

LOG NO: April 15/91 RD

ACTION:

FILE NO:

**1990 GEOLOGICAL
AND GEOCHEMICAL REPORT
ON THE
LAMA 1 & 2 CLAIMS**

Located in the Telegraph Creek Area
Liard Mining Division
NTS 104G/12E
57° 42' North Latitude
131° 35' West Longitude

BRANCH
REPORT

21,210

-prepared for-
PASS LAKE RESOURCES LTD.

-prepared by-
Bruno Kasper, Geologist
February 1991

1990 GEOLOGICAL AND GEOCHEMICAL REPORT ON THE LAMA 1 & 2 CLAIMS

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1.0 INTRODUCTION

The Lama 1 and 2 claims were staked in June, 1990 to cover favourable stratigraphy and geophysics near the junction of the Chutine and Stikine Rivers, approximately thirty-five kilometres southwest of Telegraph Creek in northwestern British Columbia (Figure 1). Regional mapping indicates that the claims are underlain by an Upper Triassic mafic/felsic submarine volcanic package, permissive for both volcanogenic massive sulphide or mesothermal precious metal deposits such as those found to the south in the Galore Creek, Iskut River, Sulphurets and Stewart mining camps.

Reconnaissance exploration, consisting of geological mapping, prospecting and geochemical sampling, was carried out over the Lama 1 and 2 claims in September of 1990. Equity Engineering Ltd. conducted this program for Pass Lake Resources Ltd., and has been retained to report on the results of the fieldwork.

2.0 LIST OF CLAIMS

Records of the British Columbia Ministry of Energy, Mines and Petroleum Resources indicate that the following claims, located in the Liard Mining Division, (Figure 2) are owned by Pass Lake Resources Ltd..

<u>Claim Name</u>	<u>Record Number</u>	<u>No. of Units</u>	<u>Record Date</u>	<u>Expiry Year</u>
Lama 1	7400	20	June 22, 1990	1991
Lama 2	7401	<u>20</u>	June 22, 1990	1991
		40		

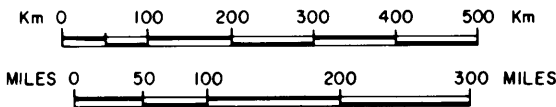
The location of the legal corner post for the Lama 1 and 2 claims has been verified by the author.

3.0 LOCATION, ACCESS AND PHYSIOGRAPHY

The Lama 1 and 2 claims are located within the Boundary Ranges of the Coast Mountains approximately 35 kilometres southwest of Telegraph Creek in northwestern British Columbia (Figure 1). They lie within the Liard Mining Division, centered at 57° 42' North latitude and 131° 35' West longitude.

Access to the Lama 1 and 2 claims for the 1990 exploration program was provided by daily helicopter setouts from the Ball Ranch, located approximately twenty kilometres to the northeast on Callbreath Creek. The Ball Ranch is connected by road and ferry to Glenora, which lies sixteen kilometres south of Telegraph Creek along a secondary road. An access road suitable for four-wheel

**PROPERTY
LOCATION**



PASS LAKE RESOURCES LTD.		
LAMA 1-2 CLAIMS LOCATION MAP		
BRITISH COLUMBIA		
EQUITY ENGINEERING LTD.		
DRAWN: J.J.E.	MINING DIV.: LIARD	FIGURE
N.T.S.: 104G/12E	SCALE: AS SHOWN	1
DATE: DEC., 1990	REVISED:	

drive vehicles has been constructed west-southwest from Glenora to a placer mining camp on the Barrington River. This road passes within 2,500 meters of the northwest corner of the Lama 1 claim.

The Lama claims cover a rounded ridge lying between the Chutine and Stikine River floodplains (Figure 4). Topography is moderate for the area, with elevations ranging from approximately 180 meters on the Chutine River floodplain to almost 800 meters on the ridgetops. Steep bluffs make access difficult in some areas.

The entire property is wooded, sparsely covered by birch and other deciduous trees. It lies in an intermediate or gradational belt between the wet belt of the Coast Range and the dry belt of the Stikine Plateau. The summers are typically cool and showery with occasional snowfalls. Considerably less snow accumulates over winter than in the wet belt. Prospecting and mapping could be started in July and continued through till October in a normal year. Shaded creek beds commonly contain packed snow until mid to late July.

4.0 PROPERTY MINING HISTORY

4.1 Previous Work

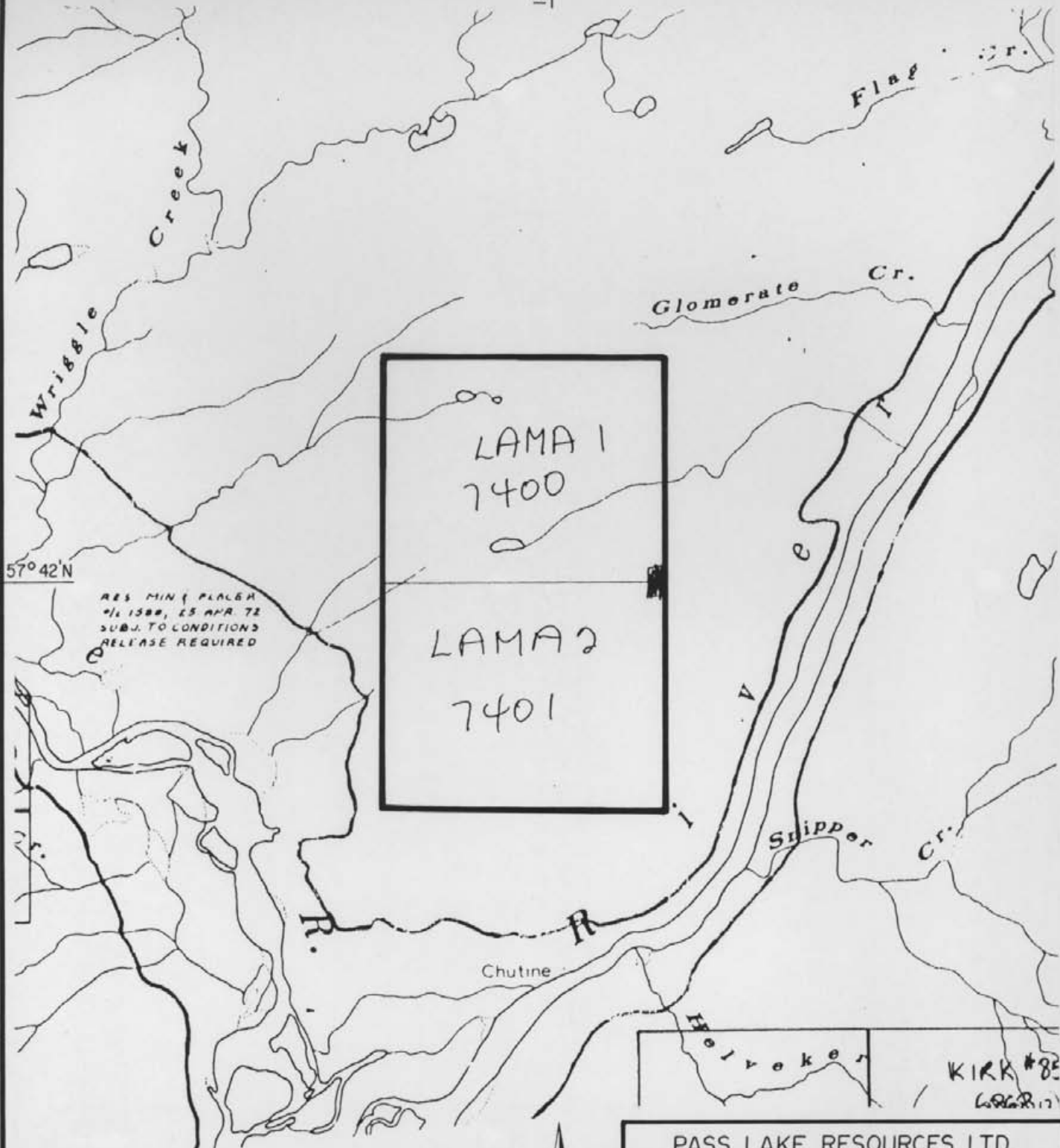
Placer gold was discovered on gravel bars of the Stikine River between Glenora and Telegraph Creek in 1861 and worked extensively until the early 1900's. The placer gold deposits of the lower Barrington River have been worked sporadically since 1903 (Figure 3).

