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

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Report on

SOIL SAMPLING

and

ECONOMIC POTENTIAL

of the

CASH PROPERTY

(Bear, Fox, Cash, Nex and Nac Claims)

091806

NTS 115I/5

Latitude 62°25'N; Longitude 137°38'W

R.C. Carne, M.Sc.

December, 1985

Work done between September 18 and 22, 1985

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

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 18,200.

Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

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INTRODUCTION

From September 18 to 22, 1985 Archer, Cathro & Associates (1981) Limited conducted a soil and rock geochemical sampling program at the Cash property. Two areas were sampled at 50 by 200 m spacing and one gossanous outcrop was rock chip sampled. A total of 239 soil samples and 8 composite rock chip samples were analyzed for gold and arsenic. The actual work was performed on the Fox 23, Cash 10-13, Cash 19-20, NEX 11-16 and NEX 24-28 claims.

The crew consisted of M. Walls and J. Dennett under the supervision of R. Carne.

PROPERTY, LOCATION AND ACCESS

The property consists of 131 claims in an irregular but contiguous block. They are currently registered in the name of Nordac Mining Corporation in the Whitehorse Mining District as follows:

Claim Name	Grant Number	Expiry Date
Fox 3	Y80425	1 February, 1989
Fox 23	Y91074	1 February, 1989
Bear 5	Y80435	1 February, 1989
Cash 1-13	YA82667-YA82679	1 February, 1990
Cash 14-20	YA87278-YA87284	19 June, 1986
NEX 3-16	YA87285-YA87298	19 June, 1986
NEX 21-30	YA87299-YA87308	19 June, 1986
NEX 41-50	YA87309-YA87318	19 June, 1986
NAC 1-28	YA87319-YA87346	19 June, 1986
NAC 41-68	YA87347-YA87374	19 June, 1986
Cash 21-27*	YA93672-YA93678	24 September, 1986
Cash 28-38*	YA93863-YA93873	25 October, 1986

*The Cash 21-38 claims were recorded after completion of the 1985 work program.

The property straddles Big Creek, 75 km west-northwest of Carmacks, at latitude 62° 25'N and longitude 137° 38'W in NTS map sheet 115I/5. Location of the property is shown on Figure 1 on the following page and claim locations in the central part of the property are shown on Figure 2 in the pocket.

The closest road suitable for two-wheel drive vehicles during summer conditions is the Freegold Road which ends at the mouth of Mechanic Creek, 17 km southeast of the Cash property. A bulldozer trail extends from Mechanic Creek to the property along the south side of Big Creek and can be used as a four-wheel drive winter road. A 500 m long winter airstrip is located along the northeast edge of the property.

Personnel and field equipment for the 1985 program were mobilized from the Freegold Road with a Bell 206B helicopter based in Whitehorse.

HISTORY

The area was first staked as the Cash and Johnny claims in November, 1969 by E. Schiller and optioned to Atlas Exploration Ltd. which explored by silt sampling and mapping in 1970.

The west half was restaked as the Car claims in May, 1974 by the Carmacks Syndicate (Castlemaine Exploration Ltd., Welcome North Mines Ltd., W.M. Bath Investments Ltd. and Ventures West Capital Ltd.) and optioned to a joint venture between Western Mines Ltd., Belmoral Mines Ltd. and Cream Silver Mines Ltd., which conducted grid soil sampling and magnetic surveys in 1974, and drilled 12 holes totalling 1026.5 m in 1975. The east half was restaked as the Bear and Fox claims in August and September, 1974 by Klotassin Joint

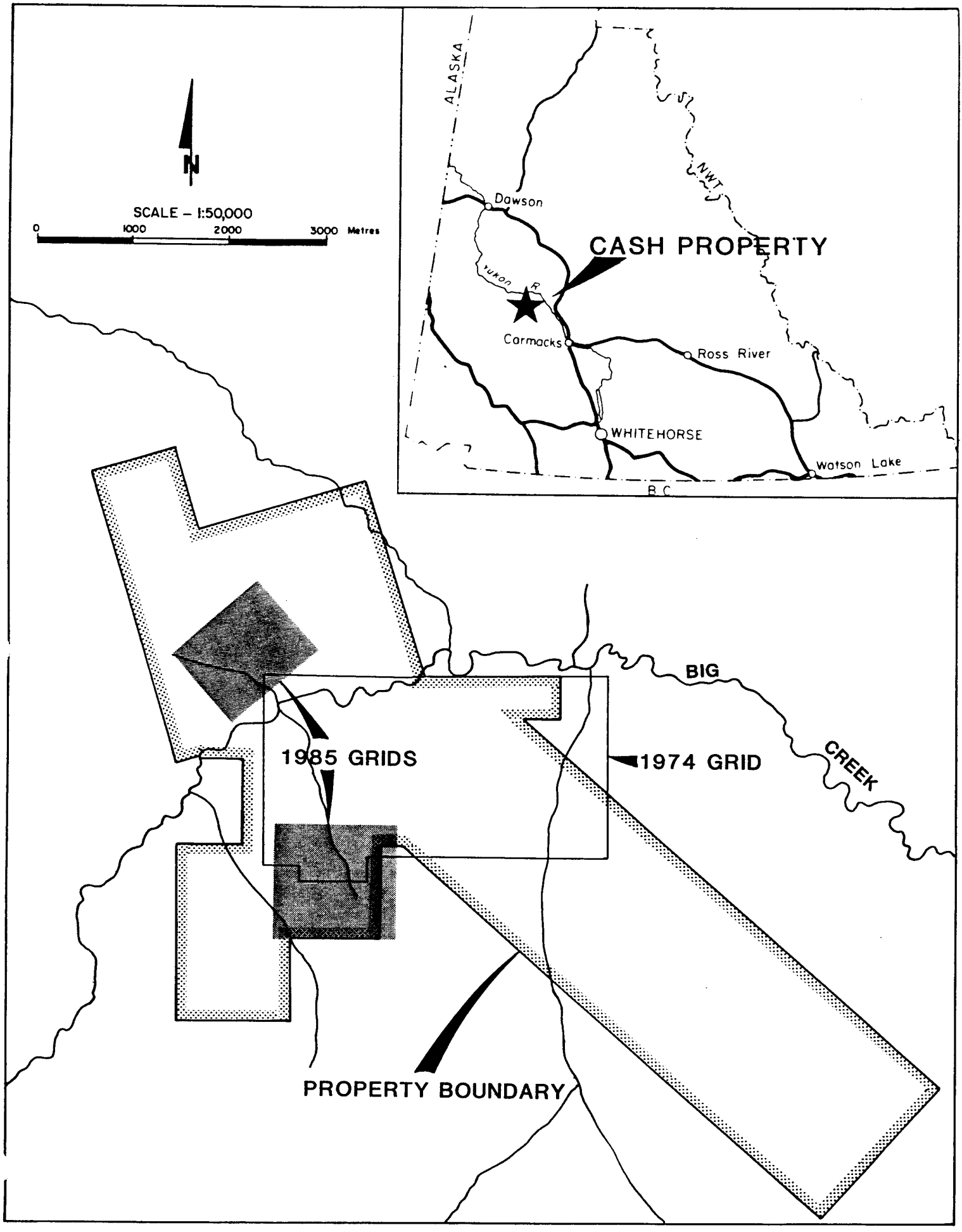


Figure 1: Location of the Cash property.

