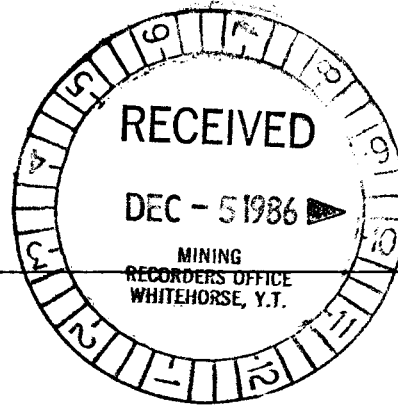


ARCHER, CATHRO

• ASSOCIATES (1981) LIMITED

CONSULTING GEOLOGICAL ENGINEERS

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09 1 8 8 2

REPORT ON BULLDOZER AND EXCAVATOR TRENCHING

done at

NAT JOINT VENTURE'S

NUCLEUS 1-141 CLAIMS

located at

Latitude 62°15'N; Longitude 137°20'W

on

NTS Map Sheet 115I/6

between

June 3 and August 3, 1986



October 20, 1986

W.D. Eaton, B.A., B.Sc.

09 1 8 8 2

5200100

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 \$ 21,500.00.

DA Edmund

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

5200100

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INTRODUCTION

Nat staked the first 34 Nucleus claims in August, 1980 and added a further 107 from 1981 to 1984. Work done during this period included geological mapping, grid soil geochemistry, linecutting, magnetometer and test EM-16 surveys, 2181 m of bulldozer trenching to bedrock and 315 m of diamond drilling in three holes. The geochemical exploration outlined four gold anomalies along the eastern edge of the property, two of which (Anomalies 1 and 2) are associated with a north-northwest trending, steeply dipping swarm of intensely clay altered and often brecciated feldspar porphyry dykes cutting less altered metamorphic and granitic country rocks. Initial development of these zones indicates potential for four to five million tons of oxidized rock averaging 0.03 oz/ton Au to a depth of 60 m. Both zones are open along strike but the larger (Anomaly 2) trends onto the adjacent Revenue property (Nordac Mining Corporation and Yukon Revenue Mining Limited) to the south.

The 1986 Nat program was confined to the main area of interest and consisted of four excavator trenches totalling 940 m in length. One trench extended a 1984 trench in Anomaly 1, another was cut in previously untested Anomaly 3, while the remaining two explored the western edge of Anomaly 2. Most of the trenching, mapping and sampling took place between June 3 and July 8 and work was completed on August 3.

While Nat was doing its work, Nordac Mining Corporation performed excavator trenching, soil geochemistry and claim surveys immediately to the east on the Revenue property. The claim survey showed a slight rotation of the Nucleus-Revenue boundary which means that part of four Nordac trenches (totalling 215 m) were actually cut on the Nucleus property. Results of mapping and sampling from these trenches are included in this report.

Appendix I contains the author's Statement of Qualifications while Appendix II is a list of personnel who worked on the property during 1986.

PROPERTY, LOCATION AND ACCESS

The Nucleus property consists of 141 claims registered in the name of Archer, Cathro & Associates (1981) Limited with the Whitehorse Mining Recorder, as listed below.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date</u>
Nucleus 1-12	YA51189-YA51200	February 19, 1993
Nucleus 13-18	YA51201-YA51206	February 19, 1994
Nucleus 19-34	YA51207-YA51222	February 19, 1993
Nucleus 35-50	YA60256-YA60271	March 1, 1993
Nucleus 51-90	YA82735-YA82774	February 19, 1990
Nucleus 91-141	YA82910-YA82960	February 19, 1990

The claims are located at latitude 62°15'N and longitude 137°20'W, on NTS map sheets 115I/5 & 6, 63 km northwest of Carmacks. Nordac's 1986 claim surveys produced a slight rotation of the Nucleus-Revenue property boundary, which is to Nat's advantage as shown on Figure N1 in the pocket.

The eastern portion of the property is accessible from the Freegold Road using two routes maintained by placer miners. One follows the ridge separating Big Creek from Bow Creek (Cole's Road), while the other parallels the south bank of Big Creek (Wienecke's Road). Both are usable in dry weather throughout the summer and fall. During 1986, Nordac extended Wienecke's Road from the mouth of Mechanic Creek to the main trenching area, a distance of approximately 1.5 km, at no cost to Nat.

PREVIOUS WORK

The eastern fifth of the Nucleus claims was originally staked as part of the Revenue property, which was explored by several groups as a low grade copper-molybdenum target in the late 1960's and early 1970's and as a high grade gold target in the 1950's and 1980's. Most gold exploration on the Revenue property was directed toward discontinuous lenses of chalcopyrite and pyrite occurring in argillically altered breccia (Discovery Zone), 2 km east of the Nucleus gold zones. The best assays reported from the Discovery Zone were 0.40 oz/ton Au with 2.0 oz/ton Ag and 0.28% W₃ across 3.3 m in a trench, and 0.14 oz/ton Au with 0.7 oz/ton Ag, 1.02% Cu and 0.18% W₃ across 7.0 m from a diamond drill hole. The highest assay reported by a previous operator from the area now covered by the Nucleus property was 0.012 oz/ton Au with 0.03% Cu from a composite sample representing a 67.1 m long rotary drill hole.