In 1929, Frank Jackson discovered sphalerite-chalcopyrite-galena-quartz lenses within a zone of pyritized volcanics which can be traced southwesterly for approximately five kilometres (Kerr, 1948). These showings, known as the Jackson and Lady Jane occurrences, lie approximately five kilometres southwest of the Lama claims on the south side of the Chutine River. Sporadic trenching was carried out until 1935, but the irregularity and discontinuity of the mineralization has discouraged further work.

The area south and west of Telegraph Creek was extensively explored for its copper potential throughout the 1960's, following the discovery of the Galore Creek copper-gold porphyry deposit in 1955 and the Schaft Creek copper-molybdenum deposit in 1957, both of which host greater than one million tonnes of contained copper. These deposits are located 87 kilometres south-southwest and 62 kilometres south-southeast, respectively, from Telegraph Creek.

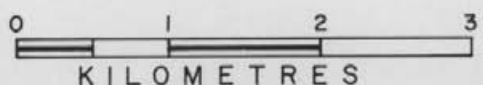
Several copper occurrences were discovered southwest of Telegraph Creek at this time (Figure 3). Kennco explored copper mineralization within a syenitic border phase of a large granodiorite stock and its intruded volcanics on their Poke claims,

131° 35' W



RES. MIN. PLAN
4/1580, 25 APR 72
SUBJ. TO CONDITIONS
RELEASE REQUIRED

KIRK #85
6/26/87



PASS LAKE RESOURCES LTD.		
LAMA 1-2 CLAIMS		
CLAIM MAP		
BRITISH COLUMBIA		
EQUITY ENGINEERING LTD.		
DRAWN:	MINING DIV.: LIARD	FIGURE
N.T.S.: 1046/12E	SCALE: 1:50000	2
DATE: DEC, 1990	REVISED:	

on Limpoke Creek. Kennco's Gordon claims, located at the junction of Limpoke Creek and the Barrington River, also host disseminated copper mineralization within the syenitic phase of the stock and the intruded volcanics (BCDM, 1966).

With increased gold exploration during the late 1970's and early 1980's, most of the copper prospects were re-evaluated for their gold potential. Du Pont of Canada Exploration Ltd. conducted geological, geochemical and geophysical surveys over Mount Barrington following up highly anomalous gold geochemistry from field-sieved stream sediment samples collected during a regional survey. Korenic (1982) reported assays up to 122 grams per tonne (3.575 oz/ton) gold from narrow pods of massive pyrite, arsenopyrite, chalcopyrite and pyrrhotite.

In 1987, the federal and provincial geological surveys conducted a joint regional silt sampling program over the entire Telegraph Creek and Sumdum map sheets, taking a total of 1291 samples (GSC, 1988). Silt sample 871174, taken from a creek draining the Lama claims, returned low values for all elements.

During the course of regional mapping in 1989 over map sheets 104G/12E and 104G/11W, Brown et al. (1990) took rock sample CGR89-93 from the eastern side of the Lama claim group. This "pyritic, siliceous dust tuff" had moderately elevated copper with 225 parts per million. No other work has been recorded on the Lama 1 and 2 claims.

4.2 1990 Work Program

The 1990 exploration program on the Lama 1 and 2 claims consisted of geological mapping, prospecting and stream sediment sampling. This work was targeted at two distinct styles of mineralization for which the property shows favourable stratigraphy:

- 1) volcanogenic massive sulphides associated with felsic and mafic submarine volcanics. A similar suite hosts the Lady Jane and Jackson showings, which exhibit many of the features of VMS deposits and are located five kilometres to the southwest along strike.
- 2) structurally-controlled mesothermal precious metals deposits. Several major gold-silver deposits, including the Silbak Premier and Snip, are located within this Mesozoic island arc stratigraphy to the south in the Galore Creek, Iskut River and Stewart mining camps.

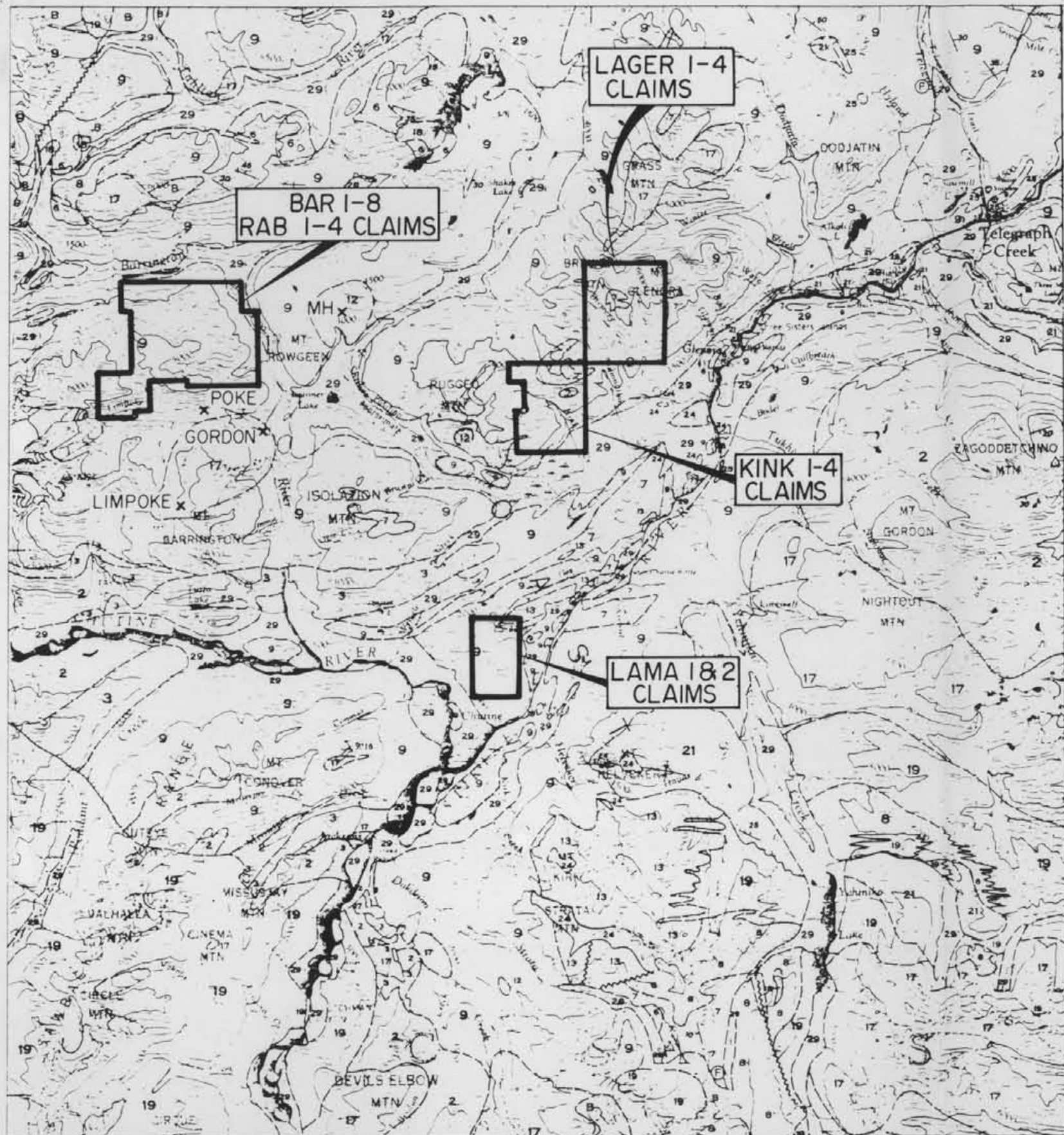
During the course of this program, two silt samples and eight rock samples were taken (Figure 4). The silt samples were collected from silt accumulations in creek drainages, sieved to minus 80 mesh in the laboratory and analyzed geochemically for gold and 32 elements by ICP.

