



53B14NE0012 2.11041 SEESEEP LAKE

010

ONTARIO GOLD JOINT VENTURE

Arseno Lake Property

1986-1987 Assessment Report

Prepared for:

Northern Dynasty Explorations Ltd.
Newfields Minerals Inc.
Westfield Minerals Limited

Written by:

DARREN C. ELSBY, M.Sc.

RECEIVED

APR 14 1988

MINING LANDS SECTION

Patricia Mining Division
(Sioux Lookout Office)
Claim Maps - Keeyask Lake/G-2085; Seeseep Lake/G-2204

N.T.S. 53B 14/15
91°06'W Long; 52°58.5'N Latitude

MARCH, 1988

TABLE OF



53B14NE0012 2.11041 SEESEEP LAKE

010C

SUMMARY

i

1.0	<u>BACKGROUND INFORMATION</u>	
1.1	Introduction	1
1.2	Location and Access	1
1.3	Physiography	1
1.4	Claim Status and Titles	1
1.5	Personnel and Survey Dates	6
1.6	History	6
2.0	<u>GEOLOGICAL REPORT</u>	
2.1	Introduction	9
2.2	Regional Geology	9
2.3	Local Geology	9
2.4	Structural Geology	13
2.5	Metamorphism	15
2.6	Mineralization	15
	2.6.1 Introduction	15
	2.6.2 Surface Mineralization	16
3.0	<u>PHASE-TWO DIAMOND-DRILLING PROGRAM</u>	
3.1	Summary	18
3.2	Introduction	18
3.3	Targets	19
3.4	Mineralization: General Discussion and Conclusions	22
4.0	<u>GROUND MAGNETICS REPORT</u>	
4.1	Introduction	24
4.2	Arseno Lake Ground Magnetism	24
5.0	<u>GROUND ELECTROMAGNETICS REPORT</u>	
5.1	Introduction	26
5.2	Arseno Lake EM-16	26
6.0	<u>GEOCHEMICAL REPORT</u>	
6.1	Introduction	28
6.2	Arseno Lake Geochemistry	28
	6.2.1 Soil and Rock Geochemistry	28
7.0	<u>REFERENCES</u>	31

FIGURES

	<u>Page No.</u>
1. Location Map, Regional	2
2. Location Map, Arseno Lake Property	3
3.a,b Arseno Lake Claim Block	4/5
4. Regional Geology	8
5. Arseno Lake Stratigraphic Section	11

TABLES

1. Claims Data	7
2. Phase-Two Diamond Drill Holes and Footages	18

APPENDICES

1. Property Holders
2. Personnel and Survey Dates
3. Technical Data Statements and Procedure Records
4. Chemical Analyses
5. Author's Certifications

2.11041

Please Note:

Appendix 3

Technical Data Statements and Procedure
Records was added to this file Aug 189
from OMEP submittal #OM87-2-JV-073

PLATES

ARSENO LAKE PROPERTY

(1:5,000 Scale)

ARSENO GRID

1. Geology
2. Ground Magnetometer Survey - Values, Contours
3. Ground Electromagnetic Survey - Values
4. Ground Electromagnetic Survey - In-Phase Profiles
5. Ground Electromagnetic Survey - Quadrature Profiles
6. Ground Electromagnetic Survey - Fraser Filter Plot
7. As, Au Grid Soil Geochemistry
8. Sample Location Map
9. As, Au Geochemistry

LUCY LAKE GRID

10. Geology
11. Ground Magnetometer Survey - Values
- 11.a Ground Magnetometer Survey - Contours
12. Ground Electromagnetic Survey - Values
13. Ground Electromagnetic Survey - In-Phase Profiles
14. Ground Electromagnetic Survey - Quadrature Profiles
15. Ground Electromagnetic Survey - Fraser Filter Plot
16. As, Au Grid Soil Geochemistry
17. Sample Location Map
18. As, Au Geochemistry

SUMMARY

Northern Dynasty Explorations Ltd., as operator for the Ontario Gold Joint Venture, holds 186 contiguous claims north of Eyapamikama Lake in northwestern Ontario. The Arseno Lake claims cover significant precious-base metal-bearing massive sulphide hosted within an extensive iron-formation horizon. This horizon is contained within a complex 700 metre wide ductile shear zone which attained amphibolite-grade metamorphism. This report discusses the results of the 1986 and 1987 field programs which included detailed geological mapping, soil and rock geochemical sampling, ground magnetic and EM-16 surveying and phase-two diamond drilling.

- Program Results:
1. Previously discovered, as well as new, gold showings were exposed, sampled and diamond drilled.
 2. An extensive horizon of precious-base metal-bearing massive sulphide was outlined through diamond drilling.
 3. A detailed study and analysis led to a better understanding of the complex structural geology, and its relationship to the mineralization.

ARSENO LAKE PROPERTY
1987 ASSESSMENT REPORT

1.0 BACKGROUND INFORMATION

1.1 Introduction

A total of 186 contiguous claims is held by Northern Dynasty Explorations Ltd. in trust for the Ontario Gold Joint Venture, north of Eyapamikama Lake in northwestern Ontario. The Arseno Lake claims are contained within the same "greenstone" belt and cover similar host lithologies as the Opapimiskan Lake Gold Deposit (Snoppy Lake, reported reserves: 6 million tonnes grading 5.6 g/tonne gold) located 48 km to the southeast which is being developed through a consortium headed by Placer-Dome.

1.2 Location and Access

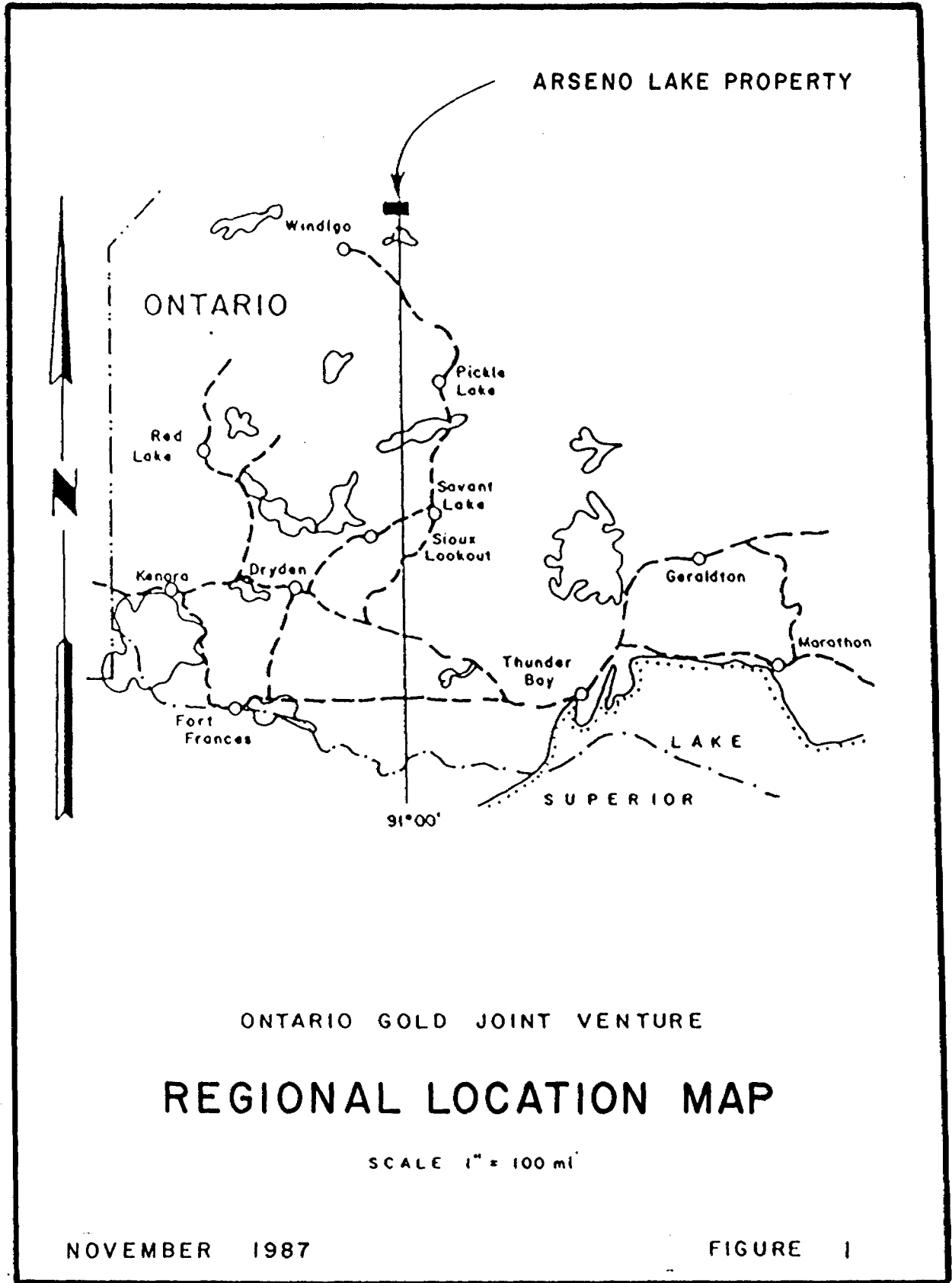
The Arseno Lake Property is located approximately 170 km north of Pickle Lake in northwestern Ontario (Fig. 1,2). The center of the claim group is situated at 91°06' W longitude and 52°58.5' latitude on NTS sheet 53B/15. Access to the area in the summer is by float equipped aircraft from Pickle Lake or Windigo Lake (55 km southwest of the claims at the terminus of Highway 599). Winter access is by ski-equipped float plane from Pickle Lake or via the Weagamow Indian Reserve winter road and connecting system of lakes.

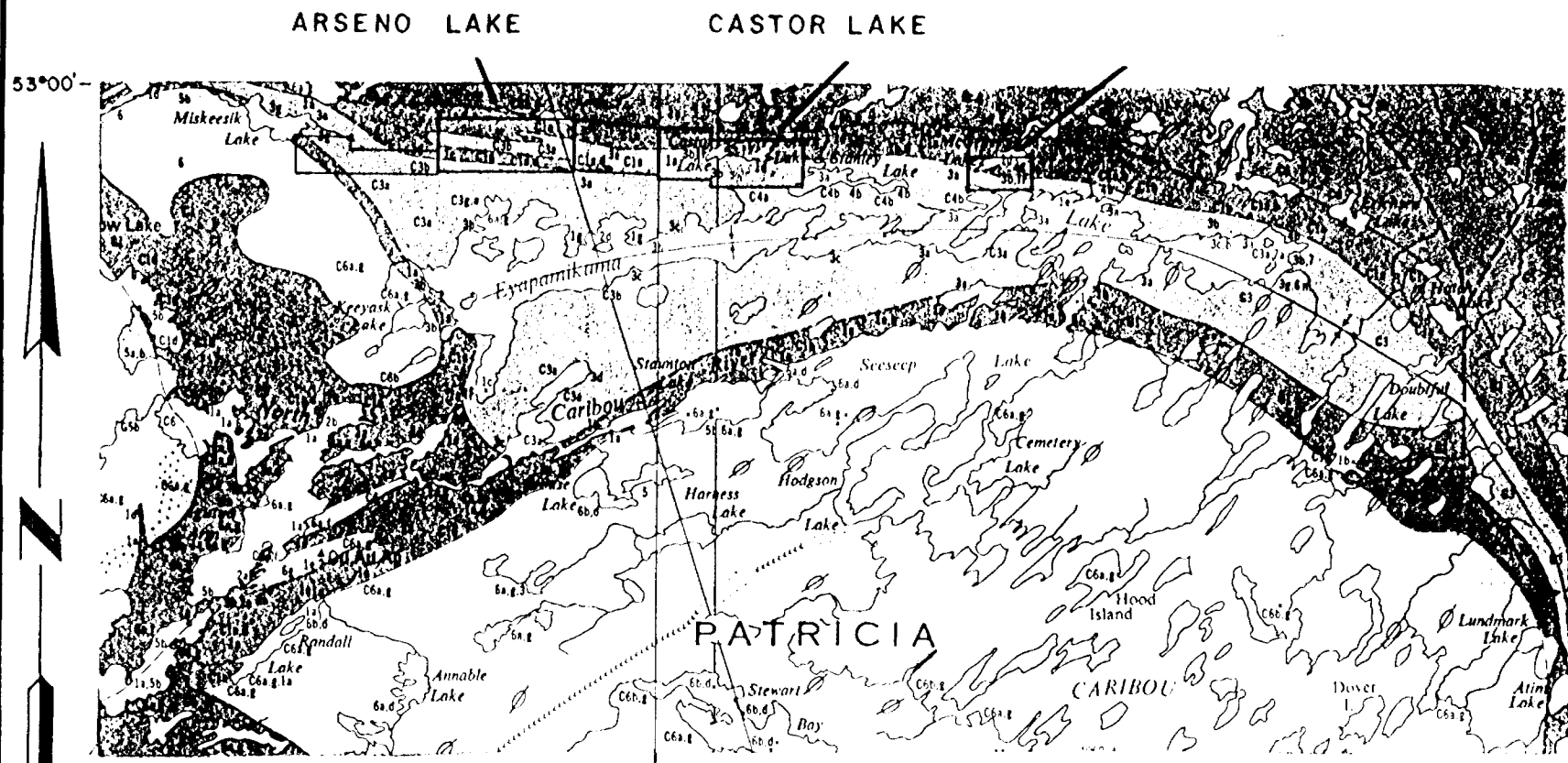
1.3 Physiography





The area bordering Eyapamikama Lake is characterized by low-lying muskeg and boulder till. Further to the north, an east-west mafic volcanic ridge is present with relief up to 120 m. Bedrock exposure is moderate to good in many of the low-lying areas. Glacial striae and drumlins are consistently oriented at about 225°Az throughout the belt.

1.4 Claim Status and Titles

The Arseno Lake Property, located within the Patricia Mining Division of Ontario, comprises some 186 contiguous mineral claims (Fig. 3a,b Table 1). All claims are held by Northern Dynasty Explorations Ltd. in trust for the Ontario Gold Joint Venture (Northern Dynasty Explorations Ltd., Newfields Minerals Inc., and Westfield Minerals Ltd.). The addresses of the property holders are listed in Appendix 1. These claims are contiguous with the Castor Lake claim block located east of the Arseno Property (see 1987 Castor Lake Property Assessment Report).





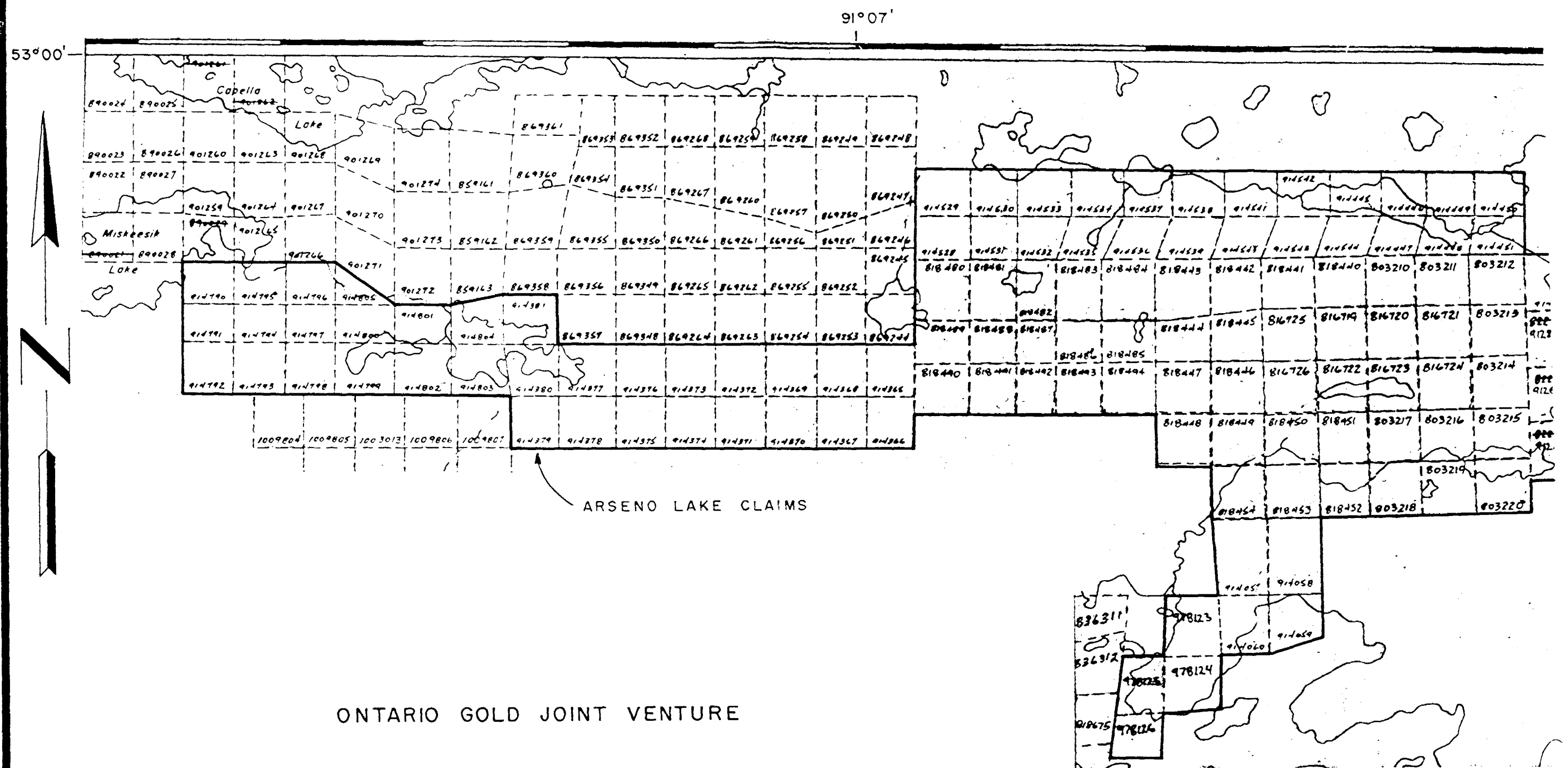
-  GRANITIC ROCKS
-  MIGMATITIC ROCKS
-  METASEDIMENTARY ROCKS
-  MAFIC METAVOLCANIC ROCKS

ONTARIO GOLD JOINT VENTURE
 EYAPAMIKAMA LAKE
 LOCATION MAP

NTS 53 B/14, 15
 1 inch = 4 miles
 1 : 253,440

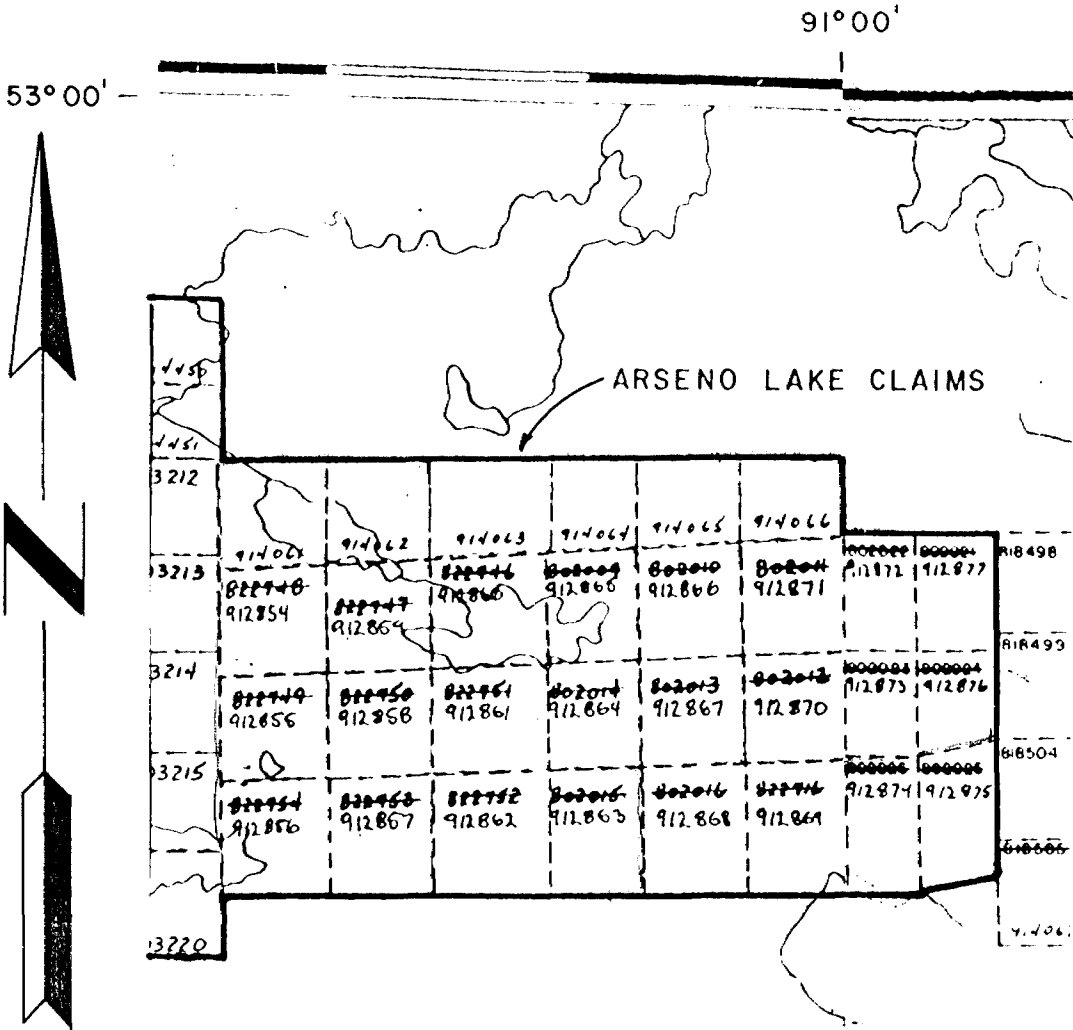
NOVEMBER 1987

FIGURE 2



ONTARIO GOLD JOINT VENTURE
ARSENO LAKE CLAIM BLOCK
WESTERN PART

KEYYASK LAKE G-2085
 SCALE 1in = 40 chain = 0.5mi



ONTARIO GOLD JOINT VENTURE
 ARSENO LAKE CLAIM BLOCK
 EASTERN PART

KEYYASK LAKE G-2085 , SEESEEP LAKE G-2204

SCALE 1in = 40 chain = 0.5mi

1.5 Personnel and Survey Dates

The work recorded in this report was completed in several phases between July and September 1986 and between July and October 1987. A detailed breakdown of the work periods and the personnel involved is listed in Appendix 2.

1.6 History

- 1938 Satterly (1941) produced the first geological map.
(scale 1"=1 mi.)
- 1960 ODM-GSC (1960) flew an airborne magnetometer survey.
(scale 1"=1 mi.)
- 1962 Emslie (1962) carried out ODM reconnaissance mapping.
(scale 1"=4 mi.)
- 1971 Thurston et.al. (1971) carried out ODM reconnaissance.
- 1981 Andrews et.al. (1981) conducted a preliminary evaluation of the geology and economic potential of the area for the Ontario Geological Survey.
- 1984 A large Ontario Geological Survey (OGS) crew mapped the area from Agutua Arm to the eastern end of Eyapamikama Lake. Results of their work were released as Bartlett et.al. (1984) and Breaks et.al. (1984).

