

81-#41-#8910

ESPERANZA EXPLORATIONS LTD.

1027 - 470 Granville St., Vancouver, B.C. V6C 1V5 Telephone (604) 687-1658

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT

ON THE

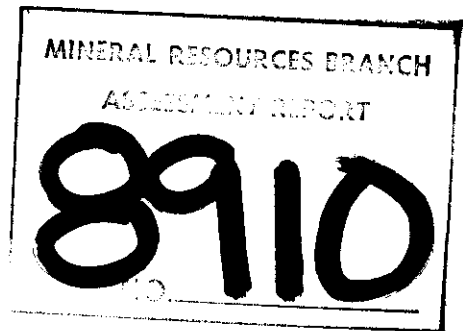
WIS 1-4 MINERAL CLAIMS

NELSON MINING DIVISION

N.T.S. 82-F7

Latitude 49° 25'N

Longitude 116° 58'W



January 14, 1981

Robert Holland
Geologist

TABLE OF CONTENTS

	<u>PAGE</u>
SUMMARY & CONCLUSIONS	1
RECOMMENDATIONS	2
INTRODUCTION	4
HISTORY	6
LOCATION	7
CLAIM STATUS	8
GEOLOGY - Regional Geology	8
- Property Geology	10
- Showings	12
MINERALIZATION	15
ORE PROCESSING	18
GEOCHEMISTRY	18
GEOPHYSICS	22
BLACK DOUGLAS SHOWING	23
REFERENCES	26
ITEMIZED COST STATEMENT	28
APPENDIX - Maps of Surface Trenches	

LIST OF FIGURES

Figure

1.	Location Map	ii
2.	Claim Location Map	5
3.	Regional Geology of the Wisconsin Claims Area.	9
4.	Surface Trenches T-17 to T-20	Appendix I
5.	Surface Trenches T-13 to T-16	"
6.	Surface Trenches T-8 to T-12	"
7.	Surface Trenches T-4 to T-8	"
8.	Surface Trenches T-2 to T-5	"
9.	Surface Trenches T-32 & T-33	"
10.	Surface Trenches T-34 to T-39	"
11.	Surface Trench A and Shaft 17A	"
12.	Surface Trenches T-40 to T-45	"
13.	Surface Trenches T-44, T-46 to T-50	"
14.	Surface Trenches T-51 to T-53A & Adit #4	"
15.	Adit No.5	"
16.	Black Douglas Showing - Trench and Sample Locations.	24

LIST OF PLATES

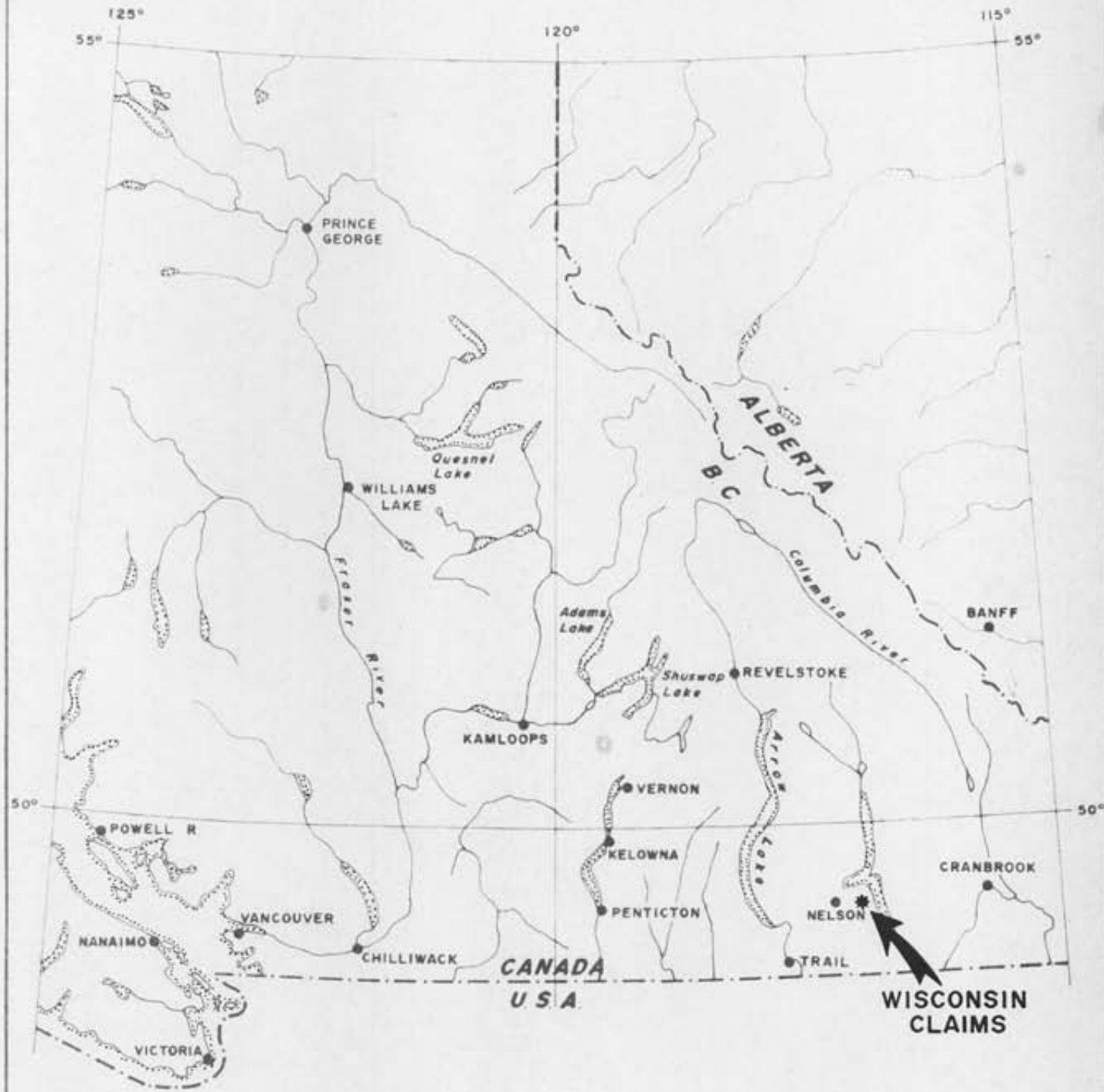
PLATE

1.	Geology and Showing Locations	In Pocket
2.	Geology, No.1 Tunnel	"
3.	Sample Locations, No.1 Tunnel	"
4.	Detailed Soil Geochemistry - Gold	"
5.	Detailed Soil Geochemistry - Arsenic	"
6.	Detailed Soil Geochemistry - Silver	"
7.	Soil Geochemistry - Gold	"
8.	Soil Geochemistry - Arsenic	"
9.	Soil Geochemistry - Silver	"
10.	Crone E. M. Survey - Horizontal Loop	"
11.	Crone E. M. Survey - Vertical Loop	"

TABLE

page

1.	Summary of 1980 work	4a
----	----------------------	----



ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS

LOCATION MAP

Scale	1 : 4,000,000	Date	MAY 1980	NTS
Revised		By	d.h	Fig 1

SUMMARY & CONCLUSIONS

1. Past work on the No.1 vein has outlined roughly 50,000 tons of probable ore of an estimated grade of 0.36 oz/ton gold, and 3.2 oz/ton silver with some copper and minor lead and zinc values. Sampling and geological work done by Esperanza Explorations during 1980 substantiates these previous results. The No. 1 vein structure appears to be strong with good depth and strike potential. Surface trenching has already defined a zone some 280 metres long with assayable widths of up to 9.5 metres. Underground development indicates a strike length of at least 100 metres and a depth projection of at least 60 metres. Grades are fairly consistent underground, particularly as reported on the 45 metre level. Grade fluctuations on surface may be due at least partially to surface weathering effects.

2. The No. 2, 3, 4, 5 and Black Douglas veins have been less well investigated but could possibly provide some additional tonnages. Vein widths and strike lengths are generally much less than for the No.1 vein and thus estimated tonnages would be considerably smaller.

Gold grades on surface along the No. 2, 4 and Black Douglas veins are poor, however, this may be in part due to oxidation as suggested for the No. 1 vein, and gold values could pick up with depth. Silver values for these veins are comparable to those from the No. 1 vein. The No. 3 vein does contain good grade material but is very narrow and of undetermined length.

The No.5 vein has the best grade and width potential outside the No. 1 vein. Further investigation could possibly extend this zone, particularly to the north where high soil geochemistry values occur. A soil value of 34,000 ppb gold at the north end of this zone may indicate a high grade pocket in this area.

3. Soil geochemistry was successful in picking up the known vein occurrences, however, it should be noted that known extensions of these veins into areas of poorer exposure often did not respond positively in the soils. This may be due in part to heavier overburden cover and to the highly oxidized and leached nature of the veins at surface.

Several other smaller anomalous zones were also encountered in the showing area. Many of these occur in areas of heavy overburden and may be results of downhill and water-transportation from existing veins. One of the anomalous areas however, is up and over the hill from the known mineralization and others downhill but to the north.

In light of the above results, any interested anomalous zones should be investigated thoroughly and the lack of anomalous results should not be interpreted as totally negative.

4. In hindsight, the lack of success with the Crone E.M. survey was not surprising in view of the high arsenopyrite content. However, the success in the past of the Radiore survey is encouraging and it is felt that an S.P. survey would be more successful in delineating the vein structures.

RECOMMENDATIONS

1. In view of the known milling and metallurgical problems with the Wisconsin ore, it is recommended that further testing be undertaken to determine the best treatment procedure. This work has been initiated and Kilborn Engineering (B.C.) Ltd. has been contacted to supervise the work. Copies of previous testing reports have been obtained through Placer Development and have been forwarded to Kilborn. Kilborn is also inquiring into the possibilities of direct shipping of ore to the Asarco Inc. smelter in Tacoma, Washington.

2. A rough four wheel drive road should be built into the property from the existing logging roads to the south. This would entail about 4 kilometres of new road construction. The route for this has already been laid out and approved in principle by Darkwood Forestry, the owners of the land to be crossed. Construction of this route should commence as soon as weather and snow conditions permit. A verbal agreement has been made with Langset Construction of Fruitvale, B.C. to carry out this work using a D-8 bulldozer with ripper and rock work equipment.
3. A S.P. survey should be run over the existing detailed grid area to trace extensions of known vein structures. If successful this survey should be extended to the north and south on a more regional scale. This work should be undertaken as soon as possible to provide targets for later bulldozer trenching and drilling. An adequate S.P. kit is available in Vancouver at a purchase price of \$200 - \$300.
4. Trenching of the known veins with a D-8 bulldozer is recommended to establish length and continuity of these structures and to prove fresh exposure for sampling. This work has already been approved and will start as soon as the road construction is completed. Langset Construction has also agreed to undertake this work.
5. The existing detailed soil grid should be extended to the north as far as 5 + 00N using the same spacing and control. Lines 1+00N to 2+50N plus any new lines should be extended to 5+00W and 6+00E to close off anomalies in these areas.
6. Follow up prospecting and resampling of unexplained anomalies should be carried out, particularly in those anomalies mentioned under Geochemistry.

7. Based on results of trenching, a diamond drill program should be initiated to determine width and grade continuity to depth. This should commence as soon as possible so as to ensure an adequate water supply. Water may be obtained from the flooded No. 2 adit or, should this prove inadequate, from Hughes Creek, via a long water line. A minimum of ten holes totalling 1500 metres is recommended.
8. As a follow up to drilling, the lower workings of the No.1 adit as well as the No. 2 adit, should be dewatered, mapped and sampled to confirm grades, widths and continuities on these levels.

The condition of the No.3 adit past the portal is unknown, but in light of the stability of the No.1 adit, it is possible that by clearing the portal access can be gained to this level. In this case it may be worth spending 2 or 3 man-days with a shovel to clear the portal area. Should access be gained, mapping and sampling of any vein structures is recommended and would provide depth and strike continuity information for veins No.s 3, 5 and possibly 2.

9. If a reasonable deal can be reached with Mr.Barker for the KITA 1 claim, the Black Douglas showings should also receive additional investigation. Detailed soil and S.P. surveys should be conducted over the showing area and if a good response is achieved, diamond drilling should be considered to test grade and continuity below the zone of oxidation. Bulldozer trenching is not recommended due to the steepness of the terrain, access problems, and the low grades achieved on surface.

INTRODUCTION

The WIS 1 and WIS 2 mineral claims were staked by Esperanza Explorations Ltd. in February 1980 following the completion of an option agreement with the joint owners of the Lucky Strike and Wisconsin Crown Grants. Under this agreement Esperanza can earn 100 percent interest in the property.

TABLE 1 - Summary of 1980 work

GEOLOGICAL MAPPING

Scale 1:1000 : area - 0.4 square kilometres

Scale 1: 200 : adit No.1 and No.5, 56 hand
trenches

Scale 1:1000 : area - 0.04 square kilometres
on the WIS 4 claim

GEOCHEMISTRY

Soils - 679 samples over an area of 1.6 square
kilometres on WIS 1, WIS 2, WISCONSIN
and LUCKY STRIKE claims.

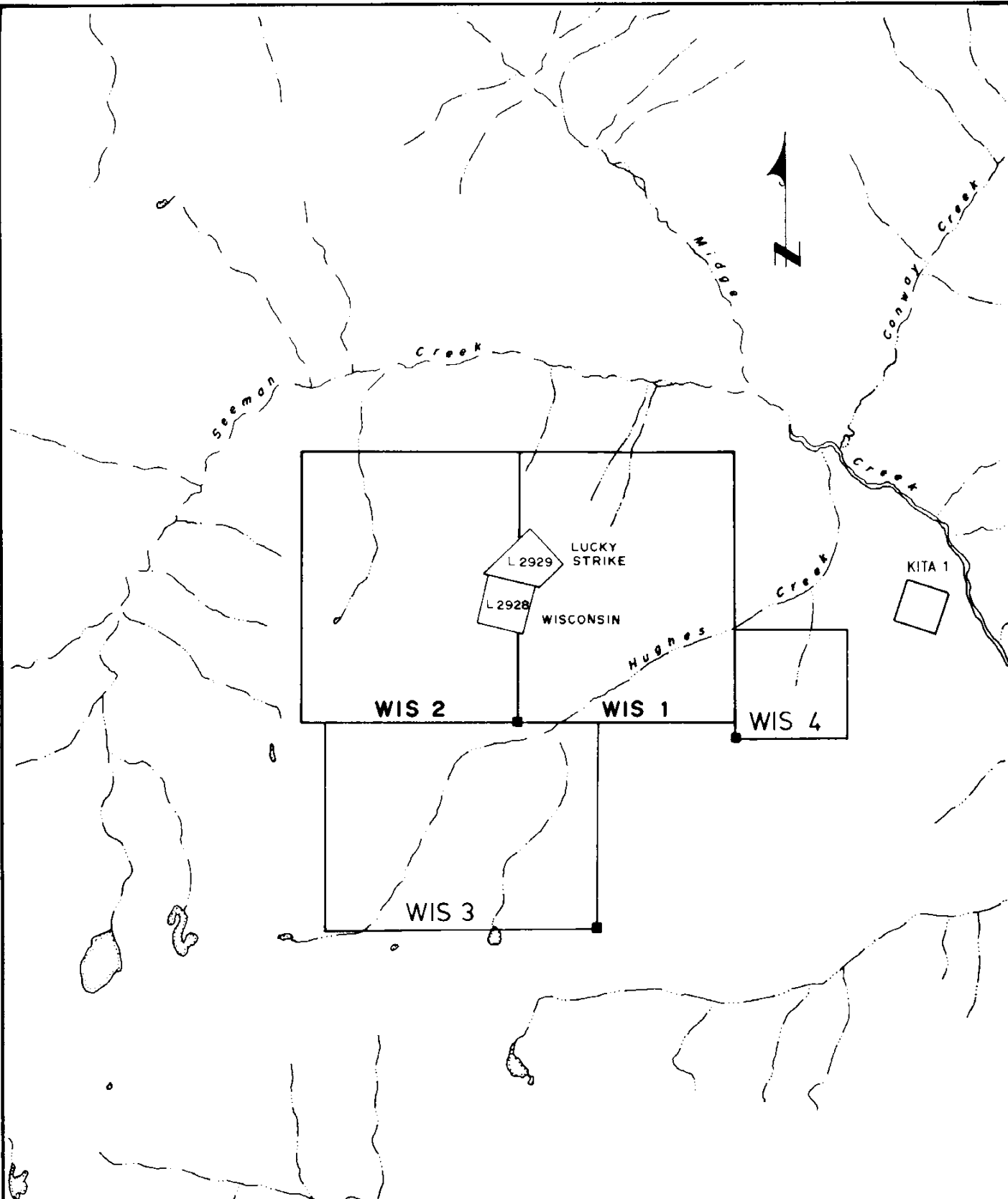
Rocks - 155 assays from surface trenches and
underground on WIS 1, WIS 2, WIS 4
WISCONSIN and LUCKY STRIKE claims.

GEOPHYSICS

Crone E.M. survey - vertical loop - 4.8 line kilometres

Crone E.M. survey - horizontal loop - 6.15 line kilometres

Unless specified otherwise, all the above work was performed on
the WISCONSIN, LUCKY STRIKE and WIS 1 claims.



Scale 1:50,000 Echelle

ESPERANZA EXPLORATIONS LTD.		
WISCONSIN CLAIMS		
CLAIM LOCATION MAP		
Scale 1:50,000	Date MAY 1980	NTS B2F/Z
Revised	By d.h.	Fig 2

During June and July 1980 a three man crew was employed on Wisconsin property. Work undertaken included geological mapping and chip sampling of the accessible adits, shafts and many of the old surface trenches. Detailed geological mapping, soil geochemistry surveys and a Crone E.M. survey over the known vein occurrences were also completed.

In September 1980 the WIS 3 claim was added for protection to the south and the WIS 4 was staked over a small but similar vein occurrence located on the south side of Hughes Creek adjoining the existing claims. A front-wheel drive road route was planned and flagged out extending from the end of existing logging roads to the property. Approval in principle for this route has been obtained from Darkwood Forestry Limited of Nelson, the owners of surface rights in this area.

HISTORY

The Wisconsin and Lucky Strike claims were staked in 1894 and between that time and 1903 development work was carried out mainly on the No.1 vein. This work included 57 metres of cross cutting, 73 metres of drifting, a 20 metre shaft and 25 open cuts. Between 1903 and 1915 development was limited to driving a meandering exploratory tunnel totalling 244 metres of cross cutting and 75 metres of drifting. Some veining was intersected but work was halted well short of the No.1 vein and no ore was reported.

In 1928 an electrical survey was completed by the Radiore Company of Canada, outlining a 500 metre long conductive zone over the No.1 vein. Three diamond drill holes totalling 300 metres and surface trenching were conducted in 1933. Between 1935 and 1937 work on the prospect continued with 158 metres of drifting and 82 metres of crosscutting, mainly on the 45 metre level of adit 1, and 65 metres of shafting. At this time, estimated reserves were 50,000 tons of 0.36 oz/ton gold and 3.2 oz/ton silver. During 1940 the adit level of tunnel No.1 was extended by a further 58 metres of drifting and 40 metres of crosscutting.

Metallurgical and mill testing was carried out from 1936 to 1942 however, results of this work were unsatisfactory and the lease was dropped. Since this time no further development work has been undertaken.

With the exception of the shipment of a few tons of hard-cobbed dump material by L. C. de Kock in the early 1960's, and the two ton smelter test shipment, there is no record of any ore shipments or active mining production on this property. All work appears to have been of an exploratory nature.

LOCATION (116° 58'W, 49° 30" N)

The WISCONSIN property is located twenty-five kilometres east-southeast of the town of Nelson, B.C. and ten kilometres west of Kootenay Lake. The main workings are situated at 1900 metres elevation on a ridge between Hughes and Seeman creeks, both east flowing tributaries of Midge Creek. Access to the area is by helicopter from Nelson or via approximately 60 kilometres of four wheel drive private logging roads followed by a hike of three kilometres to the north. In addition, an old pack trail exists which starts at the C.P.R. flag station at Midge Creek on Kootenay Lake and extends some 15 kilometres to the property. This trail was used in the early days to move the equipment and supplies to the minesite.

Topography within the claim areas is moderately steep with slopes to 45°. Elevations range from 1310 to 2190 metres above sea level. Forest cover is generally thin owing to a fire dating back to 1929 and consists mainly of spruce, pine, hemlock and larch. Underbrush is often thick and tangled.

CLAIM STATUS

The WISCONSIN property consists of the following Crown Granted and modified grid system mineral claims located within the Nelson Mining Division.

<u>Claim</u>	<u>Grant No.</u>	<u>No. of Units</u>	<u>Due Date</u>
WISCONSIN	L 2928	1	-
LUCKY STRIKE	L 2929	1	-
WIS 1	1558	20	March 19, 1981
WIS 2	1559	20	March 19, 1981
WIS 3	1957	20	Oct. 8, 1981
WIS 4	1939	4	Oct. 7, 1981

The above claims are registered in the name of Esperanza Explorations Ltd. and are owned entirely by that company with the exception of the WISCONSIN and LUCKY STRIKE crown granted claims which are held under option agreement by Esperanza from a group headed by W. W. Powell Jr. of Spokane, Washington.

GEOLOGY

Regional Geology

The WISCONSIN property is located near the southern end of the Kootenay arc, a curving structural belt of sedimentary rocks extending southeast from Revelstoke, south along Kootenay Lake, and southwest across the International Boundary. The Kootenay arc sediments consist of west-dipping quartzites, slates and limestones with intercalated volcanic rocks, all of Precambrian to lower Paleozoic age. These rocks were extensively intruded by Mesozoic and Cenozoic granitic rocks. The Kootenay arc is structurally complex with overturned and isoclinal folds and regional thrust faults conforming to the general warped configuration of the arc (Figure 3).

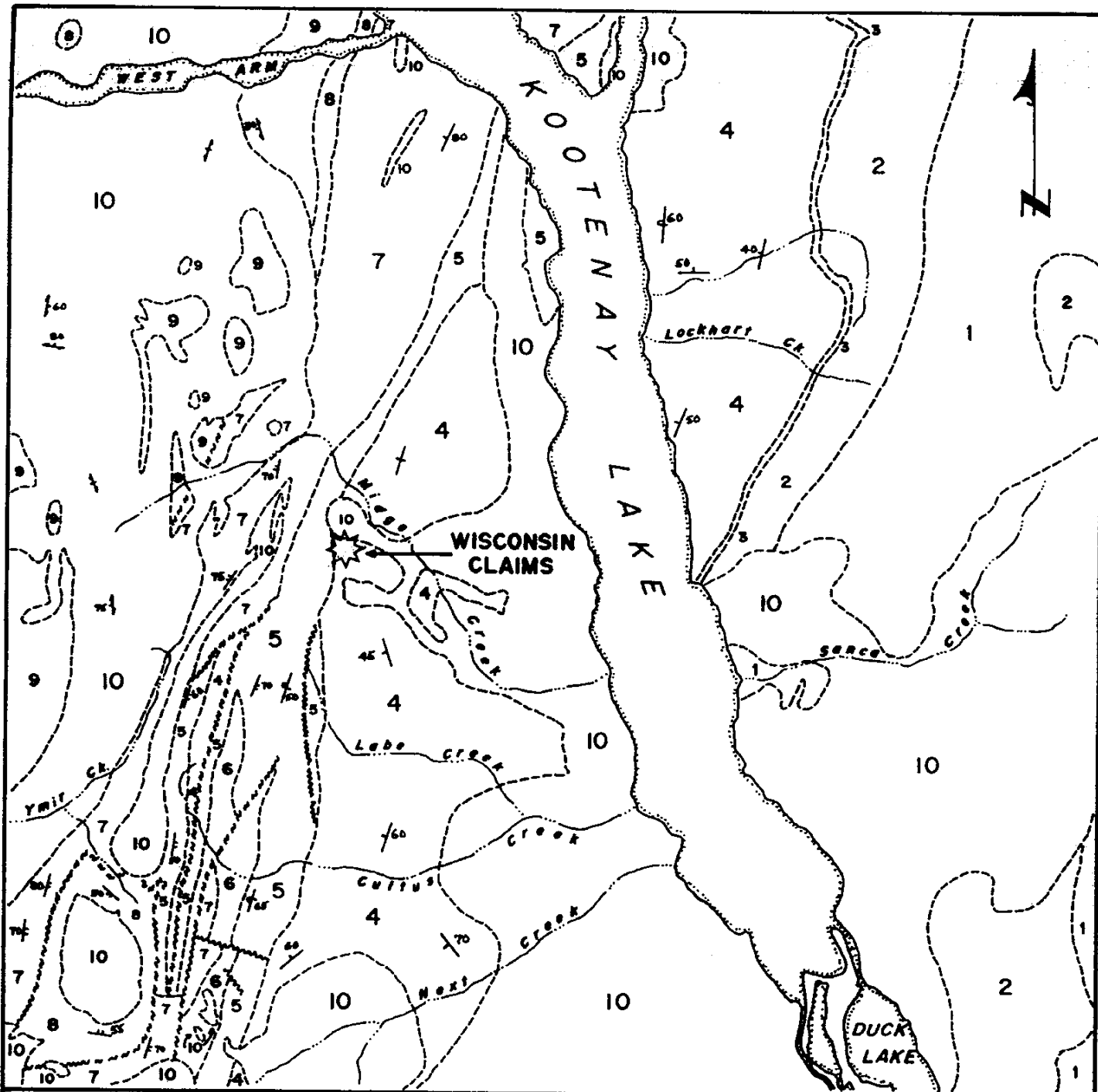


Figure 3
 REGIONAL GEOLOGY of the WISCONSIN CLAIMS AREA
 1:250,000

10	Granite, granodiorite, quartz diorite		GEOLOGICAL CONTACT
9	Slate, argillite, quartzite, schist, limestone, greenstone		FAULT
8	Slate, argillite, argillaceous quartzite, chert, limestone, schist		defined
7	Schist, quartzite, limestone, paragneiss		assumed
6	Argillite, argillaceous quartzite, limestone, dolomite, schist		BEDDING
5	Quartzite (HAMILL SERIES - late Proterozoic)		inclined
4	Argillaceous quartzite, limestone, conglomerate (HORSETHIEF CREEK SERIES - Lower Cambrian)		vertical
3	Conglomerate		overturned
2	Argillite, limestone, quartzite		tops unknown
1	Argillaceous quartzite		GNEISSOSITY
			inclined
			vertical
			CREEK

The southern end of the Kootenay arc has been noted for its lead-zinc-tungsten-silver mineralization, mainly within structurally controlled zones in dolomitic limestone of the so-called Mine Belt. Such mines as the Reeves McDonald, Jersey, H.B. and Emerald Tungsten are included in this group. The age of mineralization relative to dolomitization and granitic intrusion is uncertain.

Property Geology

The WIS claims are underlain by sedimentary rocks of the Horsethief Creek Series (late Proterozoic) and the Hamill Series (~~lower~~ ^{Pre-}late Cambrian) and by intrusive rocks related to the Cretaceous age Nelson batholith. The Hamill Series occurs to the west and south of the showing area capping the ridges and peaks of Hennesay Mountain. These rocks form a thick package consisting largely of fine grained, white to locally rose, grey or green, thick bedded massive quartzites with minor intercalated argillite.

Conformably underlying the quartzites is a sequence of schists, quartzites, metavolcanics, metasediments and marbles which form the upper part of the Horsethief Creek Series. These rocks have been broken down on to four lithological members within the showing area as shown in Plate 1. and detailed following.

a) Schist

The most common sedimentary rock on this package is a fine to medium grained, pale greenish grey quartz-sericite-locally feldspathic schist. Schistosity is generally poor to moderately developed due mainly to a high quartz and low mica content. Biotite and chlorite are locally present as is fine disseminated pyrite or limonite. These rocks were probably originally grits or sandy argillites.

b) Metavolcanics

Dark greenish grey, fine grained, moderately fissile greenstone is found as thick mappable interbands within the schist. In places the greenstone is distinctly volcanogenic and occasionally shows up to 15% dark green hornblende phenocrysts. An argillaceous component is also present and is locally dominant. Where these argillites occur near the intrusive contacts they are often hornfelsed and sericitized.

c) Quartzite

Thick resistant interbands of massive to faintly laminated, pale greenish grey quartzite are also common. These are generally composed of 80-90% sand size quartz grains with fine interstitial clay-altered feldspar and sericite. A weakly rusty coloration may also be present, which is due to the decomposition of the sericite.

d) Marble

Grey weathering, thin banded, white to dark grey marble horizons are also found within the schist. These horizons are difficult to locate and trace due to their recessive weathering characteristics and are usually only exposed by trenching. The marble appears to provide easy channels for intrusion and replacement and as a result, are often found near or associated with vein occurrences. Quartz-carbonate veining and remobilization are common in the marble particularly near vein contacts. Gossanous boxwork structures, which appear to represent carbonate material which has been oxidized and removed by solutions, are also common.

The lithological members of the Horsethief Creek Series appear conformable and are, in this vicinity, generally north to northeast trending with moderate to steep westerly dips. Some fold structures have been recognized. Schistosity and cleavage are usually parallel or nearly parallel to layering with a moderately well developed axial plane cleavage locally apparent. West of the baseline this axial plane cleavage is generally north-south, dipping moderately west. In the vicinity of Adit #3 it trends southeast, dipping moderate to steeply

southwest and curves to northeast, dipping moderately steep to the northwest in the eastern corner of the grid area.

INTRUSIVE

The sediments are cut by a complex series of dykes, sills and plugs of quartz diorite of probably Cretaceous age. These intrusive rocks are generally equigranular to weakly porphyritic (feldspar) and are composed of roughly 35% quartz, 50% feldspar (plagioclase) and 15% interstitial green hornblende which is often altered to chlorite. A weak pervasive clay alteration of feldspar is common and the mafic minerals have often been removed.

Near vein and shear zones the alteration increases to locally intense. Here saussuritization of the plagioclase is common to strong along with some sericite alteration. Mafic minerals are usually absent, clay alteration moderate to strong with shearing and silification and some sulphide enrichment common along vein contacts. In general the intrusives alter and deform the sediments little with the exception of hornfelsing and sericitization of the argillites. Some of the disseminated sericite within the schist may also be related to intrusion.

SHOWINGS

At least five mineralized structures (labelled No.1 to 5 in plate 1) have been recognized and developed to varying degrees. These are generally found within the quartz diorite at or near contacts with the sediments. Shearing and alteration of the intrusive along these veins suggest they were deposited during the late stages of intrusion by defractionated metal-rich solutions. The veins are highly oxidized and leached on surface and contain strong manganese staining in the form of manganite. Sulphides are often completely absent on surface.

The No.1 vein is the most prominent and best mineralized vein in the area. It has been traced on surface for at least 280 metres and underground to a depth of over 60 metres. Trenching shows the vein to outcrop as a complex zone of shearing and lensing, often with several mineralized horizons which occasionally are not traceable even between adjacent trenches. Vein widths vary from 0.3 metres to over ten metres including low grade zones and horses and fingers of intrusive and lesser schist. Plate 1 shows the larger vein surficial features while figures 4 to 8 show more intricate vein lithologies and structures as well as chip sampling results.

The best mineralized section found on surface is 4.6 metres averaging 0.635 oz/ton gold, 3.80 oz/ton silver in trench 9 (figure 6). Grades on surface however, are often variable and inconsistent, sometimes over short distances, within similar vein material. In general the gold values appear to decrease to the north and south and are very low in the south near trench 18 and the 34 metre shaft (figure 4). In these areas the silver values often persist suggesting that the decrease in gold may be related to surface leaching and oxidation. This is substantiated by the more consistent and uniform grades encountered underground.

The No.1 adit is open and accessible on the upper level and detailed mapping and channel sampling were carried out with results as shown in Plates 2 and 3. The vein itself follows strong prominent shear zone traceable underground for 100 metres on the upper level and reportedly at least 150 metres on the flooded lower (45 metre) level. Vein widths vary from zero to 9.5 metres on the upper level and are reported to range from 0.3 to 3.0 metres in width on the lower level.

Precious metal values are generally related to sulphide content and hence the arsenic content. The best grade and thickest mineralized exposure is found in stub adit 1 on the upper level where 9.5 metres averaging 0.482 oz/ton gold and 3.04 oz/ton silver was encountered. Mineralized zones elsewhere are somewhat narrower in width but grades are generally within the 0.1 to 0.7 oz/ton gold and 1.0 to 5.0 oz/ton silver range as shown in Plate 3. Previous sampling results from the lower level as compiled from Starr (1926-1930) and McQuade (1935) also indicate uniform values in the same range.

Vein contacts and contacts between mappable vein lithologies are generally sharp, planar, and well defined with shear control common particularly in narrower sections. The only gradational contact observed occurs on the footwall between stub adits #2 and #5, where a zone of quartz and sulphide impregnation in quartz diorite grades outwards into barren intrusive.

Splayed and subsidiary shearing is common along and adjacent to the vein and cross faulting and shearing postdate and displace the mineralized zones. The main shear appears to be cut off by one of these cross faults in the area of stubs adit #11. Similar features also occur on surface particularly near trenches 5 and 6, where the vein is displaced to the east under overburden, and in trench 4 where the vein terminates against a shear.

Vein No.2 is exposed by adit No.5 (see figure 15) and consists of an intensely oxidized, limonite-rich shear zone or series of shear zones. Rock types are often unrecognizable and no well defined vein structure or trend is apparent. The alteration appears to grade outwards into less altered country rock. Access is possible into adit No.5 and several channel samples of gossanous material were taken both underground and in the caved portal area. Silver values ranged to 3.90 oz/ton at the portal but gold values were low.

Precious metal values are generally related to sulphide content and hence the arsenic content. The best grade and thickest mineralized exposure is found in stub adit 1 on the upper level where 9.5 metres averaging 0.482 oz/ton gold and 3.04 oz/ton silver was encountered. Mineralized zones elsewhere are somewhat narrower in width but grades are generally within the 0.1 to 0.7 oz/ton gold and 1.0 to 5.0 oz/ton silver range as shown in Plate 3. Previous sampling results from the lower level as compiled from Starr (1926-1930) and McQuade (1935) also indicate uniform values in the same range.

Vein contacts and contacts between mappable vein lithologies are generally sharp, planar, and well defined with shear control common particularly in narrower sections. The only gradational contact observed occurs on the footwall between stub adits #2 and #5, where a zone of quartz and sulphide impregnation in quartz diorite grades outwards into barren intrusive.

Splayed and subsidiary shearing is common along and adjacent to the vein and cross faulting and shearing postdate and displace the mineralized zones. The main shear appears to be cut off by one of these cross faults in the area of stubs adit #11. Similar features also occur on surface particularly near trenches 5 and 6, where the vein is displaced to the east under overburden, and in trench 4 where the vein terminates against a shear.

Vein No.2 is exposed by adit No.5 (see figure 15) and consists of an intensely oxidized, limonite-rich shear zone or series of shear zones. Rock types are often unrecognizable and no well defined vein structure or trend is apparent. The alteration appears to grade outwards into less altered country rock. Access is possible into adit No.5 and several channel samples of gossanous material were taken both underground and in the caved portal area. Silver values ranged to 3.90 oz/ton at the portal but gold values were low.

A shallow caved shaft exposes the No.3 vein which follows a narrow but strong shear zone in the intrusive. Mineralization occurs over a width of 0.2 metres with good values (see figure 11) and is reportedly traceable over a 30 metre length. This shear should have been intersected by the now caved No.3 tunnel, however no ore was reported.

Northeast of the No.3 vein is a broad marble horizon which is paralleled and intruded by quartz diorite. The No.4 vein follows this contact for at least 100 metres with exposed widths up to 3 metres. This vein is traced by some 15 trenches, many of which are caved, and by a caved adit as shown in figures 12 to 14. Some silver values were obtained in samplings of vein exposure but gold values were consistently low.

Fifty metres southeast of vein No.3 is the No.5 vein which is traceable by five trenches for length of 45 metres with an exposed width of up to 4.4 metres. Chip sampling of two of the trenches indicates significant gold and silver values as shown in figure 10. A possible extension of this vein is exposed by trenching some 80 metres to the south. Here the vein is 10 metres thick and flanked to the east by a 7 metre poorly exposed zone of intermixed barren quartz and intrusive as shown in figure 9. Samples of vein material from this area returned low values for gold and silver, and the No.3 tunnel which cross cuts beneath this zone reported no ore grade material.

MINERALIZATION

The true nature of the vein mineralization is not readily apparent on surface due to the almost complete oxidation and leaching which extends to depths of 20 metres or more. Manganese staining, arsenic staining and boxwork structures are common in outcrop and several types of vein outcrop were noted as follows:

- 1) Massive limonite gossan with varying amounts of quartz (includes siliceous gossans).
- 2) Massive limonite-rich sideritic gossans, often intermixed and indistinguishable from 1).
- 3) Pitted, arsenic-stained, fine siliceous material
- 4) Rusty, white quartz with local arsenic staining
- 5) Sheared, gossanous, altered and silicified intrusive
- 6) Minor, massive pyrite and arsenopyrite usually partially oxidized and leached.

In Tunnel No.1, oxidation and leaching are greatly reduced and four distinct vein lithologies are discernible as shown in Figure 2.

These are:

- 1) massive sulphides
- 2) massive siderite with sulphides
- 3) siderite-limonite gossans
- 4) quartz-sulphide-rich intrusive

The massive sulphides contain most of the high gold and silver values and occur mainly along the footwall of the vein. They are usually comprised of 70-90% sulphides, mainly pyrite and arsenopyrite with subsidiary amounts of chalcopyrite, sphalerite, galena and chalcocite, in order of abundance. A trace of stibnite was also reported. The gangue mineral is predominantly quartz which is found in amounts locally ranging up to 90%.

Pyrite and arsenopyrite occur as coarsely crystalline masses which are well fractured to occasionally brecciated with chalcopyrite and galena occurring as fracture fillings and microveinlets within these minerals.

The remaining sulphides are usually found as fine disseminations within the chalcopyrite. Approximately half the gold is found as extremely fine grained (less than 19 microns or - 800 mesh) free gold associated intimately with chalcopyrite and to a lesser extent, galena. The remaining gold values appear to occur on a sub-microscopic scale within the pyrite and arsenopyrite crystal lattices.

The hanging wall side of the vein is often comprised of fine grained, sugary to coarsely crystalline, massive cream coloured siderite with 10-40% disseminated pyrite and arsenopyrite crystals and masses. Some massive sulphide clots occur locally, however gold and silver values are usually low and sub economic.

The thicker zones of siderite appear related to marble horizons in the hanging wall and it seems likely that much of the carbonate for the siderite was derived from these marbles. The siderite-marble contact is also generally strongly gossanous and leached and where the marble is not present, the siderite is much narrower and usually confined to the main shear zone, or absent.

The manganese-stained sideritic gossan phase often occurs outside the vein itself and in these cases it is made up of a strongly limonite-stained and coated boxwork of quartz and siderite. This appears to be a leached and altered phase of the marble (as noted above) from which most of the carbonate has been removed. Within the vein itself, however, the gossan is more massive and siliceous and appears to represent an oxidized phase of the massive sulphides and siderite zones. This phase of the gossan is present only near the portal where oxidation is present, and on surface.

Within the horses of intrusive rock and, as previously mentioned along the vein footwall, mineralizing solutions have often impregnated the wall rock with quartz and sulphides. Quartz appears as large clots and veining with 10-15% associated pyrite and arsenopyrite. Near the vein the intrusive may be highly sheared and altered, and largely replaced by silica, grading outward to minor veining and less altered quartz diorite. Some significant but low grade precious metal values were obtained from these sections.

ORE PROCESSING

Numerous mill and metallurgical tests were performed on the ore from 1936 to 1942. In most cases the ore proved extremely refractory to methods used, and where good gold recoveries were obtained, reagent consumption was too high. No recent developments have yet been determined which might improve this situation. Direct smelting of the ore produced much more favourable results and several smelters have been contacted concerning purchase of raw ore. The high arsenic content however, is a strong deterring factor and if a buyer can be found, heavy smelter penalties would be anticipated.

GEOCHEMISTRY

Two soil geochemistry programs were undertaken on the WISCONSIN property during 1980. Initially, a detailed survey was completed over many of the known vein occurrences along 50 metre-spaced, flagged and picketed, slope corrected lines, using sample intervals of 25 metres. Tielines were run across both ends of the grid for control and special care was taken to ensure accuracy of the baseline. A total of 267 samples were taken along 11 lines covering an area of 0.3 square kilometres. Values were plotted and contoured as shown in Plates 4, 5 and 6. Contour and population intervals were determined from histogram tabulations of all soil samples results for the area.

Less detailed soil grids were also established, flanking the detailed grid, to trace along strike projections of known veins and to attempt to locate parallel undiscovered vein systems. Samples were taken at 25 metre intervals along 150 metre-spaced, flag and compass lines using extensions of the baseline as control. This survey covered an area of 1.3 square kilometres with 389 samples from 13 lines. Sample results were plotted and contoured as shown on Plates 7, 8 and 9 using the same contour and population intervals as for the detailed survey.

Soil samples were collected, using a prospectors grub hoe, from a depth of 15 to 20 cm. Where the soil horizons were defined an attempt was made to sample the B-horizon. All samples were placed in brown kraft sample bags, labelled and dried prior to shipping to Min-En Laboratory in Vancouver for analysis. Standard atomic absorption analyses was used to determine silver and arsenic contents and a standard fire assay - atomic absorption technique for gold determinations. Silver and arsenic results are given in parts per million and those for gold in parts per billion.

Discussion of Results

Detailed Survey

Well defined coincidental gold-arsenic-silver soil anomalies were outlined over the four known mineral occurrences within the detailed grid area. As to be expected the more mobile arsenic produced broad extensive anomalous zones with good downhill dispersion. The gold and silver anomalies showed weaker dispersion, bettered outlining individual mineral zones. It should be noted that anomalous results were not obtained beyond the area of known sulphide exposure.

Several other notable anomalous zones were also revealed:

- 1) A single station, coincidental gold-arsenic-silver anomaly with significant gold and arsenic values was located in an area of heavy overburden near the east end of line 0+50S. This anomaly is also coincidental with a localized EM response.
- 2) A coincidental gold-arsenic anomaly was found near the west end of line 2+50N and is extendable by the regional survey to the north. This occurs in an area of schist outcropping and abundant talus debris. No sulphides were reported, however, work in this area was limited.
- 3) A small gold anomaly occurs on line 1+50S just east of the baseline in an area of heavy overburden. A gold value of 165 ppm makes this anomaly interesting despite the small size and corresponding low silver and arsenic values.
- 4) High gold values and adjacent but not coincidental high arsenic values were obtained from the east end of lines 2+00N and 2+50N. This occurs in an area of metavolcanic outcrop and talus close to a projected intrusive contact. Some bull quartz debris was noted in the area. These anomalies may also be caused by downhill dispersion from existing exposures.

The anomalous gold and arsenic values located near the dry creek in the southeastern part of the grid area appear to be caused by the creek itself which drains from the workings via the No.1 dump. Several of the other previously mentioned anomalies, particularly 1 and 2, are also downhill from the No.1 vein and could possibly also be a result of seepage from this zone.

Regional Survey

No significant anomalous values were obtained for any of the three elements analysed in the southern portion of the regional survey (south of the detailed grid). This is generally an area of heavy overburden with little or no rock exposure. To the north, anomalous values were obtained along line 3+00N and to a lesser extent line 4+50N. Many of these are extensions of anomalies from the detailed grid area and several are deemed significant.

- 1) Anomalous gold and arsenic values along the western 200 metres of line 3+00N appear to be related to those previously mentioned on L2+50N. Sampling in this area is incomplete, however results suggest a rather large but erratic anomalous zone or several smaller ones. Outcrop in this area has not been investigated.
- 2) A small but high gold anomaly near the baseline on line 4+50N appears to be related to a gossanous siderite zone (vein No.4) which has been traced by previous trenching and shown to contain some values.
- 3) A small coincidental gold-arsenic-silver anomaly at 1+75E on line 3+00N appears to be the extension of the vein occurrences exposed by trenches T-34 to T-39, (vein No.5).
- 4) A potentially large gold anomaly occurs towards the eastern ends of lines 3+00N and 4+50N. Little work has been done in this area, however, the soil gold values are comparable to those over known veins and some bull quartz float was observed in this area.

North of line 4+50N there are few anomalous results. The only one worth note is an isolated single station silver anomaly on line 9+00N significant only due to its amplitude of 7.7ppm.

GEOPHYSICS *Crone CEM 322-2226*

The previous success of the Radiore electrical survey in outlining the No.1 vein structure prompted Esperanza Explorations to run a Crone EM survey in an attempt to extend and define the mineralized zones. Both horizontal and vertical loop methods were used and readings were recorded for high (5010 Hz) and medium (1830 Hz) frequencies. A loop spacing of 50 metres was used in order to penetrate below the zone of oxidation. Trial runs at 25 metres and 100 metre separations however, failed to produce significantly different results. Readings were collected at 25 metre intervals over much of the detailed grid area and at 12 1/2 metre intervals over known showings. The results are tabulated in profile in Plates 10 and 11 using an exaggerated vertical scale of 1 cm equals 5°.

Discussion of Results

No strong conductive zones were outlined by the survey and in general results were nonconductive. Readings variations were usually less than 10° even over known sulphide occurrences. Plotting values on the exaggerated vertical scale suggested some possible very weak conductive zones corresponding to vein occurrences, however these were poorly defined and discontinuous. The only significant response was a value of - 23° obtained only on high frequency vertical loop at the east end of line 0+50S. This corresponds to a single station soil anomaly in an area of heavy overburden.

The lack of success of the E.M. survey over zones of near massive sulphide is probably due to the high arsenopyrite content of the sulphides which apparently has a disruptive effect on the conductivity of the remaining sulphides. Surface oxidation appears to have no effect on the readings as no significant variation was observed by deep and shallow tests.

BLACK DOUGLAS SHOWING

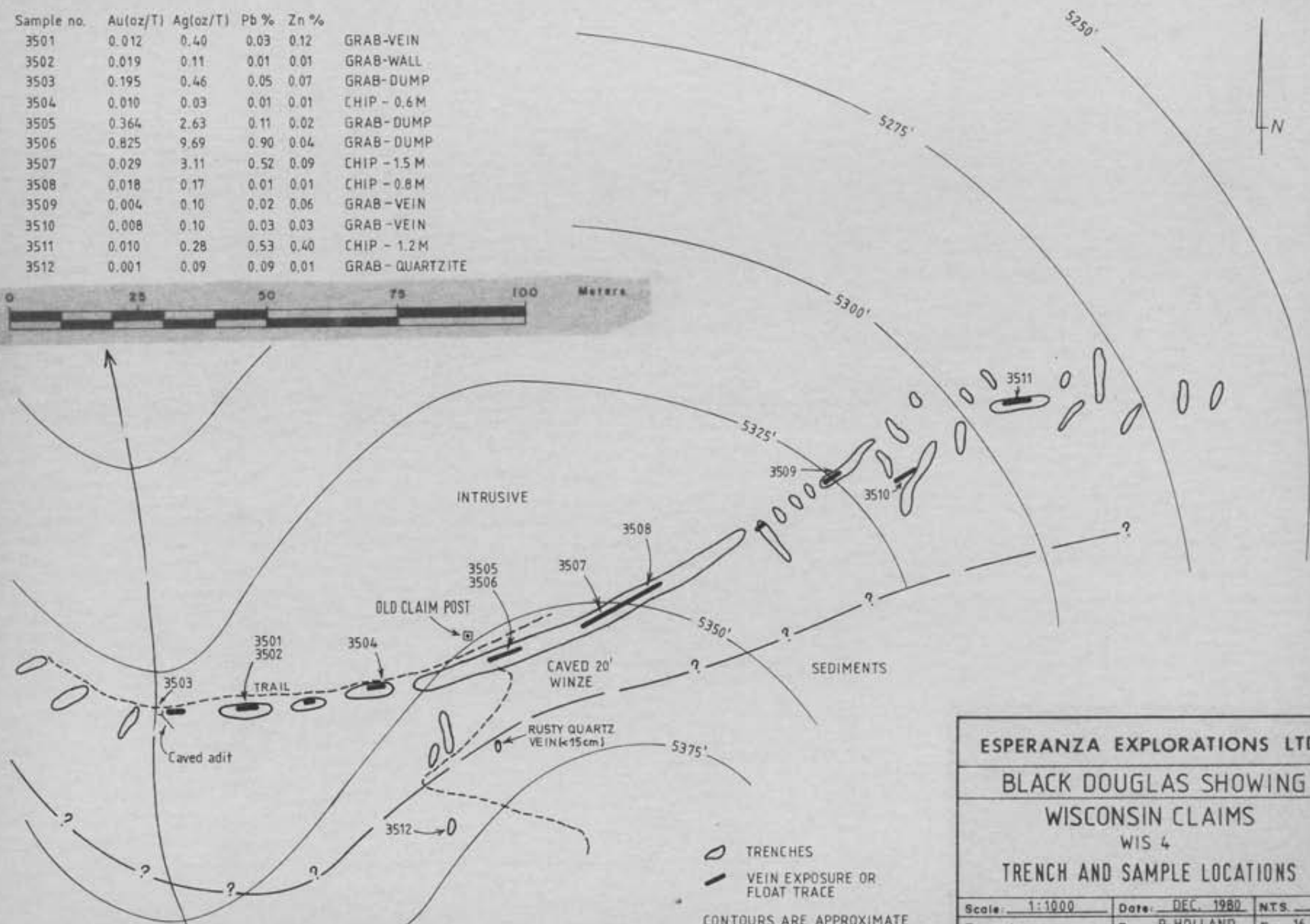
The BLACK DOUGLAS showing is located on the south side of Hughes Creek at an elevation of 1630 metres, two kilometres east-southeast of the Wisconsin showings. An old cabin in good repair is located just above the showing and is connected to it by a rough trail.

This showing appears to be covered by the KITA 1 claim owned by Arthur Barker of Vancouver and is in good standing until October 12, 1984. No posts were found during examination and attempts to contact Mr. Barker have so far not been successful.

The BLACK DOUGLAS showing was worked during 1946-47 when some 29 hand trenches, an adit and a shaft were dug. The main vein was exposed over a distance of at least 200 metres and several other smaller veins were also reported.

During September 1980 the writer spent one day on the showing. Figure 16 shows a rough sketch of the mineralized area showing trench locations and vein exposures. Many of the trenches were caved and in general the recessive weathering vein was poorly exposed and highly oxidized. Vein debris and outcrop consisted mainly of manganese and iron stained quartz-siderite similar to that found at the Wisconsin. Pyrite and arsenopyrite appear to be the main sulphides with some chalcopyrite, galena and sphalerite reported.

Sample no.	Au(oz/T)	Ag(oz/T)	Pb %	Zn %	
3501	0.012	0.40	0.03	0.12	GRAB-VEIN
3502	0.019	0.11	0.01	0.01	GRAB-WALL
3503	0.195	0.46	0.05	0.07	GRAB-DUMP
3504	0.010	0.03	0.01	0.01	CHIP - 0.6M
3505	0.364	2.63	0.11	0.02	GRAB-DUMP
3506	0.825	9.69	0.90	0.04	GRAB-DUMP
3507	0.029	3.11	0.52	0.09	CHIP - 1.5M
3508	0.018	0.17	0.01	0.01	CHIP - 0.8M
3509	0.004	0.10	0.02	0.06	GRAB-VEIN
3510	0.008	0.10	0.03	0.03	GRAB-VEIN
3511	0.010	0.28	0.53	0.40	CHIP - 1.2M
3512	0.001	0.09	0.09	0.01	GRAB-QUARTZITE



ESPERANZA EXPLORATIONS LTD.
BLACK DOUGLAS SHOWING
WISCONSIN CLAIMS
 WIS 4
TRENCH AND SAMPLE LOCATIONS

Scale: 1:1000	Date: DEC. 1980	NTS
Revised:	By: R. HOLLAND	Fig. 16

Twelve samples of the vein material, including four chip samples across outcrop exposure, were collected and assayed for gold, silver, lead and zinc. Results were generally poor and most values less than 0.03 oz/ton gold and 0.40 oz/ton silver. Grab samples from the shaft and adit dumps however, produced much better grades with up to 0.825 oz/ton gold and 9.69 oz/ton silver from selected specimens containing some unoxidized sulphides. This may indicate improved grades with depth and decreasing oxidation and should be investigated further.

REFERENCES

- Blanchflower, J.D., 1978, Property Examination of the Wisconsin and Lucky Strike Crown Grants, unpublished report for Canadian Superior Explorations Ltd.
- B. C. Ministry of Mines Reports for 1899 (p.601), 1903 (p.H.148), (1928) (p.C326), 1929 (p.356), 1930 (p.278), 1933 (p.240), 1935 (p.E27), 1936 (p.E43), 1937 (p.E22), 1940 (p.A70), 1961 (p.A49), 1962 (p.A49), 1963 (p.A49).
- Chamberlain, J.A., 1980, Geological Report, Wisconsin Property, South Central, B.C., prospectus report for Esperanza Explorations Ltd.
- Cleveland, C.E., 1948, Report on the Black Douglas Prospect, Nelson, M.D., unpublished report.
- Dept. of Mines, Ottawa, 1936, Arsenical Gold Ore from the "Wisconsin Group" Mineral Claims, Hennessy Mountain, Nelson Mining Division, British Columbia, unpublished report for A.C. Frost and Co.
- Eldridge, G.S., 1940, unpublished report for Canadian Explorations Company.
- Galloway, J. 1932, B.C. Dept. of Mines, Bull #1 (p.108).
- Godard, J.S., 1940, Canadian Industries Ltd. Laboratory Tests on Arsenical - Gold Ore from Canadian Exploration Company, Wisconsin Mine, MMidge Creek, British Columbia, unpublished report.
- Gray, S., 1936, The Consolidated Mining and Smelting Company of Canada Ltd., Wisconsin Ore, Midge Creek, Bayonne, B.C., Progress Report T.D. 329 - #1, unpublished report A. C. Frost and Company.
- Keffer, F., John H., 1915, Notes Regarding the Wisconsin Group, unpublished report.
- Keffer, F., 1938, Report on Smelting Test on Ore from the Wisconsin Mine, Midge Creek, B.C., unpublished report for A. C. Frost & Company.
- Lakes, H., 1945, The Wisconsin Mine, unpublished report.
- Little, H.W., 1960, Geological Survey of Canada, Memoir 308, Map No.1090A.

Lowe, R.H., Wark, C. R., 1942, American Cyanamid Company.
Metallurgical Tests on a Sample of Arsenical Gold
Ore from the Wisconsin Mine, Kootenay Lake, B.C.,
Submitted by Canadian Exploration Ltd., Vancouver, B.C.,
unpublished report.

Rice, H.M.A., 1940, Geological Survey of Canada, Memoir 228
(p.17), Map No.603A.

Shannon, E.A., 1973, The Wisconsin and Lucky Strike Crown Grants,
unpublished report for the Granby Mining Company Ltd.

Starr, C., 1936, The Wisconsin Mine, unpublished report.

ITEMIZED COST STATEMENT - WISCONSIN PROPERTY

PERIOD APRIL to DECEMBER 1980

WAGES & SALARIES

The following persons were employed by Esperanza Explorations Ltd. on the WISCONSIN Project on the dates indicated.

ROBERT HOLLAND, project geologist, 88.5 days @ 92.81/day, April 17, May 2,5,7, June 16-July 31, September 8-16,22,26,30 October 1-3, 6,7,20, November 10-29 December 1-19	\$ 8,213.69
JOHN BROCK, Exploration Manager, 3 days @ \$250.00/day, July 12, 13, Sept.19.	750.00
BRIAN KONST, Field Assistant, 40 days @ \$45.00/day, June 17-July 25	1,800.00
SUZANNE VOETMANN, Field Assistant, 40 days @ \$42.75/day, June 17-July 25	1,710.00
LES KISS, Fieldman, 6 days @ \$99.00/day, September 29,30, Oct.1-3,6	594.00
DAVID HARDING, Draughtsman, 245 hours @ \$8.43/hour, May 2,5-8, September 2-12, 16-19, 22, 23, 29, October 1-3, 6-8, 10, 14-16, 21, November 14, 17, 18, December 16, 17	<u>2,107.50</u>
Total:	\$ 15,175.19 =====

FOOD & ACCOMMODATION

132 man days @ \$16.70/day June 16- July 25, September 19,26,29,30 Oct. 1-3, 6, 7	2,204.40
---	----------

TRANSPORTATION

Helicopter support 13.3 hours @ \$407.9/hr June 20,21, 23, 26 July 3, 10, 13, 16, 17,23, 24, 25, September 30, October 1-3, 6	5,425.07
Transportation: includes truck fuel and maintenance, airline fares, taxis and bus.	491.31

b / fwd. \$8,120.78

INSTRUMENT RENTAL

Crone EM - 51 days at \$21.50 day 1,096.50
June 9 - July 30

GEOCHEMISTRY

Soil survey - 679 samples analysed 6,348.65
@ \$9.35/sample

Rock assaying - 155 samples analysed
@ \$26.00/sample 4,030.00

\$ 19,595.93

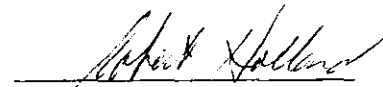
GRAND TOTAL: \$ 34,771.12

=====

CERTIFICATE

I, Robert T. Holland of 204 - 6331 McKay Avenue, Burnaby, British Columbia, DO HERBY CERTIFY THAT:

1. I am a geologist with a business office at 1027 - 470 Granville Street, Vancouver, B.C.
2. I am a graduate in geology from the University of British Columbia (BSc - 1976).
3. I have practiced my profession as a geologist for the past five years.
4. To the best of my knowledge and belief the Statement of Costs presented in this report Geological, Geochemical and Geophysical Report on the WIS 1-4 Mineral Claims is both correct and true.
5. I hold an interest in the shares of Esperanza Explorations Ltd. and I am at this time employed by Esperanza Explorations Ltd. as a geologist.



Robert T. Holland

APPENDIX 1

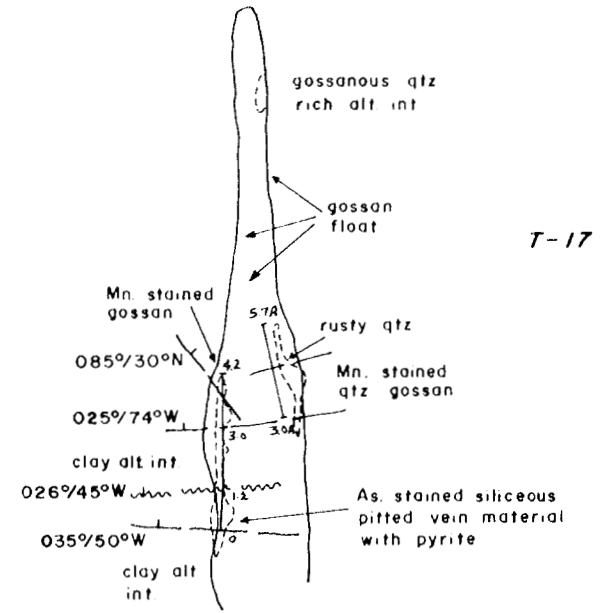
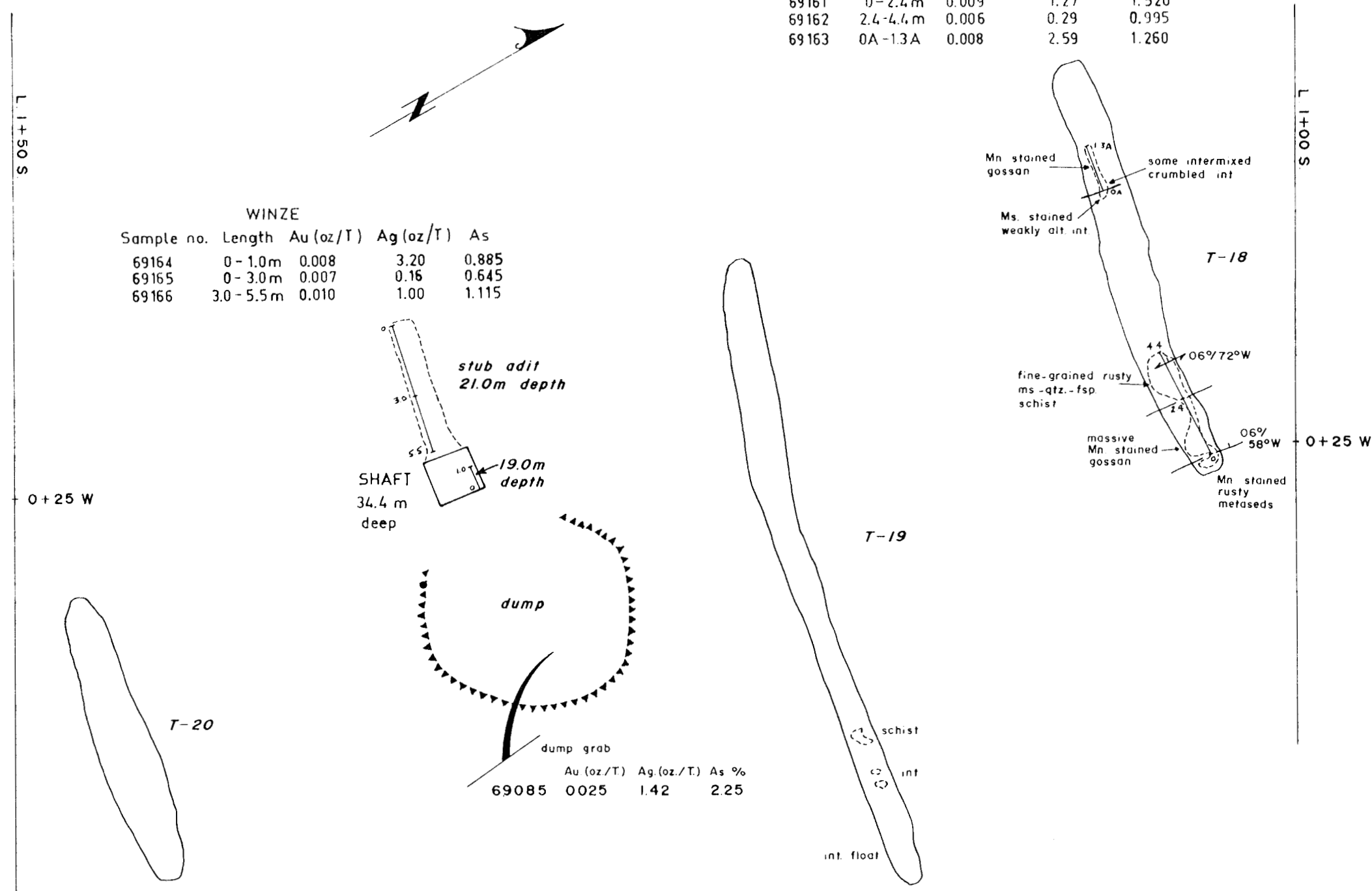
MAPS OF SURFACE TRENCHES

FIGURES 4 to 15

Sample no.	Length	Au (oz/T)	Ag (oz/T)	As %
69161	0-2.4 m	0.009	1.27	1.520
69162	2.4-4.4 m	0.006	0.29	0.995
69163	0A-1.3A	0.008	2.59	1.260

WINZE

Sample no.	Length	Au (oz/T)	Ag (oz/T)	As
69164	0-1.0m	0.008	3.20	0.885
69165	0-3.0m	0.007	0.16	0.645
69166	3.0-5.5m	0.010	1.00	1.115



Sample No	Length	Au (oz/T)	Ag (oz/T)	As %
69121	0-1.2m	0.173	1.25	15.450
69122	1.2-3.0m	0.042	0.15	0.710
69123	3.0-4.2m	0.025	0.11	0.975
69124	30A-57Am	0.012	0.41	0.535

- LEGEND:**
- GEOLOGICAL CONTACT
 - OUTCROP
 - SCHISTOSITY
 - qtz. - QUARTZ
 - fsp. - FELDSPAR
 - ms - SERICITE
 - int - INTRUSIVE
 - alt. - ALTERED

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8910
NO.

SCALE 1:200



SEE PLATE 1 FOR TRENCH LOCATIONS

ESPERANZA EXPLORATIONS LTD.		
WISCONSIN CLAIMS		
SURFACE TRENCHES T-17 TO T-20		
Scale 1:200	Date DEC '80	NTS
Revised	By R. HOLLAND	Fig 4

T-13A

Sample No.	Length	Au (oz./T)	Ag (oz./T)	As %
69098	0-2.2m	0.064	0.66	1.730
69099	2.2-4.2m	0.004	0.16	0.009
69100	4.2-5.2m	0.003	0.08	0.023
69103	0A-20Am	0.006	0.30	0.184

T-13

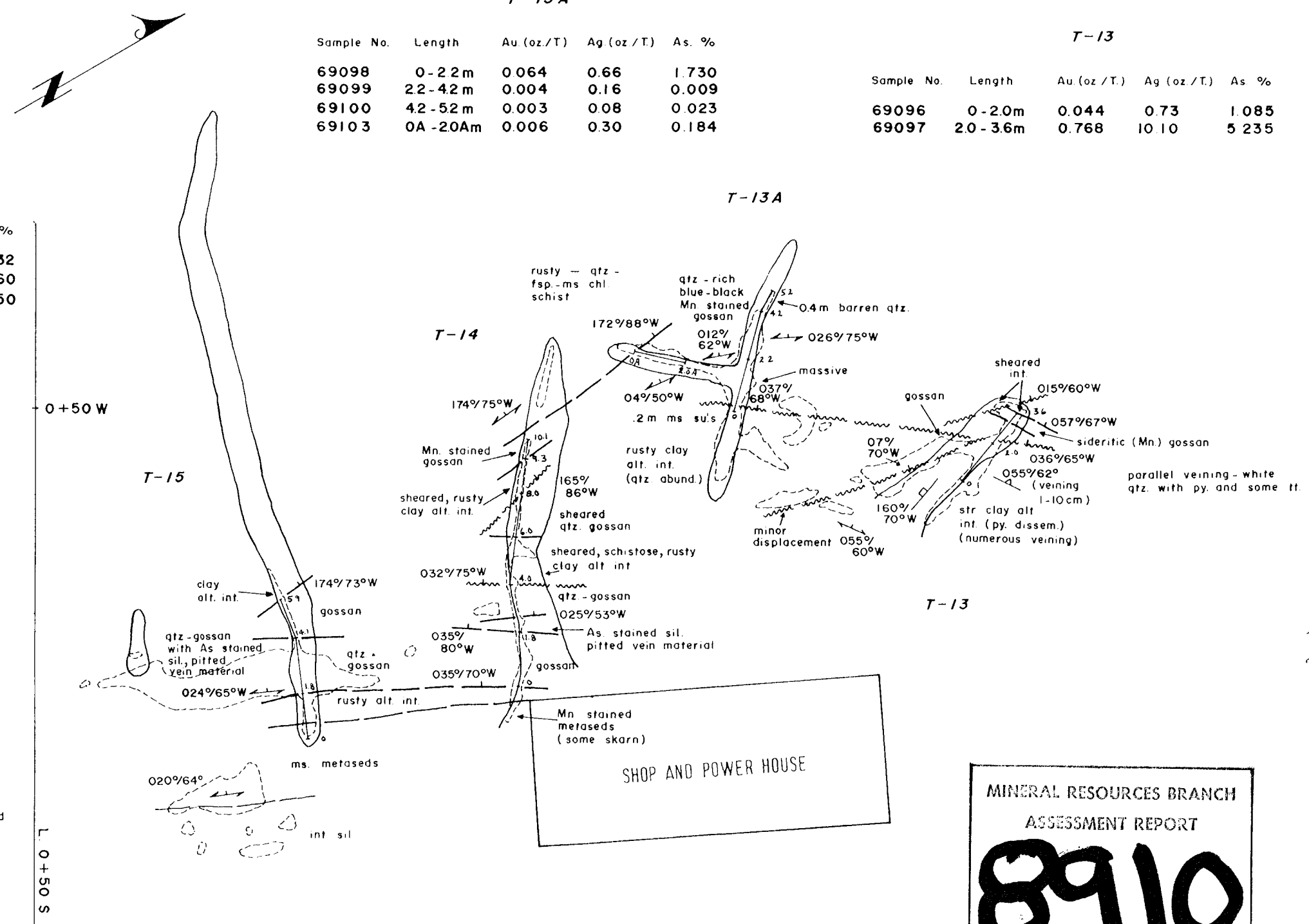
Sample No.	Length	Au (oz./T)	Ag (oz./T)	As %
69096	0-2.0m	0.044	0.73	1.085
69097	2.0-3.6m	0.768	10.10	5.235

T-15

Sample No.	Length	Au (oz./T)	Ag (oz./T)	As %
69115	0-1.8m	0.004	0.07	0.232
69116	1.8-4.1m	0.073	2.00	8.560
69117	4.1-5.9m	0.077	0.76	1.950

T-16

Sample No.	Length	Au (oz./T)	Ag (oz./T)	As %
69118	0-0.8m	0.130	0.87	5.685
69119	0.8-1.6m	0.033	0.12	2.305
69120	1.6-2.6m	0.109	0.51	9.790



- LEGEND**
- GEOLOGICAL CONTACT
 - ~ SHEARS AND FAULTS
 - OUTCROP
 - ↗ LAYERING OR SCHISTOSITY
 - ⊥ JOINTING
 - ↖ VEINING
 - CHIP SAMPLE LOCATION

- int = INTRUSIVE
- qtz = QUARTZ
- fsp = FELDSPAR
- ms = SERICITIC
- alt = ALTERED
- sil = SILICEOUS
- py = PYRITE
- tt = TETRAHEDRITE
- str = STRONG

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8910
NO.

T-14

Sample No.	Length	Au (oz./T)	Ag (oz./T)	As %
69102	0-1.8m	0.016	2.75	1.190
69104	1.8-4.0m	0.289	2.17	3.770
69105	4.0-6.0m	0.243	1.30	3.215
69106	6.0-8.0m	0.296	1.77	4.645
69107	8.0-9.3m	0.034	0.28	1.370
69108	9.3-10.1m	0.005	1.00	0.950

SCALE 1:200

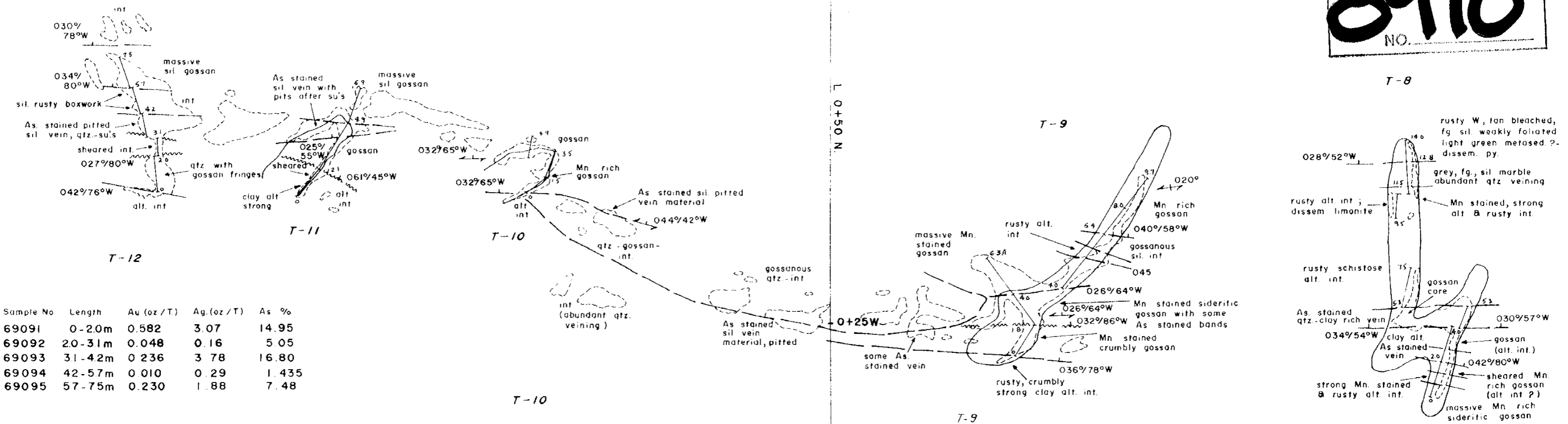
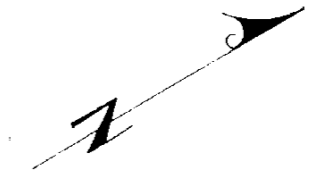


ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS
SURFACE TRENCHES T-13 TO T-16

Scale 1:200 Date DEC 1980 NTS
Revised By R. HOLLAND Fig 5

SEE PLATE 1 FOR TRENCH LOCATIONS



Sample No	Length	Au (oz/T)	Ag (oz/T)	As %
69091	0-2.0m	0.582	3.07	14.95
69092	2.0-3.1m	0.048	0.16	5.05
69093	3.1-4.2m	0.236	3.78	16.80
69094	4.2-5.7m	0.010	0.29	1.435
69095	5.7-7.5m	0.230	1.88	7.48

Sample No	Length	Au (oz/T)	Ag (oz/T)	As %
69109	0-1.5m	0.638	4.51	6.640
69110	1.5-3.5m	0.070	5.02	5.075
69111	3.5-4.9m	0.053	1.10	4.910

Sample No	Length	Au (oz/T)	Ag (oz/T)	As %
69112	0-2.1m	0.104	1.99	9.390
69113	2.1-4.9m	0.298	1.87	7.960
69114	4.9-6.9m	0.019	1.39	3.790

Sample no	Length	Au (oz/T)	Ag (oz/T)	As %
69177	0-1.8m	0.010	1.23	1.225
69178	1.8-4.0m	0.299	2.93	5.98
69179	4.0-6.4m	0.945	4.59	9.05
69180	6.4-8.0m	0.016	0.86	1.04
69181	8.0-9.7m	0.008	1.48	0.155
69182	4.0-6.3Am	1.060	6.58	10.15

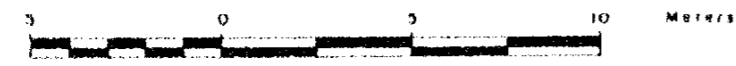
Sample no.	Length	Au(oz/T)	Ag(oz/T)	As %
69183	0-2.0m	0.012	0.50	0.705
69184	2.0-4.0m	0.056	0.82	7.55
69185	4.0-5.3m	0.595	3.98	23.50
69186	5.3-7.5m	0.036	0.29	1.46
69187	9.5-11.5m	0.010	0.42	0.235
69188	11.5-12.5m	0.002	0.17	0.035
69189	12.8-14.0m	0.007	0.02	0.030

LEGEND

- GEOLOGICAL CONTACT
- OUTCROP
- FAULT
- LAYERING OR SCHISTOSITY
- SAMPLE LOCATION

qtz = QUARTZ int = INTRUSIVE
 alt = ALTERED sil = SILICEOUS
 su's = SULFIDES mn = MONZONITE
 As = ARSENIC W = TUNGSTEN
 fg = FINE GRAINED py = PYRITE

SCALE: 1 200

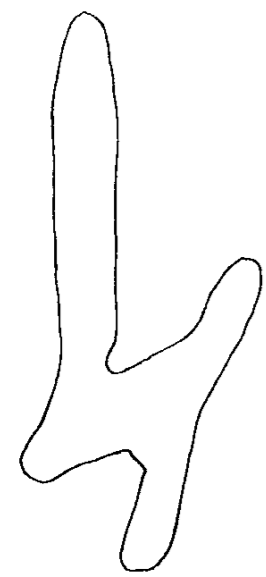


SEE PLATE 1 FOR TRENCH LOCATIONS

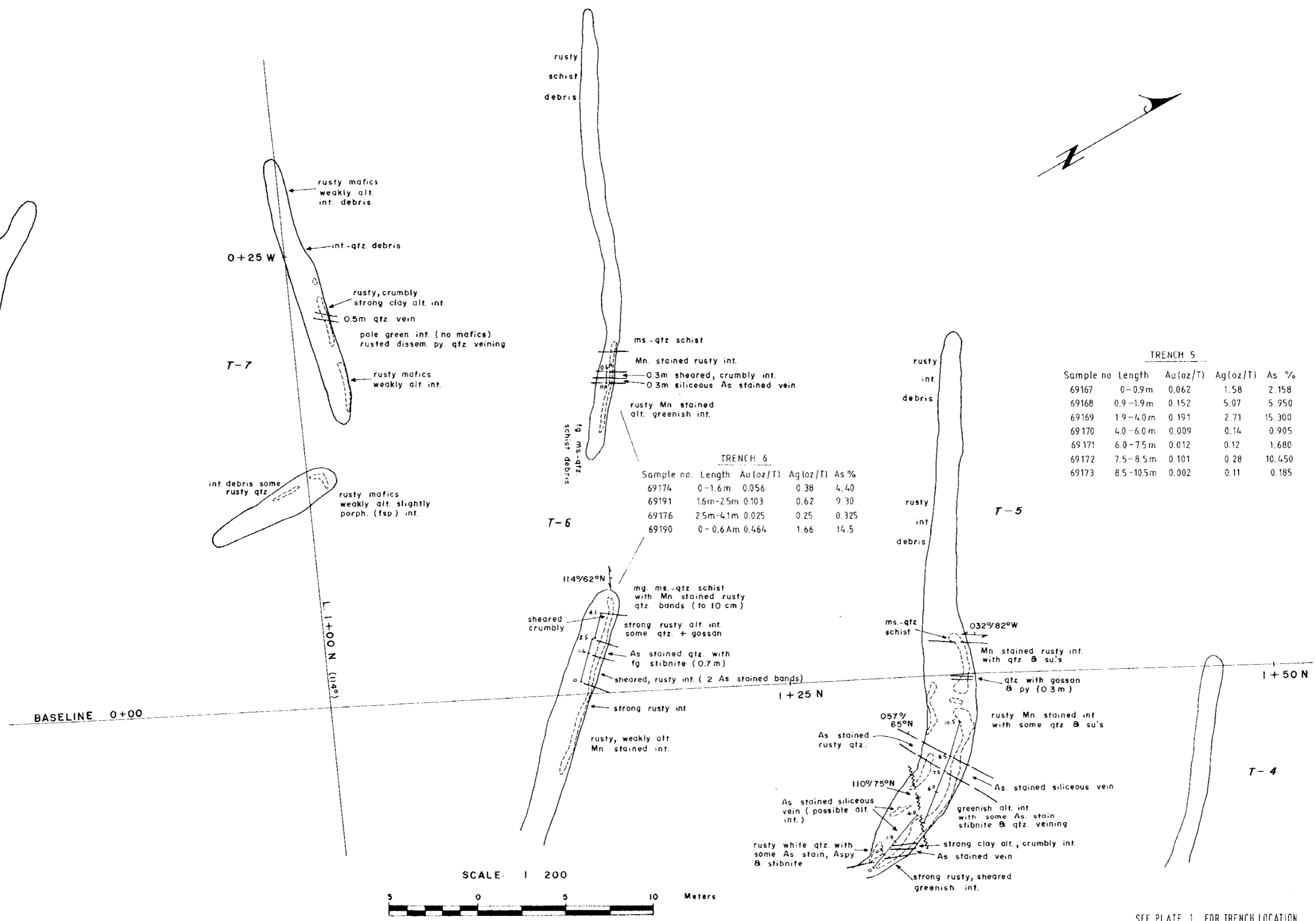
ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS
 SURFACE TRENCHES T-8 TO T-12

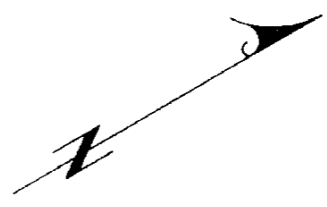
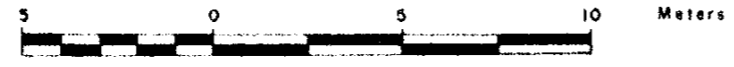
Scale: 1:200	Date: DEC. 1980	NTS
Revised:	By: R. HOLLAND	Fig. 6



T-8



SCALE: 1 200



TRENCH 5

Sample no	Length	Au(oz/T)	Ag(oz/T)	As %
69167	0-0.9m	0.062	1.58	2.158
69168	0.9-1.9m	0.152	5.07	5.950
69169	1.9-4.0m	0.191	2.71	15.300
69170	4.0-6.0m	0.009	0.14	0.905
69171	6.0-7.5m	0.012	0.12	1.680
69172	7.5-8.5m	0.101	0.28	10.450
69173	8.5-10.5m	0.002	0.11	0.185

TRENCH 6

Sample no.	Length	Au(oz/T)	Ag(oz/T)	As %
69174	0-1.6m	0.056	0.38	4.40
69191	1.6m-2.5m	0.103	0.62	9.30
69176	2.5m-4.1m	0.025	0.25	0.325
69190	0-0.6Am	0.464	1.66	14.5

LEGEND

- GEOLOGICAL CONTACT
- SHEARING
- CHIP SAMPLE LOCATION
- SCHISTOSITY
- OUTCROP

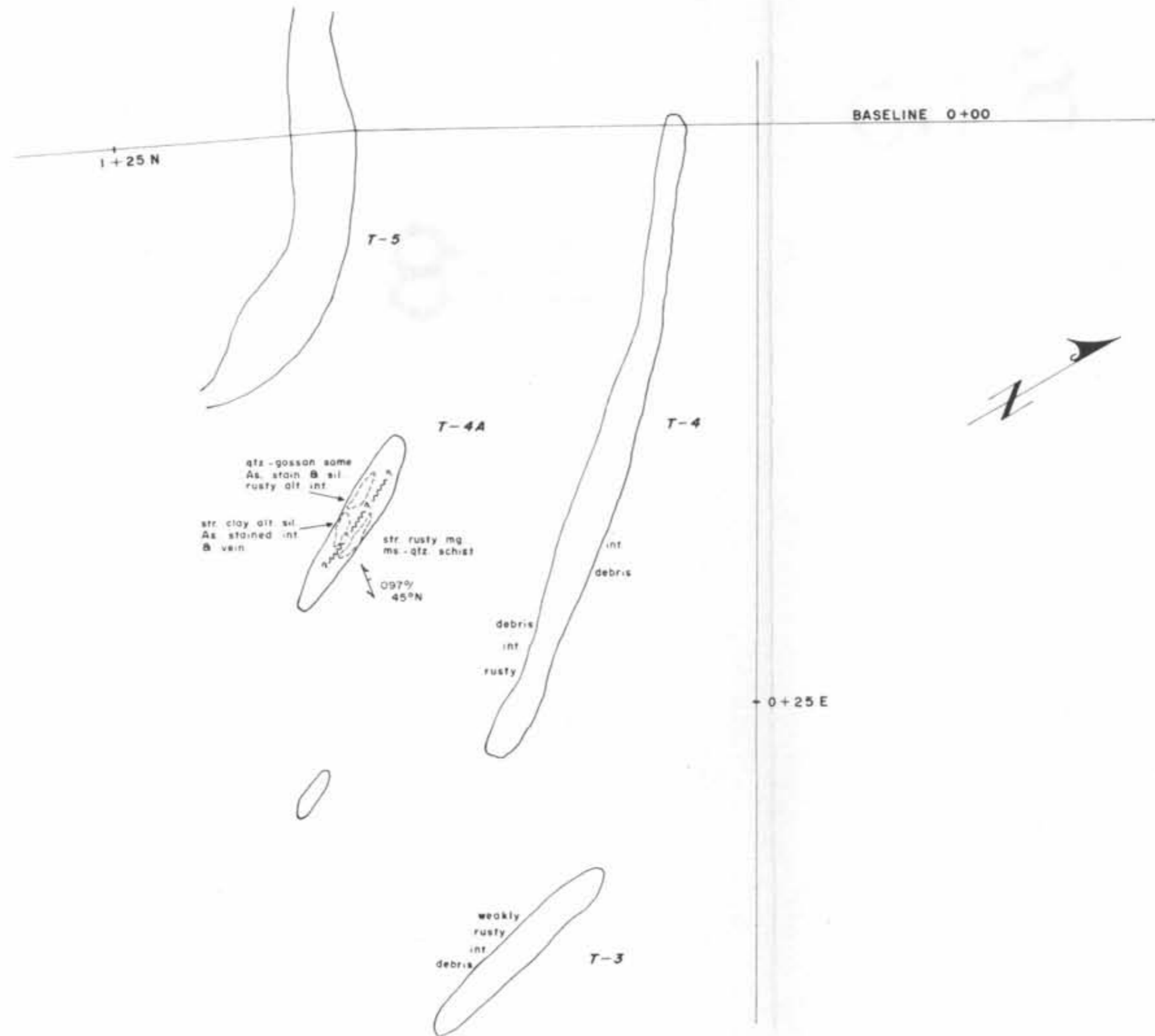
- ms - SERICITE
- qtz - QUARTZ
- py - PYRITE
- fsp - FELDSPAR
- int - INTRUSIVE
- aspy - ARSENOPYRITE
- su's - SULFIDES
- porph - PORPHYRITIC
- mg - MEDIUM GRAINED
- fg - FINE GRAINED
- alt - ALTERED

ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS
SURFACE TRENCHES T-4 TO T-8

Scale: 1:200	Date: DEC '80	NTS
Revised:	By: R. HOLLAND	Fig. 7

SEE PLATE 1 FOR TRENCH LOCATION



MINERAL RE. OUTCROP-DUNNICH
ASSESSMENT REPORT
8910
NO. _____



Sample no.	Au (oz/T)	Ag (oz/T)	As %
69192	grab	0.011	1.11
			1.80 (gossan debris)

LEGEND

- GEOLOGICAL CONTACT
- SHEARING
- SCHISTOSITY

- qtz = QUARTZ
- ms = SERICITE
- int = INTRUSIVE
- fsp = FELDSPAR
- alt = ALTERED
- sil = SILICEOUS
- mg = MEDIUM DRAINED
- str = STRONGLY

ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS
SURFACE TRENCHES T-2 TO T-5

Scale: 1:200	Date: DEC 1980	NTS
Revised: _____	By: R. HOLLAND	Fig: 8

SCALE: 1 : 200



SEE PLATE 1 FOR TRENCH LOCATIONS

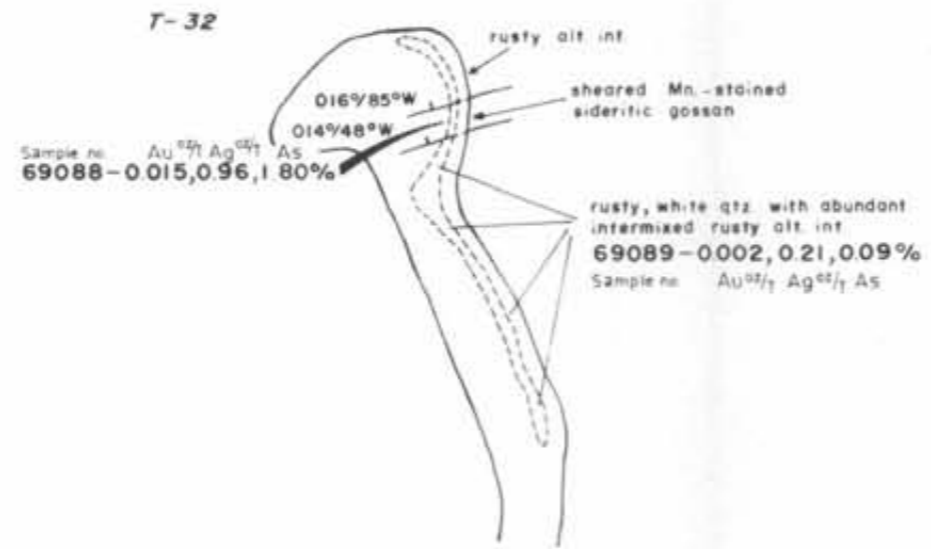
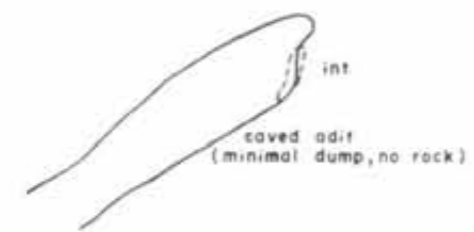
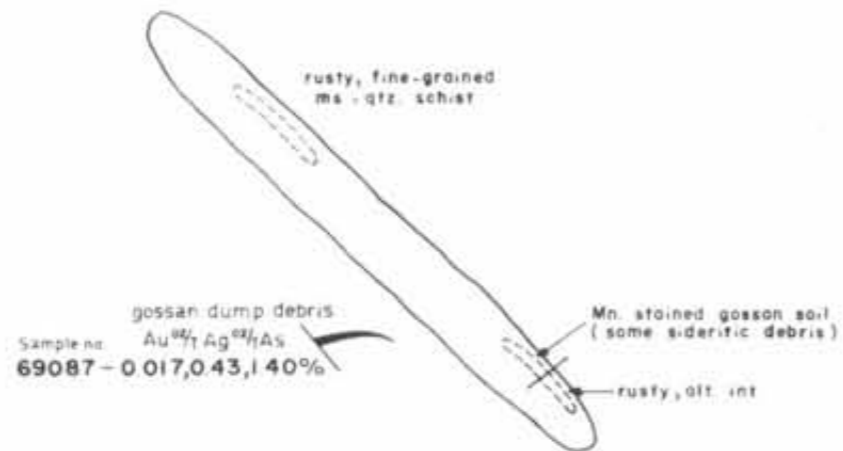
1+75 E

1+75 E

L 1+50 N

L 1+00 N

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8910
NO.



Claim Post at Andy 7(L), 8(R)
Ralph Sustad
May 31, 1974
S. 67°E.

▲ SURVEY PIN

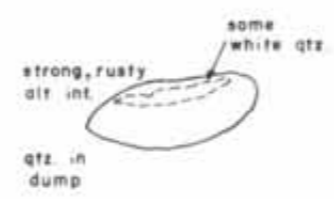
LEGEND

- GEOLOGICAL CONTACT
- OUTCROP
- qtz = QUARTZ
- int = INTRUSIVE
- ms = SERICITE
- alt = ALTERED

2+00 E

2+00 E

T-33



SCALE 1 : 200



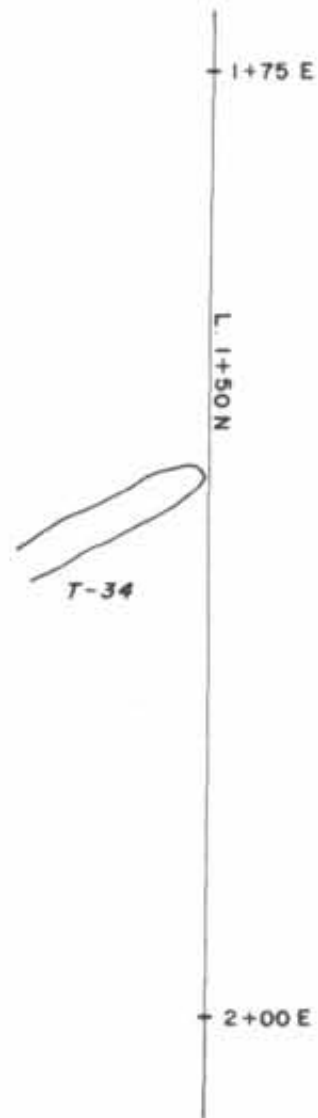
2+25 E

ESPERANZA EXPLORATIONS LTD.

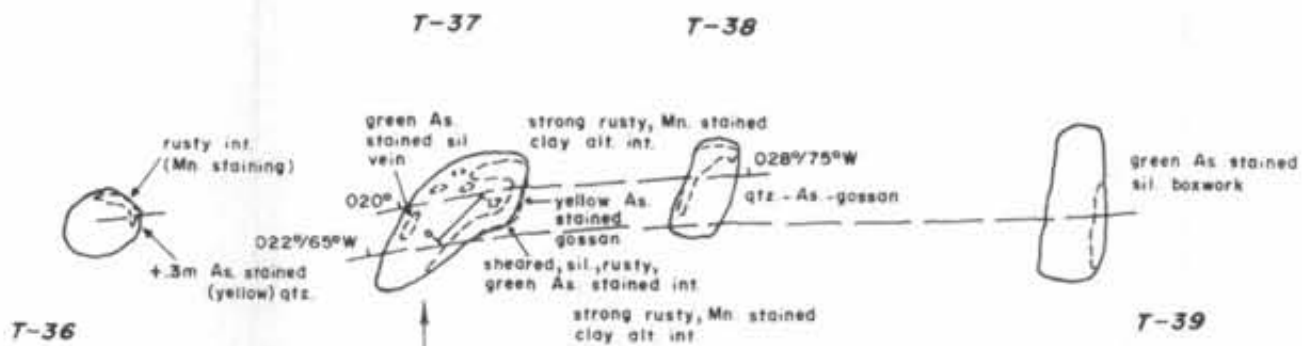
WISCONSIN CLAIMS
SURFACE TRENCHES T-32 & T-33

Scale 1:200	Date DEC 1980	NTS
Revised	By R. HOLLAND	Fig 9

SEE PLATE 1 FOR TRENCH LOCATIONS



Sample no.	Length	Au(oz/T)	Ag(oz/T)	As %
69157	0-2.4m	0.070	3.32	2.320
69158	2.4-4.4m	0.026	0.72	2.815



Sample no.	Length	Au(oz/T)	Ag(oz/T)	As %
69159	0-1.7m	0.223	22.95	9.60

34000 ppb Au in soil → 2+00 E



LEGEND

- GEOLOGICAL CONTACT
- OUTCROP
- ↔ 1.7m CHIP SAMPLE LOCATIONS

- qtz = QUARTZ
- alt = ALTERED
- int = INTRUSIVE
- sil = SILICEOUS

SCALE 1 200



SEE PLATE 1 FOR TRENCH LOCATIONS

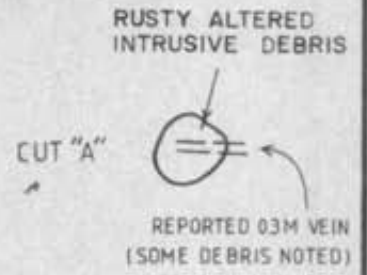
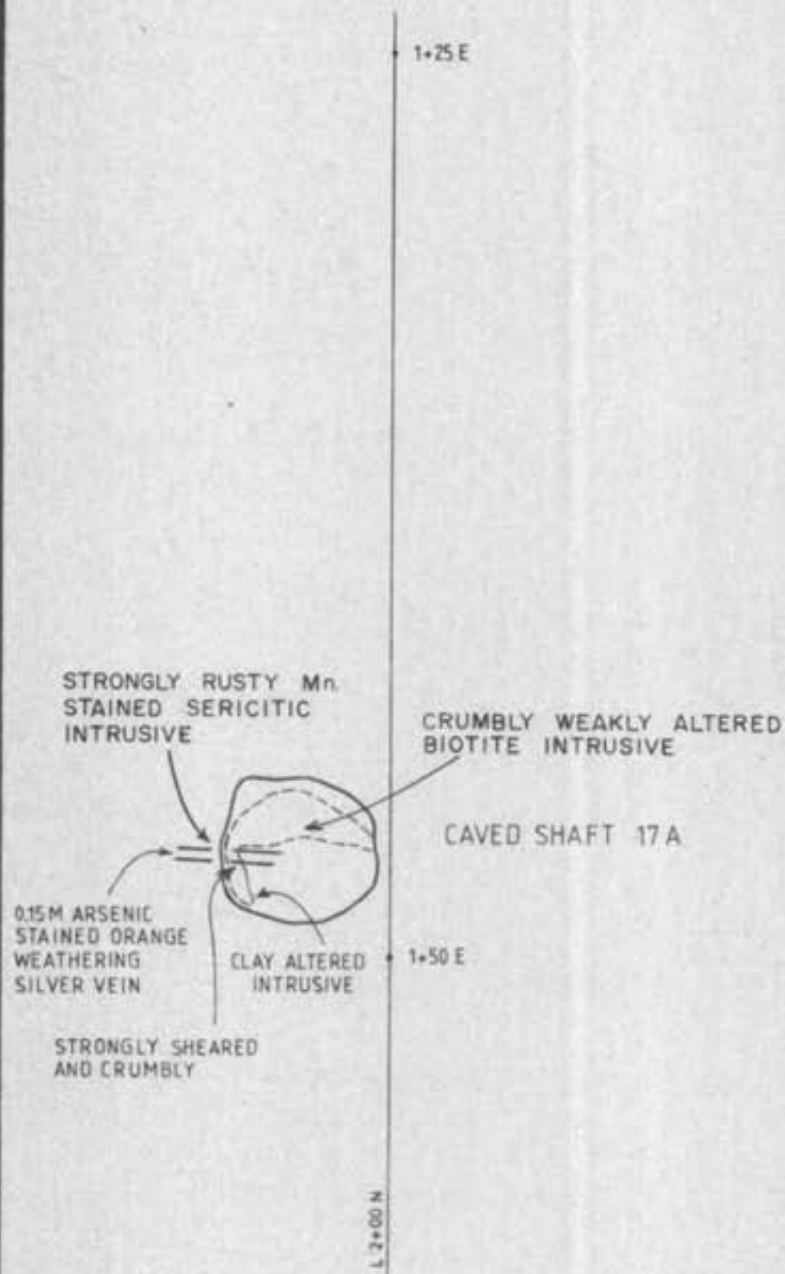
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

8910
NO. _____

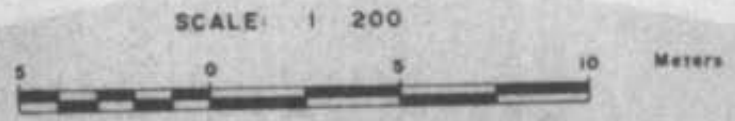
ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS
SURFACE TRENCHES T-34 TO T-39

Scale: 1:200	Date: DEC. 1980	NTS
Revised:	By: R. HOLLAND	Fig. 30



LEGEND:
 - - - - - GEOLOGICAL CONTACT
 ○ ○ ○ ○ ○ OUTCROP

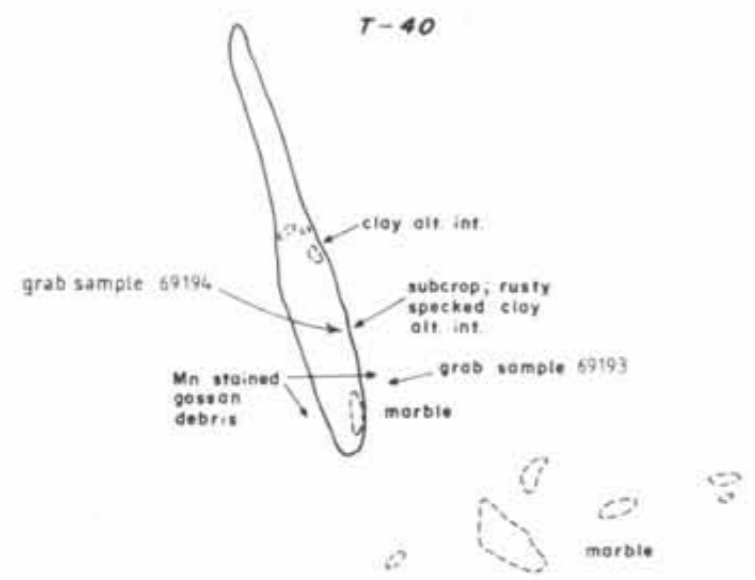
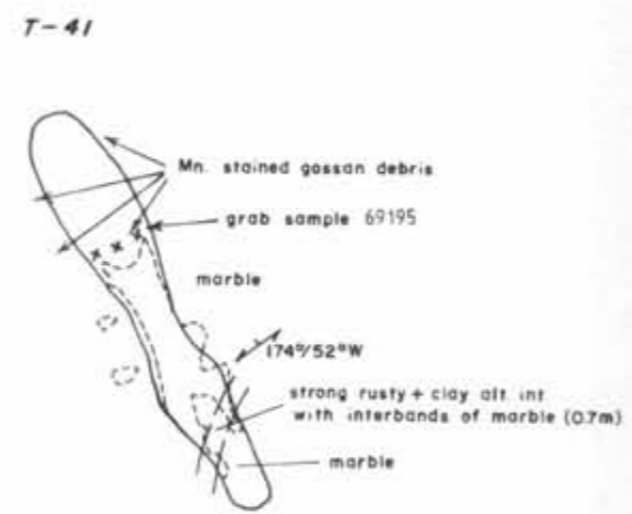
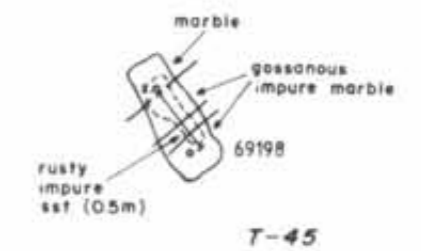
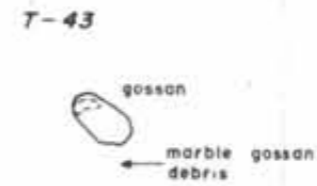
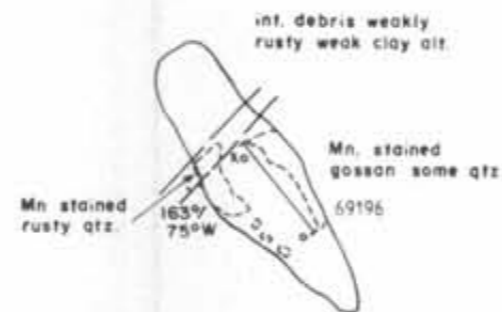


MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
8910
 NO. _____

ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS
 SURFACE TRENCH "A"
 AND SHAFT 17A

Scale: 1:200	Date: DEC. 1980	NTS
Revised:	By: R. HOLLAND	Fig. 11



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8910
NO. _____

LEGEND

- GEOLOGICAL CONTACT
- OUTCROP
- LAYERING
- CHIP SAMPLE LOCATION
- int = INTRUSIVE
- sst = SANDSTONE
- alt = ALTERED

Trench	Sample no.	Length	Au(oz/T)	Ag(oz/T)	As %
T-40	69193	GRAB	0.007	2.19	0.095
T-40	69194	GRAB	0.002	0.09	0.050
T-41	69195	GRAB	0.003	1.02	0.385
T-42	69196	0-3.0m	0.004	0.30	0.410
T-45	69198	0-2.0m	0.001	0.18	0.025

SCALE 1 : 200

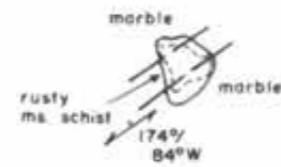


SEE PLATE 1 FOR TRENCH LOCATIONS

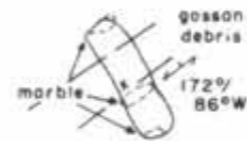
ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS
SURFACE TRENCHES T-40 TO T-45

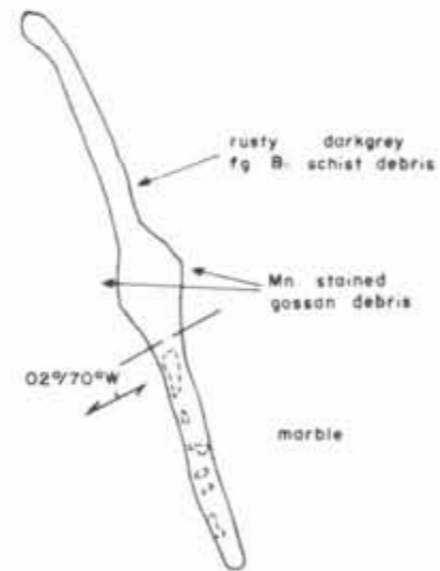
Scale 1:200	Date DEC 1980	NTS
Revised	By R. HOLLAND	Fig 12



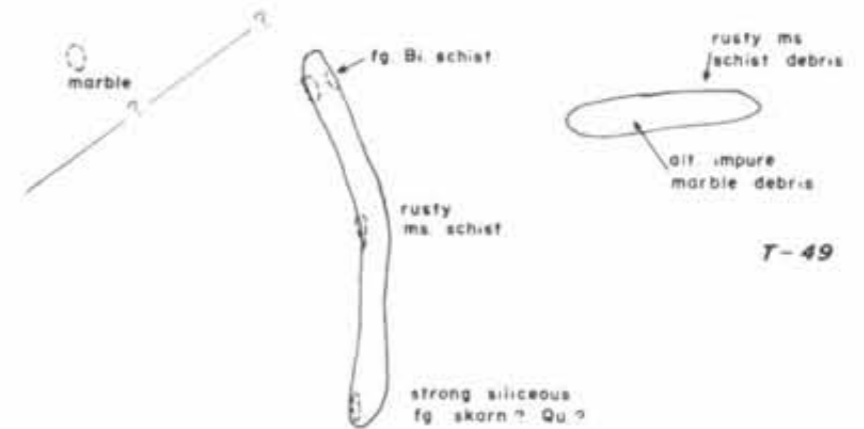
T-50



T-47



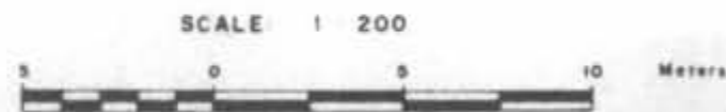
T-46



T-49



T-44



LEGEND

- GEOLOGICAL CONTACT
- LAYERING
- OUTCROP
- fg - FINE GRAINED
- Bi - BIOTITE
- ms - SERICITE
- Qu - QUARTZITE
- alt - ALTERED

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

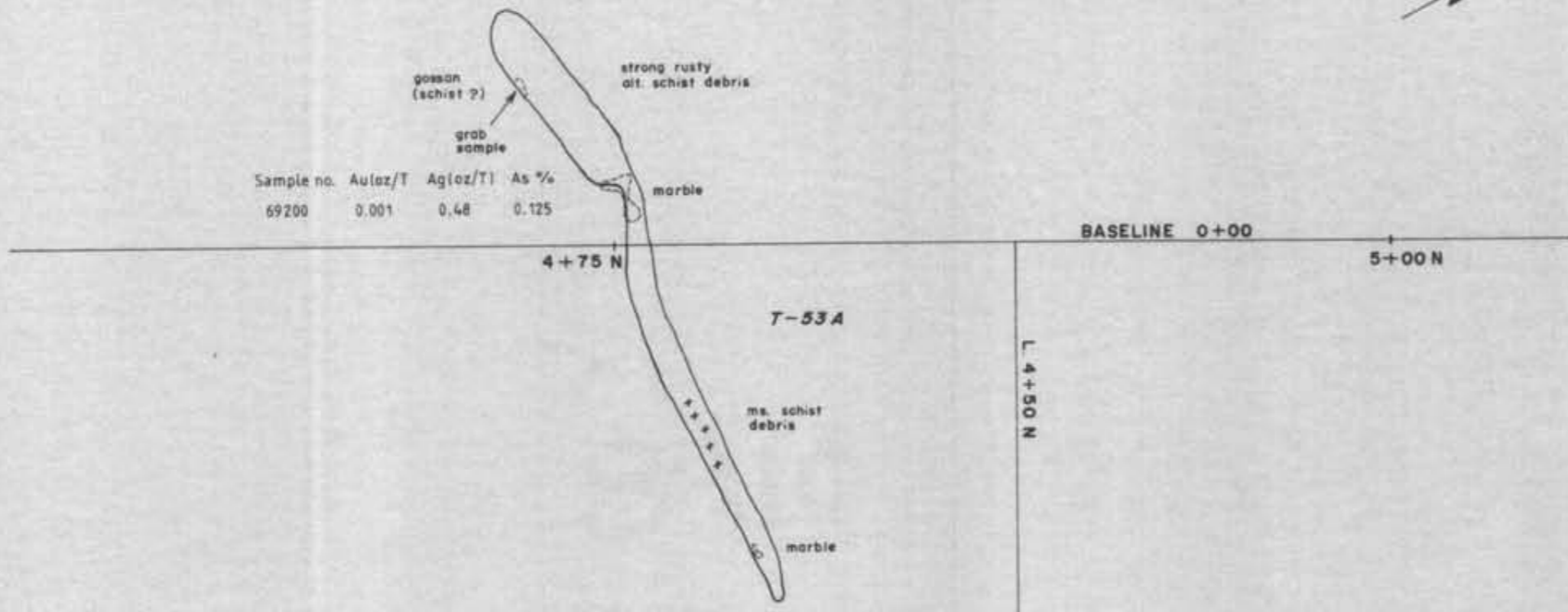
8910
NO.

ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS
SURFACE TRENCHES
T-44 T-46 TO T-50

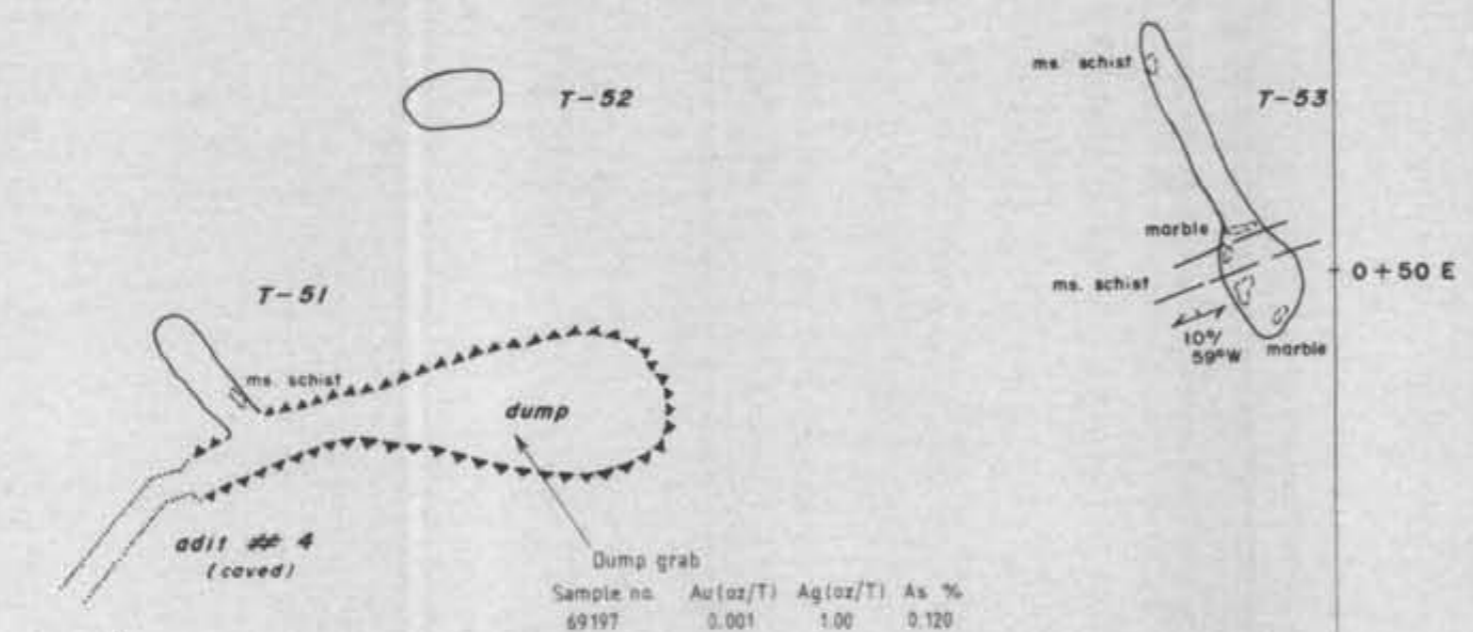
Scale 1:200	Date DEC '80	NTS
Revised	By R. HOLLAND	Fig 13

SEE PLATE 1 FOR TRENCH LOCATIONS



Sample no.	Au(oz/T)	Ag(oz/T)	As %
69200	0.001	0.48	0.125

- LEGEND**
- GEOLOGICAL CONTACT
 - OUTCROP
 - LAYERING
 - ms = SERICITE
 - alt = ALTERED



Dump grab

Sample no.	Au(oz/T)	Ag(oz/T)	As %
69197	0.001	1.00	0.120



SEE PLATE 1 FOR TRENCH LOCATIONS

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

8910

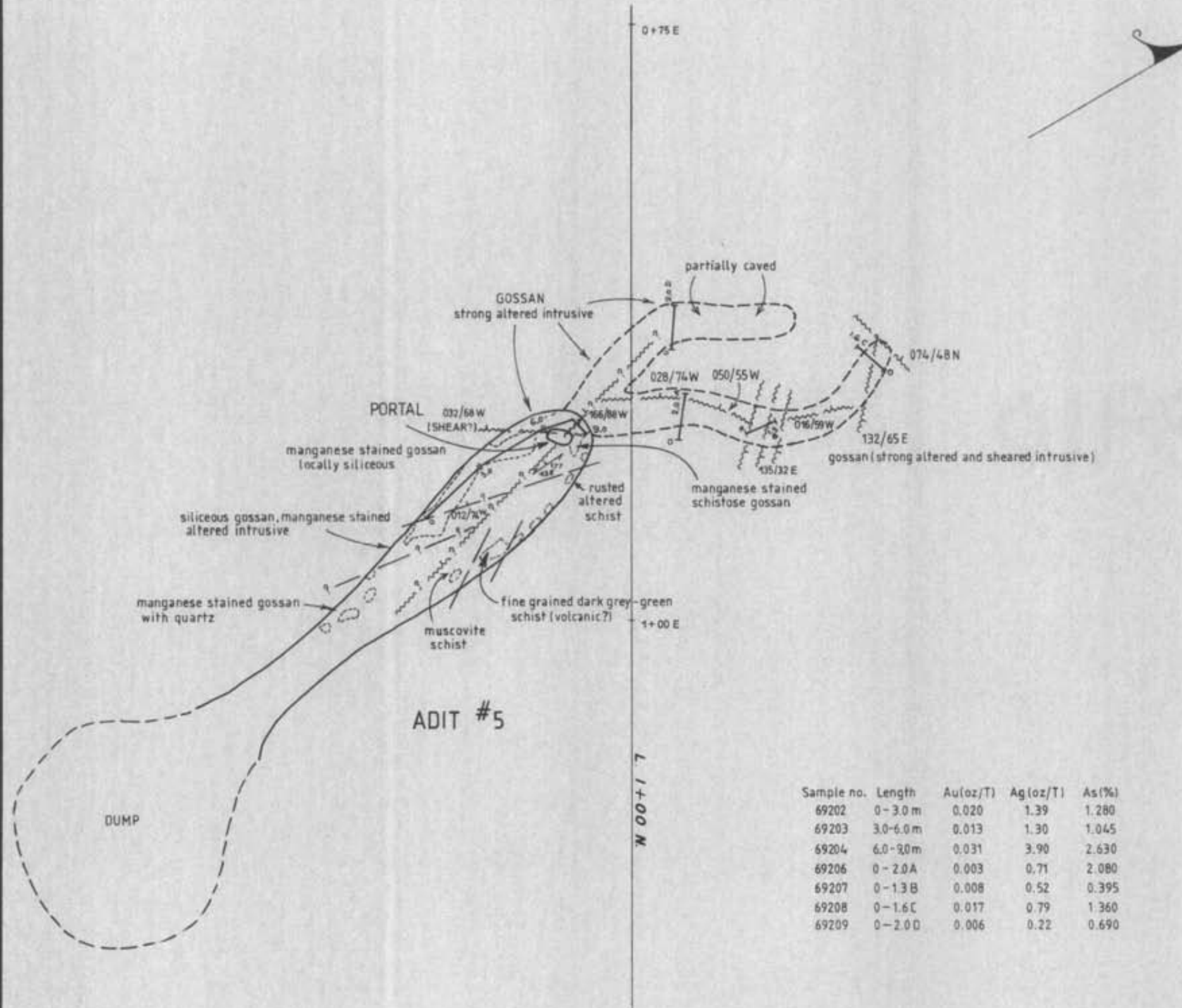
NO.

ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS
SURFACE TRENCHES T-51 TO T-53A & ADIT #4

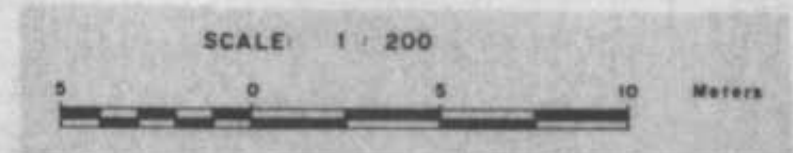
Scale: 1:200	Date: DEC 1990	NTS
Revised:	By: R. HOLLAND	Fig. 14

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8910
NO. _____



- LEGEND**
- Shear zone
 - Outcrop
 - Underground workings
 - Schistosity
 - Geological contact

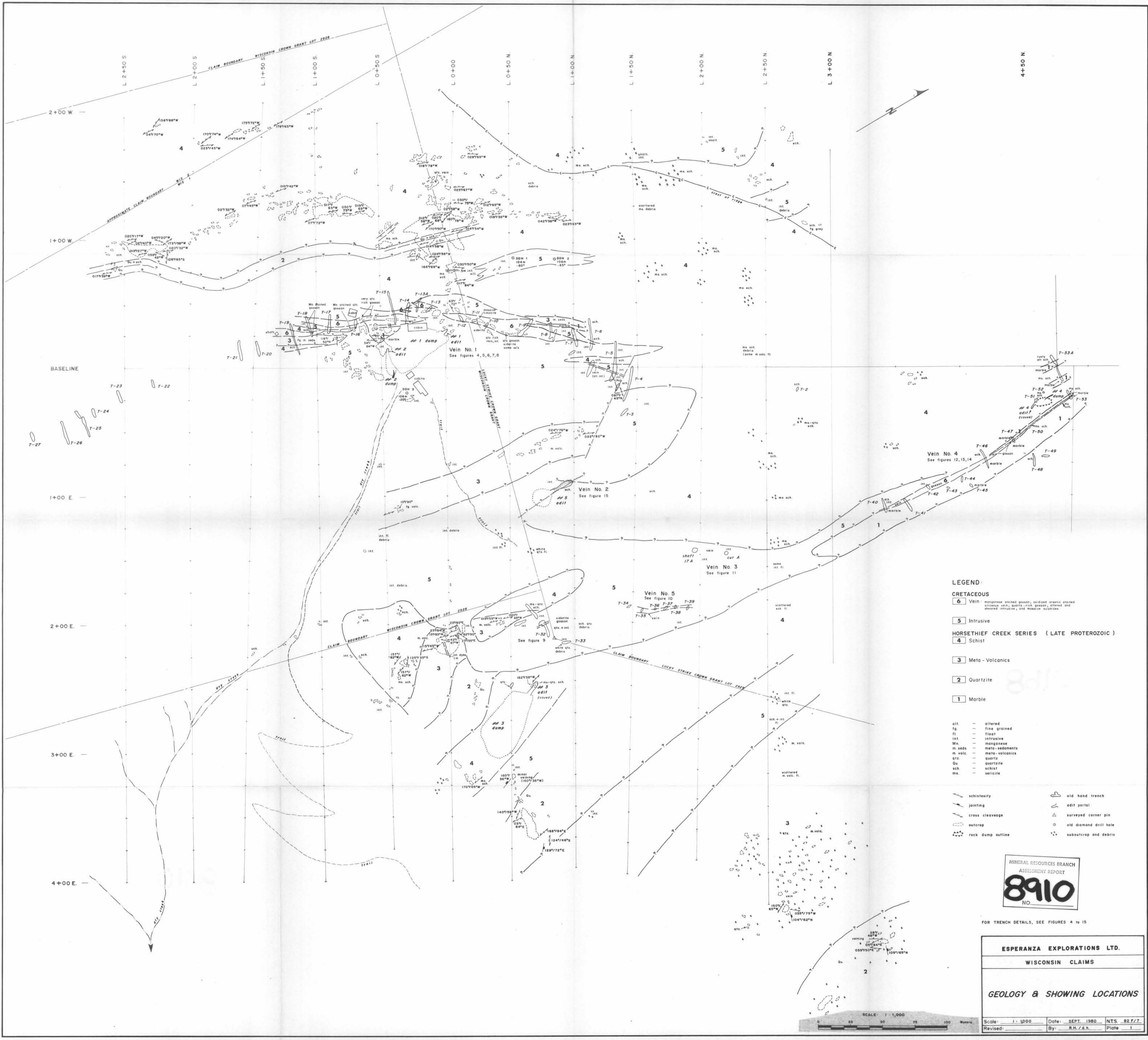
Sample no.	Length	Au(oz/T)	Ag(oz/T)	As(%)
69202	0-3.0m	0.020	1.39	1.280
69203	3.0-6.0m	0.013	1.30	1.045
69204	6.0-9.0m	0.031	3.90	2.630
69206	0-2.0A	0.003	0.71	2.080
69207	0-1.3B	0.008	0.52	0.395
69208	0-1.6C	0.017	0.79	1.360
69209	0-2.0D	0.006	0.22	0.690



ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS
ADIT #5

Scale: 1:200	Date: DEC. 1980	N.T.S.
Revised: _____	By: R. HOLLAND	Fig. 15



- LEGEND**
- CRETACEOUS**
- 6 Vein manganese stained gossan, oxidized organic stained siliceous vein, quartz-rich gossan, altered and sheared intrusive, and massive sulphides
 - 5 Intrusive
- HORSETHIEF CREEK SERIES (LATE PROTEROZOIC)**
- 4 Schist
 - 3 Meta-Volcanics
 - 2 Quartzite
 - 1 Marble

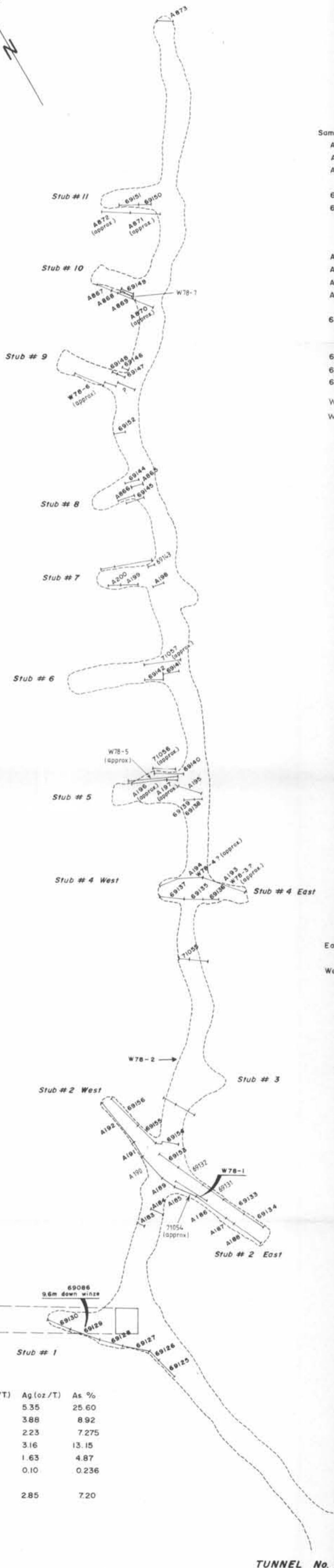
- alt. - altered
 - fg - fine grained
 - fl - float
 - int. - intrusive
 - Mn. - manganese
 - m. seds. - meta-sediments
 - m. volc. - meta-volcanics
 - qtz - quartz
 - Qu - quartzite
 - sch - schist
 - ma - sericite
- schistosity
 - jointing
 - cross cleavage
 - outcrop
 - rock dump outline
 - old hand trench
 - adit portal
 - surveyed corner pin
 - old diamond drill hole
 - suboutcrop and debris

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8910
NO.

FOR TRENCH DETAILS, SEE FIGURES 4 TO 15

ESPERANZA EXPLORATIONS LTD.		
WISCONSIN CLAIMS		
GEOLOGY & SHOWING LOCATIONS		
Scale: 1:1000	Date: SEPT. 1980	NTS: 82F/7
Revised:	By: R.H. Z.B.N.	Plate 1





Sample No	Width	Au (oz./T)	Ag (oz./T)	As %	Cu %	Pb %	Zn %		
A871	2.4 m	0.2875	2.00		0.25	0.11	0.03	Granby 1973	
A872	2.3 m	0.060	0.57		0.14	0.10	0.04		
A873	1.2 m	0.0175	0.12		0.03	0.01	0.33		
69150	0 - 0.7m	0.379	1.51	18.10					
69151	0.7-2.0m	0.026	0.21	1.205					
A867	1.2 m	0.002	0.06		0.01	0.09	0.37	Granby 1973	
A868	0.5m	0.210	0.84		0.34	0.15	0.60		
A869	1.5m	0.50	3.87		1.13	0.27	0.05		
A870	1.5m	0.025	0.20		0.14	0.09	0.16		
69149	0-1.1m	0.399	3.38	13.70					
69146	0-0.6m	0.674	8.34	12.80					
69147	0-0.7m	0.008	0.20	0.113					
69148	0.7-1.1m	0.011	0.21	1.14					
W78-6	2.4 m	0.002	0.06	0.01	0.03	0.07	0.81	Can. Sup. 1978	
W78-7	1.0 m	0.190	0.32	0.30	0.33	0.19	0.44		
Sample No	Reported Width	Measured Width	Au (oz./T)	Ag (oz./T)	As %	Cu %	Pb %	Zn %	
A865	2.4 m	0.9 m	0.025	0.36		0.10	0.22	1.00	Granby 1973
A866	1.8 m	1.5 m	0.010	0.19	0.25	0.02	0.22	1.40	
69144	0-1.3m		0.136	0.91	8.01				
69145	0-1.9m		0.068	1.47	1.335				
69152	0-1.0m		0.112	0.91	7.39				
A198	0.9m		0.05	0.40		0.03	0.08	0.21	Granby 1973
A199	2.1 m	2.0m	0.0075	0.07		0.01	0.09	0.34	
A200	1.2 m	0.9m	0.04	0.83		0.06	0.55	0.94	
69143	0-0.5m		0.005	0.14	0.96				
Sample No	Width	Au (oz./T)	Ag (oz./T)	As %	Cu %	Pb %	Zn %		
71057	3.7m	0.005	0.5	0.54	0.069	1.5	2.7	Inspiration Dev. Co. 1974	
69141	0-1.3m	0.016	0.30	1.61					
69142	1.3-2.8m	0.005	0.82	0.091					
A195	2.4m	0.115	0.78		0.29	0.31	0.28	Granby 1973	
A196	3.7m	0.005	0.09		0.01	0.09	0.58		
A197	1.2m	0.030	0.47	0.45	0.02	0.18	3.04		
71056	1.8 m	0.060	0.4	5.20	0.258	0	0.8	Inspiration Dev. Co. 1974	
69138	0-0.6m	0.084	0.51	3.28					
69139	0.6-1.5m	0.016	4.66	10.20					
69140	1.5-3.8m	0.016	1.05	0.73					
A193	3.4 m	0.325	3.24		0.40	0.89	0.18	Granby 1973	
A194	3.4 m	0.2525	1.68		0.51	0.33	0.63		
71055	1.4m	0.380	1.2	22.98	1.619	0.4	1.7	Inspiration Dev. Co. 1974	
East 69135	0-1.6m	0.453	3.46	14.95					
69136	1.6-2.8m	0.056	1.01	2.12					
West 69137	0-2.0m	0.031	0.30	1.91					
W78-2	-	0.120	0.44	2.33	0.07	0.05	0.05	Can. Sup. 1978	
W78-3	-	0.055	1.26	3.80	0.07	0.36	0.04		
W78-4	-	0.093	0.44	0.28	0.24	0.14	0.40		
W78-5	-	0.002	0.20	0.07	0.01	0.63	2.80		
Sample No	Reported Width	Measured Width	Au (oz./T)	Ag (oz./T)	As %	Cu %	Pb %	Zn %	
A183	0.6m		0.355	1.80	0.38	0.56	0.08	0.09	Granby 1973
A184	1.1 m		0.2875	1.99		0.34	0.12	0.63	
A185	2.4m	1.7m	0.335	2.35		0.58	0.10	0.05	
A186	2.4 m	3.0m	0.0175	0.46		0.05	0.39	0.19	
A187	0.6 m	0.8m	0.010	0.19		0.01	0.12	0.27	
A188	2.7 m		0.010	0.34		0.15	0.16	0.49	
A189	1.2 m	0.9m	0.3825	2.89		0.19	0.42	0.13	
A190	2.0m	1.8 m	0.515	4.58		0.90	1.07	0.13	
A191	1.7 m	1.3 m	0.0275	0.61		0.36	0.65	0.13	
A192	4.3m		0.030	0.23		0.01	0.07	0.07	
71054	1.8m		0.340	2.5	14.82	0.428	0	Trace	
W78-1	-	2.8 m	0.190	0.34	2.10	0.22	0.16	0.05	Can. Sup. 1978
Sample No	Width	Au (oz./T)	Ag (oz./T)	As %					
East 69131	20-40m	0.010	0.80	2.575					
69132	0-20m	0.392	1.90	13.85					
69133	40-60m	0.004	0.42	0.525					
69134	60-79m	0.006	1.82	1.62					
West 69153	0-1.2 m	0.221	2.42	12.65					
69154	0-15 m	0.250	0.98	16.20					
69155	15-35m	0.228	1.43	13.65					
69156	3.5-6.5m	0.032	0.20	2.185					

Sample No	Width	Au (oz./T)	Ag (oz./T)	As %
69125	0-1.8m	0.491	5.35	25.60
69126	1.8-2.8m	0.373	3.88	8.92
69127	2.8-5.0m	0.158	2.23	7.275
69128	5.0-7.0m	1.360	3.16	13.15
69129	7.0-9.5m	0.104	1.63	4.87
69130	9.5-11.6m	0.005	0.10	0.236
69086	0-1.5m	0.352	2.85	7.20

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8910
NO.

TUNNEL No. 1

SCALE 1 : 200

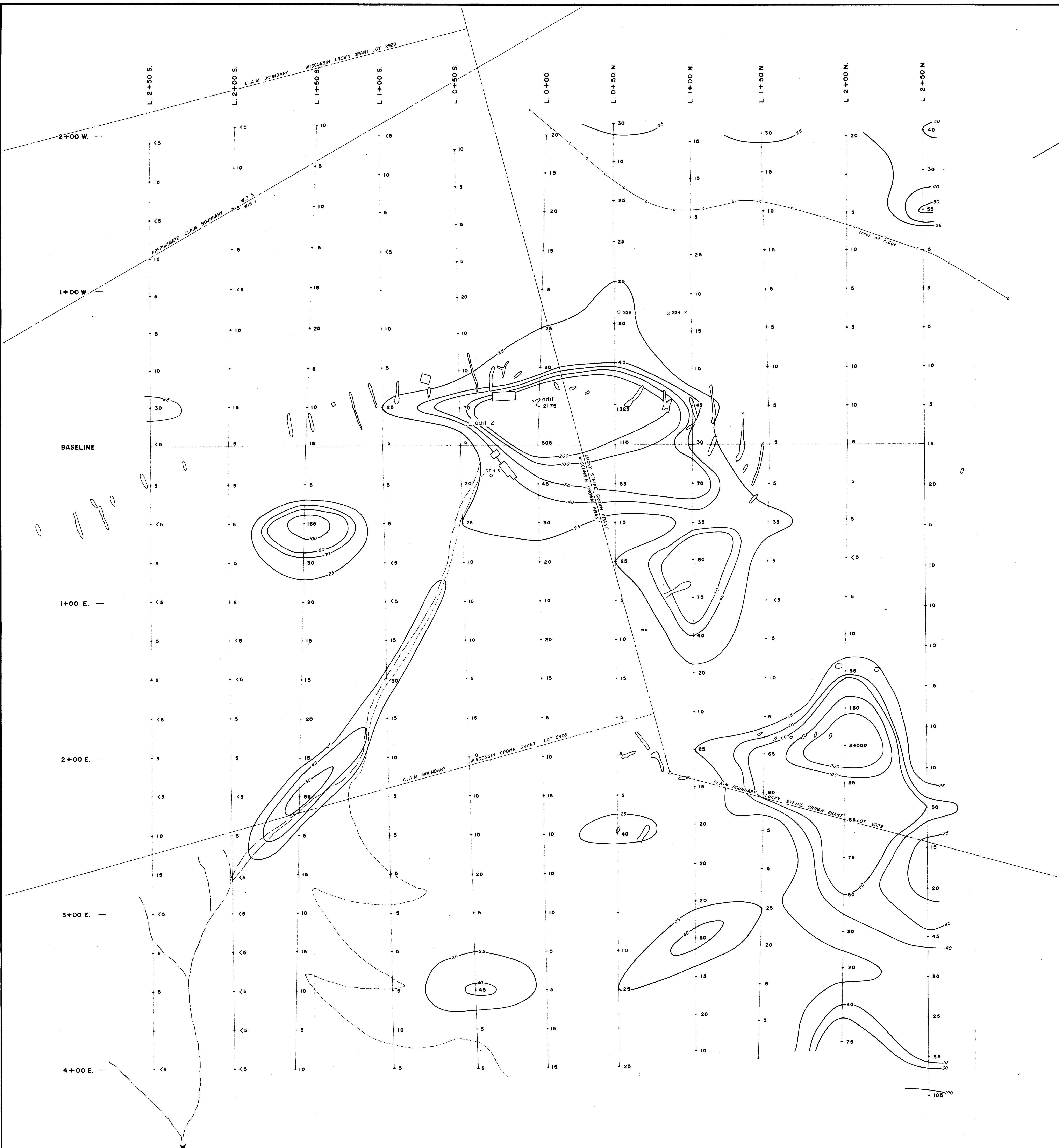


ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS

SAMPLE LOCATIONS
No. 1 TUNNEL

Scale 1:200 Date SEPT. 1980 NTS BRP/T
Revised By R.H./d.b. Pg. PLATE 3



LEGEND
 Background 0 - 25 ppb
 Threshold 26 - 40 ppb
 Anomalous 41 - 50 ppb
 Highly Anomalous > 50 ppb

Contours at 25ppb, 40ppb, 50ppb, 100ppb, 200ppb

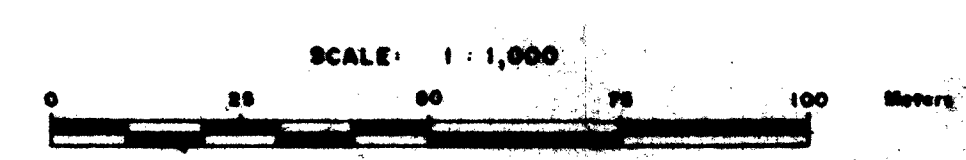
MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
8910
 NO.

ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIM

**DETAILED SOIL GEOCHEMISTRY
 GOLD**

Scale: 1:1000 Date: DEC. 1980 NTS 82 E/7
 Revised: By: Plate 4



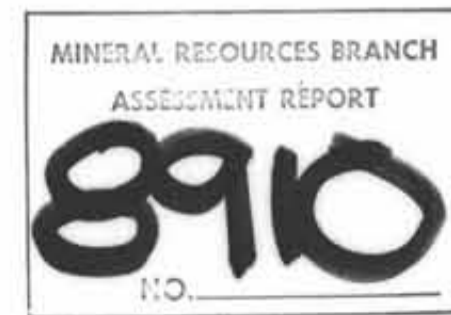
Au (ppb)



LEGEND

- Background 0 - 30 ppm
- High Background 31 - 50 ppm
- Anomalous 51 - 500 ppm
- Highly Anomalous > 500 ppm

Contours at 50 ppm, 500 ppm, 1000 ppm, 2000 ppm



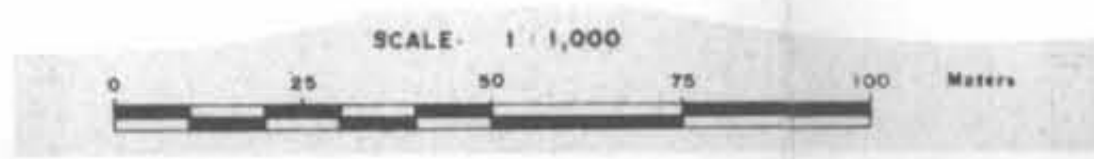
ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIM

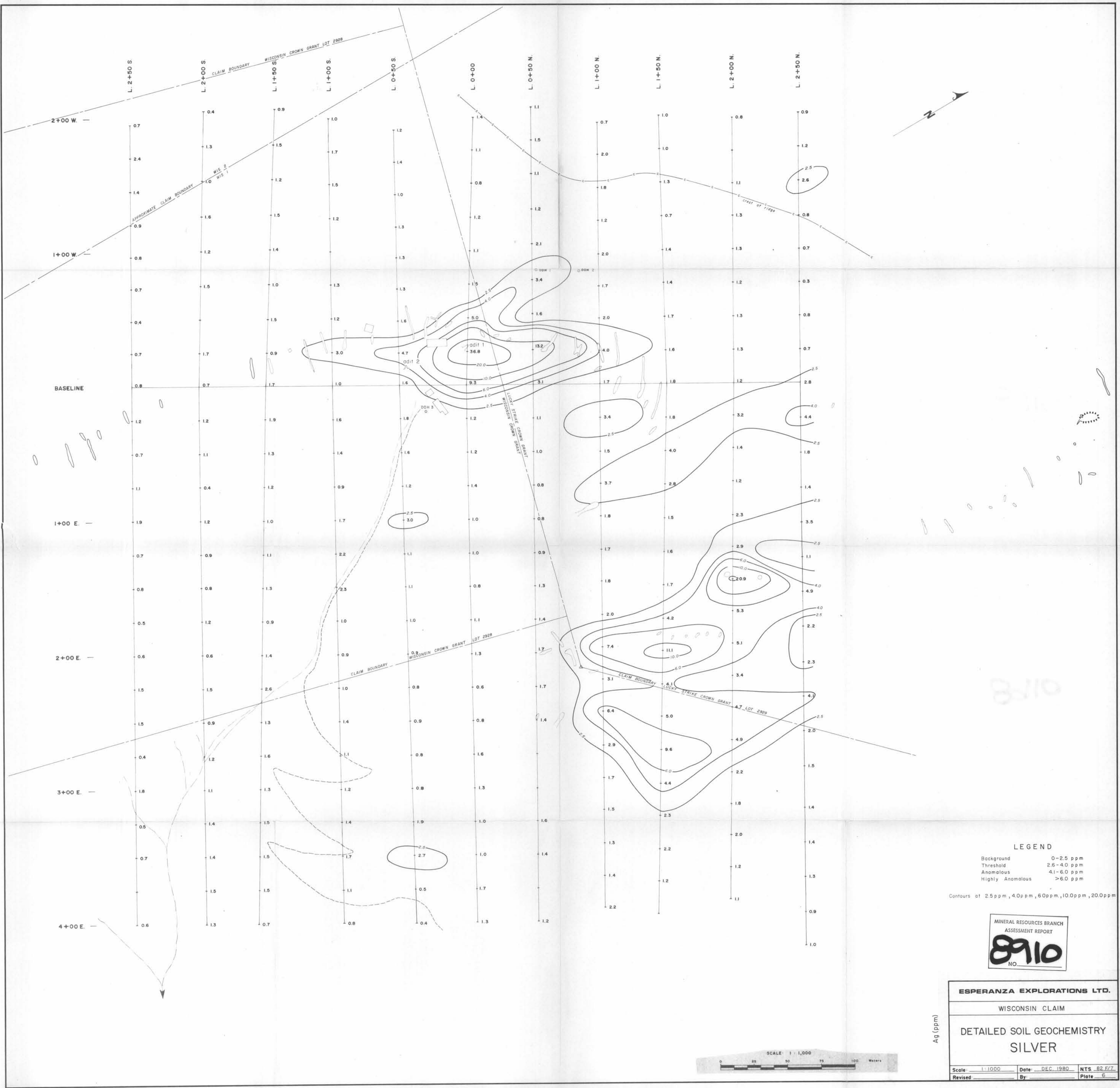
DETAILED SOIL GEOCHEMISTRY

ARSENIC

Scale: 1:1000 Date: DEC 1980 NTS: 82 F/7
 Revised: By: Plate: 5



As (ppm)



LEGEND

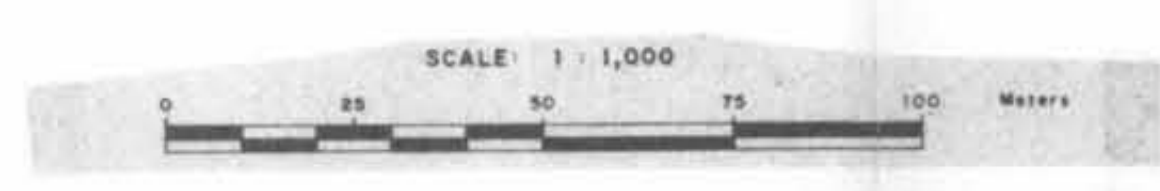
Background	0-2.5 ppm
Threshold	2.6-4.0 ppm
Anomalous	4.1-6.0 ppm
Highly Anomalous	>6.0 ppm

Contours at 2.5ppm, 4.0ppm, 6.0ppm, 10.0ppm, 20.0ppm

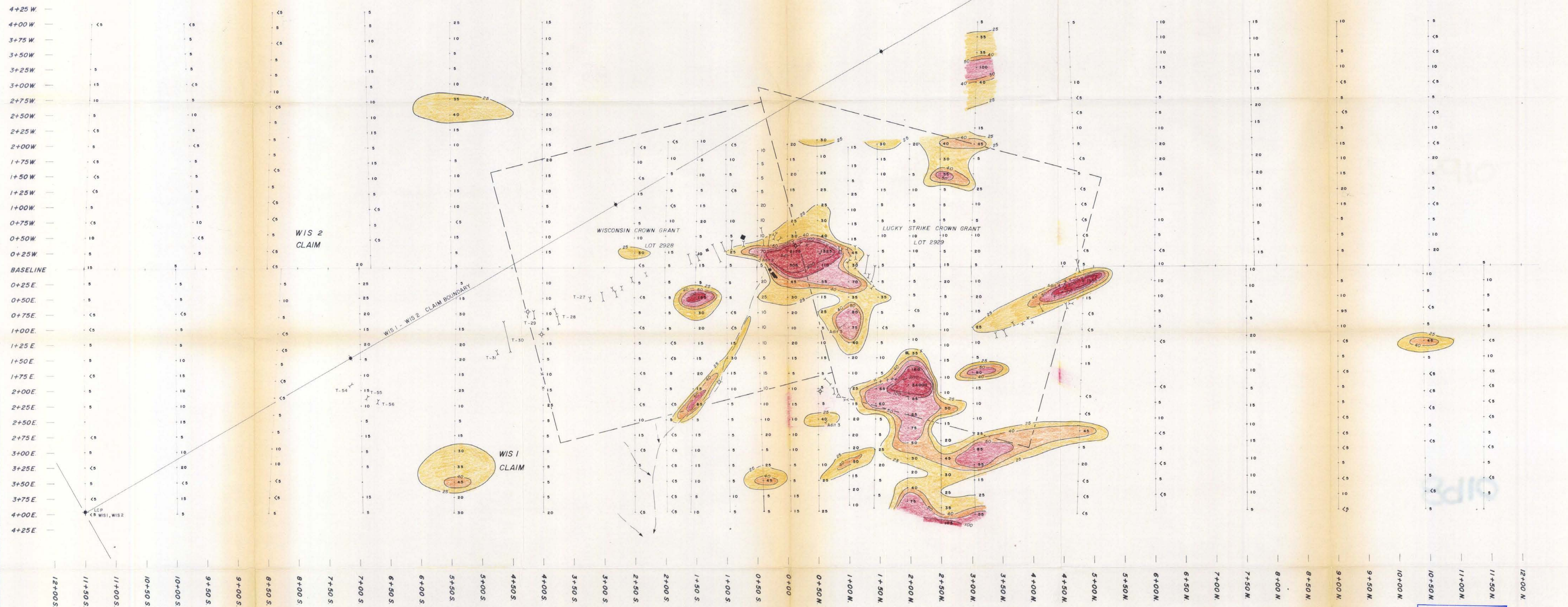
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8910
NO

ESPERANZA EXPLORATIONS LTD.
WISCONSIN CLAIM
**DETAILED SOIL GEOCHEMISTRY
SILVER**

Scale: 1:1000	Date: DEC. 1980	NTS: B2-F/7
Revised:	By:	Plate: 6



Ag (ppm)



LEGEND

- Background 0 - 25 ppb
- Threshold 26 - 40 ppb
- Anomalous 41 - 50 ppb
- Highly Anomalous > 50 ppb
- Contours of 25 ppb, 40 ppb, 50 ppb, 100 ppb, 200 ppb
- Old Claim Posts
- Valid Claim Posts
- Legal Survey Pin
- Old Hand Trenches
- Adits
- Shafts



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8910
NO

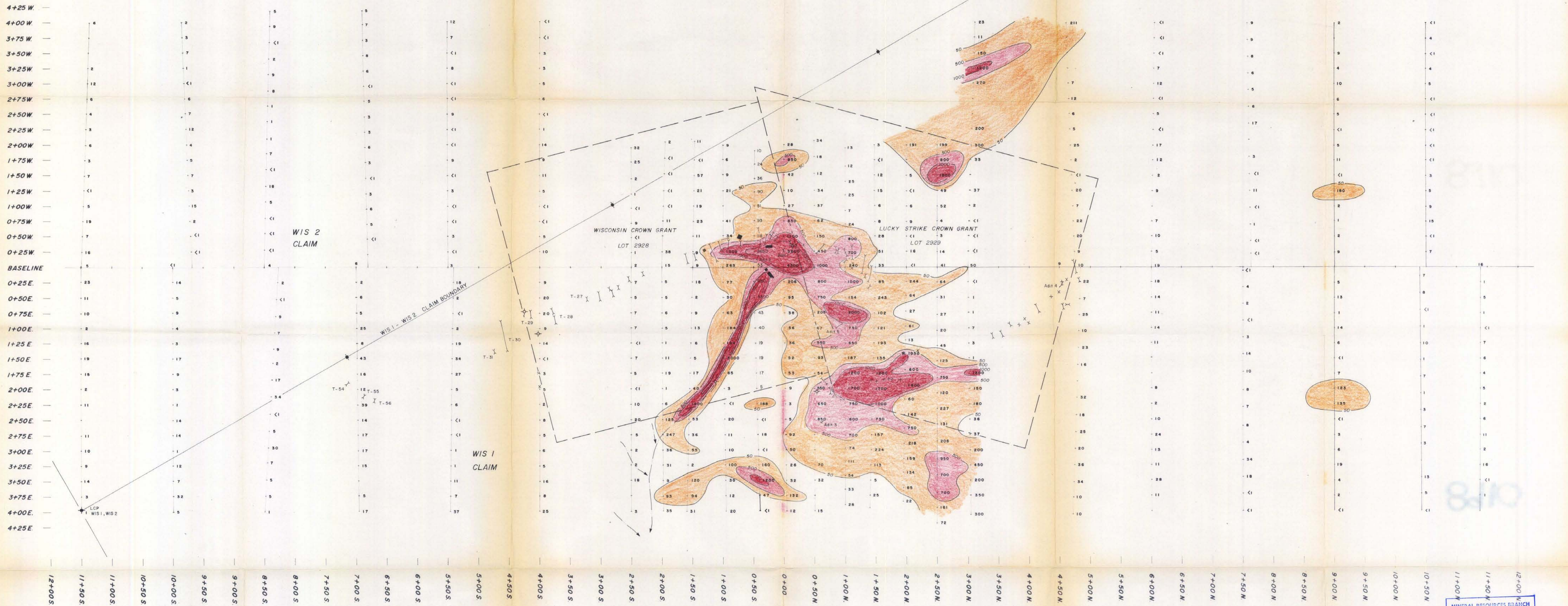
ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS

SOIL GEOCHEMISTRY
GOLD

Au (ppb)

Scale: 1:2500	Date: SEPT. 1980	NTS: B2F/7
Revised:	By: B.H. / d.h.	Plate: 7

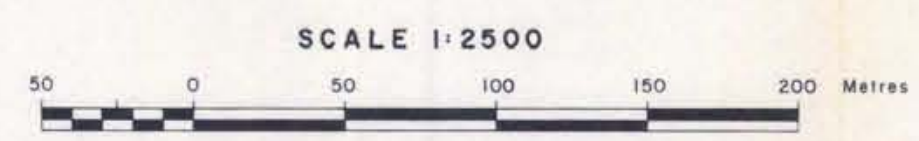


4+25 W. —
 4+00 W. —
 3+75 W. —
 3+50 W. —
 3+25 W. —
 3+00 W. —
 2+75 W. —
 2+50 W. —
 2+25 W. —
 2+00 W. —
 1+75 W. —
 1+50 W. —
 1+25 W. —
 1+00 W. —
 0+75 W. —
 0+50 W. —
 0+25 W. —
 BASELINE —
 0+25 E. —
 0+50 E. —
 0+75 E. —
 1+00 E. —
 1+25 E. —
 1+50 E. —
 1+75 E. —
 2+00 E. —
 2+25 E. —
 2+50 E. —
 2+75 E. —
 3+00 E. —
 3+25 E. —
 3+50 E. —
 3+75 E. —
 4+00 E. —
 4+25 E. —

12+00 S
 11+50 S
 11+00 S
 10+50 S
 10+00 S
 9+50 S
 9+00 S
 8+50 S
 8+00 S
 7+50 S
 7+00 S
 6+50 S
 6+00 S
 5+50 S
 5+00 S
 4+50 S
 4+00 S
 3+50 S
 3+00 S
 2+50 S
 2+00 S
 1+50 S
 1+00 S
 0+50 S
 0+00
 0+50 N
 1+00 N
 1+50 N
 2+00 N
 2+50 N
 3+00 N
 3+50 N
 4+00 N
 4+50 N
 5+00 N
 5+50 N
 6+00 N
 6+50 N
 7+00 N
 7+50 N
 8+00 N
 8+50 N
 9+00 N
 9+50 N
 10+00 N
 10+50 N
 11+00 N
 11+50 N
 12+00 N

LEGEND

- Background - - - - - 0 - 30 ppm
- High Background - - - - - 31 - 50 ppm
- Anomalous - - - - - 51 - 500 ppm
- Highly Anomalous - - - - - 500 ppm
- Contours at 50 ppm, 500 ppm, 1000 ppm, 2000 ppm
- Old Claim Posts
- Valid Claim Posts
- Legal Survey Pin
- Old Hand Trenches
- Adits
- Adit 1
- Shaft



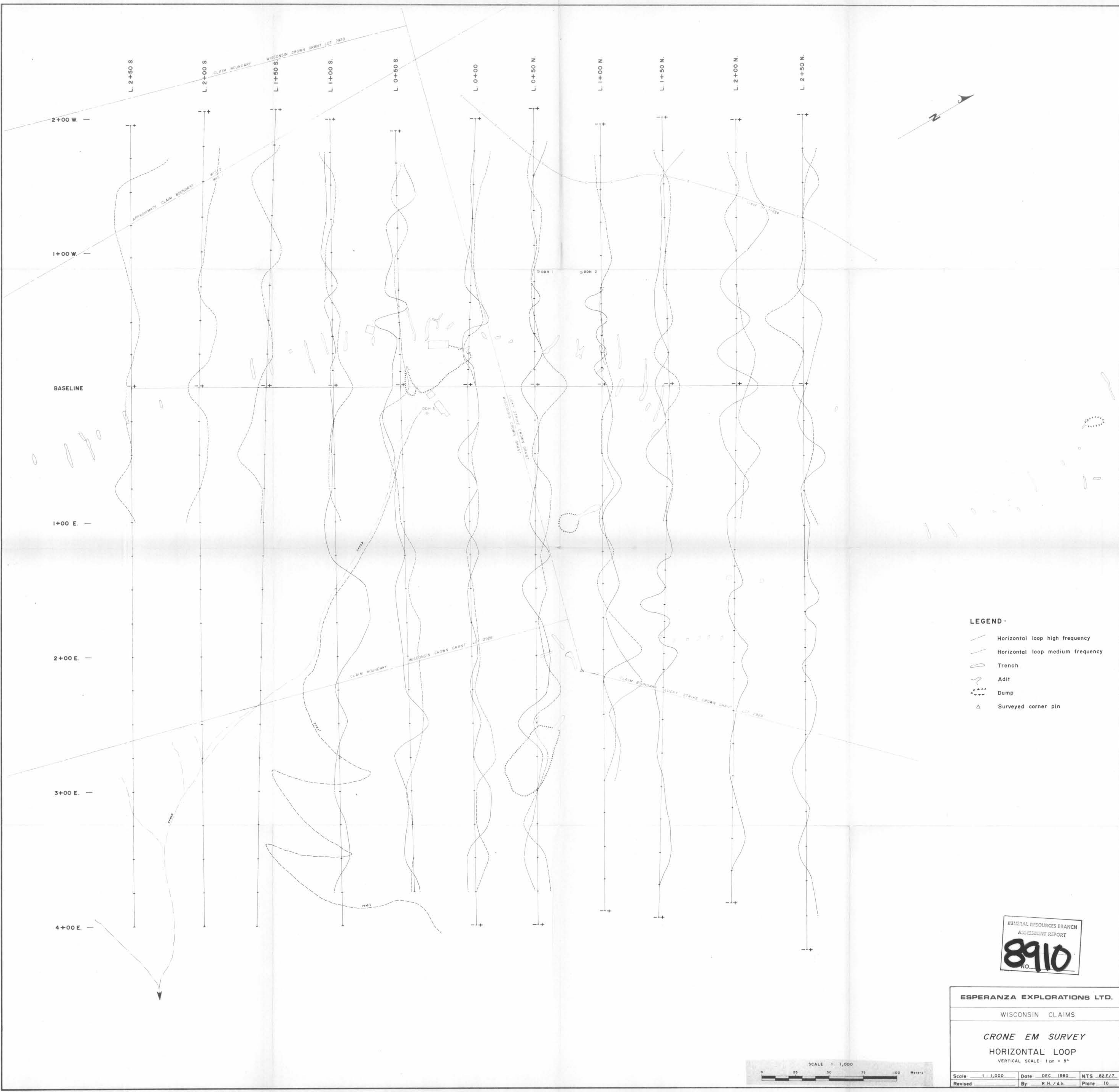
MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
8910
 NO.

ESPERANZA EXPLORATIONS LTD
 WISCONSIN CLAIMS

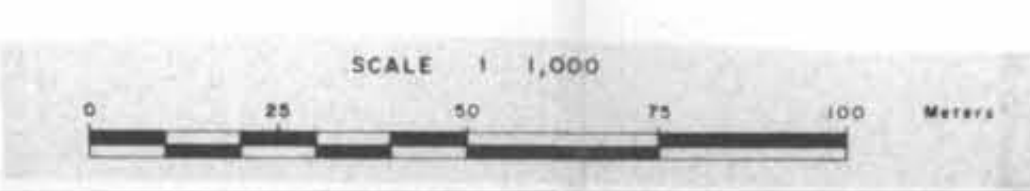
SOIL GEOCHEMISTRY
ARSENIC

Scale 1:2500 Date SEPT. 1980 NTS 82 F/7
 Revised By B.H./d.n. Plate 8

As (ppm)

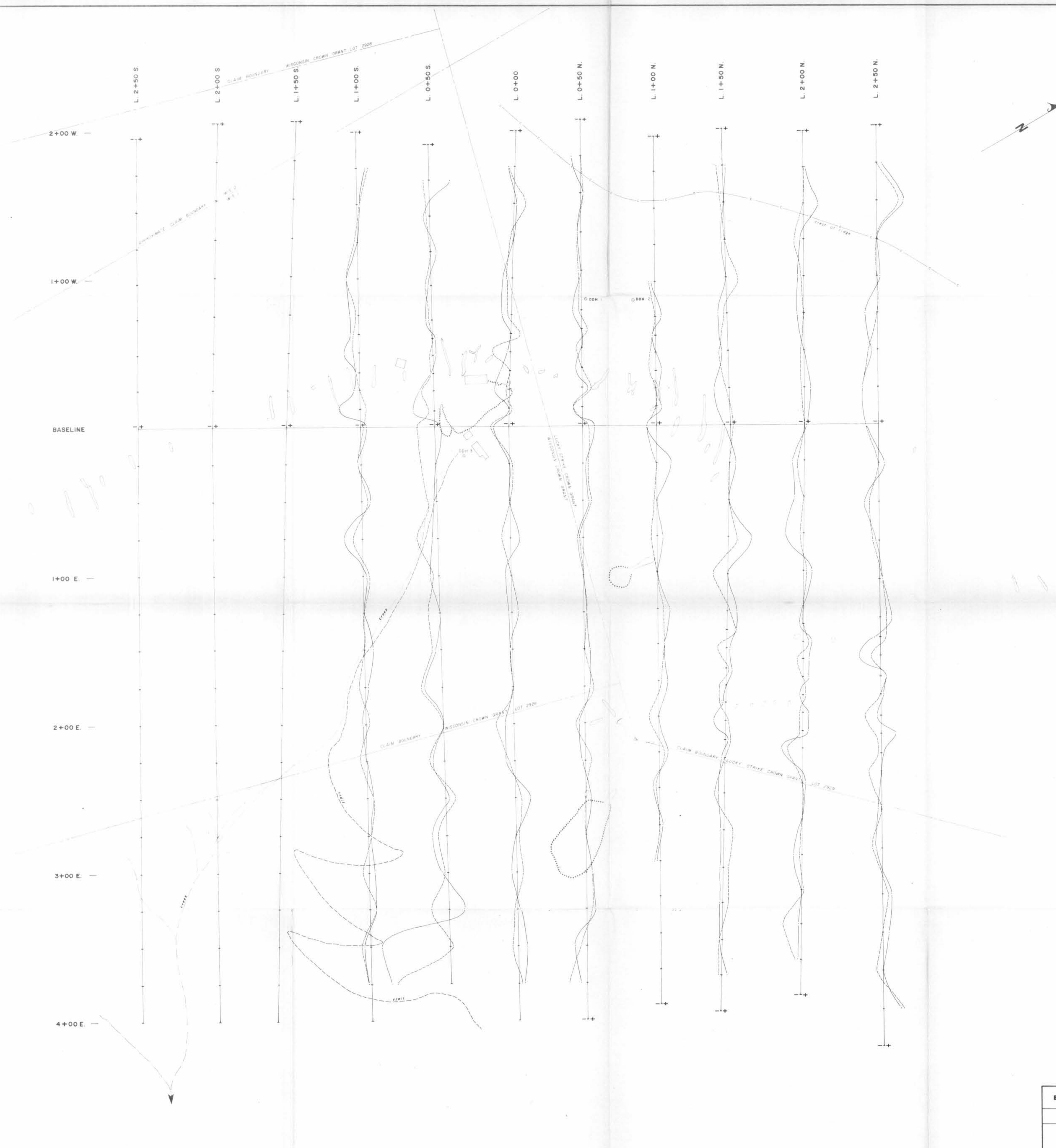


- LEGEND**
- Horizontal loop high frequency
 - Horizontal loop medium frequency
 - Trench
 - Adit
 - Dump
 - Surveyed corner pin



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8910
NO.

ESPERANZA EXPLORATIONS LTD.		
WISCONSIN CLAIMS		
CRONE EM SURVEY		
HORIZONTAL LOOP		
VERTICAL SCALE: 1 cm = 5'		
Scale 1:1,000	Date DEC 1980	NTS 82 F/T
Revised	By R.H./d.h.	Plate 10



- LEGEND:**
- Vertical loop high frequency
 - Vertical loop medium frequency
 - Trench
 - Adit
 - Dump
 - Surveyed corner pin



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8910
NO.

ESPERANZA EXPLORATIONS LTD.

WISCONSIN CLAIMS

CRONE EM SURVEY

VERTICAL LOOP
VERTICAL SCALE: 1 cm = 5'

Scale: 1:1,000 Date: DEC. 1980 NTS 82/F/7
Revised: By: R.H. / J.S. Plate: 11