Venture (Newconex Canada Exploration Ltd., Marietta Resources International Ltd., and Molybdenum Corporation of America) which conducted a magnetic survey, grid soil sampling and hand pitting in 1974 and constructed an airstrip and participated in an IP survey with Western Mines Ltd. et al in 1975. After optioning Carmacks Syndicate property in 1976, Klotassin Joint Venture drilled 8 holes totalling 858.2 m in early 1977.

This work outlined a 900 by 2500 m copper-molybdenum soil geochemical anomaly surrounded by a halo of anomalous lead, zinc, silver and gold values. Drilling tested a 1050 by 2600 m area with holes at approximately 500 m centres. Ignoring four holes on the northwest side that were outside the deposit, the other 16 holes have an arithmetic average grade of 0.17% Cu and 0.018% MoS2. The deposit is hosted by a variety of rock types but appears to be related to Middle Cretaceous feldspar porphyry dykes and plugs. It exhibits mineralogical and hypogene alteration patterns characteristic of most Cordilleran porphyry copper-molybdenum deposits.

Archer, Cathro acquired the Fox and Bear claims in 1981 when Klotassin Joint Venture disbanded. By 1984, all but three claims covering the deposit had lapsed and in July, Archer, Cathro added thirteen Cash claims to the three remaining Bear and Fox claims to cover an area that produced anomalous soil, silt and rock gold values. Archer, Cathro carried out a modest bulldozer trenching program in 1984 to test part of the known gold anomalies. The claims were transferred in October, 1985 to Nordac Mining Corporation, which funded the 1985 work program.

PHYSIOGRAPHY

The property covers three distinct physiographic regimes. The first, which occurs in the central part of the property, is a 700 m wide area of muskeg occupying the floor of the Big Creek Valley. The second lies immediately to the south and consists of a well drained, 450 to 650 m wide terrace that is separated from the muskeg by an abrupt, 20 to 30 m high embankment. A more gradual break in slope marks the transition from the terrace to a long, gentle, north-facing hillside. All three areas are vegetated with sparse, stunted black spruce surrounded by either swamp grass or moss. Soils on hillsides are locally derived, except for a thin layer of volcanic ash which lies directly below the organic layer, while those on the terrace and in the swamp are fluvial in origin. North-flowing streams, such as Styan Creek which crosses the property, are actively depositing sediments in broad fans along the break in slope between the terrace and the hillside. Local elevations range from 850 m on the valley floor to 1400 m on a ridge top immediately south of the claims.

A cross-section with 2x vertical exaggeration through the central Cash property is shown on Figure 4 following page 5. This section, generated in part from drill hole data, shows that the alluvium underlying the muskeg and terrace fills a V-shaped valley incised into bedrock as much as 100 m below the present elevation of Big Creek.

GEOLOGY

The Cash property lies on the south side of the Big Creek Fault near the northwest end of a 1 to 3 km wide, Middle Cretaceous intrusive complex that extends west-northwesterly from Freegold Mountain to Prospector Mountain, a distance of 34 km. The complex contains felsic intrusive rocks ranging from coarse-grained equigranular stocks through porphyry dykes and intrusive breccias to rare volcanic flows and tuffs. It parallels the regional tectonic fabric and the Big Creek Fault, and intrudes Paleozoic schists and gneisses, plus Jurassic intrusive rocks.

Units occurring on the property are described below from oldest to youngest and their distribution is shown on Figure 3. A generalized cross-section through the central part of the property is given on Figure 4 on the following page. Most information on the map is based on rock fragments taken from soil sample pits, plus data from widely scattered outcrops, drill holes and bulldozer trenches.

Pre-Cretaceous Country Rocks

Pelly Gneiss (Psn) - consists of Paleozoic(?) quartz-muscovite schist and micaceous quartzite with minor marble and hornblende feldspar gneiss bands.

Big Creek Syenite (Jy) - exhibits coarse-grained hornblende and potash feldspar phenocrysts in a medium-grained feldspar matrix.

Mid-Cretaceous Igneous Rocks

Casino Granodiorite (mKgd) - is a medium- to coarse-grained, leucocratic stock containing 1 to 5% biotite.

