GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

BE CLAIMS

BEMA
Industries Ltd.

This report has been examined by
the Geological Evaluation Unit
under [illegible] Quartz
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reg[illegible] amount
of $ 3,800

P. Watson

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

GEOLOGICAL AND GEOCHEMICAL REPORT
ON THE
BE CLAIMS

Mayo Mining Division

N.T.S. - 105 M/14

Centered on 63°57' Latitude, 135°02' Longitude

Owned by:

CANADA TUNGSTEN MINING CORPORATION LIMITED
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Work by:

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G. McLaren, M.Sc.

October, 1982

Field work conducted August 4-11, 1982

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ON THE

BE CLAIMS

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SUMMARY

Reconnaissance mapping, prospecting and geochemical sampling of the southeastern portion of the BE claim block was completed in August 1982. The work was undertaken in the vicinity of the 38 BE fractional claims, BE 285 Fr - 322 Fr, in order to apply it for assessment purposes and maintain these claims in good standing until September 1983.

Mapping confirmed that the stratigraphy previously outlined on adjacent ridges could be extended past the south-eastern boundaries of the claim block. No new mineralized vein structures were outlined in 1982 however the areas of previously mapped veins and stockworks on the ridge between McNeill and McMillan Gulches was re-examined. Mapping and geochemical results indicate that this ridge holds the best potential for significant mineralized vein structures. Any future work in the southern BE claims should be concentrated on this ridge.

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

BE CLAIMS

1.0 INTRODUCTION

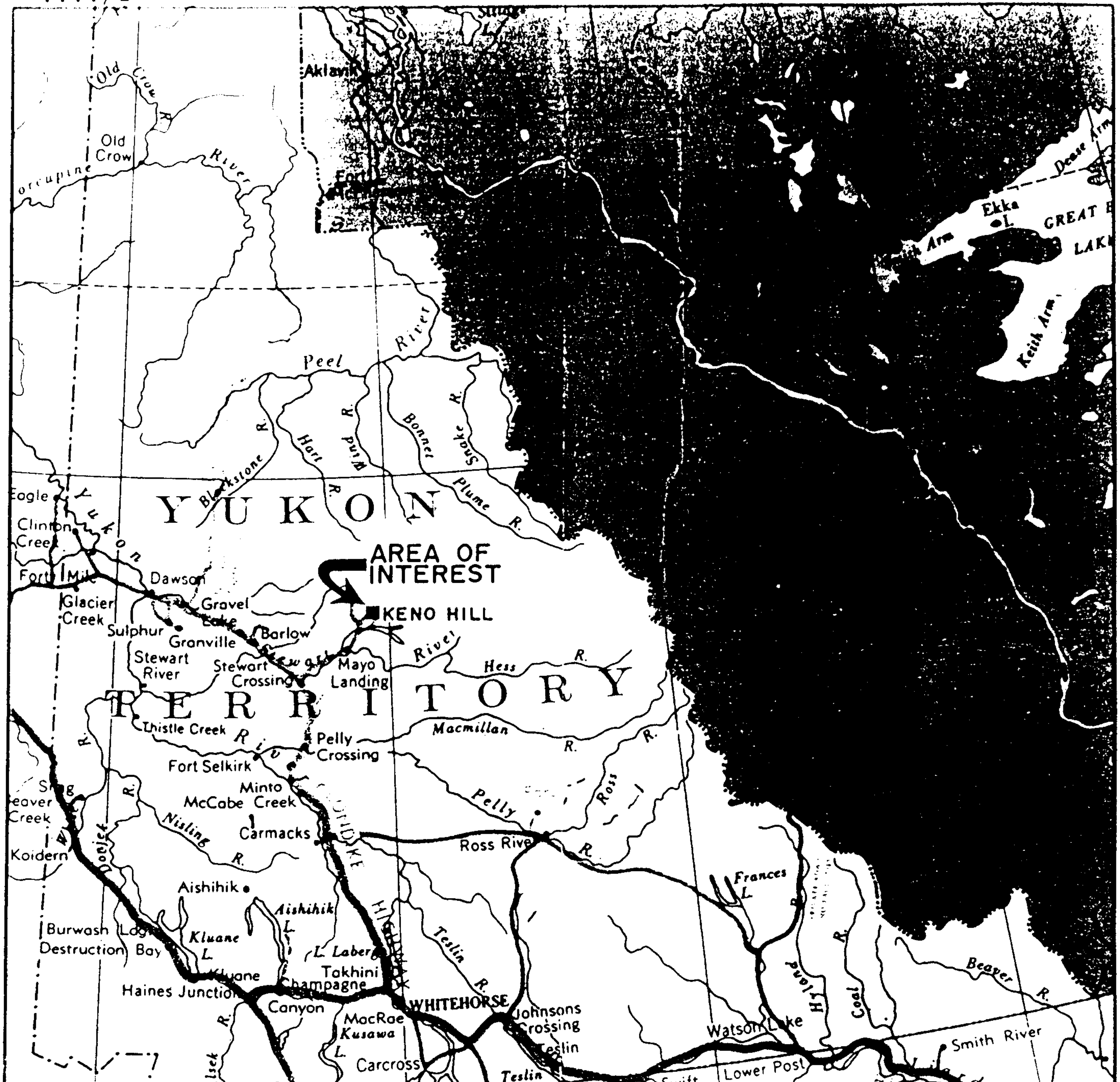
The BE claim group consists of 281 quartz mineral claims and 38 fractional mineral claims which are owned by Canada Tungsten Mining Corporation Limited. Bema Industries Ltd. was contracted by Canada Tungsten Mining Corporation Limited to carry out a geological exploration program on these claims during the 1982 field season.

