005065

PROSPECTUS DATED SEPTEMBER 15, 1987

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MERRITECH DEVELOPMENT CORPORATION

Suite 808 - 475 Howe Street Vancouver, British Columbia V6C 2B3

NEW OFFERING

K.17

F PROPERTY FILE

8217222

EFFECTIVE DATE: OCTOBER 2, 1987

250,000 Units, each Unit consisting of one common share and two Series "A" share purchase warrants (the "Unit").

| | Price to Public | Agent's Commission | Net Proceeds to be Received by the Issuer* |
|----------|-----------------|-----------------------|---|
| Per Unit | \$0.55 | \$0.055 | \$0.495 |
| Total | \$137,500 | \$13,750 | \$123,750 |

* Before deduction of the costs of this issue, estimated to be \$23,000.

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THE OFFERING PRICE OF \$0.55 PER UNIT EXCEEDS THE ANTICIPATED NET BOOK VALUE PER COMMON SHARE SUBSEQUENT TO THE OFFERING BY \$0.37, REPRESENTING A DILUTION OF 67.27%.

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Name and Address of Agent

YORKTON SECURITIES INC.

1400 - 609 Granville Street Vancouver, British Columbia V7Y 1G5 (604) 669-7752 interest acquired by the Issuer consisted of (i) the payment of the aggregate sum of \$100,000 over the period from the date of the Option Agreement until January 15, 1990 and (ii) the issuance of an aggregate of 200,000 common shares of the Issuer over the same period. In addition, the Optionor of the property shall be entitled to receive a 20% net profits interest in the property with required annual minimum royalty payments of \$40,000 commencing January 15, 1991.

The initial option payment of \$5,000 with respect to the Russel Creek property has been paid by the Issuer and, upon the Issuer obtaining a receipt for this Prospectus, 25,000 shares shall be issued to the Optionor of the property. The issuance of subsequent instalments of shares to the Optionor is subject to the prior submission to and acceptance by the Exchange of engineering reports recommending further or continuing work on the property.

The Russel Creek property is accessible via Highway 5 north from the city of Kamloops to the town of Barriere; thence, eastward on the paved and gravel Barriere Lakes road to just west of East Barrierre Lake. A gravel logging haulage road joins the East Barriere Lake road at Russel Creek and leads northeasterly through the claims. It is approximately 88 kilometres by road from Kamloops to the property.

The following is excerpted from the report of Neil B. Jorgensen, P. Eng., dated July 22, 1987, as amended July 30, 1987, with respect to the property. The full report is annexed to and forms part of this Prospectus.

History

The Barriere Lakes - Adams Plateau region has been explored intermittently since the early 1890's. Most of the work has involved the search for and development of base metals massive sulphide deposits.

One of the earliest significant discoveries was the Homestake deposit. Hoy and Goutier (1986) describe its history:

The property, as recorded in Minister of Mines Annual Reports (1927, 1936), was discovered in 1893 and first developed between 1893 and 1895. Work on the property was intermittent and shipments of ore occurred sporadically The mine was reopened by Kamloops Homestake until 1927. Mines Ltd. in 1935; workings at that time consisted of four adits and more than 455 metres of cross cuts, drifts, raises A 50 tonne per day flotation mill was and a winze. Recorded production between 1935 and installed on the site. 1941 totalled approximately 6,965 tonnes from which 12,400 grams of gold, 9,565,900 grams of silver, 11,080 kilograms of copper, 171,325 kilograms of lead and 246,520 kilograms of zinc were recovered. In the early 1970's, work on the property was resumed with geophysical and geochemical surveys, diamond drilling and drifting to gain access to the old workings and to provide underground diamond drill sites. Proven reserves were at that time, estimated to be 1,010,800 tonnes with an average grade of about 240 grams silver per tonne, 2.5 percent lead, 4.0 percent zinc, 0.55 percent copper and 28 percent barite (The Financial Post, January 13, 1973). Since 1982 work by the Kamad Silver Company Ltd. has confirmed and improved previous grade estimates but the deposit is considered difficult to mine, mainly because of the poor strength of the host rocks.

The Homestake Property was optioned by Esso Minerals Canada in 1983 and currently is being explored by that Company.

In 1978 Craigmont Mines discovered the Chu Chua copper deposit near the headwaters of Chu Chua Creek. This find led to increased activity in the area until the decline in copper prices shifted interest elsewhere.

In October, 1983, Rea Gold Corporation announced the discovery of gold bearing massive sulphide mineralization south of Johnson Lake. Minnova Inc. (formerly Corporation Falconbridge Copper) optioned the Rea Gold property and has since carried out extensive surface exploration and diamond drilling programs. This work has outlined two massive sulphide deposits with estimated reserves as follows (Reaugh, 1986):

| Deposit | Tonnage | <u>Au</u> Grade | <u>Ag</u> Grade | Zn Grade | <u>Pb</u> Grade | <u>Cu</u> Grade |
|-----------|-----------|--------------------|-----------------------|-------------|--------------------|--------------------|
| | (tons) | (oz/ton) | $(\overline{oz/ton})$ | (8) | (8) | (8) |
| Discovery | 267,720 | 0.190 | 2.14 | 2.24 | 2.14 | 0.57 |
| Silver | 1,120,000 | 0.042 | 21.22 | 2.89 | 3.20 | 1.16 |

Minnova currently is doing more drilling on the Silver Zone. Recently released results include the following (Reaugh, 1987):

| | | | Con | firmed | Assay | Result | S |
|--------------|----------------------------|------------------------------------|-------------------|-------------------|----------------|--------------|------|
| Hole RG # | Interval Meters | <u>True Width</u> Meters (Feet) | $\frac{Ag}{oz/T}$ | $\frac{Au}{oz/T}$ | Znt | Pb% | Cut |
| 107 108 | 21.5-23.5 35.7-39.0 | 1.75 (5'-9") 3.10 (10'-3") | 75.85 407.18 | .084 | 37.40 19.56 | 4.12 9.43 | 4.18 |
| 109 | 123.4-125.9 131.1-135.2 | 2.5 (8'-3") 4.1 (13'-6") | 71.76 | .074 .038 | 4.23 2.25 | 1.50 | 2.38 |

The Cad Property is located 16 km north-north west of Rea Gold and 20 km north by west of Homestake.

Blanchflower (1987) describes the history of the property as follows:

In 1971, Ducanex Resources carried out soil and silt geochemical surveying over the property, then called the "C&G" and "DEN" claims. The "EBL" and "REM" mineral claims, situated immediately north of the subject property, have been actively explored by K.E. Northcote and Associates, Westmin Resources, Craigmont Mines, Noranda Exploration, Rayrock Mines and Royal Canadian Ventures. Their work since 1969 has included geological, geochemical and geophysical surveying, and trenching.

Noranda Exploration Company Ltd. (N.P.L.) operated this property in 1984 and 1985. In 1984, they established a survey control grid over the entire property and conducted soil geochemical sampling and geophysical (horizontal surveying loop electromagnetics and magnetics). The next year, Noranda established a detailed survey control grid over a very high silver, lead and zinc soil geochemical anomaly situated in the northeastern portion of the claim group. They tested detailed geophysical (induced this anomaly with polarization and horizontal loop electromagnetics) surveying, soil sampling and drilling (2 holes totalling 184.7 metres). The drilling results were not encouraging and the Option to Purchase Agreement with Mr. Graham was terminated in February, 1986.

After optioning the property, Merritech Development Corporation had a Genie EM survey carried out by Esso Minerals Canada in the north-eastern part of the Cad claim in January 1987. Following this work the company diamond drilled three holes to test further the geochemical and geophysical features in the area.

Regional Geology

The following description of the regional geology is taken from Blanchflower (1987):

The regional geology of the Barriere Lakes - Adams Plateau has been the subject of a number of recent governmental publications; the most definitive of these are authored by: P.A. Schiarizza and V.A. Preto (1984), V.A. Preto (1981) and T. Hoy and R. Goutier (1985). Much of the following text is based on the results of these recent geological reports.

This region is underlain dominantly by a weakly to moderately metamorphased assemblage of sedimentary and

volcanic rocks belonging to the Late Devonian to Early Mississippian age Eagle Bay formation. The Eagle Bay formation appears to stratigraphically overlie volcanic rocks of the Late Devonian Fennell formation. Both of these major formations have been intruded by granodiorite orthogneiss to biotite quartz monzonite ranging in age from Late Devonian to Cretaceous. Locally, the metamorphased strata and intrusions are overlain by olivine basalt flows of Pleistocene to recent age.

Structural features of the region include, at least, two periods of folding and faulting (Preto 1979). An early period of folding, west to north-west trending with axes plunging north to north-west, has deformed the volcanic and sedimentary strata prior to later folding with axes plunging gently north.

There are numerous base metal occurrences known in the region, many of which are clearly syngenetic stratabound massive sulphide deposits. Polymetallic deposits, commonly with associated barite and precious metal values, are most abundant in the Birk Creek - North Barriere Lake, Johnson Lake - Sinmax Creek and Adams Plateau areas.

The best known deposits in the area are the Rea Gold, Homestake and Chu Chua. The former two occur in the Eagle Bay formation and the latter, in the Fennell formation.

Local Geology

Since only one outcrop has been located on the claims and diamond drilling has taken place only in the Russ Grid area, little is known about the property geology. Schiarizza and Preto (1984) show that the claims are underlain by a unit of the Eagle Bay formation composed of Devonian and/or Older calcareous chlorite schist and fragmental schist derived from mafic to intermediate volcanic and volcaniclastic rocks with lesser amounts of limestone, dolomite, chlorite and sericite phyllite. This is the same sequence of rocks which hosts the Rea Gold deposit.

The outcrop occurs along the main access road in the southern part of Cad claim. This exposure consists of a lower chloritic and somewhat talcy schist overlain by a silicified or cherty horizon which grades into massive limonitic quartz. Above the quartz is limonitic gray limestone which grades into gray thin layered unmineralized limestone over a couple of metres. Mr. Jorgensen believes that this outcrop represents a volcanic sedimentary stratigraphic contact zone marked by a cherty quartz exhalative layer. According to Shevchenko (1986) the Noranda diamond drill holes cut easterly dipping quartz dacitic volcaniclastics above siltstones and quartz arenites. Blanchflower (1987) reports that Merritech's holes in the same area intersected gently dipping fine grained sandstone, siltstone, argillite, graphitic, argillite and waterlain tuff.

