

LOG NO: 0119

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DATE:

FILE NO:

1988 SUMMARY REPORT
ON THE
JACK CLAIM

FILE NO.

Located in the Galore Creek area
Liard Mining Division
NTS 104G/4E
57° 09' North Latitude
131° 34' West Longitude

-prepared for-
CONSOLIDATED SILVER STANDARD MINES LIMITED

-prepared by-
Henry J. Awmack, P.Eng.
October, 1988

18,279

GEOLOGICAL BRANCH
ASSESSMENT REPORT

1988 SUMMARY REPORT ON THE JACK CLAIM

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1.0 INTRODUCTION

The Jack claim was staked in August 1986 on the north slope of Saddlehorn Mountain in the Liard Mining Division, approximately 180 kilometers northwest of Stewart in northwestern British Columbia (Figure 1). Four man-days of prospecting and geochemical sampling were spent on the property during August 1988. The numerous precious metals occurrences discovered throughout the Galore Creek district during 1987 and 1988 have sparked renewed exploration interest in the area.

2.0 LIST OF CLAIMS

Records of the British Columbia Ministry of Energy, Mines and Petroleum Resources indicate that the following claim is owned by Consolidated Silver Standard Mines Limited (Figure 2).

Claim Name	Record Number	No. of Units	Record Date	Expiry Year
Jack	3643	20	Sept. 19, 1986	1988

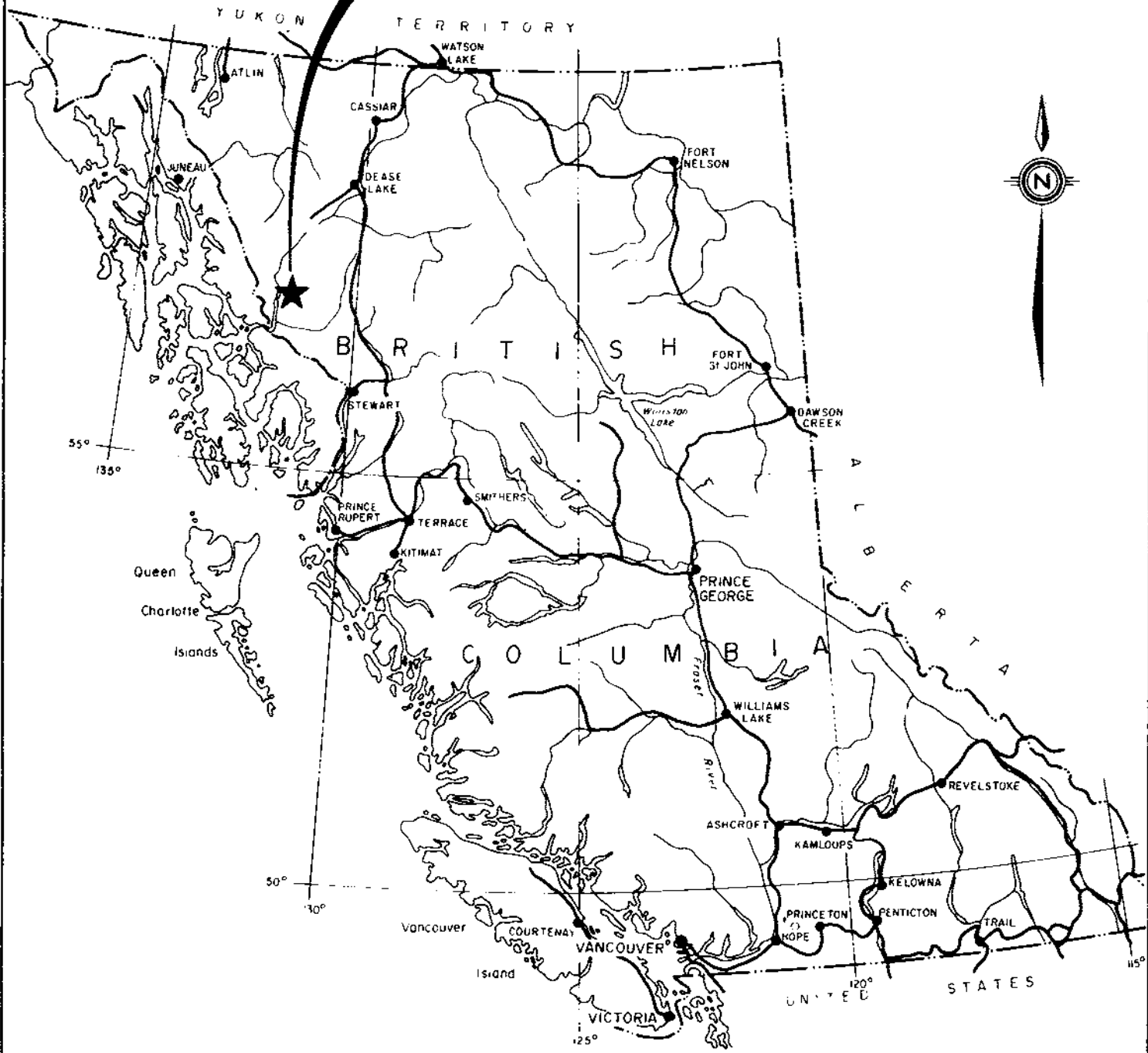
The location of the legal corner post has not been verified by the author.

