ARIS SUMMARY SHEET

District Geol	ogist, Smithers	Off	Confidential: 92.09.10
ASSESSMENT RE	PORT 21900 MINING DIN	ISION: Liard	
PROPERTY: LOCATION: CLAIM(S): OPERATOR(S): AUTHOR(S): REPORT YEAR: COMMODITIES SEARCHED FOR: KEYWORDS: WORK DONE: DI DIA EMA IPO MAC RAI	Galore Creek LAT 57 07 00 LONG 1 UTM 09 6332824 351646 NTS 104G03W 104G04E GC,Hab,Buy,Kennco GC,SK Kennecott Can. Yarrow, E.W. 1991, 358 Pages Copper,Gold,Silver Triassic,Pyroclastics,Track Metasomatism,Hydrothermal Bornite,Native copper,Chal Lling,Geophysical,Geochemics AD 6186.5 m 22 hole(s);N(Map(s) - 1; Scale(s) - 1:1 AB 459.0 km Map(s) - 3; Scale(s) - 1:1 DL 90.2 km Map(s) - 3; Scale(s) - 1:1 GA 459.0 km Map(s) - 3; Scale(s) - 1:1 DA 459.0 km Map(s) - 4; Scale(s) - 1:1 MP 925 sample(s) ;CU,AU,AG	1 teration, roas cocite, Malachit 2 0 000 2000 2000 0 000 0 000	e
REPORTS: MINFILE:	00367,00368,00371,00372,00 104G 090,104G 091,104G	092,104G-093	

LOG NO:		J. J. J.	<u>1991</u>	RD.	A - • •
ACTION:					
	. A State And	21ct			

REPORT ON AIRBORNE, INDUCED POLARIZATION

AND

DIAMOND DRILL SURVEYS

GALORE CREEK GROUP I, II, & III CLAIMS

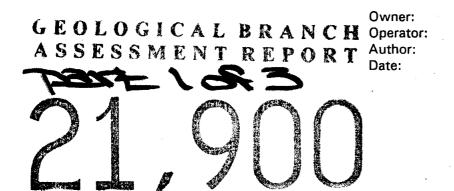
LIARD MINING DIVISION, BRITISH COLUMBIA

NTS 104G/3 & 4

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

	SUB-RECORDER RECEIVED
	DEC 9 - 1991
The second se	M.R. # \$
	VANCOUVER, B.C.

Kennecott Canada Inc. #138-200 Granville Street Granville Square Vancouver, B.C. V6C 1S4



Stikine Copper Ltd. Kennecott Canada Inc. E.W. Yarrow December 3, 1991

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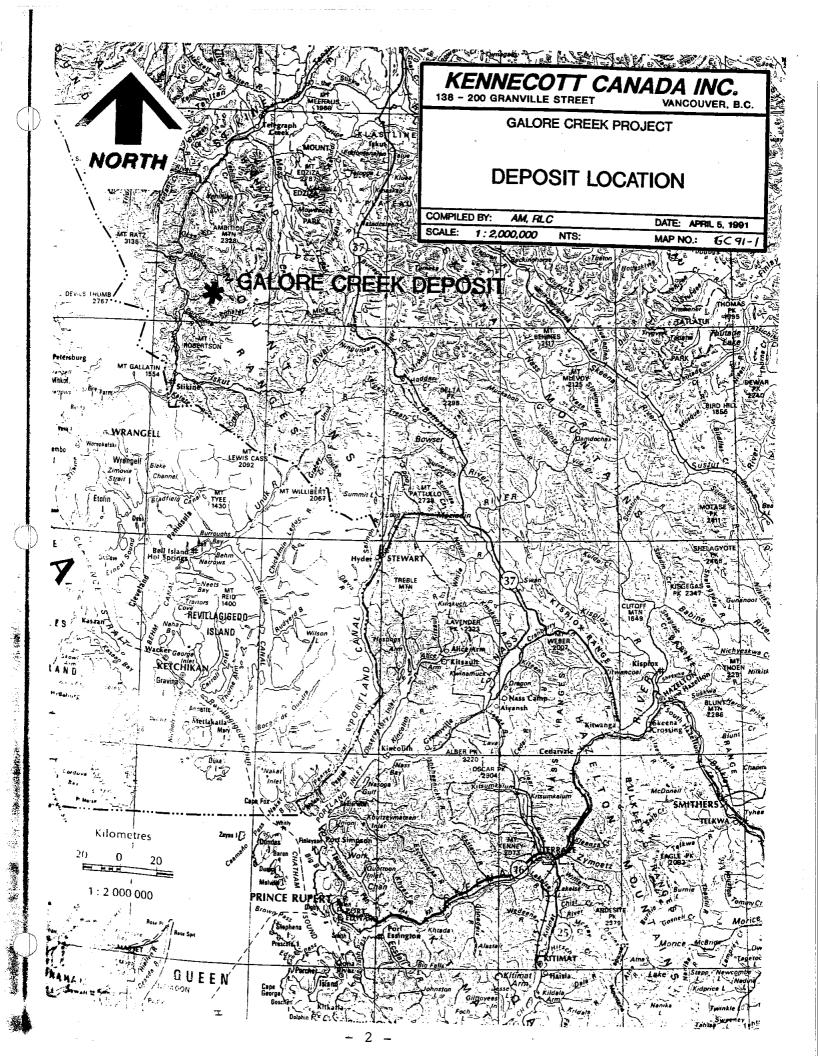
1.0 INTRODUCTION

The following report describes the geophysical and diamond drill programs conducted by Kennecott Canada Inc. personnel during the period June 10, 1991 to October 26, 1991. For assessment purposes the Galore Creek claims have been subdivided into three groups (Group I,II,III). Work has been filed on these claim groups according to anniversary dates of individual claims and the timeframe work was done. All relevant data on the claims is contained in the "Claims & Ownership" section of this report.

The 1991 program at Galore Creek comprised airborne geophysics, induced polarization (IP) surveys and an extensive diamond drill program. Table 1 is a claim grouping breakdown of the work being applied for assessment credit.

WORK TIMEFRAME	CLAIM GROUP NO	DRILL HOLE NO	METERS DRILLED	AIRBORNE GEOPHYSICS	IP
June 25 - Sept.4/91	8	GC400,402, 403	1030.5	38.4km	7km
Sept.9 - Oct.10/91	-	GC410,414, 417,419, 432	1063.9		
July 20 - Sept.1/91	11	GC388,390, 393,393A, 397,398	2047.6		
Oct.8 - Oct.18/91	II	GC433,434, 435	912.7		
July 20 - Sept.3/91		GC404,405, 409	551.4		
Sept.23 - Oct.4/91	111	GC420,427	580.4		

TABLE 1: Breakdown Of 1991 Exploration Program



2.0 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 a latitude of $57^{\circ}07'30$ "N and a longitude of $131^{\circ}27'W$ (see Plate GC91-1). The claims occur within the Liard Mining Division and extend across the boundary between N.T.S. mapsheets 104G/3 and 104G/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 1991 operated a scheduled fixed-wing service from Smithers to the Bob Quinn Airstrip which is located 70 kilometres east of the Galore Creek property. In addition, a turbine-equipped Otter aircraft made trips to the Galore Creek airstrip on a weekly basis. In 1991 helicopters were available on a casual basis from Bronson Airstrip (55km), Bob Quinn Airstrip (70km), and the Galore Creek camp.

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 deposit was imminent. As it turned out the only use of the road was for transporting several pieces of heavy duty equipment. With lack of use over the years the road has become overgrown with alders and bridges have been washed out.

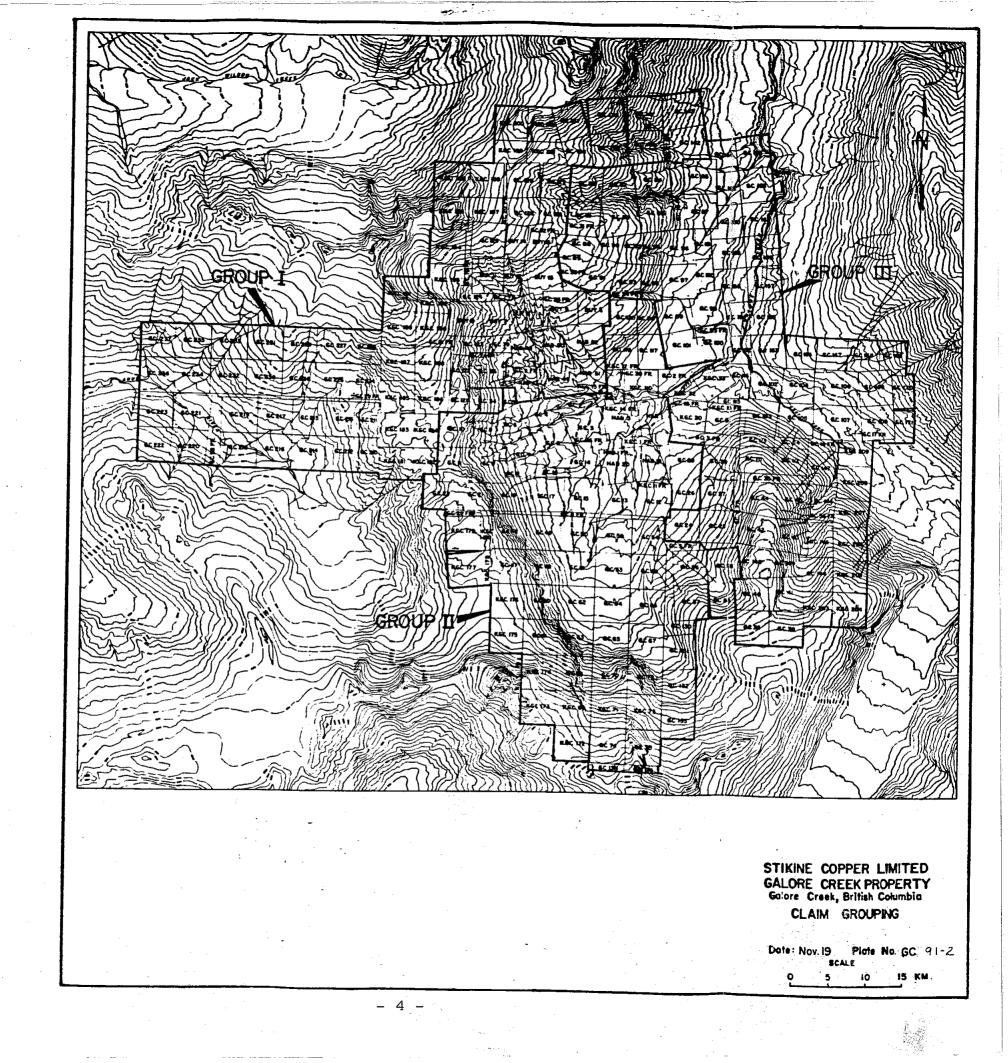
The old road between the Galore Creek (Portal) Airstrip and the camp has been upgraded to allow passage of four-wheel drive vehicles. This permits the transport of personnel and supply by truck instead of by helicopter.

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 to over 1,800 meters on the slopes of Saddlehorn Mountain.

Snow pack in the area is heavy, with peak levels of 5 meters or more being typical. Snow-free conditions below the 1,200 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 and consists of mature stands of pine, spruce and cottonwood at lower elevations and passing into scrub evergreens up to the treeline at 1,200 meters. Underbrush of alder, willow and devils club is thick, this, in combination with the deeply incised creek gullies makes traversing arduous.

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3.0 CLAIMS & OWNERSHIP (Plate GC91-2)

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 Kennecott Canada Inc., Hudson Bay Mining and Smelting Co. Ltd. and Cominco Ltd. Assessment work has been filed on claims based on anniversary dates and the dates work was conducted (Table 1). A complete listing of the claims by grouping and new anniversary dates (if work accepted) is given in Table 2.

4.0 PERSONNEL

The following personnel were involved in the Galore Creek Project during the course of the 1991 field season: E.W.Yarrow, Field Manager; S.Enns, Senior Geologist; M.Baknes, P.Varas, P.Beck, T. Heah and S. Butler, all geologists; R.Weishaupt and R. Versoza, technicians. Overall project supervision was provided by D. Johnson of Kennecott, Vancouver. Statement of qualifications for relevant technical personnel are located in Appendix II of this report.

Contract companies which completed work at the project site during the course of the field season are: Northern Mountain Helicopters, Prince George, B.C.; Quest Canada Drilling, Vancouver, B.C.; Lloyd Geophysics Inc., Vancouver, B.C.; Aerodat Limited, Mississauga, Ontario; Cando Foods Limited, Whitehorse, Y.T.; Gordon Clark & Associates, Whitehorse, Y.T. and; Central Mountain Airlines, Smithers, B.C.

5.0 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 conducted 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 highly anomalous copper samples in the headwaters of Galore Creek in 1960. The claims surrounded the H.B.E.D. ground as well as four claims which had been optioned by Cominco from one of the co-discoverers. In 1962 the three companies agreed to jointly develop the property and formed Stikine Copper to be the corporate vehicle.

TABLE 2

<u> </u>						
6	BALORE CREEK GROUP I					
	CLAIM NAME	NEW	OLD	No. OF	CURRENT	NEW
\sim [RECORD NO.	RECORD	UNITS	EXPIRY	EXPIRY
) 1	Buy 4	226175	4489	1	Aug 8/92	Aug 8/2001
2	Buy 5	226176	4490	1	Aug 8/92	the second se
3	Buy 6	226177	4491	1	Aug 8/92	Aug 8/2001
4	Buy 7	226178	4492	1	Aug 8/92	Aug 8/2001
5	Buy 8	226179	4493	1	Aug 8/92	Aug 8/2001
6	Buy 11	226180	4504	1	Aug. 13/92	Aug 8/2001
7	Buy 13	226180	4506	1		Aug. 13/200
8	Buy 14	226182	4507	1	Aug. 13/92	Aug. 13/200
9	Buy 15	226183	4508	1	Aug. 13/92	Aug. 13/200
10	Buy 16	226184	4509	1	Aug. 13/92	Aug. 13/200
11	HAB 47			·	Aug. 13/92	Aug. 13/200
12	HAB 48	226164	3792	1	October 11/92	October 11/9
13	HAB 49	226165	3793	1	October 11/92	October 11/9
14	HAB 50	226166	3794	1	October 11/92	October 11/9
		226167	3795	1	Octobar 11/92	October 11/9
15	HAB 51	226168	3796	1	October 11/92	October 11/9
16	HAB 52	226169	3797	1	October 11/92	October 11/9
17	<u>GC 34</u>	226247	8678	1	Sept21/92	Sept 21/2001
18	<u>GC 36</u>	228249	8678	1	Sept21/92	Sept 21/2001
19	GC 37	226250	8679		Sept21/92	Sept 21/2001
20	GC 79	226286	8786	1	Sept21/92	Sept 21/2001
21	GC 121	226344	9618	1	Sept. 5/92	Sept. 5/2001
22	GC 122	226345	9619	1	Sept. 5/92	Sept. 5/2001
23	GC 123	226346	9620	1	Sept. 5/92	Sept. 5/2001
24	GC 124	226347	9621	1	Sept. 5/92	Sept. 5/2001
25	GC 125	226348	9622	1	Sept. 5/92	Sept. 5/2001
26	GC 126	226349	9623	1	Sept. 5/92	Sept. 5/2001
27	GC 127	226350	9624	1	Sept. 5/92	Sept. 5/2001
28	GC 128	228351	9625	1	Sept. 5/92	Sept. 5/2001
29	GC 129	226352	9626	1	Sept. 5/92	Sept. 5/2001
30	GC 136	226359	9633	1	Sept. 5/92	Sept. 5/2001
31	GC 137	226360	9634	1	Sept. 5/92	Sept. 5/2001
32	GC 138	226361	9635	1	Sept. 5/92	Sept. 5/2001
33	GC 139	226362	9636	1	Sept. 5/92	Sept. 5/2001
34	GC 140	226363	9637	1	Sept. 5/92	Sept. 5/2001
35	GC 141	226364	9638	1	Sept. 5/92	Sept. 5/2001
36	GC 142	226365	9639	1	Sept. 5/92	Sept. 5/2001
37	GC 143	226366	9640	1	Sept. 5/92	Sept. 5/2001
38	KENNCO GC 181	226417	12184	1	October 9/93	October 9/2000
39	KENNCO GC 182	226418	12185	1	October 9/93	October 9/2000
40	KENNCO GC 183	226419	12186	1	October 9/92	October 9/99
41	KENNCO GC 184	228420	12187	1	October 9/92	October 9/99
42	KENNCO GC 185	226421	12188	1	October 9/92	
43	KENNCO GC 186	228422	12189	1	October 9/92	October 9/99 October 9/99
44	KENNCO GC 187	226423	12190	1	October 9/92	October 9/99 October 9/99
15	KENNCO GC 188	226424	12191	1	October 9/92	
46	KENNCO GC 189	226425	12192	1	October 9/92	October 9/99
47	KENNCO GC 190	226426	12193	1	October 9/92	October 9/99
48	KENNCO GC 191	226427	12194	1	October 9/92	October 9/99
49	KENNCO GC 192	226428	12195	1	October 9/92	October 9/99

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50	GC 144	226367	9641	1	Sept. 5/99	Sept. 5/200
51	GC 145	226368	9642	1	Sept. 5/99	Sept. 5/200
52	GC 146	226369	9643	1	Sept. 5/99	
53	GC 147	226370	9644	1	Sept. 5/99	Sept. 5/2001
54	GC 148	226371	9645	1	Sept. 5/99	Sept. 5/200*
55	GC 149	226372	9646	1		Sept. 5/200'
56	GC 150	226374	10192	_	Sept. 5/99	Sept. 5/2001
57	GC 151	226375	10192		Nov 7/1999	Nov 7/2001
58	GC 152	226376			Nov 7/1999	Nov 7/2001
59	GC 152	226376	10194		Nov 7/1999	Nov 7/2001
60	GC 153	226377	10195		Nov 7/1999	Nov 7/2001
61	GC 155	226378	10198		Nov 7/1999	Nov 7/2001
62	GC 156		10197		Nov 7/1999	Nov 7/2001
63	GC 155	226380	10198		Nov 7/1999	Nov 7/2001
64	GC 157	226381	10199		Nov 7/1999	Nov 7/2001
·		226382	10200		Nov 7/1999	Nov 7/2001
65	GC 159	226383	10201		Nov 7/1999	Nov 7/2001
66	<u>GC 160</u>	226384	10202		Nov 7/1999	Nov 7/2001
67	GC 161	226385	10203		Nov 7/1999	Nov 7/2001
68	GC 162	226386	10204		Nov 7/1999	Nov 7/2001
69	GC 163	226387	10205	1	Nov 7/1999	Nov 7/2001
70	GC 164	226388	10208		Nov 7/1999	Nov 7/2001
71	GC 165	226389	10207	1	Nov 7/1999	Nov 7/2001
72	GC 166	226390	10849	1	Aug. 8/2000	Aug. 6/2001
73	GC 167	226391	10850	1	Aug. 8/2000	Aug. 6/2001
74	GC 168	226392	10851	1	Aug. 6/2000	Aug. 6/2001
75	GC 169	226393	10852	1	Aug. 6/2000	Aug. 6/2001
76	<u>GC 170</u>	226394	10853	1	Aug. 8/2000	Aug. 6/2001
77	<u>GC 171</u>	226395	10854	1	Aug. 6/2000	Aug. 6/2001
78	XGC 30	226521	14896	1	Sept. 4/97	Sept. 4/2001
79	XGC 32	226522	14897	1	Sept. 4/97	Sept. 4/2001
30	XGC 33	226523	14898	1	Sept. 4/97	Sept. 4/2001
31	KENNCO GC 203	226439	12206	1	Oct 9/1998	Oct 9/2001
32	KENNCO GC 204	226440	12207		Oct 9/1998	Oct 9/2001
3	KENNCO GC 205	226441	12208	1	Oct 9/1998	Oct 9/2001
4	KENNCO GC 206	226442	12209	1	Oct 9/1998	Oct 9/2001
5	KENNCO GC 207	226443	12210	1	Oct 9/1998	Oct 9/2001
16	KENNCO GC 208	226444	12211		Oct 9/1998	Oct 9/2001
7	KENNCO GC 209	226445	12212		Oct 9/1998	Oct 9/2001
8	GC 3 Fr.	226396	10855	1	Aug. 6/2000	Aug. 6/2001
9	GC 6 Fr.	226398	10858	1	Aug. 6/2000	Aug. 6/2001
0	GC 10 FR	226402	11006	1	Sept 10/1997	Sept 10 2001
1	GC 16 Fr.	226519	14894	1	Sept. 4/97	Sept. 4/2001
2	GC 17 Fr.	226520	14895	1	Sept. 4/97	Sept. 4/2001
3	GC 23 FR	226553	15986	1 0	Dct 30/1997	Oct 30/2001
4	GC 31 FR	226561	16234		Nov 23/1997	Nov 23/2001
5	GC 35 FR	226565	16238		Nov 23/1997	Nov 23/2001
6	GC 36 FR	226566	16239		Nov 23/1997	Nov 23/2001
7	Kennco GC 15 Fr	226467	11975	1	Aug. 29/94	Aug. 29/2001
6	\$K 1 Fr.	226633	22739	1	June 2/2000	June 2/2001
Э 📃	SK 2 Fr.	226634	22740	1	June 2/2000	June 2/2001
	S.K. 3 FR	226659	24745		Sept 12/1997	Sept 12/2001

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		A 153 4 4				
	CLAIM NAME	NEW	OLD	No. OF		NEW
.		RECORD NO.	RECORD	UNITS	EXPIRY DATE	EXPIRY DAT
<u> </u>	HAB 1	226160	3760	<u> 1</u>	October 11/95	Oct 11/2001
2	HAB 3	226161	3762	1	October 11/95	Oct 11/2001
3	HAB 18	22162	3777	1	October 11/95	Oct 11/2001
•	HAB 20	226163	3779	1	October 11/95	Oct 11/2001
<u> </u>	GC 1	226219	8643	1	September 21/95	
3	GC 2	226220	8644	1	September 21/95	
<u>'</u>	GC 3	226221	8645	1	September 21/95	Sept 21/200
3	GC 4	226222	8646	1.	September 21/95	Sept 21/2001
? <u> </u>	GC 5	226223	8647	1	September 21/95	Sept 21/2001
	GC 8	226224	8648	1	September 21/95	
	GC 7	226225	8649	1	September 21/95	Sept 21/2001
!	GC 8	226226	8650	1	September 21/95	
۱ <u> </u>	GC 9	226227	8651	1	September 21/95	
· [GC 10	226228	8652	1	September 21/95	
	GC 11	226229	8653	1	September 21/95	
Ĺ	GC 12	226230	8654	1	September 21/95	
	GC 13	226231	8655	<u>`1</u>	September 21/95	
ļ	GC 14	226232	8656	1	September 21/95	
	GC 15	226233	8657	1	September 21/95	Sept 21/2001
	GC 16	226234	8658	1	September 21/95	Sept 21/2001
	GC 17	226235	8659		September 21/95	Sept 21/2001
	GC 18	226236	8660		September 21/95	
	GC 19	226237	8651		September 21/95	Sept 21/2001
	GC 21	226238	8663		September 21/95	Sept 21/2001
	GC 23	226239	8665		September 21/95	
	GC 26	226242	8668		September 21/95	
	GC 28	226244	8670		September 21/95	Sept 21/2001
-	GC 35	226248	8677		September 21/95	Sept 21/2001
	GC 46	226259	8688		September 21/95	Sept 21/2001
	GC 47	226260	8689		September 21/95	
	GC 48	228261	8690		September 21/95	Sept 21/2001
	GC 49	226262	8691		September 21/95	Sept 21/2001
	GC 50	226263	8692		September 21/95	Sept 21/2001
	GC 51	226264	8693		September 21/95	Sept 21/2001
	GC52	226265	8694		September 21/95	Sept 21/2001
	GC53	226266	8695		September 21/95	Sept 21/2001
	GC54	226267	8696		September 21/95	Sept 21/2001
	GC55	226268	8697		September 21/95	Sept 21/2001
	GC56	226269	8698		September 21/95	Sept 21/2001
	GC57	226270	8699		September 21/95	Sept 21/2001
	GC58	226271	8700		September 21/95	Sept 21/2001
	GC59	226272	8701		September 21/95	Sept 21/2001
	GC60	226273	8702		eptember 21/95	Sept 21/2001
	GC61	226274	8703		eptember 21/95	Sept 21/2001
	GC62	226275	8704		eptember 21/95	Sept 21/2001
	GC63	226276	8705			Sept 21/2001
	GC64	226277	8708		eptember 21/95	Sept 21/2001
	GC65	226278	8707		eptember 21/95	Sept 21/2001
	GC66	226279	8708		eptember 21/95 eptember 21/95	Sept 21/2001 Sept 21/2001

	50	KENNCO GC 193	226429	10100			·
	51	KENNCO GC 193		12196	1	October 9/92	October 9/99
\bigcap			226430	12197	1	October 9/92	October 9/99
\bigcirc	52	KENNCO GC 195	226431	12198	1	October 9/92	October 9/99
	63	KENNCO GC 198	226432	12199	1	October 9/92	October 9/99
	54	KENNCO GC 197	226433	12200	1	October 9/92	October 9/99
	55	KENNCO GC 198	226434	12201	1	October 9/92	October 9/99
	56	KENNCO GC 199	226435	12202	1	October 9/92	October 9/99
	57	KENNCO GC 200	226436	12203	1	October 9/92	October 9/99
	58	KENNCO GC 201	226437	12204	1	October 9/92	October 9/99
	59	KENNCO GC 202	226438	12205	1	October 9/92	October 9/99
	60	GC 210	226469	13444	1	April 2/92	April 2/2001
	61	GC 211	226470	13445	1	April 2/92	April 2/2001
	62	GC 212	226471	13446	1	April 2/92	April 2/2001
	63	GC 213	226472	13447	1	April 2/92	April 2/2001
	64	GC 214	226473	13448	1	April 2/92	April 2/2001
	65	GC 215	226474	13449	1	April 2/92	April 2/2001
	66	GC 216	226475	13450	1	April 2/92	April 2/2001
	67	GC 217	226476	13451	1	April 2/92	
	68	GC 218	226477	13452	1	April 2/92	April 2/2001 April 2/2001
	69	GC 219	226478	13453	1	April 2/92	
	70	GC 220	226479	13454	1	April 2/92	April 2/2001
	71	GC 221	226480	13455	1	April 2/92	April 2/2001
	72	GC 222	226481	13456	1	April 2/92	April 2/2001
	73	GC 223	226482	13457	1	April 2/92	April 2/2001
	74	GC 224	226483	13458	1		April 2/2001
	75	GC 225	226484	13571	1	April 2/92	April 2/2001
	76	GC 228	226485	13572	1	April 6/92	April 6/2001
	77	GC 227	226486	13573	1	April 6/92	April 6/2001
	78	GC 228	226487		<u> </u> 1	April 6/92	April 6/2001
	79	GC 229	226488	13574		April 6/92	April 6/2001
	80	GC 230	and the second se	13575		April 6/92	April 6/2001
	81	GC 231	226489	13576	1	April 6/92	April 6/2001
	82	GC 232	226490	13577	1	April 6/92	April 6/2001
	83	GC 232	226491	13578	1	April 6/92	April 6/2001
	63 64	GC 234	226492	13579	1	April 6/92	April 6/2001
	85	GC 234 GC 235	226493	13580	1	April 6/92	April 6/2001
	86¦	GC 236	226494	13581	1	April 6/92	April 6/2001
	37	GC 236	226495	13582		April 6/92	April 6/2001
	38		226496	13583	1	April 6/92	April 6/2001
		<u>GC 7 FR</u>	226399	11003	1	September 10/92	Sept 10/2001
	39	GC 9 FR	226401	11005	1	September 10/92	Sept 10/2001
		GC 19 FR	226549	15982	1	Octobar 30/92	October 30/99
	91	GC 20 FR	226550	15983	1	October 30/92	October 30/99
	2	GC 21 FR	226551	15984	1	October 30/92	October 30/99
	3	GC 24 FR	226554	15987	1	October 30/92	October 30/99
	4	GC 25 FR	226555	15988	1	October 30/92	October 30/99
	5	GC 27 FR	226559	16184	1	November 17/92	Nov 17/2001
	6	GC 28 FR	226559	15990	1	October 30/92	October 30/99
	7	GC 29 FR	226560	15991	<u>†</u>	October 30/92	October 30/99
	8	GC 32 FR	226562	18235	1	November 23/92	Nov 23/2001
91	9	GC 33 FR	226563	16236	1	November 23/92	Nov 23/2001

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GALORE CREEK GROUP III					
CLAIM NAME	NEW	RECORD	No. OF	CURRENT	NEW
	RECORD NO.	NÔ.	UNITS	EXPIRY DATE	EXPIRY DAT
GC 24	226240	8666	1	Sept 21/1997	Sept. 21/200*
GC 25	226241	8667	1	Sept 21/1997	Sept. 21/2001
GC 27	226243	8669	1	Sept 21/1997	Sept. 21/2001
GC29	226245	8671	1	Sept 21/1997	Sept. 21/2001
GC 31	226246	8673		Sept 21/1997	Sept. 21/2001
GC 38	226251	8680	1	Sept 21/1997	Sept. 21/2001
GC 39	226252	8681	· · · · · · · · · · · · · · · · · · ·	Sept 21/1997	Sept. 21/2001
GC 40	226253	8682	1	Sept 21/1997	Sept. 21/2001
GC 41	226254	8683		Sept 21/1997	Sept. 21/2001
GC 42	226255	8684	· · · · · · · · · · · · · · · · · · ·	Sept 21/1997	Sept. 21/2001
GC 43	226256	8685	7	Sept 21/1997	Sept. 21/2001
GC 44	225257	8686		Sept 21/1997	Sept. 21/2001
GC 45	226258	8687	· · · · · · · · · · · · · · · · · · ·	Sept 21/1997	Sept. 21/2001
GC 80	226287	8808		Nov 3/1997	Nov. 3/2001
GC 81	226288	8807		Nov 3/1997	Nov. 3/2001
GC 82	226289	8808		Nov 3/1997	Nov. 3/2001
GC 83	226290	8809	· · · · · · · · · · · · · · · · · · ·	Nov 3/1997	Nov. 3/2001
GC 84	226291	8810	· · · · · · · · · · · · · · · · · · ·	Nov 3/1997	
GC 85	226292	8811		Nov 3/1997	Nov. 3/2001
GC 86	226292	8812	And a state of the	Nov 3/1997	Nov. 3/2001
GC 87		8813		Nov 3/1997	Nov. 3/2001
GC 88	226294	8814		·····	Nov. 3/2001
GC 89	228296	8815		Nov 3/1997	Nov. 3/2001
GC 90				Nov 3/1997 Nov 3/1997	Nov. 3/2001
GC 91	226297	8816 8817			Nov. 3/2001
GC 92	226298			Nov 3/1997	Nov. 3/2001
GC 93	226299	8818		Nov 3/1997	Nov. 3/2001
	226300	8819		Nov 3/1997	Nov. 3/2001
GC 94	226301	8820		Nov 3/1997	Nov. 3/2001
<u> </u>	226302	8821		Nov 3/1997	Nov. 3/2001
GC 96	226303	8822		Nov 3/1997	Nov. 3/2001
GC 97	228304	8823		Nov 3/1997	Nov. 3/2001
GC 98	226305	8824		Nov 3/1999	Nov. 3/2001
<u>GC 99</u>	226306	8825		Nov 3/1999	Nov. 3/2001
GC 100	226307	8826		Nov 3/1999	Nov 3/2001
GC 101	226308	8827		Nov 3/2000	Nov 3/2001
GC 102	226309	8828		Nov 3/1999	Nov 3/2001
<u>GC 103</u>	226310	8829		Nov 3/1999	Nov 3/2001
GC 104	226311	8830		Nov 3/1999	Nov 3/2001
GC 105	226312	8831		Nov 3/1999	Nov 3/2001
GC 108	226313	8832		Nov 3/1999	Nov 3/2001
GC 107	226314	8833		Nov 3/1999	Nov 3/2001
GC 108	226315	8834		Nov 3/1999	Nov 3/2001
GC 109	226318	8835		Nov 3/1999	Nov 3/2001
<u>GC 111</u>	226334	9608	1	Sept. 5/99	Sept. 5/2001
<u>GC 112</u>	226335	9609	1	Sept. 5/99	Sept. 5/2001
GC 113	228338	9610	1	Sept. 5/99	Sept. 5/2001
<u>GC 114</u>	226337	9611	1	Sept. 5/99	Sept. 5/2001
GC 115 GC 116	226338 226339	9612 9613	1	Sept. 5/99 Sept. 5/99	Sept. 5/2001

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50	GC67	000000			<u> </u>	
51	GC68	226280	8709	1	September 21/9	
52	GC70	226281	8710	1	September 21/9	5 Sept 21/2001
53	GC72	226282	8712	1	September 21/9	
53	GC72	228283	8714	1	September 21/9	5 Sept 21/2001
55		226284	8716	1	September 21/9	5 Sept 21/2001
56	GC75	226285	8717	1	September 21/9	5 Sept 21/2001
	GC 117					
57	GC 118	226341	9615	1	Sept. 5/95	Sept. 5/2001
58	GC 119	226342	9616	1	Sept. 5/95	Sept. 5/2001
59	GC 120	226343	9617	1	Sept. 5/95	Sept. 5/2001
60	<u>GC 130</u>	226353	9627	1	Sept. 5/95	Sept. 5/2001
61	GC 131	226354	9628	1	Sept. 5/95	Sept. 5/2001
62	GC 132	226355	9629	1	Sept. 5/95	Sept. 5/2001
63	GC 133	226356	9630	1	Sept. 5/95	Sept. 5/2001
64	GC 134	226357	9631	1	Sept. 5/95	Sept. 5/2001
65	GC 135	226358	9632	1	Sept. 5/95	Sept. 5/2001
66	XGC 69	226524	14899	1	Sept. 4/95	Sept. 4/2001
67	XGC 71	228283		1		0601. 4/2001
68	XGC 73					
69	XGC 110					
ຸ70 _	KENNCO GC 172	226408	12175	1	October 9/95	Ostabas 0/2004
71	KENNCO GC 173	226409	12178	1	October 9/95	October 9/2001 October 9/2001
72	KENNCO GC 174	226410	12177	1	October 9/95	October 9/2001
73	KENNCO GC 175	226411	12178	1	October 9/95	October 9/2001
74	KENNCO GC 176	226412	12179	1	October 9/95	October 9/2001
75	KENNCO GC 177	226413	12180	1	October 9/95	October 9/2001
76	KENNCO GC 178	226414	12181	1	October 9/95	October 9/2001
77	KENNCO GC 179	226415	12182	1	October 9/95	October 9/2001
78	KENNCO GC 180	226416	12183	1	October 9/95	October 9/2001
79	GC 2 Fr.	226333	9609	1	Sept. 5/95	Sept. 5/2001
80	GC 5 Fr.	226397	10857	1	Aug.6/2000	Aug. 6/2001
81	GC 8 FR	226400	11004	1	Sapt 10/95	
82	GC 18 FR	226548	15981	1		Sept/10/2001
83	GC 22 FR	226552	15985	1		October 30/2001
84	GC 26 FR	226552	15989	1		October 30/2001
85	GC 30 FR	226560	16233	1	Nov 23/2000	October 30/2001
86	GC 34 FR	226564	16237	1	Nov 23/2001	Nov 23/2001
87	XGC 1 FR	226518	14893	1	Sept 21/96	Nov 23/2001
88	Kennco GC 11Fr	226403	11972	1	Aug.29/97	Sept 21/2001
B9	Kennco GC 12 Fr	226404	11973	1	Aug.29/97	Aug.29/2001
90	Kennco GC 13 Fr	226405	11974	1	Aug.29/97	Aug.29/2001
91 🦳	Kennco GC 14 Fr	226406	11975	1	Aug.29/97	Aug.29/2001
92	HAB 1 Fr.	226373	9655	1	Aug. 16/2000	Aug.29/2001
				!		Aug. 16/2001

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Kennco was the operator of the exploration programs until 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 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 on blocking out reserves on the Central and North Junction Zones.