The Nucleus 35 to 141 claims occupy ground previously staked as the Cash claims (private individuals from Whitehorse 1979-1980), Com claims (Cominco 1969) and the Roy, Tye and Skunk claims (Klotassin JV 1974-1975). Cominco and Klotassin JV conducted geochemical soil surveys over the area but outlined only a few, weak to moderate, copper, molybdenum, lead and zinc anomalies. Grid samples taken by Klotassin JV were analyzed for gold by Nat in the fall of 1984 and returned low values, except for two spot highs of 149 and 129 ppb.

Most creeks draining the property have received some placer exploration but there is no record of production except for Mechanic Creek which drains the main Nucleus zones.

PHYSIOGRAPHY AND GEOMORPHOLOGY

The Nucleus property lies in the Dawson Range, a west-northwest trending range of low mountains that extend from Carmacks to Dawson. The main drainage in the Nucleus area is Big Creek which occupies a major northwest-trending topographic low that follows the trace of the Big Creek Fault. Most tributaries of Big Creek, including Mechanic Creek which cuts the Nucleus claims, flow perpendicular to Big Creek and are strikingly linear, suggesting that they are developed along subsidiary fault structures. Local elevations range from 700 m in the Big Creek Valley to 1000 m on the north-trending ridge west of Mechanic Creek. The property lies below treeline and typical vegetation includes spruce and poplar trees on south- and east-facing slopes with stunted black spruce and thick moss on north- and west-facing slopes.

Although the Dawson Range was not covered by continental ice sheets during the Pleistocene Wisconsin glacial epoch, isolated alpine glaciers were present and glaciofluvial outwash is common. Exotic alluvium, which forms a broad terrace along the south side of the Big Creek Valley, are probably remnants of such outwash debris.

Soil profiles on the Nucleus property include 1 to 10 cm of A horizon organics, 0 to 100 cm of volcanic ash, 5 to 50 cm of B horizon soil, and 100 to 300 cm of C horizon soil over deeply weathered bedrock (drilling in the Anomaly 2 area intersected supergene sulphides at a depth of 60 m vertically below surface). The ash horizon covers most of the property but its thickness is highly variable due to local remobilization by fluvial and colluvial processes. It is thickest (up to 100 cm) on flat ridge tops and in

solifluction lobes on the slopes west of Mechanic Creek. Elsewhere on the property it is thin to absent. Extensive mixing between ash and locally derived soils has occurred on the lower slopes and in these areas the ash tends to occur as up to 1 cm thick lenses and individual particles within the soil. Permafrost is extensive, particularly at lower elevations and on north- and west-facing slopes.

Less than ten outcrops occur on the property; however, road cuts and old cat trenches expose abundant locally derived float. The degree of downhill transport of the float is difficult to estimate and unit contacts based on float mapping may be shifted downhill as much as 200 m in some areas.

GEOLOGY

General

The Nucleus claims cover the central part of a 1 to 3 km wide, mid-Cretaceous intrusive complex extending west-northwesterly from Freegold Mountain to Prospector Mountain, a distance of 34 km. The complex contains felsic igneous rocks ranging from coarse-grained equigranular stocks through porphyritic dykes and intrusive breccias to rare volcanic flows and tuffs. The deepest parts of the system are exposed at the east and west ends of the complex while volcanic rocks occur near its centre. The complex parallels the regional tectonic fabric and the Big Creek Fault and intrudes Paleozoic metamorphic and pre-Cretaceous intrusive rocks.

The property geology is summarized below, beginning with the main lithological units, from oldest to youngest.

Pre-Cretaceous Country Rocks

Pelly Gneiss (Psn) - These rocks were previously referred to as the Yukon Metamorphic Complex and form a 500 m wide band that trends northwesterly across the eastern end of the property. Elsewhere on the property, these rocks occur as large rafts within intrusions. The unit exhibits strong heterogeneity and includes chlorite schist, quartz-biotite schist, quartz-muscovite schist, amphibolite, impure quartzite and quartz-feldspar granulite. This suite is consistent with a paleolith composed of intermediate to felsic tuffs, sediments and mafic to felsic dykes. Rare garnet porphyroblasts include greenschist facies metamorphism.

Selwyn Gneiss (Ppn) - This unit occurs on the north side of the Big Creek Fault and is thought to be part of the Simpson Allochthonous Assemblage. It consists of strongly foliated, medium-grained hornblende-biotite-chlorite gneiss.

Gabbro-diorite (PMgb) - An irregular, 100 by 200 m, mafic intrusion invades Pelly Gneiss rocks east of Mechanic Creek. In places it exhibits strong compositional layering parallel to foliation in the enclosing schists. This texture shows that it is syntectonic and thus probably pre-Jurassic in age.

