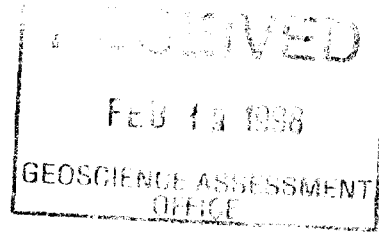




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Surface Backhoe Trenching Program
Pele Mountain Resources Inc.
Moss Lake Property
Thunder Bay, Northwestern Ontario
NTS 52/B10 SW-SE-NE

by

F.T.Archibald, B.Sc.Geologist
December 21, 1997

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Pele Mountain Resources Inc.
Summary Report
Moss Lake Property

1.0 Introduction-

Pele Mountain Resources Inc. have acquired 100% control in 217 contiguous mining claim blocks (totalling 989 claim units) in the Townships of Moss, Ames, Nelson Lake and Powell Lake in the Thunder Bay area of Northwestern Ontario. Some of the claims are under 1200157 Ontario Inc. which is a wholly-owned subsidiary of Pele Mountain Res. Inc. This group extends across a forty kilometer stretch of gold-bearing deformation zone.

The property includes the past-producing Ardeen Mine (formerly Huronian or Kerry Mine) which produced 29,948 ounces of gold and 172,376 ounces of silver down to a depth of 390 meters. This was the first gold producer in northwestern Ontario.

The exploration program to date (November, 1996 to present) consists of: geological mapping, prospecting, linecutting (107 kilometers), till sampling, rock sampling, mechanical stripping, washing and channel sampling, VLF electromagnetic surveys, proton magnetometer surveys, downhole Pulse electromagnetics, induced polarization surveys, and several phases of diamond drilling.

Several new gold occurrences have been outlined by the geological and geophysical surveys. The geological survey has delineated at least four quartz-vein systems associated with shear zones offset from the Ardeen Fault. Four types of gold-bearing systems have been outlined which are: quartz veining parallel to shearing, gold within silicified / brecciated and reworked iron formation, thermal intrusive zones along gabbro or syenite complexes, and polymetallic base metal environments along the felsic - mafic metavolcanic contacts.

The backhoe trenching program has been run over five gold-bearing vein systems. These are: Pele Zone, Pele North Zone, Trench #1 Zone, Trench #2 Zone, and the Fisher Zone. The most extensive of these is the

Pele Zone which has been delineated by backhoe trenching for a distance of approximately 1800 meters and is still open-ended at both sides.

The backhoe trenches are useful in delineating both structural controls for the gold-mineralization, and also the complexity of the vein systems. Several splay-vein systems have been encountered during the stripping program.

2.0 Location & Access-

The property lies approximately 110 kilometers northwest of Thunder Bay in Northwestern Ontario. Highway #11 is followed west from Shabaqua (junction of Highway #11 and Highway #17). The property turnoff is some 30 kilometers west of Kashabowie and 30 kilometers east of Atikokan. The Swamp Lake Road is taken for some 18 kilometers to the central portion of the claim group, although the northern portion lies along Highway # 11.

The property is located mainly over the central section of Moss Township, the west section of Ames Township, and the northeast section of the Powell Lake Area ,and Nelson Lake, and is located in NTS 52B/10SW-SE-NE (latitude 48 40 and longitude 90 50).

The property can also be accessed by float plane to Moss Lake which lies in the central portions of the property.

The property consists of a contiguous group of mining claims as follows:

1200157 Ontario Inc.

26 groups in Powell Lake Township totalling 270 individual units

6 groups in Nelson Lake Township totalling 90 individual units

10 groups in Ames Township totalling 94 individual units

4 groups in Crayfish Lake totalling 37 individual units

97 groups in Moss Township totalling 388 individual units

Pele Mountain Resources Inc.

74 groups in Moss Township totalling 110 individual units.

A total of 217 groups of mining claims totalling 989 individual units belong to the Pele Mountain Resources Inc. and its subsidiary 1200157 Ontario Inc.

3.0 **History-**

The first systematic exploration after the Ardeen Mine closed down was by run in 1957 by Noranda Mines. This program observed strong conductors which are not normally associated with gold-bearing vein systems.

The next phase of systematic exploration was run by Dome Exploration and Belore Mines, where splay systems from the Ardeen Fault and extensions of the Ardeen Mine workings were drilled respectively.

Recently the properties for the most part have layed dormant with little systematic exploration until Pele Mountain Resources Inc. have picked up most of the area surrounding the Ardden Fault deformation zone for a distance of over 38 kilometers.

1870- The Ardeen Vein was discovered by two trappers.

1872- P.McKellar sampled the Ardeen Vein

1874- H-1 claim staked by Jackfish Lake Mining Company

1882- Mining operations commenced

1883-1885- 10 ton ammalgamation mill set up, Shaft #1 sunk to 48.2 meter depth

1925- Shields Devt. Co. dewatered Shaft #1

1927-1929- Moss Mines Ltd. sank Shaft #2 to 12.9 meter depth

1931-1932- 200 ton Cyanide-Leach Mill constructed, Shaft #2 to 228.6 meter depth

1934- 529 oz. gold produced

1934-1935- Shaft #2 to 389.3 meter depth

1937- Erie Canadian Mines Ltd. evaluated surface and underground data

1938- regional geological by GSC (Tanton)

- 1957- Noranda Mines Ltd. geophysical, geological, 309.1m.diamond drilling (5 holes), 12 trenches, holes drilled strong electromagnetic conductors with low gold values returned.
- 1965- Noranda Exploration Ltd. electromagnetics,trenching , diamond drilling 686 meters (7 holes) over Waverley Loop
- 1967- Coldstream Mine, adjoining the east section of the prtoperty, produced 2.7 million tons grading 1.9% copper and 0.15 oz/ton Au.
- 1965- Cominco Ltd. airborne EM and mag, 2 diamond drill holes northern sector
- 1968-73- Belore Mines Ltd. electromagnetics and magnetics, diamond drilling 412.7 meters (5 holes)- 0.56/3'(71-3)
- 1970- ODM regional geological (Harris)
- 1971-1972- Belore Mines Ltd.- VLF electromagnetics, mag, diamond drilling 9 holes Fisher Zone-Trench #2 Zone (38.4 grams Au per ton over 3.8 meters and 5.14 grams Au per ton over 4.6 meters)(3 holes) and McKellar pit area (6 holes)
- 1969-1974- Dome Exploration Ltd. geological, horizontal loopgeophysical, diamond drilling 1697 meters (17 holes) on 1H Block. (0.22/4.7' in iron formation)(0.56/5', 0.56/5', 1/.12/5' Fisher Zone extension))
- 1976-1992- All areas except H-1 reverted to Crown, mill tailings optioned by Hermiston Ltd.
- 1977- Rio Tinto Exploration, regional airborne mag
- 1978- Camflo Mines Ltd. optioned property
- 1980- Lacana Mining Corp. sampled mill tailings
- 1982- Belore Mines Ltd. report by Excalibur Consultants Ltd.
- 1985- Kennco Exploration Ltd.- geological, magnetometer , VLF-EM , diamond drilling 1894 meters (16 holes) Waverley Loop area

- 1986-1988- Matt Berry Mines Ltd.- diamond drilling McKellar extension and under mine workings (41.14 grams Au per tonne over 1.52 meters).
14,508 feet (18 holes)
- 1988- Noranda Exploration Ltd. airborne EM and mag.; Induced Polarization, trenching Waverley Loop area
- 1988- Rainbow Lake Resources Ltd.- mag,VLF-EM, Induced Polarization,geological, diamond drilling 1513 meters (7 holes)
Rainbow Lake area
- 1988- International Geoventures acquired the Ardeen Mine property.
- 1990- Gold Fields Canadian Mining Ltd. airborne VLF Em and mag. surveys
- 1990- Noranda Exploration Inc.- airborne mag and EM, geological, till sampling, trenching, Induced Polarization
- 1991- GSC geological mapping (Osmani)
- 1991- Akiko-Lori Gold Resources stripping of Fisher Zone - 23 meters X
1.60 meters @ 20.91 grams/tonne gold
- 1991- Noranda Mines Ltd. diamond drilling 879 meters (3 holes) over
Waverly Loop (West Zone)
- 1992- Akiko-Lori Gold Resources geological, 336 meters diamond drilling
(5 holes) 2.06 grams over 8.35 meters -over Fisher-McKellar Zones
- 1993- Moss Lake Gold Mines outlined reserves of 80 to 100 million tons
grading 0.032 oz/ton Au
- 1994-1995- Ovalbay Geological Services Inc.-mapping, stripping,sampling,
diamond drilling 222 meters (5 holes) east & south 1H Block
(Fisher/Trench #2)
- 1995-1996- GSC regional mapping (Osmani)
- 1996- Ovalbay Geological Services Inc.- evaluation report- Fisher Zone
area

4.0 General Geology-

The area was previously mapped by the Ontario Department of Mines between 1960 and 1970, and again by the Ontario Geological Survey between 1992 and 1996.

The property lies within the Shebandowan section of the Wawa-Abitibi Greenstone Belt. The property is underlain by a series of intercalated felsic to mafic metavolcanic rocks which trend in a northeasterly direction and abruptly change to an easterly trend in the northern section of the claim block. There are also intercalated horizons of coarse grained flows or gabbro units. To the northwest section of the claim group is a metasedimentary unit of argillites and greywackes.

The central portion of the claim block is bounded by the Moss Lake syenite Intrusive Batholith.

4.1 Property Geology-

The central portion of the claim block was mapped for some 3400 meters west and 2300 meters east of the Ardeen Mine. An area of approximately 1000 meters was covered north and south of the Ardeen Mine.

The rocks in the vicinity of the mine are mafic metavolcanic flows intercalated with felsic metavolcanic flows of rhyolitic and tuffaceous origin. As the Moss Lake Syenite Intrusive is approached to the east the felsic metavolcanic unit (tuff and agglomerate pyroclastics) is more prevalent and these units tend to wrap around the syenite complex.

To the south of this area are intercalated felsic volcanics (agglomerates) and mafic volcanics intruded by diorites, gabbro and syenite along the contacts.

All of the units trend generally 70 to 80 degrees and are cut by a series of iron formation units up to 10 meters in width.

Northeasterly to east-west trending iron formation units are associated with most of the mineralized (auriferous) zones on the property. Although gold values are directly associated with re-worked and silicified iron formation, most occur within silicified contact areas. The iron formations generally strike at 42 degrees to the east of the Ardeen Mine and 60 degrees to the west of the Ardeen Mine.

Younger veins of lamprophyre, gabbro, and syenite cut all of the other structures. These younger vein systems appear to be steeply dipping. The syenite dykes intruded into fracture systems caused by the main Moss Lake Syenite intrusion, and generally radiate from the nose of the batholith.

