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1989 GEOLOGICAL
AND GEOCHEMICAL REPORT
ON THE
KINK 1-4 CLAIMS

Located in the Telegraph Creek Area
Liard Mining Division
NTS 104G/14W
57° 49' North Latitude
131° 32' West Longitude

SUB-RECORDER RECEIVED	
MAR 2 8 1990	
M.R. #\$ VANCOUVER, B.C.	

GEOLOGICAL BRANCH ASSESSMENT REPORT

19,845

-prepared for-PASS LAKE RESOURCES LTD. GOLDEN SITKA RESOURCES INC.

-prepared by-Jim Lehtinen, B.Sc. Geology March, 1990

1989 GEOLOGICAL AND GEOCHEMICAL REPORT ON THE KINK 1-4 CLAIMS

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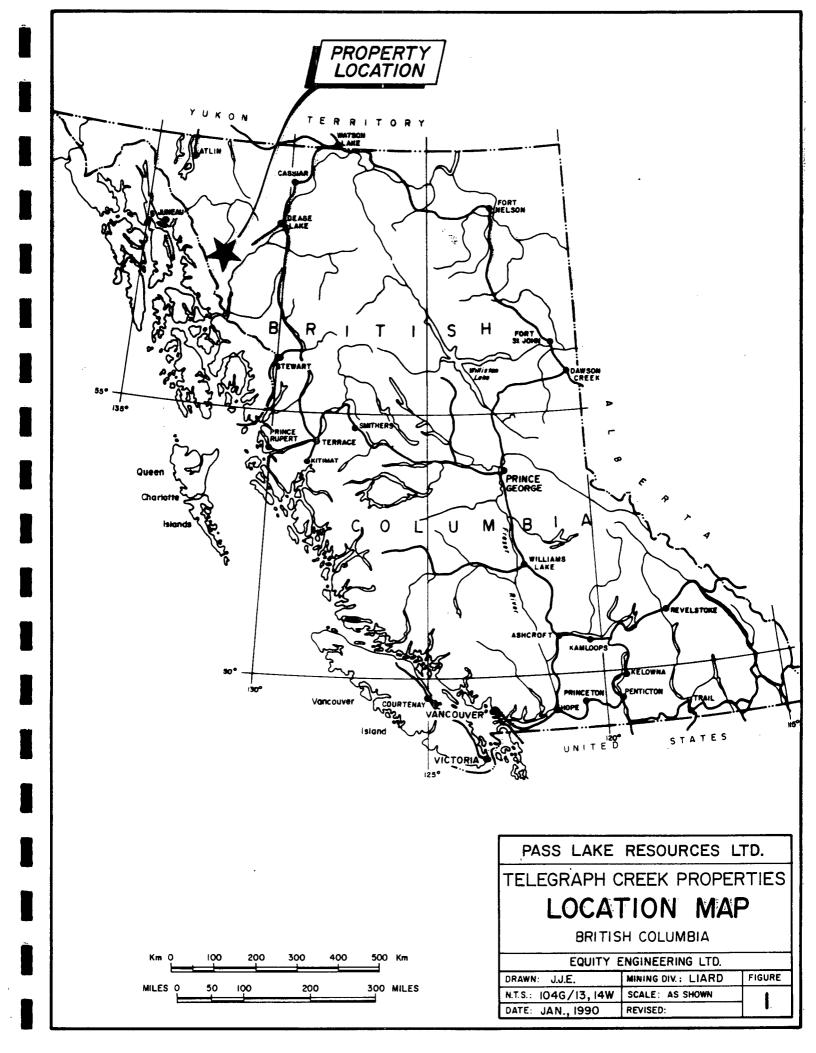
1.0 INTRODUCTION

The Kink 1-4 claims were staked in March, 1989 to cover an area of favourable geology, geochemistry and geophysics north of the Stikine River, approximately twenty-four kilometers west-southwest of Telegraph Creek in northwestern British Columbia (Figure 1). The geological similarity to the Galore Creek, Iskut River, Sulphurets and Stewart mining camps to the south and the area's potential for precious metal mineralization have sparked renewed exploration interest throughout the area.

Reconnaissance exploration, consisting of geological mapping, prospecting and geochemical sampling, was carried out over the Kink 1-4 claims in August of 1989. Equity Engineering Ltd. conducted this program for Pass Lake Resources Ltd. and Golden Sitka Resources Inc., 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.. Separate documents indicate that the claims are held in trust jointly for Pass Lake Resources Ltd. (50%) and Golden Sitka Resources Inc. (50%).



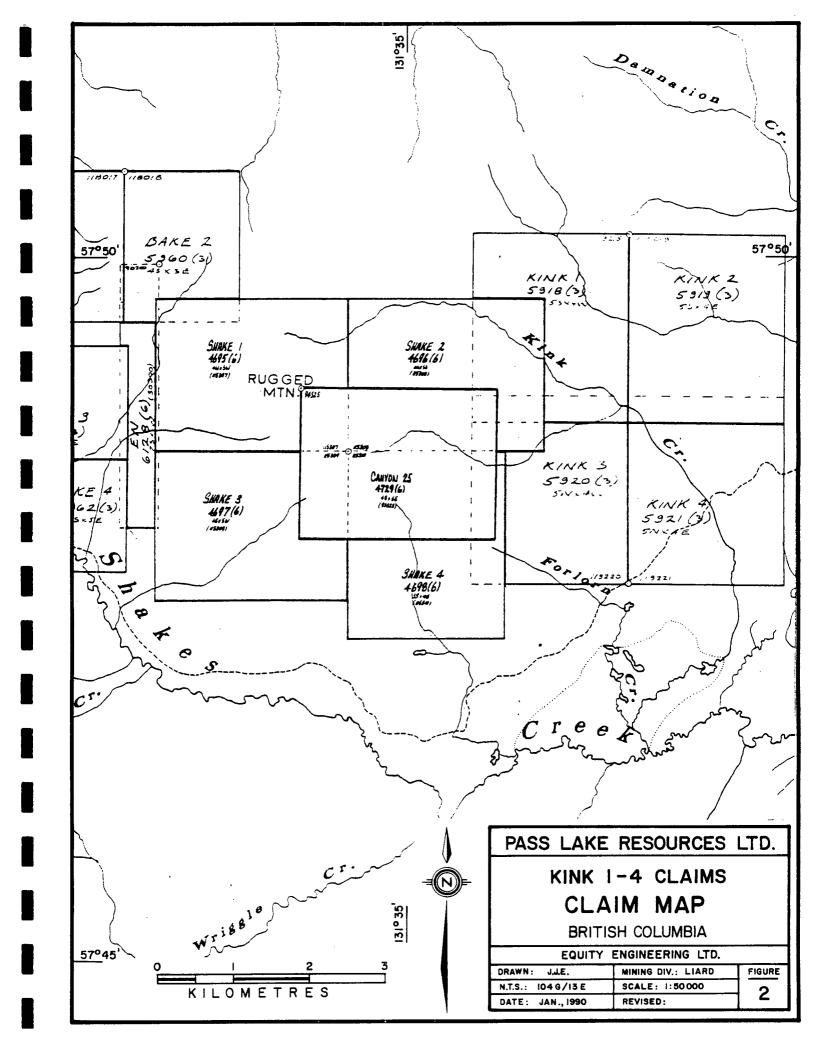
Claim Name	Record No. of Number Units		Record Date	Expiry Year	
Kink 1	5918	20	March 22, 1989	1990	
Kink 2	5919	20	March 22, 1989	1990	
Kink 3	5920	20	March 22, 1989	1990	
Kink 4	5921	<u>20</u> 80	March 22, 1989	1990	

