YEIP
87-013
Vol. 1

A SUMMARY REPORT

on the

BARNY PLATINUM - NICKEL PROSPECT
Yukon Territory

for

Rockridge Mining Corporation
and
Pak-Man Resources Inc.

by

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Consulting Geologist

Vancouver, B.C. March 6, 1987.

John S. Vincent, P. Eng.

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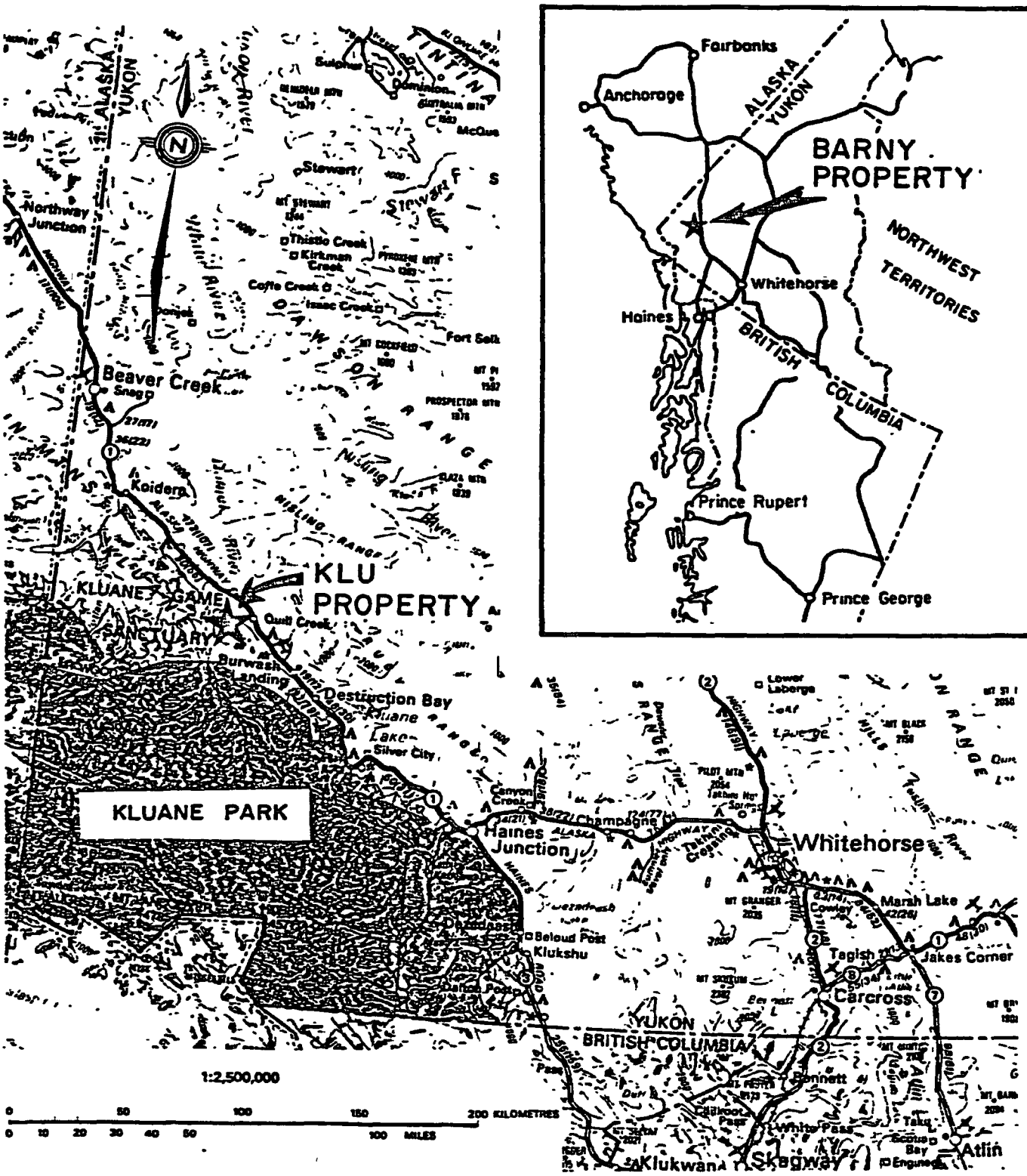
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Rockridge Mining Corporation and Pak-Man Resources Inc.			
BARNY PROPERTY			
LOCATION MAP			
Scale: 1" = 40 miles 1: 2,500,000	Date: February 1987	N.T.S 115-G/5,6	Figure 1
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INTRODUCTION

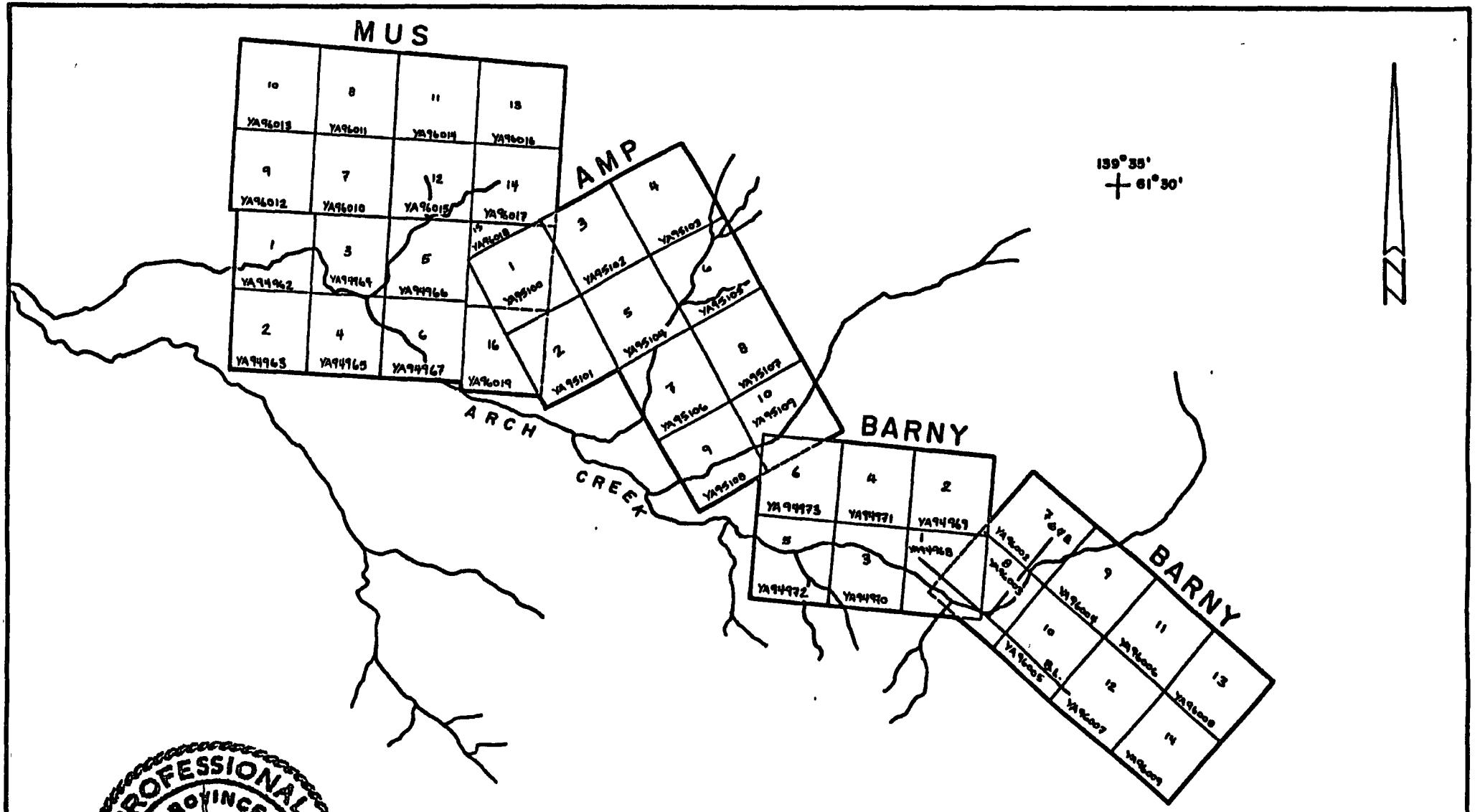
At the request of Mr. Ralph R. Brown, President of Rockridge Mining Corporation, and Mr. F. Marshall Smith, P.Eng., a Director of Pak-Man Resources Inc.,the writer has prepared a summary report on the Barny Platinum-Nickel Prospect which is located two miles northwest of the Wellgreen Mine. The study is based on a review of the compilation and field work carried out by the Kluane Joint Venture over the 1986 field season, and from data compiled in the area by the writer over the period 1970 - 1972. At that time the Wellgreen Mine was studied in detail and exploration was carried out over the claim blocks adjoining to the northwest and southeast. This work was carried out by the Nickel Syndicate under the writer's supervision.

The various claim holdings along the 10 mile belt were assembled by the Kluane Joint Venture over the 1986 season, and the BARNY group has been optioned to Rockridge Mining Corporation and Pak-Man Resources Inc. The Kluane Joint Venture consists of Chevron Minerals Ltd., 50%, and All-North Resources Ltd.,50%, and the latter is currently acting as the Operator.

The body of this report consists of a review of past work, a description of the claims, a description of the geology and distribution of metal values, and recommendations for the continued evaluation and exploration of the property.

PROPERTY, LOCATION & ACCESS

The Barny Prospect is located in the western Yukon Territory approximately 200 miles northwest of Whitehorse, and immediately west of Mile 1111 on the Alaska Highway; Figure 1. Road access is available from Mile 10 on the Wellgreen Mine road, which leaves the Alaska Highway at Mile 1111. At this point a rough two wheel drive road leads on into the Arch Creek valley and the old Nickel



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BARNY PROPERTY

CLAIM MAP

Scale: 1" = 1/2 mile 1 : 30,000 approx.	Date: February 1987	N.T.S. 115-G/5	Figure: 2

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Syndicate camp.
Arch Creek flows northwesterly into the Donjek River, and abundant streams drain into Arch Creek from the adjacent slopes. The upper Arch valley is V-shaped with a relatively steep and narrow profile. Evergreens grow more abundantly on the northern side of the valley to an average elevation of 4600 feet. Buck brush tends to create trying conditions, but above the 5500 foot elevation slopes are grassed and relatively barren.

The claims are plotted on Sheet 115 G-5 & 12, and held by Archer, Cathro and Associates (1981) Limited on behalf of the Kluane Joint Venture.
Rockridge and Pak-Man Resources Inc. have acquired the property from the Joint Venture under the terms of an Option Agreement.
The following tabulation is reproduced from Schedule "A" as attached to the Agreement dated December 12th, 1986.

Claim Name	Grant No.	Expiry Date
Barny 1	YA 94968	June 12, 1987
Barny 2	YA 94969	"
Barny 3.	YA 94970	"
Barny 4	YA 94971	"
Barny 5	YA 94972	"
Barny 6	YA 94973	"
Barny 7	YA 96002	Aug.22, 1987
Barny 8	YA 96003	"
Barny 9	YA 96004	"
Barny 10	YA 96005	"
Barny 11	YA 96006	"
Barny 12	YA 96007	"
Barny 13	YA 96008	"
Barny 14	YA 96009	"
Mus 1	YA 94962	June 12, 1987
Mus 2	YA 94963	"
Mus 3	YA 94964	"
Mus 4	YA 94965	"
Mus 5	YA 94966	"
Mus 6	YA 94967	"
Mus 7	YA 96010	Aug. 27, 1987
Mus 8	YA 96011	"

Mus 9	YA 96012	Aug. 27, 1987
Mus 10	YA 96013	"
Mus 11	YA 96014	"
Mus 12	YA 96015	"
Mus 13	YA 96016	"
Mus 14	YA 96017	"
Mus 15	YA 96018	"
Mus 16	YA 96019	"
Amp 1	YA 95100	July 11, 1987
Amp 2	YA 95101	"
Amp 3	YA 95102	"
Amp 4	YA 95103	"
Amp 5	YA 95104	"
Amp 6	YA 95105	"
Amp 7	YA 95106	"
Amp 8	YA 95107	"
Amp 9	YA 95108	"
Amp 10	YA 95109	"

The Barny and Mus claims were staked by Archer Cathro and the Amp claims were acquired by option from Mr. Graham Davidson through an agreement dated December 4th, 1986.

Although the writer has not had an opportunity to examine the claim posts, the work of Archer, Cathro and Associates is well regarded, and there is no hesitation in accepting their results.

HISTORY & PREVIOUS WORK

The current Barny group of claims covers several sulphide showings which have been staked intermittently since 1952, when the adjacent Wellgreen-Quill Creek discovery was being explored. The Nickel Syndicate explored the area under the supervision of the writer over the period 1971-1972. During this time the results of earlier efforts were compiled and utilized as effectively as possible. Several magetometer surveys had been carried out over the years using a variety of instrumentation. The Syndicate confirmed these results with an up-dated detailed survey; Figure 6, A,B,& C. Mr. R. Hilker, P.Eng. had carried out

mag and VLF-electromagnetic surveys in 1967, and the trace of these condictors is also shown on Figure 6. The Nickel Syndicate program included detailed geological mapping, sampling, magnetometer surveying, and bulldozer trenching.

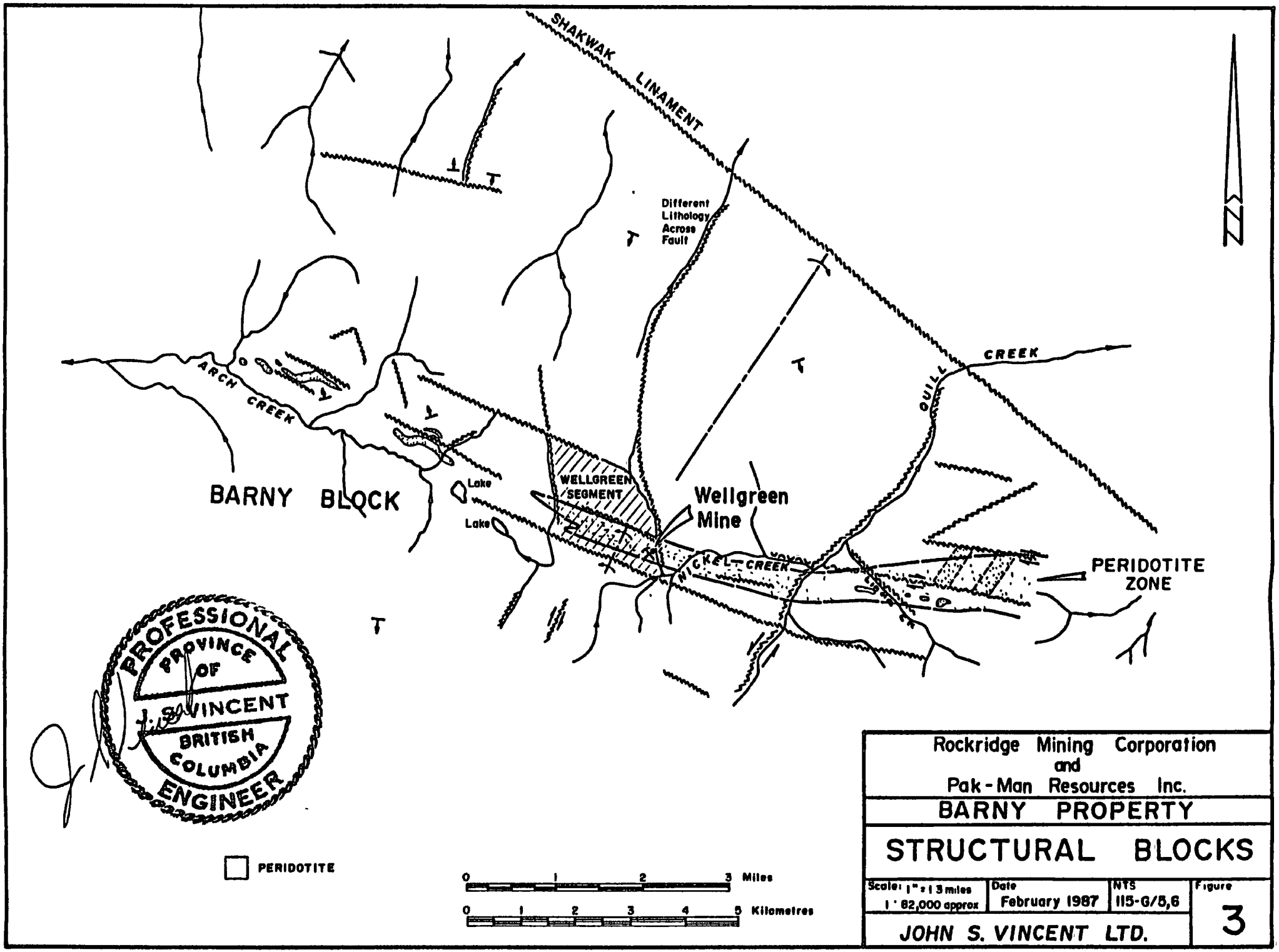
GEOLOGY

Regional Setting:

The Wellgreen Belt, which includes the BARNY Prospect, is located 4 miles south of the Shakwak Trench which separates the rugged St. Elias Mountains to the southwest from the Yukon Plateau to the northeast. The Trench is a major crustal break which trends northwesterly through the western Yukon.

The rocks of the St. Elias consist of an older core of metamorphic and granitic material and a folded and faulted sequence of mid-Paleozoic to lower Cretaceous volcanics and sediments. These sequences were intruded during the Triassic by Komatiitic ultramafic complexes of peridotite, gabbro, and dunite. In G.S.C. Memoir 340 Dr. Muller groups the sedimentary and volcanic rock types, and distinguishes three main volcanic packages: the Dezadeash being the oldest, the Cache Creek, and the Mush Lake as the youngest.

The structural fabric of lithology, thrust faults, and the traces of fold axis trend northwesterly at 110°-130°. Northerly-draining creeks reflect cross-cutting lineaments which dissect the Kluane Ranges along the northeast flank of the St. Elias Mountains. Folding and faulting can be observed on a variety of scales. Figure 3 is a schematic sketch of the Wellgreen Belt which illustrates the relationship between the fault and fracture systems, and the broad distribution of ultramafic bodies between Arch Creek on the northwest, through the Wellgreen Mine area, to



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BARNY PROPERTY

STRUCTURAL BLOCKS

Scale: 1" = 1 3 miles 1 : 82,000 approx	Date February 1987	NTS 115-G/5,6	Figure 3

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WELLGREEN BELT MAP

KLUANE DISTRICT, YUKON





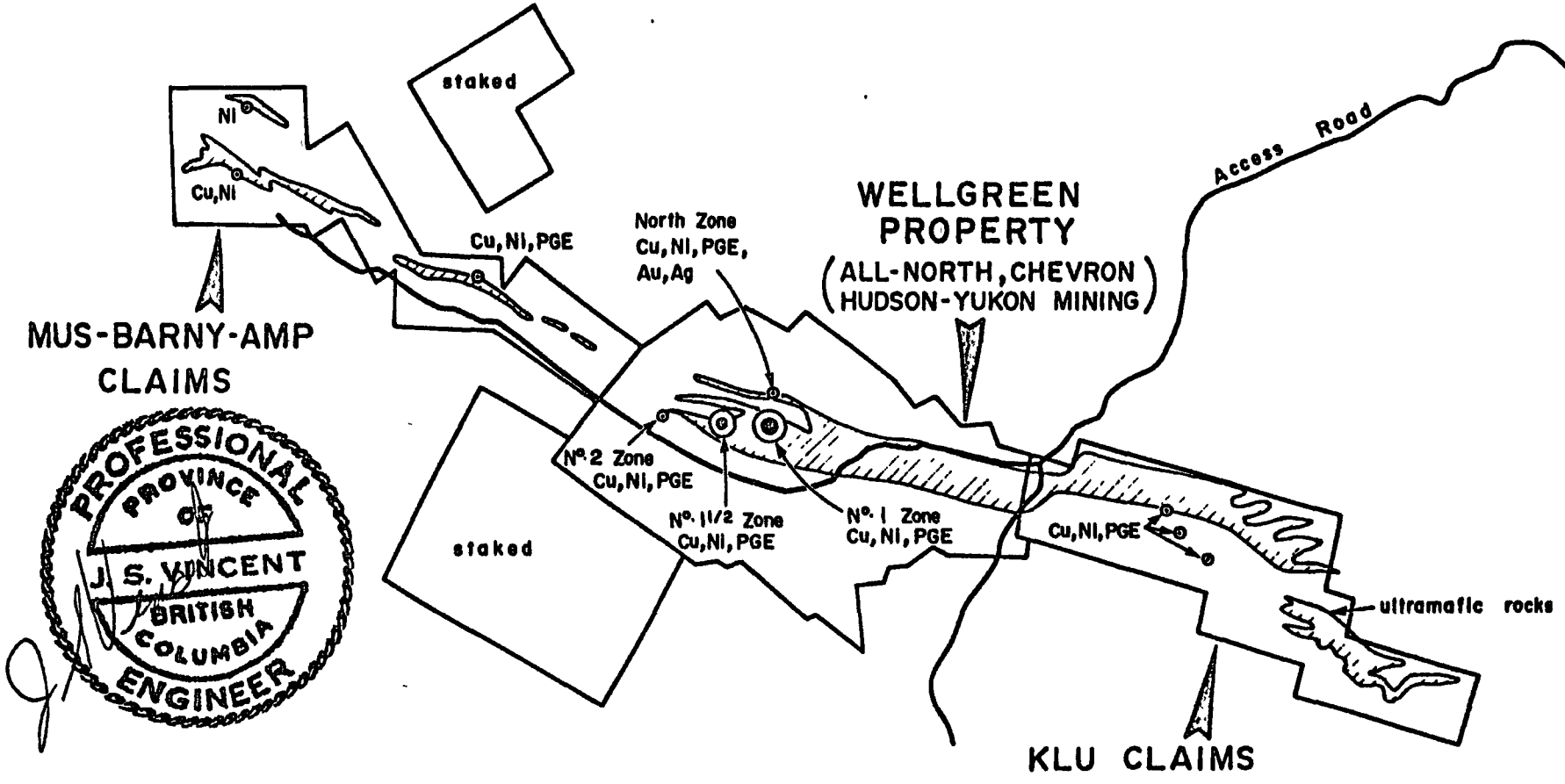


Figure 4

Linda Creek to the southeast. The latter block may be displaced a few hundred feet to the northeast relative to the Wellgreen block.

Nickel - copper occurrences are spread along a strike length of 100 miles through the Kluane District southwest of the Shakwak Trench. The Dickson Creek prospect in the southeast, the Wellgreen Mine in the center, and the Canalask property in the far northwest of the Kluane map sheet are of economic significance. These deposits are found in a similar geologic setting in association with peridotites, gabbros and strongly fractured and sheared sedimentary wall rock.