3.0 LOCATION, ACCESS AND GEOGRAPHY

The Jack claim is located within the Coast Range Mountains approximately 180 kilometers northwest of Stewart and 80 kilometers south of Telegraph Creek in northwestern British Columbia (Figure 1). It lies within the Liard Mining Division, centered at 57° 09' north latitude and 131° 34' west longitude.

Access to the Jack property is provided by helicopter from

PROPERTY LOCATION



**CONSOLIDATED SILVER STANDARD
MINES LIMITED**

JACK CLAIM

PROPERTY LOCATION MAP

0 100 200 MILES
0 100 200 300 KILOMETRES

EQUITY ENGINEERING LTD.

Drawn.	J.W.	N.T.S.	1046/4E	Date	Oct. 1988	FIG. No.	1.
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the Scud River airstrip which is located approximately twenty kilometers to the northwest, or from the Bronson Creek airstrip which is located approximately 65 kilometers to the southeast. Fixed-wing aircraft fly charters from Smithers, Dease Lake and Telegraph Creek to the Scud River airstrip and scheduled flights from Smithers and Terrace to the Bronson Creek airstrip during the field season. Throughout the 1988 field season, a helicopter was stationed in Continental Gold Corp.'s camp approximately fifteen kilometers northwest of the Jack claim.

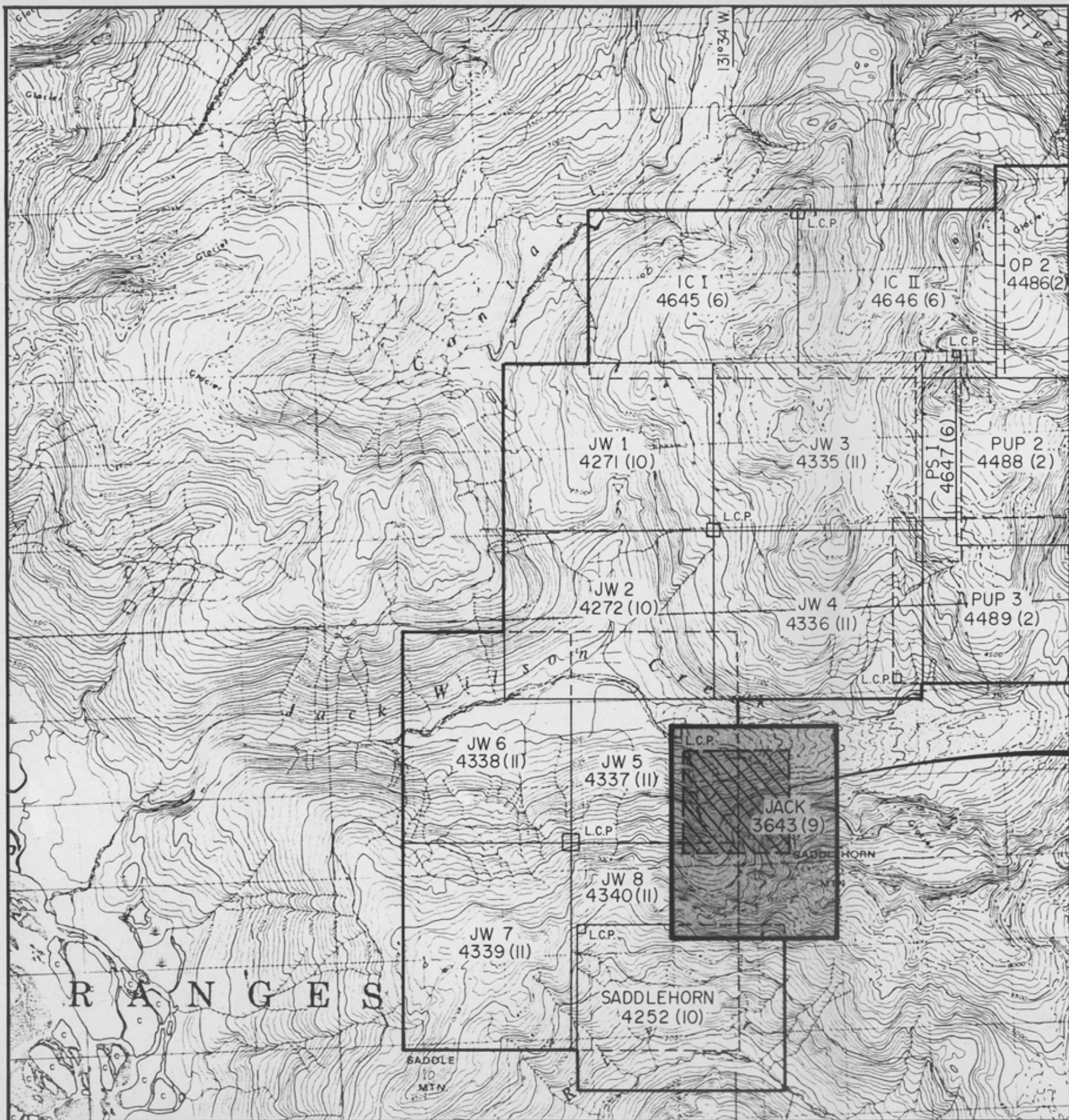
The Jack claim covers the northwest face of Saddlehorn Mountain and part of the Jack Wilson Glacier. Topography is rugged, typical of mountainous and glaciated terrain, with elevations ranging from 365 meters in the Jack Wilson Creek valley to over 2100 meters on the peak of Saddlehorn Mountain.