Dunlop Exploration, under contract to the Ontario Gold Joint Venture turned up many new and old gold showings in the area through reconnaissance prospecting and staked portions of the property discussed in this report.
- 1985 Northern Dynasty, as operator for the Ontario Gold Joint Venture, conducted a geophysical and geochemical sampling program on a 1:5000 scale across portions of the Arseno Lake Property.
- 1986 Northern Dynasty, as operator for the Ontario Gold Joint Venture, conducted additional geochemical and geophysical surveys over selected portions of the Arseno Property.
- 1987 As operator for the Ontario Gold Joint Venture, Northern Dynasty Explorations completed a phase-one 975 metre diamond drilling program to test strong geophysical anomalies and highly decomposed gossan contained within a prominent iron-formation horizon.

Following results from this drill program, additional claims were staked within the area and further geophysical-geochemical survey programs were completed. Detailed geological mapping at a scale of 1:5000 was also conducted over much of the claim block.

A second phase 1,700 metre diamond drill program was completed by Northern Dynasty (operator) over favourable sections of the property. Results outlined extensive massive sulphide mineralization carrying significant base-precious metal values.

TABLE 1

CLAIMS DATA

<u>PROPERTY</u>	<u>LONGITUDE</u>	<u>LATITUDE</u>	<u>NTS</u>	<u>CLAIM MAP</u>	<u>NO. OF CLAIMS</u>	<u>CLAIM NUMBERS</u>	<u>ANNIVERSARY DATES</u>
ARSENO LAKE	91°04'W	52°58.5'N	53B/14	KEEYASK LAKE G-2085	11	Pa 803210-803220	12 OCT. 1988
					2	816719-816720	06 SEPT. 1989
					2	816721-816722	06 SEPT. 1988
					1	816723	06 SEPT. 1989
					1	816724	06 SEPT. 1988
					1	816725	06 SEPT. 1989
					1	816726	06 SEPT. 1988
					3	817451-817453	06 SEPT. 1989
					1	818424	12 OCT. 1989
					6	818425-818430	12 OCT. 1988
					1	818431	12 OCT. 1989
					4	818432-818435	12 OCT. 1988
					5	818440-818444	12 OCT. 1988
					1	818445	12 OCT. 1989
					9	818446-818454	12 OCT. 1989
					14	818457-818469	12 OCT. 1988
					19	818480-818498	12 OCT. 1988
					2	818499-818500	12 OCT. 1989
					4	818501-818504	12 OCT. 1988
					18	912854-912871	02 APRIL 1988
13	914058-914070	21 APRIL 1988					
17	914365-914381	21 APRIL 1988					
7	914445-914451	21 APRIL 1988					
17	914528-914544	21 APRIL 1988					
16	914790-914805	30 APRIL 1988					
4	978123-978126	29 JUNE 1988					
ARSENO LAKE	91°00'W	52°58.5'N	53B/15	SEESEEP LAKE G-2204	6	Pa 912872-912877	02 APRIL 1988

THE EXPECTED FIGURE(S) HAVE BEEN MOVED TO
THE MAP SECTION OF THIS FILE.

2.0 GEOLOGICAL REPORT

2.1 Introduction

Geological mapping at a scale of 1:5,000 was conducted over much of the Arseno Lake claim group (Plates 1,10). Technical data statements and procedure records are listed in Appendix 3.

Due to the extent of the area covered in this report, the property is divided into two sections or grids. The Arseno grid (west) comprises lines 0+00E to 49+00E. Lines 50+00E to 84+00E are contained within the Lucy Lake grid (east).

2.2 Regional Geology

The North Caribou "greenstone" belt, located within the Sachigo Sub-Province of the Superior Geologic Province is a narrow arcuate east-west and northwest-southeast trending assemblage of supracrustal rocks with cusped southeastern and truncated bicusped western terminations. This belt lies within a large regional assemblage of granite and granitoid gneiss and is largely comprised of variably deformed and metamorphosed mafic volcanic rocks, interflow clastic and chemical sediments and minor sedimentary debris flows (Figure 4).

Structural geometry surrounding the Eyapamikama Lake area is characterized by a large east-west trending synclinorium which is contained within an assemblage of pre to syn-kinematic granite rocks and granitoid gneiss. The Arseno Lake Property covers a 14 km strike length within a portion of the northern limb of the synclinorium. The primary exploration target within this property is centred around gold-bearing formations adjacent to metavolcanic-metasediment contacts within an east-west trending ductile shear zone.

2.3 Local Geology

Lithologies within the Arseno Lake claim group generally strike east-west and are polydeformed and variably metamorphosed (Plates 1,10). A prominent east-west trending subvertical regional metamorphic foliation has been developed parallel to compositional layering within and adjacent to a 700 metre wide ductile shear zone. Deformation intensity fluctuates across the property with the most intense deformation recorded in the vicinity south of Lucy Lake (Plate 10).

Northern-most claims are predominantly underlain by schistose massive mafic-volcanics which pass through a sharp to transitional contact with an east-west trending ductile shear zone. Rock types within this high strain zone comprise intercalations of multiply-deformed pelitic schists, mafic volcanics, sedimentary debris flows and lesser units of volcanoclastics. Within this zone is a prominent horizon of internally folded grunerite-iron-formations which contain varying percentages of pyrrhotite, pyrite, sphalerite, galena, arsenopyrite, and magnetite. This zone of complex and varied lithologies is referred to as the "Active Zone".

3 Local Geology (continued)

Metamorphic grade is variable throughout the property. Rocks within and immediately adjacent to the "Active Zone" contain mineral assemblages indicative of the lower amphibolite facies. South of this zone, metamorphic grade progressively decreases to the middle to lower greenschist within phyllitic rocks at the southern property boundary.

The southern boundary of the shear zone extends transitionally through a prominent unit of highly deformed conglomerates and breccias (debris flows) and into an overlying horizon of less deformed schistose-massive-metavolcanics.

Within the poorly exposed southern edge of the property, this sequence is overlain with sharp contact by a package of moderately deformed turbiditic phyllites which contain well preserved sedimentary structures. Facing directions observed within structures indicate a general younging to the south and based upon this evidence, these rocks are believed to be the youngest on the property.

Metamorphic Rock Units

The following lithologic descriptions discuss both metamorphic rock names as well protolith types. All rocks within the property are variably deformed and metamorphosed (Figure 5, Plates 1, 10).

Northern Mafic Volcanics

This package of metavolcanic rocks comprise the northern-most, structurally lowest unit within the property; the upper-contact of which forms the approximate northern boundary of the main ductile shear zone. Rock types consist principally of massive mafic units with lesser gabbroic lenses and minor ultramafic pods.

The massive units, which often contain flattened and sheared pillow structures, comprise weakly foliate chlorite-hornblende-schists with minor sericite, garnet, and biotite phases. Minor sulphide zones and localized chromium-mica alteration occur throughout this unit. Small ductile shears characterized by narrow zones of intensely foliate chlorite schist (often pyrite bearing) are widespread within several hundred metres of the main shear zone. These shears are most likely parasitic to the main shear zone.

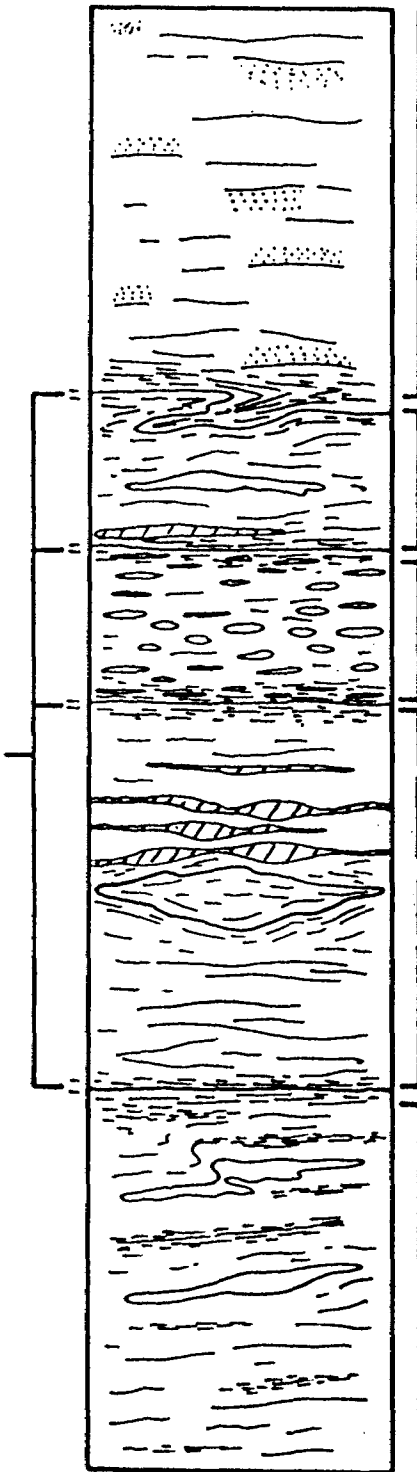
Discontinuous gabbroic dikes/sills crop-out randomly throughout this unit and are typically composed of chlorite-pyroxene-hornblende schist with associated minor tremolite, iron-carbonate, and chromium-mica. Scattered occurrences of ultramafic schist contain assemblages of iron-carbonate, actinolite, talc, and chromium-mica.

ACTIVE ZONE

Northern Pelite Assemblage

This combination of varied lithologies, or assemblage, comprises highly deformed pelitic schists, mafic-volcanic schists, grunerite-iron-formations, sedimentary debris flows, and sericite schists.

SHEARED LITHOLOGIC / STRUCTURAL CONTACTS



SOUTHERN PHYLLITES
Phyllitic Turbidites / locally schistose

SOUTHERN MAFIC METAVOLCANICS

METASEDIMENTARY DEBRIS FLOW

PELTIC SCHIST, CHROMIUM MICA SCHIST, Quartz-Tourmaline Veins

QUARTZ-GRUNERITE-IRON FORMATION HORIZON, local Argillite

"ACTIVE ZONE"

MAFIC METAVOLCANIC PACKAGE

PELTIC SCHIST, CARBONATE-ACTINOLITE SCHIST, CHROMIUM-MICA SCHIST

NORTHERN MAFIC METAVOLCANICS

SCHEMATIC - STRATIGRAPHIC SECTION

ARSENO. LAKE PROPERTY

2.3 Local Geology

Northern Pelite Assemblage (continued)

Pelites contain an intense penetrative foliation and are of probable turbiditic origin. They comprise chlorite-biotite-garnet schists which contain varying proportions of pyrrhotite, pyrite, cordierite, hornblende, sphalerite, arsenopyrite, and chalcopyrite. Intercalated within these rocks (primarily adjacent to the Northern Mafic Volcanics) are minor pods and lenses of sericite schist and chlorite-hornblende schists. These small units may represent structural "slivers" or synformal "keels" of mafic volcanics isolated within the pelites through complex folding and localized high strain.

A 2800 metre long body of mafic metavolcanics crops out between lines 22+00E and 49+00E. The continuous nature of this large isolated unit most likely reflects an original depositional feature rather than a structural phenomenon.

A prominent horizon of grunerite-bearing-iron-formations occurs as a pervasive unit throughout the Active Zone, structurally/stratigraphically adjacent to the above mafic-body (Plate 1). They are composed of up to 90% recrystallized quartz with varying percentages of grunerite and magnetite concentrated in distinct layers throughout the formation. Sulphides are commonly associated with these formations and have been the target of active exploration/drilling within the property. Precious and base-metals are commonly associated with these sulphides. Sulphide species include pyrrhotite, pyrite, sphalerite, galena, arsenopyrite, and minor chalcopyrite. Associated with the iron-formations are localized networks of arsenopyrite-bearing quartz-tourmaline veins.

The structurally highest unit within the Active Zone stratigraphy consists of an extensive metasedimentary debris flow comprising highly deformed polymictic conglomerates and breccias. Clast sizes range from 1 to 25 cm, are supported in a chlorite-hornblende matrix, and are composed of pelitic schist, iron-formation, and mafic volcanic rocks. A coarse silicified basal unit composed of 30 to 80 cm flattened quartz boulders crops-out within the western-end of the claim group. It is within this unit that the main ductile shearing/flattening strain becomes gradually less intense and forms the approximate southern boundary of the main ductile shear zone.

Southern Mafic Volcanics

Massive mafic-metavolcanics containing flattened and sheared pillow structures conformably overlie the conglomerates and breccias. Minor layers and lenses (presumably dikes) of coarse gabbroic and ultramafic rock crop-out sporadically within this unit. Massive-mafics are composed of fine-grained chlorite-actinolite-hornblende schist and usually contain a moderate to weakly defined foliation. Gabbroic units consist of coarse assemblages of chlorite, pyroxene, amphibole, and sericite. Ultramafics typically occur as complexly folded and altered pods and lenses composed of talc-iron-carbonate-actinolite-serpentine schist. Abundant chromium-mica was observed within and surrounding these occurrences.

Within the region southwest of Lucy Lake, this unit and adjacent units are deformed by a large amplitude fold structure related to an early phase of deformation.

2.3 Local Geology (Continued)

Southern Phyllite Assemblage

Dark grey phyllites of probable turbiditic origin overlie the southern mafic volcanics. Immediately adjacent to this contact is a zone of schist which, when approximately 50 to 70 metres south of the contact, grades into a dark grey phyllite characterized by a well developed slaty (pressure-solution) cleavage. Both the schist and phyllites are of equivalent composition hence the schist-phyllite transition most likely reflects differing deformation intensity. It would appear, therefore, that the deformation/metamorphism was locally intense adjacent to this contact and became progressively weaker away from it.

Schistose rocks are of lower greenschist grade and are typically composed of quartz, biotite, and chlorite. Local intercalations and layers of metaconglomerate and breccia occur within this horizon and may represent basal units. Within the phyllites, well-preserved primary sedimentary facing directions outlined by true graded bedding show a general younging to the south.

2.4 Structural Geology

Rocks within the claim group are variably deformed and metamorphosed within the lower greenschist to middle amphibolite facies. A 700 metre wide high strain zone, characterized by extensive ductile shearing and flattening trends east-west through the property and has been the site of concentrated mineralization.

Three phases of folding can be locally discerned and it is the superposition of these fold phases which has produced the nearly complete transposition of bedding/compositional layering observed throughout the area. The most prominent structural feature is a well developed penetrative regional foliation which appears, within the shear zone, to be axial planar to both first and second phase minor fold geometry and sub-parallel in orientation to bedding/compositional layering. Associated with the second phase folding event are pervasive mineral and geometric intersection lineations which plunge moderately to steeply to the east.

Earliest recognizable deformation occurs as small scale highly attenuated and flattened intrafolial isoclinal folds. Geometry relating to these structures has been largely obscured as a result of subsequent overprinting through shearing and recrystallization. In areas where these early folds are visible and only partially distorted, phase-one geometry is characterized by sub-horizontal fold axes contained within near vertical axial planes. Some minor folds exhibit asymmetric geometry which would indicate that they are most likely parasitic to larger fold structures and very possibly related to the initial formation of the regional Eyapamikama Synclinorium. Associated with these early structures is a well-developed axial planar cleavage. As a result of continued deformation, this cleavage progressively developed into a transposed (primary) foliation of a regional nature such that compositional layers became oriented sub-parallel to it.

4 Structural Geology (continued)

Second phase folds, the most prominent deformation geometry within the area, vary in style and form as a function of lithology and proximity to the ductile shear zone. It is the superposition of these folds onto earlier structures and continued high strain that resulted in the formation of this shear zone. The preferred structural location of this zone is most likely a result of the strong viscosity contrast which exists between the competent massive mafic volcanic stratigraphy and less competent pelitic lithologies. Within the "Active Zone", the presence of mixed stratigraphy; composed of iron formations, mafic volcanics and sedimentary debris flows; provided further anisotropy which most likely enhanced the ability of this structural/stratigraphic location to accommodate strain (in the form of shearing) as compared to other locations within this region. Within the shear zone, second phase folds are typically disharmonic and tight to isoclinal with an associated well-developed axial planar cleavage (schistosity). It is the combination of this geometry and subsequent strain reactivation along the phase-one foliation which (on a mesoscopic scale) forms the prominent regional foliation observed throughout portions of the Eyapamikama Lake area. This foliation most often appears parallel to compositional layering within and adjacent to the shear zone. Several hundred metres south of this zone, within pelitic schists and phyllites, an angular discordance between the phase-two cleavage and phase-one foliation is observed and fold geometry becomes moderately open to tight. Up to one kilometre south of this zone the angular discordance is more prominent and fold geometry becomes moderately open. Within this area the second phase (S_2) slaty cleavage is seen to deform and cross-cut the S_0/S_1 , transposed foliation (Plates 1, 10). Thus it appears that this second phase axial planar fabric is not oriented parallel to the primary foliation away from the shear zone and only becomes progressively rotated parallel to it as the zone is approached.

Prominent moderately to steeply east plunging mineral and intersection lineations occur widely throughout the area and appear co-linear with second phase fold axes. The mineral lineations appear to be the result of preferred mineral alignment and growth along the direction of least stress (in this case maximum elongation) within the folded units during deformation and metamorphism. This direction appears oriented parallel to the fold axes of the second-phase folds. No evidence of any "true" stretching lineations was found as the strain geometry (constriction) in this area does not appear intense enough to produce the specialized "stretching" phenomenon.

Many of the minor folds show asymmetries which indicate that they are most likely parasitic to larger scale folds. Second phase deformation is also characterized by extensive boudinage development on all scales within more competent rock units. Competent iron-formation horizons form internally deformed enclaves, which in-part define macroscopic-scale boudins enveloped by highly-deformed, less-competent lithologies. Smaller subsidiary shear zones were observed throughout the area along major lithologic contacts and to the north of the major shear zone within massive mafic volcanic units. Secondary silica enrichment is often preferentially located along these subsidiary zones and along the phase-two cleavage. In addition to the shearing (constriction) which took place during this event, significant flattening strain was also active as indicated by volcanic pillow and pebble conglomerate clast elongation ratios of up to 1:100 and 1:75 respectively.

2.4 Structural Geology (continued)

Third phase geometry is manifest as a well developed spaced crenulation cleavage (pressure solution) which cross-cuts all earlier structures. This feature is prominently developed within phyllitic turbidites at the southern edge of the property and well into the Eyapamikama Lake area. This geometry is absent to the north.

The latest deformation recognized within the Arseno Lake Property is characterized by widespread post-kinematic northeast trending fractures and joints with associated minor brittle faulting.

2.5 Metamorphism

Garnet-biotite mineral assemblages (coexisting phases) and microtextures are indicative of a prograde metamorphic event in which the peak metamorphic activity occurred just prior to and through phase-two deformation. Observation of helicitic structures and strain shadow geometry within conglomerates and garnet bearing rocks indicate a general overall dextral sense of rotation within the main shear zone. The first appearance of the garnet phase within metapelites outlines a trend subparallel in orientation to the local stratigraphy (near the south boundary of the shear zone) but detailed sampling and petrographic examination would be required to locate "true" isograd boundaries based on changes in phase-diagram tie-line geometry.

Post-deformational recrystallization and annealing was widespread throughout the area as evidenced by the overgrowth of small euhedral garnets on the deformation fabrics within pelitic rock types. Some sulphide breccia textures observed within diamond drill core sections of iron-formations indicate that in the latter stages of deformation, these silica exhalites behaved in a brittle fashion while surrounding lithologies were most likely in a more plastic state. This geometric dilatancy may in part account for the enhanced secondary mineralization observed within these horizons. From this and other observations it appears that fluid mobilization was most active during and after phase-two deformation.

2.6 Mineralization

2.6.1 Introduction

The main feature and exploration target within the Arseno Property is centered around a prominent and highly continuous horizon of grunerite-bearing iron-formations. This horizon occurs within the "Active Zone", which comprises a variety of different lithologies (Plates 1,10).

The principal zone of mineralization centers around a highly decomposed gossan, "MAIN SHOWING", which contains pods of remnant sulphides which assay up to 3.6% Zn, 4.9% Pb, 8.1 oz/ton Ag, and 0.032 oz/ton Au across a true width of 1.1 metres. Subsequent mapping and geophysics outlined an extensive and persistent horizon of iron-formations which are mostly overburden-covered.

Initial phase-one drilling tested the most prominent conductors and outlined massive banded and disseminated pyrrhotite, pyrite, and sphalerite within host iron-formations. A second phase of drilling was conducted as a follow-up to the phase-one program (Section 3.0). Sample intervals have yielded values of up to 15.4% Zn, 1.3% Pb, 1.5 oz/ton Ag, 0.42 oz/ton Au over 0.4 metres and 6.6% Zn, 4.1% Pb, 7.7 oz/ton Ag, and 0.03 oz/ton Au over 2.1 metres.

2.6.2 Surface Mineralization

Most areas which contain significant mineralization are overburden covered. Smaller subsidiary mineralized zones are scattered throughout the grids (Plates 1,10). These small zones typically comprise concentrations of disseminated sulphides within or along sheared lithologic contacts and minor structurally complex zones and shears. Several of the more significant showings are discussed below:

1. L8+75E, 0+10S

This outcrop, centered within the "Active Zone", comprises biotite-garnet-chlorite schist which envelopes a showing of grunerite iron-formation. Disseminated pyrite and arsenopyrite, accompanied by quartz-tourmaline veining appeared throughout the outcrop. Chromium-mica alteration is strongly developed and often associated with sericite. Assay values from rock grab samples yielded values up to 35,665 ppm As and 405 ppb Au.

2. L9+75E, 0+10S

This outcrop, a possible continuation of the above mineralization trend is characterized by abundant quartz-tourmaline veins which contain massive arsenopyrite accompanied by abundant chromium-mica alteration. Assay values from rock and soil samples yielded 35,921 ppm As, 420 ppb Au; 17,043 ppm As, 760 ppb Au and 13,996 ppm As, 95 ppb Au respectively.

3. L11+25E, 0+10N

This small outcrop, located within the "Active Zone" is composed of biotite-quartz-garnet schist which contains narrow veins of galena and sphalerite. Rock and soil samples have yielded values of 1515 ppm As, 150 ppb Au and 456 ppm As, 18 ppb Au respectively.

4. L33+30E, 1+00N (MAIN SHOWING)

This small outcrop of iron-formation and pelitic schist envelopes a horizon of decomposed gossan which contains remnant pyrite, arsenopyrite, and sphalerite with accompanying magnetite and grunerite. Surface values of up to 4.9% Pb, 3.6% Zn, 8.1 oz/ton Ag and 0.032 oz/ton Au were detected across a true width of 1.1 metres.

5. L40+00E, 0+90N

Abundant chromium-mica alteration accompanied by disseminated arsenopyrite was uncovered within this small outcrop of iron-formation.

6. L50-00E, 3+50S

This small trenched outcrop, contained within a strong geophysical conductor, is located within the hinge zone of a large fold structure southwest of Lucy Lake. Decomposed gossan and abundant chromium-mica alteration are present within this iron-formation horizon.

6.2 Surface Mineralization (continued)

7. L58+00E, 0+50N

This trenched locality uncovered a significant decomposed gossan with chromium-mica alteration within a host iron-formation. Subsequent diamond drilling has intersected massive pyrrhotite, pyrite, and sphalerite. Rock grab samples have returned values of 18 ppm As and 57 ppb Au.

8. L83+00E, 3+00S

This small outcrop within a strong geophysical conductor comprises decomposed gossan in association with remnant pyrite, pyrrhotite, and magnetite. Host rocks are iron-formation which occurs at the contact between the Southern Mafic Volcanics and Southern Phyllites. Rock grab samples have returned values of 16 ppm As and 41 ppb Au.

Numerous small outcrops containing disseminated sulphides occur throughout the property and have yet to be investigated. Refer to Plates 1 and 10 for locations of mineralized zones.