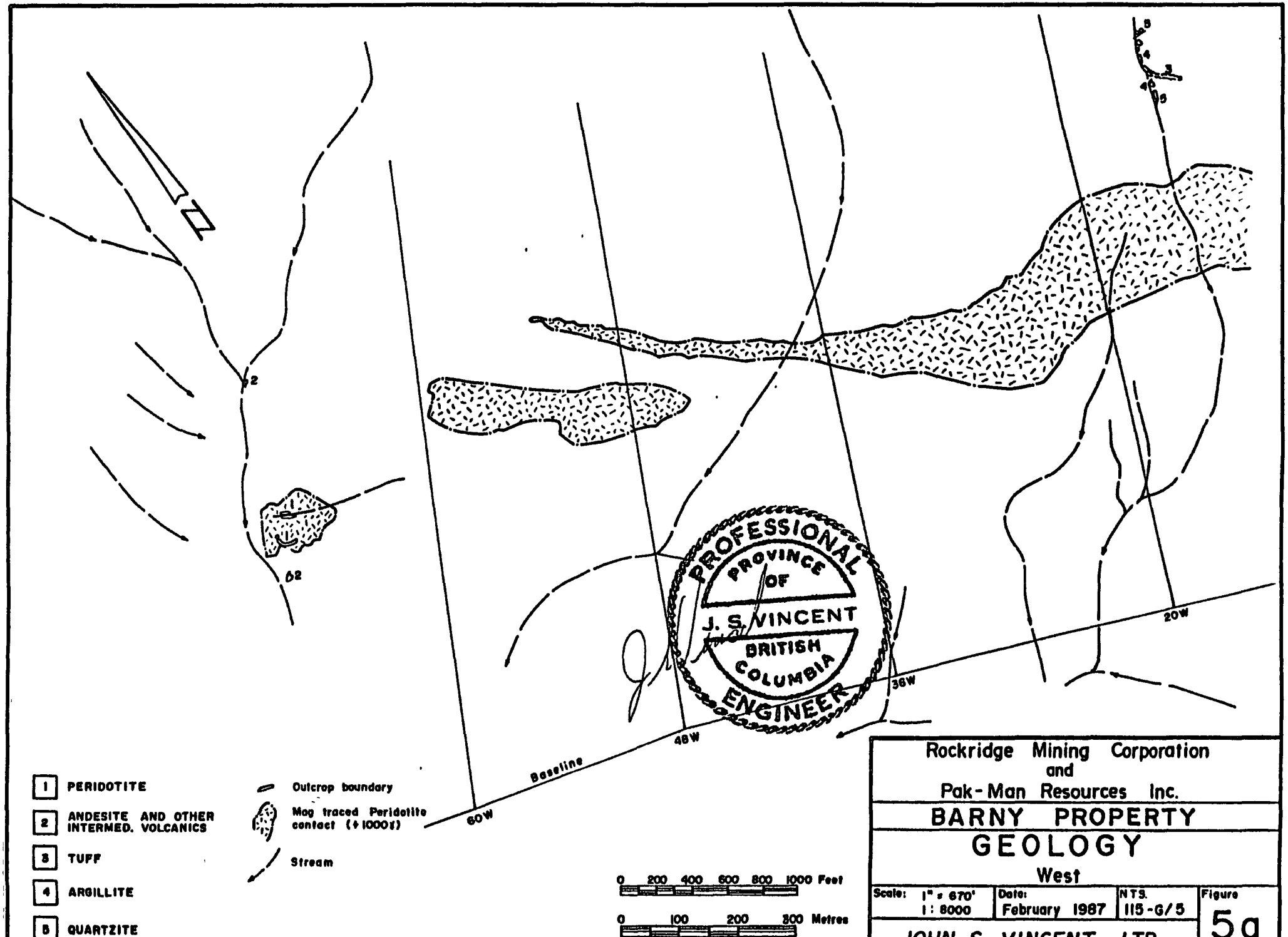
Within the area cover by Figure 3 several significant sulphide prospects occur along a 3 mile strike length. The Wellgreen Mine in the center is a former producer which shipped nickel-copper concentrates to Japan during 1972 and 1973. At the time of closure in 1973 the proven ore reserve hosted by heavy sulphide mineralization was calculated at 626,430 tons grading 2.04% nickel, 1.45% copper, 0.065% cobalt, and 0.030 ounces of platinum and 0.024 ounces of palladium per ton. Surface sampling in 1986 by the Kluane Joint Venture returned values ranging up to 0.193 ounces of platinum and 0.210 ounces of palladium per ton from stockwork sulphide stringers in a gabbroic host rock within the mine area. The other platinum group elements (PGE) are also present in very significant amounts. Recent work by the GSC which confirms the Komatiite relationship and relative high PGE values is of particular significance because of the demonstrated favourable economic potential. Typical occurrences which are well documented in the literature are the Kambalda deposits in Western Australia and the Langmuir deposit near Timmins, Ontario. (Cabri,1981) The Kambalda area was initially of interest for its gold deposits, and the sulphides have an average gold content of 400

ppb in comparison to <200 ppb in comparative deposits. It is also very significant that placer gold has been mined from the Burwash Creek drainage at the southeast extremity of the Wellgreen Belt, approximately 20 miles southeast of the Barny Property. In addition, soil geochemistry on the Wellgreen Property demonstrates a good correlation between the gold signature and the underlying target areas of interest.

Massive sulphide occurrences in a geologic setting similar to the Wellgreen occur to the northwest in the area drained by the upper reaches of Arch Creek. This prospect is covered by the Barny claim group. To the southeast, platiniferous sulphides hosted by the same Komatiitic ultramafic sequence have been sampled in the Linda Creek drainage.

Barny Setting:

The claim group is underlain by a northerly-dipping stratigraphic section of arenaceous sediments with occasional fossiliferous limestones, and intermixed volcanic tuffs and breccias. These rocks have been assigned to the Lower Permian Station Creek Formation, a locally differentiated unit within the Permian to Triassic Cache Creek Group. During the Triassic the package was intruded by an ultramafic complex of peridotite and gabbro. Subsequent serpentinization has obscured many of the textural relationships. Since the writer has had the opportunity to study and explore the ultramafic complex and related sulphide mineralization along the 10 mile Wellgreen belt,and at the Canalask nickel deposit 50 miles to the northwest, there is a good data base from which to evaluate and discuss the economic potential on the various properties presently being explored by the Kluane Joint Venture. The best exposure was provided by the Wellgreen Mine, a mile southeast of the Barny prospect, when the writer spent several days underground and in the mine office reviewing active records.



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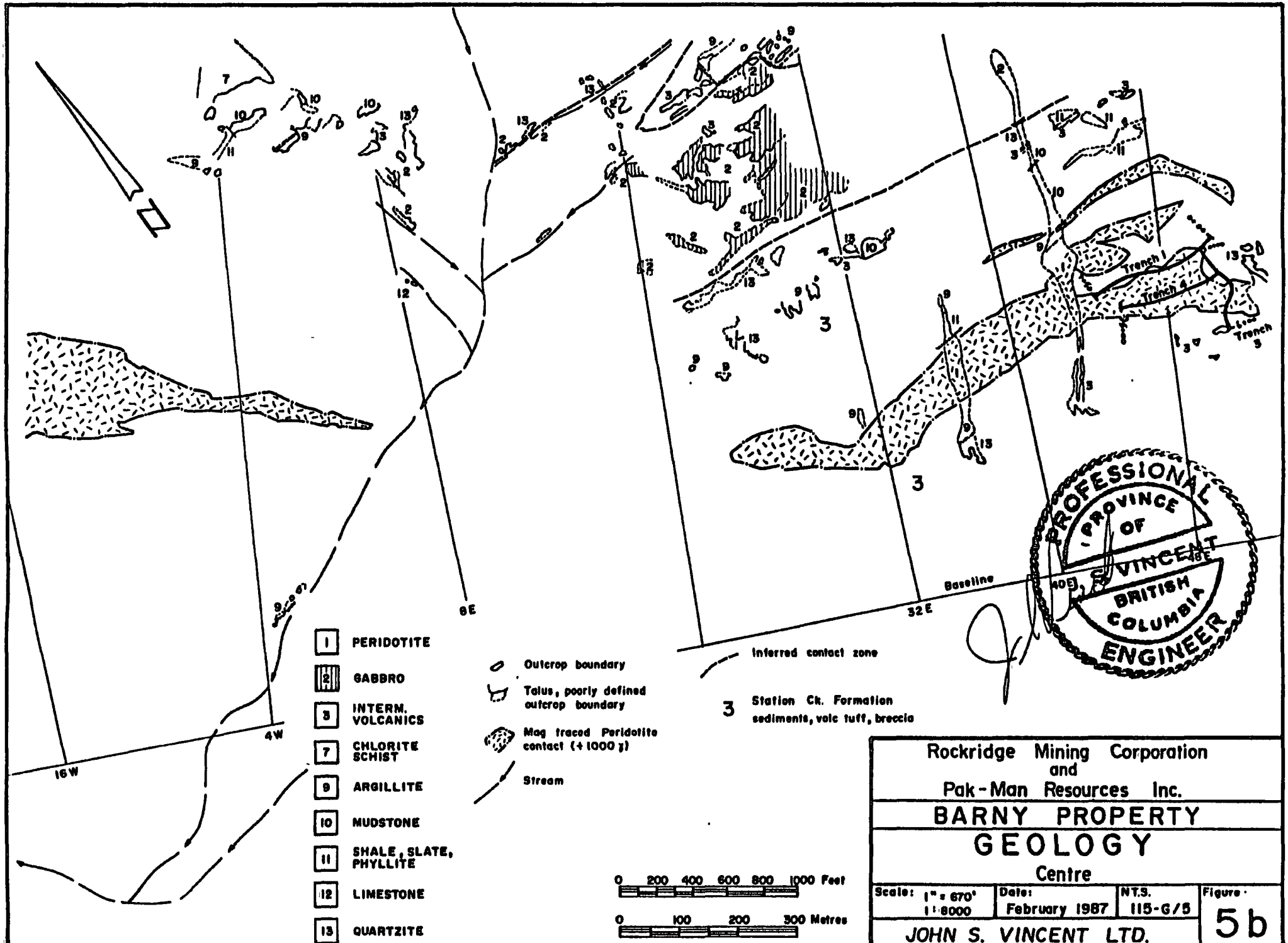
BARNY PROPERTY

GEOLOGY

West

Scale:	Date:	NTS.	Figure
1" = 670' 1 : 8000	February 1987	115-G/5	5a

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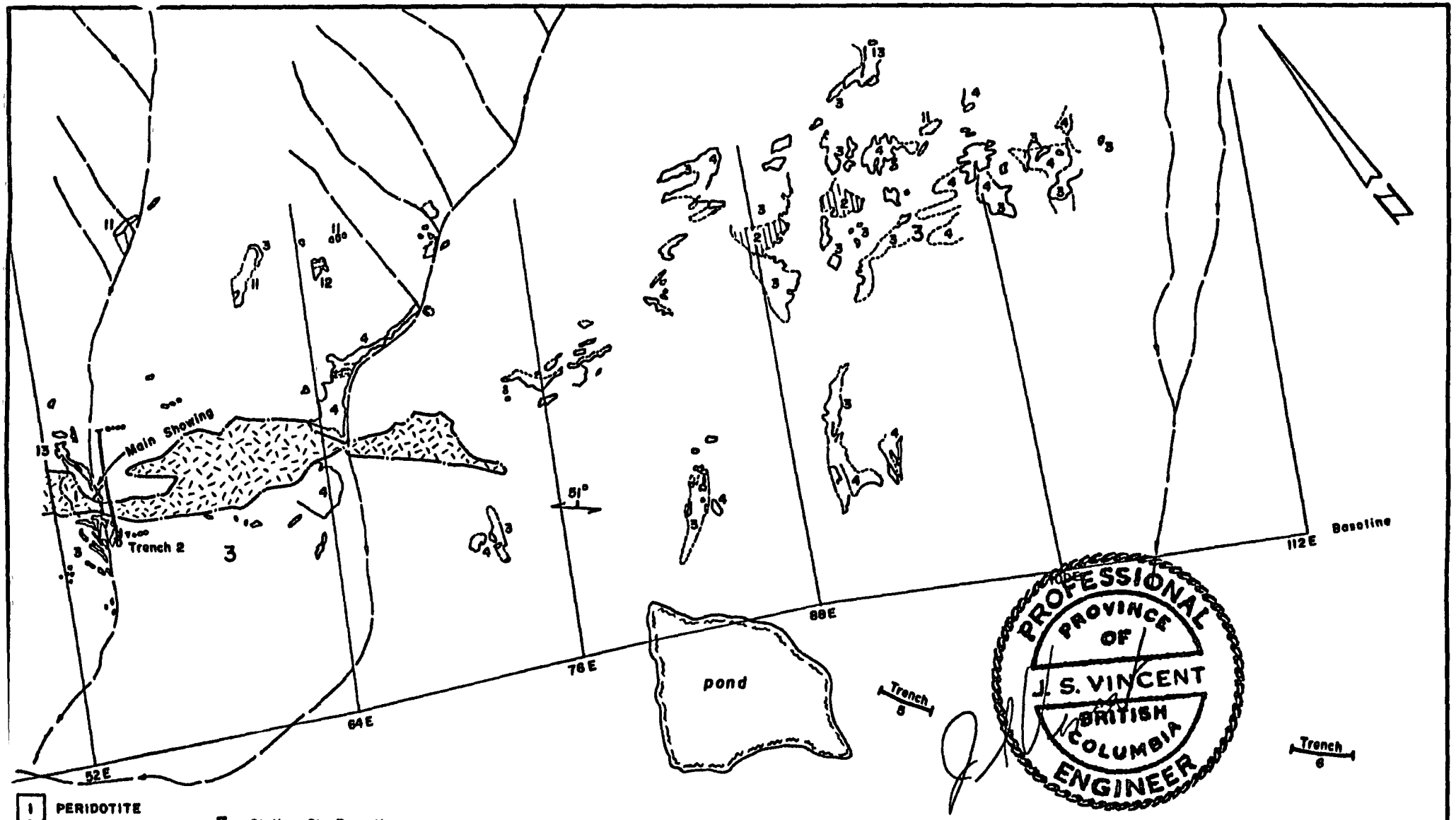
BARNY PROPERTY

GEOLOGY

Centre

Scale:	Date:	N.T.S.	Figure:
1" = 670' 1:8000	February 1987	115-G/5	5b

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1 PERIDOTITE
2 GABBRO
3 INTERMED. VOLCANICS
4 ACIDIC VOLCANICS
11 SHALE, SLATE, PHYLLITE
12 LIMESTONE
13 QUARTZITE

3 - Station Ck. Formation sediments, volc. tuff, breccia, flows

51° Cleavage attitude

Outcrop boundary

Talus, poorly defined outcrop boundary

Mag traced Peridotite contact (+1000γ)

Stream

0 200 400 600 800 1000 Feet

0 100 200 300 Metres

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BARNY PROPERTY

GEOLOGY

East

Scale:	Date:	NTS	Figure:
1" = 670' 1:8000	February 1987	115 - G/5	5c

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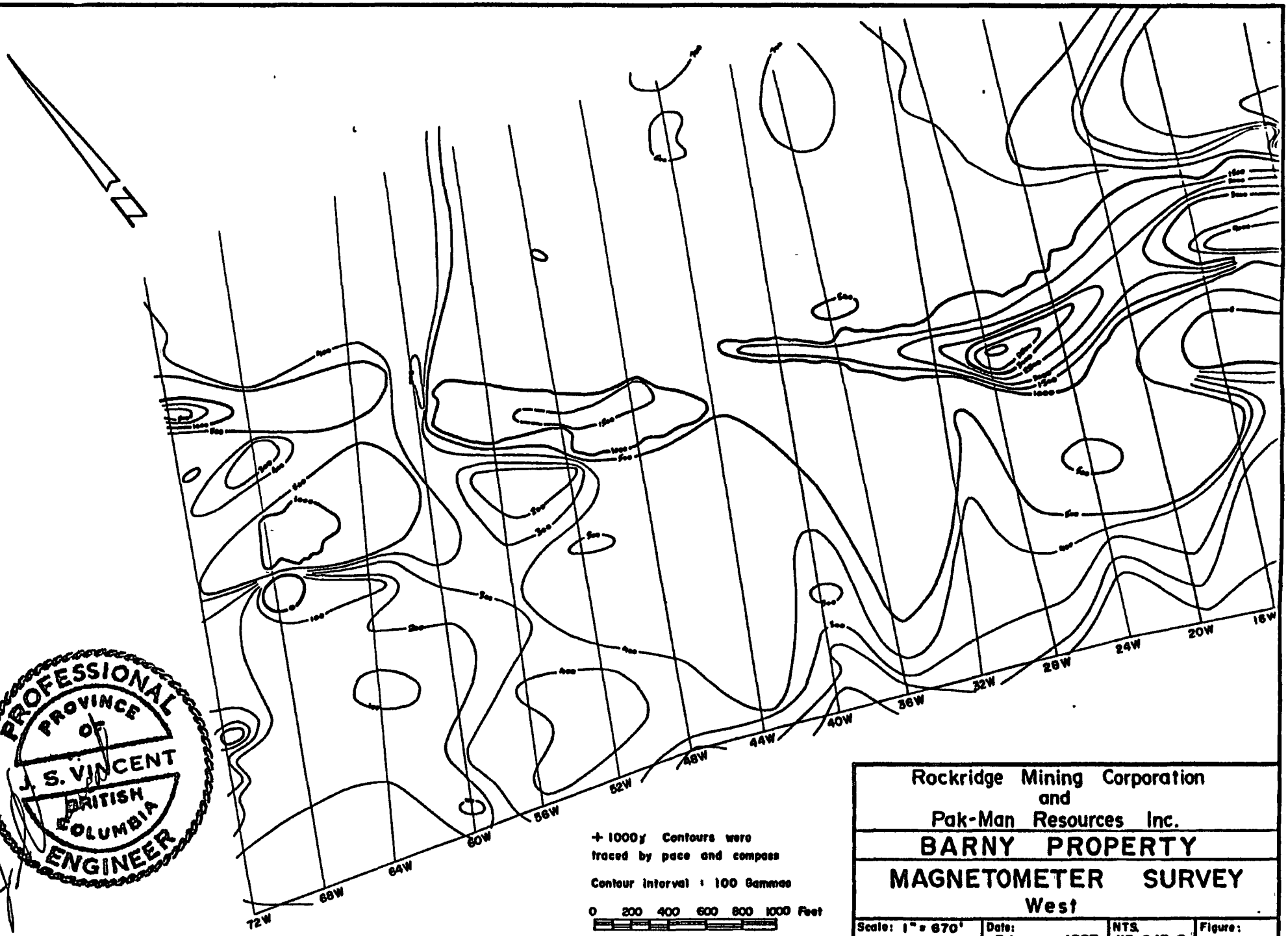
The ultramafic complex exposed on the Barny claims is represented by serpentinized peridotite and gabbro. The bodies are roughly conformable with the enclosing stratigraphy, and work along the Kluane Belt over the years has shown the complex to be generally sill-like.

The peridotite is usually serpentinized, dark greenish-black and medium grained. It weathers dark green with brown limonite spots and frequent white to greenish white coatings of calcite. Slickensided scaly fractures are common and dominate weathered material. The peridotite is strongly magnetic.

In thin section the rock consists of rounded masses and belted aggregates of relict olivine. Approximately 10% of the rock is made up of interstitial orthopyroxene (Sinclair, 1971).

Figure 5 illustrates the outline of areas underlain be peridotite and gabbro as mapped by the Nickel Syndicate. Figure 6 shows the magnetic signature of these rocks and demonstrates the good correlation of the response with geology. The ultramafic unit is split between the two bodies outlined along the total strike length of 15,000 feet. The main sulphide showing is located in the central portion of the eastern body. This segment is 5,000 feet long and up to 900 feet wide. The western body has a similar sinuous outline and extends for 7000 along strike

The gabbros resemble the varieties found at the Wellgreen. The rock is composed mainly of chloritized pyroxenes and altered plagioclase laths with occasional small patches of serpentine. At chilled margins the fine grained phases are easily confused with volcanic rocks. A mix of intrusive features between the peridotite and gabbro suggests a degree of contemporaniety. Extensive studies by others in areas of ultrmafic complexes have led to the



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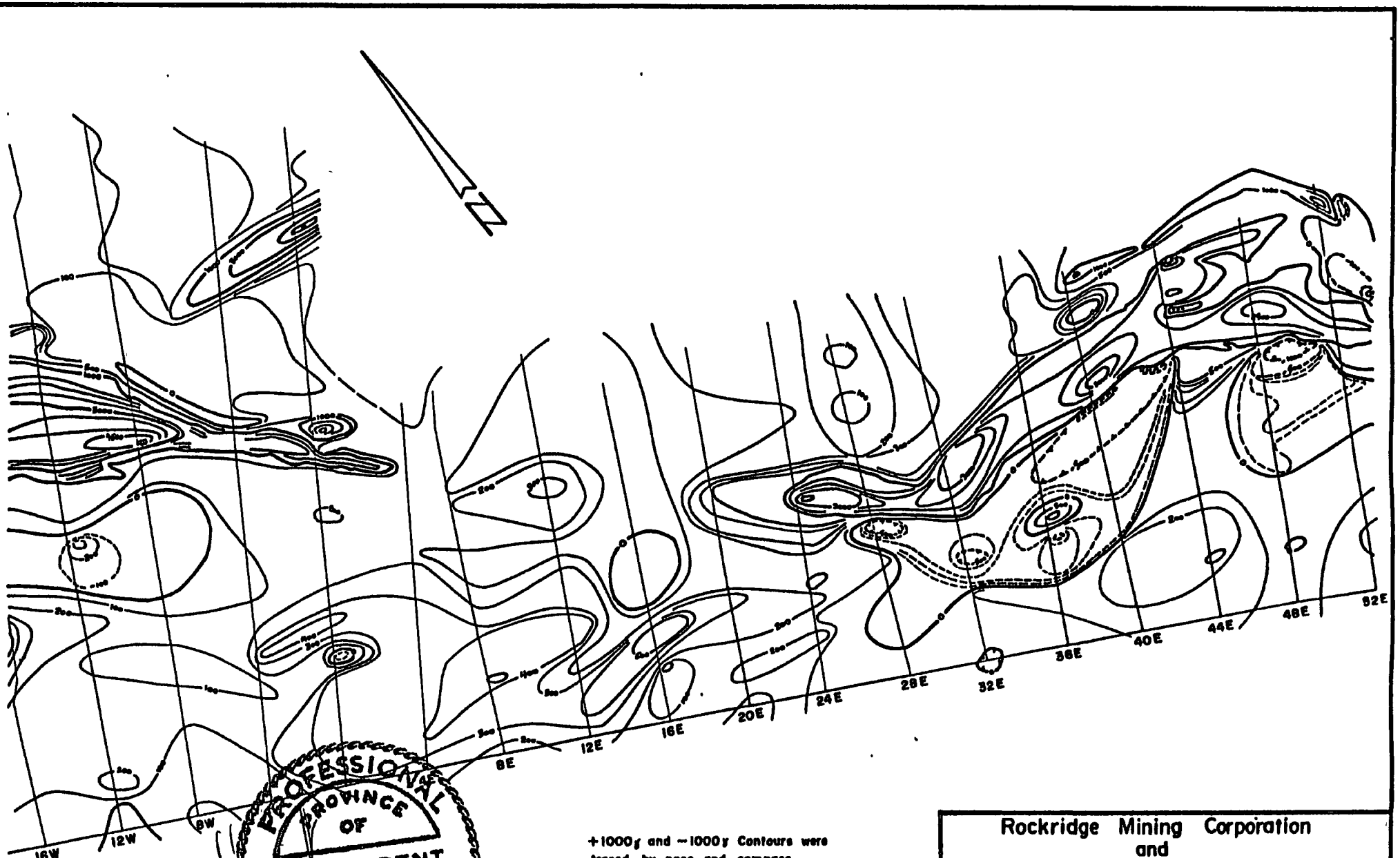
BARNY PROPERTY

MAGNETOMETER SURVEY

West

Scale: 1" = 670' 1 : 8000	Date: February 1987	NTS 115-G/5,6	Figure: 6a

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+1000γ and −1000γ Contours were traced by pace and compass

Contour Interval : 100 Gammas

0 200 400 600 800 1000 Feet

0 100 200 300 Metres

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BARNY PROPERTY			
MAGNETOMETER SURVEY Centre			
Scale: 1" = 670' 1:8000	Date: February 1987	NTS 115-G/5,6	Figure 6b
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+1000γ and −1000γ Contours were traced by pace and compass

Contour Interval : 100 Gammas

0 200 400 600 800 1000 Feet

0 100 200 300 Metres

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BARNY PROPERTY

MAGNETOMETER SURVEY

East

Scale:	Date:	N.T.S.	Figure.
1" = 670' 1:8000	February 1987	115-G/5,6	6c

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conclusion that they were emplaced together as crystal mushes. Thus, mutually intrusive and gradational relationships can be observed. Magmatic differentiation is evident in the sequence of events, and the sulphide components would also be part of the later phases of the process. Interstitial mineralization can be expected, as well as sulphide deposition along faults and fractures. It is also likely that different ages of sulphides will be available from the melt, probably with varying metal contents.

