

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 94.11.24

ASSESSMENT REPORT 23290

MINING DIVISION: Omineca

PROPERTY: Huckleberry  
LOCATION: LAT 53 41 00 LONG 127 10 00  
UTM 09 5949634 621082  
NTS 093E11E

CAMP: ~~051~~ ~~Tabdoggo Camp~~

CLAIM(S): Len 15, Len 17, Len 23-25, Len 29, Len 31-11, Len 36, Len 38, Len 44 Fr.  
New Len 22

OPERATOR(S): New Camamin Res.

AUTHOR(S): Somerville, R.

REPORT YEAR: 1994, 1115 Pages

COMMODITIES

SEARCHED FOR: Copper, Gold, Silver

KEYWORDS: Jurassic, Hazelton Group, Cretaceous, Intrusions, Gypsum, Anhydrite  
Carbonate veins, Pyrite, Chalcopyrite, Bornite

WORK

DONE: Drilling, Geochemical, Physical  
DIAD 12512.8 m 68 hole(s); NQ , NQ2  
SAMP 3185 sample(s) ; ME  
TOPO 2000.0 ha

Map(s) - 1; Scale(s) - 1:1000

MINFILE: 093E 037, 093E 038, 093E 039

# RSGM R. Somerville Geological & Mining Engineering Ltd.

Suite 240 - 171 West Esplanade • North Vancouver, B.C. Canada V7M 3K9 • Tel: (604) 986-5766 Fax: (604) 986-5928

VOLUME I

A DIAMOND DRILLING REPORT  
ON THE  
BONZAI & SOPHMEISTER GROUPS OF MINERAL CLAIMS

HUCKLEBERRY PROPERTY

Omineca Mining Division, British Columbia  
NTS 93E/11E  
Latitude 53°41'N  
Longitude 127°10'W

on behalf of

NEW CANAMIN RESOURCES LTD.  
&  
KENNECOTT CANADA INC.

by

Richard Somerville, B.Sc.(hon), P.Eng.  
R.SOMERVILLE GEOLOGICAL & MINING ENGINEERING LTD.  
#240 - 171 West Esplanade  
North Vancouver, B.C.  
V7M 3K9

PART 1 OF 3

23,290

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

FILMED

January 15, 1994

**SUB-RECORDER  
RECEIVED**  
JAN 31 1994  
M.R. # \_\_\_\_\_ \$ \_\_\_\_\_  
**VANCOUVER, B.C.**

FEB 21 1994  
LOG NO: \_\_\_\_\_ RD.  
ACTION: \_\_\_\_\_  
FILE NO: \_\_\_\_\_

TABLE OF CONTENTS

<u>VOLUME I</u>	<u>Page No.</u>
INTRODUCTION	
SUMMARY . . . . .	1
LOCATION, PHYSIOGRAPHY, ACCESS. . . . .	2
LOCATION MAP (Figure 1) . . . . .	4
PROJECT CLAIM MAP (Figure 2) . . . . .	5
WORK COMPLETED IN 1993 BETWEEN Mar.15 & Oct. 31 . . . . .	6
TABLE # 1 . . . . .	7
Diamond Drill Hole Collar Information	
CLAIM TENURE AND OWNERSHIP . . . . .	10
GEOLOGY	
REGIONAL GEOLOGY. . . . .	13
PROPERTY GEOLOGY . . . . .	14
ACKNOWLEDGEMENT . . . . .	16
AUTHOR'S QUALIFICATIONS . . . . .	17
CORE LOGGER'S QUALIFICATIONS . . . . .	18
BIBLIOGRAPHY . . . . .	19
APPENDIX	
COST STATEMENT	
STATEMENT OF WORK	
VOLUME II	
Diamond Drill Logs	
VOLUME III	
Analytical Results	



LIST OF FIGURES

	<u>Page No.</u>
Figure 1. Location Map . . . . .	4
Figure 2. Project Claim Map . . . . .	5

POCKET

WEST AREA - DRILL HOLE PLAN	1:5,000
EAST ZONE - DRILL HOLE PLAN	1:1,000

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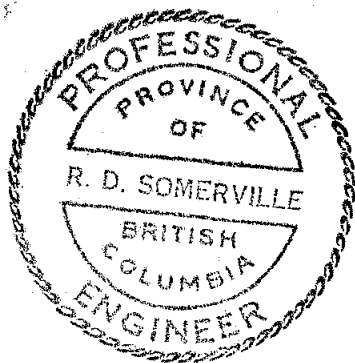
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## INTRODUCTION

### SUMMARY

This report covers the drilling of seventy NQ wireline diamond drill holes on the Huckleberry Mountain property . The holes were drilled in 1993 between March 15th and October 31st. In total, 41,052.5 ft(12,512.8 m) of hole were bored. Initially, the purpose of this drill program was to explore a limited area around the previously discovered Huckleberry Main Zone for additional copper mineralization. Hole number 93-26, a proposed tailings water monitoring hole, encountered the first significant copper sulphides in what has become the East Zone, and the subsequent holes (with the exception of holes 91 through 99 and 77 to 79) were drilled to define the physical size and continuity of the copper reserves indicated in this zone. Holes 77 to 79 and 91 to 97 were drilled to explore a mineralized zone ( the West Grid Zone) to the west of the Huckleberry Main Zone and on the western flank of the Main Intrusive . Holes 98 and 99 were drilled to test an airborne magnetic low (Mid East Zone) which lies in a structurally favourable position between the East and the Main zones. Hole # 93-98 intersected 60 feet of good grade(0.51% Cu) copper mineralization near the end of the hole.

Further drilling should be done in this area to investigate the extent of this new discovery as well as to define and extend the East Zone.



Respectfully Submitted

A handwritten signature in black ink, appearing to read "R. Somerville", written over a horizontal line.

R. Somerville P.Eng.

LOCATION, PHYSIOGRAPHY, ACCESS

The Huckleberry property is situated approximately 87 kilometres south-southwest of Houston, B.C. (Figure 1). The claim group lies immediately to the north of Tahtsa Reach and approximately 47 air kilometres north-northeast of Kemano, B.C. The NTS map sheet number is 93E/11E and the latitude and longitude is as follows:

LATITUDE: 53 31'N  
LONGITUDE: 127 10'W

The property can be reached by a total of 138 km of good gravel road which are currently being used as mainline logging access roads. Only the last 8 km of the road has not been maintained to a high standard. A route log for access to the property is as follows:

- 1.) From Highway 16 just north of Houston turn west on the Morice River Road to the junction with the Morice Owen Road.
- 2.) Follow the Morice Owen Road to the Nadina Road
- 3.) Follow the Nadina Road to the Tahtsa Road
- 4.) Follow the Tahtsa Road to the Huckleberry Road (approximately 2 km west of Sweeney Lake)
- 5.) Follow the Huckleberry Road to the Huckleberry camp.

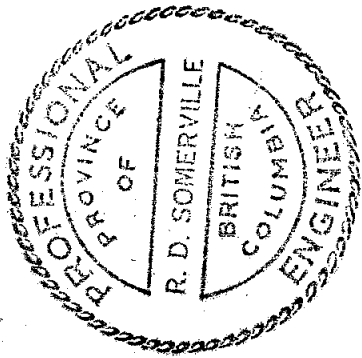
Tahtsa Reach has an elevation of about 853 metres asl, and elevations on the property range up to 1300 metres. The main mineralized areas of interest lie at about 1000 metres elevation.

