GEOCHEMICAL SAMPLING/GEOLOGICAL REPORT ON THE GORF 1, 2, 3 CLAIMS

LIARD MINING DIVISION

FROG RIVER AREA

N.T.S. 94L 3E

Lat. 58 Deg. 12' N, Long. 127 Deg 10' W

BY

Chris W. Graf B.Ap.Sc., P. Eng.

JANUARY 1995

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ECSTALL MINING CORPORATION

GORF CLAIMS

LOCATION MAP

LIARD MINING DIVISION, B.C.

JAN. 1995

SUMMARY

The Gorf property consists of three claims (20 units) wholly owned by Chris Graf. It is located on a western tributary of the Frog River in the Cassiar Mountains in Northern B.C.. Access to the property is via helicopter.

The claims were staked by Graf in November of 1989 to cover an area containing argentiferous-galena, sphalerite, rhodochrosite, chalcopyrite massive sulfide boulders within a large high value Pb-Zn-Mn soil anomaly and a coincident large gravity anomaly located previously by Cominco Ltd. Earlier work on the property by various exploration companies, dates from 1952, and includes geochemical surveys (soil and silt), geophysical surveys (including gravity, magnetometer, minor VLF-EM and IP, some drilling and hand trenching.

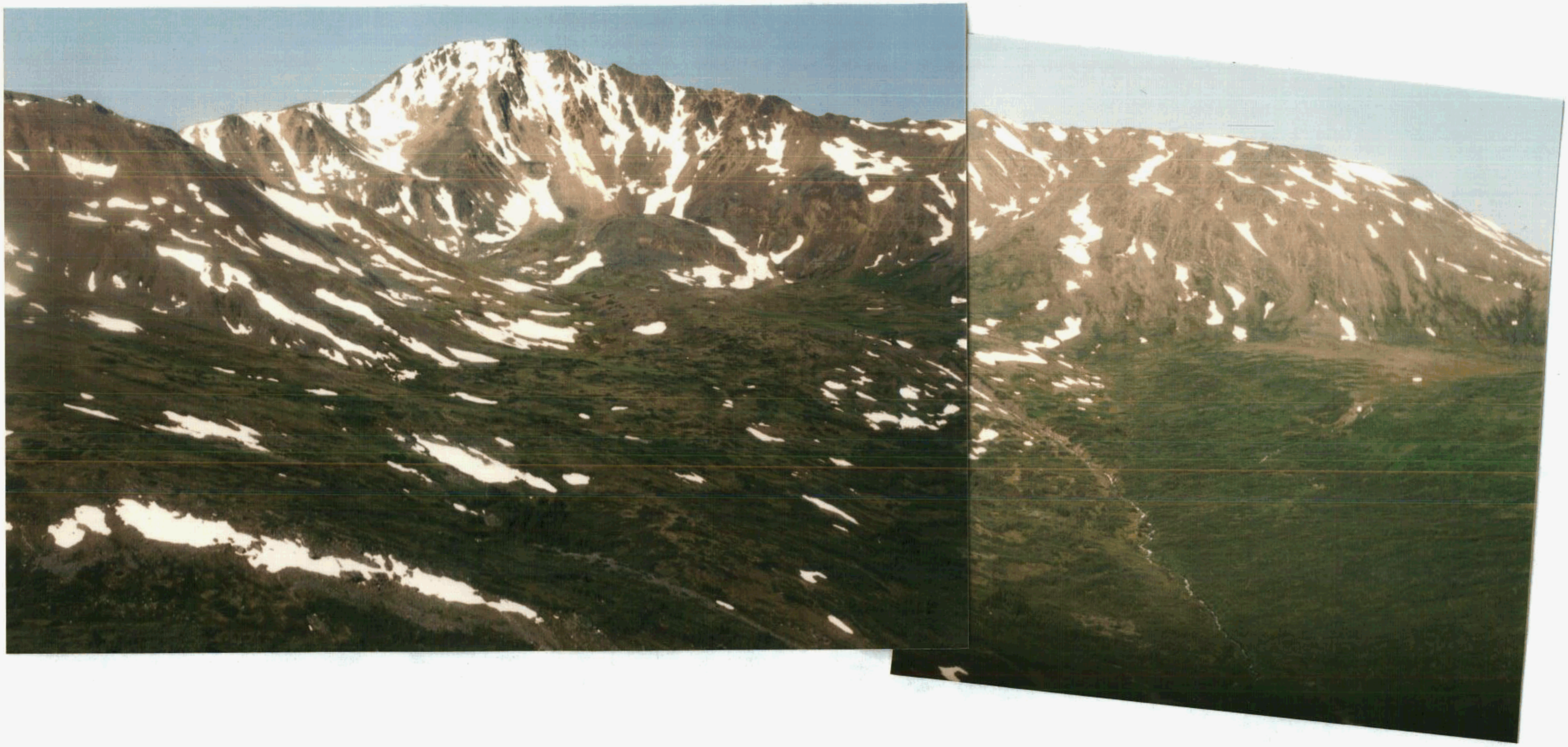
The property is underlain by upper Proterozoic micaceous quartzites and semipelitic schists which are correlative with the Swannell Formation of the Ingenika Group. Along the southern margin of the claims, these metasedimentary rocks are intruded by quartz monzonites and granodiorites related to the Cretaceous Cassiar Batholith. Numerous quartz-eye porphyry dykes occur in the vicinity of the claims.

Mineralization consists of argentiferous galena +/- pyrite +\- sphalerite +\- rhodochrosite +/- minor chalcopyrite which occurs as fine fracture fillings and pods in fracture intersections and fault zones. The boulders grade from massive sulphides, to mixtures of sulphides as replacements and fracture fillings in quartzite breccias to quartzite with numerous 10 to 20 cm wide fractures filled with sulphides and rhodochrosite. Samples of high grade mineralized float were reported, by Cominco in 1980, to average 0.01 oz/t Au, 16.6 oz/t Ag, 29.7% Pb, 6.8% Zn and 0.6% Cu.

Later work by Formosa Resources Corporation in 1989 and 1990 included prospecting and sampling of the mineralized boulders area. Results were promising and included one assay of 29.32% Pb, 10.36% Zn, 2.08% Cu, 20.67 oz/t Ag, and 0.010 oz/t Au, however a recommended follow up program of geological mapping and sampling, augmented by a series of short drill holes never carried out and their claims were allowed to lapse.