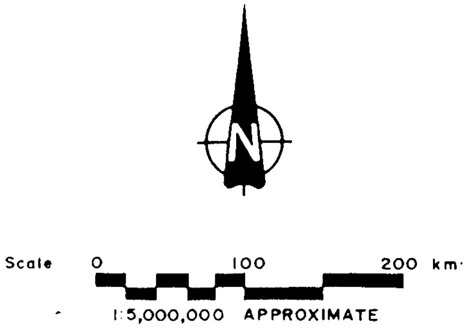
Work done in 1982 consisted of reconnaissance geological mapping at 1:5,000 scale, prospecting, and reconnaissance geochemical sampling. The work was done in the vicinity of the 38 BE fractions, in order that it could be applied for assessment purposes.

1.1 LOCATION AND ACCESS

The northern BE claim group is located in the Ladue and Gambler Lake Valley and adjoins the ZAP claim group on the western boundary. The eastern BE claims are situated on the eastern slopes of Caribou Hill and Keno Hill. The southern portion of the BE claims straddle the valleys of McNeill and McMillan Gulches. Thirty-eight (38) fractional mineral claims were staked in the vicinity of McNeill and McMillan Gulches in late August 1980 (see Figures 1 and 2).

Access to the central BE claims is by 3 kilometres of good gravel road and 7 kilometres of rough 4x4 road east of Keno Hill townsite along Lightning Creek. There is no road access to the northern and southern portions of the BE claims and they are reached by helicopter or fixed wing aircraft.





