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NORTHERN DYNASTY EXPLORATIONS LTD.

VIRGINIATOWN PROPERTY
BOUDREAUULT-SPADETTO OPTION

1987-88 SUMMARY REPORT

Written by :

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Larder Lake Mining Division
(Kirkland Lake Office)

Claim Map : McGarry Township / M-369

N.T.S. 32D/4
79°34'W Long., 48°09' N Lat.
U.T.M. 5 334 000 mN, 606 000 mE

March, 1988

DM87-6-C-068

SUMMARY

The Virginiatown Property comprises 16 contiguous claims under option to Northern Dynasty Explorations Ltd. of Vancouver, B.C. from local co-owners B. Boudreault and G. Spadetto. The property is located immediately north of the Kerr Gold Mine of Golden Shield Resources Ltd. at Virginiatown. The property is underlain by Timiskaming metasediments and lesser metavolcanics overprinted by zones of alteration and shearing. Quartz veining and gold values up to 0.26 oz/ton (9.1 g/t) are locally associated with these alteration zones.

This report discusses the 1987-88 field program which included prospecting, geological mapping, geochemical (soil and rock) sampling, and ground magnetic and electromagnetic (EM-16) surveys followed by 6,346 ft. (1,934.3 m) of diamond drilling.

RESULTS : No economically significant zones of gold mineralization were found in the course of the 1987-88 fieldwork and follow-up diamond drilling on the property. It is recommended that no further work be done by Northern Dynasty.



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Please Note:

Similar diamond drilling logs can be found
in the following record series:

D.D. H * VT-87-01 } see Toronto diamond drilling
* VT-87-02 } file # 37 McGarry Tp.

VIRGINIATOWN PROPERTY
BOUDREAUULT-SPADETTO OPTION

1987-88 SUMMARY REPORT

1.0 BACKGROUND INFORMATION

1.1 INTRODUCTION

The Virginiatown Property comprises 16 contiguous claims held under option by Northern Dynasty Explorations Ltd. from local prospectors Bernard Boudreault and Gabrielle Spadetto. The option commenced April 1, 1987 and is due for renewal April 1, 1988. The property was optioned on the basis of its very close proximity to the large Kerr Gold Mine (over ten million ounces past production) of Golden Shield Resources Ltd. and its similar structural setting.

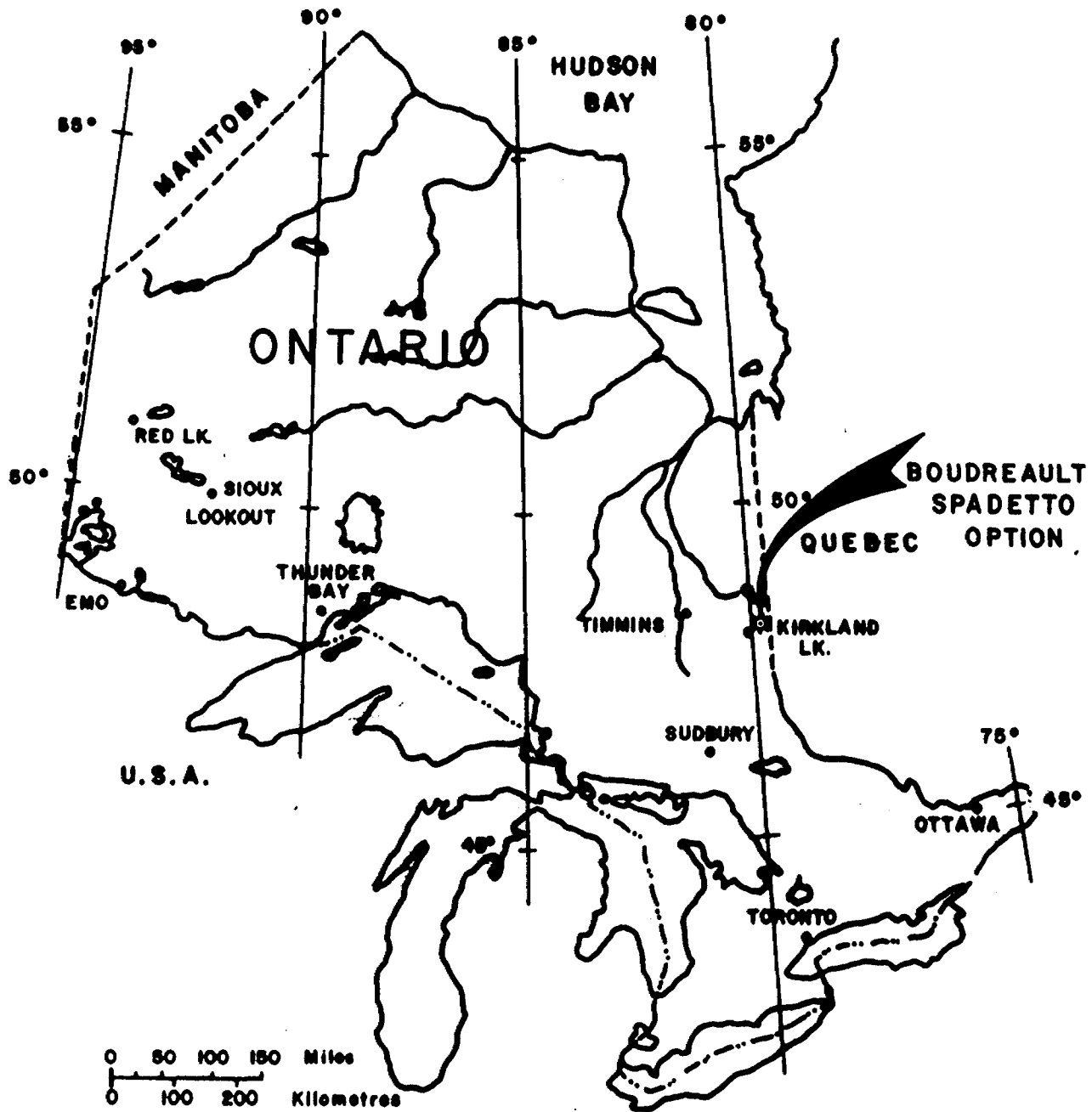
1.2 LOCATION AND ACCESS

The property is located 1.2 miles (2 km) north of Virginiatown, Ontario, and three miles (5 km) west of the Quebec-Ontario provincial border (Figure 1). The center of the property is at 79°34'W Long / 48°09'N Lat. on N.T.S. sheet 32D/4.

All season road access is available to the property via the Cheminis Lumber Road which runs north from North Virginiatown on Highway 66. The Ontario Northlands Railroad passes through the northern part of the property and an electrical powerline corridor cuts the southern part of the property (Figure 2, Plate 1).

1.3 PHYSIOGRAPHY

Much of the area is characterized by bedrock hills and ridges separated by swampy gullies. Other areas are flat and underlain by sandy till and clay.



VIRGINIATOWN PROJECT
NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY LOCATION MAP

1.4 CLAIM STATUS AND TITLES

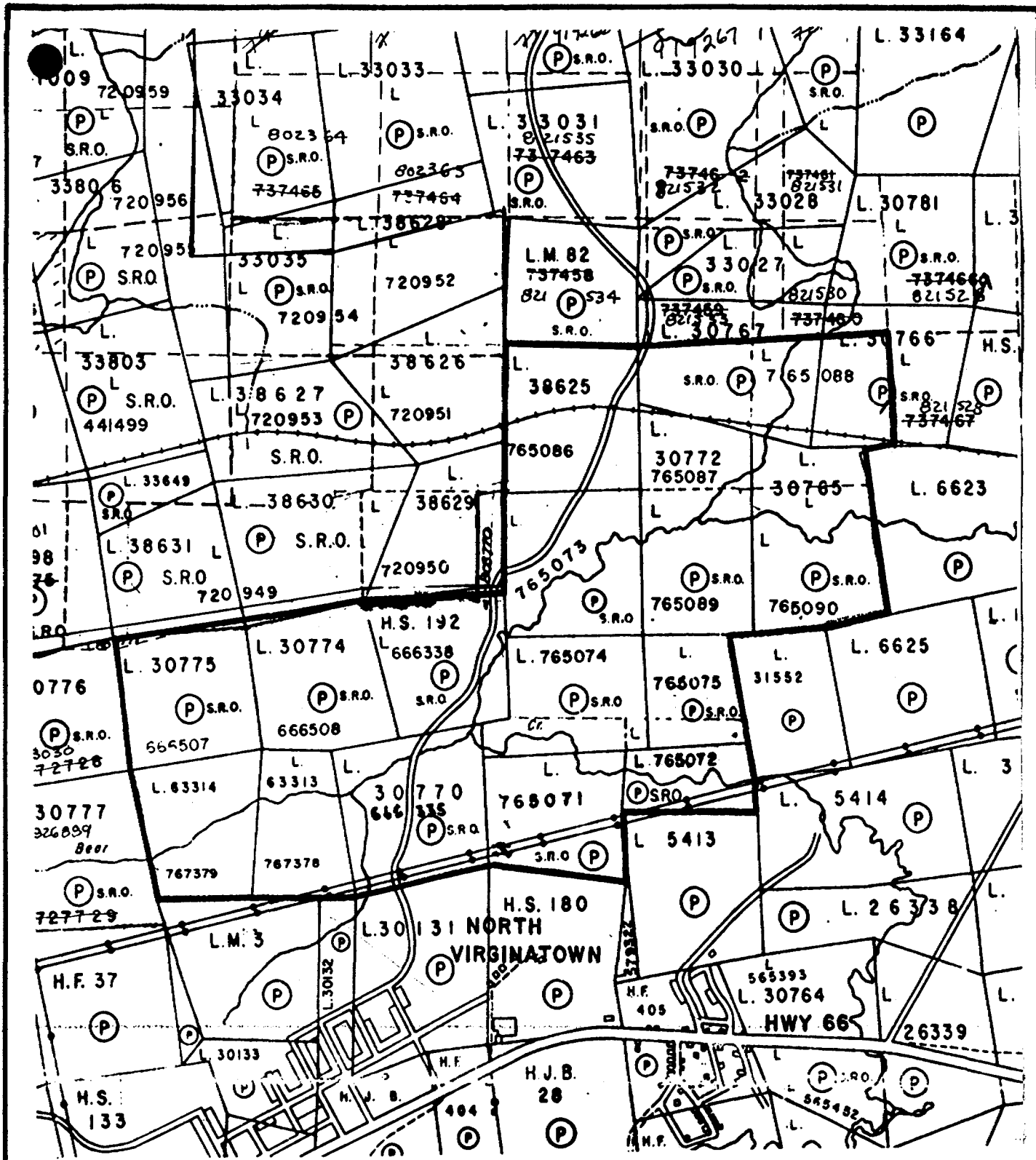
The property is located in the Larder Lake Mining Division of Ontario with recording offices in Kirkland Lake. It comprises 16 contiguous claims (Figure 2) owned equally by Bernard Boudreault of Larder Lake and Gabrielle Spadetto of Swastika. The property is under option to Northern Dynasty Explorations Ltd. of Vancouver, British Columbia (see Appendix 1 for addresses). All claims have been brought to lease pending land surveys (Table 1 and Appendix 2).

1.5 PERSONNEL AND SURVEY DATES

The work recorded in this report was completed in several phases between June 9, 1987 and February 29, 1988. A detailed breakdown of the work periods and personnel involved is in Appendix 3.

1.6 HISTORY

- 1902-25 : Various studies on the geology and mineral deposits of the area were carried out by the Ontario Bureau of Mines and the Geological Survey of Canada (Thomson, 1943).
- 1906 : Dr. Reddick makes original gold discoveries near the present site of the Kerr Gold Mine just south of the Virginiatown Property, which lead to a large staking rush.
- 1936 : First large tonnage of ore found at the Kerr Gold Mine (Thomson, 1943).
- 1938 : The Hay-Thompson Claims which cover much of the present Virginiatown Property, were consolidated. Thomson (1943) reports the discovery of "a few small quartz veins and stringers ... but no gold discovery of economic importance."
- 1938-40 : J.E. Thomson (1943) carried out a comprehensive geological mapping program which also included detailed examination of the mineral deposits in McVittie and McGarry Townships.
- 1930-50 ? : Numerous overgrown pits, trenches, and shallow shafts sunk on quartz veins are present on the Virginiatown Property. There is no known record of this work.



VIRGINIATOWN PROJECT

NORTHERN DYNASTY EXPLORATIONS LTD.

CLAIM MAP

McGARRY TWP. M 369

SCALE 1mile = 4in

FIGURE 2

TABLE 1
VIRGINIATOWN PROPERTY
CLAIM STATUS *

<u>CLAIM NUMBER</u>	<u>NUMBER OF CLAIMS</u>	<u>EXPIRY DATE</u>
L. 666335	1	Lease - Survey by March 11, 1989
L. 666338	1	Lease - Survey by March 11, 1989
L. 666507-666508	2	Lease - Survey by March 11, 1989
L. 765071-765075	5	Lease - Survey by May 10, 1989
L. 765086-765090	5	Lease - Survey by May 17, 1989
L. 767378	1	Lease - Survey by Nov. 4, 1989
L. 767379	1	Lease - Survey by Nov. 7, 1989
TOTAL	16 claims	

* - See Appendix 2 - Table of Assessment Credits - for details.

- 1948 : Geological Survey of Canada (1951) flew airborne magnetics over the area as part of a large regional program.
- 1959 : H.S. Hay (1959) drilled two short holes (101 ft. and 103 ft.) on the property at approximate grid locations 38+50W,21+50S (collar found) and 48+50W,23+00S (collar not found in field) respectively.
- 1950-70 ? : Seven other drill collars on the Virginiatown Property were found by the author or reported to the author by G. Spadetto. There is no known record of this work. The collars are plotted on Plate 1 and located at : 0+00/4+00N ? (2 collars reported, none found); 33+50W/7+00S "Waterhole" (2 collars found); 34+80W/0+60S (1 collar found); 43+00W/20+00S (1 collar reported, not found); 54+15W/1+40S (1 collar found).
- 1979 : Jensen (1979) and Jensen and Langford (1985) geologically re-mapped the general Kirkland Lake area in an attempt to unravel the stratigraphy.
- 1979 : Questor Surveys Limited (1979) flew airborne magnetics and electromagnetics over the area as part of a large regional survey for the Ontario Geological Survey.
- 1981 : Lampe Resource Co. Ltd. carried out ground magnetic and VLF electromagnetic surveys over the west half of the Virginiatown Property (Forbes and Leahy, 1981).
- 1984 : The Virginiatown Property was staked by B. Boudreault and G. Spadetto. Ground magnetic and VLF electromagnetic surveys were carried out over the entire property (Leahy, 1984A,8).
- 1985 : B. Boudreault and G. Spadetto carried out local trenching and stripping (Spadetto, 1985).
- 1986 : Hamilton (1986) re-mapped the geology and structure of the area with emphasis on understanding the gold deposits as part of a Master of Science thesis project.

2.0 GEOLOGICAL REPORT

2.1 INTRODUCTION

The geology of the Virginiatown Property was compiled from mapping during the summer and autumn of 1987, and drilling (see Section 6.0) during the winter of 1987-88 (Plate 1). The property is traversed by a cut grid with 300 foot-spaced (90 m) cross-lines. Mapping was initially conducted on every second cross-line due to time constraints and select areas were later mapped in more detail.

2.2 REGIONAL GEOLOGY

The Virginiatown Property is located in the southern Abitibi greenstone belt which is the largest and economically important belt of the Superior Province in the Canadian Shield. The Virginiatown area is mainly underlain by Early Precambrian (Archean) metavolcanics, metasediments, and plutonic rocks. To the southeast, remnants of Middle Precambrian (Huronian) metasedimentary rocks unconformably overlie the Archean rocks (Figure 3).

The metavolcanic rocks in the western Abitibi greenstone belt comprise successive volcanic piles, each composed of komatiitic flows at the base overlain by tholeiitic and calc-alkaline rocks, and capped by alkalic rocks (Jensen, 1979). In the Virginiatown area, the Upper Supergroup of Jensen (1980) is dominant and comprises one such volcanic pile (Figure 4). The basal komatiitic section of the pile is called the Larder Lake Group which is conformably succeeded by the tholeiitic basaltic to rhyolitic flows of the ten kilometre thick Kinojevis Group. This is overlain by the ten kilometre thick Blake River Group which consists of calc-alkaline and tholeiitic basalts, and calc-alkaline andesites to rhyolites. The pile is capped by a three kilometre thick section of Timiskaming Group alkalic metavolcanics and associated metasediments.

The Virginiatown Property is located in a metasedimentary dominant portion of the Timiskaming Group.

LEGEND

CENOZOIC

PLEISTOCENE AND RECENT

Till, varved clay, sand, gravel, peat.

UNCONFORMITY

MESOZOIC

19 Kimberlite: dikes.

INTRUSIVE CONTACT

PALEOZOIC

LOWER AND MIDDLE SILURIAN

18 Thornloe Formation: limestone, dolomite, sandstone.
Wabi Formation: limestone, shale.

MIDDLE AND UPPER ORDOVICIAN

17 Dawson Point Formation: shale.
Farr Formation: limestone.
Bucke Formation: limestone, shale.
Guigues Formation: sandstone.

PRECAMBRIAN

LATE PRECAMBRIAN

MAFIC INTRUSIVE ROCKS

16 Diabase: dikes.

INTRUSIVE CONTACT

MIDDLE PRECAMBRIAN

ALKALIC INTRUSIVE ROCKS

15 Syenite, nepheline syenite.

MAFIC INTRUSIVE ROCKS^a

14 Diabase, granophyre: sheets and dikes.

INTRUSIVE CONTACT

HURONIAN SUPERGROUP

COBALT GROUP
Lorrain Formation

13 Quartzite, arkose.

Gowganda Formation

12 Unsubdivided.
12a Firstbrook Member: argillite, greywacke, siltstone, arkose.
12b Coleman Member: conglomerate, arkose, greywacke, quartzite, argillite.

UNCONFORMITY

EARLY PRECAMBRIAN
MAFIC INTRUSIVE ROCKS^b

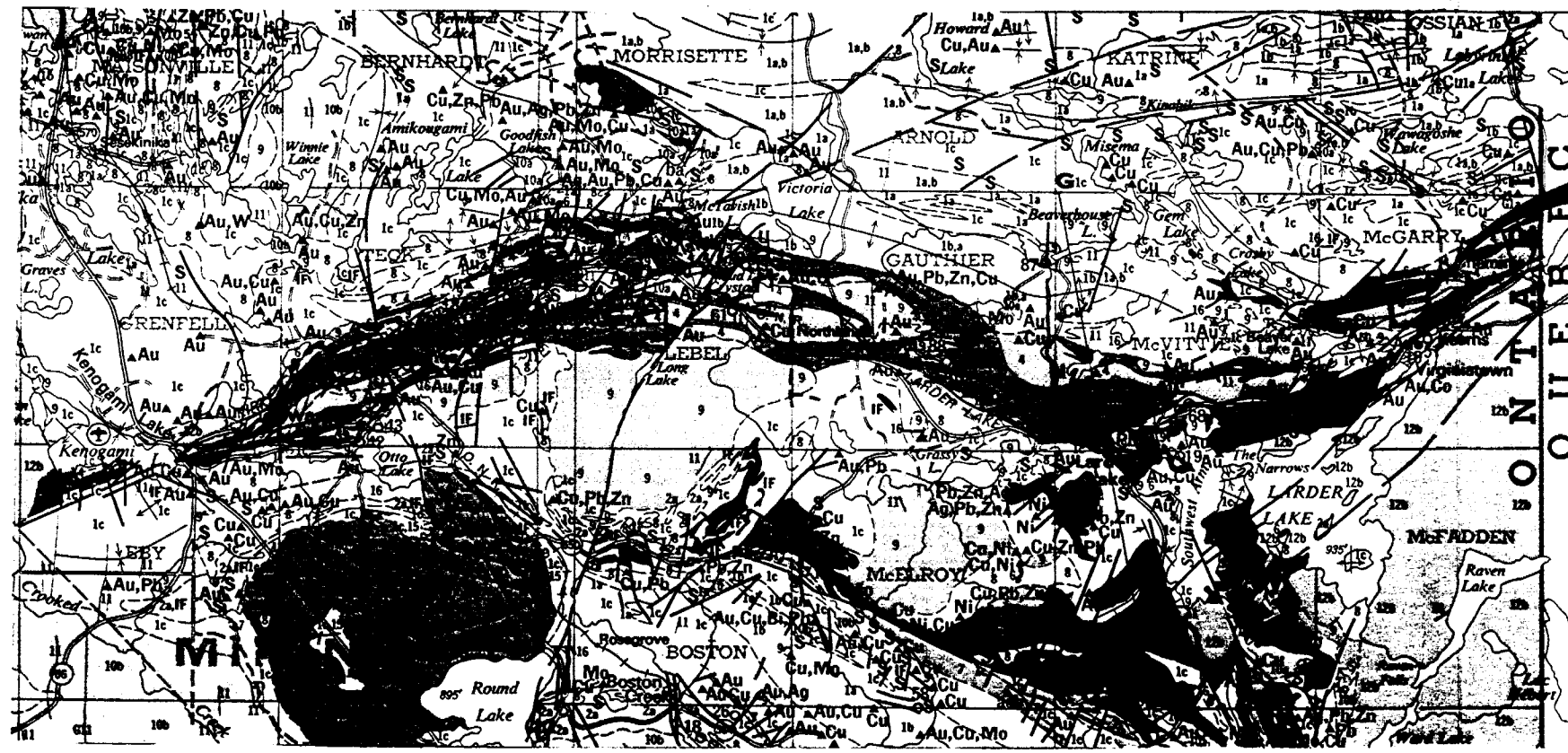
11 Diabase: dikes.

INTRUSIVE CONTACT

FELSIC INTRUSIVE ROCKS^c

10a Quartz porphyry, quartz-feldspar porphyry, feldspar porphyry, granophyre, felsite.
10b Trondhjemite, granodiorite, quartz monzonite: simple batholiths and stocks.
10c Trondhjemite, granodiorite, quartz monzonite, quartz diorite, aplite, pegmatite, migmatite: complex batholiths.

9 Syenite, monzonite, feldspar porphyry^d



BOUDREAU SPADETTO OPTION

METAMORPHOSED MAFIC AND ULTRAMAFIC ROCKS^e

8 Gabbro, diorite, lamprophyre.

7 Peridotite, dunite, pyroxenite, serpentinites^f

INTRUSIVE CONTACT
METASEDIMENTS^g

6 Conglomerate, greywacke, siltstone, slate, argillite^h

5 Greywacke, siltstone, slate, argillite and minor pebble conglomeratesⁱ

METAVOLCANICS^j
ALKALIC METAVOLCANICS^k

4 Trachyte, leucitic trachyte; flows, tuff, breccia.

ULTRAMAFIC METAVOLCANICS^l

3 Serpentinized dunitic and peridotitic flows.

FELSIC METAVOLCANICS^m

2 Unsubdivided.
2a Pyroclastic rocks.
2b Flows.

INTERMEDIATE AND MAFIC METAVOLCANICSⁿ

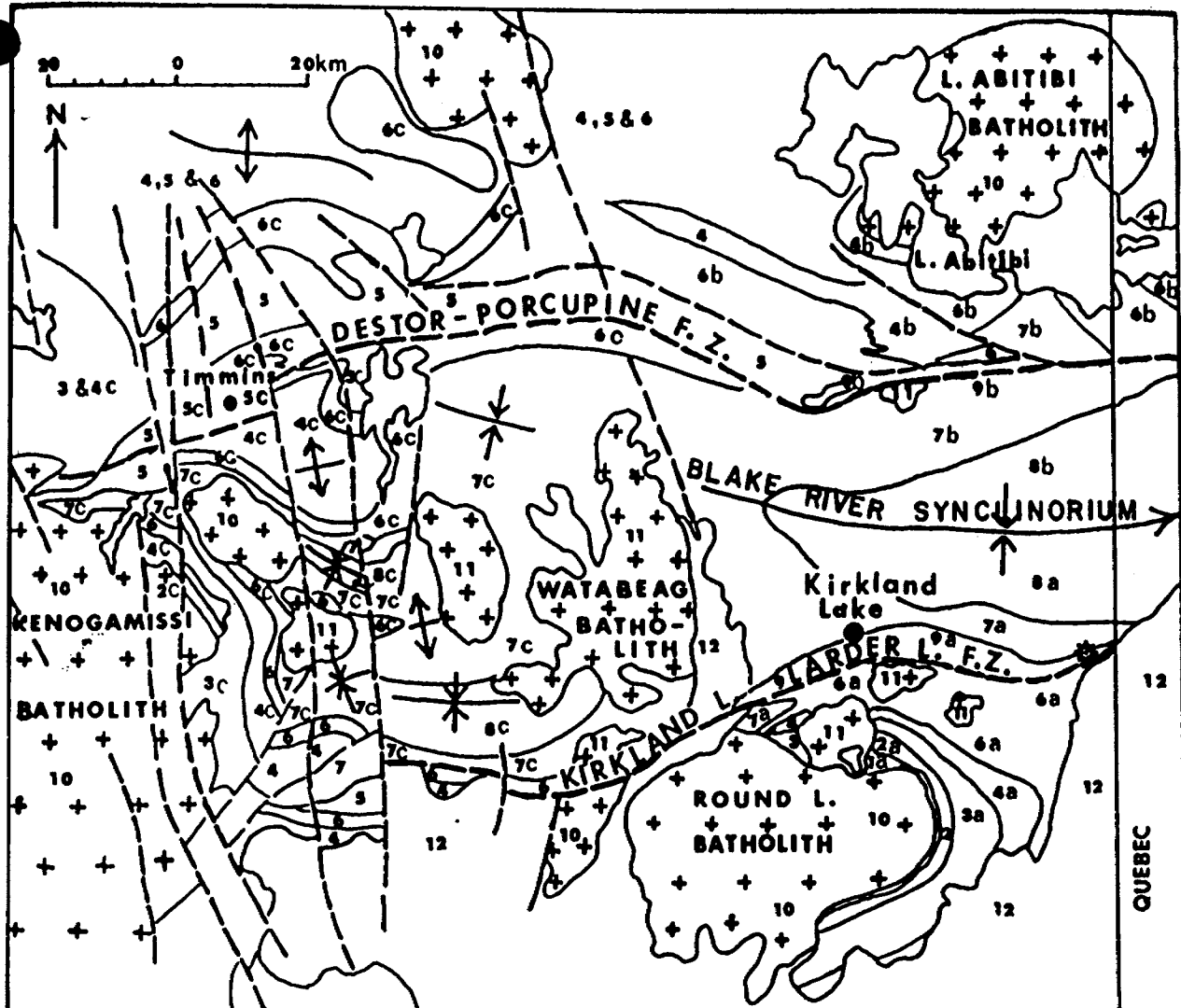
1 Unsubdivided.
1a Intermediate flows.
1b Intermediate pyroclastic rocks.
1c Mafic flows and pyroclastic rocks.

IF Iron formation and ferruginous chert (occurs as a member of stratigraphic units 1, 2, 4, and 5).

S Sulphide mineralization.

VIRGINIATOWN PROJECT
NORTHERN DYNASTY EXPLORATIONS LTD.

REGIONAL GEOLOGY



LEGEND

- Proterozoic
 - Keeweenawan diabase (not shown)
 - 12 Cobelt Group
- Archean
 - Matachewan diabase (not shown)
- Granitic rocks
 - 11 Granodiorite, monzonite, quartz monzonite, syenite
 - 10 Massive to gneissic quartz diorite, tonalite, trondhjemite
- Upper Supergroup
 - 9 9a* Timiskaming Group, 9b** Destor-Porcupine Complex
 - 8 8a, 8n, Blake River Group, 8c*** Bleke River (Upper Fm., Tisdale Group)
- Lower Supergroups
 - 7 7a, 7b, Kinojevis Group, 7c Kinojevis Group, (Middle Fm., Tisdale Group)
 - 6 6a Larder Lake Group, 6b Stoughton Roquemare Group, 6c Lower Fm., Tisdale Group
 - 5 5c Porcupine Group
 - 4 4a Skead Group, 4b Hunter Mine Group, 4c Upper Fm., Deloro Group
 - 3 3a Catherine Group, 3c Middle Fm., Deloro Group
 - 2 2a Webewewa Group, 2c Lower Fm. Deloro Group
 - 1 1a Pseud tuffs****

⊗ BOUDREAU LT SPADETTO OPTION

REGIONAL SETTING
(FROM JENSEN 1980)

FIGURE 4

2.3 REGIONAL STRUCTURE

This portion of the Abitibi greenstone belt is marked by three dominant structural features : the Blake River Synclinorium, the Destor-Porcupine Deformation Zone (DPDZ) and the Kirkland Lake-Larder Lake Deformation Zone (KLDZ) (Figure 4). The Blake River Synclinorium is a major broad east-west structure which trends down the central axis of the greenstone belt and has deformed most of the Archean stratigraphy. The DPDZ and the KLDZ are two subparallel zones of strong deformation several kilometres wide. The synclinorium and two flanking deformation zones are thought to be the product of downwarping in the crust under the weight of successive volcanic piles - the synclinorium formed along the basin center axis where the thickest volcanic deposits and maximum downwarping occurred, and the deformation zones formed sympathetic basin margin faults with long histories of repeated movement (Jensen and Langford, 1985).

The DPDZ and KLDZ are marked by abundant and often intense metasomatic alteration, and play host to most of the gold deposits of the district. The well known Larder Lake Break is a distinct ductile fault zone which occurs within the KLDZ and is characterized by intense chromium mica alteration.

The Virginiatown Property is located entirely within the KLDZ north of the Larder Lake Break.

2.4 PROPERTY GEOLOGY

2.4.1 INTRODUCTION

The Virginiatown Property is characterized by a complex of Timiskaming Group metasediments and lesser metavolcanics with local mafic dikes and sills, and very minor small syenitic to granitic intrusives (Plate 1). Numerous faults and folds of several generations deform these lithologies. The mapping was not carried out in sufficient detail to either support or contradict the structural domains outlined by Hamilton (1986).

Metamorphic grade on the property is probably sub- to lower greenschist as indicated by analogy with the studies of Jolly (1978) in the Kirkland Lake area and the noted lack of higher grade metamorphic minerals on the property.

2.4.2 DESCRIPTIONS OF LITHOLOGIES

A variety of interdigitated and repetitive rock units occur on the property. The following general descriptions of each rock type are based on observations in outcrop and drillcore. More detailed descriptions of these lithologies can be found in the drill logs of Appendix 7.

2.4.2.1 Conglomerates and Agglomerates

Conglomerates and agglomerates form the wide prominent 100 ft. (30m) high ridge that trends from the southwest corner of the property to the intersection of the railroad and the eastern property boundary (Plate 1). Several other parallel conglomerate horizons occur to the north.

The unaltered conglomerates are typically massive and polymictic with dark to medium grey open greywacke matrix. Weathered surfaces are light grey to buff brown. Clasts are usually a variety of pebbles and cobbles - most common are pink syenite/trachyte clasts but a large variety of other lithologies are evident including various sandstones, greywackes, siltstones, basalts, tuffs, and red jasper.

Locally these conglomerates grade into sections with only one or two clast types in a purple-grey tuffaceous (euhedral crystal-bearing) matrix. These sections have been called agglomerates and are most common along the main Conglomerate + Agglomerate ridge noted above.

2.4.2.2 Greywackes, Siltstones, and Shales

Greywackes are common throughout the property. They are invariably interbedded with lesser siltstones and sandstones, and locally shales and conglomerates on scales of centimetres to metres. Siltstone and shale dominant units were distinguished in places (Plate 1).

The greywackes are typically dark to light grey and show a variety of primary depositional textures such as flame structures, crossbedding, scourmarks and graded beds with stratigraphic tops consistently oriented to the south.

Siltstones are typically light grey and sercitic. They are normally thinly bedded to laminated where not associated with greywackes. Shales vary from sercitic light grey to carbonaceous black sections interbedded with siltstones and greywacke. Where found in abundance they form recessive weathering bedded to laminated units (e.g. - drillhole VT-88-5, Appendix 7).

2.4.2.3 Basalts and Andesites

Dark and medium greyish green units of igneous rocks have been called basalts and andesites respectively. Massive to locally pillowed sections occur in metavolcanic units. Massive basaltic to gabbroic units showing only minor deformation and alteration, in contrast to most other lithologies on the property, have been labelled dikes and sills.

2.4.2.4 Felsic Volcanics and Serecite Schists

A rock unit on the west side of the property has been called a felsic volcanic. It comprises light grey to light green, highly serecitic, often schistose rocks associated with basalts and andesites. Locally it contains sparse euhedral feldspar crystals. The unit appears in gradational contact with basalt at 48+00W, 1+00N, and thus may be, at least in part, an altered mafic volcanic. Diagnostic evidence of felsic volcanism in this unit has yet to be noted.

Elsewhere, serecite schists intercalated with siltstones and greywackes on a centimetre scale and larger, are altered metasediments as indicated by partially altered sections where primary textures are still discernable (see Section 2.6).

2.4.2.5 Syenite and Granite Intrusives

Felsic intrusives are rare on the property. A small granitic body occurs at 11+70E/22+00N. A possible syenite body was intersected over 90 ft. (28 m) in drillhole VT-88-4. Small (less than 4 inch (10 cm)) felsic dikelets occur elsewhere (e.g. - drillhole VT-87-2, Appendix 7).

2.4.3 QUATERNARY GEOLOGY

Topography on the property is bedrock controlled with more massive rock units usually marked by rock knobs and ridges, and schistose units occurring in low lying areas. Glacial striations generally trend 167-177° Azimuth. Valleys are typically underlain by clay and locally matrixless boulder deposits. Poplar flats (Plate 1) are underlain by boulder and sand till, and in places, clay.

2.5 PROPERTY STRUCTURAL GEOLOGY

The property is located within the Kirkland Lake-Larder Lake Deformation Zone (KLDZ) and has experienced a varied and complex history of deformation, the bulk of which remains unresolved.

The most prominent structural feature on the property is a well developed pervasive penetrative foliation which normally varies 040-055° Azimuth with subvertical dip (Plate 1). This foliation is poorly developed in more massive, unaltered rock units and toward the north and southeast corners of the property. It becomes strongly foliated to schistose along the southwest-northeast central axis of the property. A second penetrative foliation is locally developed at a small angle to the main foliation.

The schistose sections are often moderately to highly altered shear zones up to 250 ft. (75 m) wide and subparallel to the central axis of the property (see Section 2.6). The offset on these zones is not known. These altered shears on the property are parallel to the shears which appear to control gold mineralization at the Kerr Mine just to the south.

High angle cross-faults are ductile to brittle structures and, in the case of the Beaver Dam Fault, show significant alteration (see drillhole VT-87-3, Appendix 7). Northeast trending structures such as the Beaver Dam Fault host gold mineralization in the Kirkland Lake Mining Camp and elsewhere, and are considered to be important exploration targets. The northeast trending Highway Fault on the west side of the Kerr Mine orebodies, may be continuous with the Beaver Dam Fault.

Other major airphoto lineaments such as the Hamilton Fault (Plate 1), are late brittle structures and occur as wide grey mud seams in drillcore (see drillhole VT-87-4, Appendix 7).

2.6 PROPERTY ALTERATION

Alteration zones on the property are varied and often intense - iron carbonate, bleaching/sericite, potassium feldspar, and chromium mica alteration all occur, often in combination. Local zones of silicification and sulphidization are also present. Alteration is usually most intense in zones of shearing but also occurs in more massive units such as the conglomerates, where it may form patchy mosaics on scales of centimetres to metres.

Iron carbonate alteration is pervasive throughout most of the property (Plate 1). It occurs as fine to coarse disseminated grains of ankerite (?) in all lithologies and weathers to a distinctive rusty rind. It typically comprises less than 10% of individual outcrops but in more schistose sections it often increases to 40%.

Bleaching is widespread and is especially visible in drillcore. In greywackes, siltstones, and shales, bleaching is reflected by a colour change from grey to light (sercitic) green and off-white. The colour change is a reflection of carbon loss and possible sercitic (potassium) addition with partial to complete destruction of primary textures. In conglomerates similar colour changes and carbon loss occur; sercitic addition is more intense and obvious in these units as matrix and clasts of varying primary composition are partially or wholly altered to homogenous sections of light green sercitic (e.g.- drillhole VT-88-2, Appendix 7). Similar partial colour bleaching and sercitic addition have been observed locally in basalts (e.g.- at 48+00W, 1+00N); "felsic volcanics" in this vicinity may, in fact, be highly bleached and sercitized mafic volcanics. The large units of sercitic schist on the property (Plate 1) are probably altered shales, siltstones, and greywackes which appear to be most susceptible to this type of alteration.

Potassium feldspar alteration is localized as patchy zones and is most prominent on the quartz stockworked rock knob on the powerline west of the Cheminis Lumber Road (48+00W, 23+00S). The alteration here is best seen in drillholes VT-87-1, 88-2, and 88-3 which tested this zone. Patches of semi-massive potassium feldspar alteration up to 50 cm diameter occur over a 250 ft. (75 m) interval in proportions ranging from nil to 40%. It typically overprints iron carbonate and sercitic alteration, and is usually unfoliated indicating that it is a late stage product of the hydrothermal system. A similar pink alteration occurs at the Lakeshore Gold Mine in Kirkland Lake where it is attributed to hematization.

Chromium mica alteration is locally present. It typically occurs as disseminated flakes (normally less than 2%) in sercitic schist and felsic volcanics. Elsewhere chromium mica is present in greywackes and conglomerates but appears to be in the form of primary depositional grains or pebbles (e.g.- 29+90W/9+20S). Kerr Mine-type "green carbonate" alteration was not found on the property.

Silicification is usually present as envelopes on quartz veins and stockworks. It does not occur in large zones nor is it widely distributed.

Magnetite occurs as disseminated grains in some sections of conglomerate. Where these conglomerates have been affected by moderate to intense alteration, magnetite and locally chlorite have been sulphidized to pyrite and rarely pyrrhotite (see Section 4.2 - Anomalies VM-4 and VM-5).

2.7 PROPERTY MINERALIZATION

No economic gold mineralization was found on the property but, locally, encouraging gold assays were obtained. A grab sample taken from quartz + tourmaline veinlets exposed in an old trench at 17+40W/17+00N assayed 0.26 oz/ton Au (9.1 g/t); subsequent chip sampling failed to extend this zone. In drillhole VT-87-1 a 3.9 ft. (1.2 m) half core sample in altered conglomerate assayed 0.05 oz/ton Au (1.6 g/t); further assaying and drilling failed to extend or upgrade this section.

Anomalous gold values were also obtained from altered shears and quartz veins in a number of other locations (Plate 4). Many old pits, trenches, and shallow shafts tested quartz veins on the cliff marking the southern contact of the main Conglomerate + Agglomerate ridge and numerous other locations (Plate 3). A few anomalous gold values were obtained from these sites. In other areas, quartz + iron carbonate + tourmaline veins and stockworks, some hosting minor pyrite and chalcopyrite (e.g.- trench at 36+80W/1+50N), did not return appreciable gold values. Quartz + tourmaline stockwork veins in a possible small syenite intrusive (drillhole VT-88-1, Appendix 7) also did not return appreciable gold values.

Zones of sulphide mineralization are sparse. Locally up to 10% disseminated pyrite occurs in greywackes but appears to be of sedimentary origin and has no significant associated gold values. Sulphidization of magnetite to pyrite in conglomerates (see Section 2.6) does not appear to have associated gold values.

In summary, many zones of encouraging alteration and quartz veining occur on the property. Some of these zones host low anomalous gold values. Higher gold values also occur but few were found in the course of the 1987-88 program.

3.0 GEOCHEMICAL REPORT

3.1 INTRODUCTION

Selective geochemical sampling was carried out on the Virginiatown Property during the 1987 field season. Full technical data statements and procedure records are included in Appendix 4. Results for all chemical analyses are listed in Appendix 5 and on Plates 2, 3, and 4.

Grid soil samples were collected along ten grid lines spread over the entire property (Plate 2). Off-grid soil samples were collected at the discretion of field personnel (Plates 3 & 4). Rusty brown to brownish red B-horizon samples were preferentially collected. Where B-horizon samples were not available, decomposed A-horizon samples were collected. In areas underlain by dense clay, few if any soil samples were taken.

Rock samples were collected at the discretion of field personnel (Plate 3 & 4). Most of these samples are grab and representative samples from old excavations and other alteration zones.

Extensive half-core sampling was done on drillcore from the winter drill program (Section 6.0). All alteration and mineralization deemed to be of any possible significance was sampled.

Soil samples were sieved to -80 mesh and rock and drillcore samples were crushed to -100 mesh for analysis. All samples were analysed for gold (fire assay / atomic absorption finish) by Accurassay Laboratories Ltd. of Kirkland Lake. Precision and accuracy of these assays were good based on inhouse checks on every tenth sample by Accurassay, and blind external checks by Acme Analytical Laboratories of Vancouver, B.C. Select soil, rock, and drillcore samples were analysed for 30 elements by Induced Cation Plasma (I.C.P.) Spectrometry by Acme Analytical (Appendix 5).

Most sample pulps and rejects are stored with the drillcore in the abandoned theatre in Larder Lake.

3.2 SOIL GEOCHEMISTRY - DISCUSSION OF RESULTS

Gold assays for soil samples are plotted on Plates 2 and 4. Threshold values for gold in soils were not rigorously determined but assumed to be 15 ppb based on experience elsewhere. Priority was given during follow-up prospecting to multi-station anomalies with values well above this threshold.

In general anomalous results in precious and base metals are commonly higher in soils than in local bedrock and it is suspected that the source of at least some of the soil anomalies lies in the smokestack at the Kerr Gold Mine mill 1.2 miles (2 km) to the south.

The soil gold anomalies discussed below are plotted on Plate 2.

Anomaly VS-1

Location : 60+00W, 21+00S

This anomaly overlies a topographic bedrock high and adjacent cliff area. The only mineralization noted in the area was large (up to 6 ft. (2 m) diameter) bull quartz boulders. These boulders did not return significant gold values nor did they host sulphides. No other mineralization was seen.

This anomaly is probably cultural and associated with the Kerr smokestack.

Anomaly VS-2

Location : 48+00W, 24+00S

This anomaly is coincident with a prominent bedrock knob on the hydroelectric powerline. The most significant alteration (iron carbonate, bleaching, sericite, and potassium feldspar) found on the property occurs here as well as significant quartz + carbonate veins and stockworks (see drill logs for holes VT-87-1, 88-2, and 88-3 in Appendix 7 for details). Despite this encouraging geology, none of the surface rock samples returned anomalous gold values (Plate 4) and with the exception of a single value of 0.05 oz/ton Au (1.6 g/t) over 3.9 ft. (1.2 m) in drillhole VT-87-1, no other significant gold values were found in drillcore.

This soil anomaly may, in part, be due to sparse elevated bedrock gold values and, in part, be due to cultural contamination from the Kerr mill smokestack.

Anomaly VS-3

Location : 36+00W, 21+00S

This anomaly overlies the next prominent bedrock knob east of anomaly VS-2. It too hosts significant alteration with associated quartz veining but not as extensive nor intense as that associated with anomaly VS-2. Similarly, no significant bedrock gold values were obtained here (Plate 4).

This anomaly may, in part, be due to erratic bedrock gold values, but is probably mainly cultural contamination from the Kerr mill smokestack.

