LOG NO:	1213	RD.
ACTION:		
FTLE NO:		

GEOLOGICAL AND GEOCHEMICAL REPORT

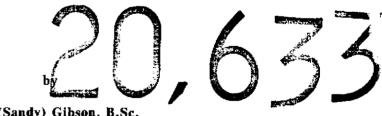
•	Start	
i Sa	E	
	[()]	161.0
M.R.	#	Ş
	VANCOL	JMER, B .C.

ON THE

MIKHAIL PROPERTY

Skeena Mining Division, British Columbia NTS 104B/10E Latitude: 56° - 35' N Longitude: 130° - 34' W

on behait EOLOGICAL BRANCH ASSESSMENT REPORT SOLOMON RESOURCES LIMITED MENT REPORT Vancouver, B.C.



A.M. (Sandy) Gibson, B.Sc. KEEWATIN ENGINEERING INC. #800 - 900 West Hastings Street Vancouver, B.C. V6C 1E5

November 8, 1990

SUMMARY

The Mikhail property is located in the Unuk River area of northwestern British Columbia about 90 km north of Stewart. The 1990 field program was concentrated in the eastern part of the property which is underlain by sediments and volcanics belonging to the Betty Creek Formation.

The 1989 field exploration program concentrated on the Triassic stratigraphy to the west of the Unuk-Harrymel shear zone. A 6-12 m wide massive magnetite unit, traceable for 900 m was located. Mineralization consists of massive magnetite, pyrite and chalcopyrite in altered sedimentary rocks adjacent to a diorite stock. A well mineralized zone in the southeastern corner of the Mikhail 4 claim was also located. Old trenches exposed a mineralized dark green andesite containing 10-15% pyrrhotite, pyrite and chalcopyrite. Lithogeochemical grab sampling yielded 0.14-0.20% copper from several samples.

The limited contour soil sampling conducted as part of the 1990 field program identified a zone of weakly anomalous coincident gold, silver and base metal anomalies near the northern boundary of the Mikhail 1 claim. More detailed geochemical sampling, prospecting and geological mapping in this area, as well as along strike to the southwest, is recommended.

SUMMARY	i
INTRODUCTION	1
Location and Access Property Status and Ownership Physiography and Climate	1 1 2
PREVIOUS EXPLORATION	2
Regional Property History 1989 Field Program	2 4 4
GEOLOGY	5
Regional Geology Property Geology Structure Alteration Mineralization	5 5 7 8 8
1990 EXPLORATION PROGRAM	8
Geological Mapping	8
GEOCHEMISTRY	8
Stream Silt Geochemistry Soil Geochemistry Rock Geochemistry	9 9 10
CONCLUSIONS AND RECOMMENDATIONS	10
REFERENCES	12
CERTIFICATE	13

TABLE OF CONTENTS

P -

۰.

.....

ъ

.

.

F 1

•

•

•

•

~

•

•

.

•

.

• ·

. .

.

• •

.

r -

. ..

- -

•

Page No.

LIST OF APPENDICES

APPENDIX I APPENDIX II APPENDIX III APPENDIX IV APPENDIX V APPENDIX VI	Itemized Cost Statement Summary of Personnel Soil and Stream Silt Sample Geochemical Results Soil and Stream Silt Sample Descriptions Rock Sample Geochemical Results Rock Sample Descriptions Stream Silt and Soil Sample Histograms and Summary Statistics
APPENDIX VI APPENDIX VII APPENDIX VIII	Stream Silt and Soil Sample Histograms and Summary Statistics Description of Analytical Techniques

. -

.

e

.

-

н.

•

.

-

`

1

.

.

•

•

.

.

.

,

.

.

. .

`

•

•

.

P 11

•

LIST OF FIGURES

Fallowing Page Na

Figure 1.	Location Map	1
	Claim Map	
	Topographic Map	
	Regional Geology - Bowser Basin	
	Regional Geology - Unuk Map Area	
Figure 6	Property Geology and Exploration Compilation	5
	1990 Exploration Compilation	

LIST OF TABLES

Page No.

.

Table 1.	Anomalous Soil Sample Results	9
Table 2.	Anomalous Rock Sample Results	10

LIST OF MAPS

Мар 1.	Geology; Rock Sample Stations and Geochemical Results	in protet
Map 2.	Soil and Stream Silt Sample Locations and Results	in pocket

Solomon Resources Limited of Vancouver, B.C. commissioned Keewatin Engineering Inc. to conduct a field exploration program on the Mikhail property located in the Unuk River area of northern British Columbia.

The objective of the 1990 field exploration program was to evaluate the mineral potential of the Mikhail 1 claim through a program of prospecting, geological mapping and geochemical sampling. The geochemical program consisted of lithogeochemical, stream silt and contour soil sampling. The program was designed to concentrate on areas of the Mikhail 1 claim upstream from anomalous heavy mineral concentrate samples collected during the 1989 exploration program.

Location and Access

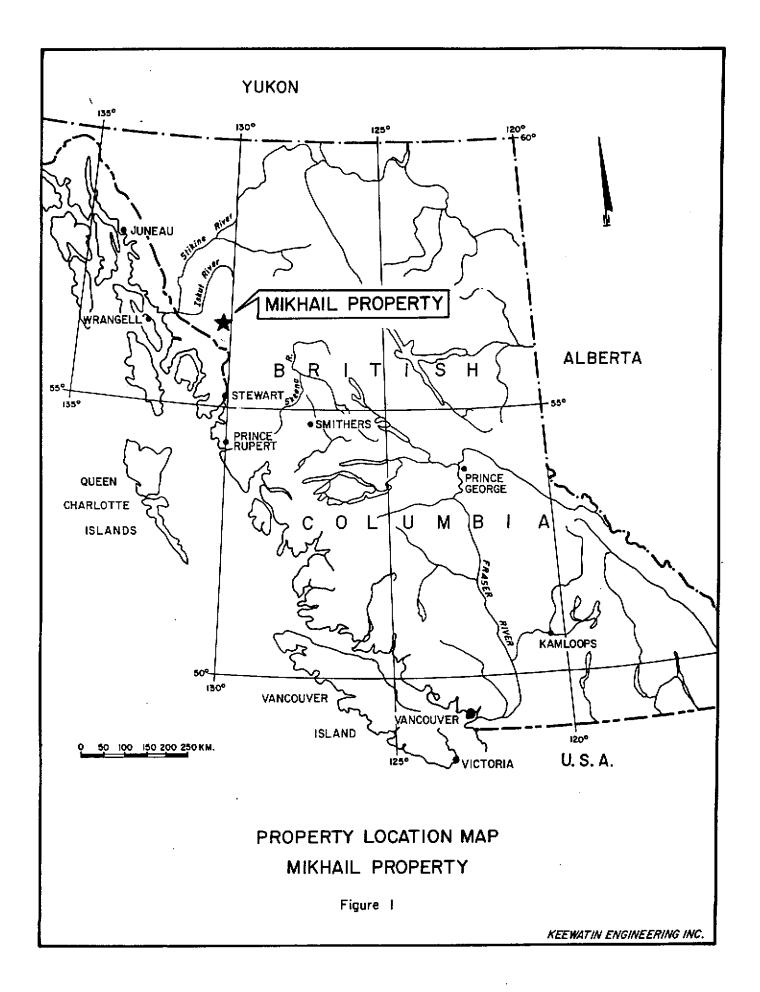
The Mikhail Property is located in northwestern British Columbia, approximately 80 kilometres northwest of Stewart (Figure 1). The claims are situated within N.T.S. map sheet 104B/10E and centred about 56° - 35° North latitude and 130° - 34° West longitude. Access to the property is by fixed wing aircraft from Terrace, Stewart or Smithers to various airstrips in the area and then via helicopter to the property. The claims can also be directly accessed by helicopter from Stewart.

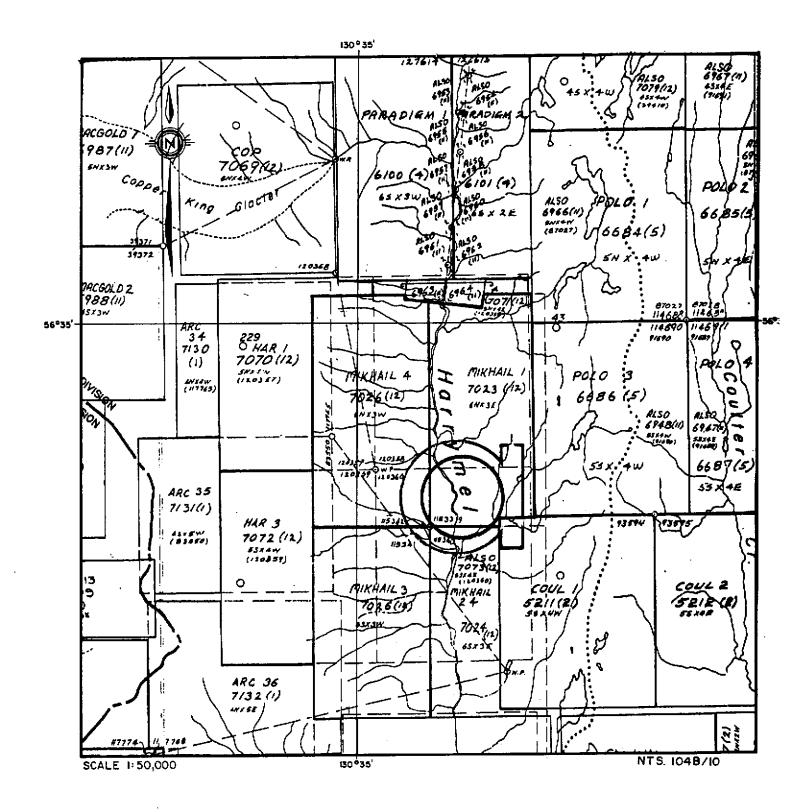
At some future date, road access to the area from the Stewart - Cassiar Highway could be obtained via the Upper Unuk River and Tiegen Creek valleys.

Property Status and Ownership

The property comprises two (2) mineral claims (36 units) located within the Skeena Mining Division. The recording documents are appended to this report and the claims are shown on Figure 2. These claims are more fully described below:

Claim Name	Record No.	No. af Units	Date of Record	Expiry Year	Name of Locator
Mikhail 1	7023	18	05/12/88	1996	L. Madison
Mikhail 4	7026	18	05/12/88	1996	L. Madison





CLAIM MAP



Figure 2

The above claims are, apparently, the subject of an agreement between the claim holders and Teuton Resources Corp. Teuton and Winslow Gold Corp. have recently optioned the property to Solomon Resources Limited. The claim records and maps (Figure 2) show that the Mikhail Property was subsequently overstaked. An unsuccessful one day search was made to locate the Mikhail legal claim post. The location, as plotted on the claim map (Figure 2) is, however, in an area of snow and rock slides.

Physiography and Climate

The Mikhail Property is situated within the Coast Range Physiographic Division and is characterized by northern rain forest and sub-alpine plateaux. The north-south trending, U-shaped Harrymel Creek valley bisects the property. Elevations (see Figure 3) range from 2,000 feet in the valley of Harrymel Creek to 5,000 feet in the western part of the property. The toes of several glaciers almost reach the western boundary of the property.

A transitional tree line, characterized by dense sub-alpine scrub, meanders through the property at, approximately, the 4,000 foot elevation. The terrain found above the tree line is typified by intermontane alpine flora. Conifers up to 30 metres tall are common below tree line, especially within the stream valleys. Water for camp and drilling purposes, is generally in good supply from the numerous creeks draining the claim area.

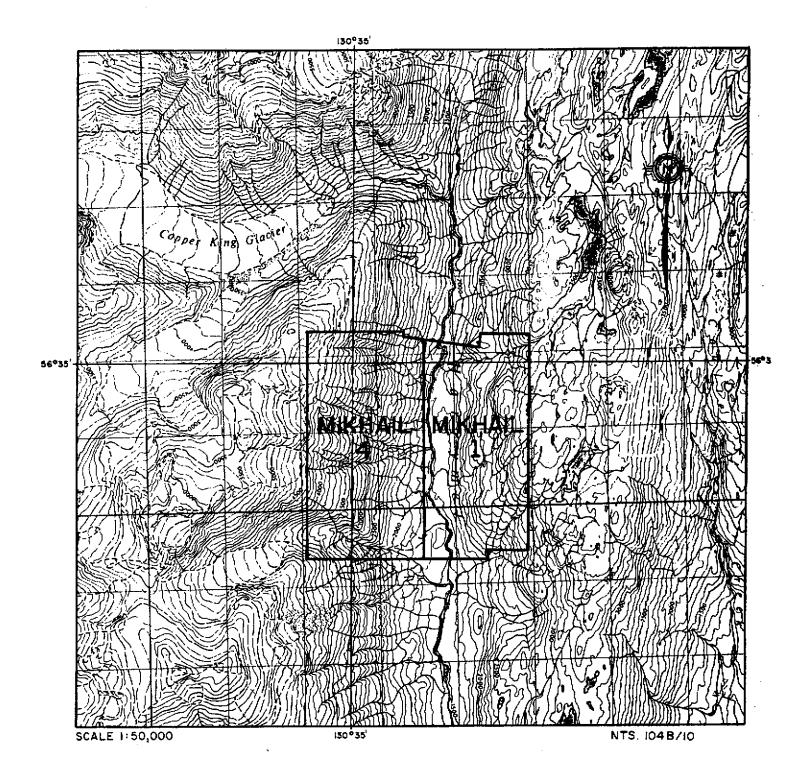
Precipitation is heavy, exceeding 200 cm per annum, with mild short summers but very wet spring and fall periods. Thick accumulations of snow are common during winter. It is seldom possible to begin surface geological work before July and difficult to continue past September.

PREVIOUS EXPLORATION

Regional History

The area drained by the upper reaches of the Stikine, Iskut, Unuk, Craig and Bell-Irving Rivers has been explored for gold since the late 1800's when prospectors passed through the region on their way to the interior. In the 1970's the porphyry copper boom again brought prospectors and companies into the area. The current gold exploration rush began in 1980 with the option of the Sulphurets property by Esso Minerals Canada and the acquisition of the Johnny Mountain claims by

2



TOPOGRAPHIC MAP MIKHAIL PROPERTY

Figure 3

Skyline Explorations Ltd. The Johnny Mountain deposit was brought into production in mid-1988 and the adjacent SNIP property is slated for production in 1991.

At this time, the Eskay Creek Prospect, located 4.5 kilometres northwest of the Mikhail Property, is the most significant showing in the area. This prospect comprises at least eight mineralized zones occurring over a strike length of 1,800 metres within a sequence of felsic volcanics (Mount Dilworth Formation). This property is currently being explored by Calpine Resources Incorporated and Consolidated Stikine Silver Ltd. N.P.L. Preliminary drilling on the #21 Zone (Northern Miner - November 7, 1988) intersected 96 feet assaying 0.752 oz/ton gold and 1.13 oz/ton silver including 52.5 feet of 1.330 oz/ton gold and 1.99 oz/ton silver.

The drilling results obtained to date indicates that the #21 Zone extends in excess of 335 m and is open along strike and at depth. There have been 665 surface diamond drill holes to date and an exploration decline driven. The 21A deposit currently is estimated to contain probable reserves of 203,000 tons of 0.66 oz/ton gold and 6.7 oz/ton silver at a gold cut-off grade of 0.25 oz/ton. The 21B and 21C Deposits and Pumphouse Lake Zone are estimated to contain possible reserves of 2,093,000 tons of 1.43 oz/ton and 54.01 oz/ton silver at the same cut-off grade (Prime Capital Corporation - News Release, September 14, 1990).

