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Title:	The Moly May Stock: Geological and Drilling Report.
Claims:	Moly May 2936(4) 10 units Beatrice 2937(4) 2 post Moly Fr. 1 2938(4) 2 post Moly May 2 3135(7) 8 units Moly May 3 3136(7) 20 units
Mining Divison:	Skeena
NTS Location:	55° 21'N 129° 48'W Map 103 P/5 W.
Owner:	Enfield Resources Inc.
Consultant:	Gregory Geotechnical Consultants Ltd.
Author:	John Affleck, B.Sc.
Work Done:	April 28 - July 11, 1982

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,898

Sept/82

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SUMMARY

The exploration program conducted for Enfield Resources, Inc. in 1982 comprised two aspects; surface work and drilling. Detailed and reconnaissance mapping was conducted on the Moly May claims from April 28 to July 11, 1982. Although mapping continued throughout the program, it was the focus of attention during May, before the drill arrived on the property. A grid was cut and surveyed during May and June, 1982. The drill arrived on the property on May 29th, 1982 and operated until July 8.

The Moly May stock contains both a densely fractured and hydrothermally altered rim and a relatively massive, unaltered quartz monzonite core zore. The lithological and structural differences of these two areas provide good evidence for two phases of cooling within the pluton. Visible mineralization and stockwork development is concentrated in three general areas within the altered outer rim that forms an arc peripherial to the core zone. The three altered and mineralized areas are referred to as the East, West and South Zones. The South Zone, an area containing four major molybdenite showings, was discovered by the writer during the 1982 program.

Surface exposure of the Moly May stock is very close to the roof of the pluton. The molybdenum mineralization present in high-grade showings in the East, West and South Zones has been deposited very high in a thermal system. High grade molybdenite

and gold mineralization in the East Zone has been interpreted to be contained within late-stage pegmatite-rich blowouts, which infill large tension gashes. The grade and continuity of the molybdenite mineralization at depth in both the South and West Zones has yet to be determined.

The writer recommends that the survey grid be extended to cover the entire pluton in order to conduct detailed geophysical surveys. A very important relationship that has yet to be established is that of molybdenite mineralization to stockwork development at depth. This relationship should be investigated by diamond drilling in both the South and West Zones. The writer believes that the mineralized West Zone is the best target area in order to further test the grade and continuity of the mineralized porphyry system.

1.0 INTRODUCTION

1.1 Terms of Reference

Gregory Geotechnical Consultants Ltd. was retained by Enfield Resources Inc. as its geological consultant on the Moly May property during summer, 1982.

John Affleck, B.Sc.; the writer, conducted a geological mapping and sampling program on the property from April 28 to July 11, 1982. During that time, he also supervised a surveying program conducted by Kevin Pielak of Langley, B.C. and Joel Thomlinson of Vancouver, B.C., and a diamond drilling program conducted by Globe Drilling (1981) Ltd.

1.2 Location and Access

The Moly May property is located at 55° 21' north latitude and 129° 48' west longitude (Figure 1) in northern British Columbia near the southern end of the "Alaskan panhandle". It covers the base of the Bocking Peninsula and is 8 km south of the abandoned smelter town of Anyox, B.C.

The Anyox area is on the west side of Observatory Inlet across from the entrance to Alice Arm. About 17 km east of Anyox at the head of Alice Arm is Amax's molybdenum mine and the town of Kitsault. At present, Kitsault is a typical company town, organized to serve the needs of the company that operates it. However, a new road connecting Kitsault with B.C. Highway 37 has just been completed, making it more useful as a staging point for exploration and development near Anyox. Useful services at Kitsault include a scheduled daily flight from Prince Rupert via Trans Provincial Airways and a Bell 206 helicopter available

for charter from Vancouver Island Helicopters Ltd.

It was found most advantageous to supply and expedite the Enfield Resources camp from Prince Rupert, B.C. which is about 130 air km south of the property. All of the services intrinsic to a large city are available at Prince Rupert including both sea and air transportation. Air transport for the 1982 exploration program was provided by North Coast Air Services Ltd. Sea transport was provided by Wainwright Marine Services Ltd.

1.3 Terrain and Vegetation

Two distinct types of landform are developed in the study area on the Moly May claims from the erosion of the Hazelton Group metasediments and volcanic rocks and the Moly May quartz monzonite stock respectively.

Metasediments and volcanic rocks underlie the northwestern part of the Moly May claim and the Beatrice claim. They weather to form steep rounded hills on dip slopes and low bluffs on opposite slopes. Variously altered quartz monzonites of the Moly May stock underlie the rest of the study area. These rocks weather to form low rounded hills and ridges.

The area covered by the claims was extensively burned over at least twice during the twentieth century; most recently in the 1940's. Upon being stripped of its forest cover, the area underwent extensive soil erosion resulting in a topography of bald hills and flat, sediment-filled valleys in the area underlain by the Moly May Stock. From

examining the roots of charred stumps, it was deduced that even before the fires and subsequent erosion, the soil cover was very thin or absent over the pluton.

The original forest comprised cedar and fir, growing in dense groves in the valleys and sparsely covering the rest of the area. At present there is no significant forest cover on the Moly May stock and no soil capable of supporting one. Dense second-growth rain forest comprising pine, fir, alder and a diverse community of bushes and ferns covers the valleys on the flanks of the stock and the Hazelton Group rocks on the northwest margin of the claims. There is no commercial timber on the property nor is there any potential for generating any on the Moly May stock.

Elevations on the Bocking Peninsula range from sea level to 150 m ASL. The study area is covered with snow for only two months each year so the local streams must be fed by rainfall. Usually the rain is plentiful; about 300 cm per year is normal. However, drainage basins in the area are small and a dry spell of only one month is sufficient for the streams to stop running.

1.4 Property

The Moly May claim group comprises the following claims, all recorded in the Skeena Mining Division of British Columbia (Figure 2):

Moly May	2936(4)	10 units	staked by D. Javorsky, Apr. 1981
Beatrice	2937(4)	2 post	and vended to Enfield Resources Inc.
Moly Fr. 1	2938(4)	2 post	
Moly May 2	3135(7)	8 units	staked by J. Ostler for Enfield
Moly May 3	3136(7)	20 units	staked by D. Javorsky for Enfield July, 1981

It is believed by the writer that the Moly May claim group is owned by Enfield Resources Inc.

1.5 Previous Exploration

The Moly May stock was first explored over fifty years ago by prospectors who blasted several small pits in both the East and West zones, using hand steel and dynamite. All of the blast pits are located in silicified portions of the intrusive body where there was abundant pyrite formation. It is, therefore, assumed that the original prospecting was initiated in search of gold in molybdenite and pyrite-bearing veins.

During June, 1965, 26 claims were staked by D. Collison of Alice Arm. At that time, N. Carter of the B.C.D.M. examined the mineralized showings and wrote a short description covering them and the nearby rocks. Carter chip sampled the Moly Mac showing and reported it to contain 12.7% MoS_2 with a trace amount of copper and lead (Carter, 1965).

During November, 1981; C. Graf, P.Eng. (Graf, 1981) conducted a mineral exploration program for Enfield Resources Inc. on the claims. The program comprised prospecting, stream silt sampling, chip sampling of showings and geological mapping. The most exciting result of his work was his discovery of the West Zone which more than doubled the area of known mineralization.

During March, 1982; P. Peto, Ph.D. (Peto, 1982) reviewed the company's data and had pulps of the samples taken by Graf re-analyzed

in order to evaluate the nature of primary metal dispersion patterns associated with molybdenite mineralization on the Moly May claims. Both Graf and Peto recommended that a drilling program be initiated to test the grade and continuity of the mineralized porphyry system on the property.

2.0 GEOLOGY

2.1 Regional Geology

The Moly May property, situated on the northern coast of British Columbia is within the Coast Plutonic Complex (Douglas ed., 1970); where granitic batholiths have intruded Mesozoic-age metasediments and volcanic rocks of the Hazelton Group and the Bowser Basin Assemblage. The main period of intrusion was during the Early Tertiary age about 80 million years ago. At about 48 million years ago, porphyritic quartz monzonite stocks; referred to as the Alice Arm intrusions, intruded both the supercrustal rocks and the Coast Range plutons.

The Alice Arm intrusions commonly contain comparatively large amounts of molybdenum. The Moly May stock is one of the Alice Arm intrusions.

2.2 Property Geology

The Moly May property is underlain in part by a small (1.5 km) 48.3 million year old, molybdenum-bearing stock; one of the Alice Arm intrusions (Figure 3). The Alice Arm intrusions are characterized by their small size, their porphyritic texture and quartz monzonitic composition. They are texturally distinct from the equigranular satellitic stocks related to the Coast Plutonic Complex (Carter, 1974)

The Moly May stock is bordered on the east and south by Observatory Inlet. To the north and northwest are Jurassic-age Hazelton Group volcanic and metasedimentary rocks, into which the Moly May stock was

intruded. It is bordered on the west by an 80 million year old batholith of the Coast Plutonic Complex. The batholith underlies the Moly May 3 claim. It was not studied during the 1982 mapping project.

The Moly May Stock

The Moly May stock contains both an altered outer rim and a relatively unaltered quartz monzonite core zone. Most of the quartz monzonite consists of approximately 25% quartz, 70% feldspar (plagioclase=orthoclase) 4% biotite and/or muscovite and 1% accessory minerals, including hydrothermal garnet, pyrite and molybdenum.

Near surface, the quartz monzonite has undergone extensive weathering, probably during the Tertiary age when the northern coast of British Columbia had a subtropical climate. Diamond drill hole information has revealed that oxidation due to surface water penetration is pervasive to an average depth of 150 m . Consequently, the quartz monzonite visible on the surface is highly altered and devoid of some of its essential and accessory components.

Hydrothermal alteration has contributed to intense stockwork development that is pervasive throughout most of the outer part of the stock. Alteration and stockwork development is concentrated in three general areas that form an arc, peripheral to the core zone. Stockwork development culminated near the East, West and South zones (Figure 3).

The inner unaltered core zone is located mostly on the Moly May 2 claim, extending northward from the shore of Observatory Inlet.