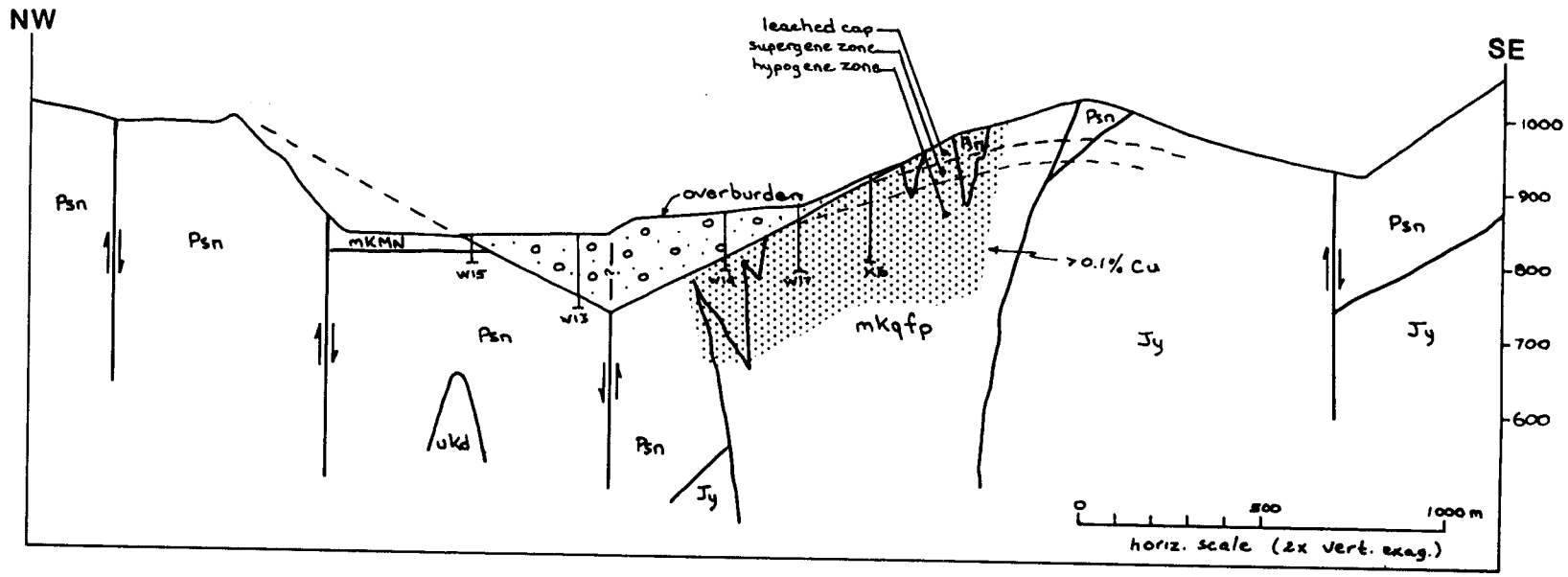


Figure 4: Generalized cross-section through the central part of the Cash property (see Figure 8 for location of the section).

Feldspar Porphyry (mKqfp) - is a leucocratic rock comprised of fine- to medium-grained potash feldspar, quartz and biotite phenocrysts in a microcrystalline groundmass. This unit occurs in dykes and small plugs and is probably a feeder for the Mount Nansen volcanics (mKMN).

Mount Nansen Group (mKMN) - consists of black to dark green, blocky weathering tuffs and volcanic breccias of andesitic composition.

Upper Cretaceous Igneous Rocks

Carmacks Group - a small porphyritic, magnetite-bearing diabase stock occurs along the north-central property boundary. This is compositionally similar to nearby Carmacks Group basalt flows.

Rocks underlying the central part of the property exhibit pervasive phyllic to argillic alteration. Alteration is most intense within the feldspar porphyry bodies but is also developed in the metamorphic and intrusive country rocks. Skarn zones are locally present within the metamorphic rocks and range from pale calc-silicate horizons to thick massive magnetite bodies.

Several generations of faults cut the bedrock sequence underlying the Cash property. These are grouped into northwest-trending structures, northeast-trending structures, northerly-trending structures and east-northeasterly trending structures.

i) Northwest-trending structures

Big Creek Fault lies along the northeast side of the Cash property. This fault and a parallel structure that borders the southwest edge of the claim group bracket a 1 to 3 km wide belt that hosts all known gold deposits between Freegold Mountain and Prospector Mountain. Sense of movement on these structures is unknown.

GEOCHEMICAL SURVEY

Two areas were soil sampled in 1985, both measuring about 1 by 1.4 km in size (Figure 1). The northern grid was located to test a northwest-trending airphoto linear uphill from gossanous outcrops on the north bank of Big Creek. Overburden cover is light and permafrost was encountered in only a few isolated locations. The southern grid covered the unsampled extension of a northeast-trending gold soil geochemical anomaly discovered by a 1974 survey. Overburden cover in this area is generally light although permafrost and frozen ash layers in some sections of the grid prevented sampling.

A 120 m long outcrop of gossanous, pyritic quartzite was sampled by 15 m long, continuous rock chips.

Soil samples were taken at 50 m intervals on lines spaced 200 m apart. Baselines were blazed, flagged and marked with a 0.5 m high wooden pickets. Soil sample pits were dug, if possible, to the B soil horizon with a light mattock. Sample sites were marked with the grid coordinate and sample number on orange flagging. The -35 mesh fraction of each sample was pulverized to -100 mesh and analyzed geochemically at Chemex Labs Ltd., North Vancouver, B.C. for gold by fire assay preparation and neutron activation finish, and for arsenic by atomic absorption spectroscopy. Rock samples were pulverized to -100 mesh and analyzed for gold by neutron activation. Results of the sampling program are given for gold on Figure 5, arsenic on Figure 6 and lead on Figure 7. The gold anomalies are numbered from 1 to 5 and summarized with bedrock geology on Figure 8 on the following page.

