

LOG NO:	RD:
ACTION: 11-30	
FILE NO:	

**REPORT ON SOIL, ROCK GEOCHEMICAL SAMPLING, VLF-EM,  
MAGNETOMETER AND DIAMOND DRILL SURVEYS**

On The

**GALORE CREEK GROUP I, II & III CLAIMS  
LIARD MINING DIVISION BRITISH COLUMBIA**

**NTS 104G/3 & 4**

**LAT. 57° 07' 30" N LONG. 131° 27' W**

For

**MINGOLD RESOURCES INC.  
Bank of Canada Building  
200 - 3 Lombard Place  
Winnipeg, Manitoba  
R3B 0Y4**

SUB-RECORDER  
RECEIVED  
NOV 27 1990  
M.R. # ..... \$ .....  
VANCOUVER, B.C.

Owner: *Stikine Copper Ltd.*  
Operator: *Mingold Resources Inc.*  
Author: *E.W. Yarrow & K.J. Taylor*  
Date: *November 1990*

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

*Part 1 of 2*

*20,558*

# GALORE CREEK PROJECT

	<b>Page</b>
1. Introduction .....	1
2. Location, Access & Climate .....	3
3. Claims & Ownership .....	5
4. Personnel.....	5
5. History .....	18
6. Geology .....	19
7. Sampling Program 1990 .....	21
7.1 Sample Preparation & Analytical Technique .....	21
7.2 Soil Sampling .....	23
7.3 Rock Sampling .....	23
7.4 Core Re-Assaying .....	23
7.5 Discussion of Results .....	24
8. Geophysics .....	25
8.1 Discussion of Geophysical Results .....	26
9. Diamond Drilling .....	27
10. Conclusions .....	30
11. Selected Bibliography .....	31

## APPENDICES

- I. Statement of Costs
- II. Statement of Qualifications
- III. Certificates of Assay
- IV. Rock & Soil Sample Descriptions
- V. VLF-EM Raw Data
- VI. Diamond Drill Record Sheets for Re-assay of Pre-1990 Drill Holes
- VII. Diamond Drill Logs

## FIGURES

	<b>Page</b>
GC-90-1	Location of Galore Creek Property (1:7,500,000) ..... 2
GC-90-2	Claim Grouping ..... 4
GC-90-3	Geology - Galore Creek Basin (1:50,000) ..... 20
GC-90-4	Sample Location Map (1:12,000) ..... Pocket
GC-90-5	Camp IP Area Sample & Drill Hole Locations (1:5000) ..... Pocket
GC-90-6	Saddle Zone Trenching & Drilling (1:5000) ..... Pocket
GC-90-7	Southwest Zone Grid Diamond Drill Plan (1:5000) ..... Pocket
GC-90-8	Junction - N. Junction Zones Drill Plan For Reassayed DDH's 1:5000) ..... Pocket
GC-90-9	Camp IP Area Au Geochemistry (1:5000) ..... Pocket
GC-90-10	Camp IP Area Cu Geochemistry (1:5000) ..... Pocket
GC-90-11	Southwest Zone Grid Contoured VLF-EM (1:5000) ..... Pocket
GC-90-12	North Rim - DDH 128 Grid Vertical Gradient Magnetics (1:5000) ..... Pocket
GC-90-13	Saddle Zone Grid Total Field Magnetics (1:5000) ..... Pocket
GC-90-14	Saddle Zone Grid Vertical Gradient Magnetics (1:5000) ..... Pocket
GC-90-15	Southwest Zone Grid - Vertical Gradient Magnetics (1:5000) ..... Pocket
GC-90-16	Southwest Zone Grid Total Field Magnetics (1:5000) ..... Pocket
GC-90-17	North Rim - DDH 128 Grid Diamond Drill Plan (1:5000) ..... Pocket
GC-90-18	Saddle Zone Grid Diamond Drill Plan (1:5000) ..... Pocket

# 1990 GALORE CREEK PROJECT

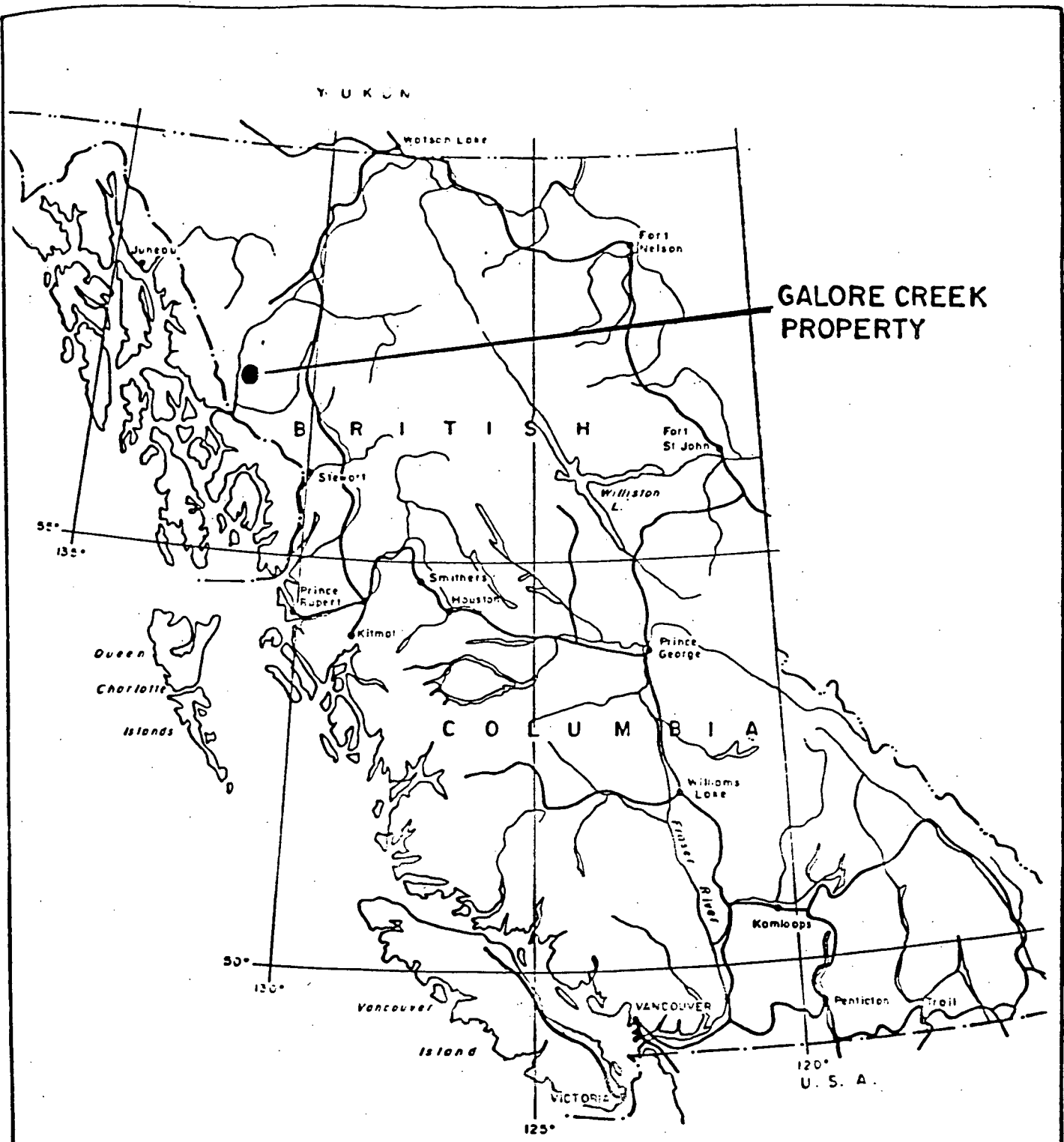
## 1. Introduction

The report which follows describes the geochemical, geophysical, rock sampling, trenching and diamond drill program conducted by Mingold Resources Inc. personnel from June 19 to October 26, 1990. The report combines assessment for all 291 two-post claims which are divided into three groups for assessment purposes (Galore Creek Group I, II and III). The assessment for each group is further subdivided into claims with anniversary dates of August 27 through November (1990 assessment) and April through August 26 (1991 assessment). All work done after August 27, 1990 is applied to 1991 assessment on the April-August claims. Refer to the "Claims & Ownership" section of this report for clarification of the above.

The 1990 program at Galore Creek comprised two separate phases of work. The first phase consisted of soil and rock geochemical work, geophysics and diamond drilling during the period June 19 through July 30, 1990. During this phase of exploration 37 soil samples and 10 rock samples were collected for analysis, 18.4 line kilometres of magnetometer, 10.9 line kilometres of VLF-EM and 1002.5 meters of diamond drilling in the thirteen holes was completed. The second phase of the program commenced August 10 and was completed by October 26, 1990. A total of 922.6 meters of diamond drilling in seven holes was completed and 166 old drill core samples were analyzed for gold content during this phase. Information on the two phases of the program is broken down into relevant claim groups in Table 1 below:

Table 1: Breakdown of 1990 Exploration Program

Year Assess. Applied For	Claim Group #	Drill Hole #	Meters Drilled	Geophysics		Geochemical Work
				Magnetometer	VLF-EM	
1990	I	GC376	93	3.3 km		29 - 1990 core samp.
1991	I					166 pre-1990 core samp.
1990	II	GC 379, 377 A,B,C GC 381, 382	506.9	8.92 km	10.9 km	160 - 1990 core samp. 53 pre-1990 core samp.
1991	II	GC 383 - 386	432.2			126 - 1990 core samp.
1990	III	GC 370 - 375	566.01	6.2 km		178 - 1990 core samp. 37 soil samp. 12 pre-1990 core samp. 10 surface rock samp.
1991	III	GC 380, 387				66 - 1990 core samp.



**GALORE CREEK  
PROPERTY**

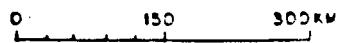
**STIKINE COPPER LTD.**

**GALORE CREEK PROPERTY  
LOCATION MAP**

NTS. 1046-3 GALORE CREEK, LIARD M.D., B.C.

DRAWN BY: K.T. DATE: NOV. 1989 SCALE 1:7,500,000

PLATE N<sup>o</sup>.  
GC-90-1



## **2. Location, Access & Climate**

The Galore Creek property of Stikine Copper Ltd. is situated in a basin at the headwaters of Galore Creek, a tributary of the Scud River, in the northwestern part of British Columbia. The property is centred at latitude 57° 07' 30" N and longitude 131° 27' W (see Plate GC-90-1). The claims occur within the Liard Mining Division and extend across the boundary between N.T.S. mapsheets 104 G/3 and 104 G/4.

The property is approximately 355 kilometres northwest of Smithers, B.C. which is the major supply centre for the area. Central Mountain Air in 1989 operated a schedule fixed-wing service from Smithers to the Bronson Airstrip which is 55 kilometres southeast of the property. In addition, a turbine-equipped Otter aircraft made trips to the Galore Creek Airstrip when warranted. In 1989, helicopters were available on a casual basis from Bronson Airstrip (55 km), Telegraph Creek (90 km) and for a limited period at Galore Creek itself.

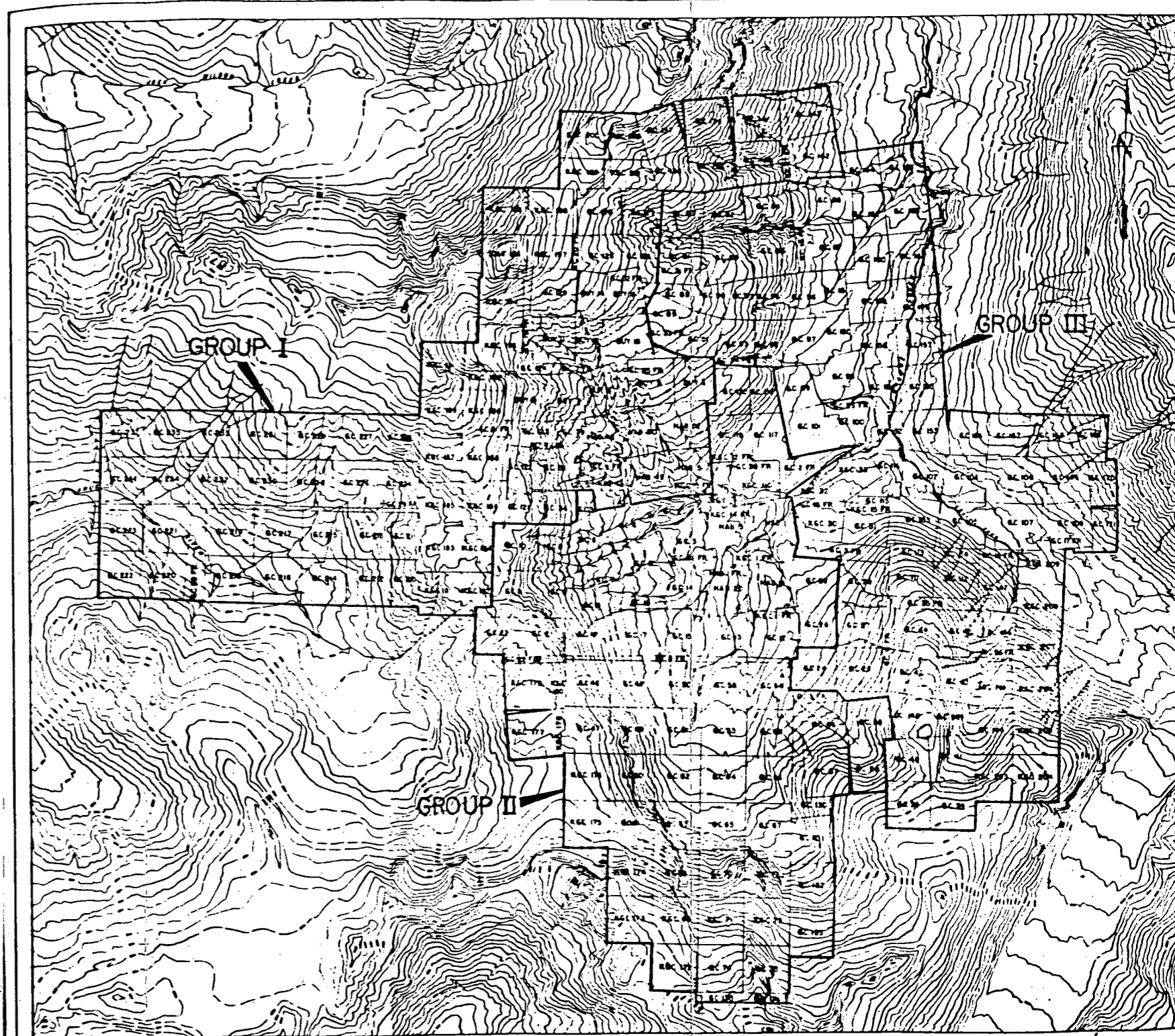
A private road was constructed by Stikine Copper Ltd. from the Scud Airstrip, at the junction of the Scud and Stikine Rivers, to the Galore Creek camp in the early 1960's. At that time, it was anticipated that production from the Galore Creek copper deposits was imminent. As it turned out, the only use of the road was for transporting several pieces of heavy duty equipment (primarily used for constructing the road). With years of lack of use, the road has overgrown with alders and the bridges have collapsed.

In 1989, the old road between the Galore Creek (Portal) Airstrip and the camp was upgraded to a useable condition for four-wheel drive vehicles. This permitted the transport of passengers and supplies by truck instead of by helicopter to and from camp.

The camp is located on the eastern side of the Galore creek valley at an elevation of approximately 760 meters above sea level. Elevations within the property boundary vary from a low of 550 meters in Galore Creek to over 1800 meters on the slopes of Saddlehorn Mountain.

Snow pack in the area is unusually heavy for northern B.C. with peak levels of 5 meters or more being typical. Snow-free conditions below the 1200 meter elevation are restricted to mid-June to late-September with air temperatures remaining relatively cool throughout the summer.

Vegetation is generally quite dense within the Galore Creek valley, consisting of mature stands of pine, spruce and cottonwood at lower elevations and passes into scrub evergreens up to treeline at 1200 meters. Underbrush of alder, willow and devil's club is extremely thick and in combination with the deeply incised creek gullies makes traversing arduous.



STIKINE COPPER LIMITED  
GALORE CREEK PROPERTY  
Galore Creek, British Columbia  
CLAIM GROUPING

Date: Nov. 1990 Plate No GC90-2

SCALE  
0 5 10 15 KM

### **3. Claims & Ownership (Plate GC-90-2)**

The Galore Creek property consists of 252 claims and 39 fractions for a total of 291 two-post claims. These claims are wholly owned by Stikine Copper Ltd. which is controlled by Kennco Mining Ltd. (59%), Hudson Bay Mining and Smelting Co. Ltd. (36%) and Cominco Ltd. (5%). In 1989 Mingold Resources Inc. entered into an option agreement with Hudson Bay Mining to explore the gold potential of the Galore Creek property.

For assessment purposes, the claims have been divided into three groups. Galore Creek Group I, II and III, comprise 99, 92 and 100 claims respectively. Each group has been further subdivided into two sets depending on whether the claim anniversary date is before or after August 27 of the current calendar year. All claims with anniversary dates after August 27 have assessment applied for the current year (1990) while those with anniversary dates before August 27 have to be filed for the following year (1991). A complete listing of the claims with each group subdivided into the year for which assessment is being applied is shown in Table II.

### **4. Personnel**

The following personnel were involved in the Galore Creek Project during the course of the 1990 field season. K.J. Taylor - field supervisor, P. Reynolds - geologist, R. Weishaupt - technician, G. McCrady, D. Sanguinetti, D. Holmes - field assistants and D. Burrige - prospector. Overall project supervision was provided by E.W. Yarrow, Mingold Vancouver.

Statement of qualifications for relevant technical personnel are located in Appendix II of this report. Contract personnel at Galore Creek included Yoshio Nishimura Helicopter pilot for Northern Mountain Helicopters of Prince George, B.C. and four contract diamond drillers for J.T. Thomas Drilling of Smithers, B.C. Mingold Resources was responsible for all room and board costs for the pilot and drillers while based at the Galore Creek camp.



TABLE II

**GALORE CREEK GROUP I CLAIMS  
(1990 ASSESSMENT)**

CLAIM NAME	RECORD NO.	No. OF UNITS	CURRENT EXPIRY DATE	NEW EXPIRY DATE
HAB 47	3792	1	October 11/91	October 11/92
HAB 48	3793	1	October 11/91	October 11/92
HAB 49	3794	1	October 11/91	October 11/92
HAB 50	3795	1	October 11/91	October 11/92
HAB 51	3796	1	October 11/91	October 11/92
HAB 52	3797	1	October 11/91	October 11/92
GC 34	8676	1	September 21/91	September 21/92
GC 36	8678	1	September 21/91	September 21/92
GC 37	8679	1	September 21/91	September 21/92
GC 79	8786	1	October 24/91	October 24/92
GC 121	9618	1	September 5/91	September 5/92
GC 122	9619	1	September 5/91	September 5/92
GC 123	9620	1	September 5/91	September 5/92
GC 124	9621	1	September 5/91	September 5/92
GC 125	9622	1	September 5/91	September 5/92
GC 126	9623	1	September 5/91	September 5/92
GC 127	9624	1	September 5/91	September 5/92
GC 128	9625	1	September 5/91	September 5/92
GC 129	9626	1	September 5/91	September 5/92
GC 136	9633	1	September 5/91	September 5/92
GC 137	9634	1	September 5/91	September 5/92
GC 138	9635	1	September 5/91	September 5/92
GC 139	9636	1	September 5/91	September 5/92
GC 140	9637	1	September 5/91	September 5/92
GC 141	9638	1	September 5/91	September 5/92
GC 142	9639	1	September 5/91	September 5/92
GC 143	9640	1	September 5/91	September 5/92
KENNCO GC 181	12184	1	October 9/92	October 9/93
KENNCO GC 182	12185	1	October 9/92	October 9/93
KENNCO GC 183	12186	1	October 9/91	October 9/92
KENNCO GC 184	12187	1	October 9/91	October 9/92
KENNCO GC 185	12188	1	October 9/91	October 9/92
KENNCO GC 186	12189	1	October 9/91	October 9/92
KENNCO GC 187	12190	1	October 9/91	October 9/92
KENNCO GC 188	12191	1	October 9/91	October 9/92
KENNCO GC 189	12192	1	October 9/91	October 9/92
KENNCO GC 190	12193	1	October 9/91	October 9/92
KENNCO GC 191	12194	1	October 9/91	October 9/92
KENNCO GC 192	12195	1	October 9/91	October 9/92
KENNCO GC 193	12196	1	October 9/91	October 9/92
KENNCO GC 194	12197	1	October 9/91	October 9/92



TABLE II

**GALORE CREEK GROUP II CLAIMS  
(1990 ASSESSMENT)**

CLAIM NAME	RECORD NO.	No. OF UNITS	CURRENT EXPIRY DATE	NEW EXPIRY DATE
HAB 1	3760	1	October 11/91	October 11/95
HAB 3	3762	1	October 11/91	October 11/95
HAB 18	3777	1	October 11/91	October 11/95
HAB 20	3779	1	October 11/91	October 11/95
GC 1	8643	1	September 21/91	September 21/95
GC 2	8644	1	September 21/91	September 21/95
GC 3	8645	1	September 21/91	September 21/95
GC 4	8646	1	September 21/91	September 21/95
GC 5	8647	1	September 21/91	September 21/95
GC 6	8648	1	September 21/91	September 21/95
GC 7	8649	1	September 21/91	September 21/95
GC 8	8650	1	September 21/91	September 21/95
GC 9	8651	1	September 21/91	September 21/95
GC 10	8652	1	September 21/91	September 21/95
GC 11	8653	1	September 21/91	September 21/95
GC 12	8654	1	September 21/91	September 21/95
GC 13	8655	1	September 21/91	September 21/95
GC 14	8656	1	September 21/91	September 21/95
GC 15	8657	1	September 21/91	September 21/95
GC 16	8658	1	September 21/91	September 21/95
GC 17	8659	1	September 21/91	September 21/95
GC 18	8660	1	September 21/91	September 21/95
GC 19	8661	1	September 21/91	September 21/95
GC 21	8663	1	September 21/91	September 21/95
GC 23	8665	1	September 21/91	September 21/95
GC 26	8668	1	September 21/91	September 21/95
GC 28	8670	1	September 21/91	September 21/95
GC 35	8677	1	September 21/91	September 21/95
GC 46	8688	1	September 21/91	September 21/95
GC 47	8689	1	September 21/91	September 21/95
GC 48	8690	1	September 21/91	September 21/95
GC 49	8691	1	September 21/91	September 21/95
GC 50	8692	1	September 21/91	September 21/95
GC 51	8693	1	September 21/91	September 21/95
GC 52	8694	1	September 21/91	September 21/95
GC 53	8695	1	September 21/91	September 21/95
GC 54	8696	1	September 21/91	September 21/95
GC 55	8697	1	September 21/91	September 21/95
GC 56	8698	1	September 21/91	September 21/95
GC 57	8699	1	September 21/91	September 21/95
GC 58	8700	1	September 21/91	September 21/95

TABLE II

## GALORE CREEK GROUP II CLAIMS

(1990 ASSESSMENT)

CLAIM NAME	RECORD NO.	No. OF UNITS	CURRENT EXPIRY DATE	NEW EXPIRY DATE
GC 59	8701	1	September 21/91	September 21/95
GC 60	8702	1	September 21/91	September 21/95
GC 61	8703	1	September 21/91	September 21/95
GC 62	8704	1	September 21/91	September 21/95
GC 63	8705	1	September 21/91	September 21/95
GC 64	8706	1	September 21/91	September 21/95
GC 65	8707	1	September 21/91	September 21/95
GC 66	8708	1	September 21/91	September 21/95
GC 67	8709	1	September 21/91	September 21/95
GC 68	8710	1	September 21/91	September 21/95
XGC 69	14899	1	September 4/91	September 4/95
GC 70	8712	1	September 21/91	September 21/95
XGC 71	14900	1	September 4/91	September 4/95
GC 72	8714	1	September 21/91	September 21/95
XGC 73	14901	1	September 4/91	September 4/95
GC 74	8716	1	September 21/91	September 21/95
GC 75	8717	1	September 21/91	September 21/95
XGC 110	14902	1	September 4/91	September 4/95
GC 117	9614	1	September 5/91	September 5/95
GC 118	9615	1	September 5/91	September 5/95
GC 119	9616	1	September 5/91	September 5/95
GC 120	9617	1	September 5/91	September 5/95
GC 130	9627	1	September 5/91	September 5/95
GC 131	9628	1	September 5/91	September 5/95
GC 132	9629	1	September 5/91	September 5/95
GC 133	9630	1	September 5/91	September 5/95
GC 134	9631	1	September 5/91	September 5/95
GC 135	9632	1	September 5/91	September 5/95
KENNCO GC 172	12175	1	October 9/91	October 9/95
KENNCO GC 173	12176	1	October 9/91	October 9/95
KENNCO GC 174	12177	1	October 9/91	October 9/95
KENNCO GC 175	12178	1	October 9/91	October 9/95
KENNCO GC 176	12179	1	October 9/91	October 9/95
KENNCO GC 177	12180	1	October 9/91	October 9/95
KENNCO GC 178	12181	1	October 9/91	October 9/95
KENNCO GC 179	12182	1	October 9/91	October 9/95
KENNCO GC 180	12183	1	October 9/91	October 9/95



TABLE II

**GALORE CREEK GROUP III CLAIMS  
(1990 & 1991 ASSESSMENT)**

CLAIM NAME	RECORD NO.	No. OF UNITS	CURRENT EXPIRY DATE	NEW EXPIRY DATE
GC 24	8666	1	September 21/91	September 21/97
GC 25	8667	1	September 21/91	September 21/97
GC 27	8669	1	September 21/91	September 21/97
GC 29	8671	1	September 21/91	September 21/97
XGC 30	14896	1	September 4/91	September 4/97
GC 31	8673	1	September 21/91	September 21/97
XGC 32	14897	1	September 4/91	September 4/97
XGC 33	14898	1	September 4/91	September 4/97
GC 38	8680	1	September 21/91	September 21/97
GC 39	8681	1	September 21/91	September 21/97
GC 40	8682	1	September 21/91	September 21/97
GC 41	8683	1	September 21/91	September 21/97
GC 42	8684	1	September 21/91	September 21/97
GC 43	8685	1	September 21/91	September 21/97
GC 44	8686	1	September 21/91	September 21/97
GC 45	8687	1	September 21/91	September 21/97
GC 80	8806	1	November 3/91	November 3/97
GC 81	8807	1	November 3/91	November 3/97
GC 82	8808	1	November 3/91	November 3/97
GC 83	8809	1	November 3/91	November 3/97
GC 84	8810	1	November 3/91	November 3/97
GC 85	8811	1	November 3/91	November 3/97
GC 86	8812	1	November 3/91	November 3/97
GC 87	8813	1	November 3/91	November 3/97
GC 88	8814	1	November 3/91	November 3/97
GC 89	8815	1	November 3/91	November 3/97
GC 90	8816	1	November 3/91	November 3/97
GC 91	8817	1	November 3/91	November 3/97
GC 92	8818	1	November 3/91	November 3/97
GC 93	8819	1	November 3/91	November 3/97
GC 94	8820	1	November 3/91	November 3/97
GC 95	8821	1	November 3/91	November 3/97
GC 96	8822	1	November 3/91	November 3/97
GC 97	8823	1	November 3/91	November 3/97