The Kink 1-4 claims overlap previously staked ground of the Shake 2 and 4 claims and the Canyon 25 claim, reducing the actual ground coverage of the claim group from 80 units to approximately 71 units. The position of the Kink 1 and 2 legal corner posts was located on the ground, but the location of the Kink 3 and 4 legal corner posts have not been verified by the author or Equity Engineering personnel.

3.0 LOCATION, ACCESS AND GEOGRAPHY

The Kink 1-4 claims are located within the Boundary Ranges of the Coast Mountains approximately 24 kilometers west-southwest of Telegraph Creek in northwestern British Columbia (Figure 1). They lie within the Liard Mining Division, centered at 57° 49' north latitude and 131° 32' west longitude.

Access to the Kink 1-4 claims for the 1989 exploration program was provided by daily helicopter setouts from Integrated Resources' Ltd. placer mining camp on the Barrington River, a distance of approximately 15 kilometers. A secondary road extends sixteen kilometers south of Telegraph Creek to Glenora on the Stikine River. An access road suitable for four-wheel drive vehicles has been constructed west-southwest from Glenora to the site of Integrated Resources' placer mining camp on the Barrington River,

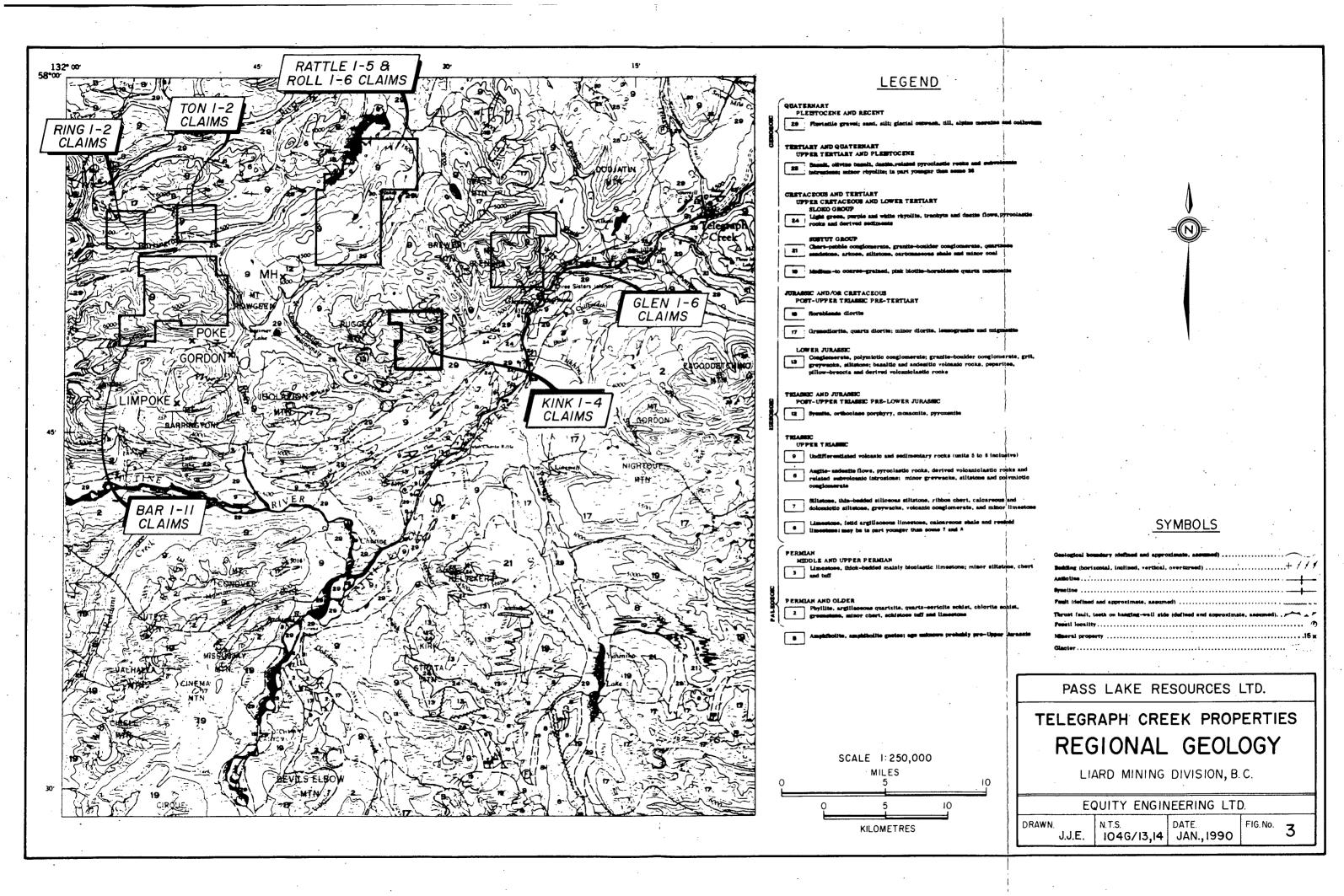


approximately four kilometers from its confluence with the Chutine River. This road passes within four kilometers of the southeast corner of the Kink claim group. An airstrip suitable for light aircraft has been constructed on the placer mining camp access road approximately one kilometer from the camp.

The Kink 1-4 claims are located east of Rugged Mountain and are centered over Kink Creek (Figure 4). Topography is rugged, typical of mountainous and glaciated terrain, with elevations ranging from approximately 485 meters on the southeast corner of the claim block to approximately 1645 meters along the northern claim boundary. The property, particularly at higher elevations, is characterized by precipitous outcrop and talus covered slopes, making access difficult.

Tree-line varies from 910 to 1600 meters elevation, dependent on slope steepness and slope-facing direction. Below tree-line, particularly within the lower valleys, vegetation predominantly consists of a dense growth of conifers. Steep slopes are frequently covered by scrub brush mixed with a tangle of debris resulting from snow avalanches. The 1989 program encountered extremely thick snow and debris infill in the valley of the southwestern fork of Kink Creek. This debris made work extremely hazardous and covered areas of potential outcrop.