Observations made by the writer at the Wellgreen Mine support these thoughts, and also confirm an intimate association of interstitial nickeliferous sulphides with the gabbroic phase of the complex. Thus, it is evident that these rocks are an economically important portion of the mafic-ultrmafic complex.

Mineralization:

The two main types of mineralization mapped by the Nickel Syndicate were the disseminated sulphides in gabbro, and massive stringers and zones localized by fractures in close proximity to the peridotite and gabbro. Table 1 compiles the sample results and descriptions of a number of sulphide occurrences mapped. The grid references tie into Figures 5 and 6 which illustrates the Syndicate survey grid. These picket lines can likely be found and the re-located grid used for the continuing work.

In a report to the Nickel Syndicate dated October 5, 1971, the writer recorded personal sample results along with those reported by previous examiners. The main exposure along upper Arch Creek which was sampled by the writer consisted of a 3 foot wide zone of massive sulphide along the contact between serpentinite and tuffs. A hand trench had opened up the showing for 15 feet along strike. The following assay results were obtained.

	Sample	Copper	Nickel
#4327	Tuffs	0.12%	0.22%
4328	Massive sulphide, 3 ft	1.05	3.00
4329	Serpentinite, 10 ft	0.20	0.32

Sampling by previous examiners were reported as follows:

Hilker, Massive sulphide	2.56%	3.78%
52 ft. composite	0.32	--
Gavin, 3.5x38 ft composite	1.79	2.03
Gibbons, 120 ft. composite	0.12	0.53
Prospector, Massive sulphide		
float	2.50	3.90
grab sample	0.83	0.27

A sample of massive sulphide mineralization from the main showing collected by F.A. Campbell in 1955, which was assayed for PGE by Falconbridge, returned values of 0.045 oz/ton platinum, 0.044 oz/ton palladium and 0.012 oz/ton rhodium.

The mineralization exposed in Arch Creek is similar in occurrence to the material on the Wellgreen Property 12,000 feet along strike to the southeast, and continued work is justified to evaluate the potential for further mineralization.

Trenching:

A total of 6 trenches were cut in the fall of 1972 located as shown on Figure 4 a, which moved 13,000 cubic yards of material. The following Tables 2 through 7 have been extracted from the Nickel Syndicate report, and present the results of the sampling carried out in the cuts. Copper and nickel values are reported in parts per million (ppm), and determinations were made using aqua-regia and hot ascorbic acid extractions. The latter extracts only sulphide-hosted nickel, whereas aqua-regia removes total nickel from both sulphides and silicate minerals.

Trenches 1-4 were cut through the northern side and contact area of the eastern peridotite body, and the background metal values are strong through the ultramafic.

TABLE OF MINERAL OCCURRENCES

Ref.#	Location	Host Rock	Structural Control	Type	Associated Metallics	Assay Values Cu	Assay Values Ni	Remarks
1	8E 30N	Gabbro/ Chert	Fracture filling at shear contact	Very fine grained massive; mainly iron oxide containing rare sulphide specs	Magnetite, Pyrite	<0.01%	0.02%	Extent unknown, 30 cm long slabs recovered from overgrown rubble
2	16E 28.5N	Gabbro/ Chert	Fracture filling at shear contact	Iron sulphide coarse crystalline cubic pyrite accumulations	Pyrite	550ppm	20ppm	Narrow zones, traced for 30 feet
3	36E 10N	Peridotite/ Argillite	Fracture filling at shear contact south of peridotite body	Cu-Ni sulphide massive, layered	Pyrrhotite, Chalcopyrite, Pyrite	0.06%	0.26%	Finger thick segmented tabular bodies in 1 ft wide shear zone, traced for 6 ft.
4	4.5E 16N	Cherts	Fracture filling + coating south of 120° striking fault	Cu-Ni sulphide oxidized	Malachite, little chalcopyrite, minor Pyrrhotite	1.74%	0.28%	2 patchy indications of mineralization, 3 ft. across
5	53.5E 14N	Large chert xenolith at peridotite contact	Fracture filling at shear contact Mineralized zone truncated at east end	Cu-Ni-Fe sulphide Massive	Pyrrhotite, Marcasite, Pentlandite, Chalcopyrite	Massive form 1.05% 3.00% in peridotite 0.20% 0.32% in chert 0.12%	0.22%	Exposure variable up to 3 ft. wide, 20 ft. long. Zone is open to west, cut off by fault at east end
6	Approx. 65E 15N	Peridotite/ m.volcanic	Fracture filling along shear zone	Sulphide	Pyrrhotite, Pyrite	Not analysed		2 ft. wide mainly covered mineralized zone traced for 5 ft.

Table 1.

Ref.#	Location	Host Rock	Structural Control	Type	Associated Metallics	Assay Values Cu	Ni	Remarks
7	84E	Fine grained Gabbro	Close northerly of fault (110/62S)	Disseminated iron sulphides. Irreg. specs, 1 mm across. Randomly distributed; 1%	Pyrite	0.01%	<0.01%	Occurrence traced for 40 ft.
8	84E 8.5N	Gabbro		Same as under #7	Pyrite	0.02%	0.01%	Traced for 20 ft. Occurrence related to #7
9	84E 17N	Gabbro		Same as under #7	Pyrite	0.01%	<0.01%	Traced for 30 ft. Similar appearance as #7

Table I.

Station	width	depth 1	depth 2	Sample no	Rpm Rpm Au	Rpm Rpm Ni	Rpm Rpm Au Cu	Rpm Rpm Ni	Remarks	Yards
0+00	14	6	3	7101	485	1600	210	570		
									peridotite rubble	116.67
1+00	15	5	3	7102	500	1250	215	435		
									peridotite rubble	194.75
2+00	17	8	5	7103	670	1750	180	745		
									peridotite rubble	107.84
3+00	15	4	2	7104	370	365	330	185		
									mostly peridotite	134.57
4+00	16	7	5	7105	325	1700	180	510		
										177.78
5+00	15	6	4	7106	125	375	62	120		
									peridotite	420.37
6+00	20	15	12	7116	278	1750	135	1600		
										845.68
7+00	20	17	13	7115	465	1800	265	785		
									peridotite	510.80
	16			7114	229	780	135	270		TOTAL 2548.46

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Scale 1"=100'

ARCH GROUP
TRENCH TR-1
OCT 1-72

Station	Width	depth1	depth2
	15	2	5
1+00	20	6	10
2+00	22	6	10
3+00	22	9	12
4+00	23	7	10
5+00	24	5	7
6+00	18	5	7
7+00	15	4	4



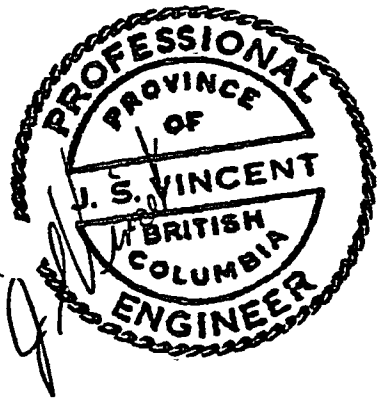
Sample no	ppm Aqua Regia Cu	Ni	Hot Ammonium Acetate Acid Cu	Ni	Remarks	Yards
7123	91	117	32	30	Volcanic	
					frost 15'	205.25
7124	89	132	215	40	intrusive.	
					gouge, 10'	355.56
7125	127	178	90	50	Massive volc	
					gouge 5'	454.95
7126	240	1675	170	770	peridotite	
						480.96
7127	254	1850	150	830	peridotite	
					Contact	335.29
7128	180	800	90	255	Volcanic	
						204.94
					Volcanic	
						164.81
					Volcanic	Total 2292.95

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Scale 1" = 100'

ACME CLAIMS GROUP
TRENCH No. 72-2
OCT 1, 1972

Station	width	depth 1	depth 2	Sample no	Aqua Regia Cu	Aqua Regia Ni	Hydrochloric Cu	Hydrochloric Ni	Remarks	Yards
0+00	20	4	4						peridotite/gneiss	340.74
1+00	35	6	6	7107	116	570	90	195		
									peridotite	427.16
2+00	46	7	8	7108	528	1800	285	650		
									peridotite	386.82
3+00	20	7	6	7109	760	2475	440	960		
									peridotite	223.46
4+00	20	5	5	7110	350	1085	215	345		
									peridotite	156.17
5+00	18	4	4	7111	325	1140	210	410		
									peridotite	120.90
6+00	15	4	4	7112	1000	2400	800	1525		
									TOTAL	1554.94



Scale 1" = 100'

ARCH GROUP
TRENCH No. 72-3
OCT. 2 72

Station	Width	depth 1	depth 2	Sample no	ppm Aqua regia Cu	ppm Aqua regia Ni	ppm H_2O_2 ascorbic Cu	ppm H_2O_2 ascorbic Ni	Remarks	Yards
0+00	18	3	2	7117	410	1150	285	690	peridotite nubble	72.84
1+00	15	4	2	7118	266	1175	20	360		90.12
				7119	300	1675	165	695		
2+00	14	5	3	7120	430	1625	230	600	peridotite	167.28
3+00	14	8	4	7121	188	640	145	355		217.4
4+00	15	7	5	7122	148	595	95	230	peridotite	222.22
									Total	770.36 cu yds
5+00	15	8	6							
6+00										

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. S. VINCENT

Scale 1" = 100'

ADCH Claims
TRENCH NO 72-4
Oct. 27 1972

Station	Width	Depth 1	Depth 2	Sample No	Cu	Ni	Cu	Ni	Remarks	yards
0+00	15	4	4	7129	91	110				
							Tan		gravel	96.30
1+00	18	4	4	7130	72	78				
							gravel			132.72
2+00	20	3	5	7131	90	109				
							gravel			85.19
3+00	20	1	2	7132	76	90				

Travel 314.21

Scale 1" = 100'

ARCH GROUP
TRENCH 72-5
Oct. 3 1972

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. S. VINCENT

Station	Width	depth 1	depth 2	Sample no	Aqua Regia Cu	Aqua Regia Ni	Remarks	yards
0+00	12	2	3	7133	94	130		
							Volcanic	72.53
1+00	15	3	4	7134	130	122		
							Volcanic	110.19
2+00	14	4	5	7135	103	97		
							volcanic	129.94
3+00	15	4	5	7136	111	96		
								108.64
4+00	13	3	4	7137	118	102	Volcanic	
								108.64
5+00	15	4	5	7138	108	108	gravel	
								112.94
6+00	15	3	4	7139	109	79	gravel	
								84.26
7+00	14	3	3	7140	90	78		
			4	7141	99	80	gravel	41.05
								TOTAL 768.21

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA H.S. VINCENT

1" = 100'

ARCH GROOP
TRENCH NO 6
OCT. 3 1972

Sampling & Analytical Work:

It is to be expected that the distribution of the platinum group elements will be heterogeneous both at the scale of the deposit and within a sample. Within a given deposit there will be significant variations between rock types, sulphide phases, and mineralogical differences. At the Wellgreen, for instance, analytical results from samples collected during the 1986 program show that apparently weakly mineralized gabbro low in copper and nickel values has an important PGE content. Thus, visual evaluation is not sufficient. Within a sample erratic concentrations can also create spurious analytical results. As a result, sample size and preparation become very important considerations in the design of evaluation studies.

Bondar-Clegg and Co. Ltd. has carried out the analytical work for both the Nickel Syndicate and the Kluane Joint Venture, and their work is considered very reliable. Their services are widely accepted by the industry. Following a rigorous checking of their expertise and techniques, Chevron chose them to do the analytical work on their Stillwater Platinum project in Montana. Where all the PGE elements are to assayed for, the initial element collection phase of the procedure utilizes the nickel sulphide fusion technique developed in South Africa. With this method Iridium and Osmium losses are avoided. If only platinum and palladium analysis are required a lead collection method is used. In either case, neutron activation analysis (NAA) is used to determine the PGE content.

In summary, work on the area now covered by the Barny claim group over the period 1953 to 1986 has found nickeliferous sulphide mineralization similar in composition and host rock to that mined at the Wellgreen Mine two miles to the southeast. Preliminary sampling has indicated an appreciable platinum-palladium content

to the sulphides. The Barny prospect lies within the Wellgreen Belt which has a very favourable economic potential, and continued exploration and evaluation is fully justified.

RECOMMENDATIONS

It is recommended that a 2-Phase program be carried out to evaluate the distribution and economic potential of the platinum group elements and the hosting nickeliferous sulphides found to date. Soil sampling, geophysical surveying, trenching, and diamond drilling will be required. Although soil sampling is perhaps not generally regarded as effective for platinum, orientation surveys over the Wellgreen deposit have demonstrated that it is a useful tool for these local conditions. Soil profiles over the zones on the Barny Prospect can be sampled for orientation, and a proper survey initiated accordingly. The work should be planned as follows:

Phase 1:

Establish a survey grid, and collect soil samples to be analysed for copper, nickel, platinum, palladium, cobalt, chromium, gold, and silver. It may be possible to re-locate the Nickel Syndicate grid. Preliminary to this, examine and sample the soil profile at selected spots for orientation purposes. Carry out gradiometer-magnetic and VLF electromagnetic surveys, and follow-up anomalous signatures with induced polarization techniques. The sensitivity provided by the gradiometer may well delineate between the gabbro and peridotite host rocks and the varying sulphide content. Soil sampling has proven effective over the Wellgreen deposit, and this combination of geophysical methods has responded favourably in orientation surveys carried out over

selected areas of known mineralization.
Target areas will then be evaluated by bulldozer trenching and diamond drilling.

Phase 2:
Contingent on positive results from the initial phase, continued drilling will be required to assess the areas of mineralization and favourable geology.

COST ESTIMATE

Phase 1:

Personnel:			
Project Geologist: 3 mos @ $5000		$15,000	
Geochem Crew:		7,000	
Benefits @ 15%		3,300	$25,300
Personnel Costs:			
Camp Costs; Est. 250 man days @ $25			$ 6,250
Transportation:			
a) Travel;		2,000	
b) 2 1/2 trucks mos @ $1,500		3,750	5,750
Grid:			
Estimate 75 Km @ $200			15,000
Geophysics:			
Estimate			$10,000
Analytical:			
a) Soils;	600 @ $15	$ 9,000	
b) Assay;	600 @ 25	15,000	
	100 @ 75	7,500	31,500
Bulldozer:			
Trenching and drill roads;			
Estimate 50 hours @ $120			6,000

Drilling:	
Allow for 500 meters of BQ @ $130 per meter, all in cost	65,000
Supplies:	
Allow	5,000
Consulting & Supervision:	7,500
O.H. & Administration:	15,000
Total	$192,300

Allow $192,000

Phase 2:

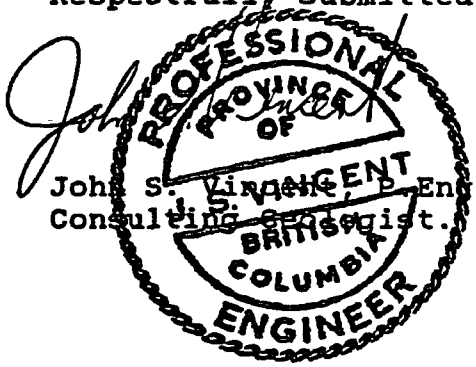
Personnel:	
Project Geologist; 2 mos @ $5,000	$10,000
Benefits @ 15%	1,500
Personnel Costs:	
Estimate 60 days @ $25	1,500
Transportation:	
Estimate 2 truck mos @ $1,500	3,000
Bulldozer:	
Estimate	5,000
Drilling:	
Allow for 1,000 meters of BQ @ $130 per meter, all in cost	130,000
Assays:	
Estimate 250 @ $75	$18,750
Supplies:	3,000

Reporting:	5,000
Supervision & Consulting:	7,500
O.H. & Administration:	15,000
Total	$ 200,250

Allow $ 200,000

Total Phase 1 and 2: $ 392,000

Respectfully submitted,



John S. Vincent, P. Eng.
Consulting Geologist.

Vancouver, B.C.,
March 6, 1987.

REFERENCES

Campbell, F.A. Nickeliferous Sulphide Deposits and Associated Basic Rocks at Quill Creek & White River, Yukon Territory; MSc. Thesis, Queen's University, April, 1956.

Vincent, J.S. Report on The Wellgreen Mine Quill Creek, Yukon Territory for The Nickel Syndicate; Private files, November 1972.

Campbell, S.A. Geology and Genesis of Copper Deposits and Associated Host Rocks In And Near The Quill Creek Area, Southwestern Yukon; PhD Thesis, UBC., April, 1981.

Economic Geology Volume 81, No. 5, August 1986; An issue devoted to Platinum deposits.

Cabri, L.J. Platinum-Group Elements; Mineralogy, Geology, Recovery; CIM Special Vol. 23, 1981.

Muller, J.E. Kluane Lake Map Area, Y.T.; GSC Memoir 340.

Nickel Syndicate, Private Files on the programs carried out through the Kluane District; 1971-1973.

CERTIFICATE

I, John S. Vincent, P. Eng., of Vancouver, British Columbia, do hereby certify that:

1. I am a Consulting Geologist with offices located at 530-800 West Pender St., Vancouver, B.C.

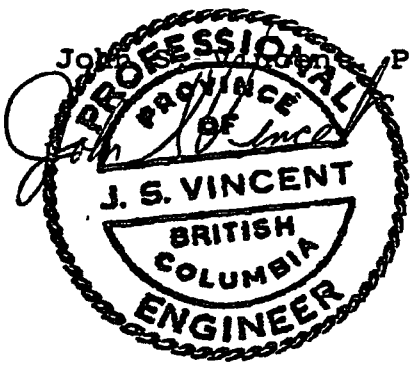
2. I am a graduate of Queen's University, Kingston, Ont., B.Sc. 1959, and a graduate of McGill Univ. in Montreal, M.Sc. 1962. Both degrees being in Mining Geology.

3. I have practiced my profession continuously for 27 years. I am a member in good standing of the Association of Professional Engineers of British Columbia, and a Fellow of the Geological Association of Canada.

4. The data upon which this report has been prepared is based on a review of files compiled by the Kluane Joint Venture, and on the writer's direct field experience in the area over the period 1970-1973.

5. I have no interest direct or indirect in the securities or properties of All-North Resources Ltd., Rockridge Mining Corporation, 2001 Resource Industries Ltd., or Pak-Man Resources Inc.

John S. Vincent, P.Eng.



Vancouver, B.C.,
March 6, 1987.

John S. Vincent, P. Eng.

ARCHER, CATHRO
& ASSOCIATES (1981) LIMITED
CONSULTING GEOLOGICAL ENGINEERS

1016 - 510 West Hastings Street
Vancouver, B.C. V6B 1L8
(604) 688-2568

March 3, 1987

Mr. J.S. Vincent,
530 - 800 West Pender Street,
Vancouver, B.C.
V6C 2V6

Dear Jack:

This letter will confirm that the KLU, Barny and MUS claims were staked by Archer, Cathro & Associates (1981) Limited personnel according to the normal industry practice under the Yukon Quartz Mining Act. Posts for those claims staked prior to September, 1986 were examined to ensure that they were clearly visible and standing up.

The Amp claims were staked by geologist Graham Davidson and we have not had the opportunity yet to check on their accuracy of location or quality of staking. However, we have no reason to doubt that they were staked correctly.

Yours truly,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

R.J. Cathro.

