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PHASE II SUMMARY REPORT

1987 KLIYUL CREEK GOLD PROJECT

SOUP CLAIMS

JOHANSON LAKE AREA, B. C.

i e
Omenica Mining Division
N.T.S. 94D/8

Latitude 56°28'N, Longitude 126°03'W 4'24"
20"

by

REBAGLIATI GEOLOGICAL CONSULTING LTD.

Owner(s): Lemming Resources Ltd.
Vital Pacific Resources Ltd.
Vital Resources Ltd.

C.M. Rebagliati, P. Eng.

November 30, 1987

16,655

GEOLOGICAL BRANCH
ASSESSMENT REPORT

FILMED

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SUMMARY

In August and September, 1987, a program of magnetometer surveying and prospecting was undertaken on the SOUP property skarn zones to explore for gold-copper mineralization. A total of 18.51 km of magnetic surveying were completed and 29 rock samples were collected and analysed.

The surveys identified a minimum strike length for the main skarn zone of 1300 m, and identified a possible repetition of the zone 750 m farther south.

A potentially important new discordant skarn was discovered by the magnetic survey, which was confirmed by subsequent prospecting and rock chip sampling. A composite chip sample across 50 m of rubble from this auriferous skarn graded 0.28 oz/ton gold and 0.43% copper.

The combination magnetic surveying and prospecting has proven to be a successful exploration technique for tracing the auriferous skarns.

A continued program of magnetic surveying, prospecting, geological mapping and sampling is proposed in conjunction with a program of diamond drilling of the presently identified auriferous skarn and cross-cutting silicified fault zones. These programs are budgeted at \$ 50,000.00 and \$ 375,000.00 respectively.

INTRODUCTION

In July, 1987, Rebagliati Geological Consulting Ltd. was commissioned by F. Mueller, President of Lemming Resources Ltd. to implement the Phase II exploration program on the Company's SOUP gold property situated at Kliyul Creek, in the Johanson Lake region of north central British Columbia.

This report describes the Phase II exploration program conducted on the SOUP claims in August-September, 1987.

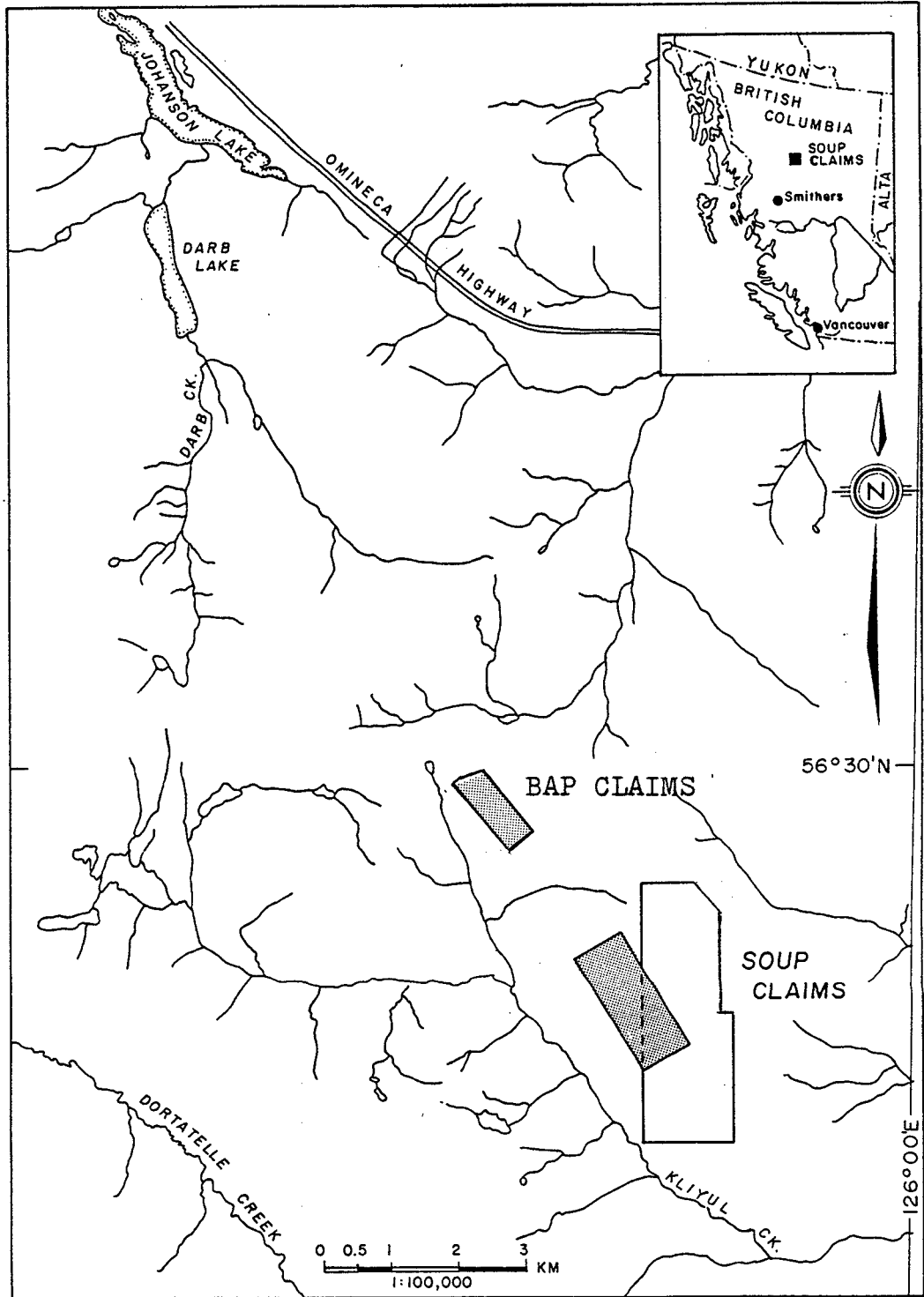
LOCATION AND ACCESS

The claims are located at 56°28' north latitude and 126°03' longitude in the Omineca Mining Division approximately 200 km north-northeast of Smithers and 15 km southeast of Johanson Lake (NTS 94D/8, Figure 1).

Access to the property is by helicopter from Johanson Lake, a distance of 15 km, which in turn is reached from Fort St. James (400 km) or via Highway 97 from Prince George (500 km). The Dease Lake extension of the British Columbia Railway is operational between Prince George and Driftwood, 65 km southwest of Johanson Lake. Road access could readily be constructed along the Kliyul Creek Valley to the base of the SOUP claims from the Omineca Highway.

The SOUP claim group is situated east of Kliyul Creek above treeline on a 30° to 35° southwest-facing slope on which elevations range from 1,300 to 2,300 metres. Ubiquitous talus, partially covered by alpine grasses and shrubs, obscures much of the bedrock. A steep-walled cirque and a talus glacier bisect the claim block.

LOCATION MAP



LEMMING RESOURCES LTD.
KLIYUL CREEK GOLD PROJECT

FIG. 1

CLAIMS

The SOUP claim block is held under option by the Company.