Lower slopes are covered by a dense growth of hemlock and spruce with an undergrowth of devil's club and huckleberry. Steeper open slopes are covered by dense slide alder growth. Above treeline, which occurs at approximately 750 meters, more open alpine vegetation occurs. Both summer and winter temperatures are moderate although annual rainfall may exceed 200 centimeters and several meters of snow commonly fall at higher elevations.

4.0 PROPERTY MINING HISTORY

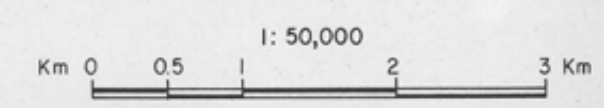
4.1 Previous Work

Keneco Explorations Limited explored the Jack Wilson Creek area immediately northwest of the Jack claim for its copper potential following the discovery of the Galore Creek copper-gold porphyry deposit in 1955 (Rayner, 1963). Conwest Explorations conducted regional mapping and sampling over the area, taking one



(6349000m N)
 46
 45
 44
 43
 42
 41
 40
 39
 38
 (40)
 37
 36
 35
 34

Area covered by Figure 4



CONSOLIDATED SILVER STANDARD MINES LIMITED			
JACK CLAIM CLAIM MAP			
LIARD MINING DIVISION, B.C.			
EQUITY ENGINEERING LTD.			
DRAWN. J.W.	N.T.S. 104 G/4E	DATE Oct. 1988	FIGURE 2

R A N G E S

SADDLE
TO
MTN

SADDLEHORN
4252 (10)

JACK
3643 (9)

JW 8
4340 (II)

JW 7
4339 (II)

JW 5
4337 (II)

JW 6
4338 (II)

JW 2
4272 (10)

JW 4
4336 (II)

PUP 3
4489 (2)

JW 1
4271 (10)

JW 3
4335 (II)

PUP 2
4488 (2)

IC I
4645 (6)

IC II
4646 (6)

OP 2
4486 (2)

PSI
4647 (6)

L.C.P.

L.C.P.

L.C.P.

L.C.P.

L.C.P.

L.C.P.

L.C.P.

L.C.P.

silt sample and one rock sample from the area presently covered by the Jack claim (Grant, 1964).

No work is recorded on the Jack claim until 1987, when limited geological mapping, prospecting and geochemical sampling were done (Folk, 1987).

4.2 1988 Work Program

During August 1988, a four man crew spent one day prospecting and sampling the Jack claim. A total of ten soil samples and twenty-seven rock samples were taken. Soil samples were taken at 25 meters intervals along the 650 meter contour lines, near the base of Saddlehorn Mountain on the northwestern corner of the Jack claim. Wherever possible, soil samples were taken from the red-brown B horizon. Samples were sieved to minus 80 mesh in the laboratory and analysed geochemically for gold, silver, copper, molybdenum, lead, zinc, arsenic and antimony (Figure 4).

Rock samples were taken from zones of alteration and mineralization and analysed geochemically for gold and 32-element ICP (Figure 4). Two rock samples returning geochemical values in excess of 2000 parts per billion gold were fire assayed for gold, silver and any significant base metals. Rock descriptions are attached in Appendix C, and analytical certificates form Appendix D.

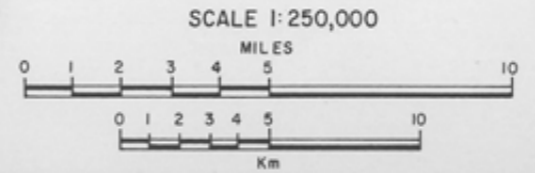
5.0 REGIONAL GEOLOGY

The Galore 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



LEGEND

- QUATERNARY**
PLEISTOCENE AND RECENT
 29 Fluvialite gravel; sand, silt; glacial outwash, till, alpine moraine and colluvium
- CENOZOIC**
CRETACEOUS AND TERTIARY
UPPER CRETACEOUS AND LOWER TERTIARY
SUSTUT GROUP
 19 Medium-to coarse-grained, pink biotite-hornblende quartz monzonite
- JURASSIC AND/OR CRETACEOUS**
POST-UPPER TRIASSIC PRE-TERTIARY
 17 Granodiorite, quartz diorite; minor diorite, leucogranite and migmatite
- JURASSIC**
LOWER JURASSIC
 13 Conglomerate, polymictic conglomerate; granite-boulder conglomerate, grit, greywacke, siltstone; basaltic and andesitic volcanic rocks, peperites, pillow-breccia and derived volcanoclastic rocks
- TRIASSIC AND JURASSIC**
POST-UPPER TRIASSIC PRE-LOWER JURASSIC
 12 Syenite, orthoclase porphyry, monzonite, pyroxenite
- MESOZOIC**
HICKMAN BATHOLITH
 10, 11. Hornblende granodiorite, minor hornblende-quartz diorite 11. Hornblende, quartz diorite, hornblende-pyroxene diorite, amphibolite and pyroxene-bearing amphibolite
- TRIASSIC**
UPPER TRIASSIC
 9 Undifferentiated volcanic and sedimentary rocks (units 5 to 8 inclusive)
 8 Augite-andesite flows, pyroclastic rocks, derived volcanoclastic rocks and related subvolcanic intrusions; minor greywacke, siltstone and polymictic conglomerate
- PERMIAN**
MIDDLE AND UPPER PERMIAN
 3 Limestone, thick-bedded mainly bioclastic limestone; minor siltstone, chert and tuff
- PALEOZOIC**
PERMIAN AND OLDER
 2 Phyllite, argillaceous quartzite, quartz-sericite schist, chlorite schist, greenstone, minor chert, schistose tuff and limestone
 8 Amphibolite, amphibolite gneiss; age unknown probably pre-Upper Jurassic
- 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 15 x
 Glacier