/mc

BOX 4127, 3125 THIRD AVENUE, WHITEHORSE, Y.T. Y1A 3S9 (403) 667-4415

ARCHER, CATHRO
& ASSOCIATES (1981) LIMITED
CONSULTING GEOLOGICAL ENGINEERS

1016 - 510 WEST HASTINGS STREET
VANCOUVER B C V6B 1L8 (604) 688-2568

SUMMARY REPORT

on

1987 EXPLORATION

ARCH PROPERTY

(BARNY, MUS, AMP and EUGENE CLAIMS)

Performed for

Pak-Man Resources Inc

Rockridge Mining Corporation and

Kluane Joint Venture

R J Cathro, B A Sc , P Eng

December, 1987

BOX 4127, 3125 THIRD AVENUE WHITEHORSE Y T Y1A 3S9 (403) 667-4415

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	PAGE
INTRODUCTION	1
PROPERTY, LOCATION AND ACCESS	2
HISTORY AND PREVIOUS WORK	3
1987 WORK PROGRAM	4
REGIONAL GEOLOGY	6
PROPERTY GEOLOGY	8
MINERALIZATION	11
GEOCHEMISTRY	14
SUMMARY AND RECOMMENDATIONS	15

TABLES

I	Table of Formations, Kluane Ultramafic Belt	Following Page 6
II	Significant 1987 Assays	Following Page 11

APPENDIX

I Results of VLF-EM and Proton Gradiometer Survey

NO	FIGURES	LOCATION
1	Location Kluane Platinum Belt	Following Page 2
2	Property Location	Following Page 2
3	Claim and Sample Location, East	In Pocket
4	Claim and Sample Location, Central	In Pocket
5	Claim and Sample Location, West	In Pocket
6	Geology, East	In Pocket
7	Geology, Central	In Pocket
8	Geology, West	In Pocket
9	Platinum Geochemistry, East	In Pocket
10	Platinum Geochemistry, Central	In Pocket
11	Platinum Geochemistry, West	In Pocket
12	Palladium Geochemistry, East	In Pocket
13	Palladium Geochemistry, Central	In Pocket
14	Palladium Geochemistry, West	In Pocket
15	Copper Geochemistry, East	In Pocket
16	Copper Geochemistry, Central	In Pocket
17	Copper Geochemistry, West	In Pocket
18	Nickel Geochemistry, East	In Pocket
19	Nickel Geochemistry, Central	In Pocket
20	Nickel Geochemistry, West	In Pocket
21	Gold Geochemistry, East	In Pocket
22	Gold Geochemistry, Central	In Pocket
23	Gold Geochemistry, West	In Pocket
24	Geophysical Compilation, East	In Pocket
25	Geophysical Compilation, Central	In Pocket
26	Geophysical Compilation, West	In Pocket
27	Compilation Map	In Pocket

INTRODUCTION

The Arch Property was acquired by staking and option in 1986 by Archer, Cathro & Associates (1981) Limited on behalf of Kluane Joint Venture (Chevron Minerals Ltd. and All-North Resources Ltd) to cover the extension of the Quill Creek Ultramafic Complex west of the Wellgreen Property Additional claims were added during the 1987 field season In December, 1986 the Joint Venture entered into an option agreement with Pak-Man Resources Inc and Rockridge Mining Corporation, which subsequently funded an exploration program for platinum group elements (PGE), nickel and copper The program consisted of grid layout, mapping, geochemical soil sampling, rock sampling, geophysical surveys and road construction and was performed between mid-June and early October by an Archer, Cathro crew based at the Wellgreen camp.

PROPERTY, LOCATION AND ACCESS

The 120 claim Arch Property is located in southwestern Yukon, 320 km northwest of Whitehorse at latitude 60°27' and longitude 139°25' on NTS claim map 115G/6 (see Figures 1 and 2 on the following pages). It is centred on Arch Creek, a tributary of Donjek River, and adjoins the west end of the Wellgreen Property Elevations range from about 1980 m (6500 feet) on ridge crests to 1070 m (3500 feet) on Lower Arch Creek.

An access road extends from the Wellgreen Property, which is reached by a 14 km all-weather road from the Alaska Highway. The access road was repaired and locally rebuilt in 1987 and now extends 5 km from Wellgreen.

The claims are registered with the Whitehorse Mining Recorder as follows:

Claim Name	Grant Numbers	Expiry Date
Barny 1-6	YA94968-YA94973	February 11, 1992
Barny 7-14	YA96002-YA96009	February 11, 1992
Barny 15-32	YA96863-YA96880	February 11, 1992
Barny 33F-38F	YA97896-YA97901	February 11, 1992
Barny 39	YA97902	February 11, 1992
Barny 40F	YA97903	February 11, 1992
Barny 41	YA97904	February 11, 1992
Barny 42F	YA97905	February 11, 1993
Barny 43	YA97906	February 11, 1993
Barny 44F	YA97907	February 11, 1993
Barny 45	YA97908	February 11, 1993
Barny 46F	YA97909	February 11, 1993
Barny 47	YA97910	February 11, 1993
Barney 48F	YA97911	February 11, 1993
Barney 49	YA97912	February 11, 1993
Barny 50F	YB08307	October 2, 1988
Mus 1-6	YA94962-YA94967	February 11, 1992
Mus 7-16	YA96010-YA96019	February 11, 1992
Amp 1-10	YA95100-YA95109	February 11, 1992
Eugene 1-44	YB08097-YB08140	September 25, 1988

The Amp claims are held by Kluane Joint Venture under an option agreement from a prospector, Graham Davidson The other claims were acquired by staking. The Eugene group was added to the north late in the season to cover a gold target. Claim locations are shown on Figures 3 to 5 (in pockets).

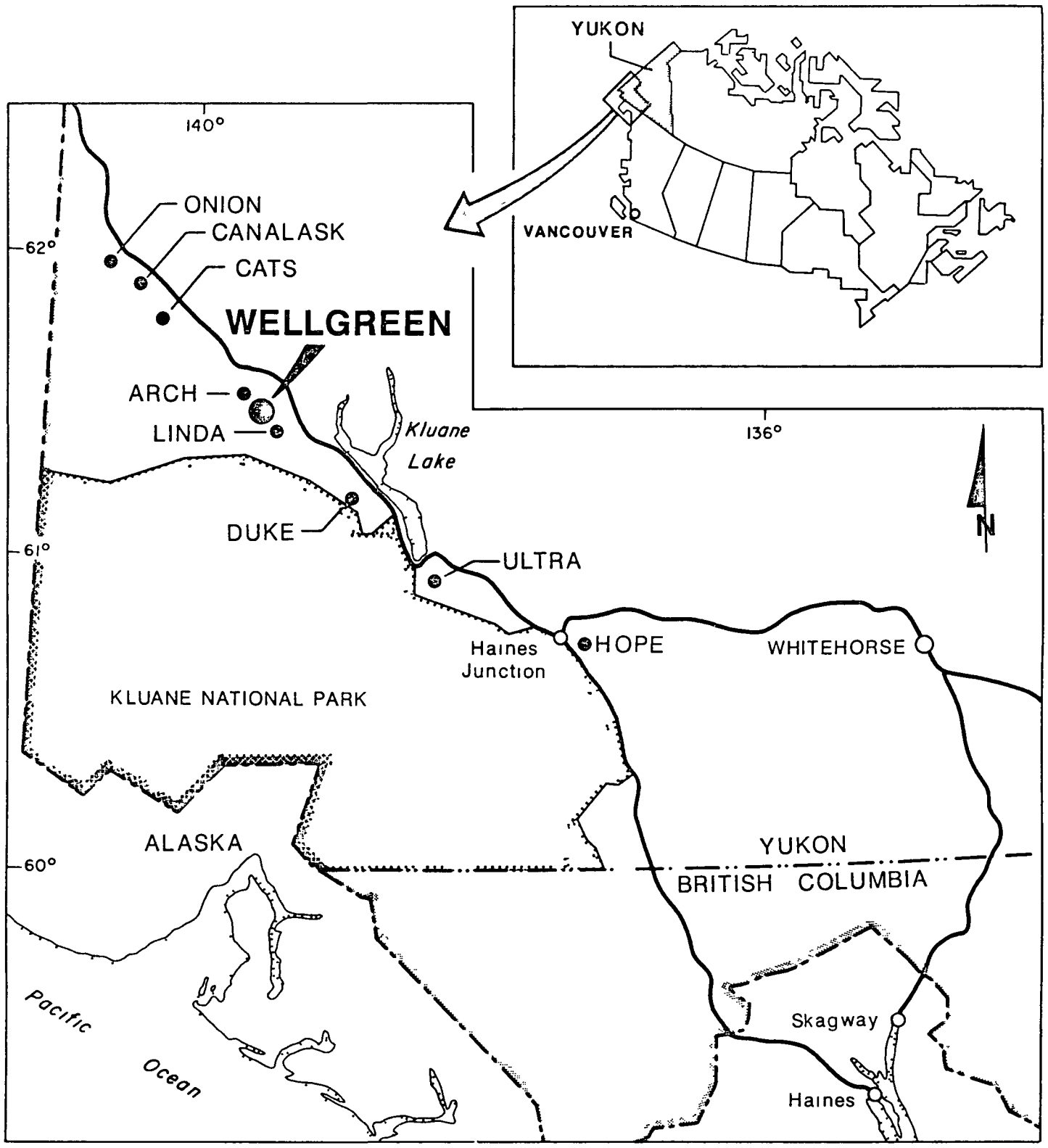


Figure 1

LOCATION

KLUANE PLATANUM BELT

YUKON, CANADA

PAK-MAN RESOURCES LTD

ROCKRIDGE MINING CORPORATION

Figure 2

PROPERTY LOCATION

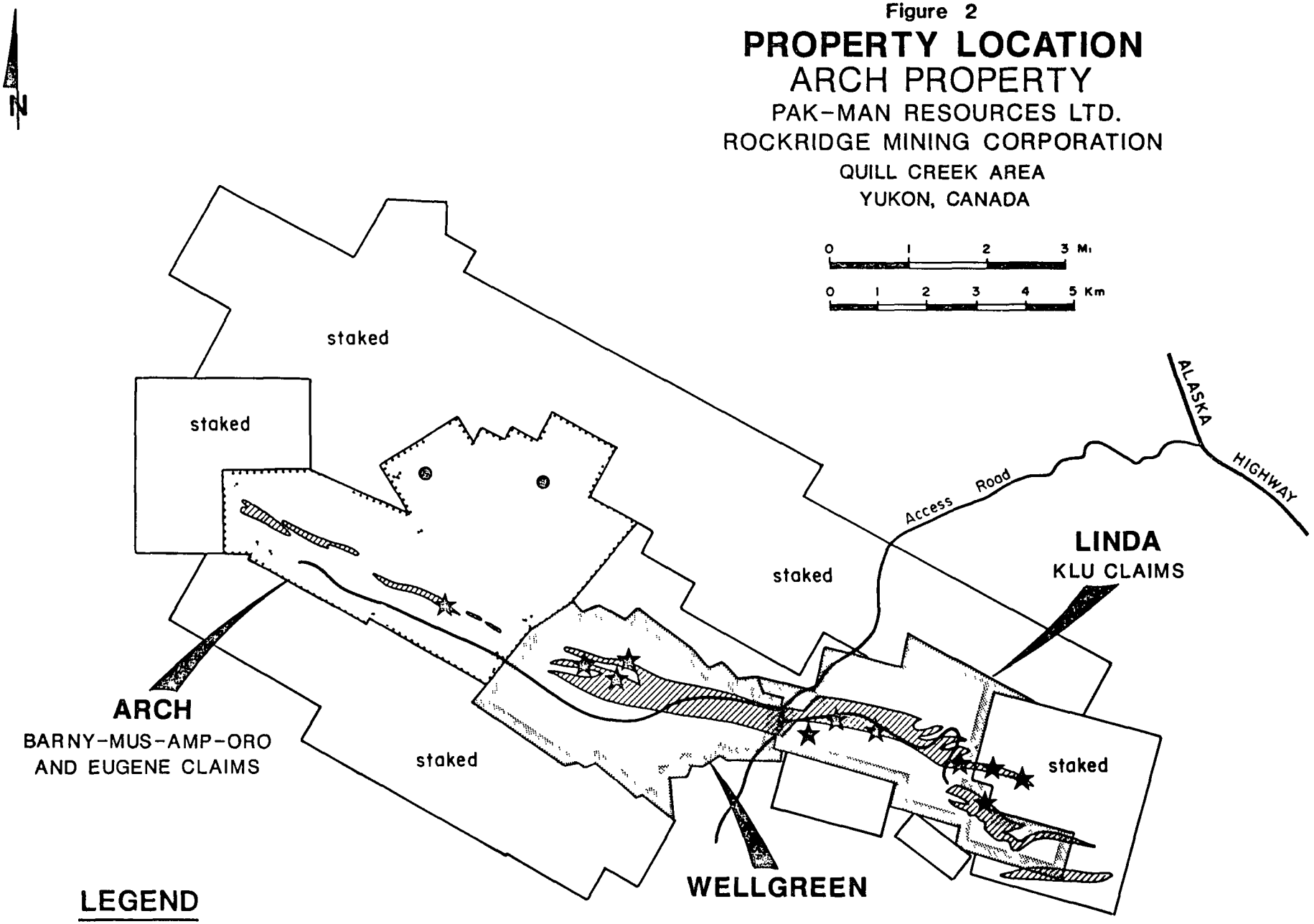
ARCH PROPERTY

PAK-MAN RESOURCES LTD.

ROCKRIDGE MINING CORPORATION

QUILL CREEK AREA

YUKON, CANADA



HISTORY AND PREVIOUS WORK

The Arch Property was staked to cover two old mineral occurrences known as Airways and Musketeer.

The Airways occurrence was originally staked in 1952 as the Enger, etc claims by a syndicate composed of Prospectors Airways Ltd , Noranda Mines Limited and Kerr Addison Gold Mines Limited, which explored with prospecting, mapping and geophysical surveys and 143 m of drilling between 1953 and 1955. The targets were restaked as Nico claims by J. Brown in 1964 and again in 1966 as the Jiffy and Tippy claims by P. Versluce and C. Gibbons, who conducted geophysical and mapping programs and trenching between 1967 and 1970 In 1972, the showing was explored under option agreement by the Nickel Syndicate (Canadian Superior Exploration Ltd , Aquitaine Co. Canada Ltd., Home Oil Limited and Getty Mines, Limited), which conducted mapping, geochemical and geophysical surveys and trenching. W. Green restaked the occurrence as the AMC claims in 1976 and performed some hand trenching between 1977 and 1980

The Musketeer occurrence was originally staked in 1952 as the Musketeer claims by Teck Exploration Company Limited and as the adjoining Donjek claims on the north side by Conwest Exploration Ltd Both companies performed mapping and prospecting in 1953 Teck continued exploration in 1955 with magnetic, EM and resistivity surveys The area was restaked as the Legacy and Sue claims in 1967-68 by P Versluce and C Gibbons, who carried out road building and trenching in 1968 This property was explored by the Nickel Syndicate in 1972 in conjunction with the work on the neighboring Airways occurrence

1987 WORK PROGRAM

Field work was performed between mid-June and early October and included claim location, tagging and additional staking, linecutting to re-establish and extend a former grid, geophysical and geochemical surveys, road repair and construction, geological mapping, prospecting, rock sampling and trenching The program was supervised by K Sax and K Thomas under the direction of the writer and R C Carne.

GRIDWORK

A pre-existing grid system at the east end of the property was upgraded, extended with linecutting, then slope-chained and picketed The baseline follows Arch Creek for a length of 6 km Crosslines at roughly 100 m intervals extend up the steep south-facing slope for 700 to 1000 m At the extreme west end of the grid, four of the crosslines also extend south of the baseline for 200 m. This grid system was then tied into the Wellgreen grid and to prominent geological and geographical features

GEOCHEMISTRY

Results from the geochemical survey are summarized in Figures 9 to 23 (in pockets). A total of 857 soil samples was collected at 50 m intervals on baselines and crosslines Whenever possible, a B horizon or mixed B+C horizon was sampled Samples were shipped by air express to Bondar-Clegg & Company Ltd , North Vancouver, B C , where they were sieved to -35 mesh and pulverized After sample preparation, one-half assay ton was tested for platinum, palladium, gold, nickel and copper by means of the "Platinum + 4" package, in which the three precious metals were analyzed by means of D C. Plasma-Atomic Emission Spectroscopy (DCP-AES) and the other metals were analyzed by Atomic Absorption Spectroscopy (AAS)

GEOPHYSICS

A detailed VLF-EM and proton gradiometer survey was performed under contract by Delta Geoscience Ltd , whose report is included as Appendix I The results are summarized on Figures 25 to 27 (in pockets) Readings were taken at 20 m intervals over the entire grid

ROAD WORK AND TRENCHING

Road work and trenching was undertaken with D7F and D7E bulldozers contracted from E Caron Diamond Drilling Ltd of Whitehorse A total of 141 hours of machine time was used The existing road along Arch Creek was upgraded and extended west for a total length of 5 km The western 2 km is presently passable only by four-wheel drive vehicles but is easily upgradable to two-wheel drive. In addition, the access trail to the Airways and FW Showings was improved and extended another 200 m

A total of 750 m of trenches was excavated, of which 500 m reached bedrock at the Airways, FW and Condie Showings Due to the steep slopes, thick overburden and presence of permafrost, trenching was difficult in some locations

GEOLOGICAL MAPPING AND PROSPECTING

Geological mapping, which is plotted on Figures 6 to 8 (in pockets), was carried out over the entire grid, some use being made of the Nickel Syndicate detailed geology map Showings were chip sampled and assayed for gold, platinum, palladium, nickel and copper

REGIONAL GEOLOGY

The Kluane ultramafic belt is bounded on the northeast by the Shakwak Fault, a major terrane boundary with latest movement in a right lateral sense The southeast boundary of the belt is formed by the sinusoidal trace of a series of interconnected faults which roughly parallels the Shakwak Fault All known ultramafic bodies in the Kluane Range lie within this 10 to 17 km wide belt.

Geology is summarized in Table I on the following page Oldest exposed bedrock is Pennsylvanian to Permian Skolai Group andesitic volcanic and volcaniclastic rocks (Station Creek Fm) grading upward to clastic sedimentary rocks and limestone (Hasen Creek Fm) These are overlain unconformably by Upper Triassic Nikolai Group basalt and limestone with infrequent gypsum horizons. All are intruded by Cretaceous granodiorite plutons and Oligocene porpnyritic latite to trachyte dykes and small stocks.

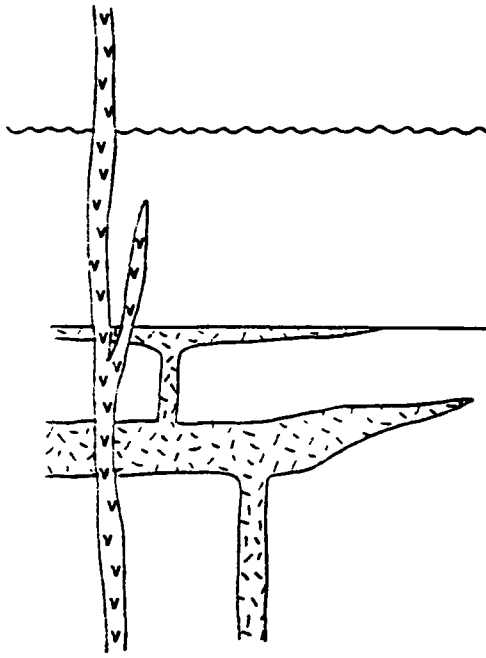
Two types of mafic and ultramafic intrusions are present·

1) the White River, Quill Creek and Tatamagouche Creek Ultramafic Complexes (Figure 4) are differentiated Lower Triassic sills that intrude Station Creek Fm and Hasen Creek Fm sedimentary and volcaniclastic rocks They typically consist of strongly serpentinized dunite, peridotite and lesser marginal facies gabbro The complexes are folded and dismembered by faults, reaching a maximum thickness of about 250 m and a length up to 25 km

   Mineral constituents in the ultramafic rocks are olivine, clinopyroxene, orthopyroxene, biotite, plagioclase, amphibole and minor magnetite and sulphides The gabbro phases consist of clinopyroxene, plagioclase, minor olivine and amphibole and trace amounts of magnetite and sulphides

TABLE I

TABLE OF FORMATIONS - KLUANE ULTRAMAFIC BELT



Upper Triassic

Nikolai Group - dark green and maroon amygdaloidal basalt, volcanic breccia and conglomerate; minor thin-bedded limestone, chert and argillite

unconformity

Lower Permian

Hasen Creek Formation - siliceous argillite, sandstone, quartzite, limestone and conglomerate

Pennsylvanian and(?) Permian

Station Creek Formation - tuff, volcanic breccia, siliceous argillite, andesite and basalt flows

INTRUSIVE ROCKS

Oligocene

not shown — biotite quartz latite porphyry to trachyte dykes and small stocks

Cretaceous

not shown — biotite-hornblende granodiorite, biotite-hornblende diorite and hornblende-biotite quartz diorite stocks

Upper Triassic

 — medium-grained diabasic gabbro dykes and small stocks; probably feeders for Nikolai Group basalts

Lower Triassic

 — differentiated ultramafic sills consisting mainly of peridotite with lesser dunite and gabbro

Cumulate textures are common in the dunite and peridotite while gabbro phases are generally compact and massive Most nickel-copper-PGE occurrences in the Kluane Ranges are spatially associated with the gabbroic marginal facies of the intrusions

Chemically the mafic-ultramafic sills have high TiO2 MgO ratios, low Fe/Mg ratios and anomalously high MgO, Ni and Cr backgrounds According to S Campbell (1981 Ph D Thesis, University of British Columbia), the compositions fall very close to the fields for komatiites Primary phlogopite biotite from the Quill Creek Complex yielded a potassium argon age determination of 224 $\pm$ 8 Ma (Lower Triassic);

ii) dykes and small stocks of medium-grained diabasic gabbro occur throughout Station Creek and Hasen Creek Fm and Nikolai Group They consist of augite and plagioclase with minor orthopyroxene, hornblende and magnetite. Field evidence supports an Upper Triassic age for the gabbros as remnants of feeder systems for the Nikolai Group basaltic flows. No known nickel-copper-PGE mineralization is associated with the younger gabbros.

PROPERTY GEOLOGY

The geology of the property has been plotted on Figures 6 to 8 (in pockets) from a compilation of remapping during 1987 and detailed mapping carried out in 1972 by V. Ahlborn for the Nickel Syndicate The 1972 work was summarized in a March 6, 1987 report by J S Vincent for Kluane Joint Venture.

The Arch Property covers the northwesterly extension of the Quill Creek Ultramafic Complex, which has been extensively studied and explored on the adjoining Wellgreen Property. The ultramafic body consists of crudely conformable, steeply north-dipping peridotite-olivine gabbro lenses intruded along a zone of structural weakness within sedimentary-volcanic rocks of the Lower Permian Station Creek Fm This is part of a fairly continuous belt of ultramafic rocks that extends for a length of 20 km southeast from the Arch Property to the vicinity of the Klu-Wash claim boundary, where it terminates as interdigitated subsidiary sills or apophyses injected along the bedding.

The main ultramafic lens, which is poorly exposed in creek cuts and trenches, is about 750 m long and over 100 m wide. Two other small exposures were mapped up to 450 m further southeast and another occurs on the bank of the large tributary of Arch Creek that crosses the northwest end of the grid The main lens is composed of dark greenish-black, medium-grained and moderately to strongly serpentinized feldspathic peridotite This unit weathers dark green with brown limonite spots and frequent white to greenish-white calcite coatings. Slickensided, scaly fractures are common and readily evident in weathered material The peridotite is generally strongly magnetic.