Results from surface sampling have outlined various sulphide occurrences and sporadic gold values. Within the western portion of the Arseno grid including L33+00E, mineralization is primarily concentrated within iron-formations and adjacent metapelitic wall rocks. Arsenopyrite, in association with quartz-tourmaline veins, is common in this area. Abundant chromium-mica alteration was observed throughout the Active Zone and in other subsidiary areas. The Lucy Lake grid is dominated on surface by decomposed gossan and lesser showings of pyrrhotite and pyrite with only small traces of arsenopyrite.

Significant base and precious metals appear somewhat sporadic and as yet do not appear to be associated with any one particular mineral phase.

Please refer to section 3.4 for discussions and conclusions concerning mineralization on the Arseno Lake Property.

3.0

ONTARIO GOLD JOINT VENTURE
ARSENO LAKE PROPERTY
1987 PHASE-TWO DIAMOND DRILLING PROGRAM

3.1 Summary

A 1,700 metre phase-two diamond drill program was completed along a 3.8 kilometre strike length on the Arseno Lake Property in 1987. Drill hole intersections have outlined a continuous horizon of highly deformed and metamorphosed iron-formations. These iron-formations are contained within a major ductile shear zone which spans a prominent metasedimentary-metavolcanic contact. Iron-formation horizons are host to an extremely continuous body of deformed polymetallic massive-sulphide. Sulphide intersections within drill holes were found to contain significant gold, silver, lead and zinc values. A prominent structural east-plunging macro-boudinage geometry was recognized within the host iron-formations and may be significant in determining the sub-surface geometry/continuation of the mineralization.

3.2 Introduction

This report summarizes results from the phase-two 1,711 metre diamond drilling program completed on the Ontario Gold Joint Ventures' Arseno Lake Property located approximately 175 kilometres north of Pickle Lake, Ontario. Drilling was completed during the period of 15 August to 19 October, 1987. This drill program was undertaken as a follow-up to phase-one drilling (Feb.-March, 1987) and the 1987 summer field program (mapping, sampling, geophysics). Drill hole designations and footages are listed in Table 2; locations appear on Plates 1 and 10.

TABLE 2

PHASE-TWO DIAMOND DRILL HOLES AND FOOTAGES

<u>HOLE #</u>	<u>CORE LENGTH (M/FT)</u>
87A-12	149.05/489.0
13	194.8/639.1
14	66.76/219.0
15	72.8/238.8
16	136.9/449.1
17	73.9/242.5
18	130.8/429.1
19	69.8/229.0
20	106.4/349.1
21	118.6/389.1
22	124.7/409.1
23	136.9/449.1
24	130.8/429.1
<u>25</u>	<u>199.3/653.8</u>
14	TOTAL 1711.5/5615.2

3.3 Targets

Phase-two drill targets were selected on the basis of results obtained from both the phase-one 1987 winter drilling and summer field programs (Plates 1,10). Preliminary exploration of the property uncovered numerous arsenopyrite-quartz-tourmaline showings associated with significant galena-sphalerite mineralization within the confines of a 700 metre wide ductile shear zone. Several gossans associated with massive sulphide mineralization were located within a horizon of quartz-grunerite iron-formations. Results from phase-one diamond drilling outlined subsurface mineralization values ranging up to 15.4% Zn, 1.3% Pb, 1.5 oz Ag/ton, 0.42 oz Au/ton over 0.4 metres and 6.6% Zn, 4.1% Pb, 7.7 oz Ag/ton, 0.03 oz Au/ton over 2.1 metres.

Ground geophysics completed in 1986 outlined a strong MaxMin conductor ranging from 15 to 90 metres in width along a 3.7 kilometre strike length. This conductor is roughly coincident with the zone of iron-formations. Subsequent geophysical surveys have distinguished several zones of sub-parallel conductors within the main MaxMin conductor.

Diamond drill holes were located for the purpose of testing the near-surface strike extension, depth, and grade of mineralization within the host iron-formations.

Results

All fourteen diamond drill holes intersected massive to disseminated sulphide mineralization accompanied by significant gold, silver, and lead-zinc values within the iron-formation horizons.

The drill holes are divided into three sections based upon their geographical location on the property and are as follows: West Section: holes 12, 13, 14, 15; Central Section: holes 18, 19, 20, 21, 22, 25; East Section: holes 16, 17, 23, 24 (refer to Plates 1 and 10 for drill hole locations).

West Section

Four drill holes (87A-12, 13, 14, 15) were collared adjacent to the metavolcanic-metasedimentary contact within the western portion of the property. Two iron-formations were intersected in holes 12 and 13 while holes 14 and 15 intersected a single exhalite horizon. These iron-formations and adjacent metapelitic wall rocks were found to host wide zones of mineralization. The best intersection intervals are as follows:

WEST SECTION

DRILL HOLE #	METERAGES	LENGTH (M)	% Pb	% Zn	Ag (oz/ton)	Au(ppb)	Au (oz/ton)	ANALYSIS METHOD
								FA (Fire Assay) AA (Atomic Absorption)
13	133.7-139.9	6.2	-	-	-	404	.011	FA
	174.4-177.6	3.2	1.07	4.8	2.39	34	.001	FA
15	8.3-14.3	6.0	.46	1.03	2.48	628	.018	FA
	12.3-14.3	2.0	.90	.91	4.32	1097	.032	FA

3.3 Targets

Western Section (continued)

Sulphides, usually intergrown with grunerite (20-30%), occur as both massive to diffuse bands in combination with abundant wispy anastomosing disseminations and irregular fracture fillings. Fragmental textures are noted throughout mineralized sections of the iron-formations in which angular to well rounded clasts of opaque silica are supported in an open massive-sulphide matrix. Pyrrhotite is the most common sulphide species followed by pyrite and sphalerite. Disseminated sulphides usually occur as euhedral grains often surrounded by chlorite. Tourmaline and chromium-mica alteration is locally present.

Additional polymetallic sulphides were detected in both 87A-12 and 14 within chlorite-biotite-garnet schist wall rocks. Assay values up to 1.27% Zn, 0.3% Pb, 3.12 oz Ag/ton and .002 oz Au/ton over 5.4 metres were received.

Central Section

Six drill holes were completed along an 800 metre strike length. These holes flank the Main Showing (Plate 1) and all intersect down-dip extensions of the surface mineralization. Two separate iron-formation horizons were intersected in holes 18, 19, 10, 21 and 25. Hole 22 only intersected a single iron-formation horizon. Mineralization widths and grades are as follows:

CENTRAL SECTION

DRILL HOLE #	METERAGES	LENGTH (M)	% Pb	% Zn	Ag (oz/ton)	Au (ppb)	Au (oz/ton)	ANALYSIS METHOD
								FA (Fire assay) AA (Atomic Absorption)
18 including	85.4-90.8	5.4	1.11	1.72	1.78	681	.020	FA
	85.4-89.4	4.0	1.14	2.17	1.90	823	.024	FA
	91.7-95.4	3.7	.714	.849	2.57	518	.015	FA
19 including and and and	28.2-40.0	11.8	.230	5.53	1.18	142	.004	FA
	28.2-33.3	5.1	.270	9.23	1.81	181	.005	FA
	28.2-36.3	8.1	.304	6.97	1.5	139	.004	FA
	28.2-29.7	1.5	.210	12.21	1.75	377	.011	FA
	28.2-31.3	3.1	.250	10.68	1.81	257	.007	FA
20 including and and	43.6-55.5	11.9	.156	3.94	1.06	163	.005	FA
	50.1-55.5	5.4	.233	7.36	1.18	103	.003	FA
	51.6-55.5	3.9	.304	8.44	1.39	90	.002	FA
	54.9-55.5	0.6	1.37	29.2	4.34	309	.009	FA
	60.0-61.2	1.2	.12	.72	1.51	651	.019	FA
21	66.5-68.0	1.54	-	-	-	780	.029	AA
22	38.6-40.2	1.6	.59	5.3	-	857	.025	AA
25	114.1-115.8	1.7	.84	2.1	1.79	795	.023	AA
	117.3-120.6	3.3	.186	.673	.499	171	.005	AA
	130.2-130.7	0.5	.36	1.6	2.71	480	.014	AA

3.3 Targets

Central Section (Continued)

In general, sulphides occur in massive and semi-massive bands in association with diffuse, wispy anastomosing stringer zones. This section differs from the western section in that pyrite (often occurring as small euhedral grains) becomes more abundant and nearly equal in abundance to pyrrhotite. Lesser amounts of sphalerite are intergrown with pyrrhotite while galena and arsenopyrite form diffuse bands of medium to coarse grained crystals. As in the western section, the iron-formations are characterized by internal brecciation and fragmentation. Drill hole intersections outline a well defined large-scale pinch and swell boudinage geometry related to deformation (Plate 1).

The widest intersections of polymetallic sulphides are present in holes 87A-19 and 20 with assay values of up to 29.2% Zn, 1.37% Pb, 4.34 oz Ag/ton, and .009 oz Au/ton over 5.4 metres. Hole 87A-21 carried values of up to .029 oz Au/ton over 1.54 metres.

It appears that the main body of the overburden-covered MaxMin conductor is related to high sulphide content within two or more variably thick iron-formation horizons. The southern-most portion of the conductor is related to a lesser sulphide enrichment within a zone of mixed chemical and clastic sedimentation. Hole 87A-21 intersected a unit of altered ultramafic composed of talc schist. This unit may represent a large dike or sill structure. Only trace sulphides were present. Abundant chromium-mica alteration is present within silica-rich bands stratigraphically above (south of) the ultramafic.

Eastern Section

Four drill holes (87A-16, 17, 23, 24) were collared along a 2000 m strike length in the Active Zone adjacent to both the metavolcanic-metasedimentary contact and coincident electromagnetic conductors. Significant sulphide zones were intersected in all holes. Though assay results are anomalous, base and precious-metal values are lower in comparison to the previous sections.

Holes 87A-16 and 17 encountered a mixed iron-formation-meta pelitic horizon. At surface this horizon is characterized by an extensive gossan. Iron-formation intersections containing grunerite are frequently mixed with green chlorite and biotite-garnet schists. Pyrrhotite is the dominant sulphide species and typically forms the matrix in strongly brecciated intervals and forms up to 50% of certain sections. Hole 87A-17 contains up to 50% pyrrhotite over 3.3 metres and up to 30% pyrite over 4.6 metres. These intersections appear to be hosted within a multi-stage breccia. Chromium-mica alteration was present throughout both holes. Porphyroblasts of biotite and chlorite are often euhedral and variably oriented within some sections and most likely indicate that post-deformational annealing and recrystallization was active.

Holes 23 and 24 encountered only minor sulphides within brecciated silica-chlorite and silica-sericite schists. Pyrrhotite (up to 5%) typically forms a majority of the matrix in the brecciated zones. Minor sections contain small bands of cordierite. Assay values are generally anomalous with gold values grading up to .006 oz/ton.

3.3 Targets

Eastern Section (continued)

Overall, holes 16 and 17 intersected a rich sulphide section within a brecciated quartz-grunerite iron-formation though assays revealed only trace values. Holes 23 and 24 intersect what appears to be a distal facies of the main iron-formation horizon to the west. It is uncertain as to whether the iron-formation in holes 16 and 17 is a continuation of the same iron-formation horizon encountered in the other sections.

3.4 Mineralization: General Discussion and Conclusions

Subsurface mineralization is primarily concentrated within deformed grunerite-iron formations and to a lesser degree in adjacent metapelitic wall rocks. Sulphide species are most commonly pyrrhotite followed by pyrite, sphalerite, galena, arsenopyrite and trace chalcopyrite. They usually occur in massive to semi-massive bands in breccias, and in fracture fillings as disseminated anastomosing, wispy laminae. The abundance and grade of mineralization appears related in part to boudinage geometry which deforms host iron formations. In areas of structural thickening of the iron-formations the volume of sulphide mineralization is greatest and is accompanied by highly anomalous precious and base metal values. In contrast, structurally thinned regions generally have smaller sulphide intersections along with lower precious and base metal values.

Gold and silver values across the property are generally somewhat sporadic and at this time do not show a clear association with a particular mineral phase. Base-metals values are much less sporadic and are generally higher within zones of structural thickening.

Transitions within mineralization trends occur along strike within the iron formations. Western section holes intersected mainly pyrrhotite-rich grunerite iron-formations. Within the Central section, sulphides are composed of nearly equal proportions of pyrrhotite and pyrite and are in association with the highest base and precious metal values. Eastern section holes, with the exception of holes 87A-16, 17, intersect a more distal facies of the iron formation horizon as rock types are dominated by a silica-rich metapelitic stratigraphy with minor argillites. Holes 16 and 17 intersect thick massive-pyrrhotite sections within a strongly brecciated iron-formation. It is uncertain as to whether this iron-formation is an eastward continuation of the main zone.

Brecciation and fragmentation textures were observed throughout the host iron-formations and served as the primary dilatant zones for mineral deposition/remobilization. Pelitic wall-rocks were found to contain local pods of massive sulphide, though the frequency and abundance are notably less than in the iron-formations. Coarse garnet horizons were also observed within footwall metapelites and serve as sub-surface marker units throughout the property. Chromium-mica is present as pervasive and locally intense alteration within various units across the claims.

3.4 Mineralization: General Discussion and Conclusions (continued)

Based upon mineral occurrences and textures, conclusions concerning mineralization on the Arseno Lake Property are as follows:

1. Mineralization on the property appears to be the product of two events:
 - (a) The bulk of the mineralization was deposited as a result of an extensive syngenetic exhalative event which occurred at the close of volcanism. This produced polymetallic massive-sulphide mineralization and associated magnetite iron-formations.
 - (b) This mineralization and its host rocks were then multiply deformed and metamorphosed within a major ductile shear zone. As a result of this, sulphide mineralization was structurally thickened, recrystallized and concentrated in some areas as well as thinned in others. Near the peak of metamorphism, a late phase of hydrothermal activity superimposed quartz-tourmaline-arsenopyrite-gold mineralization throughout portions of the shear zone. This event also probably produced abundant chromium-mica alteration.

The above mineralization model is similar in nature to that seen at the Castor Lake Property located east of and contiguous with the Arseno claims, although Castor mineralization is characterized by a stronger more localized epigenetic-arsenopyrite-gold overprint.

4.0 GROUND MAGNETICS REPORT

4.1 Introduction

Ground magnetometer surveys were run over portions of the property grid during 1986 and 1987. Results from this survey appear on Plates 2, 11, and 11 a. Technical data statements and procedure records of the survey are presented in Appendix 3. Tie-in readings at magnetometer base-stations were generally within 30 gammas and well below anomaly thresholds, hence, no diurnal corrections were calculated.

4.2 Arseno Lake Ground Magnetics (Arseno and Lucy Lake Grids)

Anomaly AM-1

Location: L32+00E,1+25N-1+40N to L43+00E,1+70N-1+90N including
L30+00E,1+00N to L43+00E,1+10N

and L50+00E,1+40N-2+60N to L57+60E,1+30N-2+10N
and L65+50E,0+90N-1+50N to L76+00E,0+60N-1+10N

Peak : 67,000 gammas

On the Arseno grid this signature is mostly overburden covered and is most likely due to sulphide concentration along the contacts between a prominent mafic volcanic unit and enclosing metapelitic rocks within the Active Zone.

Within the Lucy grid this anomaly represents a continuation from the Arseno grid and is most likely associated with a sulphide-bearing iron-formation horizon concentrated along the contact between the Northern Mafic Volcanics and the Active Zone. This anomaly is coincident with EM-16 anomaly AE-3.

Anomaly AM-2

Location: L30+00E,0+30N-0+70N to L43+00E,0+10N-0+60N

and L50+00E,0+20S-0+80N to L75+00E,0+00-0+20N

Peak : 65,000 gammas

This moderate to strong linear anomaly is centered within the Active Zone and is related to an iron-formation horizon which contains both massive and disseminated sulphides. Drill testing of this zone has revealed abundant concentrations of pyrrhotite and pyrite.

Anomaly AM-3

Location: L36+00E,1+60S-1+80S to L39+00E,1+40S-1+90S

Peak : 64,000 gammas

This weak anomaly is completely overburden covered and appears coincident with EM-16 anomaly AE-4. Drill testing of this area has confirmed a zone of semi-massive pyrrhotite concentrated along a folded contact between mafic metavolcanics and metaconglomerate.

2 Arseno Lake Ground Magnetics (Arseno and Lucy Lake Grids)
(continued)

Anomaly AM-4

Location: L43+00E,3+30S-4+20S

Peak : 65,000 gammas

This moderate to strong single line anomaly is contained within the Southern Mafic Volcanic package and appears nearly coincident with a unit of coarse, pillowed basalt. The exact nature of this anomaly is not known.

Anomaly AM-5

Location: L30+00E,5+10S-5+40S to L33+00E,4+90S-5+20S

and L50+00E,3+10S-6+50S to L84+00E,3+00S-3+40S

- note: in the vicinity of L50+00E, the anomaly is folded and displaced, hence the wide zone 2+10S-6+00S (see Plate 11a)

Peak : 69,641 gammas

This moderate to strong anomaly appears coincident with the contact zone between the Southern Mafic Volcanics and Southern Phyllites and with EM-16 anomaly AE-5. This magnetic high is related to an iron-formation horizon situated at the above contact zone. Trenching along this trend has revealed gossans and disseminated pyrrhotite, pyrite, and chalcopyrite.

Anomaly AM-6

Location: L54+00E,2+80N-3+00N to L82+00E,1+60N-1+90N

Peak : 64,967 gammas

This persistent anomaly is coincident with the contact zone between the Active Zone and Northern Mafic Volcanics. Mapping and trenching indicate a possible sulphide-bearing iron-formation horizon located within this contact zone. This magnetic high is also coincident with EM-16 anomaly AE-6.

Anomaly AM-7

Location: L50+00E,2+30S-2+50S to L81+00E,1+50S-2+20S

Peak : 64,008 gammas

This anomaly trends across the property and is related to the contact zone between the Southern Mafic Volcanics and a major debris-flow within the Active Zone. Geological mapping has outlined disseminated sulphide concentrations in places along this contact.

5.0 ELECTROMAGNETIC (EM-16) REPORT

5.1 Introduction

Ground electromagnetic surveys (EM-16) were run in 1987 over portions of the Arseno and Lucy Lake Grids. Results of this survey appear on Plates 3,4,5,6,12,13,14, and 15. Technical data statements and procedure records are included in Appendix 3. Please note that some 1985 results appear on Plates 4,5, and 6 in order to maintain continuity. For 1985 results refer to Gorzynski et.al., 1985.

5.2 Arseno Lake EM-16 (Arseno and Lucy Lake Grids)

The following results are derived from in-phase, quadrature, and contoured Fraser Filter values.

Anomaly AE-1

Location: L6+00E,0+50N-1+00N to L18+00E,0+70N-0+90N
and L25+00E,1+00N-1+20N to L27+00E,1+00N-1+30N

This moderate to strong conductor within the Active Zone is associated with a mostly overburden covered grunerite-iron-formation. This iron formation most likely contains massive and disseminated pyrrhotite, pyrite and/or magnetite. Previous work (1985) indicates that this conductor may be in part related to zones of disseminated arsenopyrite associated with quartz-tourmaline veins.

Anomaly AE-2

L6+00E,0+10S-0+20S to L49+00E,0+20N-0+50N
and continues from L55+50E,0+20S-0+30S to L62+50E,0+40S-0+70S

This moderate to strong conductor is persistent throughout the property and mostly overburden covered. Diamond Drilling and trenching confirm that this conductor is related to a small pyrrhotite-grunerite iron-formation and sulphide-bearing metapelitic wall rocks.

Anomaly AE-3

Location: L18+30E,1+60N-2+00N to L82+50,0+30N-0+60N

This moderate to strong overburden-covered conductor continues sporadically across the property and into the Castor Lake Property. The drill tested signature is associated with a mineralized (pyrrhotite, pyrite) contact zone between a horizon of mafic metavolcanics and metapelite in the vicinity of L33+00E. Minor traces of iron formation were also detected within this zone. Further to the east this conductor is associated with a drill tested iron-formation. This may be a continuation of the zone observed near L33+00E. This anomaly continues onto the Castor Lake Property where it is associated with a drill confirmed arsenopyrite/pyrite iron-formation (see 1987 Castor Lake Assessment Report).

5.2 Arseno Lake EM-16 (Arseno and Lucy Lake Grids)
(continued)

Anomaly AE-4

Location: L28+00E,2+60S-2+90S to L40+50E,1+50S-1+80S

This small weak conductor is completely overburden covered and is related to a sulphide zone concentrated along a folded contact between mafic metavolcanics and metaconglomerates. Diamond drilling has confirmed a zone of semi-massive pyrrhotite.

Anomaly AE-5

Location: L18+00E,4+50S-4+80S to L84+00E,2+90S-3+30S

This extremely strong conductor is persistent throughout the property and is folded and displaced in the vicinity of L49+00E to L57+00E. The conductor is coincident with the contact between the Southern Mafic Volcanics and Southern Phyllites. Trenched localities along this zone uncovered gossans which appear to be related to a sulphide-bearing iron formation.

Anomaly AE-6

Location: L71+00E,1+60N-2+00N to L82+50E,1+50N-1+90N

This moderately strong conductor is primarily overburden covered and appears coincident with the contact zone between the Northern Mafic Volcanics and Active Zone metapelites. As with other similar contacts in this property, a possible sulphide concentration may exist along this zone.

Anomaly AE-7

Location: L74+00E,3+00N-3+10N to L79+00E,2+60N-3+00N

This small weak conductor occurs within a zone of metapelitic lenses contained within the Northern Mafic Volcanics. These lenses may have sulphides concentrated within and around them. This locus of lenses may have originally been a single horizon that has since been structurally disseminated.

Anomaly AE-8

Location: L24+00E,6+60S-7+00S to L38+00E,7+20S-7+70S

This small weak conductor is completely overburden covered and occurs within the Southern Phyllite assemblage. The exact nature of this anomaly is not known.

6.0 GEOCHEMICAL REPORT

6.1 Introduction

Geochemical sampling was completed over various portions of the Arseno and Lucy Lake grids during 1985 and 1987. B-horizon soil samples were taken systematically over selected portions of the grid and where B-horizon samples were not available, A-horizon humus samples were taken. Rock samples and off-grid soil samples were collected at the discretion of the geologists and prospectors. Please note that both 1985 and 1987 results are plotted to retain continuity. Refer to Gorzynski et.al. 1985 for 1985 results and discussion.

The -80 mesh fraction of soil samples was analyzed and rock samples were crushed to -100 mesh. All samples were analyzed for gold (fire assay/atomic absorption finish) and 30-element I.C.P. Technical data statements and procedure records are included in Appendix 3.

Threshold values for gold and arsenic in soils were determined by the method of Sinclair (1978) and are listed in Plates 7 and 9.

In general, anomalous results in precious metals, base metals and other elements occur in both A and B soil horizons. The small portion of the anomalies which have been investigated were found in most cases to reflect bedrock mineralization.

6.2 Arseno Lake Geochemistry

6.2.1 Soil and Rock Geochemistry

Gold and arsenic analytical results for soil samples taken on the grids are plotted on Plates 7 and 16. Results for soil and rock samples taken off grid lines in 1985 and 1987 appear on Plates 8,9,17 and 18. Appendix 4 contains a complete list of analyses.

Anomaly AS-1

Location: L4+00E-L22+00E

This 1800 m x 200 m cluster of moderate to strong anomalies is centered on and around the baseline. Quartz-tourmaline veins with envelopes of disseminated arsenopyrite and selvages of massive arsenopyrite are common in the area. Zones of disseminated arsenopyrite up to 2 m wide also occur in silicious iron formation and sericitic schists with locally associated chromium-mica alteration. Rock grab samples have returned assays up to .07 oz/ton gold.