The deposit has been described as consisting of stratabound gold-silver-base metal zones, hosted by a carbonaceous mudstone unit (Salmon River Formation?) at the top of a rhyolite breccia sequence. The mudstone is overlain by andesitic pillow lavas. The rhyolite (Mount Dilworth Formation) is underlain by dacitic tuffs of the Betty Creek Formation. The southern part of the deposit (21A Zone) contains massive to disseminated stibnite-realgar mineralization with associated high grade gold and minor silver contents. This is underlain by a footwall stockwork zone in the rhyolite. The northern part of the deposit (21B Zone) is a very gold-silver rich, base metal sulphide lens, with extensive footwall stockwork mineralization. This mineralization is associated with pervasive quartz-chlorite-muscovite alteration and minor gypsum, barite, feldspar and calcite. Eskay creek appears to display characteristics of both epithermal exhalative and volcanogenic massive sulphide types of deposits (Idziszek et al., 1990).

.

A review of all the available information (Minfile, assessment reports, geological maps, reports, etc.) indicates that no mineralized occurrences or prospects are known from the area presently covered by the Mikhail property.

4

The Unuk River area was covered by regional geological mapping in 1988 as part of the Iskut-Sulphurets Project carried out by the B.C. Ministry of Energy, Mines and Petroleum Resources (Britton et al., 1989). The whole of NTS 104B is currently being mapped by R.G. Anderson of the Geological Survey of Canada (Anderson, 1989).

The results of a regional stream sediment sampling program conducted over this area were released in July, 1988 (National Geochemical Reconnaissance, 1988). In the Unuk River area, Britton et al. (1989) report that almost every known precious metal prospect in the Unuk River area is associated with high stream sediment gold values. Known gold deposits are also associated with high but variable values for such pathfinder elements as silver, arsenic, antimony and barium. Three stream sediment samples were collected from streams draining the Mikhail Property. One of these (sample #871365 on Figure 5) exhibits elevated to anomalous values in arsenic (48 ppm) and antimony (3.8 ppm).

Property History

A review of the material in the B.C. Ministry of Energy, Mines and Petroleum Resources Assessment Report Archives indicates that no work had been filed for the specific area now covered by the Mikhail Property prior to the 1989 field season. These files do, however, show that the entire Unuk River area was subjected to reconnaissance geological mapping and prospecting by Newmont Mines Ltd. in 1959-1962. This work did not discover any promising showings or prospects on the present-day Mikhail property. The assessment records (Korenic, 1982) also indicate that Duval Corp. carried out a regional heavy mineral survey in the Unuk River area in 1981.

1989 Field Program

The 1989 exploration program consisted of helicopter-supported reconnaissance prospecting, geological mapping, and geochemical sampling with the objective of evaluating the property's potential for hosting economic precious metals deposits.

A 6-12 m wide massive magnetite unit, traceable for 900 m, was discovered along the Melville Diorite contact. This occurrence appears similar to the Max deposit in which massive magnetite with lesser pyrrhotite and chalcopyrite occur in skarn-altered sedimentary rocks adjacent to a diorite stock. A number of old trenches were found in the southeastern corner of the Mikhail 4 claim. These trenches excavated a well mineralized zone within dark green andesite containing 10-15% pyrrhotite, pyrite, and chalcopyrite. Lithogeochemical grab sampling yielded 0.14-0.20% copper. In the northeastern corner of the Mikhail 4 claim, a dark green andesite was located hosting 10% pyrrhotite. These two showings are probably hosted by the same sulphide-enriched stratigraphic unit which cuts across the entire property.

Stream silt and heavy mineral samples collected from a stream draining the northern portion of the Mikhail 1 claim yielded elevated to anomalous Ag, Cu, and Zn values. Intermediate to felsic volcanics were found in the upper reaches of this drainage.

Heavy mineral samples collected from creeks draining the southern portion of the Mikhail 1 claim yielded elevated to anomalous Au, Ag and Zn values.

GEOLOGY

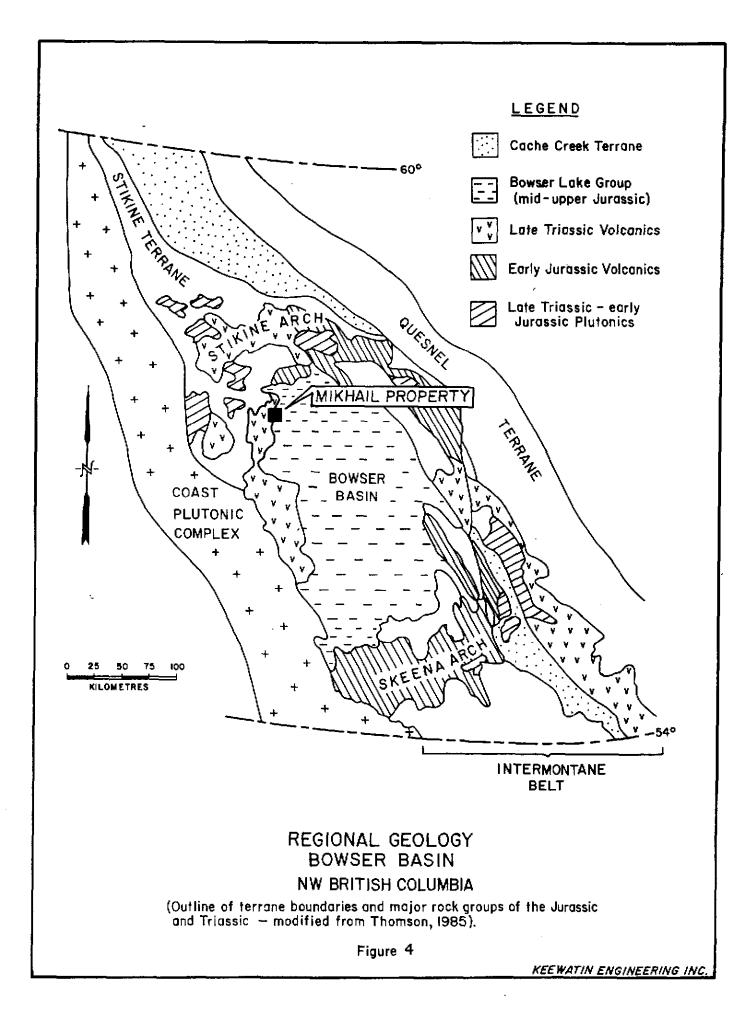
Regional Geology

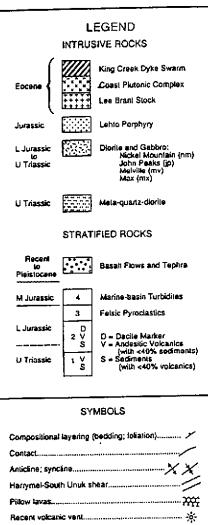
The property lies within the Intermontane Tectono-Stratigraphic Belt -- one of five parallel, northwest-southeast trending belts which comprise the Canadian Cordillera (Figure 4). The Mikhail Property occurs near the contact between the Stikine Terrane, which makes up most of the western part of the Intermontane Belt, and the unmetamorphosed sediments of the Bowser Basin.

The Unuk River area (Figure 5) is underlain by a thick succession of Upper Triassic to Lower Jurassic volcano-sedimentary arc-complex lithologies capped by Middle Jurassic marine basin lithologies. This package has been intruded by a variety of plutons representing at least four intrusive episodes spanning late Triassic to Tertiary time. These include synvolcanic plugs, small stocks, dyke swarms, isolated dykes and sills as well as batholiths belonging to the Coast Plutonic Complex.

Property Geology

Regional geological mapping by Britton et al. (1989) shows that the property is predominantly underlain by Upper Triassic to Lower Jurassic supracrustal rocks (Figure 6). The north-south trending Harrymel-South Unuk shear zone transects the property and separates the Upper Triassic to Lower Jurassic rocks in the western half of the property from the Lower Jurassic rocks which



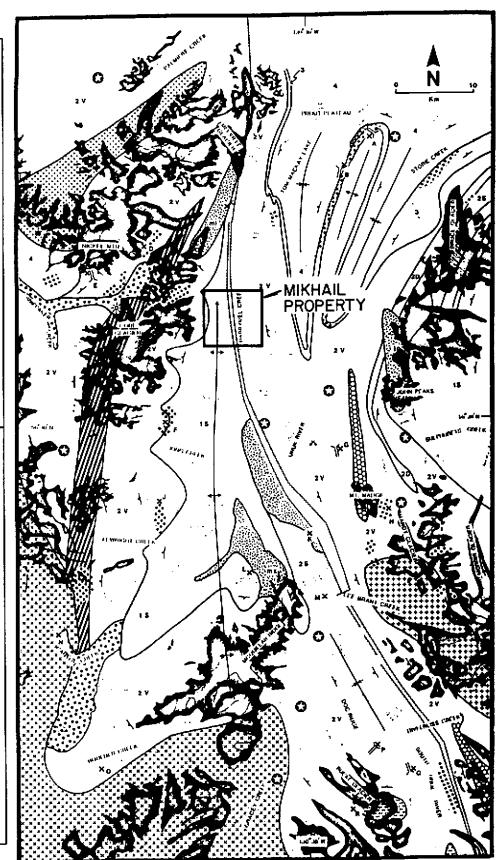


Compositional layering (bedding; toliation)	
Contact	_
Anticline; syncine	K
Harrymel-South Unuk shear	~
Pillow lavas	斑
Recent volcanic vent	¢-
Gossan	
Adit	<u>-</u>
Stream sediment gold values >90th percentile	Э
Mineral occurrence	< _R
Placer occurrence	ς.

MINERAL OCCURENCES

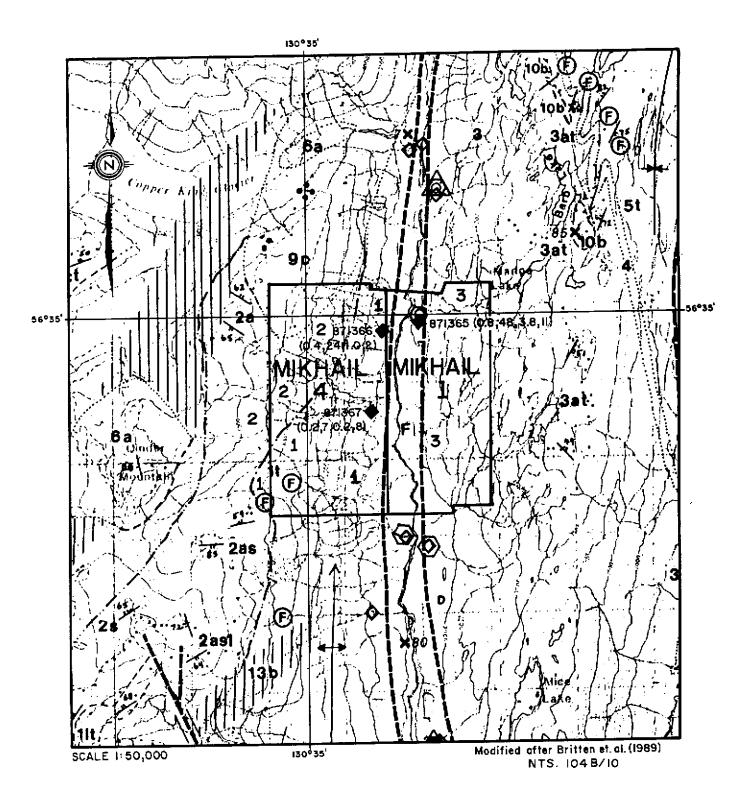
	NAME	COMMODITY
ABCDEFGH1JKLMNOFOR	Emma MacKay Copper King Cotegh E&L Mickel Cole Cumberland/Daty Mit Madge [C-10] Mit Madge [CFJ] VV Chris & Anno Max Unuk Jumbo Black Beez Boukler Creek Doc Globe Alf	Αυ, Ας, Ρb, Ζπ, Cu Αυ, Ας, Pb, Zn, Cu Cu, Fb, Zn, Cu Cu, Fb, Zn, Cu Cu, Au, Ag Ni, Cu Ou, Au, Ag Au, Ag, Zn Au, Ag, Zn Au, Ag, Zn Cu, Fe Fe, Cu Fe, Cu Fe, Cu Pb, Zn, Au, Cu Au, Ag, Pb, Cu Au, Ag

NOTE: Not to scale



Geology and mineral deposits, Unuk map area. Modified after Britton et. al. (1989) REGIONAL GEOLOGY

> UNUK MAP AREA Figure' 5



PROPERTY GEOLOGY MIKHAIL PROPERTY

Figure 6

KEEWATIN ENGINEERING INC.

LEGEND

.

	VOLCANIC AND SEDIMENTARY ROCKS
INTRUSIVE ROCKS	(nimes: his stratigraphile ampur is implied within sequences.)
10 A057-76070AUC DTVES	
Tõe (ampropress, andra se, diebese gilandur nar skout)	QUATERNARY
13a - Alap Groud Dyka Samera: folfstaer porphyry slacas, andersier, foldetae, goders charte 13a - Alamstae monspons: See-grafned locar-monanning	RECENT
12 COAST PLUTONC COMPLEX	71 - Jahoviere, pieceledwich doptisk, kantiskie dodele, micraire
	75 – Alleynan anderlein by Philipic de Biocott Salad
120 - Los Grant Stock: K-inizion porpaysy, hombiende-biblie quent monumie	PLEISTOCENE TO RECENT
JURASSIC MCKEL MCLUTING GABBRC: Internet teles-pyromen paties	6 Dent grwy at depti, baddal down wed tepting; minor pillew Area
11	fe Dari proy in dégel, datak dona nég ingérir, many panén néren 19 – Based nyiku
STAL TO POSTAVCE CANCE INTRUSICIAS: Prophysics to promovine summer; possibly hypothysical equivalences 10 al sensitive modes	TRIASSIC TO JURASSIC
184 Lako Porphy: Science pingaria se torminado porphy: Glinodiania la spania	HAZELTON GROUP MIDDLE JURASSIC (TOARCIAN TO BAJOCIAN)
189 – Baro Laka Cytes: Einer se meður-ogarðand kamolanda Gárðin 189 - Andessin-Gæren Genegalar: smákacerssör, áfnar íst maður-ogarðand árskin viði aðundari i senskin ar deur gesen værste vinkum, ýgar sikkjir (frássis)	SITUAL STRUCTURE SECURITY OF STRUCTURE (Secure Allow Formatical). Dat gray, webbeddin't situates with addre samk time
United and a start provide the start and an and a start of the start o	
In John Paaly metanecrate benetiande derrie	ge - Reynancically kanddood ulltalano karl shaka (kabballa) ger - Tainis kenddool wacha
in Also danne tarradenik Gerik, gesti karne Ro- kasan parajanda danih darik jesti dinih	3.6 Andreaking pallow based and pallow devocies with minor allowers interpods
30 Dec Autye electe man rationie	LOWER JURASSIC (TOARCIAN)
TRIASSKC 	A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A
	6.9 Varianti andra anta 1965. 19 Staanio kultu India
	Block and white, carbon screen fails: unstantist; letsily for handed and anti-anti-schemed LOWER JURASSIC (PLIENSBACHIAN TO TOARCIAN)
	J Junio 1 - Contracting and a second and a second sec
	3. Group and proy, material to poorly budged materials
	24 Goty, press and purple darking but, hashingd, oryaki and Minis but, mesons to and boolded; Betyper prysk:
METAMORPHIC ROCKS	30' a bhlian nanatharing, dutair bute, ang ganachia ndhi gaarta ukingmet. 30 - Aantandar lagdill kuli milih pina adiceana cianus
	346 - Andenanic pillow ieres and pillow peccisis with minor altsoche inputents 37 - Becci, abiej analisi altsocne, stare and argitite furbidmij
A - bestervers, d s.k. gmy, c.utbasec sous gesty hit/spansericits phydre	UPPER TRIASSIC TO LOWER JURASSIC (NORIAN TO SINEMURIAN)
8 Patter and work which, topic procedure allower charges and the pattern acceler payment and a metamore land.	2 ANDEST(E SEQUENCE (South New Formation): Grows and gray, Internations as male volcanoticities in 2 dama with locally their interaction of Ana-gravital minuture architecture, instance apagements and interactions
C Marks to unimodate menocialistic such press, stagisticalistic hyperes in the second stages of the second se	2. Govy and press, pilopick so i komando pospitytic satisfie; marshe is poorly defied
6 Namouwos-playtoch se prest; consume separate 7 Support second socies within the caute claute comparate 10 Support second socies within the claute claute claute socies	26 — Gury and proof, demokrationic (2 pyraena) bettyper physiophic particular byolf out out the full 22 — Gury, termin and proof, Pialy partical advances alterators and bee provided unalize
	ja "Barzi, danis izminator allesson furbitas); anat; arpillon 29 (Jait proj., motio-responded eanglemerne with practic cotoies
	ي المراجع المراجع بالمراجع المراجع الم المراجع المراجع
	STUHINI GROUP
	UPPER TRIASSIC (CARNIAN TO NORIAN)
	LOMEN VCX CANDSEDWER/TAMY SEGUENCE: Source, back and programmed watering works I see devoted with marchan to deal prove, mark as intermedians vocania and vectorical sec rocks
GOSSANOUS ALTERATION ZONES	ti - Geny to obieck, mining excitent alta sona, ukade, anjalite (hurthelen) tur - Besson arri prey, den preirient aufoscense tracies; minor altabene er conglemente
	11 Geory, imposenty, attles, sandry inne stone e - Groven, inne-grained, andressie, asit suit, inspaper and hombiences physic
Ann 2 quara 2 serien 2 serien 2 serien 2 slag kesky kekend in schutere	15 – Davis provet abstak 19 – Guny and provet, ande tikt tweezie with aug tre-ternisticade physicenese citate and sughtwices
SYMB	OLS
Geological boundary (Bolfnat, appresimate, assumed) Bedding, tope known Bertynnal, Indined, verikal, overhanad	
Budding, tops uninners, (polsonial, incland, vertical)	
Budding, estimated tile (pendie medianate, riter)	
Compositional legisling in metamorphics of society;	LEGEND for
tiend fire	
Regional antisting; syncline	Fig. 6
Analdorm, spalaam (honzul, dwatanted)	
Bahar 2006 and an	
Thrust Lauft (defined, seaumad; looth on upper piste)	
for phone direction and the second seco	(P)
	Ū
Area with these share 40% Testary dynamics and an area and an a	III
Limit of Inside physics 1 constants and a second	······································
Gaugiopie assiste	
Kašanai gadotnamicai iaszeniaiksenne szittette alto	_ Sample No. (Ag ppm, As ppm, Sb ppm, Au ppb)
Possielen-argen isologie upo sie: H - herrefendet, nee is millen, si vaar befar breidtigteren	