A brief examination of the 1987 core by Mr. Jorgensen revealed that much of it consists of green to white chloritized and sericitized tuff with pyrite and pyrrhotite blebs along layering, and black argillites and graphitic argillites. Some of the graphitic layers contain medium to coarse grained pyrite. In addition to the predominant rock types, Mr. Jorgensen notes in his report that he observed a few sections of crystal tuff and fine grained possible intrusive rocks.

The rock in the lower parts of DDH 87-2 is strongly sericitized or silicified and has pyrite stringers along the foliations. Much of the original texture has been obliterated by the alteration.

Geochemistry

Noranda carried out reconnaissance sampling over the entire property followed by detailed sampling in the Russ Grid area, north-eastern Cad claim. Mr. Jorgensen has examined the Noranda Geochemistry Maps for the Russ Grid area and the following discussion is based on this examination.

The detailed sampling outlined a 900 m long, 20-70 m wide north trending zone which is composed of coincident silver and lead anomalies which overlap a number of smaller zinc anomalies. The zone is very consistent throughout its length and metal values are quite high. Silver ranges from 5-23 PPM, lead from 100-630 PPM and zinc from 400-750 PPM. There is no noticeable roll off of values at either end of the zone.

It should be noted that carbonaceous sediments (graphitic argillites) commonly are anomalous in base and precious metals and may cause soil geochemistry anomalies. However, samples from the argillites cut by the 1987 drilling have uniformly low gold, silver and lead contents. Copper and zinc values are slightly higher but only a few sections had more than 100 PPM Cu or Zn. Since the major elements in the Russ Grid anomalous zone are lead and silver, it seems unlikely that the feature is caused by metal values in the carbonaceous sediments.

Geophysics

Noranda did horizontal loop electromagnetic and magnetometer surveys across the claim block and detailed HLEM and induced

polarization surveys on the Russ Grid. The work outlined numerous north to north-east striking EM conductors as well as 3 IP anomalies in the Russ Grid area. Two of the latter features are in the vicinity of the geochemical anomaly and one, the strongest, is about 300 m to the south-west on line 11,000 N.

The IP survey consisted of two test lines. It was carried out using a frequency domain system and a dipole-dipole array. Mr. Jorgensen has seen one of the pseudosection plots. On this line the anomalies consist of percent frequency effect highs and apparent resistivity lows. The other pseudosection was not available at the time of preparation of Mr. Jorgensen's report.

Before the start of the 1987 drilling program, Esso Minerals Canada carried out a Geometry Normalized In Phase Electromagnetic (Genie) survey over the Russ Grid for the Issuer. The survey outlined a prominent anomaly with a north north-westerly striking principal axis which extends for 1,000 m in length. This feature corresponds well with an EM conductor and the strong IP anomaly found by Noranda.

The Genie system was developed by Scintrex and Esso Minerals Canada. The system consists of a large fixed rectangular loop connected to a multifrequency sinusoidal wave transmitter, and a mobile horizontal loop receiver. The long edge of the transmitter is oriented parallel to the geological strike. Readings are made along grid lines perpendicular to the strike and outside of the long edge of the loop.

Readings are made at nine possible frequency pairs, measuring the amplitude of the electromagnetic fields at two relative frequencies. One frequency is the reference which is relatively unaffected by ground conductivity. The ratio (R) can be expressed as follows:

$$R = \frac{IPs}{P} \times 100 \text{ percent}$$

Where IPs = the in-phase component of the secondary field P = the primary field,

which is simply the in-phase secondary field at the signal frequency normalized by the primary field at the reciever.

Mr. Jorgensen has examined maps showing the results of the survey.

Diamond Drilling

Noranda drilled two short holes in 1986 to test part of the geochemical anomaly and one of the IP zones. The drilling did not reveal any source for the features.

In early 1987 Merritech completed 3 holes totalling 394.11 m in the Russ Grid area. Two of the holes were designed to test the geochemical anomaly and the third, the strong IP and coincident Genie anomalies to the south-west. The drilling did not uncover any mineralization capable of producing the geochemical anomaly. However, geophysical features probably are caused by graphitic and pyritic layers in the argillites.

Discussion

The target on the Cad property is a massive sulphide deposit similar to the Homestake and Rea Gold. Hoy and Goutier (1986) describe the Rea Gold discovery zone as follows:

Two massive sulphide lenses occur at the stratigraphic top of a thin felsic tuff and exhalative chert sequence that lies above a thicker sequence of mafic ash, crystal and lapilli tuffs. Both lenses are underlain by a footwall feeder and alteration zone, characterized by intense silification, pervasive pyrite and sericite development, indicative of Si, Fe and K metasomatism. The southern lense is 'capped' by a layer of massive barite. Both lenses are stratigraphically overlain by a thin sequence of mafic tuff grades up into argillites, wackes and grits. which Deposition of sulphides and barite occurred near the end of explosive volcanism. cycle of Intense regional а deformation and greenschist facies regional metamorphism have altered the host rocks to produce a succession of sheared chlorite phyllites, quartz sericite schists and chert.

They also describe the Homestake Mine:

Sulphide-barite lenses at Homestake occur near the top of a thick sequence of pyritic quartz-sericite phyllites within a predominantly mafic to intermediate tuff succession. The quartz-sericite phyllites include both felsic tuffs and metasomatically altered footwall rocks in which potassium, silica and iron have been introduced. Although macroscopic folds are not recognized within the footwall phyllites, their presence is inferred due primarily to recognition of folds in overlying units where bedding is more visible and to the presence of rootless minor folds within the phyllites.

The authors go on to state:

Rea Gold and Homestake have many similarities. They are sulphide ± barite lenses within or near the top of a felsic (?) pyroclastic unit within a thicker pile of more mafic tuffs and minor mafic flows. Both have extensive footwall alteration zones characterized by silicification, sericitization and pyrite development and both are overlain by a mixed mafic pyroclastic and clastic sedimentary sequence. These deposits, as well as a number of other somewhat similar deposits in Eagle Bay formation rocks such as Beca and Birk Creek (Goutier, et.al., 1985) are similar in many respects to the volcanogenic 'polymetallic' or Kuroko class of deposits.

According to Boldy (1981) Pre-Cambrian massive sulphide deposits in Canada occur at time stratigraphic breaks at the top of (generally felsic) volcanic sequences. These breaks commonly are marked by cherty tuff or chert layers which carry layered and disseminated pyrite. A sharp increase in metal content occurs within 30 m of a sulphide lens. In the bulk of the deposits rocks in the stratigraphic footwall, contains disseminated and stringer sulphides and are altered to chlorite and sericite.

Boyle (1982) states that typical massive sulphide deposits have extensive wall rock alteration envelopes which generally contain chlorite, sericite, quartz, pyrite, chert and in some cases, carbonate. In most cases, proximity to ore is indicated by an increase in the potassium to sodium ratio. Furthermore, most deposits have complex and irregular trace element halos involving mainly chalcophile elements such as Cu, Ag, Au, Zn, Pb, Sb, As and others. The halos and envelopes are detectable over a wide range of distances from the sulphide lenses, in some cases for as much as several hundred metres.

The geological setting of the Cad property is favourable for the discovery of massive sulphide deposits since it is the same as at Rea Gold. There are some geological indications that such a deposit may exist on the claims. The strong alteration in DDH 87-2 is similar to that described in the footwalls at Rea Gold and Homestake and fits in well with Boyles alteration envelopes. In addition, the outcrop exposes a time stratigraphic break on the Cad claim. The importance of the former feature could be tested by analysing the 1987 core for major elements to check for chemical changes associated with proximity to sulphide lenses.

The most striking indication of mineralization on the property is the large soil geochemistry anomaly. Mr. Jorgensen believes that such a strong and persistent feature probably reflects a multimetal deposit. Since the diamond drilling did not intersect any mineralization capable of producing such an anomaly, it appears that the zone has been transported. Locating its source will have to be done by overburden drilling and till sampling in the up ice direction to trace the geochemical dispersion train. Taking bedrock cores from the holes would provide valuable geological information which would not otherwise be available. Those parts of the property beyond the Russ Grid should not be discounted solely because they lack geochemical anomalies. Heavy overburden could have masked response from mineralization. Also, the fact that the geophysical conductors in the grid area are caused by graphite, does not mean that all the others on the property are. One or more, may reflect sulphides.

Sangster (1980) has studied the characteristics of massive sulphide districts in Canada and Japan. He reports that the average district has a diameter of 32 km and hosts 12 deposits. Since only two or three deposits have been defined in the Adams Lake - Barriere Lakes District to date, one must expect that several more will be discovered. Therefore, any areas underlain by favourable geology warrant thorough exploration, particularly if they have known EM anomalies.

As in the case of the grid area, further exploration on the bulk of the claim block will have to be done by overburden drilling and basal till sampling. Thompson (1979) describes a program which tested airborne EM anomalies in drift covered area of favourable geology in Ontario. In this case initial overburden drilling with holes 150-450 m apart on lines 400-800 m apart in the direction of ice movement led to the discovery of a copper deposit. Harron et.al. (1987) reports the use of holes at 245-365 m spacings perpendicular to the ice direction to locate gold mineralization. Thus it seems that drilling a series of holes at similar spacings would adequately test the Cad property.

Conclusions and Recommendations

The Cad property is situated in a geological environment which is known to host massive sulphide deposits. There is strong geochemical evidence to suggest that such a deposit may exist in the vicinity of the Russ Grid. Statistical considerations suggest that the rest of the claim block also warrants further exploration. Therefore, a two stage program is recommended to test the properties potential.

Stage la

The first phase of the program consists of determining the direction of ice movement in the area followed by detailed overburden drilling to locate the source of the anomaly and reconnaissance drilling to explore the bulk of the property. A series of holes should be drilled at 50 m spacings on lines 100 m apart for 500 m in the up ice direction from the anomaly. A geologist should be on site to log the till and check the indications of mineralization. If the source is not found by this drilling, it should be searched for in other directions by drilling on a series of lines at 200 m spacings along the length of the anomaly. The lines should extend for 200 m to either side of the zone.

Standard geochemistry samples should be taken at 1.5 m intervals along the holes. Larger samples should be taken of the basal till and separated into a geochemistry sample and a pan concentrate. Short cores of the bedrock also should be taken from each hole.

All basal till geochemistry samples should be analysed using multi-element ICP methods. A heavy mineral, separate, should be prepared from the pan concentrates and it should also be analysed by ICP. The cores from the overburden drilling and the core from the 1987 diamond drilling should be split and analysed by quantitative ICP methods to check for major element zoning. The diamond drill core should be sampled in 1.5 m sections.