TABLE II

**GALORE CREEK GROUP III CLAIMS  
(1990 & 1991 ASSESSMENT)**

CLAIM NAME	RECORD NO.	No. OF UNITS	CURRENT EXPIRY DATE	NEW EXPIRY DATE
GC 98	8824	1	November 3/91	November 3/99
GC 99	8825	1	November 3/91	November 3/99
GC100	8826	1	November 3/91	November 3/99
GC 101	8827	1	November 3/92	November 3/2000
GC 102	8828	1	November 3/91	November 3/99
GC 103	8829	1	November 3/91	November 3/99
GC 104	8830	1	November 3/91	November 3/99
GC 105	8831	1	November 3/91	November 3/99
GC 106	8832	1	November 3/91	November 3/99
GC 107	8833	1	November 3/91	November 3/99
GC 108	8834	1	November 3/91	November 3/99
GC 109	8835	1	November 3/91	November 3/99
GC 111	9608	1	September 5/91	September 5/99
GC 112	9609	1	September 5/91	September 5/99
GC 113	9610	1	September 5/91	September 5/99
GC 114	9611	1	September 5/91	September 5/99
GC 115	9612	1	September 5/91	September 5/99
GC 116	9613	1	September 5/91	September 5/99
GC 144	9641	1	September 5/91	September 5/99
GC 145	9642	1	September 5/91	September 5/99
GC 146	9643	1	September 5/91	September 5/99
GC 147	9644	1	September 5/91	September 5/99
GC 148	9645	1	September 5/91	September 5/99
GC 149	9646	1	September 5/91	September 5/99
GC 150	10192	1	November 7/91	November 7/99
GC 151	10193	1	November 7/91	November 7/99
GC 152	10194	1	November 7/91	November 7/99
GC 153	10195	1	November 7/91	November 7/99
GC 154	10196	1	November 7/91	November 7/99
GC 155	10197	1	November 7/91	November 7/99
GC 156	10198	1	November 7/91	November 7/99
GC 157	10199	1	November 7/91	November 7/99
GC 158	10200	1	November 7/91	November 7/99
GC 159	10201	1	November 7/91	November 7/99

1990  
1  
1991

1990  
1  
1991

TABLE II

GALORE CREEK GROUP III CLAIMS  
(1990 & 1991 ASSESSMENT)

CLAIM NAME	RECORD NO.	No. OF UNITS	CURRENT EXPIRY DATE	NEW EXPIRY DATE
GC 160	10202	1	November 7/91	November 7/99
GC 161	10203	1	November 7/91	November 7/99
GC 162	10204	1	November 7/91	November 7/99
GC 163	10205	1	November 7/91	November 7/99
GC 164	10206	1	November 7/91	November 7/99
GC 165	10207	1	November 7/91	November 7/99
KENNCO GC 203	12206	1	October 9/92	October 9/98
KENNCO GC 204	12207	1	October 9/92	October 9/98
KENNCO GC 205	12208	1	October 9/92	October 9/98
KENNCO GC 206	12209	1	October 9/92	October 9/98
KENNCO GC 207	12210	1	October 9/92	October 9/98
KENNCO GC 208	12211	1	October 9/92	October 9/98
KENNCO GC 209	12212	1	October 9/92	October 9/98
<u>FRACTIONS</u>				
GC 10 FR	11006	1	September 10/91	September 10/97
GC 16 FR	14894	1	September 4/91	September 4/97
GC 17 FR	14895	1	September 4/91	September 4/97
GC 23 FR	15986	1	October 30/91	October 30/97
GC 31 FR	16234	1	November 23/91	November 23/97
GC 35 FR	16238	1	November 23/91	November 23/97
GC 36 FR	16239	1	November 23/91	November 23/97
S.K. 3 FR	24745	1	September 12/91	September 12/97
<b>TOTAL</b>		<b>89</b>		

1990  
-  
1991



TABLE II

**GALORE CREEK GROUP I CLAIMS  
(1990 & 1991 ASSESSMENT)**

CLAIM NAME	RECORD NO.	No. OF UNITS	CURRENT EXPIRY DATE	NEW EXPIRY DATE
BUY 4	4489	1	AUG. 8/91	AUG. 8/92
BUY 5	4490	1	AUG. 8/91	AUG. 8/92
BUY 6	4491	1	AUG. 8/91	AUG. 8/92
BUY 7	4492	1	AUG. 8/91	AUG. 8/92
BUY 8	4493	1	AUG. 8/91	AUG. 8/92
BUY 11	4504	1	AUG. 13/91	AUG. 13/92
BUY 13	4506	1	AUG. 13/91	AUG. 13/92
BUY 14	4507	1	AUG. 13/91	AUG. 13/92
BUY 15	4508	1	AUG. 13/91	AUG. 13/92
BUY 16	4509	1	AUG. 13/91	AUG. 13/92
GC 210	13444	1	APR. 2/91	APR. 2/92
GC 211	13445	1	APR. 2/91	APR. 2/92
GC 212	13446	1	APR. 2/91	APR. 2/92
GC 213	134447	1	APR. 2/91	APR. 2/92
GC 214	13448	1	APR. 2/91	APR. 2/92
GC 215	13449	1	APR. 2/91	APR. 2/92
GC 216	13450	1	APR. 2/91	APR. 2/92
GC 217	13451	1	APR. 2/91	APR. 2/92
GC 218	13452	1	APR. 2/91	APR. 2/92
GC 219	13453	1	APR. 2/91	APR. 2/92
GC 220	13454	1	APR. 2/91	APR. 2/92
GC 221	13455	1	APR. 2/91	APR. 2/92
GC 222	13456	1	APR. 2/91	APR. 2/92
GC 223	13457	1	APR. 2/91	APR. 2/92
GC 224	13458	1	APR. 2/91	APR. 2/92
GC 225	13571	1	APR. 6/91	APR. 6/92
GC 226	13572	1	APR. 6/91	APR. 6/92
GC 227	13573	1	APR. 6/91	APR. 6/92
GC 228	13574	1	APR. 6/91	APR. 6/92
GC 229	13575	1	APR. 6/91	APR. 6/92
GC 230	13576	1	APR. 6/91	APR. 6/92
GC 231	13577	1	APR. 6/91	APR. 6/92
GC 232	13578	1	APR. 6/91	APR. 6/92
GC 233	13579	1	APR. 6/91	APR. 6/92

1991



TABLE II

GALORE CREEK GROUP II CLAIMS  
(1990 & 1991 ASSESSMENT)

CLAIM NAME	RECORD NO.	No. OF UNITS	CURRENT EXPIRY DATE	NEW EXPIRY DATE
HAB 1 FR	9655	1	AUG. 16/93	AUG. 16/2000
GC 5 FR	10857	1	AUG. 6/93	AUG. 6/2000
KGC 11 FR	11972	1	AUG. 29/93	AUG. 29/97
GC 12 FR	11973	1	AUG. 29/93	AUG. 29/97
GC 13 FR	11974	1	AUG. 29/93	AUG. 29/97
GC 14 FR	11975	1	AUG. 29/93	AUG. 29/97
<b>TOTAL</b>		<b>6</b>		

1991

TABLE II

GALORE CREEK GROUP III CLAIMS  
(1990 & 1991 ASSESSMENT)

CLAIM NAME	RECORD NO.	No. OF UNITS	CURRENT EXPIRY DATE	NEW EXPIRY DATE
GC 166	10849	1	AUG. 6/94	AUG. 6/2000
GC 167	10850	1	AUG. 6/94	AUG. 6/2000
GC 168	10851	1	AUG. 6/94	AUG. 6/2000
GC 169	10852	1	AUG. 6/94	AUG. 6/2000
GC 170	10853	1	AUG. 6/94	AUG. 6/2000
GC 171	10854	1	AUG. 6/94	AUG. 6/2000
<u>FRACTIONS</u>				
GC 3 FR	10855	1	AUG. 6/94	AUG. 6/2000
GC 6 FR	10858	1	AUG. 6/94	AUG. 6/2000
KGC 15 FR	11976	1	AUG. 29/94	AUG. 29/2000
S.K. 1 FR	22739	1	JUNE 2/94	JUNE 2/2000
S.K. 2 FR	22740	1	JUNE 2/94	JUNE 2/2000
<b>TOTAL</b>		<b>11</b>		

## 5. History

Copper deposits were first discovered in the Galore Creek valley in 1955 by prospectors working for Hudson Bay Exploration and Development Co. Ltd. Staking and sampling was completed in the same year. In 1956, mapping, trenching and diamond drilling were carried out. Due to the remoteness of the area and higher priorities for expenditures elsewhere, no further work was undertaken and all but 16 claims were allowed to lapse.

In 1959, Kennco Exploration sampled the creeks in the area as part of a reconnaissance stream silt survey. Kennco began staking the resulting highly anomalous copper in the headwaters of Galore Creek in 1960. The claims surrounded the remaining H.B.E.D. ground as well as four claims which had been optioned by Cominco from one of the original prospectors. In 1962, the three companies agreed to jointly develop the property and subsequently in 1963 Stikine Copper Ltd. was formed.

Kennco was the operator of the exploration programs until early 1967. Work included 53,164 meters of diamond drilling in 235 holes and 807 meters of tunnelling in two adits. The Central Zone which occupies the valley bottom of Galore Creek became the main focus of exploration. No exploration work was carried out from 1968 to 1972.

In 1972, Hudson Bay Mining and Smelting became operator of the property and in 1972 and 1973 an additional 25,352 meters of diamond drilling was completed in 111 holes. This work focused exclusively on blocking out reserves on the Central and North Junction Zones.

In 1974, Wright Engineers undertook a feasibility study on the Galore Creek property and came out with a mining plan for the property.

Hudson Bay continued fill-in drilling in 1976, completing an additional 5,310 meters of diamond drilling in 24 holes.

Due to the enormous costs involved in bringing a deposit in this area into production the project has remained on hold until the present.

In 1989, Mingold Resources Inc. took an option on the property with the purpose of investigating the gold potential associated with the porphyry system. Although it was previously known that the gold content in the Galore Creek copper deposits was unusually high for a porphyry, the main focus of previous exploration was to delineate the copper reserves. Mingold, on the other hand, was interested in developing high grade gold deposits within or peripheral to the copper mineralization. The work carried out in this regard is embodied in this report.

## **6. Geology**

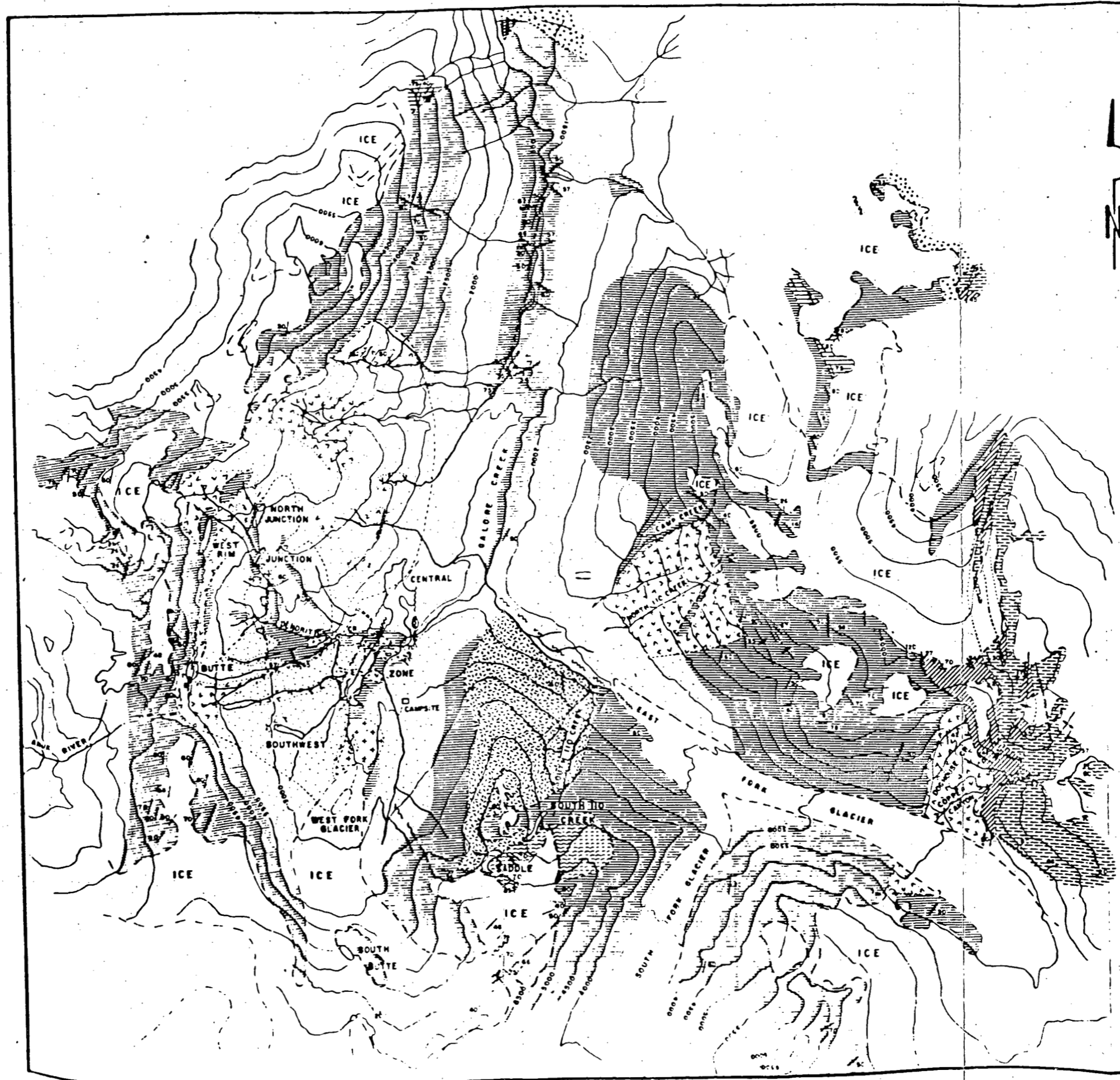
The Galore Creek deposits are situated on the western margin of the Intermontane Belt, just east of the Coast Plutonic Complex. The area contains three major lithologic units: Palaeozoic and Middle Triassic metamorphic rocks; Upper Triassic volcanic and sedimentary rocks; and intrusive rocks of various ages and types. The later two units are of prime concern in the vicinity of the copper deposits. (see GC-90-3)

The Upper Triassic rocks, within the Galore Creek valley, are primarily volcanics with sediments only forming a minor component. The volcanics include pyroclastic and intrusive breccias, trachyte flows, lithic tuff, crystal tuff and pyroxene andesites. Most of the rocks have undergone moderate to intense contact metamorphism from later syenitic intrusive events. The effects of this metamorphism have been "skarnification" and "hornfelsing" of many of the rocks to an extent where the original lithologies are often uncertain. In addition, at the contacts with the intrusive rock, considerable assimilation and granitization of the volcanics has occurred resulting in hybrid porphyritic rocks which are difficult to distinguish as either volcanic or intrusive in origin. Nomenclature of the rocks has therefore been based upon the minerals present and their relative amounts.

The intrusive rocks vary considerably in composition, texture, color and age. Syenitic intrusive rocks are the most important, both volumetrically and economically. These rocks have been divided into four main rock types which in order of introduction are dark syenite porphyry, garnet syenite megaporphyry, fine-grained syenite porphyry and epidote syenite porphyry. On the detailed level, many subdivisions of each type are possible however in order to allow some form of geological interpretation on a property basis these major divisions have been adopted. The age of the intrusive rocks varies from Upper Triassic to Lower Cretaceous with the syenites being Upper Triassic to Lower Jurassic.

Known copper mineralization occurs in ten incompletely defined deposits as well as numerous erratic high-grade pods and low-grade showings. The deposits occur largely within feldspathized and biotite altered volcanic rocks and pipe-like breccias associated with alkalic (viz. syenitic) intrusive dykes and stocks. The deposits are tabular to manto-shaped and most have a north to northeast orientation parallel to the syenite contacts and structural trend of the area. Gold is generally associated with the higher grade copper mineralization although many areas of high copper lack appreciable gold. Because earlier exploration treated gold (and silver) as only by-product credits to the copper mineralization, assays were done by compositing the pulps within selected sections (0.4% Cu) of the drill holes. This approach resulted in gross representation of the gold distribution within the copper zones but failed to properly evaluate the higher grade gold potential of the area.

Ore reserves estimates taken from the latest HBMS reports (Freberg, 1974, Walker, 1977) are as follows:



**LEGEND**

- SEDIMENTARY & VOLCANIC ROCKS**
- RECENT**
- ALLUVIUM, TALUS, MORAINE
- UPPER TRIASSIC**
- ARGILLITES, THIN-BEDDED CARBONACEOUS LIMESTONE
- TRIASSIC ?**
- VOLCANIC FLOWS, TUFF, BRECCIA, AGGLOMERATE, MINOR SEDIMENTS
- MIDDLE TRIASSIC**
- SHALES, ARGILLITE, QUARTZITE
- PERMIAN**
- LIMESTONE
- INTRUSIVE ROCKS**
- SYENITE PORPHYRY WITH METAVOLCANIC ROCKS
  - DARK SYENITE PORPHYRY
  - BUCKSHOT PORPHYRY
  - COAST INTRUSIONS, GRANITE, MONZONITE
- METAMORPHIC ROCKS**
- GREEN SYENITE

**SYMBOLS**

- COPPER MINERALIZED ZONES
- BEDDING STRIKE & DIP, OVERTURNED
- SCALOSITY STRIKE & DIP
- GEOLOGICAL CONTACT, INFERRED
- FAULT, INFERRED
- FOLD AXIS

**STIKINE COPPER LIMITED**

**GEOLOGY**

**GALORE CREEK BASIN**

AFTER: JEFFREYS (1965)  
BARR (1984 - PL. 61-1)

DATE: JAN 16 1982 DRAWN BY: J. G. L. PLATE NO: GC90-3

SCALE: 1:150,000

NOV. 1990 0 5 10K.

Central Zone (0.4% Cu cutoff) 159.7 million tonnes of 0.93% Cu,  
0.38 g/mt. Au

North Junction Zone (1% Cu cutoff) 4.8 million tonnes of 2.00% Cu,  
0.75 g/mt. Au

The satellite deposits have had too little work to calculate a satisfactory reserve figure.

## 7. Sampling Program 1990

During the course of the 1990 field season at Galore Creek a total of 881 samples were collected and analyzed. This total is broken down as follows: 597 - 1990 drill core samples, 231 pre-1990 drill core samples, 10 surface rock samples and 43 soil samples. Table 1 provides a detailed breakdown of samples into claim groups and assessment years and Plate GC90-4 outlines the location of all 1990 target areas. All samples were analyzed by fire assay and/or atomic absorption techniques by Min En Laboratories Ltd. 705 West 15th Street, North Vancouver, B.C. V7M 1T2. The analytical results of the sampling is contained in Appendix III and the description of the analytical procedures used are outlined below. All costs associated with sampling are documented in Appendix I the Statement of Costs.

### 7.1 Sample Preparation and Analytical Technique

The following analysis procedure was provided by Min En Laboratories:

#### Analytical Procedure For Au

Geochemical samples for Au are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, B.C., laboratory employing the following procedures:

After drying the samples at 95C, soil and stream sediment sample are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized on a ring mill pulverizer.

A suitable sample weight; 15.00 or 30.00 grams is fire assay preconcentrated. The precious metal beads are taken into solution with aqua regia and made to volume.

For Au only, samples are aspirated on an atomic absorption spectrometer with a suitable set of standard solutions.



### Gold Assay Procedure

Samples are dried @ 95 C and when dry crushed on a jaw crusher. A 300 - 400 gram sub-sample is riffled off using a Jones Riffle. This is then pulverized to 95% minus 120 mesh using a ring pulverizer. Sample pulp is rolled before bagging. The remaining reject from the Jones Riffle is bagged and stored.

Samples are fire assayed using one assay ton sample weight. The samples are fluxed, a silver inquart added and mixed. The assays are fused in batches of 24 assays along with a natural standard and a blank. This batch of 26 assays is carried through the whole procedure as a set. After cupellation on the precious metal beads are transferred into new glassware, dissolved, diluted to volume and mixed.

These aqua regia solutions are analyzed on an atomic absorption spectrometer using a suitable standard set. The natural standard fused along with this set must be within 3 standard deviations of its known or the whole set is re-assayed. Likewise the blank must be less than 0.015 g/tonne. For Min-gold any samples which contained in excess of 1000 p.p.b. gold was subsequently fire assayed.

### AG, Cu, PB, ZN, NI and CO Assay Procedure

Samples are dried @ 95 C and when dry are crushed on a jaw crusher. The -1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to -1/8 inch. The whole sample is then riffled on a Jones Riffle down to a statistically representative 300 - 400 gram sub-sample (in accordance with Gy's statistical rules). This sub-sample is then pulverized in a ring pulverizer to 95% minus 120 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

A 2.000 gram sub-sample is weighed from the pulp bag for analysis. Each batch of 70 assays has a natural standard and a reagent blank included. The assays are digested using a  $\text{HN03}$  -  $\text{KCL04}$  mixture and when reaction subsides,  $\text{HCL}$  is added to assay before it is placed on a hotplate to digest. After digestion is complete the assays are colled, diluted to volume and mixed.

The assays are analyzed on atomic absorption spectrometers using the appropriate standard sets. The natural standard digested along with this set must be within 3 standard deviations of its known or the whole set is re-assayed. If any of the assays are > 1% they are re-assayed at a lower weight.

## **7.2 Soil Sampling**

A total of 43 soil samples were collected from the Camp IP area with a 1:5000 sample location map (Plate GC90-5) located in the back envelope of this report. Soil samples were taken concurrently with the establishment of the grid. The lines were put in using a compass and hip-chain with sample sites marked by orange fluorescent flagging. Stations were established at 20 meter intervals with no correction for slope. Soils were collected from the 'B' horizon where available using a grubhoe. Sample depths varied from 15 to 30 centimetres with an average of 20 centimetres. The soil was placed in a gusseted Kraft bag and then air dried in camp. Samples were then sent to Min En Laboratories in Vancouver for analysis. All costs associated with this soil sample program were applied to the 1990 assessment year for the Group III claim block.

## **7.3 Rock Sampling**

Two areas on the property, Camp I.P., and Saddle Zone, were hand trenched and sampled. A total of ten continuous chip samples were collected from trenches on the two zones. Individual sample descriptions and analytical results are contained in Appendix IV of this report and results are plotted on Plate GC 90-5 and 90-6. All costs associated with this sampling were applied to the 1990 year assessment for the Group III claims.

On the Saddle Zone an old trench was cleaned out and six continuous chip samples were collected and sent for analysis. On the camp IP zone two small trenches (4 meters x 0.5 meters) were excavated on the north side of a gully and four continuous chip samples were collected for analysis.

## **7.4 Core Re-Assaying**

A total of 219 pre-1990 drill core pulps and/or core samples were analyzed for gold. This work was undertaken because past operators had never properly evaluated the gold content of various zones on the property. The holes selected for gold assaying are located in three separate zones on the property: North Junction, Saddle and Southwest Zone. Individual drill hole locations are plotted on Plate No's GC 90-6, 7 and 8 and the analytical results are contained in Appendix III.

## 7.5 Discussion of Results (Plate GC-90 - 9 & 10)

The purpose of the soil sampling completed in the vicinity of the Camp I.P. zone was to outline a discernible gold (copper) trend associated with a float rock sample collected in 1989 which assayed 22.3 grams/tonne gold. The soil samples were collected on a steep west facing slope with extensive vegetation and soil masking bedrock. Downslope transport must be considered when interpreting the results of this survey. The furthest north east soil line has a number of anomalous gold values peaking at 384 parts per billion with partly coincidental anomalous copper. Prospecting in the vicinity of this anomalous soil line failed to locate any obvious source. Additional soil sampling should be conducted upslope in order to determine the extent of the anomaly.

Rock sampling of trenches dug on the Camp IP Zone yielded generally low grade gold, silver and copper values with maximums of 2.81 g/tonne gold, 6.3 p.p.m. silver and 799 p.p.m. copper. The Camp I.P. Zone itself is marked by a 10 to 15 meter wide iron stained shear zone which strikes  $070^{\circ}$  and dips steeply north.

Continuous chip samples collected from an old trench on the Saddle zone averaged 1.54 grams/tonne gold and 0.66 percent copper over an interval of 9.12 meters. This zone comprises a magnetite cemented intrusive fragment breccia with malachite and chalcopyrite observed in the matrix. The breccia body appears to have a pipe like shape in plan however boundary contacts are obscured by rock talus.

A number of pre-1990 drill holes from three specific copper zones were tested for gold content. A summary of the results is outlined in Table III below and individual drill record sheets are contained in Appendix VI of this report.

Table III:

ZONE	DRILL HOLE NO.	GOLD G/TONNE	CORE INTERVAL (feet)
North Junction	GC 53	0.21	260' - 480' (220')
	GC 62	0.19	140' - 360' (220')
	GC 83	0.18	460' - 510' (50')
	GC 71	0.43	16' - 44' (28')
		0.70	48' - 55' (7')
		2.07	70' - 94' (24')
		0.48	100' - 120' (20')
	GC 84C	0.50	662.5' - 727' (64.5')
		0.51	730' - 790' (60')
		0.58	990' - 1090' (100')
	GC 85	0.73	163' - 200' (37')
		0.39	210' - 280' (70')
	GC 313	0.96	680' - 83.5' (152.5')
	0.60	8339' - 1140' (306.1')	
Saddle	GC 70	3.39	180' - 300' (120')
Southwest	GC 3	1.40	50' - 110' (60')
	GC 4	2.06	50' - 200' (150')
	GC 5	1.54	103' - 229' (126')
	GC 64	0.41	70' - 180' (110')

## 8. Geophysics

VLF-EM-16 and ground magnetometer surveys were conducted on specific target areas within the Galore Creek property. A Geonics EM-16 unit was used for the EM surveys and an Omni IV Tie-Line magnetometer was used for the magnetic surveys. The operation of these instruments is well documented in the literature therefore will not be discussed in this report. The Omni IV magnetometer has the versatility of giving gradiometer readings in addition to the usual total magnetic field measurements during the course of a survey. Therefore, in some cases, both gradiometer and total magnetic field maps are included with this report.

For the VLF-EM survey on the property a transmitting station at Annapolis, Maryland (Station NSS-214 KHz) was used. VLF-EM was only conducted in the vicinity of the Southwest Zone where a total of 10.9 kilometres of survey was run on north-south oriented grid lines. All EM results were smoothed by using the Fraser filtering technique and subsequently contoured and shown on Plate GC 90-11. Raw EM data is contained in Appendix V of this report.

As stated earlier during the course of the magnetometer surveying simultaneous total magnetic field integrity (T.M.F.) and vertical gradient (gradiometer) readings were taken. A total of 23.3 line kilometres of survey were conducted on grids established on the Southwest, North Rim and Saddle Zone areas. Diurnal corrections for gradiometer readings are not required because the measurements which comprise the gradient are made almost simultaneously and very closely spaced compared to the source of magnetic storm effects and diurnal variations so that such effects on the two readings are identical and therefore removed. Diurnal corrections for T.M.F.

surveys are normally required however daily fluctuations were minimal during the course of the surveys therefore corrections were not made.

## **8.1 Discussion of Geophysical Results**

### **North Rim – DDH 128 Grid**

A total of 7.7 line kilometres of gradiometer survey was completed on the North Rim - DDH 128 grid during the 1990 field season. Of this total 4.4 kilometres was completed on the North Rim grid (Claim Group III) and 3.3 kilometres was completed on the DDH 128 grid (Group I). Plate No. GC 90-12 is a 1:5000 plan of the vertical gradient magnetics. This map shows a pronounced northeast magnetic trend probably related to the north-south bias of the grid lines and topography rather than any major changes in lithologies or structure. The majority of the grid area is underlain by a magnetite rich epidote syenite porphyry. An anomalous trend which occurs along the 0+00 baseline between grid lines 0+00 and 4+00E marks the approximate contact zone of an intermediate volcanic with epidote syenite porphyry.