CANADA TUNGSTEN MINING CORPORATION

KENO HILL Y·T·

1982 GEOLOGICAL EXPLORATION PROGRAMME

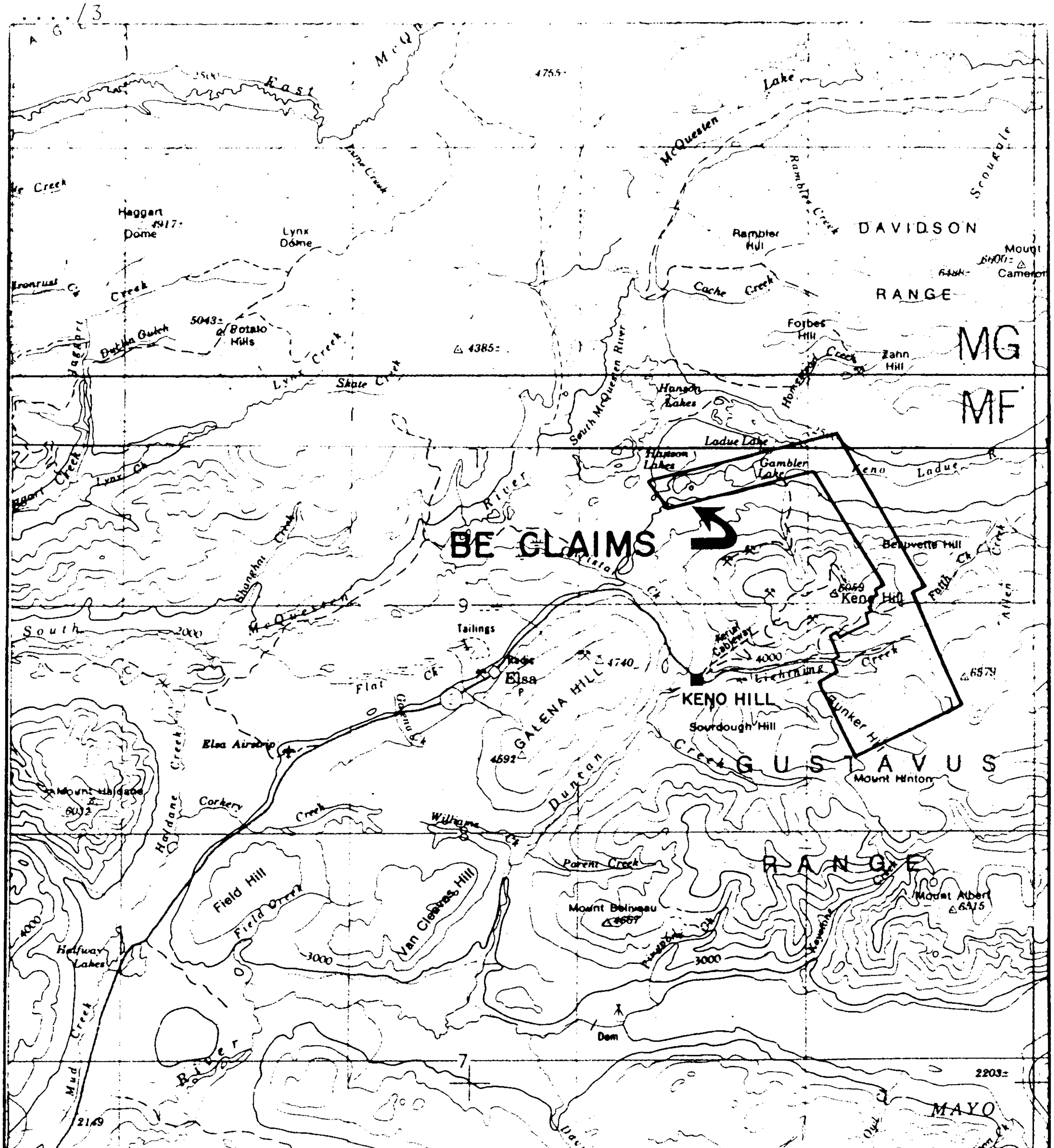
BE CLAIMS

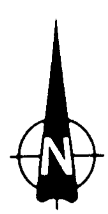
KEY MAP

DATE	OCTOBER 1982	JOB NO	82-09
REVISED BY		FIG NO	1

BEMA INDUSTRIES LTD

13





Scale 0 50 100 km·

1 : 2,500,000 APPROXIMATE

CANADA TUNGSTEN MINING CORPORATION

KENO HILL Y·T·

1982 GEOLOGICAL EXPLORATION PROGRAMME

BE CLAIMS

REGIONAL PLAN

DATE OCTOBER 1982		JOB NO	82-09
REVISED BY		FIG NO	2

BEMA INDUSTRIES LTD.

1.2 PHYSIOGRAPHY

The BE claims extend over a 13 kilometre length from the Ladue River Valley in the north to the divides of the McNeill and McMillan Gulches in the south. The northern region along Ladue River is flat and swampy and the vegetation consists of alder buckbrush and stunted spruce. The topography of the central and southern region east of Caribou Hill and south of the McNeill and McMillan Gulch divides, consists of moderate to steep alpine slopes with grass and moss cover. The alpine region is transected by Lightning Creek, McNeill Gulch and McMillan Gulch and the vegetation in the valley floors consists largely of thick alder buckbrush.

1.3 PROPERTY

The BE claim group consists of 283 quartz mineral claims and 38 fractional mineral claims. All claims are owned by Canada Tungsten Mining Corporation Limited. A list of all the claim data appears in Table 1.

Exploration work done during 1982 will be applied for assessment to keep the BE fraction claims, BE 285 Fr. to BE 322 Fr. in good standing until September 1983.

TABLE 1

BE CLAIMS DATA

CLAIM	GRANT NUMBER	EXPIRY DATE
BE 1 - 155	YA 38967 - YA 39121	Mar. 2, 1985
BE 156 - 177	YA 39122 - YA 39143	Mar. 2, 1984
BE 178 - 188	YA 39144 - YA 39154	Mar. 2, 1985
BE 189 - 279	YA 39155 - YA 39245	Mar. 2, 1984
BE 285 Fr - 322 Fr	YA 42494 - YA 42531	Sept. 2, 1983

1.4 HISTORY

Northern BE Claims

The northern BE claims are situated in the Ladue River - Gambler Lake Valleys. They have not been extensively explored due to deep overburden and the lack of outcrop. During 1979 Bema Industries Ltd. carried out a Max-Min E.M. Survey on a portion of the claims as an extension of the Western Zap claim geophysical survey. There is no other history of exploration in this area.

Central BE Claims

Numerous people have intermittently held claims within what is now the central BE claims area. Reconnaissance geological mapping in 1980 outlined three areas explored by previous operators to the east of the Idaho General Mines optioned claims and the Faith silver-lead vein. These areas are given below:

1. Located 250 metres northeast of Caribou Hill.
   A vein structure 1 to 2 metres wide has been explored by extensive caterpillar trenches.

2. Located 500 metres south of Caribou Hill.
   Several hand trenches explore a series of quartz-pyrite veins.

3. Located 1,500 metres east of the head of Faith Gulch.
   An underground shaft of unknown depth explores a 10 centimetre wide quartz-pyrite vein within a greenstone body.

Southern BE Claims

Numerous claims have been located in the past in the area of the southern BE claims and sporadic prospecting has been carried out for gold and silver. An adit was driven in the head-wall of the McNeill Gulch in 1940 by C. Brefalt. In 1964 the Geological Survey of Canada carried out a stream sediment survey in the Keno Hill area including the steams draining the BE claims. United Keno Hill Mines Ltd. staked 276 claims in 1965-66 as a follow up to this survey. Keno Hill Mines Ltd. exploration survey located 22 veins in McNeill Gulch with encouraging gold-silver

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1.6 PRESENT WORK

During the 1982 field season reconnaissance geological mapping at 1:5,000 scale was conducted in the extreme southeast corner of the BE claims on ridges adjacent to McNeill and McMillan Gulches (Plate 1). This mapping was directed at extending the stratigraphy previously established to cover the remaining unmapped portion of the claim block. Prospecting and reconnaissance soil and rock chip geochemical sampling were completed in areas previously unsampled and in areas recommended for follow-up in the 1981 BE claims assessment report. The work was conducted in the vicinity of the BE 285 Fr. to 322 Fr. claims in order to apply that work for assessment.

A base map for 1:5,000 scale geological mapping of the extreme southeast corner of the BE claim block was made from an enlarged 1:50,000 scale topographic map. Metric conversions, at fifty metre contour intervals, were made from the enlargement and were added onto the existing geological base maps (Figures 3 and 4).

assay values. An exploration shaft was sunk on the No. 21 vein and 404 tons of ore was blocked out grading 1.20 oz/ton gold and 18.3 oz/ton silver over an average width of one metre.