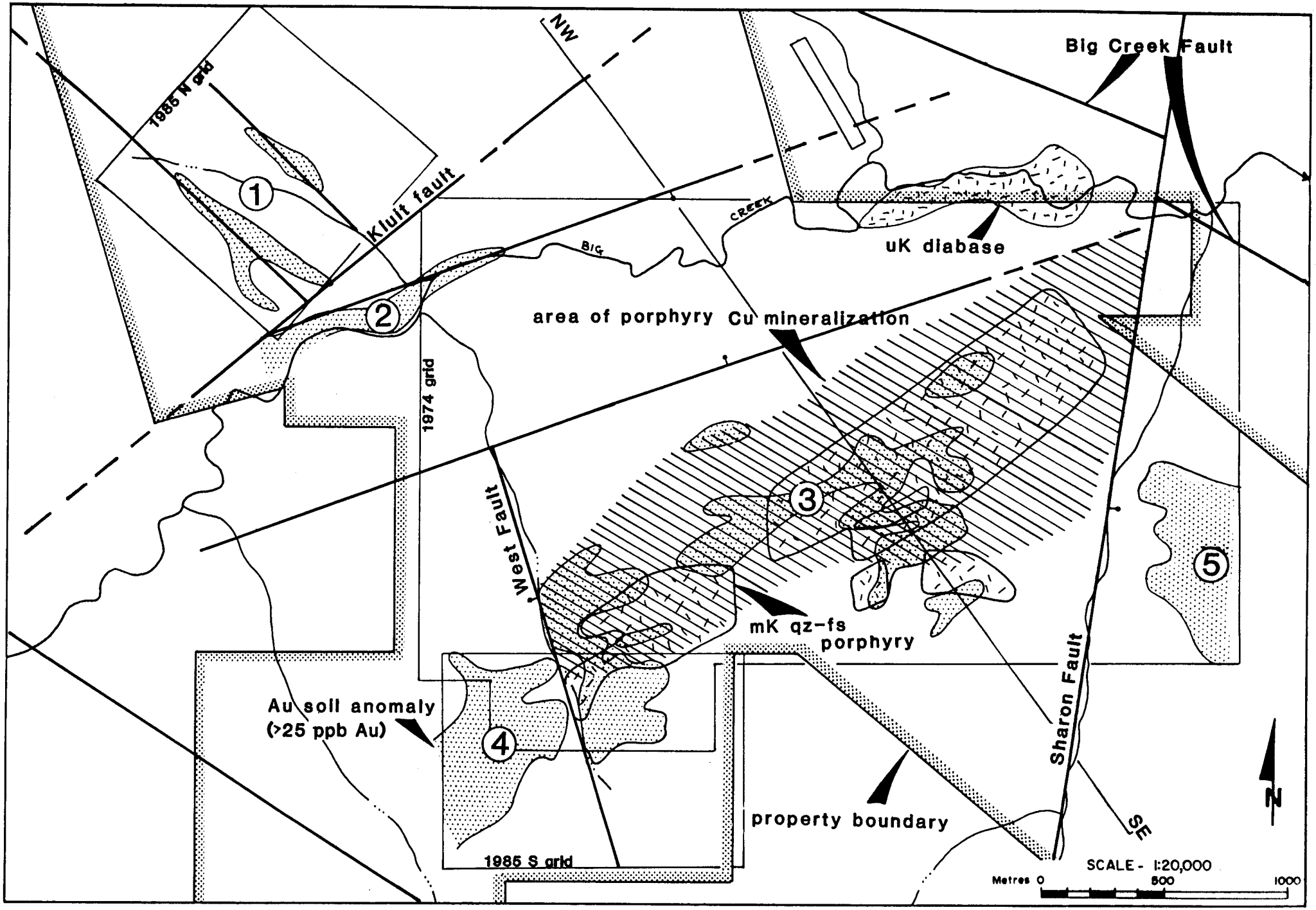


Figure 8: Geological and geochemical compilation, central Cash property.

Anomaly 1

Two northwest-trending, linear gold anomalies occur north of Big Creek. Both lie along weak airphoto linears. The southwestern linear corresponds to a large-scale fault shown on the GSC regional geology map while the parallel northeastern linear does not apparently correspond to a major fault zone. Bedrock geology of both areas is Paleozoic Pelly Gneiss. A Middle Cretaceous porphyry body intrudes the major fault zone about 1 km northwest of the anomalies.

The northeastern anomaly contains weakly anomalous Au values (25-95 ppb) and strong As values (75-2400 ppm). The southwestern anomaly is reflected by moderate strength Au response (25 to 217 ppb) and background As values (less than 75 ppm). Multi-element analyses have not been carried out on samples from the Anomaly 1 area.

Anomaly 2

Anomaly 2 is an east-northeasterly trending multi-element soil geochemical anomaly resulting from the 1974 sampling. Gold response is moderate (up to 476 ppb) and As values range up to 1100 ppm. Pb values greater than 4000 ppm and Ag values greater than 15 ppm accompany the Au-As anomaly. Copper values are only weakly anomalous.

A 120 m long gossanous outcrop of pyritic Pelly Gneiss quartzite occurs along the northwest edge of the anomaly. Gold contents of 15 m continuous rock chip samples taken along the length of the outcrop in 1985 are anomalous and range between 0.003 and 0.011 oz/ton.

Anomaly 2 lies along a major airphoto linear that probably represents an Upper Cretaceous block fault separating Pelly Gneiss from flat-lying Middle Cretaceous Mount Nansen volcanic flows and tuffs to the south. A nearby Upper Cretaceous diabase stock lies within an area of moderately anomalous Pb,Zn,Ag, Au and As values of widespread soil samples.

The multi-element character of Anomaly 2 may reflect polymetallic vein-fault mineralization similar to gold-bearing argentiferous galena veins on the Lilypad property, about 10 km to the west.

Anomaly 3

A broad, northeast-trending, discontinuous gold soil anomaly corresponds closely with the area of >0.1% Cu in bedrock in the main porphyry Cu zone. Two bulldozer trenches were cut and sampled at the west end of the anomaly in 1984.

Chip samples taken from the trench floors returned relatively consistent, strongly anomalous gold values in the range of 79 to 253 ppb (0.002 to 0.007 oz/ton). Copper and molybdenum values range from 110 to 2300 ppm and 21 to 131 ppm, respectively. All other metals, including arsenic, returned background to weakly anomalous values.

Anomaly 4

The 1985 sampling program extended Anomaly 4 for a 400 m width over a 700 m distance to the southwest of Anomaly 3. Gold values are similar to Anomaly 3 (up to 250 ppb Au), accompanying Pb values are weakly anomalous (50-120 ppm Pb) as are As values (75-140 ppm As). Copper soil values are uniformly low. The relatively high Au:As ratio of the soil geochemical analyses suggests a high-level porphyry environment rather than vein-fault mineralization. Anomaly 4 is open to the southwest in an unsampled area.

Anomaly 5

Anomaly 5 is a broad, northwest-trending area of moderate strength Au response (up to 110 ppb) that is open to the southeast in an unsampled area. Country rocks are highly altered Pelly Gneiss cut by quartz-feldspar porphyry dykes.

SUMMARY AND DISCUSSION

The Cash property encloses a large area with widespread Au (± As,Pb,Ag) gold soil geochemical anomalies that are apparently genetically related to a large Middle Cretaceous porphyry copper-molybdenum deposit located in the centre of the property. Little physical evaluation has been carried out on the gold anomalies but results of preliminary surface investigations suggest that the geological potential is diverse, ranging from low grade disseminated mesothermal Au(Cu) mineralization to high grade Au,Ag(Pb) epithermal vein faults.

A summary of each of the five gold anomalies and recommendations for further work are given below.

Anomaly 1 is a moderate strength Au-As anomaly that probably reflects epithermal vein or fault breccia mineralization. The photo linears that correlate closely with the soil anomalies extend off the grid to the northwest in an unsampled area.

The 1985 soil grid should be extended a farther 1 km to the property boundary. The area of Anomaly 1 is underlain by light or discontinuous permafrost and thin overburden. Hand trenching could be easily carried out to evaluate the presently known gold anomalies.

Anomaly 2 is a 1 km long strong Au,Ag(Pb,As,Cu) anomaly that overlies a block fault separating Paleozoic Pelly Gneiss from Middle Cretaceous Mount Nansen volcanic rocks. The strongest part of the anomaly occurs south of the fault, in an area underlain by Mount Nansen volcanics. Native gold was discovered in 1974 in a quartz vein cutting the volcanics east of the anomaly in an unsampled area. An angular sulphide boulder discovered during the construction of the Cash airstrip in 1977 assayed 1.98 oz/ton Au, 20.7 oz/ton Ag and 13% Pb. This float may have been transported a short distance downstream along Big Creek from the area of Anomaly 2. Pyritic Pelly Gneiss quartzite outcrops north of the fault were sampled in 1985, returning subeconomic but highly anomalous Au values. The anomaly loosely outlined by the 1974 sampling should be grid soil sampled and investigated by hand pitting and systematic prospecting.