Olivine gabbro is generally present as a chilled phase at the faulted northern margin of the peridotite lens A contact aureole that is present in

both the peridotite and host siliceous sediments indicates that the olivine gabbro intruded and is younger than the emplacement of the peridotite body. Nickel-copper-platinum mineralization is associated with the olivine gabbro unit

The ultramafic sill dips steeply northeast and appears to be conformable with the enclosing siliceous sediments. On the neighboring Wellgreen Property, the sill dips both steeply north and steeply south and appears to be a sub-vertical body with occasional rolls or gentle folds. Stratigraphic evidence suggest that the northeast dip on the Arch Property represents an overturned link with enclosing strata becoming younger in a downhill direction.

A second but distinctively different variety of gabbro, given the field name leucogabbro, is also present on the property. This unit, which is composed mainly of chloritized pyroxenes and altered plagioclase laths with occasional small patches of serpentine, is present uphill from the sill in the central and southeast parts of the property. Fine-grained phases resemble volcanic rocks. The leucogabbro has been interpreted in regional studies as a feeder to the Nikolai Group volcanic rocks.

The host unit to the ultramafic sill consists of siliceous sediments, andesite and agglomerate of the Station Creek Fm Siliceous argillite and mudstone is the most common sedimentary lithology although quartzite is present at mineralized contacts Argillite displays alternating grey and black layers of variable thickness The mudstone is finely layered with a light green-brown colour on a fresh broken surface. The andesite varies from light to dark green and, in some outcrops at the western end of the grid, to shades of red The andesite is composed of a chloritized matrix with chlorite pseudomorphs after

hornblende The green agglomerates are made up of fragments varying from subangular to subrounded. These chert fragments are contained in a laminated volcanic matrix.

Exposure of the Triassic Nikolai Group is limited to a few outcrops on the southern part of the grid and to the south side of Arch Creek The rock is rich in ferromagnesians with amygdules partly filled with calcite and limonite. The contact between Nikolai and Station Creek is not exposed but probably lies near the baseline.

A large area along the lower north side of Arch Creek at the northwest end of the claim block is mantled by an erosional remnant of Pleistocene glacial-fluvial gravel This gravel is well sorted with gentle dips in a downstream direction Maximum thicknesses exposed along Arch Creek are about 30 m. This extensive gravel deposit obscures the northwest extension of the ultramafic sill, which is interpreted from the results of the magnetic survey to extend off the end of the grid

MINERALIZATION

Several mineral occurrences have been reported on the Arch Property Three of these, the Airways, Musketeer and Conwest date from 1952. No significant mineralization was found at the Musketeer or Conwest locations in 1987 The FW and Condie Showings were inferred from the 1972 Nickel Syndicate data but were not explored until 1987.

Nickel-copper-platinum mineralization exposed at surface consists of massive to disseminated sulphides associated with the olivine gabbro dyke that intrudes the faulted contact between the peridotite sill and the quartzite wallrock Examples include the Airways, FW and Condie Showings. Descriptions of these showing are given below, while Table II on the following page summarizes the significant assays.

The Airways Showing, situated in the east-central part of the grid, consists of a narrow band of massive pyrrhotite-chalcopyrite 1.5 m wide and 10 m long. The showing strikes under overburden in both directions. A 1.5 m chip sample taken across this zone in 1987 assayed 0 051 opt Pt, 0.093 opt Pd, 2.51% Ni, 0 57% Cu and 0 002 opt Au A specimen collected by F A. Campbell in 1955, which was assayed for PGE by Falconbridge, returned values of 0.045 opt Pt, 0 044 opt Pd and 0 012 opt Rh Disseminated sulphides occur over a 45 m strike length and a width of 20 m A 5 m chip sample collected in 1987 yielded values of 0 012 opt Pt, 0 016 opt Pd, 0 36% Ni, 0 25% Cu and 0 002 opt Au On the other side of the contact, the country rock exhibits prominent limonite and copper staining for approximately 3 m A specimen of this material ran only 0.001 opt Pt, 0 004 opt Pd, 1 20% Ni, 0.44% Cu and 0 001 opt Au.

TABLE II

SIGNIFICANT 1987 ASSAYS
ARCH PROPERTY

Showing	Sample No	Width (m)	Platinum (opt)	Palladium (opt)	Nickel (%)	Copper (%)	Gold (opt)
Airways	R19897	1.5	0 051	0 093	2.51	0.57	0.002
	R8564	grab	0 054	0 078	4 44	8 45	0.002
	R8565	0 4	0 044	0 039	3 33	0 72	0 001
	R8568	5 0	0 019	0 025	0 46	0.25	0 003
	R19896	5 0	0 012	0 016	0.36	0.25	0.002
	R12900	grab	0 025	0 004	4 54	0 14	0.001
	R19986*	grab	0 020	0 019	2 34	0.54	0.006
	R19987*	grab	0 048	0 079	0 34	1.14	0.001
FW	R19884	grab	0 015	0 032	0 40	0.38	0.005
	R19885	2.0	0 027	0 041	0 47	0.80	0.002
	R12929	1 0	0 163	0 061	0 34	0 23	0.018
Condie	P25043	5 0	0 016	0 025	0 28	0 24	0.001
	R12590	grab	0 064	0 082	0 18	0.59	0.009
	R12592	grab	0.009	0 011	0.23	0 66	0 003
	R12921	1 0	0 027	0 105	0 60	0.76	0.008
	R12916	1.0	0 012	0 011	0.23	2.88	tr
	R12919	1.0	0 048	0 035	0 97	0.38	0.006
Musketeer	R12905	30 0	tr	0 001	0 13	0 02	tr

*Bedrock float from Trench 3, located mindway between the Airways and FW Showings.

The FW Showing, situated 330 m northwest of the Airways Showing, occurs in a creek cut. Mineralization occurs in a shear zone within olivine gabbro at the contact with limestone and siliceous argillite. Disseminated pyrrhotite and chalcopyrite has been found intermittently over a strike length of 33 m and a width of 5 m A grab sample of heavily limonitized gabbro assayed 0 015 opt Pt, 0 032 opt Pd, 0.40% Ni, 0.38% Cu and 0 005 opt Au Another chip sample of the gabbro in contact with limestone returned lower values The best results from this showing were found in copper stained and limonitic, sheared, siliceous argillite which assayed 0.163 opt Pt, 0.061 opt Pd, 0.34% Ni, 0 23% Cu and 0 018 opt Au. Sheared peridotite with only traces of visible mineralization outcrops downslope in the gulch for 110 m. A specimen of this peridotite returned values of 0.002 opt Pt, 0.003 opt Pd, 0.26% Ni, 0.03% Cu and a trace of Au

Trench 3, located midway between the Airways and FW Showings, failed to reach true bedrock at the gabbro-quartzite contact but did turn up some mineralized float. Two float specimens averaged 0.034 opt Pt, 0 049 opt Pd, 1 34% Ni and 0.84% Cu. The source was not found but this float implies that the mineralized zone may be continuous under overburden between the two showings.

The Condie Showing, exposed in a creek roughly 220 m west of the FW Showing, consists of disseminated pyrrhotite and chalcopyrite in gabbro along the upper contact between the ultramafic body and limonitic quartzite A second small showing is also present at the lower (southwest) margin of the sill, about 110 m away A sample consisting of several typical specimens of quartzite from the upper contact assayed 0 048 opt Pt, 0 035 opt Pd, 0 97% Ni,

0 38% Cu and 0 006% Au Another specimen of this material containing the same malachite staining returned values of 0 012 opt Pt, 0 011 opt Pd, 0 23% Ni and 2 88% Cu A sample comprising numerous chips of quartzite collected over a length of 5 m and about 1 m from the lower contact returned values of 0 027 opt Pt, 0.105 opt Pd, 0.60% Ni, 0 76% Cu and 0.008 opt Au. A specimen of sheared, copper stained gabbro assayed 0 064 opt Pt, 0.082 opt Pd, 0 18% Ni, 0 59% Cu and 0 009 opt Au. A specimen of peridotite containing a trace of sulphides returned only 0.003 opt Pt, 0.006 opt Pd, 0.19% Ni, 0 06% Cu and trace Au.

Two mineral showings, named the Conwest and Musketeer, were believed to be present at the northwest end of the property on the basis of sketchy descriptions and locations contained in assessment records dating from the 1950's. Exploration carried out in 1987 to confirm their existence gave disappointing results.

The reported location of the Conwest Showing was in the northwestern corner of the property near the 1430 m (4700 foot) elevation All outcrops and float in this area consist of metasedimentary and volcanic rocks with no evidence of peridotite or gabbro. The only mineralization found was a trace of pyrrhotite with copper and iron staining in a fine-grained mudstone One rock specimen assayed 1 45% Cu while three other rock samples and two soil samples returned background values in all other metals

The only evidence for the Musketeer Showing is a small exposure of weakly limonitic, moderately serpentinized and strongly magnetic peridotite on the bank of the large tributary of Arch Creek that crosses the northwest end of the grid. A specimen returned only trace Pt, 0 001 opt Pd, 0.13% Ni, 0 02% Cu and trace Au. No evidence was found of a significant mineral occurrence in the northwest portion of the property

GEOCHEMISTRY

The 1987 soil sample survey results are plotted on Figures 9 to 23 (in pockets) Approximately one-third of the Arch Property was sampled at 50 m intervals along grid lines spaced 100 m apart, resulting in coverage of over three-quarters of that portion of the property potentially underlain by the favourable ultramafic rocks

Sampling conditions varied from good to poor, with the better samples collected on the unfrozen south-facing slopes toward the east end of the grid. The worst conditions occur in the central and west parts of the grid These areas are underlain by permafrost and heavy overburden cover, particularly the glacial-fluvial gravel up to 100 m thick.

Approximate background response in soil for the various metals is shown below:

Metal	Ultramafic Rocks	Other Rocks
Pt	50 ppb	15 ppb
Pd	50 ppb	10 ppb
Ni	400 ppm	75 ppm
Cu	200 ppm	100 ppm

Soil response from ultramafic rocks is considered anomalous when it exceeds 100 ppb Pt or Pd, 800 ppm Ni or 400 ppm Cu and strongly anomalous above 200 ppb Pt or Pd, 1600 ppm Ni or 800 ppm Cu.

The distribution of anomalous and strongly anomalous platinum and palladium response in soil is generally coincident with high nickel and copper values, which agrees with prospecting observations on the type of mineralization present The anomalies are also coincident with known mineral showings, which are restricted to the vicinity of the Airways Showing Only background values were obtained over the magnetic anomalies at the northwest end of the grid, probably because overburden cover in that area is too thick to allow effective geochemical coverage

SUMMARY AND RECOMMENDATIONS

An exploration program consisting of claim staking and tagging, grid layout and linecutting, control survey, geochemical and geophysical surveys, road repair and construction, geological mapping, prospecting and rock sampling was performed on the Arch Property between mid-June and early October, 1987. The work was funded by Pak-Man Resources Inc and Rockridge Mining Corporation under an agreement with the claim owners, Chevron Minerals Ltd. and All-North Resources Ltd (Kluane Joint Venture), and G Davidson.

The property is situated on Arch Creek, a tributary of the Donjek River It covers the northwest extension of the ultramafic complex that hosts the former Wellgreen Mine and has a sporadic exploration history dating back to 1952. Previous work, consisting of geological and geophysical surveys, road building and limited trenching, was directed toward the nickel-copper potential.

The 1987 program was directed toward the platinum potential Initial emphasis was on defining the position of the ultramafic rocks using grid controlled mapping and geophysical surveys, on determining the location and extent of mineralization using geochemical soil and rock sampling and prospecting, and extending road access from the Wellgreen Mine road to the northwest end of the property Much of this work was performed in the vicinity of the old Airways Showing, which is associated with a steeply north-dipping ultramafic sill about 750 m long and over 100 m thick that intrudes quartzite wallrock Two other showings, FW and Condie, were located along strike from the Airways Showing Results confirmed that the mineralization resembles the Wellgreen deposit, with unusually high values in platinum and palladium associated with the nickel-copper mineralization

Two chip samples and a grab sample from a narrow band of massive pyrrhotite-chalcopyrite at the Airways Showing averaged 0 050 opt Pt, 0 070 opt Pd, 3.26% Ni and 3 25% Cu True thickness is about 1 5 m. Disseminated sulphides occur over a length of 45 m and a width of 20 m. At the FW Showing, situated 330 m northwest of Airways, chip and grab samples from the contact between the gabbro intrusion and the siliceous sediment averaged 0 068 opt Pt, 0.045 opt Pd, 0.40% Ni and 0 47% Cu Mineralized float averaging 0 034 opt Pt, 0 049 opt Pd, 1 34% Ni and 0.84% Cu was found midway between the two showings. Specimens of mineralized olivine gabbro near the upper contact with quartzite at the Condie Showing, located 550 m northwest of the Airways Showing, averaged 0.037 opt Pt, 0 047 opt Pd, 0 21% Ni and 0 63% Cu

Two other showings, the Musketeer and Conwest, were rumoured to be present at the northwest end of the property, according to reports of work conducted in the 1950's. Exploration in 1987 failed to confirm the presence of significant mineralization in this vicinity. However, the magnetic survey showed that the ultramafic rocks probably continue to the end of the grid under a thick terrace of glacial-fluvial gravel

The exploration program commenced in 1987 has shown that the property hosts small but poorly exposed showings that resemble the mineralization in the adjacent Wellgreen deposit Bulldozer trenching was commenced in 1987 but the program was completed before the dimensions and grade of the showings could be measured This work should be continued in 1988 and supplemented with drilling to delineate the size and grade of this mineralization and to explore the interpreted northwest extension of the ultramafic body beneath thick overburden

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

/mc

R W Cathro, B A Sc , P Eng.

APPENDIX

RESULTS OF VLF-EM AND PROTON GRADIOMETER SURVEY

BARNY 24

BARNY 22

BARNY 20

BARNY 18

BARNY 16

BARNY 15

BARNY 13

BARNY 14

BARNY 37

BARNY 36

BARNY 35

BARNY 34

WELLGREEN PROPERTY

WELLGREEN CAMP

Wally Creek

Arch Creek

TRENCH 1

TRENCH 1A

TRENCH 3

TRENCH 4

50F

Topography from NTS 1:50,000 maps

YUKON TERRITORY

Dawson

Carmacks

Haines Junction

WHITEHORSE

Skagway

Beaver Creek

ARCH PROPERTY

Burwash Landing

Kluane Lake

Kluane National Park

ALASKA

YUKON

SCALE 1:2,700,000

LOCATION MAP

LEGEND

- 5 — claim number
- ■ — claim post - tagged, surveyed
- □ — claim post - tagged
- ○ — claim post - not located
- - — soil sample location
- ▪ — rock sample location
- trench
- road - 2 wheel drive, 4 wheel drive
- Arch Property

Figure 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CLAIM AND SAMPLE LOCATION

ARCH PROPERTY

KLUANE RANGE, YUKON

PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

EAST

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987

EUGENE CLAIMS

ORO CLAIMS

ARCH PROPERTY

AMP 2
AMP 4
AMP 5
AMP 6
AMP 7
AMP 8
AMP 9
AMP 10

BARNY 26
BARNY 28
BARNY 30
BARNY 31
BARNY 32
BARNY 42
BARNY 44
BARNY 46

Arch Creek

TRENCH 2
TRENCH 5
TRENCH 6

YUKON TERRITORY

ALASKA

Dawson
Carmacks
Haines Junction
WHITEHORSE
Skagway
Haines

LOCATION MAP

Beaver Creek
Burwash Landing
Kluane Lake
Carmacks
Haines Junction
ALASKA HWY
KLUANE NATIONAL PARK RESERVE
SCALE 1:2,000,000
To Haines 160 km

LEGEND

- claim number
- claim post – tagged, surveyed
- claim post – tagged
- claim post – not located
- soil sample location
- soil sample location (off grid)
- rock sample location
- silt sample location
- trench
- road – 2 wheel drive, 4 wheel drive
- Arch Property

Figure 4
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CLAIM AND SAMPLE LOCATION

ARCH PROPERTY
KLUANE RANGE, YUKON

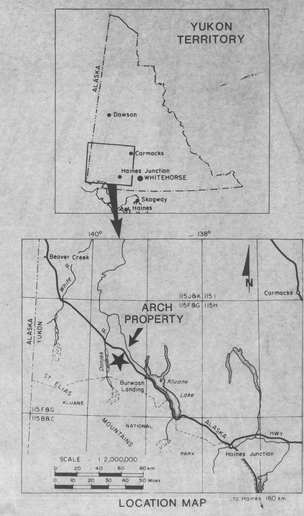
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

CENTRAL

SCALE 1:2500
0 25 50 100 150 200 m

Topography from NTS 1:50,000 maps

To accompany report dated DECEMBER 1982



MUS 1
MUS 2
MUS 4
MUS 6
MUS 7
MUS 8
MUS 9
MUS 10
MUS 11
MUS 12
MUS 13
MUS 14
MUS 15
MUS 16
AMP 1
AMP 2
AMP 3
AMP 4
BARNY 47
BARNY 48
BARNY 49

LEGEND

- 5 — claim number
- ■ — claim post – tagged, surveyed
- □ — claim post – tagged
- ○ — claim post – not located
- soil sample location
- soil sample location (off grid)
- rock sample location
- road – 2 wheel drive, 4 wheel drive
- Arch Property
- △ — cabin

Figure 5
ARCHER, CATHRO & ASSOCIATES (1985) LIMITED

CLAIM AND SAMPLE LOCATION

ARCH PROPERTY
KLUANE RANGE, YUKON

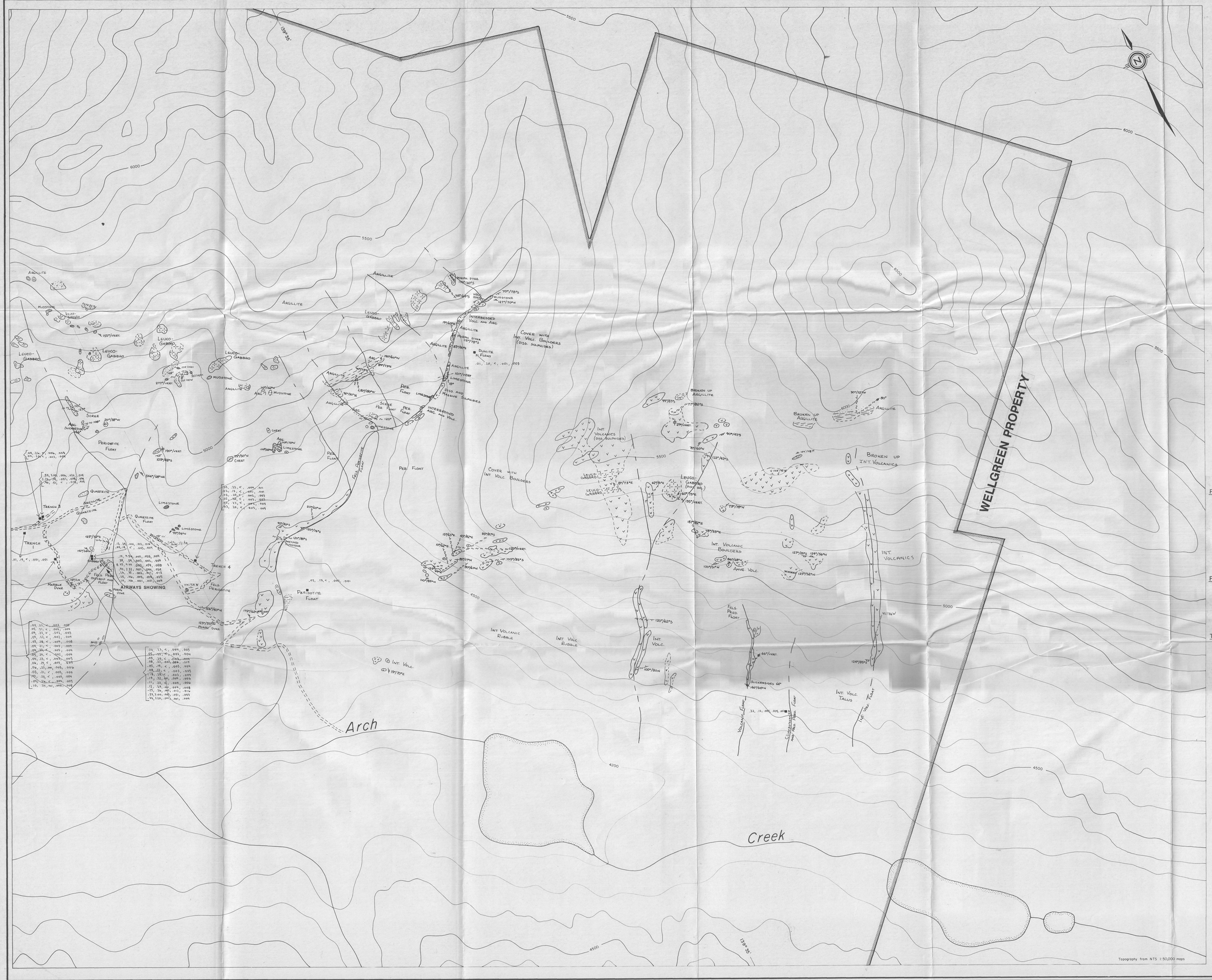
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

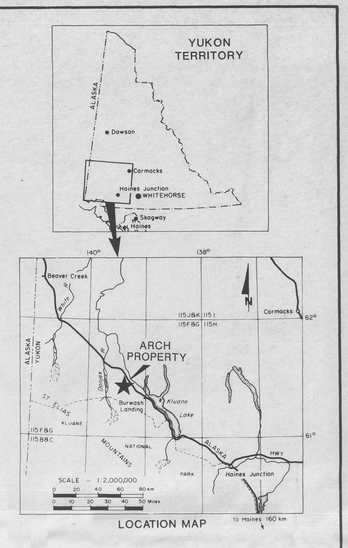
WEST

SCALE 1:2500
0 25 50 100 150 200 m

Topography from NTS 1:50,000 maps

To accompany report dated DECEMBER 1987





LOCATION MAP

Permian

Hasen Creek Formation

- argillite (black to gray)
- siltstone / siliceous argillite (olive green)
- quartzite (brown to gray)
- limestone (white to gray)
- tuffs / tuffaceous quartzites (dark green to lt. brown)

Pennsylvanian

Station Creek Formation

- agglomerate / volcanic breccia (green)
- andesitic flows or subvolcanic intrusions

Triassic

Nikolai Group

- green and purple amygdaloidal basalts
- unconformity
- olivine and feldspar porphyritic dykes (white to green)

Quill Creek Ultramafic Complex

- peridotite
- gabbro / gabbro - norite
- mafic skarn

(not all units present)

