

**REPORT
ON THE
POPLAR COPPER - MOLYBDENUM - GOLD - SILVER
PORPHYRY DEPOSIT**

CONSISTING OF 233 MINERAL CLAIMS
(DAVE 1-2, 4-5; DON 1-15, 26-32, 34-35, 45-54;
HILL 15-18; LAKE 1-36; PINE 1-22; POPLAR #1 FR. -
#2 (FR.); POPLAR 1-20, 33, 35, 37, 48-97;
TAG 1-2 (FR.); TAG 1-16, 23-42, 195-212)

LOCATED

ON NORTH SHORE OF TAGETOCHLAIN (POPLAR) LAKE,
SOUTH OF HOUSTON, BRITISH COLUMBIA

OMINECA MINING DIVISION

54 DEGREES 01 MINUTES NORTH LATITUDE
126 DEGREES 58 MINUTES WEST LONGITUDE
(N.T.S. 93 E/15W, 93 L/02W & 93 L/3E)

FOR

NEW CANAMIN RESOURCES LTD.
304 - 255 WEST 1ST. STREET,
NORTH VANCOUVER, B.C.
V7M 3G8

BY

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GEOLOGICAL ENGINEER

AUGUST 1, 1991

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SUMMARY

New Canamin Resources Ltd. has acquired an option on 233 mineral claims covering the Poplar porphyry copper-molybdenum-silver-gold deposit, located on a 900 m elevation overburden covered plain some 75 road kms south-southwest of Houston, B.C.

Utah Mines Ltd. carried out a geophysical, geochemical, geological and drilling program on the property during the period 1974 to 1982 for an expenditure of \$ 2,500,000 (uninflated 1982 dollars) and reported global reserves of 260,000,000 tonnes of 0.37% copper "equivalent" at a 0.25% copper "equivalent" cut-off grade.

The disseminated mineralization is centered on a differentiated Late Cretaceous calc-alkaline stock which intruded Lower and Upper Cretaceous volcanic and epiclastic rocks. Late Cretaceous volcanic rocks partly cap the stock. The Poplar stock is zoned with a hornblende monzodiorite-diorite border phase grading into a central biotite monzonite porphyry (K-Ar age determination at 76.2 +/- 2.7 million years). Alteration and mineralization zoning consists of a 600 m by 500 m potassic facies annulus with chalcopyrite and molybdenite surrounding a 300 m by 150 m core of argillic alteration with low copper grades. The above zones occur within a wide east-west trending phyllic alteration zone peripheral to which is a weak propylitic alteration assemblage.

There are two separate drill tested copper - molybdenum - silver - gold mineralization zones:

- (1) a main zone (west) consists of an annular body of Cu-Mo mineralization subcropping below shallow overburden and which is cut to two large north-northwest striking, steeply dipping post mineral dykes (BLOCK A), and
- (2) a buried zone to the east of the main zone which has a domical shape in its upper portion and which expands laterally and to depth (BLOCK B).

Mineral inventories at different cut-off values have been calculated for each of the drill tested zones and combined. At a cut-off value of 0.20% T. Cu, BLOCK A is estimated to contain 69,718,000 tonnes with an average grade of 0.32% T. Cu, 0.014% Mo, 0.05 opt Ag (1.7 g/tonne Ag) and 0.003 opt Au (0.1 g/tonne Au). Combining BLOCK A plus BLOCK B at the same cut-off value, the mineral inventory is in the order of 116,122,000 tonnes with an average grade of 0.32% T. Cu, 0.009% Mo, 0.06 opt Ag (2.07 g/tonne Ag) and 0.003 opt Au (0.1 g/tonne Au).

During the review of mineral inventories, it was noted that the mineral potential of the Poplar deposit is still open as the continuation of copper mineralization to the west and southwest has never been drill tested. The lateral and depth extent of the mineralization in the eastern zone (BLOCK B) is also open.

In light of untested areas, the mineral potential of the Poplar deposit could be in excess of 400 million tonnes of similar grade. In addition to the mineral potential of the immediate drill tested area, there are three other areas that have good near surface exploration potential.

A program for additional drilling, metallurgical testing and environmental studies has been recommended. The estimated cost of the proposed work program is \$ 900,000.00

INTRODUCTION

The firm of D.D.H. Geomanagement Ltd., 422 - 470 Granville St., Vancouver, B.C., V6C 1V5 has been requested by New Canamin Resources Ltd., 304 - 255 West 1st. Street, North Vancouver, B.C., V7M 3G8 to investigate the exploration potential of the Poplar copper - molybdenum - gold - silver porphyry deposit located on the north side of Tagetochlain (Poplar) Lake, south of Houston, B.C. and to recommend an exploration program, if warranted, to test that potential.

To accomplish this assignment, all available data both public and private, has been reviewed. The property was visited by the writer on July 3, 1991.

LOCATION AND ACCESS

The Poplar copper - molybdenum - gold - silver porphyry deposit of New Canamin Resources Ltd. is located in west central British Columbia, some 270 kms (168 miles) west of Prince George, B.C. and some 75 road kms (45 miles) south of Houston, B.C. Equity Silver Mines is 50 kms (29 miles) to the northeast of the property. Coordinates of the deposit are 54 degrees 01 minutes North latitude and 126 degrees 58 minutes West longitude. The claims are contained within N.T.S. areas 93E/15W, 93L/2W and 93L/3E. See Figure 1 - Location Map.

Access to the property is by 2-wheel drive via Highway 16 to Houston, B.C. then via good gravel road using the western Tahtsa Reach road at the junction to the immediate south of Owen Lake. A new main forest haul road has been constructed with upgraded bridges the location of which is just to the east of the above mentioned Tahtsa Reach road. The two roads are connected via the "Tahtsa Hook-Up" (See Figure 2 - Access Map).

The deposit lies beneath an overburden covered plain on the south slope of Poplar Mountain just north of Tagetochlain (Poplar) Lake at an elevation of approximately 900 m (2,953 feet) above sea



FIGURE 1

NEW CANAMIN RESOURCES LTD.

LOCATION MAP

Poplar Property

D.D.H. GEOMANAGEMENT LTD.



JULY 1991

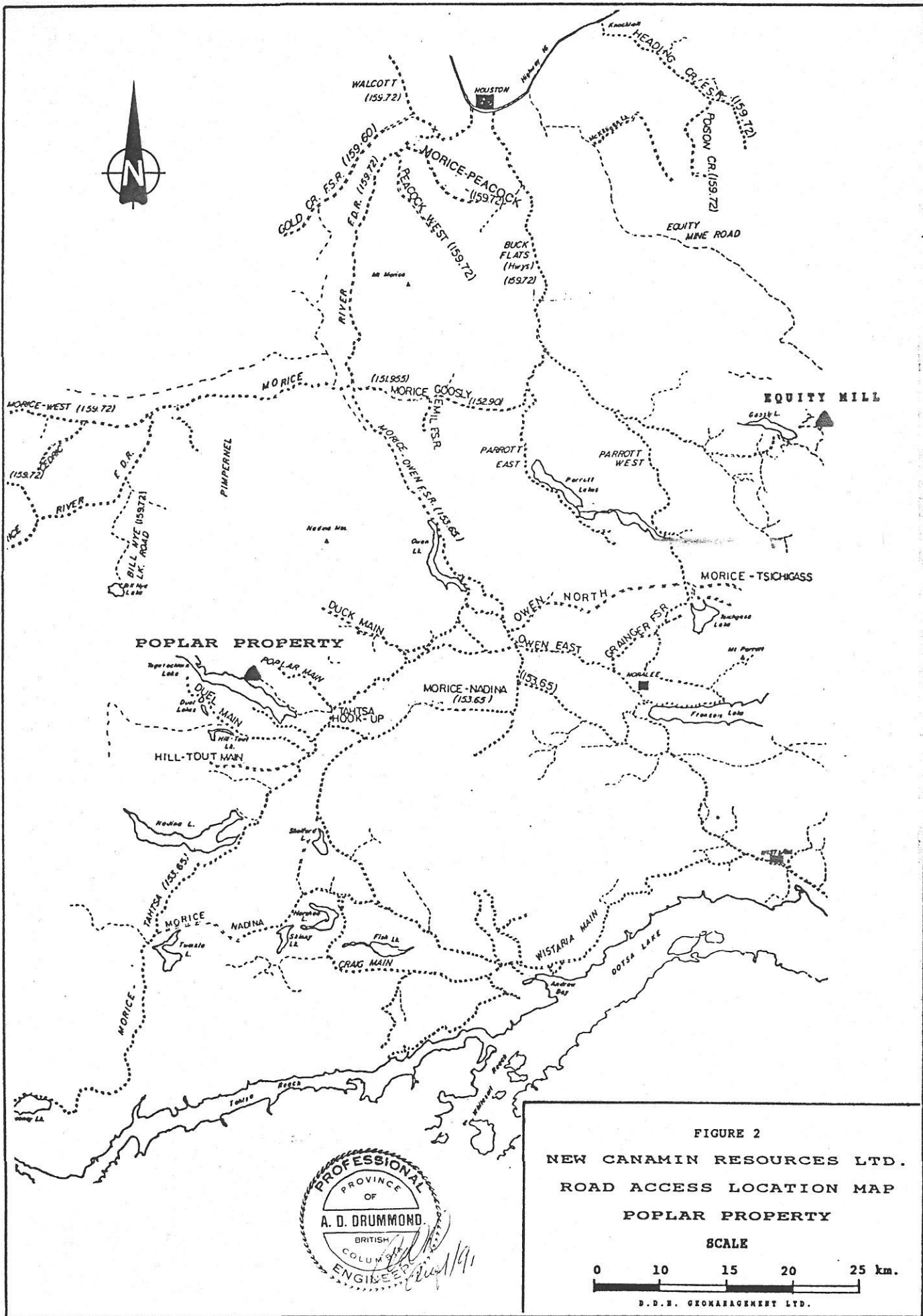


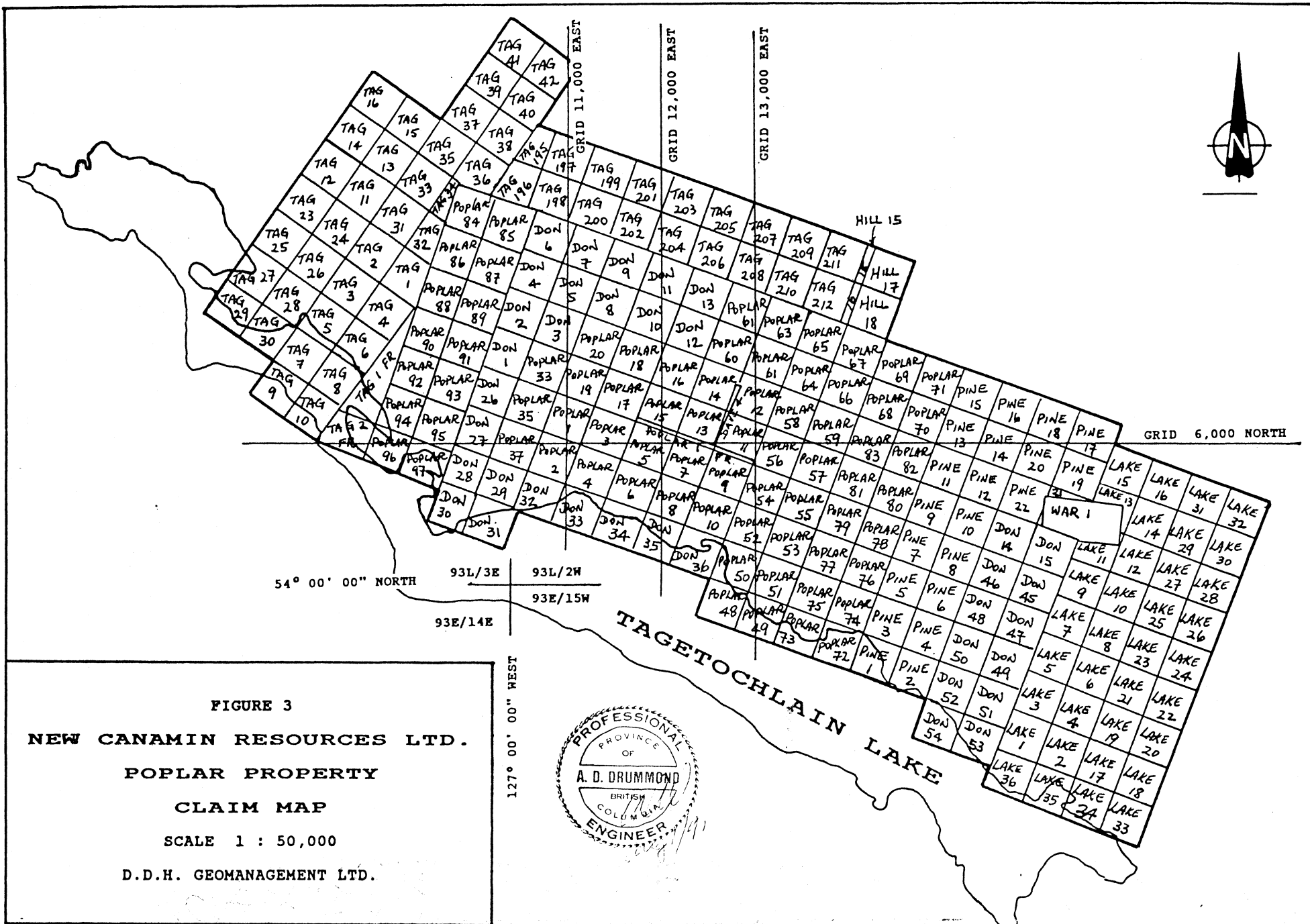
FIGURE 2
 NEW CANAMIN RESOURCES LTD.
 ROAD ACCESS LOCATION MAP
 POPLAR PROPERTY
 SCALE
 0 10 15 20 25 km.
 D. D. N. GEOMANAGEMENT LTD.

level. The area has moderately rolling topography with grassy open meadows alternating with local stands of aspen, fir and pine.

PROPERTY AND TITLE

The property comprises 233 mineral claims (233 units) which claims cover the corner of three mineral title map sheets: 93E/15W, 93L/2W and 93L/3E. Most of the claims were originally staked during 1974 - 1975 as two-post claims. The current property contains the following claims outlined below. All claims lies within the Omineca Mining Division. Mineral tenure numbers are given for each claim. (See Figure 3 - Claim Map)

<u>CLAIM NAME</u>	<u>RECORD NO.</u> (15M)	<u>MINERAL TENURE NO.</u>	<u>EXPIRY DATE</u>
DAVE 1	133103	246089	Nov. 27, 1992
DAVE 2	133104	246090	Nov. 27, 1992
DAVE 4	133105	246091	Nov. 27, 1992
DAVE 5	133106	246092	Nov. 27, 1992
DON 1	132366	245972	Oct. 03, 1992
DON 2	132367	245973	Oct. 03, 1992
DON 3	132368	245974	Oct. 03, 1992
DON 4	132369	245975	Oct. 03, 1992
DON 5	132370	245976	Oct. 03, 1992
DON 6	132371	245977	Oct. 03, 1992
DON 7	132372	245978	Oct. 03, 1992
DON 8	132373	245979	Oct. 03, 1992
DON 9	132374	245980	Oct. 03, 1992
DON 10	132375	245981	Oct. 03, 1992
DON 11	132376	245982	Oct. 03, 1992
DON 12	132377	245983	Oct. 03, 1992
DON 13	132378	245984	Oct. 03, 1992
DON 14	132379	245985	Oct. 03, 1992
DON 15	132380	245986	Oct. 03, 1992
DON 26	132381	245987	Oct. 03, 1992
DON 27	132382	245988	Oct. 03, 1992
DON 28	132383	245989	Oct. 03, 1992
DON 29	132384	245990	Oct. 03, 1992
DON 30	132385	245991	Oct. 03, 1992
DON 31	132386	245992	Oct. 03, 1992
DON 32	132387	245993	Oct. 03, 1992
DON 34	132388	245994	Oct. 03, 1992
DON 35	132389	245995	Oct. 03, 1992
DON 36	132390	245996	Oct. 03, 1992
DON 45	132399	245997	Oct. 03, 1992
DON 46	132400	245998	Oct. 03, 1992



(6)

FIGURE 3

NEW CANAMIN RESOURCES LTD.
 POPLAR PROPERTY
 CLAIM MAP
 SCALE 1 : 50,000
 D.D.H. GEOMANAGEMENT LTD.



