MAP NO.: 5 B 7

ASSESSMENT REPORT X
PROSPECTUS
CONFIDENTIAL X
OPEN FILE

DOCUMENT NO: 092755
MINING DISTRICT: Watson Lake
TYPE OF WORK: Geological

REPORT FILED UNDER: West-Mar Resources Ltd.

DATE PERFORMED: July 21-26,1989

DATE FILED: Sept. 25/89

LOCATION: LAT.: 60o 22'N

AREA: Rancheria

LONG.: 30o 50'W

VALUE $: 5200.00

CLAIM NAME & NO.: RINGO 1-26 YA 55951-58; YA 69128-131
YA 70234-241;YA70279-281

WORK DONE BY: Jim Lehtinen (Equity Engineering Ltd.)

WORK DONE FOR: West-Mar Resources Ltd.

DATE TO GOOD STANDING:	

REMARKS: #19 AURORA Geological mapping (1:12,2000 scale was performed. Previously outlined geochemical anomalies are related to a north-trending fault. The claims straddle the contact between the Cassiar Batholith and Lower Cambrian calc-silicates and schists. Molybdenite (up to 2%) occurs in diopside-garnet skarn; and zinc-silver-lead bearing quartz veins in quartz monzonite contained up t 33.5% Zn, 19.1 oz/ton Ag and 0.62% Pb.

OFFICE OF THE REGIONAL MANAGER
MINERAL RIGHTS
SEP 29 1989
WHITEHORSE
YUKON TERRITORY

092755

GEOLOGICAL REPORT
ON THE
RINGO 1-26 CLAIMS

Located in the Rancheria Area
Watson Lake Mining Division
NTS 105B/7W
60° 22' North Latitude
130° 50' West Longitude

-prepared for-
WEST-MAR RESOURCES LTD.

-prepared by-
Jim Lehtinen, Geologist

September, 1989

RECEIVED
25 SEP 1989
MINING RECORDER
WATSON LAKE, Y.T.
LA. & N.D.

This report has been examined by the Geological Evaluation Unit under Section [illegible], Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 5200.00.

D D Emond

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

GEOLOGICAL REPORT ON THE RINGO 1-26 CLAIMS

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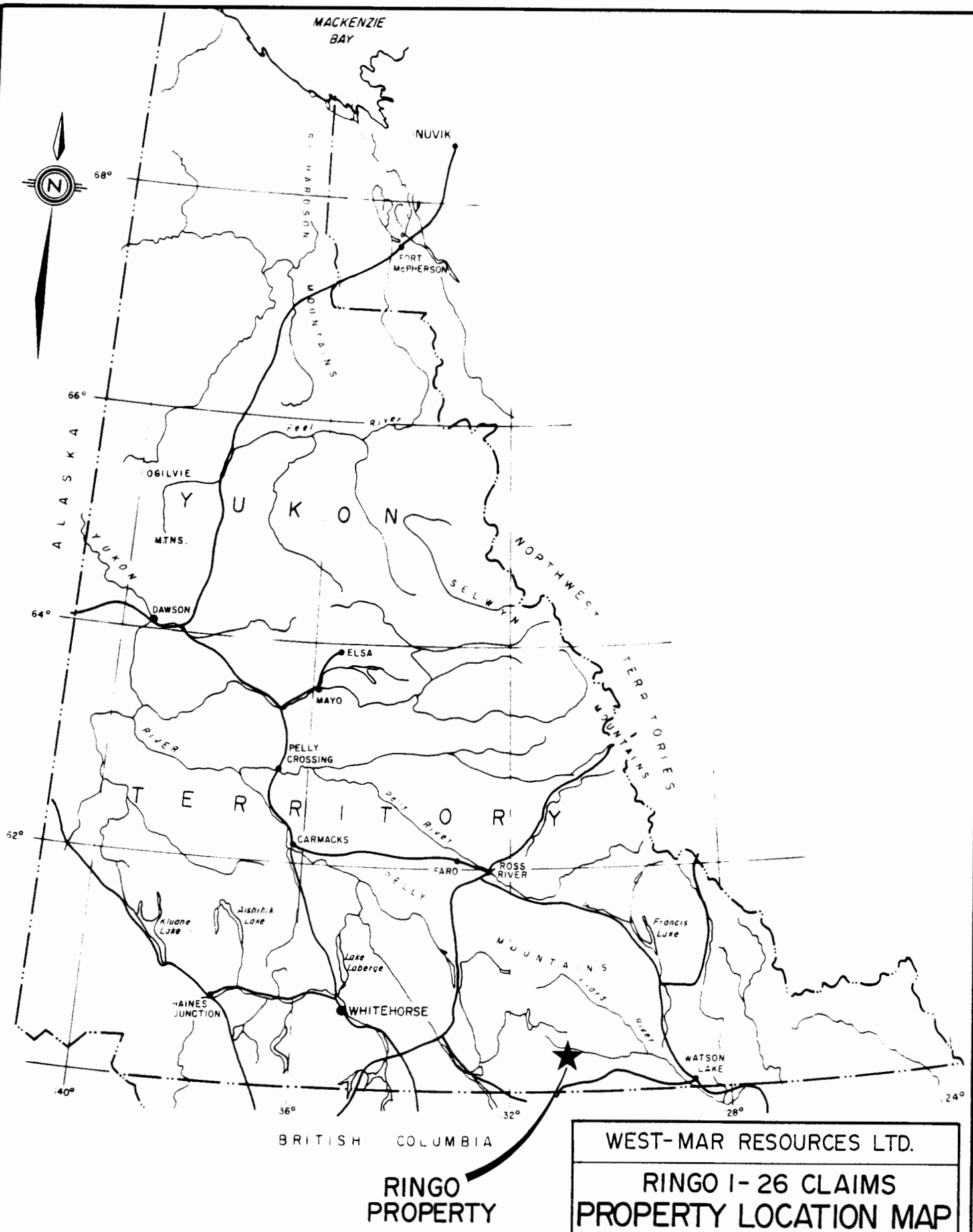
1.0 INTRODUCTION

The Ringo 1-26 claims cover several zinc-silver occurrences associated with strong soil geochemistry, located approximately 115 kilometers west-northwest of Watson Lake in the Watson Lake Mining Division of the southern Yukon Territory (Figure 1). The Ringo occurrences were discovered in the 1940's, but received little attention until the 1980's, when significant silver-lead-zinc deposits were discovered along the same lithostratigraphic belt at Midway, Hart Silver and Logan. The Hart Silver deposit, located five kilometers southeast of the Ringo property in a similar geological setting, has published reserves of 105,000 tonnes grading 1934 grams per tonne (56.4 oz/ton) silver.

A five day mapping and prospecting program was conducted on the Ringo 1 to 26 claims form July 21 to July 26, 1989. The claims were examined to determine priority areas to conduct a trenching program and to assess the results from the 1983 geochemical grid survey. The geology was mapped at a scale of 1:12,500 and results utilized to locate sites for future trenching.

2.0 LIST OF CLAIMS

Records of the Yukon Division of Indian and Northern Affairs Canada indicate that the following claims, comprising the Ringo property (Figure 2), are owned by B. A. Copper Mines Ltd. and B. A. Resources Ltd. B. A. Copper Mines Ltd. is the predecessor company to B. A. Resources Ltd. Separate documents indicate that the Ringo 1-26 claims are under option to West-Mar Resources Ltd.



WEST-MAR RESOURCES LTD.