132° 00'
58° 00'

45

30

15



LEGEND

- QUATERNARY**
PLEISTOCENE AND RECENT
29 Fluvial gravel; sand, silt; glacial outwash, till, alluvial moraine and colluvium
- CENOZOIC**
TERTIARY AND QUATERNARY
UPPER TERTIARY AND PLEISTOCENE
25 Basalt, olivine basalt, dacite-related pyroclastic rocks and subvolcanic intrusions; minor rhyolite; in part younger than some 26
- CRETACEOUS AND TERTIARY**
UPPER CRETACEOUS AND LOWER TERTIARY
SLOKO GROUP
24 Light green, purple and white rhyolite, trachyte and dacite flows, pyroclastic rocks and derived sediments
- SUSTUT GROUP
21 Chert-pebble conglomerate, granite-boulder conglomerate, quartzose sandstone, arkose, siltstone, carbonaceous shale and minor coal
19 Medium-to coarse-grained, pink biotite-hornblende quartz monzonite
- JURASSIC AND/OR CRETACEOUS**
POST-UPPER TRIASSIC PRE-TERTIARY
18 Hornblende diorite
17 Granodiorite, quartz diorite; minor diorite, leucogranite and migmatite
- LOWER JURASSIC**
13 Conglomerate, polymictic conglomerate; granite-boulder conglomerate, gnt. greywacke, siltstone; basaltic and andesitic volcanic rocks, peperites, pillow-breccia and derived volcaniclastic rocks
- TRIASSIC AND JURASSIC**
POST-UPPER TRIASSIC PRE-LOWER JURASSIC
12 Gneiss, orthoclase porphyry, monzonite, pyroxenite
- TRIASSIC**
UPPER TRIASSIC
9 Undifferentiated volcanic and sedimentary rocks (units 5 to 8 inclusive)
8 Andite-andesite flows, pyroclastic rocks, derived volcaniclastic rocks and related subvolcanic intrusions; minor greywacke, siltstone and polymictic conglomerate
7 Siltstone, thin-bedded siliceous siltstone, ribbon chert, calcareous and dolomitic siltstone, greywacke, volcanic conglomerate, and minor limestone
6 Limestone, (red) argillaceous limestone, calcareous shale and reefoid limestone; may be in part younger than some 1 and *
- PERMIAN**
MIDDLE AND UPPER PERMIAN
3 Limestone, thick-bedded mainly blocky limestone; minor siltstone, chert and tuff
- PERMIAN AND OLDER**
2 Phyllite, argillaceous quartzite, quartz-sericite schist, chlorite schist, greenstone, minor chert, schistose tuff and limestone
1 Amphibolite, amphibolite gneiss; age unknown probably pre-Upper Jurassic
- PALEOZOIC**



SYMBOLS

- Geological boundary (defined and approximate, assumed)
- Bedding (horizontal, inclined, vertical, overturned)
- Anticline
- Syncline
- Fault (defined and approximate, assumed)
- Thrust fault, teeth on hanging-wall side (defined and approximate, assumed)
- Fossil locality
- Mineral property
- Glacier

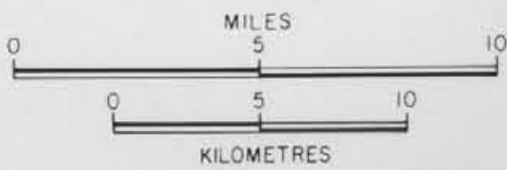
PASS LAKE RESOURCES LTD.

**TELEGRAPH CREEK PROPERTIES
REGIONAL GEOLOGY**

LIARD MINING DIVISION, B. C.

EQUITY ENGINEERING LTD.

SCALE 1:250,000



DRAWN J.W.	NTS 1046/13	DATE DEC., 1990	FIG No. 3
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Reconnaissance geological mapping and prospecting were carried out using a 1:10,000 scale enlargement of the government's 1:50,000 scale topographic map as a base (Figure 5). Rock samples, described in Appendix C, were taken from zones of alteration and mineralization and analyzed geochemically for gold and 32 elements by ICP. Analytical certificates are attached in Appendix D.