The property lies at the north end of the Boundary Ranges of the Coast Mountains. Moderately steep mountain slopes, broad U-shaped valleys, large narrow northeast-trending lakes draining ice-fields and glaciers to the west, are the dominant physiographic features of the area. Slopes on the property are moderate. Glaciers have scoured the valley walls leaving a shallow overburden on the tops of the ridges and infilling the valleys with glacialfluvial gravels and sandy clay. Between the lake level at

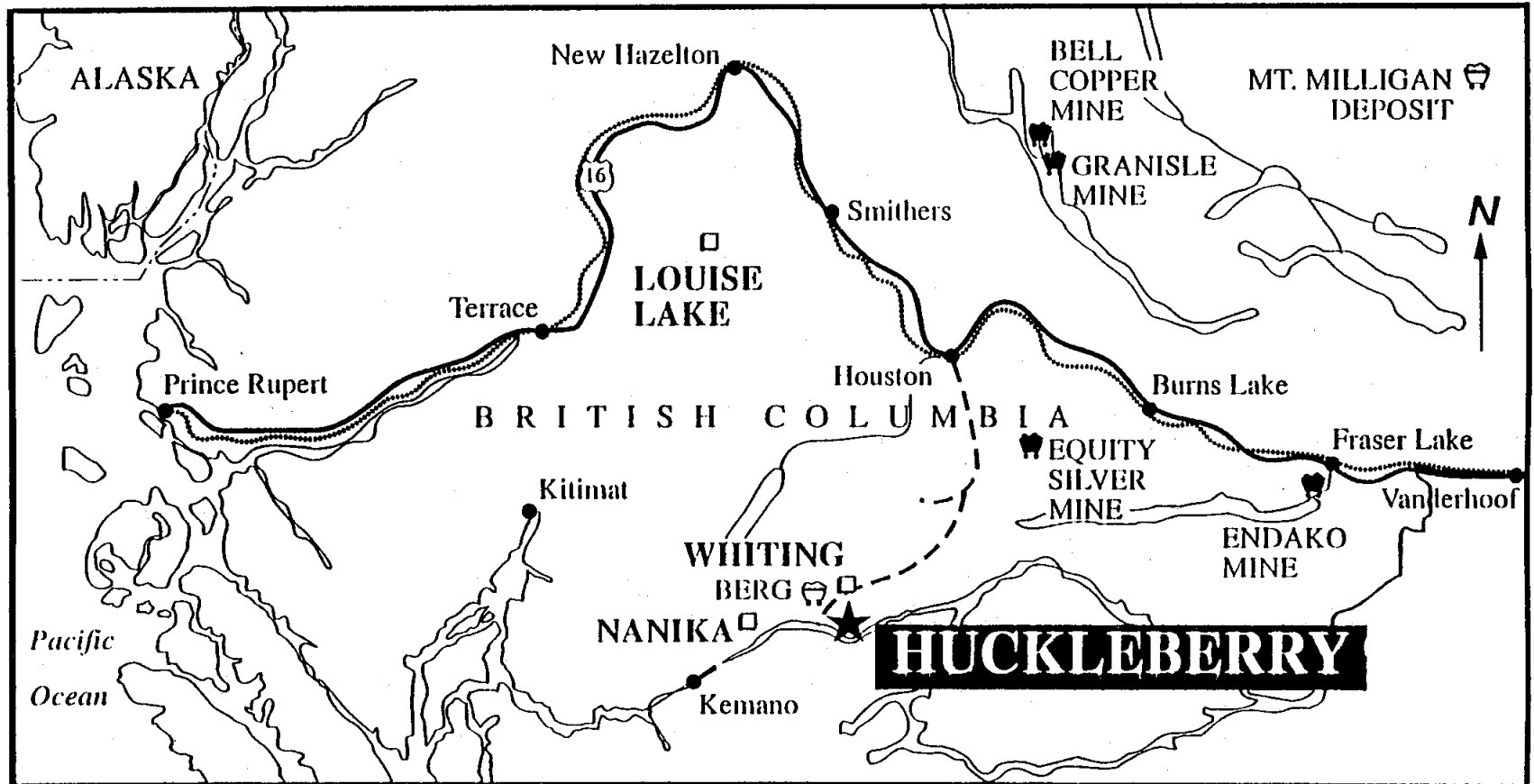
853 and about 1,100 metres, slopes are heavily covered with slide alder, mountain ash, willow, huckleberry, false azalea and gnarled spruce, balsam fir and alpine fir. Above 1100 metres, the vegetation is mainly low alpine growth.

Most of the drainages on the property are intermittent and all flow into Tahtsa Reach. The campsite is established at the same location used by all the previous operators.



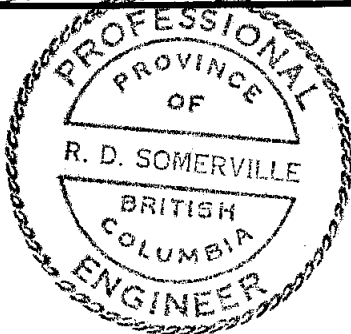
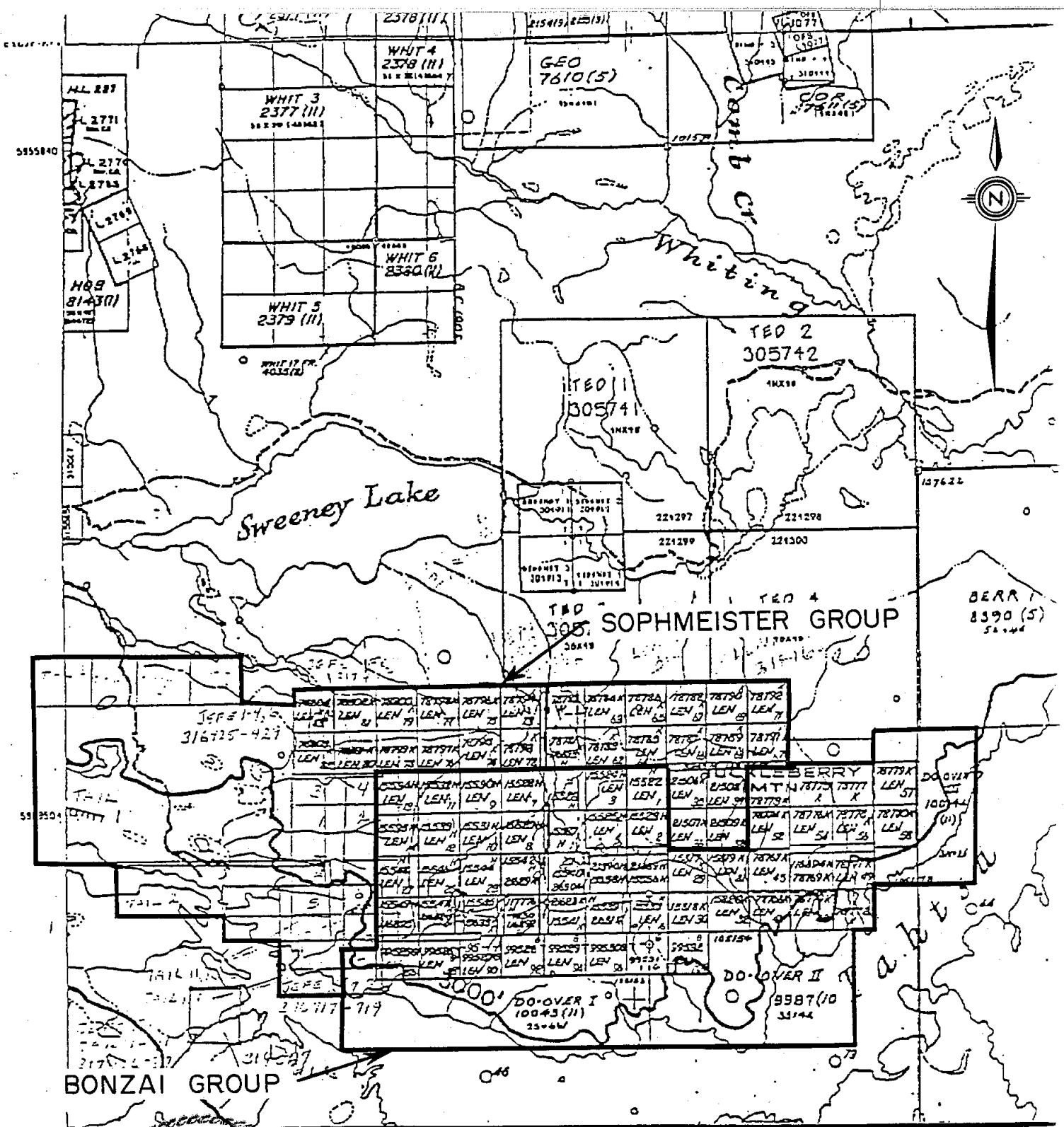