Big Creek Syenite (Jy) - A large batholith of resistant, coarse-grained to porphyritic hornblende syenite forms a prominent topographic high along the southern margin of the younger intrusive complex. No syenite xenoliths have been seen in the complex suggesting that the two units may be in fault contact.

Cretaceous Intrusive Complex

Casino Granodiorite (Kgd) - This unit is medium- to coarse-grained, equigranular and non-foliated. It is compositionally variable and includes monzonites which range between two end members, one containing greater than 10 percent quartz and less than 5 percent biotite (Kqm), and the other containing little or no quartz and up to 15 percent biotite (Kbm). The monzonites occur mainly east of Mechanic Creek while granodiorites occur west of the main ridge on the Nucleus property.

Coffee Creek Granite (Kg) - These rocks lie on the north side of the Big Creek Fault and consist of recessive, rusty weathering, strongly altered, equigranular leucogranite. They are coeval with the Casino Granodiorites but are rarely mineralized.

Mount Nansen Group Volcanics (KMN) - Resistant, dark weathering andesitic flows and related pyroclastic rocks.

Microgranite (Kmg) - This unit occurs within a 2 km area on the hillside west of Mechanic Creek. It is a fine-grained, tan to pale green, extremely felsic rock containing between 1 and 5 percent, small (1 to 5 mm), euhedral plagioclase phenocrysts in a matrix of of anhedral quartz and feldspar. Biotite originally comprised up to 3 percent of the rock but is generally altered to chlorite. Foliation is often present and drilling has shown some rocks previously assigned to this unit are actually strongly altered Pelly Gneiss rocks.

Quartz-feldspar Porphyry (Kqfp) - These rocks occur as individual dykes, dyke swarms and small plugs. They are variable in composition, ranging from quartz porphyry (Kqp) through feldspar porphyry (Kfp) to feldspar-biotite-hornblende porphyry (Kfbhp). In the main area of interest, the porphyries consist of 5 to 15 percent feldspar and quartz phenocrysts in a tan, nearly aphanitic, locally flow banded matrix. Argillic alteration is common. In most specimens collected at surface, feldspar phenocrysts appear as holes and the matrix is punky rather than vitreous. Sparse clasts found in some dykes strongly resemble matrix material. The dykes cut all other units and are often too narrow to show on property scale maps.

Brecciation

Numerous north-northwest trending breccia zones occur within a 100 by 300 m area on the hillside west of Mechanic Creek. They cut microgranite, schists and feldspar porphyry and are typically clast-dense, angular and exhibit minimal mixing. The fragments are commonly rotated, indicating some degree

of movement during formation. A few slickensides occur in breccia cobbles. Silicification of clasts, as well as matrix, is particularly evident in breccias composed of microgranite fragments. The matrix normally consists of quartz, clays and limonite.

Alteration

Several alteration zones have been identified on the Nucleous property. The most significant is a 50 to 300 m wide, 1100 m long, north-trending zone that coincides with the main geochemical anomalies (Anomalies 1 to 4) on the west side of Mechanic Creek. The northern two-thirds of this zone affects microgranite while the southern third coincide with the area of brecciation described above. Within the microgranite there is an extensive stockwork of hairline to 3 cm wide quartz veins surrounded by a swarm of parallel veins. Silicification is rarely pervasive but rocks adjacent to the quartz veins typically exhibit pervasive sericite or clay alteration which often completely destroys primary textures. Where pervasive alteration is present, most appears to be hypogene. A poorly developed, weak argillic alteration zone is developed in the microgranite peripheral to the advanced argillic-phyllitic zone, but in most cases this weak alteration is difficult to distinguish from supergene alteration. Where the zone of strong alteration affects the Pelly Gneiss rocks, the schists are typically bleached to a pale green or tan colour and it is often hard to distinguish them from altered microgranite in hand specimens. Quartz-feldspar dykes within the zone characteristically exhibit intense argillic alteration and are occasionally cut by white to gray chalcedonic quartz veins. The most intense alteration in the schists normally occurs adjacent to porphyry dykes.

A second large alteration zone occurs 600 m southeast of the main zone and a smaller zone lies to the northwest. The large zone covers a 100 by 400 m area and consists of strongly bleached schist mixed with intensely clay altered and occasionally silicified porphyry float. The small zone is confined to the microgranite and exhibits intense phyllic and argillic alteration without quartz veining.

Further to the west there is a broad zone of argillic and phyllic alteration centred on porphyry plugs in the Gish and Magman Creek areas.

Structure

There is too little outcrop data to interpret structure within the metamorphic rocks but in general they appear to dip steeply except along the ridge top west of Mechanic Creek. Where exposed, intrusive contacts are generally steep although the microgranite appears to dip shallowly beneath the schists along the ridge. The porphyry dykes show a pronounced north-northwesterly trend and dip vertically or steeply to the west.

Most major drainages along the south side of Big Creek are strikingly linear and show consistent north-northeast trends. A number of topographic lineaments paralleling the creeks are recognizable in the ground as poorly defined slope breaks and vegetation anomalies. Most of the linears do not show offsets or lithological breaks and thus appear to be fracture zones rather than faults.