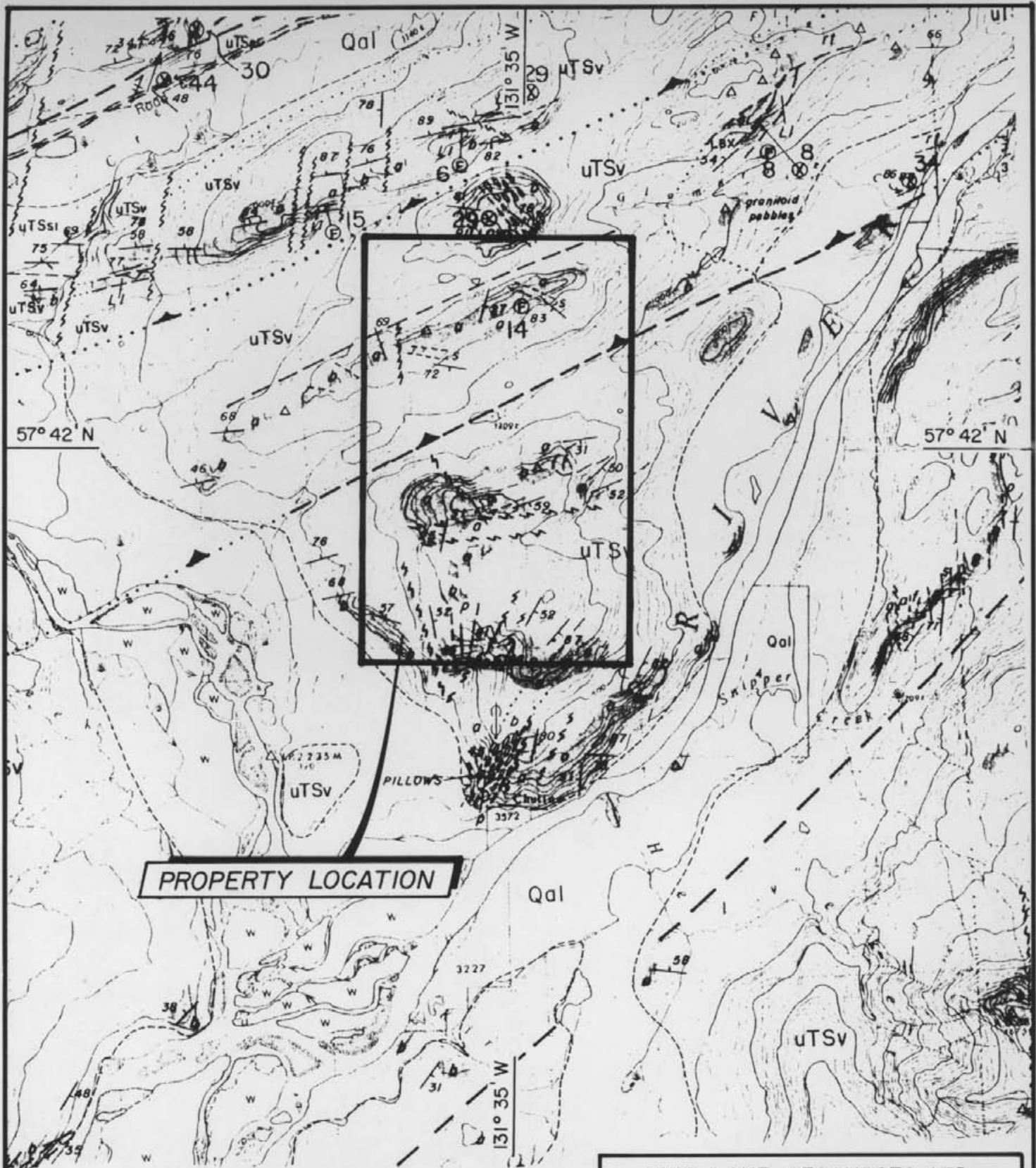
5.0 REGIONAL GEOLOGY

The Telegraph Creek area lies on the western margin of the Intermontane Belt within the Stikine Arch near its contact with the Coast Plutonic Complex (Figures 3 and 4). A sequence of Paleozoic to Middle Triassic oceanic sediments is unconformably overlain by rocks equivalent to Upper Triassic Stuhini Group island arc volcanics and sediments. These have been intruded by Upper Triassic to Lower Jurassic syenitic stocks and by Jurassic to Lower Cretaceous quartz diorite and granodiorite plutons of the Coast Plutonic Complex.

The oldest rock assemblage in the Telegraph Creek area consists of Permian bioclastic limestone (Unit 3) overlying metamorphosed sediments and volcanics (Unit 2) and crinoidal limestone (Unit 1).

Unconformably overlying the Permian limestone unit are Upper Triassic Stuhini Group island arc bimodal volcanics and sediments (Units 5 through 8). In the area of the Lama claims (Figure 4), Brown et al (1990) divided the Stuhini Group into sediments (Unit uTSs1) and volcanics (Unit uTSv). The sediments comprise grey, arkosic wacke with limestone clasts, siltstone, graphitic shale, rare black chert and rare polymictic conglomerate with granitoid clasts. The volcanics have been further subdivided. **Sub-unit b** consists of mafic volcanics, including augite porphyry flows and pyroclastics. **Sub-unit p** comprises bladed plagioclase porphyry basalt, with pillows on the Lama claims. **Sub-unit a** includes intermediate volcanics, primarily andesite flow-breccia, red-brown volcanic breccia and fine-grained andesite. **Sub-unit f** includes felsic volcanic rocks, primarily pyritic, laminated sub-aqueous silicious ash tuff (Brown and Greig, 1990). Several significant gold occurrences are hosted by Upper Triassic Stuhini volcanics in a cluster around Galore Creek sixty kilometres to the south.

Small, equidimensional syenite, pyroxenite and orthoclase porphyry stocks (Unit 12), dated as Late Triassic to Early Jurassic by Souther (1972), intrude mainly Stuhini volcanics. The Galore Creek and Copper Canyon copper-gold porphyry deposits are hosted by Upper Triassic volcanics intruded by syenitic stocks of Unit 12. Mesozoic orthoclase porphyry or syenite stocks are associated with most significant precious metals deposits in the Stewart, Sulphurets and Iskut River districts, including the Silbak Premier, Sulphurets, and Snip deposits.



Geology after BROWN ET AL (1990)

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PASS LAKE RESOURCES LTD.

LAMA 1-2 CLAIMS
 REGIONAL GEOLOGY
 British Columbia

EQUITY ENGINEERING LTD.

DRAWN J.J.E.	MINING DIV.: LIARD	FIGURE
N.T.S.: 104 G/12 E	SCALE: 1:50 000	4
DATE: DEC., 1990	REVISED:	

LEGEND

(to accompany Figure 4)

LITHOLOGIES

QUATERNARY

Qal Alluvium, unconsolidated glaciofluvial deposits

UPPER TRIASSIC

Stuhini Group

uTSs1 Grey arkosic wacke with limestone clasts, siltstone, graphitic shale, rare black chert; rare granitoid-bearing polymictic conglomerate/breccia

uTSv Volcanic rocks; undifferentiated















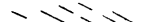




b Mafic volcanic rocks; augite-porphyrific basalt to basaltic andesite flows and breccia; pyroxene-rich crystal lithic lapilli tuff; volcanic wacke, dark green to olive-green, medium-grained, massive, minor plagioclase

p Bladed plagioclase-porphyrific basalt or basaltic andesite, locally pillowed

a Intermediate volcanic rocks; massive, green andesite flow-breccia containing 10-20% equant plagioclase phenocrysts; red-brown to purple plagioclase-rich volcanic breccia and tuff; fine-grained, massive, green to olive aphyric andesite

f Felsic volcanic rocks; rhyolite/dacite: subaqueous felsic/siliceous ash tuff, laminated, pale to dark green, commonly pyritic; "sharpstone", silicic wacke/breccia, pale to dark green, siliceous angular fragments; local welded ignimbrite

SYMBOLS

Geological boundary (defined, approximate, assumed)	
Unconformity (defined, approximate, assumed)	
Bedding (inclined, vertical)	
Bedding; tops observed (inclined, overturned)	
Foliation (inclined, vertical)	
Dike (inclined, vertical; composition indicated by abbreviation)	
Antiformal axis (approximate)	
Synformal axis (approximate)	
Overtured synclinal axis	
Axial plane of minor fold (inclined, vertical)	
Fold axis of minor fold (arrow indicates plunge)	
Glacial striae (undetermined direction of movement)	
High-angle fault (defined, approximate; solid circle on downthrown side)	
Reverse fault (defined, approximate, assumed; teeth in direction of dip)	
Dike swarm	
Cross-section line	
Fossil location: age determined, undetermined (data on Sheet 2)	
Potassium-argon isotopic age sample location (data on Sheet 2)	
Field station with no structural measurements	

Geology after Brown et al (1990)

Lower Jurassic conglomerates (Unit 13) with granodiorite clasts unconformably overly Stuhini Group sediments. The Jurassic volcano-sedimentary strata are similar in appearance to those of the underlying Triassic rocks, with differentiation possible mainly through fossil identification, but have been assigned to the Hazelton Group by Brown and Greig (1990).