ens el prom

es: Marifill number

×83

≽

age in

underlie the eastern part of the property. The distribution of map-units suggests that the rocks to the west of the major shear zone dip shallowly to the west. Units in the eastern part of the property display a moderate easterly dip. The northwestern corner of the property is underlain by the southern nose of the Melville Diorite Stock.

Geological mapping during the 1990 field season was concentrated on the Lower Jurassic Betty Creek Formation stratigraphy on the east side of the Unuk-Harrymel shear zone (Mikhail #1 claim). Two geological mapping/prospecting traverses were completed along drainages at the north and south ends of the property. This work showed that the property is underlain by alternating bands of resistive grey to green intermediate volcanics, and recessive black thinly bedded siltstone, shale and argillite. The intermediate volcanics included fine grained massive flows, pillowed flows, banded, lithic tuffs and fragmentals. The sediments are generally thinly bedded, but two distinctive sheared and altered siltstone/argillite bands were also identified. This stratigraphic package is similar to that which hosts the Eskay Creek deposit, 10 km to the northwest, except for the absence of felsic volcanic bands.

The Map-Units occurring on the Mikhail Property are described below.

Stuhini Group (Upper Triassic - Unit 1 on Figure 6)

Fossil evidence led Britton et al. (1989) to ascribe a Carnian to Norian age to this unit and to equate it with the Stuhini Group. This unit occurs as a wedge between the Harrymel-South Unuk shear zone and the volcanics and sediments of the Unuk River Formation (Unit 2 on Plate 6) to the west. The Upper Triassic rocks have been sub-divided into three lithostratigraphic sequences, only the lowest of which occurs on the Mikhail Property. This unit consists of grey to black, thinly bedded siltstone and shales, argillites and immature fine grained wackes.

Unuk River Formation (Upper Triassic to Lower Jurassic - Unit 2 on Figure 6)

These Norian to Sinemurian age rocks belong to the Unuk River Formation which is the lowermost unit of the Hazelton Group. This unit has been mapped by Britton et al. (1989) in the northwestern part of the property. The dominant unit appears to be grey and brown, massive to poorly bedded plagioclase <u>+</u> hornblende porphyritic andesite. Lesser amounts of

6

thinly bedded, grey, brown and green tuffaceous siltstones and fine grained wackes occur locally.

Betty Creek Formation (Lower Jurassic - Unit 3 on Figure 6)

A Pleinsbachian to Toarcian age is assigned to this unit by Britton et al. (1989). This pyroclastic-epiclastic sequence comprises a sequence of westward facing but locally overturned interbedded volcanics and lesser sediments, underlying the eastern part of the property. The volcanics are dominantly grey and green, massive to poorly bedded units, and range in composition from basaltic andesite to dacite. Pillow lavas, breccias, and felsic pyroclastics, including spherulitic rhyolite, have been reported in the John Peaks area, but were not mapped by Britton et al. (1989) within the Mikhail property. The sedimentary rocks are, on the whole, less abundant than the volcanic rocks, and consist of black thinly bedded siltstone, shale, and argillite. Limestones are rare or absent in the Lower Jurassic section.

Melville Diorite Stock (Jurassic - Unit 9c on Figure 6)

The southern extremity of this elongate stock underlies the northwestern corner of the property along the inferred contact between Triassic and Jurassic strata. This lithotype is medium- to coarse-grained, equigranular, and ranges in composition from hornblendebiotite diorite to quartz diorite.

<u>Structure</u>

The Unuk-Harrymel shear zone bisects the Mikhail property trending north-south along Harrymel Creek (western Mikhail 1 claim area). This cataclastic zone has been interpreted as a major east dipping fault structure with normal offset. The zone itself is composed of strongly sheared and foliated black graphitic argillite. This shear zone separates the Jurassic Betty Creek Formation to the east from the Upper Triassic Stuhini Group to the west. Fault surfaces mapped in the Betty Creek rocks were seen to trend north-northeast and dip moderately to steeply both east and west. Variably orientated strikes, dips and contacts seem to indicate folding of the Betty Creek Formation. <u>Alteration</u>

Regional greenschist facies alteration has chloritized the intermediate volcanics and produced dark green coloration. Rare quartz-carbonate stringer zones are found within these volcanics. Zones of carbonate alteration are also encountered, possibly the result of hydrothermal fluids migrating along nearby zones of weakness.

Mineralization

Mineralization observed on the Mikhail 1 claim was limited to fine grained disseminated pyrite within intermediate massive volcanics, tuffs, argillites and quartz carbonate stringers. No other sulphides were identified. Pyrite mineralization was seen to increase in host argillites at and near contacts of intermediate dykes. The highest geochemical value from the 1990 field exploration program was returned from a chip sample (PR4184; 120 ppb Au) at this contact within the argillite (Figure 7, Appendix V and VI).

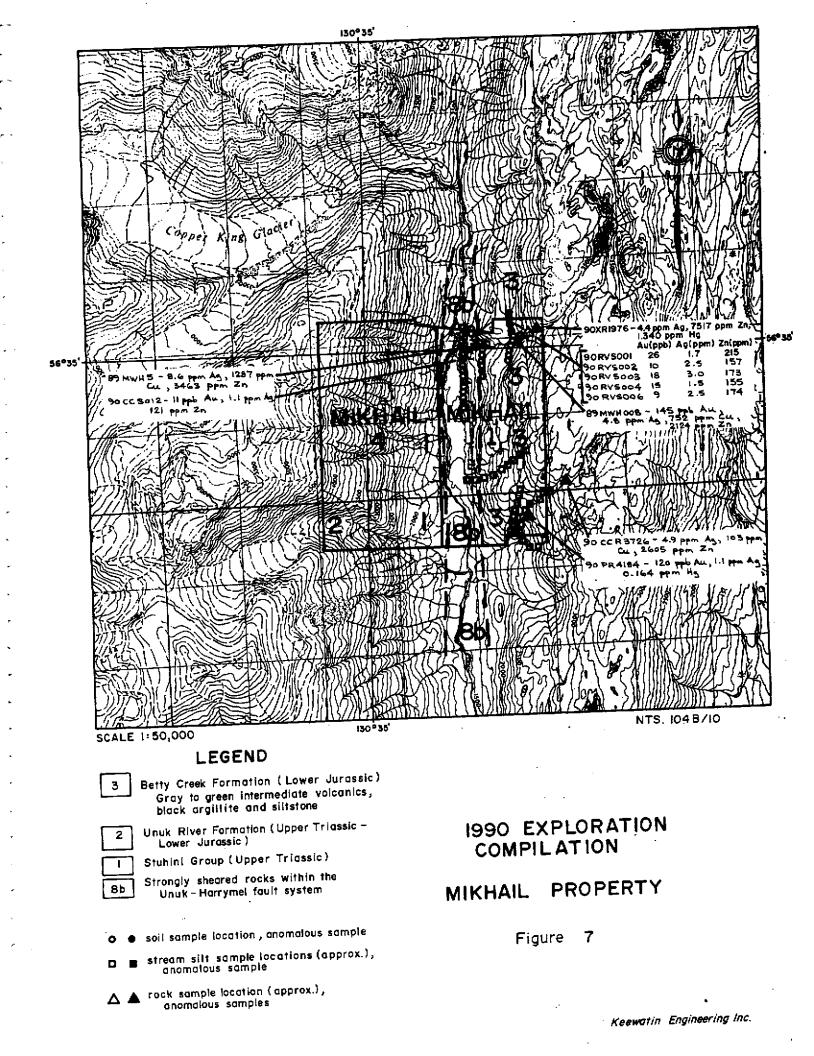
1990 EXPLORATION PROGRAM

Geological Mapping

The 1990 program of geological mapping was concentrated in the eastern half of the Mikhail Property. This is the area to the east of the Harrymel-South Unuk shear zone and which is mapped by Britton et al. (1989) as underlain by rocks belonging to the Betty Creek Formation. Two geological mapping/prospecting traverses (5 line-kilometres) were completed along drainages at the northern end and southern extremities of the property.

GEOCHEMISTRY

A total of 65 soil samples, 46 stream silt samples and 19 rock samples were taken as part of the geochemical survey on the Mikhail property. All samples were shipped to Bondar Clegg of North Vancouver where they were analyzed for Au and 8 element ICP (Cu, Pb, Zn, Ag, Mo, As, Sb, Hg). The analytical techniques are described in Appendix VIII).



Stream Silt Geochemistry

A total of 46 stream silt sediment geochemical samples were collected from creeks and streams in both the northern and southern parts of the Mikhail 1 claim. The northern stream was investigated in order to follow-up a heavy mineral concentrate sample from the 1989 exploration program which was anomalous in copper and zinc (89MWH5; 1281 ppm Cu, 3,463 ppm Zn). The sample site was not found, leading the author to believe that the sample was taken on a nearby stream. None of the silt samples collected in 1990 from the northern drainages produced anomalous values. The southern drainages sampled as part of the 1990 exploration program also did not produce any geochemically anomalous samples. As in the northern part of the claim, these drainages were sampled in order to investigate an anomalous heavy mineral concentrate sample collected during the 1989 program. This original sample site was not located in 1990.

Soil Geochemistry

A total of sixty five contour soil samples were collected along three contour lines at roughly 300 foot contour intervals. Due to the initial discouraging results from the silt and soil geochemistry, the work on the Mikhail property was suspended and these contour lines were not extended beyond one kilometre south of the northern boundary. From this limited sampling, one weakly anomalous zone of gold, silver, copper, lead, zinc and mercury was outlined close to the northern claim boundary on the 2,600 foot contour (Figure 7). If this weak soil geochemical anomaly is related to the stratified mineralized horizon, the geological trend could extend towards the untested central to central western portion of the claim. Results are listed below:

Table 1 Anomalous Soil Sample Results							
90 RV S001	26	1.7	16	50	215	0.149	
90 RV \$002	10	2.5	28	55	159	0.159	
90 RV S003	18	3.0	77	38	173	0.164	
90 RV S004	15	1.5	77	43	155	0.215	
90 RV S005	9	2.5	63	26	174	0.184	

9

<u>Rock Geochemistry</u>

A total of nineteen grab samples were collected during prospecting/geological mapping traverses on the Mikhail property. Traverses were not conducted in the central portion of the property. Anomalous results are listed below, and plotted on Figure 7.

			Table 2				····
	<u> </u>	Anomalo	us Rock Sa	mple Result	ts		
Sample No.	Au	Ag	As	Cu	Pb	Zn	Hg
	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
90 XR 1976	な	4.4	42	140	95	7517	1.340
90 CC R3726	な	4.9	80	103	10	2605	0.680
90 PR 4184	120	1.1	29	93	62	54	0.164

CONCLUSIONS & RECOMMENDATIONS

The 1990 exploration program on the Mikhail property consisted of prospecting, mapping and geochemical sampling. Work was confined to the northern and southern extremities of the Mikhail 1 claim.

Geological mapping, confined during the 1990 exploration program to the Betty Creek Formation of the Mikhail 1 claim, determined that the property is underlain by alternating bands green to grey intermediate volcanics and black, thinly bedded siltstone, shale and argillite.

The results of the geochemical survey failed to define any obvious exploration targets. One area of coincident weak geochemical anomalies in soil along the 2,600 foot contour in the northern part of the Mikhail 1 claim was identified. This area may warrant further investigation. Due to a lack of encouraging results, the soil contour geochemical survey was not extended southward from the northern area of coverage. Geochemical contour soil sampling lines, prospecting and geological mapping along creeks and stream silt sampling could still be conducted in the central part of the Mikhail 1 claim area. The weak coincident soil geochemical anomaly, if related to a stratified horizon would project into this area. A search in this central claim area for the, as yet unlocated, anomalous heavy mineral concentrate sample site from the 1989 exploration program should be made. Once located, detailed (100 m spaced) silt samples should be collected from the above noted drainages. Prospecting and mapping should also be done in this area.

Respectfully submitted,

KEEWATIN ENGINEERING INC.

AMC1.65-

Alexander M. (Sandy) Gibson, B.Sc.