Field work was carried out on the property by Chris Graf P. Eng., in July 1994 and consisted of geological mapping, stream silt sampling and prospecting/rock sampling.

A total of 18 stream silt samples were collected on a traverse situated along Hall's Creek to the south and west of the old trenched area containing the polymetallic massive sulfide float boulders. This silt sampling was done in order to locate possible mineralized source areas for the massive sulfide float boulders, both upstream and up slope from their present location.



Gorf Property looking west

PROPERTY LOCATION, ACCESS, AND PHYSIOGRAPHY

The Gorf 1, 2, 3, claims are located on a western tributary of the Frog River in the Cassiar Mountains (Stikine Range) of north central B.C., Liard Mining Division. Co-ordinates for the centre of the property are approximately 58 Deg 12' north latitude, 127 Deg 10' west longitude. The applicable topographic maps are 94L - Kechika River (1:250,000) and 94L/3 - Mount Irving (1:50,000).

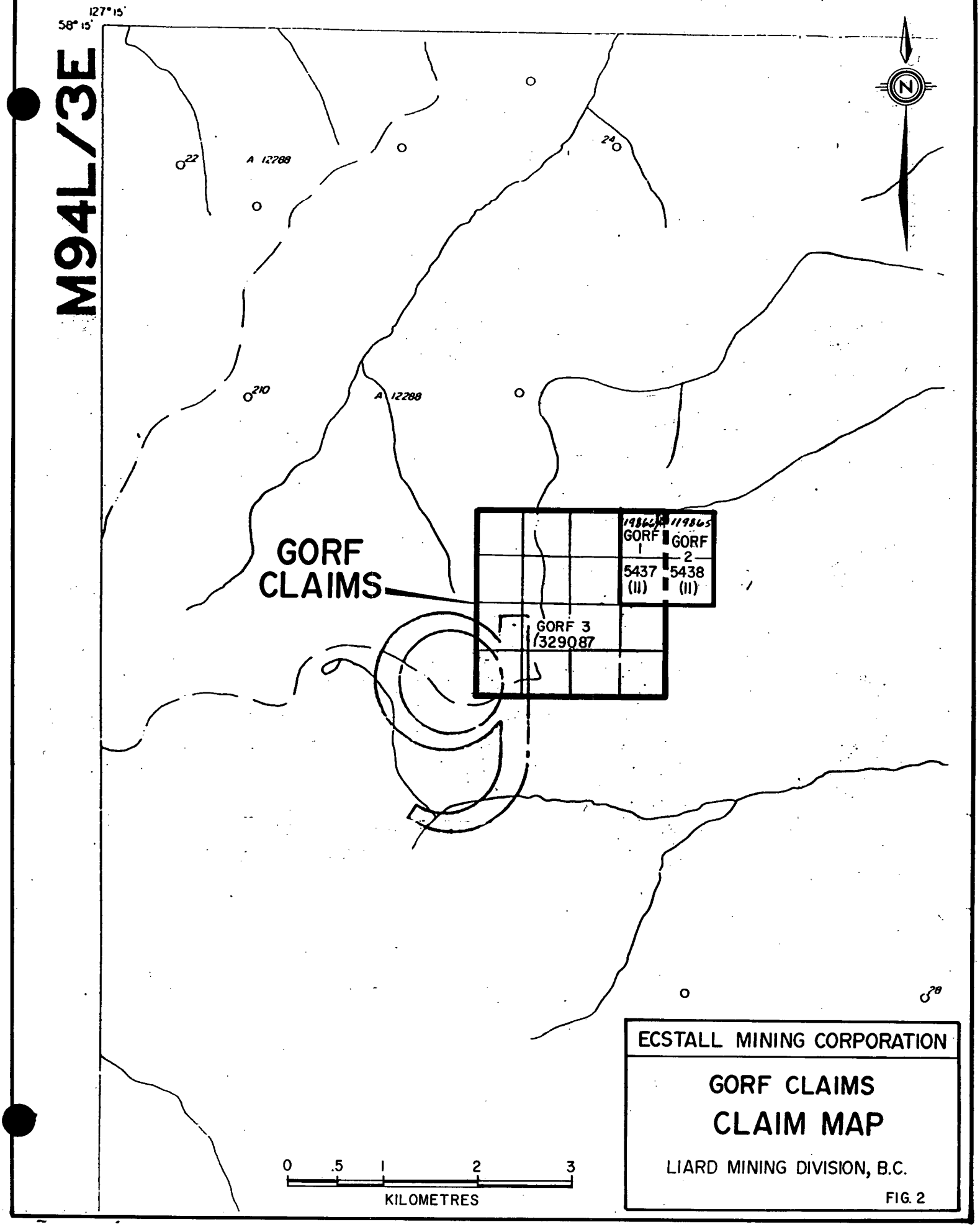
At present, access to the property is by helicopter only. The nearest fixed wing facility is Terminous Mountain airstrip located about 60 kilometres to the north in the Rocky Mountain Trench. Float planes can land at Denetiah Lake 35 km northwest of the claims, but at no significant advantage over the Terminous strip. Access to the property can also be gained by airplane from Smithers to the Sturdee Airstrip in the Toodoggone area, a distance of 280 km, and from Sturdee north to the property by helicopter, a distance of approximately 110 km or by helicopter from the Driftpile Creek airstrip 75 km east.

The main area of interest is centred on a broad glacial cirque drained by informally named Hall's Creek. The cirque floor is mainly covered by grass and moss which is fringed by outcrop and felsenmere. The latter mantles most of the mountainside. Elevations on the property range between about 1500 metres and 2200 metres. The claims are mainly above tree line but patches of spruce and scrub brush occur at the lowest points.

CLAIMS INFORMATION

The Gorf claim group comprises of the Gorf 1, 2, 3 claims staked in November 1988 and are wholly owned by Chris Graf of 307-475 Howe Street, Vancouver, B.C., claim data is as follows:

CLAIM NAME	RECORD NO.	UNITS	EXPIRY DATE
GORF 1	223448	2	6/11/96
GORF 2	223449	2	6/11/96
GORF 3	329087	16	14/07/96



ECSTALL MINING CORPORATION

GORF CLAIMS
CLAIM MAP

LIARD MINING DIVISION, B.C.