Jurassic and/or Cretaceous granodiorite to quartz diorite batholiths (Unit 17) of the Coast Plutonic Complex intrude all older lithologies. This unit consists mainly of medium-grained hornblende-biotite granodiorite with lesser hornblende quartz diorite and is locally foliated near its margins. Marginal phases of this intrusive unit have been noted by Government geologists, to be syenitic and they conclude, "much additional work is needed to subdivide the many phases of this map-unit" (Souther, 1972).

Coarse conglomerate, sandstone, siltstone and minor black shale of the Upper Cretaceous and Lower Tertiary Sustut Group (Unit 21) unconformably overlies Jurassic strata on Mount Helveker and are found along the Stikine River below Telegraph Creek. Conformably overlying the Sustut Group on Helveker Mountain are about 160 meters of felsic to intermediate, mainly pyroclastic rocks (Unit 24), correlated by Souther (1972) to the Early Tertiary Sloko Group found further to the northwest.

Upper Tertiary and Quaternary basalt flows (Unit 25) are exposed in the Stikine River and north of Dodjatin Mountain.

6.0 PROPERTY GEOLOGY AND MINERALIZATION

6.1 Geology

The Lama 1 and 2 claims are underlain by an interbedded sequence of volcanic, volcanoclastic and sedimentary rocks of the Upper Triassic Stuhini Group (Figure 5). These rocks show variable strikes, moderate to steep dips and have undergone zeolite grade metamorphism. A major east-northeast-striking, northerly-dipping thrust fault bisects the property. Stuhini Group rocks occur on both sides of this fault. East and north to northeast-trending, steeply-dipping faults have been mapped, mainly within the southern half of the property. Several distinct rock types have been identified on the Lama 1 and 2 claims but more mapping will be necessary in order to determine the continuity of these units. Geology in Figure 5 has been adapted in part from Brown et al (1990) and has been modified on the basis of field work carried out during 1990.

Government mapping has revealed two outcrops of undifferentiated sedimentary rocks (Unit 8A) on the ridge to the north of Dolly Creek. These rocks strike to the northwest and dip

steeply towards the southwest. Their exact composition is unknown.

Augite-porphyrific basalt and basaltic andesite flows (Unit 8D) outcrop in several places throughout the property. These rocks are dark green, massive and may contain up to 20% one to two millimetre augite phenocrysts. Pillow textures have been observed within this unit in the northern part of the property (Brown et al., 1990) and rocks containing calcite amygdules (Unit 8D1) have been mapped in the southeast corner of the Lama 1 claim.

Andesite and feldspar-porphyrific andesite (Unit 8E) is widespread throughout the property. This unit is dark green, massive and often contains 10-20% feldspar phenocrysts. Local, parallel alignment of phenocrysts suggests that some of these rocks may represent flows.

Government mapping indicates an outcrop of felsic volcanics (Unit 8F) on the ridge to the south of Dolly Creek.

Heterolithic lapilli tuff (Unit 8H) outcrops near the legal corner post. These rocks are massive, maroon coloured and contain mafic and felsic rock fragments up to one centimetre across.

A strong magnetic anomaly is centred around the peak near the southern boundary of the claims (GSC, 1978). Government mapping indicates that the area is underlain by volcanic rocks of units 8E and 8D.

6.2 Mineralization

A total of 8 rock samples were taken on the property during 1990. Most of these samples returned low values for the major base and precious metals, although a few contained some copper.

Sample LAMA ROCK-1 was taken from brecciated, silicified volcanic float on the slope to the north of Guru Creek. The sample, containing disseminated chalcopryrite, assayed 0.92% copper, with low values for other metals. Samples 484811 and 484812, taken from malachite stained volcanic cliffs above sample LAMA ROCK-1, returned copper values of 8560 and 6040 ppm respectively. Float sample 484810, from the same vicinity, returned 3510 ppm copper. The brecciated nature of some of these samples suggests that mineralization may be related to east-trending faults, which have been mapped to the west of this area and may continue along Guru Creek.

A strong iron-carbonate alteration zone within volcanics is exposed on the slope to the north of Dolly Creek. Samples from this area returned low values for all of the major base and precious metals.

Malachite staining has been observed on south facing cliffs in

the northern part of the Lama 1 claim. This area has yet to be investigated.

7.0 GEOCHEMISTRY

Regional geochemical sampling of the Telegraph Creek map sheet was conducted by the British Columbia Geological Survey in 1987 (GSC Open File 1646, 1988). One silt sample (871174) was taken from a creek which drains the western part of the Lama 1 claim, however it returned values below the 90th percentile for all base and precious metals.

In 1990, two silt samples (90BK-45 and 90DC-20) were taken from Dolly and Guru Creeks, on the Lama property. Sample 90BK-45, from Dolly Creek on the Lama 1 claim, returned an anomalous silver value of 0.4 ppm (equivalent to the 95th percentile for silver for the government survey). The creek drains an area of iron carbonate altered volcanics. Other precious and base metal values for both of the silt samples are low.

8.0 DISCUSSION AND CONCLUSIONS

The Lama 1 and 2 claims are underlain by Upper Triassic Stuhini Group rocks. These rocks host significant base and precious metal deposits to the south in the Galore Creek area. In addition, the presence of felsic and submarine mafic volcanics and the possibility of a volcanogenic massive sulphide target warrants attention.

During the 1990 field season an area of copper mineralization was found on the Lama 2 claim, malachite-stained cliffs were observed on the Lama 1 claim and a silt sample from Dolly Creek was found to be anomalous in silver. A large magnetic anomaly on the Lama 2 claim is, as yet, unexplained. The Lama 1 and 2 claims are in a very early stage of exploration but the results to date offer encouragement for further work.

Respectfully submitted,
EQUITY ENGINEERING LTD.


Bruno Kasper, Geologist

Vancouver, British Columbia
February, 1991.