The following information for the SOUP claims was obtained from Government and Company records. The writer has not made a field examination of all the claim posts and can pass no opinion on the manner of staking, nor can he verify the position of the claims as depicted on Figure 2. Essential claim data is listed as follows:

Vital Pacific REsources Ltd. Option

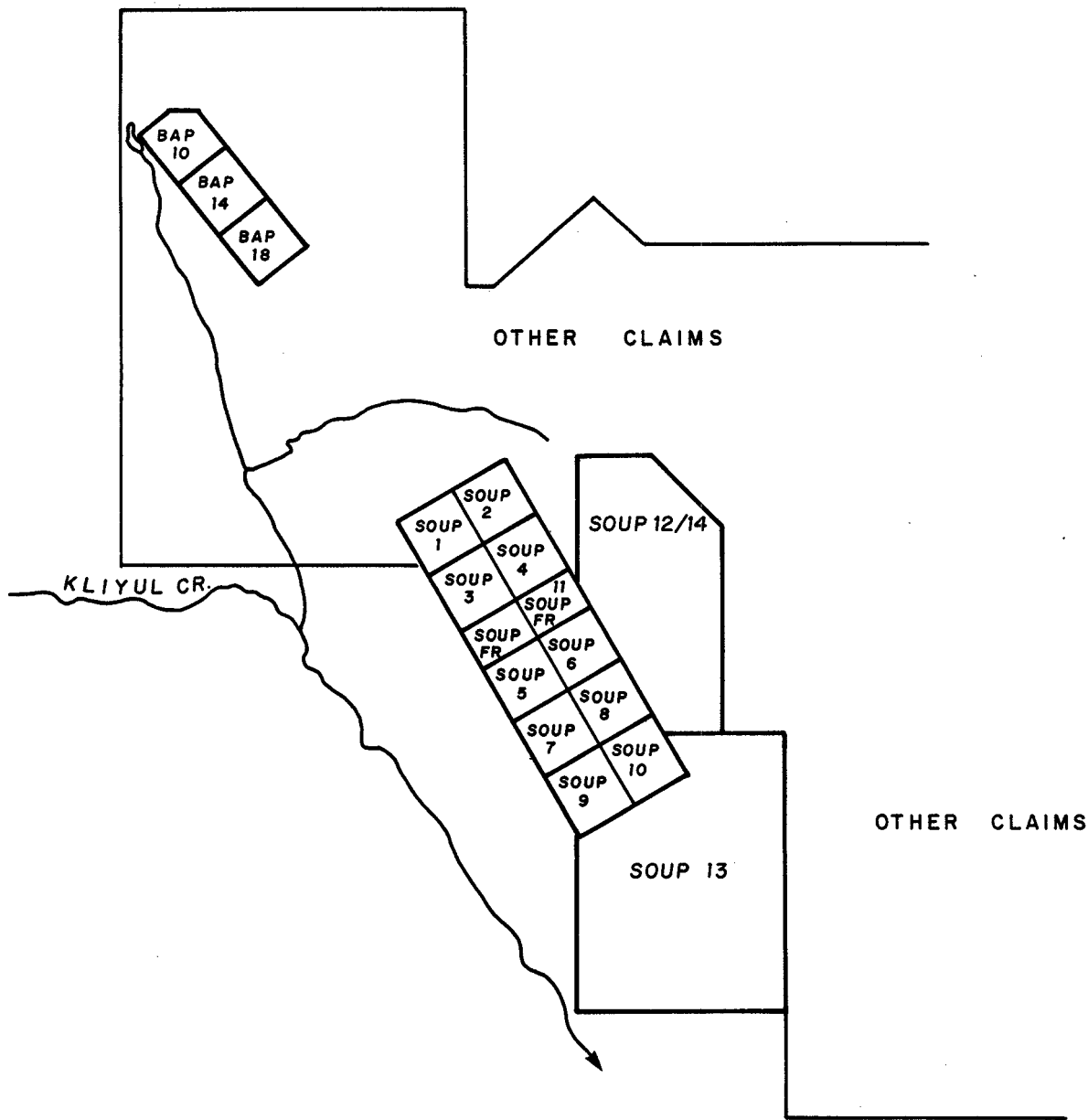
<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Recording Date</u>	<u>Expiry Date</u>
SOUP 1	26941	1	August 7, 1964	August 7, 1994
SOUP 2	26942	1	August 7, 1964	August 7, 1994
SOUP 3	26943	1	August 7, 1964	August 6, 1994
SOUP 4	26944	1	August 7, 1964	August 7, 1994
SOUP 5	26945	.1	August 7, 1964	August 7, 1994
SOUP 6	26946	1	August 7, 1964	August 7, 1994
SOUP 7	26947	1	August 7, 1964,	August 7, 1994
SOUP 8	26948	1	August 7, 1964	August 7, 1994
SOUP 9	26949	1	August 7, 1964	August 7, 1994
SOUP 10	26950	1	August 7, 1964	August 7, 1994
SOUP 11FR	4206	1	August 15, 1981	August 15, 1994
SOUP 12	5805	12	October 5, 1983	October 5, 1994
SOUP 13	5806	12	October 5, 1983	October 5, 1994
SOUP 14	6491	12	August 13, 1984	August 13, 1994

Lemming Resources Ltd.

<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Recording Date</u>	<u>Expiry Date</u>
SOUPFR	7735	1	August 1, 1986	August 1, 1993

EXPLORATION HISTORY

Exploration on the SOUP claims has been conducted intermittently since 1947 by several companies. This work resulted in the discovery of auriferous magnetite zones on the SOUP claims. A more complete documentation of past exploration is provided in a report by the writer dated July 10, 1986.



LEMMING RESOURCES LTD.
CLAIM MAP
BAP & SOUP PROPERTIES
KLIYUL CREEK GOLD PROJECT

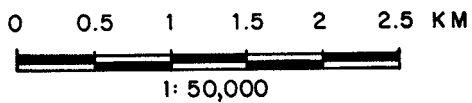


Figure 2

The 1987 program was directed towards extending the gold-bearing skarn prospects on the SOUP claims by expanding the area of magnetometer surveying.

