GEOLOGICAL AND GEOCHEMICAL REPORT
on the
DISCOVERY CREEK PROPERTY

Blondie 1-8, BX 1-7, Ducky 1-3, and Willy 1-5 Claims

OMINECA MINING DIVISION, BRITISH COLUMBIA

January, 1991

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for

MANSON CREEK RESOURCES LTD.

by

Michael Fox, P.Geol.

and

R.D.Cruickshank, FGAC, P.Geol.

GEOLOGICAL and GEOCHEMICAL REPORT

on the

DISCOVERY CREEK PROPERTY

BLONDIE 1 to 8, BX 1 to 7,
DUCKY 1 to 3, and WILLY 1 to 5 CLAIMS

OMINECA MINING DIVISION

BRITISH COLUMBIA

NTS 94N/14E & W

LATITUDE 55 deg. 53'N LONGITUDE 125 deg. 15'W

UTM 6197000N 361000E

for

MANSON CREEK RESOURCES LTD.
#410, 1122 - 4th Street S.W.
Calgary, AB T2R 1M1

by

M.Fox, P.Geol.

and

R.D.Cruickshank, FGAC, P.Geol.

January, 1991

SUMMARY

The Discovery Creek property is situated in north-central British Columbia, 30 km west of Germansen Landing and 265 km northwest of Prince George. The claim block consists of twenty-three (23) modified grid claims, for a total of 413 units with a surficial area of about 10,000 ha.

This property is underlain by units of Quesnellia Terrane, covering a contact between the Hogem Batholith (Upper Triassic to Middle Jurassic) and Takla Group volcanic and volcaniclastic rocks (of similar age). Several smaller satellitic intrusions occur within the Takla units. Within the batholith, a syenite-monzodiorite contact associated with the Lorraine and Boundary copper-gold deposits (located 10 km and 20 km northwest of this property, respectively) extends onto the Golden Rule Resources Ltd. claim block. The Cat Mountain prospect, currently being explored by Lysander Gold and BP Minerals, occurs 25 km north-northwest, in a similar geological context to the eastern portion of the Discovery Creek property.

Activities in 1990 consisted of reconnaissance geological mapping and prospecting, supplemented by a stream silt geochemical survey. An airborne geophysical survey was also conducted, and is reported separately. Two copper showings were located within the Hogem Batholith, near the major syenite-quartz monzondiorite contact. These showings are associated with K-feldspar metasomatism and epidote alteration; two samples ran 1.30% copper/0.015 oz/ton gold, and 0.57% copper/0.005 oz/ton gold. Four other areas with encouraging geological, geochemical, and/or geophysical features are associated with smaller intrusive bodies within Takla Group rocks.

It is concluded that this property has excellent potential for the discovery of alkaline porphyry gold-copper deposits.

A two phase exploration program is proposed for the 1991 season. Phase I should include detailed geological mapping and prospecting of the entire property, interpretation of the surficial geology, and detailed soil geochemistry and ground magnetic surveys in selected areas. Phase II would await the results of Phase I, and consist of some or all of: infill and extension of soil geochemistry or ground magnetic grids, IP surveys, trenching, or drilling.

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I INTRODUCTION

Exploration activities on the Discovery Creek property were conducted in August and September of 1990. These included reconnaissance geological mapping and prospecting, stream silt sampling, and an airborne geophysical survey. The geophysics will be reported elsewhere (Aerodat Limited, in preparation), while geological and geochemical results are described in this report.

Geological mapping and stream silt sampling were conducted intermittently between August 24 and September 6, 1990. The crew lived at Germansen Landing and were transported daily by helicopter. Silt samples were collected by R.Gauthier, R.Klassen, and J.Osborne. Most geological mapping on this project was conducted by R.D.Cruickshank. A second geologist, M.Fox also did some mapping, designed the silt sampling program, and provided overall supervision for the program. Work was carried out more or less concurrently with activities on Golden Rule's Duckling Creek and Johanson Lake properties.

The geological portions of this report have been written by R.D.Cruickshank, while M.Fox had responsibility for the stream geochemistry section. The conclusions and recommendations are the joint responsibility of both authors.

Several informal place-names have been employed throughout this report, in order to facilitate discussion. These are all indicated on Figure 5, and on the 1:10,000 scale geological maps. Most of these have been devised by the authors, and have no usage outside of this report. One, "Willy George Creek", is informal local usage.

II PROPERTY

The Discovery Creek property consists of twenty-three (23) modified grid claims totalling 413 units. The claims are shown on Figure 1 and listed in Table 1 of this report. The nominal surface area of 413 units, at 25 ha each, is 10,325 ha. However, due to overlaps with pre-existing claims, the actual area would be somewhat less. Suffice to say that the surficial area of the claim block amounts to approximately 10,000 ha. The total assessment requirement for each of the first three claim years is $41,300, increasing to $82,600 after 1993.

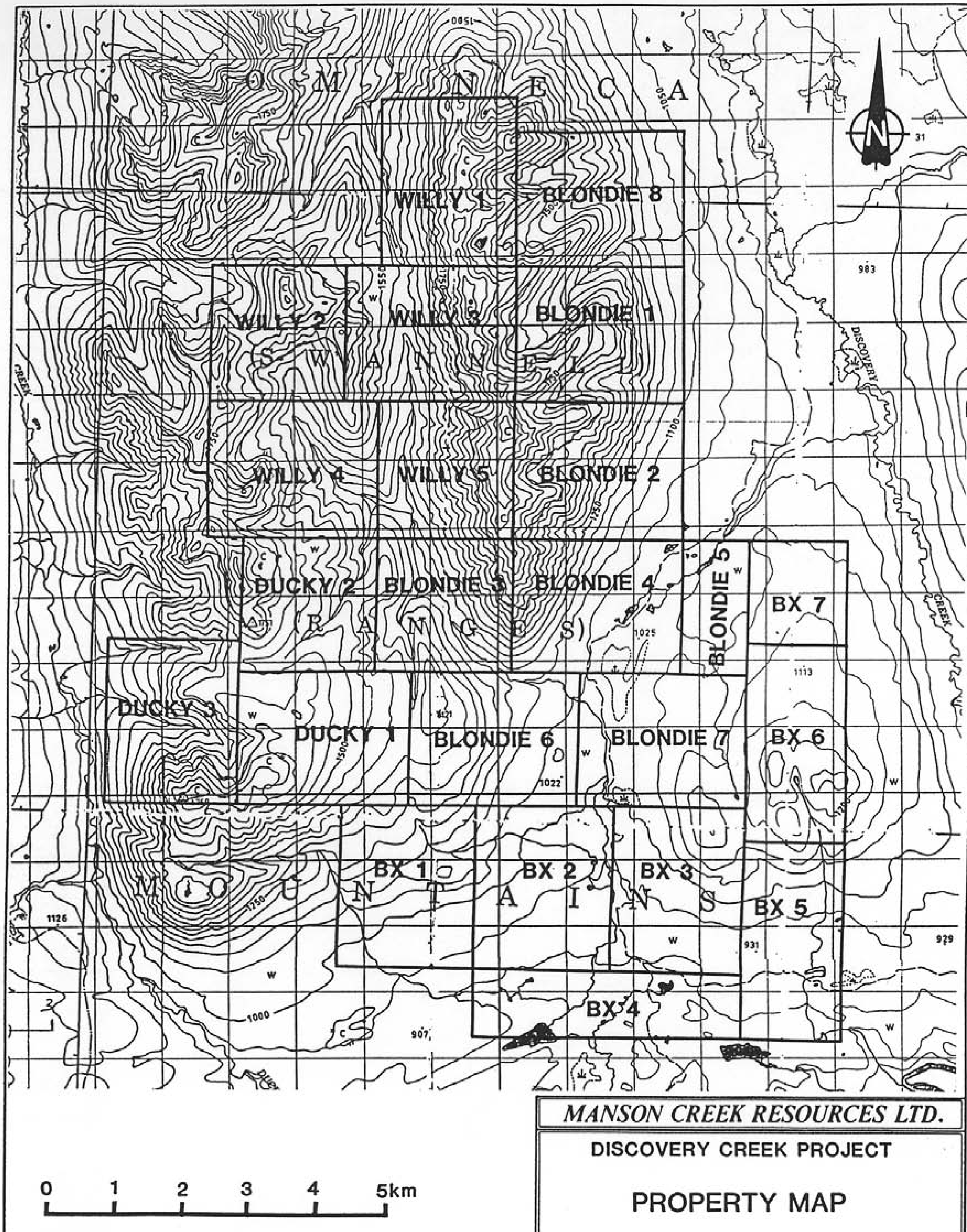
Almost all of the Willy 2 claim overlaps the pre-existing ATO IV claim, owned by Cathedral Gold.

The property is held by Golden Rule Resources Ltd. in trust for Manson Creek Resources Ltd.

TABLE 1

PROPERTY STATUS

CLAIM NAME	NO. OF UNITS	RECORD NO.	RECORD DATE	MAP NO.
BLONDIE 1	20	12141	JUL 1/90	93N/143
BLONDIE 2	20	12142	JUL 1/90	93N/14E
BLONDIE 3	16	12143	JUL 29/90	93N/14E-14W
BLONDIE 4	20	12144	JUL 1/90	93N/14E
BLONDIE 5	8	12145	JUL 2/90	93N/14E
BLONDIE 6	20	12146	JUL 1/90	93N/14E-14W
BLONDIE 7	20	12147	JUL 1/90	93N/14E
BLONDIE 8	20	12148	JUL 1/90	93N/14E
BX 1	20	12151	JUN 30/90	93N/14E-14W
BX 2	20	12152	JUN 30/90	93N/14E
BX 3	20	12153	JUL 1/90	93N/14E
BX 4	16	12154	JUL 1/90	93N/14E
BX 5	18	12476	AUG 10/90	93N/14E
BX 6	18	12477	AUG 10/90	93N/14E
BX 7	9	12478	AUG 24/90	93N/14E
DUCKY 1	20	12149	JUN 30/90	93N/14W
DUCKY 2	16	12150	JUN 29/90	93N/14W
DUCKY 3	20	12535	AUG 26/90	93N/14W
WILLY 1	20	12136	JUN 29/90	93N/14E-14W
WILLY 2	16	12137	JUN 29/90	93N/14W
WILLY 3	20	12138	JUN 29/90	93N/14E-14W
WILLY 4	20	12139	JUN 29/90	93N/14W
WILLY 5	16	12140	JUN 29/90	93N/14E-14W
TOTAL:	413 units			



MANSON CREEK RESOURCES LTD.

DISCOVERY CREEK PROJECT

PROPERTY MAP

Date: JANUARY 1991	N.T.S.:
Revised:	FIGURE 1
Scale:	

III LOCATION, ACCESS, and PHYSIOGRAPHY

The Discovery Creek property is situated in north-central British Columbia, 170 km northeast of Smithers, and 265 km northwest of Prince George (Figure 2). The small community of Germansen Landing is 30 km east-southeast from the nearest corner of the claim group.

The Omineca Mining Road crosses the southeastern corner of the claim group. A branch road, accessible to four wheel drive vehicles, leaves the Omineca road and follows Willy George Creek (informal local name) to the northern claim boundary. A couple of bulldozer trails extend east and west from this track, onto higher mountains east and west of the valley. Away from the roads, the most efficient access is by helicopter.

The Omineca Road on the claim block connects to Germansen Landing, and from there to either Mackenzie or Fort St. James. An airstrip, suitable for light aircraft, is located at Germansen Landing, and aircraft may be chartered in Mackenzie, 110 km to the southeast. There is no regular helicopter base in the immediate area. Lodging, gasoline, and a limited selection of groceries may be obtained in Germansen Landing.

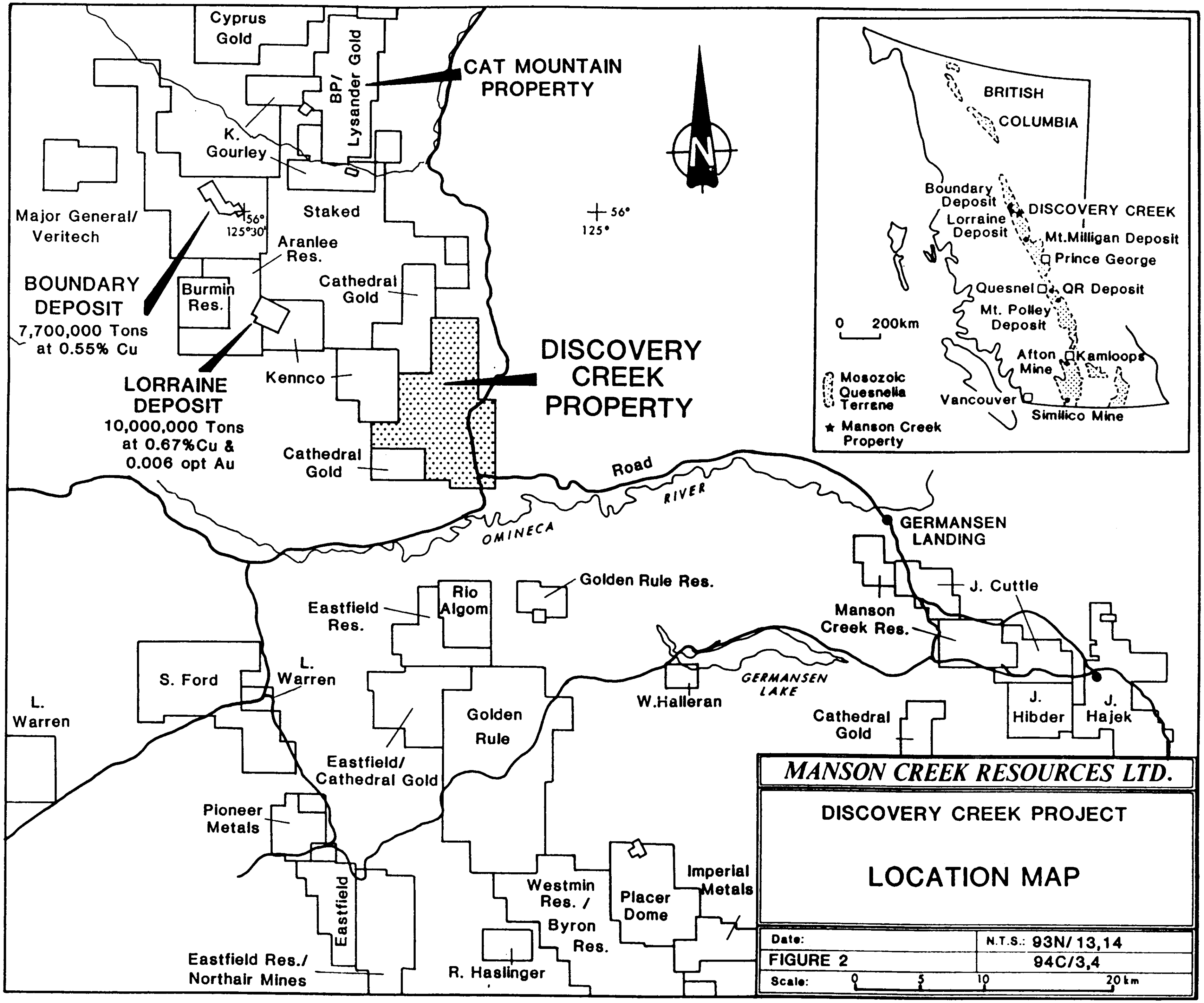
The physiography of the claims area is characterized by broad float valleys along Omineca River and Discovery Creek, with moderately rugged mountain ridges to the northwest. The valleys are heavily timbered, with tree line occurring at about 1650 m. Elevations in the property area range from about 850 m along Omineca River, to almost 2000 m at the summit of Wasi Ridge. The peaks are all readily accessible by foot traverse, with some cliffy portions that are easily circumvented.

IV PREVIOUS WORK

Manson Creek Resources Ltd. has conducted no previous work on this property, which was acquired in 1990. The region in general has seen considerable prior exploration activity, however.

Placer gold was discovered on Silver Creek, 15 km southwest of the property, in 1868, and by 1871, all the major gold creeks in the Omineca Mining Camp had been discovered. Production of placer gold has continued intermittently up to the present time.

The Lorraine porphyry copper deposit, some 10 km northwest of the Discovery Creek property, was known as early as 1918. The overall low grade of the surface showing deterred serious early exploration efforts. The prospect was held briefly by Cominco in


Cyprus Gold
BP/ Lysander Gold
CAT MOUNTAIN PROPERTY
K. Gourley
Major General/ Veritech
Staked
56° 125°30'
Aranlee Res.
+ 56° 125°
BOUNDARY DEPOSIT
7,700,000 Tons at 0.55% Cu
Burmin Res.
Cathedral Gold
DISCOVERY CREEK PROPERTY
LORRAINE DEPOSIT
10,000,000 Tons at 0.67%Cu & 0.006 opt Au
Kennco
Cathedral Gold
Road
OMINECA RIVER
GERMANSEN LANDING
Golden Rule Res.
J. Cuttle
Rio Algom
Eastfield Res.
Manson Creek Res.
S. Ford
L. Warren
L. Warren
Golden Rule
W.Halleran
GERMANSEN LAKE
Cathedral Gold
J. Hibder
J. Hajek
Eastfield/ Cathedral Gold
Pioneer Metals
Eastfield
Westmin Res. / Byron Res.
Placer Dome
Imperial Metals
Eastfield Res./ Northair Mines
R. Haslinger
BRITISH COLUMBIA
Boundary Deposit
DISCOVERY CREEK
Lorraine Deposit
Mt.Milligan Deposit
Prince George
Quesnel
QR Deposit
Mt. Polley Deposit
0 200km
Afton Mine
Kamloops
Mesozoic Quesnella Terrane
Vancouver
Similico Mine
★ Manson Creek Property
MANSON CREEK RESOURCES LTD.
DISCOVERY CREEK PROJECT
LOCATION MAP
Date:
N.T.S.: 93N/ 13,14
FIGURE 2
94C/3,4
Scale: 0 5 10 20 km

the mid-1940's, and then acquired by Kennco in 1947 (Wilkinson et al, 1976). Reserves are currently listed at 10 million tons grading 0.67% copper and 0.006 oz/ton gold.

Prospecting for lode copper deposits in the immediate vicinity of the Discovery Creek property has proceeded since at least 1948. The Dorothy showing was discovered by Kennco Explorations in that year, and the Elizabeth showing in 1949 (Assessment Report 73). These occurrences are situated on a steep mountainside immediately east of Duckling Creek, some 1.5 and 2.0 km west of the current Golden Rule claims. Copper mineralization occurs within a dioritic phase of the Hogem Batholith.

Kennco conducted further exploration in the area in the period 1961 to 1963. This work focused on two separate areas: i) two claim blocks east of Duckling Creek (including the Dorothy and Elizabeth showings); and ii) an area along the Omineca road, in the southeastern part of the current Golden Rule property. Work on the Dorothy properties in this period included geological mapping, soil geochemistry, magnetic and IP surveys (Assessment Reports 366, 378, 432, 511, and 513). Geological mapping extended to the western boundary of the present Golden Rule property, in the vicinity of the Willy 4 claim.

Kennco's "Valley" claim block was located along the Omineca road in the vicinity of the current Blondie 4 claim. Activities in this area between 1961 and 1963 included soil geochemistry, magnetic, and IP surveys (Assessment Reports 384, 431, and 504). Soil geochemistry for copper and molybdenum failed to detect distinctive anomalies, but this is a largely drift-covered area. A significant IP anomaly was located in an area within 200 m of the main road; there was no magnetic correlation.

The next period of sustained exploration in this region occurred between 1971 and 1974. Pyramid Mining Co. had a large claim block covering much of "Wasi Ridge" and some areas west of Willy George Creek. Pyramid conducted soil geochemistry and magnetic surveys over three small grids, bulldozer trenching, and geological mapping in 1971 (Assessment Report 3219). This property was adjacent to a Cominco-Tyee Lake Resources claim block that covered the Rondah copper occurrence.

Falconbridge prospected the Haggis claims in 1971. This claim group covered the eastern contact of Hogem Batholith, along the valley of Willy George Creek, in the vicinity of the current Willy 5 and Blondie 3 claims. Soil sampling was undertaken to follow up anomalous silt samples collected in 1970. Results were equivocal (Assessment Report 3140).

Other companies active in the region east of Duckling Creek in the early 1970's included Donna Mines (Assessment Report 3536), Fortune Channel Mines (Assessment Report (3461), Acano Exploration (Assessment Report 3860), Cominco (Assessment Report 3861), and Kennco (Assessment Report 3855, and 3996). Most of the work was of a grassroots nature, with geological mapping, soil geochemistry, and ground geophysical surveys predominating. Donna Mines reported the presence of four copper showings near the Hogem-Takla contact in the area south of the current Ducky 1 claim. Three of the showings occurred within Takla volcanics, and one of these (the Discovery showing) was investigated by bulldozer trenching and diamond drilling (Assessment Report 3536). Donna Mines concluded that there is a poor correlation between the mineral showings, and the magnetic and soil geochemical results.

Noranda conducted IP surveys on their Discovery Creek property in 1972 (Assessment Report 3879, and 4432). This property was in the vicinity of the former Kennco "Valley" claims, in the southeastern corner of the present Golden Rule property (the current Blondie 4, 5, 7; and BX 6 and 7 claims). This work outlined a broad area of high background IP responses, sometimes coinciding with resistivity lows. It was concluded that these anomalies were most likely caused by disseminated sulphide mineralization. As there is little or no outcrop in this area, this conclusion could not be confirmed by prospecting, and there is no record of drilling.

Canadian Superior Exploration conducted a fairly thorough investigation of an area partly covered by Golden Rule's BX 1 to 4 claims, in 1974 (Assessment Report 5186). Their property covered the northern contact of a syenite stock that intrudes Takla volcanics. This area of subdued topography and limited outcrop was investigated by geological, prospecting, soil geochemical, IP, and magnetic surveys. Strong soil copper and IP anomalies were located. Prospectors discovered float mineralized with chalcopyrite and K-feldspar veins.

Cathedral Gold reported on their 1987 activities on the Ato and Ling claim groups in Assessment Reports 16830 and 16831. The Ato property adjoins the Golden Rule ground to the north; one sample of chalcopyrite in diorite returned an analysis of 29.1 ppm gold. On the Ling claims, located southwest of Golden Rule's ground, Cathedral reported that porphyry style mineralization with anomalous gold values is sporadic throughout the property. High soil gold values (7 over 1000 ppb) showed good correlation with copper (several samples over 10,000 ppm). The Ling claims currently held by Cathedral Gold are approximately coincident with the prior Donna Mines property discussed earlier in this section.

In the summer of 1990, Kennco maintained an exploration camp on Duckling Creek for several months. Their program is believed to have consisted primarily of geological and geochemical surveys.

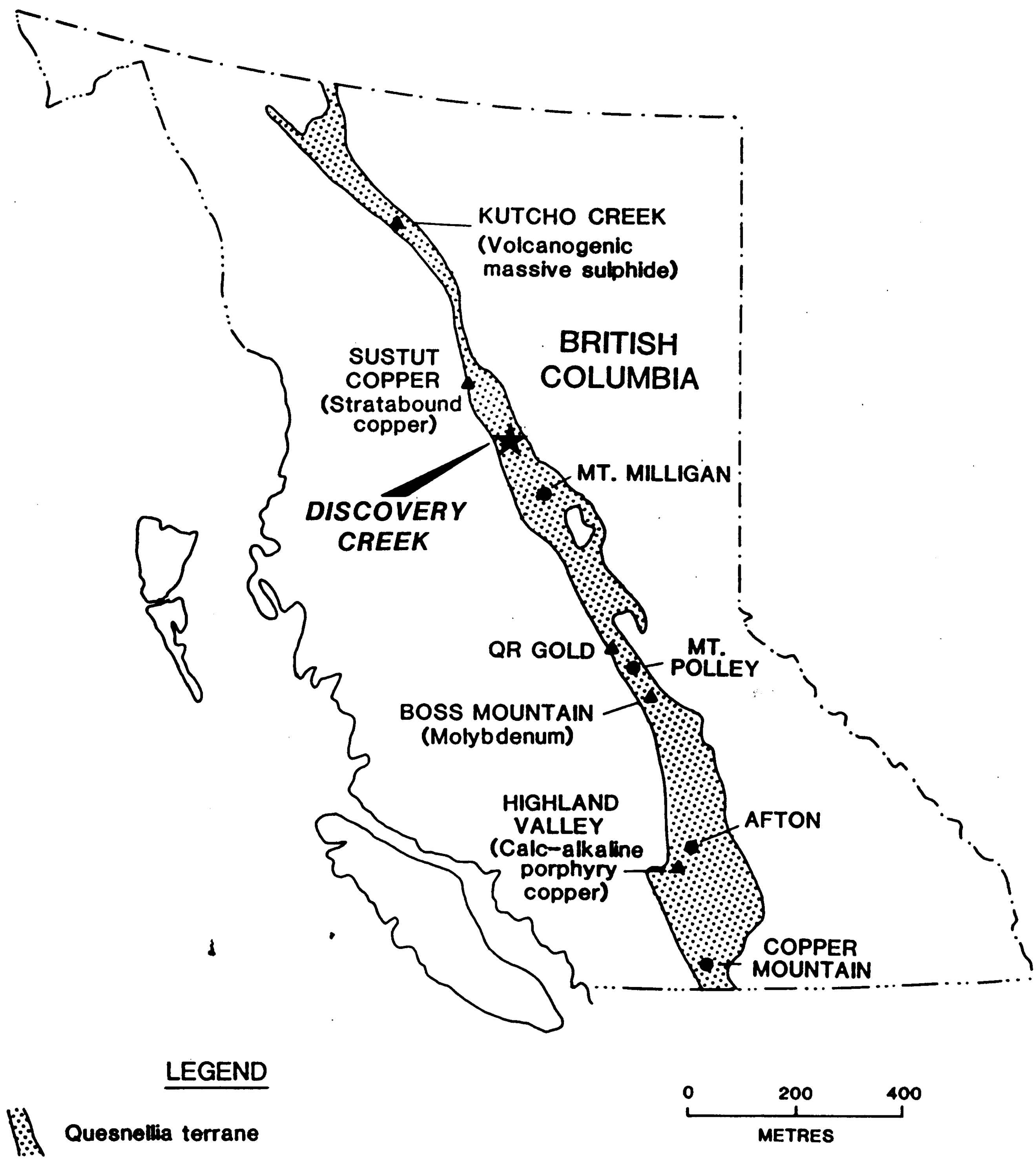
V REGIONAL GEOLOGY and MINERAL DEPOSITS

The geology of this region has been described by Armstrong (1945) and Garnett (1978). The most recent tectonic interpretation appears on Wheeler et al (1988).

Rocks underlying the Discovery Creek property belong to a stratigraphic-tectonic terrane known as "Quesnellia". This terrane extends in a north to northwesterly direction for hundreds of kilometers across most of British Columbia, but is in general only a few tens of kilometers wide (Figure 3).