Anomaly VS-4

Location : 21+00W, 20+00S

This anomaly is also situated on a bedrock hill. Some mineralization is locally present. Downhill and just east of the anomaly, a series of trenches and pits expose a 3 ft. (1 m) wide quartz vein (Plate 1); no significant gold values were obtained from this vein. On the powerline at the northwest end of the anomaly a soil sample returned 1,253 ppb Au; this sample was taken over a 2 inch (5 cm) wide iron carbonated shear; two rock samples from the shear ran less than 5 ppb Au. Thus no bedrock source for the gold anomaly was found in the area.

This anomaly is probably due to cultural contamination from the Kerr mill smokestack.

Anomaly VS-5

Location : 48+00W, 2+50S

This anomaly occurs in a relatively flat area of poplars with moderate outcrop. It is partially coincident with electromagnetic anomalies VE-2 (see Section 5.2). Both the electromagnetic anomalies and the glacial up-ice portion of the soil gold anomaly were tested by drillhole VT-88-4; local alteration and quartz veining were noted but no significant gold values were encountered (see drill log VT-88-4 in Appendix 7 for details).

The source of this anomaly is not known. It is probably not, however, a reflection of local bedrock mineralization.

Anomaly VS-6

Location : 36+00W, 1+00N

This cluster of low soil gold anomalies occurs in an area of moderate outcrop. Some alteration is present in the area but not in significant abundance. A recent large bedrock trench was blasted in the area (Spadetto, 1985) to expose a quartz + carbonate + tourmaline vein 1 - 30 inches (3 - 75 cm) wide with associated minor pyrite and chalcopyrite; no significant gold values are associated with the vein. Other samples of veins and alteration zones in the area did not return significant gold values (Plate 4).

The source of this anomaly remains unknown. No significant bedrock mineralization was found in the area.

Anomaly VS-7

Location : 0+00, 1+50N

This anomaly is located on a wide flat alder and spruce valley bottom. It is underlain by sandy till and clay. Drillhole VT-88-5 located 600 ft. (180 m) to the west tested this section of the stratigraphy and found it to be underlain mainly by greywackes and carbonaceous shales and siltstones (Appendix 7).

The source of this anomaly is not known but it is probably not derived from local bedrock.

Numerous single station soil gold anomalies were also detected. All anomalies over 50 ppb Au and several anomalies less than 50 ppb Au were investigated during the field season. Most of these anomalies were in overburden-covered areas with little or no outcrop - their source is not known. Some of the anomalies occur in areas of outcrop but no significant bedrock mineralization was found to be associated with any of them.

3.3 ROCK GEOCHEMISTRY

Although a number of anomalous gold values were obtained from rock samples, only two are considered to be noteworthy.

An old trench at 17+40W, 17+00N exposed a 3 ft. (1 m) section of 5% small quartz + carbonate + tourmaline veins in sheared greywacke with 10% iron carbonate and minor chromium mica. An initial grab sample of vein material returned 0.26 oz/ton Au (9.1 g/t) but later more thorough grab and chip samples returned only 180 ppb Au at best (Plate 4). The zone was traced 50 ft. (15 m) along strike to the west where the veins pinch out; overburden covers the zone to the east.

An assay of 0.05 oz/ton Au (1.6 g/t) over 3.9 ft. (1.2 m) was obtained from a sericite-altered conglomerate in drillhole VT-87-1 at 115.5-119.4 ft. (35.2-36.4 m) (see Appendix 7 for drill log). The lack of significant results from surface rock sampling and two other drillholes (VT-88-2 and 88-3) in the area suggests this is an isolated gold value.

Some 30 element Induced Cation Plasm (I.C.P.) spectrometric analyses were carried out on selected surface rock and drillcore samples from alteration zones throughout the property (Appendix 5). Based on the work of Fyon and Crocket (1983), these analyses were used in an attempt to identify alteration zones with anomalous values in pathfinder elements indicative of gold mineralizing systems. Weak anomalies in some pathfinder elements (As, Mo, Cu, Pb, Zn, and Ag) were detected in the vicinity of 48+00W, 23+00S and 30+00W, 7+00S; these zones were tested by drillholes VT-87-1/88-2/88-3 and VT-87-3 respectively. With the exception of the single value of 0.05 oz/ton Au (1.6 g/t) in drillhole VT-87-1, no significant gold values were found in either surface bedrock or drillcore sampling. Some weak pathfinder element anomalies continued to be detected in drillcore from these areas (Appendix 5).

In summary, anomalous bedrock gold values are associated with quartz veins and alteration zones. The gold values of significance found in the 1987-88 program, were few and erratic.

4.0 GROUND MAGNETICS REPORT

4.1 INTRODUCTION

A ground vertical gradient magnetic survey was carried out over the Virginiatown Property during the 1987 field season. Grid lines were surveyed at 600 ft. (180 m) spacings and tightened to 300 ft. (90 m) spacing in geologically more complex areas. Results of the survey appear on Plate 5. Technical data statements and procedure records are included in Appendix 4.

4.2 GROUND MAGNETICS - DISCUSSION OF RESULTS

The magnetic signature on the property is generally flat with only a few notable anomalies (Plate 5).

Anomaly VM-1

Location : 60+00W, 3+00S to 6+00E, 22+00N

This long and continuous anomaly traverses the entire property and roughly follows a magnetic basalt unit and adjacent conglomerate units.

Anomaly VM-2

Location : 60+00W, 12+50S to 24+00W, 2+50N

This moderately strong continuous anomaly follows a mafic dike which forms a bedrock ridge for much of its length. The eastern end of the dike abuts against the Beaver Dam Fault (Plate 1).

Anomaly VM-3

Location : 54+00W, 12+50S to 48+00W, 12+50S

This anomaly occurs in an overburden-covered area and crosscuts the general bedding and foliation trends on the property. It appears to splay off anomaly VM-2 and thus may also represent a mafic dike.

Anomalies VM-4 & VM-5

Locations : 60+00W, 23+00S to 54+00W, 21+00S
and 24+00W, 3+25S to 6+00W, 7+00N

These prominent anomalies occur over the main Conglomerate + Agglomerate unit along the central axis of the property and are attributable to disseminated magnetite (commonly 1%). The gap between anomalies VM-4 and VM-5 may be due in part, to a decrease in primary magnetite content of the conglomerates, and due in part, to destruction of magnetite by sulphidization to pyrite as observed in the alteration zones of drillholes VT-87-1, 88-2, and 88-3 (see Appendix 7).

Anomaly VM-6

Location : 6+00E, 14+00N to 12+00E, 17+00N

This broad anomaly outlines an area of andesite outcrops along the eastern property boundary. The anomaly is presumably due to disseminated pyrrhotite or magnetite in the andesites.

Anomaly VM-7

Location : 18+00W, 27+00N

This strong anomaly occurs along the northern property boundary and is due to an unknown source north of the property.

5.0 GROUND ELECTROMAGNETICS (VLF) REPORT

5.1 INTRODUCTION

A ground electromagnetic (EM-16) survey was carried out over the entire grid at 600 ft. (180 m) spacings with fill-in lines at 300 ft. (90 m) spacing in areas of complex geology. Results of the survey are plotted on Plates 6 (in-phase readings and profiles), 7 (quadrature readings and profiles), and 8 (Fraser Filter contours). Technical data statements and procedure records are included in Appendix 4.

5.2 GROUND ELECTROMAGNETICS (EM-16) - DISCUSSION OF RESULTS

The anomalies discussed below are outlined on the Fraser Filter Plot (Plate 8).

Anomalies VE-1

Location : 60+00W, 17+00S to 0+00, 11+00S

This large cluster of strong subparallel anomalies follow, in part, Bear Creek which is underlain by dense grey clay. The quadrature component (Plate 7) of these anomalies in many cases, shows reverse polarity to the in-phase readings (Plate 6) indicating a shallow probably overburden source to the anomalies (Geonics Ltd, 1973). The anomalies all trend about east-west in contrast to the 040-055° Azimuth trend of the bedrock geology.

It is concluded that these anomalies, for the most part, reflect overburden clay deposits and are unrelated to bedrock geology except to indirectly outline the linear topographic depressions which mark the Bear Creek Fault and other possible subparallel faults.

Anomalies VE-2

Location : 48+00W, 0+50S and 48+00W, 2+50S

These strong one line anomalies are in part coincident with the glacial up-ice portion of geochemical soil gold anomaly VS-5. Both electromagnetic anomalies were tested by drillhole VT-88-4.

These anomalies may reflect two small unmineralized shears encountered in drillhole VT-88-4 (see Section 6.0 and Appendix 7).

Anomaly VE-3

Location : 30+00W, 0+75S

This isolated anomaly is over a topographic low with no outcrop.

The anomaly probably reflects an overburden conductor.

Anomaly VE-4

Location : 12+00W, 0+25S to 6+00E, 2+00N

This anomaly is in a low overburden covered area. It trends east-west across the strike of the local geology. It was tested by drillhole VT-88-5.

This anomaly probably reflects, in part, an overburden clay deposit and, in part, carbonaceous shales encountered in drillhole VT-88-5 (see Appendix 7).

Anomaly VE-5

Location : 6+00E, 6+50N to 12+00E, 6+75N

This small anomaly is in a low overburden covered area. It is marked by reversed quadrature and in-phase polarities.

The anomaly probably reflects an overburden conductor.

Anomaly VE-6

Location : 18+00W, 2+50N to 0+00, 9+50N

This anomaly follows a low area of deep overburden (see drillholes VT-87-5 & 87-6, Appendix 7) near Hamilton Creek and the Hamilton Fault.

The anomaly probably reflects an overburden clay deposit and possibly an underlying zone of unconsolidated fault gouge associated with the Hamilton Fault.

Anomaly VE-7

Location : 6+00E, 13+00N to 12+00E, 12+50N

This small anomaly lies in an overburden covered area and trends east-southeast across local bedrock geology trends. It is characterised by reversed in-phase and quadrature polarities.

The anomaly probably reflects an overburden conductor.

Anomaly VE-8

Location : 12+00W, 23+00N

This anomaly lies in a wide flat poplar stand with no local outcrop.

The source of the anomaly is not known.

Anomaly VE-9

Location : 6+00W, 17+00N to 0+00, 18+75N

This anomaly is located in a flat largely overburden covered area. It's definition is uncertain due to the presence of railway tracks.

The source of the anomaly is not known.

Anomaly VE-10

Location : 15+00E, 6+25N

This anomaly is in a flat overburden covered area on the eastern property boundary.

The source of the anomaly is not known.

A number of other small isolated anomalies also occur (Plate 8). They have not been investigated.

6.0 DIAMOND DRILLING REPORT

6.1 INTRODUCTION

Twelve BQ wireline diamond drillholes totalling 6346 ft. (1934.3 m) were drilled on the Virginiatown Property between November 22, 1987 and February 8, 1988 (Table 2). The holes tested a variety of geological, geophysical, and geochemical targets as described below. Drill logs with assays are attached as Appendix 7. Drillhole collars and surface projections of the holes are plotted on Plates 1 to 8.

Drillcore from all holes is stored in the abandoned theatre in Larder Lake.

6.2 DRILLHOLE SUMMARIES

Drillholes VT-87-1, 88-2, and 88-3

Locations : VT-87-1 - 47+80W, 24+60S
 VT-88-2 - 52+00W, 20+20S
 VT-88-3 - 45+60W, 22+05S

Purpose :

1. To test a large zone of intense alteration and quartz veining with accompanying geochemical soil gold anomaly VS-2 (see Section 3.2) and weak gold lithochemical pathfinder element anomalies (see Section 3.3).
2. To test the intersection of topographic linears with these alteration and shear zones.

Results :

1. A 250 ft. (75 m) thick section of sheared conglomerates with abundant bleaching, sericite, iron carbonate, and potassium feldspar alteration and many sections of quartz veining, were encountered.
2. Only a single significant gold value of 0.05 oz/ton (1.6 g/t) in drillhole VT-87-1 was detected.

TABLE 2
VIRGINIATOWN PROPERTY
DRILLHOLE TECHNICAL DATA

<u>DRILL HOLE NUMBER</u>	<u>CLAIM NUMBER</u>	<u>GRID LOCATION</u>	<u>DEPTH (ft./m)</u>	<u>DRILL COLLAR AZIMUTH /ANGLE</u>
VT-87-1	L.767378	47+80W/24+60S	549/167.3	320°/-44°
VT-87-2	L.666338	30+75W/ 3+50S	449/136.9	140°/-46°
VT-87-3	L.666338	30+30W/ 6+45S	849/258.8	140°/-50°
VT-87-4	L.765073	18+60W/ 8+85N	499/152.1	140°/-45°
VT-87-5	L.765073	14+50W/ 8+10N	87/ 26.5	140°/-50°
VT-87-6	L.765073	12+00W/10+00N	55/ 16.7	140°/-51°
VT-88-1	L.765073	14+15W/11+80N	809/246.6	320°/-53°
VT-88-2	L.767378	52+00W/20+20S	539/164.3	140°/-60°
VT-88-3	L.666335	45+60W/22+05S	399/121.6	320°/-45°
VT-88-4	L.666508	49+20W/ 0+17N	599/182.5	140°/-45°
VT-88-5	L.765075	6+20W/ 2+10S	810/247.0	320°/-45°
VT-88-6	L.765089	9+60W/ 1+80N	709/216.1	320°/-46°

Notes

1. Drill logs and sections are attached as Appendix 7.
2. Drillhole collars and surface projections plotted on Plates 1-8.
3. Drill contractor - Langley Drilling
49 Jayfield Road
Brampton, Ontario
L6S 3G3

Drillholes VT-87-2 and 87-3

Locations : VT-87-2 - 30+75W, 3+50S
 VT-87-3 - 30+30W, 6+45S

Purpose :

1. To test wide intense zones of surface bleaching and iron carbonate alteration and shearing.
2. To test the intersection of the Beaver Dam Fault with these zones of alteration and shearing.
3. To test an area of weakly anomalous gold pathfinder elements in surface bedrock sampling.

Results :

1. Most of the section is marked by moderate to intense bleaching, sericite, and iron carbonate alteration.
2. No significant gold mineralization was encountered.

Drillhole VT-87-4

Location : 18+60W, 8+85N

Purpose :

1. To test the Hamilton Fault in the vicinity of its intersection with the Beaver Dam Fault.

Results :

1. The Hamilton Fault is a late brittle (unconsolidated gouge) structure with no associated mineralization.
2. No significant mineralization was encountered.

Drillhole VT-87-5, 87-6, and 88-6

Locations : VT-87-5 - 14+50W, 8+10N
 VT-87-6 - 12+00W, 10+00N
 VT-88-6 - 9+60W, 1+80N

Purpose :

1. To test a zone of alteration and local sulphides near the northern contact of the main Conglomerate + Agglomerate unit.

Results :

1. Drillholes VT-87-5 and 87-6 were both abandoned in deep overburden.
2. Drillhole VT-88-6 intersected local significant bleaching, sericite, iron carbonate, and potassium feldspar alteration. Only minor sulphides were encountered.
3. No significant gold mineralization was found.

Drillhole VT-88-1

Location : 14+15W, 11+80N

Purpose :

1. To test the basalt-conglomerate contact.
2. To test a weak electromagnetic conductor.
3. To test a small gold occurrence in a trench at 17+40W, 17+00N.

Results :

1. Several zones of slight to moderate alteration were intersected.
2. A number of syenite dikes, some with abundant quartz + tourmaline veins, were intersected.
3. The weak electromagnetic conductor may be due to one of several water-filled fracture zones intersected in the hole.
4. No significant gold mineralization was encountered.

Drillhole VT-88-4

Location : 49+20W, 0+17N

Purpose :

1. To test two restricted but strong electromagnetic conductors (VE-2).
2. To test the glacial up-ice portion of soil gold anomaly VS-5.
3. To test alteration zones projected from the west.

Results :

1. Several zones of moderate to intense alteration with local quartz veins were intersected.
2. The electromagnetic conductors are probably due to two small shear zones intersected in the hole.
3. No significant mineralization was encountered.

Drillhole VT-88-5

Location : 6+20W, 2+10S

Purpose :

1. To test strong electromagnetic conductor VE-4.
2. To test a zone of alteration, shearing and quartz veins along the southern contact of the main Conglomerate + Agglomerate unit.

Results :

1. Moderate bleaching, sericite, iron carbonate, and potassium feldspar alteration was intersected along the southern contact of the Conglomerate + Agglomerate unit.
2. The electromagnetic conductor is due in part, to a recessive weathering unaltered unit of carbonaceous shales and siltstones.
3. No significant gold mineralization was encountered.

In summary, despite the favourable structural setting and alteration in close proximity to the large Kerr Gold Mine, significant gold values from drilling and surface bedrock sampling on the property were few and erratic.

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APPENDIX 1
PROPERTY HOLDERS

APPENDIX 1

PROPERTY HOLDERS

VENDORS :

Bernard Boudreault & Gabrielle Spadetto
P.O. Box 324
Larder Lake, Ontario
POK 1L0

UNDER OPTION TO :

Northern Dynasty Explorations Ltd.
844 West Hastings Street
Vancouver, British Columbia
V6C 1C8

APPENDIX 2

TABLE OF ASSESSMENT CREDITS

APPENDIX 2

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TABLE OF ASSESSMENT CREDITS

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VIRGINIATOWN PROPERTY

Claim No.	Record'g Date	Total Credits Appl for Approved	Expiry Date	Filing Date	Geologic max 40	Geochem max 40	Geophys max 80	Drilling	Manual	Expend. Credits
L 666335	Mar 11/83	210.89	210.89	Lease Pdg : March 5/84				Extension to Aug 31/84		
				Survey by : Aug 20/84				40 MAG		
				Mar 11/89 : March 7/85				G.Spadetto transfer 50% interest to B.Boudreault		
				: March 7/85						26
				: Feb 25/86				Extension to Dec 31/86		
				: Sept 29/86						2.63
				: Sept 29/86						33.2
				: Sept 29/86						9.06
				: March 6/87				20 EM		
				: March 6/87				20 EM		
				: Feb 16/88						60
666338	Mar 11/83	210.89	210.89	Lease Pdg : March 5/84				Extension to Aug 31/84		
				Survey by : Aug 20/84				40 MAG		
				Mar 11/89 : Sept 28/84				Order for correction in staking		
				: Oct 16/84				Complied with staking order		
				: March 7/85				G.Spadetto transfer 50% interest to B.Boudreault		
				: March 7/85						24
				: March 7/85						2
				: Feb 25/86				Extension to Dec 31/86		
				: Sept 29/86						2.63
				: Sept 29/86						33.2
				: Sept 29/86						9.06
				: March 6/87				20 EM		
				: March 6/87				20 EM		
				: Feb 16/88						60
666507	Mar 11/83	210.89	210.89	Lease Pdg : Dec 20/83				Order for correction in staking		
				Survey by : Jan 18/84				Complied with staking order		
				Mar 11/89 : March 6/84				Extension to Sept 11/84		
				: Aug 20/84				40 MAG		
				: Sept 28/84				Order for correction in staking		
				: Oct 16/84				Complied with staking order		
				: March 4/85				B.Boudreault transfer 50% interest to G.Spadetto		
				: March 7/85						24
				: March 7/85						2
				: Feb 25/86				Extension to Dec 31/86		
				: Sept 29/86						2.63
				: Sept 29/86						33.2
				: Sept 29/86						9.06
				: March 6/87				20 EM		
				: March 6/87				20 EM		
				: Feb 16/88						60

VIRGINIATOWN PROPERTY (continued)

Claim No.	Record'g Date	Total Credits Appl for	Credits Approved	Expiry Date	Filing Date	Geologic max 40	Geochem max 40	Geophys max 80	Drilling	Manual	Expend. Credits			
666508	Mar 11/83	210.89	210.89	Lease Pdg	Dec 20/83				Order for correction in staking					
				Survey by	Jan 18/84				Complied with staking order					
					March 6/84				Extension to Sept 11/84					
					Aug 20/84						40 MAG			
					Sept 28/84							Order for correction in staking		
					Oct 16/84							Complied with staking order		
					March 4/85							B.Boudreault transfer 50% interest to G.Spadetto		
					March 7/85									26
					Feb 25/86							Extension to Dec 31/86		
					Sept 29/86									2.63
					Sept 29/86									33.2
					Sept 29/86									9.06
					March 6/87							20 EM		
	March 6/87							20 EM						
	Feb 16/88									60				
765071	May 10/83	208.89	208.89	Lease Pdg	May 3/84				Extension to Oct 31/84					
				Survey by	Aug 20/84				40 MAG					
					Sept 28/84							Order for correction in staking		
					Oct 16/84							Complied with staking order		
					March 7/85							G.Spadetto transfer 50% interest to B.Boudreault		
					March 7/85									24
					April 30/86							Extension to Sept 30/86		
					Sept 29/86									2.63
					Sept 29/86									33.2
					Sept 29/86									9.06
					March 6/87							20 EM		
					March 6/87							20 EM		
					Feb 16/88									60
765072	May 10/83	208.89	208.89	Lease Pdg	May 3/84				Extension to Oct 31/84					
				Survey by	Aug 20/84				40 MAG					
					March 7/85							G.Spadetto transfer 50% interest to B.Boudreault		
					March 7/85									24
					April 30/86							Extension to Sept 30/86		
					Sept 29/86									2.63
					Sept 29/86									33.2
					Sept 29/86									9.06
					March 6/87							20 EM		
					March 6/87							20 EM		
					Feb 16/88									60

VIRGINIATOWN PROPERTY (continued)

Claim No.	Record'g Date	Total Credits Appl for Approved	Expiry Date	:	Filing Date	Geologic max 40	Geochem max 40	Geophys max 80	Drilling	Manual	Expend. Credits
765073	May 10/83	210.89	210.89	Lease Pdg	May 3/84				Extension to Oct 31/84		
				Survey by	Aug 20/84				40 MAG		
				May 10/89	Sept 28/84				Order for correction in staking		
					Oct 16/84				Complied with staking order		
					March 7/85				G.Spadetto transfer 50% interest to B.Boudreault		
					March 7/85					24	
					March 7/85					2	
					April 30/86				Extension to Sept 30/86		
					Sept 29/86					2.63	
					Sept 29/86					33.2	
					Sept 29/86					9.06	
					March 6/87				20 EM		
					March 6/87				20 EM		
					Feb 16/88					60	
765074	May 10/83	210.89	210.89	Lease Pdg	May 3/84				Extension to Oct 31/84		
				Survey by	Aug 20/84				40 MAG		
				May 10/89	March 7/85				G.Spadetto transfer 50% interest to B.Boudreault		
					March 7/85					24	
					March 7/85					2	
					April 30/86				Extension to Sept 30/86		
					Sept 29/86					2.63	
					Sept 29/86					33.2	
					Sept 29/86					9.06	
					March 6/87				20 EM		
					March 6/87				20 EM		
					Feb 16/88					60	
765075	May 10/83	208.89	208.89	Lease Pdg	May 3/84				Extension to Oct 31/84		
				Survey by	Aug 20/84				40 MAG		
				May 10/89	March 7/85				G.Spadetto transfer 50% interest to B.Boudreault		
					March 7/85					24	
					April 30/86				Extension to Sept 30/86		
					Sept 29/86					2.63	
					Sept 29/86					33.2	
					Sept 29/86					9.06	
					March 6/87				20 EM		
					March 6/87				20 EM		
					Feb 16/88					60	

VIRGINIATOWN PROPERTY (continued)

Claim No.	Record'g Date	Total Credits Appl for	Credits Approved	Expiry Date	Filing Date	Geologic max 40	Geochem max 40	Geophys max 80	Drilling	Manual	Expend. Credits
765086	May 17/83	208.89	208.89	Lease Pdg Survey by May 17/89	May 3/84				Extension to Oct 31/84 40 MAG		
					Aug 20/84				Order for correction in staking		
					Sept 28/84				Complied with staking order		
					Oct 16/84				B.Boudreault transfer 50% interest to G.Spadetto		
					March 4/85						24
					March 7/85						
					April 30/86				Extension to Sept 30/86		
					Sept 29/86						2.63
					Sept 29/86						33.2
					Sept 29/86						9.06
					March 6/87			20 EM			
					March 6/87			20 EM			
					Feb 16/88						60
765087	May 17/83	148.89	148.89	Lease Pdg Survey by May 17/89	May 3/84				Extension to Nov 19/84 40 MAG		
					Aug 20/84				B.Boudreault transfer 50% interest to G.Spadetto		
					March 4/85						24
					March 7/85						
					April 30/86				Extension to Sept 30/86		
					Sept 29/86						2.63
					Sept 29/86						33.2
					Sept 29/86						9.06
					March 6/87			20 EM			
					March 6/87			20 EM			
					Feb 16/88						60
765088	May 17/83	210.89	210.89	Lease Pdg Survey by May 17/89	May 3/84				Extension to Nov 19/84 40 MAG		
					Aug 20/84				B.Boudreault transfer 50% interest to G.Spadetto		
					March 4/85						24
					March 7/85						2
					March 7/85						
					April 30/86				Extension to Sept 30/86		
					Sept 29/86						2.63
					Sept 29/86						33.2
					Sept 29/86						9.06
					March 6/87			20 EM			
					March 6/87			20 EM			
					Feb 16/88						60
765089	May 17/83	208.89	208.89	Lease Pdg Survey by May 17/89	May 3/84				Extension to Nov 19/84 40 MAG		
					Aug 20/84				B.Boudreault transfer 50% interest to G.Spadetto		
					March 4/85						24
					March 7/85						
					April 30/86				Extension to Sept 30/86		
					Sept 29/86						2.63
					Sept 29/86						33.2
					Sept 29/86						9.06
					March 6/87			20 EM			
					March 6/87			20 EM			
					Feb 16/88						60
					Feb 16/88						

VIRGINIATOWN PROPERTY (continued)

Claim No.	Record'g Date	Total Credits Appl for	Credits Approved	Expiry Date	Filing Date	Geologic max 40	Geochem max 40	Geophys max 80	Drilling	Manual	Expend. Credits
765090	May 17/83	208.89	208.89	Lease Pdg Survey by May 17/89	May 3/84				Extension to Nov 19/84 40 MAG		
					Aug 20/84				B. Boudreault transfer 50% interest to G. Spadetto		24
					March 4/85				Extension to Sept 30/86		
					March 7/85						2.63
					April 30/86						33.2
					Sept 29/86						9.06
					Sept 29/86						
					Sept 29/86						
					March 6/87			20 EM			
					March 6/87			20 EM			
					Feb 16/88				60		
767378	Nov 4/83	208.89	208.89	Lease Pdg Survey by Nov 4/89	Aug 20/84				40 MAG		
					March 7/85				G. Spadetto transfer 50% interest to B. Boudreault		24
					March 7/85						
					Sept 29/86						2.63
					Sept 29/86						33.2
					Sept 29/86						9.06
					March 6/87			20 EM			
					March 6/87			20 EM			
					Feb 16/88				60		
767379	Nov 7/83	246.89	246.89	Lease Pdg Survey by Nov 7/89	Aug 20/84				40 MAG		
					March 7/85				G. Spadetto transfer 50% interest to B. Boudreault		24
					March 7/85						
					Sept 29/86						2.63
					Sept 29/86						33.2
					Sept 29/86						9.06
					March 6/87			20 EM			
					March 6/87			20 EM			
					Feb 16/88				98		
=====											
TOTALS		3334.24	3334.24			0	0	1280	938	1116.24	0
=====											

APPENDIX 3

PERSONNEL AND SURVEY DATES

APPENDIX 3

PERSONNEL AND SURVEY DATES

VIRGINIATOWN PROPERTY

PERSONNEL

WORK PERIODS

GEORGE GORZYNSKI
3836 West 16th Ave.
Vancouver, B.C.
V6R 3C7

Field : August 27 - October 12, 1987
November 22, 1987 - February 8, 1988
Office : February 10 - 29, 1988

H. ERIC EWEN
3239 Ganymede Dr.
Burnaby, B.C.
V3J 1A5

Field : August 27 - October 12, 1987
Office : October 15, 1987 - February 29, 1988

JERRY W. HO
1334 Woodbine Ave.
Toronto, Ont.
M4C 4G2

Field : August 27 - October 12, 1987
November 22, 1987 - February 8, 1988
Office : February 10 - 29, 1988

BERNARD BOUDREAU
P.O. Box 324
Larder Lake, Ont.
P0K 1L0

Field : June 9 - July 20, 1987

GABRIELLE SPADETTO
P.O. Box 324
Larder Lake, Ont.
P0K 1L0

Field : June 9 - July 20, 1987

LANGLEY DRILLING
49 Jayfield Rd.
Brampton, Ont.
L6S 3G3

Drilling : November 22, 1987 - February 8, 1988

APPENDIX 4

TECHNICAL DATA STATEMENTS AND PROCEDURE RECORDS



TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) GROUND GEOPHYSICS (MAGNETICS & EM-16) AND GEOCHEMISTRY
Township or Area Mc GARRY TOWNSHIP
Claim Holder(s) B. BOUDREAU & G. SPADETTO

Survey Company NORTHERN DYNASTY EXPLORATIONS LTD
Author of Report GEORGE GORZYNSKI, P. ENG.
Address of Author 3836 WEST 16th AVE, VANCOUVER, B.C.
Covering Dates of Survey JUNE 15, 1987 - FEBRUARY 29, 1988
(linecutting to office)
Total Miles of Line Cut 21.5 mi.

MINING CLAIMS TRAVERSED
List numerically

<u>L.</u> (prefix)	<u>666335</u> (number)
	<u>666338</u>
	<u>666507</u>
	<u>666508</u>
	<u>765071</u>
	<u>765072</u>
	<u>765073</u>
	<u>765074</u>
	<u>765075</u>
	<u>765086</u>
	<u>765087</u>
	<u>765088</u>
	<u>765089</u>
	<u>765090</u>
	<u>767378</u>
	<u>767379</u>
TOTAL CLAIMS _____	

If space insufficient, attach list

**SPECIAL PROVISIONS
CREDITS REQUESTED**

ENTER 40 days (includes
line cutting) for first
survey.
ENTER 20 days for each
additional survey using
same grid.

	DAYS per claim
Geophysical	
- Electromagnetic _____	
- Magnetometer _____	
- Radiometric _____	
- Other _____	
Geological _____	
Geochemical _____	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: May 1/88 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

Number of Stations 2,020 Number of Readings 1978 MAG/1980 X 2 EM
Station interval ~~10 METRES~~ 25 FEET Line spacing 300 - 600 FEET
Profile scale EM -> 1cm = 10' = 10 ft.
Contour interval 5' (FRASER FILTER EM) // 56,500 X, 56,750 X, 57,000 X, 57,500 X, 58,000 X MAG.

MAGNETIC

Instrument SCINTREX MFD-2 DIGITAL FLUXGATE MAGNETOMETER
Accuracy - Scale constant ± 10 GAMMAS (HAND HELD)
Diurnal correction method ONE HOUR BASE STATION TIE-INS WERE ALL WITHIN
Base Station check-in interval (hours) ± 40 GAMMAS - NO CORRECTION APPLIED
Base Station location and value MAIN BASE STATION AT 33+00W, 6+25S
READING: 56870 ± 40 GAMMAS

ELECTROMAGNETIC

Instrument GEONICS RONKA EM-16
Coil configuration TWO PERPENDICULAR RECEIVING COILS
Coil separation -
Accuracy ± 1%, ± 1°
Method: Fixed transmitter Shoot back In line Parallel line
Frequency 18.6 KHZ (SEATTLE, WASHINGTON, U.S.A.)
(specify V.L.F. station)
Parameters measured IN-PHASE SIGNAL (DEGREES) AND QUADRATURE (PERCENT)

GRAVITY

Instrument _____
Scale constant _____
Corrections made _____
Base station value and location _____
Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

Instrument _____
Method Time Domain Frequency Domain
Parameters - On time _____ Frequency _____
- Off time _____ Range _____
- Delay time _____
- Integration time _____
Power _____
Electrode array _____
Electrode spacing _____
Type of electrode _____

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken ALL

Total Number of Samples 537 SOILS, 87 ROCKS, 501 DRILLCORE

ANALYTICAL METHODS

Type of Sample SOIL, ROCK
(Nature of Material)

Values expressed in: per cent
p. p. m.
p. p. b.

Average Sample Weight 0.3 kg.

Method of Collection MATTOCK, ROCK HAMMER, CHISEL.

(Cu, Pb, Zn, Ni, Co, Ag, Mo, As) (circle)

Soil Horizon Sampled B₂+ (A₂)

Others SEE BELOW

Horizon Development A₁-A₂-(B₁)-B₂-C

Field Analysis (_____ tests)

Sample Depth 1-120 cm

Extraction Method _____

Terrain BEDROCK, GLACIAL TILL, SWAMP

Analytical Method _____

Drainage Development POOR TO MODERATE

Reagents Used _____

Estimated Range of Overburden Thickness _____

Field Laboratory Analysis

0-50m?

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Commercial Laboratory (_____ tests)

Mesh size of fraction used for analysis _____

Name of Laboratory ACCURASSAY LABORATORIES LTD. ACME ANALYTICAL LABORATORIES LTD.

SOILS: -80 MESH

Extraction Method AQUA REGIA

ROCKS: -100 MESH PULP

Analytical Method SEE BELOW

Reagents Used _____

General INDUCED CATION PLASMA (I.C.P.)

General OTHER I.C.P. ELEMENTS:

30 ELEMENT ANALYSIS:

Mn, Fe, U, Th, Sr, Cd, Sb, Bi, V,

0.5 g SAMPLE DIGESTED IN

Ca, P, La, Cr, Mg, Ba, Ti, B, Al,

3ml OF 3-1-2 HCL-HNO₃-H₂O AT

Na, K, W, Au

95°C FOR 1 HOUR, THEN DILUTED TO

10 ml WITH H₂O FOR T.C.P.

ANALYSIS.

Au: 10g SAMPLE: FIRE ASSAY

WITH AN ATOMIC ABSORPTION

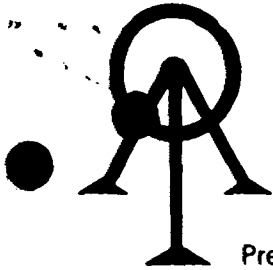
FINISH.

APPENDIX 5
CHEMICAL ANALYSES

GOLD ASSAYS FOR
SURFACE BEDROCK SAMPLES
AND
SOIL SAMPLES

Geochemical Sample Identification Code :

Example - GK7-R-152
 G = Sampler
 K = Virginiatown Property
 7 = 1987
 R = Rock sample (S = Soil sample)
 152 = Sequential sample number



ACCURASSAY LABORATORIES LTD.

P.O. BOX 604
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J5
TEL.: (705) 567-6343

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

8211 Northern Dynasty Explorations
844 West Hastings Street
Vancouver B.C.
V6C 1C8

Page #1

Date: 09/10/87 19

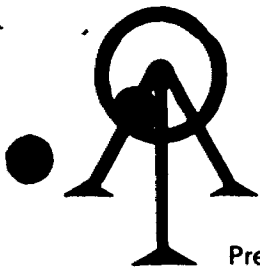
Work Order 870562

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
55820	L21+00W 3+00N	16
55821	3+50N	<5
55822	4+00N	<5
55823	4+50N	<5
55824	5+00N	24
55825	5+50N	<5
55826	6+00N	<5
55827	6+50N	<5
55828	7+50N	<5
55829	8+00N	<5
55829	8+00N	6 Check
55830	8+50N	<5
55831	9+00N	<5
55832	9+50N	<5
55833	10+00N	<5
55834	10+50N	<5
55835	11+00N	<5
55836	11+50N	<5
55837	12+00N	<5
55838	12+50N	<5
55838	12+50N	<5 Check
55839	13+00N	47
55840	13+50N	<5
55841	14+00N	<5
55842	14+50N	<5
55843	15+00N	<5
55844	15+50N	<5
55845	16+00N	<5
55846	16+50N	<5
55847	17+00N	7
55848	17+50N	8
55849	18+00N	7
55850	18+50N	<5

*N.Y.
Vancouver
D.C. to Seattle
D.A. to Los

Per: _____



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Date: 09/10/87 19

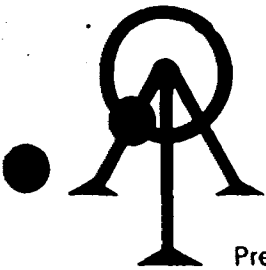
Work Order 870562

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
55851	19+00N	<5
55852	20+00N	<5
55853	20+50N	<5
55854	21+00N	<5
55855	21+50N	<5
55856	22+00N	<5
55857	22+50N	142
55858	23+00N	<5
55859	23+50N	<5
55860	24+00N	<5
55861	24+50N	<5
55862	25+00N	6
55863	25+50N	5
55864	L18+00W 11+00N	<5
55865	11+50N	<5
55866	12+00N	<5
55867	12+50N	<5
55868	13+00N	<5
55869	13+50N	<5
55870	14+00N	<5
55871	14+50N	34
55872	15+00N	<5
55873	15+50N	11
55874	16+00N	<5
55875	16+50N	<5
55876	17+00N	13
55877	17+50N	<5
55878	18+00N	<5
55879	18+50N	<5
55880	19+00N	11
55881	19+50N	<5
55882	20+00N	8
55883	20+50N	52

Per: _____

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Date: 09/10/87 19

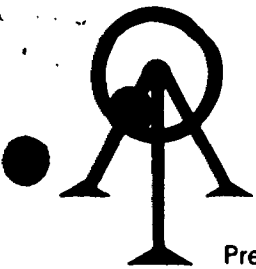
Work Order 870562

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
55884	L60+00W 0+00N	<5
55885	0+50N	5
55886	1+00N	<5
55887	1+50N	<5
55888	2+00N	9
55889	2+50N	5
55890	L63+00W 0+00S	<5
55891	0+50S	<5
55892	1+00S	33
55893	1+50S	<5
55894	2+00S	<5
55895	2+50S	<5
55896	3+00S	5
55897	3+50S	<5
55898	4+00S	5
55899	4+50S	7
55900	5+00S	<5
55901	5+50S	<5
55902	6+00S	<5
55903	6+50S	<5
55904	7+00S	11
55905	7+50S	176
55906	8+00S	<5
55907	8+50S	<5
55908	9+00S	<5
55909	9+50S	5
55910	10+00S	10
55911	10+50S	<5
55912	11+00S	<5
55913	11+50S	10
55914	12+00S	<5
55915	12+50S	<5
55916	13+00S	<5

Per: _____

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Page #4

Date: 09/10/87 19

Work Order 870562

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
55917	13+50S	10
55918	14+00S	<5
55919	14+50S	<5
55920	15+00S	<5
55921	15+50S	<5
55922	16+00S	<5
55923	16+50S	<5
55924	17+00S	<5
55925	L63+00W 17+50S	<5
55926	GK7-S100	6
55927	GK7-S101	65
55928	GK7-R100	<5
55929	GK7-R101	<5
55930	GK7-R102	7
55931	JK7-S1	<5
55932	JK7-S2	13
55933	JK7-S3	12
55934	JK7-R1	<5
55935	JK7-R2	56
55936	JK7-R3	7
55937	JK7-R4	5
55937	JK7-R4	<5 Check

NOTE: Some Checks on the tenth sample were not performed due to Insufficient Sample.