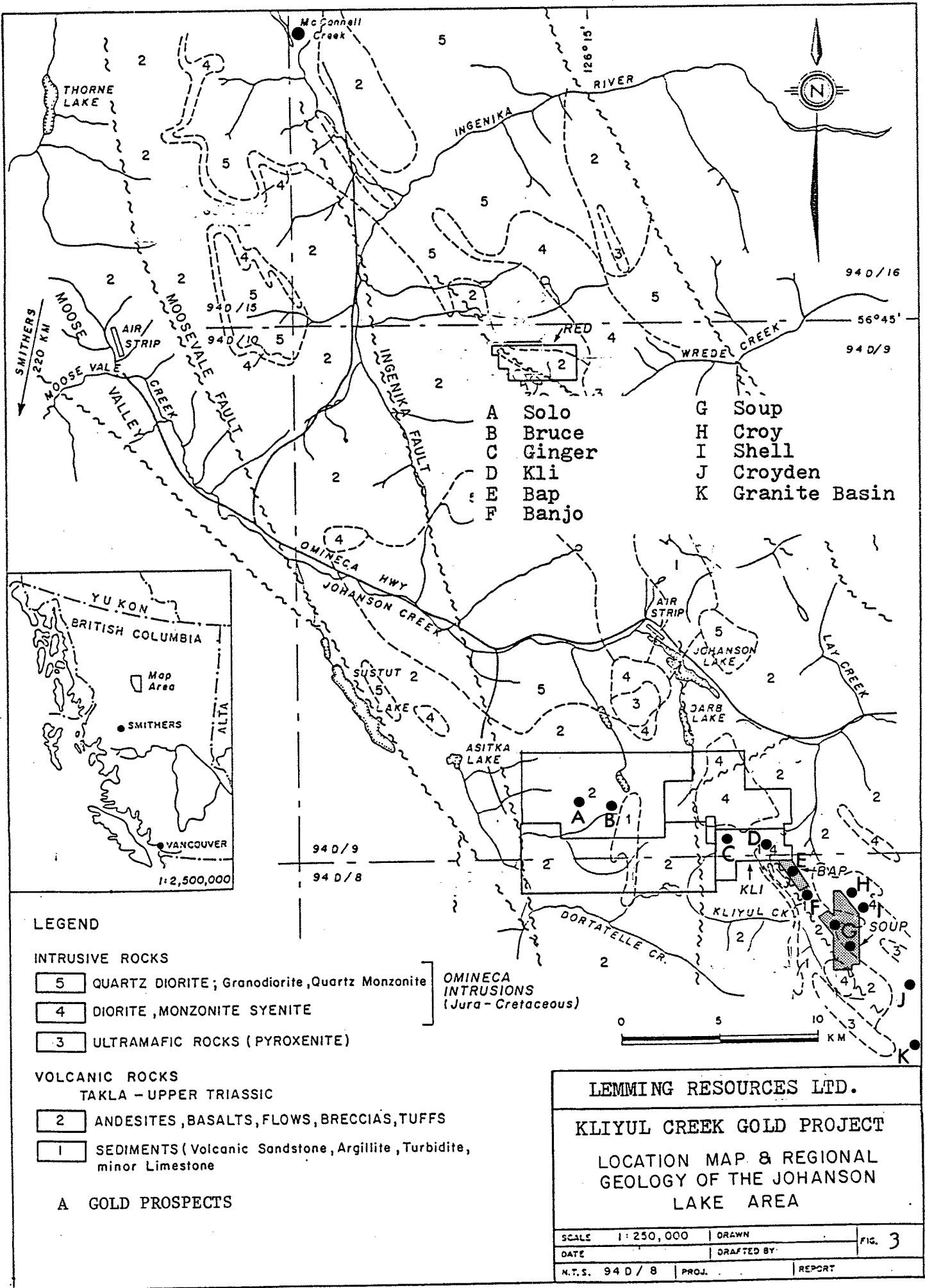
REGIONAL GEOLOGICAL SETTING

The Kliyul Creek area lies in the northern extension of the Quesnel Trough, within the Intermontane Belt of the Canadian Cordillera. The Quesnel Trough forms a 30 to 60 km wide north-westerly-trending assemblage of volcanic and sedimentary rocks of Upper Triassic to Lower Jurassic age Takla Group rocks whose equivalents extend from the U.S. border to north of the Stikine River (Richards 1976, Monger 1977).

The Takla Group is bordered on the east by late Paleozoic (Penn.-Perm.) metasedimentary and metavolcanic rocks of the Lay Range Assemblage (Omineca Geanticline) and on the west by Lower to Middle Jurassic rocks of the Hazelton Group (Pinchi Geanticline). The Takla volcanic rocks are an association of island-arc type calc-alkaline to alkaline flows and volcanoclastic rocks of predominantly submarine origin. The extrusive rocks are interlayered with volcanogenic sandstone, siltstone, conglomerate, argillite, laminated limestone and limestone breccia (Fig.3).

The Takla stratigraphy is intruded by granitic to intermediate plutons of Jura-Cretaceous age which are satellitic to the Hogem Batholith. Small ultramafic bodies present in the region may be related to deep-seated faulting, while some high level subvolcanic intrusions are part of the Takla sequence.

Much of the region is dissected by north and northwest-trending branches of the Ingenika-Pinchi, Dortatelle and Lay

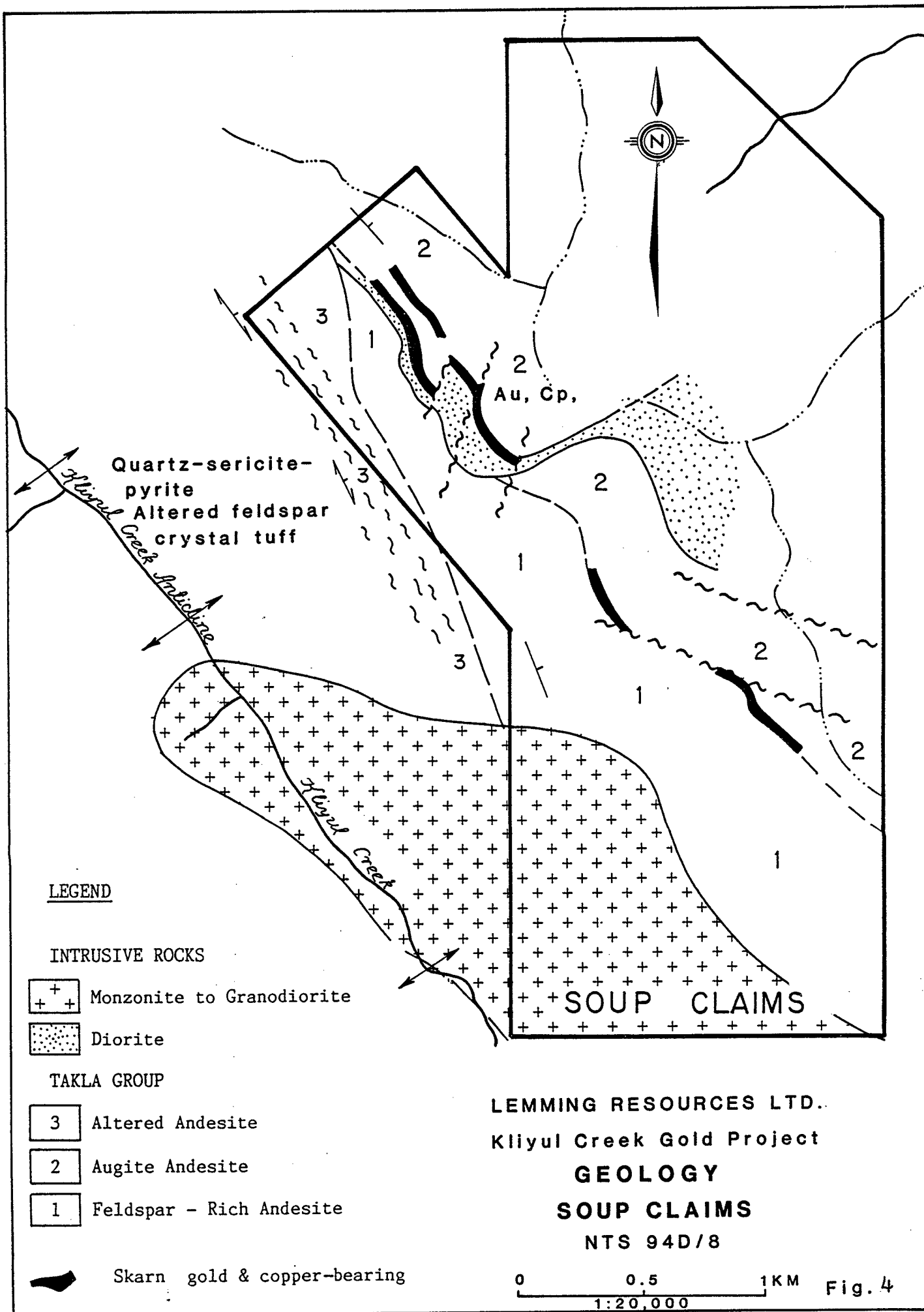


Range fault systems. The northwest-trending Kliyul Fault is marked by a broad zone of shearing and schistose rocks which are exposed along the southwest side of the SOUP claims.