At this latitude, Quesnellia trends north-northwesterly, consisting of a belt of Takla Group volcanic rocks to the east, and the Hogem Batholith to the west (Figure 4). The Takla Group, of Upper Triassic to Middle Jurassic age, comprises basaltic to andesitic flows, breccias, agglomerates, and tuffs. Sedimentary rocks, which occur in the Takla Group in other parts of British Columbia, are of rare occurrence in this region. According to Garnett (1978), the Hogem Batholith consists of three or four suites of rock: i) monzonite and monzodiorite of Upper Triassic to Lower Jurassic age (Hogem Basic Suite); ii) granodiorite of a similar age to (i) and which may or may not constitute a separate phase; iii) a Lower to Middle Jurassic syenite suite; and iv) a Lower Cretaceous leucocratic granite to quartz syenite suite. The Takla volcanics are probably comagmatic with the Hogem Basic Suite ((i) above). The Harper Ranch subterrane of Quesnellia represents basement to the Takla Group, appearing at surface in a parallel belt immediately to the east. Harper Ranch subterrane consists of Upper Devonian to Triassic arc clastics, volcanics, and carbonate (Wheeler et al, 1988).

Quesnellia is an allochthonous terrane which was obducted onto the North American continent in Jurrassic time. In this area, it is separated from North American rocks by Slide Mountain Terrane oceanic volcanic and sedimentary rocks of Devonian to Late Triassic age. The boundary between Harper Ranch subterrane and Slide Mountain units is marked by the Manson Fault Zone, a major structural feature situated about 7 to 10 km northeast of the Discovery Creek property. North American rocks, represented by Wolverine complex schists and gneisses, occur 20 km northeast.



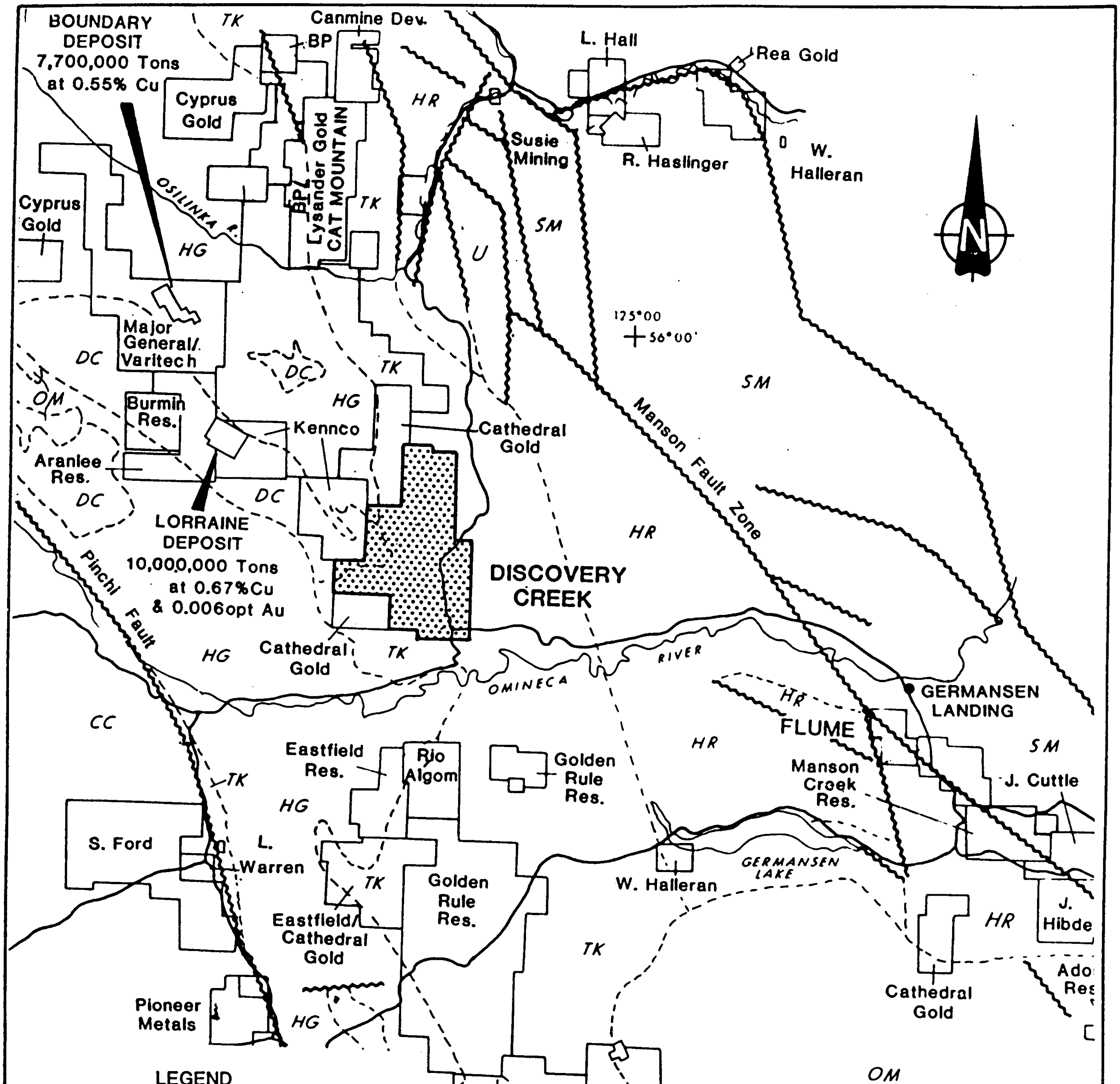
Terrane map taken from
Wheeler et al (1988)

MANSON CREEK RESOURCES LTD.

DISCOVERY CREEK PROJECT

QUESNELLIA TERRANE AND
SELECTED MINERAL DEPOSITS

Date: JANUARY 1991	N.T.S.:
Revised:	FIGURE 3
Scale:	



LEGEND

EARLY CRETACEOUS

OM Omineca Intrusions: quartz monzonite, granite, granodiorite

U Uslika Formation: conglomerate

LOWER-MIDDLE JURASSIC

DC Duckling Creek syenite complex and related intrusions

UPPER TRIASSIC-LOWER JURASSIC

HG Hogem Batholith & Related Intrusions: granodiorite, quartz monzonite, quartz diorite, monzonite

UPPER TRIASSIC

TK Takla Group: volcanics and related sediments

PALEOZOIC TO TRIASSIC

CC Cache Creek Group: chert, argillaceous quartzite, argillite

SM Slide Mountain Group: massive limestone, minor argillite, slate, chert

HR Harper Ranch Subterrane: arc clastics, volcanics, carbonate

MANSON CREEK RESOURCES LTD.

DISCOVERY CREEK PROJECT

REGIONAL GEOLOGY

Date: JANUARY 1991	N.T.S.:
Revised:	FIGURE 4
Scale:	

At the latitude of Omineca River, Harper Ranch units are 6 to 10 km wide, the Takla Group belt also 6 to 10 km, and the Hogem Batholith, 8 to 15 km broad. Hogem Batholith is separated from Cache Creek Terrane to the west by another major structure, the Pinchi Fault. Cache Creek Terrane consists of oceanic volcanic and sedimentary rocks of Mississippian to Triassic age.

The Quesnellia terrane in British Columbia is host to several important classes of mineral deposits. There is a great deal of current interest in alkaline intrusive related porphyry gold-copper deposits, such as Mt. Milligan, Mt. Polley, Afton, and Copper Mountain (Figure 3). Quesnellia is also host to the Highland Valley calc-alkaline porphyry copper deposits, the QR intrusive related gold deposit, and the Boss Mountain porphyry molybdenum deposit. The Sustut stratabound epigenetic copper deposit occurs in Takla Group conglomerates in Stikinia Terrane, but very close to Quesnellia. In the Dease Lake area, the Kutcho Creek volcanogenic massive sulphide deposit occurs in Triassic volcanics, again just outside the boundary of Quensellia (Figure 3). The recent discovery of the Mt. Milligan alkaline porphyry gold-copper deposit, located 110 km southeast of Discovery Creek, has instigated a great deal of exploration activity in this area during the last two years.

Several copper +/- gold occurrences are known from the vicinity of this property. The Lorraine and Boundary deposits occur 10 km and 20 km northwest. Both are associated with the Duckling Creek syenite complex, one of the Lower to Middle Jurassic syenites of the Hogem Batholith. Lorraine is reported to host 10 million tons of ore grading 0.67% copper and 0.006 oz/ton gold; with Boundary quoted at 7.7 million tons of 0.55% copper. The geology of both areas is described by Garnett (1978). Both occur within the syenite, near its northeastern contact with the Hogem Basic Suite; <u>this contact strikes onto Manson Creek's properties to the southeast</u>. The mineralization occurs as disseminated chalcopyrite, and bornite (rare at Boundary), in a foliated border phase of the syenite. Potash feldspar alteration is important in both areas.

A joint venture of Lysander Gold Corp. and BP Minerals is actively exploring another gold-copper prospect at Cat Mountain, 25 km north-northwest of the Discovery Creek property. Cat Mountain occurs close to the eastern boundary of the Hogem Batholith, and is underlain by Takla volcanics and a central porphyritic syenite intrusion (Assessment Report 7999). Mineralization occurs in gold-copper-magnetite veins, and one zone is enriched in arsenopyrite. Alteration consists of epidote, chlorite, and K-feldspar. Copper grades varying from 0.2% to 2.0%, accompanied by gold in the 0.02 oz/ton to 0.30 oz/ton range, over widths up to 15 m or more, have been reported from drill holes and trenches (Assessment Report 7999; Lysander Gold Corp., 1990).

Other copper showings in the Hogem Batholith in this area include the Dorothy, Elizabeth, and Duckling localities, within 1 or 2 km of the western boundary of the Manson Creek property. The Rondah showing, near the headwaters of Wasi Creek, lies just outside the northern property boundary.

The Mt. Milligan deposit, 110 km southeast of Discovery Creek, provides a useful model for exploration in regions underlain by Takla Group volcanic rocks. The deposit occurs adjacent to several smallish, subvolcanic, alkaline stocks (mainly monzonites). The ore deposit occurs near the eastern edge of a large coincident magnetic, IP, and soil geochemical anomaly. Magnetic anomalies in the area are related to the intrusive stocks. From an exploration viewpoint, it is important to note that these anomalies cover a much larger area than the deposit itself. Alteration at Mt. Milligan consists of a central potassic core (hydrothermal K-feldspar and biotite), and an outer propylitic halo (Rebagliati and Copeland, 1989).

VI PROPERTY GEOLOGY

The geology of the Discovery Creek property is still imperfectly known. Mapping on the ridge-tops was fairly thorough, but coverage is very incomplete elsewhere. As any discovery will necessarily be made in the lower, more poorly exposed portions of the claim block, it must be emphasized that the geology outside of the ridge crests requires further study.

Bedrock outcrops are estimated to underlie only about 1% to 2% of the property area, with the best exposures on the higher ridges.

i) Surficial Geology

The surficial geology of the claim block has not been studied, so only a few general observations can be recorded here.

The mountainous ridges in the northwestern two thirds of the property have been profoundly affected by alpine glaciation. This area is characterized by a series of arretes that separate many, mainly northeast-facing, cirque valleys. The upper portions of the ridges are mantled by talus and colluvium, and the cirque floors by morainal debris. A high lateral moraine was noted along Willy George Creek where it exits the mountain range. Gravel deposits occur along the bottoms of the larger stream valleys in this region.

The lower hills southeast of the Omineca road (BX 5, 6 & 7 claims) are probably mantled by locally derived till, but this supposition has not been checked in detail.

The major valleys of Discovery Creek and Omineca river have a fairly broad cover of outwash sands and gravels, but it is likely that till would also occur in these areas. The distribution of surficial materials has not been mapped to date.

The ice flow in this area was eastwards along the Omineca Valley (Armstrong, 1945). Fluting southeast of Wasi ridge suggests that a portion of this ice sheet turned northeast into the broad valley of Discovery Creek.

ii) Bedrock Lithology and Stratigraphy

The Discovery Creek property is underlain by two discrete suites of rocks: i) Takla Group volcanic, pyroclastic, and volcaniclastic rocks; and ii) intrusive phases of the Hogem Batholith, including dykes and sills that extend into the Takla rocks. These are described separately below:

A) Takla Group Rocks

Takla Group rocks in the Discovery Creek - Duckling Creek area comprise a volcaniclastic/pyroclastic belt, flanked to the southeast and west by andesitic or basaltic flows. Mapping in 1990 was reconnaissance in nature, but nevertheless indicated that the volcaniclastic assemblage demonstrates a mappable stratigraphy, about 3000 m thick. This stratigraphy is listed in Table 2, and localities indicated on Figure 5 of this report (most place names were devised by the author for ease of discussion, and are unofficial). The area was mapped on a reconnaissance basis at a scale of 1:10,000 (Figures 6, 7 & 8) of this report. Mapping was fairly thorough on most ridges above tree line, but is very incomplete elsewhere.

The pyroclastic/volcaniclastic package is well exposed on the high ridges west of Discovery Creek, and east of the Hogem Batholith (Figures 7 & 8). Bedding in this area usually strikes between 140 deg. and 160 deg, with westerly dips ranging from 65 deg. to vertical. A banded, pyritic, mafic tuff unit (Tml, Table 2) provides a useful marker horizon, discernable at a distance by its associated color anomalies.

The volcaniclastic units are interpreted to represent two broad fining-upward cycles (Table 2). Only the top of Cycle I was observed, consisting of mafic to intermediate ash, lapilli, (and crystal?) tuffs, overlain by the Tml marker horizon. Above this horizon, Cycle II begins with 100 m to 300 m of mafic lapilli tuffs, which pass into a thick unit dominated by andesitic agglomerates. These, in turn, go through a gradational contact to a sequence of primarily massive, poorly bedded andesitic tuffs (some flows could occur in this section). The

TABLE 2

TAKLA GROUP STRATIGRAPHY
Discovery Creek - Duckling Creek Area

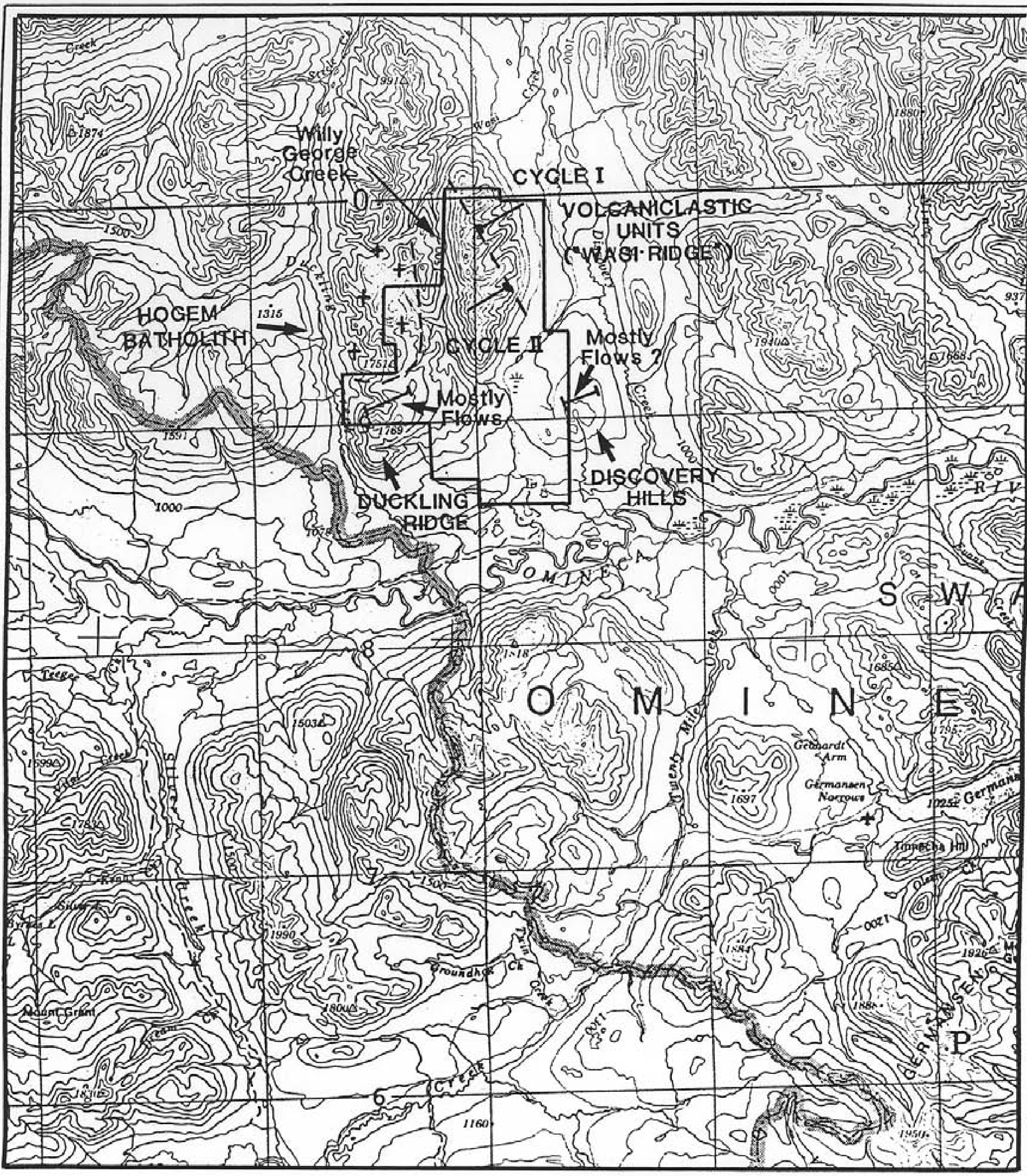
Area	Map Symbol	Cycle	Lithology	Thickness (Est.)(m)
Duckling Ridge	Fa	-	Andesite/basalt, massive, augite phenocrysts (mostly flows)	?
-	No exposure: valley of Willy George Creek (Willy George Fault) -			
Wasi Ridge	Tc	II	Tuff, cherty, laminated, very fine grained	700 +
Wasi Ridge	Tm	II	Tuff, andesitic, fine grained, massive; minor bedded tuff, lapilli tuff and agglomerate	700
Wasi Ridge	Agg	II	Agglomerate, lapilli tuff; minor ash tuff, breccia; mainly andesitic	550 - 750
Wasi Ridge	Tm	II	As for Tm (above), but with significant lapilli tuff component	100 - 300
Wasi Ridge	Tml	I	Tuff, fine grained, laminated, pyritic, mafic; interbedded with Tm (as above)	200
Wasi Ridge	Tm	I	Tuff; orange-weathering, mostly ash, some lapilli; intermediate composition	250
Wasi Ridge	Txl	I	Feldspar crystal tuff, minor breccia (alternatively could be a porphyry intrusion)	300
Wasi Ridge	Tm	I	Tuff, massive, fine grained, andesitic	100 +
-	No mapping/little exposure -			

TABLE 2

TAKLA GROUP STRATIGRAPHY
Discovery Creek - Duckling Creek Area

Area	Map Symbol	Cycle	Lithology	Thickness (Est.)(m)
Discovery Hills	Tm (or Fa?)	-	Andesite/basalt; fine grained, massive, mafic volcanic rocks (mafic tuffs?); description based on very limited exposure	?

Note: The place names "Duckling Ridge", "Wasi Ridge", and "Discovery Hills" were devised by the author for ease of discussion; none are official. The appellation "Willy George Creek" is an unofficial name used by residents of the area.



MANSON CREEK RESOURCES LTD.

DUCKLING CREEK PROJECT

TAKLA GROUP LOCALITIES IN THE DISCOVERY CREEK AREA

Date: JANUARY 1991	N.T.S.:
Revised:	FIGURE 5
Scale: 1:250,000	

uppermost exposed portion of Cycle II consists of very fine grained, well bedded, laminated tuffs, which however lack the bedded iron sulphides noted at the top of Cycle I.

It is assumed that these units face west, as the cycles identified above fine in that direction. No tops indicators on an outcrop scale were noted. The thicknesses listed in Table 2 are estimated from the 1:10,000 scale geological map.

The above volcaniclastic units have been intruded by a monzodiorite body near the south end of "Wasi Ridge". Further north, narrow intrusive sills of the same lithology may be traced for distances of up to 500 m. The tuffaceous rocks demonstrate aeromagnetic lows, in contrast with a high over the monzodiorite.

Takla Group outcrops on the ridge immediately east of Duckling Creek ("Duckling Ridge") comprise massive, andesitic or basaltic rocks that are probably flows. No bedding or clastic textures have been observed in this area. These units typically contain pyroxene phenocrysts. Contact metamorphic effects are evident near the margin of the Hogem Batholith, where the volcanic units are represented by coarse pyroxene-plagioclase porphyries, or by finely-crystalline mafic hornfels. These flows are accompanied by aeromagnetic highs, approximately equivalent to those over the nearby Hogem Batholith.

Takla units in the "Discovery Hills" are poorly exposed. This region lies on strike with the volcaniclastic succession that is well exposed on "Wasi Ridge" to the northwest. However, in the few exposures examined on "Discovery Hills", bedding or clastic textures were not observed. It is possible that these could be equivalent to the mafic tuff (Tm) unit, which in many places also has no recognizable bedding or clastic features. If not, then either a facies change or a fault must intervene between "Discovery Hills" and "Wasi Ridge". These units are accompanied by low aeromagnetic response, which is typical of the tuffaceous rocks.

B) Rocks of the Hogem Batholith

Plutonic rocks associated with the Hogem Batholith occur in two separate settings in this project area:

1) Those belonging to the main body of the batholith, in the region between Willy George Creek and Duckling Creek.

2) Smaller intrusions within Takla Group rocks to the south and east of the batholith.

All of these intrusions are associated with aeromagnetic highs.

a) Main Batholith

The portion of the main batholith underlying the southwest corner of the property, consists of quartz monzodiorite in the north and syenite to the south. The classification of these rocks follows Garnett (1978); petrographic data from the 1990 works have not yet been received. The descriptions that follow are based on megascopic examination.

Quartz monzodiorite is usually equigranular, comprised of crystals 1 mm to 2 mm in size, 10% to 25% quartz, 15% mafic minerals (hornblende and/or biotite), with the remainder being feldspar. The syenite is light orange on fresh surfaces, is comprised almost entirely of orange or grey alkali feldspar, contains no visible quartz, and has up to 5% mafic minerals (biotite or pyroxene). The syenite is typically coarse and megacrystic, with K-feldspar crystals to 10 mm or more in length.

Finely-crystalline, melanocratic phases ("mafic hornfels") occur in several places: i) at the quartz monzodiorite-volcanic contact; ii) at the quartz monzodiorite-syenite contact; and iii) as roof pendants within the syenite. These are typically finely-crystalline rocks comprised of at least 50% mafic minerals, such as pyroxene, hornblende, biotite, and chlorite, with the balance being plagioclase. Epidote and K-feldspar alteration are commonly present. Thin section study by Kennco in 1961 determined that one of these occurrences consisted of 40% diopside, in a matrix of plagioclase and white mica (Assessment Report 378). These units are probably roof pendants and contact zones of mafic protolith that have been affected by contact metamorphism. Those at the quartz monzodiorite-syenite contact may correspond to the "migmatites" of Garnett (1978), although here they lack typical migmatitic textures.

Syenite dykes occur within the quartz monzodiorites and mafic hornfels units. Veins and patches of pink secondary potash feldspar may occur anywhere, but are most abundant near the syenite-quartz monzodiorite contact, and within bodies of mafic hornfels.

b) Intrusives Outside of the Main Batholith

Smaller intrusions, believed to be related to the Hogem Batholith, occur within Takla rocks in many other areas of the property. These are known from limited outcrops and associated aeromagnetic highs.

About 50% of the south end of "Wasi Ridge" is comprised of monzodiorite, with minor quartz monzodiorite and feldspar porphyry. Contact relationships with Takla Group tuffs are complex, as shown on the 1:10,000 scale geology map (Figure 7).

The main body of this intrusive must occur on the west flank of the ridge, according to the aeromagnetic map. Further to the north along the ridge, intrusive bodies become narrower and more dyke-like in morphology (many in fact are sills). The principal intrusive rocks at the north end of the ridge are narrow monzodiorite sills, up to at least 500 m long.

Syenite bodies have been reported from the topographically low region between Omineca River and Duckling and Wasi Ridges. One of these was examined along Willy George Creek. A considerable amount of mafic hornfels occurs along the volcanic contact, passing to the south into a typical megacrystic syenite. Much angular syenite rubble, but no real outcrop, also occurs along the summit of a hill 1.5 km to the northeast. These is a strong suggestion that syenite underlies a large portion of this low-lying, poorly exposed region; extensive aeromagnetic highs are present.

A fairly large (400 m long) dioritic outcrop is present on the summit of a hill in the southeastern corner of the property (BX 6 claim). This unit is coarsely crystalline (2 mm to 4 mm), equigranular, and composed of 50% hornblende and 50% white feldspar. Minor, localized K-feldspar alteration was noted. This outcrop is about 1300 m northeast of the syenite-rubbled hilltop described in the previous paragraph, and is also associated with an aeromagnetic high.

iii) Structural Geology

The excellent exposures along Wasi Ridge provide a good understanding of the structural geology in that area. Elsewhere, the structure is less well known.

Takla Group units on Wasi Ridge essentially define a monocline, striking 140 deg. to 160 deg., and dipping southwest at 65 deg. to vertical, with steeper dips predominating. Minor variations in strike and dip are observable, and the sequence is locally overturned (85 deg. east dip) near the north end of the ridge. The sequence is believed to face west, based on stratigraphic evidence discussed earlier in this report. Neither large scale nor minor folds were observed on Wasi Ridge.

The laminated sulphidic tuff marker horizon (Tml) is displaced by a fault near the northern end of Wasi Ridge. This fault strikes about 040 deg. with a near-vertical dip. The principal observable effect is that the Tml unit narrows abruptly from 150 m south of the fault, to 50 m to the north. This suggests a large component of vertical displacement, while the horizontal component would be minor. The structure is therefore probably a normal fault. Other similar faults may be present, but unnoticed due to the lack of good marker horizons elsewhere.

The valley immediately to the west of Wasi Ridge is underlain by a major fault, named here the "Willy George Fault". A topographic lineament, trending almost due north, extends for a distance of 15 km through this area, coinciding with a prominent lineament on the aeromagnetic map. The headwaters of Wasi Creek and Willy George Creek flow in opposite directions along this valley, Wasi to the north and Willy George to the south. This fault forms an oblique angle with the regional strike as exposed on Wasi Ridge to the east. Preliminary comparison with mapping on Golden Rule's Duckling Creek property to the northwest suggests no significant offset of the laminated sulphidic tuff marker unit across this structure. It is therefore most likely a normal fault with a predominantly vertical component of slip.

Other normal faults are probably present as well. The reconnaissance nature of the 1990 mapping, and the paucity of outcrop away from the ridge tops, may have resulted in a number of faults going unrecognized.

iv) Mineralization and Alteration

There are no defined ore reserves on this property. Two copper-gold showings are known from the vicinity of the syenite-quartz monzodiorite contact on the Willy 4 claim. Elsewhere, a number of sulphide showings, some with anomalous copper content, were located during the 1990 mapping program. Potash feldspar veins and alteration are common within the batholith, and were noted in some of the satellite intrusions as well. Mineralization and alteration within the various geological or geographical subdivisions of the property are discussed separately below:

A) Hogem Batholith

Units of the Hogem Batholith occur in the region between Duckling and Willy George Creeks, as described elsewhere in this report, and as mapped on Figure 7. Outcrops are mainly limited to ridge tops, and a large proportion of the area has no bedrock exposure. Quartz monzodiorite to the north is in contact with a syenite intrusive to the south. The contact between the two intrusive phases is characterized by rafts of mafic hornfels, and intensive potash feldspar alteration. The K-feldspar is a distinctive pink color, occurring as stringers, veins, or narrow dykes. Further from the contact, this pink feldspar principally occurs as narrow alteration halos along fractures. The alteration is most intense in quartz monzodiorite and mafic hornfels near the contact, but extends several hundred meters north into the quartz monzodiorite, and occurs occasionally within the syenite as well.