The outline of the area designated as the unaltered core zone is somewhat spherical in shape. Core zone rocks have a bleached white appearance and although they have been intensly silicified, good stockwork development, comprising individually spaced quartz veins is absent. Iron and ferri-molybdite staining throughout the area is minimal.

The outer altered and mineralized shell lies in a semicircular arc, peripheral to the core zone. In general, this part of the pluton also has a bleached white colour; mostly due to hydrothermal alteration of plagioclase and orthoclase to kaolinite and sericite. Alteration of the pluton is very potassic (Peto, 1982). On weathered surfaces, these rocks have a leucocratic clay-like appearance commonly accompanied by paches of brown iron limonite stain. The limonite stain is a result of dis equilibrium within a potassic hydrothermal alteration system, where kinetics allow the reaction (iron transfer to the kaolinite) to occur. This reaction is most prevalent in those areas adjacent to quartz veins and increases in intensity outwards from the veins.

The quartz monzonite is also selectively altered by the formation of pyrite and molybdenite. Iron and ferri-molybdite staining is most noticable in the three areas previously defined as the East, West and South zones. Ferri-molybdite stain is a distinctive brilliant yellow colour and is always accompanied by red-brown iron pyrite stain. Pyrite is required to break down molybdenum to form the alteration product, ferri-molybdite.

Stockwork development seems to be related to stresses resulting

from differential cooling and shrinking of the inner and outer parts of the Moly May stock. It has developed into a very strongly sheeted N 10° to 40° W trending fracture system. Stockwork quartz veins vary in intensity. They are commonly 0.5 to 1 cm in width; however, widths of up to 50 cm were recorded. The lack of sulphide mineralization in quartz veins suggests that hydrothermal activity lacks molybdenite mineralization at surface. There is however, an exceptionally large number (16 found to date) of good to excellent high grade showings throughout the stockwork areas. Most of the showings seem to be concentrated by latter stage northeast-trending structures. The Moly May stock has just been unroofed. The exposed top of the stock is very high in the system. Molybdenum-bearing stockwork is probably more pervasive at depth.

Large quartzofeldspathic pegmatitic injections have resulted locally in various compositional changes throughout the pluton. There is a strong relationship between quartzofeldspathic pegmatitic injection and biotite enrichment within the intrusive host rock.

A broad area near the northern margin of the South Zone (Figure 3) is extensively biotite-enriched. Mapping has not yet revealed if biotite enrichment in this area is directly related to quartzofeldspathic injection or if it is actually a separate phase of intrusion.

Quartzofeldspathic pegmatitic injections are also abundant on the eastern side of the Moly May claim. Within the pegmatites, there is an irregular potassic-rich phase that is commonly associated with

molybdenite mineralization. The biotite phase probably is a feldspathic marginal phase of the pegmatite.

Visible molybdenite is present in biotite-rich rocks in two areas along the shore of Observatory Inlet. There, rocks of this phase are exposed in elongate bodies. They are oriented along zones of weakness trending N 65° E and have been later intruded by diabase dykes along the same general trend.

Metasedimentary and Volcanic Rocks

Metasedimentary and volcanic rocks in the area are part of the Jurassic-age Hazelton Group. The metasediments comprise interbedded siltstones, greywackes and sandstones. Greywacke is the most common sedimentary lithology on the Moly May claims. The volcanic rocks are andesitic.

Hazelton Group rocks are well exposed along the south shoreline of Sylvester Bay (Figure 3) and also along the northeast shoreline of the Bocking Peninsula. South of Sylvester Bay, they are interbedded greywackes and andesites that together form a well defined eugeosynclinal assemblage. The only sulphide minerals observed in these rocks are cubic pyrite in the andesites and very finely disseminated pyrrhotite in the hornfelsed siltstones and greywackes.

The Moly May stock has deformed and forcefully intruded the overlying Hazelton Group rocks. Subsequent uplift and erosion has caused the pluton to be just unroofed. Metasedimentary and volcanic rocks are found as xenoliths and roof pendants across the stock and

overlie the stock with low angle contacts. Good exposures of the intrusive contact are common near the East Zone.

In the East Zone there is a sedimentary roof pendant, 100 m long. The roof pendant is a synclinal keel-like structure and is observed on surface as large sedimentary screens separated by finger-like projections of the intrusive. Due to the injection of the host rock material, the sedimentary rocks within this area are thermally altered.

Late Stage Dykes

A variety of mafic to felsic dykes cut across all other rocks on the property. Their exact age is unknown. However, they cut across the quartz monzonite which is dated at about 48 million years old and are thus Late Tertiary age. Classified under the heading of "Late Stage Dykes" are the following: diabase, diorite, gabbro and quartz-feldspar porphyry.

The diabase and gabbroic dykes are essentially the same rock type. Diabase is distinguished from gabbro by its characteristic sub-ophitic texture. These dykes are best exposed on the eastern shoreline of the property, adjacent to Observatory Inlet. Their general trend is N 60° to 80° E and they form many of the northeast linaments observable from the air. Although some dykes are quite wide, the majority average one metre in width. Consequently, the majority are also fine-grained. The dyke rocks have cooled from very hot anhydrous melts with very little hydrothermal activity associated with them. From

their mineral composition and sharp contacts with the quzrtz monzonites , it can be concluded that the diabase and gabbroic dykes postdate molybdenite mineralization. Evidence for their relative age is confirmed by several 5 to 10 cm granitic pieces that have been stoped out of the intrusive body and incorporated into the dykes. Diabase and gabbroic dykes were intersected at numerous locations within the drill holes.

Diorite is seen at only one locality; on the shoreline at the south end of Sylvester Bay. It is present in a 10 m wide dyke that trends parallel to the sedimentary rocks which are trending N 20° W.

Like the diorite, the quartz-feldspar porphyry was also mapped in only one location, on the eastern shore of the property, adjacent to Observatory Inlet. It is 10 m wide and trends at N 35° E. The quartz-feldspar porphyry dyke is purple-grey in colour and is unmineralized. It was intersected at several places in the top 30 m of all three drill holes.

3.0 STRUCTURE

The oldest rocks on the Moly May claims are Jurassic-age meta-greywackes and andesites of the Hazelton Group. On the Bocking Peninsula, these rocks have been compressed into an open inclined syncline that trends northeast along the length of the peninsula.

During the Late Cretaceous, the area was deformed and intruded by Coast Range Intrusive Complex Batholiths. The 80 million year old granitic pluton on the Moly May 3 claim is associated with the complex.

With regard to exploration on the Moly May claims, the most significant tectonic event recorded in rocks on the property was the forceful intrusion of the Moly May stock into overlying strata. Subsequently, the stock differentially cooled and fractured. It was intruded by mafic to felsic dykes and translated along at least two major faults. The pluton has been partly unroofed by the erosion of the Hazelton Group rocks.

3.1 Moly May Stock

The Moly May stock has been densly fractured (Figure 4). The earliest set of fractures are within the outer shell of the stock. They are oriented in a circular pattern around the core zone. These fractures seem to be shrinkage fractures, resulting from the contraction of the pluton as it cooled. Also observed in the outer shell are two sets of radial fractures. The two preferred radial directions form a conjugate set, probably the result of external compressional stresses. One of the fracture sets is pervasive throughout the outer

shell and forms a very strongly sheeted N 40° W trending fracture pattern. This fracture set is responsible for most of the stockwork development. The majority of the two fracture patterns are infilled with quartz; however, some remain unfilled. The writer assumed that the unfilled fractures were of the same age as the others but were closed at the time of fluid emplacement.

Large tension gashes infilled by massive quartzofeldspathic pegmatite, are present in two distinct forms; elongated and globular. The elongated pegmatites trend in a north-northeasterly direction and are abundant in the southern part of the East Zone (Figure 3). Globular pegmatites trend in a northerly direction and are abundant in the southwestern part of the pluton.

The highly fractured outer shell of the stock and the relatively unfractured inner core, provide good evidence for two stages of cooling. When stresses were ative within the pluton, the outer shell must have been brittle in order to sustain fracturing; whereas the inner core was plastic and thus not capable of sustaining brittle failure.

External stresses were active during the emplacement of the pluton and after cooling. Evidence for the latter is provided by large displacements along major faults. Two extensive fault zones cut across the Moly May stock (Figure 3,4) trending in a northeasterly direction. The semicircular shape of the outer shell (including mineralized and stockwork areas) is translated by these faults.

4.0 SURFACE MINERALIZATION

The nature of the mineralization may best be described by dealing with each of the three mineralized zones, the East Zone, the West Zone and the South Zone individually.

4.1 The East Zone

Detailed geological mapping and drill hole information have revealed two styles of mineralization in the East Zone; disseminated molybdenite and high-grade local showings of molybdenite and gold-bearing pyrite.

Small 1 mm molybdenite rosettes are randomly disseminated throughout the rock within 100 metres of an area that has been heavily intruded by large quartzofeldspathic pegmatitic masses. The grade averages .001 to .002% Mo. This molybdenite predates the high grade showings within the immediate area of the 1982 drill site.

The high grade molybdenite-gold showings are the result of accumulation within late stage pegmatitic masses. The local high grade showings are part of an irregular potassic-rich biotite phase of the pegmatites that contains molybdenite and gold mineralization.

Five major molybdenite showings are present within the East Zone. Two of which, including the Moly Mack, are located on the shoreline of Observatory Inlet. (Figure 3).

4.2 The West Zone

The West Zone is located on the Moly May claim, approximately

700 metres west of the East Zone. (Figure 3). The West Zone was previously thought to contain nine molybdenite showings consisting of disseminated (1.5mm) grains in altered and Fe-Mo oxide stained quartz monzonite. Detailed mapping has revealed that there are actually twelve such showings within the immediate area.

One of these newly discovered showings, now referred to as the West Zone Workings, consists of five old prospector's pits averaging 3 x 5 metres in size. The West Zone Workings occur in a very silicified portion of the quartz monzonite where two prominent fracture systems intersect. The mineralized fracture system containing visible molybdenite (1-5mm) grains, fresh 2mm cubic pyrite and abundant sericite trends roughly northeast-southwest, perpendicular to the general 320^{o} trend of stockwork veins.