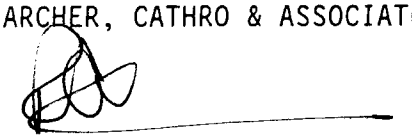
Anomaly 3 reflects widespread, but generally low grade, gold values within the main Cash porphyry Cu-Mo deposit. The southern half of the 0.5 by 2 km area of anomalous gold values lies within an area of deep weathering and may represent a potential heap leach target. This hypothesis should be tested by widespaced bulldozer trenching once access to the area is upgraded by the construction of the proposed Casino road.

Anomaly 4 is a southwestern continuation of Anomaly 3 across the West Fault, which bounds the western edge of the uplifted Cash porphyry Cu-Mo deposit. Tenor of the gold soil anomalies is similar across the fault but copper values drop to background in the area of Anomaly 4. This probably reflects a higher level in the porphyry system. Anomaly 4 is higher in elevation than Anomaly 3 and also is a potential heap leach Au target. The soil grid should be extended 1.5 km southwest to the property boundary and, if warranted, follow-up bulldozer trenching is recommended as the next phase.

Anomaly 5 is a moderate strength, widespread gold soil anomaly occurring along the east edge of the 1974 grid. Bedrock is highly altered Pelly Gneiss cut by quartz-feldspar dykes. The anomaly extends into an unsampled 1 by 5 km area of favourable geology that should be grid soil sampled.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



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R.C. Carne, M.Sc.

STAKING RESERVE

AIRSTRIP

CASH PROPERTY

LOCATION MAP

MAP AREA

PROPERTY BOUNDARY

LEGEND

- 1985 soil sample
- × 1985 silt sample
- 1974 soil sample
- × 1974 silt sample
- ×( ) 1970 silt sample
- hand pit location
- claim post; tagged, not tagged
- muskeg or swamp

Figure 2

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

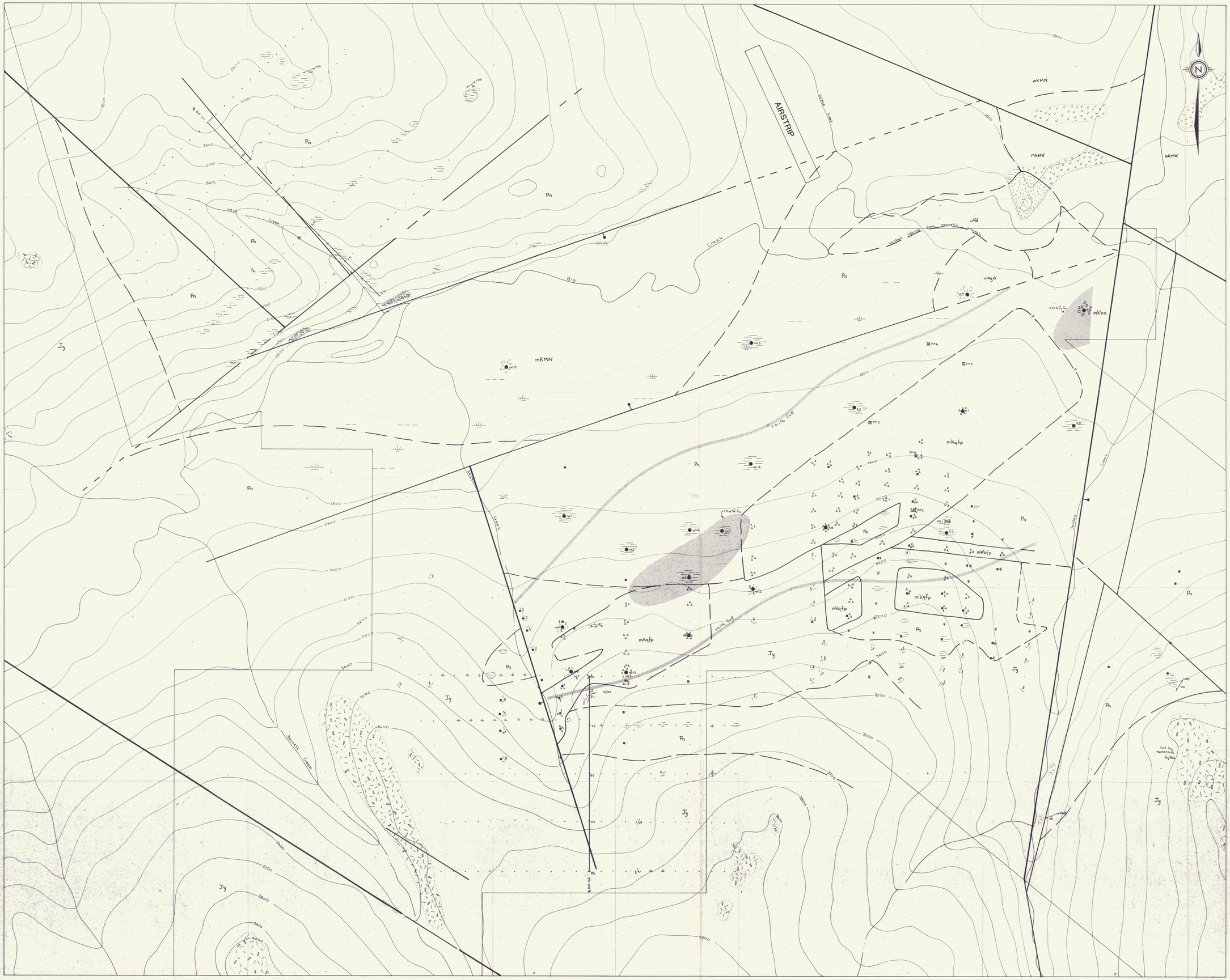
SAMPLE AND CLAIM LOCATIONS

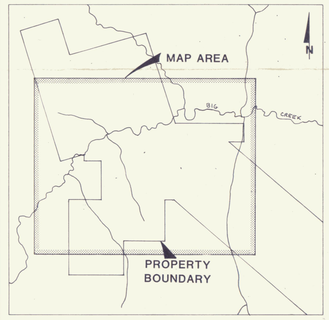
CASH PROPERTY

NORDAC MINING CORPORATION

SCALE – 1:5,000

To accompany report dated Dec./85





LEGEND

UPPER CRETACEOUS

Carmacks Group

- uKd — porphyritic diabase

MID-CRETACEOUS

Mount Nahsgen Group

- mKMN — porphyritic andesite flows and tuff breccia
- mKbx — brecciated, sericitized and silicified Pelly Gneiss (Psn) cut by highly altered and brecciated porphyritic dykes (mkqfp)
- mkqfp — quartz feldspar porphyry

Casino Granodiorite

- mKgd — slightly porphyritic biotite quartz monzonite(?)