The property 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. Accumulated snow in the winter is considerably less 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).

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 kilometers south-southwest and 62 kilometers 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, on Limpoke Creek. Their 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). The MH iron deposit, hosted by a pyroxenite stock on Shakes Creek approximately twelve kilometers west-northwest of the Kink claims, was also explored extensively in the 1960's (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, 19 kilometers west-southwest of the Kink claims, 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). Four silt samples were taken from creeks draining the Kink claims, of which two samples exceeded the 90th percentile in copper.

4.2 1989 Work Program

The 1989 exploiration program on the Kink claims consisted of geological mapping, prospecting and stream sediment sampling. This program was targeted at gold-rich mesothermal base metal veins comparable to those occurring within a similar geological environment to the southeast in the Galore Creek, Iskut River, Sulphurets and Stewart mining districts.

During the course of this program, seven silt samples and fourteen rock samples were taken on the Kink claims (Figure 4). The silt samples were collected from silt accumulations in creek drainages, sieved to minus 80 mesh in the laboratory and analysed geochemically for gold and 32-elements by ICP.

Reconnaissance geological mapping and prospecting were carried out using a 1:10,000 scale base map which was produced by enlargement of a segment of a 1:50,000 scale NTS map sheet 104G/13

(Figure 4). Rock samples, described in Appendix C, were taken from zones of alteration and mineralization and analysed 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 (Figure 3). 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 rocks (Units 5 through 8) equivalent to the Stuhini Group island arc volcanics and sediments. In the Telegraph Creek area, Souther (1971) grouped these volcanic and sedimentary members in Unit 9, noting however that it was composed predominantly of augite andesite breccia, conglomerate and volcanic sandstone. Several significant gold occurrences are hosted by Upper Triassic Stuhini volcanics in a cluster around Galore Creek seventy kilometers to the south.

Small, equidimensional syenite, pyroxenite and orthoclase porphyry stocks (Unit 12), dated as Late Triassic to Early Jurassic by Souther (1971), 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. 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.

Lower Jurassic conglomerates (Unit 13) with granodiorite clasts unconformably overly Stuhini Group equivalent Triassic sediments. The Jurassic volcano-sedimentary strata are similar in appearance to those of the underlying Triassic rocks, with differentiation possible mainly through fossil identification. To the southwest, these Jurassic rocks 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, 1971).

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 (1971) 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, MINERALIZATION AND GEOCHEMISTRY

6.1 Property Geology

Upper Triassic sediments, volcaniclastics and mafic to intermediate volcanics underlie most of the Kink claims. These rocks have been intruded by Triassic to Jurassic diorite, monzonite and syenite intrusives. Outcrop patterns combined with the few bedding measurements taken indicate a north-northwest trend of rock units on the property.

Regional greenschist facies metamorphism, consisting of weak to moderate chlorite, calcite and epidote alteration, is evident throughout the Upper Triassic rocks. Little faulting was observed in the limited outcrop exposure traversed on the Kink claims. Geology in Figure 4 is modified from Souther (1971) as a result of reconnaissance mapping during the 1989 program.

Mapping on the Kink claims divided the lithologies into six units, structured after Souther's (1971) map units 7, 12 and 17. Unit 7 is predominantly a sedimentary unit with interbeds of volcanics and volcaniclastics, while units 12 and 17 represent intrusives of differing ages and lithologies.

The Kink claims are predominantly underlain by a clastic and pelitic sedimentary sequence (Unit 7a). These sedimentary rocks are composed of siltstone and wacke with thin bedded to thinly laminated, dark grey, black and green argillaceous mudstone.

Poorly sorted pebble and cobble conglomerate beds were noted in the coarser grained clastics. Rare, fetid limestone beds were observed in the field and are included in this sedimentary package. These sediments appear to have the largest outcrop exposure on the property and occur centrally located in the Kink Creek valley and along a major west-southwest tributary of Kink Creek.

Volcanic rocks (Unit 7b) are exposed on the property in limited outcrop exposure and appear interbedded with sedimentary and volcaniclastic rocks. The volcanic units, which may display minor flow breccia textures, vary in colour from medium to dark green to grey and are commonly pyroxene or feldspar porphyritic. Phenocrysts vary in length from less than one millimeter for the feldspar phenocrysts to three millimeters for the pyroxene phenocrysts. The major exposures of these volcanic rocks is on a ridge on the south-central portion of the Kink 3 claim where both a pyroxene porphyritic volcanic and a feldspar porphyritic volcanic are exposed in individual outcrops on the southeast facing slope. A second exposure of pyroxene porphyritic volcanics is exposed along the major, unnamed creek flowing east-southeast through the northeast corner of the Kink 2 claim. The volcanics appear interbedded with sedimentary rocks of Unit 7a and volcaniclastic rocks of Unit 7c.

Interbedded with Units 7a and 7b are volcaniclastic rocks which appear to be both volcanic derived sediments (epiclastics) and pyroclastics (Unit 7c). The epiclastics dominate Unit 7c and are composed of conglomerates and wackes with lesser amounts of silt-sized clastic rocks. The units weather dark to light grey and are generally dark grey on the fresh surface. Pyroclastic rocks appear to be restricted to tuffs and minor breccias. Both epiclastic and pyroclastic rocks were encountered on the northeast section of the claim group.

Intrusive rocks have limited exposure on the Kink claims. A Triassic and/or Jurassic syenite intrusive was mapped by Souther (1971) to the southwest of the claim group. During the 1989 program syenite intrusions (Unit 12a) were encountered on the southwestern corner of the claims and are undoubtedly related to Souther's previously mapped syenite. Geometry of these bodies is unknown, but the intrusive(s) is likely an extension of Souther's mapped intrusive body and /or a dyke.

A government magnetometer survey (total field magnetics) of NTS map sheet 104G/13 indicates a magnetic low centered over the Kink claims. The Rugged Mountain area, approximately 1.3 kilometers west-southwest of the Kink property, is underlain by an intrusive body which is responsible for the magnetic high. The magnetic low over the Kink property is likely indicating a thickened pile of Triassic volcano-sedimentary rocks that may be the result of a synform underlying the Kink property.

A small exposure of monzonite (Unit 12b), which may be related to the syenite emplacement, was also noted on the unnamed creek north of Kink Creek. A diorite intrusion on the southwest branch of Kink Creek is assigned to Unit 17 based on lithology. The intrusion is medium grey in colour and has hornblende phenocrysts up to 1.5 centimeters in length. The diorite intrudes wacke and argillite and trends 045°. Xenoliths of limestone and argillite are found in the intrusive as well as up to 1% pyrrhotite.