This area was surveyed and adjoined to the 1982 survey grid. The surveyed lines were systematically chip sampled at 1m intervals and assayed for Mo and Au. Refer to (figure 5, Appendix B).

The other eleven showings in the West Zone area are very similar in geologic setting to the West Zone Workings. They are concentrated in altered zones averaging 10 to 15 metres in widths that trend about $N70^{o}E$.

4.3 The South Zone

The South Zone is situated on the southwest corner of the Moly May 2 claim (Figure 3). The South Zone is similar to the West Zone. It consists of heavily altered and Fe-Mo oxide stained quartz monzonite containing several molybdentie showings and extensive stockwork

development. Four major molybdenite showings were discovered by the writer during the 1982 mapping program.

The South Zone showings are concentrated in an area approximately 1200 metres to the southwest of the southern most line of the 1982 surveyed grid. The showings were considered to be out of the immediate area of interest of the 1982 diamond drill program and have yet to be precisely positioned by transit survey. The showings are referred to as: S_1, S_2, S_3, and S_4 (Figure 3).

These showings are very similar in geologic setting to the West Zone. S_3 is the most impressive showing in the South Zone. It is situated in an area approximately 5 m wide that has been intensely silicified. The silicified area weathers grey and is slightly raised in comparison to the surrounding outcrop. On surface, the grey silicified rock has a very vuggy texture and seems to be barren of sulphide mineralization. Below surface, the rock contains abundant (up to 10%) 5 mm molybdenite rosettes. The molybdenite has replaced biotite and is most concentrated in the unaltered garnetiferous portions.

The silicified zone containing this anomalous molybdenite mineralization is very shallow-dipping and strikes at 250°. This showing is on a cross-cutting structural feature that postdates local stockwork development in the South Zone.

Surface exposure of the Moly May stock is very close to the roof of the pluton. The molybdenum mineralization present in high grade showings in the East, West and South zones has been deposited very high in a thermal system. It is probable that the molybdenum

mineralization has been distilled from a deep source area within the stock and has localized on surface as high-level blowouts.

High-grade molybdenum mineralization seems to be related to late-stage external regional tectonic stresses, resulting in fluid migration through the Moly May stock. Accessory gold mineralization was also deposited at that time and was associated with molybdenum deposited in pegmatite tension gash fillings.

5.0 1982 EXPLORATION PROGRAM

The exploration program conducted for Enfield Resources Inc. in 1982 comprised two aspects; surface work and drilling. Detailed and reconnaissance mapping was conducted on the Moly May claims from April 28 to July 11, 1982. Although mapping continued throughout the program, it was the focus of attention during May, before the drill arrived on the property. A grid was cut and surveyed during May and June, 1982. The drill arrived on the property on May 29th, 1982 and operated until July 8.

5.1 Mapping and Surveying

In May, 1982, most of the property was mapped. Toward the end of the month, special attention was given to detailed mapping of the mineralized zones where alteration types and major fracture patterns were interpreted, The results of this work (Figures 3,4) are summarized in the Property Geology and Surface Mineralization sections of this report.

The surveyed grid was laid out by Kevin Pielak and his assistant Joel Thomlinson. The immediate use of this grid was to accurately locate the mineralized showings, the 1981 geochemical grid (Graf, 1981) and the 1982 drill site. The grid lends itself to easy extension, in order that an enlarged version may be used in the future to conduct accurate geophysical surveys (Figures 3,4).

5.2 Diamond Drilling

The diamond drill camp was established on May 29th, 1982.

Drill equipment arrived from Prince Rupert on a barge and was then moved via helicopter to a drill site in the East Zone.

The drill was put on the East Zone to test the continuity of high-grade molybdenite mineralization, to test the continuity of geological features at depth and to discern the relationship of molybdenite and gold mineralization. Three holes were splayed from the same setup so that the shape and extent of the mineralized zone could be visualized in three dimensions (Figures 6,7).

6.0 GEOLOGICAL MODEL

6.1 Evolution of the Moly May Stock

The Moly May stock contains both a densely fractured and hydrothermally altered rim and a relatively massive, unaltered quartz monzonite core zone. The lithological and structural differences of these two areas provide good evidence for two phases of cooling within the pluton.

During pluton emplacement, external stresses applied to the pluton created dense fracturing throughout the altered outer rim. The inner core zone was in a plastic state and could not sustain brittle fracturing. Open fractures created within the outer rim were later infilled by quartz and a strong stockwork was developed.

The interpretation of angles of both the shrinkage and the radial fractures has led to the development of a theoretical model to evaluate the orientation and magnitude of the regional stresses during emplacement of the Moly May stock, about 48 million years ago (Figure 4). The greatest compressive stress was oriented northeast-southwest. The medial compressive stress was oriented southwest-northeast. The least compressive stress was subvertical, with a southwesterly trend and a steep plunge of approximately 80° .

The regional stresses rotated slightly and changed in magnitude throughout the late Tertiary.

The regional tension created within the system led to block movement and translation along extensive northeast trending planes. Pre-existing fractures were re-opened and latter infilled by quartzo-feldspathic pegmatitic material.

The entire stock has been subsequently intruded along pre-existing trends of weakness by various Post-Tertiary age dykes. Most of the dykes are mafic and form many of the northeast linaments observable from the air.

6.2 Relationship of Plutonism to Mineralization

High-grade molybdenite showings contain disseminated molybdenite in quartz monzonite in the South and West Zones. In their present form, showings are very local. However, the molybdenite is believed to have originated from deep within the pluton. Mineralization in both of these zones lies peripheral to intensive stockwork development (Figure 3). Quartz veins in the stockwork contain no visible molybdenum. However, surface outcrop is representative of a very high level within the pluton. Molybdenum mineralization in the stockwork at depth may have supplied the metal to high-grade showings on surface.

The high-grade molybdenite showings in the East Zone are related to intense fracturing and pegmatitic veining. The quartzo-feldspathic pegmatites are associated with late stage translation and a period of tension in the late Tertiary. High gold values, obtained in the East Zone during the 1981 geochemical survey, are

also related and appear confined to the late stage pegmatitic phase of the Moly May stock.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The Moly May stock cooled in stages, resulting in an outer altered shell and a barren core zone. The outer altered shell contains both intensive stockwork development and numerous high-grade molybdenite showings that are concentrated in three separate zones. High-grade molybdenite and gold mineralization in the East Zone has been interpreted to be contained within late-stage pegmatite-rich blowouts, which infill large tension gashes. This high-grade mineralization has probably been distilled from a source at depth. The grade and continuity of the molybdenite mineralization at depth, in both the South and West Zones, has yet to be determined.

I recommend that the following programs be conducted in order to evaluate the Moly May property:

1. The 1982 survey grid should be extended to cover the entire pluton. Geophysical and electromagnetical surveys should then be conducted in order to outline and define mineralization at depth. An I.P. (induced polarization) survey would probably be the best definitive survey for this porphyry-style deposit. It could assist in the definition of a halo (high conductivity) around mineralization and also the barren core zone (high resistivity).
2. Detailed mapping and thorough prospecting should continue over the southern portion of the pluton.
3. A very important relationship that has yet to be established is that of molybdenite mineralization to stockwork development at depth.

This relationship should be investigated by diamond drilling in both the South and West Zones. The writer believes that the mineralized West Zone is the best target area in order to further test the grade and continuity of the mineralized porphyry system.

Vancouver, British Columbia
August 6, 1982.

Respectfully submitted

John Affleck, B.Sc.

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APPENDIX A

ASSAY PROCEDURE:

Silver & Gold: Fire Assay Method

0.5 assay ton sub samples are fused in litharge, carbonate and silicious fluxes. The lead button containing the precious metals is cupelled in a muffle furnace. The combined Ag & Au is weighed on a microbalance, parted annealed and again weighed as Au. The difference in the two weighing is Ag.

MOLYBDENUM ASSAY (Total)

A 2 gm sample of pulp is digested for 2 hours in a mixture of $HClO_4$ and HNO_3 acids. The beakers are then cooled and the acid solution is diluted with de-ionized water. This solution is heated, then transferred into a 250 ml volumetric flask containing 10 ml of $AlCl_3.7H_2O$ which is used as an ionization suppressent.

After cooling, the solution is mixed and analyzed on an A.A.5 spectrophotometer at 3133Å using a nitrous oxide-acetylene flame.

MOLYBDENUM ASSAY (MoO_3 Leach)

2 gms. of prepared sample pulp is leached by mixing for 1 min. in 25 ml of hot 25% HCl acid. After dilution with 25 ml of de-ionized water, this solution is filtered into a 250 ml volumetric flask containing 25 ml of 70 % $HClO_4$ acid and 10 ml of $AlCl_3.7H_2O$ solution. The mixed solution is then analyzed as above by atomic absorption procedures.