### **Saddle Zone**

A total of 1.8 line kilometres of gradiometer and TFM survey was completed on the Saddle Zone grid in 1990. Contoured results are shown on Plate GC90-13 & 14. The Saddle Zone occurs above treeline on a steep west facing slope near the southeast corner of the property. The zone is comprised of a magnetite cemented intrusive fragment breccia containing varying amounts of chalcopyrite, malachite and bornite with associated gold values. In plan it has a rough oval shape with approximate dimensions of 110 meters by 60 meters. Actual breccia-country rock contacts are obscured by rock scree and rubble. Both the T.F.M. and gradiometer surveys delineated an anomaly which encompasses the known surface extent of the Saddle Zone however the T.F.M. anomaly is twice the size of the gradiometer anomaly. This is not unexpected because gradiometer measurements tend to remove regional magnetic gradients thus better define shallower anomalies. Both anomaly types have the strongest responses in a rubble covered area east of the Saddle Zone. The significance of this eastern extensions is not known at this time. The gradiometer anomaly has a few very large negative numbers in the immediate Saddle Zone area and this effect is likely due to the massive magnetite mineralization exposed at surface. This fact along with the uneven steep topography may confound gradiometer results.

### Southwest Zone

On the Southwest Zone grid a total of 8.92 line kilometres of gradiometer and T.M.F. survey plus 10.9 line kilometre of VLF-EM were completed in 1990. VLF-EM data has undergone the Fraser filtering technique to smooth out the data and allow contouring (Plate GC 90-11). Raw EM data is included in Appendix V.

The contoured EM data shows a pronounced east-west trending anomaly near the centre of the grid which is marked by the +10 contour line which coincides with the copper-gold zone drilled in 1990. This anomaly is approximately 500 meters long dissipates to the west and may be faulted off on the east side. This postulated fault would follow the north-east flowing Southwest Creek. There is an indication, observed on the VLF contour map, that an EM anomaly (fault offset?) is developing near the Cirque airstrip. VLF-EM anomalies on the northwest part of the grid have not been explained. The vertical gradient magnetic map (Plate GC 90-15) shows a narrow east-west trending anomaly which occurs immediately north and parallel to the EM anomaly which coincides with the 1990 drilling area. Unfortunately mechanical problem with the Omni magnetometer prevented survey completion of the eastern portion of the grid in 1990. Both the gradiometer and T.M.F. readings show anomalous conditions on the northwest part of the grid. It is evident both VLF-EM and ground magnetometer surveys are useful in delineating structure and perhaps copper-gold systems at Galore Creek. Therefore additional VLF and magnetometer surveys are recommended for the Galore Creek property.

### 9. Diamond Drilling

During the 1990 field season a two phased program of diamond drilling totalling 1925 meters was completed at Galore Creek. Phase 1 comprised 1002.4 meters of drilling in eleven holes completed during the period June 18 through July 26. The Phase II program comprised 922.6 meters of drilling in seven holes completed during the period August 14 through August 28. J.T. Thomas Diamond Drilling Ltd. Box 394 Smithers, B.C. VOJ 2N0 was contracted to do all drilling. They provided four drill personnel and a J.T. 600 diamond drill for the project. The location of all drill holes is shown on Plates GC-90-5, 6, 17, 18. The drill logs with assay results are included in Appendix VII of this report. Table IV lists all relevant drill hole information. The purpose of the drilling program was to test five specific copper-gold targets (Plate GC 90-4) which were located during the course of the 1989 field program.

### DH 128 Zone

One hole, GC 376, was drilled to test the south extension of the DH 128 Zone (9.94 g/tonne Au, 1.73% Cu/3.05 m). GC 376 intersected a low grade zone which assayed 0.3 percent copper and <0.34 g/tonne gold over a 21 meter core interval.

TABLE IV: 1990 DRILLING STATISTICS – GALORE CREEK

Drill Hole No.	* Location Northing	* Location Easting	Length (m)	Core Size	Inclination	Azimuth	Dip Tests	Elevation* (m)	Casing (m)	% Recovery	Date Core Started	Date Completed	Area	Comments
GC 370	14296'	24448'	116.43	BDBGM	-72	180	116.4'm - 70 45'	1513	3.05	90	July 10	July 12	Saddle Zone	
GC 371	14314'	24251'	109.42	BDBGM	-71.5	180	109.4m - 68 30'	1503	3.05	90	July 12	July 12	Saddle Zone	
GC 372	29397'	17299'	84.43	BDBGM	-70	330	—	1204	3.05	100	July 13	July 13	North Rim	
GC 373	29561'	17584'	81.68	BDBGM	-65	330	76.8m - 62 30'	1198	3.05	100	July 14	July 15	North Rim	
GC 374	29233'	17015'	81.68	BDBGM	-66.5	330	81m - 66 30'	1216	3.05	90	July 15	July 16	North Rim	
GC 375	28779'	16163'	100.27	BDBGM	-50	330	100m - 51	1265	16.76	90	July 16	July 17	North Rim	
GC 376	28707'	13931'	92.96	BDBGM	-70	100	92m - 71 30'	1426	7.62	90	July 17	July 18	DH128	
GC 377A	18086'	16383'	12.19	BDBGM	-60	0	—	844	12.19	—	July 18	July 19	SW Zone	Hole lost in overburden
GC 377B	18086'	16383'	3.05	BDBGM	-65	0	—	844	3.05	—	July 19	July 19	SW Zone	Hole lost in overburden
GC 377C	18086'	16383'	16.46	BDBGM	-65	0	—	844	16.46	—	July 19	July 20	SW Zone	Hole lost in overburden
GC 378	19122'	23371'	121.61	BDBGM	-65	170	92m - 66.5	1052	6.10	90	July 21	July 22	Camp I.P.	
GC 379	18244'	16136'	85.04	BDBGM	-60	0	—	860	29.56		July 23	July 25	SW Zone	Bedrock at 15.2 m
GC 380	293103'	172546'	102.10	BDBGM	-70	330	93m - 70 45'	1201	3.05		July 25	July 26	North Rim	
GC 381	18165'	16103'	179.52	BDBGM	-61.5	0	179m - 64 45'	863	24.38		Aug. 14	Aug. 16	SW Zone	
GC 382	18148'	15808'	210.61	BDBGM	-61.5	0	210m - 64 45'	903	21.34		Aug. 17	Aug. 18	SW Zone	
GC 383	18165'	15480'	159.71	BDBGM	-61.5	0	159m - 63 30'	927	27.74		Aug. 19	Aug. 20	SW Zone	
GC 384	18132'	15152'	134.72	BDBGM	-61.5	0	—	951	18.29	—	Aug. 22	Aug. 22	SW Zone	Lost hole-sanded in
GC 385	17922'	16383'	15.85	BDBGM	-61.5	0	—	847	15.85		Aug. 23	Aug. 24	SW Zone	Hole lost in overburden
GC 386	18117'	16383'	121.91	BDBGM	-90	V. Hole	121m - 76	843	30.48		Aug. 24	Aug. 26	SW Zone	
GC 387	29766'	17401'	100.27	BDBGM	-55	270	100m - 51	1210	6.10		Aug. 27	Aug. 28	North Rim	
			1925.05											

\*Not Surveyed

No further work is warranted on this zone.

#### North Rim Zone Area

Six diamond drill holes totalling 545.7 meters were drilled around the North Rim Trench Zone. GC 372 was designed to test the down dip projection of the zone which on surface assayed 9.26 grams/tonne gold and 2.37 percent copper across 7 meters. The results from GC 372 were disappointing with a 27 meter section averaging 0.27 grams/tonne gold and 0.3 percent copper. Other holes (GC 373, 374, 375, 380) designed to test this zone along strike were also disappointing. GC 387 was designed to test the North Rim Zone which occurs on a steep north facing gulley. Nothing of major significance was intercepted in this hole. The highest gold assay obtained was 0.79 grams/tonne and the highest copper assay was 0.187 percent.

#### Camp I.P. Area

Drill hole GC 378 was designed to test the down dip projection of a shear zone which was believed to be the source of a float boulder which assayed 22.28 grams/tonne gold. No significant gold or copper values were obtained in GC 378.

#### Saddle Zone

Two drill holes, GC 370 and GC 371, were drilled to test the projected down dip extension of a magnetite matrix syenite breccia which on surface averaged 7.9 grams/tonne gold and 2.05 percent copper across 25.8 meters. Two zones of enriched copper and gold in breccias were outlined in GC 370. An upper zone assayed 2.19 grams/tonne gold and 0.55 percent copper over 12 meters and a lower zone averaged 3.98 grams/tonne gold and 2.49 percent copper over a core interval of 12 meters. GC 371 intersected one low grade section which assayed 0.45 grams/tonne gold and 0.16 percent copper over a core interval of 30 meters. The Saddle Zone requires two more drill holes in order to properly evaluate the potential of the zone.

#### Southwest Zone

Ten drill holes totalling 939 meters were completed in the Southwest Zone area during the 1990 program. Four of these holes (GC 377 A, B, C, GC 385) failed to reach their targeted depth because of difficult overburden conditions. GC 379 was taken to a depth of 85 meters before the hole was abandoned because of difficult ground conditions. A 61 meter intercept averaged 5.14 grams/tonne gold and 1.88 percent copper. Drill holes GC 381 through GC 386 tested the down dip and strike projection of the zone intersected in GC 379. All holes intersected a mottled syenite breccia which contained significant copper and gold values. Additional holes are required to determine the overall dimensions and grade of this new zone.



## **10. Conclusions**

The 1990 field program drill tested five different targets outside of the main Central Zone at Galore Creek. At least one of these zones (Southwest Zone) contains significant quantities of gold and copper mineralization and requires additional drilling to properly evaluate its potential. VLF-EM and magnetometer surveys proved to be useful exploration tools at Galore Creek and their continued application is recommended.

## 11. SELECTED BIBLIOGRAPHY

- |                   |      |   |
|-------------------|------|---|
| Walker, A.A.      | 1977 | "Stikine Copper Limited: Progress Report - 1976 /1977 - Galore Creek Project" In House Report; March 1977             |
| Barr, D.A.        | 1964 | "Stikine Copper Limited: Progress Report 1963 - Galore Creek Project" In House Report; April 30, 1964                 |
|                   | 1963 | "Kennco Explorations, (Western) Limited: Progress Report 1962 - Galore Creek Project" In House Report; April 17, 1963 |
|                   | 1965 | "Stikine Copper Limited: Progress Report 1964 - Galore Creek Project" In House Report; April 30 1965                  |
|                   | 1966 | "Stikine Copper Limited: Progress Report 1965- Galore Creek Project" In House Report; May 30, 1966                    |
|                   | 1961 | "Kennco Explorations, (Western) Limited: Progress Report 1960 - Galore Creek Area" In House Report; March 15, 1962    |
|                   | 1962 | "Kennco Explorations, (Western) Limited: Progress Report 1961 - Galore Creek Project" In House Report; March 15, 1962 |
| Freberg, R.A.     | 1974 | "Stikine Copper Limited: Progress Report 1973 - Galore Creek Project". In Hse Rept; March 1974                        |
| Zurowski, M.T.    | 1988 | "Gold Potential of the Galore Creek Deposits" In House Report; Jan. 11, 1988  |
| Allen, D.G. et al | 1976 | "Galore Creek" in Can. Inst. of Mining and Met. Special Vol. No. 15; Part C pp. 402-414; 1976                         |
| Jeffery, W.G.     | 1966 | "A Geology of Upper Galore Creek" B.C. Min. Mines and Petrol. Res., Annual Report, 1965, pp. 19-29                    |
| Panteleyev, A.    | 1973 | "GC, HAB, BUY (Stikine Copper)" B.C. Dept. Mines & Petrol. Res., Geology, Exploration & Mining 1972, pp. 520-526      |
| Souther, J.G.     | 1972 | "Telegraph Creek Map-Area, British Columbia" Geol. Surv. Canada, Paper 71-44.   |

Taylor, K.J.

1989

Report On Soil, Silt & Rock Geochemical Sampling, Trenching & VLF-EM Surveying On The Galore Creek Group I, II, III Claims, Liard M.D. British Columbia

**APPENDIX I**

**STATEMENT OF COSTS**

Statement of Costs - Group I (1990 Assess)

Personnel

K. Taylor - Geologist/Supervisor @ \$200/day

D. Sanguinetti - Field Assistant @ \$100/day

D. Holmes - Field Assistant @ \$100/day

D. Burr ridge - Prospector @ \$125/day

E. Yarrow - Geologist @ \$250/day

Dates Work Done

June 20 -23, July 9, 17, 18

Cost Breakdown

*Drilling (GC 376)*

Drill site preparation - 3 man days @ \$100/day	300.00
Geological Supervision & Core logging: - 3.5 man days @ \$200/man day	700.00
Room & Board Costs - 16.5 man days @ \$100/man day	1,815.00
Mobilization/Demobilization of Drill - 1/8 of 10,000	555.56
Coring: 85.34m @ \$92/meter	7,851.28
Casing: 7.62m @ \$96/meter	731.52
Core boxes: 12 boxes @ \$6.50/box	78.00
Fuel (drill): 3 barrels diesel @ \$235/barrel (includes transport)	705.00
Helicopter Support: 5.5 hours @ \$700/hour	3,850.00
Expediting	160.00

16,746.36

*Assaying*

Sample preparation: 29 rock samples @ \$3/sample	87.00	
Core splitting: 1.5 man days @ \$100/man day	150.00	
Room & Board: 1.5 man days @ \$110/man day	165.00	
Sample analysis 29 samp @ \$15/samp (Cu, Au, Ag)	435.00	
Shipping	135.00	
		972.00

*Geophysics* (June 21, 22, 23 - North Rim DH 128 Zone)

Grid preparation/magnetometer survey – 2 man days @ \$100/man day	200.00	
Helicopter support: 0.2 hours @ \$700/hour	140.00	
Room & Board: 2.5 man days @ \$110/man day	275.00	
		615.00

*Report*

Preparation - 3 days @ \$200/day	600.00	
Secretarial - 1 day @ \$100/day	100.00	
Drafting - 5 hours @ \$15/hour	75.00	
		<u>775.00</u>
		19,108.36

Statement of Costs - Group II (1990 Assess.)

Personnel

K. Taylor - Geologist/Supervisor @ \$200/day

D. Sanguinetti - Field Assistant @ \$100/day

D. Holmes - Field Assistant @ \$100/day

P. Reynolds - Geologist @ \$130/day

Dates Work Done

June 24 - July 1, July 10, July 18, Aug. 18

Cost Breakdown

*Drilling (GC 377 A,B,C, GC 379, 381, 382)*

Drill site preparation - 2 man days @ \$100/man day	
– 4 man days @ \$130/man day	720.00
Geological Supervision & Core Logging	
– 10 man days @ \$200/man day	
– 4 man days @ \$130/man day	2,520.00
Room & Board Costs: 75 man days @ \$110/day	8,250.00
Mobilization/Demobilization Drill (4/18/ of 10,000)	2,222.22
Coring: 401.11m @ \$92/m	36,902.12
Casing: 105.77m @ \$96/m	10,153.92
Core boxes: 81 boxes @ \$6.50/box	526.50
Fuel (drill): incl. air transp. \$235/barrel x 7 barrels	1,645.00
Helicopter Support: 17.9 hrs. @ \$700/hr.	12,530.00
Expediting	416.00

75,885.76

*Assaying*

Sample Preparation: 213 samples @ \$3/samp	639.00	
Core Splitting: 9 man days @ \$100/man day	900.00	
Room & Board: 9 man days @ \$110/man day	990.00	
Sample Analysis: 160 core samp. @ \$15/samp		
– 53 old core samp. @ \$15/samp.	3,195.00	
Shipping	426.00	
		6,150.00

*Geophysics* (June 24 - July 3 - Southwest Zone)

Grid preparation & Magnetometer & EM Survey		
– 10 man days @ \$100/man day	1,000.00	
Room & Board Costs: 10 man days @ \$110/ day	1,100.00	
Helicopter Support: 1 hour @ \$700/hr	700.00	
		2,800.00

*Report*

Preparation: 6 days @ \$250/day	1,500.00	
Secretarial Charges: 2 days @ \$100/day	200.00	
Drafting: 8 hrs. @ \$15/hr	120.00	
		<u>1,820.00</u>
		86,655.76



**Statement of Costs - Group III (1990 Assess)**

Personnel

K. Taylor - Geologist/Supervisor @ \$200/day

P. Reynolds - Geologist @ \$130.00/day

D. Sanguinetti - Field Assistant @ \$100/day

D. Holmes - Field Assistant @ \$100/day

D. Burrige - Prospector @ \$125/day

E. Yarrow - Geologist @ \$250.00/day

Dates Work Done

July 2-17

Cost Breakdown

*Drilling (GC 370 - 375, 380)*

Drill site preparation - 18 man days @ \$100/day	1,800.00
Geological Supervision & Core Logging	
– 13 man days @ \$200/man day	
– 6 man days @ \$130/man day	3,380.00
Room & Board: 72 man days @ \$110/man day	7,920.00
Mobilization/Demobilization Drill (6/18 of \$10,000)	3,333.33
Coring: 534.01m @ \$92/m	49,128.92
Casing: 32 m @ \$96/m	3,072.00
Core boxes: 137 boxes @ \$6.50/box	890.50
Fuel (drill): 12 barrels @ \$235/barrel (incl. transp.)	2,820.00
Helicopter Support: 28.1 hrs. @ \$700/hr.	19,670.00
Expediting	407.00

92,421.75

*Assaying*

Sample Preparation: 190 samples @ \$3/samp	570.00	
Core Splitting: 12 man days @ \$100/man day	1,200.00	
Room & Board: 12 man days @ \$110/man day	1,320.00	
Sample Analysis: 190 core samp. @ \$15/samp	2,850.00	
Shipping	446.00	
		6,386.00

*Geochemistry (Soil sampling - Camp IP area)*

Sampling/grid preparation		
– 2 man days @ \$100/day	200.00	
Assaying: 37 soil samples @ \$15/sample	555.00	
Sample Preparation: 37 samples @ \$0.90/sample	33.30	
Field Supplies	65.00	
Room & Board: 2 man days @ \$110/man day	220.00	
Helicopter Support: 0.6 hours @ \$700/hour	420.00	
Shipping	50.00	
		1,543.30

*Geochemistry (Trench sampling: Saddle Zone and Camp I.P.)*

Trench clean out 2 sampling:		
– 4 man days @ \$200/day	800.00	
Room & Board: 4 man days @ \$110/man day	440.00	
Assaying: 10 rock samples @ \$15/sample	150.00	
Sample Preparation: 10 samples @ \$3/sample	30.00	
Helicopter Support: 0.8 hrs. @ \$700/hr	560.00	
Shipping	40.00	
		2,020.00

*Geophysics* (Magnetometer Survey - Saddle Zone & North Rim)

Grid preparation & Survey	
— 10 man days @ \$100/man day	1,000.00
Plotting: 1.5 days @ \$200/day	300.00
Helicopter Support: 1.4 hours @ \$700/hr	980.00
Room & Board: 11.5 man days @ \$110/day	1,265.00
	3,545.00

*Report*

Preparation: 6 days @ \$250/day	1,500.00
Secretarial: 2 days @ \$100/day	200.00
Drafting: 8 hours @ \$15/hr	120.00
	<u>1,820.00</u>
	107,736.05

Statement of Costs - Group I (1991 Assess)

Personnel

P. Reynolds - Geologist @ \$130/day

E.W. Yarrow - Geologist @ \$250/day

Dates Work Done

October 19 - 26

Reassaying Pre-1990 Core (North Junction Zone)

Locating old pulps: 2 man days @ \$130/day 260.00

Analysis of 166 drill core pulps @ \$10/sample 1,660.00

1,920.00

Report

Preparation: 0.5 days @ \$250/day 125.00

Secretarial: 2 hrs @ \$12.50/hr/ 25.00

Drafting: 2 hrs @ \$15.00/hr 30.00

180.00

2,100.00

Statement of Costs - Group II (1991 Assess)

Personnel

K. Taylor: Geologist/Supervisor @ \$200/day

P. Reynolds: Geologist @ \$130/day

R. Weishaupt: Field Technician @ \$130/day

G. McCrady: Field Technician @ \$120/day

E.W. Yarrow: Geologist @ \$250/day

Dates Work Done

August 19 to August 26

Cost Breakdown

*Drilling (GC 383-386)*

Drill Site Preparation - 8 man days @ \$130/day	1,040.00
Geol. Supervision & Core logging	2,520.00
– 10 man days @ \$200/day	
– 4 man days @ \$130/day	
Room & Board Costs: 62 man days @ \$110/day	6,820.00
Mobilization/Demobilization Drill (4/18 of 10,000)	2,222.22
Coring of 339 85m @ \$92/m	31,266.20
Casing: 92.35m @ \$96/m	8,865.60
Core boxes: 65 boxes @ \$6.50/box	422.50
Fuel: 14 barrels diesel @ \$235/bbl. (incl. transp.)	3,290.00
Helicopter Support: 14.4 hrs. @ \$700/hr	10,080.00
Expediting	416.00

66,942.52

*Assaying*

Sample Preparation: 126 samp @ \$3/samp	378.00	
Sample Analysis: 126 samp @ \$15/samp	1,890.00	
Core Splitting: 4 man days @ \$130/man day	520.00	
Room & Board: 4 man days @ \$110/man day	440.00	
Shipping	410.00	
		3,638.00

*Report*

Preparation - 4 days @ \$250/day	1,000.00	
Secretarial - 2 days @ \$100/day	200.00	
Drafting - 3 hrs. @ \$15/hr	45.00	
		<u>1,245.00</u>
		71,825.52

**Statement of Costs - Group III (1991 Assess)**

Personnel

K. Taylor: Geologist/Supervisor @ \$200/day

P. Reynolds: Geologist @ \$130/day

R. Weishaupt: Field Technician @ \$130/day

D. Holmes: Field Technician @ \$100/day

E.W. Yarrow: Geologist @ \$250/day

Dates Work Done

July 25 to August 28

Cost Breakdown

*Drilling (GC 380,387)*

Site Preparation - 3 man days @ \$100/day	
— 2 man days @ \$130/man day	560.00
Geol. Supervision & Core logging	1,360.00
— 5.5 man days @ \$200/day	
— 2 man days @ \$130/day	
Room & Board Costs: 325 man days @ \$110/day	3,575.00
Mobilization/Demobilization Drill (2/18 of 10,000)	1,111.11
Coring: 193.24m @ \$92/m	17,778.08
Casing: 9.14m @ \$96/m	877.44
Core boxes: 32 boxes @ \$6.50/box	208.00
Fuel: 5 barrels diesel @ \$235/barrel	1,175.00
Helicopter Support: 9.7 hrs. @ \$700/hr	6,790.00
Expediting	185.00

33,619.63

*Assaying*

Sample Preparation: 66 samp @ \$3/samp	198.00	
Sample Analysis: 66 samp @ \$15/samp	990.00	
Core Splitting: 2 man days @ \$100/man day – 2 man days @ \$130/man day	460.00	
Room & Board: 4 man days @ \$110/day	440.00	
Shipping	305.00	
		2,393.00

*Report*

Preparation - 2 man days @ \$250/day	500.00	
Secretarial - 1 day @ \$100/day	100.00	
Drafting - 2 hrs. @ \$15/hr	30.00	
		630.00
		<hr/>
		36,642.63



**APPENDIX II**

**STATEMENT OF QUALIFICATIONS**

## **STATEMENT OF QUALIFICATIONS**

I, Edward W. Yarrow of 1819 - 127 A Street, Surrey, British Columbia do hereby certify that:

1. I am a geologist with a B.Sc. in Geology from the University of British Columbia, 1973.
2. I have practised my profession continuously since 1973.
3. I am a Fellow of the Geological Association of Canada.
4. I supervised and co-executed the 1990 fieldwork at the Galore Creek property on behalf of Mingold Resources Inc.




E.W. Yarrow

Regional Representative, Western District  
Mingold Resources Inc.

## **STATEMENT OF QUALIFICATIONS**

I, Kenneth J. Taylor of 15732-92 B Avenue, Surrey, British Columbia do hereby certify that:

1. I am a geologist with a B.Sc. in Geology from the University of British Columbia, 1973.
2. I have practised my profession continuously since 1973.
3. I am a Fellow of the Geological Association of Canada.
4. I supervised and co-executed the 1990 fieldwork at the Galore Creek property on behalf of Mingold Resources Inc.



K.J. Taylor

Senior Project Geologist  
Mingold Resources Inc.

## STATEMENT OF QUALIFICATIONS

I, Paul Reynolds of 4034 West 39th Avenue, Vancouver, British Columbia do hereby certify that:

1. I am a graduate of the University of British Columbia with a B.Sc. degree in geology, 1987.
2. I have practised my profession continuously since 1987.
3. I logged core, under the direction of Ken Taylor, at Galore Creek during the 1990 field season.

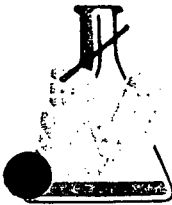


Paul Reynolds

Geologist  
Mingold Resources Inc.

**APPENDIX III**

**CERTIFICATES OF ASSAY**



**MIN-EN LABORATORIES**

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

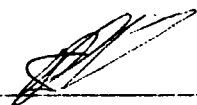
ON-0003-RG1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-07-90**  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.

We hereby certify the following Geochemical Analysis of 30 CORE samples submitted JUN-01-90 by K. TAYLOR.

Sample Number	AG PPM	CU PPM
21174	4.3	6900
21175	3.2	6450
21176	2.8	4700
21177	2.9	4150
21178	11.8	17000
GC 3 (Reassay 1/4 split)		
21179	7.9	12000
21180	5.5	8250
21181	6.0	10000
21182	2.0	2300
21183	5.2	7350
21184	8.8	15700
21185	12.6	21000
21186	12.3	16500
21187	20.0	19000
21188	8.2	16400
GC 4 (Reassay 1/4 split)		
21189	5.6	11000
21190	7.5	10500
21191	3.0	4150
21192	2.9	4350
21193	7.7	12500
21194	4.6	9100
21195	9.1	13500
21196	3.8	9500
21197	1.3	1230
21198	1.6	680
GC 5 (Reassay 1/4 split)		
21199	3.3	1090
21200	4.8	4300
21201	3.2	6600
21202	1.9	2090
21203	1.8	1470
21204	2.0	2580

Certified by 

Assay Certificate

ON-0003-RA1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-07-90**  
Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**  
2. **MINGOLD RESOURCES, SMITHERS, B.C.**

**We hereby certify the following Assay of 31 CORE samples submitted JUN-01-90 by K. TAYLOR.**

Sample Number	AU g/tonne	AU oz/ton
21174	1.01	.029
21175	1.20	.035
21176	.62	.018
21177	.60	.018
21178	3.60	.105
-----		
21179	1.41	.041
21180	1.80	.053
21181	1.60	.047
21182	.44	.013
21183	1.64	.048
-----		
21184	3.22	.094
21185	2.02	.059
21186	2.85	.083
21187	2.80	.082
21188	1.85	.054
-----		
21189	1.84	.054
21190	2.90	.082
21191	1.04	.030
21192	.64	.019
21193	3.40	.099
-----		
21194	2.17	.063
21195	2.70	.079
21196	1.03	.030
21197	.15	.004
21198	8.65	.252
-----		
21199	10.80	.315
21200	3.06	.089
21201	.86	.025
21202	.60	.018
21203	.15	.004
-----		
21204	.47	.014

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Assay Certificate

ON-0001-RA1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: JUL-07-90

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.