PROPERTY GEOLOGY

The SOUP claims are underlain largely by volcanic rocks of the Upper Triassic Takla Group. These have been intruded by diorite stocks, sills and dykes, microdiorite and feldspar porphyry dykes and by quartz monzonitic batholithic rocks. (Fig.4) A few narrow dykes of augite porphyry and mica lamprophyre also occur. Volcanic units strike north-northwesterly and dip moderately eastward and are offset by northwesterly and north to northeasterly-striking faults. Magnetite-rich, gold-copper-bearing skarn beds appear to lie parallel to the volcanic layering and are traceable for over 2,000 metres.

The stratigraphically lowest exposed rocks are grey to greenish feldspar-rich andesitic lavas. These andesites grade upward into, and at first interfinger with, beds of andesitic to basaltic augite porphyry flows and flow breccias. Both the andesite and the augite porphyry flows are intruded by augite porphyry feeder dykes. Recessive, thin calcareous andesitic tuff units, indicative of a period of sedimentation, lie at the base of the augite-bearing units. On the west side of Kliyul Creek, these units correlate with west-dipping, thick beds of pyritic ash tuff, interlayered calcareous tuffs, gritty limestone and argillite which occupy the same stratigraphic position between the feldspathic andesite and the augite porphyries. The opposing dips suggest that Kliyul Creek occupies an anticlinal valley.



LEGEND

INTRUSIVE ROCKS

- + + Monzonite to Granodiorite
- Diorite

TAKLA GROUP

- 3 Altered Andesite
- 2 Augite Andesite
- 1 Feldspar - Rich Andesite

Skarn gold & copper-bearing

LEMMING RESOURCES LTD.
Kliiyul Creek Gold Project
GEOLOGY
SOUP CLAIMS
NTS 94D/8

0 0.5 1KM
 1:20,000

Fig. 4

GOLD-COPPER MAGNETITE OCCURRENCES

Massive conformable lenses (or beds) of magnetite-rich skarn occurring near the base of the augite porphyry contain appreciable gold and copper. At least three parallel skarn horizons are recognized, possibly replacing calcareous tuffs. Similar-looking mineralization is present in quartz-magnetite veins occurring along cross-cutting faults which offset the skarn units. The skarn occurs in a series of intermittently exposed concordant lenses 1 to 5 metres thick, each up to several hundred metres long. Magnetite, ranging from 60 to 100%, is concentrated near the top of the horizon. Peripheral zones of disseminated magnetite 5 to 20 metres thick underlie most massive horizons and contain minor pyrite and chalcopyrite. Lenses of massive pyrite also occur within or adjacent to the zones of disseminated magnetite. Outcrops of skarn tend to be highly oxidized, forming orange-brown stain zones, and are characterized by epidote, actinolite and fine-grained garnet. Only minor calc-silicate alteration, typical of many skarn deposits, is present on the SOUP claims. The quartz-magnetite veins and replacement bodies occupy subsidiary faults and shear zones branching from or parallel to the main Saddle Gully Fault. These auriferous veins have only been observed to occur near the magnetite-bearing skarn units.

MAGNETOMETER SURVEY

Talus obscures much of the outcrop in the vicinity of the auriferous skarn and vein occurrences. A magnetometer survey was conducted to trace the magnetite-bearing skarn units and veins to the west and east of the area covered by the 1986 survey. A picketed base line, totalling 2.2 km, was established for control. Cross lines were placed at 25 m intervals and magnetometer

measurements were recorded at 10 km intervals along 16.31 km of lines. All readings were corrected for diurnal variation.

Three skarn horizons were identified (Figure 5) (Sheets 1, 2 and 3). Each is marked by a series of deep linear magnetic troughs and/or peaks. The upper, or main, skarn horizon is also marked by a discontinuous series of magnetic highs. The folded appearance of the magnetic trends is attributed to topographic effects on the surface trace of the gently to moderately east-dipping skarn and is further accentuated by faulting.

The main magnetite skarn zone is traced for 950 m along the 49+25E base line from 47+00N to 56+50N by a discontinuous series of sinuous magnetic highs and lows. The zone is open along strike to the northwest, but terminates to the southeast at 46+75N. Southeast of the rock glacier, which extends from 44+50N to 40+00N, the main zone reappears at 39+25N and is open for extension to the southeast.

At 51+50N, a discordant magnetic feature trends northerly, merging with the main zone at 54+50N. Skarn outcrop and rubble is mapped along the trace of this 300 m long zone.

The skarn at 48+00N on line 46+50N was not traced to the north or south by the survey even though, by prospecting, it can be traced by its boulder train. Apparently this lower skarn horizon is only occasionally magnetite-bearing.

ROCK SAMPLING

As the magnetometer survey was being conducted, the outcrop and talus rubble locations of skarn alteration and mineralization were noted for later examination. No attempt was made to pros-

pect the entire survey area, nor to trace the skarn along the magnetic trends. Undoubtedly, a more intensive prospecting and geological mapping and sampling program would locate and extend more of the mineralized skarn zones. Sample locations are plotted on Figure 5. Sample descriptions and analyses are contained in Appendix I.

On line 52+00N at 48+05E, sample 87-M-108 of skarn-magnetite talus rubble assayed 9760 ppb gold (0.28 oz/t) and 0.43% copper, indicating that at least part of the newly-identified discordant skarn is well mineralized. The reported 50 m width of the skarn rubble train indicates the mineralized zone may have a substantial thickness. Sample 87-M-109, located on line 52+25N, 100 m north of sample 87-M-108, is also significantly mineralized with 1020 ppb gold.

The presence of skarn rubble near 60+00N, 51+25E, a distance of 350 m grid north of the limit of the magnetometer survey, indicates that the auriferous skarn extends well beyond the surveyed area. Samples 87-D-216 and 87-D-217 from this skarn locality are geochemically enriched, carrying 290 ppb and 740 ppb gold respectively.

Sample 87-D-209, at 52+25N, 49+70E, situated along the main skarn zone, carries a geochemically significant 1130 ppb gold and 1776 ppm copper.

At the south end of the magnetometer grid, where the main skarn zone reappears from under the rock glacier, a sample (87-D-218) of the mineralized skarn graded 1680 ppb gold and 9071 ppm copper, further substantiating that the mineralized skarns on the SOUP claims are extensive. Similarly, skarn sample 87-D-202,

located at approximately 38+00N, 52+00E, in an area not previously explored, carried 2450 ppb gold.

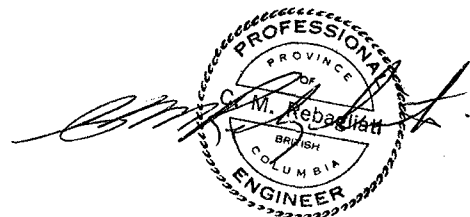
CONCLUSIONS

The main skarn zone trending along the base line is extensive and has been traced by a combination of prospecting and magnetometer surveying for 1300 m. Approximately 750 m grid south of the southern termination of the main skarn zone an apparent continuation of the zone reappears just beyond the edge of the rock glacier. Prospecting undertaken in 1984 indicates that this zone extends for several hundred metres to the south. The mineralized sample 87-D-202 indicates that, with thorough prospecting, more auriferous skarns can be located.