A copper showing is present in quartz monzodiorite within a few meters of the legal corner post for the Willy 2 and 4 claims. The outcrop displays a stockwork of K-feldspar veinlets 2 mm to 15 mm wide. One K-feldspar vein is 20 cm (200 mm) wide. Epidote is widespread in the wallrocks. A small minority of fractures carry thin quartz veinlets with chalcopyrite, pyrrhotite, and conspicuous secondary malachite. Some chalcopyrite is also disseminated in the wallrocks. These copper mineralized fractures are sparsely distributed over about 150 m of the outcrop. Many old trenches occur on the Kennco property immediately west of this location. A composite grab sample of copper mineralized rock (#74934) ran 506 ppb (0.015 oz/ton) gold, 8.90 ppm (0.26 oz/ton) silver, and 1.30% copper. The iron content of this sample was 6.40%, and enhanced levels of Zn, Cd, V, P, and La are also present. Molybdenum content was very low, at 1 ppm.

Composite grab sample #74935 was collected from a site within the syenite, 1 km south of the above location. This was a talus sample of mafic hornfels collected from the bottom of a cliff of syenite. The mafic talus showed malachite stain, both disseminated and on fractures, comprising less than 1% of the rock. This sample returned analyses of 164 ppb gold, 4.4 ppm silver, and 0.57% copper. The rock was also enhanced in Co, Cr, and K (1.49%; the leach is very limited for this element).

Another anomalous result from this region was obtained in sample #74937. This was collected about 100 m outside the southern property boundary, where massive andesites are intruded by monzodiorite and feldspar porphyry dykes. Mineralization consists of a strongly oxidized hematite - limonite gossan about 2 m wide. The analysis was anomalous for gold (60 ppb), silver (5.4 ppm), copper (630 ppm), arsenic (88 ppm), molybdenum (21 ppm), and iron (14.44%). This suite of elements differs from those in the batholith to the north, suggesting a different style of mineralization.

The copper occurrences in the batholith in this area occur in a similar setting to the Lorraine Deposit, as described by Garnett (1978), and Wilkinson, et al (1976). Both occur in the same contact zone between syenite and older phases of the plutonic complex. The pendants of mafic hornfels along the contact on this property may be approximately correlative with the "migmatites" that host Lorraine. Potash feldspar and epidote alteration are present in both areas.

B) <u>Wasi Ridge</u>

"Wasi Ridge" is an informal name, devised by the author, for the first high ridge west of Discovery Creek, and lying immediately east of the upper reaches of Wasi Creek and "Willy

George Creek". The ridge is underlain by a thick succession of volcaniclastic/pyroclastic Takla rocks, with lesser intrusive phases, as described elsewhere in this report. Epidote alteration, with attendant calcite veining, and (rarer) quartz veining, is of widespread occurrence. In addition, three types of more localized alteration/mineralization were recognized:

1) pyrite/pyrrhotite gossans at intrusive-volcanic contacts on the southern end of the ridge;

2) iron carbonate alteration in isolated shears, and in broader, roughly strata-bound zones; and

3) strata-bound and bedded iron sulphides in a laminated mafic tuff unit.

Samples of all three types of mineralization were collected during the mapping program. All were composite grab samples. The iron carbonate and strata-bound sulphide zones (types 2) and 3), above) were not anomalous in their precious or base metal contents. Carbonate zones contained up to 17% Ca and 1300 ppm Mn. Samples of the sulphidic tuff were unusual only in their iron contents (#74931, 4.58% Fe; and #74933, 5.95% Fe).

Five samples collected near intrusive contacts on the south end of the ridge (#74920, 74921, 74922, 74924, and 74927) contained geochemically anomalous quantities of copper, ranging from 259 ppm to 878 ppm. The gold (maximum 28 ppb) and silver (maximum 0.45 ppm) contents of these samples are low, and other base metals are at background levels. Four of these five samples were collected from tuffs near intrusive contacts, while the fifth (#74924) was from the intrusive lithology. All these occurrences typically demonstrate disseminated and fracture controlled sulphide mineralization, that does not exceed about 1% of the rock by volume. Pyrrhotite predominates over pyrite, with traces of chalcopyrite occasionally visible. Takla Group lithologies in this area are principally a very fine grained, siliceous, cherty, bedded, and laminated tuff. The siliceous, flinty character of this unit may result from contact metamorphism or metasomatism.

In summary, no mineralization of economic grade was located on this ridge. Mapping did not cover all areas of outcrop, however, so more work remains to be done. The association of anomalous copper content with gossans at intrusive contacts is an encouraging feature.

C) <u>Lower Willy George Creek</u>

"Willy George Creek" is local usage for the first major left bank tributary of the Omineca River, downstream from Duckling

Creek. Outcrops of Takla volcanics and syenite occur intermittently along the creek downstream from "Wasi Ridge" (Figures 6 & 7). About 50 m of mafic hornfels, with attendant K-feldspar alteration, occurs at the volcanic-syenite contact.

Two samples of bedded to laminated, cherty, siliceous tuff, with bedded pyrite and pyrrhotite, were collected (#74950 and 74951). Analyses show weakly enhanced levels of copper (159 and 219 ppm), and strontium (240 and 254 ppm) in these rocks. Precious metal contents were very low.

These results confirm the observation from "Wasi Ridge", that the bedded pyritic tuffs do not contain anomalous quantities of precious or base metals. No copper mineralization was noted on this traverse, but outcrop is very limited.

The occurrence of a body of syenite, with associated K-feldspar alteration, is very encouraging. Previous work by Canadian Superior Exploration to the west located a similar (probably the same) syenite body, with associated soil geochemical and IP anomalies, and chalcopyrite - K-feldspar mineralized float (Assessment Report 5186). More investigation of this area is required.

D) <u>Southeastern Corner of the Property</u>

One day was spent traversing the area occupied by four low hills in the southeastern corner of the property (Blondie 7, BX 3, and BX 6 claims). Bedrock exposure is limited in this heavily forested region. Previous workers detected a large IP anomaly (Assessment Reports 3879, 4432).

Massive andesitic volcanic rocks (possibly equivalent to the "mafic tuff" unit) underlie the eastern and southeastern parts of this area. Angular float, but no outcrop, of laminated tuff was found on the easternmost hill. A large outcrop of equigranular diorite is present on the northern hill, while the top of the western one is covered with angular syenite rubble.

Two examples of mafic volcanic rock, with less than 1% disseminated pyrite, were located and sampled (#74947 and 74948, Appendix 1). Precious and base metals contents were low. the potassium (K) content of both was anomalous, however, at 0.97% and 0.59% (this analytical leach is very limited for K, but the only higher results from this property were from a copper showing). Sample 74948 also had pyrite in a few rare quartz veinlets.

A strongly limonitic, quartz-clay-(carbonate) zone on the syenite hill was also sampled (#74949). This sample carried no economic mineralization, but was slightly enhanced in Mn (1804 ppm), Zn (130 ppm), and La (13 ppm).

The occurrence of a large IP anomaly and intrusives in this area are considered highly encouraging, and follow up is warranted.

VII GEOCHEMISTRY

i) Sampling and Analytical Methods

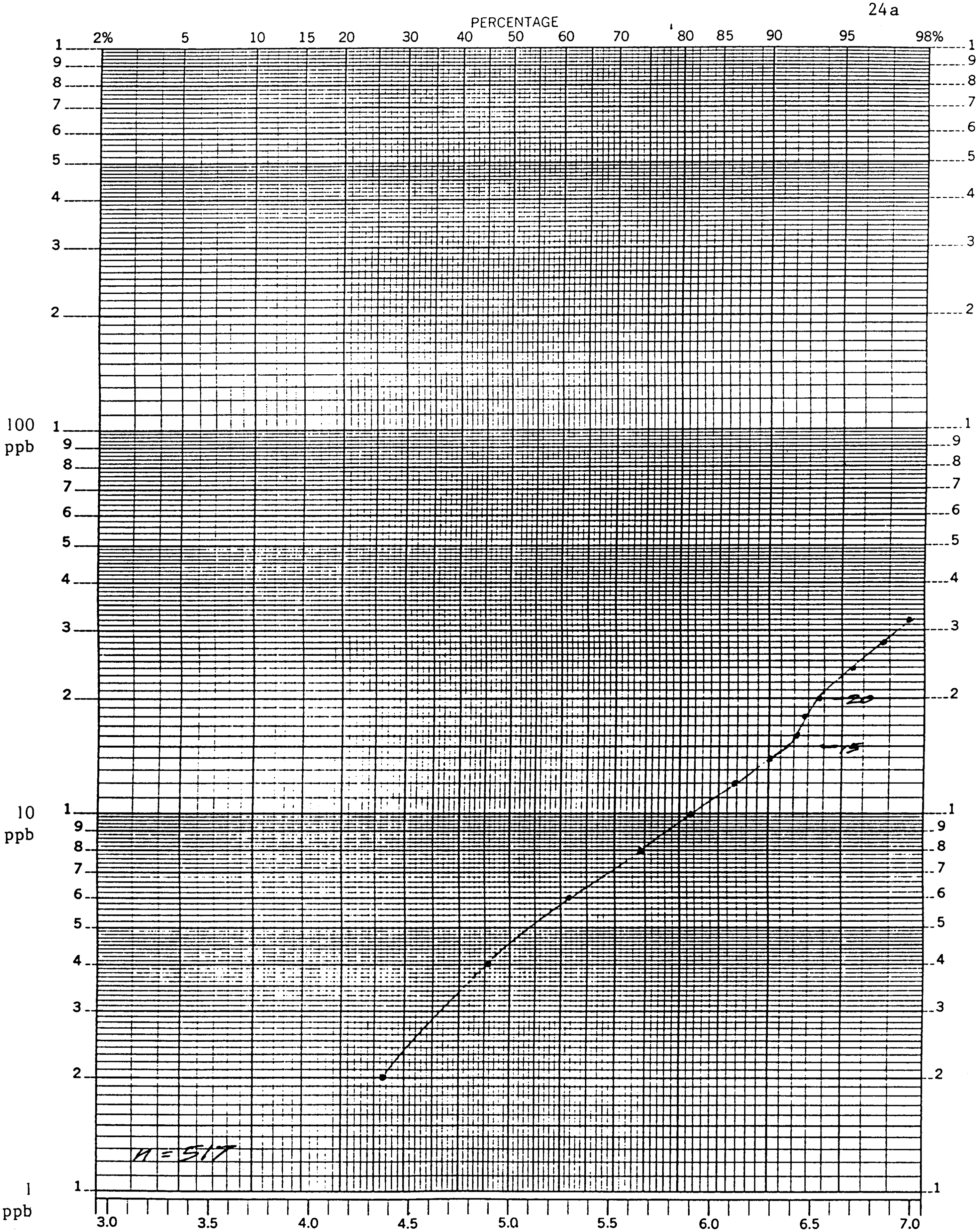
A total of 235 stream silt samples and forty-seven (47) rock samples were collected during the course of 1990 reconnaissance work described in this report. Rock samples consisted of "character" chip samples collected along traverses, and stream silt samples were collected at nominal 200 m to 250 m intervals. Stream silt sample material simply consisted of fine, "active" silts that samplers were able to obtain at sample sites. No pre-concentration of sample material was carried out, and moss mats were not used as a sample medium.

Silt samples were dried and sieved and a -80 mesh fraction was analyzed for Au and Ag by Fire Assay/AA techniques by TerraMin Research Labs Ltd. of Calgary, Alberta. Sample pulps were shipped to Acme Analytical Laboratories Ltd. of Vancouver, B.C. and analyzed for 30 elements including Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, %Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, %Ca, %P, La, Cr, %Ma, Ba, %Ti, B, %Al, %Na, %K, and W by Induction Coupled Plasma analysis. I.C.P. analysis utilizes a 0.500 g sample digested with 3 ml of 3-1-2 $HCl-HNO_3-H_2O$ at 95 deg. C for 1 hour, followed by dilution to 10 ml with H_2O. This leach is only partial for Mn, Fe, Sn, Ca, P, La, Cr, Mg, Ba, Ti, B, and W, and the leach is limited for Na, K, and Al. Consequently, ICP analyses for the above elements (particularly K) are not reliable indicators of alteration, particularly in volcanic rocks, where the effects of K alteration might be more subtle than in intrusive rocks.

ii) Statistical Analysis of Stream Silt Data

For purposes of carrying out a statistical analysis of stream silt geochemical data, results obtained from the 235 samples from the Discovery project claims (this report), were combined with stream silt geochemical analyses of 282 stream silt samples collected from the adjoining HA 1 through 6, and 9 through 11, GRIZ 1 through 10, and DEN 1 through 12 claims owned by Golden Rule Resources Ltd ("Duckling" project).

A cumulative probability graph of Au-in-silt values for the 517 sample population is shown in Figure 6 and cumulative probability for Cu-in-stream silt samples is graphed in Figure 8.



CUMULATIVE PROBABILITY GRAPH

Figure 6

Au-in-Stream Silts

Project BC-38/42 (1990)

The cumulative probability graph for Au-in-stream silts (Figure 6) indicates two overlapping lognormal populations are present with an anomalous threshold of 15 ppb, with definitely anomalous samples (upper population) defined by values of 20 ppb or greater.

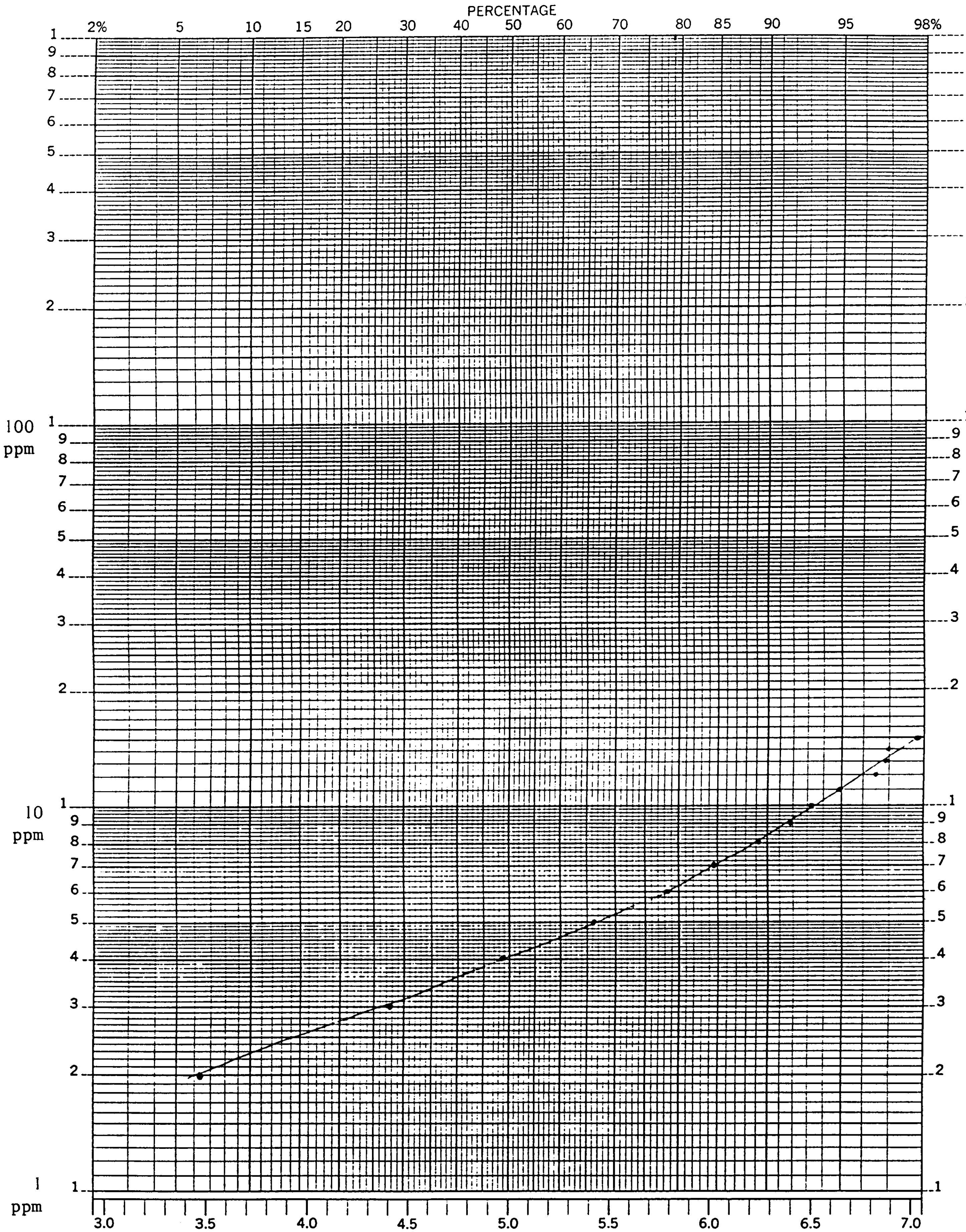
The cumulative probability graph for Cu-in-stream silts (Figure 8) indicates that two overlapping lognormal populations are present with an anomalous threshold of 90 ppm and definitely anomalous samples (upper population) defined by values of 240 ppm Cu and greater. The upper population is relatively large, constituting about 25% of the total sample population. This could indicate a pronounced lithologic influence on sample results, but more likely reflects the broad zones of weak Cu metallization around the various syenite bodies at the property. Partitioning of the two populations suggests that it would be more appropriate to consider a value of 120 ppm as a definitely anomalous threshold value, rather than 240 ppm Figures 9 and 10 are cumulative probability graphs for Cu-in "C" horizon soils (data extracted from BC Assessment Report No. 4522) and Cu-in-"B" horizon soils (data from BC Assessment Report No. 3610) provided here for comparative purposes.

The cumulative probability graph for Mo-in-stream silts (Figure 7) has a weakly defined lower anomalous threshold of 6 ppm, but no upper threshold value can be interpreted. The graph closely approximates a Gaussian lognormal distribution, with the slight deviation from a straight line plot the result of a slightly skewed distribution. Examination of a histogram for Mo-in-stream silts geochemical data (not presented here) indicates small, discrete upper populations at 11 and 12 ppm, and again at 15 and 16 ppm. For purposes of interpreting this data, 7 ppm is regarded as a lower threshold value, and all values greater than or equal to 11 ppm (the 95th percentile) are considered to be definitely anomalous.

Statistical analyses were not done for Ag or As-in-stream silts data which showed very little variation, and are therefore considered not to be useful as geochemical indicators of porphyry type mineralization. The exception is the area of the Blondie 1 and 8 claims, where two northeasterly to easterly flowing tributaries of Discovery Creek display clearly anomalous As-in-stream silts trends.

iii) <u>Results</u>

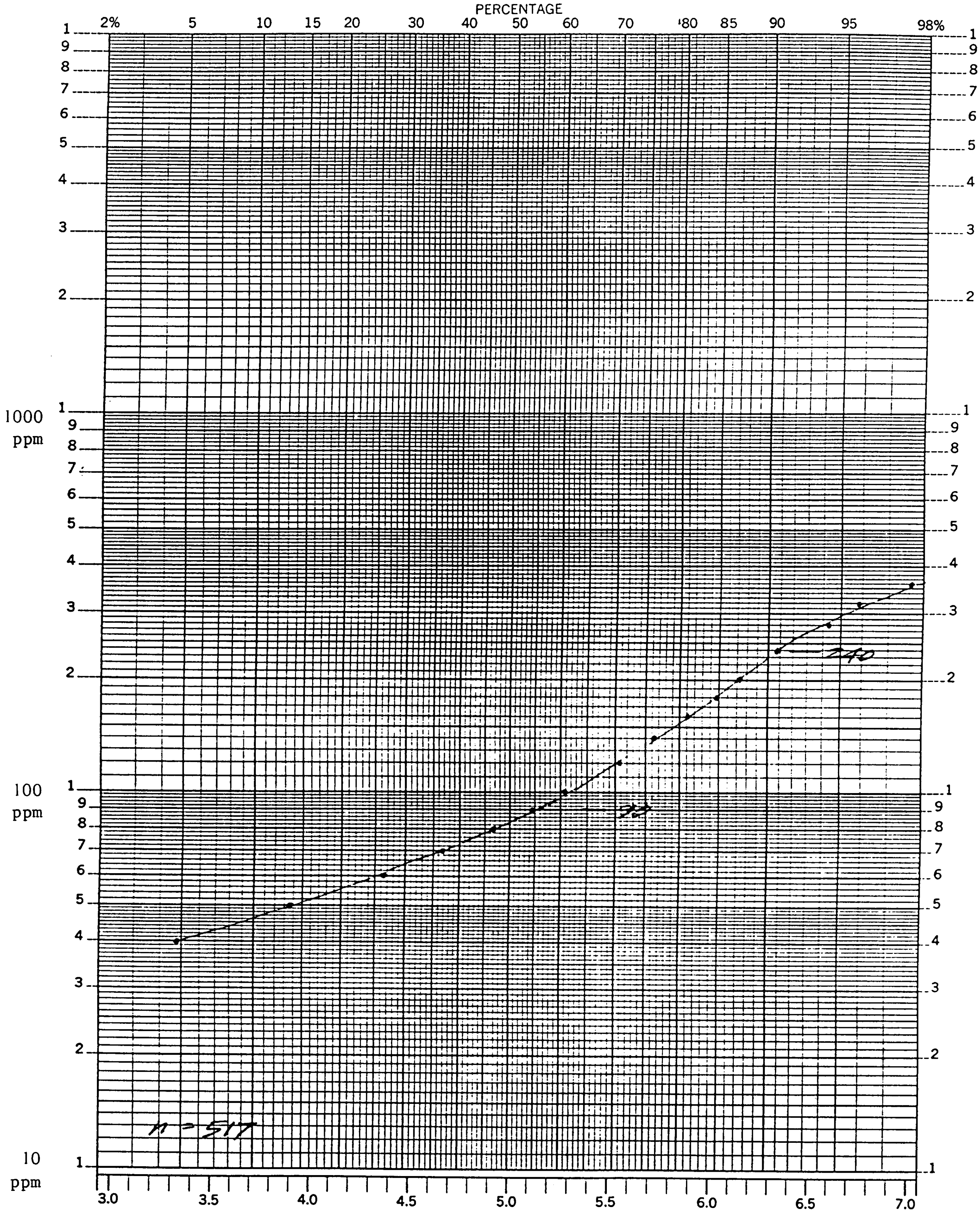
Most of the area encompassed by the Willy 1 through 5, Blondie 1 through 8, and the Ducky 1 and 2 claims are drained by Willy George Creek (informal name) and its tributaries. The west side of the Willy 1 claim is drained by a north flowing branch of Wasi Creek and a number of northeasterly to easterly flowing



CUMULATIVE PROBABILITY GRAPH

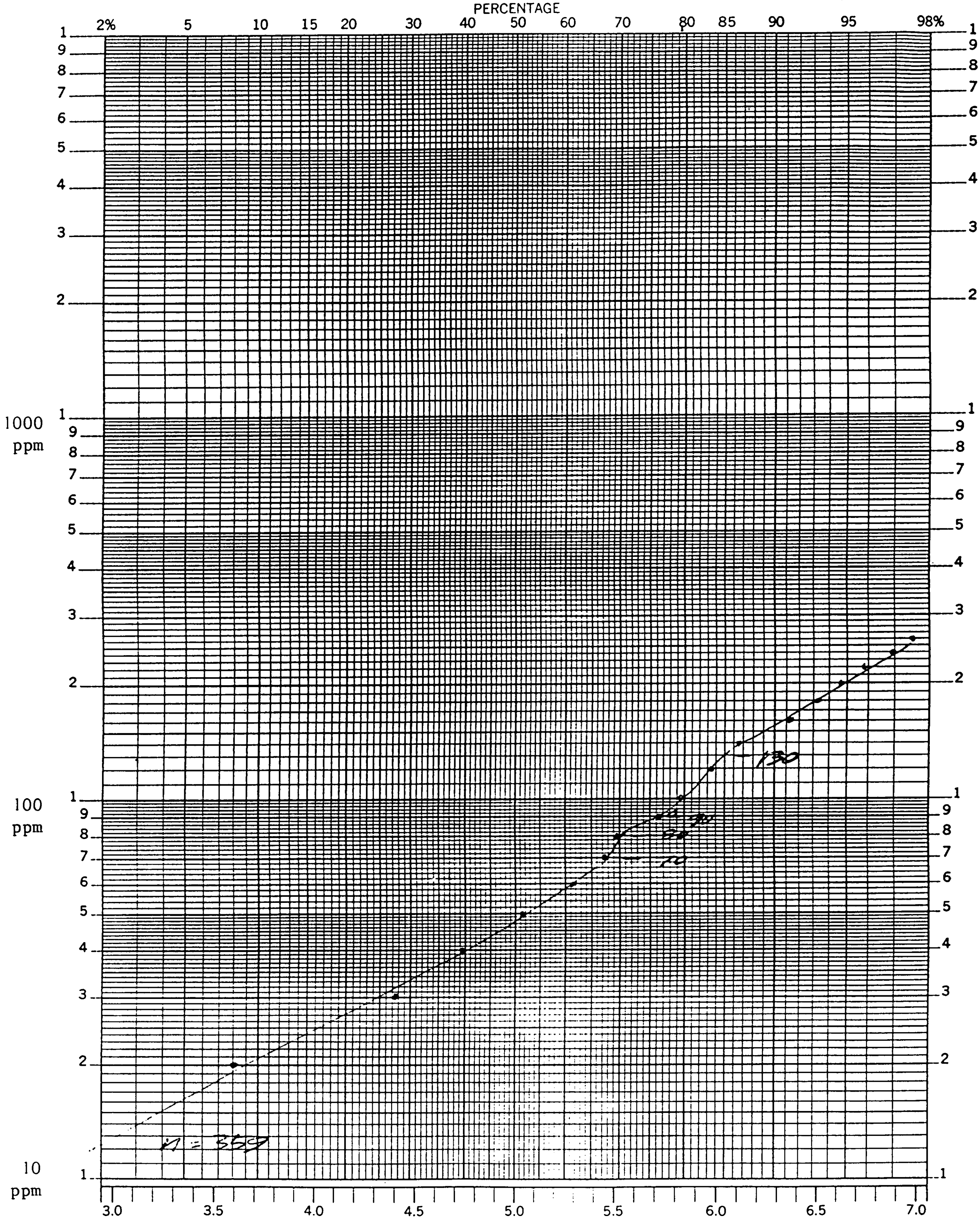
Mo-in-Stream Silts Project BC-38/42 (1990)