# Location Map



NEW CANAMIN RESOURCES LTD. Huckleberry Project, BC

100kms



NEW CANAMIN RESOURCES LTD.

HUCKLEBERRY PROJECT

SOPHMEISTER GROUP & BONZAI GROUP

(Taken from MEMPR Mineral Titles Reference maps 93E11E, 93E11W)

WORK COMPLETED IN 1993 BETWEEN MARCH 15th AND OCTOBER 31st

Between March 15th and October 31st, a total of 41,052.5 feet (12,512.8 m) of NQ drill hole was bored on the Huckleberry Property. In all, seventy diamond drill holes were completed. All the pertinent information on the holes drilled in this program, regarding location, length, and orientation, may be found in Table 1 in this report. The holes are all plotted on the West Area Drill Hole Plan and the East Zone Drill Hole Plan found in the pocket of Volume I of this report. The core was recovered and stored on the property in wooden and steel core racks. The holes were logged in detail. (see Volume II of this report) The majority of the core was sampled, generally by splitting and generally in ten foot sections, and assayed for copper and for 31 elements with ICP, at Min-En Laboratories in North Vancouver B.C. The analyses reports together with the analytical procedures are presented in Volume III of this report.

RESULTS

Fifty eight drill holes have been drilled to date in the East Zone. All the holes encountered anomalous copper mineralization. Eight holes were too low grade to be considered ore grade or were incomplete due to mechanical difficulties or poor core recovery. All the data has been reviewed by A. Jackson P.Eng. and as stated (1993) by him in his recent report:

Drill indicated and inferred reserves within the area drilled to date on the east zone total 39,000,000 tonnes at 0.60% Cu. . . . The overall geological reserve of the East Zone within the area drilled is 75,000,000 tonnes at 0.47% Cu.

The ten drill holes drilled on the area west of the Main Zone (West Zone)(Holes 91 to 97 and 77 to 79) all encountered subeconomic copper values but no ore grade intersections were found.

**NEW CANAMIN RESOURCES LTD.  
Huckleberry Project 1993**

**Diamond Drill Hole  
Collar Information**

Hole #	Start Date	End Date	Northing	Easting	Elevation	Dip/Az	Length(m)	Cum (m)	Length (ft)	Cum (ft)
93-26	9-Feb	10-Feb	14272.23	14446.77	1041.11	-90	41.1	41.1	135	135
93-31	26-Mar	27-Mar	14277.61	14442.14	1041.15	-90	42.7	42.7	140	140
93-32	27-Mar	28-Mar	14248.77	14467.45	1035.81	-90	182.9	225.6	600	740
93-33	28-Mar	29-Mar	14302.31	14413.93	1043.52	-90	152.4	378.0	500	1240
93-34	30-Mar	30-Mar	14296.66	14348.05	1037.17	-90	121.9	499.9	400	1640
93-35	30-Mar	1-Apr	14239.02	14430.11	1033.08	-90	152.4	652.3	500	2140
93-36	1-Apr	2-Apr	14239.02	14430.11	1033.08	-59/24	70.1	722.4	230	2370
93-37	2-Apr	3-Apr	14297.42	14467.19	1047.06	-90	64.0	786.4	210	2580
93-38	3-Apr	4-Apr	14211.12	14519.08	1031.72	-90	152.4	938.8	500	3080
93-39	26-Apr	27-Apr	14269.79	14400.72	1034.51	-90	158.5	158.5	520	520
93-40	27-Apr	28-Apr	14297.70	14491.17	1048.78	-90	152.4	310.9	500	1020
93-41	28-Apr	30-Apr	14272.85	14552.99	1051.77	-90	152.4	463.3	500	1520
93-42	30-Apr	1-May	14353.24	14368.82	1051.35	-90	158.5	621.8	520	2040
93-43	1-May	2-May	14328.17	14434.92	1050.88	-90	155.3	777.1	509.5	2549.5
93-44	2-May	3-May	14153.71	14492.94	1020.08	-90	146.3	923.4	480	3029.5
93-45	3-May	4-May	14184.53	14442.36	1020.60	-90	91.4	1014.8	300	3329.5
93-46	5-May	6-May	14324.62	14279.79	1038.70	-90	164.6	1179.4	540	3869.5
93-47	6-May	8-May	14383.08	14308.94	1049.15	-90	242.0	1421.4	794	4663.5
93-48	8-May	10-May	14443.31	14330.46	1067.22	-90	152.4	1573.8	500	5163.5
93-49	10-May	11-May	14388.95	14456.99	1068.53	-90	152.4	1726.2	500	5663.5
93-50	11-May	13-May	14262.46	14257.54	1027.93	-90	210.3	1936.5	690	6353.5