JURASSIC

Big Creek Syenite

- Jy — coarse-grained hornblende syenite

PALEOZOIC(?)

Pelly Gneiss

- Psn — micaceous quartzite, quartz-muscovite schist
- altered Psn and magnetite-rich skarn

SYMBOLS

- area of outcrop or sub-outcrop
- bedrock at top of drill hole
- sub-outcrop in soil pit
- fault; inferred
- airphoto linear
- gossanous pyritic outcrop
- copper equivalent isopleth (1977 Cu:Mo ratios)
- diamond drill hole (W-1975, K-1977)

Figure 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GEOLOGY

CASH PROPERTY

NORDAC MINING CORPORATION

SCALE — 1:5,000

100 50 0 50 100 200 300 400 Metres

100 50 0 50 100 200 300 400 Yards

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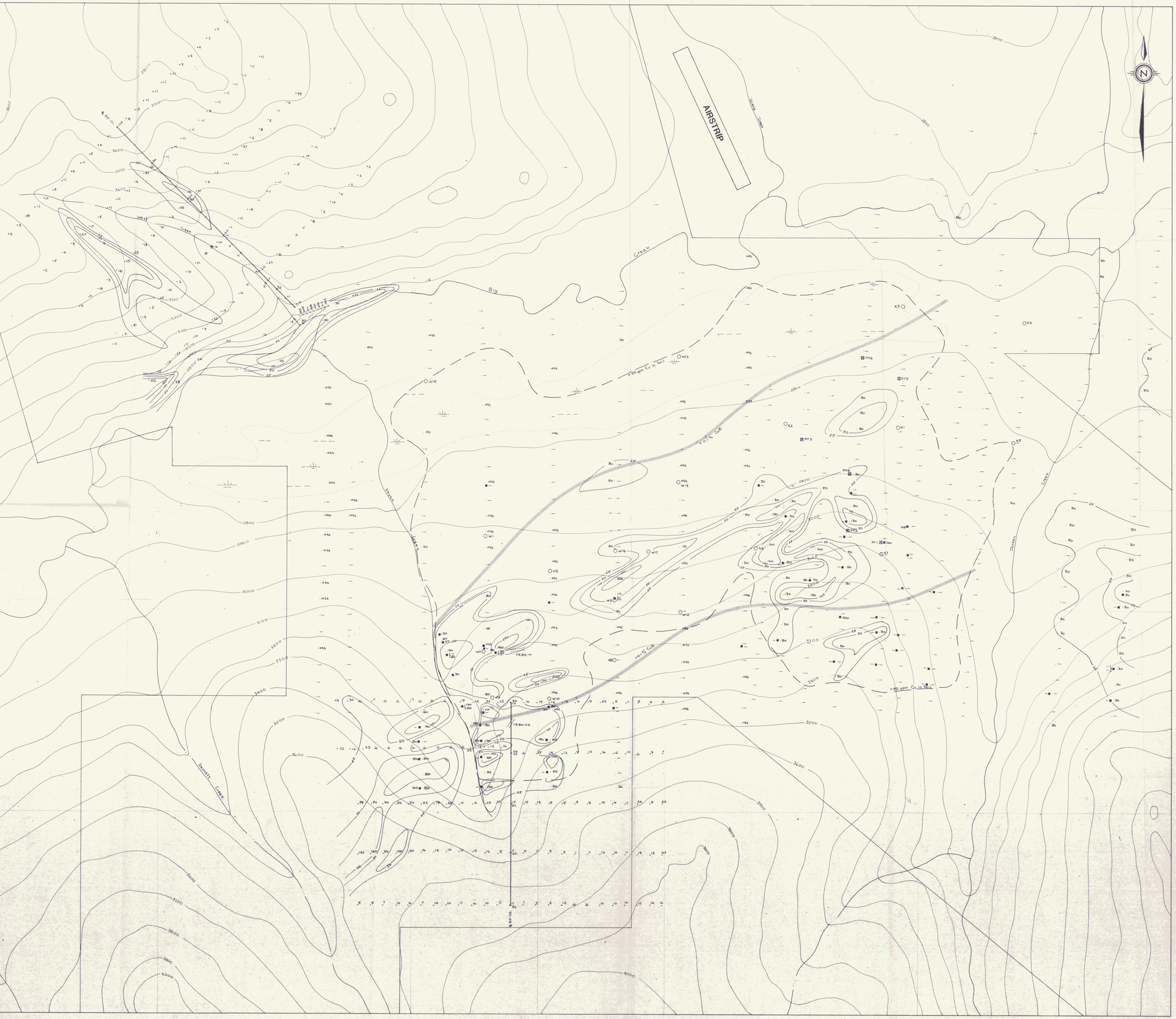
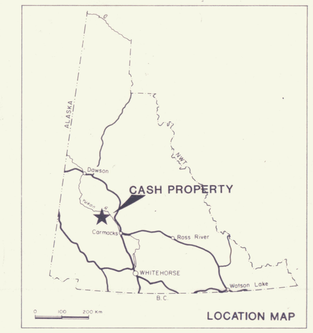
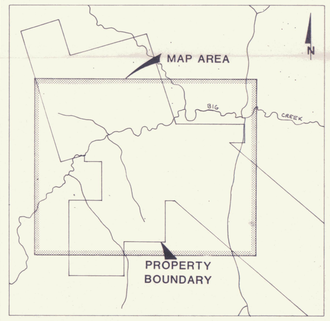






LEGEND

- 1985 soil sample
- X 1985 silt sample
- 1974 soil sample
- x 1974 silt sample
- X( ) 1970 silt sample

Au in ppb

- ⊠ hand pit location
- nss not sufficient sample for analysis
- ⁂ muskeg or swamp