MINERALIZATION

Sulphide mineralization is rare at surface and drilling has indicated that the zone of intense oxidation ranges from 15 to 60 m in depth. Most of the mineral occurrences are associated with chalcedonic quartz veins which encapsulate minor fine-grained pyrite and arsenopyrite and occasionally sphalerite, galena, chalcopryrite and magnetite. Rock fragments taken from soil normally contain less than 1% limonite but trenching has shown that bedrock 2 to 3 m below surface averages 3 to 5 percent. Yellow to brown limonites are most common and occur on fractures, as disseminations and in quartz veins within all units. Most are after pyrite although yellow to yellow-green limonite in some porphyry dykes is derived from arsenopyrite. Black manganiferous and red hematitic oxides are relatively rare. Black limonite is usually associated with altered schists while red limonite occurs along the margins of porphyry dykes.

The best gold assays (0.03 to 0.10 oz/ton) are associated with narrow (less than 1 m wide) steeply west dipping chalcedony veins and stockwork and up to 20 m wide brecciated and argillically altered porphyry dykes. The veins and dykes form a series of subparallel, north-northwest trending zones that have been traced up to 300 m along strike and are still open. The average grade of these zones is about 0.040 oz/ton Au over an average width of about 15 m. Broad halos of lower grade (0.01 to 0.03 oz/ton Au) material occur in the surrounding wallrocks.

Other metals are present in low but anomalous quantities with silver averaging 0.3 ppm, copper 321 ppm, lead 4 ppm, zinc 22 ppm, arsenic 421 ppm, bismuth 14 ppm, antimony 26 ppm, tellurium 1.2 ppm, mercury 53 ppb, and

tungsten 16 ppm. The silver-to-gold ratios are surprisingly low averaging less than 1 to 1. Bismuth, silver and arsenic show the highest correlation with gold. Although there is little or no correlation between total limonite content and gold, rocks containing red limonite often return high gold values.

The 1984 diamond drilling in the Anomaly 2 area showed that the mineralized structures continue to depth and exhibit grades comparable to those obtained from the overlying trenches. Supergene sulphides including chalcocite and covellite were intersected at a depth of 60 m vertically below surface. Samples taken from the supergene sulphide zone returned much higher copper values (up to 0.4%) but there was no evidence of gold enrichment.

TRENCHING

General

The 1986 bulldozer trenching continued to explore the main area of interest immediately west of the Nucleus-Revenue property boundary. Table N1 on the following page lists the lengths of the trenches and the target that each tested. Permafrost was encountered in all trenches and had to be ripped before it could be removed. In some areas the permafrost was covered by a 1 to 2 m thick layer of extremely wet organics and volcanic ash which slumped and flowed into the trenches. Pre-stripping required a total of 56 hours of bulldozer time and was done with a ripper-equipped Caterpillar D7E bulldozer contracted from E. Caron Diamond Drilling of Whitehorse. Trenching to bedrock used 27.5 hours and was done with an Insley 1000H excavator contracted from IbeX Contracting Ltd., also of Whitehorse.

A total of 225 channel samples averaging 9 kg each was collected from trench ribs near the floor of the excavator cut where bedrock was well exposed. Sample intervals ranged from 0.4 to 10.6 m in length. All samples were sent to Chemex Labs in North Vancouver where they underwent a fire assay preparation and neutron activation analysis for gold. Details concerning analytical techniques are discussed in Appendix III.

Results

Significant assays are listed on Table N2 (following Table N1) and illustrated schematically on Figure N1 in the pocket. Complete sample data and results are given in Appendix IV. Geology exposed in the trenches is quite complex in some areas but generally agrees with earlier trench results and float mapping. However, bedrock gold values show little direct correlation to nearby soil values and are often much higher or lower.

In the Anomaly 1 area, Trench 86N-3 exposed brecciated quartz feldspar porphyry dykes cutting quartzite which exhibits weak to strong development of quartz stockwork. The highest assays were obtained from a narrow chalcedony vein within a porphyry dyke.

At Anomaly 2, the geology consists of an irregular contact between schists to the east and microgranites to the west, which are cut by a north-northwest trending porphyry dyke swarm and related breccia zones. The microgranites exhibit pervasive phyllic alteration while the schists range from relatively fresh to intensely bleached and phyllically altered. Feldspar porphyry dykes normally show intense argillic alteration and often transform along strike from dykes to brecciated dykes to breccia zones without porphyry clasts.

The best values in Trench 86N-1 came from a chalcedonic quartz vein cutting a strongly argillically altered quartz feldspar porphyry dyke, while most high assays in Trench 86N-2 were obtained from a series of up to 15 m wide north- to northwest-trending breccia and gouge zones related to porphyry dykes.

Significant values in Trench 86N-4, which is located in Anomaly 3, 600 m south of Anomaly 2, come from up to 20 cm wide quartz veins that are also associated with narrow north- to northwest-trending gouge zones.