Hole #	Start Date	End Date	Northing	Easting	Elevation	Dip/Az	Length(m)	Cum (m)	Length (ft)	Cum (ft)
93-51	13-May	15-May	14244.06	14318.20	1027.21	-90	160.9	2097.5	528	6881.5
93-52	15-May	16-May	14360.05	14219.36	1040.98	-90	198.1	2295.6	650	7531.5
93-53	17-May	18-May	14281.51	14187.52	1031.45	-90	158.5	2454.1	520	8051.5
93-54	18-May	19-May	14310.69	14113.93	1033.75	-90	155.4	2609.5	510	8561.5
93-55	19-May	20-May	14199.92	14225.07	1029.15	-90	103.6	2713.2	340	8901.5
93-56	21-May	22-May	14373.16	14155.65	1040.35	-90	201.2	2914.3	660	9561.5
93-57	22-May	23-May	14183.72	14578.77	1027.95	-90	143.3	3057.6	470	10031.5
93-57	7-Jul	8-Jul	14183.72	14578.77	1027.95	-90	89.0	89.0	292	292
93-58	8-Jul	11-Jul	14325.38	14275.74	1038.58	-90	304.8	393.8	1000	1292
93-59	12-Jul	14-Jul	14280.85	14438.23	1041.37	-90	246.9	640.7	810	2102
93-60	14-Jul	17-Jul	14409.46	14095.20	1044.06	-90	317.0	957.7	1040	3142
93-61	17-Jul	21-Jul	14350.91	14066.26	1035.34	-90	292.6	1250.3	960	4102
93-62	21-Jul	23-Jul	14407.68	14243.08	1049.96	-90	268.2	1518.5	880	4982
93-63	23-Jul	25-Jul	14436.85	14178.66	1052.42	-90	231.6	1750.2	760	5742
93-64	25-Jul	28-Jul	14230.66	14166.45	1029.35	-90	234.7	1984.9	770	6512
93-65	28-Jul	10-Aug	14218.41	14382.56	1025.54	-90	273.7	2258.6	898	7410
93-66	10-Aug	11-Aug	14379.31	14003.00	1034.71	-90	240.8	2499.4	790	8200
93-67	12-Aug	14-Aug	14349.39	14066.11	1035.03	-64/205	304.8	2804.2	1000	9200
93-68	14-Aug	16-Aug	14330.78	14121.53	1034.65	-65/205	304.8	3109.0	1000	10200
93-69	16-Aug	18-Aug	14474.37	14270.98	1066.62	-90	210.3	3319.3	690	10890
93-70	18-Aug	19-Aug	14440.62	14331.97	1066.66	-61/025	155.4	3474.7	510	11400
93-71	20-Aug	20-Aug	14409.02	14395.94	1065.00	-90	169.8	3644.5	557	11957
93-72	21-Aug	25-Aug	14251.51	14614.23	1050.66	-90	213.4	3857.9	700	12657
93-73	25-Aug	27-Aug	14233.24	14010.49	1033.21	-90	304.8	4162.7	1000	13657
93-74	27-Aug	29-Aug	14203.07	14070.02	1032.49	-90	296.9	4459.5	974	14631
93-75	29-Aug	31-Aug	14170.92	14134.79	1030.60	-90	294.1	4753.7	965	15596
93-76	31-Aug	2-Sep	14142.36	14348.45	1023.69	-90	199.9	4953.6	656	16252
93-77 W	3-Sep	4-Sep	13839.27	12410.54	1014.42	-90	137.2	5090.8	450	16702
93-78 W	4-Sep	6-Sep	13930.23	12360.22	1019.66	-90	152.4	5243.2	500	17202
93-79 W	6-Sep	8-Sep	14101.13	12260.01	1038.52	-90	152.4	5395.6	500	17702

Hole #	Start Date	End Date	Northing	Easting	Elevation	Dip/Az	Length(m)	Cum (m)	Length (ft)	Cum (ft)
93-80	8-Sep	10-Sep	14219.98	14672.45	1044.09	-90	66.4	5462.0	218	17920
93-81	10-Sep	12-Sep	14160.36	14639.53	1024.92	-90	243.8	5705.9	800	18720
93-82	12-Sep	13-Sep	14104.57	14623.11	1011.65	-90	88.4	5794.2	290	19010
93-83	13-Sep	15-Sep	14051.13	14738.82	998.28	-90	189.0	5983.2	620	19630
93-84	15-Sep	16-Sep	13993.88	14716.35	983.33	-90	79.9	6063.1	262	19892
93-85	16-Sep	18-Sep	14181.99	14579.83	1027.70	-60/204	171.9	6235.0	564	20456
93-86	18-Sep	20-Sep	14160.36	14639.53	1024.92	-60/024	243.8	6478.8	800	21256
93-87	20-Sep	22-Sep	14126.87	14697.14	1020.29	-60/024	240.8	6719.6	790	22046
93-88	22-Sep	24-Sep	14308.50	14637.04	1071.46	-90	213.4	6933.0	700	22746
93-89	24-Sep	25-Sep	14291.57	14706.57	1074.24	-90	78.0	7011.0	256	23002
93-90	26-Sep	27-Sep	14291.57	14706.57	1074.24	-70/205	50.0	7061.0	164	23166
93-91W	28-Sep	29-Sep	14134.60	11903.01	1013.92	-90	152.4	7213.4	500	23666
93-92W	29-Sep	30-Sep	14182.80	12216.32	1021.61	-90	152.4	7365.8	500	24166
93-93W	1-Oct	2-Oct	13874.53	12047.98	1000.09	-90	152.4	7518.2	500	24666
93-94W	2-Oct	3-Oct	13960.64	12005.47	1009.48	-90	152.4	7670.6	500	25166
93-95W	3-Oct	5-Oct	14043.34	11951.59	1014.15	-90	137.2	7807.8	450	25616
93-96W	5-Oct	6-Oct	13686.18	12156.03	986.36	-90	152.4	7960.2	500	26116
93-97W	7-Oct	8-Oct	13779.63	12097.35	1000.45	-90	118.9	8079.0	390	26506
93-98ME	9-Oct	10-Oct	14153.93	13699.60	1041.14	-65/000	243.8	8322.9	800	27306
93-99ME	10-Oct	11-Oct	14153.93	13699.60	1041.14	-60/180	152.4	8475.3	500	27806

<b>Total East Zone</b>	<b>10656.6</b>	<b>34962.5</b>
<b>Total West Grid</b>	<b>1460.0</b>	<b>4790.0</b>
<b>Total Mid-East Zone</b>	<b>396.2</b>	<b>1300</b>

CLAIM TENURE AND OWNERSHIP

The HUCKLEBERRY property comprises 173 claim units which were held in the name of Kennecott Canada Inc. until November 1993 at which time New Canamin Resources Ltd. assumed 100% ownership, subject to a contractual right allowing Kennecott to backin for a 60% ownership. The claim status at the Huckleberry property is as follows:  
(see Figure 3):

<u>Claim Name</u>	<u>Record No.</u>	<u>No. of Units</u>	<u>Date Staked</u>	<u>Expiry</u>
LEN 1	243790	1	July 12, 1962	2004
LEN 2	243791	1	July 12, 1962	2004
LEN 3	243792	1	July 12, 1962	2004
LEN 4	243793	1	July 12, 1962	2004
LEN 5	243794	1	July 12, 1962	2004
LEN 6	243795	1	July 12, 1962	2004
LEN 7	243796	1	July 12, 1962	2004
LEN 8	243797	1	July 12, 1962	2004
LEN 9	243798	1	July 12, 1962	2004
LEN 10	243799	1	July 12, 1962	2004
LEN 11	243800	1	July 12, 1962	2004
LEN 12	243801	1	July 12, 1962	2004
LEN 13	243802	1	July 12, 1962	2004
LEN 14	243803	1	July 12, 1962	2004
LEN 15	243804	1	July 12, 1962	2004
LEN 16	243805	1	July 12, 1962	2004
LEN 17	243806	1	July 12, 1962	2004
LEN 18	243807	1	July 12, 1962	2004
LEN 19	243808	1	July 12, 1962	2004
LEN 20	243809	1	July 12, 1962	2004
LEN 21	243810	1	July 12, 1962	2004
LEN 23	243811	1	July 12, 1962	2004
LEN 24	243812	1	July 12, 1962	2004
LEN 25	243813	1	July 12, 1962	2004
LEN 26	243814	1	July 12, 1962	2004
LEN 27	243815	1	July 12, 1962	2004
LEN 28	243816	1	July 12, 1962	2004
LEN 29	243817	1	Aug 24, 1962	2004
LEN 30	243818	1	Aug. 24, 1962	2004
LEN 31	243819	1	Aug. 24, 1962	2004
LEN 32	243820	1	Aug. 24, 1962	2004
LEN 33FR	243867	1	July 30, 1963	2004
LEN 34FR	243868	1	July 30, 1963	2004
LEN 35	243869	1	Aug. 2, 1963	2004
LEN 36	243870	1	Aug. 2, 1963	2004
LEN 37	243871	1	Aug. 2, 1963	2004
LEN 38	243872	1	Aug. 2, 1963	2004
LEN 39FR	243873	1	Aug. 15, 1963	2004
LEN 40FR	243874	1	Aug. 15, 1963	2004
LEN 41FR	243875	1	Aug. 15, 1963	2004