Several units of feldspar porphyry, some with a syenitic phase, parallel and close to shear zones and splay off of the shear zones.

All of the gold-bearing veins are associated with shear zones or fault zones. Two to four major fault zones have been observed east of the Ardeen Mine, with many offset structures splaying off of these units. The offset shears dip 70 degrees to the northeast and 60-70 degrees to the

southwest. There appears to be two parallel deformation zones in the area. The strongest, some 300 to 500 meters in width, occurs between the Fisher Fault (north side of Fisher Lake) , and the Pele North Zone (some 400 - 500 meters north of the Ardeen Mine workings). The other occurs within a thin belt some 425 meters south of the Fisher Zone.

The most prominent structure is the Ardeen Fault which averages 10 to 30 meters in width. Discontinuous gold-bearing vein systems have been found associated with the contact areas. The Ardeen Fault with its associated quartz veins dips steeply (70 degrees) to the north and at depth it dips moderately (50-70 degrees) to the south.

4.2 Economic Geology-

Most of the gold and base metal occurrences in the area are associated with felsic metavolcanics (rhyolite-feldspar porphyry), mafic metavolcanics (Basalts), gabbro (coarse grained flows), or ultramafic units. The gold bearing systems are associated with the first three units. Gold-bearing systems are shear controlled and coincide with units of feldspar porphyry (altered rhyolite) and iron formation.

In the area of Moss Township and the central portion of the claim group, there are two belts of iron formation, which trend in a northeasterly direction, and appear to be associated with distinct deformation belts of up to 300 to 500 meters in width. They lie along the metasediment-mafic metavolcanic contact and the mafic-felsic metavolcanic contact in the northwest and the southeast respectively. Most of the gold-bearing systems have associated base-metal values (chalcopyrite with minor sphalerite) which is to be expected within the metasediment and felsic metavolcanic environments. Within the mafic metavolcanic areas the gold-bearing veins are also associated with contact areas with gabbro intrusives and coarse-grained flow units.

The Span Lake (Inco) gold occurrence, associated with sheared porphyry and gabbro units, has drill intersections of up to 7.4 meters and values of up to 1.29 ounces of gold per tonne.

The Burchell Lake (Newmont) gold occurrence has drill intersections of up to 0.14 ounces per ton and widths of up to 0.9 meters. It is associated with porphyry and gabbro rock units.

The Snodgrass Lake Deposit (River Gold Mines) is associated with shear zones within gabbro and porphyry units. The reserves stand at approximately 80 to 100 million tons at 1.03 grams Au per tonne.

The Ardeen Mine began production in 1932 and closed in 1936. Some 143,724 tons were produced averaging 0.20 oz. Au per ton in the final stages. The cost of milling averaged 0.25 oz. Au per ton. A total of 29,678 ounces of gold was produced from this mine. The main orebody lies within a shear-controlled contact between gabbro intrusive units to the north

and pillow basalt flows and breccias to the south. The gold-bearing quartz veins occur along the contact areas and within the Ardeen Fault, and mainly within the mafic volcanic (basalt) units. The mineralized zone also lies along the contact with a feldspar porphyry or rhyolite volcanic unit. The mineralization occurs within a quartz vein system ranging from a few centimeters to 7.3 meters in width. Within the main orebody, some 426 meters in length, there are a series of "en-echelon" veins up to 1.8 meters wide and 61.0 meters in length. The veins averaged between 10.0 and 18.1 grams Au per tonne. At depth the vein splits into two systems. Near surface the vein dips 75 degrees northwest and to 60 degrees southeast at depth. The vein is associated with feldspar porphyry or felsic metavolcanics (rhyolite) usually as the south wallrock, and in some cases this unit is related with syenite rich intrusions.

5.1- **Backhoe Trenching Program-**

A total of 7,935 meters of backhoe trenching were done on eight unpatented mining claims extending off the 1-H patent claim which hosts the Ardeen Mine occurrence. Of this approximately 10% was filled in by November of 1997 after the trenches were mapped and sampled; totalling approximately 7, 142 meters of trenching with an average width of 2.3 meters and an average depth between 0.6 meters and 2.0 meters. Most of the trenches deeper than 1.5 meters were filled in during December of 1997; with exception of two trenches which will have to be mapped and sampled in 1998 before being filled in.

The Fisher Zone was trenched for a distance of 210 meters although it was traced systematically for a distance of 400 meters.

The Pele Zone was trenched and sampled in detail over a distance of some 575 meters and traced systematically for some 1800 meters.

Some 670 hours of backhoe trenching was done on the eight claims from November 1996 to December of 1997. This work was done by two contractors; Syncox Sand & Gravel Ltd. and Rene Methot Excavating Ltd. The work was done using a John Deere 690 and a Cat 320EL retroexcavator respectively.

Trench #1- This trench is approximately 140 meters in length and is generally less than 0.5 meters in depth however some sections were dug up to 2.5 meters . The trench varies from a few meters to 5.0 meters in width. The zone is underlain by mafic volcanics (basalt) which has been sheared by one main 80 degree shear that has been cross-sheared by up to seven cross shears at 30 to 40 degrees to the main shear. The cross-cutting shears appear to be offset to the east and usually never on the west side of the main shear system. The shears are carbonate rich with some areas of quartz veining (galena-pyrite rich) generally within pods up to 0.5 meters wide. The most promising mineralization is within a discontinuous (vertical dipping)quartz vein made up of dark grey quartz and 1-2% sulphide mineralization. The other mineralized quartz veins appear to be flat-lying and dipping to the northeast. At the eastern end is a syenite dyke

up to 0.4 meters wide with and trending at 90 degrees. The syenite dyke is pyrite-chalcopyrite-carbonate rich.

Trench #2- has been exposed for a distance of approximately 150 meters. On the west side it is only 0.25 meters to bedrock and on the east side up to 1.5 meters in depth in some cases. It averages 2.0 to 2.5 meters in width. The underlying rock is mafic metavolcanic Flows (basalts) which are cut by a shear trending 80 to 90 degrees. This shear is within fractured rock and has been intruded by a discontinuous quartz vein system. The vein system, where it is offset by a splay fault (30 degrees to the main axis), is up to 0.20 to 0.30 meters in width. Sulphide mineralization is pyrite-galena-carbonate. This vein does not have potential due to inconsistency in the shear fracturing and narrow widths and lengths.

Trench #3- is up to 0.5 and 1.2 meters in depth. It occurs along the Fisher Fault trend (80 degrees). The underlying rock is mafic volcanics (basalt) with two bands of iron formation (up to 30 meters in width each) which cut the north side of the trench. The iron formation is within the Fisher Fault. There is up to 10% pyrite mineralization within the contact areas of the iron formation. There is an offset splay shear at 30 degrees to the main shear. Gold values are found within a short distance from the contact of the two shears but dissipates after a short distance of less than 40 meters. The trench is approximately 7 to 8 meters in width and approximately 60 meters in length. It has been channel sampled and mapped in detail; and a map is enclosed with this report. Gold values are associated with the splay and also with the highly fractured and silicified contacts of the iron formation.

Trench #4- is within the Fisher Zone. This trench was expanded but not mapped in detail due to previously being mapped in the central sections. Less than 0.5 meters of earth was removed from this trench as it is located on a rock knoll. The trench is up to 120 meters in length and averages from 3.0 to 4.0 meters in width. The underlying rock is mafic metavolcanics (basalt) with an altered feldspar porphyry unit on the northeast side. It is cut by several bands of iron formation which are thought

to be the same unit that has been thrust faulted and folded. The iron formation noses-out in the west section of the trench but has been picked up by drilling under the trench. There is a main shear zone (averaging 2.0 to 3.0 meters in width) trending at 80 degrees. This steeply dipping shear varies in dip from 80 degrees north to 80 degrees south. It is cut by numerous shears trending 30 degrees to the main shear. Where these slays cut to the east they contain gold-bearing vein systems. Also, there appears to be discontinuous gold-bearing vein systems (within grey-vitreous quartz) at both contacts of the main shear. The sulphides within the grey quartz are galena-sphalerite-chalcopyrite-pyrite. Within the wallrock mineralization consists mainly of pyrite; and generally in amounts less than 5% disseminated.

Trench #5- This is the main trench (Pele Zone) which has been stripped. It has been stripped continuously for some 600 meters. The trench averages from 2.3 to 3.0 meters in width. The average depth is between 0.5 meters and 1.5 meters in depth. The host rock is mafic metavolcanic flows (basalt) which has been sheared (at 80 degrees). The basalts are bleached and altered within the sheared areas with segregation of the mafic minerals into bands and shards. This shear zone averages between 1.9 and 8.0 meters in width. The shear is sercitic and carbonate rich. Within the shear are one to two quartz veins which converge and diverge from one another. A series of vertical-boudinaging systems are seen within the quartz veins where gold values are seen to occur within the central sections that have not been squeezed. The quartz veins generally average between 0.4 meters and 1.8 meters in width. Sulphide mineralization is mainly pyrite with a few localized areas containing amounts of galena and chalcopyrite. Sulphides generally amount to 0.5% to 2.5% on average. On the north side of the trench is an altered (sercitic-fuschite rich) feldspar porphyry which contains 1-3% disseminated pyrite. On the south side is one to two bands of iron formation ranging from 0.5 meters to several meters in width. In some areas gabbro dykes are noticeable. Host rock for gold mineralization is within the feldspar porphyry

and within the quartz veins. It appears that the mineralization is vertical plunging but most likely plunges 40 degrees to the northeast.

Trench #6- is formerly known as the Minoletti Vein and has been trenched for some 400 to 500 meters in length. The depth of the trench averages between 0.3 meters to 2.0 meters, and the average width is 2.0 to 3.0 meters. There is intense shearing occurring in this area which lies immediately south of the Ardeen Fault (and paralleling). The host rock is mafic metavolcanics (basalt) which is carbonate rich. The main shearing is at 80 degrees with a minor shear (cross-cutting splay) at 120 degrees. Both shear systems are steeply dipping to the north and northeast respectively. There is an altered feldspar porphyry cutting the south side of the zone, as well as several syenite dyke systems at 120 degrees. The syenite dykes are generally only up to 0.5 meters in width. The feldspar porphyries are sericite rich and have up to 1.5% fine disseminated pyrite. Within the trench is a discontinuous quartz vein (white-calcite rich silica) which is up to 1.5 meters in width in sections. Sulphides within the quartz vein are generally - 1/2% pyrite. There is a few localized sections with minor galena. This trench was washed down but not sampled or mapped in detail due to unexpected winter conditions arriving early.