Figure 7



CUMULATIVE PROBABILITY GRAPH   Figure 8

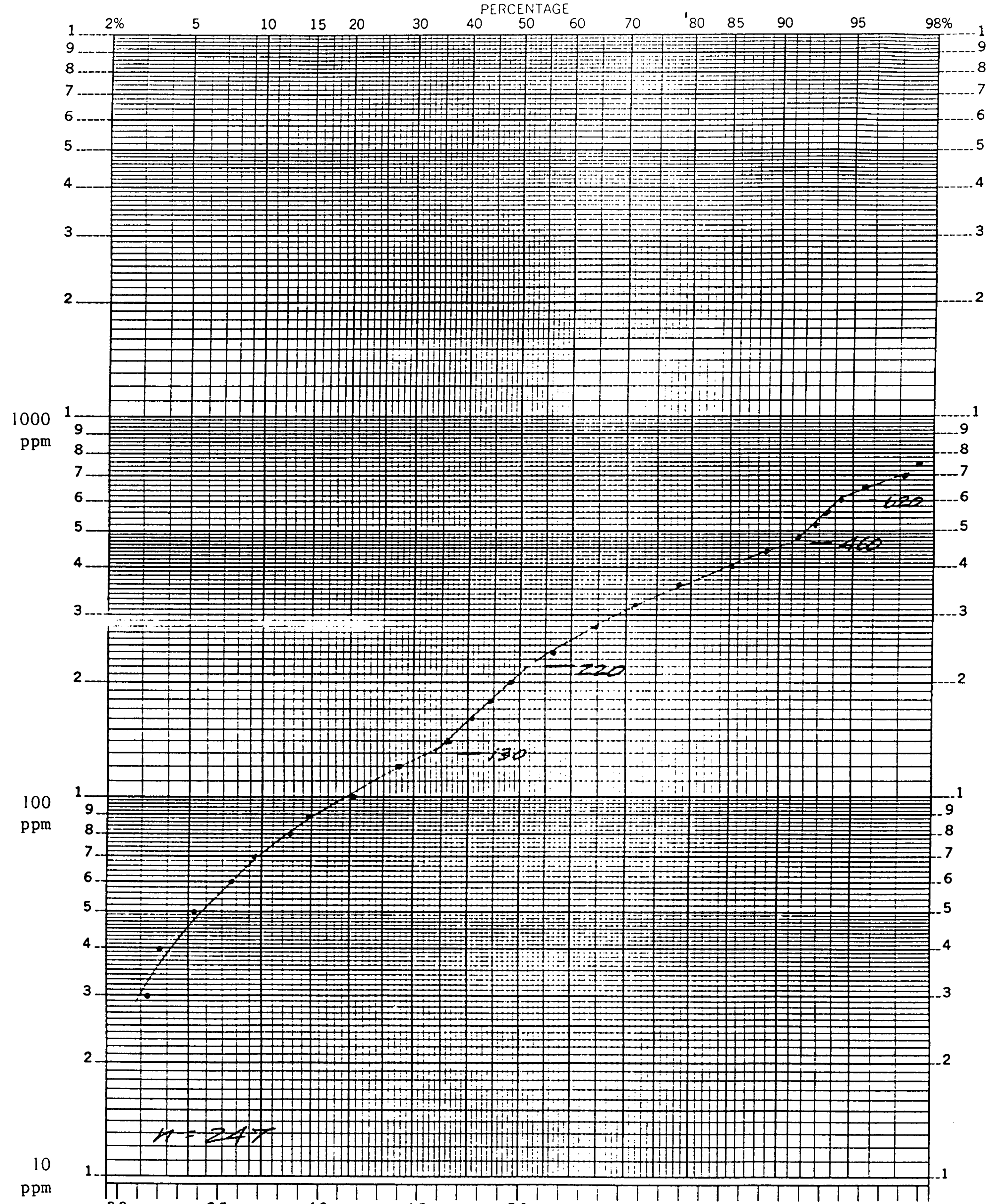
Cu-In-Stream Silts   Project BC-38/42 (1990)



CUMULATIVE PROBABILITY GRAPH

Figure 9

Cu-in-"B" Horizon Soils
(Data extracted from BC Assessment Report No.3610)



CUMULATIVE PROBABILITY GRAPH Figure 10

Cu-in-"C" Horizon Soils

(Data extracted from BC Assessment Report No.4522) tributaries of Discovery Creek drain the east sides of the Willy 1 and 3 claims as well as those portions of the Blondie 1, 2, 4, 5, 7, & 8 claims covering the east side of "Wasi" Ridge (informal name for the 10 km long ridge separating the upper drainage of Willy George Creek and the southward flowing branch of the headwaters of Discovery Creek). The Ducky 3 claim is drained by two westward flowing tributaries of Duckling Creek, each about 3 km in length.

1) Upper Tributaries of Willy George Creek

For purposes of discussing geochemical results, upper Willy George Creek is divided into a "Main Branch" which is the southerly flowing section transecting the Willy 3 and 5 and Blondie 3 claims, and the two western tributaries of the main branch referred to as the "north tributary of upper Willy George Creek" and "south tributary of upper Willy George Creek". The south tributary flows into the main branch in the central part of the Blondie 3 claim and drains a relatively small area, but the north tributary and its several branches (described below) drains a considerably larger area.

A) North Tributary of Upper Willy George Creek

Approximately 500 m upstream from its confluence with the main branch of Willy George Creek, the north tributary of the main branch splits into a north fork and a south fork.

a) North Fork of the North Tributary of Upper Willy George Creek

The north fork and its several branches drain the Willy 2 and 4 claims. Practically all of the stream silt samples collected along the north fork and the three small tributaries that flow into it from the west returned moderately to highly anomalous Cu-in-stream silt values ranging up to 939 ppm Cu. The entire lengths of the northern, central and southern tributaries of the north fork returned strongly anomalous Cu-in-stream silt values, whereas along the north fork itself, the upper 2 km returned strongly anomalous Cu-in-stream silt values, but anomalous response was more moderate along the lower 2 km. There are no associated Au, Ag, Mo, or As anomalous trends, but several samples returned noticeably higher "sub-threshold" Au values (J0-29, 31, 32, and 52 and one sample (J0-44) returned an isolated anomalous value of 66 ppb Au).

Very little in the way of previous exploration (ca 1968-74) was done in this area, although considerable trenching and sampling has been done in the area of the Elizabeth and Dorothy showings (Kennco) located immediately to the west of the Willy 2 and 4 claims.

Reconnaissance geological mapping carried out along the ridges surrounding the basins drained by the north fork located several zones of strong potassic alteration and lesser quartz-chalcopyrite stringers mainly hosted in quartz monzonites and monzodiorites of Phase I of the Hogem Batholith which have been intruded by a variety of Phase II syenitic rocks. Field relationships indicate that a contact zone between Takla Group rocks and a sizable mass of syenite transects the drainage basins of the north fork (mainly in the area of the Willy 4 claim) in overburden covered areas. The coincidence of highly anomalous geochemical results and interesting porphyry type alteration and mineralization justify a high priority for more detailed exploration in this area.

b) South Fork of the North Tributary of Upper Willy George Creek

Geochemical results returned from the south fork are much lower, with only a few samples near the extreme upper end of the drainage returning definitely anomalous Cu-in-stream silt values (sample numbers JO-2, 3, 6, 7, & 8) although above threshold Cu-in-stream silt values do extend for a length of about 1500 m along the drainage (as far downstream as sample number JO-13). There are no associated anomalous Ag, Mo or As trends, but one "sub-threshold" Au value and one anomalous Au value (JO-3 & 4) are associated with the strongest part of the Cu trend and one isolated definitely anomalous value of 140 ppb Au (JO-15) occurs well downstream from the high Cu values, in the vicinity of an area of outcrop along the stream bed. The area around the zone of anomalous Cu-in-stream silt values at the head of the drainage should be prospected more closely as a number of quartz stringers were noted cutting the intrusive rocks at wide intervals. Reconnaissance "base of slope" and "along terrain" or slope parallel geochemical sampling traverses should be carried to better investigate large areas in the central and northern portions of the Ducky 2 claim which are not drained by the south fork.

B) South Tributary of Upper Willy George Creek

Only four stream silt samples were collected along the lower few hundred meters of the south tributary, immediately above its confluence with the main branch of Willy George Creek in the central part of the Blondie 3 claim.

No anomalous values were returned, although Cu-in-stream silt values are all just at or just below the statistically anomalous threshold of 90 ppm Cu, and may be significant in a strictly local context (background Cu-in-stream silt values are 30 to 50 ppm).

2) Main Branch of Willy George Creek

The upper part of the main branch of Willy George Creek is here considered to be the 10 km long southerly and southeasterly flowing stretch, from its headwaters down, which occupies the valley immediately west of "Wasi" Ridge (informal name; see explanation at beginning of "Geochemistry" section). The uppermost 4 km stretch of the main branch is characterized by high "sub-threshold" to weakly anomalous Cu-in-stream silt values, ranging up to 140 ppm Cu, which extend as far downstream as the mouth of the south tributary of upper Willy George Creek (see 1b) above). Downstream from this point, Cu-in-stream silt values are at background levels, averaging about 50 ppm Cu.

There are no obvious lithologic changes along the drainage which could explain the higher Cu concentrations upstream from the mouth of the south tributary. Several small Cu-in-soil anomalies of quite limited extent occur on small soil sampling grids emplaced in the early 1970's by Pyramid Mines Ltd. in the areas of the west sides of the Willy 3 and 5 claims, and minor amounts of malachite bearing quartz float have been found immediately upstream from the confluence of the south tributary and main branch of upper Willy George Creek. Volcanic rocks exposed at different places along the creek are well fractured, silicified, and pyritized. A number of dyke-like intrusives as well as a large magnetic high, which are present along the ridges and slopes of the east side of the main branch, suggest that a sizeable cupola or lobe 1 to 2 km in diameter of the Hogem Batholith is present in this area. Unusual amounts of magnetite were observed in silt trains associated with ground water seeps, areas of intermittent overland flow, and in several of the poorly developed drainages and avalanche chutes along the east side of the main branch of upper Willy George Creek.

The elevated stream silt geochemical results, together with the above described geological and geophysical features of interest justify further exploration of this area. A series of "slope parallel" or "along terrain" geochemical sampling traverses should be carried out on both sides of the upper 4 km of the main branch of Willy George Creek to determine whether or not the high Cu-in-stream silt values have a local mineralized source. Substantial areas of outcrop at higher elevations on the east side of the main branch have not yet been mapped, particularly in the area geophysically indicated as being underlain by an intrusive body (ie/magnetic high east side of Willy 5 claim).

3) Lower Willy George Creek and Western Tributaries

Lower Willy George Creek is here considered to be section of the creek which flows easterly and southeasterly for 1.5 km across the northeast sector of the Blondie 6 claim, commencing at a point immediately south of the south end of "Wasi" Ridge and then flows in a southerly direction for about 3 km subparallel to and only 100 to 200 m west of the Omineca Mine access road (west side of Blondie 7 claim and west boundary of BX 3 claim), and then flows southwesterly for about 2 km (southeast corner of BX 3 claim and west half of BX 4 claim) before entering the northeast corner of a small, 600 m long triangular shaped lake. The creek exits on the southeast corner of the lake and flows in a winding southeasterly direction for about another 3 km before entering the Omineca River at a point about midway between the mouths of Duckling Creek and Discovery Creek.

Two large tributaries flow into lower Willy George Creek from the west. The largest of these, referred to here as "southern tributary of lower Willy George Creek", enters Willy George Creek about 400 m upstream from the point where Willy George Creek flows into the small triangular shaped lake. The smaller or "north tributary of lower Willy George Creek" flows into Willy George Creek approximately 2 km upstream from the mouth of the southern tributary.

A) <u>Lower Willy George Creek - Main Branch</u>

Cu-in-stream silt values along lower Willy George Creek are at background levels, averaging 50 ppm Cu. The only geochemical results of interest in the 1990 stream silt data were returned from a sequence of three samples (RG 108, 110, & 111) collected along the west side of the Blondie 7 claim, which returned Au-in-stream silt values of 12, 48, and 64 ppb respectively. The "sub-threshold" value of 12 ppb Au (RG-108) collected from a small gully draining into Willy George Creek from the east, suggests a local bedrock source of Au mineralization along the steep eastern bank of Willy George Creek. Two small exposures of pyritic cherty tuffs were mapped 200 to 500 m downstream from this area.

B) <u>Northern Tributary of Lower Willy George Creek</u>

The northern tributary of lower Willy George Creek flows mainly in an easterly direction across the northern portions of the BX 1 and 2 claims. Several "sub-threshold" to anomalous Au-in-stream silt values sample numbers DK-1, 4, 5, 11, 14, and 15 (16, 28, 26, 14, 12, & 14 ppb, respectively) defining a weak but statistically significant anomalous trend, mainly along the 1 km long southerly flowing headwaters of this tributary in the north-central part of the BX 1 claim. No significant Ag, Mo, Cu, or As values are associated with these Au values. Approximately 1.5 km downstream at sample site number DK-22, in the northeast sector of the BX 2 claim, a Cu-in-stream silt value of 127 ppm and a Au-in-stream silt value of 36 ppb were returned. The terrain suggests a local bedrock source immediately to the north.

The anomalous Au values along the upper southward flowing 1 km long stretch of this tributary occur along a topographically and aeromagnetically indicated lineament several kilometers in length, which is also aligned along the southerly flowing section of upper Willy George Creek. This area and the area around sample site DK-22 should be carefully prospected and reconnaissance geochemical sampling traverses should be carried out with a view to delineating local bedrock sources of these gold values. Although overburden cover is extensive existing geological and geochemical data (BC Assessment Report No. 5186) indicate that the gold anomalies may be related to the easterly trending (northern) contact zone between a syenite/monzonite boss, and Takla Group volcanic rocks.

C) <u>Southern Tributary of Lower Willy George Creek</u>

Only the upper, southeasterly flowing 3 km of this tributary were sampled (west-central and southwest portions of the BX 1 claim). Extensive swampy sections occur along the easterly flowing section of this stream (south of the south boundary of the BX 1 claim and in the western half of the BX 4 claim), and these sections were not sampled.

Above threshold to highly anomalous Cu-in-stream silt values, ranging from 92 to 998 ppm Cu occur along a 3000 m long section of this drainage (sample numbers RG 1 through 16). Several "sub-threshold" to anomalous Au-in-stream silt values (14 to 26 ppb) are associated with the strongest Cu values at the head of the drainage (RG 1 through 4) and an isolated anomalous Au-in-stream silt value of 28 ppb (sample number RG 18) occurs at the lower end of the anomalous Cu trend. Intervening Au-in-stream silt values (RG 5 through 17) are slightly higher on average (8 to 14 ppb) than background values obtained in other areas of the property (2 to 8 ppb).

Anomalous Mo-in-stream silt values (10 to 12 ppm) are also associated with the strongest part of the anomalous Cu trend (RG 1 through 4). Available geological and geochemical data (BC Assessment Report No.s 3357, 16831) indicate that these anomalous Cu and Au results may be related to the easterly trending (southern) contact zone of a syenite/monzonite boss, and Takla Group volcanic rocks.

The encouraging results in hand plus the tenor of (porphyry type?) Au and Cu mineralization reported from previous exploration programs (BC Assessment Report No.s 3357, 16831) justify a high priority for further exploration is this area.

VIII CONCLUSIONS

The following conclusions are drawn from the discussions presented earlier in this report:

1) The Discovery Creek property occurs in a highly favorable geological setting, similar to the nearby Lorraine, Boundary, and Cat Mountain copper-gold prospects. It covers the same northeast contact of the large syenite body that hosts the Lorraine and Boundary deposits. This claim group also covers satellite intrusions within Takla Group volcanics, east of the Hogem Batholith, a situation similar to Cat Mountain.

2) The property occurs within the Quesnellia stratigraphic-tectonic terrane, covering a portion of the contact between the Hogem Batholith to the west, and Takla Group volcanic and volcaniclastic rocks to the east.

3) Rocks of the Hogem Batholith on the property include quartz monzodiorite and syenite of Upper Triassic to Middle Jurassic age. The contact between these two phases is complicated by bodies of contact metamorphosed mafic rock, and considerable potash feldspar metasomatism. Smaller bodies of syenite, monzodiorite, and diorite intrude the volcanic rocks east and south of the main batholith.

4) Takla Group lithologies (Upper Triassic - Lower Jurassic) are well exposed on a long ridge east of the batholithic contact. A mappable stratigraphy consisting of about 3000 m of mainly andesitic breccias, agglomerates, and massive and bedded tuffs is present. Some areas west and southeast of this ridge are underlain by andesitic flows.

5) The dominant structural trend in the Takla rocks is north-northwesterly. Rocks on the well exposed ridge form a monocline with steep (65 deg. to vertical) westerly dips. Folds have not been recognized. One normal fault was mapped, and more are likely to be present. One 15 km long, north-south topographic lineament is possibly a major normal fault.

6) Intrusive rocks and mafic volcanic flows are accompanied by aeromagnetic highs, with volcaniclastic units displaying a much lower magnetic susceptibility.

7) Copper mineralization was located in two showings in the vicinity of the syenite-quartz monzodiorite contact. One of these returned analyses of 1.30% copper and 0.015 oz/ton gold from a composite grab sample. This showing consists of thin quartz-chalcopyrite-pyrrhotite veinlets sparsely

distributed over a distance of about 150 m; wallrocks demonstrate strong K-feldspar and epidote alteration. The second showing demonstrates malachite, sparsely disseminated in mafic hornfels, grading 0.57% copper and 164 ppb gold.

8) In addition to the above, situations with interesting economic implications were recognized in four other areas:

   i) a 2 m wide hematite-limonite gossan zone near the southwestern property boundary had anomalous contents of copper (630 ppm), silver (5.4 ppm), and gold (60 ppb);

   ii) pyrrhotite-pyrite gossans at intrusive contacts on Wasi ridge (Willy 5 claim) were found to carry anomalous levels of copper, with five samples ranging from 259 ppm to 878 ppm copper;

   iii) a syenite body intruding Takla volcanics in the southern part of the property demonstrates K-feldspar alteration in the vicinity of the contact; previous workers have reported soil geochemical and IP anomalies from this area, as well as chalcopyrite and K-feldspar mineralized float; and

   iv) diorite and syenite intrusions were located within Takla volcanic rocks in the southeastern corner of the property; previous workers have reported an extensive IP anomaly in this region (BX 5, 6, & 7 claims).

9) Mapping and prospecting conducted in the 1990 program were reconnaissance in nature, with only the better exposed ridge tops receiving much attention. Information on the geology of most of this very large property is still incomplete.

10) Interesting Cu/Au-in-stream silt geochemical anomalies occur along Willy George Creek and several of its tributaries in the area of the Willy 2 and 4 claims (north fork of north tributary of upper Willy George Creek), the Willy 3 and 5 claims (upper Willy George Creek), the Blondie 7 claim (lower Willy George Creek), the BX 1 and 2 claims (north tributary of lower Willy George Creek), and the BX 1 claim (southern tributary of lower Willy George Creek).

IX RECOMMENDATIONS

The authors feel that this property has excellent potential for the discovery of porphyry gold-copper deposits. It is recommended that exploration in 1991 be conducted in two separate phases. As the details of Phase II will depend on timely receipt and interpretation of Phase I results, exploration should commence early in the summer season.

i) Phase I

a) Detailed mapping, sampling, and prospecting of the areas of interest identified aobve.

Areas which in particular require more detailed attention include:

- the vicinity of the syenite/quartz monzodiorite contact east of Duckling Creek, and the margins of the batholith in general (Ducky 2 & Willy 4 claims).
- the southern end of Wasi Ridge, particularly lower portions below treeline (Willy 5 claim; parts of Blondie 2, 3 & 4 claims).
- the low hills southeast of the Omineca road (BX 3, BX 6 & Blondie 7 claims). A pre-existing grid in this area could be retrieved for ground control.
- the low country west of the Omineca road, along the southern boundary of the property (BX 1, 2 & 4 claims). It may also be possible to retrieve old grid lines in this area.

b) Surficial geology studies should be undertaken. This should comprise air photo interpretation followed by ground checks. Information on till composition, stratigraphy, and origin should be obtained through field studies.

c) The results of the air photo surficial geology study should be compiled with all of the other available data, in order to select areas for detailed soil geochemistry. The four areas listed under recommendation (i) should all be covered by soil grids.

d) The airborne geophysical data should be carefully reviewed and integrated into the overall interpretation.

e) Detailed magnetic surveys should be undertaken on the BX 5, 6, and 7 claims, which were missed in 1990.

f) The old Noranda grid in the southeastern corner of the present Golden Rule property should be relocated. This would permit exact relocation of their IP anomalies, which have been described in assessment reports (Blondie 4, 5, 7 & BX 6 & 7 claims).

g) The results of the above activities should be compiled, and then employed to direct Phase II exploration.

ii) <u>Phase II</u>

The details of this phase of exploration will depend on Phase I results. Some possible activities are:

- infill/extension of geochemical and geophysical grids
- IP surveys
- trenching or drilling
- ground magnetic surveys in selected areas of the property, based on review of the soil geochemical and other data.

It is anticipated that Phase II activities will definitely be warranted, so that any 1991 budget could include allocations for this work.

Respectfully submitted,

M.Fox, P.Geol.

PROFESSIONAL GEOLOGIST ALBERTA R. D. CRUICKSHANK

GEOLOGICAL ASSOCIATION OF CANADA R. D. CRUICKSHANK

R.D. Cruickshank, FGAC, P.Geol.

January, 1991

91-2-4

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XI CERTIFICATE

I, Roy Douglas Cruickshank, hereby certify that:

1. I reside at 96 Braden Crescent, N.W., Calgary, Alberta, T2L 1N3.

2. I received a B.Sc. (hons) degree in geology from the University of Calgary in 1969, and a M.Sc. degree in geology (metamorphic petrology) from the same institution in 1976.

3. I have practiced my profession as a mineral exploration geologist from 1969 to 1971, and continuously since 1976.

4. I am a fellow of the Geological Association of Canada, and a member of the Association of Professional Engineers, Geologists, and Geophysicists of Alberta.

5. I am a co-author of the report entitled "Geological and Geochemical Report on the Discovery Creek Property (Blondie 1 to 8, BX 1 to 7, Ducky 1 to 3, and Willy 1 to 5 Claims) Omineca Mining Division, British Columbia".

6. This report is based on the references cited in the bibliography, and on field mapping carried out in August and September, 1990.

7. I have no interest, direct or indirect, in the securities of Manson Creek Resources Ltd., nor any of its affiliated companies, nor do I expect to receive any.

91-2-4

R.D.Cruickshank, FGAC, P.Geol.

January, 1991

CERTIFICATE

I, Michael Fox, hereby certify that:

1. I reside at 5008 Varsity Dr., N.W., Calgary, Alberta.

2. I received a B.Sc. in geology from the University of British Columbia in 1974.

3. I have worked in the field of mineral exploration since 1965 and I have practiced my profession as a mineral exploration geologist continuously since 1974.

4. I am a member of the Association of Professional Engineers, Geologists, and Geophysicists of Alberta.

5. I am the co-author of the report entitled "Geological and Geochemical Report on the Discovery Creek Property (Blondie 1 to 8, BX 1 to 7, Ducky 1 to 3, and Willy 1 to 5 Claims), Omineca Mining Division, British Columbia".

6. This report is based on the references cited in the bibliography, and on field mapping carried out in August and September, 1990.

7. I have no interest, direct or indirect, in the securities of Manson Creek Resources Ltd., nor any of its affiliated companies, nor do I expect to receive any.

Michael Fox, P.Geol.

January, 1991

XII COST STATEMENTS

Supervisory Geological Personnel	$ 12,534.50
Support Personnel	4,893.75
Camp Costs	976.50
Field Costs	2,487.21
Helicopter & Fixed Wing Support	24,233.96
Travel Expenses	302.02
Expediting	219.05
Computor Costs	523.13
Geochemical Analyses	4,206.30
Contractor - Geophysical Surveys	61,202.74
Digital Topo-Base	8,235.00
Drafting/Secretarial/Reproduction	900.00
TOTAL:	**$ 122,714.16**

APPENDIX 1

TERRAMIN RESEARCH LABS LTD.
14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
(403) 276-8668

GOLDEN RULE RESOURCES

ANALYTICAL METHOD FOR GOLD AND SILVER

Approximately 1 assay ton of prepared sample is fused with a litharge/flux charge to obtain a lead button. The lead button is cupelled to obtain a prill. The prill is dissolved in nitric/hydrochloric acids (aqua regia), and the resulting solution is analysed by atomic absorption spectroscopy.

TERRAMIN RESEARCH LABS LTD.
14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
(403) 276-8668

GOLDEN RULE RESOURCES

SAMPLE PREPARATION

Soil and sediment samples are dried and sieved to -80 mesh (approx. 200 micron).

Rock Samples:

The entire sample is crushed to approx. 1/8" maximum, and split divided to obtain a representative protion which is pulverized to -200 mesh (approx 90 micron).

APPENDIX 2

ROCK SAMPLE ANALYSES

ROCK SAMPLE DESCRIPTIONS

DISCOVERY CREEK PROJECT
(BC-42)

74919	Intrusive (monzonite) from near contact with tuff. Rusty weathering, carries traces of pyrite or pyrrhotite.
74920	Hornblende monzonite - tuff contact. Sample from large gossan in tuffs. Disseminated pyrite + pyrrhotite less than 1%. Trace chalcopyrite.
74921	Cherty tuff. Carries disseminated pyrrhotite, some pyrite (total less than 1%). Zone runs 50 m along ridge.
74922	Cherty tuff, near contact with monzonite dyke. Less than 1% pyrrhotite with haematite on fractures. Traces of chalcopyrite. Sulphides less than 1 mm in size. Composite grab over 15 m width, perpendicular to contact.
74923	Rubbly exposure of mafic tuff/intrusive contact. Sample of gossanous intrusive. 1% pyrrhotite disseminated and on fractures; trace pyrite cubes.
74924	Silicifed intrusive near mafic tuff contact. Hematitic fractures, less than 1% pyrrhotite + pyrite cubes (disseminated).
74925	Rusty gully in mafic tuff. Rocks in gully show much iron carbonate alteration. Zone strikes 030 Degrees.
74926	Extensive Fe carbonate rubble. No sulphides seen.
74927	Mafic tuff near contact with monzonite dyke; is flinty, siliceous. Thin (1 mm) pyrite veinlets on fractures.
74928	Prominent rusty zone in mafic tuff. Silicified, cherty, carries about 1% disseminated Fe sulphides. Zone dips 45 Degrees W, strikes 160 Degrees, is 4 m wide by 100 m long.
74929	Rubble of flinty, aphanitic (silicifed) rock. Pyrrhotite disseminated and as veinlets less than 1 mm wide.
74930	Mafic/cherty tuff contact. Lots of Fe carbonate; + Fe sulphides in the cherty tuff.