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CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

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CERTIFICATE OF ASSAY

TO : OSTLER, MR. JOHN

1902-1501 HARO STREET
VANCOUVER, B.C.
V6G 1G4

APPENDIX B

CERT. # : A8211672-001-A
INVOICE # : I8211672
DATE : 9-JUL-82
P.O. # : NONE
PROJECT #32-1

Sample description	Prep code	Mo %	Au FA oz/t				
4'-24'	207	0.003	0.007	--	--	--	--
24'-46'	207	<0.001	<0.003	--	--	--	--
46'-65'	207	<0.001	0.003	--	--	--	--
65'-83'	207	0.001	0.003	--	--	--	--
83'-103'	207	0.001	0.003	--	--	--	--
103'-123'	207	0.002	<0.003	--	--	--	--
123'-143'	207	0.002	<0.003	--	--	--	--
143'-163'	207	0.002	<0.003	--	--	--	--
163'-183'	207	0.001	0.003	--	--	--	--
183'-190.5'	207	<0.001	<0.003	--	--	--	--
190.5'-194.5'	207	0.002	<0.003	--	--	--	--
194.5'-215'	207	0.001	<0.003	--	--	--	--
215'-237'	207	0.001	<0.003	--	--	--	--
237'-255'	207	0.002	<0.003	--	--	--	--
255'-273'	207	0.001	<0.003	--	--	--	--
273'-293'	207	<0.001	<0.003	--	--	--	--
293'-315'	207	<0.001	0.003	--	--	--	--
315'-335'	207	<0.001	<0.003	--	--	--	--
335'-355'	207	<0.001	<0.003	--	--	--	--
355'-375'	207	<0.001	<0.003	--	--	--	--
375'-395'	207	<0.001	0.003	--	--	--	--
395'-415'	207	<0.001	<0.003	--	--	--	--
415'-435'	207	<0.001	<0.003	--	--	--	--
435'-455'	207	<0.001	<0.003	--	--	--	--
455'-475'	207	<0.001	<0.003	--	--	--	--
475'-495'	207	<0.001	<0.003	--	--	--	--
495'-515'	207	<0.001	<0.003	--	--	--	--
515'-535'	207	<0.001	<0.003	--	--	--	--

John Allen

B. Sweeten

Registered Assayer, Province of British Columbia

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CERTIFICATE OF ASSAY

TO : OSTLER, MR. JOHN

1902-1501 HARO STREET
VANCOUVER, B.C.
V6G 1G4

ATTN: ENFIELD RES.

CERT. # : A8211864-001-A
INVOICE # : I8211864
DATE : 14-JUL-82
P.O. # : NONE
82-1

Sample description	Prep code	Mo %					
DDH82-1 535-555	208	<0.001	--	--	--	--	--
DDH82-1 555-575	208	<0.001	--	--	--	--	--
DDH82-1 575-595	208	<0.001	--	--	--	--	--
DDH82-1 595-615	208	<0.001	--	--	--	--	--
DDH82-1 615-635	208	<0.001	--	--	--	--	--
DDH82-1 635-655	208	<0.001	--	--	--	--	--
DDH82-1 655-675	208	<0.001	--	--	--	--	--
DDH82-1 675-695	208	<0.001	--	--	--	--	--
DDH82-1 695-715	208	<0.001	--	--	--	--	--
DDH82-1 715-735	208	<0.001	--	--	--	--	--
DDH82-1 735-756	208	<0.001	--	--	--	--	--
DDH82-1 756-775	208	<0.001	--	--	--	--	--
DDH82-1 775-795	208	<0.001	--	--	--	--	--
DDH82-1 795-815	208	<0.001	--	--	--	--	--
DDH82-1 815-835	208	<0.001	--	--	--	--	--
DDH82-1 835-855	208	<0.001	--	--	--	--	--
DDH82-1 855-875	208	<0.001	--	--	--	--	--
DDH82-1 875-899	208	<0.001	--	--	--	--	--

John Allan

B. Stewart

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CERTIFICATE OF ASSAY

TO : OSTLER, MR. JOHN

1902-1501 HARO STREET
VANCOUVER, B.C.
V6G 1G4

ATTN: ENFIELD RES.

CERT. # : A8211865-001-A
INVOICE # : I8211865
DATE : 16-JUL-82
P.O. # : NONE
82-2

Sample description	Prep code	Mo %	Au FA oz/t				
DDH82-2 7-20	207	<0.001	<0.003	--	--	--	--
DDH82-2 20-40	207	<0.001	<0.003	--	--	--	--
DDH82-2 40-60	207	0.002	<0.003	--	--	--	--
DDH82-2 60-80	207	0.005	<0.003	--	--	--	--
DDH82-2 80-100	207	0.003	<0.003	--	--	--	--
DDH82-2 100-120	207	0.002	<0.003	--	--	--	--
DDH82-2 120-140	207	0.004	0.003	--	--	--	--
DDH82-2 140-160	207	0.002	<0.003	--	--	--	--
DDH82-2 160-180	207	0.002	<0.003	--	--	--	--
DDH82-2 180-200	207	0.001	<0.003	--	--	--	--
DDH82-2 200-220	207	0.001	<0.003	--	--	--	--
DDH82-2 220-240	207	0.002	<0.003	--	--	--	--
DDH82-2 240-260	207	0.002	0.003	--	--	--	--
DDH82-2 260-280	207	<0.001	<0.003	--	--	--	--
DDH82-2 280-300	207	<0.001	<0.003	--	--	--	--
DDH82-2 300-320	207	<0.001	<0.003	--	--	--	--
DDH82-2 320-340	207	<0.001	<0.003	--	--	--	--
DDH82-2 340-360	207	<0.001	0.003	--	--	--	--
DDH82-2 360-380	207	<0.001	<0.003	--	--	--	--
DDH82-2 380-400	207	<0.001	<0.003	--	--	--	--
DDH82-2 400-420	207	<0.001	<0.003	--	--	--	--
DDH82-2 420-440	207	<0.001	<0.003	--	--	--	--
DDH82-2 440-460	207	<0.001	<0.003	--	--	--	--

John Allen

B. Kwong

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CERTIFICATE OF ASSAY

TO : OSTLER, MR. JOHN

1902-1501 HARO STREET
VANCOUVER, B.C.
V6G 1G4

CERT. # : A8211978-001-A
INVOICE # : I8211978
DATE : 21-JUL-82
P.O. # : NONE
82-2

ATTN: ENFIELD RESOURCES

Sample description	Prep code	Mo %	Au FA oz/t				
82-2 460-480	207	<0.001	<0.003	--	--	--	--
82-2 480-500	207	<0.001	<0.003	--	--	--	--
82-2 500-520	207	0.001	<0.003	--	--	--	--
82-2 520-540	207	<0.001	<0.003	--	--	--	--
82-2 540-560	207	<0.001	<0.003	--	--	--	--
82-2 560-580	207	0.001	<0.003	--	--	--	--
82-2 580-600	207	0.001	<0.003	--	--	--	--
82-2 600-620	207	0.001	<0.003	--	--	--	--
82-2 620-640	207	0.001	<0.003	--	--	--	--
82-2 640-660	207	<0.001	<0.003	--	--	--	--
82-2 660-680	207	<0.001	<0.003	--	--	--	--
82-2 680-700	207	<0.001	<0.003	--	--	--	--

John A. Fletcher

Registered Assayer, Province of British Columbia

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CERTIFICATE OF ASSAY

TO : OSTLER, MR. JOHN

1902-1501 HARO STREET
VANCOUVER, B.C.
V6G 1G4

CERT. # : A8211979-001-A
INVOICE # : I8211979
DATE : 19-JUL-82
P.O. # : NONE
82-3

ATTN: ENFIELD RESOURCES

Sample description	Prep code	Mo %					
82-3 7-20	208	<0.001	--	--	--	--	--
82-3 20-40	208	0.002	--	--	--	--	--
82-3 40-60	208	<0.001	--	--	--	--	--
82-3 60-80	208	0.002	--	--	--	--	--
82-3 80-100	208	<0.001	--	--	--	--	--
82-3 100-120	208	<0.001	--	--	--	--	--
82-3 120-140	208	0.001	--	--	--	--	--
82-3 140-160	208	0.001	--	--	--	--	--
82-3 160-180	208	<0.001	--	--	--	--	--
82-3 180-200	208	<0.001	--	--	--	--	--
82-3 200-220	208	0.004	--	--	--	--	--
82-3 220-240	208	<0.001	--	--	--	--	--
82-3 240-260	208	<0.001	--	--	--	--	--
82-3 260-280	208	<0.001	--	--	--	--	--
82-3 280-300	208	0.001	--	--	--	--	--

John Ostler.

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CERTIFICATE OF ASSAY

TO : OSTLER, MR. JOHN

1902-1501 HARO STREET
VANCOUVER, B.C.
V6G 1G4

CERT. # : A8212050-001-A
INVOICE # : I8212050
DATE : 19-JUL-82
P.O. # : NONE
82-3

ATTN: ENFIELD RESOURCES

Sample description	Prep code	Mo %					
82-3 300-320	208	0.001	--	--	--	--	--
82-3 320-335.75	208	<0.001	--	--	--	--	--

John Affleck.

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CERTIFICATE OF ASSAY

TO : OSTLER, MR. JOHN

1902-1501 HARO STREET
VANCOUVER, B.C.
V6G 1G4

CERT. # : A8211673-001-A
INVOICE # : I8211673
DATE : 9-JUL-82
P.O. # : NONE
PROJECT#82-1

Sample description	Prep code	Mo %	Au FA oz/t				
WZW-12	207	0.002	<0.003	--	--	--	--
WZW-13	207	0.002	<0.003	--	--	--	--
WZW-14	207	<0.001	0.003	--	--	--	--
WZW-15	207	<0.001	<0.003	--	--	--	--
WZW-16	207	0.001	<0.003	--	--	--	--
WZW-17	207	<0.001	<0.003	--	--	--	--
WZW-18	207	0.130	0.003	--	--	--	--
WZW-19	207	0.650	0.005	--	--	--	--
WZW-20	207	0.070	0.003	--	--	--	--
WZW-21	207	0.745	0.005	--	--	--	--
WZW-22	207	0.024	0.003	--	--	--	--
WZW-23	207	0.078	0.005	--	--	--	--
WZW-24	207	0.005	0.003	--	--	--	--
WZW-25	207	0.004	0.003	--	--	--	--
WZW-26	207	0.004	0.008	--	--	--	--
WZW-27	207	0.003	0.034	--	--	--	--
WZW-28	207	0.004	0.005	--	--	--	--
WZW-34	207	0.078	0.003	--	--	--	--
WZW-35	207	0.002	<0.003	--	--	--	--
WZW-36	207	0.002	0.003	--	--	--	--
WZW-37	207	<0.001	0.003	--	--	--	--
WZW-38	207	<0.001	0.003	--	--	--	--

