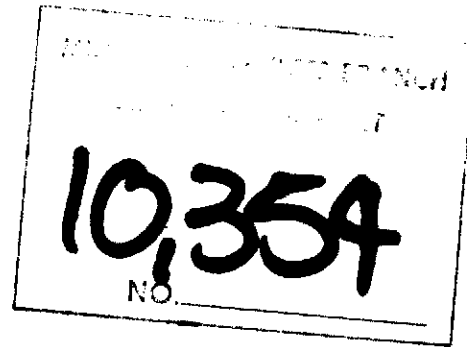


'81-#1261-#10354



GEOLOGICAL REPORT
ON THE
WIGWAM PROPERTY
(Including 1981 Diamond Drilling)

Revelstoke Mining Division
British Columbia

82 K / 13 W

50° 53 N 117° 58 W

PARMAC MINES LTD. (N.P.L.)

September 14, 1982
Vancouver, B.C.

T. R. Tough, P. Eng.
Consulting Geologist

INDEX

	<u>Page</u>
A. SUMMARY	
B. CONCLUSIONS	
C. RECOMMENDATIONS	
D. REPORT IN DETAIL	
INTRODUCTION.....	1
PROPERTY.....	2
OWNERSHIP.....	3
LOCATION.....	3
ACCESS.....	3
TOPOGRAPHY.....	3
CLIMATE.....	3
WATER.....	3
POWER.....	4
SUPPLIES.....	4
TRANSPORTATION.....	4
HISTORY.....	4
PRESENT WORK.....	5
GENERAL GEOLOGY.....	6
GEOLOGY - DETAILED.....	7
MINERAL DEPOSITS.....	9
DIAMOND DRILLING.....	17

MAPS

<u>Plate No.</u>		<u>Scale</u>
1	GEOLOGY PLAN OF ICE ADIT	1" = 40'
2	SECTION PLAN OF CROOKED ADIT	1" = 20'
3	GEOLOGY PLAN OF NO. 13 ADIT	1" = 20'

Plate No.

Scale

3a SECTION, PORTAL OF NO. 13 ADIT
4 GEOLOGY PLAN OF NO. 11 ADIT
5 SAMPLE PLAN OF GALENA TRENCH
LOCATION

1" = 10'
1" = 20'
1" = 10'
1" = 150 mil.

APPENDIX

DIAMOND DRILL LOGS

GEOLOGICAL REPORT
ON THE
WIGWAM PROPERTY
REVELSTOKE MINING DIVISION, BRITISH COLUMBIA
PARMAC MINES LTD (N.P.L.)

PART "A"

SUMMARY

The Wigwam property, owned by Parmac Mines Ltd. (N.P.L.), consists of 38 mineral claims located approximately 20 miles south-east of Revelstoke, B.C. and is accessible by road.

Water is available for all phases of exploration and development and railroad facilities are available in Revelstoke.

Exploration has been carried out intermittently by various owners since 1924. Twenty-eight diamond drill holes were drilled along the mineralized zone. The total footage drilled was 5,877 feet. Except for a few poor sections showing the relative location of the drill holes, their lengths, limits of mineralized zones intersected, and a few assays for drill hole 20, the information compiled during these years has been lost.

Trenching, open-cutting, and the driving of thirteen adits along 4,500 feet of outcrops has been carried out. The underground development totalled 1,963 feet of drifts, raises and crosscuts. A geophysical survey was carried out in 1928.

Detailed mapping and sampling was done in 1960 and 1961 by Cominco Ltd. and complex folding appears to control the localization of replacement sulphides in limestone.

In 1968 a total of 1,269 feet of diamond drilling was completed and some sampling was done on several of the surface and underground exposures, but much of the mineralized zone remains to be sampled.

During the summer of 1969 Canex Aerial Exploration Ltd. optioned the property from Parmac Mines Ltd. (N.P.L.) and undertook a programme of geological mapping, sampling, road building and diamond drilling. During the 1981 field season, Parmac Mines Ltd. (N.P.L.) completed a total of 684 meters (2,244 feet) of underground diamond drilling in 15 drill holes.

CONCLUSIONS

1. From data compiled to date ^{632 810 TM} 697,558 tons of indicated ore grading 2.14% lead and 3.54% zinc have been estimated.
2. A total of 8,481,212 tons of inferred ore grading approximately the same grade as the indicated ore has also been estimated.
3. The tonnages appear to represent only a small portion of the mineralized zone. Great potential may be expected along the strike length. The zone is open in three directions. A total of 34 showings are exposed along a dip length of 4,800 feet between the elevations of 2,400 and 4,400 feet. The zone varies in thickness from 6 to 150 feet, and is exposed along a steep mountainside. According to Mr. B. Mawer, a geologist for Cominco Ltd. who worked on the property during 1960 and 1961, in discussions with the writer, the mineralized zone was traced by him for a strike length of two miles.
4. It is concluded from the results of sampling surface and underground workings and diamond drill core that one, and possible two, limestone horizons of the Badshot Formation carry sulphide mineralization in sufficient concentration to be of economic significance.
5. Drill results by Canex have proven a strike length of greater than 500 feet into the mountain in the area of the No. 11 adit.

6. Systematic and detailed work will be required to develop mineable tonnages of silver-lead-zinc ore.

RECOMMENDATIONS

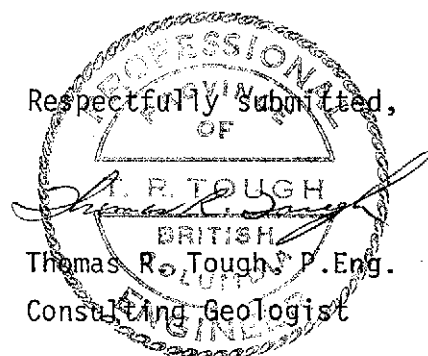
It is recommended that surface diamond drilling be carried out to test the depth of the known mineralized zones.

Additional geological mapping and sampling both underground and on surface should be carried out over unexplored areas on the property.

A program of drifting and underground diamond drilling should be carried out to further develop the mineralized zones.

Metallurgical testing should be carried out to determine the best method of extraction to maximize recovery and enable economic projections to be made with a good degree of confidence.

Respectfully Submitted,



Thomas R. Tough, P. Eng.
Consulting Geologist

September 14, 1982
Vancouver, B.C.

GEOLOGICAL REPORT
ON THE
WIGWAM PROPERTY
REVELSTOKE MINING DIVISION, BRITISH COLUMBIA
OF
PARMAC MINES LTD. (N.P.L.)

PART "B"

INTRODUCTION

The following report has been compiled from information obtained during numerous trips to the Wigwam Property on October 7 and 8, 1967, and the month of November, 1968; also during 1969, 1970, 1979, and 1981 from past records of work carried out by former owners; and from a limited diamond drilling program undertaken by Parmac Mines Ltd., recommended by, and under the supervision of, the writer. A study was made of the results of Canex Aerial Exploration's program carried out during the summer of 1969. A review of all available reports of the Minister of Mines of British Columbia was made.

The purpose of the examination was to investigate the various old workings and mineralized areas and assess the potential of the property.

PROPERTY

The property consists of 38 mineral claims held by location. They are as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Expiry Date</u>
Parmac #1	183	20	April 5, 1984
Big R 1-4	7799-7802 incl.		October 27, 1983
Big M 1-6	7814-7819 incl.		November 13, 1983
Big M 7-8	7951-7952 incl.		December 18, 1983
Mel 1-2 Fractions	7949-7950 incl.		December 18, 1983
Big M 9-12	7953-7956		December 18, 1983

The claims cover the entire old Wigwam Mining Company property, and much of the surrounding areas of extensions of the mineralized zones.

OWNERSHIP

The claims are owned by Parmac Mines Ltd (N. P. L.), of Vancouver, British Columbia.

LOCATION (117° - 50° NW)

The Wigwam Property lies on the western flank of the Selkirk Mountain Range, Revelstoke Mining Division, B. C., approximately 20 miles south-easterly from the town of Revelstoke on the Trans-Canada Highway.

ACCESS

The partially paved Arrowhead Highway leads southward from Revelstoke. At Mile 12 an all-weather gravelled logging road turns east and follows the Akolkolex River. The road passes through the Wigwam property at Mile 9.8 and is maintained by the Akolkolex River Logging Company. The various showings are accessible by road and trail.

TOPOGRAPHY

Although the topography is steep, the mountains do not attain altitudes much greater than 6,000 feet. The hillsides are covered with good stands of Cedar, Pine, Balsam, Birch and Poplar.

CLIMATE

Winters are relatively mild but of long duration with heavy snows. Temperatures range from 60 to 80° during summer months and rainfall is moderate.

WATER

The Akolkolex River and its tributaries have sufficient flowage for all phases of mining, milling and domestic use. Little water is available in the immediate area of the old workings.

POWER

Diesel power would be necessary for the initial stages of development. The Mica Dam project could possibly be a source of hydro-electric power for the property as well as the Akolkolex River which has the potential of supplying sufficient power for any future operation.

The City of Revelstoke has power resources to supply the project adequately.

SUPPLIES

Most supplies may be obtained from Revelstoke. Good daily express services will enable purchasing locally unobtainable goods from major centres in either British Columbia or Alberta.

TRANSPORTATION

Shipping of concentrates from the Revelstoke area by Canadian Pacific Railway is readily feasible.

HISTORY

References to the Wigwam Property are made in the Minister of Mines Annual Reports for 1915, 1921, 1923, to 1931, 1960 and 1961.

In 1924 the property was acquired by the Wigwam Mining Company of Tacoma, Washington. Over a six-year period, work included diamond drilling, trenching, open-cutting and thirteen adits along 4,500 feet of outcrops. Twenty-eight holes were drilled along the outcrops for a total footage of 5,877 feet. Except for a few poor sections showing the relative location of the drill holes, their lengths, limits of mineralized zones, and a few assays for drill hole 20, the information compiled during these years has been lost. A section across 52 feet in drill hole No. 20 gave a weighted average grade of 9.8% lead and 15.20% zinc. Twenty-eight trenches and open cuts have revealed mineralization along the outcrops. Several channel

samples were taken from most of the workings. The thirteen drifts, crosscuts and raises account for a total of 1,963 feet of underground development. Many channel samples were cut in the exposed mineralized zones.

The Schlumberger Electrical Prospecting Company executed a geophysical survey of the property in 1928. The results of this survey were not available to the writer.

In the 1950's Newmont Mining Co. did limited mapping and sampling.

During 1960 and 1961, Cominco Explorations Limited took an option on the property and completed a program of detailed geologic mapping and channel sampling. The mapping brought to light an intricate system of complex folding similar to the Duncan mine and other conformable deposits in the Kootenay Arc Metallogenic Province. Secondary and possibly Tertiary folding appeared to control the localization of replacement mineralization.

There is no record of any production from the property.

PRESENT WORK

In 1968 Parmac Mines Ltd., (N. P. L.) carried out a limited programme of diamond drilling, trenching, sampling and road building on the Wigwam property. Mapping consisted of checking the old workings to ascertain the validity of the earlier results.

Twenty-three hundred feet of road were built to facilitate diamond drilling along the original trail.

Canex Aerial Exploration Ltd, optioned the property from Parmac Mines Ltd (N. P. L.) in the summer of 1969. The property was surveyed, geologically

mapped and sampled and a structural study was carried out to determine the relationship between the folding and mineralization. 2.2 miles of access road were constructed to the upper portion of the showings to facilitate access to the diamond drill sites. A trail approximately 1500 feet long extends from the end of the road to the two drill sites. Eight holes were drilled from two drill sites for a total of 4,065 feet. During 1979-80 Parmac Mines constructed a road to provide access to the workings.