<u>Claim Name</u>	<u>Record No.</u>	<u>No. of Units</u>	<u>Date Staked</u>	<u>Expiry</u>
LEN 42FR	243876	1	Aug. 15, 1963	2004
LEN 43FR	243877	1	Aug. 15, 1963	2004
LEN 44FR	243878	1	Aug. 15, 1963	2004
LEN 45	244828	1	Aug. 18, 1969	2004
LEN 46	244829	1	Aug. 18, 1969	2004
LEN 47	244830	1	Aug. 18, 1969	2004
LEN 48	244831	1	Aug. 18, 1969	2004
LEN 49	244832	1	Aug. 18, 1969	2004
LEN 50	244833	1	Aug. 18, 1969	2004
LEN 51	244834	1	Aug. 18, 1969	2004
LEN 52	244835	1	Aug. 18, 1969	2004
LEN 53	244836	1	Aug. 18, 1969	2004
LEN 54	244837	1	Aug. 18, 1969	2004
LEN 55	244838	1	Aug. 18, 1969	2004
LEN 56	244839	1	Aug. 18, 1969	2004
LEN 57	244840	1	Aug. 18, 1969	2004
LEN 58	244841	1	Aug. 18, 1969	2004
LEN 60	244842	1	Aug 19, 1969	2004
LEN 61	244843	1	Aug 19, 1969	2004
LEN 62	244844	1	Aug 19, 1969	2004
LEN 63	244845	1	Aug 19, 1969	2004
LEN 64	244846	1	Aug 19, 1969	2004
LEN 65	244847	1	Aug 19, 1969	2004
LEN 66	244848	1	Aug 19, 1969	2004
LEN 67	244849	1	Aug 19, 1969	2004
LEN 68	244850	1	Aug 19, 1969	2004
LEN 69	244851	1	Aug 19, 1969	2004
LEN 70	244852	1	Aug 19, 1969	2004
LEN 71	244853	1	Aug 19, 1969	2004
LEN 72	244854	1	Aug 19, 1969	2004
LEN 73	244855	1	Aug 19, 1969	2004
LEN 74	244856	1	Aug 19, 1969	2004
LEN 75	244857	1	Aug 19, 1969	2004
LEN 76	244858	1	Aug 19, 1969	2004
LEN 77	244859	1	Aug 19, 1969	2004
LEN 78	244860	1	Aug 19, 1969	2004
LEN 79	244861	1	Aug 19, 1969	2004
LEN 80	244862	1	Aug. 19, 1969	2004
LEN 81	244863	1	Aug. 19, 1969	2004
LEN 82	244864	1	Aug. 19, 1969	2004
LEN 83	244865	1	Aug. 19, 1969	2004
LEN 84FR	244909	1	Sept. 9, 1969	2004
LEN 86	245344	1	June 23, 1971	2004
LEN 88	245345	1	June 23, 1971	2007
LEN 90	245346	1	June 23, 1971	2004
LEN 92	245347	1	June 23, 1971	2004
LEN 94	245348	1	June 23, 1971	2004
LEN 96	245349	1	June 23, 1971	2004
LEN 98	245350	1	June 23, 1971	2004
LEN 100	245351	1	June 23, 1971	2004



<u>Claim Name</u>	<u>Record No.</u>	<u>No. of Units</u>	<u>Date Staked</u>	<u>Expiry</u>
BERRY 2	245654	1	Oct. 6, 1972	2004
BERRY 3	245655	1	Oct. 6, 1972	2004
BERRY 4FR	245656	1	Oct. 6, 1972	2004
DO-OVER I	240225	12	Nov. 26, 1988	2004
DO-OVER III	240226	6	Nov. 26, 1988	2004
DO-OVER II	240197	12	Oct. 29, 1988	2003
NEW LEN 22	245657	1	Oct. 24, 1972	2004
JEFFE 1	316425	1	Feb. 20, 1993	2004
JEFFE 2	316426	1	Feb. 20, 1993	2004
JEFFE 3	316427	1	Feb. 20, 1993	2004
JEFFE 4	316428	1	Feb. 20, 1993	2004
JEFFE 5	316717	1	Mar. 25, 1993	2004
JEFFE 6	316429	1	Feb. 21, 1993	2004
JEFFE 7	316718	1	Mar. 25, 1993	2004
JEFFE 8	316719	1	Mar. 25, 1993	2004
TAIL 1	317426	18	Apr. 27, 1993	2004
TAIL 2	317427	4	Apr. 28, 1993	2004
TAIL 3	317428	1	May 1, 1993	2004
TAIL 4	317429	1	Apr. 28, 1993	2004
TAIL 5	317430	1	Apr. 28, 1993	2004
TAIL 6	317431	1	Apr. 28, 1993	2004
TAIL 7	317432	1	Apr. 30, 1993	2004
TAIL 8	317433	1	Apr. 30, 1993	2004
TAIL 9	317434	1	Apr. 30, 1993	2004
TAIL 10	317435	1	Apr. 30, 1993	2004
TAIL 11	317436	1	Apr. 30, 1993	2004
JEFE FR	317437	1	May 1, 1993	2004
LEN 101FR	318161	1	June 6 1993	2004
LEN 102FR	318162	1	June 6 1993	2004
LEN 103FR	318163	1	June 6 1993	2004
LEN 104FR	318164	1	June 15 1993	2004

GEOLOGYREGIONAL GEOLOGY

The Huckleberry Property is underlain by the middle Jurassic Hazelton Group, a complex group of sedimentary and volcanic rocks which comprise an island arc complex. The complex lies west of the successor Bowser Basin of the intermontane Tectonic Belt and east of the Coast Plutonic Complex. In the area of the property the Hazelton rocks are in places unconformably overlain by sediments of the Bowser Group. The Hazelton Group is mainly an island arc complex of sub-aerial volcanics of differentiated andesitic to dacitic calc-alkaline composition with interbedded sedimentary facies. The Jurassic rocks are all capped by Skeena marine basin turbidites of Early Cretaceous age, as well as Late Cretaceous age felsic pyroclastics and even later basalt flows, both of the Kasaska Group.

Subsequent to the sedimentary and volcanic activity, the rocks have been complexly folded and faulted and intruded by a succession of small to medium sized intrusives whose ages range from Upper Cretaceous to Eocene. The Eocene Nanika intrusives are known to have porphyry showings, including the Berg copper deposit. However, of these many intrusives, the Late Cretaceous Bulkley Valley hornblende-biotite diorites appear to contain the most important porphyry copper-molybdenum deposits of the district - including the Huckleberry and Whiting Creek deposits.