(7)

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>MINERAL TENURE NO.</u>	<u>EXPIRY DATE</u>
DON 47	132401	245999	Oct. 03, 1992
DON 48	132402	246000	Oct. 03, 1992
DON 49	132403	246001	Oct. 03, 1992
DON 50	132404	246002	Oct. 03, 1992
DON 51	132405	246003	Oct. 03, 1992
DON 52	132406	246004	Oct. 03, 1992
DON 53	132407	246005	Oct. 03, 1992
DON 54	132408	246006	Oct. 03, 1992
HILL 15	132458	246009	Oct. 30, 1992
HILL 16	132459	246010	Oct. 30, 1992
HILL 17	132560	246011	Oct. 30, 1992
HILL 18	132561	246012	Oct. 30, 1992
LAKE 1	132574	246035	Oct. 16, 1992
LAKE 2	132575	246036	Oct. 16, 1992
LAKE 3	132576	246037	Oct. 16, 1992
LAKE 4	132577	246038	Oct. 16, 1992
LAKE 5	132578	246039	Oct. 16, 1992
LAKE 6	132579	246040	Oct. 16, 1992
LAKE 7	132580	246041	Oct. 16, 1992
LAKE 8	132581	246042	Oct. 16, 1992
LAKE 9	132582	246043	Oct. 16, 1992
LAKE 10	132583	246044	Oct. 16, 1992
LAKE 11	132584	246045	Oct. 16, 1992
LAKE 12	132585	246046	Oct. 16, 1992
LAKE 13	132586	246047	Oct. 16, 1992
LAKE 14	132587	246048	Oct. 16, 1992
LAKE 15	132588	246049	Oct. 16, 1992
LAKE 16	132589	246050	Oct. 16, 1992
LAKE 17	132590	246051	Oct. 16, 1992
LAKE 18	132591	246052	Oct. 16, 1992
LAKE 19	132592	246053	Oct. 16, 1992
LAKE 20	132593	246054	Oct. 16, 1992
LAKE 21	132594	246055	Oct. 16, 1992
LAKE 22	132595	246056	Oct. 16, 1992
LAKE 23	132596	246057	Oct. 16, 1992
LAKE 24	132597	246058	Oct. 16, 1992
LAKE 25	132598	246059	Oct. 16, 1992
LAKE 26	132599	246060	Oct. 16, 1992
LAKE 27	132600	246061	Oct. 16, 1992
LAKE 28	132601	246062	Oct. 16, 1992
LAKE 29	132602	246063	Oct. 16, 1992
LAKE 30	132603	246064	Oct. 16, 1992
LAKE 31	132604	246065	Oct. 16, 1992
LAKE 32	132605	246066	Oct. 16, 1992
LAKE 33	132606	246067	Oct. 16, 1992
LAKE 34	132607	246068	Oct. 16, 1992
LAKE 35	132608	246069	Oct. 16, 1992
LAKE 36	132609	246070	Oct. 16, 1992

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>MINERAL TENURE NO.</u>	<u>EXPIRY DATE</u>
PINE 1	132492	246013	Oct. 10, 1992
PINE 2	132493	246014	Oct. 10, 1992
PINE 3	132494	246015	Oct. 10, 1992
PINE 4	132495	246016	Oct. 10, 1992
PINE 5	132496	246017	Oct. 10, 1992
PINE 6	132497	246018	Oct. 10, 1992
PINE 7	132498	246019	Oct. 10, 1992
PINE 8	132499	246020	Oct. 10, 1992
PINE 9	132500	246021	Oct. 10, 1992
PINE 10	132501	246022	Oct. 10, 1992
PINE 11	132502	246023	Oct. 10, 1992
PINE 12	132503	246024	Oct. 10, 1992
PINE 13	132504	246025	Oct. 10, 1992
PINE 14	132505	246026	Oct. 10, 1992
PINE 15	132506	246027	Oct. 10, 1992
PINE 16	132507	246028	Oct. 10, 1992
PINE 17	132508	246029	Oct. 10, 1992
PINE 18	132509	246030	Oct. 10, 1992
PINE 19	132510	246031	Oct. 10, 1992
PINE 20	132511	246032	Oct. 10, 1992
PINE 21	132512	246033	Oct. 10, 1992
PINE 22	132513	246034	Oct. 10, 1992
POPLAR #1 FR	110648	245457	Jul. 01, 1992
POPLAR #2	130951	245898	Aug. 14, 1992
POPLAR 1	96902	245318	Jan. 29, 1992
POPLAR 2	96903	245319	Jan. 29, 1992
POPLAR 3	96904	245320	Jan. 29, 1992
POPLAR 4	96905	245321	Jan. 29, 1992
POPLAR 5	96906	245322	Jan. 29, 1992
POPLAR 6	96907	245323	Jan. 29, 1992
POPLAR 7	130933	245890	Aug. 14, 1992
POPLAR 8	130934	245891	Aug. 14, 1992
POPLAR 9	130935	245892	Aug. 14, 1992
POPLAR 10	130936	245893	Aug. 14, 1992
POPLAR 11	130937	245894	Aug. 14, 1992
POPLAR 12	130938	245895	Aug. 14, 1992
POPLAR 13	130939	245896	Aug. 14, 1992
POPLAR 14	130940	245897	Aug. 14, 1992
POPLAR 15	98818	245331	May 27, 1992
POPLAR 16	98819	245332	May 27, 1992
POPLAR 17	98820	245333	May 27, 1992
POPLAR 18	98821	245334	May 27, 1992
POPLAR 19	98822	245335	May 27, 1992
POPLAR 20	98823	245336	May 27, 1992
POPLAR 33	110642	245454	Jun. 01, 1992
POPLAR 35	110644	245455	Jun. 01, 1992

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>MINERAL TENURE NO.</u>	<u>EXPIRY DATE</u>
POPLAR 37	110646	245456	Jun. 01, 1992
POPLAR 48	131404	245910	Sep. 23, 1992
POPLAR 49	131405	245911	Sep. 23, 1992
POPLAR 50	131406	245912	Sep. 23, 1992
POPLAR 51	131407	245913	Sep. 23, 1992
POPLAR 52	131408	245914	Sep. 23, 1992
POPLAR 53	131409	245915	Sep. 23, 1992
POPLAR 54	131410	245916	Sep. 23, 1992
POPLAR 55	131411	245917	Sep. 23, 1992
POPLAR 56	131412	245918	Sep. 23, 1992
POPLAR 57	131413	245919	Sep. 23, 1992
POPLAR 58	131414	245920	Sep. 23, 1992
POPLAR 59	131415	245921	Sep. 23, 1992
POPLAR 60	131416	245922	Sep. 23, 1992
POPLAR 61	131417	245923	Sep. 23, 1992
POPLAR 62	131418	245924	Sep. 23, 1992
POPLAR 63	131419	245925	Sep. 23, 1992
POPLAR 64	131420	245926	Sep. 23, 1992
POPLAR 65	131421	245927	Sep. 23, 1992
POPLAR 66	131422	245928	Sep. 23, 1992
POPLAR 67	131423	245929	Sep. 23, 1992
POPLAR 68	131424	245930	Sep. 23, 1992
POPLAR 69	131425	245931	Sep. 23, 1992
POPLAR 70	131426	245932	Sep. 23, 1992
POPLAR 71	131427	245933	Sep. 23, 1992
POPLAR 72	131428	245934	Sep. 23, 1992
POPLAR 73	131429	245935	Sep. 23, 1992
POPLAR 74	131430	245936	Sep. 23, 1992
POPLAR 75	131431	245937	Sep. 23, 1992
POPLAR 76	131432	245938	Sep. 23, 1992
POPLAR 77	131433	245939	Sep. 23, 1992
POPLAR 78	131434	245940	Sep. 23, 1992
POPLAR 79	131435	245941	Sep. 23, 1992
POPLAR 80	131436	245942	Sep. 23, 1992
POPLAR 81	131437	245943	Sep. 23, 1992
POPLAR 82	131438	245944	Sep. 23, 1992
POPLAR 83	131439	245945	Sep. 23, 1992
POPLAR 84	132231	245957	Sep. 30, 1992
POPLAR 85	132232	245958	Sep. 30, 1992
POPLAR 86	132233	245959	Sep. 30, 1992
POPLAR 87	132234	245960	Sep. 30, 1992
POPLAR 88	132235	245961	Sep. 30, 1992
POPLAR 89	132236	245962	Sep. 30, 1992
POPLAR 90	132237	245963	Sep. 30, 1992
POPLAR 91	132238	245964	Sep. 30, 1992
POPLAR 92	132239	245965	Sep. 30, 1992
POPLAR 93	132240	245966	Sep. 30, 1992
POPLAR 94	132241	245967	Sep. 30, 1992
POPLAR 95	132242	245968	Sep. 30, 1992
POPLAR 96	132243	245969	Sep. 30, 1992

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>MINERAL TENURE NO.</u>	<u>EXPIRY DATE</u>
POPLAR 97	132244	245970	Sep. 30, 1992
TAG 1 (FR)	133101	246087	Nov. 27, 1992
TAG 2 (FR)	133102	246088	Nov. 27, 1992
TAG 1	133184	246095	Nov. 04, 1992
TAG 2	133185	246096	Nov. 04, 1992
TAG 3	133186	246097	Nov. 04, 1992
TAG 4	133187	246098	Nov. 04, 1992
TAG 5	133188	246099	Nov. 04, 1992
TAG 6	133189	246100	Nov. 04, 1992
TAG 7	133190	246101	Nov. 04, 1992
TAG 8	133191	246102	Nov. 04, 1992
TAG 9	133192	246103	Nov. 04, 1992
TAG 10	133193	246104	Nov. 04, 1992
TAG 11	133194	246105	Nov. 04, 1992
TAG 12	133195	246106	Nov. 04, 1992
TAG 13	133196	246107	Nov. 04, 1992
TAG 14	133197	246108	Nov. 04, 1992
TAG 15	133198	246109	Nov. 04, 1992
TAG 16	133199	246110	Nov. 04, 1992
TAG 23	133206	246111	Nov. 04, 1992
TAG 24	133207	246112	Nov. 04, 1992
TAG 25	133208	246113	Nov. 04, 1992
TAG 26	133209	246114	Nov. 04, 1992
TAG 27	133210	246115	Nov. 04, 1992
TAG 28	133211	246116	Nov. 04, 1992
TAG 29	133212	246117	Nov. 04, 1992
TAG 30	133213	246118	Nov. 04, 1992
TAG 31	133214	246119	Nov. 04, 1992
TAG 32	133215	246120	Nov. 04, 1992
TAG 33	133216	246121	Nov. 04, 1992
TAG 34	133217	246122	Nov. 04, 1992
TAG 35	133218	246123	Nov. 04, 1992
TAG 36	133219	246124	Nov. 04, 1992
TAG 37	133220	246125	Nov. 04, 1992
TAG 38	133221	246126	Nov. 04, 1992
TAG 39	133222	246127	Nov. 04, 1992
TAG 40	133223	246128	Nov. 04, 1992
TAG 41	133224	246129	Nov. 04, 1992
TAG 42	133225	246130	Nov. 04, 1992
TAG 195	133368	246131	Nov. 04, 1992
TAG 196	133369	246132	Nov. 04, 1992
TAG 197	133370	246133	Nov. 04, 1992
TAG 198	133371	246134	Nov. 04, 1992
TAG 199	133372	246135	Nov. 04, 1992
TAG 200	133373	246136	Nov. 04, 1992
TAG 201	133374	246137	Nov. 04, 1992
TAG 202	133375	246138	Nov. 04, 1992

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>MINERAL TENURE NO.</u>	<u>EXPIRY DATE</u>
TAG 203	133376	246139	Nov. 04, 1992
TAG 204	133377	246140	Nov. 04, 1992
TAG 205	133378	246141	Nov. 04, 1992
TAG 206	133379	246142	Nov. 04, 1992
TAG 207	133380	246143	Nov. 04, 1992
TAG 208	133381	246144	Nov. 04, 1992
TAG 209	133382	246145	Nov. 04, 1992
TAG 210	133383	246146	Nov. 04, 1992
TAG 211	133384	246147	Nov. 04, 1992
TAG 212	133385	246148	Nov. 04, 1992
WAR 1	302	300580	May 27, 1992

The records in the office of the Mining Recorder as of July 16, 1991 indicate that all of the above claims are owned by Mr. Michael J. Callaghan as to one-third, Mr. Frank Onucki as to one-third and Mr. Clyde V. Critchlow as to one-third. Messers Onucki and Critchlow have recently entered into an option agreement with Metamin Enterprises Inc. which company in turn has an option agreement with New Canamin Resources Ltd. The terms of the option agreements are beyond the scope of the report.

HISTORY

Carter (1974) and Jones (1972) report that the Poplar porphyry prospect was originally staked by M. Callaghan, F. Onucki and C. Critchlow in 1971 for El Paso Mining and Milling Co. During 1971 - 1972, El Paso conducted soil geochemistry, geological mapping and bulldozer trenching. Results were disappointing and the property was subsequently acquired by the original stakers.

According to Mesard, Godwin and Carter (1979) the Poplar property was optioned by Utah Mines Ltd. in 1974. Development work to 1977 included geological and topographic mapping, soil geochemistry, magnetometer and induced polarization surveys as well as forty diamond drill holes for a total of 8,281 metres (Bowen, 1975 and 1976). In 1978, P.M. Mesard conducted fieldwork for an M.A.Sc. thesis at the University of British Columbia and N.C. Carter obtained biotite monzonite porphyry samples for K/A age dating.

By 1982, Utah Mines Ltd. had diamond drilled a total of 17,900 metres in 73 holes, expended \$ 2,500,000 and estimated a global reserve of 260,000,000 tonnes of 0.37% copper "equivalent" at a 0.25% copper "equivalent" cut-off (Janes (1982)). In April 1982, Utah Mines Ltd. filed ten years of assessment work on the claims, allowed the option to lapse and returned the property to the original vendors. There has been no additional work done on the property since 1982.

In 1991, Metamin Enterprises Inc. optioned the property and subsequently reoptioned the property to New Canamin Resources Ltd.

REGIONAL GEOLOGY

The geology of the Smithers - Houston region has been studied by many workers (Tipper and Richards (1976); Carter and Kirkham (1969); Tipper (1976) and Carter (1981)).

The description of the regional geological setting that follows is taken from Carter (1981). The Poplar porphyry deposit lies within the Intermontane Belt to the east of the Coast Crystalline Belt and south of the Skeena Arch (See Figure 4 - A). The Intermontane Belt is underlain principally by Mesozoic volcanic and sedimentary rocks. The Skeena Arch which was a prominent transverse structure during Early Mesozoic time, marks the boundary between the Bowser successor basin to the north and a broad area to the southeast covered by a veneer of Early to Late Tertiary volcanic rocks (See Figures 4 - B and 4 - C).

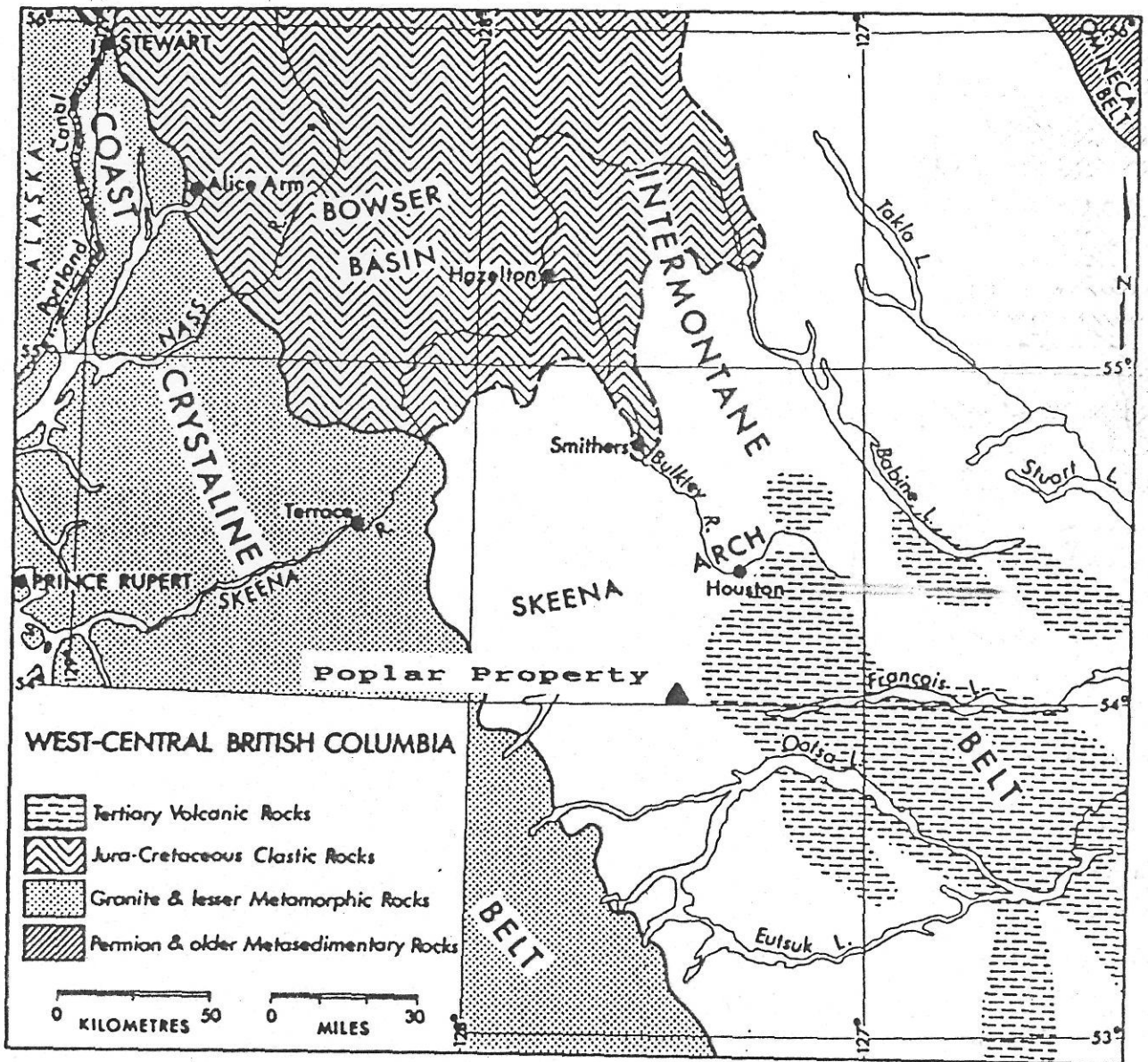
The Table of Formations, Table 1 is reproduced from Carter (1981), p. 31.