If no indications of the source of the anomaly are discovered by this work the rest of the samples collected from the detailed drilling holes should be analysed in an effort to determine the direction of transport.

At the completion of the field work all available data should be compiled and interpreted and a report written with recommendations for further exploration.

Estimated cost of the program is \$102,800.

Stage 1b

The bulk of the property should be tested at some time by a series of holes at 150 m spacings along lines spaced 500-800 m apart in the direction of ice movement. Basal till and bedrock samples should be taken and analysed as described previously. At the completion of the work a report should be prepared with recommendations for further exploration.

Estimated cost of the program is \$55,000.

Stage 2

Depending on the results of the first program, the second stage will consist of diamond drilling, additional overburden drilling, or both. For the purpose of this report it is assumed that Stage 2 will consist of 1,200 m of diamond drilling at a cost of \$170,200.

USE OF PROCEEDS

The net proceeds to be derived by the Issuer from the sale of the securities offered by this Prospectus will be \$123,750 which, when added to working capital as at the date of this Prospectus of approximately \$19,040, aggregate \$142,790 and will be used for the following purposes (listed in order of priority):

REPORT ON THE CAD PROPERTY

KAMLOOPS MINING DIVISION BRITISH COLUMBIA

Latitude 51° 18' N Longitude 119° 52' W

NTS 82M/5W

FOR

MERRITECH DEVELOPMENT CORPORATION

BY

NEIL B. JORGENSEN, P.ENG.

JULY 22, 1987

Revised July 30, 1987

REPORT ON THE CAD PROPERTY

MERRITECH DEVELOPMENT CORPORATION

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APPENDICES

Appendix I 1987 Diamond Drill Logs

REPORT ON THE CAD PROPERTY

MERRITECH DEVELOPMENT CORPORATION

SUMMARY

The Cad property consists of 10 claims totalling 47 units in the Barriere Lakes Area, Kamloops Mining Division, B.C. The claims are owned by J.D. Graham and are under option to Merritech Development Corporation.

Exploration has taken place in the Barriere Lakes - Adams Plateau Region since the late 1890's and production took place from the Homestake deposit prior to 1941. Interest in the area was rekindled in 1983 when Rea Gold Corporation discovered massive sulphides at a location about 16 km south south-east of the Cad claims. Continuing exploration on the Rea Gold claims has outlined two polymetallic deposits with aggregate reserves of about 1.4 million tons.

The property was briefly explored by Ducanex Resources in 1971. In 1984 and 1985 Noranda carried out reconnaissance and detailed geochemical and geophysical surveys and a limited diamond drilling program on the claims. Merritech acquired the ground in 1986 and completed three diamond drill holes in the Russ Grid area, north-eastern Cad claim in early 1987.

The Barriere Lakes Region is underlain by weakly to moderately metamorphased sedimentary and volcanic rocks belonging to the Devonian to Mississippian Eagle Bay formation. The Cad claims cover an area of chloritic schists derived from volcanic rocks and lesser amounts of sedimentary rocks. A volcanic sedimentary stratigraphic contact has been located on the property and strongly altered volcanic rocks were cut by one of the drill holes. Both of these features indicate a favourable environment for the occurrence of massive sulphide deposits.

A 900 m long multi-element soil geochemistry anomaly is present on the Russ Grid. This feature appears to be indicative of a sulphide lens. Since the diamond drilling did not intersect any mineralization capable of producing such an anomaly, it appears that the zone is transported from its source.

Numerous geophysical anomalies have been located on the claim block. Those in the vicinity of the diamond drilling likely are reflections of graphitic layers in underlying argillites. However, several EM conductors elsewhere may be of interest, particularly since they are located in a favourable geological sequence within a developing massive sulphide district.

A two stage program is recommended to search for massive sulphide deposits on the claims. The first phase involves detailed overburden drilling to find the source of the geochemical anomaly and wide spaced drilling to test the potential of the rest of the claim block. The work is split into two sections, with estimated costs of \$103,000.00 and \$55,000.00. The second stage consists of diamond drilling at a cost of \$170,000.00.

SECTION 1.0 - INTRODUCTION

The author was engaged by Merritech Development Corporation to examine the Cad Property and to recommend a program on it if warranted. The following report is based on data provided by the Company, observations made during a field examination on July 12, 1987 and research into other sources. Much of the discussion in the Diamond Drilling Section of this report is based on Blanchflower (1987), the Geophysics Section on Ashton (1987) and Blanchflower (1987) and the Geochemistry Section on Noranda (1986).

1.1 LOCATION AND ACCESS

The property is situated to the east of East Barriere Lake, about 24 km east north-east of the Town of Barriere and 78 km north north-east of the City of Kamloops, B.C. Property location is shown on Figures 1, 2 and 3.

The claims are situated at latitude 51° 18'N and longitude 119° 52'W, NTS 82M/5W. They are in the Kamloops Mining Division.

Access from Kamloops is via Highway 5 to Barriere, thence 1.1 km through town on the Barriere business road, thence 21.1 km east on the East Barriere Lakes Road. From this point the Barriere Ridge Road runs north-easterly and crosses the claim block. The legal corner post of the Cad and Win claims is about 5.9 km by road from the junction.

A four wheel drive vehicle is recommended for access. Total distance by road from Kamloops is about 90 km.

1.2 PROPERTY AND OWNERSHIP

The property consists of the 10 claims listed in the following table:





| <u>Claim</u> | Record | | | Expiry | Registered |
|--------------|------------|--------|-------|--------------------|------------|
| Name | <u>No.</u> | Туре | Units | Date | Owner |
| | | | | | |
| CAD | 4937 | MGS | 12 | Nov. 16/87 | J.D.Graham |
| CAD 1 | 4938 | 2 Post | 1 | Nov.16/87 | J.D.Graham |
| CAD 2 | 4950 | 2 Post | 1 | Nov . 16/87 | J.D.Graham |
| CAD 3 | 4951 | 2 Post | 1 | Nov.16/87 | J.D.Graham |
| CAD 4 | 4952 | 2 Post | 1 | Nov.16/87 | J.D.Graham |
| CAD 5 | 4953 | 2 Post | 1 | Nov.16/87 | J.D.Graham |
| CAD 6 | 4954 | 2 Post | 1 | Nov.16/87 | J.D.Graham |
| DIAL | 5030 | MGS | 15 | Nov.22/87 | J.D.Graham |
| NBR 8 | 5944 | MGS | 8 | Nov.7/87 | J.D.Graham |
| BRI | 6344 | MGS | 6 | Nov.1 <i>5</i> /87 | J.D.Graham |
| | | | 47 | | |

A notice to Group No. 2231 covering all the claims was registered on November 18, 1985.

The author located the common legal corner post of the Cad and Win claims and is of the opinion that it conforms to the Staking Regulations of the Mineral Act of British Columbia. He had an examination made of the claim records in the Gold Commissioner's Office in Kamloops which revealed that the claims are duly recorded and have up to date assessment filed on them. He can not, however, make any further comments about the validity of the claims.

J.M. Ashton has informed the writer that the 1987 diamond drilling will be filed for assessment before the claims expire.

Merritech Development Corporation has optioned the property from the Owner. The option was registered on the claim records as No. 554 on March 27, 1987.

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Esso Minerals Canada has a right to earn a 51 percent ownership in the claims from Merritech. The company has expressed a continuing interest in doing so (McDonald, 1987).

1.3 PHYSICAL SETTING

The claim block covers a section of the broad north-east trending ridge between East and North Barriere Lakes and extends part way into the North Barriere Lakes - Barriere River Valley. The valley walls are steep but elsewhere on the property the terrain is moderate. Elevations on the claims range from 975 to 1,370 m and total local relief is about 800 m.

The climate in the region is temperate with summer highs up to 30° C and winter lows down to -25° C. Precipitation is moderate to heavy.

Sections of the property have been subjected to clear cut logging. Elsewhere the area is covered by moderately thick forests of pine, balsam, fir, cedar and aspen. Only one outcrop has been located on the property to date.

1.4 HISTORY

The Barriere Lakes - Adams Plateau region has been explored intermittently since the early 1890's. Most of the work has involved the search for and development of base metals massive sulphide deposits.

One of the earliest significant discoveries was the Homestake deposit. Hoy and Goutier (1986) describe its history:

The property, as recorded in Minister of Mines Annual Reports (1927, 1936), was discovered in 1893 and first developed between 1893 and 1895. Work on the property was intermittent and shipments of ore

occurred sporadically until 1927. The mine was reopened by Kamloops Homestake Mines Ltd. in 1935; workings at that time consisted of four adits and more than 455 metres of cross cuts, drifts, raises and a winze. A 50 tonne per day flotation mill was installed on the site. Recorded production between 1935 and 1941 totalled approximately 6,965 tonnes from which 12, 400 grams of gold, 9,565,900 grams of silver, 11,080 kilograms of copper, 171,325 kilograms of lead and 246,520 kilograms of zinc were recovered. In the early 1970's, work on the property was resumed with geophysical and geochemical surveys, diamond drilling and drifting to gain access to the old workings and to provide underground diamond drill sites. Proven reserves were at that time, estimated to be 1,010,800 tonnes with an average grade of about 240 grams silver per tonne, 2.5 percent lead, 4.0 percent zinc, 0.55 percent copper and 28 percent barite (The Financial Post, January 13, 1973). Since 1982 work by the Kamad Silver Company Ltd. has confirmed and improved previous grade estimates but the deposit is considered difficult to mine, mainly because of the poor strength of the host rocks.

The Homestake Property was optioned by Esso Minerals Canada in 1983 and currently is being explored by that Company.

In 1978 Craigmont Mines discovered the Chu Chua copper deposit near the headwaters of Chu Chua Creek. This find led to increased activity in the area until the decline in copper prices shifted interest elsewhere.