The regional metamorphic grade is of the lower greenschist facies. The regional scale alteration assemblage consists of moderate chloritic alteration with trace to minor disseminated pyrite. This regional metamorphic event peaked during the mid-Cretaceous time (approximately 110 - 90 Ma). In the immediate vicinity of ore deposits and economic showings a pervasive alteration comprising silica-carbonate-sericite/clay-pyrite is common. This alteration appears to have preceded, accompanied, and followed, sulphide deposition probably along long-lived or

reactivated channelways within the stratovolcano. Commonly, accompanying the porphyry sulphide mineralization, are areas of intense to moderate biotization and albitization.

#### PROPERTY GEOLOGY

The Huckleberry copper deposits are located in an aureole around a small Cretaceous (82my) hornblende-biotite intrusive stocks and dyke swarms which are cutting dark tuffs and porphyritic andesites of the Hazelton Group. (Telkwa Formation) Pyrite, chalcopyrite, and minor bornite mineralization is found in varying amounts in fractures, as disseminations and in crosscutting quartz veins. Minor molybdenite is noted throughout the core, with some concentrations noted at depth and in areas of the heaviest potassic alteration. Ore grades are found, both in the intrusive as well as in the volcanics, but the economic sulphide mineralization appears to decrease rapidly toward the center of the intrusive. The host volcanics are mineralized with pyrite and non economic copper mineralization for a large distance from the known copper deposits. The obvious inference is that the intrusives occupy mineralizing centers which were active pre, during and post-intrusive activity. However, the shape and distribution of the intrusives in the area, both horizontally as well as vertically is not yet known, and the extent and concentration of the sulphides has not yet been determined so the correlation cannot be stated as a fact. However there are at least two intrusive stocks exposed at surface as well as a number of porphyry dykes. It may well be that these smaller exposures come together with depth as a larger intrusive body. A small number of post mineral lamprophyre and microdioritic dykes cut through all the other rocks. These late stage dykes do not seem to be too extensive or dilutive in the oregrade areas.

Both the East Zone and the Main zone are extensively fractured and veined. The veins are either quartz (generally sulphide mineralized) or gypsum/anhydrite (joint fillings) with variable amounts of calcite. The pattern of the fracturing has not yet been

clearly determined except to say that there is clearly a steeply north-dipping east-west set of fractures which roughly parallels the East Zone and appears to control the extent and dip of the oregrade copper mineralization. Late stage, and probably post ore, NW-SE faulting occurs on the south side of the East Zone clearly cutting and offsetting oregrade mineralization.

Jackson (1993) has noted that the porphyry alteration envelope is elongated in an east-west direction and at least 4 km in length. There is not enough exposure or drilling to map the alteration in detail, but an early clay-sericite event appears to have been followed by a biotite/magnetite/amphibole (accompanied by magnetite, hematite and pyrite) which grades to moderate chlorite with minor disseminated pyrite away from the intrusive "core". Strong biotite and albitite alteration is noted patchily in the oregrade mineralized areas - in the groundmass of the host volcanics and in the veins associated with magnetite and chalcopyrite.

Jackson has also observed a very late stage overprint of quartz-sericite-clay on the potassic zone which is followed by the previously mentioned gypsum/anhydrite and carbonate veins.

ACKNOWLEDGEMENT

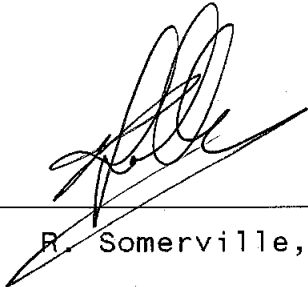
As author of this report, I wish to acknowledge the assistance of Kelly Illerbrun, B.Sc. who logged and supervised the logging of the core and was responsible for the locating of the drill collars as well as the solution for many of the other technical problems inherent in a program such as this. I should also like to acknowledge A.W. Jackson, P. Geo., who allowed his Report to be freely used in the preparation of this report.

AUTHOR'S QUALIFICATIONS

I, Richard D. Somerville, residing at #1704 2016 Fullerton Avenue, North Vancouver, British Columbia, V7P 1E6, certify that:

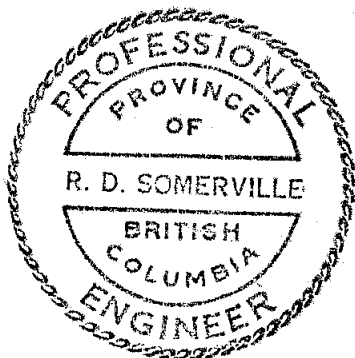
1. I am a practising Consulting Geologist with offices at 240 -171 West Esplanade, North Vancouver, B.C., V7M 3K9.
2. I am President of R. Somerville Geological and Mining Engineering Ltd.
3. I am a Registered Professional Engineer of the Provinces of Ontario and British Columbia.
4. I am a Fellow of the Geological Association of Canada and a Member of the Canadian Institute of Mining and Metallurgy.
5. I am a graduate of Queen's University at Kingston, Ontario, having received a B.Sc. (honours) degree majoring in Geology, and a B.A. degree majoring in Physics and Mathematics.
6. During the diamond drill program I was consulted professionally on a regular basis. During this period I visited the property, and I am satisfied that the work covered in this report was conducted in a proper and professional manner.

North Vancouver, British Columbia  
January 15, 1994



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R. Somerville, P. Eng.



## Statement of Qualifications

I, Kelly Lynn Illerbrun of 3829 9th Avenue, Smithers, BC, hereby certify the following to be true and correct:

I am a graduate of the University of British Columbia, with the degree of Bachelor of Applied Science, Geological Engineering, in May 1987.

I have been employed in the mineral industry in British Columbia, prior to and after graduation, for eight years. I have held the following positions:

1985-1986	Engineering Assistant Westar Mining Ltd., Greenhills Operations Elkford, BC
1987-1989	Exploration & Mine Geologist Cheni Gold Mines Inc., Lawyers Operations Vancouver, BC
1989-1990	Underground Miner Cheni Gold Mines Inc., Lawyers Operations Vancouver, BC
1990	Exploration Geologist Gulf International Minerals Inc., Inel Project Vancouver, BC
1991-1992	Mine Engineer/Geologist Timmins Nickel Inc., Dome Mountain Operation Smithers, BC
1993-	Exploration Geologist/ Project Manager New Canamin Resources Ltd., Huckleberry Project Vancouver, BC

I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia as an Engineer-in-Training and have been since 1987. My registration as a Professional Engineer with the Association is pending.

I have been granted an option by New Canamin Resources Ltd., of North Vancouver, BC as an employee of the company to purchase 30,000 common shares of New Canamin. New Canamin Resources Ltd. has an option agreement with Kennecott Canada Inc. of Vancouver, BC for the Huckleberry Project. Other than the share purchase option with New Canamin, I hold no other interest, either direct or indirect, in the property.



Dated January 19, 1994 at North Vancouver, BC

Kelly L. Illerbrun, B.A.Sc.  
Project Manager  
Huckleberry Project

BIBLIOGRAPHY

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93E/10W,11E O.F. 1987-4
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Huckleberry Mtn. Copper Deposit - East Zone, November 15,  
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Geology and Mineral Deposits of the Tahtsa Lake District, West  
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APPENDIX

**HUCKLEBERRY PROJECT  
COST STATEMENT**

Costs reported herein have been prepared by New Canamin Resources Ltd. and are reported as follows:

1) **Persons Employed**

(see attached list)

Total wages of persons employed: \$125,545.00

2) **Food and Accommodation**

- a) Food and accommodation were charged to New Canamin by the diamond drilling contractor at \$50.00 per man day for each person in camp not employed by the drilling contractor.