GENERAL GEOLOGY

The overall structure of the Selkirk Mountain Range is essentially geosynclinal with a northwesterly trend. To the east lies the metamorphosed Lardeau series of the Windermere system of Upper Proterozoic age according to Messrs. J. Fyles and J.O. Wheeler of the Geological Society of Canada. The series is composed of schists, phyllites, slates, quartzite and limestone.

Conformably underlying the Lardeau series is the Badshot Formation of Upper Precambrian age. The Badshot is a grey, siliceous, crystalline limestone which forms the western limb of the synclinal structure and is overturned to the northeast.

The Hamill series of quartzite, schist and limestone is west of, and conformably underlying, the Badshot Formation.

The gneissic granite of the Nelson Batholith which forms the Monashee Range lies west of the Columbia River. The batholith, of Precambrian age, follows the Illecillewaet River Valley to the north.

Post-Triassic granites of the Kuskanax Batholith lie approximately eight miles to the south.

A major N-S fault in the area lies along the Columbia River Valley between Revelstoke and Arrowhead. Three short splays occur to the west.

GEOLOGY - DETAILED

The rock types identified on the property and in diamond drill core are listed and described in descending order of sequence.

Schist and Phyllite:

The unit occurs in the upper limits of the geologic sequence within the map area, and is grey, schistose, brown-weathering, and contains metacrysts of white-weathering feldspar.

Limestone:

White, massive, recrystallized, coarse-grained, with diopside; contains minor grey phyllite and zones of tremolitic limestone and dolomite.

Schist:

Black to dark grey, with brown weathering and calcarious in places.

Limestone:

White, massive, recrystallized, coarse-grained, contains diopside; blue-grey weathering.

Dolomite:

White to blue-grey, fine-grained, massive weathers to buff.

Quartzite:

Grey, thin-bedded, minor tremolitic limestone.

Limestone:

Grey, recrystallized, thin-bedded, fetid, contains varying amounts of diopside.

Quartzite:

White, grey to blue-grey, fine-grained thin-bedded, contains varying amounts of carbon and limestone, minor drag folds.

Schist and Phyllite:

Black to dark grey, carbonaceous and calcareous in places.

The presence of sericite, diopside and tremolite in the recrystallized limestone and mineralized zones was observed.

The limestone strikes $N30^{\circ}W$ and has an average dip of $25^{\circ}NE$, forming the western limb of a large syncline. Minor rolls and folds within the marble are very common. Small anticlinal structures and areas of flat-lying beds form the most prominent loci for emplacement of sulphide bodies. These bodies are siliceous and ramify irregularly in all directions. The replacement by pyrrhotite, pyrite, sphalerite and galena occurs along bedding planes as narrow bands or wide irregular lenses. Pyrrhotite and pyrite are the most abundant sulphides with sphalerite predominating over subordinate amounts of galena.

The limestone has responded to deformation by flowage and shearing more or less parallel to formational boundaries. The physical properties of the carbonaceous rock controlled the deformation, and the deformation pattern probably controlled the migration and precipitation of the sulphide minerals.

Evidence of faulting was noted in one place along the limestone unit. It is expressed topographically. NE-SW jointing is rather poorly developed. The limestone could possibly be 300 to 500 feet thick. Underlying the limestone is a series of biotite schists, argillaceous quartzites and limestones, as witnessed in the area of the lower workings.

MINERAL DEPOSITS

In the following description of the various mineral occurrences, elevations were obtained with an altimeter using a base elevation of 1,500 feet at Revelstoke. Tabulation of the numerous workings and showings is used for clarification.

Showing # 1 - Elevation 2,175 feet

Description: The lowest working is a drift about 75' above the Akolkolex River on the north side of the logging road. An adit is collared in biotite schist and argillaceous limestone. The adit is caved and the work could not be examined. Judging from material seen on the waste dump, the adit did not encounter the Badshot limestone.

Showing # 2 - Elevation 2,225 feet

Description: Three hundred feet west of the above adit is a fifty-foot drift collared in a twenty-foot boulder and the remainder is in partially consolidated gravel.

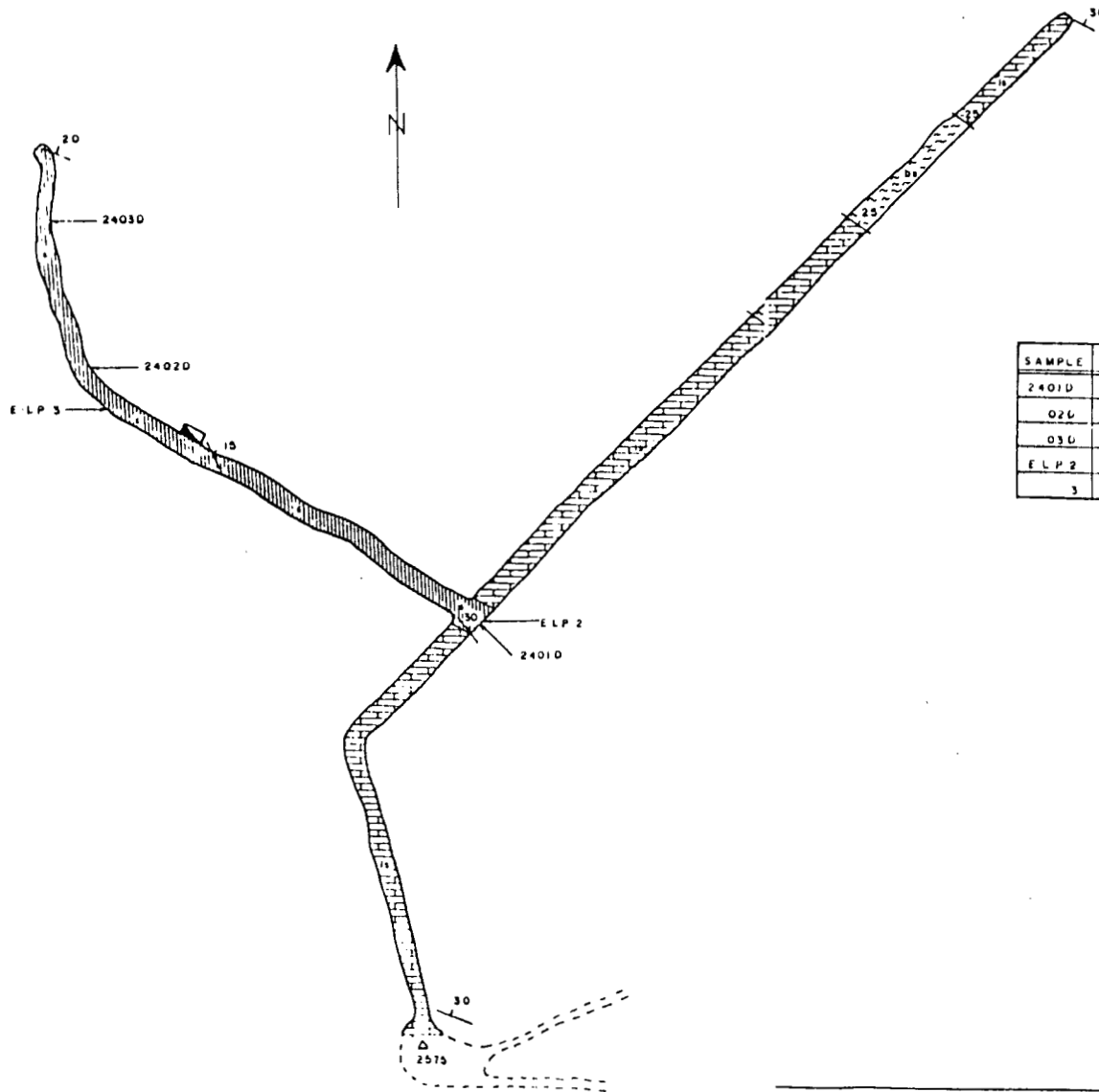
Showing # 3 - Elevation 2,500 feet

Description: Nine hundred feet along the trail is a short fifteen-foot drift collared in white marble. It was driven along a one foot wide band of oxidized sulphides. Scattered sulphides were noted in the limestone.

Showing # 4 - Elevation 2,575 feet (ice adit) (Plate # 1)




Description: Two hundred feet farther along the outcrop is an adit with 386 feet of crosscut, 227 feet of drift and a fifty-foot raise.

Near the portal, white marble is crosscut which grades into a highly silicified zone near the collar of the drift, 151 feet from the portal.






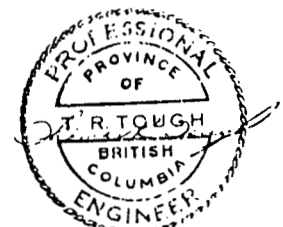
SAMPLE	FT	Ag. oz.	Pb. %	Zn %
24010	5.5	0.15	0.44	8.05
026	5.5	0.15	2.14	8.20
036	6.5	0.30	1.40	11.05
E.L.P. 2	5.0		0.24	4.67
3	7.5	0.08	1.45	12.60

LEGEND

-  Limestone
-  Biotite Schist
-  Sulphide Minerals

SYMBOL

-  Bedding
-  Sample no. & loc.
-  Elevation



FEET 40 0 20 40 FEET

Plate No. 1

PARMAC MINES LTD. (N.P.L.)	
GEOLOGY PLAN of ICE ADIT WIGWAM PROPERTY REVELSTOKE MINING DIVISION	
Project: P-1	Drawn By: J.H. Trough
Scale: 1" = 40'	Date: Feb. 8, 1961

A 5.5' chip sample was taken by the writer across banded replacement sulphides from the right wall at the junction of the crosscut and drift.

Assay results were: Tr. Au; 0.15 oz Ag; 0.44% Pb and 6.05% Zn. Another five-foot channel sample on the same zone ran 0.24% Pb and 4.67% Zn.

The crosscut continues for another 135 feet, passing through crystalline limestone containing a conformable fifty-foot bed of biotite schist about 50 feet from the face.

One hundred and two feet along the northwesterly drift, a four by eight-foot inclined raise was driven on the right wall for 50 feet across the beds. The raise is at approximately 45°. The drift was driven along a highly altered gossaned, lenticular band which varies from one to eight feet in thickness. A 5.5-foot chip sample, taken by the writer, of this material at 145 feet from the collar assayed: Tr. Au; 0.15 oz Ag; 2.14% Pb; 8.20% Zn.

At 150 feet from the drift collar a 7.5-foot channel sample ran 1.45% Pb and 12.60% Zn. Twenty-seven feet from the face, a 6.5-foot chip sample ran: Tr Au; 0.30 oz Ag; 1.40% Pb and 11.05% Zn. The samples were taken by the writer.

Banded sulphides occur at the drift face. A narrow band of oxidized sulphides occurs 115 feet from the crosscut portal. Just above the portal is a trench revealing oxidized sulphides.

Showing # 5 - Elevation 2,625 feet

Description: About 100 feet NW of the above adit is a fifty-foot adit. Near the portal a three-foot band of massive sulphides was noted. There is a sloughed-in trench 25 feet west of the portal.

Showing # 6 - Elevation 3,075 feet

Description: Trenching has exposed highly folded beds which are massively replaced by pyrrhotite, sphalerite and galena. A nine-foot channel sample, cut by the writer, assayed 1.45% Pb and 7.11% Zn. The actual thickness of the zone could not be determined. The trench is about 150 feet below the trail. The zone dips 30° ENE and strikes NNW.

Showing # 7 - Elevation 3,250 feet

Description: Farther along the trail, there is an open cut exposing a light and dark banded, silicified limestone with sparse sulphides. A nine-foot channel sample ran 0.34% Pb and 0.89% Zn. A grab sample taken from banded sulphides exposed along the trail gave 0.25 oz Ag; 6.45% Pb and a trace of zinc. Both samples were taken by the writer.