.2 Arseno Lake Geochemistry

6.2.1 Soil and Rock Chemistry (continued)

Anomaly AS-2

Location: L6+00L36+00E

This 3000 m x 300 m wide anomalous zone straddles the Southern Mafic Volcanic-Conglomerate (Active Zone) contact. Follow-up work on the anomaly trend exposed several small (20 cm wide) silicified lenses and quartz-veined zones with 10 to 30% arsenopyrite. A rock grab sample (GX5-R-110; see Gorzynski et.al., 1985) assayed .032 oz/ton gold. This anomaly is most likely related to sulphide concentrations distributed along the geologic contact.

Anomaly AS-3

Center: L32+00E,6+00S

This moderate cluster of anomalies straddle the overburden-covered contact zone between the Southern Mafic Volcanics and Southern Phyllites. Drill holes within this zone have revealed massive pyrite zones within a chert horizon along the contact.

Anomaly AS-4

Center: L33+00E,0+70N

This small cluster of anomalies is centered around an exposure of grunerite bearing iron-formation (Main Showing). Semi-massive arsenopyrite, pyrrhotite, pyrite and sphalerite have been recovered from drill holes and trenches within this area. Gold values ranging up to 0.4 oz/ton over .6 m were received from drill core. Surface values from soils have yielded gold values of up to 0.17 oz/ton. Rock channel samples assayed 4.9% Pb, 3.6% Zn, 0.1% Cu, 0.21% As, 8.1 oz/ton Ag, and .09 oz/ton Au over a true width of 1.1 metres.

Anomaly AS-5

Location: L42+00E-L50+00E

This 800m x 300 m wide zone of anomalies is centered around the contact between the Southern Mafic Volcanics and Southern Phyllites. Geological mapping has outlined small zones of disseminated pyrite and chalcopyrite adjacent to the contact.

Anomaly AS-6

Center: L40+00E,1+50N

This small but strong anomaly is on the site of one of the original discoveries. Sparse disseminated arsenopyrite lenses of galena and sphalerite and local chromium-mica alteration in silicious iron formation. Rock grab samples assayed up to .04 oz/ton gold. This zone may be related to anomaly AS-4.

6.2 Arseno Lake Geochemistry

6.2.1 Soil and Rock Chemistry (continued)

Anomaly AS-7

Location: L55+00E-L67+00E

This 1200 m x 100 m wide zone is centered around the baseline and is coincident with EM-16 and ground magnetic anomalies AE-2,3 and AM-2 respectively. Trenching and diamond drilling have delineated an iron formation horizon along this trend which hosts significant massive pyrrhotite and sphalerite.

Anomaly AS-8

Center: L80+00E, 2+00S

This small line anomaly centers around an outcrop of highly deformed and altered meta-ultramafic. Geologic mapping has uncovered small disseminated pods of pyrite and chalcopyrite. Other single station and small cluster anomalies occur throughout the grid and have yet to be investigated.

Other rock samples were collected from various locations on the property. The most significant anomalies are discussed in the above section (6.2.1) and in section 2.6. Gold and arsenic values are plotted on plates 8,9,17 and 18. A full list of analyses is presented in Appendix 4.

7.0 References

- Andrews, A.J., Sharpe, D.R. and Janes, D.A.
1981: Preliminary Reconnaissance of the Weagamow-North Caribou Lake Metavolcanic-Metasedimentary Belt, including the Opapimiskan Lake (Musselwhite) Gold Occurrences; p. 196-202 in Summary of Field Work, 1981, by the Ontario Geological Survey, edited by John Wood, O.L. White, R.B. Barlow and A.C. Colvine, Ontario Geological Survey, Miscellaneous Paper 100, 255 p.
- Bartlett, J.R., Breaks, F.W., DeKemp, E.A., Shields, H.N., and assistants.
1984: Eyapamikama Lake Area (Opapimiskan Lake Project), Kenora District (Patricia Portion); Ont. Geol. Surv., Prelim. Map P.2834, scale 1:31,680.
- Breaks, F.W., Bartlett, J.R., DeKemp, E.A., Finamore, P.F., Jones, G.R., MacDonald, A.J., Shields, H.N., and Wallace H.
1984: "Opapimiskan Lake Project: Precambrian Geology, Quaternary Geology, and Mineral Deposits of the North Caribou Lake Area, District of Kenora, Patricia Portion", in Ontario Geological Survey "Summary of Field Work, 1984, Misc. Paper MP 119, p. 258-273.
- Elsby, D., Youngman, B., Gorzynski, G.
1987: Castor Lake Property, 1987 Assessment Report, Patricia Mining Division.
- Emslie, R.F.
1962: "Wunnummin Lake (NYS 53A), Ontario", GSC Map 1-1962, scale 1" = 4 mi.
- Fripp, R.E.P.
1986: Stratabound Gold Deposits in Archean Banded Iron-Formation, Rhodesia; Econ. Geol., v.71, p. 58-75.
- Gorzynski, G., Youngman, B.A., Tupper, D.W.
1985: Eyapamikama Lake - North Rim Properties Arseno Lake, Castor Lake, McGruer Lake, 1985 Assessment Report, Patricia Mining Division, Vol. I,II.
- Hall, R.S. and Rigg, D.M.
1986: Geology of the West Anticline Zone, Musselwhite Prospect, Opapimiskan Lake, Ontario, Canada; p. 124-136 in Proceedings of Gold '86 Symposium, Toronto, 1986.
- McLarty, E.A.
1985: A Detailed Study of the Mineralogy, Structure, and Metal Distribution within the Pollux Lake BIF, Northeastern Ontario; unpublished B.Sc. Thesis.

ODM-GSC

1960: "North Caribou Lake - Airborne Magnetics Map 919G", scale 1" - 1 mi.

Piroscho, D. and Shields, H.

1985: Geology and Gold Mineralization of the North Caribou Lake Greenstone Belt, District of Kenora, in Ontario Geological Survey, Miscellaneous Paper 126, p. 277-286.

Satterly, J.

1941: "Geology of the Windigo-North Caribou Lakes Area", Ont. Dept. Mines Annual Rpt. 49, pt. 9, 32 p. and 2 maps.

Sinclair, A.J.

1978: Applications of probability graphs in mineral exploration. Assoc. Expl. Geochemists, Spec. Vol. 4, 95 pp.

APPENDIX 1

Property Holders

Operator:

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

Joint Venture Partners:

Westfield Minerals Limited
940-800 West Pender Street
Vancouver, British Columbia
V6C 2V6

Newfields Minerals Inc.
808-750 West Pender Street
Vancouver, British Columbia
V6C 2T8

APPENDIX 2

Personnel and Survey Dates

APPENDIX 2

PERSONNEL AND SURVEY DATES

ARSENO LAKE PROPERTY

<u>PERSONNEL</u>	<u>WORK PERIODS</u>	
	<u>1986</u>	<u>1987</u>
DARREN ELSBY 6869 123rd Street Surrey, B.C.	Field : ---- Office : ----	May 29 - Sept. 29 Oct. 15 - Dec. 22 Jan. 5 - March 30/88
GEORGE GORZYNSKI 3836 West 16th Ave. Vancouver, B.C.	Field : Sept. 9-15 Office : Nov. 15-20	May 29 - Oct. 21 Nov. 2-17 Feb. 15 - March 30/88
DAN KILBY 2420 Edgemont Blvd. North Vancouver, B.C.	Field : ---- Office : ----	Aug. 24 - Oct. 16 Oct. 20 - Nov. 15
BRUCE YOUNGMAN 6565 Whiltshire St. Vancouver, B.C.	Field : July 11-21 Office : Nov. 15 - Dec.15	May 29 - June 26 Sept. 15 - Oct. 31
GARY LOHMAN 31A Main St. Springdale, Nfld.	Field : Sept. 9-15 Office : Nov. 15-25	---- ----
H. ERIC EWEN 3239 Ganymede Dr. Burnaby, B.C.	Field : ---- Office : ----	May 29 - June 25 Nov. 15 - Dec. 22
JERRY HO 1334 Woodbine Dr. Toronto, Ont.	Field : ----	May 29 - June 25
TODD NICKEL RR #2, Site 15 Dryden, Ont.	Field : ----	May 29 - Oct. 21
JOHN RITCEY 10811 Maplecrest Rd. SE Calgary, Alberta	Field : July 11-21	----
ROBERT WARREN 1447 Wende Rd. Victoria, B.C.	Field : July 11-21	----
SEAN MCGOWAN 83 Alexandra Blvd. Toronto, Ont.	Field : ----	July 16 - Aug. 21

Appendix 2 -Personnel and Dates-cont

<u>PERSONNEL</u>	<u>WORK PERIODS</u>	
	<u>1986</u>	<u>1987</u>
JEFF NEWBY Field : 625 Langworthy Cres. Apt. #217 Thunder Bay, Ont.	-----	July 16 - Aug. 21.

APPENDIX 3

Technical Data Statements and Procedure Records

1986 - 1987

ARSENO LAKE PROPERTY

GEOCHEMICAL ANALYSES EXPENDITURES
(Rock and Soils)

TOTAL AMOUNT AS PER ENCLOSED INVOICES:

\$18,802.80

0M87-2-JV-073

ACME ANALYTICAL LABORATORIES LTD.

PHONE: 253-3158

852 (st Hastings St., Vancouver, B.C. 1R6

File: B6-1672

Date: AUG 1 1986

NORTHERN DYNASTY EXPLORATION
844 W. HASTINGS ST
VANCOUVER B.C.
V6C 1C8

TERMS:
NET TWO WEEKS
2% PER MONTH CHARGED ON
OVERDUE ACCOUNTS.

NUMBER	ASSAY	PRICE	AMOUNT
919	ICP ANALYSIS @	6.00	5514.00
916	GEOCHEM AU ASSAY @	4.00	3664.00
3	GEOCHEM AU BY FA + AA @	5.50	16.50
704	SOIL SAMPLE PREPARATION @	.75	528.00
212	FULVERIZING SAMPLE @	1.50	318.00
3	ROCK SAMPLE PREPARATION @	3.00	9.00

			10049.50
	10 % DISCOUNT		-1004.95
	GREYHOUND LINES # 26545094		119.70
	GREYHOUND LINES # 26545105		125.10
	GREYHOUND LINES # 26545116		114.90

	TOTAL		9404.25

*Pd. Aug 8
277*

ARSEND.

MS.

PLEASE PAY LAST AMOUNT →

1986
ARSEND LAKE PROPERTY
GEOCHEMICAL EXPENDITURE
\$ 9044.55

NORTHERN DYNASTY EXPLORATIONS LTD.
344 W. HASTINGS STREET PHONE (604) 682-3711
VANCOUVER, B.C. V6C 1C8

277

August 8 19 86

PAY TO THE ORDER OF ACME ANALYTICAL \$ 9,942.17

Nine thousand, nine hundred and forty-two 17/100 DOLLARS

NORTHERN DYNASTY EXPLORATIONS LTD.

BANK OF BRITISH COLUMBIA
999 WEST HASTINGS ST. PH. 668-4630
VANCOUVER, B.C. V6C 1M3

PER

PER

⑈0000277⑈ ⑆000020⑈016⑆ 30632⑈6⑈02⑈ ⑆0000994217⑈

Northern Analytical Laboratories Ltd

TO THE CREDIT OF

FOR DEPOSIT ONLY

AG '86 11 100-098210
BANK OF MONTREAL
VANCOUVER REGIONAL
DATA CENTRE

07850001
07850001
07850001

⑆214020⑈

1986

ARSENIC LAKE PROPERTY

GEOCHEMICAL EXPENDITURE

\$ 9044.55

REMAINING DOLLARS SPENT ON
TRANSPORTATION AND UNRELATED
ANALYSES

ACME ANALYTICAL LABORATORIES LTD.

PHONE: 253-3158

852 West Hastings St., Vancouver, B.C. V6A 1R6

File: 87-2400 ✓

Date: JULY 22 1987

NORTHERN DYNASTY EXPLORATION LTD.
844 WEST HASTINGS ST.
VANCOUVER B.C.
V6C 1C8

TERMS:
NET TWO WEEKS.
1% PER MONTH CHARGED ON
OVERDUE ACCOUNTS.

NUMBER	ASSAY	PRICE	AMOUNT
PROJECT : ARSEND LAKE			
12	ICF ANALYSIS @	6.00	72.00
6	GEOCHEM AU ASSAY @	4.25	25.50
6	GEOCHEM AU BY FA+AA @	5.75	34.50
6	SOIL SAMPLE PREPARATION @	.75	4.50
6	ROCK SAMPLE PREPARATION @	3.00	18.00
			154.50
SURCHARGE FOR UNDER 20 SAMPLES PER BATCH			5.00
TOTAL			159.50

**APPROVED FOR
PAYMENT**

AS
ARSEND
659.

PLEASE PAY LAST AMOUNT →

CH# 1349

1987

ARSEND LAKE PROPERTY
GEOCHEMICAL EXPENDITURE

\$ 159.50

NORTHERN DYNASTY EXPLORATIONS LTD.
844 W. HASTINGS STREET PHONE (604) 682-3727
VANCOUVER, B.C. V6C 1C8

1349

July 28 19 87

PAY TO THE ORDER OF ACME ANALYTICAL \$ 7,250.01

Seven thousand, two hundred and fifty -----01
100 DOLLARS

NORTHERN DYNASTY EXPLORATIONS LTD.

BANK OF BRITISH COLUMBIA
999 WEST HASTINGS ST. PH. 668-4630
VANCOUVER, B.C. V6C 1M3

PER [Signature]
PER [Signature]

⑈0001349⑈ ⑆00020⑆016⑆ 30632⑆6⑆02⑆ ⑆000072500⑆⑈

07120-003
DEPOSIT TO ACME ANALYTICAL LAB. LTD.
ACCOUNT NUMBER
30 JUL 30 87
ROYAL BANK
BRITISH COLUMBIA
VANCOUVER
HASTINGS
STREET
VANCOUVER
B.C.

1987

ARSENAL LAKE PROPERTY
GEOCHEMICAL EXPENDITURE

\$ 159.50

REMAINING DOLLARS SPENT ON
TRANSPORTATION AND UNRELATED
ANALYSES

ACME ANALYTICAL LABORATORIES LTD.

PHONE: 253-3158

852 1st Hastings St., Vancouver, B.C. A 1R6

File: 87-3179

Date: AUGUST 19 1987

NORTHERN DYNASTY
844 W. HASTINGS ST.
VANCOUVER B.C.
V6C 1C8

TERMS:
NET TWO WEEKS -
1% PER MONTH CHARGED ON
OVERDUE ACCOUNTS.

NUMBER	ASSAY	PRICE	AMOUNT
	PROJECT : ARSENO LAKE		
172	ICP ANALYSIS @	6.00	1032.00
172	GEOCHEM AU ASSAY @	4.25	731.00
24	ROCK SAMPLE PREPARATION @	3.00	72.00
148	SOIL SAMPLE PREPARATION @	.75	111.00
16	PULVERIZING SAMPLE @	1.50	24.00
	WESTERN CANADIANS #861812	659	1970.00
		647.	120.75
	TOTAL		2090.75

OSV 659

ARSENO
APPROVED FOR
PAYMENT

PLEASE PAY LAST AMOUNT →

1987

ARSENO LAKE PROPERTY

GEOCHEMICAL EXPENDITURE

\$ 1970.00

1419

ACME ANALYTICAL LABORATORIES LTD.

PHONE: 253-3158

852 1st Hastings St., Vancouver, B.C. V1R6

File: 87-3390

Date: AUGUST 26 1987

NORTHERN DYNASTY EXPLORATIONS LTD.
844 W. HASTINGS ST.
VANCOUVER B.C.
V6C 1C8

TERMS:
NET TWO WEEKS.
1% PER MONTH CHARGED ON
OVERDUE ACCOUNTS.

NUMBER	ASSAY	PRICE	AMOUNT
253	ICP ANALYSIS @	6.00	1518.00
253	GEOCHEM AU ASSAY @	4.25	1075.25
253	SOIL SAMPLE PREPARATION @	.75	189.75
55	PULVERIZING SAMPLE @	1.50	82.50
		659	2865.50
	FORSTER TRUCKING LTD. #862325-00	647.	60.65
	TOTAL		2926.15

m Aug. 30 1987

ARSENAL

APPROVED FOR PAYMENT

Pd. Sep 1/87 #1419

PLEASE PAY LAST AMOUNT →

1987

ARSENAL LAKE PROPERTY
GEOCHEMICAL EXPENDITURE
\$ 2865.50

NORTHERN DYNASTY EXPLORATIONS LTD.

844 W. HASTINGS STREET PHONE (604) 682-3727
VANCOUVER, B.C. V6C 1C8

1419

September 1 19 87

PAY TO THE ORDER OF ACME ANALYTICAL \$ 6,310.40

Six thousand, three hundred and ten ----- 40
100 DOLLARS

BANK OF BRITISH COLUMBIA
999 WEST HASTINGS ST. PH. 668-4630
VANCOUVER, B.C. V6C 1M3

NORTHERN DYNASTY EXPLORATIONS LTD.

PER *[Signature]*
PER *[Signature]*

⑈0001419⑈ ⑆00020⑈016⑆ 30632⑈6⑈02⑈ ⑆0000631040⑆

ACCOUNT NUMBER
1419

SE 87 03
ROYAL BANK
BRITISH
COLUMBIA PC

00740-003
THE ROYAL BANK OF CANADA
CHINATOWN BRANCH
VANCOUVER B.C.
0-40-003

838615176

1987

ARSEND LAKE PROPERTY

GEOCHEMICAL EXPENDITURE

\$ 1970.00 + \$ 2865.50 = \$ 4835.50

REMAINING DOLLARS SPENT ON
TRANSPORTATION AND UNRELATED
ANALYSES

ACME ANALYTICAL LABORATORIES LTD.

PHONE: 253-3158

852 East Hastings St., Vancouver, B.C. V6A 1R6

File: 87-3454

Date: SEPT. 1 1987

NORTHERN DYNASTY EXPLORATION
844 W. HASTINGS ST.
VANCOUVER B.C.
V6C 1C8

TERMS:
NET TWO WEEKS -
1% PER MONTH CHARGED ON
OVERDUE ACCOUNTS.

NUMBER	ASSAY	PRICE	AMOUNT
	PROJECT : ARSENO LAKE		
214	ICP ANALYSIS @	6.00	1284.00
194	GEOCHEM AU ASSAY @	4.25	824.50
20	GEOCHEM AU BY FA+AA @	5.75	115.00
20	ROCK SAMPLE PREPARATION @	3.00	60.00
194	SOIL SAMPLE PREPARATION @	.75	145.50
61	PULVERIZING SAMPLE @	1.50	91.50

			<u>2520.50</u>
	PORTER TRUCKING LTD. #862083-00		60.65

	TOTAL		2581.15

**APPROVED FOR
PAYMENT**

*ARSENO
659.*

#1447

PLEASE PAY LAST AMOUNT →

1987

ARSENO LAKE PROPERTY

GEOCHEMICAL EXPENDITURE

\$ 2520.50

ACME ANALYTICAL LABORATORIES LTD.

PHONE: 253-3158

852 (st Hastings St., Vancouver, B.C. V... 1R6

File: 87-3781 ✓

Date: SEPT. 12 1987

NORTHERN DYNASTY EXPLORATION
844 W. HASTINGS ST.
VANCOUVER B.C.
V6C 1C8

TERMS:
NET TWO WEEKS -
1% PER MONTH CHARGED ON
OVERDUE ACCOUNTS.

NUMBER	ASSAY	PRICE	AMOUNT
	PROJECT : ARSEND LAKE		
188	ICF ANALYSIS @	6.00	1128.00
173	GEOCHEM AU ASSAY @	4.25	735.25
15	GEOCHEM AU BY FA+AA @	5.75	86.25
173	SOIL SAMPLE PREPARATION @	.75	129.75
15	ROCK SAMPLE PREPARATION @	3.00	45.00
40	PULVERIZING SAMPLE @	1.50	60.00
	TOTAL		2184.25
	OTV . 659.		

Pd. Sept 22/87 # 1447

PLEASE PAY LAST AMOUNT →

1987
ARSEND LAKE PROPERTY
GEOCHEMICAL EXPENDITURE
\$ 2184.25

01-0101
87-3454

NORTHERN DYNASTY EXPLORATIONS LTD.
844 W. HASTINGS STREET PHON (604) 682-3727
VANCOUVER, B.C. V6C 1C8

1447

September 22, 1987

PAY TO THE ORDER OF ACME ANALYTICAL

\$ 8,193.52

Eight thousand, one hundred and ninety-three ----- 52 DOLLARS
100

NORTHERN DYNASTY EXPLORATIONS LTD.

BANK OF BRITISH COLUMBIA
999 WEST HASTINGS ST. PH. 668-4630
VANCOUVER, B.C. V6C 1M3

PER

PER

⑈0001447⑈ ⑆00020⑆016⑆ 30632⑆6⑆02⑈ ⑈0000819352⑈

SE '87 28
ROYAL BANK
BRITISH COLUMBIA
PC

28 SEP 87

07120-003
DEPOSIT ON HAND
09093425
NORTHERN DYNASTY EXPLORATIONS LTD.

1987

ARSENAL LAKE PROPERTY

GEOCHEMICAL EXPENDITURE

\$ 2184.25 + \$ 2520.50 = \$ 4704.75

REMAINING DOLLARS SPENT ON
TRANSPORTATION AND UNRELATED
ANALYSES

ACME ANALYTICAL LABORATORIES LTD.

PHONE 253-3158

852 East Hastings St., Vancouver, B.C. V6A 1R6

File: 87-4482

Date: OCT. 6 1987

NORTHERN DYNASTY EXP.
844 W. HASTINGS ST.
VANCOUVER B.C.
V6C 1C8

TERMS:
NET TWO WEEKS.
1% PER MONTH CHARGED ON
OVERDUE ACCOUNTS.

NUMBER	ASSAY	PRICE	AMOUNT
	PROJECT : ARSEND		
15	GEOCHEM CU PB ZN & AG ASSAY @	4.25	63.75
7	ICP ANALYSIS @ (5 ROCK, 2 SOILS)	6.00	42.00
20	GEOCHEM AU BY FA+AA @	5.75	115.00
2	GEOCHEM AU ASSAY @	4.25	8.50
20	CORE & ROCK SAMPLE PREPARATION @ 5 ROCK @ 3.00/ROCK =	3.00	60.00
2	SOIL SAMPLE PREPARATION @	0.75	1.50

			290.75
	COURIER CHARGES		5.00

	TOTAL		295.75

APPROVED FOR
PAYMENT

ARSEND.

#1502

PLEASE PAY LAST AMOUNT →

1987

ARSEND LAKE PROPERTY

GEOCHEMICAL EXPENDITURE

58.50

NORTHERN DYNASTY EXPLORATIONS LTD.

1502

844 W. HASTINGS STREET PHONE (604) 682-3727
VANCOUVER, B.C. V6C 1C8

Oct. 23 19 87

PAY TO THE ORDER OF ACME ANALYTICAL \$ 3,365.45

Three thousand, three hundred and sixty-five ----- 45
100 DOLLARS

NORTHERN DYNASTY EXPLORATIONS LTD.

BANK OF BRITISH COLUMBIA
999 WEST HASTINGS ST. PH. 688-4630
VANCOUVER, B.C. V6C 1M3

PER _____
PER _____

⑈0001502⑈ ⑆00020⑈016⑆ 30632⑈6⑈02⑈ ⑆0000336545⑆

DEPOSIT ONLY TO THE ORDER OF THE ISSUING INSTITUTION

OT '87, 26,
ROYAL BANK
BRITISH COLUMBIA PC

26 OCT 87

01081017

028761087

1987

ARSENIC LAKE PROPERTY

GEOCHEMICAL EXPENDITURE

\$ 58.50

REMAINING DOLLARS SPENT ON
TRANSPORTATION AND UNRELATED
ANALYSES

APPENDIX 4

Chemical Analyses

1986

ROCK AND Soil

GEOCHEMICAL

ASSAYS

ARSENIC

ACME ANALYTICAL LABORATORIES LTD.