Per: _____

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Date: 09/11/87 19

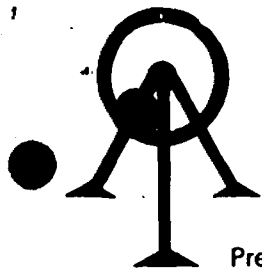
Work Order 870575

Assay results are as follows:

SAMPLE NUMBER			Gold
Accurassay	Customer		ppb
57505	63+00W	19+00S	12
57506		19+50S	10
57507		20+00S	7
57508		20+50S	7
57509		21+00S	8
57510		21+50S	15
57511		22+00S	11
57512		22+50S	12
57513		23+00S	15
57514		23+50S	12
57515		24+00S	13
57516	60+00W	17+00S	29
57517		18+00S	84
57518		18+50S	22
57519		19+00S	35
57520		19+50S	19
57521		20+00S	28
57522		20+50S	19
57523		21+00S	29
57524		21+50S	26
57525		22+00S	16
57526		22+50S	21
57527		23+00S	17
57528		23+50S	16
57529		24+00S	14
57530	0+00W	0+00S	19
57531		0+50S	19
57532		1+00S	19
57533		1+50S	6
57534		2+00S	<5
57535		2+50S	<5
57536		3+00S	<5
57537		3+50S	<5

Per: _____

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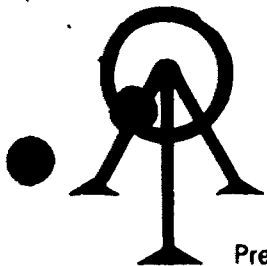
Work Order 870575

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
57538		4+00S 8
57539		4+50S 21
57540		5+00S <5
57541		5+50S 6
57542		6+00S 13
57543		6+50S 12
57544		7+00S 7
57545		7+50S 6
57546		8+00S 5
57547		8+50S <5
57548		9+00S 8
57549		9+50S 11
57550		10+00S 6
57551		10+50S 23
57552		11+00S 5
57553		11+50S 17
57554		12+00S 9
57555		12+50S 45
57556		13+00S 11
57557		14+00S 24
57558		14+50S 16
57559	0+00W 0+50N	12
57560	1+00N	10
57561	1+50N	213
57562	2+00N	13
57563	2+50N	9
57564	3+00N	7
57565	3+50N	8
57566	4+00N	<5
57567	4+50N	<5
57568	5+00N	8
57569	5+50N	7
57570	6+00N	14

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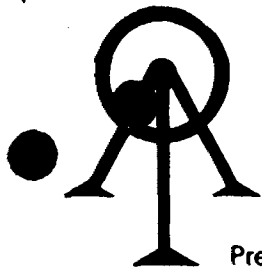
Work Order 870575

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
57571		6+50N 9
57572		7+00N 9
57573		7+50N 7
57574		8+00N 9
57575		8+50N 21
57576		9+00N 10
57577		9+50N 10
57578		10+00N 6
57579		10+50N <5
57580		11+00N 6
57581		11+50N 10
57582		12+00N <5
57583		12+50N 6
57584		13+00N <5
57585	21+00W	0+00N 53
57586		0+50N 16
57587		1+00N 12
57588		1+50N 18
57589		2+00N 6
57590	21+00W	0+50S <5
57591		1+00S 10
57592		1+50S <5
57593		2+00S 8
57594		2+50S 44
57595		3+00S 6
57596		3+50S 9
57597		4+00S 93
57598		4+50S 9
57599		5+00S 6
57600		5+50S 10
57601		6+00S <5
57602		6+50S 10
57603		7+00S 6

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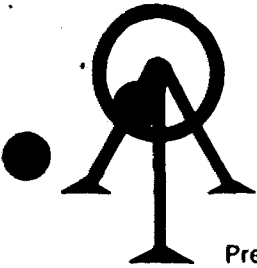
Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
57604		7+50S <5
57605		8+00S <5
57606		8+50S 8
57607		9+00S 13
57608		9+50S 12
57609		10+00S 7
57610		10+50S Missing
57611	33+00W	0+50S <5
57612		1+00S <5
57613		1+50S <5
57614		2+00S 7
57615		2+50S 8
57616		3+00S 24
57617		3+50S 13
57618		4+00S 31
57619		4+50S 9
57620		5+00S <5
57621		5+50S 8
57622		6+00S 7
57623	33+00W	0+00N 10
57624		0+50N 5
57625		1+00N 26
57626		1+50N 5
57627		2+00N <5
57628		2+50N 7
57629		3+00N 13
57630		3+50N 8
57631		4+00N 8
57632		4+50N 9
57633	36+00W	0+00N 24
57634		0+50N 11
57635		1+00N 19
57636		1+50N 16

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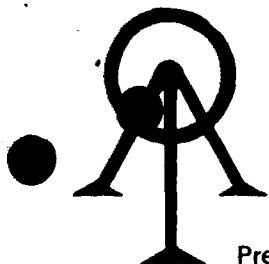
Work Order 870575

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
57637	2+00N	19
57638	2+50N	13
57639	3+00N	8
57640	3+50N	35
57641	4+00N	9
57642	4+50N	<5
57643	36+00W 0+50S	<5
57644	1+00S	12
57645	1+50S	<5
57646	2+00S	<5
57647	2+50S	15
57648	3+00S	18
57649	3+50S	<5
57650	4+00S	<5
57651	4+50S	20
57652	5+00S	12
57653	5+50S	11
57654	6+00S	<5
57655	6+50S	16
57656	7+00S	19
57657	7+50S	10
57658	8+00S	7
57659	8+50S	6
57660	9+00S	6
57661	11+00S	7
57662	11+50S	<5
57663	12+00S	11
57664	12+50S	13
57665	13+00S	11
57666	13+50S	8
57667	14+00S	6
57668	14+50S	<5
57669	15+00S	9

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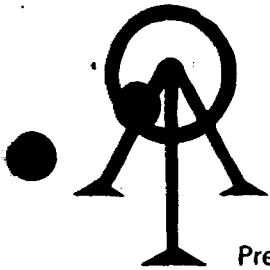
Work Order 870575

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
57670		15+50S 5
57671		18+00S <5
57672		18+50S <5
57673		17+00S <5
57674		17+50S <5
57675		18+00S <5
57676		18+50S 5
57677		19+00S 30
57678		19+50S 51
57679		20+00S 69
57680		20+50S 85
57681		21+00S 22
57682		21+50S 28
57683		22+00S 101
57684		22+50S 29
57685		23+00S 15
57686	36+00W	12+60S <5
57687	21+00W	11+00S 6
57688		11+50S 8
57689		12+00S <5
57690		12+50S 11
57691		13+00S 15
57692		13+50S 25
57693		14+00S 18
57694		14+50S <5
57695		15+00S <5
57696		15+50S <5
57697		16+00S <5
57698		16+50S 51
57699		17+00S 10
57700		17+50S 8
57701		18+00S 7
57702		18+50S 10

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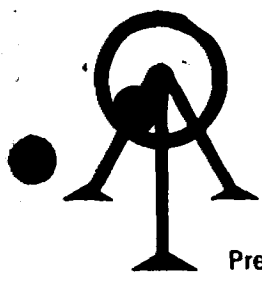
Date: 09/11/87 19

Work Order 870575

Assay results are as follows:

SAMPLE NUMBER			Gold
Accurassay	Customer		ppb
57703	121	19+00S	62
57704		19+50S	9
57705		20+00S	55
57706		20+50S	14
57707		21+00S	81
57708		21+50S	102
57709		22+00S	125
57710	48+00W	0+50S	38
57711		1+00S	5
57712		1+50S	<5
57713		2+00S	58
57714		2+50S	28
57715		3+00S	58
57716		3+50S	54
57717		4+00S	15
57718		4+50S	19
57719		5+00S	73
57720		5+50S	20
57721		6+00S	18
57722		6+50S	<5
57723		7+00S	<5
57724		7+50S	6
57725		8+00S	10
57726		8+50S	<5
57727		9+00S	<5
57728		9+50S	<5
57729		10+00S	45
57730		10+50S	<5
57731		11+00S	257
57732		11+50S	7
57733		12+00S	<5
57734		12+50S	5
57735		13+00S	5

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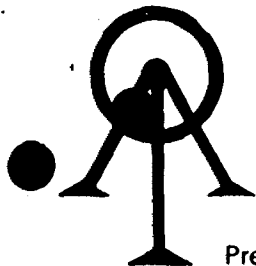
Work Order 870575

Assay results are as follows:

SAMPLE NUMBER	Customer	Gold ppb
57736	13+50S	13
57737	14+00S	6
57738	14+50S	15
57739	15+00S	<5
57740	15+50S	<5
57741	16+00S	7
57742	16+50S	<5
57743	17+00S	10
57744	17+50S	<5
57745	18+00S	<5
57746	18+50S	11
57747	19+00S	<5
57748	19+50S	7
57749	20+00S	37
57750	20+50S	15
57751	21+00S	7
57752	21+50S	16
57753	22+00S	19
57754	22+50S	36
57755	23+00S	7
57756	23+50S	114
57757	24+00S	42
57758	48+00W 0+50N	<5
57759	1+00N	<5
57760	1+50N	5
57761	2+00N	<5
57762	2+50N	<5
57763	3+00N	<5
57764	3+50N	8
57765	4+00N	10
57766	GK7-S-150	137
57767	151	980
57768	152	660

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Assay results are as follows:

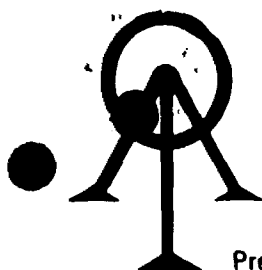
SAMPLE NUMBER	Customer	Gold ppb
57769		153
57770		154
57771		155
57772		156
57773		157
57774		158
57775	GK7 S-102	7
57776		15
57777		32
57778		8
57779		12
57780		8
57781		109
57782		67
57783	JK7-S-4	6
57784		9
57785		13
57786		63
57787		7
57788	GK7-R-150	6
57789		16
57790		19
57791		53
57792		89
57793		45
57793		45
57794		1130
57795		337
57796		1532
57797	GK7-R-103	41
57798		8
57799		<5
57800		<5

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Work Order 870575

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
57801	107	<5
57802	108	<5
57802	108	<5 Check
57803	109	<5
57804	110	5
57805	111	<5
57806	112	<5
57807	113	6
57808	114	10
57809	115	10
57810	JK7-R-5	6
57811	6	8
57811	6	7 Check
57812	7	9
57813	8	<5
57814	9	<5
57815	10	6
57816	0+00W 13+50S	17
57817	L48+00W 0+00	9
57817	L48+00W 0+00	7 Check

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Work Order 870590

Assay results are as follows:

SAMPLE NUMBER	Gold
Accurassay Customer	ppb
59079 L15+00E 0+00B	6
59080 0+50N	<5
59081 1+00N	24
59082 1+50N	15
59083 2+00N	6
59084 2+50N	<5
59085 3+00N	sample missing
59086 3+50N	6
59087 4+00N	<5
59088 4+50N	6
59088 4+50N	<5 Check
59089 5+00N	14
59090 5+50N	27
59091 6+00N	5
59092 6+50N	<5
59093 7+00N	6
59094 7+50N	23
59095 8+00N	7
59096 8+50N	7
59097 9+00N	10
59097 9+00N	10 Check
59098 9+50N	11
59099 10+00N	14
59100 10+50N	10
59101 11+00N	13
59102 11+50N	7
59103 12+00NB	<5
59104 L0+00 14+00NB	37
59105 14+50N	18
59106 15+00N	<5
59106 15+00N	15 Check
59107 15+50N	7
59108 16+00N	<5

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Work Order 870590

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
59109	16+50N	7
59110	17+00N	7
59111	17+50N	7
59112	18+00N	8
59113	18+50N	6
59114	19+00N	8
59115	19+50N	8
59115	19+50N	7 Check
59116	20+00N	10
59117	20+50N	12
59118	21+00N	7
59119	21+50N	<5
59120	22+00N	8
59121	22+50N	<5
59122	23+00N	8
59123	23+50N	11
59124	24+00N	18
59124	24+00N	6 Check
59125	24+50N	9
59126	25+00NB	5
59127	L9+00W 10+00NB	<5
59128	10+50N	10
59129	11+00N	6
59130	11+50N	<5
59131	12+00N	12
59132	12+50N	10
59133	13+00NB	16
59133	13+00NB	36 Check
59134	13+50N	<5
59135	14+00N	<5
59136	14+50N	5
59137	15+00N	<5
59138	15+50N	<5

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Assay results are as follows:

SAMPLE NUMBER	Gold
Accurassay Customer	ppb
59139 16+00N	<5
59140 16+50N	6
59141 17+00N	7
59142 17+50N	<5
59142 17+50N	<5 Check
59143 18+00N	<5
59144 18+50N	<5
59145 19+00N	<5
59146 19+50N	<5
59147 20+00N	<5
59148 20+50N	sample missing
59149 21+00N	14
59150 21+50N	<5
59151 22+00N	<5
59151 22+00N	<5 Check
59152 22+50N	<5
59153 23+00N	<5
59154 23+50N	<5
59155 24+00N	<5
59156 24+50N	<5
59157 25+00NB	<5
59158 L18+00W 21+50NB	6
59159 22+00N	<5
59160 22+50NB	10
59160 22+50NB	5 Check
59161 23+00N	11
59162 23+50N	7
59163 24+00N	9
59164 24+50N	22
59165 25+00N	10
59166 25+50N	11
59167 26+00N	7
59168 26+50NB	11

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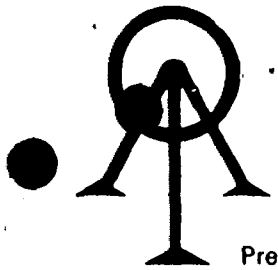
Work Order 870590

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
59169	GK7-S-110	6
59169	GK7-S-110	10 Check
59170	GK7-S-111	10
59171	GK7-S-112	7
59172	GK7-S-113	12
59173	EK7-S-1	56
59174	EK7-S-2	16
59175	EK7-S-3	17
59176	EK7-S-4	<5
59177	EK7-S-5	20
59178	EK7-S-6	21
59178	EK7-S-6	19 Check
59179	EK7-S-7	65
59180	EK7-S-8	20
59181	EK7-S-9	217
59182	EK7-S-10	102
59183	EK7-S-11	75
59184	EK7-S-12	25
59185	EK7-S-13	24
59186	EK7-S-14	29
59187	EK7-S-15	7
59187	EK7-S-15	15 Check
59188	EK7-S-16	56
59189	EK7-S-17	<5
59190	JK7-S-9	982
59191	JK7-S-10	51
59192	JK7-S-11	1253
59193	JK7-S-12	8
59194	JK7-S-13	12
59195	GK7-R-116	7
59196	GK7-R-117	<5
59196	GK7-R-117	<5 Check
59197	GK7-R-118	<5

Per: _____

ORIGINAL



ACCURASSAY LABORATORIES LTD.

P.O. BOX 604
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J5
TEL.: (705) 567-6343

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

8501 Northern Dynasty Explorations
844 West Hastings Street
Vancouver B.C.
V6C 1C8

Page #5

Date: 09/18/87 19

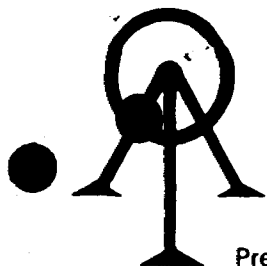
Work Order 870590

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
59198	GK7-R-119	<5
59199	GK7-R-120	<5
59200	EK7-R-1	166
59201	EK7-R-2	292
59202	EK7-R-3	40
59203	EK7-R-4	180
59204	EK7-R-5	21
59205	EK7-R-6	<5
59205	EK7-R-6	<5 Check
59206	EK7-R-7	<5
59207	JK7-R-11	6
59208	JK7-R-12	23
59209	JK7-R-13	7
59210	JK7-R-14	<5
59210	JK7-R-14	13 Check
59210-A	JK7-R-15	<5
59210-A	JK7-R-15	<5 Check

Per: _____

ORIGINAL



ACCURASSAY LABORATORIES LTD.

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KIRKLAND LAKE, ONTARIO, CANADA P2N 3J5
TEL.: (705) 567-6343

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

8495 Northern Dynasty Explorations
844 West Hastings Street
Vancouver B.C.
V6C 1C8

Page #1

Date: 09/18/87 19

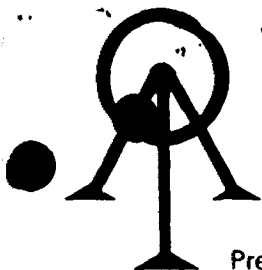
Work Order 870603

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
59416	EK7-S18	557
59417	EK7-S19	8
59418	EK7-S20	<5
59419	EK7-S21	16
59420	EK7-S22	19
59421	EK7-S23C	9
59422	L48+00W 24+50S	<5
59423	L18+00W 20+50N	<5
59424	L21+00W 22+50N	<5
59425	GK7-S114	56
59425	GK7-S114	32 Check
59426	GK7-S115	132
59427	GK7-S116	9
59428	GK7-S117	17
59429	GK7-S118	<5
59430	GK7-S119	<5
59431	GK7-S120	84
59432	GK7-S121	<5
59433	EK7-R8	11
59434	EK7-R9	8
59434	EK7-R9	14 Check
59435	EK7-R10	7
59436	EK7-R11	9
59437	EK7-R12	<5
59438	GK7-R121	<5
59439	GK7-R122	<5
59440	GK7-R123	<5
59441	GK7-R124	5
59442	GK7-R125	<5
59443	GK7-R126	<5
59443	GK7-R126	<5 Check
59444	GK7-R127	<5
59445	GK7-R128	7

Per: _____

ORIGINAL



VIRGINIA

(GK7 150-158

ACCURASSAY LABORATORIES LTD.

P.O. BOX 604

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J5

TEL.: (705) 567-6343

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

8496

Northern Dynasty Explorations
844 West Hastings Street
Vancouver B.C.
V6C 1C8

Page #2

Date: 09/18/87 19

Work Order 870603

Assay results are as follows:

SAMPLE NUMBER		Gold
Accurassay	Customer	ppb
59446	GK7-R129	<5
59447	GK7-R130	<5
59448	GK7-R131	<5
59449	GK7-R132	<5
59450	GK7-R133	<5
59451	GK7-R134	8
59452	GK7-R135	<5
59452	GK7-R135	<5 Check
59453	GK7-R136	12
59454	GK7-R137	16
59455	GK7-R138	<5
59456	GK7-R139	8
59457	GK7-R140	8
59458	GK7-R141	<5
59459	GK7-R142	<5
59460	GK7-R143	<5
59461	GK7-R144	<5
59461	GK7-R144	<5 Check
59462	GK7-R145	10
59463	GK7-R146	14
59464	GK7-R147	13
59465	GK7-R148	<5
59466	GK7-R149	8
59467	GK7-R180	173
59468	GK7-R181	6
59469	GK7-R182	<5
59470	GK7-R183	<5
59470	GK7-R183	<5 Check
59471	GK7-R184	6
59472	GK7-R185	<5
59473	GK7-R186	12
59474	GK7-R187	9
59474	GK7-R187	13 Check

Per: _____

INDUCED CATION PLASMA (I.C.P.) SPECTROMETRIC ANALYSES
FOR SURFACE BEDROCK SAMPLES
AND
SOIL SAMPLES

Geochemical Sample Identification Code :

Example - GK7-R-152
 G = Sampler
 K = Virginiatown Property
 7 = 1987
 R = Rock sample (S = Soil sample)
 152 = Sequential sample number

KIRKLAND LAKE

ACME ANALYTICAL LABORATORIES

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 NCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: P1-SOIL P2-ROCK AU11 ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: JUNE 3 1987

DATE REPORT MAILED: June 9/87

ASSAYER: D. J. Toy. DEAN TOYE, CERTIFIED B.C. ASSAYER

NORTHERN DYNASTY PROJECT-KIRKLAND LAKE File # 87-1571 Page 1

SAMPLE#	NO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BT	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	AU11
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
6K7-S-1	1	18	14	48	.1	20	5	98	2.00	24	5	ND	1	12	1	2	2	25	.17	.032	6	31	.35	20	.09	2	1.08	.01	.03	1	1
6K7-S-2	1	103	49	161	.4	160	58	489	3.23	218	5	ND	4	267	1	8	7	2	1.07	.084	19	12	.71	18	.01	9	.20	.01	.04	1	44
6K7-S-3	1	242	95	316	.3	189	67	902	5.60	250	5	ND	1	190	1	6	2	4	.66	.111	19	15	.44	28	.01	11	.32	.01	.04	2	84
6K7-S-4	2	45	32	143	.3	48	17	710	2.57	82	5	ND	1	41	1	10	2	11	.17	.055	24	10	.09	55	.01	2	.49	.01	.03	1	32
6K7-S-5	1	21	14	68	.2	28	9	131	2.97	28	5	ND	2	8	1	2	2	25	.11	.044	15	56	.35	21	.03	4	1.45	.01	.03	1	1
6K7-S-6	1	9	11	29	.1	10	3	90	.77	2	5	ND	1	9	1	2	3	17	.14	.018	9	26	.18	26	.05	2	.57	.01	.01	1	1
6K7-S-7	1	5	2	12	.1	4	1	15	.19	5	5	ND	1	6	1	2	3	7	.04	.012	6	6	.02	35	.02	2	.24	.01	.01	1	4
6K7-S-8	3	62	43	94	.1	93	29	507	10.43	239	5	ND	3	32	1	2	3	31	.41	.068	23	62	.41	66	.03	11	1.84	.01	.05	1	3
STD C/AU-S	18	55	42	130	6.8	64	27	972	3.89	37	15	8	32	46	17	17	23	60	.43	.087	34	58	.90	171	.08	34	1.71	.06	.13	12	49

NORTHERN DYNASTY PROJECT-KIRKLAND LAKE FILE # 87-1571

SAMPLE#	NO PPH	CU PPH	PB PPH	ZN PPH	AG PPH	NI PPH	CO PPH	MN PPH	FE %	AS PPH	U PPH	AU PPH	TH PPH	SR PPH	CD PPH	SO PPH	BI PPH	V PPH	CA %	P %	LA PPH	CR PPH	MG %	BA PPH	TI %	B PPH	AL %	NA %	K %	W PPH	AU# PPH
6K7-R-1	1	11	19	44	.1	35	6	251	2.00	14	5	ND	2	64	1	3	3	9	.40	.025	6	14	.70	27	.01	3	.84	.01	.06	1	7
6K7-R-2	1	11	7	24	.2	14	4	154	1.10	15	5	ND	2	196	1	6	2	1	.75	.019	4	7	.31	17	.01	2	.07	.02	.03	1	2
6K7-R-3	1	9	44	82	.3	10	1	288	1.19	11	5	ND	2	507	1	2	2	1	1.88	.035	2	3	.68	11	.01	5	.06	.01	.03	1	1
6K7-R-4	1	9	10	22	.2	9	1	271	.96	8	7	ND	2	298	1	2	2	1	.97	.026	2	5	.37	9	.01	2	.04	.01	.02	1	1
6K7-R-5	1	48	18	42	.1	32	5	221	1.97	22	5	ND	1	151	1	4	4	3	.51	.021	4	8	.53	17	.01	2	.26	.02	.05	1	1
6K7-R-6	2	52	14	72	.1	81	20	474	4.29	69	5	ND	5	35	1	2	2	13	.21	.081	19	89	.65	27	.01	2	1.25	.01	.10	1	5
6K7-R-7	1	72	15	45	.1	36	9	673	2.62	44	5	ND	3	385	1	2	3	8	5.68	.048	10	32	1.97	26	.01	3	.70	.01	.08	1	4
6K7-R-8	1	33	14	47	.1	6	7	508	2.13	3	5	ND	4	1332	1	2	2	4	2.01	.093	25	5	.60	935	.01	10	.23	.03	.07	1	1
6K7-R-9	1	166	14	61	.1	4	7	561	2.61	2	6	ND	3	1522	1	2	2	2	5.75	.035	5	2	1.76	619	.01	14	.05	.02	.01	1	1
6K7-R-10	1	49	10	40	.1	3	4	338	1.63	2	5	ND	1	158	1	2	2	1	1.39	.031	7	4	.47	396	.01	2	.12	.02	.03	1	1
6K7-R-11	1	33	5	11	.1	3	4	224	.75	2	5	ND	2	166	1	2	2	1	.95	.012	8	4	.32	1640	.01	3	.05	.02	.04	1	1
6K7-R-12	1	9	17	27	.1	9	9	575	1.77	2	5	ND	5	315	1	2	2	4	3.36	.086	22	5	1.11	277	.01	3	.22	.02	.16	1	1
6K7-R-13	9	1035	24	36	3.8	3	4	182	1.11	28	5	ND	1	106	1	16	21	1	.89	.024	2	3	.02	1894	.01	8	.03	.02	.01	1	9150
6K7-R-14	2	22	13	54	.1	12	9	558	2.19	2	5	ND	4	85	1	2	2	4	.90	.072	17	6	.34	650	.01	2	.22	.02	.10	1	1
6K7-R-15	1	15	7	13	.1	11	2	332	1.13	3	5	ND	1	173	1	2	2	1	1.83	.017	3	5	.64	36	.01	2	.03	.02	.01	1	1
6K7-R-16	1	18	2	75	.1	67	19	725	3.21	7	8	ND	3	292	1	2	4	19	3.14	.068	14	66	1.80	65	.01	2	1.01	.02	.07	1	1
6K7-R-17	1	10164	2	19	.1	3	8	1952	2.52	5	5	ND	4	92	1	2	2	41	20.24	.001	5	3	.40	11	.01	2	.59	.01	.01	5	1
STD C/AU-R	20	58	39	139	7.2	63	29	1045	3.79	42	19	9	35	49	18	17	23	64	.47	.101	37	58	.90	184	.08	36	1.73	.07	.13	12	510

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1-SOIL P2-ROCK AU88 ANALYSIS BY FA+AA FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 19 1987

DATE REPORT MAILED:

Nov 2/87

ASSAYER.. *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

NORTHERN DYNASTY PROJECT-KIRKLAND LT. File # 87-5084 Page 1

SAMPLE#	NO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE I	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SD PPM	BI PPM	V PPM	CA I	P I	LA PPM	CR PPM	MG I	BA PPM	TI I	B PPM	AL I	NA I	K I	W PPM	AU88 PPB
EX7-S-50	1	20	7	39	.3	7	5	162	1.88	8	5	ND	2	38	1	2	2	16	.26	.034	13	8	.09	140	.01	4	.45	.02	.02	2	4
EX7-S-200	5	28	5	26	.3	14	6	1218	1.29	11	5	ND	3	763	1	2	2	14	.88	.025	9	20	.47	230	.05	4	.59	.04	.03	1	1
EX7-S-201	1	7	5	34	.2	7	2	92	1.75	4	5	ND	2	14	1	2	2	31	.14	.020	8	22	.15	39	.10	2	.74	.01	.04	1	1

NORTHERN DYNASTY PROJECT-KIRKLAND LT. FILE # 87-5084

SAMPLE#	NO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	HG	BA	TI	B	AL	NA	K	M	AU11
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
EK7-R-50	1	328	16	60	.5	5	9	325	2.54	2	5	ND	3	6881	1	3	2	3	4.29	.037	7	2	1.46	228	.01	19	.07	.06	.02	1	1
EK7-R-51	1	279	14	45	.1	3	5	402	1.81	4	5	ND	2	101	1	2	2	3	.26	.024	7	4	.08	816	.01	39	.08	.03	.02	2	10
EK7-R-52	1	232	14	51	.4	6	5	613	2.78	2	5	ND	3	502	1	2	2	3	3.56	.038	8	2	.93	1586	.01	16	.12	.04	.04	1	8
EK7-R-53	1	15	4	39	.7	5	6	464	2.17	2	5	ND	18	359	1	2	2	8	1.97	.179	69	4	.81	194	.01	11	.54	.07	.17	2	1
JK7-R-16	1	13	7	20	.1	7	1	130	1.01	9	5	ND	1	44	1	2	2	2	.09	.034	2	4	.07	29	.01	5	.12	.03	.01	1	1

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEC. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B M AND LIMITED FOR NA K AND AL. NO DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: Pulv AUTO ANALYSIS BY FA+AA FROM 10 GM SAMPLE.

DATE RECEIVED: NOV 18 1987 DATE REPORT MAILED: Nov 27/87 ASSAYER: D.C. JAYZ DEAN TOYE, CERTIFIED B.C. ASSAYER

NORTHERN DYNASTY File # 87-5700 Page 1

Table with columns for SAMPLE#, MO, CU, PB, ZN, AG, NI, CO, MN, FE, AS, U, AU, TH, SR, CD, SB, BI, V, CA, P, LA, CR, MG, BA, TI, B, AL, NA, K, M, AU11, and AUI1. Rows list various sample IDs (e.g., GK7-R-100) and their corresponding elemental concentrations in PPM.

Handwritten notes and corrections: '13 ACCURASAIL', 'NOT FROM Y-TOWN PROPERTY', and a list of numbers (87, 45, 1130, 337, 1532) next to sample IDs.

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Pulp AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: NOV 18 1987

DATE REPORT MAILED: Nov 27/87

ASSAYER: *D. Joyce* DEAN TOYE, CERTIFIED B.C. ASSAYER

NORTHERN DYNASTY File # 87-5700 Page 2

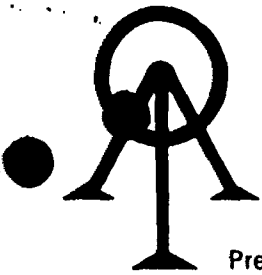
SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	AU#	
	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	I	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	I	I	PPH	PPH	I	PPH	I	I	I	I	I	PPH	PPB	
✓ BK7-S-109	1	117	59	86	.1	16	5	233	2.26	48	5	ND	3	12	1	2	2	14	.04	.076	22	9	.04	72	.01	2	.40	.01	.04	1	67	
WNS DIC BK7-S-150	1	66	12	59	.3	236	29	984	3.58	172	5	ND	5	38	1	3	2	38	.73	.040	14	188	1.03	52	.08	4	1.64	.05	.08	2	125	
WNS ZONE BK7-S-151	2	296	29	140	.6	2711	161	6447	16.15	3107	5	ND	2	16	1	94	2	21	.92	.051	4	309	.65	61	.01	6	.61	.03	.02	1	980	
WNS BK7-S-152	1	174	22	75	.5	1411	165	6954	24.63	4169	5	ND	5	20	1	12	2	80	.15	.032	34	364	.40	125	.01	3	1.31	.02	.02	1	725	
WNS BK7-S-153	1	33	2	21	.1	380	22	312	1.53	93	5	ND	3	10	1	2	2	23	.24	.028	7	97	.48	21	.06	3	.93	.03	.01	1	4	
WNS BK7-S-154	1	38	2	32	.1	75	10	188	2.17	12	5	ND	2	17	1	2	2	32	.26	.042	7	117	.61	21	.07	2	1.52	.03	.02	21	12	
WNS BK7-S-155	1	181	94	156	.4	470	58	909	8.62	10405	5	ND	2	217	1	2	2	8	.96	.066	12	62	1.26	37	.01	9	.50	.03	.01	1	510	
WNS BK7-S-156	1	11	2	13	.1	15	3	58	.93	27	5	ND	3	6	1	2	2	14	.11	.016	5	19	.15	12	.05	3	1.12	.01	.02	1	1	
WNS BK7-S-157	1	7	4	25	.8	7	3	90	1.62	7	5	ND	4	6	1	4	2	30	.08	.020	8	21	.09	15	.08	3	1.13	.02	.02	1	2	
WNS BK7-S-158	1	6	7	11	.2	10	3	83	1.06	2	5	ND	3	6	1	2	2	21	.09	.017	7	21	.11	17	.06	14	.95	.02	.01	1	1	
STD C/AU-R	19	58	41	132	7.0	67	27	1024	4.08	41	20	7	38	49	18	18	20	56	.48	.085	37	58	.85	178	.08	32	1.90	.09	.14	10	490	

ACCURASSAY
 Au
 137
 980
 669
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GOLD ASSAYS FOR
DIAMOND DRILLCORE SAMPLES

* - Assays recorded on drill logs and on sections in Appendix 7.



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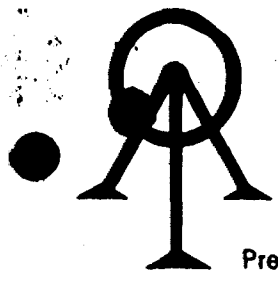
Northern Dynasty Explorations
844 West Hastings Street
Vancouver, B.C.
V6C-1C8

Date: December 10 1987

Work Order # : 870982
Project :

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
86015	7001	90
86016	7002	<5
86017	7003	<5
86018	7004	<5
86019	7005	11
86020	7006	<5
86021	7007	<5
86022	7008	<5
86023	7009	<5
86024	7010	<5
86024	7010	<5 Check
86025	7011	<5
86026	7012	7
86027	7013	<5
86028	7014	11
86029	7015	6
86030	7016	5
86031	7017	<5
86031	7017	<5 Check

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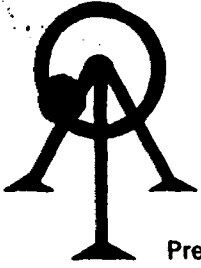
Northern Dynasty Expl. Ltd.
844 West Hastings Street
Vancouver, B.C.
V6C-1C8

Date: December 11 1987

Work Order # : 870970
Project :

SAMPLE NUMBERS	Customer	Gold Oz/T	Gold ppb	
85768	7301	<0.001	<5	
85769	7302	<0.001	<5	
85770	7303	<0.001	<5	
85771	7304	<0.001	16	
85772	7305	0.047	1603	
85773	7306	<0.001	18	
85774	7307	<0.001	16	
85775	7308	<0.001	<5	
85776	7309	<0.001	13	
85777	7310	<0.001	<5	
85777	7310	<0.001	<5	Check
85778	7311	<0.001	<5	
85779	7312	<0.001	<5	
85780	7313	<0.001	<5	
85781	7314	<0.001	11	
85782	7315	<0.001	12	
85783	7316	<0.001	12	
85784	7317	<0.001	26	
85785	7318	<0.001	<5	
85786	7319	<0.001	<5	
85786	7319	<0.001	<5	Check
85787	7320	<0.001	<5	
85788	7321	<0.001	<5	
85789	7322	<0.001	<5	
85790	7323	<0.001	<5	
85791	7324	0.002	84	
85792	7325	<0.001	<5	
85793	7326	<0.001	10	
85794	7327	<0.001	6	
85795	7328	<0.001	<5	
85795	7328	<0.001	9	Check

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844 West Hastings Street
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V6C-1C8

Date: December 11 1987

Work Order # : 870970
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
85796	7329	<0.001	10	
85797	7330	<0.001	5	
85798	7331	<0.001	9	
85799	7332	<0.001	<5	
85800	7333	<0.001	<5	
85801	7334	<0.001	7	
85802	7335	<0.001	<5	
85803	7336	<0.001	7	
85804	7337	<0.001	7	
85804	7337	<0.001	7	Check
85805	7338	<0.001	8	
85806	7339	<0.001	7	
85807	7340	<0.001	16	
85808	7341	<0.001	8	
85809	7342	<0.001	<5	
85810	7343	<0.001	<5	
85811	7344	<0.001	8	
85812	7345	<0.001	<5	
85813	7346	<0.001	<5	
85813	7346	<0.001	<5	Check

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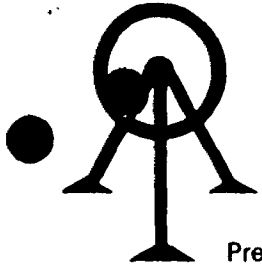
Northern Dynasty Expl. Ltd.
844 West Hastings Street
Vancouver, B.C.
V6C-1C8

Date: January 5 1988

Work Order # : 871030
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
89234	7018	<0.001	14	
89235	7019	<0.001	8	
89236	7020	<0.001	7	
89237	7021	<0.001	<5	
89238	7022	<0.001	13	
89239	7023	<0.001	7	
89240	7024	<0.001	<5	
89241	7025	<0.001	<5	
89242	7026	<0.001	7	
89243	7027	<0.001	<5	
89243	7027	<0.001	6	Check
89244	7028	<0.001	7	
89245	7029	<0.001	5	
89246	7030	<0.001	8	
89247	7031	<0.001	13	
89248	7032	<0.001	9	
89249	7033	<0.001	8	
89250	7034	<0.001	12	
89251	7035	<0.001	10	
89252	7036	<0.001	15	
89252	7036	0.001	37	Check
89253	7037	<0.001	9	
89254	7038	<0.001	12	
89255	7039	<0.001	7	
89256	7040	<0.001	9	
89257	7041	<0.001	9	
89258	7042	<0.001	10	
89259	7043	<0.001	11	
89260	7044	<0.001	10	
89261	7045	<0.001	17	
89261	7045	<0.001	19	Check

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16524 Northern Dynasty Expl. Ltd.
844 West Hastings Street
Vancouver, B.C.
V6C-1C8

Date: January 5 1988

Work Order # : 871030
Project :

SAMPLE NUMBERS		Gold	Gold
Accurassay	Customer	Oz/T	ppb
89262	7046	<0.001	<5
89263	7047	<0.001	8
89264	7048	<0.001	15
89265	7049	<0.001	14
89266	7050	<0.001	32
89267	7051	<0.001	<5
89268	7052	<0.001	20
89269	7053	<0.001	30
89270	7054	<0.001	<5
89270	7054	<0.001	30
89271	7055	<0.001	6
89272	7056	<0.001	<5
89273	7057	<0.001	9
89274	7058	<0.001	<5
89275	7059	<0.001	<5
89276	7060	<0.001	<5
89277	7061	0.004	142
89278	7062	<0.001	<5
89279	7063	<0.001	12
89279	7063	<0.001	11
89280	7064	<0.001	6
89281	7065	<0.001	16
89282	7066	<0.001	14
89283	7067	<0.001	9
89284	7068	<0.001	<5
89285	7069	<0.001	<5
89286	7070	<0.001	<5
89287	7071	<0.001	<5
89288	7072	<0.001	<5
89288	7072	<0.001	<5
89289	7073	<0.001	<5

Check

Check

Check

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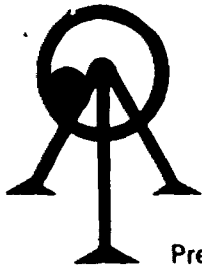
16525 Northern Dynasty Expl. Ltd.
844 West Hastings Street
Vancouver, B.C.
V6C-1C8

Date: January 5 1988

Work Order # : 871030
Project :

SAMPLE NUMBERS		Gold	Gold
Accurassay	Customer	Oz/T	ppb
89290	7074	<0.001	<5
89291	7075	<0.001	<5
89292	7076	<0.001	9
89293	7077	<0.001	7
89294	7078	<0.001	<5
89295	7079	<0.001	17
89295	7079	<0.001	<5 Check

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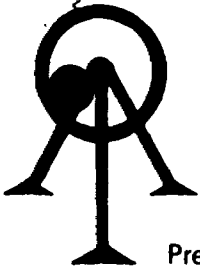
17121 Northern Dynasty Expl. Ltd.
844 West Hastings Street
Vancouver, B.C.
V6C-1C8

Date: January 25 1988

Work Order # : 880036
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
94596	7080	<0.001	10	
94597	7081	<0.001	<5	
94598	7082	<0.001	<5	
94599	7083	<0.001	<5	
94600	7084	<0.001	<5	
94601	7085	<0.001	6	
94602	7086	<0.001	17	
94603	7087	<0.001	<5	
94604	7088	<0.001	22	
94605	7089	<0.001	9	
94605	7089	<0.001	23	Check
94606	7090	<0.001	9	
94607	7091	<0.001	<5	
94608	7092	<0.001	<5	
94609	7093	<0.001	21	
94610	7094	<0.001	6	
94611	7095	<0.001	18	
94612	7096	<0.001	7	
94613	7097	<0.001	12	
94614	7098	0.005	173	
94614	7098	0.003	95	Check
94615	7099	0.004	129	
94616	7100	<0.001	8	
94617	7101	0.002	83	
94618	7102	0.003	94	
94619	7103	<0.001	17	
94620	7104	<0.001	32	
94621	7105	<0.001	17	
94622	7106	<0.001	<5	
94623	7107	<0.001	6	
94623	7107	<0.001	6	Check

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17122 Northern Dynasty Expl. Ltd.
844 West Hastings Street
Vancouver, B.C.
V6C-1C8

Date: January 25 19 88

Work Order # : 880036
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
94624	7108	<0.001	<5	
94625	7109	<0.001	<5	
94626	7110	<0.001	<5	
94627	7111	<0.001	<5	
94628	7112	<0.001	<5	
94629	7113	<0.001	<5	
94630	7114	<0.001	<5	
94631	7115	<0.001	<5	
94632	7116	<0.001	10	
94632	7116	<0.001	9	Check
94633	7117	<0.001	<5	
94634	7118	<0.001	<5	
94635	7119	<0.001	10	
94636	7120	<0.001	<5	
94637	7121	<0.001	<5	
94638	7122	<0.001	<5	
94639	7123	<0.001	<5	
94640	7124	<0.001	<5	
94641	7125	<0.001	<5	
94641	7125	<0.001	8	Check
94642	7126	<0.001	<5	
94643	7127	<0.001	<5	
94644	7128	<0.001	5	
94645	7129	<0.001	<5	
94646	7130	<0.001	6	
94647	7131	<0.001	<5	
94648	7132	<0.001	<5	
94649	7133	<0.001	<5	
94650	7134	<0.001	<5	
94650	7134	<0.001	<5	Check
94651	7135	<0.001	<5	

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Date: January 25 1988

Work Order # : 880036
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
94652	7136	<0.001	8	
94653	7137	<0.001	<5	
94654	7138	<0.001	<5	
94655	7139	<0.001	<5	
94656	7140	<0.001	16	
94657	7141	<0.001	6	
94658	7142	<0.001	16	
94659	7143	0.003	96	
94659	7143	0.008	283	Check
94660	7144	0.002	78	
94661	7145	0.005	187	
94662	7146	<0.001	11	
94663	7147	<0.001	<5	
94664	7148	<0.001	8	
94665	7149	<0.001	<5	
94666	7150	<0.001	<5	
94667	7151	<0.001	<5	
94668	3251	<0.001	<5	
94668	3251	<0.001	<5	Check
94669	3252	<0.001	<5	
94670	3253	<0.001	<5	
94671	3254	<0.001	<5	
94672	3255	<0.001	<5	
94672	3255	<0.001	<5	Check

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V6C-1C8

Date: February 1 1988

Work Order # : 880075
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
97156	3264	0.004	140	
97157	3265	<0.001	34	
97158	3266	0.002	80	
97159	3267	0.002	65	
97160	7231	<0.001	26	
97161	7232	<0.001	14	
97162	7233	<0.001	11	
97163	7234	<0.001	10	
97164	7235	<0.001	6	
97165	7236	<0.001	23	
97165	7236	<0.001	12	Check
97166	7237	<0.001	16	
97167	7238	<0.001	18	
97168	7239	<0.001	15	
97169	7240	<0.001	15	
97170	7241	<0.001	32	
97171	7242	<0.001	17	
97172	7243	<0.001	15	
97173	7244	<0.001	8	
97174	7245	<0.001	<5	
97174	7245	<0.001	<5	Check
97175	7246	<0.001	<5	
97176	7247	0.009	311	
97177	7248	0.003	112	
97178	7249	<0.001	5	
97179	7250	0.002	60	
97180	7251	0.002	55	
97181	7252	<0.001	15	
97182	7253	<0.001	9	
97183	7254	<0.001	7	
97183	7254	<0.001	11	Check

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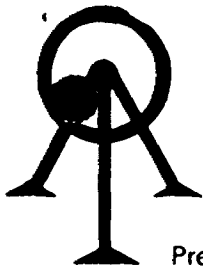
Northern Dynasty Expl. Ltd.
844 West Hastings Street
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V6C-1C8

Date: February 1 19 88

Work Order # : 880075
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
97184	7255	<0.001	11	
97185	7256	<0.001	<5	
97186	7257	<0.001	7	
97187	7258	<0.001	8	
97188	7259	<0.001	9	
97189	7260	<0.001	<5	
97190	7261	<0.001	<5	
97191	7262	<0.001	8	
97192	7263	<0.001	10	
97192	7263	<0.001	<5	Check
97193	7264	<0.001	<5	
97194	7265	<0.001	<5	
97195	7266	<0.001	<5	
97196	7267	<0.001	<5	
97197	7268	<0.001	<5	
97198	7269	<0.001	13	
97199	7270	<0.001	9	
97200	7271	<0.001	6	
97201	7272	<0.001	10	
97201	7272	<0.001	<5	Check
97202	7273	<0.001	8	
97203	7274	<0.001	11	
97204	7275	<0.001	5	
97205	7276	<0.001	6	
97206	7277	<0.001	<5	
97206	7277	<0.001	9	Check

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844 West Hastings Street
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Date: February 1 19 88

Work Order # : 880068
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
96885	3256	<0.001	17	
96886	3257	<0.001	<5	
96887	3258	<0.001	<5	
96888	3259	<0.001	<5	
96889	3260	<0.001	7	
96890	3261	0.004	137	
96891	3262	<0.001	<5	
96892	3263	0.003	114	
96893	7152	<0.001	<5	
96894	7153	<0.001	<5	
96894	7153	<0.001	<5	Check
96895	7154	<0.001	<5	
96896	7155	<0.001	<5	
96897	7156	<0.001	<5	
96898	7157	<0.001	<5	
96899	7158	<0.001	<5	
96900	7159	<0.001	<5	
96901	7160	<0.001	<5	
96902	7161	<0.001	18	
96903	7162	<0.001	11	
96903	7162	<0.001	<5	Check
96904	7163	<0.001	<5	
96905	7164	<0.001	8	
96906	7165	<0.001	9	
96907	7166	<0.001	<5	
96908	7167	<0.001	<5	
96909	7168	<0.001	<5	
96910	7169	<0.001	<5	
96911	7170	<0.001	<5	
96912	7171	<0.001	12	
96913	7172	<0.001	7	

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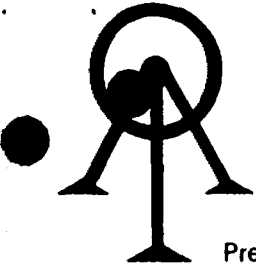
Date: February 1 19 88

Work Order # : 880068
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
96914	7173	<0.001	<5	
96915	7174	<0.001	<5	
96916	7175	<0.001	<5	
96917	7176	<0.001	9	
96918	7177	<0.001	<5	
96919	7178	<0.001	6	
96920	7179	<0.001	<5	
96921	7180	<0.001	<5	
96921	7180	<0.001	<5	Check
96922	7181	<0.001	<5	
96923	7182	<0.001	<5	
96924	7183	<0.001	<5	
96925	7184	<0.001	<5	
96926	7185	<0.001	15	
96927	7186	<0.001	9	
96928	7187	<0.001	11	
96929	7188	<0.001	8	
96930	7189	<0.001	10	
96930	7189	<0.001	18	Check
96931	7190	<0.001	13	
96932	7191	<0.001	11	
96933	7192	<0.001	10	
96934	7193	<0.001	18	
96935	7194	<0.001	14	
96936	7195	<0.001	20	
96937	7196	<0.001	9	
96938	7197	<0.001	6	
96939	7198	<0.001	8	
96939	7198	<0.001	6	Check
96940	7199	0.002	72	
96941	7200	<0.001	6	

Per: _____

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Northern Dynasty Expl. Ltd.
844 West Hastings Street
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V6C-1C8