FIG. 2

PREVIOUS GEOLOGICAL WORK

The showings have a history which dates back to Conwest Ltd. in 1952 who did a limited amount of trenching and drilling. The prospect was later staked and explored by others including Cominco from 1977 to 1988. Previous work includes geochemical surveys (soil and silt), geophysical surveys (including gravity, magnetometer, minor VLF-EM, and minor IP) and some drilling and hand trenching. This work outlined a large area of low-grade Pb-Zn-Ag mineralization, but the source of the high grade mineralized felsenmere was never precisely located by the previous workers. Cominco's gravity survey, which indicated a 3-5,000,000 ton anomalous body beneath the mineralized felsenmere area, was considered a priority target for follow up work, however a Cretaceous Pb isotope age date obtained by them from galena samples deterred them from further work as they were exploring for a PreCambrian syngenetic massive sulfide deposit and the target was never drilled.

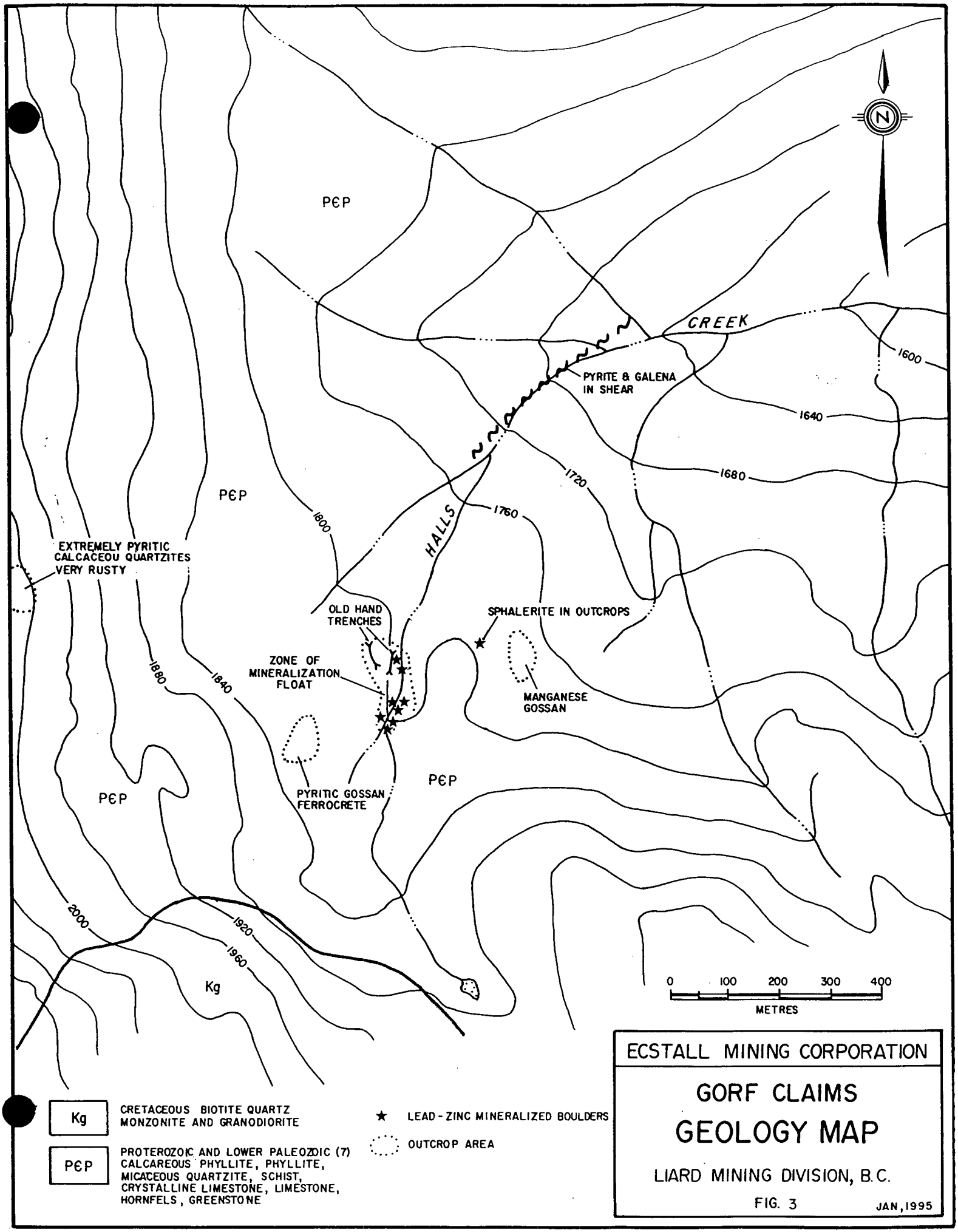
PROPERTY GEOLOGY AND MINERALIZATION

The general area is occupied by a northwest trending belt of metasedimentary and metavolcanic rocks of Lower Paleozoic and upper Proterozoic age. These rocks lie along the east flank of the Cassiar Batholith (Cretaceous granodiorite, monzonite, diorite) and west of the Rocky Mountain Trench.

In the Frog River area, upper Proterozoic Ingenika Group clastic and carbonate rocks are broadly folded and faulted and have been intruded to the west by the Cretaceous aged Cassiar batholith. The Ingenika Group clastic rocks comprise a lower succession of medium to thick bedded grey-white quartzites with intercalated andesitic composition grey-green chloritic phyllites of the Swannell Formation. These rocks are in turn overlain by Tsaydiz Formation grey phyllites, thin-bedded limestones, and phyllitic carbonates. These units strike westerly and dip northerly. Major structural breaks strike generally north-west.

The Gorf property is underlain by upper Proterozoic micaceous quartzites and semipelitic schists which are correlative with the Swannell Formation of the Ingenika Group. Along the southern margin of the claims, the metasedimentary rocks are intruded by quartz monzonites and granodiorites related to the Cretaceous Cassiar Batholith. Numerous quartz-eye porphyry dykes occur in the vicinity of the claims. Two major fault systems were noted in the area by Cominco workers; one striking northwest and dipping vertically, the other striking northeast and also steeply dipping.