In October, 1983, Rea Gold Corporation announced the discovery of gold bearing massive sulphide mineralization south of Johnson Lake. Minnova Inc. (formerly Corporation Falconbridge Copper) optioned the Rea Gold property and has since carried out extensive surface exploration and diamond drilling programs. This work has outlined two massive sulphide deposits with estimated reserves as follows (Reaugh, 1986):

| Deposit | Tonnage | Au | Ag | <u>Zn</u> | Pb | <u>Cu</u> |
|-----------|-----------|----------|----------|-----------|-------|-----------|
| | | Grade | Grade | Grade | Grade | Grade |
| | (tons) | (oz/ton) | (oz/ton) | (%) | (%) | (%) |
| Discovery | 267,720 | 0.190 | 2.14 | 2.24 | 2.14 | 0.57 |
| Silver | 1,120,000 | 0.042 | 21.22 | 2.89 | 3.20 | 1.16 |

Minnova currently is doing more drilling on the Silver Zone. Recently released results include the following (Reaugh, 1987):

| | | | Confirmed Assay Results | | | | |
|--------------|--------------------|------------------------------------|-------------------------|-------------------|------------|------------|------------|
| Hole RG # | Interval Meters | <u>True Width</u> Meters (Feet) | <u>Ag</u> oz/T | <u>Au</u> oz/T | <u>Zn%</u> | <u>Pb%</u> | <u>Cu%</u> |
| 107 | 21.5 - 23.5 | 1.75 (5' - 9") | 75.85 | .084 | 37.40 | 4.12 | 4.18 |
| 108 | 35.7 - 39.0 | 3.10 (10' - 3") | 407.18 | .340 | 19.56 | 9.43 | 6.34 |
| 109 | 123.4 - 125.9 | 2.5 (8' - 3") | 71.76 | .074 | 4.23 | 1.50 | 2.38 |
| | 131.1 - 135.2 | 4.1 (13' - 6") | 19.81 | .038 | 2.25 | 1.55 | 0.78 |

The Cad Property is located 16 km north-north west of Rea Gold and 20 km north by west of Homestake.

Blanchflower (1987) describes the history of the property as follows:

In 1971, Ducanex Resources carried out soil and silt geochemical surveying over the property, then called the 'C & G' and "DEN' claims. The 'EBL' and 'REM' mineral claims, situated immediately north of the subject property, have been actively explored by K.E. Northcote and Associates, Westmin Resources, Craigmont Mines, Noranda Exploration, Rayrock Mines and Royal Canadian Ventures. Their work, since 1969, has included geological, geochemical and geophysical surveying and trenching. Noranda Exploration Company Ltd. (N.P.L.) explored this property in 1984 and 1985. In 1984, they established a survey control grid over the entire property and conducted soil geochemical sampling and geophysical surveying (horizontal loop electromagnetics and magnetics). The next year, Noranda established a detailed survey control grid over a very high silver, lead and zinc soil geochemical anomaly, situated in the north-eastern portion of the claim group. They tested this anomaly with detailed geophysical surveying (induced polarization and horizontal loop electromagnetics), soil sampling and drilling (2 holes totalling 184.7 metres). The drilling results were not encouraging, and the Option to Purchase Agreement with Mr. Graham was terminated in February 1986.

After optioning the property Merritech Development Corporation had a Genie EM survey carried out by Esso Minerals Canada in the north-eastern part of the Cad claim in January 1987. Following this work the company diamond drilled three holes to test further the geochemical and geophysical features in the area.

SECTION 2.0 - REGIONAL GEOLOGY

The following description of the regional geology is taken from Blanchflower (1987):

The regional geology of the Barriere Lakes - Adams Plateau has been the subject of a number of recent governmental publications; the most definitive of these are authored by: P.A. Schiarizza and V.A. Preto (1984), V.A. Preto (1981) and T. Hoy and R. Goutier (1985). Much of the following text is based on the results of these recent geological reports.

This region is underlain dominantly by a weekly to moderately metamorphased assemblage of sedimentary and volcanic rocks belonging to the Late Devonian to Early Mississippian age Eagle Bay formation. The Eagle Bay formation appears to stratigraphically overlie volcanic rocks of the Late Devonian Fennell formation. Both of these major formations have been intruded by granodiorite orthogneiss to biotite quartz monzonite ranging in age from Late Devonian to Cretaceous. Locally, the metamorphased strata and intrusions are overlain by olivine basalt flows of Pleistocene to recent age.

Structural features of the region include, at least, two periods of folding and faulting (Preto 1979). An early period of folding, west to north-west trending with axes plunging north to north-west, has deformed the volcanic and sedimentary strata prior to later folding with axes plunging gently north.

There are numerous base metal occurrences known in the region, many of which are clearly syngenetic stratabound massive sulphide deposits. Polymetallic deposits, commonly with associated barite and precious metal values, are most abundant in the Birk Creek - North Barriere Lake, Johnson Lake - Sinmax Creek and Adams Plateau areas.

The best known deposits in the area are the Rea Gold, Homestake and Chu Chua. The former two occur in the Eagle Bay formation and the latter, in the Fennell formation.

SECTION 3.0 - LOCAL GEOLOGY

Since only one outcrop has been located on the claims and diamond drilling has taken place only in the Russ Grid area, little is known about the property geology. Schiarizza and Preto (1984) show that the claims are underlain by a unit of the Eagle Bay formation composed of Devonian and/or Older calcareous chlorite schist and fragmental schist derived from mafic to intermediate volcanic and volcaniclastic rocks with lesser amounts of limestone, dolomite, chlorite and sericite phyllite. This is the same sequence of rocks which hosts the Rea Gold deposit.

The outcrop occurs along the main access road in the southern part of Cad claim. This exposure consists of a lower chloritic and somewhat talcy schist overlain by a silicified or cherty horizon which grades into massive limonitic quartz. Above the quartz is limonitic gray limestone which grades into gray thin layered unmineralized limestone over a couple of metres. The writer believes that this outcrop represents a volcanic sedimentary stratigraphic contact zone marked by a cherty quartz exhalative layer. The outcrop is shown on the compilation Map, Figure 4.

According to Shevchenko (1986) the Noranda diamond drill holes cut easterly dipping quartz dacitic volcaniclastics above siltstones and quartz arenites. Blanchflower (1987) reports that Merritech's holes in the same area intersected gently dipping fine grained sandstone, siltstone, argillite, graphitic, argillite and waterlain tuff.

A brief examination of the 1987 core by the author revealed that much of it consists of green to white chloritized and sericitized tuff with pyrite and pyrrhotite blebs along layering, and black argillites and graphitic argillites. Some of the graphitic layers contain medium to coarse grained pyrite. In addition to the predominant rock types, the writer observed a few sections of crystal tuff and fine grained possible intrusive rocks.



The rock in the lower parts of DDH 87-2 is strongly sericitized or silicified and has pyrite stringers along the foliations. Much of the original texture has been obliterated by the alteration.

SECTION 4.0 - GEOCHEMISTRY

Noranda carried out reconnaissance sampling over the entire property followed by detailed sampling in the Russ Grid area, north-eastern Cad claim. The author has examined the Noranda Geochemistry Maps for the Russ Grid area. The following discussion is based on this examination.

The detailed sampling outlined a 900 m long, 20-70 m wide north trending zone which is composed of coincident silver and lead anomalies which overlap a number of smaller zinc anomalies. The zone is very consistent throughout its length and metal values are quite high. Silver ranges from 5-23 PPM, lead from 100-630 PPM and zinc from 400 - 750 PPM. There is no noticeable roll off of values at either end of the zone.

It should be noted that carbonaceous sediments (graphitic argillites) commonly are anomalous in base and precious metals and may cause soil geochemistry anomalies. However, samples from the argillites cut by the 1987 drilling have uniformly low gold, silver and lead contents. Copper and zinc values are slightly higher but only a few sections had more than 100 PPM Cu or Zn. Since the major elements in the Russ Grid anomalous zone are lead and silver, it seems unlikely that the feature is caused by metal values in the carbonaceous sediments. Details of the sampling are on the drill logs, Appendix I.

The anomaly is shown on Figure 4.

SECTION 5.0 - GEOPHYSICS

Noranda did horizontal loop electromagnetic and magnetometer surveys across the claim block and detailed HLEM and induced polarization surveys on the Russ Grid. The work outlined numerous north to north-east striking EM conductors as well as 3 IP anomalies in the Russ Grid area. Two of the latter features are in the vicinity of the geochemical anomaly and one, the strongest, is about 300 m to the south-west on line 11,000 N.

The IP survey consisted of two test lines. It was carried out using a frequency domain system and a dipole-dipole array. The author has seen one of the pseudosection plots. On this line the anomalies consist of percent frequency effect highs and apparent resistivity lows. The other pseudosection is not available at this time.

Before the start of the 1987 drilling program Esso Minerals Canada carried out a Geometry Normalized In Phase Electromagnetic (Genie) survey over the Russ Grid for Merritech Resources. The survey outlined a prominent anomaly with a north north-westerly striking principal axis which extends for 1,000 m in length. This feature corresponds well with an EM conductor and the strong IP anomaly found by Noranda.

The Genie system was developed by Scintrex and Esso Minerals Canada. The system consists of a large fixed rectangular loop connected to a multifrequency sinusoidal wave transmitter, and a mobile horizontal loop receiver. The long edge of the transmitter is oriented parallel to the geological strike. Readings are made along grid lines perpendicular to the strike and outside of the long edge of the loop.

Readings are made at nine possible frequency pairs, measuring the amplitude of the electromagnetic fields at two relative frequencies. One frequency is the reference which is relatively unaffected by ground conductivity. The ratio (R) can be expressed as follows: $R = \frac{IPs}{P} \times 100 \text{ percent}$

Where IPs = the in-phase component of the secondary field P = the primary field,

which is simply the in-phase secondary field at the signal frequency normalized by the primary field at the receiver.

The author has examined maps showing the results of the survey.

The anomalies are shown on Figure 4.

SECTION 6.0 - DIAMOND DRILLING

Noranda drilled two short holes in 1986 to test part of the geochemical anomaly and one of the IP zones. The drilling did not reveal any source for the features.

In early 1987 Merritech completed 3 holes totalling 394.11 m in the Russ Grid area. Two of the holes were designed to test the geochemical anomaly and the third, the strong IP and coincident Genie anomalies to the southwest. The drilling did not uncover any mineralization capable of producing the geochemical anomaly. However, geophysical features probably are caused by graphitic and pyritic layers in the argillites.

Drill hole locations are shown on Figure 4. Figures 5 to 7 are cross-sections through DDH 87-1, 87-2 and 87-3. Samples with values greater than or equal to 100 PPM copper, lead or zinc are plotted on the cross-sections. Blanchflower's (1987) geological logs are presented in Appendix I.



