83-#171 _ #11228

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GEOCHEMICAL REPORT

S.I.B. 1 - 16 CLAIMS

SKEENA MINING DIVISION

NTS MAP 104B/9W

130° 27' West Longitude; 56° 37' North Latitude

Owner CONSOLIDATED SILVER BUTTE MINES, LTD.

Operator RYAN EXPLORATION CO., LTD.

ROGER H. GEORGE

2 April 83

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INTRODUCTION

History

The areas drained by the upper reaches of the Stikine, Iskut, Unuk and Bell-Irving Rivers have been prospected for gold since the late 1800's when prospectors passed through the region on their way to the interior. The heaviest concentration of effort has been around and north of Stewart, due to its location at tidewater, but continuation of similar rock-types through to the Taku River and generally east of the crest of the coast range implies the significance of this general region.

The mineralization near Tom MacKay Lake was discovered in 1932 and active prospecting continued through 1940 fostered by the increases in gold prices in 1934. Two adits, both completely accessible exist on the property, and are the result of sporadic mining activities. Several attempts to delineate mineralization with "winkie-type" diamond drills has been conducted in the general vicinity of these adits. However, because of the very nature of the mineralization, and the shallowness of the holes, it is doubtful that the results would add significantly to current data. Evidence of three larger diameter holes exists a short distance north of the Emma Adit, but little information is available.

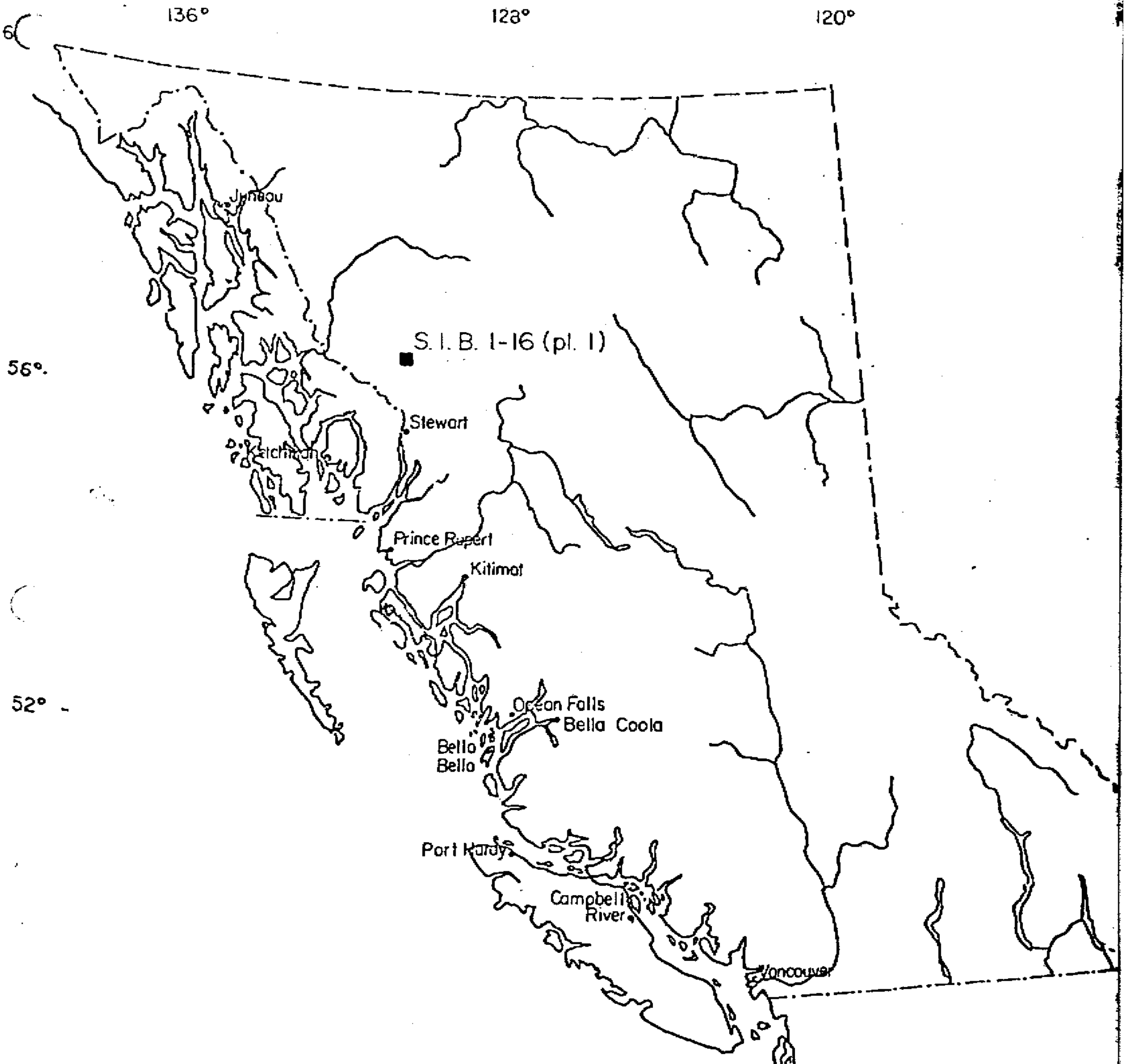
In 1975, Texas Gulf acquired a lease on the properties and conducted substantial mapping, sampling and geophysical programs. As a result, diamond drilling was undertaken in 1976 in an attempt to delineate zones of massive sulfides adjacent to "rhyolite-domes" but due to discouraging results, the property was then turned back to the owners. May-Ralph Resources, Ltd. acquired an option in 1979 mining some hygrade materials and helicopturing them out to the Bell-Irving Road.