Wright Engineers undertook a feasibility study on the property in 1974, and devised a preliminary mine plan for the project.

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

In 1990 Hudson Bay, through an affiliated company (Mingold Resources), undertook preliminary evaluation of the gold potential associated with the porphyry system. Although it was previously known the gold content in the Galore Creek copper deposits was high for a porphyry copper deposit, the main focus of previous exploration was to delineate the copper reserve.

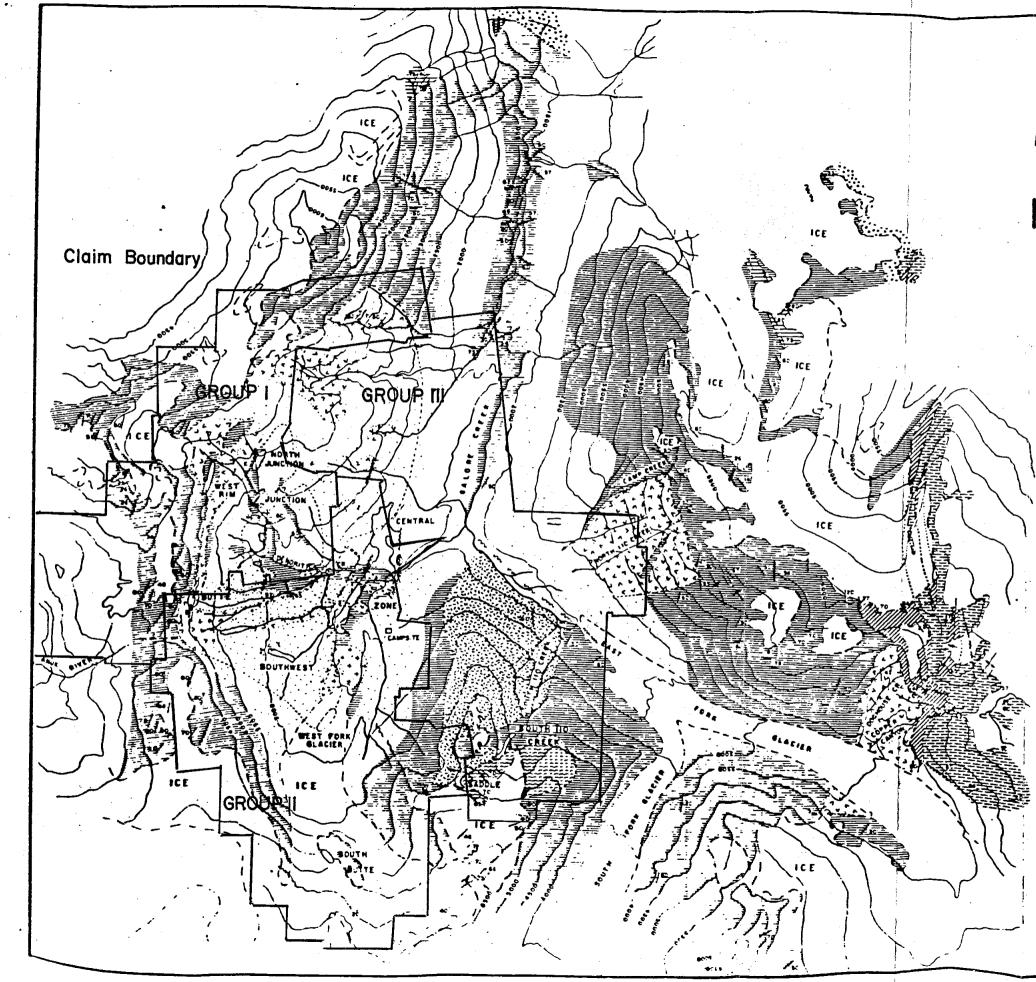
Kennecott resumed operatorship of the project in 1991, and set out to delineate new reserves of copper-gold mineralization and reliably determine gold grades in previously explored zones. This assessment report describes the former objective.

6.0 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: Paleozoic 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 GC91-3).

The Upper Triassic rocks within the Galore Creek valley are primarily volcanics with minor sediments. The volcanics include pyroclastics, trachytes and augite bearing flows. Breccias of various origins are common throughout the valley. These rocks have been intruded by a number of syenite and syenite porphyry dykes, sills and plugs. Most of the rocks have undergone moderate to intense hydrothermal alteration and contact metasomatism. The effects of this alteration have made identification of original lithologies extremely difficult.

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- 13 -

LEGEND

SEDIMENTARY & VOLCANIC ROCKS RECENT ALLUYNN, TALUS, MORAINE

UPPER TRIASSIC

TRIASSIC ?

VOLCANIC FLOWS, TUFF, BRECCIA,

MIDDLE TRIASSIC SHALES, ARGILLITE, QUARTZITE

PERMIAN LINESTONE

NTRUSIVE ROCKS

TYENTE PORPHYRY WITH METAVOLCANIC

DARK SYENITE PORPHYRY

BUCKSHOT PORPHYRY

COAST INTRUSIONS; MANTE, MONZONITE METAMORPHIC ROCKS GREEN EVENITE

SYMBOLS

- COMPER MINERALIZED ZONES
- PP BEDDING STRIKE & DIP, OVERTURNED
- SCHSTOSITY STRIKE & BIP
- SEOLOGICAL CONTACT; INFERRED MAULT, INFERRED
- ++ FOLD AXIS

STIKINE COPPER LIMITED GEOLOGY SALORE CREEK BASIN AFTER: JEFFREYS [1965] BARR [1964 - PL.61-1] Beaut 1.50,000 NOV. 1970 0 5 10)

The intrusive rocks vary considerably in texture, colour and age, however the predominant composition is alkaline. Syenite intrusive rocks are the most important, both volumetrically and economically. These rocks have been divided into four main rock types which in order of intrusion are grey syenite porphyry, dark syenite porphyry, medium grained orthoclase syenite megaporphyry and fine grained syenite. On the detailed level, many subdivisions of each type are possible, however, in order to allow some form of geological interpretation these major divisions have been adopted. The syenites are Upper Triassic to Lower Jurassic in age.

Known copper mineralization occurs in ten incompletely defined deposits as well as numerous erratic high-grade pods and low-grade showings. The deposits occur mainly within feldspathized and biotite altered volcanic rocks and pipe-like breccias associated with syenitic intrusives. The deposits are tabular to manto shaped and most have a north to northeast orientation parallel to the structural trend of the area. Gold is generally associated with the higher grade copper mineralization although many areas of high copper grades lack appreciable gold.

The largest known zone at Galore Creek is called the Central Zone. According to CIM Special Volume 15 "Porphyry Deposits of the Canadian Cordillera", page 411, the main Central Zone deposit contains 125,000,000 tonnes grading 1.06 percent copper 0.40 grams/tonne gold and 7.7 grams/tonne silver.

7.0 DISCUSSION OF RESULTS (Plate GC91-4 to GC91-8)

The following section is subdivided into three sections: Airborne Geophysics, Induced Polarization and Diamond Drilling. The first two sections are brief summaries of work performed with comprehensive independent reports on the two surveys included as Appendix IV and V of this report. The section on Diamond Drilling refers to these reports where necessary. Plate GC91-4 is a 1:10000 Area Location Map which outlines the geophysical survey areas and drill locations as they relate to topography, claim group boundaries and property grid coordinates and is contained in the back folder of this report.

7.1 Airborne Geophysics

Aerodat Limited was contracted to do an airborne geophysical survey on the Galore Creek property in 1991. During the period June 23 to June 25, 1991 a total of 459 line kilometres was flown over the property. A total of 38.4 line kilometres of this survey is being applied to Group I assessment (see Table No. 1).

All data pertinent to this survey, including interpretations and conclusions, is contained in Appendix IV of this report.

7.2 Induced Polarization Survey

Lloyd Geophysics Inc. was contracted to do pole-dipole induced polarization surveys on the property in 1991. During the period July 7 to August 18, 1991 a total of 90.17 line kilometres was completed over three separate grids. A total of 7 kilometres of this survey is being applied to Group I assessment (Table No. 1).

All data pertinent to the IP survey, including interpretation and maps is contained in Appendix V of this report.

7.3 Diamond Drilling

During the 1991 field season, a total of 13,830 meters of diamond drilling in 49 holes was completed at Galore Creek. A total of 6,186.5 meters in 22 holes is being applied for assessment credit. Quest Canada Drilling Ltd., Suite 810, 610 W. Georgia Street, Vancouver, B.C., V6B 4N8, provided three diamond drills and operating personnel for the drill program. The program commenced on July 20 and concluded on October 18, 1991. The location of all drillholes is shown on Plate No.91-5 to 91-8 which are located in the text of this report. Drill logs with assay results are contained in Appendix VI of this report. The mineral zones mentioned in this section are keyed to Plate No.GC91-3 with claim groupings located on Plate No.GC91-2. Table No. 3 lists all relevant drillhole information with holes used for assessment marked by an asterisk.

The objectives of the drilling program were to:

- 1) Test the strike and dip extensions of known zones and new showings.
- 2) Test I.P. targets outlined by the 1991 I.P. program.

The results of the drilling are described on a claim group basis below:

<u>GROUPI</u>: Eight drillholes totalling 2,094.4 meters tested various targets on the claim group. Three holes tested the North Junction Zone. This volcanic hosted copper-gold zone had been tested by drilling in the 1960's and early 1970's. This work delineated a mineralized zone which strikes N20E and dips northwest at angles between 20 and 60. The zone has been traced for a length of 300 meters and a down dip thickness of 250 meters and has an average width of 60 meters. Drillholes GC400, 402 and 403 were designed to test the northern strike extension of the North Junction Zone.

GC400, the southernmost hole of the three, intersected the favourable volcanic lithology from 181 to 338.3 meters, however copper and gold grades were low. An intercept from 181 to 199 meters grades 0.46 percent copper and 0.051 grams/tonne gold.

	Hole ID.	Northing	Easting	Elevation	Length	Depth	Dip	Azimuth	%Recover	OB	Started	Finished	Size	Zone
	GC-389	5717 74	1051 00	007.05	050 70	0.00	15.00	100 00						
*		3/11.24	4951.66	887.35	352.70	0.00	-45.00	180.00	95.00	15.20	,07-20	,07-23	NQ	SOUTHWEST
	GC-388						-42.00	180.00						
	GC-388 GC-388	······		••••		250.00		161.00	*****************************					
	GC-389	6725 40	6216 60	CEO 02	00000	350.00	-35.50	180.00		10.00				
	GC-389	0133.45	6316.60	658.93	279.80		-90.00	180.00	92.00	18.90	,07-20	,07-23	NQ	CENTRAL
						120.70	-87.20	168.00						
	GC-389	5040 04	E000 74	007.00	000 10	279.80	-88.00	179.00						
×	GC-390	0348.24	5029.74	897.90	262.10	0.00	-45.00	0.00	95.00	67.70	.07-23	,07-30	NQ	SOUTHWEST
	GC-390					137.80	-45.75	5.00						•••••
	GC-390	••••••				259.70	-47.50	1.00	*****	Į				
	GC-390	2050 00	0150 45	705 00	001 70	262.10	-47.50	1.00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			63.66		
	GC-391	1008.22	6150.15	705.86	234.70	0.00	-90.00	0.00	95.00	38.90	,07-24	,07-26	NQ	CENTRAL
	GC-391	0070 00		070 00		234.70	-84.70	0.00	~~~~~~			00.00		
	GC-392	6679.52	6258.31	675.93	225.60	0.00	-90.00	0.00	95.00	15.20	,07-27	,07-30	NQ	CENTRAL
	GC-392	FOOF OO		000 00		225.60	-85.30	0.00						
×	GC-393	5365.68	5143.05	880.89	76.20	0.00	-50.00	0.00	0.00	76.80	,07-30	,08-01	NQ	SOUTHWEST
	GC-393					76.20	-50.00	0.00						***************************************
*		5355.96	5145.47	880.43	249.00	0.00	-60.00	0.00	96.00	45.70	,08-02	,08-04	NQ	SOUTHWEST
	GC-393A					125.90	-58.50	2.50						
	GC-393A	001100			170 00	247.80	-58.50	5.00						
	GC-394	6944.66	5862.05	759.00	172.60	1	-90.00	0.00	91.00	11.50	.07-31	,08-03	NQ	CENTRAL
·····	GC-394					172.60		0.00						
	GC-395	6847.50	5899.67	753.24	396.30	0.00	-60.00	86.50	95.00	33.50	,08-04	,08-10	NQ	CENTRAL
	GC-395	ļ				243.90		44.00	**********	_				······································
	GC-395					396.30	-78.75	59.00						***
	GC-396	5390.62	4524.50	983.50	343.50		-50.00	0.00	85.00	17.40	,08-04	,08-09	NQ	SOUTHWEST
	GC-396					160.60	-50.00	12.00						
	GC-396					343.50		9.00						*******
★	GC-397	5449.01	4317.58	1042.29	383.10		-50.00	0.00	95.00	30.50	,08-11	,08-15	NQ	SOUTHWEST
	GC-397					188.90		5.00	******					
	GC-397					371.80		11.00	**********					
	GC-397				•••••	383.10	-51.50	11.00	**********					
×	Not Survey	ed												
*=)	Not Survey	ved					383.10	383.10 -51.50						

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TABLE 3

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	Hole ID.	Northing	Easting	Elevation	Length	Depth	Dip	Azimuth	%Recover	OB	Started	Finished	Size	Zone
					••••••••••••	1								
*	GC-398	5388.77	4734.22	932.38	381.10	0.00	-60.50	2.00	94.00	15.20	,08-11	,09-16	NQ	SOUTHWEST
	GC-398					207.30	-57.50	348.00						
	GC-398					381.00	-51.25	347.00	······································		*******			
		5509.76	5145.43	874.63	115.50	0.00	-55.00	0.00	87.00	49.50	,08-17	,08-19	NQ	SOUTHWEST
	GC-399					115.50	-55.00	0.00						
×		8278.92	4350.46	1270.72	338.40	0.00	-90.00	100.00	92.00	9.00	,08-16	.08-19	NQ	NORTH JUNCTION
	GC-400					338.30	-88.90	100.00						
		5580.46	5148.44	868.89	278.00	0.00	-60.00	0.00	95.00	40.20	.08-20	.08-24	NQ	SOUTHWEST
	GC-401					278.00	-55.00	5.00						
X		8385.14	4351.02	1313.17	329.19	0.00	-60.00	100.00	95.00	10.00	,08-20	,08-23	NQ	NORTH JUNCTION
	GC-402					329.20	-61.00	94.00						
X		8477.79	4514.79	1292.52	362.71	0.00	-60.00	100.00	95.00	6.00	,08-23	,08-27	NQ	NORTH JUNCTION
	GC-403				,	362.70	**************	100.00						
*	GC-404	9000.00	6800.00	720.00	147.50	0.00	-50.00	90.00	0.00	147.50	,08-24	.08-27	NQ	NORTH CENTRAL
×	GC-404			···· <u>··</u> ·····		147.50	-50.00	90.00						
	GC-405	9000.00	6558.00	710.00	352.65	0.00	-55.00	90.00	95.00	64.00	.08-27	.09-01	NQ	NORTH CENTRAL
*	GC-405					352.65		95.00					`	****
		5282.25	4863.26	921.35	469.70	0.00	-60.00	0.00	94.00	53.90	.08-28	,09-06	NQ/BQ	SOUTHWEST
ļ	GC-406					152.40	******	0.00						*****************
	GC-406	.				304.80	-54.00	0.00	, ,					
ļ	GC-406		·····			468.50	***********	7.00	•••••••• <u>1</u> • <u>••</u> •• <u>•</u> ••••••••					
	GC-407	7890.59	4447.06	1171.94	310.90	0.00	-50.00	130.00	95.00	22.90	,08-28	,09-01	NQ	NORTH JUNCTION
	GC-407					310.90		101.00						
	GC-408	7800.27	4060.41	1144.30	402,30	0.00	-55.00	100.00	95.00	13.70	,09-01	,09-06	NQ	NORTH JUNCTION
	GC-408					402.30	-47.00	108.00						
X	GC-409A	2000.00	6310.00	770.00	326.40	0.00	-60.00	91.00	99.00	40.20	,09-02	.09-11	NQ/BQ	NORTH CENTRAL
<u> </u>	GC-409A	·····		*****		166.70		91.00						********
	GC-409A	ZOOF OO		4007 00		326.40		91.00						******
*		/ 383.80	4058.74	1067.08	246.90	0.00	-50.00	100.00	95.00	15.20	,09-06	,09-09	NQ	NORTH JUNCTION
	GC-410			*****	•••••••••••••••••	246.90	-45.00	100.00						
	•••••••				•••••	·····	••••••							
*=1	Not Survey	ed			••••••		•••••					**********************		
			·····		•••••									
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ľ	Hole ID.	Northing	Easting	Elevation	Length	Depth	Dip	Azimuth	%Recover	OB	Started	Finished	Size	Zone
	GC-411	5284.77	4621.68	968.81	477.70	0.00	-60.00	6.00	80.00	32.60	.09-09	09-18	NQ/BQ	SOUTHWEST
	GC-411					152.40		6.00			,00.00	,00 10		30011111231
	GC-411		*******	********		304.80		6.00				••••••	÷	
	GC-411			**********************	†	477.70		16.50		•••••			•••••••	
	GC-412	7080.59	4928.75	935.79	183.80		-55.00	90.00	95.00	36.50	,09-10	.09-13	NQ	DRYCREEK
	GC-412			*****************	* ***********************************	183.80		90.00	······					
M	GC-413	9510.00	6430.00	710.00	343.50	0.00	-54.50	90.00	94.00	33.30	.09-11	,09-16	NQ	NORTH CENTRAL
×	GC-413			*********************		343.50	-47.00	90.00	******					
¥	GC-414	7029.60	4769.54	952.86	189.00	0.00	-55.00	84.00	85.00	57.90	.09-14	.09-20	NQ	MIDDLE CREEK
	GC-414			*******************	*	189.00	-55.00	84.00	**********	******			· · · · · · · · · · · · · · · · · · ·	
×	GC-415	9510.00	6640.00	675.00	227.70	0.00	-55.00	89.00	94.00	26.50	.09-16	,09-22	NQ	NORTH CENTRAL
31	GC-415			*******		227.70	-57.00	89.00						
	GC-416	5606.79	5302.52	852.47	297.80	0.00	-60.00	90.00	95.00	39.60	.09-18	.09-21	NQ	SOUTH CENTRAL
·	GC-416			•••••••••••••••••••••••••		145.40	-59.00	90.00	*****					
	GC-416					291.70	-59.00	90.00				**************	******	
	GC-416			*************************************		297.80	-59.00	90.00	•••••••••••••••••••••••••••••••••••••••					
★	GC-417	7075.92	5036.90	875.58	185.90	0.00	-61.00	90.00	95.00	8.10	.09-20	.09-22	NQ	DRY CREEK
	GC-417			***********************		185.90	-61.00	90.00		••••••				
	GC-418	5597.62	5555.54	786.96	291.40	0.00	-50.00	89.00	92.00	6.40	.09-22	.09-25	NQ/BQ	SOUTH CENTRAL
	GC-418			******************		152.40	-50.50	88.00	***************************************	*****				******
	GC-419			••••••••••••••••••••••		289.60	-41.00	101.00	*******************************					
	GC-418	·				291.40	-41.00	101.00						•••••••••••••••••••••••••••••••••••••••
Ж	GC-419	7080.59	4926.25	952.86	164.60	0.00	-65.00	270.00	95.00	29.00	.09-22	.09-25	NQ	DRYCREEK
	GC-419			***********************		164.60	-65.00	270.00	************************	*****			·····	
*	GC-420	8500.00	6100.00	830.00	316.10	0.00	-59.50	90.00	95.00	25.00	.09-23	.09-27	NQ	NORTH CENTRAL
M	GC-420					316.10	-51.50	90.00		********				********
	GC-421	8710.01	4978.93	1284.97	268.20	0.00	-50.00	90.00	95.00	4.20	.09-25	.09-27	NQ	NORTH WEST PLATEAU
	GC-421					268.20	-50.00	90.00						•••••••••••••••••••••••••••••••••••••••
	GC-422	5595.15	5781.27	764.62	313.00	0.00	-55.00	90.00	95.00	6.10	,09-26	,09-28	NQ	SOUTH CENTRAL
]	GC-422					152.40	-52.00	90.00	******					
	GC-422					310.90	-53.50	97.50	*****				†	
	GC-422					313.00	-53.50	97.50				••••••		•••••
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GC402 located 100 meters north of GC400 intersected an intermediate to mafic volcanic from 133 meters to the bottom of the hole. A narrow intercept from 106 meters to 115 meters averaged 0.66 percent and 0.247 grams/tonne gold. GC403, the last hole designed to test for the northern extension of the North Junction Zone, intersected a thick sequence of host volcanics comprising intermediate composition lapilli and ash tuffs. A 57 meter intercept from 187 meters to 244 meters averaged 0.51 percent copper and 0.253 grams/tonne gold.

Drill holes GC414, 417, and 419 tested two copper zones hosted in tuffaceous volcanics and located on Middle and Dry Creeks (Plate No. GC6). The Middle Creek copper-gold showing is exposed on surface and comprises disseminated and fracture controlled chalcopyrite and bornite in tuffaceous volcanics. Prior to 1991 this showing had not been tested by drilling. GC414 drilled at an azimuth of 082, intersected the host lithology from 112 meters to the bottom of the hole at 189 meters. Fine chalcopyrite, bornite and traces of native copper were observed in this interval which averaged 0.36 percent copper and 0.06 grams/tonne gold. Core recovery in this section averaged only 20 percent.

GC419 was spotted 190 meters east of GC414 and was drilled west towards this hole. GC419 intersected a zone from 124 meters to 141.8 meters (17.8 meters) which averaged 1.77 percent copper and 3.68 grams/tonne gold. This tenor of mineralization is analogous to results obtained on surface, and suggests the zone dips very steeply east. GC417 was spotted 200 meters east of the Middle Creek showing and was drilled to test a zone located in Dry Creek. In the past GC100 tested this zone and contained 0.55 percent copper over a core interval of 124 meters. GC417 intersected a zone from 35.2 meters to 47.7 meters which averaged 0.90 percent copper and 0.13 grams/tonne gold. Both GC100 and GC417 contain native copper, chalcocite and malachite with very little chalcopyrite and no bornite, leading the writer to conclude the copper grades are directly related to supergene enrichment processes. As a result the economic potential of this zone is limited.

GC432, the last hole applied to Group I assessment, was drilled to test a copper showing called the West Rim showing. No significant copper-gold intercepts were obtained in this hole.

<u>GROUP II</u>: A total of 2,960 meters in ten holes was completed on Group II claims during the course of the field season. Seventy percent of this total was used to test the Southwest (copper-gold) Zone. The Southwest Zone is interpreted as a tabular east-west striking zone approximately 400 meters long and 100 meters wide, which dips steeply south. It is localized within a breccia

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zone which has characteristics of a diatreme with polylithologic fragments, unsorted and unbedded with clasts supported by a fine rock flour matrix. Sulphide mineralization comprises chalcopyrite, pyrite and traces of bornite. Pyrite is predominant beyond the copper zone and may occupy up to 10 percent by volume of the breccia in these areas. This pyrite content plus the presence of magnetite explains the strong IP response which encompasses the Southwest Zone (see Appendix V pages 9-11). Drillholes GC388, 390, 393, 393A and 396 to 398 tested the Southwest Zone along strike and down dip. Table IV lists the significant intercepts obtained in this drilling.

Drillholes GC433 and 434 were holes designed to test an induced polarization anomaly (Appendix V, p.11) located northwest of the Southwest Zone. Neither hole intersected any significant copper values, but both holes contained up to 3 percent pyrite and 2 percent magnetite. These two minerals are the likely source of the anomalous IP response.

GC435 was designed to test for a possible west dip of a copper showing called the Butte Zone. No significant copper intercepts were obtained as the hole contained only post copper mineral syenite porphyry.

<u>GROUP III:</u> A total of 1,131.8 meters in five holes was applied to Group III claim assessment. These holes tested the overburden covered region, north along the projected strike of the Central Zone. GC404 was stopped in overburden at a depth of 147.5 meters. GC405 tested the eastern flank of an induced polarization anomaly located north of the Central Zone. No significant copper mineralization was intersected in this hole.

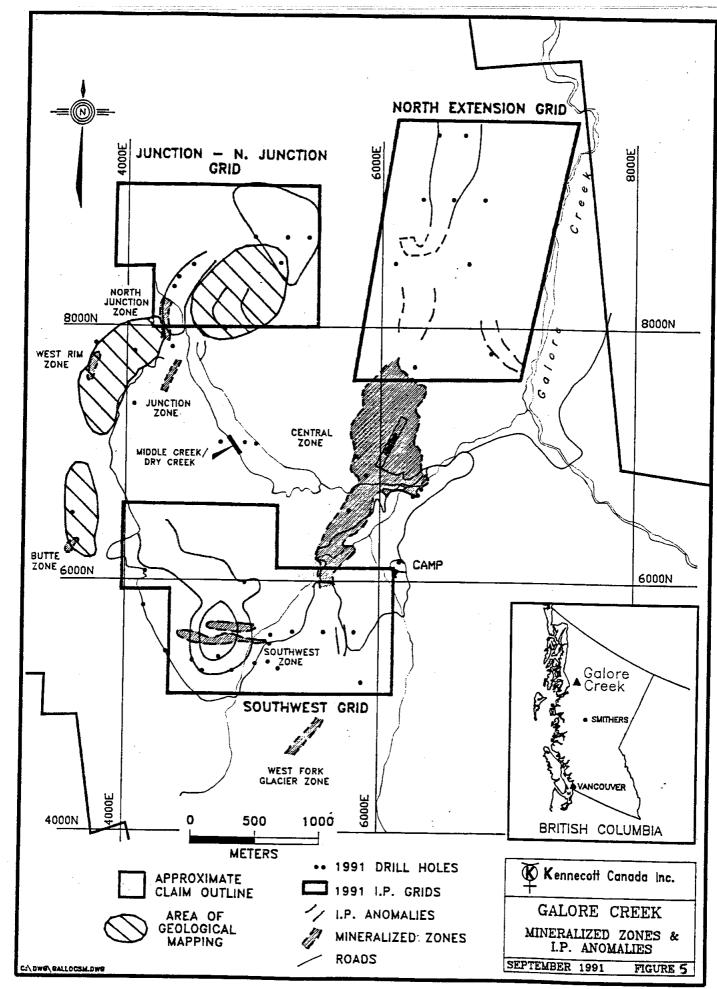
The IP anomaly is believed to be caused by disseminated pyrite observed throughout the core. GC409 was lost in overburden at a depth of 55.5 meters. GC420 is located 700 meters north on strike of the Central Zone and was drilled to test for a possible north strike extension of this deposit. An interval from 266 meters to 288 meters averages 0.44 percent copper and 0.85 grams/tonne gold. Potassic alteration (orthoclase, biotite), which is prevalent in the Central Zone is weak in GC420, which is dominated by an alteration assemblage comprising chlorite and epidote. This assemblage would suggest a peripheral type alteration to a porphyry system. GC427 tested an induced polarization anomaly located in an overburden covered area northeast of the Central Zone. The predominant rock type encountered in the hole is relatively unaltered fine grained lapilli tuff and mafic volcanic flows. No significant copper mineralization or alteration was observed in the core and the IP anomaly is caused by pyrite which is weakly disseminated throughout the rock.

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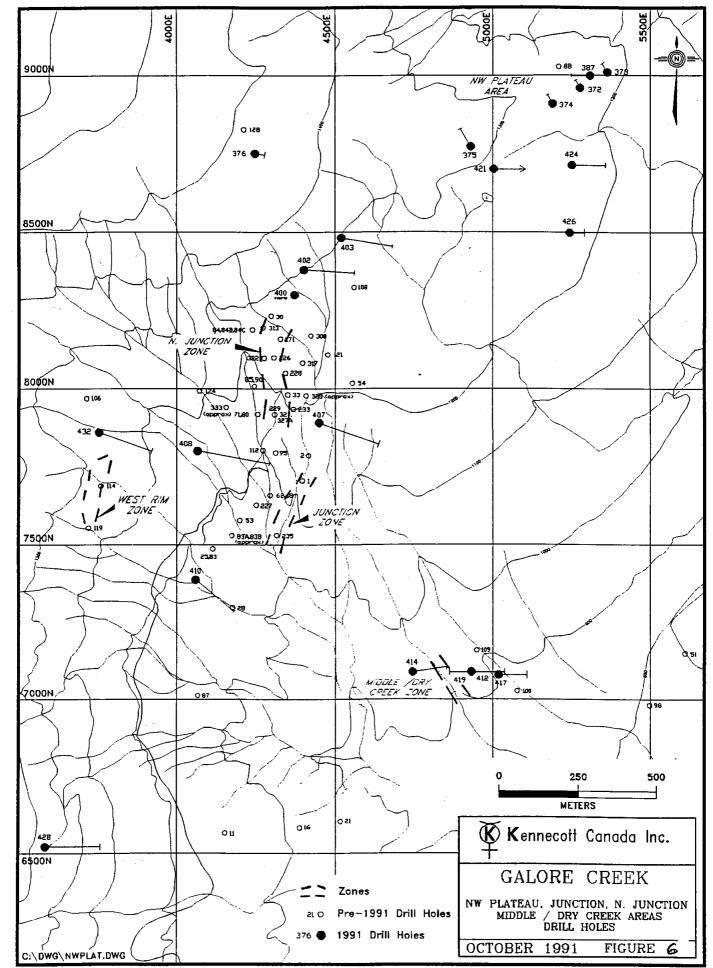
TABLE 4

INTERCEPTS IN DIAMOND DRILLING IN SW ZONE, GALORE CREEK IN 1991 0.3% USED AS CUT-OFF GRADE

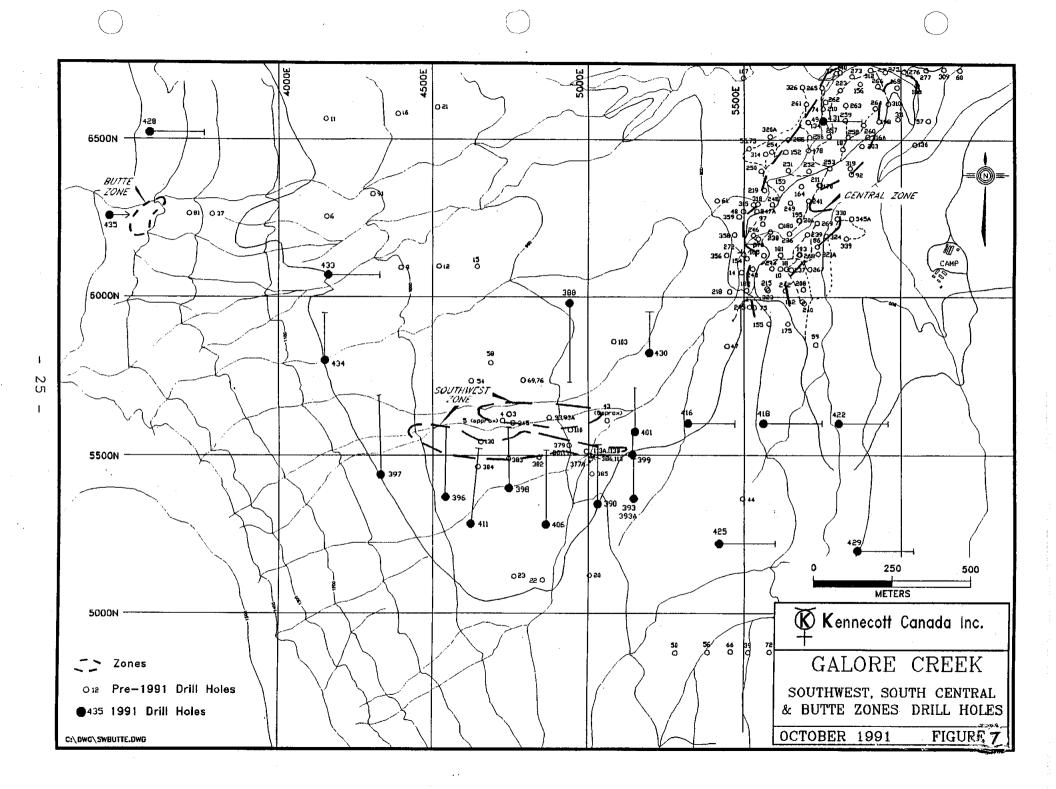
D	DH	FROM	ТО	WIDTH	Cu	Au	Ag	ROCK T	ZONE	REMARK
	ļ	m	m	M	%	g/t	g/t			
GC	388								sw	NO SIGNI
GC	390	159.8	180.8	21.0	0.720	1.39	6.0	DBX	SW	
GC	393A								SW	NO SIGNI
GC	396	268.4	298.4	30.0	0.455	0.62	2.6	MOSMP,F	SW	
GC	397								SW	NO SIGNI
GC	398	108.1	114.1	6.0	0.638	0.54	2.0	MOSMP	SW	
	1	163.8	250.8	87.0	1.120	0.86	5.5	DBX, FGS		

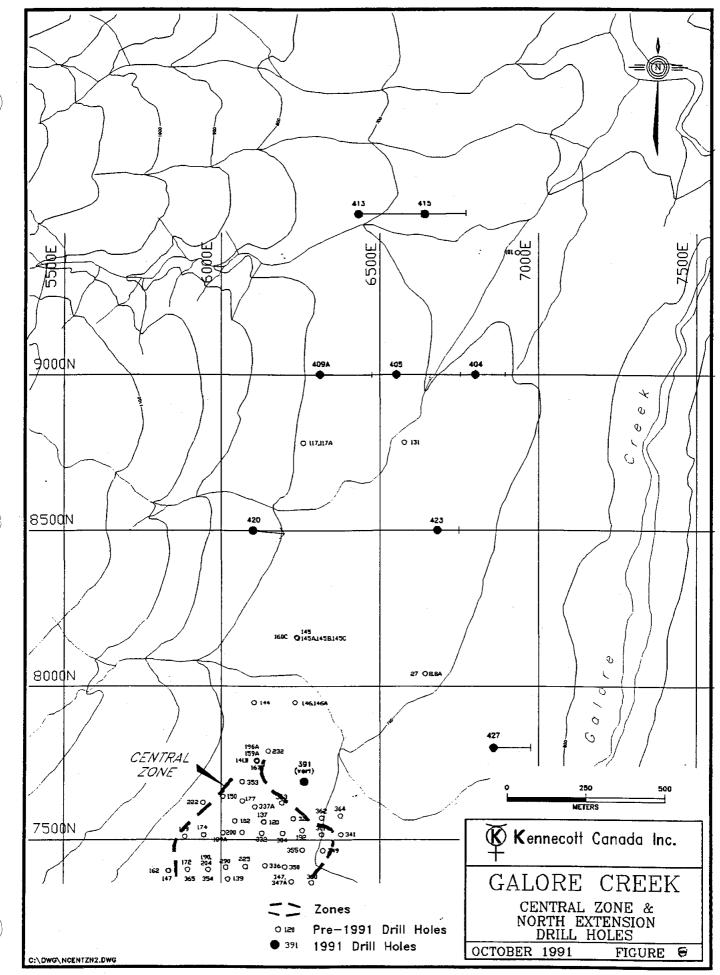


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8.0 CONCLUSIONS

The 1991 field program at Galore Creek encompassed a five month period during which airborne geophysics, induced polarization and diamond drilling programs were conducted. The airborne survey conducted by AERODAT outlined one low priority target on or near the boundary of Group I and II. This anomaly designated anomaly "A" in the report (p.18, Appendix IV) is marked by low magnetic relief and relatively high potassium count. Prospecting in this region did not locate any significant copper zones. The IP survey outlined eight well defined zones of anomalous chargeability responses. Five of these targets were tested by the drilling which has been filed for assessment and were explained by a combination of pyrite, magnetite and occasional chalcopyrite. The other three IP targets are associated with known copper zones. Diamond drilling was successful in delineating the maximum dimensions of the Southwest Zone and determining the limited north strike potential of the North Junction Zone. Drilling in the Middle Creek area was successful in discovering a new zone, however the narrow width and apparent limited strike extent suggest tonnage potential is limited.