SW

SECTION AZIMUTH 070°

- 100

250°

8d 7a,7d,8d

7a, Ep, Ch, Sr, Mp ALTERATION

8d

8c,8d

50

98.8 m





SECTION 7.0 - DISCUSSION

The target on the Cad property is a massive sulphide deposit similar to the Homestake and Rea Gold. Hoy and Goutier (1986) describe the Rea Gold discovery zone as follows:

Two massive sulphide lenses occur at the stratigraphic top of a thin felsic tuff and exhalative chert sequence that lies above a thicker sequence of mafic ash, crystal and lapilli tuffs. Both lenses are underlain by a footwall feeder and alteration zone, characterized by intense silicification, pervasive pyrite and sericite development, indicative of Si, Fe and K metasomatism. The southern lense is 'capped' by a layer of massive barite. Both lenses are stratigraphically overlain by a thin sequence of mafic tuff which grades up into argillites, wackes and grits. Deposition of sulphides and barite occurred near the end of a cycle of explosive volcanism. Intense regional deformation and greenschist facies regional metamorphism have altered the host rocks to produce a succession of sheared chlorite phyllites, quartz sericite schists and chert.

They also describe the Homestake Mine:

Sulphide-barite lenses at Homestake occur near the top of a thick sequence of pyritic quartz-sericite phyllites within a predominantly mafic to intermediate tuff succession. The quartz-sericite phyllites include both felsic tuffs and metasomatically altered footwall rocks in which potassium, silica and iron have been introduced. Although macroscopic folds are not recognized within the footwall phyllites, their presence is inferred due primarily to recognition of folds in overlying units where bedding is more visible and to the presence of rootless minor folds within the phyllites.

The authors go on to state:

Rea Gold and Homestake have many similarities. They are sulphide <u>+</u> barite lenses within or near the top of a felsic (?) pyroclastic unit within a thicker pile of more mafic tuffs and minor mafic flows. Both have extensive footwall alteration zones characterized by silicification, sericitization and pyrite development and both are overlain by a mixed mafic pyroclastic and clastic sedimentary sequence. These deposits, as well as a number of other somewhat similar deposits in Eagle Bay formation rocks such as Beca and Birk Creek (Goutier, et.al., 1985) are similar in many respects to the volcanogenic 'polymetallic' or Kuroko class of deposits.

According to Boldy (1981) Pre-Cambrian massive sulphide deposits in Canada occur at time stratigraphic breaks at the top of (generally felsic) volcanic sequences. These breaks commonly are marked by cherty tuff or chert layers which carry layered and disseminated pyrite. A sharp increase in metal content occurs within 30 m of a sulphide lens. In the bulk of the deposits rocks in the stratigraphic footwall, contains disseminated and stringer sulphides and are altered to chlorite and sericite.

Boyle (1982) states that typical massive sulphide deposits have extensive wall rock alteration envelopes which generally contain chlorite, sericite, quartz, pyrite, chert and in some cases, carbonate. In most cases, proximity to ore is indicated by an increase in the potassium to sodium ratio. Furthermore, most deposits have complex and irregular trace element halos involving mainly chalcophile elements such as Cu, Ag, Au, Zn, Pb, Sb, As and others. The halos and envelopes are detectable over a wide range of distances from the sulphide lenses, in some cases for as much as several hundred metres. The geological setting of the Cad property is favourable for the discovery of massive sulphide deposits since it is the same as at Rea Gold. There are some geological indications that such a deposit may exist on the claims. The strong alteration in DDH 87-2 is similar to that described in the footwalls at Rea Gold and Homestake and fits in well with Boyles alteration envelopes. In addition, the outcrop exposes a time stratigraphic break on the Cad claim. The importance of the former feature could be tested by analysing the 1987 core for major elements to check for chemical changes associated with proximity to sulphide lenses.

The most striking indication of mineralization on the property is the large soil geochemistry anomaly. The author believes that such a strong and persistant feature probably reflects a multi-metal deposit. Since the diamond drilling did not intersect any mineralization capable of producing such an anomaly, it appears that the zone has been transported. Locating its source will have to be done by overburden drilling and till sampling in the up ice direction to trace the geochemical dispersion train. Taking bedrock cores from the holes would provide valuable geological information which would not otherwise be available.

Those parts of the property beyond the Russ Grid should not be discounted solely because they lack geochemical anomalies. Heavy overburden could have masked response from mineralization. Also, the fact that the geophysical conductors in the grid area are caused by graphite, does not mean that all the others on the property are. One or more, may reflect sulphides.

Sangster (1980) has studied the characteristics of massive sulphide districts in Canada and Japan. He reports that the average district has a diameter of 32 km and hosts 12 deposits. Since only two or three deposits have been defined in the Adams Lake - Barriere Lakes District to date, one must expect that several more will be discovered. Therefore, any areas underlain by favourable geology warrant thorough exploration, particularly if they have known EM anomalies.

As in the case of the grid area, further exploration on the bulk of the claim block will have to be done by overburden drilling and basal till sampling. Thompson (1979) describes a program which tested airborne EM anomalies in drift covered area of favourable geology in Ontario. In this case initial overburden drilling with holes 150-450 m apart on lines 400-800 m apart in the direction of ice movement led to the discovery of a copper deposit. Harron et.al. (1987) reports the use of holes at 245-365 m spacings perpendicular to the ice direction to locate gold mineralization. Thus it seems that drilling a series of holes at similar spacings would adequately test the Cad property.

SECTION 8.0 - CONCLUSIONS AND RECOMMENDATIONS

The Cad property is situated in a geological environment which is known to host massive sulphide deposits. There is strong geochemical evidence to suggest that such a deposit may exist in the vicinity of the Russ Grid. Statistical considerations suggest that the rest of the claim block also warrants further exploration. Therefore, a two stage program is recommended to test the properties potential.

8.1 STAGE la

The first phase of the program consists of determining the direction of ice movement in the area followed by detailed overburden drilling to locate the source of the anomaly and reconnaissance drilling to explore the bulk of the property. A series of holes should be drilled at 50 m spacings on lines 100 m apart for 500 m in the up ice direction from the anomaly. A geologist should be on site to log the till and check the indications of mineralization. If the source is not found by this drilling, it should be searched for in other directions by drilling on a series of lines at 200 m spacings along the length of the anomaly. The lines should extend for 200 m to either side of the zone.

Standard geochemistry samples should be taken at 1.5 m intervals along the holes. Larger samples should be taken of the basal till and separated into a geochemistry sample and a pan concentrate. Short cores of the bedrock also should be taken from each hole.

All basal till geochemistry samples should be analysed using multi-element ICP methods. A heavy mineral, separate, should be prepared from the pan concentrates and it should also be analysed by ICP. The cores from the overburden drilling and the core from the 1987 diamond drilling should be

split and analysed by quantitative ICP methods to check for major element zoning. The diamond drill core should be sampled in 1.5 m sections.

If no indications of the source of the anomaly are discovered by this work the rest of the samples collected from the deailed drilling holes should be analysed in an effort to determine the direction of transport.

At the completion of the field work all available data should be compiled and interpreted and a report written with recommendations for further exploration.

Estimated cost of the program is \$102,800.00.

8.2 STAGE 1b

The bulk of the property should be tested at some time by a series of holes at 150 m spacings along lines spaced 500-800 m apart in the direction of ice movement. Basal till and bedrock samples should be taken and analysed as described previously. At the completion of the work a report should be prepared with recommendations for further exploration.

Estimated cost of the program is \$55,000.00.

8.3 <u>STAGE 2</u>

Depending on the results of the first program the second stage will consist of diamond drilling, additional overburden drilling, or both. For the purpose of this report it is assumed that Stage 2 will consist of 1,200 m of diamond drilling at a cost of \$170,200.00.

Neil B. Jorgensen, P.Eng. July 22, 1987 Revised July 30, 1987

SECTION 9.0 - COST ESTIMATES

9.1 STAGE la

| PERSONNEL COST: | |
|--|-----------------|
| Geologist and Assistant - 30 days at \$400/day | \$ 12,000.00 |
| Room and board - 30 days at \$120/day | \$ 3,600.00 |
| | \$ 15,600.00 |
| TRUCK RENTAL: | |
| 1 month at \$4,000/month including fuel | \$ 4,000.00 |
| OVERBURDEN DRILLING: | |
| *1020 m at \$34/m all inclusive | \$ 34,700.00 |
| Drill pad and access preparation | \$ 14,000.00 |
| | \$ 48,700.00 |
| GEOCHEMICAL AND ASSAY COSTS: | |
| *68 basal samples for \$7.75 for ICP | \$ 500.00 |
| *69 heavy mineral separates at \$21.75 for preparation and ICP | \$ 1,500.00 |
| *325 core samples at \$15.50 for Quantitative ICP | \$ 5,050.00 |
| 550 contingent till samples at \$7.75 for ICP | \$ 4,250.00 |
| | \$ 11,300.00 |
| FIELD SUPPLIES: | \$ 2,000.00 |
| COMMUNICATIONS: | \$ 400.00 |

| PREPARATION AND SUPERVISION | • | \$ 6,000.00 |
|-----------------------------|-----------|------------------|
| REPORT PREPARATION: | | \$ 5,500.00 |
| | SUB-TOTAL | \$ 93,500.00 |
| CONTINGENCIES AT 10 PERCENT | | \$ 9,300.00 |
| | TOTAL | \$ 102,800.00 |

* Includes 300 m, 20 cores, 20 basal till, 20 heavy minerals, 20 core ICP, contingent on not finding indications of anomaly's source in first pass drilling.