*We hereby certify* the following Assay of 11 CORE samples  
submitted JUN-28-90 by K.TAYLOR.

Sample Number	AU g/tonne	AU oz/ton
21163	.02	.001
21164	.04	.001
21165	4.00	.117
21166	1.00	.029
21167	1.86	.054
<i>GC 64 (Renssay)</i>		
21168	.10	.003
21169	.19	.006
21170	.24	.007
21171	.15	.004
21172	.14	.004
<i>1/4 split</i>		
21173	.16	.005

Certified by \_\_\_\_\_

MIN-EN LABORATORIES





**MIN  
• EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

ON-0001-RG1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-07-90**

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.

**We hereby certify the following Geochemical Analysis of 11 CORE samples submitted JUN-28-90 by K.TAYLOR.**

Sample Number	AG PPM	CU PPM
21163	1.3	320
21164	1.2	1020
21165	6.6	6100
21166	1.7	1420
21167	1.8	770
21168	2.0	1120
21169	1.8	810
21170	1.6	520
21171	1.8	540
21172	1.8	490
21173	1.6	600

*6064*

Certified by \_\_\_\_\_



Geochemical Analysis Certificate

ON-0002-SG1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-07-90**

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.

**We hereby certify** the following Geochemical Analysis of 12 SOIL samples submitted JUN-29-90 by K.TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
SG10464014S	42	1.4	185
SG10464015S	156	1.4	65
SG10464016S	250	1.2	60
SG10464017S	111	1.6	101
SG10464018S	180	1.6	57
SG10464019S	44	1.4	60
SG10464020S	225	1.3	40
SG10464021S	72	2.6	37
SG10464022S	384	1.1	77
SG10464023S	236	1.0	110
SG10463024	105	1.5	175
SG10463029S	30	2.2	470

*Comp IP*

Certified by \_\_\_\_\_





Assay Certificate

OS-0096-RA1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUN-28-90**

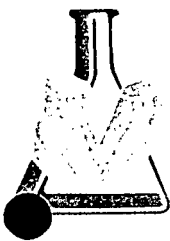
- Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.  
3. MINGOLD RESOURCES, C/O MIN-EN LABS

**We hereby certify the following Assay of 22 ROCK samples submitted JUN-22-90 by K. TAYLOR.**

Sample Number	*AU g/tonne	*AU oz/ton	
21003	.18	.005	Saddle Zone Surface samples
21004	2.16	.063	
21005	3.15	.092	
21006	2.60	.076	
21007	1.04	.030	
21008	.02	.001	Camp IP Surface Samples
21101	.63	.018	
21102	.09	.003	
21103	2.81	.082	
21104	.13	.004	
21151	1.58	.046	GC 70 Re-assay
21152	1.67	.049	
21153	1.00	.029	
21154	1.24	.036	
21155	2.09	.061	
21156	6.40	.187	
21157	3.52	.103	
21158	6.09	.178	
21159	5.25	.153	
21160	7.90	.230	
21161	3.38	.099	
21162	.49	.014	

\*AU - 1 ASSAY TON

Certified by   
MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

***Geochemical Analysis Certificate***

**ON-0005-RG1**

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-19-90**

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.

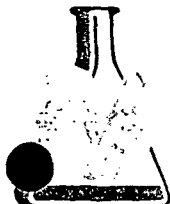
**We hereby certify the following Geochemical Analysis of 9 ROCK samples submitted JUL-11-90 by K.TAYLOR.**

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21216	33	1.2	140
21217	3	1.1	122
21218	1	0.9	113
21219	2	1.1	119
21220	3	0.6	129
21221	205	1.7	910
21222	712	2.3	2370
21223	515	1.8	1580
21224	689	2.6	2700

*GC370*

Certified by \_\_\_\_\_

**MIN-EN LABORATORIES**



**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

*Geochemical Analysis Certificate*

OS-0164-RG1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: JUL-24-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

We hereby certify the following Geochemical Analysis of 29 CORE samples submitted JUL-20-90 by K. TAYLOR.

Sample Number	AU-FIRE PFB	AG PPM	CU PPM
21225	1610	3.2	5000
21226	2635	4.6	6750
21227	2770	4.0	6120
21228	1780	2.7	3780
21229	410	2.0	2040
21230	130	1.2	1150
21231	113	0.8	780
21232	273	1.7	1280
21233	197	1.4	895
21234	117	1.0	865
21235	80	0.6	510
21236	10	0.8	442
21237	153	1.3	703
21238	590	4.2	2610
21239	7500	98.5	37650
21240	5000	35.5	33300
21241	1900	10.8	15600
21242	855	7.6	13275
21243	380	3.6	4970
21244	123	1.8	2000
21245	126	2.6	2470
21246	580	2.1	3230
21247	187	1.7	2040
21248	150	1.6	1930
21249	107	1.7	1320
21250	30	1.4	760
21751	13	1.0	600
21752	53	1.2	655
21753	10	1.0	555

GC 370

GC 370

Certified by

MIN-EN LABORATORIES

*Geochemical Analysis Certificate*

OS-0165-RG1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: JUL-24-90


Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

*We hereby certify* the following Geochemical Analysis of 15 CORE samples submitted JUL-20-90 by K. TAYLOR.

Sample Number	AU-FIRE PFB	AG PPM	CU PPM
21251	2	0.9	118
21252	5	0.9	191
21253	6	1.0	170
21254	2	0.8	91
21255	2	0.9	131
21256	11	0.8	150
21257	6	0.7	88
21258	2	0.8	89
21259	10	0.8	56
21260	3	0.6	90
21261	1	0.7	100
21262	2	1.0	175
21263	6	0.7	107
21264	9	1.1	98
21265	34	1.4	283

GC 3 71

Certified by



MIN-EN LABORATORIES





**MIN  
• EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate OS-0155-RG1

Company: MINGOLD RESOURCES  
Project: GALORE  
Attn: E. YARROW

Date: JUL-24-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.  
3. MINGOLD RESOURCES, C/O MIN-EN LABS.

We hereby certify the following Geochemical Analysis of 14 CORE samples submitted JUL-16-90 by K. TAYLOR.

Sample Number	AU-FIRE PPB	AS PPM	CU PPM
21266	213	2.2	860
21267	163	2.5	740
21268	87	1.7	562
21269	60	1.6	515
21270	40	1.7	478
-----			
21271	20	2.8	570
21272	197	3.0	1420
21273	225	2.1	1060
21274	17	1.5	422
21275	253	1.9	940
-----			
21276	308	1.8	1000
21277	368	3.2	1100
21278	800	2.6	1720
21279	700	2.2	1880

GC371

Certified by   
MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

OS-0175-RG1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: JUL-24-90

- Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.  
3. MINGOLD RESOURCES, C/O MIN-EN LABS

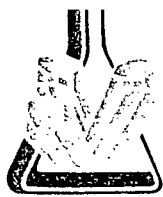
We hereby certify the following Geochemical Analysis of 6 CORE samples submitted JUL-17-90 by K. TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21 280	265	1.4	1090
21 281	305	1.6	1020
21 282	605	1.8	1603
21 283	478	2.0	1760
21 284	370	1.6	2170
21 285	312	1.8	2200

GC371

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

*Geochemical Analysis Certificate*

OS-0166-RG1

Company: **MINGOLD RESOURCES**  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: JUL-24-90

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

**We hereby certify** the following Geochemical Analysis of 19 CORE samples submitted JUL-20-90 by K.TAYLOR.

Sample Number	AU-FIRE PFB	AG PPM	CU PPM
			GC372
21754	510	2.0	3950
21755	130	1.4	1970
21756	455	3.7	3360
21757	137	2.1	2120
21758	57	3.8	2790
21759	364	6.1	4300
21760	380	4.2	3400
21761	356	4.8	3610
21762	73	1.8	1530
21763	7	1.4	780
21764	87	1.2	735
21765	127	1.0	1210
21766	20	0.8	1240
21767	16	0.9	910
21768	137	1.3	1190
21769	118	1.1	915
21770	130	1.0	630
21771	105	1.0	1310
21772	148	0.8	810

Certified by

MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

*Geochemical Analysis Certificate*

OS-0163-RG1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-24-90**

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

*We hereby certify* the following Geochemical Analysis of 15 CORE samples submitted JUL-20-90 by K. TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21773	90	1.6	406
21774	13	0.8	150
21775	28	0.6	575
21776	7	0.5	291
21777	13	1.0	595
-----			
21778	3	0.9	453
21779	7	0.6	319
21780	2	0.6	220
21781	2	0.3	187
21782	6	0.8	221
-----			
21783	10	0.6	213
21784	2	0.4	190
21785	84	1.1	391
21786	7	0.9	293
21787	171	0.7	530

GC372

CC373

Certified by

MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES LTD.**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

***Geochemical Analysis Certificate***

**OS-0176-RG1**

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-24-90**

- Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.  
3. MINGOLD RESOURCES, C/O MIN-EN LARS

**We hereby certify** the following Geochemical Analysis of 13 CORE samples submitted JUL-17-90 by K.TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21 788	118	1.0	650
21 789	33	0.8	250
21 790	.032 1000	1.8	465
21 791	280	1.2	462
21 792	13	1.0	263
<hr/>			
21 793	7	0.9	362
21 794	44	1.1	410
21 795	33	0.9	152
21 796	20	1.0	112
21 797	10	1.0	300
<hr/>			
21 798	7	1.0	374
21 799	13	0.9	240
21 800	242	0.8	184

*GC 373*

Certified by \_\_\_\_\_

*[Signature]*  
MIN-EN LABORATORIES



**MIN-EN LABORATORIES**

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
PORT VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Assay Certificate OS-0176-RA1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

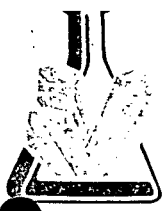
Date: JUL-24-90

- Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.  
3. MINGOLD RESOURCES, C/O MIN-EN LABS

We hereby certify the following Assay of 1 ROCK samples submitted JUL-17-90 by K.TAYLOR.

Sample Number	AU		
	g/tonne	oz/ton	
21 790	1.08	.032	GC373

Certified by *Benjamin*  
MIN-EN LABORATORIES



**MIN-EN LABORATORIES LTD.**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

OS-0180-RG1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-24-90**

- Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.  
3. MINGOLD RESOURCES, C/O MIN-EN LABS

*We hereby certify* the following Geochemical Analysis of 15 CORE samples submitted JUL-18-90 by K. TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21 301	17	1.2	280
21 302	294	1.4	535
21 303	98	1.4	497
21 304	30	1.0	244
21 305	17	0.9	266
21 306	282	1.8	2200
21 307	295	1.8	1800
21 308	436	1.4	2140
21 309	67	1.2	890
21 310	7	0.7	404
21 311	10	0.7	340
21 312	172	1.8	1220
21 313	195	1.4	1040
21 314	318	1.6	1730

↑ GC 373  
↓

GC 374

Certified by \_\_\_\_\_

MIN-EN LABORATORIES

29:40



**MIN  
• EN  
LABORATORIES**

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

***Geochemical Analysis Certificate***

**OS-0178-RG1**

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-25-90**

- Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.  
3. MINGOLD RESOURCES, C/O MIN-EN LABS

**We hereby certify the following Geochemical Analysis of 17 ROCK samples submitted JUL-20-90 by K. TAYLOR.**

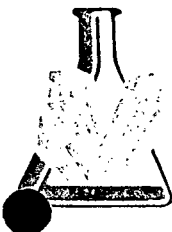
Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21 315	133	1.3	850
21 316	330	1.8	1800
21 317	140	0.8	1130
21 318	190	0.9	1040
21 319	117	1.0	800
21 320	72	0.9	610
21 321	120	1.2	900
21 322	340	1.7	1650
21 323	112	1.0	840
21 324	205	1.1	1180
21 325	6	0.4	260
21 326	2	0.6	350
21 327	27	0.8	300
21 328	57	0.8	480
21 329	6	0.6	650
21 330	10	0.6	400
21 331	156	1.0	1030

*GC 37A*

Certified by \_\_\_\_\_

MIN-EN LABORATORIES





**MIN  
• EN  
LABORATORIES**

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate OS-0179-RG1

Company: **MINGOLD RESOURCES**  
Project: GALDRE CREEK  
Attn: E. YARROW/K. TAYLOR

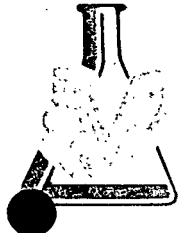
Date: JUL-25-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.  
3. MINGOLD RESOURCES, C/O MIN-EN LABS

We hereby certify the following Geochemical Analysis of 5 ROCK samples submitted JUL-20-90 by K. TAYLOR.

Sample Number	AU-FIRE FPB	AG PPM	CU PPM
21 286	72	1.3	710
21 287	53	0.9	230
21 288	9	1.0	400
21 289	100	0.9	600
21 290	6	0.6	220

} GC 375

Certified by   
MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

**Geochemical Analysis Certificate OS-0177-RG1**

Company: **MINGOLD RESOURCES**  
Project: **GALDRE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

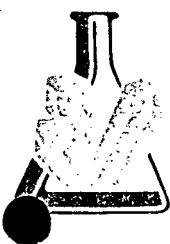
Date: **JUL-25-90**  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.  
3. MINGOLD RESOURCES, C/O MIN-EN LABS

**We hereby certify the following Geochemical Analysis of 9 ROCK samples submitted JUL-20-90 by K. TAYLOR.**

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21 291	3	1.4	210
21 292	32	1.1	420
21 293	270	1.4	800
21 294	13	1.2	290
21 295	7	1.3	250
21 296	50	1.6	1490
21 297	16	1.4	910
21 298	6	1.2	1050
21 299	93	1.4	1420

*CC 375*

Certified by *[Signature]*  
MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

*Geochemical Analysis Certificate* OS-0169-RG1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-30-90**  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX  
3. MINGOLD RESOURCES, C/O MIN-EN LABS.

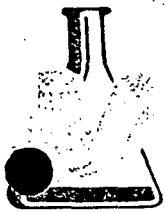
*We hereby certify* the following Geochemical Analysis of 9 CORE samples submitted JUL-26-90 by K.TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21354	30	1.0	202
21355	55	1.2	865
21356	55	1.0	1020
21357	20	0.8	399
21358	30	0.9	253
21359	40	1.3	312
21360	50	1.0	810
21361	130	1.6	1770
21362	80	1.1	329

CC 375

Certified by 

MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**

705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**

33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

OS-0174-RG1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: JUL-24-90

- Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.  
3. MINGOLD RESOURCES, C/O MIN-EN LABS.

We hereby certify the following Geochemical Analysis of 9 CORE samples submitted JUL-20-90 by K. TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	
21 300	13	1.2	690	} GC 375
21 351	214	1.8	2540	
21 352	17	1.0	590	
21 353	50	1.1	475	
21 332	33	0.9	445	
21 333	40	1.0	750	} GC 376
21 334	13	0.6	192	
21 335	60	1.0	115	
21 336	27	1.0	122	

Certified by

MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

OS-0184-RG1

Company: **MINGOLD RESOURCES**  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: JUL-25-90

- Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.  
3. MINGOLD RESOURCES, C/O MIN-EN LABS.

We hereby certify the following Geochemical Analysis of 24 ROCK samples submitted JUL-20-90 by K. TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21337	9	0.6	200
21338	2	0.6	170
21339	5	0.5	100
21340	2	0.6	110
21341	27	0.8	450
21342	112	1.4	1610
21343	46	0.8	890
21344	57	0.9	670
21345	6	0.7	400
21346	15	0.6	30
21347	2	0.4	32
21348	5	0.6	20
21349	6	0.6	110
21350	159	1.6	2700
21363	62	1.2	950
21364	153	1.4	1780
21365	575	1.8	3770
21366	510	3.0	6500
21367	415	1.4	2840
21368	400	1.8	2470
21369	20	1.1	670
21370	166	2.0	1920
21371	2	1.4	500
21372	6	0.6	130

GC 376

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621  
**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931  
**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

0S-0170-RG1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: ED YARROW/KEN TAYLOR

Date: JUL-30-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RES. C/O JAYCOX, SMITHERS, B.C.

We hereby certify the following Geochemical Analysis of 30 ROCK samples submitted JUL-24-90 by KEN TAYLOR.

Sample Number	AU FIRE PFB
21373	10
21374	15
21375	10
21376	40
21377	100
21378	30
21379	15
21380	15
21381	20
21382	30
21383	10
21384	15
21385	5
21386	10
21387	15
21388	15
21389	50
21390	30
21391	75
21392	20
21393	20
21394	30
21395	120
21396	100
21397	130
21398	110
21399	130
21400	45
21401	50
21402	30

GC378

Certified by

MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

05-0170-RG2

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: ED YARROW/KEN TAYLOR

Date: JUL-30-90

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RES. C/O JAYCOX, SMITHERS, B.C.

We hereby certify the following Geochemical Analysis of 10 ROCK samples submitted JUL-24-90 by KEN TAYLOR.

Sample Number	AU FIRE PFB	AG PPM	CU PPM	
21403	25			GC 378
21404	60			
21405	30			
21406	35			
21407	45			
21408	30			
21409	50			
21410	60			
21411	85			
21412	80			

Certified by

MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

***Geochemical Analysis Certificate***

**OS-0170-RG1**

Company: **MINGOLD RESOURCES**  
Project: **GALDRE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-31-90**  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.

**We hereby certify the following Geochemical Analysis of 30 ROCK samples submitted JUL-29-90 by K.TAYLOR.**

Sample Number	AU-FIRE PFB	AG PPM	CU PPM
21373	10	0.7	34
21374	15	0.7	64
21375	10	0.4	66
21376	40	0.9	120
21377	100	0.8	85
21378	30	0.8	101
21379	15	0.6	173
21380	15	0.8	143
21381	20	0.8	118
21382	30	0.9	109
21383	10	0.6	52
21384	15	0.9	64
21385	5	0.9	55
21386	10	1.0	76
21387	15	1.0	60
21388	15	0.9	67
21389	50	1.2	218
21390	30	1.4	84
21391	75	1.5	117
21392	20	0.7	30
21393	20	0.9	57
21394	30	0.9	66
21395	120	1.4	232
21396	100	1.9	301
21397	130	1.6	442
21398	110	1.2	192
21399	130	1.6	453
21400	45	0.7	155
21401	50	0.7	141
21402	30	0.7	137

GC 378

Certified by \_\_\_\_\_

*[Handwritten Signature]*

MIN-EN LABORATORIES



*Geochemical Analysis Certificate*

OS-0170-RG2

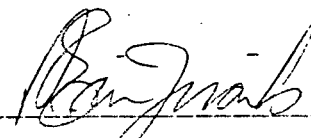
Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-31-90**  
Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**  
2. **MINGOLD RESOURCES, SMITHERS, B.C.**

*We hereby certify* the following Geochemical Analysis of 10 ROCK samples submitted JUL-29-90 by K.TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21403	25	0.8	100
21404	60	1.4	284
21405	30	1.0	144
21406	35	1.3	248
21407	45	1.2	176
21408	30	1.0	117
21409	50	1.4	189
21410	60	1.6	172
21411	85	1.5	215
21412	80	1.3	250

Certified by \_\_\_\_\_





**MIN  
• EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

OS-0171-RG1

Company: **MINGOLD RESOURCES**  
Project: **GALDRE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **AUG-01-90**  
Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**  
2. **MINGOLD RESOURCES, C/O JAYCOX**

*We hereby certify* the following Geochemical Analysis of 18 ROCK samples submitted JUL-25-90 by K.TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21413	100	0.8	492
21414	3370	10.0	9030
21415	2920	8.2	15165
21416	4550	13.0	20760
21417	4850	24.0	27330
21418	2458	5.4	27900
21419	10970	45.0	27675
21420	3810	31.0	14760
21421	1130	8.6	7320
21422	11440	10.5	30615
21423	7770	12.4	18150
21424	3640	12.0	13725
21425	1820	6.0	20820
21426	320	1.2	1890
21427	610	1.4	2356
21428	1540	6.2	10065
21429	12640	17.0	32100
21430	12080	10.2	19425

GC 379

Certified by \_\_\_\_\_

MIN-EN LABORATORIES

# MIN-EN LABORATORIES

(A DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

## VANCOUVER OFFICE:

705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

## THUNDER BAY LAB.:

TELEPHONE (807) 622-8958  
FAX (807) 623-5931

## SMITHERS LAB.:

TELEPHONE/FAX (604) 847-3004

### Assay Certificate

OS-0171-RA1

#### MINGOLD RESOURCES

GALORE CREEK

E. YARROW/K. TAYLOR

Date: JUL-31-90

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.

2. MINGOLD RESOURCES, C/O JAYCOX

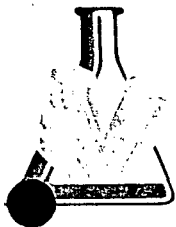
hereby certify the following Assay of 15 ROCK samples  
submitted JUL-25-90 by K. TAYLOR.

Sample Number	AU g/tonne	AU oz/ton
21414	2.88	.084
21415	2.60	.076
21416	4.20	.123
21417	4.50	.131
21418	1.70	.050
21419	8.20	.239
21420	3.60	.105
21421	.99	.029
21422	9.00	.263
21423	8.43	.246
21424	3.10	.090
21425	1.23	.036
21428	1.32	.039
21429	14.80	.432
21430	10.04	.293

CC374

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0203-RA1

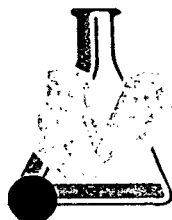
Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: ED YARROW/KEN TAYLOR

Date: AUG-01-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

We hereby certify the following Assay of 3 ROCK samples  
submitted JUL-26-90 by KEN TAYLOR.

Sample Number	AU		<i>Metallurgical</i>	
	g/tonne	oz/ton		
21431	10.60	.309	.325	
21432	9.70	.283	.262	GC 379
21433	5.50	.160	.122	
		<u>.251</u>	<u>.230</u>	

Certified by *[Signature]*  
MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

OS-0203-RG1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **ED YARROW/KEN TAYLOR**

Date: **AUG-01-90**  
Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**  
2. **MINGOLD RESOURCES, C/O JAYCOX**

*We hereby certify* the following Geochemical Analysis of 21 ROCK samples submitted JUL-26-90 by KEN TAYLOR.

Sample Number	AU-FIRE PFB	AG PPM	CU PPM
21431	10620	11.0	32250
21432	8830	15.2	21750
21433	4990	7.8	22500
21434	170	1.4	670
21435	120	1.2	440
21436	240	1.4	2782
21437	240	1.5	1423
21438	670	5.8	3703
21439	200	5.9	5109
21440	110	2.8	3090
21441	110	1.9	1974
21442	110	0.7	1351
21443	300	0.3	1999
21444	110	1.1	1302
21445	120	1.1	1254
21451	65	0.8	676
21452	55	0.7	1026
21453	50	0.9	874
21454	65	1.1	958
21455	50	0.9	759
21456	60	0.6	969

004 Au (metals)  
000 " ( " )

GC379

GC380

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
 (DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
 CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

705 WEST 15TH STREET  
 9TH VANCOUVER, B.C. CANADA V7M 1T2  
 TELEPHONE (604) 980-5814 OR (604) 988-4524  
 FAX (604) 980-9621  
**THUNDER BAY LAB.:**  
 TELEPHONE (807) 622-8958  
 FAX (807) 623-5931  
**SMITHERS LAB.:**  
 TELEPHONE/FAX (604) 847-3004

***Geochemical Analysis Certificate*** **OS-0208-RG1**

Company: **MINGOLD RESOURCES**  
 Project: **GALORE CREEK**  
 Attn: **E. YARROW/K. TAYLOR**

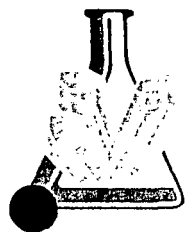
Date: **AUG-01-90**  
 Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
 2. MINGOLD RESOURCES, SMITHERS, B.C.

*We hereby certify* the following Geochemical Analysis of 11 ROCK samples submitted JUL-29-90 by K.TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	
21458	70	1.4	1060	<i>GC 380</i>
21459	85	1.4	1024	
21460	85	0.9	778	
21461	25	0.7	166	
21462	15	0.6	161	
21463	90	1.1	895	
21464	110	1.1	1750	
21465	110	1.0	1362	
21466	90	0.7	1320	
21467	75	0.6	876	
21468	45	0.6	402	

Certified by 

MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

**Geochemical Analysis Certificate** **OS-0204-RG1**

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **JUL-30-90**  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX  
3. MINGOLD RESOURCES, C/O MIN-EN LABS.

*We hereby certify* the following Geochemical Analysis of 6 CORE samples submitted JUL-27-90 by K.TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	
21446	55	1.0	703	<b>GC 380</b>
21447	140	0.7	620	
21448	75	1.1	805	
21449	1230	1.3	1360	
21450	270	0.9	925	
21455	80	1.0	750	

Certified by *Benjamins*  
MIN-EN LABORATORIES



**MIN  
EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
75 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0325-RA1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: AUG-25-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

We hereby certify the following Assay of 26 ROCK samples  
submitted AUG-19-90 by K. TAYLOR.

Sample Number	*AU g/tonne	*AU oz/ton	AG g/tonne	AG oz/ton	CU %
21501	.14	.004	0.6	.02	.029
21502	1.26	.037	7.3	.21	.337
21503	.43	.013	1.8	.05	.073
21504	.06	.002	2.1	.06	.109
21716	5.60	.163	19.6	.57	1.765
21717	7.00	.204	16.0	.47	2.275
21718	6.00	.175	12.5	.36	2.440
21719	1.65	.048	3.8	.11	.880
21720	1.02	.030	0.7	.02	.160
21721	.76	.022	3.6	.11	.365
21722	.41	.012	3.2	.09	.224
21723	.85	.025	3.9	.11	.427
21724	10.90	.318	26.3	.77	4.140
21725	10.80	.315	16.5	.48	2.690
21726	11.70	.341	33.9	.99	2.640
21727	8.50	.248	30.4	.89	2.890
21728	1.80	.053	6.9	.20	.396
21729	.43	.013	1.5	.05	.130
21730	.85	.025	6.0	.18	.562
21731	3.40	.099	6.6	.19	1.445
21732	.33	.010	3.2	.09	.174
21733	.52	.015	3.8	.11	.380
21734	.44	.013	2.4	.07	.127
21735	.86	.025	3.6	.11	.168
21736	**7.10	.207	12.3	.36	1.375
21737	**7.60	.222	42.4	1.24	1.705

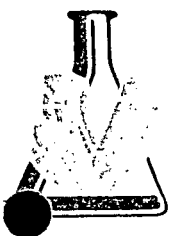
Gc381  
↓

\*AU - 1 ASSAY TON

\*\* SAMPLES CONTAIN METALLIC GOLD, RECOMMEND METALLIC GOLD ASSAY.

Certified by \_\_\_\_\_





**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
75 WEST 15TH STREET  
DORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621  
**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931  
**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0325-RA2

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: AUG-25-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

We hereby certify the following Assay of 13 ROCK samples submitted AUG-19-90 by K. TAYLOR.

Sample Number	%AU g/tonne	%AU oz/ton	AG g/tonne	AG oz/ton	CU %
21738	.75	.022	5.6	.16	.246
21739	.69	.020	3.7	.11	.139
21740	** .12	.004	3.7	.11	.090
21741	**6.10	.178	2.2	.06	2.105
21742	**3.80	.111	18.0	.53	2.060
21743	6.80	.198	18.5	.54	1.890
21744	3.50	.102	23.7	.69	.379
21745	10.50	.306	5.2	.15	1.670
21746	19.00	.554	14.5	.42	2.675
21747	25.00	.729	80.0	2.33	2.230
21748	7.90	.230	28.1	.82	1.515
21749	.44	.013	17.4	.51	.1087
21750	.49	.014	2.1	.06	.067

GC 381

\*AU - 1 ASSAY TON

\*\* SAMPLES CONTAIN METALLIC GOLD, RECOMMEND METALLIC GOLD ASSAY.

