



GEOLOGICAL REPORT

on the

LEGATE CREEK PROPERTY

MAX, MAX1 CLAIMS

Omineca ~~Exploration~~ Mining Division - British Columbia

Lat. 54° ~~28'~~ N.
39.2'

Long. 128° ~~28'~~ W.
08.9'

N.T.S. 103 I/9E

FILMED

for

Owner/Operator: MICHAEL BOYLE

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

Rec'd

AUG 8 1986

SUBJECT _____

FILE _____

VANCOUVER, B.C.

15,006

by

D. G. Allen, P. Eng. (B.C.)

July 21, 1986

Vancouver, B.C.

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SUMMARY

Mike Boyle holds three claims, MAX, MAX 1 and LEG 1, comprising 23 units in the Skeena Mining Division of west central British Columbia. The claims are situated at the head of Legate Creek in rugged Coast Range Mountains 32 kilometres northeast of Terrace, B.C. Access at present is by helicopter but logging roads extend up Legate Creek to within four kilometres of the claim boundaries.

The area is underlain by Hazelton Group andesitic and rhyolitic volcanic rocks and diorite to quartz diorite of the Coast Plutonic Complex. These rocks are intruded by dikes and irregular bodies of quartz monzonite, felsite and quartz feldspar porphyry. A prominent quartz vein containing pyrite, galena, sphalerite, tetrahedrite and chalcopyrite with precious metals was discovered in the area prior to 1918 and was formerly known as the Zona May prospect. The main vein ranges in width from 0.2 to 3 metres and can be traced intermittently over a length of about 700 metres. Several smaller veins are present in the area but to date have not been fully explored. Two relatively high grade shoots occur in the east and central part of the vein system. The central zone contains silver values up to 116 oz/ton over a vein length of eight metres, and the east contains gold values of 0.1 to 0.7 oz/ton over a length of 50 metres.

The more accessible parts of the main vein system were mapped and sampled in October, 1981 by D. G. Allen and D. R. MacQuarrie for Carl Creek Resources Ltd. and Claude Resources Inc., and in 1986 reconnaissance mapping and sampling were carried out by D. G. Allen. An attempt was made to locate the Regina prospect which should occur on the LEG 1 claim. A follow-up exploration program comprising blasting and trenching, geological mapping and geochemical surveys is proposed.

CONCLUSION

Lode gold-silver mineralization on the southwest fork of Legate

Creek is that which is described in previous government reports on the Zona May prospect. The Regina prospect apparently occurs on the northern part of the claim group but has not yet been located.

The main quartz vein is exposed discontinuously over a length of 700 metres and a vertical range of 200 metres, and has a prominent alteration envelope. Both features indicate a strong structure.

Two zones or shoots within the vein system warrant further work:

- 1) The gold-rich portion appears to be at least 50 metres long and is covered by overburden on the west end;
- 2) A small sulphide-rich zone containing high silver values.

Topography in the area is difficult but road access to the lower part of the cirque would be relatively easy. Assuming slightly better metal prices and establishing one or two relatively high grade shoots, the prospect might be developed with a tramline and an adit from a shoulder at 1100 metres elevation.

RECOMMENDATION

Hand stripping of overburden and detailed sampling on the vein system is warranted to further define the extent of the gold-rich zone. Diamond drilling of this section would be worthwhile to establish depth continuity.

A two-phase exploration program is recommended to evaluate the Legate Creek property. Phase I will consist of surface blasting, sampling and drill site preparation: After surface sampling has defined the gold-rich portion along strike, follow-up diamond drilling should be carried out in Phase II.

Further geological mapping over the claim area should be carried out during Phase I. Special attention should be made to (1) prospecting along dike contacts for other vein systems, (2) follow-up geochemical anomalies and (3) to locate the Regina prospect. Examination of the ridge on the east side of the claims should be carried out to check the vein extension along strike.

Estimated costs of Phases I and II are \$36,000 and \$118,000, respectively, for a total of \$154,000.

Donald P. Allen

ESTIMATED COSTS OF RECOMMENDATIONPHASE I Blasting, sampling, drill site preparation, geological mapping.

Salaries		
Geologist	15 days @ \$400/day	\$ 6,000
Assistant	15 days @ \$150/day	2,250
Blasting crew	15 days @ \$500/day	7,500
Telephone and radio rental		500
Topographic base and orthophoto maps		3,000
Helicopter access	10 hrs. @ \$500/hr.	5,000
Camp supplies, equipment, powder		1,500
Shipping expense		500
Project travel		1,000
Room and board	60 man-days @ \$35/day	2,100
Assay	30 samples @ \$12/sample	360
Supervision, consulting, report		<u>3,000</u>
	Subtotal	32,710
	Contingencies	<u>3,290</u>
	Total Phase I	\$36,000

PHASE II Diamond drilling.

Salaries		
Supervisor	1 mo. @ \$5,000/mo.	5,000
Assistant	1 mo. @ \$2,000/mo.	2,000
Consulting geologist	10 days @ \$400/day	4,000
Telephone and radio rental		500
Helicopter support	40 hrs. @ \$500/hr.	2,000
Drilling expense	2,000 ft. @ \$40/ft.	80,000
Camp supplies, equipment		5,000
Expediting services		500
Shipping expense		1,000
Project travel		1,500
Room and board	70 man-days @ \$35/day	2,450
Assay	50 samples @ \$12/sample	600
Vehicle rental		1,000
Report preparation and drafting		<u>2,000</u>
	Subtotal	<u>107,550</u>
	Contingencies	<u>10,450</u>
	Total Phase II	118,000
	GRAND TOTAL	\$154,000

INTRODUCTION

M. Boyle holds three claims, MAX, MAX 1, and LEG 1 in the Legate Creek area. The claims cover lode gold-silver mineralization described in previous government reports as the Zona May showings.

This report summarizes results of work carried out by D. G. Allen and D. R. MacQuarrie of A & M Exploration Ltd. for Carl Creek Resources Ltd. and Claude Resources Inc. during the period October 17-20, 1981. Purpose of this work was to initiate geological mapping and carry out sampling of all accessible parts of the vein system.

On June 18, 1986 an attempt was made by the writer to locate the Regina prospect which was described in the 1918 Minister of Mines report as being situated just above the forks of Legate Creek at an elevation of 4,200 feet. The vein which is described as being 2 to 8 feet wide was not located but some soil and rock chip sampling were undertaken. Results of this and work undertaken in 1981 are summarized in this report.