With the dramatic increase in metal prices in the late 1970's, Ryan Exploration Co., Ltd., initiated a reconnaissance program in portions of the Western Cordillera. North of Stewart, efforts were concentrated on properties with precious metal values as it was suspected that the remoteness, fine-grained type of mineralization and its antimonial or arsenical nature may have contributed to the area having been bypassed. A spectacular color, anomaly croppingout over eleven kilometers, accompanied by significant gold and silver values and similarities between observed rock-types and those of producing districts lead to acquistion of the properties. The property is comprised of 16 contiguous claims, presently held by Ryan Exploration Co., Ltd. under terms of the 1980 agreement with Consolidated Silver Butte Mines, Ltd. (the S.I.B. 1-16 inclusive mineral claims).

Physiography

The center of the project area is located at 130° 27' west longitude and 56° 37' north latitude (fig. 1); NTS may reference 104B/9W (pl. 1), approximately 80 km north of Stewart, B.C. Access to the claims is best afforded by helicopters, available on a casual basis in Stewart through Vancouver Island Helicopters which operates a 206 and Jet Ranger. Camp supplies, drilling

FIGURE 1



RYAN EXPLORATION

MAY—RALPH PROJECT

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equipment and additional personnel should be trucked-up the Bell-Irving Highway to Teigen Creek, approximately 75 kilometers north of Mesiadin Junction and then conveyed 38 kilometers to the west by helicopter to the camp site. Amphibious, or float equiped aircraft, could be employed after July 1st, landing on Tom MacKay Lake, four kilometers west of the area. Current plans by B.C. Hydro indicate that a dam might be sited on the Iskut River eleven kilometers to the north.

Generally, the property lies above timberline 750 meters which maximum relief of approximately 700 meters and the highest point at an elevation of 1,300 meters immediately west of camp. Extremes in relief are limited to local areas and should not be considerd a significant problem. Along the southern edges of the property, this situation changes and the land rapidly pitches-off into the Unuk River Canyon.

Vegetation, consisting of scrub trees, alders and some evergreens is subdued as the claims generally overlie an alpine area. However, moving to the south into the Unuk River Canyon and tributaries a definite increase in vegetation is noted becoming very heavy, and constituting a considerable impediment to mapping, sampling and access.

Precipitation is heavy and exceeds 125 cm. per year. While the summers are drier, heavy amounts of rain fall in May, June and September. Wet snow, up to one or two foot depths, should be expected anytime after the middle of September, but substantial amounts do not accumulate until late October. Temperatures below 0° C. are expected in the latter part of August but do not constitute a problem for drilling or camp activities until the middle of October or later. Due to heavy accumulation of snow during the winter, July 1st would probably be the earliest date that activities out of tent camps would be expected to operate efficiently. The construction of a substantial A-frame by Ryan Exploration Co, Inc., however, allows preparatory activities to begin early in June.