REFERENCES

- Alldrick, D.J.; Drown, T.J.; Grove, E.W.; Kruchkowski, E.R.; Nichols, R.F. (1989): Iskut-Sulphurets Gold; in The Northern Miner Magazine, January 1989
- Anderson, R.G. (1989): A Stratigraphic, Plutonic and Structural Framework for the Iskut River Map Area (NTS 104B), Northwestern British Columbia; <u>in</u> Current Research, Part E; Geol.Surv.Cda., Paper 89-1E
- Britton, J.M.; Webster, I.C.L.; Alldrick, D.J. (1989): Unuk Map Area (104B/7E,8W,9W,10E); in B.C.Energy Mines & Petr.Res., Geological Field Work 1988, Paper 1989-1, pp.241-250

Consolidated Stikine Silver Ltd.: - 1989 Annual Report

DuPré, D.G. (Sep.6, 1989): Geological Report on the Mikhail Property, Skeena Mining Division, B.C.; for Solomon Resources Limited

Geological Survey of Canada:

- Open File 1645 (1988): National Geochemical Reconnaissance; Iskut River

Grove, E.W. (1971): Geology and Mineral Deposits of the Stewart Area, British Columbia; B.C.Energy Mines & Petr.Res., Bulletin 58

----- (1986): Geology and Mineral Deposits of the Unuk River-Salmon River-Anyox Area; B.C.Energy Mines & Petr.Res., Bulletin 63

Korenic, J.A. (1982): Assessment Report of Geological, Geochemical, and Geophysical Work Performed on the Cole Claim in 1981, Skeena Mining Division; B.C.Energy Mines & Petr.Res., Assess.Rpt.10474

Northern Miner: - Nov.7, 1989

- Pegg, R.S. (1988): Geological Compilation of the Iskut, Sulphurets, and Stewart Gold camps; for BP Resources Canada Limited, private company report
- Shensha Consultants Limited (1989): Report on Interpretation of VLF-EM and Magnetic Survey on Mikhail and Store Claims; for Winslow Gold Corporation, private company report

Woods, D.V.; Hermary, R.G. (1988): Geophysical Report on an Airborne Magnetic and VLF-EM Survey, Mikhail 1-4 Claims; for Dino Cremonese

CERTIFICATE

I, ALEXANDER M. GIBSON, of 555 E. St. James Road in the District of North Vancouver in the Province of British Columbia, do hereby certify that:

- 1) I am a graduate of the University of British Columbia, B.Sc. Geology (1988) and have practised my profession continuously since graduation.
- 2) I am a member of the Geological Association of Canada.
- 3) I am presently employed on contract with the firm of Keewatin Engineering Inc., with offices at Suite 800 - 900 West Hastings Street, Vancouver, British Columbia.
- 4) During the period of August 10 August 15, 1990, I managed and carried out the exploration program on the Mikhail Property on behalf of Solomon Resources Limited.
- 5) I am the author of the report entitled "Geological and Geochemical Report on the Mikhail, Skeena Mining Division, British Columbia", dated November 8, 1990.
- 6) I do not own or expect to receive any interest (direct, indirect or contingent) in the property described herein nor in the securities of Solomon Resources Limited in respect of services rendered in the preparation of this report.

Dated at Vancouver, British Columbia this 9th day of November, 1990.

Respectfully submitted,

AMINSO

Alexander M. Gibson, B.Sc.

APPENDIX I

-

b....

κ.

*****···

•

- -.

. .

•

.

•

. ,

.

.

÷ .

,

.

•

.

•

•

.

e .

.

 $\boldsymbol{e} \geq$

.

p. -

•

Itemized Cost Statement

ITEMIZED COST STATEMENT

<u>ب</u> م

•

.

2 60 N 2 M 2 M 2 M	HAIL SUMMARY ber 25, 1990	
1	Wages	\$ 4,580.00
2	Domicile	1,275.00
3	Helicopter	3,810.00
4	Mobilization/Demobilization, Freight, Fuel, etc.	10,313.46
5	Supplies	1,430.92
6	Assays Soils - 65 @ \$11.00 each Silts - 46 @ \$11.00 each Rocks - 19 @ \$13.48 each	715.00 506.00 256.03
7	TOTAL	22,886.50

APPENDIX II

. .

.

. .

.

-

.

•

.

•

۰ ۲

.

.

٣

•

۲

.

,

•

۰.

***** ···

•

Statement of Personnel

SUMMARY OF PERSONNEL

Employee	No. of Days	Day Rate	Total \$
Anderson, Colin	3	\$250.00	\$ 750.00
Birkeland, Eric	2	\$300.00	600.00
Gibson, Sandy	2	\$325.00	650.00
McIntyre, Brian	3	\$300.00	900.00
Thompson, Scott	5	\$250.00	1,250.00
Whittam, Heath	1	\$190.00	190.00
Wood, Lesley	1	\$240.00	240.00
TOTAL:			\$4,580.00

.

,

APPENDIX III

.....

ber.

۲.

.

. .

.

.

÷

. .

٣

r ·

.

.

.-

-

.

.

•

.

Soil and Stream Silt Sample Geochemical Results

Bondar-Clegg & Company Ltd. 130 Pemberton Ave. North Vancouver, B.C. V7P 2R5 j., (604) 985-0681 Telex 04-352667

-

-



Geochemical Lab Report

i

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

				A DIVISION	IOF INCLICE	IF L 1.451 LC 1		DAT	E PRINTED	<u>- 25-se</u> i	-90		
† —	REPORT: V90-020	153.0						PRO	JECT: 044			PAGE 1	
 t	SANPLE NUMBER	ELEMENT Units	Au 30g PP8	Ag PPM	Cu PPN	Pb PPM	Zn PPN	As PPM	Sb PPN	Mo PPN	Hg PPN		
,		-001	6	0.4	26	7	56	<5	<5	7	0.143		
	S1 90 CC 044 S-		8	1.2	20	24	45	18	<5	8	0.116		
]	S1 90 CC 044 S-		7	1.7	18	23	51	16	8	14	0.090		
J .	S1 90 CC 044 S-		<5	1.1	19	11	55	6	6	5	0.063		
,	S1 90 CC 044 S-		<5	1.0	16	45	37	12	<5	6	0.135		
	\$1 90 CC 044 S		<5	1.9	25	28	46	14	11	9	0.103		
	S1 90 CC 044 S		7	1.8	20	25	65	18	8	11	0.060		
1	\$1 90 CC 044 S		9	1.1	27	13	42	7	7	5	0.043		
	S1 90 CC 044 S-		6	1.2	33	9	32	15	<5	3	0.149		
•	S1 90 CC 044 S	-010	6	1.5	29	10	37	8	8	3	0.126		
	\$1.90 CC 044 S	-011	5	1.7	29	14	76	18	<5	4	0.182		
. .	S1 90 CC 044 S		11	1.1	45	26	121	32	<5	4	0.085		
	S1 90 CC 044 S		б	1.1	22	8	45	<5	<5	3	0.139		
1	S1 90 CC 044 S		<5	1.5	28	16	59	8	6	6	0.115		
 -	S1 90 CC 044 S	-015	6	1.4	28	16		31	6	3	0.175		
				1 2	18	18	63	7	<5	14	0.077		
ì	S1 90 CC 044 S		< <u>5</u>	1.2 1.6	21	23	64	10	8	12	0.086		
ļ	S1 90 CC 044 S S1 90 CC 044 S		<5 <5	1.0	21	20	59	7	6	8	0.069		
	SI 90 CC 044 S		<5 <5	2.6	30	24	B4	17	7	6	0.184		
]	S1 90 CC 044 S		<5	1.4	30	17	79	<5	<5	7	0.074		
-~-		. 021		1.7	29		33	41	14	4	0.137		<u> </u>
	S1 90 CC 044 S S1 90 ST 044 S		<5 <5	0.8	18	17	46	<5	<5	5	0.095		
	SI 90 ST 044 S SI 90 ST 044 S		<л б	1.9	19	10	32	12	10	5	0.108		
J	S1 90 ST 044 S		5	1.0	16	14	33	<5	5	3	0.105		
- ,	S1 90 ST 044 S		<5	0.9	10	10	40	5	<5	2	0.086		
• • • • • • • • • • • • • • • • • • •				• •	20	12	26	34	8	3	0.100		
·	S1 90 ST 044 S		17	1.1 1.0	20	18	68	11	7	3	0.077		
٦	S1 90 ST 044 S S1 90 ST 044 S		<5 9	1.0	19	13	51	13	8	4	0.066		
	S1 90 ST 044 S S1 90 ST 044 S		<\$	1.3	26	15	62	<5	<5	12	0.075		
L.	S1 90 ST 044 S		6	1.1	24	14	55	7	<5	14	0.101		
·							tr		7	- 7	0.084		
1	S1 90 ST 044 S		6	1.4	41	14 22	56 109	9 30	י 7	i A	0.190		
	S1 90 ST 044 S		b 0	1.2	49 21	23 14	109 39	50 6	5	10	0.056		
ו	S1 90 ST 044 S		9 <5	0.7 1.7	31	16	56	24	9	6	0.120		
	S1 90 ST 044 S S1 90 ST 044 S		7	1.1	17	7	43	<5	<5	4	0.090		
-	01 70 31 044 6		· · · · · · · · · · · · · · · · · · ·										
1	S1 90 ST 044 9		8	0.9	16	14	41	6	<5 <5	4	0.069 0.157		
,] ,	S1 90 ST 044		5	1.9	28	17	61 62	24	<5 8	8 4	0.157		
	S1 90 ST 044		11	1.2	25	55 50	62 215	23 64	о Т	14	0.149		
1	S1 90 RV 044		26	1.7	145 66	ой 55	159	66	9	14	0.159		
<u>۱</u>	S1 90 RV 044	5-002	10	2.5			133						

Bondar-Clegg & Company Ltd. 130 Pemberton Ave. North Vancouver, B.C. V7P 2R5 (604) 985-0681 Telex 04-352667

.

.

-

-

.....



Geochemical Lab Report

ì.

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

	. <u>.</u>			·					TE PRINTE		<u>ep-90</u> Page 2		
	REPORT: V90-0	2053.0						PR	OJECT: 04	4		PAGE Z	
	SANPLE	ELENENT	Au 30g	Ag	Cu	Pb	Zn	As	Sb	Mo	Hg		
	NUMBER	UNITS	PPB	PPN	PPM	PPN	PPN	PPN	PPN	PPN	PPN		
	S1 90 RV 044	S-003	18	3.0	77	38	173	45	8	9	0.164		
	S1 90 RV 044		15	1.5	77	43	155	30	6	6	0.215		
	S1 90 RV 044		9	2.5	63	26	174	31	11	7	0.184		
	\$1 90 RV 044		9	1.4	51	23	125	10	6	9	0.129		
	S1 90 RV 044		<5	2.5	39	21	88	9	10	8	0.146		
	S1 90 RV 044	s_009	6	0.2	13	3	37	<5	<5	<1	0.110		
			7	1.7	75	37	186	42	9	5	0.152		
	S1 90 RV 044		7	0.9	27	15	84	16	6	4	0.117		
	S1 90 RV 044		, <5	1.0	35	16	184	14	8	3	0.073		
	S1 90 RV 044		<5		21	18	93	6	Š	7	0.060		
	\$1 90 RV 044	5-13	<u></u>	1.4									
	S1 90 RV 044	S-14	6	1.6	24	11	76	6	<5	3	0.087		
	S1 90 RV 044		<5	1.4	33	15	68	<5	10	3	0.109		
	T1 90 CC 044		13	0.8	32	13	130	11	7	Э	0.089		
	T1 90 CC 044		10	0.9	27	15	160	40	7	5	0.058		
	T1 90 AW 044		10	1.5	28	18	202	8	<5	3	0.158		
		1 002 1+00	12	1.7	48	28	252	17	6	5	0.216		•
	T1 90 AN 044		12	0.9	31	17	153	14	<5	3	0.139		
			9	0.9	29	20	133	23	5	3	0.116		
	T1 90 AW 044		9 15	1.1	34	19	139	14	g	4	0.133		
	T1 90 AW 044		15	0.9	54 41	17	105	13	ģ	3	0.120		
	T1 90 AW 044	L-000 3+00		0.3	41	1/	103						· · · ·
-	T1 90 AN 044	L-007 6+00	13	0.7	45	13	129	8	<5	2	0.091		
	T1 90 AW 044		9	0.7	47	19	135	<5	6	3	0.083		
	T1 90 AN 044		9	0.7	41	15	121	9	8	3	0.080		
	T1 90 AW 044		6	0.7	39	17	123	17	8	3	0.081		

Bondar-Clegg & Company Ltd. 130 Pemberton Ave. North Vancouver, B.C. ٠



A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

File: Solonie - Milchart

DATE PRINTED: 12-SEP-90

PROJECT: 044

б

5

б

7

135

152

12

18

32

39

3

5

0.154

0.102

Geochemical Lab Report

PAGE 1

V7P 2R5

-

•

(604) 985-0681 Telex 04-352667

REPORT: V90-01860.0

T1 90 X 044 L019

T1 90 X 044 L020

	SANPLE ELEMENT	Au 30g	Ag	 Çu	Pb	Zn	As	Sb	Mo	Hg	
۰.	NUMBER UNITS	PPB	PPN	PPM	PPM	PPM	РРИ	PPN	PPN	<u> </u>	<u> </u>
	S1 90 ST 044 S001	<5	1.1	21	8	39	<5		3	0.233	
	S1 90 ST 044 S002	15	1.0	12	B	49	5	<5	7	0.205	
T	\$1 90 ST 044 S003	7	0.9	22	15	44	<5	<5	4	0.193	
	T1 90 CC 044 L001	<5	1.2	44	39	365	44	6	4	0.212	
-	T1 90 CC 044 L002	<5	1.1	44	44	395	24	8	4	0.278	
				47	26	247	25	6		0.119	
I	T1 90 CC 044 L003	<5	0.9 0.6		24	223	18	8	3	0.124	
	T1 90 CC 044 L004	6	0.0	45 55	28	211	28	6	3	0.104	
1	T1 90 CC 044 L005	24 9	0.6	98	19	208	18	<Š	3	0.087	
	T1 90 CC 044 L006	21	0.7	57	27	189	29	6	3	0.085	
· _	T1 90 CC 044 L007	£1	0.7								· · · · · · · · · · · · · · · · · · ·
1	T1 90 CC 044 L008	16	0.8	52	26	173	34	7	3	0.093	
	T1 90 CC 044 L009	109	0.7	66	25	453	30	9	4	0.132	
•	T1 90 ST 044 LD01	<5	0.7	27	15	152	<5	<5	2	0.177	
1	T1 90 ST 044 L005	24	1.8	87	45	270	43	<5 /	6	0.245	
	T1 90 ST 044 L006	5	0.9	72	24	182	23	<5	4	0.123	
<i>+</i> -	T1 00 CT 044 1003	9	0.8	53	22	166	15	б	3	0.099	
ı	T1 90 ST 044 L007	> <5	0.0 0.6	45	15	145	17	<5	3	0.103	
	T1 90 ST 044 L008	<5	0.5	39	14	130	14	<5	2	0.097	
1	T1 90 ST 044 L009 T1 90 ST 044 L010	<5 <5	0.7	41	18	123	13	<5	3	0.143	
ĩ	T1 90 ST 044 L010	21	0.7	68	37	186	13	8	3	0.106	
		. <u> </u>								0 131	
	T1 90 ST 044 L012	19	0.7	74	29	327	11	5	4	0.121 0.087	
h	T1 90 ST 044 L013	15	0.7	61	28	292	20	6	4, ว	0.087	
	T1 90 ST 044 L014	15	0.6	54	21	193	14	<5 <5	3 4	0.112	
,	T1 90 ST 044 L015	13	0.6	49	20	223	15 24	5	3	0.093	
•	T1 90 ST 044 L016	15	0.8	56	26	215	<u> </u>		_	0.000	
	T1 90 ST 044 L017	<5	0.7	46	27	204	16	<5	3	0.097	
3	T1 90 ST 044 L018	15	0.6	47	25	215	6	6	4	0.109	
×.	T1 90 ST 044 L019	15	0.6	45	23	212	24	<5	4	0.101	
	T1 90 ST 044 L020	15	0.6	43	22	219	16	<5	4	0.105	
Ļ	T1 90 X 044 L001 MOSS	14	0.6	52	24	170	21	5	4	0.128	
- -, -						167	16	7	3	0.110	
	T1 90 X 044 LOO2 MOSS	12	0.5	45	19 25	167 221	15	, 6	4	0.097	
J.	T1 90 X 044 L003 MOSS	17	0.7	55	25 25	237	27	10	2	0.114	
	T1 90 X 044 L004	28	0.8	58 33	25 12	112	13	8	4	0.120	
Ì	T1 90 X 044 L005	37	0.5	33 17	13	102	23	ě.	3	0.079	
J	T1 90 X 044 L015	12	0.3	11		102					
-	T1 90 X 044 L016	18	0.8	24	11	232	28	<5	5	0.123	
1	T1 90 X 044 L017	<5	0.4	11	6	95	13	<5	2	0.043	
ļ	11 90 X 044 L018	6	0.4	15	8	147	6	<5	3	0.070	
	IT AN U ALL CATA			20	13	100	6	6	2	0.154	

0.5

0.5

6

15

Bondar-Clegg & Company Ltd. 130 Pemberton Ave. North Vancouver, B.C. p. . . . V7P 2R5 (604) 985-0681 Telex 04-352667 b.