9.0 SELECTED BIBLIOGRAPHY

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Zurowski, M.T. (1988). Gold Potential of the Galore Creek Deposits. In house report.

APPENDIX I

STATEMENT OF COSTS

STATEMENT OF COSTS

Group I Filing - September 10, 1991

DRILL HOLES GC400, 402, 403:

Direct Drilling Costs

Mob/demob drill Site prep. Drill fuel Core boxes Drilling costs	9% of 35,000 3 days x 2 men x \$130/manday 3000l x \$0.70/l (incl trans) 150 boxes x \$6.50/box 1030.5m x \$52/m	\$3,182.00 780.00 2,100.00 975.00 53,586.00						
Drill supervision, core sp	Drill supervision, core splitting							
1 geologist 1 helper	\$200/day x 20 days \$130.00/day x 20 days	4,000.00 2,600.00						
Aircraft support								
Fixed wing Helicopter	Central Mtn Air - 3 trips @ \$2400/trip North Mtn. Heli 12 hours @ \$660/hr.	7,200.00 7,920.00						
Camp Support	20 days x 7 people x \$38/manday	5,320.00						
Assay Charges	250 samples x \$15/sample	3,750.00						
Report Preparation	1 geologist @ \$200/day for 4 days Secretarial & drafting	800.00 <u>1,500.00</u>						

TOTAL COSTS <u>\$93,713.00</u>

STATEMENT OF COSTS

Group I Filing - September 10, 1991

GEOPHYSICS:

Airborne Geophysics (AERODAT)

38.4km @ \$179.0km

\$6,874.00

Induced Polarization (Lloyd Geophysics)

Mob/demob linect	1,500.00	
Mob/demob IP cre	ew .	422.00
Grid preparation	7km x \$500/km	3,500.00
Air support	2.8 hrs x \$660/hr	1,848.00
Camp support	7 days x 7 men x \$38	1,862.00
IP survey	7km x 575/km	4,025.00

TOTAL COSTS

<u>\$20,031.00</u>

STATEMENT OF COSTS

Group | Filing - November 15, 1991

DRILL HOLES GC410, 414, 417, 419, 432:

Direct Drilling Costs

GC410	246.9m x \$56.07/m	
GC414	189.0m x \$92.21/m	
GC417	186.0m x \$57.78/m	
GC419	164.6m x \$75.24/m	
GC432	277.4m x \$55.46/m	
		\$69,787.55

Drill site preparation	5 days x 2 men x \$130/manday	1,300.00
Core boxes	150 boxes x \$6.50/box	975.00
Supervision, core splitti		

1 geologist	20 days x \$200/day	4,000.00
1 core splitter	20 days x \$130/day	2,600.00

Aircraft support

Helicopter	15hrs x \$660/hr	9,900.00
Camp support	6 men x 17 days x \$38/manday	3,876.00
Analytical charges	300 samples x \$15/sample	4,500.00

Report Preparation

1 geologist	4 days @ \$200/day	800.00
secretarial & dr	afting	1,500.00

TOTAL COSTS

\$99,238.55

Group II Filing - September 10, 1991

Direct Drilling Costs

GC388	352.7m x \$52/m
GC390	262.1m x \$52/m
GC393	76.2m x \$52/m
GC393A	249.0m x \$52/m
GC396	343.5m x \$52/m
GC397	383.1m x \$52/m
GC398	381.1m x \$52/m

TOTAL COSTS

<u>\$106,476.20</u>

Group II Filing - November 15, 1991

DRILL HOLES GC433, 434, 435:

Direct Drilling Costs

GC433 GC434 GC435		
90435	299.4m x \$52.04/m	\$52,091.73
Drill site preparation	3 days x 2 men x \$130/manday	780.00
Core boxes	125 boxes x \$6.50/box	812.00
Supervision & core split	ing	
1 geologist 1 helper	10 days x \$200/manday 10 days x \$130/manday	2,000.00 1,300.00
Camp charges		
	6 people x 10 days x \$38/manday	2,280.00
Aircraft support		
Helicopter	10 hours x \$660/hr.	6,600.00
Analytical costs	275 samples x \$15/sample	4.200.00
Report preparation	·	
1 geologist secretarial & draft	4 days x \$200/manday ing	800.00
	TOTAL COSTS	<u>\$72,363.73</u>

Group III - November 15, 1991

Direct Drilling Costs GC 427 264.3m x \$50.38/m \$13,315.43 GC 420 316.1m x 51.91/m 16,408.75 **Drill Site Preparation** 2 days x 2 men x \$130/manday 520.00 Core boxes 80 boxes x \$6.50/box 520.00 Air Support 5 hours x \$660/hour 3,300.00 Camp charges 6 personnel x 8 days x \$38/manday 1,824.00 **Report Preparation** 500.00 TOTAL COSTS \$38,638.00

Group III Filing - September 10, 1991

DRILL HOLES GC404, 405, 407:

Direct Drilling Costs

GC404 GC405 GC409	146.3m x \$52/m 349.6m x \$52/m 55.5m x \$52/m	
		\$28,672.80
Mobil of drill & crew	5% of \$35,000	1,754.00
Drill site preparation	3 days x 2 men x \$130/manday	780.00
Drill fuel	28351 x \$0.70/I (incl. trans.)	1,984.00
Core boxes	50 x \$6.50/box	325.00
Air support		
Fixed wing Helicopter	(Cent. Mtn. Air) 2 x \$2400/trip 11 hours x \$660/hr	4,800.00 7,260.00
Camp support	10 days x 6 people x \$38/manday	2,280.00
Supervision & core split	ting	
1 geologist 1 helper	10 days x \$200/day 10 days x \$130/day	2,000.00 1,300.00
Analytical Costs	100 samples x \$15/ sample	1,500.00
Report Preparation 1 geologist secretarial & draft	3 days x \$200/day ing	600.00 500.00
	TOTAL COSTS	<u>\$53,756.30</u>

APPENDIX II

STATEMENT OF QUALIFICATIONS

I, Edward W. Yarrow of 1819-127A 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, 1970 and a Masters in Business Administration from Simon Fraser University, 1990.

2. I have practised my profession continuously since 1970.

3. I am a Fellow of the Geological Association of Canada. Number F2869.

4. I directly supervised and co-executed the 1991 fieldwork at the Galore Creek property on behalf of Kennecott Canada Ltd.

Edward W. Yarrow

Regional Representative, Western District Hudson Bay Exploration & Development

I, Steve G. Enns of 1696 Davenport Place, North Vancouver B.C. V7J 1N5 do hereby certify that:

1. I am a geologist with a B.Sc. in Geology from the University of Manitoba,1967 and a Master of Science in Geology from University of Manitoba, 1971.

2. I have practised my profession continuously since 1967.

3. I logged core, under the direction of E.W. Yarrow, at Galore Creek during the 1991 field season.

Steve G. Enns, Senior Geologist December 5, 1991

I, Tom S.T. Heah of 3685 W. 11 Avenue, Vancouver B.C. V6R 2K4

1. I am a geologist with a B.Sc. in Geology from the University of British Columbia, 1982 and a Master of Science in Geology from University of British Columbia, 1991

2. I have practised my profession continuously since 1982.

3. I logged core, under the direction of E.W. Yarrow, at Galore Creek during the 1991 field season.

Tom S.T. Heah

Geologist Kennecott Canada Inc.

I, Mark E. Baknes of Apt. 101, 2098 W. 46 Avenue, Vancouver B.C. V6M 2K9 do hereby certify that:

1. I am a geologist with a B.Sc. in Geology from the University of British Columbia, 1986 and a Master of Science in Geology from McMaster University, 1990

2. I have practised my profession continuously since 1986.

3. I logged core, under the direction of E.W. Yarrow, at Galore Creek during the 1991 field season.

Mark E. Baknes are Bakne

Geologist Kennecott Canada Inc.

I, J. Patricio Varas of 104-7155 Granville Street, Vancouver B.C. V6P 4X6 do hereby certify that

1. I am a geologist with a B.Sc. in Geology from the University of British Columbia, 1986.

2. I have practised my profession continuously since 1986.

3. I logged core, under the direction of E.W. Yarrow, at Galore Creek during the 1991 field season.

J. Patricio Varas

Geologist, Kennecott Canada Ltd. November 30, 1991

APPENDIX III

CERTIFICATE OF ASSAYS

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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

NVIRONMENTS BORATORIES OF ASSAYERS CORP.)

KENNECOTT CANADA Company:

MINERAL

Project: STIKINE COPPER 02400 Attn: D. JOHNSON/E. YARROW

				-	
1	S-	N2	28	-RA	1

Date: JUL-31-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 ROCK samples submitted JUL-25-91 by MARK BAKNES.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number			AG AG tonne oz/ton		
911501 911502 911503 911504 911505	.02 .01 .01 .01 .01	.001 .001 .001 .001 .001	2.5 .07 0.4 .01 2.3 .07 1.5 .04 1.3 .04	.007 .010 .015	
911506 911507 911508 911509 911510	.01 .01 .01 .02 .01	.001 .001 .001 .001 .001	1.6 .05 2.3 .07 2.8 .08 1.7 .06 1.3 .04	.017 .010 .007	
911511 911512 911513 911513 911514 911515	.01 .01 .01 .01 .01	.001 .001 .001 .001 .001	2.7 .08 1.7 .05 1.2 .04 2.5 .07 1.3 .04	.004 .002 .005	
911526 911527A&B 911528 911529 911529 911530	.03 .04 .02 .05 .01	.001 .001 .001 .001 .001	6.6 .19 6.6 .19 6.2 .18 6.7 .20 6.0 .18	.362 .376 .500	
911531 911532 911533 911533 911534	.03 .02 .01 .02	.001 .001 .001 .001	9.3 .27 5.7 .17 5.8 .17 4.5 .13	. 292	

MIN-EN LABORATORIES

Certified by

MIN • EN LABOR (DIVISION OF ASSAVE SPEC CH

Company:

Project:

Attn:

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

/IRONMENTS

LABORATORIES (DIVISION OF ASSAYERS CORP.)

KENNECOTT CANADA

STIKINE COPPER 02400

D. JOHNSON/E. YARROW

1S-0228-RA2

		n de la composition an esta de la composition de la composit	D	ate:	JUL-31-91
Сору	1.	KENNECOTT	CANADA,	VAN	COUVER, B.C.
	2,	KENNECOTT	CANADA,	C/0	SMITHERS EXP.
	3.	KENNECOTT	CANADA,	C/0	MIN-EN LABS.

We hereby certify the following Assay of 24 ROCK samples submitted JUL-25-91 by MARK BAKNES.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton	AG g/tonne	AG oz/ton	CU %	
911535 911536 911537 911538 911539	.01 .02 .02 .02 .01	.001 .001 .001 .001 .001	6.0 4.5 3.7 4.8 7.2	.18 .13 .11 .14 .21	.246 .171 .128 .218 .414	6C 389
911540 911541 911542 911543 911544	.01 .02 .01 .12 .02	.001 .001 .001 .004 .001	5.3 5.1 5.9 16.6 5.4	.15 .15 .17 .48 .16	.189 .170 .198 .359 .214	ICP
911545 912037 912038 912039 912046	.01 .51 .32 .17 .28	.001 .015 .007 .005 .008	5.6 3.1 3.4 2.7 3.5	-16 -09 -10 -08 -10	.229 .025 .020 .015 .031	GC 388
912048 912049 912050 912051 912052	.30 .28 .09 .04 .04	.007 .008 .003 .001 .001	3.5 3.3 3.8 3.9 3.6	.10 .10 .11 .11 .11	.013 .012 .013 .022 .028	
912053 912054 912055 912055 912056	.03 .15 .22 .12	.001 .004 .006 .004	2.9 1.3 4.2 4.3	.08 .04 .12 .13	.033 .029 .023 .023	

Certified by



Company:

Project:

Attn:

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

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Assay Certificate

VIRONMENTS LABORATORIES

(DIVISION OF ASSAYERS CORP.)

KENNECOTT CANADA

STIKINE COPPER 02400

D. JOHNSON/E. YARROW

1S-0228-RA3

Date: JUL-31-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 4 ROCK samples submitted JUL-25-91 by MARK BAKNES.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton	AG g/tonne	AG oz/ton	CU 7	
912057	.05	.001	4.2	.12	.037	6C38P
912058	. 18	,005	4.0	.12	.038	
912059	.02	.001	3.9	.11	.036	

Certified by



NVRONMENTS ABORATORIES IVISION 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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

Company: KENNECOTT CANADA

Project: STIKINE COPPER 02400 Attn: D.JOHNSON/E.YARROW 1S-0228-XA4

Date: AUG-15-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 23 ROCK samples submitted JUL-25-91 by MARK BAKNES.

Sample Number	CU %	AG g/tonne				
91-2001 91-2002 91-2003 91-2004 91-2005	.005 .005 .006 .015 .010	1.3 1.1 1.4 1.6 1.0				
91-2006 91-2007 91-2008+91-2009 91-2010 91-2011	.007 .009 .012 .020 .013	1.4 2.1 1.4 1.2 1.6			 	
2012 91-2013 91-2014 91-2015 91-2016	.004 .011 .011 .010 .010	0.7 0.9 1.0 1.0 1.2				
91-2017 91-2018 91-2019 91-2020 91-2021	.006 .015 .008 .006 .011	1.1 1.3 1.4 0.8 1.1				
91-2022 91-2023 91-2024	.034 .024 .009	*1.7 1.3 1.0				

Certified by



Attn:

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

VIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

Company: KENNECOTT CANADA Project: STIKINE COPPER 02400

D. JOHNSON/E. YARROW

1S-0228-XA5

Date: AUG-15-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 21 ROCK samples submitted JUL-25-91 by MARK BAKNES.

Sample Number		CU % c	AG I/tonne			
91-2025 91-2026 91-2027 91-2028 91-2029		.016 .003 .017 .008 .016	0.5 1.2 1.2 0.6 1.4			
91-2030 91-2031 91-2032 91-2033 91-2033		.009 .006 .006 .012 .009	0.9 1.2 1.6 1.8 1.1			
2035 91-2036 91-2040 91-2041 91-2042		.019 .014 .013 .019 .019	1.9 2.5 1.5 2.4 2.2			
91-2043 91-2044 91-2045 91-2060 91-2061		.010 .012 .019 .037 .031	1.2 1.6 0.7 2.0 1.7			
91-2062	na yan ayan ana pany any any any ana ana any	.010	1.3	 	 	

Certified by

MIN-EN LABORATORIES

•ENVIRONALIN S LABORATORIES (DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS - ASSAYERS - ANALYSTS - GEOCHEMISTS

Certificate Assay

Companyi Project: Atta:

KENNECOTT CANADA STIKINE COPPER D. JOHNSON/E. YARROW

VANCOUVER OFFICE:

705 WEST 15TH STREET NORTH VANCOUVER B.C. CANADA V7M 172 TELEPHONE (604) 960-5814 OR (604) 988-4524 FAX (604) 980-9621

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C., CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0249-RA1

Date: AUG-01-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECUTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O HIN-EN LABS.

He hereby certify the following Assay of 30 ROCK samples submitted JUL-28-91 by PAT VARAS. 7

Sample Number	AU-FIRE q/tonne	and the second		CU Z	
91-2063 91-2064 91-2065 91-2065 91-2066	.01 .05 .01	.001 3.1 .001 1.9 .001 2.6	.09 .06 .08	.014 .025 .035 .047 .045	
91-2068 91-2069 91-2070 91-2070 91-2071 91-2072	3.77 2.24 .82	.116 2.8 -065 2.5 .024 1.5	.08 .07 .04	. 042 . 023 . 008 . 008 . 005	
91-2073 91-2074 91-2075 91-2076 91-2077	.01 .46 .15	.001 1.6 .013 2.3 .005 2.0	,05 .07 .96	.007 .23 .052 .050 .037	
91-2078 91-2079 91-2080 91-2081 91-2083	1.08 ,12 ,19	"0 <u>32</u> 4.4 .004 1.7 .006	.13 .05 .04	.049 .403 .049 .072 .064	
91-2083 91-2083 91-2085 91-2085 91-2085	.04	.001 1.9 .001 2.0 .001 1.6	,05 ,06 ,05	. 059 . 050 . 064 . 043 . 041	
91-2091 91-2092 91-2093 91-2093 91-2094 91-2094	.02 .01 .01	.001 • 4.3 .001 2.0 .001 2.1	.13 .06 .08	. 029 . 045 . 043 . 037 . 046	

Certified by

VANCOUVER OFFICE:

705 WEST 15TH STREET NORTH VANCOUVER S.C. CANADA V7M 1T2 TELEPHONE (604) 980-55 14 OR (604) 988-4524 FAX (604) 980-9621

1S-0249-RA2

SMITHERS LAB.:

SINT THERS EAD. SITT THERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSYS • GEOCHEMISTS

Assay Certificate

Company: Project: Attn: KENNECOTT CANADA STIKINE COPPER D.JOHNSON/E.YARROW

(DIVISION OF ASSAYERS CORP.)

MINER

EN CARATORIES

Date: AUG-01-91 Copy J. KENNECUTI CANADA, VANCOUVER, B.C. 2. KENNECUTI CANADA, C/O SMITHERS EXP. 3. KENNECUTI CANADA, C/O MIN-EN LABS.

.7

Ne hereby certify the following Assay of 30 ROCK samples submitted JUL-28-91 by PAT VARAS.

Sample Number	AU-F1RE g/tonne	AU-FIRE pz/ton	AG a/tonne	AG oz/ton	CU %	
91-2096 91-2097 91-2098 91-2099 91-2099	.04 .01 .10 .01 .02	.001 .001 .003 .001 .001	1.7 1.8 2.9 2.4 2.5	.05 .05 .08 .07 .07	。051 .043 .115 .047 .094	
91-2101 91-2105 91-2106 91-2107 71-2108	- 12 - 22 - 26 - 21 - 22	.004 .004 .008 .006 .006	8.8 3.1 3.5 4.4	. 11 .09 .07 .10 .13	.164 .220 .210 .153 .156	
91-2109 91-2110 91-2111 91-2112 91-2113	.03 .01 .19 .14 .19	.001 .001 .006 .004 .004	3.1 3,1 3.9 3.7 4,0	.07 .07 .i1 .11 .12	.101 .082 .145 .053 .079	
71-1546 91-1547 71-1548 91-1549 91-1549	.05 .02 .02 .05 .01	.001 .001 .001 .001 .001	6.0 5.3 4.1 4.8 3.8	.18 .15 .12 .14 .11	.342 .238 .184 .240 .141	
91~1551 91-1552 91-1553 91-1553 91-1555	. 01 . 02 . 01 . 01 . 01	.00) .001 .001 .001 .001	2.4 1,7 2.0 1.9 1.0	. 97 , 03 . 05 . 06 . 03	.119 .033 .080 .065 .011	
91~1556 91-1557 91~1558 91~1558 91~1559 91~1559	.02 .01 .04 .01	.003 .001 .001 .002 .003	1.4 1.6 2.5 2.4 2.3	.04 .05 .07 .07 .07	.017 .022 .1217 .056 .089	

Certified by

	MIN EN LABORATORIE (DIVISION OF ASSAYERS DORP.) SPECIALISTS IN N CHEMISTS + ASSAYE	S			TELEPHONE (60 FAX (604) 980-9 SMITHERS 3176 TATLOW R	STREET VER. B.C. CANADA V7M 112: 4) 980-5814 OR (604) 988-45; 621 LAB.: DAD CANADA VOJ 2NO CANADA VOJ 2NO 4) 847-3004	24
	Assay Cert	ificat	£			S-0249-RA3	-
Company: Project: Attn: He bei	KENNECOTT CANADA STIKINE COPPER D.JOHNSON/E.YARROW Ceby certify the fo ted JUL-28-91 by P	llowing Ass	ay of 30	3. KENNECI	111 CANADA, VAI 117 CANADA, C/I 111 CANADA, C/I	E AUG-01-91 NCOUVER, B.C. D SMITHERS EXP. D MIN-EN LABS:	
supmi (ample Number	AU-FIRE	AU-FIRE	AG g/tonne	AG oz/ton	CU %		
91-156 91-156 91-156 91-156 91-156	.02 .01	.003 <u>.001</u> .001	3.4 3.5 12.0 6.7 11.4	.10 .10 .35 .20 .33	.070 .143 2.040 .433 .810		
91-136 91-136 91-136 91-136 91-136	.01 .01 .01	. 001 . 001 . 001	9 <u>1</u> 9 <u>0</u> 7 . 3 5 . 2 5 . 4	. 27 . 26 . 21 . 18 . 16	. 620 . 499 . 383 . 293 . 236		
91-157 91-157 91-137 91-157 91-157	, 05 5 4 , 07	.001 .001 .001	6.8 8.6 8.7 8 7 3	.19 .25 .25 .27 .10	.395 .609 .568 .410 .028		
91-157 91-137 91-157 91-157 91-157 91-158	201 80 90 01	.001 .001 .001	3.0 4.0 5.5 4.0 10.7	.09 .12 .16 .18 .32	.059 .034 .307 .042 .690		1
91-158 91-158 91-158 91-158 91-158	2 .01 8 .01 4 .01	.001 .001 .001	4,5 2,5 2,5 2,4 2,4	.13 .07 .07 .07 .07 .08	.237 .067 .054 .101 .076		· · · · · · · · · · · · · · · · · · ·
91-156 91-156 91-156 91-155 91-155	p	100. 100. 100.	1.7 3.2 4.0 4.0 3.5	.05 .09 .12 .12 .12 .10	.046 .150 .243 .138 .072		

Certified by

1

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Certificate ASSAY

RONMENTS

ABORATORIES

(DIVISION OF ASSAYERS CORP.)

Company; Attn:

KENNECOTT CANADA Projecta STIKINE COPPER D. JOHNSON/E. YARROW

Date: AUG-D1-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECUIT CANADA: C/O MIN-EN LABS.

Ne hereby certify the following Assay of 26 ROCK samples submitted JUL-28-91 by PAT VARAS.

	Sample Number		AU-F1RE g/tonne	AU-FIRE oz/tan	A6 ç/tonne	AG oz/tan	CU %	
	91-159 91-160 91-160 91-160 91-160		.01 .01 .01 .02 .01	. 001 .001 .001 .001 .001 .001	5.4 2.8 2.6 3.2 3.3	.16 .08 .08 .09 .09 .10	.160 .064 .041 .060 .151	
	91-160 91-160 91-161 91-161 91-161	5 2	.01 .01 .01 .02 .01	. 001 . 001 . 001 . 001 . 001	2.7 2.4 2.3 2.8 2.3	.08 .07 .07 .08 .07	,060 .075 .043 .102 .069	
	91-161 91-161 91-161 91-161 91-161	4 5 5	.01 .01 .01 .44 .02	.001 .001 .001 .013 .001	2.3 3.8 3.9 7.8 6.8	.07 .11 .11 .23 .20	.134 .327 .100 .645 .592	
	91-161 91-161 91-162 91-162 91-162		- 18 , 39 , 80 , 46 1.07	.005 .011 .023 .013 .031	4.7 10.0 8.7 4.9 11.3	.14 .29 .25 .14 .34	.177 .410 .685 .440 .704	
•	11-162 1-162 1-162 1-162 1-162 1-162		.49 .19 .16 .02	.020/ .006 .011 .005 .001	7.3 4.9 5.6 10.7 5.2	- 21 - 14 - 19 - 53 - 15	,325 .114 .182 .355 .146	
	51-1628		.01	.001	3.6	= <u>i</u> 1	. 129	

Certified by

1S-0249-RA4

			NIN EN LAE	OF ASSAYERS C SPECIALI	ORIES	AL ENVIRONN MALYSTS • GEOCHEMIS	MENTS STS			VANC 705 WE NORTH TELEPI FAX (60 SMIT S176 TA SMITHE FELEPI	EST 15TH VANCOU HONE (60 24) 980-96 HERS ATLOW RC ERS, B.C.	R OFFICE: STREET VER, B.C. CANAI 4) 980-5814 OF 321 LAB: DAD CANADA VOJ 2 4) 847-3004	DA V7M 1T2 (604) 988-4	524
						<u>ifica</u>							19-RA5	
		Company: Project: Attn:	ST IK	NECOTT INE COPP HNSON /E	ER	ORPORATIO	N	:	2. KI	ENNECOTT	CANADA, CANADA,	Nate: AUG VANCOUVER, B C/O SMITHER	.C. S EXP.	
		He her submit	eby d ted 1	ertify JUL-28-	the fol 91 by ED	lowing As YARROW.	ssay of	27	ROCK	sampl	es Lanada,	C/O MIN-EN	LAB5,	· ,
	: - -	Samale Number			AU-FIRE g/tohne	AU-FIRE oz/ton	A g∕tonn	•	AB oz/ton		CU %			
		91-1316 91-1517 91-1515 91-1515 91-1519 91-1520			.01 .92 .02 .01 .04	.001 .001 .001 .001 .002	2. 2. 5.		.07 .06 .06 .10 .10 .15		.034 .018 .016 .132 .299			. A Mala and any area in
· ·		91-152) 91-1522 91-3523 91-3523 91-3524 91-3523			, 04 , 08 .01 .03 , 05	, 001 , 002 , 001 , 001 , 001	3.4 4.4 4.4 4.4	de restante de comen	, 14 , 14 , 06 , 14 , 21;		. 747 , 281 , 015 , 310 , 331	1 fang akk unse gene kinn inte orge tie internet internet internet internet internet internet internet internet internet inter		er #1 14 μ = 12,
		91-1589 91-1590 91-1592 91-1593 91-1593			.04 .11 .12 .24 .21	.001 .003 .004 .004 .004	3.5 5.5 5.5 4.7		. 10 . 11 . 15 . 14		.055 .076 .055 .110 .117	<u>an an a</u>		
		91-1598 91-1599 91-1500 91-1507 91-1507			.01 .02 .22 .01 .01	.001 .001 .006 .001 .001	3.9 3.7 5.7 2.3 3.4	n anna a ghair anna ann an tha ann an	. 11 . 11 . 17 . 06 . 10		.075 .057 .137 .055 .055			
		91-1009 91-2084 91-2085 91-2086 91-2086 91-2086			.03 .17 .18 .03 .51	. 005	2.8 2,1 2,5 2.1 4.8		.08 .04 .07 .06 .14		. 014 . 047 . 036 . 032 . 300	38	8	· · · · · · · · · · · · · · · · · · ·
		91-2103 91-2104			.87 .20	. 075 . 006	7.8 4.5				. 446 . 143 5	ar ann ann gear gur bha sala ann ann	<u> </u>	

MTRUPN IL POPLEODTES

Certified by



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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004

FAX (604) 847-3005

Certificate Assay

VIRONMENTS

LABORATORIES (DIVISION OF ASSAYERS CORP.)

1	S –	0	3	3	1	-RA2
				1.1		
		-				

Company:	KENNECOTT	CANADA	CORPORATION
Project:	STIKINE COPP	ER	
Attn:	D.JOHNSON /E	.YARROW	

Date: AUG-08-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-ENLABS.

He hereby certify the following Assay of 24 ROCKS samples submitted AUG-03-91 by E. YARROW.

Sample Number	*AU-FIRE g/tonne	*AU-FIRE oz/ton	AG g/tonne	AG oz/ton	CU %	
911719	.01	.001	1.3	.04	.009	GC392
911720	.01	.001	0.9	.03	.005	A-
911721	.02	.001	1.0	.03	.007	
911722	.01	.001	1.2	. 04	.014	
911723	.01	.001	1.7	.05	.008	
911724	.01	.001	1.0	.03	. 004	
911725	.02	.001	1.0	.03	.009	
912114	.09	.003	1.7	.05	.209	GC 390
912115	.03	.001	1.6	• • 05	.087	
912116	.02	.001	2.5	.07	.116	
912117	.06	.002	2.4	.07	.147	, TYP ND, STATUN DIN die NN UST Din Die Ange auf das das des aus aus aus aus aus
912118	.04	.001	3.0	.09	.220	
912119	.08	.002	2.7	.08	.164	
912120	.09	.003	2.6	.08	.197	
912121	.02	.001	1.2	.04	.047	
912122	.34	.010	2.2	.06	.088	
912123	1.84	.054	4.1	.12	.361	
912124	.09	.003	1.6	.05	.020	
912125	.02	.001	1.3	. 04	.009	
912126	.06	,002	2.4	.07	.009	
912127	.02	.ù01	2.7	.08	.011	
912128	.30	.009	2.4	.07	.033	
912129	.02	and the second	1.8	.05	.007	
912140	.03	.001	2.0	.06	.013	\mathcal{N} , and the second secon

GC 2130- 2139 - not rec't by Aug21/61

*AU - 1 ASSAY TON.

Certified by

MIN-ÉN 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

1S-0331-RA3

SMITHERS LAB .: S176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

KENNECOTT CANADA CORPORATION

Company: Project: Attn:

STIKINE COPPER D.JOHNSON /E.YARROW

NVIRONMENTS

ABORATORIES

(DIVISION OF ASSAYERS CORP.)

Date: AUG-08-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-ENLABS.

He hereby certify the following Assay of 24 ROCKS samples submitted AUG-03-91 by E. YARROW.

Sample	*AU-FIRE	*AU-FIRE	AG	AG	CU	
Number	g/tonne	oz/ton	g/tonne	oz/ton	%	
912141	.26	.008	3.3	.10	.031	GC 300
912142	.08	.002	3.0	.09	.026	
912143	.05	.001	3.3	.10	.038	
912144	.12	.004	2.7	.08	.037	
912145	.18	.005	2.0	.06	.015	
912146	.01	.001	1.7	.06	.006	-
912147	.02	.001	3.4	.10	.063	
912148	.06	.002	4.1	.12	.064	
912159	.03	.001	2.4	.07	.027	
912160	.42	.012	2.9	.08	.064	
912161	.05	.001	2.6	.08	.044	
912162	.11	.003	2.6	.08	.073	
912163	.02	.001	2.7	.08	.054	
912164	.01	.001	2.8	.08	.088	
912165	1.20	.035	2.8	.08	.073	
912166	.04	.001	2.6	.08	.088	
912167	.02	.001	2.5	.07	.107	
912168	.05	.001	3.4	.10	.096	
912169	.06	.002	3.3	.10	.112	
912170	.03	.001	2.5	.07	.064	
912171 912172 912173 912174	.61 .07 .05 .07	.018 .002 .001 .002	2.9 2.6 3.0 3.2	.08 .08 .09 .09	.102 .100 .126 .097	/ /

Certified by

*AU - 1 ASSAY TON.

MIN-EN LABORATORIES

VANCOUVER OFFICE:

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SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

1S-0331-RA4

Company:	KENNECOTT CANADA CORPORATION
Project:	STIKINE COPPER
Attn:	D.JOHNSON /E.YARROW

VIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

MINERAL

Date: AUG-08-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-ENLABS.

He hereby certify the following Assay of 2 ROCKS samples submitted AUG-03-91 by E. YARROW.

Sample Number	*AU-FIRE g/tonne	*AU-FIRE oz/ton	AG g/tonne	AG oz/ton	CU %		
912175 912176	.02 .01	.001 .001	2.1 1.6	.06 .05	.015	GC 390	

*AU - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES



SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Certificate

NVIRONMENTS

LABORATOR (DIVISION OF ASSAYERS CORP.)

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2N0 TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0377-RA1

KENNECOTT CANADA Company:

Assay

Project: STIKINE COPPER D. JOHNSON/E. YARROW Attn: . .

Date: AUG-15-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/D MIN-EN LABS

He hereby certify the following Assay of 24 CORE samples submitted AUG-08-91 by D.JOHNSON/E.YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne	
91-1696 91-1697 91-1698 91-1702 91-1703	.312 .216 .364 .372 .083	.01 .01 .01 .01 .01	5.7 3.3 5.2 7.3 2.6	
91-1704 91-1726 91-1727 91-1728 91-1729	.424 .372 .027 .020 .029	.02 .15 .02 .03 .02	7.5 7.1 1.4 0.9 1.0	
1730 91-1731 91-1732 91-1733 91-1733 91-1734	.051 .564 .648 .675 .549	.11 .01 .01 .01 .01	1.8 6.3 7.3 6.8 5.2	
91-1735 91-1736 91-1737 91-1742 91-1743	.424 .152 .061 .021 .032	.01 .01 .01 .04 .02	4.4 3.1 1.9 0.9 1.0	
91-1744 91-1745 91-1750 91-1751	.009 .148 .252 .337	.03 .04 .01 .01	0.7 5.4 5.7 4.2	

*AU - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES



Assay Certificate

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VIRONMENTS

(DIVISION OF ASSAYERS CORP.)

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0377-RA2

Company: KENNECOTT CANADA Project: STIKINE COPPER Attn: D.JOHNSON/E.YARROW

Date: AUG-15-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS

He hereby certify the following Assay of 24 CORE samples submitted AUG-08-91 by D.JOHNSON/E.YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne			
91-1752 91-1753 91-1754 91-1755 91-1756	.169 .102 .053 .188 .277	.03 .04 .01 .10 .07	2.7 2.9 1.7 4.5 5.4			
91-1757 91-1758 91-1759 91-1760 91-1761	.243 .306 .319 .373 .614	.07 .12 .16 .13 .18	4.3 5.2 8.0 5.1 9.1			
91-1762 91-1763 91-1764 91-1765 91-1766	.262 .226 .206 .456 .562	.06 .06 .04 .10 .09	3.6 4.1 3.1 4.2 4.0	-GC 395		
91-1767 91-1768 91-1769 91-1770 91-1771	.388 .205 .776 .316 .332	.01 .07 .13 .02 .01	3.1 2.4 6.2 2.2 2.7			
91-1772 91-1773 91-1774 91-1775	.480 1.660 1.298 .597	.01 .38 .26 .20	2.7 8.9 8.8 5.4			

1 ASSAY TON.

Certified by



Company:

Project:

Attn:

AINER AL

(DIVISION OF ASSAYERS CORP.)