CLAIM DATA

<u>Claim Name</u>	<u>No. of units</u>	<u>Record No.</u>	<u>Expiry Date</u>
MAX	12	7103 (6)	June 21, 1987
MAX 1	8	7104 (6)	June 21, 1987
LEG 1	3	not yet received	July 21, 1987

LOCATION, ACCESS, PHYSIOGRAPHY

The property is situated 32 kilometres northeast of Terrace (Figure 1). It lies at the head of the southwest branch of Legate Creek. Access at present is by helicopter, based in Terrace, but logging roads up Legate Creek are less than four kilometres from the northern boundary of the claim group (Figure 2.)

The claims lie within the Hazelton Mountains of the eastern side of

LEGATE CREEK PROPERTY LOCATION MAP

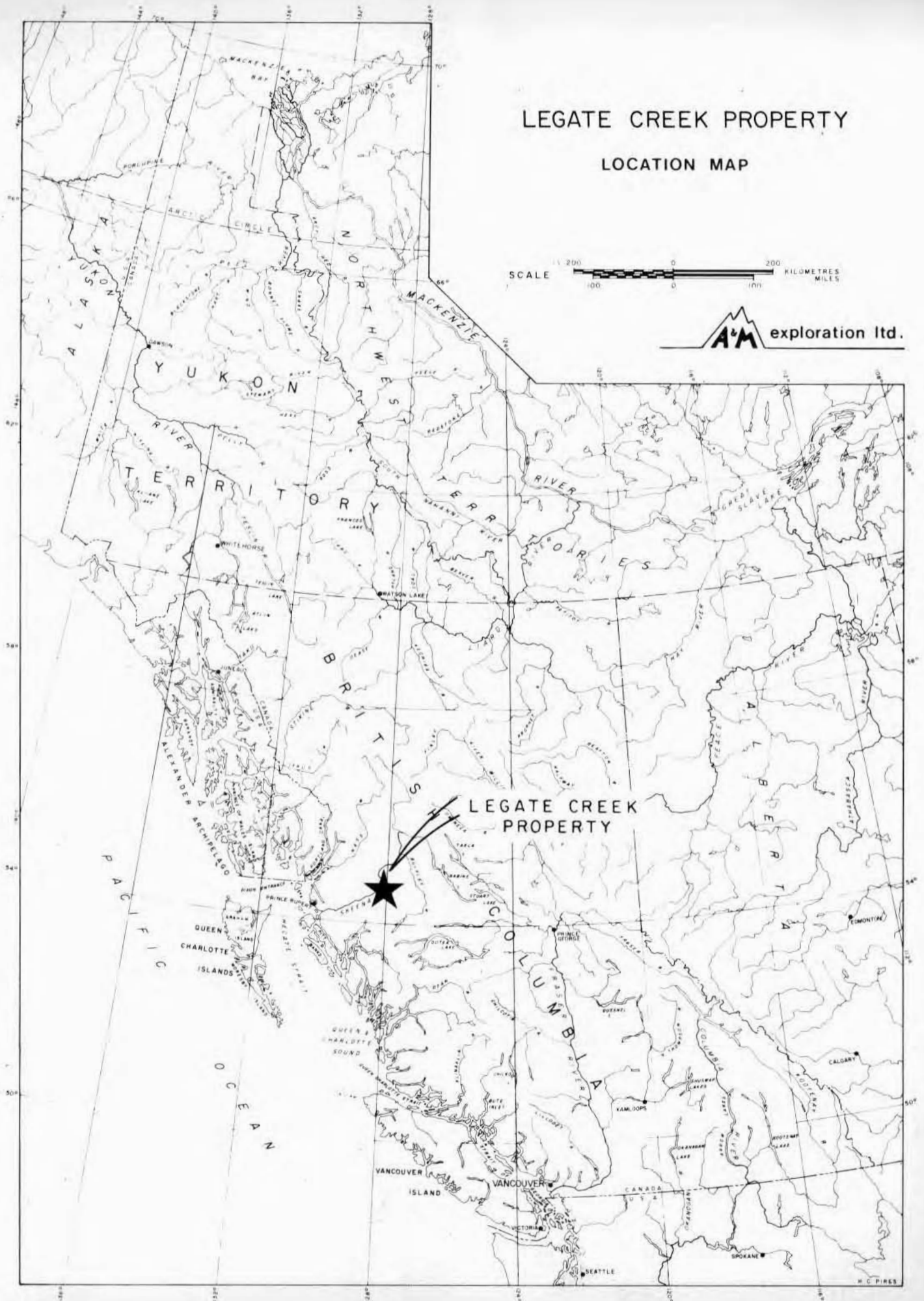
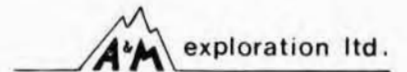
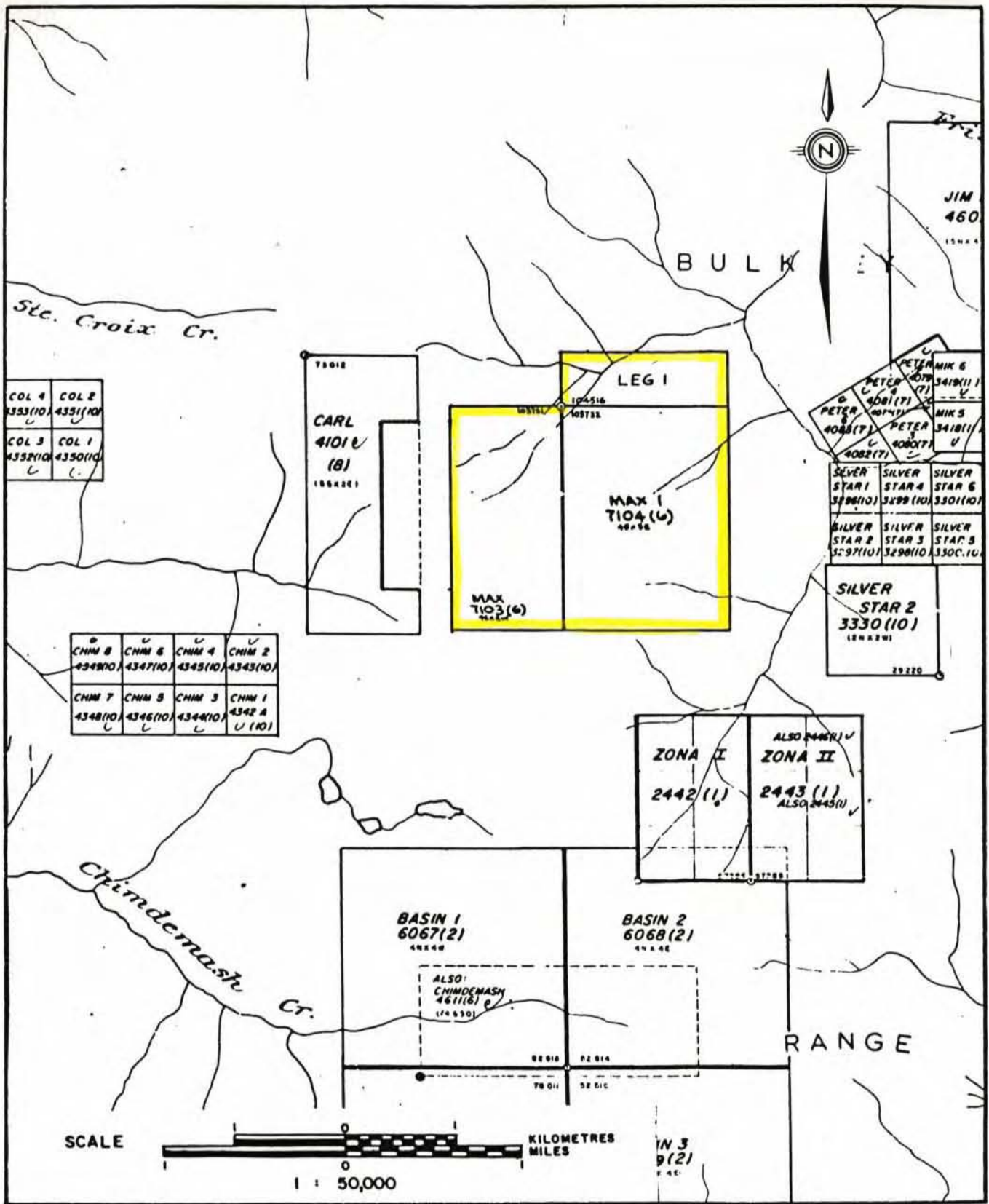