John Allen

Registered Assayer, Province of British Columbia

APPENDIX C

GRID LOCATIONS OF SHOWINGS	NAME DESIGNATED BY GRAF (1981)
96.5 N , 816.0 W	A
96.5 N , 856.1 W	B
25.1 N , 877.9 W	C
21.0 S , 825.4 W	D
64.8 S , 902.2 W	E
70.4 S , 937.9 W	F
36.4 N , 859.8 W	G
71.9 S , 869.5 W	H
131.5 N , 905.7 W	I
105.0 N , 8.3 W	E_1 Moly Mack
60.0 N , 87.9 W	E_2
42.3 N , 112.8 W	E_3
52.7 N , 137.8 W	E_4

	NAME DESIGNATED BY 1982 FIELD PARTY
331.8 S , 974 .6 W	FAIRBANKS SHOWING
6.8 S , 1112.7 W	WEST ZONE WORKINGS
102.3 S , 1014.8 W	THOMLINSON PITS
467.3 S , 160.9 W	MOLY MACK 2
950 S , 1600 W (approximate)	S_1
1009 S , 1709 W (approximate)	S_2
1028 S , 1747 W (approximate)	S_3
939 S , 1858 W (approximate)	S_4
522 S , 849 W (approximate)	

John A. Fleck,

APPENDIX D

COST OF 1982 PROGRAM

TRANSPORT		
Aircraft (C.P. Air, North Coast Air Ltd.)	10,913.31	
Helicopter (Vancouver Island Helicopters Ltd)	5,721.75	
Truck (Lease and Gasoline)	1,988.35	
Barge and Tug Boat (Wainwright Marine)	10,430.00	
Ferry-Water Taxi, Taxi, Overweight Baggage, etc.	620.27	29,673.68
ACCOMODATION		
for crews and company personnel in transit	819.81	819.81
GEOLOGY, ENGINEERING AND GEOTECHNICAL		
SURVEYS: WAGES AND FEES		
John Affleck, B.Sc., Consulting Geologist 90 days @ $187.00 a day	16,830.00	
Kevin Pielak, Surveyor and Geotechnician 84 days @ $105.00 a day	8,820.00	
Joel Thomlinson, Geotechnician 80 days @ $105.00 a day	8,400.00	34,050.00
DRILLING		
Globe Drilling (1981) Ltd.		
2000 ft. B.Q. Core for cash	48,389.85	
for 20,496 shares @ .90	18,446.40	66,836.25
CAMP AND PROGRAM SUPPORT		
Geotechnical camp equipment rental	900.00	
Meals and camp food	2,394.92	
Naphtha	97.44	
Camp supplies including sampling supplies	1,869.93	
Chain saw rental, 2 saws @ $150.00 a Mo. x 2	600.00	
Saw chains, parts, gas & oil, repairs	546.67	
Survey equipment	900.54	7,309.50
COMMUNICATIONS		
Rental of 2 SBX IIA radios 2 3/4 mo. @ $200.00 mo. x 2	1,100.00	
Radio-telephone charges	612.91	
Long distance telephone charges	49.57	1,762.48
ASSAY AND SAMPLE HANDLING	1,850.98	1,850.98
DRAFTING AND REPORT PRODUCTION	1,049.90	1,049.90
TOTAL COST OF 1982 SUMMER PROGRAM		$143,352.60

John Affleck, B.Sc.
Consulting Geologist

John Ostler, M.Sc., P.Geol.
President, Enfield Resources, Inc.

CERTIFICATE OF QUALIFICATION

I, John Affleck, of 2446 Rosewood Avenue, in the city of Ottawa, Province of Ontario, do hereby certify:

That I am a consulting geologist employed by Gregory Geotechnical Consultants Ltd. whose business address is 412 - 675 West Hastings Street, City of Vancouver, British Columbia;

That I am a graduate of Carleton University, Ottawa, Ontario, where I obtained my Bachelor of Science degree, with honours in Geology, in February 1982.

That I have been engaged in the study and practice of the geological profession for five years;

That this report is based on a personal examination of the Moly May claim group from April 28 to July 11, 1982;

That I have no interest in the Moly May claim group nor in the securities of Enfield Resources Inc.

Dated at Vancouver, British Columbia, this 6th day of August, 1982.

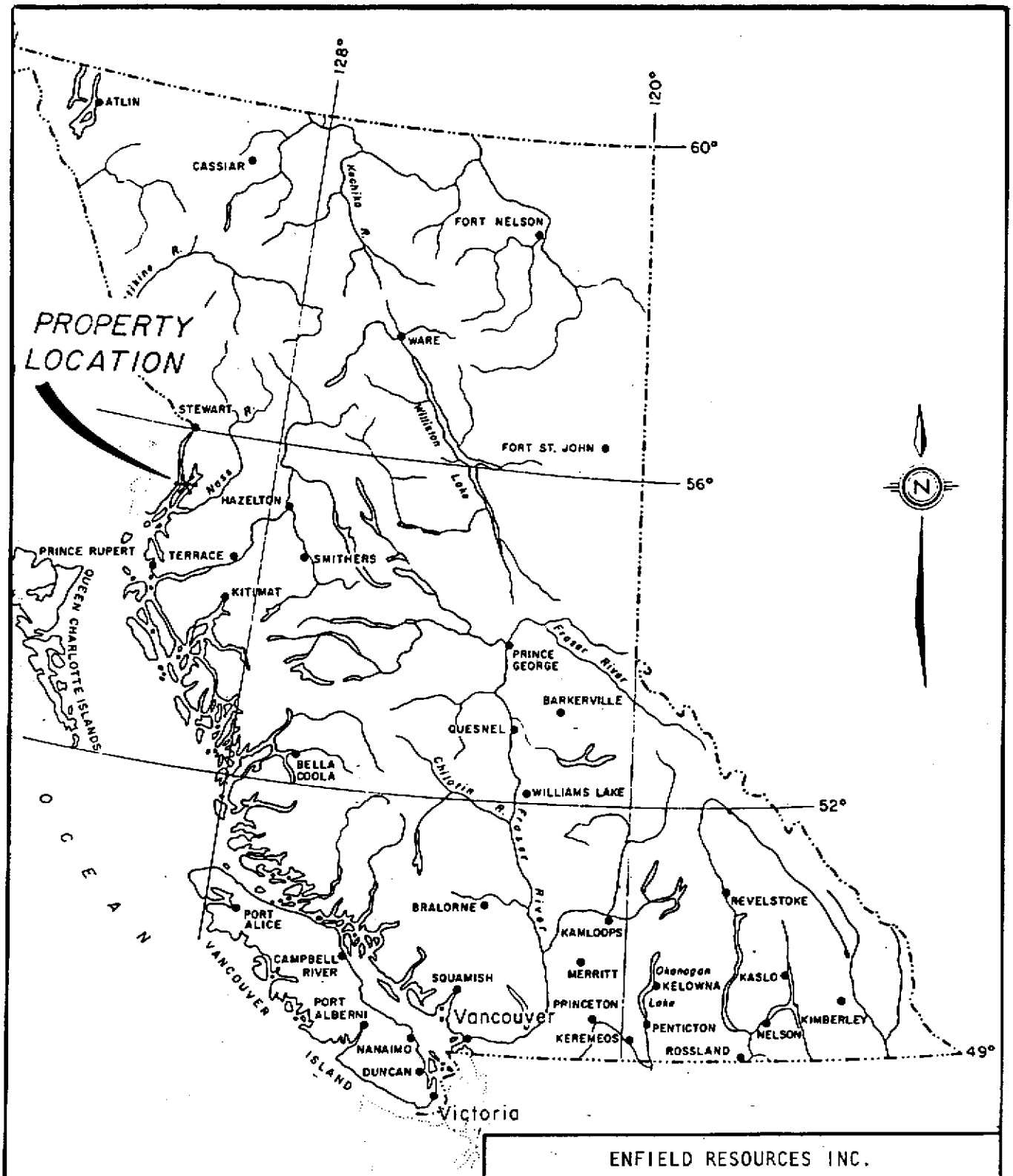
John Affleck, B.Sc.
Consulting Geologist

RELEASE

I John Affleck, B.Sc. do permit Enfield Resources Inc. to use my report of August 6, 1982 for public statements of material facts or to raise money.

Dated at Vancouver, British Columbia this 6th day of August, 1982.

John Affleck, B.Sc.



BRITISH COLUMBIA

Scale 1:7,500,000m.

ENFIELD RESOURCES INC.