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 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR NH, FE, CA, P, CR, MG, BA, TI, D, AL, NA, K, V, SI, ZR, CE, SM, Y, ND AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 SAMPLE TYPE: SOIL -80 MESH AU ANALYSIS BY AA FROM 10 GRAM SAMPLE, *Pulverized*
 PBT - ROCKS

DATE RECEIVED: JULY 26 1986 DATE REPORT MAILED: *Aug 1 1986* ASSAYER: *D. Kelly*... DEAN TOYE, CERTIFIED B.C. ASSAYER.

NORTHERN DYNASTY FILE # 86-1672

PAGE 1

SAMPLE#	No PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Br PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	V PPM	Au PPM
AL 10E 5+10S B	1	16	12	97	.7	12	5	205	3.50	2	5	ND	10	6	1	3	2	56	.09	.116	5	25	.45	40	.19	3	3.20	.02	.09	1	1
AL 10E 5+20S B	1	18	12	137	.4	13	5	194	4.26	2	5	ND	15	6	1	2	2	55	.08	.303	5	29	.36	36	.17	2	4.32	.02	.06	1	1
AL 10E 5+30S B	1	5	7	33	.1	3	1	53	1.37	2	5	ND	3	6	1	6	2	39	.07	.023	4	11	.09	24	.12	2	.57	.01	.02	1	1
AL 10E 5+40S B	1	7	8	38	.1	9	3	97	1.73	2	5	ND	5	6	1	2	2	52	.10	.033	4	24	.27	21	.17	2	.76	.02	.04	1	1
AL 10E 5+60S B	1	4	6	22	.1	3	1	41	1.13	7	5	ND	3	4	1	2	2	41	.05	.026	4	11	.06	13	.15	2	.38	.01	.02	1	1
AL 10E 5+70S B	1	80	12	61	.6	160	18	184	4.19	10	5	ND	4	4	1	2	2	106	.11	.109	2	643	.79	23	.27	4	2.86	.02	.03	1	11
AL 10E 5+90S A	1	29	15	40	.2	11	2	49	.52	2	5	ND	1	19	1	2	2	10	.28	.048	14	15	.06	80	.02	3	.41	.01	.04	1	1
AL 10E 6+00S A	1	30	23	74	.6	15	2	349	.51	3	5	ND	2	39	1	5	3	9	.65	.066	14	8	.09	157	.02	5	.36	.02	.07	1	1
AL 10E 6+10S B	1	3	5	14	.1	3	1	42	.57	3	5	ND	2	4	1	2	2	21	.06	.004	2	8	.09	9	.13	2	.24	.01	.01	1	1
AL 10E 6+20S B	1	4	2	24	.1	6	2	69	.92	2	5	ND	3	5	1	2	2	29	.07	.026	4	14	.15	18	.11	3	.39	.01	.05	1	1
AL 10E 6+30S B	2	12	14	62	.1	16	5	148	2.81	2	7	ND	8	6	1	5	2	74	.06	.053	3	33	.36	35	.23	4	1.03	.02	.06	1	1
AL 10E 6+40S B	1	12	13	52	.2	11	4	176	2.07	3	6	ND	6	10	1	4	2	56	.15	.029	6	29	.30	42	.21	3	.89	.02	.07	1	1
AL 10E 6+50S B	1	42	32	69	.3	22	9	196	3.09	2	5	ND	13	9	1	3	2	44	.10	.043	21	28	.36	52	.12	4	3.12	.02	.09	1	1
AL 10E 6+60S B	1	35	19	34	.1	36	6	108	1.64	4	5	ND	8	7	1	2	2	30	.09	.008	9	89	.37	28	.09	3	.88	.01	.04	1	1
AL 10E 6+70S B	1	23	10	43	.1	22	6	122	2.50	7	5	ND	3	7	1	2	2	60	.10	.015	8	41	.35	27	.15	3	.99	.02	.05	1	1
AL 10E 6+80S B	1	27	14	49	.1	41	7	126	3.49	46	5	ND	5	7	1	3	2	70	.10	.028	5	82	.34	25	.15	4	1.09	.02	.05	2	1
AL 10E 6+90S B	1	12	14	44	.2	11	4	129	3.38	2	5	ND	9	6	1	10	2	71	.09	.060	7	38	.25	28	.15	4	2.83	.02	.06	1	2
AL 10E 7+00S A	1	76	17	25	.1	25	3	15	.94	2	5	ND	3	26	1	2	2	7	.18	.051	53	27	.06	73	.02	2	1.01	.01	.02	1	1
AL 16E 3+00N A	1	49	11	46	.6	11	3	52	.85	4	5	ND	2	10	1	2	2	15	.30	.042	16	13	.06	30	.04	2	.66	.02	.04	1	1
AL 16E 2+70N B	1	123	16	55	.6	68	19	142	4.98	4	5	ND	1	1	1	5	5	226	.11	.019	2	76	.57	26	.24	2	1.29	.03	.12	1	1
AL 16E 2+50N B	6	353	260	102	6.5	60	20	436	12.45	2	5	ND	1	5	1	2	90	306	.09	.031	2	135	1.48	86	.48	2	3.89	.06	.93	16	9
AL 16E 2+20N B	17	340	28	120	.5	48	14	149	2.43	10	5	ND	1	2	1	2	2	87	.18	.012	2	59	.52	24	.17	2	1.11	.03	.05	2	1
AL 16E 2+00N B	10	71	21	51	.4	16	5	93	2.39	6	5	ND	6	5	1	4	2	93	.10	.015	5	22	.23	27	.22	3	.89	.02	.05	1	1
AL 16E 1+90N B	13	204	77	90	2.0	34	9	87	4.24	2	5	ND	7	6	1	4	2	90	.10	.018	10	57	.26	61	.17	2	1.74	.02	.05	1	1
AL 16E 1+60N B	6	248	116	97	2.4	52	51	788	1.54	4	7	ND	5	39	3	5	2	10	2.64	.137	84	14	.15	137	.01	6	1.24	.04	.04	1	1
AL 16E 1+50N A	22	186	19	497	4.3	137	45	32456	6.34	46	8	ND	14	33	11	2	2	86	2.80	.212	194	65	.20	457	.02	4	1.92	.06	.05	1	1
AL 16E 1+30N A	2	61	8	119	1.2	45	7	7386	1.66	6	8	ND	6	39	3	2	2	15	2.82	.144	101	17	.09	179	.01	10	1.73	.04	.01	1	1
AL 16E 1+20N A	1	82	66	269	1.6	46	4	1034	.56	3	6	ND	1	36	7	2	2	10	5.44	.187	24	13	.08	87	.01	9	.77	.05	.02	1	1
AL 16E 1+10N A	1	107	496	456	1.4	36	9	198	1.29	3	5	ND	3	21	17	2	2	10	.82	.096	43	13	.05	101	.01	4	1.23	.02	.03	1	1
AL 16E 1+00N A	1	101	531	58	2.0	11	2	26	2.17	2	5	ND	1	7	1	3	2	12	.15	.099	17	22	.02	38	.02	5	1.85	.01	.02	1	1
AL 16E 0+90N A	1	93	508	113	4.1	17	5	32	.77	6	5	ND	2	17	2	3	2	8	.32	.081	27	13	.04	65	.02	4	1.02	.02	.04	1	1
AL 16E 0+60N B	2	254	66	61	12.8	24	8	162	11.16	3	5	ND	3	2	1	4	2	272	.03	.032	10	88	.75	53	.20	2	2.89	.03	.32	3	2
AL 16E 0+50N B	1	41	402	177	31.2	39	9	439	8.13	744	5	ND	1	2	1	60	2	387	.09	.019	2	82	.82	13	.55	2	2.06	.03	.29	1	55
AL 16E 0+00N A	1	25	20	67	.8	23	4	175	.95	11	5	ND	3	36	1	2	2	6	.05	.138	40	7	.07	73	.01	4	.63	.02	.02	1	1
AL 16E 0+108 A	4	75	31	30	2.6	37	18	1469	2.35	13	7	ND	11	31	1	2	2	28	.69	.239	145	47	.05	74	.02	5	2.33	.03	.02	1	1
AL 16E 0+20S A#1	1	74	29	63	.8	78	7	217	1.56	10	6	ND	6	33	1	2	2	30	.61	.060	64	30	.26	92	.06	4	1.32	.03	.07	1	1
STD C/AU 0.5	20	62	40	138	7.1	74	30	1151	3.98	40	16	7	35	50	19	15	18	72	.48	.107	38	62	.89	188	.09	37	1.73	.09	.13	14	505

NORTHERN DYNASTY FILE W 86-1672

PAGE 2

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	V	AuI
	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH
AL 16E 0+20S A12	1	93	34	25	2.7	30	4	20	2.83	4	5	ND	7	13	1	2	2	8	.22	.099	51	11	.02	41	.02	6	1.58	.01	.03	1	1
AL 16E 0+30S A	1	31	14	51	.6	27	2	24	.47	2	5	ND	4	43	1	2	2	3	.71	.043	64	2	.05	41	.01	2	.50	.02	.03	1	1
AL 16E 0+40S A	1	42	15	35	.4	48	3	13	.27	2	5	ND	4	49	2	2	2	4	.72	.037	25	2	.04	53	.01	2	.36	.02	.03	2	1
AL 16E 0+50S A	1	80	34	35	.7	63	2	13	.61	3	5	ND	7	55	1	2	2	5	.96	.041	117	5	.06	121	.02	2	.85	.02	.03	1	1
AL 16E 0+80S B	1	38	27	81	.2	27	8	201	3.24	3	5	ND	6	10	1	2	2	58	.11	.032	12	40	.48	43	.19	5	1.51	.02	.12	1	1
AL 16E 0+90S B	1	4	10	38	.3	4	3	90	1.29	3	5	ND	6	6	1	2	2	30	.07	.025	4	7	.20	25	.17	2	.58	.01	.07	2	1
AL 16E 1+10S B	1	20	17	77	.2	59	8	114	3.11	3	5	ND	5	4	1	2	2	84	.06	.122	7	148	.49	27	.16	3	1.11	.02	.04	1	2
AL 16E 1+20S B	1	15	11	74	.2	10	5	157	1.94	2	5	ND	5	8	1	2	2	38	.12	.057	7	21	.33	23	.17	2	.86	.02	.07	1	1
AL 16E 1+30S B	1	23	10	63	.3	11	4	175	1.73	3	5	ND	6	5	1	2	2	32	.11	.041	6	15	.25	25	.14	2	.89	.02	.08	1	1
AL 16E 1+40S B	1	13	15	74	.3	11	4	173	2.21	3	5	ND	7	5	1	2	2	40	.08	.096	7	23	.34	37	.17	3	1.32	.02	.08	1	2
AL 16E 1+70S B	1	8	10	62	.2	7	4	191	1.70	2	5	ND	8	5	1	2	2	31	.09	.078	9	15	.24	30	.12	2	.88	.01	.08	1	11
AL 16E 1+90S B	1	19	18	82	.4	32	7	152	3.21	7	5	ND	6	5	1	2	2	65	.10	.144	6	68	.39	26	.19	6	1.27	.02	.09	1	1
AL 16E 2+00S B	1	10	13	82	.3	19	5	151	2.16	5	5	ND	5	6	1	2	2	44	.11	.087	6	25	.37	67	.18	3	.88	.02	.08	1	1
AL 16E 2+10S B	1	8	8	20	.1	5	2	51	1.47	2	5	ND	3	6	1	2	3	32	.06	.023	5	10	.11	15	.11	2	.44	.01	.02	2	1
AL 16E 2+60S B	1	35	9	29	.2	174	13	101	2.66	18	5	ND	2	5	1	2	4	66	.09	.023	5	380	.84	29	.16	3	1.08	.02	.04	2	13
AL 16E 2+70S B	1	13	8	21	.1	68	6	61	1.87	12	5	ND	2	3	1	3	2	52	.04	.007	3	150	.34	15	.12	2	.75	.01	.02	2	3
AL 16E 2+80S B	1	3	2	8	.1	15	2	19	.26	3	5	ND	1	2	1	2	2	10	.05	.004	2	47	.08	12	.03	2	.17	.01	.01	1	2
AL 16E 3+00S B	1	8	11	62	.6	21	5	161	1.94	6	5	ND	4	5	1	2	2	40	.11	.028	4	35	.38	30	.17	2	.88	.02	.11	1	2
AL 16E 3+10S B	1	17	43	273	.2	46	7	160	2.80	19	5	ND	4	5	1	2	3	59	.07	.038	7	104	.47	32	.18	3	1.10	.02	.08	1	1
AL 16E 3+30S B	1	7	5	21	.1	78	6	44	1.53	4	5	ND	1	2	1	2	2	30	.04	.008	4	144	.60	14	.04	2	.82	.01	.02	2	1
AL 16E 3+50S B	1	22	10	64	.1	186	17	113	2.92	91	5	ND	3	3	1	2	2	51	.09	.005	8	371	1.13	45	.12	4	1.76	.02	.02	1	1
AL 16E 3+60S B	1	29	11	47	.1	119	11	96	3.44	481	5	ND	5	3	1	2	2	54	.06	.009	23	310	1.10	49	.15	2	1.75	.02	.02	3	18
AL 16E 3+70S B	1	42	14	37	.1	29	5	64	3.76	1351	5	ND	2	4	1	3	2	79	.06	.034	5	94	.40	33	.05	2	1.64	.02	.03	6	8
AL 16E 3+90S B	1	13	8	57	.2	9	5	114	3.91	212	5	ND	2	4	1	4	3	136	.11	.033	5	11	.17	29	.05	3	1.23	.02	.02	1	1
AL 16E 4+00S B	1	17	15	70	.1	19	7	208	4.62	54	5	ND	7	5	1	2	2	97	.07	.077	3	46	.53	31	.27	4	1.43	.02	.12	1	1
AL 16E 4+10S B	1	52	29	80	.1	61	12	204	3.25	44	5	ND	5	8	1	2	2	57	.14	.057	12	96	.53	53	.16	4	1.69	.02	.09	1	1
AL 16E 4+20S B	2	68	22	80	.2	39	12	276	4.22	32	5	ND	8	7	1	2	2	75	.12	.025	9	45	.74	36	.23	7	1.74	.02	.10	1	22
AL 16E 4+30S A	1	31	26	66	.2	67	20	205	2.92	28	5	ND	7	11	1	2	2	44	.22	.027	19	140	1.22	57	.13	4	2.54	.05	.04	2	3
AL 16E 4+40S B	2	38	33	78	.4	98	22	678	4.55	36	5	ND	13	10	1	4	2	54	.21	.030	31	51	.33	93	.10	5	3.06	.02	.05	2	1
AL 16E 4+50S A	1	70	28	35	.4	54	26	1168	2.48	13	5	ND	13	30	1	2	2	17	1.91	.087	104	31	.97	115	.03	3	2.68	.03	.03	1	1
AL 16E 4+60S A11	1	142	4	24	.2	70	1	227	.42	16	5	ND	3	29	1	2	2	3	5.56	.059	72	16	.84	43	.01	5	.77	.04	.01	1	1
AL 16E 4+60S A12	1	31	2	39	.1	16	2	141	.20	2	5	ND	2	35	1	2	2	10	7.34	.055	4	3	.87	42	.01	7	.23	.05	.02	2	1
AL 16E 4+90S A	1	292	4	36	.1	198	3	540	.36	31	6	ND	3	35	1	3	2	10	7.35	.063	95	17	.87	57	.01	5	.50	.05	.01	2	2
AL 16E 4+90S A	1	99	15	42	.2	47	1	32	.19	5	5	ND	1	17	1	2	2	6	3.02	.054	36	7	.86	24	.01	7	.32	.04	.03	2	1
AL 16E 5+10S A	1	63	2	48	.2	42	2	54	.53	22	9	ND	4	28	1	3	2	4	4.55	.061	45	13	.05	34	.01	5	.66	.04	.02	1	1
AL 16E 5+30S A	1	53	10	43	.2	43	3	374	2.82	392	7	ND	3	26	1	2	3	46	4.91	.060	21	10	.88	43	.01	6	.20	.05	.02	2	1
AL 16E 5+50S A	2	15	2	59	.1	26	1	208	.11	2	7	ND	2	29	1	3	2	1	5.82	.055	2	4	.86	33	.01	7	.06	.04	.03	1	1
STD C/MU-0.5	21	61	42	137	7.3	74	30	1135	3.95	39	18	8	35	51	19	15	19	64	.45	.105	36	62	.84	188	.09	36	1.64	.09	.14	15	495

NORTHERN DYNASTY FILE # B6-1672

PAGE 3

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	Sb PPH	Bi PPH	V PPH	Cr %	P %	La PPH	Pr PPH	Nd %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	M PPH	Au1 PPH
AL 16E 5+60S A P	1	6	3	64	.1	13	1	220	.08	7	5	ND	1	36	1	2	2	1	7.10	.052	2	2	.00	32	.01	11	.07	.05	.01	1	1
AL 16E 5+70S A P	1	8	3	82	.1	13	1	145	.08	3	5	ND	1	34	1	2	2	1	6.60	.063	2	1	.08	31	.01	12	.06	.05	.02	1	1
AL 16E 5+80S A P	1	6	2	73	.2	10	1	90	.09	2	6	ND	1	29	1	3	2	1	5.51	.051	2	1	.07	27	.01	10	.06	.04	.02	1	1
AL 16E 5+90S A P	1	12	4	86	.1	27	3	515	.51	10	5	ND	1	34	1	2	2	5	6.17	.068	2	1	.08	43	.01	9	.11	.05	.01	1	1
AL 16E 6+00S A P	1	5	4	95	.2	9	1	137	.13	5	5	ND	1	34	1	2	2	2	5.98	.057	2	1	.07	39	.01	8	.13	.05	.02	1	1
AL 16E 6+10S B P	1	9	13	64	.1	9	4	135	1.87	2	5	ND	6	8	1	2	2	50	.12	.033	4	20	.31	35	.19	5	1.06	.02	.09	1	1
AL 16E 6+20S B P	1	22	12	55	.1	14	5	126	3.27	3	5	ND	5	7	1	2	2	73	.08	.043	6	37	.34	22	.22	7	1.50	.02	.05	1	1
AL 16E 6+30S B	1	11	10	41	.1	10	3	100	2.72	7	5	ND	4	5	1	2	2	62	.08	.039	6	35	.26	19	.16	6	.90	.01	.03	2	1
AL 16E 6+40S B	1	7	9	24	.1	8	2	74	2.11	2	5	ND	4	4	1	2	2	47	.06	.031	4	29	.19	16	.17	4	1.05	.01	.03	1	2
AL 16E 6+50S B	1	6	12	20	.1	3	1	37	2.37	4	5	ND	5	4	1	3	2	44	.05	.043	6	26	.07	19	.09	5	1.48	.01	.02	1	2
AL 16E 6+60S B	1	6	9	42	.1	9	3	111	1.65	2	5	ND	5	5	1	2	2	34	.07	.024	6	17	.25	20	.14	4	.78	.01	.06	1	1
AL 16E 6+70S B	1	6	6	25	.1	9	3	67	1.61	7	5	ND	5	4	1	2	2	44	.06	.012	6	33	.25	14	.13	4	.92	.01	.03	2	15
AL 16E 6+80S B	1	3	6	12	.1	2	1	33	.70	3	5	ND	3	3	1	4	2	19	.04	.007	4	9	.08	11	.09	2	.42	.01	.01	1	1
AL 16E 6+90S B	1	3	6	14	.1	2	1	26	1.90	2	5	ND	2	3	1	3	2	31	.04	.011	4	12	.06	12	.09	3	.54	.01	.01	1	1
AL 16E 7+00S B	1	11	7	29	.1	11	3	60	1.56	6	5	ND	4	4	1	2	2	36	.06	.015	7	29	.17	18	.09	4	.98	.01	.03	1	110
AL 20E 2+90N B	1	9	6	14	.1	11	3	82	1.33	9	5	ND	5	6	1	3	2	20	.12	.004	6	19	.22	27	.06	4	.84	.01	.04	1	2
AL 20E 2+70N B	1	8	8	20	.1	11	4	77	1.90	2	5	ND	6	5	1	2	2	14	.13	.014	10	11	.17	31	.06	3	.54	.01	.04	1	1
AL 20E 2+60N B	1	10	6	19	.1	11	4	81	1.69	2	5	ND	8	4	1	2	2	24	.06	.008	8	15	.18	27	.09	4	1.21	.01	.03	1	1
AL 20E 2+50N B	1	4	6	11	.1	6	2	53	1.64	2	5	ND	4	5	1	2	2	23	.06	.006	10	15	.15	23	.07	3	.86	.02	.03	1	1
AL 20E 2+40N B	1	90	11	31	.2	47	16	158	3.92	3	5	ND	2	4	1	3	2	158	.07	.022	5	63	.44	28	.21	8	1.67	.02	.09	1	1
AL 20E 2+30N B	1	12	7	21	.1	16	4	95	1.49	2	5	ND	5	8	1	2	2	27	.18	.006	9	25	.27	35	.08	4	1.06	.02	.07	1	1
AL 20E 2+20N B	1	16	21	16	.1	7	3	54	2.12	2	5	ND	4	4	1	2	2	72	.07	.010	9	22	.10	16	.13	4	.97	.01	.03	1	5
AL 20E 2+10N A P	1	41	5	28	1.3	27	8	469	.66	2	5	ND	1	41	1	2	2	9	4.88	.096	13	6	.08	113	.01	7	.69	.05	.02	1	1
AL 20E 2+00N A P	1	52	11	31	.5	15	3	13	.54	2	5	ND	2	35	1	2	2	6	2.38	.052	19	12	.07	67	.02	4	.62	.03	.02	2	4
AL 20E 1+90N A P	1	36	7	71	.6	17	1	16	.41	3	5	ND	2	35	1	2	2	2	2.66	.042	22	3	.09	63	.01	5	.46	.04	.02	1	1
AL 20E 1+70N A P	1	4	2	35	.1	3	1	21	.36	2	5	ND	1	14	1	2	2	1	.68	.042	2	3	.03	44	.01	3	.11	.02	.01	1	1
AL 20E 1+60N A P	1	3	6	36	.1	2	1	34	.15	2	7	ND	1	12	1	2	2	2	.46	.042	2	5	.03	36	.01	3	.11	.01	.02	1	1
AL 20E 1+50N A P	1	3	6	35	.1	4	1	47	.27	2	5	ND	1	16	1	2	2	1	.51	.053	4	4	.03	40	.01	3	.13	.02	.03	1	1
AL 20E 0+80N A P	1	13	2	23	.1	13	1	55	.20	2	5	ND	2	18	1	2	2	3	.81	.052	20	9	.03	49	.01	4	.32	.03	.01	1	1
AL 20E 0+50N A P	1	11	3	44	.2	15	1	47	.22	2	5	ND	1	27	1	2	2	4	1.04	.055	14	7	.05	63	.01	3	.31	.02	.01	1	1
AL 20E 0+00N A P	1	4	3	46	.1	2	1	38	.25	2	8	ND	1	9	1	2	2	1	.21	.039	2	6	.02	28	.01	2	.11	.01	.01	2	1
AL 20E 0+30S A P	1	4	2	47	.1	3	1	57	.13	2	5	ND	1	8	1	2	2	1	.24	.029	2	5	.02	27	.01	2	.10	.01	.01	1	1
AL 20E 0+60S A P	1	4	2	36	.1	3	1	31	.22	2	5	ND	1	8	1	2	2	1	.18	.042	2	1	.02	28	.01	2	.11	.01	.01	2	1
AL 20E 0+90S A P	1	6	2	42	.1	5	1	22	.32	9	5	ND	1	9	1	2	2	5	.13	.055	10	3	.01	34	.01	2	.26	.01	.01	1	4
AL 20E 1+20S A P	1	5	3	79	.1	5	1	72	.42	3	5	ND	1	16	1	2	2	2	.43	.049	3	4	.04	42	.01	2	.17	.02	.02	1	1
AL 20E 1+40S A P	1	3	3	69	.1	3	1	68	.19	2	5	ND	1	18	1	2	2	1	.40	.036	2	1	.04	38	.01	2	.13	.02	.01	1	1
STD C/AU 0.5	22	60	38	135	7.1	71	29	1103	3.93	41	17	7	35	49	18	15	18	61	.46	.103	38	63	.88	181	.08	38	1.72	.09	.13	13	495