Mesard, Godwin and Carter (1979) have reported two biotite potassium-argon age dates from a 'biotite monzonite porphyry' which rock is associated with the Poplar porphyry copper deposit as being 71.9 +/- 2.5 and 75.1 +/- 2.3 million years. This age places the intrusions in Late Cretaceous time which correlates with the Bulkley Intrusions. Regional distribution of the Bulkley Intrusions is shown in Figure 4 - C.

The Skeena Arch was a positive feature only during Jurassic time and provided one of the controls for the emplacement of Upper Triassic and Lower Jurassic plutons. Most smaller intrusions of Late Cretaceous and Tertiary age show no apparent relationship to the Skeena Arch according to Carter (1981). Figure 4 - C demonstrates the regional intrusive setting as a north - south trending zone of porphyry copper +/- molybdenum +/- gold +/- silver disseminated deposits each of which is associated with one of four intrusive types.

PROPERTY GEOLOGY

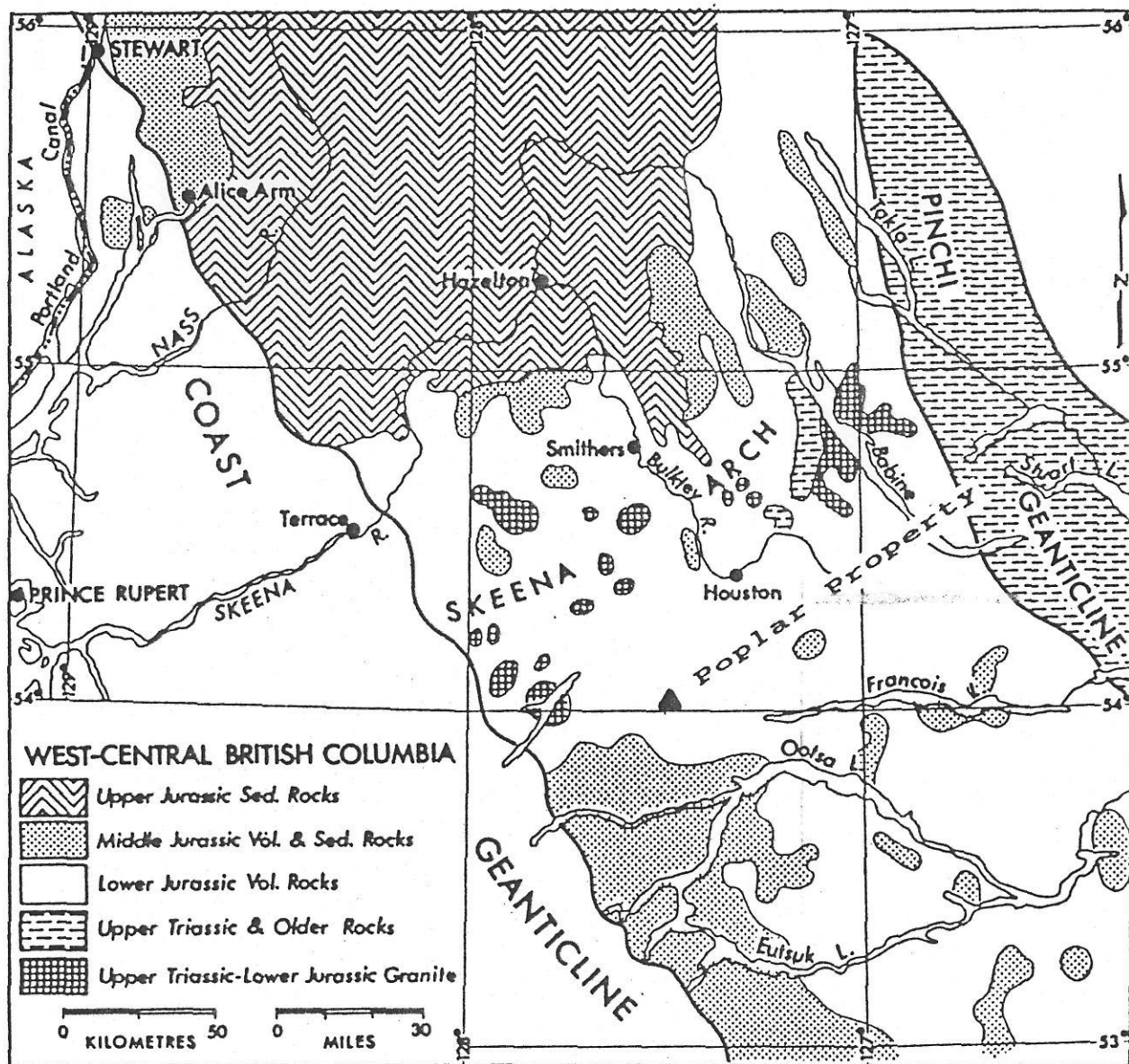
The Poplar copper-molybdenum deposit is centered on a Late Cretaceous differentiated calc-alkaline stock which intruded Lower and Upper Cretaceous volcanic and epiclastic rocks. Late Cretaceous volcanic flows cap the stock. The Poplar stock is zoned with a hornblende monzodiorite border phase grading into a central



Generalized tectonic map (modified after Sutherland Brown, *et al.*, 1971).
 (Modified after Carter, 1981, page 29)

FIGURE 4A
 NEW CANAMIN RESOURCES LTD.
 REGIONAL GEOLOGY AND STRUCTURE
 D.D.H. GEOMANAGEMENT LTD.

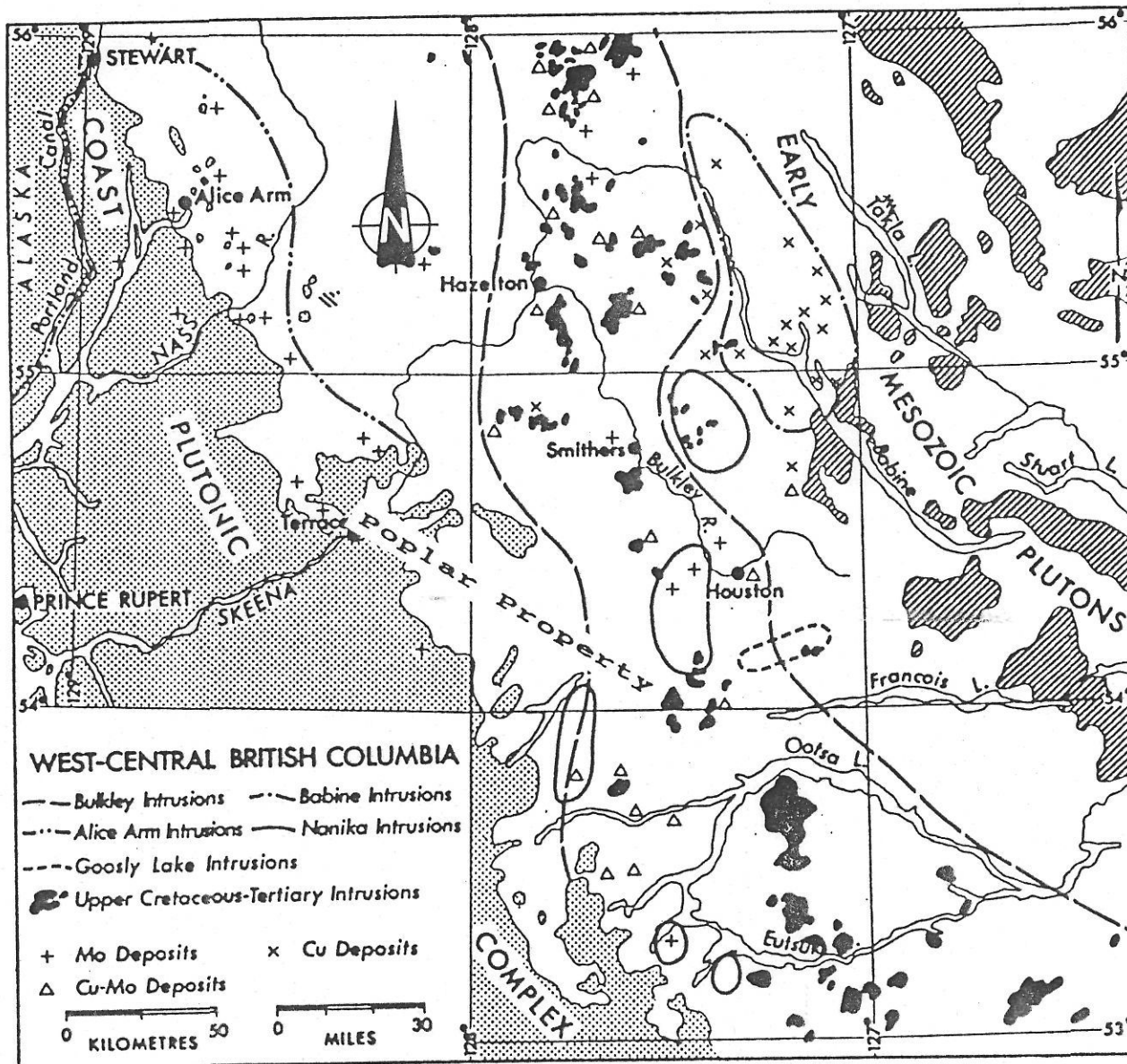




Distribution of Late Triassic and Jurassic rocks
 (Modified after Carter, 1981, page 38)

FIGURE 4B
 NEW CANAMIN RESOURCES LTD.
 REGIONAL GEOLOGY AND STRUCTURE
 D.D.H. GEOMANAGEMENT LTD.





Classification and distribution of intrusive suites in the study area showing associated mineral deposit types. (Modified after Carter, 1981, page 46)

FIGURE 4C

NEW CANAMIN RESOURCES LTD.
 REGIONAL GEOLOGY AND STRUCTURE
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TABLE 1. TABLE OF FORMATIONS

SEDIMENTARY AND VOLCANIC ROCKS

ERA	PERIOD	EPOCH	FORMATION	LITHOLOGY	
Cenozoic	Quaternary	Pleistocene and Recent	Endako Group, Goosly Lake and Buck Creek volcanic rocks	Basalt flows and cinder cones.	
	Tertiary	Eocene and Miocene		Basalt and andesite flows and breccias; some rhyolite and dacite.	
Unconformity					
Mesozoic and Cenozoic	Cretaceous and Tertiary	Upper Cretaceous and Paleocene	Ootsa Lake Group, Tip Top Hill volcanic rocks	Basalt, andesite, dacite, and related tuffs and breccias; some rhyolite flows and breccias.	
			Sustut Group	Sandstone, conglomerate, and shale.	
Unconformity					
Mesozoic	Cretaceous	Lower Cretaceous	Skeena Group, Brian Boru and Redrose Formations	Siltstone, sandstone, shale; porphyritic andesite flows; breccias and tuffs.	
		Unconformity			
	Jurassic and Cretaceous	Upper Jurassic and Lower Cretaceous	Hazleton Group (in part)		Siltstone, greywacke, sandstone, conglomerate, argillite; minor limestone and coal.
		Local Unconformity			
	Jurassic	Middle Jurassic	Hazleton Group		Andesite, basalt, dacite tuffs and breccias; volcanic sandstone and conglomerate; siltstone and greywacke.
		Unconformity			
	Lower Jurassic	Hazleton Group		Green, red, and purple andesite and basalt tuffs and breccias; volcanic sandstone and conglomerate; argillite and greywacke.	
Local Unconformity					
Mesozoic	Triassic	Upper Triassic	Takla Group (in part)	Mafic volcanic rocks; volcanic sandstone; argillite, limestone, chert; some acid metavolcanic rocks; chlorite, sericite, and biotite schists.	
Unconformity					
Paleozoic	Permian and older ?		Cache Creek Group	Andesite flows and breccias; chert, limestone, quartzite; chlorite and hornblende schists.	

METAMORPHIC ROCKS

Paleozoic				Gneiss complex: almandine-amphibolite facies gneisses and related migmatite; greenstone, amphibolite, and schist.
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INTRUSIVE ROCKS

Cenozoic	Tertiary	Oligocene	Portland Canal dyke swarms	Lamprophyre dyke swarms.
		Eocene	Goosly Lake intrusions	Granitic rocks.
			Alice Arm intrusions	Gabbro syenomonzonite.
			Nanika intrusions	Quartz monzonite and granite porphyry.
Cenozoic and Mesozoic (?)	Tertiary and older (?)		Babine intrusions	Quartz monzonite porphyry, feldspar porphyry, and felsite.
			Coast Plutonic Complex	Quartz diorite and granodiorite porphyry.
Mesozoic	Cretaceous and Jurassic and Cretaceous	Upper Cretaceous	Bulkley intrusions	Granitic rocks: quartz diorite, granodiorite, quartz monzonite; locally foliated and/or gneissic.
			Kitsault intrusions	Porphyritic quartz monzonite and granodiorite.
	Jurassic	Upper Jurassic	Francols Lake intrusions	Feldspar porphyry, augite porphyry, hornblende diorite.
		Lower and Middle Jurassic	Omineca intrusions	Porphyritic quartz monzonite, granodiorite, and quartz diorite.
	Triassic and Jurassic	Upper Triassic - Lower Jurassic	Topley intrusions	Granodiorite, quartz diorite, syenite, gabbro, monzonite, and diorite.
Intrusive Contact				
Paleozoic	Permian		Trembleur intrusions	Quartz monzonite, granodiorite, and quartz diorite; porphyritic varieties.
Intrusive Contact				
Paleozoic	Permian		Trembleur intrusions	Ultramafic rocks.

(after Carter, 1981, page 31)

biotite monzonite porphyry. Several types of northwest trending post-mineral dykes cut the stock.

A. HOST ROCKS (Unit 1a and 1b)

Volcanic and sedimentary rocks of the Hazelton Group of Early to Middle Jurassic age can be subdivided into two units on the property (Bowen, 1975 and 1976, Mesard et al, 1979). A lower volcanic units consists of a dark grey to pale tan dust and lapilli tuff, agglomerate, massive andesite and chlorite-zeolite-carbonate amygdaloidal flows, argillaceous tuff and siltstone. This is Unit 1a which is defined by Mesard et al (1979) as a volcanoclastic and epiclastic volcanic member. Bedding attitudes are 050 to 075 degrees with dips of 50 to 80 degrees southwesterly. The overlying unit consists of moderately sorted polyolithic conglomerate and sandstone. This is Unit 1b - an epiclastic member as defined by Mesard et al (1979) (See Figure 5 - Geology Map).

B. INTRUSIVE ROCKS (Unit 2 and 3)

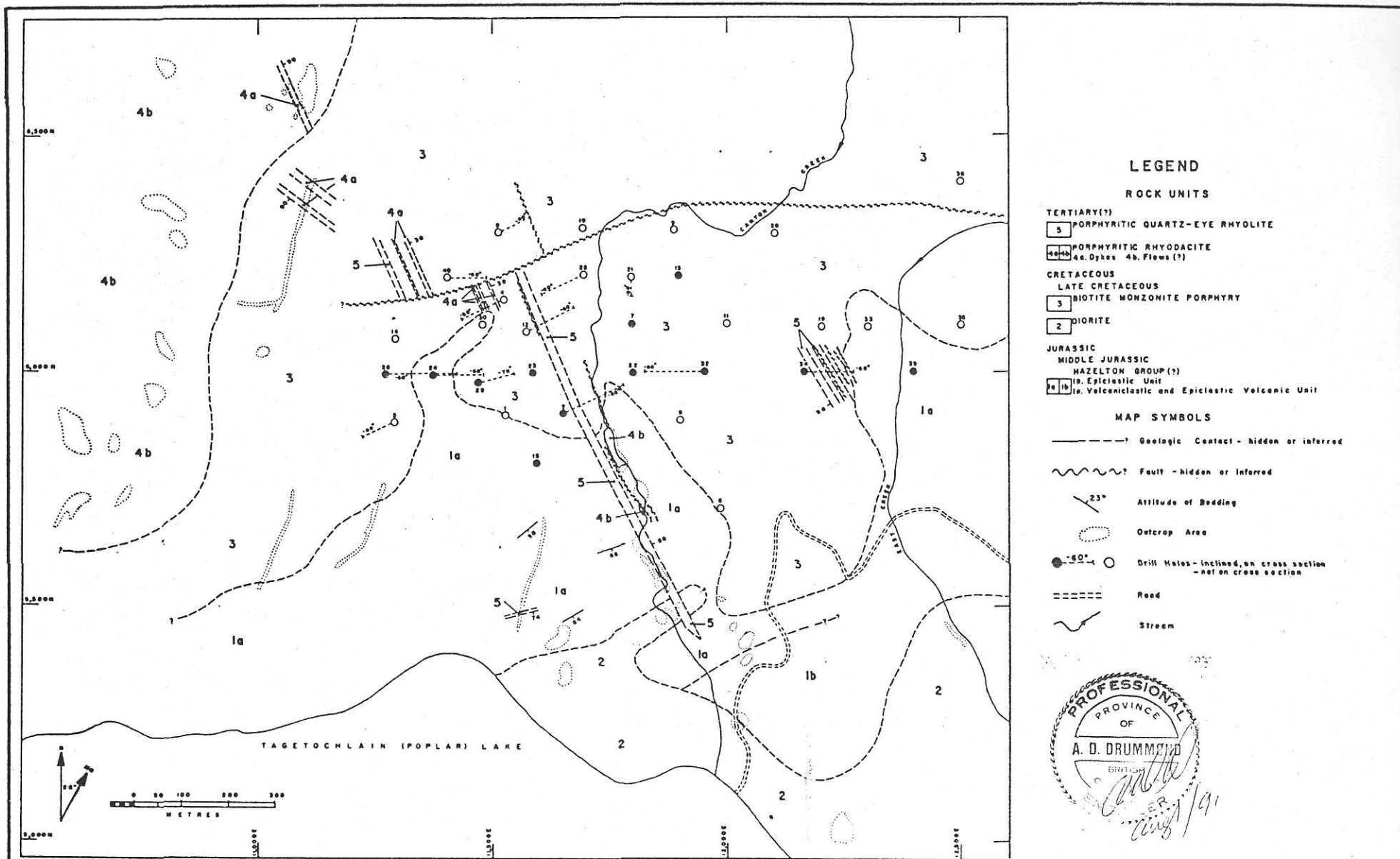
Diorite (Unit 2)

The diorite is generally porphyritic with 20% coarse-grained hornblende in an aphanitic pinkish tinged groundmass. Magnetite is a common accessory. The diorite has a chilled margin against Unit 1b.