Bema Industries Ltd. was contracted by Canada Tungsten Mining Corporation Ltd. to complete reconnaissance geological mapping, prospecting and geochemical sampling over the central and southern portions of the BE claims during 1980 and 1981. Mineralized vein structures with coincident anomalous silver, lead and zinc rock geochemistry were outlined in the Caribou Hill area, in Lightning Creek Valley, and on the ridge between McNeill and McMillan Gulches. The last mentioned area included a number of quartz-stockwork vein systems, one of which returned anomalous values in gold and silver.

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PLATE 1: McNEILL (right) AND McMILLAN (left) GULCHES
(looking south from Keno Hill)

Field work was completed on the two ridges in the distance. The area of most interest lies on northern nose of the ridge between the gulches.

2.0 GENERAL GEOLOGY

The Keno Hill - Galena Hill area containing the BE claims is located at the northwestern end of the Selwyn Basin. The Selwyn Basin is a Pb-Zn-Ag bearing province which covers central Yukon, western N.W.T. and north central B.C. The basin is bounded to the east, in the MacKenzie Mountains by a marginal carbonate shelf facies. To the west, the basinal shale facies gives way to the carbonate shelf complex of the Pelly-Cassiar Fold Belt or terminates abruptly against the Tintina Trench. The Tintina Trench, which passes 100 kilometres south of Keno Hill, contains a strike-slip fault with 450 kilometres of right lateral displacement (Tempelman-Kluit, 1970).

The rocks underlying the Keno Hill - Galena Hill area are predominantly metasediments of the Yukon Group. Until recently the Yukon Group was thought to be of Precambrian age. Boyle (1965) considered the section to be a simple homocline of metasediments of probable Precambrian age. Tempelman-Kluit (1970) and Green (1971) have interpreted Mesozoic ages for the Lower Schist (Jurassic) and Central Quartzite (Lower Cretaceous) formations and a Precambrian age for the allochthonous Upper Schist formation. Blusson (1978) suggested that the Lower Schist and Central Quartzite formations resemble the Upper Devonian to Mississippian Canol and Imperial formations.

The Lower Schist formation consists predominantly of graphitic schists with minor intercalated chlorite-sericite schist and thin bedded quartzite, conformably overlain by the Central Quartzite formation.

The Central Quartzite formation consists of thick and thin bedded quartzite with intercalated graphitic phyllite, argillite and schist.

The Upper Schist formation overlies the Central Quartzite formation. The nature of the contact between Central Quartzite and Upper Schist is controversial. It is considered to be conformable by Boyle, 1965; or a thrust fault by Green, 1971. The Upper Schist formation consists primarily of quartz-mica schists, graphitic schists and thin bedded quartzites with minor limestone lenses.

TABLE 2

TABLE of FORMATIONS

ERA	PERIOD	MILLIONS of YEARS	BOYLE, R.W 1965	GREEN, L.H. 1971 TEMPELMAN-KLUIT 1970	BLUSSON, S.L. 1978	BEMA 1980
CENOZOIC	TERTIARY	65		Quartz-Feldspar Porphyry		
		* 87		Greenstone		Granodiorite
	CRETACEOUS	136	Quartz-Feldspar Porphyry Biotite Lamprophyre	Keno Hill Quartzite fm		Quartz-Feldspar Porphyry Biotite Lamprophyre
	JURASSIC	190	Greenstone	Lower Schist fm		Greenstone Keno Hill Quartzite fm Lower Schist fm
MESOZOIC	TRIASSIC	225				
	PERMIAN	280				
	CARBONIFEROUS	345			Central Quartzite	
	DEVONIAN	395			Lower Schist	
	SILURIAN	430				
	ORDOVICIAN	500				
PALEOZOIC	CAMBRIAN	570				
PRECAMBRIAN		4600	Upper Schist fm Central Quartzite fm Lower Schist fm	Upper Schist fm		?Upper Schist fm

NOTE * AGE of MINERALIZATION
SINCLAIR et al, 1980

This stratigraphic sequence has been intruded by several plutonic phases. The oldest of these are the greenstone sills. These sills, originally diorite to gabbro in composition, were deformed into lens-shaped "boudins". These boudins are discontinuous but tend to align, en echelon, in certain stratigraphic horizons.

The second plutonic phase in the area is the granitic rocks which have intruded along the hinge zone of the Mayo Lake anticline. These intrusions range between quartz monzonite to diorite in composition and give ages between 81 million years and 109 million years (Wanless, et.al., 1966, 67, 71, 73; Armstrong, 1978; cited by Tessari, 1979).

The youngest intrusions in the area are dykes and sills of biotite lamprophyre and quartz-feldspar porphyry. As these units have not been observed in a crosscutting relationship, their relative ages cannot be ascertained.

In the Keno Hill - Galena Hill area there have been at least two periods of structural deformation (Green, 1971). The oldest period of deformation produced isoclinal and recumbent folding with extensive bedding-plane movement. Rocks involved in this earliest deformation developed a strong foliation and retained a few original sedimentary structures. Many of the greenstones have been intensely foliated which indicates that they were intruded prior to this period of deformation. Also others, including some of the larger greenstone sills were probably intruded during this period of deformation (Green, 1971). The intensity of this early deformation is indicated by the boudinage of pre-existing greenstone sills. It has also been hypothesized by Green and others that it was during this period of deformation that the Upper Schist formation was thrust over the Central Quartzite and Lower Schist formations.