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
 (DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
 CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
 705 WEST 15TH STREET  
 NORTH VANCOUVER, B.C. CANADA V7M 1T2  
 TELEPHONE (604) 980-5814 OR (604) 988-4524  
 FAX (604) 980-9621

**THUNDER BAY LAB.:**  
 TELEPHONE (807) 622-8958  
 FAX (807) 623-5931

**SMITHERS LAB.:**  
 TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate OS-0331-RG1

Company: MINGOLD RESOURCES  
 Project: GALORE CREEK  
 Attn: E. YARROW/K. TAYLOR

Date: AUG-25-90  
 Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
 2. MINGOLD RESOURCES, C/O JAYCOX

We hereby certify the following Geochemical Analysis of 15 ROCK samples submitted AUG-21-90 by K. TAYLOR.

Sample Number	AU-FIRE PFB	AG PPM	CU PPM	
<del>30701</del>	<del>2500</del>	<del>6.2</del>	<del>25500</del>	? (38)
<del>30702</del>	<del>159</del>	<del>0.9</del>	<del>460</del>	
<del>30703</del>	<del>197</del>	<del>1.5</del>	<del>750</del>	
<del>30704</del>	<del>35</del>	<del>1.2</del>	<del>270</del>	
<del>30705</del>	<del>52</del>	<del>0.9</del>	<del>210</del>	
<del>30706</del>	<del>19</del>	<del>1.0</del>	<del>310</del>	
<del>30707</del>	<del>50</del>	<del>0.9</del>	<del>350</del>	
<del>30708</del>	<del>62</del>	<del>0.4</del>	<del>410</del>	
<del>30709</del>	<del>59</del>	<del>0.7</del>	<del>470</del>	
<del>30710</del>	<del>71</del>	<del>1.2</del>	<del>950</del>	
<del>30711</del>	<del>58</del>	<del>1.6</del>	<del>690</del>	
<del>30712</del>	<del>14</del>	<del>0.7</del>	<del>190</del>	
<del>30713</del>	<del>106</del>	<del>1.3</del>	<del>540</del>	
<del>30714</del>	<del>42</del>	<del>1.7</del>	<del>1000</del>	
<del>30715</del>	<del>56</del>	<del>1.1</del>	<del>430</del>	

Wrong numbers

Certified by *[Signature]*  
 MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

10111 VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0331-RA1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **AUG-25-90**  
Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**  
2. **MINGOLD RESOURCES, C/O JAYCOX**

*We hereby certify* the following Assay of 1 ROCK samples  
submitted AUG-21-90 by K.TAYLOR.

Sample Number	AU g/tonne	AU oz/ton
30701	2.60	.076

Certified by \_\_\_\_\_

MIN-EN LABORATORIES

Assay Certificate

OS-0322-RA1

Company: MINGOLD RESOURCES  
Project: GALDRE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: AUG-25-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, SMITHERS, B.C.

We hereby certify the following Assay of 25 ROCK samples submitted AUG-19-90 by K. TAYLOR.

Sample Number	*AU g/tonne	*AU oz/ton	AG g/tonne	AG oz/ton	CU %
21515	.03	.001	1.6	.05	.072
21516	.07	.002	1.7	.05	.089
21517	.02	.001	1.9	.06	.153
21518	.16	.005	1.8	.05	.268
21519	.18	.005	1.3	.04	.202
21520	.23	.007	2.2	.06	.495
21521	.16	.005	1.8	.05	.294
21522	*.15	.004	1.6	.05	.236
21523	*.25	.007	3.2	.09	.403
21524	*.34	.010	5.7	.17	.702
21525	*.37	.011	11.2	.33	1.305
21526	.45	.013	4.3	.13	.615
21527	.25	.007	3.5	.10	.490
21528	.41	.012	6.2	.18	1.075
21529	.23	.007	4.6	.13	.890
21530	.18	.005	3.7	.11	.742
21531	.22	.006	3.2	.09	.660
21532	.84	.025	10.0	.29	1.700
21533	*1.29	.037	16.7	.49	3.115
21534	*3.20	.132	34.2	1.00	4.600
21535	*4.50	.131	26.5	.77	4.000
21536	3.75	.109	29.3	.83	4.230
21537	*3.10	.090	22.7	.66	4.040
21538	1.48	.043	7.8	.23	1.600
21539	.07	.002	1.5	.04	.049

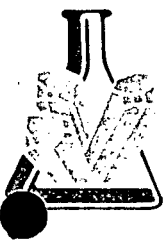
GC 382

\*AU - 1 ASSAY TON

\*\* SAMPLES CONTAIN METALLIC GOLD, RECOMMEND METALLIC GOLD ASSAY

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
25 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0323-RA1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: AUG-25-90

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX IND.

We hereby certify the following Assay of 9 ROCK samples  
submitted AUG-19-90 by K. TAYLOR.

Sample Number	AU		AG		CU
	g/tonne	oz/ton	g/tonne	oz/ton	%
21540	.01	.001	0.9	.03	.008
21541	.02	.001	0.2	.01	.003
21542	1.54	.045	10.2	.30	2.090
21543	1.64	.048	1.9	.06	1.555
21544	.80	.023	5.7	.17	1.455
21547	1.22	.036	4.4	.13	.803
21548	.82	.024	2.6	.08	.925
21549	.62	.018	5.2	.15	1.040
21550	.40	.012	2.9	.08	.750

GC 382

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

**Geochemical Analysis Certificate** OS-0346-RG1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: AUG-27-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/D MIN-EN LABS.

We hereby certify the following Geochemical Analysis of 26 ROCK samples submitted AUG-22-90 by K. TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21505	837	3.2	2480
21506	219	2.1	826
21507	478	2.0	500
21508	480	2.0	433
21509	1125	2.9	655
21510	850	1.9	320
21511	1430	2.1	419
21512	1150	2.1	321
21513	803	2.2	388
21514	342	1.2	233
21545	3000	6.9	13600
21546	3530	7.8	15000
21551	1040	3.7	7880
21552	1000	3.3	6150
21553	1550	5.6	9050
21554	325	1.4	1530
21555	153	1.5	1370
21556	157	1.1	1130
21557	143	1.4	1290
21558	1810	6.5	14700
21559	300	1.7	1530
21560	440	3.6	5000
21561	551	1.8	2440
21562	358	1.7	1890
21563	246	1.4	1610
21564	407	1.9	1780

GC 381

↑

↓ GC 382

Certified by   
MIN-EN LABORATORIES

*Geochemical Analysis Certificate*

OS-0346-RG2

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: AUG-27-90

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O MIN-EN LABS.

*We hereby certify* the following Geochemical Analysis of 23 ROCK samples submitted AUG-22-90 by K. TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21565	2150	5.3	7700
21566	341	2.1	1900
21567	120	1.2	750
21568	110	1.4	865
21569	507	1.8	1860
21570	562	1.9	1470
21571	1040	3.3	4600
21572	3500	5.2	18300
21573	3140	5.0	22800
21574	2160	5.7	22500
21575	4000	10.8	27900
21576	987	5.0	5970
21577	173	2.1	1220
21578	217	2.2	1050
21579	147	1.7	647
21580	123	1.8	865
21581	1710	2.2	1340
21582	83	1.3	582
21583	263	1.8	1270
21584	395	1.8	834
21585	2430	5.0	1210
21586	261	1.9	1170
21587	205	1.1	493

GC 381



Certified by \_\_\_\_\_

Assay Certificate

OS-0346-RA1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

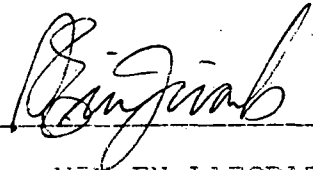
Date: AUG-27-90

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O MIN-EN LABS.

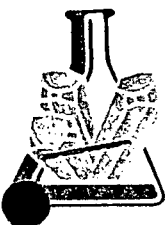
*We hereby certify* the following Assay of 19 ROCK samples submitted AUG-22-90 by K. TAYLOR.

Sample Number	AU g/tonne	AU oz/ton
21509	1.13	.033
21510	.95	.028
21511	1.47	.043
21512	1.18	.034
21545	2.81	.082
21546	3.60	.105
21551	1.07	.031
21552	.93	.027
21553	1.71	.050
21558	1.84	.054
21565	2.11	.062
21571	1.10	.032
21572	2.61	.076
21573	3.22	.094
21574	2.20	.064
21575	4.17	.122
21576	.98	.029
21581	1.70	.050
21585	2.51	.073

Certified by \_\_\_\_\_







**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

OS-0345-RG1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: AUG-28-90

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

We hereby certify the following Geochemical Analysis of 6 ROCK samples submitted AUG-22-90 by KEN TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	
21588	594	2.1	3200	
21589	645	2.0	3290	
21590	11500	3.9	3680	GC 383
21591	7000	4.3	6500	
21592	4000	1.1	640	
21593	302	2.5	3650	

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0345-RA1

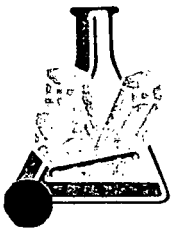
Company: **MINGOLD RESOURCES**  
Project: **GALDRE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **AUG-28-90**  
Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**  
2. **MINGOLD RESOURCES, C/O JAYCOX**

*We hereby certify* the following Assay of samples  
submitted AUG-22-90 by **KEN TAYLOR.**

Sample Number	AU g/tonne	AU oz/ton
21590	12.00	.350
21591	6.64	.194
21592	4.03	.118

Certified by \_\_\_\_\_



**MIN  
• EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0347-RA1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: AUG-27-90

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

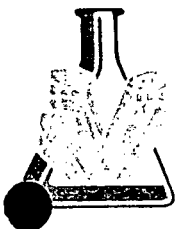
We hereby certify the following Assay of 5 ROCK samples  
submitted AUG-22-90 by K.TAYLOR.

Sample Number	AU g/tonne	AU oz/ton
21595	2.21	.064
21596	1.73	.050
32503	2.21	.064
32504	1.63	.048
32510	2.63	.077

GC 383

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

OS-0347-RG1

Company: **MINGOLD RESOURCES**  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: **AUG-29-90**

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

We hereby certify the following Geochemical Analysis of 24 ROCK samples submitted AUG-22-90 by K.TAYLOR.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM
21594	160	1.5	2230
21595	2200	5.5	32250
21596	2000	6.0	31500
21597	104	1.0	1150
21598	319	1.4	2550
-----			
21599	193	1.0	1480
21600	906	4.4	9680
32501	381	1.7	3590
32502	407	1.4	1960
32503	1695	9.1	23340
-----			
32504	1700	10.0	23700
32505	63	0.7	99
32506	18	0.8	55
32507	10	0.9	32
32508	725	2.4	4920
-----			
32509	774	5.3	9000
32510	2525	11.4	26700
32511	521	4.1	8950
32512	613	4.9	17250
32513	113	1.2	1500
-----			
32514	517	2.5	4600
32515	275	2.3	3380
32516	725	2.4	4700
32517	123	0.9	852

GC 383

GC 383

Certified by   
MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
 (DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
 CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
 5 WEST 15TH STREET  
 NORTH VANCOUVER, B.C. CANADA V7M 1T2  
 TELEPHONE (604) 980-5814 OR (604) 988-4524  
 FAX (604) 980-9621

**THUNDER BAY LAB.:**  
 TELEPHONE (807) 622-8958  
 FAX (807) 623-5931

**SMITHERS LAB.:**  
 TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0396-RA1

Company: MINGOLD RESOURCES  
 Project: GALORE CREEK  
 Attn: E. YARROW/K. TAYLOR

Date: AUG-30-90

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
 2. MINGOLD RESOURCES, C/O JAYCOX

We hereby certify the following Assay of 6 ROCK samples submitted AUG-21-90 by K.TAYLOR.

Sample Number	AU g/tonne	AU oz/ton	
32527	1.20	.035	GC 383
32530	2.26	.066	
32531	2.21	.064	
32535	1.44	.042	
32536	2.44	.071	
32537	1.50	.044	

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
35 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate OS-0396-RG1

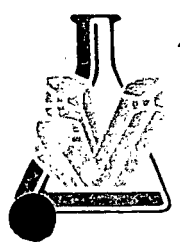
Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: AUG-30-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

We hereby certify the following Geochemical Analysis of 21 ROCK samples submitted AUG-21-90 by K. TAYLOR.

Sample Number	AU-FIRE PFB	AG PPM	CU PPM	
32518	430	2.9	7650	GC 383 ↓
32519	190	2.3	4950	
32520	260	2.1	4880	
32521	500	3.1	6990	
32522	370	2.1	4660	
32523	630	3.0	7000	
32524	380	1.9	4230	
32525	400	1.8	3620	
32526	350	1.8	3390	
32527	1150	4.6	9530	
32528	235	1.4	2470	
32529	850	3.0	6100	
32530	2200	10.9	29500	
32531	2150	8.3	22250	
32532	250	2.5	3650	
32533	955	3.5	9360	
32534	195	1.7	2950	
32535	1420	7.3	17500	
32536	2500	10.2	28500	
32537	1430	5.2	12500	
32538	495	3.3	3710	

Certified by *[Signature]*  
MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
 (DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
 CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
 705 WEST 15TH STREET  
 NORTH VANCOUVER, B.C. CANADA V7M 1T2  
 TELEPHONE (604) 980-5814 OR (604) 988-4524  
 FAX (604) 980-9621

**THUNDER BAY LAB.:**  
 TELEPHONE (807) 622-8958  
 FAX (807) 623-5931

**SMITHERS LAB.:**  
 TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate OS-0397-RG1

Company: MINGOLD RESOURCES  
 Project: GALORE CREEK  
 Attn: E. YARROW/K. TAYLOR

Date: AUG-30-90  
 Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
 2. MINGOLD RESOURCES, C/O JAYCOX

We hereby certify the following Geochemical Analysis of 23 ROCK samples submitted AUG-24-90 by K. TAYLOR.

Sample Number	AU-FIRE PPM	AG PPM	CU PPM	
32539	5	0.4	98	GC 384 ↓
32540	2	0.5	210	
32541	2	0.6	112	
32542	3	0.8	390	
32543	6	0.9	310	
32544	645	0.7	9180	
32545	7	0.5	550	
32546	3	0.6	1780	
32547	5	0.5	220	
32548	2	0.4	139	
32549	13	0.5	161	
32550	40	0.3	48	
32551	2	0.5	45	
32552	57	0.5	280	
32553	80	1.7	4100	
32554	27	0.8	230	
32555	10	0.6	290	
32556	6	0.3	220	
32557	2	0.6	390	
32558	5	0.5	100	
32559	6	0.9	200	
32560	13	1.0	360	
32561	2	0.8	280	

Certified by *[Signature]*  
 MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

OS-0398-RG1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: AUG-30-90

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

*We hereby certify* the following Geochemical Analysis of 4 ROCK samples submitted AUG-24-90 by K. TAYLOR.

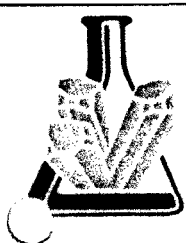
Sample Number	AU-FIRE PPB	AG PPM	CU PPM
32562	6	0.7	178
32571	2	1.2	70
32572	1	1.4	121
32573	18	0.7	710

63384

Certified by

MIN-EN LABORATORIES





**MIN-EN LABORATORIES**  
 (DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
 CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
 5 WEST 15TH STREET  
 NORTH VANCOUVER, B.C. CANADA V7M 1T2  
 TELEPHONE (604) 980-5814 OR (604) 988-4524  
 FAX (604) 980-8821

**THUNDER BAY LAB.:**  
 TELEPHONE (807) 822-8958  
 FAX (807) 823-8831

**SMITHERS LAB.:**  
 TELEPHONE/FAX (604) 847-3004

Assay Certificate OS-0399-RA1

Company: **MINGOLD RESOURCES**  
 Project: **GALDRE CREK**  
 Attn: **E. YARROW/K. TAYLOR**

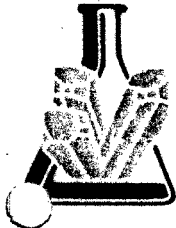
Date: **AUG-30-90**  
 Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**  
 2. **MINGOLD RESOURCES, C/O JAYCOX**

**We hereby certify the following Assay of 25 ROCK samples submitted AUG-26-90 by K. TAYLOR.**

Sample Number	AU		AG		CU %	GC 384
	g/tonne	oz/ton	g/tonne	oz/ton		
32563	.62	.018	3.9	.11	.662	
32564	.08	.002	2.0	.06	.128	
32565	.90	.026	3.2	.09	.523	
32566	2.34	.068	3.8	.11	.574	
32567	3.12	.091	1.6	.05	.069	
-----						
32568	6.84	.200	2.3	.07	.178	
32569	2.66	.078	2.5	.07	.195	
32570	.83	.024	3.3	.10	.352	
32574	.94	.027	4.2	.12	1.190	
32575	.80	.023	3.7	.11	.810	
-----						
32576	.58	.017	4.1	.12	.890	
32577	.24	.007	1.8	.05	.306	
32578	.41	.012	1.9	.06	.281	
32579	.19	.006	3.6	.11	.423	
32580	.17	.005	1.7	.05	.195	
-----						
32581	.32	.009	2.3	.07	.336	
32582	.03	.001	1.4	.04	.068	
32583	.66	.019	3.9	.11	.475	
32584	.06	.002	1.5	.04	.123	
32585	.42	.012	2.0	.06	.360	

Certified by *[Signature]*

**MIN-EN LABORATORIES**



**MINERAL ENVIRONMENTAL LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
35 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-8821

**THUNDER BAY LAB.:**  
TELEPHONE (807) 822-8958  
FAX (807) 823-8831

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0402-RA1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **SEP-04-90**  
Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**  
2. **MINGOLD RESOURCES, C/O JAYCOX**

We hereby certify the following Assay of 19 ROCK samples submitted AUG-27-90 by K.TAYLOR.

Sample Number	AU g/tonne	AU oz/ton	GC 384
32595	.14	.004	✓
32596	.07	.002	
32597	.93	.027	
32598	.16	.005	
32599	2.42	.071	
-----			
32600	.75	.022	
32601	.06	.002	
32602	.05	.001	
32603	.06	.002	
32604	.07	.002	
-----			
32605	.11	.003	
32606	.10	.003	
32607	.15	.004	
32608	.23	.007	
32609	.09	.003	
-----			
32610	.11	.003	
32611	.23	.007	
32612	.35	.010	
32613	.15	.004	

Certified by   
MIN-EN LABORATORIES



**MIN  
• EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
05 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9821

**THUNDER BAY LAB.:**  
TELEPHONE (807) 822-8858  
FAX (807) 823-5831

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

OS-0402-RG1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **SEP-04-90**

Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

*We hereby certify* the following Geochemical Analysis of 19 ROCK samples submitted AUG-27-90 by K.TAYLOR.

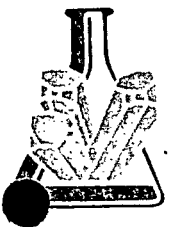
Sample Number	AG PPM	DU PPM
32585	1.0	392
32586	2.4	530
32587	2.9	685
32588	1.6	1780
32589	13.2	4300
32600	6.0	604
32601	0.8	50
32602	0.8	74
32603	0.6	155
32604	1.0	340
32605	1.4	685
32606	2.4	735
32607	1.9	900
32608	2.3	1100
32609	1.2	560
32610	0.9	564
32611	1.6	674
32612	1.0	596
32613	1.3	570

CC 386

Certified by

*[Signature]*

MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Assay Certificate OS-0387-RA1

Company: MINGOLD RESOURCES  
Project: GALORE CREEK  
Attn: E. YARROW/K. TAYLOR

Date: AUG-31-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
2. MINGOLD RESOURCES, C/O JAYCOX

*We hereby certify* the following Assay of 9 ROCK samples submitted AUG-26-90 by K.TAYLOR.

Sample Number	AU g/tonne	AU oz/ton	AG g/tonne	AG oz/ton	CU %	
32591	4.59	.134	25.9	.76	3.420	GC 386
32592	3.41	.099	6.1	.18	1.810	
32593	3.11	.091	6.3	.18	1.430	
32594	.22	.006	.5	.01	.132	
32586	.21	.006	1.6	.05	.199	
32587	.14	.004	.7	.02	.187	GC 39A
32588	1.74	.051	5.9	.17	1.760	
32589	1.92	.056	5.8	.17	1.190	
32590	2.19	.064	8.3	.24	1.680	

Certified by *Ben Jones*  
MIN-EN LABORATORIES



**MIN-EN LABORATORIES**  
 (DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
 CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
 705 WEST 15TH STREET  
 NORTH VANCOUVER, B.C. CANADA V7M 1T2  
 TELEPHONE (604) 980-5814 OR (604) 988-4524  
 FAX (604) 980-9621

**THUNDER BAY LAB.:**  
 TELEPHONE (807) 622-8958  
 FAX (807) 623-5931

**SMITHERS LAB.:**  
 TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0401-RA1

Company: MINGOLD RESOURCES  
 Project: GALORE CREEK  
 Attn: E. YARROW/K. TAYLOR

Date: SEP-04-90  
 Copy 1: MINGOLD RESOURCES, VANCOUVER, B.C.  
 2: MINGOLD RESOURCES, C/O JAYCOX

We hereby certify the following Assay of 20 ROCK samples submitted AUG-28-90 by K.TAYLOR.

Sample Number	AU g/tonne	AU oz/ton
32614	.02	.001
32615	.15	.004
32616	.04	.001
32617	.03	.001
32618	.01	.001
32619	.04	.001
32620	.05	.001
32621	.03	.001
32622	.05	.001
32623	.02	.001
32624	.03	.001
32625	.03	.001
32626	.02	.001
32627	.15	.004
32628	.08	.002
32629	.05	.001
32630	.15	.004
32631	.16	.005
32632	.80	.023
32633	.04	.001

GC 387

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

OS-0401-RG1

Company: **MINGOLD RESOURCES**  
Project: **GALORE CREEK**  
Attn: **E. YARROW/K. TAYLOR**

Date: **SEP-04-90**  
Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**  
2. **MINGOLD RESOURCES, C/O JAYCOX**

We hereby certify the following Geochemical Analysis of 20 ROCK samples submitted AUG-28-90 by K.TAYLOR.

Sample Number	AG PPM	CU PPM
32614	0.3	180
32615	0.4	730
32616	0.8	750
32617	0.4	180
32618	0.5	108
32619	0.6	157
32620	0.4	250
32621	0.9	950
32622	0.6	470
32623	0.6	175
32624	0.6	480
32625	0.6	732
32626	0.4	270
32627	1.8	1670
32628	0.6	900
32629	0.6	596
32630	0.8	1150
32631	1.0	1460
32632	0.6	820
32633	0.6	475

Certified by \_\_\_\_\_

*Benjamin*



**MIN-EN**  
**ENVIRONMENTAL**  
**LABORATORIES**  
 (DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
 CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
 705 WEST 15TH STREET  
 NORTH VANCOUVER, B.C. CANADA V7M 1T2  
 TELEPHONE (604) 980-5814 OR (604) 988-4524  
 FAX (604) 980-9621

**THUNDER BAY LAB.:**  
 TELEPHONE (807) 622-8958  
 FAX (807) 623-5931

**SMITHERS LAB.:**  
 TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0400-RA1

Company: MINGOLD RESOURCES  
 Project: GALORE CREEK  
 Attn: E. YARROW/K. TAYLOR

Date: SEP-04-90  
 Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.  
 2. MINGOLD RESOURCES, C/O JAYCOX

*We hereby certify* the following Assay of 13 ROCK samples submitted AUG-28-90 by K. TAYLOR.

Sample Number	AU g/tonne	AU oz/ton
32634	.04	.001
32635	.03	.001
32636	.24	.007
32637	.13	.004
32638	.25	.007
32639	.11	.003
32640	.18	.005
32641	.16	.005
32642	.22	.006
32643	.35	.010
32644	.27	.008
32645	.23	.007
32646	.31	.009

GC 387

Certified by   
 MIN-EN LABORATORIES

*Geochemical Analysis Certificate*

OS-0400-RG1

Company: **MINGOLD RESOURCES**  
 Project: **GALORE CREEK**  
 Attn: **E. YARROW/K. TAYLOR**

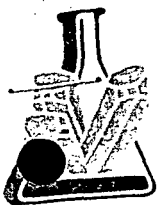
Date: **SEP-04-90**  
 Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**  
 2. **MINGOLD RESOURCES, C/O JAYCOX**

*We hereby certify* the following Geochemical Analysis of 13 ROCK samples submitted AUG-28-90 by K.TAYLOR.

Sample Number	AS PPM	CU PPM
32634	0.6	1100
32635	0.4	1310
32636	0.8	1270
32637	0.4	447
32638	0.6	1200
32639	0.7	865
32640	1.0	1740
32641	0.5	1350
32642	0.8	1480
32643	0.7	790
32644	0.8	1200
32645	1.2	1620
32646	1.3	1100

Certified by   
 MINERAL LABORATORIES





**MINERAL  
ENVIRONMENTS  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0735-PA1

Company: MINGOLD RESOURCES INC.  
Project: GALORE CREEK  
Attn: ED YARROW/K. TAYLOR

Date: NOV-01-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.

We hereby certify the following Assay of 26 PULPS samples submitted OCT-31-90 by E. YARROW.

Sample Number	AU g/tonne	AU oz/ton
7136 B	.38	.011
7137 B	.89	.026
7138 B	.87	.025
7139 B	.58	.017
7140 B	1.19	.035
7141 B	1.02	.030
7142 B	1.68	.049
7143 B	1.28	.037
7144 B	1.25	.036
7145 B	2.75	.080
7146 B	1.88	.055
7147 B	.76	.022
7148 B	.13	.004
7149 B	1.19	.035
7150 B	.36	.011
GC DD 7271-847	.10	.003
GC DD 7271-848	.07	.002
GC DD 7271-849	.19	.006
GC DD 7271-850	.08	.002
GC 1753	1.08	.032
GC 1754	1.41	.041
GC 1755	2.94	.086
GC 1756	2.02	.059
GC 1757	2.65	.077
GC 1758	.68	.020
GC 1759	.58	.017

GC 313

↑

GC 62

GC 71

Certified by

MIN-EN LABORATORIES

Assay Certificate

OS-0735-PA2

Company: MINGOLD RESOURCES INC.  
 Project: GALORE CREEK  
 Attn: ED YARROW/K. TAYLOR

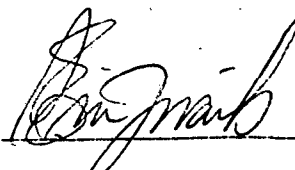
Date: NOV-01-90  
 Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.

**We hereby certify the following Assay of 26 PULP samples submitted OCT-31-90 by E. YARROW.**

Sample Number	AU g/tonne	AU oz/ton
GC 1760	1.03	.030
GC DD 7599-720	.05	.001
GC DD 7599-721	.08	.002
GC DD 7599-722	.09	.003
GC DD 7599-723	.17	.005
GC DD 7599-724	.60	.018
GC 725	.52	.015
GC DD 7044-726	.81	.024
GC 727	.41	.012
GC DD 7044-728	.13	.004
GC DD 7044-729	.06	.002
GC DD 7044-730	.09	.003
GC 731	.10	.003
GC DD 7044-732	.44	.013
GC DD 7044-733	.12	.004
GC 734	.07	.002
GC DD 7271-735	.05	.001
GC DD 7271-736	.17	.005
GC DD 7271-1151	.62	.018
GC DD 7271-1152	.16	.005
GC DD 7271-1153	.12	.004
GC DD 7271-1154	.23	.007
GC DD 7271-1155	.61	.018
GC DD 7271-1156	.24	.007
GC DD 7271-1157	.38	.011
GC DD 7271-1158	.20	.006

GC62

Certified by



Assay Certificate

OS-0735-PA3

Company: MINGOLD RESOURCES INC.  
 Project: GALORE CREEK  
 Attn: ED YARROW/K. TAYLOR

Date: NOV-01-90  
 Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.