The Gorf claims were staked to cover an area which, according to Cominco geologists, has low grade Ag-Pb-Zn mineralization over a large area (one square kilometre). This mineralization occurs as fine fracture fillings and local small pods in fracture intersections and fault zones. In addition, high grade massive sulfide boulders and frost-heaved blocks are present over an area of approximately 120 x 180 metres on the claims. These boulders consist of galena +/- pyrite +/- sphalerite +/- rhodochrosite +/- minor chalcopyrite. The boulders, which can be in excess of one cubic metre in size, grade from massive sulphides, to mixtures of sulphides as replacements and fracture fillings in quartzite breccias, to quartzite with numerous 10 to 20 cm wide fractures filled with sulphides and rhodochrosite. Samples of the high grade mineralized float were reported, by Cominco, to average 0.01 oz/t Au, 16.6 oz/t Ag, 29.7% Pb, 6.8% Zn and 0.6% Cu.


N
PEP
CREEK
1600
1640
1680
1720
1760
1800
1840
1880
1920
1960
2000
HALLS
PYRITE & GALENA IN SHEAR
EXTREMELY PYRITIC CALCACEOU QUARTZITES VERY RUSTY
OLD HAND TRENCHES
ZONE OF MINERALIZATION FLOAT
SPHALERITE IN OUTCROPS
MANGANESE GOSSAN
PYRITIC GOSSAN FERROCRETE
Kg
0 100 200 300 400
METRES
Kg
CRETACEOUS BIOTITE QUARTZ MONZONITE AND GRANODIORITE
PEP
PROTEROZOIC AND LOWER PALEOZOIC (?) CALCAREOUS PHYLLITE, PHYLLITE, MICACEOUS QUARTZITE, SCHIST, CRYSTALLINE LIMESTONE, LIMESTONE, HORNFELS, GREENSTONE
LEAD-ZINC MINERALIZED BOULDERS
OUTCROP AREA
ECSTALL MINING CORPORATION
GORF CLAIMS
GEOLOGY MAP
LIARD MINING DIVISION, B.C.
FIG. 3
JAN, 1995

Prospecting by Formosa Resources Ltd. in 1989/90 confirmed the presence of numerous boulders of high grade lead-zinc float on the claims. The boulders are distributed on the floor of a large bench-like cirque near the contact between Cretaceous granitic rocks and quartzo-feldspathic metasedimentary rocks. In addition to sulphides and rhodochrosite, the mineralized material locally contains large, yellowish, secondary micas (zinwaldite?).

The following is a direct quote, by permission, from a Cominco report written by senior geologist Bruce Mawer and contained in a letter dated October 22, 1987 to John Mirko, Operations Manager for Skylark Resources Ltd., from Mr. John M. Hamilton, Manager, Exploration-Western Canada for Cominco:

"In the lower basin in a few exposed areas, creek banks etc. there is considerable (up to 2 m) of pyrolusite cemented capping on the quartzite and grit bedrock. The quartzite, grit and phyllite is fractured and cut by a strong fault in the creek bed. The fractures are hairline to 1-2 mm thick and are mineralized with galena, sphalerite, pyrite, rhodochrosite and rhodonite and minor chalcopyrite. Where fractures intersect and within the fault zones local small pods of high grade sulphide occur. The channel sampling done by the Lake Expanse company appears in part parallel to the fault zone and not normal to it."

"The high grade float area at an elevation of 1,800 m is located in Halls Creek and immediately to the west. The area is roughly 120m x 180m and contains numerous blocks of high grade galena, pyrite, sphalerite, rhodonite rhodochrosite and minor chalcopyrite. The blocks contain solid sulphide to mixtures of sulphide and quartzite breccia to quartzite blocks up to 2m x 2m with numerous 10-20 cm fractures filled with sulphides and rhodochrosite. There is very little to no hydrothermal or secondary quartz as a gangue mineral. Conwest's sampling of a number of blocks of float and check samples by Cominco averaged 0.01 oz Au/t, 16.6 oz Ag/ton, 29.7% Pb, 6.8% Zn, 0.6% Cu. One sample by Conwest was reported to contain 0.4 oz Au/t, no sampling to date has confirmed this gold content. Conwest dug two trenches within the float area and ground sluiced the creek bed, the trenches are now caved and contain only minor exposed pyritic quartzite with a few small fractures of mineralization in Trench 1. Approximately 25-30 tons of high grade were thrown up out of the creek bed on to the east side of the creek bank. The trend of the float patterns of sulphide blocks within the area appear to be influenced by soil solufluction and polygonal frost heaves. In the upper part of the ground sluiced creek trench the mineralized blocks contain abundant rhodochrosite in a higher proportion to the sulphides than at Trench 1 and 2."

"Approximately 200 m east of Trench 1 and 2 a short hand trench 1 m wide x 4 m long x 1 m deep was made to expose bedrock consisting of pyrolusite covered basic sill or dyke material. This dark green rock contains disseminated and banded sphalerite and galena. Contiguous chip sampling assayed as follows: 2 m @ 0.002 oz/t Au, 1.48 oz/t Ag, 1.85% Pb, 8.85 % Zn, 2.0 m @ 0.002 oz/t Au, 0.38 oz/t Ag, 0.41% Pb, 0.75% Zn, 2.0 m @ 0.002 oz/t Au, 0.26 oz/t Ag, 0.22% Pb, 1.20% Zn."

"The mineralization of interest, Ag-Pb-Zn, is scattered over a very large area (1 km x 1 km) occurring as fine fracture fillings and local small pods in fracture intersections and in fault zones. This would represent a large low grade potential. The high grade float area is 120 m x 180 m in dimension and could represent a local area of limited but high grade potential. Diamond drilling by Conwest in these areas intersected only minor fracture mineralization similar as seen in outcrop but did not intersect any thick zones of high grade."

"A possible reason for the discouraging drill results is that most of the holes were drilled parallel to the structures that are inferred as mineralizing controls."

"Diligent prospecting on the claim revealed that the surface trace of the main zone of well-mineralized float has a 054 Deg to 058 Deg strike (See Figure 3), which can be followed for some 250 m."

"Southwest of the estimated 25 to 30 tons of high grade massive sulphides, float mineralization becomes very sporadic, with narrow breccia zones and galena stringers to 1 cm wide. Local, rare quartz stringers were also noted, varying in width from a few millimetres 10 2 cm wide."

"Galena, where present is often massive and well-cleaved but locally banded and fine grained crushed or "steel" galena zones exist, indicative of post-mineral faulting or shearing."