Few structural measurements, other than bedding in the sediments, were taken during the course of mapping. The trend of the sediments is north-northwest and bedding measurements taken on either side of Kink Creek suggests (in a very general sense) that a synform exists with a fold axis roughly paralleling the Kink Creek drainage in a northwest-southeast direction. No major faulting was observed on the property.

Alteration of the rock units ranges from regional greenschist facies metamorphism, intrusive contact metamorphism and local hydrothermal metamorphism. Greenschist facies metamorphism is observed as chlorite, epidote and calcite alteration of the mafic to intermediate volcanics. Intrusive contact metamorphism of the sedimentary rocks occurs in the southwest corner of the claims at the contact with the syenite intrusive, where weak biotite metasomatism occurs. Hydrothermal metamorphism resulting in silicification of the sedimentary rocks was observed in a small area of the sediments along the southeasterly flowing unnamed creek on the Kink 2 claim. Weak iron carbonate alteration surrounding calcite stringers and a weak brecciated zone was also noted on the northern section of the claims.

6.2 Mineralization

During the 1989 exploration program, 14 rock samples of mineralized or altered bedrock and float were collected for geochemical analysis from the Kink claims (Figure 4). The best mineralization encountered was sampled at a contact zone between a syenite intrusion and clastic sedimentary rocks at sample location #446890. The geochemical results were 55 parts per billion gold and 749 parts per million copper. Other samples assayed returned significantly lower assay values. Rock sample numbers and selected geochemical elements (gold, silver, copper, lead, zinc, arsenic) are listed on Figure 4 while a complete listing of geochemical values is given in Appendix D.

7.0 GEOCHEMISTRY

During the regional geochemical sampling of the Telegraph Creek map sheet conducted by the British Columbia Geological Survey during 1987 (GSC Open File 1646, 1988), four silt samples were taken from streams which drain the Kink property.

None of the samples returned gold values greater than the 90th percentile (30 ppb). A copper value of 392 parts per million, which is greater than the 99th percentile (272 ppm), was collected at sample location #873617 in the southwest corner of the property from a stream which drains an area identified for its contact-style chalcopyrite mineralization at the margin of a syenite body. second sample, #873619 which unfortunately drains an area west of the property, returned an anomalous copper value of 221 parts per million and was taken on a short steep drainage on the north side of the southwest branch of Kink Creek. This sample was greater than the 95th percentile (132 ppm) for copper and may also be reflecting copper mineralization similar to the contact mineralization seen one kilometer to the south (sample #446890).

During the course of the 1989 exploration program, 7 stream silt samples were taken from creeks draining the Kink claims (Figure 4). Very few anomalies, as defined by the government survey, were encountered during the survey. Sample #BKS-29 taken on the northeastern section of the claim group was above the 90th percentile (22 ppm) in cobalt with a concentration of 23 parts per million. Nickel and chromium were also slightly elevated at 55 and 98 parts per million, respectively. Generally, most of the geochemical values were very low.

8.0 DISCUSSION AND CONCLUSIONS

Reconnaissance exploration conducted over the Kink claims in 1989 encountered an Upper Triassic volcano-sedimentary package, equivalent to the Stuhini Group, intruded by Mesozoic syenite and monzonite intrusives. Similar geological environments host significant precious metal deposits to the south in the Galore Creek, Iskut, Sulphurets and Stewart camps.

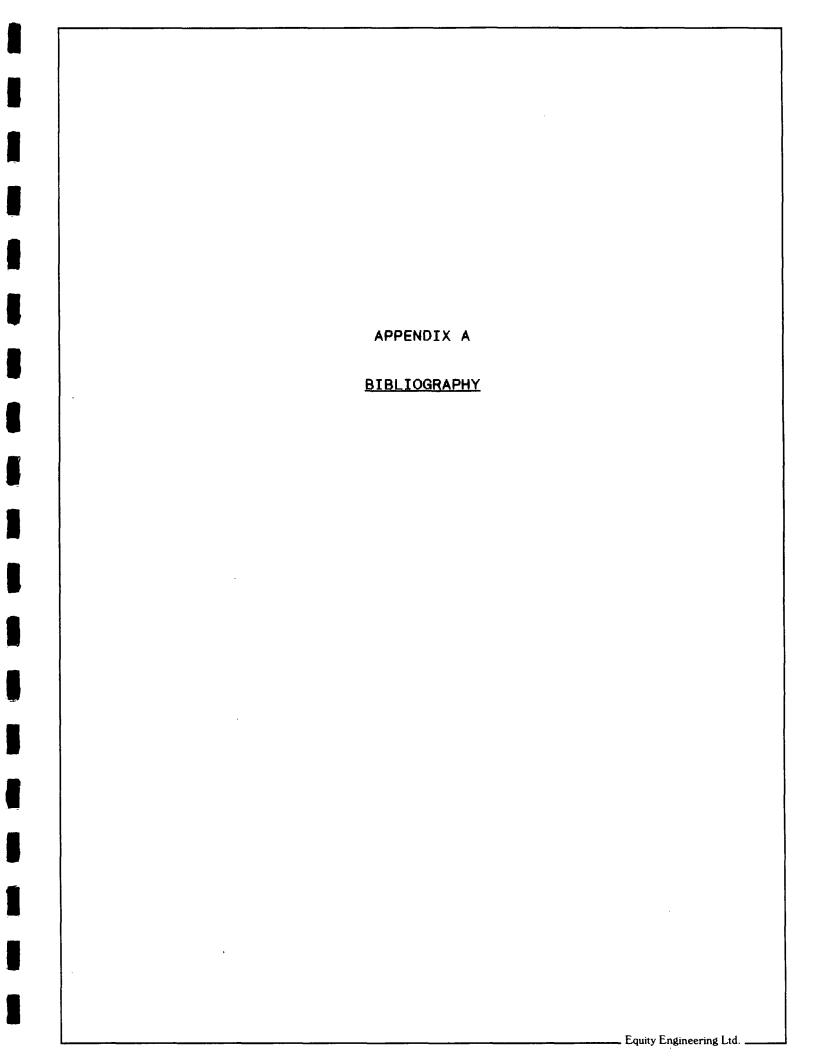
Results of the current program did not encounter significant mineralization. Government silt sampling over the Kink claims encountered highly geochemically anomalous copper values, with no other associated values.

The southern portion of the claim block, which has seen only limited mapping and prospecting, hosts syenite intrusions which are commonly associated with gold and copper mineralization. Further exploration should be directed at this potential.

Respectfully submitted, EQUITY ENGINEERING LTD.