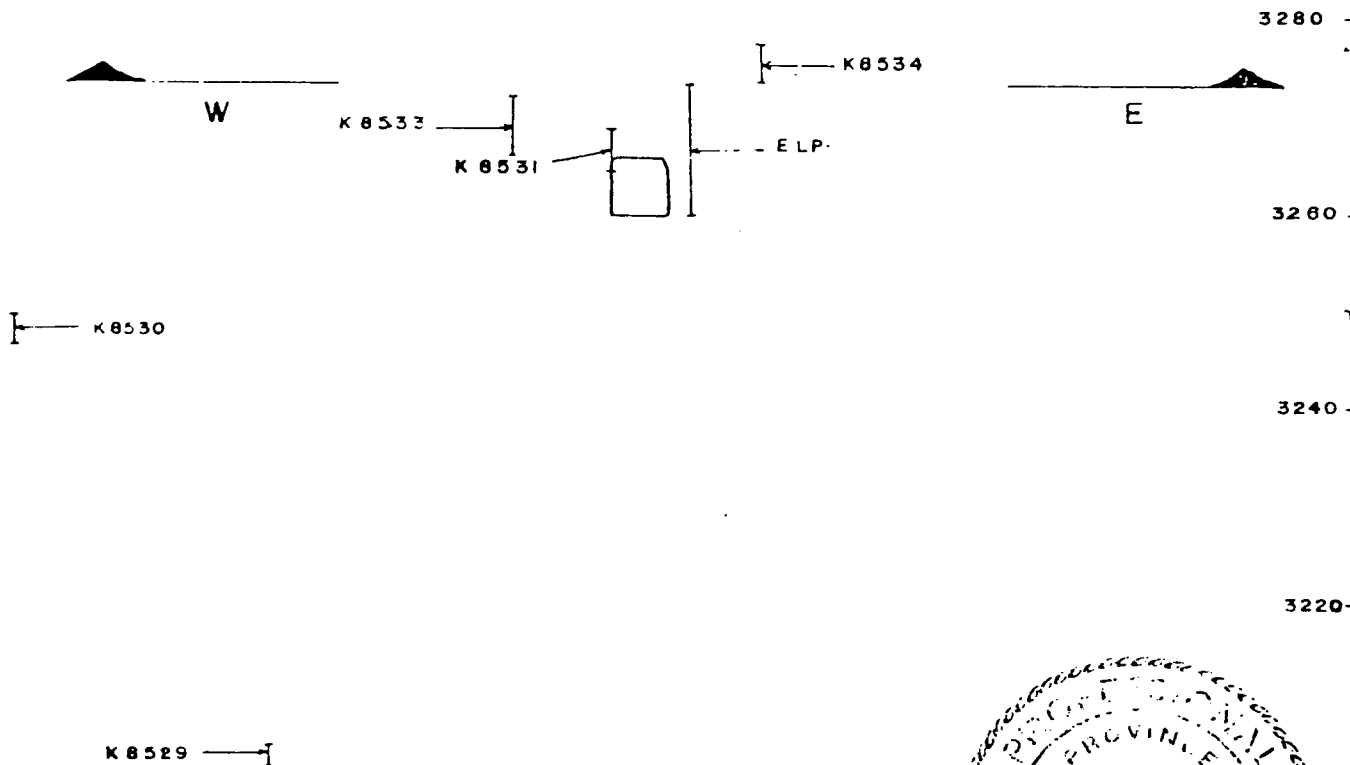
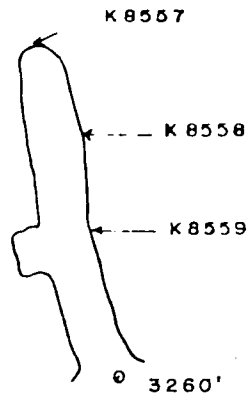
Showing # 8 - Elevation 3,275 feet

Description: Two hundred and twenty-five feet farther along the hillside, the silicified limestone is flat-lying and mineralized with sphalerite and sparse galena along bedding planes. The zone appears to be mineralized over a thickness of more than 50 feet. A series of grab samples picked by the writer, ran 0.10 oz Ag; 0.80% Pb and 4.10% Zn.

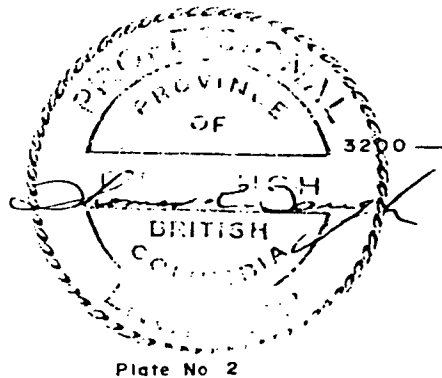
Showing # 9 - Elevation 3,425 feet (Galena Pit)

Description: Two hundred feet north of the above showing, a fifty-foot drift was driven along a one to two foot-wide zone of coarse galena and sphalerite, galena predominating, in silicified limestone. A grab sample chosen by the writer of some of this material assayed 1.60 oz Ag; 21.00% Pb; and 2.30% Zn. Sparse amber-coloured sphalerite and galena occur in the marble along the outcrop for some 200 feet.

SAMPLE	FT.	Ag oz.	Pb %	Zn %
K 8557	4.5	0.40	2.10	0.60
K 8558	5.0	0.30	0.90	0.20
K 8559	5.0	0.32	3.00	0.70



SAMPLE	FT.	Ag oz.	Pb %	Zn %
K 8529	2.5	0.10	1.51	Tr
K 8530	2.8	0.30	1.95	Tr
K 8531	4.0	0.45	5.60	1.20
K 8533	6.0	Tr	0.45	Tr
K 8534	1.8	0.20	0.95	0.60
S 28	7.0		1.30	12.20
ELP.	14.0		3.42	2.71



PARMAC MINES LTD. (N.P.L.)	
SECTION, PLAN of CROOKED ADIT WIGWAM PROPERTY	
REVELSTOKE MINING DIVISION	
Project: P-1	Drawn By: T.R.Tough
Scale 1" = 20'	Date: Jan. 27, 1969

Showing # 10 - Elevation 3, 275 feet (Plate # 2) (Crooked Adit)

Description: Two hundred feet from the 3, 275 foot elevation showing, at S 50° W, there is a short thirty-five foot drift, driven into a small anticline in silicified limestone. A ten-foot crosscut was driven in the left wall and a fifteen-foot vertical raise at the face. Bands of replacement sulphides were noted in most of the drift. "S"-shaped folding was evident. To the right of the portal, a fourteen-foot channel sample cut by the writer assayed 3.42% Pb and 2.71% Zn, and a 4.8-foot channel sample by Cominco ran 4.96% Pb and 2.36% Zn.

Showing # 11 - Elevation 3, 250 feet

Description: Two trenches were cut 100 feet east of the above adit. The trenches were partially sloughed-in.

Showing # 12 - Elevation 3, 195 feet

Description: Sixty feet below the portal of the Crooked Adit is a trench which assayed 1.3% Pb and 12.20% Zn across 7 feet.

Showing # 13 - Elevation 3, 350 feet

Description: One hundred and fifty feet NW of the above drift, a trench exposes banded replacement sulphides in limestone.

Showing # 14 - Elevation 3, 350 feet (Trench # 6)

Description: One hundred feet SW a seventy-five foot long trench reveals a wide zone of mineralized siliceous limestone. More intense mineralization occurs in the upper six feet of the trench with weaker occurrences in the lower beds. Mineralized beds approximately 50 feet thick were exposed. Cominco sampled the bottom 10 feet of the exposure which assayed 0.8% Pb and 1.7% Zn. The richer portion was not sampled.

Showing # 15 - Elevation 3,400 feet (Trench # 7)

Description: The trench cuts bands of oxidized sulphide. A five-foot zone was channel sampled by Cominco. It assayed 1.0% Pb and 3.8% Zn. The Wigwam Mining Company sampled 8 feet which ran 2.6% Pb and 7.2% Zn.

Showing # 16 - Elevation 3,475 feet (Trench # 5)

Description: One hundred and seventy-five feet farther west is an open cut which exposes a massive sulphide zone. In the upper portion of the cut is a highly folded zone of pyrrhotite. Below the massive pyrrhotite-sphalerite zone, banded pyrrhotite, pyrite, sphalerite and galena occur in siliceous limestone. The cut has bared the mineralized beds for a true thickness of 25 feet. A grab sample composed of specimens, chosen by the writer, from the upper and lower extremities ran 0.15 oz Ag; 1.55% Pb, and 4.25% Zn. Cominco channel sampled 5 feet which graded 0.8% Pb and 4.1% Zn.

Showing # 17 - Elevation 3,475 feet (No. 13 Adit) (Plates # 3 and 3a)

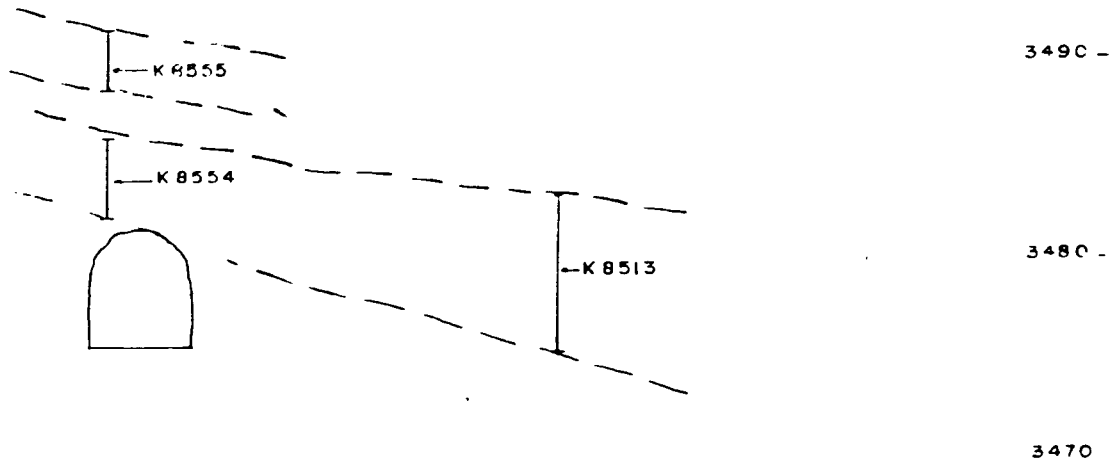
Description: One hundred and twenty-five feet farther west, an adit has been driven for 110 feet in silicified limestone and has a 15-foot vertical raise at the face on the right side. The siliceous limestone forms a slight anticline. On the east side of the portal an open-cut has exposed banded sulphides over a length of 75 feet. Grab samples taken here gave Tr. of Ag; 2.75% Pb; 6.95% Zn, and 0.40 oz Ag; 13.35% Pb and 5.20% Zn. Mineralization is rather weak in the tunnel. Cominco channel sampled an 8-foot section which ran 1.50% Pb and 5.20% Zn.

Showing # 18 - Elevation 3,525 feet (Trench # 4)

Description: Fifty feet above the 3,475 foot level portal a fifteen-foot zone of banded sphalerite and subordinate galena is exposed. Cominco assayed a nine-foot section running 0.8% Pb and 4.80% Zn.