GEOLOGY

General Statement

Generally, the area north of the Unuk River is underlain by a moderately folded sequence of volcanics and sedimentary rocks of marine origin. Deposition occurred in a near shore, island arc environment. Upper Triassic sediments cropout west of Harrymel Creek while the rocks underlying the claims area are considered to be of the Hazelton Group with the Bowser Group bordering them to the north and northeast (Souther, Brew and Okulitch, 1979).

Intrusive materials constitute only a minor proportion of the rocks in the region, with Late Triassic quartz diorites cropping out in the upper portions of Harrymel Creek and only minor scattered occurrences of Jurassic diorites noted elsewhere. The Late Cretaceous and Early Tertiary phases of the coast crystalline belt are well to the west, perhaps as much as ten kilometers.

The major trends within the region are generally northwest to southeast with major paralleling lineaments. Within the claims area, a north-northeast trend is prominent and is the result of a local paleo-depositional surface. Significant north to northwest structures are present throughout the region producing offsets along the north-northeast trends in the claims area. These are evidenced on the coast by long fiords and major river valleys and prominent gulches in the interior. The oldest and most subdued regional feature is a rather ill-defined east-west trend which is most apparent along portions of major river valleys.

GEOCHEMISTRY

Introduction

During the fall of 1982, sixty-eight (68) stream sediment samples and twenty-seven (27) rock chip samples were collected on the S.I.B. claims, an area 1,000 meters by 4,000 meters. Samples were collected from all major drainages at intervals of three hundred (300) meters or less. As many tributaries as possible, regardless of size were likewise sampled. Samples were obtained from what is considered active sediments with sample size necessarily in excess of 10 gr. in order to supply suitable amounts of material for the various analysis. Samples were contained in "poly-type" bags labeled and containerized in burlap for shipping. All samples were shipped to U.S. Borax's Research Laboratory, 412 Crescent Way, Anaheim, California 92801.

The samples are shipped wet and undergo routine drying procedures upon receipt, followed by sieving and retention of the -80 mesh portion of the sample. Geochemical determininations for copper, molybdenum, lead, zinc, and silver were made by the usual method of acid digestion with aqua-regia and analysis by atomic absorption. Gold was determined by fire assay, follwed by digestion of the DORE' bead in aqua-regia and analysis by atomic absorption. Tungsten was determined colorimetrically with dithiol after fusion of the sample with potassium bisulfate and digestion in HCl. Arsenic was determined colorimetrically in pyridine -silver diethyldithio-carbamate after fusion with potassium bisulfate, digestion with concentrated HCl and generation of arsine.

Results

Orientation surveys have been conducted in several areas where Jurassic volcanic and sediments exist in an alpine terrain and are exposed to similar climatic conditions.

Using previously described sampling methods and analytical procedures background values were established for copper, molybdenum, lead, zinc, silver and gold at 18 ppm, 2 ppm, 15 ppm, 50 ppm 0.7 ppm and no value, respectively and anomalous values were set at the mean plus two standard deviations 150 ppm, 15 ppm, 50 ppm 195 ppm, 1.6 ppm and 0.35 pm, respectively (Kock and Link, 1970). Using these latter values, little is overlooked on a reconnaissance basis. Previous reconnaissance work, however, has lead to the establishment of the claim boundaries over the anomalous area, thus eliminating the necessity of redefining this zone. From a considerable amount of data collected in the cordillera, higher values have been established which have proven to lead directly to the specific mineral occurrence and they are:

copper - 170 ppm, molybdenum - 15 ppm, lead - 75 ppm, zinc 250 ppm, silver - 1.7 ppm and gold 0.40 ppm. It is these values which are considered noteworthy and their existance along strike from known occurrences defines zones where soil sampling and geophysics should be employed.

Anomalous values are found on the Eskay Creek divide and along the creek draining to the southwest from this divide. Information collected on float and bedrock at the time of sampling indicate that the valley is underlain by a sequence of shales and graywackes. As a result, much of the higher zinc values are discounted and only become pertinent where they coincide with good lead and silver values. A strong anomaly exists around divide lake and in streams draining the ridges on both sides (pl. 2). Pyrite mineralization occurs in a sequence of rhyolitic vitrophyres and flow breccias, however, only narrow veins carrying galena, sphalerite and silver values were noted near an old adit (sample 3746) and west of divide lake (sample 3747) (pl. 3).