"Northwest of the creek and along the inferred strike of the zone, mineralization is confined predominantly to fracture coatings and veinlets with pyrite-galena intergrowths, the former rimming the latter."

"It appears probably that the main mineralized zones are located at the juncture of the two main structural zones previously mentioned, and that numerous parallel to subparallel mineralized veins and fractures also occur in the area."

"The northeast structural trend appears to have been the dominant mineralizing control based upon a field examination of the property. If this assumption is correct, their previous drilling was parallel to the strike of the mineralization."

"An interesting observation here is that the mineralization has the same approximate strike as the bedding, although previous drilling would have somewhat constrained the tonnage potential of the property."

1994 GEOCHEMICAL SAMPLING PROGRAM AND RESULTS

Work in 1994 consisted of geological mapping and stream silt sampling. The purpose of the geochemical survey was to locate the source of the high grade Ag/Pb/Zn/Cu/Mn float boulders situated along Halls Creek.

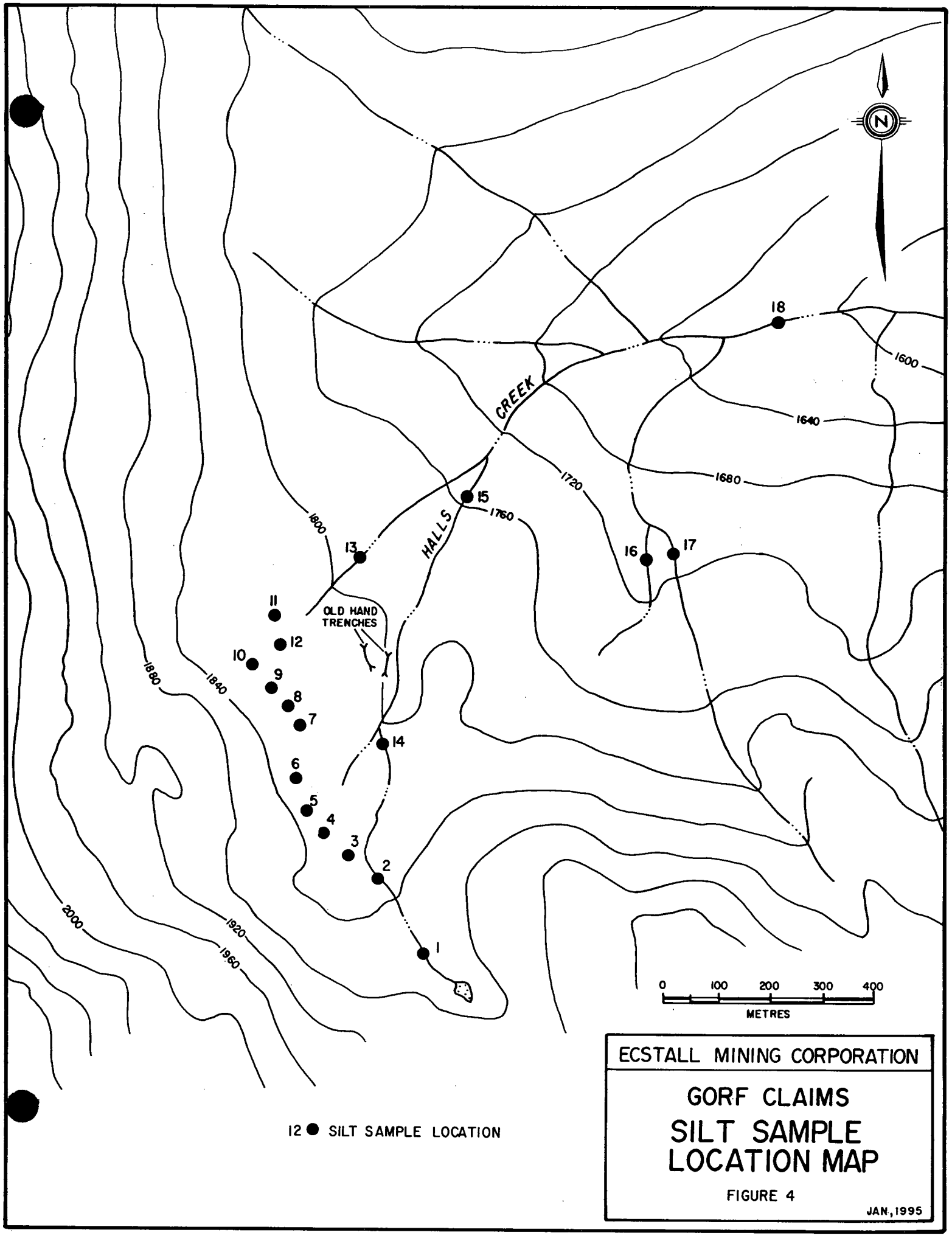
Exploration work consisted of collecting 18 stream silt samples (Frog 1-18) from the property. These were dried in the field and shipped to Min-En Labs Ltd. in Vancouver for 31 element ICP plus fire gold analysis. Of these, 15 silt samples were taken from small tributaries to Hall's Creek which drains northwards across the main area of mineralized float boulders and previous trenching, 2 silt samples were taken from a separate north flowing creek, draining a separate Cirque area 500 m east of the mineralized/trenched area on Hall's Creek, and 1 silt sample was taken from Hall's Creek 100 m down stream of the junction with the 2nd above mentioned creek. (Figure 3).

Silt samples Frog 1,2,3,4,5 and 6 were taken from separate small tributaries at distances 300 m to 500 m upstream (south) of the area of mineralized float boulders and previous trenching/drilling.

These samples all contained anomalous lead (186 ppm to 550 ppm) , zinc (402 ppm to 1717 ppm), antimony (15 ppm to 75 ppm), phosphorous (890 ppm to 3240 ppm), and manganese (3679 ppm to >10,000 ppm) contents.

In addition to the above anomalous elements sample Frog 5 contained anomalous copper (228 ppm), cadmium (31.8 ppm), beryllium (30.8 ppm), molybdenum (75 ppm), nickel (448 ppm), strontium (155 ppm), and tungsten (12 ppm). The gold values were not high in any of these silt samples (3 ppb to 19 ppb)

These anomalous silt samples indicate a source of polymetalic sulfide mineralization exists a considerable distance south of the mineralized float area previously trenched, however no mineralized float was found prospecting in the intervening area while collecting these silt samples. The mountain peaks and high cirque walls west and south of the area containing the massive sulfide float boulders, are highly sheared, altered, rusty and bleached. The altered zones cover a considerable area, both vertically and horizontally and together with the stream silt geochem anomalies, may indicate a larger porphyry style mineralizing system exists with many possible sources for the high grade boulders. These altered rusty areas, particularly towards the southwest should be geologically mapped, prospected and rock/soil sampled.