Date: February 1 1988

Work Order # : 880068
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
96942	7201	<0.001	<5	
96943	7202	<0.001	11	
96944	7203	<0.001	8	
96945	7204	<0.001	<5	
96946	7205	<0.001	22	
96947	7206	<0.001	7	
96948	7207	<0.001	<5	
96948	7207	<0.001	12	Check
96949	7208	<0.001	8	
96950	7209	<0.001	<5	
96951	7210	<0.001	23	
96952	7211	<0.001	6	
96953	7212	<0.001	10	
96954	7213	<0.001	10	
96955	7214	<0.001	<5	
96956	7215	<0.001	11	
96957	7216	<0.001	8	
96957	7216	<0.001	9	Check
96958	7217	<0.001	17	
96959	7218	<0.001	15	
96960	7219	<0.001	<5	
96961	7220	<0.001	7	
96962	7221	<0.001	<5	
96963	7222	<0.001	10	
96964	7223	<0.001	7	
96965	7224	<0.001	9	
96966	7225	<0.001	<5	
96966	7225	<0.001	12	Check
96967	7226	<0.001	<5	
96968	7227	<0.001	9	
96969	7228	<0.001	<5	

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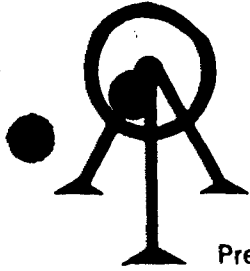
Northern Dynasty Expl. Ltd.
844 West Hastings Street
Vancouver, B.C.
V6C-1C8

Date: February 1 19 88

Work Order # : 880068
Project :

SAMPLE NUMBERS		Gold	Gold
Accurassay	Customer	Oz/T	ppb
96970	7229	<0.001	10
96971	7230	<0.001	<5
96971	7230	<0.001	<5 Check

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Northern Dynasty Expl. Ltd.
844 West Hastings Street
Vancouver, B.C.
V6C-1C8

Date: February 5 19 88

Work Order # : 880097
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
98288	3268	<0.001	<5	
98289	3269	<0.001	9	
98290	3270	<0.001	7	
98291	3271	<0.001	9	
98292	3272	<0.001	10	
98293	3273	<0.001	7	
98294	3274	<0.001	<5	
98295	3275	<0.001	13	
98296	3276	<0.001	15	
98297	3277	<0.001	15	
98297	3277	<0.001	10	Check
98298	3278	<0.001	21	
98299	3279	<0.001	16	
98300	3280	<0.001	24	
98301	3281	<0.001	<5	
98302	3282	<0.001	<5	
98303	3283	<0.001	<5	
98304	3284	<0.001	9	
98305	3285	<0.001	<5	
98306	3286	<0.001	<5	
98306	3286	<0.001	14	Check
98307	3287	<0.001	<5	
98308	3288	<0.001	20	
98309	3289	<0.001	10	
98310	3290	<0.001	<5	
98311	3291	<0.001	7	
98312	3292	<0.001	10	
98313	3293	<0.001	5	
98314	3294	<0.001	15	
98315	3295	<0.001	20	
98315	3295	<0.001	8	Check

Per: _____

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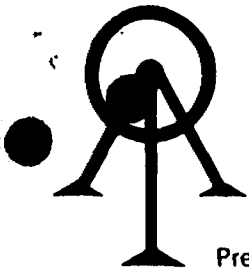
Date: February 5 1988

Work Order # : 880097
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
98316	3296	<0.001	13	
98317	7278	<0.001	10	
98318	7279	<0.001	<5	
98319	7280	<0.001	6	
98320	7281	<0.001	14	
98321	7282	<0.001	18	
98322	7283	<0.001	17	
98323	7284	<0.001	15	
98324	7285	<0.001	8	
98324	7285	<0.001	8	Check
98325	7286	<0.001	8	
98326	7287	<0.001	<5	
98327	7288	<0.001	7	
98328	7289	<0.001	8	
98329	7290	<0.001	<5	
98330	7291	<0.001	5	
98331	7292	<0.001	7	
98332	7293	<0.001	10	
98333	7294	0.002	81	
98333	7294	<0.001	21	Check
98334	7295	<0.001	6	
98335	7296	<0.001	<5	
98336	7297	<0.001	<5	
98337	7298	<0.001	8	
98338	7299	<0.001	5	
98339	7300	<0.001	5	
98339	7300	<0.001	16	Check

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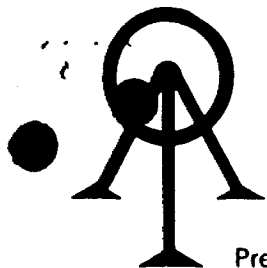
Northern Dynasty Expl. Ltd.
844 West Hastings Street
Vancouver, B.C.
V6C-1C8

Date: February 8 19 88

Work Order # : 880118
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold Oz/T	Gold ppb	
99196	97501	<0.001	<5	
99197	97502	<0.001	9	
99198	97503	<0.001	<5	
99199	97504	<0.001	9	
99200	97505	<0.001	17	
99201	97506	<0.001	12	
99202	97507	<0.001	15	
99203	97508	<0.001	21	
99204	97509	<0.001	25	
99205	97510	<0.001	14	
99205	97510	<0.001	10	Check
99206	97511	<0.001	22	
99207	97512	<0.001	25	
99208	97513	<0.001	27	
99209	97514	<0.001	20	
99210	97515	<0.001	26	
99211	97516	<0.001	24	
99212	97517	<0.001	23	
99213	97518	<0.001	33	
99214	97519	<0.001	28	
99214	97519	<0.001	34	Check
99215	97520	<0.001	15	
99216	97521	<0.001	10	
99217	97522	<0.001	14	
99218	97523	<0.001	19	
99219	97524	<0.001	18	
99220	97525	<0.001	17	
99221	97526	<0.001	15	
99222	97527	0.001	36	
99223	97528	<0.001	27	
99223	97528	0.001	36	Check

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844 West Hastings Street
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Date: February 8 1988

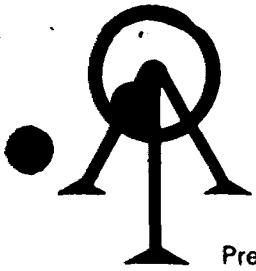
Work Order # : 880118
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
99224	97529	<0.001	13	
99225	97530	<0.001	22	
99226	97531	<0.001	18	
99227	97532	<0.001	18	
99228	97533	<0.001	19	
99229	97534	<0.001	23	
99230	97535	<0.001	34	
99231	97536	<0.001	26	
99232	97537	<0.001	22	
99232	97537	<0.001	25	Check
99233	97538	<0.001	12	
99234	97539	<0.001	10	
99235	97540	<0.001	15	
99236	97541	<0.001	18	
99237	97542	<0.001	14	
99237	97542	<0.001	16	Check

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Date: February 15 19 88

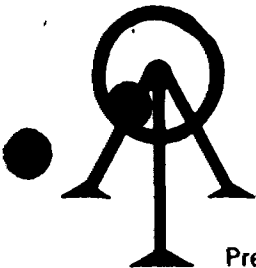
Work Order # : 880134
Project :

Accurassay	SAMPLE NUMBERS Customer	Gold Oz/T	Gold ppb	
100266	97543A	<0.001	13	
100267	97544A	<0.001	14	
100268	97545A	<0.001	19	
100269	97546A	<0.001	6	
100270	97547A	<0.001	<5	
100271	97548A	<0.001	<5	
100272	97549A	<0.001	<5	
100273	97550A	<0.001	<5	
100274	97551A	<0.001	<5	
100275	97552A	<0.001	5	
100275	97552A	<0.001	<5	Check
100276	97553A	<0.001	<5	
100277	97554A	<0.001	<5	
100278	97555A	<0.001	10	
100279	97556A	<0.001	<5	
100280	97557A	<0.001	<5	
100281	97558A	<0.001	<5	
100282	97559A	<0.001	<5	
100283	97560A	<0.001	<5	
100284	97561A	<0.001	<5	
100284	97561A	<0.001	26	Check
100285	97562A	<0.001	18	
100286	97563A	<0.001	12	
100287	97564A	<0.001	8	
100288	97565A	0.001	48	
100289	97566A	<0.001	20	
100290	97567A	<0.001	<5	
100291	97568A	<0.001	<5	
100292	97569A	<0.001	27	
100293	97570A	0.002	64	
100293	97570A	<0.001	<5	Check

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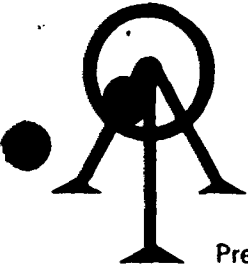
Northern Dynasty Expl. Ltd.
844 West Hastings Street
Vancouver, B.C.
V6C-1C8

Date: February 15 19 88

Work Order # : 880134
Project :

SAMPLE NUMBERS		Gold	Gold
Accurassay	Customer	Oz/T	ppb
100294	97571A	<0.001	6
100295	97572A	<0.001	5
100296	97573A	<0.001	7
100297	97574A	<0.001	<5
100298	97575A	<0.001	<5
100299	97576A	<0.001	8
100300	97577A	<0.001	<5
100301	97578A	<0.001	6
100302	97579A	<0.001	8
100302	97579A	<0.001	9 Check
100303	97580A	Result to be forwarded	
100304	97581A	<0.001	11
100305	97582A	<0.001	6
100306	97583A	<0.001	12
100307	97584A	<0.001	13
100308	97585A	<0.001	10
100309	97586A	<0.001	5
100310	97587A	<0.001	24
100311	97588A	<0.001	30
100311	97588A	<0.001	10 Check
100312	97589A	<0.001	15
100313	97590A	<0.001	15
100314	97591A	<0.001	14
100315	97592A	<0.001	10
100316	97593A	<0.001	18
100317	97594A	<0.001	13
100318	97595A	<0.001	22
100319	97596A	0.001	47
100320	97597A	<0.001	12
100320	97597A	<0.001	16 Check
100321	97598A	0.002	52

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Page: 3

17710 Northern Dynasty Expl. Ltd.
844 West Hastings Street
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V6C-1C8

Date: February 15 19 88

Work Order # : 880134
Project :

SAMPLE NUMBERS		Gold	Gold
Accurassay	Customer	Oz/T	ppb
100322	97599A	0.001	51
100323	97600A	<0.001	11
100324	97601A	<0.001	15
100325	97602A	<0.001	11
100326	97603A	<0.001	<5
100327	97604A	<0.001	<5
100328	97605A	<0.001	<5
100329	97606A	<0.001	<5
100329	97606A	<0.001	9 Check
100330	97607A	<0.001	10
100331	97608A	<0.001	10
100332	97609A	<0.001	9
100333	97610A	<0.001	6
100333	97610A	<0.001	9 Check

Per: G. Duncan

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INDUCED CATION PLASMA (I.C.P.) SPECTROMETRIC ANALYSES
FOR DIAMOND DRILLCORE SAMPLES

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-N2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR HG BA TI B V AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Pulp

DATE RECEIVED: JAN 06 1988

DATE REPORT MAILED:

Jan 11/88

ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

NORTHERN DYNASTY

File # 88-0064

SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SD	BI	V	CA	P	LA	CR	HG	BA	TI	B	AL	NA	K	V
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM
7021	2	54	9	72	.1	62	29	997	4.38	7	5	ND	5	642	1	2	3	13	4.32	.092	32	125	2.47	137	.01	3	.25	.02	.10	1
7038	2	33	4	59	.1	31	15	700	3.62	4	5	ND	3	146	1	3	2	11	1.34	.071	21	215	.73	660	.01	4	.30	.04	.12	1
7043	2	38	6	77	.1	32	17	1276	5.25	5	5	ND	7	403	1	2	7	13	2.43	.115	32	149	.92	612	.01	8	.35	.04	.13	1
7045	2	57	7	83	.1	38	43	1377	5.88	10	5	ND	6	151	1	2	9	18	.79	.102	25	254	.50	110	.01	6	.39	.05	.13	2
7054	2	48	13	59	.1	42	43	1735	6.33	30	5	ND	3	159	1	4	5	17	1.75	.120	23	262	.85	63	.01	7	.29	.03	.09	2
7061	1	37	4	31	.1	13	9	521	2.20	4	5	ND	3	85	1	2	5	7	3.05	.074	19	140	.92	71	.01	25	.32	.02	.10	1
7064	1	33	5	67	.1	24	15	826	3.75	2	5	ND	3	597	1	2	7	13	3.55	.083	22	167	1.71	725	.01	31	.31	.04	.12	1
7067	1	43	2	48	.1	21	10	529	2.58	3	5	ND	6	866	1	2	2	6	1.94	.083	29	126	1.11	281	.01	32	.38	.04	.13	1
7076	2	29	6	32	.1	58	18	552	2.67	36	5	ND	8	382	1	2	2	6	3.89	.037	26	99	2.06	32	.01	9	.30	.03	.08	1
7079	2	64	19	48	.2	146	33	672	4.82	66	5	ND	6	374	1	2	2	9	1.90	.066	19	136	2.39	32	.01	9	.48	.01	.11	3

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MM FE CA P LA CR MG BA TI B AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: ROCK PULP

DATE RECEIVED: MAR 08 1988

DATE REPORT MAILED: Mar 11/88

ASSAYER: C. Leong D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

NORTHERN DYNASTY

File # 8B-0680

Page 1

SAMPLE#	MO PFM	CU PFM	PB PFM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	M PPM
7001	2	58	38	54	.3	45	19	786	4.45	3	8	ND	5	801	1	2	2	11	3.85	.125	25	22	2.48	83	.01	5	.36	.04	.15	1
7005	2	44	23	42	.3	49	13	481	2.87	45	8	ND	9	640	1	2	2	4	2.16	.072	29	15	1.48	57	.01	2	.24	.02	.12	1
7012	3	60	17	41	.2	102	19	624	4.20	94	7	ND	6	700	1	4	2	7	2.47	.100	17	19	2.16	54	.01	2	.23	.02	.09	1
7101	1	37	5	24	.2	18	6	852	2.23	2	5	ND	3	86	1	2	2	10	3.46	.061	14	181	1.31	80	.01	4	.56	.03	.13	1
7116	1	3	6	33	.2	21	8	573	2.12	2	5	ND	4	128	1	2	2	11	3.17	.062	18	178	1.26	404	.01	3	.48	.04	.11	1
7130	2	11	3	60	.1	63	22	735	4.47	10	5	ND	2	74	1	2	2	23	3.62	.043	4	272	1.43	54	.01	3	1.27	.04	.09	1
7143	1	51	10	43	.3	61	35	626	3.79	13	5	ND	3	194	1	2	2	19	3.09	.040	8	187	1.40	32	.01	5	1.07	.04	.10	2
7159	1	72	5	75	.3	65	30	1225	4.80	3	5	ND	4	109	1	2	2	18	2.79	.092	18	163	1.45	74	.01	3	1.01	.04	.17	1
7178	1	61	5	78	.3	39	25	1227	5.25	5	5	ND	5	179	1	2	2	17	2.37	.132	32	110	1.22	715	.01	2	.38	.04	.15	1
7185	1	24	7	59	.1	27	14	672	3.18	4	6	ND	6	248	1	2	2	15	2.87	.097	29	149	1.23	1310	.01	6	.37	.05	.13	1
7189	1	26	10	62	.2	30	15	793	3.24	4	9	ND	5	337	1	2	2	13	4.34	.065	20	284	1.62	996	.01	5	.27	.03	.10	1
7193	1	35	12	62	.2	41	19	1708	4.38	5	11	ND	5	559	1	2	2	11	5.95	.097	20	123	2.19	1118	.01	4	.39	.02	.10	1
7194	1	29	6	42	.2	29	20	691	3.43	2	5	ND	6	250	1	2	2	16	2.21	.115	34	114	.99	283	.01	4	.48	.04	.18	2
7199	1	32	8	54	.2	33	16	897	3.60	3	6	ND	5	335	1	2	2	13	4.18	.084	23	203	1.76	755	.01	5	.30	.03	.11	1
7202	1	19	8	46	.2	35	17	1008	3.60	4	9	ND	5	361	1	2	2	17	5.31	.073	19	278	1.97	659	.01	5	.42	.02	.12	1
7210	1	77	7	47	.2	36	29	773	3.79	4	5	ND	6	282	1	2	3	14	2.93	.104	27	158	1.31	734	.01	7	.47	.03	.14	2
7217	1	22	10	69	.2	39	28	825	4.17	2	6	ND	6	689	1	2	2	15	3.23	.107	31	131	1.50	635	.01	6	.41	.04	.17	1
7219	1	12	9	46	.2	32	15	886	3.26	3	10	ND	6	366	1	2	2	23	4.68	.094	27	229	1.94	319	.01	4	.53	.04	.19	1
7222	1	12	7	59	.3	38	18	978	4.08	4	5	ND	6	159	1	2	2	12	1.71	.121	30	146	1.04	266	.01	6	.39	.03	.15	1
7226	1	38	4	55	.2	37	27	1134	4.71	9	5	ND	5	157	1	2	2	17	2.74	.112	23	91	1.51	97	.01	3	.46	.04	.16	1
7229	1	56	31	55	.4	41	23	1425	6.63	38	5	ND	5	131	1	2	2	21	2.46	.110	22	99	1.73	102	.01	3	.59	.03	.20	2
7230	2	44	40	77	.3	85	26	661	4.06	123	5	ND	7	84	1	2	2	7	1.00	.062	21	70	1.04	88	.01	4	.43	.03	.15	1
7236	2	58	46	63	.3	94	25	864	5.10	130	5	ND	5	107	1	4	3	16	1.25	.080	20	103	1.13	76	.01	9	.46	.04	.15	1
7241	2	66	6	58	.2	38	20	1535	4.83	7	7	ND	4	312	1	2	2	27	5.90	.116	14	174	1.33	273	.01	3	.40	.04	.13	1
7247	2	33	9	74	.4	34	18	1909	6.58	8	5	ND	3	370	1	2	2	17	4.61	.084	8	177	1.38	108	.01	2	.13	.02	.05	1
7255	2	27	6	49	.4	25	12	1289	3.97	6	8	ND	4	338	1	2	3	17	5.32	.109	18	137	1.62	226	.01	3	.18	.02	.05	1
7259	1	43	8	62	.3	31	21	1000	4.69	2	5	ND	6	570	1	2	2	20	1.80	.135	34	97	.88	879	.01	8	.35	.04	.15	1
7263	1	68	7	49	.3	55	26	1002	4.87	3	5	ND	5	163	1	2	3	13	1.92	.123	26	115	1.05	241	.01	4	.29	.03	.11	1
7274	1	33	6	57	.3	46	25	844	4.09	4	5	ND	4	349	1	2	3	12	3.16	.115	13	100	1.75	917	.01	2	.43	.02	.13	1
7281	1	41	7	48	.3	14	17	898	3.33	4	5	ND	4	171	1	2	3	14	4.15	.106	24	65	1.49	133	.01	6	.56	.02	.12	2
7289	5	79	12	35	.4	12	23	1175	3.31	13	11	ND	2	334	1	2	2	13	6.55	.057	10	137	2.51	634	.01	2	.36	.01	.12	2
7293	1	26	10	38	.2	25	11	616	2.39	3	8	ND	4	374	1	2	2	10	3.88	.071	22	336	1.62	1245	.01	13	.53	.03	.10	1
7294	1	17	7	30	.1	20	13	588	2.03	3	6	ND	4	223	1	2	2	6	3.71	.075	17	76	1.47	488	.01	2	.36	.02	.09	2
7299	1	26	5	14	.2	23	14	546	2.24	3	5	ND	4	128	1	2	2	6	3.83	.082	21	127	.97	505	.01	7	.33	.04	.09	1
STD C	17	57	40	127	6.8	68	28	1026	4.19	39	20	7	36	47	16	19	20	55	.51	.088	35	58	.89	174	.06	33	1.84	.07	.14	10

NORTHERN DYNASTY FILE # 88-0680

SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM
3273	1	36	8	57	.2	14	12	670	2.83	5	5	ND	2	144	1	2	2	14	3.51	.097	12	161	1.42	68	.01	6	.67	.01	.16	1
3284	1	56	4	46	.2	13	18	728	2.82	3	7	ND	3	401	1	2	2	11	4.07	.082	14	96	1.65	494	.01	4	.50	.04	.19	3
3288	4	36	6	57	.2	31	14	927	3.59	5	7	ND	3	372	1	2	2	15	3.43	.088	18	316	2.35	329	.01	3	.59	.02	.11	1
3294	1	41	5	38	.1	8	14	727	2.68	4	5	ND	4	294	1	3	2	16	4.03	.121	32	69	1.62	419	.01	3	.28	.03	.14	2
97522	1	56	12	80	.2	49	24	1340	6.75	16	5	ND	3	217	1	2	2	21	2.87	.121	19	64	2.07	55	.01	4	.51	.04	.10	1
97527	1	69	6	72	.3	44	21	1438	6.76	3	5	ND	5	187	1	3	3	21	2.99	.132	19	84	1.57	67	.01	5	.36	.04	.13	1
97531	2	112	4	38	.1	17	16	954	3.63	3	5	ND	4	360	1	2	2	11	5.01	.105	26	66	1.63	675	.01	8	.31	.02	.15	1
97533	1	50	2	37	.2	17	13	937	3.36	5	5	ND	3	340	1	2	2	12	4.28	.097	22	134	1.39	745	.01	2	.29	.05	.11	1
97535	1	9	3	64	.2	44	14	780	3.74	4	5	ND	4	424	1	2	2	28	3.23	.091	28	136	2.72	678	.01	2	1.41	.06	.16	1
97545A	1	57	11	94	.1	43	22	1178	5.87	3	5	ND	3	249	1	3	2	30	2.88	.125	18	90	1.49	247	.01	3	.34	.03	.14	1
97546A	1	13	9	85	.3	40	19	1304	5.76	2	5	ND	4	309	1	3	3	22	2.91	.125	18	60	1.55	214	.01	3	.39	.04	.17	1
97557A	1	11	6	37	.2	26	13	1266	3.87	5	5	ND	3	250	1	2	2	10	5.05	.082	16	126	1.42	56	.01	2	.27	.01	.12	1
97565A	2	74	12	20	.2	31	32	1018	2.92	42	5	ND	1	140	1	2	2	14	4.80	.088	11	256	1.76	54	.01	3	.24	.01	.11	1
97570A	1	26	6	38	.3	25	12	983	3.62	5	5	ND	4	358	1	2	2	17	4.14	.115	30	69	1.26	154	.01	7	.64	.02	.38	1
97571A	3	67	5	17	.3	23	18	592	2.31	10	5	ND	3	195	1	2	2	11	2.84	.115	19	163	.84	97	.01	6	.35	.01	.23	1
97588A	1	23	5	69	.2	41	17	839	4.30	5	5	ND	4	336	1	2	2	66	3.22	.098	29	252	3.09	311	.02	2	1.58	.11	.15	1
97596A	1	34	6	44	.2	26	13	898	3.32	7	5	ND	5	612	1	2	2	23	3.85	.101	28	112	1.94	1263	.01	3	.82	.04	.21	1
97598A	1	27	6	49	.3	32	18	844	3.82	8	5	ND	4	515	1	2	2	21	3.86	.090	23	89	2.03	109	.01	2	.96	.05	.27	1
STD C	17	58	37	132	7.1	68	27	1021	4.12	40	20	7	36	47	17	18	18	58	.49	.086	37	55	.93	175	.06	35	1.83	.08	.14	10

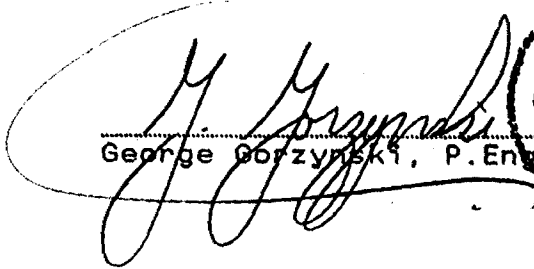
APPENDIX 6

AUTHOR'S CERTIFICATION

AUTHOR'S CERTIFICATION

I, George Gorzynski, of 3836 West 16th Avenue, Vancouver, British Columbia, hereby certify as follows :

1. That I am a registered Professional Engineer in the Province of British Columbia.
2. That I graduated from the University of Toronto with a Bachelor of Applied Science Degree in Geological Engineering/ Mineral Exploration in 1978, and from the University of British Columbia with a Master of Applied Science Degree in Economic Geology in 1986.
3. That I have practised my profession since 1978.
4. That I supervised or personally carried out the fieldwork and then authored this report based on the 1987-88 program on the Virginiatown Property.


George Gorzynski, P.Eng.



APPENDIX 7

NORTHERN DYNASTY EXPLORATIONS LTD.

VIRINIATOWN PROPERTY

1987-88 DIAMOND DRILL PROGRAM

DRILL LOGS AND SECTIONS

FOR HOLES VT-87-1 TO VT-87-6

AND VT-88-1 TO VT-88-6

To accompany '1987-88 Summary Report' by G. Gorzynski, P.Eng.

March, 1988

DIAMOND DRILL RECORD

Hole No.: VT 87-01 Started: November 25, 1987
 Property: Virginiatown Completed: November 27, 1987
 Claim No.: L767378 Logged by: G. Gorzynski, J. Ho
 Ref. Co-ord.: Drill Contractor: Langley Drilling, Brampton, Ontario
 Elevation: Assayer: Accurassay Laboratories, Kirkland Lake, Ontario
 Surveyed: No
 Grid Co-ord.: L47+80W, 24+60S Purpose: 1. To test surface gold anomalies.
 Core Size: BQ 2. To test cross faults.
 Casing Left: No

Hole Survey				
Meterage	Azimuth	Dip (corrected)	Method	
0.0	320°	-44°	Compass	
60.7		-41°	Acid	
121.6		-30°	Acid	
167.3		-30°	Acid	

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS							
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)			
0.0	1.7	Casing - no recovery.													
1.7	26.0	SANDSTONE/SILTSTONE: Mainly banded light to dark grey; bedding typically ≤ 2 cm thick - several massive sandstone beds ≤ 50 cm; rare scours and graded beds indicate stratigraphic tops downhole; non-mag; non-calc; several limonitic fractures to 9.4 m; predominantly phyllitic; bedding/foliation at: 40° to core axis at 1.7-18.0; 45° to core axis at 18.0-26.0 m; basal contact gradational over 1.8 m; ALTERATION: 11.7 - 16.0: slight bleaching/sericitization? 16.0 - 26.0: highly bleached light green sericite bands intercalated with light grey sandstone. MINERALIZATION: 20.4-20.6: 80% white quartz veins; trace chalcopyrite.													
26.0	36.4	SERICITIC CONGLOMERATE: Polymictic, matrix supported, clast size ranges from 1/3 cm to 3 cm; generally angular to subangular, ratio of clasts to matrix 35-65. Clast type dominated by fine grained syenitic intrusive (90%). Lesser amounts of fine-grained volcanic/sedimentary clasts (5%) and pink quartz. Overall colour, light green, generally soft. Non-magnetic, non-calcareous. Bedding/foliation; highly variable - 60-40° to core axis. ALTERATION: Both matrix and clasts altered to a sericite dominant alteration assemblage. Lesser amounts of irregularly formed zones of silicification. 5% emerald green Cr-mica fragments(?) and wisps. Not pervasively developed. MINERALIZATION: 1-2% euhedral pyrite cubes up to 1/2 cm in size. Appear to be localized between 27.5-32.9 m. Dominantly in the matrix but some pyrite found in quartz fragments. Basal contact gradation over ~ 20 cm. *Coincidence with mag spike.*	26.0	27.5	1.5	7301		5							
			27.5	30.2	2.7	7302		5							
			30.2	32.9	2.7	7303		5							
			32.9	35.2	2.3	7304		16							
			35.2	36.4	1.2	7305		1603							

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
36.4	39.0	CONGLOMERATE: Polymictic, matrix supported, similar clast assemblage as sericitic conglomerate. Dark grey in colour. MINERALIZATION: Commonly cut by quartz veins oriented about 90° to clasts, clasts foliation parallel. Also some quartz veins have inclusions (xenoliths) of host - hydrostatic brecciation. Overall not highly altered. Foliation to core axis: 37.0 m - 45°, 39.8 m - 40°. Basal contact gradational over 5 cm.	36.4	39.0	2.6	7306		18				
39.0	40.0	SERICITE, K-FELDSPAR ALTERED CONGLOMERATE: Sericite 25%, K-feldspar 25%. Primary fragments not easily recognized. 39.38-39.52 - quartz-iron-carbonate veins, sharp but irregular margins. Foliation to core axis: 39.8 - 50°. Basal contact gradational over 10 cm.	39.0	40.0	1.0	7307		16				
40.0	41.2	CONGLOMERATE: same as 36.4 - 39.0 m. 40.68 - 40.80 - quartz veins with carbonate (Ca) halo. Basal contact gradational over 10 cm.	40.0	41.2	1.2	7308		5				
41.2	54.8	SERICITIC, K-FELDSPAR CONGLOMERATE: same as 39.0 - 40.0 m. Primary structures again, difficult to recognize. MINERALIZATION: 12% quartz vein development, veins rimmed with carbonate (ankeritic, dolomitic?), <3 mm wide. Disseminated fine tourmaline within quartz veins (<2% abundance). Minor sulphides (21%), comprised of pyrite and chalcopyrite, occurring as fracture coats within the quartz veins. Cr-mica occurs as before, in irregular fragments, wispy-like forms (<3%). Local vug structure in quartz-carbonate vein (~51.3 m).	41.2	43.5	2.3	7309		13				
			43.5	44.7	1.2	7310		5				
			44.7	46.7	2.0	7311		5				
			46.7	48.2	1.5	7312		5				
			48.2	49.7	1.5	7313		5				
			49.7	50.7	1.0	7314		11				
			50.7	52.3	1.6	7315		12				
			52.3	53.8	1.5	7316		12				
			53.2	54.8	1.6	7317		26				
54.8	83.5	CONGLOMERATE: same as 40.0 - 41.24 m. MINERALIZATION: 54.8 - 57.6 - moderately intense (10%) quartz-carbonate veins. Generally <3 cm in width, moderate halos of sericitization and K-feldspar. Alteration abundant quartz veins. Downhole quartz-carbonate veins become fewer but larger in size, averaging >15 cm, also more intense sericitic and K-feldspar alteration. 62.3 - 62.7 - quartz carbonate-K-feldspar vein, with inclusions of host. 69.9 - 70.1 - quartz carbonate vein with later cross cutting K-feldspar filled fractures. Tourmaline observed on fracture and foliation surfaces. 72.7 - 74.2 - quartz-carbonate-sericite-black chlorite-iron-carbonate veins and carbonate and K-feldspar alteration. 75.5 - 76.2 - quartz carbonate vein with a sericite-K-feldspar alteration halo. 76.3 - 76.9 - core ground, about 60% recovery. 76.9 - 77.1 - quartz-carbonate - Cr-mica (trace) vein. 77.1 - 78.9 - no recovery - core tube did not lock. 78.9 - 83.1 - variable amounts of quartz-carbonate veins and mild sericitic-K-feldspar alteration zone. Basal contact gradational.	54.8	57.6	2.8	7318		5				
			62.3	62.7	0.4	7319		5				
			69.9	70.1	0.2	7320		5				
			72.7	74.4	1.7	7321		5				
			75.5	76.2	0.7	7322		5				
			76.9	77.1	0.2	7323		5				
			78.9	80.9	2.0	7324		84				
			80.9	83.3	2.4	7325		5				

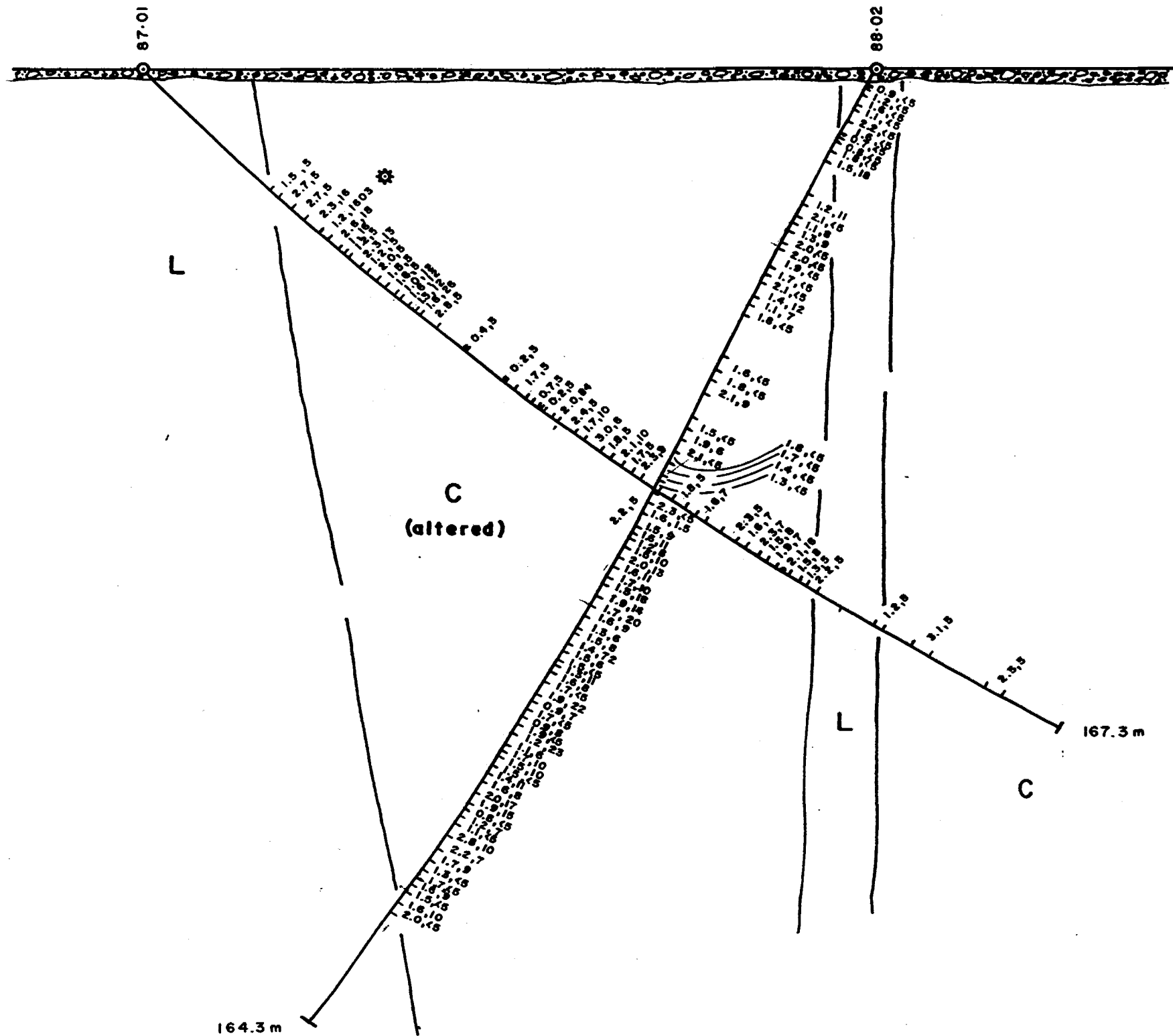
From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
83.5	95.8	SERICITE-K-FELDSPAR CONGLOMERATE: Highly altered, light green to beige mosaic, fairly evenly distributed. More altered zones are quite soft. Where quartz veining is intense, get brecciation of host. Non-magnetic, slightly local calcareous zones (<5%). Foliation to core axis 85 m - 50°, 91 m - 45°. ALTERATION: Dominantly sericitization 40% and K-feldspar addition, 30% with small zones of silicification about quartz veins - some quartz veins have ankeritic(?) halos and inclusions. Disseminated Cr-mica (<1%). MINERALIZATION: Sulphides located with tourmaline/black chlorite fracture fills, sulphide dominantly pyrite (<1%). Also at basal contact fine disseminations of chalcopyrite and pyrite (<2% total). Zones of ground core indicative of ground water flow(?) which may coincide with brittle deformation zones(?), also coated with limonite. N.B. spring feed zone located at 88.5 - 89.7 m.	83.3	85.0	1.7	7326		10				
			85.0	88.0	3.0	7327		6				
			88.0	89.8	1.8	7328		5				
			89.8	91.9	2.1	7329		10				
			91.9	93.6	1.7	7330		5				
			93.6	96.4	2.3	7331		9				
95.8	109.1	CONGLOMERATE: same as 40.0 - 41.2 m. Upper section is finer grained, giving way to typical breccia/fragmental assemblage. ALTERATION: Fracture fills of calcium carbonate (3% fractures) zones of relatively more intense alteration: 96.4 - 97.1 - mild sericitic (5%) and K-feldspar (15%) alteration plus small (<2cm) quartz veins (10%). 100.9 - 102.3 - pervasive finely developed sericitic (10%) and K-feldspar (40%) alteration with quartz-carbonate veins (2%), possible tourmaline (black chlorite?) fracture fills and calcium carbonate fracture fills (5% fractures). Note: ground core at 101.4 - 101.6 m. 104.6 - 105.7 - Intensely altered, K-feldspar (45%), sericite (15%) and silicification (20%), quartz veins, small (<2 cm) (2%); minor Cr-mica (<1%). Sericite not uncommonly found as a halo about quartz veins. All contacts between alterations are gradational over a distance of 10-15 cm. Foliation to core axis: 102.6 m - 65°, 104.1 m - 53°: appears to be increasing relative to core axis.	96.4	98.6	2.2	7332		5				
			100.8	102.6	1.8	7333		5				
			104.5	106.1	1.6	7334		7				
			109.1	111.4	2.3	7335		5				
109.1	123.6	SERICITIC CONGLOMERATE: Similar to previous but clasts not altered to the same degree. Matrix preferentially altered to K-feldspar (45%) and sericite (30%), minor amounts of Cr-mica (<1%). MINERALIZATION: The entire section is sprinkled with very fine (<0.5 mm) grained pyrite and minor amounts of chalcopyrite, < 2% in total sulphides - these sulphides occur dominantly where the sericite and K-feldspar alteration is most intense, though not all zones of intense alteration has sulphide development. Also some sulphides have been found in the breccia clasts which display a high degree of alteration. Black, flakey hematite has also been found as fracture fills, often accompanied with pyrite and/or chalcopyrite, 2% of fractures are as such. Calcium carbonate has also been found as fracture fills as well as minor amounts	111.4	113.0	1.6	7336		7				
			113.0	115.3	2.3	7337		7				
			115.3	116.8	1.5	7338		8				
			116.8	118.7	1.9	7339		7				
			118.7	120.8	2.1	7340		16				
			120.8	122.3	1.5	7341		8				
			122.3	123.6	1.3	7342		5				

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS					
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)	
		disseminated into the host. Foliation to core axis: 112.7 m - 60°, 116.6 m - 55°, 122.9 - 50°. Gradational basal contact over a length of 10 cm.											
123.6	125.8	CONGLOMERATE: same as above, 95.8 - 109.1 - clast to matrix ratio getting smaller. ALTERATION: Minor (<5%) weak zones of sericitic alteration with trace pyrite development. 124.8 - 125.8 - core ground, coincides with topographic depression. Remnant quartz found, also trace pyrite. Fault zone? Basal contact relatively abrupt.	123.6	125.8	2.2	7343		5					
125.8	136.1	SANDSTONE/SILTSTONE: Interbedded on a 1-3 cm scale. No primary textures visible. Non-calcareous, non-magnetic. ALTERATION: Patchy zones of K-feldspar addition ⁺ -silicification. Sericitization less common, approximately 15% patchy weak alteration. Sericite also occurs as a primary metamorphic mineral. 135.2 - 136.4 - moderately more intense alteration. Bedding/foliation to core axis: averaging approximately 60°. Basal contact sharp.	135.2	136.4	1.2	7344		8					
136.1	167.3	CONGLOMERATE: same as before, 123.6 - 125.8. Clast to matrix ratio larger, fragments generally smaller. Minor interbeds of sandstone/siltstone units. Non-magnetic, non-calcareous. Foliation/bedding to core axis: averaging 60°. ALTERATION: Generally patchy zones of K-feldspar, sericite ⁺ -silica additions. More pervasive in upper sections. Lower sections, sericitization, with lesser amounts of K-feldspar are generally restricted to stringers in the matrix.	141.6	144.7	3.1	7345		5					
			154.4	156.9	2.5	7346		5					
167.3		END OF HOLE											


Notes:

1. Difficult to assess proportions of carbonate due to cold weather while logging.
2. Core recovery generally 100%.

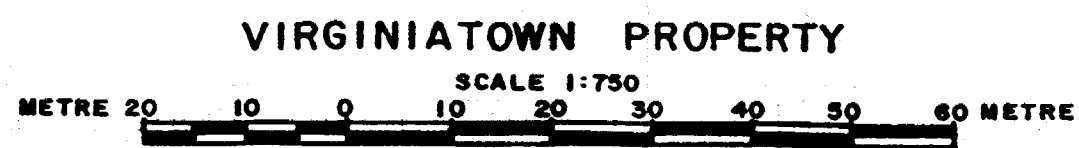
Ferry D *J. Jozynski* *J*



LEGEND

- C** CONGLOMERATE ± AGGLOMERATE
 - D** GREYWACKE
 - L** SILTSTONE AND SHALE
 - S** SERECITE SCHIST
 - T** SYENITE / TRACHYTE
-  20,12
WIDTH IN METRES, PPB Au

164.3 m
LOOKING WEST



SECTION OF DIAMOND DRILL HOLE 87-1, 88-2
NOV 87 - FEB 88 FIGURE 1

DIAMOND DRILL RECORD

Hole No.: VT 87-02 Started: November 28, 1987
 Property: Virginitown Completed: November 29, 1987
 Claim No.: L666338 Logged by: G. Gorzynski, J. Ho
 Ref. Co-ord.: Drill Contractor: Langley Drilling, Brampton, Ontario
 Elevation: Assayer: Accurassay Laboratories, Kirkland Lake, Ontario
 Surveyed: No Purpose: 1. To test Beaver Dam Cross-Fault.
 Grid Co-ord.: 30+75W, 3+50S 2. To test zones of surface alteration.
 Core Size: BQ
 Casing Left: No

Hole Survey				
Meterage	Azimuth	Dip (corrected)	Method	
0.0	140°	-46°	Compass	
60.7	-	-44°	Acid	
136.8	-	-42°	Acid	

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS							
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)			
0.0	17.4	Casing: Few mafic volcanic pebbles recovered. Casing may have been driven a long way into bedrock. Overburden is reported to be mainly clay.													
17.4	136.9	SERICITE SCHIST: Light green with off-white bands and patches; banding is typically vague, <1 cm thick; entire unit is generally very uniform in appearance; non-magnetic, non-calcareous; patchy sections are poorly developed breccia zones; sparse sections (<15 cm) are silicified; generally non-siliceous at top of unit, becoming moderately siliceous downhole; foliation to core axis = 40° at 17.5 m, 40° at 23.5 m, 50° at 31.0 m, 45° at 36.5 m, 40° at 42.5 m, 40° at 46.0 m. Small (<7 cm width) rhyolitic+quartz dikelets/veins(?) intersecting core section (<3% abundance). Sections of broken core (faults?) at 24.6-27.1 m (core tube did not lock), 28.3-29.3 m, and small sections elsewhere; ALTERATION: Sparse local highly silicified sections (<15 cm) - very rare disseminated Cr-mica. MINERALIZATION: Sparse (<<1%) pink quartz veins (<15 cm) parallel to foliation.													
		17.4 - 20.7 - <1% disseminated pyrite; only trace pyrite elsewhere; fine (1 mm) veinlets at 43.9 m and 48.8 m host 0.5% pyrrhotite-pyrite and 3% molybdenum(?).	17.4	20.7	3.3	7001		90							
		45.2 - 45.4 - 3 cm quartz-black chloritic veinlet at 10° to core axis; rare thin (<3 mm) similar veinlets occur elsewhere.	37.5	39.7	2.2	7002		5							
			43.6	46.5	2.9	7003		5							
		57.0 - 59.3 - moderately more silicification (~8% total rock) in discrete bands. Finely disseminated pyrite (3%) associated with brecciated quartz veins (<1 cm wide), (~3% total), pyrite often concentrated along contact zone. Also fracture coated Mo (~1%) and minor fracture coated py (~1%). This type of fine grained pyrite development occurs at varying intervals, often >1 m, and <1 cm wide. Note: ground core at 58.9 - 59.0 m.	57.0	59.3	2.3	7004		5							

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
114.2	116.6	A very contorted zone of smaller quartz-rich sandstone beds(?) which have been cross cut by small (<< 5 mm) quartz pyritic veins (25% veining). Pyrite developed in the sericitic rich margins (<0.3 mm width), pyrite abundance approximately 3% (overall abundance).	114.4	116.6	2.2	7015					6	
124.8	126.1	1% small pyritic quartz veins, < 1 cm width, 2% pyrite, in a typical sericitic schist.										
134.2	134.7	Typical sericitic schist, but quartz veins, 5% abundance, have approximately 1% Cr-mica, also approximately 2% fine grained pyritic, quartz veins <3 cm wide.	133.4	134.7	1.3	7016				5		
134.7	135.5	Rhodochrosite+dolomite vein (30:70 ratio). From 134.7 - 135.2, top contact approximately parallel to foliation bottom contact irregularly parallel to core axis. Fine grained pyrite (-chalcopyrite) disseminated about margins (3% abundance), some pyrite found as (approximately 2% of total) inclusions in vein itself. Molybdenite (approximately 1%) also found as inclusions. Best of section is dominantly a sericitic schist with finely disseminated pyrite (approximately 2%). Foliation to core axis: 118.7 m - 35°, 125.1 m - 40°, 129.2 m - 40°, 133.9 m - 40°.	134.7	135.5	0.8	7017				5		

136.9 END OF HOLE

Note:

Carbonate proportions underestimated due to cold weather, outcrops typically display 20 - 25% iron carbonate in this vicinity.

Ferry B *J. Grynch*

NORTHERN DYNASTY EXPLORATIONS LTD.

DIAMOND DRILL RECORD

Hole No.:	VT 87-03	Started:	December 1, 1987	Hole Survey			
Property:	Virginiatown	Completed:	December 4, 1987	Meterage	Azimuth	Dip (corrected)	Method
Claim No.:	666338	Logged by:	J. Ho	0.0	140°	-50°	Compass
Ref. Co-ord.:		Drill Contractor:	Langley Drilling, Brampton, Ontario	60.7	-	-49°	Acid
Elevation:		Assayer:	Accurassey Laboratories, Kirkland Lake, Ontario	121.6	-	-47°	Acid
Surveyed:	No			197.8	-	-41°	Acid
Grid Co-ord.:	30+30W, 6+45S	Purpose:	1. Test surface alteration zones. 2. Test deformation zones.	258.8	-	-35°	Acid
Core Size:	BQ						
Casing Left:	No						

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS						
			From	To	Length	No.	Rec %	Au (ppm)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)		
0.0	1.4	CASING - no recovery.												
1.4	126.5	SERICITE SCHIST: Patchy mosaic of light greens to white representing regions of (1 - 3 cm wide) more siliceous rock which are separated by yellow-green stringer zones (<1-2 mm wide) of sericite-chlorite (85:15). Primary features are absent due to alteration and accompanying deformation. Non-calcareous, non-magnetic. Number of limonitic-rusty fractures to 10.9 m. Foliation/bedding to core axis: 2.6 m: 45°; 8.8 m: 40°; 17.9 m: 45°. ALTERATION: Sericite is the dominant alteration mineral (45%) with lesser amounts of silicification about quartz veins (<8%), also minor (trace) amounts of Cr-mica occurring in a fragment-like form. MINERALIZATION: 3.8 - 11.0: Small <3 cm wide quartz veins. Very infrequent, <1% of rock, with trace sulphides (pyrite), often with carbonate-chlorite-sericite margins. Margins <2 mm wide. 14.5 - 14.8: Variable width quartz vein, from 2 - 1/2 cm wide with a pink K-feldspar alteration halo, extending approximately 3 cm from quartz vein margin with a chloritic richer inner zone approximately 1 cm from margin. The vein displays periodic pinch and swell features over its length. The contact runs approximately parallel to core axis (true width unknown). Locally about the quartz vein and within the quartz vein sulphide concentrations up to 5%, but averaging <2%. Sulphide is pyrite, formed in small <1 mm euhedral forms. 25.7 - 27.7: Small (<2 cm wide) quartz veins, totalling <2% of rock with chloritic (tourmaline?)-carbonate-sericitic 1 - 2 mm margins. 31.3 - 39.5: Relatively abundant quartz veining approximately 10% total rock, and approximately 8% small, <3 cm wide, syenitic dikelets, increasing in frequency down hole. Also, a small, 1/2 cm wide tourmaline vein at 31.3 m.												
			14.5	14.8	0.3	7018		14						

From (Metric)	To	DESCRIPTION	SAMPLE				ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)
32.1	34.7	15% quartz vein concentration, veins about 20 cm wide, contacts parallel to foliation, veins cut by chloritic-sericitic filled fractures. Pyrite (3% abundance) formed as fine disseminations in the immediate marginal zones. Dolomitic carbonate also intimately intergrown with quartz, up to 25% of vein.	32.1	34.7	2.6	7019		8			
37.4	39.4	Quartz veins, highly contorted to foliation parallel, comprising 7% of section. Intergrown with the quartz is 25-60% dolomitic carbonate and 1-2% Fe-carbonate. 25% of section is comprised of 1 - 3 cm wide syenitic (?) pink dikes/sills (?), thin, < 1 - 2 mm, wide alteration rims are visible. Bleaching (?) and some whitish (bleaching ?) spots also found on some dikes (10%). Very fine pyrite (1%) has been observed as fracture coats of the quartz veins.	37.4	39.4	2.0	7020		7			
40.7	43.7	Sericitic alteration bands (2 mm wide) more widely spaced (1 - 2 cm) with primary (?) depositional grains visible in the interband zones. Fine pyrite, up to 2%, found in more sericitic and siliceous zones. Cr-mica fragments (?) appearing in lower section (1% total). Quartz-carbonate-tourmaline vein (70:20:10 ratio) located at 41.8 - 42.3 with fine pyrite 2% localized about upper contact, contacts parallel to foliation.	40.7	43.7	3.0	7021		< 5			
44.0	44.2	Quartz-dolomitic carbonate-Fe-carbonate (80:18:2 ratio) with fine-grained pyrite (3%) localized about lower contact. Trace chalcopyrite inclusion.	44.0	44.2	0.2	7022		13			
44.5	45.7	80% core recovery.									
46.2	46.5	75% core recovery.									
48.3	48.5	core ground.									
50.6		calcium carbonate fracture fill, fracture width < 2 mm.									
		Foliation to core axis: 54.6: 38°; 57.7: 38°.									
58.8	64.8	Sericitic alteration reduced by 10 - 15% with primary clastic outlines visible, somewhat whiter in colour. Cr-mica alteration increase, up to 2%, appears to be intergrown with the sericitic bands (< 1 mm wide). Trace jasper (?) clasts visible. Relatively large quartz veins (> 25 cm), with contacts parallel to foliation, are developed. The quartz is intergrown with dolomitic carbonate (average 15%) and black, fractured tourmaline (?). 5% very fine-grained pyrite (< 1/2 mm) is observed disseminated throughout section, 2% in total. More concentrated pyrite (pyrrhotite; non-magnetic) in fractures, up to 55% locally. < 1% of fractures are mineralized.	58.8	62.5	2.2	7023		7			
			62.5	63.3	1.2	7024		< 5			
			63.3	64.6	1.3	7025		< 5			
71.7	72.1	Syenitic dikes/sills?, 80% of section. Structurally, these features and the host schist display a weakly developed kink band.									
82.4	83.3	Small (1/2 cm wide) quartz veins, 5% of section, with very fine grained pyrite, 2% in total, K-feldspar alteration, 6% towards top.	82.4	83.3	0.9	7026		7			
86.0	88.6	Same as above 82.4 - 83.3, but quartz vein slightly wider, approximately 1 cm, all quartz veins parallel to foliation.	86.0	87.6	1.6	7027		< 5			
		Foliation to core axis: 71.5: 37°; 81.4: 30°; 85.2: 32°.	87.6	88.6	1.0	7028		7			
88.6	99.5	Same as above 86.0 - 88.6 but few quartz veins, 2% of section; some quartz veins (approximately 10%) have developed fine-grained pyrite (2%) over widths of 3 - 5 cm; 2 - 3% K-feldspar alteration.	88.6	99.5	0.9	7029		5			

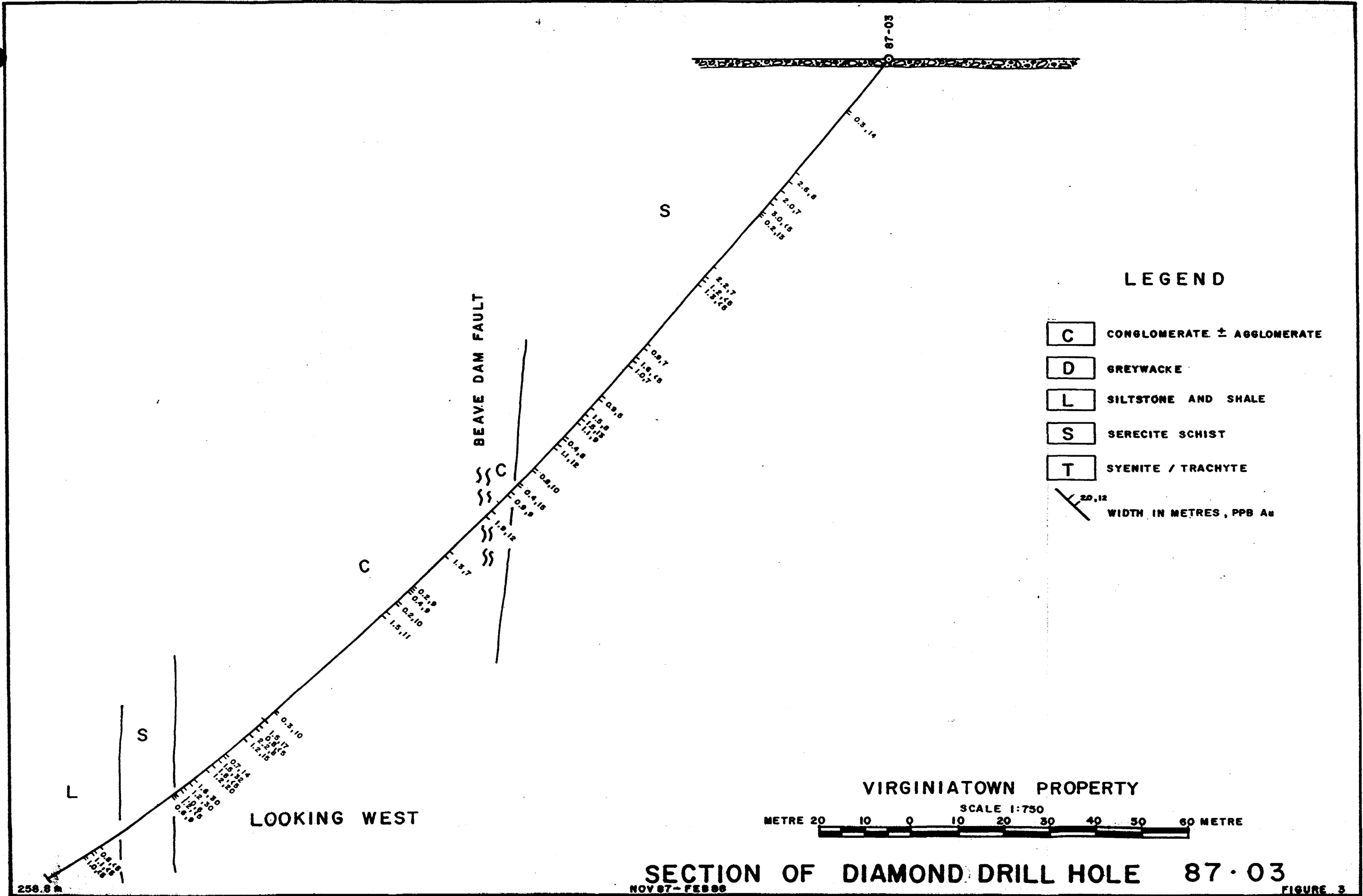
From (Metric)	To	DESCRIPTION	SAMPLE				ASSAYS					
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
		MINERALIZATION: 190.3, 1 cm wide zone of 80% Cr-mica with 10% sericite, 10% silica and trace fine pyrite.										
193.1	216.3	SERICITIC CONGLOMERATE: Same as 126.5 - 129.8. 197.0 - 197.3: Quartz vein with 5% dolomitic carbonate and 4% Fe-carbonate. Trace pyrite inclusions in the quartz. Both contacts, roughly parallel to foliation, are characterized by black chlorite-Fe-carbonate and trace pyrite in a zone about 2 - 3 mm wide. MINERALIZATION: Finely disseminated pyrite up to 2 - 3% can be seen. Calcium carbonate fracture fills/veins, oriented roughly parallel to core axis (2% fractures). 3% highly contorted small (<2 cm wide) quartz veins with 1 - 2% marginal fine pyrite. Trace Cr-mica appears from 212.4 on down hole. 211.8 - 213.3: 5% calcium carbonate fracture fills, locally up to 5% pyrite. 213.3 - 215.1: Pyrite becomes large (5 - 8 cm) euhedral cubes with 2 - 3 mm wide silicate pressure shadows, oriented parallel to foliation (2% sulphides). 215.1 - 216.3: Disseminated and quartz vein (3%) associated pyrite (1%).	197.0	197.3	0.3	7044		10				
			200.1	201.6	1.5	7045		17				
			201.6	202.4	0.8	7046		< 5				
			202.4	204.6	2.2	7047		8				
			204.6	205.8	1.2	7048		15				
			211.1	211.8	0.7	7049		14				
			211.8	213.3	1.5	7050		32				
			213.3	215.1	1.8	7051		< 5				
			215.1	216.3	1.2	7052		20				
216.3	219.9	INTERBEDDED SERICITIC SCHIST/SERICITIC CONGLOMERATE: The conglomerate is similar to 126.5 - 129.8 and bedding widths average >10 cm. The sericitic schist is a homogeneous lime green with 1% pyritic (10%) quartz veins. Beds typically >30 cm in width. Pyrite also occurs as fracture fills with black chlorite, 2% fractures, 1% pyrite.										
219.9	225.3	SERICITIC CONGLOMERATE: Same as 126.5 - 129.8. 220.3 - 221.9: 1% fine-grained pyrite disseminated into conglomerate. Quartz vein from 220.5 - 220.8, with 1% pyrite about contacts and as fracture coats within the quartz. Quartz vein from 221.8 - 221.9, similar to quartz vein at 220.5 - 220.8 but 5% fracture pyrite. 221.9 - 223.1: Core ground, but good recovery, 90%. 1 - 2% finely disseminated pyrite. 224.0 - 225.3: Large quartz vein, 60 cm wide with 2% pyrite in fractures and 1% disseminated pyrite in host. Foliation to core axis: 218.0: 50°; 221.7: 50°; 225.2: 53°.	220.3	221.9	1.6	7053		30				
			221.9	223.1	1.2	7054		< 5	(30)			
			223.0	224.0	1.0	7055		6				
			224.0	225.2	1.2	7056		< 5				
225.3	239.4	BANDED SERICITIC SCHIST: Banded on a scale of 1 - 1-1/2 cm; alternating light green coloured bands with dark grey coloured bands; fine-grained in texture, grading visible, fining up hole; non-magnetic; non-calcareous. 225.3 - 225.9: 50% quartz vein with 10% dolomitic carbonate, trace pyrite in contacts. Contact, foliation parallel. 237.1 - 237.3: 11 cm wide quartz vein with finely disseminated pyrite in margins. 238.0 - 238.9: Calcium carbonated fracture fill with trace pyrite, running length of section. Basal contact gradational (alteration) over interval of 2 m.	225.3	225.9	0.6	7057		9				

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
239.4	258.8	<p>INTERBEDDED MUDSTONE/SILTSTONE: Light grey to greenish grey in colour, banded on a scale of 1 - 1-1/2 cm. Visible primary textures include basal scours and convoluted bedding. Non-calcareous, non-magnetic.</p> <p>Foliation to core axis: 243.4: 50°; 245.1: 54°; 225.7: 52°.</p> <p>MINERALIZATION: Relatively large quartz veins (>25 cm) with trace pyrite in fractures and margins.</p> <p>253.2 - 254.5: core ground, 85% recovery.</p>	245.4	246.2	0.8	7058		< 5				
			247.7	248.8	1.1	7059		< 5				
			248.8	249.8	1.0	7060		< 5				
258.8		END OF HOLE										

Note:

Fault zones may be evidenced by narrow quartz-black chlorite-⁺fe-carbonate-dolomitic carbonate, poorly consolidated zones with wide fe-carbonate alteration halos.

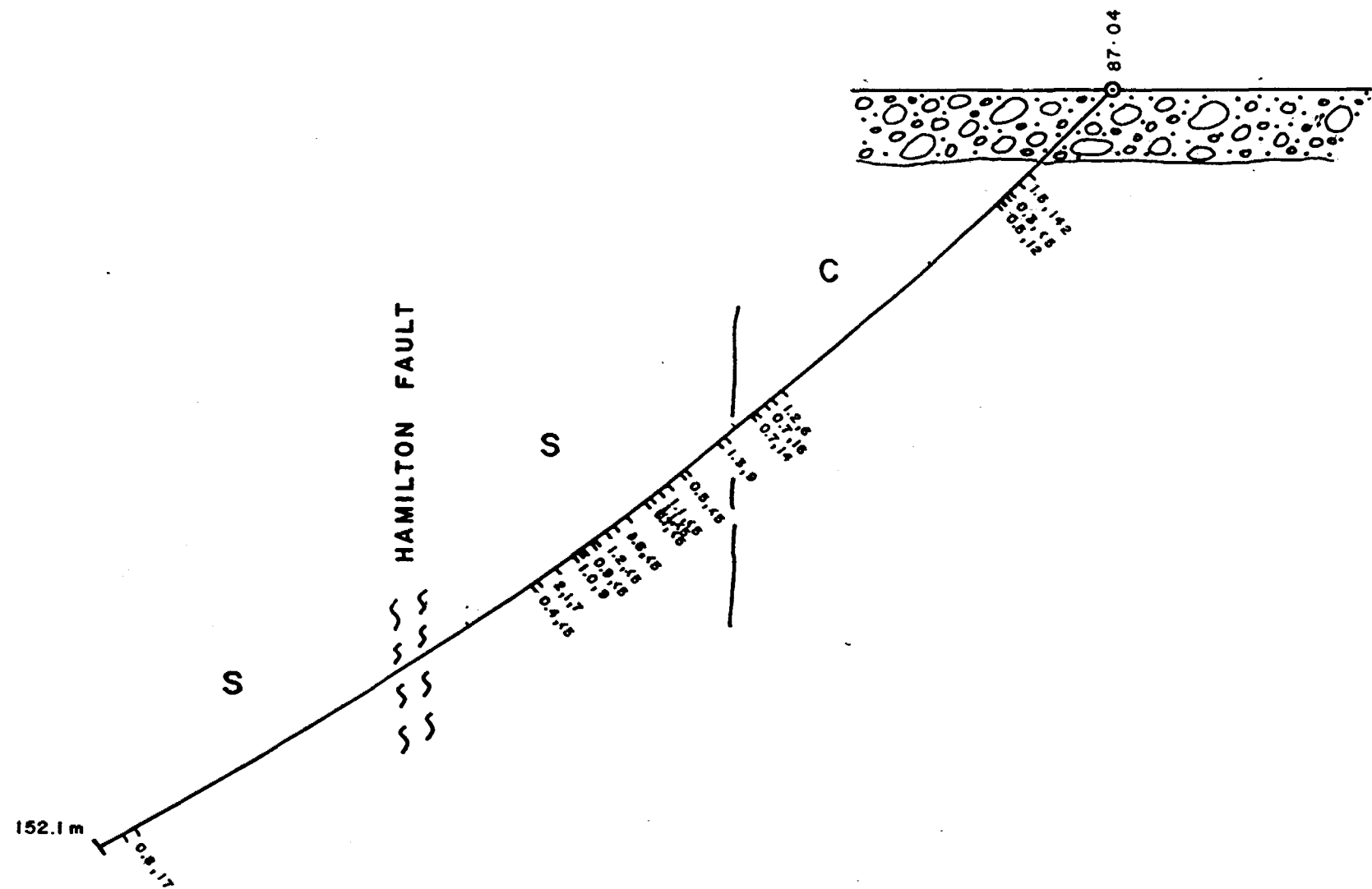
Henry B. G.




From (Metric)	To	DESCRIPTION	SAMPLE				ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)
		MINERALIZATION: 18.3 - 18.8 - 1% black-chlorite (?) filled fractures cross-cutting core axis with 3% fine-grained pyrite, weak potassic alteration halo (2 cm wide). Quartz vein also associated with these fractures. Foliation to core axis: 24.0 m: 51°; 28.6 m: 56°.	18.3	18.8	0.5	7063		12			
22.5	60.4	BLEACHED CONGLOMERATE: Conglomerate same as 17.5 - 22.5 except bleaching more evident, increasing from 5 - 10% uphole to 85% toward end of section. Bleaching is evidenced by an overall lighter color, a light grey. Cr-mica (1%) in the form of angular-like fragments are also present. 45.9 - 46.3 - 40 cm wide interbed of fine sandstone. Same alteration as host conglomerate. Contacts are foliation parallel. MINERALIZATION: 2% small quartz veins with tourmaline ? halos, veins < 2 cm wide and trace pyrite, contacts foliation parallel. 53.2 - 54.4 - 2% quartz veins, veins highly contorted. 54.4 - 55.1 - 20% quartz veins, 10 cm vein at 54.5 - 54.6 with 5% acicular 2 mm long tourmaline. 15% dolomitic carbonate and 3% Fe-carbonate. 56.8 - 57.5 - 45% quartz veins, 25 cm vein at 57.1 - 57.35, composed of 10% massive to acicular (2 mm long) black tourmaline, 15% dolomitic carbonate, 10% Fe-carbonate. All contacts foliation parallel. Foliation to core axis: 52.5 m: 60°; 57.8 m: 55°.	53.2	54.4	1.2	7064		6			
			54.4	55.1	0.7	7065		16			
			56.8	57.5	0.7	7066		14			
60.4	152.1	SERICITIC SCHIST: Typical limey-green color with whitish interbands on a scale of 3 - 5 mm. Green bands composed of sericite (90%) and chlorite (10%). Whitish bands composed of fine silt to sandstone. Small scale undulations, folds and load structures visible. ALTERATION: Generally sericitic, but local zones of K-feldspar addition (2% total). Trace to 1% Cr-mica intergrown with sericite. MINERALIZATION: 61.0 - 61.1 - Fault zone. 61.4 - 61.5 - Breccia zone: infilled with chlorite 80%, silica 10%, 7% tourmaline and 3% sericite. 61.5 - 62.7 - 20% K-feldspar alteration, 1% quartz veining with dolomitic and Fe-carbonates. 65.1 - 65.7 - Interbed of conglomerate, same as 22.5 - 60.4. 68.2 - 68.7 - 80% quartz veining with sericitic-chlorite-rich, 1 - 2 mm margins. Quartz veining 1 - 2 cm wide and foliation parallel. 70.8 - 71.9 - Interbed of conglomerate, same as 22.5 - 60.4, from 71.2 - 71.6. At upper contact 8 cm wide quartz vein with chloritic margins and 5% pyrite. Pyrite occurs as fracture coats within the quartz vein and as euhedral cubes in the margins of sericitic host. Finely disseminated (1%) pyrite in rest of section associated with small < 1 cm wide quartz veins. All quartz vein contacts parallel to foliation. ≤ 7% quartz veins. 71.9 - 73.0 - Large 0.75 cm cubic pyrite disseminated in sericitic host from 71.9 - 72.4, about 2% total sulphide. From 72.4 - 72.9 silicified (20%) and K-feldspar alteration (80%), trace sulphides.	61.4	62.7	1.3	7067		9			
			68.2	68.7	0.5	7068		< 5			
			70.8	71.9	1.1	7069		< 5			
			71.9	73.0	1.1	7070		< 5			

From (Metric)	To	DESCRIPTION	SAMPLE				ASSAYS					
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
73.0	73.7	Similar large pyrite cubes at 71.9 - 73.0 (2%) with 2 - 3 mm wide silicate pressure shadows. Small, 1 cm wide quartz vein at 73.4 with 50% pyrite. Also trace fine-grained pyrite disseminations.	73.0	73.7	0.7	7071		< 5				
76.8	84.5	2 - 3%, 1 - 3 cm wide quartz veins with chloritic, 1 - 2 mm wide, margins. Up to 30% pyrite within the quartz veins. Overall 2 - 3% pyrite.	76.9	78.5	1.6	7072		< 5				
			79.8	81.0	1.2	7073		< 5				
			82.2	83.4	1.2	7074		< 5				
			83.6	84.5	0.9	7075		< 5				
87.4	88.4	20% K-feldspar alteration with 5 - 10% silicification. 2% fine-grained pyrite in areas of high silica.	87.4	88.4	1.0	7076		9				
88.4	105.2	2%, 1 - 2 cm wide, quartz veins with chloritic selvages (1 - 2 mm wide) and trace to 1% fine-grained pyrite. Local pyrrhotite development. Host is typically a sericitic schist.	88.4	90.5	2.1	7077		7				
			90.5	90.9	0.4	7078		< 5				
96.2		5 cm wide fold nose zone, axial plane is foliation parallel. Foliation to core axis: 88.0 m: 53°; 94.2 m: 51°; 101.7 m: 51°.										
105.2	110.0	Mud seam; no return, poor recovery. 5 - 8% ground sericitic schist core fragments and 3% mud. Mud is light-grey in color, fine clay-sized particles.										
110.7	113.7	Fabrics oriented roughly parallel to core axis and well-developed small scale undulations and folds. Uphole contact marked by tight, 5 - 7 mm wide, asymmetrical chevron folds. 'Z' asymmetry where looking east.										
120.1		5 cm wide pink and brown carbonate vein. Contacts parallel to core axis. Yuggy in texture. Carbonate is rhodochrosite, with exposed surfaces weathered brown. 1 - 3 mm wide crystal faces developed. Impregnated with 1% fine-grained pyrite. Chloritic selvages.										
124.9	126.0	Similar texture as 110.7 - 113.7. 'M' zone of fold system (?). Downhole half displays breccia fabrics when in contact with regionally oriented fabrics. Breccia clasts subrounded, in a zone 1-1/2 - 2 cm wide. Sericite altered, as before.										
140.7	140.8	2 mm wide calcium carbonate vein/fracture fill, trending diagonal to core axis. 1% pyrite.										
142.5	151.6	Thicker fine silt/sandstone interbeds, from 1/2 - 2 cm wide, intercalated with typical sericitic-chlorite schist. These fine silt/sandstone beds are highly contorted, displaying both 'S' and 'Z' asymmetries (looking west). Axial planes are foliation parallel. Other kinematic indicators abundant. 1%, 1 - 2 cm wide quartz veins with trace to 1% pyritic selvages or inclusions. These quartz veins display similar deformation fabrics as the host. Upper contact displays dextral offsets, roughly parallel to core axis, 2%.	147.6	148.4	0.8	7079		17				
151.6	152.1	Typical sericitic schist. Foliation to core axis: 127.6 m: 33°; 133.6 m: 42°; 145.5 m: 40°; 151.6 m: 32°.										

152.1 END OF HOLE



LEGEND

- C** CONGLOMERATE ± AGGLOMERATE
 - D** GREYWACKE
 - L** SILTSTONE AND SHALE
 - S** SERICITE SCHIST
 - T** SYENITE / TRACHYTE
-  20,12
WIDTH IN METRES, PPB Au

LOOKING WEST

VIRGINIATOWN PROPERTY



SECTION OF DIAMOND DRILL HOLE 87-04

NOV 97 - FEB 98

FIGURE 4

DIAMOND DRILL RECORD

Hole No.: VT-87-05 Started: December 9, 1987
 Property: Virginiatown Completed: December 11, 1987
 Claim No.: 765073 Logged by: J. Ho
 Ref. Co-ord.: Drill Contractor: Langley Drilling, Brampton, Ontario
 Elevation: Assayer: Accurassay Laboratories, Kirkland Lake, Ontario
 Surveyed: No
 Grid Co-ord.: 14+50W, 8+10N Purpose: 1. To test deformation zone under creek.
 Core Size: BQ 2. To test surface sulphides on North Cliff.
 Casing Left: No

Hole Survey				
Meterage	Azimuth	Dip (corrected)	Method	
0.0	140°	-50°	Compass	

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS							
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)			
0.0	26.5	Casing: 2% recovery. Recovery consisted of boulder, sandy till with mud and clay intervals. Casing stuck at 26.5 m in loose boulder horizon; further penetration not possible.													

END OF HOLE

Notes:

1. Glacial till may be localized in a faulted zone paralleling the creek, graben-like fault zone?
2. Recovery of drill string complete except for lowermost 5 feet of casing and shoe bit.
3. Hole re-drilled as VT-87-06, 200 feet east.

Henry B. J.

DIAMOND DRILL RECORD

Hole No.: VT-87-06 Started: December 11, 1987
 Property: Virginiatown Completed: January 6, 1988
 Claim No.: 765073 Logged by: J. Ho
 Ref. Co-ord.: Drill Contractor: Langley Drilling, Brampton, Ontario
 Elevation: Assayer: Accurassay Laboratories, Kirkland Lake, Ontario
 Surveyed: No Purpose: 1. To test deformation zone under creek.
 Grid Co-ord.: 12+00W, 10+00N 2. To test surface sulphides on North Cliff fault.
 Core Size: BQ
 Casing Left: No

Hole Survey				
Meterage	Azimuth	Dip (corrected)	Method	
0.0	140°	-51°	Compass	

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS							
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)			
0.0	15.2	Casing - BQ. 0.0 - 6.1 - Sandy till. 6.1 - 15.2 - Loose boulder horizon, no matrix. Mechanical failure on December 12, 1987, parts not readily available, break for Christmas. BQ casing left in hole.													
0.0	13.7	Casing - NQ. Resumed drilling January 5, 1988. NQ casing reamed over BQ casing to achieve greater depth penetration. NQ casing seized at 13.7 m.													
15.2	16.7	Casing - BQ. Resumed BQ casing drilling from 15.2 m. BQ casing seized at 16.7 m. Similar loose boulder horizon. Hole abandoned.													
16.7		END OF HOLE													

Notes:

1. 100% recovery of BQ drill string and casing.
2. Abandoned 12.2 (40 feet) of NQ casing and shoe bit.
3. Attempt hole from south (DDH VT-88-06).

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
77.9	84.8	<p>CONGLOMERATE: Color - light grey with slight green tint. Moderately well-foliated. Clasts well rounded to subrounded. Clasts comprise 80% felsics (granodiorite?), 10% volcanics, 10% quartz, plagioclase and jasper clasts. Matrix comprised of fine-grained wacke sediment. Matrix to clasts ratio 60:40, matrix supported.</p> <p>78.0 - mud seam.</p> <p>Non-magnetic, non-calcareous.</p> <p>ALTERATION: Generally very fresh but local zones of alteration:</p> <p>78.9 - 79.9 - 5% K-feldspar alteration resulting in a pinkish-red tint coloring.</p> <p>81.5 - 81.7 - Same alteration as 78.9 - 79.9. K-feldspar alteration about fractures, extending not more than 2 mm into host. Less than 3% total hairline fractures. Trace Cr-mica overall.</p> <p>MINERALIZATION:</p> <p>78.9 - 79.9 - 10% quartz-Fe-carbonate fracture network with 1% Cr-mica alteration. 1% pyrite⁺ chalcopyrite mineralization on fracture surfaces.</p> <p>81.2, 82.4, 83.4 - 1 - 3 cm wide quartz-Fe-carbonate-Ca-carbonate veins (10-15% carbonate in total).</p> <p>Foliation to core axis: 78.6 m: 50°; 81.9 m: 56°.</p>	78.9	79.9	1.0	7087		< 5				
84.8	95.5	<p>INTERBEDDED CONGLOMERATE AND QUARTZ GREYWACKE: The entire sequence has a distinct green-grey color with patches of pink-red, yellow and yellow-green reflecting clast type and alteration; moderately well-foliated; clasts are generally 1 - 4 cm long in the long dimension and are well-rounded to rounded. The quartz greywacke is poorly to moderately well-foliated (more massive) and is fine-grained. The clasts comprised by variety of lithologies; granite/rhyolite - 60%, sediments (mudstone) - 20%, volcanic (15%) and a 5% mixture of quartz and jasper clasts. The matrix highly chloritic, matrix to clast ratio is 30:70, though matrix supported. Quartz greywacke zones: 85.3 - 85.5; 90.1 - 90.6; 90.7 - 93.6. Non-magnetic, non-calcareous.</p> <p>ALTERATION: The alteration is dominated by bleaching and secondary addition of sericite. The sericite (10%) forms as small (<2 mm) yellow streaks and where more intense as yellow-greenish stringers and patches. 1% Cr-mica alteration can be found in localized fractures. Upper contact gradational over 20 cm, lower contact very abrupt.</p> <p>MINERALIZATION: Nearly the entire sequence is disseminated with very fine chalcopyrite (<1%) and pyrite (1%). Concentrations increase locally (<2 cm in width) up to 5% where fractures are calcium-carbonate filled, where sericite is well-development, and where quartz-Fe-carbonate veins (<1/2 cm wide) appear. There is nearly a 1:1 ratio of the presence of sulphides with these small quartz-Fe-carbonate veinlets. Pyritic sulphides also penetrate into the more felsic clasts. Limonitic staining at 87.2, 90.3. A 2-1/2 cm wide quartz-Fe-carbonate (5%) vein is localized at the lower contact and is mineralized with molybdenite (3%) and chalcopyrite (1%).</p>	87.3	88.4	1.1	7088		22				
			88.4	90.2	1.8	7089		9				
			90.2	91.1	1.1	7090		9				
			91.1	92.6	1.5	7091		< 5				
			92.6	93.6	1.0	7092		< 5				
			93.6	94.6	1.0	7093		21				
			94.6	95.6	1.0	7094		6				

From (Metric)	To	DESCRIPTION	SAMPLE				ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)
95.5	99.1	<p>SYENITE DIKE: Reddish pink in color, fine to medium-grained, generally weakly foliated. Non-magnetic, non-calcareous (excluding fracture fills).</p> <p>ALTERATION: Restricted mainly to 1 - 5 mm wide veins and fractures. Alteration assemblage comprised dominantly of calcium carbonate (67%) and black chlorite (tourmaline?) (20%). Lesser amounts of sericite (8%) and Fe-carbonate (5%). Weak sericite development into host, generally forms a halo about fractures (2 - 3 cm wide). Also < 2% black chlorite (tourmaline?) dissemination.</p> <p>MINERALIZATION: 1 - 2% pyrite - 1% chalcopyrite⁺molybdenite restricted to altered fractures (veins) and quartz veins. Quartz veins < 2 cm wide (2% abundance) and foliation parallel. Sulphides coincidence with black chlorite fracture development. Fracture abundance 4%.</p> <p>Lower contact marked by 4 cm wide zone of chlorite (60%), quartz (vein) (35%) and 5% CaCO₃; 5 cm wide halo of sericite alteration is also present.</p> <p>Foliation to core axis: 95.7 m: 57°; 97.9 m: 63°.</p>	95.5	96.4	0.9	7095		18			
			96.4	97.6	1.2	7096		7			
			97.6	99.1	1.5	7097		12			
99.1	102.9	<p>INTERBEDDED QUARTZ-GREYWACKE AND CONGLOMERATE (same as 84.8 - 95.5 m). This section slightly more altered, sericite development up to 15%. Also increasing amounts of black chlorite (tourmaline?) downhole. 5 - 8% black chlorite localized in fractures, fracture abundance 5%. Quartz veining < 1%.</p> <p>Bedding contacts: 99.1 - 99.9 - quartz greywacke. 99.9 - 100.3 - conglomerate. 100.3 - 100.9 - quartz greywacke. 100.9 - 101.2 - conglomerate. 101.2 - 101.5 - quartz-greywacke. 101.5 - 101.6 - conglomerate. 101.6 - 101.7 - quartz-greywacke. 101.7 - 102.4 - conglomerate. 102.4 - 102.9 - quartz-greywacke.</p> <p>MINERALIZATION: Trace pyrite⁺chalcopyrite, restricted to chloritic fractures where present.</p> <p>Foliation to core axis: 99.5 m: 65°.</p>	99.1	101.4	2.3	7098		173			
			101.4	102.9	1.5	7099		129			
102.9	106.7	<p>SYENITE DIKE: (same as 95.5 - 99.1 m).</p> <p>ALTERATION: More fractures, up to 10% with similar carbonate-chlorite-sericite-Fe-(Mg) carbonate assemblage in fractures.</p> <p>102.9 - 103.2 - Bleached, resulting in a change of color from pinkish-red to faded pink.</p> <p>103.9 - 3 cm wide zone of brecciation with black chlorite infills.</p> <p>MINERALIZATION: Only trace - 1% pyrite⁺chalcopyrite; 102.9 - 103.2 - 20% quartz filled fracture network. Majority of core is broken and fractured, with 90 - 95% recovery. Natural water spring encountered at approximately 104 m.</p>	102.9	104.4	1.5	7100		8			
			104.4	106.7	2.3	7101		83			

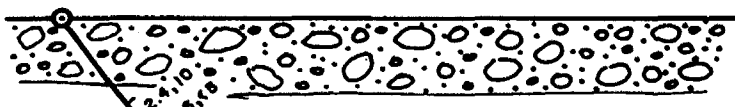
From (Metric)	To	DESCRIPTION	SAMPLE				ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)
106.7	111.2	INTERBEDDED CONGLOMERATE-QUARTZ GREYWACKE: Same as 99.1 - 102.9 m, again more altered than the similar lithological sequence at 84.8 - 95.5 m. MINERALIZATION: 1% chalcopyrite-pyrite disseminations throughout section. This section displays more quartz veining than 99.1 - 102.9, up to 10%, localized at 108.2 - 108.6, and 109.8 - 109.9. Bedding contacts: 106.7 - 107.3 - quartz-greywacke. 107.3 - 107.7 - conglomerate. 107.7 - 108.2 - quartz-greywacke. 108.2 - 111.2 - conglomerate. Limonitic coatings at 109.8, 110.2 - 110.4. Localized zones of core are broken and fractured 110.2 - 110.5, 110.6 - 110.9, and 111.0 - 111.5. Foliation to core axis: 108.3 m: 50°; 111.2 m: 58°.	106.7	108.2	1.5	7102		94			
			108.2	109.2	1.0	7103		17			
			109.2	110.2	1.0	7104		32			
			110.2	111.3	1.1	7105		17			
111.2	135.6	SYENITE DIKE (same as 95.5 - 99.1): however, adding to the alteration assemblage is the development of patchy silicification. Overall there is 5 - 8% silicification in this section. Cr-mica also appears as small (<2 mm) foliation parallel patches and stringers, total abundance <1%. Mineralization also remains the same with a pyrite-chalcopyrite (<1% of total sulphide) assemblage developed on Ca-carbonate-black-chlorite-sericite-quartz-Fe-carbonate fractures (veins where quartz became dominant mineral); fracture (vein) abundance 6%; generally <1 cm in width and commonly <5 mm in width. Foliation to core axis: 118.6 m: 45°; 124.7m: 50°; 130.4 m: 60°; 134.4 m: 37°.	111.2	112.7	1.5	7106		< 5			
			112.7	114.2	1.5	7107		< 6			
			114.2	115.8	1.6	7108		< 5			
			115.8	117.8	2.0	7109		< 5			
			117.8	119.8	2.0	7110		< 5			
			119.8	121.6	1.8	7111		< 5			
			121.6	123.1	1.5	7112		< 5			
			123.1	124.6	1.5	7113		< 5			
			124.6	126.1	1.5	7114		< 5			
			126.1	127.6	1.5	7115		< 5			
			127.6	129.9	2.3	7116		10			
			129.9	132.4	2.5	7117		< 5			
			132.4	133.3	0.9	7118		< 5			
135.6	141.6	QUARTZ-GREYWACKE: Similar to quartz-greywacke at 84.8 - 95.5; but more coarse-grained, generally medium-grained. Moderately foliated. Kink band at 135.7. ALTERATION: Moderate increase (4%) in bleaching and sericite development downhole (139.4 - 141.6). Sericite becomes more disseminated downhole. Trace Cr-mica. MINERALIZATION: 1 - 3% black-chlorite-quartz-sericite-Ca-carbonate fractures and veins; widths <1 cm. 1% disseminated fine (<1 mm) pyrite associated with 1 cm wide quartz-chlorite-sericite vein at 136.8 m. Foliation to core axis: 136.7 m: 65°; 140.1 m: 65°. Upper contact sharp, lower contact sharp but accompanied by increasing sericitization and bleaching.	133.3	134.8	1.5	7119		10			
			134.8	135.6	0.8	7120		< 5			
			135.6	137.0	1.4	7121		< 5			
			137.0	139.4	2.4	7122		< 5			
			139.4	140.6	1.2	7123		< 5			
			140.6	141.7	1.1	7124		< 5			

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
141.6	144.4	SYENITE DIKE (same as 95.5 - 99.1 and alteration similar to 111.2 - 135.6). However, pyrite becomes dominant sulphide which occurs as fracture coats, as before, (2%) and now also as disseminations (1%) into host about the chloritic fractures and quartz-chlorite veins.	141.6	143.3	1.7	7125		< 5				
			143.3	144.4	1.1	7126		< 5				
144.4	145.4	QUARTZ-GREYWACKE (same as 135.6 - 141.6). Pyritic mineralization, trace. Foliation to core axis: 140.0 m: 60°.	144.4	145.4	1.0	7127		< 5				
145.4	150.0	CONGLOMERATE (same as 84.8 - 95.5 m conglomerate). Alteration is also similar as well; 1% (locally 2%) sulphides. Sulphides dominated by pyrite with lesser amounts of chalcopyrite. Also have increase of quartz veining, up to 3%, generally < 5 cm wide. 147.0 - 3 cm wide quartz vein with 1% very fine-grained pyrite and 2% Cr-mica. Contacts foliation parallel. 148.1 - 148.3 - Core broken and fractured, 95% recovery. 148.9 - 149.1 and 149.5 - 150.0 - Limonite coatings on core. Foliation to core axis: 148.5 m: 48°.	145.4	146.6	1.2	7128		< 5				
			146.6	148.1	1.5	7129		< 5				
			148.1	150.0	1.9	7130		6				
150.0	162.6	SYENITE DIKE (same as 111.2 - 135.6). Only trace pyritic sulphides, but similar patchy and fracture filled silicification. 150.0 - 151.3 - 8% quartz-black chlorite-carbonate fracture fills. Limonitic coating at 150.0 - 150.1 and 150.6 m. 151.3 - 152.9 - Same as 150.0 - 151.3 except also development of pink dolomitic veins and fracture fills. 5% dolomitic carbonate abundance in veins < 4 cm wide. 3% abundance veins and fractures. 156.6 - 162.6 - Significant increase in alteration, gradual increase in bleaching and sericitization until typical red-pink color becomes light yellow-green towards the lower contact. Alteration is fairly diffuse but sericitization parallels fractures and diffuses out into host at right angles along foliation surfaces. 156.6 - 156.8 - Low angle cross-cutting Ca-carbonate fracture fill with 1% pyrite. 157.3 - 157.8 - 30%, 2 - 3% wide quartz veining with black chloritic, 2 - 3 mm wide, selvages. 1% pyrite. 161.3 - 167.6 - Gradual appearance of 1 mm sized hornblende (?), increase in abundance to 5% downhole. Randomly oriented with somewhat diffusive crystal surfaces. Foliation to core axis: 151.5 m: 50°; 158.0 m: 50°; 161.5 m: 55°.	150.0	151.3	1.3	7131		< 5				
			151.3	152.9	1.6	7132		< 5				
			152.9	155.1	2.2	7133		< 5				
			155.1	156.6	1.5	7134		< 5				
			156.6	158.2	2.4	7135		< 5				
			158.2	159.5	1.3	7136		8				
			159.5	161.5	2.0	7137		< 5				
			161.5	162.6	1.1	7138		< 5				
162.6	203.4	CONGLOMERATE (same as 145.4 - 150.0). Alteration is similar with weak bleaching and patchy stringer forms of sericite. Trace to 1% Cr-mica developed. MINERALIZATION: Very fine disseminated pyrite ⁺ chalcopyrite ⁺ pyrrhotite (abundance ≤ 1%) can be found throughout the section. Locally, sulphide abundance increases to 2 - 3% over 1 - 2 cm widths. Both upper and lower contacts very sharp.	162.6	163.8	1.2	7139		< 5				
			163.8	165.6	1.8	7140		16				
			170.9	172.1	1.2	7141		6				
			176.8	178.6	1.8	7142		16				

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
		Foliation to core axis: 169.0 m: 60°; 174.5 m: 60°; 182.3 m: 50°; 189.5 m: 60°; 192.5 m: 58°; 201.2 m: 55°.	178.6	179.9	1.3	7143					283	
		Core broken and fractured: 195.5 - 196.0 m.	179.9	182.1	2.2	7144					78	
		Core ground: 200.9 - 203.1, 203.5 - 203.9 m.	183.9	185.9	2.0	7145					187	
			185.9	187.4	1.5	7146					11	
			191.4	193.4	2.0	7147					< 5	
			193.4	195.0	1.6	7148					8	
203.4	246.6	QUARTZ-WACKE: Dark green in color, medium to fine-grained, composed of 40% mafics (chlorite), 50% combined quartz and plagioclase and 10% lithics. Primary clastic outlines still visible. 10%, 10 - 50 cm wide conglomerate interbeds. Non-magnetic, non-calcareous. ALTERATION: Fairly fresh, only minor (<5%) sericite developed. MINERALIZATION: 4 - 5%, 1 - 2 cm wide quartz-calcium carbonate veinlets developed, cross-cutting core axis. Associated sulphides, < 0.75%, pyrite-chalcopyrite. Also finely disseminated pyrite (< 0.5%) in sediment. 221.27 - 223.3 - 15% sericitic alteration and moderate bleaching, 2 - 3 cm wide quartz veins (3% abundance) towards upper hole.	207.5	209.0	1.5	7149					< 5	
			209.0	211.0	2.0	7150					< 5	
			221.3	223.3	2.0	7151					< 5	
246.6		END OF HOLE										

Ferry B 

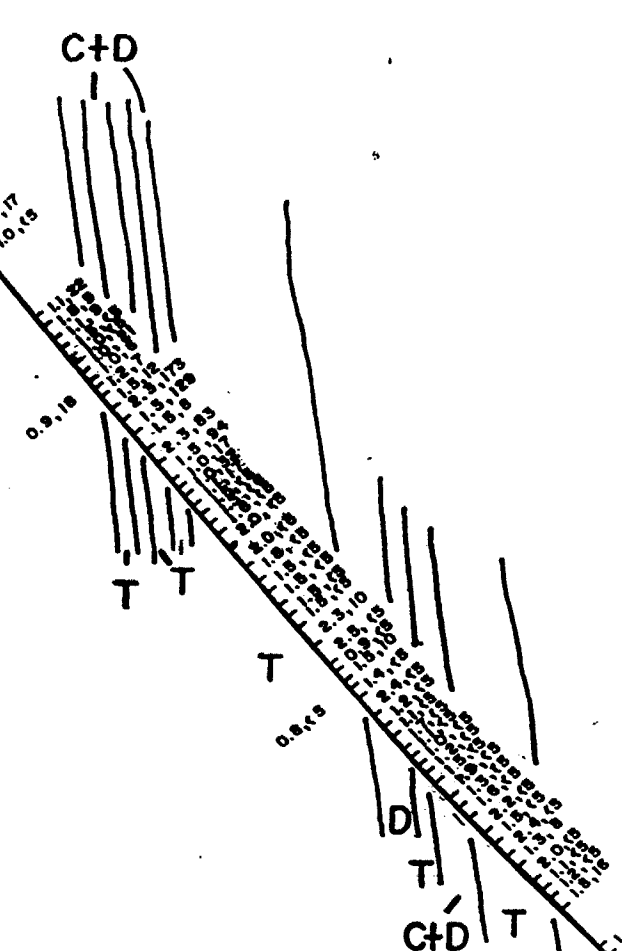
88-01




GABBRO

C

C+D

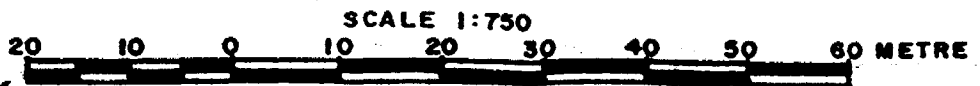


LEGEND

- C** CONGLOMERATE ± AGGLOMERATE
 - D** GREYWACKE
 - L** SILTSTONE AND SHALE
 - S** SERECITE SCHIST
 - T** SYENITE / TRACHYTE
-  20.12
WIDTH IN METRES, PPB Au

LOOKING WEST

VIRGINIATOWN PROPERTY



246.6 m

SECTION OF DIAMOND DRILL HOLE 88-01

NOV 27 - FEB 88

FIGURE 5

NORTHERN DYNASTY EXPLORATIONS LTD.

DIAMOND DRILL RECORD

Hole No.:	VT-88-02	Started:	January 16, 1988					
Property:	Virginiatown	Completed:	January 18, 1988					
Claim No.:	L767378	Logged by:	G. Gorzynski					
Ref. Co-ord.:		Drill Contractor:	Langley Drilling, Brampton, Ontario					
Elevation:		Assayer:	Accurassay Laboratories, Kirkland Lake, Ontario					
Surveyed:	No							
Grid Co-ord.:	52+00W, 20+20S	Purpose:	To further test gold mineralization and alteration in DDH VT-87-01.					
Core Size:	BQ							
Casing Left:	No							

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS						
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)		
0.0	1.7	CASING - Recovered 20 cm unaltered feldspar glomeroporphyritic basalt boulder.												
1.7	6.5	ALTERED SILTSTONE+(GREYWACKE): Generally ≤ 2 cm wide light grey siltstone layers separated by ≤ 5 mm light green sericite layers; local botroidal patches (≤ 5 cm) of white quartzitic siltstone; non-magnetic; weakly dolomitic - reaction to HCl most notable in limonitic sections. NOTE - the proportion of ankerite/dolomite in altered sections is commonly 5 - 10% here and elsewhere, but reaction to HCl is typically very weak; banding and foliation generally at 25° to core axis; 15% of section is broken core; 1.7 - 2.5 m - predominantly light to medium grey greywacke; basal contact in broken core. ALTERATION: Generally bleached and weakly carbonitized (see note above). MINERALIZATION: Pyrite $< 1\%$ - disseminated and on fractures, limonite-ankerite rust: 7% at 5.4 - 6.5 m. Quartz-white carbonate veinlets: 5% at 1.7 - 5.0 m.	1.7	2.6	0.9	7152		< 5						
			2.6	3.8	1.2	7153		< 5						
			3.8	5.4	1.6	7154		< 5						
			5.4	6.5	1.1	7155		< 5						
6.5	10.3	ALTERED GREYWACKE+(SILTSTONE)+(CONGLOMERATE): Predominantly orange-brown limonite/ankerite rust stained; 30% dark to light grey; 30% broken core; generally medium-grained, well foliated/poorly banded at 30° to core axis; local sections of siltstone (as 1.7 - 6.5 m) and conglomerate (as below) present toward uphole contact; non-magnetic; basal contact gradational over 40 cm. ALTERATION: - Local bleaching; local patches (≤ 3 cm) quartz+K-feldspar; - Weakly to moderately ankeritic throughout. MINERALIZATION: Limonite+ankerite rust - average 15% - disseminated, on fractures and as boxworks; pyrite $<< 1\%$ - disseminated and on fractures; quartz-white carbonate veinlets - $<< 1\%$.	6.5	8.7	2.2	7156		< 5						
			8.7	10.3	1.6	7157		< 5						
10.3	13.6	ALTERED CONGLOMERATE: Dark to light grey with pink, white and green sections; polymictic; clast definition varies with alteration from nil to good; non-magnetic. Clasts: ≤ 3 cm diameter;	10.3	11.0	0.7	7158		< 5						
			11.0	11.8	0.8	7159		< 5						

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
		<p>Clasts dominantly syenite/trachyte and greywacke; closed matrix varies from chloritic to greywacke; foliation and clast elongation at 35° to core axis; basal contact gradational over 20 cm.</p> <p>ALTERATION: Variable.</p> <ol style="list-style-type: none"> Prominent pink K-feldspar and (rhodochrosite?) with 20% intercalated light green sericite at 11.0 - 11.8 m and small (<5 cm) patches elsewhere; Prominent off-white quartz and (dolomite) at 13.1 - 13.4 m and small (<5 cm) patches elsewhere. Minor (<1 cm thick bands) bleaching/sericitization. <p>MINERALIZATION: 25% limonite and ankerite rust in broken core at 10.5 - 11.0 m - disseminated, fractures, boxworks.</p> <ul style="list-style-type: none"> Pyrite and chalcopyrite - trace - disseminated. Quartz⁺carbonate⁺chlorite veins - < 1%. 	11.8	13.6	1.8	7160		< 5				
13.6	21.4	<p>CONGLOMERATE: Polymictic; ≤ 15 cm angular to subrounded clasts in light grey quartzitic sandstone closed matrix; clasts consist of pink syenite/trachyte, variably grey greywackes, light green sericitic siltstones, sparse green basalt, and rare purple crystal tuff; non-magnetic; no bedding evident; weakly to moderately dolomitic matrix; poor to moderate foliation and clast elongation generally at 35° to core axis; basal contact gradational over 1.5 m.</p> <p>ALTERATION: Minor - 2% lenses and slivers of bleached/sericitized material especially uphole in unit.</p> <p>MINERALIZATION: Commonly 1% pyrite disseminations in conglomerate matrix; 4% quartz+white carbonate veins (≤ 3 cm wide) at 13.6 - 15.1 m; < 1% elsewhere.</p>	13.6	15.1	1.5	7161		18				
21.4	41.1	<p>ALTERED CONGLOMERATE: Similar to 13.6 - 21.4 but moderately bleached/sericitized(?) throughout; weakly to moderately dolomitic sandstone matrix; foliations to core axis → 40° at 24.1 m, 40° at 27.1 m, 35° at 30.1 m, 35° at 33.2 m, 30° at 36.3 m, 30° at 39.3 m; basal contact gradational over 20 cm.</p> <p>ALTERATION: Moderately bleached throughout; intensely sericitized (?) lenses and slivers comprise 5 - 20%; most intense sericitization toward basal contact;</p> <ul style="list-style-type: none"> carbonate in matrix may be secondary; Chrome Mica - trace - disseminated. <p>MINERALIZATION: Pyrite - overall < 1%; locally ≤ 4% mainly in conglomerate matrix; chalcopyrite - trace - disseminated; hematite - 38.9 - 39.5 - 2% massive veinlets ≤ 8 mm; quartz⁺white carbonate⁺chlorite veins, generally < 1%, 10% at 33.0 - 34.7 m; 5% at 38.2 - 41.1 m; ankerite/limonite - 10 - 20% over 10 - 20 cm associated with fractures at 24.8 m, 25.4 m, 28.4 m, 31.9 m, 37.3 m.</p>	21.4	22.6	1.2	7162		11				
			22.6	24.7	2.1	7163		< 5				
			24.7	25.8	1.1	7164		8				
			25.8	27.1	1.3	7165		9				
			27.1	29.1	2.0	7166		< 5				
			29.1	31.1	2.0	7167		< 5				
			31.1	33.0	1.9	7168		< 5				
			33.0	34.7	1.7	7169		< 5				
			34.7	36.8	2.1	7170		< 5				
			36.8	38.2	1.4	7171		12				
			38.2	39.3	1.1	7172		7				
			39.3	41.1	1.8	7173		< 5				
41.1	58.4	<p>TUFFACEOUS CONGLOMERATE/AGGLOMERATE: 60% rounded to angular clasts in open purple-grey to brown-grey matrix with 10% disseminated sericitized (?) feldspars; clasts are predominantly pink syenite/trachyte and tuffaceous material similar to matrix; non-magnetic; massive, moderately foliated at 35° - 40° to core axis throughout; siliceous - Moh = 6 - 7 throughout; very weakly to non-calcareous, basal contact gradational over 20 cm.</p>	48.5	50.1	1.6	7174		< 5				
			50.1	51.9	1.8	7175		< 5				
			51.9	54.0	2.1	7176		9				

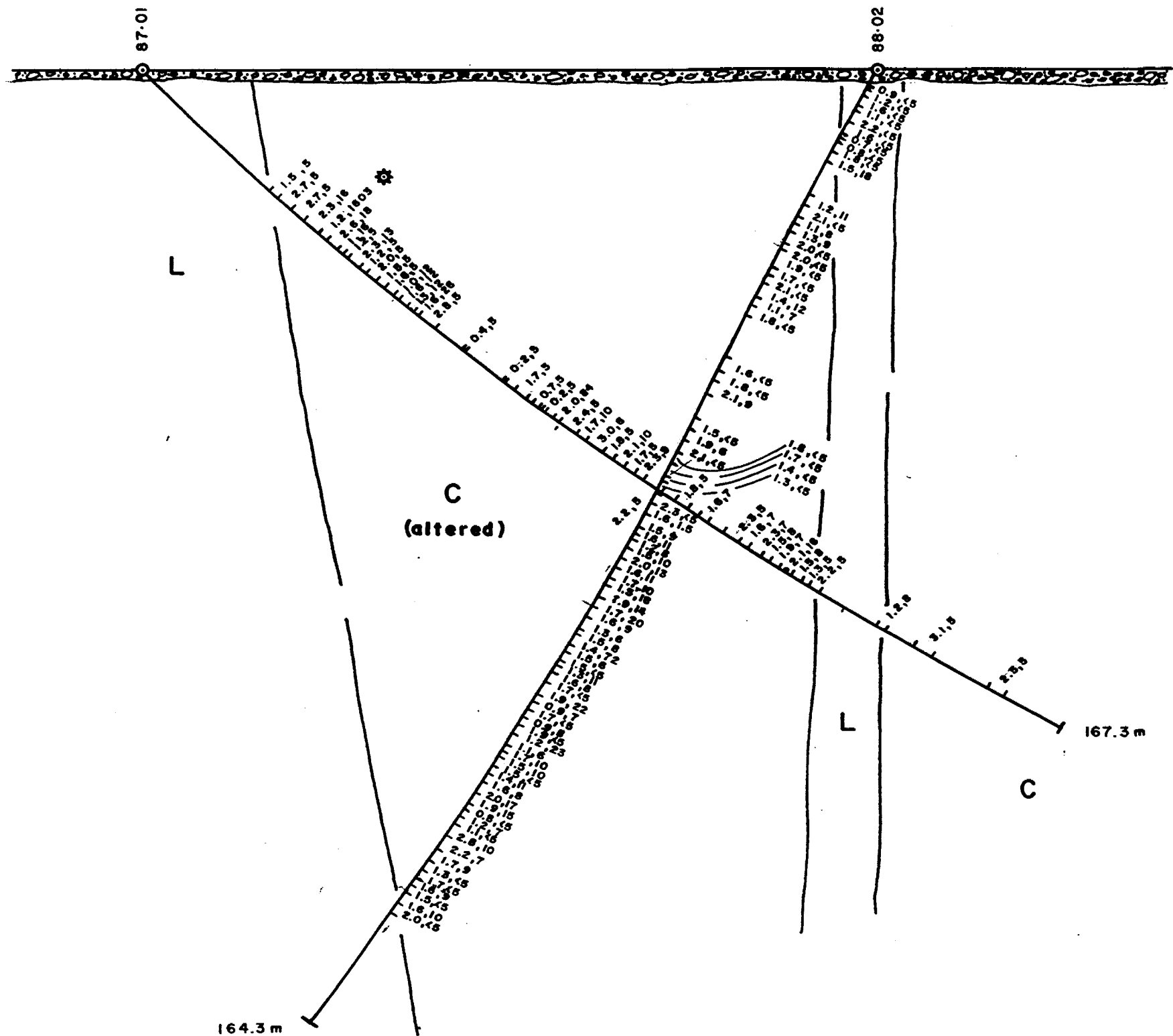
From (Metric)	To	DESCRIPTION	SAMPLE				ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)
		ALTERATION: Light pink quartz+K-feldspar [±] dolomite [±] sericite patches - 10% at 48.5 - 54.0 m, \leq 2% elsewhere - Cr-mica - trace - disseminations and local clots. MINERALIZATION: Pyrite \ll 1% - disseminated; hematite+chalcopyrite - trace - associated with rare \leq 1 cm bands of chlorite alteration; quartz+white carbonate veinlets generally $<$ 1%.									
58.4	70.1	ALTERED CONGLOMERATE: Generally light green to beige with varicoloured clasts; 10% patchy sections (\leq 30 cm wide) of relatively unaltered tuffaceous conglomerate (as 41.1 - 58.4 m); clasts \leq 3 cm diameter; angular to rounded, predominantly pink syenite/trachyte and purple-brown tuff; clasts comprise 40% of unit; open matrix is predominantly sericite and quartz; hardness Moh = 3 - 6; non-magnetic; weakly to non-calcareous; well foliated at approximately 35 ^o to core axis through-out; basal contact gradational over 3 cm. ALTERATION: Generally highly bleached/sericitized? - Cr-mica - trace - disseminated. MINERALIZATION: Pyrite \ll 1%, disseminated; quartz+white carbonate veins \ll 1%; orange siderite+chlorite veins - trace, 1 cm parting quartz (20%)+Cr-mica (40%)+hematite (40%)+chalcopyrite (1%) at 61.9 m.	58.4	59.9	1.5	7177					$<$ 5
			59.9	61.8	1.9	7178					6
			61.8	63.9	2.1	7179					$<$ 5
			63.9	65.7	1.8	7180					$<$ 5
			65.7	67.4	1.7	7181					$<$ 5
			67.4	68.8	1.4	7182					$<$ 5
			68.8	70.1	1.3	7183					$<$ 5
70.1	75.5	TUFFACEOUS CONGLOMERATE/AGGLOMERATE: As 41.1 - 58.4 m; generally moderately foliated at 35 ^o to core axis; basal contact gradational over 2 cm. ALTERATION: 72.4 - 72.8 m - highly bleached conglomerate similar to 58.4 - 70.1; sparse \leq 3 cm zones of bleaching elsewhere. MINERALIZATION: Pyrite - 1% - disseminations and clots in veins; quartz+white carbonate [±] orange siderite veins - 5% - irregular, variably oriented.	70.1	72.4	2.3	7184					$<$ 5
			72.4	74.0	1.6	7185					15
			74.0	75.5	1.5	7186					9
75.5	81.8	ALTERED CONGLOMERATE: Patchy pink-brown to light green; vestiges of clasts only locally discernible; predominantly light green sericite and pink-brown K-feldspar; non-magnetic; non-calcareous; well foliated at variable 30 - 40 ^o to core axis; basal contact gradational/ragged over 1 cm. ALTERATION: Pervasive intense potassic alteration marked by patchy intergrown sericite and K-feldspar; Cr-mica - trace - disseminations and clots. MINERALIZATION: Prominant quartz+white carbonate-chlorite-orange siderite [±] (tourmaline?) veins \leq 30 cm wide - 20% at 78.3 - 81.8 m; 3% at 75.5 - 78.3 m; pyrite \ll 1% - disseminated and in veins; chalcopyrite+pyrrhotite - trace - in veins.	75.5	77.1	1.6	7187					11
			77.1	78.3	1.2	7188					8
			78.3	79.8	1.5	7189					10
			79.8	81.8	2.0	7190					13
81.8	83.4	TUFFACEOUS CONGLOMERATE/AGGLOMERATE: As 41.1 - 58.4 m; moderately foliated at 30 ^o to core axis; basal contact sharp. ALTERATION: 5% patchy to wispy bleached/sericitized? zones; \ll 1% Cr-mica - disseminated wisps. MINERALIZATION: Pyrite - trace - disseminations and fracture-fill; quartz+white carbonate-orange siderite veinlets - 3% - irregular.	81.8	83.4	1.6	7191					11
83.4	86.4	ALTERED CONGLOMERATE: Similar to 75.5 - 81.8 m; predominantly pink-brown K-feldspar uphole with light green sericite increasing to 50% downhole; 3% patchy vestiges (\leq 3 cm diameter) of unaltered tuffaceous conglomerate; non-magnetic; moderately to well foliated at 35 ^o to core axis;	83.4	85.1	1.7	7192					10
			85.1	86.4	1.3	7193					18

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
		Basal contact gradational over 2 cm. ALTERATION: Pervasive K-feldspar with sericite increasing downhole - very weakly to non-dolomitic/calcareous; silica+albite (?) patches - 10% at 85.1 - 86.4 m; Cr-mica - disseminations and wisps (clasts?) - 3% at 83.8 - 84.8 m; <<1% elsewhere; possibly associated with fine grains of disseminated chromites. MINERALIZATION: Quartz+white carbonate+orange siderite+chlorite veins - 15% - Irregular - ≤ 10 cm wide; pyrite+pyrrhotite - < 1% - in veins and (disseminations).										
86.4	88.3	TUFFACEOUS CONGLOMERATE/AGGLOMERATE: Similar to 41.1 - 58.4 m but moderately altered throughout; well foliated at 30° to core axis; basal contact gradational over 1 cm. ALTERATION: Bleaching/sericitization(?) - 3% - disseminations and wisps; K-feldspar - ≤ 40% at 87.7 - 88.3 m; Cr-mica - trace - disseminated wisps. MINERALIZATION: Quartz+white carbonate+orange siderite veinlets - 4% - Irregular, < 1 cm wide; pyrite - trace - disseminated and on fractures.	86.4	88.3	1.9	7194		14				
88.3	105.3	ALTERED CONGLOMERATE: As 75.5 - 81.8 m; moderate to strong foliation to core axis → 30° at 91.1, 40° at 94.2, 40° at 97.2, 35° at 100.1, 45° at 103.1; basal contact gradational over 3 cm. ALTERATION: Pervasive intense K-feldspar+sericite alteration in varying proportions throughout; weakly dolomitic throughout; Cr-mica - 1% - disseminations and wisps. MINERALIZATION: Quartz+white carbonate+chlorite+orange siderite+tourmaline veins; 8% at 88.3 - 95.8 m; 20% at 95.8 - 101.7 m; 10% at 101.7 - 105.3 m; pyrite - << 1% - on fractures in veins and disseminations; chalcopyrite - trace - on fractures in veins.	88.3	90.0	1.7	7195		20				
			90.0	91.6	1.6	7196		9				
			91.6	92.9	1.3	7197		6				
			92.9	94.4	1.5	7198		8				
			94.4	95.8	1.4	7199		72				
			95.8	97.3	1.5	7200		6				
			97.3	98.8	1.5	7201		< 5				
			98.8	100.1	1.3	7202		11				
			100.1	101.7	1.6	7203		8				
			101.7	103.4	1.7	7204		< 5				
			103.4	105.3	1.9	7205		22				
105.3	110.7	TUFFACEOUS CONGLOMERATE/AGGLOMERATE: Similar to 41.1 - 58.4 m; moderately to poorly foliated at 45° to core axis; basal contact gradational over 10 cm; ALTERATION: Slight bleaching 109.0 - 110.7 m; Cr-mica - trace - disseminations and wisps. MINERALIZATION: Quartz+white carbonate+orange siderite veins - 8% - Irregular, ≤ 8 cm wide.	105.3	106.2	0.9	7206		7				
			106.2	107.9	1.7	7207		5				
			107.9	108.8	0.9	7208		8				
			108.8	110.7	1.9	7209		< 5				
110.7	111.9	ALTERED CONGLOMERATE: Similar to 75.5 - 81.8 m; moderately to well foliated at 35° to core axis; basal contact gradational over 5 cm. ALTERATION: Pervasive K-feldspar (40%)+sericite (60%). Alteration in patchy mosaic; weakly dolomitic; Cr-mica - 0.5% - disseminated wisps. MINERALIZATION: Quartz+white carbonate+orange siderite+black chlorite veins - 20% - Irregular, ≤ 20 cm wide; pyrite/chalcopyrite/pyrrhotite - < 1% on fractures in veins.	110.7	111.9	1.2	7210		23				


From (Metric)	To	DESCRIPTION	SAMPLE				ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)
111.9	120.7	TUFFACEOUS CONGLOMERATE/AGGLOMERATE: Similar to 41.1 - 58.4 m; moderately foliated at 35° to core axis; basal contact sharp but irregular. ALTERATION: Minor bleaching/sericitization especially toward uphole contact. MINERALIZATION: Quartz+white carbonate+orange siderite+sericite veins → 111.9 - 114.7 - 5%, 114.7 - 116.2 - 25%; 116.2 - 120.7 - 4%.	111.9	113.0	1.1	7211		6			
			113.0	114.7	1.7	7212		10			
			114.7	116.2	1.5	7213		10			
			116.2	117.7	1.5	7214		< 5			
			117.7	119.1	1.4	7215		11			
			119.1	120.7	1.6	7216		8			
120.7	124.6	ALTERED CONGLOMERATE: Similar to 75.5 - 81.8 m; moderately foliated at 40° to core axis; basal contact gradational over 2 cm. ALTERATION: Pervasive K-feldspar (40%)+sericite (60%) as patchy mosaic; weakly dolomitic; Cr-mica - 0.5% - disseminations and wisps. MINERALIZATION: Quartz+white carbonate+orange siderite (+black chlorite) veins - 8% - irregular, 5 cm wide; pyrite - trace - disseminated.	120.7	122.7	2.0	7217		17			
			122.7	124.6	1.9	7218		15			
124.6	125.4	TUFFACEOUS CONGLOMERATE/AGGLOMERATE: Similar to 41.1 - 58.4; well foliated at 45° to core axis; basal contact gradational over 1 cm. ALTERATION: Bleaching/sericite - 2% - wisps and patches; Cr-mica - trace - disseminations and wisps. MINERALIZATION: Quartz+white carbonate+orange siderite veins - 7% - irregular, ≤ 2 cm wide.	124.6	125.4	0.8	7219		< 5			
125.4	130.5	ALTERED CONGLOMERATE: Similar to 75.5 - 81.8 m; well foliated at 40° to core axis; basal contact gradational over 5 cm. ALTERATION: Pervasive K-feldspar (25%)+sericite (75%) alteration as patchy mosaic; locally only moderately altered; Cr-mica - trace - disseminations and wisps. MINERALIZATION: Quartz+white carbonate+orange siderite+black chlorite veins → 125.4 - 127.7 - 10%; 127.7 - 130.5 - 2%; irregular, ≤ 5 cm wide.	125.4	126.6	1.2	7220		7			
			126.6	127.7	1.1	7221		< 5			
			127.7	130.5	2.8	7222		10			
130.5	134.4	TUFFACEOUS CONGLOMERATE/AGGLOMERATE: Similar to 41.1 - 58.4 m, moderately foliated at 35° to core axis; basal contact gradational over 20 cm. ALTERATION: Pervasive to patchy moderate bleaching through 60% of unit. MINERALIZATION: Quartz+white carbonate+orange siderite (+black chlorite) veins - 2% - irregular, ≤ 8 cm wide.	130.5	132.7	2.2	7223		7			
			132.7	134.4	1.7	7224		9			
134.4	137.4	ALTERED CONGLOMERATE: As 75.5 - 81.8 m; well foliated at 30 - 40° to core axis; basal contact gradational over 10 cm. ALTERATION: Pervasive K-feldspar (40%)+sericite (30%)+silica/albite? (30%); local (<1%) albite (?) patches (≤ 2 cm diameter); Cr-mica - trace - disseminated. MINERALIZATION: Quartz+white carbonate+sericite+chlorite veins - 3% - irregular, ≤ 2 cm wide; pyrite+chalcopyrite - trace - disseminations and wisps.	134.4	135.7	1.3	7225		< 5			
			135.7	137.4	1.7	7226		< 5			

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
137.4	142.1	<p>QUARTZ FRAGMENT BRECCIA/CONGLOMERATE: Light green, poorly defined crystal tuff and conglomerate clasts (35%) (≤ 3 cm diameter) in open sericitic matrix; overprinted (?) by 5%, 1 - 5 mm diameter, well-defined, angular, white to light grey quartz clasts (tectonic breccia clasts?); non-magnetic, non-calcareous; well foliated at 45° to core axis; basal contact sharp at 40° to core axis.</p> <p>ALTERATION: Pervasive Intense sericitization and moderate silicification (?); Cr-mica - trace - disseminated wisps.</p> <p>MINERALIZATION: Pyrite - overall 1%, locally $\leq 5\%$ - disseminated cubes ≤ 3 mm diameter, commonly in quartz clasts (replacement by quartz?); pyrrhotite - trace - replacing quartz; quartz+white carbonate veins - $< 1\%$, ≤ 2 cm wide; blue quartz veins - 1% - 1 cm wide.</p>	137.4	139.0	1.6	7227	9					
			139.0	140.5	1.5	7228	< 5					
			140.5	142.1	1.6	7229	10					
142.1	145.2	<p>SERICITE SCHIST: Light greenish yellow, pastey-textured, sericite bands with $\leq 30\%$ light (uphole) to medium (downhole) grey interbeds of fine arenite; non-magnetic, non-calcareous; very soft; well foliated and bedded (≤ 2 cm thick) at 30° to core axis; basal contact gradational over 1 m.</p> <p>ALTERATION: Pervasive bleaching/sericitization (?).</p> <p>MINERALIZATION: Quartz+white carbonate veinlets - $<< 1\%$, ≤ 5 mm thick.</p>	142.1	144.1	2.0	7230	< 5					
145.2	164.3	<p>SANDSTONE/SILTSTONE: Generally interbedded light to medium grey, fine to medium grained sandstone beds (≤ 10 cm thick) and dark grey siltstone (shale) beds (≤ 1 cm thick); non-magnetic, non-calcareous; bedding/foliation at $35 - 40^\circ$ to core axis; local cross beds indicate stratigraphic tops downhole.</p> <p>ALTERATION: 145.2 - 152.3 m \rightarrow decreasing moderate to slight bleaching/sericitization (?) of siltstone beds.</p> <p>MINERALIZATION: Pyrite - $<< 1\%$ - disseminated; quartz veinlets $<< 1\%$, ≤ 1 cm wide.</p>										
164.3		END OF HOLE										

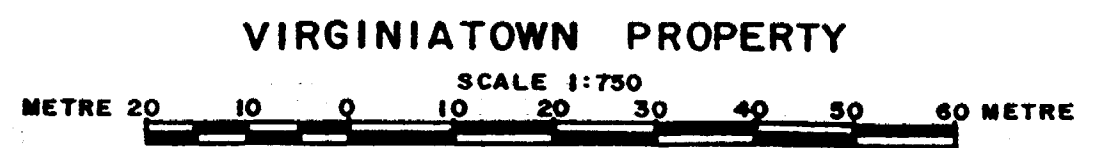
J. Goryunsk



LEGEND

- C** CONGLOMERATE ± AGGLOMERATE
 - D** GREYWACKE
 - L** SILTSTONE AND SHALE
 - S** SERECITE SCHIST
 - T** SYENITE / TRACHYTE
-  20.12
WIDTH IN METRES, PPB Au

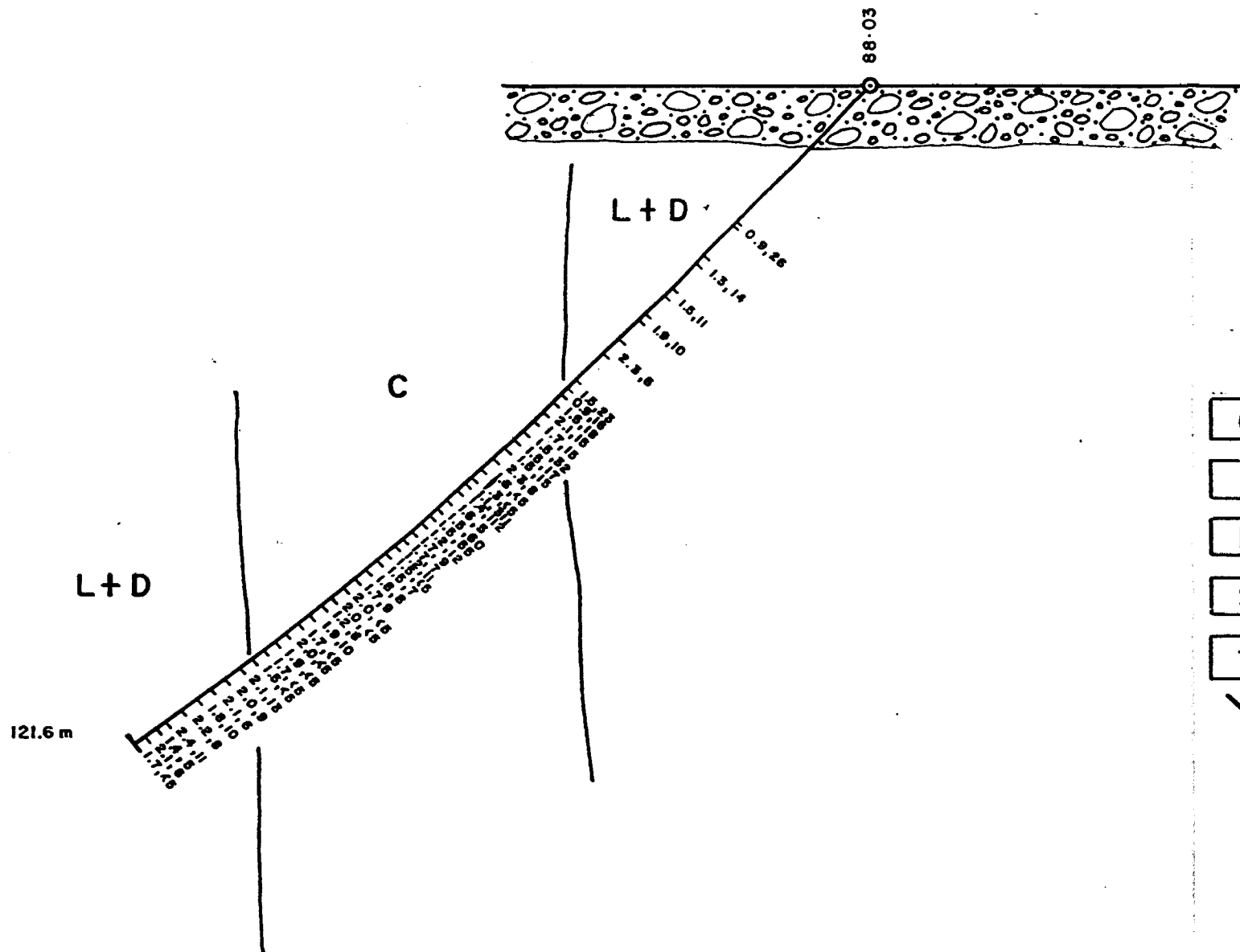
164.3 m
LOOKING WEST



SECTION OF DIAMOND DRILL HOLE 87-1, 88-2
NOV 87 - FEB 88 FIGURE 1

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS						
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)		
		ALTERATION: Pervasive bleaching 10 - 15%. \leq 7% sericite development, 5% K-feldspar alteration. Trace Cr-mica development.												
		MINERALIZATION: \leq 1%, 1 cm wide quartz veins with 5 - 10% Fe(Mg)-carbonate. Foliation/bedding to core axis: 87.7 m: 41 $^{\circ}$; 90.5 m: 40 $^{\circ}$.	86.4	88.1	1.7	7259		9						
			88.1	90.1	2.0	7260		< 5						
			90.1	92.1	2.0	7261		< 5						
92.1	103.8	BLEACHED SERICITIC CONGLOMERATE: Color - light green with beige-white patches. Textures - Clasts, 1 - 3 cm in long direction, well-rounded to subrounded. Clasts comprised 70% felsics, 20% volcanics-sediments, and 10% quartz-feldspar. Matrix composed of chlorite-sericite-quartz feldspar. 40% matrix, matrix supported. Non-magnetic, non-calcareous.												
		ALTERATION: Pervasive bleaching 80 - 90% with 5 - 10% sericitic stringers intergrown with the matrix. 1 - 2% K-feldspar alteration. Trace Fe(Mg)-carbonate fracture fills (101.2 - 101.5 m).												
		MINERALIZATION: Trace 1 - 1-1/2 cm wide quartz veins. Foliation to core axis: 95.2 m: 32 $^{\circ}$; 104.0 m: 47 $^{\circ}$.	92.1	93.3	1.2	7262		8						
			93.3	95.2	1.9	7263		10						
			95.2	96.7	1.5	7264		< 5						
			96.7	98.7	2.0	7265		< 5						
			98.7	100.6	1.9	7266		< 5						
			100.6	102.3	1.7	7267		< 5						
			102.3	103.8	1.5	7268		< 5						
103.8	121.6	BLEACHED SERICITIC INTERBEDDED SILTSTONE-SANDSTONE: Color - light green with beige-white bands. Texture - bedding (banding) variable scale from 2 - 3 cm to 30 cm. Non-magnetic, non-calcareous.												
		ALTERATION: Pervasive bleaching 80 - 90%, decreasing downhole. \leq 5% sericitic alteration.												
		MINERALIZATION: \leq 1%, < 1 cm wide quartz veins with 3 - 5% Fe(Mg)-carbonate. Trace dolomitic carbonate fracture fills with trace chalcopyrite.	103.8	105.9	2.1	7269		13						
		103.9 and 104.7 - (< 3 cm wide) black chlorite (70%), quartz (25%)-sericite (5%) filled fractures. Fault zone.	105.9	107.9	2.0	7270		9						
		Foliation to core axis: 105.4 m: 38 $^{\circ}$; 109.8 m: 45 $^{\circ}$; 117.2 m: 47 $^{\circ}$; 121.5 m: 51 $^{\circ}$.	107.9	110.0	2.1	7271		6						
			110.0	111.8	1.8	7272		10						
			111.8	114.0	2.2	7273		8						
			114.0	116.4	2.4	7274		11						
			116.4	117.8	1.4	7275		5						
			117.8	119.9	2.1	7276		6						
			119.9	121.6	1.7	7277		< 5						
121.6		END OF HOLE.												

Larry D. G.



LEGEND

- C** CONGLOMERATE ± AGGLOMERATE
 - D** GREYWACKE
 - L** SILTSTONE AND SHALE
 - S** SERECITE SCHIST
 - T** SYENITE / TRACHYTE
- 20, 12
WIDTH IN METRES, PPB Au

LOOKING WEST

VIRGINIATOWN PROPERTY



SECTION OF DIAMOND DRILL HOLE 88-03

NOV 87 - FEB 88

FIGURE 6

NORTHERN DYNASTY EXPLORATIONS LTD.

DIAMOND DRILL RECORD

Hole No.:	VT-88-04	Started:	January 23, 1988	<u>Hole Survey</u>		
Property:	Virginiatown	Completed:	January 27, 1988	<u>Meterage</u>	<u>Azimuth</u>	<u>Dip</u> (corrected)
Claim No.:	L666508	Logged by:	G. Gorzynski			<u>Method</u>
Ref. Co-ord.:		Drill Contractor:	Langley Drilling, Brampton, Ontario	0.0	140°	-45°
Elevation:		Assayer:	Accurassay Laboratories, Kirkland Lake, Ontario	60.6	-	-46°
Surveyed:	No			121.6	-	-43°
Grid Co-ord.:	49+20W, 0+17N	Purpose:	1. To test two EM conductors. 2. To test alteration zone projected from west.	182.6	-	-37°
Core Size:	BQ					Compass
Casing Left:	No					Acid
						Acid

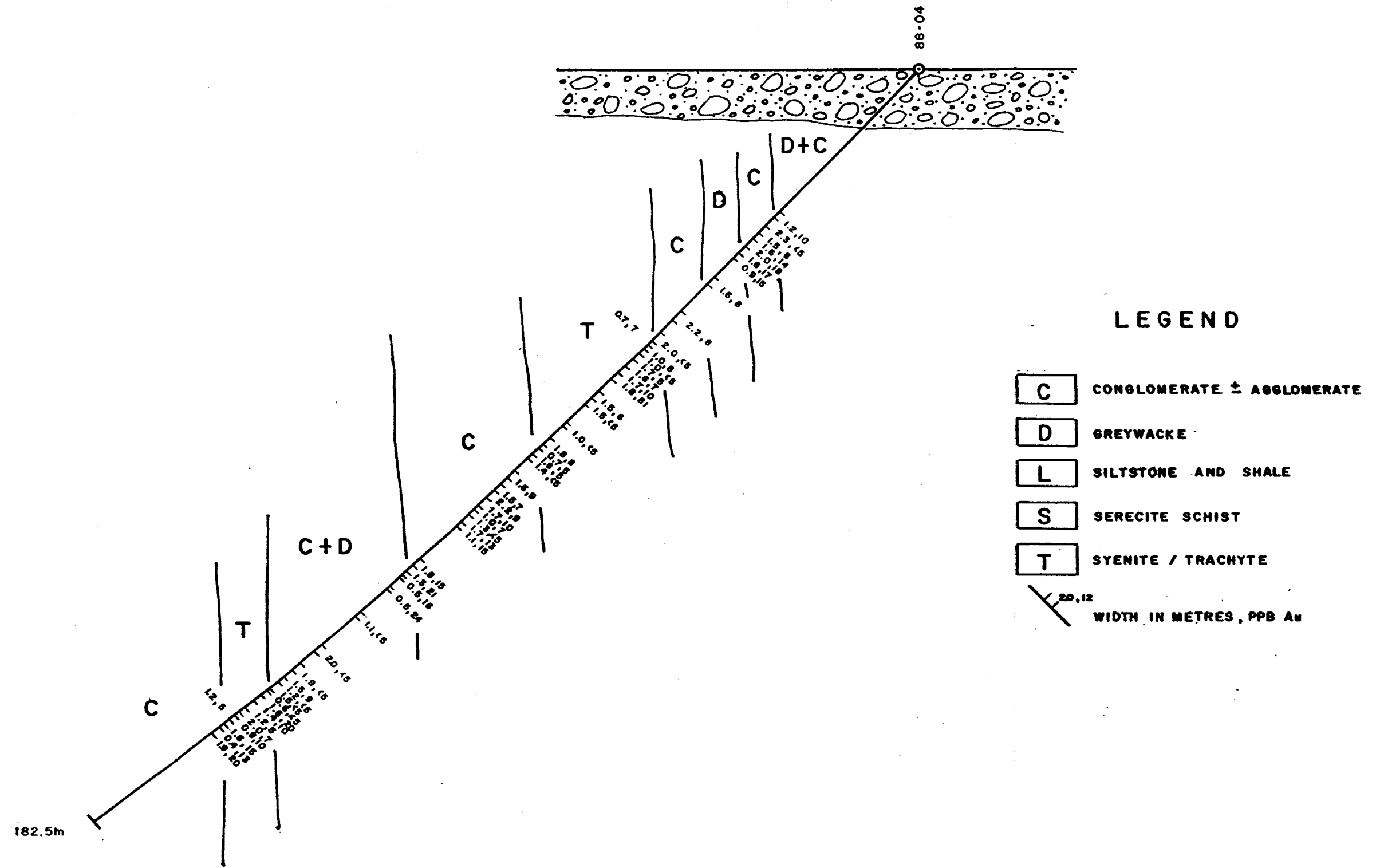
From (Metric)	To	DESCRIPTION	SAMPLE				ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)
0.0	14.0	Casing - Unaltered/unmineralized basalt, greywacke and (diorite) pebbles.									
14.0	35.5	TUFFACEOUS GREYWACKE/TUFF?+(CONGLOMERATE/AGGLOMERATE?): Generally medium grey to greenish grey, massive to thickly bedded, medium-grained; predominantly feldspar (locally as crystals)+quartz+sericite-chlorite; locally grades into pebble conglomerate with < 30% greywacke, trachyte and basalt (?) clasts over < 50 cm; locally slightly magnetic; Foliation - weak to moderate at 35 - 40° to core axis; basal contact gradational over 30 cm. ALTERATION: White ankerite (?) - disseminated - 10% uphole, decreasing downhole to < 1%; no significant bleaching. MINERALIZATION: Pyrite+pyrrhotite - <<1% - disseminated - quartz+white carbonate+(orange siderite) veinlets - << 1% - typically < 2 mm thick; local limonite-strained fractures.	34.3	35.5	1.2	7278		10			
35.5	44.5	TUFFACEOUS CONGLOMERATE/AGGLOMERATE ? : Generally medium-grey, massive. Clasts → typically vaguely defined, form 10 - 30% of unit; variety of clast types - predominantly pink trachyte/syenite and chlorite-spotted tuff?; matrix: tuffaceous greywacke?; weakly dolomitic, moderately to well foliated at 35 - 40° to core axis. ALTERATION: Moderate bleaching+K-feldspar+ankerite (?) at 37.9 - 38.5 m and 39.4 - 39.8 m. MINERALIZATION: Magnetite - <1% - disseminated. Pyrite - <<1% - disseminated, up to 20% over < 3 cm in small silicified zones at 43.0 and 43.9 m. Quartz+white carbonate+orange siderite veins - 7% at 37.9 - 38.5 m. Limonite+ankerite rust stained fractures - 5% at 40.2 - 40.9 and 5% at 42.3 - 42.8 m.	35.5	37.8	2.3	7279		< 5			
			37.8	39.3	1.5	7280		6			
			39.3	40.9	1.6	7281		14			
			40.9	42.9	2.0	7282		18			
			42.9	44.5	1.6	7283		17			

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
44.5	54.0	GREYWACKE: Generally medium-grey, thick bedded, local pebbles and cobbles toward base of unit; locally slightly magnetic; weakly to non-dolomitic; bedding and weak to moderate foliation at 35° to core axis; basal contact gradational over 4 cm. ALTERATION: Local very weak bleaching. MINERALIZATION: Pyrite: Trace - disseminated. Quartz+white carbonate ⁺ -orange siderite ⁺ -chlorite veins - <<1% - 10 cm vein at 50.5 m. Limonite - 5% - on fractures at 44.5 - 45.0 m and sparsely elsewhere.	44.5	45.4	0.9	7284		15				
			50.1	51.7	1.6	7285		8				
54.0	65.4	CONGLOMERATE: 20 - 40% clasts (< 15 cm diameter) in open to closed light grey greywacke matrix; clast size increases downhole. Clasts - several types, predominantly pink trachyte/syenite and chlorite-spotted light green volcanic (?); massive, non-magnetic, weakly to non-dolomitic; moderately foliated at 35° to core axis; basal contact sharp. ALTERATION: Minor patchy bleaching. MINERALIZATION: Pyrite - trace - disseminated, locally 1% at 58.2 - 60.4 m developed on fractures; quartz+white carbonate veinlets: < 1% - irregular.	58.2	60.4	2.2	7286		8				
			63.4	65.4	2.0	7287		< 5				
65.4	68.1	TRACHYTE/SYENITE AND CRYSTAL TUFF: Intercalated 5 - 60 cm wide sections of medium grey crystal tuff (?) (40%) and pink trachyte/syenite (60%); contacts are sharp and parallel to foliation at 45 - 55° to core axis; Crystal Tuff (?) - fine-grained with common feldspar crystals, massive; Trachyte/Syenite: massive/foliated; dikelets associated with chlorite-spotted trachyte/syenite below (?); non-magnetic; basal contact gradational over 3 cm; 0.5 m of highly broken core near uphole contact. ALTERATION: Generally weakly dolomitic - pervasive to patchy, moderate to strong silicification over 50% of unit - preferentially in trachyte/syenite. Local wisps of sericite in crystal tuff. Cr-mica - trace - disseminated in trachyte/syenite. MINERALIZATION: Quartz+white carbonate ⁺ -tourmaline ⁺ -chlorite ⁺ -orange siderite veins/stockworks - 35% - irregular, generally veins < 1 cm.	65.4	66.1	0.7	7288		7				
			66.1	67.1	1.0	7289		8				
			67.1	68.1	1.0	7290		< 5				
68.1	73.1	CHLORITE-SPOTTED TRACHYTE/SYENITE: Pinkish grey to bright orange-pink; fine to medium-grained, typically with 10% green chlorite spots < 2 mm long; non-magnetic, non-calcareous; generally moderately to well foliated at 45° to core axis; basal contact sharp. ALTERATION: K-feldspar(+silicification?) - pervasive and intense at 71.4 - 73.1 m. - sericitization - trace - as bands and wisps. MINERALIZATION: Quartz+white carbonate ⁺ -chlorite ⁺ -tourmaline ⁺ -orange siderite veins - 2% at 68.1 - 71.4 m; 20% at 71.4 - 73.1 m - irregular, < 10 cm; 72.7 - 72.8 → spectacular 20% tourmaline-spiculed quartz vein. Pyrite - trace - disseminated and on fractures.	68.1	69.8	1.7	7291		5				
			69.8	71.4	1.6	7292		7				
			71.4	73.1	1.7	7293		10				
73.1	93.4	TRACHYTE TUFF/PORPHYRITIC SYENITE: Typically 10 - 20% sub-rounded pink feldspars (< 4 mm diameter) and 2 - 7% wispy chlorite spots (< 3 mm long) in a pink to pinkish grey, fine-grained matrix;	73.1	74.9	1.8	7294		81				
			77.9	79.4	1.5	7295		6				

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
138.5	141.0	GREYWACKE: Medium grey, medium-grained, massive, non-magnetic, weakly dolomitic; moderately to well foliated at 50° to core axis; basal contact gradational over 4 cm. ALTERATION: not altered. MINERALIZATION: Quartz+white carbonate veinlets - <<1%; pyrite - trace - disseminated.										
141.0	154.9	CONGLOMERATE: Similar to 54.0 - 65.4 m; moderately to well foliated at 50° to core axis; basal contact across 10 cm quartz+white carbonate vein. ALTERATION: K-feldspar - pervasive - slight to moderate uphole varying to intense downhole (151.6 - 154.9 m); sericitization - local wisps and bands throughout. Cr-mica - trace - disseminated - increasing downhole. MINERALIZATION: Quartz+white carbonate+chlorite+orange siderite veins - generally <1% - irregular; pyrite - trace - disseminated and in veins.	142.6	144.6	2.0	3282		< 5				
			148.2	150.1	1.9	3283		< 5				
			150.1	151.6	1.5	3284		9				
			151.6	152.8	1.2	3285		< 5				
			152.8	154.3	1.5	3286		< 5				
			154.3	154.9	0.6	3287		< 5				
154.9	159.1	CHLORITE-SPOTTED TUFF (?): Generally very light grey with 15% disseminations. < 3 mm long chlorite wisps; local pink syenite clasts (< 2 cm diameter) increasing downhole; massive, non-magnetic, weakly dolomitic; well foliated at 55° to core axis; basal contact sharp. ALTERATION: K-feldspar - intense as < 2 cm selvages on quartz-carbonate veins at 154.9 - 156.5 m; local patches elsewhere. MINERALIZATION: Quartz+white carbonate+orange siderite+chlorite+tourmaline veins - 25% at 154.9 - 156.5 m; 1% at 156.5 - 159.1 m; pyrite+(chalcopyrite): disseminated and in veins.	154.9	156.5	1.6	3288		20				
			156.5	157.9	1.4	3289		10				
			157.9	159.1	1.2	3290		5				
159.1	164.8	TRACHYTE/SYENITE: Light to dark pink, massive; typically homogeneous, 0.5 m feldspar crystal mosaic; poorly defined breccia of rounded trachyte clasts (< 1 cm) in similar tight closed matrix at 160.2 - 162.0 m; non-magnetic, non-dolomitic, moderately hard (Moh = 6); poorly foliated at 50° to core axis; basal contact sharp. ALTERATION: Moderately bleached and locally sericitized at 161.1 - 162.0 m. MINERALIZATION: Quartz+white carbonate+orange siderite+chlorite veins - 3% at 159.1 - 162.0 m; <<1% at 162.0 - 164.8 m.	159.1	161.1	2.0	3291		7				
			161.1	162.0	0.9	3292		10				
			162.0	163.2	1.2	3293		5				
			163.2	164.8	1.6	3294		15				
164.8	182.5	CONGLOMERATE: Generally light brownish grey with pink tint toward uphole contact; large variety of < 3 cm well-rounded clasts in closed greywacke matrix; clasts include pink trachyte/syenite, light to dark grey sandstones, and green tuffs (?); moderate foliation varies 45 - 55° to core axis; non-magnetic; weakly to non-dolomitic. ALTERATION: Slightly bleached throughout; K-feldspar - slight pink tint at 164.8 - 168.8 m. MINERALIZATION: Quartz+white carbonate+chlorite veins - <<1% - irregular; 5% at 168.4 - 168.8 m; pyrite - trace - disseminated.	164.4	164.8	0.4	3296		13				
			164.8	166.7	1.9	3295		20				

182.5 END OF HOLE

Serry B 



LOOKING WEST

VIRGINIATOWN PROPERTY



SECTION OF DIAMOND DRILL HOLE 88-04

NOV 97 - FEB 98

FIGURE 7

NORTHERN DYNASTY EXPLORATIONS LTD.

DIAMOND DRILL RECORD

Hole No.: VT 88-05 Started: January 30, 1988
 Property: Virginitown Completed: February 2, 1988
 Claim No.: L765075 Logged by: J. Ho
 Ref. Co-ord.: Drill Contractor: Langley Drilling, Brampton, Ontario
 Elevation: Assayer: Accurassay Laboratories, Kirkland Lake, Ontario
 Surveyed: No
 Grid Co-ord.: 6+20W, 2+10S Purpose: 1. Test South Cliff mineralized zone.
 Core Size: BQ 2. Test VLF conductor.
 Casing Left: No

Meterage	Hole Survey		Method
	Azimuth	Dip (corrected)	
0.0	320°	-45°	Compass
60.6	-	-47°	Acid
121.6	-	-43°	Acid
182.6	-	-40°	Acid
247.0	-	-38°	Acid

From (Metric)	To	DESCRIPTION	SAMPLE				ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)
0.0	2.5	CASING.									
2.5	60.0	<p>GREYWACKE: Color - typical medium-grey. Texture - fine-grained with 5 - 8% 1 - 3 cm wide intercalations of silt-mudstone. Silt-mudstone slightly darker in colour. Abundant primary structures visible: load casts common, graded beds, and flame structures up to 1-1/2 cm in length. All are indicative of top direction uphole. Non-magnetic. No reaction to 10% HCl acid. However, 2.5 - 10.4 m marks a zone of 1 - 2 mm sized, cubic mineralization. Abundance, from 20% maximum at top of section gradually diminishing, to trace at 10.4 m. This mineralization appears to be carbonate.</p> <p>ALTERATION: Fresh, only weak bleaching, immediately about quartz-filled fracture networks.</p> <p>MINERALIZATION: 1 - 3% quartz veining and quartz filled fracture networks. Quartz veins generally $\leq 45^\circ$ to core axis. Moderately well-developed in pyritic sulphides. Locally, 1 - 2 cm wide ones of 3 - 4% pyrite, but averaging $\leq 1\%$ over section. Pyrite is developed in two forms; 1) very fine disseminations, < 1 mm in size, and 11) relatively large, up to 1/2 cm in size, euhedral cubes. The large cubes are quite spectacular. Weak halo of CaCO_3 about veins.</p> <p>5.0 - 6.5: Typical mineralized zone (as above).</p> <p>15.8 - 17.0: Same as 5.0 - 6.5.</p> <p>19.5 - 20.8: Increasing in quartz veining, 25% of section, largest quartz vein 10 cm wide, contact at right angles to core axis. Host is moderately brecciated about the quartz veins. 1% pyrite in host.</p> <p>27.9 - 29.2: Similar to 19.5 - 20.8 but quartz veining down to 10 - 12%. Typical large pyrite cubes in host, < 1% sulphide total.</p>	5.0	6.5	1.5	97501	< 5				
			15.8	17.8	2.0	97502	9				
			19.5	20.8	1.3	97503	< 5				
			27.9	29.2	1.3	97504	9				

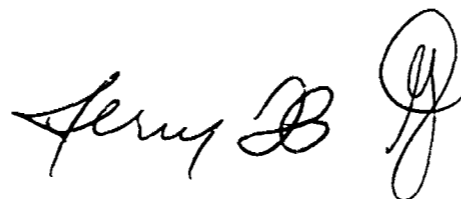
From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
		ALTERATION AND MINERALIZATION: Very fresh, only trace quartz veins. Foliation/bedding to core axis: 80.9 m: 47°; 82.7 m: 45°.										
82.8	94.7	GRAPHITIC SILTSTONE-MUDSTONE: Color - dark grey-black. Texture - fine-grained, phyllitic, bedding < 1 cm wide. Non-magnetic, non-calcareous. ALTERATION AND MINERALIZATION: No visible signs of alteration. ≤ 1%, 2 - 5 mm wide, quartz veins, trace pyrite. 89.0 - 94.6: 80% of core ground and broken, 88% recovery. 93.6 - 94.2: core lost. Bedding/foliation to core axis: 85.5 m: 55°; 91.2 m: 53°.	88.9	91.4	2.5	97515		26				
94.7	96.9	GREYWACKE: Color - light-medium grey. Texture - fine-grained. Non-magnetic, non-calcareous. ALTERATION AND MINERALIZATION: No visible signs of significant alteration or mineralization. Bedding/foliation to core axis: 95.7 m: 54°.										
96.9	113.4	INTERBEDDED GREYWACKE: Mudstone/siltstone, same as 75.0 - 82.0. 101.8 - 103.6: 1% quartz vein, contacts bedding parallel, trace pyrite. Bedding/foliation to core axis: 101.3 m: 53°; 106.8 m: 52°.	101.8	103.6	1.8	97516		24				
113.4	121.1	BLEACHED GREYWACKE: Color - light green-grey. Texture - fine-grained, minor interbeds of fine silt. Non-magnetic, non-calcareous. ALTERATION: Weakly altered, greenish tint from bleaching. MINERALIZATION: Trace disseminated pyrite. Trace CaCO ₃ fracture fills. Upper and lower contact gradational over 30 cm. Foliation/bedding to core axis: 117.0 m: 52°; 111.8 m: 60°.										
121.1	147.8	GREYWACKE: Color - typical medium grey with slight green tint. Texture - fine-grained, 3 - 5%, 1 - 3 cm wide, intercalations of silt-mudstone. Silt-mudstone slightly darker in colour. Primary features visible, though not as distinct as 2.5 - 60.0 m. Overall, similar to 2.5 - 60.0 m. ALTERATION: Localized zones of slight (2.5%) bleaching. Generally < 1 cm wide. 126.2 - 126.9: Slightly more intense zone of bleaching. Pervasive, 5 - 10% abundance. 139.9 - 143.5: Weak zone of bleaching (3 - 4%). MINERALIZATION: Trace, stratabound, euhedral pyritic bands, widths < 1 cm, 2 - 3% over this width. 126.2 - 126.9: Trace pyrite and galena (?) associated with 5 cm wide quartz vein and silicification zone. 142.2 - 143.8: Weak zone of bleaching with very fine-grained pyrite developed at most intense zone of alteration (143.2 - 143.3). 1% abundance. Foliation/bedding to core axis: 118.5 m: 58°; 130.5 m: 60°; 133.9 m: 62°; 142.0 m: 60°; 144.9 m: 59°.	126.2	126.9	0.7	97517		23				
			142.2	143.8	1.6	97518		33				

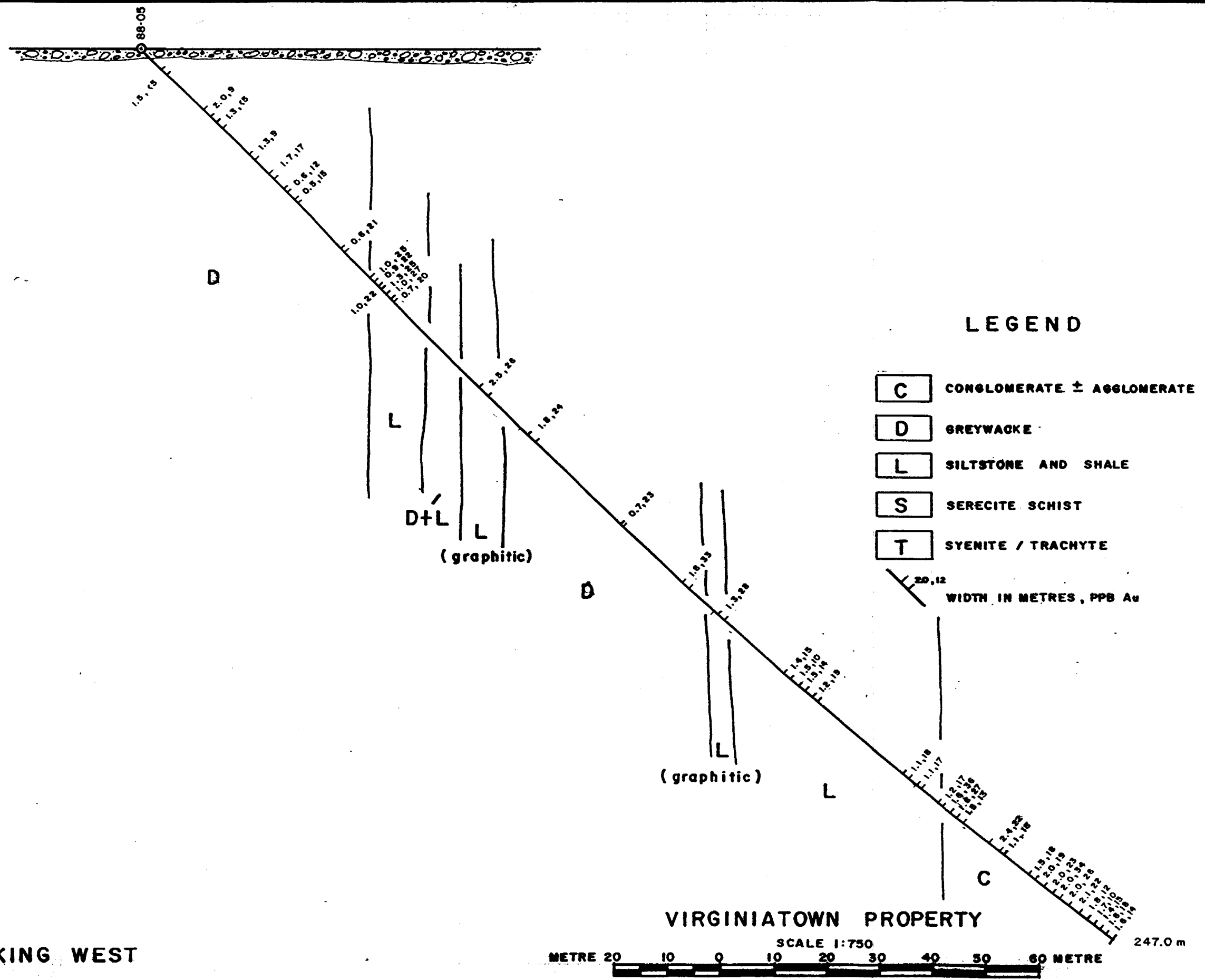
From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS							
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)			
		MINERALIZATION: 2 - 3% localized 10 - 20 cm wide quartz veins with 1 - 2% fracture filled pyrite. Pyrite also occurs as discrete euhedral forms with grey silicate pressure shadows (1% pyritic abundance).													
		196.9 - 198.0: two 10 - 20 cm wide quartz veins, contacts foliation parallel (197.1 - 197.3 and 197.6 - 197.3 respectively).	196.9	198.0	1.1	97524		18							
		200.2 - 201.1: Three quartz veins (200.3 - 2 cm wide and 200.5 - 200.8 and 200.9 - 201.0 m respectively), 1 - 2% pyritic filled fractures associated with 200.9 - 201.0 m quartz vein.	200.2	201.1	1.1	97525		17							
		204.8 - 206.3: Trace quartz veins. 1% euhedral pyrite with silica pressure shadows. Pyrite forms 1 - 2 mm in size. Foliation/bedding to core axis: 192.7 m: 65°; 198.5 m: 67°; 203.6 m: 59°.	205.1	206.3	1.2	97526		15							
206.3	209.5	BLEACHED CONGLOMERATE: Color - gradual change from yellow-green (similar to above unit) to pinkish-red downhole. Textures - Clasts are rounded to sub-angular and aligned parallel to foliation. Clasts dominated by syenitic (trachyte) 85%, 15% volcanics and quartz. Clasts generally 1 - 4 cm long. Matrix supported, 45% matrix to 55% clasts. Non-magnetic, non-calcareous. ALTERATION: Dominated by extreme bleaching in upper sections gradually fading downhole. Moderate (5 - 10%) K-feldspar addition towards lower contact. Also weak (1 - 2%) sericitic addition, as stringers and wisps in the matrix. MINERALIZATION: Trace to 1% euhedral pyrite in upper sections, with silicate pressure shadows, discriminated. 206.3 - 207.9: 1% euhedral disseminated pyrite with silicate pressure shadows. Trace CaCO ₃ filled fractures with ≤ 1% pyrite. 207.9 - 209.5: Similar to 206.3 - 207.9 (above) except lesser bleaching with depth. Foliation to core axis: 205.2 m: 53°; 208.1 m: 63°.	206.3	207.9	1.6	97527		36							
			207.9	209.5	1.6	97528		27							
209.5	219.7	CONGLOMERATE: Color - dark grey-red with pinkish clasts. Texture - Clasts rounded to sub-angular, variable sizes generally 1 - 4 cm in size. Same as above section (206.3 - 209.5 m). Similar clast types and abundances. Matrix supported, 55% matrix to 45% clasts. ALTERATION: Weak bleaching and weak K-feldspar addition at upper and lower contacts. Trace Cr-mica. MINERALIZATION: Upper contact marked by 1 - 3 cm breccia zone. This is filled with chlorite (10 - 15%), host (45%), quartz (40 - 45%). Lower contact marked by 3 - 5 cm wide mud seam. Core ground from 219.2 - 219.6 m. 209.5 - 211.0: Weakly altered, 1% quartz veins with xenoliths of host 5 - 8%, Mg-carbonate with quartz vein. 217.3 - 219.7: Weakly bleached and K-feldspar altered. Foliation/bedding to core axis: 211.1 m: 70°; 214.8 m: 64°; 219.1 m: 54°.	209.5	211.0	1.5	97529		13							
			217.3	219.7	2.4	97530		22							

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
219.7	220.6	<p>ALTERED CONGLOMERATE: Color - pinkish red. Texture - Clasts rounded to sub-angular, variable sizes 1 - 3 cm. Clast type and abundance same as 206.3 - 209.5 m. Matrix supported, 35% matrix to 65% clasts.</p> <p>ALTERATION: Dominated by K-feldspar addition. 80 - 85% of section altered weak bleaching. Trace Cr-mica.</p> <p>MINERALIZATION: Trace pyrite.</p> <p>Upper contact fairly sharp - marked by mud seam.</p> <p>Lower contact gradational over 10 - 20 cm.</p>	219.7	220.6	1.1	97531		18				
220.6	227.3	<p>CONGLOMERATE: Color - grey-green with pinkish clasts. Texture - Clasts rounded to subrounded, aligned foliation parallel. 85% syenitic to trachytic, 10% volcanics (mafic) and 5% quartz. Local kink bands. Non-magnetic, non-calcareous.</p> <p>ALTERATION: Very weak local bleaching.</p> <p>MINERALIZATION: Trace quartz veins with Fe-carbonate⁺-dolomite.</p> <p>Upper and lower contacts gradational over 30 cm.</p> <p>Foliation/bedding to core axis: 222.1 m: 54°; 226.4 m: 62°.</p>										
227.3	230.8	<p>ALTERED CONGLOMERATE: Color - red-pink. Texture - Same as 220.6 - 227.3. Minor kink bands visible. Non-magnetic, non-calcareous.</p> <p>ALTERATION: Highly altered, alteration dominated by K-feldspar (60 - 70%). Alteration intensifies downhole.</p> <p>MINERALIZATION: Trace pyritic sulphides in matrix and trace 1 cm wide quartz veins.</p> <p>Upper contact gradational over 20 cm. Lower contact gradational over 5 cm.</p> <p>Foliation/bedding to core axis:</p>	227.3	228.8	1.5	97532		18				
			228.8	230.8	2.0	97533		19				
230.8	243.8	<p>CONGLOMERATE: Color - green-grey. Texture - Moderately well-foliated. Much more mafic clasts. 20% syenitic/trachytic clasts, 60% mafics, 10% mudstone and 10% quartz and lithics. Clasts well deformed parallel to foliation. Silicate pressure shadows developed on the large syenitic clasts: good kinematic indicator. Non-magnetic, non-calcareous (calcareous fracture fills).</p> <p>ALTERATION: Weak bleaching, generally localized about quartz veins.</p> <p>MINERALIZATION: 2%, 1/2 cm wide quartz veins with intergrown pink carbonate (Mg(Fe)CO₃). Trace sulphides. 10 - 15% sericitic alteration associated with quartz veins.</p> <p>Foliation/bedding to core axis: 233.7 m: 55°; 236.5 m: 56°; 241.3 m: 50°.</p>	230.8	232.8	2.0	97534		23				
			232.8	234.8	2.0	97535		34				
			234.8	236.8	2.0	97536		26				
			236.8	238.9	2.1	97537		22				
			238.9	240.7	1.8	97538		12				
			240.7	242.4	1.7	97539		10				
			242.4	243.8	1.4	97540		15				

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
243.8	247.0	AGGLOMERATE: Color - dark green-grey. Texture - Poorly foliated. Rounded syenitic (trachytic) clasts with 1 - 5 mm sized plagioclase crystals. Clast group comprised 60% syenites (trachytic) and 37% plagioclase crystals, and 30% mafic fragments. Matrix to clast ratio 60:40. Non-magnetic, non-calcareous (CaCO ₃ filled fractures). ALTERATION: No significant signs of alteration. Weakly bleached immediately about quartz veins. MINERALIZATION: 1 - 1-1/2%, 1 - 1-1/2 cm wide quartz veins and fracture fills. Also pyritic (3%) - CaCO ₃ fracture fills, abundance < 1%. Trace chalcopyrite. Foliation/bedding to core axis: 241.2 m: 54°; 246.8 m: 46°.	243.8	245.4	1.6	97541		18				
			245.4	247.0	1.6	97542		14				

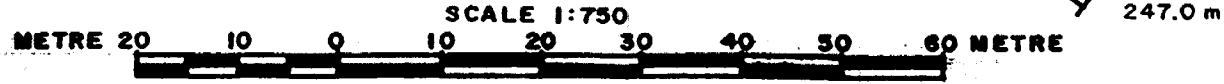
247.0 END OF HOLE





LOOKING WEST

VIRGINIATOWN PROPERTY



SECTION OF DIAMOND DRILL HOLE 88-05

NOV.87 - FEB.88

FIGURE 6

NORTHERN DYNASTY EXPLORATIONS LTD.

DIAMOND DRILL RECORD

Hole No.:	VT-88-06	Started:	February 4, 1988					
Property:	Virginiatown	Completed:	February 7, 1988					
Claim No.:	L765089	Logged by:	G. Gorzynski					
Ref. Co-ord.:		Drill Contractor:	Langley Drilling, Brampton, Ontario					
Elevation:		Assayer:	Accurassay Laboratories, Kirkland Lake, Ontario					
Surveyed:	No							
Grid Co-ord.:	9+60W, 1+80N	Purpose:	1. To test south cliff fault zone. 2. To test north cliff fault zone.					
Core Size:	BQ							
Casing Left:	Yes							

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS						
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)		
0.0	3.2	Casing: small unaltered basalt pebbles recovered.												
3.2	8.1	SERECITE SCHIST (HIGHLY ALTERED CONGLOMERATE?): Light green locally grading to pink-beige sections of K-feldspar(?) alteration; relatively homogeneous; non-magnetic, moderately to well-foliated at 45° to core axis; basal contact sharp. ALTERATION: Pervasive intense bleaching/sericitization?; K-feldspar(?) - pervasive in < 30 cm sections comprising 15% of unit; weakly to moderately dolomitic throughout; Cr-mica - trace-disseminated. MINERALIZATION: Quartz+white carbonate veins - < 10 cm wide, irregular; 3% at 3.2 - 5.2; 20% at 5.2 - 6.7; 2% at 6.7 - 8.1 m; pyrite < 1% - locally 3% in veins - disseminated and clots; limonite/ankerite rust - 2% - as gossanous boxworks around fractures, especially at 6.7 - 6.9 m.	3.2	5.2	2.0	97543A		13						
			5.2	6.7	1.5	97544A		14						
			6.7	8.1	1.4	97545A		19						
8.1	11.8	ALTERED CONGLOMERATE: Light green, light brown and purple-grey mosaic varying with degree of alteration and composition of conglomerate clasts; massive/unbedded; clasts poorly to well-defined; variety of subrounded to subangular clasts form 15 - 40% of unit; most common clasts are pink trachyte/syenite and medium grey felsic crystal tuff; non-magnetic; weakly to non-dolomitic; moderately to well-foliated at 50° to core axis; basal contact gradational over 30 cm. ALTERATION: Bleaching/sericitization(?) moderate to intense over 75% of unit; Cr-mica - trace - disseminated. MINERALIZATION: Quartz+white carbonate veins - << 1%; pyrite - trace - disseminated.	8.1	10.0	1.9	97546A		6						
			10.0	11.8	1.8	97547A		< 5						
11.8	44.4	TUFFACEOUS CONGLOMERATE+(GREYWACKE): Generally light grey to dark purple-grey; massive/unbedded conglomerate grading to similar greywacke sections (< 3 m thick) over 15% of unit; conglomerate comprises variety of clasts; predominantly pink trachyte and grey greywacke in open to closed greywacke matrix; clasts vary 10 - 60% of unit, < 3 cm diameter; generally non-magnetic,	11.8	12.9	1.1	97548A		< 5						
			22.3	23.8	1.5	97549A		< 5						
			23.8	25.5	1.7	97550A		< 5						
			25.5	27.5	2.0	97551A		< 5						

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
		non-dolomitic; moderately to well-foliated at 50° to core axis throughout; basal contact gradational over 3 cm.	31.2	33.0	1.8	97552A	< 5					
		ALTERATION: Local patchy bleaching, especially → 5% at 22.3 - 23.8, 25% at 23.8 - 27.5 m; Cr-mica - trace - disseminated and wisps (as conglomerate clasts?).	33.0	34.6	1.6	97553A	< 5					
		MINERALIZATION: Quartz+white carbonate vein - <<1% generally; 5% at 33.0 - 35.7; 5% at 40.7 - 44.4 m; hematite - trace - in veins at 31.5 m and 41.1 m; pyrite - trace - disseminated and in veins.	34.6	35.7	1.1	97554A	< 5					
			40.7	42.9	2.2	97555A	10					
			42.9	44.4	1.5	97556A	< 5					
44.4	45.8	ALTERED CONGLOMERATE: Generally light green and grey mosaic; altered version of conglomerate at 11.8 - 44.4 m; moderately to poorly-defined clasts; non-magnetic, weakly to non-dolomitic; moderately foliated at 50° to core axis; basal contact gradational over 5 cm.	44.4	45.8	1.4	97557A	< 5					
		ALTERATION: Moderate bleaching/sericitization(?) throughout; K-feldspar+silicification: Intense in patches at 45.2 - 45.8 m; Cr-mica - trace - disseminated.										
		MINERALIZATION: Quartz+white carbonate veins - ≤2 cm wide, irregular - 3% at 44.4 - 45.2, 15% at 45.2 - 45.8 m.										
45.8	54.0	TUFFACEOUS CONGLOMERATE+(GREYWACKE): Similar to 11.8 - 44.4 m with 40% intercalated greywacke; moderately foliated at 50° to core axis; basal contact in broken core; 49.8 - 54.0 - broken core, 70% recovery; minor gouge recovered.	45.8	47.4	1.6	97558A	< 5					
		ALTERATION: Slight to moderate bleaching throughout; 53.5 - 54.0 m - moderately silicified/K-feldspar/sericite.	47.4	49.1	1.7	97559A	< 5					
		MINERALIZATION: Quartz+white carbonate+chlorite veins: 3% at 45.8 - 53.5; 25% at 53.5 - 54.0 m; irregular; pyrite - trace - disseminated; locally 3% in veins.	49.1	50.1	1.0	97560A	< 5					
			50.1	51.6	1.5	97561A	26					
			51.6	53.5	1.9	97562A	18					
			53.5	54.0	0.5	97563A	12					
54.0	77.6	ALTERED CONGLOMERATE: Only local vestiges of poorly-defined clasts visible; generally light green; relatively massive; commonly magnetic due to sections (<1 m thick) of < 5% disseminated magnetite - decreasing downhole; moderately to non-dolomitic; moderately to well-foliated at 60° to core axis; basal contact sharp(?); 54.0 - 54.8 - broken core, 70% recovery.	54.0	54.6	0.6	97564A	8					
		ALTERATION: 54.0 - 55.9: pervasive, very intense silica/ankerite/sericite - mosaic green, white and pink; 54.0 - 55.6 - 20% ankerite rust in zone of fracturing; similar alteration at 58.1 - 58.7 m; 55.9 - 77.6 m: pervasive, intense bleaching/sericitization throughout; local patches (< 30 cm thick) of moderate K-feldspar alteration. Cr-Mica - trace - 0.5% - increasing downhole.	54.6	55.1	0.5	97565A	48					
		MINERALIZATION: Pyrite: 54.0 - 62.2 m - <<1% - disseminated; 62.2 - 77.6 m - 0.5 - 3% - increasing downhole - disseminated - replacing magnetite; (locally 10% over 10 cm); chalcopyrite - trace - in veins; hematite - trace - in veins; quartz+white carbonate+chlorite+orange siderite veins; generally <1%; 4% at 57.4 - 59.3 m; 10% at 62.2 - 63.6 m; rhodochrosite-chalcopyrite (2%) vein - 1 cm thick at 66.2 m.	55.1	55.9	0.8	97566A	20					
			55.9	57.4	1.5	97567A	< 5					
			57.4	59.3	1.9	97568A	< 5					
			59.3	60.7	1.4	97569A	27					
			60.7	62.2	1.5	97570A	64					
			62.2	63.6	1.4	97571A	6					
			63.6	65.2	1.6	97572A	5					
			65.2	66.2	1.0	97573A	7					
			66.2	66.9	0.7	97574A	< 5					
			66.9	68.7	1.8	97575A	< 5					
			68.7	70.2	1.5	97576A	8					
			70.2	71.4	1.2	97577A	< 5					
			71.4	72.8	1.4	97578A	6					
			72.8	74.8	2.0	97579A	8					
			74.8	76.1	1.3	97580A	5					
			76.1	77.6	1.5	97581A	11					

From (Metric)	To	DESCRIPTION	SAMPLE				ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)
77.6	82.3	ALTERED GREYWACKE+(CONGLOMERATE): Generally light greenish grey; massive/unbedded with gradationally interbedded polymictic pebble conglomerate at 80.8 - 81.5 m; non-magnetic, weakly dolomitic; moderately foliated at 60° to core axis; basal contact gradational over 3 cm. ALTERATION: Moderately to weakly bleached throughout. MINERALIZATION: Pyrite: 0.5% - 2% - disseminated and in veins; quartz+white carbonate veins - <1%.	77.6	79.3	1.7	97582A		6			
			79.3	80.8	1.5	97583A		12			
			80.8	82.3	1.5	97584A		13			
82.3	94.2	CONGLOMERATE: Generally medium to dark green-grey; predominantly rounded pink trachyte/syenite clasts (<4 cm diameter) in open chloritic greywacke matrix; locally magnetic due to <1% disseminated magnetite; weakly to non-dolomitic; moderately foliated at 65° to core axis; basal contact gradational over 1.5 m. ALTERATION: Increasing silicification downhole (Hardness Moh = 5 - 7); increasing (nil - moderate) patchy K-feldspar alteration downhole; slight bleaching toward uphole contact. MINERALIZATION: Quartz+white carbonate+orange siderite veins: <1% at 82.3 - 92.0; 7% at 92.0 - 94.2 m; pyrite - trace - disseminated.	82.3	84.3	2.0	97585A		10			
			88.3	89.7	1.4	97586A		5			
			89.7	91.2	1.5	97587A		24			
			91.2	92.7	1.5	97588A		30			
			92.7	94.2	1.5	97589A		15			
94.2	103.5	ALTERED CONGLOMERATE: Dark green-grey with dark orange-red patches uphole (94.2 - 99.5 m) and orange-pink/light green-grey mosaic downhole (99.5 - 103.5 m); original conglomerate similar to 82.3 - 94.2 m above; alteration has obscured most vestiges of clasts uphole; clasts moderately to well-defined downhole; massive (uphole) to moderately foliated (downhole) at 55° to core axis. Basal contact gradational over 70 cm. ALTERATION: 94.2 - 99.5: Patchy K-feldspar+silicification varies from 25% uphole to 90% downhole; downhole contact of this alteration is across 3 cm gouge zone parallel to foliation; 99.5 - 103.0 - patchy K-feldspar - ankerite - 30%. 103.0 - 103.3 - moderate bleaching. MINERALIZATION: Quartz+white carbonate+orange siderite ⁺ -chlorite veins: 4% at 94.2 - 94.9 m; 30% at 94.9 - 96.3 m; 4% at 96.3 - 98.5 m; 60% at 98.5 - 99.5 m; 6% at 99.5 - 103.5 m; 95.1 - 96.0 m: quartz-healed rubble and crackle breccia (<20% matrix); pyrite - trace - disseminated and in veins.	94.2	94.9	0.7	97590A		15			
			94.9	96.3	1.4	97591A		14			
			96.3	97.3	1.0	97592A		10			
			97.3	98.5	1.2	97593A		18			
			98.5	99.5	1.0	97594A		13			
			99.5	100.7	1.2	97595A		22			
			100.7	101.8	1.1	97596A		47			
			101.8	103.5	1.7	97597A		12			
103.5 - 111.8		GREYWACKE: Generally light green-grey; massive/unbedded; minor gradationally intercalated conglomerate; moderately foliated at 65° to core axis; basal contact gradational over 50 cm; non-magnetic, weakly to non-dolomitic. ALTERATION: Slight to moderate bleaching throughout; K-feldspar - 5% patches at 103.5 - 106.5 m. MINERALIZATION: Pyrite - 1 - 2% - disseminated - replacing disseminated chlorite?; quartz+white carbonate ⁺ -chlorite veins: 5% - irregular.	103.5	105.2	1.7	97598A		52			
			105.2	106.6	1.4	97599A		51			
			106.6	108.8	2.2	97600A		11			
			108.8	110.6	1.8	97601A		15			
			110.6	111.8	1.2	97602A		11			
111.8	116.7	CONGLOMERATE: Similar to 82.3 - 94.2 m; magnetic due to <3% disseminated magnetite; moderately foliated at 65° to core axis; basal contact gradational over 2 cm. ALTERATION: Slight bleaching throughout; minor K-feldspar patches. MINERALIZATION: Quartz+white carbonate veins - <<1%; pyrite - trace - disseminated.	111.8	113.9	2.1	97603A		< 5			
			113.9	115.4	1.6	97604A		< 5			
			115.4	117.1	1.7	97605A		< 5			

From (Metric)	To	DESCRIPTION	SAMPLE					ASSAYS				
			From	To	Length	No.	Rec %	Au (ppb)	Ag (ppm)	Zn (ppm)	Pb (ppm)	Cu (ppm)
116.7	121.6	GREYWACKE: Medium green-grey; massive/unbedded; locally magnetic due to < 1% disseminated magnetite; weakly to non-dolomitic; moderately foliated at 65° to core axis; basal contact gradational over 50 cm. ALTERATION: Slight bleaching throughout; 116.7 - 117.1 - 30% K-feldspar alteration. MINERALIZATION: Pyrite - generally << 1%; 2% coarse (2 mm) grains at 120.8 - 121.6 m.	120.8	121.6	0.8	97606A		9				
121.6	216.1	GREYWACKE+(SILTSTONE): Generally green-grey; massive/unbedded to thinly bedded; siltstone generally < 10% except 50% at 121.6 - 127.9 m; greywacke varies from fine to coarse grained; locally magnetic due to minor disseminated magnetite; generally non-dolomitic; generally moderately foliated at 60 - 70° to core axis throughout; broken core at 124.5 - 126.3 m and at 173.7 - 174.6 m; 90% recovery; 174.6 - 216.1: 5 - 20% intercalated thin white quartz arenite beds increasing downhole. ALTERATION: Generally nil - some slight bleaching; intense, pervasive sericitization with 2% rhodochrosite veins at 155.8 - 156.6 m and small sections elsewhere. MINERALIZATION: Quartz+white carbonate-(orange siderite) veins: < 2% - irregular; pyrite - trace - disseminated; locally < 1%.	127.4	128.1	0.7	97607A		10				
			134.7	135.3	0.6	98608A		10				
			137.3	139.3	2.0	97609A		9				
			155.8	156.6	0.8	97610A		6				
216.1		END OF HOLE										

G. Gorynski

ASTRONOMIC

LEGEND

- IP IRON SURVEY PIN
- PERIMETER CLAIM POST AND LINE
- INTERNAL CLAIM POST AND LINE
- CUT GRID LINES WITH 100' STATIONS
- 98-2 DIAMOND DRILL HOLE, YEAR-NUMBER
- CAT ROAD, WINTER
- SWAMP
- BEAVER DAM
- CREEK
- TRENCH
- CLIFF



GEOLOGICAL LEGEND

Lithological Suffixes
Code (capitalized) (Descriptive Data)

EXAMPLE: **SgC** = Siltstone, chlorite, calcite
 Suffixes (Structural Data) Alteration Type and Percent
 Suffixes (Structural Data) Alteration Designator


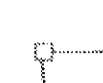
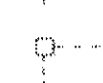
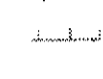


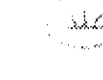



PREFIXES	LITHOLOGICAL CODES	SUFFIXES	ALTERATION
a - schistose	C - conglomerate ± agglomerate	c - chlorite	cc - calcite
f - foliated	D - greywacke/arenite ± local tuff	g - greywacke	cm - chromium mica
p - phyllitic	L - siltstone	p - pillowed	fe - iron carbonate
u - unfoliated	H - shale	q - quartz-rich	kf - potassium feldspar
	S - sericite/muscovite schist	s - sericite	qc - quartz-carbonate veins
	B - basalt		to - tourmaline
	N - andesite		si - silicification
	F - felsic volcanic		se - sericitization
			py - pyrite
			cp - chalcopyrite
			mg - magnetite

SYMBOLS

- Bedding (inclined, vertical, stratigraphic top)
- Volcanic pillows
- Foliation (inclined, vertical)
- Second foliation (inclined, vertical)
- Jointing (inclined, vertical)
- Minor fold axis
- Glacial striations
- LITHOLOGICAL CONTACT
- INFERRED FAULT



LEGEND

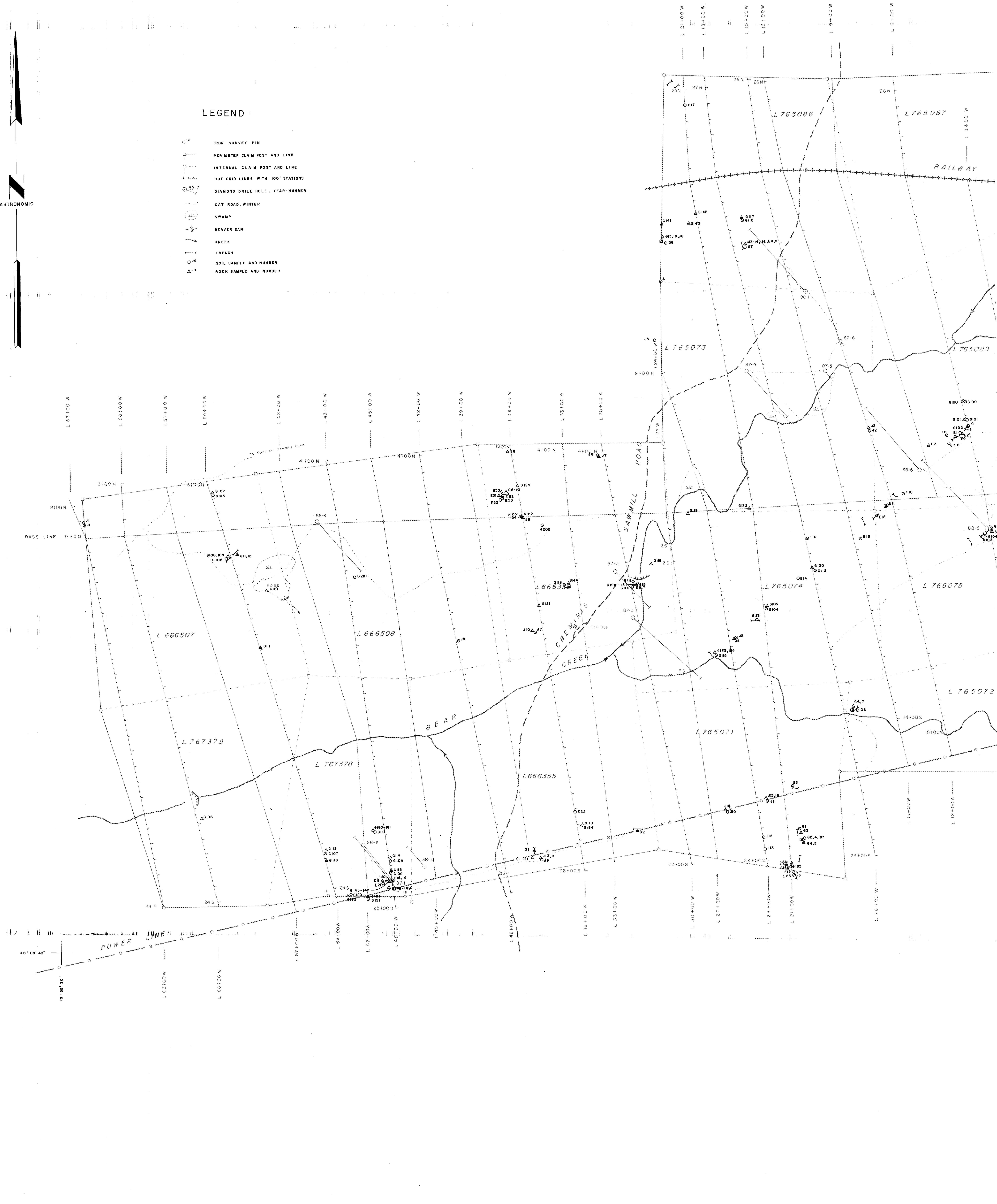
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-  PERIMETER CLAIM POST AND LINE
-  INTERNAL CLAIM POST AND LINE
-  CUT GRID LINES WITH 100' STATIONS, GOLD VALUES IN PARTS PER BILLION
-  DIAMOND DRILL HOLE, YEAR-NUMBER
-  CAT ROAD, WINTER
-  SWAMP
-  BEAVER DAM
-  CREEK
-  VS-6 ANOMALOUS ZONE





LEGEND

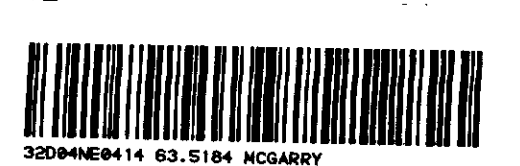
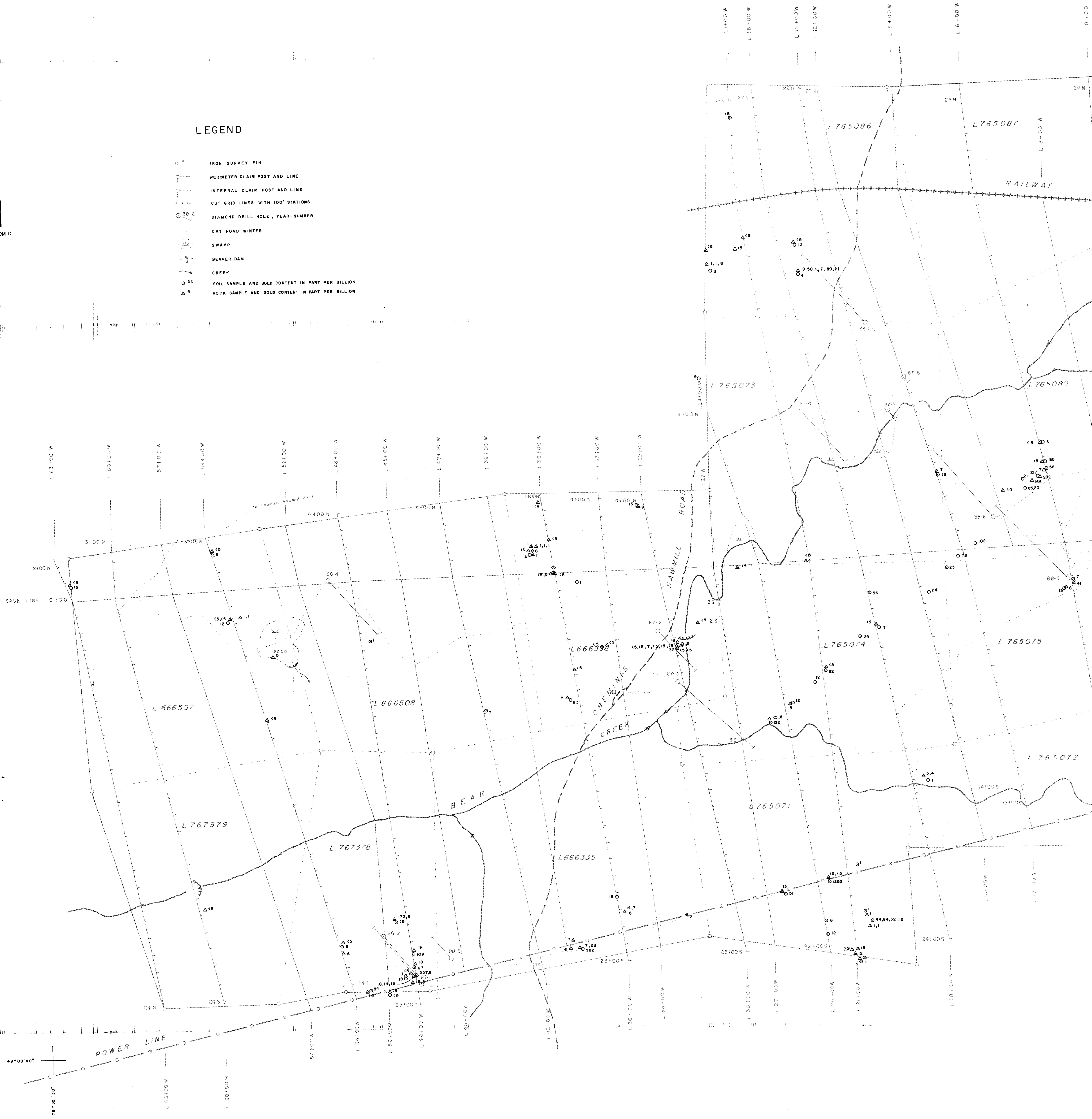
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- PERIMETER CLAIM POST AND LINE
- INTERNAL CLAIM POST AND LINE
- CUT GRID LINES WITH 100' STATIONS
- 88-2 DIAMOND DRILL HOLE, YEAR-NUMBER
- CAT ROAD, WINTER
- SWAMP
- BEAVER DAM
- CREEK
- TRENCH
- 99 SOIL SAMPLE AND NUMBER
- △ 99 ROCK SAMPLE AND NUMBER



ASTRONOMIC

LEGEND

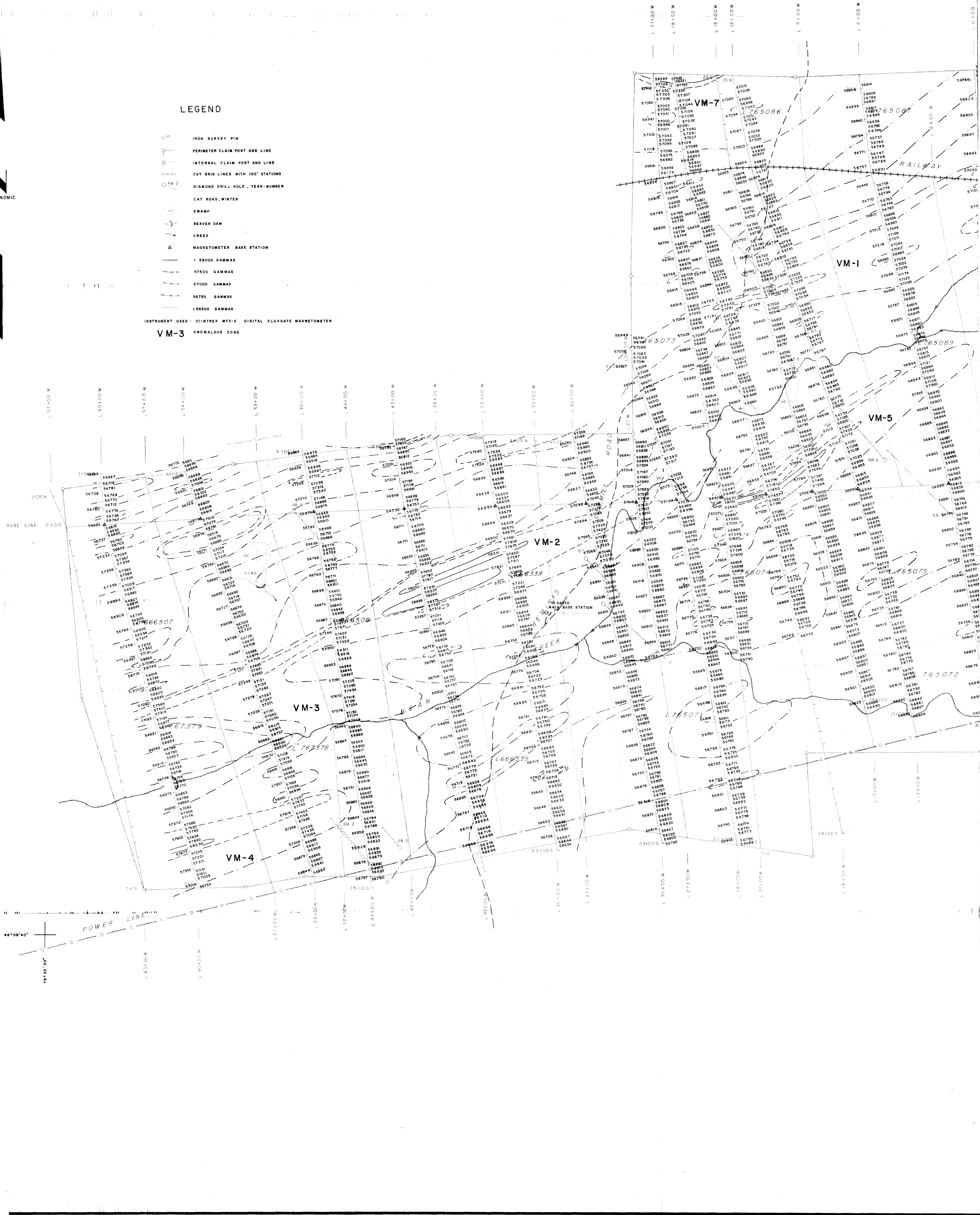
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- INTERNAL CLAIM POST AND LINE
- CUT GRID LINES WITH 100' STATIONS
- 88-2 DIAMOND DRILL HOLE, YEAR-NUMBER
- CAT ROAD, WINTER
- SWAMP
- BEAVER DAM
- 20 SOIL SAMPLE AND GOLD CONTENT IN PART PER BILLION
- △ 5 ROCK SAMPLE AND GOLD CONTENT IN PART PER BILLION















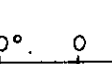

LEGEND

- IP IRON SURVEY PIN
 - PERIMETER CLAIM POST AND LINE
 - INTERNAL CLAIM POST AND LINE
 - CUT GRID LINES WITH 100' STATIONS
 - 88-2 DIAMOND DRILL HOLE, YEAR-NUMBER
 - SWAMP
 - BEAVER DAM
 - CREEK
 - △ MAGNETOMETER BASE STATION
 - 58000 GAMMAS
 - 57500 GAMMAS
 - 57000 GAMMAS
 - 56750 GAMMAS
 - 56500 GAMMAS
- INSTRUMENT USED: SCINTREX MFD-2 DIGITAL FLUXGATE MAGNETOMETER
- VM-3 ANOMALOUS ZONE





LEGEND

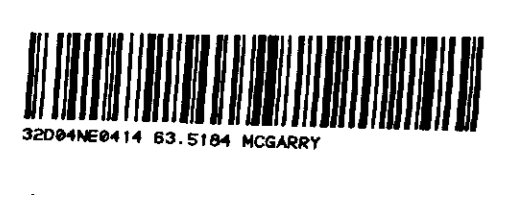
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 -  PERIMETER CLAIM POST AND LINE
 -  INTERNAL CLAIM POST AND LINE
 -  CUT GRID LINES WITH 100' STATIONS
 -  DIAMOND DRILL HOLE, YEAR-NUMBER
 -  CAT ROAD, WINTER
 -  SWAMP
 -  BEAVER DAM
 -  CREEK
 -  INPHASE PROFILE (1cm = 10')
 -  QUADRATURE PROFILE (1cm = 10%)
 -  PROFILE SCALE
- TRANSMITTER: SEATTLE, WASH., U.S.A.
INSTRUMENT: GEONICS RONKA EM-16





LEGEND

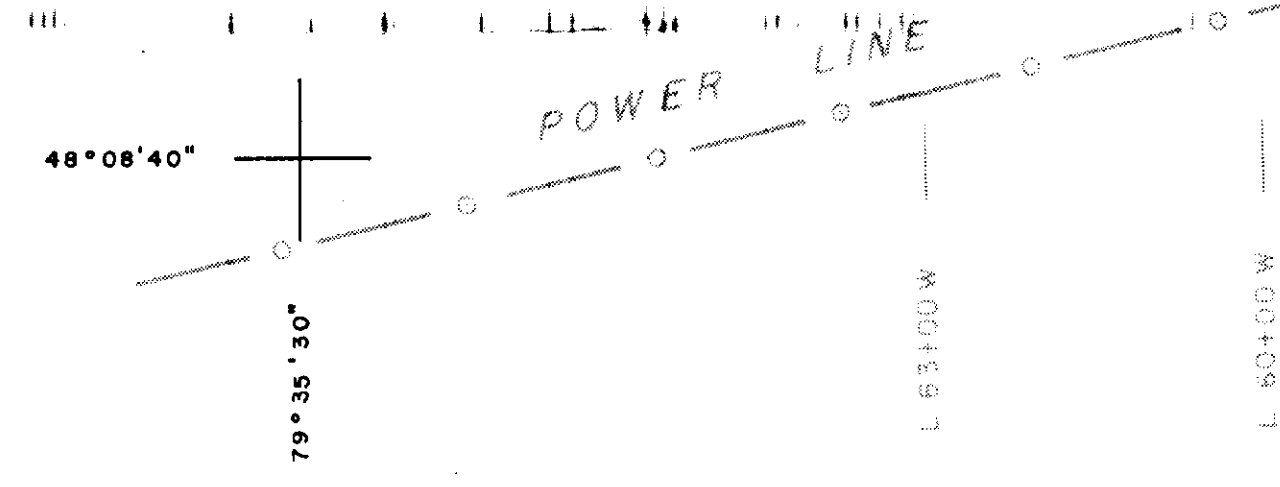
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- PERIMETER CLAIM POST AND LINE
- INTERNAL CLAIM POST AND LINE
- CUT GRID LINES WITH 100' STATIONS
- DIAMOND DRILL HOLE, YEAR-NUMBER
- CAT ROAD, WINTER
- SWAMP
- BEAVER DAM
- CREEK
- INPHASE PROFILE (1cm = 10')
- QUADRATURE PROFILE (1cm = 10%)
- PROFILE SCALE
- TRANSMITTER: SEATTLE, WASH., U.S.A.
- INSTRUMENT: GEONICS RONKA EM-16





LEGEND

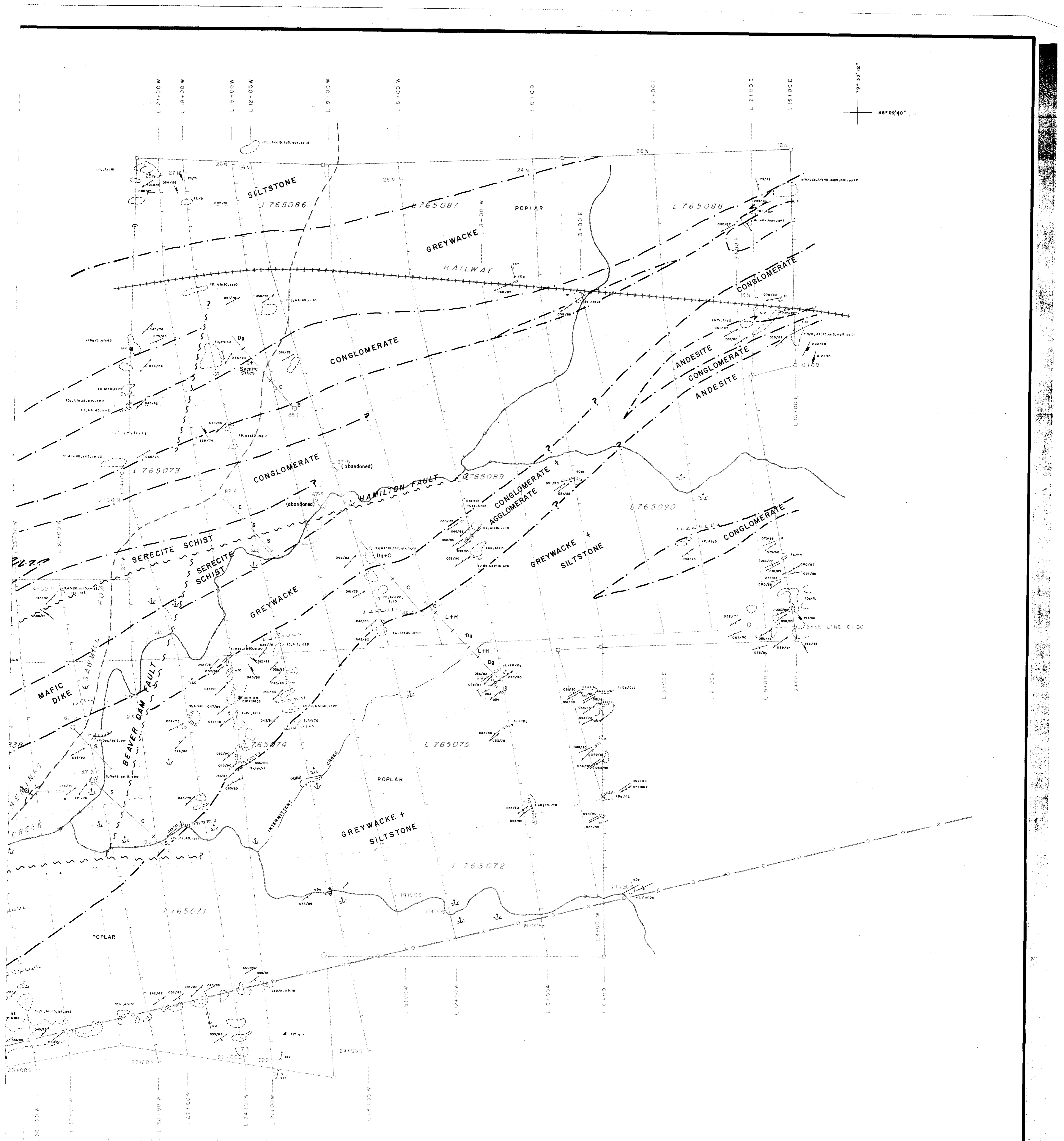
- IRON SURVEY PIN
- PERIMETER CLAIM POST AND LINE
- INTERNAL CLAIM POST AND LINE
- CUT GRID LINES WITH 100' STATIONS
- DIAMOND DRILL HOLE, YEAR-NUMBER
- CAT ROAD, WINTER
- SWAMP
- BEAVER DAM
- CREEK



LEGEND

- TRANSMITTER : SEATTLE, WASHINGTON
- INSTRUMENT : GEONICS RONKA EM-16
- FRASER FILTER CONTOUR INTERVALS
- 5
- 10
- 15
- 20
- 25
- 30

VE-7 - ANOMALOUS ZONE



LEGEND

Symbol: --- LITHOLOGICAL CONTACT
 Symbol: ~~~~~ INFERRED FAULT

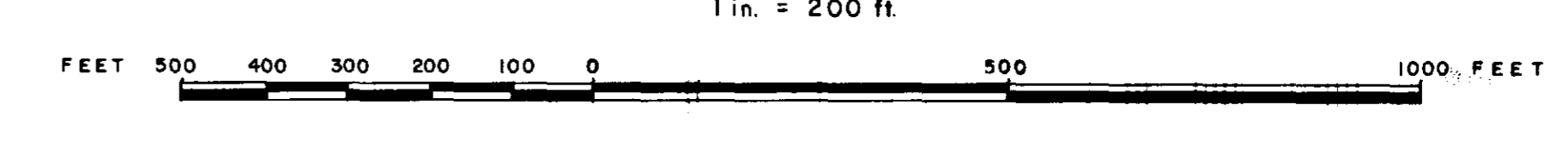
FIXES	ALTERATION
chlorite	cc - calcite
greYWacke	cm - chromium mica
pillowed	fe - iron carbonate
quartz-rich	kf - potassium feldspar
sercite	qw - quartz-carbonate veins
	to - tourmaline
	si - silicification
	se - sericitization
	py - pyrite
	cp - chalcopyrite
	mg - magnetite

VIRGINIATOWN PROJECT
 NORTHERN DYNASTY EXPLORATIONS LTD.
 BOUDREAU SPADETTO OPTION

GEOLOGY

NTS 32 D/4 McGARRY TOWNSHIP M-369

SCALE 1:2,400
 1 in. = 200 ft



SEPT 87 - FEB 88

63.5184

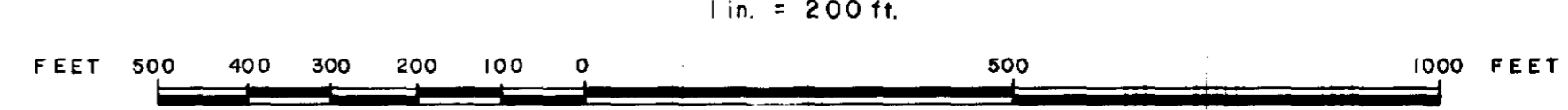
PLATE I

0187-6-C-068

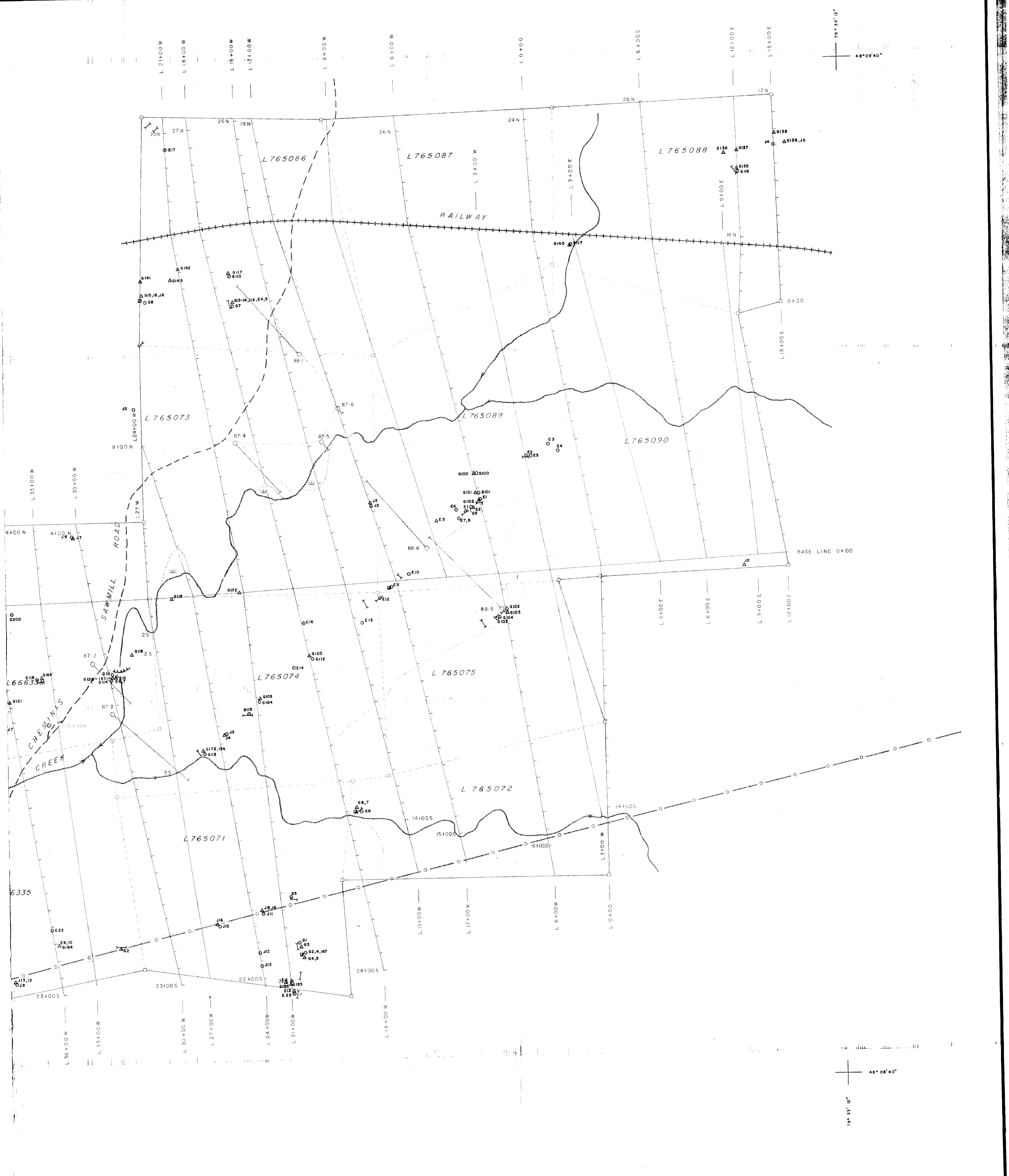


VIRGINIATOWN PROJECT
 NORTHERN DYNASTY EXPLORATIONS LTD.
 BOUDREAU SPADOTTO OPTION
 SOIL GEOCHEMISTRY - GOLD

NTS 32D/4 MCGARRY TOWNSHIP M-369
 SCALE 1:2,400
 1 in. = 200 ft.



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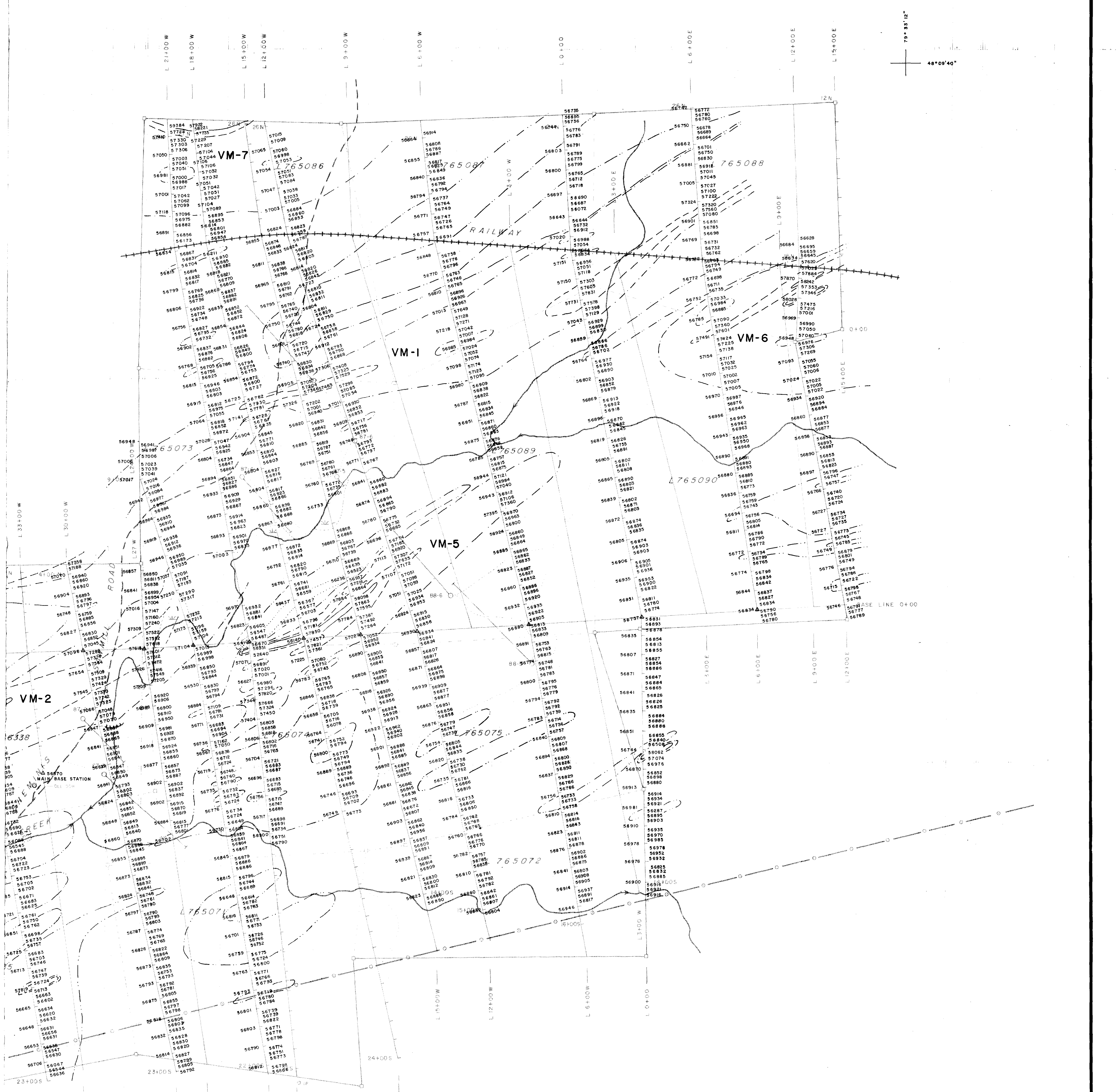


VIRGINIATOWN PROJECT
 NORTHERN DYNASTY EXPLORATIONS LTD.
 BOUDREAUULT SPADETTO OPTION
 SAMPLE LOCATION MAP

NTS 32D/4 MCGARRY TOWNSHIP M 369
 SCALE 1:2,400
 1 in. = 200 ft.



63.5184



VIRGINIATOWN PROJECT
 NORTHERN DYNASTY EXPLORATIONS LTD.
 BOUDREAUULT SPADETTO OPTION
 GROUND MAGNETOMETER SURVEY

NTS 32 D/4 MCGARRY TOWNSHIP M-369
 SCALE 1:2,400
 1 in. = 200 ft.

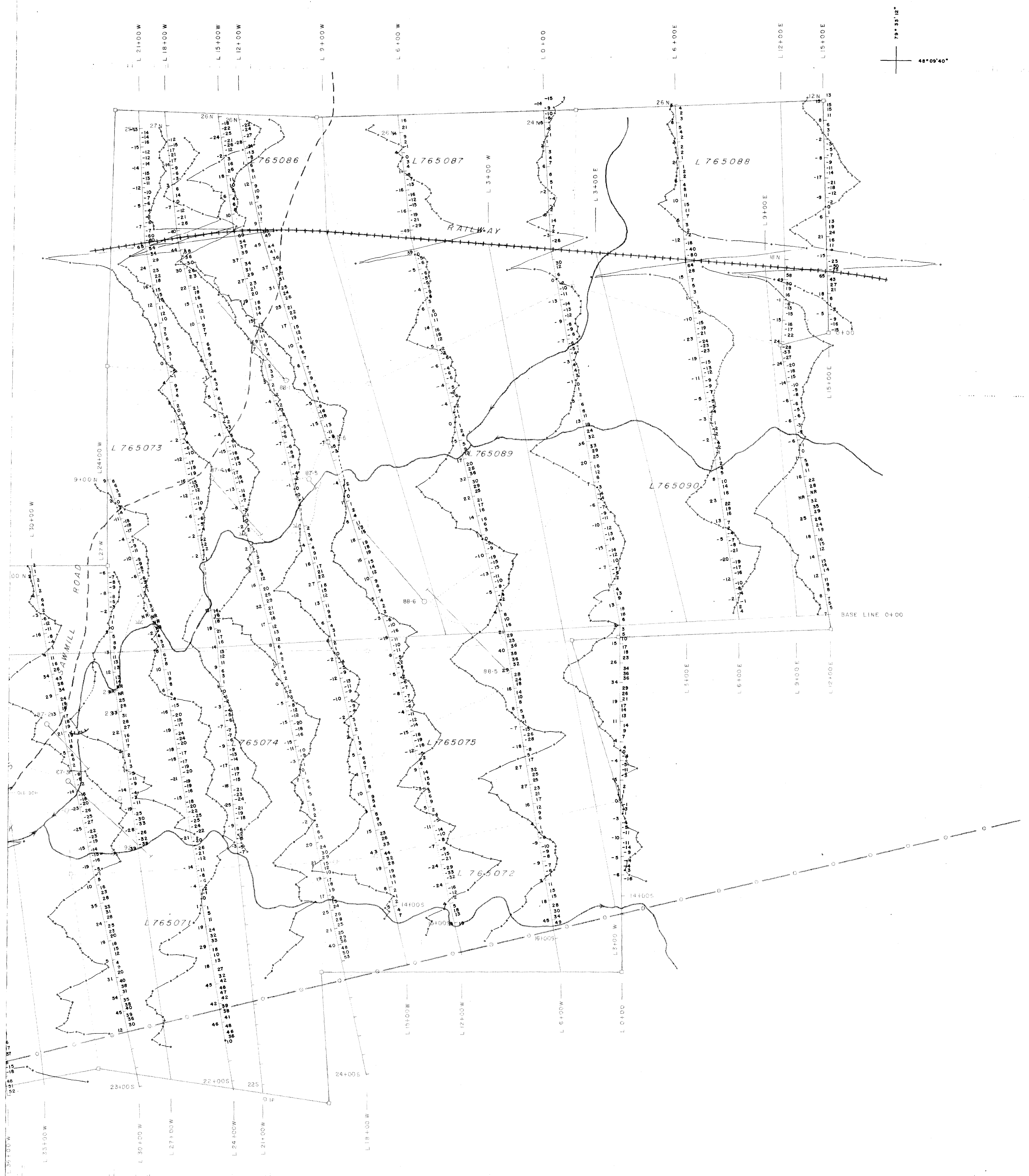


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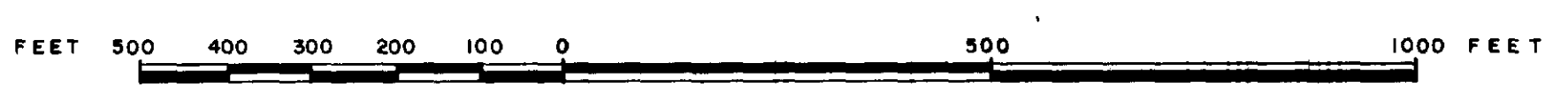
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PLATE 5

DM87-6-C-068



VIRGINIATOWN PROJECT
 NORTHERN DYNASTY EXPLORATIONS LTD.
 BOUDREAU SPADETTO OPTION
GROUND ELECTROMAGNETIC SURVEY
IN-PHASE PROFILES
 NTS 32 D/4 McGARRY TOWNSHIP M-369
 SCALE 1:2,400
 1 in. = 200 ft.

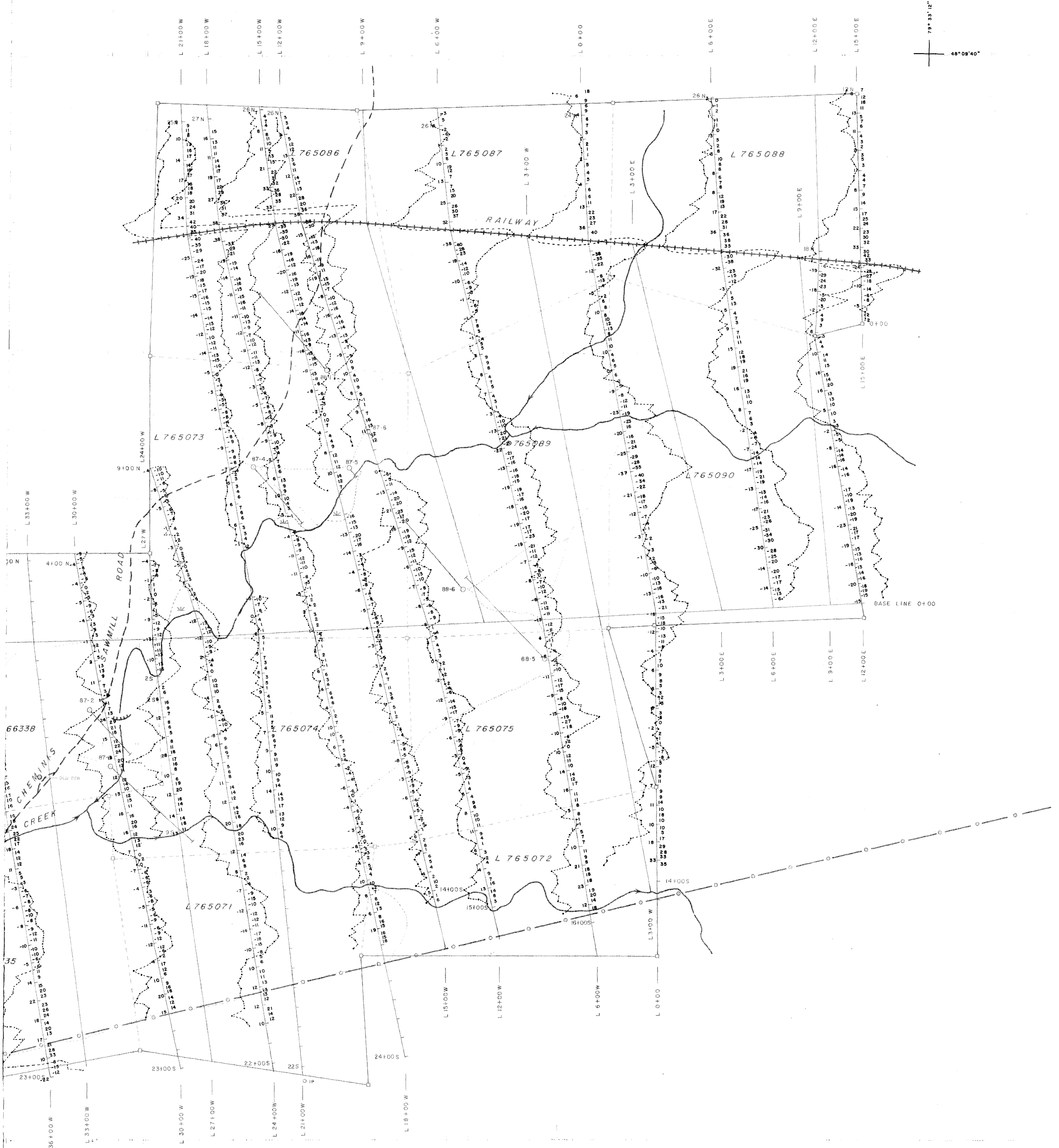


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PLATE 6

OM87-6-C-068



VIRGINIATOWN PROJECT
 NORTHERN DYNASTY EXPLORATIONS LTD.
 BOUDREAULT SPADETTO OPTION
 GROUND ELECTROMAGNETIC SURVEY
 QUADRATURE PROFILES

NTS 32 D/4 MCGARRY TOWNSHIP M-369

SCALE 1:2,400
 1 in. = 200 ft.



63.5184

SEPT. 1987 - FEB. 1988

PLATE 7

0M87-6-C-068



LEGEND

TRANSMITTER : SEATTLE, WASHINGTON
 INSTRUMENT : GEONICS RONKA EM-16
 FRASER FILTER CONTOUR INTERVALS
 5
 - - - - 10
 - - - - 15
 - - - - 20
 - - - - 25
 - - - - 30
 VE-7 - ANOMALOUS ZONE

VIRGINIATOWN PROJECT
 NORTHERN DYNASTY EXPLORATIONS LTD.
 BOUDREAULT SPADETTO OPTION
GROUND ELECTROMAGNETIC SURVEY
FRASER FILTER PLOT

NTS 32 D/4 Mc GARRY TOWNSHIP M-369

SCALE 1:2,400
 1 in. = 200 ft