Good silver values (samples 3756 - 3763) were obtained from streams draining to the southwest from Argillite Creek divide but are of unknown origin as no significant mineralized float or bedrock was noted. Streams draining to the west off of a significant red stained cliff are strongly anomalous (samples 3749, 3751, 3753, 3754 and 3011). The cliff is composed of rhyolitic vitrophyres and flow breccias and are heavily mineralized with pyrite and arsenopyrite. Stockwork quartz veining is very prominent but carried only minor amounts of sulfides. Galena and sphalerite were noted in trace amounts where the pyrite mineralization was the strongest.

EXPENDITURES

Helicopter:	Long Beach Helicopter 6 Hours @ $425/hr.	$ 2,550.00
Geologist:	Evaluation of data and report 8 Hours @ $165/hr.	1,320.00
Crew Leader:	August 20th - 29th @ $1,800/mn.	600.00
Field Assistant:	August 20th - 29th @ $1,500/mn.	500.00
Samples:	95 for Cu, Mo, Pb, Zn, Ag @ $4.55/sample	432.25
	95 for Au goechem, fire assay, AA finish @ $4.00/sample	380.00
	95 W @ $3.75/sample	356.25
Food:	$1,500.00/man/day	300.00
Camp Equipment:		200.00
Base Map:	1:6,000	75.00
Drafting:	10 Hours @ $6.00/hr.	60.00
Report Prep:	Typing 4 hr. @ $20.00/hr	80.00
	Copying	30.00
	Miscellaneous	25.00
TOTAL		$ 6,908.50

PERSONAL QUALIFICATIONS

I received Bachelor of Science degrees in Chemistry and Geology from Washington State University in 1967 and 1968, respectively, and a Master of Science degree in Geology from Idaho State University in 1971. From 1972 through 1976, while employed by El Paso Mining and Milling reconnaissance, detailed mapping and drilling projects were supervised in Southeastern Alaska. Since 1977, I have been retained as a consultant by U.S. Borax and Chemical Company supervising exploration programs in Southeast Alaska, Alaska interior and the coast range of British Columbia, Canada.

Submitted April 2, 1983.

Roger H. George

Roger H. George

APPENDIX A

Stream Sediment Geochemistry

USBRC Geochemical Analysis

Sample Number	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Ag ppm	Au ppm	W ppm
MR- 3001	42	5	41	396	2.3	0.30	17
MR- 3009	56	5	87	254	2.2	0.06	8
MR- 3011	75	5	116	104	4.4	0.03	5
MR- 3012	38	5	41	114	1.7	0.05	1
MR- 3014	38	5	24	124	2.1	0.05	2
MR- 3015	149	5	42	158	2.9	0.10	11
MR- 3017	206	7	59	183	2.3	0.08	2
MR- 3018	31	5	10	96	0.9	0.05	2
MR- 3019	179	5	23	199	1.4	0.06	21
MR- 3021	50	5	22	194	1.7	0.05	4
MR- 3055	164	5	34	185	1.0	0.09	2
MR- 3056	133	5	30	200	1.0	0.06	2
MR- 3057	72	5	37	260	1.3	0.05	5
MR- 3058	119	5	34	207	1.2	0.05	3
MR- 3059	140	5	27	179	1.0	0.12	14
MR- 3060	162	5	96	341	1.7	0.12	3
MR- 3062	151	5	84	281	2.4	0.12	3
MR- 3063	75	5	42	235	1.8	0.05	3
MR- 3064	627	6	35	280	1.4	0.05	4
MR- 3065	62	5	50	248	2.2	0.06	2
MR- 3066	55	5	20	198	1.7	0.12	7
MR- 3068	54	5	41	300	2.0	0.10	3
MR- 3069	47	5	70	162	2.0	0.18	1
MR- 3070	120	5	42	254	1.1	0.10	15
MR- 3072	95	5	35	201	0.9	0.10	2
MR- 3073	124	5	21	169	1.5	0.09	4
MR- 3076	76	5	32	132	1.2	0.06	7
MR- 3077	60	5	40	254	2.0	0.05	17
MR- 3079	130	5	23	181	1.0	0.09	13
MR- 3080	63	5	55	235	2.4	0.18	12
MR- 3081	49	5	63	288	3.1	0.14	13
MR- 3748	125	5	258	274	7.6	0.09	4
MR- 3749	60	5	90	503	6.0	0.12	4
MR- 3751	40	7	107	337	5.5	0.06	5
MR- 3752	68	7	71	437	2.8	0.12	6
MR- 3753	95	32	464	469	18.5	0.75	0
MR- 3754	38	11	62	423	4.3	0.04	4
MR- 3755	81	7	57	478	3.8	0.03	5
MR- 3756	79	9	96	485	4.8	0.03	4
MR- 3757	85	6	85	568	4.2	0.03	8