CONSOLIDATED SILVER STANDARD
 MINES LIMITED

JACK CLAIM
REGIONAL GEOLOGY

LIARD MINING DIVISION, B.C.
 N.T.S. 104 G/3W & 4E

EQUITY ENGINEERING LTD.

DRAWN. J. W.	PROJECT KEY 88-02	DATE October, 1988	FIGURE 3
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to middle Triassic oceanic sediments is unconformably overlain by Upper Triassic Hazelton 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 Galore 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 Hazelton Group island arc volcanics and sediments (Units 5 through 8). In the Galore 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. This volcanosedimentary package is correlative with that which hosts the SNIP and Stonehouse gold deposits of the Iskut River district approximately 65 kilometers to the south.

Subvolcanic syenite and orthoclase porphyry stocks (Unit 12), dated as Late Triassic to Early Jurassic by Souther (1971), intrude all older stratified rocks. The Galore Creek copper-gold porphyry deposit, whose Central Zone hosts reserves of 125 million tonnes grading 1.06% copper and 400 ppb gold (Allen et. al., 1976), is hosted by Upper Triassic volcanics intruded by syenitic stocks. 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.

Jurassic and Cretaceous granodiorite to quartz diorite batholiths (Unit 17) of the Coast Plutonic Complex intrude all older lithologies. Souther (1971) incorrectly shows almost the

entire Jack Wilson Creek drainage to be underlain by one of these batholiths (Figure 3).

6.0 PROPERTY GEOLOGY AND GEOCHEMISTRY

6.1 Geology

No geological mapping was conducted over the Jack claims during 1988. Souther (1971) shows the entire Jack claim to be underlain by undifferentiated Upper Triassic volcanics and sediments. Folk (1987) describes "complexly folded tuffaceous volcanic rocks in contact with black phyllites and ankeritic sediments" on the northwest corner of the Jack claim.

6.2 Geochemistry

Four of the ten soil samples taken from the northwestern corner of the Jack claim returned values greater than 30 parts per billion gold, which should be considered anomalous. High arsenic, antimony, copper and silver values up to 240 ppm As, 4.2 ppm Sb, 258 ppm Cu and 1.4 ppm Ag are also associated with the anomalous gold results (Figure 4).

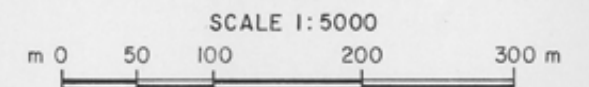
Several rock samples contained significant quantities of copper, arsenic, lead and gold (Figure 4). Sample 88DR-01, taken from float of a quartz-sulphide vein hosted by weakly chloritic andesite, assayed 1.509 ounces/ton (51.7 grams per tonne) gold, with 0.12% copper. Sample RM88-01, taken from quartz-pyrite-arsenopyrite float, assayed 0.058 ounce/ton (1.99 grams per tonne) gold. Three further samples from the Jack claim contained above 200 parts per billion gold and may be considered anomalous.



ROCK GEOCHEMICAL RESULTS

Sample	Au(ppb)	Ag(ppm)	Cu(ppm)
BY88-01	10	0.4	45
BY88-02	40	0.4	146
BY88-03	280	1.6	781
BY88-04	5	0.4	733
RM88-01	0.058opt	0.09opt	0.09%
88C-01	50	4.4	88
88C-02	80	1.8	465
88C-03	135	0.4	59
88C-04	90	1.0	1110
88C-05	<5	0.8	199
88C-06	<5	1.0	101
88C-07	180	0.8	331
88C-08	25	0.6	6860
88C-09	30	0.4	>10000
88C-10	450	1.2	1340
88C-11	20	0.6	75
88DR-01	1.509opt	0.12opt	0.12%
88DR-02	130	1.2	3520
88DR-03	90	2.0	747
88DR-03A	80	0.8	1190
88DR-04	550	6.2	2350
88DR-05	<5	2.6	2190
88DR-06	<5	0.6	41
88DR-07	40	2.0	1170
88DR-08	<5	0.4	184
88DR-09	<5	0.8	220
88DR-10	<5	6.6	2050

- ROCK SAMPLE
- ⊙ SOIL SAMPLE



CONSOLIDATED SILVER STANDARD
MINES LIMITED

**JACK CLAIM
GEOCHEMISTRY**
LIARD MINING DIVISION, B.C.

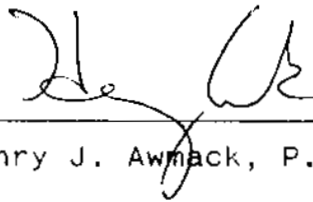
EQUITY ENGINEERING LTD.