9.2 STAGE 1b

PERSONNEL COST:

| Geologist and Assistant - 15 days at \$400/day | \$ 6,000.00 |
|--|-----------------|
| Room and board - 15 days at \$120/day | \$ 1,800.00 |
| | \$ 7,800.00 |
| TRUCK RENTAL: | |
| 0.5 month at \$4,000/month including fuel | \$ 2,000.00 |
| OVERBURDEN DRILLING: | |
| *525 m at \$35/m all inclusive | \$ 18,400.00 |
| Drill pad and access preparation | \$ 8,000.00 |
| | \$ 26,400.00 |
| GEOCHEMICAL AND ASSAY COSTS: | |
| *35 basal samples for \$7.75 for ICP | \$ 300.00 |
| *35 heavy mineral separates at \$21.75 for preparation and ICP | \$ 750.00 |
| *35 core samples at \$15.50 for Quantitative ICP | \$ 550.00 |
| | \$ 1,600.00 |

| FIELD SUPPLIES: | | \$ 1,500.00 |
|------------------------------------|-----------|------------------|
| COMMUNICATIONS: | | \$ 200.00 |
| PREPARATION AND SUPERVISIC | DN: | \$ 5,000.00 |
| REPORT PREPARATION: | | \$ 5,500.00 |
| | SUB-TOTAL | \$ 50,000.00 |
| CONTINGENCIES AT 10 PERCEN | Т | \$ 5,000.00 |
| | TOTAL | \$ 55,000.00 |
| 9.3 <u>STAGE 2</u> | | |
| PERSONNEL COSTS: | | |
| Geologist - 30 days at \$250/day | | \$ 7,500.00 |
| Room and board - 30 days at \$70/d | lay | \$ 2,100.00 |
| | | \$ 9,600.00 |
| TRUCK RENTAL: | | |
| 1 month at \$4,000/month including | g fuel | \$ 4,000.00 |
| DIAMOND DRILLING: | | |
| 1,200 m at \$90/m all inclusive | | \$ 108,000.00 |
| Drill pad and access preparation | | \$ 10,000.00 |
| Core Splitting | | \$ 1,100.00 |
| | | \$ 119,100.00 |

| GEOCHEMICAL AND ASSAY CO | OSTS: | |
|------------------------------------|---------------|------------------|
| ICP of all core, 480 samples at \$ | 515.50/sample | \$ 7,450.00 |
| Assays, 30 samples at \$35 for Au | ı, Ag, Pb, Zn | |
| and Cu | | \$ 1,050.00 |
| | | \$ 8,500.00 |
| FIELD SUPPLIES: | | \$ 2,000.00 |
| COMMUNICATIONS: | | \$ 500.00 |
| PREPARATION AND SUPERVIS | ION: | \$ 4,500.00 |
| REPORT PREPARATION: | | \$ 6,500.00 |
| | SUB-TOTAL | \$ 154,700.00 |
| Contingencies at 10 percent | | \$ 15,500.00 |
| | TOTAL | \$ 170,200.00 |

SECTION 10.0 - STATEMENT OF QUALIFICATIONS

I, Neil B. Jorgensen do hereby certify that:

- 1. I am a resident of British Columbia and have been since 1964.
- 2. I graduated from the University of British Columbia in 1972 with a degree of Bachelor of Applied Science in Geological Engineering.
- 3. I am a member in good standing of the Association of Professional Engineers of British Columbia and the Canadian Institute of Mining and Metallurgy.
- 4. I have practiced my profession in mineral exploration since graduation.
- 5. I have no direct or indirect interest in either the Cad property or Merritech Development Corporation, nor do I expect to receive any.
- 6. I consent to the use of this Report on the Cad property in a prospectus or statement of material facts so long as it is not condensed or excerpted in any way such as to portray a meaning different from that of the whole.

Neil B. Jorgensen, P.Eng. July 22, 1987 Revised July 30, 1987

SECTION 11.0 - REFERENCES

Ashton, J.M., 1987; Personal Discussions and J.M. Ashton and Associates Maps showing Genie Results on the Cad Claims.

> Drilling Report on the Cad Property, Kamloops Mining Division, British Columbia; Minorex Consulting Ltd. Report; February 27, 1987.

> Prospecting for Deep Volcanogenic Ore; Canadian Institute of Mining and Metallurgy Bulletin, October 1981; pp. 55-64.

> Geochemical Methods for the Discovery of Blind Mineral Deposits, Parts 1 and 2; <u>Canadian Institute of Mining and</u> <u>Metallurgy Bulletin</u>, August 1982 and September 1982; pp. 123-142 and pp. 113-132.

> Geochemical and Geophysical Gold Exploration in the Timmins Area, Ontario: A Case History; <u>Canadian I-</u> <u>nstitute of Mining Metallurgy Bulletin</u>, February 1987; pp. 52-57.

> Rea Gold (Hilton) and Homestake Volcanogenic Sulphide-Barite Deposits,

Boldy, G.D.J., 1981;

Blanchflower, J.D., 1987;

Boyle, R.W., 1982;

Harron, G.A., 1987; Middleton, R.S., Durham, R.B.

Hoy, T. and Goutier, F., 1986; South Eastern British Columbia; <u>Geological Field Work</u>, 1985; B.C. Ministry of Energy, Mines and Petroleum Resources Paper 1986-1; pp. 52-68.

Mineral deposits of the Birk Creek Area: An Introduction to a Metallogenic Study of the Adams Plateau, Clearwater Area; <u>Geological Field Work</u>, <u>1984</u>; Ministry of Energy, Mines and Petroleum Resources Paper 1985; pp. 53-66.

McDonald, J.A., 1987;

Hoy, T., Goutier, F.,

and Godwin, C.I., 1985;

Noranda, 1986;

Preto, V.A., 1981;

Reaugh, L.W., 1987;

Reaugh, L.W., 1986;

Letter to Merritech Development Corporation from Esso Minerals Canada; July 6, 1987.

Contoured Soil Geochemistry Maps, Russ Grid; January 15, 1986.

Barriere Lakes - Adams Plateau Area; Geological Field Work, 1980; B.C. Ministry of Energy, Mines and Petroleum Resources Paper 1981-1; pp. 15-23.

News Release by Rea Gold Corporation; November 10, 1986.

News Release by Rea Gold Corporation; June 9, 1987. Sangster, D.F., 1980;

Schiarizza, P.A. and Preto, V.A., 1984;

Shevchenko, G., 1986;

Thompson, I.S., 1979;

Quantitative Characteristics of Volcanogenic Massive Sulphide Deposits; <u>Canadian Institute of Mining and Me-</u> <u>tallurgy Bulletin</u>, February 1980; pp. 74-81.

Geology of the Adams Plateau - Clearwater Area; B.C. Ministry of Energy, Mines and Petroleum Resources Preliminary Map 56, September, 1984.

Assessment Report, Diamond Drilling on the Cad Claim Group, Kamloops Mining Division; Noranda Exploration Company Report; February 1986.

Till Prospecting for Sulphide Ores in the Abitibi Clay Belt of Ontario; <u>Can-</u> <u>adian Institute of Mining and Metal-</u> <u>lurgy Bulletin, July 1979; pp. 65-72.</u>

APPENDIX I

1987 DIAMOND DRILL LOGS

| : | | | | | | | | | | | | | | | | | |
|--------|---|----------------------------|------------------|-----------------------------|--|--|---|-------------------------------|--|--|---|---------------|--|-----------|--|-----------|-----------|
| | RUSSEL | . CREEK | (CAD |) PROP | ERTY | | MINC | IREX CONS | ULTING LTD. | | | Hole No |). | CAD E | 17 - 1 | | |
| | Suite Vancou | ech De 808 - Iver, E | 475 Hd 1.C. (| ment C owe Sti V6C 2B | orpoi reet 3 | ration | | DRILL | LOG | | | Page | 1 | of | 3 | | |
| | Date Started: February 2, 1987 Date Completed: February 4, 1987 Collar Elevation: N/S Northing: 110+00 Easting: 144+50 Azimuth: 250 degrees Depth: 175.0 metres (574 Core Size: NQ | | | | 2, 1987 4, 1987 25 7es (574 fee | Depth Dip Angle Aziouth Collar - 450 2500 eet) | | | | | Project: N.T.S. Location: Drilling Co. Hole Type: Date Logged: Logged By: | | RUSSEL CR 82 M / 5 510 18' N J.T. Thom Drilling D.D.H. : J.D. Blan February | | EK (CA) 1190 : Diae d. hflowen 1987 | 52' W. | |
| | Fron feet | From metre | To feet | To metre | Rory | 1 | | Descri | ption | | Sample No. | Width feet | Au ppb | Ag ppm | Cu ppe | Pb ppe | Zn ppm |
| | 0.0 | 0.0 | 44.0 | 13.4 | 9 0 | Overburden | | | , | | | | | | | | |
| | 44.0 | 13.4 | 55.0 | 16.8 | 95 | Dark grey t with lamina | o black, ar e 35 degree | gillaceo es to cor | us sandstone e axis. Pyr | . Finely-bedded ite diss'ns. < 1) | | | | | | | |
| | 55.0 | 16.8 | 60.0 | 18.3 | 95 | Black graph graphitic w | itic argill ith < 1% py | ite. Fi write dis | nely-bedded s'ns. | and very | | | | | | | |
| | 60.0 | 18.3 | 71.0 | 21.6 | 95 | Dark grey t with lamina | o black, ar e 35 degree | gillaceo es to cor | us sandstone e axis. Pyr | . Finely-bedded ite diss'ns. < 1) | | | | | | | |
| | 71.0 | 21.6 | 75.5 | 23.0 | 95 | Black graph graphitic w | itic argill ith < 1% di | ite, Fi agenetic | nely-bedded pyrite diss | and very 'ns. | | | | | | | |
| | 75.5 | 23.0 | 99.0 | 30.2 | 90 | Interbedded sandstone. bedding. | graphitic Shearing i | argillit s subpar | e and argill allel to the | aceous 35 to 40 degree | 90-99 | 9 | <5 | 0.0 | 89 | 2 | 129 |
| | 99.0 | 30.2 | 106.0 | 32.3 | >95 | Medium brow and 40 degr | n, massive ee to core | sandston axis bed | e with < 12 ding. | pyrite diss'ns. | | | | | | | |
| | 106.0 | 32.3 | | | (4 0 | 20 degree t | o core axis | shear c | ontact. | | | | | | | | |
| | 106.0 | 32.3 | 124.0 | 37.8 | 90 | Black graph Coarse-grai argillaceou | itic argill ned (1 cm.) s sections. | ite with diagene Schist | tuffaceous tic pyrite d osity is 25o | and grit laminae iss'ns. in the to 30o to c.a. | | | | | | | |
| | 124.0 | 37.8 | 125.0 | 38.1 | 95 | Dark grey s | iltstone_wi | th 3 % f | .g. pyrite d | iss'ns. | | | | | | | |
| | 125.0 | 38.1 | 157.5 | 48.0 | 95 | Black graph Coarse-grain argillaceou | itic argill ned (1 cm.) s sections. | ite with diagene Schist | tuffaceous tic pyrite d osity is 25o | and grit laminae iss'ns, in the to 30o to c.a. | | | | | | | • |
| к - | 157.5 | 48.0 | 174.5 | 53.2 | 95 | Medium grey disseminati | /black cher ons. Disti | ty tuff nct 35 d | with 1 cm.di egree to c.a | agenetic pyrite . bedding. | 160-170 | 10 | <5 | 0.0 | 87 | 1 | 2: |
| | 174.5 | 53.2 | 179.0 | 54.6 | 90 | Black graph: with 1 to 2 | itic argill X pyrite d | ite shea Iissemina | r zone, 45 d tions. | egr ees to c.a. | | | | | | | |