The discordant skarn at sample location 87-M-108 on line 52+00N may be a fault-controlled splay off the main zone. Previous exploration and sampling has shown that some of the better grades are found where cross-cutting mineralized structures cut the skarn units.

Continued exploration of the property is warranted and a program of prospecting, geological mapping and magnetometer surveying along the trends of the mineralized zones is proposed. Diamond drilling of the currently identified gold-bearing skarn and vein occurrences is also recommended.

Stringent cost controls, a hardworking, well-trained crew, favourable weather conditions and the availability of a helicopter from the Moose Valley gravel airstrip contributed to the successful completion of the Phase III exploration program for less than originally budgeted.



RECOMMENDATIONS

A two-part exploration program is recommended. Part A will further define the presently known auriferous skarns and explore for extensions and new zones. Part B will involve diamond drill testing of the better mineralized areas of the presently known auriferous skarns and cross-cutting silicified structures.

Phase III

Part A:

1. Extend the magnetometer grid to the northwestern and southeastern boundaries of the claims to define the full extent of the magnetite-bearing skarns and to identify new skarn horizons.
2. Thoroughly prospect, geologically map and sample along the magnetic trace of the auriferous skarns.

Part B:

3. Utilizing a lightweight, helicopter-portable diamond drill, drill the most highly-mineralized segments of the skarn units and the silicified cross-structures. The steep terrain will necessitate the drilling of a fan of two or more holes at each drill site. Some drilling and blasting will be required to prepare the drill sites.

This drilling program should be scheduled for late June to utilize snow melt waters for the drilling.

STATEMENT OF COSTS

Rebagliati Geological Consulting Ltd.

Professional Services

July 14 - 31, 1987

1.39 Days @ \$450.00/day \$ 625.50

Aug. 16 - Nov. 30, 1987

11.61 days @ \$450.00/day 5,224.50

Canadian Airlines International 386.40

Fixed Wing Aircraft-Northern Mountain Air 826.00

Northern Mountain Helicopters 2,524.20

Car Rental Rate and mileage - 2 days 105.74

Truck Rental - including operating costs 1,120.00

Magnetometer Rental 1,985.01

Acme Laboratories - Assays 382.00

Report Reproduction and publication 137.61

Field expenses 145.51 \$ 13,462.47

Amex Exploration Services Ltd.

Magnetometer survey:

J. Leonard Aug.19-Sept.3

16 days @ \$140.80 \$ 2,252.80

M.Mankowske Aug.19-Sept.3

16 days @ \$179.20 2,867.20

D. Delisle Aug.19-Sept.9

21 days @ \$173.71 3,648.00

A. Ablett Sept. 6 - 9

4 days @ \$179.20 716.80

Field Expenses, Amex 6,888.45 \$ 16,373.25TOTAL COSTS \$ 29,835.72

CERTIFICATE OF QUALIFICATIONS

I, Clarence Mark Rebagliati, of 3536 West 15th Avenue, Vancouver, B. C., hereby certify that:

1. I am a consulting Geological Engineer with offices at 3536 West 15th Avenue, Vancouver, B. C.
2. I am a graduate of the Provincial Institute of Mining, Haileybury, Ontario (Mining Technology, 1966).
3. I am a graduate of the Michigan Technological University, Houghton, Michigan, U.S.A., (B.Sc., Geological Engineering, 1969).
4. I am a member in good standing of the Association of Professional Engineers of British Columbia.
5. I have practiced my profession continuously since graduation.
6. The foregoing report is based on:
 - a) A study of all available company and government reports.
 - b) My personal knowledge of the general area resulting from regional studies and from examinations of the property made while supervising the 1984, 1986 and 1987 work programs.
7. I have not directly or indirectly received nor do I expect to receive any interest, direct or indirect, in the property of Lemming Resources Ltd., or any affiliate, or beneficially own, directly or indirectly, any securities of Lemming Resources Ltd., or any affiliate.
8. I consent to the inclusion of this report in a Statement of Material Facts.


C. M. Rebagliati, P. Eng.
November 20, 1987

APPENDIX I

ROCK CHIP SAMPLE DESCRIPTIONS

AND ANALYSES

ROCK CHIP SAMPLE DESCRIPTIONS

<u>Sample No.</u>	<u>Location</u>	<u>Description</u>
Sampler M = Milton Mankowske		
87-M-100	57+60N 49+16E	Quartz vein, minor pyrite, apparent strike 280°, Dip 45°N.
87-M-102	60+00N 44+25E	Massive pyrite
87-M-103	56+20N 49+25E	Rubble sample, minor magnetite with pyrite
87-M-104	55+95N 49+30E	Magnetite with pyrite, Outcrop 10 m.
87-M-105	55+40N 49+15E	Magnetite
87-M-106	54+30N 49+25E	Massive Magnetite
87-M-107	53+50N 51+00E	Quartz, hematite and minor pyrite.
87-M-108	52+00N 48+05E	Skarn-rubble, 50 m wide, malachite, azurite, limonite.
87-M-109	52+28N 48+32E	Massive magnetite float.
Sampler D = Denis Delisle		
87-D-201	38+35N 52+18E	Skarn?-calcite, hematite, apparent strike 330°, dip 90°, 8m x 30m.
87-D-202	38+55N 52+93E	Skarn?-pyrite, calcite, apparent strike 200°, Dip 35°E/2m x 4m.
87-D-203	41+30N 49+25E	Float - calcite, quartz, stibnite, malachite, chalcopyrite.
87-D-204	53+25N 49+50E	Magnetite, rust stain, epidote, Apparent strike 350°, Dip 85°N. 25m x 10m
87-D-205	53N 49+85E	Magnetite, rust stain, seems to connect with 87-D-204, 10m.

ROCK CHIP SAMPLE DESCRIPTIONS (Cont'd)

<u>Sample No.</u>	<u>Location</u>	<u>Description</u>
87-D-206	53N 49+55E	Magnetite, rust iron stain, also seems to be part of 87-D-204. Some quartz veins, in an intrusive. Apparent strike 134°, Dip 75°W.
87-D-207	52+65N	Magnetite, oxidized iron staining, limonite, extends to 52+75N, Strike + Dip.
87-D-208	52+60N 49+35E	Breccia, weakly cemented together, oxidized heavily. 3m x 4m.
87-D-209	52+25N 49+40E	Magnetite - column - 2m x 1m.
87-D-210	53N	5" quartz vein, with some calcite and pyrite in an intrusive. Apparent strike 22°, Dip 85°W.
87-D-211	53+25N	Breccia - running with intrusives towards breccia of sample 87-D-208. Apparent strike 40°, Dip 45°N - some pyrite. Cemented together more solidly. 1m x 4m.
87-D-212	53+05N 40+00E	Oxidized pyrite, magnetite, layered alternately, 10m x 4m, Apparent strike 340°, Dip 82°W.
87-D-212-A	53+05N 40+00E	Ending into a 5 cm wide vein of gouge. Reddish in colour, with a strike 30°, Dip 84°NW. On the southeast side of the gouge is a quartz, diorite, porphyry with magnetite, calcite and some oxidation staining of iron. Seems to run parallel with surrounding intrusives.
87-D-213	54+56N 49+02E	Massive magnetite, apparent strike 350°, Dip 70°NW, 2m wide, runs up to 54+72N, 49+25E.
87-D-214	55+20N 50+09E	Weak quartz, rust staining, some azurite, malachite bordering the edge, 10cm wide, Strike 360° and folding.