The second period of deformation superimposed open folds and a pervasive wrinkle lineation on the already deformed rocks. The broad northwest trending, southeast plunging Mayo Lake anticline formed during this later period of deformation. Later, but during this second period of deformation, two subsidiary anticlines, the McQuesten River and Lynx Creek anticlines, formed (Tessari, 1978). These sub-parallel structures trend northeast-southwest and plunge to the west. The Keno Hill - Galena Hill area is on the southern limb of the McQuesten River anticline.

Granitic rocks intruded these rocks after the second period of deformation was ended.

Three ages of faulting are known to exist; a) early formed bedding plane and low angle faults, b) vein faults and c) late cross faults, low angle faults and bedding faults.

The early bedding plane and low angle faults show small displacements and are the result of thrusting accompanying regional folding. They may follow bedding planes or crosscut the strata at a low angle and are seldom ore-bearing.

The vein faults create breccia, sheeted zones and void spaces when cutting through competent rock such as greenstone or quartzite. These zones range from 1.5 to 15.0 metres wide and are responsible for localizing ore. Two types of vein faults are recognized; transverse faults which strike between 0° and 45° azimuth; and more commonly, longitudinal faults which strike between 35° and 80° azimuth.

In schists, the faults are tight and pose a barrier to migrating fluids.

Late cross faults commonly strike northwesterly, dip about 60° and show horizontal displacement of 0 to 150 metres. Most of these appear as a series of slips and fractures with an associated breccia zone 6 to 30 metres in thickness.

Vein faults and cross faults can both be shown to post-date the younger deformation because they contain fragments of lineated phyllites (Green, 1971). It is clearly evident that cross faults post-date vein faults as many vein faults are off-set by cross faults. Several periods of movement in the vein faults are indicated by brecciation of ore minerals. The relative ages of the vein and cross faults to the period of mineralization is controversial. This is an extremely significant relationship as 95% of the district's silver production is from deposits associated with cross faults. Boyle (1965) considers that the cross faults are post-mineralization and the presence of cross faults in nearly every mine is incidental. Franzen (1979) on the other hand, states that the cross faults are pre-mineralization and acted as barriers to ore solutions thereby having a damming effect on mineralizing solutions and creating ore pods.

Favourable locations for ore lodes exist where vein faults cut through competent greenstone or quartzite and especially where these faults are truncated by a cross fault or transition between different rock types.

Two stages of mineralization are evident. In the first stage, quartz, pyrite, arsenopyrite and minor gold were deposited along vein faults. Later brecciation allowed the deposition of siderite, galena, sphalerite, pyrite, freibergite, chalcopyrite, meneghinite, boulangerite, dolomite, quartz and minor barite. Later reworking, leaching, oxidation and remobilization of ore minerals played important roles as secondary concentrating processes. Vein mineralization probably originated from a circulating hydrothermal system driven by thermal energy from nearby granitic intrusives as K-Ar dating of mineralization (87 million years) coincides with K-Ar ages for a number of Cretaceous intrusives (81 million years to 109 million years) in the area (A.J. Sinclair, et.al., 1980).

2.1 PROPERTY GEOLOGY

The BE claims are underlain by metasediments of the Lower Schist formation and the Central Quartzite formation of probable Jurassic age. The northern portion of the claims are underlain predominantly by graphitic schist with minor units of sericite schist and thin bedded quartzites. These rocks belong to the Lower Schist Formation.

The central and southern portion of the BE claims are underlain by thin to thick bedded quartzites of the No. 9 Quartzite and Central Quartzite formation. The quartzites are interbedded with graphitic and sericite schists.

Greenstone boudins, deformed remnants of early diabase dykes and sills, occur interspersed throughout the metasedimentary sequence.

2.2 LITHOLOGICAL UNITS

Unit 1 - Lower Schist

The Lower Schist formation on the BE claims is composed of a lower sequence of graphitic phyllite with minor thin bedded quartzite and an upper sequence of thick bedded quartzites of the No. 9 Quartzite unit with interbedded thin bedded quartzite and sericite schist. The minimum thickness of the Lower Schist in this area is 700 metres.

Graphitic phyllite comprises the bulk of the lower sequence and crops out throughout the northern BE claims. It is dark grey, fissile and contains minor 1 to 3 centimetre interbeds of thin bedded quartzite.

The upper sequence consists primarily of thick bedded quartzite of the No. 9 Quartzite unit. The No. 9 Quartzite is the most competent member found in the Keno Hill area and is favourable host rock for vein mineralization. It is usually light grey to dark grey in colour and is composed of thick bedded quartzites (1.0 to 6.0 metres) interbedded with graphitic phyllite and thin bedded quartzites. The 1982 mapping extended a thick section of this quartzite unit across the lower, northern portions of the ridge lying east of McMillan Gulch. Quartzite strata structurally overlying this massive horizon (i.e. further south on this ridge) are much thinner bedded and are intercalated with schistose and phyllitic lithologies.

The upper part of the Lower Schist formation contains several quartz-sericite schist units. They crop out at the top of Faith Gulch and along the north slope of Lightning Creek opposite Thunder Gulch.

Unit 2 - Central Quartzite Formation

The Central Quartzite Formation is composed of thin to thick bedded quartzites interbedded with graphitic and sericite schists. The competency difference in these lithologies has allowed the development and preservation of many minor structures.