We hereby certify the following Assay of 26 PULP samples submitted OCT-31-90 by E. YARROW.

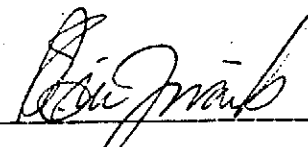
Sample Number	AU g/tonne	AU oz/ton
GC DD 7271-1159	.15	.004
GC DD 7271-1160	.13	.004
GC DD 7271-1161	.06	.002
GC DD 7271-1162	.09	.003
GC DD 7271-1163	.12	.004
GC DD 7271-1164	.12	.004
GC DD 7271-1165	.07	.002
GC DD 7271-1166	.27	.008
GC DD 7271-1167	.09	.003
GC DD 7271-1168	.16	.005
DD 7855-1540	.22	.006
DD 7855-1541	.13	.004
DD 7855-1542	.36	.011
DD 7855-1543	.49	.014
DD 7855-1544	.64	.019
DD 7855-1545	.41	.012
DD 7855-1546	1.01	.029
DD 7855-1547	.31	.009
DD 7855-1548	NO	SAMPLE
DD 7855-1549	.18	.005
DD 7855-1550	1.09	.032
GC 3862	.83	.024
GC 3863	.60	.018
GC 3864	.22	.006
GC 3865	.59	.017
GC 3866	.04	.001

GC 62

GC 71

GC 84C

Certified by



MIN-EN LABORATORIES

Assay Certificate

OS-0735-PA4

Company: **MINGOLD RESOURCES INC.**  
 Project: **GALORE CREEK**  
 Attn: **ED YARROW/K. TAYLOR**

Date: **NOV-01-90**  
 Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**

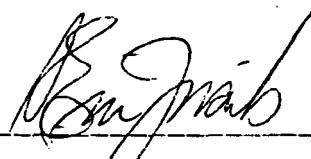
**We hereby certify the following Assay of 26 PULP samples submitted OCT-31-90 by E. YARROW.**

Sample Number	AU g/tonne	AU oz/ton
GC 3867	3.01	.088
GC 3868	.40	.012
GC 3869	.20	.006
GC 3870	.30	.009
GC 3871	.41	.012
GC 3872	.21	.006
GC 3873	.57	.017
GC 3874	.10	.003
GC 3875	1.94	.057
GC 3876	.70	.020
GC 3877	.98	.029
GC 3878	1.58	.046
GC 3879	.21	.006
GC 3880	.02	.001
GC 3881	.68	.020
GC 4851	.19	.006
GC 4852	.46	.013
GC 4853	.29	.008
GC 4854	1.01	.029
GC 4855	.25	.007
GC 4856	.70	.020
GC 4857	.44	.013
GC 4858	.03	.001
GC 4859	.23	.007
GC 4860	2.17	.063
GC DD 8433-2456	.17	.005

GC 84C

GC 85

Certified by



Assay Certificate

OS-0735-PA5

Company: **MINGOLD RESOURCES INC.**  
Project: **GALORE CREEK**  
Attn: **ED. YARROW/K. TAYLOR**

Date: **NOV-01-90**  
Copy 1. **MINGOLD RESOURCES, VANCOUVER, B.C.**

**We hereby certify the following Assay of 21 PULP samples submitted OCT-31-90 by E. YARROW.**

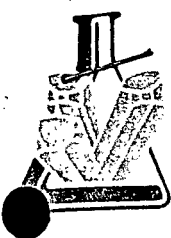
Sample Number	AU g/tonne	AU oz/ton
---------------	------------	-----------

GC DD 8433-2457	.31	.009
GC DD 8433-2458	1.25	.036
GC DD 8433-2459	1.02	.030
GC DD 8433-2461	.12	.004
GC DD 8433-2462	.08	.002
GC DD 8433-2463	.57	.017
GC DD 8433-2464	.30	.009
GC DD 8433-2465	.29	.008
GC DD 8433-2466	.45	.013
GC DD 8433-2469	.93	.027
GC DD 8433-2471	.72	.021
GC DD 8433-2472	.21	.006
GC DD 8433-2474	.12	.004
GC DD 8433-2475	.21	.006
GC DD 8433-2476	.18	.005
GC DD 8433-2477	.16	.005
GC DD 8672-2674	.04	.001
GC DD 8672-2675	.11	.003
GC DD 8672-2676	.12	.004
GC DD 8672-2677	.28	.008
GC DD 9405-2678	.36	.011

GC85

Certified by

MIN-EN LABORATORIES



**MINERAL ENVIRONMENT LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**THUNDER BAY LAB.:**  
TELEPHONE (807) 622-8958  
FAX (807) 623-5931

**SMITHERS LAB.:**  
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0734-PA1

Company: MINGOLD RESOURCES INC.  
Project: STIKINE COPPER  
Attn: E. YARROW/K. TAYLOR

Date: NOV-01-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.

We hereby certify the following Assay of 26 PULPS samples submitted OCT-31-90 by E. YARROW.

Sample Number	AU g/tonne	AU oz/ton
---------------	------------	-----------

GC 313

7132 B	.14	.004
7133 B	.08	.002
7134 B	.44	.013
7135 B	.06	.002
7151 B	.03	.001

7152 B	.06	.002
7153 B	.91	.027
7154 B	.42	.012
7155 B	.70	.020
7156 B	.68	.020

7157 B	.18	.005
7158 B	.18	.005
7159 B	1.48	.043
7160 B	1.54	.045
7161 B	1.11	.032

7162 B	2.45	.071
7163 B	.50	.015
7164 B	.50	.015
7165 B	.51	.015
7166 B	.01	.001

7167 B	.26	.008
7168 B	.69	.020
7169 B	.42	.012
7170 B	.42	.012
7171 B	.22	.006

7172 B	.16	.005
--------	-----	------

Certified by

MIN-EN LABORATORIES

Assay Certificate

OS-0734-PA2

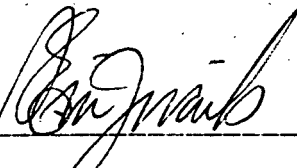
Company: MINGOLD RESOURCES INC.  
Project: STIKINE COPPER  
Attn: E. YARROW/K. TAYLOR

Date: NOV-01-90  
Copy 1. MINGOLD RESOURCES, VANCOUVER, B.C.

We hereby certify the following Assay of 18 PULPS samples submitted OCT-31-90 by E. YARROW.

Sample Number	AU g/tonne	AU oz/ton	
7173 B	.23	.007	
7174 B	.05	.001	
7175 B	.04	.001	
7176 B	.14	.004	
7177 B	3.19	.093	
-----			
7178 B	.77	.022	
7179 B	.57	.017	
7180 B	1.02	.030	
GC DD 737	.13	.004	↑ GC 313
GC DD 738	.18	.005	↓ GC 53
-----			
GC DD 739	.17	.005	
GC DD 740	.20	.006	
GC DD 741	.07	.002	
GC DD 8672-2478	.10	.003	
GC DD 8672-2479	.09	.003	
-----			
GC DD 8672-2481	.26	.008	
GC DD 8672-2482	1.31	.038	
GC DD 8672-2483	.08	.002	GC 85

Certified by \_\_\_\_\_



**APPENDIX IV**

**ROCK & SOIL SAMPLE DESCRIPTIONS**









HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

SOIL SAMPLE RECORD

PROJECT

Sample Number	LINE	STN.	SOIL TYPE	HORIZON	COLOUR	DEPTH	OTHER
56104G301		0015		B	lbr	7"	crude oil
		0025		F	v. lbr	10"	
		0035		B	lbr	5"	
		0045		F	lbr	5"	
		0055		F	lbr	5"	
		0065		F	lbr	5"	
		0075		F	lbr	5"	oil on surface
		0085		F	lbr	6"	
		0095		F	lbr	7"	
		0105		F	lbr	5"	
		0115		F	lbr	5"	
		0125		F	lbr	5"	
		0135		F	lbr	5"	oil on surface
56104G314		0145		B	lbr	5"	
		0155		B	lbr	10"	
		0165		B	lbr	6"	
		0175		F	lbr	5"	
		0185		B	lbr	5"	
		0195		F	lbr	7"	
		0205		F	lbr	7"	
		0215		B	dark brown	6"	
		0225		B	dark brown	10"	
		0235		F	lbr	11"	oil horizon, 10" above rock
		0245		B	dark brown	18"	some grains

DATE

Submitted for:

**APPENDIX V**

**VLf-EM RAW DATA**









△	Dip Angle	Slope °	Correction Factor	Reading	1 <sup>st</sup> Diff.	F. Filler		Quad.
5+00S								
4+75								
4+50								
4+25								
4+00	-20	-35						+3
3+75	-21	-35						+5
3+50	-20	-30				-1		+4
3+25	-20	-30				-1		+3
3+00	-20	-30				+1		+1
2+75	-21	-30				+1		+6
2+50	-20	-2				+2		+6
2+25	-22	-25				+1		-6
2+00	-20	-25				-7		-2
1+75	-15	-25				-15		-4
1+50	-12	-20				-11		-1
1+25	-12	-20				-5		-3
1+00	-10	-20				-3		-2
0+75	-11	-15				+1		-3
0+50	-12	-10				+2		-4
0+25	-11	-10				0		-3
0+00 S	-12	+45				-1		0
0+25 N	-10	+45				-3		+8
0+50	-10	+30				-2		+6
0+75	-10					+4		+8
1+00	-14					+10		+9
1+25	-20					+16		+5
1+50	-20	-5				+6		+3
1+75	-20					-4		+5
2+00	-16	+5				-4		+2
2+25	-20	+5				-2		+4
2+50	-14					-17		0
2+75	-5	-50				-34		+4
3+00	+5					-31		+3
3+25	+7					-13		+5
3+50	+6					-2		+1
3+75	+9					+5		+4
4+00	0					+13		+5
4+25	+1					+4		+2
4+50 N	+3							+4



$\Delta$	Dip Angle	Slope °	Correction Factor	Reading	1 <sup>st</sup> Diff.	F. Filter		Quod.
5+00S	-1A							0
4+75	-8	-25-30				-6		+2
4+50	-8	-20				0		+3
4+25	-8	-15				0		+3
4+00	-8	-5				-1		+2
3+75	-8	-5				+1		+3
3+50	-7					+7		+6
3+25	-10	-5				+6		+6
3+00	-12	-5				-1		+8
2+75	-11	-5				-2		+4
2+50	-10	-5				+5		+4
2+25	-11	-5				+4		0
2+00	-15	-5				-8		0
1+75	-10	-5				-11		+1
1+50	-8	-5				-6		+1
1+25	-6	+2				-3		+1
1+00	-6	-2				-20		0
0+75	-5					-26		-2
0+50	+13					+13		+12
0+25	+2					+39		+10
0+00 S	-7	+7				+30		+4
0+25 N	-17	-5				+7		+4
0+50	-18	-2				-10		0
0+75	-13					-11		-1
1+00	-12					0		+1
1+25	-8					+12		+6
1+50	-17					+17		+5
1+75	-15					+21		+8
2+00	-27					+11		+3
2+25	-26	+10				-3		+5
2+50	-27	+10				-10		+4
2+75	-23					-17		+1
3+00	-20	-2						+3
3+25 N	-13	+2						+5

$\Delta$	Dip Angle	Slope °	Correction Factor	Reading	1 <sup>st</sup> Diff.	F. Filter		Quad.
5+00S	-12						-	+5
4+75	-10							+5
4+50	-7	+7				-8		+4
4+25	-7	+10				+2		+7
4+00	-12	+5				+5		+2
3+75	-7	+20				-2		+1
3+50	-10	+20				+1		+2
3+25	-10	+20				+1		+2
3+00	-8	+20				-12		+2
2+75	0	+25				-26		+8
2+50	+8	+5				+4		+10
2+25	-20	+5				+31		+10
2+00	-3	+5				+1		+10
1+75	-10					-1		0
1+50	-12					+9		-3
1+25	-10					-2		-4
1+00	-10					-2		+2
0+75	+4					-16		+3
0+50	+4					-28		+9
0+25	+7					-17		+9
0+00S	-12					+13		+11
0+75N	-12					+35		+11
0+50	-20					+27		+2
0+25	-20					+27		+2
0+00	-20	+10				+16		+8
1+75	-23	+20				+8		-3
1+50	-20	0				+8		-3
1+25	-16					-2		+2
1+00	-20					-2		+2
2+75	-23	+20				-2		+2
2+50	-20	-20				-2		+2
2+25	-20	+1				-2		+2
2+00	-17	+1				-2		+2
3+75	-16	+1				-2		+2
3+50	-10	+1				-2		+2
3+25N	-8	+1				-2		+2



$\Delta$	Dip Angle	Slope °	Correction Factor	Reading	1 <sup>st</sup> Diff.	F. Filter		Quod.
7+00 S	+1	-5						+5
6+75	-2	-10						+4
6+50	0	+5				+3		+2
6+25	-4					+7		+1
6+00	-5	-5				+5		-2
+75	-4	+5				+3		+1
5+50	-8					+4		0
5+25	-5					-5		+5
5+00	-2					-11		+7
4+75	0	+20				-3		+4
4+50	-4	+5				+8		+2
4+25	-6					+4		+2
4+00	-2					-2		+1
3+75	-6	+30				+5		+1
3+50	-7					+7		+1
3+25	-8					-3		+1
3+00	-2					-7		+5
2+75	-6	-4				+5		+6
2+50	-9	-4				+9		+1
2+25	-8	-4				-7		+1
2+00	0	-4				-7		+3
1+75	-10	-4				+20		-4
1+50	-10	-4				+26		-5
1+25	-10					+5		0
1+00	-15					-1		+1
0+75	-20	-35				+5		+4
0+50	-20	+35				-2		+7
0+25	-13	-45				-12		+7
0+00 S	-15	+45				-8		+5
0+25 N	-10					-14		+10
0+50	-4					-19		+12
0+75	-2	-2				-15		+13
1+00	+3					-7		+16
1+25	-2					+13		+9
1+50	-10	+2				+21		+5
1+75	-10					+16		+4
2+00 N	-18							-5



$\Delta$	Dip Angle	Slope °	Correction Factor	Reading	1 <sup>st</sup> Diff.	F. Filter		Quad.
6+50 S	-3							+2
6+25	0							+2
6+00	0	-10				-3		+1
5+75	-1					+2		+1
5+50	-1					+6		+1
5+25	-6					+12		+2
5+00	-8	+5				+19		+4
4+75	-12	-5				+10		+2
4+50	-12	+5				-4		+4
4+25	-10	+10				-7		+6
4+00	-7					-7		+8
3+75	-8					-1		+6
3+50	-8	+2				-2		+4
3+25	-5	+2				-1		+3
3+00	-10					+2		+5
2+75	-5	+20				0		+6
2+50	-5					-10		+6
2+25	0	-2				-10		+8
2+00	-5					+9		+5
1+75	-9	-20				+14		+8
1+50	-10	+30				+11		+7
1+25	-15					+10		+8
1+00	-14	+30				+4		+8
0+75	-15					-4		+8
0+50	-10	-20				-4		+8
0+25	-15	+20				+4		+2
0+00 S	-14	+45				+4		+5
0+25 N	-15					+4		+4
0+50	-18	+5				+6		+3
0+75	-17	+10				-4		+3
1+00	-12	-2				-14		+3
1+25	-9	-2				-11		+3
1+50	-6	-2				-13		+4
1+75	-2	-4				-15		+6
2+00	+2	-2				-12		+10
2+25	+2	-10				-5		+5
2+50 N	+3	-5				-4		+8
						-5		

















**APPENDIX VI**

**DIAMOND DRILL RECORD SHEETS FOR  
RE-ASSAY OF PRE-1990 DRILL HOLES**

































# DIAMOND DRILL RECORD

## CORRECTED DIP TESTS

REASSAYING

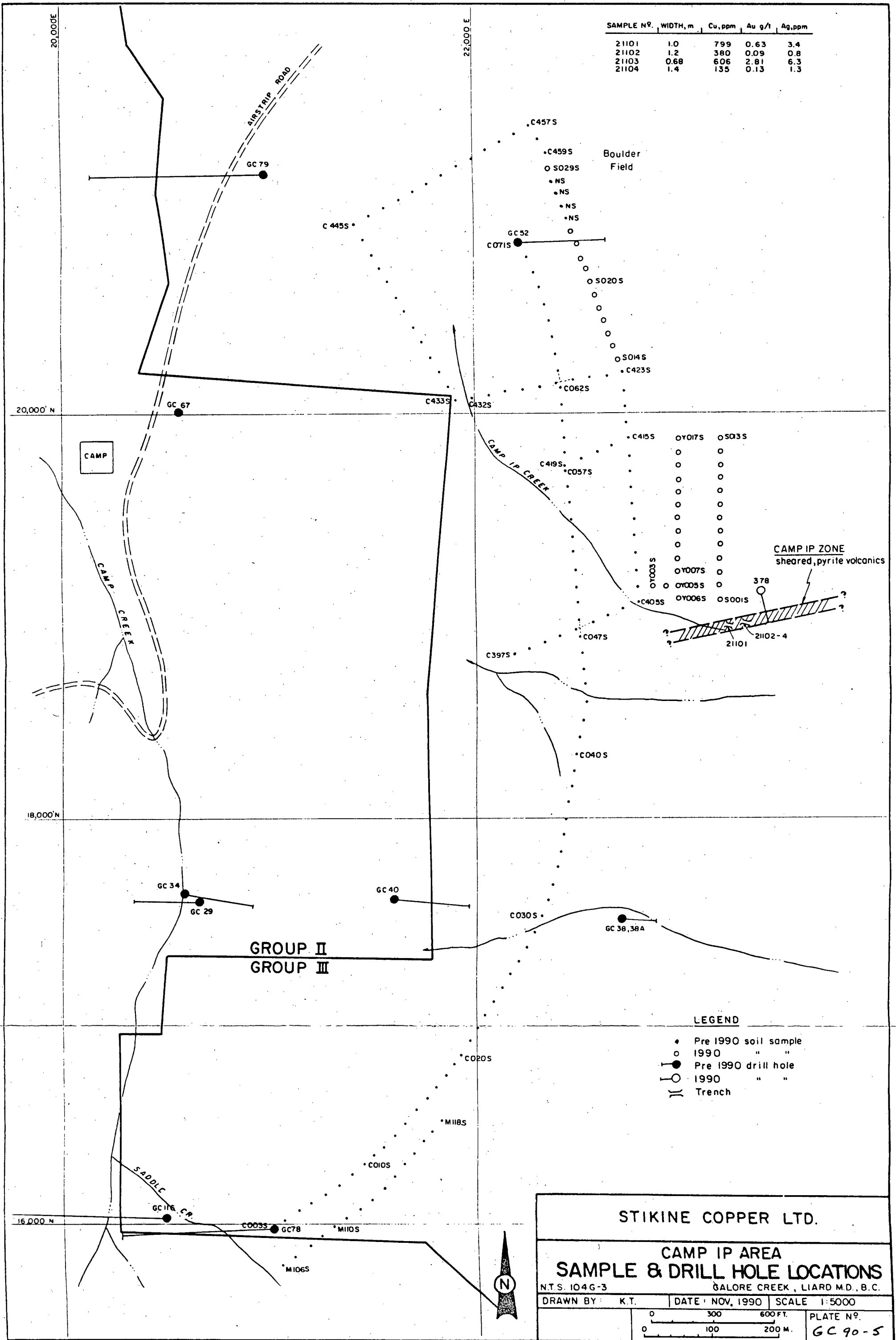
Property Galore Creek Date Began ..... Date Completed .....  
 Hole No. GC 313 Project No. .... Depth .....  
 Sheet No. 1 of 2 Co-ord ..... Horizontal Length .....  
 Claim No. .... Elevation ..... Direction .....  
 Angle .....

Depth	Number	Width	ASSAY				WIDTH X ASSAY				AVERAGES					
			(ppb) AU	(oz/t) AU	(ppm) CU	(g/t) Au					WIDTH	AU	AG	CU	ZN	PB
680-690	7132 B	10'		0.004		0.14										
690-700	7133 B	10'		0.002		0.08										
700-710	7134 B	10'		0.013		0.44										
710-720	7135 B	10'		0.002		0.06										
720-730	7136 B	10'		0.011		0.38										
730-740	7137 B	10'		0.026		0.89										
740-750	7138 B	10'		0.025		0.87										
750-760	7139 B	10'		0.017		0.58										
760-770	7140 B	10'		0.035		1.19										
770-780	7141 B	10'		0.030		1.02										
780-790	7142 B	10'		0.049		1.68										
790-800	7143 B	10'		0.037		1.28										
800-810	7144 B	10'		0.036		1.25										
810-820	7145 B	10'		0.080		2.75										
820-830	7146 B	10'		0.055		1.88										
830-832.5	7147 B	2.5'		0.022		0.76										
832.5-833.9	-	-														
833.9-840	7148 B	6.1'		0.004		0.13				70						
840-850	7149 B	10'		0.035		1.19										
850-860	7150 B	10'		0.011		0.36										
860-870	7151 B	10'		0.001		0.03										
870-880	7152 B	10'		0.002		0.06										
880-883.5	7153 B	3.5'		0.027		0.91				147						
883.5-893	7154 B	9.5'		0.012		0.42				34						
893-900	7155 B	7'		0.020		0.70				4.9						
900-910	7156 B	10'		0.020		0.68				6.8						









SAMPLE N <sup>o</sup>	WIDTH, m	Cu, ppm	Au g/t	Ag, ppm
21101	1.0	799	0.63	3.4
21102	1.2	380	0.09	0.8
21103	0.68	606	2.81	6.3
21104	1.4	135	0.13	1.3

**LEGEND**

- Pre 1990 soil sample
- 1990 " "
- Pre 1990 drill hole
- 1990 " "
- || Trench

STIKINE COPPER LTD.

**CAMP IP AREA  
SAMPLE & DRILL HOLE LOCATIONS**

N.T.S. 104G-3 GALORE CREEK, LIARD M.D., B.C.

DRAWN BY: K.T. DATE: NOV, 1990 SCALE 1:5000

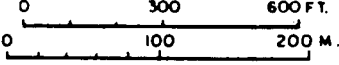
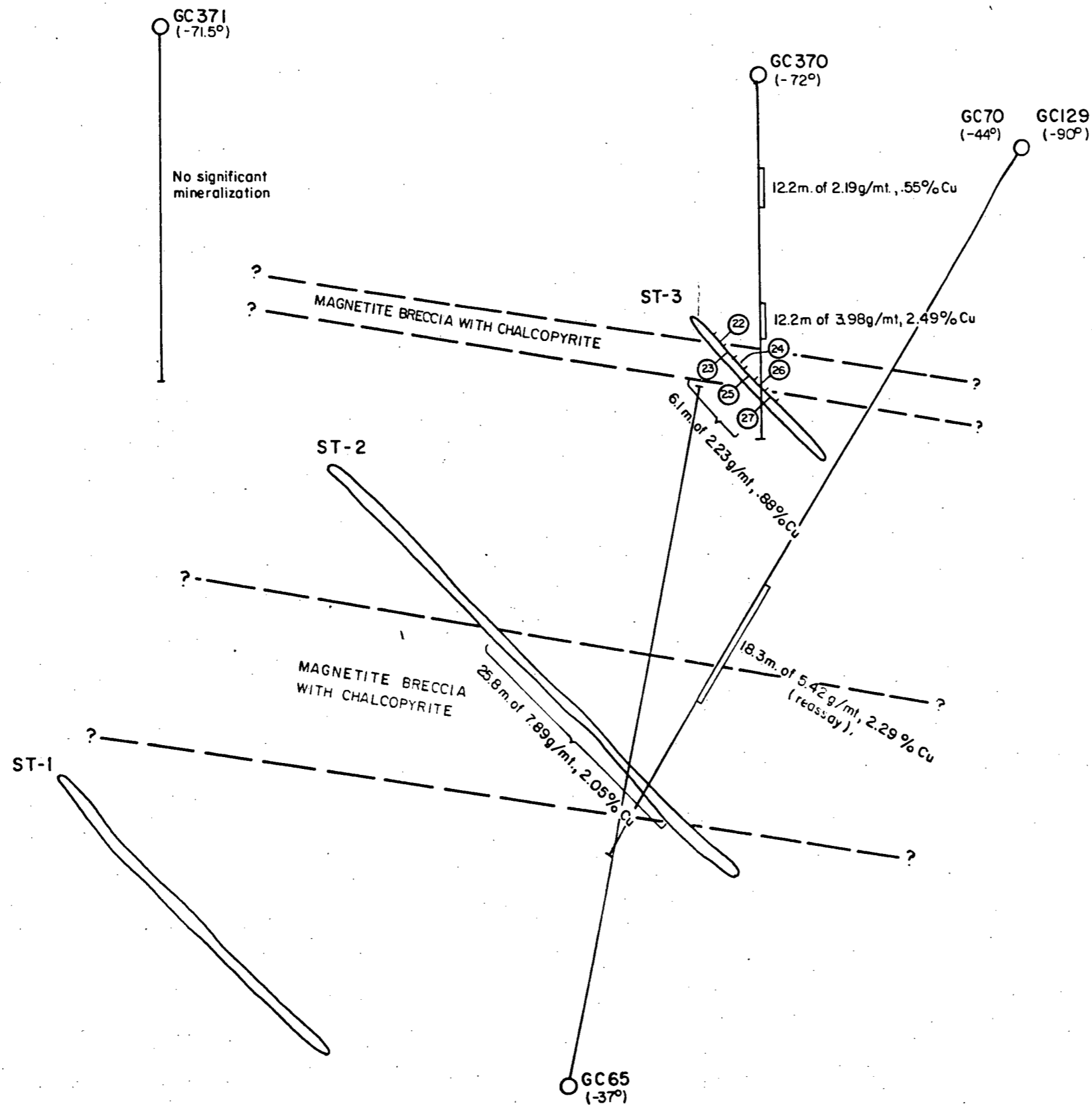


PLATE N<sup>o</sup>.  
GC 90-5



Sample No.	Width,m	Au,g/mt	Cu,%
②② YGC104 G3 I02R	1.52	0.17	.102
②③ I03R	"	2.16	.840
②④ I04R	"	3.15	.994
②⑤ I05R	"	2.61	1.107
②⑥ I06R	"	1.03	.574
②⑦ I07R	"	0.03	.364

STIKINE COPPER LTD.