RINGO 1-26 CLAIMS
PROPERTY LOCATION MAP

WATSON LAKE MINING DIVISION

YUKON TERRITORY

EQUITY ENGINEERING LTD.

Drawn	N.T.S.	Date.	FIGURE.
J.W.	105B/7W	MARCH, 1989	1.

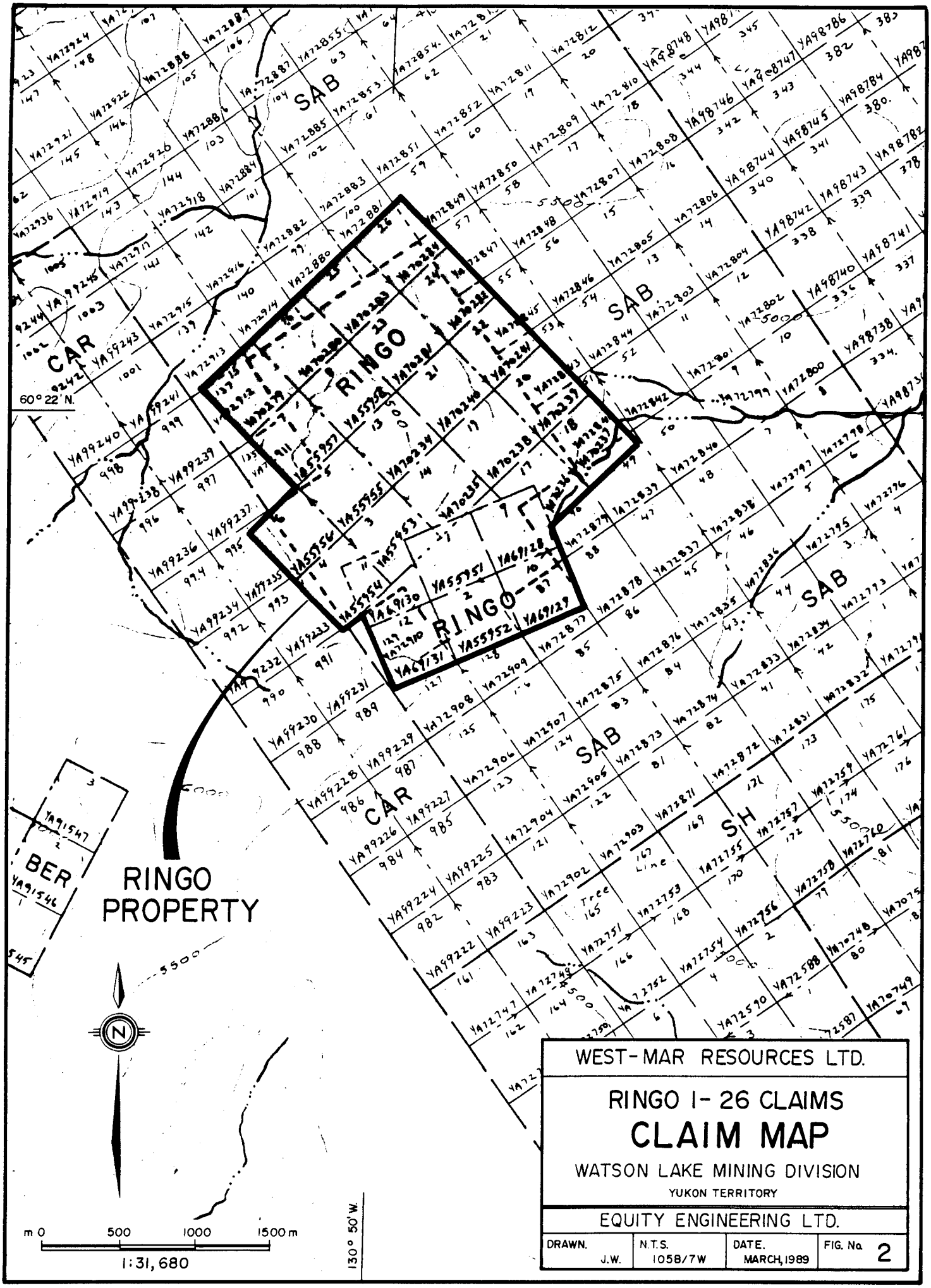
Claim Name	Record Number	Owner	Record Date	Expiry Date
Ringo 1	YA55951	B. A. Copper Mines	Aug. 8/80	Aug. 8/91
Ringo 2	YA55952	B. A. Copper Mines	Aug. 8/80	Aug. 8/91
Ringo 3	YA55953	B. A. Copper Mines	Aug. 8/80	Aug. 8/91
Ringo 4	YA55954	B. A. Copper Mines	Aug. 8/80	Aug. 8/91
Ringo 5	YA55955	B. A. Copper Mines	Aug. 8/80	Aug. 8/92
Ringo 6	YA55956	B. A. Copper Mines	Aug. 8/80	Aug. 8/92
Ringo 7	YA55957	B. A. Copper Mines	Aug. 8/80	Aug. 8/91
Ringo 8	YA55958	B. A. Copper Mines	Aug. 8/80	Aug. 8/91
Ringo 9	YA69128	B. A. Resources	Oct. 1/82	Oct. 1/91
Ringo 10	YA69129	B. A. Resources	Oct. 1/82	Oct. 1/91
Ringo 11	YA69130	B. A. Resources	Oct. 1/82	Oct. 1/91
Ringo 12	YA69131	B. A. Resources	Oct. 1/82	Oct. 1/91
Ringo 13	YA70234	B. A. Resources	July 25/83	July 25/91
Ringo 14	YA70235	B. A. Resources	July 25/83	July 25/91
Ringo 15	YA70279	B. A. Resources	Aug. 4/83	Aug. 4/91
Ringo 16	YA70280	B. A. Resources	Aug. 4/83	Aug. 4/91
Ringo 17	YA70236	B. A. Resources	July 25/83	July 25/91
Ringo 18	YA70237	B. A. Resources	July 25/83	July 25/91
Ringo 19	YA70238	B. A. Resources	July 25/83	July 25/91
Ringo 20	YA70239	B. A. Resources	July 25/83	July 25/91
Ringo 21	YA70240	B. A. Resources	July 25/83	July 25/91
Ringo 22	YA70241	B. A. Resources	July 25/83	July 25/91
Ringo 23	YA70281	B. A. Resources	Aug. 4/83	Aug. 4/91
Ringo 24	YA70282	B. A. Resources	Aug. 4/83	Aug. 4/91
Ringo 25	YA70283	B. A. Resources	Aug. 4/83	Aug. 4/91
Ringo 26	YA70284	B. A. Resources	Aug. 4/83	Aug. 4/91

The locations of the claim posts for the Ringo 1-26 claims have not been verified by the author.

3.0 LOCATION, ACCESS AND GEOGRAPHY

The Ringo 1-26 claims are located on the northeastern flank of the Cassiar Mountains approximately 35 kilometers north of Rancheria and 115 kilometers west-northwest of Watson Lake in the southern part of the Yukon Territory (Figure 1). They lie within the Watson Lake Mining Division, centered at 60° 22' north latitude and 130° 50' west longitude.

Until 1985, access to the Ringo property was provided by



WEST-MAR RESOURCES LTD.

RINGO 1-26 CLAIMS
CLAIM MAP

WATSON LAKE MINING DIVISION

YUKON TERRITORY

EQUITY ENGINEERING LTD.