The Central Quartzite - Lower Schist formation contact runs northwest-southeast down McNeill Gulch.

Unit 4 - Greenstone

Greenstones are found predominantly within the schistose formations and occur as conformable sills and boudins. They are schistose to coarse grained and consist of diorite, gabbro and their altered equivalents. The greenstones vary in thickness from one metre to hundreds of metres. One body commonly thins or pinches out and another appears in its thickest width in overlying or underlying beds. The greenstone is dark green or grey to brownish green in colour and has a varied texture due to the alteration and replacement of mafic minerals (amphibole and biotite) and feldspar by secondary amphiboles, saussuritization, chloritization and silicification. The greenstone has a diabasic texture with some evidence of original grain size and layering in large bodies and intense foliation in small bodies.

Graphitic phyllites of the Lower Schist formation in the northern and central portion of the BE claims contain numerous boudins and bodies of greenstone. These bodies occur along definite horizons and are thought to be sills which have been transformed into boudins.

A series of discontinuous greenstone bodies crop out on the crest of Bunker Hill (Plate 2) and extend southeasterly to the headwaters of McNeill Gulch. They are contained in a sequence of thin bedded quartzites with interbedded graphitic phyllite and schist. Similar smaller greenstone boudins occur on the noses of ridges adjacent to McNeill and McMillan Gulches.

2.3 VEIN STRUCTURE AND MINERALIZATION

No new vein structures were located during the 1982 field-work, however the area of vein structures located during the 1981 exploration work was re-visited and sampled. The area of interest, lying immediately above the break in slope on the northern and northeastern portions of the ridge between McNeill and McMillan Gulches, contains numerous vein and stockwork type structures, cutting thick bedded quartzites with minor graphitic phyllites and quartz-sericite schist. Vuggy quartz veins with numerous drusy quartz crystal cavities are common in this area. Calcite and siderite are common accessories in some veins. A quartz vein with disseminated galena was resampled and returned strongly anomalous lead with weakly anomalous silver and gold values (sample 27152,

Appendix 1A). Other quartz breccia zones with pyritic boxworks that were sampled contained up to 35 ppm silver and 0.4% lead. A float sample of a silicious boxwork with pyrite, arsenopyrite, and minor scorodite returned values of 18.7 ppm silver and 4.2 ppm gold, however no bedrock source could be located for this material.

This particular area on the nose of this ridge remains the most prospective zone located to date in the southern BE claims.

PLATE 2: GREENSTONE BOUDINS, BUNKER HILL
(looking southerly from Keno Hill)

Discontinuous greenstone boudins contained in a sequence of quartzites, phyllites and schists outcropping on eastern slopes of Bunker Hill. McNeill Gulch lies in the foreground.

3.0 GEOCHEMISTRY

A total of thirteen (13) rock chip samples were taken from veined and/or altered lithologies during the course of prospecting the ridges adjacent to McNeill and McMillan Gulches. These samples were analyzed geochemically by standard atomic absorption techniques for lead, zinc, silver and gold by Chemex Labs Ltd. of North Vancouver. The results are tabulated in Appendix 1A. The only apparently anomalous values are those from mineralized vein structures noted in Section 2.4. Samples taken from previously unmapped areas on the ridges east of McNeill and McMillan Gulches returned low results. (Figures 3 and 4).

Very little outcrop is present on the slopes lying east of McNeill Gulch hence a series of soil/silt samples were taken from a traverse line along this slope. These samples were taken either from intermittent stream beds or from B horizon soil profiles and were analyzed geochemically for lead, zinc, silver and gold. The results from these seventeen (17) samples , tabulated in Appendix 1B, are uniformly low along the length of the slope. (Figure 4)

4.0 CONCLUSIONS AND RECOMMENDATIONS

Geological mapping and prospecting was carried out in the extreme southeast corner of the BE claim block, partially in an area previously unexamined in the BE exploration programme. A thick section of massive quartzite previously mapped on the southern slopes of Keno Hill could be traced across the lower, northern slopes of the ridge east of McMillan Gulch. Stratigraphy overlying this massive quartzite, consisting of interbedded quartzites, schists and phyllites, can also be extended to the southeastern boundaries of the claim group.

No significant new mineralized vein structures were located by prospecting or indicated by the reconnaissance geochemical samples taken in 1982. The prime area of interest in this area remains the northern nose of the ridge dividing McNeill and McMillan Gulches. Numerous quartz-calcite veins, stockworks, and breccia zones are present here with some evidence of galena, pyrite, and/or arsenopyrite mineralization. A number of rock chip geochemical samples from these veins have returned significantly high analyses in lead, silver and gold. The veins observed at present are discontinuous and of limited width due to the intensely fractured nature of the host quartzites, phyllites and schists. If a larger, more continuous structure could be defined, potential exists for locating a well mineralized vein structure.

Any future work on the southern BE claims should concentrate solely on the slopes of the above mentioned ridge and should consist of controlled traverses of rock chip and/or soil geochemistry. Detailed prospecting of talus slopes for quartz-siderite-galena vein material or for quartz-pyrite-scorodite stockwork material should be undertaken in an effort to trace these rocks to their bedrock source.

APPENDIX I

1A: ROCK CHIP GEOCHEMICAL RESULTS

1B: SOIL/SILT GEOCHEMICAL RESULTS

APPENDIX 1A

BEMA INDUSTRIES LTD.