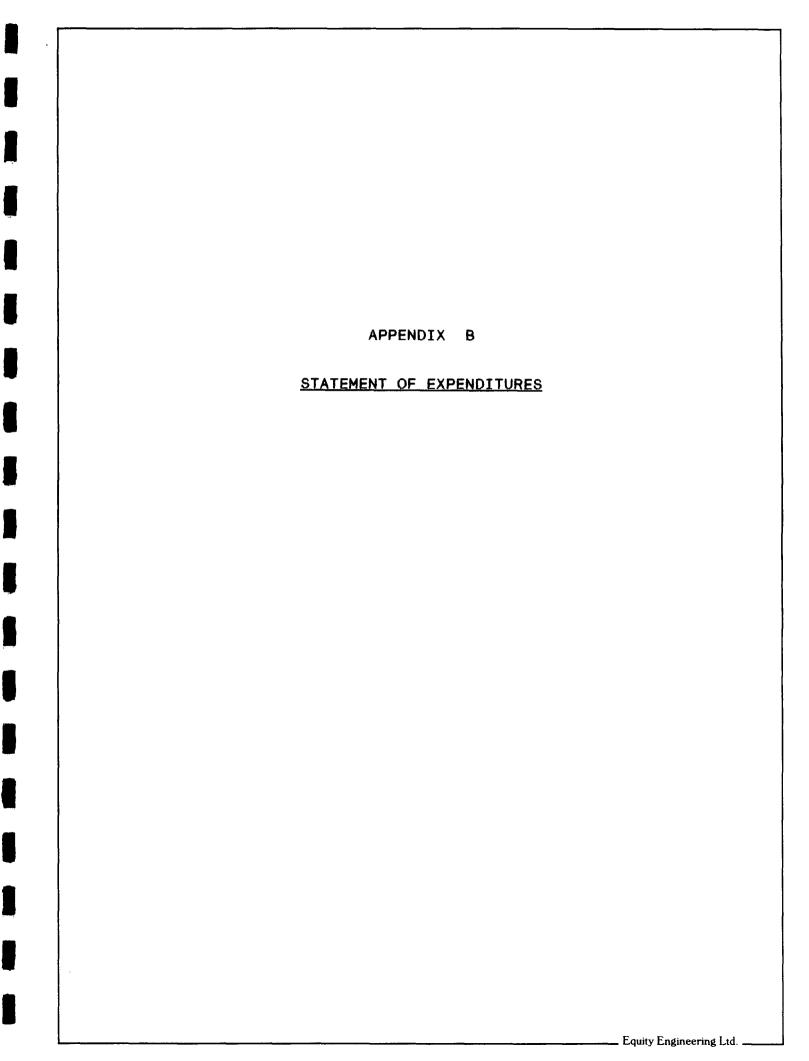
Jim Lehtinen, B.Sc. Geology

Vancouver, British Columbia March, 1990.



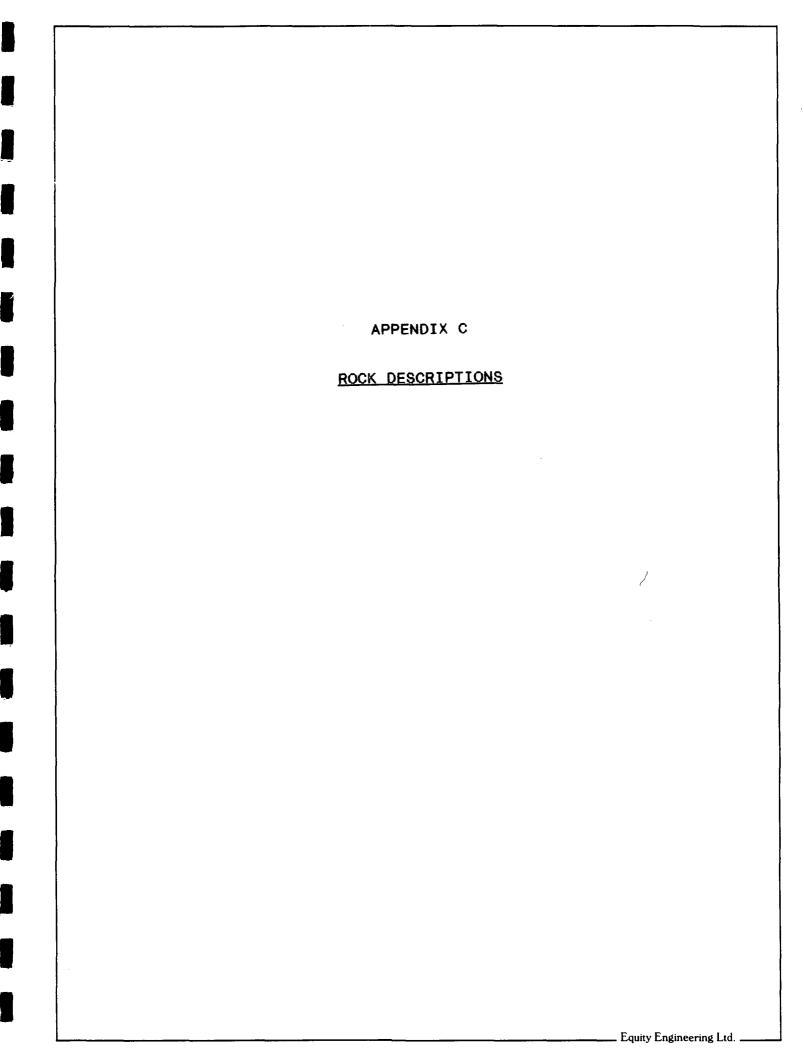
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STATEMENT OF EXPENDITURES Kink 1-4: Kink Group