Total cost for food and accommodation: \$ 43,446.60

3) **Transportation Costs:**

- |   |             |
|---|-------------|
| a) Truck rental - Smithers Truck Rental | \$ 2,159.26 |
| b) H. Smit @ \$50.00/day                | 150.00      |
| c) K. Illerbrun @ \$530.00/month        | 3,975.75    |
| d) Fuel cost                            | 4,402.52    |

Total cost for transportation: \$10,687.53

4) **Diamond Drilling**

J.T. Thomas Diamond Drilling of Smithers, B.C. was the drilling contractor under a contract with a direct cost of \$18.00 per foot of NQ and NQ2 wireline drilling. A D6 bulldozer was supplied by J. T. Thomas at a rate of \$75.00 per operating hour.

Total cost for diamond drilling, bulldozer operation, drill fluids etc. \$853,070.01

5) **Total cost of camp construction and equipment rental: \$ 7,011.28**

**HUCKLEBERRY PROJECT  
COST STATEMENT**

6) Assaying:

Assaying, ICP and geotechnical analysis of drill core samples was carried out by Min En Laboratories. 3,185 samples were assayed for copper and gold and a 3.1 element ICP. In addition, geochemical analysis for arsenic and mercury was carried out.

Total cost of assaying @ \$2.23/foot: \$ 71,021.04

7) Surveying:

McElhanney Engineering staked and surveyed mineral claims, generated additional topographic base maps and an orthophoto for the project.

Total cost of McElhanney services: \$59,795.60

8) Road Maintenance - Drill Site Preparation:

Removal of snow from access routes, back hoe drill site preparation and tree removal.

Total cost of road maintenance drill site preparation: \$47,977.18

9) Field Expense and Supplies:

Field supplies purchased by New Canamin Resources Ltd. \$13,309.31

10) Communications:

Telephone charges for an Autotel system at site and mobile radio.

Total cost of communications: \$10,377.29

**TOTAL \$ 1,242,241.00**



**PERSONS EMPLOYED**

<u>Geoffrey A. Whiton</u> P.Eng. (Manager of Project Development) From March 15/93 to Oct. 31/93 \$2,000 per month starting month of Oct./93 \$2,500		<u>\$15,500</u>
<u>Kelly Illerbrun</u> Geological Engineer (Huckleberry Project Manager) From April 1/93 to Oct. 31/93	\$4,000 per month	<u>\$28,000</u>
<u>Daryl Hanson</u> Geologist From May 15/93 to Oct. 15/93	\$4,000 per month	<u>\$20,000</u>
<u>Kent Novakowski</u> Environmental Technican July 8/93 to Oct. 15/93	\$100.00 per day	<u>\$ 9,900</u>
<u>Robert McIntyre</u> Technician/Watchman Mar.24/93 to Oct.31/93	\$100.00 per day	<u>\$20,100</u>
<u>Terry Prosser</u> Technician April 15/93 to Oct.4/93	\$100.00 per day	<u>\$14,800</u>
<u>Alvin W. Jackson</u> P. Geo. Consultant Sept. 23,24,27,28, Oct. 1,4,5,8,12,13	\$350.00 per day	<u>\$ 6,300</u>
<u>Delbert E. Myers</u> P. Geo. Consultant Aug. 18 to 31 - 14 days	\$300.00 per day	<u>\$ 6,600</u>
<u>Hans Smit</u> P. Geo. March 26 to 31st/93 4 days	\$300.00 per day	<u>\$ 1,200</u>
<b>TOTAL COST OF PERSONS EMPLOYED IN THE FIELD:</b>		<b><u>\$122,400</u></b>