W

E



SAMPLE	FT.	Ag oz.	Pb %	Zn %
K8513	8.0	Tr	1.50	5.20
K8554	3.9	0.30	2.00	4.20
K8555	3.0	1.00	1.05	4.10

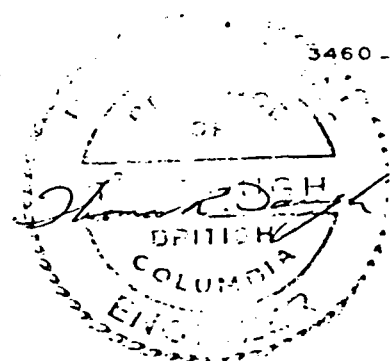
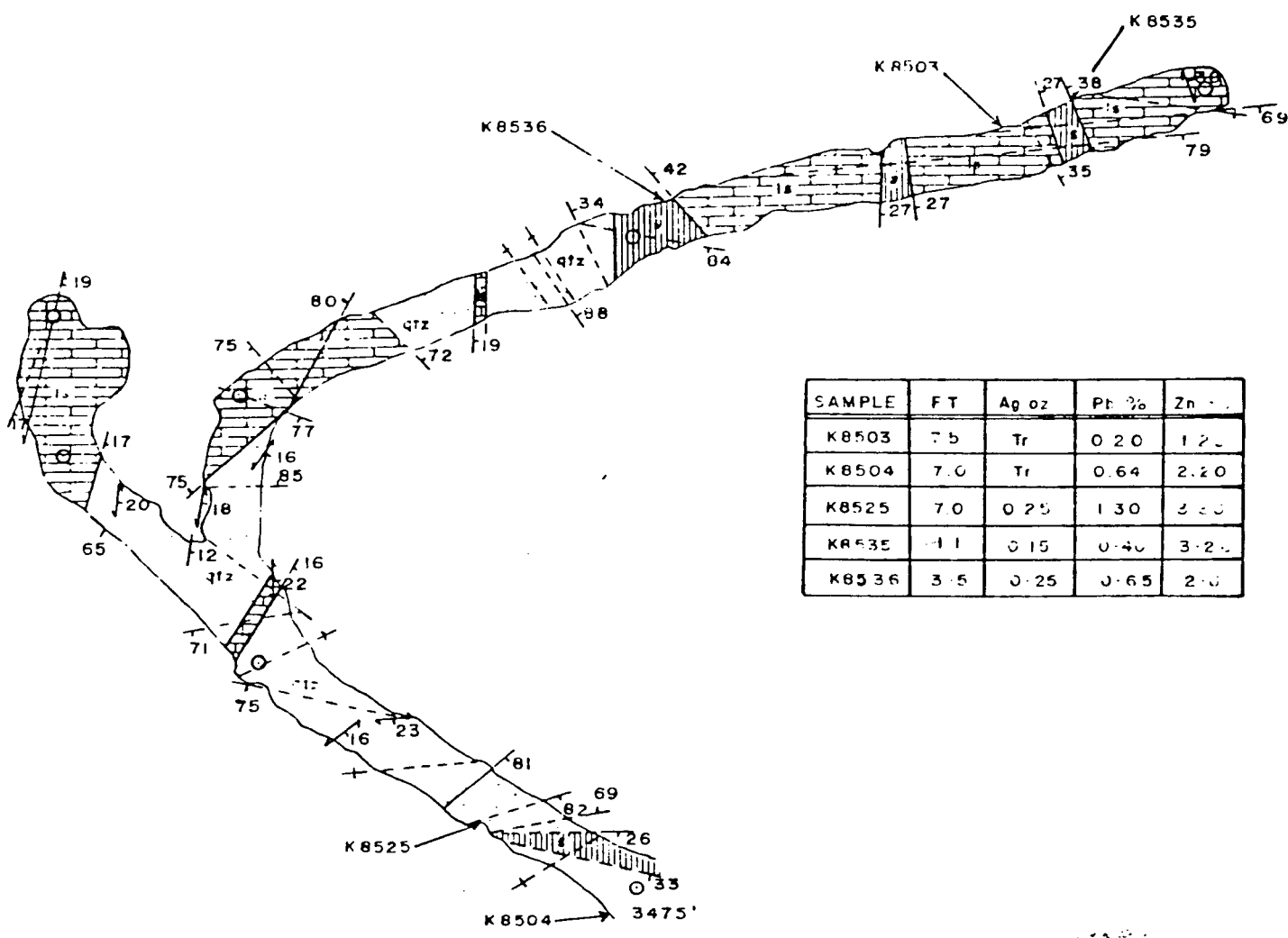
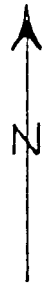





Plate No 3a

PARMAC MINES LTD. (N.P.L.)	
SECTION, PORTAL of No-13 ADIT	
WIGWAM PROPERTY	
REVELSTOKE MINING DIVISION	
Project: P-1	Drawn By: T.R. Tough
Scale: 1" = 10'	Date: Jan. 24, 1969








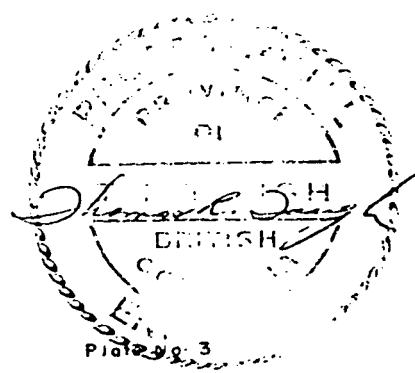
SAMPLE	FT	Ag oz	Pb %	Zn %
K8503	7.5	Tr	0.20	1.20
K8504	7.0	Tr	0.64	2.20
K8525	7.0	0.25	1.30	3.20
K8535	1.1	0.15	0.40	3.20
K8536	3.5	0.25	0.65	2.00

LEGEND

-  Limestone
-  Quartzite
-  Sulphide Mineralization

SYMBOLS

-  Bedding (inclined)
-  Fracture (inclined & vertical)
-  Contact
-  Survey station
-  Sample no & location



PARMAC MINES LTD. (N.P.L.)	
GEOLOGY PLAN of No. 13 ADIT WIGWAM PROPERTY REVELSTOKE MINING DIVISION	
Project: 4-1	Drawn by: T.R. Tough
Scale: 1" = 20'	Date: Jan. 21, 1969

Showing # 19 - Elevation 3, 575 feet (Trench # 8)

Description: Bands of pyrrhotite, sphalerite and galena are exposed in the trench. Cominco channel sampled an eight-foot width which assayed 1.5% Pb and 4.00% Zn. The total exposure was not sampled.

Showing # 20 - Elevation 3, 550 feet (Trench # 3)

Description: The trench is located 100 feet west of Trench # 4 and cuts high-grade zones of oxidized sulphides. Crystalline limestone occurs at the top of the trench. A channel sample taken by Cominco across 14 feet assayed 0.9% Pb and 3.0% Zn.

Showing # 21 - Elevation 3, 600 feet (Trench # 2)

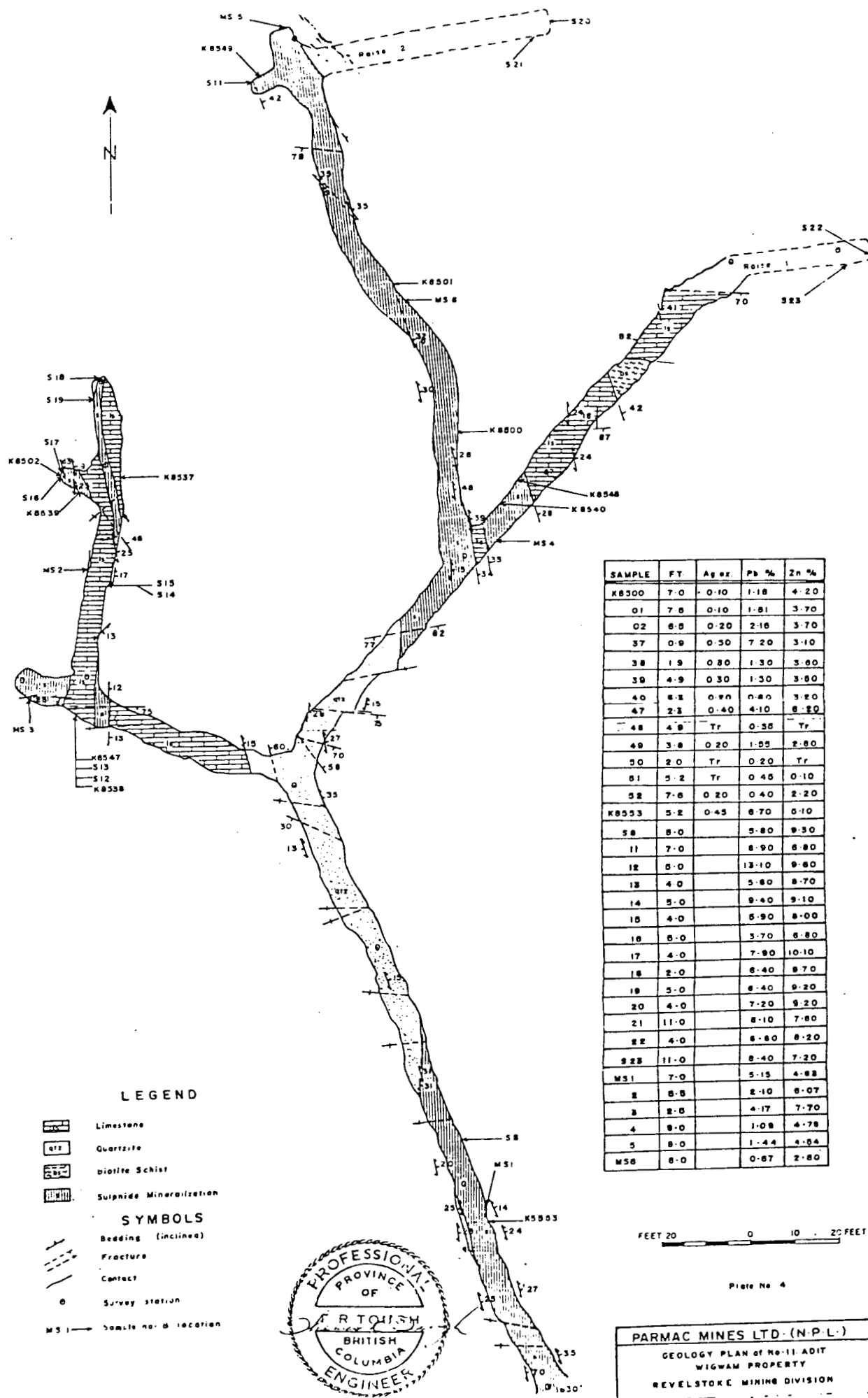
Description: The trench is 100 feet west of Trench # 3 and has two mineralized zones separated by 10 feet of limestone. The upper zone has not been sampled but Cominco channel sampled 9 feet of the lower zone which ran 3.6% Pb and 5.4% Zn.

Showing # 22 - Elevation 3, 700 feet





Description: Two hundred feet north of Trench # 2 is an adit which was driven for 40 feet. Immediately above the portal is a ten-foot wide, highly folded zone of massive pyrrhotite, sphalerite and galena. The zone strikes N NW and dips 55° NE. An eight-foot sample assayed 1.08% Pb and 4.78% Zn.