Figure 5

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GOLD GEOCHEMISTRY

CASH PROPERTY

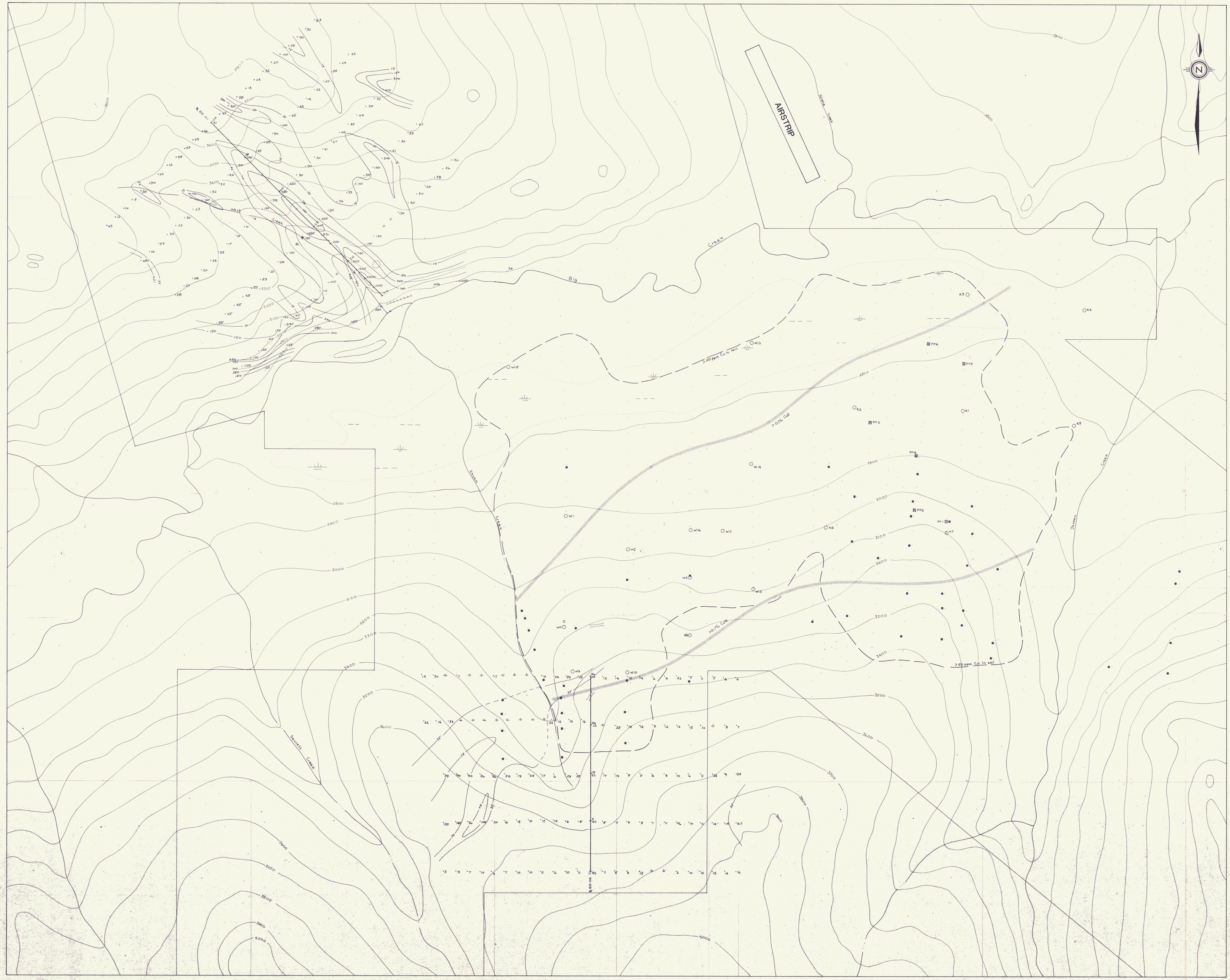
NORDAC MINING CORPORATION

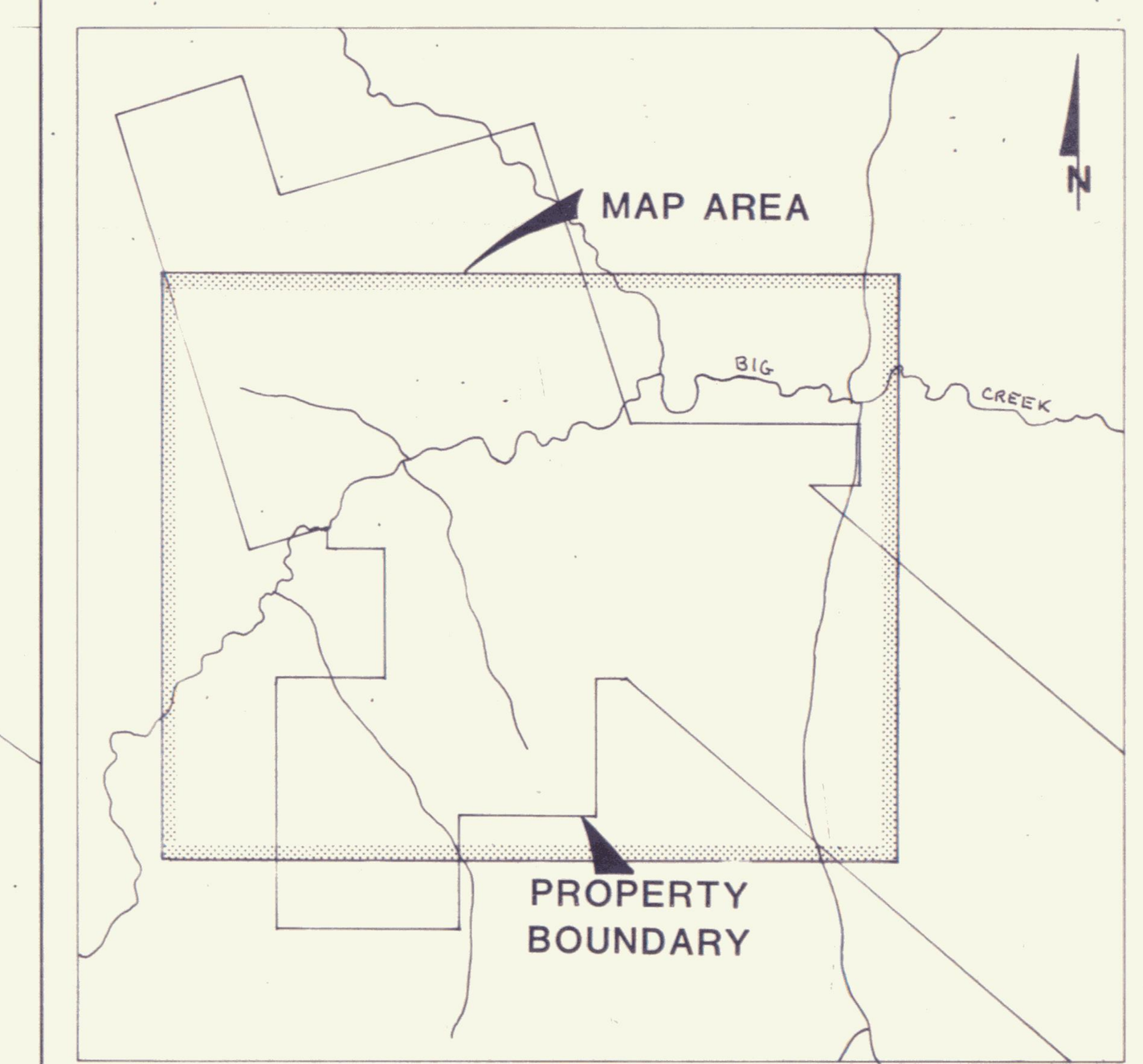
SCALE – 1:5,000

100 50 0 50 100 200 300 400 Metres

400 200 0 200 400 600 800 1000 1200 Feet

To accompany report dated Dec./88





LEGEND

•	1985 soil sample	As in ppm
×	1985 silt sample	
·	1974 soil sample	
×	1974 silt sample	
×( )	1970 silt sample	
⊠	hand pit location	
NSS	not sufficient sample for analysis	
⚹	muskeg or swamp	

Figure 6

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

ARSENIC GEOCHEMISTRY

CASH PROPERTY

NORDAC MINING CORPORATION