ASSay

STIKINE COPPER

KENNECOTT CANADA

D. JOHNSON/E. YARROW

NVIRONMENTS ABORATORIES

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Certificate

1S-0377-RA3

Date: AUG-15-91

- Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP.
 - 3. KENNECOTT CANADA, C/O MIN-EN LABS
 - o. KERREUUTI UMAHUR; U/U HIN-EN LADU

We hereby certify the following Assay of 24 CORE samples submitted AUG-08-91 by D.JOHNSON/E.YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne	
91-1776 91-1777 91-1778 91-1779 91-1783	.307 .746 1.053 1.081 .026	.11 .20 .29 .28 .02	4.0 5.8 7.7 8.1 1.1	
91-1784 91-1785 91-2177 91-2178 91-2178 91-2179	.022 .352 .046 .138 .142	.02 3.22 .25 .24 .09	0.7 49.4 3.1 3.2 2.5	
91-2180 91-2181 91-2182 91-2183 91-2184	.102 .141 .271 .031 .034	.07 .18 .10 .02 .01	1.7 2.2 3.5 1.7 2.0	
91-2188 91-2189 91-2190 91-2191 91-2192	.023 .053 .052 .077 .017	.02 .02 .01 .02 .02	1.7 1.6 1.7 2.1 2.3	
91-2193 91-2194 91-2195 91-2196	.029 .090 .135 .066	.02 .01 .02 .02	2.1 3.0 4.6 1.7	

*AU - 1 ASSAY TON.

Certified by

MIN-EN/LABORATORIES

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

IFONMENTS

AIN FRANK

KENNECOTT CANADA

D. JOHNSON/E. YARROW

STIKINE COPPER

LABORATO

(DIVISION OF ASSAYERS CORP.)

Date: AUG-15-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS

He hereby certify the following Assay of 24 CORE samples submitted AUG-08-91 by D.JOHNSON/E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number	CU X		AG g/tonne		
91-2197 91-2198 91-2199 91-2200 91-2201	.108 .039 .096 .044 .067	.06 .08 .06	2.7 4.2 1.9 2.5 2.0		
91-2202 91-2206 91-2207 91-2208 91-2209	.021 .074 .067 .033 .017	.19 .12 .02	1.9 2.7 2.6 2.3 4.1		
2210 91-2211 91-2212 91-2213 91-2214	.030 .048 .045 .092 .104	.06 .09 .01	2.1 3.1 1.9 2.5 2.1		
91-2218 91-2219 91-2220 91-2221 91-2222	.123 .107 .110 .115 .114	.01 .01 .02	2.3 2.1 2.3 1.9 2.4		
91-2223 91-2227 91-2228 91-2229	.115 .147 .061 .032	.01	2.8 3.0 2.1 2.2		

*AU - 1 ASSAY TON.

MIN-EN LABORATORIES

Certified by_

1S-0377-RA4

Company:

Project:

Attn:



Attn:

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

IRONMENTS

ABORATOR (DIVISION OF ASSAYERS CORP.)

15-0377-RA5

KENNECOTT CANADA Company: Project: STIKINE COPPER

D. JOHNSON/E. YARROW

Date: AUG-15-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS

He hereby certify the following Assay of 24 CORE samples submitted AUG-08-91 by D.JOHNSON/E.YARROW,

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne	
91-2230 91-2231 91-2232 91-2236 91-2237	.007 .049 .080 .106 .040	.02 .01 .09 .26 .07	1.4 2.3 2.6 4.0 2.1	
91-2238 91-2239 91-2240 91-2241 91-2242	.072 .044 .004 .035 .031	.19 .09 .01 .10 .03	2.3 2.5 1.7 1.9 1.7	
2243 91-2244 91-2245 91-2245 91-2246 91-2247	.029 .025 .021 .026 .010	.02 .04 .01 .33 .02	2.0 1.9 1.7 4.0 1.8	
91-2248 91-2249 91-2250 91-2251 91-2252	.011 .008 .006 .006 .005	.01 .01 .01 .01 .01	1.8 1.5 1.3 0.7 1.0	
91-2253 91-2254 91-2255 91-2255	.005 .007 .019 .007	.01 .03 .01 .01	0,5 0.8 0.9 0.7	

AU - 1 ASSAY TON.

Certified by



LABORATORIES (DIVISION OF ASSAYERS CORP.)

VIRONMENTS

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

1S-0377-RA6

Company:	KENNECOTT	CANADA
Project:	STIKINE COPI	PER
Attn:	D.JOHNSON/E.	. YARROW

IINERAL

Date: AUG-15-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS

He hereby certify the following Assay of 24 CORE samples submitted AUG-08-91 by D.JOHNSON/E.YARROW.

Sample Number	CU X	*AU-FIRE g/tonne	AG g/tonne	
91-2257 91-2258 91-2259 91-2260 91-2261	.266 .006 .002 .002 .012	.02 .01 .01 .04 .01	0.9 0.6 0.7 0.7 0.5	
91-2262 91-2263 91-2264 91-2265 91-2265 91-2266	.027 .052 .102 .151 .075	.01 .04 .06 .11 .06	0.4 1.0 1.1 1.6 0.8	
91-2267 91-2268 91-2269 91-2270 91-2271	.143 .083 .121 .052 .068	.12 .02 .06 .02 .01	0.9 0.9 1.0 0.2 0.9	
91-2272 91-2273 91-2274 91-2275 91-2276	.290 .150 .092 .049 .015		0.5 0.5 0.8 0.7 0.9	
91-2277 91-2278 91-2279 91-2280	.019 .030 .015 .006	.01 .01 .02 .01	0.9 0.5 0.9 0.4	

*AU - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES



Assay Certificate

NVIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

KENNECOTT CANADA Company: Project: STIKINE COPPER D. JOHNSON/E. YARROW Attn:

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

SMITHERS LAB .: S176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0377-RA7

Date: AUG-15-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C.

2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/D MIN-EN LABS

He hereby certify the following Assay of 14 CORE samples submitted AUG-08-91 by D.JOHNSON/E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne			
91-2281	.017	.02	1.0			
91-2282	.007	.02	0.9			
91-2283	.026	.03	0.5		··· · .	
91-2284	.056	.04	0.8			
91-2285	.028	.05	0.8			all and an
91-2286	.019	.02	0.4			
91-2287	.002	.01	0.5			a
91-2288	.009	.02	0.4			
91-2289	.011	.02	0.7			
91-2290	.032	.07	0.6	· · ·		
2291	.028	.02	0.7			 n mar onle olin pair di inde inn
91-2292	.054	.07	0.9		4	
91-2293	.033	.02	0.3			
91-2294	.003	.01	0.9	•		

*AU - 1 ASSAY TON.

Certified by



MINERAL NVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

Company:	KENNECOTT CANADA	INC.		
Project:	STIKINE COPPER			
Attn:	D. JOHNSON/E. YARROW		÷	

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0385-RA1

Date: AUG-15-91

- Copy 1. KENNECOTT CANADA INC, VANCOUVER, B.C.
 - 2. KENNECOTT CANADA, C/O SMITHERS EXP.
 - 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted AUG-08-91 by ED YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne	
91-1738 91-1739 91-1740 91-1741 91-1746	.146 .075 .041 .020 .141	.02 .04 .01 .01 .07	4.5 3.6 1.8 1.5 10.5	
91-1747 91-1748 91-1749 91-1780 91-1781	.307 .346 .563 .995 .257	.11 .14 .18 .34 .09	4.1 4.8 8.6 7.0 4.8	
91-1782 91-2185 91-2186 91-2187 91-2203	.027 .147 .049 .046 .032	.02 .01 .01 .02 .02	1.6 2.6 1.7 1.8 1.8	
91-2204 91-2205 91-2215 91-2216 91-2217	.037 .065 .027 .041 .101	.01 .08 .07 .04 .12	2.1 2.6 1.7 1.3 1.8	393A
91-2224 91-2225 91-2226 91-2233	.073 .044 .064 .044	.07 .03 .10 .08	2.1 2.1 1.9 1.8	

Certified by



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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

<u>Certificate</u> Assay

VIRONMENTS LABORATORIES

(DIVISION OF ASSAYERS CORP.)

Company:	KENNECOTT CANADA	INC.
Project:	STIKINE COPPER	
Atta:	D.JOHNSON/E.YARROW	

*AU - 1 ASSAY TON.

1S-0385-RA2

Date: AUG-15-91 Copy I. KENNECOTT CANADA INC, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 2 CORE samples submitted AUG-08-91 by ED YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne	
91-2234	.059	. 10	2.1	
91-2235	.040	.35	2.6	

Certified by



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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO. TELEPHONE (604) 847-3004 FAX (604) 847-3005

Certificate Assay

ABORATORIES

(DIVISION OF ASSAYERS CORP.)

Company:	KENNECOTT	CANADA	INC.
Project:	STIKINE COPP	ER	
Attn:	D. JOHNSON/E.	YARROW	

1S-0406-RA1

Date: AUG-19-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted AUG-12-91 by ED YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS

CHEMISTS . ASSAYERS . ANALYSTS . GEOCHEMISTS

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne	
91-1786 91-1787 91-1788 91-1792 91-1793	.261 .324 .658 .623 .821	.04 .17 .12 .16 .20	4.7 5.2 6.3 6.4 7.7	
91-1794 91-1795 91-1796 91-1797 91-1798	.913 1.577 2.457 1.000 1.527	1.05 1.50 1.50 1.01 .60	8.2 10.7 19.8 6.6 9.7	
91-1800 91-1801 91-2295 91-2296	1.866 1.028 1.109 .023 .067	.95 .62 .42 .02 .02	12.4 7.7 7.6 1.4 1.3	
91-2297 91-2298 91-2299 91-2300 91-2301	.092 .036 .023 .037 .464	.02 .04 .02 .10 .42	1.4 1.5 1.6 1.6 2.8	
91-2302 91-2303 91-2304 91-2305	.335 .171 .045 .084	.27 .20 .06 .32	2.6 2.4 1.7 1.6	

AND - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES



ENVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

Company:	KENNECOTT CANADA	INC.
Project:	STIKINE COPPER	
Attn:	D.JOHNSON/E.YARROW	

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0406-RA2

Date: AUG-19-91 Copy 1. KENNECOTT CANADA, VANCDUVER,B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 17 CORE samples submitted AUG-12-91 by ED YARROW.

Sample Number		CU %	*AU-FIRE g/tonne	AG g/tonne		1 - 44 	
91-2306 91-2307 91-2308 91-2309 91-2310		.068 .067 .082 .106 .159	.01 .01 .06 .03 .22	.6 .8 .7 .7 1.5			
91-2311 91-2312 91-2313 91-2314 91-2315]	.381 .007 .003 .001 .134	.72 .01 .01 .01 .21	2.1 2.1 2.4 2.4 1.7			
91-2316 91-2317 91-2318 91-2319 91-2320		.147 .104 .039 .319 .332	.16 .01 .70 .18	1.8 1.5 1.2 1.7 1.5			
91-2321 91-2322		.093 .161	.01 .11	1.5 1.6			***

Certified by



Assay Certificate

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0480-RA1

Company:	KENNECOTT CANADA CORPORATION	
Project:	STIKINE COPPER	
Attn:	D. JOHNSON/E. YARROW	

ENVIRONMENTS

ABORATOR (DIVISION OF ASSAYERS CORP.)

> Date: AUG-20-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 ROCK samples submitted AUG-17-91 by ED YARROW.

	Sample Number		CU %	*AU-FIRE g/tonne	AG g/tonne		
Same (91-1015 91-1015 91-1016 91-1017 -91-1018 91-2353	4 Contin Chip Om Contin Chip Sm Contin Chip	.672 .400 .415 .520 .039	.04 1.24 .10 .34 .05	1.9 4.2 2.7 5.1 2.0	1.6 .830	. 41/6m
	91-2354 91-2355 91-2356 91-2366 91-2367	an a	.026 .099 .017 .023 .183	.08 .21 .02 .01 .29	2.1 2.4 1.9 2.1 1.8	6039	7
	91-2368 91-2369 91-2370 91-2371 91-2372		.074 .099 .035 .036 .039	.13 .09 .05 .03 .03	1.7 1.9 1.8 2.0 1.6		
61	91-2373 91-2385 91-2386 91-2387 91-2388		.044 .071 .104 .046 .030	.05 .17 .07 .05 .07	1.5 2.0 2.1 2.1 1.7		
	91-2389 91-2390 91-2391 91-2392		.057 .049 .051 .034	.04 .07 .06 .03	2.3 1.8 2.0 1.9		

*AU - 1 ASSAY TON.

Certified by



Company:

Project:

Attn:

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

KENNECOTT CANADA CORPORATION

STIKINE COPPER

D. JOHNSON/E. YARROW

1S-0480-RA2

Date: AUG-21-91

- Copy 1. KENNECDIT CANADA, VANCOUVER, B.C. 2. KENNECDIT CANADA, C/O SMITHERS EXP.
 - 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 10 ROCK samples submitted AUG-17-91 by ED YARROW.

Sample Number	CU X		AG g/tonne		
91-2393 91-2394 91-2395 91-2396 91-2397	.035 .036 .033 .032 .032	.02 .01 .03	1.2 0.8 1.6 1.3 1.0	6C 397	
91-2398 91-2399 91-2400 91-2401 91-2402	.061 .058 .055 .064 .042	.02	1.2 1.1 1.3 1.5 1.6		

Certified by

MIN EN LABORATORIES



LABORATORIES (DIVISION OF ASSAYERS CORP.)

ENVIRONMENTS

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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0490-RA1

Company:	KENNECOTT CANADA INC.				Date: AUG-23-91	
Project:	STIKINE COPPER DDH 398		1. A.	Copy 1. KENNECOTT	CANADA, VANCOUVER, B.C.	ć
Attn:	D.JOHNSON/E.YARROW			2. KENNECOTT	CANADA, C/O SMITHERS EXP.	
				3. KENNECOTT	CANADA, C/O MIN-ENLABS.	
		a 11 11 1 11	- E 01	DOCK1		

He hereby certify the following Assay of 24 ROCK samples submitted AUG-19-91 by ED YARROW.

Sample Number	CU *AU-FIRE % g/tonne	AG g/tonne		
DDH 398 91-1861 DDH 398 91-1862 DDH 398 91-1863 DDH 398 91-1864 DDH 398 91-1865	.058 .01 .024 .01 .264 .05 .046 .01 .036 .01	1.5 1.0 1.5 0.9 1.1		
DDH 378 91-1866 DDH 398 91-1867 DDH 398 91-1868 DDH 398 91-1869 DDH 398 91-1870	.042 .08 .164 .31 .091 .10 .457 .50 .089 .10	0.6 1.4 0.7 2.2 1.3	-6-398 -	
DDH 398 91-1871 DDH 398 91-1872 DDH 398 91-1873 DDH 398 91-1873 DDH 398 91-1874 DDH 398 91-1875	.070 .07 .048 .04 .259 .19 .150 .03 .372 .21	0.9 1.0 1.7 1.5 2.2	60.9m-131.4	
DDH 398 91-1876 DDH 398 91-1877 DDH 398 91-1877 DDH 398 91-1878 DDH 398 91-1879 DDH 398 91-1880	.046 .03 .307 .23 .064 .05 .583 .48 .090 .02	0.8 0.6 1.2 2.6 93- 1.1	0.28Cm	
DDH 398 91-1881 DDH 398 91-1882 DDH 398 91-1883 DDH 398 91-1884	.237 .16 .132 .09 .249 .15 .812 .68	1.5 1.0 1.4 2.5		

Certified by

MIN-EN LABORATORIES



Attn:

MINERAL ENVIRONMENTS LABORATORIES

(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

KENNECOTT CANADA INC. Company: Project: STIKINE COPPER DDH 398

D. JOHNSON/E. YARROW

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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0490-RA2

- Date: AUG-23-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.
 - 3. KENNECOTT CANADA, C/O MIN-ENLABS.

He hereby certify the following Assay of 24 ROCK samples submitted AUG-19-91 by ED YARROW.

Sample Number		U-FIRE /tonne	AG g/tonne	
DDH 398 91-1885 DDH 398 91-1886 DDH 398 91-1887 DDH 398 91-1888 DDH 398 91-1889 DDH 398 91-1889	.463 .371 .287 .344 .164	.40 .11 .17 .26 .15	1.4 1.7 1.2 1.6 1.2	358
DDH 398 91-1890	.242	.30	1.3	(alom)
DDH 398 91-1891 <i>129.1</i>	- 131, ¹ .133	.15	1.4	
DDH 398 91-1892	.093	.20 3.4	2.1	
DDH 398 91-1893	.042	.01	1.7	
DDH 398 91-1894	.092	.30	2.7	
DDH 398 91-1895 DDH 398 91-1896 DDH 398 91-1897 DDH 398 91-1898 DDH 398 91-1898 DDH 398 91-1899	.012 .027 .005 .137 .248	.10 .30 .04 .14 .25	1.8 1.1 1.2 1.1 1.7	(96 ml) 1.05 90 Cm 1.05 91 Cm 0.55 9 12 04 0.55 9 912 6.23 912 6.23 912
DDH 398 91-1900	.166	.15	2.1	87m/
DDH 398 91-1901	.377	.30	2.7	
DDH 398 91-1902	.709	.31	4.3	
DDH 398 91-1903	1.124	.50	5.4	
DDH 398 91-1904	1.453	.43	5.8	
DDH 378 91-1905	1.943	.78	12.8	
DDH 378 91-1906	1.349	.60	3.4	
DDH 398 91-1907	1.011	1.10	3.7	
DDH 398 91-1908	1.831	.80	7.4	

Certified by



• EN VERONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

KENNECOTT CANA

Company: Project

Attn:

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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0490-RA3

¥∓ ∔ :	CENNECUII CAN					Dat	e: AUG-23-93	1
	STIKINE COPPER I			Copy 1.	KENNECOTT	CANADA, V	ANCOUVER, B.C.	. .
	D.JOHNSON/E.YARF	(UW		2.	KENNECOTT	CANADA, C	O SMITHERS EXP.	
				3.	KENNECOTT	CANADA, C.	O MIN-ENLABS.	

He hereby certify the following Assay of 24 ROCK samples submitted AUG-19-91 by ED YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	A6 g/tonne			
DDH 398 91-1909 DDH 398 91-1910 DDH 398 91-1910 DDH 398 91-1911 DDH 398 91-1912 DDH 398 91-1913	.599 .721 .897 .356 .582	.14 .32 .34 .12 .20	2.8 4.2 4.1 2.0 2.3			
 DDH 398 91-1914 DDH 398 91-1915 DDH 398 91-1916 DDH 398 91-1916 DDH 398 91-1917 DDH 398 91-1918	.891 .846 1.071 .782 1.965	.26 .33 .71 .59 1.02	8.3 6.4 7.6 4.5 6.8		60-398	
DDH 398 91-1919 DDH 398 91-1920 DDH 398 91-1921 DDH 398 91-1922 DDH 398 91-1923	1.426 2.419 2.174 1.084 .745	1.02 1.40 1.52 1.28 1.43	6.3 7.5 7.6 5.4 4.6 ₁₇ 1	. 33	66 m/1,05 Cu . 85	
DDH 398 91-1924 DDH 398 91-1925 DDH 398 91-1926 DDH 398 91-1927 DDH 398 91-1928	1.351 .502 .638 1.182 1.265	1.53 .77 .84 2.07 2.04	2.9 5.5 3.7 6.1 8.1		13 39m/1.37g/t	
DDH 398 91-1929 DDH 398 91-1930 DDH 398 91-1931 DDH 398 91-1932	.727 .850 .323 .385	1.11 1.28 .43 .41	5.7 5.01 2.2 2.4	Cu ¥ 33.58	Qu 26,18 167,5	

*AU - 1 ASSAY TON.

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

1S-0490-RA4

SMITHERS LAB.: 3176 TATLOW ROAD

SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

Company:	KENNECOTT CANADA INC.
Project:	STIKINE COPPER DDH 398
Attn:	D. JOHNSON/E. YARROW

ENVIRONMENTS LABORATORIES (DIVISION OF ASSAVERS CORP.)

> Date: AUG-23-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-ENLABS.

He hereby certify the following Assay of 13 ROCK samples submitted AUG-19-91 by ED YARROW.

	Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne		an thu Thu a tao
	DDH 398 91-1933 DDH 398 91-1934 DDH 398 91-1934 DDH 398 91-1935 DDH 398 91-1936 DDH 398 91-1937	. 162 . 194 . 137 . 154 . 093	.19 .32 .28 .34 .13	2.2 2.5 2.2 2.3 2.1	66-358	
- - -	DDH 398 91-1938 DDH 398 91-1939 DDH 398 91-1940 DDH 398 91-1941 DDH 398 91-1942	.144 .095 .090 .108 .100	. 22 . 19 . 14 . 31 . 29	2.1 1.8 2.0 1.7 1.8		
	DDH 398 91-1946 DDH 398 91-1947 DDH 398 91-1948	.113 .036 .005	.29 .02 .01	2.3 1.6 0.9		

Certified by

MIN-FN IZRODATODIFC



NVERONAENTS ABORATORIES MISION 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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

Company:	KENNECOTT CANACA	INC.	
Project:	STIKINE COPPER		
Attn:	D. JOHNSON/E. YARROW		

1S-0491-RA1

Date: AUG-23-91 Copy 1. KENNECOTT CANADA, VANCOUVER,B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 ROCK samples submitted AUG-19-91 by ED YARROW.

Sample Number		CU "%	*AU-FIRE g/tonne	AG g/tonne	24.3
91-1009 91-1010 91-1011 91-1012 91-1013	gamphing 1	5.245 .450 .557 .716 .572	**12.15 4.79 3.24 1.96 1.99	32.1 16.5 6.8	Sim cont chip 18,79 3.7 m cont chip 5.88 66.99 5.2 m cont chip 9,95. 6.49 3 m cont chip 10.35 5.365 5 m cont chip 10.35 5.365 5 m cont chip middle 3.23
91-1014 91-2357 91-2358 91-2359 91-2360	3	.710 .043 .026 .030 .033	1.99 .05 .01 .01 .09	4.8 0.6 0.7 0.5 0.4	5.2 n. 00000 clip CREEK 5.146 2.86 2.89 31.98
91-2361 91-2362 91-2363 91-2364 91-2365		.025 .026 .022 .004 .003	.07 .07 .06 .04 .05	0.6 0.5 0.7 0.9 0.7	
91-2374 91-2375 91-2376 91-2377 91-2378		.042 .007 .020 .062 .068	.03 .01 .02 .09 .08	1.2 0.9 1.4 1.6 1.1	
91-2379 91-2380 91-2381 91-2382		.055 .042 .047 .041	.32 .47 .25 .01	0.9 1.2 1.2 1.0	62397

*AU - 1 ASSAY TON ** SAMPLE MAY CONTAIN METALLIC GOLD.

VA

Certified by



Assay Certificate

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS . ASSAYERS . ANALYSTS . GEOCHEMISTS

KENNECOTT CANADA INC. Company: Project: STIKINE COPPER D. JOHNSON/E. YARROW Attn:

VIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0491-RA2

Date: AUG-24-91

- Copy 1. KENNECOTT CANADA, VANCOUVER, B.C.
 - 2. KENNECOTT CANADA, C/O SMITHERS EXP.
 - 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted AUG-19-91 by ED YARROW,

Sample Number		CU *AU-FIRE % g/tonne	AG g/tonne			
91-2383 91-2384 91-2403 91-2404 91-2405	.0. .0. .0. .0.	20 .07 47 .05 48 .02	2.1 2.2 2.0 2.0 1.8	V		
91-2406 91-2407 91-2408 91-2409 91-2409 91-2410	.0. .0 .0 .0 .0	79 .09 58 .02 73 .05	1.7 2.2 2.2 2.0 2.3	1		
91-2411 91-2412 91-2413 91-2414 91-2414 91-2415	0 -0 -0 -0 -0	06 .01 07 .01 71 .05	3.1 2.5 3.1 2.1 2.0	GC 397		
91-2416 91-2417 91-2418 91-2419 91-2420	.0 .0 .1 .1 .1	30 .05 25 .08 26 .09	2.1 2.2 2.3 2.1 2.5			
91-2421 91-2422 91-2423 91-2424	.0. .1 .1 .1 .1	.08 .09	2.0 2.2 2.5 2.7			

Certified by



ENVIRONMENTS LABORATORIES (DVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

<u>Assay Certificate</u>

Company:	KENNECOTT CANADA	INC.	
Project:	STIKINE COPPER		 Copy 1. KENNECOTT
Attn:	D. JOHNSON/E. YARROW		2. KENNECOTT
			3 VENNECOTT

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0491-RA3

Date: AUG-24-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 17 CORE samples submitted AUG-19-91 by ED YARROW.

Sample Number		J-FIRE tonne g	AG /tonne				
91-2425 91-2426 91-2427 91-2428 91-2428	.038 .044 .030 .070 .145	.03 .05 .10 .18 .42	2.0 2.1 1.6 2.1 2.6				
91-2430 91-2431 91-2432 91-2433 91-2434	.033 .023 .158 .097 .059	.07 .06 .18 .11 .09	2.0 1.9 2.3 2.6 2.1	GC	397		
91-2435 91-2436 91-2437 91-2438 91-2439	.101 .060 .054 .212 .074	.07 .02 .02 .19 .02	2.4 2.6 2.9 3.2 2.5	· · · · · · · · · · · · · · · · · · ·			
91-2440 91-2441	.121 .077	.07 .08	2.3 2.4		200 / 201 (

nal Certified by

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Certificate Assay

NVIRONMENTS

ABORATORIES

(DIVISION OF ASSAYERS CORP.)

KENNECOTT CANADA Company: Project: Attn:

STIKINE COPPER D.JOHNSON/E.YARROW

MINERAL

1S-0590-RA1

Date: SEP-02-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C.

2. KENNECOTT CANADA, C/D SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted AUG-26-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number		CU %	*AU-FIRE g/tonne	AG g/tonne		
DDH 398 DDH 398 DDH 398	91-1943 91-1944 91-1945 91-1945 91-1949 91-1950	.013 .039 .061 .012 .077	.02 .09 .17 .02 .14	1.2 2.0 1.9 1.7 2.6		
DDH 398 DDH 398 DDH 398	91-1951 91-1952 91-1953 91-1954 91-1955	 .054 .378 .147 .098 .129	. 16 . 56 . 22 . 23 . 26	2.0 / 4.2 2.8 2.5 2.9		
DDH 398 DDH 398 DDH 398	91-1956 91-1957 91-1958 91-1959 91-1959 91-1960	.132 .133 .340 .312 .076	.20 .15 .28 .40 .12	3.1 2.3 3.7 3.2 2.4		
DDH 398 DDH 398 DDH 398	91-1961 91-1962 91-1963 91-1964 91-1965	.052 .130 .132 .106 .041	.07 .14 .13 .11 .03	1.7 2.3 2.5 2.3 1.9		
DDH 398 DDH 398	91-1966 91-1967 91-1968 91-1968 91-1969	.064 .072 .028 .046	. 17 . 23 . 11 . 12	• 1.8 2.6 1.7 1.8		

*AU - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

TRONMENTS

ABORATORIES

(DIVISION OF ASSAYERS CORP.)

Company: KENNECOTT CANADA Project: STIKINE COPPER Attn: D.JOHNSON/E.YARROW

NINER AL

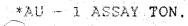
1S-0590-RA2

Date: SEP-02-91 Eopy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

We hereby certify the following Assay of 5 CORE samples submitted AUG-26-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number		· ·	CU %	*AU-FIRE g/tonne	AG g/tonne	
DDH 398	91-1970		.023	,03	1.8	
DDH 398	91-1971		.026	" 07	1.3	
DDH 398	91-1972		.043	" 04	2.0	
DDH 398	91-1973		.042	" 06	1.9	·
DDH 398	91-1974		.148	.18	3.0	
			(



Certified by

MIN-EN LABORATORIES

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

NVIRONMENTS ABORATORIES

1S-0591-RA1

KENNECOTT CANADA Company: STIKINE COPPER Project: Attn:

D. JOHNSON/E. YARROW

AINER AL

(DIVISION OF ASSAYERS CORP.)

Date: SEP-02-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted AUG-26-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number		AU-FIRE g/tonne	AG g/tonne	
DDH 400 91-1975	.010	.01	1.5	6C-400
DDH 400 91-1976	.018	.02	1.8	
DDH 400 91-1977	.024	.04	2.0	
DDH 400 91-1978	.004	.02	1.3	
DDH 400 91-1979	.006	.02	1.3	
DDH 400 91-1980	.035	.02	1.8	
DDH 400 91-1981	.031	.07	1.7	
DDH 400 91-1982	.016	.03	1.5	
DDH 400 91-1983	.017	.08	1.3	
DDH 400 91-1984	.020	.02	1.4	
) (400 91-1985	.014	.01	1.2	
DDH 400 91-1986	.006	.02	0.9	
DDH 400 91-1987	.008	.01	0.7	
DDH 400 91-1988	.070	.04	1.9	
DDH 400 91-1989	.021	.01	1.4	
DDH 400 91-1990	.006	.02	1.3	
DDH 400 91-1991	.009	.01	1.4	
DDH 400 91-1992	.018	.02	1.4	
DDH 400 91-1993	.003	.01	1.3	
DDH 400 91-1994	.009	.01	1.4	
DDH 400 91-1995	.008	.02	1 - 1	
DDH 400 91-1996	.004	.02	1 - 6	
DDH 400 91-1997	.002	.01	1 - 5	
DDH 400 91-1998	.014	.02	2 - 1	

- 1 ASSAY TON. *AU

Certified by



MINERAL VIRONMENTS 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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

KENNECOTT CANADA Company: Project: Attn:

STIKINE COPPER D.JOHNSON/E.YARROW 1S-0591-RA2

Date: SEP-02-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted AUG-26-91 by E.YARROW.

Sample Number		CU %	*AU-FIRE g/tonne	AG g/tonne		and an an Ardan ann. An Arainn an Arainn Ar an Arainn an Arainn
DDH 400 91-1 DDH 400 91-2 DDH 400 91-4 DDH 400 91-4 DDH 400 91-4	000 001 009	.025 .016 .019 .016 .016	.01 .07 .02 .01 .02	1.6 1.3 2.2 1.8 1.6		
DDH 400 91-4 DDH 400 91-4 DDH 400 91-4 DDH 400 91-4 DDH 400 91-4 DDH 400 91-4	015 016 017	.030 .013 .031 .043 .029	.01 .01 .03 .03 .02	1.6 1.5 1.6 1.5 1.3	6C - 400	
400 91-40 DDH 400 91-40 DDH 400 91-40 DDH 400 91-40 DDH 400 91-40 DDH 400 91-40	020 021 022	.004 .001 .001 .001 .001	.01 .01 .02 .01 .01	1.0 0.5 0.2 0.3 0.5		
DDH 400 91-40 DDH 400 91-40 DDH 400 91-40 DDH 400 91-40 DDH 400 91-40)27)28)29	.018 .019 .026 .070 .059	.02 .02 .07 .04 .03	1.1 1.5 1.5 2.8 2.7		
DDH 400 91-40 DDH 400 91-40 DDH 400 91-40 DDH 400 91-40 DDH 400 91-40	32 33	. 082 . 215 . 228 . 308	02 07 03 03	2.0 3.1 3.2 3.8		

Certified by



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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

/IRONMENTS

ABORATO (DIVISION OF ASSAYERS CORP.)

1S-0591-RA3

Company: KENNECOTT CANADA Project: STIKINE COPPER Attn: D. JOHNSON/E. YARROW

Date: SEP-03-91 Copy 1. KENNECUTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted AUG-26-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sam Num	ple ber	• •	CU %			
DDH DDH DDH	400 400 400	91-4035 91-4036 91-4037 91-4038 91-4039	.575 .572 .845 .026 .089	.04 .10 .01	4.9 4.0 4.3 1.4 2.0	
DDH DDH DDH	400 400 400	91-4040 91-4041 91-4042 91-4043 91-4044	.234 .237 .191 .149 .045	.02 .01 .01	2.9 3.1 3.0 2.9 2.4	6C-400
DDH DDH DDH	400 400 400	91-4045 91-4046 91-4047 91-4048 91-4049	.047 .066 .042 .078 .065	.01 .02 .03	2.1 2.4 2.9 3.6 3.5	
DDH DDH DDH	400 400 400	91-4050 91-4051 91-4052 91-4053 91-4054	.089 .106 .050 .027 .048	.07 .02 .01	3.5 3.8 3.1 2.5 2.4	
DDH DDH	400 400	91-4055 91-4056 91-4057 91-4058			2.5 2.6 2.8 3.7	

Certified by

MINGEN LABORATORIES

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

VIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

Company: KENNECOTT CANADA Project: STIKINE COPPER Attn: D.JOHNSON/E.YARROW

*AU - 1 ASSAY TON.

MINERAL

1S-0591-RA4

Date: SEP-03-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 7 samples submitted AUG-26-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number		CU %	¥AU−FIRE g/tonne	AG g/tonne			
DDH 400	91-4059	.044	.02	2.7			
DDH 400	91-4060	.087	.03	3.4			
DDH 400	91-4061	.060	.08	3.3	· · · · ·	-400	
DDH 400	91-4062	.091	.10	3.3	- (nC-		
DDH 400	91-4063	,055	.03	3.0			
DDH 400	91-4064	. 106	19	····· ··· ··· ··· ··· ··· ··· ··· ···	- 1944 ANN FRA ANN ANN ALS AND AN <u>L.</u>		THE ART CAN BE USE AND THE ART AND AND THE ARE AND
DDH 400	91-4065	. 445	.10	4.9			

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELERHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

NVIRONMENTS ABORATORIES

Company: KENNECOTT CANADA

STIKINE COPPER SW ZONE Project: D. JOHNSON/E. YARROW Attn:

1S-0592-RA1

Date: SEP-04-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted AUG-26-91 by E.YARROW.

Sample Number		2U *AU-FIRE % g/tonne	AG g/tonne			
91-2442 91-2443 91-2444 91-2445 91-2445 91-2446	. 08 . 10 . 07 . 07 . 07	00 .07 39 .02 25 .03	2.3 2.5 1.9 2.0 2.2	66 - :	97	
91-2447 91-2448 91-2449 91-2450 91-2451	.0 .1 .2 .1 .0	57 .12 05 .08 17 .09	2.3 / 2.3 / 2.7 / 2.0 / 2.2 /			
) \$ 91-2453 91-2454 91-2455 91-2455 91-2456	712452 .1 .0 .0 .0 .0 .0	56 .01 08 .01 04 .02	2.8 (1.9 (1.7 (1.8 (3.3 (
91-2457 91-2458 91-2459 91-2460 91-2461	.0 .2 .1 .3 .2	26 .17 70 .09 09 .12	2:2 2.8 / 3.2 / 3.6 / 3.0 /			
91-2462 91-2463 91-2464 91-2465	. 0 . 0 . 1 . 2	20 .02 64 .11	2:4 1:7 1:6 2:4			

Certified by



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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

VIRONMENTS

ABORATORIES

(DIVISION OF ASSAYERS CORP.)

Company: KENNECOTT CANADA

Project: STIKINE COPPER SW ZONE Attn: D. JOHNSON/E. YARROW

1S-0592-RA2

Date: SEP-03-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted AUG-26-91 by E.YARROW.