Biotite Monzonite Porphyry (Unit 3)

The biotite monzonite porphyry has distinctive medium-grained euhedral phenocrysts of plagioclase (up to 70% of the rock) and biotite (7 to 10% of the rock) in a pink to dark grey aphanitic groundmass. Hydrothermal alteration and sulphide mineralization are most abundant in this Unit. Pyrite, chalcopyrite and molybdenite are largely fracture controlled in this Unit (Bowen, 1975).

Contact relations against Hazelton rocks are typically steep and sheared. Potassium-argon age dates on biotite from Unit 3 gave 71.9 +/- 2.5 and 75.1 +/- 2.3 million years suggesting a Late Cretaceous age and a part of the Buckley Intrusions. These intrusive rocks are also associated with disseminated copper-molybdenum mineralization at the Huckleberry and Ox Lake porphyry deposits to the south.



LEGEND

ROCK UNITS

- TERTIARY(?)**
- 5 PORPHYRITIC QUARTZ-EYE RHYOLITE
 - 4a, 4b PORPHYRITIC RHYODACITE
4a. Dykes 4b. Flows (?)
- CRETACEOUS**
- LATE CRETACEOUS
 - 3 BIOTITE MONZONITE PORPHYRY
 - 2 DIORITE
- JURASSIC**
- MIDDLE JURASSIC
 - HAZLETON GROUP (?)
 - 1a. Epiclastic Unit
 - 1b. Volcaniclastic and Epiclastic Volcanic Unit

MAP SYMBOLS

- Geologic Contact - hidden or inferred
- ~ Fault - hidden or inferred
- 23° Attitude of Bedding
- Outcrop Area
- 50° ○ Drill Holes - inclined, on cross section
○ Drill Holes - not on cross section
- Road
- ~ Stream



Geology of the Poplar porphyry copper-molybdenum deposit.

(After P.M. Mesard, C.I. Godwin and N.C. Carter, 1979, page 138)

FIGURE 5

NEW CANAMIN RESOURCES LTD.
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(18)

C. DYKE ROCKS (Unit 4a, 4b and 5)

Unit 4 a, a porphyritic rhyodacite has fine to medium-grained plagioclase phenocrysts in a maroon aphanitic groundmass. Locally quartz eyes (up to 5 mm), medium-grained biotite, elongated amygdales and a trachytoid texture occur.

Unit 4b, a porphyritic flow(?) rock is composed of up to 50% fine to medium-grained phenocrysts of plagioclase, biotite, hornblende and potassium feldspar in a reddish brown to pink aphanitic groundmass. Mesard et al (1979) noted that these flows(?) are typically fresh and unmineralized.

Unit 5, a white to tan porphyritic quartz eye rhyolite is composed of abundant well-rounded quartz eyes (up to 6 mm) with medium-grained euhedral plagioclase and biotite phenocrysts in an aphanitic groundmass. Unit 5 is the most abundant dyke rock and intruded all other units except Unit 4b (Mesard et al, 1979) (See Figure 5 - Geology Map).

The dyke swarms shown in Figure 5 appear to be an expression of a dominant north northwestern structural trend which can have a width of 200 metres or more (Bowen, 1976).

D. ALTERATION AND MINERALIZATION

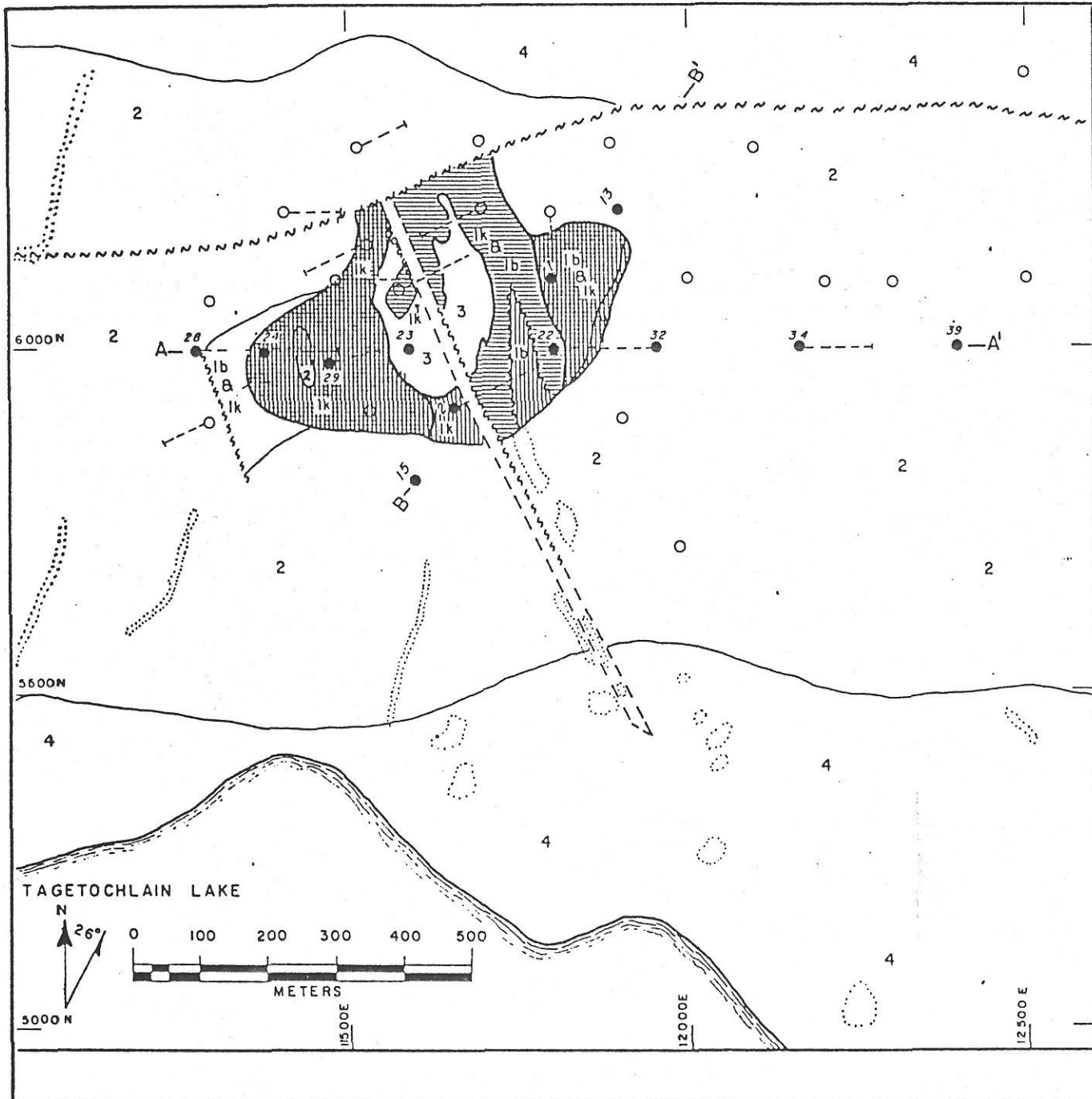
All significant hydrothermal alteration and sulphide concentrations are restricted to the Poplar stock and its thermal aureole. Hornfelsing in the volcanic rocks occurs up to 300 metres from the biotite monzonite contact (Bowen, 1976). Within the hornfelsed aureole, there is an increase in quartz-pyrite veining towards the stock contact. Outside of the aureole, chlorite-epidote or quartz-epidote+/-pyrite veining occurs in a propylitic facies.

Mesard (1979) and Mesard et al (1979) report that the major alteration assemblages are:



- (1) Potassic: potassium feldspar+secondary biotite+magnetite+gypsum+/-quartz+/-hematite;
- (2) Phyllic: quartz+sericite+pyrite+/-gypsum+/-clay+/-carbonate+/-hematite;
- (3) Argillic: clay+/-sericite+/-carbonate+/-quartz, and
- (4) Propylitic: chlorite+/-carbonate+/-epidote+/-albite(?).

The most widespread alteration is phyllic followed by potassic and propylitic. Argillic alteration is minor.





Distribution of alteration facies was compiled by Mesard (1979) for the main mineralized area of the Poplar deposit which map is reproduced as Figure 6.








Mineralization Zones

-  CHALCOPYRITE
-  MOLYBDENITE

Alteration Zones

-  POTASSIC
lk. K-feldspar
lb. Biotite
-  PHYLIC
-  ARGILLIC
-  PROPYLITIC

MAP SYMBOLS

-  Mineralization boundary
-  Alteration boundary
-  Area of outcrop
-  Drill hole on x section, other
-  A--A' Cross section

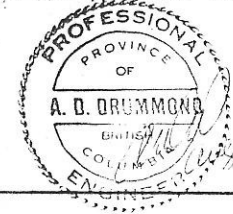


FIGURE 6
 NEW CANAMIN RESOURCES LTD.
 POPLAR PORPHYRY DEPOSIT
 MINERALIZATION AND ALTERATION MAP
 After Keaard, 1979
 D.D.H. GEOMANAGEMENT LTD.

Sulphide minerals, in order of decreasing abundance, include: pyrite, chalcopyrite and molybdenite. Traces of sphalerite, galena, tetrahedrite, covellite and chalcocite occur in veins. Chalcopyrite is commonly disseminated and closely associated with sericitized biotite. Molybdenite occurs mainly in veins associated with gypsum and quartz.

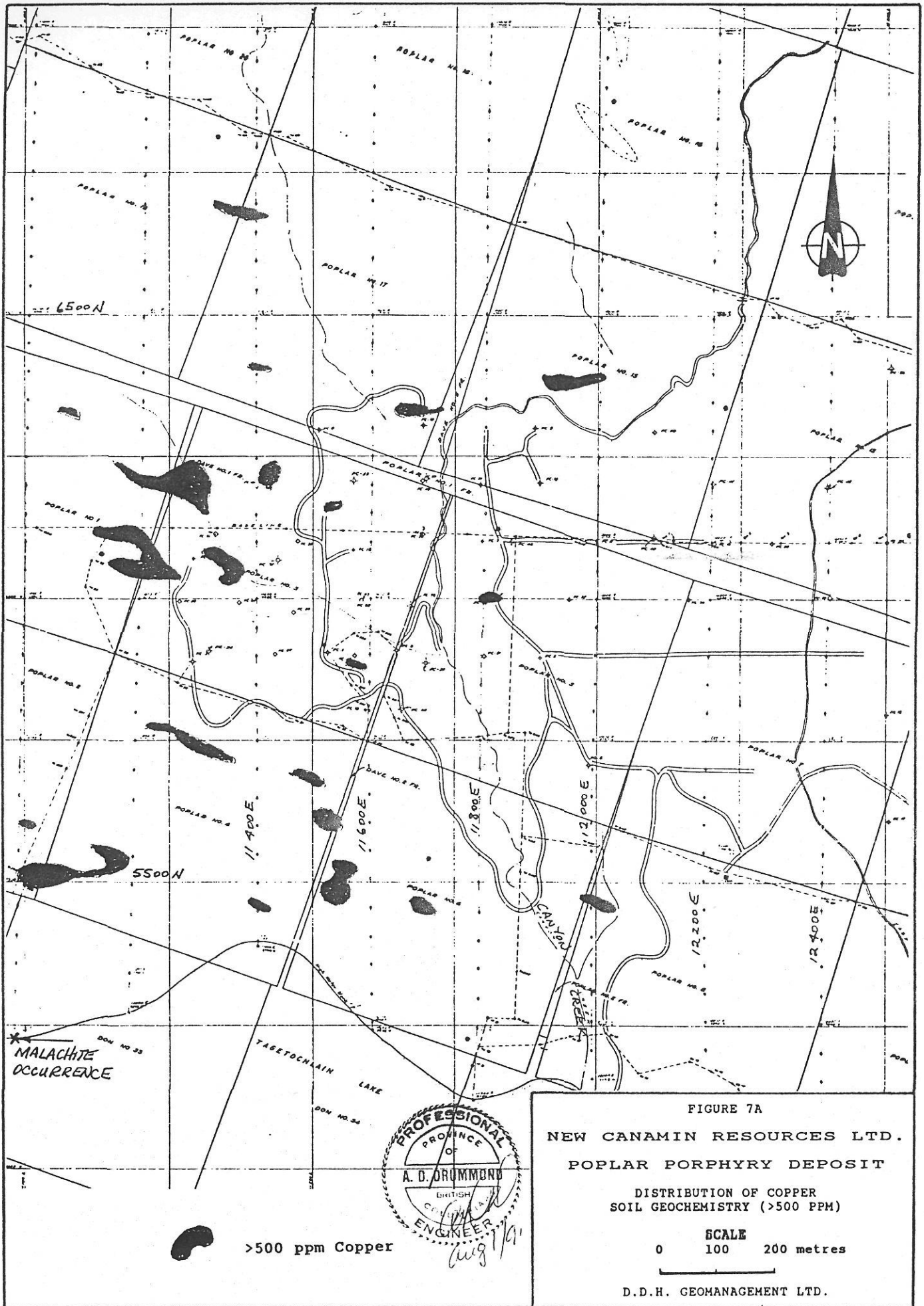
Distribution of sulphide minerals is shown in Figure 6 for the main mineralized area of the Poplar deposit. Alteration and mineralization zoning in and around the Poplar stock consists of a 600 metre by 500 metre potassic facies annulus with chalcopyrite and molybdenite surrounding a 300 metre by 150 metre core of weakly mineralized argillic alteration. The above zones occur within a 750 metre wide east-west trending phyllic alteration zone peripheral to which is a weak propylitic alteration assemblage.

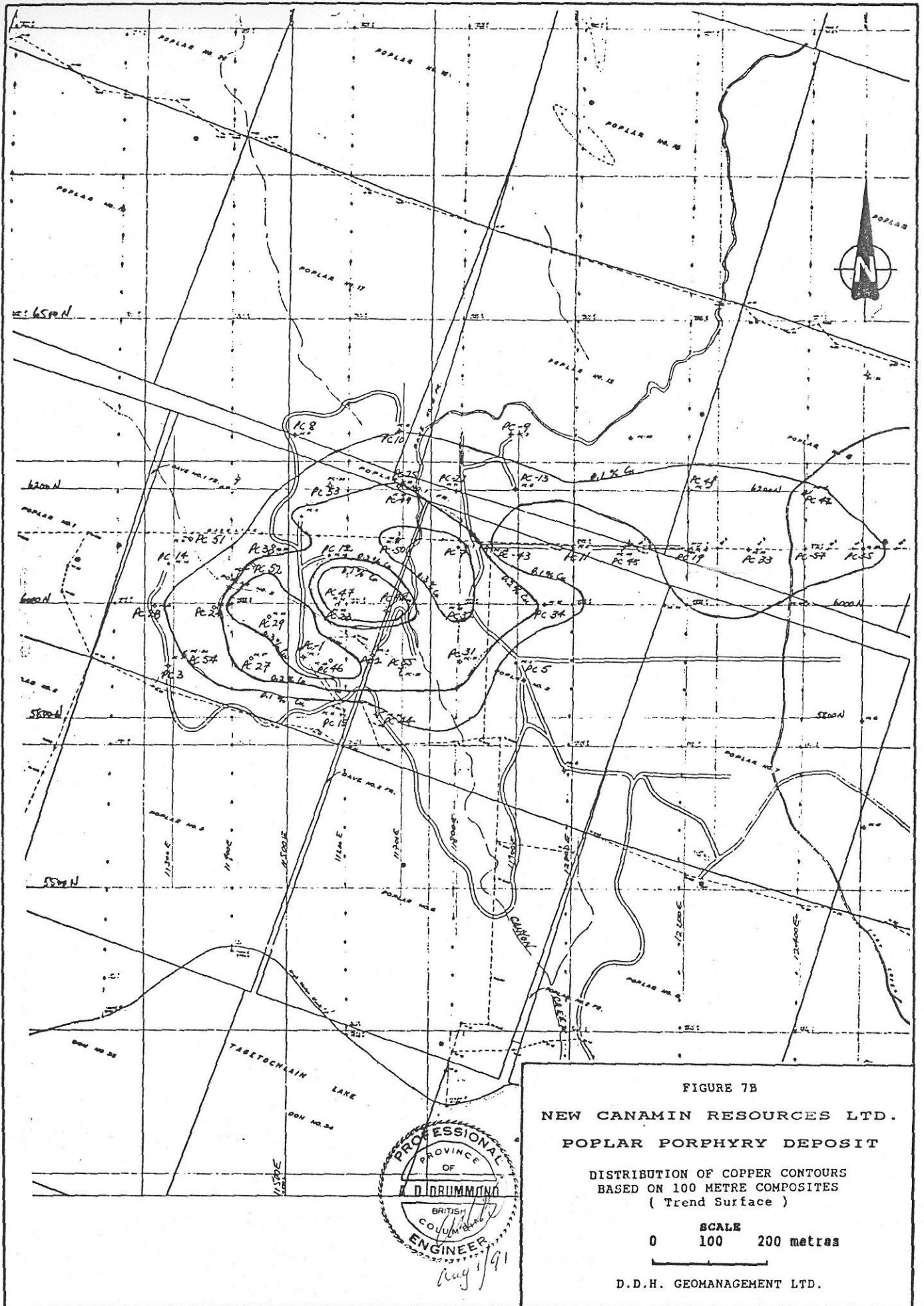
E. SOIL GEOCHEMICAL RESPONSE

El Paso Mining and Milling Co. conducted a "B" horizon geochemical survey on the Poplar 1 - 20 mineral claims area (Jones, 1972). A 7,400 foot baseline was established at 110 degrees azimuth with cross lines at 020 degrees azimuth every 200 feet with stations every 100 feet. A total of 2,231 soil samples were collected and analyzed for copper, molybdenum and silver. Molybdenum results were of little significance (Jones (1972), p.4). Copper indicated a collection of 500 ppm (parts per million) highs within a wider area of 200 ppm copper areas west of Canyon Creek (See Figure 7A). The distribution of the 500 ppm copper areas suggests a glacial dispersion from west to east which is in agreement with Tipper (1963) who has shown west to east ice movement in the adjacent Nechako River Map-Area. Silver geochemical response was one of scattered greater than 4 ppm silver, some of which coincided with greater than 500 ppm copper. Figure 7B illustrates the position of a 100 metre thick trend surface for copper. Comparing Figures 7A and 7B, anomalous copper values in soil are not explained by known mineralization or by reported ice movement in the area. This suggests that additional near surface mineralization exists to the northwest, west and south of the drill defined zones. Further exploration by drilling is warranted.