N
18
1600
CREEK
1640
1680
1720
15
1760
HALLS
1800
13
16
17
11
OLD HAND
TRENCHES
12
10
9
8
7
14
6
5
4
3
2
1
1880
1840
2000
1920
1960
0
100
200
300
400
METRES
12 ● SILT SAMPLE LOCATION
ECSTALL MINING CORPORATION
GORF CLAIMS
SILT SAMPLE
LOCATION MAP
FIGURE 4
JAN., 1995

Silt samples Frog 8, 9, 10, 11, 12, were taken from separate small tributaries draining the altered and rusty high peaks due west of the area of mineralized float boulders and previous trenching/drilling. Sample Frog 7 was a soil sample of ferricrete/gossanous seep material. It was notably low in all elements except iron (>15%) and boron (30 ppm). Some of the other samples contained anomalous lead (39 ppm to 594 ppm), manganese (534 ppm to 2056 ppm) and lesser chromium (16 ppm to 30 ppm), but only background contents of any other elements.

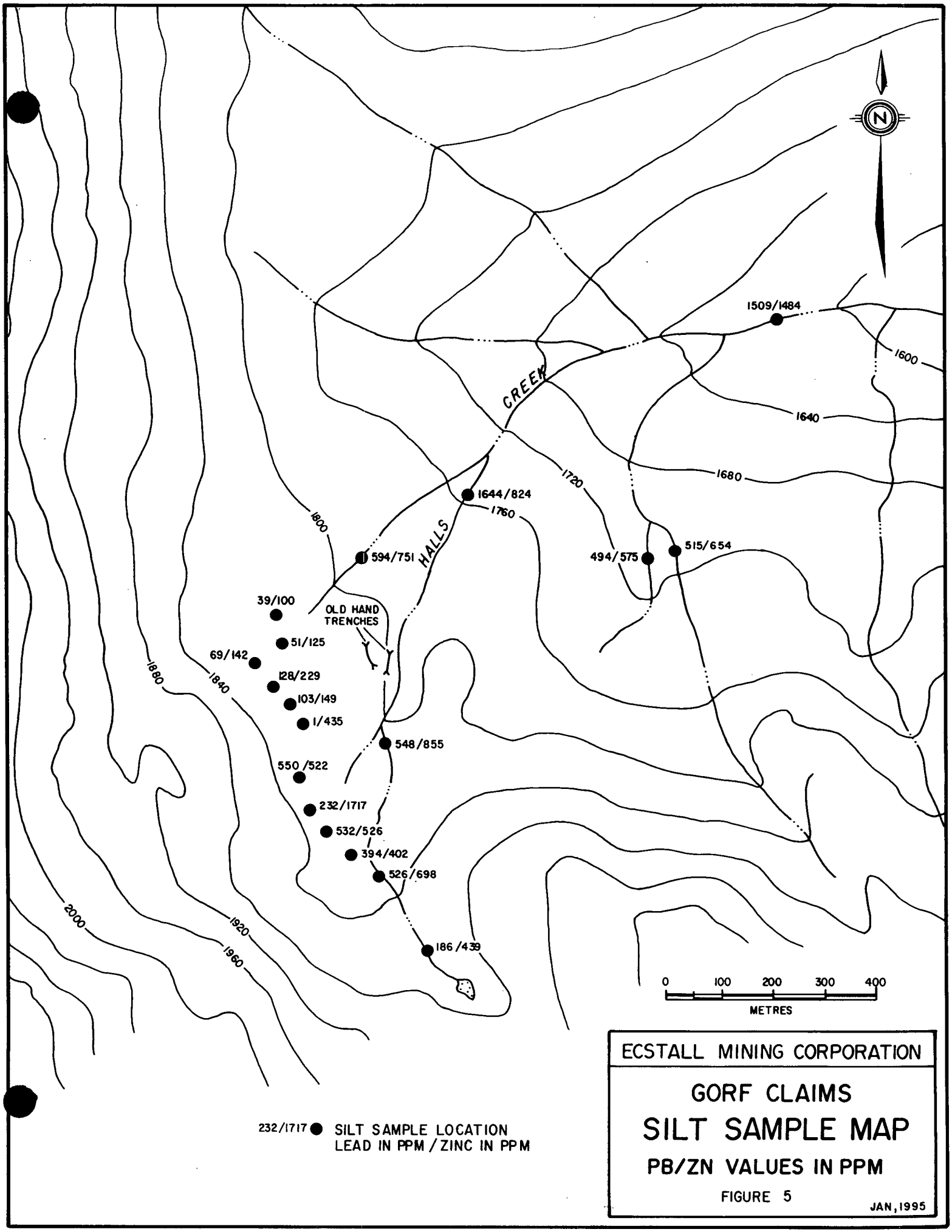
The metal contents in silt samples Frog 1-6 were considerably higher then those obtained from silt samples 8-12 indicating that a potential source area for the mineralized float and/or new mineralized areas lies to the southwest rather than west.

Silt sample Frog 13 was taken from the main stream draining the high cirque above the northwest side of the mineralized float area. The tributaries sampled as Frog 8-12 all are above and drain into this stream. The position of sample Frog 13 is roughly due north and down the valley 200 m below the mineralized float boulders and could have been contaminated from that source area. This sample contained anomalous lead (594 ppm), zinc (751 ppm), manganese (>10,000 ppm), iron (8.3%), copper (99 ppm) and bismuth (21 ppm).

Silt sample Frog 14 was taken from Hall's Creek 50 m upstream, above the area underlain by the mineralized float boulders. It was anomalous in lead (548 ppm), zinc (885 ppm), manganese (7207 ppm) and phosphorous (1340 ppm), again indicating a source of mineralization upstream to the southwest of the high grade float area.