.

Г



ì

Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICE	A DIVISION	OF INCHCAPE INSPECTION	& TESTING SERVICES
-----------------------------------------------------	------------	------------------------	--------------------

 REPORT: V90-	01860.0							T <u>e printe</u> Oject: 04			PAGE 2
 SANPLE NUMBER		Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPN	Sb Ppm	No PPN	Hg PPM	
T1 90 X 044 T1 90 X 044 T1 90 X 044 T1 90 X 044 T1 90 X 044	L022 L023	9 <5 22 24	0.5 0.5 0.4 0.5	37 40 32 41	21 15 11 12	183 173 133 153	23 15 <5 16	6 <5 <5 10	б 6 4 5	0.116 0.091 0.065 0.093	

 Bondar-Clegg & Company Ltd. 130 Pemberton Ave.
 North Vancouver, B.C. V7P 2R5
 (604) 985-0681 Telex 04-352667

r •

۹.



Geochemical Lab Report

	REPORT: V90	 0_02267_0			ł			STING SERVIC DA PR	ATE PRINTE ROJECT: 04	<u>.0: 12-01</u> 44	<u>1-AN</u>	PAGE 1
	SAMPLE NUMBER	ELEMENT	Au 30g PPB	Ag PPN	Cu PPN	Pb PPN	Zn PPM	As PPN	Sb PPM	Mo PPN	Hg PPM	
				0.4	36	13	122	20	<5	3	0.070	
	T1 90 ST 04 T1 90 X 044	4 (PRE)	6							4	0.155	
	T1 L-020 MO	JSS MATT	31	1.0	81	51	223	50	<5	٦	U+144	
							 .				-	
-												
											. <u></u>	
								<u> </u>				
											•	
<u> </u>						_						
							_				·	

APPENDIX IV

k...

P • • •

κ.

ы. -

.

e ...

۰'.

. .

.

.

,

~

.

-

•

•

-

·

.

• *

Soil and Stream Silt Sample Descriptions

STREAM SE	DIMENTS Results Pla
-----------	---------------------

nutration (244 - Mikhail	STREAM	SEDI	MEN	13 1	Resul	ts Pl	otted	By: _				·		. 1			
					1	Map:	-				N.	T, S. : .	<u>10</u>	<u>4 (</u>	<u>571</u>	<u>06</u>	······	
Area (Grid):		·				Date:		Ace	1.2	71	20			<u>,4</u> (
Collectors :	Aaron Wardwell								TREA		ΔΤΔ	1]
		•	-	SEDI	NENT		≙,₌∔		TREA Vite				NS.	<u>_</u>	1			1
Sample	NOTES		Gravel	Sand		Clay	Organic	Bank	2 U	휜	Į.	ê∠ I	PR:	CULL GULL				
Number			5	S	Sit	0	0	, eù	<	Metel	cm		S.	<u> </u>				
Number - 90AU044									NO	.5	4							
_ <u> </u>	silt		┝╾╌┥						NO	1	5	-						
L002	Silt								Kes !	5.	30	Siow						
	silt								NO	.5]
L004	silt								NO									
_ L005_	silt		┣						Yes			Mad					†	
4006	silt		╞╼═┥				<u> </u>			-,	-	Mod						
4007	silt								Yes Yes	2		slaw					-+	
LCOB	silt							·						┝╌╌┥╢		-+		
2009	silt								Yes	_		<u>slow</u>						
2010	silt								Yes	3	3	Mod		 !				
													<u> </u>					
																		
							-											
										·								
			<u> </u>					1	i									
								<u> </u>										
								╂───										
								 										
									+		╂			 			-	
			<u> </u>					┣━━━	+	<u> </u>		┝───	<u> </u>					
	· · ·		 	 	┣		<u> .</u>	╢───-			_─	<u> </u>					<u> </u>	
			<u> </u>		 	┞	<u> </u>	╂───				 		╞──┤				
·		*			ļ							<u> </u>		<u> </u>				
·					L	<u> </u>			<u> </u>	ļ	_		<u> </u>					
· · · · ·										<u> </u>	_	· · ·		$\left \right $	Ļ			
					<u> </u>			∦	<u> </u>	<u> </u>	<u> </u>	<u> </u>			<u> </u>			
				Ī							<u> </u>		·					
·			1	1		1						<u> </u>	<u> </u>		<u> </u>			
	· · · · · · · · · · · · · · · · · · ·		1		1							-	<u> </u>]	
			L			-							1 7					

		ENGI L SED		ERII Its	NG	INC.		_									
	MIKHAIL 044 STREAM				Reșu	ilts P	lotted	By: .					011	n 1			
ea (Grid):	SE corner · Creek traverse from 3500'				Мар	:		1-		N.	.T.S.:	/- ·	04	12/1	0		·····
llectors :	B. Mc Entrace						Aug				90			1			
			SEDI	MEN [*]		FA		TREA	_			y.	, X				
Sample	NOTES	Gravel	Sand	Silt	Clay	Organic	Bank	Active	Width	eprt	city Celo	SPRING	DRY GULLY	ļ			
Number X 044 L-		ق	Ň	ŝ	5	•	8	۲	×	<u> </u>	2 U	~~~~	00		<u> </u>	<u> </u>	
01																<u> </u>	
02							<u> </u>									┼──┤	
03																┥╌╌┥	
04		-								· ·						<u>├</u> †	
05															<u> </u>		
<u></u>															<u> </u>		
		1															
				50		50			lm	Sch	ø	?			1	T	
	small rivulots form Imdia pool- start of watershed	20	10			10			Im	20cm	m						
016	Flow 180° a fallen tree - Pocharite enterite & orgellite bed. Tribenters: flows 260° - organic stream bed (recent?)			45		50			4x.,	Sca	8						
	Flow 253° pool bolow 2m fulls MOSS MATT		5	60		35			1.5 m	30cm	F.						
	Flow 230° badrock - angular to SR Floot									2500				<u> </u>	ļ	\square	
	Flow 240° answer to 3A anderite	30	10	50		10			<u>1.5 m</u>	25G	m						
	Flow 280° mossy banks - anderite floot.									2500					<u> </u>		
022		50	10	30		10	<u>.</u>			3+cm					<u> .</u>	\vdash	
	Flow 260° - boulder backs 1m	20	20	53-		5		_		25cm	÷				 	╞╾╾┥	
	Flow 290° - angular to SA Float 5-405-	20	20	60					Km.	300-	F					┝──┼	
															┼──	$\left \cdot \right $	
		1														╞╾╍╼╪	
						ľ	∦				+				 	┝━─┤	
			 				<u> </u>						<u> </u>	<u> </u>	\mathbf{H}	┼───┼	
·			L						-						 		
						+	N								<u> </u>	<u>†</u> −†	
				+		1	 										
						1											
				1			1										
		1		<u> </u>	<u> </u>	<u> </u>	 			1						[

SOIL SAMPLES

Results Plotted By:

 	 _

٠

Project: A Area (Grid)	1: kail : <u>1700</u>	HO44	ans T B44	SOIL S	MIT.			Resu Mapa D <u>ate</u>					N	.T.S.	:						_
Collectors	: SCOTT	Thom/Son	9057044		Та	pogra	phy	•		V	egeta	iti on					Soi	1	Data		_
		Location		~ ·		1				-					led	1 a n	Harlzan	Develop ment	Parent	Material	ļ
_	<u>.</u>		Notes		Boltom	t slope		r ou d	Vooded	Mood		3	P		Samp	o Hor iple	Ĥ	a e	Pe -	<u> </u>	
Sample Number			NOTES	· .	Valley Bo	Direction of	HIII Top	Level Ground	Heavily Wooded	Sporsely Wooded	Burnt	Logged	Grassland	Swampy	Horizon' Sampled	Depth to Horlzon Sample	G ood	Poor	0111	Bedrock	Colour
	Line	Station			>		<u> </u>		H /						B	30					DRB DRB
Sool		0+50	Olo hock Fras	······································							•				B	35	-				bRB
5002		1+00	(i i i i i i i i i i i i i i i i i i i					'													
5002 003 004															 	<u> </u>					
·····						<u> </u>	 				 										<u> </u>
					+	+							 			<u> </u>			└─── ┼───	 	<u> </u>
									. 	<u> </u>	 										
	 					<u> </u>										+	 		<u>↓</u>	<u> </u>	
											 					- <u> </u> 					$\frac{1}{1}$
						<u> </u>			<u> </u>				-		ļ					<u> </u>	
										-				+				+	+	+	╞╾
										┥┈╸		+					ľ				Ē
						+															
	·									1			+					-	+	4	

•

 \mathbf{c}

SOIL SAMPLES

Project:	SOIL S				Resu	ults	Plot	ted E	ly: _				neli			<u> </u>					
Arrent (Crid)	· 1600	" Cantau						Мар	:				I	۷.T.S	.:_/	04 i	24	<u>971</u> -		<u> </u>	
Area (Gria)	C.1.	11 la	9066#044					Date	یک د	et 9	5/9	0									
Collectors	<u>Solia</u>	NAGERSON	-1000 014								egeti							;1	Det	a	
	Sample I	Location			To	pogr	aphy			• •	eyen	1.101					^				
			1												-	5	E E	Develop – meni		Te.	ł
						a d			Ţ	ed	Burnt D.C.				Sampled	Depth to Horizon Somple	Ň.	te a ci	Parent	Materia	ł
				•	Ballom	slope		Ground	Wooded	Poo				·	Ĕ	è.	Ĕ	δĔ.	Por	Ma	ł
Sample			Notes		10	5		°.	Ň	Š	Ų,		2.		Š		<u> </u>		<u> </u>	<u>ا</u> ا	
Number					t		Top	6		ž	2	P	Grassland	Swampy	Harizon	ĽŽ E.				Bedrock	5
					Valley	ection		Level	Heavily	S.	S	66	5	5	늰	40	6 004	Poor	Ori LI	- p	Calour
	Line	Station		•	Į.	, ž	HIE	1	je j	ġ.		گ	ં	Ś	Ť	ð	9	α.	ō	I	
				54.411	-			-						1-	A						18/00
Sool	1400	0400	40m South at creek - Loon	0/10				1						1	A-B	1		1	<u> </u>	لنسل	6 cg
<u></u>	(1	0450					i	-	· · ·		1			1	A-B				<u> </u>		LRB
<u>0n</u> 3	<u></u>	11.00			†	1		1						/	4-B					\square	RB
604	16	1+50				4	1				17				B.				ļ		b RR
025	<u> </u>	2 +00	20% Sub angular 10%		1	w	1			•					B	ļ	1~	<u> </u>	<u> </u>	<u> </u>	RB
006	11 11	2150	10.6			W							ļ	ļ	B		4	4—	╄──		RB
007		3,600			1	V						· ·	<u> </u>	 	<u> </u> B_		\vdash	+	<u> </u>		RB
008	, .	3450	20% 5 6			14			· ·	<u> </u>			<u> </u>		<u> </u> <u> </u>	· ·	4	∔	—	+	<u>ÞRR</u>
009	10	4400	July Jan order			W				<u> </u>	4	· · · · ·			13	. <u> </u>	⊬				RB
010		4450	30% Sab argubr 20% " 20% Sab rounded			W		<u> </u>	 		<u> </u>	· 	—		<u>lã</u>		⊬	┼──	┢───		KB.
DI		5400 5450	and the frage Collek			W			<u> </u>	 	1	ļ			B		Ł	┼──	<u> </u>	<u> </u>	RR
	1	6+00	a conte fran			N		<u> </u>	Ļ	ļ	1	<u> </u>	·		<u>B</u>		⊬	+	┼──		<u>l r</u> ŝ Drig
017 013 014 015 016		6150	O pork frag Criek O cark frag	·		4	ļ	ļ		<u> </u>	Ķ				B	-	F		+	+'	18B
014	1	7400				S	Ľ.			ļ	Ľ-				B	<u>.</u>	⊬	+	┼╌╼		RB
015	17	7450	O rock frag		ļ	ļ	<u> </u>	$\downarrow \sim$			<u> </u>			·	R R	1	+	+	+		LRD.
017	1,7	8400	4			N.	÷.	_	<u> </u>	<u> </u>	⊬		┨		B.		17	+	+		HRB.
-01%	11	8450	f4 (1		ļ	w				ļ	1				R	+	F		+	 	n KG
-CILA -CILA	• 1	9+00	20% Subangala			<u>v</u> _		—	<u> </u>	<u> </u>	12	┼	-	+	B	+		+	1		n R6
030	11	9150	Orack fogg 10% Subround	······		V		╆╌──			17		<u>†</u>	1	R			+	1		AB
021	17	10+00	10% Subrand			N.	+	╂		<u> </u>	┢╱──		<u> </u>	1	╧	1	<u>†</u>	1	1	1	1
							+		+	┼		ļ. —	 	+	+	1-	1	+		1	1
					+	<u> </u>	+		1	+	+	1	1	1			1		<u> </u>		
					┼──	┟╌┈━	<u>†</u>	+		1		1	İ						T		
						\vdash	†	+		†	1		1								
						+	<u>+</u>	+	1	<u> </u>	1										1
					╉───	+	+														
I	<u> ·</u>				1	<u>†</u>	1		Ī								<u> </u>	<u> </u>	\bot	<u> </u>	<u> </u>
	ļ					t	1	1		T	T	ł	1	ł	1	ł	1	1	1	1	1

,

.

.

• 1

SOIL SAMPLES

	MIKHAIL			SOIL S	SAM	PLE	S					By: _						<u></u>	<u></u>			-
Area (Grid	l):	an an t	· · · · · · · · · · · · · · · · · · ·	•				Мо	— : qc		4-	5 '9		N.T.S	3. : <u>-</u>							
Collector	s: S.THO	MYSON		•	_			Da	ite 🕳	2E	1.	5 /	0									_
	Sample L				Ţ	opog	ltaby	y .			Vege	tat.i a	1				So	il	Del	ta		
Sample					Boltom	s lope	.	Ground	Wooded	Sparsely Wooded	oun Bearing		•		mpled	Depth la Harizon Sampte	iorizon	Derelop - ment	Parent	Material		
, Sompre			Notes		1 3	5		Ē	Ň	- 3	e e		ŧ		ŝ	I [±] ŧ		<u> </u>		. 2		1
Number		· ·			1			0	<u> </u>	- 	E	þ	slan	γqe	UO	5 m 5				e¥	3	ļ
905T044	Line	Station		•	Volley	Direction	HH	Level	Heavily	Spara		Logged	Grossland	Swampy	Horl	Dept	6000	Poo		SAND Bedrock	Colour	
5201	2200	6100	Land @ 2620 in Me	a down				1		1	40				В	45	V				MR	s
52.00	2190	OTSOS	Nofcreek			1					40					45	~			LY:		þ
5205	2200	ltop									·N		-			40	-			5	OR	
\$2.04	47	59	bluff 5-10 m high, 30 m large outerop 10 m high x	wide							. N	احضا				45			<	$\overline{\checkmark}$	Ħ	ľ
5205	и		; ,	wide.					1		310					40			$\mathbf{\cdot}$	/	MR	ß
\$ 20 06	11	2-100 50	large outerop Wom high x	15 months		ļ	 	<u> </u>	·	ľ	310					30			-	7	7	
\$20,77	2170	3100				<u> </u>		<u> </u>			30					35	-	i l	-	5	*	l
5203	2200	50	· · · · · · · · · · · · · · · · · · ·			·	<u> </u>	ļ			290	· ·				4	\checkmark	╞━━╋	~		#	ĺ
2.19	2180	4+00	-					ļ	<u> </u>	· ·	240	<u> </u>				Чo	$ \rightarrow$		$ \rightarrow $	·	1	
210	2130	59				ļ	<u> </u>	<u> </u>	<u> </u>		145					30	4		4		7	1
211	2060	5700					<u> </u>	ļ	<u> </u>		150					- 35	~		day	4	<u> </u>	
212	2120	50								· · ·	19•	_			╺┼╾┼	35	.~	<u> </u>	CIAY	<u> </u>		~
2.3	2150	6100		· ·			<u> </u>	<u> </u>	-		H.	<u></u> [<u> </u>			35		<u> </u>	<u> </u>		LR	5
	ንንመ	50							<u> </u>		210				+	40	4		4		- 11	
3455	2180	1100							<u> </u>		150		_			35	4		$ \rightarrow $			
216.	2160	50		<u> </u>					ļ		180				<u> </u>	40	귕	╧┿┼	,	7	7	
5217	2170	8002							 	<u> </u>	180.	-	-+		B			<u> </u>		<u> </u>	MRB	•
_									┢───	•					┈╇			<u> </u>	╼╼┾	╾╍╾┥	$ \rightarrow $	
									ļ	· ·		<u> </u>							-+	-+		
													+		+			-+	+			
														-+	-+			<u> </u>		\rightarrow	1	
	,						{										╼┽	-+-	\rightarrow	\rightarrow		
																		-+-	\rightarrow	\rightarrow		
<u> </u>							<u> </u>											<u> </u>		+	-	
			· · · · · · · · · · · · · · · · · · ·										-+					╼┼	+	 +-	{	
			· · · · · · · · · · · · · · · · · · ·								<u> </u>			-+			 -	+	-+	{•		
						<u> </u>									-+		<u>-</u>	-+-	-+-			
									{		- 1									\rightarrow		
	Į			 												-+-			━━┿╸	-+	1	