Trench #7- is located along the Pele South Zone or Beaver Trench area. The underlying rock consists of altered (syenitized) mafic metavolcanics (basalt) which has been bleached. There is a shear zone up to 0.50 meters in width which trends at 80 degrees. In some sections is altered feldspar porphyry which has up to 1% disseminated pyrite. The trench, up to 1.5 meters in width, has been trenched for approximately 120 meters. The average depth is from 0.5 meters to 1.2 meters. This trench has not been mapped due to winter conditions arriving during the backhoe stripping.

Trench #8- is part of the Pele West Zone and has been stripped for approximately 250 meters. It averages from 2.0 to 2.5 meters in width (sometimes up to 4.5 meters width) and averages between 0.2 to 2.5 meters in depth. The underlying rock is mafic metavolcanic flows (basalts) which

are cut by felsic volcanics (agglomerates and fragmental tuffs). The trench follows several parallel shears which are generally less than 0.5 meters in width but can be up to 4.5 meters in width. At the west end of the trench feldspar porphyry units and iron formation units are found at the south side and north side of the shear respectively. The feldspar porphyry, sericite rich, is up to 2.0 to 3.0 meters in width in sections. The iron formation appears to bulge and pinch and is discontinuous. The gold values are associated with a vertical quartz vein which averages from a few centimeters to 0.30 meters in width. The quartz vein boudinages and can dip steeply north to steeply south. Sulphide mineralization within the quartz vein consists of generally less than 1/2 to 1% pyrite mineralization.

Trenches #9 to 14- are narrow trenches up to 1.0 to 1.5 meters in width and from 10 to 30 meters in length. They are generally from 1.0 to 1.5 meters in depth with exception of the swamp areas where they are up to 3.0 meters in depth. The deeper areas have been mapped and filled in. The purpose of these trenches is to find parallel extensions of the Pele Zone, and all of them exist within mafic volcanics (basalts). At the western end, trenches 13 and 14 have encountered banded iron formation up to 10 meters in width with some minor feldspar porphyry on the south side up to 1.0 meters in width. The porphyry has generally up to 2% fine disseminated pyrite and sericite-fuschite mineralization. Most of these trenches have been filled in because they exist along the road which joins the west trenches to the east trenches.

Trenches #15 to 23- are up to 1.2 to 1.8 meters in width and average between 0.5 and 2.0 meters in depth. They range from 10 to 60 meters in length. They all encountered mafic metavolcanics (basalt) which has been intruded by feldspar porphyry units from 0.5 meters to 2.5 meters in width. The porphyry is found as unmineralized and syenite rich units and as altered sericite rich units with up to 2.5% fine disseminated pyrite. The porphyries are generally discontinuous and converge-diverge from one another. Some of the trenches intersected silicified banded iron formation from 2.0 meters to 8.0 meters in width.

Trench 24- encountered sheared mafic metavolcanics (basalt) at the east end of the Pele North Zone. At this point the shear is only 0.5 meters in width and the quartz vein system pinches out. The trench is 1.5 meters in depth by 10 meters in length and 1.5 meters in width. It continues immediately south of the Ardeen Fault. Sulphides occur as disseminated pyrite to amounts not exceeding 1% but without the necessary silicification needed for gold-mineralization.

Trenches #25 to 31- occur along the western portions of the Pele West Zone. These are cross trenches of between 10 and 70 meters in length that were put in during snow conditions. They were mapped in brief and were not properly sampled. They average 1.5 meters in width and from 1.0 to 3.0 meters in depth. The deeper trenches were filled in due to water filling the trenches. A narrow shear zone trending 80 degrees and up to 0.5 and 1.0 meters in width was exposed. Quartz veining within the shear varies from 0.3 to 0.6 meters in width. The quartz is found as steeply plunging boudinages , and appear to be discontinuous. The underlying rock is mafic metavolcanics (basalt) which have been intruded by altered feldspar porphyry which ranges from 0.5 meters to 4.5 meters in width. Some sections of the porphyry are unaltered with low sulphides (pyrite) less than 1% content. The altered sections have up to 3% fine disseminated pyrite in sections. Discontinuous units of iron formation trend along the north side of the shear zone, and varies in widths from 0.5 meters to 10 meters.

6.0- Conclusions-

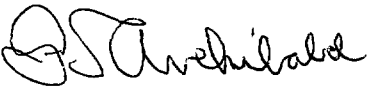
The backhoe trenching has been successful in tracing the Pele Zone for some 1800 meters in length and also the Fisher zone (Fisher North) for some 400 meters in length. Although the underlying rock in most cases is mafic metavolcanic basalt flows, there are some felsic volcanic fragmental tuffs and agglomerates found in the western extensions of the trenching and increasing to the west. The basalt in the vicinity of the shears are bleached and have undergone alteration (hydrothermal and heating). Gold-bearing veins (averaging from 0.3 to 1.8 meters in width) are associated with shear zones which average from 0.3 meters to 8.0 meters in width. These shears have banded iron formation and altered feldspar porphyry associated with them.

The most significant systems encountered are the 80 degree trends due to continuity. The cross-shearing generally pinches out within short distances.

The grey silica veins with galena-chalcopyrite-sphalerite are the most significant for gold mineralization. The altered feldspar porphyries are more abundant but generally contain lower gold values. These porphyry units increase towards the west. The iron formation, where they are re-fractured and silicified, have indicated gold mineralization.

The most important aspect of the backhoe trenching has been indications of the complexity of deformation in the area and the good probability of finding more parallel mineralized zones between the Ardeen Fault and the Fisher Zone. Existence of several directions of gold-bearing quartz veining which pinch out abruptly over short distances has shown that some of the past drilling is bypassed in the wrong direction and that some of the drilling missed the intended targets. Any future drilling should be done on shorter spacings.

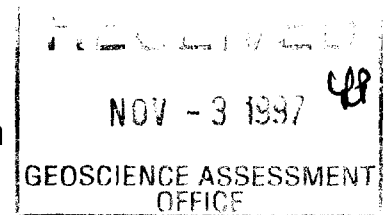
December 21, 1997
Concord, Ontario.


F.T. Archibald, B.Sc. Geologist

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Pele Mountain Resources Inc.

Manual Overburden Stripping Program
Moss Lake Property



Syncox Sand & Gravel Ltd., using a John Deere 790 excavator stripped between November 22 and December 2, 1996 two trenches on claims 1172315 and 677470; costing \$7445 and \$9420 respectively. Cost was at \$95 per hour base price (\$96.80 total price per hour). A total of 174.2 hr. was completed.

The trenches were over mafic volcanics pillow basalts with minor syenite intrusive dykes. Discontinuous sulphides within shear zones trending 080 and 110 were outlined. The main mineralization is within the 110 degree axis.

On claim 1172315 is an iron formation up to 5.0 meters wide and trending 080. This is located between two faults.

Work was discontinued due to snow conditions.

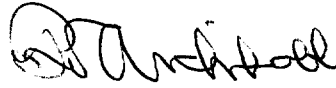
Rene Methot Excavating Ltd., using a Cat 320 EL excavator (1997 model) stripped claims 677468-71 inclusive, 1172315, 1172365, 1172349, 1172350. The rate, at \$95 per hour base price included 670.5 hrs. This averages \$112.16 per hour total. The work was run between July 26, 1997 through October 25, 1997. On average 8 to 11 hours per day were done. A total of 670.5 hours was completed. On these claims the underlying rock units are mafic volcanic flows (pillowed basalts). These are paralleled by iron formation units and feldspar porphyry units. Gold-bearing quartz veins from 0.3 to 2.1 meters in width are located within shear zones striking at 080 to 110 degrees. The shears average 1.0 meters to 8.0 meters in width. Located immediately north of the claims are gabbro intrusive units and ultramafic units.

At present samples have been channel-sampled at spacings 8 to 15 meters between fences. These samples are presently being assayed and have not been compiled on base maps.

Enclosed are two maps; one showing trench locations and

dimensions, and the other showing relationship with geology and shearing.
These maps are at scale of 1:2000 and 1:2500 respectively

October 29, 1997
Moss Lake Ontario

A handwritten signature in black ink, appearing to read 'F.T. Archibald'. The signature is written in a cursive style with a large, looped initial 'F'.

F.T. Archibald

NOU 04 '97 15:21 FR GEOSCIENCE ASSESSMENT 7056705081 TO 9190567143

2.17861



Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

Assessment Work Performed on Mining Land (Mining Act, Sections 65(1) and 66(1), R.S.O. 1990, c. 28)



52B10SW0037.2 17861 MOSS

900

Thunder Bay Mining Division

OCT 29 1997

Amended copy

1. Recorded Holder (Attach a list if necessary)

Name: **12001ST ONTARIO INC.**

Address: **20 RICHMOND ST. E. SUITE 242 TORONTO, ONTARIO M5C 2R9**

Client Number: **302464**

Telephone Number: **905 660 0501**

Fax Number: **905 660 7143**

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

- Geotechnical: prospecting, surveys, assays and work under section 18 (regs).
- Physical: drilling, stripping, trenching and associated assays
- Rehabilitation

Work Type: **BACKHOE STRIPPING**

Office Use:

Commodity:

Total \$ Value of Work Claimed: **92,068.00**

NTS Reference:

Mining Division: **Thunder Bay**

Resident Geologist: **Thunder Bay**

Global Positioning System Date (if available): **JULY 25 1997 TO OCT 25 1997**

Township/Area: **MASS TOWNSHIP**

M or G-Plan Number: **676**

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Please remember to:

- obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assessing work;
- include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name: **F.T. APPIA CONSULTING LTD**

Address: **66 MILLWAY AVE UNIT 15**

Name: **CONCORD ONT**

Address: **CH 312**

Telephone Number: **905 660 0501**

Fax Number: **905 660 7143**

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OCT 29 1997

GEOSCIENCE ASSESSMENT OFFICE

4. Certification by Recorded Holder or Agent

I, **F.T. APPIA** **ALAN DECHENAY** do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent: **[Signature]** Date: **OCT 29 1997**

Agent's Address: **668 MILLWAY AVE UNIT 15 TORONTO ONT M9W 2H2**

Telephone Number: **905-660-0501**

Fax Number: **905-660-7143**

NOV 04 '97 15:22 FR GEOSCIENCE ASSESSMENT 7056705981 TO 919056607143 P.09/10
the mining land where work was performed, at the time work was performed. A map showing the contiguous
must accompany this form.