DISCUSSION AND CONCLUSIONS

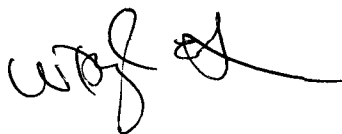
The 1983 and 1984 bulldozer trenching outlined two reserve blocks (Anomaly 1 and Anomaly 2 blocks) on the Nucleus property in which the average gold content is about 0.03 oz/ton Au. The host rocks are highly fractured and intensely oxidized feldspar porphyries, microgranites and schists. Diamond drilling beneath the trenches confirmed that the gold mineralization continues into the subsurface and that the leached cap is approximately 60 m deep in the area of interest. Inferred tonnages of leachable ore in the two blocks is in the range of 4 to 5 million tons.

The 1986 trenching exposed additional gold-bearing zones, some of which lacked soil geochemical expression. The work confirmed that mineralization extends beyond the indicated reserve blocks but is still associated with north- to northwest-trending porphyry dykes and related veins, breccias and gouge zones. The new data is too wide spaced to permit revision of reserve calculations.

Work on the Nucleus property has outlined a deposit that is mineable by open pit methods and appears to be suitable for extraction by low capital cost, heap leach methods. While known reserves are too small to be economic at current prices, the deposit is still open in three directions and there is good potential for additional reserves. Further metallurgical testing is required to determine reagent consumption and recovery rate from different sized fractions before a preliminary feasibility study can be undertaken.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



W.D. Eaton, B.A., B.Sc.

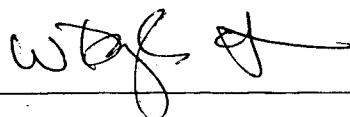
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APPENDIX I
AUTHOR'S STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, W. Douglas Eaton, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia, and residential address in Burnaby, British Columbia, do hereby declare:

1. I graduated from the University of British Columbia in 1980 with a B.Sc.
2. From 1971 to the present, I have been actively engaged in mineral exploration in British Columbia and Yukon Territory and on June 1, 1981, became a partner in Archer, Cathro & Associates (1981) Limited.
3. I have personally participated in or supervised the field work reported herein and have interpreted all data resulting from this work.



W. Douglas Eaton, B.A., B.Sc.

APPENDIX II
LIST OF PERSONNEL

LIST OF EMPLOYEES

A.R. Archer (Prof. Engineer)	7823 Stanley Street, Burnaby, B.C.
W.D. Eaton (Geologist)	6108 Burns Avenue, Burnaby, B.C.
C.A. Main (Geologist)	3694 Ontario Street, Vancouver, B.C.
M. Walls (Geologist)	5770 McKinnon, Vancouver, B.C.
K. Capnerhurst (Geologist)	Box 153, 100 Mile House, B.C.
T. Knight (Fieldman)	R.R. #2 Canyonview, Summerland, B.C.
L. Robinson (Fieldman)	General Delivery, Whitehorse, Yukon
M. Gazetas (Fieldman)	#24 - 11391 7th Avenue, Richmond, B.C.

APPENDIX III
ANALYTICAL TECHNIQUES

ANALYTICAL TECHNIQUES

PREPARATION:

1. The trench samples were crushed, dried and pulverized to -100 mesh.
2. A 10 gm split was fused in litharge, carbonate and siliceous flux. The resulting lead button containing any gold in the sample is cupelled in a muffle furnace to produce a precious metals bead.

ANALYSIS:

The sample beads, plus standard and blank beads were irradiated in a thermal neutron flux. The gamma emissions of the irradiated bead were counted utilizing a Ge (Li) detector and quantified for gold.

The detection limit for a 10 gm sample is 1 ppb gold.

APPENDIX IV
TRENCH SAMPLE DATA AND RESULTS

DATE: JUNE 21 1993

CERTIFICATE NO(S): _____

PROJECT: NUCLEUSSAMPLE TYPE: Ro.

PACKAGE NO.	SAMPLE NO.	LOCATION (Trench)	FROM (m)	TO (m)	INTERVAL (m)	ASSAYS	
						Au oz/ton	
	P22528	R8 Nuc-1	0	5	5m	10.001	
	P22529		5	10		0.001	
	P22530		10	15		0.001	
	P22531		15	20		20.001	
	P22532		20	25		20.001	
	P22533		25	30		0.001	
	P22534		30	35		0.004	
	P22535		35	40		0.004	
	P22536		40	45		0.004	
	P22537		45	50		0.010	
	P22538		50	55		20.001	
	P22539		55	60		0.012	
	P22540		60	65		0.001	
	P22541		65	70		0.017	
	P22542		70	75		0.001	
	P22543		75	80		0.006	
	P22544		80	85		0.005	
	P22545		85	90		20.001	
	P22546		90	95		0.001	
	P22547		95	100		0.066	
	P22548		100	105		0.012	
	P22549		105	110		0.001	
	P22550		110	115		0.002	
	P22751		115	120		0.009	
	P22752		120	125		0.013	
	P22753		125	130		0.008	
	P22754		130	135		0.005	
	P22755		135	140		0.004	
	P22756		140	145		0.002	
	P22757		145	150		0.005	
	P22758		150	155		0.021	
	P22759		155	160		0.004	
	P22760		160	165		0.003	
	P22761		165	170		0.001	
	P22762	R8 Nuc-1	170	175	5m	0.014	