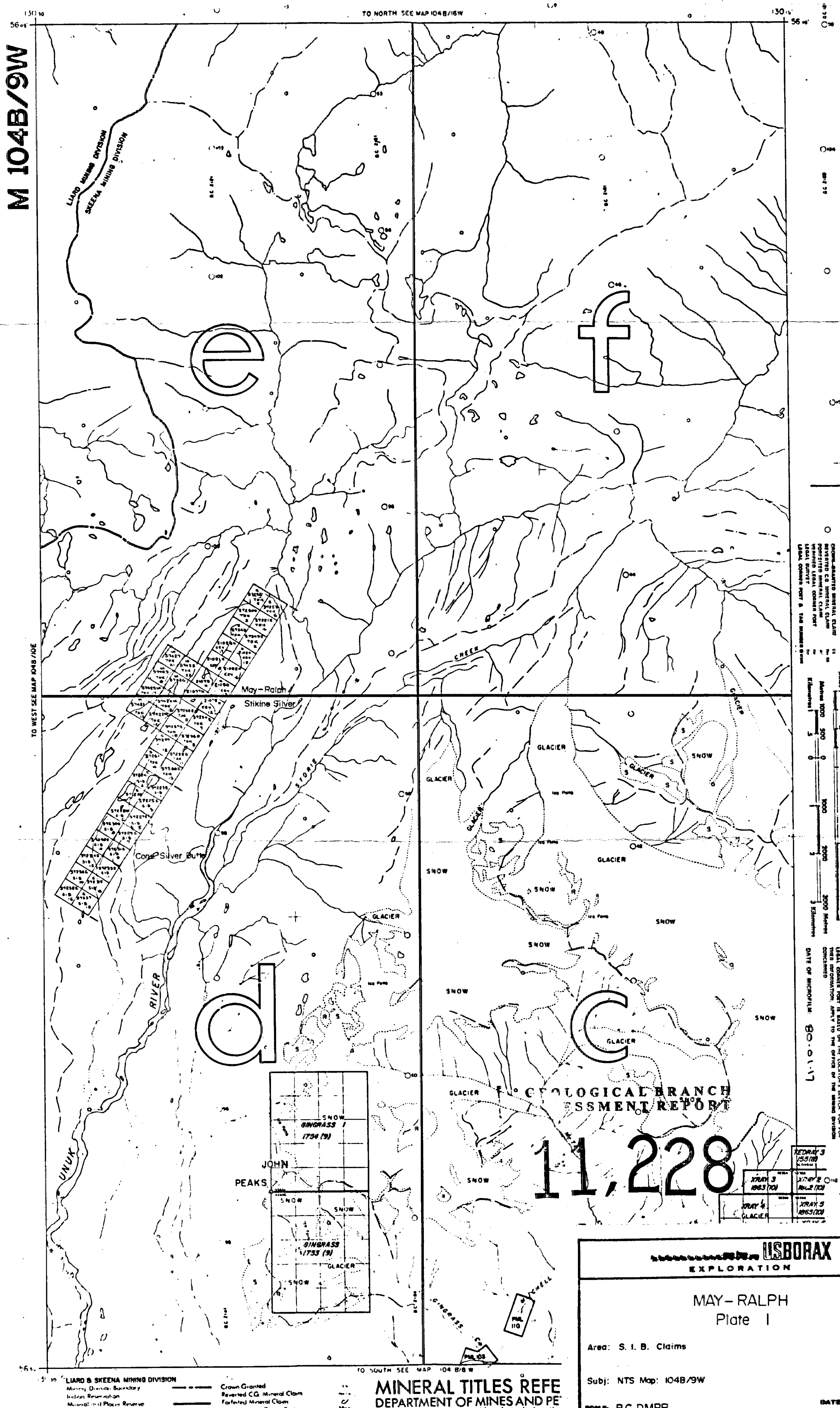
Sample Number	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Ag ppm	Au ppm	W ppm
MR- 3959	66	5	44	363	4.3	0.05	0
MR- 3760	64	5	54	332	3.2	0.14	6
MR- 3761	68	5	39	361	4.2	0.20	7
MR- 3762	67	6	50	428	5.4	0.04	0
MR- 3763	67	4	44	363	4.8	0.08	5
MR- 3764	98	6	45	439	1.2	0.36	12
MR- 3765	63	6	29	367	1.5	0.06	6
MR- 3766	82	9	68	485	0.2	0.09	10
MR- 3849	77	5	60	251	2.1	0.09	9
MR- 3850	281	5	2270	880	7.4	0.18	11
MR- 3851	126	5	330	116	12.0	0.08	3
MR- 3853	42	5	85	359	2.3	0.21	3
MR- 3854	42	5	527	602	2.4	0.27	4
MR- 3855	39	5	296	497	3.7	0.24	4
MR- 3856	68	6	191	503	1.8	0.06	3
MR- 3857	21	5	68	140	2.0	0.06	3
MR- 3858	89	5	248	423	2.3	0.06	7
MR- 3859	75	5	51	338	2.0	0.06	6
MR- 3864	65	8	32	442	1.3	0.04	3
MR- 3865	63	7	17	395	1.3	0.04	6
MR- 3866	72	6	24	413	1.6	0.03	3
MR- 3867	55	45	59	584	1.7	0.03	8
MR- 3868	59	26	38	430	2.5	0.03	6
MR- 3869	41	26	28	790	2.7	0.03	9
MR- 3870	42	11	22	349	1.8	0.05	5
MR- 3871	35	14	18	305	1.4	0.03	13
MR- 3872	26	11	18	141	1.4	0.03	3
MR- 3873	46	9	28	285	1.5	0.12	5
MR- 3874	74	7	18	403	1.6	0.03	3