74931	Well-bedded tuff, very rusty. About 2% disseminated pyrite (non-magnetic).
74932	Qz-carbonate shear in agglomerate, 15 cm wide. Alteration extends 50 - 150 cm into wall rock. Sample both shear and wall rock.
74933	Laminated and bedded tuff. Less than 1% fine-grained disseminated pyrrhotite.
74934	Granodiorite. Stockwork of pink K-feldspar veinlets 2 - 15 mm wide. Much epidote in wall rock. Chalcopyrite + much malachite stain, often associated with thin quartz veinlets on fractures, also some disseminated in wall rocks. Associated with pyrrhotite, secondary hematite, and malachite. Copper is present on only a few fractures, in contrast to K-feldspar, which is widespread.
74935	Talus sample. Very fine-grained biotitic, melanocratic rock. Along bottom of cliff of syenite. Malachite stain on fractures and disseminated (less than 1%).
74936	Andesite; massive, dark grey-green. Rusty weathering, due to sparse pyrrhotite veinlets 1-2 mm wide, much less than 1% of rock. trace pyrrhotite + epidote in wall rocks.
74937	Gossan zone, 2 m wide, strikes 125 Degrees. Very light, rock, completely altered to hematite and limonite. Wall rocks are andesite.
74947	Fine-grained andesite or basalt. Nonmagnetic. Less than 1% pyrite cubes disseminated and on fractures. Most outcrop here has less pyrite than this.
74948	Lots of angular rubble of fine-grained basalt. Less than 1% pyrite disseminated and on rare quartz veinlets.
74949	Rubble exposed under fallen trees. Rock very limonitic (probably after iron carbonate), has some vuggy quartz veins. Original lithology difficult to discern - possibly porphyritic syenite.

74950	Cherty, siliceous, fine-grained tuff. Bedded and laminated pyrite and (possibly) pyrrhotite. Sulphides as very fine disseminations and rarely on fractures.
74951	Similar to 74950. Less than 1% fine grained disseminated pyrite.

SILT SAMPLE ANALYSES

SAMPLE DESCRIPTIONS

BC-42

Sample No.	Description
86129	Loc. BX 4 Claim, pit beside Omineca road approximately 1200 m E of Old Hogem road turnoff; feldspar porphyry sill injected into mafic tuff/sedimentary succession; approximately 20% very coarse grained light grey feldspar phenocrysts 5 - 8 mm long in dark grey fine-grained groundmass, very fresh looking; 2 - 3% disseminated, fine-grained euhedral pyrite.
86130	Loc. BX 4 Claim, same location as 86129; strongly silicified, fine-grained to glassy chilled margin of feldspar porphyry sill (?) or recrystallized volcanic hostrock (?) carrying abundant fine-grained disseminated pyrite.
86131	Loc. BX 4 Claim, same location as 86129 strongly epidotized mafic lapilli tuff; 2 - 3% pyrrhotite blebs at contact with feldspar porphyry sill.
86132	Loc. BX 4 Claim, same location as 86129 very fine-grained to aphanitic chilled feldspar porphyry sill or recrystallized volcanic at sill contact.
86133	Loc. BX 4 Claim; same location as 86129 medium grey, brecciated sandy sedimentary bed with angular black argillite clasts subparallel to bedding planes - no sulphides.
86148	Loc. WILLY 1 Claim, near post 5N1W; float in cirque; leucocratic quartz-carbonate material, minor sulphides.
86149	Loc. WILLY 1 Claim, same area as 86148 hematitic, limonitic pyrite-bearing silicified, hornfelsed greenish metasediment - float in cirque.
86150	Loc. WILLY 4 Claim, near post 2S0E; quartz-epidote-sulphide (oxidized) stringers cutting coarse-grained, orange weathering leucosyenite, low to zero mafic content.
86151	Loc. WILLY 4 Claim, same location as 86150 sample is similar to 86150.
86152	Loc. WILLY 4 Claim, near post 3S0E; fine-grained pink syenite, < 1% fine-grained biotite, no sulphides.

86153 Loc. WILLY 4 Claim, near post 1S0E; quartz-epidote-sulphide stringers cutting fine-grained pinkish-orange syenite.

86154 Loc. WILLY 5 Claim, near L.C.P; siliceous, fractured, rusty weathering pyritized volcanic-near leucodiorite contact.

86155 Loc. WILLY 1 Claim, near post 2N0W; fresh looking medium-grained andesite - no sulphides.

86156 Loc. WILLY 1 Claim, near post 4N0W; dark green, fine-grained hornfelsed volcanic, rusty weathering, <1% fine-grained disseminated euhedral pyrite.

86157 Loc. WILLY 1 Claim, near L.C.P.; dark green fresh basalt; no sulphides, no alteration.

86158 Loc. WILLY 1 Claim, near post 0N2W; dense fine-grained andesitic flow cut by carbonate stringers - no sulphides.

86159 Loc. WILLY 3 Claim, near post 0S1W; fresh, fine-grained andesite flow (?) cut by epidote stringers.

86161 Loc. DUCKY 1 Claim, near post 1N0E; well pyritized chilled syenite (?) or feldspar porphyry sill (?) approximately 2% fine-grained disseminated pyrite.

86216 Loc. WILLY 5 Claim, approximately 200 m WNW of L.C.P.; "skarny" siliceous cherty to silty recrystallized metaseds near intrusive contact sediments strike NW, dip steeply NE, limonitic fractures.

86217 Loc. WILLY 5 Claim, same area as 86216; similar to 86216, but a little coarser-grained - looks like a chilled intrusive with abundant pyrite disseminated in a mafic matrix - traces of chalcopyrite.

86218 Loc. WILLY 5 Claim, near L.C.P.; siliceous, rusty weathering hornfelsed metasediments at quartz diorite contact; minor syenite float indicates zone is also cut by syenite dykes/stringers; extremely fine-grained pyrrhotite on fractures and disseminated in the recrystallized material-traces extremely fine-grained chalcopyrite.

86219	Loc. WILLY 5 Claim, same location as 86218; similar to 86218.
86220	Loc. WILLY 5 Claim, near L.C.P; siliceous, light green to medium green, fine to medium-grained skarn or hornfels with 4 - 5 % very fine grained disseminated pyrrhotite and traces of very fine-grained chalcopyrite.

APPENDIX 3

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Golden Rule Resources Ltd. File # 90-4927 Page 1

410 - 1122 - 4th St. S.W., Calgary AB T2R 1M1

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
74919	5	27	2	11	.1	4	6	156	2.00	2	5	ND	1	99	.2	2	2	34	.72	.077	3	80	.35	29	.08	3	1.04	.11	.05	2
74920	3	679	3	30	.7	40	25	215	3.92	4	5	ND	1	69	.3	2	3	60	.97	.052	2	57	.98	38	.14	4	1.70	.13	.04	1
74921	3	878	7	13	.6	14	12	166	2.94	2	5	ND	1	117	.5	2	2	40	1.62	.048	3	37	.36	103	.13	3	2.05	.17	.05	2
74922	10	597	9	7	.3	11	15	106	2.42	2	5	ND	1	79	.2	2	2	31	1.34	.062	3	56	.23	33	.13	3	1.45	.14	.06	1
74923	4	151	2	6	.1	3	7	187	1.87	2	5	ND	1	45	.2	2	2	31	.72	.095	4	55	.24	35	.07	2	.74	.09	.05	2
74924	11	259	4	13	.1	3	8	178	1.83	3	5	ND	1	49	.2	2	2	26	.66	.091	4	59	.22	26	.07	2	.70	.08	.04	1
74925	1	15	11	66	.4	31	15	1359	5.42	5	5	ND	1	90	.2	2	2	48	12.64	.043	4	44	1.11	217	.01	4	.51	.01	.15	1
74926	1	65	4	43	.6	19	16	1024	4.42	9	8	ND	1	81	.2	2	2	55	17.35	.009	2	22	2.05	19	.01	8	.33	.01	.11	1
74927	4	280	8	28	.2	13	18	318	3.90	2	5	ND	1	36	.2	2	2	57	1.25	.082	4	50	.64	68	.17	3	1.66	.14	.20	2
74928	15	163	6	37	.4	36	16	232	4.32	24	5	ND	1	46	.5	6	2	82	.81	.050	5	77	1.08	27	.26	3	1.67	.14	.09	1
74929	3	102	6	49	.6	27	16	502	5.06	4	5	ND	1	48	1.0	3	2	113	1.44	.079	4	67	1.48	20	.31	5	2.55	.16	.05	1
74930	1	38	11	63	.4	35	13	834	3.30	181	8	ND	1	83	.2	3	2	49	7.22	.057	3	53	1.51	130	.01	5	.46	.02	.12	1
74931	8	103	5	46	.4	27	17	502	4.58	3	5	ND	1	8	.5	2	2	117	1.62	.065	5	58	.96	12	.33	4	2.12	.07	.01	1
74932	1	38	5	47	.4	50	18	793	3.47	15	12	ND	1	53	.2	2	2	61	10.98	.021	2	76	2.55	72	.01	5	.54	.01	.06	1
74933	5	95	8	81	.6	36	19	837	5.95	7	5	ND	1	14	.8	6	2	163	1.54	.050	3	67	2.25	12	.34	8	3.19	.05	.03	1
74934	1	13019	22	114	9.4	19	22	936	6.40	9	5	2	1	55	1.6	4	2	253	1.59	.374	17	28	1.78	65	.19	5	1.88	.05	.30	1
74935	1	5757	8	78	4.6	111	73	728	4.14	2	5	ND	1	27	.8	2	2	146	.76	.072	6	164	2.35	167	.24	2	2.06	.14	1.49	1
74936	6	149	8	47	.4	12	12	694	5.20	6	5	ND	1	43	.2	2	2	106	.86	.118	4	46	1.03	43	.17	2	1.82	.15	.72	2
74937	21	630	23	58	5.8	7	55	214	14.44	88	11	ND	1	26	.2	4	4	108	.13	.112	2	82	.38	81	.12	4	.74	.02	.20	1
74938	4	84	6	76	.6	27	15	602	5.24	3	5	ND	1	57	.2	3	2	56	3.53	.069	3	31	1.42	40	.14	2	1.98	.03	.08	1
74939	3	76	6	55	.3	11	14	623	4.46	2	5	ND	1	27	.2	2	2	20	2.80	.054	2	18	1.04	61	.20	2	1.62	.03	.12	1
74940	1	25	11	32	.8	3	6	362	6.01	2	5	ND	1	23	.3	3	2	40	.36	.047	2	29	1.47	49	.40	2	1.47	.02	.10	1
74941	11	7451	4	94	10.3	19	16	795	5.40	7	12	ND	1	43	1.0	3	4	70	8.03	.029	2	91	1.59	52	.05	2	1.72	.01	.19	1
74942	12	115	9	20	.4	25	14	274	4.36	10	5	ND	1	105	.4	2	2	67	1.35	.061	5	45	.40	15	.23	4	1.74	.11	.04	2
74943	2	1113	18	102	.5	7	24	1769	10.71	5	5	ND	4	8	.2	6	3	90	.38	.135	8	27	1.56	79	.01	5	2.98	.01	.20	1
74944	3	235	3	18	.3	19	20	326	3.73	3	5	ND	1	54	.2	2	3	85	.93	.089	3	47	1.06	59	.18	2	1.93	.16	.24	1
74945	3	99	2	10	.2	16	12	127	1.94	5	5	ND	2	30	.2	2	3	39	.49	.063	4	46	.31	257	.18	3	.63	.08	.16	1
74946	1	83	14	77	.5	39	23	1090	5.82	16	7	ND	1	78	.2	4	2	97	6.15	.048	2	81	2.70	21	.10	3	3.24	.02	.05	1
74947	1	78	8	53	.5	18	17	564	3.93	2	5	ND	1	70	.5	3	2	94	1.71	.051	2	42	1.42	233	.27	2	2.46	.21	.97	1
74948	9	31	5	37	.3	23	13	339	3.08	5	5	ND	1	51	.6	2	2	70	1.12	.059	2	64	1.03	43	.19	2	2.21	.26	.59	2
74949	1	5	12	130	.1	8	14	1804	4.62	2	5	ND	6	72	.2	2	2	164	.55	.113	13	21	.09	136	.01	7	.42	.02	.08	1
74950	7	159	7	29	.3	38	21	230	3.53	3	5	ND	1	240	.5	3	3	54	3.11	.072	5	65	.45	45	.14	6	3.22	.30	.10	2
74951	7	219	9	16	.3	37	16	90	2.83	3	5	ND	2	254	.7	4	2	47	2.09	.070	5	58	.35	51	.15	4	2.71	.31	.10	1
74952	1	80	11	32	.6	5	22	223	4.84	6	5	ND	1	22	.5	4	2	81	.53	.044	2	30	1.66	9	.14	2	2.26	.11	.02	1
74953	2	193	7	39	.7	12	20	263	4.38	5	5	ND	1	38	.3	3	2	107	.98	.024	2	47	1.30	10	.14	2	2.47	.18	.02	2
74954	3	186	9	55	.5	9	15	359	4.65	4	5	ND	1	47	.4	2	2	67	.82	.029	2	48	1.49	97	.11	2	3.15	.22	.52	1
STANDARD C	18	61	37	131	7.0	68	32	1052	3.95	40	17	8	39	53	18.5	16	19	56	.46	.095	37	58	.89	181	.08	36	1.89	.07	.13	11

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: PULP

DATE RECEIVED: SEP 27 1990 DATE REPORT MAILED: Oct 5/90. SIGNED BY......... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 [illegible] HAS[illegible] [illegible]GS [illegible] VAN[illegible] ER V[illegible]R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Golden Rule Resources Ltd. File # 90-4718 Page 1

410 - 1122 - 4th St. S.W., Calgary AB T2R 1M1

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
DK-1	2	87	15	84	.7	17	4	139	.70	6	5	ND	1	52	.4	2	2	17	.79	.113	4	44	.37	69	.02	4	1.00	.02	.10	1
DK-2	4	79	4	95	.6	27	18	1618	3.77	5	5	ND	1	85	.5	2	2	91	.88	.101	4	84	.94	91	.07	3	1.69	.03	.14	1
DK-3	5	57	3	75	.3	27	19	2909	3.61	6	5	ND	1	83	.3	2	2	83	.85	.080	2	84	.64	99	.07	4	1.43	.04	.12	1
DK-4	5	69	2	77	.4	25	16	2375	3.53	2	5	ND	1	88	.4	2	2	81	.90	.070	3	81	.58	91	.07	4	1.49	.04	.11	1
DK-5	7	47	2	75	.2	22	16	2698	3.57	2	5	ND	1	92	.6	2	2	81	.85	.063	2	96	.51	92	.10	3	1.26	.06	.14	1
DK-6	5	38	3	58	.1	19	10	723	2.99	2	5	ND	1	128	.2	2	2	88	.69	.060	3	100	.67	56	.10	4	.99	.05	.14	1
DK-7	5	37	2	63	.2	21	10	664	3.19	2	5	ND	1	124	.2	2	2	94	.75	.067	3	113	.73	53	.10	3	1.01	.05	.14	2
DK-8	3	38	3	48	.1	17	10	662	2.82	2	5	ND	1	119	.4	2	2	86	.61	.057	3	81	.63	52	.09	2	.94	.04	.12	2
DK-9	3	35	2	42	.1	15	9	607	2.63	2	5	ND	1	120	.2	2	2	82	.56	.056	3	68	.57	49	.08	2	.84	.04	.12	2
DK-10	6	44	7	56	.3	18	12	1321	3.12	2	5	ND	1	144	.2	2	2	84	.66	.057	3	96	.55	78	.08	3	1.06	.05	.13	1
DK-11	4	36	2	44	.2	16	9	615	2.75	2	5	ND	1	125	.2	2	2	77	.74	.064	2	80	.63	57	.10	3	1.03	.05	.13	2
DK-12	6	42	5	50	.2	17	10	656	3.05	2	5	ND	1	131	.2	2	2	86	.80	.064	3	96	.68	62	.10	2	1.17	.07	.14	2
DK-13	4	38	5	49	.1	16	9	497	2.98	2	5	ND	1	113	.2	2	2	87	.82	.061	2	84	.70	52	.11	3	1.13	.06	.13	2
DK-14	5	35	3	55	.1	20	11	629	4.09	3	5	ND	1	131	.2	2	2	126	1.08	.065	2	126	.77	50	.13	9	1.25	.07	.14	1
DK-15	5	39	4	45	.1	15	10	648	2.87	2	5	ND	1	123	.2	2	2	81	.83	.057	2	85	.67	59	.10	5	1.17	.07	.13	2
DK-16	5	36	2	51	.1	17	10	659	3.15	2	5	ND	1	120	.2	2	2	91	.88	.062	2	91	.70	56	.11	4	1.19	.07	.14	2
DK-17	5	42	2	58	.1	18	11	675	3.27	4	5	ND	1	123	.2	2	2	94	1.00	.066	3	100	.76	56	.11	2	1.27	.07	.13	1
DK-18	6	34	4	48	.3	14	9	615	2.76	2	5	ND	1	130	.2	2	2	76	.78	.056	3	87	.62	63	.10	2	1.12	.07	.13	2
DK-19	3	42	3	44	.1	14	9	478	2.57	6	5	ND	1	81	.2	2	2	70	.64	.050	2	59	.59	39	.08	2	.97	.04	.08	2
DK-20	3	46	3	48	.1	15	9	453	2.78	6	5	ND	1	84	.2	2	2	79	.70	.053	2	58	.66	43	.09	2	1.06	.04	.08	3
DK-21	4	41	2	44	.3	15	9	742	2.72	2	5	ND	1	93	.2	2	2	72	.70	.042	2	63	.60	47	.09	5	1.05	.05	.10	2
DK-22	6	127	9	67	.5	22	13	1344	3.54	2	5	ND	1	134	.2	2	2	88	1.40	.076	5	78	.72	71	.07	5	1.45	.04	.07	1
DK-23	3	65	4	35	.2	19	11	396	2.87	3	5	ND	1	87	.2	2	2	93	.81	.066	3	64	.75	50	.09	3	1.19	.05	.10	1
DK-24	2	59	2	33	.2	18	11	364	2.59	2	5	ND	1	83	.2	2	2	80	.77	.063	2	56	.74	49	.09	2	1.15	.04	.10	1
DK-26	8	81	2	38	.1	5	6	378	2.59	2	5	ND	1	64	.2	2	2	83	.49	.070	5	79	.36	79	.07	2	.81	.05	.12	1
DK-27	5	77	2	42	.1	4	6	359	2.19	2	5	ND	1	55	.2	2	3	68	.48	.080	5	40	.37	64	.06	2	.73	.03	.07	1
DK-28	6	71	2	42	.1	4	6	351	2.00	3	5	ND	1	56	.2	2	2	59	.47	.070	5	54	.35	68	.05	3	.74	.04	.09	2
DK-29	5	72	2	37	.1	4	7	348	3.13	2	5	ND	1	54	.2	2	2	101	.46	.075	5	48	.35	61	.06	2	.71	.04	.08	1
DK-30	11	83	3	40	.3	6	7	411	3.09	2	5	ND	1	75	.2	2	2	95	.56	.083	6	110	.39	92	.08	4	.91	.07	.14	1
DK-31	12	100	4	41	.3	9	10	484	6.29	2	5	ND	1	76	.2	2	3	210	.60	.094	8	132	.41	79	.09	4	.94	.07	.13	2
DK-33	10	47	4	26	.1	9	7	371	2.50	2	5	ND	1	130	.2	2	2	78	.64	.103	6	108	.39	124	.07	2	.82	.08	.16	1
DK-34	5	60	2	31	.2	7	7	300	2.72	2	5	ND	1	69	.2	2	2	87	.60	.109	5	56	.40	56	.07	2	.76	.04	.08	2
DK-35	6	52	4	31	.1	14	11	364	7.29	5	5	ND	1	65	.2	2	3	264	.53	.086	5	111	.33	53	.09	5	.68	.04	.08	2
DK-36	6	63	2	33	.1	8	7	301	2.87	2	5	ND	1	64	.2	2	2	95	.52	.093	4	53	.38	61	.06	2	.72	.03	.06	1
DK-37	5	82	3	44	.1	10	9	360	4.01	2	5	ND	1	72	.2	2	2	135	.62	.116	7	55	.48	72	.08	3	.90	.03	.07	1
DK-38	6	56	2	34	.1	8	7	285	2.58	2	5	ND	1	72	.2	2	2	83	.53	.085	5	63	.38	70	.07	2	.77	.05	.09	2
STANDARD C	19	57	41	131	7.1	71	31	1052	3.98	36	24	7	38	53	18.5	15	22	56	.48	.095	36	55	.93	181	.07	34	1.89	.06	.14	11

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: PULP

DATE RECEIVED: SEP 24 1990 **DATE REPORT MAILED:** Sept 28/90 **SIGNED BY**............D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

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
DK-78	5	85	2	37	.1	17	13	444	3.81	2	5	ND	1	124	.2	2	2	97	.74	.132	6	90	.63	121	.08	2	.62	.04	.15	1
DK-79	5	160	4	62	.1	29	20	698	3.81	3	5	ND	1	149	.2	2	2	92	.79	.147	8	81	1.16	204	.14	3	1.11	.04	.27	1
DK-80	6	66	2	31	.2	20	14	486	6.89	3	5	ND	1	118	.2	2	2	177	.64	.112	6	145	.38	113	.07	5	.54	.05	.13	1
DK-81A	5	105	2	45	.2	24	16	505	5.59	2	5	ND	1	137	.2	5	2	139	.92	.191	9	114	.76	123	.10	4	.73	.04	.16	1
DK-81B	5	76	2	36	.1	17	12	461	4.22	2	5	ND	1	120	.2	2	2	109	.70	.139	7	91	.49	106	.07	3	.56	.04	.13	1
DK-82	5	101	2	44	.1	21	15	541	4.30	2	5	ND	1	125	.2	2	2	106	.69	.132	6	89	.70	137	.09	2	.73	.03	.16	1
DK-83	8	61	2	44	.1	15	10	459	4.84	2	5	ND	1	124	.2	2	2	128	.60	.094	5	131	.33	118	.06	4	.54	.06	.15	1
DK-84	4	96	2	47	.1	17	12	501	3.90	3	5	ND	1	91	.2	2	3	92	.71	.159	12	67	.56	130	.08	2	.77	.03	.14	2
DK-85	6	68	2	29	.1	13	9	431	3.48	2	5	ND	1	112	.2	2	2	91	.56	.095	5	96	.38	112	.06	2	.56	.05	.14	1
DK-86	5	85	2	34	.1	14	10	442	2.53	2	5	ND	1	115	.2	2	2	64	.51	.087	5	67	.51	124	.07	2	.66	.04	.15	1
DK-88	3	165	2	89	.1	39	23	615	4.18	18	5	ND	1	125	.4	3	2	122	1.24	.081	2	65	1.37	67	.18	5	3.54	.04	.06	1
DK-89	2	114	30	144	.3	51	18	512	4.01	10	5	ND	1	65	.9	2	2	105	.97	.076	3	95	1.65	45	.17	4	5.22	.03	.06	1
DK-90	4	101	4	104	.3	42	18	634	3.66	36	5	ND	1	91	.8	2	2	105	1.60	.061	2	83	1.40	46	.16	5	2.85	.08	.07	1
DK-91	4	96	5	101	.3	40	20	725	3.76	37	5	ND	1	84	.8	2	2	110	1.51	.057	3	81	1.39	44	.17	5	2.74	.08	.06	1
DK-92	4	100	6	56	.1	14	13	614	3.92	7	5	ND	1	86	.3	2	2	110	.97	.108	6	40	.79	75	.10	5	1.80	.04	.06	1
DK-93	6	75	4	58	.1	13	12	685	3.31	7	5	ND	1	96	.2	2	2	91	1.15	.095	6	69	.73	69	.11	5	1.70	.06	.07	1
DK-94	5	89	2	55	.2	12	13	719	3.43	10	5	ND	1	92	.2	2	2	96	1.07	.095	5	62	.70	70	.11	5	1.67	.05	.07	1
DK-95	5	90	2	58	.1	11	11	646	3.11	7	5	ND	1	86	.3	2	2	87	.96	.100	7	71	.65	75	.09	4	1.47	.06	.08	1
DK-96	3	84	2	49	.1	12	12	620	4.04	7	5	ND	1	76	.2	2	2	122	.85	.092	6	51	.60	60	.10	5	1.35	.04	.06	1
DK-97	4	74	2	44	.1	11	10	532	3.01	3	5	ND	1	74	.2	2	2	85	.87	.090	4	53	.59	57	.09	4	1.29	.05	.07	1
DK-98	4	89	3	43	.1	11	10	530	3.72	2	5	ND	1	70	.2	2	2	113	.78	.105	6	53	.56	59	.09	3	1.17	.04	.07	1
DK-99	4	82	2	42	.1	11	10	495	3.49	5	5	ND	1	72	.2	2	2	106	.79	.097	7	56	.56	60	.09	4	1.17	.05	.07	1
DK-101	6	83	2	39	.1	25	28	448	2.41	2	5	ND	1	76	.2	2	2	76	.62	.048	3	93	.50	38	.07	3	.92	.05	.11	2
DK-102	5	91	3	41	.1	29	31	619	2.71	2	5	ND	1	90	.2	2	2	81	.67	.058	3	78	.57	45	.07	2	.98	.03	.10	2
DK-103	5	74	2	36	.1	26	29	483	2.51	2	5	ND	1	95	.2	2	2	73	.73	.059	2	104	.63	46	.08	2	1.01	.04	.11	2
DK-105A	3	73	2	41	.1	30	22	419	2.42	4	5	ND	1	80	.2	2	2	71	.71	.056	2	96	.74	47	.08	2	1.03	.04	.12	1
DK-105B	5	89	2	41	.1	30	27	459	2.56	6	5	ND	1	92	.2	2	2	75	.80	.057	2	109	.78	52	.09	3	1.16	.05	.13	1
DK-106	5	84	2	43	.1	31	23	497	2.50	2	5	ND	1	92	.2	2	2	73	.79	.060	3	111	.78	55	.09	3	1.17	.05	.14	2
DK-107	5	84	2	48	.1	33	21	575	2.87	2	5	ND	1	92	.2	2	2	81	.82	.060	3	129	.80	55	.09	3	1.18	.05	.14	2
DK-108	6	78	4	46	.1	32	18	508	2.92	2	5	ND	1	95	.2	2	2	82	.82	.057	3	143	.79	57	.09	2	1.19	.05	.15	2
DK-109	4	68	2	42	.1	26	18	475	2.46	2	5	ND	1	85	.2	2	2	72	.70	.054	3	89	.64	48	.08	2	1.02	.04	.11	1
JDK-1	3	107	2	101	.2	32	22	821	3.58	2	5	ND	1	75	.2	2	2	67	.68	.068	2	73	1.77	76	.10	2	2.21	.03	.08	1
JDK-2	3	65	2	84	.2	24	20	814	3.73	2	5	ND	1	53	.3	2	2	70	.61	.059	2	63	1.92	51	.12	2	2.37	.03	.06	1
JDK-3	3	63	2	85	.2	25	20	773	3.77	2	5	ND	1	54	.3	2	2	71	.64	.057	2	73	1.86	53	.12	2	2.29	.03	.06	1
JDK-4	3	139	2	106	.4	41	27	944	4.46	2	5	ND	1	86	.3	2	3	79	.76	.073	2	98	2.01	88	.12	2	2.75	.03	.09	2
JDK-5	3	57	2	72	.1	22	18	681	3.54	2	5	ND	1	43	.2	2	2	68	.65	.055	2	61	1.76	37	.13	2	2.12	.02	.05	2
STANDARD C	19	59	36	131	6.8	71	31	1052	3.98	37	17	7	38	53	18.4	15	22	56	.47	.093	38	56	.92	181	.07	34	1.89	.06	.14	11