F. GEOPHYSICAL SURVEY RESPONSE

Assessment reports have indicated that line cutting covered an area of 13 square kms (Bowen, 1976). The following line-kms of grid have been utilized by Utah Mines Ltd. for the outlined activity: magnetometer survey - 114.6 line-kms; induced polarization (I.P.) survey - 54.8 line-kms; altimeter (topographic) survey - 76.8 line-kms, and geological mapping - 81.5 line-kms. Line spacing was 200





metres on north-south lines with stations every 50 metres.

Magnetometer Survey

Magnetic susceptibility according to Bowen (1976) showed a very subdued response. The main feature was a large central area of very gentle magnetic relief surrounded by areas of more magnetic activity. Maximum anomaly values were in the order of 1,500 gammas. These findings from ground magnetometer surveys are in agreement with the regional aeromagnetic maps (Map 7750G - Whitesail Lake, B.C. - Sheet 93E and Map 7760G - Smithers, B.C. - Sheet 93L). Magnetic declination in the area is 24.5 degrees east.

Induced Polarization Survey

In 1974 and 1975, induced polarization surveys were conducted by Utah Mines Ltd. Bowen (1975) reported that n=2 and n=4 data show anomalous chargeability values from line 10,400E to 13,400E and from 5,100N to 6,750N or an anomaly length of 3.0 kms east-west and 1.6 kms north-south. Bowen (1975) pointed out that the position of Tagetochlain (Poplar) Lake prevented closing off the anomaly to the south. Bowen (1975) correlated the high chargeability response to widespread pyrite (sulphides) and possibly to clay alteration. He mentioned that apparent resistivity values do not show any obvious correlation with chargeability data. The apparent resistivity values varied from 50 to 2,400 ohm-metres with most of the area showing 150 to 500 ohm-metres. The size of the drill tested copper zone is small relative to the 3.0 km by 1.6 km induced polarization anomaly reported. The copper geochemistry and mineralization lie within the induced polarization anomaly and together cover an area of 1.5 km by 1.0 km which area is about twice the dimensions of the drill tested area. If conductive overburden is not the source of the chargeability, then the Poplar copper deposit, as currently defined, is part of a very large sulphide system, the limits of which are still not defined.

G. DIAMOND DRILLING

Utah mines Ltd. drilled 17,900 metres in 73 NQ size diamond drill core holes during the period 1974 to 1981. Locations are listed below.

Hole No.	North (m)	East (m)	Depth (m)	Dip	Dir. (Azi)	O.B. (m)	Date Drilled Mo., Yr.
PC - 01	5905	11526	300.8	090	-	0.6	Oct. 1974
PC - 02	5909	11648	285.6	060	065	7.6	Oct. 1974

Hole No.	North (m)	East (m)	Depth (m)	Dip	Dir. (Azi)	O.B. (m)	Date Drilled Mo., Yr.
PC - 03	5890	11291	153.3	060	245	16.7	Nov. 1974
PC - 04	6151	11523	197.2	060	245	8.2	Nov. 1974
PC - 05	5895	11898	179.2	090	-	23.5	May 1975
PC - 06	5707	11986	172.5	090	-	18.6	May 1975
PC - 07	6100	11798	229.2	090	-	25.0	May 1975
PC - 08	6297	11510	153.0	060	065	19.2	May 1975
PC - 09	6299	11889	200.5	090	-	26.0	May 1975
PC - 10	6305	11693	191.4	090	-	24.7	Jun. 1975
PC - 11	6100	11999	188.4	090	-	21.0	Jun. 1975
PC - 12	6085	11571	230.7	060	065	3.4	Jun. 1975
PC - 13	6200	11900	160.9	090	-	21.0	Jun. 1975
PC - 14	6075	11375	153.9	090	-	11.6	Jun. 1975
PC - 15	5804	11594	152.7	090	-	3.7	Jun. 1975
PC - 16	5672	12703	260.9	090	-	12.5	Jun. 1976
PC - 17	5611	12505	230.7	090	-	6.1	Jun. 1976
PC - 18	5797	12501	191.1	090	-	3.0	Jun. 1976
PC - 19	6096	12203	188.1	090	-	6.7	Jun. 1976
PC - 20	6293	12102	200.5	090	-	12.0	Jun. 1976
PC - 21	6200	11797	227.7	080	180	33.5	Jun. 1976
PC - 22	5998	11801	184.1	090	-	27.9	Jun. 1976
PC - 23	5998	11587	206.4	090	-	6.7	Jul. 1976
PC - 24	5993	11374	214.6	060	090	6.7	Jul. 1976
PC - 25	6206	11696	196.9	060	115	32.3	Jul. 1976
PC - 26	5494	12704	185.3	090	-	16.0	Jul. 1976
PC - 27	5904	11436	303.9	090	-	7.5	Sep. 1976
PC - 28	5996	11271	306.6	060	090	21.3	Oct. 1976
PC - 29	5977	11468	239.6	070	077	15.4	Oct. 1976
PC - 30	6101	11476	260.9	060	090	11.5	Oct. 1976
PC - 31	5899	11803	252.1	080	090	33.0	Oct. 1976
PC - 32	6000	11950	257.3	060	270	29.2	Oct. 1976
PC - 33	6096	12301	370.0	090	-	3.5	Oct. 1976/ Nov. 1979
PC - 34	6001	12162	215.2	060	090	7.5	Oct. 1976/ May, 1981
PC - 35	6100	12500	182.0	090	-	3.0	May, 1977
PC - 35	Extended to		608.7				May, 1981
PC - 36	6407	12507	185.0	090	-	3.0	May, 1977
PC - 37	6400	14621	119.5	045	055	15.0	May, 1977
PC - 38	Missing Data						
PC - 39	Missing Data						
PC - 40	6217	11400	Missing Data				
PC - 41	6200	12000	300.8	090	-	4.0	Nov. 1979
PC - 42	6200	12400	287.6	090	-	4.0	Nov. 1979
PC - 43	6101	11846	303.9	060	090	30.5	May, 1980
PC - 44	5806	11657	306.9	060	090	6.1	May, 1980
PC - 45	6100	12100	337.4	090	-	6.0	May, 1980
PC - 46	5900	11576	306.9	060	090	7.1	May, 1980
PC - 47	5998	11589	319.1	060	090	6.1	May, 1980
PC - 48	5988	11673	151.2	060	090	7.0	May, 1980

Hole No.	North (m)	East (m)	Depth (m)	Dip	Dir. (Azi)	O.B. (m)	Date Drilled Mo., Yr.
PC - 49	6210	11700	303.9	060	090	34.0	May, 1980
PC - 50	6113	11693	180.4	090	-	39.6	May, 1980
PC - 51	6121	11331	374.0	060	090	16.0	Jun. 1980
PC - 52	6069	11438	300.8	060	090	16.0	Jun. 1980
PC - 53	6207	11571	200.3	060	270	9.7	Jun. 1980
PC - 54	5908	11320	201.2	060	090	15.2	Jun. 1980
PC - 55	5887	11700	215.5	060	090	9.1	Jun. 1980
PC - 56	5898	12383	309.7	090	-	7.6	Apr. 1981
PC - 57	6093	12403	456.3	090	-	6.7	Apr. 1981
PC - 58	6298	12307	306.9	090	-	10.4	Apr. 1981
PC - 59	6194	12015	361.8	070	090	9.8	Apr. 1981
PC - 60	5895	12115	334.4	060	090	9.1	Apr. 1981
PC - 61	5998	12042	312.7	070	090	17.1	May, 1981
PC - 62	5706	12123	238.7	070	090	7.1	May, 1981
PC - 63	5807	11355	278.3	045	090	18.9	May, 1981
PC - 64	5770	10796	203.3	073	270	5.2	May, 1981
PC - 65	6117	11694	349.6	090	-	23.5	May, 1981
PC - 66	6095	12604	303.9	090	-	3.0	Jun. 1981
PC - 67	6198	12494	294.8	070	090	3.0	Jun. 1981
PC - 68	6195	12316	316.1	090	-	10.1	Jun. 1981
PC - 69	6000	12000	337.1	090	-	28.0	Oct., 1981
PC - 70	5900	12000	306.7	066	090	20.0	Nov. 1981
PC - 71	6300	12400	218.2	090	-	8.0	Nov. 1981
PC - 72	6300	12400	309.6	060	090	8.0	Nov. 1981
PC - 73	6000	12500	328.0	090	-	9.0	Nov. 1981

Note: O.B. refers to overburden depth.

Core and records for holes PC - 38, - 39 and - 40 have not been reviewed and are listed as missing. These holes were reportedly used as a bulk sample and sent for testing to a Utah Mines Ltd. facility in Palo Alto, California where 27 barrels of material are said to be in storage.

The area in which the majority of holes were drilled is contained within the Poplar 3, 5, 7, 11, 13, 15, 17, and on Poplar No. 1 Fractional mineral claims (See Figure 7B).

H. UNDEFINED MINERALOGICAL FEATURES

There are three additional areas in which mineralization was reported and these areas remain undefined in the opinion of the writer. The first relates to the WAR mineral claim (See Figure 3 for location) on which the association of antimony-gold was noted in a sulphide-bearing shear(?) zone. The second feature is the existence of malachite-stained mineralization along the north shore of Tagetochlain (Poplar) Lake and located south of the copper geochemical anomalies (See Figure 7A). These anomalies have yet

to be drill tested. The occurrence of the malachite was an influencing factor in the decision of Mr. F. Onucki and partners to stake the original claims. The third area is one of strong argillic alteration associated with low copper values according to Mr. F. Onucki and which area is located on Poplar 58 mineral claim (See Figure 3 for location). This location had been previously staked by Mr. J.R. Woodcock in period of 1973(?) or 1974(?) according to Mr. F. Onucki. These features will be discussed under the section of Mineral Potential.

MODELLING THE MINERALIZATION

A model of the zones of disseminated mineralization was developed using plans and sections. Geology and available copper (Cu), molybdenum (Mo), gold (Au) and silver (Ag) assay data were 'geolog' codes by Placer Dome Inc. and reproduced on east-west sections. Copper-molybdenum values were compared to silver-gold values where available in each mineralization type of which there are two distribution types: one being copper with higher molybdenum in the main (west) zone and the second being copper with lower molybdenum in the buried (east) zone. The 15 m bench composites were calculated and then combined into 100 m vertical composites for the depth intervals of 900 to 800 m elevation, 800 to 700 m elevation and 700 to 600 m elevation. These data were plotted in plan and contoured (See Figures 8, 9 and 10). Copper is reported as % total copper (% T. Cu) in the absence of oxide or sulphide copper assays.

A. DISTRIBUTION OF COPPER - MOLYBDENUM MINERALIZATION

Copper and molybdenum distribution has been calculated for the upper 300 m of rock below overburden cover (900 to 600 m elevation) by segregating data in "BLOCK A" - area west of about line 11,900E and "BLOCK B" - area east of about line 11,900E (See Figures 8, 9 and 10).

BLOCK A - (Cu - Mo)

Tonnage and grade at a 0.10% total copper cut-off is as follows:

Elevation	Tonnes	% T. Cu	% Mo
900 to 800 m	52,556,000	0.26	0.009
800 to 700 m	42,700,000	0.25	0.014
700 to 600 m	34,400,000	0.28	0.010

Total tonnes	129,625,000		
Average % T. Cu		0.26	
Average % Mo			0.011

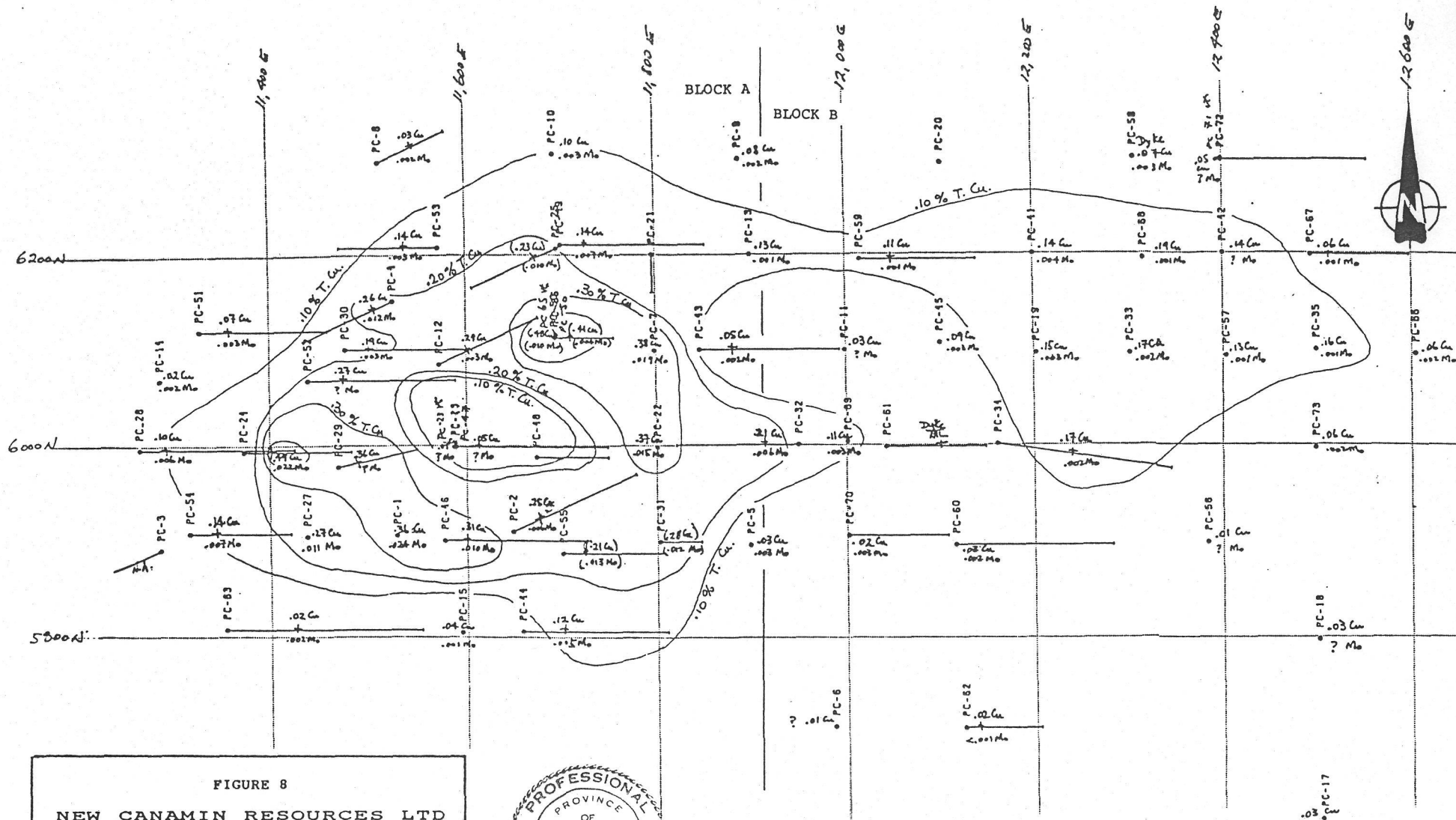


FIGURE 8
NEW CANAMIN RESOURCES LTD
 100 M. VERTICAL COMPOSITE ASSAY PLAN
 COPPER TREND SURFACE
 900 - 800 METRE ELEVATION

 SCALE
 0 100 200 m.
 D.D.H. Geomanagement Ltd.