Drawn. J.W.	N.T.S. 104 G/4E	Date. Oct. 1988	FIG. No. 4.
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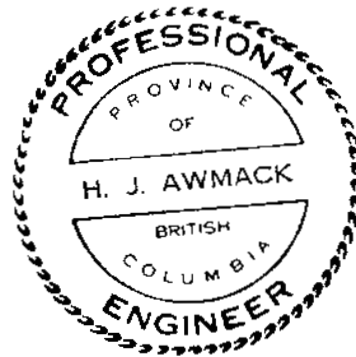
7.0 DISCUSSION

No significant gold-bearing mineralization has yet been found in place on the Jack claim. Gold-bearing float, anomalous soil geochemical results and several precious metal discoveries elsewhere in the Galore Creek district during the 1988 field season provide encouragement for further work on the Jack claim.

Respectfully submitted,
EQUITY ENGINEERING LTD.



Henry J. Awmack, P.Eng.



Vancouver, British Columbia
October, 1988

APPENDIX A

BIBLIOGRAPHY

BIBLIOGRAPHY

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- Grant, G.W. (1964): Final Geological Report - CW Group: British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report #621.
- Rayner, G.H. (1963): Geochemical and Geophysical Surveys on the J.W. 1-14 Claim Group: British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report #501.
- Souther, J.D. (1971): Telegraph Creek Map Area, British Columbia; Geological Survey of Canada Paper 71-44.

APPENDIX B

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES: JACK CLAIM
(August 29, 1988)

PROFESSIONAL FEES AND WAGES:

Brian Yamamura, Project Geologist		
1.0 day @ \$300/day	\$	300.00
David Ridley, Prospector		
1.0 day @ \$225/day		225.00
Catherine Ridley, Prospector		
1.0 day @ \$225/day		225.00
Rick Mayer, Sampler		
1.0 days @ \$175/day		<u>175.00</u>
	\$	925.00

EQUIPMENT RENTAL:

Camp Rental		
4 man-days @ \$25/manday		100.00

CHEMICAL ANALYSES:

10 soil samples @ \$19.75	\$	197.50	
27 rock samples @ \$19.25		519.75	
2 assays @ \$19		<u>38.00</u>	
			755.25

EXPENSES:

Helicopter Charters	\$	840.00	
Communications		32.00	
Report		<u>600.00</u>	
			1,472.00

MANAGEMENT FEES:

15% on expenses only			<u>334.00</u>
	\$	3,586.25	=====

APPENDIX C

ROCK DESCRIPTIONS

Sampler D. Ridley

Project _____

Location Ref _____

Date Aug. 29/88

Property Jack Claims

Air Photo No _____

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width		DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS					
			Width	True Width	Rock Type	Alteration	Mineralization							
88DR-1-J	E. side Saddlehorn Cr. 2900'	rock float	-	-	quartz vein in andesite	minor chlorite	pyrite chalcoppyrite pyrrhotite	2% sulphides						
88DR-2-J	as 1-J 20m West.	rock chip	3.0m	+3.0m	altered volcanics	chlorite silica minor epidote	chalcoppyrite >1%	malachite widespread; shear zone 150'/50NE(?)						
88DR-3-J	E. side Saddlehorn Cr. 320m N. of DR-2-J	rock chip 2700'	5m	10m	sheared volcanics(?)	carbonate silica chlorite/epidote	pyrite chalcoppyrite malachite/azurite	sulphides up to 50% in pockets mainly pyrite + fine chalcocite malachite-azurite snags,						
88DR-3a-J	continuation of DR-3-J	rock chip	5m	10m	"	"	"	minor carbonate veinlets; white in very broken & sheared can't tell original rock.						
88DR-4-J	E. side Saddlehorn Cr. 2350'	rock float	-	-	quartz vein in dk grey tuff	minor chlorite carbonate	pyrite chalcoppyrite galena	5-10% sulphides; minor disseminated sulphide in wall rock; cobble-size vein 2cm wide.						
88DR-5-J	as DR-4-J	rock float	-	-	quartz vein(?)	-	pyrite chalcoppyrite minor sphal(?)	50cm smaller dimension angular; local float						
88DR-6-J	E. fork Saddlehorn Cr 2900'	rock chip	3m	3m	dk grey tuff andesite(?)	carbonate silica chlorite	pyrite chalcoppyrite 3-5%	5-10cm carb lenses & veins (5-10cm wide) in structure 3m wide just above E fork 020°/80W						
88DR-7-J	base of talus w/ E fork 3240'	rock float	-	-	quartz	-	cupriferous pyrite up to 20%	first size chunk; sheared + limonite coated.						
88DR-8-J	W side Saddlehorn Cr. 3340' Cirque	rock chip	1.5m	1.5m	altered volcanic	chlorite silica	bornite? very minor	specks of possible bornite(?) 170°/65E						
88DR-9-J	100m N of DR-8-J, 3200'	rock float	1.5m	?	tuff?	chlorite	euhedral pyrite minor chalcocite	quartz stringers						
88DR-10-J	talus center of valley 3060'	talus float	-	-	black tuff	chlorite carbonate	chalcoppyrite galena	sulphides intergrown; quartz vein with carbonate mantling; minor mineral of wall rock; 30cm wide.						

Sampler C. J. Ridley
Date Aug 1988

Project _____
Property JACK CLAIMS

NTS _____
Location Ref _____
Air Photo No _____

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width	True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS					
					Rock Type	Alteration	Mineralization							
88-C-1	saddlehorn cr. 240m. N.W. of main waterway	rock float			slate	quartz	pyrite	elev: 2260' 10-15% in quartz wall rock						
88-C-2	W. side: 25' m. S of C-1	rock float			agglomerate	epidote	20-25% pyrite	elev. 2270' dissem. crystals pyrite. several large boulders						
11-3	5m. S of C-2 elev. 2270'	rock outcrop			fine-grained green-blue andesite	-	dissem. pyrite	W. side of gully.						
11-4	20m. S of C-3 W. side gully	rock outcrop		5m/10m.	andesite	epidote	malachite	shear zone: 10m. wide zone of min. extends for 5m.						
-5	15m. S of C-4	rock float			light grey fine-grained siliceous rock	quartz	pyrite							
-6	5m. S of C-5	rock float			green-black fine-grained siliceous rock	malachite	chalc min. pyrite	rock outcrops above sample 1/8" quartz vein/mineral quartz wall rock						
-7	20m. S of C-6	rock float			muoposite		min. dissem. pyrite	rock outcrops above sample location in W. fork of saddle horn cr.						
-8	15m. due E of C-3	rock outcrop			fine-grained highly siliceous andesite		dissem. pyrite	E. side of cr.						
-9	30m. N. of C-8 E. side	rock float			andesite veinlets	quartz - malachite	malachite azurite	minor dissem. pyrite thru wall rock						
-10	200m. N.P first cr. to E. of saddle horn	rock float			siliceous agglomerate	malachite	chalc pyrite azurite	rock outcrops by the creek several 100m. from sample						
-11	100m. S. of -10	rock float			shale	graphite	pyrite	rock outcrops upslope to the W. of sample						

Sampler B. Yamamura, R. Mayer

Project _____

Location Ref Jack Wilson Creek

Date August 29, 1988

Property Jack Claims

Air Photo No _____

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS						
				Rock Type	Alteration	Mineralization								
BY88-01	780m Elev	Grab	30cm 3-5cm	qtz veinlet, shale	qtz	Py	Most westerly fork of next gully to east of main one. small but qtz vein in shale which is altered and contains dissemin. py.							
BY88-02	800m Elev	Grab	1m	Volc. ?	Sericite / Kaolin	Py	Same area as previous sample. Extremely fractured and gasconduit volc. ? adjacent to shear zone.							
BY88-03	800m Elev	Grab	50cm	Volc. ?	Sericite / Kaolin	Py	~20-25m NW of previous sample. Extremely fractured and altered volc. adjacent to another major shear.							
BY88-04	800m Elev	Grab	30cm	Volc. ?	Chlorite	Malachite, Azurite, sp. py.	~20-25m NE of sample 88-02. Extremely chloritized volcanic ? with good copper string.							
RH88-01		Flood		qtz		Py, Hsp.								

APPENDIX D

CERTIFICATES OF ANALYSIS



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE. NORTH VANCOUVER
BRITISH COLUMBIA, CANADA V7L 1C1

PHONE (604) 984-8221

EQUITY ENGINEERING LTD.

406 - 675 W. HASTINGS ST.
VANCOUVER, BC
V6B 1N2

Project: KEY 8804

Comments: ATTN: HENRY AWACK

Page 1 of 1
Tot. Pages: 1
Date: 5-OCT-88
Invoice #: I-8824549
P.O. #: NONE

CERTIFICATE OF ANALYSIS A8824549

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	As ppm	Sb ppm	
000 660M	202 ---	40	175		8	43	155	0.3	140	1.2
025E 660M	202 ---	40	230		4	57	172	0.7	240	1.8
050E 655M	202 ---	15	193		4	23	120	0.4	50	0.8
075E 645M	202 ---	10	46		2	17	90	0.9	27	0.4
100E 650M	202 ---	35	105		3	16	112	0.7	9	0.2
150E 660M	202 ---	60	258		3	37	272	1.4	110	4.2
175E 660M	202 ---	10	136		2	10	105	0.3	20	0.4
200E 660M	202 ---	10	30		5	7	45	0.3	7	0.2
225E 665M	202 ---	15	33		5	7	46	0.4	15	0.1
250E 665M	202 ---	< 5	52		4	8	70	0.3	17	0.2

CERTIFICATION:

Stuart Buchler



Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 BROOKSBANK AVE. NORTH VANCOUVER
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PHONE (604) 984-0221

EQUITY ENGINEERING LTD.

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VANCOUVER, BC
V6B 1N2

Project: KEY 8804
Comments: ATTN: HENRY AWMAK

Page No. 1-A
Total Pages 1
Date 8-OCT-88
Invoice # 1-8824550
P.O. # NONE

CERTIFICATE OF ANALYSIS A8824550

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Al %	Ag ppm	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
BY 8801	212 238	10	1.09	0.4	< 5	190	< 0.5	4	7.69	< 0.5	12	24	45	2.56	20	< 1	0.24	< 10	1.18	711
BY 8802	212 238	40	2.15	0.4	< 5	110	< 0.5	< 2	1.65	< 0.5	31	14	146	5.06	< 10	< 1	0.35	10	2.16	1495
BY 8803	212 238	280	1.91	1.6	< 5	100	< 0.5	< 2	1.16	< 0.5	20	11	781	4.75	< 10	1	0.68	10	1.66	1390
BY 8804	212 238	5	2.53	0.4	< 5	170	< 0.5	< 2	2.81	< 0.5	24	5	733	4.89	< 10	< 1	0.34	< 10	1.96	1945
RM 8801	212 238	2180	0.26	1.8	>10000	50	< 0.5	< 2	0.83	2.5	131	14	1125	10.40	< 10	< 1	0.08	10	0.19	457
88C-01	212 238	50	0.37	4.4	515	50	< 0.5	< 2	3.54	7.0	9	21	88	3.29	10	1	0.20	< 10	0.48	530
88C-02	212 238	80	2.37	1.8	25	30	< 0.5	< 2	1.55	< 0.5	31	14	465	9.45	< 10	2	0.17	20	2.56	1350
88C-03	212 238	135	3.15	0.4	40	30	< 0.5	< 2	2.50	< 0.5	35	11	59	4.89	< 10	< 1	0.05	10	2.85	1075
88C-04	212 238	80	2.53	1.0	< 5	190	0.5	< 2	1.60	< 0.5	22	13	1110	3.67	< 10	< 1	1.32	10	2.02	1250
88C-05	212 238	< 5	1.72	0.8	< 5	150	1.0	< 2	3.47	< 0.5	35	47	199	7.64	10	1	0.17	< 10	1.23	951
88C-06	212 238	< 5	0.64	1.0	190	70	0.5	< 2	0.03	< 0.5	33	153	101	3.68	20	< 1	0.36	< 10	4.40	863
88C-07	212 238	180	1.49	0.8	10	20	0.5	6	6.75	< 0.5	26	90	331	3.61	10	< 1	0.14	< 10	1.78	737
88C-08	212 238	25	3.34	0.6	5	210	0.5	< 2	2.66	< 0.5	35	4	6860	5.41	< 10	1	0.21	10	2.89	2600
88C-09	212 238	30	1.19	0.4	< 5	1010	1.0	< 2	2.86	2.0	51	41	>10000	3.97	< 10	< 1	0.59	10	1.36	687
88C-10	212 238	450	2.03	1.2	< 5	90	0.5	< 2	1.04	< 0.5	26	8	1340	5.73	< 10	< 1	0.30	10	1.66	1265
88C-11	212 238	20	0.60	0.6	110	130	< 0.5	< 2	5.07	< 0.5	8	19	75	2.79	10	< 1	0.31	< 10	1.00	606
88IR-01	212 238	>10000	2.25	3.8	< 5	120	< 0.5	2	1.32	< 0.5	31	19	1270	4.21	< 10	< 1	0.32	10	1.75	711
88IR-02	212 238	130	2.02	1.2	< 5	60	< 0.5	< 2	2.67	< 0.5	28	11	3520	3.90	< 10	< 1	0.12	< 10	1.53	895
88IR-03	212 238	90	1.84	2.0	< 5	290	< 0.5	6	2.79	0.5	31	19	747	5.00	< 10	< 1	0.49	10	1.50	790
88IR-03 A	212 238	80	2.22	0.8	< 5	250	< 0.5	2	1.77	0.5	23	15	1190	5.04	< 10	1	0.39	10	1.53	773
88IR-04	212 238	550	1.66			80	< 0.5	2	1.39	0.5	21	25	2150	4.94	< 10	1	1.24	10	1.66	706
88IR-05	212 238	< 5	0.15	2.6	< 5	30	< 0.5	< 2	0.81	1.0	9	20	2190	2.19	< 10	< 1	0.07	< 10	0.11	309
88IR-06	212 238	< 5	2.02	0.6	< 5	110	< 0.5	< 2	2.32	< 0.5	31	14	41	5.13	10	1	0.26	10	1.66	1005
88IR-07	212 238	40	0.42	2.0	< 5	40	< 0.5	2	0.39	< 0.5	19	22	1170	4.50	< 10	< 1	0.13	< 10	0.27	256
88IR-08	212 238	< 5	2.22	0.4	10	250	< 0.5	6	1.52	< 0.5	21	9	184	3.70	< 10	2	0.45	10	1.65	934
88IR-09	212 238	< 5	1.71	0.8	< 5	140	< 0.5	< 2	4.22	1.0	24	9	220	4.64	10	2	0.31	< 10	1.57	1595
88IR-10	212 238	< 5	0.84	6.6	< 5	30	< 0.5	20	9.21	1.0	10	12	2050	2.07	20	< 1	0.30	< 10	0.69	1195

CERTIFICATION :

B. Coughlin



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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VANCOUVER, BC
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Project: KEY 8804
Comments: ATTN: HENRY AWMAK

Page No. 1-B
Tot. Pgs. 51
Date 8-CCT-88
Invoice # I-8824550
P.O. # NONE

CERTIFICATE OF ANALYSIS A8824550

SAMPLE DESCRIPTION	PREP CODE	Mb ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
BY 8801	212 238	< 1	0.04	18	650	8	< 5	3	985	0.14	< 10	< 10	27	< 5	103
BY 8802	212 238	< 1	0.05	18	1560	8	< 5	4	77	0.24	< 10	< 10	104	< 5	196
BY 8803	212 238	3	0.02	5	2130	12	< 5	4	143	0.22	< 10	< 10	129	< 5	136
BY 8804	212 238	< 1	0.05	2	1470	6	< 5	6	137	0.27	< 10	< 10	103	< 5	173
RM 8801	212 238	< 1	0.03	9	210	70	15	1	36	< 0.01	< 10	< 10	4	< 5	851
88C-01	212 238	< 1	0.03	21	410	1680	< 5	1	328	< 0.01	< 10	< 10	7	< 5	600
88C-02	212 238	< 1	0.03	12	4750	4	< 5	4	166	0.19	< 10	< 10	209	< 5	153
88C-03	212 238	< 1	0.05	9	1390	6	< 5	6	175	0.25	< 10	< 10	120	< 5	110
88C-04	212 238	< 1	0.08	6	2030	2	< 5	4	292	0.24	< 10	< 10	117	< 5	166
88C-05	212 238	15	0.10	50	1430	32	< 5	8	280	0.04	< 10	< 10	181	< 5	70
88C-06	212 238	< 1	0.01	165	900	10	85	17	1195	< 0.01	< 10	< 10	24	< 5	36
88C-07	212 238	< 1	0.06	18	2280	2	< 5	7	377	0.21	< 10	< 10	123	10	42
88C-08	212 238	< 1	0.04	5	1500	6	< 5	5	208	0.24	< 10	< 10	97	< 5	207
88C-09	212 238	2	0.01	8	1390	2	< 5	11	135	0.01	< 10	< 10	25	< 5	178
88C-10	212 238	< 1	0.03	7	2270	< 2	5	8	90	0.24	< 10	< 10	159	< 5	147
88C-11	212 238	< 1	0.04	19	870	2	< 5	4	405	< 0.01	< 10	< 10	18	5	85
88DR-01	212 238	< 1	0.02	18	1070	8	< 5	6	53	0.12	< 10	< 10	62	< 5	63
88DR-02	212 238	2	0.04	11	1290	2	< 5	5	260	0.19	< 10	< 10	79	< 5	73
88DR-03	212 238	8	0.03	16	1900	38	< 5	5	112	0.07	< 10	< 10	55	< 5	132
88DR-03 A	212 238	5	0.03	11	1770	2	< 5	5	71	0.12	< 10	< 10	79	< 5	58
88DR-04	212 238	42	0.06	10	1660	1905	5	13	76	0.20	10	< 10	130	< 5	100
88DR-05	212 238	2	0.01	14	140	152	< 5	1	24	0.01	< 10	< 10	12	< 5	24
88DR-06	212 238	< 1	0.04	8	1300	< 2	< 5	6	129	0.24	< 10	< 10	89	< 5	77
88DR-07	212 238	< 1	0.01	25	500	6	< 5	1	20	0.06	10	< 10	17	< 5	26
88DR-08	212 238	< 1	0.07	6	1860	< 2	< 5	4	253	0.20	10	< 10	94	< 5	86
88DR-09	212 238	3	0.02	6	1470	18	< 5	4	401	< 0.01	10	< 10	39	< 5	87
88DR-10	212 238	2	0.02	8	950	1515	< 5	7	639	0.05	< 10	< 10	52	< 5	27

CERTIFICATION :

B. Coughlin



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Project: KEY 8804
Comments: ATTN: HENRY AWMAK

Page No. 1
Tot. Pages 1
Date 20-OCT-88
Invoice # I-8825448
P.O. # NONE

CERTIFICATE OF ANALYSIS A8825448

SAMPLE DESCRIPTION	PREP CODE	Au FA oz/T	Ag FA oz/T	Cu %
RM 88-01	214 --	0.058	0.04	0.09
88 DR-01	214 --	1.509	0.12	0.12

ALL ASSAY DETERMINATIONS ARE PERFORMED OR SUPERVISED BY BC CERTIFIED ASSAYERS

CERTIFICATION:

W. J. [Signature]

APPENDIX E

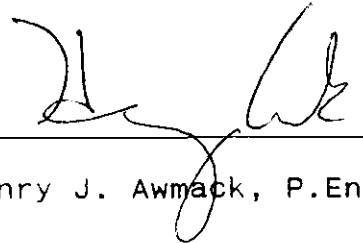
ENGINEER'S CERTIFICATE

ENGINEER'S CERTIFICATE

I, HENRY J. AWMACK, of 308-1510 Burnaby Street, Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Consulting Geological Engineer with offices at Suite 406, 675 West Hastings Street, Vancouver, British Columbia.
2. THAT I am a graduate of the University of British Columbia with an honors degree in Geological Engineering.
3. THAT I am a member in good standing of the Association of Professional Engineers of British Columbia.
4. THAT this report is based on fieldwork conducted by Equity Engineering Ltd. on the Jack claim during August 1988, government publications and reports filed with the Government of British Columbia.

DATED at Vancouver, British Columbia, this 27th day of October, 1988.


Henry J. Awmack, P.Eng.