Golden Rule Resources Ltd. FILE # 90-4718

	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
6	2	75	8	86	.1	21	19	844	3.70	2	5	ND	1	56	.2	2	2	73	.81	.055	2	83	1.83	59	.13	3	2.67	.03	.08	1
-7	3	68	7	86	.1	29	25	911	4.15	2	5	ND	1	52	.2	2	2	85	.93	.060	2	95	1.99	56	.15	3	3.00	.03	.06	1
JDK-8	2	48	2	95	.1	37	20	922	4.33	4	5	ND	1	57	.2	2	2	76	.94	.075	2	103	2.05	54	.15	3	3.23	.03	.05	1
JDK-9	2	68	9	88	.1	33	21	980	4.18	7	5	ND	1	58	.2	2	2	83	.88	.059	2	103	2.00	55	.15	6	3.08	.03	.06	1
JDK-11	3	66	15	87	.1	32	24	914	4.34	2	5	ND	1	52	.2	2	2	85	.93	.068	2	104	2.03	51	.15	3	3.01	.02	.05	1
JDK-12	2	77	8	72	.1	40	19	735	3.60	3	5	ND	1	61	.2	2	2	87	1.10	.154	4	126	1.80	50	.11	4	2.30	.02	.08	1
JDK-13	3	74	2	90	.1	31	24	1007	4.09	2	5	ND	1	67	.2	2	2	81	.89	.063	2	108	1.97	77	.14	2	3.10	.03	.07	2
JDK-15	4	72	2	81	.1	27	21	861	4.09	5	5	ND	1	59	.2	2	2	82	1.05	.070	3	127	1.91	62	.16	6	2.96	.04	.08	1
JDK-17	3	95	10	87	.1	43	23	880	4.53	4	5	ND	1	57	.2	2	2	91	.96	.083	3	136	2.05	71	.14	2	3.03	.03	.07	1
JDK-18	3	72	14	78	.1	36	22	798	3.94	4	5	ND	1	52	.2	2	2	78	.84	.068	3	103	1.89	58	.14	5	2.64	.03	.07	1
JDK-19	3	52	2	71	.1	31	20	804	3.79	7	5	ND	1	49	.2	3	2	76	.86	.066	3	96	1.84	53	.14	4	2.52	.03	.06	1
JDK-20	4	57	18	72	.1	37	19	817	4.05	10	5	ND	1	50	.2	2	4	81	.89	.072	3	110	1.93	57	.14	3	2.69	.02	.05	2
JDK-21	3	81	19	85	.1	44	22	828	4.62	7	5	ND	1	58	.2	2	2	93	1.01	.093	3	157	2.01	57	.13	4	2.92	.03	.07	2
DK-23	4	58	4	52	.1	81	23	624	4.12	2	5	ND	1	70	.2	2	2	91	1.04	.109	3	286	2.05	86	.11	7	2.04	.03	.11	3
DK-24	6	86	22	73	.1	89	26	789	4.59	4	5	ND	1	71	.2	2	2	98	1.20	.105	4	285	2.24	84	.13	6	2.70	.04	.11	4
DK-25	6	66	17	75	.3	63	23	754	4.18	9	5	ND	1	64	.2	3	7	89	1.11	.091	4	198	2.12	72	.14	4	2.59	.04	.08	2
DK-26	3	123	2	49	.1	75	25	629	3.56	2	5	ND	1	51	.2	2	8	74	1.17	.055	3	203	2.05	76	.12	5	2.20	.05	.12	2
DK-27	3	67	3	74	.1	55	24	728	4.57	8	5	ND	1	59	.2	2	2	93	1.01	.103	3	208	1.96	54	.12	5	2.39	.03	.07	1
DK-28	4	72	3	71	.1	60	24	694	5.19	8	5	ND	1	73	.2	2	2	107	1.05	.105	4	314	1.89	64	.12	6	2.43	.04	.08	9
DK-29	7	78	2	71	.1	94	24	585	5.77	8	5	ND	1	103	.2	2	2	119	1.08	.100	4	484	2.06	62	.11	5	2.46	.06	.09	21
DK-30	4	69	2	64	.1	55	21	700	3.93	6	5	ND	1	58	.2	2	2	80	.93	.085	3	167	2.00	65	.12	6	2.27	.03	.09	1
DK-31	3	71	3	69	.1	60	23	739	4.21	6	5	ND	1	64	.2	2	2	86	1.04	.100	3	170	2.04	60	.12	5	2.46	.02	.06	1
DK-32	5	72	10	75	.1	70	21	673	4.13	4	5	ND	1	67	.2	2	6	84	1.00	.095	4	208	2.12	70	.12	2	2.55	.03	.08	1
DK-33	3	93	9	70	.1	75	26	680	4.39	3	5	ND	1	79	.2	2	2	87	1.22	.152	4	221	2.12	70	.10	2	2.44	.02	.08	1
DK-34	6	77	4	73	.1	53	21	724	4.18	10	5	ND	1	57	.2	2	2	81	1.06	.082	4	171	1.85	73	.13	2	2.30	.02	.08	3
DK-35	8	62	4	58	.1	42	20	643	3.86	2	5	ND	1	47	.2	2	3	80	1.01	.067	4	137	1.72	66	.14	3	2.05	.03	.08	3
DK-36	10	59	2	52	.2	34	18	578	3.37	4	5	ND	1	44	.2	2	6	70	.80	.065	5	113	1.55	70	.12	4	1.76	.03	.08	1
DK-37	9	96	6	66	.1	53	21	693	4.21	2	5	ND	1	58	.2	3	2	88	1.00	.081	5	165	1.91	73	.13	3	2.20	.03	.10	1
DK-38	8	74	5	60	.1	45	22	640	3.84	6	5	ND	1	57	.2	2	5	83	1.07	.079	5	133	1.71	59	.14	4	2.02	.03	.08	1
DK-39	9	153	2	74	.3	76	28	800	4.61	8	5	ND	1	64	.2	3	3	96	1.16	.085	5	197	2.05	90	.12	3	2.45	.03	.09	5
DK-40	7	68	6	57	.1	34	17	601	3.57	6	5	ND	1	48	.2	2	4	76	.90	.068	5	116	1.60	68	.13	2	1.88	.03	.09	1
JO-1	4	60	11	75	.1	54	18	547	3.06	7	5	ND	1	68	.2	2	2	78	1.44	.078	3	267	1.72	73	.09	2	1.88	.05	.27	1
JO-2	4	203	6	119	.5	56	28	1083	3.96	11	5	ND	1	66	.2	3	2	98	1.58	.097	3	213	1.39	66	.08	5	1.86	.03	.14	2
JO-3	6	158	4	101	.1	60	25	1077	3.84	8	7	ND	1	64	.2	2	2	109	1.42	.088	3	194	1.33	79	.09	5	1.69	.04	.19	1
JO-4	6	109	5	78	.4	49	22	870	2.77	9	5	ND	1	53	.2	2	8	124	1.38	.118	4	205	1.33	72	.06	5	1.86	.02	.07	1
JO-5	3	68	2	38	.1	22	10	541	2.48	10	5	ND	1	81	.2	2	2	92	1.07	.067	5	103	.71	43	.08	6	1.02	.03	.10	1
STANDARD C	18	62	37	132	7.7	73	31	1044	4.01	42	18	8	35	49	18.4	15	20	55	.51	.097	36	59	.90	179	.08	37	1.91	.06	.15	11

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
JO-6	4	146	2	86	.1	45	21	1460	3.69	9	5	ND	1	68	.2	3	2	125	1.02	.090	4	149	1.17	72	.08	2	1.66	.04	.14	1
JO-7	6	158	7	37	.1	31	17	216	1.65	9	5	ND	1	99	.2	3	2	83	.97	.080	4	107	.82	55	.06	2	1.63	.03	.07	1
JO-8	4	145	6	31	.1	29	13	332	3.10	3	5	ND	1	96	.2	2	2	99	.96	.058	3	101	.96	30	.13	3	1.65	.04	.11	1
JO-9	5	122	5	41	.1	24	17	281	2.28	7	5	ND	1	106	.2	2	2	103	1.14	.083	4	97	.73	51	.08	2	1.35	.04	.10	1
JO-10	3	85	3	41	.1	29	23	667	4.12	13	5	ND	1	87	.2	2	2	146	.99	.079	3	107	.86	46	.11	2	1.25	.05	.16	1
JO-11	3	99	3	39	.1	28	19	504	3.82	3	5	ND	1	94	.2	2	2	136	1.03	.075	3	117	.86	53	.11	3	1.35	.05	.15	1
JO-12	3	83	2	37	.1	24	17	470	3.86	9	5	ND	1	95	.2	2	2	143	1.02	.075	3	118	.79	46	.11	5	1.26	.06	.14	1
JO-13	3	78	3	37	.1	22	16	460	3.28	4	5	ND	1	89	.2	2	2	119	.93	.072	3	93	.76	45	.10	2	1.18	.05	.13	1
JO-14	3	48	3	31	.1	12	10	551	2.31	5	5	ND	1	119	.2	2	2	83	.56	.050	4	68	.41	51	.06	3	.73	.04	.10	1
JO-15	3	50	2	25	.1	16	11	420	3.60	5	5	ND	2	128	.2	2	2	147	.75	.049	4	113	.44	47	.08	2	.79	.05	.11	1
JO-16	3	50	4	27	.1	14	10	386	3.09	4	5	ND	2	103	.2	2	2	123	.61	.047	4	84	.44	44	.07	2	.73	.05	.11	1
JO-17	4	53	5	30	.2	16	9	385	2.71	5	5	ND	2	119	.2	3	2	103	.70	.054	4	86	.50	47	.08	3	.82	.06	.13	1
JO-18	4	60	2	31	.2	14	10	453	2.48	2	5	ND	1	99	.2	2	3	91	.61	.048	4	85	.58	50	.08	3	.89	.06	.15	1
JO-19	3	55	4	28	.1	16	10	381	2.80	5	5	ND	1	88	.2	2	2	107	.62	.055	4	76	.51	42	.07	3	.79	.05	.12	1
JO-20	3	50	2	28	.1	16	11	411	3.29	2	5	ND	2	101	.2	2	3	129	.67	.052	4	96	.50	43	.08	2	.80	.06	.13	1
JO-21	3	48	2	25	.1	13	9	342	2.53	4	5	ND	1	113	.2	2	5	96	.68	.046	4	79	.45	45	.08	4	.79	.06	.11	1
JO-22	4	93	2	47	.1	19	13	573	3.37	5	6	ND	1	138	.2	2	2	139	.96	.073	11	113	.69	61	.08	7	1.19	.07	.16	1
JO-23	3	61	2	28	.1	19	13	456	4.27	4	5	ND	2	105	.2	2	2	172	.71	.054	4	116	.57	46	.09	3	.91	.07	.14	1
JO-24	3	46	7	27	.1	12	7	325	1.97	2	5	ND	1	125	.2	2	2	74	.52	.041	4	65	.37	53	.06	3	.72	.05	.11	2
JO-25	3	54	5	25	.1	14	12	415	4.23	7	5	ND	3	115	.2	2	2	174	.77	.051	4	123	.50	50	.09	2	.87	.08	.14	1
JO-26	2	49	2	24	.1	15	10	344	2.66	2	5	ND	1	109	.2	2	3	103	.66	.046	4	75	.45	43	.08	3	.80	.06	.12	1
JO-27	2	53	2	25	.1	16	11	402	3.98	4	5	ND	2	105	.2	2	3	165	.68	.049	4	97	.47	46	.08	2	.82	.06	.12	1
JO-28	5	306	11	75	.2	24	32	1388	5.08	13	5	ND	1	117	.2	2	2	139	1.12	.076	5	63	1.00	62	.10	4	2.53	.05	.12	1
JO-29	2	348	4	48	.1	22	20	653	4.26	11	5	ND	1	157	.2	2	2	124	1.44	.082	4	54	1.08	51	.06	3	2.87	.04	.09	1
JO-30	2	276	3	43	.1	20	26	567	4.57	8	5	ND	1	145	.2	2	5	134	1.31	.084	4	58	.95	63	.07	2	2.14	.04	.09	1
JO-31	3	259	3	46	.1	21	24	664	5.09	10	5	ND	1	158	.2	2	2	158	1.40	.092	5	67	.94	69	.07	4	2.37	.05	.08	1
JO-32	4	220	9	51	.1	19	20	781	4.05	11	5	ND	1	162	.2	2	2	116	1.48	.098	5	73	.83	64	.07	6	2.06	.05	.10	2
JO-33	3	238	6	50	.1	15	14	646	3.45	8	5	ND	1	181	.2	2	4	115	1.05	.078	8	62	.74	111	.08	2	1.69	.04	.08	1
JO-34	3	120	2	46	.1	11	14	757	2.85	4	5	ND	1	127	.2	2	2	110	.82	.067	6	60	.48	86	.06	2	1.07	.04	.08	1
JO-35	3	86	3	33	.1	11	14	688	3.26	8	5	ND	1	127	.2	2	2	129	.74	.057	5	72	.44	85	.07	3	1.00	.06	.09	1
JO-36	3	94	2	33	.1	13	13	545	3.11	5	5	ND	1	117	.2	2	2	120	.82	.061	5	66	.52	74	.08	2	1.11	.06	.10	1
JO-37	3	102	3	33	.1	15	14	549	3.17	3	5	ND	1	109	.2	2	2	122	.81	.062	5	61	.54	67	.08	2	1.12	.05	.09	1
JO-38	5	93	6	29	.1	12	14	569	2.58	7	5	ND	1	131	.2	2	3	95	.80	.054	5	77	.50	81	.08	3	1.12	.06	.12	1
JO-39	4	109	2	26	.2	16	16	387	2.88	4	5	ND	2	115	.2	2	2	114	.80	.057	5	76	.51	67	.09	2	1.08	.07	.13	1
JO-40	4	104	2	28	.2	17	14	431	2.63	5	5	ND	2	117	.2	2	2	104	.77	.056	5	77	.47	68	.08	2	1.06	.07	.13	1
JO-41	4	110	2	29	.2	14	15	415	2.68	5	5	ND	2	110	.2	2	4	104	.76	.056	5	72	.51	67	.08	3	1.11	.07	.14	1
STANDARD C	18	59	36	130	6.9	68	31	1055	3.99	45	18	7	38	53	19.0	15	21	55	.48	.094	36	57	.90	180	.08	34	1.89	.06	.14	11

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
JO-42	5	110	2	28	.1	15	14	414	2.76	2	5	ND	1	112	.2	2	2	109	.70	.057	4	74	.55	68	.08	2	1.07	.07	.14	1
JO-43	5	63	3	37	.1	17	11	398	3.95	2	5	ND	3	103	.2	2	2	162	.68	.054	4	106	.56	51	.09	2	.90	.08	.14	1
JO-44	5	73	2	35	.1	18	13	428	4.24	4	5	ND	3	108	.2	2	2	177	.66	.055	5	108	.53	56	.09	5	.91	.07	.14	2
JO-45	5	72	2	35	.1	18	14	451	5.22	2	5	ND	2	105	.2	2	2	222	.77	.056	4	129	.55	52	.10	3	.95	.08	.13	2
JO-46	4	66	2	30	.1	17	12	392	3.98	4	5	ND	2	104	.2	2	2	164	.69	.053	3	101	.52	52	.09	2	.90	.07	.13	1
JO-47	5	71	2	33	.3	17	12	426	4.60	2	5	ND	3	103	.2	2	2	189	.69	.055	3	111	.56	55	.09	3	.93	.08	.14	1
JO-48	4	67	4	32	.1	16	12	400	4.27	2	5	ND	3	100	.2	2	2	178	.68	.052	3	97	.51	55	.09	2	.88	.07	.13	1
JO-49	10	308	9	74	.1	18	13	1592	4.25	8	5	ND	1	125	.2	2	2	153	.82	.147	9	68	.68	100	.06	2	2.00	.04	.09	1
JO-50	6	266	8	62	.2	14	11	1046	4.30	5	5	ND	1	164	.2	2	2	157	.75	.129	7	65	.60	72	.06	3	1.88	.05	.08	1
JO-51	8	939	5	71	.4	11	9	1071	2.81	6	35	ND	1	183	.2	2	2	102	1.41	.140	22	80	.49	109	.04	6	1.47	.05	.08	1
JO-52	6	165	2	35	.2	10	9	639	2.41	6	21	ND	1	199	.2	2	2	82	1.74	.099	7	77	.49	84	.05	4	1.50	.06	.06	2
JO-53	8	187	3	35	.1	8	16	1304	3.08	3	5	ND	1	273	.2	2	2	99	.90	.077	5	64	.36	112	.05	2	1.50	.06	.10	1
JO-54	6	411	4	66	.3	22	17	1429	3.26	3	14	ND	1	133	.2	2	2	113	1.43	.137	11	90	.92	116	.09	2	2.04	.05	.16	1
JO-55	6	267	2	44	.3	11	11	634	3.38	2	9	ND	1	196	.2	2	2	116	1.13	.100	7	81	.51	91	.05	4	1.43	.05	.10	1
JO-56	4	233	2	52	.3	16	16	770	3.30	3	8	ND	1	157	.2	2	2	113	1.32	.095	6	68	.68	122	.06	4	1.63	.04	.08	2
JO-57	6	76	2	50	.2	10	8	688	3.09	2	13	ND	1	103	.2	2	2	148	.61	.054	9	101	.40	87	.06	3	.77	.07	.11	2
JO-58	7	73	2	50	.1	10	7	629	2.56	2	9	ND	1	115	.2	2	2	124	.56	.053	10	103	.38	73	.06	2	.70	.06	.12	1
JO-59	4	164	2	72	.2	13	9	1006	2.68	2	29	ND	1	174	.2	2	2	125	.89	.092	24	82	.57	67	.05	2	1.06	.05	.12	1
JO-60	4	175	3	72	.5	15	12	1488	2.88	2	27	ND	1	136	.2	2	2	131	.76	.086	25	85	.61	80	.06	3	1.13	.05	.11	1
JO-61	5	194	4	66	.1	18	15	1636	3.21	2	15	ND	1	103	.2	2	2	149	.73	.080	10	93	.83	66	.08	2	1.28	.07	.15	1
JO-62	9	140	4	79	.1	24	47	6086	3.57	7	5	ND	1	70	.5	2	2	179	.77	.158	8	101	.27	169	.04	3	1.97	.04	.11	1
JO-63	3	300	2	23	.1	21	25	325	4.31	2	5	ND	1	159	.2	2	2	146	.71	.119	5	56	1.23	73	.18	2	2.44	.04	.33	1
JO-64	3	326	2	46	.2	26	30	497	4.29	4	7	ND	1	118	.2	2	2	168	.86	.115	3	79	1.28	85	.15	2	2.00	.05	.32	1
JO-65	2	342	2	41	.1	27	25	451	4.22	2	5	ND	1	83	.2	2	2	155	.64	.099	4	65	1.21	87	.15	3	2.02	.05	.23	1
JO-66	4	505	2	46	.1	36	52	526	4.74	2	7	ND	1	99	.2	2	2	197	.83	.098	5	96	1.13	67	.14	2	1.70	.07	.27	1
JO-67	3	355	2	50	.3	36	60	552	5.07	6	8	ND	1	84	.2	2	2	223	.88	.104	5	91	1.07	61	.12	3	1.51	.05	.27	1
JO-68	3	274	2	37	.2	29	34	386	3.78	2	5	ND	1	94	.2	2	2	154	.74	.083	5	64	.87	59	.12	2	1.37	.05	.21	1
JO-69	5	244	2	36	.1	30	32	395	4.90	3	5	ND	1	87	.2	2	3	209	.87	.082	4	125	.84	54	.12	2	1.33	.09	.19	1
JO-70	3	226	2	36	.1	27	29	358	3.52	2	5	ND	1	90	.2	2	2	144	.76	.081	3	64	.77	53	.10	2	1.24	.06	.18	1
JO-71	3	220	2	40	.1	27	30	400	4.01	2	5	ND	1	85	.2	2	2	168	.73	.081	5	72	.79	55	.11	4	1.25	.06	.19	1
JO-72	4	189	2	48	.1	22	22	605	3.38	2	5	ND	1	102	.2	2	2	141	.83	.087	7	77	.92	62	.11	2	1.31	.07	.18	2
JO-73	3	168	2	34	.1	21	22	376	3.20	2	5	ND	2	92	.2	2	2	133	.67	.068	4	67	.62	51	.09	2	1.07	.06	.15	1
JO-74	4	155	3	38	.3	22	23	443	4.95	2	5	ND	2	89	.2	2	2	216	.72	.067	4	102	.58	48	.09	2	1.03	.07	.15	1
JO-75	5	81	2	48	.2	14	9	847	2.58	2	9	ND	1	110	.2	2	2	114	.65	.052	11	88	.41	50	.06	2	.92	.06	.10	1
JO-76	5	51	2	35	.1	10	7	703	2.31	2	5	ND	1	94	.2	2	2	102	.44	.039	6	75	.28	44	.06	2	.70	.06	.10	1
JO-77	15	443	2	63	.3	41	72	912	5.49	12	5	ND	1	252	.2	3	2	140	1.72	.101	6	58	1.23	77	.10	4	4.94	.04	.15	1
STANDARD C	18	60	37	131	6.7	70	31	1052	3.93	36	15	7	40	53	18.6	15	19	59	.47	.095	40	57	.92	181	.07	36	1.89	.06	.14	11

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
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm
JO-78	12	321	3	69	.2	29	72	827	4.96	7	5	ND	1	179	.5	4	2	127	1.73	.088	2	67	1.27	59	.15	4	4.01	.06	.12	1
JO-79	11	356	2	68	.4	29	52	590	4.86	12	5	ND	1	209	.3	6	2	124	1.73	.098	3	59	1.21	65	.12	4	4.41	.05	.14	1
JO-80	7	125	7	86	.3	33	39	3549	4.81	18	5	ND	1	90	.6	5	5	128	.93	.084	5	92	1.11	186	.10	3	3.42	.04	.12	1
JO-81	4	115	2	55	.2	27	20	712	4.02	2	5	ND	1	95	.3	2	2	114	1.20	.076	2	82	1.36	70	.19	2	2.43	.08	.11	1
JO-82	4	102	2	49	.2	27	22	854	3.86	2	5	ND	1	96	.2	2	2	107	1.03	.072	2	66	1.37	64	.18	2	2.32	.06	.10	2
JO-83	3	88	2	52	.2	33	21	852	3.81	2	5	ND	1	87	.2	2	2	101	1.02	.071	2	70	1.48	55	.19	3	2.35	.06	.09	1
JO-84	3	86	9	48	.3	31	20	780	3.76	2	5	ND	1	92	.2	2	2	103	1.07	.070	2	72	1.44	57	.19	2	2.29	.07	.10	1
JO-85	3	88	2	49	.2	32	21	898	3.82	2	5	ND	1	93	.2	2	2	102	1.03	.071	2	74	1.44	63	.18	2	2.36	.07	.10	1
JO-86	3	91	3	46	.1	27	20	781	3.71	2	5	ND	1	95	.2	2	2	106	1.12	.070	2	67	1.36	63	.18	2	2.28	.07	.10	1
JO-87	4	92	3	44	.1	27	19	691	3.77	2	5	ND	1	101	.2	2	2	109	1.20	.070	2	77	1.31	64	.17	2	2.21	.08	.11	2
JO-88	4	102	3	54	.2	28	21	814	4.12	2	5	ND	1	103	.2	2	2	119	1.22	.069	2	82	1.33	66	.17	2	2.32	.08	.11	1
JO-89	4	168	2	80	.6	19	12	911	1.83	2	5	ND	1	124	.6	2	2	56	3.37	.119	4	119	.57	59	.03	8	1.71	.03	.05	1
JO-90	5	101	3	44	.1	24	19	785	3.56	2	5	ND	1	118	.2	2	2	107	1.25	.069	3	78	1.21	69	.16	2	2.19	.08	.11	2
JO-91	4	98	3	46	.1	25	17	951	3.76	16	5	ND	1	104	.3	2	2	112	.99	.078	3	89	1.09	71	.13	2	2.18	.07	.10	1
JO-92	3	87	2	44	.1	24	18	695	3.51	2	5	ND	1	106	.2	2	2	99	1.15	.067	2	72	1.24	66	.16	2	2.12	.08	.10	1
JO-93	2	91	5	48	.1	21	17	716	3.44	11	5	ND	1	104	.3	2	2	94	1.06	.070	2	50	1.21	66	.15	2	2.18	.07	.08	1
JO-94	6	116	7	67	.2	17	15	709	3.86	62	5	ND	1	150	.4	4	5	68	1.08	.089	3	71	1.07	155	.07	3	3.16	.07	.12	1
JO-95	3	119	2	51	.1	21	16	629	3.50	11	5	ND	1	113	.2	2	2	92	1.13	.080	2	60	1.14	77	.11	3	2.24	.05	.09	2
JO-96	4	109	2	45	.1	20	15	583	3.56	15	5	ND	1	110	.3	2	2	89	1.09	.072	2	59	1.21	85	.13	2	2.36	.07	.09	1
JO-97	4	107	2	49	.1	21	16	606	3.67	12	5	ND	1	121	.2	2	2	92	1.10	.069	2	63	1.21	81	.13	2	2.35	.07	.09	1
JO-98	3	89	5	48	.1	18	14	583	3.38	18	5	ND	1	108	.2	2	2	85	1.05	.073	2	52	1.23	76	.14	3	2.34	.08	.09	1
JO-99	3	96	2	45	.1	20	16	552	3.61	8	5	ND	1	102	.2	2	2	90	1.09	.070	2	55	1.20	66	.13	2	2.19	.07	.09	1
JO-100	3	75	4	34	.1	17	14	434	4.51	2	11	ND	10	91	.2	2	3	189	.67	.056	3	89	.56	48	.09	2	.97	.05	.10	1
JO-101	3	101	5	46	.2	23	17	575	6.50	2	5	ND	1	85	.4	3	3	271	.83	.080	4	116	.84	58	.11	2	1.28	.07	.15	1
JO-102	3	71	6	28	.3	14	11	401	2.43	2	5	ND	1	113	.2	2	2	88	.65	.050	3	57	.58	64	.08	2	1.10	.05	.10	2
JO-103	4	140	5	51	.2	24	18	549	4.08	2	5	ND	1	100	.2	2	2	146	.95	.090	5	88	1.19	81	.13	2	1.82	.08	.18	2
JO-104	4	107	2	41	.1	20	15	440	3.89	2	5	ND	1	92	.3	2	2	149	.88	.077	5	87	.93	64	.12	2	1.49	.08	.14	1
JO-105	5	76	2	30	.1	16	12	417	2.70	2	5	ND	1	109	.2	2	2	103	.79	.056	3	73	.66	61	.10	2	1.24	.07	.11	1
JO-106	4	99	10	41	.1	20	16	497	5.21	2	5	ND	1	96	.2	2	2	206	.93	.084	4	110	.86	60	.11	2	1.40	.08	.13	2
JO-107	3	61	2	27	.1	14	10	409	2.51	2	5	ND	1	98	.2	2	2	91	.76	.053	2	61	.56	49	.09	2	1.05	.05	.09	1
JO-108	3	73	3	30	.1	19	12	421	3.34	2	5	ND	1	91	.3	2	2	121	.88	.071	3	82	.72	53	.10	3	1.19	.07	.12	1
JO-109	3	75	2	40	.1	26	14	489	3.26	2	5	ND	1	88	.2	2	2	104	.90	.069	2	107	.95	62	.11	2	1.29	.06	.18	2
JO-110	5	82	5	43	.3	30	15	518	4.17	2	5	ND	1	88	.2	2	2	129	.98	.070	2	161	1.05	64	.12	2	1.37	.08	.20	2
JO-111	5	91	7	48	.2	33	17	621	3.89	2	5	ND	1	90	.2	2	2	117	.97	.071	2	150	1.14	73	.11	4	1.50	.07	.22	2
JO-112	4	77	5	40	.1	28	14	515	3.40	2	5	ND	1	86	.2	2	2	109	.97	.070	2	123	1.02	60	.12	2	1.33	.07	.20	1
JO-113	7	127	3	44	.1	3	8	612	3.39	2	5	ND	1	35	.2	2	3	87	.42	.084	6	58	.50	91	.05	4	1.09	.04	.09	2
STANDARD C	19	59	38	131	6.9	69	31	1049	3.95	37	23	7	39	53	18.3	15	22	57	.46	.094	38	56	.91	181	.07	35	1.89	.06	.14	11