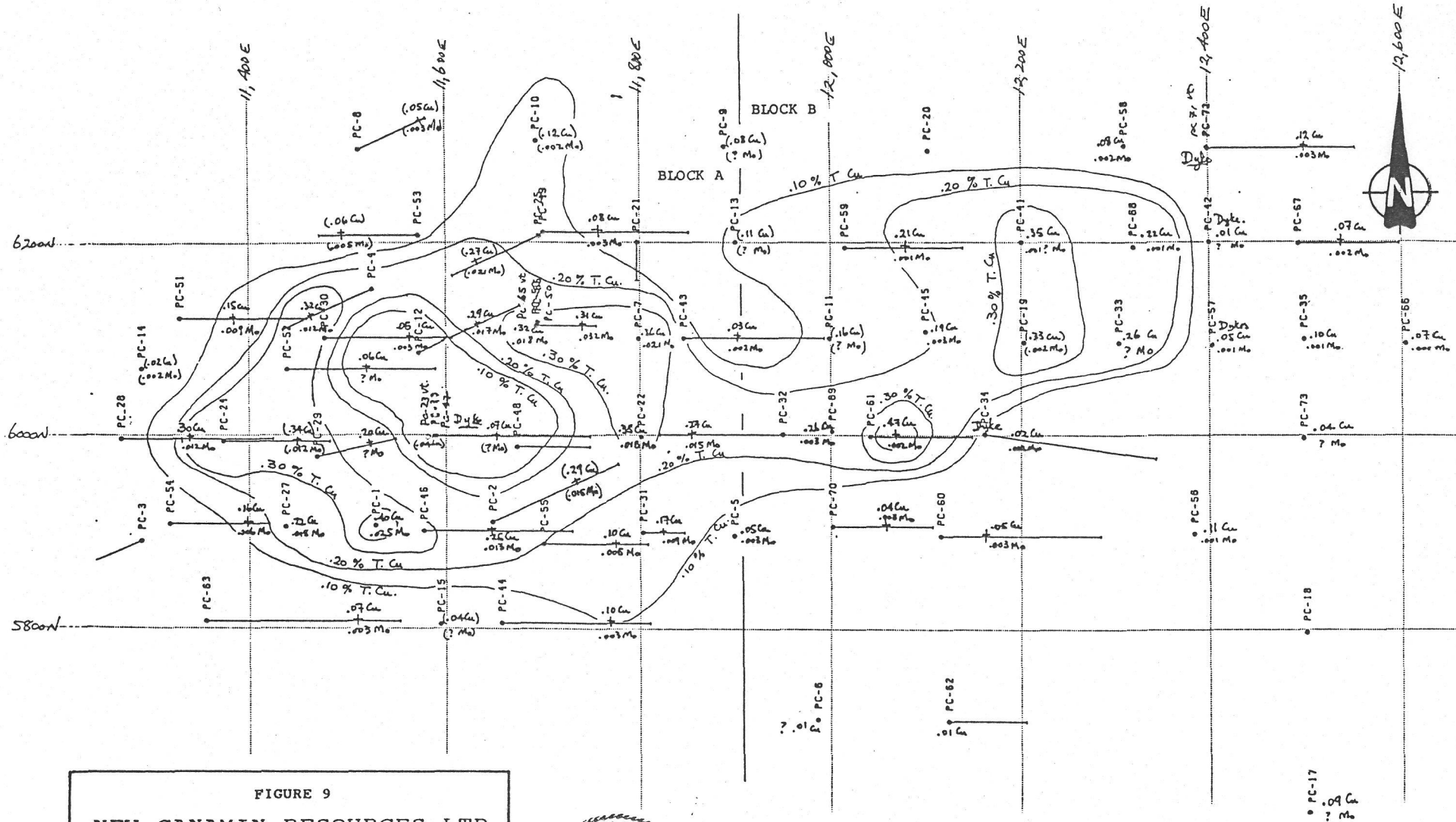


FIGURE 9
 NEW CANAMIN RESOURCES LTD
 100 M. VERTICAL COMPOSITE ASSAY PLAN
 COPPER TREND SURFACE
 800 - 700 METRE ELEVATION
 SCALE
 0 100 200 m.
 D.D.H. Geomanagement Ltd.



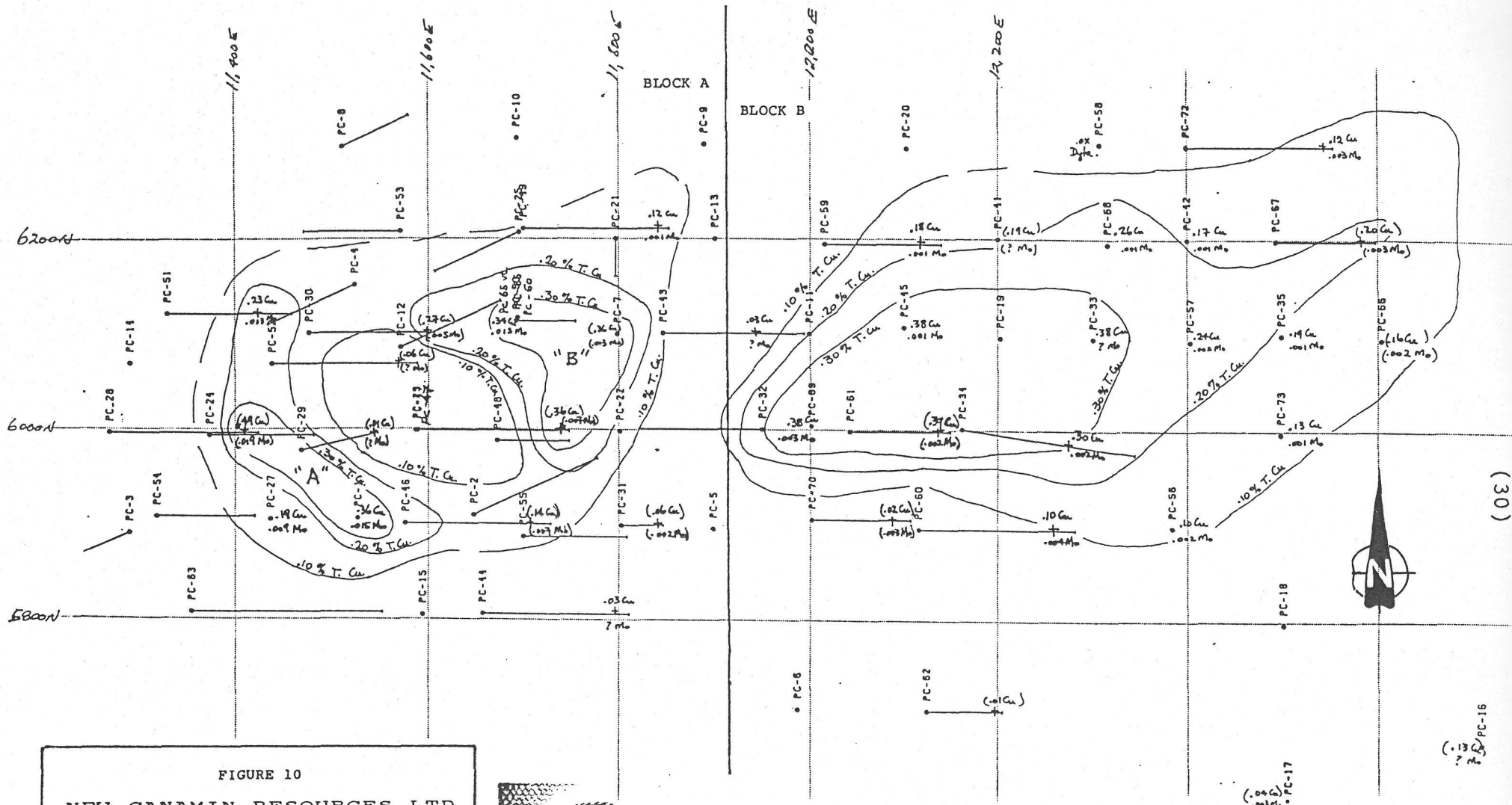
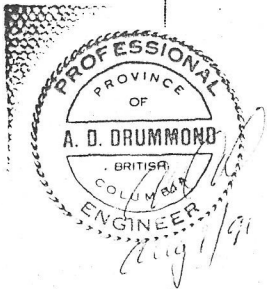


FIGURE 10
NEW CANAMIN RESOURCES LTD
 100 M. VERTICAL COMPOSITE ASSAY PLAN
 COPPER TREND SURFACE
 700 - 600 METRE ELEVATION
 SCALE
 0 100 200 m.
 D.D.H. Geomanagement Ltd.



(30)
 PC-15
 (0.13 Cu)
 (0.02 Mo)

Tonnage and grade at a 0.20% total copper cut-off is as follows:

Elevation	Tonnes	% T. Cu	% Mo
900 to 800 m	30,000,000	0.32	0.012
800 to 700 m	25,518,000	0.30	0.010
700 to 600 m			
Sub "A"	6,200,000	0.36	0.016
Sub "B"	8,000,000	0.33	0.010

Total tonnes	69,718,000		
Average % T. Cu		0.32	
Average % Mo			0.014

BLOCK B - (Cu - Mo)

Tonnage and grade at a 0.10% total copper cut-off is as follows:

Elevation	Tonnes	% T. Cu	% Mo
900 to 800 m	23,780,000	0.15	0.002
800 to 700 m	29,444,000	0.26	0.002
700 to 600 m	58,741,000	0.23	0.002

Total tonnes	111,965,000		
Average % T. Cu		0.22	
Average % Mo			0.002

Tonnage and grade at a 0.20% total copper cut-off is as follows:

Elevation	Tonnes	% T. Cu	% Mo
900 to 800 m	NIL	----	----
800 to 700 m	18,330,000	0.30	0.002
700 to 600 m	28,074,000	0.32	0.002

Total tonnes	46,404,000		
Average % T. Cu		0.31	
Average % Mo			0.002

Consideration of BLOCK A compared to BLOCK B suggests that BLOCK A is the target for economic consideration. Taken together, BLOCKS A and B indicate a large porphyry system. Combining BLOCKS A and B to a depth of 300 m, there are 241,000,000 tonnes of 0.24% T. Cu and 0.007% Mo at a 0.10% T. Cu cut-off while at a 0.20% T. Cu cut-off, there are 116,122,000 tonnes of 0.32% T. Cu and 0.009% Mo.

The ultimate size of the porphyry system at the Poplar deposit is undefined. Hole PC - 35 in BLOCK B was drilled to a depth of 600 m and indicated 0.23% T. Cu and 0.002% Mo for the vertical interval between 600 to 500 m elevation; 0.35% T. Cu and 0.002% Mo for the vertical interval between 500 to 400 m elevation and 0.27% T. Cu

and 0.008% Mo for the vertical interval between 400 to 300 m elevation. The average for hole PC - 35 is 0.22% T. Cu over a vertical depth of 600 m and indicates that the overall mineral potential could be very large to huge.

B. GRADE VARIABILITY

The following intercepts contain assay information on all four elements and are here presented to illustrate the grade variability.

BLOCK A (in zone of >0.20% T. Cu cut-off)

HOLE NO.	INTERVAL		T. Cu	Mo	Ag	Au
	(m)	(ft)	%	%	opt.	opt.
SECTION 6200 N						
PC - 25	161	528	0.25	0.015	0.10	0.005
SECTION 6100 N						
PC - 65	326	1070	0.37	0.015	0.06	0.003
PC - 30	64	210	0.30	0.005	0.04	0.003
PC - 50	141	463	0.36	0.020	0.03	0.004
SECTION 6000 N						
PC - 28	167	548	0.36	0.013	0.02	0.003
PC - 24	207	679	0.43	0.019	0.05	0.005
PC - 29	189	620	0.31	0.002	0.02	0.003
PC - 22	152	499	0.37	0.017	0.07	0.004
PC - 32	229	751	0.24	0.010	0.05	0.002
SECTION 5900 N						
PC - 01	113	371	0.42	0.028	0.05	0.003
PC - 27	122	400	0.27	0.010	0.03	0.003
PC - 31	100	328	0.28	0.016	0.16	0.004

Total meters 1,971 (5847 ft)

Average copper is 0.33% T. Cu

Range of copper is 0.24 to 0.43% T. Cu

Average molybdenum is 0.014% Mo

Range of molybdenum is 0.002 to 0.028% Mo

Average silver is 0.05 opt Ag (1.7 g/tonne Ag)

Range of silver is 0.02 to 0.16 opt Ag (0.69 to 5.52 g/tonne Ag)

Average gold is 0.003 opt Au (0.21 g/tonne Au)

Range of gold is 0.002 to 0.005 opt Au (0.07 to 0.17 g/tonne Au).

The higher gold and silver values are contained within the areas of higher copper and molybdenum.

BLOCK BSECTION 6100 N

HOLE NO.	INTERVAL (m)	INTERVAL (ft)	T. Cu %	Mo %	Ag opt.	Au opt.
PC - 45						
005 - 110	105	344	0.14	0.003	0.02	0.002
110 - 195	85	279	0.23	0.003	0.07	0.003
195 - 222	27	95	(late barren dyke)			
222 - 337	115	377	0.38	0.002	0.15	0.004
PC - 33						
045 - 120	75	246	0.21	0.002	0.04	0.003
120 - 180	60	196	0.20	0.001	0.06	0.003
180 - 327	227	745	0.37	0.001	0.13	0.003

Within BLOCK B, gold and molybdenum values remain low but silver and copper values increase with depth.

BLOCK B mineralization is distinct from that in BLOCK A based on the copper/molybdenum ratios. Gold and silver indicate a slight increase in value with increase in copper in both mineralization types.

C. MINERAL INVENTORY OF THE POPLAR DEPOSIT

The mineralized porphyry system at the Poplar deposit is very large and remains undefined laterally and at depth.

Two distinct mineralization types are present in the Poplar deposit. The Cu-Mo-Ag-Au mineralization occurs near surface at the base of the overburden in the main (west) zone or BLOCK A while the buried (east) zone or BLOCK B has low grade near surface with >0.2% copper being encountered at a depth of 100 meters. Figure 10 illustrated that the two zones are separated at 300 m depth (600 m elevation) with the main (west) BLOCK A mineralization tapering with depth while the east BLOCK B mineralization is expanding laterally with depth (suggestive of a domical shape).

Mineral inventory for the Poplar deposit based on BLOCK A only and contained within an annular body to a depth of 300 m is determined to be:

- (a) at a 0.10% T. Cu cut-off,
 129,625,000 tonnes of
 0.26% T. Cu,
 0.011% Mo,
 0.03 opt Ag (1 g/tonne Ag) and
 0.003 opt Au (0.10 g/tonne Au);

(b) at a 0.20% T. Cu cut-off,
69,718,000 tonnes of
0.32% T. Cu,
0.014% Mo,
0.05 opt Ag (1.7 g/tonne Ag) and
0.003 opt Au (0.10 g/tonne Au).

Mineral inventory for the Poplar deposit based on BLOCK A plus BLOCK B is calculated from available drilling to a depth of 300 m to be in the order of:

(a) at a 0.10% T. Cu cut-off,
241,590,000 tonnes of
0.24% T. Cu,
0.007% Mo,
0.03 opt Ag (1 g/tonne Ag) and
0.003 opt Au (0.1 g/tonne Au).

(b) at a 0.20% T. Cu cut-off,
116,122,000 tonnes of
0.32% T. Cu,
0.009% Mo,,
0.06 opt Ag (2.1 g/tonne Ag) and
0.003 opt Au (0.1 g/tonne Au).

Mineral inventory for the Poplar deposit based on the presence of 0.3% T. Cu material extending to depth and expanding laterally beneath the domical shaped zone of BLOCK B, could be in excess of 400 million tons of similar grade to a depth of 600 m. This mineral inventory does not include the areas of mineral potential for additional near surface mineralization outside of the presently drill defined zones.

D. MINERAL POTENTIAL - DISCUSSION

The indicated grades for the disseminated mineralization of the Poplar porphyry deposit lead to the concept of open pit mining. Stripping ratio or amount of "waste" mined to obtain one unit of "ore" is one of the major considerations in open pit mining, i.e., deposits with a low stripping ratio may have better economic aspects than those deposits with high stripping ratios. During this review, several possibilities suggested themselves to the writer which could increase the amount of near surface mineralization. These possibilities enhance the mineral potential of the property.

The writer noted that the copper gradient on the western side of BLOCK A is steep as is the copper gradient into the 0.06% T. Cu core area of BLOCK A (See Figures 8, 9 and 10). The writer also noted that there are insufficient drill holes to the west of BLOCK A mineralization to conclude that copper mineralization does not continue further to the west (See Figure 7B). Further, it is noted that the copper soil geochemical anomalies are located to the west, northwest and south of the drilled mineralization (See Figure 7A) and that there has been no drilling to define the presence or absence of copper beneath those anomalies which lie within a 3.0 km by 1.6 km induced polarization anomaly. The secondary copper mineral malachite was observed on the northern shore of Tagetochlain (Poplar) Lake just outside of the geochemical grid and south of the copper anomalies (See Figure 7A). These factors indicate that additional diamond drilling is warranted to test the area northwest and south of the drilled area.