APPENDIX A

BIBLIOGRAPHY

BIBLIOGRAPHY

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APPENDIX B

STATEMENT OF EXPENDITURES

LAMA CLAIM GROUP
(LAMA 1 & 2 CLAIMS)
 (September 26 - Septmeber 29, 1991)

PROFESSIONAL FEES AND WAGES:

Bruno Kasper, Geologist		
1 day @ \$300/day	\$	300.00
Don Coolidge, Prospector		
1 day @ \$250/day		<u>250.00</u>
	\$	550.00

CHEMICAL ANALYSES:

Rock Geochemical Samples		
7 @ \$17.75/each	\$	124.25
Silt Samples		
2 @ \$14.94 each		<u>29.88</u>
		154.13

EXPENSES:

Accommodation	\$	230.00
Aircraft Charter		18.47
Courier and Telefax		8.44
Drafting		16.95
Expediting		2.55
Freight		10.01
Fuel		4.43
Geochemical Supplies		9.91
Helicopter Charters		569.60
Materials and Supplies		2.39
Maps and Publications		1.21
Meals		4.28
Printing and Reproductions		82.24
Radio Rental		10.00
Telephone Distance Charges		4.86
Truck Standby		<u>5.00</u>
		<u>980.34</u>
	\$	1,684.47

MANAGEMENT FEE @ 15% on expenses

		<u>167.92</u>
	\$	1,852.39

REPORT (estimated)

		<u>2,000.00</u>
	\$	<u><u>3,852.39</u></u>

APPENDIX C

ROCK SAMPLE DESCRIPTIONS

Mineral Abbreviations:

AS	Arsenopyrite	KF	Potassium Feldspar
AZ	Azurite	LI	Limonite
BI	Biotite	MC	Malachite
BO	Bornite	MG	Magnetite
CA	Calcite	MO	Molybdenite
CC	Chalcocite	MN	Manganese-oxides
CB	Fe-Carbonate	MR	Mariposite
CL	Chlorite	MS	Sericite
CP	Chalcopyrite	MU	Muscovite
CV	Covellite	PO	Pyrrhotite
CY	Clay	PY	Pyrite
DO	Dolomite	QZ	Quartz
EP	Epidote	SI	Silica
GE	Goethite	SM	Smithsonite
GL	Galena	SP	Sphalerite
HE	Hematite	TA	Talc
JA	Jarosite	TT	Tetrahedrite

Property : Lama 1 & 2 Claims

NTS : 104G/12E

Date : 02/21/91

Sample No.	Location :		Type :	Float	Alteration :	SI, CL	Au	Ag	Cu	Pb	Zn	As	
LAMA ROCK-1		6397670	N	Strike Length Exp. :	m	Sulphides :	2-3%CP, TR. PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	
		346980	E	Sample Width :	m	Oxides :	MC, LI	5.	4.4	0.92%	36.	76.	10.
		1200 ft		True Width :	m	Host :	Intermediate volcanoclastic?						
	Orientation:	/											

Comments : Brecciated rock containing 1-2mm wide quartz veinlets. Chalcopyrite occurs as 1mm blebs within the quartz veinlets.

Sample No.	Location :		Type :	Float	Alteration :	CB, SI?	Au	Ag	Cu	Pb	Zn	As	
484810		6397720	N	Strike Length Exp. :	m	Sulphides :	1%CP, 1%PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	
		346970	E	Sample Width :	m	Oxides :	GE, MC	<5.	<0.2	3510.	8.	74.	5.
		1250 ft		True Width :	m	Host :	Feldspar-porphyry						
	Orientation:	/											

Comments : The sample was taken from a talus slope below malachite-stained cliffs.

Sample No.	Location :		Type :	Select	Alteration :	CB, SI?	Au	Ag	Cu	Pb	Zn	As	
484811		6397720	N	Strike Length Exp. :	? m	Sulphides :	1-2%CP, 1%PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	
		346900	E	Sample Width :	25 cm	Oxides :	MC	<5.	<0.2	8560.	<2.	82.	<5.
		1320 ft		True Width :	35 cm	Host :	Feldspar porphyry/Andesite						
	Orientation:	/											

Comments : The sample was taken from a bluff face.

Sample No.	Location :		Type :	Grab	Alteration :	CB, SI?	Au	Ag	Cu	Pb	Zn	As	
484812		6397650	N	Strike Length Exp. :	? m	Sulphides :	1-2%CP, 1%PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	
		346830	E	Sample Width :	1 m	Oxides :	MC	<5.	<0.2	6040.	<2.	130.	<5.
		1350 ft		True Width :	? m	Host :	Mafic volcanics						
	Orientation:	/											

Comments : Malachite occurs along fracture surfaces.

Sample No.	Location :		Type :	Grab	Alteration :	CA, CB, QZ	Au	Ag	Cu	Pb	Zn	As	
484915		6398440	N	Strike Length Exp. :	<1 m	Sulphides :	<1%PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	
		346710	E	Sample Width :	20 cm	Oxides :	GE	<5.	0.4	121.	2.	140.	<5.
		1320 ft		True Width :	m	Host :	Felsic Dyke?						
	Orientation:	? / ?											

Comments : The sample was taken from a poorly exposed outcrop. Disseminated pyrite is associated with silicification.

Sample No.	Location :		Type :	Grab	Alteration :	CB	Au	Ag	Cu	Pb	Zn	As	
484916		6399230	N	Strike Length Exp. :	1.5 m	Sulphides :	TR. PY	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	
		346510	E	Sample Width :	1.0 m	Oxides :	GE, JA	<5.	0.2	24.	8.	92.	25.
		1700 ft		True Width :	4.0 cm	Host :	Volcaniclastics						
	Orientation:	072 / 75 N											

Comments : The sample was taken from an iron-oxidized fracture within a carbonate alteration zone.

APPENDIX D

CERTIFICATES OF ANALYSIS



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
 VANCOUVER, BC
 V6B 1N2

A9024446

Comments: ATTN: HENRY AWMACK

CERTIFICATE	A9024446
--------------------	-----------------

EQUITY ENGINEERING LTD.

Project: LAMA-1-2
 P.O. #: PLJ90-03

Samples submitted to our lab in Vancouver, BC.
 This report was printed on 16-OCT-90.

SAMPLE PREPARATION		
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	7	Geochem ring to approx 150 mesh
294	7	Crush and split (0-10 pounds)
238	7	NITRIC-AQUA REGIA DIGESTION
* NOTE 1:		

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES					
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	7	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
922	7	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
921	7	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
923	7	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	7	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	7	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	7	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	7	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	7	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	7	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	7	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	7	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	7	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	7	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	7	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	7	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	7	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	7	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	7	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	7	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	7	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	7	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	7	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	7	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	7	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	7	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
944	7	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	7	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	7	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	7	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	7	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	7	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	7	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984 0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project: LAMA
Comments:

Page Number: 1 A
Total Pages: 1
Invoice Date: 15 JUL 90
Invoice No.: I-9018208
P.O. Number: PLJ90 02

CERTIFICATE OF ANALYSIS

A9018208

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
			FA+AA		%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
LAMA ROCK-1	205	294	5	4.4	2.42	10	130	< 0.5	< 20	2.83	< 0.5	30	55	>10000	6.13	< 10	< 1	0.15	< 10	1.15	930

CERTIFICATION:



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project: LAMA
Comments:

Page Number: 1-B
Total Pages: 1
Invoice Date: 15 JUL 90
Invoice No.: I-9018208
P.O. Number: PLJ90.02

CERTIFICATE OF ANALYSIS

A9018208

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
LAMA ROCK-1	205	294	3	0.03	7	2200	36	5	12	77	< 0.01	< 10	< 10	213	< 10	76

CERTIFICATION:



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Page Number : 1-A
Total Pages : 1
Invoice Date: 16-OCT-90
Invoice No. : I-9024446
P.O. Number : PLJ90-03

Project : LAMA-1-2
Comments: ATTN: HENRY AWMACK

CERTIFICATE OF ANALYSIS

A9024446

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
	FA+AA																				
484810	205	294	< 5	< 0.2	3.17	5	40	< 0.5	< 2	3.52	< 0.5	30	30	3510	7.79	< 10	< 1	0.12	< 10	2.01	1030
484811	205	294	< 5	< 0.2	3.17	< 5	30	< 0.5	< 2	3.29	< 0.5	34	16	8560	8.64	< 10	< 1	0.08	< 10	2.49	1375
484812	205	294	< 5	< 0.2	3.53	< 5	60	< 0.5	< 2	2.59	< 0.5	38	17	6040	9.47	< 10	< 1	0.13	< 10	2.94	1350
484915	205	294	< 5	0.4	1.09	< 5	740	< 0.5	< 2	0.69	0.5	4	27	121	3.69	< 10	< 1	0.08	20	0.48	965
484916	205	294	< 5	0.2	2.05	25	70	< 0.5	< 2	0.58	< 0.5	8	77	24	5.90	< 10	< 1	0.28	10	1.31	350
484917	205	294	< 5	0.2	0.73	10	90	< 0.5	< 2	5.61	< 0.5	12	36	107	4.95	< 10	< 1	0.22	< 10	2.29	1105
484918	205	294	< 5	< 0.2	2.79	15	140	< 0.5	< 2	0.54	< 0.5	16	77	23	6.17	< 10	< 1	0.07	10	2.70	1155

CERTIFICATION:



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
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British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

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VANCOUVER, BC
V6B 1N2

Page Number : 1-B
Total Pages : 1
Invoice Date: 16-OCT-90
Invoice No. : I-9024446
P.O. Number : PLJ90-03

Project : LAMA-1-2
Comments: ATTN: HENRY AWMACK

CERTIFICATE OF ANALYSIS

A9024446

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
484810	205	294	2	0.02	54	2330	8	5	15	78	< 0.01	< 10	< 10	242	< 10	74
484811	205	294	2	0.05	15	2400	< 2	5	13	55	0.27	< 10	< 10	252	< 10	82
484812	205	294	2	0.05	12	2600	< 2	5	21	60	0.02	< 10	< 10	250	< 10	130
484915	205	294	1	0.08	5	1280	2	< 5	2	36	< 0.01	< 10	< 10	69	< 10	140
484916	205	294	5	0.02	5	920	8	5	12	28	< 0.01	< 10	< 10	84	< 10	92
484917	205	294	1	0.02	8	770	2	5	16	274	< 0.01	< 10	< 10	43	< 10	78
484918	205	294	1	0.04	9	770	10	< 5	18	20	0.01	< 10	< 10	185	< 10	120

CERTIFICATION:



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

A9111438

Comments: ATTN: ROBERT FALLS

CERTIFICATE

A9111438

EQUITY ENGINEERING LTD.

Project: LAMA
P.O. #: PLJ90-02

Samples submitted to our lab in Vancouver, BC.
This report was printed on 25-FEB-91.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
214	1	Received sample as pulp

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
301	1	Cu %: HC104-HNO3 digestion	AAS	0.01	100.0



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project: LAMA
Comments: ATTN: ROBERT FALLS

Page Number : 1
Total Pages : 1
Certificate Date: 25-FEB-91
Invoice No. : 19111438
P.O. Number : PLJ90-02

CERTIFICATE OF ANALYSIS

A9111438

SAMPLE DESCRIPTION	PREP CODE	Cu %									
LAMA ROCK -1	214 --	0.92									

CERTIFICATION:

W. Peter ...



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

A9024447

Comments: ATTN: HENRY AWMACK

CERTIFICATE

A9024447

EQUITY ENGINEERING LTD.

Project: LAMA1-2
P.O. #: PLJ90-03

Samples submitted to our lab in Vancouver, BC.
This report was printed on 16-OCT-90.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
203	2	Dry, sieve to -35 mesh
205	2	Geochem ring to approx 150 mesh
238	2	NITRIC-AQUA REGIA DIGESTION

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	2	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
922	2	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
921	2	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
923	2	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	2	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	2	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	2	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	2	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	2	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	2	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	2	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	2	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	2	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	2	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	2	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	2	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	2	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	2	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	2	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	2	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	2	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	2	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	2	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	2	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	2	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	2	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
944	2	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	2	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	2	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	2	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	2	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	2	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	2	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
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Page Number : 1-A
Total Pages : 1
Invoice Date: 16-OCT-90
Invoice No. : I-9024447
P.O. Number : PLJ90-03

Project : LAMA1-2
Comments: ATTN: HENRY AWMACK

CERTIFICATE OF ANALYSIS A9024447

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
			FA+AA	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
90 BK-45	203	205	5	0.4	1.52	5	340	0.5	< 2	0.94	< 0.5	10	164	18	3.24	10	< 1	0.12	10	0.98	650
90 DC-20	203	205	< 5	0.2	1.43	5	90	< 0.5	< 2	3.54	< 0.5	13	251	40	2.98	10	< 1	0.07	< 10	1.46	555

CERTIFICATION:

B. Campbell



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project : LAMA1-2
Comments: ATTN: HENRY AWMACK

Page Number : 1-B
Total Pages : 1
Invoice Date: 16-OCT-90
Invoice No. : I-9024447
P.O. Number : PLJ90-03

CERTIFICATE OF ANALYSIS

A9024447

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
90 BK-45	203	205	1	0.05	28	530	2	< 5	4	57	0.12	< 10	< 10	80	< 10	52
90 DC-20	203	205	< 1	0.04	63	510	< 2	< 5	4	66	0.10	< 10	< 10	80	< 10	58

CERTIFICATION:

APPENDIX E

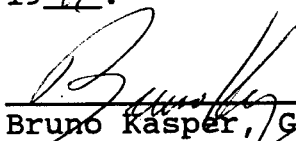
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, BRUNO KASPER, of 101-1990 West 6th Avenue, Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