SADDLE ZONE  
TRENCHING & DRILLING

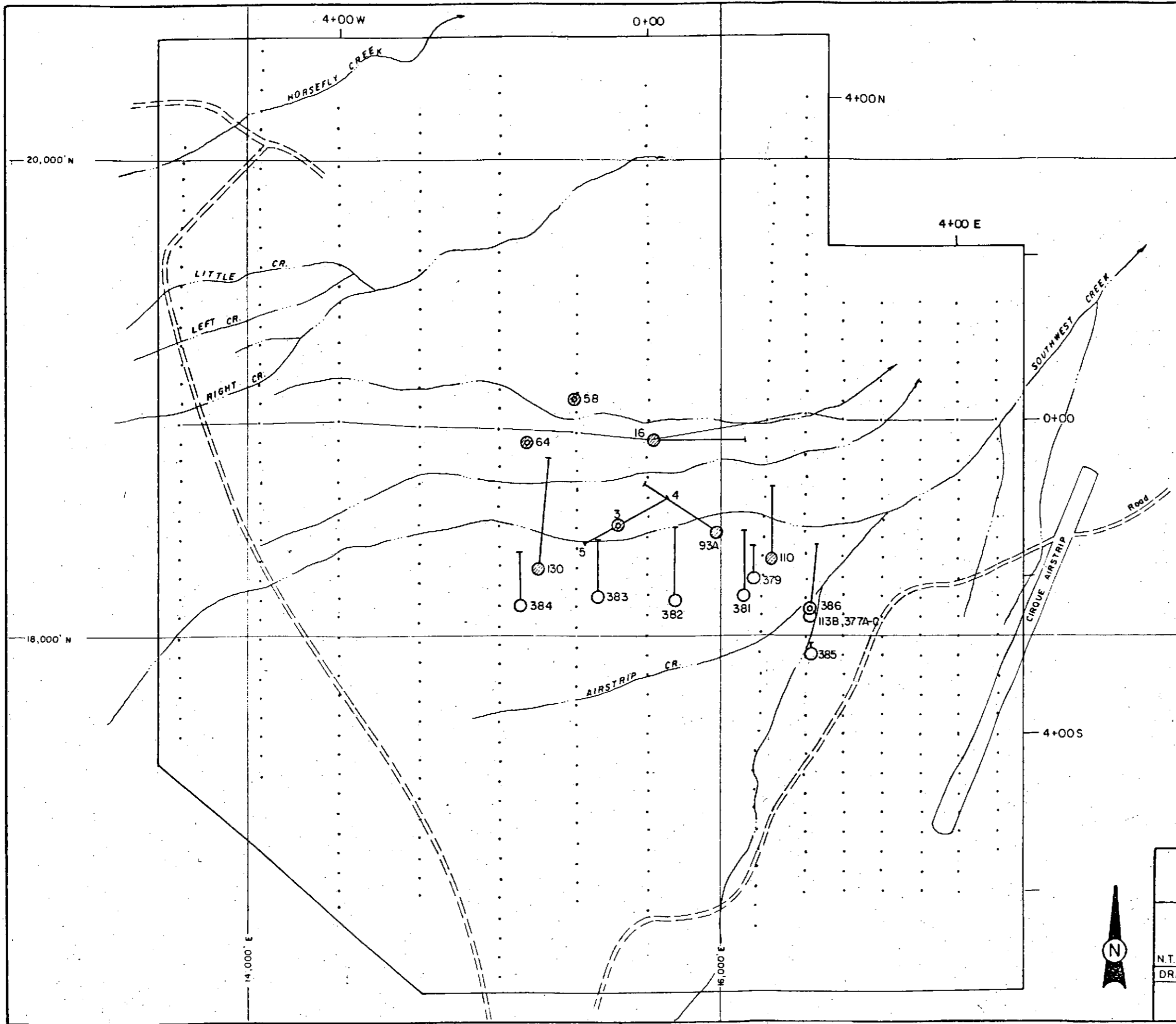
N.T.S. 104 G-3 GALORE CREEK, LIARD M.D., B.C.

DRAWN BY: K.T. DATE: NOV. 1990 SCALE 1:500

0 10 20 30 60 FEET  
0 5 10 20 METRES

PLATE NO.  
GC 90-6





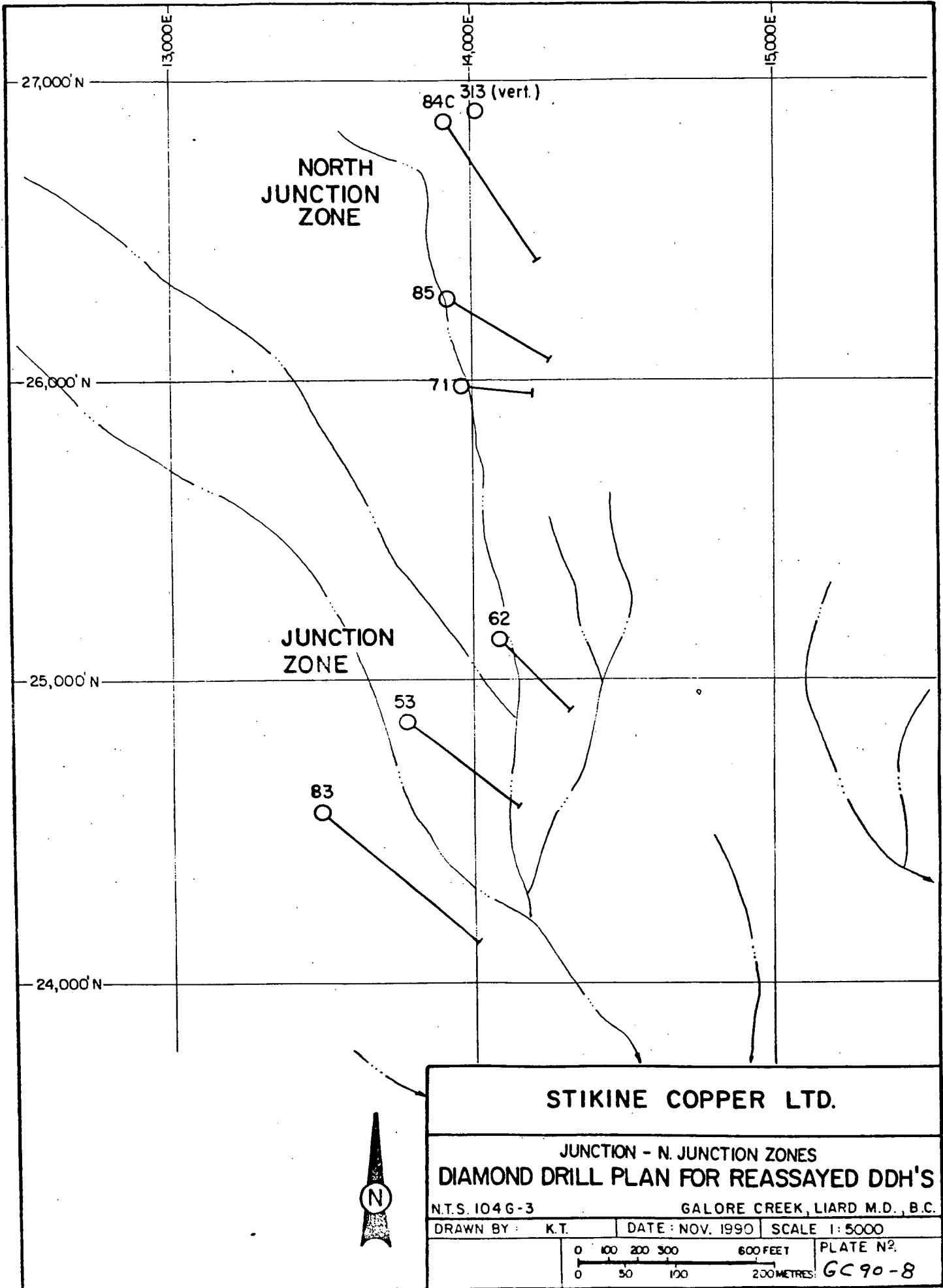
- LEGEND**
- Pre 1990 DDH'S
  - 1990 "
  - ⊙ Vertical "

**STIKINE COPPER LTD.**

**SOUTHWEST ZONE GRID  
DIAMOND DRILL PLAN**

NTS 104G-3		GALORE CREEK, LIARD M.D., B.C.	
DRAWN BY: K.T.	DATE: NOV. 1990	SCALE: 1:5000	PLATE NO.
0 100 200 300 600 FEET		0 50 100 200 METRES	
			<b>GC 90-7</b>





**STIKINE COPPER LTD.**

**JUNCTION - N. JUNCTION ZONES  
DIAMOND DRILL PLAN FOR REASSAYED DDH'S**

N.T.S. 104 G-3

GALORE CREEK, LIARD M.D., B.C.

DRAWN BY: K.T.

DATE: NOV. 1990

SCALE 1:5000

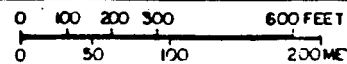
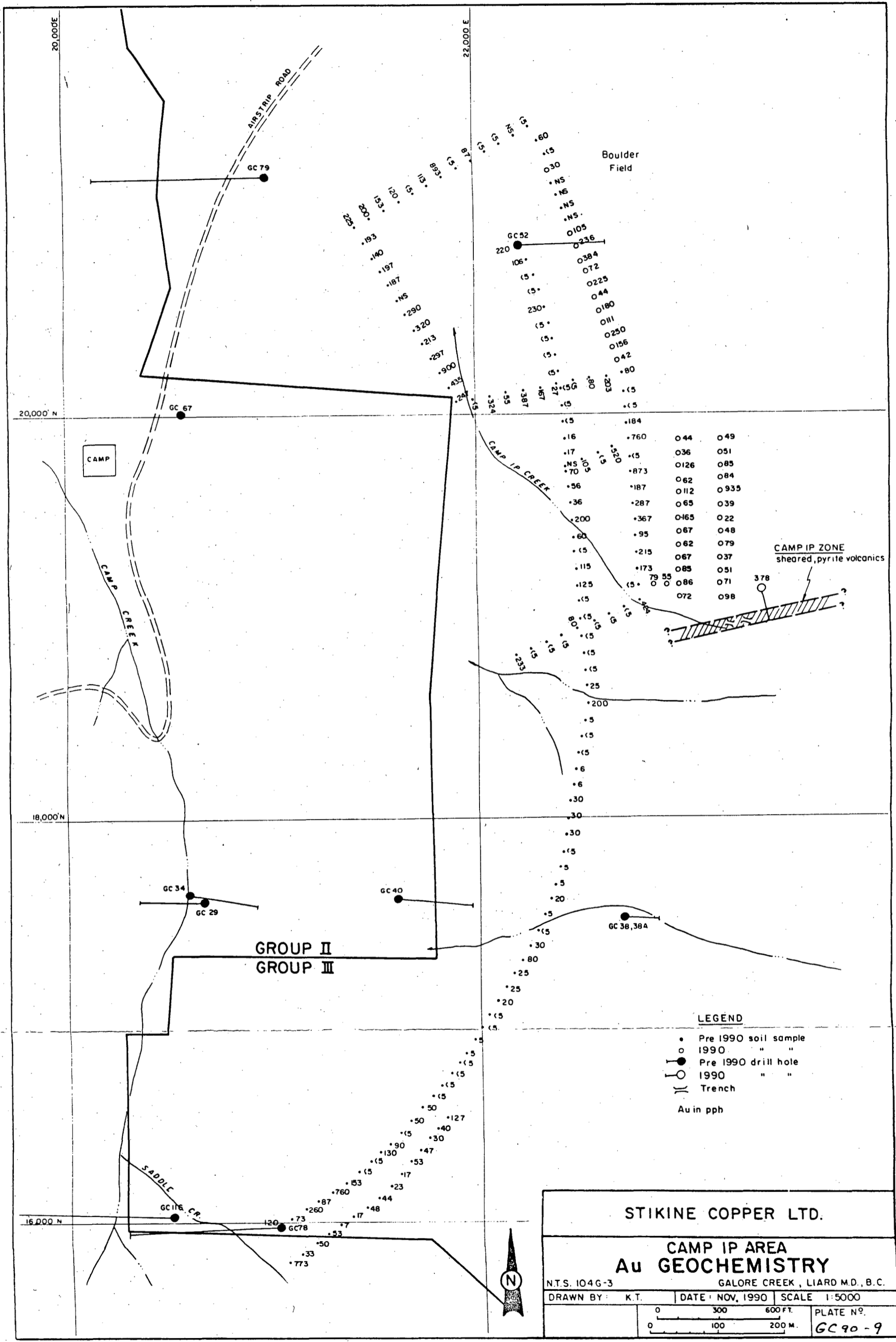


PLATE N<sup>o</sup>.

GC 90-8



**LEGEND**

- Pre 1990 soil sample
- 1990 " "
- ⊖ Pre 1990 drill hole
- ⊖ 1990 " "
- ⊖ Trench
- Au in ppb

**STIKINE COPPER LTD.**

**CAMP IP AREA  
Au GEOCHEMISTRY**

N.T.S. 104G-3 GALORE CREEK, LIARD M.D., B.C.

DRAWN BY: K.T. DATE: NOV, 1990 SCALE 1:5000

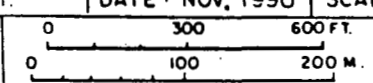
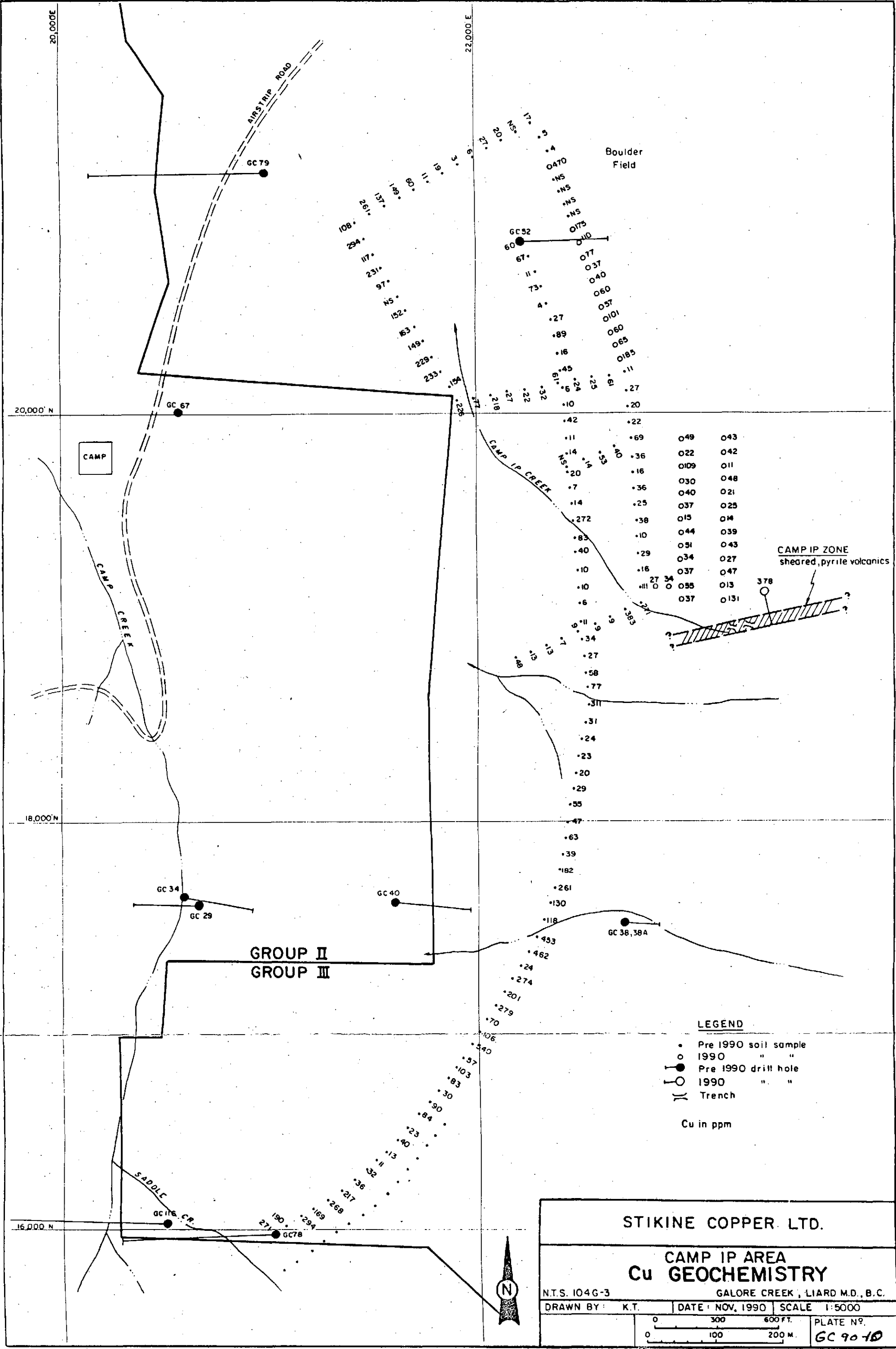


PLATE NO.  
**GC90-9**



**LEGEND**

- Pre 1990 soil sample
- 1990 " "
- Pre 1990 drill hole
- 1990 " "
- || Trench

Cu in ppm

**STIKINE COPPER LTD.**

**CAMP IP AREA  
Cu GEOCHEMISTRY**

N.T.S. 104G-3 GALORE CREEK, LIARD M.D., B.C.

DRAWN BY: K.T. DATE: NOV, 1990 SCALE 1:5000

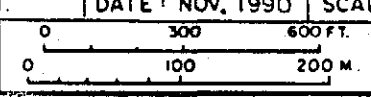
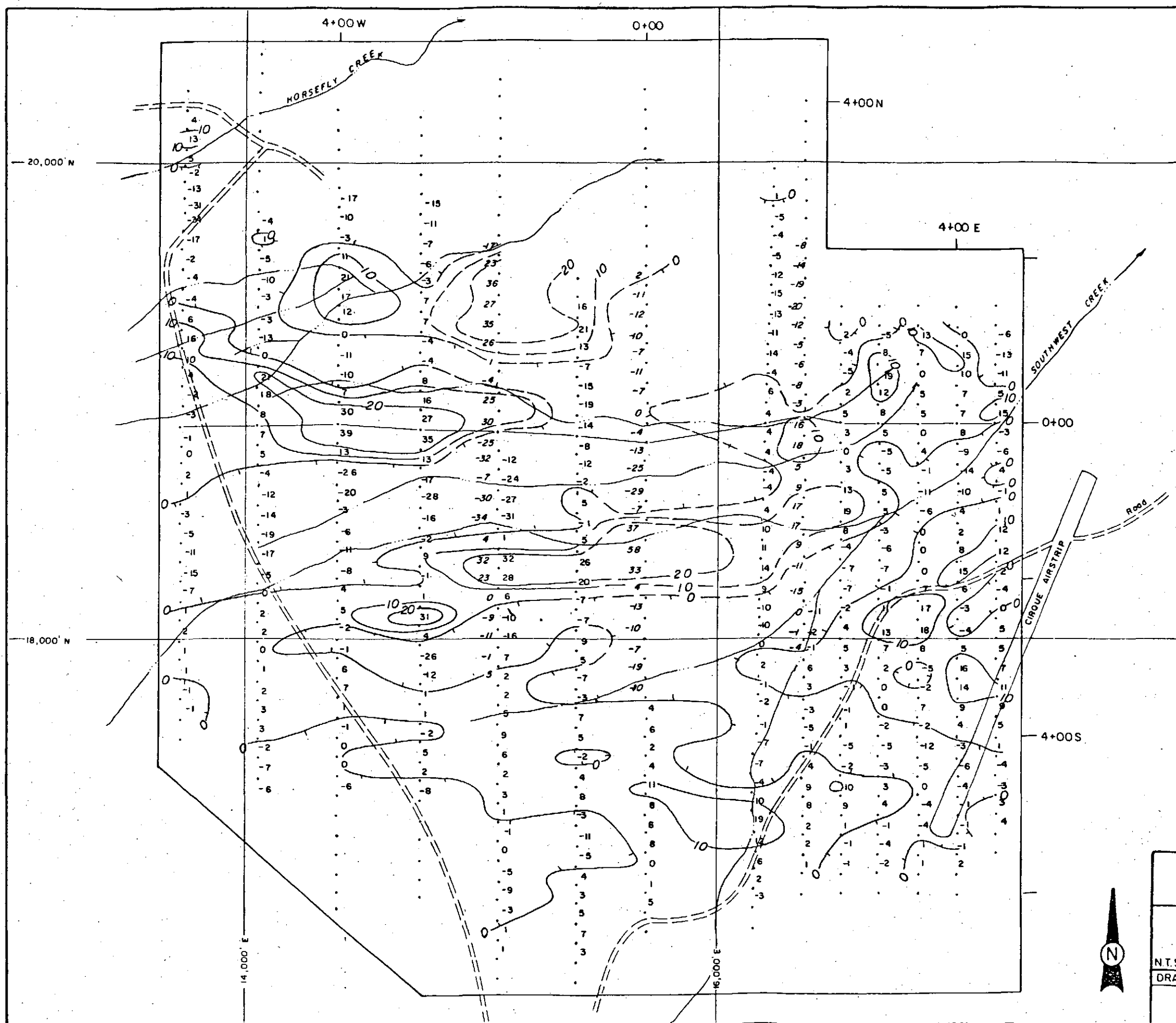


PLATE NO.  
**GC 9010**



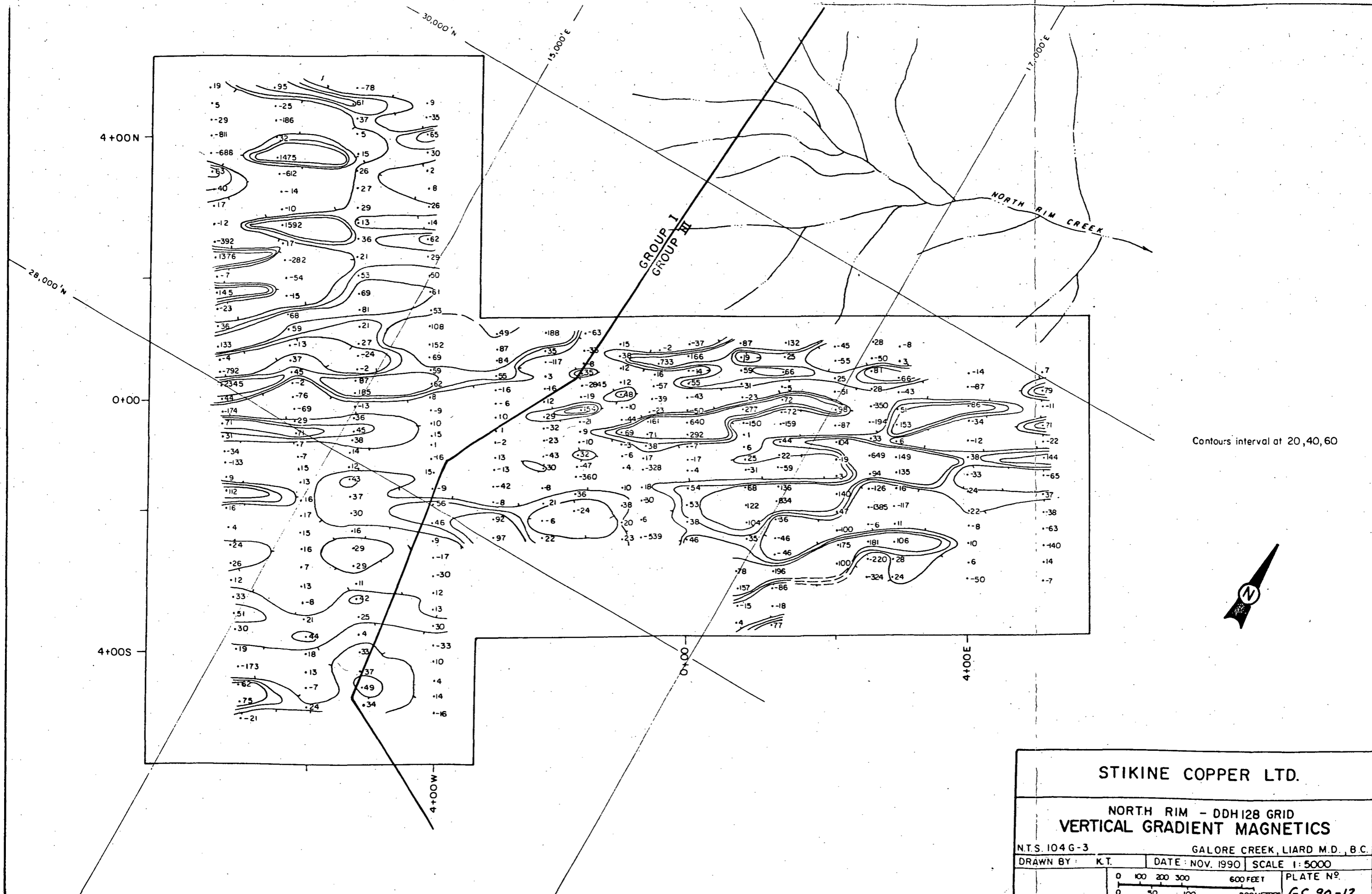
**LEGEND**  
 1990 work  
 Pre 1990 work

Station : Maryland (Maine)  
 VLF-EM : Fraser filtered  
 Facing : North



<b>STIKINE COPPER LTD.</b>			
<b>SOUTHWEST ZONE GRID</b>			
<b>CONTOURED VLF-EM (Fraser filtered)</b>			
N.T.S. 104G-3		GALORE CREEK, LIARD M.D., B.C.	
DRAWN BY: K.T.	DATE: NOV. 1990	SCALE: 1:5000	PLATE NO.
0 100 200 300 600 FEET		0 50 100 200 METRES	
			<b>GC 90-11</b>





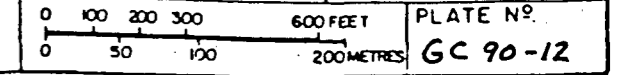
Contours interval at 20,40,60

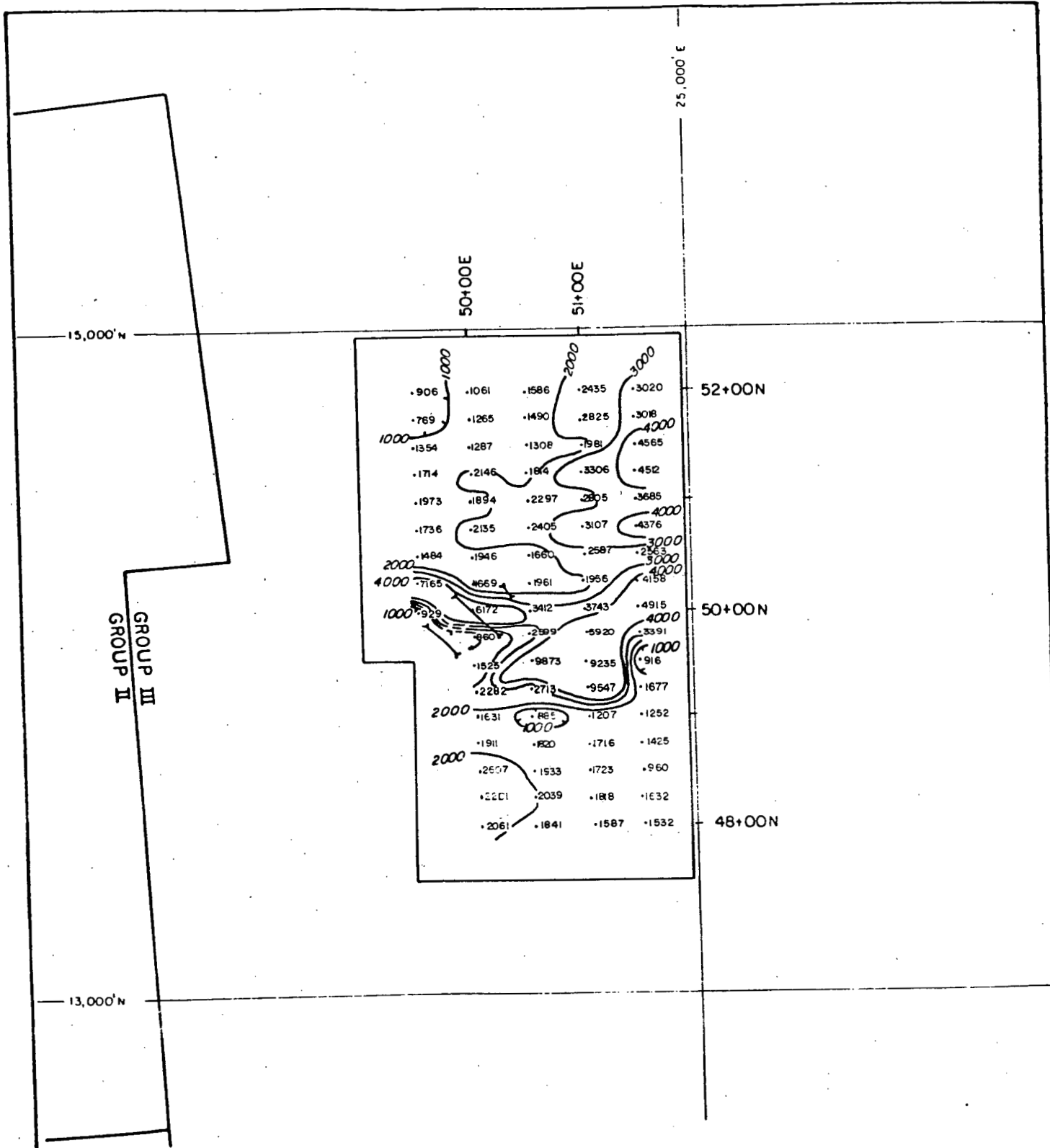
STIKINE COPPER LTD.