DATE AUGUST 7 - 11, 1982 PROJECT 82-09
COLLECTOR G. McLaren N·T·S· 105 M 14

ANALYST Chemex Labs
METHOD A.A. Geochem

ROCK CHIP SAMPLE DATA

Number	Location	Grid Refer'ce	Notes	Date	Type	Depth	Length	Width	Remarks	Values (ppm) Pb	Zn	Ag	Au (ppb)	
27151	CLAIM BE SW McMillan Gulch, side				Rock chip				quartzite float with pyrite and trace arsenopyrite	225	80	6.6	2,800	
27152	CLAIM BE SW McMillan Gulch, side				Rock chip				vuggy quartz vein with coarsely disseminated galena	>10,000	56	>100.0	140	
27153	CLAIM BE SW McMillan Gulch, side				Rock chip				brecciated quartzite: strong pyrite boxwork, minor wad.	4,200	100	35.0	40	
27154	CLAIM BE SW McMillan Gulch, side				Rock chip				float: silicious boxwork with pyrite and trace arsenopyrite	490	48	18.7	2,400	
27155	CLAIM BE NE McNeill Gulch, side				Rock chip				phyllitic quartzite: pyritic quartz veins along contact with greenstone	100	22	2.0	10	
27156	CLAIM BE NE McNeill Gulch, side				Rock chip				limonitic black phyllite: quartz carbonate veining	92	50	2.0	< 10	
27157	CLAIM BE NE McNeill Gulch, side				Rock chip				pyritic quartz vein	29	53	1.0	< 10	
27158	CLAIM BE NE McNeill Gulch, side				Rock chip				pyritic quartz vein	14	57	0.6	< 10	
27159	CLAIM BE NE McMillan Gulch, side				Rock chip				quartz veining in altered greenstone	5	95	0.8	< 10	
27160	CLAIM BE NE McMillan Gulch side				Rock chip				limonitic quartz vein in black phyllites	5	25	0.7	< 10	
27161	CLAIM BE NE McMillan Gulch, side				Rock chip				black phyllite: quartz veining and pyrite boxwork	4	153	1.0	< 10	
27162	CLAIM BE NE McMillan Gulch, side				Rock chip				black phyllite: pyritic and graphitic	35	68	0.5	< 10	
27163	CLAIM BE NE McMillan Gulch, side				Rock chip				vuggy quartzite with strong limonite	11	15	0.2	< 10	
	CLAIM													
	CLAIM													
	CLAIM													
	CLAIM													
	CLAIM													

APPENDIX 1B

BEMA INDUSTRIES LTD.
EXPLORATION DEPARTMENT

DATE AUG. 7 - 11, 1982 PROJECT 82-09
COLLECTOR G. McLaren N.T.S. 105 M 14
ANALYST Chemex Labs
METHOD A.A.

Sample No. Code: 73 S H L 23 (Year / Project / Collector / Number; L - Silt, S - Soil, T - Rock, W - Water)

SAMPLE DATA

Number	Location	Type	Horiz.	Depth	Slope	Color	Texture	Width	Remarks	Au	Ag	Cu	Mo	Pb	Zn			
										Values (ppm)								
S 1	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown			- - - - - - - -	<10	0.5			18	110			
S 2	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown			- - - - - - - -	<10	0.5			25	125			
S 3	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown			- - - - - - - -	10	0.6			15	98			
S 4	CLAIM BE McNeill Gulch	Soil/ silt			20°	brown			- - - - - - - -	30	0.8			30	125			
S 5	CLAIM BE McNeill Gulch	Soil/ silt			20°	brown			- - - - - - - -	10	0.5			22	125			
S 6	CLAIM BE McNeill Gulch	Soil/ silt			20°	brown			- - - - - - - -	30	0.6			19	87			
S 7	CLAIM BE McNeill Gulch	Soil/ silt			20°	brown			- - - - - - - -	10	0.4			13	85			
S 8	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown			- - - - - - - -	<10	0.4			13	76			
S 9	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown			- - - - - - - -	<10	0.2			16	90			
S 10	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown			- - - - - - - -	<10	0.3			17	90			
S 11	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown			- - - - - - - -	<10	0.1			20	110			
S 12	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown			- - - - - - - -	20	0.7			18	97			
S 13	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown			- - - - - - - -	<10	1.0			17	97			

BEMA INDUSTRIES LTD.
EXPLORATION DEPARTMENT

DATE AUG. 7 - 11, 1982 PROJECT 82-09
COLLECTOR G. McLaren N.T.S. 105 M 14

ANALYST Chemex Labs
METHOD A.A.

Sample No. Code: 73 S H L 23 — Year / Project / Collector / Number; L - Silt, S - Soil, T - Rock, W - Water

SAMPLE DATA

Values (ppm)

Number	Location	Type	Horiz.	Depth	Slope	Color	Texture	Width	Remarks	Au	Ag	Cu	Mo	Pb	Zn			
S 14	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown				<10	0.6			40	100			
S 15	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown				10	0.6			29	90			
S 16	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown				<10	0.7			9	72			
S 17	CLAIM BE McNeill Gulch	Soil/ silt			30°	brown				<10	0.5			14	75			
	CLAIM																	
	CLAIM																	
	CLAIM																	
	CLAIM																	
	CLAIM																	
	CLAIM																	
	CLAIM																	
	CLAIM																	
	CLAIM																	