ROCK CHIP SAMPLE DESCRIPTIONS (Cont'd)

<u>Sample No.</u>	<u>Location</u>	<u>Description</u>
87-D-215	55+00N 50+75E	Skarn?-calcite veinlets, malachite, pyrite, 2cm wide convoluted in an intrusive (diorite?).
87-D-216	60+65N 49+75E	Skarn? Chalcopyrite, hematite, malachite, quartz on float, a bit of it about, some calcite, this is on a ridge.
87-D-217	60+05N 49+80E	Magnetite, pyrite oxidized float, angular, quite a lot of it.
87-D-218	39+60N 48+55E	Malachite, massive magnetite in an intrusive (rhyolite, feldspar).
87-D-219	40+20N 48+70E	Massive magnetite, in an intrusive, apparent strike 180°, dip 85°NE. About 18m wide, runs towards Sample 87-D-218.

Note: All samples 87-D were collected by Denis Delisle. All samples 87-M were collected by Milton Mankowske.

GEOCHEMICAL ICF ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-ROCK P2-SOIL AU: ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 15 1987

DATE REPORT MAILED: *Sept 26/87*ASSAYER: *D. Jepsen*...DEAN TOYE, CERTIFIED B.C. ASSAYER

REBAGLIATI GEOLOGICAL

File # 87-4139

Page 1

SAMPLE#	ND PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	<i>Soap</i>		V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU# PPB
																SB PPM	BT PPM														
87-D-201	1	20	6	55	.3	17	16	1891	5.33	4	5	ND	1	126	1	2	2	29	17.52	.017	3	4	3.29	336	.01	2	.45	.01	.08	1	6
87-D-202	9	11	11	37	2.4	12	87	555	7.31	2	5	2	1	35	1	3	2	67	1.61	.092	2	8	1.57	27	.01	2	1.37	.06	.03	1	2450
87-D-203	3	1896	8684	2649	5.6	16	26	679	1.69	6	5	ND	1	53	84	9	2	27	2.65	.013	2	44	.57	19	.03	2	.52	.03	.04	2	230
87-D-204	8	991	15	34	.3	6	27	313	35.78	11	8	ND	3	19	1	2	2	59	.38	.063	2	20	.08	8	.09	2	.55	.02	.02	7	138
87-D-205	8	440	31	36	.3	3	10	429	33.05	18	8	ND	3	31	1	2	2	73	1.00	.048	2	28	.08	8	.07	2	.47	.03	.02	8	210
87-D-206	20	1019	18	32	.2	9	53	697	29.53	8	5	ND	3	13	1	2	2	101	.94	.067	2	27	.11	11	.10	2	1.07	.03	.02	9	53
87-D-207	34	2033	22	35	.3	8	30	122	34.86	38	6	ND	4	39	1	2	2	81	.11	.073	3	27	.23	72	.08	2	.98	.05	.12	3	310
87-D-208	9	984	10	32	.2	22	30	204	9.77	2	5	ND	2	34	1	5	2	62	.25	.084	2	35	.63	87	.22	2	1.65	.05	.08	2	21
87-D-209	42	1776	21	43	1.3	7	43	248	48.60	15	5	ND	5	39	1	2	2	47	.06	.056	7	45	.12	13	.05	2	.46	.02	.02	13	1130
87-D-210	16	146	13	19	9.1	17	7	482	1.76	2	5	ND	2	10	1	2	3	5	2.06	.034	5	3	.11	90	.01	3	.38	.03	.13	1	680
87-D-211	2	216	14	33	1.0	7	9	491	11.77	42	7	ND	2	24	1	5	2	64	.72	.025	3	2	1.03	4	.28	3	2.04	.03	.01	1	210
87-D-212	11	1600	19	68	1.0	28	80	1373	18.07	14	5	ND	2	41	1	3	2	155	.43	.155	4	80	1.20	15	.08	2	1.87	.05	.03	4	197
87-D-213	1	217	16	56	.6	19	10	405	35.62	21	5	ND	4	20	1	2	2	56	.38	.033	2	20	.25	21	.09	2	.44	.05	.06	1	115
87-D-214	2	1131	9	32	4.8	55	13	511	3.70	2	5	ND	1	19	1	6	2	69	1.17	.027	2	131	1.64	46	.08	2	1.30	.05	.14	2	560
87-D-215	3	2130	9	51	1.7	17	16	1659	4.63	2	5	ND	1	67	1	3	2	110	11.63	.034	2	27	2.24	12	.09	2	2.23	.01	.02	1	121
87-D-216	3	17561	11	108	24.7	7	15	855	6.07	3	5	2	2	12	4	6	2	111	1.15	.068	2	5	1.81	68	.12	2	1.76	.06	.26	1	290
87-D-217	17	1254	13	55	1.2	39	77	254	29.84	9	5	ND	3	9	1	2	2	65	.28	.049	2	65	.55	25	.11	2	.71	.05	.05	6	740
87-D-218	1	9071	12	72	2.9	4	26	248	19.35	3	6	ND	3	19	1	2	2	54	.37	.040	5	3	.53	11	.12	2	.79	.06	.03	2	1680
87-D-219	1	320	16	44	.3	4	11	121	49.10	15	5	ND	5	7	1	2	2	130	.04	.008	2	1	.10	25	.04	5	.28	.04	.05	5	132
87-M-100	1	134	2	5	.2	3	2	131	.95	2	5	ND	1	6	1	2	2	4	.20	.002	2	5	.08	3	.01	2	.09	.02	.01	1	9
87-M-102	1	29	13	60	.2	5	8	537	4.63	5	5	ND	1	38	1	4	2	49	.25	.030	2	5	1.48	55	.17	2	1.42	.09	.15	1	13
87-M-103	3	1173	16	37	2.5	15	35	426	18.07	52	5	ND	2	31	1	2	2	61	.73	.056	2	25	.36	9	.15	5	.86	.03	.02	4	340
87-M-104	2	239	8	20	1.3	9	15	222	12.36	20	5	ND	2	17	1	2	2	58	.60	.033	2	44	.27	8	.23	2	.78	.04	.02	1	81
87-M-105	1	421	13	35	.9	8	17	554	21.34	21	5	ND	2	12	1	2	2	38	.96	.054	2	22	.13	6	.13	2	.59	.03	.01	2	104
87-M-106	1	70	14	34	.3	7	9	284	31.17	5	5	ND	3	13	1	2	2	56	.42	.042	2	20	.14	11	.06	4	.32	.03	.04	3	76
87-M-107	35	30	11	26	2.7	16	25	207	8.64	2	5	2	1	15	1	2	2	76	.16	.017	2	90	.62	31	.04	2	.74	.03	.07	1	1710
87-M-108	11	4305	18	48	2.6	15	25	339	38.71	13	11	4	4	23	1	2	2	41	.22	.044	2	16	.15	15	.06	2	.47	.03	.04	13	9760
87-M-109	3	675	20	58	.3	4	21	449	57.33	17	5	ND	5	13	1	2	2	21	.08	.022	2	2	.10	16	.03	5	.25	.02	.05	7	1020
STD C/AU-R	18	57	41	131	7.1	68	27	1030	3.91	38	19	8	38	49	18	18	19	56	.47	.087	37	58	.87	177	.08	37	1.80	.08	.13	12	515

REBAGLIATI GEOLOGICAL FILE # 87-4139

Page 2

SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	AU*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
87-D-212A	10	2480	9	63	1.3	68	129	1603	12.77	24	5	ND	2	48	1	2	2	92	.29	.373	3	89	.77	23	.10	2	9.06	.03	.03	3	295

APPENDIX II

MAGNETOMETER SPECIFICATIONS

SPECIFICATIONS

GM-122 PROTON MAGNETOMETER

Range: 20,000 to 99,999 in 12 ranges

Accuracy: $\pm 1 \%$ through operating temperature range.