Project: Area (Grid	<u>M y</u>	0 2/2/		KEEWA	TIN EI SOIL					ults		ted I	By: .		K N.T. S	<u></u>	/					·
Collector	s: <u> </u>	obert	VIENS			T	pogr	-	Dati	e	<u>~~~~</u> v	- <u></u> 'aget	ot.io		<u>e-)</u>			301	1	Dat		— <u>j</u>
	Sample L	ocation]	· • •			1	1	· · · · ·		1	7					1_	r _	1			
Sample			Notes			Bottom	slope		Ground	Wooded	Wooded					Sampled	Horizan	Horlzen	Develop menl	Parent	Klateria	
Number	Line	Station				Valley Bo	Ulrection of	HIII Top	Level Gr	Heavily W	Sparsely	Burnt ·	Logged -	Grossland	Swampy	Horizon	Oeplh to Horizen Sample	Good	Poor	Drifi	Badrock	Colour
90RV044		1	70 с.с.	<u>70 cor</u> 75	tro.	+										B	20					D.C.R.
5001	2700	0400	5	10							Ī	•					30					MRB
<u>5002</u> 003	2,700	0+50	10	10												\square	130					
00'/	2700	1+50	5	10							<u> </u>	·					30				<u> </u>	
005	2700	2400	70	10								·					30				<u> </u>	┝╋╴┪
006	2700	2450	20	15													30				 	┝╍╂╼╍┩
007	2670	3+00	10	10		<u> </u>											30					┝╋╋┥
008	2620	3+50	20	10 .													30				\vdash	
009	2600	4+00	15	10							· ·			- 1		╍┢╼	25				-+	H-i
010	2600	4150	10	30										{		-+-	1 <u>3</u> 0				$\left - \right $	
0/1	2600	5100	15	10													30					
010	2600	5450	30	10			·		!	<u> </u>							25	i				
013	2600	6+00	15	10		<u>.</u>	· -							1			30				l i	
014	2640	6+ 50	70	70										ĺ		ß	30				ΠÌ	MRB
0/5	2650	7400	10	70										Ì					Ì		ii	
	1		·						1											-		
		· · · · ·									· I											
					· · · · · · · · · · · · · · · · · · ·	† †	i				•					·						
														[ļ		┢╍╌╎					
																	<u> </u>				ļ	
							· -				·						╞──┞				ļ	
	· · ·	•												{			┟╍╍╶┟	<u> </u>			\rightarrow	
						┝╍╌╿											┝╌┼		<u> </u>			<u> </u>
						┝───┢	+					·					┝━━╌┞		{-			[
											 					·· · ·						— ·]
														<u> </u>	-+		┝──┾				+	
	•																	-+			 +	
																	<u> </u>				<u> </u>	

APPENDIX V

۶

.

.

.

.

.

.

.

Ŧ

•

•

•

•

.....

.

- -. ·.

<u>Rock Sample Geochemical Results</u>

Keewatin Engineering Inc.

Bondar-Clegg & Company Ltd. 130 Pemberton Ave. North Vancouver, B.C. V7P 2R5 (604) 985-0681 Telex 04-352667

J



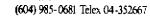
File Solomon-Mikharl

Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

 REPORT: V90	-01859.0							ITE PRINTE		EP-90	PAGE 1	
 SANPLE NUNBER	ELEMENT Units	Au 30g PP8	Ag PPM	Cu PPN	Pb PPM	Zn PPN	Ås Ppn	Sb Ppn	No PPN	H9 PPN		
R2 90 ST 04	R3710	<5	0.6	156	<2	88	6	6	<1	0.011		
R2 90 ST 044	1 R3711	8	0.5	73	15	203	12	<5	1	0.021		
R2 90 CC 044	R3726	<5	4.9	103	10	2605	80	19	18	0.680		
R2 90 CC 044	R3727	<5	0.6	14	10	42	8	<5	3	0.045		
 R2 90 CC 044	R3728	<5	0.4	14	8	78	8	<5	5	0.105		
R2 90 P0 044	R4179	<5	0.6	41	11	86	<5	6	2	0.017		
R2 90 P0 044	R4180	<5	1.4	26	32	196	27	<5	8	0.221		
R2 90 P0 044	84181	<5	1.2	22	27	98	26	<5	7	0.111		
R2 90 P0 044	R4182	<5	<0.2	9	<2	173	<5	<5	<1	<0.010		
 R2 90 PD 044	R4183	<5	0.3	47	<2	100	<5	<5	4	0.041		
 R2 90 P0 044	R4184	120	1.1	93	62	54	29	8	5	0.164		

 Bondar-Clegg & Company Ltd. 130 Pemberton Ave.
 North Vancouver, B.C. V7P 2R5





Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

	REPORT: V90	-02072.0							TE PRINTE Roject: 04		EP-90	PAGE 1	
	SANPLE NUNBER	ELEMENT UNITS	Au 30g PP8	Ag PPM	Cu PPN	Pb PPN	Zn PPH	As PPM	Sb Ppn	Ho PPN	Hg PPN		
F.	R2 90 X 44	R-1891	<5	0.3	69	8	82	20	<5	<1	<0.010		
	R2 90 X 44	R-1892	<5	0.4	75	9	79	12	6	<1	<0.010		
]	R2 90 X 44	R-1893	9	1.3	40	23	169	45	8	8	0.141		
1	R2 90 X 44	R-1894	36	2.0	27	22	6	29	8	2	1.893		
. —	R2 90 ST 04	4 R-1941	<5	0.4	85	11	66	8	<5	1	0.030		
[R2 90 X 44	R-1974	10	3.0	73	23	169	81	7	6	0.405		1 4 444
٢	R2 90 X 44	R-1975	7	1.5	150	24	534	7	<5	5	0.042		
	R2 90 X 44	R-1976	<5	4.4	140	95	7517	42	16	7	1.340		

APPENDIX VI

<u>ب</u>ر د

.

.

•

.

* ~

•

.

.

.

.

,

.

.

.

.

.

.

.

.

.

.

.

1 -

.

-

.

<u>Rock Sample Descriptions</u>

Keewatin Engineering Inc.

•

>

roject:	MI	<hail< th=""><th>044</th><th>-</th><th></th><th>-</th><th>F</th><th>ROCK</th><th>SAMPLES</th><th>Results Plotted By:NTS:NTS:</th><th></th></hail<>	044	-		-	F	ROCK	SAMPLES	Results Plotted By:NTS:NTS:	
rea (Grid):_ ollector\$:	£	. Mc Intyre	-			-				Date: <u>Aug / Sept 1990</u> Surface Undergrour	nd
SAMPLE NUMBER	LOCATION	NOTES	REP. SAMPLE NUMBER		PLE T d IHD	CHANNEL 34	LENG	FLOAT E	ROCK TYPE		MAP HEET
1891	1620 Harryme	Cric MWH 14		~					Feldspar Porphyr-	Dyke or sill, orgillic context, chloritie - ~ sulphides	
1892	1620' "	<i>h</i>									
	1490' "	" Ebank		V					Argillite	heavily sheared sure about FP sill or dyke 540% PY.	
1894	1490' "	11 Falbank		r					F.P. sill ordy	altered, silistical, some bleading 5-10% PY	····
				⁻							
1974	North Creek -	N. Bdry		V					Acquillite	Folded, sheared, discrete bedding corries > 2% PY disser	· · · · ·
1975	- 44 - ¹ 3	1/		~	<u> </u>				ducite	breasing to pyroclustic, totherease content, 72% by healing.	
1976	11 11	11		<u> </u>				\checkmark	interm. vole	20cm angular, med to light gray, cokycous, 2-5% PY.	
-	1		1	1		<u> </u>	†	1			
			· ·	1			1				
		, 		1	1						-
					1						
			1	1	1	†	1	<u> </u>	1		
				1	†	 	1				
	1	···		1	1				T		
				1	1						
			1	1		1	1				
			1	1	1	1	1	1	1		

.

1 7

٦

r 1

1 J

.

t t t t t t

1

.

.

Project:	MICHAIL 044				_	г	OUK	SAMPLES	Results Plotted By:
Area (Grid): . Collectors: _	S. Thompson ST				•				Map: NTS: Date: _Z1- Y · 9 · · Surface Underground
		REP.	SAM	PIF	TYPE.		тн)		
SAMPLE NUMBER 9057044	LOCATION NOTES	SAMPLE NUMBER	B	CHIP		CORE		ROCK Type	SAMPLE DESCRIPTION MAP SHEET
R3710	3120 increek	ST	マ						pyritic; calcarious; gray Igreen / brown
R3711	2800' in same crock	57	~						pyritic; siliceous; intermediate
27.8.90									
R1931	2340' in some creek bed	ST	I				V		pyritic; siliceous; cheaty
R1938	2740' in some creek bed 1980' in creek bed	St	✓ 						pyritic; siliceous; cherty siliceous; cherty-guartz(yellow)
	······································		1	<u>†</u>	<u>† – – – – – – – – – – – – – – – – – – –</u>	<u> </u>			
					<u> </u>				
· · ·									
				<u> </u>					
			<u> </u>		<u> </u>		 		
				.	.	.	 		
			_		<u> </u>			<u> </u> .	
					<u> </u>	<u> </u>	<u> </u>		
						<u> </u>	<u> </u>	 	
<u> </u>			- 		–	╂—	<u> </u>		····
	+		+	┿──	+	+	<u> </u>	 	
ļ	-		+	+		┨──			

Area (Grid):_	Mikhail (044) South Silt / Geology 1	trav			-			NGINEERI SAMPLES	Results Plotted By: AMGibso-	
Collectors:	Gibson / Anderso	20			-				Map: NTS: Date: Surface Undergro	ound.
		REP	SAM	PLE 1	TYPE	(LENG	5ТН)			
SAMPLE NUMBER	LOCATION NOTES	SAMPLE NUMBER	I 🗸	CHIP	CHANNEL	CORE	FLOAT	ROCK TYPE	SAMPLE DESCRIPTION	MAI Shee
(90P044)	South silt traverse					1	~	Andes ite breed	Fine grained andesite precise with atz	
R4179	- 3200'								Matrix, Fragments with 1-21 Py, 1-21.	
`									pyrch-tike. Matrix GISD pyritic (0.2.6/665 1-2)	\mathcal{D}
R4180	Sonth silt frau ~2800'		\checkmark					Argillite	Sheaved graphitic argillite from area	
	~ 2800'								of arguilite landesite contact	ļ
-R4181	South silt frav		<u> </u>	V				Argillite	Chip Sumple from Argillite landesite	
	~ 20m downstream								Contract Im into Graillik. Intensily Fe	
• <u></u>	from R4180. 2820'								Stamed occasional py clasts 1-3cm	
R4182	Same as R4181			\checkmark				Anlesite	Chip sample from Arsillite /Andesite	
									Chip sample from Argillite / Andesite contact /m into andesite. Black	
									Ma stained fractures.	
<u>P 4183</u>	South silt trav.		K					Siltstore	Pysitic Siltstone with blebs to	
· · · · · · · · · · · · · · · · · · ·	~2800'	 	<u> </u>						2.0cm of Massive fin grained pyrite	
0	30m upstream of R3728								Bedding 015/30W	<u> </u>
R4184	South Silt Trav		ļ					Argillite	Chip sample from intermediate dy tel	í
	~2550'					 			Argillite contact into argillite. Argillite	
<u>n</u>	22.20			-					highly oxidiard, pyritic. White oxide motted texture, pyrite	
<u>9022044</u>	3310' South SILL Fred		~					Argilite	White oxide mitted texture, pyrite	
R3726		···· ·				<u> </u>				
R3727	_2820'		~					Andesite	10%. Sulphides, pyrite	
R3728	2750'							Breccia	pyritic	}
									,	
·										

and the second
APPENDIX VII

-

κ.

. .

.

• •

--

, .

•

.

.

•

.

•

•

.

•

.

. .

-

•

٣

*

•

. .

•

·

Stream Silt and Soil Sample Histograms and Summary Statistics (Au, Ag, As, Cu, Pb, Zn, Sb, Hg)

Keewatin Engineering Inc.

.

٩,

F -

•

-

-

P -

•

.

•

.

.

•

•

.

.

-

•

•

•

.

• •

•

۶

.

-

.

•

PROJECTS 044 \$ 082 (SOILS) KEENATIN ENGINEERING INC.

Histogram for Gold 30 grams (AU_306)

Values in PPB

	I of total		
	0 10 20 30 40 50 !!!!!!!	in interv #	21 Z
	 <u> \$\$\$\$\$*******************************</u>	521	\$7.2
26.0	1 * *	10	1.5
53.7	I	3	0.6
101.8	1	1	0.2
139.7	1	•	0.0
177,5		-	0.0
215.4		0	
253.3	1 	0	0.0
271.2	F 1	0	0.0
	1	0	0.0
329,1	1	0	0.0
357.0	1 1 F	1	0.2
] ¦ ¦		
	0 10 20 30 40 50 X of total		

t				Summary Statistics				!
ŧ				••••••••••••••••••••••••••••••••••••••				ł
i	Number of samples	;		536	Hean value	:	7+1	- 1
F	Number of intervals	:		11	Standard Deviation	1	18.94	!
i	Ninimum value ~	1		2,5	Coeff. of variation	n‡	2,680	1
i	Maximum value	1		393	Skewness	1	16.35	I
i	Median value	:		2,5	Kurtosis	1	320,497	1
ŀ	Nodal Ranse	ţ	less	than 26.0				I
1	Values in modal range	;	521	(97.2 % of total)				1

۳.-

۰,

٠

۶

ъ

н -

•

.

•

.

."

.

.

•

•

.

,

•

.

.

٣

•

.

-

.

•

.

PROJECTS 044 & 032 (SDILS) KEEWATIN ENGINEERING INC.

Histogram for Silver (AG) Values in PPH

	X of total 0 10 20 30 40 50	in interv ‡	el X
	 ###################################	115	21.5
0+71	 ###################################	351	65.5
1,74	1	50	7. 3
2,77		10	1.5
3,80		2	0.4
4.82	1	2	0.4
5,85		1	0.2
5.83		1	0.2
7,71		2	0+4
8.74		1	0.2
9+75	1	0	0.0
10.77	1 11	i	0.2
	l 1lllllll		

1			Summary Statistics			1
L						ŀ
Ł	Number of samples_	;	536	Hean value	1.23	l
Ì.	Number of intervals	‡	12	Standard Deviation :	1.028	ł
1	Minimum value	:	0.1	Coeff. of variation:	0.838	1
1	Maximum value	t	11.0	Skewness :	5,108	1
ł	Median value	1	1.02	Kurtosis ‡	35+3645	1
i	Nodal Ranse	1	greater than 0.71 to less than 1.74			I
1	Values in modal range	t	351 (35.5 % of total)			1

٩,

١.

r

• • •

- *

• •

•••••

•

•

•

*

. ·

•

•

•

-

.