DATE: July 2, 1986

CERTIFICATE NO(S): _____

PROJECT: Nuc-2SAMPLE TYPE: Rock

PACKAGE NO.	SAMPLE NO.	LOCATION (Trench)	FROM (m)	TO (m)	INTERVAL (m)	ASSAYS	
						Au oz/ton	
	P22763	R86 Nuc-2	35W	30W	5m	0.001	
	P22764		30W	25W		0.001	
	P22765		25W	20W		0.002	
	P22766		20W	15W		0.001	
	P22767		15W	10W		0.001	
	P22768		10W	5W		0.004	
	P22769		5W	0		<0.001	
	P22770		0	5E		0.003	
	P22771		5E	10E		0.001	
	P22772		10E	15E		<0.001	
	P22773		15E	20E		0.001	
	P22774		20E	25E		<0.001	
	P22775		25E	30E		<0.001	
	P22776		30E	35E		<0.001	
	P22777		35	40		<0.001	
	P22778		40	45		<0.001	
	P22779		45	50		<0.001	
	P22780		50	55		0.001	
	P22781		55	60		0.055	
	P22782		60	65		0.053	
	P22783		65	70		0.004	
	P22784		70	75		0.002	
	P22688		75	80		0.001	
	P22689		80	85		<0.001	
	P22690		85	90		0.007	
	P22691		90	95		0.014	
	P22692		95	100		0.011	
	P22785		100	105		0.010	
	P22786		105	110		0.024	
	P22787		110	115		0.006	
	P22788		115	120		0.007	
	P22789		120	125		0.008	
	P22790		125	130		0.009	
	P22791		130	135		0.012	
	P22792		135	140		0.013	
	P22793	R86 Nuc-2	140	145	5m	0.050	

DATE: July 3 1996

CERTIFICATE NO(S): _____

PROJECT: NUCLEUSSAMPLE TYPE: Rock

PACKAGE NO.	SAMPLE NO.	LOCATION (Trench)	FROM (m)	TO (m)	INTERVAL (m)	ASSAYS	
						Au oz/ton	
	P22794	R86 NUC-2	145	150	5m	0.024	
	P22795		150	155		0.032	
	P22796		155	160		0.002	
	P22797		160	165		<0.001	
	P22798		165	170		0.001	
	P22799		170	175		0.001	
	P22800		175	180		0.001	
	P22901		180	185		0.008	
	P22902		185	190		0.003	
	P22903		190	195		0.005	
	P22904		195	200		0.007	
	P22905		200	205		0.002	
	P22906		205	210		0.006	
	P22907		210	215		0.009	
	P22908		215	220		0.004	
	P22909		220	225		0.002	
	P22910		225	230		<0.001	
	P22911		230	235		0.003	
	P22912		235	240		0.010	
	P22913		240	245		0.001	
	P22914		245	250		0.003	
	P22915		250	255		0.002	
	P22916		255	260		0.003	
	P22917		260	265		0.010	
	P22918		265	270		0.008	
	P22919		270	275		0.002	
	P22920		275	280		0.003	
	P22921		280	285		0.003	
	P22922		285	290		0.002	
	P22923		290	295		0.003	
	P22924		295	300		0.002	
	P22925		300	305		0.001	
	P22926		305	310		0.002	
	P22927		310	315		0.001	
	P22928		315	320		0.001	
	P22929	R86 NUC-2	320	325	5m	0.003	

DATE: July 6 1986

CERTIFICATE NO(S): _____

PROJECT: IndustrialsSAMPLE TYPE: Rock

PACKAGE NO.	SAMPLE NO.	LOCATION (Trench)	FROM (m)	TO (m)	INTERVAL (m)	ASSAYS	
						Au oz/ton	
	P22863	R86 NUL-3	0	5	5 m	0.002	
	P22864		5	10		0.003	
	P22865		10	15		0.004	
	P22866		15	20		0.006	
	P22867		20	25		0.014	
	P22868		25	30		0.008	
	P22869		30	35		0.008	
	P22870		35	40		0.001	
	P22871		40	45		0.004	
	P22872		45	50		0.003	
	P22873		50	55		0.005	
	P22900		55	60		0.001	
	P22874		60	65		0.001	
	P22875		65	70		0.001	
	P22876		70	75		0.003	
	P22877		75	80		0.002	
	P22878		80	85		0.008	
	P22879		85	90		0.052	
	P22880		90	95		0.003	
	P22881		95	100		0.002	
	P22899		100	105		0.005	
	P22882		105	110		0.002	
	P22883		110	115		0.001	
	P22898		115	120		0.003	
	P22884		120	125		0.001	
	P22885		125	130		0.001	
	P22886		130	135		0.001	
	P22887		135	140		0.004	
	P22888		140	145		0.001	
	P22889		145	150		0.002	
	P22890		150	155		0.001	
	P22891		155	160		0.002	
	P22892		160	165		0.001	
	P22893		165	170		0.001	
	P22894		170	175		0.001	
	P22895	R86 NUL-3	175	180	5 m	0.005	