SCALE — 1:5,000

100 50 0 50 100 200 300 400 Metres

100 50 0 50 100 200 300 400 Yards

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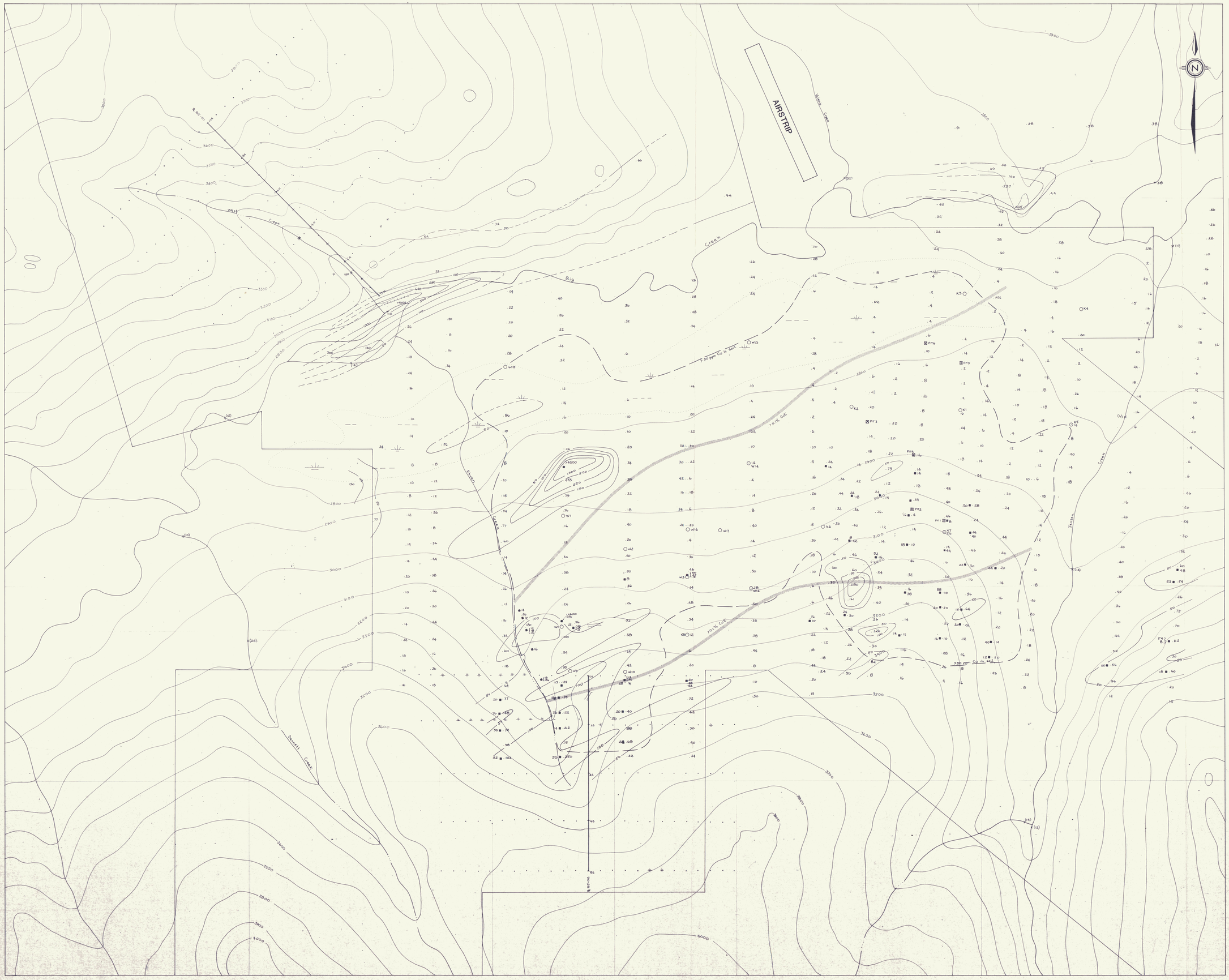

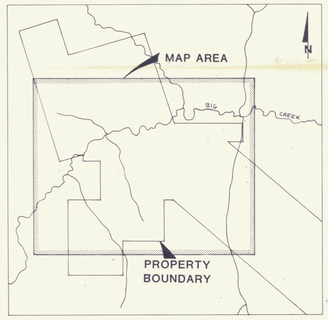

LEGEND

- 1985 soil sample
- X 1985 silt sample
- 1974 soil sample
- x 1974 silt sample
- X( ) 1970 silt sample

} Pb in ppm

- ⊠ hand pit location
- N65 not sufficient sample for analysis
- muskeg or swamp

Figure 7

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

LEAD GEOCHEMISTRY

CASH PROPERTY

NORDAC MINING CORPORATION

SCALE — 1:5,000

100 50 0 50 100 200 300 400 Metres

100 50 0 50 100 200 300 400 Yards

To accompany report dated Dec. /81