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
JRG-91	10	119	2	62	.4	16	19	611	3.10	5	5	ND	2	89	.2	2	2	59	.70	.068	4	121	1.01	182	.09	2	1.73	.06	.14	1
JRG-92	7	39	3	39	.1	8	11	469	1.76	2	5	ND	1	70	.2	2	2	34	.38	.045	3	80	.53	107	.06	2	.89	.04	.07	2
JRG-93	5	153	2	59	.3	17	22	649	3.30	3	5	ND	1	88	.2	2	2	62	.67	.075	4	66	1.11	181	.09	2	1.77	.04	.13	1
JRG-94	10	60	2	45	.1	12	15	633	2.21	2	5	ND	1	81	.2	2	2	42	.47	.047	4	123	.71	150	.07	2	1.22	.05	.09	2
JRG-96	6	104	3	55	.3	14	17	568	2.95	3	5	ND	1	90	.2	2	2	55	.59	.068	4	77	.98	194	.08	2	1.59	.04	.10	1
JRG-97	8	30	2	36	.1	9	10	461	1.86	2	5	ND	1	66	.2	2	2	35	.37	.038	3	96	.66	103	.06	2	1.02	.04	.06	1
JRG-98	5	40	2	40	.1	10	9	365	2.00	2	5	ND	1	62	.2	2	2	38	.40	.043	3	66	.72	117	.06	2	1.05	.03	.06	1
RG-1	12	218	19	150	.4	9	10	706	3.15	4	5	ND	1	155	1.0	2	2	75	.99	.071	3	52	.70	42	.07	5	1.78	.04	.11	2
RG-2	10	998	4	100	1.3	14	17	716	3.24	5	5	ND	1	149	.2	2	2	77	.94	.092	3	77	1.00	36	.10	4	1.79	.05	.13	1
RG-3	11	354	28	130	.5	9	15	789	3.20	4	5	ND	1	226	.5	2	2	79	1.14	.093	2	56	.98	37	.10	3	2.15	.05	.15	1
RG-4	7	264	19	110	.4	8	13	670	2.75	6	5	ND	1	251	.4	2	2	67	1.35	.082	2	43	.85	40	.08	2	2.46	.06	.13	1
RG-5	8	227	12	112	.3	9	12	660	3.09	5	5	ND	1	216	.2	2	2	77	1.17	.090	3	68	.88	43	.11	2	2.02	.07	.14	1
RG-6	7	137	6	90	.2	8	11	612	3.11	3	5	ND	1	177	.2	2	2	81	1.01	.088	3	65	.78	42	.11	3	1.60	.06	.13	1
RG-7	6	154	3	87	.2	8	10	590	2.79	3	5	ND	1	174	.2	2	2	70	.94	.083	3	46	.79	43	.09	3	1.64	.05	.11	1
RG-8	6	160	3	92	.3	10	11	613	2.80	3	5	ND	1	173	.2	2	2	69	.97	.084	3	51	.85	48	.09	3	1.73	.05	.12	1
RG-9	6	111	4	73	.3	11	10	550	3.08	4	5	ND	1	149	.2	2	2	78	.90	.085	3	73	.81	42	.11	2	1.41	.05	.13	1
RG-10	5	122	2	80	.2	16	11	550	2.99	3	5	ND	1	138	.2	2	2	70	.87	.087	2	74	1.02	49	.10	2	1.51	.04	.12	1
RG-11	5	97	3	75	.1	13	10	548	2.83	2	5	ND	1	136	.2	2	2	69	.83	.086	2	67	.92	46	.10	3	1.39	.05	.13	1
RG-12	4	121	2	75	.3	15	11	505	2.90	5	5	ND	1	125	.2	2	2	68	.78	.083	3	62	.92	46	.08	3	1.33	.03	.11	1
RG-13	5	109	3	68	.1	12	10	535	2.68	2	5	ND	1	123	.2	2	2	65	.76	.081	2	51	.86	44	.10	2	1.31	.04	.11	1
RG-14	6	103	3	69	.2	14	11	518	2.93	3	5	ND	1	121	.2	2	2	71	.77	.081	2	68	.87	45	.10	2	1.27	.04	.12	1
RG-15	5	102	3	67	.1	13	11	538	2.84	3	5	ND	1	114	.2	2	3	68	.73	.078	3	56	.87	44	.09	2	1.26	.03	.11	1
RG-16	5	92	2	62	.1	13	10	519	2.70	2	5	ND	1	111	.2	2	2	67	.74	.080	3	62	.85	46	.10	2	1.20	.04	.12	1
RG-17	6	89	3	68	.1	12	10	534	2.71	2	5	ND	1	112	.2	2	2	67	.76	.081	3	65	.85	46	.10	2	1.20	.04	.12	1
RG-18	5	71	2	58	.1	12	9	489	2.73	2	5	ND	1	105	.2	2	2	68	.73	.079	3	72	.83	44	.11	3	1.09	.05	.13	1
RG-19	5	71	3	58	.1	12	9	493	2.83	2	5	ND	1	109	.2	2	2	71	.75	.079	4	71	.84	44	.11	3	1.10	.04	.13	1
RG-20	6	82	2	59	.1	13	9	517	2.72	2	5	ND	1	107	.2	2	2	69	.74	.082	4	66	.86	49	.11	2	1.22	.05	.13	1
RG-21	4	76	2	34	.1	17	8	354	4.72	2	5	ND	3	45	.2	2	2	196	.52	.102	8	97	.50	56	.10	4	.78	.04	.06	1
RG-22	4	69	2	38	.1	10	6	320	2.70	2	5	ND	3	50	.2	2	3	79	.59	.106	7	63	.55	53	.07	5	.83	.05	.07	2
RG-23	4	62	2	36	.1	10	6	289	2.73	2	5	ND	2	43	.2	2	2	93	.50	.094	7	56	.48	48	.06	4	.72	.04	.06	1
RG-24	4	71	2	37	.1	10	6	291	2.38	2	5	ND	2	50	.2	2	2	72	.51	.092	6	55	.53	60	.07	4	.82	.04	.07	1
RG-25	4	102	2	38	.1	5	7	328	2.82	2	5	ND	2	74	.2	2	2	92	.57	.102	7	37	.47	56	.06	2	.81	.03	.07	1
RG-26	7	84	2	41	.1	6	7	329	2.46	2	5	ND	2	89	.2	2	3	74	.59	.082	7	74	.50	73	.06	4	.92	.06	.11	2
RG-27	5	65	2	33	.1	8	6	319	2.79	2	5	ND	3	54	.2	2	2	94	.51	.087	6	59	.47	54	.07	4	.76	.05	.08	1
RG-28	5	70	2	38	.1	7	6	308	2.38	2	5	ND	2	61	.2	2	2	72	.52	.082	6	65	.49	67	.06	4	.85	.05	.09	1
STANDARD C	19	61	39	131	6.7	70	31	1054	3.97	36	19	7	40	53	18.4	15	21	60	.48	.099	39	58	.95	182	.08	38	1.90	.06	.14	13

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
RG-64	5	128	3	72	.5	23	12	448	3.50	4	5	ND	1	148	.3	2	2	94	.82	.136	8	120	.67	131	.08	10	.71	.05	.23	2
RG-65	3	131	2	56	.6	25	13	406	3.59	2	5	ND	1	130	.2	2	3	94	.74	.135	8	105	.69	116	.08	7	.67	.04	.21	1
RG-66	4	163	2	47	.6	26	15	443	6.17	2	5	ND	1	129	.4	2	2	169	.79	.132	7	145	.53	107	.08	7	.56	.05	.19	1
RG-67	4	177	9	54	.5	22	13	424	3.33	4	5	ND	1	143	.4	3	4	87	.67	.119	7	104	.69	139	.08	4	.72	.05	.26	1
RG-68	3	104	7	48	.4	41	22	566	13.37	7	5	ND	1	94	.2	2	2	361	.65	.116	5	228	.38	88	.08	4	.38	.03	.14	3
RG-69	4	150	5	53	.4	23	12	409	3.42	2	5	ND	1	137	.6	2	2	89	.70	.118	7	108	.69	132	.09	5	.70	.05	.24	1
RG-70	5	119	5	48	.4	18	10	368	3.15	3	5	ND	1	126	.5	3	2	86	.71	.118	7	106	.52	110	.07	6	.60	.05	.21	2
RG-71	3	132	2	47	.4	17	11	387	2.76	3	5	ND	1	120	.3	2	2	73	.59	.118	8	77	.55	117	.07	4	.63	.04	.21	2
RG-72	4	119	2	49	.6	23	13	411	4.88	3	5	ND	1	118	.5	2	3	127	.61	.113	7	127	.51	113	.07	5	.58	.05	.20	2
RG-73	3	124	4	45	.3	17	10	376	2.73	2	5	ND	1	122	.4	2	2	73	.60	.111	7	78	.54	116	.07	4	.58	.04	.19	1
RG-74	3	117	7	45	.3	36	18	455	9.23	2	5	ND	1	98	.2	2	3	229	.61	.117	6	201	.48	88	.07	3	.50	.03	.16	1
RG-75	7	100	2	46	.4	18	13	506	4.81	2	5	ND	1	97	.6	2	3	128	.66	.108	8	124	.45	99	.07	6	.71	.05	.13	1
RG-76	5	140	9	48	.5	20	11	408	2.89	2	5	ND	1	127	.6	3	2	76	.67	.117	7	95	.64	130	.08	7	.69	.05	.22	2
RG-77	4	135	4	49	.4	22	12	438	3.91	4	5	ND	1	124	.5	3	2	101	.58	.104	6	107	.58	135	.08	7	.67	.05	.22	1
RG-78	4	108	2	42	.4	18	11	350	3.95	4	5	ND	1	105	.2	3	3	103	.66	.117	7	110	.49	94	.06	6	.52	.04	.16	2
RG-79	3	131	2	50	.3	30	15	436	6.22	2	5	ND	1	102	.3	2	3	161	.65	.120	7	143	.57	106	.08	8	.58	.04	.18	2
RG-80	4	116	7	43	.3	30	15	423	6.35	4	5	ND	1	96	.4	2	2	161	.67	.129	7	146	.57	99	.08	5	.56	.03	.18	1
RG-81	4	138	2	81	.6	31	23	936	3.96	5	5	ND	1	173	.5	4	2	98	.87	.163	8	75	1.36	373	.16	6	1.29	.06	.42	1
RG-82	4	61	4	43	.3	17	16	576	8.19	2	5	ND	1	134	.2	2	2	234	.71	.136	7	107	.41	159	.07	5	.54	.06	.18	1
RG-83	3	75	3	42	.3	16	14	586	4.35	3	5	ND	1	144	.2	2	2	118	.75	.139	7	75	.57	186	.08	4	.64	.05	.20	2
RG-84	2	68	2	46	.5	26	26	714	15.65	2	5	ND	1	129	.2	3	2	436	.78	.196	8	121	.38	124	.08	4	.44	.04	.13	2
RG-85	2	76	3	43	.2	14	14	545	5.79	3	5	ND	1	125	.2	2	5	163	.70	.151	7	71	.46	155	.07	6	.55	.04	.17	2
RG-86	3	68	3	41	.3	19	14	471	5.16	9	6	ND	1	79	.2	4	2	196	.87	.064	4	129	.59	46	.09	5	1.02	.06	.11	2
RG-87	3	59	2	36	.3	20	13	417	4.09	7	5	ND	1	74	.2	3	2	145	.87	.060	4	127	.59	44	.09	6	1.01	.06	.12	1
RG-88	4	62	3	43	.3	18	12	441	3.43	8	6	ND	2	85	.2	3	2	120	1.00	.065	4	111	.67	52	.10	6	1.13	.08	.15	1
RG-89	3	63	2	42	.2	19	12	416	3.27	6	6	ND	1	83	.3	3	4	112	.91	.064	4	95	.67	51	.09	5	1.13	.07	.14	2
RG-90	4	69	3	47	.4	19	13	438	3.31	7	7	ND	1	93	.3	3	4	109	1.07	.069	4	107	.74	55	.10	6	1.25	.08	.15	3
RG-91	3	54	2	37	.3	14	10	387	2.59	6	5	ND	1	90	.2	4	2	88	.79	.057	4	72	.58	76	.09	5	1.07	.07	.11	1
RG-92	3	54	7	30	.1	13	11	362	2.39	5	5	ND	1	87	.3	3	2	80	.74	.057	3	66	.55	54	.08	6	1.02	.06	.11	1
RG-93	2	57	3	43	.1	34	15	473	6.46	6	5	ND	1	70	[illegible]	2	2	223	.79	.061	4	174	.56	44	.09	4	.96	.06	.11	2
RG-94	4	54	6	37	.3	18	12	412	3.67	5	5	ND	1	91	.2	4	2	124	.97	.059	4	123	.64	56	.10	7	1.15	.08	.15	3
RG-95	4	51	3	37	.3	17	10	369	2.63	5	6	ND	1	84	[illegible]	3	2	86	.85	.059	3	82	.61	53	.09	5	1.08	.07	.13	2
RG-96	3	53	4	38	.1	19	12	397	3.60	6	5	ND	1	74	.4	3	2	117	.85	.065	4	106	.63	48	.09	8	1.02	.06	.12	2
RG-97	2	50	6	34	.1	15	10	359	2.48	6	5	ND	1	76	.5	3	2	80	.71	.059	4	68	.56	51	.08	6	.96	.06	.11	1
RG-98	4	47	2	36	.2	18	10	365	2.66	4	5	ND	1	81	.4	4	2	83	.91	.059	3	92	.65	52	.09	4	1.07	.08	.14	1
RG-99	3	54	3	36	.2	16	10	360	2.41	7	7	ND	1	84	[illegible]	5	2	77	.73	.058	4	77	.59	59	.08	5	1.05	.07	.13	1
STANDARD C	19	61	35	135	7.4	71	32	1059	4.00	42	18	8	38	50	18.4	16	21	57	.51	.094	38	61	.90	182	.08	39	1.90	.07	.14	11

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
RG-100	3	60	2	31	.2	18	10	375	2.55	3	5	ND	1	94	.2	2	2	80	.78	.056	4	78	.64	54	.10	7	1.12	.06	.11	1
RG-101	2	66	2	34	.2	20	11	397	3.09	9	5	ND	1	92	.2	2	2	98	.81	.061	4	87	.71	56	.10	6	1.19	.06	.12	1
RG-102	2	62	2	31	.2	20	11	408	3.54	10	5	ND	1	89	.2	2	2	116	.83	.062	4	98	.69	53	.10	7	1.18	.06	.12	1
RG-103	2	55	2	31	.1	18	10	378	2.87	3	5	ND	1	92	.3	2	2	92	.81	.060	4	84	.67	55	.10	6	1.15	.06	.11	1
RG-104	4	54	3	33	.3	18	10	392	2.70	6	5	ND	1	106	.2	2	2	84	.83	.058	4	92	.69	63	.10	7	1.22	.07	.13	1
RG-105	3	56	2	32	.1	19	10	388	2.46	2	5	ND	1	106	.2	2	2	75	.81	.055	4	84	.68	63	.10	6	1.23	.07	.13	1
RG-106	3	55	2	32	.2	21	11	416	3.90	5	5	ND	1	94	.2	2	2	125	.88	.057	4	124	.67	52	.10	7	1.14	.06	.11	1
RG-107	2	55	2	36	.2	20	11	388	3.77	4	5	ND	2	82	.2	2	2	121	.81	.060	4	106	.65	49	.10	6	1.08	.06	.11	1
RG-108	17	65	6	41	.2	17	12	4965	13.27	5	6	ND	2	95	.4	2	2	112	.93	.077	5	66	.40	153	.04	2	1.01	.03	.06	1
RG-109	3	53	3	31	.1	17	9	424	2.53	9	5	ND	1	89	.2	2	2	74	.75	.054	3	74	.62	53	.10	5	1.10	.05	.10	1
RG-110	3	53	2	32	.1	19	10	367	3.01	2	5	ND	1	91	.2	2	2	95	.84	.056	4	103	.67	52	.10	7	1.13	.06	.11	1
RG-111	2	49	2	37	.2	21	11	406	4.11	4	5	ND	1	88	.2	2	2	129	.82	.058	4	115	.63	49	.11	6	1.09	.06	.11	1
RG-112	4	48	2	35	.1	21	10	404	3.21	6	5	ND	1	102	.2	2	2	98	1.02	.060	4	114	.73	53	.12	7	1.24	.07	.13	1
RG-113	3	52	2	29	.1	17	9	352	2.52	2	5	ND	1	87	.2	2	2	77	.74	.054	4	73	.62	51	.10	6	1.07	.05	.10	1
RG-114	3	41	2	30	.1	20	9	369	2.54	8	5	ND	1	93	.2	2	2	76	.79	.055	4	85	.63	52	.10	6	1.09	.06	.10	1
RG-115	3	43	2	29	.1	19	9	365	3.31	5	5	ND	1	85	.2	2	2	103	.78	.055	4	101	.60	47	.10	7	1.03	.06	.09	1
RG-116	3	45	2	28	.2	19	10	369	3.47	6	5	ND	2	90	.2	2	2	109	.83	.060	5	99	.60	47	.10	8	1.07	.06	.11	1
RG-117	3	40	2	32	.1	17	9	369	3.06	2	5	ND	1	96	.2	2	2	95	.83	.053	4	95	.59	50	.10	6	1.12	.06	.10	1
RG-118	3	43	2	31	.1	16	9	361	2.50	5	5	ND	1	99	.2	2	2	76	.85	.054	4	79	.61	52	.10	6	1.16	.06	.10	1
RG-119	4	53	4	37	.2	19	10	379	2.67	8	5	ND	1	100	.2	2	2	83	.86	.055	5	95	.67	56	.10	6	1.25	.07	.12	1
RG-120	3	48	2	34	.1	17	9	365	2.54	8	5	ND	1	99	.2	2	2	77	.87	.057	5	77	.64	51	.10	7	1.21	.06	.11	1
RG-121	3	52	2	32	.1	18	9	398	2.45	7	5	ND	1	121	.2	2	2	74	.90	.054	4	73	.67	59	.10	7	1.35	.06	.10	1
RG-122	5	48	2	30	.1	19	10	412	3.35	2	5	ND	1	120	.2	2	2	105	1.01	.058	5	116	.68	61	.12	7	1.35	.09	.12	1
RG-123	3	44	15	38	.2	21	11	458	4.01	8	5	ND	1	118	.2	2	2	129	1.08	.059	4	115	.67	50	.11	8	1.30	.08	.11	1
RG-124	3	45	3	32	.1	15	9	382	2.65	5	5	ND	1	112	.2	2	2	84	.88	.056	5	76	.61	53	.10	8	1.20	.07	.11	1
RG-125	3	40	4	32	.1	16	8	367	2.45	4	5	ND	1	114	.2	2	2	78	.88	.051	4	73	.59	53	.09	6	1.19	.07	.10	1
RG-126	3	42	2	34	.2	17	9	383	3.34	8	5	ND	2	100	.2	2	2	109	.86	.056	5	92	.60	47	.10	6	1.12	.07	.11	1
RG-127	3	41	4	32	.1	18	9	400	3.29	7	5	ND	1	108	.2	2	2	110	.92	.062	6	89	.63	48	.10	8	1.18	.07	.10	1
RG-128	7	155	6	55	.1	8	16	1133	4.82	4	5	ND	1	54	.2	2	2	160	.67	.170	10	46	.77	79	.10	7	1.25	.04	.07	1
RG-129	9	193	8	91	.1	17	15	1083	4.63	5	5	ND	1	76	.3	2	2	152	.82	.169	12	120	.99	124	.11	9	1.64	.07	.15	1
RG-130	6	258	9	64	.4	46	21	952	5.79	6	19	ND	4	133	.3	2	2	207	1.12	.183	12	167	1.39	172	.14	7	2.14	.07	.17	1
RG-131	6	214	6	63	.1	34	19	733	4.65	12	6	ND	1	116	.3	2	2	153	1.01	.163	11	105	1.33	147	.12	8	2.00	.08	.13	1
RG-133	5	106	5	42	.1	20	12	423	3.30	2	5	ND	2	75	.2	2	2	90	.75	.132	8	73	.85	97	.09	8	1.33	.07	.12	1
RG-134	4	118	5	46	.1	18	11	321	2.89	2	5	ND	2	85	.2	2	2	70	.74	.139	9	60	.83	104	.08	7	1.38	.05	.09	1
RG-135	6	80	5	46	.1	13	10	615	2.48	4	5	ND	1	72	.3	2	2	63	.67	.110	8	69	.60	101	.06	8	1.12	.06	.11	1
STANDARD C	18	57	40	132	7.0	71	31	1053	3.95	40	22	7	40	55	19.6	15	18	58	.47	.093	39	59	.90	182	.07	40	1.91	.06	.13	12

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
RG-136A	5	149	4	48	.3	26	17	795	3.70	12	5	ND	3	77	.2	2	2	120	.82	.137	9	80	1.06	122	.10	7	1.48	.06	.15	1
RG-136B	7	159	5	62	.4	21	16	620	3.40	11	5	ND	3	94	.2	2	2	103	.91	.155	11	94	.89	137	.08	7	1.62	.06	.12	1
RG-137	7	114	9	53	.2	21	20	962	6.07	8	5	ND	3	56	.2	2	2	230	.68	.143	9	109	.65	104	.10	6	1.27	.05	.10	1
RG-138	7	89	4	50	.1	17	13	825	4.16	7	5	ND	2	68	.2	2	2	164	.74	.143	9	103	.61	115	.09	7	1.16	.06	.11	1
RG-139	7	72	3	42	.3	13	11	620	3.69	7	5	ND	2	59	.2	2	2	140	.68	.126	8	99	.52	95	.09	6	1.00	.07	.12	1
RG-140	8	78	5	48	.3	17	12	668	4.51	2	5	ND	3	63	.2	2	2	186	.75	.138	9	128	.56	103	.11	7	1.06	.08	.13	1
RG-141	6	91	5	43	.4	15	12	601	3.88	2	5	ND	3	63	.2	2	2	148	.73	.147	9	85	.60	97	.09	6	1.06	.06	.10	1
RG-142	5	77	4	39	.2	12	11	534	2.75	10	5	ND	3	52	.2	2	2	84	.59	.113	8	52	.58	88	.08	5	1.01	.04	.09	1
RG-143	4	58	2	32	.3	12	8	301	3.44	8	5	ND	3	43	.2	2	2	136	.63	.144	8	70	.42	59	.08	6	.78	.04	.08	1
RG-144	8	131	8	49	.3	16	14	836	3.18	8	5	ND	2	70	.2	2	2	89	.69	.133	10	62	.77	116	.06	5	1.48	.04	.08	1
RG-145A	13	569	12	113	.6	14	33	1306	5.63	11	5	ND	2	217	.5	2	2	128	1.29	.221	14	72	1.72	191	.10	5	3.54	.04	.19	1
RG-145B	5	67	3	35	.1	9	9	453	2.23	5	5	ND	2	55	.2	2	2	65	.67	.122	9	50	.46	73	.06	5	.89	.04	.07	1
RG-146	6	164	6	52	.3	17	13	561	3.58	8	5	ND	2	85	.2	2	2	111	.91	.169	11	67	.80	137	.07	6	1.55	.04	.08	1
RG-147	5	52	3	27	.1	7	6	329	2.12	2	5	ND	3	59	.2	2	2	66	.53	.087	6	69	.33	69	.05	4	.73	.05	.10	1
RG-148	6	60	2	33	.1	10	8	352	3.49	5	5	ND	2	73	.2	2	2	122	.59	.090	7	91	.35	74	.07	5	.78	.06	.10	1
RG-150	11	274	5	53	.5	73	24	867	4.91	14	7	ND	3	102	.2	2	2	131	.92	.148	10	232	1.54	156	.14	5	2.09	.06	.21	1
RG-151	20	573	8	91	.8	29	34	1351	6.08	13	55	ND	2	150	.4	2	2	156	1.12	.176	18	87	1.66	216	.10	4	3.24	.04	.17	1
RG-152	8	452	2	84	.5	27	26	970	7.89	5	14	ND	5	73	.2	2	3	253	.83	.173	14	106	1.41	139	.12	2	2.26	.03	.26	1
RG-153	7	289	4	75	.3	21	18	712	5.36	7	5	ND	4	56	.2	2	2	163	.78	.137	10	84	1.23	106	.11	5	1.79	.05	.22	1
RG-154	9	237	4	66	.2	25	20	728	7.69	6	5	ND	3	61	.2	2	2	280	.81	.132	10	131	1.08	96	.11	3	1.71	.05	.14	1
RG-155	12	230	3	60	.2	25	23	832	6.69	7	5	ND	3	60	.3	2	2	224	.76	.122	10	122	1.02	70	.10	3	1.58	.05	.13	1
RG-156	8	385	6	97	.4	18	14	528	2.05	6	23	ND	1	110	.6	2	2	56	1.65	.153	11	77	.51	82	.02	8	1.31	.02	.15	1
RG-157	11	289	4	82	.3	36	19	739	4.52	4	5	ND	2	91	.3	2	2	157	1.17	.119	8	188	.85	79	.07	7	1.64	.08	.15	1
RG-158	15	243	5	96	.2	43	23	985	5.29	6	5	ND	2	107	.3	2	2	188	1.24	.098	7	261	.92	85	.09	8	1.76	.11	.14	1
RG-159	7	176	2	52	.1	39	17	573	5.20	5	5	ND	2	84	.3	2	4	183	.99	.095	6	199	.88	67	.09	6	1.50	.08	.11	1
RG-160	8	279	4	50	.5	35	15	515	4.35	2	8	ND	1	102	.4	2	2	151	1.45	.144	13	180	.89	108	.08	8	1.62	.06	.19	1
RG-161	4	132	2	32	.2	26	14	345	7.18	2	5	ND	4	64	.2	2	4	280	.80	.115	8	165	.71	75	.12	3	1.18	.05	.15	1
RG-162	4	119	3	41	.1	26	13	327	5.68	6	5	ND	4	63	.2	2	2	205	.80	.120	9	139	.72	67	.11	5	1.17	.05	.13	1
RG-163	4	98	2	31	.1	17	9	286	3.40	8	5	ND	3	65	.2	2	3	112	.75	.115	10	77	.60	63	.08	6	1.09	.05	.11	1
RG-164	5	53	3	32	.2	13	8	310	3.69	4	5	ND	2	60	.2	2	3	130	.57	.084	6	75	.39	50	.07	3	.79	.04	.08	1
RG-165	4	41	3	26	.1	7	5	179	1.70	6	5	ND	2	62	.2	2	2	56	.51	.077	5	40	.32	48	.05	3	.72	.03	.07	1
RG-166	3	74	3	41	.1	26	8	278	1.42	2	5	ND	1	62	.2	2	2	50	.63	.071	3	110	.94	73	.08	3	.98	.04	.22	1
RG-167	5	36	4	48	.1	33	17	1523	3.63	9	5	ND	1	71	.2	2	3	77	.71	.070	2	141	1.02	97	.08	3	1.01	.04	.21	1
RG-168	4	93	2	57	.1	51	20	756	3.28	7	5	ND	1	72	.2	2	2	85	.78	.064	2	192	1.63	95	.11	3	1.50	.04	.32	1
RG-169	5	171	2	45	.2	44	25	486	2.90	2	5	ND	1	81	.2	3	2	78	.85	.080	2	168	1.33	60	.12	3	1.30	.05	.31	1
RG-170	5	150	2	55	.2	51	25	544	3.60	9	5	ND	1	86	.2	3	2	97	.89	.081	3	217	1.56	96	.13	3	1.49	.06	.43	1
STANDARD C	19	60	37	131	7.1	73	31	1055	3.97	36	16	7	40	52	18.9	15	21	59	.48	.096	40	60	.91	183	.08	39	1.92	.06	.13	13