APPENDIX B

Rock Sample Geochemistry

USBRC Geochemical Analysis

Sample Number	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Ag ppm	Au ppm	W ppm
MR- 3002	24	17	157	45	3.9	0.03	12
MR- 3003	18	5	81	29	1.8	0.05	13
MR- 3004	10	5	40	71	1.0	0.06	10
MR- 3005	34	5	26	322	1.7	0.74	16
MR- 3006	9	5	27	6	3.7	0.18	21
MR- 3007	15	5	104	38	3.5	0.44	32
MR- 3008	7	5	29	23	1.3	0.14	18
MR- 3010	8	5	29	6	3.7	0.18	10
MR- 3013	87	22	75	40	5.7	0.24	5
MR- 3016	64	5	6	5	2.2	0.05	25
MR- 3020	14	5	5	5	1.2	0.05	20
MR- 3022	5	15	9	20	1.1	0.03	4
MR- 3051	11	5	116	9	4.1	0.32	11
MR- 3052	6	14	9	17	0.7	0.05	6
MR- 3053	5	10	21	28	2.0	0.06	16
MR- 3054	5	29	19	17	0.9	0.03	6
MR- 3061	127	5	43	58	1.8	0.05	29
MR- 3067	20	5	40	40	1.4	0.06	11
MR- 3071	95	5	5	12	1.6	0.05	9
MR- 3075	26	5	13	155	1.7	0.03	25
MR- 3078	60	5	43	220	6.8	0.03	6
MR- 3744	110	5	24000	1940	555.0	2.39	7
MR- 3745	15	5	311	112	3.8	0.08	6
MR- 3746	667	6	6830	27500	34.6	4.95	11
MR- 3747	941	10	2240	21600	21.6	3.06	7
MR- 3750	17	7	288	90	4.6	0.26	7
MR- 3767	32	5	134	508	2.4	0.12	6



USBORAX
EXPLORATION

MAY-RALPH
Plate I

(1)