PROFESSIONAL FEES AND WAGES:		
Jim Lehtinen, Project Geologi		
. 60,0 0 4000, 20,	\$ 350.00	
Bruno Kasper, Geologist		
1 days @ \$250/day	250.00	
Tom Bell, Prospector		
1 days @ \$250/day	250.00	
Don Coolidge, Prospector		
1 days @ \$250/day	250.00	
Ray Cournoyer, Prospector	050 00	
1 days @ \$250/day	250.00	
Dan Either, Prospector	250.00	
1 days @ \$250/day	250.00	
Ian Anderson, Sampler 1 days @ \$175/day	175.00	
I days w \$175/day	173.00	\$ 1,775.00
		φ 1,770.00
JOINT MOBILIZATION, SUPERVISION AN	D SUPPORT COST	s•
Prorated in accordance with t		••
mandays worked on each of sev		
groups in the Telegraph Creek		326.49
g. aupo c., a . a . a . a . a . a . a . a . a . a		
CHEMICAL ANALYSES:		
Silt Samples		
7 @ \$15.05	\$ 105.35	
Rock Geochemical Samples		
14 @ \$16.45	230.30	
		335.65
EXPENSES:		
Camp Rental	\$ 140.00	
Radio Rental	20.00	
Truck Rental	30.00	
Materials and Supplies	47.51	
Printing and Reproductions	58.38	
Meals & Accommodation	299.83	
Travel	47.69	
Automotive	15.11	
Aircraft Charters	51.58 1,375.50	
Helicopter Charters	31.29	
Telephone & Telefax	21.98	
Freight	11.19	
Expediting		2,150.06
		2,100100
REPORT PREPARATION:		
(Estimated)		1,500.00
(L30 (ma 00 d)		.,
MANAGEMENT FEE:		
15% on expenses only		369.63
1077 Gil Gripationa Gilly		\$ 6,456.83
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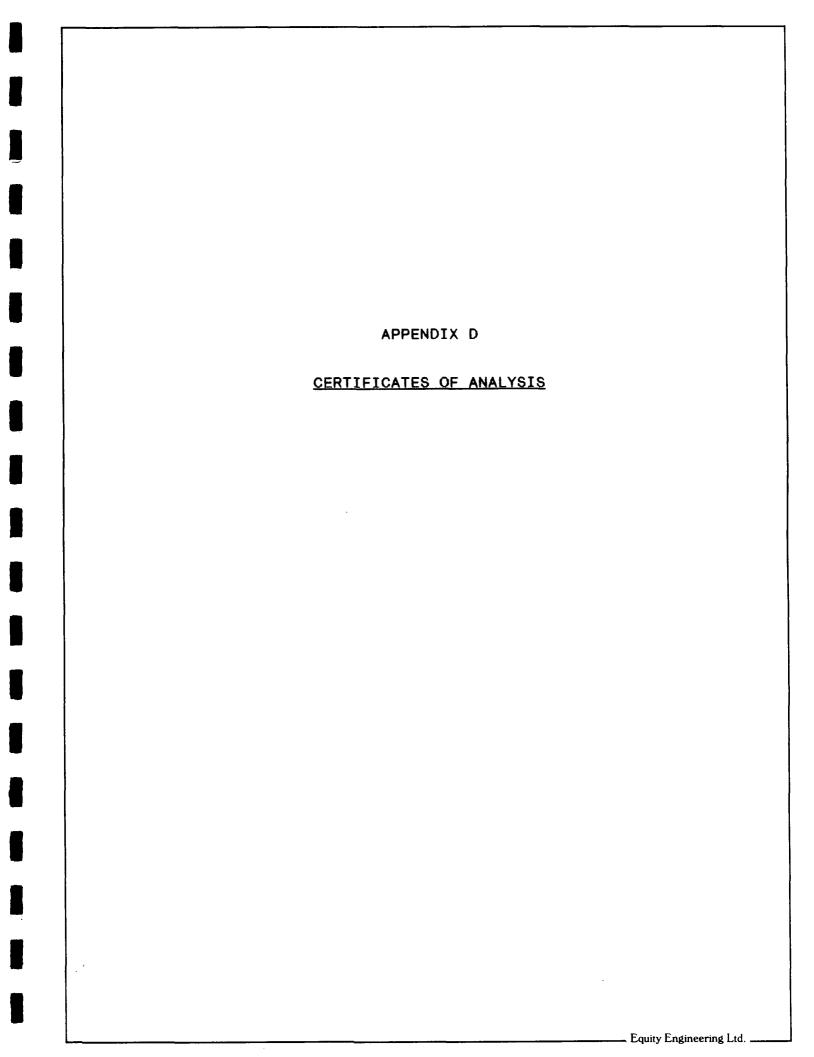


EQUITY ENGINEERING LTD.

Geochemical Data Sheet - ROCK SAMPLING

ENGINEERING LTD.		NTS 104 G/13E
Sampler	Project	Location Ref
Date <u>August 22/89</u>	Property KINK	Air Photo No

		044015	Sample	$\overline{}$		DESCRIPTION	1				ASS	AYS		
SAMPLE NO.	LOCATION	SAMPLE TYPE	Width	True Width	Rock Type	Alteration	Mineralization	ADDITIONAL OBSERVATIONS	Au	Ag ppm	Cı,	Pb	Zn	Hs ppm
D	- Ethier													
149301	N 6,409,290 E 349,755				felsic dyke		Py	- Minor Calcite / Otz stringers	4 5	7.4	9	246	24	35
149 303	N 6,409,890 € 350,060	//			Qte Stringers		Magnetite		4 5	1.4	142	40	18	5
149 305	N 6,410,610 E 349,530	"			cale/silicate		PY	elev 670m	10	1.8	135	20	1870	25
B	· Kaspe	-				Siliea	au.	Carbonate altered elev						
446793	N. 6,413,060 E 349,180	Float		<u> </u>	Volcanie	Chlorite	PY, CP	Breccia Zone 1615m	5	20.2	253	6	16	45
7.	Bell					Clal		elev BISm						
	N 6,41,490 E 351,540		10 m	c m	Volcanie	Chlorite Servicite Carbonate Chlorite	PY	elev & 70m	45	L0.Z	36	16	86	5_
446825	N 6,411,810 E 351,050	Float			Argill, le	Silica	PY		5	0.2	28	L 2	20	15
J.	Lehtinen N6,409,450				syemite/		PY	- Confact mineralization						
	E 348,060	Chip	/	Com	sediments		СР	thenfelsed sediments elev. 1303 m 1	40	20.2	219	<u> </u>	46	10
446896	E 348,080 N 6,410,130	Grab %			syenite /	hornfels		e/ev. 1285 m	55	40.2	749	42	60	30
446891	£ 348,050	Grab Khip	2	2.00	Syenite		5% PY	elev 980m	45	Z0.Z	33	~ Z	46	10
R.	Courney N6,411,620	er						elev. 920m						
446901	E 347,995 N6,411,530	Grab %		_	sittstone		PY	Nerrow calcide stringers with PY eler 915 m	< 5	20.2	77	<u></u>	76	45
446902	E 348,070 NG,411,190	"			siltstone		100	Carbonate Alteration =	25	40.2	86	22	86	< 5
446903	E 348,390 NG,411,120	"			sillstone		<u>-</u>	Quarte Veinlet in sillstone	2 5	K0.Z	74	42	80	25
446904	E 348,460 N6,411,100	//			silfstone	}	PY	elev 820m		0.4				45
446905	E 348,510				Siltstone	Carbonafe	PY	Corbonate altered sitt stone	<u> 4.5</u>	20.2	80	2	74	<i>-5</i>
					L	L	<u> </u>		<u></u>	1	l		RINTED IN	CANADA





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

A8925241

Comments: ATTN: DAVID A. CAULFIELD

CERTIFICATE

A8925241

EQUITY ENGINEERING LTD.

Project: PLJ89-05 P.O. #: NONE

Samples submitted to our lab in Vancouver, BC. This report was printed on 14-SEP-89.