Showing # 23 - Elevation 3, 625 feet (No. 11 Adit) (Plate # 4)





Description: The adit is located 100 feet west of Trench No. 2. Over 600 feet of crosscuts, drifts and raises were driven developing three separate mineralized zones. At the portal the silicified beds strike N 30° W and dip 20° NE. Above the portal the beds are oxidized over a width of 20 feet. Kennecott channel sampled an 18-foot section near the portal which assayed 1.7% Pb and 4.1% Zn. Zone A, to the west, has not



LEGEND

-  Limestone
-  Quartzite
-  Diorite Schist
-  Sulphide Mineralization

SYMBOLS

-  Bedding (inclined)
 -  Fracture
 -  Contact
 -  Survey station
- MS 1 → Sample no. & location

SAMPLE	FT.	Ag. ex.	Pb %	Zn %
K8300	7.0	0.10	1.18	4.20
01	7.8	0.10	1.81	3.70
02	6.8	0.20	2.16	3.70
37	0.9	0.50	7.20	3.10
38	1.9	0.80	1.30	3.60
39	4.9	0.30	1.30	3.60
40	6.8	0.90	0.80	3.80
47	2.8	0.40	4.10	6.80
48	4.9	Tr	0.58	Tr
49	3.8	0.20	1.55	2.80
50	2.0	Tr	0.20	Tr
51	5.2	Tr	0.45	0.10
52	7.6	0.20	0.40	2.20
K8553	5.2	0.45	6.70	6.10
58	8.0		5.80	9.50
11	7.0		6.90	6.80
12	8.0		13.10	9.80
13	4.0		5.60	8.70
14	5.0		9.40	9.10
15	4.0		5.90	8.00
16	6.0		3.70	6.80
17	4.0		7.90	10.10
18	2.0		6.40	9.70
19	5.0		6.40	9.20
20	4.0		7.20	9.20
21	11.0		8.10	7.80
22	4.0		6.80	8.20
S28	11.0		8.40	7.20
MS1	7.0		5.15	4.88
2	6.5		2.10	6.07
3	2.5		4.17	7.70
4	8.0		1.08	4.78
5	8.0		1.44	4.64
MS6	6.0		0.67	2.80

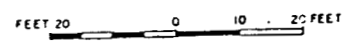


Plate No. 4



PARMAC MINES LTD. (N.P.L.)
 GEOLOGY PLAN of No. 11 ADIT
 WIGWAM PROPERTY
 REVELSTOKE MINING DIVISION

had its true thickness exposed in the drift. A total of fifteen channel samples were taken over a length of 80 feet. They averaged 5.39% Pb and 7.11% Zn across an average width of 3.9 feet. A total of thirteen channel samples were taken in Zone B, the central zone, over a strike length of 330 feet. They averaged 2.97% Pb and 4.97% Zn over an average width of 6.8 feet. The zone was crosscut across a true width of 20 feet. The eastern zone, Zone C, developed by two raises ran 8.25% Pb and 7.50% Zn across eleven feet. These assays appear in doubt, as another set of samples taken in the southernmost raise gave 0.42% Pb and 1.30% Zn across 12.2 feet.

Showing # 24 - Elevation 3, 610 feet

Description: Fifty feet southwest of No. 11 adit is another adit which is caved at the portal, and apparently crosscuts the B zone just below the portal of the No. 11 adit.

Showing # 25 - Elevation 3, 850 feet (Trench # 1)

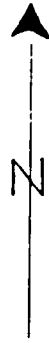
Description: The trench is 100 feet long and exposes three well-mineralized zones. Cominco channel sampled a five-foot section which assayed 0.30% Pb and 3.30% Zn.

Showing # 26 - Elevation 3, 900 feet

Description: One hundred feet along the trail from Trench # 1 a twenty-foot zone of highly oxidized sulphides is partially exposed.

Showing # 27 - Elevation 3, 875 feet galena showing (Plate # 5)

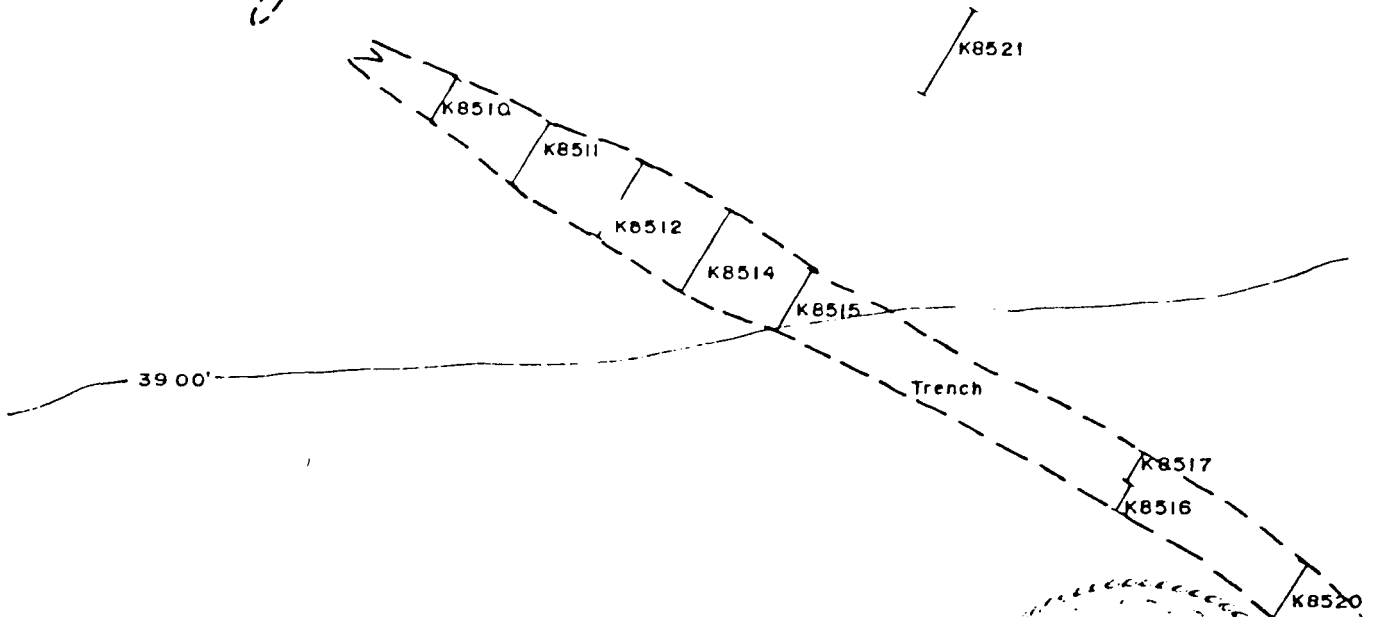
Description: Fifty feet east of the trail is the Galena Trench, a zone channel sampled by Kennecott over a length of 60 feet. A total of eight samples averaged 8.25% Pb and 6.65% Zn across a width of 3.5 feet.



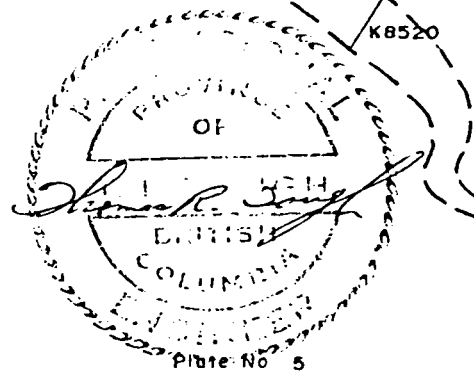
Trench

Trench

Trench



SAMPLE	FT.	Ag oz.	Pb %	Zn %
K 8510	2.7	0.36	8.20	6.70
K 8511	3.7	0.25	6.50	5.70
K8512	4.3	0.50	12.20	9.80
K8514	5.0	0.30	7.80	4.70
K8515	3.3	0.25	5.20	5.10
K8516	1.4	1.20	23.20	18.10
K8517	1.3	0.30	7.20	6.80
K8520	3.1	0.15	2.70	2.10
K8521	5.0	Tr	0.20	1.20



PARMAC MINES LTD. (N.P.L.)
 SAMPLE PLAN of GALENA TRENCH
 WIGWAM PROPERTY
 REVELSTOKE MINING DIVISION

Project: P-1 Drawn By: T.R. Tough
 Scale: 1" = 10' Date: Jan. 27, 1969

Showing # 28 - Elevation 4, 075 feet

Description: Fifty feet above the trail, trenching has revealed a zone of pyrrhotite, sphalerite and galena.

Showing # 29 - Elevation 4, 150 feet

Description: Along the trail highly oxidized material was noted under light overburden.

Showing # 30 - Elevation 4, 200 feet

Description: A trench which has partially sloughed-in exposes massive sulphides. An eight-foot sample cut by the Wigwam Mining Company ran 6.20% Pb and 11.6% Zn.

Showing # 31 - Elevation 4, 230 feet (Gold Adit)

Description: The drift was driven for approximately 225 feet between two mineralized zones. The lower zone is highly folded and mineralized with pyrrhotite, sphalerite and galena.

Showing # 32 - Elevation 4, 300 feet

Description: Immediately above the Gold Adit a trench reveals massive sulphides. A four-foot sample cut by the Wigwam Mining Company assayed 0.7% Pb and 10.60% Zn.

Showing # 33 - Elevation 4, 380 feet (Sleepers Adit)

Description: Five hundred and fifty feet further along the trail from the Gold Adit lies the Sleepers Adit which was driven for 25 feet in sparsely mineralized rock. A channel sample, cut by the writer, over 7 feet to the right of the portal, ran 0.68% Pb and 0.46% Zn.

Showing # 34 - Elevation 4, 440 feet

Description: Immediately above the Sleepers Adit is a zone which was sampled in two places, 150 feet apart, by Cominco. The eastern sample ran 4.80% Pb and 3.30% Zn across 2.5 feet. The western sample assayed 7.00% Pb and 5.60% Zn across three feet. Mineralization was encountered several hundred feet west of the Sleepers Adit, but was not sampled. Well-mineralized float was found approximately 2,000 feet north of No. 11 adit at an elevation of 4,200 feet.

During 1960 and 1961 while Cominco Ltd was working on the property, their prospecting revealed the presence of lead-zinc mineralization over a strike length of approximately two miles to the north.

DIAMOND DRILLING

During the latter part of 1968, Parmac Mines Ltd. drilled five holes for a total of 1,269 feet. Drill hole data is as follows:

Hole No:	Dip	Location	Length	From - to	Per /ton Ag/oz	Pb%	Zn%	Fe%
B 1	-90°	70'E of (30)	176'	101.8- 129.0	0.17	0.23	3.79	
				139.0- 147.0	1.00	1.07	tr.	
B 2	-90°	60'NE of (28)	167'	69.0- 112.0	3.25	2.83	3.25	5.79
				69.0- 103.0'	(4.25	3.48	3.45	7.00)
B 3	-90°	at (22)	124.5'	82.0- 100.00	0.27	1.98	2.05	2.28
				75.0- 82.0	0.15	0.30	0.17	21.60
B 4	-90°	60'N of (25)	101'	14.0- 59.0	0.99	1.06	1.76	
B 5	-90°	40'NW of (19)	41'	0.0- 0.16	0.08	2.35	3.34	

Hole No:	Dip	Location	Length	From - to	Per /ton Ag/oz	Pb%	Zn%	Fe%
S 1	-90°	200'NE of (4)	390'	127.5- 132.9	0.10	0.65	5.65	
S 2	-90°	100'NE of (5)	391'	71.3- 76.0	0.10	0.10	3.00	

Core recovery in holes B 1, B 2, B 3, B 4 and B 5 was poor, especially within mineralized zones.

Holes S 1 and S 2 were drilled using a wire-line drill and recovery was better than 95%.

The limited program of drilling was to check old drill holes to establish thicknesses and grades.

For detailed diamond drill logs and assay values for the drilling undertaken by Canex Aerial Exploration Ltd kindly refer to Appendix "B" of this report.

The first six holes, C-1, to C-6 inclusive, were completed to their proposed depth but holes C-7 and C-8 were abandoned before reaching completion. C-7 was abandoned at 472 feet and did not intersect the lower zone encountered in C-5 and C-6. A drill bit and reaming shell were lost at the bottom of the hole curtailing the completion of the hole.

100 feet of drill rods were lost in hole C-8 between 400 feet and 500 feet in the hole which forced abandonment at a depth of 551 feet. C-8 was stopped in mineralization and did not reach the lower zones cut by C-5 and C-6.

During the 1981 field season, Parmac Mines Ltd. (N.P.L.) completed a total of 684 meters (2,244 feet) of underground diamond drilling in 15 drill holes. The drilling took place within the No. 11 Adit workings.

There are three known mineralized zones that have been exposed in the underground workings and the drill program was initiated to test the zones up and down their dips in an attempt to block out some reasonable assured tonnages and grades.