DRAWN.	N.T.S.	DATE.	FIG. No.
J.W.	1058/7W	MARCH, 1989	2

helicopter from the Pine Lake air strip, located approximately thirty kilometers south on the Alaska Highway, or from Caribou Lake, approximately six kilometers east of the property, which is accessible to float planes. In 1985, Silver Hart Mines Ltd. constructed a 35 kilometer road up the Swift River from the Alaska Highway to their Hart Silver deposit and exploration camp, located approximately five kilometers southeast of the Ringo claim group. This road greatly shortens the distance for helicopter access and would allow the construction of a road extension to the property in the future. Heavy equipment could now be walked in to the Ringo property from the Hart Silver camp with a minimum of difficulty, reducing mobilization and moving costs for diamond drilling and backhoe trenching.

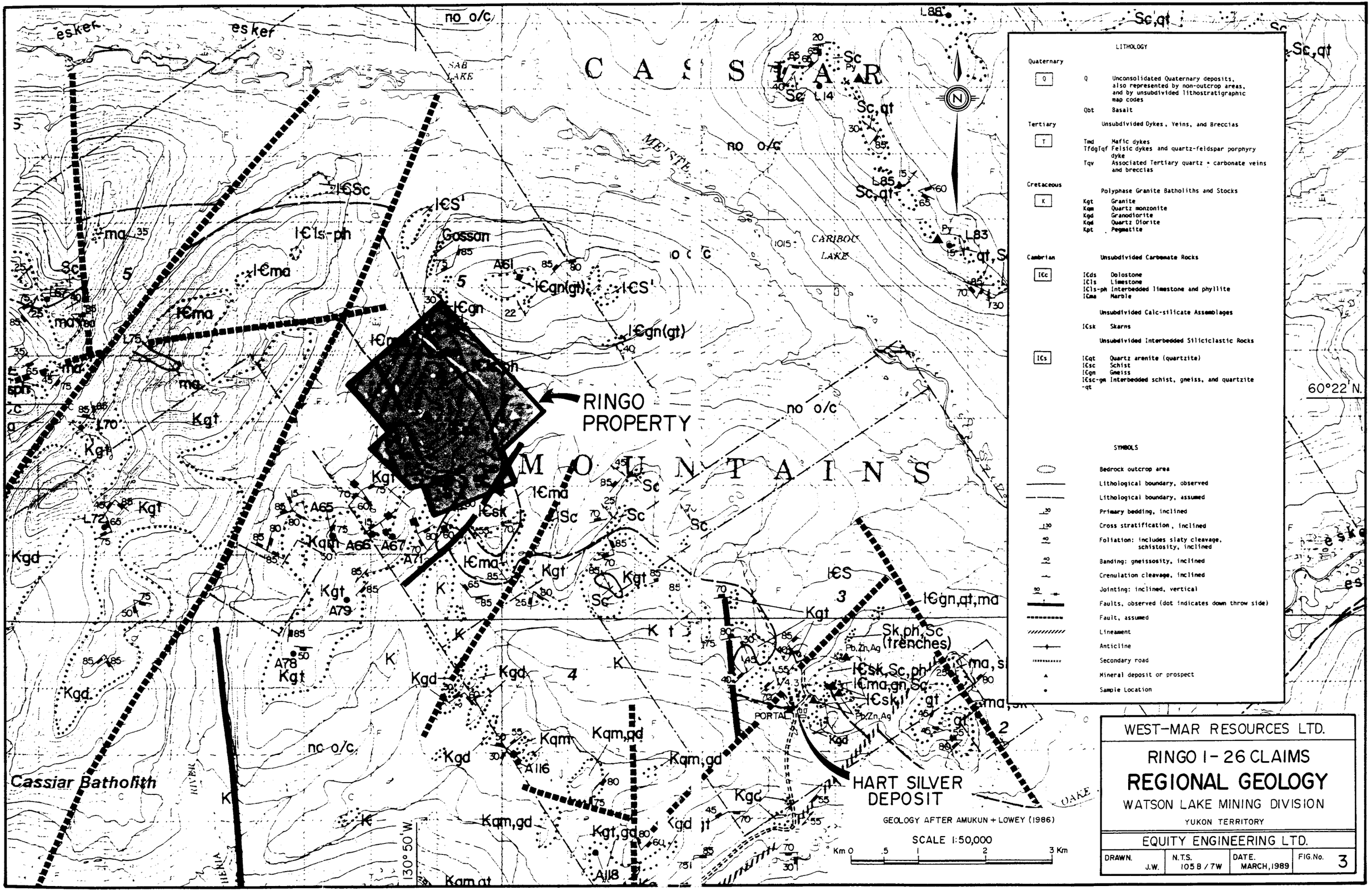
The Ringo 1-26 claims cover a rounded mountain, all of whose drainages flow northerly into the broad valley of the Meister River, four kilometers to the north. Topography is moderate, with elevations ranging from 1200 meters on the Ringo 15 claim to over 1700 meters on the unnamed peak near the center of the property (Figure 4).

Lower slopes are covered by a dense growth of alpine fir and balsam. Above treeline, which occurs at approximately 1400 meters, more open alpine vegetation occurs.

4.0 PROPERTY MINING HISTORY

4.1 Previous Work

The area currently covered by the Ringo 1-26 claims (Figure 3) was originally staked as the Aurora prospect in 1948 by Great Northern Exploration Co. Ltd. over two tungsten-molybdenum skarn showings and a silver-lead vein (Amukun and Lowey, 1986). Trenches



LITHOLOGY

Quaternary

Q — Unconsolidated Quaternary deposits, also represented by non-outcrop areas, and by unsubdivided lithostratigraphic map codes

Qbt — Basalt

Tertiary

Unsubdivided Dykes, Veins, and Breccias

Tmd — Mafic dykes
TfdgTqf — Felsic dykes and quartz-feldspar porphyry dyke
Tqv — Associated Tertiary quartz ± carbonate veins and breccias

Cretaceous

Polyphase Granite Batholiths and Stocks

Kgt — Granite
Kqm — Quartz monzonite
Kgd — Granodiorite
Kqd — Quartz Diorite
Kpt — Pegmatite

Cambrian

Unsubdivided Carbonate Rocks

ICds — Dolostone
ICls — Limestone
ICls-ph — Interbedded limestone and phyllite
ICma — Marble

Unsubdivided Calc-silicate Assemblages

ICsk — Skarns

Unsubdivided Interbedded Siliciclastic Rocks

ICqt — Quartz arenite (quartzite)
ICsc — Schist
ICgn — Gneiss
ICsc-gn — Interbedded schist, gneiss, and quartzite -qt

SYMBOLS

- Bedrock outcrop area
- Lithological boundary, observed
- Lithological boundary, assumed
- Primary bedding, inclined
- Cross stratification, inclined
- Foliation: includes slaty cleavage, schistosity, inclined
- Banding: gneissosity, inclined
- Crenulation cleavage, inclined
- Jointing: inclined, vertical
- Faults, observed (dot indicates down throw side)
- Fault, assumed
- Lineament
- Anticline
- Secondary road
- Mineral deposit or prospect
- Sample Location

GEOLOGY AFTER AMUKUN + LOWEY (1986)

SCALE 1:50,000

Km 0 .5 1 2 3 Km

WEST-MAR RESOURCES LTD.

RINGO 1-26 CLAIMS
REGIONAL GEOLOGY

WATSON LAKE MINING DIVISION

YUKON TERRITORY

EQUITY ENGINEERING LTD.