.

-

 ${\pmb r}^{(i)}$

.

.

•

.

PROJECTS 044 & 082 (SOILS) KEEWATIN ENGINEERING INC.

Histogram for Arsenic (AS) Values in PPH

in inter # 484 2B 11 7 1 1 1 0	2 90.1 5. 2. 1. 0.1 0.1
2B 11 7 1	5. 2. 1. 0.
11 7 1 1	2. 1. 0.
7 1 1	1. 0.: 0.:
1	0.1
1	0.3
0	0.4
1	0.
1	0.
1	0.
0	0.
0	0.
1	0.
	1 0 0

L	-		Summary Statistics			
!			***************************************			1
ŧ.	Number of samples	1	536	Mean value 🕴 🕻	28.1	
1	Number of intervals	:	13	Standard Deviation :	61.70	F
1	Minimum value	:	2,5	Coeff. of variation:	2,199	1
ł	Maximum value	:	742	Skewness :	6.71	ł
1	Nedian value	:	12.7	Kurtosis :	57.095	1
ĺ	Modal Ranse	:	less than 58.9			1
L	Values in model ranse	1	484 (70.3 Z of total)			

۰.

٠

•

e 1 .

.....

.

٠

. .

-÷ .

. .

.

م ہو

.

-

• .

.

• .

.

.

,

. .

.

• -

•

.

•

ł

١

L

I

ł

L

1

-+

PROJECTS 044 & 082 (SBILS) KEEWATIN ENGINEERING INC.

Histogram for Copper (CU) Values in PPM

	0 10	20	Z of total 30	40	50	in interv	al
		<u>بر</u>	·]==== ==== =				7
	 #					4	0.7
7.1	 {###############					63	11.8
15.8		********	******	******		225	42.0
24.5	1		******	*****		108	20.1
33.2	***** *******************************	KXXXXX					
42.0	*** ******					58	10.8
	<u>}***</u>					30	5.6
	1222					15	2,8
59.4						9	1.7
68.1						8	1.5
75.8	I.					7	1.3
85.ა	1					3	0.6
94.3							
03.0						2	0.4
11.7						1	0.2
	H					1	0.2
20.4						1	0+2
27+1						0	0.0
37.7						1	0.2
] - 					- 1	
	0 10	20	30 Z of total	40	50		
u in in in i n i n i n			Subrat	y Statist	ics		
1L ·					<u></u>	Mean value 1	- 28.9
	er of samples er of intervals	:	536 17			Standard Deviation :	17+44
Minis	um value		5.2 I #5			Coeff. of variation: Skewness	0.604 2.44

Maximum value : 145 Median value : 23.2 Modal Ranse : greater than 15.8 to less than 24.5 Skewness 2,44 : 1 21,997 Kurtosis Values in modal range : 225 (42.0 % of total)

•

•

٠

e -۰. ~

۴. • •

. .

...

• .

> . <u>, -</u>

> > .

,

.

. ٠

.

.

-

.

.

.

.

Į.

-1

PROJECTS 044 1 082 (SDI).S) KEEWATIN ENGINEERING INC.

Histogram for Lead (PB) Values in PPN

	total 30 40 50 -		al X
		104	19.4
1	<i>, ,, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,</i>	*** 369	68.8
#####################################	***** ** // *** **********		
#######		39	7.3
 ###		16	3.(
1		0	0.0
} }		3	0.4
1		3	0.0
# 			
11		1	0.1
ł		0	0.0
1		0	0.1
1		0	0.
• 1		0	0+
I		Q	0.
8		0	0.
. 1 		0	0.
- 1 1		i	0,
 0 10 20	30 40 50 Ftotel		
	Summery Statistics		
er of samples : 536 er of intervals : 16 num value : 1 num value : 250		Mean value : Standard Deviation : Coeff. of variation: Skewness : Kuntasis :	17.7 16.07 0.905 7.28 84.609
er of int mum value mum value an value l Ranse	ervals : 16 : 1 : 250 : 14.7 : greater ti	ervals 16 1 250 14.7	ervals 16 Standard Deviation 1 Coeff. of variation 250 Skewness 1 14.7 Kurtosis 1 sreater than 9.7 to less than 25.6

Bondar-Cless & Company Ltd., Vancouver

ŧ-----

Values in modal ranse : 369 (68.8 % of total)

s. .

ς.

********* .

.

e.

e •••

.

+ -

.

. .

• r

. ~

.

÷.,

, . ۴

> . .

> > ...

ς.

.

.

.

4

-

r

PROJECTS 044 & 082 (SDILS) KEEWATIN ENGINEERING INC.

Values in PPH Histogram for Zinc (ZN)

0 10	Z of total 20 30 40 50	in intervi ‡	el Z
}		7	1.3
1 \$ 26.8 1		,	
	*******	112	20.9
51.5 ######### ##	***********	156	28+1
76+2 \$\$\$\$\$\$\$\$\$	*******	102	19.(
1 8.00 ****** **	*	65	12+1
25.5 #####		34	6.3
50.2 ####		22	4.1
74.7 ###		17	3.2
97+5 ##		9	1.7
24.2 1		2	0.
48.7 I		6	1+
73+5 I 1 1		3	0.
98+3 I I		0	0.0
22.9 I II		1	0.:
0 10	20 30 40 50 X of total		
	Summary Statistics		
Number of sample	5 \$ 536	Mean valu e :	88+5
Number of interv	als : 14	Standard Deviation :	
Minimum value		Coeff. of variation: Skewness	1,58
Maximum value Median value	, 74.5	Kurtosis i	
Nodal Ranse	<pre>sreater than 51.5 to less than 76.2 ranse : 156 (29.1 % of total)</pre>		•

٩.

• i Be ar

_ κ.

• - - r -

.

۰ •

-

. .

. . .

÷ ÷.,

.

•

A 1 . . ·

÷

-

.

, . ~

.

.

.

~

.

PROJECTS 044 & 082 (SOILS) KEEWATIN ENGINEERING INC.

Histogram for Antimony (SB) Values in PPM

.

 * 3.1 * 5.3 1* 7.5 * 7.5 * 9.7 * 1* 1*		‡ 216 18 113 101	40.3 3.4 21.1
3.1 * 5.3 * 7.5 * 9.7 * * 1.1 *	***	18 113	3.4
* 5.3 1* 7.5 1* 9.7 1*	*****************	113	
5.3 ¥ 7.5 9.7 ¥ 1.7	*****************		21,1
7,5 # %7 # 1,7		101	
9.7 1 1,7	****************		18.8
1 1 1.7 1			
	1111111	44	8.2
11	****	19	3,3
14.1		8	1.5
11 1613	l de la constante de		
11		6	1.3
1 4.8 11		4	0.
20.5 1		1	0.1
 22 . 8			0.
11		3	U+1
25.0 I I		. 2	0.
27.2 H		0	0.
27₊4 I 1		Û	0.
31₊5 ¦ 		0	0.
33.9 1		0	0.
36.0 1		1	0.
i !	 		
**	Summary Statistics		
Number	r of samples : 536	Mean value	6.4
	r of intervals : 17	Standard Deviation :	4.39 0.691
Minim	um value : 2,5	Coeff. of variation:	1.90
	um value 38	Skewness : Kurtosis :	11.931
	n value : 6	MU10013 .	
leboli	Ranse : less than 3.1 s in modal ranse : 216 (40.3 % of total)		

e 1

.

r : n .

p- 4

۰.

÷ .

•

. .

٠ • `

• .

-

۴

-۰.

. • .

•

.

.

.

.

.

.

•

.

PROJECTS 044 & 082 (SOILS) KEEWATIN ENGINEERING INC.

Histogram for Mercury (HG) Values in PPM

0 	10 -] -	Z of totel 20 30 40 !!!!!-	50 in interv ‡	al Z
- 1 1222	*******		23	11.8
'64 I		*******************	74	37.9
44 1	*****		51	26.2
24 3	*****		25	12.8
04 1			7	3.6
1##1 84			6	3.1
\$\$\$ 564	ſ		i	0.5
1¥ 244 1				0.5
1¥ 324 1			1	
1##			4	2.1
403 1			0	0.0
983 I I			0	0.0
563 1 1			0	0.0
143 I IX			2	1.(
723 1			0	0,0
303 I IT			1	0.
 0	10	 20 30 40 2 of total) 50 	
			Mean value ;	0.1634
lumber c	of samples of intervals value	: 15 : 0.042	Standard Beviation : Coeff. of variation:	0.11599 0.710
Median M Modal Ra	ande	: 0.848 : 0.135 : ⊴reater than 0.0764 to e : 74 (37.9 Z of tot.	o less then 0.1344	15.7886

...

•

•

•

• •

e 11 .

. .

.

•

• .

.

, .

... .

. ر •

~

. .

.

-

-

.

•

.

PROJECTS 044 & 082 (SEDIMENTS) KEEWATIN ENGINEERING INC.

Histogram for Gold 30 grams (AU_306)

.

Values in PPB

9 10	20 30 40 50	in interva ‡	Z
1	*********	56	46+
18-1		41	34.:
5+1 I	***************	15	12.
\$\$\$\$\$\$###############################			3.
[#\$\$ 2.7		•	
12		1	0.
L.O I 1		0	0.
7.3 1		0	0.
7.5 I I X		1	٥.
5.9 1		0	0,
1		0	0.
1 2.5 1		0	0.
0.9 I		0	0.
1 7+2 [*		0	0.
l 7.5 l		1	0
⊺≭ 5₊3 i		0	0
 4,1 #		1	0
I	20 30 40 50 % of total		
	Summary Statistics		
Number of samples Number of intervals Hinimum value Maximum value Nedian value	2.5 : 129 : 8.7	Mean value : Standard Deviation : Coeff. of variation: Skewness : Kurtosis :	1.375 4.81
Nodal Ranse Values in modal rans	: less than 7.8 e i 56 (46.7 % of total)		

.

١.

.

*

. -

۳ -.

,

•

. .

•

.

۰ ۱

-

•

+

.

.

.

7

.

,

PROJECTS 044 & 082 (SEDIMENTS) KEEWATIN ENGINEERING INC.

Histogram for Silver (AG)

Values in PPM

	% of total	in interv	21
0 10	20 30 40 50 -111111	‡	ž
***********	*************************************	113	<u>94</u> ,2
1,57 l ####		5	4.2
2.97		0	0.0
4.16 1		1	0,8
5.45		0	0.0
5.75 I		0	0.0
8.04		0	0.0
9.33		0	0+0
10.63 1		0	0.0
 11.72		0	0+0
13.21		1	0.8
# 0 10	 20 30 40 50		

Z

	Summary Statistics		
Number of samples Number of intervals Minimum value Maximum value Median value Median value Modal Ranse Values in modal ranse	: 120 : 11 : 0.3 : 14.1 : 0.7 : less than 1.57 : 113 (94.2 % of total)	Mean value : Standard Deviation : Coeff. of variation: Skewness : Kurtosis :	0.93 1.293 1.395 8.955 85.0921

p-**-**

•

1

*

/ -•

. .

٠

e -

• -

•

.

٠

1. .

.

-,

.

.

-

.

,

,

-

.

.

-

-

PROJECTS 044 & 082 (SEDIMENTS) KEEWATIN ENGINEERING INC.

Histogram for Arsenic (AS) Values in PPM

-

	2 of total o 10 20 30 40 50	in interval	
	0 10 20 30 40 50 	*	z
] *********************	29	24.2
9.9	 ###################################	71	59.2
34.2	 ################	18	15.0
58.5		1	0.8
B2₊?		0	0+0
107.2	,] 1	0	0+0
131.5	•	0	0+0
155.3		0	0.0
180.1		O	0.0
204,4		0	0.0
223.7] \$	1	8+0
	i iiiiiiii		

0	£	ŧ.e	ıŧз	1

		Summary Statistics				
Number of samples	;	120	Hean value Standard Deviation	:	22.1 24.31	
Number of intervals	1	11 2,5	Coeff. of variation		1.102	
Minimum value — Maximum value	;	243	Skewness	:	6.36 52.346	
Hedian value	;	17.2 greater than 9.9 to less than 34.2	Kurtosis	•	971940	
		71 (57.2 % of total)				

p-- *

.

e 11

۰. ۲

-

- م

*

.

.

.

,

.

-

•

s

.

.

`

7

PRDJECTS 044 % 0B2 (SEDIMENTS) KEEWATIN ENGINEERING INC.

Histogram for Copper (CU) Values in PPM

I of total in interval 50 30 40 0 10 20 Z ŧ 1 1,7 2 14 13.5 | 9.2 11 1\$\$\$\$\$\$\$\$ 21.5 1 11.7 14 29.7 1 16.7 20 | ************** 37.71 23.3 28 46.0 | 20.8 25 54.11 7.5 9 | ######### 32.2 I 3.3 4 |\$\$\$ 70.4 1 2.5 3 1225 78.5 E 0.8 1 1\$ 86₊ó I 1.7 2 |\$\$ 94.8 1 Q₊B 1 1\$ 1 40 50 0 10 20 30

% of total

ļ				Ę	Bunnar	ry Statis	tics				
•	Number of samples	t	120	, -		••••		Hean value	:	41.9	
•	Number of intervals	÷	12)				Standard Deviation	1	16.26	
		:		•				Coeff, of variation	1	0.388	
	Mini sum value	÷	10.8	5						0.67	
	Naximum value	1	78	3				Skewness	4		
	Nedian value	ţ	4	1				Kurtosis	ŧ	138.198	
	Model Ranse	:	greater	than	37.9	to less	than 46.0				
	Values in model range	:	28 (23,3	Z of	total)					

.

٠

•

•---

•••

-

s,

•

. .

.

.

`

÷

.

•

.

.

~

,

.

-

PROJECTS 044 & 082 (SEDIMENTS) KEENATIN ENGINEERING INC.

Histogram for Lead (?B)

Values in PPN

Z of total 0 20 30 40 50	in interv	lev
0 10 20 30 40 50 	+	Z
	2	1.7
i+6	5	4,2
1×#### •0 1	15	12,5
#####################################	32	26.7
	 29	24+2
####################################	19	15.8
1454544999777777777777777777777777777777	9	7.5
1+++++++++++++++++++++++++++++++++++++	2	1.7
1++ 3,4 []#	1	0.8
8.8 I I#	i	0+8
3.2 I I##	2	1.7
7.5 I I\$\$\$	3	2.5

1		Summary Statistics		1
1		*****		1
} } 	Number of samples- Number of intervals	120 Mean value 12 Standard Deviation		
 	Minimum value Maximum value	2.3 Coeff. of variation 51 Skewness 17.4 Kurtosis	1 0.403 1 1.41 1 62.398	1
 		<pre>17.6 Refutures is in the initial initia initial initial initial initial initial initial initial i</pre>		

p- - **a**

.

. .

.

•

• •

. .

•

•

,

.

7

•

,

.

.

.

•

.

-

PROJECTS 044 1 082 (SEDIMENTS) KEEWATIN ENGINEERING INC.

Histogram for Zinc (ZN) Values in PPM

I	Z of total 0 10 20 30 40 50 1111111	in interval ŧ	ž
	 1	1	0.8
43+0		8	6.7
82,5		15	17.5
122+0		28	23.3
161.5	1	26	21.7
201.1		20	16.7
240₊ა		11	9.2
280.1	########## 	4	3.3
317.8		2	1.7
359,2		_	2.5
398.7	1222	3	
43B+2	1	0	0.0
400+4	1**	2	1.7
	 0 10 20 30 40 50 Z of total		

1				S	un nar	y Statis	tics				1
	Number of samples.	:	120	-				Nean value	1	181.3	į
;	Number of intervals	t	12					Standard Deviation		79.05	1
1	Ninigum value	1	34					Coeff. of variation	n‡	0.436	I
1	Maximum value	:	477					Skewness	:	1.07 B1.136	
1	Median value	1	170					Kurtosis	1	011100	י ו
1	Modal Ranse	ŧ	greater	than	122.0) to less	than 161.	5			
i	Values in modal ranse	ł	28 (23,3	7 of	total)					1

P----

ς.