* P = Pulverizing

NORTHERN DYNASTY FILE # 86-1672

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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Mg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	M PPH	Au1 PPB
AL 20E 1+60S A	1	9	6	40	.2	9	1	37	.70	3	7	ND	2	19	1	4	2	3	.27	.104	17	13	.03	43	.01	5	.74	.01	.02	1	1
AL 20E 1+70S A	1	13	7	32	.2	5	1	25	.48	2	5	ND	2	17	1	2	2	4	.16	.073	17	12	.03	49	.02	4	.66	.01	.02	1	1
AL 20E 1+80S A	1	8	6	62	.2	3	1	84	.26	3	8	ND	1	32	1	3	2	3	.36	.061	5	9	.04	94	.01	3	.37	.02	.04	1	2
AL 20E 1+90S B	1	6	6	17	.1	4	2	52	2.06	2	5	ND	6	3	1	2	2	31	.05	.017	4	21	.09	8	.10	5	2.08	.01	.01	1	1
AL 20E 2+00S B	1	2	8	18	.1	2	1	52	.68	2	5	ND	5	5	1	2	2	22	.05	.009	3	5	.11	16	.10	2	.63	.01	.03	1	1
AL 20E 2+10S B	1	6	12	34	.1	7	3	95	1.62	2	5	ND	5	5	1	2	2	38	.07	.014	4	18	.24	16	.14	4	1.50	.01	.03	1	2
AL 20E 2+20S B	1	5	10	28	.1	4	1	52	1.72	3	5	ND	5	4	1	2	2	40	.04	.034	4	18	.12	23	.11	4	1.45	.01	.03	1	1
AL 20E 2+30S B	1	8	12	43	.1	8	3	127	2.60	3	5	ND	6	6	1	2	2	63	.07	.034	5	25	.29	30	.19	6	1.11	.02	.05	1	1
AL 20E 2+40S B	1	12	8	24	.1	9	3	77	1.45	2	5	ND	6	4	1	2	2	30	.09	.024	7	17	.21	18	.10	5	1.84	.01	.03	1	5
AL 20E 2+50S A	1	27	26	48	.5	7	2	28	.73	2	5	ND	1	26	1	3	2	6	.20	.135	11	7	.04	96	.01	4	.97	.01	.06	1	1
AL 20E 2+60S A	1	20	17	38	.2	5	2	12	.80	2	5	ND	1	31	1	2	2	5	.17	.090	15	9	.03	96	.01	4	.95	.01	.04	1	1
AL 20E 2+70S A	1	11	8	49	.3	4	1	13	.63	3	5	ND	1	29	1	2	2	3	.16	.072	9	4	.02	82	.01	3	.60	.01	.03	2	1
AL 20E 2+80S A	1	17	17	40	.2	5	1	10	.61	3	5	ND	1	16	1	2	2	5	.09	.075	10	9	.02	60	.01	3	.83	.02	.02	1	1
AL 20E 2+90S B	1	5	8	41	.1	8	3	98	1.23	3	8	ND	3	6	1	2	2	34	.07	.014	3	27	.26	16	.11	4	.74	.01	.05	1	1
AL 20E 3+00S B	1	5	5	13	.1	2	1	24	.69	2	5	ND	4	4	1	2	2	17	.04	.012	6	13	.05	12	.05	3	1.36	.01	.02	1	1
AL 20E 3+10S A	1	19	21	44	.3	5	1	54	.40	2	5	ND	1	22	1	3	2	6	.19	.070	7	7	.04	138	.01	4	.57	.01	.05	1	1
AL 20E 3+20S B	1	6	11	39	.1	7	3	97	1.27	2	5	ND	4	6	1	2	2	33	.08	.018	5	16	.25	19	.13	5	1.30	.01	.04	1	1
AL 20E 3+30S B	1	10	16	17	.1	4	1	37	3.20	5	5	ND	8	3	1	2	2	44	.04	.029	3	26	.08	8	.12	8	2.78	.01	.01	3	1
AL 20E 3+40S B	1	5	8	17	.1	5	2	50	1.13	4	5	ND	4	4	1	2	2	38	.05	.007	5	14	.13	11	.13	4	1.21	.01	.02	1	1
AL 20E 3+50S B	1	5	15	23	.1	4	2	58	1.88	4	6	ND	5	4	1	2	2	29	.06	.007	6	15	.15	12	.13	5	.96	.01	.04	1	2
AL 20E 3+60S B	1	12	14	28	.1	6	2	57	3.01	2	5	ND	8	6	1	2	2	58	.07	.024	9	24	.14	16	.14	7	2.77	.02	.03	1	1
AL 20E 3+70S B	1	13	4	11	.1	1	1	33	.36	11	5	ND	1	2	1	2	2	14	.08	.007	4	3	.07	14	.02	2	.30	.01	.02	2	24
AL 20E 3+80S A	1	9	23	71	.2	4	1	55	.16	3	5	ND	1	16	1	2	2	3	.62	.067	2	3	.05	132	.01	3	.13	.02	.06	1	1
AL 20E 3+90S B	1	14	19	64	.1	19	7	175	5.11	2	5	ND	9	8	1	2	2	108	.11	.029	6	45	.50	39	.30	11	2.97	.03	.06	1	14
AL 20E 4+00S B	1	12	14	46	.1	15	4	114	2.45	10	5	ND	4	5	1	2	2	91	.07	.020	3	32	.31	14	.24	8	1.94	.02	.06	1	3
AL 20E 4+20S B	1	3	11	33	.1	8	3	90	1.21	5	5	ND	4	5	1	3	2	36	.08	.008	3	25	.23	18	.17	3	.61	.02	.05	2	1
AL 20E 4+30S B	1	6	8	47	.1	14	5	160	2.30	6	5	ND	6	6	1	2	2	69	.08	.017	5	37	.44	20	.24	7	.98	.02	.08	1	1
AL 20E 4+40S B	1	13	17	83	.1	18	6	212	2.64	8	5	ND	6	7	1	2	2	62	.10	.049	5	33	.57	30	.24	8	1.35	.02	.12	1	1
AL 20E 4+50S B	1	31	22	111	.2	30	11	283	3.72	7	5	ND	6	9	1	4	2	87	.13	.028	6	44	.73	46	.29	8	1.81	.03	.12	1	1
AL 20E 4+60S B	1	7	12	42	.1	9	4	110	1.51	5	5	ND	4	6	1	2	2	47	.07	.009	4	21	.29	20	.18	5	.69	.02	.06	1	1
AL 20E 4+70S B	1	11	8	21	.1	8	2	45	.83	2	5	ND	4	4	1	2	2	18	.08	.009	7	15	.16	11	.08	3	.84	.01	.03	1	1
AL 20E 4+80S B	1	12	14	81	.1	17	7	232	2.89	8	5	ND	8	7	1	3	2	56	.13	.025	11	27	.50	25	.20	7	1.43	.03	.11	1	1
AL 20E 4+90S B	1	10	23	34	.1	12	4	100	1.90	6	5	ND	4	5	1	3	2	76	.07	.010	4	27	.26	20	.21	4	.87	.02	.05	1	1
AL 20E 5+00S B	1	5	12	31	.1	6	2	48	.58	5	7	ND	5	4	1	3	3	18	.06	.006	5	16	.12	19	.08	2	.44	.01	.04	2	1
AL 20E 5+10S B	1	7	23	43	.1	5	2	67	.71	2	5	ND	3	7	1	3	3	26	.09	.015	8	13	.12	33	.08	2	.54	.01	.04	2	1
AL 20E 5+20S B	1	7	35	67	.1	12	4	108	1.64	5	5	ND	4	7	1	2	2	54	.15	.011	6	30	.29	26	.16	5	.85	.02	.06	1	1
STD C/MU 0.5	20	62	39	143	7.0	73	30	1138	3.98	39	21	8	36	50	19	15	20	71	.48	.107	38	62	.89	187	.09	42	1.73	.09	.14	14	500

NORTHERN DYNASTY FILE # 86-1672

PAGE 5

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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Mg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	M PPH	Aut PPH
AL 20E 5+30S A	1	42	24	42	.7	30	6	370	1.38	2	5	ND	3	31	1	2	2	11	4.20	.114	46	20	.05	119	.02	2	1.68	.04	.02	1	1
AL 20E 5+40S A	1	22	5	67	.3	13	1	49	.30	2	5	ND	1	33	1	2	2	3	4.18	.057	26	5	.05	95	.01	2	.69	.04	.02	1	1
AL 20E 5+50S A	1	30	2	247	.3	14	4	83	.75	2	7	ND	2	29	4	2	2	5	4.18	.049	41	5	.04	71	.01	4	.71	.05	.02	1	1
AL 20E 5+60S A	1	21	4	117	.3	11	13	347	1.10	5	5	ND	2	29	3	2	2	12	3.83	.078	20	8	.05	94	.01	3	.44	.05	.03	1	1
AL 20E 5+80S A	1	10	2	69	.2	9	6	789	.53	4	5	ND	1	43	1	2	2	2	6.31	.073	4	4	.07	113	.01	4	.22	.05	.02	1	1
AL 20E 5+90S A	1	9	2	75	.1	8	3	639	.87	6	5	ND	1	39	1	2	2	2	5.58	.049	4	1	.07	97	.01	4	.16	.05	.01	1	2
AL 20E 6+00S A	1	12	2	76	.3	9	4	482	.70	4	4	ND	1	48	1	3	2	3	6.50	.052	4	2	.08	119	.01	3	.22	.04	.01	1	1
AL 20E 6+15S A	4	16	3	111	.3	12	3	955	.70	6	5	ND	1	54	1	2	2	4	7.12	.033	3	2	.07	160	.01	5	.29	.05	.01	1	1
AL 20E 6+30S A	1	11	5	67	.1	8	3	1175	.79	4	5	ND	1	45	1	2	2	5	5.60	.065	5	5	.08	127	.01	2	.26	.04	.01	1	1
AL 20E 6+45S A	1	7	5	60	.2	7	9	3180	2.00	19	5	ND	1	40	1	2	2	4	4.74	.107	3	2	.08	137	.01	5	.19	.04	.03	1	1
AL 20E 6+60S A	1	11	3	63	.2	6	4	2414	1.02	8	5	ND	1	36	1	2	2	5	4.34	.056	9	4	.09	110	.01	4	.31	.04	.01	1	1
AL 20E 6+70S A	1	5	4	55	.1	4	2	753	1.16	11	9	ND	1	38	1	2	2	3	4.62	.099	4	2	.10	61	.01	5	.19	.04	.02	1	1
AL 20E 6+80S A	1	13	3	67	.3	8	3	723	.74	2	5	ND	1	38	1	2	2	4	4.15	.103	18	7	.08	100	.01	5	.46	.04	.03	1	2
AL 20E 6+90S A	2	11	6	42	.2	8	5	1113	2.48	11	5	ND	2	34	1	2	2	14	3.34	.150	25	6	.08	113	.01	4	.46	.04	.01	1	1
AL 20E 7+00S A	2	25	12	48	.4	11	12	2143	3.15	17	5	ND	5	38	1	2	2	18	3.83	.154	47	10	.09	120	.01	4	.74	.04	.03	1	1
AL 26E 3+00N B	1	15	15	87	.2	14	6	206	3.18	2	5	ND	6	5	1	2	2	41	.11	.136	9	29	.43	39	.13	2	3.60	.02	.07	1	1
AL 26E 2+90N B	1	16	16	72	.1	30	7	170	3.02	2	5	ND	5	5	1	2	2	47	.09	.075	6	42	.44	33	.14	3	2.49	.02	.06	1	1
AL 26E 2+80N B	1	15	17	81	.2	13	5	134	2.94	2	5	ND	7	5	1	3	2	38	.08	.063	12	25	.32	41	.12	3	3.05	.01	.06	1	1
AL 26E 2+70N B	1	20	12	50	.1	9	4	128	2.10	3	5	ND	5	5	1	2	2	33	.08	.063	7	19	.25	34	.09	2	2.23	.01	.05	2	1
AL 26E 2+60N B	1	11	15	55	.1	9	3	122	2.47	2	5	ND	6	4	1	2	2	37	.06	.073	7	19	.24	38	.11	2	2.24	.01	.05	1	1
AL 26E 2+50N B	1	10	12	51	.1	7	3	119	2.20	4	5	ND	6	4	1	2	2	32	.06	.095	6	16	.19	30	.09	2	2.15	.01	.04	1	6
AL 26E 2+40N B	1	21	17	76	.1	12	6	156	3.50	4	5	ND	20	5	1	2	2	43	.08	.131	14	26	.37	36	.14	2	2.98	.02	.05	1	1
AL 26E 2+30N B	1	8	12	39	.1	6	2	64	2.09	4	5	ND	6	4	1	2	2	28	.05	.091	5	18	.15	22	.07	2	2.23	.07	.02	1	1
AL 26E 2+20N B	1	9	12	45	.3	5	3	91	2.17	2	5	ND	6	5	1	2	2	38	.07	.159	6	22	.17	30	.08	2	2.18	.01	.03	3	1
AL 26E 2+10N B	1	10	11	54	.2	8	3	137	2.93	2	5	ND	7	5	1	4	2	46	.08	.127	3	20	.30	28	.16	2	1.81	.02	.07	1	2
AL 26E 1+00N B	1	4	11	19	.1	3	2	95	1.27	2	5	ND	4	3	1	2	2	35	.04	.011	3	9	.13	14	.12	2	.57	.01	.03	1	1
AL 26E 1+70N B	1	6	9	28	.1	6	3	83	1.86	2	5	ND	4	4	1	2	2	56	.05	.014	5	11	.20	17	.19	2	.58	.02	.05	1	1
AL 26E 1+50N A	1	27	21	35	.1	10	3	19	.47	2	5	ND	2	45	1	2	2	6	.41	.048	14	3	.06	116	.01	2	.54	.02	.04	1	1
AL 26E 1+40N B	1	2	8	12	.1	1	1	21	.28	4	5	ND	2	3	1	2	2	10	.04	.006	3	5	.05	6	.09	2	.21	.01	.02	1	1
AL 26E 1+30N A	1	16	13	22	.1	5	2	11	.44	2	5	ND	2	27	1	2	2	6	.29	.038	21	3	.04	59	.02	2	.59	.02	.03	1	1
AL 26E 1+10N A	1	9	3	24	.2	4	2	13	.33	2	5	ND	1	48	1	2	2	6	3.79	.048	4	5	.13	44	.01	2	.43	.03	.01	1	1
AL 26E 1+00N A	1	5	3	59	.2	3	3	95	.47	2	5	ND	1	46	1	2	2	8	5.00	.047	2	2	.17	40	.01	3	.23	.04	.02	1	1
AL 26E 0+90N A	1	4	4	54	.2	1	2	112	.35	2	9	ND	1	41	1	2	2	2	3.79	.039	2	3	.15	33	.01	2	.09	.04	.02	1	2
AL 26E 0+80N A	1	4	3	76	.3	1	2	103	.51	2	5	ND	1	49	1	2	2	1	4.92	.055	2	2	.18	39	.01	7	.07	.04	.02	1	1
AL 26E 0+70N A	2	4	2	46	.2	1	1	66	.23	2	5	ND	1	57	1	2	2	2	5.53	.042	2	3	.19	44	.01	5	.10	.04	.02	2	1
AL 26E 0+60N A	1	3	3	53	.2	2	1	217	.15	2	5	ND	1	49	1	2	2	1	4.49	.039	2	3	.18	43	.01	5	.09	.04	.02	1	1
STD C/AU-0.5	22	58	38	137	7.1	72	29	1113	3.96	40	16	7	34	48	18	15	22	62	.48	.103	38	62	.09	179	.08	39	1.73	.08	.14	13	495

NORTHERN DYNASTY FILE # 86-1672

PAGE 6

SAMPLE#	Mo 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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Hg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	W PPH	AuI PPH
AL 26E 0+50N A	1	2	3	37	.2	1	1	85	.55	2	5	ND	1	58	1	2	2	2	5.15	.048	2	3	.20	46	.01	6	.06	.04	.01	1	1
AL 26E 0+50N A	1	2	8	40	.1	1	1	264	.38	2	5	ND	1	50	1	2	2	1	4.21	.052	2	2	.20	33	.01	7	.05	.05	.02	1	1
AL 26E 0+20N A	1	3	18	86	.1	1	6	1972	.68	2	5	ND	1	59	1	2	2	2	4.97	.091	3	1	.22	58	.01	9	.08	.05	.04	1	1
AL 26E 0+10N A	1	2	4	39	.1	1	2	575	.30	2	5	ND	1	58	1	2	2	1	4.87	.060	2	1	.24	41	.01	7	.07	.05	.02	1	1
AL 26E 0+00N A	1	2	2	34	.2	1	1	389	.31	2	5	ND	1	57	1	2	2	1	4.90	.048	2	4	.22	47	.01	8	.09	.05	.02	1	1
AL 26E 0+10S A	1	3	3	24	.1	1	2	505	.66	2	5	ND	1	69	1	2	2	1	5.67	.061	3	1	.26	84	.01	9	.09	.05	.01	1	1
AL 26E 0+20S A	1	3	3	44	.2	1	1	190	.55	2	5	ND	1	57	1	2	2	1	4.92	.052	2	5	.22	55	.01	9	.09	.04	.01	1	1
AL 26E 0+30S A	1	4	4	51	.1	1	1	179	.51	2	5	ND	1	45	1	2	2	3	3.92	.050	3	3	.20	44	.01	7	.13	.05	.01	1	2
AL 26E 0+40S A	1	4	7	67	.1	1	2	220	2.63	8	5	ND	1	61	1	2	2	3	5.08	.082	9	2	.22	62	.01	10	.06	.10	.02	1	1
AL 26E 0+50S A	2	7	5	31	.3	3	11	2034	7.12	11	5	ND	2	46	1	2	2	17	3.05	.120	25	6	.14	102	.01	12	.25	.05	.03	1	1
AL 26E 0+60S A	1	6	2	29	.3	3	1	350	.46	2	5	ND	1	66	1	2	2	2	5.24	.064	6	3	.25	71	.01	5	.20	.05	.01	1	1
AL 26E 0+70S A	1	18	23	47	.9	12	38	1609	3.84	12	5	ND	6	29	1	2	3	24	1.78	.090	45	8	.10	103	.01	8	.38	.04	.02	1	1
AL 26E 0+80S A	1	9	12	50	.4	8	29	1060	3.01	7	5	ND	5	40	1	2	2	11	2.54	.077	43	4	.14	72	.01	7	.27	.04	.01	1	1
AL 26E 0+90S A	2	12	17	64	.7	8	22	1733	4.72	91	5	ND	6	36	2	2	2	19	2.73	.125	57	6	.15	119	.01	10	.35	.04	.03	1	2
AL 26E 1+00S A	1	10	6	66	.4	6	7	2977	.93	16	5	ND	1	62	1	2	2	4	5.04	.090	20	4	.24	102	.01	7	.31	.05	.01	1	1
AL 26E 1+10S A	1	11	11	90	.4	5	2	2024	.43	5	5	ND	1	65	2	2	2	4	5.45	.086	31	2	.26	79	.01	8	.41	.05	.02	1	1
AL 26E 1+20S A	1	9	3	117	.1	2	1	31	.18	2	5	ND	1	66	2	2	2	2	5.36	.039	4	3	.25	60	.01	3	.18	.05	.01	1	1
AL 26E 1+30S A	1	22	11	110	.5	7	2	441	.49	5	5	ND	1	69	3	2	2	4	5.53	.085	45	7	.28	83	.01	4	.57	.05	.03	1	1
AL 26E 1+40S A	1	5	6	30	.1	3	1	30	.21	2	5	ND	5	31	1	2	2	3	.69	.031	7	4	.05	25	.02	2	.32	.02	.03	1	1
AL 26E 1+50S A	1	8	13	57	.1	3	1	44	.23	2	5	ND	2	33	1	2	2	3	1.25	.040	10	5	.08	47	.01	2	.23	.02	.03	1	1
AL 26E 1+60S A	1	35	18	64	.5	8	5	1627	.93	14	5	ND	7	46	3	2	2	14	3.17	.112	102	8	.19	81	.01	3	.91	.04	.02	1	1
AL 26E 1+70S A	1	15	7	31	.2	8	1	24	.28	3	5	ND	3	36	1	2	2	2	2.21	.028	42	4	.13	46	.01	2	.37	.03	.01	1	1
AL 26E 1+80S A	1	9	2	42	.1	13	1	15	.16	2	5	ND	1	32	1	2	2	2	2.47	.027	20	3	.15	36	.01	4	.21	.03	.01	1	1
AL 26E 1+90S A	1	26	6	49	.5	28	1	369	.39	6	5	ND	5	45	1	2	2	4	3.41	.070	104	4	.17	75	.01	5	.71	.04	.02	1	1
AL 26E 2+00S A	2	42	6	61	.7	44	2	5267	.47	25	5	ND	4	39	1	2	2	6	3.61	.137	107	7	.16	112	.01	5	.78	.04	.04	1	1
AL 26E 2+10S A	16	171	5	66	.8	56	4	3497	.36	92	5	ND	7	35	5	2	2	23	4.59	.073	104	9	.16	118	.01	7	.74	.04	.01	2	3
AL 26E 2+20S A	5	48	7	83	.5	18	4	5208	1.24	140	5	ND	4	26	2	2	2	20	3.02	.079	61	6	.08	109	.01	5	.50	.03	.02	1	1
AL 26E 2+30S A	2	26	10	102	.6	7	5	1904	1.09	19	6	ND	5	31	2	3	2	13	1.83	.115	54	11	.12	109	.01	5	.56	.03	.02	1	1
AL 26E 2+50S A	2	17	3	43	.3	6	2	584	.49	13	5	ND	5	17	1	2	2	8	1.04	.064	57	7	.06	55	.01	2	.82	.02	.01	1	1
AL 26E 2+70S A	3	14	3	155	.2	15	19	9821	5.18	393	5	ND	1	21	1	2	2	6	1.24	.085	19	9	.08	305	.01	5	.65	.03	.01	1	1
AL 26E 2+90S A	1	29	7	36	.2	33	1	219	.83	10	5	ND	2	50	1	4	2	4	2.09	.085	45	11	.09	126	.01	2	.52	.03	.03	1	1
AL 26E 3+00S B	1	5	9	15	.1	5	1	55	.83	2	5	ND	3	7	1	3	2	14	.13	.019	9	15	.08	17	.07	2	.92	.01	.02	1	1
AL 26E 3+10S B	1	10	10	18	.1	7	2	58	1.29	4	5	ND	7	4	1	2	2	25	.07	.023	10	19	.12	17	.09	2	1.75	.01	.03	1	1
AL 26E 3+20S B	1	11	11	19	.1	9	2	57	1.91	3	5	ND	7	4	1	2	2	29	.07	.035	10	21	.13	16	.09	2	1.83	.01	.03	1	1
AL 26E 3+30S B	1	15	13	26	.1	16	4	81	2.35	4	5	ND	7	4	1	2	2	38	.07	.043	11	36	.20	18	.10	2	1.97	.01	.03	1	1
AL 26E 3+40S B	1	4	15	32	.1	6	2	108	1.00	2	5	ND	5	4	1	2	2	23	.07	.015	5	11	.21	24	.11	2	.59	.01	.07	2	1
STD C/MU-0.5	21	61	41	134	7.1	74	29	1140	3.96	39	20	7	36	51	18	15	18	65	.46	.105	36	60	.09	188	.09	38	1.75	.09	.14	14	480