FIGURE - 1



N.T.S. 103 I/9

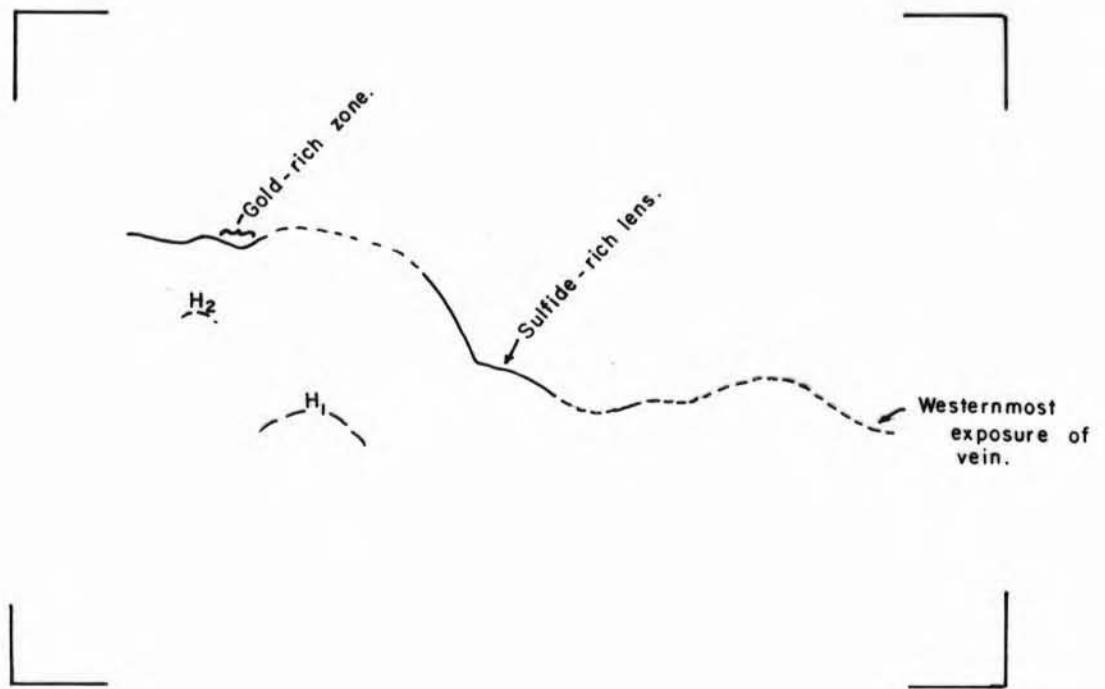
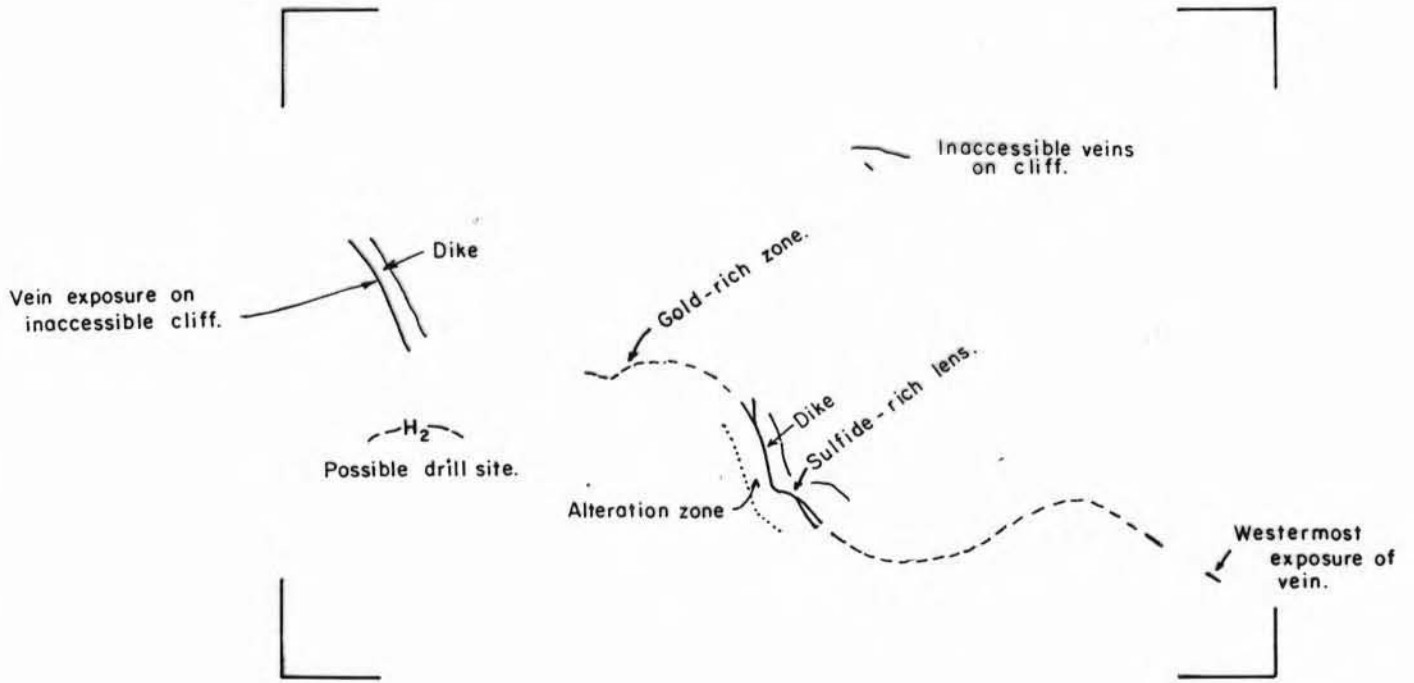
CLAIM MAP

LEGATE CREEK PROPERTY

Skeena Mining Division - British Columbia



Figure 3



Vein exposure on
inaccessible cliff.



Westernmost
exposure of
vein.

Plate 1. Photograph looking southeast showing vein system.



Westernmost
exposure of
vein.

Plate 2. Photograph from air looking south.

the Coast Range. Topography is steep and locally precipitous with alpine glaciers lying in higher parts of the mountain cirques. Elevations in the claim area range from 600 to 1900 metres (2,000 to 6,000 feet - Plates 1 & 2).

HISTORY

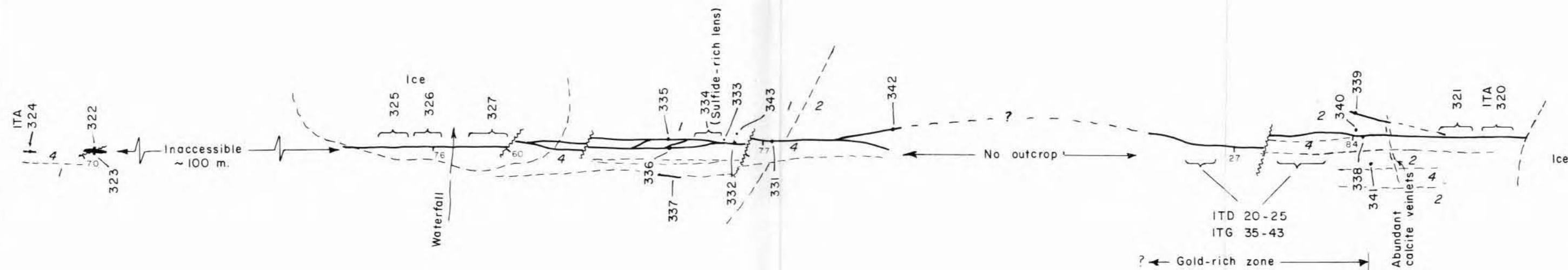
The Legate Creek area and vicinity have had a long mining history. Placer gold deposits were worked in Chimdemash Creek, west of Legate Creek and in Kleanza Creek to the south. Some high grade ores from gold, silver, lead, zinc, and copper deposits in the area were developed and shipped in the 1920's and 1930's. These are described in Minister of Mines Annual Reports (1915, 1918, 1925, 1928) and by Kindle (1937), and Duffle and Souther (1967). There has been little activity since the 1930's because of access difficulty. With improved access by logging roads and many of these showings have recently been re-evaluated. The Legate property was staked in June, 1980 as the TOM claims by T. Conway and held by Carl Creek Resources Ltd. and Claude Resources Ltd. M. Boyle acquired the property in 1986.

GEOLOGY

Oldest rocks in the area are Lower to Middle Jurassic Hazelton Group volcanic rocks which consist of various textured phases of andesite to rhyolite flows and breccias (Unit 1, Figure 4).

The volcanic rocks are intruded by a northeast trending tongue of diorite (Unit 2) of the Coast Plutonic complex. The diorite is a coarse-grained equigranular rock consisting of about 40% biotite and hornblende in a greenish gray feldspathic matrix.

Irregular bodies of quartz monzonite (Unit 3) outcrop locally in the cirque area. The rock is medium grained, has a fresh appearance and is light pinkish gray in colour. It consists of about 25% biotite and hornblende disseminated in a quartzofeldspathic groundmass.

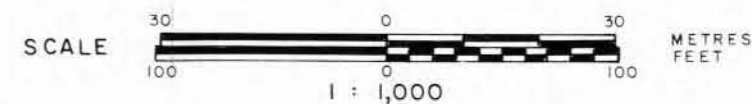


LEGEND

- 4 Felsite
- 2 Diorite
- 1 Andesite, rhyolite
- Quartz vein
- Geological contact
- Sample site, sample number

CARL CREEK GOLD MINING LTD.
 - LEGATE CREEK PROPERTY
 SKEENA MINING DIVISION - BRITISH COLUMBIA

**SCHEMATIC PLAN
 MAIN VEIN & SAMPLE SITES**



Donald G. Allen
 exploration ltd

FIGURE 5

Dikes up to seven metres wide are common in the area. Dike types include felsite, quartz-feldspar porphyry, feldspar porphyry and andesite (Unit 4).

MINERALIZATION

Zona May

The main vein outcrops on the southeast side of the cirque basin. The vein was found to be exposed semi-continuously over a length of 700 metres and a vertical range of 200 metres. Parts of the vein system are covered by overburden and ice. The more accessible parts were examined and sampled over a length of 400 metres (Figure 5).

The easternmost portion is exposed on an inaccessible cliff above a small glacier. The steep slopes to the east of this cliff along strike were examined but the vein was not located. A 10-30 centimetre wide vein (sample site 1TA 345, Figure 4) might be the fault-offset extension of the main vein.

To the west, ice, moraine and talus cover the projection of the vein. Outcrops along strike suggest that it might be cut off by an irregular body of quartz monzonite.