Duckling Creek

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
RG-171	4	141	2	39	.2	40	23	465	3.19	9	5	ND	1	90	.2	2	2	83	.71	.073	3	162	1.25	77	.11	5	1.22	.04	.33	1
RG-172	6	315	2	88	.2	32	13	564	3.15	8	5	ND	1	122	.3	2	2	98	.90	.067	6	163	.97	86	.10	5	1.05	.05	.24	1
RG-173	5	132	2	50	.3	33	19	479	2.92	5	5	ND	1	116	.2	2	2	81	.73	.071	3	133	1.09	73	.10	4	1.14	.05	.28	1
RG-174	6	88	6	45	.3	35	17	453	3.53	7	5	ND	1	83	.2	2	2	94	.79	.070	3	192	1.08	68	.10	5	1.05	.05	.31	1
RG-175	3	101	2	45	.3	37	17	464	3.12	9	5	ND	1	81	.2	2	2	85	.67	.073	3	156	1.13	78	.10	4	1.09	.04	.31	1
RG-176	5	92	2	51	.2	41	18	487	3.77	9	5	ND	1	73	.2	2	2	100	.68	.072	3	215	1.22	81	.10	4	1.13	.04	.33	1
RG-177	4	84	2	45	.1	32	15	447	2.82	5	5	ND	1	73	.2	2	2	79	.59	.067	2	140	1.01	72	.08	4	.96	.03	.27	1
RG-178	4	75	2	43	.2	31	14	441	3.56	6	5	ND	1	85	.2	2	2	96	.63	.065	3	195	.95	68	.09	4	.92	.04	.25	1
RG-179	5	98	3	53	.1	31	15	524	2.87	5	5	ND	1	91	.2	2	2	84	.63	.067	3	135	.98	77	.08	4	1.01	.04	.25	1
RG-180	4	74	2	49	.1	28	13	470	3.17	6	5	ND	1	88	.2	2	2	91	.70	.067	3	163	.90	69	.09	5	.92	.05	.24	1
RG-181	4	74	2	47	.1	28	13	447	3.64	6	5	ND	1	86	.2	2	2	101	.64	.063	3	184	.86	67	.09	4	.90	.04	.22	1
RG-182	3	84	3	48	.2	30	14	458	3.10	8	5	ND	1	90	.2	2	2	88	.64	.068	3	149	.93	70	.09	6	.95	.04	.25	1
RG-183	4	81	2	51	.3	30	14	470	3.22	2	5	ND	1	88	.2	2	2	93	.67	.065	3	166	.95	71	.09	4	.98	.04	.24	1
RG-184	4	69	2	49	.2	27	13	507	3.70	5	5	ND	2	91	.2	2	2	106	.69	.066	4	183	.81	67	.09	4	.89	.05	.22	1
RG-185	4	60	2	46	.2	24	12	472	3.00	3	5	ND	1	83	.2	2	2	87	.61	.065	3	138	.76	61	.08	4	.83	.04	.21	1
RG-186	4	82	2	49	.1	28	13	475	3.16	4	5	ND	1	80	.2	2	2	89	.57	.065	3	148	.84	66	.08	3	.88	.03	.21	1
STANDARD C	18	59	36	129	7.0	72	31	1055	3.96	40	22	6	39	55	19.5	15	19	58	.48	.094	38	60	.91	182	.07	39	1.91	.06	.14	13

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-235

Project:

	Sample Number	Au ppb	Ag ppm
G-AZ	74919	2	0.05
	74920	2	0.45
	74921	16	0.40
	74922	28	0.18
	74923	2	0.01
	74924	2	0.04
	74925	2	0.05
	74926	4	0.13
	74927	2	0.07
	74928	2	0.04
	74929	2	0.13
	74930	4	0.16
	74931	2	0.02
	74932	2	0.04
	74933	4	0.05
	74934	506	8.90
	74935	164	4.40
	74936	8	0.08
	74937	60	5.40
BC-32	74938	2	0.17
	74939	2	0.04
	74940	2	0.32
	74941	410	11.00
	74942	6	0.17
	74943	4	0.22
	74944	2	0.14
	74945	4	0.05
	74946	2	0.15
BC-AZ	74947	2	0.14
	74948	2	0.06
	74949	2	0.01
	74950	2	0.14
	74951	2	0.10
BC-32	74952	14	0.24
	74956	12	0.22
BC-37	74959	2	0.25
	74961	2	0.09
	74964	2	0.06
	74965	2	0.06
BC-38 (Bait)	74966	2	0.01

TERRAMIN RESEARCH LABS Lt

Job#: 90-228

Project: BC-32

Sample Number	Au ppb	Ag ppm
DK- 1	16	0.92
2	4	0.44
3	8	0.28
4	28	0.38
5	26	0.13
6	6	0.07
7	2	0.08
8	2	0.07
9	2	0.07
10	2	0.10
11	14	0.07
12	6	0.09
13	10	0.06
14	12	0.06
15	14	0.07
16	2	0.06
17	6	0.08
18	10	0.06
19	6	0.06
20	6	0.09
21	10	0.06
22	36	0.31
23	2	0.05
24	12	0.05
26	4	0.10
27	24	0.10
28	2	0.09
29	4	0.07
30	30	0.08
31	12	0.11
32	I.S.	
33	18	0.09
34	22	0.07
35	6	0.06
36	26	0.07
37	4	0.08
38	4	0.06
39	I.S.	
40	2	0.10
41	148	0.07

BC-12

BC-38

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-228

Project: BC-32

	Sample Number	Au ppb	Ag ppm
	81 B	10	0.07
	82	4	0.07
BC-38	83	6	0.08
	84	12	0.14
	85	6	0.09
	86	34	0.08
	88	16	0.07
	89	12	0.12
	90	10	0.12
	91	8	0.09
	92	16	0.04
	93	10	0.04
	94	28	0.06
	95	8	0.05
	96	8	0.04
	97	8	0.03
	98	18	0.07
	99	6	0.05
	101	6	0.03
	102	6	0.02
BC-42	103	4	0.04
	105 A	2	0.06
	105 B	8	0.08
	106	6	0.09
	107	8	0.10
	108	8	0.08
	109	4	0.07
	JDK- 1	8	0.10
	2	12	0.08
BC-32	3	80	0.09
	4		
	5	10	0.09
	6	14	0.08
	7	12	0.08
	8	12	0.08
	9	12	0.07
	11	14	0.10
	12	2	0.12
	13	10	0.08
	15	4	0.07

Job#: 90-228

Project: BC-32

	Sample Number	Au ppb	Ag ppm
JDK-	17	24	0.08
	18	14	0.09
	19	4	0.08
BC-32	20	8	0.05
	21	18	0.22
	23	6	0.06
	24	10	0.06
	25	12	0.06
	26	12	0.08
	27	8	0.06
	28	50	0.07
	29	6	0.08
	30	6	0.05
	31	6	0.08
	32	6	0.03
	33	8	0.08
	34	2	0.06
	35	4	0.13
	36	4	0.09
	37	10	0.07
	38	8	0.06
	39	14	0.12
	40	6	0.06
JO-	1	6	0.15
	2	10	0.15
BC-32	3	20	0.09
	4	14	0.28
	5	2	0.07
	6	2	0.10
	7	2	0.18
	8	2	0.05
	9	6	0.08
	10	2	0.03
	11	10	0.05
	12	6	0.03
	13	8	0.04
	14	4	0.03
	15	140	0.03
	16	6	0.03
	17	4	0.03

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-228

Project: BC-32

Sample Number	Au ppb	Ag ppm
JO- 18	6	0.03
19	4	0.03
20	2	0.02
21	2	0.02
22	6	0.11
23	2	0.01
24	2	0.01
25	6	0.02
26	4	0.02
27	4	0.01
28	6	0.16
29	14	0.14
30	2	0.05
31	12	0.06
32	12	0.05
33	2	0.03
34	2	0.03
35	2	0.01
36	12	0.02
37	6	0.03
38	2	0.01
39	6	0.02
40	4	0.02
41	6	0.04
42	4	0.03
43	4	0.02
44	66	0.03
45	4	0.03
46	2	0.01
47	10	0.02
48	2	0.01
49	6	0.06
50	2	0.01
51	2	0.21
52	14	0.09
53	4	0.03
54	4	0.22
55	4	0.11
56	2	0.13
57	2	0.08

Job#: 90-228

Project: BC-32

	Sample Number	Au ppb	Ag ppm
JO-	58	2	0.07
	59	4	0.19
	60	2	0.34
	61	8	0.14
	62	2	0.31
	63	2	0.04
	64	4	0.13
	65	2	0.07
	66	2	0.09
	67	2	0.11
	68	2	0.04
	69	2	0.06
	70	4	0.06
	71	6	0.06
	72	2	0.05
	73	4	0.06
	74	2	0.03
	75	6	0.06
	76	2	0.03
	77	2	0.23
	78	6	0.11
	79	2	0.14
	80	4	0.12
	81	8	0.04
	82	4	0.05
	83	2	0.03
	84	8	0.03
	85	2	0.03
	86	6	0.03
	87	16	0.03
	88	4	0.04
	89	8	0.23
	90	2	0.04
	91	2	0.08
	92	8	0.04
	93	2	0.03
	94	10	0.15
	95	8	0.08
	96	6	0.04
	97	2	0.05

TERRAMIN RESEARCH LABS Ltd

Job#: 90-228

Project: BC-32

Sample Number	Au ppb	Ag ppm
JO- 98	4	0.06
99	6	0.04
100	10	0.03
101	2	0.04
102	2	0.03
103	8	0.07
104	2	0.03
105	8	0.05
106	4	0.04
107	2	0.04
108	4	0.04
109	10	0.05
110	4	0.04
111	12	0.06
112	4	0.03
113	2	0.08
114	8	0.38
115	4	0.12
116	4	0.28
117	2	0.15
118	2	0.15
119	2	0.07
120	6	0.10
121	2	0.23
122 A	2	0.21
122 B	2	0.10
123	2	0.07
124	2	0.09
125	2	0.21
126	4	0.10
127	2	0.05
128	2	0.11
129	4	0.09
130	6	0.14
131	12	0.06
132	2	0.10
133	2	0.05
134	6	0.06
135	2	0.06
136	12	0.15

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-228

Project: BC-32

Sample Number	Au ppb	Ag ppm
JRG- 96	60	0.11
97	10	0.05
98	18	0.05
RG- 1	18	0.35
2	26	1.27
3	14	0.48
4	14	0.30
5	8	0.27
6	2	0.15
7	8	0.17
8	6	0.17
9	10	0.13
10	12	0.14
11	10	0.11
12	10	0.14
13	6	0.11
14	14	0.10
15	6	0.10
16	10	0.12
[illegible]	[illegible]	[illegible]
18	28	0.08
19	8	0.08
20	4	0.09
21	10	0.06
22	6	0.06
23	8	0.05
24	2	0.05
25	8	0.07
26	12	0.09
27	6	0.07
28	4	0.07
29 A	8	0.06
29 B	6	0.06
30	8	0.06
31	8	0.06
32	4	0.07
33	8	0.08
34	10	0.06
35	4	0.07
36	6	0.04

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-228

Project: BC-32

Sample Number	Au ppb	Ag ppm
RG- 77	12	0.18
78	10	0.16
79	16	0.13
80	12	0.15
81	4	0.10
82	74	0.08
83	4	0.08
84	14	0.07
85	4	0.10
86	4	0.04
87	2	0.04
88	2	0.05
89	4	0.03
90	4	0.05
91	2	0.04
92	4	0.05
93	12	0.04
94	2	0.04
95	2	0.04
96	2	0.04
97	4	0.04
98	2	0.03
99	6	0.04
100	6	0.04
101	2	0.04
102	2	0.04
103	2	0.03
104	4	0.04
105	4	0.03
106	2	0.03
107	2	0.03
108	12	0.12
109	2	0.02
110	48	0.07
111	64	0.08
112	2	0.03
113	2	0.03
114	4	0.04
115	6	0.03
116	4	0.02

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-228

Project: BC-32

Sample Number	Au ppb	Ag ppm
RG- 117	6	0.03
118	4	0.04
119	6	0.04
120	8	0.03
121	2	0.03
122	2	0.04
123	6	0.06
124	2	0.02
125	4	0.02
126	2	0.03
127	2	0.03
128	2	0.04
129	8	0.09
130	10	0.16
131	10	0.14
133	6	0.08
134	6	0.07
135	2	0.07
136 A	6	0.11
136 B	8	0.18
137	4	0.05
138	2	0.06
139	4	0.04
140	8	0.04
141	6	0.07
142	6	0.06
143	6	0.04
144	8	0.08
145 A	24	0.24
145 B	4	0.05
146	12	0.22
147	2	0.07
148	8	0.04
150	10	0.14
151	16	0.48
152	10	0.18
153	8	0.11
154	8	0.13
155	4	0.08
156	4	0.36

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-228

Project: BC-32

	Sample Number	Au ppb	Ag ppm
RG-	157	6	0.12
	158	52	0.10
	159	4	0.08
	160	12	0.16
	161	8	0.06
	162	4	0.07
	163	6	0.05
	164	4	0.04
38	165	6	0.05
	166	2	0.09
42	167	4	0.05
	168	8	0.05
	169	10	0.07
	170	6	0.07
	171	16	0.08
	172	6	0.13
	173	6	0.07
	174	4	0.04
	175	6	0.05
	176	4	0.05
	177	8	0.07
	178	2	0.05
	179	2	0.08
	180	4	0.07
	181	4	0.08
	182	4	0.07
	183	8	0.07
	184	2	0.06
	185	8	0.06
	186	6	0.09

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-261

Project: BC-42

	Sample Number	Au ppb	Ag ppm
DK-	110	4	0.07
	111	14	0.51
	112	10	0.18
	113	8	0.08
	114	8	0.05
	115	6	0.09
	116	4	0.05
	117	8	0.07

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-163

Project: BC-32

Sample Number	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
86203	8	0.10	106	1	33
86204	10	0.21	430	4	62
86205	8	0.19	360	4	35
86206	8	0.02	12	1	63
86207	12	0.05	83	7	55
86208	2	0.03	20	3	44
86209	8	0.97	1320	39	79
86210	8	0.53	330	5	34
86211	2	0.01	21	5	19
86212	4	0.02	30	2	31
86213	8	0.13	146	4	75
86214	474	11.5	15700	12	51
86217	40	0.59	2200	2	26
86218	6	0.22	950	2	14
86219	4	0.14	530	2	9
86220	4	0.12	530	2	15

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-143

Project: BC-38

Sample Number	Au ppb	Ag ppm	Cu ppm
86101	2	0.08	84
86102	12	0.10	10
86103	4	0.22	35
86104	8	0.20	24
86105	4	0.11	42
86106	4	0.10	80
86107	12	0.13	86
86108	20	0.12	94
86109	14	0.12	25
86110	10	0.08	6
86111	4	0.01	3
86112	8	0.48	640
86113	6	0.09	130
86114	2	0.09	68
86115	4	0.02	77
86116	32	0.33	90
86117	2	0.01	23
86118	2	0.03	52
86119	14	0.39	4800
86120	12	0.55	5700
86121	4	0.08	151
86122	2	0.04	97
86123	140	5.40	12600
86124	22	1.14	2000
86125	16	0.64	1230
86126	64	2.50	82
86127	8	0.07	81
86128	8	0.09	97
86129	8	0.13	58
86130	4	0.05	73
86131	6	0.12	162
86132	4	0.10	53
86133	10	0.19	55
86134	8	0.03	79
86135	6	0.05	87
86136	10	0.05	7
86137	2	0.05	86
86138	2	0.04	34
86139	8	0.04	30
86140	24	0.16	85

TERRAMIN RESEARCH LABS Ltd.

Job#: 90-143

Project: BC-38

Sample Number	Au ppb	Ag ppm	Cu ppm
86141	8	0.04	71
86142	2	0.21	108
86143	2	0.03	4
86144	8	0.22	310
86145	4	0.05	114
86146	4	0.10	310
86147	4	0.15	260
86148	2	0.03	52
86149	4	0.10	122
86150	2	0.02	5
86151	2	0.02	10
86152	4	0.02	8
86153	2	0.01	7
86154	10	0.29	900
86155	2	0.04	39
86156	8	0.06	67
86157	2	0.02	53
86159	4	0.05	108
86160	2	0.03	42
86161	2	0.04	132

LEGEND

Trail

Lake

Intermittent Lake

River

Stream

Sand

Tree

Contours
Index
Intermediate

For Geological Legend Refer To Map Sheet 2

5
4	3
2
1

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,428

MANSON CREEK RESOURCES LTD.

DISCOVERY CREEK PROJECT
BRITISH COLUMBIA

COMPILATION MAP
MAP SHEET 1

Date: JANUARY 1991	N.T.S.:
Revised:	FIGURE: 6
Scale: 1:10,000 0 500 1000m	

LEGEND

- Trail
- Lake
- Intermittent Lake
- River
- Stream
- Sand
- Tree
- Contours
  - Index
  - Intermediate

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,428

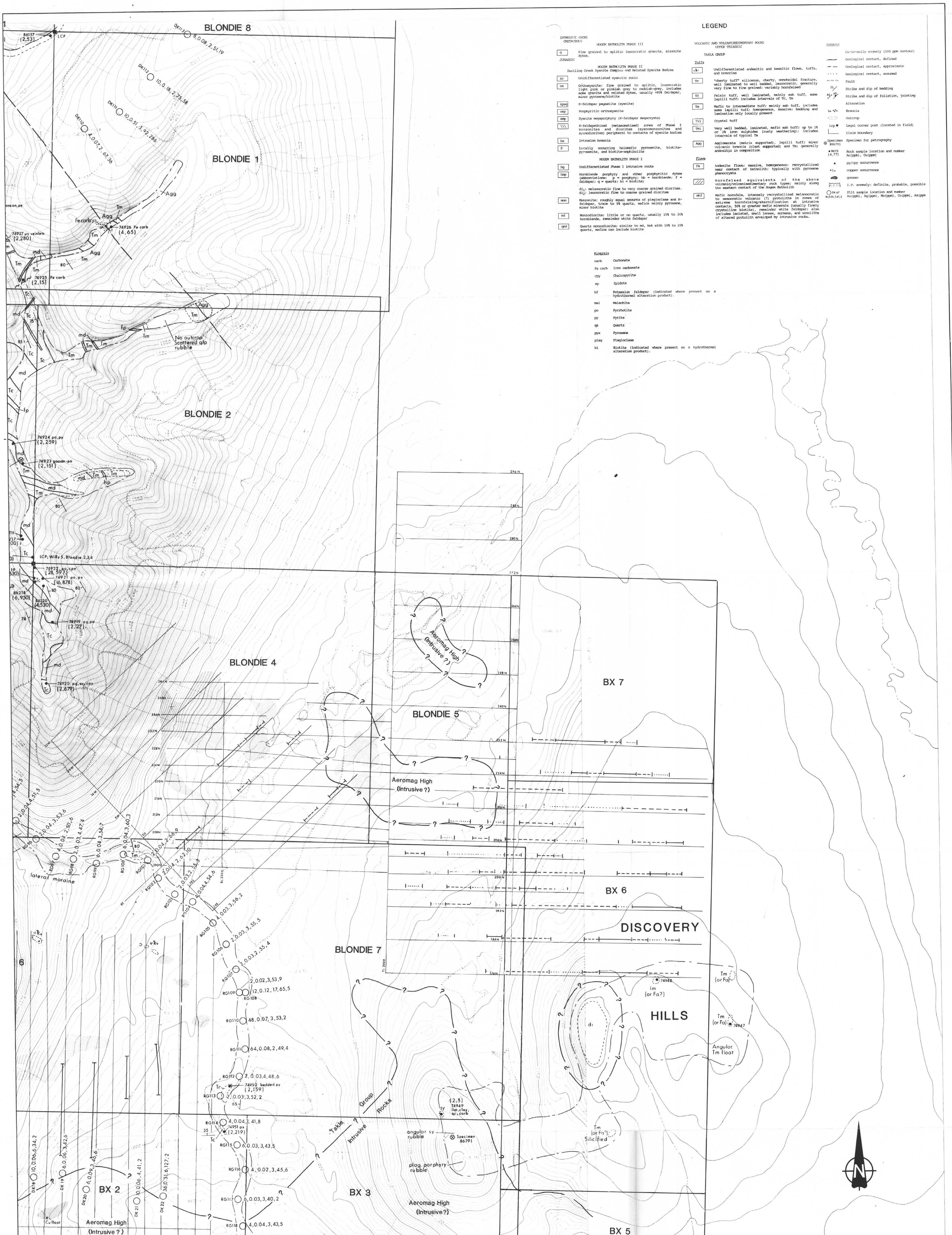
MANSON CREEK RESOURCES LTD.

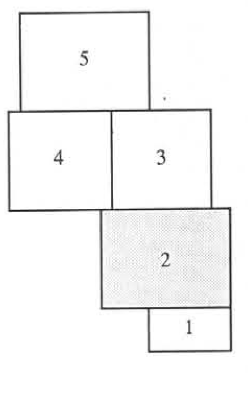
DISCOVERY CREEK PROJECT
BRITISH COLUMBIA

COMPILATION MAP

MAP SHEET 2 WEST

Date: JANUARY 1991	N.T.S.:
Revised:	FIGURE 7a
Scale: 1:10,000	0 500 1000m





Date of photography:1984/1987
Control obtained from B.C. Government Trim Project
Compiled by THE ORTHOSHOP

GEOLOGICAL BRANCH
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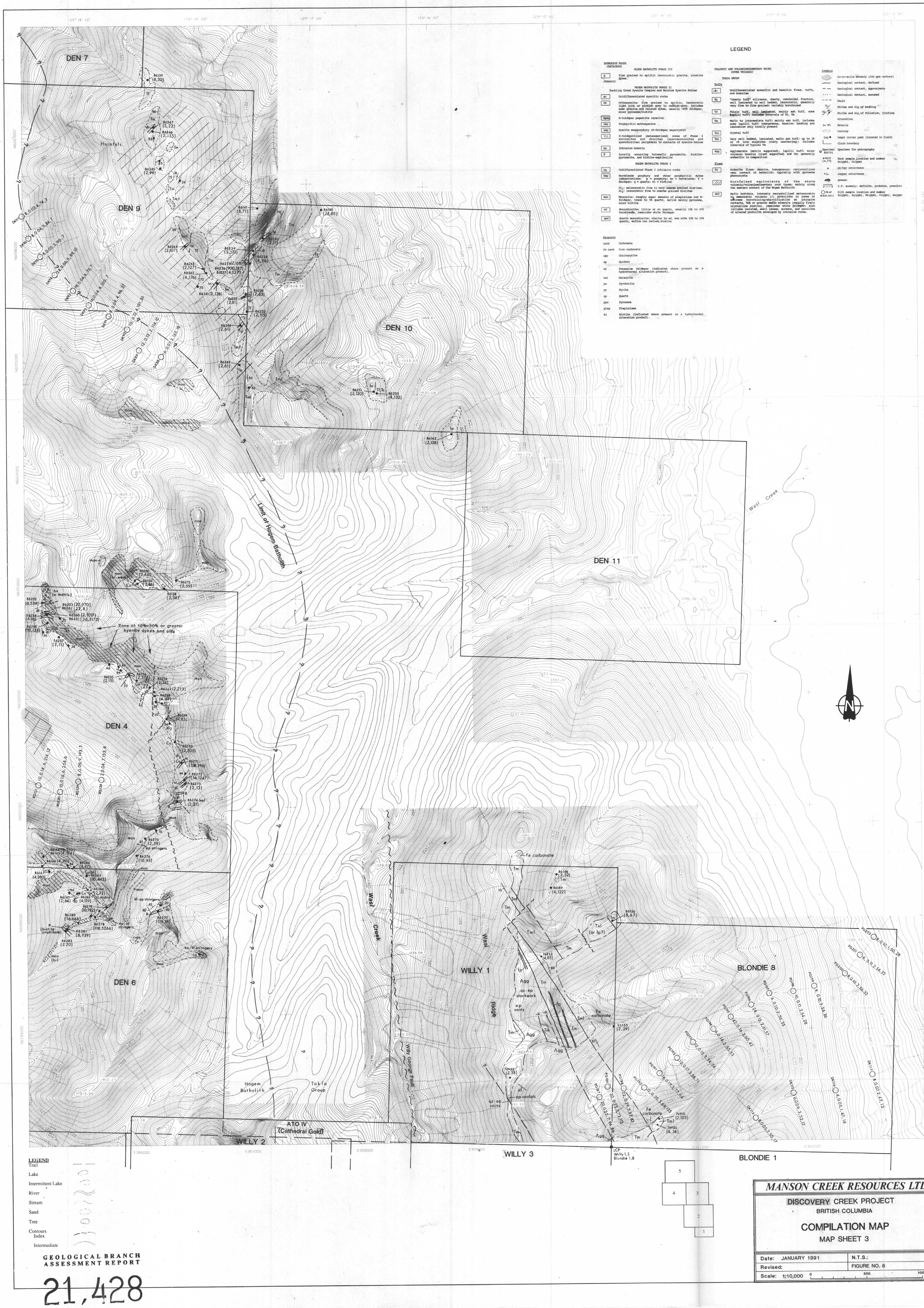
21,428

MANSON CREEK RESOURCES LTD.

DISCOVERY CREEK PROJECT
BRITISH COLUMBIA

COMPILATION MAP
MAP SHEET 2 EAST

Date: JANUARY 1991	N.T.S.:
Revised:	FIGURE: 7 b
Scale: 1:10,000 0 500 1000m	



MANSON CREEK RESOURCES LTD.

DISCOVERY CREEK PROJECT
BRITISH COLUMBIA

COMPILATION MAP
MAP SHEET 3

Date: JANUARY 1991	N.T.S.:
Revised:	FIGURE NO. 8
Scale: 1:10,000	0 500 1000m

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,428