**MISCELLANEOUS PERSONNEL**

R.D. Somerville, P. Eng., Consultant

August 1 to October 31/93    3 months @ \$500/ month

\$ 1,500.00

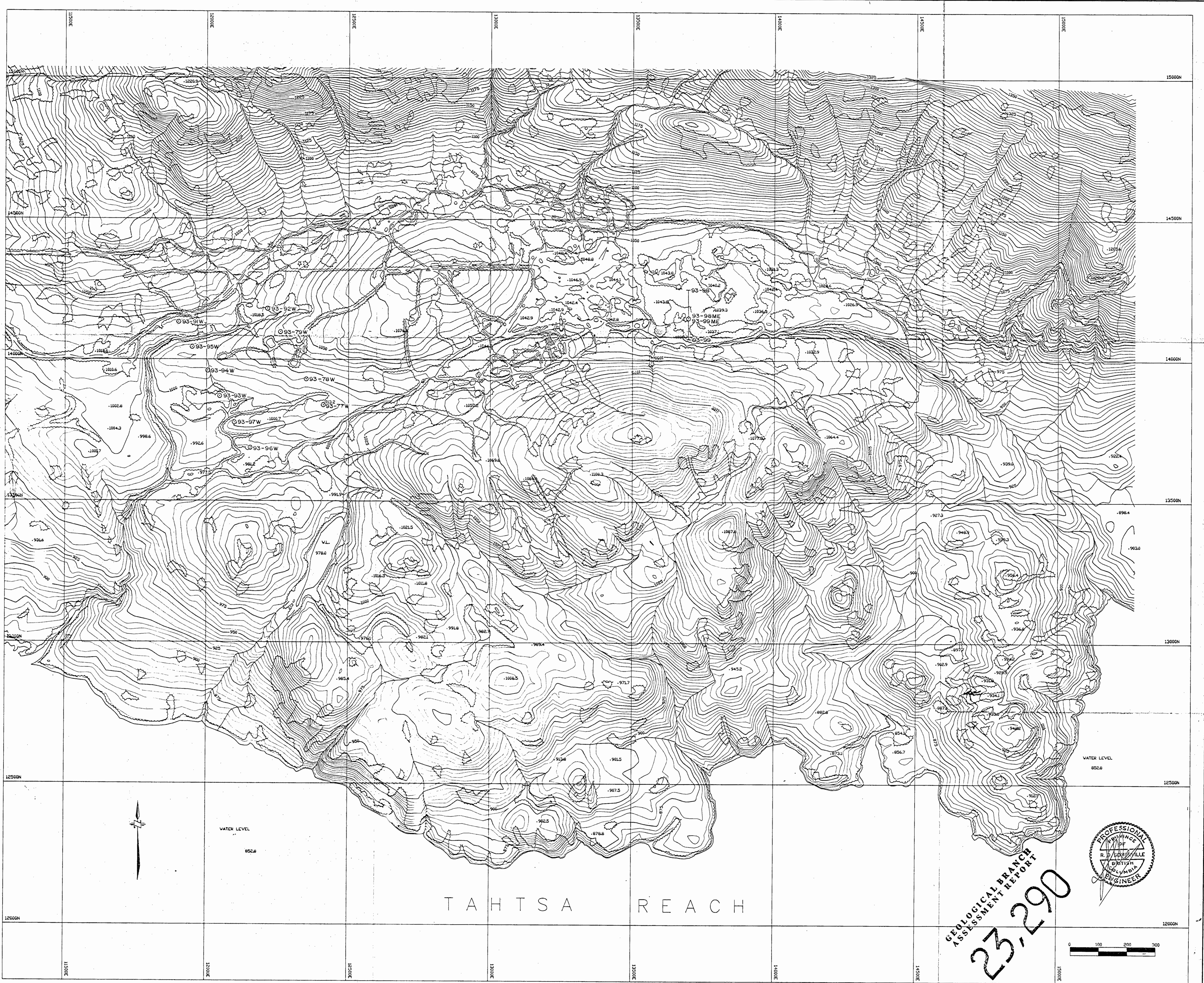
S. Smeeton, Draftsperson

Sept. 1 - October 31/93    84.25 hours @ \$20.00/hour

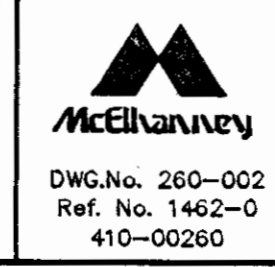
\$ 1,645.00

**TOTAL**

**\$125,545.00**



To accompany a report by: R. Somerville, P.Eng.  
Dated Jan. 15, 1994

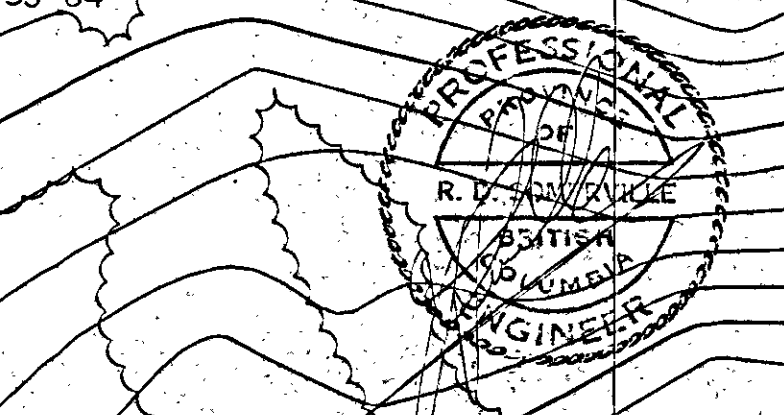
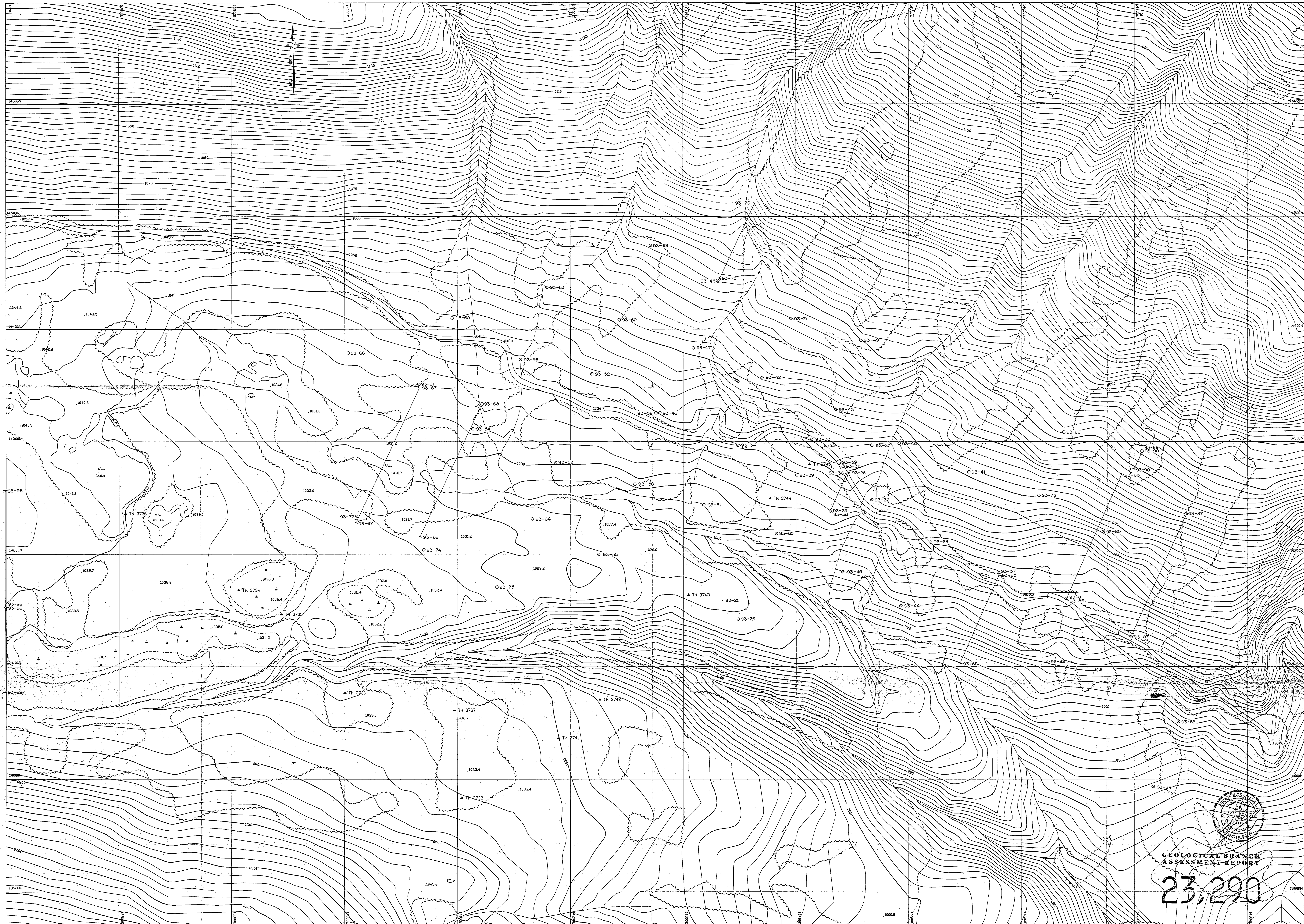


McIlhenny Engineering Services Ltd.  
13160-88th Avenue, Surrey, B.C. V3W 3K3 (604) 586-0391

MAP SCALE	1 : 5000	CONTOUR INTERVAL	5 meter
DATE COMPLETED	DEC.1992	SHEET NUMBER	1 of 1

NEW CANAMIN RESOURCES LTD.  
HUCKLEBERRY MTN.  
WEST AREA- DRILL HOLE PLAN.

GEOLOGICAL BRANCH  
ASSESSMENT REPORT  
23,290



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

23,290

- ▲ TRAVERSE POINT
- X DRILL HOLE SURVEY 1963
- DRILL HOLE SURVEY 1993

To accompany a report by R. Somerville, P. Eng.  
Dated Jan. 15, 1994

MAP H-A-18,19



DATE DRAWN/OCT. 13, 1993 (E.S.)



McElhanney Engineering Services Ltd.  
13160-88th Avenue, Surrey, B.C. V3W 3K3 TEL: (604)296-0361  
Compiled from 1 : 15,000 scale photography taken in 1973

MAP SCALE	1 : 1000	CONTOUR INTERVAL	2 metre
DATE COMPILED	APRIL 1993	SHEET NUMBER	1 of 1

NEW CANAMIN RESOURCES LTD.  
HUCKLEBERRY MTN.  
EAST ZONE - DRILL HOLE PLAN