Sample Number		-FIRE conne g/t	AG Ionne		•	
91-2466 91-2467 91-2468 91-2469 91-2470	.278 .333 .071 .065 .058	.18 .21 .10 .08 .02	2.8 3.1 1.6 1.3 1.6	16 377		
91-2471 91-2472 91-2473 91-2474 91-2475	.039 .050 .149 .023 .017	.12 .13 .22 .20 .06	1.5	66399		
2476 71-2477 91-2478 91-2479 91-2480	.031 .014 .017 .013 .013	.07 .12 .17 .18 .30	1.4 1.7 1.6 1.8 2.0			·
91-2481 91-2482 91-2483 91-2484 91-2485	.002 .011 .025 .014 .028	.07 .20 .19 .11 .10	1.7 1.0 1.6 1.1 1.2			1
91-2486 91-2487 91-2488 91-2489	.007 .025 .027 .008	.02 .12 .21 .02	1.0 1.7 2.3 1.2			• • • • • • • • • • • • • • • • • • •

Certified by

					۲ Տ			SMITHE	10NE (604 4) 847-300	ANADA VO) 847-3004		
apanyi K Bjectr S tni - D	CENNECOTT STIKINE CDPP JUHNSON/E.	CANADA Per Yarrow				2, KEN 3, KEN	NECOTT Necott	CANADA, CANADA, CANADA,	ate: S) VANCOUVI C/O SKI	EP-16-	-91	
hereb ubmitt incle unber	by cartify ad AUG-26-	y the fol -91 by E. CU %	lowing As YARROW, *AU-FIRE g/tonne	ssay of AG g/tenne	5	RE si	ampl	ê 8				•
0H/400 9 0K/400 9 0R/400 9 0R/400 9 0R/400 9	1-4002 1-4003- 1-4004 1-4005 m 1-4005 m	.012 .021 .894 .299 .046	.02 .01 1.00 .31 .03	1, 4 1, 7 7, 2 7, 4 2, 3	7				an gap ana ana bila bila bi	<u></u>	-	
)H 400 9)H 400 9)H 400 9 JH 400 9 JH 400 9 (H 400 9	1-4007 1-4008 1-4012 1-4013	.034 .026 .047 .020 .047	.01 .01 .01 .02 .01	2,0 2,1 1,5 1,4 1,3	1 7 4							b nyi tis di
£ 400 9	/1-4025)1-4026	. 055	.01 .03	1.7 2.6							b. 40 see een ide de	• • • • • • • • • • • • • • • • • • •
			, , , , , , , , , , , , , , , , , , ,	•	• ▲ ▲ ₩, ₩, ₩, ₩, ₩, ₩, ₩, ₩, ₩, ₩, ₩, ₩, ₩,			· · · · · · · · · · · · · · · · · · ·				p gai più dev



MIN • EN LABORATORIES (DMISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Company:	KENNECOTT CANADA	INC.		
Project:	STIKINE COPPER	· · .		C
Attn:	D.JOHNSON/E.YARROW			

Date: SEP-04-91 Copy 1. KENNECOTT CANADA, VANCOUVER,B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 18 CORE samples submitted AUG-29-91 by ED YARROW.

	Sample Number	CU X	¥AU−FIRE g/tonne	AG g/tonne	
	91- 4066 91- 4067 91- 4068 91- 4069 91- 4069 91- 4070	.206 .428 .037 .043 .049	.03 .10 .03 .02 .02	3.5 5.9 2.1 2.4 3.9	HOLE GC-400
	91- 4071 91- 4072 91- 4073 91- 4073 91- 4074 91- 4075	.042 .060 .050 .030 .025	.03 .09 .03 .02 .02	2.0 2.3 2.1 2.2 1.9	
	91- 4076 91- 4077 91- 4078 91- 4078 91- 4079 91- 4080	.025 .022 .005 .013 .010	.01 .04 .01 .02 .01	2.0 1.8 1.6 1.7 1.7	
-	91- 4081 91- 4082 91- 4083	.001 .010 .003	.01 .02 .06	1.5 1.7 1.7	

Certified by



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

1S-0626-RA1

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

ENVIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

Company: KENNECOTT CANADA INC.

Project: STIKINE COPPER P.O. 6C 402 Attn: D. JOHNSON/E. YARROW

Date: SEP-06-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted AUG-29-91 by ED YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number	· · · · ·	CU %	*AU-FIRE g/tonne	AG g/tonne	
91- 4084 91- 4085 91- 4086 91- 4087 91- 4088		.028 .030 .016 .006 .019	.04 .03 .02 .02 .07	1.7 1.5 1.5 1.3 1.4	GC 402
91- 4089 91- 4090 91- 4091 91- 4092 91- 4093		.213 .034 .034 .043 .043	. 43 .04 .01 .07 .04	8.2 1.1 1.0 1.9 1.1	
4094 91-4095 91-4096 91-4097 91-4098		.031 .030 .032 .019 .021	.02 .01 .01 .02 .02	1.1 1.6 1.6 1.6 1.6	
91- 4099 91- 4100 91- 4122 91- 4123 91- 4124		.067 .015 .048 .026 .009	.04 .01 .01 .01 .02	2.0 1.1 1.9 1.4 1.4	
91- 4125 91- 4126 91- 4127 91- 4128		.029 .009 .009 .009 .039	.01 .01 .02 .03	1.3 1.3 1.4 1.1	

1 ASSAY TON.

Certified by

EN LABORATORIES MIN



Attn:

CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

SPECIALISTS IN MINERAL ENVIRONMENTS

Assay Certificate

NVIRONMENTS ABORATORIES

(DIVISION OF ASSAYERS CORP.)

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0626-RA2

Company: KENNECOTT CANADA INC. Project: STIKINE COPPER P.O. GC 402 D. JOHNSON/E. YARROW

Date: SEP-06-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SNITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted AUG-29-91 by ED YARROW.

Sam Num	•	CU *AU-FI % g/ton		
91- 91- 91-	4129 4130 4131 4132 4133	.045 .0 .109 .0 .007 .0	04 1.6 03 2.0 08 2.5 02 1.5 01 1.5	
91- 91- 91-	4134 4135 4136 4137 4138	.266 1.1 .318 .0 1.450 1.0	9 1.9	GC 407
91- 91- 91-	4139 4140 4141 4142 4143	.254 .4 .115 .2	27 1.8 98 1.4	
91- 91- 91-	4144 4145 4146 4147 4148	.100 .0 .186 .0 .122 .0 .066 .0 .105 .0	062.2042.3081.6	
91- 91-	4149 4150 4151 4152	.093 .0 .074 .0 .022 .0 .025 .0	1.8 2 1.7	

Certified by

VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUNTER BC CANAL

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

ENVIRONMENTS

(DIVISION OF ASSAYERS CORP.)

BORATORIES

Company: KENNECOTT CANADA INC.

Project: STIKINE COPPER P.O. GC 402 Attn: D.JOHNSON/E.YARROW

MINERAL

1S-0626-RA3

Date: SEP-06-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 8 CORE samples submitted AUG-29-91 by ED YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne			
91- 4153	.031	.01	2.3			
91- 4154	.028	.02	1.9		1	
91-4155	.025	.01	1.7	GC 4	02	
91- 4156	.024	.01	1.8			
91- 4157	.036	.02	1.6			
91- 4158	.039	.30	1.3			
91- 4159	.085	.01	1.9			
91- 4160	.046	.01	1.8			
					•	

*AU - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES

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

SMITHERS LAB .: SITE TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

		//
		- 71

1S-0662-RA1

Company:	KENNECOTT	CANADA
Project:	STIKINE COPP	PER
Attn:	D.JOHNSON/E.	YARROW

Date: SEP-11-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 samples submitted SEP-03-91 by E.YARROW.

Sample Number	CU *AU-FIRE % g/tonne	AG g/tonne	
DDH #403 91-4161 DDH #403 91-4162 DDH #403 91-4163 DDH #403 91-4163 DDH #403 91-4164 DDH #403 91-4165	.052 .02 .097 .04 .212 .09 .059 .03 .016 .01	2.2 2.4 3.8 2.3 1.8	GC - 403
DDH #403 91-4166 DDH #403 91-4167 DDH #403 91-4167 DDH #403 91-4168 DDH #403 91-4169 DDH #403 91-4170	.028 .02 .045 .02 .029 .02 .051 .08 .033 .01	2.2 2.4 2.5 2.9 2.2	
(#403 91-4171 Dun #403 91-4172 DDH #403 91-4173 DDH #403 91-4173 DDH #403 91-4174 DDH #403 91-4175	.039 .02 .035 .03 .054 .02 .033 .01 .029 .02	2.5 2.1 2.7 2.3 2.4	
DDH #403 91-4176 DDH #403 91-4177 DDH #403 91-4178 DDH #403 91-4178 DDH #403 91-4180	.042 .08 .038 .04 .017 .03 .010 .02 .018 .02	2.8 2.6 2.3 2.0 2.2	
DDH #403 91-4181 DDH #403 91-4182 DDH #403 91-4183 DDH #403 91-4183 DDH #403 91-4184	.026 .06 .016 .02 .011 .05 .029 .02	2.3 1.6 1.9 2.2	

*AU - 1 ASSAY TON,

MINERAL

Assay Certificate

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

Certified by

ENVIRONMENTS LABORATORIES		705 WEST 15TH NORTH VANCOUN TELEPHONE (604 FAX (604) 980-96
(DIVISION OF ASSAYERS CORP.)		SMITHERS
SPECIALISTS IN MINE CHEMISTS • ASSAYERS • A	NTS	3176 TATLOW RO SMITHERS, B.C. TELEPHONE (604
		FAX (604) 847-30
· · · · · · · · · · · · · · · · · · ·	 	

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

1S-0662-RA2

LAB.: OAD CANADA VOJ 2NO 04) 847-3004 3005

Assay Certificate

Company:	KENNECOTT CANADA
Project:	STIKINE COPPER
Attn:	D. JOHNSON/E. YARROW

NERAL

			D	ate:	SEP-06-91
Сору	1.	KENNECOTT	CANADA,	VAN	COUVER, B.C.
	2.	KENNECOTT	CANADA,	C/0	SMITHERS EXP.
	3.	KENNECOTT	CANADA,	C/0	NIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted SEP-03-91 by E.YARROW.

Sample	CU	*AU-FIRE	AG	
Number	%	g/tonne	g/tonne	
DDH #403 91-4185 DDH #403 91-4185 DDH #403 91-4186 DDH #403 91-4187 DDH #403 91-4188 DDH #403 91-4189	.022 .025 .012 .023 .022	.02 .01 .05 .01 .01	3.6 2.8 2.5 3.2 3.0	EC - 403
DDH #403 91-4190 DDH #403 91-4191 DDH #403 91-4191 DDH #403 91-4192 DDH #403 91-4193 DDH #403 91-4194	.017 .042 .033 .023 .013	.01 .01 .01 .01 .01	2.8 3.5 2.8 3.1 3.0	
#403 91-4195	.014	.01	2.6	
DDH #403 91-4196	.039	.01	2.8	
DDH #403 91-4197	.019	.04	2.9	
DDH #403 91-4198	.015	.01	2.6	
DDH #403 91-4199	.012	.01	2.3	
DDH #403 91-4200	.024	.01	2.6	
DDH #403 91-4201	.065	.01	2.5	
DDH #403 91-4202	.088	.07	2.7	
DDH #403 91-4203	.323	.02	3.4	
DDH #403 91-4204	.120	.01	3.1	
DDH #403 91-4205	.064	.01	2.5	
DDH #403 91-4206	.049	.01	2.6	
DDH #403 91-4207	.110	.01	2.4	
DDH #403 91-4208	.228	.05	2.3	

*AU - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES



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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

NVIRONMENTS LABORATORIES

(DIVISION OF ASSAYERS CORP.)

Company: KENNECOTT CANADA Project: STIKINE COPPER D. JOHNSON/E. YARROW Attn:

1S-0662-RA3

Date: SEP-11-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted SEP-03-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample	CU *AU-FIRE	AG	
Number	% g/tonne	g/tonne	
DDH #403 91-4209 DDH #403 91-4210 DDH #403 91-4211 DDH #403 91-4212 DDH #403 91-4213	.075 .03 .496 .07 .428 .05 .520 .10 .562 .15	1.9 2.5 3.2 3.3 3.8	
DDH #403 91-4214	.587 .09	4.2	
DDH #403 91-4215	.910 .13	4.9	
DDH #403 91-4216	.552 .25	3.0	
DDH #403 91-4217	.608 .27	4.6	
DDH #403 91-4218	.197 .09	2.8	
#403 91-4219 Dbn #403 91-4220 DDH #403 91-4221 DDH #403 91-4222 DDH #403 91-4223	.177 .01 .197 .01 .343 .17 .850 .94 .668 .34	2.7 2.4 4.5 6.0 4.8	
DDH #403 91-4224	.845 .62	5.3	
DDH #403 91-4225	.321 .20	3.1	
DDH #403 91-4226	.571 .59	4.6	
DDH #403 91-4227	.496 .41	4.9	
DDH #403 91-4228	.400 .32	3.7	
DDH #403 91-4229	.019 .07	0.6	
DDH #403 91-4230	.116 .10	2.5	
DDH #403 91-4231	.318 .21	5.3	
DDH #403 91-4232	.085 .03	1.5	

Certified by





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

SMITHERS LAB.:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

Company: Project: Attn:

KENNECOTT CANADA STIKINE COPPER D. JOHNSON/E. YARROW

1S-0662-RA4

Date: SEP-11-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted SEP-03-91 by E.YARROW.

Sample Number	CU *AU-F % g/to		
DDH #403 91-4233 DDH #403 91-4234 DDH #403 91-4235 DDH #403 91-4236	.065 .059 .066	.01 2.0 .01 1.7 .01 1.3 .03 1.0	
DDH #403 91-4237 DDH #403 91-4238 DDH #403 91-4239 DDH #403 91-4240 DDH #403 91-4241 DDH #403 91-4242	.102 .065 .053 .064	.30 1.0 .10 1.6 .03 1.0 .01 0.9 .01 1.3 .08 1.4	
I #403 91-4243 DDH #403 91-4244 DDH #403 91-4244 DDH #403 91-4245 DDH #403 91-4246 DDH #403 91-4247	.050 .058 .060	.07 1.2 .03 1.1 .01 0.9 .02 1.0 .25 3.1	
DDH #403 91-4248 DDH #403 91-4249 DDH #403 91-4250 DDH #403 91-4251 DDH #403 91-4252	.508 .125 .072	02 1.7 10 5.0 06 1.2 10 1.1 01 1.8	
DDH #403 91-4253 DDH #403 91-4254 DDH #403 91-4255 DDH #403 91-4255 DDH #403 91-4256	.227 .795	05 1.7 10 2.5 06 1.5 11 1.8	

*AU - 1 ASSAY TON.

MIN-EN LABORATORIES

Certified by



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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

Company: KENNECOTT CANADA Project: STIKINE COPPER

Attn: D.JOHNSON/E.YARROW

1S-0662-RA5

Date: SEP-11-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 12 CORE samples submitted SEP-03-91 by E.YARROW.

	Sample Number		AU-FIRE g/tonne (AG g/tonne		
	DDH #403 91-4257 DDH #403 91-4258 DDH #403 91-4259 DDH #403 91-4259 DDH #403 91-4260 DDH #403 91-4261	.108 .077 .148 .130 .310	.02 .07 .08 .01 .02	1.5 1.3 1.7 2.3 3.1		
	DDH #403 91-4262 DDH #403 91-4263 DDH #403 91-4264 DDH #403 91-4265 DDH #403 91-4265 DDH #403 91-4266	.462 .198 .287 .116 .100	.10 .04 .10 .02 .01	2.0 1.8 1.8 0.9 1.1		
$\left(\right)$	#403 91-4267 Jun #403 91-4268	. 146 . 108	.01 .01	2.0 2.2	 	*** ***

Certified by



LABORATORIES (DIVISION OF ASSAYERS CORP.) SDECIAL ISTS IN MINERAL ENVIRO

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

VIRONMENTS

Company: KENNECOTT CANADA Project: STIKINE COPPER Attn: D.JOHNSON/E.YARROW

1S-0675-RA1

Date: SEP-13-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted SEP-04-91 by ED YARROW.

Sample Number		J-FIRE /tonne g	AG //tonne		
DDH 405 91-5016 DDH 405 91-5017 DDH 405 91-5018 DDH 405 91-5019 DDH 405 91-5020	.117 .005 .018 .014 .012	.02 .01 .01 .02 .01	1.6 0.3 1.5 0.5 0.9		
DDH 405 91-5021 DDH 405 91-5022 DDH 405 91-5023 DDH 405 91-5024 DDH 405 91-5025	.013 .011 .035 .070 .011	.01 .01 .02 .02 .01	0.7 1.2 0.7 0.8 1.0		
) 405 91-5026 DDH 405 91-5027 DDH 405 91-5028 DDH 405 91-5029 DDH 405 91-5030	.029 .020 .033 .016 .010	.02 .01 .01 .01 .01	1.6 1.1 0.9 0.9 0.6		
DDH 405 91-5031 DDH 405 91-5032 DDH 405 91-5033 DDH 405 91-5034 DDH 405 91-5035	.012 .012 .018 .010 .015	.01 .02 .01 .01 .01	1.2 0.8 1.1 0.8 0.9		
DDH 405 91-5036 DDH 405 91-5037 DDH 405 91-5038 DDH 405 91-5039	.017 .012 .007 .071	.01 .01 .02 .05	1.1 1.4 1.2 0.7		

Certified by



Assay Certificate

NVIRONMENTS

KENNECOTT CANADA Company: STIKINE COPPER Project: Attn: D. JOHNSON/E. YARROW

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0675-RA2

Date: SEP-13-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/D MIN-EN LABS.

He hereby certify the following Assay of 2 CORE samples submitted SEP-04-91 by ED YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample	CU	*AU-FIRE	AG	
Number	%	g/tonne	g/tonne	
DDH 405 91-5040	.068	.06	1.3	
DDH 405 91-5041	.058	.02	1.0	

Certified by

BORATORIES (DIVISION OF ASSAYERS CORP.)

IRONMENTS

Assay Certificate

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS . ASSAYERS . ANALYSTS . GEOCHEMISTS

KENNECOTT CANADA INC. Company:

Project: SSTIKINE COPPER Attn:

MINERAL

D. JOHNSON/E. YARROW

Date: SEP-14-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 14 CORE samples submitted SEP-06-91 by ED YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne	
GC405 915001	.013	.01	2.0	
GC405 915002	.004	.03	2.0	
GC405 915003	.037	.03	2.1	
GC405 915004	.108	.08	1.9	
GC405 915005	.051	.02	2.6	
GC405 915006	.016	.02	2.0	
GC405 915007	.031	.03	2.1	
GC405 915008	.003	.01	. 6	
GC405 915009	.001	.01	. 4	
GC405 915010	.001	.01	.5	
6C405 915011	.001	.01	.6	
GC405 915012	.001	.01 -	.5	
6C405 915013	.006	.02	1.8	
GC405 915014	.160	.07	2.4	

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

15-0706-RA1

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

*AU = 1 ASSAY TON.

Certified by



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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

ENVIRONMENTS LABORATORIES

Company: KENNECOTT CANADA Project: STIKINE COPPER Attn: D.JOHNSON/E.YARROW

MINER AL

(DIVISION OF ASSAYERS CORP.)

1S-0729-RA1

Date: SEP-16-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 6 CORE samples submitted SEP-09-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Number % g/to	nne g/tonne	
	.02 25.8 .02 2.0	
GC 405 91-5045 ./011 1	.01 1.9 .01 2.2	
	.01 1.8 	

TAU - 1 ASSAY TON. Certified by MIN-EN LABORATORIES



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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

ENVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

Company: KENNECOTT CANADA Project: STIKINE COPPER Attn: D.JOHNSON/E.YARROW 1S-0747-RA1

Date: SEP-13-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 3 CORE samples submitted SEP-10-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne		
6C 409 91 5111 6C 409 91 5112 6C 409 91 5113	.031 .028 .030	.16 .02 .04	2.0 1.0 1.3	• We den wir and any main any main was also been any.	

*AU - 1 ASSAY TON.

Certified by

MINEN 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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

1S-0769-RA1

Company:	KENNECOTT CANADA	INC.
Project:	GALORE CREEK	
Attn:	D.JOHNSON/E.YARROW	

Date: SEP-19-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP.

3. KENNECOTT CANADA, C/D MIN-EN LABS.

We hereby certify the following Assay of 24 ROCK samples submitted SEP-12-91 by ED YARROW.

Sample Number		CU %	*AU-FIRE g/tonne	AG g/tonne	
6C 405 9 6C 405 9 6C 405 9 6C 405 9 6C 405 9	71-5050 71-5051 71-5052	 .151 .042 .030 .017 .007	.19 .03 .05 .01 .01	1.6 1.5 1.5 1.3 1.2	
GC 405 4 GC 405 4 GC 405 4 GC 405 4 GC 405 4	91-5055 91-5056 91-5057	.025 .030 .031 .070 .040	.04 .02 .01 .01 .01	1.8 1.0 1.3 1.2 0.9	Ceretriz y ni gal
GC 405 GC 405 GC 405 GC 405 GC 405	91-5060 91-5061 91-5062	.048 .025 .025 .007 .001	.01 .01 .14 .01 .01	1.1 1.4 2.0 1.4 0.5	Jal
6C 405 6C 405 6C 405 6C 405 6C 405 6C 405	91-5065 91-5066 91-5067	 .001 .002 .086 .013 .006	.01 .01 .01 .01 .01	0.8 0.6 0.6 0.4 0.8	
GC 405 GC 405 GC 405 GC 405 GC 405	91-5070 91-5071	.016 .014 .017 .006	.01 .01 .01 .01	0.6 0.9 0.8 1.0	

Certified by

MIN-EN LABORATORIES



• ENVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

Ez S. 6. 6⁰⁰⁰, In

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

Company: Project:	KENNECOTT CANADA GALORE CREEK	INC.			Date: SEP-19-9
Attn:	D.JOHNSON/E.YARROW		Сору	1. KENNECOTT	CANADA, VANCOUVER, B.C.
	DICOMICOUVE I HAROW				CANADA, C/D SMITHERS EXP.
<u>Ne hàn</u>	ahu namhittu Li			3. KENNECOTT	CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 17 ROCK samples submitted SEP-12-91 by ED YARROW.

	Sample Number			AU-FIRE g/tonne	AG g/tonne		
	GC 405 91-50 GC 405 91-50 GC 405 91-50 GC 405 91-50 GC 405 91-50	074 075 076	.007 .007 .006 .029 .008	.01 .01 .01 .01 .01	1.1 0.9 0.7 0.4 0.6		
· ((5C 405 91-50 5C 405 91-50 5C 405 91-50 5C 405 91-50 5C 405 91-50	79 80 81	.009 .007 .011 .013 .009	.01 .01 .01 .02 .01	0.6 0.5 0.5 1.0 0.4	Sentero in	
0 C C	5C 405 91-50 5C 405 91-50 5C 405 91-50 5C 405 91-50 5C 405 91-50 5C 405 91-50	84 85 36	.026 .037 .010 .016 .053	.02 .01 .01 .01 .01	0.7 1.0 0.5 0.6 0.8	log-	
	6C 405 91-508 6C 405 91-508		006 009	.01 .01	0.4 0.4		

*AU - 1 ASSAY TON.

Certified by

VANCOUVER OFFICE: 705 WEST 15TH STREET

NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-58 14 OR (604) 988-4524 FAX (604) 980-9621

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

SEP-19-91

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

SMITHERS LAB .: 3176 TATLOW ROAD

SMITHERS, B.C. CANADA VOJ 2N0 TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

IES

Company:	KENNECOTT CANADA	INC.	
Project:	GALORE CREEK		1
Attn:	D.JOHNSON/E.YARROW		

LABORATOR

(DIVISION OF ASSAYERS CORP.)

IRONMENTS

MINERAL

1S-0772-RA1

Date: SEP-19-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP. 3. KENNECOTT CANADA, C/D MIN-EN LABS.

He hereby certify the following Assay of 24 ROCK samples submitted SEP-13-91 by ED YARROW.

Sample Number		CU %	*AU-FIRE g/tonne	AG g/tonne	
DDH 410 DDH 410 DDH 410	91-4487 91-4488 91-4489 91-4490 91-4491	.018 .038 .020 .019 .059	.01 .01 .01 .01 .02	1.4 1.1 1.5 1.5 1.7	
DDH 410 DDH 410 DDH 410	91-4492 91-4493 91-4494 91-4495 91-4502	.029 .015 .033 .025 .013	.03 .01 .01 .01 .01	1.6 1.4 1.2 1.1 1.3	,
DDH 410 DDH 410 DDH 410	91-4503 91-4504 91-4505 91-4506 91-4507	.024 .045 .042 .051 .016	.01 .01 .03 .01	1.3 1.1 1.4 1.2 1.1	Entered
DDH 410 DDH 410 DDH 410	91-4511 91-4512 91-4513 91-4513 91-4514 91-4515	.001 .001 .038 .026 .086	.01 .01 .02 .01 .06	0.1 0.1 0.6 0.8 1.4	
DDH 410 DDH 410	91-4516 91-4517 91-4518 91-4523	.068 .520 .529 .142	, 05 . 14 . 17 . 11	1.5 2.7 4.3 1.8	

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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

Company:	KENNECOTT CANADA INC.
Project:	GALORE CREEK
Attn:	D.JOHNSON/E.YARROW

NVIRONMENTS ABORATORIES

(DIVISION OF ASSAYERS CORP.)

1S-0772-RA2

			Da	ate:	SEP-19-91
Сору	1.	KENNECOTT	CANADA,	VAN	COUVER, B.C.
	2.	KENNECOTT	CANADA,	C/0	SMITHERS EXP.
	3.	KENNECOTT	CANADA,	C/0	MIN-EN LABS.

He hereby certify the following Assay of 22 ROCK samples submitted SEP-13-91 by ED YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne		
DDH 410 91-4524 DDH 410 91-4525 DDH 410 91-4526 DDH 410 91-4527 DDH 410 91-4528	.108 .119 .208 .094 .176	.07 .08 .14 .11 .03	0.4 0.9 2.3 1.7 1.5		
DDH 410 91-4529 DDH 410 91-4539 DDH 410 91-4540 DDH 410 91-4541 DDH 410 91-4544	.067 .089 .018 .019 .167	.03 .04 .01 .02 .07	1.4 1.3 0.3 0.7 2.4		
DDH 410 91-4545 DDH 410 91-4546 DDH 410 91-4547 DDH 410 91-4548 DDH 410 91-4549	.187 .196 .450 .027 .200	.10 .13 .12 .01 .20	2.3 3.3 4.0 1.0 2.7	Senteral	
DDH 410 91-4550 DDH 410 91-4551 DDH 410 91-4552 DDH 410 91-4553 DDH 410 91-4554	.158 .249 .268 .216 .118	.11 .12 .13 .22 .05	2.7 3.1 3.1 2.5 2.9		
DDH 410 91-4555 DDH 410 91-4556	.082 .248	.01 .10	1.7 2.5		

Certified by

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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

KENNECOTT CANADA INC. Company: Project: GALORE CREEK D.JOHNSON/E.YARROW Attn:

(DIVISION OF ASSAYERS CORP.)

VIRONMENTS ABORATORIES

Date: SEP-19-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 8 ROCK samples submitted SEP-13-91 by ED YARROW.

Sample Number		CU ¥AU-FIR % g/tonn				
DDH 410 91-455 DDH 410 91-455 DDH 410 91-455 DDH 410 91-456 DDH 410 91-456 DDH 410 91-456	8 . 9 . 0 .	336 .2 402 .2 076 .0 164 .0 246 .1	4 3.6 2 1.8 9 2.7			
DDH 410 91-515 DDH 410 91-515 DDH 410 91-515 DDH 410 91-515		040 .0 132 .1 288 .4	2 1.8			

*AU - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES

1S-0772-RA3



SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

Company:	KENNECOTT CANADA INC,	
Project:	GALORE CREEK	
Attn:	D. JOHNSON/E. YARROW	

VIRONMENTS

LABORATORIES (DIVISION OF ASSAYERS CORP.)

MINERAL

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0773-RA1

						-21-91
Сору	1.	KENNECOTT	CANADA,	VANC	OUVER,	B.C.
	2.	KENNECOTT	CANADA,	C/D	SMITHE	RS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 DRILL CORE samples submitted SEP-12-91 by ED YARROW.

Sample	CU	¥AU−FIRE	AG	
Number	X	g/tonne	g/tonne	
DDH 409 91-5090	.047	.01	1.0	
DDH 409 91-5091	.033	.01	.5	
DDH 409 91-5092	.037	.02	1.1	
DDH 409 91-5093	.016	.01	.6	
DDH 409 91-5094	.015	.04	1.2	
DDH 409 91-5095	.073	.02	.8	ni Coroton
DDH 409 91-5096	.192	.15	2.7	
DDH 409 91-5097	.038	.01	.9	
DDH 409 91-5098	.024	.03	.8	
DDH 409 91-5098	.025	.01	.8	
DDH 409 91-5100 DDH 409 91-5101 DDH 409 91-5102 DDH 409 91-5103 DDH 409 91-5103 DDH 409 91-5104	.019 .009 .016 .023 .038	.01 .01 .01 .03 .10	.9 1.4 .2 .8 1.3	
DDH 409 91-5105	.030	.01	- 9	
DDH 409 91-5106	.032	.01	- 4	
DDH 409 91-5107	.033	.01	- 9	
DDH 409 91-5108	.062	.08	1 - 1	
DDH 409 91-5109	.070	.03	- 5	
DDH 409 91-5110	.041	.05	.4	
DDH 409 91-5114	.049	.11	1.0	
DDH 409 91-5115	.011	.01	.3	
DDH 409 91-5118	.018	.01	1.3	

*AU = 1 ASSAY TON.

mail

Certified by

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

NVIRONMENTS

BORATORIES

(DIVISION OF ASSAYERS CORP.)

Company: KENNECOTT CANADA Project: GALORE CREEK Attn: D.JOHNSON/E.YARROW

NINERAL

1S-0773-RA2

Date: SEP-20-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted SEP-12-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number	Cl		AG g/tonne		:
DDH 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51	20 .01 21 .00 22 .00	4 .02 7 .01 B .01	1.3 1.3 1.4 0.9 0.2		
DDH 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51	25 .04 26 .02 27 .03	0 .02 4 .02 9 .07	0.6 1.6 1.3 1.6 1.3	Conterned m Bal	
2 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51	.03 (31 .02 (32' .07	7 .08 5 .09 1 .22	2.2 2.1 0.7 2.3 2.2		•
DDH 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51 DDH 409 91-51	135 .04 136 .17 137 .05	4 .02 7 .20 8 .02	1.6 1.9 1.5 1.0 1.7		•
DDH 409 91-5: DDH 409 91-5: DDH 409 91-5: DDH 409 91-5: DDH 409 91-5:	140 .02 141 .05	.08 2	1.4 1.7 2.2 2.0		

*AU - 1 ASSAY TON.

Certified by

MIN EN LABORATORIES



• EN / RONMENTS 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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

Company:	KENNECOTT CANADA
Project:	GALORE CREEK
Attn:	D. JOHNSON/E. YARROW

1S-0773-RA3

Date: SEP-20-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C.

2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 12 CORE samples submitted SEP-12-91 by E.YARROW.

Sample	CU	*AU-FIRE	AG	
Number	%	g/tonne	g/tonne	
DDH 409 91-5143	.051	.11	0.8	
DDH 409 91-5144	.024	.03	1.4	
DDH 409 91-5145	.018	.02	0.6	
DDH 409 91-5146	.023	.01	0.8	
DDH 409 91-5147	.010	.01	0.6	
DDH 409 91-5148 DDH 409 91-5149 DDH 409 91-5150 DDH 409 91-5151 DDH 409 91-5152	.048 .027 .081 .031 .064	.02 .01 .02 .02 .03	0.7 0.7 1.0 1.4 1.5	Enterned mithe
407 71-5153	.086	.10	0.8	
DH 407 71-5154	.045	.08	1.1	

*AU - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

ENVIRONMENTS LABORATORIES (DIVISION OF ASSAVERS CORP.)

Company:	KENNECOTT CANADA
Project:	GALORE CREEK
Attn:	D.JOHNSON/E.YARROW

MINERAL

Date: SEP-21-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 14 CORE samples submitted SEP-16-91 by ED YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number			J-FIRE 'tonne g	AG /tonne					
GC 409	91-5167	, 134	,08	1.6					
GC 409	91-5168	.086	.17	1.4					
GC 409	91-5169	.241	. 49	4.1		2			
GC 409	91-5170	.049	.01	0.5	. de	اللغ			
GC 409	91-5171	.006	.01	0.7	inder	· · · ·			
GC 409	91-5172	.012	.01	0,2	100	 לי		· · ·	
GC 409	91-5173	.123	.02	1.2	J.0*	D.			
6C 409	91-5174	.015	.01	0.1					
GC 409		.189	.91	2.5					
GC 409		.184	.67	2.0					
·							*** *** *** *** ***		
6. +09	91-5177	.227	.54	2.7					
GC 409	91-5178	.052	.01 ·	1.6					
6C 409	91-5179	027	.0Ż	1.2					
6C 409	91-5180	.017	.01	0.7					

AU = 1 ASSAY TON. Certified by Roumail

<u>1S-0788-RA1</u>

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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

NVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

MINERAL

Assay Certificate

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Company:	KENNECOTT CANADA	INC.
Project:	GALORE CREEK	
Attn:	D.JOHNSON/E.YARROW	

1S-0789-RA1 Date: SEP-21-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted SEP-16-91 by ED YARROW.

Sample Number			CU %	*AU-FIRE g/tonne	AG g/tonne	
GC 410 GC 410 GC 410	91-4496 91-4497 91-4498 91-4499 91-4500	- <u> </u>	.030 .036 .019 .017 .016	.01 .05 .03 .01 .01	1.6 1.6 1.2 1.3 1.4	Plotted on Jag.
GC 410 GC 410 GC 410	91-4501 91-4508 91-4509 91-4510 91-4519		.016 .043 .024 .027 .545	.02 .01 .02 .02 .18	1.3 1.8 1.5 .9 3.2	
GC 410 GC 410 GC 410	91-4520 91-4521 91-4522 91-4530 91-4531		.993 .624 .730 .043 .106	.39 .28 .28 .02 .02	6.0 3.5 6.2 1.5 1.7	
GC 410 GC 410 GC 410	91-4532 91-4533 91-4534 91-4535 91-4535 91-4536		.101 .057 .078 .054 .039	.08 .02 .02 .01 .01	1.6 1.4 1.4 1.2 1.5	
6C 410) 91-4537) 91-4538) 91-4542) 91-4543		.083 .103 .110 .110 .117	.02 .02 .09 .02	1.6 2.3 1.7 1.4	

*AU = 1 ASSAY TON.

Certified by



Assay Certificate

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0789-RA2

Company:	KENNECOTT CANADA	INC.
Project:	GALORE CREEK	
Attn:	D. JOHNSON/E. YARROW	

VIRONMENTS

ABORATOR

(DIVISION OF ASSAYERS CORP.)

Date: SEP-20-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 11 ROCK samples submitted SEP-16-91 by ED YARROW.