Sensitivity: 1%

Gradient Tolerance: 600 $\%$ /ft.

Power: 12 "D" cells

Power Consumption: 50 Joules (Wsec) per reading.

Polarizing Power: 0.8 A @ 13.5 V for 1.5 sec. (3 second cycle).
0.8 A @ 13.5 V for 3 sec. (6 second cycle).

Number of Readings
with 1 Battery Set: 2,000 - 10,000 depending on type of batteries.

Frequency of Readings: 1 every 3 seconds.
1 every 6 seconds.

Controls: Pushbutton switch - Slide switch for 3 and 6
seconds located on P/C Board.

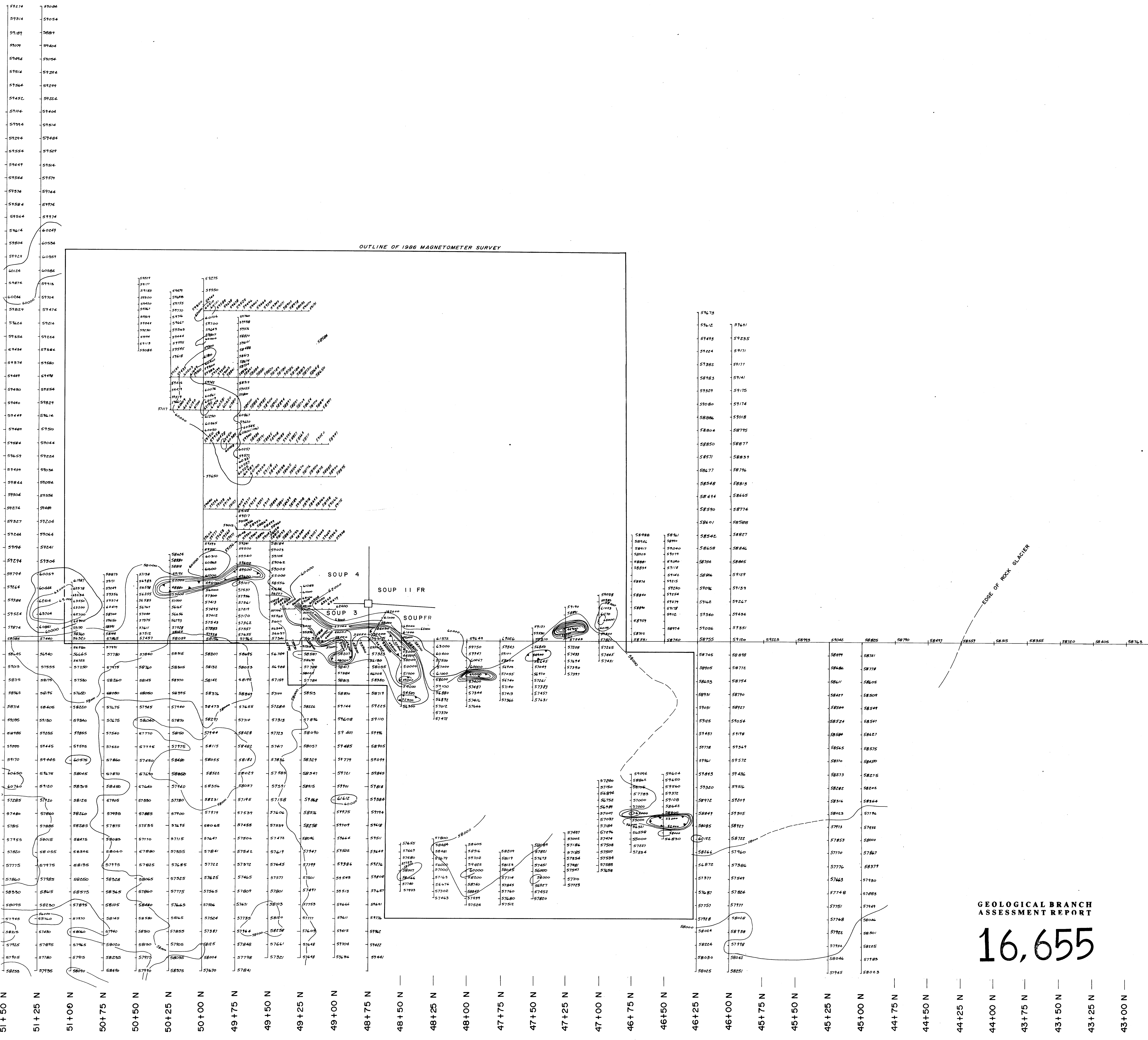
Output: 5 digit incandescent filament readout.

Indicators: LED point.
Lock Indicator - last three digits of the
display blanked off when phaselock not
achieved.
Segment Function Indicator - all segments light
up to permit visual inspection of the display
function.

GM-122 PROTON MAGNETOMETER

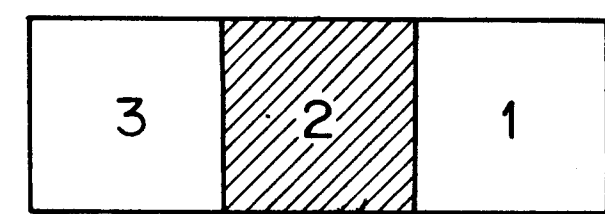
General Description, Principle of Operation

If a proton rich fluid such as kerosene, jet fuel, heptane, etc. is placed into a magnetic field, the protons will align along the magnetic field vector. The magnetic field is induced in the sensor upon depressing the pushbutton. Then this field is suddenly removed. Protons which behave as elementary gyroscopes will start precessing around the remaining magnetic field - that of the earth. The precession frequency is directly proportional to the magnetic field of the earth. The magnetometer counts this frequency, divides it by the appropriate constant to obtain a reading in gammas ($1\gamma = 10^{-5}$ gauss) and displays the reading in the form of a 5 digit number.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,655