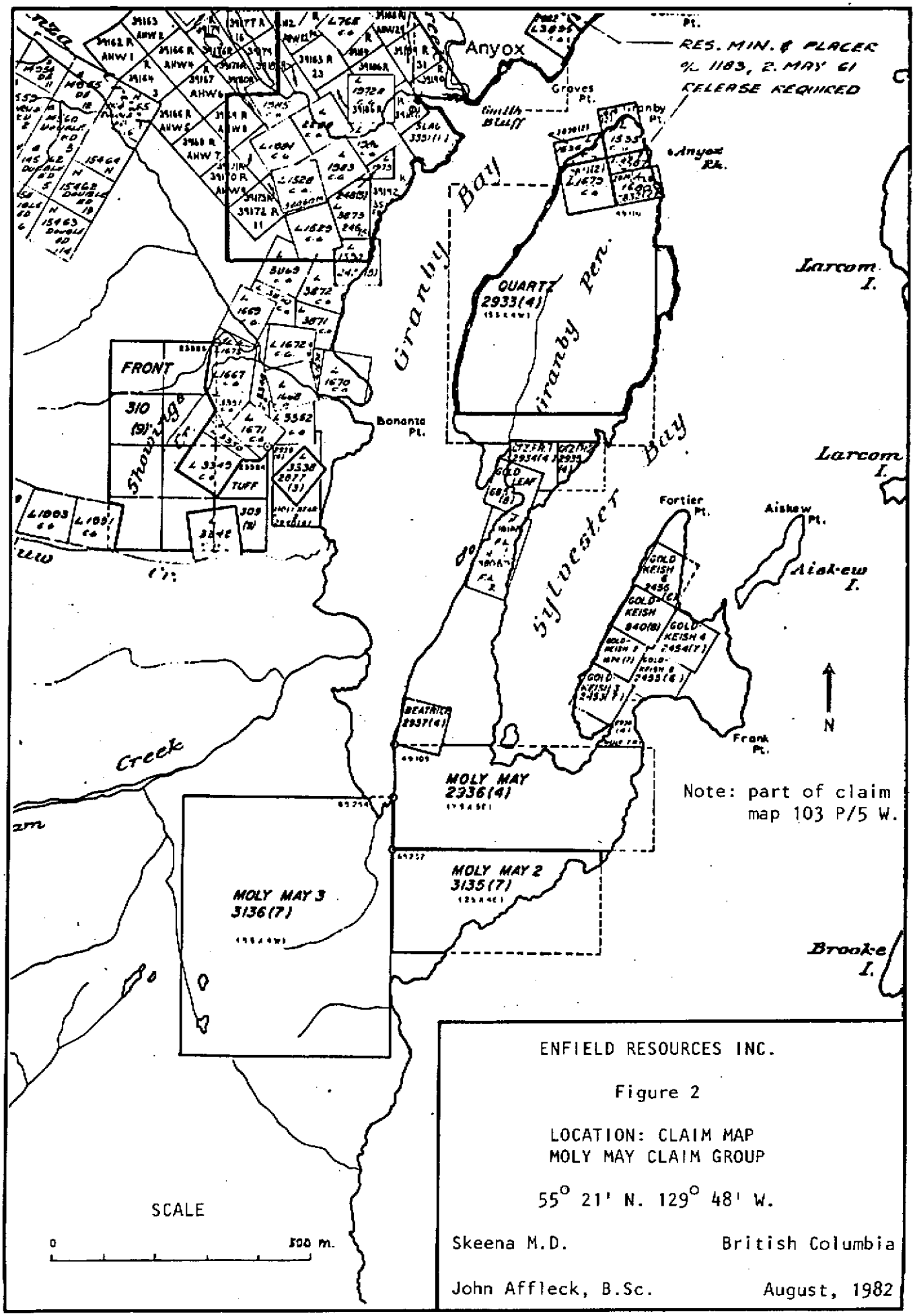
Figure 1

GENERAL LOCATION OF THE
MOLY MAY CLAIM GROUP

55° 21' N. 129° 48' W.

Skeena M.D. British Columbia

John Affleck, B.Sc. August, 1982



ENFIELD RESOURCES INC.

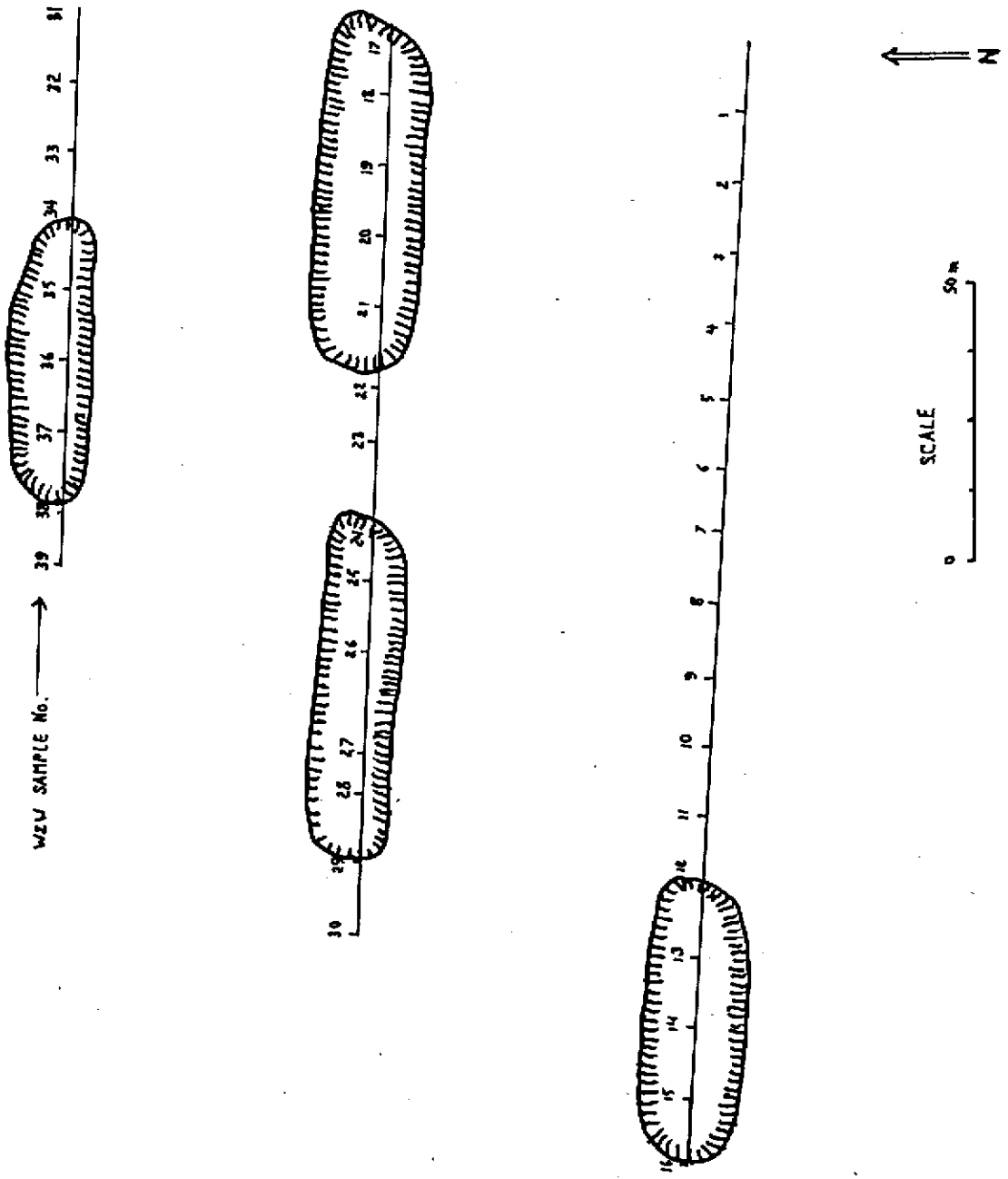
Figure 2

LOCATION: CLAIM MAP
MOLY MAY CLAIM GROUP

55° 21' N. 129° 48' W.

Skeena M.D. British Columbia

John Affleck, B.Sc. August, 1982



NOTE: FOR LOCATION SEE FIGURES 3,4

ENFIELD RESOURCES INC.

FIGURE 5

WEST ZONE WORKINGS

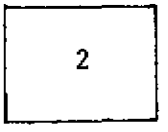
MOLY MAY CLAIM GROUP

SKEENA M.D. BRITISH COLUMBIA

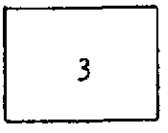
JOHN AFFLECK, B.Sc. AUGUST, 1982

LEGEND FOR FIGURES 6 AND 7

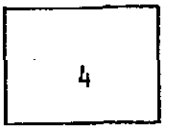
Massive smokey quartz



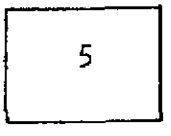
Quartz feldspar porphyry



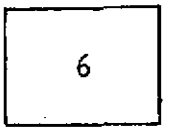
Diabase or gabbro



Biotite and/or muscovite quartz monzonite



Altered biotite quartz monzonite



Silicified and chloritized quartz monzonite

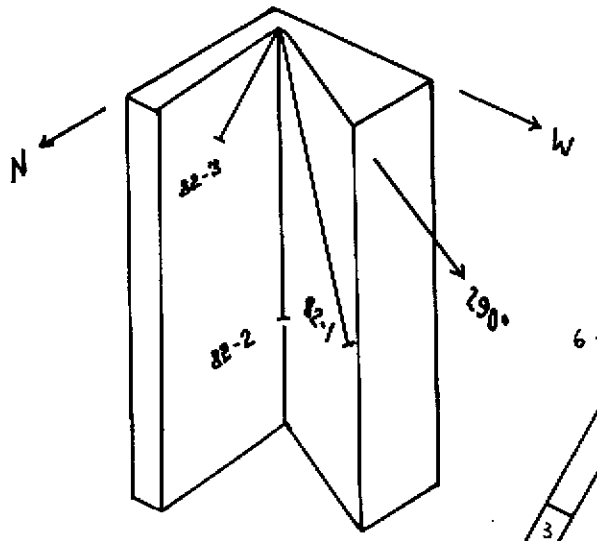
ENFIELD RESOURCES INC.

Figure 6

DDH 82-1 and 2
MOLY MAY CLAIM GROUP

55° 21' N. 129° 48' W.
Skeena M.D. British Columbia

John Affleck, B.Sc. August, 1982



Note: for lithologies see preceeding legend

for location see figures 3,4

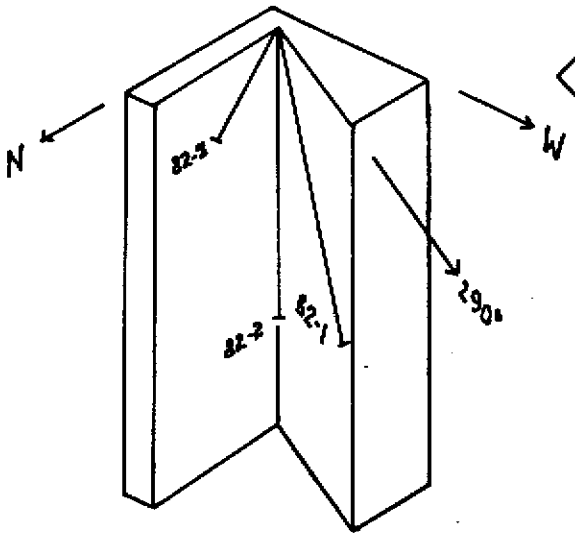
ENFIELD RESOURCES INC.