Silt samples Frog 16 and Frog 17 were taken along a separate tributary of Hall's Creek than the one from which samples Frog 1-15 were taken. It drains a separate cirque 500 m east of the area containing the mineralized float boulders. These two samples were taken from 2 separate streams draining the eastern and western sides of the above cirque basin. They were both anomalous in lead (515 ppm) , zinc (654 ppm), manganese (9844 ppm), iron (4.79%) and phosphorous (1000 ppm). Samples Frog 16, 17 were taken down valley 100 m lower than the mineralized float area on Hall's Creek and could have been glacially contaminated from that source area or rather could indicate a separate new mineralized area.

Silt sample Frog 18 was taken from Hall's Creek over 1 km downstream of the mineralized float area. It was anomalous in lead (1509 ppm), zinc (1484 ppm), and manganese (8330 ppm). It also contained the highest gold content (50 ppb) obtained in any of the 18 silt samples.


N
1509/1484
1600
CREEK
1640
1680
1720
1644/824
1760
1800
HALLS
594/751
494/575
515/654
39/100
OLD HAND TRENCHES
51/125
69/142
128/229
103/149
1/435
1880
1840
548/855
550/522
232/1717
532/526
394/402
526/698
2000
1920
1960
186/439
0 100 200 300 400
METRES
232/1717 SILT SAMPLE LOCATION
LEAD IN PPM / ZINC IN PPM
ECSTALL MINING CORPORATION
GORF CLAIMS
SILT SAMPLE MAP
PB/ZN VALUES IN PPM
FIGURE 5
JAN, 1995

CONCLUSIONS AND RECOMMENDATIONS

Significant lead, zinc, silver, copper, manganese, mineralization is present on the Gorf property as massive sulfide boulders and frost-heaved blocks which coincide with a major gravity anomaly. The mineralized area occurs near the contact between Cretaceous granitic rocks and older metasedimentary rocks. This mineralization may correspond to a porphyry, greisen, manto-type (e.g. Midway) deposit or possibly a syngenetic deposit partly remobilized by intrusive effects related to the nearby quartz-monzonite/granodiorite stock.

Future work should focus on attempting to locate the source of the high grade felsenmere and clarifying the environment of mineralization through a program of detailed geological mapping including an alteration study. The exploration should also focus on the headwaters area of Hall's Creek southwest of the area of the massive sulfide float boulders, where anomalous stream silt samples were collected in 1994.

This work should be augmented by drilling a series of short holes perpendicular to Bruce Mawer's new interpretation of the orientation of the mineralized structures directly underlying the mineralized boulders. Depending upon results of the above, a relatively aggressive drilling program could be initiated. A major objective of the second stage follow-up work would be to drill test the previously identified gravity anomaly.

Anomalous results obtained from the stream silt samples (Frog 1-6 ,14) indicate that further exploration work be directed towards the higher elevations southwest of the mineralized float area previously focused on by earlier exploration companies. Prospecting this area may locate in situ mineralization which could be a new separate zone or the source for the mineralized float.

Lower silt sample results obtained from the area west of the mineralized float (Frog 7-12) indicate that this area is not their likely source and therefore not a priority for further work.

Anomalous results obtained in samples Frog 16, 17, may indicate a new area of mineralization occurrs in the separate cirque east of Hall's Creek. Because of topography this area could not be the source for the mineralized float boulders, however conversely the two silt samples could have been glacially contaminated from the mineralized float boulders area.

There are considerable rusty zones of hydrothermal alteration and bleaching on the south and west portions of the property. These together with the mineralized float boulders and anomalous silt sample geochem results are evidence that a major mineralizing event has occurred. The property should be geologically mapped in detail, particularly along the intrusive contact and alteration zones to better outline and interpret the geological setting/exploration model, its dimensions and economic potential.

The exploration targets, conclusions and recommendations made in the reference list of assessment reports by previous explorationists indicating a local in situ source for the mineralized float boulders should be followed up by further work as well.

Despite the extensive alteration associated with the quartz monzonite/granodiorite intrusion and the presence of chalcopyrite in the float boulders, the low copper values obtained in the silt samples do not support the potential for discovering a porphyry copper deposit.

REFERENCES

Ashton A. S. 1962. Report on EM Gun Electromagnetic Survey on the West Group of Claims Frog River B.C. Assessment Report No. 467.

Bell, R. a. 1970. Report on the Induced Polarization and Resistivity Survey on the Linda Project, Frog River Area B.C. Assessment Report No. 2995.

Burns, P. J. 1987. Geological and Geophysical report on the West 1 Claim. B.C. Assessment Report No. 16,898.

Gabrielse, H. 1962. G.S.C. Map 42 - 1962.

Jackisch, Ingo October, 1980. Geophysical Surveys on the West Group, Frog River Property. B.C. Assessment Report No. 8,549.

Leighton, D. G. 1990. Prospecting Report on the Jackstone 1-5 Claims (Frog Group) B.C. Assessment Report No. 20517.

Scott, A. R. 1979. Geophysical Survey (Gravity) on the West Group, Frog River Property B.C. Assessment Report No. 7523.

Reeve, A. F. March, 1970. Geological and Geochemical Report on the Linda Claim Group. B.C. Assessment Report No. 2336.

APPENDIX 1

GEOCHEMICAL ANALYSIS RESULTS/SAMPLE DESCRIPTION NOTES

COMP: ECSTALL
PROJ: FROG
ATTN: C.GRAFF

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
TEL:(604)980-5814 FAX:(604)980-9621