Sample Number	CU *AU-FIRE % g/tonne			
GC 410 91-4562 GC 410 91-4563 GC 410 91-5158 GC 410 91-5159 GC 410 91-5160	.142 .02 .087 .01 .096 .03 .091 .02 .076 .02	1.1 1.9 2.1		
GC 410 91-5161 GC 410 91-5162 GC 410 91-5163 GC 410 91-5164 GC 410 91-5165	.057 .01 .025 .01 .055 .02 .108 .16 .045 .01		Platted cc 409A	
GC 410 91-5166	.053 .01	1.5	, and any and any an	ar an ar an an an an an an an an

*AU - 1 ASSAY TON.

Certified by

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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Certificate

VIRCHMENTS ABORATORIES

Date: SEP-26-91

1S-0809-RA1

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

We hereby certify the following Assay of 6 CORE samples submitted SEP-19-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number	CU *AU-FIRE % g/tonne	AG g/tonne	
DDH 398 91-4564	.385 .01	5.7	
DDH 398 91-4565	.376 .12	2.2	
DDH 398 91-4566	.003 .01	2.1	
DDH 398 91-4567	.003 .01	1.6	
DDH 398 91-4568	.004 .03	2.0	
DDH 398 91-4569	,007 ,01	0-6	
	ч.		

Certified by

MIN EN LABORATORIES

Company:

Project:

Attn:

*AU - 1 ASSAY TON.

ASSay

GALDRE CREEK

KENNECOTT CANADA

D.JOHNSON/E.YARROW

VINER AL

(DIVISION OF ASSAYERS CORP.)

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

1S-0811-RA1

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

ENVIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

Company: Project: Attn:

KENNECOTT CANADA GALORE CREEK D. JOHNSON/E. YARROW

THIN GRADE

Date: SEP-26-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 2 CORE samples submitted SEP-19-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne		• • •		
DDH 407 91-5116 DDH 409 91-5117	.026 .015	.01 .02	1.6 1.5	ontered	 	aning from allow first and field and gains	
				lez.	•		

*AU - 1 ASSAY TON,

Certified by

MIN-EN LABORATORIES



ИІЛ	ERA	te Met		
• EN	VIRC	INN	EN	15
LA	BOR	ATC	RIE	S
(DIVISIO	ON OF ASSA	ERS CORP	u)	

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

KENNECOTT CANADA Company: Project: GALORE CREEK Attn: D. JOHNSON/E. YARROW

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

SMITHERS LAB .:

S176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0821-RA1

Date: SEP-28-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 20 CORE samples submitted SEP-21-91 by ED YARROW.

Sample	CU	*AU−FIRE	AG	
Number	%	g/tonne	g/tonne	
DDH 414 91-4619	.088	.01	2.1	
DDH 414 91-4620	.085	.01	1.3	
DDH 414 91-4621	.050	.01	2.6	
DDH 414 91-4622	.029	.02	3.1	
DDH 414 91-4623	.055	.03	3.3	
DDH 414 91-4624	.083	.06	2.6	ontered
DDH 414 91-4625	.088	.03	2.0	
DDH 414 91-4626	.036	.01	1.4	
DDH 414 91-4627	.413	.64	1.7	
DDH 414 91-4628	.156	.11	1.1	
DDH 414 91-4629	.100	.07	1.2	
DDH 414 91-4630	.274	.08	2.6	
DDH 414 91-4631	.207	.03	2.0	
DDH 414 91-4632	.245	.04	1.9	
DDH 414 91-4633	.205	.03	1.9	
DDH 414 91-4634	.047	.01	1.6	
DDH 414 91-4635	.090	.01	1.8	
DDH 414 91-4636	.088	.14	2.0	
DDH 414 91-4637	.399	.03	1.9	
DDH 414 91-4638	1.056	.01	3.2	

*AU = 1 ASSAY TON.

Certified by



Company:

Project:

Attn:

ENVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

KENNECOTT CANADA INC.

STIKINE COPPER D. JOHNSON/E. YARROW

Date: OCT-02-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O NIN-EN LABS.

He hereby certify the following Assay of 19 ROCK samples submitted SEP-26-91 by ED YARRÓW.

Sampl e Number	CÙ X	¥AU−FIRE g/tonne	AG g/tonne		• •	
DDH 414 91-4639 DDH 414 91-4640 DDH 414 91-4641 DDH 414 91-4642 DDH 414 91-4643	.213 .270 .205 .113 .354	.02 .05 .07 .01 .02	1.7 1.8 1.9 2.3 2.1			
DDH 414 91-4644 DDH 414 91-4645 DDH 414 91-4646 DDH 414 91-4647 DDH 414 91-4648	.509 .837 .385 .560 .404	.01 .20 .02 .02 .02	2.3 3.6 4.1 2.7 2.1			
DDH 414 91-4650 DDH 414 91-4651 DDH 414 91-4653 DDH 414 91-4654 DDH 414 91-4655	.324 .229 .553 .114 .194	.11 .12 .32 .12 .01	2.1 2.1 1.7 1.2 1.3	Jantered		
DDH 414 91-4656 DDH 414 91-4657 DDH 414 91-4658 DDH 414 91-4658	.470 .680 .223 .156	.01 .11 .09 .01	3.1 4.1 1.7 1.2			

Certified by

*AU - 1 ASSAY TON.

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

1S-0855-RA1

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-58 14 OR (604) 988-4524 FAX (604) 980-9621

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

MINERAL

Assay Certificate

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

KENNECOTT CANADA INC. Company: STIKINE COPPER Project: Attn:

ENVIRONMENTS

ABORATORIES

(DIVISION OF ASSAYERS CORP.)

D.JOHNSON/E.YARROW

Date: OCT-04-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 ROCK samples submitted SEP-26-91 by ED YARROW.

Sample Number	CU *AU-FIRE AG % g/tonne g/tonne	
DDH 417 91-4660 DDH 417 91-4661 DDH 417 91-4662 DDH 417 91-4663 DDH 417 91-4664	.063 .01 0.9 .075 .02 0.9 .069 .02 0.7 .039 .01 0.6 .019 .01 1.0	ENTERED
DDH 417 91-4665 DDH 417 91-4666 DDH 417 91-4667 DDH 417 91-4668 DDH 417 91-4668 DDH 417 91-4669	.065 .10 2.0 .074 .13 2.1 .043 .30 1.4 .080 .17 2.3 .355 .20 2.4	
DDH 417 91-4670 DDH 417 91-4671 DDH 417 91-4672 DDH 417 91-4673 DDH 417 91-4673 DDH 417 91-4674	.329 .11 1.2 1.890 .08 2.3 1.010 .13 1.9 .412 .12 2.1 .255 .10 2.2	
DDH 417 91-4675 DDH 417 91-4676 DDH 417 91-4677 DDH 417 91-4678 DDH 417 91-4679	.033 .02 1.0 .026 .02 1.8 .038 .03 1.4 .044 .02 1.1 .063 .01 1.4	
DDH 417 91-4680 DDH 417 91-4681 DDH 417 91-4682 DDH 417 91-4683 DDH 417 91-4683	.072 .04 2.7 .050 .02 1.3 .060 .02 1.5 .053 .01 1.8	

*AU - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES

1S-0858-RA1

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

SMITHERS LAB .: S176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

VIRONMENTS ABORATORIES

Company:	KENNECOTT CANADA	INC.
Project:	STIKINE COPPER	
Attn:	D. JOHNSON/E. YARROW	

HINERAL

(DIVISION OF ASSAYERS CORP.)

1S-0858-RA2

Date: OCT-10-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C.

2. KENNECOTT CANADA, C/D SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted SEP-26-91 by ED YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample	CU *AU-FIRE	AG	
Number	% g/tonne	g/tonne	
DDH 417 91-4684 DDH 417 91-4685 DDH 417 91-4685 DDH 417 91-4686 DDH 417 91-4687 DDH 417 91-4688	.118 .13 .155 .07 .071 .08 .102 .09 .148 .10	1.8 1.6 0.8 2.3 2.0	
DDH 417 91-4689	.140 .13	2.4	ENTERED
DDH 417 91-4690	.121 .05	1.3	
DDH 417 91-4691	.068 .01	0.4	
DDH 417 91-4691	.213 .14	1.7	
DDH 417 91-4693	.061 .02	1.1	
H 417 91-4694 DDH 417 91-4695 DDH 417 91-4695 DDH 417 91-4696 DDH 417 91-4697 DDH 417 91-4698	.030 .01 .019 .01 .088 .02 .037 .02 .027 .01	0.8 0.8 1.3 0.9 1.2	
DDH 417 91-4699 DDH 417 91-4700 DDH 417 91-4700 DDH 417 91-4701 DDH 417 91-4702 DDH 417 91-4703	.050 .46 .017 .08 .084 .04 .038 .03 .040 .10	1.8 1.0 1.2 1.4 1.0	
DDH 417 91-4704	.177 .09	1.6	
DDH 417 91-4705	.190 .12	1.6	
DDH 417 91-4706	.128 .06	0.7	
DDH 417 91-4707	.263 .11	2.4	

*AU - 1 ASSAY TON.

MIN-EN LABORATORIES

Certified by

1S-0858-XA1 Assay Certificate Date: OCT-17-91 KENNECOTT COPPER Company: Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. STIKINE COPPER 2. KENNECOTT CANADA, C/O SMITHERS EXP. Project: D. JOHNSON/E. YARROW 3. KENNECOTT CANADA, C/O MIN-EN LABS. Attn: He hereby certify the following Assay of 6 PULP samples submitted OCT-14-91 by D.JOHNSON. CU-OXIDE CUNATIVE Sample AS CU % AS CU % Number .001 ,107 DDH 417 91-4669 .002 ,199 DDH 417 91-4670 .040 1.100 DDH 417 91-4671 .005 .625 DDH 417 91-4672 ,004 . 210 DDH 417 91-4673 .098 .001 DDH 417 91-4674 Certified by MAN-EN LABORATORIES

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

MINER AL

ENVIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)



Project:

Attn:

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

VIRONMENTS

Company: KENNECOTT CANADA INC.

STIKINE COPPER

D. JOHNSON/E. YARROW

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0858-RA3

Date: OCT-10-91

Copy 1. KENNECDTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 14 CORE samples submitted SEP-26-91 by ED YARROW.

Sample Number		CU %		AG g/tonne			
DDH 41 DDH 41 DDH 41	7 91-4708 7 91-4709 7 91-4710 7 91-4711 7 91-4711 7 91-4712	.179 .197 .158 .159 .212	.24 .10 .08 .07 .15	1.4 2.4 2.5 2.4 2.5			
DDH 41 DDH 41 DDH 41	7 91-4713 7 91-4714 7 91-4715 7 91-4715 7 91-4716 7 91-4717	.166 .060 .024 .059 .070	.15 .33 .10 .11 .10	2.4 1.6 1.0 1.3 1.0			
DDH 41 DDH 41	7 91-4718 7 91-4719 7 91-4720 7 91-4721	.071 .058 .103 .064	.15 .05 .03 .02	0.5 0.5 1.0 0.6			

*AU - 1 ASSAY TON.

Certified by



Assay Certificate

ENVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

Company: KENNECOTT CANADA INC. Project: GALORE CREEK Attn: D.JOHNSON/E.YARROW 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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0860-RA1

Date: OCT-05-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 7 CORE samples submitted SEP-26-91 by ED YARROW.

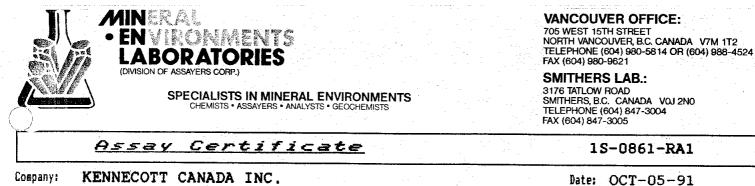
SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number		AU-FIRE g/tonne	AG g/tonne	
DDH 419 91-4722 DDH 419 91-4723 DDH 419 91-4723 DDH 419 91-4724 DDH 419 91-4725 DDH 419 91-4726	.124 .058 .141 .061 .141	.08 .02 .02 .02 .03	3.1 2.2 2.0 1.8 2.1 entred	
DDH 419 91-4727 DDH 419 91-4728	.102 .071	.02 .01	1.8 1.9	

** II = 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES



Company: KENNECOTT CANADA INC. Project: GALORE CREEK Attn: D.JOHNSON/E.YARROW

*AU = 1 ASSAY TON.

Date: OCT-05-9 Copy 1. KENNECDTT CANADA, VANCOUVER, B.C. 2. KENNECDTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 3 CORE samples submitted SEP-26-91 by ED YARROW.

Sample Number	CU *AU-FIR % g/tonn			
DDH 420 91-5353	.013 .0	1 1.0 >	>	یپ سند همه وجه نیم بین بین بین می می می منه منه منه این این این این می بید می مید این این این این این
DDH 420 91-5354	.015 .0	6	entered.	
DDH 420 91-5355	.021 .0	1 1.1) – se se transformer e	

Certified by



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

SMITHERS LAB .: SITE TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

VIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

KENNECOTT CANADA Company: Project: GALORE CREEK Attn: D.JOHNSON/E.YARROW

1S-0872-RA1

Date: OCT-07-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 16 CORE samples submitted SEP-27-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number		CU *AU-F1 % g/tor		6 e	
DDH 419 91- DDH 419 91- DDH 419 91- DDH 419 91- DDH 419 91- DDH 419 91-	-4743 -4744 -4745	.022 .058 .183	01 1. 01 1. 01 1. 15 2. 03 2.	2 3 5	
DDH 419 91- DDH 419 91- DDH 419 91- DDH 419 91- DDH 419 91- DDH 419 91-	-4748 -4749 -4750	.169 .146 .068	07 3. 03 3. 27 3. 16 3. 26 3.	1 2 2 0 2 0 0 1 0 2	De.
DDH 419 91- DDH 419 91- DDH 419 91- DDH 419 91- DDH 419 91- DDH 419 91-	-4753 -4754 -4755 1	.192 . .123 . .640 9.	21 4. 34 3. 12 2. 18 8. 30 14.	5 (
DDH 419 91-	-4757 2	2.290 10.	88 20.	1	

AU - 1 ASSAY TON.

Certified by



SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

NVIRONMENTS LABORATORIES

(DIVISION OF ASSAYERS CORP.)

KENNECOTT CANADA Company: GALORE CREEK Project: D. JOHNSON/E. YARROW Attn:

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

SMITHERS LAB .: SING TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0873-RA1

Date: OCT-07-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted SEP-27-91 by E.YARROW.

Sample Number	CU *AU-FIF % g/tonn		
DDH 420 91-5356 DDH 420 91-5357 DDH 420 91-5358 DDH 420 91-5359 DDH 420 91-5360	.036 .0 .008 .0 .018 .1 .006 .0 .025 .0	0.9 0 1.0 0 1.1	
DDH 420 91-5361 DDH 420 91-5362 DDH 420 91-5363 DDH 420 91-5364 DDH 420 91-5365	.004 .0 .001 .0 .022 .0 .041 .0 .024 .0	0.6 01 0.6 01 1.1 04 1.7	
420 91-5366 DDH 420 91-5367 DDH 420 91-5368 DDH 420 91-5369 DDH 420 91-5370)1 1.0	Sentered
DDH 420 91-5371 DDH 420 91-5372 DDH 420 91-5373 DDH 420 91-5374 DDH 420 91-5375	.016 .0 .028 .0 .025 .0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
DDH 420 91-5376 DDH 420 91-5377 DDH 420 91-5378 DDH 420 91-5379	.005	01 1.0 02 1.1 02 0.5 02 0.6	

*AU - 1 ASSAY TON.

Certified by



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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

<u>Assay Certificate</u>

VIRONMENTS

LABORATORIES (DIVISION OF ASSAYERS CORP.)

Company: **KENNECOTT CANADA** Project: GALDRE CREEK Attn: D.JDHNSON/E.YARROW

*AU - 1 ASSAY TON.

1S-0873-RA2

Date: OCT-07-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C.

2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 16 CORE samples submitted SEP-27-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample	CU	¥AU−FIRE	AG	
Number	%	g/tonne	g/tonne	
DDH 420 91-5380	.001	.01	0.5	
DDH 420 91-5381	.001	.01	0.4	
DDH 420 91-5382	.006	.01	0.8	
DDH 420 91-5383	.015	.02	0.5	
DDH 420 91-5384	.006	.01	0.9	
DDH 420 91-5385	.008	.02	0.8 (Zertered.
DDH 420 91-5386	.125	.18	2.5	
DDH 420 91-5387	.006	.02	0.5	
DDH 420 91-5388	.034	.01	1.8	
DDH 420 91-5389	.016	.01	1.3	
L 420 91-5390	.002	.01	1.0	
DDH 420 91-5391	.002	.01	0.6	
DDH 420 91-5392	.012	.02	0.6	
DDH 420 91-5393	.005	.02	0.7	
DDH 420 91-5394	.001	.01	0.5	
DDH 420 91-5395	.001	.01	0.7	

Certified by



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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

VIRONMENTS **ABORATORIES**

(DIVISION OF ASSAYERS CORP.)

1S-0876-RA1

Company: KENNECOTT CANADA Project: GALORE CREEK

Attn: D. JOHNSON/E. YARRW

Date: OCT-07-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 17 CORE samples submitted SEP-30-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS . ASSAYERS . ANALYSTS . GEOCHEMISTS

Sampl Numbe		CU %	*AU-FIRE g/tonne	AG g/tonne	
DDH 4 DDH 4 DDH 4	20 91-5396 20 91-5397 20 91-5398 20 91-5399 20 91-5399 20 91-5400	.001 .014 .015 .046 .141	.01 .01 .01 .04 .14	0.5 1.0 1.0 1.6 3.3	
DDH 4 DDH 4 DDH 4	20 91-5401 20 91-5402 20 91-5403 20 91-5404 20 91-5405	.036 .035 .024 .022 .017	.03 .03 .02 .01 .01	1.2 0.9 1.2 1.2 1.0) entired
DDH 4 DDH 4 DDH 4	20 91-5406 20 91-5407 20 91-5408 20 91-5409 20 91-5410	.023 .022 .030 .024 .001	.01 .02 .01 .01	0.7 0.8 1.2 0.6 0.4	
	20 91-5411 20 91-5412	.001 .001	.01 .01	0.5 0.4	

AU - 1 ASSAY TON.

Certified by

MIN EN LABORATORIES



Assay Certificate

Company: KENNECOTT CANADA Project: GALORE CREEK Attn: D.JOHNSON/E.YARROW 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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0877-RA1

Date: OCT-07-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted SEP-30-91 by E.YARROW.

Sample Number	CU *AU-FIRE % g/tonne	AG g/tonne	ara an An Anna an Anna Anna An Anna Anna A	
DDH 419 91-4729 DDH 419 91-4730 DDH 419 91-4731 DDH 419 91-4732 DDH 419 91-4733	.095 .03 .230 .27 .106 .04 .064 .02 .040 .11	1.9 2.5 2.0 1.9 2.2		
DDH 419 91-4734 DDH 419 91-4735 DDH 419 91-4736 DDH 419 91-4737 DDH 419 91-4738	.051 .16 .056 .03 .064 .12 .056 .20 .062 .11	2.9 3.3 2.4 3.0 2.5		
<pre>419 91-4739 L. 419 91-4740 DDH 419 91-4741 DDH 419 91-4758 DDH 419 91-4759</pre>	.046 .02 .008 .01 .012 .11 1.612 2.56 2.390 2.88	1.8 1.2 1.6 10.2 19.6	entered	
DDH 419 91-4760 DDH 419 91-4761 DDH 419 91-4762 DDH 419 91-4763 DDH 419 91-4764	1.435 1.86 .576 .52 .177 .18 .123 .10 .205 .12	13.1 4.2 2.1 3.0 3.2		
DDH 419 91-4765 DDH 419 91-4766 DDH 419 91-4767 DDH 419 91-4768	.181 .07 .177 .10 .145 .09 .140 .08	3.2 2.5 2.2 2.0	1	

*AU - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES

J	HINERAL 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 SMITHERS LAB: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2N0 TELEPHONE (604) 847-3004 FAX (604) 847-3005
	Assay Certificate	1S-0877-RA2
Company: Project: Attn:	KENNECOTT CANADA GALORE CREEK D.JOHNSON/E.YARROW	Date: OCT-07-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.
<i>He her</i> submit	eby certify the following Assay of ted SEP-30-91 by E.YARROW.	1 CORE samples
Sample Number	CU *AU-FIRE AG % g/tonne g/tonne	\
DDH 419	91-4769 .110 .03 1.2	entiree.

*AU - 1 ASSAY TON.

the Certified by

	MIN • EN LAE (DIVISION	ARONMEN BORATORIE OF ASSAYERS CORP.) SPECIALISTS IN MI CHEMISTS + ASSAYERS	S NERAL ENVI			705 WEST 15T NORTH VANCO TELEPHONE (FAX (604) 980- SMITHERS 3176 TATLOW	UVER, B.C. CANADA V7M 004) 980-5814 R (604) 99 9621 5 LAB.: ROAD , CANADA VOJ 2N0 304) 847-3004	1T2 38-4524
	Assa	y Certi:	ficat	<u>e</u>		15	-0891-RA1	
	:: GALORE CR D.JOHNSON Dereby certi			ay of 16	2. 3.	KENNECOTT CANADA, VANCI KENNECOTT CANADA, C/O I KENNECOTT CANADA, C/O I	SMITHERS EXP.	
Sampl Numbe			U-FIRE /tonne	AG g/tonne				
6C 42 6C 42 6C 42	20 91-5425 20 91-5426 20 91-5427 20 91-5428 20 91-5428	.326 .165 .055 .039 .110	.88 .30 .11 .04 .12	3.3 2.5 1.8 1.4 1.7				
GC 42 GC 42 GC 42	20 91-5430 20 91-5431 20 91-5438 20 91-5439 20 91-5440	.265 .322 .093 .065 .271	.64 .73 .21 .20 .17	1.8 3.5 2.1 2.6 3.3		Entered		
42 42 6C 42	20 91-5441 20 91-5442 20 91-5443 20 91-5443 20 91-5444 20 91-5445	.037 .088 .047 .029 .062	.09 .10 .07 .05 .02	1.0 1.6 1.6 2.2 1.4		log		
GC 42	20 91-5446	. 150	- 17	1.8				<u> </u>

*AU - 1 ASSAY TON. Certified by____

MIN-EN LABORATORIES



Attn:

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

	and the second	and the second
Company:	KENNECOTT CANADA	INC.
Project:	STIKINE COPPER	

D. JOHNSON/E. YARROW

NVIRONMENTS ABORATORIES

1INERAL

(DIVISION OF ASSAYERS CORP.)

Date: OCT-21-91 Copy 1. KENNECDIT CANADA, VANCDUVER,B.C. 2. KENNECDIT CANADA, C/O SMITHERS EXP. 3. KENNECDIT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 ROCK samples submitted OCT-10-91 by ED YARROW.

Sample Number		CU 7#	*AU-FIRE g/tonne g	AG /tonne	
GC 427 GC 427 GC 427	91-5450 91-5451 91-5452 91-5453 91-5453 91-5454	.002 .007 .006 .003 .002	.01 .01 .03 .01 .01	1.6 1.3 1.7 1.8 0.8	•
GC 427 GC 427 GC 427	91-5455 91-5456 91-5457 91-5458 91-5458 91-5459	.006 .006 .011 .002 .003	.01 .01 .05 .01 .01	2.0 2.1 1.6 1.5 1.6	ENTERED IN
GC 427 GC 427 GC 427	91-5460 91-5461 91-5462 91-5463 91-5463	.005 .006 .007 .004 .003	.01 .02 .01 .02 .02	2.2 2.0 1.9 1.7 1.5	L0G7
GC 427 GC 427 GC 427	91-5465 91-5466 91-5467 91-5468 91-5468	.005 .008 .005 .004 .004	.01 .03 .02 .03 .01	1.8 2.2 2.0 1.7 1.8	
GC 427 GC 427	91-5470 91-5471 91-5472 91-5473	.003 .004 .005 .003	.01 .02 .03 :04	1.6 1.3 1.7 1.4	

*AU - 1 ASSAY TON.

Certified by

MIN-EN LABORATORIES

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Company:	KENNECOTT CANADA	INC.
Project:	STIKINE COPPER	
Attn:	D.JOHNSON/E.YARROW	

VIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

MINERAL

Date: OCT-21-91 Copy 1. KENNECOTT CANADA, VANCDUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 ROCK samples submitted OCT-10-91 by ED YARROW.

Sample	CU *AU-FIRE	AG	
Number	% g/tonne g/	tonne	
GC 427 91-5474 GC 427 91-5475 GC 427 91-5475 GC 427 91-5476 GC 427 91-5477 GC 427 91-5478	.003 .01 .002 .01 .005 .01 .002 .02 .002 .01	1.0 1.2 1.6 1.4 1.3	
GC 427 91-5479	.003 .02	1.5	
GC 427 91-5480	.001 .01	1.2	
GC 427 91-5481	.002 .01	1.4	
GC 427 91-5482	.006 .01	1.5	
GC 427 91-5483	.003 .01	1.1	
GC 427 91-5484	.004 .07	1.2	
GC 427 91-5485	.005 .01	1.2	
GC 427 91-5486	.006 .01	1.4	
GC 427 91-5487	.010 .01	2.3	
GC 427 91-5488	.011 .01	1.3	
GC 427 91-5489	.007 .01	1.4	
GC 427 91-5490	.005 .02	1.0	
GC 427 91-5491	.003 .01	1.2	
GC 427 91-5492	.010 .01	1.9	
GC 427 91-5493	.015 .01	1.6	
6C 427 91-5494 6C 427 91-5495 6C 427 91-5495 6C 427 91-5496 6C 427 91-5497	.005 .01 .002 .02 .005 .01 .005 .01	1.3 1.5 1.1 1.2	

*AU -1 ASSAY TON.

MIN-EN LABORATORIES

Certified by

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

MINERAL

Company:

Project:

Attn:

VIRONMENTS

KENNECOTT CANADA INC.

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

STIKINE COPPER

D. JOHNSON/E. YARROW

Assay Certificate

Date: OCT-21-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

We hereby certify the following Assay of 16 ROCK samples submitted OCT-10-91 by ED YARROW.

Sample Number		CU %		AG g/tonne			und gene spin man stati gene stre sam bare gene man and
6C 427 6C 427 6C 427	91-5498 91-5499 91-5500 91-5501 91-5502	.011 .008 .005 .121 .024	.01 .07	1.2 1.1 0.8 2.9 2.1			· · · · · · · · · · · · · · · · · · ·
GC 427 GC 427 GC 427	91-5503 91-5504 91-5505 91-5505 91-5506 91-5507	.004 .003 .003 .003 .005	.02 .01 .01	1.2 1.2 1.4 1.0 1.5		ENTERED	
GC 427 GC 427 GC 427	7 91-5508 7 91-5509 7 91-5510 7 91-5511 7 91-5511 7 91-5512	. 003 . 004 . 002 . 004 . 003	+ .01 2 .01 + .03	1 = 4 1 = 4 1 = 7	an a	1~	
GC 42	7 91-5513	.00	3 ,01	<u>i</u> 4		LoG	

*AU - 1 ASSAY TON.

Certified by

MAN-EN LABORATORIES

1S-0936-RA3



ENVICENTS LABORATORIES (DIVISION OF ASSAVERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

VANCOUVER OFFICE: 705 WEST 15TH STREET

NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-58 14 OR (604) 988-4524 FAX (604) 980-9621

SMITHERS LAB.:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0948-RA1

Company:	KENNECOTT CANADA	INC.
Project:	STIKINE COPPER	
Attn:	D.JOHNSON/E.YARROW	

Date: OCT-21-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP. 3. KENNECOTT CANADA, C/D MIN-EN LABS.

We hereby certify the following Assay of 1 ROCK samples submitted OCT-15-91 by ED YARROW.

Sample	сIJ		AG
Number		g/tonne	g/tonne
GC 427 91-5509	.002	.02	1.8

already assayed m 15-0936-RA3

*AU - 1 ASSAY TON.

Certified by



SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

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

SMITHERS LAB .: CMITTERS LAD. 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

VANCOUVER OFFICE:

Company:	KENNECOTT CANADA	INC,
Project:	STIKINE COPPER	
Attn:	D.JOHNSON/E.YARROW	

NVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

1	n for a start and a start a	D	ate:	OCT-21-91
				COUVER,B.C.
2.	KENNECOTT	CANADA,	C/0	SMITHERS EXP.
3.	KENNECOTT	CANADA,	C/0	MIN-EN LABS

He hereby certify the following Assay of 24 CORE samples submitted OCT-16-91 by ED YARROW.

Sample Number		CU %	*AU-FIRE g/tonne	AG g/tonne	
	91-9011	.004 .065 .117 .113 .024	.01 .02 .02 .10 .03	0.5 1.3 2.3 2.0 1.1	ENTERED
GC 432 GC 432	91-9022 91-9023	.077 .036 .029 .151 .055	.04 .06 .10 .10 .09	2.9 1.7 2.0 2.9 2.6	1 1/
6C 432 6C 432 6C 432 6C 432 6C 432 6C 432	91-9027 91-9031	.050 .035 .136 .102 .091	.02 .01 .13 .06 .05	2.2 2.1 3.1 2.3 2.0	LOG
GC 432	91-9036 91-9037	.108 .032 .024 .015 .013	.31 .02 .01 .01 .01	2.8 1.4 1.4 2.0 .7	
6C 432 6C 432 6C 432 6C 432 6C 432	91-9043 91-9044	.088 .006 .010 .017	.03 .02 .01 .03	2.1 1.3 1.2 1.5	

mark Certified by



Company:

Project:

Attn:

ENVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

KENNECOTT CANADA INC.

STIKINE COPPER

D. JOHNSON/E. YARROW

VINERAL

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Assay Certificate

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0956-RA2

Date:	OCT-21-91	
-------	-----------	--

- Copy 1. KENNECOTT CANADA, VANCOUVER, B.C.
 - 2. KENNECOTT CANADA, C/O SMITHERS EXP.
 - 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 4 ROCK samples submitted OCT-16-91 by ED YARROW.

Sample Number	CU X	∦AU-FIRE g∕tonne	AG g/tonne			
GC 432 91-9046 GC 432 91-9047	.041 .052	.02	2.3 2.4	EI	WTERED	
GC 432 91-9048 GC 432 91-9049	.020 .007	.02 .04	1.6 0.8		N	

LOG

*AU - 1 ASSAY TON.

Certified by

MÉN-EN LABORATORIES

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Company:	KENNECOTT CANADA INC.	
Project:	STIKINE COPPER	
Attn:	D. JOHNSON/E. YARROW	

VIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

MINERAL

1S-0957-RA1

		- 11. 1	D	ate:	OCT	-22-	91
Сору	1.	KENNECOTT	CANADA,	VAN	COUVER, I	9,6.	
	2.	KENNECOTT	CANADA,	<u>[</u>]/0	SMITHER	RS EXP.	
	3,	KENNECOTT	CANADA,	C/0	MIN-EN	LABS.	
	77		a. in				

He hereby certify the following Assay of 24 ROCK samples submitted OCT-15-91 by ED YARROW.

	Sample Number		CU %	∦AU-FIRE g/tonne	AG g/tonne	
	GC 433 91-553 GC 433 91-553 GC 433 91-553 GC 433 91-553 GC 433 91-554	7 8 9	.017 .151 .853 .196 .126	.07 .44 1.16 .48 .17	1.0 2.3 6.6 2.7 1.9	ENTERED
	GC 433 91-554 GC 433 91-554 GC 433 91-554 GC 433 91-554 GC 433 91-554 GC 433 91-554	2 3 4	.078 .019 .021 .023 .031	.03 .07 .01 .03 .10	44 - 7 - 17 - 10 - 17 - 10 - 17 - 10 - 17 - 17 - 17 - 17 - 17 - 17 - 17 - 17	1~1
	6C 433 91-554 6C 433 91-554 6C 433 91-554 6C 433 91-554 6C 433 91-555	7 8 9	.040 .024 .027 .035 .037	.07 .02 .49 .02 .05	1.1 1.1 2.5 0.8 1.0	LO G
	GC 433 91-555 GC 433 91-555 GC 433 91-555 GC 433 91-555 GC 433 91-555 GC 433 91-555	2	.016 .031 .070 .053 .006	.01 .01 .17 .24 .03	0.6 1.1 1.7 1.5 1.8	
-	6C 433 91-555 6C 433 91-555 6C 433 91-555 6C 433 91-555 6C 433 91-555	7 8	.098 .051 .021 .055	.03 .07 .07 .17	0.7 1.6 0.6 0.5	

*AU - 1 ASSAY TON.

MIN-EN LABORATORIES

Certified by



Attn:

ENVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Certificate Assay

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

SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0957-RA2

Company:	KENNECOTT CANAD	A INC.

Project: STIKINE COPPER D. JOHNSON/E. YARROW

Date: OCT-22-91 Copy I. KENNECUTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/D SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 6 ROCK samples submitted OCT-15-91 by ED YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne			1
GC 433 91-5560 GC 433 91-5561 GC 433 91-5562 GC 433 91-5563 GC 433 91-5564	,055 .068 .039 .044 .073	.12 .07 .01 .07 .07	1.3 0.8 1.1 1.3 0.9			
GC 433 91-5565	,004	. Qi	1.J	 1988 Talif And anna man sin san ann	1999 - 1999 - 1999 - 1999 - 1999 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 -	

*AU - 1 ASSAY TON.

Certified by

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

<u>Assay Certificate</u>

PONMENTS

BORATORIES

(DIVISION OF ASSAYERS CORP.)

Company: KENNECOTT CANADA Project: STIKINE COPPER

MINERAL

Attn: D.JOHNSON/E.YARROW

*AU - 1 ASSAY TON.

Date: OCT-28-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 4 CORE samples submitted OCT-18-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number	CU *AU-FIRE % g/tonne		• • •
6C 433 91-5580 6C 433 91-5610 6C 433 91-5611 6C 433 91-5612	.040 .48 .026 .05 .115 .06 .073 .03	0.9 1.6	

Certified by

MIN-EN LABORATORIES

1S-0964-RA1

S.Z



Company:

Project:

Attn:

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

SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

<u>Assay Certificate</u>

NVIRONMENTS LABORATORIES

(DIVISION OF ASSAYERS CORP.)

KENNECOTT CANADA

D. JOHNSON/E. YARROW

STIKINE COPPER

1S-0965-RA1

Date: OCT-28-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 8 CORE samples submitted OCT-18-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number	CU 72	*AU-FIRE g/tonne	AG g/tonne		
5C 434 91-9070 6C 434 91-9071 6C 434 91-9072 6C 434 91-9088 6C 434 91-9089	.127 .186 .115 .027 .112	.08 .02 .05 .06 1.54 *	1.1 1.2 1.0 0.9 23.8	ENTER E B IN	
5C 434 91-9096 GC 434 91-9097 GC 434 91-9098	.103 .067 .060	.23 .08 .08	1.7 1.5 1.5	L0G	

*AU - 1 ASSAY TON.

Certified by

MAN-EN LABORATORIES

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

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

NVIRONMENTS

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

Company: KENNECOTT CANADA Project: STIKINE COPPER Attn: D.JOHNSON/E.YARROW

*AU - 1 ASSAY TON,

MINERAL

1S-0988-RA1

Date: OCT-28-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

We hereby certify the following Assay of 15 CORE samples submitted OCT-21-91 by E.YARROW.