	SAMPLE PREPARATION						
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION					
202 203 217 238	2 3 3 8	Dry, sieve -80 mesh, save reject Dry, sieve -35 mesh and ring Geochem:Ring only,no crush/split ICP: 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.

ANALYI	ICAL	PROCED	URES

		· · · · · · · · · · · · · · · · · · ·			
CHEMEX CODE	NUMBER SAMPLES		METHOD	DETECTION LIMIT	UPPER Limit
100 9212 9223 9224 9225 9229 9312 9331 9331 9335 9340 9412 9443 9445 9445 9449	***************************************	Au ppb: Fuse 10 g sample Al %: 32 element, soil & rock Ag ppm: 32 element, soil & rock As ppm: 32 element, soil & rock Ba ppm: 32 element, soil & rock Ba ppm: 32 element, soil & rock Bi ppm: 32 element, soil & rock Ca %: 32 element, soil & rock Cd ppm: 32 element, soil & rock Cd ppm: 32 element, soil & rock Cc ppm: 32 element, soil & rock Cc ppm: 32 element, soil & rock Cu ppm: 32 element, soil & rock Ga ppm: 32 element, soil & rock Ga ppm: 32 element, soil & rock Ga ppm: 32 element, soil & rock Mg ppm: 32 element, soil & rock Mg ppm: 32 element, soil & rock Mn ppm: 32 element, soil & rock Mn ppm: 32 element, soil & rock Mn ppm: 32 element, soil & rock Nn ppm: 32 element, soil & rock Nn ppm: 32 element, soil & rock Pp ppm: 32 element, soil & rock Pp ppm: 32 element, soil & rock Sc ppm: 32 element, soil & rock Sc ppm: 32 element, soil & rock Ti %: 32 element, soil & rock Ti ppm: 32 element, soil & rock Ti %: 32 element, soil & rock Ti ppm: 32 element, soil & rock	FA-AAS ICP-AES	5 0.01 0.2 5 10 0.5 2 0.01 0.05 1 1 0.01 10 0.01 5 1 0.01 10 2 5 1	10000 15.00 2000 10000 10000 100.0 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000
950	8	Zn ppm: 32 element, soil & rock	ICP-AES	SFP 18 1	10000



PREP

CODE

205 238

205 238

205 238

SAMPLE

149301

149303

149305

DESCRIPTION

Analytical Chemists • Geochemists • Registered Assayers

.\g

ppm

7.4

1 4

1.8

Λs

ppm

35

5

25

A1

0.57

0.26

3.80

Au ppb

FAHAA

< 5

< 5

10

212 BROOKSBANK AVE., NORTH VANCOUVER. BRITISH COLUMBIA, CANADA V7.J-2C1 PHONE (604) 984-0221

Ba

ppm

20

20

60

Вe

ppm

0.5

1.0

< 0.5

Вi

ppm

< 2

< 2

< 2

To : EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST. VANCOUVER. BC

V6B 1N2 Project : PLJ89-05

Ca

2.89

%

5.34 < 0.5

3.67 < 0.5

Cd

ppm

7.5

Comments: ATTN: DAVID A. CAULFIELD

Co

ppm

11

8

10

Cr

ppn

81

32

53

Cu

ppm

9

142

135

Page No : I-A

Tot. Pages: 1

La

ppm

< 10

< 10

K

c'n

0.06

0.01

10 < 1 0.13 < 10

:18-SEP-89 Date Invoice #:1-8925242 P.O. # NONE

Mg

0.24

0.28

Mn

ppn

625

225

240

CERTIFICATE OF ANALYSIS A8925242

Fe

3.48

3.80

3.02

%

Ga

ppm

< 10

10

Hg

ppm

< 1

< 1

			-									-								
1446793	205 238	, 5	2.36	< 0.2	< 5	. 30	0.5	< 2	1.80	0.5	21	2.5	253	4 . 51	10	< 1	0.05	< 10	0.71	240
								· .												
Liizi	المداءما		- ::					_ ;						4.79	10	· ··· · · · · · · · · · · · · · · · ·	0.20	< 10	1.69	9 50
446824	205 238 205 238	< 5 5	2.84 4.45	< 0.2 0.2	5 15	50 10	1.0 1.0	< 2 < 2	4.34 7.73	< 0.5 < 0.5	18 16	44 52	36 28	3.68	10	<u> </u>	0.20	< 10	0.17	200
1	1;1			÷				•	•											,
446889	205 238	40	2.79	< 0.2	10	10	1.5	< 2	7.07	< 0.5	16	49	219	4.37	10	< 1	0.04	< 10	1.02	1095
													749	10.06	20	< 1	0.01	< 10	 1.17	1320
446890 446891	205 238 205 238	5 5 < 5	5. 0 7 1.61	< 0.2 < 0.2	30 10	< 10 30	0.5 2.0	< 2 < 2	9.79 3.84	< 0.5 < 0.5	21 13	33 12	33	10.95 4.14	10	< 1	0.42	< 10	0.83	835
446901	205 238	< 5	3.34		< 5	10	0.5	< 2	7.60		17	69	77	4.44	10	< i	0.03	< 10	2.06	
446902	205 238	< 5	3.50		< 5	30	0.5	< 2	3.83	< 0.5	19	5.5	86	5.18	10	< 1	0.07	< 10	1.92	630 715
446903	205 238	< 5	3.53		25	30	0.5	< 2	3.77		19	74	74	4.88	10	< 1	0.06	< 10	1.86	610
446904	205 238	< 5	2.24	0.4	< 5	30	2.5	< 2	2.69	< 0.5	6	27	36	2.79	10	< i	0.08	10	0.53	790
446905	205 238	< 5	3.21		< 5	10	0.5	< 2	5.08	< 0.5	18	7.3	80	4.84	10	< 1	0.03	< 10	1.61	1185

CERTIFICATION : _



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 : PLJ89-05

Comments: ATTN: DAVID A. CAULFIELD

Page No. :1-B Tot. Pages: 1

:18-SEP-89 Date Invoice #: I-8925242

P.O. # : NONE

CERTIFICATE OF ANALYSIS A8925242

SAMPLE	PREP	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Tri	T1	U	V	W	Zn
DESCRIPTION	CODE	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
149301	205 238	< 1	0.01	12	120	246	5	7	102 <	0.01	< 10	< 10	95	< 10	24
149303	205 238	< 1	0.05	3	4150	40	< 5	4	74	0.14	< 10	< 10	108	< 10	18
149305	205 238	< 1	0.22	6_	620	20	< 5	5	71	0.11	< 10	< 10	33	< 10	1870