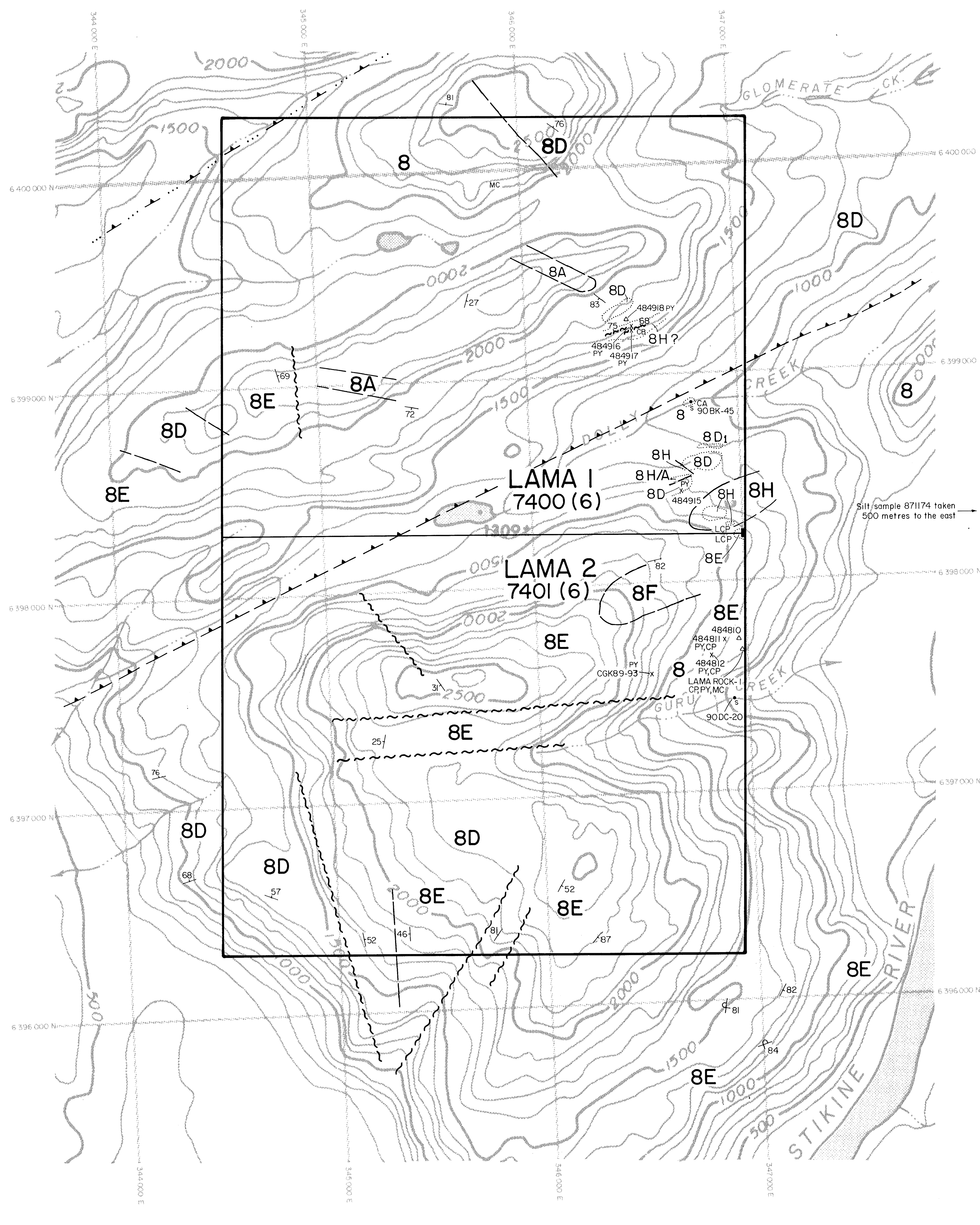
1. THAT I am a Consulting Geologist with offices at Suite 207, 675 West Hastings Street, Vancouver, British Columbia.
2. THAT I am a graduate of the University of Alberta with a Bachelor of Science degree in Geology.
3. THAT my primary employment since June, 1988 has been in the field of mineral exploration.
4. THAT this report is based on fieldwork carried out under my direction.
5. THAT I have no interest, directly or indirectly, in the securities of Pass Lake Resources Ltd. or any of its affiliates. I have no interest, directly or indirectly in the property.

DATED at Vancouver, British Columbia, this 28th day of February, 1991.



Bruno Kasper, Geologist

Vancouver, British Columbia
February, 1991.



1990 ROCK SAMPLE ANALYSES

Sample	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
LAMA ROCK-1	5	4.4	0.92%	36	76	10
484810	<5	<0.2	3510	8	74	5
484811	<5	<0.2	8560	<2	82	<5
484812	<5	<0.2	6040	<2	130	<5
484915	<5	0.4	121	2	140	<5
484916	<5	0.2	24	8	92	25
484917	<5	0.2	107	2	78	10
484918	<5	<0.2	23	10	120	15

1989 GOVERNMENT ROCK SAMPLE ANALYSIS

Sample	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
CGR 89-93	<2	<0.5	225	2	83	6

1990 SILT SAMPLE ANALYSES

Sample	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
90BK-45	5	0.4	18	2	52	5
90DC-20	<5	0.2	40	<2	58	5

1987 GOVERNMENT REGIONAL SILT SAMPLE ANALYSIS

Sample	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
871174	1	0.1	35	8	67	4

STATISTICAL ANALYSIS FOR GOVERNMENT REGIONAL SILT SAMPLES

Percentile	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
90th	30	0.3	103	16	133	17
95th	65	0.4	132	22	181	29
99th	237	1.0	272	55	478	81

LEGEND

LITHOLOGIES

- UPPER TRIASSIC**
Stuhini Group
 8 Undivided Stuhini Group rocks.
 8A Undivided sedimentary rocks.
 8D Augite-porphyritic basalt to basaltic andesite, locally pillowed.
 8D, Amygdaloidal mafic volcanic rocks.
 8E Andesite and feldspar-porphyritic andesite.
 8F Felsic volcanic rocks.
 8H Heterolithic crystal lithic lapilli tuff, and tuff breccia.

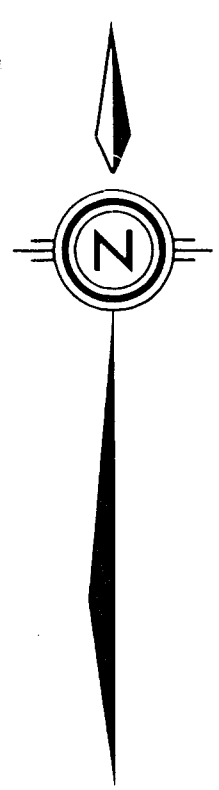
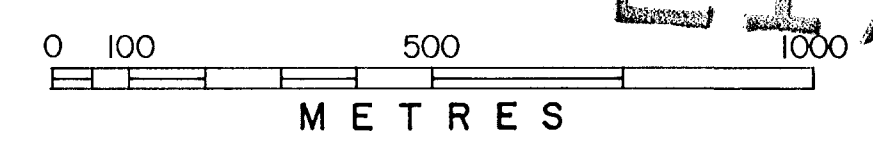
MINERAL AND ALTERATION TYPES

- CA calcite CB Fe-carbonate
 CP chalcopyrite MC malachite
 PY pyrite

SYMBOLS

- Rock Outcrop
- Geological Contact (approximate)
- Bedding (inclined, overturned)
- Fault with dip (defined, approximate)
- Thrust Fault (approximate, assumed) with barbs on upper plate indicating direction of dip
- Rock Sample (outcrop, float)
- Silt Sample
- Legal Corner Post (located)

Geology adapted in part from Brown et al (1990b),
 Government Rock Sample Data from Brown et al (1990b),
 Government Regional Geochemical Data from G.S.C. OPEN FILE 1646.



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GEOLOGICAL BRANCH ASSESSMENT REPORT

PASS LAKE RESOURCES LTD.

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 BRITISH COLUMBIA

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DRAWN: / J.J.E.	MINING DIV.: LIARD	FIGURE 5
N.T.S.: 104 G/12 E	SCALE: 1:10000	
DATE: MARCH, 1991	REVISED:	