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

Sample Number		CU 74	*AU-FIRE g∕tonne	AG g/tonne	
GC 432 GC 432 GC 432	91-9007 91-9008 91-9009 91-9016 91-9017	.010 .148 .040 .075 .059	.02 .10 .02 .12 .03	0.4 1.2 0.4 2.2 1.1	ENTERED
GC 432 GC 432 GC 432	91-9018 91-9019 91-9020 91-9021 91-9028	.058 .054 .054 .069 .013	.02 .07 .02 .07	1 - 4 1 - 4 1 - 4 1 - 4 1 - 4 1 - 0	IN .
GC 432 GC 432 GC 432	91-9029 91-9030 91-9040 91-9041 91-9042	 .012 .012 .194 .022 .039	.01 .01 .18 .02 .02	1.2 1.1 3.0 1.4 1.2	LOG

Certified by



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SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

Assay Certificate

Company: KENNECOTT CANADA

Project: STIKINE COPPER Attn: D.JOHNSON/E.YARROW 1S-0989-RA1

Date: OCT-28-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted OCT-22-91 by E.YARROW.

Sample Number	CU %		AG g/tonne	
6C 433 91-55 6 C 433 91-55 6C 433 91-55 6C 433 91-55 6C 433 91-55	534 Rock CHIT .332 535 .038 566 .006	.01 .03 .01	1.6 1.1 0.7 1.5 1.3	
GC 433 91-55 GC 433 91-55 GC 433 91-55 GC 433 91-55 GC 433 91-55	569 .066 570 .003 571 .193	.03 .02 .15	1.2 1.1 1.4 2.2 1.9	
433 91-5 GC 433 91-5 GC 433 91-5 GC 433 91-5 GC 433 91-5 GC 433 91-5	.077 .575 .221 .576 .100	.13 .08	1.6 1.8 2.3 2.2 2.1	ENTRED
GC 433 91-5 GC 433 91-5 GC 433-91-5 GC 433-91-5 GC 433-91-5 GC 433-91-5	579 .063 581 .116 582 .110	.07 .03 .08	3.0 2.1 2.4 2.1 1.8	12
6C 433-91-5 6C 433-91-5 6C 433-91-5 6C 433-91-5 6C 433-91-5	585 .112 586 .109	.06	2.4 1.7 2.1 2.0	LO G

*AU - 1 ASSAY TON.

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ASSAY	Certi	1S-0989-RA2		
Company: KENNECOTT Project: STIKINE COPPU Attn: D.JOHNSON/E. He hereby certify submitted OCT-22-	ER YARROW the follo	wing As RROW.	say of 22	Date: OCT-28-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS. 2 CORE samples
Sample Number		4U−FIRE g/tonne	AG g/tonne	
GC 433-91-5588 GC 433-91-5589 GC 433-91-5590 GC 433-91-5591	.148 .365 .030 .139	.10 .30 .04 .03	2.1 2.9 1.8 2.1	ENTERED
6C 433-91-5592	.051	. 02	1.6	
GC 433-91-5593 GC 433-91-5594 GC 433-91-5595 GC 433-91-5595 GC 433-91-5596 GC 433-91-5597	.117 .160 .082 .236 .151	.05 .20 .03 .37 .09	1.6 2.3 1.9 2.7 2.3	
433-91-5598 GC 433-91-5599 GC 433-91-5600 GC 433-91-5601 GC 433-91-5601 GC 433-91-5602	.302 .017 .037 .032 .046	.18 .03 .02 .02 .01	4.1 1.7 1.1 0.8 1.6	L O G
6C 433-91-5603 6C 433-91-5604 6C 433-91-5605 6C 433-91-5606 6C 433-91-5606	.005 .032 .132 .067 .117	.02 .01 .09 .05 .07	2.0 1.5 2.1 1.7 2.1	
GC 433-91-5608 GC 433-91-5609	"042 "077	,08 ,10	4	

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SMITHERS LAB .:

3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0990-RA1

Company: KENNECOTT CANADA Project: STIKINE COPPER Attn: D. JOHNSON/E. YARROW

Date: OCT-29-91

Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP.

3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted OCT-22-91 by E.YARROW.

	mple mber		CU %	*AU-FIRE g/tonne	AG g/tonne	
-		91-9050	.251	.04	2.0	
		91-9051	. 397	.02	2.4	
		91-9052	.193	.03	2.7	
		91-9053	.056	.01	1.7	
GC	434	91-9054	.042	.06	1.4	
GC	434	91-9055	.036	.09	1.3	
GC	434	91-9056	.076	.03	2.2	
GC	434	91-9057	.162	.02	1.5	$=$ $i = 2 \overline{D} \overline{D} \overline{D}$
GC	434	91-9058	.110	.12	2.1	ENTERED
GC	4 34	91-9059	.251	.05	2.7	
$\overline{\bigcirc}$	434	91-9060	.354	.02	2.6	
ĞC		91-9061	.208	.01	2.8	
GC	434	91-9062	.109		1.8	1N
		91-9063	.153	.01	1.5	
		91-9064	.095	.01	1.5	
GC	434	91-9065	. 388	.02	2.0	
		91-9066	.315	.03	1.9	
		91-9067	.223	.03	2.3	LOGY
		91-9068	.046	.01	1.7	2007
		91-9069	.095	.02	1.6	
 6C	434	91-9073	. 121	.02	1.8	
		919074	.117	.02	1.9	
		91-9075	.162	.09	1.9	
		91-9076	.081	.01	1.3	

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SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0990-RA2

Company: KENNECOTT CANADA Project: STIKINE COPPER Attn: D. JOHNSON/E. YARROW

Date: OCT-29-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SNITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 24 CORE samples submitted OCT-22-91 by E.YARROW.

Sample Number	CU X	¥AU−FIRE g/tonne	AG g/tonne	
GC 434 91-9077	.106	.02	2.0	
GC 434 91-9078	.115	.04	2.0	
GC 434 91-9079	.094	.01	1.7	
GC 434 91-9080	.084	.02	1.6	
GC 434 91-9081	.113	.01	1.8	
GC 434 91-9082	,046	.01	1.6	
GC 434 91-9083	.258	.08	3.0	
GC 434 91-9084	.288	.12	2.8	ENTERED
6C 434 91-9085	.304	. 18	3.0	ENTERED
6C 434 91-9086	.047	.01	2.8	
434 91-9087	.042	.10	2.4	
GC 434 91-9090	.151	.44	4.7	
6C 434 91-9091	.061	.01	1.6	
GC 434 91-9092	, 059	.03	1.5	
GC 434 91-9093	. 151	.02	2.2	
GC 434 91-9094	.092	.09	2.0	
GC 434 91-9095	.153	. 47	3.8	
GC 434 91-9099	.057	.02	1.7	2069
GC 434 91-9100	.075	.01	2.2	
GC 434 91-9101	.048	.01	1.9	
6C 434 91-9102	.076	. 10	1.8	
GC 434 91-9103	, 074	.01	2.0	
6C 434 91-9104	.103	.01	2.2	
GC 434 91-9105	.090	.02	2.7	

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Company: **KENNECOTT CANADA** STIKINE COPPER Project: Attn: D. JOHNSON/E. YARROW

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1S-0990-RA3

Date: OCT-29-91 Copy 1. KENNECOTT CANADA, VANCDUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 16 CORE samples submitted OCT-22-91 by E.YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne	
6C 434 91-9106 6C 434 91-9107 6C 434 91-9108 6C 434 91-9109 6C 434 91-9110	.174 .206 .209 .290 .228	.13 .06 .25 .20 .08	2.5 2.7 3.4 3.0 3.6	ENTERED
GC 434 91-9111 GC 434 91-9112 GC 434 91-9113 GC 434 91-9113 GC 434 91-9114 GC 434 91-9115	.065 .071 .075 .088 .169	.01 .03 .01 .01 .02	2.0 1.8 1.4 1.4 1.6	,~
434 91-9116 6C 434 91-9117 6C 434 91-9118 6C 434 91-9119 6C 434 91-9119 6C 434 91-9120	.185 .265 .041 .013 .048	.03 .09 .01 .01 .03	2.0 1.6 1.3 1.4 1.1	L067
GC 434 91-9121	.015	.20	1.9	

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Company: KENNECOTT CANADA Project: STIKINE COPPER Attn: D.JOHNSON/E.YARROW 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0997-RA1

Date: OCT-30-91 Copy 1. KENNECOTT CANADA, VANCDUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 8 CORE samples submitted OCT-22-91 by E.YARROW.

Sample	CU	¥AU−FIRE	AG	
Number	%	g/tonne	oz/ton	
6C 433 91-5613 6C 433 91-5614 6C 433 91-5615 6C 433 91-5616 6C 433 91-5617	.077 .084 .051 .026 .025	.09 .12 .22 .07 .09	1.6 1.4 1.4 1.6 1.2	ENTEREO IN
6C 433 91-5618	.036	.09	1.6	20G
6C 433 91-5619	.151	.11	1.8	
6C 433 91-5620	.052	.06	1.0	

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KENNECOTT CANADA

D. JOHNSON/E. YARROW

STIKINE COPPER

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Attn:

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SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

15-0998-RA1

Date: OCT-30-91 Copy 1. KENNECOTI CANADA, VANCOUVER, B.C. 2. KENNECOTI CANADA, C/O SMITHERS EXP. 3. KENNECOTI CANADA, C/O MIN-EN LABS. ay of 23 CORE samples

He hereby certify the following Assay of 23 CORE samples submitted OCT-22-91 by E.YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	AG oz/ton	
GC 434 91-9122 GC 434 91-9123	.016	.13	2.0 1.9	
6C 434 91-9124	.080	.06	1.7	and the second
GC 434 91-9125	.033	.01	1.3	ENTERED
6C 434 91-9126	.118	.02	1.8	
6C 434 91-9127	.079	.03	1.6	
GC 434 91-9128	. 446	.21	3.2	and a second
6C 434 91-9129	.186	.11	2.3	
6C 434 91-9130	.180	1.28 -		
GC 434 91-9131	.141	.15	1.5	
434 91-9132	.088	.04	1.8	
L 434 91-9133	. 165	.12	1.6	
6C 434 91-9134	.271	.08	1.7	LOG
6C 434 91-9135	. 357	. 42	2.4	
GC 434 91-9136	.036	.08	1.5	
GC 434 91-9137	.064	.03	1.6	
GC 434 91-9138	. 109	.05	1.5	
GC 434 91-9139	. 096	.03	1.8	······································
GC 434 91-9140	.051	.02	1.2	
GC 434 91-9141	.045	.02	1.3	
GC 434 91-9142	.036	.01	1.0	
GC 434 91-9143	* 070	.03	1.8	
6C 434 91-9144	.052	.04	1.7	
			\$	

*AU - 1 ASSAY TON,

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SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

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• EN LABORATORIES (DIVISION OF ASSAYERS CORP.)

1S-0999-RA1

Company:	KENNECOTT CANADA
Project:	STIKINE COPPER
Attn:	D.JOHNSON/E.YARROW

MINZRAL

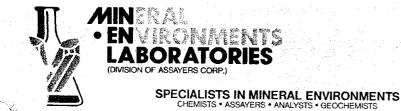
1. C			Da	ate:	OCT-29-91
Сору					OUVER, B.C.
	2.	KENNECOTT	CANADA,	C/0	SMITHERS EXP.
	3.	KENNECOTT	CANADA,	C/0	MIN-EN LABS.
OOT	S TO				

He hereby certify the following Assay of 24 CORE samples submitted OCT-22-91 by E.YARROW.

Sample Number	CU %	*AU-FIRE g/tonne	AG g/tonne	
GC 435 91-5621	.018	.03	2.1	
GC 435 91-5622	.011	.01	2.3	
6C 435 91-5623	.007	.02	1.2	
GC 435 91-5624	.007	.03	1.3	
GC 435 91-5625	.010	.02	2.1	
GC 435 91-5626	.060	.01	2.9	
GC 435 91-5627	.026	.01	2.2	ENTERED
GC 435 91-5628	.040	.02	2.0	
GC 435 91-5629	.037	.01	1.7	
6C 435 91-5630	.053	.02	1.8	
435 91-5631	.060	.08	2.1	
GC 435 91-5632	.047	.04	2.2	
6C 435 91-5633	.037	.01	2.1	\mathcal{A}
6C 435 91-5634	.017	.02	2.4	
5C 435 91-5635	.012	.01	2.5	
GC 435 91-5636	.079	.20	3.4	
6C 435 91-5637	.051	.11	2.0	
GC 435 91-5638	.006	.01	1.0	LOG
6C 435 91-5639	.005	.02	1.4	
GC 435 91-5640	.004	.01	1.1	
6C 435 91-5641	.107	.02	1.9	
6C 435 91-5642	.121	.01	2.4	
6C 435 91-5643	.104	.01	1.5	
GC 435 91-5644	.080	.12	2.1	

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Assay Certificate

sompany: KENNECOTT CANADA Project: STIKINE COPPER

Attn: D. JOHNSON/E. YARROW VANCOUVER OFFICE:

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SMITHERS LAB .: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

1S-0999-RA2

Date: OCT-30-91 Copy 1. KENNECOTT CANADA, VANCOUVER, B.C. 2. KENNECOTT CANADA, C/O SMITHERS EXP. 3. KENNECOTT CANADA, C/O MIN-EN LABS.

He hereby certify the following Assay of 16 CORE samples submitted OCT-22-91 by E.YARROW.

Sample	CU	*AU -F IRE	AG	
Number	%	g/tonne	oz/ton	
GC 435 91-5645	.055	.02	1.2	
GC 435 91-5646	.014	.03	1.1	
GC 435 91-5647	.006	.01	1.0	
GC 435 91-5648	.009	.01	1.1	
GC 435 91-5649	.035	.02	1.6	
6C 435 91-5650	.013	.01	1.7	ENTERED
GC 435 91-5651	.075	.01	1.9	
GC 435 91-5652	.140	.07	2.1	
GC 435 91-5653	.141	.05	3.1	
GC 435 91-5654	.081	.03	1.8	
435 91-5655 	.134 .072 .029 .306 .550	.01 .01 .01 .01 .03	1.6 2.1 1.4 2.4 4.0	
GC 435 91-5660	.069	.07	2.2	

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APPENDIX IV

REPORT ON A COMBINED HELICOPTER-BORNE MAGNETIC,

VLF-EM AND RADIOMETRIC SURVEY, AERODAT LTD.

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GEOLOGICAL BRANCH ASSESSMENT REPORT

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REPORT ON A COMBINED HELICOPTER-BORNE MAGNETIC, ELECTROMAGNETIC, VLF-EM AND RADIOMETRIC SURVEY GALORE CREEK PROPERTY BRITISH COLUMBIA

FOR

KENNECOTT CANADA INC. GRANVILLE SQUARE 138 - 200 GRANVILLE STREET VANCOUVER, B.C. V6C 1S4

BY

AERODAT LIMITED 3883 NASHUA DRIVE MISSISSAUGA, ONTARIO L4V 1R3 PHONE: 416 - 671-2446

August 21, 1991

Ian Johnson, Ph.D., P.Eng. Consulting Geophysicist



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LIST OF MAPS

Maps are labelled according to map type and sheet number. All maps are presented at a scale of 1:10,000. The total field magnetic shadow map is presented at a scale of 1:20,000. Details on map types are given in Section 4.

The survey involved a primary survey grid of east/west flight lines and a secondary overlapping grid of north/south lines over the central part of the survey area. Black line map types 3, 4 and 5 and colour map types 1 and 2 and the shadow map involve both sets of flight lines. All other map types are shown in two map sheets - one for the east/west lines and one for the north/south lines.

BLACK LINE MAPS: (Scale 1:10,000)

Map <u>Description</u> Type

Salar Salar

5.

- 1. BASE MAP; screened topographic base map with survey area boundary and UTM grid.
- 2. FLIGHT PATH MAP; photocombination of the base map with flight lines, and EM anomaly symbols.
- 3. COMPILATION/INTERPRETATION MAP; with base map and flight lines.
- 4. TOTAL FIELD MAGNETIC CONTOURS; with base map and flight lines.

VERTICAL MAGNETIC GRADIENT CONTOURS; with base map and flight lines.

6. APPARENT RESISTIVITY CONTOURS; apparent resistivity calculated for the 4600 Hz data, with base map and flight lines.

- 7. VLF-EM TOTAL FIELD CONTOURS; with base map and flight lines.
- 8. APPARENT WEIGHT PERCENT MAGNETITE CONTOURS; with base map and flight lines.
- 9. TOTAL COUNT RADIOMETRIC CONTOURS; with base map and flight lines.
- 10. POTASSIUM RADIOMETRIC CONTOURS; with base map and flight lines.

- 11. URANIUM RADIOMETRIC CONTOURS; with base map and flight lines.
 - 12. THORIUM RADIOMETRIC CONTOURS; with base map and flight lines.

COLOUR MAPS: (Scale 1:10,000)

- 1. TOTAL FIELD MAGNETICS; with superimposed contours, flight lines and EM anomaly symbols.
- 2. VERTICAL GRADIENT MAGNETICS; with superimposed contours, flight lines and EM anomaly symbols.
- 3. APPARENT RESISTIVITY; calculated for the 4600 Hz data with superimposed contours, flight lines and EM anomaly symbols.
- 4. VLF-EM TOTAL FIELD; with superimposed contours, flight lines and EM anomaly symbols.
- 5A. HEM OFFSET PROFILES; east/west lines 935 and 33000 Hz data with flight lines and EM anomaly symbols.
- 5B. HEM OFFSET PROFILES; east/west lines 4175 and 4600 Hz data with flight lines and EM anomaly symbols.
- 6A. HEM OFFSET PROFILES; north/south lines 935 and 33000 Hz data with flight lines and EM anomaly symbols.
- 6B. HEM OFFSET PROFILES; north/south lines 4175 and 4600 Hz data with flight lines and EM anomaly symbols.
- 7. APPARENT WEIGHT PERCENT MAGNETITE; with superimposed contours, flight lines and EM anomaly symbols.

DERIVATIVE COLOUR MAP: (Scale 1:20,000)

1-A. TOTAL FIELD MAGNETICS SHADOW MAP; at an illumination direction given by angle A.

REPORT ON A COMBINED HELICOPTER-BORNE MAGNETIC, ELECTROMAGNETIC, VLF-EM AND RADIOMETRIC SURVEY GALORE CREEK PROPERTY BRITISH COLUMBIA

1. INTRODUCTION

This report describes an airborne geophysical survey carried out on behalf of Kennecott Canada Inc. (Kennecott) by Aerodat Limited under a contract dated May 28, 1991. Principal geophysical sensors included a four frequency electromagnetic system, a high sensitivity cesium vapour magnetometer, a two frequency VLF-EM system and a four channel radiometric system. Ancillary equipment included radar ranging and GPS navigation systems, a colour video tracking camera, a radar altimeter, a power line monitor and a base station magnetometer.

The survey was flown over an area of about 35 square kilometres immediately west and south of Galore Creek in northwestern British Columbia. Flight line spacings were 100 m (east-west lines) and 150 m (north-south lines). The north/south lines covered the central part of the survey area. Total coverage was approximately 459 line kilometres. The Aerodat Job Number is J9135.

This report describes the survey, the data processing and the data presentation. Electromagnetic anomalies which are thought to be the response to bedrock conductors have been identified and appear on selected map products as EM anomaly symbols with interpreted source characteristics. Where EM and Magnetic results supported it, anomaly centers are joined to form conductor axes. Recommendations concerning areas with favourable geophysical characteristics are made with reference to a compilation/interpretation map.

2. SURVEY AREA

The survey area borders Galore Creek in northwestern British Columbia. The area is approximately 175 km northwest of Stewart. Area topography is shown on the 1:50,000 scale NTS map sheet - 104G/3 (Sphaler Creek).

Local relief is moderate to extreme. Galore Creek, on the eastern side of the area is at 2000 feet. Mountain peaks in the western and southern parts of the survey area reach over 5000 feet. One peak at 6384 feet is just outside the survey area. The area is free of major roads, railroads, etc. The survey area is centered over old mine workings, an airstrip and a large exploration camp. A part (15%?) of the survey area is covered by glaciers or their outwash gravels.

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The survey covers the known extent of the Galore Creek porphyry copper deposit and areas around this deposit.

The survey area is shown in the attached index map which includes local topography and latitude - longitude coordinates. This index map appears on map legends.

The local magnetic field has an inclination of 75° and a declination of 30° east of north.

3. SURVEY PROCEDURES

The survey was flown in the period June 23 to June 25, 1991. Principal personnel are listed in Appendix IV. Eight (8) survey flights were required to complete the project.

The flight line spacings were 100 m (east/west lines) and 150 m (north/south lines). All of the survey area was covered at 100 m. The central part only - about 50% of the total - was flown with an orthogonal grid at a 150 m line spacing. The aircraft ground speed was maintained at approximately 60 knots (30 metres per second). The nominal EM sensor height was 30 metres, consistent with the safety of the aircraft and crew.

Following equipment installation and testing, the ground based transponders of the radar ranging navigation system were installed at two or more sites or more near the survey area. The UTM coordinates of each site were taken from published 1:50,000 NTS maps. The base line (or line between transponders) was flown to determine their separation. The result is used to check the UTM coordinates assigned to each transponder.

Two electronic navigation systems were installed. GPS and the radar ranging systems were operational and the navigation was based on which system performed best.

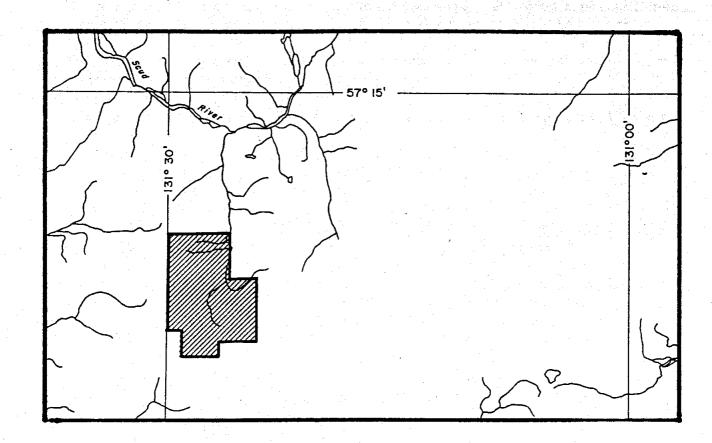
The UTM coordinates of survey area corners were taken from maps provided by Kennecott. These coordinates are used to program the navigation system. A test flight was used to confirm that area coverage would be as required.

Thereafter the traverse lines are flown under the guidance of the navigation systems. Areas with poor quality electronic navigational control, were flown with visual navigation. The operator entered manual fiducials over prominent topographic features as seen on a 1:20,000 scale topographic map (a 2.5 times enlargement of the 1:50,000 scale NTS map sheet). Survey lines which showed excessive deviation were re-flown.

Calibration lines are flown at the start, middle (if required) and end of every survey flight. These lines are flown outside of ground effects to record electromagnetic and radiometric zero levels.

Pre-flight radiometric checks involved placing potassium, uranium and thorium sources at set locations on the crystal package.

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HELICOPTERBORNE GEOPHYSICAL SURVEY GALORE CREEK PROPERTY

on behalf of KENNECOTT CANADA INC.

BY

AERODAT LIMITED J9135

4. DELIVERABLES

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The results of the survey are presented in a report plus maps. The report is presented in four copies. Folded white print copies of all of the black line maps are bound with the report.

The colour and shadow maps are delivered in four copies. The colour and shadow maps are rolled and delivered in map tube(s).

A full list of all map types is given at the beginning of this report. A summary is given here.

DESCRIPTION
Base Map (Black line)
Flight Path Map (Black line)
Compilation/Interpretation Map (Black line)
Total Magnetic Field Contours (Black line)
Vertical Magnetic Gradient Contours (Black line)
Apparent Resistivity - 4600 Hz (Black line)
VLF-EM Total Field Contours (Black line)
Apparent Weight % Magnetite (Black line)
Total Count Contours (Black line)
Potassium Contours (Black line)
Uranium Contours (Black line)
Thorium Contours (Black line)
Total Magnetic Field Contours (Colour)
Vertical Magnetic Gradient Contours (Colour)
Apparent Resistivity Contours - 4600 Hz - (Colour)
VLF-EM Total Field Contours (Colour)
HEM Offset Profiles - e/w - 935 & 33000 Hz (Colour)
HEM Offset Profiles - e/w - 4175 & 4600 Hz (Colour)
HEM Offset Profiles - n/w - 935 and 33000 Hz (Colour)
HEM Offset Profiles - n/s - 4175 and 4600 Hz (Colour)
Apparent Weight Percent Magnetite (Colour)
Total Field Magnetic Shadow Map (Colour)

All maps are presented at a scale of 1:10,000. The total field magnetics shadow map is presented at a scale of 1:20,000. All black line maps show a screened topographic base with survey area boundary and UTM grid. The colour maps show the survey area boundary and the UTM grid.

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Black line map types 3, 4, and 5 and colour maps 1 and 2 and the shadow map are presented on one map sheet using data from both the east/west and the north/south survey lines. All other map types are presented in two map sheets -- one for the east/west lines and one for the north/south lines.

The processed digital data is organized on 9 track archive tape. Both the profile and the gridded data are saved on tape. A full description of the archive tape(s) is delivered with the tape(s).

All gridded data are also provided on diskettes suitable for displaying on IBM compatible 286 or 386 microcomputers using the Aerodat RTI software package.

The original analog records, base station magnetometer records, navigators map, flight path video tape and all cronaflex originals are delivered at the conclusion of the project.

5. AIRCRAFT AND EQUIPMENT

5.1 <u>Aircraft</u>

An Aerospatiale Lama helicopter, (C-GXYM), owned and operated by Peace Helicopters, was used for the survey. Installation of the geophysical and ancillary equipment was carried out by Aerodat. The survey aircraft was flown at a mean terrain clearance of 60 metres.

5.2 Electromagnetic System

The electromagnetic system was an Aerodat 4-frequency system. Two vertical coaxial coil pairs were operated at 935 Hz and 4,600 Hz and two horizontal coplanar coil pairs at 4175 Hz and 33000 Hz. The transmitter-receiver separation was 7 metres. Inphase and quadrature signals were measured simultaneously for the 4 frequencies with a time constant of 0.1 seconds. The HEM bird was towed 30 metres below the helicopter.

5.3 VLF-EM System

The VLF-EM System was a Herz Totem 2A. This instrument measures the total field and vertical quadrature components of two selected frequencies. The sensor was towed in a bird 15 metres below the helicopter.

VLF transmitters are designated "Line" and "Ortho". The line station is that which is in a direction from the survey area which is ideally normal to the flight line direction. This is the VLF station most often used because of optimal coupling with near vertical conductors running perpendicular to the flight line direction. The ortho station is ideally 90 degrees in azimuth away from the line station.

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The transmitters used were NLK, Jim Creek, Washington broadcasting at 24.8 kHz and NPM, Lualualei, Hawaii broadcasting at 23.4 kHz. NLK (24.8 kHz) was used as the line station and NPM was used as the ortho station. NLK is in a direction of about 30° east of south from the survey area.

5.4 <u>Magnetometer</u>

The magnetometer employed was a Scintrex H8 cesium, optically pumped magnetometer sensor. The sensitivity of this instrument is 0.001 nanoTeslas at a 0.2 second sampling rate. The sensor was towed in a bird 15 metres below the helicopter.

5.5 Gamma-Ray Spectrometer

An Exploranium GR-256 spectrometer coupled to 512 cubic inches of crystal sensor was used to record four channels of radiometric data. Spectrum stabilization is based on the 662 KeV peak from Cesium sources planted on the crystals.

The four channels recorded and their energy windows were as follows:

Channel	Window			
Total Count (TC)	0.83 to 3.00 MeV			
Potassium (K)	1.38 to 1.56 MeV			
Uranium (U)	1.67 to 1.90 MeV			
Thorium (Th)	2.51 to 2.78 MeV			

The four channels of radiometric data were recorded at a 1 second update rate (counts per second - cps). Digital recording resolution is 1 cps.

Ancillary Systems

5.6

Base Station Magnetometer

An IFG-2 proton precession magnetometer was operated at the base of operations to record diurnal variations of the earth's magnetic field. The clock of the base station was synchronized with that of the airborne system to facilitate later correlation. Recording resolution was 1 nT. The update rate was 4 seconds.

External magnetic field variations were recorded on a 3" wide paper chart and in digital form. The analog record shows the magnetic field trace plotted on a grid. Each division of the grid (0.25") is equivalent to 1 minute (chart speed) or 5 nT (vertical sensitivity). The date, time and current total field magnetic value are printed every 10 minutes.

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Radar Altimeter

A King KRA-10 radar altimeter was used to record terrain clearance. The output from the instrument is a linear function of altitude.

Tracking Camera

A Panasonic colour video camera was used to record flight path on VHS video tape. The camera was operated in continuous mode. The flight number, 24 hour clock time (to .01 second), and manual fiducial number are encoded on the video tape.

Radar Ranging Navigation System

A Motorola Miniranger III positioning system was used to guide the pilot over a programmed grid. The ranges to at least two ground stations were digitally recorded. The output sampling rate is 1 second. Ranges are recorded with a resolution of 0.1 m.

GPS Navigation System

A Trimble TANS GPS receiver was used to record aircraft position. The update rate is 1 sec. The resolution is 0.1 m. This unit was coupled with a Picodas PNAV 2001 to provide guidance over a pre-programmed survey grid.

Analog Recorder

A RMS dot matrix recorder was used to display the data during the survey. Record contents are as follows:

Label

Contents

Scale

GEOPHYSICAL SENSOR DATA

MAGF	Total Field Magnetics, Fine	2.5 nT/mm
MAGC	Total Field Magnetics, Course	25 nT/mm
VLT	VLF-EM, Total Field, Line Station	2.5 %/mm
VLQ	VLF-EM, Vertical Quadrature, Line Station	2.5 %/mm
VOT	VLF-EM, Total Field, Ortho Station	2.5 %/mm
VOQ	VLF-EM, Vertical Quadrature, Ortho Station	2.5 %/mm
CXI1	935 Hz, Coaxial, Inphase	2.5 ppm/mm
CXQ1	935 Hz, Coaxial, Quadrature	2.5 ppm/mm
CXI2	4600 Hz, Coaxial, Inphase	2.5 ppm/mm
CXQ2	4600 Hz, Coaxial, Quadrature	2.5 ppm/mm
CPI1	4175 Hz, Coplanar, Inphase	10 ppm/mm
CPQ1	4175 Hz, Coplanar, Quadrature	10 ppm/mm

CPI2	33000 Hz, Copl	anar, Inphase	20 ppm/mm
CPQ2		anar, Quadrature	20 ppm/mm
TC	Total Count Rad	diometrics	50 cps/mm
K	Potassium		5 cps/mm
UR	Uranium		5 cps/mm
TH	Thorium		5 cps/mm

Label Contents

ANCILLARY DATA

RALT	Radar Altimeter	10 ft/mm
PWRL	60 Hz Power Line Monitor	

The zero of the radar altimeter is 5 cm (5 large divisions) from the top of the analog chart. The full analog range for the radar altimeter is therefore 500 feet. A flying height of 60 m (197 feet) gives an analog trace which is three large divisions (3 cm) below the top of the analog record.

Scale

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Chart speed is 2 mm/second. The 24 hour clock time is printed every 20 seconds. The total magnetic field value is printed every 30 seconds. The ranges from the radar navigation system are printed every minute.

Vertical lines crossing the record are operator activated manual fiducial markers. The start of any survey line is identified by two closely spaced manual fiducials. The end of any survey line is identified by three closely spaced manual fiducials. Manual fiducials are numbered in order. Every tenth manual fiducial is indicated by its number, printed at the bottom of the record.

Calibration sequences are located at the start and end of each flight and at intermediate times where needed.

Digital Recorder

A DGR-33 data system recorded the digital survey data on magnetic media. Contents and update rates were as follows:

DATA TYPE	SAMPLING	RESOLUTION
Magnetometer	0.2 s	0.001 nT
VLF-EM (4 Channels)	0.2 s	0.03 %
HEM (8 Channels)	0.1 s	0.03 ppm (coaxial),
		0.06 ppm (coplanar)
Position (4 Channels)	0.2 s	0.1 m
Altimeter	0.2 s	0.05 m
Power Line Monitor	0.2 s	
Manual Fiducial		
Clock Time		

6. DATA PROCESSING AND PRESENTATION

6.1 <u>Base Map</u>

The 1:10,000 scale base maps were prepared from a five times enlargement of the 1:50,000 scale NTS map sheet. The survey area boundary and a UTM reference grid were added.

6.2 Flight Path Map

The flight path is drawn using linear interpolation between x,y positions from the navigation system. These positions are updated every second (or about 3 mm at a scale of 1:10,000). These positions are expressed as UTM eastings (x) and UTM northings (y).

Navigational control form the radar ranging or GPS system may be temporarily lost. Short gaps in the flight path are covered by interpolation. Longer gaps are filled by stitching in segments of flight path taken from the navigators map/flight path recovery. These segments are recognizable by the straight line character of the flight path.

The manual fiducials are shown as a small circle and labelled by fiducial number. The 24 hour clock time is shown as a small square, plotted every 30 seconds. Small tick marks are plotted every 2 seconds. Larger tick marks are plotted every 10 seconds.

The block, line and flight numbers are given at the start and end of each survey line. The number 10610 6 for example indicates a line flown east/west (prefix 1), line number 61, flight 6. The north/south flight lines use a prefix 2.

The flight path map is registered to the base map by matching UTM coordinates from the base maps and the flight path record. The match is confirmed by checking the position of prominent topographic features as recorded by manual fiducial marks or as seen on the flight path video record.

6.3 Electromagnetic Survey Data

The electromagnetic data were recorded digitally at a sample rate of 10 per second with a time constant of 0.1 seconds. A two stage digital filtering process was carried out to reject major sferic events and the reduce system noise.

Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events.

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The signal to noise ratio was further enhanced by the application of a low pass digital filter. This filter has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 0.25 seconds. This low effective time constant gives minimal profile distortion.

Following the filtering process, a base level correction was made using EM zero levels determined during high altitude calibration sequences. The correction applied is a linear function of time that ensures the corrected amplitude of the various inphase and quadrature components is zero when no conductive or permeable source is present. The filtered and levelled data were used in the determination of apparent resistivity (see below).

The offset profiles are drawn at vertical scales of 2 ppm/mm (935 and 4600 Hz), 8 ppm/mm (4175 Hz) and 16 ppm/mm (33000 Hz).

6.4 Total Field Magnetics

The aeromagnetic data were corrected for diurnal variations by adjustment with the recorded base station magnetic values. Where needed, the magnetic tie line results were used to further level the magnetic data. No corrections for regional variations were applied. The corrected profile data were interpolated on to a regular grid using an Akima spline technique. The grid provided the basis for threading the presented contours. The minimum contour interval is 5 nT. A grid cell size of 25 m was used.

The total field magnetic map was made using bidirectional gridding in the area covered by orthogonal survey grids.

A page size copy of the 1:10,000 scale black line contoured total magnetic field map is attached.