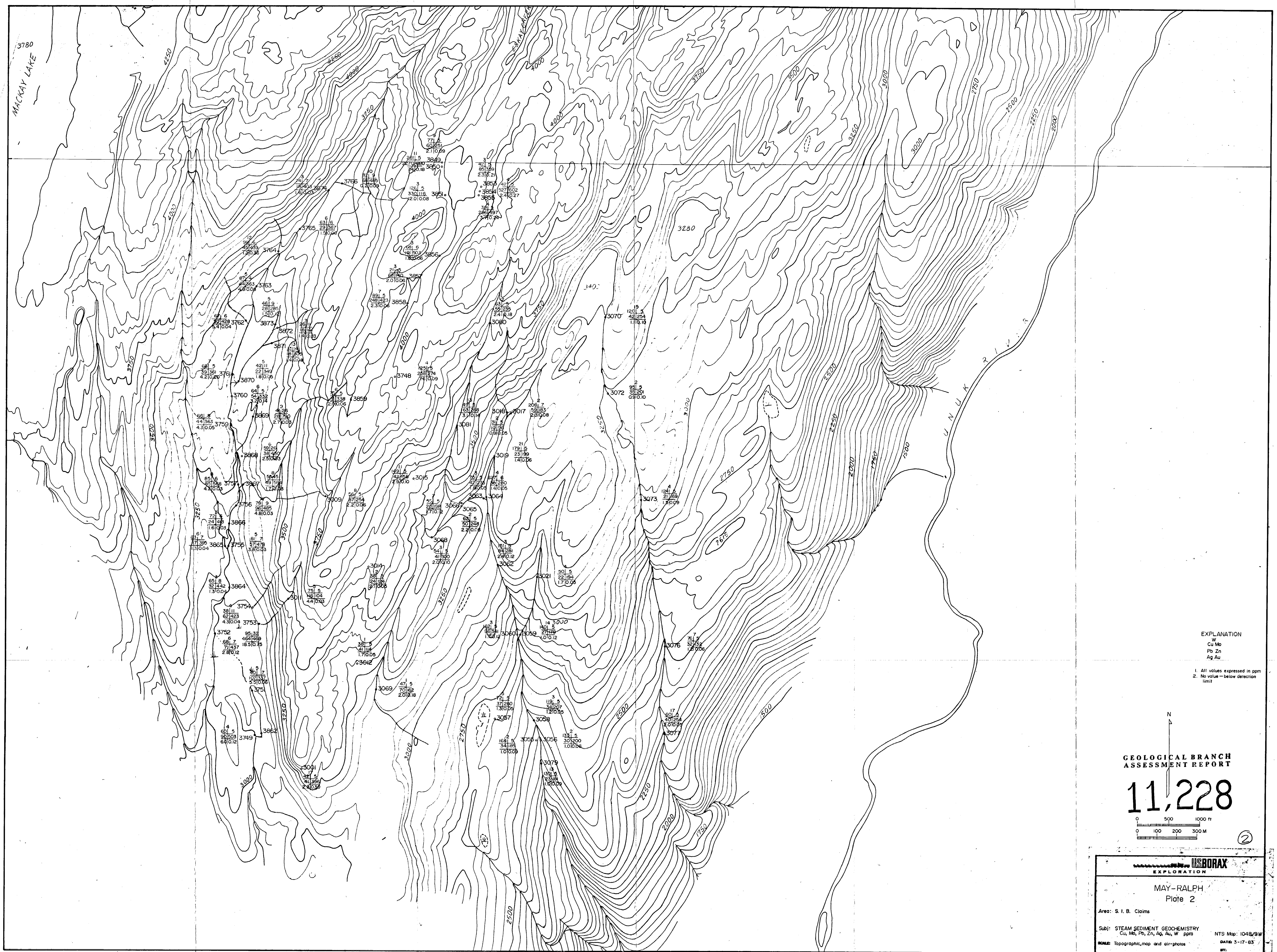
Area: S. I. B. Claims

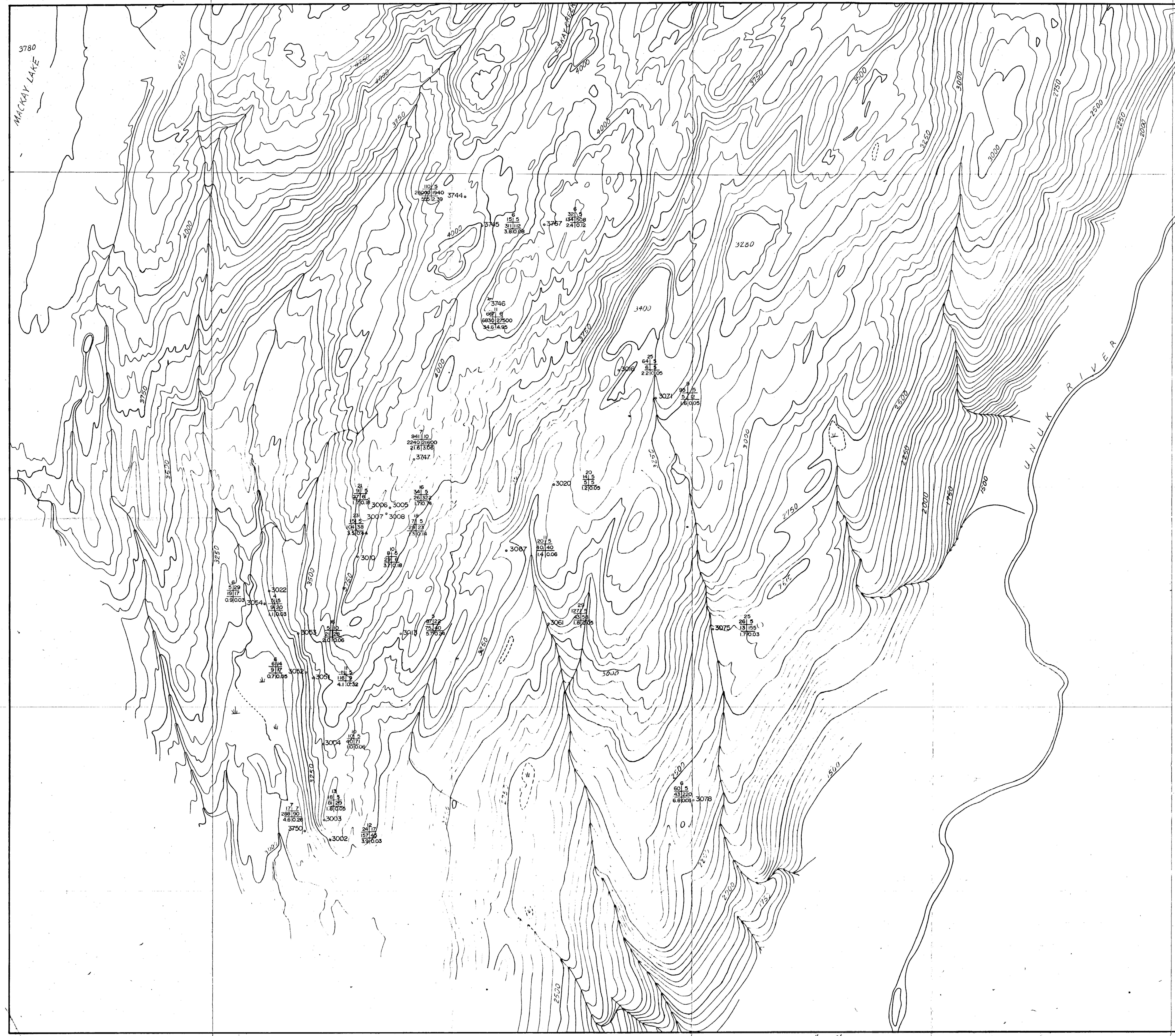
Subj: NTS Map: 104B/9W

SCALE: B.C. DMPR

DATE:

BY:


MACKAY LAKE
UNUK RIVER
EXPLANATION
W
Cu Mo
Pb Zn
Ag Au
1. All values expressed in ppm
2. No value — below detection limit
N
GEOLOGICAL BRANCH
ASSESSMENT REPORT
11,228
0 500 1000 ft
0 100 200 300 M
②
USBORAX
EXPLORATION
MAY-RALPH
Plate 2
Area: S. I. B. Claims
Subj: STEAM SEDIMENT GEOCHEMISTRY
Cu, Mo, Pb, Zn, Ag, Au, W ppm
NTS Map: 104B/9W
SCALE: Topographic map and air-photos
DATE: 3-17-83
BY:
SCALE 1" = 500'



SCALE 1"=500'

EXPLANATION
W
Cu Mo
Pb Zn
Ag Au

1. All values expressed in ppm
2. No value — below detection limit
3. Representative rock chip

N

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,228

0 500 1000 ft

0 100 200 300 M

3

US BORAX
EXPLORATION

MAY-RALPH
Plate 3

Area: S. I. B. Claims

Subj: ROCK GEOCHEMISTRY
Cu, Mo, Pb, Zn, Ag, Au, W ppm

NTS Map: 104B/9W

Topographic map, and air-photos

DATE: 3-23-83

BY: