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CONSULTING GEOLOGICAL ENGINEERS

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NUCLEUS PROPERTY

1989 FINAL REPORT

BIG CREEK AREA, YUKON TERRITORY

Latitude 62°20'N; Longitude 137°20'W

NTS 115I/5&6

T.C. Becker, B.Sc.

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December, 1989

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INTRODUCTION

The Nucleus gold-copper property is owned by Chevron Minerals Ltd. and is under option to Big Creek Resources Ltd. (Big Creek) which can earn a 50% interest. The 1989 exploration program was funded by Big Creek and consisted of nine bulldozer trenches totalling 1270 m and six diamond drill holes totalling 591.9 m. The work was conducted between August 28 and October 1 from a camp 5 km east of the property. D. Eaton supervised the program while T. Becker was the project geologist and field manager. Appendix A contains the Authors' Statements of Qualifications and Appendix B lists personnel who worked on the project.

HISTORY

The Big Creek area has been explored for placer gold intermittently since the early 1900's and for in situ mineralization since the 1930's.

The eastern part of the present Nucleus property and most of the adjacent Revenue property were first staked in 1968 by Yukon Revenue Mines Ltd., which explored with grid soil geochemistry and IP surveys later that year. In 1970, Kaiser Resources Ltd. optioned the claims and drilled a wide spaced grid of percussion and diamond drill holes that tested for porphyry-type copper mineralization. Only two holes were on the Nucleus property and they returned discouraging results.

Cominco staked most the western part of the property in 1969 and soil sampled in 1970. The area was restaked in 1974 by Klotassin Joint Venture (Newconex Canada Exploration Ltd., Marietta Resources International Ltd. and Molybdenum Corporation of America) which performed soil sampling and minor bulldozer trenching in 1975. These programs outlined weak to moderate copper geochemical anomalies and discovered float containing traces of malachite.

Nat Joint Venture (Chevron and Armco) staked the eastern part of the Nucleus claim block in 1980. Chevron later purchased Armco's interest and acquired additional claims to the west. From 1980 to 1986, the property was explored with grid and reconnaissance soil geochemistry, geophysical surveys, bulldozer trenching and diamond drilling (3 holes totalling 315.2 m). This work showed that the area is more deeply weathered than previously suspected and identified two zones of widespread, low grade gold mineralization (called Anomalies 1 and 2) in an approximately 60 m thick leached cap, and suggested the presence of an underlying porphyry-type copper-gold system.

In 1987, Big Creek optioned the property and formed a joint venture with Rexford Minerals Ltd. The joint venture cut a few bulldozer trenches later that year and drilled 35 reverse circulation percussion holes totalling 1283 m in 1988. The drill program consisted of shallower, close spaced holes in the core of Anomaly 2 and was designed to determine average grade and suitability of near surface gold mineralization for heap leach mining. Earlier grade and tonnage estimates were confirmed but planned metallurgical tests were not performed due to inadequate financing. Rexford sold its interest in the property to Big Creek in spring 1989.

PROPERTY, LOCATION AND ACCESS

The property consists of 253 contiguous mineral claims registered with the Whitehorse Mining Recorder as follows.

Claim Name		Grant Number	Expiry Date*
Nucleus 1-12	12	YA51189-YA51200	February 19, 1993
Nucleus 13-18	6	YA51201-YA51206	February 19, 1994
Nucleus 19-34	16	YA51207-YA51222	February 19, 1993
Nucleus 35-50	16	YA60256-YA60271	March 1, 1993
Nucleus 51	1	YA82735	February 19, 1993
Nucleus 52F	1	YA82736	February 19, 1993
Nucleus 53-90	38	YA82737-YA82774	February 19, 1993
Nucleus 91-102	12	YA82910-YA82921	February 19, 1993
Nucleus 103-104	2	YA82922-YA89223	February 19, 1990
Nucleus 105-115	11	YA82924-YA82934	February 19, 1993
Nucleus 116	1	YA82935	February 19, 1990
Nucleus 117	1	YA82936	February 19, 1993
Nucleus 118	1	YA82937	February 19, 1990
Nucleus 119	1	YA82938	February 19, 1993
Nucleus 120-126	7	YA82939-YA82945	February 19, 1990
Nucleus 127-141	15	YA82946-YA82960	February 19, 1993
MEC 1-8	8	YA93679-YA93686	February 19, 1993
ERL 116	1	YA92451	April 2, 1993
ERL 118	1	YA92453	April 2, 1993
ERL 120	1	YA92455	April 2, 1993
ERL 138-150	13	YA92473-YA92485	April 2, 1993
ERL 164-178	15	YA92499-YA92513	April 2, 1993
ERL 191-206	16	YA92524-YA92539	April 2, 1993
ERL 216-234	19	YA92547-YA92565	April 2, 1993
ERL 237-268	32	YA92568-YA92599	April 2, 1993
ERL 269-274	6	YA93132-YA93137	April 2, 1993
	253		

*Does not include 1989 assessment credits.

The claims are located at latitude 62°20′N and longitude 137°20′W within NTS claim sheets 115I/5 and 6. They lie 63 km west-northwest of Carmacks and are accessible from early spring to late fall by an 80 km gravel road maintained by the Yukon Territorial Government, as shown on Figure 1. Direct access to the main areas of interest is provided by some 3.5 km of four-wheel drive roads.

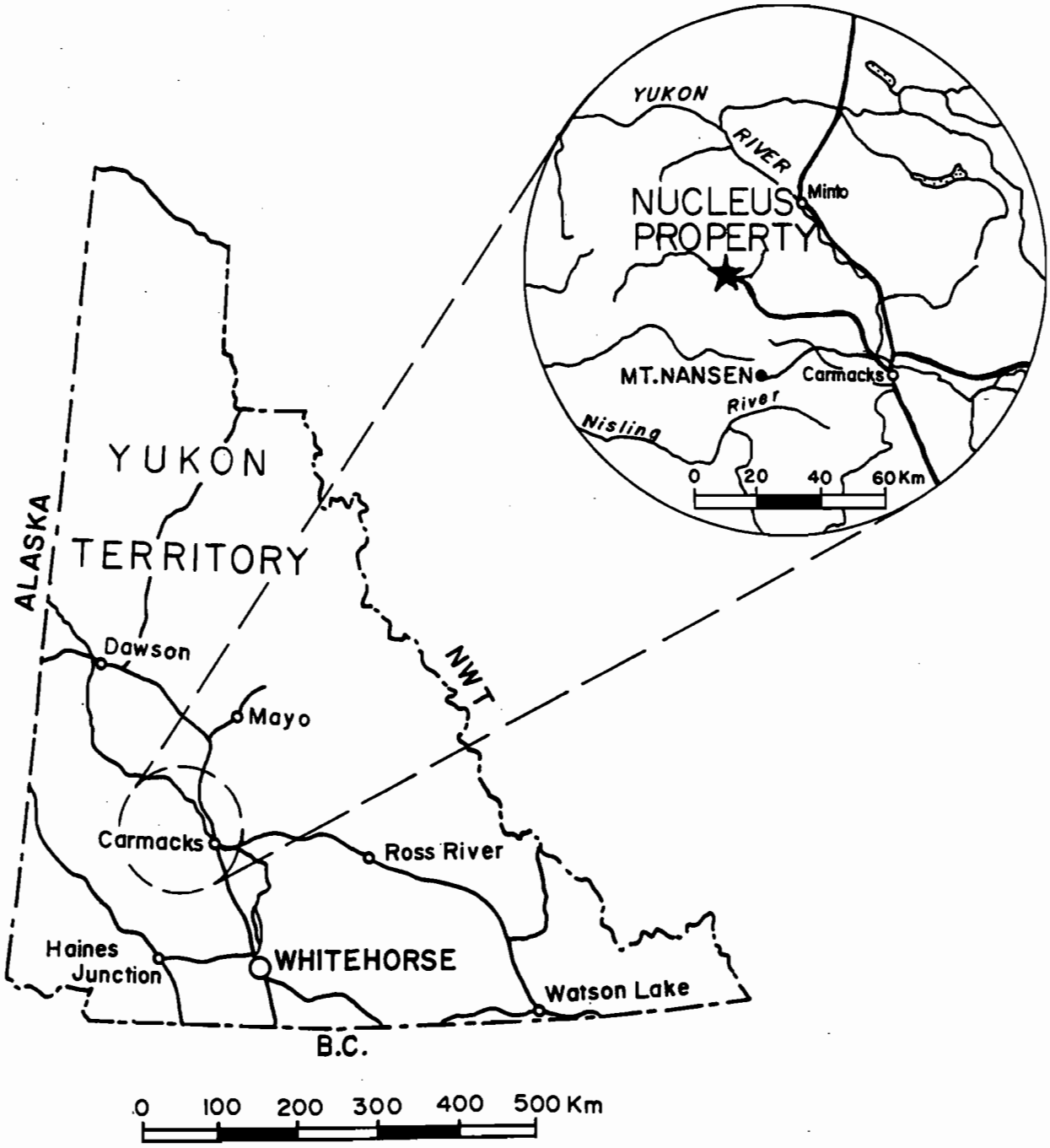


Figure 1

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

LOCATION MAP

NUCLEUS PROPERTY

BIG CREEK RESOURCES LTD.

CHEVRON MINERALS LTD.

To accompany report dated DEC/89

GEOMORPHOLOGY

The Nucleus property lies within the Dawson Range, an eroded peneplane extending northwest from Carmacks to Dawson. The main drainage in the area is Big Creek which flows into the Yukon River. Local elevations range from 600 m on the floor of the Big Creek Valley to a maximum of 1450 m.

The area was not covered by Pleistocene continental ice sheets but isolated alpine glaciers of the earliest Pleistocene glacial event (Pre-Reid) left glacial and glaciofluvial deposits on parts of the property. Glacial till is thickest in the Big Creek Valley and thins upslope to an elevation of about 825 m, above which it has been eroded except for a few large boulders. Post-glacial lacustrine and fluvial deposits overlie the till and form a broad terrace along the south side of the Big Creek Valley.

The soil profile typically consists of 5 to 10 cm of organics overlying 0 to 10 cm of white volcanic ash, 30 to 150 cm of buff or red-brown soil and 100 to 200 cm of decomposed bedrock fragments mixed with soil. Strong solifluction is common on hillsides. The volcanic ash was derived from eruptions in the Wrangell Mountains, 200 km southwest of Nucleus, about 1200 years ago. Drilling indicates that surface weathering ranges from 1 m to greater than 90 m in depth, depending on bedrock permeability.

North- and west-facing slopes on the property are vegetated with stunted black spruce and thick moss, while south- and east-facing slopes are covered by more mature spruce and aspen. Permafrost is extensive, particularly at lower elevations and on north- or west-facing slopes.

GEOLOGY

General

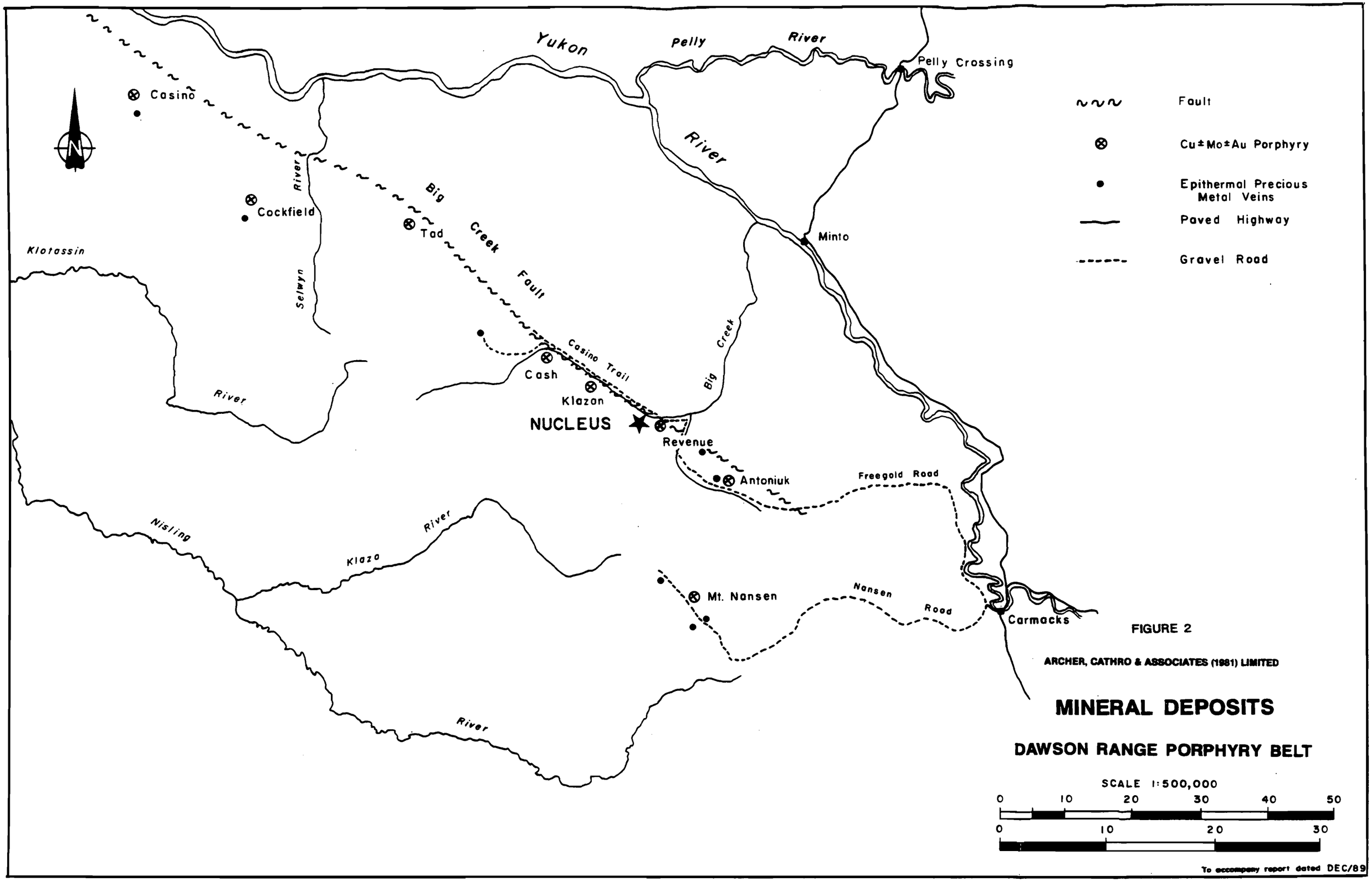
The claims cover part of a mid-Cretaceous intrusive centre, which is one of several igneous complexes in a northwest-trending, 85 km long belt developed along the south side of the Big Creek Fault, a major structural feature of uncertain origin. The igneous complexes range from coarse-grained stocks through finer-grained porphyry dykes and breccia pipes to occasional volcanic flows and tuffs. These rocks cut Paleozoic metamorphic rocks, Pre-Jurassic foliated intrusions and Jurassic unfoliated intrusions. A series of porphyry copper ± molybdenum ± gold deposits and associated precious metal veins occur at 10 to 20 km intervals along the belt, beginning with the Antoniuk deposit in the southeast and ending at the Casino deposit in the northwest, as shown on Figure 2.

Property geology is illustrated on Figure 3 and is summarized as follows.

Lithology

The basement metamorphic assemblage consists of Paleozoic metasedimentary and metaplutonic rocks including quartz-feldspar-mica schist, quartz-feldspar-chlorite gneiss, quartz-feldspar gneiss, amphibolite, quartzite and rare limestone lenses. All rocks have a distinct foliation, weather recessively and show alteration of mica, feldspars and mafic minerals to clay and chlorite within the supergene zone and adjacent to intrusive bodies. On the property, metamorphic rocks occur as large roof pendants and smaller xenoliths within intrusions.

Big Creek Syenite is Jurassic in age and forms a large batholith in the southwestern part of the property. It is resistant weathering, coarse grained and often porphyritic, and is comprised primarily of orthoclase and hornblende.


Yukon
Pelly
River
Pelly Crossing
Casino
Cockfield
Tad
Big
Creek
Fault
River
Selwyn
Klotassin
River
Minto
Big Creek
Casino Trail
Cash
Klazan
NUCLEUS
Revenue
Antoniuk
Freegold Road
Nisling
River
Klaza
River
Mt. Nansen
Nansen
Road
Carmacks
Fault
Cu±Mo±Au Porphyry
Epithermal Precious Metal Veins
Paved Highway
Gravel Road
FIGURE 2
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
MINERAL DEPOSITS
DAWSON RANGE PORPHYRY BELT
SCALE 1:500,000
0 10 20 30 40 50
0 10 20 30
To accompany report dated DEC/89

No syenite xenoliths have been seen in the younger igneous complex, suggesting that the two units may be in fault contact.

The oldest rocks of the Cretaceous igneous complex belong to the Coffee Creek Granite and Casino Granodiorite. These units are both medium- to coarse-grained, equigranular, and non-foliated. The Coffee Creek Granite is restricted to the northern edge of the property and is a mixture of orthoclase, plagioclase and quartz with rare mafic minerals. The Casino Granodiorite occurs throughout the property and is more variable in composition. In the western part, it is a true granodiorite but in the eastern part it is actually monzonite ranging between two end members: one containing greater than 10% quartz with less than 5% biotite; and, the other little or no quartz and up to 15% biotite.

Microgranite is confined to the main area of interest in the eastern part of the property. It is a tan to pale green, fine-grained, extremely felsic rock containing between 1 and 5%, small (1 to 5 mm), euhedral plagioclase phenocrysts in a matrix of anhedral quartz and feldspar. Biotite originally comprised up to 3% of the rock but is generally altered to chlorite. The unit is often highly fractured and brecciated near contacts and typically exhibits flow banding and quartz veinlets. Flow banded microgranite is difficult to distinguish from altered and bleached metamorphic rocks, especially when the rocks are weathered. Xenoliths of coarse-grained monzonite occasionally are found within the microgranite.

The youngest rocks are hypabyssal porphyritic intrusions that occur as dykes and plugs throughout the property. They are variable in composition ranging from quartz-feldspar porphyry through feldspar porphyry to feldspar-biotite-hornblende porphyry. In the main area of interest, the

porphyry forms a sheeted dyke complex and consists of 5 to 15% feldspar and quartz phenocrysts in a tan, nearly aphanitic, locally flow banded matrix. Argillic alteration of feldspar is common. The dykes cut all other units and are often too narrow to show on property-scale maps.

Alteration

Alteration minerals are primarily controlled by host rock lithology, while intensity of alteration is directly related to the degree of fracturing and brecciation. Four alteration zones have been identified on the property.

The most significant is a 1000 m long, 30 to 200 m wide, north-trending zone that approximately coincides with the dyke complex in Anomaly 2. Quartz-feldspar porphyry within this zone usually exhibits intense argillic alteration and is occasionally cut by chalcedonic quartz veins. Microgranite contains an extensive stockwork of hairline to 3 cm thick quartz veins that are surrounded by pervasive sericite or clay alteration envelopes. Metasedimentary rocks are less affected by alteration, but in highly fractured areas they are often bleached to a pale green or tan colour and cut by quartz veinlets. In most rock types, supergene clay alteration overprints original hypogene alteration.

A second zone occurs 600 m southwest of the main zone while a third lies 200 m to the northwest. The southwesterly zone covers a 100 by 400 m area and consists of strongly bleached schist mixed with intensely clay altered and occasionally silicified porphyry dykes. The other zone is approximately 100 m in diameter and is confined to microgranite which exhibits intense phyllic and argillic alteration without quartz veining.

The fourth and largest zone is located 1200 m northwest of Anomaly 2 and consists of a 1000 m in diameter area of argillic and phyllic alteration centred on a porphyry plug with associated dyke swarms.

Structure

The dominant structure in the area is the Big Creek Fault which strikes northwesterly and dips approximately 70° toward the southwest. Direction and magnitude of offsets on the fault are not known. Most subsidiary structures are aligned subparallel to the Big Creek Fault or have a northerly trend. In the main area of interest, a series of mineralized faults and breccia zones strike north-northwesterly and dip vertically to 70° toward the west.

MINERALIZATION

The main mineral occurrences on the property are the Anomaly 1 and 2 zones west of Mechanic Creek. Anomaly 1 has only been explored by trenching while Anomaly 2 has received drilling and trenching. Figures 4 and 5 show trench geology and assays, respectively.

The mineralization occurs as disseminations and fracture fillings in broad stockwork and breccia zones developed within porphyry dyke swarms and adjacent altered wallrocks. Deep surface weathering has produced marked vertical zonation consisting of a strongly oxidized, approximately 60 m thick, leached cap containing gold without other economic metals and an underlying supergene blanket containing copper with gold and minor silver. Presumably, hypogene mineralization is present below the supergene blanket but none of the holes has been drilled deep enough to reach the zone of primary sulphides.

Pre-1989 trenching and drilling within the leached cap indicates that Anomalies 1 and 2 contain approximately 4.1 million tonnes grading 1.03 g/t Au to a depth of 60 m. Typical values within these zones range from 0.3 to 2.1 g/t Au. They occur in a 10 to 150 m wide, north-northwest trending band that has been traced 400 m along strike. The best values (up to 44.71 g/t Au over 3.5 m from a trench and 35.72 g/t Au over an intersected length of 13.7 m in a percussion drill hole) are associated with less than 1 m wide, steeply-dipping chalcedonic veins and stockworks within the broader band of lower values. Close spaced drilling has shown that these zones are often localized along geological contacts and that the gold is erratically distributed. Although there is a good correlation between silver and gold in the leached cap, the average silver-to-gold ratio is low, averaging less than 1 to 1. Geochemically anomalous quantities of bismuth and arsenic are associated with the gold in the leached cap. Copper within the leached cap ranges from about 50 ppm at surface to approximately 500 ppm near the base.

Porphyry-type copper-gold mineralization was first identified in 1984 when drill hole DN84-1 penetrated beneath the leached cap in Anomaly 2 and intersected the top of a supergene blanket at a depth of 77.7 m vertically below surface. Assays from the last 6.1 m of the hole averaged 0.31% Cu and 0.53 g/t Au. Mineralization within this zone consists of chalcocite with rare covellite and malachite replacing chalcopyrite and pyrite in nearly vertical, hairline to 3 mm wide veinlets. Total sulphide content is low, normally ranging between 0.5 and 2% of the rock. Silver to gold ratios are slightly higher in the supergene zone, averaging about 3 to 1.

Results from the 1989 program are described in the following section.

TRENCHING AND DRILLING

General

The 1989 bulldozer trenching and diamond drilling program explored in and adjacent to the main area of interest adjoining the eastern property boundary. The work was done with a Caterpillar D-7E bulldozer and Longyear 38 diamond drill, contracted from E. Caron Diamond Drilling Ltd. of Whitehorse. It included nine trenches which exposed 1270 m of bedrock and six holes which were drilled from six separate sites for a total of 591.9 m. Trenching required 95 hours of bulldozer time while drill pad preparation and moves required 44.5 hours. All holes were drilled with HQ equipment. Recovery averaged about 98%, except for Hole DN89-6 which cut highly fractured and clay altered metamorphic rocks and returned only 85% of the core. Greater than normal quantities of drill mud were required during the program due to high permeability in weathered bedrock.

A total of 489 samples was assayed, 252 from trenches and 237 from drill core. Trench samples ranged from 5 to 10 kg in weight and were taken along the trench floors over 1 to 12 m intervals depending upon the degree of alteration and abundance of quartz veining and limonite. All core was split on the property and samples were taken over approximately 2.0 m intervals using geological contacts as boundaries where possible. The remaining core is stored in racks on the property.

All samples were sent to Chemex Labs Ltd. in North Vancouver where they were dried, crushed, and pulverized to approximately -150 mesh before being geochemically analyzed for gold using a neutron activation finish. Drill core samples were also geochemically analyzed for 32 other elements, including copper and silver. Appendix C contains Certificates of Analysis.

Trench Results

Geology exposed in the trenches is illustrated on Figure 4, while trench assays are shown schematically on Figure 5. Complete assay results are tabulated in Appendix D.

The results were disappointing, except for Trench 89N-8 on the south side of Anomaly 2 where samples taken across a series of north-northwest trending breccia and gouge zones containing minor quartz veinlets averaged 1.90 g/t Au across 20 m. Although the other trenches extend at least 1 m into bedrock and exposed a number of narrow porphyry dykes, gouge zones and faults, assays from them were much lower than were obtained from similar structures in adjacent pre-1989 trenches.

Mapping suggests that the breccia and stockworks comprising Anomaly 2 are developed where a number of north-northwest trending faults are intruded by an irregularly shaped porphyry plug and associated dyke swarm. The result is a complex area of mineralization that is stronger on the north side of the plug than the south. The plug itself has an anomalous gold background but contains relatively few values exceeding 0.5 g/t. There are no obvious geological controls at the north or south end of the zone except that the faults and accompanying alteration and mineralization gradually weaken as the distance from the intrusive centre increases. Faults and dykes that lie to the west of the plug and main body of the dyke swarm are generally lower grade and lack continuity.

Drill Results

All four holes drilled in Anomaly 2 returned encouraging gold and/or copper values, as shown in Table 1 which lists the most significant 1989 intersections. The other two holes, which tested gold mineralization in trenches to the south and northwest of Anomaly 2, returned low values throughout. Drill sections, with all copper and gold assays, are shown on Figures 6 to 11 while logs are in Appendix E.

In general, there is a good correlation between geology mapped in trenches and that observed in drill core. Geological contacts exhibit fairly consistent 60° westerly to nearly vertical dips, except in Hole DN89-5 where dips are approximately 85° to the east.

The rocks intersected in the holes can be divided into three principal categories based on degree of oxidation and the type of sulphide minerals that are present. The first category is the leached cap which is located near surface and is virtually devoid of sulphide minerals. Most core and all rocks in the trenches are of this type. The second category is called the transition zone because it contains partially oxidized sulphides. Rocks in this group occur at the base of the leached cap or as isolated zones within it. The third category is the supergene zone which contains primary sulphides that are wholly or partially replaced by supergene minerals, mainly chalcocite. Rocks from the supergene zone were only intersected in Holes DN84-1, DN89-1 and DN89-4. A fourth category that has not yet been intersected on the property is the hypogene zone consisting exclusively of primary sulphide minerals.

The gold grades from drill holes are generally similar or slightly lower than the values in overlying trenches. Although the best assays are normally associated with quartz vein and veinlet fracture and stockwork zones within or along the margin of porphyry dykes, scattered high values were also obtained

TABLE 1
SIGNIFICANT 1989 DRILL HOLE INTERSECTIONS

Hole No.	From (m)	To (m)	Intersected Width (m)	Au (g/t)	Cu (%)	Mineralization Type
89-1	2.4	60.0	57.6	1.13	trace	leached cap
including	39.0	49.1	10.1	3.05	trace	leached cap
	60.0	98.0	38.0	0.86	0.52	supergene
89-2	2.4	37.5	35.1	0.75	trace	leached cap
	93.0	98.0	5.0	19.17	trace	leached cap
including	95.5	98.0	2.5	36.48	trace	leached cap
89-3	6.1	21.5	15.4	0.75	trace	leached cap
89-4	47.0	68.0	21.0	1.17	trace	leached cap
including	47.0	57.0	10.0	1.71	trace	leached cap
	89.0	120.4	31.4	0.41	0.28	supergene
89-5	no significant intersections					
89-6	no significant intersections					

from gouge zones in other units. There is no apparent relationship between high gold values and the abundance of limonite or any sulphide mineral, nor is there any evidence of gold enrichment at surface or within the supergene zone. The longest intersection of consistently high gold values came from the leached cap at the top of Hole DN89-1 which assayed 3.05 g/t Au over 10.1 m, while the highest single interval was from silicified metamorphic rocks in the leached cap of Hole DN89-2 which returned 36.48 g/t Au over 2.5 m.

Minor values in silver, arsenic and bismuth show a strong correlation with gold, while zinc is weakly associated and copper has no direct correlation. Absolute values for silver range up to 111.4 ppm. Copper is the only metal whose distribution clearly indicates remobilization, with depletion in the leached cap and enrichment by a factor of 50 to 1000% in the supergene zone. The average copper value in the leached cap of Hole DN89-1 is 313 ppm over 55.6 m compared to 3570 ppm over 75.2 m in the supergene zone. The highest single interval assayed 7880 ppm Cu over 2 m.

The base of the leached cap (as defined by oxidation of sulphides and geochemical data) is irregular and depends on bedrock permeability. In general, the deepest oxidation occurs in highly fractured feldspar porphyry dykes and the shallowest is in poorly fractured metamorphic rocks. The deepest oxidation observed to date is in Hole DN89-2 which was drilled to 98 m below surface before supergene sulphide minerals were encountered. Additional drilling will be required to accurately determine the average depth of oxidation but, based on available results, 60 m still seems reasonable.

CONCLUSIONS AND RECOMMENDATIONS

The 1989 field program produced mixed results. Trenching and drilling on the periphery of Anomaly 2 did not significantly expand the area of interest and showed that most promising targets outside the zone are relatively low grade and lack continuity. On the other hand, four drill holes that tested Anomaly 2 all produced significant gold assays within the leached cap and two returned long intervals of porphyry-grade copper and gold values in the underlying supergene zone. In addition, one hole cut a band of high grade gold mineralization which is the third such band discovered in the Anomaly 2 Zone.

Future drilling should include at least 4 or 5, 150 m deep holes to further test porphyry copper-gold potential, plus a number of close-spaced holes around the bands of higher grade gold mineralization to determine the continuity of the structures. Metallurgical tests are required to determine whether or not low grade gold mineralization in the leached cap is suitable for heap leaching.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

T.C. Becker, B.Sc.

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

APPENDIX A

AUTHORS' STATEMENTS OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Thomas C. Becker, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Vancouver, British Columbia, do hereby certify that:

1. I graduated from the University of Alberta in 1989 with a B.Sc. in geology.
2. From 1984 to present, I have been actively engaged in mineral exploration in the Yukon Territory and am presently employed with Archer, Cathro & Associates (1981) Limited.
3. I have personally participated in and supervised the field work reported herein.

T.C. Becker

T.C. Becker, B.Sc.

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 delcare:

1. I graduated from the University of British Columbia in 1980 with a B.Sc. majoring in Geological Sciences.
2. From 1971 to present, I have been actively engaged in mineral exploration in Yukon Territory and on June 1, 1981, I 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 B

LIST OF PERSONNEL

Name	Position
W.D. Eaton	Project Supervisor
T. Becker	Geologist
M. Phillips	Geologist
D. Lister	Geologist
F. Gish	Field Assistant
R. Tough	Cook

APPENDIX C

CERTIFICATES OF ANALYSIS

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8
Project : NUCLEUS
Comments:

Date : 1-OCT-89
Invoice # : I-8926079
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8926079

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
T28001	205	238	530	1.70	2.0	75	90	< 0.5	32	0.08	< 0.5	< 1	65	332	4.58	10	3	0.67	20	0.58	40
T28002	205	238	390	0.61	1.2	60	70	< 0.5	12	0.02	< 0.5	< 1	57	110	1.28	< 10	< 1	0.32	20	0.05	10
T28003	205	238	600	0.95	1.6	210	70	< 0.5	8	0.02	< 0.5	< 1	97	204	3.03	10	< 1	0.49	20	0.24	25
T28004	205	238	275	0.92	2.4	70	60	< 0.5	10	0.01	< 0.5	< 1	71	202	2.95	< 10	1	0.56	20	0.27	25
T28005	205	238	310	0.71	1.6	195	80	< 0.5	6	0.01	< 0.5	< 1	58	256	3.89	< 10	< 1	0.33	40	0.11	20
T28006	205	238	770	1.06	3.2	590	350	< 0.5	28	0.02	< 0.5	< 1	36	430	6.35	10	< 1	0.63	30	0.26	30
T28007	205	238	340	2.42	1.4	150	170	< 0.5	< 2	0.02	< 0.5	< 1	34	542	8.32	20	< 1	1.39	20	1.07	65
T28008	205	238	2000	1.11	1.4	280	60	< 0.5	4	0.02	< 0.5	< 1	66	477	6.29	10	< 1	0.39	20	0.15	45
T28009	205	238	1020	0.69	1.2	180	180	< 0.5	16	0.01	< 0.5	< 1	56	408	6.76	< 10	< 1	0.47	10	0.06	30
T28010	205	238	2050	0.75	2.6	4800	100	< 0.5	30	0.02	< 0.5	< 1	66	342	5.92	< 10	< 1	0.50	20	0.04	90
T28011	205	238	350	0.73	1.0	120	60	< 0.5	10	0.01	< 0.5	< 1	73	184	2.76	< 10	< 1	0.32	20	0.15	25
T28012	205	238	195	0.79	1.8	45	130	< 0.5	< 2	0.03	< 0.5	< 1	59	254	3.99	< 10	< 1	0.42	40	0.13	20
T28013	205	238	475	2.11	1.2	325	40	< 0.5	12	0.03	< 0.5	< 1	74	463	5.09	10	< 1	1.00	10	0.85	45
T28014	205	238	205	0.57	0.6	140	70	< 0.5	2	0.01	< 0.5	< 1	64	106	1.15	< 10	< 1	0.14	30	0.03	5
T28015	205	238	660	1.45	2.4	370	50	< 0.5	30	0.01	< 0.5	< 1	36	378	4.76	10	2	0.65	10	0.51	40
T28016	205	238	1140	0.50	2.0	150	90	< 0.5	44	0.01	< 0.5	< 1	64	199	1.92	< 10	< 1	0.33	20	0.02	10
T28017	205	238	1510	0.42	2.2	65	80	< 0.5	80	0.01	< 0.5	< 1	57	166	1.46	< 10	2	0.28	20	0.02	5
T28018	205	238	850	0.57	2.8	70	60	< 0.5	50	0.01	< 0.5	< 1	67	177	1.31	< 10	< 1	0.24	20	0.02	5
T28019	205	238	2390	0.50	3.0	125	70	< 0.5	78	0.01	< 0.5	< 1	49	187	1.60	< 10	< 1	0.28	20	0.01	5
T28020	205	238	3410	0.40	3.2	210	70	< 0.5	92	0.01	< 0.5	< 1	58	164	1.36	< 10	< 1	0.27	10	0.01	5
T28021	205	238	1760	0.46	3.0	840	60	< 0.5	92	0.01	< 0.5	< 1	52	230	1.78	< 10	3	0.29	10	0.01	10
T28022	205	238	3950	2.46	9.0	360	50	0.5	264	0.02	< 0.5	< 1	150	765	5.49	10	< 1	0.95	20	0.76	65
T28023	205	238	3410	2.37	11.4	735	20	0.5	230	0.02	< 0.5	< 1	141	787	7.15	10	< 1	0.73	10	0.65	45
T28024	205	238	1400	2.58	6.6	295	90	< 0.5	306	0.06	< 0.5	< 1	162	535	7.63	10	< 1	1.54	20	1.25	75
T28025	205	238	315	0.45	1.4	90	110	< 0.5	64	0.01	< 0.5	< 1	63	189	4.46	< 10	< 1	0.25	10	0.02	10
T28100	205	—	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28101	205	—	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28102	205	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28103	205	—	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28104	205	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28105	205	—	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28106	205	—	80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28107	205	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28108	205	—	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28109	205	—	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28110	205	—	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28111	205	—	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28329	205	—	130	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28330	205	—	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28331	205	—	< 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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T89N-2

T89N-1

CERTIFICATION : B. Caughlin

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PHONE (604) 984-0221

ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8
Project : NUCLEUS
Comments:

Date : 1-OCT-89
Invoice # : I-8926079
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8926079

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
T28001	205	238	< 1	0.05	2	660	2	< 5	14	20	0.03	< 10	< 10	108	< 10	26
T28002	205	238	1	0.01	2	460	12	5	2	14	< 0.01	< 10	< 10	14	< 10	8
T28003	205	238	1	0.02	1	340	8	5	5	7	0.01	< 10	< 10	33	< 10	18
T28004	205	238	1	0.01	1	330	4	10	6	9	0.02	< 10	< 10	31	< 10	14
T28005	205	238	1	0.01	1	530	10	5	7	10	< 0.01	< 10	< 10	26	< 10	20
T28006	205	238	< 1	0.03	< 1	1000	8	10	11	23	0.02	< 10	< 10	76	< 10	22
T28007	205	238	< 1	0.03	1	1480	4	10	25	28	0.11	< 10	< 10	215	< 10	42
T28008	205	238	2	0.02	2	1490	12	10	16	21	< 0.01	< 10	< 10	64	< 10	36
T28009	205	238	2	0.02	< 1	330	8	5	4	12	< 0.01	< 10	< 10	20	< 10	30
T28010	205	238	1	0.03	5	900	10	10	15	20	< 0.01	< 10	< 10	24	< 10	30
T28011	205	238	1	0.01	1	220	16	< 5	5	5	0.01	< 10	< 10	31	< 10	12
T28012	205	238	< 1	0.03	4	430	4	5	5	12	0.01	< 10	< 10	52	< 10	18
T28013	205	238	< 1	0.02	6	670	2	5	16	21	0.07	< 10	< 10	83	< 10	28
T28014	205	238	1	0.01	4	270	< 2	< 5	2	8	< 0.01	< 10	< 10	5	< 10	6
T28015	205	238	1	0.01	5	440	< 2	5	15	14	0.04	< 10	< 10	86	< 10	36
T28016	205	238	2	0.01	4	530	4	5	3	22	< 0.01	< 10	< 10	11	< 10	10
T28017	205	238	1	0.01	5	490	< 2	5	2	16	< 0.01	< 10	< 10	7	< 10	8
T28018	205	238	2	0.01	5	520	6	< 5	2	17	< 0.01	< 10	< 10	6	< 10	6
T28019	205	238	2	0.01	4	510	2	10	2	21	< 0.01	< 10	< 10	5	< 10	6
T28020	205	238	2	0.02	4	480	8	5	2	11	< 0.01	< 10	< 10	3	< 10	6
T28021	205	238	1	0.02	3	530	56	10	2	11	< 0.01	< 10	< 10	3	< 10	8
T28022	205	238	4	0.03	21	1450	20	10	18	41	0.06	< 10	< 10	100	< 10	44
T28023	205	238	1	0.05	29	1750	4	10	19	16	0.04	< 10	< 10	83	< 10	38
T28024	205	238	< 1	0.04	8	1290	2	< 5	21	28	0.10	< 10	< 10	150	< 10	52
T28025	205	238	4	0.03	2	350	8	< 5	1	7	< 0.01	< 10	< 10	4	< 10	10
T28100	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28101	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28102	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28103	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28104	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28105	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28106	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28107	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28108	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28109	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28110	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28111	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28329	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28330	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28331	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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PHONE (604) 984-0221

ARCHER CATHRO & ASSOC. (1981) LTD.
3125 3RD AVE., BOX 4127
WHITEHORSE, YT
Y1A 3S9
Project : NUCLEUS
Comments:

Date : 21-SEP-89
Invoice # : I-8926078
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8926078

SAMPLE DESCRIPTION	PREP CODE		Au ppb RUSH	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
T28026	255	238	675	0.41	2.6	60	70	< 0.5	42	0.01	< 0.5	< 1	80	60	0.90	< 10	< 1	0.23	20	0.01	10
T28027	255	238	465	0.68	1.6	105	160	< 0.5	8	0.02	< 0.5	2	52	1155	3.21	< 10	< 1	0.32	50	0.06	15
T28028	255	238	1660	1.97	3.4	500	20	0.5	94	0.23	< 0.5	25	36	4080	5.54	10	< 1	0.59	20	0.86	70
T28029	255	238	2000	1.13	4.4	90	40	0.5	94	0.06	< 0.5	26	46	5420	3.52	10	< 1	0.28	50	0.20	25
T28030	255	238	2960	2.57	6.8	55	30	0.5	58	0.16	0.5	28	47	7880	5.99	20	< 1	1.28	10	1.26	80
T28031	255	238	1640	1.42	5.4	630	20	1.0	46	0.05	< 0.5	23	63	6190	3.59	< 10	< 1	0.29	20	0.26	30
T28032	255	238	410	0.79	1.4	250	10	0.5	20	0.09	2.5	18	73	2220	2.74	< 10	< 1	0.16	10	0.24	75
T28033	255	238	680	1.39	4.0	145	50	0.5	64	0.06	< 0.5	14	66	5160	2.26	10	< 1	0.31	50	0.35	35
T28034	255	238	550	1.70	3.0	355	40	0.5	26	0.06	< 0.5	18	79	5020	2.82	< 10	1	0.36	20	0.38	35
T28035	255	238	370	2.20	2.8	175	20	0.5	82	0.08	< 0.5	25	55	6770	3.87	10	< 1	0.64	10	0.82	70
T28036	255	238	1220	2.52	4.4	135	20	1.0	246	0.10	< 0.5	27	65	6520	5.06	10	< 1	0.68	10	1.09	85
T28037	255	238	340	2.69	3.0	255	10	1.5	36	0.10	< 0.5	40	66	5660	6.57	10	< 1	0.58	10	0.69	85
T28038	255	238	360	1.48	3.0	135	40	1.0	18	0.09	< 0.5	33	52	3590	3.77	10	1	0.21	50	0.10	25
T28039	255	238	175	2.30	2.6	115	40	1.0	22	0.11	< 0.5	41	82	4210	3.08	< 10	< 1	0.41	20	0.39	60
T28040	255	238	160	2.00	3.2	220	30	1.0	34	0.10	< 0.5	127	66	7230	2.86	10	< 1	0.25	70	0.11	20
T28041	255	238	190	1.43	2.4	45	20	1.0	22	0.10	< 0.5	31	53	3210	1.41	< 10	< 1	0.23	20	0.06	15
T28042	255	238	155	1.50	2.4	65	30	1.0	8	0.12	0.5	36	46	4490	1.80	< 10	< 1	0.20	20	0.11	25

DN99-1

CERTIFICATION : B. Caughlin

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PHONE (604) 984-0221

ARCHER CATHRO & ASSOC. (1981) LTD.

3125 3RD AVE., BOX 4127
WHITEHORSE, YT
Y1A 3S9

Project : NUCLEUS
Comments:

Date : 21-SEP-89
Invoice # : I-8926078
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8926078

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
T28026	255	238	4	0.01	< 1	80	14	< 5	< 1	6	< 0.01	< 10	< 10	1	< 10	4
T28027	255	238	1	0.04	2	310	12	5	2	12	< 0.01	< 10	< 10	7	< 10	16
T28028	255	238	2	0.02	11	1420	6	5	16	5	0.04	< 10	< 10	121	< 10	58
T28029	255	238	3	0.02	18	500	12	15	5	5	0.01	< 10	< 10	31	< 10	68
T28030	255	238	3	0.02	23	900	10	15	18	4	0.09	< 10	< 10	135	< 10	98
T28031	255	238	1	0.01	16	230	8	20	6	5	0.01	< 10	< 10	19	< 10	78
T28032	255	238	1	0.04	10	300	10	10	5	4	< 0.01	< 10	< 10	9	< 10	38
T28033	255	238	6	0.01	15	300	8	15	7	6	0.01	< 10	< 10	36	< 10	56
T28034	255	238	5	0.01	20	490	12	20	10	13	0.01	< 10	< 10	62	< 10	58
T28035	255	238	2	0.01	23	370	4	15	16	5	0.04	< 10	< 10	94	< 10	74
T28036	255	238	3	0.01	20	390	16	10	18	6	0.04	< 10	< 10	118	< 10	82
T28037	255	238	2	< 0.01	33	450	34	15	19	4	0.03	< 10	< 10	100	< 10	126
T28038	255	238	1	0.01	30	460	20	15	7	8	< 0.01	< 10	< 10	21	< 10	66
T28039	255	238	9	0.01	48	430	16	10	10	8	< 0.01	< 10	< 10	75	< 10	48
T28040	255	238	5	< 0.01	118	510	10	10	5	18	< 0.01	< 10	< 10	20	< 10	66
T28041	255	238	2	< 0.01	45	510	8	20	2	13	< 0.01	< 10	< 10	9	< 10	40
T28042	255	238	2	0.01	51	590	16	15	2	26	< 0.01	< 10	< 10	11	< 10	56

CERTIFICATION : B. Caughlin

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To : ARCHER CATHRO & ASSOC. (1981) LTD.
16 - 510 W. HASTINGS ST.
..NCOUVER, BC
V6B 1L8
Project : NUCLEUS
Comments:

Date : 3-OCT-89
Invoice # : A-8927044
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8927044

SAMPLE DESCRIPTION	PREP CODE		Cu %									
T28028-042 COMP	299	--	0.43									

CERTIFICATION : W. Stenzenini

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Page : 1
Total Pages: 1
Date : 1-OCT-89
Invoice # : I-8926576
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8926576

SAMPLE DESCRIPTION	PREP CODE		Au oz/T
28028 RESPLITS	207	--	0.046
28029 RESPLITS	207	--	0.089
28030 RESPLITS	207	--	0.047
28031 RESPLITS	207	--	0.057
28032 RESPLITS	207	--	0.004
28033 RESPLITS	207	--	0.022
28034 RESPLITS	207	--	0.010
28035 RESPLITS	207	--	0.028
28036 RESPLITS	207	--	0.075
28037 RESPLITS	207	--	0.014

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Laboratoires Chemex Ltee.

Essayeurs * Geochimistes * Chimistes Analytique
175 Boul. Industriel C.P. 284, Rouyn,
Quebec, Canada J9X 5C3
PHONE: 819-797-1922

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V6B 1L8

Project : NUCLEUS
Comments:

Invoice Date: 27-SEP-89
Invoice No. : I-8926267
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8926267

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA
T28043	205	205	1760
T28044	205	205	600
T28045	205	205	170
T28046	205	205	375
T28047	205	205	120
T28048	205	205	50
T28049	205	205	460
T28050	205	205	705
T28051	205	205	110
T28052	205	205	505
T28053	205	205	30
T28054	205	205	100
T28055	205	205	40
T28056	205	205	80

CERTIFICATION : Frank Vrsh

CN89-1

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BRITISH COLUMBIA, CANADA V7J-2C1
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VANCOUVER, BC
V6B 1L8

Project : NUCLEUS
Comments:

Date : 16-OCT-89
Invoice # : I-8927424
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8927424

SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
T28043	214	238	1.15	5.0	125	10	0.5	56	0.10	< 0.5	52	16	6190	1.70	< 10	< 1	0.11	20	0.09	20	< 1
T28044	214	238	0.87	3.2	130	20	0.5	22	0.11	< 0.5	24	26	3360	1.06	< 10	< 1	0.10	20	0.07	20	< 1
T28045	214	238	1.50	3.0	100	30	0.5	14	0.11	< 0.5	14	56	3550	1.27	< 10	< 1	0.20	30	0.10	20	< 1
T28046	214	238	1.16	2.2	55	20	0.5	20	0.15	1.5	13	61	2060	1.83	< 10	< 1	0.18	20	0.06	125	< 1
T28047	214	238	0.88	2.4	115	10	0.5	20	0.10	< 0.5	14	21	2880	1.42	< 10	< 1	0.09	20	0.01	5	< 1
T28048	214	238	1.24	1.2	20	30	0.5	12	0.12	< 0.5	11	50	2210	1.39	< 10	1	0.15	20	0.02	40	< 1
T28049	214	238	0.33	3.2	85	10	< 0.5	80	0.15	3.0	17	22	2290	3.06	< 10	< 1	0.09	20	0.07	225	1
T28050	214	238	0.44	3.2	65	10	< 0.5	294	0.18	1.5	17	46	1405	3.41	< 10	< 1	0.14	20	0.14	285	1
T28051	214	238	0.63	1.6	40	10	< 0.5	100	0.15	1.0	11	15	1435	1.59	< 10	< 1	0.08	20	0.04	100	1
T28052	214	238	1.12	2.4	930	10	< 0.5	24	0.11	< 0.5	16	20	3460	2.22	< 10	< 1	0.09	20	0.01	45	1
T28053	214	238	0.54	1.2	125	< 10	< 0.5	8	0.17	2.0	12	19	1250	2.38	< 10	< 1	0.08	20	0.06	230	< 1
T28054	214	238	0.46	1.2	55	< 10	< 0.5	60	0.21	1.5	16	29	920	3.96	< 10	1	0.11	20	0.26	425	2
T28055	214	238	2.29	0.2	50	40	< 0.5	12	0.25	< 0.5	20	59	334	5.40	10	< 1	1.34	10	1.90	310	2
T28056	214	238	2.97	< 0.2	70	90	< 0.5	< 2	0.63	< 0.5	27	65	302	6.74	10	< 1	1.70	10	2.53	610	1

CERTIFICATION : B. Caughlin

CN89-1

Chemex Labs Ltd.
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ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project : NUCLEUS
Comments:

Date : 16-OCT-89
Invoice # : I-8927424
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8927424

SAMPLE DESCRIPTION	PREP CODE		Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
T28043	214	238	< 0.01	66	590	8	15	2	27	< 0.01	< 10	< 10	8	< 10	54
T28044	214	238	< 0.01	32	610	6	20	1	21	< 0.01	< 10	< 10	7	< 10	42
T28045	214	238	< 0.01	23	600	10	15	2	35	< 0.01	< 10	< 10	9	< 10	36
T28046	214	238	< 0.01	17	630	8	10	1	21	< 0.01	< 10	< 10	7	< 10	30
T28047	214	238	< 0.01	22	600	32	< 5	1	22	< 0.01	< 10	< 10	4	< 10	46
T28048	214	238	< 0.01	28	650	12	< 5	1	30	< 0.01	< 10	< 10	5	< 10	26
T28049	214	238	< 0.01	12	600	20	5	1	5	< 0.01	< 10	< 10	3	< 10	48
T28050	214	238	< 0.01	13	610	76	5	2	6	< 0.01	< 10	< 10	6	< 10	44
T28051	214	238	< 0.01	13	640	74	< 5	2	11	< 0.01	< 10	< 10	3	< 10	26
T28052	214	238	< 0.01	42	640	26	20	2	24	< 0.01	< 10	< 10	6	< 10	54
T28053	214	238	< 0.01	13	600	42	< 5	1	7	< 0.01	< 10	< 10	4	< 10	66
T28054	214	238	< 0.01	16	590	16	< 5	4	4	< 0.01	< 10	< 10	18	< 10	54
T28055	214	238	0.01	24	470	< 2	< 5	18	4	0.09	< 10	< 10	124	< 10	52
T28056	214	238	0.10	28	440	< 2	< 5	20	27	0.12	< 10	< 10	165	< 10	50

DN89-1

CERTIFICATION : B. Caughlin

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ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8
Project : NUCLEUS
Comments:

Date : 9-OCT-89
Invoice # : I-8926392
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8926392

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
T 28057	205	238	160	1.24	0.4	360	140	< 0.5	12	0.09	< 0.5	1	70	155	2.96	< 10	< 1	0.47	20	0.34	45
T 28058	205	238	220	0.87	0.4	315	160	< 0.5	8	0.08	< 0.5	1	87	227	4.05	< 10	< 1	0.41	20	0.28	35
T 28059	205	238	1750	0.52	0.6	1575	280	< 0.5	12	0.04	< 0.5	< 1	61	140	3.96	< 10	< 1	0.52	30	0.03	15
T 28060	205	238	330	1.44	0.6	670	230	< 0.5	14	0.09	< 0.5	< 1	90	141	3.73	< 10	< 1	0.66	30	0.38	35
T 28061	205	238	1050	0.58	1.0	870	170	< 0.5	18	0.02	< 0.5	< 1	103	92	2.20	< 10	< 1	0.33	30	0.03	15
T 28062	205	238	155	0.55	0.4	785	110	< 0.5	10	0.01	< 0.5	1	98	53	1.40	< 10	< 1	0.29	20	0.01	40
T 28063	205	238	815	1.04	0.6	335	120	< 0.5	16	0.06	< 0.5	< 1	83	247	5.30	< 10	< 1	0.48	40	0.11	45
T 28064	205	238	860	2.99	0.4	855	180	< 0.5	10	0.12	< 0.5	6	152	645	4.24	10	< 1	0.98	30	1.12	115
T 28065	205	238	1090	1.97	0.4	700	260	< 0.5	62	0.13	< 0.5	23	150	321	4.73	10	< 1	0.65	30	1.55	230
T 28066	205	238	345	2.71	< 0.2	< 5	330	< 0.5	12	0.49	0.5	21	150	181	5.28	10	< 1	1.29	20	2.40	330
T 28067	205	238	1410	3.98	0.2	2750	200	4.0	70	0.15	< 0.5	46	240	956	10.35	10	< 1	1.84	10	3.67	285
T 28068	205	238	780	2.36	0.4	305	100	1.5	66	0.12	< 0.5	21	103	1380	4.83	< 10	< 1	0.77	20	1.33	125
T 28069	205	238	810	2.44	0.2	215	40	4.5	60	0.32	< 0.5	36	95	805	10.80	< 10	< 1	0.41	10	2.11	840
T 28070	205	238	250	2.44	< 0.2	45	80	3.5	8	0.28	< 0.5	32	111	421	9.93	< 10	< 1	0.71	10	2.41	515
T 28071	205	238	445	2.39	< 0.2	65	90	3.0	4	0.29	< 0.5	33	77	349	9.10	< 10	< 1	1.06	10	2.42	610
T 28072	205	238	200	0.57	< 0.2	200	40	< 0.5	8	0.03	< 0.5	4	123	203	1.21	< 10	< 1	0.15	20	0.07	35
T 28073	205	238	225	0.53	< 0.2	295	50	< 0.5	6	0.02	< 0.5	< 1	88	80	2.45	< 10	< 1	0.21	20	0.05	20
T 28074	205	238	830	0.63	< 0.2	100	30	< 0.5	10	0.01	< 0.5	1	39	514	0.85	< 10	< 1	0.27	20	0.04	15
T 28075	205	238	75	0.49	< 0.2	90	40	< 0.5	14	0.01	< 0.5	< 1	27	988	1.06	< 10	< 1	0.27	30	0.02	10
T 28076	205	238	30	0.59	< 0.2	95	110	< 0.5	10	0.01	< 0.5	< 1	41	54	1.94	< 10	< 1	0.43	30	0.01	10
T 28077	205	238	60	0.51	< 0.2	165	70	< 0.5	36	< 0.01	< 0.5	< 1	19	66	1.63	< 10	< 1	0.33	20	0.01	5
T 28078	205	238	140	0.50	0.2	15	20	< 0.5	6	< 0.01	< 0.5	< 1	28	44	0.58	< 10	< 1	0.14	30	0.01	5
T 28079	205	238	530	0.57	0.2	20	20	< 0.5	12	0.01	< 0.5	4	23	669	0.71	< 10	< 1	0.18	30	0.01	5
T 28080	205	238	235	0.59	< 0.2	10	100	< 0.5	6	0.01	< 0.5	1	54	26	0.56	< 10	< 1	0.26	40	0.02	10
T 28081	205	238	50	0.46	< 0.2	65	90	< 0.5	4	0.01	< 0.5	1	83	50	1.88	< 10	< 1	0.27	20	0.01	10
T 28082	205	238	1710	0.90	0.6	90	90	< 0.5	44	0.01	< 0.5	1	90	70	2.26	< 10	< 1	0.37	20	0.14	20
T 28083	205	238	40	0.55	< 0.2	65	60	< 0.5	4	< 0.01	< 0.5	1	108	23	0.68	< 10	< 1	0.20	20	0.01	5
T 28084	205	238	110	0.40	< 0.2	115	70	< 0.5	4	< 0.01	< 0.5	< 1	86	39	1.02	< 10	< 1	0.19	20	< 0.01	10
T 28085	205	238	270	0.45	0.2	75	20	< 0.5	6	0.01	< 0.5	4	44	449	0.94	< 10	< 1	0.16	20	0.01	5
T 28086	205	238	265	0.43	< 0.2	195	80	< 0.5	6	0.01	< 0.5	1	79	45	1.54	< 10	< 1	0.25	20	0.01	10
T 28087	205	238	40	0.33	< 0.2	90	30	< 0.5	6	0.01	< 0.5	2	58	130	0.63	< 10	< 1	0.11	20	0.01	10
T 28088	205	238	150	0.43	< 0.2	130	70	< 0.5	46	0.01	< 0.5	1	79	38	1.17	< 10	< 1	0.21	20	0.01	15
T 28089	205	238	900	1.29	0.4	105	140	< 0.5	32	< 0.01	< 0.5	1	184	32	1.61	< 10	< 1	0.44	20	0.01	15

CERTIFICATION : B. Caughlin

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ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8
Project : NUCLEUS
Comments:

Date : 9-OCT-89
Invoice # : I-8926392
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8926392

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
T 28057	205	238	2	0.07	6	360	< 2	< 5	6	26	0.01	< 10	< 10	44	< 10	14
T 28058	205	238	1	0.11	6	350	< 2	< 5	4	30	< 0.01	< 10	< 10	39	< 10	14
T 28059	205	238	16	0.12	1	500	< 2	< 5	3	37	< 0.01	< 10	< 10	13	< 10	6
T 28060	205	238	3	0.14	4	500	< 2	5	15	43	0.01	< 10	< 10	45	< 10	10
T 28061	205	238	5	0.09	2	310	< 2	< 5	5	27	< 0.01	< 10	< 10	9	< 10	2
T 28062	205	238	7	0.02	4	210	< 2	< 5	3	14	< 0.01	< 10	< 10	5	< 10	2
T 28063	205	238	< 1	0.14	3	480	< 2	5	7	31	< 0.01	< 10	< 10	58	< 10	12
T 28064	205	238	6	0.02	14	420	< 2	< 5	15	69	0.04	< 10	< 10	95	< 10	28
T 28065	205	238	< 1	0.04	39	300	< 2	< 5	10	7	0.06	< 10	< 10	76	< 10	60
T 28066	205	238	< 1	0.06	41	400	< 2	< 5	16	18	0.16	< 10	< 10	119	< 10	78
T 28067	205	238	< 1	0.03	75	440	< 2	< 5	27	7	0.11	< 10	< 10	167	< 10	74
T 28068	205	238	1	0.02	28	530	12	< 5	12	18	0.04	< 10	< 10	78	< 10	38
T 28069	205	238	< 1	0.01	41	710	4	< 5	19	12	0.02	< 10	< 10	138	10	82
T 28070	205	238	< 1	0.02	31	650	< 2	< 5	19	4	0.06	< 10	< 10	134	< 10	78
T 28071	205	238	< 1	0.02	28	620	< 2	< 5	21	4	0.08	< 10	< 10	168	10	146
T 28072	205	238	3	0.04	8	130	4	< 5	1	8	< 0.01	< 10	< 10	7	< 10	16
T 28073	205	238	1	0.04	2	100	< 2	5	1	8	< 0.01	< 10	< 10	5	< 10	8
T 28074	205	238	< 1	0.04	4	70	2	5	< 1	8	< 0.01	< 10	< 10	1	< 10	6
T 28075	205	238	1	0.04	4	100	< 2	< 5	< 1	5	< 0.01	< 10	< 10	2	< 10	8
T 28076	205	238	2	0.07	2	140	2	< 5	< 1	12	< 0.01	< 10	< 10	2	< 10	4
T 28077	205	238	1	0.03	2	130	24	5	< 1	8	< 0.01	< 10	< 10	3	< 10	4
T 28078	205	238	15	0.03	2	50	< 2	5	< 1	2	< 0.01	< 10	< 10	1	< 10	2
T 28079	205	238	16	0.03	3	140	2	5	1	10	< 0.01	< 10	< 10	1	< 10	6
T 28080	205	238	5	0.04	4	190	< 2	5	< 1	9	< 0.01	< 10	< 10	1	< 10	4
T 28081	205	238	14	0.04	< 1	180	8	< 5	< 1	6	< 0.01	< 10	< 10	2	< 10	4
T 28082	205	238	1	0.02	5	540	8	5	4	14	< 0.01	< 10	< 10	20	< 10	18
T 28083	205	238	4	0.02	4	110	8	< 5	< 1	9	< 0.01	< 10	< 10	2	< 10	2
T 28084	205	238	2	0.02	4	80	6	5	< 1	6	< 0.01	< 10	< 10	1	< 10	2
T 28085	205	238	6	0.04	2	80	4	5	< 1	4	< 0.01	< 10	< 10	1	< 10	8
T 28086	205	238	2	0.02	3	180	6	5	< 1	10	< 0.01	< 10	< 10	2	< 10	4
T 28087	205	238	1	0.03	1	80	2	< 5	< 1	5	< 0.01	< 10	< 10	< 1	< 10	4
T 28088	205	238	2	0.03	1	90	8	5	< 1	8	< 0.01	< 10	< 10	1	< 10	4
T 28089	205	238	< 1	0.02	6	100	4	< 5	< 1	10	< 0.01	< 10	< 10	3	< 10	4

CERTIFICATION : B. Caughlin

CN 84-2

Chemex Labs Ltd.

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ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project : NUCLEUS
Comments:

Invoice Date: 10-OCT-89
Invoice No. : I-8926573
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8926573

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Au FA oz/T	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %
28090	205	238	1990	-----	0.32	1.4	490	90	< 0.5	40	< 0.01	< 0.5	< 1	94	36	1.56	< 10	1	0.19	10	< 0.01
28091	205	238	>10000	1.064	0.43	2.2	425	80	< 0.5	406	< 0.01	< 0.5	< 1	86	39	1.37	< 10	< 1	0.18	20	< 0.01
28092	205	238	60	-----	1.07	0.8	350	70	< 0.5	16	0.01	< 0.5	12	74	1175	2.18	< 10	< 1	0.16	20	0.03
28093	205	238	70	-----	0.37	0.6	55	20	< 0.5	4	0.07	0.5	13	82	194	3.08	< 10	1	0.11	20	0.16
28094	205	238	135	-----	0.84	0.8	355	40	< 0.5	36	0.07	0.5	12	88	649	2.81	< 10	< 1	0.18	20	0.09
28095	205	238	185	-----	0.93	0.6	115	60	< 0.5	10	0.02	< 0.5	9	68	926	1.51	< 10	< 1	0.16	30	0.03
28096	205	238	615	-----	0.96	0.4	40	30	< 0.5	8	0.12	< 0.5	15	62	704	1.17	< 10	< 1	0.15	20	0.03
28097	205	238	170	-----	0.56	0.4	30	20	< 0.5	< 2	0.10	< 0.5	6	71	96	2.01	< 10	< 1	0.13	20	0.26
28098	205	238	340	-----	0.45	0.6	40	10	< 0.5	8	0.15	< 0.5	7	78	117	3.19	< 10	< 1	0.11	30	0.19
28099	205	238	555	-----	0.74	0.8	65	10	< 0.5	70	0.28	< 0.5	22	59	258	4.81	< 10	< 1	0.13	30	0.43

CERTIFICATION : B. Caughlin

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: ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project : NUCLEUS
Comments:

Invoice Date: 10-OCT-89
Invoice No. : I-8926573
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8926573

SAMPLE DESCRIPTION	PREP CODE		Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
28090	205	238	10	< 1	0.01	2	110	4	< 5	< 1	9	< 0.01	< 10	< 10	2	< 10	4
28091	205	238	5	< 1	0.01	3	140	8	< 5	1	10	< 0.01	< 10	< 10	3	< 10	4
28092	205	238	10	< 1	0.01	19	410	8	5	4	13	< 0.01	< 10	< 10	6	< 10	26
28093	205	238	180	< 1	0.03	14	150	6	< 5	4	5	< 0.01	< 10	< 10	2	< 10	32
28094	205	238	75	< 1	0.02	19	500	6	10	5	13	< 0.01	< 10	< 10	14	< 10	34
28095	205	238	10	< 1	0.01	17	330	4	5	5	21	< 0.01	< 10	< 10	4	< 10	16
28096	205	238	10	< 1	< 0.01	26	750	6	5	4	6	< 0.01	< 10	< 10	11	< 10	16
28097	205	238	140	< 1	0.02	4	170	10	< 5	4	3	< 0.01	< 10	< 10	3	< 10	24
28098	205	238	355	< 1	0.01	4	260	10	< 5	3	3	< 0.01	< 10	< 10	6	< 10	24
28099	205	238	390	< 1	0.01	8	690	8	10	6	5	< 0.01	< 10	< 10	25	< 10	30

CERTIFICATION : B. Caughlin

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ARCHER CATHRO & ASSOC. (1981) LTD.

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VANCOUVER, BC
V6B 1L8

Project : NUCLEUS
Comments:

Invoice Date: 10-OCT-89
Invoice No. : I-8927037
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8927037

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA
28221	205	--	45
28222	205	--	75
28223	205	--	140
28224	205	--	85
28225	205	--	55
28226	205	--	210
28227	205	--	65
28228	205	--	640
28229	205	--	170
28230	205	--	85
28231	205	--	250
28232	205	--	870
28233	205	--	50
28234	205	--	40
28235	205	--	75
28236	205	--	240
28237	205	--	230
28238	205	--	215
28239	205	--	175
28240	205	--	2420
28241	205	--	460
28242	205	--	260
28243	205	--	210
28244	205	--	65
28251	205	--	350
28252	205	--	170
28253	205	--	615
28254	205	--	230
28255	205	--	1560
28256	205	--	530
28257	205	--	290
28258	205	--	120
28259	205	--	430
28260	205	--	680
28261	205	--	330
28262	205	--	45
28263	205	--	550
28264	205	--	70
28265	205	--	55
28266	205	--	45

T89N-6

T89N-7

ON89-3

CERTIFICATION : [signature]

Chemex Labs Ltd.

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PHONE: 709-686-2119

: ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project : NUCLEUS
Comments:

Invoice Date: 10-OCT-89
Invoice No. : I-8927037
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8927037

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA
28267	205	--	30
28268	205	--	590
28269	205	--	65
28270	205	--	80
28271	205	--	650
28272	205	--	340
28273	205	--	70
28274	205	--	170
28275	205	--	45
28276	205	--	140
28277	205	--	180
28278	205	--	40

ON89-3

CERTIFICATION : Hart Vonk

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

450 Matheson Blvd.,E., Unit 54, Mississauga,
Ontario, Canada L4Z 1R5
PHONE: 416-890-0310

To: ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project : NUCLEUS
Comments:

Invoice Date: 18-OCT-89
Invoice No. : I-8928195
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8928195

SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
28251	214	238	0.46	1.0	645	240	< 0.5	38	0.04	< 0.5	< 1	44	56	2.66	< 10	1	0.49	20	0.03	10	< 1
28252	214	238	0.34	0.4	435	110	< 0.5	14	0.02	< 0.5	< 1	41	23	0.74	< 10	< 1	0.22	10	0.02	15	5
28253	214	238	0.32	0.6	300	120	< 0.5	14	0.01	< 0.5	< 1	36	24	0.73	< 10	1	0.21	20	0.01	5	2
28254	214	238	0.36	0.4	255	110	< 0.5	6	0.02	< 0.5	< 1	38	25	0.84	< 10	1	0.28	20	0.01	5	1
28255	214	238	0.44	0.2	960	380	< 0.5	44	0.02	< 0.5	< 1	39	61	2.58	< 10	< 1	0.57	20	0.02	5	< 1
28256	214	238	0.41	0.8	525	90	< 0.5	46	0.01	< 0.5	< 1	55	30	0.75	< 10	< 1	0.32	20	0.01	10	2
28257	214	238	0.46	0.8	540	100	< 0.5	10	0.01	< 0.5	< 1	50	47	0.74	< 10	< 1	0.32	20	0.01	10	2
28258	214	238	0.45	0.4	280	150	< 0.5	4	< 0.01	< 0.5	< 1	58	134	0.85	< 10	1	0.30	20	0.01	10	4
28259	214	238	0.42	0.6	575	260	< 0.5	18	< 0.01	< 0.5	< 1	56	99	0.94	< 10	< 1	0.34	20	0.01	10	6
28260	214	238	0.46	0.8	305	210	< 0.5	30	< 0.01	< 0.5	< 1	58	28	0.77	< 10	< 1	0.31	20	0.01	5	2
28261	214	238	0.41	0.6	770	140	< 0.5	16	< 0.01	< 0.5	< 1	55	50	0.75	< 10	< 1	0.29	20	0.01	10	2
28262	214	238	0.57	0.6	225	220	< 0.5	2	< 0.01	< 0.5	< 1	53	42	1.00	< 10	< 1	0.34	30	0.01	10	2
28263	214	238	0.48	0.8	3500	130	0.5	132	0.01	< 0.5	1	55	143	2.57	< 10	< 1	0.52	10	0.02	10	< 1
28264	214	238	0.55	0.4	1065	250	0.5	< 2	< 0.01	< 0.5	< 1	55	51	2.44	< 10	2	0.65	10	0.02	5	< 1
28265	214	238	0.48	0.6	175	100	< 0.5	2	< 0.01	< 0.5	< 1	52	25	0.95	< 10	< 1	0.31	20	< 0.01	5	< 1
28266	214	238	0.38	0.4	285	80	< 0.5	2	< 0.01	< 0.5	< 1	58	33	0.60	< 10	< 1	0.22	20	< 0.01	10	< 1
28267	214	238	0.41	0.4	420	100	< 0.5	< 2	< 0.01	< 0.5	< 1	60	69	0.99	< 10	< 1	0.27	20	< 0.01	10	< 1
28268	214	238	0.35	1.4	375	80	< 0.5	32	< 0.01	< 0.5	< 1	61	26	0.88	< 10	< 1	0.26	20	< 0.01	10	< 1
28269	214	238	0.38	0.4	165	90	< 0.5	16	< 0.01	< 0.5	< 1	62	26	1.14	< 10	1	0.28	20	< 0.01	15	< 1
28270	214	238	0.45	0.6	185	120	< 0.5	6	< 0.01	< 0.5	< 1	67	17	1.08	< 10	< 1	0.29	20	< 0.01	15	< 1
28271	214	238	0.42	1.8	4060	190	< 0.5	16	< 0.01	< 0.5	< 1	67	35	3.38	< 10	< 1	0.65	10	0.01	10	< 1
28272	214	238	0.36	0.6	1215	90	< 0.5	2	< 0.01	< 0.5	< 1	59	19	1.07	< 10	< 1	0.31	20	< 0.01	10	< 1
28273	214	238	0.51	0.6	530	80	< 0.5	4	< 0.01	< 0.5	< 1	71	14	0.87	< 10	< 1	0.26	30	< 0.01	10	< 1
28274	214	238	1.33	0.6	315	120	< 0.5	< 2	0.02	< 0.5	3	63	231	2.88	< 10	< 1	0.40	20	0.34	45	< 1
28275	214	238	2.19	0.2	140	70	< 0.5	< 2	0.35	0.5	18	67	145	4.88	< 10	< 1	0.39	10	1.32	390	< 1
28276	214	238	1.69	< 0.2	225	80	< 0.5	< 2	0.26	< 0.5	19	69	111	4.88	< 10	< 1	0.42	10	1.28	435	< 1
28277	214	238	0.40	0.4	1150	40	< 0.5	< 2	0.07	0.5	5	77	73	3.07	< 10	< 1	0.14	20	0.11	335	1
28278	214	238	0.95	0.8	125	30	< 0.5	< 2	0.03	< 0.5	2	66	488	0.66	10	< 1	0.12	30	0.02	20	1

DN89-3

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

450 Matheson Blvd.,E., Unit 54, Mississauga,
Ontario, Canada L4Z 1R5
PHONE: 416-890-0310

To: ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project : NUCLEUS
Comments:

Invoice Date: 18-OCT-89
Invoice No. : I-8928195
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8928195

SAMPLE DESCRIPTION	PREP CODE		Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
28251	214	238	0.01	2	130	2	5	4	19	< 0.01	< 10	< 10	31	10	12
28252	214	238	< 0.01	1	70	2	5	2	12	< 0.01	< 10	< 10	6	< 10	2
28253	214	238	< 0.01	1	70	8	5	1	9	< 0.01	< 10	< 10	2	< 10	< 2
28254	214	238	< 0.01	1	70	8	5	1	9	< 0.01	< 10	< 10	3	< 10	< 2
28255	214	238	0.01	< 1	210	20	5	6	21	< 0.01	< 10	< 10	10	10	2
28256	214	238	< 0.01	1	70	6	< 5	1	25	< 0.01	< 10	< 10	1	< 10	< 2
28257	214	238	< 0.01	1	50	4	< 5	1	11	< 0.01	< 10	< 10	1	< 10	< 2
28258	214	238	< 0.01	< 1	60	10	< 5	1	12	< 0.01	< 10	< 10	1	< 10	< 2
28259	214	238	< 0.01	1	50	10	< 5	1	8	< 0.01	< 10	< 10	< 1	< 10	< 2
28260	214	238	< 0.01	< 1	30	4	< 5	< 1	7	< 0.01	< 10	< 10	< 1	< 10	< 2
28261	214	238	< 0.01	< 1	30	6	5	< 1	7	< 0.01	< 10	< 10	< 1	< 10	< 2
28262	214	238	< 0.01	2	90	18	< 5	1	17	< 0.01	< 10	< 10	2	< 10	< 2
28263	214	238	0.01	< 1	100	20	15	3	13	< 0.01	< 10	< 10	5	< 10	4
28264	214	238	0.01	2	80	12	5	4	17	< 0.01	< 10	< 10	8	< 10	2
28265	214	238	< 0.01	< 1	60	10	< 5	1	8	< 0.01	< 10	< 10	1	< 10	< 2
28266	214	238	< 0.01	1	30	8	< 5	1	5	< 0.01	< 10	< 10	< 1	< 10	< 2
28267	214	238	< 0.01	2	50	14	< 5	< 1	6	< 0.01	< 10	< 10	< 1	< 10	< 2
28268	214	238	< 0.01	2	40	14	< 5	< 1	5	< 0.01	< 10	< 10	1	< 10	< 2
28269	214	238	< 0.01	1	50	10	5	< 1	6	< 0.01	< 10	< 10	2	< 10	2
28270	214	238	< 0.01	1	70	10	< 5	< 1	8	< 0.01	< 10	< 10	1	< 10	2
28271	214	238	0.02	< 1	250	602	35	3	17	< 0.01	10	< 10	3	10	12
28272	214	238	< 0.01	< 1	60	26	5	< 1	6	< 0.01	< 10	< 10	< 1	< 10	6
28273	214	238	0.01	< 1	80	10	< 5	< 1	9	< 0.01	< 10	< 10	< 1	< 10	2
28274	214	238	0.06	4	290	74	< 5	4	18	< 0.01	< 10	< 10	22	10	24
28275	214	238	0.08	11	390	6	< 5	10	17	0.02	< 10	< 10	67	20	98
28276	214	238	0.05	10	420	< 2	< 5	10	10	0.02	< 10	< 10	54	10	96
28277	214	238	0.02	3	100	4	< 5	2	3	< 0.01	< 10	< 10	1	10	32
28278	214	238	0.01	7	140	8	< 5	3	6	< 0.01	< 10	< 10	2	< 10	8

CERTIFICATION : B. Cogl.

ON89-3

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
WestEnd Industrial Park, Pasadena,
Newfoundland, Canada A0I 1K0
PHONE: 709-686-2119

To: ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project : NUCLEUS
Comments:

Invoice Date: 11-OCT-89
Invoice No. : I-8926868
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8926868

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
T28279	205	238	270	1.46	1.0	105	120	0.5	14	0.06	< 0.5	2	29	646	5.32	< 10	< 1	0.21	10	0.08	25
T28280	205	238	75	1.46	0.6	10	170	< 0.5	6	0.03	< 0.5	2	46	433	4.52	< 10	< 1	0.32	10	0.21	35
T28281	205	238	10	1.18	0.8	90	80	< 0.5	< 2	0.01	0.5	7	31	452	6.99	< 10	< 1	0.31	< 10	0.06	205
T28282	205	238	155	1.50	0.8	220	110	< 0.5	4	0.04	0.5	8	40	433	8.54	< 10	< 1	0.61	10	0.28	150
T28283	205	238	10	2.86	0.2	165	90	< 0.5	< 2	0.09	< 0.5	7	22	324	3.48	< 10	< 1	0.65	< 10	0.88	135
T28284	205	238	40	3.72	0.4	35	70	0.5	< 2	0.07	< 0.5	9	36	436	4.72	< 10	< 1	0.89	10	1.08	175
T28285	205	238	210	1.14	0.4	15	70	< 0.5	2	0.02	< 0.5	7	89	264	4.68	< 10	< 1	0.15	10	0.12	240
T28286	205	238	250	0.59	0.4	70	430	< 0.5	12	0.01	< 0.5	7	72	165	5.02	< 10	< 1	0.32	10	0.03	265
T28287	205	238	790	1.07	0.8	85	160	< 0.5	< 2	0.02	1.0	11	26	1130	>15.00	< 10	< 1	0.04	< 10	0.05	970
T28288	205	238	295	1.48	0.8	75	110	0.5	10	0.02	< 0.5	< 1	27	900	>15.00	< 10	< 1	0.25	10	0.04	75
T28289	205	238	95	2.11	0.6	90	100	< 0.5	2	0.03	< 0.5	2	59	370	4.60	< 10	< 1	0.34	20	0.30	35
T28290	205	238	35	2.89	0.6	< 5	200	< 0.5	10	0.05	0.5	9	125	488	7.95	< 10	< 1	0.62	10	0.34	210
T28291	205	238	105	0.48	1.0	685	190	< 0.5	16	0.01	< 0.5	6	29	148	5.05	< 10	< 1	0.46	10	0.03	160
T28292	205	238	190	0.51	1.2	385	130	< 0.5	26	0.01	< 0.5	6	29	161	3.63	< 10	< 1	0.36	20	0.02	190
T28293	205	238	70	0.40	1.0	295	130	< 0.5	10	0.01	< 0.5	5	31	121	3.37	< 10	< 1	0.36	20	0.02	150
T28294	205	238	150	0.34	0.8	240	740	< 0.5	8	0.01	< 0.5	3	40	141	3.74	< 10	< 1	0.42	10	0.02	75
T28295	205	238	65	0.43	0.6	165	160	< 0.5	< 2	< 0.01	< 0.5	3	26	124	4.70	< 10	< 1	0.44	10	0.03	210
T28296	205	238	125	0.50	0.4	150	120	0.5	8	0.01	< 0.5	4	31	157	4.75	< 10	< 1	0.38	20	0.02	330
T28297	205	238	265	0.42	0.4	150	270	0.5	6	< 0.01	< 0.5	5	22	221	4.27	< 10	< 1	0.32	10	0.02	275
T28298	205	238	140	0.55	0.8	330	120	0.5	2	< 0.01	< 0.5	6	31	397	4.80	< 10	< 1	0.43	20	0.03	310
T28299	205	238	2020	0.54	0.4	350	110	1.0	18	0.01	< 0.5	5	26	413	4.70	< 10	< 1	0.49	20	0.03	275
T28300	205	238	2350	0.61	0.4	445	220	1.0	24	0.01	< 0.5	4	26	334	6.74	< 10	< 1	0.56	20	0.03	415
T28401	205	238	45	0.40	0.2	850	750	1.0	6	0.01	< 0.5	6	26	228	5.39	< 10	< 1	0.42	10	0.01	265
T28402	205	238	1730	0.31	1.4	>10000	210	1.5	58	0.01	< 0.5	1	42	232	8.48	< 10	< 1	1.28	< 10	0.01	15

ON89-4

CERTIFICATION : B. Caylor

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

WestEnd Industrial Park, Pasadena,
Newfoundland, Canada A0I 1K0
PHONE: 709-686-2119

To: ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project : NUCLEUS
Comments:

Invoice Date: 11-OCT-89
Invoice No. : I-8926868
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8926868

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
T28279	205	238	3	0.01	8	770	8	25	25	24	< 0.01	< 10	< 10	136	< 10	24
T28280	205	238	2	0.01	8	660	8	5	17	24	< 0.01	< 10	< 10	68	< 10	20
T28281	205	238	4	0.01	5	750	12	< 5	15	10	< 0.01	< 10	< 10	60	< 10	38
T28282	205	238	4	0.08	7	740	8	< 5	16	30	0.01	< 10	< 10	66	< 10	48
T28283	205	238	1	0.02	9	430	8	< 5	14	14	0.05	< 10	< 10	52	< 10	36
T28284	205	238	1	0.02	12	460	8	< 5	19	19	0.10	< 10	< 10	99	< 10	54
T28285	205	238	3	0.01	11	550	6	< 5	17	8	< 0.01	< 10	< 10	74	< 10	52
T28286	205	238	3	0.01	6	500	< 2	< 5	9	11	< 0.01	< 10	< 10	35	< 10	32
T28287	205	238	12	< 0.01	8	650	10	25	8	2	< 0.01	< 10	< 10	47	< 10	108
T28288	205	238	7	0.01	2	380	6	15	5	5	< 0.01	< 10	< 10	42	< 10	46
T28289	205	238	5	0.02	6	790	4	< 5	13	24	0.02	< 10	< 10	59	< 10	16
T28290	205	238	3	0.07	18	1090	6	< 5	25	35	0.01	< 10	< 10	126	< 10	54
T28291	205	238	5	0.02	4	730	22	130	5	19	< 0.01	< 10	< 10	21	< 10	38
T28292	205	238	6	0.01	2	550	14	120	2	21	< 0.01	< 10	< 10	7	< 10	28
T28293	205	238	7	0.01	2	540	24	75	2	18	< 0.01	< 10	< 10	6	< 10	44
T28294	205	238	6	0.01	2	430	6	80	2	22	< 0.01	< 10	< 10	7	< 10	72
T28295	205	238	4	0.01	2	520	10	40	2	18	< 0.01	< 10	< 10	7	< 10	42
T28296	205	238	3	0.01	2	690	4	35	2	19	< 0.01	< 10	< 10	5	< 10	28
T28297	205	238	4	0.01	3	520	26	40	2	21	< 0.01	< 10	< 10	5	< 10	50
T28298	205	238	4	0.01	3	560	108	50	2	20	< 0.01	< 10	< 10	7	< 10	84
T28299	205	238	4	0.02	3	750	20	60	2	23	< 0.01	< 10	< 10	8	< 10	50
T28300	205	238	5	0.02	2	810	24	60	2	29	< 0.01	< 10	< 10	11	< 10	92
T28401	205	238	7	0.02	2	620	8	60	1	24	< 0.01	< 10	< 10	9	< 10	230
T28402	205	238	7	0.04	< 1	900	20	140	12	15	< 0.01	< 10	< 10	9	< 10	38

DN89-4

CERTIFICATION : B. Caghi

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE. NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: ARCHER CATHRO & ASSOC. (1981) LTD.
016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8
Project : NUCLEUS
Comments:

Date : 16-OCT-89
Invoice # : I-8927227
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8927227

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
28403	205	238	2500	0.38	4.0	>10000	240	< 0.5	138	0.02	< 0.5	3	39	1205	7.41	< 10	< 1	0.85	10	0.02	30
28404	205	238	140	0.49	2.2	2870	120	< 0.5	32	0.01	< 0.5	1	50	54	2.71	< 10	< 1	0.62	10	0.04	25
28405	205	238	460	0.46	1.2	5410	560	< 0.5	62	0.01	< 0.5	1	65	163	2.38	< 10	< 1	0.59	10	0.03	15
28406	205	238	130	0.53	0.6	305	480	< 0.5	26	0.01	< 0.5	1	39	290	2.10	< 10	< 1	0.47	20	0.02	20
28407	205	238	300	0.42	2.0	1920	250	< 0.5	338	0.01	< 0.5	2	57	154	3.93	< 10	< 1	0.62	10	0.01	45
28408	205	238	2140	0.58	1.4	725	230	< 0.5	832	< 0.01	< 0.5	1	83	126	2.58	< 10	< 1	0.52	20	0.04	20
28409	205	238	305	0.78	0.4	285	140	< 0.5	24	0.01	< 0.5	1	80	115	2.24	< 10	< 1	0.38	30	0.03	10
28410	205	238	70	1.09	0.2	120	100	< 0.5	8	0.04	< 0.5	4	60	495	2.53	< 10	< 1	0.34	10	0.18	65
28411	205	238	95	1.23	0.2	35	170	0.5	14	0.35	< 0.5	31	93	81	6.79	10	< 1	0.46	30	0.68	805
28412	205	238	30	1.38	0.4	100	500	0.5	2	0.22	< 0.5	17	93	306	3.65	10	< 1	0.46	40	0.35	270
28413	205	238	75	1.35	< 0.2	85	60	0.5	6	0.26	< 0.5	15	59	91	4.35	< 10	< 1	0.63	20	0.78	355
28414	205	238	< 5	1.02	0.2	60	60	< 0.5	6	0.23	< 0.5	12	85	63	3.53	< 10	< 1	0.41	20	0.57	305
28415	205	238	85	0.89	0.2	>10000	50	< 0.5	10	0.21	< 0.5	25	57	248	4.03	< 10	< 1	0.40	20	0.39	240
28416	205	238	245	0.99	0.4	15	30	< 0.5	6	0.24	< 0.5	19	42	642	5.19	< 10	< 1	0.29	50	0.49	335
28417	205	238	380	1.72	1.2	300	40	0.5	10	0.34	< 0.5	26	32	3220	6.99	< 10	< 1	0.43	20	0.61	170
28418	205	238	1400	1.39	2.8	>10000	40	< 0.5	30	0.10	< 0.5	77	31	4910	11.25	< 10	< 1	0.27	10	0.05	50
28419	205	238	320	1.15	0.6	265	40	0.5	66	0.22	< 0.5	16	64	1575	4.68	< 10	< 1	0.19	20	0.46	250
28420	205	238	740	2.22	< 0.2	80	30	< 0.5	48	0.27	< 0.5	19	58	339	5.92	< 10	< 1	0.62	10	1.52	330
28421	205	238	435	2.17	< 0.2	35	110	< 0.5	68	0.30	< 0.5	17	52	526	6.09	< 10	< 1	0.86	10	1.64	275
28422	205	238	165	1.47	0.8	35	20	0.5	62	0.25	< 0.5	16	60	1980	5.09	< 10	< 1	0.24	10	0.56	315
28423	205	238	900	1.28	0.6	70	40	0.5	28	0.14	< 0.5	11	62	1670	2.71	< 10	< 1	0.31	10	0.27	190
28424	205	238	150	2.21	0.8	155	50	1.0	12	0.14	< 0.5	13	60	5050	2.42	< 10	< 1	0.38	10	0.27	70
28425	205	238	350	2.69	1.4	310	30	1.5	16	0.18	< 0.5	21	55	6880	2.61	< 10	< 1	0.21	10	0.05	15
28426	205	238	165	1.97	0.8	120	30	1.0	10	0.18	< 0.5	16	37	3870	2.87	< 10	< 1	0.15	10	0.09	120
28427	205	238	180	1.14	0.4	60	40	1.0	8	0.20	< 0.5	8	47	1710	2.40	< 10	< 1	0.11	10	0.11	225
28428	205	238	355	1.88	0.6	155	60	1.0	8	0.12	< 0.5	9	24	2490	1.45	< 10	< 1	0.09	10	0.02	75
28429	205	238	500	2.47	0.8	170	260	1.5	12	0.17	< 0.5	9	34	3800	1.76	< 10	< 1	0.14	10	0.05	105
28430	205	238	585	1.05	0.6	270	60	0.5	16	0.02	< 0.5	5	47	2140	0.77	< 10	< 1	0.09	30	0.01	10
28431	205	238	75	1.26	0.8	115	130	1.0	6	0.10	< 0.5	12	42	2470	2.76	< 10	< 1	0.13	40	0.13	205
28432	205	238	35	0.48	0.2	35	640	< 0.5	2	0.14	< 0.5	16	43	146	3.16	< 10	< 1	0.13	60	0.14	365
28433	205	238	60	1.79	< 0.2	< 5	70	< 0.5	56	0.40	< 0.5	28	44	200	6.87	< 10	< 1	0.87	20	1.53	715

CERTIFICATION : B. Cogli

C:N89-4

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE. NORTH VANCOUVER,
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PHONE (604) 984-0221

T ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8
Project : NUCLEUS
Comments:

Date : 16-OCT-89
Invoice # : I-8927227
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8927227

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
28403	205	238	5	0.02	2	1320	72	245	14	18	0.01	10	< 10	15	< 10	44
28404	205	238	4	0.03	1	280	12	220	2	19	< 0.01	< 10	< 10	8	< 10	16
28405	205	238	6	0.02	< 1	500	20	180	4	24	< 0.01	< 10	< 10	6	< 10	8
28406	205	238	3	0.01	3	410	12	40	2	26	< 0.01	< 10	< 10	8	< 10	18
28407	205	238	4	0.02	2	530	500	145	5	31	< 0.01	< 10	< 10	8	< 10	38
28408	205	238	3	0.02	< 1	320	154	70	3	15	< 0.01	< 10	< 10	21	< 10	22
28409	205	238	< 1	0.01	6	410	< 2	10	6	14	< 0.01	< 10	< 10	33	< 10	16
28410	205	238	2	0.01	9	390	8	< 5	8	6	< 0.01	< 10	< 10	36	< 10	18
28411	205	238	< 1	0.02	43	500	4	< 5	10	5	0.02	< 10	< 10	66	< 10	84
28412	205	238	1	0.01	35	620	2	< 5	9	7	0.02	< 10	< 10	64	< 10	36
28413	205	238	< 1	0.02	18	400	< 2	< 5	11	4	0.06	< 10	< 10	73	< 10	38
28414	205	238	2	0.01	35	550	< 2	5	7	4	0.03	< 10	< 10	45	< 10	30
28415	205	238	< 1	0.01	23	640	< 2	5	7	5	0.03	< 10	< 10	47	< 10	26
28416	205	238	1	< 0.01	21	680	8	< 5	13	9	0.01	< 10	< 10	64	< 10	38
28417	205	238	< 1	0.01	35	1280	6	40	24	12	0.02	< 10	< 10	139	10	64
28418	205	238	< 1	< 0.01	35	490	< 2	315	6	5	< 0.01	30	< 10	27	< 10	112
28419	205	238	< 1	< 0.01	15	580	< 2	5	14	5	< 0.01	< 10	< 10	54	< 10	36
28420	205	238	< 1	0.02	11	610	< 2	5	18	4	0.03	< 10	< 10	116	< 10	42
28421	205	238	< 1	0.03	11	620	2	< 5	21	6	0.07	< 10	< 10	122	< 10	38
28422	205	238	< 1	< 0.01	16	580	10	< 5	15	7	< 0.01	< 10	< 10	65	< 10	40
28423	205	238	< 1	< 0.01	15	470	10	< 5	10	6	0.01	< 10	< 10	31	< 10	28
28424	205	238	1	0.01	57	680	18	35	11	10	0.01	< 10	< 10	48	20	78
28425	205	238	2	0.01	62	980	34	120	15	26	< 0.01	< 10	< 10	61	20	88
28426	205	238	2	< 0.01	50	820	14	75	12	11	< 0.01	< 10	< 10	60	10	76
28427	205	238	1	< 0.01	24	760	< 2	20	10	13	< 0.01	< 10	< 10	24	< 10	40
28428	205	238	3	< 0.01	70	710	10	50	7	27	< 0.01	< 10	< 10	20	10	54
28429	205	238	1	< 0.01	53	900	8	30	10	24	< 0.01	< 10	< 10	28	10	56
28430	205	238	3	< 0.01	35	250	6	65	2	24	< 0.01	< 10	< 10	5	< 10	44
28431	205	238	< 1	< 0.01	32	340	< 2	10	9	26	< 0.01	< 10	< 10	25	10	46
28432	205	238	< 1	< 0.01	7	240	2	< 5	1	12	< 0.01	< 10	< 10	4	< 10	56
28433	205	238	< 1	0.03	31	360	6	5	20	11	0.08	10	< 10	123	< 10	90

CERTIFICATION : B. Caughlin

CN89-4

Chemex Labs Ltd.
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ARCHER CATHRO & ASSOC. (1981) LTD.
1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8
Project : NUCLEUS
Comments:

Date : 12-OCT-89
Invoice # : I-8927529
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8927529

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA
28245	205	--	100
28246	205	--	1860
28247	205	--	1940
28248	205	--	300
28249	205	--	360
28250	205	--	60
28434	205	--	25
28435	205	--	< 5
28436	205	--	< 5
28437	205	--	< 5
28438	205	--	< 5
28439	205	--	< 5
28440	205	--	5
28441	205	--	< 5
28442	205	--	< 5
28443	205	--	< 5
28444	205	--	< 5
28445	205	--	160
28446	205	--	10
28447	205	--	< 5
28448	205	--	< 5
28449	205	--	< 5
28450	205	--	110
28451	205	--	100
28452	205	--	140
28453	205	--	10
28454	205	--	515
28455	205	--	20
28456	205	--	10
28457	205	--	10
28458	205	--	30
28459	205	--	< 5
28460	205	--	30
28461	205	--	70
28462	205	--	5
28463	205	--	50
28464	205	--	20
28465	205	--	130
28466	205	--	35
28467	205	--	200

CERTIFICATION :

Chemex Labs Ltd.
Analytical Chemists • Geochemists • Registered Assayers
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: ARCHER CATHRO & ASSOC. (1981) LTD.
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Page : 2
Total Pages: 2
Date : 12-OCT-89
Invoice # : I-8927529
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8927529

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA
28468	205	--	70
28469	205	--	65
28470	205	--	20
28471	205	--	20
28472	205	--	< 5
28473	205	--	< 5
28474	205	--	30
28475	205	--	25
28476	205	--	< 5
28477	205	--	210
28478	205	--	20
28479	205	--	< 5
28480	205	--	< 5
28481	205	--	< 5
28482	205	--	5
28483	205	--	55
28484	205	--	< 5
28485	205	--	< 5
28486	205	--	30
28487	205	--	< 5
28488	205	--	< 5
28489	205	--	70

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CERTIFICATION : _____

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project :
Comments:

Invoice Date: 18-OCT-89
Invoice No. : I-8928236
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8928236

SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
28434	214	238	0.66	< 0.2	610	170	< 0.5	< 2	0.05	< 0.5	2	96	48	4.21	< 10	< 1	0.35	20	0.03	110	1
28435	214	238	0.59	< 0.2	300	250	< 0.5	< 2	0.02	< 0.5	< 1	80	34	5.20	< 10	< 1	0.43	10	0.02	125	< 1
28436	214	238	0.43	< 0.2	220	150	< 0.5	< 2	0.01	< 0.5	< 1	72	27	2.05	< 10	< 1	0.24	< 10	0.01	35	< 1
28437	214	238	0.46	0.2	160	200	< 0.5	< 2	0.01	< 0.5	3	117	49	3.47	< 10	< 1	0.24	10	0.03	85	< 1
28438	214	238	0.89	0.2	105	190	< 0.5	< 2	0.05	< 0.5	2	125	61	3.28	< 10	< 1	0.28	10	0.30	90	2
28439	214	238	0.56	1.6	1345	370	< 0.5	10	0.01	< 0.5	3	110	58	2.60	< 10	< 1	0.31	10	0.07	60	< 1
28440	214	238	1.94	0.6	260	250	< 0.5	< 2	0.02	< 0.5	2	172	147	3.24	< 10	< 1	0.42	10	0.80	130	< 1
28441	214	238	0.97	0.2	180	380	< 0.5	< 2	0.01	< 0.5	1	128	51	1.99	< 10	< 1	0.33	10	0.23	85	< 1
28442	214	238	1.69	0.2	40	140	< 0.5	< 2	0.04	< 0.5	3	156	78	3.07	< 10	< 1	0.22	10	0.83	110	1
28443	214	238	1.18	0.2	30	180	< 0.5	< 2	0.05	< 0.5	2	122	53	2.51	< 10	< 1	0.20	10	0.44	70	3
28444	214	238	0.46	0.4	25	70	< 0.5	< 2	0.05	< 0.5	2	65	36	1.09	< 10	< 1	0.15	20	0.04	110	< 1
28445	214	238	0.73	0.2	530	180	< 0.5	< 2	0.03	< 0.5	4	130	51	2.41	< 10	< 1	0.33	20	0.07	90	4
28446	214	238	0.77	0.6	305	190	< 0.5	< 2	0.01	< 0.5	4	143	65	3.92	< 10	< 1	0.45	30	0.04	230	2
28447	214	238	1.75	0.2	45	140	< 0.5	< 2	0.07	0.5	7	125	164	3.21	< 10	< 1	0.54	40	0.30	145	< 1
28448	214	238	1.56	< 0.2	10	100	< 0.5	< 2	0.04	0.5	7	157	79	2.97	< 10	< 1	0.44	30	0.40	150	< 1
28449	214	238	1.29	< 0.2	95	60	< 0.5	< 2	0.01	< 0.5	10	126	70	3.52	< 10	< 1	0.45	40	0.17	225	< 1
28450	214	238	0.74	1.0	1230	150	< 0.5	< 2	< 0.01	< 0.5	5	177	85	4.20	< 10	< 1	0.50	30	0.03	190	< 1
28451	214	238	0.53	1.2	2410	100	< 0.5	< 2	0.01	< 0.5	< 1	170	34	3.28	< 10	< 1	0.59	10	0.03	45	2
28452	214	238	0.64	0.8	2210	150	< 0.5	< 2	< 0.01	< 0.5	< 1	155	32	2.23	< 10	< 1	0.61	20	0.02	45	2
28453	214	238	0.75	0.2	485	140	< 0.5	< 2	< 0.01	< 0.5	< 1	121	31	1.52	< 10	< 1	0.55	20	0.03	30	1
28454	214	238	0.58	1.4	9210	120	< 0.5	6	< 0.01	< 0.5	3	152	933	2.71	< 10	< 1	0.54	20	0.02	45	1
28455	214	238	0.70	0.8	675	170	< 0.5	6	< 0.01	< 0.5	< 1	140	89	1.82	< 10	< 1	0.51	30	0.02	35	5
28456	214	238	1.27	0.6	300	200	< 0.5	< 2	0.01	< 0.5	1	184	148	2.99	< 10	< 1	0.49	30	0.10	55	8
28457	214	238	0.75	0.6	245	140	< 0.5	< 2	0.01	1.0	< 1	151	134	2.33	< 10	< 1	0.46	30	0.02	25	1
28458	214	238	0.67	0.8	1195	200	< 0.5	< 2	0.01	1.0	< 1	172	103	3.10	< 10	< 1	0.60	30	0.02	30	3
28459	214	238	1.09	0.4	780	160	< 0.5	< 2	0.01	0.5	5	138	107	3.33	< 10	< 1	0.43	30	0.13	110	< 1
28460	214	238	0.84	3.0	4450	250	< 0.5	< 2	0.01	0.5	< 1	144	707	8.42	< 10	< 1	0.64	30	0.03	25	15
28461	214	238	1.03	0.4	735	200	< 0.5	< 2	0.02	< 0.5	< 1	126	204	5.90	< 10	< 1	0.43	30	0.15	55	14
28462	214	238	1.18	0.4	30	80	< 0.5	< 2	0.12	1.0	10	137	85	2.39	10	< 1	0.24	30	0.88	210	< 1
28463	214	238	1.44	< 0.2	230	50	< 0.5	< 2	0.27	0.5	11	189	105	3.38	< 10	< 1	0.38	20	0.94	205	17
28464	214	238	1.42	0.2	1765	50	< 0.5	< 2	0.15	2.5	11	198	192	3.12	< 10	< 1	0.27	10	0.93	200	3
28465	214	238	1.12	< 0.2	325	130	< 0.5	< 2	0.13	< 0.5	13	60	273	4.58	< 10	< 1	0.33	30	0.35	310	< 1
28466	214	238	0.97	0.2	1215	90	< 0.5	< 2	0.14	0.5	15	138	260	4.61	< 10	< 1	0.23	30	0.10	495	< 1
28467	214	238	0.93	0.2	5050	120	< 0.5	14	0.09	1.0	13	117	318	4.11	< 10	< 1	0.28	30	0.06	205	< 1
28468	214	238	2.07	< 0.2	395	60	< 0.5	< 2	2.18	< 0.5	19	161	145	5.68	< 10	< 1	0.19	10	1.53	1215	< 1
28469	214	238	1.54	< 0.2	95	30	< 0.5	< 2	1.62	< 0.5	11	157	72	3.87	< 10	< 1	0.27	10	0.84	470	< 1
28470	214	238	1.77	< 0.2	235	430	< 0.5	< 2	0.40	1.0	14	63	130	4.99	< 10	< 1	0.71	20	1.13	520	< 1
28471	214	238	1.71	< 0.2	260	160	< 0.5	< 2	0.20	< 0.5	10	100	78	4.15	< 10	< 1	0.69	20	0.75	465	2
28472	214	238	1.92	< 0.2	50	320	< 0.5	< 2	0.14	< 0.5	10	114	51	3.60	< 10	< 1	0.74	20	1.00	480	1
28473	214	238	1.75	< 0.2	195	120	< 0.5	< 2	0.29	0.5	9	110	47	3.17	< 10	< 1	0.43	20	0.75	380	< 1

DN89-5

DN89-6

CERTIFICATION : B. Cargli

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
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PHONE: 604-984-0221

To: ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project :
Comments:

Invoice Date: 18-OCT-89
Invoice No. : I-8928236
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8928236

SAMPLE DESCRIPTION	PREP CODE		Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
28434	214	238	0.04	5	400	28	20	5	17	< 0.01	10	< 10	47	< 10	48
28435	214	238	0.02	3	370	4	25	6	20	< 0.01	10	20	41	< 10	58
28436	214	238	< 0.01	1	170	6	20	3	7	< 0.01	10	10	9	< 10	20
28437	214	238	0.01	7	410	8	10	5	11	< 0.01	10	10	40	< 10	58
28438	214	238	< 0.01	15	790	8	< 5	5	12	< 0.01	10	10	82	< 10	60
28439	214	238	0.01	11	360	8	5	2	11	< 0.01	10	< 10	32	< 10	38
28440	214	238	0.01	11	240	14	5	8	12	0.01	< 10	< 10	64	< 10	52
28441	214	238	< 0.01	4	310	8	< 5	3	14	< 0.01	10	< 10	29	< 10	32
28442	214	238	0.01	9	470	4	< 5	7	8	< 0.01	< 10	< 10	88	< 10	50
28443	214	238	< 0.01	5	750	12	5	3	10	< 0.01	10	< 10	66	< 10	50
28444	214	238	0.03	3	220	4	< 5	< 1	8	< 0.01	< 10	< 10	1	< 10	36
28445	214	238	0.01	10	630	24	5	3	14	< 0.01	< 10	< 10	40	< 10	92
28446	214	238	0.01	13	430	48	10	4	13	< 0.01	< 10	< 10	27	< 10	122
28447	214	238	0.02	18	410	12	5	4	12	0.01	< 10	< 10	21	< 10	70
28448	214	238	0.01	16	320	4	< 5	5	11	0.01	< 10	< 10	27	< 10	82
28449	214	238	0.01	19	350	8	5	6	11	0.01	< 10	< 10	26	< 10	136
28450	214	238	0.01	12	360	18	20	5	13	< 0.01	< 10	< 10	17	< 10	246
28451	214	238	0.01	3	200	22	30	3	12	< 0.01	< 10	< 10	9	< 10	26
28452	214	238	< 0.01	2	90	24	10	3	18	< 0.01	< 10	< 10	13	< 10	8
28453	214	238	< 0.01	2	100	10	5	2	24	< 0.01	< 10	< 10	16	< 10	6
28454	214	238	< 0.01	3	100	34	20	4	14	< 0.01	< 10	< 10	16	< 10	16
28455	214	238	0.01	5	150	18	15	3	20	< 0.01	< 10	< 10	20	< 10	20
28456	214	238	0.01	5	250	8	5	5	14	< 0.01	10	< 10	36	< 10	118
28457	214	238	< 0.01	3	230	10	< 5	3	15	< 0.01	< 10	< 10	21	< 10	12
28458	214	238	0.02	3	260	32	20	4	20	< 0.01	< 10	< 10	17	< 10	16
28459	214	238	0.01	9	280	6	5	5	12	< 0.01	< 10	< 10	28	< 10	122
28460	214	238	0.03	5	360	34	45	4	15	< 0.01	20	< 10	52	< 10	164
28461	214	238	0.04	6	300	16	15	4	16	< 0.01	< 10	< 10	29	< 10	70
28462	214	238	0.03	27	260	< 2	< 5	4	12	0.01	< 10	< 10	33	< 10	62
28463	214	238	0.01	40	910	< 2	5	6	10	0.03	< 10	< 10	92	< 10	72
28464	214	238	0.02	45	540	10	10	5	7	0.01	< 10	< 10	90	< 10	82
28465	214	238	< 0.01	25	530	10	< 5	10	21	0.01	< 10	< 10	63	< 10	42
28466	214	238	< 0.01	27	570	4	5	7	15	< 0.01	< 10	< 10	42	< 10	34
28467	214	238	< 0.01	17	460	4	10	9	35	< 0.01	10	< 10	36	< 10	24
28468	214	238	0.01	40	690	8	5	18	43	< 0.01	< 10	< 10	88	< 10	46
28469	214	238	0.04	30	550	2	5	13	27	0.08	< 10	< 10	57	< 10	36
28470	214	238	< 0.01	21	730	14	< 5	15	7	0.04	< 10	< 10	79	< 10	98
28471	214	238	< 0.01	13	470	8	5	9	5	0.05	10	< 10	41	< 10	48
28472	214	238	< 0.01	9	190	10	5	6	4	0.05	< 10	< 10	26	< 10	56
28473	214	238	0.02	6	350	4	< 5	7	11	0.03	< 10	< 10	30	< 10	32

DN89-5

DN89-6

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project :
Comments:

Page Number : 2-A
Total Pages : 2
Invoice Date: 18-OCT-89
Invoice No. : I-8928236
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8928236

SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
28474	214	238	1.95	< 0.2	195	120	< 0.5	< 2	0.36	< 0.5	15	99	125	4.26	< 10	< 1	0.43	30	0.67	380	< 1
28475	214	238	0.78	< 0.2	90	20	< 0.5	< 2	0.12	< 0.5	8	99	167	3.61	< 10	< 1	0.10	20	0.05	200	< 1
28476	214	238	1.01	< 0.2	70	20	< 0.5	< 2	0.10	< 0.5	11	88	156	3.36	< 10	< 1	0.13	10	0.06	195	< 1
28477	214	238	0.90	< 0.2	355	340	< 0.5	< 2	0.11	1.0	11	79	232	3.61	< 10	< 1	0.15	10	0.04	130	< 1
28478	214	238	0.88	0.4	130	230	< 0.5	6	0.13	< 0.5	9	64	241	2.61	< 10	< 1	0.14	20	0.05	70	< 1
28479	214	238	0.96	< 0.2	35	60	< 0.5	< 2	0.25	0.5	7	74	92	2.03	< 10	< 1	0.13	20	0.13	205	11
28480	214	238	0.67	< 0.2	10	20	< 0.5	< 2	0.76	< 0.5	10	54	53	2.63	< 10	< 1	0.14	30	0.49	380	< 1
28481	214	238	0.61	< 0.2	35	20	< 0.5	< 2	0.37	< 0.5	8	62	43	1.86	< 10	< 1	0.13	10	0.39	320	< 1
28482	214	238	1.54	< 0.2	115	30	< 0.5	< 2	1.81	< 0.5	15	53	53	3.98	< 10	< 1	0.31	30	1.20	595	< 1
28483	214	238	0.76	< 0.2	115	10	< 0.5	< 2	1.23	< 0.5	18	49	112	4.34	< 10	< 1	0.07	30	0.74	790	< 1
28484	214	238	0.85	< 0.2	80	10	< 0.5	< 2	1.95	< 0.5	18	53	148	4.48	< 10	< 1	0.12	30	0.91	745	< 1
28485	214	238	1.36	< 0.2	10	20	< 0.5	< 2	1.53	0.5	16	66	77	4.20	< 10	< 1	0.21	30	0.94	515	< 1
28486	214	238	1.53	< 0.2	25	30	< 0.5	< 2	1.46	< 0.5	13	93	47	4.08	< 10	< 1	0.47	20	1.29	460	< 1
28487	214	238	1.04	< 0.2	75	20	< 0.5	< 2	1.34	< 0.5	9	50	21	2.90	< 10	< 1	0.12	30	0.59	490	< 1
28488	214	238	0.97	< 0.2	80	50	< 0.5	< 2	1.99	< 0.5	15	57	67	4.38	< 10	< 1	0.10	20	0.89	740	< 1
28489	214	238	2.02	< 0.2	50	70	< 0.5	< 2	0.46	0.5	25	84	173	5.03	< 10	< 1	0.21	20	0.83	640	< 1

CERTIFICATION : B. Caughlin

DN84-6

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
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PHONE: 604-984-0221

To: ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Project :
Comments:

Invoice Date: 18-OCT-89
Invoice No. : I-8928236
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8928236

SAMPLE DESCRIPTION	PREP CODE		Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
28474	214	238	< 0.01	18	700	10	5	11	8	0.01	< 10	< 10	59	< 10	62
28475	214	238	< 0.01	14	340	4	5	6	4	< 0.01	< 10	< 10	20	< 10	36
28476	214	238	< 0.01	15	280	2	< 5	7	6	< 0.01	< 10	< 10	16	< 10	46
28477	214	238	< 0.01	13	390	6	10	9	25	< 0.01	< 10	< 10	20	< 10	38
28478	214	238	< 0.01	13	410	8	10	7	37	< 0.01	< 10	< 10	17	< 10	44
28479	214	238	< 0.01	20	510	4	< 5	5	8	< 0.01	< 10	< 10	39	< 10	84
28480	214	238	< 0.01	13	340	4	5	7	25	< 0.01	< 10	< 10	22	< 10	34
28481	214	238	0.02	7	220	6	< 5	3	18	0.02	< 10	< 10	19	< 10	24
28482	214	238	< 0.01	14	540	2	5	9	39	0.01	< 10	< 10	50	< 10	38
28483	214	238	< 0.01	22	540	< 2	5	13	21	< 0.01	< 10	< 10	51	< 10	48
28484	214	238	< 0.01	17	610	2	5	11	44	< 0.01	< 10	< 10	33	< 10	34
28485	214	238	0.01	17	580	2	5	9	31	0.01	< 10	< 10	60	< 10	32
28486	214	238	0.02	20	460	< 2	5	11	30	0.09	< 10	< 10	70	< 10	36
28487	214	238	< 0.01	8	220	< 2	< 5	7	27	< 0.01	< 10	< 10	25	< 10	26
28488	214	238	< 0.01	18	610	4	5	12	46	< 0.01	< 10	< 10	43	< 10	34
28489	214	238	0.02	37	740	4	5	13	18	0.03	< 10	< 10	99	< 10	64

DN89-6

CERTIFICATION : B. Caughlin

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Y1A 3S9
Project : NUCLEUS
Comments:

Page : 1-A
Tot. Pages: 1
Date : 26-SEP-89
Invoice # : I-8925688
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8925688

SAMPLE DESCRIPTION	PREP CODE		Au NAA ppb	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
T28301	205	238	17	0.43	< 0.2	40	70	< 0.5	6	0.03	< 0.5	1	65	24	0.83	< 10	< 1	0.16	20	0.02	30
T28302	205	238	5	0.39	< 0.2	65	80	< 0.5	4	0.03	0.5	1	65	24	0.73	< 10	< 1	0.17	20	0.02	30
T28303	205	238	7	0.44	< 0.2	135	150	< 0.5	6	0.02	< 0.5	< 1	70	29	0.75	< 10	< 1	0.23	20	0.02	20
T28304	205	238	33	0.50	< 0.2	50	130	< 0.5	22	0.04	< 0.5	1	73	34	0.96	< 10	< 1	0.28	20	0.04	35
T28305	205	238	98	0.43	< 0.2	55	100	< 0.5	14	0.03	< 0.5	1	76	39	0.99	< 10	< 1	0.23	20	0.02	20
T28306	205	238	96	0.57	< 0.2	125	340	< 0.5	20	0.02	0.5	< 1	43	32	1.71	< 10	1	0.52	20	0.04	10
T28307	205	238	178	0.50	< 0.2	50	540	< 0.5	38	0.03	< 0.5	< 1	36	24	1.85	< 10	< 1	0.52	20	0.04	15
T28308	205	238	91	0.51	< 0.2	90	220	< 0.5	14	0.05	< 0.5	< 1	71	43	1.51	< 10	< 1	0.34	20	0.04	25
T28309	205	238	255	0.53	< 0.2	210	120	< 0.5	18	0.06	< 0.5	1	82	70	1.54	< 10	1	0.21	20	0.05	40
T28310	205	238	227	0.52	< 0.2	410	110	< 0.5	16	0.05	0.5	1	82	72	1.95	< 10	< 1	0.17	20	0.04	35
T28311	205	238	7	0.49	< 0.2	500	90	< 0.5	6	0.05	< 0.5	1	82	72	1.96	< 10	< 1	0.14	20	0.04	45
T28312	205	238	20	0.54	< 0.2	320	120	< 0.5	2	0.07	< 0.5	1	76	34	1.23	< 10	< 1	0.19	20	0.06	50
T28313	205	238	10	0.41	< 0.2	120	90	< 0.5	6	0.04	< 0.5	< 1	69	27	0.86	< 10	< 1	0.15	20	0.04	35
T28314	205	238	15	0.47	< 0.2	145	110	< 0.5	6	0.05	< 0.5	1	64	26	1.06	< 10	< 1	0.20	20	0.05	55
T28315	205	238	6	0.44	< 0.2	200	90	< 0.5	2	0.03	< 0.5	< 1	74	27	1.24	< 10	< 1	0.16	20	0.03	40
T28316	205	238	11	0.44	< 0.2	155	90	0.5	2	0.03	< 0.5	< 1	72	17	0.88	< 10	< 1	0.16	30	0.02	30
T28317	205	238	9	0.38	< 0.2	110	70	< 0.5	4	0.02	< 0.5	1	74	22	0.71	< 10	< 1	0.14	20	0.02	20
T28318	205	238	3	0.48	< 0.2	155	90	< 0.5	6	0.02	< 0.5	< 1	84	29	1.01	< 10	< 1	0.22	20	0.02	20
T28319	205	238	7	0.46	< 0.2	100	90	< 0.5	10	0.02	0.5	1	76	34	1.03	< 10	< 1	0.21	20	0.03	20
T28320	205	238	4	0.57	< 0.2	75	90	0.5	4	0.04	< 0.5	1	98	27	0.93	< 10	< 1	0.21	20	0.04	25
T28321	205	238	6	0.50	< 0.2	115	60	< 0.5	4	0.05	< 0.5	1	86	44	1.05	< 10	< 1	0.16	20	0.05	35
T28322	205	238	6	0.47	< 0.2	90	80	< 0.5	8	0.04	< 0.5	1	76	35	0.98	< 10	< 1	0.18	20	0.03	30
T28323	205	238	164	0.42	< 0.2	55	190	< 0.5	14	0.02	< 0.5	< 1	63	21	1.09	< 10	< 1	0.36	20	0.03	15
T28324	205	238	23	0.45	< 0.2	65	140	< 0.5	16	0.02	< 0.5	< 1	76	20	1.06	< 10	< 1	0.31	20	0.02	15
T28325	205	238	76	0.47	< 0.2	65	170	< 0.5	20	0.02	< 0.5	< 1	74	24	1.20	< 10	< 1	0.35	20	0.03	15
T28326	205	238	240	0.47	< 0.2	105	130	< 0.5	8	0.01	< 0.5	< 1	89	30	1.07	< 10	< 1	0.26	20	0.02	15
T28327	205	238	184	0.44	< 0.2	135	100	0.5	20	0.03	< 0.5	< 1	90	32	0.93	< 10	< 1	0.21	20	0.03	20
T28328	205	238	203	0.40	< 0.2	240	100	0.5	12	0.02	< 0.5	< 1	77	38	1.02	< 10	< 1	0.20	20	0.02	20

T89N-1

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.
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ARCHER CATHRO & ASSOC. (1981) LTD.
3125 3RD AVE., BOX 4127
WHITEHORSE, YT
Y1A 3S9
Project : NUCLEUS
Comments:

Date : 26-SEP-89
Invoice # : I-8925688
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8925688

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
T28301	205	238	2	0.01	< 1	70	4	< 5	< 1	9	< 0.01	< 10	< 10	< 1	< 10	8
T28302	205	238	4	0.01	< 1	50	4	< 5	< 1	8	< 0.01	< 10	< 10	1	< 10	4
T28303	205	238	1	0.02	< 1	50	4	< 5	< 1	9	< 0.01	< 10	< 10	< 1	< 10	2
T28304	205	238	2	0.02	2	60	6	5	< 1	10	< 0.01	< 10	< 10	2	< 10	4
T28305	205	238	2	0.01	1	50	4	5	< 1	7	< 0.01	< 10	< 10	< 1	< 10	4
T28306	205	238	1	0.01	< 1	250	< 2	< 5	< 1	26	< 0.01	< 10	< 10	2	< 10	4
T28307	205	238	1	0.01	< 1	500	10	< 5	1	37	< 0.01	< 10	< 10	3	< 10	4
T28308	205	238	3	0.02	< 1	250	8	5	< 1	22	< 0.01	< 10	< 10	3	< 10	6
T28309	205	238	2	0.01	1	150	4	10	1	16	0.01	< 10	< 10	4	< 10	8
T28310	205	238	1	0.01	2	260	16	10	1	10	< 0.01	< 10	< 10	3	< 10	8
T28311	205	238	1	0.01	3	250	22	5	1	9	< 0.01	< 10	< 10	4	< 10	6
T28312	205	238	1	0.01	2	140	10	< 5	1	12	0.01	< 10	< 10	7	< 10	8
T28313	205	238	< 1	0.01	3	70	10	< 5	< 1	8	< 0.01	< 10	< 10	4	< 10	4
T28314	205	238	< 1	0.01	1	110	22	5	1	12	< 0.01	< 10	< 10	5	< 10	6
T28315	205	238	< 1	0.01	1	110	10	5	< 1	9	< 0.01	< 10	< 10	3	< 10	4
T28316	205	238	< 1	0.01	1	80	18	< 5	< 1	7	< 0.01	< 10	< 10	2	< 10	2
T28317	205	238	< 1	0.01	1	50	12	< 5	< 1	6	< 0.01	< 10	< 10	1	< 10	2
T28318	205	238	< 1	< 0.01	1	50	8	10	< 1	6	< 0.01	< 10	< 10	1	< 10	2
T28319	205	238	< 1	0.01	2	60	20	5	< 1	7	< 0.01	< 10	< 10	2	< 10	2
T28320	205	238	< 1	0.01	2	60	18	5	< 1	9	< 0.01	< 10	< 10	3	< 10	4
T28321	205	238	1	0.01	< 1	60	14	5	< 1	8	< 0.01	< 10	< 10	4	< 10	6
T28322	205	238	1	0.01	1	50	10	5	< 1	8	< 0.01	< 10	< 10	3	< 10	4
T28323	205	238	1	0.01	1	140	8	< 5	< 1	17	< 0.01	10	< 10	3	< 10	4
T28324	205	238	2	0.01	2	100	12	< 5	< 1	13	< 0.01	< 10	< 10	2	< 10	2
T28325	205	238	1	0.01	2	120	12	< 5	1	17	< 0.01	< 10	< 10	3	< 10	4
T28326	205	238	1	0.01	1	100	8	< 5	< 1	15	< 0.01	< 10	< 10	2	< 10	2
T28327	205	238	< 1	0.02	< 1	90	6	< 5	< 1	12	< 0.01	< 10	< 10	2	< 10	2
T28328	205	238	1	0.01	1	100	10	5	< 1	12	< 0.01	< 10	< 10	2	< 10	2

T89N-1

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.
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ARCHER CATHRO & ASSOC. (1981) LTD.
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Project : NUCLEUS
Comments:

Date : 1-OCT-89
Invoice # : I-8926079
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8926079

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
T28332	205	515																		
T28333	205	60																		
T28334	205	125																		
T28335	205	35																		
T28336	205	100																		
T28337	205	30																		
T28338	205	45																		
T28339	205	265																		
T28340	205	35																		
T28341	205	30																		
T28342	205	45																		
T28343	205	45																		
T28344	205	20																		
T28345	205	50																		
T28346	205	80																		
T28347	205	50																		
T28348	205	20																		
T28349	205	30																		
T28350	205	35																		
T28351	205	10																		
T28352	205	10																		
T28353	205	< 5																		
T28354	205	< 5																		
T28355	205	45																		
T28356	205	5																		
T28357	205	10																		
T28358	205	10																		
T28359	205	< 5																		
T28360	205	25																		
T28361	205	240																		
T28362	205	1610																		
T28363	205	670																		
T28364	205	250																		
T28365	205	55																		
T28366	205	200																		
T28367	205	160																		
T28368	205	385																		
T28369	205	190																		
T28370	205	60																		
T28371	205	390																		

T89N-1

T89N-2

CERTIFICATION : B. Caglin

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CERTIFICATE OF ANALYSIS A8926079

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
T28372	205	—	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28373	205	—	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28374	205	—	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28375	205	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28376	205	—	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28377	205	—	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28378	205	—	55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28379	205	—	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28380	205	—	< 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28381	205	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28382	205	—	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28383	205	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28384	205	—	< 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28385	205	—	< 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28386	205	—	< 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28387	205	—	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28388	205	—	660	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28389	205	—	215	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28390	205	—	80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28391	205	—	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28392	205	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28393	205	—	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28394	205	—	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28395	205	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28396	205	—	< 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28397	205	—	< 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28398	205	—	< 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28399	205	—	< 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T28400	205	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

T89 N-2

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
WestEnd Industrial Park, Pasadena,
Newfoundland, Canada A0I 1K0
PHONE: 709-686-2119

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1016 - 510 W. HASTINGS ST.
VANCOUVER, BC
V6B 1L8

Invoice Date: 10-OCT-89
Invoice No. : I-8927037
P.O. Number : NONE

Project : NUCLEUS
Comments:

CERTIFICATE OF ANALYSIS A8927037

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA
28138	205	--	95
28139	205	--	80
28140	205	--	20
28141	205	--	55
28142	205	--	< 5
28143	205	--	< 5
28144	205	--	10
28145	205	--	< 5
28146	205	--	< 5
28147	205	--	< 5
28148	205	--	< 5
28149	205	--	190
28150	205	--	15
28151	205	--	65
28152	205	--	105
28153	205	--	45
28154	205	--	1790
28155	205	--	20
28156	205	--	140
28157	205	--	105
28158	205	--	< 5
28159	205	--	95
28160	205	--	70
28161	205	--	110
28162	205	--	105
28163	205	--	120
28164	205	--	130
28165	205	--	15
28166	205	--	310
28167	205	--	50
28168	205	--	85
28169	205	--	65
28170	205	--	180
28171	205	--	305
28172	205	--	190
28173	205	--	215
28174	205	--	280
28175	205	--	115
28176	205	--	185
28180	205	--	20

T89N-4

CERTIFICATION : [signature]

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Project : NUCLEUS
Comments:

CERTIFICATE OF ANALYSIS A8927037

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA
28181	205	--	45
28182	205	--	20
28183	205	--	30
28184	205	--	45
28185	205	--	35
28186	205	--	40
28187	205	--	560
28188	205	--	410
28189	205	--	60
28190	205	--	5
28191	205	--	< 5
28192	205	--	10
28193	205	--	20
28194	205	--	< 5
28195	205	--	135
28196	205	--	20
28197	205	--	20
28198	205	--	30
28199	205	--	< 5
28200	205	--	40
28201	205	--	70
28202	205	--	20
28203	205	--	115
28204	205	--	120
28205	205	--	60
28206	205	--	360
28207	205	--	85
28208	205	--	150
28209	205	--	20
28210	205	--	180
28211	205	--	30
28212	205	--	15
28213	205	--	150
28214	205	--	550
28215	205	--	280
28216	205	--	15
28217	205	--	10
28218	205	--	220
28219	205	--	760
28220	205	--	1150

T84N-5

CERTIFICATION : Hasko Vivek

Chemex Labs Ltd.
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BRITISH COLUMBIA, CANADA V7J-2C1
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Comments:

Date : 27-SEP-89
Invoice # : I-8926391
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8926391

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA
T 28112	205	--	25
T 28113	205	--	< 5
T 28114	205	--	< 5
T 28115	205	--	20
T 28116	205	--	< 5
T 28117	205	--	< 5
T 28118	205	--	< 5
T 28119	205	--	5
T 28120	205	--	25
T 28121	205	--	10
T 28122	205	--	20
T 28123	205	--	15
T 28124	205	--	20
T 28125	205	--	20
T 28126	205	--	< 5
T 28127	205	--	< 5
T 28128	205	--	5
T 28129	205	--	< 5
T 28130	205	--	< 5
T 28131	205	--	325
T 28132	205	--	50
T 28133	205	--	10
T 28134	205	--	10
T 28135	205	--	180
T 28136	205	--	< 5
T 28137	205	--	< 5
T 28177	205	--	380
T 28178	205	--	30
T 28179	205	--	285

T89N-3
T84N-21
T86N-4

CERTIFICATION : [signature]

APPENDIX D

TRENCH ASSAY RECORDS

DATE: Sept /89

PROJECT: NUCLEUS

TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: T89N-1 1/2

SAMPLER:

CERTIFICATE No.	SAMPLE No.	FROM (m)	TO (m)	WIDTH (m)	Au (g/t)				
A8925688	T28301	0100	0105E	5	0017				
	302	0105	0+10	5	0.005				
	303	0+10	0+15	5	0007				
	304	0+15	0+19	4	0.033				
	305	0+19	0+22	3	0.098				
	306	0122	0125	3	0.096				
	307	0125	0128	3	0.178				
	308	0128	0133	5	0091				
	309	0133	0136	3	0.255				
	310	0136	0139	3	0.227				
	311	0139	0+42	3	0 007				
	312	0142	0145	3	0.020				
	313	0145	0148	3	0010				
	314	0148	0152	4	0015				
	315	0152	0156	4	0.006				
	316	0156	0160	4	0011				
	317	0160	0164	4	0 009				
	318	0164	0168	4	0 003				
	319	0168	0+72	4	0 007				
	320	0172	0176	4	0.004				
	321	0176	0180	4	0.006				
	322	0180	0184	4	0.006				
	323	0184	0188	4	0.164				
	324	0188	0191	3	0.023				
	325	0191	0194	3	0 076				
	326	0194	0198	4	0.240				
	327	0198	1102	4	0 184				
	328	1102	1106	4	0.203				
A8926079	329	1106	1110	4	0.130				
	330	1110	1+13	3	0.040				
	331	1113	1116	3	<0.005				
	N/S	1116	1+21	5					
A8926079	332	1+21	1125	4	0.515				
	333	1+25	1130	5	0.060				
	334	1130	1135	5	0.125				
	335	1135	1140	5	0.035				
	336	1140	1145	5	0.100				
	337	1145	1150	5	0.030				
	338	1150	1155 E	5	0.045				

DATE: Sept / 89

PROJECT: NUCLEUS

TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: T89N-1 2/2

SAMPLER:

CERTIFICATE No. A8926079

SAMPLE No.	FROM (m)	TO (m)	WIDTH (m)	Au (g/t)				
T28339	1+55E	1+60E	5	0.265				
340	1+60	1+65	5	0.035				
341	1+65	1+70	5	0.030				
342	1+70	1+75	5	0.045				
343	1+75	1+80	5	0.045				
344	1+80	1+85	5	0.020				
345	1+85	1+90	5	0.050				
346	1+90	1+95	5	0.080				
347	1+95	2+05	10	0.050				
348	2+05	2+15	10	0.020				
T28349	2+15	2+27E	12	0.030				

DATE: Sept /89

PROJECT: NUCLEUS

TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: T89N-2 1/2

SAMPLER:

CERTIFICATE No. A8926079

SAMPLE No.	FROM (m)	TO (m)	WIDTH (m)	Au (g/t)				
T28350	0+01E	0+02	1	0.035				
351	0+02	0+03	1	0.010				
352	0+03	0+04	1	0.010				
353	0+04	0+05	1	<0.005				
354	0+05	0+06	1	<0.005				
355	0+06	0+07	1	0.045				
356	0+07	0+08	1	0.005				
357	0+08	0+09	1	0.010				
358	0+09	0+10	1	0.010				
359	0+10	0+11	1	<0.005				
360	0+11	0+12	1	0.025				
361	0+12	0+13	1	0.240				
362	0+13	0+15	2	1.610				
363	0+15	0+17	2	0.670				
364	0+17	0+20	3	0.250				
365	0+20	0+25	5	0.055				
366	0+25	0+30	5	0.200				
367	0+30	0+35	5	0.160				
368	0+35	0+40	5	0.385				
369	0+40	0+45	5	0.190				
370	0+45	0+50	5	0.060				
371	0+50	0+60	10	0.390				
372	0+60	0+70	10	0.020				
373	0+70	0+80	10	0.015				
374	0+80	0+90	10	0.015				
375	0+90	0+95	5	0.010				
376	0+95	1+00	5	0.025				
377	1+00	1+10	10	0.025				
378	1+10	1+20	10	0.055				
379	1+20	1+30	10	0.030				
380	1+30	1+35	5	<0.005				
381	1+35	1+40	5	0.010				
382	1+40	1+46	6	0.015				
383	1+46	1+49	3	0.010				
384	1+49	1+54	5	<0.005				
385	1+54	1+58	4	<0.005				
386	1+58	1+61	3	<0.005				
387	1+61	1+63	2	0.035				
T28388	1+63	1+65E	2	0.660				

DATE: Sept. 1/89

PROJECT: NUCLEUS

TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: T89 N-2 2/2

SAMPLER:

CERTIFICATE No.	SAMPLE No.	FROM (m)	TO (m)	WIDTH(m)	Au (g/t)				
A8926079	T28389	1+65 E	1+68	3	0.215				
	390	1+68	1+71	3	0.080				
	391	1+71	1+75	4	0.035				
	392	1+75	1+80	5	0.010				
	393	1+80	1+85	5	0.020				
	394	1+85	1+90	5	0.025				
	395	1+90	1+95	5	0.010				
	396	1+95	2+00	5	<0.005				
	397	2+00	2+05	5	<0.005				
	398	2+05	2+10	5	<0.005				
	399	2+10	2+15	5	<0.005				
	T28400	2+15	2+20	5	0.010				
A8926079	T28100	2+20	2+25	5	0.200				
	101	2+25	2+30	5	0.035				
	102	2+30	2+35	5	0.010				
	103	2+35	2+40	5	0.020				
	104	2+40	2+45	5	0.010				
	105	2+45	2+50	5	0.015				
	106	2+50	2+56	6	0.080				
	107	2+56	2+60	4	0.010				
	108	2+60	2+70	10	0.025				
	109	2+70	2+80	10	0.015				
	110	2+80	2+90	10	0.020				
	T28111	2+90	3+00 E	10	0.015				

DATE: Sept 1/89

PROJECT: NUCLEUS

TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: T89N-3 1/1

SAMPLER:

CERTIFICATE No. A8926391

SAMPLE No.	FROM (m)	TO (m)	WIDTH (m)	Au (g/t)				
T28 112	0100	0110 E	10	0.025				
113	0+10	0120	10	<0.005				
114	0+20	0+30	10	<0.005				
115	0130	0140	10	0.020				
116	0140	0+45	5	<0005				
117	0 145	0+55	10	<0.005				
118	0 155	0162	7	<0005				
119	0162	0168	6	0 005				
120	0+68	0+73	5	0.025				
121	0173	0177	4	0.010				
122	0177	0187	10	0.020				
123	0187	0197	10	0.015				
124	0197	1+07	10	0.020				
T28125	1107	1117E	10	0.020				

DATE: Sept 1/89

PROJECT: NUCLEUS

TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: T89N-4 1/1

SAMPLER:

CERTIFICATE No. A8927037

SAMPLE No.	FROM (m)	TO (m)	WIDTH (m)	Au (g/t)				
T28138	0100	0+02.5E	7.5	0.095				
139	0+07.5	0+09.5	2	0.080				
140	0+09.5	0+12	2.5	0.020				
141	0+12	0+13.5	1.5	0.055				
142	0+13.5	0+20	6.5	<0.005				
143	0+20	0+30	10	<0.005				
144	0+30	0+40	10	0.010				
145	0+40	0+50	10	<0.005				
146	0+50	0+60	10	<0.005				
147	0+60	0+63	3	<0.005				
148	0+63	0+67	4	<0.005				
149	0+67	0+71	4	0.190				
150	0+71	0+75	4	0.015				
151	0+75	0+83	8	0.065				
152	0+83	0+89	6	0.105				
153	0+89	0+92	3	0.045				
154	0+92	0+94	2	1.790				
155	0+94	0+97	3	0.020				
156	0+97	0+99.5	2.5	0.140				
157	0+99.5	1+03	3.5	0.105				
158	1+03	1+07	4	<0.005				
159	1+07	1+17	10	0.045				
160	1+17	1+27	10	0.070				
161	1+27	1+33	6	0.110				
162	1+33	1+34	1	0.105				
163	1+34	1+39	5	0.120				
164	1+39	1+43	4	0.130				
165	1+43	1+50	7	0.015				
166	1+50	1+57	7	0.310				
167	1+57	1+61	4	0.050				
168	1+61	1+65	4	0.085				
169	1+65	1+68	3	0.065				
170	1+68	1+72	4	0.180				
171	1+72	1+75	3	0.305				
172	1+75	1+79	4	0.190				
173	1+79	1+81	2	0.215				
174	1+81	1+83	2	0.280				
175	1+83	1+93	10	0.115				
T28176	1+93	1+97E	4	0.185				

DATE: Sept 1/89

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TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: T89N-5 1/1

SAMPLER:

CERTIFICATE No. A8927037

SAMPLE No.	FROM (m)	TO (m)	WIDTH (m)	Au (g/t)				
T28180	0+07 E	0+17	10	0.020				
181	0+17	0+25	8	0.045				
182	0+25	0+33.5	8.5	0.020				
183	0+33.5	0+35.5	2	0.030				
184	0+35.5	0+40.5	5	0.045				
185	0+40.5	0+46	5.5	0.035				
186	0+46	0+50	4	0.040				
187	0+50	0+52	2	0.560				
188	0+52	0+54	2	0.410				
189	0+54	0+56	2	0.060				
190	0+56	0+58	2	0.005				
191	0+58	0+60	2	<0.005				
192	0+60	0+62	2	0.010				
193	0+62	0+64.5	2.5	0.020				
194	0+64.5	0+67	2.5	<0.005				
195	0+67	0+78	11	0.135				
196	0+78	0+88	10	0.020				
197	0+88	0+98	10	0.020				
198	0+98	1+08	10	0.030				
199	1+08	1+18	10	<0.005				
200	1+18	1+27	9	0.040				
201	1+27	1+30	3	0.070				
202	1+30	1+32	2	0.020				
203	1+32	1+34	2	0.115				
204	1+34	1+36	2	0.120				
205	1+36	1+37	1	0.060				
206	1+37	1+39	2	0.360				
207	1+39	1+41	2	0.085				
208	1+41	1+43	2	0.150				
209	1+43	1+50	7	0.020				
210	1+50	1+61	11	0.180				
211	1+61	1+65	4	0.030				
212	1+65	1+70	5	0.015				
T28213	1+70	1+75 E	5	0.150				

DATE: Sept 1/89

PROJECT: NUCLEUS

TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: T89N-6 1/1

SAMPLER:

CERTIFICATE No. A8927037

SAMPLE No.	FROM (m)	TO (m)	WIDTH(m)	Au (g/t)				
T28214	0+06E	0+11	5	0.550				
215	0+11	0+14	3	0.280				
216	0+14	0+16	2	0.015				
217	0+16	0+18	2	0.010				
218	0+18	0+25.5	7.5	0.220				
219	0+25.5	0+27.5	2.5	0.760				
220	0+27.5	0+29.5	2	1.150				
221	0+29.5	0+40	10.5	0.045				
222	0+40	0+50	10	0.075				
223	0+50	0+55	5	0.140				
224	0+55	0+63	8	0.085				
225	0+63	0+71	8	0.055				
226	0+71	0+80	9	0.210				
227	0+80	0+90	10	0.065				
228	0+90	1+00	10	0.640				
229	1+00	1+10	10	0.170				
230	1+10	1+15	5	0.085				
T28231	1+15	1+17E	2	0.250				

DATE: Sept/89

PROJECT: NUCLEUS

TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: T89N-7 1/1

SAMPLER:

CERTIFICATE No.	SAMPLE No.	FROM (m)	TO (m)	WIDTH (m)	Au (g/t)				
	T28232	0+00	0+03E	3	0.870				
	233	0+03	0+06	3	0.050				
	234	0+06	0+12	6	0.040				
	235	0+12	0+17	5	0.075				
	236	0+17	0+19	2	0.240				
	237	0+19	0+22	3	0.230				
	238	0+22	0+25	3	0.215				
	239	0+25	0+26.5	1.5	0.175				
	240	0+26.5	0+27.5	1	2.420				
	241	0+27.5	0+28.5	1	0.460				
	242	0+28.5	0+29.5	1	0.260				
	243	0+29.5	0+30.5	1	0.210				
	T28244	0+30.5	0+31.5E	1	0.065				

DATE: Sept 1/89

PROJECT: NUCLEUS

TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: T89N-8 1/1

SAMPLER:

CERTIFICATE No.	SAMPLE No.	FROM (m)	TO (m)	WIDTH (m)	Au (g/t)				
	T28245	0+45E	0+56	11	0.100				
	246	0+56	0+66	10	1.860				
	247	0+66	0+76	10	1.940				
	248	0+76	0+86	10	0.300				
	249	0+86	0+97	11	0.360				
	T28 250	0+97	1+07	10	0.060				
	T28 489	1+07	1+15E	8	0.070				

DATE: Sept 189

PROJECT: NUCLEUS

TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: Resample T86N-4

SAMPLER:

CERTIFICATE No. A8926391

SAMPLE No.	FROM (m)	TO (m)	WIDTH(m)	Au(g/t)				
T28177	1+48	1+49	1	0.380				
178	1+49	1+50	1	0.030				
T28179	1+50	1+52	2	0.285				

DATE: Sept / 89

PROJECT: NUCLEUS

TRENCH SAMPLE RECORD

ARCHER, CATHRO & ASSOCIATES (1981) LTD.

TRENCH: - extension T84N-21 Y1

SAMPLER:

CERTIFICATE No. AB9.26391

SAMPLE No.	FROM (m)	TO (m)	WIDTH (m)	Au (g/t)				
T28126	0+00	0+03W	3	<0.005				
127	0+03	0+13	10	<0.005				
128	0+13	0+22	9	0.005				
129	0+22	0+26	4	<0.005				
130	0+26	0+34	8	<0.005				
131	0+34	0+35	1	0.325				
132	0+35	0+36	1	0.050				
133	0+36	0+40	4	0.010				
134	0+40	0+41	1	0.010				
135	Grab	Sample		0.180				
136	0+41	0+50	9	<0.005				
T28137	0+50	0+54	4	<0.005				

APPENDIX E

DRILL LOGS

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** NUCLEUS **PROPERTY** NUCLEUS **HOLE NO.** DN89-1 **Page** 1 **of** 7

Elevation 917m **Drill contractor** CARON **Logged by** T.C. Becker **Total depth** 133.20m

Coordinates 1+04W 2+35N **Hole started** Sept 2, 1989 **completed** Sept 5, 1989 **Core size** HQ

Dip -90° **Target** Copper and Gold Mineralization Below T84N-7 and Near DN84-1

Azimuth 000

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSX	PY	CP	LI	CV	CC	CB	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
0				Casing 0-2.43m																			
2	0			2.43																			
	2.43		F	Quartz - Feldspar Gneiss	Supergene and Clay STR	0			15					3	18	T28001	2.43-4.0 1.57m	0.530	0.0332				
4	50 3.66 100		Fol	Qz, Feld. rich rock, well foliated, Gneissic texture 3.90	-Supergene overprints hypogene alteration																		
	4.27 100	20°	F	Quartz - Feldspar Porphyry -fine grained groundmass, med. grey -plagioclase phenocrysts 1-2mm in	Supergene STR. clay MOD -FRC contain clay and LI	0			5					2	30	002	4.0 - 6.0 2.0m	0.390	0.0110				
6	5.33 100 5.94	50°	F	size, avg. 4mm - quartz eyes 1-9 mm in size, round. 6.15 -chilled margins w̄ flow banding.	coatings																		
	100 6.71			Quartz - Feldspar Gneiss 6.80 -BR and FRC near CNT	Supergene and clay STR. -7% LI diss, 3% LI along FRC	0			10					40	15	003	6.0 - 8.0 2.0m	0.600	0.0204				
8	100 7.92		F	Micrograniic -fine grained light grey rock with very weak foliation, feldspar grains 8.10 and chlorite visible	Same - LI along FRC 1% red oxide coating	0			5					6	21								
	100		Fol	Quartz - Feldspar Gneiss 8.95	Same											004	8.0 - 10.0 2.0m	0.275	0.0202				
10	9.45 100 10.97			Micrograniite see 6.8-8.10 - sugary texture, phenocrysts of feldspar - coarser grained groundmass 10.97 than porphyry	Same											005	10.0 - 12.0 2.0m	0.310	0.0256				
12	100 12.5 100	10°	F CNT F	10.97-11.10 Qz-Feld Porphyry Dyke Quartz - Feldspar Gneiss -12.05 -3-4cm wide Feldspar porphyry dyke -med. grey groundmass, fine grained. feldspar phenocrysts 1-4 mm.	Same - LI diss in rock	0			10					2	15								
					Same - 1% LI diss, 5% along FRC	0			6					30	15	006	12.0 - 14.0 2.0m	0.770	0.0430				
14	13.1 100 14.63		CNT	-BR porphyry w̄ wall rock fragments 13.75 Quartz - feldspar gneiss -well foliated metamorphic rock, Qz + Fx w̄ 5% mafics	Same - 2% LI along FRC, 8% Diss	0			15					2	12								
																007	14.0 - 16.0 2.0m	0.340	0.0542				
16	100 15.85 100 16.76		F F Fol	- compositionally variable into feldspar rich zones - altered to LI and clay 16.25 16.50	STR clay, LI on rx fragments STR Supergene overprints											008	16.0 - 18.0 2.0m	2.000	0.0477				
18	100 17.83 100			18.0	hypogenc alteration Some - Red oxide coating rock											009	18.0 - 20.0 2.0m	1.020	0.0408				
20	19.35			19.60 Stronger FRC w̄ Qz veinlets										20	6								

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN 89-1 **Page** 2 **of** 7

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T Sx	PY	CP	LI	CV	CC	CQ	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
20	100			-20.5 -Qz veinlets 0.5-10.0 mm, sulphide	Qz flooding w̄ Qz-sericite	0.1								20	10	T28010	20.0-22.0 2.0m	2.050	0.0342				
	-21.03-			band 1-2mm thick. black, metallic 21.55 Arsenopyrite	alteration																		
-22-	100		5-10° F	-Breccia zone Microgranite -22.0 -FRC w̄ fragments, clay and LI -22.2 -fine grained siliceous rock, FRC and	Same	0			10					25 15	10 30								
	-22.56-			Breccia zones contain LI and clay										40	6	011	22.0-24.0 2.0m	0.350	0.0184				
	100		10° F	~1% vugs along FRC. -chalcedony veins 1-20mm, light grey 24.0 Qz veinlets 1-5mm wide																			
-24-	-24.1-			24.4 Monzonite - med. grained rock. 24.65 Microgranite	Same	0			10					15	20	012	24.0-26.0 2.0m	0.195	0.0254				
				Quartz - Feldspar Gneiss	STR Supergene and clay																		
	100			-well foliated, med. grained -25.50 -25.75 STR altered gneiss	Some clay w̄ LI				20 10														
-26-	-26.1-		Fol 50°	-mafic rich gneiss (10% mafics)												013	26.0-29.0 3.0m	0.475	0.0463				
	100																						
	-27.13-			-27.85																			
-28-	100		F	-Qz veinlets, 1-5mm wide, 2% vugs	Some - Feld → KA., LI and clay along FRC	0			10					24	10								
	-28.65-			-28.55 29.1		0			20					15	20								
	100		F	Microgranite	Some -10% LI and clay along FRC	0			10					30	18	014	29.0-31.0 2.0m	0.205	0.0106				
-30-	-30.18-		F	-Qz-feld matrix, fine grained, light grey; Feld + CH phenocrysts, 1-3mm -crackle breccia along CNT. 30.8	Mafics (Biotite?) → Chlorite																		
	100		Fol	Quartz - Feldspar Gneiss	Some	0			5					24	30	015	31.0-33.0 2.0m	0.660	0.0378				
-32-	-31.7-		F	Qz veinlets 1-3mm wide, some 32.05 FRC w̄ vugs	-4% LI along FRC. 1% diss.																		
	100			Quartz - Feldspar Gneiss										15	12								
	-32.91-			- fine grained, light grey matrix																			
	100			with phenocrysts of feldspar.												016	33.0-35.0 2.0m	1.140	0.0199				
-34-	-33.83- -34.14-			1-10mm in size about 5% of rock. Quartz eyes, 1-5 mm in size, form 1% of rock.																			
	100			- two FRC orientations, 66%																			
	-35.66-			of FRC steep to core axis, 33% flat to core axis -35.8												017	35.0-37.0 2.0m	1.510	0.0166				
-36-	100		10° F	-increase in Qz FRC, 0.5-2.0mm in size, contain LI 14%), clay										24	10								
	-37.19-		F	and 1% vugs, irregular shape,												018	37.0-39.0 2.0m	0.850	0.0177				
-38-	100			<1mm in size																			
	-38.10-																						
	100																						
	-39.01-															019	39.0-41.0 2.0m	2.390	0.0187				
40	100																						

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-1

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSX	PY	CP	LI	CV	CC	CO	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
40	40.54			Quartz - Feldspar Gneiss - Quartz eyes, 1% of rock, 1-5mm - feldspar phenocrysts, 5% of	Supergene and clay Mod.																		
42	100 42.06 100		F F	rock, 1-12 mm, anhedral - Qz veinlets, 1-6 mm wide, contain LI, vugs and boxwork												T28020	41.0 - 43.0 2.0m	3.410	0.0164				
44	43.69 100															021	43.0 - 45.0 2.0m	1.760	0.0230				
46	45.11 100 46.33 100		CNT Fol	45.50 Quartz - Feldspar - Chlorite Gneiss - well foliated, dark grey rock, Qz. Feld and mafic rich layers alternate with 1cm Qz-Feld gneiss layers	Supergene and clay Wk - feld. soft but not totally Alt'd to clay	0			5					15	9	022	45.0 - 47.0 2.0m	3.950	0.0765				
48	47.55 100			47.1 47.5 Mafic poor, feldspar rich 48.8	clay alteration STR clay alt' MOD				10 7							023	47.0 - 49.0 2.0m	3.410	0.0789				
50	49.07 100 50.6		F	mafic rich, ie. amphibolite 50.6 - increased FRC near CNT.	clay alt' Wk Supergene and clay alt' STR				5 7					5	25	024	49.0 - 52.0 3.0m	1.400	0.0535				
52	100 52.12 100		Fol CNT 20°	breccia @ STR alteration 52.10 Microgranite - pinkish, fine grained rock (<1.5mm) - occational Qz grains 1-2mm in size - 1% vugs, 0.5 - 5.0 cm, irregular shape, LI.	- green clay present. Supergene and clay alt' MOD - red oxide covering and between mineral grains - decreases away from CNT - feld → K.A.	0			1					20	10	025	52.0 - 55.0 3.0m	0.315	0.0189				
54	53.64 100																						
56	55.17 100 56.69			55.17 - very light grey to white		0			1					30	12	026	55.0 - 58.0 3.0m	0.675	0.0060				
58	100 58.22 100			58.70 Monzonite - med. grained	Supergene and Clay MOD	1.3	Tr		5		0.3			3	21	027	58.0 - 60.0 2.0m	0.465	0.1155				
60	59.74			equigranular, granitic texture. 59.85 Qz. feld. Horn rich rock																			

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-1 **Page** 4 **of** 7

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSX	PY	CP	LI	CV	CC	CB	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %
60	100		30° Fol	Quartz - Feldspar - Chlorite Gneiss - dark, fine grained rock, with zones of quartz rich rock	Supergene and clay Mod. - stronger alt near lower CNT.	2.5	1	0.5	1		1			9	40	T28028	60.0 - 62.5 2.5m	1.660	0.4080
62	61.26 100 62.94		20° F CNT	- amphibole and feldspar rich, well foliated - numerous FRC, <3 mm wide, avg 1mm. LI and PY common, CP rare. present CC coats CP and PY. 62.94	- diss. PY present											029	62.5 - 64.5 2.0m	2.000	0.5420
64	100 64.47 100		45° 10° F CNT 60°	Monzonite - light grey med grained, granitic texture - FRC. 0.5-3 mm wide, LI along edges CP coated by CC. 64.35 Quartz - Feldspar - Chlorite Gneiss	- Supergene and clay Mod. - Feld → KA, Mafics → CH Some	2.5 1.75	1 0.5	1 0.25	1 1	Tr	0.5 1			10 12	8 20	030	64.5 - 66.5 2.0m	2.960	0.7880
66	65.07 100 66.75		70° Fol 20° F	- light grey to dark purplish rock - medium grained amphibole, feldspar layers alternate with quartz-feldspar gneiss - foliation well developed	LI coats FRC edges											031	66.5 - 68.5 2.0m	1.640	0.6190
68	100 68.28		60° F	67.20 67.40 Monzonite - FRC 0.5-5.0 mm wide, LI along CNT, CP grains coated with soft, black sulphide - cc. - rock contains less mafics near lower CNT	Some - minor green clay minerals present											032	68.5 - 70.5 2.0m	0.410	0.2220
70	100 69.80 100		10° F	70.70 Monzonite	Same	1.25		0.25	1		1			6	10	033	70.5 - 72.5 2.0m	0.680	0.5160
72	71.32 100 72.84			- light grey, med. grained, granitic texture - sulphides along FRC. - metamorphic xenoliths, 3-7 cm angular in Monzonite 72.35 Quartz - Feldspar Gneiss	- Feldspar → KA - LI along FRC Same	1.75	0.5	0.25	1		1			9	30	034	72.5 - 75.0 2.5m	0.550	0.5020
74	100 74.37		20° F 70° F	- light grey, medium grained, Qz + Feld. rich rock, well foliated - mafics present - FRC 0.5-5.0 mm wide, LI occurs along edges and CC coats PY and CP.	- LI along FRC boundaries Feld → KA, mafics → CH														
76	100 75.90 100		60° Fol													035	75.0 - 77.5 2.5m	0.370	0.6770
78	77.42 100 78.18 100		10° F	77.50 - FRC 0.5-2.0 mm wide contain CP and coarse PY grains coated by C.C. 78.45	Same Same - increasing alteration toward lower CNT	2.25 1.75	1 1	0.25 0.25			1 0.5					036	77.5 - 79.5 2.0m	1.220	0.6520
80	79.56																		

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-1 **Page** 5 **of** 7

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T SX	PY	CP	LT	CV	CC	CQ	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %
80	100															T28037	74.5 - 83.0 3.5m	0.340	0.5660
82	81.38 – 100 – 82.91																		
84	100 – 84.43		CNT	83.25 – 83.4 – 83.65 Q2-Feld Porphyry **Monzonite** – light grey in color, med. grained granitic texture, Qz, Feld. rich – 85.05 clasts of gneiss present	Supergene and clay STR CP altered to CC, CC coats CP and Qz	2	1	0.5	1		0.5			3	3	038	83.0 - 85.0 2.0m	0.360	0.3590
86	100 – 85.95 – 100		Fol 60°	**Quartz - Feldspar Gneiss** – light grey-green colored, med. grained, foliated rock – Qz veinlets, 1-5 mm wide, contain soft black mineral, pyrite grains coated by CC.	Same - Supergene and clay STR – KA common	1	0.5		1		0.5			10	5	039	85.0 - 87.5 2.5m	0.175	0.4210
88	87.48 – 100 – 89.0		CNT 20° / CNT 10°	87.6 **Monzonite** – med. grained, granitic texture, crackle breccia along CNT. 88.8 SX along FRC	Same	1	0.5		1		0.5			30	10	040	87.5 - 89.5 2.0m	0.160	0.7230
90	100 – 90.53		20° F	**Quartz - Feldspar Porphyry** – med. grey rock w̄ white phenocrysts – fine grained matrix of Qz + feldspar w̄ feldspar phenocrysts – 90.5	Mod. supergene and clay – matrix more alt' near CNT – Feld → KA, except large (>6mm) phenocrysts where center is fresh	2.0	1	0.5	0.5	Tr	0.5			20	10	041	89.5 - 92.0 2.5m	0.140	0.3210
92	100 – 92.05 – 100		30° F	1-10 mm in size. Quartz eyes 0.5% of rock <2mm in size, near CNT, feldspar 3-7% of rock. – sulphides occur along FRC w̄ Qz veinlets, 1-5 mm in size		1	0.5	Tr	0.5		0.5			12	10	042	92.0 - 95.0 3.0m	0.155	0.4490
94	93.57 – 100 – 94.79		10° F	– PY + CP form small grains coated by black mineral, CC. – 2 FRC orientations ~80% are 70-85° to core axis															
96	100 – 96.32 – 100			~20% are <40° to core axis – CP grains along FRC, QZ, PY and CC also present – 96.5 – Steep FRC have Qz + SX	Same			Tr						14	8	043	95.0 - 98.0 3.0m	1.760	0.6190
98	97.38 – 100 – 98.91			while flat FRC are dry												044	98.0 - 101.0 3.0m	0.600	0.3360
100																			

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-1

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T Sx	PY	CP	LI	CV	CC	CO	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
100	100.13 100			100 - Quartz veinlets w̄ CP, coated by CC and CV. PY in veinlets	Some	1	0.5	0.5	Tr	Tr	Tr			30	10								
102	101.19 100 102.7			and cavities in porphyry. - veinlets contain vugs, 1% w̄ QZ crystals, < 3mm in size												T28045	101.0 - 104.0 3.0m	0.170	03550				
104	100 103.9 100 104.7			- disseminated PY in porphyry, altered to a black oxide ~1% of rock 105												046	104.0 - 107.0 3.0m	0.375	0.2060				
106	100 106.07 100			- FRC density decreases - disseminated grains of PY w̄ black mineral coating it		0.5	0.5		Tr		Tr			10	8								
108	107.54 100															047	107.0 - 110.0 3.0m	0.120	0.2880				
110	109.12 100 110.34			110 - diss. PY same as above - Qz veinlets w̄ Trace of CP, PY and CC.	Some	1	1	Tr	Tr		Tr			20	6	048	110.0 - 112.0 2.0m	0.050	0.2210				
112	100 111.86 100			112 - Qz veinlets, 1-5 mm in size, CP w̄ black mineral coating it (CC)	Some	2	1	0.5	Tr		0.5			24	9	049	112.0 - 114.0 2.0m	0.460	0.2290				
114	113.39 100 114.91			113.6 - chalcedonic veins present, 6/m density, 1-4mm wide, dark grey, low angle to core axis.	Some	1	1	Tr	Tr		Tr			26	6	050	114.0 - 116.5 2.5m	0.705	0.1405				
116	100 116.43			- Qz veinlets w̄ Cu high angle 116.5 - Quartz eyes first appear	Some	1	1	Tr	Tr		Tr			24	15	051	116.5 - 119.5 3.0m	0.110	0.1435				
118	100 117.96 100			in porphyry, 1-3 mm wide, more common near lower CNT																			
120	119.48			- Qz veinlet w̄ CP, 1cm wide												052							

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-1 **Page** 1 **of** 1

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct		Lithology	Alteration	Sulphide & Alteration Mineralogy										Sample Number	Assay Interval	Assay Results Au (g/t)	Assay Results Cu %
120	100																T28052	119.5 - 122.0 2.5m	0.505	0.3460
122	121.01 100 122.53		Δ	Δ	121.2 Crackle Breccia w̄ Qz, PY and 121.65 block oxide matrix As above	Some Some	3 1	3 1	Tr Tr	Tr Tr	Tr Tr			60 10	15 12		053	122.0 - 124.0 2.0m	0.030	0.1250
124	100 124.05 100																054	124.0 - 126.0 2.0m	0.100	0.0920
126	125.58 100		STR FRC CNT 10°		125.85 CNT is sharp with STR FRC a 126.35 low angle to core axis Quartz - Feldspar - Chlorite Gneiss	Mod Supergene and clay	0		1					12 10	75 21		055	126.0 - 129.5 3.5m	0.040	0.0334
128	127.10 100 128.63				- med. grained, well foliated, dark grey to black, Qz sweats < 5mm 128.0 - feldspar rich rock, strong FRC and alteration	- along FRC clay and LI present STR Supergene and clay								10	30					
130	100 130.15 100				129.30 - back into dark grey rock - amphibolite		0	Tr	Tr	1		Tr		10	20		056	129.5 - 133.20 3.7m	0.080	0.0302
132	131.67 100 133.20				133.20															

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED PROJECT NUCLEUS PROPERTY NUCLEUS HOLE NO. DN89-2 Page 1 of 7

Elevation 936 **Drill contractor** CARON **Logged by** T.C. Becker **Total depth** 121.92 m

Coordinates 1+57 W 3+36 N **Hole started** Sept. 6, 1989 **completed** Sept. 8, 1989 **Core size** HQ

Dip -90° **Target** Gold Mineralization Below T5311-1

Azimuth 000

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T SX	PY	CP	LI	CV	CC	CO	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu (%)
0				Casing - no recovery															
2																			
	2.44			Microgranite	Str supergene and clay	0			3					30	12	T28057	2.44-5.0	0.160	0.0155
4	20 4.27 50 4.80		Mod to Str FRC	- light grey with red or brown oxide coating - fine grained Qz, feldspar matrix with feldspar phenocrysts	- LI and clay along FRC - reddish oxide coating												2.55m		
6	60 5.49 60 6.10 65 6.40 70 6.71 90 7.01		10° F 30° F	- contains Qz veinlets 1-2 mm wide, med. grey Qz, veinlets not continuous, forms a stock work												058	5.0-8.0 3.0m	0.220	0.0227
8	7.16 90 7.77 100 8.38 100															059	8.0-10.5 2.5m	1.750	0.0140
10	9.30 100 9.75 100 10.36 100		CNT	10.1 - med. BRN. soft. crumbly rock 10.65 2-3 cm fine gr. dark grey soft dyke assoc. w BR, contains phenocrysts	Stronger supergene alteration Same				7 5					30 15	15 15	060	10.5-12.5 2.0m	0.330	0.0141
12	11.28 100 12.80		10°	11.30 12.3 } Fault zones, 5cm wide, Frag. in clay matrix 12.7	Same Same -less clay alteration then above				3					20 30	12 9	061	12.5-14.5 2.0m	1.050	0.0092
14	100 14.33		STR. FRC.	- light grey, fine grained, with feldspar phenocrysts - contains numerous Qz veinlets, 1-3 mm wide, light to dark grey	- fresher appearance											062	14.5-17.0 2.5m	0.155	0.0053
16	100 15.85 100 16.92		CNT 20° 15° F 30° F	14.9 - 2-3 cm wide zone of chalcedonic vein, contains frag. 15.5 of wall rock. - Same as above - parallel FRC dipping 75-80° common	Qz flooding of wall rock Same									50 30	20 9				
18	100 17.98 100 18.90			17.4 - fault zone, 2 cm wide, BR in clay matrix 18.7 Same as above w	Same Same w red oxide coating									24	9	063	17.0-20.0 3.0m	0.815	0.0247
20			CNT 15°	19.5 pinkish-red color Quartz-Feldspar Gneiss	rock	0			3					9	15				

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-2

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct.	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSX	PY	CP	LI	CV	CC	CB	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu (%)
20	20.42		STR FRC.	20.05 Quartzite - light BRN, fine grained, QZ rich rock	Some - LI and clay along FRC	0			2					24	15	T28064	20.0-23.0 3.0m	0.860	0.0645
	100			- FRC 21mm common, discontinuous, contain vugs															
22	21.95		CNT	21.85 Feldspar - Chlorite - Quartz Gneiss	Same	1	1		2					20	6				
	100		30° Fol 30°	- med. grey - greenish grey rock. alternating QZ and CL rich layers. good foliation	- LI along FRC - less supergene alteration away from CNT														
24	23.47		10° F 40° F	- PY and LI form along QZ FRC. - rock appears FRC due to movement along zones of weakness	- mafics (amphibole) → chlorite - feldspar → KA - green clay, which locally swells likely MM.											065	23.0-26.0 3.0m	1.090	0.0321
	100																		
	24.99																		
26	100																		
	26.52															066	26.0-28.5 2.5m	0.345	0.0181
28	100																		
	28.04																		
	100			28.8	Same											067	28.5-31.5 3.0m	1.410	0.0946
30	29.57		10° F	- QZ veinlets 0.5-2.0 cm wide, STR LI on QZ w̄ PY and CP grains, CP coated by CV or CC		2.2	1	0.1	1		0.1			24	6				
	100			30.8	Same														
32	31.04			- Same as above but with only a trace of Cu mineralization		1	1	Tr	1					20	6				
	100		CNT	32.35												068	31.5-34.5 3.0m	0.780	0.1380
	32.61		10°	Microgranite	Mod. Supergene and Clay Alteration	2	2	Tr	1		Tr			10	6				
34	100			- CNT gradational - flooding of wall rock - fine gr. QZ - feldspar rock, V. Wk. foliation															
	34.14		CNT	34.7															
	100		10°	Feldspar - Chlorite - Quartz Gneiss	STR Supergene and Clay Alt. - LI and clay along FRC	0	Tr		1					15	15	069	34.5-37.5 3.0m	0.810	0.0805
36	35.66			35.75 Gneiss Frag. in Microgranite + BR															
	100		CNT 30°	36.3 Microgranite 36.5 36.95 Gneiss Frag in M.G. plus BR.	Same	0	Tr		1					15	20				
38	37.19													10	10				
	100		CNT 70°	37.7 37.9 Microgranite										20	15	070	37.5-40.5 3.0m	0.250	0.0421
	38.71			Feldspar - Chlorite - Quartz Gneiss - dark grey to black, fine - med.	Same - local zones of stronger supergene	0	Tr		1					10	25				
40	100 39.47 100		Fol 30°	grained, amphibole - feldspar rich rock	alteration, to light BRN clay														

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Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T SX	PY	CP	LI	CV	CC	CO	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu (%)
40	100			Some	Some														
	41.0				- locally altered to M.M. - a brownish green clay - which swells											T28071	40.5 - 43.0 2.5m	0.445	0.0349
42	100		20° Fol																
	42.67		CNT	42.9															
44	100		10°	Microgranite	STR supergene and clay Feld → KA	3	3	Tr	1					20	12	072	43.0 - 45.0 2.0m	0.200	0.0203
	43.89		MOD FRC	- light greyish-green fine grained Quartz-feldspar matrix with feldspar															
	100			- 44.6 - Same, light brown color	Same		Tr		5										
46	45.41		10° F	- phenocrysts, 1-3 mm in size, <3% of the rock	- stronger LI covering grains and along fracture surface											073	45.0 - 48.0 3.0m	0.225	0.0080
	100			- strongest fracturing and Qz veinlets near CNT, PY occurs in veinlets, 1-5 mm in size and	- feldspar - in matrix altered to KA														
	46.9			diss. in rock.															
48	100		5° F	48.0 - light greyish-green color	Some - less LI covering rock	2	2	Tr	1		Tr			16	10	074	48.0 - 50.0 2.0m	0.830	0.0514
	48.46			- Qz veinlets, 0.5-5 mm in width,															
50	100			contain PY, a soft black mineral around prite loxide (CC?). chalcopyrite forms small grains coated by CC.															
	49.99		WK FRC													075	50.0 - 53.0 3.0m	0.075	0.0988
	100			50.7	Same		Tr	Tr						9	9				
52	51.51		20° F	- light brown color	- more LI covering rock and along FRC														
	100			- quartz and chlorite phenocrysts present															
54	53.03															076	53.0 - 56.0 3.0m	0.030	0.0054
	100			53.8 - light greyish-green color	Some - LI occurs along FRC and grading into wall rock		Tr		3					15	9				
	54.56			- Qz veinlets 1-3mm - some															
56	100			contain vugs and LI, others display white Qz with quartz sericite alteration of wall rock.	- Quartz - sericite along veinlets														
	56.24															077	56.0 - 59.0 3.0m	0.060	0.0066
58	100																		
	57.91																		
	100																		
60	59.44			59.5 Qz veinlets 1-20 mm wide	Same									12	9	078	59.0 - 61.0 2.0m	0.140	0.0044

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Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct.	Lithology	Alteration	Sulphide & Alteration Mineralogy: T SX	PY	CP	LI	CV	CC	CB	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu (%)				
60	100 60.96			- quartz - sericite alt' along Qz veinlets	- quartz - sericite																		
62	100 62.64		20° F	61.15 - light greyish - green color - Py occurs as diss. grains in rock and in Qz veinlets w̄ CP - CP occurs in disseminated grains along w̄ PY and a soft BLK mineral	Same - Py altered to a soft black mineral	2	2	Tr	1		Tr			18	9	T28079	61.0 - 64.0 3.0m	0.530	0.0669				
64	100 64.16 100			64.10 - light greyish - green color - minor veins present <2 mm in width, sulphides rare	Same - except rock looks fresher, patches of LI	0	Tr		Tr					15	5	080	64.0 - 67.0 3.0m	0.235	0.0026				
66	65.23 100 66.29 100			66.9																			
68	67.67 100			- light brown - greenish color - minor chlorite and Qz phenocrysts - feldspar phenocrysts present	Same - feldspar in matrix and phenocrysts → KA	0			5					20	6	081	67.0 - 70.0 3.0m	0.050	0.0050				
70	69.19 100 70.71		45° CNT 45° FOL	70.3 Quartz - Feldspar Gneiss - light brownish - grey color - well foliated, fine grained rock	STR Supergene and Clay - Qz, sericite along Qz veinlets	0			5							082	70.0 - 72.0 2.0m	1.710	0.0070				
72	100 72.24 100		20° CNT	71.5 Microgranite - light greenish - grey color - fine grained Quartz, feldspar matrix with occasional feldspar and chlorite phenocrysts	- LI and clay along FRC Same	0			1					30	6	083	72.0 - 75.0 3.0m	0.040	0.0023				
74	73.76 100		15° F 10° F	- discontinuous Qz veinlets common, LI along edges and <5% small irregular vugs																			
76	75.29 100 76.81		NOD FRC	- larger Qz veins 1-7 mm, show Quartz - sericite alteration - Quartz in veinlets is fine grained, white to dark grey.												084	75.0 - 78.0 3.0m	0.110	0.0039				
78	100 78.33 100			77.75 - less LI on rock more sulphides along FRC surfaces, PY common	Same - LI along FRC only	2	2	Tr	0.5		Tr					085	78.0 - 81.0 3.0m	0.270	0.0449				
80	79.40			along FRC, Cp grains coated by CC.																			

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Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T Sx	PY	CP	LI	CU	CC	CA	CS	Q E	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Ca (%)
80	80.47																		
82	100 81.64 100 82.91		20° F 45° F	81.7 - light greenish-grey color, more LI less sulphides then above unit.	Same - LI along FRC and coating rock	1	1		3					24	6	T28086	81.0 - 84.0 3.0m	0.265	0.0045
84	100 84.43															087	84.0 - 87.0 3.0m	0.040	0.0130
86	100 85.95 100		MOD FRC	85.15 - less LI, more sulphides then above unit	Same - supergene alteration not as STR as units above and below	2	2	Tr	1										
88	87.48 88.39			87.50 - more LI, less sulphides then above - dark grey, fine grained Qz veinlets present	Same - feldspar in	0			2							088	87.0 - 90.0 3.0m	0.150	0.0038
90	100 89.91 100		10° F	90.20 - 1cm. vertical FRC causing stronger alteration of rock 90.00												089	90.0 - 93.0 3.0m	0.900	0.0032
92	91.44 100 92.96			91.90 - FRC with large vugs, 1-3 cm 92.25 and LI along edges															
94	100 94.44															090	93.0 - 95.5 2.5m	1.990	0.0036
96	100 96.01 100		STR F	- Qz veinlets, 1-10mm wide, increase toward contact, LI and vugs along FRC												091	95.5 - 98.0 2.5m	36.48 (1.064 oz/t)	0.0039
98	97.69 100		CNT 20°	98.10 - 98.50 - same as above w̄ Qz veinlets 1-10mm wide, contain PY and random CP grains, coated by a soft black mineral, cc. 98.10 98.50 Quartz - Feldspar Gneiss	Same STR supergene and clay	1.8 1	1.5 1	0.1 Tr	1 3		Qz Tr			15	5	092	98.0 - 101.0 3.0m	0.060	0.1175
100	99.21			- light brown, fine-medium grained well foliated	- alteration envelope around vein, marked by LI depletion														

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Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T SX	PY	CP	LI	CV	CC	CO	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
100	100			-100.5																			
	-100.84-			- light greenish-grey color	Same	1.5	1.5		0.5		Tr												
	100			- fine-med. grained, well foliated, Qz-Feld matrix	- less LI then above unit											T28093	101.0 - 104.0 3.0m	0.070	0.0194				
-102-	-101.95-		30° F	- PY diss. in rock and occuring along FRC																			
	100																						
	-103.48-																						
-104-	100			-104.0																			
	105.0			-PY common as diss. grains and in Qz FRC 0.5-3.0 m in width.	Same	2	2	Tr	0.5		Tr			24	8	094	104.0 - 107.0 3.0m	0.135	0.0649				
				commonly covered by a BLK oxide.																			
-106-	100			-105.9 - Stronger LI then above	Same	1	1		1														
	-106.68-		20° F	-106.25 - FRC w̄ Qz crystals, 0.1-10mm in size																			
				-106.70	- Stronger alteration rock has a chalky texture, STR KA.	Tr	Tr		0.5					10	10								
	100			- white bleached color												095	107.0 - 110.0 3.0m	0.185	0.0426				
	-107.40-			-107.8	- rock is less altered then above unit	2	2	Tr	0.5		0.1												
-108-	100		F 80°	- pale greenish-grey color	- no chalky texture																		
	-108.20-			- gneissic texture																			
	100			- PY forms diss. grains and veinlets 0.5-3.0 mm wide																			
-110-	-109.73-			- along FRC block Cu oxid?																			
	100															096	110.0 - 113.0 3.0m	0.615	0.0704				
	-111.25-																						
-112-	100																						
	-112.78-																						
				-113.2												097	113.0 - 116.0 3.0m	0.170	0.0096				
	100			- light brown to grey color	Same - LI diss. and along FRC, Feldspar → K.A.	Tr	Tr		2					9	9								
-114-	-114.30-		45° F	- Quartz - feldspar gneiss																			
				Quartz bands, parallel to foliation common																			
	100																						
-116-	-115.82-																						
	100															098	116.0 - 119.0 3.0m	0.340	0.0117				
	-117.35-																						
-118-	100			-117.9		1	1		2														
	-118.87-			- PY occurs as diss. grains and along FRC surfaces																			
120	100															099	119.0 - 121.92 2.92m	0.555	0.0258				

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Elevation	Drill contractor	Logged by	Total depth
Coordinates	Hole started	completed	Core size
Dip	Target		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy										Sample Number	Assay Interval	Assay Results					
						TSX	PY	CP	LI	CV	CC	CØ	CS	QF	F								
120.0	120.4			Quartz - Feldspar Gneiss	Same - PY coated by a soft black mineral																		
122	121.92																						

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Elevation 957m **Drill contractor** CARON **Logged by** T.C. Becker **Total depth** 64.31m

Coordinates 2+03W 4+37N **Hole started** Sept 8, 1989. **completed** Sept 10, 1989. **Core size** HQ

Dip -70° **Target** Gold Mineralization Below T84 N-9

Azimuth 090

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSX	PY	CP	LI	CV	CC	CB	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
0	0			Overburden - Casing 0 - 1.83m																			
2	1.83 2.13 2.74	80 90	45° Fol	1.83 Quartz - Feldspar - Gneiss - light greenish - grey, fine - med. grained, well foliated. Quartz - feldspar	STR Supergene and clay - LI along FRC - Feld → K.A., Mafics → CL											T28251	1.83 - 4.0 2.17m	0.350	0.0056				
4	3.35 4.27 4.57	100 100 90	MOD FRC	rich rock. - QZ vein lets w̄ LI present and 4.0 metamorphic QZ. // to foliation Microgranite - light greenish - grey. fine grained	3.14m - 4cm wide zone of emerald green material, // to foliation Same - alteration envelope around	0 0			2 0.5					3 24	12 10	 252	 4.0 - 6.0 2.0m	 0.170	 0.0023				
6	6.10	100 100	20° F	Quartz, feldspar matrix with 3% 1mm euhedral feldspar phenocrysts - small. <2mm wide, QZ veinlets common, discontinuous, minor QZ flooding of wall rock	QZ veinlets											 253	 6.0 - 7.0 1.0m	 0.615	 0.0024				
8	7.62	100	45° F	8.5 1cm wide zone of brecciated wall rock in a light GRN matrix												254 255	7.0 - 8.0 1.0m 8.0 - 10.0 2.0m	0.230 1.560	0.0025 0.0061				
10	9.14 9.60	90	50° F	9.14 - 9.60 { - 0.46m zone of breccia, frag. of wall rock, 1-40 cm in size, brown fine grained matrix w̄ 5% vugs, irreg. shape, coated in LI	Same - STR LI coating matrix and vugs Same - LI along FRC, minor clay along FRC	0 0			5 0.5					3 24	30 10	 256	 10.0 - 12.5 2.5m	 0.530	 0.0030				
12	11.12 12.50	100	45° F	11.9 - 12.5 { QZ veinlets w̄ PY, LI, 1% small irregular vugs, possibly AS present covered by GRN oxide	Same	0.2 0	0.2		0.5 0.5							257	12.5 - 14.5 2.0m	0.240	0.0047				
14	14.02	100 100	45° F	13.5 - FRC 1.0cm true thickness, fine grained black sulphides and quartz matrix with wall rock fragments												258	14.5 - 16.5 2.0m	0.120	0.0134				
16	15.52	100	45° F	16.2 - 1.5cm wide QZ vein, no visible sulphides but 5% vugs, <2mm in size, coated by LI.												259	16.5 - 19.0 2.5m	0.430	0.0099				
18	17.07 18.54	100		17.3 - QZ vein, 1.5cm, dark grey QZ												260	19.0 - 21.5 2.5m	0.680	0.0028				
20		100																					

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Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSX	PY	CP	LI	CV	CC	CB	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
20	20.12 100																						
22	21.64 100		50° F	22.75 - zone of Q2 veinlets ϖ PY and As	Same	2	2		0.5							T28261	21.5 - 24.0 2.5m	0.330	0.0050				
24	23.16 100 24.38 100		45° F	23.50 - light greenish - grey, fine grained Q2 and feldspar rich rock, with phenocrysts of feldspar - Microgranite	Same Feld → KA, LI and clay along FRC	Tr	Tr		0.5							262	24.0 - 26.5 2.5m	0.045	0.0042				
26	25.3 100 26.84			- numerous, <2mm Q2 veinlets 25.9 xenoliths of Quartz - Feldspar 26.2 gneiss in microgranite												263	26.5 - 28.0 1.5m	0.550	0.0143				
28	100 27.74 100		30° CNT 60° Fol CNT	27.15 27.25 Quartz vein ϖ sulphides 27.74 Breccia zone Quartz - Feldspar Gneiss - well foliated gneissic texture 28.75 28.90 Quartz Vein + Q2 flooding	STR Supergene ϖ Q2 flooding Same	4 Tr Tr	2		3 7 3					1 12	Qr 4	264	28.0 - 29.5 1.5m	0.070	0.0051				
30	29.26 100 30.48		50° 5° F 60° F	Microgranite - light greenish - grey in color - fine grained quartz - feldspar matrix with Q2 and FX phenocrysts	STR Supergene and clay Feld → KA - LI along FRC ϖ clay	1	1		0.5					30	3	265	29.5 - 32.0 2.5m	0.055	0.0025				
32	100 32.0 100		MOD FRC	- Quartz veinlets common, 0.1-5 mm thick, 1-10% irregular shaped vugs <2mm in size, lined ϖ LI and Q2 crystals - minor fine grained calcedonic Q2 veinlets with SX												266	32.0 - 35.0 3.0m	0.045	0.0033				
34	33.68 100			- some veinlets contain traces of arsenopyrite 34.5		Tr	Tr		0.5														
36	35.2 100 36.73		45° F 50° F	36.0 - widely spaced dry FRC ϖ vugs and LI along edges										35	6	267	35.0 - 38.0 3.0m	0.030	0.0069				
38	100 38.25			- numerous Q2 veinlets, <2mm in size, usually discontinuous - some Q2 veinlets over 2.0mm wide, open space filling Q2 crystals												268	38.0 - 41.0 3.0m	0.590	0.0026				
40	100 39.93																						

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Elevation	Drill contractor	Logged by	Total depth
Coordinates	Hole started	completed	Core size
Dip	Target		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSX	PY	CP	LI	CV	CC	CB	CS	QF	=	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
40	100			Microgranite cont' as above	Same																		
42	41.45 100 42.98			- widely spaced FRC w̄ vugs 42.2 - FRC 1-10mm wide, LI along edges, vugs 1-10mm, minor chalcedony 42.98												T28269	41.0 - 44.0 3.0m	0.065	0.0026				
44	100 43.89 100															270	44.0 - 46.5 2.5m	0.080	0.0017				
46	45.41 100 46.94		CNT	zone of crackle breccia, 0.1-7cm clasts light BRN. clay matrix minor chalcedony 46.94	STR Supergene and clay											271	46.5 - 48.5 2.0m	0.650	0.0035				
48	100 48.46		20° 10° CNT	47.20 - Microgranite 47.60 Breccia zone - angular clasts, 0.1-3cm in size, microgranite clasts in a BRN clay matrix 48.50 Microgranite	Some	Tr 0 Tr Tr	Tr Tr	 0.5 0.5 0.5						10 30 30	30 10 Br 6	272	48.5 - 51.0 2.5m	0.340	0.0019				
50	100 49.99 100																						
52	51.51 100 52.73															273	51.0 - 53.5 2.5m	0.070	0.0014				
54	100 53.64 100			53.64 zone of FRC, Qz Flooding 53.85 54.30 Chilled microgranite Quartz - Feldspar - Chlorite Gneiss	Qz flooding MOD Supergene + clay Alt.	 1.5	 1.5	 0.5						6 10	30 10	274	53.5 - 55.0 1.5m	0.170	0.0231				
56	55.17 100 56.39 56.64		30° F	Medium grey-green rock, well foliated, thin layers of Qz rich material	- pyrite grains not oxidized - near upper CNT STR alt.											275	55.0 - 58.0 3.0m	0.045	0.0145				
58	100 58.22 100			58.5 Qz flooding of wall rock and 58.8 small microgranite dyke	Some + Qz flooding									1		276	58.0 - 60.0 2.0m	0.140	0.0111				
60	59.74		CNT 55°	59.55 Microgranite - see above, chilled		 1.5	 1.5	 Tr	 0.5					10 30	10 6								

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-3 **Page** 4 **of** 4

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSX	PY	CP	LI	CU	CC	CB	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
60	100		20° CHT	60.05 Breccia zone - 2-5cm clasts of gneiss in a Q2 microgranite matrix 60.8	Same + Q2 flooding	1	1		0.5					9	18	T28277	60.0-62.0 2.0m	0.180	0.0073				
	60.96																						
62	100			Quartz - Feldspar Gneiss - light greyish green, fine grained, quartz - feldspar rich rock, well foliated - pyrite and CC. occur along	STR supergene and clay - soft green clay mineral MM.	2	2	Tr	0.5		Tr			21	10								
	62.48															278	62.0-64.31 2.31m	0.040	0.0488				
	63.25			FRC surfaces																			
	63.55																						
64	100			64.31																			

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED PROJECT NUCLEUS PROPERTY NUCLEUS HOLE NO. DN89-4 Page 1 of 7

Elevation 918m Drill contractor CARON Logged by T.C. Becker Total depth 125.89m

Coordinates 1+47W 1+26N Hole started Sept 10, 1989 completed Sept 13, 1989 Core size HQ

Dip -90° Target Gold and Copper Mineralization Below T83 N-3

Azimuth 000

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T Sx	PY	CP	LI	CV	CC	CO	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
0				Overburden - casing - no recovery																			
2	0 2.43			2.43																			
	80			2.80 QZ-FELD Porphyry (overburden)												T28279	2.43 - 5.0	0.270	0.0646				
4	3.05 90 3.66 90			Quartz - Feldspar Gneiss - light BRN, fine to medium grained rock, well foliated - weathered to a light BRN clay	Int Supergene and clay - Supergene overprints hypogene alteration - LI and clay along FRC.	0			8					9	18		2.57m						
6	5.18 90 6.71			- gneissic texture - quartz rich zones more resistant to weathering												280	5.0 - 7.5 2.5m	0.075	0.0433				
8	90 7.62 90			7.20 - Fractures at low angles to core axis, contain Qz, LI + vugs 0.1-20mm wide - Fractures steeper to core axes are <1mm wide, w̄ only LI	Less supergene alt. - rock appears fresher	0			5							281	7.5 - 10.0 2.5m	0.010	0.0452				
10	9.14 100 10.06 90 10.97			9.65 10.50	zone of red oxide STR Sup. and clay											282	10.0 - 13.0 3.0m	0.155	0.0433				
12	100 11.89 100 12.80			12.8 Transition zone Qz rich w̄ chlorite	Same																		
14	100 14.17 100 14.93			13.7 Quartz - Feldspar - Chlorite Gneiss - dark grey to greenish, medium grained, well foliated rock.	Same - local variability between crumbly clay altered material and fresher	0			5							283	13.0 - 16.0 3.0m	0.010	0.0324				
16	100 15.85 100 16.76			15.6 Fractures in various orientations 0.5-50 mm wide	Qz rich rock Mod supergene and clay	0			3					20	12	284	16.0 - 18.5 2.5m	0.040	0.0436				
18	100 18.29 90			17.65 Quartz - Feldspar Gneiss - light BRN, medium grained, foliated rock	STR Supergene and clay - LI along FRC and covering rock - Feld → KA, soft white, bleached	0			5							285	18.5 - 20.5	0.210	0.0264				
20	19.20 100			- dominately feldspar w̄ some Qz rich layers	appearance																		

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-4

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSX	PY	CP	LI	CV	CC	CB	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
20																							
	20.73															T28286	20.5-22.5 2.0m	0.250	0.0165				
	100																						
	21.49																						
22	100																						
				22.85												287	22.5-24.5 2.0m	0.790	0.1130				
	23.16			Breccia Zone, FRC, Q2 veinlets	STR LI + red oxide coating rx.	0			8					20	BR								
				23.40 Quartz-Feldspar Porphyry Breccia	STR Sup and clay	0			8					30	15								
24	100			-med-dk. BRN, fine grained, w̄ FX phenocrysts or euhederal cavities	-STR LI coating rock + FRC, red oxide common																		
	24.64			-Q2 veinlets, 0.5-3mm wide, STR LI												288	24.5-26.0 1.5m	0.295	0.0900				
	100			small vugs, box work, sulphides leached out	-Feld → KA or removed to form vugs																		
26				25.80																			
	26.21			Quartz-Feldspar Gneiss	Some Feld → KA. LI coating rock	0			4					15	10	289	26.0-28.0 2.0m	0.095	0.0370				
	26.67			-light BRN, well foliated																			
				-Q2 FRC, 1-4mm, 1% vugs																			
	27.13			27.13																			
28	100		5° F	-light greenish grey color chlorite present in rock	Mod. Sup. Feld → KA Mafics → MM.	0			1					9	9								
	28.65															290	28.0-30.0 2.0m	0.035	0.0488				
				29.0 Lt-Dk BRN Q2-FX Gneiss thin Q2 rich layers, minor FRC																			
	100			-29.75 - Breccia zone - clasts in a fine grained, BRN, Q2 rich matrix	STR supergene and clay	0			4					5	9								
30	30.17		40° CNT		Some	0			6					5	Br	291	30.0-32.0 2.0m	0.105	0.0148				
	100			30.3 Quartz-Feldspar Porphyry Breccia 1-40 mm BR fragments, BRN matrix	Same	0			5					5	60								
				31.35 Quartz-Feldspar Porphyry											Br								
32	31.70		20° F	-5% phenocrysts	Same	Tr			4					35	9								
	100			-Feldspar euhedral grains, 0.5-3 mm in size altered to KA.	LI 3% along FRC, 1% coating rock	Ol										292	32.0-34.5 2.5m	0.190	0.0161				
				-Quartz eyes, rounded 0.5-5 mm in size, FX more common																			
	33.38			FRC usually low angle to core axis - some steep angle																			
34	100			-most FRC <1mm, w̄ LI along CNT minor Q2 and vugs.																			
	34.44															293	34.5-37.0 2.5m	0.070	0.0121				
	100			- some w̄ fine grained sulphides																			
36	35.97		30° F																				
	100			36.80																			
	37.18		F	Quartz-Feldspar-Porphyry Breccia	Same	0.2			5					15	Br	294	37.0-39.0 2.0m	0.150	0.0141				
38	100		60°	-light BRN to grey rock,	-LI along FRC and in matrix																		
	38.40		30° F	-clasts of fine grained porphyry w̄ Q2 and FX phenocrysts, 1-10 cm clasts																			
	100																						
40	39.62			-matrix is a fine grained BRN material with Q2 and rare SX												295	39.0-41.0 2.0m	0.065	0.0124				

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-4 **Page** 3 **of** 7

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T Sx	PY	CP	LI	CU	CC	Cb	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
40	100			40.40 Quartz-Feldspar Porphyry	Some	0			5					15	9								
42	41.15 – 100 – 42.67		15° F	- light BRN to grey, fine gr groundmass w̄ feldspar phenocrysts - local zones, < 1cm of Breccia, Frag. < 0.5cm												T28296	41.0 - 43.0 2.0m	0.125	0.0157				
44	100 – 44.20 – 100		F	- 42.5 zone 1-5 cm wide, porphyry clasts in fine grained soft BRN matrix - 43.3 Same as above												297	43.0 - 45.0 2.0m	0.265	0.0221				
46	45.72 – 100		45° 10° F	45.1 Same as above, but w̄ more FRC		0			7					30	15	298	45.0 - 47.0 2.0m	0.140	0.0347				
48	47.24 – 100 – 48.92			48.6 FRC zone - 0.5 - 3.0cm wide, Qz white to Dk. grey w̄ porphyry clasts	- scattered areas w̄ yellow oxide											299	47.0 - 49.0 2.0m	2.020	0.0413				
50	100 – 50.29 – 100			49.1												T28300	49.0 - 51.0 2.0m	2.350	0.0334				
52	51.21 – 100 – 52.43 – 100		30° F	51.35 Quartz-Feldspar Porphyry Breccia - subrounded - angular clasts, 0.5-60 mm in size, matrix is fine gr. BRN material. Clasts is porphyry	Some - LI along FRC and Vugs - light GRN oxide assoc w̄ SX	1.5	Tr		5					30	BR 100	T28401	51.0 - 53.0 2.0m	0.045	0.0228				
54	53.34 – 100 – 54.86		0-5° QV	- Qz veins BR, 0.5 - 3.0cm wide, porphyry clasts, flow banding, Quartz is v fine grained dk. grey to black (sulfosalts + As), GRN oxide assoc. w̄ sulphides												402	53.0 - 55.0 2.0m	1.730	0.0232				
56	100 – 56.39		5° QV CNT	- more Qz eyes in porphyry near CNT - 56.0 Qz vein // to core axis, 1-5 cm 56.6 wide, Dark grey Qz (Sx) + Qz veinlets												403	55.0 - 57.0 2.0m	2.500	0.1205				
				Microgranite	STR Sup and Clay	0			2					30	12								
58	100 – 57.91 – 100		20° 20° F	- greyish green color, fine grained pitted texture - Qz + FX rich, occasional Cl + FX phenocrysts - 2 zones, 0.5 - 2cm wide of QR along FRC	- LI and clay along FRC											404	57.0 - 59.0 2.0m	0.140	0.0054				
60	59.44		80° F	- Qz veinlets, < 1cm wide, 2% vugs mainly WHT Qz w̄ LI												405	59.0 - 61.5 2.5m	0.460	0.0163				

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED PROJECT PROPERTY NUCLEUS HOLE NO. DN89-4

Elevation	Drill contractor	Logged by	Total depth
Coordinates	Hole started	completed	Core size
Dip	Target		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T Sx	PY	CP	LI	CU	CC	CB	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (o/t)	Cu %				
60	100																						
	60.96			61.35																			
62	100			Quartz - Feldspar Porphyry -sharp CNT, fine grained, light BRN, with 7% sub-hederal feldspar phenocrysts and 0.5% quartz eyes	Some Feld → KA -clay and LI along FRC	1.5	0.5		2					24	8	T28406	61.5-64.0 2.5m	0.130	0.0290				
	62.48																						
64	100			-Q2 FRC from 1-3.0mm in size, grey in color																			
	64.00															407	64.0-65.5 1.5m	0.300	0.0154				
	100			-64.4 two Q2 FRC zones w̄ fine gr. black Q2(Sx), PY and porphyry clasts																			
				65.35																			
66	65.53			Quartz - Feldspar - Chlorite Gneiss -grey to dark grey. well foliated -66.6 CH bands alternate w̄ Q2-Fx -66.8 Q2-Fx Band rich bands	Mod Supergene and clay -feldspar rich bands show stronger alt' then CH rich bands	Tr	Tr		3					10	20	408	65.5-68.0 2.5m	2.140	00126				
	100																						
	67.06			- FRC narrow and discontinuous -Q2 veins 1-2cm present, coarse while quartz																			
68	100																						
	68.27															409	68.0-71.0 3.0m	0.305	0.0115				
70	100																						
	69.80																						
	100																						
72	71.48															410	71.0-74.0 3.0m	0.070	0.0495				
	100																						
	72.24			-72.1 Qz-Feld Gneiss -LL. BRN, Med grained.	Some -LI along FRC and coating rock	0			5					8	15								
	100																						
74	73.76			-73.75 Qz-Feld-Chlorite Gneiss -grey to greenish-grey in color, well foliated	Feld → KA Some LI along FRC	0.1	0.1	Tr	2					10	24	411	74.0-76.5 2.5m	0.095	0.0081				
	100																						
76	75.24			- FRC contain QZ, PY, LI and a trace of CP.																			
	100			-76.5 - FRC w̄ sulphides less common		Tr	Tr		1							412	76.5-79.0 2.5m	0.030	0.0306				
	76.81																						
78	100																						
	78.33																						
80	100															413	79.0-81.5 2.5m	0.075	0.0091				
	79.86																						

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-4 **Page** 5 **of** 7

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: Tsx	PY	CP	LI	CV	CC	CB	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu (%)
80	100		60° CNT	80.6 80.9 Monzonite - med. grained	Weak Supergene and Clay	0			Tr					6	9				
82	81.38 100 82.91			Quartz - Feldspar Gneiss - soft LL BRN rock, well foliated w̄ layers of Feld rich material 82.4 Quartz - Feldspar - Chlorite Gneiss	Mod - STR Supergene and Clay	0 0			I Tr					4	6	T28414	81.5 - 84.0 2.5m	<0.005	0.0063
84	100 84.43		30° F	- dark grey to black in color, well foliated, finely layered with bands of Feld rich material												415	84.0 - 87.0 3.0m	0.085	0.0248
86	100 85.95 100		60° F	87.0															
88	87.48 100 89.00			87.5 Yellowish grey color, PY on FRC Monzonite - med. grained, granitic tex. FRC contain PY and a Tr of CP. 88.4 Quartz - Feldspar - Chlorite Gneiss	STR Sup and clay Same Same	0.5 1	0.5 1	Tr	0.5					6 25	10 10	416	87.0 - 89.0 2.0m	0.245	0.0642
90	100 90.53		20° F	- light grey in color, well foliated, CH content varies - FRC filled w̄ Qz and sulphides, mainly PY w̄ minor CP and CC?												417	89.0 - 92.0 3.0m	0.380	0.3220
92	100 92.05 100		20° QV	- LI occurs along FRC edges Breccia + Quartz Vein 92.6 Dk. grey, Breccia clasts with Qz matrix Qz contains 20% PY, 20% Sx, AS + Cu	STR Qz flooding and Quartz - sericite	41	20	0.2	3	0.2	0.2			QV	Br	418	92.0 - 93.5 1.5m	1.400	0.4910
94	93.57 100		20° CNT	93.2 Qz vein - 80% Sulphides 93.5 Quartz - Feldspar Gneiss - light yellowish grey color, well foliated, fine grained Qz - Feld rich rock	Same STR Supergene and clay	80 1	1		1		Tr			QV 15	6	419	93.5 - 96.5 3.0m	0.320	0.1575
96	95.04 100 96.62															420	96.5 - 98.5 2.0m	0.740	0.0339
98	100 98.15 100		30° Fol	97.10 - Yellowish grey, KA w̄ CH specks and a sandy texture 97.75 Quartz - Feldspar - Chlorite Gneiss - greenish grey, foliated, fine-med grained gneiss w̄ white QZ		0 0.5	0.5		1 Tr					15 12	6 3	421	98.5 - 100.5 2.0m	0.435	0.0526
100	99.67			bands // to foliation 98.1 - 98.2 Monzonite dyke 8.0cm thick															

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-4 **Page** 6 **of** 7

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSX	PY	CP	LI	CV	CC	CB	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %
100	100			-100.5 Quartz-Feldspar Gneiss	STR Supergene and clay	2.1	2	Tr	1	Tr	0.1			30	12	T28422	100.5-102.5	0.165	0.1980
-101.19-				- light yellowish grey in color, foliated, Qz-Feld rich rock	- alteration halos around Qz filled FRC												2.0m		
-102-	100		20° F	- FRC contain Qz. 0.1-3.0 mm wide black Qz with PY and less common	- LI near FRC and coating rock														
-102.72-			Fol	CP, CP coated by CV or CC.												423	102.5-104.5	0.900	0.1670
	100		45°	- 3 ages of FRC. Qz + Sulphides oldest followed by Qz // fol. and last dry FRC													2.0m		
-104-	-104.24-			-104.5															
	100			Same - with more soft black metallic mineral (CC) coating	Same	2.4	2	0.1	1	0.1	0.3			34	14	424	104.5-106.5	0.150	0.5050
-105.77-			X/ MOD FRC	FRC - PY most common sulphide usually coated by black mineral													2.0m		
-106-	100			-106.5 - rock has a bleached appearance															
-106.98-			20° F	Same - with more CC. occuring	Same	2.7	2	0.1	1	0.2	0.4			40	18	425	106.5-108.5	0.350	0.6880
	100		60° F	along FRC with any orientation													2.0m		
-108-			X/ STR FRC	- FRC are narrow <2mm and discontinuous															
-108.5-			-108.25																
			MOD FRC	Same - w̄ less CC along FRC.	Same	2.5	2	0.1	1	0.1	0.3			30	16	426	108.5-110.5	0.165	0.3870
	100			- rock is light greenish grey and Qz rich, well foliated w̄ white Qz bands upto 7cm wide.													2.0m		
-110-	-110.18-																		
	100															427	110.5-112.5	0.180	0.1710
-111.71-																	2.0m		
-112-			20° F																
	100															428	112.5-114.5	0.355	0.2490
-113.39-																	2.0m		
-114-	100		WK FRC	-114.0 Same - Qz-Feld. gneiss	Same														
-114.91-				- Lt. BRN color, foliated w̄ a	- with more LI along FRC and	1.1	1	Tr	3	Tr	0.1			18	8	429	114.5-117.0	0.500	0.3800
	100			sandy texture.	replacing PY.												2.5m		
-116-				- fractures and sulphides less common															
-116.43-			CNT	117.0															
	100		30°	Quartz-Feldspar Porphyry - fine gr. light grey ground mass, SX along FRC	STR Supergene and Clay Feld → KA	1.5	1	Tr	1	0.2	0.3			24	15	430	117.0-118.5 1.5m	0.585	0.2140
-118-	-117.96-		20° CNT	118.0 Microgranite - light greenish grey color, granitic texture	Same	1.5	1	Tr	1	0.2	0.3			20	12				
	100			-118.70												431	118.5-120.5	0.075	0.2470
-119.48-				- sulphides occur in FRC decreasing in abundance away from CNT PY main sulphide plus CC		0.5	0.3	Tr	Tr	0.1	0.1			18	6		2.0m		
120																			

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Elevation	Drill contractor	Logged by	Total depth
Coordinates	Hole started	completed	Core size
Dip	Target		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T Sx	PY	CP	LJ	CV	CC	CB	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
120	100			120.5 Same - with less sulphides	Same	0.1	0.1		Tr	Tr	Tr			5	4	T28432	120.5-123.5 3.0m	0.035	0.0146				
122	121.01 100 122.53		20° F																				
124	100 124.20		60° CNT 10° Fol	123.7 Quartz-Feldspar-Chlorite Gneiss - Dark grey, well foliated, chlorite rich rock	Mod Supergene and clay	0			Tr					15	6	433	123.5-125.88 2.38m	0.060	0.0200				
	100																						

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED PROJECT NUCLEUS PROPERTY NUCLEUS HOLE NO. DN89-5 Page 1 of 5

Elevation 999 m
Drill contractor CARON
Logged by I. C. Becker
Total depth 81.69m
Coordinates 4+29W 4+97N
Hole started Sept 13, 1989 completed Sept 18, 1989
Core size HQ
Dip -50°
Target Gold Mineralization Below T89 N-2
Azimuth 090

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSx	PY	CP	LI	CV	CC	CN	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu (%)				
0																							
2	0			Overburden - Casing - No Recovery 3.05																			
4	3.05 3.35 80 90 4.14 90 4.72 90			Quartz - Feldspar Gneiss - light BRN, foliated, Q2-Feld rich medium grained, layers 0.25-10cm thick of white Q2	STR Sup and clay - LI and clay along FRC - LI also covers rock - minor red oxide	0			5					16	12	T28434	3.05-6.00 2.95m	0.025	0.0048				
6	5.18 90 5.94 90 6.40		50° Fol	5.18 } Zones of BR. 1cm wide, angular frag and clay 5.98 - feldspar rich layers show stronger supergene alt'												435	6.0-9.0 3.0m	<0.005	0.0034				
8	100 7.92 100		60° F 45° F	then Q2 rich layers																			
10	9.45 100 10.67 10.90 100		MOD FRC	10.0 - Blocky core - dry FRC result in MOD FRC rock		0			3					18	30	436	9.0-12.0 3.0m	<0.005	0.0027				
12	85 12.19 95 12.80			- chlorite content increases in rock - bands of chlorite-feldspar-Q2 alternating w Q2-feldspar bands - STR Gneissic Texture												437	12.0-15.0 3.0m	<0.005	0.0049				
14	100 13.41 100 14.02 90 14.78		80° Fol																				
16	100 16.31 100		10° F													438	15.0-18.0 3.0m	<0.005	0.0061				
18	17.07 100 18.59 100															439	18.0-21.0 3.0m	<0.005	0.0058				
20	19.20 100 19.81			19.1 - Coarser grained Q2-Feld gneiss minor chlorite. good foliation	Some Feld → KA	0			1					15	10								

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-5 **Page** 2 **of** 5

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TCY	PY	CP	LI	CU	CC	CR	CS	QF	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
20	100		MOD FRC	20.3 - Dark grey, fine grained, quartz - feldspar gneiss, with chlorite - quartz gneiss layers - well foliated	Some	0			3					16	30								
22	21.34 100 21.95 100				- LI along FRC and coating RA											T28440	21.0 - 23.5 2.5m	0.005	0.0147				
24	23.62 100 24.69		wk FRC	23.4 - Coarser grained, Qz - Feld gneiss	Same LI along FRC Feld → KA	0			1					9	10	441	23.5 - 26.0 2.5m	<0.005	0.0051				
				24.6 Same as 20.3 - 23.4		0			3					16	30								
26	100 26.21 100		STR FRC	- local zones of STR FRC, crackle Breccia or clast supported Breccia - FRC, 0.1 - 3 mm in size, Some												442	26.0 - 29.0 3.0m	<0.005	0.0078				
28	27.58 100 28.96		Fol 80° 50° 5° F F	w̄ 3% vugs and STR LI												443	29.0 - 31.5 2.5m	<0.005	0.0053				
30	100 30.33			STR FRC near CNT																			
32	100 31.85 100 32.61 100			31.4 - light greenish - grey, v. fine grained siliceous material, no visible structures, 0.5% fine grained	Weak alteration	0.5			1						12	444	31.5 - 34.0 2.5m	<0.005	0.0036				
34	33.22 100 33.98 100 34.59			soft, black, metallic mineral 34.0 Chilled Porphyry																			
				Quartz - Feldspar Gneiss - light to dark grey, gneissic	STR Supergene and clay LI along FRC	0			2					3	20	445	34.0 - 37.0 3.0m	0.160	0.0051				
36	100 35.97 100			texture, layers of QZ - Feld gneiss, alternating w̄ QZ - Feld - Chlorite gneiss and coarse grained white QZ																			
38	37.49 100		MOD FRC	37.4 - less chlorite, QZ - Feld. gneiss dominant rock type										20	16	446	37.0 - 40.0 3.0m	0.010	0.0065				
40	39.01																						

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-5 **Page** 3 of 5

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T Sx	PY	CP	LT	CU	CC	CB	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
40	40.54															T2B447	40.0 - 43.0 3.0m	<0.005	0.0164				
42	42.21		75° Fol	41.10 Chlorite content increases - light greenish grey colored rock	Some																		
44	43.74		30° F	44.5 less chlorite - light BRN color	Some											448	43.0 - 46.0 3.0m	<0.005	0.0079				
46	45.41																						
	46.94															449	46.0 - 48.5 2.5m	<0.005	0.0070				
48	48.46			48.2	rock coated by red oxide																		
																450	48.5 - 51.0 2.5m	0.110	0.0085				
50	50.14																						
52	51.51		STR FRC	51.05 / 51.25 20cm crackle breccia zone in gneiss, clay matrix, angular clasts	Same	Tr			0.5						Br	451	51.0 - 53.0 2.0m	0.100	0.0034				
	52.12		30° CNT	51.90 / 52.12 20 cm crackle breccia zone w̄ QZ FRC filling and SX in QZ	Some w̄ QZ flooding and QZ Alt	0			3					10	40								
						1			0.5						Br								
			STR FRC	52.7 crackle breccia 52.12 - 52.7		0.2	0.1		Tr					15	40								
54	53.64		30° QV	53.4 - 2 cm wide QV w̄ SX in a 4cm OR.												452	53.0 - 55.0 2.0m	0.140	0.0032				
			30° BR	53.9 / 54.1 20 cm breccia zone, 1-20 cm subrounded clasts, STR QZ flooding. QZ matrix																			
56	55.17		70° Fol	- pale greenish white QZ-Feld gneiss. - STR bleached appearance, well foliated, QZ rich												453	55.0 - 57.0 2.0m	0.010	0.0031				
	56.69																						
58	58.22		35° QV	57.3 QZ vein - 3 cm true thickness 10% PY, 30% QZ, 49% SX, 10% vugs 1% GRN oxide												454	57.0 - 59.0 2.0m	0.515	0.0933				
				58.75 Crackle breccia QZ veinlets																			
60	59.74			59.0 QZ flooding												455	59.0 - 61.5 2.5m	0.020	0.0089				
				Breccia Zone	QS and QZ flooding	0.1	Tr		1						Sc								

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-5 **Page** 4 **of** 5

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T Sx	PY	CP	LI	CV	CC	CA	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
60	100			0.1-10.0 cm clasts of wall rock, subrounded, matrix is Qz + clay. Qz veinlets w̄ minor Sx																			
62	61.26 100 62.79		30° CNT 30° CNT	61.25 61.95 62.15 Crackle breccia zone, clay + Qz matrix Quartz - Feldspar Gneiss	STR Supergene and clay - rock has a bleached appearance - LI occurs along FRC.	0			1					20	24	T28456	61.5-63.5 2.0m	0.010	0.0148				
64	100 64.16 100 64.92		50° Fol MOD FRC	- Lt. BRN. to pale green, foliated Qz - Feld. rich, bleached appearance - FRC contain Qz. LI. 10% vugs and 30% of FRC contain BRN or pale green clay												457	63.5-66.0 2.5m	0.010	0.0134				
66	100 65.84 100		45° F 30° BR	66.60 66.90 Breccia zone - 0.1-3.0 cm clasts of wall rock in BRN clay matrix												458	66.0-68.0 2.0m	0.030	0.0103				
68	67.36 100 68.88		25° QV	67.16 67.35 Qz vein - 10 cm true thickness grey Qz w̄ 1mm vugs, 0.1% Sx												459	68.0-70.5 2.5m	<0.005	0.0107				
70	69.19 100 70.41 100			70.90												460	70.5-72.5 2.0m	0.030	0.0707				
72	71.02 100 72.54		40° FRC	- Crackle breccia zone, 0.1-5.0 cm angular frag. of wall rock in clay matrix, 0.1-3mm wide veins of fine grained sulphides 72.00	STR Supergene and clay - LI along FRC and covering rock	0.2 0			5 4					24	Br 22	461	72.5-75.0 2.5m	0.070	0.0204				
74	100 73.91 100			74.5 - darker grey in color	Same	0			2					20	18								
76	75.44 100 76.51 76.96		MOD FRC	- higher chlorite content, less intense bleached look 76.0 Qz content of rock increases 76.5 Quartzite - fine grained, light	- Mod supergene and clay Same	1	1		1					15	18	462	75.0-77.5 2.5m	0.005	0.0085				
78	77.27 100 78.74		30° CNT 30° Fol	grey Siliceous material 77.4 Quartz - Feldspar Gneiss - dark grey, finely foliated, chlorite rich. Feld fresh	weak supergene and clay	1.5	1.5		1					20	18	463	77.5-80.0 2.5m	0.050	0.0105				
80	100			- PY forms along FRC - FRC from 1-3 mm wide, 25% green clay																			

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED PROJECT PROPERTY NUCLEUS HOLE NO. DN89-5 Page 5 of 5

Elevation	Drill contractor	Logged by	Total depth
Coordinates	Hole started	completed	Core size
Dip	Target		
Azimuth			

Depth	% Recov	Visual Log	Struct		Lithology	Alteration	Sulphide & Alteration Mineralogy										Sample Number	Assay Interval	Assay Results					
							T Sx	PY	CP	LJ	CU	CC	CB	CS	Q F	F			Au (g/t)	Cu %				
80	80.16 – 100				Same	Same											T28464	80.0 - 81.69 1.69m	0.020	0.0192				
	81.69				81.69																			

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** NUCLEUS **PROPERTY** NUCLEUS **HOLE NO.** DN89-6 **Page** 1 **of** 4

Elevation 888m **Drill contractor** CARON **Logged by** J.C. Becker **Total depth** 64.92m

Coordinates 0+80W 3+80S **Hole started** Sept 18, 1989 **completed** Sept 21, 1989 **Core size** HQ

Dip -60° **Target** Gold Mineralization Below T86N-4

Azimuth 090

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T SX	PY	CP	I	CU	CC	CO	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
0																							
2				Overburden, casing - no recovery																			
4				4.88																			
6	5.49 100 5.94 90 6.40 95		60° Fol	Quartz - Feldspar - Chlorite Gneiss - reddish grey, medium grained, well foliated. - rock contains foliation layers	STR Supergene - possibly overprinting propylitic or clay alteration - red oxide covers rock	0			5					8	?	T28465	4.88 - 7.0 2.12m	0.130	0.0273				
8	7.31 60 8.23 100 8.53 90 8.99 90		40° Fol	defined by alignment of mica grains, chlorite, and layers of Qz, feldspar.												466	7.0 - 10.0 3.0m	0.035	0.0260				
10	9.45 100 9.91 100			9.90 - chlorite content decreases, except in some layers,	Some - except less to nil red oxide	0			7					8	?	467	10.0 - 13.0 3.0m	0.200	0.0318				
12	11.12 100 11.89 100			- only a trace of mica																			
14	13.1 100 14.48 100			13.4 - rock decomposed to BRN clay with rock chips of Qz grains	INT Supergene - rock → BRN clay - minor KA - local zones w̄ red oxide											468	13.0 - 16.0 3.0m	0.070	0.0145				
16	15.54 100 16.92			16.55 Quartzite	STR Supergene	0			3					?	?	469	16.0 - 19.0 3.0m	0.065	0.0072				
18	60 17.98 95 18.29 95 18.59			- grey, fine grained siliceous material - poor recovery, rounded rx Frag + mixing w̄ other rock types 18.80 Quartz - Feldspar Gneiss																			
20	65		60° Fol	- Brown - grey in color, fine grained, well foliated		0			7					5	10	470	19.0 - 22.0 3.0m	0.020	0.0130				

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-6 **Page** 2 **of** 4

Elevation	**Drill contractor**	**Logged by**	**Total depth**
Coordinates	**Hole started**	**completed**	**Core size**
Dip	**Target**		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: TSX	PY	CP	LI	CV	CC	CB	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
20	20.12 75 20.73			- unit dominated by clay minerals																			
22	100 21.64 100			22.0 - unit contains fine grained mica plates, muscovite?	Alteration not as strong - Feld → KA	0			3					2	10	T28471	22.0 - 25.0 3.0m	0.020	0.0078				
24	23.16 100 24.69		60° rel	- rock has a pinkish color	- red oxide covering rock - black oxide along FRC																		
26	100 26.21 100															472	25.0 - 28.0 3.0m	<0.005	0.0051				
28	27.13 100 28.65			28.7 28.9 Quartzite - f. gr., lt. grey												473	28.0 - 31.0 3.0m	<0.005	0.0047				
30	100 29.56 100 30.63			- mica not present - high clay content BRN 30.63 31.0 Quartzite	Stronger supergene All. - black oxide along FRC	0 0			7 3														
32	100 31.70 100 32.92		60° F	Same as 28.9 - 30.63 32.40 - pinkish BRN color, well foliated	Same STR supergene overprints	0 0	Tr		7 3					8	12	474	31.0 - 34.0 3.0m	0.030	0.0125				
34	100 34.44		5° F	QZ - Feld. Gneiss 34.0 1.0mm FRC, filled w PY 34.5 2.0cm Breccia, BRN clay matrix w <1.0mm clasts	other alteration types Feld → KA	0			3					14	12	475	34.0 - 37.0 3.0m	0.025	0.0167				
36	100 35.66 100		20° F 10° F 60° CNT	36.0 QZ veinlets, <2.0mm, chalcedony 36.40 crackle breccia zone, 3-30mm 36.80 angular clasts, f. gr. matrix	Same	0			5						Br								
38	37.18 37.44 100 38.40		5° CNT	38.40 crackle breccia zone, vugy 38.60 LI coated matrix		0			3					6	10	476	37.0 - 39.0 2.0m	<0.005	0.0156				
40	100 39.93			QZ - Feld. Gneiss - reddish BRN in color	Same - red oxide coats rock, LI along FRC											477	39.0 - 42.0 3.0m	0.210	0.0232				

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED **PROJECT** **PROPERTY** NUCLEUS **HOLE NO.** DN89-6 **Page** 3 **of** 4

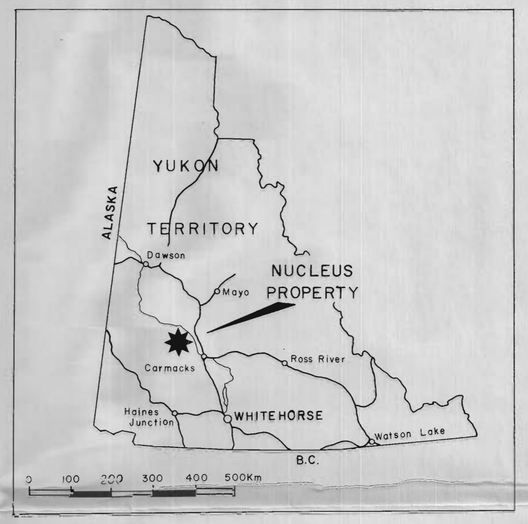
Elevation	Drill contractor	Logged by	Total depth
Coordinates	Hole started	completed	Core size
Dip	Target		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T Sx	PY	CP	LI	CV	CC	CO	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
40	70			- fine grained, well foliated, gneissic texture																			
	40.84																						
	90			- narrow zones of stronger supergene alteration to BRN clay																			
42	42.37		85° Fol	- FRC light w̄ minor LI and some vugy Qz, 3% vugs												T28478	42.0 - 45.0 3.0m	0.020	0.0241				
	20																						
	42.98			43.0																			
	90			- 43.1 Crackle Breccia Zone																			
44	43.89																						
	70																						
	44.81																						
	30															479	45.0 - 48.0 3.0m	<0.005	0.0092				
46	46.00																						
	40																						
	46.79																						
	47.24																						
	100																						
48	48.16															480	48.0 - 50.0 2.0m	<0.005	0.0053				
	100																						
	49.07				Red oxide ends of CNT																		
	100																						
	49.84			49.8 QZ-FX-CH Gneiss																			
50	100				Mod Sup and clay	0			1					6	10	481	50.0 - 52.0 2.0m	<0.005	0.0043				
	50.29		30° F	50.35 QZ-FX Gneiss - pale grey to white	Some	0	Tr		1					10	12								
	100																						
	51.05																						
	51.36		20° F	- fine - medium grained, QZ rich, QZ veinlets w̄ PY	- wk. LI along FRC																		
52	100		Fol	51.9																			
	52.12		85°	QZ-FX-CH Gneiss - dark grey to black, med. grained well foliated, CH rich, w̄ QZ + FX	Wk Sup. and clay	0	Tr		0.5							482	52.0 - 54.5 2.5m	0.005	0.0053				
	100				- calcite and green clay along FRC																		
	53.34			- FRC contain minor coarse grained PY w̄ QZ, CA and MM.																			
54	100																						
	54.10			54.40																			
	100			QZ-FX Gneiss see above	Same	0.3	0.3		2					20	18	483	54.5 - 55.5 1.0m	0.055	0.0112				
	55.17		60° QV	- 55.40 QZ vein 2.0 cm wide, dark grey, QZ(SX) with 5% PY and 20% wall rock fragments	- dry FRC have STR LI and minor clay																		
56	100		60° F	- numerous small QZ FRC w̄ PY, FRC discontinuous and wk.												484	55.5 - 57.0 1.5m	<0.005	0.0148				
	56.69			56.95																			
	100																						
	57.30			QZ-FX-CH Gneiss.	Same	0	Tr		1					14	12	485	57.0 - 59.0 2.0m	<0.005	0.0077				
58	100		30° F	- greenish dark grey, fine - med grained, well foliated	- calcite and green clay along FRC																		
	58.37			- narrow FRC, <1.0mm wide, filled w̄ QZ and PY	- calcite 1mm thick																		
			5° F													486	59.0 - 61.0 2.0m	0.030	0.0047				
60	59.59			59.60 QZ-FX Gneiss	Same	0			Tr					12	12								

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED PROJECT PROPERTY NUCLEUS HOLE NO. DN89-6 Page 4 of 4

Elevation	Drill contractor	Logged by	Total depth
Coordinates	Hole started	completed	Core size
Dip	Target		
Azimuth			

Depth	% Recov	Visual Log	Struct	Lithology	Alteration	Sulphide & Alteration Mineralogy: T SX	PY	CP	LI	CV	CC	CB	CS	Q F	F	Sample Number	Assay Interval	Assay Results: Au (g/t)	Cu %				
60	60.05		Fol 80°	60.05 QZ-FX-CH Gneiss -dark grey to black, well foliated 60.90 gneissic texture	-Some -CA along FRC	Q			Tr					10	9								
62	100 62.74		50° F	62.90 QZ-FX Gneiss -light greenish-grey, fine-med. gr. well foliated, gneissic texture -minor PY along FRC, assoc. w/ LI	Same -V. minor CA and clay along FRC	0.1	0.1		Tr					10	11	T28487	61.0-63.0 2.0m	<0.005	0.0021				
64	100 65.08			65.08												488	63.0-65.08 2.08m	<0.005	0.0067				



RECENT

- 7 — Glaciofluvial Deposit

CRETACEOUS

- 6 — Quartz Feldspar Porphyry, grades to quartz porphry (6a), feldspar porhyry (6b), and feldspar-biotite-hornblende porphyry (6c)
- 5 — Microgranite
- 4 — Casino Granodiorite
- 3 — Coffee Creek Granite

JURASSIC

- 2 — Big Creek Syenite

PALEOZOIC OR OLDER

- 1 — Basement Metamorphic Assemblage

- Approximate Geological Contact
- Fault
- Phyllitic and/or Argillitic Alteration Zone
- Placer Workings
- Property Boundary
- ⊕ Cu — Mineral Occurrence (n.a. Metal if Float)

FIGURE 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

Dec 13/89
T.C. Becker

PROPERTY GEOLOGY

NUCLEUS PROPERTY

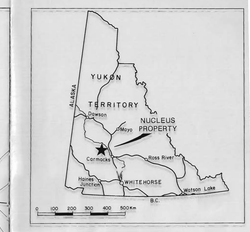
BIG CREEK RESOURCES LTD. / CHEVRON MINERALS LTD.

SCALE 1:20,000

0 500 1000 1500 Metres

0 1/4 1/2 1 Mile

To accompany report dated DEC/89



INTENT

Overburden

CRETACEOUS

Dacite Feldspar Porphyry

Monzogranite

Monzonite

PALEOZOIC OR OLDER

Basement Metamorphic Assemblage

Grewacke, Schist, Quartzite

Amphibolite

Breccia

Crackle Breccia

Fault Gouge

Fault With Dip (Known and Inferred)

Geological Contact With Dip (Known and Inferred)

Bulldozer Trench

Silicification - % Quartz Veinlets
For - Moderate (5-7%)
Moderate - Strong (7-9%)

Property Boundary

Inclined Diamond Drill Hole

Vertical Diamond Drill Hole

Inclined Percussion Drill Hole

Vertical Percussion Drill Hole

Road

FIGURE 4

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

DETAILED GEOLOGY

ANOMALY 1 AND 2 ZONES

NUCLEUS PROPERTY

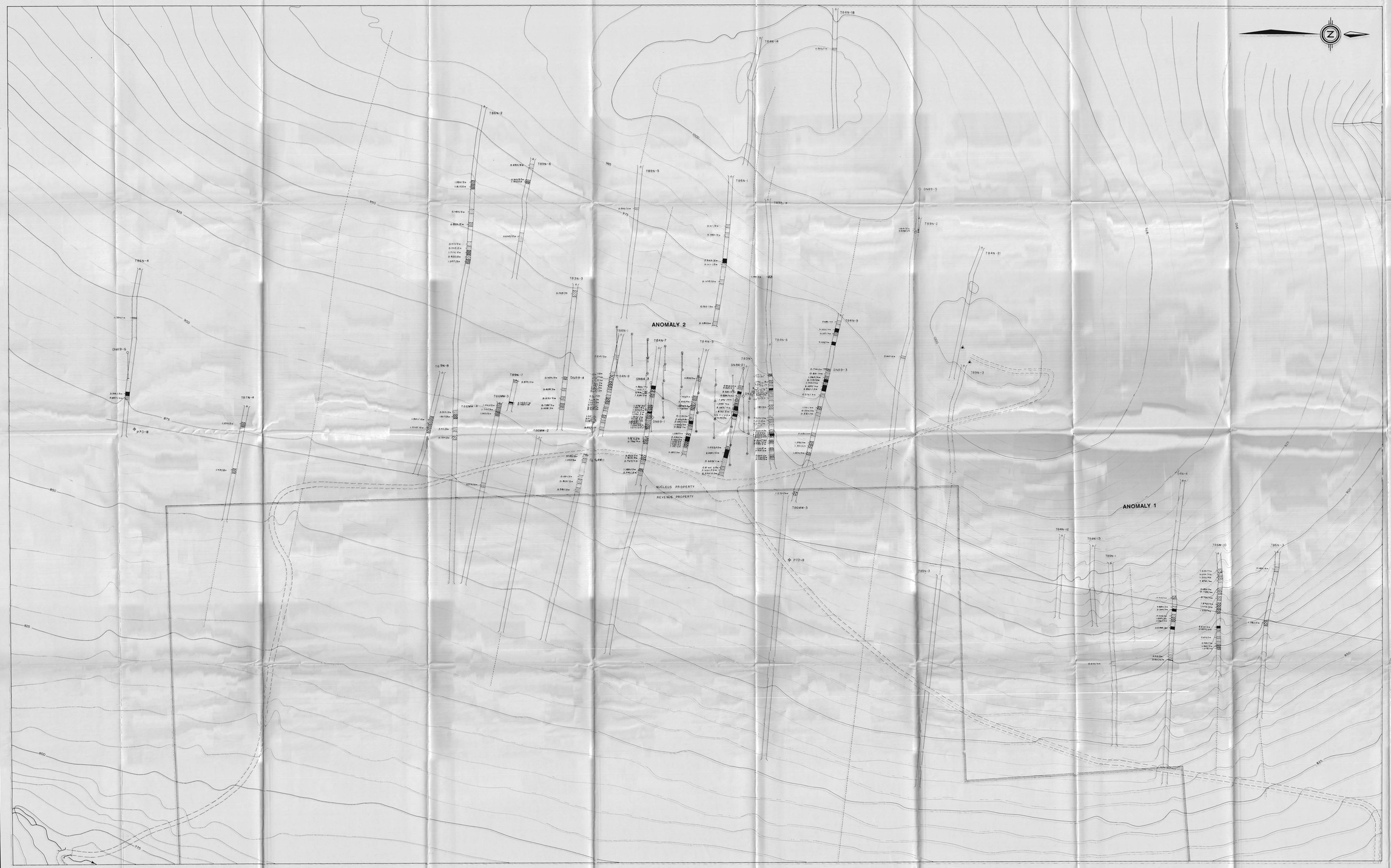
BIG CREEK RESOURCES LTD. / CHEVRON MINERALS LTD.

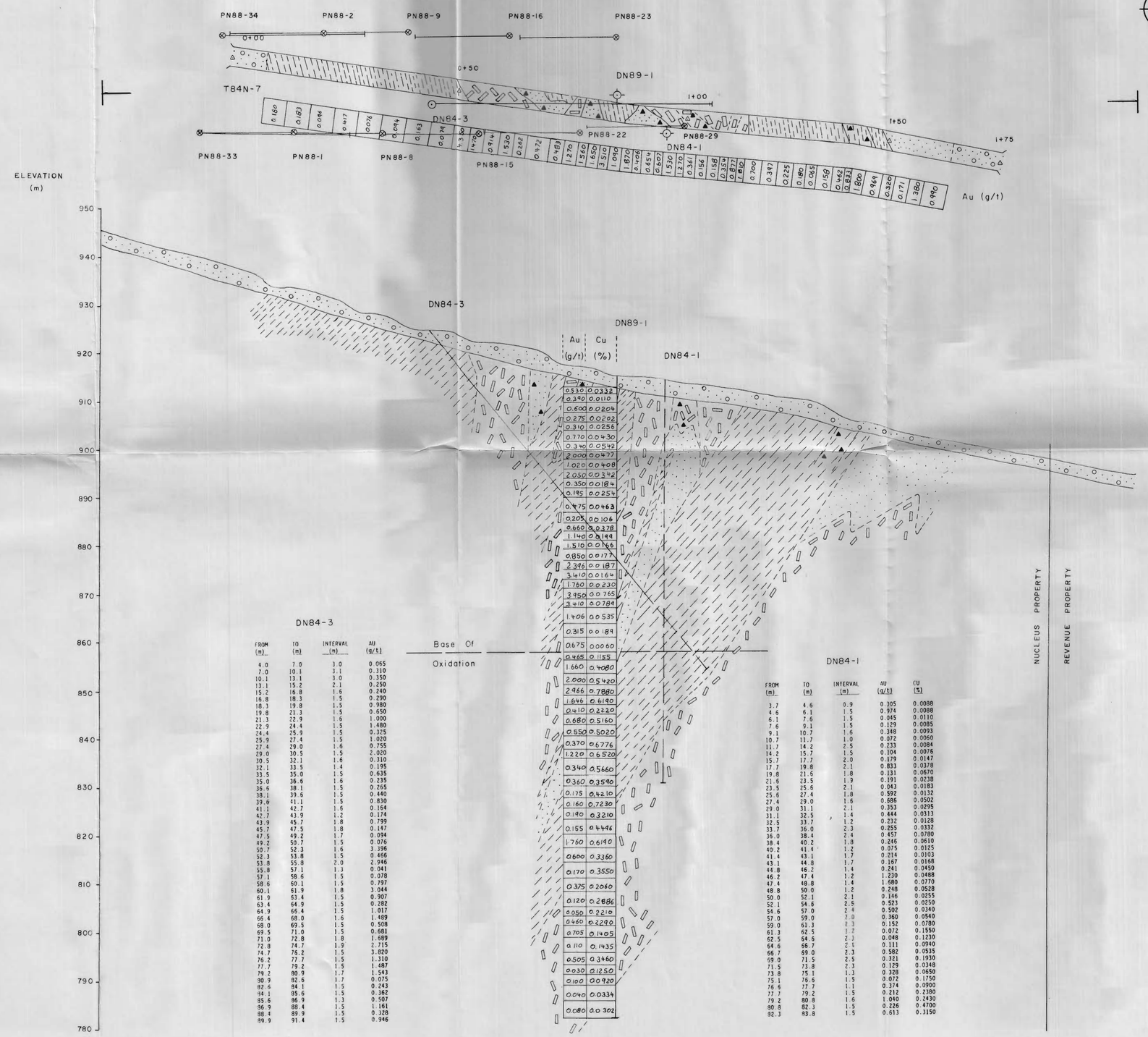
SCALE 1:1000

0 10 20 30 40 50 100 Metres

0 50 100 200 300 Feet

To accompany report dated DEC/89


ANOMALY 2
ANOMALY 1
NUCLEUS PROPERTY
REVENUE PROPERTY
T86N-2
T89N-6
T89N-5
T86N-1
T84N-18
T84N-16
T86N-4
T89N-3
T84N-21
T84N-9
T84N-6
T84N-7
T84N-5
T89N-8
T89N-7
T86MW-3
T86MW-2
T86MW-5
T87N-4
T85N-3
T84N-12
T84N-13
T89N-1
T86N-10
T86N-3
T84N-4
P70-8
P70-9
DN89-5
DN89-4
DN89-3
DN84-2
DN84-1
DN86-1
875
850
825
800
775
750
725
700
675
650
625
600
575
550
525
500
475
450
425
400
375
350
325
300
275
250
225
200
175
150
125
100
75
50
25
0
Z
YUKON
TERRITORY
ALASKA
Dawson
Mayo
NUCLEUS PROPERTY
Carmacks
Ross River
Haines Junction
WHITEHORSE
BRITISH COLUMBIA
B.C.
0 100 200 300 400 500Km
≥0.4g/t <0.7g/t Au
≥0.7g/t <1.0g/t Au
≥1.0g/t <2.0g/t Au
≥2.0g/t Au
Bulldozer Trench
Grams per Tonne Gold/Metres
Property Boundary
Inclined Diamond Drill Hole
Vertical Diamond Drill Hole
Inclined Percussion Drill Hole
Vertical Percussion Drill Hole
Road
FIGURE 5
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
TRENCH ASSAY
ANOMALY 1 AND 2 ZONES
NUCLEUS PROPERTY
BIG CREEK RESOURCES LTD. / CHEVRON MINERALS LTD.
SCALE 1:1000
0 10 20 30 40 50 100 Metres
0 50 100 200 300 Feet
To accompany report dated DEC/89



SECTION LINE

Overburden
Feldspar Porphyry
Microgranite
Monzonite
Yukon Metamorphic Complex
Breccia
Crackle Breccia
Fault Gouge
Quartz Vein
Fault With Dip
Geological Contact With Dip (Known and Inferred)
Survey Station
Bulldozer Trench
Inclined Diamond Drill Hole
Vertical Diamond Drill Hole
Inclined Percussion Drill Hole
Vertical Percussion Drill Hole

DN84-3

FROM (m)	TO (m)	INTERVAL (m)	AU (g/t)
4.0	7.0	3.0	0.065
7.0	10.1	3.1	0.310
10.1	13.1	3.0	0.350
13.1	15.2	2.1	0.250
15.2	16.8	1.6	0.240
16.8	18.3	1.5	0.290
18.3	19.8	1.5	0.980
19.8	21.3	1.5	0.650
21.3	22.9	1.6	1.000
22.9	24.4	1.5	1.480
24.4	25.9	1.5	0.325
25.9	27.4	1.5	1.020
27.4	29.0	1.6	0.755
29.0	30.5	1.5	2.020
30.5	32.1	1.6	0.310
32.1	33.5	1.4	0.195
33.5	35.0	1.5	0.635
35.0	36.6	1.6	0.235
36.6	38.1	1.5	0.265
38.1	39.6	1.5	0.440
39.6	41.1	1.5	0.830
41.1	42.7	1.6	0.164
42.7	43.9	1.2	0.174
43.9	45.7	1.8	0.799
45.7	47.5	1.8	0.147
47.5	49.2	1.7	0.094
49.2	50.7	1.5	0.076
50.7	52.3	1.6	3.196
52.3	53.8	1.5	0.466
53.8	55.8	2.0	2.946
55.8	57.1	1.3	0.041
57.1	58.6	1.5	0.078
58.6	60.1	1.5	0.797
60.1	61.9	1.8	3.044
61.9	63.4	1.5	0.907
63.4	64.9	1.5	0.282
64.9	66.4	1.5	1.017
66.4	68.0	1.6	1.489
68.0	69.5	1.5	0.508
69.5	71.0	1.5	0.681
71.0	72.8	1.8	1.689
72.8	74.7	1.9	2.715
74.7	76.2	1.5	3.820
76.2	77.7	1.5	1.310
77.7	79.2	1.5	1.487
79.2	80.9	1.7	1.543
80.9	82.6	1.7	0.075
82.6	84.1	1.5	0.243
84.1	85.6	1.5	0.362
85.6	86.9	1.3	0.507
86.9	88.4	1.5	1.161
88.4	89.9	1.5	0.328
89.9	91.4	1.5	0.946

DN84-1

FROM (m)	TO (m)	INTERVAL (m)	AU (g/t)	CU (%)
3.7	4.6	0.9	0.305	0.0088
4.6	6.1	1.5	0.974	0.0088
6.1	7.6	1.5	0.045	0.0110
7.6	9.1	1.5	0.129	0.0085
9.1	10.7	1.6	0.348	0.0093
10.7	11.7	1.0	0.072	0.0060
11.7	14.2	2.5	0.233	0.0084
14.2	15.7	1.5	0.104	0.0076
15.7	17.7	2.0	0.179	0.0147
17.7	19.8	2.1	0.833	0.0378
19.8	21.6	1.8	0.131	0.0670
21.6	23.5	1.9	0.191	0.0238
23.5	25.6	2.1	0.043	0.0183
25.6	27.4	1.8	0.592	0.0132
27.4	29.0	1.6	0.686	0.0502
29.0	31.1	2.1	0.353	0.0295
31.1	32.5	1.4	0.444	0.0313
32.5	33.7	1.2	0.232	0.0128
33.7	36.0	2.3	0.255	0.0332
36.0	38.4	2.4	0.457	0.0780
38.4	40.2	1.8	0.246	0.0610
40.2	41.4	1.2	0.075	0.0125
41.4	43.1	1.7	0.214	0.0103
43.1	44.8	1.7	0.167	0.0168
44.8	46.2	1.4	0.241	0.0450
46.2	47.4	1.2	1.230	0.0488
47.4	48.8	1.4	1.680	0.0770
48.8	50.0	1.2	0.248	0.0528
50.0	52.1	2.1	0.146	0.0255
52.1	54.6	2.5	0.523	0.0250
54.6	57.0	2.4	0.502	0.0340
57.0	59.0	2.0	0.360	0.0540
59.0	61.3	2.3	0.152	0.0780
61.3	62.5	1.2	0.072	0.1550
62.5	64.6	2.1	0.048	0.1230
64.6	66.7	2.1	0.111	0.0940
66.7	69.0	2.3	0.582	0.0535
69.0	71.5	2.5	0.321	0.1930
71.5	73.8	2.3	0.129	0.0348
73.8	75.1	1.3	0.328	0.0650
75.1	76.6	1.5	0.072	0.1750
76.6	77.7	1.1	0.374	0.0900
77.7	79.2	1.5	0.212	0.2380
79.2	80.8	1.6	1.040	0.2430
80.8	82.3	1.5	0.226	0.4700
82.3	83.8	1.5	0.613	0.3150

Dec 13/89
T.C. Beck

FIGURE 6

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

SECTION DN89-1

NUCLEUS PROPERTY

BIG CREEK RESOURCES LTD.
CHEVRON MINERALS LTD.

SCALE 1:500

0 5 10 20 30 40 50 Metres

0 10 50 100 150 Feet

To accompany report dated DEC/89

Overburden

Feldspar Porphyry

Microgranite

Monzonite

Yukon Metamorphic Complex

Breccia

Crackle Breccia

Fault Gouge

Quartz Vein

Fault With Dip

Geological Contact With Dip (Known and Inferred)

Survey Station

Bulldozer Trench

Inclined Diamond Drill Hole

Vertical Diamond Drill Hole

Inclined Percussion Drill Hole

Vertical Percussion Drill Hole

Dec 13/89

T.G. Becker

FIGURE 7

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

SECTION DN89-2

NUCLEUS PROPERTY

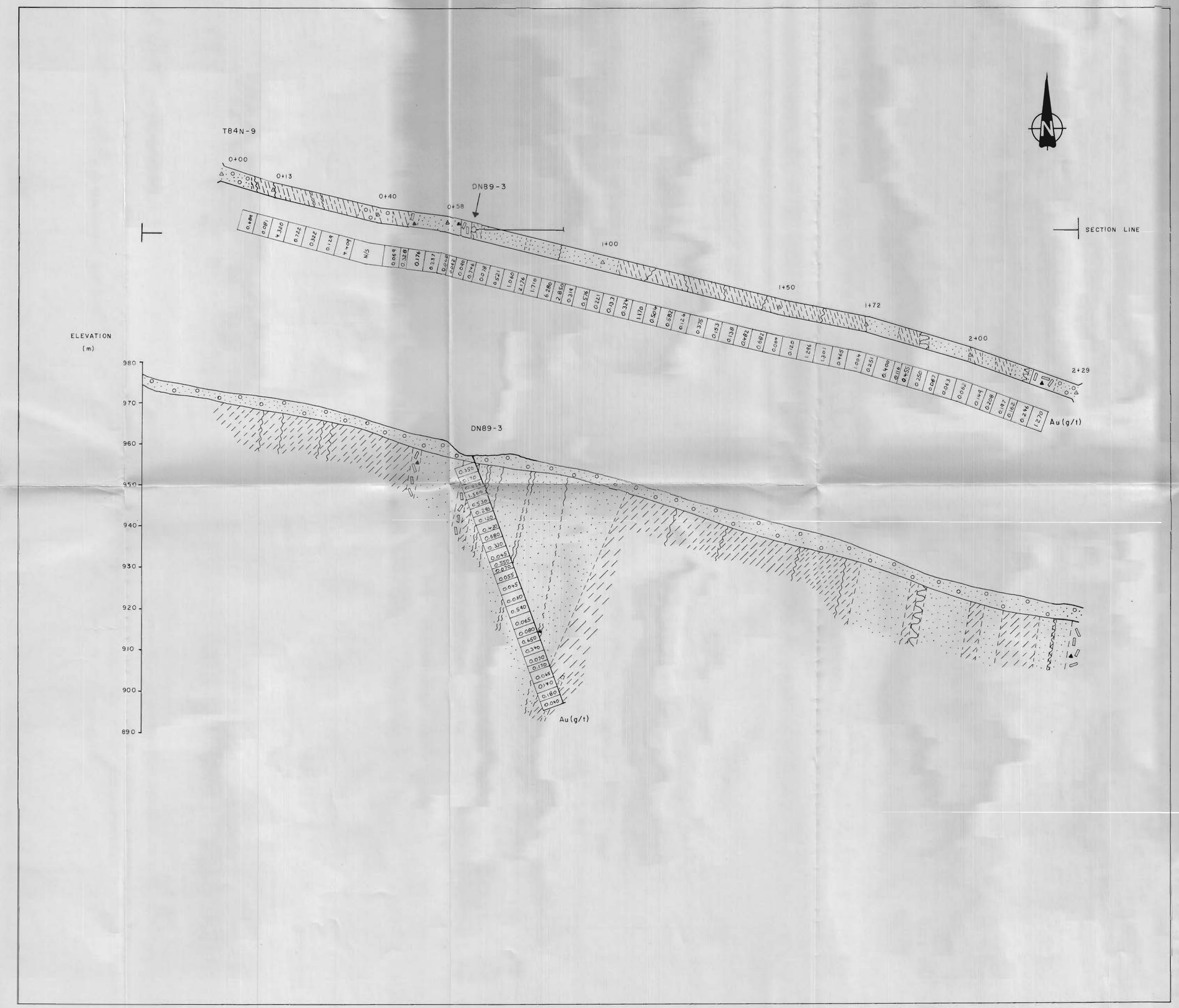
BIG CREEK RESOURCES LTD.
CHEVRON MINERALS LTD.

SCALE 1:500

0 5 10 20 30 40 50 Metres

0 10 50 100 150 Feet

To accompany report dated DEC/89



Overburden

Feldspar Porphyry

Microgranite

Monzonite

Yukon Metamorphic Complex

Breccia

Crackle Breccia

Fault Gouge

Quartz Vein

Fault With Dip

Geological Contact With Dip (Known and Inferred)

Survey Station

Bulldozer Trench

Inclined Diamond Drill Hole

Vertical Diamond Drill Hole

Inclined Percussion Drill Hole

Vertical Percussion Drill Hole

Dec 13/89

T.C. Beck

FIGURE 8

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

SECTION DN89-3

NUCLEUS PROPERTY

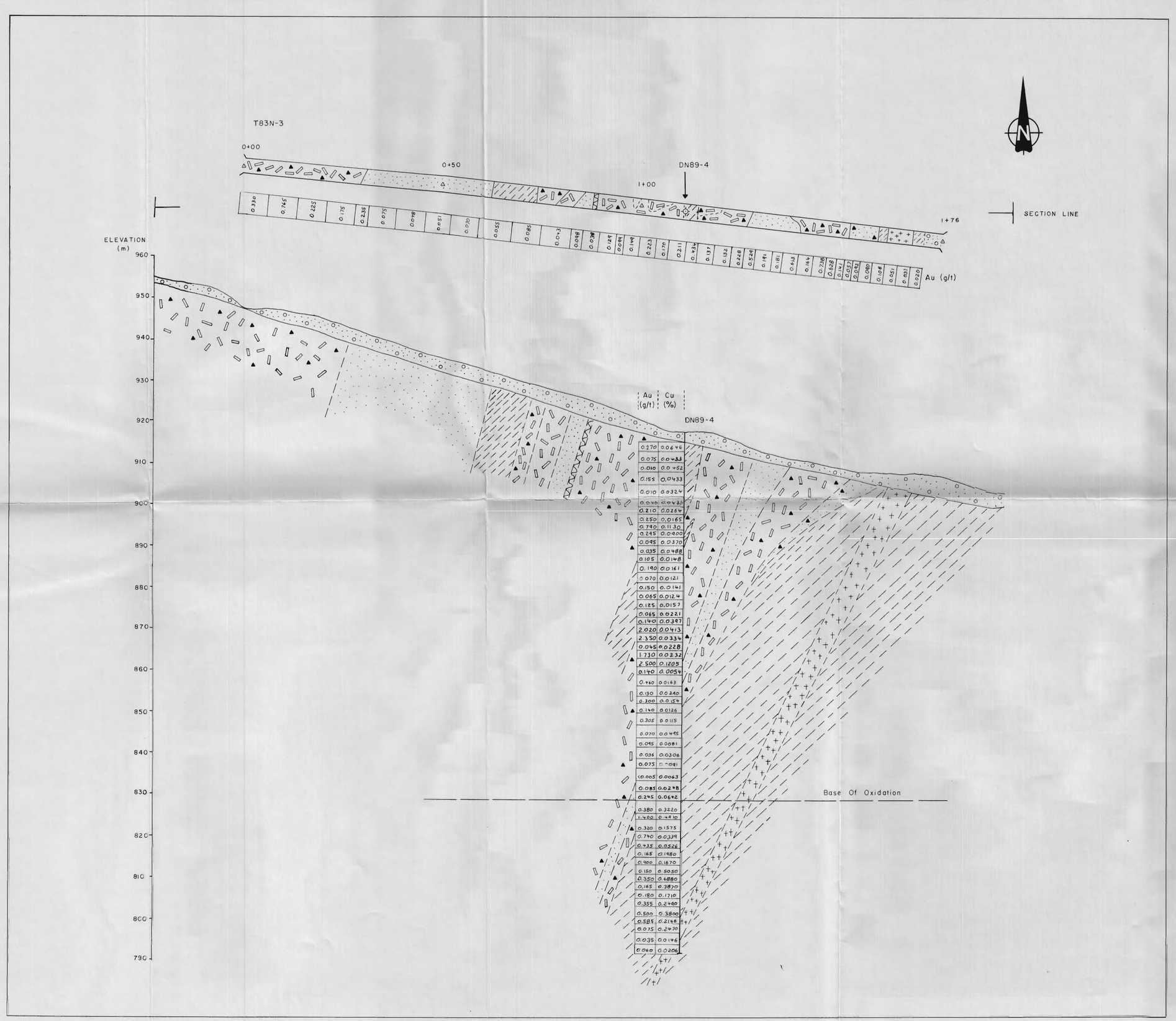
BIG CREEK RESOURCES LTD.
CHEVRON MINERALS LTD.

SCALE 1:500

0 5 10 20 30 40 50 Metres

0 10 50 100 150 Feet

To accompany report dated DEC/89



Overburden

Feldspar Porphyry

Microgranite

Monzonite

Yukon Metamorphic Complex

Breccia

Crackle Breccia

Fault Gouge

Quartz Vein

Fault With Dip

Geological Contact With Dip (Known and Inferred)

Survey Station

Bulldozer Trench

Inclined Diamond Drill Hole

Vertical Diamond Drill Hole

Inclined Percussion Drill Hole

Vertical Percussion Drill Hole

FIGURE 9

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

SECTION DN89-4

NUCLEUS PROPERTY

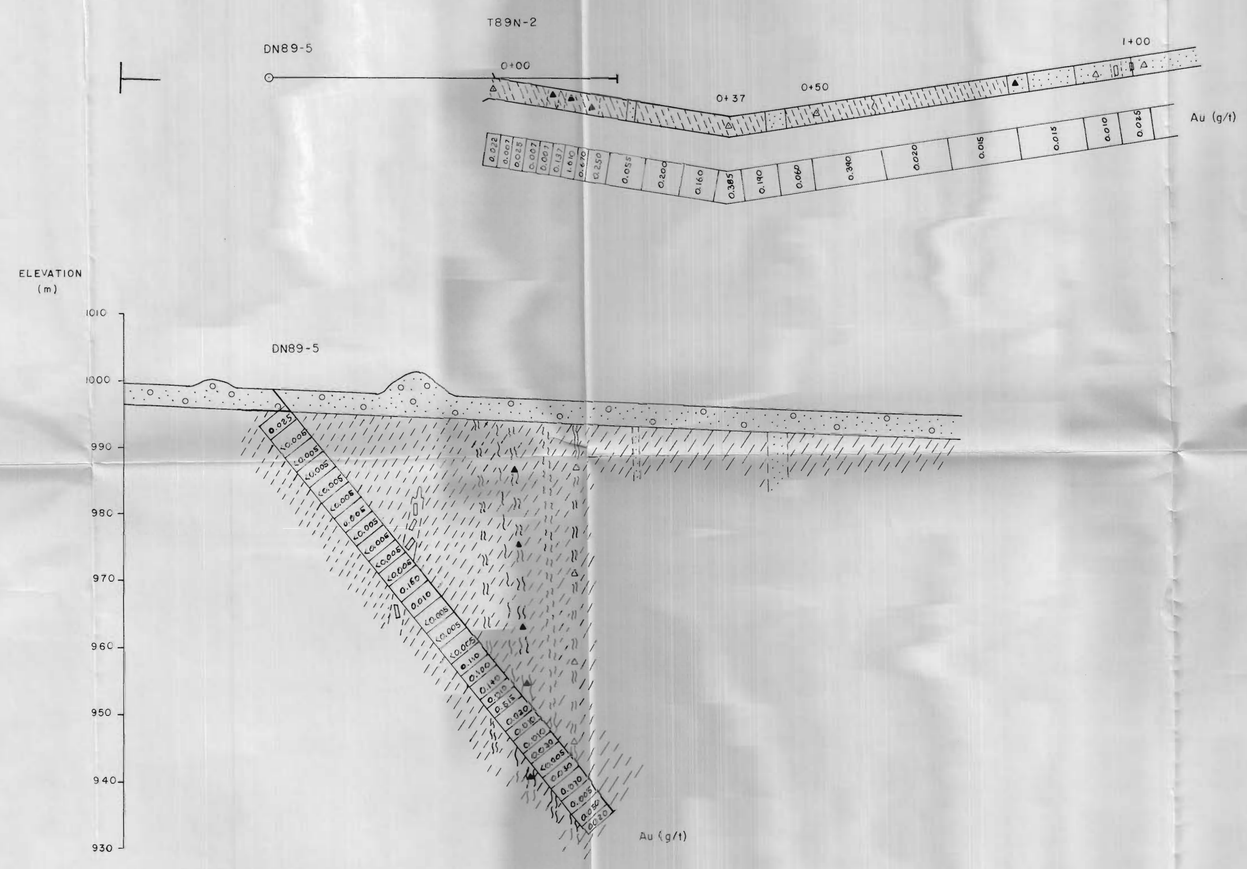
BIG CREEK RESOURCES LTD.
CHEVRON MINERALS LTD.

SCALE 1:500

0 5 10 20 30 40 50 Metres

0 10 50 100 150 Feet

To accompany report dated DEC/89



Overburden

Feldspar Porphyry

Microgranite

Monzonite

Yukon Metamorphic Complex

Breccia

Crackle Breccia

Fault Gouge

Quartz Vein

Fault With Dip

Geological Contact With Dip (Known and Inferred)

Survey Station

Bulldozer Trench

Inclined Diamond Drill Hole

Vertical Diamond Drill Hole

Inclined Percussion Drill Hole

Vertical Percussion Drill Hole

Dec 15/89
T.C. Dicks

FIGURE 10

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

SECTION DN89-5

NUCLEUS PROPERTY

BIG CREEK RESOURCES LTD.
CHEVRON MINERALS LTD.

SCALE 1:500

0 5 10 20 30 40 50 Metres

0 10 50 100 150 Feet

To accompany report dated DEC/89

Overburden

Feldspar Porphyry

Microgranite

Monzonite

Yukon Metamorphic Complex

Breccia

Crackle Breccia

Fault Gouge

Quartz Vein

Fault With Dip

Geological Contact With Dip (Known and Inferred)

Survey Station

Bulldozer Trench

Inclined Diamond Drill Hole

Vertical Diamond Drill Hole

Inclined Percussion Drill Hole

Vertical Percussion Drill Hole

FIGURE 11

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

SECTION DN89-6

NUCLEUS PROPERTY

BIG CREEK RESOURCES LTD.
CHEVRON MINERALS LTD.

SCALE 1:500

0 5 10 20 30 40 50 Metres

0 10 50 100 150 Feet

To accompany report dated DEC/89