Figure 6

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GEOLOGY

ARCH PROPERTY

KLUANE RANGE, YUKON

PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

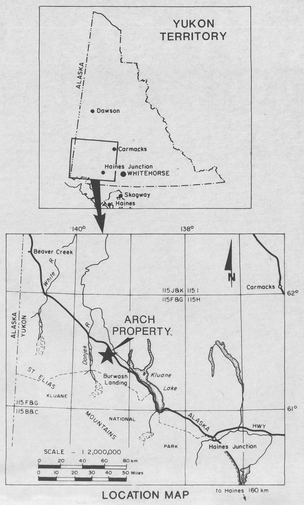
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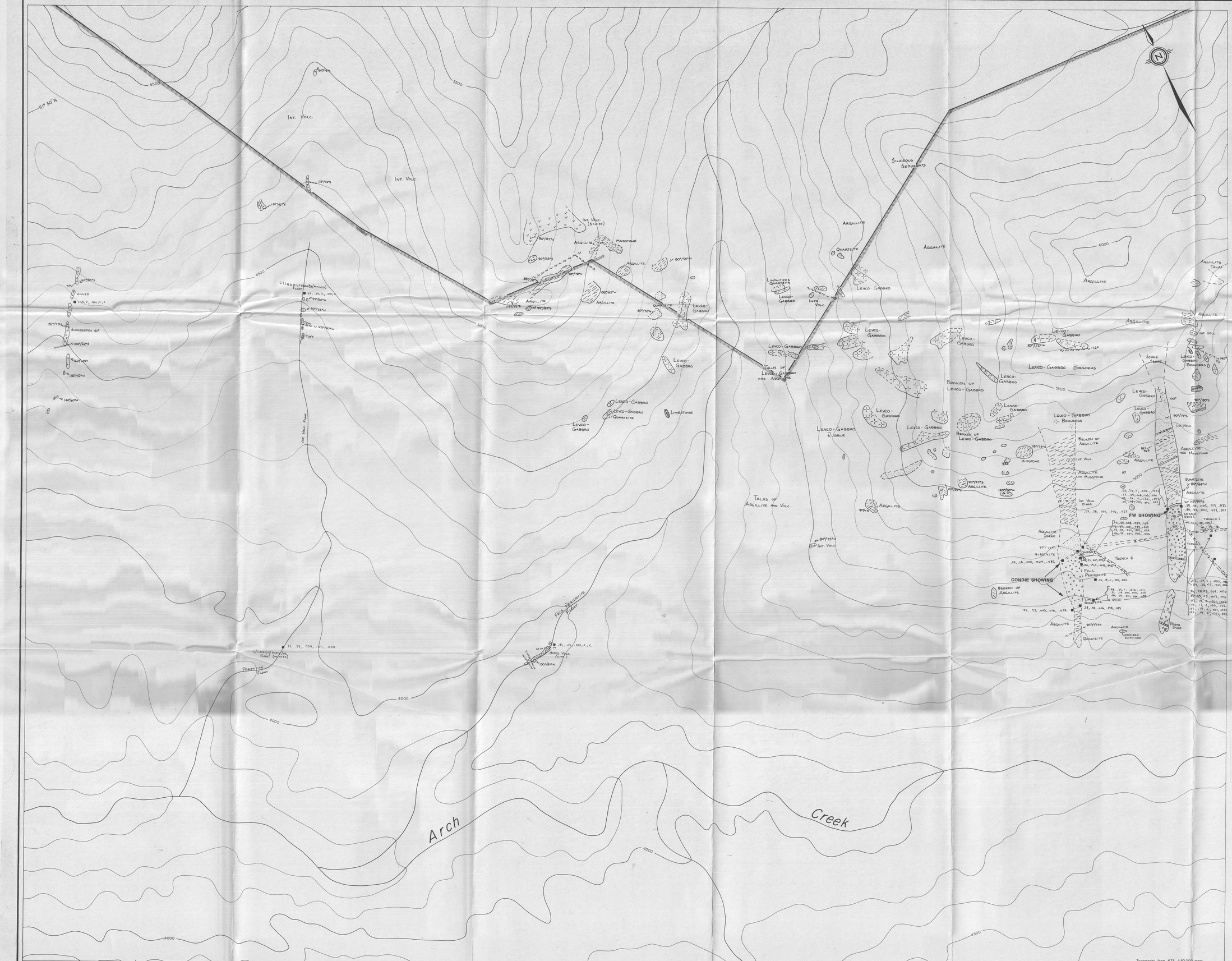
SCALE 1:2500

0 25 50 100 150 200 m

Topography from NTS 1:50,000 maps

To accompany report dated DECEMBER 1987





Permian

Hasen Creek Formation

- argillite (black to gray)
- siltstone / siliceous argillite (olive green)
- quartzite (brown to gray)
- limestone (white to gray)
- tuffs / tuffaceous quartzites (dark green to lt. brown)

Pennsylvanian

Station Creek Formation

- agglomerate / volcanic breccia (green)
- andasitic flows or subvolcanic intrusions

Triassic

Nikolai Group

- green and purple amygdaloidal basalts

unconformity

- olivine and feldspar porphyritic dykes (white to green)

Quill Creek Ultramafic Complex

- peridotite
- gabbro / gabbro - norite
- mafic skarn

(not all units present)

Figure 7
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GEOLOGY

ARCH PROPERTY

KLUANE RANGE, YUKON

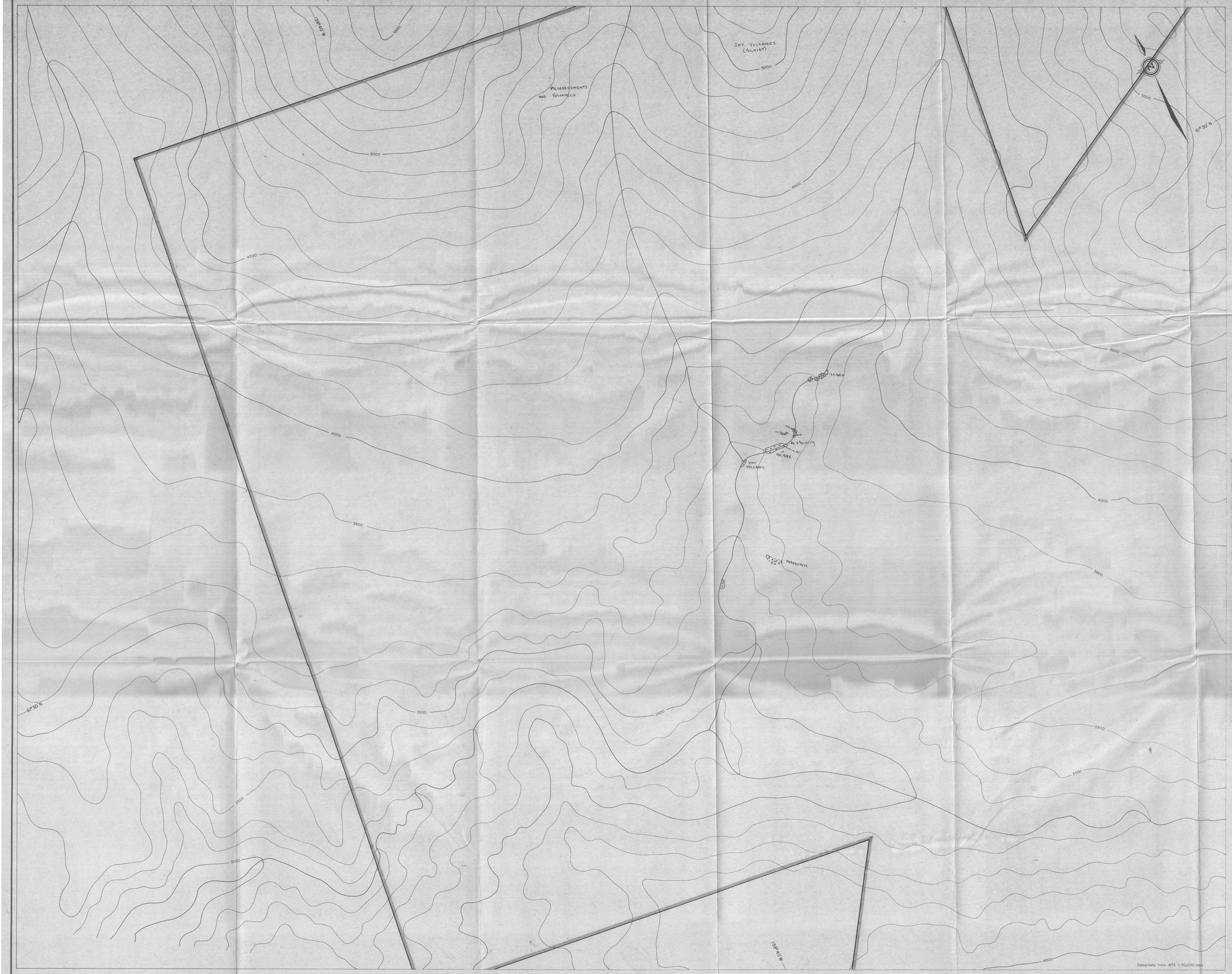
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

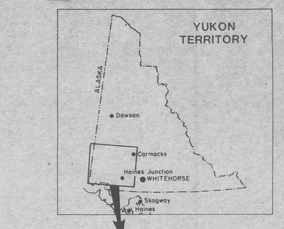
CENTRAL

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987





LOCATION MAP

Permian

Hasen Creek Formation

- argillite (black to gray)
- siltstone / siliceous argillite (olive green)
- quartzite (brown to gray)
- limestone (white to gray)
- tuffs / tuffaceous quartzites (dark green to lt. brown)

Pennsylvanian

Station Creek Formation

- agglomerate / volcanic breccia (green)
- andesitic flows or subvolcanic intrusions

Triassic

Nikolai Group

- green and purple amygdaloidal basalts

unconformity

- olivine and feldspar porphyritic dykes (white to green)

Quill Creek Ultramafic Complex.

- peridotite
- gabbro / gabbro – norite
- mafic skarn

(not all units present)

Figure 8
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GEOLOGY

ARCH PROPERTY

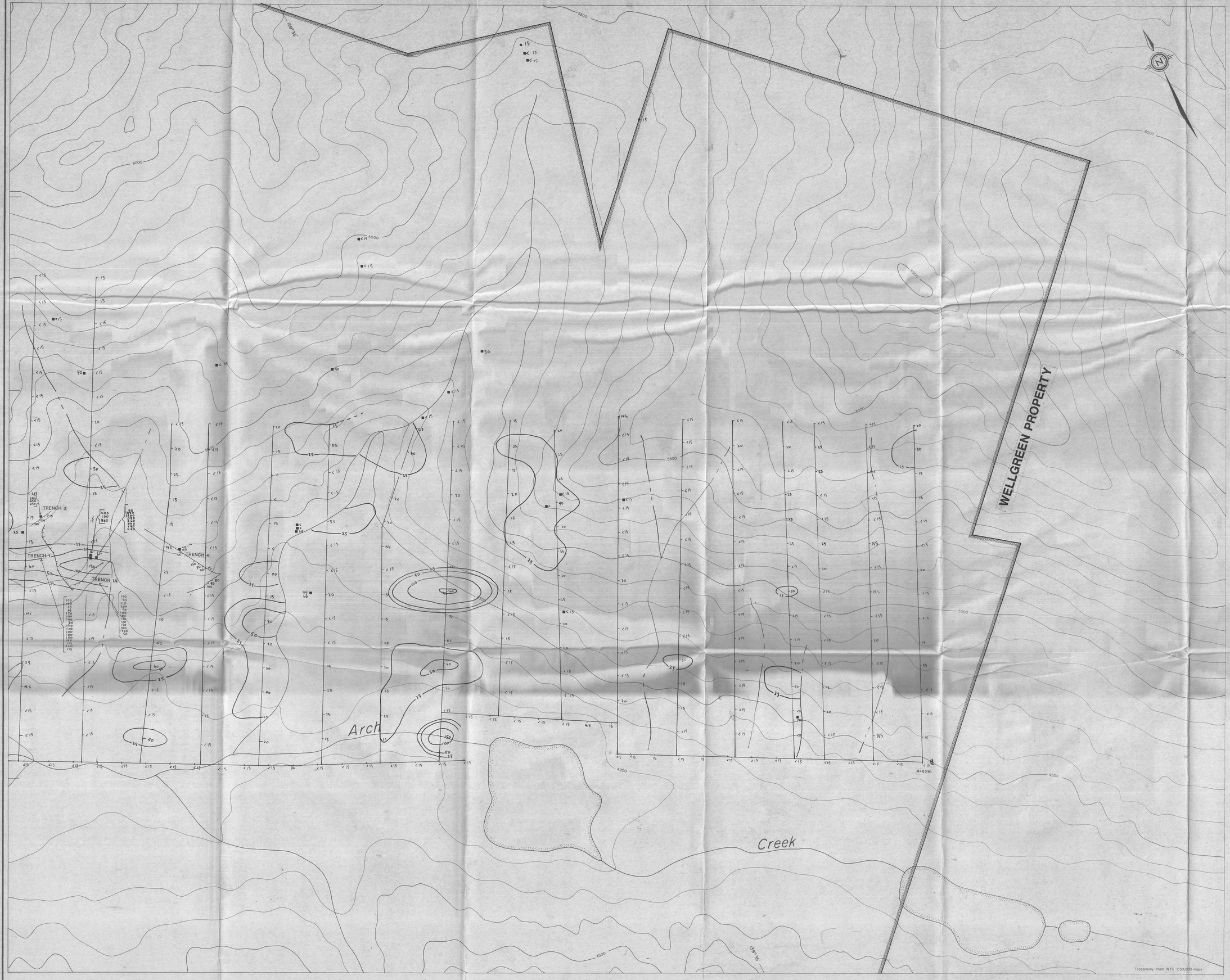
KLUANE RANGE, YUKON

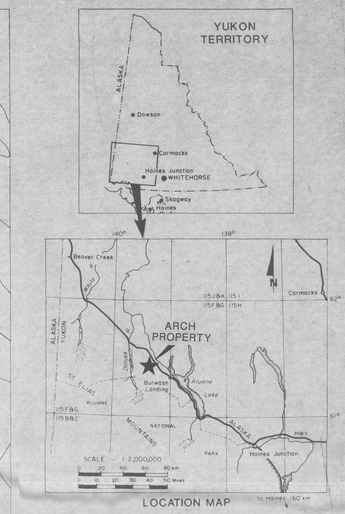
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

WEST

SCALE 1:2500
0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987





LEGEND

- 25 — contour intervals at 25, 50, 100 and 250 ppb
- 25 soil sample location with Pt in ppb
- 3.50 rock sample location with Pt in ppb
- trench
- Arch Property

Figure 9

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

PLATINUM GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

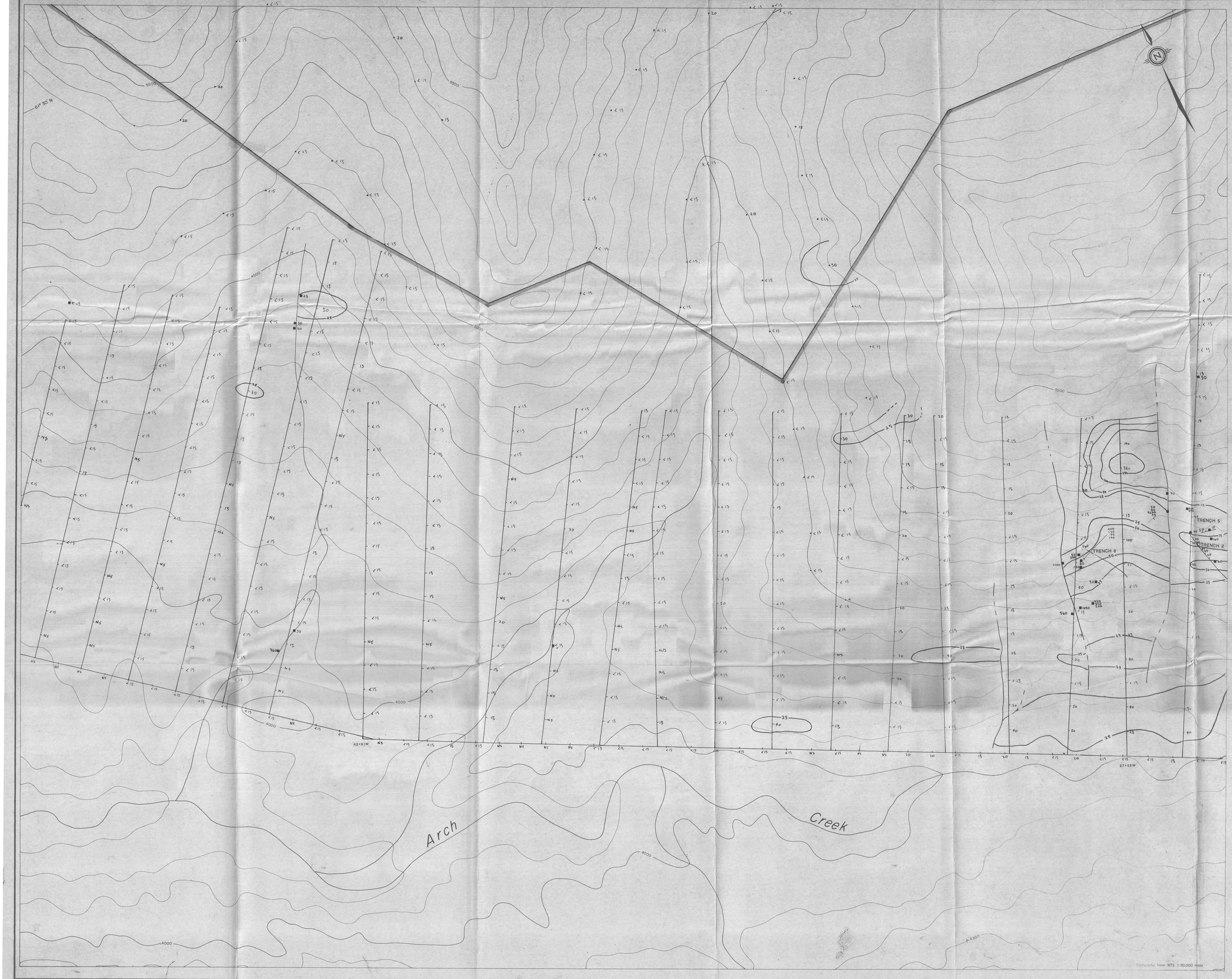
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

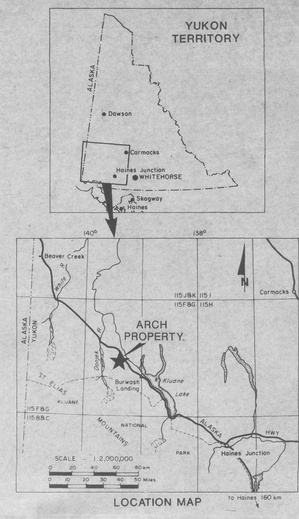
EAST

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987





LOCATION MAP

LEGEND

- 25 —— contour intervals at 25, 50, 100 and 250 ppb
- ·25 soil sample location with Pt in ppb
- ● 25 soil sample location with Pt in ppb (off grid)
- ■350 rock sample location with Pt in ppb
- x 25 silt sample location with Pt in ppb
- trench
- Arch Property

Figure 10

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

PLATINUM GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

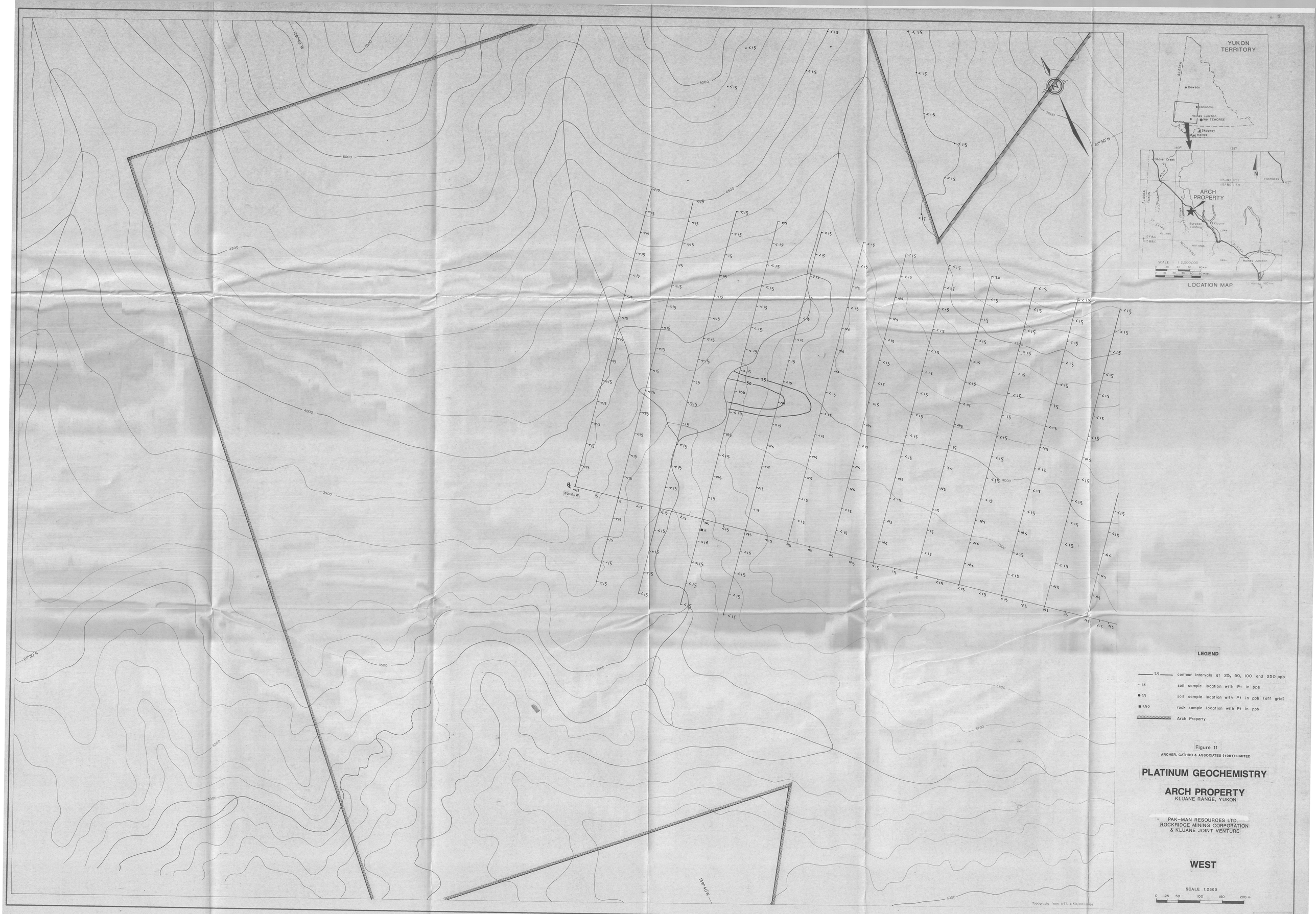
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

CENTRAL

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987


YUKON TERRITORY
ALASKA
Dawson
Carmacks
Haines Junction
WHITEHORSE
Skagway
Alaska Highway
Alaska Highway
Beaver Creek
ARCH PROPERTY
Burwash Landing
Kluane Lake
Carmacks
Haines Junction
SCALE 1:2,000,000
LOCATION MAP
139°40'W
61°30'N
61°30'
Topography from NTS 1:50,000 maps
LEGEND
25 contour intervals at 25, 50, 100 and 250 ppb
25 soil sample location with Pt in ppb
25 soil sample location with Pt in ppb (off grid)
250 rock sample location with Pt in ppb
Arch Property
Figure 11
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
PLATINUM GEOCHEMISTRY
ARCH PROPERTY
KLUANE RANGE, YUKON
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE
WEST
SCALE 1:2500
0 25 50 100 150 200 m
To accompany report dated DECEMBER 1987

TRENCH 3

TRENCH 1

TRENCH 1A

TRENCH 4

Arch

Creek

WELLGREEN PROPERTY

6+00W

5500

6000

6500

5000

4500

4000

139°35'

YUKON TERRITORY

ALASKA

Dawson

Carmacks

Haines Junction

WHITEHORSE

Skagway

Haines

LOCATION MAP

Beaver Creek

Dezadeash L.