Correlating hole PC - 04 and PC - 46, drilled at the location of 500 ppm Cu soil anomalies, with vertical overburden depth, it was noted that the depth in PC - 04 was 7.1 m (23 ft) and in PC - 46, it was 6.1 m (20 ft). Both holes intersected significant copper mineralization below the overburden cover. The rest of BLOCK A and B mineralization is not overlain by any geochemical response greater than 500 ppm Cu. Vertical overburden depth over BLOCK A and B averages 12.9 m (42 ft) and ranges from 0.6 m (2 ft) to 37.2 m (122 ft). (BLOCK A has an average vertical overburden depth of 15.5 m (51 ft) and a range of 0.6 m (2 ft) to 37.2 m (122 ft). BLOCK B has an average vertical overburden depth of 9.5 m (31 ft) and a range of 2.8 m (9 ft) to 28.0 m (92 ft).) The above suggests that the overburden is too deep to correlate surface soil geochemistry to underlying mineralization with any degree of reliability. Since the overburden depth fluctuates and since there are no drill holes in the vicinity of the soil copper geochemical anomalies, the potential for intersecting near surface copper mineralization is good. A minimum of ten holes to a depth of 200 m will be recommended to test for low stripping ratio copper mineralization.

The occurrence of antimony-gold on the War 1 mineral claim is approximately 3.0 kms east of the disseminated copper mineralization of BLOCK B (See Figure 3 showing the relative position of War 1 and Poplar 13 mineral claims). It has been well documented that porphyry copper mineral systems are zoned outward from a copper-molybdenum core to epithermal precious metal occurrences that fringe the porphyry chemical system (Titley and Hicks (1966) and CIM Special Volume 15 (1976). As the Poplar deposit is essentially overburden covered, it is not possible at this time, to conclude that the War 1 occurrence is related to or not related to the Poplar porphyry system. It would not be unreasonable to suggest that it is associated with the porphyry system which would reinforce the suggestion that the Poplar

porphyry system could be very large. If the mineral zoning is consistent, the diameter of the system could be in the order of 8 to 10 kms. The point here is that there could be a porphyry system several times as large as that drilled in the past. The mineral potential can be considered as open considering the geochemical, geophysical data and the area of Poplar 58 mineral claim.

METALLURGY

Utah Mines Ltd. has conducted some metallurgical testing (holes PC - 38, 39 and 40 were reportedly sent to Palo Alto, California), the results of which are not available to the writer. In an unsigned 1982 preliminary economic study, the following recoveries were mentioned: copper recovery, 83 to 88%; molybdenum recovery, 74%; silver recovery, 49% and gold recovery, 56%. Specific gravity was taken at 2.60. Grindability (Work Index) was not noted. It is not known if metallurgical studies were conducted to determine the grade of the copper and molybdenum concentrates nor if the precious metal component of these concentrates was determined. It has been verbally reported by Mr. B. Bowen that the Utah Mines Ltd. metallurgical work was of a preliminary nature only. New Canamin Resources Ltd. will have to undertake metallurgical definition studies both for conventional flotation processing and for heap leaching of low grade dump material.

ENVIRONMENTAL ASPECTS

Sulphide-bearing low grade and/or waste rock moved during the course of an open pit operation may be "an acid generator" (oxidation of sulphide minerals contributes hydrogen ion with the consequence being an increase in pH in the contained solution). Separate studies will be required to determine the degree of acid generation of waste dump and low grade copper material. The concept of "liquid ion exchange" (LIX) - solvent extraction should be investigated for low grade copper dump leaching. Utilization of this technology is currently employed by Gibraltar Mines near Williams Lake, B.C. If this technique could be successfully applied to the Poplar deposit, some of the "waste" rock may be converted to productive rock such that the relative amount of "waste" might be reduced effecting a reduction in stripping ratio.

Baseline environmental data collection should be started prior to any development in order to define the environmental parameters associated with development permitting. Within this aspect, the definition of cultural items such as trap-lines and status of native land claims in the region should be addressed.

INFRASTRUCTURE

The proximity of the Poplar deposit to Houston, B.C. would permit an operation without a townsite similar to Gibraltar Mines near Williams Lake, B.C. Rail at Houston, B.C. could serve for delivering concentrates to tide water at either Prince Rupert, B.C., 350 kms to the west or to Kitimat, the proposed site of a B.C. copper smelter, 300 kms to the west. Power supply from the B.C. Hydro grid is available at Houston, B.C. and may be available from the Equity Silver mine site after closure of that mine which is currently planned for late 1992. The Bell Copper mine on Babine Lake, north of Houston, B.C., is also reportedly facing closure in two to four years. The area could have a substantial unemployed but skilled work force available in the next few years.

CONCLUSIONS AND RECOMMENDATIONS

The Poplar porphyry copper-molybdenum-silver-gold deposit of New Canamin Resources Ltd. contains, at least, two distinct mineralized blocks, associated with a Late Cretaceous (72 to 75 million year) biotite monzonite porphyry and, overlain by a thin veneer of overburden.

Utah Mines Ltd. drilled 73 holes during the period 1974 to 1981, had expenditures totalling \$ 2,500,000 by April 1982 and estimated a global reserve of 260,000,000 tonnes of 0.37% copper "equivalent" at a 0.25% copper "equivalent" cut-off value.

The majority of the drill holes intersected significant copper-molybdenum-silver-gold mineralization and defined two separate zones of mineralization. The western zone (BLOCK A) is defined as a vertical annular body while the eastern zone (BLOCK B) suggests a deeper mineralized body with a domical shape, expanding laterally with depth. Geochemical and possibly geophysical data suggest that BLOCK A is open to the northwest, west and south.

Mineral inventories at different cut-off values for the drill defined area have been suggested for each zone and combined. At a cut-off value of 0.20% T. Cu, BLOCK A is estimated to contain 69,718,000 tonnes at an average grade of 0.32% T. Cu, 0.014% Mo, 0.05 opt Ag and 0.003 opt Au. Combining BLOCK A plus BLOCK B at the same cut-off value, the mineral inventory is in the order of 116,122,000 tonnes with an average grade of 0.32% T. Cu, 0.009% Mo, 0.06 opt Ag and 0.003 opt Au. The mineral potential of the Poplar deposit could be in excess of 400 million tonnes and is still open as the continuation of copper mineralization to the west, north and south has never been drill tested.

This project has comparable grade and tonnage potential to other bulk deposits that are under active consideration in British Columbia at this time such as Fish Lake, Taseko and the Hushamu and Red Dog deposits of Moraga Resources Ltd.

In light of the above, it is recommended that

- (1) 12 NQ (minimum) sized fill-in holes be drilled in and around the annular body of >0.30% T. Cu in BLOCK A to define the copper gradient in space and 5 fill-in holes in BLOCK B;
- (2) preliminary metallurgical testing be undertaken to determine Work Index, mineral recoveries and to determine to what degree the precious metals report to the copper concentrate using 6 inch diameter drill core from representative mineralization;
- (3) 10 NQ (minimum) holes to a minimum depth of 200 m be drilled to test the area west and southwest of BLOCK A to determine the significance of (a) the copper soil geochemical anomalies and (b) the presence of malachite on the shore of the lake;
- (4) baseline environmental studies be organized and the data collection process started;
- (5) sulphide material be collected from the west and east zones and tested by accepted methodology to determine the degree of acid generating potential, and
- (6) column bacterial leaching be undertaken for initial evaluation of copper heap leach recovery from low grade (<0.2% copper) material.

ESTIMATED COST OF PROPOSED WORK PROGRAM

In light of the above recommendations, the estimated cost of the proposed program is outlined below.

Diamond drilling

(a) 12 fill-in holes to 200 m	2,400 m	
(b) 10 holes to 200 m	2,000 m	
(c) 5 fill-in holes to 300 m	<u>1,500 m</u>	
Cost per m of \$ 75.00 times	5,900 m	\$ 442,500

Assaying

1,960 samples at \$ 17.00 each	33,320
freight to Laboratory	1,000

Drill site preparation

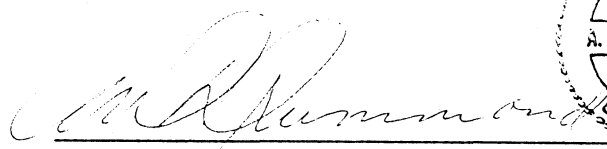
D-7 dozer, 8 days at 10 h/d at \$ 125.00/h	10,000
fuel for 8 days at \$ 200.00/d	1,600

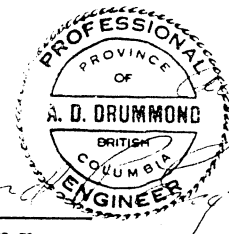
Vehicle rental

3/4 Ton 4X4 with insurance times 2	3,735
fuel	1,600

<u>Supervision, core logging, surveying</u> 45 days at \$ 450.00/d	21,150
<u>Core logging</u> 45 days at \$ 300.00/d	13,500
<u>Meals and accommodation</u> 2 men at \$ 70.00/d for 45 days (drillers camp)	6,300
<u>Metallurgical sample</u> 100 feet of 6 inch diameter core at \$ 100.00 per foot with mob./demob.	18,000
<u>Metallurgical laboratory testing</u> allow	170,000
<u>Environmental studies</u> allow	50,000
<u>Compilation and final report</u> allow	10,000
Subtotal	<u>\$ 782,705</u>
Contingency @ about 15%	\$ 117,295
Total estimated cost of proposed work program	<u>\$ 900,000</u>

Respectfully submitted,


A.D. Drummond, Ph.D., P.Eng.



August 1, 1991

REFERENCES

- Bowen, B.K. (1975) Geological and Geophysical Report on the Poplar Groups 1, 2, 3, 5, and 6, Omineca Mining Division: Assessment Report No. 5679, for Utah Mines Ltd. dated Oct. 30, 1975.
- Bowen, B.K. (1976) Geological, Geophysical, Geochemical and Drilling Report on the Poplar Groups 1 to 7, Omineca Mining Division: Assessment Report No. 6065, for Utah Mines Ltd. dated Nov. 23, 1976.
- Bowen, B.K. and Holland, G.L. (1980) Drilling Report on the Poplar Group 1, Omineca Mining Division: Assessment Report for Utah Mines Ltd. for work in the period Nov. 18 to Dec. 1, 1979.
- Carter, N.C. (1975) Poplar (93L-239): Geology, Exploration and Mining in B.C. - 1974; B.C. Dept. Mines and Petroleum Resources, pp. 256 - 257.
- Carter, N.C. (1981) Porphyry Copper and Molybdenum Deposits West-Central British Columbia: B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 64, 150 p.
- Carter, N.C. and Kirkham, R.V. (1969) Geological Compilation Map of the Smithers, Hazelton and Terrace Areas, Prelim. Map Series 1.
- Holland, G.L. (1980a) Drilling Report for the Poplar Groups 3 - 5, Omineca Mining Division: Assessment Report for Utah Mines Ltd. for work in the period May 10 to July 5, 1980.
- Holland, G.L. (1980b) Drilling Report for the Poplar Group 2, Omineca Mining Division: Assessment Report for Utah Mines Ltd. for work in the period May 18 - 31, 1980.
- Holland, G.L. (1980c) Drilling Report for the Poplar Groups 3 - 5, Omineca Mining Division: Assessment Report No. 8186 for Utah Mines Ltd. dated July 18, 1980.
- Holland, G.L. (1981) Drilling Report for the Poplar Groups 1 - 3, Omineca Mining Division: Assessment Report for Utah Mines Ltd. for work in the period April 12 to June 28, 1981.
- Holland, G.L. (1982) Drilling Report for the Poplar Groups 1 - 2, Omineca Mining Division: Assessment Report for Utah Mines Ltd. for work in the period Oct. 28 to Nov. 16, 1981.

- Janes, T.W. (1982) Poplar Lake Reserves: internal Utah Mines Ltd. letter, dated Sept. 8, 1982.
- Jones, H.M. (1972) Geological - Geochemical Report on the Poplar Mineral Claims, Tagetochlain Lake Area, 93L/2W: Assessment Report No. 3665 for El Paso Mining and Milling Co. dated Jan. 6, 1972.
- Mesard, P.M. (1979) The Alteration And Mineralization Of The Poplar Copper - Molybdenum Deposit, West-Central B.C.: unpublished M.A.Sc. thesis, University of British Columbia.
- Mesard, P.M., Godwin, C.I. and Carter, N.C. (1979) Geology of the Poplar Porphyry Copper - Molybdenum Deposit: Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork, 1978; Paper 1979 - 1, pp. 138 - 143.
- Tipper, H.W. (1963) Nechako River Map - Area, B.C.: Geol. Surv. Can.; Memoir 324, Figure 1, Glacial Features.
- Tipper, H.W. (1976) Smithers, B.C. 93L: Geol Surv. Can.; Open File Map 351.
- Tipper, H.W. and Richards, T.A. (1976) Jurassic Stratigraphy and History of North Central British Columbia: Geol. Surv. Can.; Bulletin 270, 73 p.
- Titley, S.R. and Hicks, C.L. (1966) Geology of the Porphyry Copper Deposits, Southwestern North America: Univ. of Arizona Press, 287 p.

OTHER REFERENCES

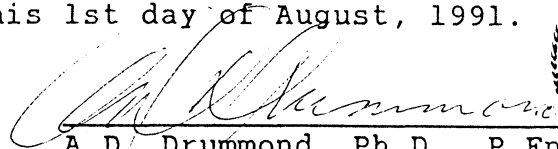
- CIM (1976) Porphyry Deposits of the Canadian Cordillera: Can. Inst. Min. and Met., Special Volume 15, A. Sutherland Brown, Editor, 510 p.
- GEM (1973) Poplar: Geology, Exploration and Mining in B.C. - 1972: B.C. Dept. Mines and Petroleum Resources, p. 373.
- MAP 671A - Houston, B.C. Map Area, Geological Map.
- MAP 7750G (1969) Geol. Surv. Can., Geophysical Paper 7750, Whitesail Lake, B.C., Sheet 93E, Scale 1" = 4 miles.
- MAP 7760G (1969) Geol. Surv. Can., Geophysical Paper 7760, Smithers, B.C., Sheet 93L, Scale 1" = 4 miles.

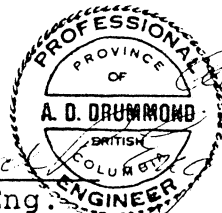
CERTIFICATION

I, Arthur Darryl Drummond of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1. I am a geological engineer residing at 3249 West 35th Ave., Vancouver, B.C., V6N 2M9 and employed by D.D.H. Geomanagement Ltd., with an office at 422 - 470 Granville Street, Vancouver B.C., V6C 1V5.
2. I am a registered Professional Engineer of the Province of British Columbia, certificate number 5778. I graduated from the University of British Columbia in 1959 with a B.A.Sc. in geological engineering, and in 1961 with a M.A.Sc. in geological engineering. I graduated from the University of California at Berkeley in 1966 with a Ph.D. in geology.
3. I have practised my profession continuously for 29 years primarily with the Placer Development Group of Companies at Craigmont, Endako and Gibraltar mines, and in mineral exploration in Canada, United States of America, Chile, Argentina, Mexico and the Philippines.
4. I am the author of this report which is based on reviewing all available reports on the Poplar porphyry copper - molybdenum deposit of New Canamin Resources Ltd. I have personally visited the property on July 3, 1991.
5. I have no interest, direct or indirect, in the property discussed in this report or in the securities of New Canamin Resources Ltd., nor do I expect to receive any.
6. This report may be utilized for development of the property, provided that no portion may be used out of context in such a manner as to convey a meaning which differs from that set out in the whole.
7. Consent is hereby given to New Canamin Resources Ltd. to reproduce this report or any part of it for the purposes of development of the property, or related to the raising of funds.

Dated at Vancouver, B.C. this 1st day of August, 1991.


A.D. Drummond, Ph.D., P.Eng.



D.D.H. GEOMANAGEMENT LTD.

Geological Engineer



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Mr Darryl Hanson
Equity Silver Mines Ltd
Houston, BC.

10th October 1991

Dear Darryl,

Please find enclosed a copy of the report by Dr. Darryl Drummond on the Poplar project and, interleaved, some of the Utah memoranda describing their evaluation of reserves and Darryl's subsequent letter describing the higher grade near surface rock that he has identified.

We have not yet taken the next logical step to see what best grade we could enclose within a 20 million tonne reserve at somewhat higher stripping ratios. From Table 1, the last of the pages of Utah information, it would seem reasonable to anticipate that within some of those reserves one might find sufficient tonnage of higher grade.

We are noting some interest from other groups and are actively seeking further financing so that we may keep the momentum rolling on the project. The direction we have been leaning towards is to take down a reasonably substantial private placement with a possible right of first refusal for the group making the placement to enter into a further agreement to earn an interest in the project.

Yours sincerely,

Ben Ainsworth.

D . D . H . GEOMANAGEMENT LTD .

422 - 470 GRANVILLE ST.,
VANCOUVER, BRITISH COLUMBIA
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604-681-4413 FAX 604-688-6479

8 August 1991

Mr. Alan Savage,
New Canamin Resources Ltd.,
304, 255 West 1st Street,
North Vancouver, B.C.
V7M 3G8

Dear Mr. Savage,

RE: POPLAR CU-MO-AG-AU PORPHYRY DEPOSIT, NEAR HOUSTON, B.C.
NEAR SURFACE GRADE VARIABILITY

The following outlines that there is significantly higher grade available in the upper three benches of the BLOCK A portion of this deposit. This letter is in response to questions pertaining to near surface open pitable grade as compared to that grade defined in the overall global mineral inventory. To illustrate the grade variability in the upper benches, three 15 meters thick benches were selected, i.e., Bench 900 - 885 m elevation; Bench 885 - 870 m elevation and Bench 870 - 855 m elevation. Figure 1 outlines the drill hole locations within the Poplar survey grid. Figure 2 illustrates the contoured copper values for the 900 - 885 m bench; Figure 3 illustrates the contoured copper values for the 885 - 870 m bench and Figure 4 illustrates the contoured copper values for the 870 - 855 m bench. These illustrations allow an appreciation of the potential grades that could be mined during the early stage of open pitting this deposit.