DRAWN.	N.T.S.	DATE.	FIG.No.
J.W.	105 B / 7W	MARCH, 1989	3

were blasted in several mineral occurrences at this time, with manganiferous oxide material reportedly assaying in excess of 34 grams per tonne silver (Ostler, 1981).

In 1980, the Ringo 1-8 claims were staked over the Aurora silver-bearing occurrences. Further staking in 1982 and 1983 enlarged the property to 26 claims. Ostler (1981) conducted several days of geological mapping over the Ringo claims, and re-sampled all old trenches. In 1983, further geological mapping, sampling of trenches, and reconnaissance magnetometer and soil geochemical surveys were conducted over an area of 1500 meters by 1200 meters. Detailed soil geochemistry was subsequently carried out over the principal showings, an area of 650 meters by 300 meters, in order to define geochemical anomalies returned from the reconnaissance survey (Adamson, 1983). Orientation VLF-EM and self-potential surveys were carried out on the property in 1984 (DIAND, 1985b, p. 56), but results are unavailable.

The Hart Silver property, which surrounds the Ringo claims, has been explored, mainly for its tungsten skarn occurrences, since 1947. Discovery of the Midway and Logan silver-zinc-lead deposits elsewhere in the Rancheria district in the late 1970's and discovery of the FM silver/lead/zinc occurrence on the Hart Silver property in 1983 led to a shift in exploration emphasis towards the property's high-grade silver potential (Bolin et al, 1987). In 1986, Silver Hart Mines Ltd. conducted underground exploration on the No. 1 Vein Zone, which includes the FM and several other orebodies, announcing underground and open pit reserves of 105,000 tonnes grading 1934 grams per tonne silver. Further development and production await project financing (Silver Hart, 1987).

4.2 1989 Exploration Program

Five days of geological mapping and prospecting were conducted over the Ringo 1-26 claims from July 21 to July 26, 1989. Mapping was carried out at a scale of 1:12,500, using an enlargement of the 1:50,000 topographic map as a base. Eighteen rock samples were taken from zones of mineralization and alteration. Rock sample descriptions and certificates of analysis are attached in Appendix C and D, respectively.

The baseline from the 1983 geochemical grid was re-established. Six proposed trench sites were picketed and flagged for future excavation.

5.0 REGIONAL GEOLOGY

The Rancheria area lies within the Cassiar Platform on the northeastern margin of the Cassiar Batholith (Figure 3). A sequence of folded, Lower Cambrian miogeoclinal carbonate and clastic rocks and their metamorphic equivalents have been intruded by granitic Cretaceous stocks and batholiths (Amukun and Lowey, 1986).

The Lower Cambrian carbonate rocks (Unit lCc) have been subdivided into limestone (Unit lCls), marble (Unit lCma) and interbedded limestone and phyllite (Unit lCls-ph). Garnet-pyroxene skarns (Unit lCsk) have locally formed in carbonate rocks near their contact with steeply-dipping Cretaceous intrusives. The Lower Cambrian clastic sediments (Unit lCs) consist of interbedded wackes and arenites, subdivided on Figure 3 by their metamorphic equivalents: quartzite (Unit lCqt), schist (Unit lCsc); gneiss (Unit lCgn), and; interbedded schist, gneiss and quartzite (Unit lCsc-gn-qt).

Polyphase Cretaceous batholiths and stocks such as the Cassiar and Marker Lake Batholiths intrude the Lower Cambrian sedimentary rocks. The Cassiar Batholith, which forms the western boundary of the Ringo claims, is approximately 200 kilometers long by 25 kilometers wide and elongated northwest-southeast. Granitic phases (Unit Kgt) are most common, but compositions range through quartz monzonite (Unit Kqm) and granodiorite (Unit Kgd) to quartz diorite (Unit Kqd). Akumun and Lowey (1986) also recognized simple pegmatites (Unit Kpt), veins and dikes associated with the Cretaceous intrusives.

The Cassiar Batholith occupies a major northwest-trending anticline, with a parallel syncline to the east. These folds plunge 0-15° to the south, with near vertical axial planes (Poole, 1960). The Tintina Fault, a major dextral transcurrent fault, parallels the folding approximately fifty kilometers northeast of the Ringo property.

Several significant silver-lead-zinc vein, manto and replacement deposits are located along the eastern margin of the Cassiar Batholith in the Rancheria district of northern British Columbia and southern Yukon (Abbott, 1985). The Midway manto deposit, located 55 kilometers southeast of the Ringo claims, contains reserves of 1,185,000 tonnes grading 410 grams silver per tonne, 9.6% zinc and 7.0% lead. It consists of irregular massive sulphide and breccia bodies hosted by mid-Devonian carbonates beneath a major unconformity, possibly associated with a hidden intrusive (Bradford and Godwin, 1988).

The Logan deposit, located approximately 26 kilometers northeast of the Ringo property, consists of sulphide-bearing quartz stockworks, veins, breccia bodies and silicified zones within intensely sericitized Cretaceous granite. The intense alteration and mineralization is sandwiched between parallel

footwall and hangingwall faults of a major 8,000 meter northeasterly trending fault system. Current geological reserves in the Main Zone are 7.3 million tonnes grading 8.03% Zn and 31.5 grams silver per tonne (Stammers, 1989).

The Hart Silver No. 1 Vein Zone, which contains 105,000 tonnes grading 1934 grams silver per tonne along with significant lead and zinc values (Silver Hart, 1987), is located approximately five kilometers southeast of the Ringo property. The No. 1 Vein Zone consists of sulphide-bearing quartz-carbonate veins occurring along 1200 meters of a major northeasterly-trending fault system and its more easterly trending fault splays. The ore bodies occur within both Cretaceous granodiorite and Lower Cambrian schists, marbles and skarns, near the intrusive contact (Silver Hart, 1986). On surface, the weathered vein material appears as

> "patches of vuggy, fine grained, black manganiferous material up to 10 m wide [which] can be traced for about 200 m along the fault. Similar material also forms conformable lenses within two limestone beds that intersect the fault" (DIAND, 1985a, p. 144).

6.0 PROPERTY GEOLOGY

The geology of the Ringo claims was mapped at a scale of 1:12,500 in July 1989 (Figure 4). The claims cover three basic rock subdivisions as previously described by Amukun and Lowey (1986), Adamson (1983) and Ostler (1981).

A large proportion of the property is comprised of a Cambrian unit of interbedded siliciclastic rocks (Unit lCs) which have been metamorphosed to biotite schist, quartz-biotite schist, garnet-biotite schist, quartzite and recrystallized limestone. The recrystallized limestone occurs near the base of the schist unit. The siliciclastic rocks all have a moderate to well developed foliation which appears to parallel the original bedding of the

Ringo Property

Quartz float
310/40
330/85
320/44
320/35
Csc
Csk
Mn float
Cqt
320/40
010/67
326/52
329/55
mf
008/50
Cls
125/48
360/36
326/38
T2
Mn in float
315/42
Cqt Cls "marker bed"
342/32
330/35
344/90
345/48
T4
T1
T3
317/47
Csc + Cqt
Csk, Kgd
055/90
044/26
105/48
wf
Kqd
T5
T6
024/68
T8
092/65
100/20
QV hosted in fault
324/43
050/60
Apparent strike= 040°
Psilomelane
mf
084/90
Stump structure

I€s
I€k, I€sk
I€sk
Kqm, Kgd
Kqm
Kgt ?
Kgt

F

LEGEND

CRETACEOUS

K
- Kqm — Quartz monzonite
- Kgt — Granite
- Kgd — Granodiorite
- Kqd — Quartz diorite

CAMBRIAN

I€
- I€c — Unsubdivided Carbonate rocks
  - I€ls – limestone
  - I€sk – skarns
- I€s
  - I€qt – Quartzite
  - I€sc – Schist
  - I€gn – Gneiss

Bedding

Foliation

Vein

020/45 Fault plane orientation and lineation (slickensides)

Faults: observed, assumed
wf = weak fault mf = moderate fault
MF = major fault

Trench location

Outcrop exposure

x Float

SCALE 1:12,500

m 0 250 500 750 m

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RINGO 1-26 CLAIMS
GEOLOGY

WATSON LAKE MINING DIVISION

EQUITY ENGINEERING LTD.