115 J/8K | 115 I
115 F/8D | 115 H

ARCH PROPERTY

St. Elias

Kluane

Burwash Landing

Kluane Lake

115 F/8G
115 B/8C

NATIONAL PARK

MOUNTAINS

ALASKA HWY

SCALE - 1:2,000,000

0 20 40 60 80 km
0 10 20 30 40 50 Miles

to Haines 160 km

LEGEND

- 25 — contour intervals at 25, 50, 100 and 250 ppb
- 25 soil sample location with Pd in ppb
- 250 rock sample location with Pd in ppb
- trench
- Arch Property

Figure 12

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

PALLADIUM GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

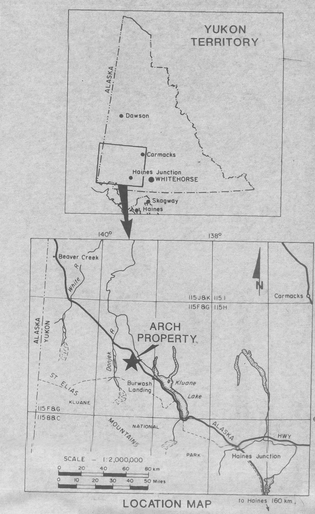
EAST

SCALE 1:2500

0 25 50 100 150 200 m

Topography from NTS 1:50,000 maps

To accompany report dated DECEMBER 1987



LOCATION MAP

LEGEND

- 25 —— contour intervals at 25, 50, 100 and 250 ppb
- ~ 25 soil sample location with Pd in ppb
- • 25 soil sample location with Pd in ppb (off grid)
- ■ 250 rock sample location with Pd in ppb
- ⅄ 2.5 silt sample location with Pd in ppb
- trench
- Arch Property

Figure 13

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

PALLADIUM GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

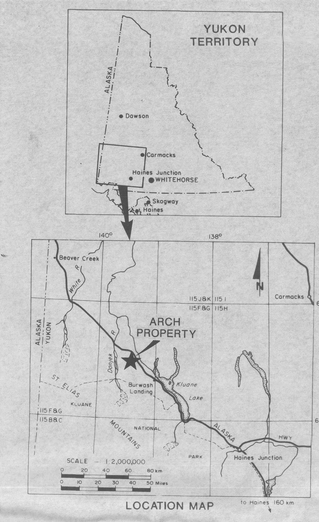
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

CENTRAL

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1982



LOCATION MAP

LEGEND

- 25 — Contour intervals at 25, 50, 100 and 250 ppb
- – 25 soil sample locations with Pd in ppb
- • 25 soil sample location with Pd in ppb (off grid)
- ■ 250 rock sample location with Pd in ppb
- Arch Property

Figure 14

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

PALLADIUM GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

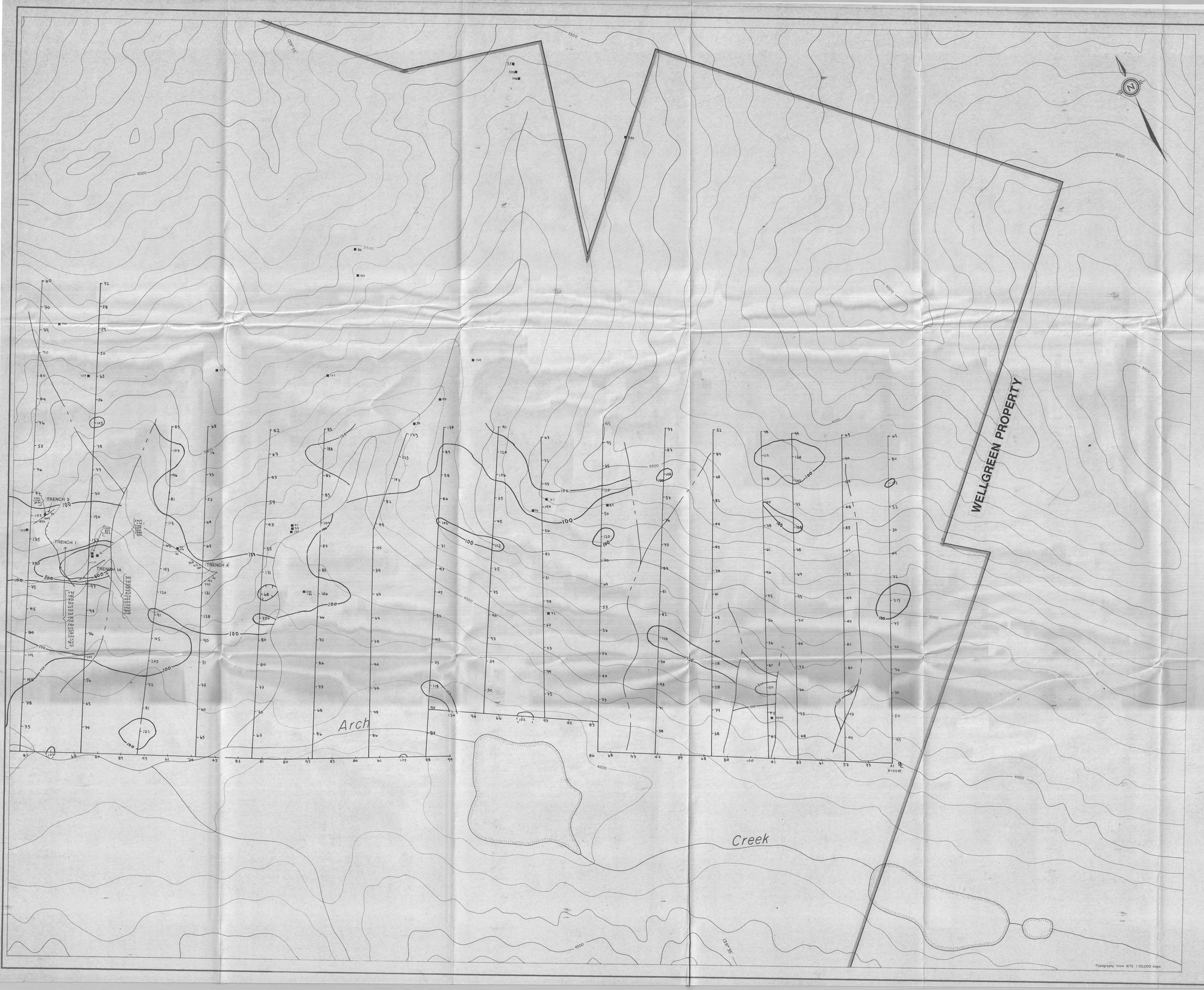
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

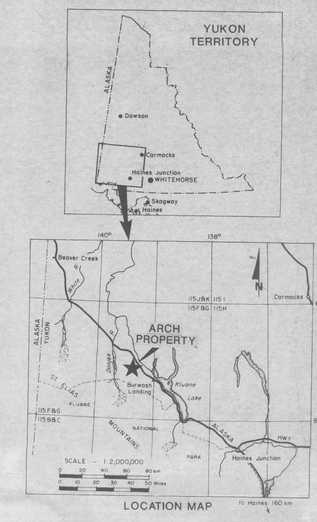
WEST

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987





LEGEND

- 100 — contour intervals at 100, 300, 600 ppm
- 25 soil sample location with Cu in ppm
- ■ 250 rock sample location with Cu in ppm
- trench
- Arch Property

Figure 15

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

COPPER GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

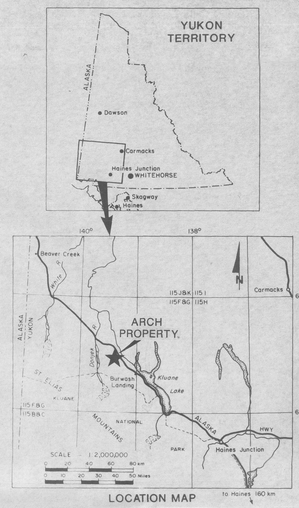
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

EAST

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987



LOCATION MAP

LEGEND

- 100 — contour intervals at 100, 300, 600 ppm
- 25 soil sample location with Cu in ppm
- ● 25 soil sample location with Cu in ppm
- ■ 250 rock sample location with Cu in ppm
- x 25 silt sample location with Cu in ppm
- trench
- Arch Property

Figure 16

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

COPPER GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

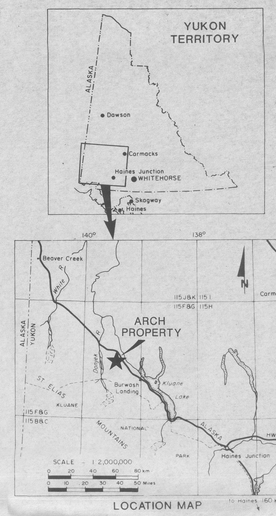
CENTRAL

SCALE 1:2500

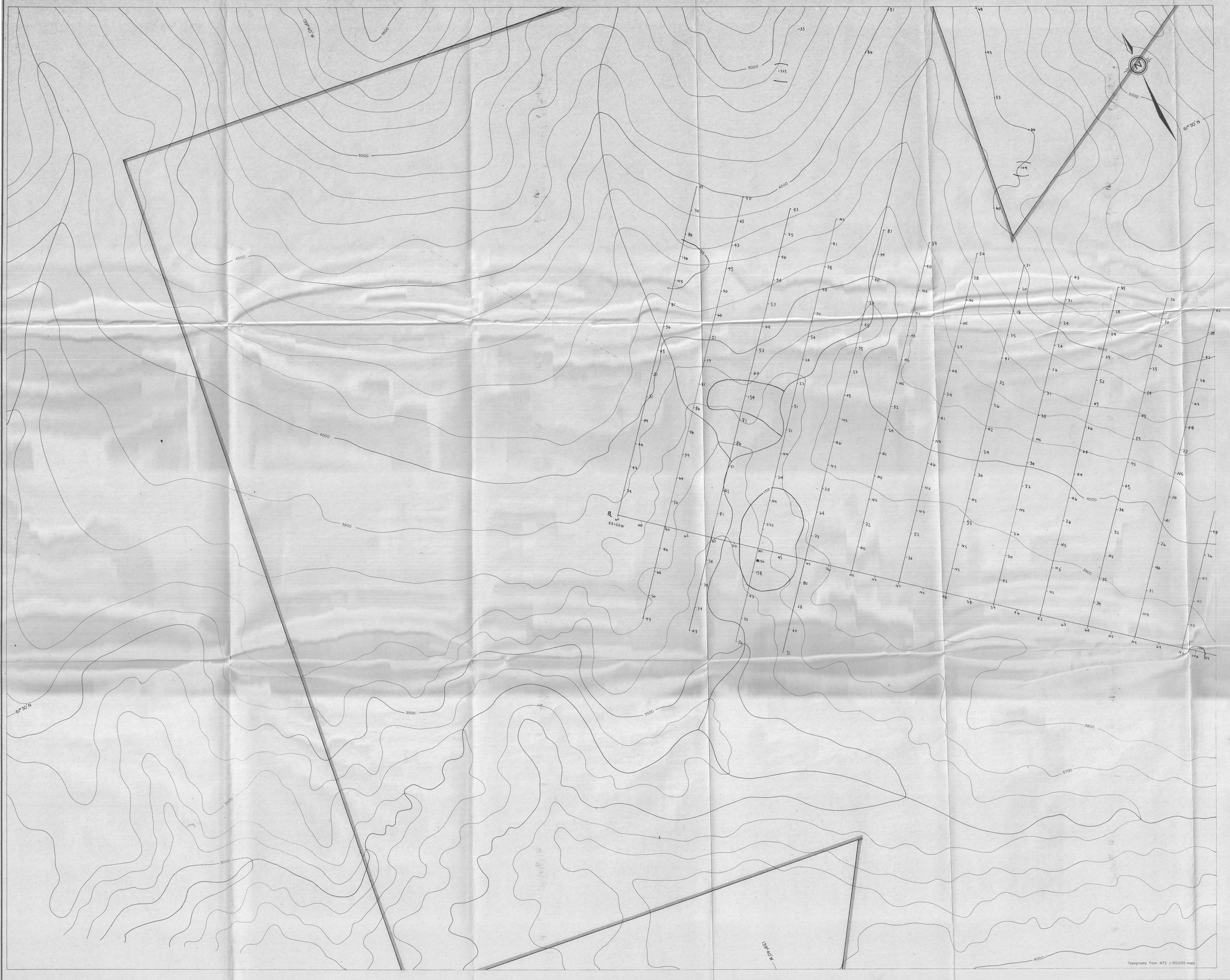
0 25 50 100 150 200 m

Topography from NTS 1:50,000 maps

To accompany report dated DECEMBER 1987



LOCATION MAP



Topography from NTS 1:50,000 maps

LEGEND

- 100 — contour intervals at 100, 300, 600 ppm
- 25 soil sample location with Cu in ppm
- 25 soil sample location with Cu in ppm (off grid)
- 250 rock sample location with Cu in ppm
- Arch Property

Figure 17

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

COPPER GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

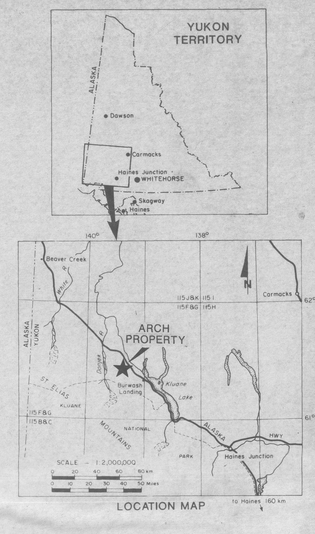
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

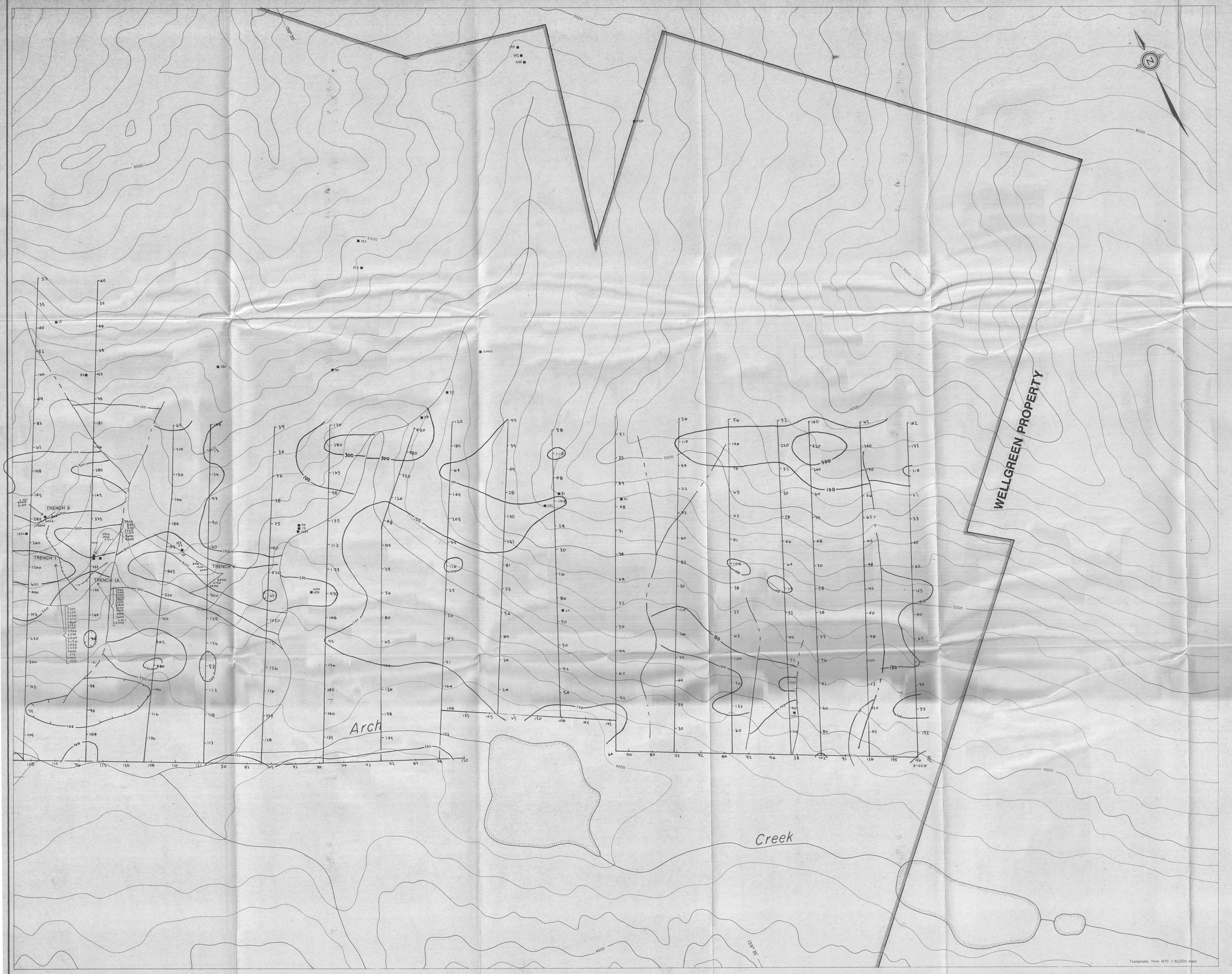
WEST

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987





LEGEND

- 100 — contour intervals at 100, 300 and 600 ppm
- ~25 soil sample location with Ni in ppm
- ■ 250 rock sample location with Ni in ppm
- trench
- Arch Property

Figure 18

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

NICKEL GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

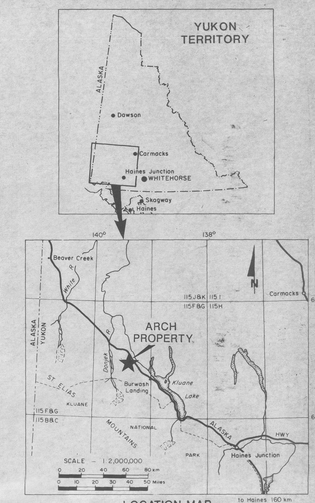
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

EAST

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987



LOCATION MAP

LEGEND

- 100 — contour intervals at 100, 300 and 600 ppm
- 25 soil sample location with Ni in ppm
- • 25 soil sample location with Ni in ppm (off grid)
- ■ 250 rock sample location with Ni in ppm
- x 25 silt sample location with Ni in ppm
- trench
- Arch Property

Figure 19

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

NICKEL GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

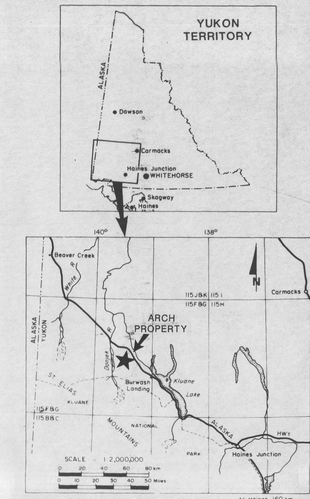
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

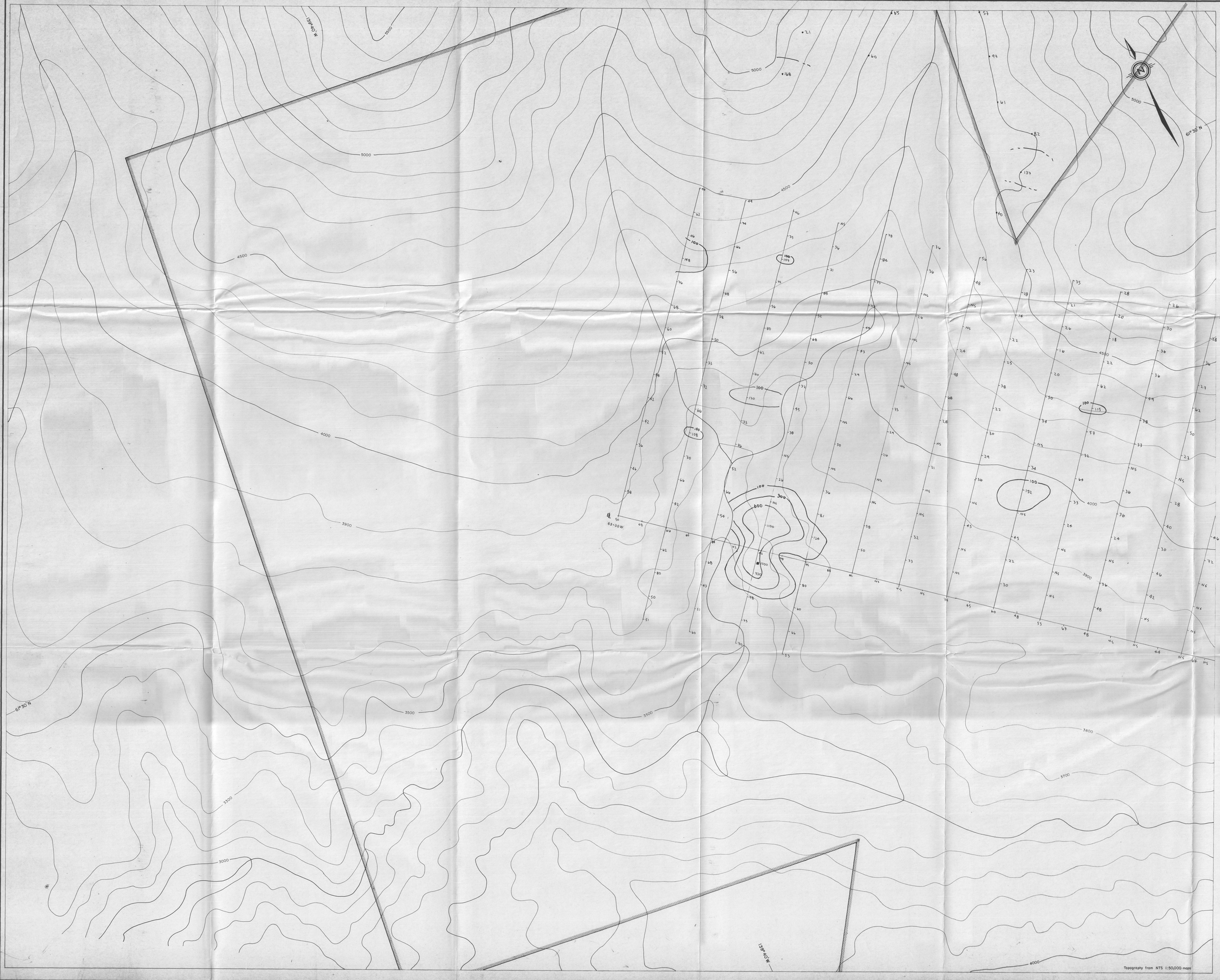
CENTRAL

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987





LEGEND

25	contour intervals at 25, 50, 100 and 250
– 25	soil sample location with Ni in ppb
● 25	soil sample location with Ni in ppb (off grid)
■ 250	rock sample location with Ni in ppb
	Arch Property