FILE NO: 4V-0922-SJ1
DATE: 94/09/07
* soil * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI %	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	Au-Fire PPB
FROG-01	.1	.89	1	1	69	4.0	7	.26	2.3	4	18	2.61	.23	19	.29	6149	16	.01	29	1650	186	18	120	4	.01	15.1	439	1	1	4	4	10
FROG-02	.1	.75	1	1	60	5.0	8	.25	4.8	3	18	2.29	.21	15	.25	7470	8	.01	33	1410	526	15	92	3	.01	12.5	698	1	1	4	3	9
FROG-03	.1	.94	1	1	58	4.8	7	.38	2.0	6	28	2.71	.22	32	.47	3670	12	.01	27	1450	394	20	104	6	.01	17.4	402	1	1	7	9	5
FROG-04	.1	.80	1	1	58	3.6	7	.26	.1	8	32	3.21	.21	31	.60	5039	8	.01	40	950	532	17	80	10	.01	19.0	526	1	2	5	15	3
FROG-05	.1	3.88	1	1	42	30.8	16	.20	31.8	12	228	2.34	.11	85	.18	>10000	75	.01	448	3240	232	75	155	16	.01	12.0	1717	1	2	12	19	19
FROG-06	.1	.79	1	1	62	3.3	8	.27	.6	8	40	3.36	.21	31	.57	6804	8	.01	48	890	550	16	77	9	.01	18.9	522	1	2	4	13	4
FROG-07	.1	.30	1	30	21	3.2	1	.01	.1	18	19	>15.00	.05	2	.03	1023	1	.01	87	740	1	1	12	1	.03	10.9	435	1	9	1	1	2
FROG-08	1.0	1.01	1	1	62	3.8	8	.12	.1	7	66	4.51	.34	51	.72	534	9	.01	39	880	103	24	57	6	.03	29.4	149	4	2	6	30	14
FROG-09	.1	.51	1	1	42	5.2	5	.09	.1	10	69	5.22	.21	27	.36	1150	11	.01	51	840	128	11	42	15	.01	22.6	229	1	2	4	20	3
FROG-10	.1	.67	1	1	23	2.4	5	.19	.1	14	62	5.15	.07	44	.77	2056	5	.01	67	780	69	9	42	17	.01	17.3	142	1	2	3	24	2
FROG-11	.1	.91	1	1	16	1.7	5	.18	.1	13	39	4.45	.04	67	1.06	583	4	.01	57	600	39	15	49	16	.01	19.3	100	4	2	4	30	6
FROG-12	.1	.49	1	1	22	1.9	3	.49	.1	9	32	3.72	.10	32	.57	691	2	.01	41	770	51	8	63	12	.01	12.6	125	1	1	2	16	4
FROG-13	.1	.87	1	1	80	7.9	21	.12	4.2	66	99	8.30	.14	36	.46	>10000	7	.01	216	800	594	16	54	5	.02	25.3	751	1	4	6	7	7
FROG-14	.1	.71	1	1	64	4.8	8	.25	2.7	9	54	3.07	.17	26	.37	7207	12	.01	48	1340	548	15	82	7	.01	17.3	855	1	2	5	9	14
FROG-15	.1	.61	1	1	42	4.3	7	.26	3.7	6	51	2.51	.15	20	.30	6118	9	.01	35	1180	1644	15	66	8	.01	14.2	824	1	1	5	7	4
FROG-16	.1	.72	1	1	22	2.6	9	.18	4.6	2	52	1.87	.11	10	.27	8196	11	.01	34	1780	494	14	46	1	.01	9.0	575	1	1	3	9	3
FROG-17	.1	.71	1	1	34	3.1	9	.04	2.4	9	57	4.79	.18	22	.30	9844	8	.01	60	1000	515	16	46	6	.01	23.8	654	1	3	5	15	15
FROG-18	.1	.62	1	1	39	4.7	10	.24	4.2	9	57	3.57	.12	29	.47	8330	7	.01	66	980	1509	15	59	10	.01	15.9	1484	1	2	5	13	50

MINERAL
•ENVIRONMENTS
LABORATORIES
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

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FAX (604) 847-3005

Geochemical Analysis Certificate

4V-0922-SG1

Company: **ECSTALL**
Project: FROG
Attn: C. Graff

Date: JAN-24-95
Copy 1. Ecstall Mining, Vancouver, B.C.

We hereby certify the following Geochemical Analysis of 18 soil samples submitted MMM-DD-YY by C. Graff.

Sample Number	Ag PPM
FROG-01	1.7
FROG-02	2.2
FROG-03	2.1
FROG-04	1.9
FROG-05	4.2
FROG-06	1.3
FROG-07	<.1
FROG-08	1.9
FROG-09	.8
FROG-10	.6
FROG-11	.2
FROG-12	.5
FROG-13	.9
FROG-14	2.2
FROG-15	4.5
FROG-16	5.7
FROG-17	1.0
FROG-18	3.9

Certified by _____

MIN-EN LABORATORIES

FROG SILT SAMPLES

SAMPLE NO.S	DESCRIPTION AND LOCATION
#1	-from upper part of creek SW of trenches above the swampy area.
#2	-below #1 but above swampy area sample taken from SE fork.
#3	-beside #2 but from SW fork.
#4	west side of swampy area by snow patch.
#5	-70 m below #4 west side of swampy area.
#6	-70 m north of #5 west side of swampy area.
#7	-from ferricite cemented gossan west of trenches at base of mountain.
#8	-70 m north of #7 in creek draining the high cirque west of the trenches.
#9	-100 m north of #8.
#10	-100 m north of #9 from drainage flowing NE.
#11	-from large creek draining high basin NW of trenches approx. 150 m north of #10.
#12	-100 m south of #11 100 m downstream of #10.
#13	-main stream draining northwest side of ridge with the trenches on tap.
#14	-stream draining swampy area along NE side of the ridge with trenches approx. 70 m upstream of last trench (southernmost trench).
#15	-in main creek approx. 200 m below trenches just above where the creek drops off steep.
#16	-in main bowl below and east to the knob with the drIl core racks (helicopter landing spot) sample taken from western tributary.
#17	- same area as #16 but from the eastern/main tributary.
#18	-by my new LCP claim post for Gorf 3 claim in main area drained from NW below the trenches, intrusive rocks here in Hall's Creek are manganese stained.

STATEMENT OF EXPENDITURES

GORF

CAMP	$100.
COPIES OF REFERENCE ASSESSMENT REPORTS	63.
HELICOPTER (1 HOUR & FUEL & OIL)	670.
FIELDWORK 1 DAY @ $500	500.
GEOCHEMICAL ANALYSIS 18 SAMPLES	200.
REPORT PREPARATION 2 DAYS @ $500	1000.
TOTAL EXPENDITURES	**$2533.**

STATEMENT OF QUALIFICATIONS

I, Chris Graf, of #307-475 Howe Street, Vancouver, British Columbia, Canada, hereby certify that:

1. I graduated with a B.A. Sc. (Geological Engineering) from the university of British Columbia.

2. I am a registered member of the Association of professional Engineers of British Columbia, and have been since 1980.

3. I have been practising my geological engineering profession since 1974.

Signed in Vancouver, British Columbia, on the 27th day of January, 1995.

Chris Graf, B.A.Sc.,P.Eng.