Drawn	N.T.S.	Date	FIG. No.
J.W.	105 B/7W	Sept. 1989	4

units, striking north-northwest and dipping 30° to 50° to the northeast.

The clastic succession comformably overlies a carbonate unit (Unit lCc). The limestones of the carbonate unit have been altered in part to marble and skarn by the thermal effects of the Cassiar Batholith intrusive rocks. Generally, the carbonate rocks appear as light, rubbly weathering, moderately resistant zones which have been skarnified to pyroxene-garnet skarn. The skarn calc-silicate rock is composed of aggregates and bands of pale, flesh orange to cinnamon coloured massive garnet in a varying amount of calcite. Diopside occurs in varying proportions and imparts a dark, dirty green colour to the skarn. In isolated locations, the limestone has been altered to an epidote marble in which epidote makes up 25% of the rock volume. In all locations, the skarn and limestone can be distinguished easily by their lighter colour and recessive weathering pattern relative to some of the schistose units and the intrusive. Local foliation has been observed in the limestone where a platy weathering or fissility has been developed. Field observation of the calc-silicate unit showed the original strata to be skarnified selectively. Discrete beds of skarn lie parallel to recrystallized limestone, or even sandwiched between recrystallized limestone layers. This preferential skarning may be the result of bedding porosity/permeability or original chemical composition.

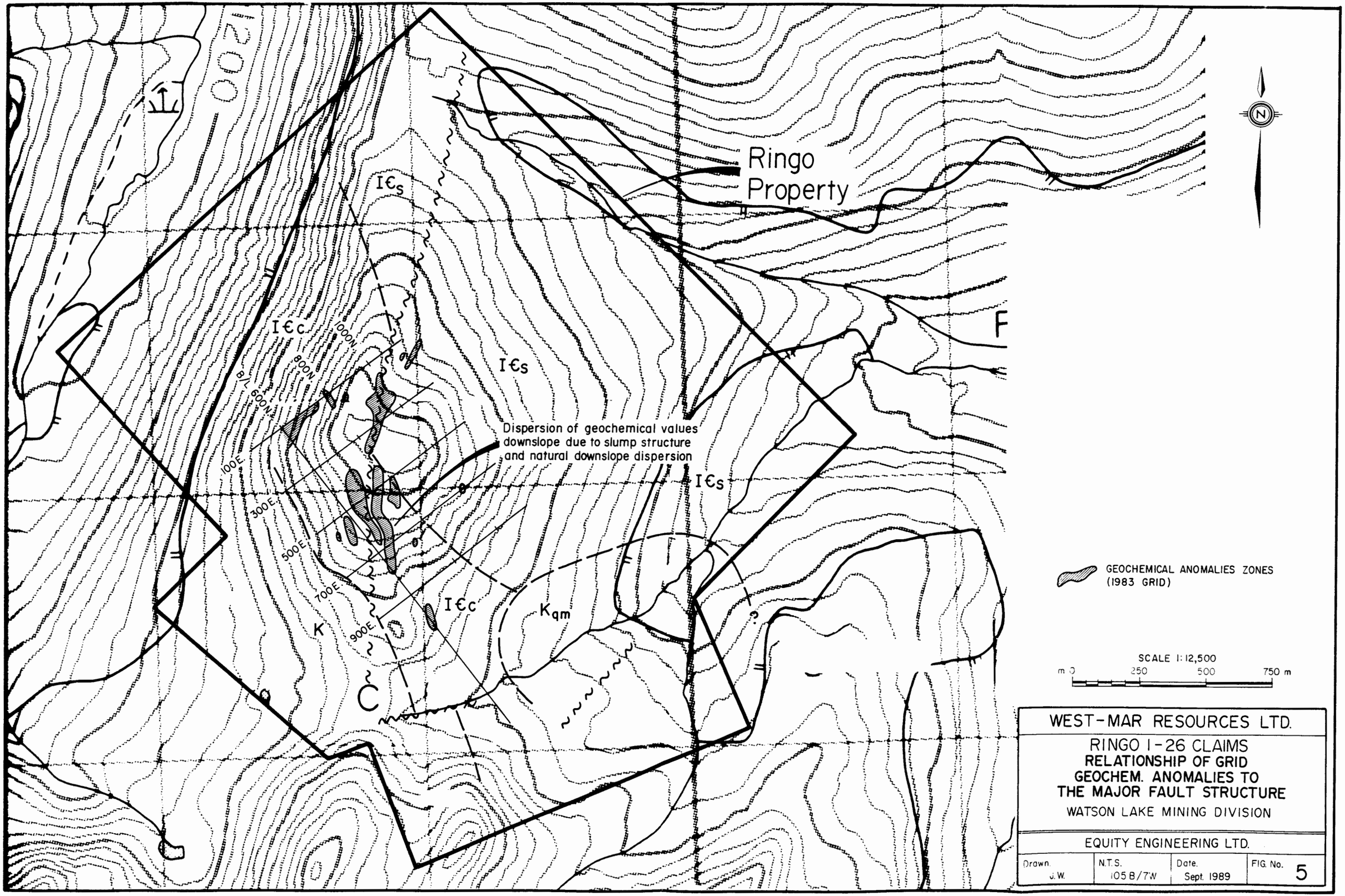
Cretaceous intrusive rocks of the Cassiar Batholith underlie the western side of the Ringo claims. Compositionally, the observed intrusive phases are quartz monzonite (Unit Kqm), granodiorite (Unit Kgd), granite (Unit Kgt) and quartz diorite (Unit Kqm) in order of decreasing abundance.

Quartz monzonite (Unit Kqm) occurs on the southernmost Ringo claims and is likely a small satellite intrusive or embayment of

the Cassiar Batholith. The quartz monzonite is locally porphyritic with large orthoclase phenocrysts up to one centimeter and is darker in colour than the other intrusive phases due to a higher percentage of mafic minerals. The main body of the Cassiar Batholith, composed primarily of white and pink granite (Unit Kgt), was observed on the southwest side of the claim group. Small intrusives within the calc-silicate rocks or the siliciclastic rocks are granodioritic and quartz dioritic in composition.

Structurally, all bedding and foliation strikes north-northwest (340°) and dips moderately (30°-50°) east-northeast. Relict bedding in the calc-silicates is conformable with the overlying siliciclastic rocks. Faulting was observed in two major directions, north to northwest and east to northeast.

A major north to north-northeast fault appears to be the dominant structural feature of the property. The trace of the fault cuts through the west-central portion of the property and dips 50° to the east. Slickensides on the fault plane indicate primarily dip slip motion, while outcrop exposure indicates normal movement on the fault. A second fault direction, and a zone which appears to be a system of faults was observed sub-parallel to the major creek in the southern part of the claims. The fault strikes 084° with a vertical dip and is marked by strike-slip slickensides. The motion on the fault appears to be strike-slip and sinistral. The contact between the calc-silicate and the intrusive may have been shifted by this fault as indicated by the outcrop pattern of the creek headwaters. Numerous lesser magnitude related faults were observed to the east.