| ч. | RUSSE | CREE | K (CAD |) PROP | ERTY | - | MINOREX CONS | ULTING LTD. | | Hole No | ۱. | CAD (| 87 - 1 | | |
|----|-------------------------|----------------|---------------|----------------------------|-----------|---|--|---|-----------------------|---------------|----------------|-----------|-----------|-----------------|----|
| | Nerri Suite Vanco | BOB - Uver, | 475 H B.C. | went C owe St V6C 3B | reet 3 | ation . | DRILL | LOG | | Page | 2 | of : | 2 | | |
| • | From feet | Froa | To feet | To aetre | RCF) X | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Descri | ption | Sample No. | Width feet | Au Au Au | Ag Ppe | Cu ppe | РЪ РЪ рре | Zn |
| ° | 179.0 | 54.6 | 180.5 | 55.0 | 90 | Black graphiti rich sections. | c argillite grad Bedding is 30o | ing downward to tuffaceous to core axis. | - | | | | | | |
| | 180.5 | 55.0 | 195.5 | 59.6 | 95 | Medium brown, pyrite diss'ns features - rip | mafic waterlain : . Good waterlain ple marks and fla | tuff with 1 to 5 % (local) n sedimentary depositional ame structures. | y) 190-195 | 5 | 5 | 0.2 | 122 | 40 | 51 |
| | 195.5 | 59.6 | 205.5 | 62.6 | 80 | Black graphiti disseminations | c argillite with • Very schistos | 0.5 cm. diagenetic pyrite e 40o to core axis. | | | | | | | |
| | 205.5 | 62.6 | 249.0 | 75.9 | 95 | Nedium brown, | mafic waterlain (| tuff with 1 to 5 % py diss | 'ns. | | | | | | |
| | 249.0 | 75.9 | 353.5 | 107.7 | >90 | Medium grey to graphitic argi is common. Fi White quartz v Increased Py d | green, interbed llite and tuffac ne-grained pyrite eining @ 100.9 to iss'ns. from 10 | ded sandstone, siltstone, eous laminae. Graded bedd: e diss'ns. << 1 to 1 %. o 101.0 m. 30 degrees to c 3.6 to 106.1 m. | 340-350 ing .a. | 10 | <5 | 0.1 | 55 | 10 | 64 |
| | 353.5 | 107.7 | 389.0 | 118.6 | 95 | Medium green, and chlorite a | poorly bedded sam lteration. | ndstone with pervasive epi | dote | | | | | | |
| | 389.0 | 118.6 | 398.0 | 121.3 | 90 | Black, finely- laminae. Diag | bedded graphitic enetic pyrite dis | argillite with thin silts ss'ns. < 1% (< 1 cm.). | tone | | | | | | |
| | 398.0 | 121.3 | 421.0 | 128.3 | 95 | Medium grey to tuffaceous com throughout sec | green, finely-1; ponent. Fine-gra tion. | aminated cherty siltstone (ained pyrite diss'ns. (< 1) | with X) | | | | | | • |
| | 421.0 | 128.3 | 434.0 | 132.3 | 95 | Black, graphit white quartz f | ic argillite with racture fillings | h distinct 550 bedding. Lo parallel to schistosity. | ocal | | | | | | |
| | 434.0 | 132.3 | 499.0 | 152.1 | 95 | Medium grey to schistosity. | green siltstone | with 60g to 65g to core as | XİS | | | | | | |
| | 499.0 | 152.1 | | | | Indistinct str | atigraphic contac | ct. | | | | | | | |
| - | 499.0 | 152.1 | 516.0 | 157.3 | 95 | Black, graphit white quartz f | ic argillite with racture fillings | h distinct 550 bedding. Lo parallel to schistosity. | cal 500-505 | 5 | <5 | 0.2 | 61 | 26 | 58 |
| | 516.0 | 157.3 | | | | 55 degree to c | ore axis stratig | raphic contact. | • | | | | | | |
| | 516.0 | 157.3 | 533.0 | 162.5 | 95 | Medium grey to schistosity. | green siltstone | with 600 to 650 to core a | xis | | | | | | |
| | 533.0 | 162.5 | | | | Sharp 60o to c | ore axis stration | raphic contact. | | | | | | | |

| RUSSE | L CREEK | ((CAD |) PROP | ERTY | MINOREX CONSULTING LTD. | | Hole No | • | CAD E | 17 - 1 | | |
|-------------------------|-----------------------------|------------------------|----------------------------|--------------------|--|-------------------------------|---------------|---------------|-------------------|----------------|------------------|-------------------|
| Merri Suite Vanco | tech De 808 - uver, E | velop 475 H B.C. | ment C owe St V6C 3B | orpor reet 3 | DRILL LDG | | Page | | of | 3 | | |
| From feet | From | To feet | To metre | Rcry | / Description | Sample No. | Width feet | Au ppb | Ag pp= | Cu ppa | Pb ppe | Zn pp e |
| 533.0 | 162.5 | 539.5 | 164.4 | 90 | Black graphitic argillite with thin siltstone laminae at distinct 550 schistosity. Local, white, quartz fracture fillings parallel to schistosity. Local diagenetic pyrite disseminations {< 1%}. | | | | | | | |
| 539.5 | 164.4 | 553.0 | 168.6 | 95 | Medium grey to green siltstone with 600 to 650 schistosity. Local 1 - 4 % pyrite diss'ns. with minor associated chalco- pyrite and galena (545' to 550'). | 545-550 550-555 555-560 | 5 5 5 | 30 <5 5 | 1.0 0.6 0.2 | 73 35 38 | 323 165 38 | 100 97 90 |
| 553.0 | 168.6 | 574.0 | 175.0 | 90 | Black graphitic argillite with siltstone laminae. Schisto- city is 550 to core axis, and there is 1-3 % pyrite diss'n. | | | | | | | |
| 574.0 | 175.0 | | | | END OF HOLE (No dip survey) | | | | | | | |

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| RUSSE | | K (CAD |) PROP | ERTY | | MINOR | EX CONSULTING L | .TD. | | | Hole No | • | CAD E | 7 - 2 | | |
|--|---|-------------------------|----------------------------|-----------|--|---|---|---|-------------------------------------|---------------|---------------|-----------------------------|---|--|---|---------------------|
| Suite Vanco | tecn D 808 - uver, | evelop 475 H B.C. | ment L owe St V6C 2B | reet 3 | rætion | | DRILL LOG | | | | Page | 1 | of | 2 | | |
| Date S Date S Collar North: Eastin Azieut Depth: Core S | Date Started: February 4, 196 Date Completed: February 5, 196 Collar Elevation: N/S Northing: 111+50 Easting: 146+42 Azimuth: 250 degrees Depth: 98.8 metres (32 Core Size: NQ From From To To Rcry | | | | | Depth Dip Angle Azimuth Collar - 60o 250o et) Samp | | | | | | n: g Co. gged: By: | RUSSE 82 M 51o 1 J.T. Drill D.D.H J.D. Febru | CL CREE / 5 W B' N. Thomas ing Lt I. Blanch wary 10 | K (CAI 1190 S Dianc d. oflower), 1987 |)) 52' W. ond |
| From feet | From metre | To feet | To metre | Rcry | / | | Description | | | Sample No. | Width feet | Au ppb | Ag pp e | Cu pp e | Pb ppm | Zn pp e |
| 0.0 | 0.0 | 30.0 | 9.1 | | Överburden | | | | | ** | ****** | | | | | |
| 30.0 | 9.1 | 38.0 | 11.6 | 95 | Medium grey ch lamínae. Quit | nert brecci Le siliceou | a with siltsto us. Trace to < | ne and tuff 1 % pyrite | aceous diss'ns. | | | | | | | |
| 38.0 | 11.6 | 41.0 | 12.5 | 90 | Black graphiti disseminations | ic argillit 5. Schiste | e with 0.5 cm. Disity is 65 deg | diagenetic rees to cor | pyrite e axis. | | | | | | | |
| 41.0 | 12.5 | 45.5 | 13.9 | 95 | Interbedded sa ings. Ninor p | andstone ar Dyrite dise | nd siltstone wi seminations. é | th argillac 50 schistos | eous part- ity, | | | | | | | |
| 45.5 | 13.9 | 122.0 | 37.2 | 90 | Interbedded sa Finely-laminat rather well so parallel to 55 | andstone, s ted to thic orted. Loc So to 60o s | siltstone and g ckly-bedded met cal < 1 cm. pyr schistosity. | raphitic ar asedimentar ite diss'ns | gillite. y section, . Shearin | 100-110 g | 10 | <5 | 0.0 | 29 | 14 | 76 |
| 122.0 | 37.2 | 146.0 | 44.5 | 95 | Medium brown c veins @ 134' t not pyritized. | cherty tuff to 138' and | with white qu 1 144.5' to 146 | artz fractu 5'. Silicif | re filling ied but | 135-146 | 11 | <5 | 0.1 | 13 | 15 | 75 |
| 146.0 | 44.5 | 159.0 | 48.5 | 90 | Interbedded bl siltstone. Lo | lack graphi ocal diager | itic argillite metic pyrite di | and finely- ssemination | laminated s (< 1%). | | | | | | | |
| 159.0 | 48.5 | 185.0 | 56.4 | 95 | Black to dark argillite. Si schistosity. | grey, inte licified a | erbedded cherty and fractured p | tuff, silt arallel to | stone and 50o to 60o | | | | | | | |
| 185.0 | 56.4 | 214.0 | 65.2 | 90 | Interbedded bl siltstone. Lo | lack graphi ocal diager | itic argillite netic pyrite di | and finely- ssemination | laminated s (< 1%). | • | | | | | • | |
| 214.0 | 65.2 | | | | Sharp 55 degre | es to core | e axis stratigr | aphic conta | ct. | | | | | | | |
| 214.0 | 65.2 | 259.5 | 79.1 | 90 | Black to dark argillite. Si schistosity. | grey, inte licified a | erbedded cherty and fractured p | v tuff, silt parallel to | stone and 50o to 60o | | | | | | | |

| RUSSEL CREEK (CAD) PROPERTY | MINOREX CONSULTING LTD. | | Hole No. | | CAD B | 7 - 2 | | |
|--|---|---------------|---------------|-----------------|-----------|-------------------|-----------|-------------|
| <pre>Merritech Development Corpora Juite 808 - 475 Howe Street Vancouver, B.C. V6C 3B3</pre> | DRILL LOG | | Page | 2 | of | 2 | | |
| From From To To Rcry feet metre feet metre % | Description | Sample No. | Width feet | Au Au ppb | Ag ppa | Cu pp e | Pb ppe | Zn . ppa |
| 259.5 79.1 324.0 98.8 95 M | ledium grey to green siliceous interbedded cherty tuff with siltstone and argillite laminae. Mariposite, sericite, epidote and chlorite alteration 262'-264'. Locally pyritic 280'-290'(<= 1 %). Schistosity is 450 to 500 to core axis. | 280-290 | 10 | <5 | 0.0 | 30 | 2 | 25. |