Mining Claim Number, Or if work was done on other adjacent mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank Value of work to be distributed at a future date.
09 TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
09	12	0	\$24,000	0	0
09	2	\$8,892	\$4,000	0	\$4,892
①	1	7175			
②	1	1320			
③	1	1315			
④	1	1315			
⑤	1	11544			
⑥	1	11843			
⑦	1	3298			
8	1	990			
9	1	8246			
10	1	1649	2	1780	
11	10		4000		
12	15		6000		
⑬	15		6000		
14	1		400		
15					
Column Totals					

I, DEAN BECHAM, do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Record Holder or Agent Authorized in Writing: Dean Becham Date: Oct 29 1997

6. Instructions for cutting back credits that are not approved. Some of the credits claimed in this declaration may be cut back. Please check (x) in the boxes below to show how you wish to prioritize the deletion of credits:
 1. Credits are to be cut back from the Bank first, followed by option 2, or 3, or 4 as indicated.
 2. Credits are to be cut back starting with the claims listed last, working backwards; or
 3. Credits are to be cut back equally over all claims listed in this declaration; or
 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp: **OCT 29 1997 RECEIVED**

Deemed Approved Date: _____ Date Notification Sent: _____

Date Approved: _____ Total Value of Credit Approved: _____

Approved for Recording by Mining Recorder (Signature): _____

NOU 04 '97 15:23 FR GEOSCIENCE ASSESSMENT 7056705981 TO 919056607143 P. 09/10

Ontario

Northern Development and Mines

Assessment Work on Mining Land

11/09/97 10:00 AM

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the locator number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land	Value of work applied to this claim	Value of work applied to other mining land	Value of work to be distributed on a future date
18 12150792	11	—	4400	—	—
19 1215147	10	—	4000	—	—
20 1215148	1	—	400	—	—
21 1215149	2	—	800	—	—
22 1215450	2	—	800	—	—
23 1215451	8	—	3200	—	—
24 1215452	8	—	3200	—	—
25 1215453	15	—	6000	—	—
26 1215454	10	—	4000	—	—
27 1215751	1	—	400	—	—
28 1215752	4	—	1600	—	—
29 1215758	1	—	400	—	—
30 1215831	2	—	800	—	—
31 1215859	1	—	400	—	—
32 1195761	5	—	233	—	—
33 1196862	4	—	1600	—	—
34 1209761	15	—	6000	—	—
35 1210782	2	—	800	—	—
37 1210783	12	—	4800	—	—
38 1210792	11	—	4400	—	—
39 1213248	16	—	6400	—	—
40 1215200	1	—	400	—	—
41 1215306	8	—	320	—	—
42 1215323	15	—	3463	—	—
43 1215327	1	—	400	—	—
44 1215758	1	—	400	—	—
Column Totals		92068	92068		

2.17861

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NOV - 9 1997

GEOSCIENCE ASSESSMENT

duplicate *

duplicate *

duplicate *

NOU 04 '97 15:24 FR GEOSCIENCE ASSESSMENT 7056705081 TO 919036607143 P.10/10
and Mines for Assessment Credit

669740.00471

Personal information collected on this form is obtained under the authority of subsection 8(1) of the Assessment Work Regulation 606. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 8th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of Work <small>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.</small>	Cost Per Unit	Total Cost
STRIPPING BACKHOE	84470 hr.	109. ⁰⁰	92,068
Associated Costs (e.g. supplies, mobilization and demobilization).			
Transportation Costs			
Food and Lodging Costs			
Total Value of Assessment Work			92,068

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NOV - 3 1997
GEOSCIENCE ASSESSMENT
OFFICE

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK x 0.50 = Total \$ value of worked claimed.

Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, R.T. ARCHIBALD (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as AGENT I am authorized to make this certification. (recorded holder, agent, or state company position with signing authority)

Signature: R.T. Archibald Date: OCT 29/97

March 27, 1998

PELE MOUNTAIN RESOURCES INC.
20 Richmond Street East
Suite 212
TORONTO, ONTARIO
M5C 2R9

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9846
Fax: (705) 670-5881

Dear Sir or Madam:

Submission Number: 2.17861

Status

Subject: Transaction Number(s): W9740.00971 Approval After Notice

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Bruce Gates by e-mail at gatesb2@epo.gov.on.ca or by telephone at (705) 670-5856.

Yours sincerely,



ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Work Report Assessment Results

Submission Number: 2.17861

Date Correspondence Sent: March 27, 1998

Assessor: Bruce Gates

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9740.00971	1172315	MOSS	Approval After Notice	March 19, 1998

Section:

10 Physical PSTRIIP

The revisions outlined in the Notice dated February 2, 1998, have been corrected.

Based on the invoices supplied the total for Rene Methot is \$71,238 as calculated below.

The work was originally filed on Oct 29/97 and was for work performed up to October 25/97. The additional invoice for \$4930.03, received from F.T. Archibald on February 13, 1998, was for work after this date (Oct 27 to Oct 31).

The original invoices contained on the last page 3 "receipts" for work from Oct 6 to Oct 25. It is the receipt for the work from Oct 6 to Oct 10 for \$4607.50 (It is this amount that was originally reduced) that is duplicated as invoice 16910 and with the GST totals \$4,930.03. I allowed the costs of \$4,930.03. The new invoices supplied include the work from Oct 14 to Oct 18 (invoice 16913 for \$5,047.73) and Oct 20 to Oct 25 (invoice 16914 for \$4,777.55). These invoices include the GST and float costs and represent an increase of \$642.78 from the information originally submitted.

Including the actual invoiced amount brings the total to \$71,237.93 for the 1997 and \$88,102.93 for the total submission. This represents a reduction of \$3,965. ($\$4607.50 - \$642.78 = \3965)

The TOTAL VALUE of assessment credit that will be allowed, based on the information provided in this submission, is \$88,103

Assessment work credit has been approved as outlined on the attached Distribution of Assessment Work Credit sheet.

Work Report Assessment Results

Submission Number: 2.17861

Correspondence to:

Resident Geologist
Thunder Bay, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):

F. T. Archibald
CONCORD, ONTARIO, CANADA

PELE MOUNTAIN RESOURCES INC.
TORONTO, ONTARIO

1200157 ONTARIO INC.
TORONTO, ONTARIO

Distribution of Assessment Work Credit

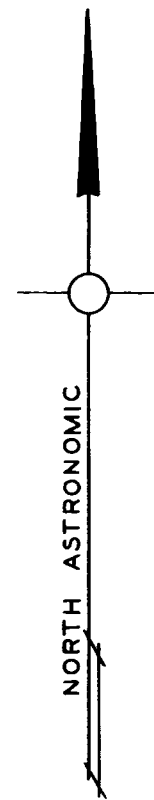
The following credit distribution reflects the value of assessment work performed on the mining land(s).

Date: March 27, 1998

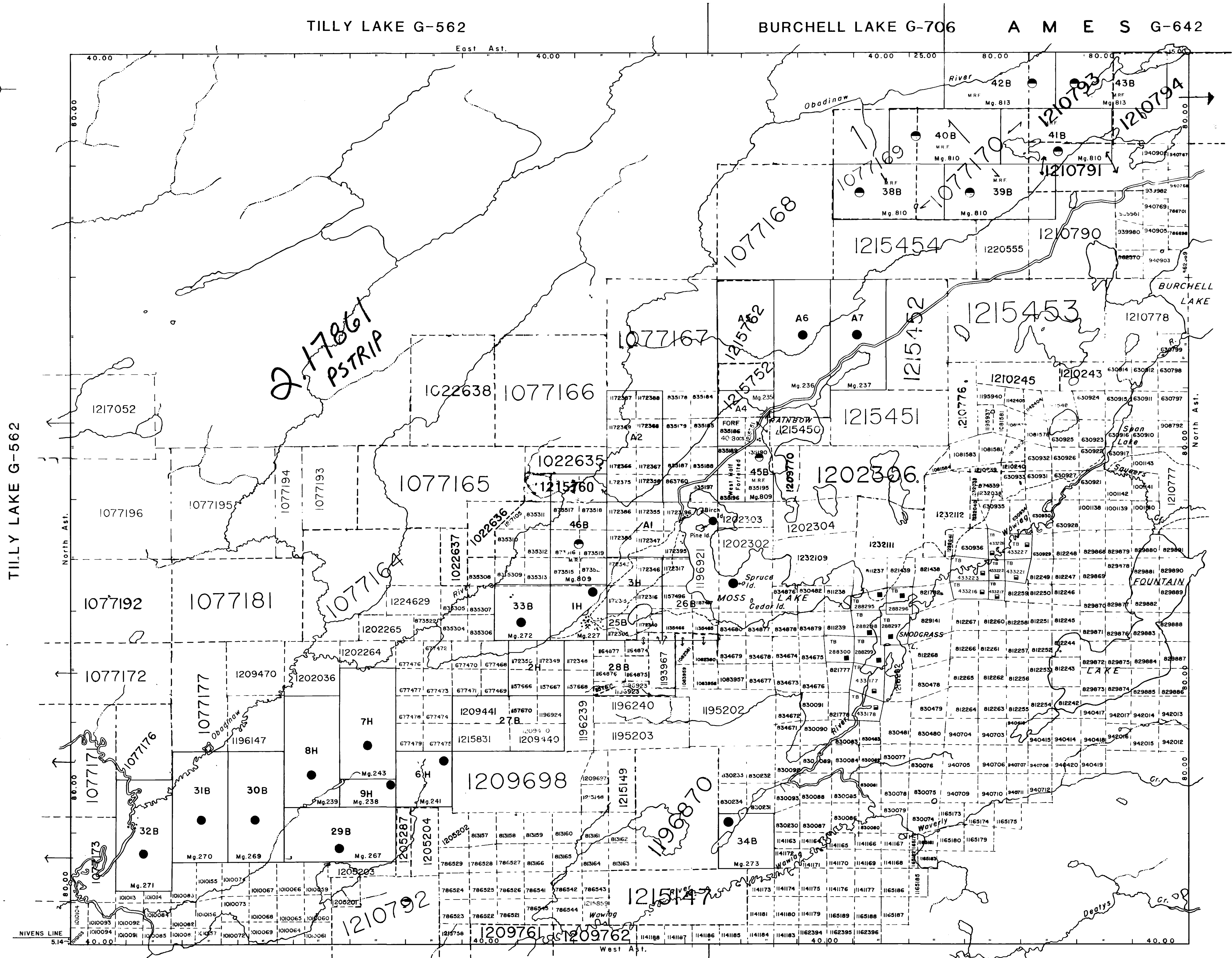
Submission Number: 2.17861

Transaction Number: W9740.00971

<u>Claim Number</u>	<u>Value Of Work Performed</u>
1172315	10,280.00
677470	20,062.00
677468	6,314.00
677469	12,625.00
677471	14,204.00
1172365	947.00
1172349	7,891.00
1172350	15,780.00
Total: \$	88,103.00



TILLY LAKE G-562



TILLY LAKE G-562

BURCHELL LAKE G-706

A M E S G-642

BURCHELL LAKE G-706

POWELL LAKE G-549

NELSON LAKE G-745

NOTICE: The information that appears on this map has been compiled from various sources, and accuracy is not guaranteed. Those wishing to stake mining claims should consult with the Mining Recorder, Ministry of Northern Development and Mines for additional information on the status of the lands shown on this map.