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RINGO 1-26 CLAIMS
RELATIONSHIP OF GRID GEOCHEM. ANOMALIES TO THE MAJOR FAULT STRUCTURE
WATSON LAKE MINING DIVISION

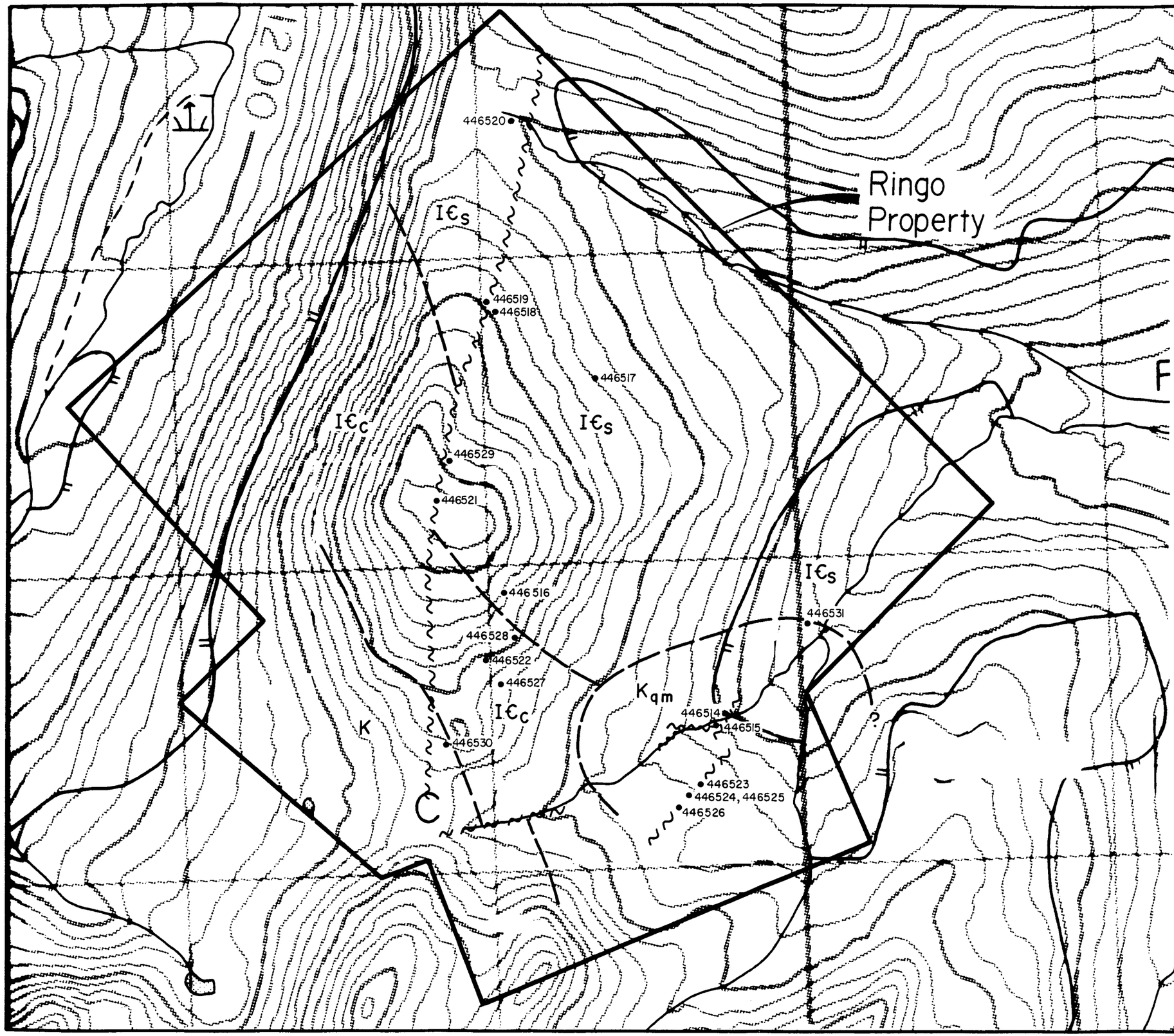
EQUITY ENGINEERING LTD.

Drawn.	N.T.S.	Date.	FIG. No.
J.W.	105 B/7W	Sept. 1989	5

7.0 MINERALIZATION

To date, mineralization on the property has been identified in skarn and in structurally controlled occurrences. Prior to the current program, it was not clear whether the large manganese gossans which were initially tested by hand trenching and soil geochemistry were overlying structurally or stratigraphically controlled mineralization. From the recent mapping, it appears that the mineral occurrences on the Ringo claims are structurally controlled. After plotting the major north - south fault and the geochemically anomalous zones on the grid, it became apparent that the majority of the anomalous areas are either coincident with the fault or were dispersed downslope by either large scale slump structures or normal gravitational dispersion (Figure 5). Few geochemical anomalies are outside of this area. It is suggested that the major fault is the mineralizing conduit and deposition has occurred within the fault or within chemically and/or physically favourable host rocks in the calc-silicate unit. The manganiferous gossans and local manganese staining have been observed in both intrusive and calc-silicate rock outcrops associated with faulting. Intensity of manganiferous stain along the fault surface trace is apparently in direct relation to fault size and possibly to mineralization.

Several showings are documented in a previous summary reports by Awmack (1989), Adamson (1983) and Ostler (1980). In addition, a hand trench which was previously unrecorded was located at sample location 446519 (Figure 6). This trench is located in diopside-garnet skarn containing less than 0.5% molybdenite overall with local concentrations up to 2% molybdenite. From the sample location map, it can be seen that this mineral occurrence is proximal to the major north-south fault.



ROCK GEOCHEMICAL RESULTS

Sample	Mo(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)	Ag(ppm)
446514	11	4	8	180	0.6
446515	9	2	41	164	0.1
446516	1	24	8	36	0.1
446517	3	2	2	1	0.1
446518	2	110	12	86	0.2
446519	1115	191	3	172	1.4
446520	11	12	6	79	0.1
446521	11	4	11	79	0.1
446522	6	6	12	11	0.3
446523	2	908	233	99999	315.8
446524	1	1840	1637	99999	310.2
446525	3	94	76	28211	25.0
446526	2	239	5367	45970	54.0
446527	4	3	16	168	0.7
446528	62	33	147	7552	8.4
446529	4	19	40	78	1.6
446530	3	473	258	13978	11.5
446531	3	20	25	157	1.4

ASSAY RESULTS

Sample	Mo(%)	Pb(%)	Zn(%)	Ag(oz/t)
446519	.125	-	-	-
446523	-	.02	13.12	10.35
446524	-	.17	33.47	19.12
446525	-	.01	2.93	.78
446526	-	.62	6.15	1.78

● ROCK SAMPLE LOCATION

SCALE 1:12,500

m 0 250 500 750 m

WEST-MAR RESOURCES LTD.

RINGO 1-26 CLAIMS
SAMPLE LOCATION MAP

WATSON LAKE MINING DIVISION

EQUITY ENGINEERING LTD.