Zone 'A', the western-most zone has been sampled underground. Although the total width of the zone has not been exposed, the weighted average grade of 15 samples cut along a strike length of 80 feet ran 5.39% Pb and 7.11% Zn across 4.0 feet of exposed width. Zone 'B', the central zone, averaged 2.97% Pb and 4.97% Zn across an average exposed width of 6.8 feet along a strike length of 330 feet. Thirteen samples were cut along the 330 foot length. The third zone, Zone 'C' the easterly zone, has little information as to grade but has been intersected by two raises some 90 feet apart. Hole B-3 drilled from the surface in 1968 cut 8.0 feet in zone 'C' which assayed 0.34 oz. Ag/Ton, 4.09% Pb and 2.98% Zn.

In 1969 Canex Aerial exploration Ltd. carried out a surface diamond drill program and hole C-8 intersected 53 feet of Zone 'B' and was stoped in mineralization. The 53-foot intersection assayed 2.21% Pb and 2.03% Zn. The top 39.5 feet assayed 0.03oz. Ag/Ton, 2.65% Pb and 3.13% Zn. The intersection was some 500 feet along strike from the portal of the No. 11 Adit.

The 1981 diamond drill data is tabulated as follows:

<u>DDH #</u>	<u>Core Length</u>	<u>Ag oz/Ton</u>	<u>Pb %</u>	<u>Zn %</u>	<u>Mineral Zone</u>
U1 -81	6.0'	0.05	1.09	3.29	A
U2 -81	7.5'	0.05	0.76	3.42	C
U3 -81	9.0'	Tr	0.66	3.43	B
U4 -81	7.0'	0.10	0.98	3.40	B
U4 -81	5.0'	0.15	2.11	4.86	A
U5 -81	5.0'	Tr	0.26	2.67	B
U5 -81	9.0'	0.05	1.24	4.35	A
U6 -81	8.0'	0.10	1.13	1.19	A
U7 -81	6.0'	0.15	1.89	3.34	C
U8 -81	5.0'	0.41	4.18	4.07	B
U8 -81	3.8'	0.20	2.48	0.76	C
U9 -81	17.0'	0.14	3.06	3.94	B
U10-81	15.0'	0.02	2.35	3.79	B
U11-81	17.5'	0.08	2.21	3.97	B includes 4.0' of waste
U12-81	3.0'	0.10	5.90	6.54	B
U12-81	6.5'	0.05	1.11	2.35	C
U13-81	8.5'	0.10	2.40	5.93	A
U14-81	4.0'	Tr	0.65	2.49	B last 4.0' of footwall
U15-81	2.5'	Tr	0.55	2.76	B last 2.5' of Hangingw

TONNAGE CALCULATIONS

<u>Zone 'A'</u>	<u>Ag oz/Ton</u>	<u>Pb %</u>	<u>Zn %</u>	<u>Core Length</u>
U1 -81	0.05	1.09	3.29	6.0'
U4 -81	0.15	2.11	4.86	5.0'
U5 -81	0.05	1.24	4.35	9.0'
U6 -81	0.10	1.13	1.19	8.0'
U13-81	0.10	2.40	5.93	8.5'

The weighted average grade of the five drill holes across an average width of 7.3 feet is 0.09 oz Ag/Ton, 1.58% Pb and 3.92% Zn.

The weighted average grade of the underground sampling along 80 feet of the zone is 5.39% Pb and 7.11% Zn across 4.0 feet. The average four foot width of the samples is not representative of the actual width of the zone.

The weighted average grade of the diamond drilling underground sampling is 0.06 oz Ag/Ton, 2.93%Pb and 5.05% Zn across an average width of 5.6 feet.

Strike length of zone tested: 160'
 Width of zone: 5.6'
 Dip length: 100'
 Tonnage Factor: 12 cubic feet per ton

$$\frac{160 \times 5.6 \times 100}{12} = 7,467 \text{ tons}$$

Zone 'A' contains a reasonably assured tonnage of 7,500 tons with a grade of 0.06 oz Ag/Ton, 2.93% Pb and 5.05% Zn.

<u>Zone 'B'</u>	<u>Ag oz/Ton</u>	<u>Pb %</u>	<u>Zn %</u>	<u>Core Length</u>
U3 -81	Tr	0.66	3.43	9.0'
U4 -81	0.10	0.98	3.40	7.0'
U5 -81	Tr	0.26	2.67	5.0'
U8 -81	0.41	4.18	4.07	5.0'
U9 -81	0.14	3.06	3.94	17.0'
U10-81	0.02	2.35	3.79	15.0'
U11-81	0.08	2.21	3.97	17.5'
U12-81	0.10	5.90	6.54	3.0'

Holes U14-81 and U15-81 both collared in the last few feet of the footwall and hanging wall respectively and were not given any significance to the grade calculations.

The weighted average grade of the 1981 series of drill holes is 0.09 oz Ag/Ton, 2.28% Pb and 3.84% Zn across an average width of 9.8 feet.

Surface drilling cut 39.5 feet grading 0.03 oz Ag/Ton, 2.65% Pb and 3.13% Zn.

Underground sampling averaged 2.97% Pb and 4.97% Zn across an average width of 6.8 feet.

The weighted average grade of all the diamond drill holes and the underground sampling is 0.05 oz Ag/Ton, 2.62% Pb and 3.48% Zn across an average width of 18.7 feet.

Strike length tested: 600 feet
 Width of zone: 18.7 feet
 Dip Length: 200 feet
 Tonnage Factor: 12 cubic feet per ton

$$\frac{600 \times 18.7 \times 200}{12} = 187,000 \text{ Tons}$$

Zone 'B' contains a reasonably assured tonnage of 187,000 tons grading 0.05 oz Ag/Ton, 2.62 % Pb and 3.48 % Zn.

<u>Zone 'C'</u>	<u>Ag oz/Ton</u>	<u>Pb %</u>	<u>Zn %</u>	<u>Core Length</u>
U2-81	0.05	0.76	3.42	7.5'
U7-81	0.15	1.89	3.34	6.0'
U8-81	0.20	2.48	0.76	3.8'

The weighted average grade of the underground drilling that intersected Zone 'C' is 0.12 oz Ag/Ton, 1.53% Pb and 2.81% Zn across an average width of 5.8 feet.

Surface drill hole B-3, drilled in 1968 intersected 8 feet of Zone 'C' which assayed 0.34 oz Ag/Ton, 4.09% Pb and 2.98% Zn.

The total weighted average grade of Zone 'C' is 0.24 oz Ag/Ton, 3.01% Pb and 2.91% Zn across an average width of 6.9 feet.

Length of Zone tested:	150 feet
Width of Zone:	6.9 feet
Dip Length:	100 feet
Tonnage Factor:	12 cubic feet per ton
<u>$150 \times 6.9 \times 100 = 8,625$ tons</u>	
	12

Zone 'C' has a drill indicated tonnage of 8,600 tons with a grade of 0.24 oz Ag/ton, 3.01% Pb and 2.91% Zn.

The writer personally logged, split and sampled the core for drill holes U1-81 to U7-81 inclusive. The remaining holes were sampled by Parmac Mines Ltd. (N.P.L.).

Respectfully submitted,



Thomas R. Tough, P. Eng.
Consulting Geologist

September 14, 1982
Vancouver, B.C.

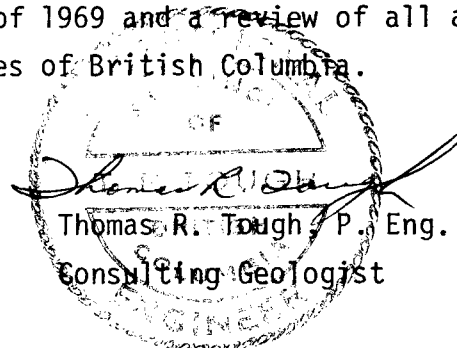
CERTIFICATE

I, Thomas R. Tough, of the City of Richmond, in the Province of British Columbia, do hereby certify:

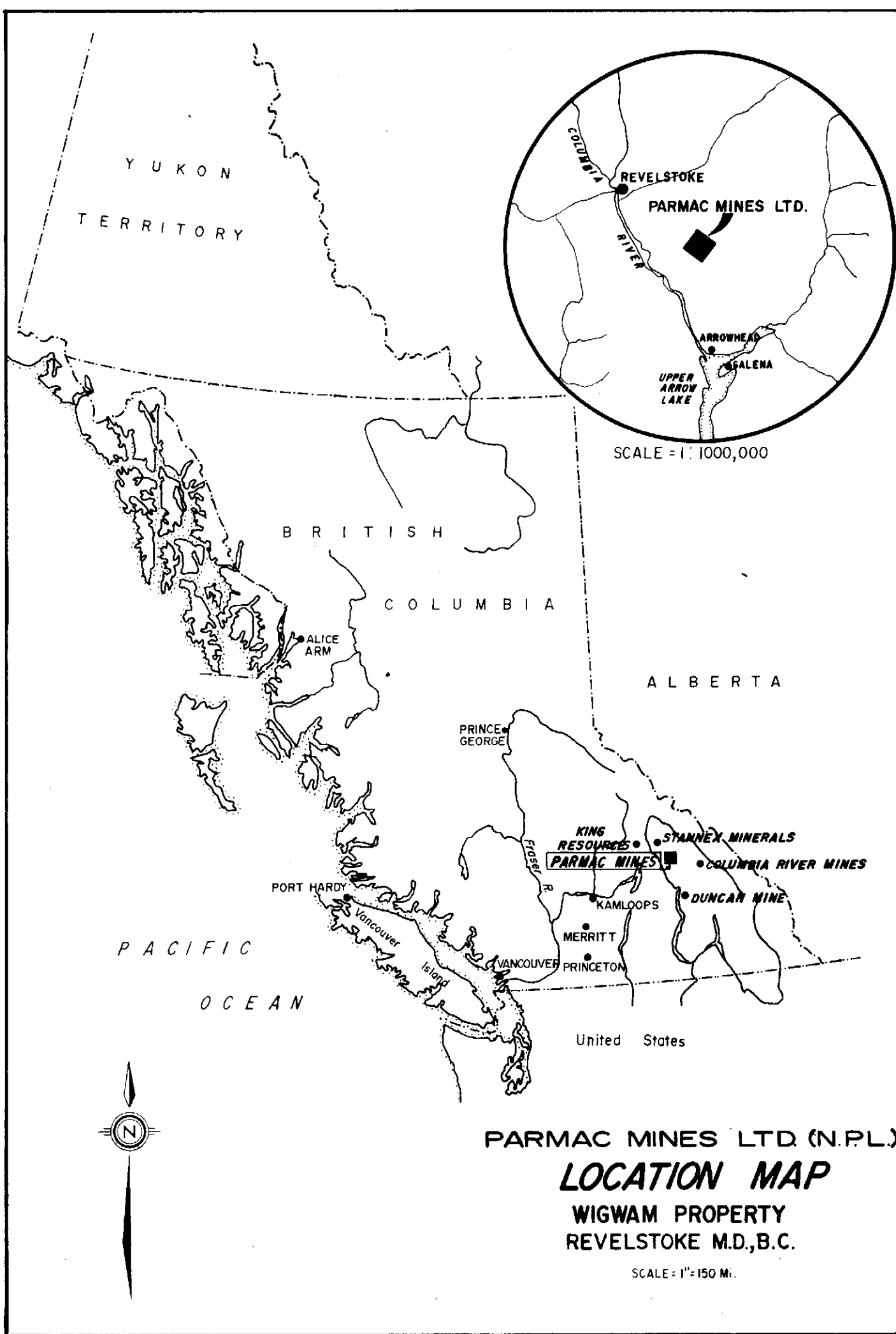
THAT I am a Consulting Geologist and a principal with T. R. Tough & Associates Ltd., with offices at 408 - 850 West Hastings Street, Vancouver, British Columbia.