APPENDIX 2

STATEMENT OF COSTS

AND QUALIFICATIONS

STATEMENT OF COSTS

A. LABOUR

Field: August 4 - 11, 1982

	DAYS	RATE	TOTAL
G. McLaren Senior Project Geologist	6	$325.00	$1,950.00
R. Vail Geological Assistant	5	95.00	475.00

Office: October, 1982

	DAYS	RATE	TOTAL
G. McLaren Senior Project Geologist	3	325.00	975.00
E. Hempsall Secretary	1	135.00	135.00

B. TRANSPORTATION

	DAYS	RATE	TOTAL
Truck - Rental	6	50.00	300.00
Fuel			50.00
Helicopter			380.00

C. ROOM AND BOARD

	TOTAL
Keno City Cafe	330.00

D. GEOCHEMISTRY

Chemex Labs Ltd. -

	TOTAL
Sample preparation	43.00
Geochem analyses: Pb, Zn, Ag, Au	252.00
TOTAL	$4,890.00

STATEMENT OF QUALIFICATIONS

I, GRAEME P. McLAREN, OF BEMA INDUSTRIES LTD. DO HEREBY CERTIFY THAT:

1. I am a graduate of the University of British Columbia and the University of Toronto, and I hold the following degrees:

   B.Sc. Honours Geology, 1974 (U. of T.)

   M.Sc. Geology, 1978 (U.B.C.)

2. I have practiced my profession as a geologist since 1974 gaining a wide variety of geological experience with the British Columbia government and with mining companies in Canada and Australia.

3. I have no interest, direct or indirect, in the property or shares of Canada Tungsten Mining Corporation Ltd., nor do I expect to receive any such interest.

4. I have conducted the 1982 summer field programme on the BE claims and have written the accompanying report for submittal for assessment purposes.

Signed: Graeme McLaren
Graeme P. McLaren, M.Sc.
Senior Project Geologist

Date: Nov. 22/1982


Vein 2
Vein 3
LOWER SCHIST Fm.
CENTRAL QUARTZITE Fm.
7 089 000 N
7 087 000 N
498 000 E
LEGEND
SYMBOLS
LITHOLOGY
091386
CANADA TUNGSTEN MINING CORPORATION
KENO HILL Y.T.
1982 GEOLOGICAL EXPLORATION PROGRAMME
BE CLAIMS
GEOLOGY and GEOCHEMISTRY
DATE OCTOBER 1982
JOB NO. 82-09
FIG NO. 3
DRAWN BY
REVISED BY G McL
SCALE 1:5000 METRES
BEMA INDUSTRIES LTD.

LEGEND

SYMBOLS

GEOLOGICAL BOUNDARY — defined, approximate, assumed
LIMIT of GEOLOGICAL MAPPING
OUTCROP
FELSENMEER
TALUS
FAULTS — defined, approximate, assumed
VEIN STRUCTURE — defined, approximate, assumed
BEDDING — horizontal, vertical, inclined, overturned
FOLIATION — horizontal, vertical, inclined, unknown
ANTICLINE — defined, approximate, overturned
SYNCLINE — defined, approximate, overturned
JOINTING — vertical: weak, moderate, strong; inclined: weak, moderate, strong
MINOR FOLDS — 10° style & direction
GLACIAL STRIAE — movement known; movement known
GEOCHEMISTRY — SOIL / SILT, ROCK — PPM (Pb / Zn / Ag 19/157/0.8) PPB (Au 20)

SHAFT
RAISE
WINZE
ADIT or TUNNEL — caved
QUARRY or MINE — active, abandoned
TRENCH — closed end, open end
PIT
GRAVEL PIT — active, dormant
DUMP or TAILINGS
DDH & NUMBER — 80 00 location; 45 surface projection
OVERBURDEN DRILL HOLE — OBH-80 location
CHIP SAMPLE
ROCK SAMPLE
FLOAT — 2 with rock type
SURVEY STATION
TRIANGULATION POINT
CLAIM POST
CLAIM BOUNDARY
ROAD
CAT TRAIL
CABIN
SPRING

LITHOLOGY

DRIFT — 8
LAMPROPHYRE — 7
QUARTZ-FELDSPAR PORPHYRY — 6
GRANITIC ROCKS — 5 — Granodiorite, quartz monzonite, minor granite, and quartz diorite
GREENSTONE — 4
UPPER SCHIST FORMATION — 3
- 3a Quartz-sericite schist
- 3b Quartz-chlorite-sericite schist
- 3c Thin-bedded quartzite
- 3d Phyllite, graphitic phyllite
- 3e Limestone

CENTRAL QUARTZITE FORMATION — 2
- 2a Massive quartzite
- 2b Thin-bedded quartzite
- 2c Graphitic phyllite

LOWER SCHIST FORMATION — 1
- 1a Thin-bedded quartzite
- 1b Quartz-chlorite sericite schist
- 1c Graphitic schist
- 1d Phyllite and argillite
- 1e Quartz-sericite schist
- 1f Massive quartzite — No 9

091386

CANADA TUNGSTEN MINING CORPORATION
KENO HILL Y.T.
1982 GEOLOGICAL EXPLORATION PROGRAMME

BE CLAIMS
GEOLOGY and GEOCHEMISTRY

DATE OCTOBER 1982	JOB NO. 82-09	FIG NO. 4
DRAWN BY		
REVISED BY G McL	SCALE 1:5000	METRES

BEMA INDUSTRIES LTD.