LEGEND

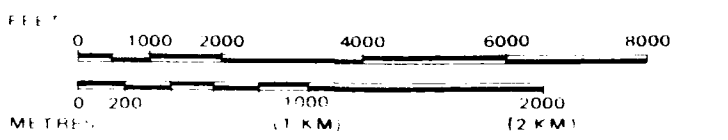
- HIGHWAY AND ROUTE NO.
- OTHER ROADS
- TRAILS
- SURVEYED LINES
- TOWNSHIPS, BASE LINES, ETC.
- LOTS, MINING CLAIMS, PATENTS, ETC.
- UNSURVEYED LINES
- LOT LINES
- PARCEL BOUNDARIES
- MINING CLAIMS, ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMBINATION PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
... SURFACE RIGHTS ONLY	○
... MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	■
... SURFACE RIGHTS ONLY	◼
... MINING RIGHTS ONLY	◻
LICENCE OF OCCUPATION	○
ORDER IN COUNCIL	OC
RESERVATION	⊙
CANCELLED	⊘
SAND & GRAVEL	⊙
... COMMERCIAL TOURISM OUTPOST CAMPS	⊙

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 8, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63 SUBSEC. 1

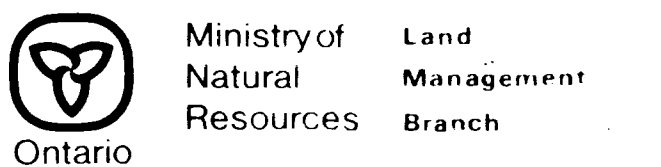
SCALE: 1 INCH = 40 CHAINS



TOWNSHIP

MOSS

M.N.R. ADMINISTRATIVE DISTRICT THUNDER BAY
MINING DIVISION THUNDER BAY
LAND TITLES / REGISTRY DIVISION THUNDER BAY



Date MARCH 1982

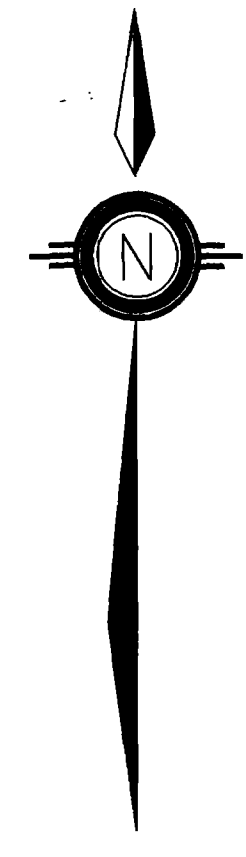
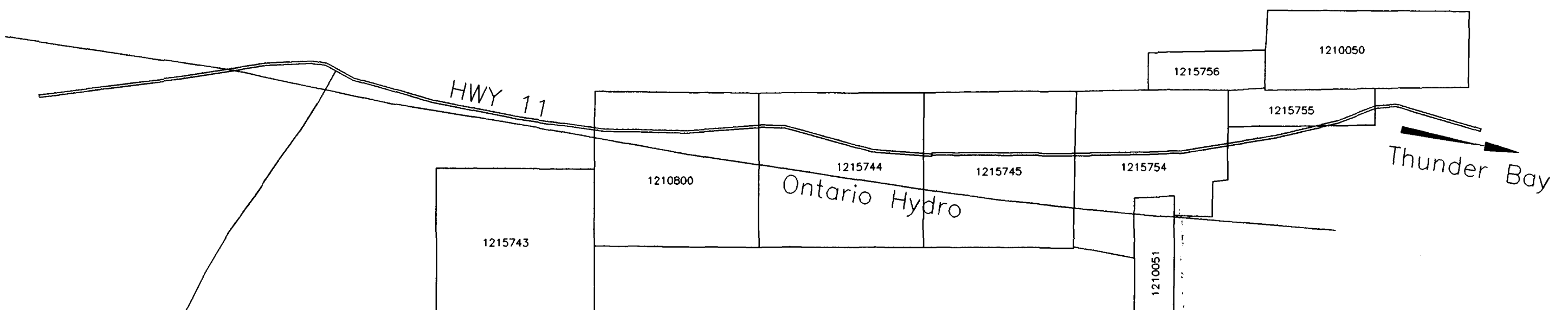
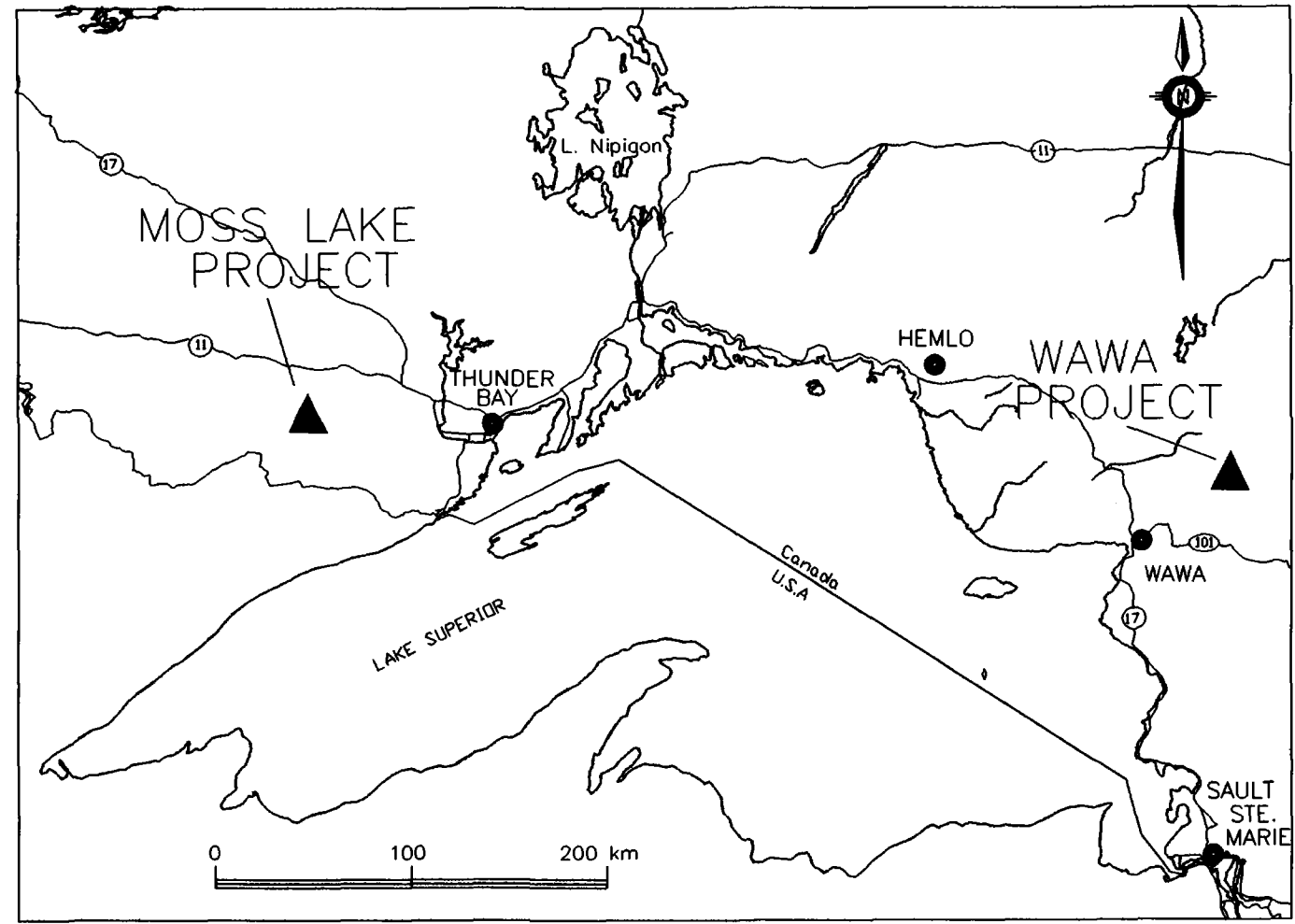
Number

In Service Sep. 27/94.