The vein appears to be a fissure and local fault filling along the north contact on an altered felsite dike. Thickness of the vein ranges from 0 to 1.5 metres. In the central part of the vein area it splits into two or more veins over a width of three metres and, in at least two locations, a subsidiary vein horsetails off the main vein. The dike ranges in width from 3 to 15 metres and locally splits into two dikes. Minor vein quartz also occurs erratically along the south contact of one dike.

The vein material is massive white quartz which is somewhat drusy with tightly packed quartz crystals up to two centimetres long. Variable amounts of galena, pyrite and minor amounts of chalcopyrite and tetrahedrite occur as irregular streaks and disseminations. A lens with up to 50% sphalerite, galena, tetrahedrite and chalcopyrite is exposed

over an area of 8 metres by 5 to 20 centimetres (sample site 1TA 333, Figure 4). The sulphide-rich quartz appears to be an older vein filling and is cut off by the more massive drusy quartz.

Vein trend ranges from 110° to 132° in azimuth, with southerly dips in the range of 70° to 90° . A dip of 27° S. was noted in one locality.

A prominent alteration envelope occurs along the margin of the quartz vein. The diorite, andesite and felsite dike are altered to a light greenish-gray mixture of quartz, sericite, carbonate, and serpentine with minor pyrite for a distance of up to 15 metres from the vein wall. Quartz veinlets containing pyrite or galena are common in the envelope.

Narrow quartz veins were noted elsewhere in the cirque (Figure 4) and were sampled where accessible.

Copper and silver-bearing veins were found on the ridge on the west edge of the claim area (Allen and Allen, 1981).

Regina

An attempt was made to locate the Regina prospect which according to Galloway (1918):

"...varies from 2 to 8 feet in width and consists of alternating bands of quartz and granodiorite. In places quartz fills almost the entire vein; in others the vein is a series of parallel stringers spaced across a width of 6 to 8 feet of granodiorite.

Mineralization is with grey-copper, a little galena, and occasionally a little chalcopyrite. The metallic minerals only occur in small amounts, but carry high values in silver. A selected specimen assayed: Gold, 0.06 oz.; silver, 386 oz; copper, 13 per cent. An average sample across $1\frac{1}{2}$ feet returned: Gold, 0.02 oz.; silver, 71 oz. A grab sample of a small dump from an open-cut assayed: Gold, 0.02 oz.; silver, 38.6 oz.; copper, 2.3 per cent.

Unfortunately the prospect could not be found in the limited time available. Further prospecting will be necessary.

ANALYTICAL RESULTS

1981 Survey

The accessible portions of the quartz vein system were sampled over a length of 400 metres. Samples usually consisted of two to four kilograms of rock taken either as channel samples or a bulk sample along the length and width of the vein. Assays and geochemical analyses were carried out by Rossbacher Laboratory Ltd. and check assays carried out by Acme Analytical Laboratories Ltd. Sample sites are plotted on Figures 4 and 5 and results included in Appendix I. Sample descriptions and gold and silver assays are summarized in Table 1.

Discrepancies were noted in re-analysis of the following samples: 1) 81 TAT 338—gold values were found to range from 0.382 to 0.700 oz/ton in four assays on two different splits; and 2) 81 TAT 334 - silver values of 93.6 and 116.0 were obtained on two different splits.

Best gold values were obtained on the eastern part of the vein system over a distance of about 50 metres (sample no. 1TA 338, Figure 4 and Plate 3, and vein sampled by Allen, 1981) where the vein locally contains 10 to 30% pyrite, galena, and sphalerite over a width of 0.4 to 0.7 metres. Assay results including a sample taken by Lay (1928) are as follows:

	<u>Au</u> <u>oz/ton</u>	<u>Ag</u> <u>oz/ton</u>	<u>Pb%</u>	<u>Zn%</u>	<u>Cu%</u>
Lay (1928)	1.2	1.7	5.6	3.8	
1TA 338 (this report)	0.38-0.70	1.5	0.02	0.5	0.13
1TG 40 (July, 1981 report)	0.27	2.03	0.30	0.30	0.09
1TG 41	0.71	1.74	1.36	0.22	0.04
1TD 21	0.64	1.38	0.04	0.04	0.04
1TG 22	0.19	45.0	0.09	2.6	0.12



Plate 3. Sample site 1TA 338. Quartz vein containing pyrite, galena, and sphalerite.

This zone is open to the west where the vein disappears underneath overburden.

Best silver values were obtained from the sulphide-rich lens in the central part of the vein system. This area was sampled by Lay (1928) and Kindle (1937) and results compare as follows:

	<u>Au</u> <u>oz/ton</u>	<u>Ag</u> <u>oz/ton</u>	<u>Pb%</u>	<u>Zn%</u>	<u>Cu%</u>
Kindle (1937)	0.16	92.0	6.1	17.3	1.42
Lay (1928)	0.28	95.2	3.4	11.5	-
1TA 334 (this report)	0.11	93.6	1.1	0.97	0.9

Significant silver and gold values were obtained from quartz vein float at the toe of the easternmost glacier (1TA 344 - 0.07 oz/ton Au, 17.4 oz/ton Ag). Samples taken from three veins northeast of the main vein yielded negligible results (1TA 345-347).

A limited amount of prospecting was carried out on the west side of the cirque basin. Lay (1928) reports a vein exposure on the west side of the glacier but it was not observed in this examination. Anomalous soil samples (1TM 1 and 2) in the area indicate that further prospecting is warranted.

1986 Geochemical Survey

Reconnaissance soil, rock and silt geochemical sampling was carried out on June 18, 1986 mainly in the northern part of the claim group. A total of 10 samples comprising 1 silt, 5 soil and 4 rock samples were collected. The silt was taken from the active part of the stream channel on the west side of the west fork of Legate Creek. The soil samples consisted of talus fines taken at the top of talus fans near steeper rock bluffs. Rock samples consisted of one to two kilograms mainly of float collected on talus fans and represented mineralized or iron stained rock observed on the talus slope. Soils and silt were placed in Kraft paper bags and along with rock samples were shipped to

Rosbacher Laboratory Ltd. for analysis for molybdenum, copper, silver, zinc, lead and gold by standard atomic absorption techniques. Sample sites are plotted on Figure 4 and results are included in Appendix I.