I further certify THAT:

1. I am a graduate of the University of British Columbia (1965) and hold a B.Sc. Degree in Geology.
2. I have been practising in my profession for the past seventeen years.
3. I am registered with the Association of Professional Engineers of British Columbia.
4. The information for the accompanying report was obtained from information obtained during numerous trips to the Wigwam Property on October 7 and 8, 1967 and the month of November, 1968, 1970, and November 16, 1979, September, October, 1981; from past records of work carried out by former owners; and from a limited diamond drilling program undertaken by Parmac Mines Ltd. Data was also obtained from the results of Canex Aerial Exploration's program carried out during the summer of 1969 and a review of all available reports of the Minister of Mines of British Columbia.



September 14, 1982
Vancouver, B.C.



YUKON
TERRITORY

BRITISH
COLUMBIA

ALBERTA

PACIFIC
OCEAN

United States

PARMAC MINES LTD. (N.P.L.)

LOCATION MAP

WIGWAM PROPERTY
REVELSTOKE M.D., B.C.

SCALE = 1" = 150 Mi.

REVELSTOKE

PARMAC MINES LTD.

ARROWHEAD

SALENA

UPPER
ARROW
LAKE

SCALE = 1 : 1000,000

ALICE
ARM

PRINCE
GEORGE

KING
RESOURCES

STANNEX MINERALS

PARMAC MINES

COLUMBIA RIVER MINES

PORT HARDY

KAMLOOPS

DUNCAN MINE

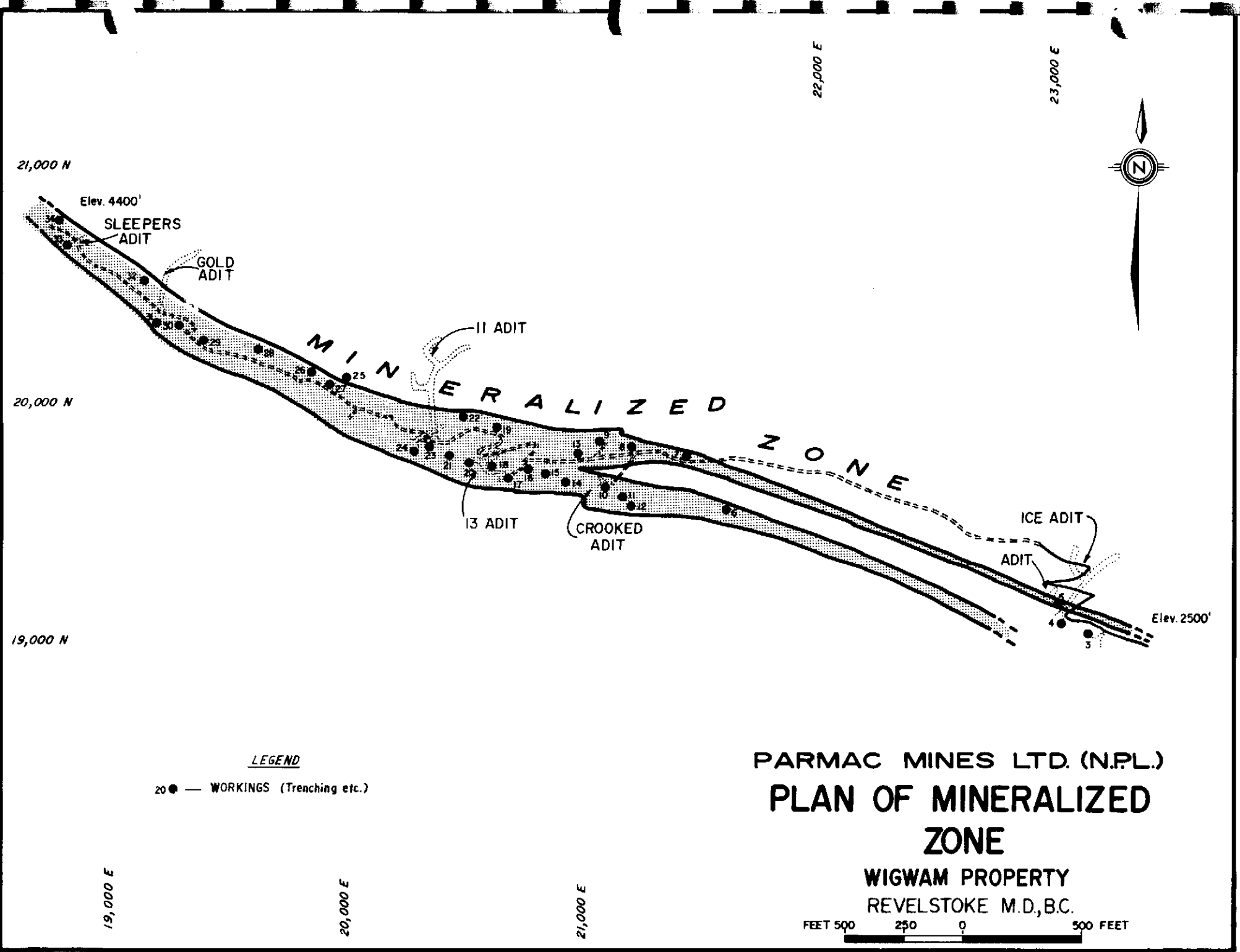
MERRITT

PRINCETON

VANCOUVER

Vancouver
Island





21,000 N

Elev. 4400'

SLEEPERS ADIT

GOLD ADIT

20,000 N

MINERALIZED ZONE

II ADIT

13 ADIT

CROOKED ADIT

ICE ADIT

ADIT

Elev. 2500'

19,000 N

LEGEND

20 ● — WORKINGS (Trenching etc.)

PARMAC MINES LTD. (N.P.L.)
PLAN OF MINERALIZED ZONE

WIGWAM PROPERTY
 REVELSTOKE M.D., B.C.

FEET 500 250 0 500 FEET

19,000 E

20,000 E

21,000 E

22,000 E

23,000 E

CLAIM NO. B.I.G. M.#5

DIAMOND DRILL RECORD

WIGWAM
PROPERTY PARMAC MINES LTD.

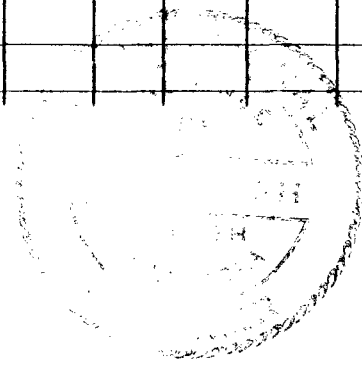
HOLE NO. U-1-81

LATITUDE ELEVATION 3630' BEARING 260° DEPTH 201' STARTED July 31, 1981 COMPLETED August 13, 1981

DEPARTURE SECTION DIP -45° DRILLED BY MIKE MARREN LOGGED BY T.R. TOUGH, P. Eng.

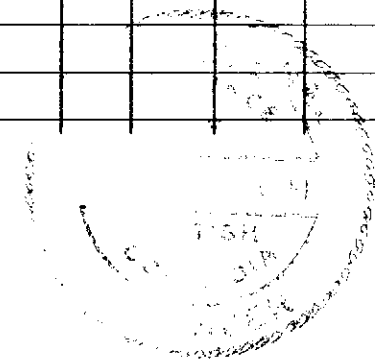
DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS		
						Agoz/T	Pb%	Zn%
0 - 14'	Quartzite - limey, bedding 45° C.A. sericitic, grey							
14 - 19'	Limestone Grey							
19 - 25'	Mineralized Zone - banded sulphides scattered							
25 - 31'	Mineralized Zone - heavy pyrrhotite. sphalerite, galena	0001	19	25	6.0'	Tr	0.07	0.62
31 - 47'	Quartzite, increasing limey to 47' bedding 45° to C.A. minor pyrrhotite bands	0002	25	31	6.0'	0.05	1.09	3.29
47 - 62'	Limestone, quartzitic bands							
62 - 68'	Quartzite Contact 45° to C.A.							
68 - 85'	Limey Quartzite bedding - 30° to C.A.							
85 - 92'	Limestone Xstalline, quartzitic							
92 - 107'	Quartzite limey							
107 - 128'	Lost Core - Cement							
128 - 131'	Quartzite							
131 - 201'	Limestone. Xstalline grey bedding 35° to C.A.							
	End of Hole							

WESTERN MINER-PRESS LTD.
STANDARD FORM NO. 502



CLAIM NO. BIG M #5**DIAMOND DRILL RECORD**PROPERTY WIGWAMHOLE NO. U-2-81LATITUDE ELEVATION 3630 BEARING 080⁰ DEPTH 104' STARTED August 15, 1981 COMPLETED August 17, 1981DEPARTURE SECTION DIP +40⁰ DRILLED BY MIKE MARREN LOGGED BY T.R. TOUGH, P.Eng.

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS		
						Agate	Pb%	Zn%
0 - 10'	Limestone grey, Xstalline							
10 - 15'	Mineralized zone heavy pyrrhotite sphalerite bedding 45 ⁰ to C.A.	0003	10'	15'	5.0'	Tr	0.07	0.15
15 - 21.5'	Quartzite - scattered sulphide bands	0004	21.5	26.5	5.0	Tr	0.13	0.98
21.5-26.5'	Mineralized zones sulphides increasing galena, sphalerite pyrrhotite	0005	26.5	34.0	7.5	0.05	0.76	3.42
26.5 - 34'	Same; better grades	0006	34.0	40.5	6.5	0.05	0.97	1.89
34 - 40.5'	Same; banded sulphides	0007	40.5	48.0	7.5	Tr	0.47	0.47
40.5 - 48'	Mineralized zone high grade pyrrhotite, sphalerite, brecciated textures	0008	61.0	71.0	10.0	Tr	0.18	0.14
48 - 61'	Limestone, quartzitic grey bedding 30 ⁰ to C.A.							
61 - 83'	Quartzitic - limey. Bedding 30 ⁰ to C.A. @70' sulphide bands							
	lessening to 83'							
83 - 104'	Quartzite - limey. Bedding 30 ⁰ to C.A.							
	End of Hole							

WESTERN MINER-PRESS LTD.
STANDARD FORM NO. 502

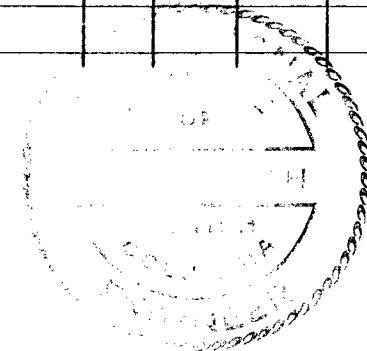
CLAIM NO. *D.L.G. #5***DIAMOND DRILL RECORD**PROPERTY *WIGWAM*HOLE NO. *U-3-81*LATITUDE..... ELEVATION *3630'*BEARING *200°*DEPTH *324'*STARTED *August 19, 1981*COMPLETED *September 3, 1981*

DEPARTURE.....

SECTION.....

DIP *-40°*DRILLED BY *MIKE MARREN*LOGGED BY *T.R. TOUGH, P.Eng.*

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS		
						AgOz/T	Pb%	Zn%
0 - 34'	Limestone, Xstalline bedding 45° to C.A. grey sericitic to 6'							
34 - 43'	Mineralized section - banded sulphides pyrrhotite, sphalerite	0009	34'	43'	9.0'	Tr	0.66	3.43
43 - 54'	Quartzite, slightly limey, bedding 45° to C.A.	0010	54'	59'	5.0'	Tr	0.50	1.82
54 - 66'	Mineralized zone - better grade 54' - 57' scattered bands to 56'	0011	106'	111.5'	5.5'	0.10	1.54	0.14
	bedding 45° to C.A.	0012	111.5'	120'	8.5'	0.10	1.01	0.16
66 - 105'	Quartzite minor sulphides white to 81' more grey and limey after 81'							
	bedding 45° to C.A.							
105 - 120'	Mineralized zone galena increasing from 111.5'							
120 - 140'	Quartzite Bedding 45° to C.A.							
140 - 175'	Limestone quartzitic grey. Bedding 45° to C.A. becomes chloritic from 142 - 166'							
175 - 324'	Limestone, Xstalline, grey bedding 45° to C.A. gouge @232-233' bedding 40° to C.A. @243' End of Hole							

WESTERN MINER-PRESS LTD.
STANDARD FORM NO. 502

CLAIM NO. B.16. n #5

DIAMOND DRILL RECORD

PROPERTY WIGWAMHOLE NO. U-4-81LATITUDE ELEVATION 3630' BEARING 245⁰ DEPTH 243' STARTED September 3, 1981 COMPLETED September 8, 1981DEPARTURE SECTION DIP -40⁰ DRILLED BY MIKE MARREN LOGGED BY T. R. TOUGH, P. Eng.