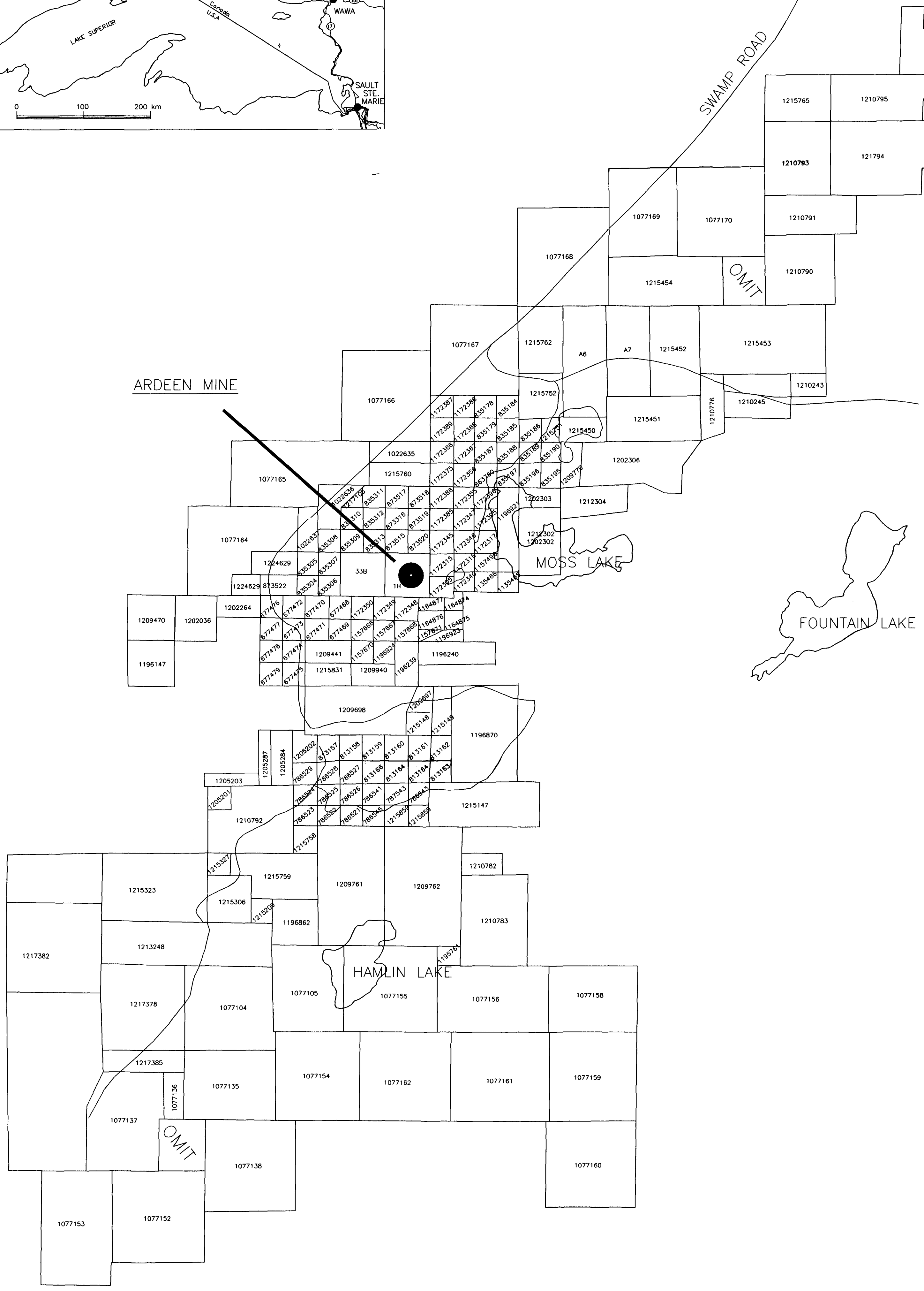
G-676

200



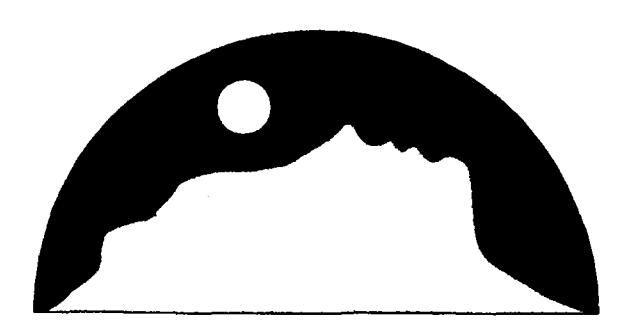


ARDEEN MINE



MOSS LAKE CLAIM GROUP (Au)
MOSS TOWNSHIP, ONTARIO

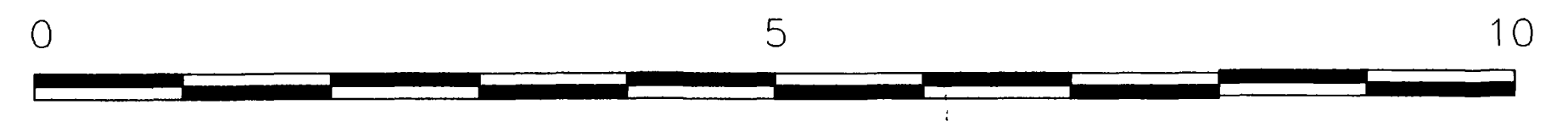
2.1786T



Pele Mountain Resources Inc



SCALE (KM)




ATC/land



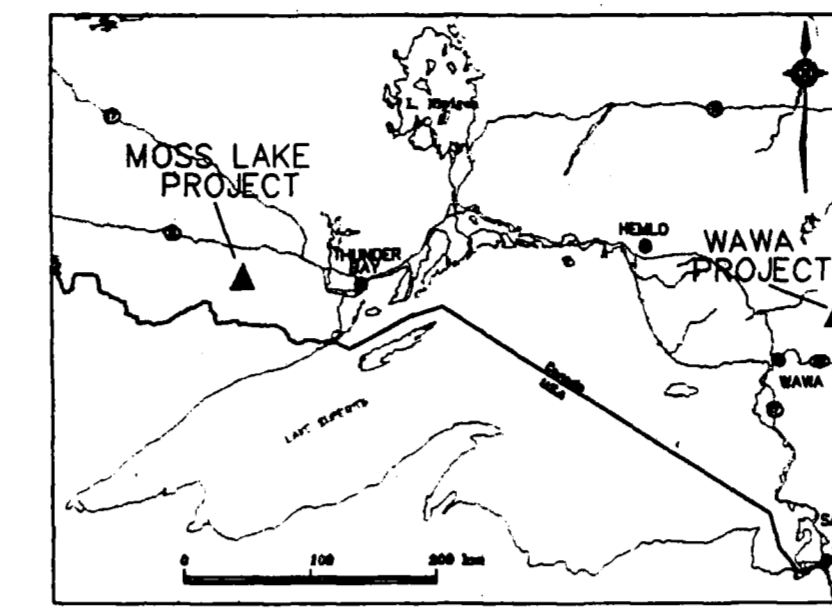
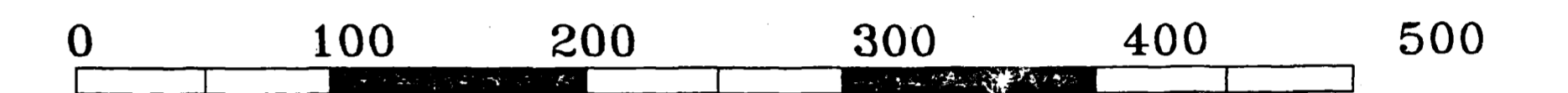
2.17861

Handwritten signature

TRENCHING PLAN

 Pele Mountain Resources Inc.	
MOSS LAKE PROJECT	ARDEEN GRID
1997 Exploration Program Surface Plans	
NTS Basemap: 52B/10	Compiled: Oct.29/97 By: JR Version 4.0
Digital File Code: Mossgrd8.dwg	
Program Management: Sonic Soil Sampling Inc.	

SCALE (METRES)



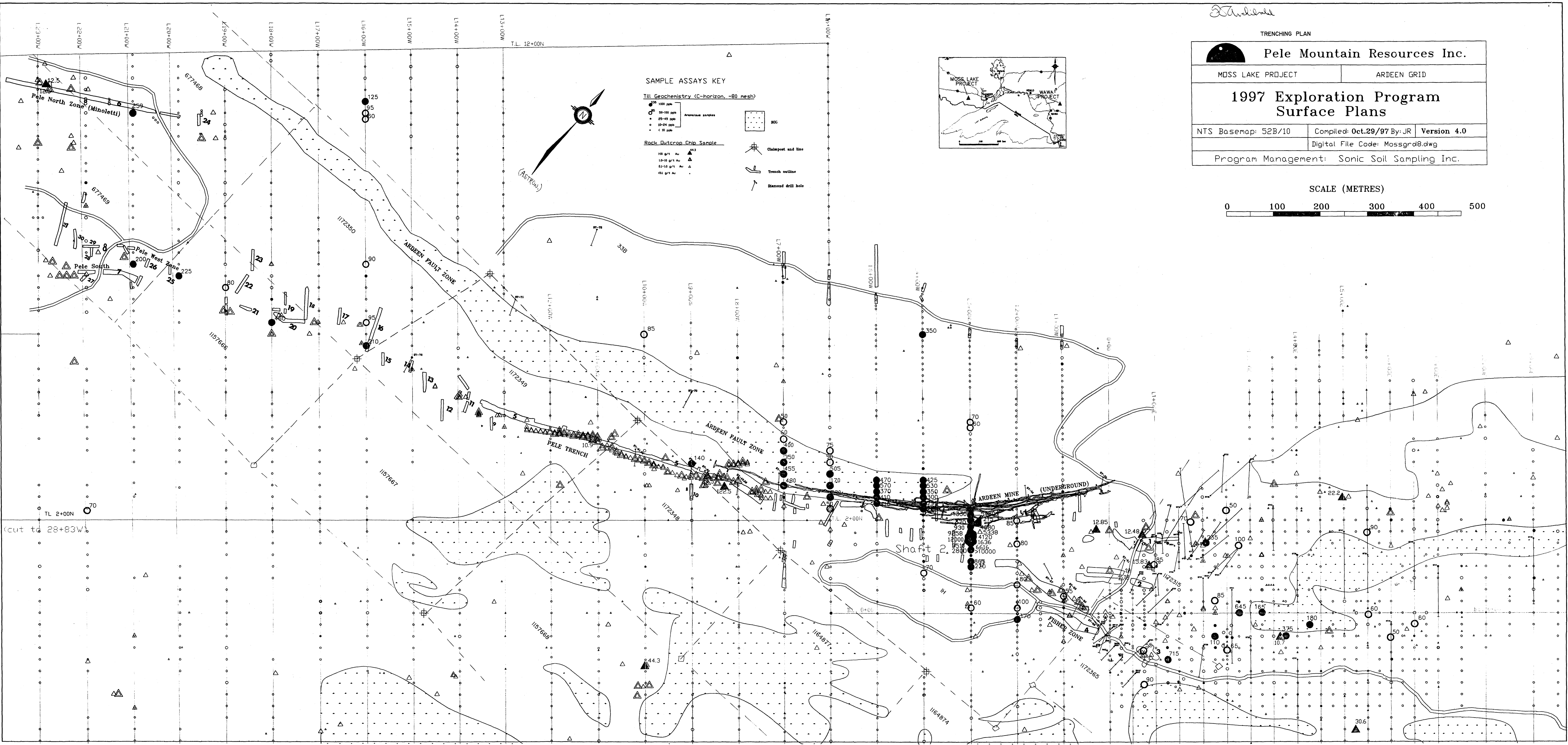
SAMPLE ASSAYS KEY

Till Geochemistry (C-horizon, -80 mesh)

- 25-100 ppm Au
- 10-25 ppm Au
- 5-10 ppm Au
- < 5 ppm Au
- ▲ Arsenious arsenides
- BGC
- ⊠ Chalmers and line
- Trench outline
- ⊙ Diamond drill hole

Rock Outcrop Chip Sample

- ▲ 200 gr/t Au
- ▲ 10-20 gr/t Au
- ▲ 5-10 gr/t Au
- ▲ 0-5 gr/t Au



(cut to 28+83W)



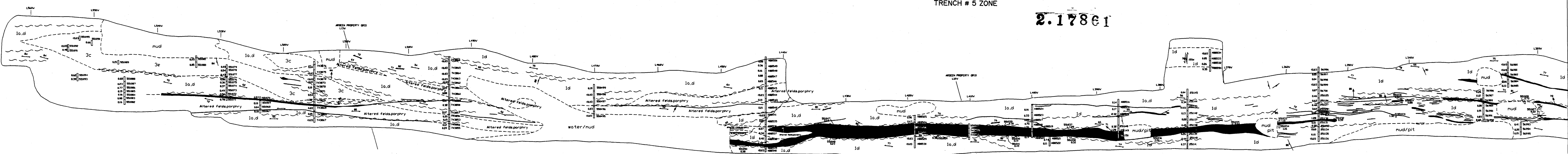
B. P. ...