Kliyl Creek Gold Project
SOUP CLAIMS
MAGNETOMETER SURVEY

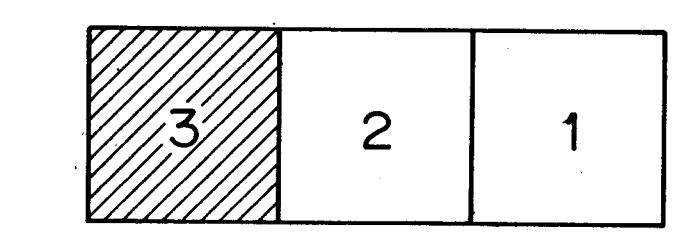
87-D-216 87-D-217

49+25E at 140° 87-M-104 87-M-103 87-M-102 87-M-101 87-M-100

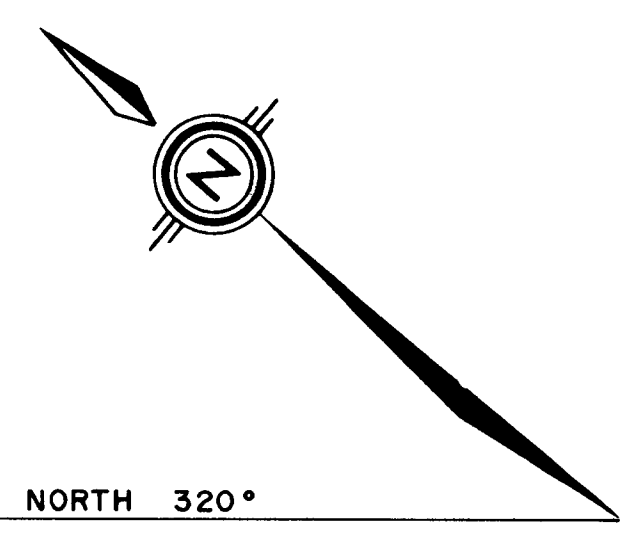
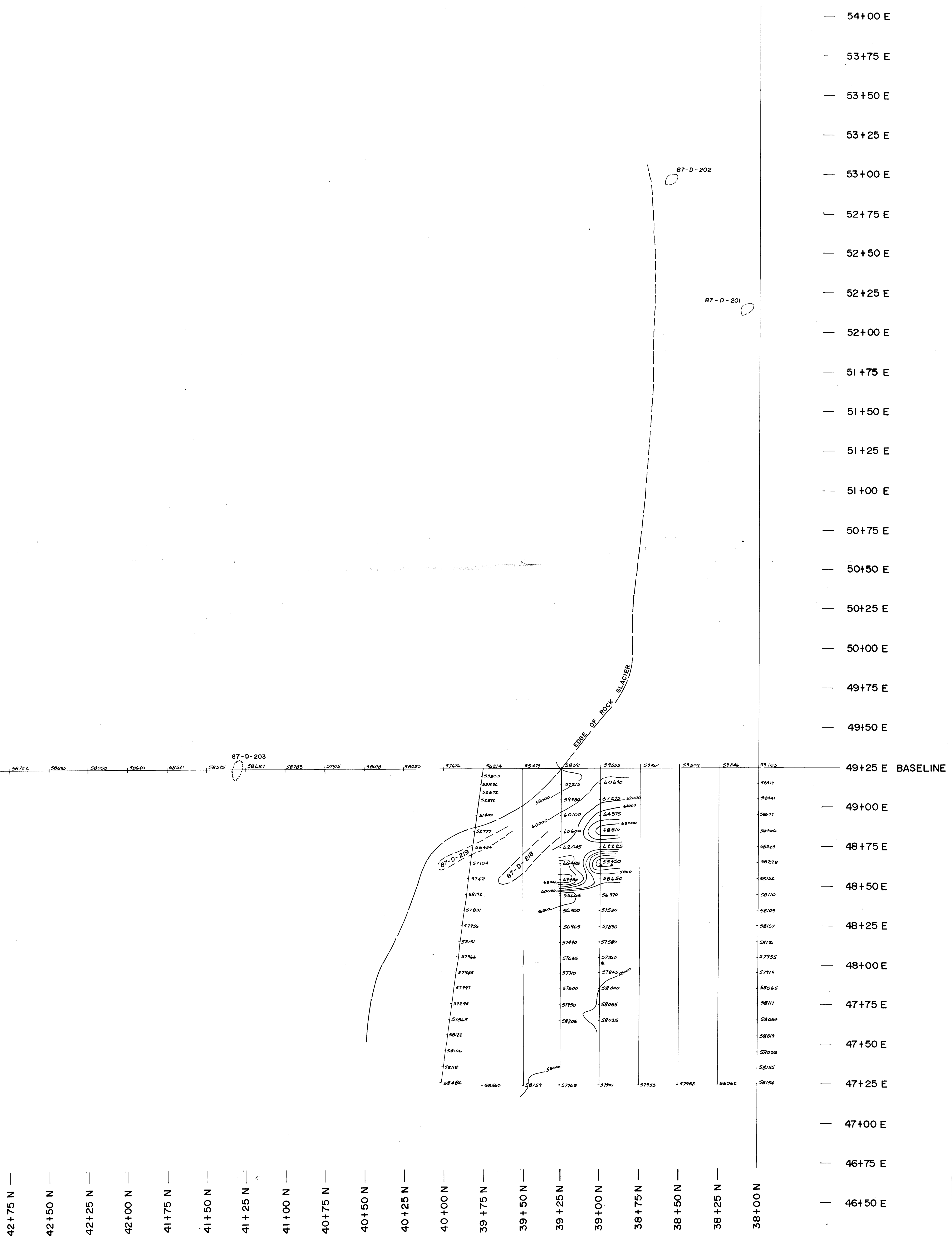
60+00 N	59+75 N	59+50 N	59+25 N	59+00 N	58+75 N	58+50 N	58+25 N	58+00 N	57+75 N	57+50 N	57+25 N	57+00 N	56+75 N	56+50 N	56+25 N	56+00 N	55+75 N	55+50 N	55+25 N	55+00 N	54+75 N	54+50 N	54+25 N	54+00 N	53+75 N	53+50 N	53+25 N	53+00 N	52+75 N	52+50 N	52+25 N	52+00 N	51+75 N
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,655

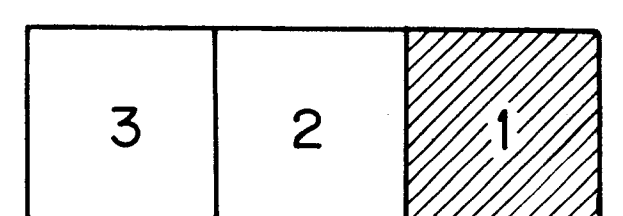


Kliiyul Creek Gold Project
SOUP CLAIMS
MAGNETOMETER SURVEY

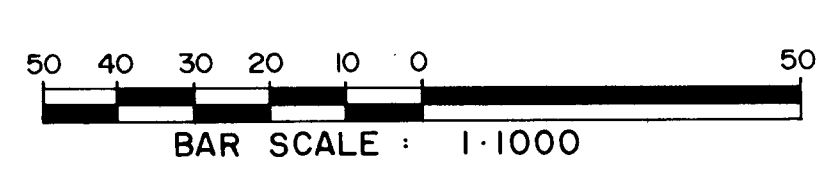


LEGEND

- CLAIM POST
- GRID LINE WITH MAGNETIC READINGS REPRESENTS THE TOTAL FIELD INTENSITY IN GAMMAS (G)
- ISOMAGNETIC CONTOURS (2000 G INTERVALS)
- MAGNETIC DEPRESSION
- OUTCROP SAMPLE
- FLOAT SAMPLE



GEOLOGICAL BRANCH
ASSESSMENT REPORT



16,655

LEMMING RESOURCES LTD. REBAGLIATI GEOLOGICAL CONSULTING LTD.	
KLIYUL CREEK GOLD PROJECT SOUP CLAIMS JOHANSON LAKE AREA, B.C. OMINECA MINING DIVISION NTS 94 D / 8 MAGNETOMETER SURVEY	
TECHNICAL WORK BY:	SCALE: 1:1000
DRAWN BY: DBM	DATE: AUG. / 87
REVISIONS:	FIGURE NO. 5