



GEOLOGICAL REPORT
ON
MINNTAKI LAKE CLAIMS
OF
CONECHO MINES LIMITED
IN THE DISTRICT OF PATRICIA, ONTARIO
BY
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and
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Toronto, Ontario

December 4th, 1951



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LIST OF MAPS

In Folder in Rear

Map of General Geology..... scale - 1 inch equals
approximately 467 ft.

In Accompanying Folder

Maps #1 to #7 Inclusive
showing detail geology,
claim lines and traverse
lines..... scale - 1 inch equals
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Assays Plan and Geology of
High Grade Showing..... scale - 1 inch equals
20 ft.

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INTRUDUCTION

During the period 23rd May to 17th October, 1951, a detailed geological survey was made of the Minnitaki Lake property of Conecho Mines Ltd. The claims lie in the greenstone belt in which are located the Newlund and Windward Mines to the south-west and the Lewis and the San Antonio (formerly Central Manitoba) Options to the eastward. This favourable environment suggested thorough exploration by geological mapping and a prospecting team.

The property consists of 59 unsurveyed claims numbered Pa. 12002 to Pa. 12055, inclusive, and Pa. 12649 to Pa. 12653, inclusive, located in unsurveyed territory, about six miles due south of the town of Sioux Lookout, in the District of Patricia, Ontario.

Of the total 59 claims the land protion of 43 is covered by the present geological survey, namely;- Pa. 12002 - 13; 12015 - 36; 12038 - 41; 12054 - 5; 12649; 12651 2. A magnetometer survey by Koulomzine and Geoffrey was conducted on the remaining 16 water claims in the winter of 1951.

Access to the property is by water, from Sioux Lookout via Polican Lake, Abram Lake and North-East Bay. No part of the property is more than one-half mile from water.

TOPOGRAPHY, DRAINAGE, TIMBER

Abut one-half of the property is land, with claims

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INTRODUCTION

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TOPOGRAPHY, DRAINAGE, TIMEER

About one-half of the property is land, with claims

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Pa. 12042 to Pa. 12053, inclusive, Pa. 12014, Pa. 12037 and Pa. 12650 being entirely water claims. Of the land surface, only some 10-20% is outcrop. Moss and glacial drift is generally heavy, while a large swamp area covers the north-west portion of the property. A prominent 80 ft. east-west ridge parallels the lake shore on Pa. 12038 - 12039 - 12040 with drainage to the northward. On claims Pa. 12008-12009, broad north-east to south-west hills up to 150 ft. in height were found. The area to the east and south-east of Troutfish Bay is low and generally dry with only occasional swamps.

The north and central portions of the property are well wooded, while the south-west area is but sparsely covered by alders, poplar and birch. A variety of evergreens and deciduous trees are represented on the property, being chiefly spruce, jackpine, poplar and birch. In general, they are second growth with large areas of tangled windfalls, scattered over the length of the property. Exceptions are spruce and jackpine stands on Pa. 12034 and Pa. 12002 - 12651 and some white birch on Pa. 12649 - 12018 and Island #274. Evidences of timber cutting were found only on Pa. 12034.

SURVEY PROCEDURE

All base and section lines were laid out by Brunton compass, with correction made for a 5 deg. east magnetic declination. Lines were chained and marked at 100 ft. intervals.

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Although preliminary plans had been to contract the line cutting for the survey, upon starting the season it was found that experienced line cutters were not available for either contract or day labour. Consequently, it was necessary to employ inexperienced labour of a comparatively inferior quality. This, combined with windfalls and heavy scrub-growth, made cutting of lines slow and tedious.

Due to the large area and the shape of the property, five base lines were laid out. Numbers 1, 1A and the west portion of No. 2 were cut by Koulomzine Geoffrey & Co., for geophysical purposes. The west portion of No. 2 has a bearing of S 97 deg. W. No. 3 has an east-west bearing and dissects the property. To parallel the topography and regional strike, No. 4 was cut on a bearing of N45 deg. E and traverses the northern claims. South of No. 2, section lines were turned off at right angles at 300 ft. intervals to conform with Koulomzine's lines while north of No. 2 at 400 ft. intervals.

Mapping was done in the field by traversing the picket lines and locating topographical and geological features by means of scaled points on sketch sheets. Wherever possible, paced traverses were run between picket lines to locate further outcrop. The information on the sketch sheets was transferred daily to corresponding work maps at the base camp. The southern third of the property was mapped in considerable detail, to endeavour to confirm, in view of developments on Neepawa Island the favourable structural interpretation of Koulomzine and Geoffrey's

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1" = 100 ft.

REGIONAL GEOLOGY

The main features of the regional geology as shown on Provincial maps of the area, comprise a north-east trending belt of infolded Keewatin volcanics and sediments about 15 miles wide. Large areas of granite and related rocks are found to the north and south as well as intruding the belt itself.

There is a disagreement as to whether the sedimentary rocks are of Pre-Algoman age, or Keewatin age and consequently contemporaneous with the volcanics.

GENERAL GEOLOGY OF CONECHO PROPERTY

The Minnitaki claims group of Conecho Mines is located within the middle band of greenstones, extending north from the assumed greenstone - sediment contact on the south for approximately three miles. The gold-bearing zones of Echo and Pickerek townships, some 20 miles to the south-west, occupy a similar position in the belt. The Neepawa Island gold showing is immediately east and the Lewis Option is about two miles to the north-east.

All the rocks observed on the Conecho Property

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All the rocks observed on the Conecho Property

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Table of Formations

Quaternary

Pleistocene:- clay, sand, gravel and boulders

Precambrian

Algoman:- porphyritic intrusives (quartz, quartz-feldspar)
diorite

Keewatin:- andesite (fine to coarse, carbonated and porphyritized)
pillow lava
agglomerate and tuff (unaltered and porphyritized)

Acid intrusives vary from fine to coarse grained and contain varying amounts of quartz, feldspar and to a minor extent, carbonate. They occur as dikes or possible bosses. The former have apparently little lateral continuity. Observed strikes tend to follow either the regional pattern of about N 55 deg. E, or at an obtuse angle to it.

Lavas are basic to intermediate in composition and vary in texture from felsitic, through granular, to porphyritic. In general the regional strike is N 55 deg. E. with flow tops facing south-east as evidenced by pillow structure.

Agglomerates show considerable variety in size of fragmentals, from tiny to 10 inches by 14 inches angular

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DETAILED GEOLOGY

PORPHYRITIC INTRUSIVES:- These vary in composition from a quartz to a quartz-feldspar. In all, nine exposures were found. Where of dike character, strikes generally follow the regional structure. Widths vary from 3 ft. to 30 ft., but, due to the nature of the overburden, the amount of lateral continuity is obscure.

Located on Pa. 12041, (map No. 2) is a fine grained, grayish, east-west trending dike of unknown extent. Minor amounts of fine pyrite were observed disseminated through the intrusive. The presence of rust on the weathered surface suggests an iron carbonate in the composition.

Located in the north-east corner of Pa. 12009, (Map No. 7) is a quartz porphyry dike some 30 ft. in width. Numerous tiny quartz eyes are seen in a medium grey matrix, with finely disseminated pyrite and chalcopyrite throughout. Gold and copper assays resulted in very low values.

A coarse textured fairly basic, east-west trending intrusive found on Pa. 12007 was mapped as a diorite. "Ghosts" of feldspar exceeding $\frac{1}{2}$ inch were seen. The texture

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is most evident on the polished and weathered surface where it presents a mottled appearance. The north contact is irregular and blending, in contrast to the sharper and more regular south contact. Widths of the intrusive appear to increase as it enters the swamp to the south-west. To date, the strike of the dike is undetermined. The south contact is approximately vertical in dip. Some fine disseminated sulphides can be seen in the diorite and a concentration of magnetitic in the north-west portion of the exposed area. Overburden limited work in the vicinity, but an area 50 ft. by 150 ft. was exposed, open on both ends. Parallel tension fractures, striking N 30 deg. E were found, carrying quartz and pyrite and showing minor step-faulting.

ANDESITE:- The andesite varies from basic to intermediate in composition and forms much of the outcrop exposed on the property. For field mapping this type was sub-divided into fine, medium, coarse grained and carbonated lava, but it is now believed that the granular appearance is due to recrystallization. This type carries heavy localizations of magnetite on claims Pa. 12034 - 12035 - 12040 - 12041 - 12008 - 12009. Felsitic to fine grained andesite commonly has very fine disseminated sulphides present.

PILLOW LAVA:- Well formed pillow structure was found at two locations; the shoreline of Pa. 12040 and in the Pa. 12006 - 12007 area. Pillows vary in size from 0.5 ft. by 1.0 ft. to 3 ft. by 6 ft. and average is about 2 ft. in length. In most cases they are fine grained, have pale weathering with dark

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AGGLOMERATE:- For mapping purposes, this type includes all pyrochlstics, from occasional tuffaceous beds to inclusions measuring 10 inches by 14 inches. It is wide spread on the property, extending over large areas in Pa. 12013 - 12008 - 12009 - 12024 - 12025 and on Island #274. Deformation was noted only on the south-east end of Island #274 where considerable east-west elongation occurs.

The agglomerate provide a relatively clear horizon from Pa. 12009 to Pa. 12013, in contrast to the apparent lack of continuity observed in both the andesite and pillow lavas. The bed has considerable thickness, up to 500 ft., and concentration of coarse fragmentals was noted near the north contact.

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REGIONAL METAMORPHISM AND ALTERATIONS

Metamorphism and alteration were found to be chiefly confined to the northern claims (Maps 5-6-7) although some metamorphosed lavas were located on claim Pa. 12027 (Map No. 2). They consist essentially of porphyritized lavas and of carbonated lavas.

The porphyritization of the lavas has developed as two types, manely; a porphyritic greenstone and what has been mapped as "cube lava". The former is a greenstone with distinct growth of feldspar phenocrysts, varying in size from tiny to over 1/10 inches in length. It was not observed in pillow lava, occasionally was found in an andesite, and reaches its maximum development in the tuffaceous agglomerate bed found on the north-east and central claims. In the case of the agglomerate, both the groundmass and the fragmentals are often porphyritized although the more acidic inclusions are only lightly metamorphosed.

The homogeneous character of the feldspar superficially suggests either an intrusive body or a coarse, deep-seated phase of a thick lava flow. However, detailed mapping shows that the porphyritization may be due to other causes. The hypothesis of a gentle fold, having a north-west to south-east trending axis, indicates thermodynamic metamorphism accompanying the folding as the cause for the porphyritization.

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It is postulated that a genetical relationship exists between the two types, with both owing their porphyritic character to recrystallization. It is suggested that at the time of the folding the porphyritic greenstone was rich in feldspar while the cube lava contained a relatively high percentage of carbonate. The cubes in question attain a maximum size of 1/10 inch and, from field examination of hand specimens, appear to be an iron carbonate. Where the cube lava has weathered, the surface is pitted and pseudomorphs of iron oxide are found.

The carbonated lava is a disseminated carbonate alteration of andesite and, with few exceptions, was found to be associated with structural movement -- specifically the shearing and faulting found on the northern claims. In comparison with the cube lavas it is limited in extent, being found almost totally in association with zones of schistosity. Where these zones are intense, the uniform carbonate alteration reaches its maximum degree. Some fine carbonate is found where cross-fractures have relieved regional stress.

STRUCTURAL GEOLOGY

Mapping of the Minnitaki claims has indicated that major folding, faulting and shearing all occur within the property boundaries. Faulting of various proportions seems fairly wide-spread, while evidences of folding and shearing are

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mainly confined to the northern portion of the claims.

Such sparse information as is available on the balance of the greenstone belt (M.E.Hurst, vol. XLI, part 6, 1932) in this neighbourhood suggests the possibility that structures observed on these claims might be related to major regional deformations. These fall into two categories which are briefly summarized below and which (it must be emphasized) are largely conjectural in view of the lack of detailed data to substantiate them:

(1) The shearing associated with the Forster vein has been shown by prospecting to the northward to be part of a strong zone of shearing, carrying north-east on a general strike of N 55 deg. E for at least one mile. Hurst, in his mapping, has shown agglomerates to the north of this line of weakness in very much the same relationship to it as those mapped on Conecho, to the south. This might be interpreted as representing an overturned synclinal or anticlinal structure with its axis represented by the above mentioned zone of shearing. In this respect it is important to note that mapping of the Conecho bed of agglomerates has shown it to be a wide horizon with strong lateral continuity.

(2) Of equal interest is the fact that the major fold evidenced by the agglomerate on claims Pa. 12009 - 12011 - 12012 and 12013 repeats and lines up on a general axial basis with that indicated both in the northern greenstone-sedimentary contact on Abram Lake at Vaughan Mines; and also with the possible

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cont.....

change of strike in the southern greenstone-sedimentary contact in the vicinity of Ruby Island.

FOLDING:- The first sign of major folding was found in the attitude of the agglomerate bed located on Pa. 12009 - 12011 - 12012 and 12013. Supporting evidence of this fold has also been found by detailed mapping of pillow strikes on claims Pa. 12006 - 12007 and 12008. On claims Pa. 12007 - 12008 the pillows strike within a small variance of east-west in contrast to the normal regional strike found elsewhere of N 55 deg. E. Although no strikes except that indicated by the agglomerate could be confirmed on the east limb, to the west a resumption to normal strikes of the pillows were observed just off the property at the south-west corner of Pa. 12005 and also the southern portion of Pa. 12013.

This folding can also be used to account for (or be supported by) the conflicting strikes observed in the south end of the property in the vicinity of claim Pa. 12027 (Map No. 2)

On Pa. 12002 a 10 ft. drag fold in a 25 ft. shear zone was observed. Occasional minor folds over a few feet were found in poorly bedded tuffs.

FAULTING:- Although no direct evidence of major faulting has been observed on the property, topographical features and deduced evidence point strongly to its occurring with considerable frequency. The greater part of these faults appear to follow the regional strike of N 55 deg. E but there is some evidence,

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TO FOLLOW**

cont.....

change of strike in the southern general-sedimentary contact in the vicinity of Ruby Island.

FOLDING:- The first sign of major folding was found in the attitude of the agglomerate bed located on P.A. 12009 - 12011 - 12012 and 12013. Supporting evidence of this fold has also been found by detailed mapping of pillow strikes on claims P.A. 12006 - 12007 and 12008. On claims P.A. 12007 - 12008 the pillows strike within a small variance of east-west in contrast to the normal regional strike found elsewhere of N 55 deg. E. Although no strikes except that indicated by the agglomerate could be confirmed on the east limb, to the west a resumption to normal strikes of the pillows were observed just off the property at the south-west corner of P.A. 12005 and also the southern portion of P.A. 12013.

This folding can also be used to account for (or be supported by) the conflicting strikes observed in the south end of the property in the vicinity of claim P.A. 12027 (Map No. 2)

On P.A. 12002 a 10 ft. drag fold in a 25 ft. shear zone was observed. Occasional minor folds over a few feet were found in poorly bedded tuffs.

FAULTING:- Although no direct evidence of major faulting has been observed on the property, topographical features and deduced evidence point strongly to its occurring with considerable frequency. The greater part of these faults appear to follow the regional strike of N 55 deg. E but there is some evidence,

cont.....

such as the possible displacement of the agglomerate horizon on Pa. 12007, of a N 45 deg. W pattern as well.

A study of aerial photographs indicated several strong lineaments having a regional north-east to south-west trend possibly radiating southward from an area one-half mile north-east of the property. Field mapping showed that these lineaments were characterized by steep hills or cliffs. At two locations, on Pa. 12002 - 12651, there are 30 ft. depressions flanked by parallel cliffs some 40 ft. apart. These depressions are 400 ft. and 700 ft. long respectively. The eroded depressions and oxidized residual rock would indicate that considerable shearing accompanied the major faulting.

Two faults were indicated by topography on the southern claims (Map No. 2). One follows a marked depression at about N 45 deg. E from Pa. 12040 to Pa. 12019. A study of a horizon of pillow lava indicates a horizontal displacement of about 250 ft.

The second, having a parallel strike, is indicated by a low fault scarp just west of Harvey Narrows. Topographical features point to the possibility of these faults having considerable lateral continuity to the north-east.

Direct evidence of small scale cross faulting was mapped. On Pa. 12009, immediately north of the Hi Grade showing, a N 30 deg W, vertically dipping fault horizontally displaces a narrow acid dike for a distance of one foot. The

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TO FOLLOW**

cont.....

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cont.....

southern side of the fault has moved to the north-west in relation to the northern side of the fault. Some 1200 ft. to the south-west, along the strike of regional faulting, a N 65 deg. W presumed cross fault has the same direction of displacement, determined by a slickensided surface.

SHEARING:- Direct evidence of shearing and of schisting is confined to the northern claims, where the former reaches a width of 25 ft. Strikes tend to follow those of the region with dips mainly vertical. Greatest intensity is noted in three locations, namely; the Forster showing on Pa. 12002; on the edge of the swamp on the north-east corner of Pa. 12007; and the south-western portion of Pa. 12009.

ECONOMIC GEOLOGY

It has been previously noted that the northern claims are favourably located with regard to the structure of the greenstone belt. The geological survey has eliminated large areas of the property as unsuited for surface exploration (swamp and drift covered areas) as seen by the maps, and has indicated several zones deserving detailed mapping and more intense exploration.

The fine grained acidic dike on Pa. 12041, at the south end of Harvey Narrows, is believed to be part of a similar dike found at Base Line No. 1 and L 12 W. If so, this

cont.....

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POOR QUALITY ORIGINAL
TO FOLLOW**

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cont.....

would give a length of 500 ft. with a width in excess of 40 ft. A series of random ships taken over the exposure as one sample, returned a gold assay of 0.10 oz. Several quartz-filled one inch cross fractures were found and irregular hair-like pink fractures occur throughout the intrusive. Heavy drift and residual rock covers much of the dike, but it is believed to be worthy of further investigation.

The Forster showing is located in Pa. 12002 and consists of irregular, lenticular quartz in a 25 ft. wide shear zone. It strikes N 55 deg. E and the shearing has been traced for over 600 ft. to the south-west, however sometimes lacking quartz in association. The north end of the shear shows intense schisting and drag folding with introduction of massive quartz, disseminated carbonate, pyrite and minor sericite. The shear decreases in intensity, width and mineralization to the southward. Although the zone returned gold assays up to 0.12 oz., it was found to be sporadic and generally low.

The Diorite showing is located in Pa. 12007 and consists of a coarse diorite of undetermined area, cut at right angles by quartz-filled tension fractures, having a west dip of 45 deg. - 55 deg. and striking approximately N 30 deg. E. In places smaller flat-lying stringers occur, giving the impression of a stock-work. These fractures show horizontal step-faulting up to 3 ft. in displacement. Mineralization consists of fine to $\frac{1}{4}$ inch cube pyrite with the quartz, and fine pyrite and magnetite in the intrusive itself. Although scattered gold colours were

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cont.....

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cont.....

found by pannig, extensive gold sampling resulted in a high of only 0.03 oz.

The WW showing is located in Pa. 12008 at 2100 ft. N on BL 4. The work there consisted of trenching and blasting, which exposed a total length of 130 ft. of quartz vein, varying from 4 inches to 10 inches and pinching at the south end. The vein strikes approximately north-south and dips from 45 deg. to 60 deg. to the westward. The host rock is a basic, granular greenstone. The wall rock for several inches is considerably altered by albite, cut by tiny, irregular quartz stringers and well mineralized with fine cube pyrite. Early sampling of wall rock returned gold assays up to 0.72 oz. Further detailed sampling over the length exposed did not substantiate these assays. However, the presence of some gold values and the location of the showing with respect to the structure of the area makes it worthy of future consideration.

The Hi Grade showing is located in Pa. 12009 at 1100 ft. E between L 22 A-N and L 26 N. It consists of a series of narrow, quartz-filled, cross fractures at fairly wide-spaced intervals, striking about north-south and having flat dips of 10 deg. - 15 deg. to the west. Visible gold varying from pin-point size to six inches in length was found. The host rock is a brittle, basic and granular greenstone, occasionally showing a slight carbonate alteration and having localized

cont.....

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TO FOLLOW**

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The NW showing is located in P.A. 12008 at 2100 ft. N on RL 4. The work there consisted of trenching and blasting, which exposed a total length of 130 ft. of quartz vein, varying from 4 inches to 10 inches and pinching at the north end. The vein strikes approximately north-south and dips from 45 deg. to 60 deg. to the westward. The host rock is a basic, granular greenstone. The wall rock for several inches is considerably altered by albite, cut by tiny, irregular quartz stringers and well mineralized with fine cube pyrite. Early sampling of wall rock returned gold assays up to 0.72 oz. Further detailed sampling over the length exposed did not substantiate these assays. However, the presence of some gold values and the location of the showing with respect to the structure of the area makes it worthy of future consideration.

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cont.....

concentrations of 1/8 inch cube pyrite or fine magnetite. The zone lies between, and is apparently under the structural control of, two parallel shear zones; striking N 63 deg. E, having a vertical dip and being about 210 ft. apart. Vein widths vary from 0.4 inches to 6.0 inches and contain considerable chlorite mainly on the contacts. Sparse magnetite and chalcopyrite were found in the quartz. Assays, showing no V.G. returned gold values up to 1.52 oz. and a grab sample with pin-points of V.G. returned a gold value of 4.40 oz. From sampling carried out to date, it appears that increased gold values occur with increased vein widths.

CONCLUSIONS AND RECOMMENDATIONS

The Minnitaki claims are well located with respect to structural features and other promising gold showings in the area.

Geological and structural features observed during the past season indicate that best possibilities of finding economic concentrations of gold may be had on the northern claims. In view of finds already made on them, and their location with respect to major folding and faulting observed in the area, greatest promise seems to lie on claims Pa. 12007 - 12008 and 12009.

cont.....

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TO FOLLOW**

concentrations of 1/8 inch cube pyrite or fine magnetite. This zone lies between, and is apparently under the structural control of, two parallel shear zones; striking N 60 deg. E, having a vertical dip and being about 210 ft. apart. Vein widths vary from 0.4 inches to 6.0 inches and contain considerable chlorite mainly on the contacts. Sparse magnetite and chalcopyrite were found in the quartz. Assays, showing no V G, returned gold values up to 1.52 oz. and a grab sample with pin-points of V G returned a gold value of 4.40 oz. From sampling carried out to date, it appears that increased gold values occur with increased vein widths.

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cont.....

Extensive sampling of north-east trending shear zones found no value of economic importance, but where fractures or movement occurred at obtuse angles to the regional structure an increase in assay values resulted. It is felt that variance between the regional axis and the fold axis has resulted in deferential stress and a consequant tensional fracture pattern. in competant horizons as described above.

Considering this, it is recommended that the predominance of future work could by concentrated on the above area. This may be divided into:

1st: A detailed search for further occurrences beyond those already found and

2nd: An effort to trace those now exposed towards the axis of the indicated fold in the hopes of finding stronger fracture patterns and higher gold values.

Some further work is also recommended on the intrusive found on Pa. 12041. This could consist of stripping, possibly by hydraulic pump and further smapling to ascertain whether higher gold values could be obtained.

Respectfully submitted,
TECHNICAL MINE CONSULTANTS LIMITED

D.C. Leggett, B.Sc., P.Eng.

Toronto, Ontario
November 12th, 1951

E. Spancer.

**DUPLICATE COPY
POOR QUALITY ORIGINAL
TO FOLLOW**

Extensive sampling of samples at trending shear zones found no values of economic importance, but where fractures or movement occurred at obtuse angles to the regional structure an increase in assay values resulted. It is felt that variance between the regional axis and the fold axis has resulted in differential stress and a consequent tensional fracture pattern in competent horizons as described above.

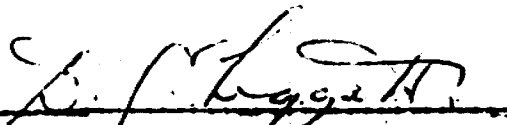
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Respectfully submitted,

TECHNICAL MINING CONSULTANTS LIMITED



D. C. Leggett, B.Sc., P. Eng.



E. Spencer

Toronto, Ontario,
November 12th, 1951.



5200450017 PARNES LAKE

900

December 14, 1950.

MEMO

To: Mr. P. E. Younge.
From: Mr. D. C. Leggett.

Re: East Minnitaki Lake Claims

Holdings at the present time in this area consist of two groups optioned from C.W. Forster of 27 and 21 claims respectively, and a group of 59 claims staked by us and owned outright. These three groups are all contiguous and cover an area approximately four miles long, north and south, by two miles wide. Outcrops are plentiful in all the area except the south fifth which is overlain by Minnitaki Lake.

The original purpose of acquiring this ground was to obtain a North-South cross-section of the greenstone belt for prospecting in the summer of 1951.

Anticipation of possible favourable results was based on the following facts:

1. Commercial gold values have been obtained by Central Patricia Mines in diamond drilling on their property just to the north-east of this group. This drilling indicated an ore lense 150' long in a strong vein structure averaging a little better than half an ounce over three feet.
2. Commercial gold values have also been obtained in preliminary prospecting by Central Manitoba Mines on Noepawa Island, just east of the south end of the group. This is approximately three and a half miles south of the Central Patricia work.
3. On claim #11552 at the north end of the group of 27, a grab by the stakers of a mineralized porphyry ran 0.10 ounces.
4. A showing on claim #11562 was examined by the writer prior to optioning the group. A narrow quartz stringer had been stripped for about fifteen feet and grab samples of quartz and mineralize bleached wall rock ran up to 0.08 ounces.
5. In the vicinity of claim #11568, Mr. R. McCombe, Mining Engineer of Sioux Lookout, located a series of quartz-carbonate stringers and also a mineralized rhyolite. Grab samples of the latter ran \$3.75.
6. These various exposures indicated a fairly widespread gold deposition of varying intensity. As no intensive prospecting had ever been carried out on this ground, it appeared that such a campaign could be productive of interesting results.

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TO FOLLOW**

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From: Mr. D. C. Leggett.

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6. These various exposures indicated a fairly widespread gold deposition of varying intensity. As no intensive prospecting had ever been carried out on this ground, it appeared that such a campaign could be productive of interesting results.

It was on the basis of the above that acquisition of the 27 claims was made and staking carried out.

Following the start of staking, developments on Neepawa Island became sufficiently favourable that the above mentioned group of 21 claims to the west of the ground being staked were optioned. This group covered the possible western extension of the favourable zone in which the Neepawa Island showings occurred, and also tied directly east of Ourgold Mines where earlier diamond drilling had given interesting gold values.

Original work on the Neepawa Island showing had indicated an East-west strike. By the end of the discovery to be about N-35-W. It was consequently decided to prospect our ground in the vicinity of the projected strike in the hopes of making a find prior to snowfall.

Difficulty was had obtaining men due to the staking activity in the area, but on November 3rd, three men were sent out to establish camp. Unfortunately a heavy snow storm came up the night of the 5th, and it was found necessary to break camp on the 7th.

During this time camps were set up and a picket line run from the Central Manitoba showing onto our ground to approximately a mile inland. This line intersected the mainland about the middle of the north portion of claim #12027. Some prospecting was done on island #274 and a few barren, narrow quartz stringers uncovered. Grab samples gave no values

Just after snow fell, I was informed that visible gold had been found in a quartz vein on the point of land on claim #12652 at the south end of our staking. My informant had not seen the showing and was only told that samples he saw came from there. This will bear investigating next Spring.

Claim Nos. 12002 - 12055, 12649 - 12653, a total of 59, will need to have tags placed on the posts by April 20th, 1951.

DCL/gp

D.C. Laggett.

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TO FOLLOW**

- 2 -

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Original work on the Neepawa Island showing had indicated an East-west strike. By the end of October, however, surface trenching had disclosed the strike of the discovery to be about N - 35 - W. It was consequently decided to prospect our ground in the vicinity of the projected strike in the hopes of making a find prior to snowfall.

Difficulty was had obtaining men due to the staking activity in the area, but on November 3rd, three men were sent out to establish camp. Unfortunately a heavy snow storm came up the night of the 5th, and it was found necessary to break camp on the 7th.

During this time camps were set up and a picket line run from the Central Manitoba showing onto our ground to approximately a mile inland. This line intersected the mainland about the middle of the north portion of claim #12027. Some prospecting was done on island #274 and a few barren, narrow quartz stringers uncovered. Grab samples gave no values.

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D. C. Leggett.

DCL/gp

APPENDIX

Property: Claim Pa. 12002 - 12013 inclusive
Pa. 12015 - 12036 inclusive
Pa. 12038 - 12041 inclusive
Pa. 12649
Pa. 12651 - 12652 inclusive
Pa. 12054 - 12055 inclusive

Ownership: Conecho Mines Limited,
Suite 1922,
44 King Street West,
Toronto, Ontario

Survey by: Edwin Spencer, R.R. #1, Islington, Ontario
D.C. Leggett, P. Eng., Toronto, Ontario

Persons Engaged in Survey:

W. Berneaur, 222 South Algoma, Port Authur, Ontario
H. Lunmark, Wabigon, Ontario
W. Danio, Nakina, Ontario
Y. Savoie, Sioux Lookout, Ontario
S. Fracsar, Sioux Lookout, Ontario
M. Malowney, Sioux Lookout, Ontario
V. Robertson, Woodside, Manitoba
N. Anderson, Sioux Lookout, Ontario
T. Johnson, Sioux Lookout, Ontario
E. Spencer, R. R. #1, Islington, Ontario
D.C. Leggett, 40 Binscarth Rd., Toronto, Ontario

Covering Dates: May 22 to November 6, 1951

Man Days:

Line-cutting and chaining	- 236	Amended 215
Traversing, outcrop mapping, geology	- 135	156
Draughting, interpretation, report	- 59	59
	430	430

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TO FOLLOW**

APPENDIX

Property: Claims P.A. 12002 - 12013 inclusive
P.A. 12015 - 12035 inclusive
P.A. 12038 - 12041 inclusive
P.A. 12649
P.A. 12651 - 12652 inclusive
P.A. 12054 - 12055 inclusive

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Persons Engaged in Survey:

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W. Danio, Nakina, Ontario
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S. Fraczar, Sioux Lookout, Ontario
M. Malownay, Sioux Lookout, Ontario
V. Robertson, Woodside, Manitoba
N. Anderson, Sioux Lookout, Ontario
T. Johnson, Sioux Lookout, Ontario
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D.C. Leggett, 40 Binacarth Rd., Toronto, Ontario

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	Traversing, outcrop mapping, geology	- 135	156
	Draughting, interpretation, report	- 59	59
		<hr/> 430	<hr/> 430

N

SCALE: 1" = 40 CH

DRAYTON TWP.

CLAIMS UNDER THIS SURVEY

1 mile
East, 500
showing

C. W. FORSTER
OPTION
27 CLAIMS

TROUTISH BAY
TROUTISH BAY

EAST MINNITAH L.
EAST MINNITAH L.

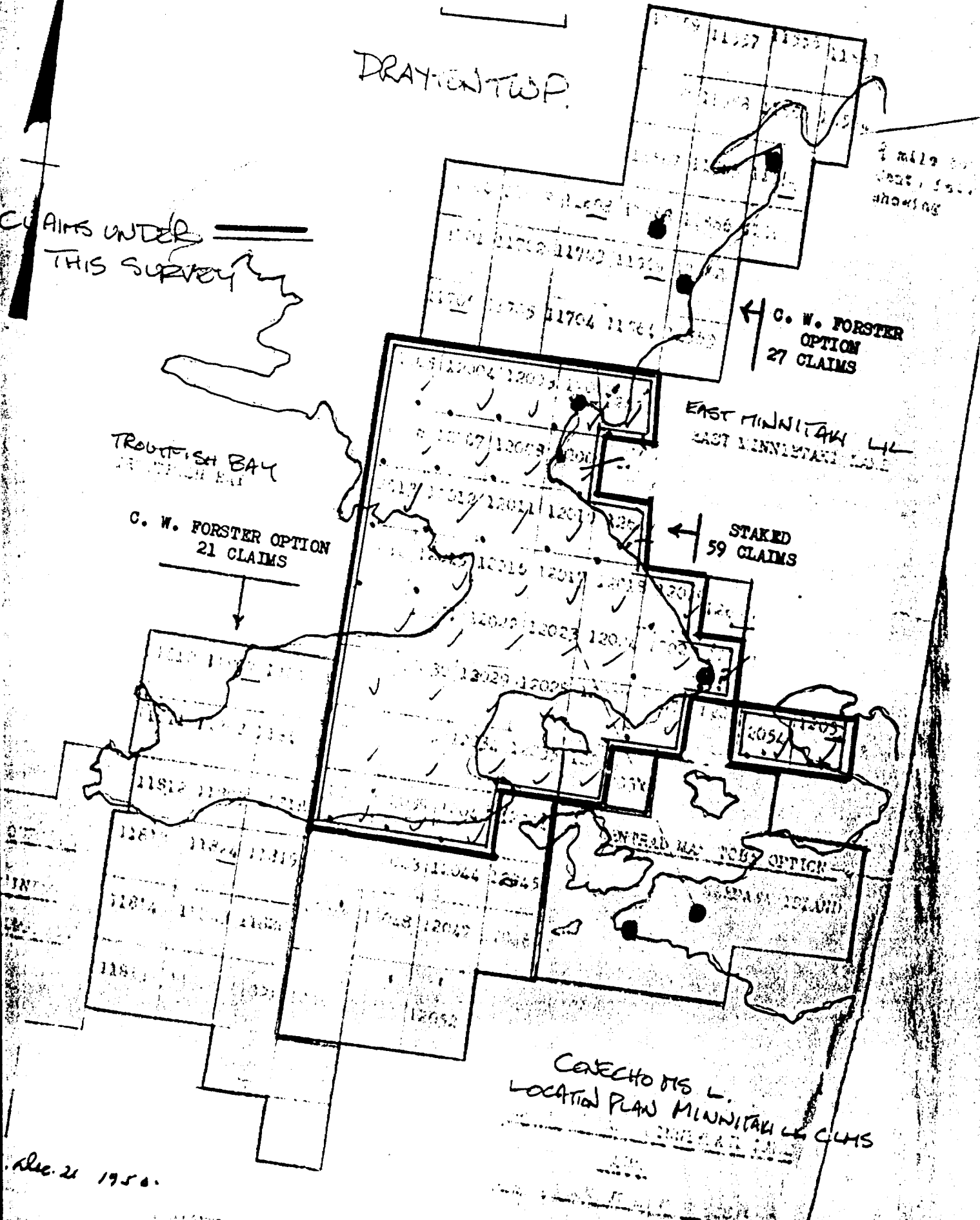
C. W. FORSTER OPTION
21 CLAIMS

STAKED
59 CLAIMS

GENERAL MAP 1907 OPTION
GENERAL MAP 1907 OPTION

CASEY'S L.
LOCATIONAL PLAN MINNITAH L. CLAIMS

Dec. 21 1950.



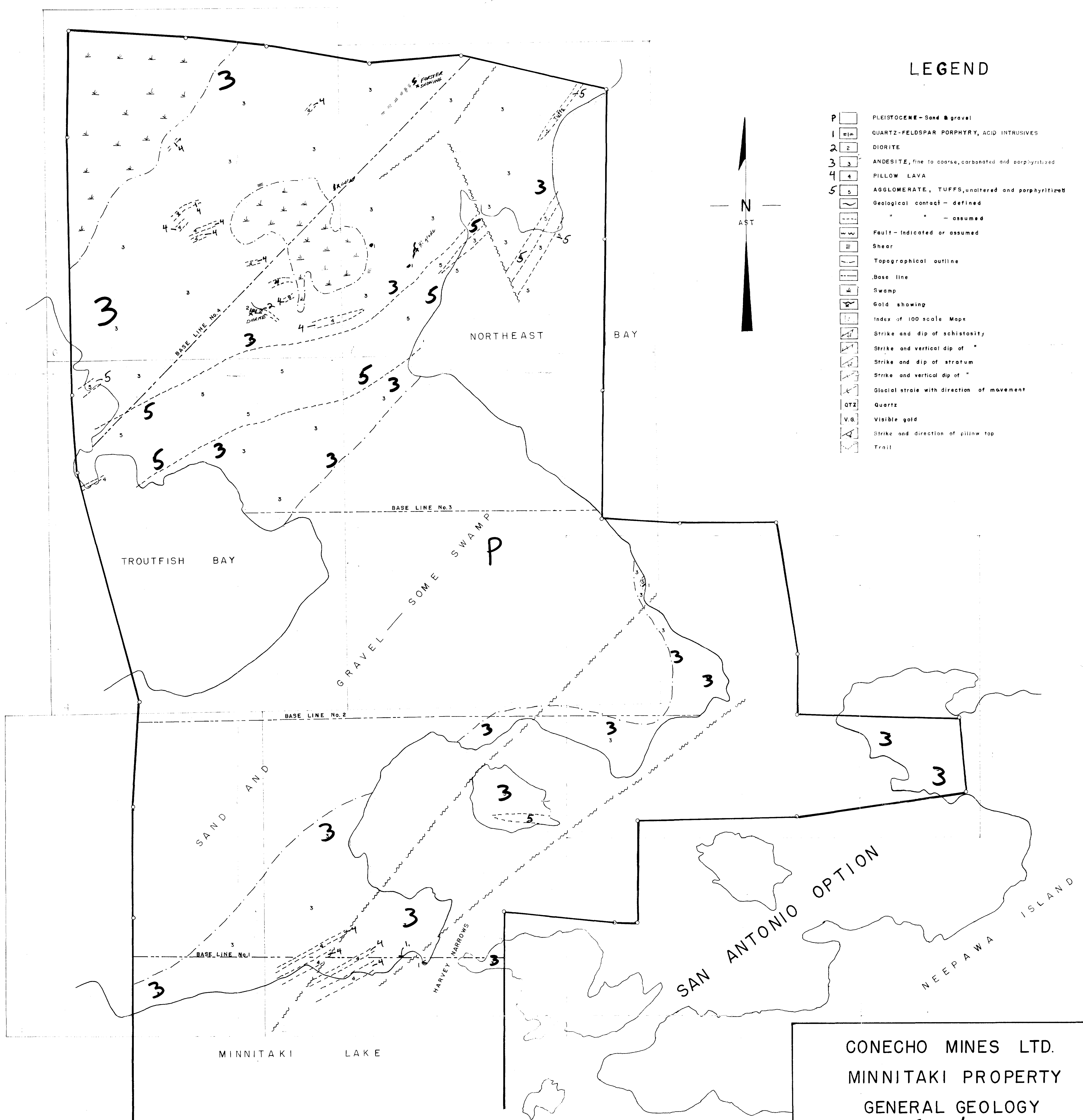
FOR ADDITIONAL
INFORMATION

SEE MAPS:

52-T/04SW-0017 #1-#9

LEGEND

- P P PLEISTOCENE - Sand & gravel
- 1 1 QUARTZ-FELDSPAR PORPHYRY, ACID INTRUSIVES
- 2 2 DIORITE
- 3 3 ANDESITE, fine to coarse, carbonated and porphyrylized
- 4 4 PILLOW LAVA
- 5 5 AGGLOMERATE, TUFFS, unaltered and porphyrylized
- Geological contact - defined
- " " - assumed
- Fault - Indicated or assumed
- Shear
- Topographical outline
- Base line
- Swamp
- Gold showing
- Index of 100 scale Maps
- Strike and dip of schistosity
- Strike and vertical dip of "
- Strike and dip of stratum
- Strike and vertical dip of "
- Glacial striae with direction of movement
- QTZ Quartz
- V.G. Visible gold
- Strike and direction of pillow top
- Trail

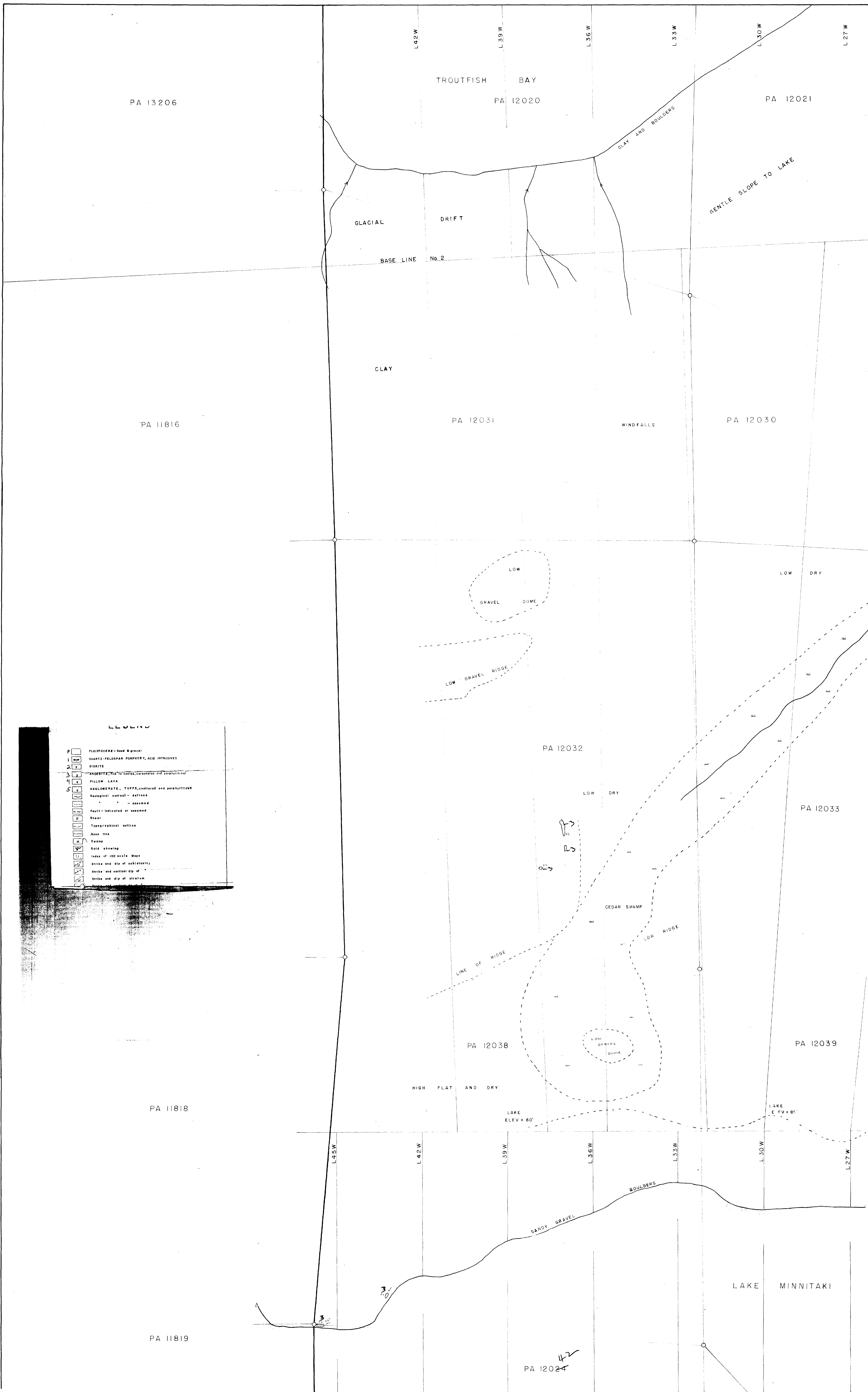


CONECHO MINES LTD.
 MINNITAKI PROPERTY
 GENERAL GEOLOGY
 527/045W-0017-#1

Topographical Outline from Aerial Photographs

Scale 1" = 467'-app. Nov. 6 - 1951

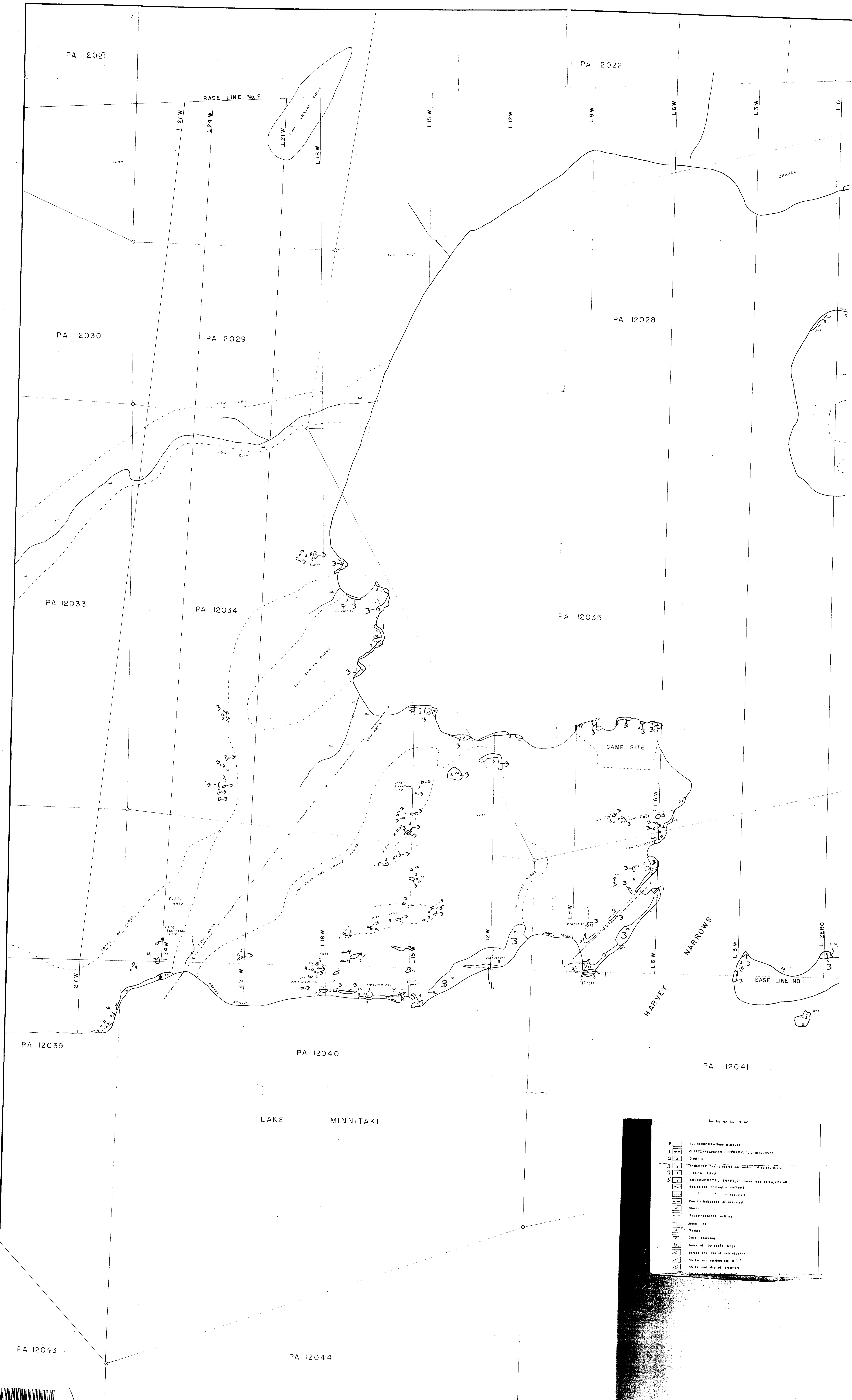
D.C. Lyett - P. Eng.



LEGEND

- P [] PLEISTOCENE - Sand & gravel
- 1 [] QUARTZ-FELDSPAR PORPHYRY, ACID INTRUSIVES
- 2 [] DIORITE
- 3 [] ANDESITE, "M" in cores, calcinated and porphyritic
- 4 [] PILLOW LAVA
- 5 [] AGGLOMERATE, TUFFS, unsorted and porphyritic
- [] Geological contact - defined
- [] - assumed
- [] Fault - indicated or assumed
- [] Shear
- [] Topographical outline
- [] Base line
- [] Swamp
- [] Gold showing
- [] Index of 100 scale Maps
- [] Strike and dip of schistosity
- [] Strike and vertical dip of
- [] Strike and dip of stratum

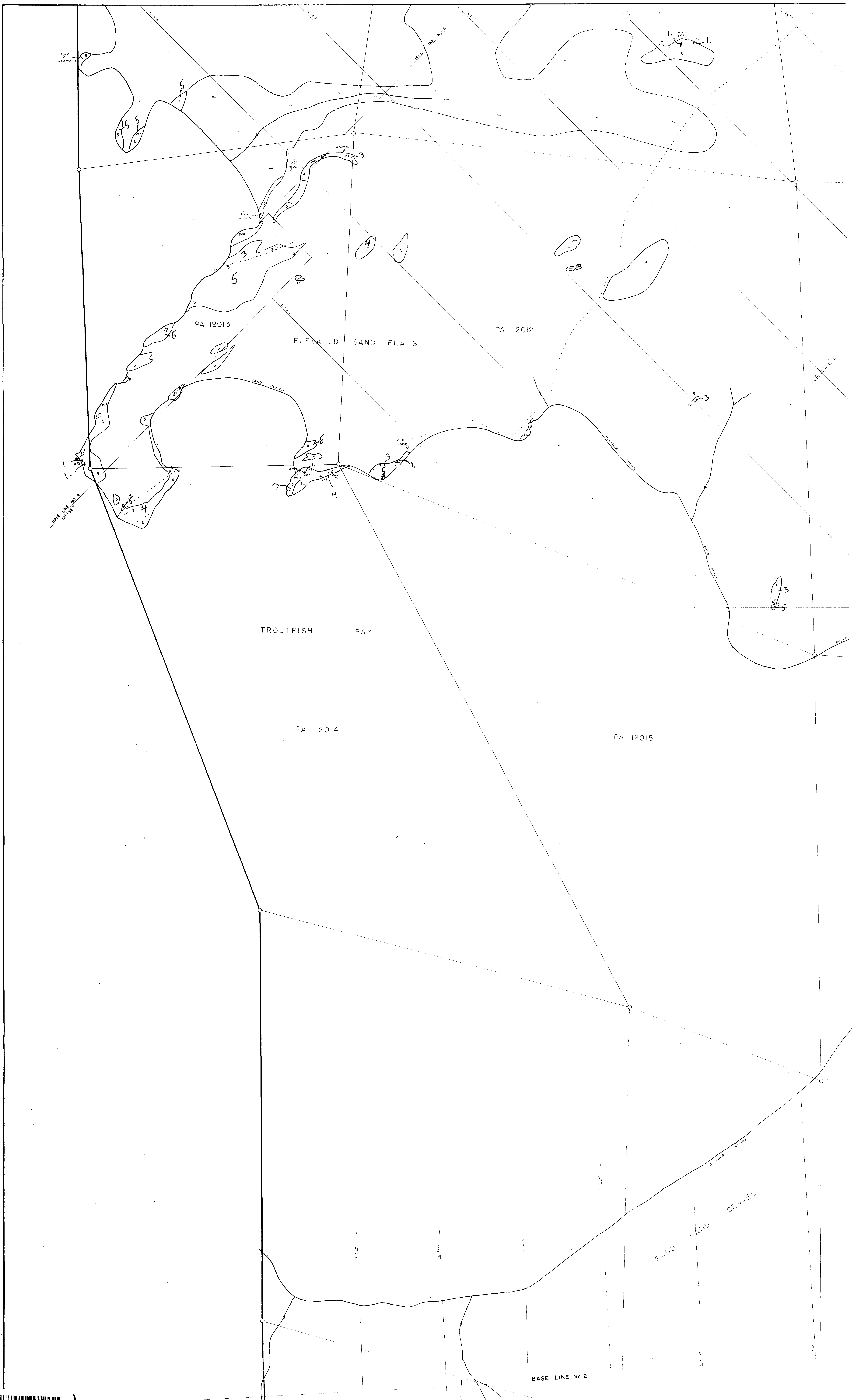




LEGEND

P	PLEISTOCENE - Sand & gravel
1	QUARTZ-FELDSPAR PORPHYRY, ACID INTRUSIVES
2	DIORITE
3	ANDESITE, TRACHYANDESITE, AND TRACHYDIOBASE
4	PILLOW LAVA
5	AGGLOMERATE, TUFFS, SANDSTONES AND SANDS
6	Geological contact - defined
7	Geological contact - assumed
8	Fault - indicated or assumed
9	Shear
10	Topographical outline
11	Base line
12	Sound
13	Gold showing
14	Index of 100 scale maps
15	Strike and dip of schistosity
16	Strike and vertical dip of stratum
17	Strike and dip of stratum





PA 12009

PA 12650

NORTHEAST BAY

PA 12010

PA 12649

LOW GRAVEL RIDGE

BOULDER RIDGE

BASE LINE NO 3

GRAVEL RIDGE

PA 12017

LOW — SAND AND GRAVEL

PA 12018

LOW GRAVEL RIDGE

GRAVEL HILLS — SLIGHTLY LOWER

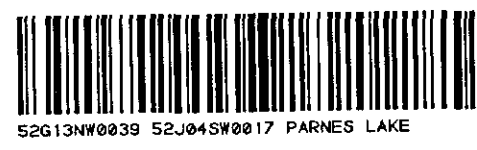
PA 12023

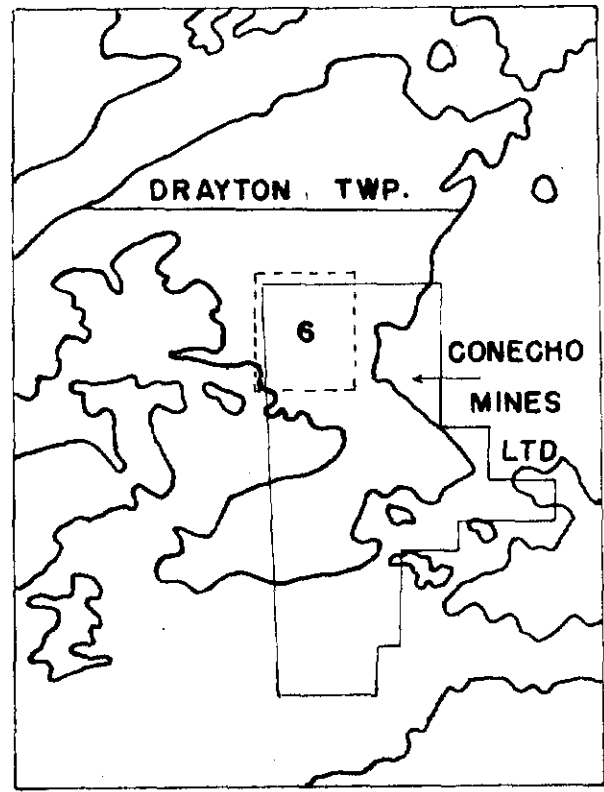
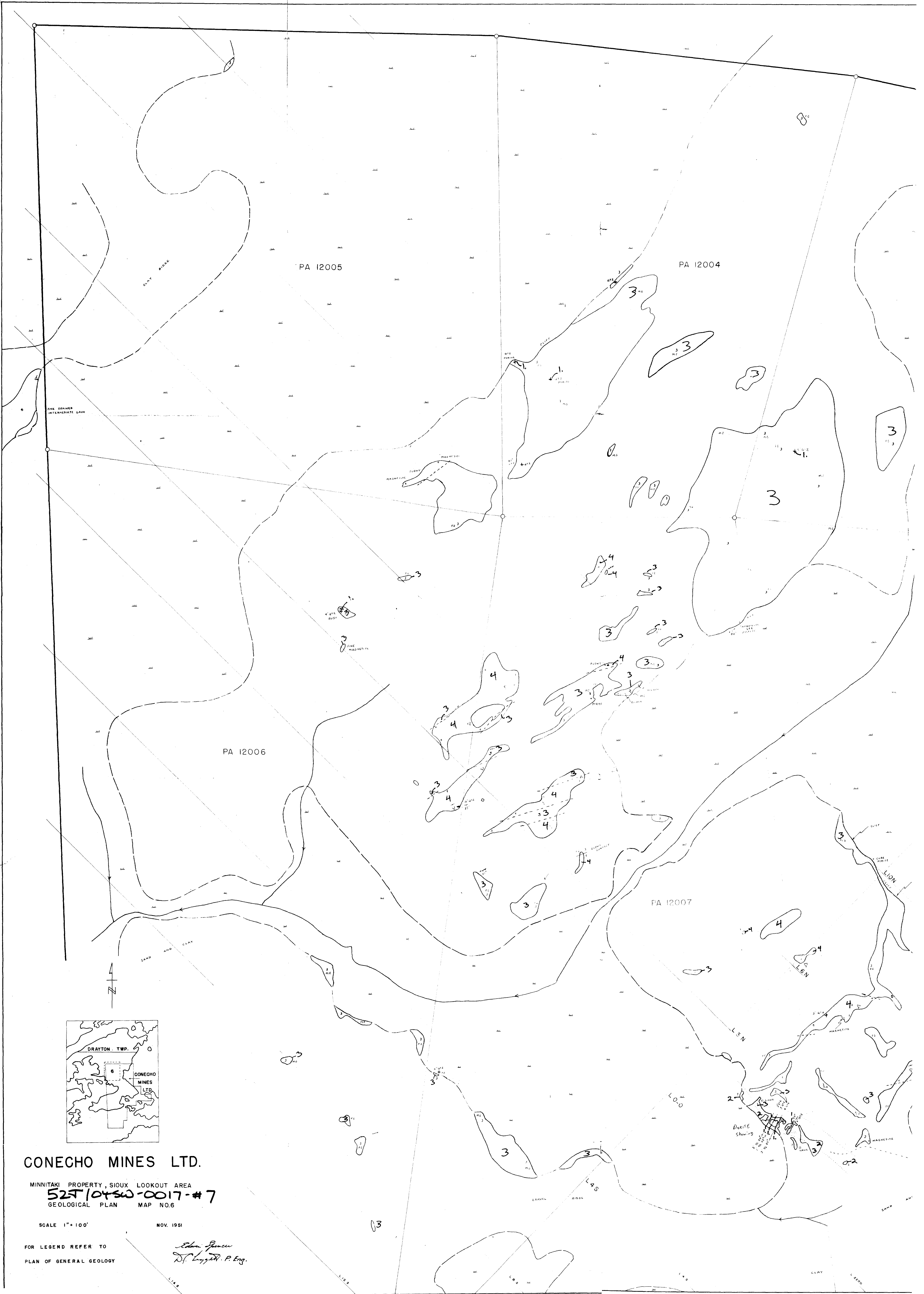
PA 12024

GRAVEL RIDGE

LOW AREA

BASE LINE NO 2





CONECHO MINES LTD.

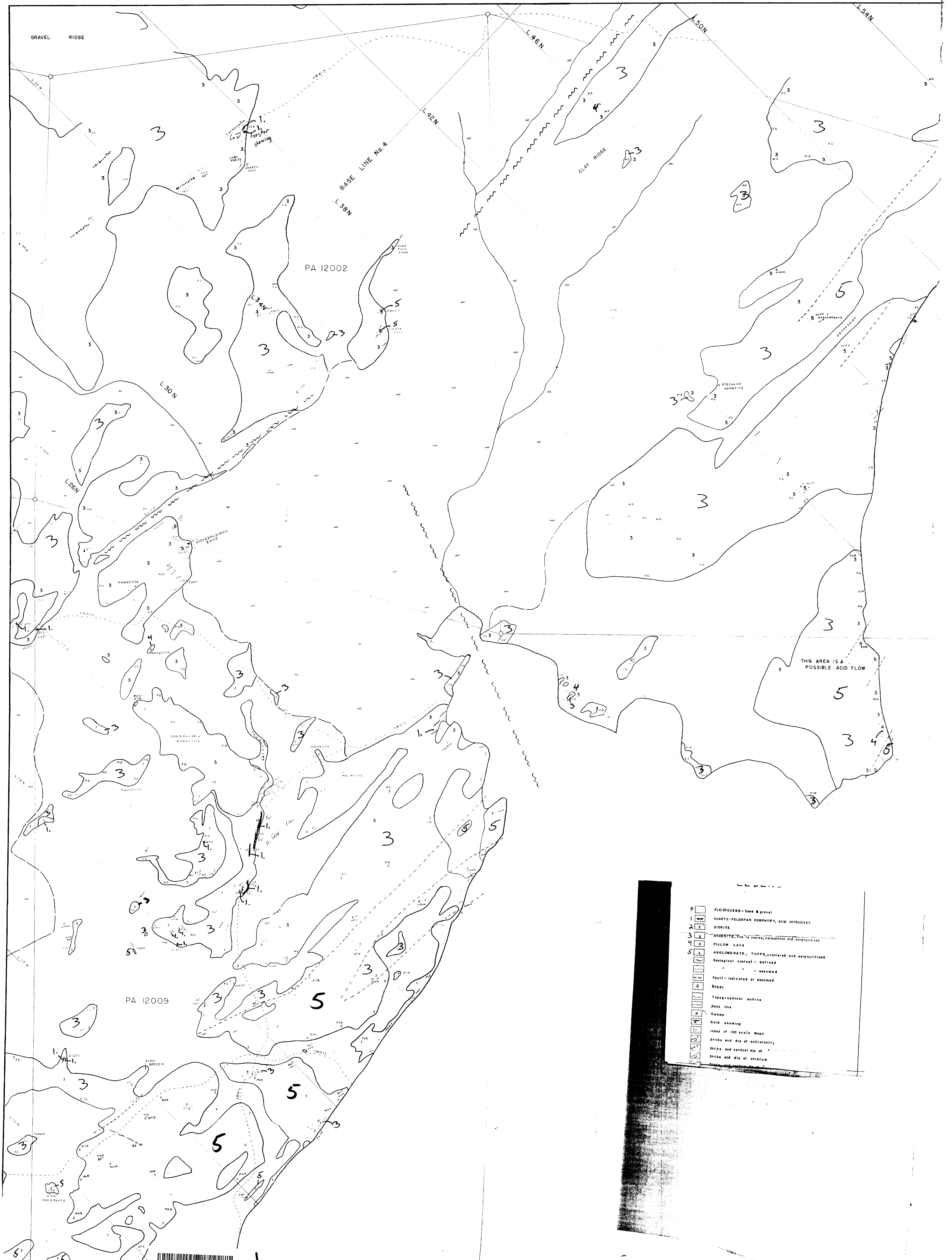
MINNITAKI PROPERTY, SIOUX LOOKOUT AREA
52T104SW-0017-#7
 GEOLOGICAL PLAN MAP NO.6

SCALE 1" = 100' NOV. 1981

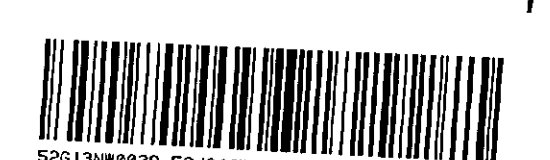
FOR LEGEND REFER TO
 PLAN OF GENERAL GEOLOGY

Edwin Fencer
D. F. Lyggett, P. Eng.


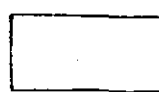
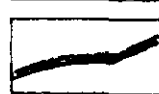

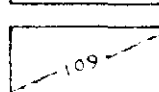
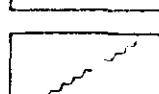
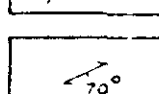
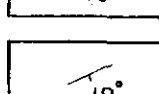
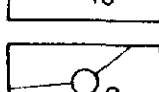
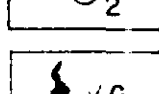




P	PLEISTOCENE - Sand & gravel
1	QUARTZ-FELDSPAR PORPHYRY, ACID INTRUSIVES
2	DIORITE
3	ANDESITE, fine to coarse, carbonated and porphyritic
4	PILLOW LAVA
5	AGGLOMERATE, TUFFS, uncaldered and porphyritic
	Geological contact - defined
	Geological contact - assumed
	Fault - indicated or assumed
	Shear
	Topographical outline
	Base line
	Swamp
	Gold showing
	Index of 100 scale Maps
	Strike and dip of schistosity
	Strike and vertical dip of
	Strike and dip of stratum
	Strike and vertical dip of

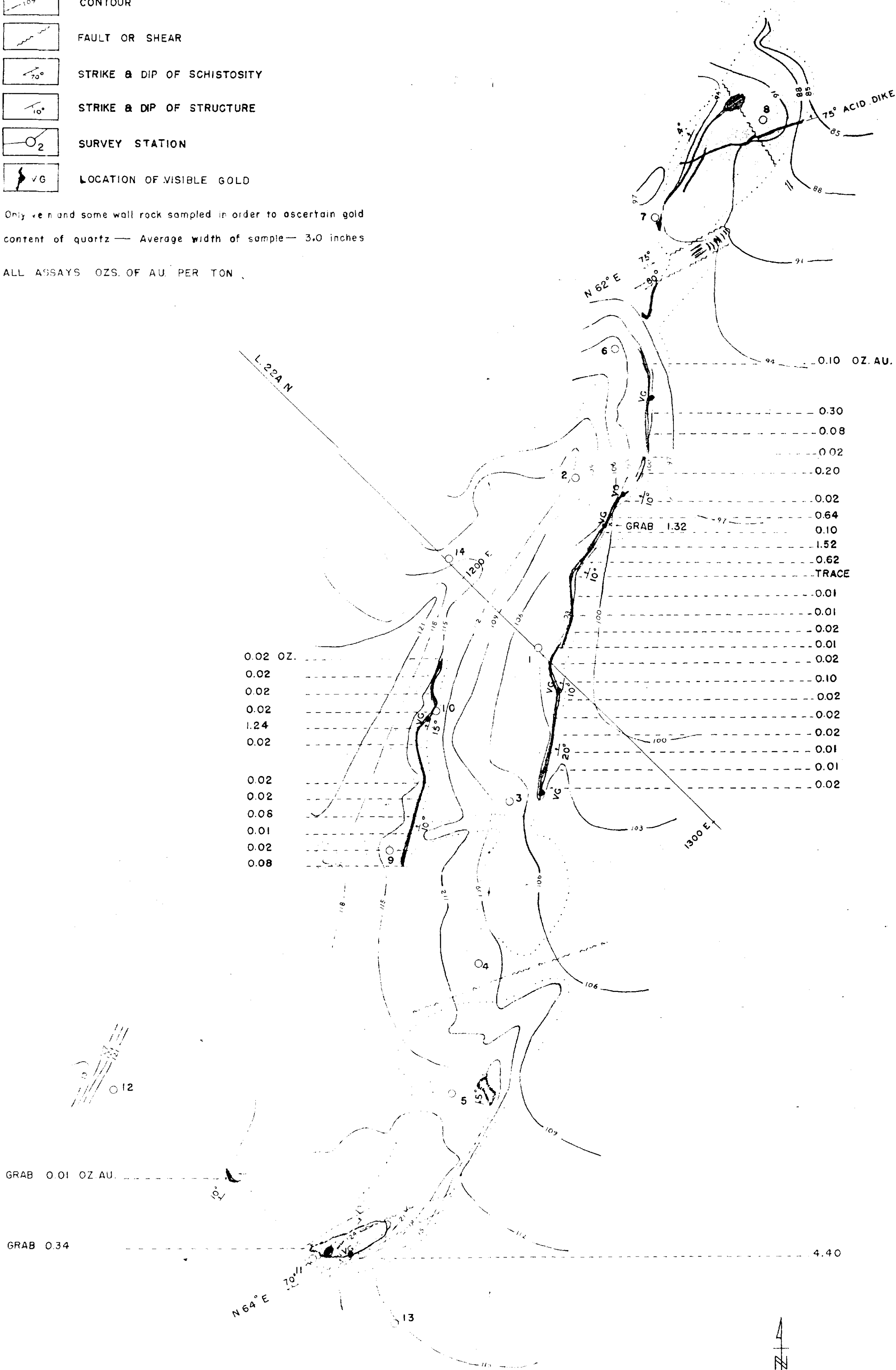


LEGEND

-  LAVAS
-  CARBONATED LAVAS
-  QUARTZ
-  ROCK OUTCROP, WASHED
-  CONTOUR
-  FAULT OR SHEAR
-  STRIKE & DIP OF SCHISTOSITY
-  STRIKE & DIP OF STRUCTURE
-  SURVEY STATION
-  LOCATION OF VISIBLE GOLD

Only vein and some wall rock sampled in order to ascertain gold content of quartz — Average width of sample — 3.0 inches

ALL ASSAYS OZS. OF AU PER TON



52T104SW-0017-#9

CONECHO MINES LTD:

MINNITAKI PROPERTY, SIOUX LOOKOUT AREA


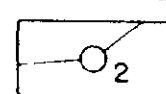
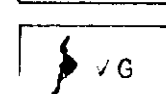
PLAN OF HIGH-GRADE SHOWING CLAIM PA.12009

SCALE 1" = 20'

Edwin Spencer
D. Leggett, P. Eng.

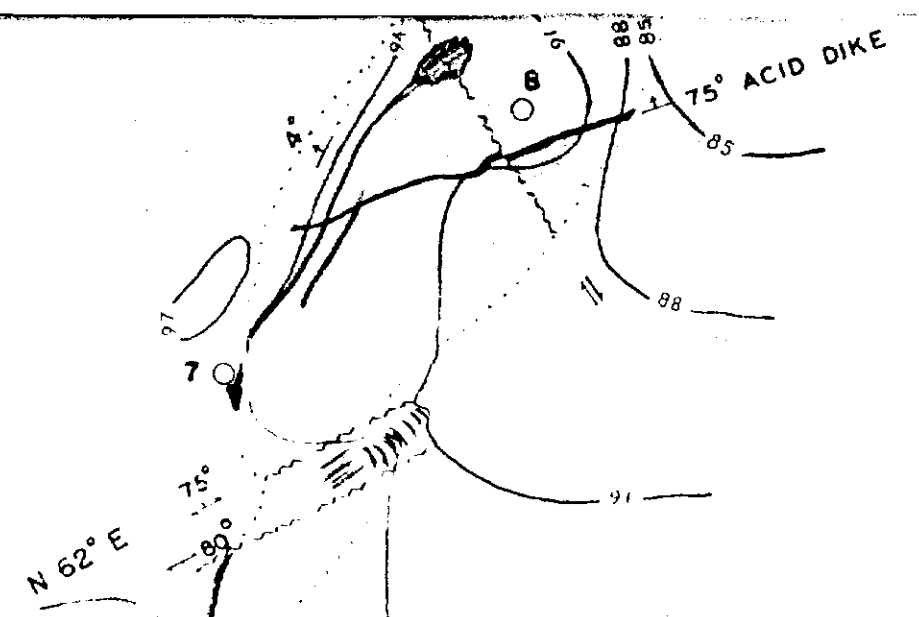


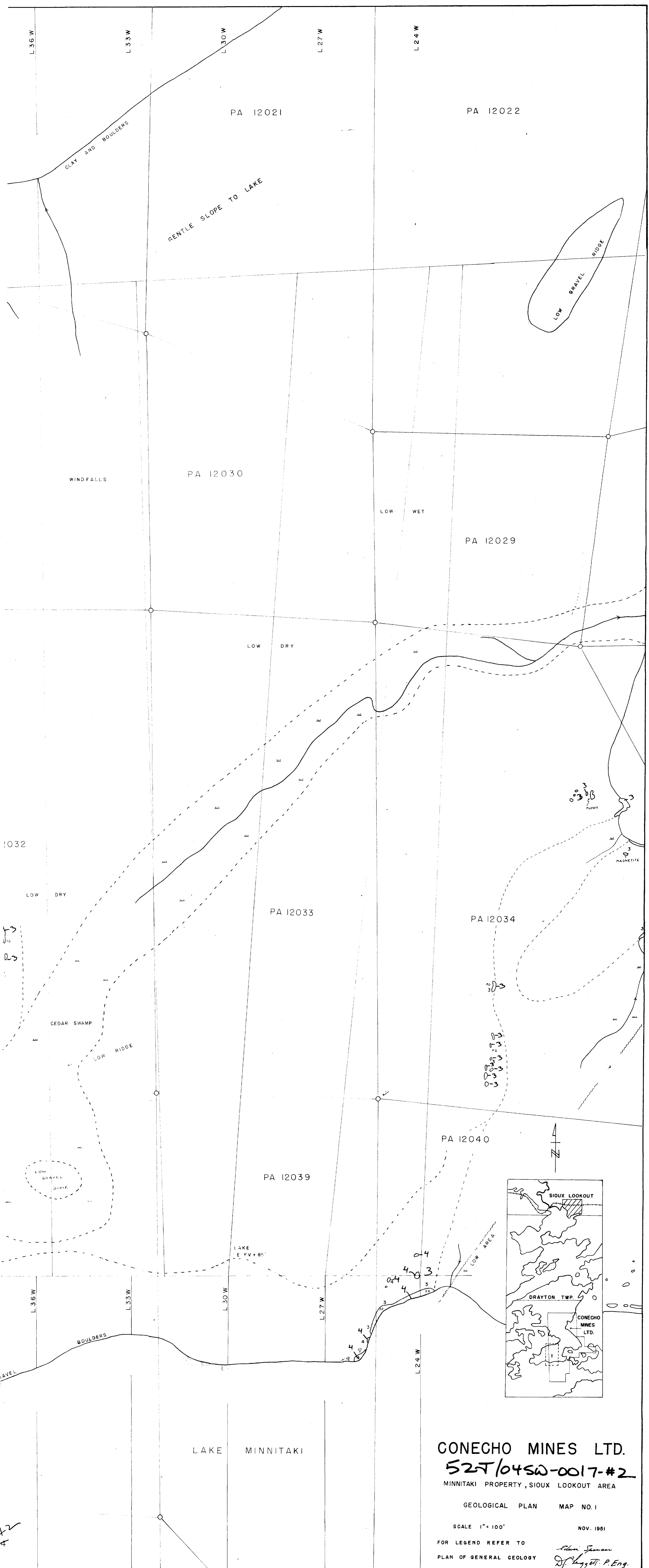
280

-  STRIKE & DIP OF STRUCTURE
-  SURVEY STATION
-  LOCATION OF VISIBLE GOLD

Only vein and some wall rock sampled in order to ascertain gold content of quartz — Average width of sample — 3.0 inches

ALL ASSAYS OZS. OF AU PER TON





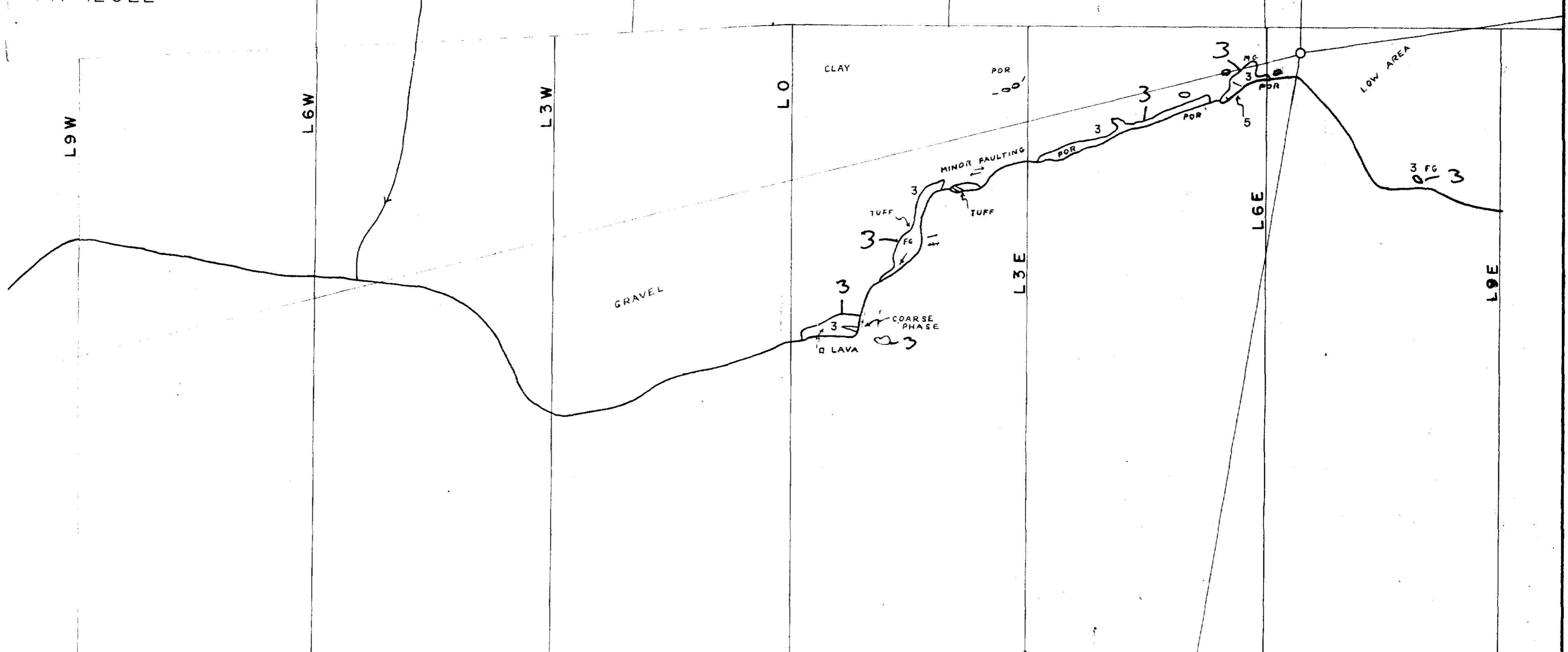
CONECHO MINES LTD.
527/0450-0017-#2
 MINNITAKI PROPERTY, SIOUX LOOKOUT AREA
 GEOLOGICAL PLAN MAP NO. 1
 SCALE 1" = 100' NOV. 1951
 FOR LEGEND REFER TO
 PLAN OF GENERAL GEOLOGY

Edwin Seaman
Df. Eng'g. P. Eng.

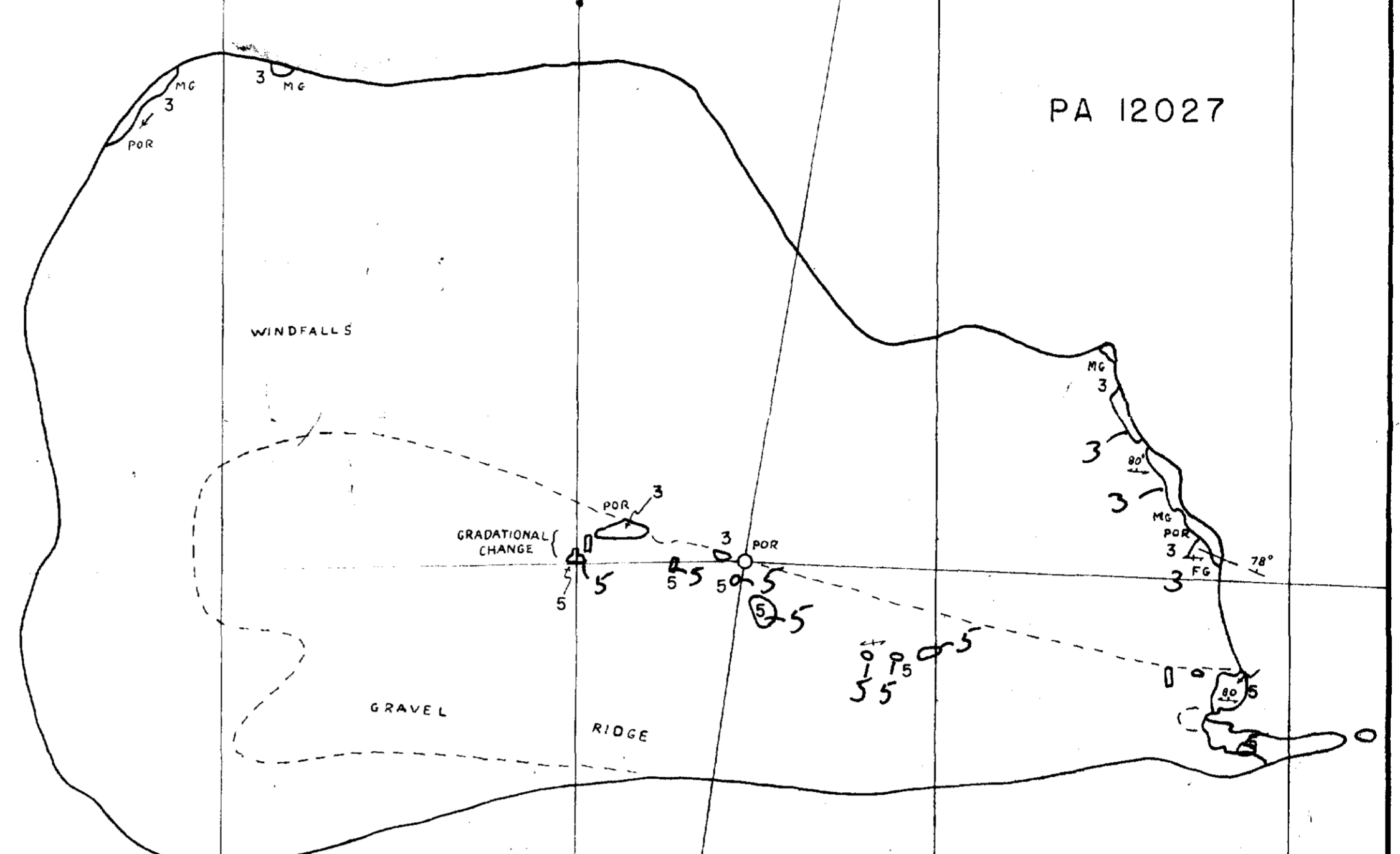
1032
 103
 103

42
 42

PA 12022

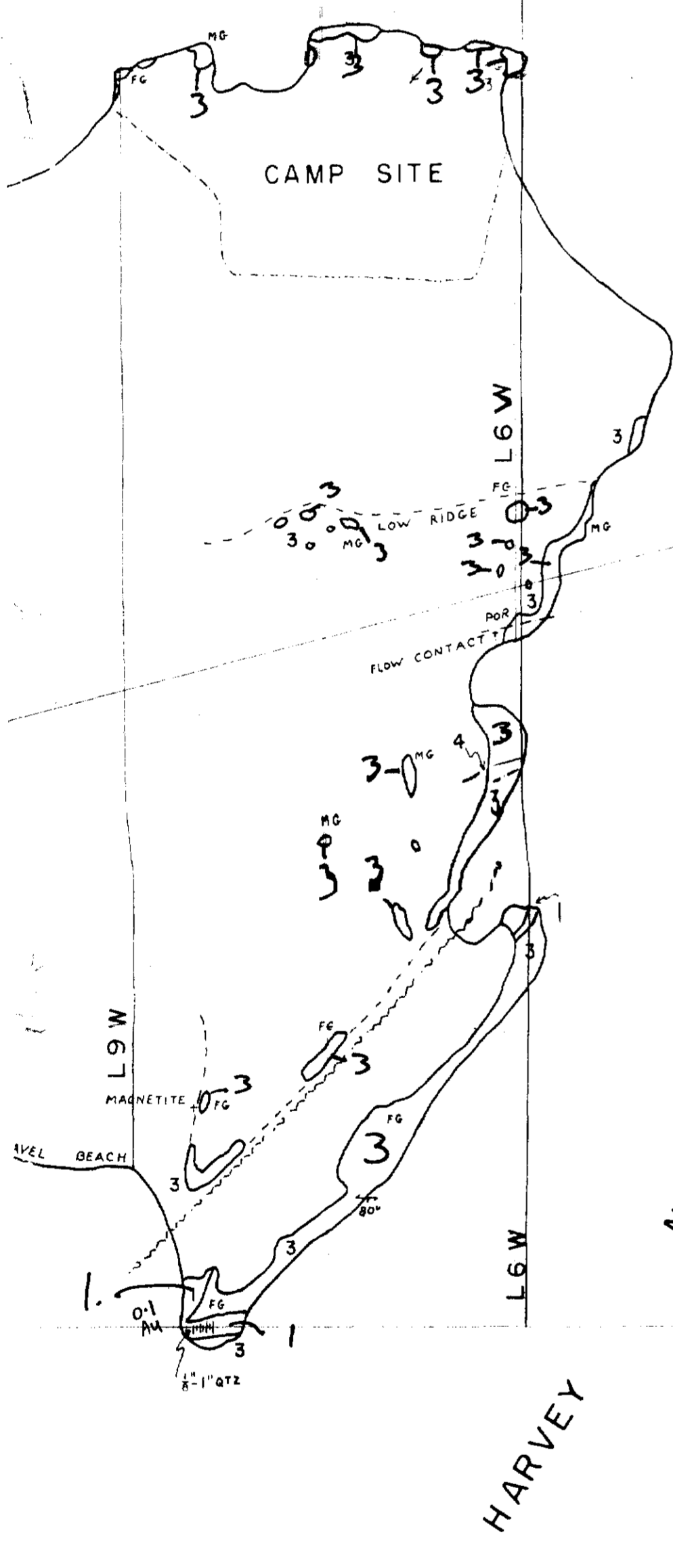


PA 12028

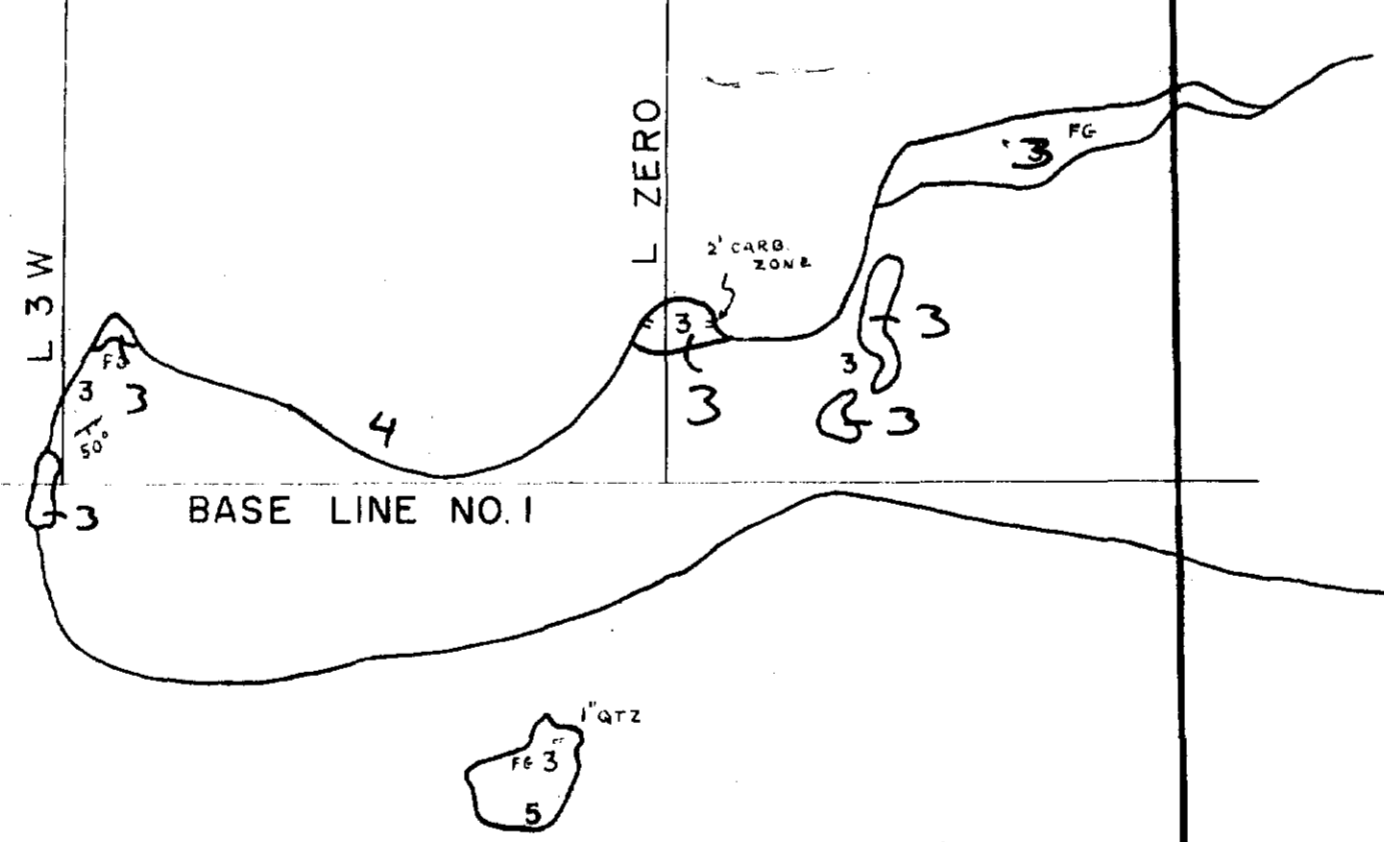


PA 12027

PA 12035



PA 12036

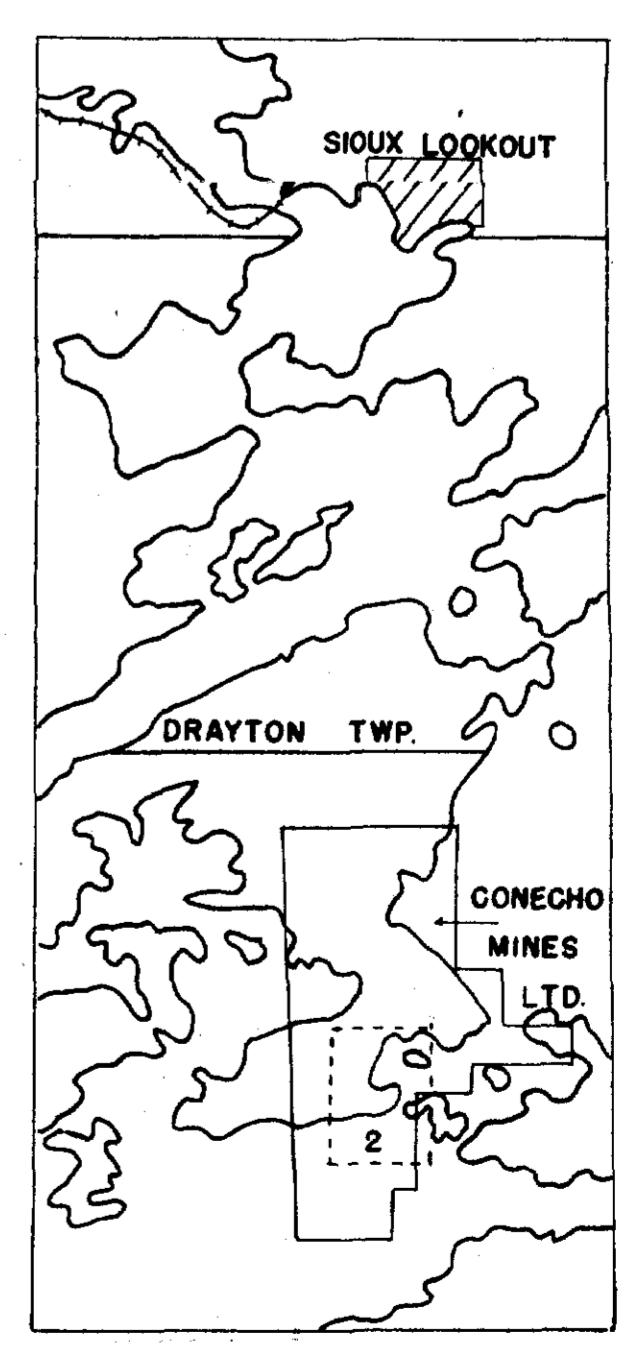


PA 12041

SAN ANTONIO OPTION

LEGEND

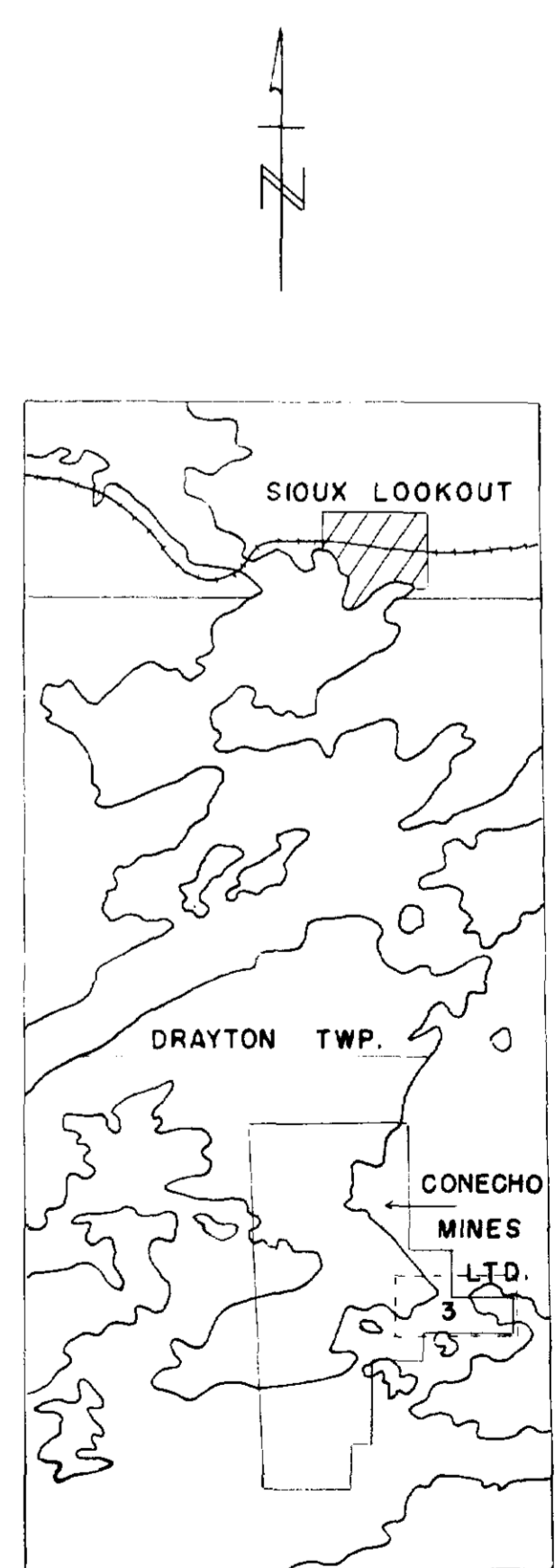
P	PLEISTOCENE - Sand & gravel
1	QUARTZ-FELDSPAR PORPHYRY, ACID INTRUSIVES
2	DIORITE
3	ANDESITE, thin to coarse, carbonated and serphyrized
4	PIELLO LAVA
5	AGGLOMERATE, TUFFS, unaltered and perphyritic
6	Geological contact - defined
7	Geological contact - assumed
8	Fault - indicated or assumed
9	Shear
10	Topographical outline
11	Base line
12	Swamp
13	Gold showing
14	Index of 100 scale Maps
15	Strike and dip of schistosity
16	Strike and vertical dip of
17	Strike and dip of stratum



CONECHO MINES LTD.
52T/0450-0017-#3
 MINNITAKI PROPERTY, SIOUX LOOKOUT AREA

GEOLOGICAL PLAN MAP NO.2
 SCALE 1" = 100' NOV. 1951
 FOR LEGEND REFER TO
 PLAN OF GENERAL GEOLOGY
Edwin Spencer
D. J. Leggett, P. Eng.

NORTHEAST BAY



CONECHO MINES LTD.
527104SW-0017-#4
MINNITAKI PROPERTY, SIOUX LOOKOUT AREA
GEOLOGICAL PLAN MAP NO. 3
SCALE 1" = 100' NOV. 1951
FOR LEGEND REFER TO
PLAN OF GENERAL GEOLOGY
Edwin Spencer
D. J. Haggart, P. Eng.

PA 12650

NORTHEAST BAY

PA 12649

BOULDER SHORE

RIDGE
GRAVEL

LOW — SAND AND GRAVEL

PA 12018

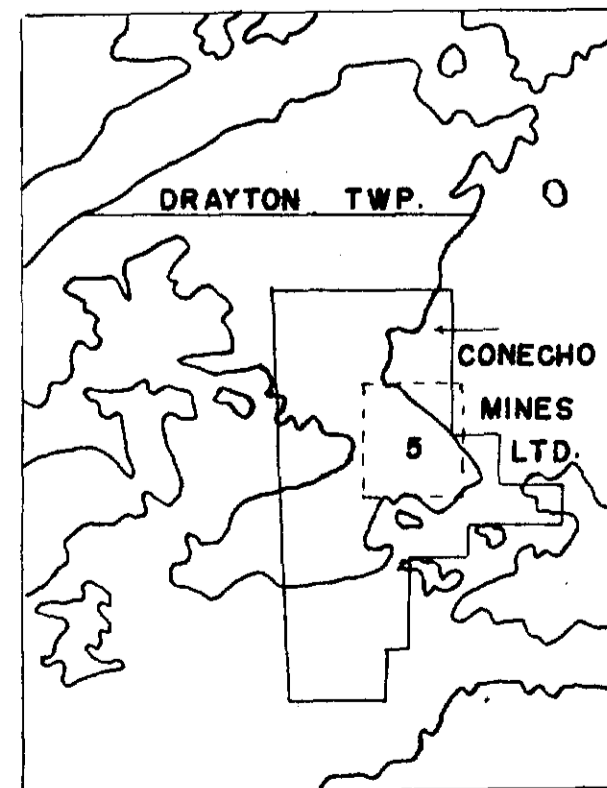
LOW AREA

GRAVEL HILLS — SLIGHTLY LOWER

PA 12024

RIDGE

LOW AREA



CONECHO MINES LTD.
527104SW-0017-#6
 MINNITAKI PROPERTY, SIOUX LOOKOUT AREA

GEOLOGICAL PLAN MAP NO.5

SCALE 1" = 100'

NOV. 1961

FOR LEGEND REFER TO
 PLAN OF GENERAL GEOLOGY.

Edwin Spencer
D. Leggett, P. Eng.