DATE: Aug 7, 1978

CERTIFICATE NO(S): _____

PROJECT: 100125SAMPLE TYPE: Rock

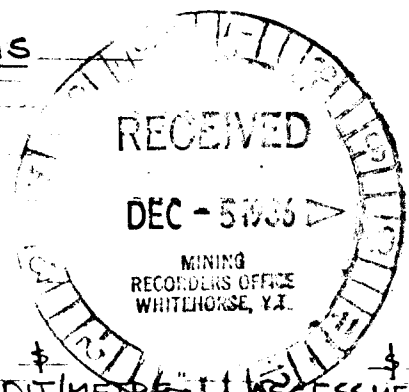
PACKAGE NO.	SAMPLE NO.	LOCATION (Trench)	FROM (m)	TO (m)	INTERVAL (m)	ASSAYS	
						Au oz/ton	
	R1001	R86-N-4	0	5	5	0.001	
	R1002		5	7	2	0.001	
	R1003		7	12	5	0.002	
	R1004		12	17	5	0.003	
	R1005		17	21	4	0.002	
	R1006		21	26	5	0.001	
	R1007		26	30.5	4.5	0.002	
	R1008		30.5	31.2	0.7	0.001	
	R1009		31.2	35	3.8	0.001	
	R1010		35	35.4	0.4	0.002	
	R1011		35.4	37	1.6	<0.001	
	R1012		37	37.4	0.4	0.001	
	R1013		37.4	48	10.6	0.001	
	R1014		48	53	5	0.004	
	R1015		53	58	5	0.002	
	R1016		58	59	1	0.022	
	R1017		59	66	7	0.009	
	R1018		66	69	3	0.001	
	R1019		69	74	5	<0.001	
	R1020		74	81	7	<0.001	
	R1021		81	86	5	0.001	
	R1022		86	91	5	0.001	
	R1023		91	96	5	0.002	
	R1024		96	101	5	0.001	
	R1025		101	106	5	0.002	
	R1026		106	111	5	0.003	
	R1027		111	121	10	0.002	
	R1028		121	131	10	0.005	
	R1029		131	136	5	0.002	
	R1030		136	146	10	0.001	
	R1031		146	150	4	0.005	
	R1032		150	155	5	0.104	
	R1033		155	159	4	0.025	
	R1034		159	160	1	0.007	
	R1035		160	162	2	0.001	
	R1036	R86-N-4	162	164	2	0.010	

TABLE 1

ASSESSMENT CALCULATIONS

NUCLEUS CLAIMS

MECHANIC CREEK 115I/6
NAT. JOINT VENTURE



A. TRENCH CREDIT

<u>TRENCH NO</u>	<u>METRES TOTAL LENGTH</u>	<u>CLAIM LOCATION</u>	<u>METRES LENGTH</u>	<u>*CREDIT/METRE</u>	<u>ASSESSMENT CREDIT</u>
86N1	195	NUCLEUS 16	195	17.72	3455.40
86N2	450	16 ✓ 25 ✓	170 280		3012.40 4961.60
86N3	210	20 ✓ 29	160 50		2835.20 886.00
86N4	210	23 ✓	210		3721.20
86MW1	20	25	20		354.40
86MW2	45	25	45		797.40
86MW3	85	25	85	17.72	1506.20
TOTAL	<u>1215</u>		<u>1215</u>		<u>\$ 21,529.80</u>