•

ς. -

• .

2 -

٠ ~

۲

۶ •

,

ŀ

-

.

,

٠

.

.

.

.

١

-1

PRBJECTS 044 & 082 (SEBIMENTS) KEEWATIN ENGINEERING INC.

Histogram for Antimony (SB) Values in PPH

.

Values in modal ranse : 53 (44.2% of total)

I	0 10	% of totel 20 30 40 5 	50 in interv - ‡	al X
	1	*******	53	44.:
3.1	1		0	0.4
4.7]]] xxxxxxxxxxxxxxxxxxx		15	12.
6.2		*****	25	20.
7.7			16	13.
7.2			4	3.
10.7	1 1 ## #		3	2.
12.3	i i \$\$\$\$		3	2.
13.9			1	0.
	 0 10	 20 30 40 % of total	50	
		Summary Statistics	5	
Numb Mini Maxi Medi	er of samples er of intervals mum value mum value lan value i Ranse		Mean value : Standard Deviation : Coeff. of variation: Skewness : Kurtosis :	3.04

-

.

e -

s.

٠ .

-

, . .

• 1.

.

. -

.

, .

.

. .

.

.

e.

Ŧ

.

,

x

PROJECTS 044 & 082 (SEDIMENTS) KEEWATIN ENGINEERING INC.

Histogram for Mercury (NG) Values in PPM

30 40 50	in interv. ‡	81 Z
	i	1.0
	10	10.1
*******	41	41.4
	22	22.2
	11	11.1
	5	5,1
	3	3.0
	_	
	3	3.(
	1	1.1
	0	0+
	0	0.0
	1	1.
	0	0.
	0	0.
	1	1.
30 40 50	- 1	
Summary Statistics		
5 3 2 4	Standard Deviation : Coeff. of variation: Skewness : Kurtosis :	0.07216 0.539 2.6622
	 ################################	30 40 1 10 10 10 10 11 22 11 5 3 3 1 0 0 1 0 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 10 1 11 1 12 1 13 1 14 1 15 1 16 1

APPENDIX VIII

....

њ. -

κ.

P -

.

.

-

. . .

.

.

٠

,

-

Δ.

r.

•

•

Analytical Procedures

Keewatin Engineering Inc.

ANALYTICAL PROCEDURES

The Bondar-Clegg analytical methods are described as follows:

Sample Preparation

Silt & Soil:	Dry and sieve through 80 mesh screens. Gold values are determined on 30 gram, representative sample of minus 80 fraction by fire assay with AA finish; remaining elements are determined using 0.6 gram sample of minus 80 fraction by hot aqua regia digestion followed by ICP.			
Rocks	Dry and crush to minus 150 mesh; analysis made on minus 150 fraction by methods described above.			
Geochemical Analysis:	Gold is determined on a test sample of 30 g using Fire Assay Lead Collection pre-concentration. The bead is dissolved in nitric acid and hydrochloric acid and run by Atomic Absorp- tion.			
	Mercury is determined on a test sample of 0.6 g. The sample is digested by aqua regia and bulked to 12 ml. The solution is then run by Cold Vapour Atomic Absorption.			
	All other elements are determined on a test sample of 0.6 g. The sample is digested by aqua regia and bulked to 12 ml. The solution is then run by ICP.			
Fire Assay Procedure for Au:	A prepared sample of one assay ton (29.166 grams) is mixed with a flux which is composed mainly of lead oxide. The proportions of the flux components (the litharge, soda, silica, borax glass, and flour) are adjusted depending upon the nature of the sample. Silver is added to help collect the gold. The samples are fused at 1950 F until a clear melt is obtained. The 30-40 gram lead button that is produced contains the precious metals. It is then separated from the slag. Heating in the cupellation furnace separates the lead from the noble metals. The normal-sized precious metal beads that are produced are transferred to test tubes and dissolved with aqua-regia. This solution is analyzed using Atomic Absorption by comparing the absorbance of these solutions with that of standard solutions. In the case of high grade samples, the precious metal bead is parted to separate the silver and the remaining gold is weighed.			
Comments:	As part of the routine quality control we run a duplicate analysis for about 12% of the samples. Also, all samples which are over 0.20 opt on the original fusion are run again to verify the results. If a sample gives erratic results, such as 0.10, 0.020, 0.30, we will indicate this on the report. We suggest			

the results. If a sample gives erratic results, such as 0.10, 0.020, 0.30, we will indicate this on the report. We suggest that a new split should be taken from the reject for preparation and analysis by our metallics sieve procedure. These assay results will always be signed by the registered assayer.

Contamination Prevention:

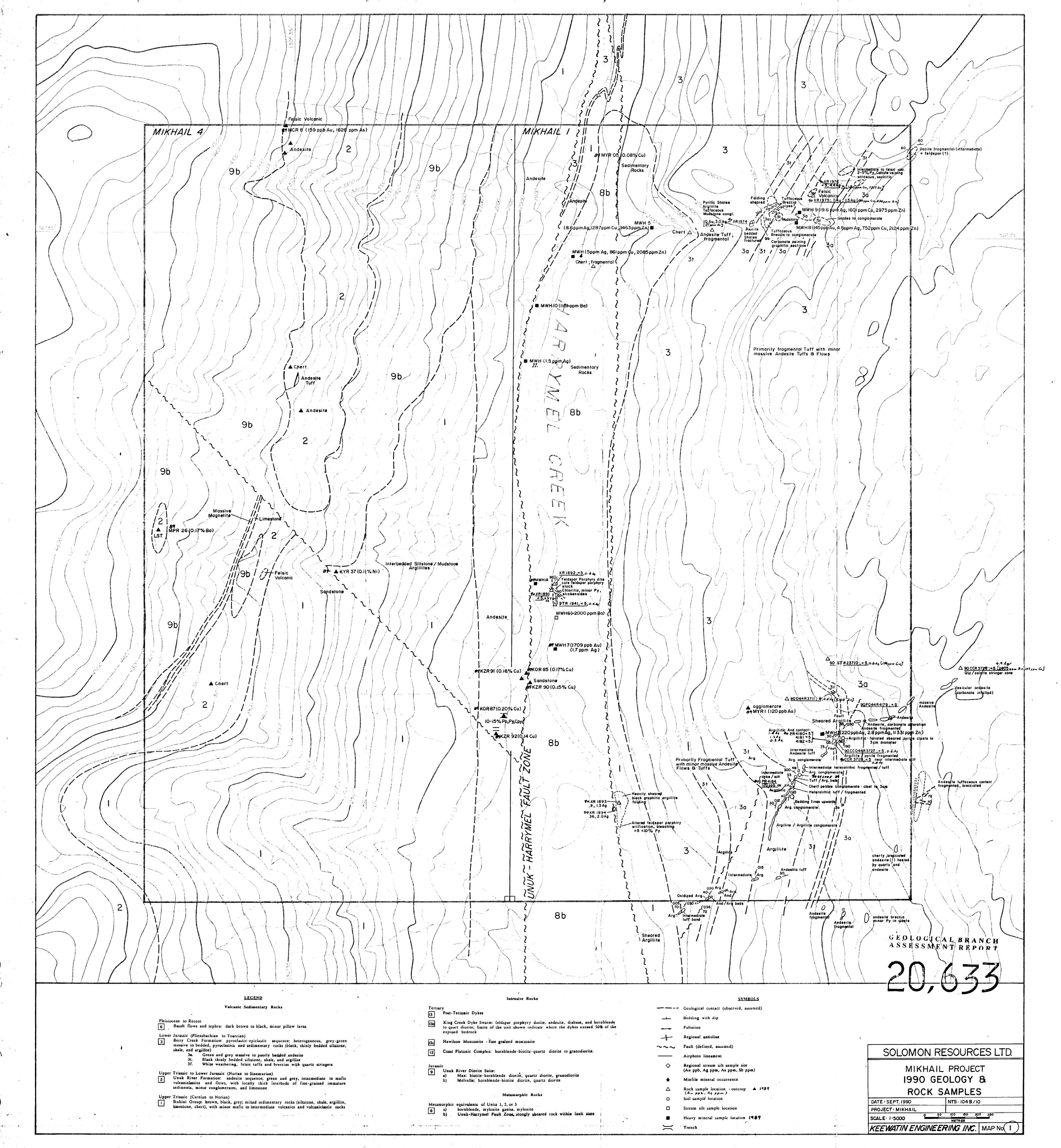
The test tubes and cupels are used only once so that there is no possibility of cross contamination. The fusion crucibles are cleared before re-use by discarding any which had high samples in them. During the analysis a blank solution is run between each sample to ensure that there is no carry over.

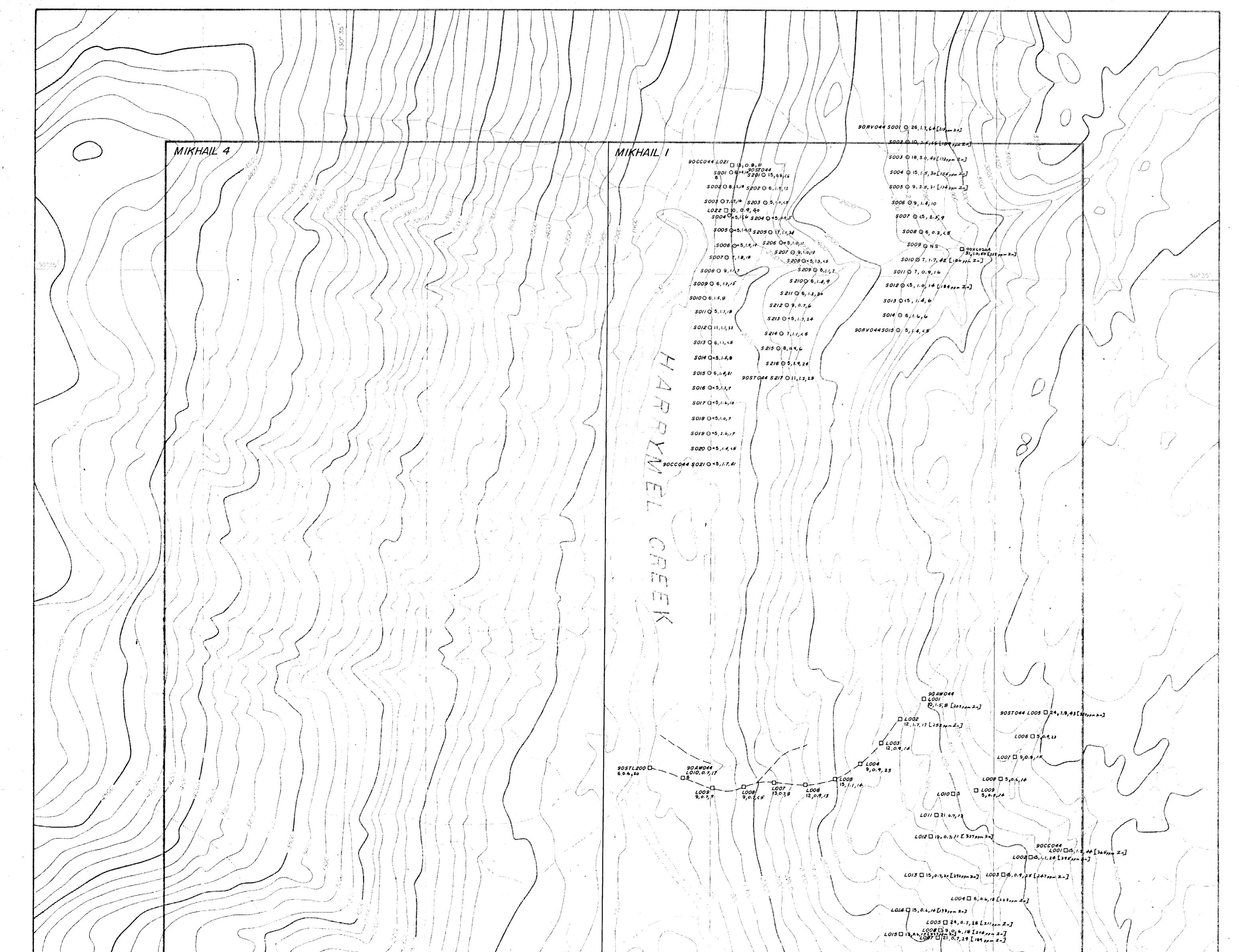
Determination of Arsenic by Borohydride Generation:

Samples of 0.5 grams in weight are digested in borosilicate glass test tubes, with concentrated nitric and hydrochloric acids. These tubes are heated in a 90 degree Celsius water bath for two and one-half hours. The sample is then diluted with 14% HCl and mixed. A 0.5 ml aliquot is taken from this solution and HCl, deionized water, and potassium iodide are added. The resulting mixture is allowed to sit for one hour, after which it is run through a hydride generation system. In this system, the solution is reduced with sodium borohydride, releasing arsenic as arsine gas. The arsine gas is then swept into a quartz furnace mounted on a flame AA unit. The absorbance is recorded and compared to a standard series to determine the amount of arsenic present.

Standards, repeats, and blanks are run with each batch of samples. These are carefully checked, and reweighs of samples are ordered if necessary. High arsenic results are also checked by running the original solution by flame AA and comparing the results from the two procedures.

Quality Control:





		0 90577003 7,09,65 0 90577003 75,10,65 0 90575007 25,13,65 XLOQI TI 14, 4, 6, 21	$L016 \Box 15, 0.0, 24 [2,5,0,0,2,-] L007 \Box 5,0.7, 16 [2,0,0,0,0] I 900CC 044 L009 109, 0.7, 30 [453,0,0, 7,-] L018 \Box 15, 0.6, 16 [2,1,0,0,-,3,-] L019 \Box 15, 0.6, 16 [2,1,0,0,-,3,-] XL005 [2,1,0,-,4,-] XL005 (2,1,0,-,4,-] XL021 [2,1,0,-,4,-] (2,0,-,4,-,5,-] XL022 (3,0,5,25 (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3,0,5,-,5,-) (3$	$ \begin{array}{c} \square xLOIS \\ \square zLOIS \\ \square zLOIS \\ \square xLOI7 \\ \hline (S, 0.4, is) \\ \square xLOI8 \\ 6, 6, 4, 6 \\ \square xLOI9 \\ 6, 0.5, 7 \\ \end{array} $ $ \begin{array}{c} \square xLOI9 \\ 6, 0.5, 7 \\ \end{array} $ $ \begin{array}{c} \square xLO20 \\ \square s, 0.5, 7 \\ \end{array} $ $ \begin{array}{c} \square xLO20 \\ \square s, 0.5, 7 \\ \end{array} $ $ \begin{array}{c} \square xLO20 \\ \square s, 0.5, 7 \\ \end{array} $ $ \begin{array}{c} \square xLO20 \\ \square s, 0.5, 7 \\ \end{array} $ $ \begin{array}{c} \square xLO20 \\ \square s, 0.5, 7 \\ \end{array} $ $ \begin{array}{c} \square xLO20 \\ \square s, 0.5, 7 \\ \end{array} $ $ \begin{array}{c} \square xLO20 \\ \square s, 0.5, 7 \\ \end{array} $ $ \begin{array}{c} \square xLO20 \\ \square s, 0.5, 7 \\ \end{array} $
		- S		SOLOMON RESOURCES LTD. MIKHAIL PROJECT 1990 SOILS & SILTS DATE - SEPT. 1990 PROJECT - MIKHAIL SCALE - 1:500 METREE KEEWATIN ENGINEERING INC. MAP No. 2