NORTH RIM - DDH128 GRID  
 VERTICAL GRADIENT MAGNETICS

N.T.S. 104 G-3 GALORE CREEK, LIARD M.D., B.C.

DRAWN BY: K.T. DATE: NOV. 1990 SCALE 1:5000





LEGEND

└ Trench

• 1364 - Gammas

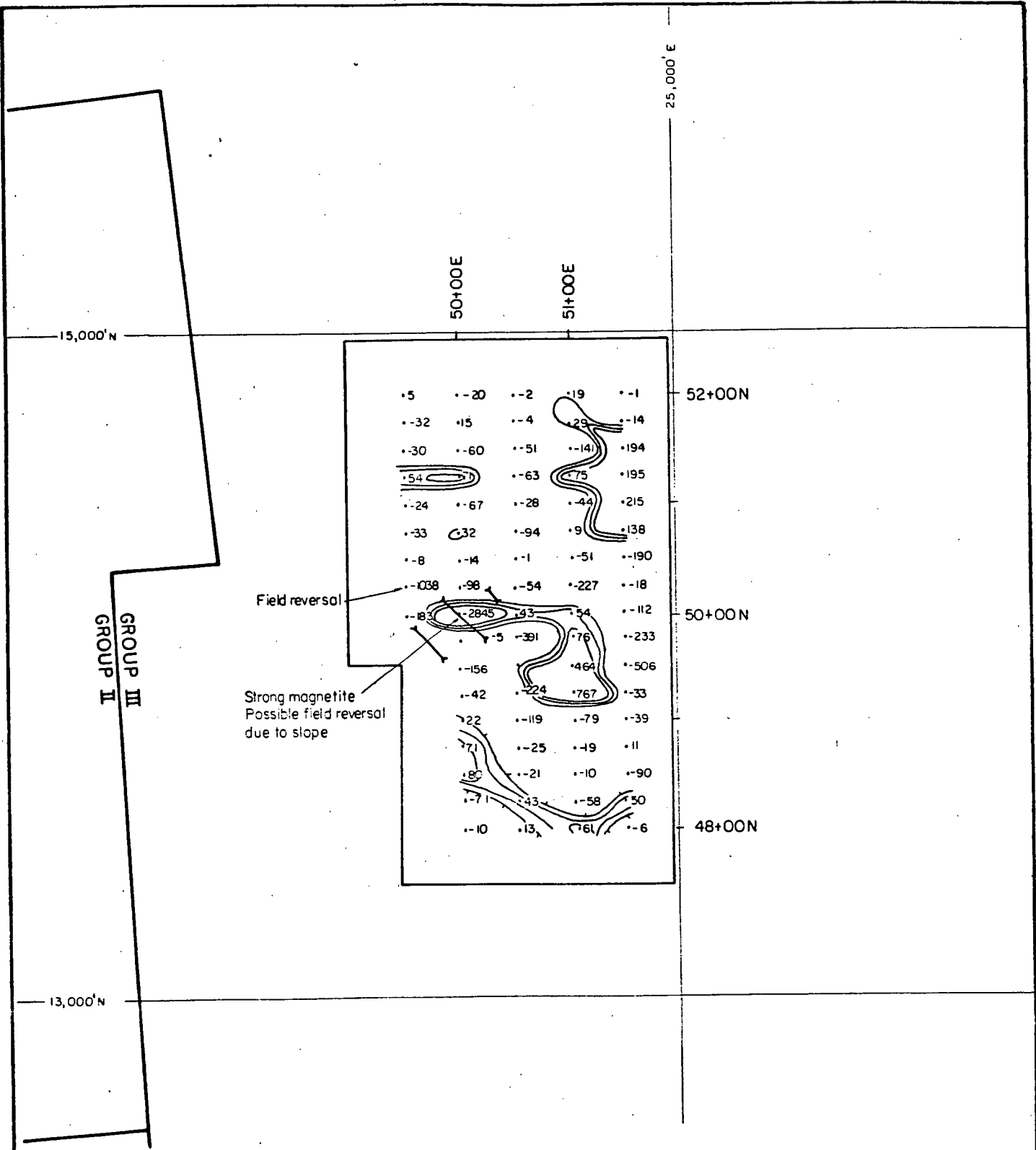


**STIKINE COPPER LTD.**

**SADDLE ZONE GRID**  
**TOTAL FIELD MAGNETICS**

N.T.S. 104G-3 GALORE CREEK, LIARD M.D., B.C.

DRAWN BY: K.T.	DATE: NOV. 1990	SCALE: 1:5000
		PLATE NO. <b>GC 90-13</b>



**LEGEND**

Trench

Contours interval at 20,40,60  
gamma/meters



**STIKINE COPPER LTD.**

**SADDLE ZONE GRID  
VERTICAL GRADIENT MAGNETICS**

N.T.S. 104G-3

GALORE CREEK, LIARD M.D. & B.C.

DRAWN BY: K.T.

DATE: NOV. 1990

SCALE 1:5000

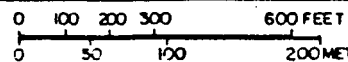
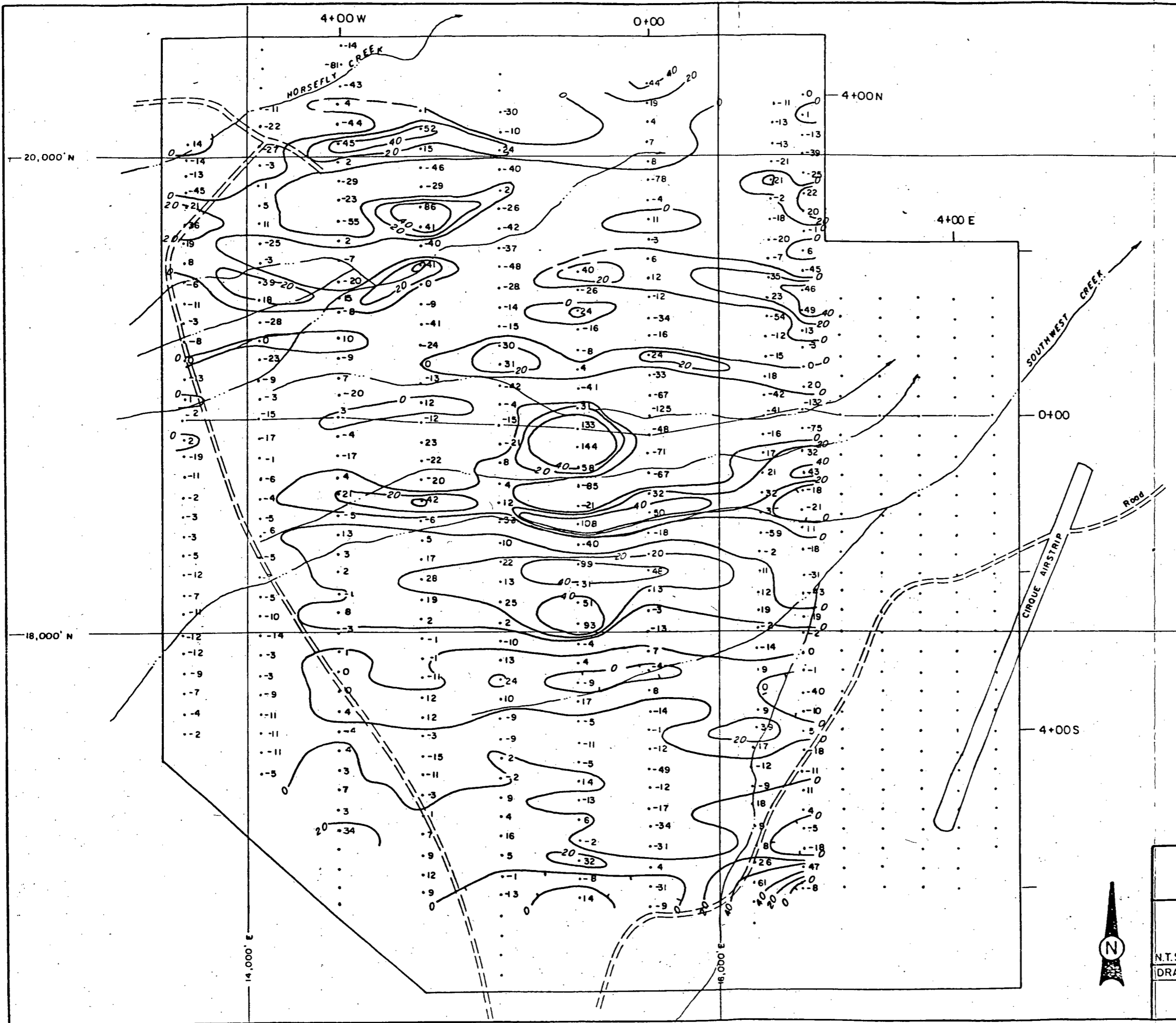


PLATE NO.

GC 90-14



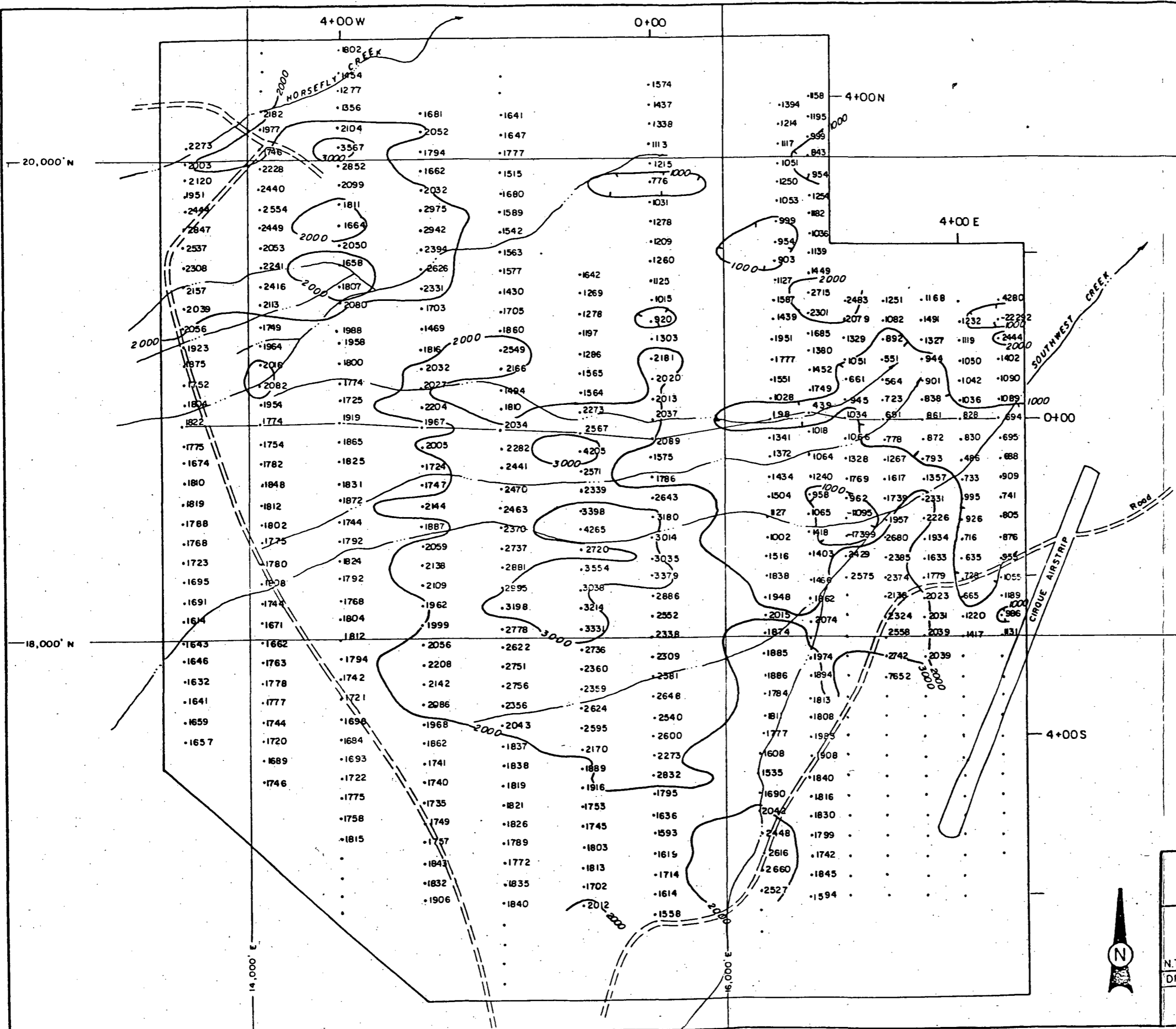
**STIKINE COPPER LTD.**

**SOUTHWEST ZONE GRID  
VERTICAL GRADIENT MAGNETICS**

N.T.S. 1046-3      GALORE CREEK, LIARD M.D., B.C.

DRAWN BY: K.T.	DATE: NOV. 1990	SCALE 1:5000
----------------	-----------------	--------------

PLATE NO.  
**GC 90-15**



BASE VALUE = 56,000 GAMMAS

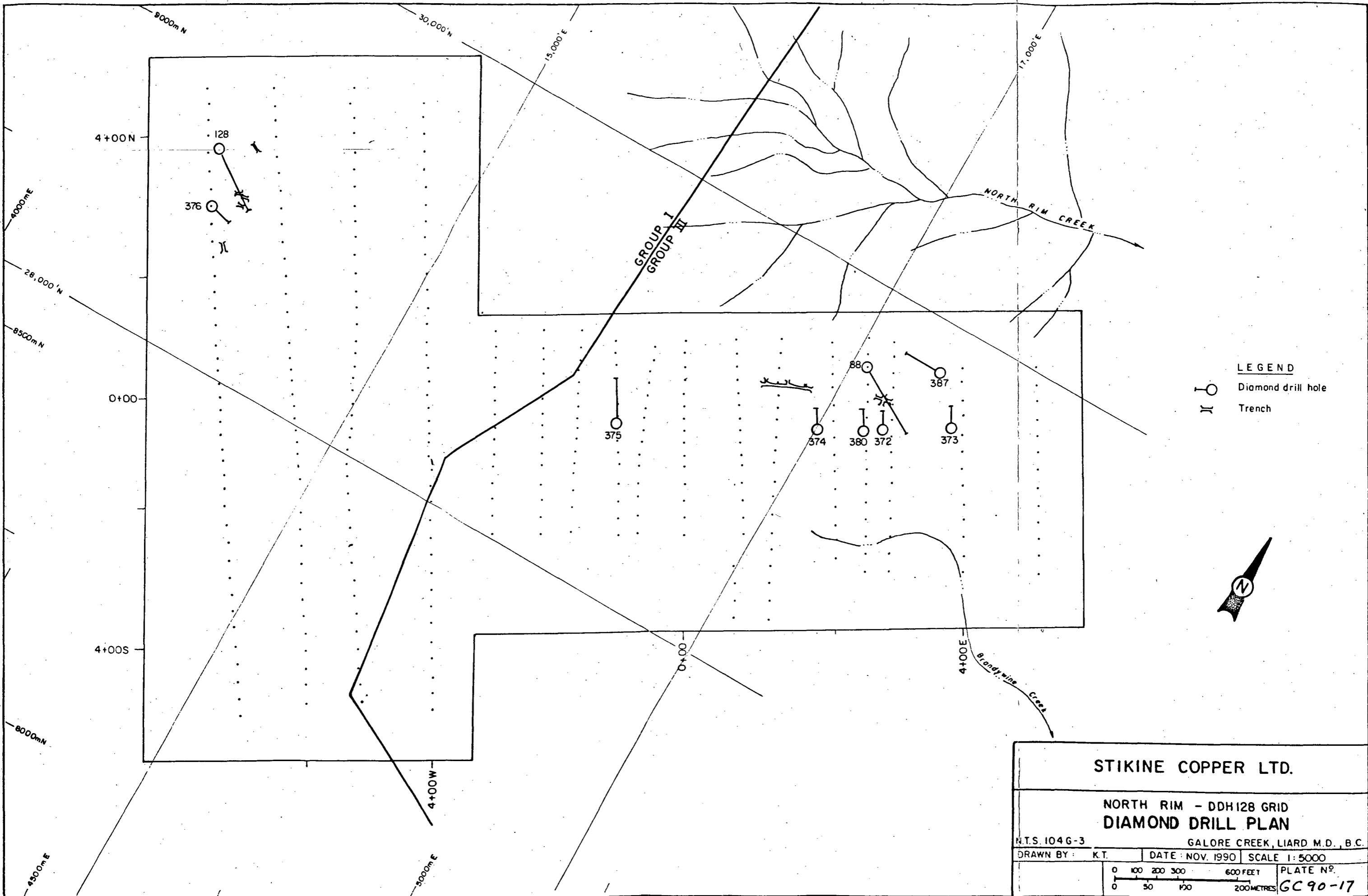
**STIKINE COPPER LTD.**

**SOUTHWEST ZONE GRID  
TOTAL FIELD MAGNETICS**

N.T.S. 1046-3 GALORE CREEK, LIARD M.D., B.C.

DRAWN BY: K.T. DATE: NOV. 1990 SCALE 1:5000

<p>0 100 200 300 600 FEET</p>	<p>0 50 100 200 METRES</p>
<p>PLATE N<sup>o</sup>. GC 90-16</p>	



**LEGEND**

-  Diamond drill hole
-  Trench

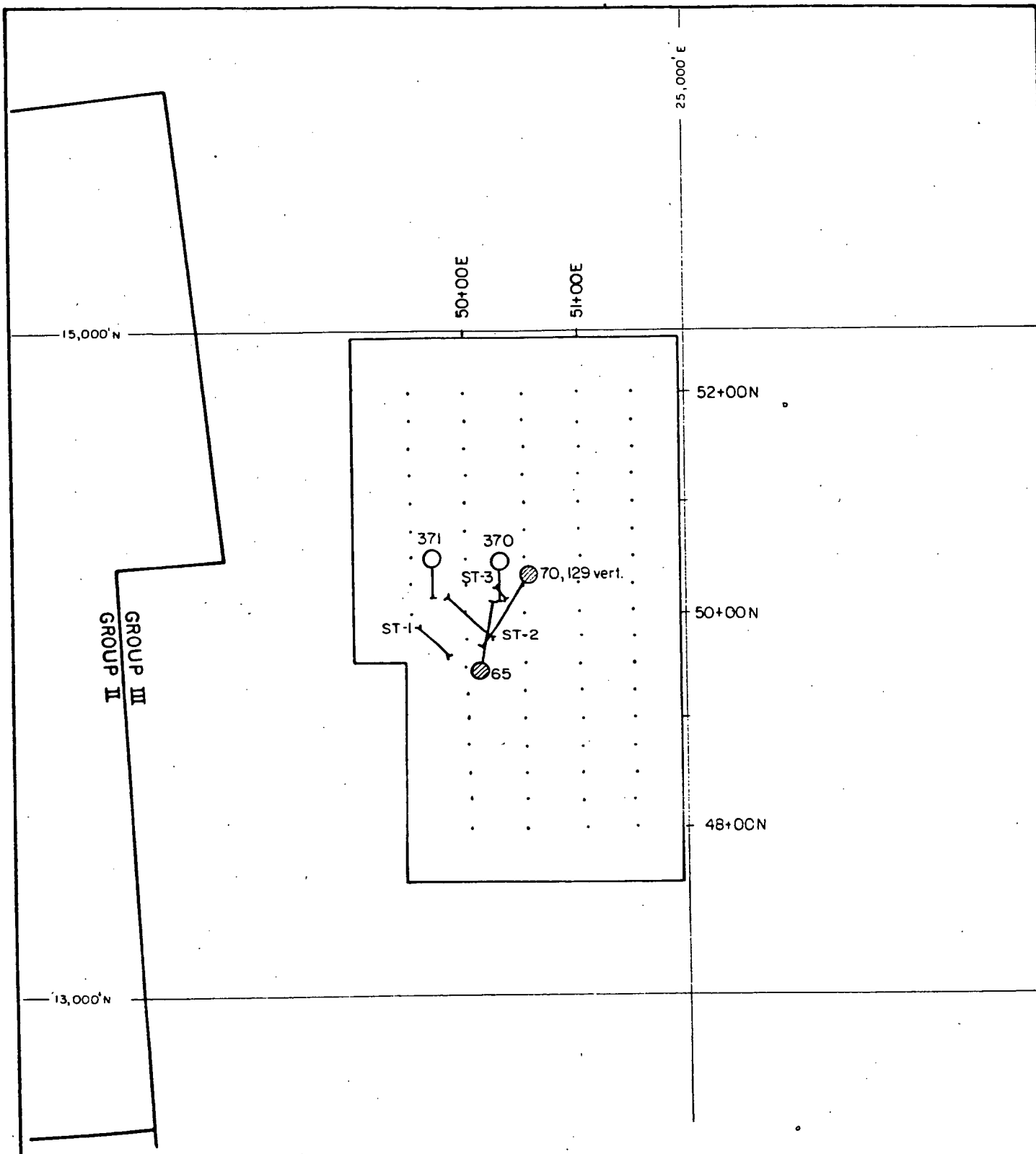
**STIKINE COPPER LTD.**




**NORTH RIM - DDH128 GRID  
DIAMOND DRILL PLAN**

N.T.S. 1046-3 GALORE CREEK, LIARD M.D., B.C.

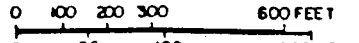
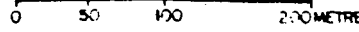
DRAWN BY: K.T. DATE: NOV. 1990 SCALE: 1:5000

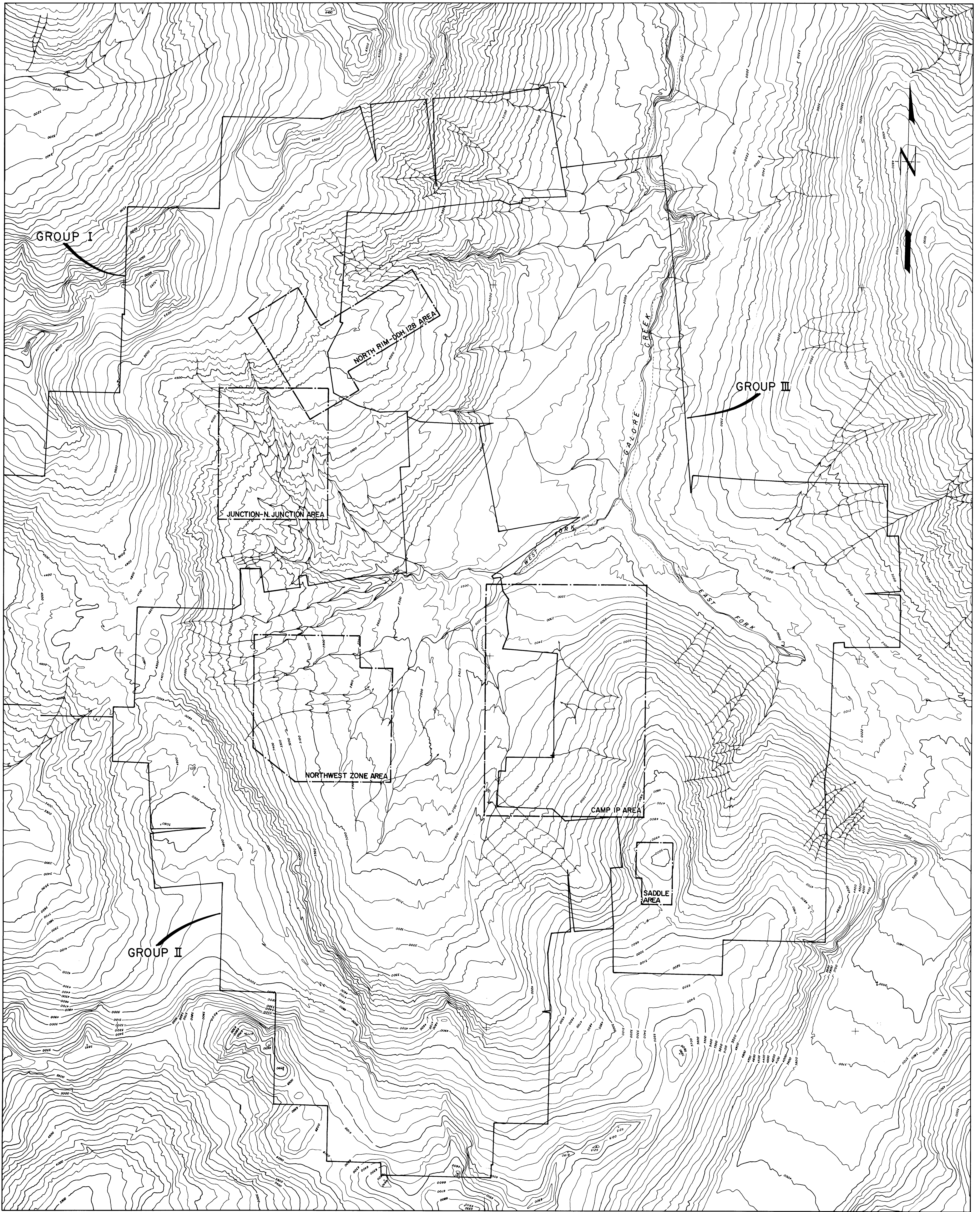
0 100 200 300 600 FEET PLATE NO.  
0 50 100 200 METRES **GC90-17**



- LEGEND**
-  Trench
  -  Pre 1990 DDH
  -  1990 DDH



<b>STIKINE COPPER LTD.</b>			
<b>SADDLE ZONE GRID DIAMOND DRILL PLAN</b>			
N.T.S. 1046-3		GALORE CREEK, LIARD M.D., B.C.	
DRAWN BY: K.T.	DATE: NOV. 1990	SCALE 1:5000	
			PLATE N <sup>o</sup> . <b>GC 90-18</b>
			



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,558  
Part 1 of 2

<b>STIKINE COPPER LIMITED</b>			
GALORE CREEK PROPERTY			
<b>INDEX MAP</b>			
Galore Creek, Liard M.D. British Columbia			
DATE: NOV. 1990	DRAWN BY: K.T.	SCALE: 1:12,000	PLATE No. GC 9a-4
REVISED BY:	DATE:	0 500 1000 1500 FT.	0 200 400 M.