* CREDIT/METRE = \$21,536.19 / 1215 = \$17.72

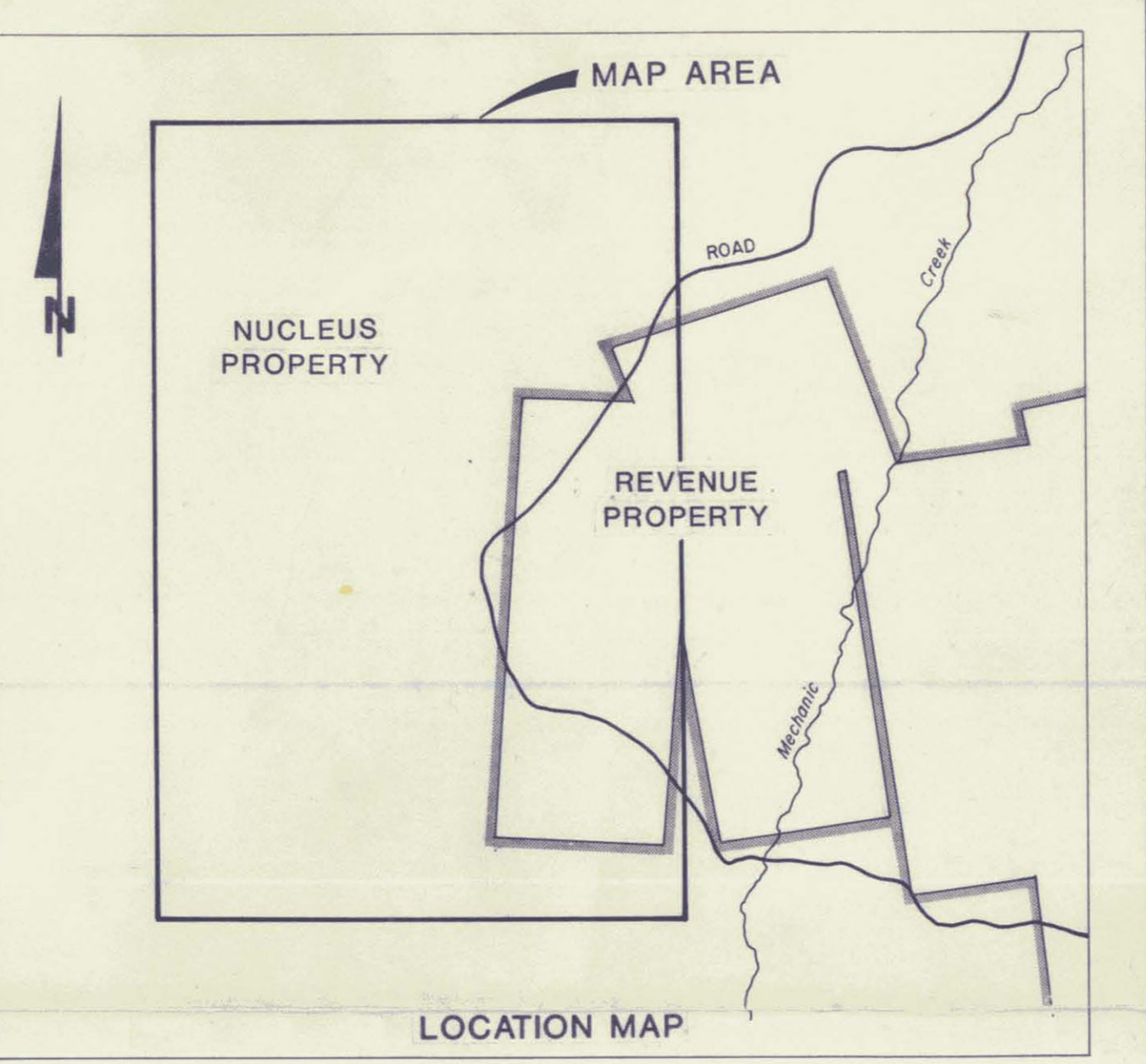
B. CLAIM CREDIT

<u>CLAIM LOCATION</u>	<u>TRENCH NO</u>	<u>ASSESSMENT CREDIT</u>	<u>TOTAL</u>
NUCLEUS 16	86N1	3455.40	6467.80
	86N2	3012.40	
NUCLEUS 20	86N3	2835.20	2835.20
NUCLEUS 23	86N4	3721.20	3721.20
NUCLEUS 25	86N2	4961.60	7619.60
	86MW1	354.40	
	86MW2	797.40	
	86MW3	1506.20	
NUCLEUS 29	86N3	886.00	886.00
TOTAL			<u>21,529.80</u>

INFERRED TONNAGES AND GRADIES

ANOMALY 2 BLOCK		ANOMALY 1 BLOCK	
Avg. Grade oz/ton Au	Length m/ft	Avg. Width m/ft	Tonnage to 200' (60.1m) in millions
0.027	325/1056	91.5/300	24,600
0.030	275/902	87.7/288	19,983
0.036	225/738	73.0/239	13,568
0.042	225/738	57.1/187	10,616
0.028	62.5/205	67.7/222	3,590
0.031	62.5/205	64.7/213	2,823
0.038	62.5/205	40.7/133	2,097
0.041	62.5/205	33.7/111	1,743

* In calculating, all values exceeding 0.2 oz/ton Au cut to 0.2 oz/ton Au and all intervals assaying 0.01 oz/ton Au across 5 m are considered waste.
 * Assumes 13 cu ft/ton and includes only area within dark lines (i.e., no projection beyond trenches).



- LEGEND**
- Builder trench
 - Chip sample values averaging 20.00 oz/ton Au
 - Chip sample values averaging 2.000 < 0.03 oz/ton Au
 - Chip sample values averaging 20.01 < 0.02 oz/ton Au
 - Chip sample values averaging < 0.01 oz/ton Au
 - Soil sample location
 - Rock sample location
 - Reconnaissance chip sample location
 - Soil grid control line
 - 2500 gpb Au
 - 2500 < 2000 gpb Au
 - 2500 < 600 gpb Au
 - < 600 gpb Au
 - Altitude zone
 - Road
 - Property boundary



Figure N1
 ARCHER, CATMO & ASSOCIATES (1981) LIMITED
TRENCH ASSAY AND SOIL GEOCHEM COMPILATION
 NUCLEUS PROPERTY
 NAT JOINT VENTURE