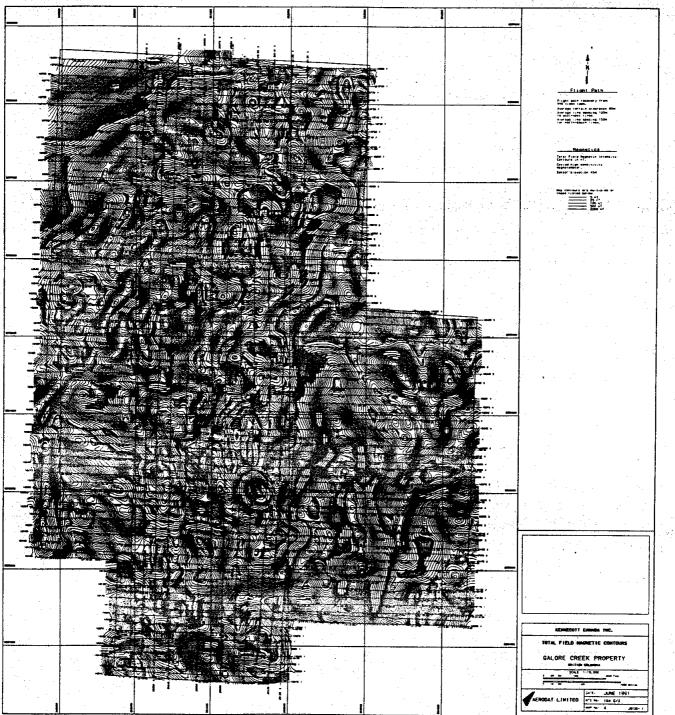
6.5 Vertical Magnetic Gradient

The vertical magnetic gradient was calculated from the gridded total field magnetic data. The calculation is based on a 17 x 17 point convolution in the space domain. The results are contoured using a minimum contour interval of 0.1 nT/m. The grid cell size is the same as that used in processing the total field data.

6.6 Apparent Resistivity

The apparent resistivity is calculated by assuming a 200 metre thick conductive layer over resistive bedrock. The computer determines the resistivity that would be consistent with the sensor elevation and recorded inphase and quadrature response amplitudes at the selected frequency. The apparent resistivity profile data were interpolated onto a regular grid at a 25 metres true scale interval using an Akima spline technique and contoured

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using logarithmically arranged contour intervals. The contour interval is 0.1 log(ohm.m). This translates to contour lines at 100, 126, 158, 200, 251, 316, 398, 501, 631 and 794 ohm.m and multiples of 10. Thicker contour lines are used for 100 and 316 ohm.m and multiples of 10.

The highest measurable resistivity is approximately equal to the transmitter frequency. The lower limit on resistivity is rarely encountered.

6.7 <u>VLF-EM</u>

The VLF Total Field data from the Line Station is levelled such that a response of 0% is seen in non-anomalous regions. The corrected profile data are interpolated onto a regular grid using an Akima spline technique. The grid provided the basis for threading the presented contours. The minimum contour interval is 5 %. Grid cell size is 25 m.

The VLF profile data is subjected to a high pass filter before gridding to remove the effects of variations in transmitter power. The filter removes signal with periods more than about 150 seconds - 450 m at a ground speed of 30 m/s.

In areas of extreme topographic relief, the VLF total field channel mimic the terrain -broad VLF highs over mountain tops and lows in the valleys. Peak amplitudes are large - $\pm 25\%$. The removal of terrain effects using simple filters is not always totally effective and broad VLF anomalies in mountainous areas should be viewed with suspicion.

6.8 Apparent Weight Percent Magnetite

The apparent weight percent magnetite has been calculated from the 935 Hz inphase EM response. The algorithm is based on the HEM response to a non-conducting, magnetically polarizable half-space. The calculation involves a correction to a sensor elevation of 30 m followed by a conversion to weight percent. The elevation correction is based on the cubic fall-off of response amplitude with height. As a rule of thumb, a negative inphase response of 1 ppm in either coaxial channel will work out to a percent magnetite by weight of about 0.2%.

The results will be misleading if the source is a near-vertical dyke or intrusion. In such cases, the calculated weight percent magnetite may be too little by a factor of 10 or more.

The calculated apparent percent magnetite data were interpolated on a square grid (25 m grid cell size). The grid provided the basis for threading the presented contours. The minimum contour interval is 0.2%.

6.9 <u>Radiometric Data</u>

The four channels of radiometric data are subject to a four stage data correction process.

The stages are

- low pass filter (seven point Hanning)
- background removal
- terrain clearance correction
- compton stripping correction

The Compton stripping factors used were

alpha	- 0.45 (Th into U)
beta	- 0.40 (Th into K)
gamma	- 0.83 (U into K)
а	- 0.09 (U into Th)
b	- 0.00 (K into Th)
g	- 0.03 (K into U)

where alpha, beta and gamma are the forward stripping coefficients and a, b, g are the backward stripping coefficients. These coefficients are taken in part from the sample checks done at the start of each flight.

The altitude attenuation coefficients used were 0.0072 (TC), 0.0085 (K), 0.0082 (U) and 0.0067 (Th). The units are m^{-1} . These coefficients are taken from GSC publications for similar radiometric systems. Radiometric data were corrected to a mean terrain clearance of 60 m.

The corrected data were interpolated on a square grid (grid cell size 25m) using an Akima spline technique. The grids provided the basis for threading the presented contours. The minimum contour intervals are 25 cps (TC), 5 cps (K) and 1 cps (U,Th).

7. INTERPRETATION

7.1 <u>Area Geology</u>

The following notes have been taken from an article which appeared in CIM Special Volume Number 15, 1975 - PART C: Porphyry Copper Deposits of the Alkalic Suite. The article is titled Galore Creek, by D.G. Allan, A. Panteleyev and A.T. Armstrong. A copy of this article was provided by Darrel Johnson of Kennecott.

copper deposits were discovered in the upper Galore Creek valley in 1955. Major exploration programs were undertaken from 1960 to 1967. Work included 235 diamond drill holes and two adits. An additional 111 holes were drilled in 1972 and 1973. Exploration activity on the deposits was largely discontinued from 1976 to 1990.

the Galore Creek porphyry copper deposits are situated at the western margin of the Intermontagne Belt about 7 km east of the Coast Plutonic Complex.

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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 intrusive rocks include Upper Triassic to Lower Triassic syenite stocks and dykes, quartz diorite and granodiorite stocks and at least one large pluton (Hickman batholith). Sedimentary and volcanic strata close to the syenite intrusive complex are severely folded, faulted, sheared and brecciated.

7.2 Exploration Target

Extensive exploration work on the Galore Creek copper deposits has lead to a relatively detailed understanding of their extent and nature. The purpose of the airborne survey is to define the geophysical signature of the known deposits and to suggest possible extensions in inaccessible areas or in areas covered by overburden or permanent snow cap/glaciers and their outwash gravels.

The characteristics of the Galore Creek deposits are taken from the article by D. G. Allan (1975) cited above. Principal among them are

- * the Galore Creek copper deposits occur in altered Upper Triassic volcanic rocks and pipe like breccias. Host metavolcanic rocks include volcanic breccias, bedded and crystal tuff, trachyte and pseudoleucite phonolite. These rocks are intruded by syenite porphyry dykes and plugs.
- the copper deposits are tabular to manto shaped and strike north to northeast. They are controlled by symptotic dyke contacts and zones of structural weakness.
 - metallic minerals include disseminated pyrite, chalcopyrite, magnetite and bornite in order of decreasing abundance, together with minor amounts of sphalerite and galena. Exploration in the Central zone deposit has outlined 125 million tonnes grading 1.05% copper.
 - of the ten known deposits in the survey area, only two the Central Zone and the North Junction - are large enough to have been extensively tested. The Central Zone is some 2000 m long with widths ranging from 200 to 500 m. The North Junction deposit is at least 370 m long and varies from 50 to 150 m wide. It is an irregular flat lying manto plunging about 20° to the northeast.

magnetite is a common accessory mineral in syenite porphyries and occurs disseminated throughout metavolcanic rocks. It also occurs in veinlets with or without pyrite and chalcopyrite. Magnetic rich rocks occur in a belt that

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includes the Central Zone deposit, but lies to the west of the deposit. Magnetite is abundant in the matrix in a number of breccias.

within and near the intrusive complex, volcanic rocks are slightly to intensely metasomatized. Alteration haloes are defined by the abundance of K-feldspar and pyrite.

The direct geophysical signature of the deposit may therefore be relatively high radioactive potassium, with or without high magnetite. Local concentrations of metallic sulphides within or near vertical fault zones may be seen as a linear resistivity low with coincident weak EM and/or VLF anomalies.

7.3 EM Anomaly Selection and Analysis

A. Anomaly Selection

*

The purpose of EM anomaly selection is to identify possible bedrock conductors. The principal characteristic for most anomalies picked is a positive anomaly in the 4600 Hz inphase or quadrature channel with a coincident low in the 4175 Hz inphase quadrature channel.

These criteria reject EM anomalies due to gradual changes in overburden thickness or resistivity. For such anomalies, the coaxial and coplanar channels (either inphase or quadrature) for the same operating frequency move together and no separation is seen. This information is best seen in the contour plan maps of apparent resistivity.

The width of an anomaly from a thin sheet conductor will depend principally on depth of burial, dip and orientation with respect to flight line direction. A near vertical conductor running normal to the flight lines will yield a coaxial EM anomaly whose width is about 2.5 times the source-sensor separation (measured from 20% of the anomaly peak). The anomaly from such conductors at surface is about 80 m. The comparable figures for a conductor under 50 m of overburden is 220 m.

Special care is taken in areas of negative inphase response (due to magnetite). The quadrature channels may be the only indicators of a coincident conductor.

EM anomalies due to cultural sources are so judged if there is a coincident response in the power line monitor as seen on the analog records. If present, they are shown on maps as open squares. Conductance range estimates and inphase response amplitudes are not plotted with the anomaly symbol.

Cultural anomalies may also be caused by buildings in the exploration camp and

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older debris scattered near the airstrip. The video type and analog records have been examined to locate any possible EM responses due to such sources. Line 10340 passed over the southern edge at the camp but no coincident EM response was seen. Line 10350 passed over the center of the camp at 11:14:11 (\pm 5 seconds). A coincident response in the power line monitor and three sharp peaks in the EM data were seen at this location. A cultural EM anomaly is indicated.

B. Analysis

The EM anomaly response amplitudes at 4600 Hz are used to determine the conductance and depth of burial of a vertical thin sheet conductor model. These data appear in Appendix II. The anomaly listings are given for each of the four survey blocks separately.

The inphase anomaly amplitude and the thin sheet conductance range as determined from the 4600 Hz response amplitudes are shown with the plotted anomaly symbols. Each anomaly is identified by flight line number and letter label.

Where the inphase response is negative, the conductance estimates are unreliable. Where the 4600 Hz inphase response is negative, the anomaly symbol is shown as an open circle with an "M" printed inside. This is intended to indicate a conductor in the presence of appreciable magnetite.

Conductive overburden will generally reduce thin sheet conductance estimates because of elevated background levels in the quadrature channels. Depth of burial estimates will in general be too small.

7.4 General Comments

EM

The maps of apparent resistivity show resistivity highs - more than 5000 ohm-m - over topographic highs and resistivity lows - less than 1000 ohm-m over the river valleys. The largest area of uniformly low apparent resistivities is over and immediately west of Galore Creek. Apparent resistivities are less than 300 ohm-m over an area some 500 m (e/w) by 2000 m (n/s). There is no clear relationship between the Central Zone deposit and the resistivity map. The deposit has coincident resistivities of 300 to 3000 ohm-m.

A number of EM anomalies have been identified and appear on selected map products as anomaly centers. Three types of EM anomalies are shown: a) normal, b) with magnetite and c) cultural. The one cultural anomaly over the exploration camp has been discussed.

The normal anomalies are seen mostly as highs in the 4600 Hz inphase and quadrature

channels and coincident lows in the 4175 Hz inphase and quadrature channels. They are thought to be caused by generally weak bedrock conductors. In some cases they may be due to edge effects at the borders of prominent resistivity lows. Conductance estimates are uniformly low - less than 1 mho. These anomalies are common in the Galore Creek valley.

An almost equal number of EM anomalies which show coincident magnetite have been picked. These anomalies are seen in the 4600/4175 Hz quadrature channels only as the inphase channels are negative due to near surface magnetite.

Negative inphase EM anomalies which show little or no positive quadrature response are common. There responses indicate near surface magnetite with no detectable electrical conductor. They are best represented in the map of apparent weight percent magnetite.

The Central Zone shows a number of weak EM anomalies over its southern and central parts. In the south, EM anomalies are near the edge of the deposit and often show an M indicating a conductor in the presence of magnetite.

The north end of the Central Zones shows few anomalies. This is an area of relatively low resistivities - thicker overburden would explain this feature and the absence of EM conductors or detectable magnetite over this part of the deposit.

The greatest concentration of EM responses is in an e/w band centered 500 m south of the Central Zone deposit. The North Junction deposit has no coincident EM anomalies.

Magnetics

The total field magnetic map shows a range of values from about 56,500 to over 60,000 nT. The lower amplitudes are generally found in the valleys and the higher amplitudes are found over the mountain tops. The bulk of the Central Zone has coincident total field magnetic values of 57,000 to 57,500 nT. and would overall be characterized as having a coincident magnetic low. A 1000 nT (30 nT/m) magnetic anomaly parallels the deposit immediately to the west.

The much smaller North Junction deposit is found in an area with background total field amplitudes of 58,200 to 58,400 nT. A local magnetic high - peak values of 58,600 nT - is just west of the deposit.

The contoured vertical gradient map shows the expected increased resolution of shallow magnetic sources. Although a general nne/ssw trend persists over most of the survey area, a number of VG anomalies are circular or arcuate with no preferred strike direction. Anomaly amplitudes over and to the east of the Central Zone are relatively low.

A number of possible faults have been taken from the contoured vertical gradient map

(see section 7.5 below). Common strike directions near the Central Zone are n/s, e/w and ne/sw. some nw/se trending faults are indicated to the southwest. Faults which should cross the mineralized zone are not seen over the deposit.

Taking magnetic axes and possible faults from the contoured vertical gradient data assumes navigational quality sufficient to produce a good quality total field map. Where the total field map is best, i.e., in the center of the survey area, the vertical gradient results are more reliable.

The contour maps of apparent weight percent magnetite show strong local concentrations of magnetite in parts of the survey area. Anomalous magnetite is found in two broad bands which trend ne/sw and in an arcuate band just south of the Central Zone deposit. The two bands parallel the long axis of the Central Zone but are centered some 1500 m southeast and northwest of the deposit.

The area of the Central zone is notable for the almost complete lack of measurable weight percent magnetite. This applies to both data sets - e/w and n/s survey lines. The band of anomalous magnetite south of the Central Zone is unusual in that its trend is normal to the local total field magnetics. The band crosses from west to east from an area of high background values - more than 57,750 nT - to an area of low background values less than 57,000 nT. This apparent inconsistency may be due to the different sampling depths of the magnetic and EM methods. The pattern over the low background areas south of the deposit suggests a thin near surface horizontal layer of anomalous magnetite.

Apparent magnetite maps should be viewed with the following in mind. Unlike the magnetometer, the EM system response to conductors or magnetic bodies is strongly dependent as source-sensor separation. A large concentration of magnetite at surface will appear as both a magnetic anomaly and anomalous weight percent magnetite. The same source at depths of 50 m or more will be seen only as a magnetic anomaly.

<u>VLF</u>

The contoured VLF total field map shows occasional anomalies of intermediate amplitude (10%) and short strike length (500m). They are scattered over the survey area and show a variety of strike directions.

The greatest concentration of anomalous VLF responses are over and near the southern end of the Central Zone. Peak amplitudes reach +10% and -10%. Strike directions are nne/ssw. These responses end abruptly at line 10400 which divides the deposit in half. This behaviour is sometimes interpreted as due to faulting.

Radiometrics

The Total Count and Potassium contour maps show broad prominent highs over the south end and just north of the Central Zone. Peak potassium values exceed 100 cps. Background values are on the order of 10 to 20 cps. As a rule of thumb, a potassium count rate of 20 cps from a 512 cu in crystal sensor indicates a surface concentration of 1% Potassium.

An equally strong potassium anomaly trends nnw/sse in the southwest part of the survey area.

The band of low count rates across the middle of the Central Zone may be due to overburden. If this is the case, the deposit may be situated in the center of a larger n/s band of high potassium.

7.5 <u>Compilation Map</u>

The compilation map shows the following geophysical features:

- EM conductor axes
- the 57,500 and the 58,000 nT contour lines
- possible faults
- areas of high potassium (greater than 75 cps)
- outline of the Galore Creek copper deposit
 - (Central Zone and North Junction)
- favourable area labels

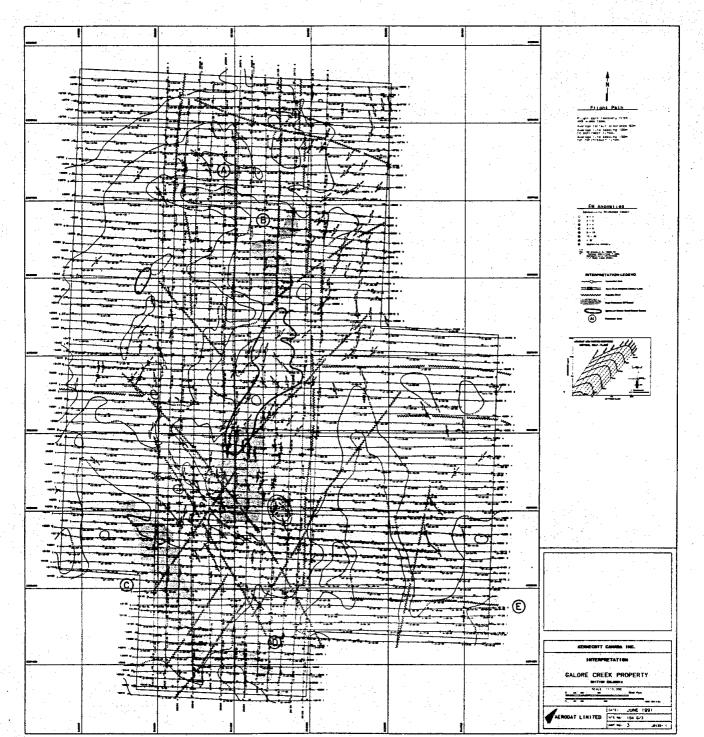
Conductor axes are drawn through EM anomaly centers for EM anomalies of like character. Consistency with local magnetic strike may be a factor.

The 57,500 nT contour line is used to separate areas of low and high background total field magnetic field amplitudes. The 58,000 nT contour line is used to define peak areas.

Possible faults are taken from breaks and discontinuities in the black line contoured vertical gradient map.

Areas of high radiometric potassium count rates are defined by the 75 cps contour line. Background values are 10 to 20 cps. These count rates translate roughly to anomalous ground concentrations of 4% in a background of 0.5 to 1%.

The outlines of the Central Zone and North Junction deposits have been taken from the article by Allan et al, cited above.



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Favourable area labels are shown as a letter (A to E). Discussion about these areas is given below.

7.6 Favourable Areas

From the general comments in section 7.4 above, it is clear that the large Central Zone of the Galore Creek copper deposit is characterised for the most part by the lack of coincident geophysical responses. The deposit has been seen as an area of

- low background total magnetic field amplitudes and reduced magnetic relief
- no measurable magnetite
- no distinctive EM or VLF responses
- high potassium count rates (southern part only).

Further exploration may therefore be concentrated in areas with a similar largely negative geophysical setting. This includes a possible extension of the Central Zone to the south and the five favourable areas labelled A to E. These are all areas of high potassium count rates. All but area D are found in areas of low magnetic field strength - i.e., below 57,500 nT. In almost all cases the high potassium region defined by the 75 cps contour line shares a border with the 57,500 nT contour line. This complimentary pattern, which has no geological explanation, is remarkable.

Each target is identified by the survey line and 24 hour clock time of the center of the potassium peak. Possible ground targets are therefore

A: Line 10660 (8:15:41)

B: Line 10590 (7:43:42) *
B: Line 10540 (7:18:40) *
C: Line 10220 (9:04:16)
C: Line 10150 (7:13:40) *
C: Line 10090 (13:08:06) *
D: Line 10050 (12:55:02)

E: Line 10110 (13:27:02) *

Extensions to the Central Zone to the south might be looked for as far south as line 10260 (9:39:30).

Of all the targets given under the heading A through E, the most promising are those accompanied by an asterisk. The other two have higher background magnetic values.

It is understood that the location of peak potassium count rates is meant to indicate an area of interest and not a geophysical target in the sense of an EM conductor for example. The measured radiometric count rates are a function of the potassium concentration in rock and the masking effects of water, overburden, snow/ice and vegetation. Variations in measured potassium may be caused entirely by variations in masking.

8. CONCLUSIONS

High resolution helicopterborne geophysical surveys have been completed over an area of about 35 square kilometres centered in the Galore Creek area about 175 km northwest of Stewart, B.C. Total coverage is approximately 459 line kilometres. Results are presented on black line and colour maps at scales of 1:10,000. Map types include EM anomaly centres, apparent resistivity, contoured magnetic field, contoured vertical magnetic gradient, contoured VLF-EM Total Field, contoured apparent weight percent magnetite and contoured radiometric data - total count, potassium, uranium and thorium.

Preferred geophysical characteristics have been built up from a model geological target. These characteristics have been extracted from various map products and transferred to a compilation/interpretation map. Favourable areas are discussed with reference to this compilation map.

Respectfully submitted,

Ian Johnson, Ph.D., P.Eng. Consulting Geophysicist for

AERODAT LIMITED August 18, 1991.



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J9135

APPENDIX II

ANOMALY LIST

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J9135 - KENNECOTT CANADA INC. ANOMALY LIST - GALORE CREEK PROPERTY

LIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE INPHASE				BIRD HEIGHT MTRS
1	10120	A MAGN	0	-9.3	5.1	0.0	0	20
2	10130	A MAGN	0	-4.8	11.4	0.0	0	47
2	10140	A MAGN	0	-2.1	9.1	0.0	0	39
2	10180	A MAGN	0	-1.0	13.4	0.0	0	43
2 2 2 2	10190 10190 10190 10190	A MAGN B MAGN C D	-	-7.9 -6.6 0.3 0.3	7.6	0.0 0.0 0.0 0.0	0 0 0 0	30 40 49 37
3	10201	A MAGN	0	-9.2	25.2	0.0	0	29
3 3	10210 10210	A MAGN B	0 0	-3.9 3.3	14.6 9.8	0.0	0	22 55
3 3 3 3 3	10220 10220 10220 10220 10220	A B MAGN C MAGN D E MAGN	0 0	2.2 -6.6 -46.0 2.8 0.5	7.5 13.9 40.9 28.2 9.2	0.0 0.0 0.0	2 0 0 0 0	19
3 3 3 3	10230 10230 10230 10230	A MAGN B MAGN C D	-	-0.5 -2.2 4.6 4.3	3.8 8.6 14.6 15.3		0 0 0 0	37 43 44 37
3 3 3 3	10240 10240 10240 10240	A B C MAGN D MAGN	0 0 0 0	4.2 7.4 0.0 -2.2	19.0		0 0 0 0	37 35 28 39
3 3	10250 10250	A MAGN B	0 0	2.6 6.6	33.3 23.6	0.0	0	29 39
3 3 3 3	10260	A B MAGN C MAGN D MAGN	0 0 0 0	0.7 -2.0 -13.6 -6.7		0.0 0.0 0.0 0.0	0 0 0	35 31 39 41
3 3	10270 10270	A MAGN B MAGN	0 0	-7.7 -5.7	7.2 10.1	0.0	0	38 45

J9135 - KENNECOTT CANADA INC. ANOMALY LIST - GALORE CREEK PROPERTY

FLIGHT	LINE	ANOMALY CATH	IGORY	AMPLITUDI INPHASE				HEIGHT
3 3	10270 10270	C MAGN D	0	-0.5 6.2	28.7 26.2		0 0	30 38
4	10280	A MAGN	0	-1.0	40.7	0.0	0	28
4 4	10290 10290	A MAGN B MAGN	0	-0.3 -3.4	22.5 14.9	0.0	0 0	34 36
4 4 4	10300 10300 10300 10300 10300	B MAGN C MAGN D MAGN	0 0 0 0 0	2.8 -9.3 -45.2 -14.9 -2.6	31.2 36.9 41.7 18.9 21.6	0.0	0	32 30 18 25 25
4 4 4	10310 10310 10310	A MAGN B C	0 0 0	-23.7 3.2 1.2	6.8 27.3 7.1	0.0		16 34 19
4 4 4	10320 10320 10320	A B MAGN C MAGN	0 0 0	0.1 -2.2 -5.5	25.9 21.8 35.2	0.0 0.0 0.0	0 0 0	35 30 23
4 4 4 4 4	10330 10330 10330 10330 10330		0 0 0 0 0	1.3 0.7 -3.3 -4.3 1.9	13.7 25.7 16.3 12.0 6.7	0.0 0.0 0.0	0 0 0	30 33 33
4 4 4	10340 10340 10340 10340 10340 10340	B C MAGN D MAGN E MAGN	0 0 0 0 0	-2.5 0.0 -8.1 -12.2 -6.9 -11.3	13.0 8.8 16.5 23.1 23.0 34.1	0.0	0 0 0 0 0	48 29 26 22
4 4 4	10350 10350 10350	A CULT B MAGN C	0 0 0	16.4 1.4 2.7	14.4	0.0	0	33
4 4 4 4	10360 10360 10360 10360	A B MAGN C D MAGN	0 0 0 0	3.9 -8.4 2.5 -10.0	8.8 23.4 48.0 12.2 9.8	0.0 0.0 0.0 0.0	0 0 0	46 20 41 39
4	10370	A	0	3.8	17.9	0.0	0	49

J9135 - KENNECOTT CANADA INC. ANOMALY LIST - GALORE CREEK PROPERTY

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FLIGHT	LINE	ANOMALY C	ATEGORY	AMPLITUD INPHASE	E (PPM) QUAD.	CONDUCTO CTP DEPT MHOS MTR	H HEIGHT
4 4	10370 10370	B C	0 0	2.6 2.0	17.7 15.0		34 39
4 4 4 4	10381 10381 10381 10381	B MAGN C MAGN	0 0 0 0	2.6 2.3 1.2 -8.6	43.3	0.0 0 0.0 0 0.0 0 0.0 0	53 24
4 4 4	10390 10390 10390	B	0 0 0	8.9 3.5 2.1	35.0 27.5 14.1	0.0 0	38
5 5	10400 10400		0 0	1.5 -4.5	9.0 11.1		
5 5 5	10410 10410 10410	В	0 0 0	-2.9 -0.2 0.9	34.8 10.8 8.0	0.0 0	31
5 5 5 5 5 5 5 5 5 5 5 5	10420 10420 10420 10420 10420 10420 10420 10420 10420	C MAGN D E MAGN F G		$ \begin{array}{r} -4.3 \\ -6.2 \\ -1.0 \\ -0.1 \\ -2.7 \\ -0.1 \\ 2.0 \\ 3.2 \\ -1.7 \\ \end{array} $	13.9 13.5	0.0 0 0.0 0 0.0 0 0.0 0 0.0 0	34 52 40 43 26 21 24
5 5 5 5	10430 10430 10430 10430	B MAGN C MAGN	0 0 0 0	-5.9	16.5 15.3 6.4 7.0	0.1 0 0.0 0 0.0 0 0.0 0	35 19
5 5 5	10440 10440 10440		0 0 0	0.1 4.5 6.7	13.0 12.4 17.0		36
5 5	10450 10450		0 0	8.6 -0.2		0.4 0 0.0 0	
5 5 5 5	10460 10460 10460 10460		0 0 0	-0.4 4.8 4.5 10.1	13.3 7.3 14.7 15.2	0.0 0 0.4 7 0.1 0 0.5 0	48 44

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects. .

J9135 - KENNECOTT CANADA INC. ANOMALY LIST - GALORE CREEK PROPERTY

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE INPHASE				HEIGHT
5	10460	E	0	9.9	18.0	0.4	6	32
5 5	10470 10470	A B	0	15.8 10.6	38.2 16.7	0.3 0.5	0	37 40
5 5 5 5 5 5 5	10480 10480 10480 10480 10480 10480	В	0 0 0 0 0 0	0.0 -1.3 -0.1 4.8 14.3 12.8	7.5 12.1 27.7	0.0 0.0 0.1 0.4	0	36 51 53
5	10490	А	0	6.5	14.0	0.2	0	41
5	10500	A	0	7.1	14.0	0.3	0	42
5 5	10510 10510	A B	0 0		13.3 9.6			55 54
5 5	10520 10520	a Magn B	0 1 0	0.0 3.7	9.7 13.8	0.0	0	34 54
6 6 6	10530 10530 10530	A MAGN B C	0 0 1 0	-4.2 8.7 12.8	9.0 16.0 31.1			34 45 30
6 6	10550 10550		0	6.1 7.8	10.4 17.7	0.3	0	49 52
6 6 6 6	10570 10570 10570 10570	A MAGN B C D	0 0 0 1 0	h K ·	5.8 13.7 21.5 28.7	- 11 - 2	0 14 0 0	33 26 49 47
6	10580	A	0	5.8	11.8	0.2	10	33
6	10590	A	0	13.5	24.1	0.5	· 0	48
6 6 6	10600 10600 10600	A B C	0 0 0		11.6 12.5 10.2	0.4 0.3 0.1	0 14 0	49 28 43
6 6	10610 10610		0	5.4 6.4	7.8 7.5	0.4	12 0	42 77
6	10620	A	0	5.8	8.0	0.5	7	47

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

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J9135 - KENNECOTT CANADA INC. ANOMALY LIST - GALORE CREEK PROPERTY

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUI INPHASE			UCTOR DEPTH MTRS	BIRD HEIGHT MTRS
6	10620	B	0	4.0	7.3	0.2	12	41
6	10630	A	0	2.4	10.3	0.0	0	51
6	10640	A	0	8.2	18.4	0.3	0	47
6 6	10660 10660	a B Magn	4 O 0	4.3 -3.3	9.6 4.7	0.2 0.0	0	51 30
6	10670	A	•	1.6	8.8	0.0	0	58
7 7 7	10680 10680 10680	A MAGN B C	0 0 0	-11.9 8.8 7.8	4.5 14.2 9.8	0.0 0.4 0.6	0. 9 3	31 34 48
7	10690	A	0	5.8	13.7	0.2	0	39
7 7	10700 10700	A MAGN B	0 1 0	-5.1 6.4	5.2 14.2	0.0	0 0	33 48
7 7	10710 10710	a B Magn	0 1 0	5.4 -9.0	9.5 5.1	0.3	3 0	45 19
7 7	10720 10720	a Magn B Magn		-4.0 -12.1	10.8 17.0	0.0	0	37 26
7	10730	A MAGN	T 0	-4.2	8.0	0.0	0	44
7 7 7	10740 10740 10740	A MAGN B MAGN C		-12.2 -1.6 2.7	6.6 9.3 12.4	0.0 0.0 0.0	0 0 0	24 35 46
7	10750	A	0	2.6	7.9	0.1	0	48
7	10760	A	0	-0.8	19.9	0.0	0	34
7 7	10770 10770	A B MAGN	0 T 0	-0.5 -1.9	7.3 9.2	0.0	0	46 48
777	10780 10780	A B	0 0	5.8 2.1	12.6 10.0	0.2	4 0	37 53
7 7	10790 10790	A B MAGN	0 1 0	2.7 -7.5	10.5 8.2	0.0	0 0	55 19

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J9135 - KENNECOTT CANADA INC. ANOMALY LIST - GALORE CREEK PROPERTY

FLIGHT LI	NE ANOMALY	CATEGORY	AMPLITUDI INPHASE	E (PPM) QUAD.			BIRD HEIGHT MTRS
8 200 8 200 8 200	10 B	0	-4.2 0.1 -12.1	26.6 23.5 5.3	0.0 0.0 0.0	0 0 0	30 28 24
8 200 8 200 8 200	20 B MAGN	· <u>0</u> ·	-40.6 -2.2 1.9	7.4 17.0 26.1	0.0 0.0 0.0	0 0 0	21 41 31
8 200 8 200 8 200	30 B MAGN	-	-3.6 -6.9 1.1	26.8 35.4 6.6	0.0 0.0 0.0	0 0 8	24 20 30
8 200 8 200 8 200 8 200 8 200 8 200	40 B MAGN 40 C MAGN 40 D MAGN	0 0 0	-6.2 -11.1 -6.0 -2.4 -10.9	27.0 56.7 42.8 28.6 24.6	0.0 0.0 0.0 0.0 0.0	0 0 0 0	27 22 23 27 21
8 200 8 200			-27.0 -20.9	36.0 21.8	0.0	0	20 22
8 200 8 200 8 200	60 B	0 0 0	0.6 -2.0 -7.6	15.4 7.4 10.4	0.0 0.0 0.0	0 0 0	32 37 34
8 200 8 200 8 200 8 200 8 200 8 200	70 B MAGN 70 C MAGN 70 D	· 0 ···	-5.7 -4.0 -6.1 7.5 0.2	12.1 13.2 14.1 19.3 17.2	0.0	0 0 0 0	40 26 28 36 44
8 200 8 200 8 200 8 200 8 200 8 200 8 200 8 200 8 200	80 B 80 C 80 D MAGN 80 E MAGN 80 F MAGN	0 0 0 0 0	-2.0 4.6 4.1 -4.3 -5.5 -4.1 -15.6	15.7 15.8	0.0 0.1 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0	41 43 36 20 30 31 31
8 200 8 200 8 200 8 200 8 200 8 200	90 B MAGN 90 C MAGN 90 D	0	-15.3	22.0	0.0 0.0 0.0 0.0 0.0	0 0 0 0	22 18 21 38 31

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FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE INPHASE	QUAD.	CTP		HEIGHT
8 8 8 8 8 8 8 8 8 8 8	20100 20100 20100 20100 20100 20100	F MAGN G MAGN H MAGN	1 0 1 0 1 0 1 0 1 0 0 0 0	4.0 5.9 4.2 -16.0 -24.2 3.0 -1.2	37.5 53.0 35.5	0.0 0.0 0.0	0 0 5 0 0 0 0	
8 8 8 8 8 8 8	20110 20110 20110 20110 20110 20110	B MAGI C MAGI D MAGI E	0 7 0 7 0 7 0 7		13.2 34.8 25.3 18.2	0.0	0	32 24 26 28 43 39
8 8 8 8	20120 20120 20120 20120 20130 20130	A	0 0 10 0		6.8 18.1 20.0 18.8 9.2	0.1 0.0	-	48 36 30 28 34

APPENDIX III

CERTIFICATE OF QUALIFICATIONS

I, IAN JOHNSON, certify that:

- 1. I am registered as a Professional Engineer in the Province of Ontario.
- 2. I reside at 38 Tinti Place in the town of Thornhill, Ontario.
- 3. I hold a Ph.D. in Geophysics from the University of British Columbia, having graduated in 1972.
- 4. I have been continuously engaged in both professional and managerial roles in the minerals industry in Canada and abroad for the past fourteen years.
- 5. The accompanying report was prepared from published or publicly available information and material supplied by Kennecott Canada Inc. and Aerodat Limited in the form of government reports and proprietary airborne exploration data. I have not personally visited the specific property.
- 7. I have no interest, direct or indirect, in the property described nor in Kennecott Canada Inc.
- 8. I hereby consent to the use of this report in a Statement of Material Facts of the Company and for the preparation of a prospectus for submission to the appropriate securities commission and/or other regulatory authorities.

Signed,

Ian Johnson, Ph.D., P. Eng.



J9135 Thornhill, Ontario August 21, 1991

APPENDIX IV

PERSONNEL

FIELD

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Flown

June 23 to June 25, 1991

Pilots

Del Rokosh

Operators

Steve Arstad

OFFICE

Processing

Tom Furuya George McDonald

Report

Ian Johnson