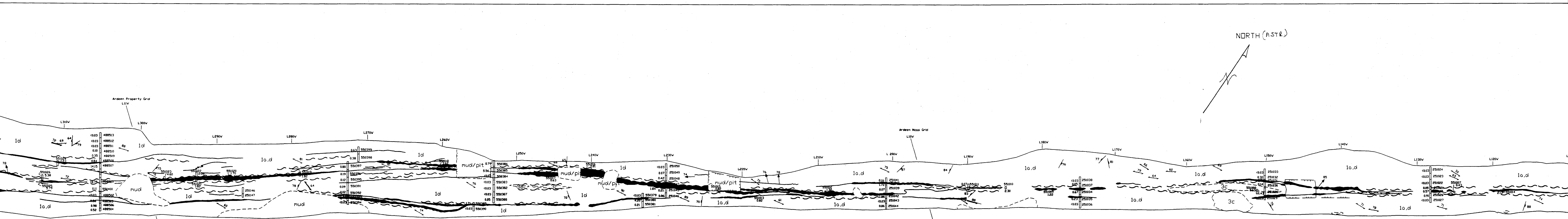
Moss Lake Project - Pele Trench Geology/Sampling Plan

TRENCH # 5 ZONE

2.17861

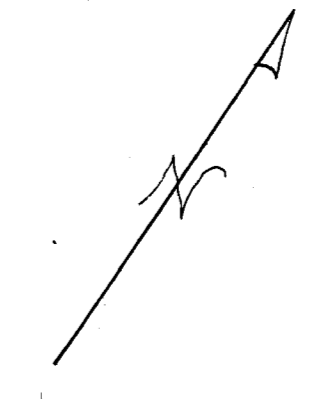


WEST PELE TRENCH

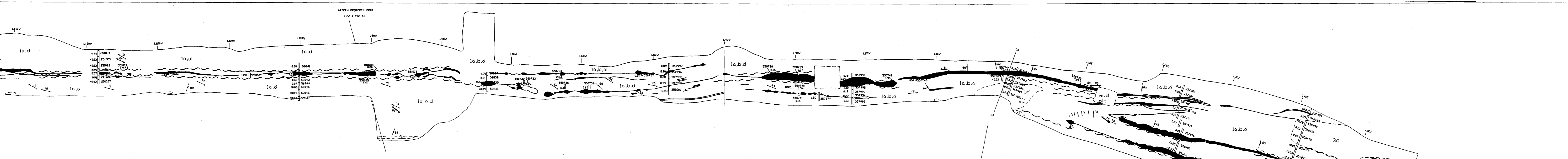


CENTRAL PELE TRENCH

NORTH (A STR.)



GEOLOGICAL KEY



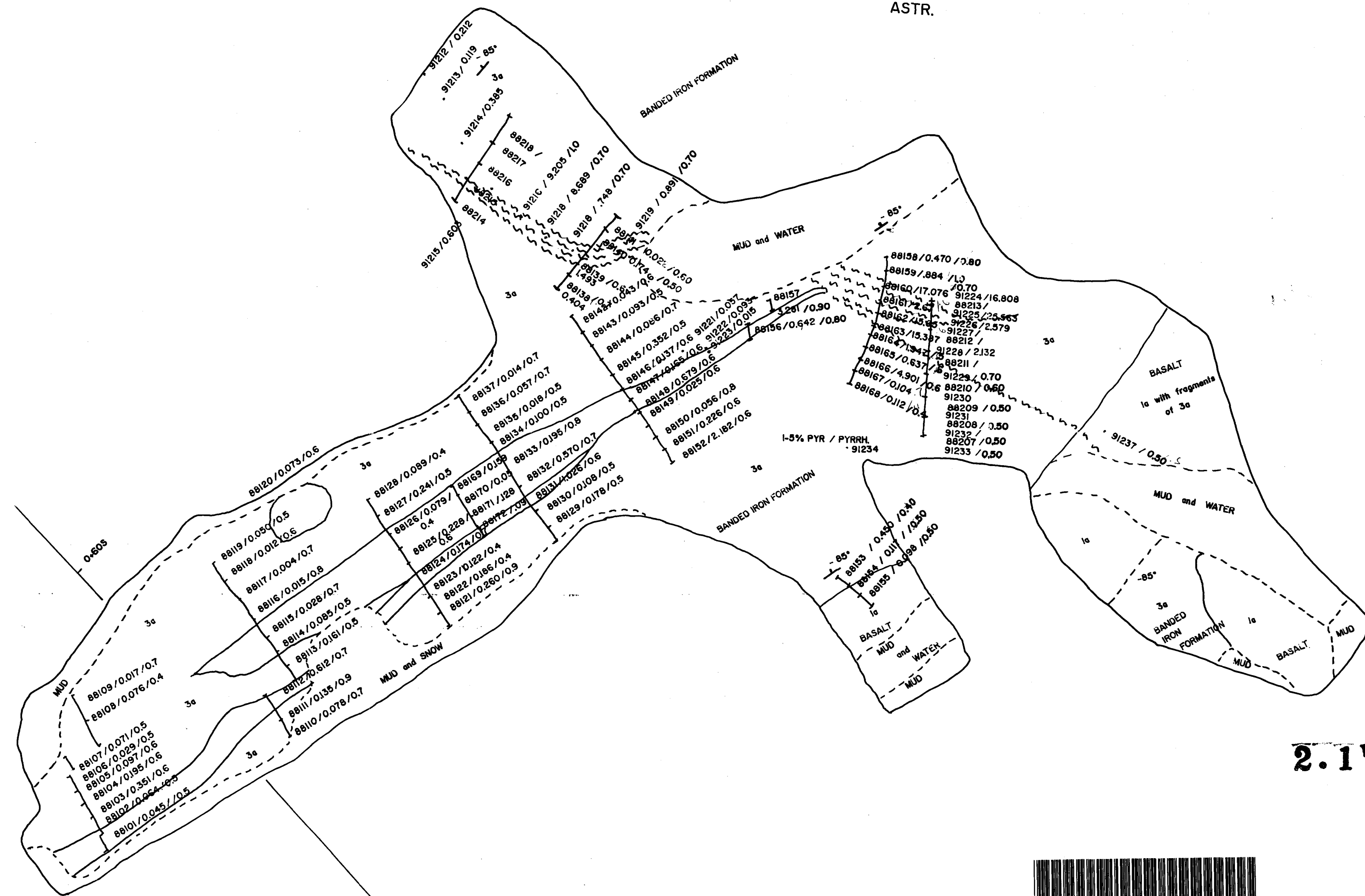
Local trench grid 0+00

EAST PELE TRENCH

GEOLOGICAL KEY

- L30V Trench grid reference
- Foliation 1
- Foliation 2
- Jointing
- Boudin axis (azimuth & plunge value)
- Channel sample (Au g/t & sample no.)
- Shear axis
- Quartz veins/boudins
- 3a.c Iron formation (c-brecciated)
- 1a,b,c,d Mafic Metavolcanics
 - a-massive; b-pillowed;
 - c-tuff/breccia; d-chlorite schist