Figure 20

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

NICKEL GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

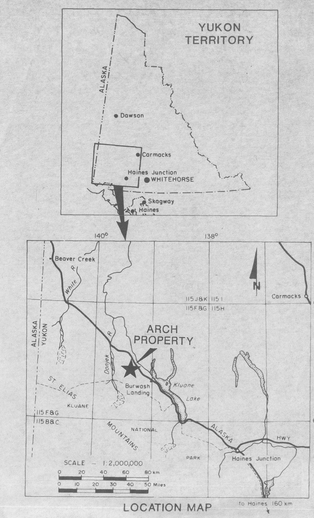
WEST

SCALE 1:2500

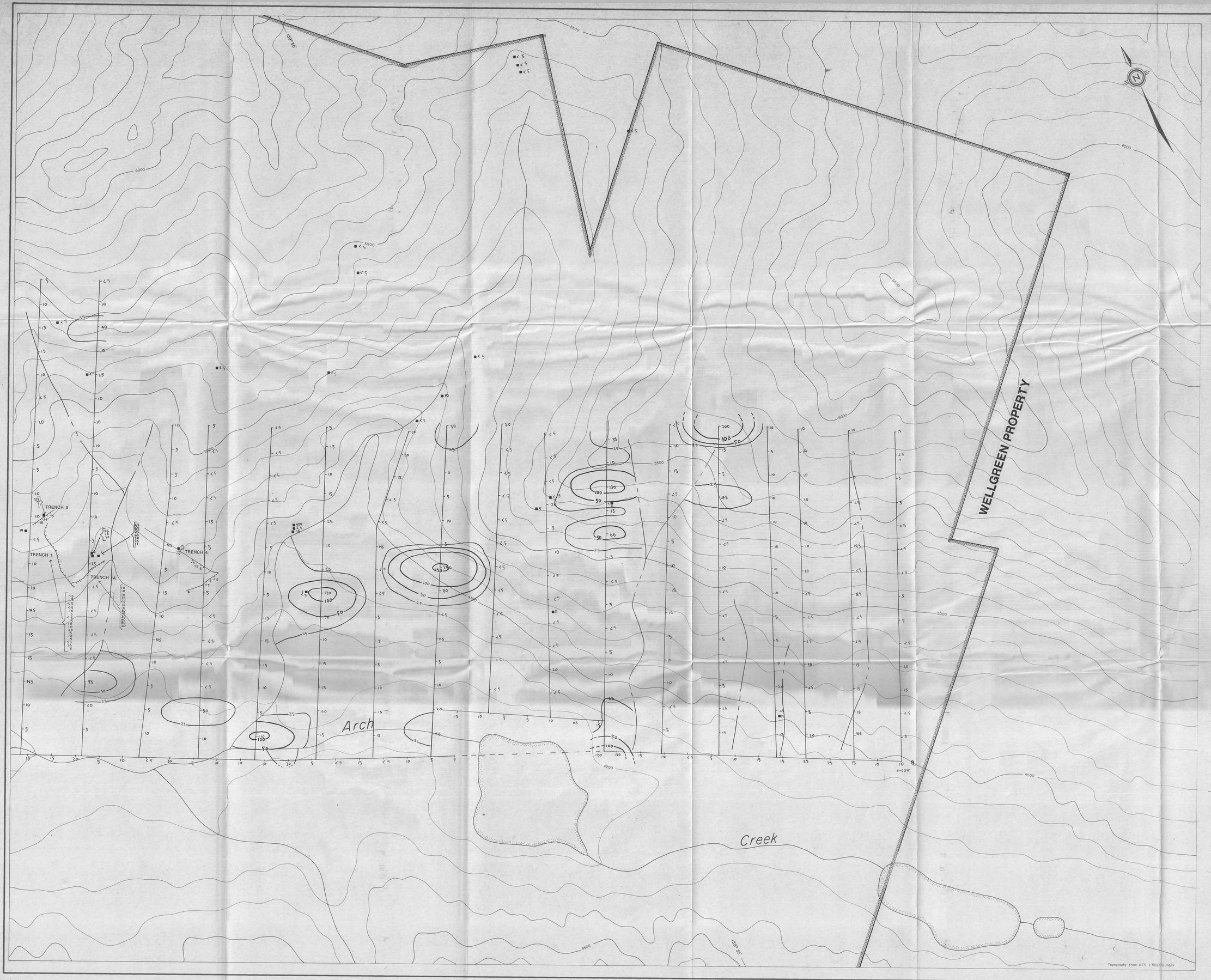
0 25 50 100 150 200 m

Topography from NTS 1:50,000 maps

To accompany report dated DECEMBER 1987



LOCATION MAP



LEGEND

- 25 — contour intervals at 25, 50, 100 and 250 ppb
- 25 soil sample location with Au in ppb
- ■ 350 rock sample location with Au in ppb
- trench
- Arch Property

Figure 21

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GOLD GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

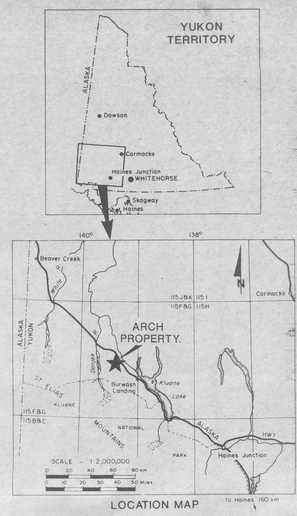
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

EAST

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987



LOCATION MAP

LEGEND

- 25 — contour intervals at 25, 50, 100 and 250 ppb
- 25 soil sample location with Au in ppb
- ● <5 soil sample location with Au in ppb (off grid)
- ■ 150 rock sample location with Au in ppb
- X 25 silt sample location with Au in ppb
- trench
- Arch Property

Figure 22

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED *

GOLD GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

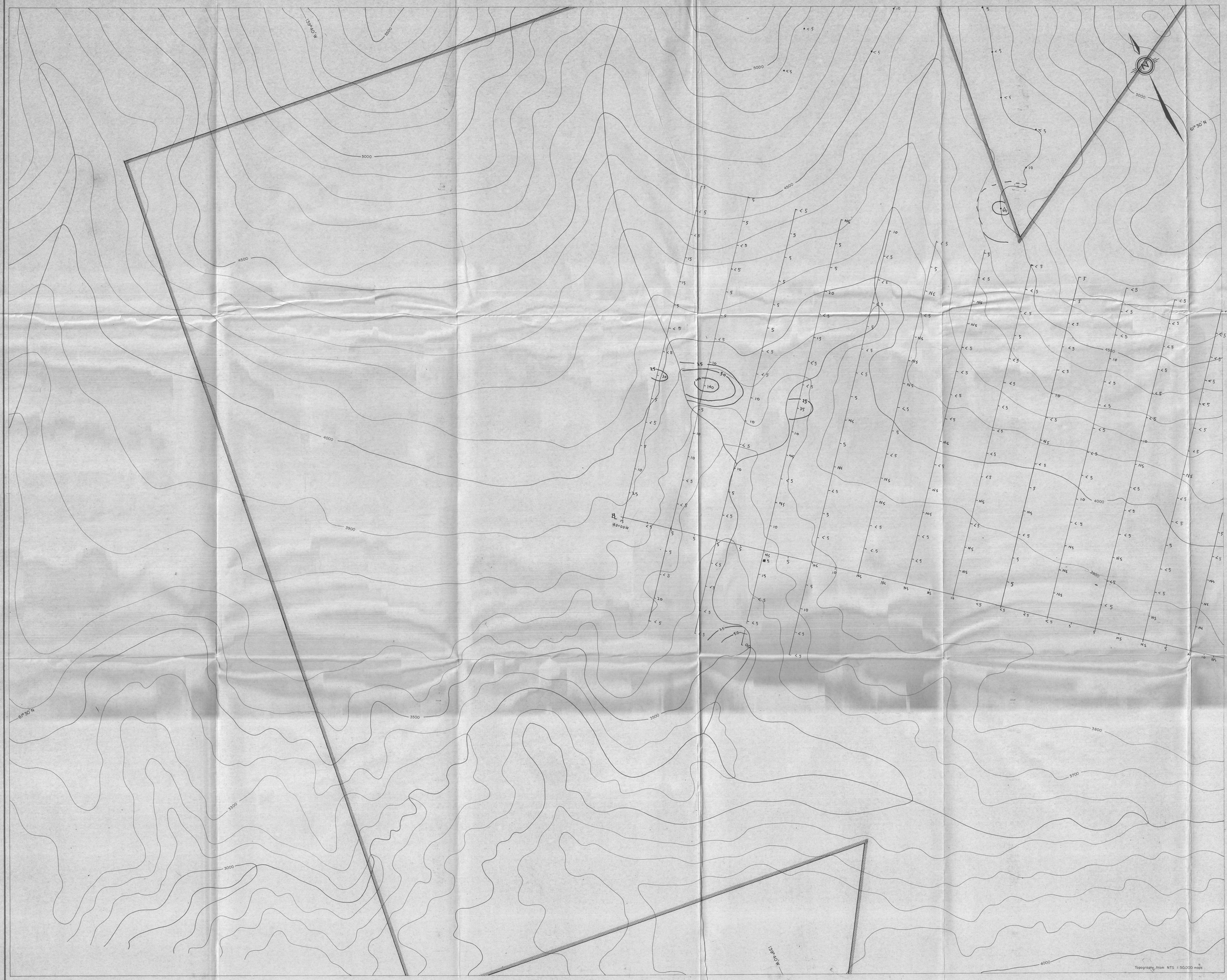
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

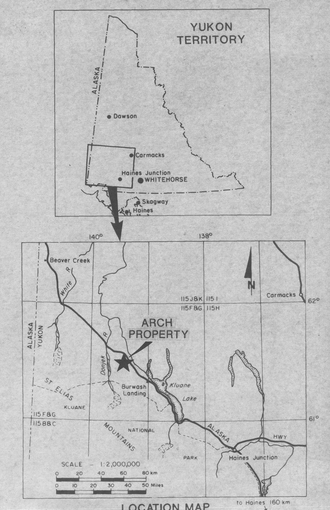
CENTRAL

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987





Topography from NTS 1:50,000 maps

LEGEND

- 25 — contour intervals at 25, 50, 100 and 250 ppb
- 25 soil sample location with Au in ppb
- 25 soil sample location with Au in ppb (off grid)
- 250 rock sample location with Au in ppb
- Arch Property

Figure 23

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GOLD GEOCHEMISTRY

ARCH PROPERTY

KLUANE RANGE, YUKON

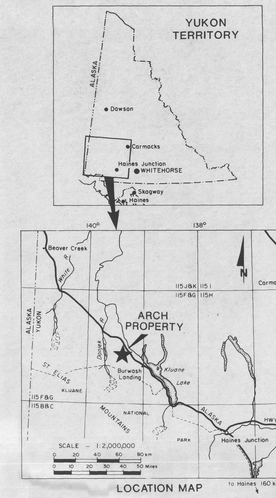
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

WEST

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987



LEGEND

- VLF anomaly (weak, moderate, strong)
- 57000 — magnetic response (in nanoteslas)
- Arch Property

Figure 24

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GEOPHYSICAL COMPILATION

ARCH PROPERTY
KLUANE RANGE, YUKON

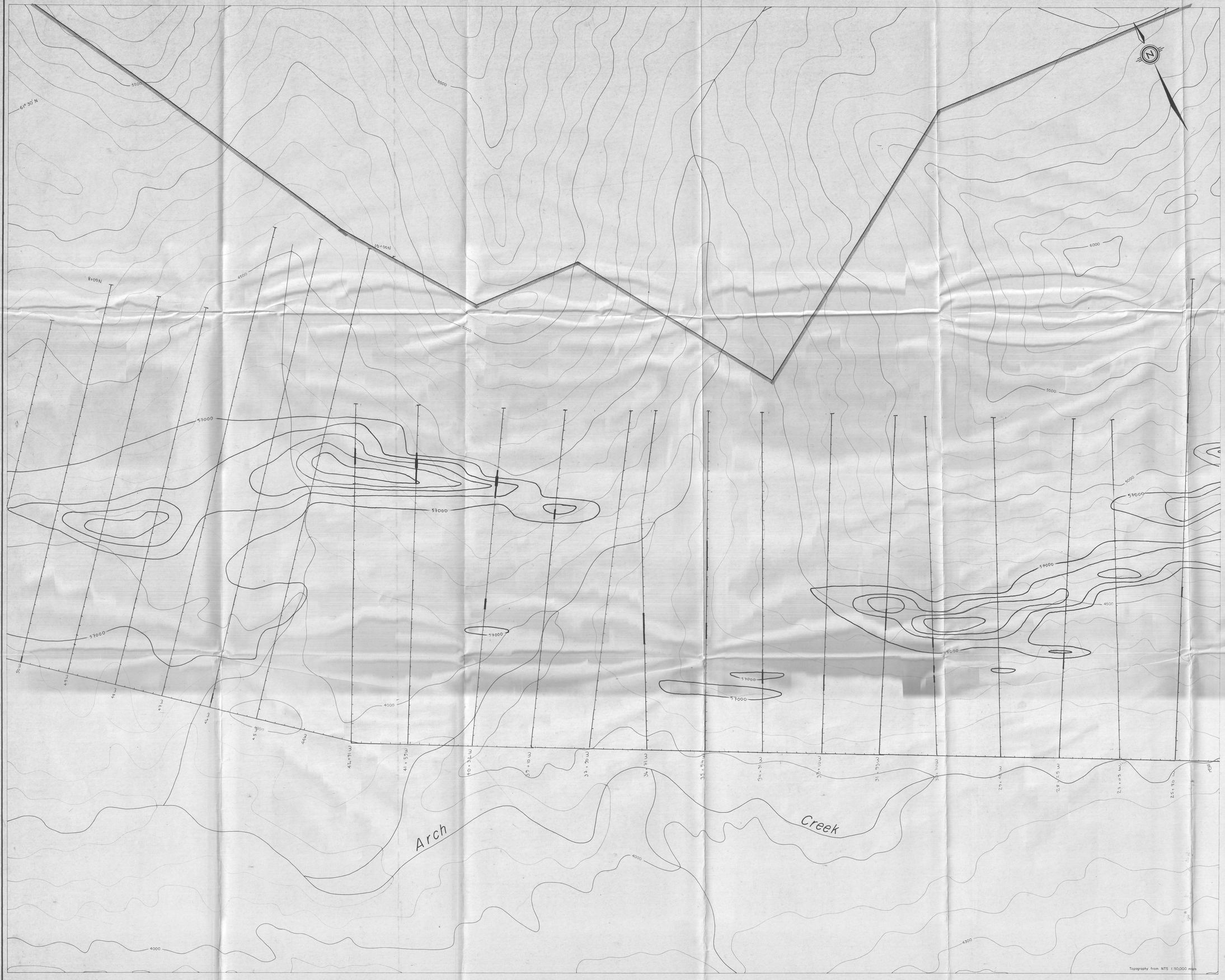
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

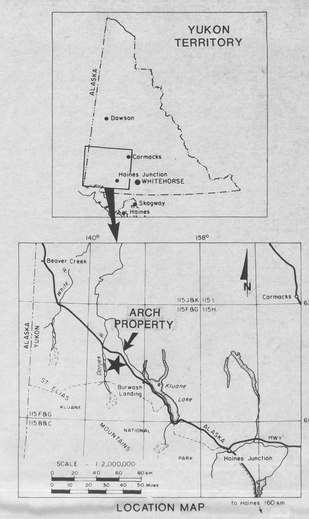
EAST

SCALE 1:2500
0 25 50 100 150 200 m

Topography from NTS 1:50,000 maps

To accompany report dated DECEMBER 1987





LEGEND

VLF anomaly (weak, moderate, strong)

53000 magnetic response (in nanoteslas)

Arch Property

Figure 25

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GEOPHYSICAL COMPILATION

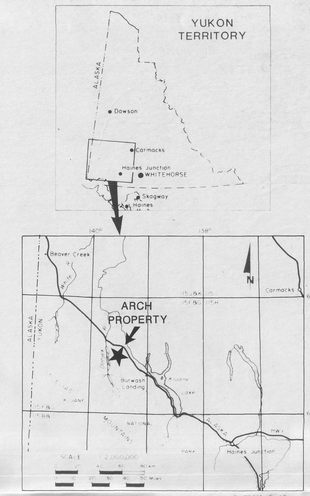
ARCH PROPERTY
KLUANE RANGE, YUKON

PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

CENTRAL

SCALE 1:2500
0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987



LOCATION MAP



LEGEND

- VLF anomaly (weak, moderate, strong)
- 57000 — magnetic response (in nanoteslas)
- Arch Property

Figure 26

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GEOPHYSICAL COMPILATION

ARCH PROPERTY

KLUANE RANGE, YUKON

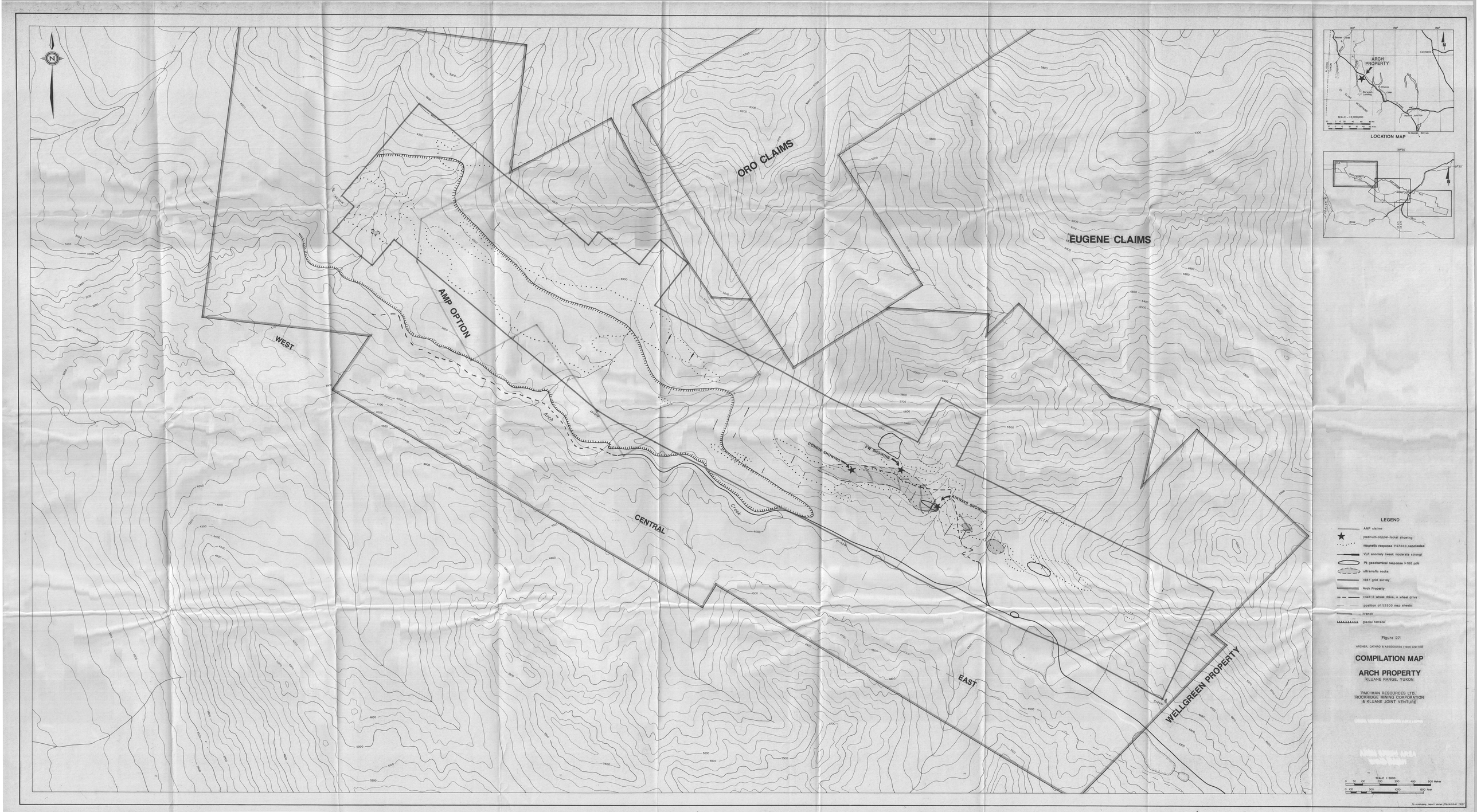
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE

WEST

SCALE 1:2500

0 25 50 100 150 200 m

To accompany report dated DECEMBER 1987


ORO CLAIMS
EUGENE CLAIMS
AMP OPTION
WEST
CENTRAL
EAST
WELLGREEN PROPERTY
Arch Creek
CONDIE SHOWING
FW SHOWING
RAWAYS SHOWING
ARCH PROPERTY
LOCATION MAP
LEGEND
AMP claims
platinum-copper-nickel showing
magnetic response >57000 nanoteslas
VLF anomaly (weak moderate strong)
Pt geochemical response >100 ppb
ultramafic rocks
1997 grid survey
Arch Property
road-2 wheel drive, 4 wheel drive
position of 1:2500 map sheets
trench
glacial terrace
Figure 27
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
COMPILATION MAP
ARCH PROPERTY
KLUANE RANGE, YUKON
PAK-MAN RESOURCES LTD.
ROCKRIDGE MINING CORPORATION
& KLUANE JOINT VENTURE
SCALE 1:5000
0 50 100 200 300 400 500 Metres
0 400 500 1000 1500 Feet
To accompany report dated December 1997