SAMPLE#	Mo PPH	Cu PPH	Pb PPH	Zn PPH	Ag PPH	Ni PPH	Co PPH	Mn PPH	Fe %	As PPH	V PPH	Au PPH	Th PPH	Sr PPH	Cd PPH	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Mg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	U PPH	Au1 PPB
AL 26E 3+50S B	1	10	6	23	.1	32	4	48	1.30	11	5	ND	4	4	1	2	2	23	.07	.008	7	47	.15	17	.07	2	.75	.01	.02	2	1
AL 26E 3+60S A	1	10	12	16	.1	4	1	44	.53	4	5	ND	1	13	1	3	2	12	.52	.029	9	13	.07	32	.02	2	.53	.02	.02	1	1
AL 26E 3+70S B	1	9	8	21	.1	12	3	71	1.15	5	5	ND	4	5	1	2	2	28	.11	.013	9	22	.20	16	.09	2	.62	.01	.03	1	1
AL 26E 3+80S B	3	12	8	30	.1	20	4	81	1.84	4	5	ND	4	4	1	2	2	42	.06	.016	6	21	.20	17	.10	2	.82	.01	.04	1	1
AL 26E 3+90S B	1	14	9	29	.1	19	5	112	1.79	8	5	ND	4	7	1	2	2	30	.23	.023	10	25	.27	29	.09	2	1.12	.02	.04	3	1
AL 26E 4+00S A	1	34	12	37	.3	14	10	1281	1.84	5	5	ND	2	46	1	2	2	28	3.32	.113	31	25	.15	148	.02	2	1.49	.04	.04	3	1
AL 26E 4+10S A	1	33	5	38	.2	19	8	1923	.87	8	5	ND	1	54	1	2	2	21	6.05	.097	13	9	.13	176	.01	2	1.31	.09	.05	1	1
AL 26E 4+20S A	1	19	2	52	.2	8	2	755	.26	9	5	ND	1	46	1	2	2	7	6.45	.078	8	5	.09	115	.01	6	.47	.05	.01	1	1
AL 26E 4+40S A	3	9	3	73	.2	3	2	3267	.11	5	5	ND	1	47	1	2	2	3	6.39	.045	2	2	.09	195	.01	6	.12	.11	.02	1	1
AL 26E 4+60S A	1	4	2	63	.1	2	2	1094	.09	5	5	ND	1	37	1	2	2	1	4.75	.054	2	1	.08	80	.01	7	.09	.04	.02	1	1
AL 26E 4+80S A	1	3	2	68	.2	1	1	162	.11	5	5	ND	1	32	1	2	2	1	4.12	.034	2	1	.09	46	.01	3	.05	.04	.01	1	1
AL 26E 4+90S A	2	6	6	68	.2	3	2	2306	.12	5	5	ND	1	43	1	2	2	2	5.30	.054	2	3	.10	118	.01	5	.13	.04	.01	1	1
AL 26E 5+00S A	2	5	3	58	.1	3	1	1804	.14	6	5	ND	1	45	1	2	2	2	5.70	.048	2	3	.10	124	.01	6	.12	.06	.01	1	1
AL 26E 5+10S A	1	4	4	26	.2	2	1	298	.15	4	5	ND	1	38	1	2	2	2	4.60	.053	2	1	.10	66	.01	5	.12	.06	.01	1	1
AL 26E 5+30S A	1	4	3	33	.2	2	1	142	.43	3	5	ND	1	44	1	2	2	2	5.21	.040	2	3	.10	83	.01	5	.11	.04	.01	1	4
AL 26E 5+50S A	1	5	3	58	.2	2	2	346	.73	13	5	ND	1	51	1	2	2	1	5.46	.063	2	5	.11	121	.01	4	.11	.05	.01	1	3
AL 26E 5+80S A	1	4	3	73	.2	1	1	909	.54	7	5	ND	1	33	1	2	2	1	3.44	.060	2	2	.10	62	.01	5	.05	.04	.01	1	1
AL 26E 6+10S A	2	11	2	38	.1	9	5	1333	1.19	8	5	ND	1	60	1	2	2	4	5.92	.034	6	4	.07	194	.01	5	.25	.09	.01	2	1
AL 26E 6+40S A	1	10	2	68	.1	7	1	320	.23	11	5	ND	1	33	1	2	2	2	3.15	.064	3	2	.08	66	.01	6	.27	.03	.01	1	1
AL 26E 6+70S A	1	7	2	53	.1	9	1	158	.26	8	5	ND	1	47	1	2	2	2	3.34	.048	5	3	.08	71	.01	5	.24	.05	.01	1	1
AL 26E 6+90S A	1	5	4	41	.2	7	1	358	.16	10	5	ND	1	38	1	2	2	2	3.37	.041	2	2	.08	51	.01	4	.16	.04	.02	2	1
AL 26E 7+20S A	1	7	2	35	.1	6	1	134	.10	11	5	ND	1	16	1	2	2	2	1.10	.050	4	5	.06	15	.01	2	.19	.02	.01	1	2
AL 26E 7+50S A	1	9	5	55	.2	5	1	84	.10	6	5	ND	1	19	1	2	2	3	1.37	.049	2	3	.10	20	.01	2	.15	.03	.01	1	1
AL 26E 7+70S A	1	6	2	50	.3	3	1	14	.13	3	5	ND	2	31	1	3	2	4	1.49	.049	12	4	.09	51	.01	2	.31	.02	.01	1	1
AL 26E 7+90S A	1	10	5	39	.2	4	1	65	.50	2	5	ND	1	44	1	2	2	4	2.19	.093	16	5	.14	66	.01	2	.37	.03	.02	1	1
AL 26E 8+00S A	1	6	4	16	.2	3	1	21	.30	2	5	ND	1	23	1	2	2	3	.60	.066	11	9	.06	51	.02	2	.37	.02	.02	1	1
AL 30E 3+00N A	1	32	4	49	.4	6	2	644	.25	2	5	ND	2	53	1	2	2	5	4.76	.096	42	6	.08	64	.01	4	.47	.04	.02	1	1
AL 30E 2+90N A	2	11	2	47	.1	2	2	90	.12	2	5	ND	1	32	1	2	2	4	5.09	.051	2	2	.11	48	.01	5	.15	.04	.01	1	1
AL 30E 2+80N A	2	15	11	70	.2	4	2	1007	.33	3	5	ND	1	47	1	2	2	13	4.61	.082	7	2	.12	59	.01	7	.21	.04	.03	1	1
AL 30E 2+70N A	2	10	5	64	.2	2	1	179	.15	2	5	ND	1	57	1	2	2	4	5.33	.035	2	2	.13	57	.01	5	.14	.04	.02	1	1
AL 30E 2+50N A	1	5	2	40	.3	1	3	684	.15	2	6	ND	1	40	1	2	2	2	4.38	.061	2	2	.12	40	.01	4	.18	.04	.02	2	1
AL 30E 2+40N A	1	5	4	51	.2	2	2	643	.19	5	5	ND	1	41	1	2	2	2	4.33	.059	2	1	.12	44	.01	6	.09	.04	.02	1	1
AL 30E 2+30N A	1	4	3	65	.2	2	1	305	.46	2	5	ND	1	39	1	2	2	1	4.87	.061	2	3	.14	49	.01	3	.07	.04	.02	1	1
AL 30E 2+20N A	3	13	2	54	.1	3	1	56	.44	2	5	ND	1	42	1	2	3	19	5.71	.068	2	1	.13	46	.01	5	.06	.04	.05	1	1
AL 30E 2+10N B	1	6	2	60	.2	2	1	88	.41	2	5	ND	1	47	1	2	2	3	6.41	.069	2	4	.14	60	.01	11	.10	.05	.01	1	1
AL 30E 2+00N A	1	6	4	51	.2	1	3	259	1.20	3	5	ND	1	42	1	2	2	6	5.22	.080	2	3	.11	65	.01	7	.11	.04	.01	1	1
STD C/AU-0.5	21	60	41	135	7.3	71	29	1113	3.96	39	15	7	36	50	18	16	20	63	.45	.104	37	59	.04	185	.08	38	1.72	.09	.13	13	500

SAMPLE#	Mo 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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Mg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	W PPH	Au1 PPH
AL 30E 1+90M AP	3	8	6	80	.1	3	11	2049	3.14	5	5	ND	1	40	1	2	3	5	4.78	.069	2	1	.12	151	.01	6	.13	.05	.02	1	1
AL 30E 1+80M AP	1	9	2	51	.1	3	1	163	.23	2	5	ND	1	57	1	2	2	4	7.55	.048	11	1	.16	48	.01	10	.24	.05	.01	2	9
AL 30E 1+70M AP	1	19	2	56	.2	4	1	1039	.29	2	15	ND	1	58	1	2	2	4	7.32	.071	44	2	.15	93	.01	10	.48	.05	.01	2	2
AL 30E 1+60M AP	1	7	2	65	.2	2	1	16	.18	2	11	ND	1	39	1	2	2	3	3.34	.046	3	3	.08	41	.01	4	.20	.04	.02	1	1
AL 30E 1+50M AP	1	26	11	31	.3	5	4	862	.64	4	5	ND	2	44	1	2	2	8	5.08	.115	72	5	.12	79	.01	6	.80	.04	.02	1	2
AL 30E 1+40M B	1	6	7	56	.1	7	4	180	1.44	3	5	ND	5	11	1	2	2	31	.65	.017	7	15	.28	40	.17	2	.66	.02	.10	2	2
AL 30E 1+20M B	1	53	10	19	.1	22	10	140	1.42	2	5	ND	3	6	1	2	2	37	.33	.011	8	119	.56	32	.13	2	1.10	.03	.05	1	4
AL 30E 1+10M AP	1	106	16	71	1.0	11	4	283	1.19	6	5	ND	14	38	1	2	3	14	3.90	.098	195	27	.10	114	.01	4	2.47	.04	.03	1	1
AL 30E 1+00M AP	1	34	10	76	.6	6	4	569	.69	3	5	ND	4	47	1	2	2	10	5.02	.130	90	9	.12	86	.01	6	1.23	.05	.03	1	1
AL 30E 0+90M AP	2	23	6	43	.4	5	7	3895	.63	2	5	ND	3	49	1	2	2	11	5.76	.187	73	5	.15	130	.01	10	.81	.05	.03	2	1
AL 30E 0+80M AP	1	20	2	48	.3	5	1	653	.56	2	12	ND	3	51	1	2	2	7	5.86	.087	51	3	.17	72	.01	8	.49	.04	.03	2	1
AL 30E 0+70M AP	3	16	5	72	.3	5	74	3688	.33	2	5	ND	1	41	1	2	2	7	4.61	.091	18	5	.16	103	.01	9	.30	.04	.02	1	1
AL 30E 0+50M AP	1	15	3	38	.2	6	1	88	.32	3	9	ND	2	50	1	2	2	3	5.15	.097	34	5	.17	70	.01	8	.56	.04	.02	1	2
AL 30E 0+40M AP	1	6	2	79	.1	3	1	75	.23	2	5	ND	1	54	1	2	2	5	5.19	.058	9	2	.20	57	.01	7	.30	.04	.02	2	2
AL 30E 0+30M AP	2	17	5	95	.3	7	1	2169	.32	11	5	ND	1	61	1	2	2	5	6.36	.092	33	6	.22	81	.01	9	.54	.05	.03	1	3
AL 30E 0+20M AP	1	25	2	80	.2	8	1	262	.34	4	10	ND	2	54	1	2	2	3	5.59	.122	36	6	.19	86	.01	8	.64	.05	.02	1	1
AL 30E 0+10M AP	1	29	7	26	.5	45	5	2117	1.02	118	5	ND	10	31	1	2	2	11	3.05	.099	157	10	.10	216	.01	5	1.46	.04	.02	1	3
AL 30E 0+00M AP	1	13	2	51	.1	5	1	555	.61	10	6	ND	1	52	1	2	2	3	6.02	.082	17	1	.18	84	.01	10	.33	.05	.01	1	1
AL 30E 0+10S AP	1	10	3	35	.1	6	1	186	.19	3	7	ND	1	51	1	3	2	4	6.04	.057	5	1	.16	51	.01	9	.18	.05	.02	2	1
AL 30E 0+20S AP	2	10	6	51	.1	6	5	3549	.91	17	5	ND	1	43	1	2	2	5	5.21	.088	10	4	.14	109	.01	11	.23	.04	.02	1	1
AL 30E 0+30S A	1	36	5	73	.7	31	10	422	.64	4	5	ND	4	46	1	2	2	5	4.53	.088	49	7	.13	88	.01	7	.75	.04	.03	1	2
AL 30E 0+40S AP	1	24	8	35	.7	8	1	74	.36	3	11	ND	6	40	1	2	2	4	3.08	.086	105	4	.12	50	.01	7	.84	.04	.03	2	2
AL 30E 0+50S AP	1	44	2	60	1.2	40	6	49	.64	2	5	ND	5	53	1	2	2	3	4.04	.130	73	4	.13	124	.01	10	.72	.04	.04	1	3
AL 30E 0+60S AP	1	75	7	60	1.6	116	14	79	.77	2	5	ND	6	45	1	2	2	3	2.84	.167	62	10	.12	159	.01	7	.95	.04	.03	1	6
AL 30E 0+80S AP	1	30	8	37	.7	20	4	147	1.43	8	5	ND	8	38	1	2	3	24	2.62	.110	87	14	.09	88	.01	5	.56	.04	.01	1	4
AL 30E 0+90S AP	1	17	5	89	.4	12	3	99	.75	2	5	ND	5	29	1	2	2	4	1.12	.102	42	7	.05	107	.01	5	.51	.02	.02	1	1
AL 30E 1+00S AP	1	25	12	21	.1	156	12	100	1.85	72	5	ND	3	4	1	2	2	44	.06	.022	4	358	.72	47	.14	2	1.16	.03	.16	1	1
AL 30E 1+10S A	1	13	5	66	.1	31	1	44	.47	2	8	ND	3	15	1	2	3	3	.32	.109	24	10	.03	82	.01	3	.62	.01	.03	1	1
AL 30E 1+20S AP	2	47	15	85	.3	200	17	137	3.61	64	5	ND	6	14	1	2	2	93	.61	.056	23	812	1.62	77	.11	2	1.87	.03	.05	2	12
AL 30E 1+30S AP	3	29	12	59	.9	45	27	7647	5.87	49	5	ND	6	29	1	2	3	41	2.00	.306	61	79	.21	169	.01	2	.97	.04	.05	2	4
AL 30E 1+40S AP	1	21	5	55	.2	10	1	204	.82	4	5	ND	3	28	1	2	3	3	1.91	.121	37	8	.10	70	.01	4	.45	.03	.03	1	1
AL 30E 1+50S AP	1	16	5	44	.1	21	1	185	.33	3	5	ND	3	31	1	5	2	2	.97	.045	13	5	.07	105	.01	4	.27	.02	.04	2	1
AL 30E 1+60S AP	3	25	14	345	.3	63	17	10009	2.34	254	5	ND	3	42	3	2	4	20	3.08	.117	47	13	.11	200	.01	5	.94	.04	.04	3	1
AL 30E 1+70S AP	5	22	20	222	.3	48	50	17545	7.27	817	5	ND	4	38	2	9	2	52	2.59	.165	21	29	.14	237	.01	2	.63	.05	.04	2	1
AL 30E 1+90S AP	1	19	8	212	.2	15	17	1587	4.48	298	5	ND	4	19	2	2	2	22	1.26	.133	22	15	.05	205	.01	2	.49	.03	.02	2	2
AL 30E 2+00S AP	1	15	3	123	.2	10	8	1067	2.47	70	5	ND	3	25	1	3	2	11	1.66	.098	17	9	.06	107	.01	4	.34	.03	.04	2	1
STD C/AU 0.5	20	61	43	141	7.0	72	29	1145	3.96	40	17	7	36	50	18	16	22	71	.48	.108	38	61	.89	185	.08	38	1.72	.09	.13	15	500

NORTHERN DYNASTY FILE # B6-1672

PAGE 9

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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Mg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	M PPH	Au1 PPB
AL 30E 2+30S A	1	33	16	141	.4	21	6	1053	2.24	26	5	ND	4	34	1	2	2	27	2.53	.117	51	25	.16	120	.02	8	1.10	.03	.06	1	1
AL 30E 2+60S A	1	32	11	122	.4	16	7	2010	1.45	45	5	ND	4	38	1	2	2	15	3.58	.131	52	23	.13	119	.02	6	.97	.04	.04	1	1
AL 30E 2+80S A	1	23	8	121	.2	15	5	1425	1.00	11	5	ND	2	35	1	2	2	17	2.76	.115	40	15	.12	83	.02	6	.85	.03	.03	1	1
AL 30E 3+00S A	3	14	13	109	.2	19	17	4718	3.89	56	5	ND	4	26	1	2	2	40	1.27	.105	29	24	.36	115	.06	10	1.18	.04	.11	1	1
AL 30E 3+10S B	1	14	7	29	.1	11	3	119	1.57	27	5	ND	3	11	1	2	2	28	.41	.033	11	20	.22	28	.10	2	1.03	.02	.04	1	2
AL 30E 3+20S B	1	8	11	30	.1	10	4	89	2.10	2	5	ND	5	9	1	2	2	36	.28	.036	11	28	.20	24	.12	3	1.50	.02	.04	1	1
AL 30E 3+30S B	1	16	12	40	.1	13	5	97	2.86	4	5	ND	6	7	1	2	2	42	.16	.064	12	29	.20	20	.09	3	2.00	.02	.04	2	1
AL 30E 3+40S B	1	12	10	37	.1	17	6	123	3.24	2	5	ND	8	16	1	4	2	56	.18	.045	14	36	.37	40	.12	5	1.75	.02	.08	2	1
AL 30E 3+50S B	1	10	10	36	.2	9	3	105	2.07	4	5	ND	6	7	1	2	2	30	.12	.100	7	22	.16	23	.10	2	1.73	.02	.03	1	1
AL 30E 3+60S B	1	14	14	34	.1	9	3	84	2.50	2	5	ND	7	6	1	2	3	42	.12	.184	8	21	.16	19	.12	4	2.30	.02	.03	1	1
AL 30E 3+70S B	1	13	14	50	.1	12	4	105	2.61	2	5	ND	8	7	1	2	3	41	.11	.082	8	31	.22	32	.13	5	2.88	.02	.04	1	1
AL 30E 3+80S B	1	18	13	71	.2	9	4	176	2.86	2	5	ND	7	6	1	2	2	47	.10	.172	8	26	.22	24	.15	4	2.38	.02	.05	1	2
AL 30E 3+90S B	1	11	12	53	.1	9	3	108	2.37	2	5	ND	8	6	1	2	2	37	.10	.109	10	23	.17	22	.12	3	2.25	.02	.03	1	1
AL 30E 4+00S B	1	15	15	42	.1	11	3	110	2.68	2	5	ND	11	7	1	2	2	40	.11	.132	14	26	.20	24	.11	3	2.90	.02	.04	1	1
AL 30E 4+10S B	1	16	17	61	.3	12	4	106	2.87	2	11	ND	10	7	1	4	4	48	.11	.201	11	29	.25	30	.14	4	2.58	.02	.05	1	1
AL 30E 4+20S B	1	12	12	40	.1	11	3	124	2.82	4	5	ND	7	7	1	3	2	47	.12	.075	8	27	.23	19	.14	3	1.46	.02	.04	1	1
AL 30E 4+30S B	1	20	15	49	.1	11	4	105	3.03	5	5	ND	10	6	1	2	2	46	.10	.091	13	26	.25	27	.16	3	3.34	.02	.05	2	1
AL 30E 4+40S B	1	11	9	40	.1	9	3	90	2.28	2	5	ND	7	7	1	2	2	36	.10	.057	9	22	.19	23	.12	2	1.68	.02	.04	2	1
AL 30E 4+50S B	1	11	7	23	.1	9	3	75	2.25	2	5	ND	7	6	1	2	2	35	.10	.048	9	22	.16	18	.12	3	1.85	.02	.02	1	1
AL 30E 4+60S B	1	10	10	26	.1	6	2	72	2.69	2	5	ND	7	6	1	3	3	52	.08	.072	8	24	.16	17	.16	3	2.08	.02	.04	1	2
AL 30E 4+70S B	1	14	9	31	.1	16	4	106	3.30	2	5	ND	6	6	1	2	2	60	.09	.077	9	53	.29	15	.16	4	1.73	.02	.04	2	4
AL 30E 4+80S B	1	5	12	26	.1	7	2	75	1.93	2	5	ND	4	7	1	3	2	40	.09	.031	5	25	.17	19	.14	2	1.68	.02	.03	1	1
AL 30E 4+90S B	1	8	8	44	.1	13	4	143	3.63	6	5	ND	7	8	1	2	2	77	.10	.046	7	35	.39	23	.25	5	1.30	.02	.08	1	1
AL 30E 5+00S B	1	9	4	21	.1	9	3	90	1.04	2	5	ND	4	8	1	2	2	23	.15	.023	9	16	.18	18	.10	2	.87	.02	.03	1	2
AL 30E 5+10S A	1	26	6	53	.6	8	3	139	.51	64	5	ND	1	57	1	2	2	33	5.21	.085	27	5	.23	86	.02	3	.82	.04	.02	1	1
AL 30E 5+20S A	2	12	2	54	.2	6	1	681	.36	22	5	ND	1	68	1	2	2	22	5.44	.099	9	3	.21	91	.01	4	.56	.04	.01	2	1
AL 30E 5+30S A	2	9	2	118	.2	4	1	227	.21	6	5	ND	1	59	1	2	2	34	4.97	.074	5	3	.20	62	.01	6	.30	.04	.01	1	1
AL 30E 5+40S A P	1	12	2	79	.3	5	1	36	.37	9	5	ND	1	49	1	2	2	27	4.31	.073	14	3	.18	60	.01	3	.30	.04	.02	1	1
AL 30E 5+50S A	2	11	2	33	.2	6	1	231	.44	2	5	ND	1	59	1	2	2	43	5.12	.040	5	3	.21	81	.01	2	.28	.04	.01	1	1
AL 30E 5+60S A	3	9	4	50	.2	4	2	199	1.20	17	5	ND	1	53	1	2	2	8	4.17	.043	5	5	.17	99	.01	3	.20	.03	.01	1	1
AL 30E 5+90S A	1	18	5	25	.2	9	2	255	.72	4	5	ND	2	49	1	2	2	5	3.35	.075	10	6	.12	125	.02	2	.85	.03	.01	1	2
AL 30E 6+00S A	1	11	2	20	.2	5	2	314	.99	2	5	ND	2	49	1	2	2	6	3.56	.076	6	5	.12	124	.01	2	.34	.03	.02	1	1
AL 30E 6+10S A	1	10	2	20	.1	5	2	233	1.04	5	5	ND	1	48	1	2	2	6	3.25	.111	7	6	.12	102	.01	3	.42	.03	.01	1	1
AL 30E 6+20S A	2	15	5	35	.2	6	1	716	.99	10	5	ND	1	56	1	2	2	6	3.82	.136	12	7	.14	117	.01	4	.33	.03	.02	1	1
AL 30E 6+30S A	14	16	14	58	.5	7	11	1702	1.88	69	5	ND	1	50	1	2	2	29	3.28	.231	11	8	.14	154	.02	6	.67	.03	.03	1	1
AL 30E 6+40S A	1	11	2	34	.2	5	2	139	1.03	2	5	ND	1	53	1	2	2	6	3.55	.167	6	3	.11	108	.01	3	.46	.03	.01	1	1
STD C/NU-0.5	20	60	40	138	7.1	72	29	1102	3.98	40	19	8	34	49	18	15	21	62	.46	.103	38	58	.84	183	.08	40	1.73	.08	.13	15	495