324 98.8

END OF HOLE (No dip survey)

| RUSSE | L CREE | K (CAD |) PROP | ERTY | , | NIN | IOREX CON | SULTING LTD. | | | Hole No. | • | CAD E | 37 - 3 | | |
|---|---|-------------------------|--|--------------------------------------|---|---|---|--|--|---------------|--|-----------------------------|---|--|---|---------------------|
| Merri Suite Vanco | tech D 808 - uver, | evelop 475 H B.C. | eent C lowe St V6C 2B | orpa reet 3 | ration | | DRILL | LOG | | | Page | 1 | of | 3 | | |
| Date Date Colla North Easti Azimu Depth Core | starte Comple r Elev ing: ng: th: Size: | d: ted: ation: | Febru Febru N/S 106+9 145+6 250 di 120.4 NQ | ary ary 4 0.5 egre et | 5, 1987 7, 1987 es res (395 fee | Depth Collar t) | | Dip Angle - 45o | Azieuth 250o | | Project N.T.S. Location Drillinn Hole Typ Date Lo Logged 1 | n: g Co. gged: By: | RUSSE 82 M 510 1 J.T. Drill D.D.H J.D. Febru | EL CREE / 5 W 18' N. Thomas ling Lt 1. Blanct Lary 11 | K (CAL 1190 5 Dianc d. nflower 1, 1987 |) ;2 ' W. ind |
| Froa feet | From metre | To feet | To metre | Rcr X | y | | Descr | iption | | Sample No. | Width feet | Au ppb | Ag pp n | Cu pp n | РЬ рр е | Zn pp n |
| 0.0 | 0.0 | 10.0 | 3.0 | | Overburden | | | ~~~~~ | | | | | | | ***** | |
| 10.0 | 3.0 | 11.0 | 3.4 | 90 | Light to me siltstone. | dium brown Schistosi | , finely ty is 50 | -laminated wat o to core axis | erlain tuff and | 10-20 | 10 | <5 | 0.1 | 46 | 4 | 79 |
| 11.0 | 3.4 | 18.5 | 5.6 | 90 | Orange, wel veins appro | l-sorted s ximately O | andstone .3 m. ap | with (1 cm. art. 50o schi | white quartz stosity. | | | | | | | |
| 18.5 | 5.6 | 19.5 | 5.9 | 90 | Orange silt and 450 bed | stone/sand ding. | stone wi | th 2 to 3 mm. | pyrite diss'ns. | | | | | | | |
| 19.5 | 5.9 | 22.0 | 6.7 | 95 | Orange, wel veins appro | l-sorted s ximately O | andstone .3 m. ap | with < 1 cm. art. 50o schi | white quartz stosity. | | | | | | | |
| 22.0 | 6.7 | 30.0 | 9.1 | 95 | Medium grey pervasive e disseminatio | to green pidote and ons. | siltston chlorit | e/waterlain ma e alteration, | fic tuff with and trace pyrite | | | | | | | |
| 30.0 | 9.1 | 33.0 | 10.1 | 95 | Light green above with dissemination | , mafic wa distinct 4 ons. | terlain 5o to 50 | tuff. More si o schistosity. | liceous than Trace pyrite | | | | | | | |
| 33.0 | 10.1 | 104.0 | 31.7 | 90 | Light to ae siltstone w and bedding ive epidote | dium green ith local attitudes and chlor | , interb diagenet are 40o ite alte | edded waterlai ic pyrite diss to 500 to cor ration (lower | n ash tuff and 'ns. Schistosity e axis. Pervas- greenschist). | | | | | | | |
| 104.0 | 31.7 | 116.0 | 35.4 | 95 | Medium grey hanging wal | , cherty t l and foot | uff with wall co | no pyrite dis ntacts. | s'ns. Sharp | 100-110 | 10 | <5 | 0.0 | 39 | 15 | 68 |
| 116.0 | 35.4 | 134.0 | 40.8 | 95 | Light to men siltstone w and bedding ive epidote | dium green ith local attitudes and chlor | , interb diagenet are 40o ite alte | edded waterlai ic pyrite diss to 500 to cor ration (lower | n ash tuff and 'ns. Schistosity e axis. Pervas- greenschist). | | | | | | | |
| 134.0 | 40.B | 144.0 | 43.9 | 90 | Dark grey to stone, cher Local diagen | o black, i t and grap netic pyri | nterbedd hitic ar te disse | ed waterlain a gillite with 3 minations (< 1 | sh tuff, silt- 550 - 450 bedding. %). | | | | | | | |

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3 54

| RUSSE | L CREE | K (CA | D) PRO | PERTY | MINOREX CONSULTING LTD. | | Hole No | • | CAD 8 | 7 - 3 | | |
|-------|---------------|-------------|------------------|-------------|--|--------------------|---------------|-----------|-------------------|-----------|-------------------|------------|
| Suite | BOB - | 475 B.C. | Howe St V6C 3 | treet B3 | DRILL LOG | | Page | 2 | of | 3 | | |
| From | From Metre | To fee | To To | Rcr Rcr | y Description | Sample No. | Width feet | Au ppb | Ag pp e | Cu ppe | Pb pp e | Zn. ppe |
| 144.0 | 43.9 | 163. | 5 49.1 | 3 90 | Dark grey to black, interbedded siltstone and graphitic argillite. | 160-170 | 10 | <5 | 0.0 | 15 | 18 | 82 |
| 163.5 | 49.8 | 195. | 0 59.4 | 4 90 | Black graphitic argillite with siltstone partings. Shearin is parallel to 250 schistosity. More siliceous or cherty a 185' - 196'. | g t | | | | | | |
| 195.0 | 59.4 | 205. | 0 62.5 | 5 95 | Medium grey, cherty waterlain ash tuff/siltstone with 450 shearing and white quartz fracture fillings (202' - 205'). | | | | | | | |
| 205.0 | 62.5 | 215. | 0 65.9 | 5 20 | Black graphitic argillite with cherty siltstone partings. Poor recovery (20 %). Local diagenetic pyrite diss'ns.(<1%) | • | | | | | | |
| 215.0 | 65.5 | 219. | 0 65.8 | 3 50 | Medium grey, waterlain ash tuff with local pyrite diss'ns. and 350 bedding. | | | | | | | |
| 219.0 | 66.8 | 239. | 0 72.6 | 3 90 | Black graphitic argillite with siltstone partings and distinct 250 to 300 schistosity and bedding. Becomes more siliceous and pyritic (1 to 3 %) with depth. | 235-240 | 5 | <5 | 0.0 | 118 | 10 | 135 |
| 239.0 | 72.8 | 247. | 0 75.9 | 7 90 | Black, siliceous and argillaceous siltstone with thin pyritic (+/- cp ?) bands @ 239.5'. White quartz fracture filling veinlets @ 246' to 249', parallel to 30o to 40o schistosity. | 240-245 | 5 | <5 | 0.1 | 85 | 12 | 106 |
| 249.0 | 75.9 | 298.0 | 90.8 | 3 90 | Black graphitic argillite with thin siltstone and sandstone partings. Local < 1 cm. diagenetic pyrite diss'ns. Beddin and schistosity are 40o to 45o to core axis. | 295-300 g | 5 | <5 | 0.2 | 06 | 19 | 141 |
| 298.0 | 90.8 | 301.0 | 0 91.7 | 90 | Dark grey to black, interbedded siltstone and graphitic argillite. | 300-305 | 5 | <5 | 0.2 | 37 | 23 | 176 |
| 301.0 | 91.7 | 314.5 | 5 95.9 | 9 95 | Medium grey, interbedded siltstone and well-sorted sandston with thin argillite partings. Pyrite diss'ns. decrease 305 to 314'. | e | | | | | | |
| 314.5 | 95.9 | | | | Sharp 30o stratigraphic contact. | | | | | | | |
| 314.5 | 95.9 | 337. | 5 102.9 | 9 90 | Black, graphitic argillite with siltstone partings. Quite pyritic, locally parallel to 250 to 300 schistosity. | 325-330 330-335 | 5 5 | <5 <5 | 0.1 0.2 | 40 92 | 22 18 | 57* 81 |
| 337.5 | 102.9 | | | | Sharp 35o stratigraphic contact. | | | | | | | • |
| 337.5 | 102.9 | 346,(| 0 105.5 | 95 | Medium grey to green, well sorted, massive sandstone with a tuffaceous component. Trace pyrite disseminations and 450 schistosity. | | | | | | | |

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| RUSSEL CREEK (CAD) PROPERTY | MINGREX CONSULTING LTD. | | Hole No | | CAD 8 | 17 - 3 | | |
|--|---|---------------|---------------|--------------------|-----------|-----------|-------------------|-------------------|
| Merritech Development Corpor Suite 808 - 475 Howe Street Vancouver, B.C. V6C 3B3 | ation DRILL LOG | | Page 3 | | of | 3 | | |
| From From To To Rcry feet metre feet metre % | Description | Sample No. | Width feet | ===== Аu ppb | Ag ppe | Cu ppe | Pb pp e | Zn pp n |
| 346.0 105.5 | Sharp 450 shear contact. | | | | | | | |
| 346.0 105.5 395.0 120.4 90 | Black, graphitic argillite with siltstone laminae and part- ings. Well fractured parallel to 300 to 450 schistosity. Local diagenetic pyrite diss'ns. in the more argillaceous sections. | 380-385 | 5 | <5 | 0.2 | 60 | 15 | 52 |
| 395.0 120.4 | END OF HOLE (No dip survey and no final block marker). | | | | | | | |

CERTIFICATE OF THE ISSUER

The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by the Securities Act and its regulations.

Dated: September 15, 1987

um FEREYDOUN HADAD Chief Executive Officer

A. BIAGION ROBERT

Chief Financial Officer

MANSOUR MOTAMEDI Director

ON BEHALF OF THE BOARD OF DIRECTORS BRIAN W. SAMERON

Director

ON BEHALF OF THE PROMOTERS

MANSOUR MOTAMEDI Promoter

BRIAN W. CAMERON Promoter

3114 INVESTMENTS LTD. Promoter

KENNETH D. REEVES

CERTIFICATE OF THE AGENT

To the best of our knowledge, information and belief the foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by the Securities Act and its regulations.

Dated: September 15, 1987.

YORKTON SECURITIES INC.