**GRADE VARIABILITY IN UPPER THREE 15 M BENCHES
(900 - 855 M ELEVATION)**

BLOCK A (West of 11900E)

BENCH ELEVATION (meters)	> 0.4% Cu		> 0.3% Cu	
	tonnes	% Cu %Mo	tonnes	% Cu %Mo
900 - 885	530,000	0.46 0.012	1,366,000	0.40 0.013
885 - 870	520,000	0.48 0.011	1,823,000	0.41 0.011
870 - 855	1,128,000	0.48 0.011	2,778,000	0.43 0.017

(2)

BLOCK B (East of 11900E)

BENCH ELEVATION (meters)	> 0.4% Cu		> 0.3% Cu		
	tonnes	% Cu ‰	tonnes	% Cu	‰
900 - 885	151,000	0.72	375,000	0.52	0.002
885 - 870	-	-	12,000	0.30	0.001
870 - 855	-	-	114,000	0.39	0.001

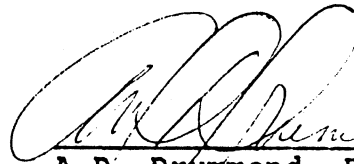
SUMMARY UPPER THREE BENCHES

At > 0.4% Cu: 2,329,000 tonnes at 0.49% Cu.

At > 0.3% Cu: 6,468,000 tonnes at 0.42% Cu.

The above illustrates that significantly higher grade than the global mineral inventory average is present near surface and would be available during the initial stage of pit development.

Respectfully submitted,



A.D. Drummond, Ph.D., P.Eng.

Geological Engineer

Attached: 4 Figures
8 August 1991

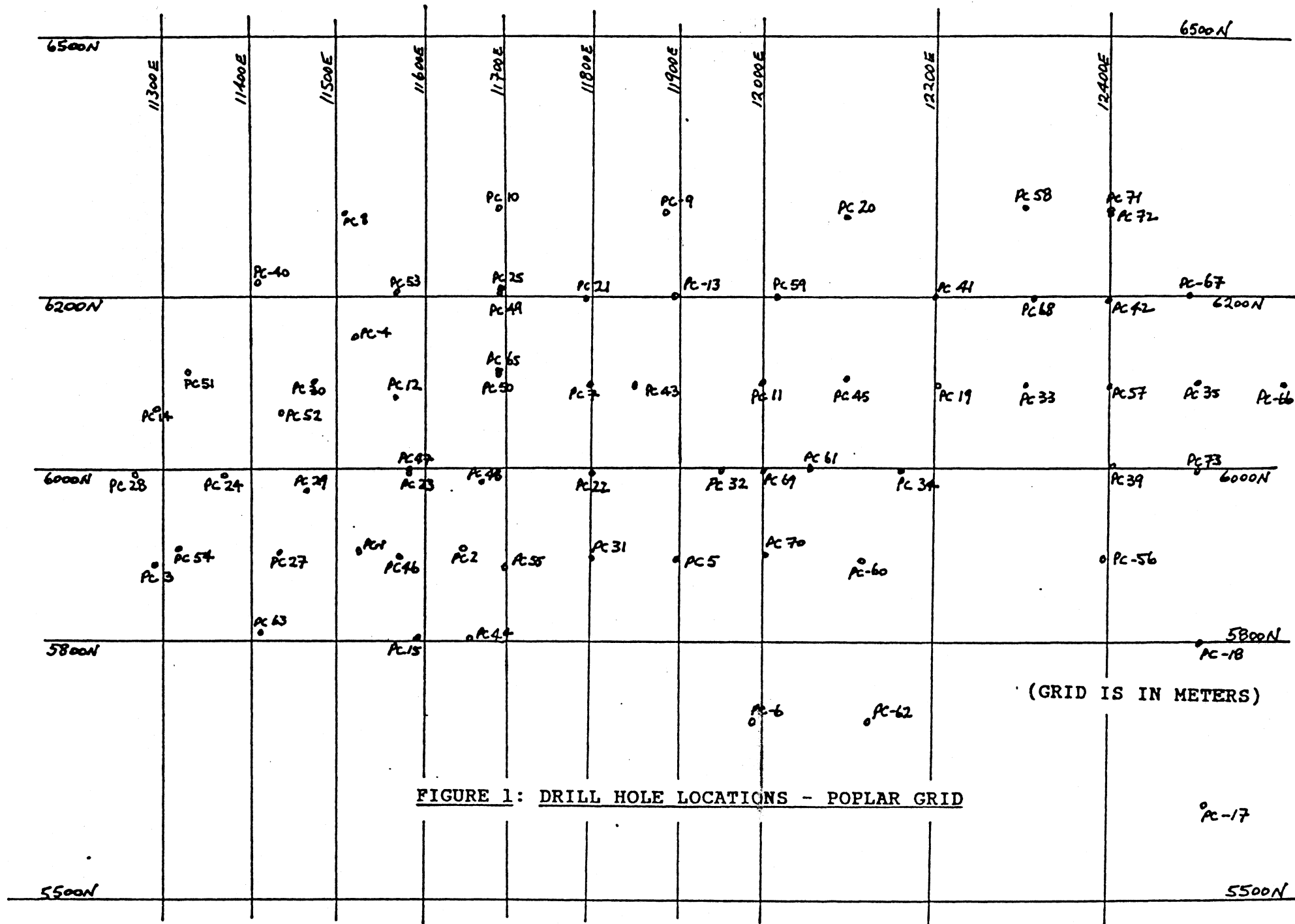
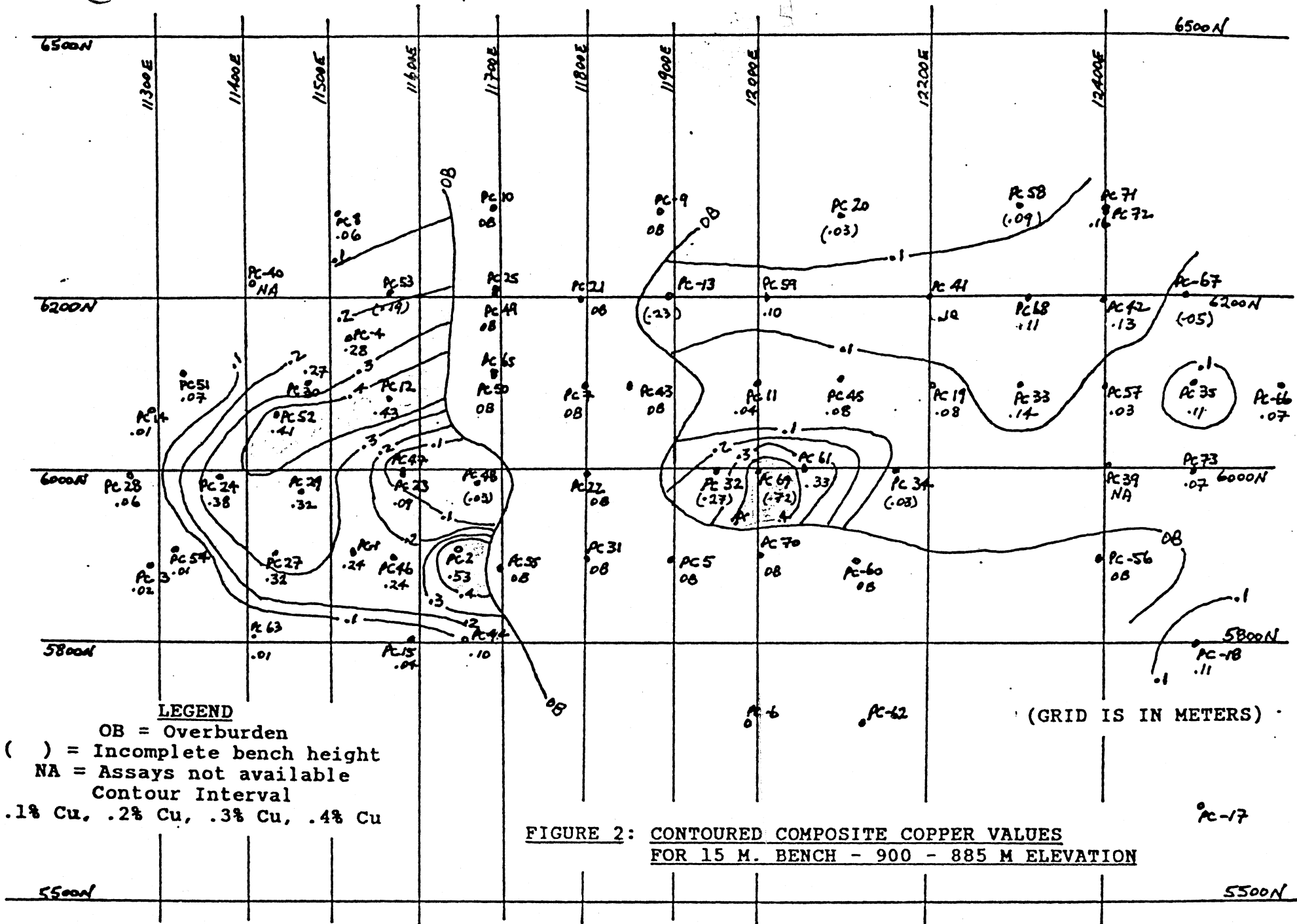


FIGURE 1: DRILL HOLE LOCATIONS - POPLAR GRID



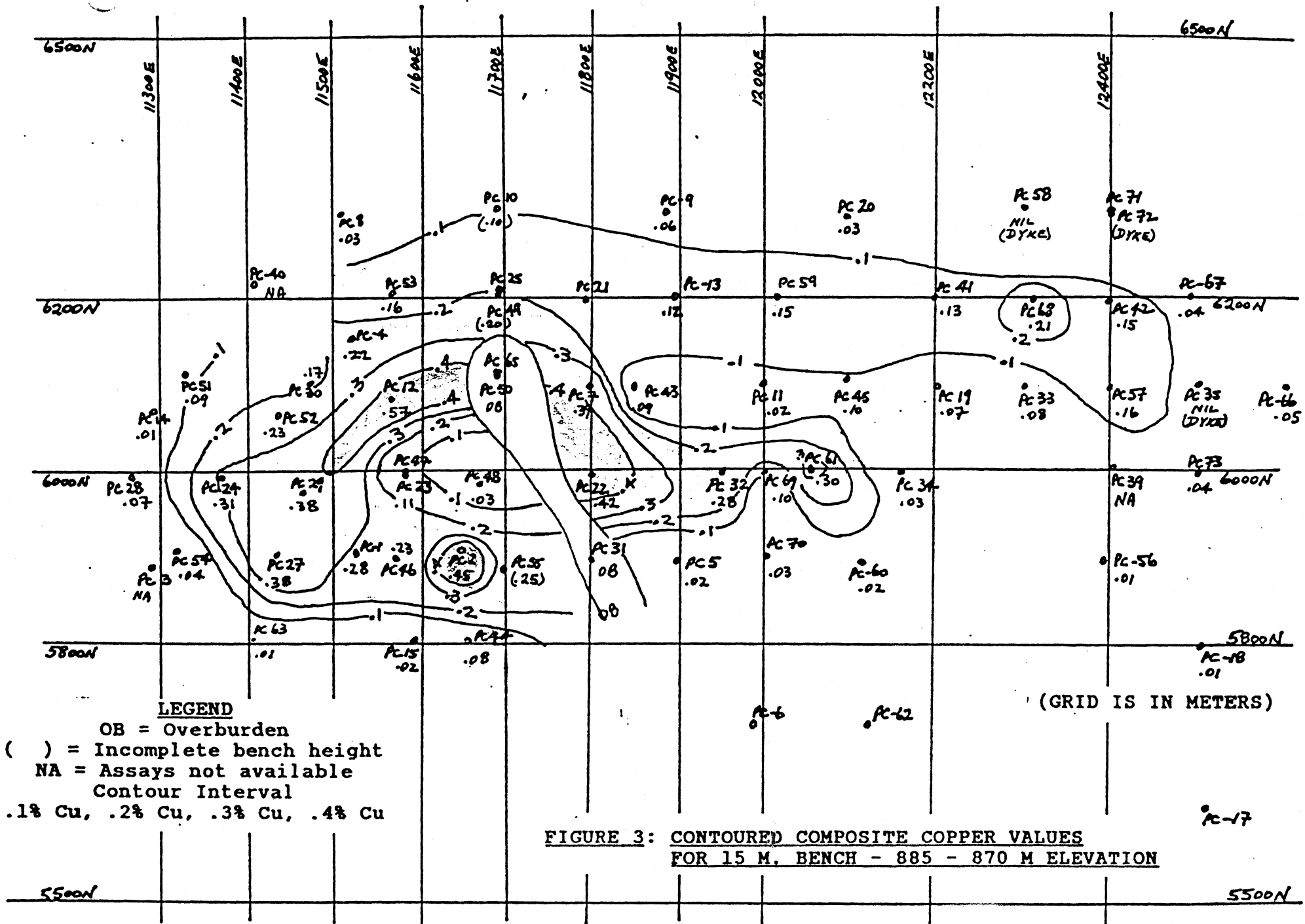
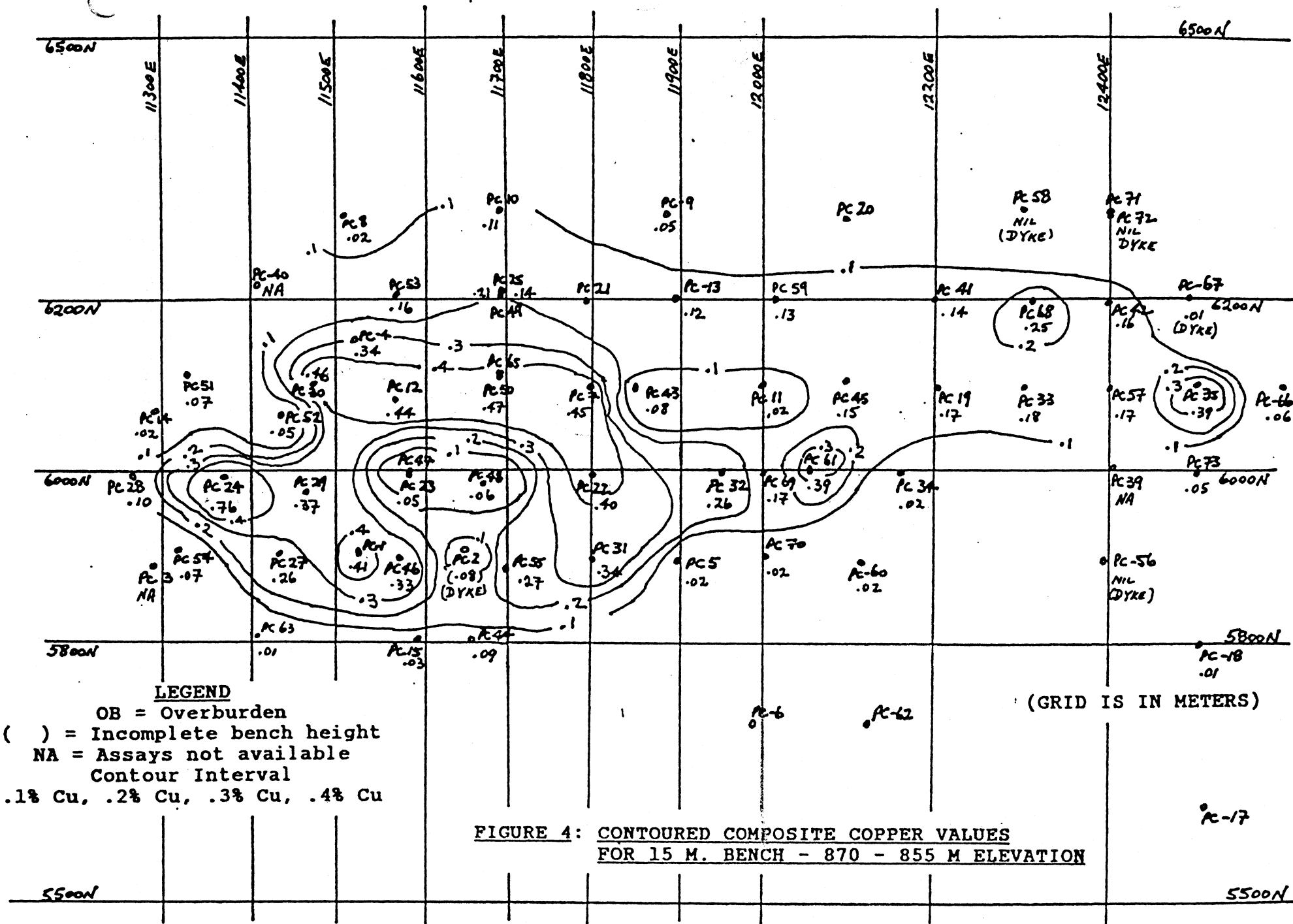


FIGURE 3: CONTOURED COMPOSITE COPPER VALUES
 FOR 15 M. BENCH - 885 - 870 M ELEVATION



LEGEND
 OB = Overburden
 () = Incomplete bench height
 NA = Assays not available
 Contour Interval
 .1% Cu, .2% Cu, .3% Cu, .4% Cu

FIGURE 4: CONTOURED COMPOSITE COPPER VALUES FOR 15 M. BENCH - 870 - 855 M ELEVATION