0 meters 5



2.17861



240

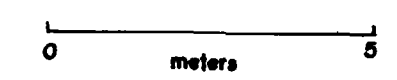
LEGEND

VALUES in grams Au per tonne / WIDTH in meters

- 1a BASALT
- 3a IRON FORMATION

TRENCH # 3 ZONE

FISHER ZONE EAST EXTENSION



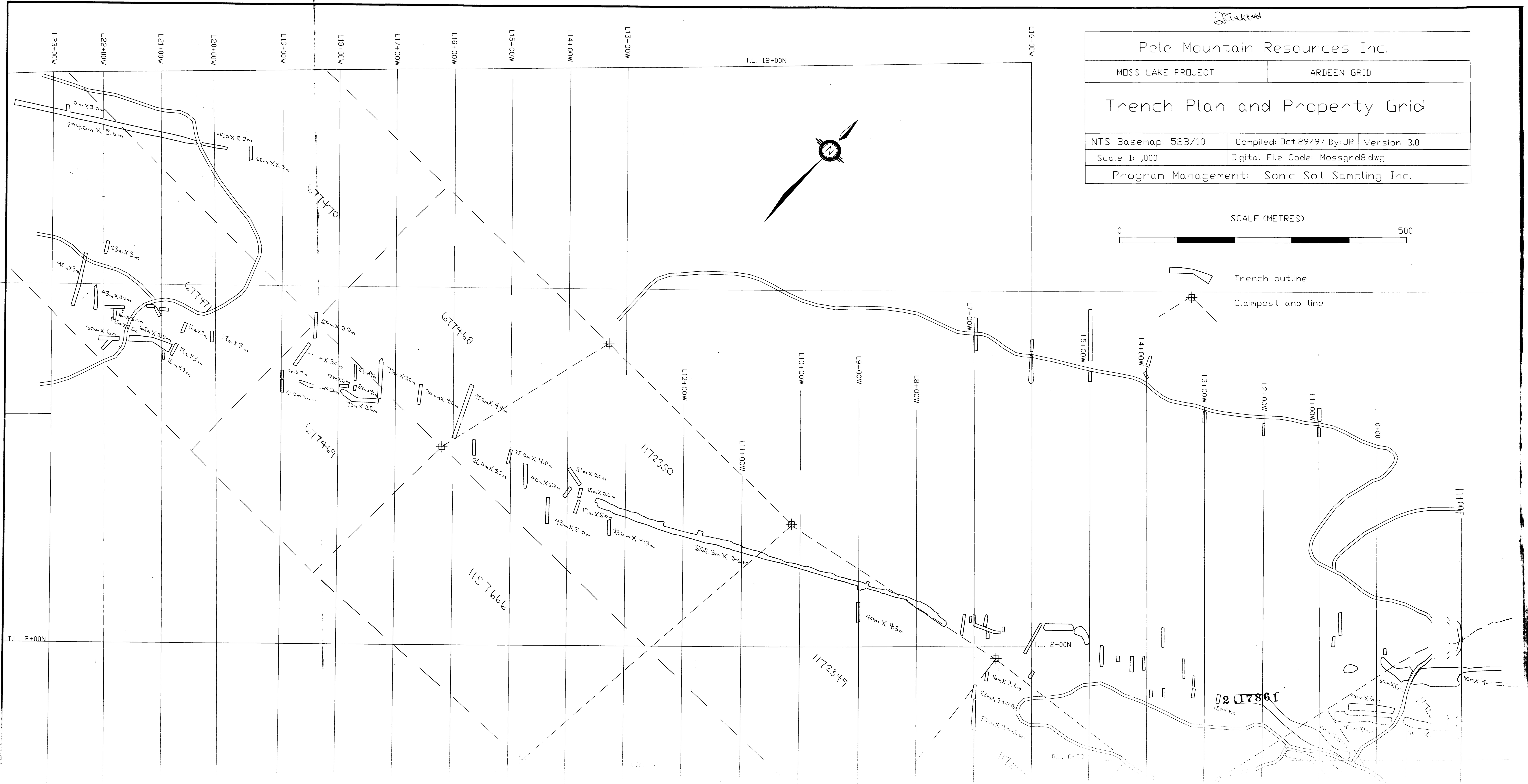
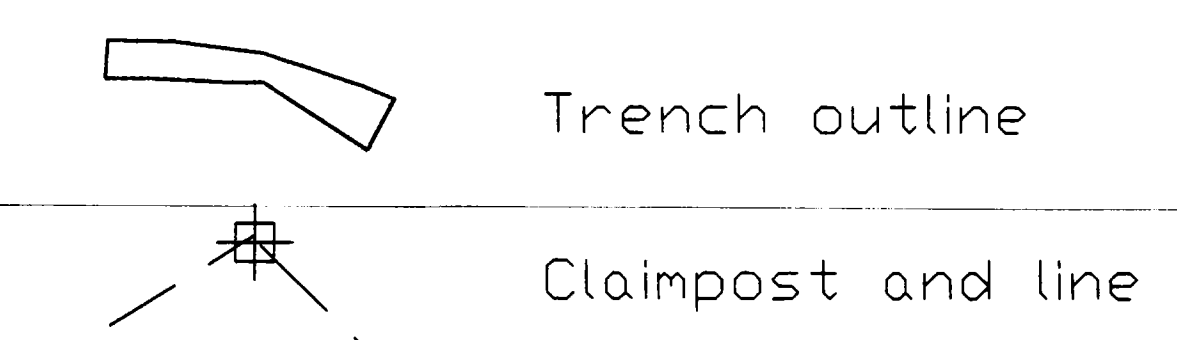
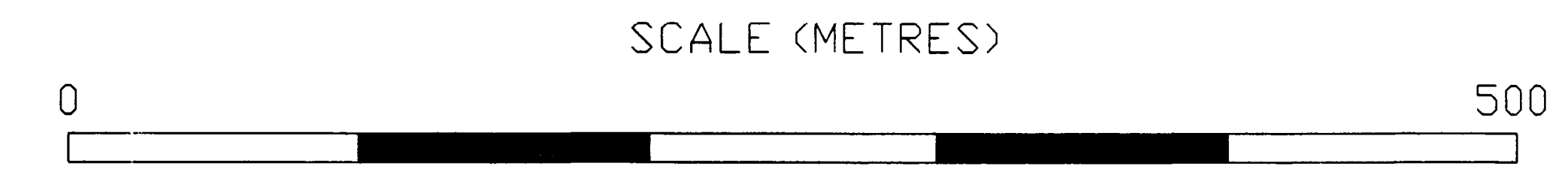
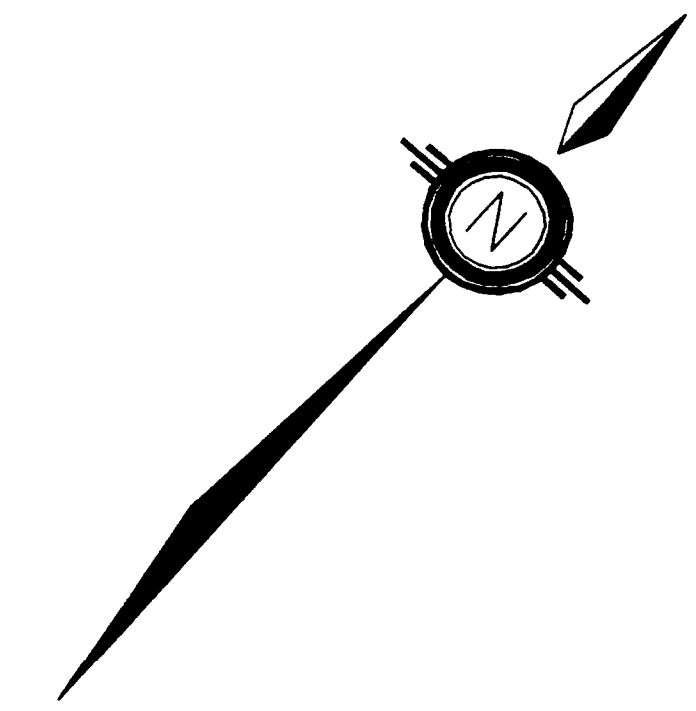
Handwritten signature: J. Archbold



2/2/97

Pele Mountain Resources Inc.		
MOSS LAKE PROJECT	ARDEEN GRID	
Trench Plan and Property Grid		
NTS Basemap: 52B/10	Compiled: Oct.29/97 By: JR	Version 3.0
Scale 1: ,000	Digital File Code: Mossgrd8.dwg	
Program Management: Sonic Soil Sampling Inc.		

T.L. 12+00N



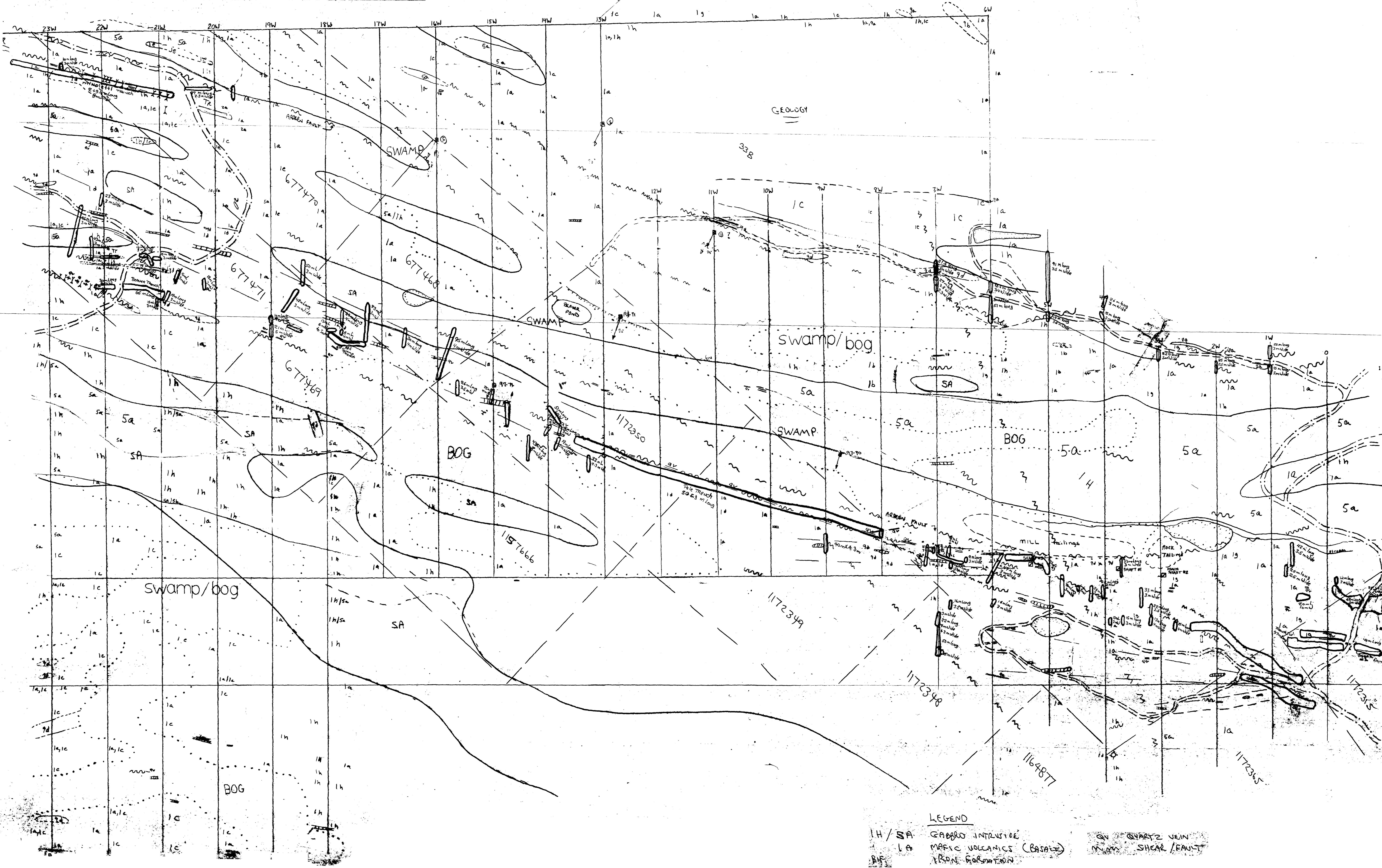
T.L. 2+00N

T.L. 2+00N

R.L. 0+00

- 9 Late Felsic to mafic Intrusive Rocks
 - 9a granite
 - 9b diorite
 - 9c monzonite
 - 9d ultramafic gabbro
 - 9e ultramafic gabbro
 - 9f amphibolite
- 8 Intermediate to Felsic Intrusive Rocks
 - 8a tonalite
 - 8b granodiorite
 - 8c granite
- 5 Mafic to Ultramafic Intrusive Rocks
 - 5a gabbro
 - 5b diorite
- 3 Chemical Metasedimentary Rocks
 - 3a chert-magnetite-banded iron formation
 - 3b chert
 - 3c brecciated ironstone
- 2 Intermediate to Felsic Metavolcanic Rocks
 - 2a massive flow
 - 2b tuff
- 1 Intermediate to Mafic Metavolcanic Rocks
 - 1a fine to medium grained massive flows
 - 1b pillow flow
 - 1c tuff, tuff breccia, lapilli tuff
 - 1d chert
 - 1e chert schist
 - 1f amphibolite
 - 1g amphibolite and vesicular flows
 - 1h medium to coarse grained flows
 - 1i plagioclase phric flow

- Trench
- Shear
- Quartz Vein (dip unknown, inclined, vertical)
- Small bedrock outcrop
- Outcrop (exposed, mass covered)
- Geologic Boundary (defined, assumed)
- Pillow Lava (dips known)
- Foliation (dip unknown, inclined, vertical)
- Fold axis (with plunge)
- Banded Iron Formation
- DDH location
- Mine Shaft
- Claim Post(s)
- Access Road
- Pond
- Bog/Swamp



LEGEND
 1H/SA GABBRO INTRUSIVE
 1A MAFIC VOLCANICS (BASALT)
 1B Banded Iron Formation
 1C QUARTZ VEIN
 1D SHEAR / FAULT

PELE MOUNTAIN RES.
 Moss Lake Property
 WEST GRID
 GEOLOGY
 scale
 1:2500