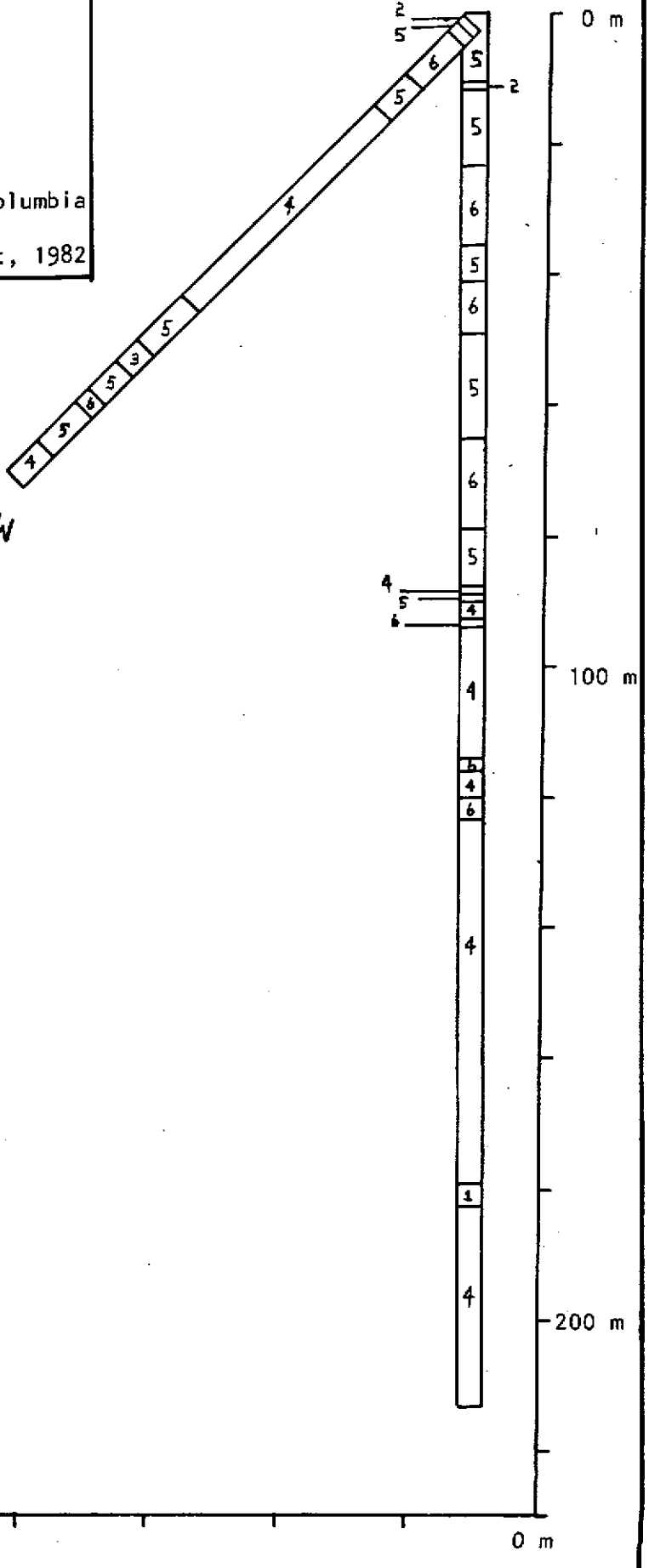
Figure 7

DDH 82-2 and 3
MOLY MAY CLAIM GROUP

55° 21' N. 129° 48' W.
Skeena M.D. British Columbia

John Affleck, B.Sc. August, 1982





Note: for lithologies see preceeding legend

for location see figures 3,4

John Affleck

DRILL LOGS

In 1982, three holes were drilled on the Moly May claim from one location in the East Zone near the shore of Observatory Inlet. The exact location of the drill holes is 032 m n., 090 m W. on the 1982 surveyed grid (Figure 3 in pocket) at an elevation of 6 m. A.S.L. The attitudes of the holes are as follows:

NO.	TREND	PLUNGE	LENGTH	CORE
82-1	290°	-60°	274 m	B.Q.
82-2	Vertical	-90°	213.4 m	B.Q.
82-3	360°	-45°	102.3 m	B.Q.

The core is stored in wood core boxes on the property about 50 m north of the drill site.

SUMMARY LOG

MOLY MAY CLAIM GROUP DDH 82-1

METRES	
0-1.2	CASING
1.2-2.7	BROKEN CHIPS OF VARIOUS COMPOSITION
2.7-4.3	ALTERED AND UNALTERED QUARTZ FELDSPAR PORPHYRY -unaltered segments contain more pyrite -1mm cubes up to 1% -Fe stained feldspars -moderate lineation at 45° to the core axis
4.3-14.0	ALTERED AND UNALTERED BIOTITE MUSCOVITE QUARTZ MONZONITE WITH ACCESSORY GARNET -majority of mica is muscovite - some sericite alteration -garnets replacing plagioclase -abundant pyrite occurs on fracture surfaces ~ 15% -pyrrhotite mineralization is present and in some places it is more abundant than pyrite -on the average po < 1% -minor ~.001% Mo
14.0-15.1	QUARTZ FELDSPAR PORPHYRY -Po>Py is seen as stringers 1mm wide parallel to the lineation at 60° -60% feldspar -phenocrysts range from 1 to 5mm
15.1-18.1	ALTERED MUSCOVITE BIOTITE QUARTZ MONZONITE WITH ACCESSORY GARNET -Fe oxidation and sericitization is pervasive throughout this section -molybdenum is present in 2mm rosettes ~.001% -mica accounts for approximately 2-5% Muscovite is greater than Biotite -garnet < 1% has a leached rusty red-brown appearance.
18.1-58.1	BIOTITE MUSCOVITE QUARTZ MONZONITE (CONTAINING QUARTZ VEINS AND ALTERED SEGMENTS) WITH ACCESSORY GARNET -fresh, 4mm pyrite grains are present on fracture surfaces - fractures at 30° to the core axis -1-2mm molybdenum rosettes are sporadically distributed throughout the section < .001%

John Allen.

METRES

-altered sections (Fe stained) at:
21.9 - 22.9
27.6 - 27.9
38.7 - 39.0
48.1 - 53.6
54.5 - 54.9

58.1-65.0 SILICIFIED AND CHLORITIZED QUARTZ MONZONITE
-1st 15cm consists of massive quartz
-py concentrated in quartz rich sections
-no Mo observed
-some stained sections

65.0-94.5 BIOTITE QUARTZ MONZONITE WITH ACCESSORY GARNET
-biotite content now up to 5 - 10%
-feldspars unaltered
-plagioclase now identifiable
-quartz 20-25%
-py mineralization is restricted to fracture surfaces
-altered sections at:
65.0 - 65.5
80.0 - 81.0
84.2 - 85.0
86.5 - 90.0
92.0 - 93.0
-silicified sections at:
69.5 - 72.1
74.2 - 75.0
78.0 - 79.2

94.5-100.8 SILICIFIED AND CHLORITIZED QUARTZ MONZONITE
-biotite content low < 1%
-no Mo mineralization
-moderate to heavy silicification

100.8-108.2 Fe STAINED BIOTITE QUARTZ MONZONITE
-staining is very pervasive
-fresh 5mm biotites
-minor 1% pyrite
-from 104.2 to 106.2 pervasively stained

108.2-111.7 SILICIFIED AND CHLORITIZED QUARTZ MONZONITE
-biotite now 1%
-pyrite concentrated along chloritized fractures
-fractures are of random orientation

John A. Fletcher

METRES

111.7-116.7	BIOTITE QUARTZ MONZONITE WITH ACCESSORY GARNET -last 1.5m of this section is heavily stained -fractures are at 50° to the core axis -pyrrhotite seen replacing pyrite -both py and po < 1% -no visible Mo mineralization
116.7-120.2	CHLORITIZED QUARTZ MONZONITE -biotite content < 1% -minor < .1% po -feldspar around 65% of the total composition -no Mo mineralization is observed
120.2-121.0	ALTERED BIOTITE QUARTZ MONZONITE -sulphides << .001% -similar to other biotite quartz monzonite section described earlier (111.7 - 116.7)
121.0-122.5	CHLORITIZED QUARTZ MONZONITE -this section is identical to the section between 116.7 - 120.2 -some quartz veining
122.5-146.7	BIOTITE QUARTZ MONZONITE WITH < .1% ACCESSORY GARNET -1st few metres - heavily Fe stain -total feldspar ~ 70%, 50/50 plag./Kspar -no Mo observed -po replacing py -at 146, 20cm quartz vein is present -fractures at 60° to the core axis
146.7-152.8	DIABASE -porphyritic texture developed from small stoped segments of the intrusive host rock -ferromagnesium minerals comprise roughly 2/3 of the total composition consisting of pyroxene, hornblende (possibly orthopyroxene) and minor biotite -chlorite alteration -very minor < .01% dissiminated py
152.8-165.0	ALTERED BIOTITE QUARTZ MONZONITE -no Mo is observed -from 157 to 158.9 the rock is full of cavities containing elongated prismatic quartz crystals and calcite

John Allen.

METRES	
165.0-188.3	BIOTITE QUARTZ MONZONITE -4% biotite,fresh,unaltered; 30% quartz, and 65% feldspar 60% Kspar and 40% Plag. -quartz veining at 169.5, 174.3 and 185.2m
188.3-189.0	FINE GRAINED GABBRO -massive and melanocratic -minor spinel? up to 1% -minor olivene up to 1% is seen throughout -2/3 pyroxene and amphibole, 1/3 calcic plag.
189.0-218.8	BIOTITE QUARTZ MONZONITE -mislatch at 189.9 to 192.9 and 1.5m of core lost -5% biotite, 35% quartz and 60% feldspar -some quartz veining -no metallic mineralization
218.8-219.8	FINE GRAINED GABBRO -minor 1mm cubic pyrite is seen dissiminated throughout $\angle$ 1% -contacts (upper and lower) at 53° to the core axis
219.8-228.9	BIOTITE QUARTZ MONZONITE -20 to 25% quartz -some chlorite alteration -pyrite concentrated along fracture surfaces parallel to the core axis
228.9-229.5	GABBRO -2/3 ferromagnesium minerals, 1/3 plagioclase -minor biotite -faint lineation at 45° to the core axis -sulphide mineralization is absent
229.5-240.9	BIOTITE QUARTZ MONZONITE -green biotites chlorite alteration -some of the feldspars are red in colour and it appears as though this is representative of garnets forming in the early stage, going after the plagioclase

John Aflleck.