Drawn	N.T.S.	Date.	FIG. No.
J.W.	105 B/7W	Sept. 1988	6

A second mineral occurrence, which may be the Trench 7 referred to by Ostler (1980), was located and sampled (446523 to 446526). The samples returned values up to 33.5% zinc, 19.1 oz/ton silver and 0.62% lead. This zone was previously trenched along strike with small shallow pits exposing a quartz vein hosted in a fault zone within quartz monzonite. Three of the four samples were taken in massive sphalerite with minor galena, chalcopyrite and pyrite. Grab samples were taken across widths of less than one meter, as exposure from previous hand trenching limited true width determination. Grab samples ranged up to 80% sphalerite with 5% combined pyrite, galena and chalcopyrite and 15% quartz. The zone can be followed by tracing manganese stained float and outcrop along strike toward the showings in Trenches 6 and 8 and it has characteristics similar to both of these showings. A maximum potential strike length, extending from a small pond on the southwest to Trench 6, is 350 metres. The strike appears to be 040° and the dip is vertical. A further extension to this system may be related to the vein quartz-pyrite float which was sampled at location 446531. This location is an abandoned creek channel which has incised deep into the hillside and hosts numerous rusty quartz boulders. The strike of the creek may reflect this fault zone.

Quartz veins sampled on the property which were not hosted in faults have erratic orientation and short strike length. They appear to parallel the bedding/foliation, commonly within quartz biotite schist, and are single stage white quartz veins with only occasional pyrite mineralization. All assays from these quartz veins returned low values for most elements and do not appear to be of economic interest.

8.0 DISCUSSION

From the mapping and assessment of the Ringo claims, particularly in the area of the geochemical anomalies, an explanation for the anomaly shape and location is suggested. The geochemical anomalies are directly related to a major north-south normal fault which cuts through the center of the property. The "boomerang" shape of the anomalies is a direct result of combined topographic effects, fault attitude, bedding attitude and the dispersion of the anomaly downslope by mass movement of colluvial material and natural downslope dispersion of the anomalous elements. The manganese stain occurs almost exclusively in areas where there is a known or suspected fault. Knowing the attitude of the major fault and projecting it north and south, there is a clear correlation between the anomalies, manganese stain and the fault trace (Figure 5). This correlation may be the result of mineralizing fluids migrating along the fault and ultimately depositing the base metal sulphides and silver in the calc-silicate unit. The faulting in the area post-dates emplacement of the Cassiar Batholith and therefore the mineralizing events would likely be unrelated to the skarn event which has previously been suggested as the source of the mineralization. The majority of the mineralization found to date is hosted by veins associated with faulting, reducing the probability of a stratigraphically controlled deposit on the Ringo property.

The Ringo 1-26 claims share several similarities with other, more fully-explored silver-zinc-lead deposits of the eastern flank of the Cassiar Batholith, including the Midway and Logan deposits, and in particular, the Hart Silver deposit which lies five kilometers to the southeast. Both the Ringo claims and the Hart Silver deposit straddle the intrusive contact between the Cassiar Batholith and Lower Cambrian calc-silicates and schists. Both contain zinc-silver-lead occurrences marked on surface by highly

oxidised manganiferous gossans and associated with major northerly-trending faults. Exploration on the Ringo claims has been limited to date, but extensive surface and underground exploration on the Hart Silver deposit has indicated a potentially economic silver deposit. Further exploration of the Ringo claims is necessary to test its potential for silver-zinc-lead mineralization.

9.0 RECOMMENDATIONS

An exploration program involving backhoe trenching, geophysics, geochemistry, prospecting and geological mapping is recommended for the Ringo 1-26 claims. This program would serve to define trench and drill targets for the future.

Seven trenches have been selected, six of which have been marked out in the field. The first six proposed trenches test the trace of the major north-south fault and the 1983 soil geochemical anomalies. The seventh proposed trench, which has not been marked out, will investigate the significance of the zinc-silver vein hosted within the northeasterly trending fault on the southern part of the property. A small, unitized, helicopter transportable backhoe should be sufficient to excavate the proposed trenches as glacial debris appears to be relatively shallow. The trench locations, using the grid coordinates from the 1983 geochemical survey, are as follows:

1. Line 4+50E 6+35N - 7+00N
2. Line 5+00E 7+35N - 7+60N
3. Line 6+00E 6+65N - 7+15N
4. Line 6+50E 6+20N - 6+50N
5. Line 7+50E 7+15N - 7+40N
6. Line 3+00E 8+45N, trending 126° towards the exposed outcrop (Picket line placed).
7. Unmarked. The area between sample locations 446523 and 446526 should be excavated to expose the fault-hosted vein.

The 1983 geochemical grid should be re-established, in part, and surveyed with VLF-EM equipment. A previous reconnaissance survey was reported to have been useful in detecting conductors. The EM survey results could then be utilized for locating prospective trenching and drilling areas.

A grid should be established over the zone which returned high silver and zinc values in samples 446523 to 446526. The grid should be designed to explore the known vein as well as parallel systems, extending them along strike to the northeast and southwest. The grid should be soil sampled and geophysically surveyed with magnetometer and VLF-EM.

Where heavy manganese stain masks structure and mineralogy in the backhoe trenches, a program to blast fresh exposures should be incorporated. These trenches should then be mapped and systematically sampled. Future prospecting and mapping should concentrate on the areas underlain by the intrusive and carbonate units, as no significant mineralization has been discovered in the siliciclastic rocks to date and they must be regarded as a low priority exploration area. Mapping and prospecting should be carried out on the west side of the claims. Here the rocks are well exposed on a steep face which has received little exploration work to date.

Respectfully submitted,
EQUITY ENGINEERING LTD.

per Jim Lehtinen, Geologist

Vancouver, British Columbia
September 1989

APPENDIX A

BIBLIOGRAPHY

BIBLIOGRAPHY

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APPENDIX B

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

PROFESSIONAL FEES AND WAGES:		
Jim Lehtinen, Project Geologist		
11.0 days @ $350/day	$ 3,850.00	
Clerical		
2 hours @ $20/hour	40.00	
		$ 3,890.00
EQUIPMENT RENTALS:		
4WD Truck		
5.0 days @ $60/day	$ 300.00	
4WD Truck (Standby)		
8.0 days @ $10/day	80.00	
Fly Camp		
5 mandays @ $20/manday	100.00	
		480.00
EXPENSES:		
Materials and Supplies	$ 34.51	
Chemical Analysis	311.50	
Printing and Reproductions	14.79	
Camp Supplies	7.82	
Camp Food	69.92	
Meals	52.30	
Accomodation	130.00	
Automotive Fuel	68.17	
Helicopter	1,899.33	
Expediting	15.00	
Telephone Distance Charges	119.26	
		2,722.60
REPORT PREPARATION (estimated)		1,500.00
MANAGEMENT FEE:		
15% on expenses		115.79
		$ 8,708.39

APPENDIX C

ROCK SAMPLE DESCRIPTIONS

EQUITY ENGINEERING LTD.