Examination of geochemical results reveals that most of the soil samples contain anomalous amounts of molybdenum (319 parts per million), silver (0.4-1.8 ppm), zinc (174-182ppm) and lead (20-114 ppm). One sample contains weakly anomalous amounts of gold (20 ppb). Of significance is a sample of felsite float (sample no. AT 60) which was found to contain several seams of chalcopyrite. Results indicate that prospecting is warranted on the steeper slopes and on the ridge above the talus slope.

ECONOMIC POTENTIAL

Results of work to date indicate two zones of interest: a gold-rich zone perhaps 50 or more metres in length and a small sulphide-rich zone 8 metres in length. Further work should be directed to establishing the extent and depth of the gold-rich zone. A small topographic shoulder at elevation 1100 metres (3,600 feet - see Plate 4 and helicopter landing site H₁ on Figure 4) would serve as a base for carrying out further exploration and would provide a possible site for underground development should a significant tonnage be established.

Good silver values and interesting gold values are reported from the Regina prospect which according to Galloway (1918) is situated "just above the forks of Legate Creek at an elevation of 42,000 feet". Additional effort should be made to locate this showing.

Donald G. Allen



Plate 4. Photograph looking southwest showing possible development site.

TABLE 1

ROCK SAMPLE DESCRIPTIONS

SAMPLE NO.	DESCRIPTION	Au oz/ton	Ag oz/ton
81 TAT 320	25-40 cm wide milky quartz containing minor pyrite, trace galena.	0.020	nil
321	25-40 cm wide quartz vein with scattered clots and streaks gal and py.	0.014	nil
322	Footwall side of fault cutting lens-shaped vein 0.7 x 5 cm milky quartz lens with scattered clots of pyrite.	0.030	nil
323	Hanging wall side of same fault 0.7 x 10 m lens of quartz containing disseminated clots pyrite with minor galena and sphalerite.	0.130	nil
324	15 m west of 323 - barren milky quartz vein 25 cm including 5 cm sheared wallrock.	0.002	nil
325	10-40 cm quartz vein - blebs and disseminations of pyrite and galena.	0.088	0.11
326	1 m wide quartz vein - minor streaks of pyrite and galena on west side of waterfall under ice bridge.	0.040	0.17
327	Two 30 cm parallel quartz veins on east side of waterfall minor galena and pyrite.	0.003	nil
331	80-120 cm vein milky quartz with pyrite and galena in bands parallel to wall; minor tetrahedrite	0.116	2.2
332	Altered footwall andesite over 1.5 m containing 1% irregularly disseminated pyrite and minor cpy - a few 0.5 cm qtz stringers with py and gal.	0.010	0.3
333	Milky white quartz vein, locally vuggy, with minor pyrite appears to cut sulfide-rich lens.	0.030	0.3
334	Sulfide-rich quartz lens 8 m long by 5-20 cm wide containing up to 50% sphalerite, tetrahedrite, galena and chalcopyrite.	0.110	116.0
335	80 cm wide white vuggy quartz with dissem clots pyrite and galena on north side of splayed vein.	0.002	0.3
336	60-70 cm wide quartz as above on south side of splayed vein.	0.008	0.1
337	5-30 cm wide quartz vein on south side of felsite dike - milky locally vuggy quartz with scattered clots of galena.	0.002	nil
338	0.5 m wide vein, well mineralized with streaks of galena and pyrite.	0.395	1.5
339	5-20 cm vein containing clots and streaks pyrite and galena.	0.054	0.4
340	Footwall altered diorite with minor disseminated pyrite.	0.001	nil
341	Altered diorite between felsite dikes on hanging wall - containing scattered quartz veinlets containing pyrite and galena.	0.003	1.3
342	Milky white quartz at top of cliff - minor pyrite disseminated along margin of vein.	0.008	0.2
343	Altered diorite over 5 metres on footwall side of vein - contains scattered veinlets containing galena, sphalerite and pyrite.	0.004	0.4
344	Quartz vein float containing pyrite, minor chalcopyrite.	0.070	17.2
345	10-30 cm quartz vein containing minor py and galena.	0.010	0.1
346	2-3 m wide quartz carbonate alteration zone containing scattered quartz veinlets.	0.002	0.1
347	Narrow quartz and carbonate veins in 1.5 m wide alteration zone in diorite - irregularly disseminated pyrite.	0.001	0.1

TABLE 1 (Cont'd.)

ROCK SAMPLE DESCRIPTIONS

<u>SAMPLE NO.</u>	<u>DESCRIPTIONS</u>	<u>Au</u> <u>oz/ton</u>	<u>Ag</u> <u>oz/ton</u>
81 TDT 20	Barren qtz. vein 10-15 cm wide parallel to main vein	0.152	0.39
21	20 cm qtz. vein below glacier	0.187	45.0
22	20 cm qtz. below glacier	0.640	1.38
23	10 cm qtz. stringer parallel to main vein	0.025	35.37
24	1 metre qtz. vein	0.014	0.73
25	1 metre qtz. vein	0.002	0.50
26	Qtz. chalcopryrite vein on CARL claim	0.002	0.18
81 TGT 30	Pyritized granodiorite with calcite veins		
31	Pyritized granodiorite with calcite veins		
32	Chalcopryrite on fractures in diorite		
33	Calcite and quartz veinlets in diorite		
34	Calcite and quartz veinlets in diorite		
35	Rusty weathering wallrock		1.86
36	Rust vein material		
37	Calcite veinlet locally containing galena	0.001	3.41
38	Small quartz vein parallel to main vein	0.001	0.96
39	Composite over possible mining width	0.128	0.50
40	Composite of vein	0.270	2.03
41	Sample over best mineralized part of vein	0.710	1.74
42	Composite of hanging wallrock	0.006	0.77

TABLE 1 (Cont'd.)

ROCK SAMPLE DESCRIPTIONS

<u>SAMPLE NO.</u>	<u>DESCRIPTIONS</u>	<u>Au oz/ton</u>	<u>Ag oz/ton</u>
43	Composite of footwall rock	0.001	
46	Quartz - chalcopryrite vein on CARL claim	0.006	4.64
327 AT 52	Iron stained quartz monzonite float		
57	Quartz porphyry and felsite float with Fe carbonate and minor quartz veining		
59	Quartz-veined felsite; includes some quartz vein material. Iron stained. Chlorite and trace specular hematite in quartz veins		
60	Felsite with several seams of chalcopryrite and pyrite.		

REFERENCES

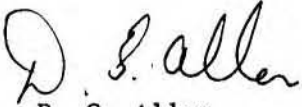
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- Galloway, J. D. (1918). Regina in Annual Report of the Minister of Mine Mines for 1917, p. F100-101.
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- Lay, D. (1928). Zone May, in Annual Report of the Minister of Mines of 1928, p. C147-148.

CERTIFICATE

I, Donald G. Allen, certify that:

1. I am a Consulting Geological Engineer with A & M Exploration Ltd., 614-850 West Hastings Street, Vancouver, British Columbia
2. I am a graduate of the University of British Columbia with degrees in Geological Engineering (B.A.Sc., 1964; M.A.Sc., 1966).
3. I have been practising my profession since 1964.
4. I am a member in good standing of the Association of Professional Engineers of British Columbia.
5. This report is based on field work carried out personally during the period October 17, 18 and 20, 1981 and on June 18, 1986.
6. I hold no interest, nor do I expect to receive any, in the MAX or LEG claims.

July 20, 1986
Vancouver, B.C.


D. G. Allen
P. Eng. (B.C.)

APPENDIX I

Analytical Results

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
BURNABY, B.C. V5B 3N1
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : A&M EXPLORATION LTD.
614-850 W. HASTINGS STREET
VANCOUVER B.C.

CERTIFICATE#: 86181
INVOICE#: 6441
DATE ENTERED: 86-07-04
FILE NAME: A&MB6181
PAGE # : 1

PROJECT: 327
TYPE OF ANALYSIS: GEOCHEMICAL

PRE FIX	SAMPLE NAME	-40 MESH	PPM Mo	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPB Au
L	327 AL 51		1	88	0.2	114	18	5
S	327 AS 53		7	188	0.6	174	114	20
S	54		19	1260	1.8	182	82	5
S	55	*	11	282	0.4	114	26	5
S	56	*	2	102	0.2	116	20	5
S	327 AS 58		3	174	0.2	118	20	5
A	327 AT 57		1	6	0.2	52	2	5
A	59		1	12	0.2	32	2	5
A	327 AT 60		9	1240	5.0	24	2	5

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
BURNABY, B.C. V5B 3N1
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

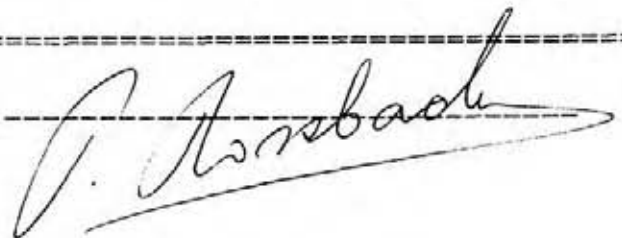
TO : A&M EXPLORATION LTD.
614-850 W. HASTINGS STREET
VANCOUVER B.C.

CERTIFICATE#: 86227
INVOICE#: NONE
DATE ENTERED: 86.07.19
FILE NAME: A&M86227
PAGE # : 1

PROJECT: 327
TYPE OF ANALYSIS: GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPM Mo	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPB Au
T	327 AT 52	2	12	0.4	70	6	5

CERTIFIED BY :



Kossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 81233-1

INVOICE NO. 1324

DATE ANALYSED JULY 23/81

TO: **A & M EXPLORATION LTD.**

4570 HOSKINS ROAD

NORTH VANCOUVER, B.C. V7K 2R1

PROJECT **CARL CREEK GOLD MIN**

No.	Sample	pH	Mo	Cu	Ni	Co	Fe%	Pb	Zn	Ag			No.
01	81 TDT 20		11	1426	10	10	1.1	636	2890	12.0			01
02	21		30	372	10	6	0.7	420	420	1460.0			02
03	22		9	1170	6	14	0.5	880	26600	43.0			03
04	23		4	3340	16	18	0.5	12000	26000	1160.0			04
05	24		16	450	6	4	0.4	7800	2000	23.0			05
06	81 TDT 25		620	46	44	70	710.0	228	1180	15.4			06
07	81 TDT 26		46	-	10	56	0.2	-	-	-			07
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VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by

J. Kossbacher

Kossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

A & M EXPLORATION LTD.

TO: 4570 HOSKINS ROAD
NORTH VANCOUVER, B.C. V7K 2R1

CERTIFICATE NO. 81233-2
INVOICE NO. 1324
DATE ANALYSED JULY 23/81
PROJECT CARL CREEK GOLD MINE

No.	Sample	pH	Mo	Cu	Ni	Co	Fe%	Pb	Zn	Ag				No.
01	81 TGT 30		2	220	20	18	3.8	30	180	0.2				01
02	31		15	2250	32	22	3.0	20	64	4.8				02
03	32		1	620	28	28	5.0	70	146	2.6				03
04	33		10	132	42	16	3.1	22	112	0.4				04
05	34		6	110	62	30	3.0	20	94	0.2				05
06	35		4	630	20	26	4.4	244	770	58.0				06
07	37		360	1540	34	34	2.1	240	6200	106.0				07
08	38		22	764	28	20	2.4	2720	720	36.0				08
09	39		5	1020	8	6	0.6	1870	3740	15.6				09
10	40		35	860	12	8	0.6	3000	3000	63.0				10
11	41		17	430	12	8	0.5	13600	2200	54.0				11
12	42		13	420	32	22	3.2	370	710	24.0				12
13	81 TGT 43		12	96	28	24	4.0	300	1240	3.0				13
14	81 TGT 46		116	-	10	32	5.0	-	-	-				14
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VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by

J. Kossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
 BURNABY, B. C.
 CANADA
 TELEPHONE: 299-6910
 AREA CODE: 604

CERTIFICATE OF ANALYSIS

TO: A & M EXPLORATION LTD.
 4570 HOSKINS ROAD
 NORTH VANCOUVER, B.C.

ATTN: CARL CREEK GOLD MINES LTD.

CERTIFICATE NO. 81233

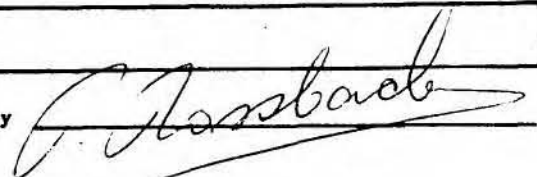
INVOICE NO. 1324

DATE RECEIVED

DATE ANALYSED July 22, 1981.