METRES

	-lower contact at 40° to the core axis
240.9-248.5	GABBRO -dark gray -some silicification -porphyritic appearance
248.5-274.0	BIOTITE QUARTZ MONZONITE -fairly consistent to the end of the hole -similar to the unit described for 229.5 to 240.9 -5% biotite, 20% quartz and 75% feldspar 50/50 Plag/Kspar -sulphide content is low restricted to fresh cubic pyrite on fracture surfaces - seen at 254.5
274.0	END OF HOLE

John Affleck.

SUMMARY LOG

MOLY MAY CLAIM GROUP DDH 82-2

METRES	
0-2.1	CASING
2.1-3.9	BROKEN CHIPS OF VARIOUS COMPOSITION
3.9-8.3	ALTERED MUSCOVITE QUARTZ MONZONITE -moderately oxidized -numerous 1mm fractures at all angles to the core axis -fairly siliceous and numerous quartz veins -molybdenum mineralization is seen as five separate grains throughout this section - one such grain is 5mm in size
8.3-9.5	QUARTZ FELDSPAR PORPHYRY -light grey colour -faint lineation at 50° to the core axis -the porphyroblasts are white Kspar, subangular to angular and average 2mm in size -sulphide mineralization is absent
9.5-23.3	ALTERED BIOTITE QUARTZ MONZONITE (siliceous) -Mo is seen throughout, ~ .001% and is more concentrated where the alteration is intense -some quartz veining
23.3-35.0	CHLORITIZED AND SILICIFIED QUARTZ MONZONITE WITH MINOR ACCESSORY GARNET -leucocratic -quartz content around 40% -some quartz veining -pyrite mineralization is seen throughout < 1% -some molybdenum mineralization ~ .001%
35.0-41.0	ALTERED BIOTITE QUARTZ MONZONITE (WITH MINOR ACCESSORY GARNET) -moderate to heavily stained -2% biotite -molybdenum mineralization around .001%
41.1-48.5	CHLORITIZED AND SILICIFIED QUARTZ MONZONITE WITH MINOR ACCESSORY GARNET -identical to the section described between 23.3 and 35.0 -minor po and py concentrated on fracture surfaces -.001% Mo

John Affleck.

METRES

48.5-65.1	ALTERED BIOTITE QUARTZ MONZONITE CONTAINING UNALTERED SEGMENTS -25% quartz and 75% feldspar -molybdenum is seen throughout but now less concentrated < .001% -biotite content increases towards the end of this unit (up to 5%)
65.1-79.3	CHLORITIZED AND SILICIFIED QUARTZ MONZONITE (MINOR ACCESSORY GARNET) -leucocratic appearance -3% biotite and between 35 to 45% quartz -pyrite mineralization restricted to fracture surfaces -molybdenum mineralization is very sparse -some quartz veining
79.3-87.9	ALTERED (Fe stained) BIOTITE QUARTZ MONZONITE -orange-brown colour -biotites have increased in size -comprising 5% -quartz content is still quite high ~ 25% -no molybdenum mineralization -lower contact at 70° to the core axis
87.9-180.0	BIOTITE QUARTZ MONZONITE (WITH CHLORITE AND QUARTZ-RICH SECTIONS) -altered sections at: 89.2 - 89.6 -chloritized and silicified sections at: 93.5 - 94.0 117.4 - 119.9 123.4 - 126.5 -from 125.6 to 126.0 the rock consists of 90% quartz -fairly abundant quartz veining -the last 3 metres of the entire unit gradually becomes more silicious until it comes in contact with a massive quartz unit
180-185.3	MASSIVE SMOKEY QUARTZ -dark gray colour -highly fractured -pyrite concentrated along fracture surfaces at 90° to the core axis -upper and lower contacts are broken

John Afflerbach

METRES

185.3-213.4	BIOTITE QUARTZ MONZONITE -overall white colour -25% quartz, 72% feldspar, 50/50 plag/Kspar and 3% bleached biotite -some quartz veining
213.4	END OF HOLE

John Hoffler

SUMMARY LOG

MOLY MAY CLAIM GROUP DDH 82-3

METRES	
0-2.1	CASING
2.1-3.8	BROKEN ROCK CHIPS OF VARIOUS COMPOSITION
3.8-5.5	ALTERED AND UNALTERED QUARTZ FELDSPAR PORPHYRY -biotite around 3% -minor pyrite is seen throughout < 1% -quartz content is high 30% -upper and lower contacts are broken -no molybdenum mineralization
5.5-12.3	ALTERED QUARTZ MONZONITE (WITH MINOR ACCESSORY GARNET) -this section is almost entirely quartz and feldspar (30/70) -minor < 1% .5mm garnets are seen throughout -some quartz veining -molybdenum mineralization < .001%
12.3-16.7	SILICIFIED MUSCOVITE QUARTZ MONZONITE (WITH SOME CHLORITIZED SECTIONS) -last 2 metres are heavily chloritized -some quartz veining -minor molybdenum mineralization <.001% -muscovite content averages 1%
16.7-23.6	ALTERED MUSCOVITE/BIOTITE QUARTZ MONZONITE WITH MINOR ACCESSORY GARNET -overall light brown colour -1% and 1mm garnets are seen throughout -some pyrrhotite < 1% -minor molybdenum mineralization <.001%
23.6-64.9	BIOTITE AND/OR MUSCOVITE QUARTZ MONZONITE WITH MINOR ACCESSORY GARNET -1st part of this section contains < 1% muscovite and the mica content gradually increases towards the end of this section where 2% biotite is observed -feldspar appears to be 50% plagioclase and 50% Kspar -some quartz veining

John Affleck.

METRES

	-lower contact at 20° to the core axis -molybdenum mineralization is very sparse -1mm < 1% garnets are still pervasive throughout
64.9-73.9	ALTERED BIOTITE QUARTZ MONZONITE -rock has an overall grey tint due to the nature and the % of the quartz - quartz content averages 2% but occasionally exceeds 5% -minor quartz veining with minor pyrite <.1%
73.9-78.1	DIABASE -dark green-gray colour -medium grained -1st and last 10cm of this section is very fine grained -the distinctive ophitic texture is visible throughout -some of the plagioclase displays a light green tint -minor <.001% pyrite is seen throughout -no molybdenum mineralization is seen in this section
78.1-102.3	ALTERED AND UNALTERED BIOTITE QUARTZ MONZONITE -from 85.6 to 88.4 the rock is chloritized and silicified -the final 7 metres of this section is relatively unaltered, minor Fe stain on fracture surfaces at 60° to the core axis -no molybdenum mineralization is observed in this section
102.3	END OF HOLE

John Allen.

ENFIELD RESOURCES INC.

THE MOLY MAY STOCK

MOLY MAY CLAIM GROUP
55°21' N., 129° 48' W.
SKEENA MINING DIVISION BRITISH COLUMBIA

JOHN AFFLECK, B.Sc. AUGUST, 1982

BEATRICE
2937 (4)

SYLVESTER BAY

MOLY FR. 1
2935 (4)

GRANBY BAY

MOLY MAY (2S. X 5E.)
2936 (4)

MOLY MAY 3
(5S. X 4W.)
3136 (7)

MOLY MAY 2 (2S.X4E)
3135 (7)

WEST ZONE

EAST ZONE

SOUTH ZONE

WEST ZONE WORKINGS

MOLY MACK SHOWING

DDH 82-1-3

S1 S2 S3 S4

OBSERVATORY INLET

5+00 N.
0+00
5+00 S.
10+00 S.
15+00 S.
20+00 W
15+00 W
10+00 W
5+00 W
0+00 W

N

LOCATION

MOLY MAY

BRITISH COLUMBIA

TABLE OF UNITS

MOLY MAY STOCK

- Dykes: diabase / quartzofeldspathic pegmatite
- Fresh Quartz Monzonite
- Moderately Altered Quartz Monzonite: bleached, minor stockwork development, sparse Fe·Mo stain
- Coarse Biotite, abundant throughout units 2-3
- Intensive Vein Stockwork Development in highly altered Quartz Monzonite
- Highly Altered Quartz Monzonite; abundant Fe·Mo stain, highly fractured

HAZELTON GROUP

- Greywacke, Argillite, Andesite

LEGEND

- Geological contact or igneous phase boundary — Defined / Approximate / Assumed
- Limit of outcrop
- Major molybdenite showing
- Major fault
- Sedimentary bedding, upright
- Limit of tidal flat
- Surveyed grid
- Diamond drill hole

SCALE

0 500

FIGURE 3

CASSIAR EAST YUKON EXP. LTD.

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FRACTURES IN THE MOLY MAY STOCK

MOLY MAY CLAIM GROUP

55° 21' N., 129° 48' W.

SKEENA MINING DIVISION BRITISH COLUMBIA

JOHN AFFLECK, B.Sc. AUGUST, 1982

BEATRICE
2937 (4)

SYLVESTER BAY

MOLY FR. 1
2935 (4)

GRANBY BAY

MOLY MAY (2S. X 5E.)
2936 (4)

EAST ZONE

WEST ZONE

MOLY MAY 3
(5S. X 4W.)
3136 (7)

MOLY MAY 2 (2S. X 4E.)
3135 (7)

SOUTH ZONE

OBSERVATORY INLET

5+00 N
0+00
5+00 S
10+00 S
15+00 S
20+00 W
15+00 W
10+00 W
5+00 W

N

LOCATION

MOLY MAY

BRITISH COLUMBIA

LEGEND

Stereonets of fracture data (poles of fracture planes) — 50% of data; 95% of data

Contact of the Moly May Stock and Hazelton Group rocks — Defined; Approximate; Assumed

Limit of outcrop

Major molybdenite showing

Major fault

Sedimentary bedding, upright

Limit of tidal flat

Surveyed grid

Diamond drill hole

SCALE

0 500

Metres

CASSIAR EAST YUKON EXP. LTD.

FIGURE 4