446890	446824 205 238	446793	205 238	1	0.19	24	1090	6.	_ < 5_	5	. 31	0.22	_< 10	< 10	94	< 10	16
446889	446889	446824	205 238	< 1	0.05				< 5	11					120	10	86
446890	446890	446889				-		_	< 5								
446902 205 238 < 1 0.22 19 1000 < 2 < 5 12 138 0.36 < 10 < 10 183 < 10 86	446902 205 238 < 1	446890 446891	205 238 205 238	< 1	0.03	3	1140	< 2	< 5	7	109	0.25	< 10	< 10	185	20 < 10	60 46
		446902 446903	205 238 205 238	< 1 < 1	0.22	19	960	< 2 42	< 5 5	8	138 159	0.36 0.36	< 10 < 10	< 10 < 10	183 184	< 10 < 10	86 80
						•											

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: PLJ89-05 Comments: ATTN: DAVID A. CAULFIELD

Page Number : 1-A Total Pages : 1 Invoice Date: 14-SEP-89 Invoice No. : I-8925241 P.O. Number : NONE

CERTIFICATE OF ANALYSIS	A8925241
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SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
IA#1 BKS29 TB#10 149302 149304	217 238 202 238 202 238 203 238 217 238	< 5 < 5 < 5	3.54 3.04 2.71	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2	< 5 < 5 < 5 < 5 < 5		< 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2	2.01 1.58 1.74 2.00 1.71	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5	19 23 18 15 14	64 98 55 69 61	79 96 69 67 76	5.16 5.44 5.09 4.76 4.41	< 10 < 10 < 10 < 10 < 10	< 1 < 1 < 1 < 1 < 1	0.09 0.08 0.05 0.09 0.14	< 10 < 10 < 10 < 10 < 10	1.78 2.14 1.66 1.62 1.46	1010 895 850 720 670
446739 446740	203 238 203 238			< 0.2 < 0.2	< 5 < 5		< 0.5 < 0.5	< 2 < 2	2.02 2.24	< 0.5 < 0.5	19 17	51 57	68 64	5.23 5.13	< 10 < 10	< 1 < 1	0.10 0.09	< 10 < 10	1.82 1.72	890 840



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.

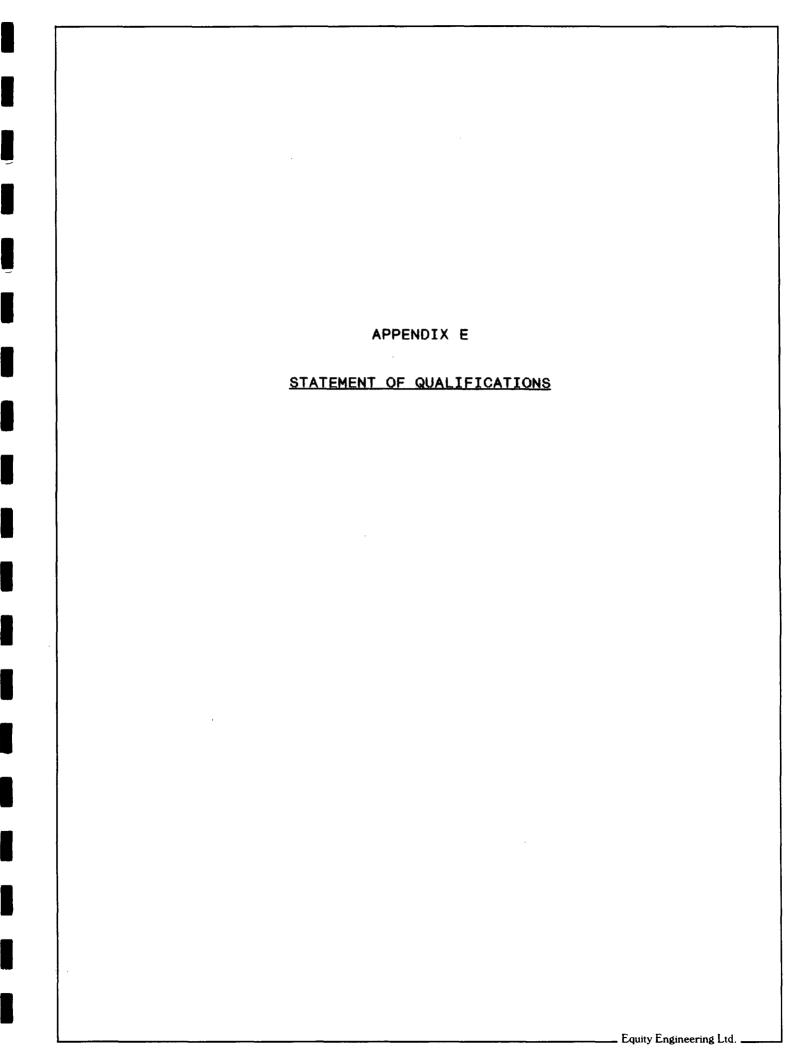
207 - 675 W. HASTINGS ST. VANCOUVER, BC V6B 1N2

Project: PLJ89-05 Comments: ATTN: DAVID A. CAULFIELD

Page Number : 1-B Total Pages : 1 Invoice Date: 14-SEP-89 Invoice No. : I-8925241 P.O. Number : NONE

									<u> </u>	CE	RTIF	CATE	OF A	MAL	'SIS	A8925241
SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	PPm P	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	T1 ppm	ppm U	ppm v	PPm W	Zn PPM	
IA#1 BKS29 TB#10 149302 149304	217 238 202 238 202 238 203 238 217 238	<1 <1 <1 <1 <1	0.04 0.04 0.05 0.05 0.08	25 55 24 27 20	1010 1010 1130 1150 960	10 < 2 4 8 < 2	< 5 < 5 < 5 < 5	11 15 11 11 8	87 306 132 110 76	0.36 0.34 0.32 0.28 0.34	< 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10	169 176 172 160 145	< 10 < 10 < 10 < 10 < 10	112 120 94 90 80	
446739 446740	203 238 203 238	< 1	0.08 0.07	23 20	1210 1110	8 4	5 < 5	11 12	115 132	0.36 0.35	< 10 < 10	< 10 < 10	174 174	< 10 < 10	100 94	





STATEMENT OF QUALIFICATIONS

I, JIM LEHTINEN, of 302-880 West 71st Avenue, Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

- 1. THAT I am a Contract Geologist, with offices at Suite 207, 675 West Hastings Street, Vancouver, British Columbia.
- 2. THAT I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology, 1984.
- 3. My primary employment since 1978 has been in the field of mineral exploration.
- 4. My experience has encompassed a wide range of geological environments and has allowed considerable familiarization with geophysical, geochemical, and diamond drilling techniques.
- 5. This report is based on data generated from work supervised by myself on August 22, 1989.
- 6. I have no interest in the property described herein, nor in securities of any company associated with the property, nor do I expect to acquire any such interest.

DATED at Vancouver, British Columbia, this 23 day of March, 1990.

Jim Lehtinen, B.Sc. Geology