Geochemical Data Sheet - ROCK SAMPLING

NTS 105 B/7 W

Sampler J. Lehtinen

Date July 21 - 26 / 1989

Project West-Mar Resources

Property Ringo WMX-89-01

Location Ref

Air Photo No

SAMPLE NO.	~~LOCATION~~ ELEVATION	SAMPLE TYPE	Sample Width / True Width	DESCRIPTION: Rock Type	DESCRIPTION: Alteration	DESCRIPTION: Mineralization	ADDITIONAL OBSERVATIONS	ASSAYS ppm: Cu	Pb	Zn	Ag	Mo	ASSAYS oz/T: Ag
446514	1415	Grab	.50 cm	Quartz Vein		Py	Fault Hosted	4	8	180	.6	11	
446515	1415	Grab	20 cm	Quartz Vein		Py	Fault Hosted	2	41	164	.1	9	
516	1645	Grab		Quartz Calc-Silicate		Py	Calc-silicate float 5-7% Py	24	8	36	.1	1	
517	1540	Grab	1.5m / 1.5m	Quartz Vein		—	No visible sulphides	2	2	1	.1	3	
518	1585	Grab		Quartzite		Pyrrhotite	- Minor skarn	110	12	86	.2	2	
519	1585	Grab		Skarn		Pyrrhotite Mt		191	3	172	1.4	.125%	
520	1505	Grab	35cm	Quartz Vein		-	Quartz vein 1 5cm Hangingwall 5cm Footwall	12	6	79	.1	11	
521	1730	Grab		Quartz Breccia		—	Fault hosted quartz breccia	4	11	79	.1	11	
522		Grab		Quartz stockwork		Py	Hosted in quartzite	6	12	11	.3	6	
523	1455	Grab		Quartz Vein Breccia		Sphalerite Galena Pyrite	Float or outcrop? Likely O/C	908	.02%	13.12%	315.8	2	10.35
524	1760	Grab		Quartz Breccia		Sphalerite Galena Pyrite	Sulphides as massive aggregates	1840	.17%	33.47%	310.2	1	19.12
525	1460	Grab		Quartz Vein Breccia		Pyrite Sphalerite	Same location as # 524	94	.01%	2.93%	25.0	3	.78
526	1460	Grab		Quartz Vein		Sphalerite Galena Pyrite	Poorly exposed. Subcrop.	239	.62%	6.15%	54.0	2	1.78
527	1570	Grab	50cm	Quartz Vein		Pyrite	Contact between Diorite and skarn	3	16	168	.7	4	
528	1600	Float		Manganiferous float		Pyrite Sphalerite		33	147	7552	8.4	62	
529	1685	Float Grab		Siliceous Breccia		—	Major fault hosted Breccia	19	40	78	1.6	4	
530	1600	Float		Quartz, Mn stained		Sphalerite Galena pyrite		473	258	13978	11.5	3	
531	1365	Float		Quartz		pyrite	Pyrite up to 35 %	20	25	157	1.4	3	

PRINTED IN CANADA

APPENDIX D

CERTIFICATES OF ANALYSIS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL/ASSAY CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: AUG 16 1989 DATE REPORT MAILED: Aug 21/89 SIGNED BY. C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

WEST-MAR RESOURCES LTD File # 89-2949

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	AU* PPB	MO %	PB %	ZN %	AG OZ/T
446514	11	4	8	180	.6	4	1	121	2.11	49	5	ND	3	5	1	4	2	1	.03	.010	6	5	.01	4	.01	5	.14	.01	.07	138	7	-	-	-	-
446515	9	2	41	164	.1	5	2	971	.89	11	5	ND	8	17	1	2	2	1	.12	.020	14	3	.01	13	.01	8	.20	.01	.12	8	4	-	-	-	-
446516	1	24	8	36	.1	26	8	119	2.48	2	5	ND	9	434	1	2	2	8	5.84	.282	33	38	.41	8	.04	3	7.92	.47	.04	1	2	-	-	-	-
446517	3	2	2	1	.1	7	1	29	.26	2	5	ND	1	1	1	2	2	1	.02	.001	2	6	.01	1	.01	2	.01	.01	.01	1	2	-	-	-	-
446518	2	110	12	86	.2	35	12	63	3.01	2	5	ND	10	300	1	2	2	31	3.03	.017	34	46	.39	22	.07	2	4.75	.30	.14	6	1	-	-	-	-
446519	1115	191	3	172	1.4	13	7	932	2.66	2	5	ND	6	27	1	2	2	7	3.57	.089	21	10	.11	2	.05	2	1.29	.01	.01	1	1	.125	-	-	-
446520	11	12	6	79	.1	16	4	400	1.50	3	5	ND	10	23	1	2	2	8	.82	.011	19	19	.19	28	.02	6	1.00	.03	.11	1	1	-	-	-	-
446521	11	4	11	79	.1	8	2	79	.81	11	5	ND	3	5	1	2	2	5	.09	.012	5	6	.01	2	.01	2	.28	.01	.03	1	1	-	-	-	-
446522	6	6	12	11	.3	6	1	29	.88	53	5	ND	6	11	1	2	2	4	.05	.020	6	7	.01	2	.01	10	.27	.01	.04	1	4	-	-	-	-
446523	2	908	233	99999	315.8	7	4	14747	9.34	185	5	ND	1	1	237	90	13	2	.03	.009	2	6	.04	10	.01	6	.12	.01	.05	3	160	-	.02	13.12	10.35
446524	1	1840	1637	99999	310.2	6	7	8405	7.84	201	5	ND	1	1	570	163	32	1	.02	.003	2	1	.04	5	.01	6	.11	.01	.07	2	149	-	.17	33.47	19.12
446525	3	94	76	28211	25.0	11	4	3056	5.30	164	5	ND	1	3	57	18	2	3	.05	.022	5	3	.03	10	.01	3	.16	.01	.07	2	71	-	.01	2.93	.79
446526	2	239	5367	45970	54.0	4	4	37523	18.97	34	5	ND	3	2	81	13	19	7	.05	.005	3	6	.05	5	.01	2	.17	.01	.03	3	53	-	.62	6.15	1.78
446527	4	3	16	168	.7	7	1	103	1.01	93	5	ND	2	6	1	2	2	4	.06	.009	4	8	.01	1	.01	3	.24	.01	.04	1	20	-	-	-	-
446528	62	33	147	7552	8.4	10	5	41112	14.59	1262	5	ND	4	39	21	2	8	5	.17	.022	4	11	.24	7	.01	7	.35	.01	.08	2	3	-	-	-	-
446529	4	19	40	78	1.6	9	2	227	2.66	467	5	ND	13	8	1	10	2	19	.10	.048	11	16	.01	7	.01	2	.72	.01	.02	1	26	-	-	-	-
446530	3	473	258	13978	11.5	4	13	65566	18.72	1383	9	ND	4	12	20	2	17	2	.10	.001	2	9	.08	4	.01	7	.13	.01	.02	3	95	-	-	-	-
446531	3	20	25	157	1.4	16	5	96	2.22	103	5	ND	5	31	1	7	2	5	.27	.011	9	10	.03	7	.01	2	.67	.04	.07	1	14	-	-	-	-
STD C/AU-R	18	64	39	134	6.9	76	31	1106	4.24	42	22	8	37	49	19	14	22	59	.51	.095	39	56	.89	177	.07	38	1.95	.06	.14	12	490	-	-	-	-

- ASSAY REQUIRED FOR CORRECT RESULT -

RECEIVED
AUG 23 1989

APPENDIX E

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, JIM LEHTINEN, of 302-880 West 71st Avenue, Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Consulting Geologist with offices at Suite 207, 675 West Hastings Street, Vancouver, British Columbia.

2. THAT I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology.

3. My primary employment since 1978 has been in the field of mineral exploration.

4. My experience has encompassed a wide range of geological environments and has allowed considerable familiarization with geophysical, geochemical, and diamond drilling techniques.

5. This report is based on data generated from work supervised by myself from July 21 through July 26, 1989.

6. I have no interest in the property described herein, nor in securities of any company associated with the property, nor do I expect to acquire any such interest.

DATED at Vancouver, British Columbia, this 16th day of September, 1989.

per Jim Lehtinen, Geologist