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS		
						AgOz/T	Pb%	Zn%
0 - 4	Casing							
4 - 22	Limestone Xstalline grey Bedding 15 ⁰ to C.A.							
22 - 30	Mineralized zone pyrrhotite, sphalerite	0013	23'	30'	7.0'	0.10	0.98	3.40
30 - 36	Quartzite buff Bedding 0 - 5 ⁰ to C.A.	0014	35.5'	40.5'	5.0'	Tr	0.18	0.76
36 - 50'	Mineralized Zone limey Bedding 25 ⁰ to C.A.	0015	40.5'	45.5'	5.0'	0.15	2.11	4.86
50 - 59'	Quartzite slightly limey	0016	45.5'	50'	4.5'	Tr	0.03	0.06
59 - 102'	Quartzite, limey grey Bedding 45 ⁰ to C.A. chloritic	0017	79'	85.5'	6.5'	Tr	0.08	0.05
	79 - 85.5' scattered bands of sulphides; bedding 60 ⁰ @94'							
	30 ⁰ @99', 20 ⁰ @101'							
102 - 130	Limestone bedding steepens from 107 - 117' then to 20 ⁰ to C.A.							
	Chloritic from 124 - 130' gouge @130'							
130 - 154	Limestone Xstalline lt. grey Bedding 20 ⁰ to C.A. gouge 154' chlorite							
154 - 170	Limestone dk. grey, chloritic bedding 30 ⁰ to C.A.							
170 - 243	Limestone lt. grey vuggy to 150' Bedding to 15 ⁰ to C.A. @191' Xstalline Bedding 25 ⁰ to C.A.							
	End of Hole							

CORIM NO. R.I.S.M.#5

DIAMOND DRILL RECORD

PROPERTY WIGWAM

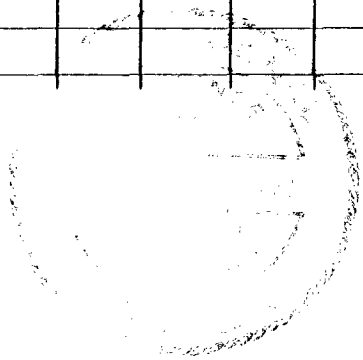
HOLE NO. U-6-81

LATITUDE ELEVATION 3630' BEARING 260° DEPTH 113' STARTED September 13, 1981 COMPLETED September 16, 1981

DEPARTURE SECTION DIP -45° DRILLED BY MIKE MARREN LOGGED BY T.R. TOUGH, P.Eng.

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS		
						AgOz/T	Pb%	Zn%
0 - 10'	Quartzite grey - sulphide @ 6', 9'	0023	10'	14'	4.0'	0.05	1.05	1.52
10 - 20'	Mineralized zone - heavy	0024	14'	18'	4.0'	0.15	1.20	0.86
20 - 37'	Quartzite							
37 - 44'	Limestone Xstalline grey							
44 - 71'	Quartzite limey chloritic bedding 50° to C.A. @52'; 30° to C.A. @67'							
71 - 83'	Limestone grey Xstalline							
83 - 113'	Limestone grey banded, quartzitic, chloritic bedding 30 - 50° at C.A.							
	End of Hole							

WESTERN MINER-PRESS LTD. STANDARD FORM NO. 502



CLAIM NO. B16 M45

DIAMOND DRILL RECORD

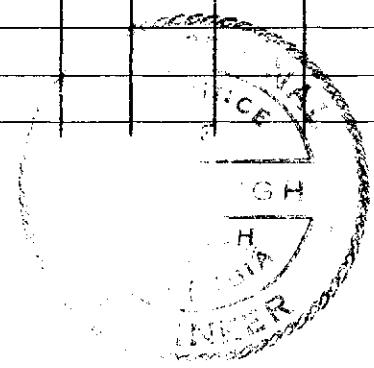
PROPERTY WIGWAM

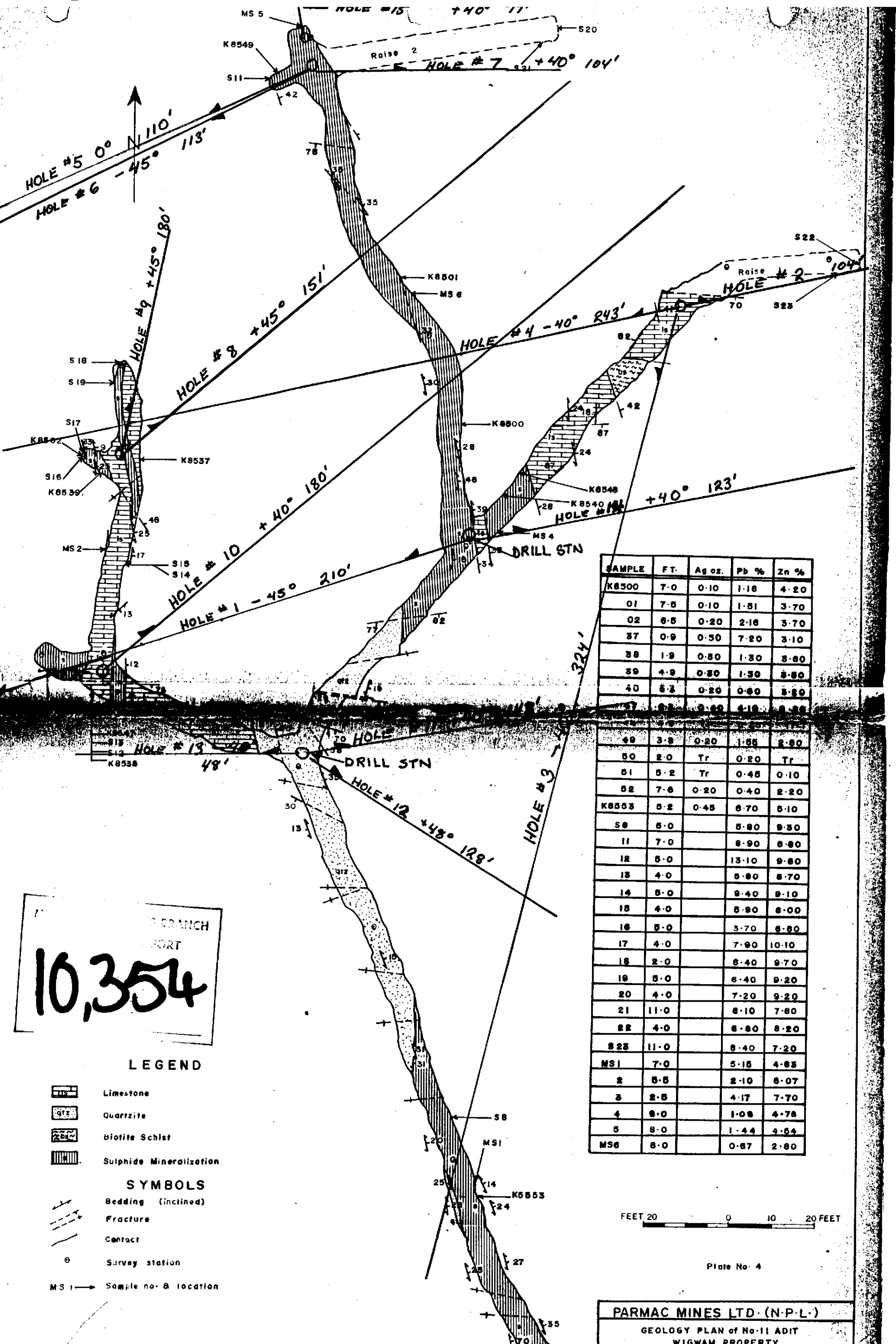
HOLE NO. U-7-81

LATITUDE ELEVATION 3630' BEARING 080° DEPTH 104' STARTED September 16, 1981 COMPLETED September 18, 1981

DEPARTURE SECTION DIP +40° DRILLED BY MIKE MARREN LOGGED BY T.R. TOUGH, P.Eng.





DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS		
						AgOz/T	Pb%	Zn%
0 - 44'	Limestone, Xstalline sericitic 22 - 24' bedding 30° to C.A. oxidized							
	30 - 40' (.ft of core)	0025	53'	62'	9.0'	Tr	0.50	1.01
44 - 54'	Quartzite limey	0026	62'	68'	6.0'	0.15	1.89	3.34
54 - 74'	Mineralized Zone bedding 30° to C.A. @58', 40° to C.A. @74' limey	0027	68'	74'	6.0'	Tr	0.18	0.21
74 - 104'	Limestone, Quartzitic bedding 17° to C.A. @79' small crenulations	0028	30'	ft of core 34'	4.0'	Tr	0.62	1.75
	@93', 95', 96'							
	*Banded suplhides 82' - 88' low grade							
	End of Hole							










BRANCH
PORT
10,354

LEGEND

-  Limestone
-  Quartzite
-  Biotite Schist
-  Sulphide Mineralization

SYMBOLS

-  Bedding (inclined)
-  Fracture
-  Contact
-  Survey station
-  MS 1 → Sample no. & location

SAMPLE	FT.	Ag oz.	Pb %	Zn %
K8500	7.0	0.10	1.18	4.20
01	7.6	0.10	1.51	3.70
02	6.6	0.20	2.16	3.70
37	0.9	0.50	7.20	3.10
38	1.9	0.80	1.30	3.80
39	4.9	0.80	1.30	3.80
40	6.3	0.20	0.80	3.20
37	8.2	0.20	4.18	3.80
49	3.8	0.20	1.55	2.80
50	2.0	Tr	0.20	Tr
51	5.2	Tr	0.45	0.10
52	7.6	0.20	0.40	2.20
K8553	5.2	0.45	6.70	5.10
58	6.0		5.90	9.30
11	7.0		6.90	6.80
12	6.0		13.10	9.60
13	4.0		5.80	6.70
14	6.0		9.40	9.10
15	4.0		5.90	6.00
16	6.0		3.70	6.80
17	4.0		7.90	10.10
18	2.0		6.40	9.70
19	6.0		6.40	9.20
20	4.0		7.20	9.20
21	11.0		8.10	7.80
22	4.0		6.80	8.20
S25	11.0		8.40	7.20
MS1	7.0		5.15	4.65
2	6.5		2.10	6.07
3	2.5		4.17	7.70
4	6.0		1.08	4.78
5	6.0		1.44	4.54
MS6	6.0		0.67	2.80

FEET 20 0 10 20 FEET

Plate No. 4

PARMAC MINES LTD. (N.P.L.)
 GEOLOGY PLAN of No. 11 ADIT
 WIGWAM PROPERTY
 REVELSTOKE MINING DIVISION

Project: P-1
 Drawn By: Tough
 Date: 20 1989

M82K/13W

10 NORTH 92 E

MINERAL RIGHTS TRACT
ASSOCIATION

10354

MT LLEWELYN

MT KENNETH

SELKIRK

CE

LINDA 1336 (10)	LINDA 1337 (10)
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7955K
7955L
7955M
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183 (4)

ADIT II

CROOKED ADIT

18401

DEAN-1 369 (6)	DEAN-2 370 (6)
DEAN-3 371 (6)	DEAN-4 372 (6)

AKOIA

21471 21472
21473 21474

TO WEST SEE MAP 92

Ho