SAMPLE NO.:	oz/t Au	oz/t Ag	% Pb	% Zn	% Cu
81 TDT 20	0.152				
81 TDT 21	0.187				
81 TDT 22	0.640				
81 TDT 23	0.025				
81 TDT 24	0.014				
81 TDT 25	0.002				
81 TDT 26	0.002	0.18	0.28	0.56	5.90
81 TGT 37	0.001				
81 TGT 38	0.001				
81 TGT 39	0.128				
81 TGT 40	0.270				
81 TGT 41	0.710				
81 TGT 42	0.006				
81 TGT 43	0.001				
81 TGT 46	0.006	4.64	0.70	0.84	3.50

Certified by



Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

TO: **A & M EXPLORATION LTD.**

4570 HOSKINS ROAD

NORTH VANCOUVER, B.C. V7K 2G1

CERTIFICATE NO. 81444-2

INVOICE NO.

DATE ANALYSED OCT. 30/81

PROJECT

PPb

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Tl%	Ag	Pb	Zn	Alx	No.
01	81TMS1		1	170	70	36	2650	6.0	0.8	102	242	40	01
02	81TMS2		1	152	100	40	3100	6.0	0.4	106	244	10	02
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VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by

J. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

A & M EXPLORATION LTD.

TO: 4570 HOSKINS ROAD
NORTH VANCOUVER, B.C. V7K 2R1

CERTIFICATE NO. 81444-1
INVOICE NO. 2002
DATE ANALYSED OCT. 30/81
PROJECT LEGATE CREEK

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	T ₂₀ ^g	As	S% ^g	Zn	No.
01	81TAT 321		2	56	32	14	190	0.8	1.0	110	174	01
02	320 722A		1	44	36	16	190	0.6	1.2	44	174	02
03	722B		5	10	28	12	100	0.8	0.4	16	14	03
04	723		6	14	24	12	60	0.6	0.9	90	16	04
05	724		14	72	26	12	210	0.9	0.2	14	18	05
06	725		7	200	24	14	120	1.1	3.6	1630	2460	06
07	726		3	84	18	10	90	0.6	3.3	1680	26	07
08	727		2	172	18	8	200	0.6	1.2	90	18	08
09	331		23	840	20	10	80	0.6	67.0	1280	2760	09
10	81TAT 332		17	900	54	32	810	4.5	8.0	180	770	10
11	333		9	218	16	6	100	0.5	8.8	350	66	11
12	334		51	8000	26	34	350	1.5	2000	11300	97000	12
13	335		3	86	20	8	120	0.5	9.4	280	560	13
14	- 336		7	26	22	8	80	0.5	4.3	208	44	14
15	337		3	8	24	8	110	0.4	0.6	66	28	15
16	338		12	1300	28	12	80	2.5	46.0	234	4790	16
17	339		3	1900	42	22	540	1.1	13.0	308	360	17
18	340		1	46	50	22	710	3.4	1.2	26	240	18
19	341		4	450	60	24	670	3.3	39.0	190	360	19
20	81TAT 342		3	84	28	12	230	0.8	5.8	58	62	20
21	343		3	182	50	32	930	4.6	12.0	84	220	21
22	344		2	2200	48	32	80	3.4	55.0	360	670	22
23	345		8	72	26	14	200	1.4	4.2	770	94	23
24	346		2	64	58	26	1690	3.4	2.1	138	400	24
25	81TAT 347		3	154	54	26	840	3.2	2.4	130	320	25
26	STD		2	120	8	2	100	0.8	4.0	104	530	26
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VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by

J. Rossbach



ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

862 E. Hastings St., Vancouver, B.C. V6A 1R6

Telephone: 253 - 3158

To: A & M Exploration Ltd.,
4570 Hoskins Road,
N. Vancouver, B.C.
V7K 2R1

Attn.: Mr. D. Allen

File No. 81-1786 B

Type of Samples Rock

Disposition _____

ASSAY CERTIFICATE

Project : 81-122 (Tat Series)

No.	Sample	Au oz/ton	Au oz/ton (FA)	Ag oz/ton				No.
1	81 Tat 323	.140						1
2	325	.089						2
3	331	.088						3
4	334	.105		116.00				4
5	338	.382	.395					5
6	339	.054						6
7	341	.001						7
8	81 Tat 344	.059		17.20				8
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10								10
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12								12
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All reports are the confidential property of clients.

FA = Fire Assay

DATE SAMPLES RECEIVED Nov. 9, 1981

DATE REPORTS MAILED Nov. 17, 1981

ASSAYER

Dean Toye
DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

AFFIDAVIT OF EXPENSES

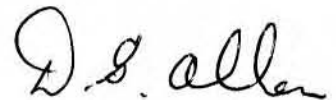
This will certify that geological mapping and sampling were carried out on June 18, 1986 on the MAX, MAX 1 and LEG 1 claims, Skeena Mining Division, British Columbia, to the value of the following:

Field Work and Mobilization

Salaries		
D. G. Allen	1.5 days @ \$400/day	\$ 600.00
Field supplies		7.00
Telephone		27.20
Travel and vehicle expenses		424.41
Assays and geochemical analyses		106.80
Helicopter access and support		\$ 660.58

Report

Salaries		
D. G. Allen	1 day @ \$400/day	400.00
Draughting, typing, photocopying, compilation		<u>369.00</u>
	TOTAL	\$ 2,594.99



D. G. Allen
P. Eng. (B.C.)



LEGEND

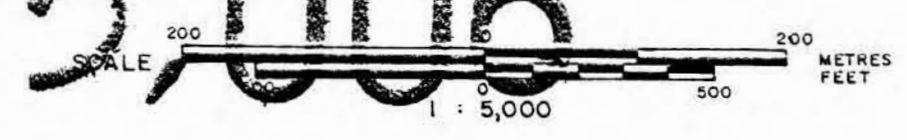
- LATE DIKE & PLUGS**
- Felsite, quartz feldspar porphyry
 - Quartz monzonite
- COAST PLUTONIC COMPLEX**
- Diorite, quartz diorite
- HAZELTON GROUP**
- Andesite, rhyolite.

SYMBOLS

- Outcrop
- Geological contact
- Quartz vein
- Fault
- ITA 347 Rock sample site, sample number
- ITM 1 Soil sample site, sample number
- LCP Legal corner post, claim, boundary
- Claim unit boundary
- H Helicopter landing site
- S1 Silt sample site, sample number.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,006



NTS 103 1/9

LEGATE CREEK PROPERTY
SKEENA MINING DIVISION - BRITISH COLUMBIA

**GEOLOGY
&
SAMPLE SITES**



DRAWN BY: J.M. & D.A.	JOB No.	FIGURE
CHECKED BY: D.M.	327	4
DATE: JULY, 1986		