NORTHERN DYNASTY FILE # B6-1672

PAGE 10

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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Hg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	M PPH	Au1 PPB
AL 30E 6+50S A	2	13	6	30	.2	5	2	332	.97	17	5	ND	1	59	1	2	2	8	3.97	.116	7	6	.15	123	.01	5	.37	.03	.03	1	1
AL 30E 6+60S B	1	8	4	20	.1	9	2	92	.78	5	5	ND	3	8	1	2	2	16	.24	.041	9	17	.18	15	.08	4	.55	.02	.04	1	1
AL 30E 6+70S B	1	16	3	31	.1	15	4	117	1.08	10	5	ND	4	8	1	2	2	28	.18	.023	8	29	.30	16	.13	3	.67	.02	.06	1	10
AL 30E 6+80S B	1	15	15	85	.1	12	5	147	3.37	9	5	ND	7	8	1	7	2	48	.12	.044	8	37	.30	33	.18	6	1.57	.02	.07	1	1
AL 30E 6+90S B	1	48	11	69	.2	31	11	177	2.66	13	5	ND	8	8	1	2	2	52	.16	.050	9	51	.45	46	.15	5	1.62	.02	.07	1	1
AL 30E 7+00S B	1	30	7	23	.1	18	5	92	1.77	11	5	ND	4	6	1	3	2	41	.15	.026	10	31	.27	17	.11	3	1.00	.02	.04	1	1
AL 30E 7+10S B	1	20	5	25	.1	17	4	91	1.49	9	5	ND	4	7	1	2	2	36	.13	.014	10	36	.24	17	.11	3	.78	.02	.03	1	1
AL 30E 7+20S B	1	17	5	24	.1	20	4	90	1.17	6	5	ND	5	7	1	2	2	27	.14	.015	13	36	.24	22	.10	3	.72	.02	.04	1	1
AL 30E 7+26S B	1	22	4	31	.1	20	6	118	1.31	6	5	ND	5	9	1	2	2	26	.22	.031	17	34	.29	28	.10	4	.82	.02	.04	3	1
AL 30E 7+40S A	1	35	12	54	.1	11	2	17	.52	2	5	ND	3	33	2	2	2	4	.36	.050	42	8	.03	79	.01	4	.54	.01	.02	1	1
AL 30E 7+50S A	2	28	2	30	.2	17	1	5235	.34	25	5	ND	1	74	1	2	2	5	7.18	.059	5	5	.22	162	.01	13	.38	.04	.02	1	1
AL 30E 7+60S A	1	22	6	45	.1	15	4	2437	.35	23	5	ND	1	72	1	2	2	14	6.49	.113	10	9	.23	82	.01	17	.32	.04	.03	1	1
AL 30E 7+70S A	1	23	2	19	.2	10	1	90	.21	2	5	ND	2	82	1	2	2	8	7.32	.063	9	11	.22	89	.01	13	.32	.04	.01	1	1
AL 30E 7+80S A	7	26	4	39	.2	11	3	3116	.36	12	10	ND	1	72	1	2	2	9	7.51	.064	7	11	.23	298	.01	11	.29	.05	.02	2	1
AL 30E 7+90S A	1	24	2	55	.2	11	2	1037	.94	31	6	ND	1	64	1	2	2	9	6.59	.085	29	6	.20	81	.01	10	.45	.05	.02	1	1
AL 30E 8+00S A	1	26	4	51	.2	11	1	734	.23	10	5	ND	1	75	1	2	2	5	7.82	.083	7	5	.24	75	.01	14	.30	.05	.03	1	1
AL 31E 1+50M A	1	39	2	49	.3	10	2	744	.50	3	5	ND	2	56	1	2	3	5	6.99	.136	49	8	.21	86	.01	11	.68	.04	.02	1	6
AL 31E 1+60M A	1	51	5	52	.3	10	3	1388	.53	3	5	ND	2	56	1	2	2	7	6.69	.162	54	8	.17	113	.01	12	.72	.04	.03	1	1
AL 31E 1+30M A	1	30	3	20	.2	9	1	46	.45	2	5	ND	1	50	1	2	2	7	6.14	.050	6	12	.17	76	.02	6	.46	.04	.02	1	1
AL 31E 1+20M A	1	77	11	44	.5	11	2	354	.46	2	12	ND	2	48	2	2	3	5	5.84	.099	72	9	.12	90	.01	9	.78	.04	.02	1	1
AL 31E 1+10M A	1	37	7	54	.1	10	2	545	.45	2	5	ND	1	53	1	2	2	5	6.29	.067	22	7	.16	100	.01	8	.46	.04	.03	1	1
AL 31E 1+00M A	1	73	14	51	1.6	16	2	94	.93	2	5	ND	2	51	3	3	2	16	5.40	.065	51	14	.16	108	.03	7	.85	.04	.04	1	1
AL 31E 0+90M A	1	18	9	31	.2	9	2	102	.54	2	15	ND	2	44	1	2	2	9	5.05	.058	23	8	.11	78	.01	8	.32	.04	.02	2	1
AL 31E 0+80M A	1	8	4	27	.1	4	1	170	1.41	3	5	ND	1	45	1	2	2	3	4.79	.064	5	2	.11	85	.01	8	.16	.04	.02	1	1
AL 31E 0+70M A	1	11	6	34	.1	5	2	627	.37	4	5	ND	1	55	1	2	2	6	6.35	.070	4	5	.14	83	.01	10	.23	.04	.02	1	1
AL 31E 0+60M A	2	10	4	53	.1	4	2	550	.26	4	5	ND	1	48	1	2	2	6	5.55	.072	2	4	.14	65	.01	9	.16	.04	.02	1	21
AL 31E 0+50M A	2	7	5	74	.1	3	2	1734	.27	2	5	ND	1	45	1	2	2	6	4.88	.073	4	1	.12	78	.01	9	.18	.04	.01	1	22
AL 31E 0+40M A	1	13	4	41	.2	5	1	326	.55	2	5	ND	1	52	1	2	2	3	5.70	.074	10	4	.13	98	.01	7	.25	.04	.02	1	11
AL 31E 0+30M A	1	9	5	53	.1	3	1	692	.59	2	5	ND	1	47	1	2	2	3	4.33	.090	9	3	.10	128	.01	8	.26	.04	.02	1	3
AL 31E 0+20M A	1	4	4	52	.1	2	1	21	.88	2	5	ND	1	24	1	2	2	1	1.86	.029	2	4	.05	38	.01	5	.07	.02	.01	1	1
AL 32E 3+00M A	1	23	7	42	.2	8	4	135	.47	2	5	ND	1	51	1	2	2	4	3.60	.084	14	8	.12	97	.01	7	.35	.03	.02	2	1
AL 32E 2+90M B	1	3	7	13	.1	2	1	28	.46	2	11	ND	2	5	1	3	2	15	.08	.008	5	9	.03	12	.06	2	.21	.01	.02	1	2
AL 32E 2+80M B	1	5	6	18	.1	3	1	51	.83	2	5	ND	4	6	1	2	3	37	.08	.009	6	11	.09	18	.16	3	.38	.01	.04	1	1
AL 32E 2+70M N A	1	6	9	14	.2	7	1	40	1.92	3	9	ND	3	5	1	3	2	76	.06	.020	3	23	.08	11	.22	4	.62	.01	.03	1	2
AL 32E 2+60M B	1	7	11	23	.1	6	2	94	.95	4	5	ND	4	9	1	2	3	32	.10	.009	5	10	.20	18	.18	3	.39	.02	.05	1	2
AL 32E 2+50M B	1	3	11	17	.1	3	1	42	.53	2	5	ND	3	6	1	2	4	26	.06	.009	6	11	.08	12	.16	2	.47	.01	.03	1	1
AL 32E 2+40M B	1	4	12	23	.1	2	1	39	.51	2	5	ND	6	7	1	2	3	22	.07	.016	5	10	.07	18	.16	4	.42	.01	.05	2	1
STD C/AU 0.5	21	63	41	140	7.0	70	31	1181	4.00	40	20	8	36	51	20	16	21	73	.48	.111	41	66	.89	192	.09	40	1.73	.09	.15	15	490

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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Hg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	W PPH	Au1 PPH
AL 3ZE 2+30N A	1	24	15	18	.1	5	1	25	.41	2	5	ND	2	8	1	2	2	12	.09	.021	13	8	.04	40	.06	2	.50	.01	.04	1	1
AL 3ZE 2+20N B	1	3	6	11	.2	3	1	51	.61	2	5	ND	3	6	1	3	2	25	.09	.002	4	7	.10	7	.11	2	.31	.01	.03	1	1
AL 3ZE 2+10N B	1	5	12	24	.1	5	2	80	.95	2	5	ND	4	8	1	2	2	37	.11	.010	6	10	.15	24	.19	2	.48	.01	.05	1	2
AL 3ZE 2+00N B	1	7	17	27	.2	8	3	100	1.26	2	5	ND	4	9	1	2	2	44	.14	.008	6	16	.24	19	.25	2	.71	.02	.05	1	1
AL 3ZE 1+90N B	1	100	22	30	1.4	93	17	176	3.46	10	5	ND	16	10	1	7	2	47	.46	.030	94	33	.18	52	.11	3	3.61	.03	.05	1	6
AL 3ZE 1+76N B	1	4	9	20	.1	3	1	32	.35	2	5	ND	2	7	1	2	2	15	.09	.011	6	7	.07	16	.10	2	.32	.01	.05	2	1
AL 3ZE 1+70N A	1	31	12	38	.3	21	3	39	.66	4	5	ND	3	45	1	2	2	3	1.66	.063	60	3	.10	107	.01	2	.67	.02	.03	2	1
AL 3ZE 1+60N A	1	59	7	36	.6	46	3	56	1.05	21	5	ND	6	53	1	2	2	5	3.21	.096	96	6	.14	126	.01	3	.86	.03	.02	1	1
AL 3ZE 1+60N B	1	4	2	13	.1	4	1	49	.57	9	5	ND	3	6	1	2	2	9	.20	.037	7	7	.10	8	.05	2	.22	.01	.03	1	2
AL 3ZE 1+50N A P	1	91	6	25	.5	68	2	102	.54	33	5	ND	7	41	1	2	2	5	3.82	.089	124	5	.11	95	.01	5	1.34	.03	.02	1	4
AL 3ZE 1+40N A P	1	91	6	64	.9	70	3	734	1.02	171	5	ND	8	39	1	2	2	13	3.49	.256	148	21	.13	112	.01	7	1.38	.03	.02	1	1
AL 3ZE 1+30N A P	1	74	6	93	.8	63	2	200	.56	18	5	ND	3	49	1	2	2	4	4.75	.140	60	7	.14	124	.01	7	.89	.03	.03	1	1
AL 3ZE 1+20N A P	1	35	19	91	.9	34	1	170	.58	12	5	ND	1	38	1	2	2	4	3.71	.090	29	2	.11	97	.01	5	.50	.03	.03	1	1
AL 3ZE 1+10N A P	1	28	4	68	.4	29	1	51	.62	4	5	ND	2	46	1	2	2	5	4.44	.069	20	2	.12	101	.01	4	.45	.03	.02	1	1
AL 3ZE 1+00N A P	1	45	4	30	.2	9	1	154	.17	2	5	ND	2	32	1	2	2	5	2.84	.055	46	5	.09	58	.01	3	.56	.03	.01	1	4
AL 3ZE 0+90N A P	1	36	6	64	.2	18	2	342	.41	2	5	ND	3	47	1	2	2	5	4.35	.072	51	3	.12	99	.01	4	.64	.03	.01	1	6
AL 3ZE 0+80N A	1	25	2	63	.2	15	2	419	.31	2	5	ND	2	43	1	2	2	6	4.01	.075	35	2	.12	103	.01	4	.58	.03	.01	1	1
AL 3ZE 0+70N A	1	26	4	39	.2	13	1	389	.31	4	5	ND	2	47	1	2	2	6	4.65	.071	27	3	.14	90	.01	6	.48	.03	.01	2	4
AL 3ZE 0+60N A P	1	19	12	69	.2	16	5	1102	.63	8	5	ND	2	44	1	2	2	5	4.32	.092	24	4	.14	95	.01	6	.40	.03	.04	1	6
AL 3ZE 0+50N A P	1	16	9	91	.2	14	4	1826	.39	5	5	ND	1	42	1	2	2	5	4.17	.061	18	2	.14	92	.01	6	.33	.03	.02	1	4
AL 3ZE 0+30N A P	1	6	9	158	.1	4	1	178	.15	5	5	ND	1	14	1	2	2	2	.81	.047	2	3	.07	27	.01	3	.10	.03	.07	1	1
AL 3ZE 0+10N A P	1	5	5	107	.1	2	1	57	.09	2	5	ND	1	11	1	2	2	2	.39	.032	2	1	.03	20	.01	2	.10	.02	.03	1	1
AL 3ZE 0+10S A P	1	2	3	103	.1	1	1	55	.05	2	5	ND	1	9	1	2	2	1	.41	.024	2	1	.04	16	.01	2	.08	.02	.02	1	1
AL 3ZE 0+30S A P	1	27	2	82	.2	5	1	32	.09	2	5	ND	2	16	1	2	2	6	.95	.020	7	6	.04	40	.01	2	.26	.02	.01	1	6
AL 3ZE 0+45S A P	1	4	2	55	.1	4	1	40	.07	2	5	ND	1	12	1	2	2	2	.61	.020	2	5	.03	26	.01	2	.10	.01	.01	1	1
AL 3ZE 0+60S A P	1	6	2	35	.2	3	1	36	.15	2	5	ND	1	14	1	2	2	2	.75	.040	7	2	.03	46	.01	2	.20	.02	.01	1	1
AL 3ZE 0+80S A P	1	11	6	37	.2	6	1	41	.57	2	5	ND	2	18	1	4	2	6	.38	.073	20	4	.03	56	.01	3	.38	.01	.01	1	1
AL 3ZE 1+00S A P	1	32	4	60	.3	22	2	78	.68	2	5	ND	4	54	1	2	2	3	1.72	.053	36	2	.10	83	.01	3	.36	.03	.02	1	1
AL 3ZE 1+20S A P	1	5	2	49	.2	11	1	42	.17	2	5	ND	1	25	1	2	2	1	1.18	.020	2	2	.05	46	.01	2	.10	.02	.01	1	1
AL 3ZE 1+40S A P	1	8	3	52	.1	17	1	11	.15	2	5	ND	1	35	1	2	2	2	1.59	.034	2	2	.06	57	.01	2	.16	.02	.01	1	1
AL 3ZE 1+60S A P	1	4	3	35	.1	7	1	29	.09	2	5	ND	1	22	1	2	2	1	.57	.033	2	3	.04	40	.01	2	.11	.02	.01	1	1
AL 3ZE 1+80S A P	1	9	11	33	.4	3	1	19	.19	2	5	ND	1	14	1	2	2	3	.18	.104	11	6	.03	58	.02	2	.73	.01	.03	1	6
AL 3ZE 1+90S B	1	11	11	37	.1	9	3	95	2.48	2	5	ND	4	10	1	2	2	50	.13	.037	8	22	.24	23	.13	2	1.16	.02	.06	2	1
AL 3ZE 2+00S B	1	11	10	45	.1	19	6	125	2.16	3	5	ND	5	13	1	2	2	47	.12	.023	9	31	.37	57	.13	5	1.70	.02	.12	1	2
AL 3ZE 2+10S B	1	12	11	85	.1	15	7	238	2.99	3	5	ND	6	8	1	2	2	58	.12	.072	7	33	.59	32	.27	3	2.02	.02	.11	1	4
STD C/AU-0.5	20	60	40	139	7.2	71	29	1104	3.98	38	18	7	34	49	19	16	18	62	.46	.104	35	62	.84	184	.08	38	1.70	.08	.14	13	500

NORTHERN DYNASTY FILE # B6-1672

PAGE 12

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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Mg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	V PPH	Au PPH
AL 32E 2+20S B	1	27	24	90	.2	20	8	282	3.59	2	5	ND	8	6	1	2	2	65	.10	.142	7	39	.56	33	.22	2	3.00	.02	.15	2	1
AL 32E 2+30S B	1	37	21	112	.2	17	7	321	4.14	2	5	ND	12	9	1	3	2	58	.13	.218	6	39	.46	43	.19	2	4.48	.02	.00	3	1
AL 32E 2+40S B	1	10	22	78	.1	9	4	133	3.03	3	5	ND	9	5	1	3	3	46	.05	.155	3	29	.31	35	.13	2	3.31	.01	.00	1	1
AL 32E 2+50S B	1	9	8	24	.1	5	2	54	2.14	2	5	ND	7	4	1	2	2	34	.05	.053	5	16	.13	14	.11	2	1.68	.01	.03	1	1
AL 32E 2+60S B	1	12	17	92	.1	12	5	225	3.53	2	5	ND	9	6	1	2	2	60	.08	.202	7	27	.47	31	.20	2	2.84	.02	.00	1	1
AL 32E 2+70S B	1	21	22	118	.2	39	7	220	4.46	2	5	ND	8	7	1	2	2	73	.09	.172	8	75	.53	32	.23	2	3.22	.02	.09	1	1
AL 32E 2+80S B	1	25	15	54	.1	13	4	124	3.53	2	5	ND	9	5	1	2	2	58	.08	.131	8	35	.29	20	.17	3	2.20	.02	.05	3	1
AL 32E 2+90S B	1	10	7	20	.1	7	2	55	1.67	6	5	ND	6	5	1	2	2	29	.07	.060	6	19	.11	15	.09	3	1.32	.01	.02	1	1
AL 32E 3+00S B	1	7	6	24	.1	6	2	62	1.78	2	5	ND	3	4	1	5	2	46	.05	.034	5	15	.13	13	.15	3	.56	.01	.03	1	1
AL 32E 3+10S B	1	8	12	31	.1	7	2	70	2.31	2	5	ND	8	4	1	3	2	37	.06	.041	6	22	.15	23	.13	3	1.71	.01	.03	1	1
AL 32E 3+20S B	1	5	5	18	.1	3	1	42	1.01	2	5	ND	2	4	1	3	2	23	.05	.024	4	9	.08	19	.09	2	.54	.01	.03	1	1
AL 32E 3+30S B	1	24	10	54	.1	15	5	160	2.92	2	5	ND	5	6	1	5	2	58	.08	.074	6	33	.40	22	.18	3	1.20	.02	.06	2	1
AL 32E 3+40S A	1	22	26	80	.3	12	2	44	.37	2	6	ND	1	29	1	2	2	6	.49	.071	8	5	.07	98	.01	3	.36	.02	.05	1	1
AL 32E 3+50S B	1	4	7	21	.1	5	2	61	1.04	2	10	ND	5	5	1	2	2	20	.04	.015	5	12	.14	15	.09	2	.64	.01	.04	1	1
AL 32E 3+60S B	1	4	9	13	.1	5	1	51	.51	2	5	ND	2	5	1	2	2	13	.04	.010	4	10	.13	8	.09	2	.39	.01	.02	1	1
AL 32E 3+70S A	1	15	7	40	.1	6	1	15	.58	2	5	ND	1	36	1	2	2	3	1.13	.084	17	6	.06	70	.02	5	.53	.02	.02	2	1
AL 32E 3+80S A	1	16	7	59	.2	12	3	179	1.23	8	5	ND	1	44	1	2	2	13	2.66	.097	20	14	.18	79	.03	7	.84	.03	.04	1	1
AL 32E 3+90S A	1	20	13	67	.2	11	15	2779	2.16	78	5	ND	1	52	1	3	2	35	3.50	.103	26	12	.18	138	.03	6	.74	.04	.05	1	1
AL 32E 4+00S B	2	9	17	53	.1	7	6	632	4.43	209	5	ND	6	7	1	5	2	80	.17	.022	6	19	.16	26	.16	2	.71	.02	.04	1	1
AL 32E 4+20S A	1	33	13	61	.2	24	11	1649	2.99	56	5	ND	9	26	1	2	2	46	1.46	.082	52	32	.41	150	.09	4	1.25	.04	.11	1	1
AL 32E 4+30S A	1	30	14	71	.3	13	11	3425	1.58	33	5	ND	3	47	1	2	2	21	3.92	.091	58	11	.15	150	.02	12	.77	.04	.06	2	1
AL 32E 4+50S A P	1	35	2	60	.2	11	3	857	.74	2	5	ND	1	47	1	2	2	6	4.14	.084	39	10	.09	120	.01	6	.53	.03	.02	1	1
AL 32E 4+60S A P	2	30	7	92	.4	12	21	8856	1.30	21	5	ND	1	55	1	2	2	20	4.73	.110	40	7	.10	266	.01	10	.61	.04	.02	1	1
AL 32E 4+70S A P	1	30	2	55	.4	10	5	523	1.24	8	5	ND	2	49	1	2	2	9	3.95	.134	36	10	.10	115	.01	8	.57	.03	.01	1	1
AL 32E 4+80S A P	1	34	4	51	.3	11	4	334	.92	8	5	ND	4	46	1	2	2	19	3.85	.132	51	13	.10	121	.01	8	.70	.03	.02	1	1
AL 32E 4+90S A P	6	28	8	52	.3	15	15	4711	3.03	380	5	ND	1	56	1	2	2	61	5.36	.149	29	11	.18	216	.01	8	.84	.04	.03	1	1
AL 32E 5+00S A P	2	24	2	48	.1	12	3	451	1.06	53	5	ND	1	46	1	2	2	27	4.92	.080	20	12	.27	93	.02	9	.62	.04	.04	1	1
AL 32E 5+10S A	2	37	7	93	.5	25	12	20645	1.39	337	8	ND	2	60	2	2	2	48	5.34	.166	17	8	.20	535	.01	8	.76	.04	.02	1	1
AL 32E 5+20S A	1	24	5	47	.2	11	1	185	.36	6	5	ND	1	58	1	2	2	11	5.18	.070	13	3	.18	99	.01	7	.43	.04	.02	2	4
AL 32E 5+30S A	1	22	7	37	.3	9	5	183	.53	16	5	ND	1	54	1	2	2	7	3.79	.120	23	7	.18	86	.01	5	.56	.03	.02	1	1
AL 32E 5+40S B	1	10	5	23	.1	13	3	80	1.22	18	5	ND	3	6	1	2	2	37	.16	.014	6	23	.20	17	.11	2	.61	.02	.02	2	1
AL 32E 5+50S B	1	4	3	12	.1	2	1	32	.42	2	5	ND	4	4	1	5	2	15	.06	.007	7	11	.06	11	.07	2	.50	.01	.01	1	1
AL 32E 5+60S A	1	25	7	34	.1	16	4	16	.68	2	5	ND	3	71	1	2	2	3	1.14	.066	52	5	.04	160	.01	3	.86	.02	.01	2	1
AL 32E 5+70S A	4	31	6	30	.5	40	38	189	3.46	20	7	ND	4	54	1	3	2	32	5.64	.163	57	12	.16	144	.01	8	1.31	.04	.01	2	1
AL 32E 5+80S A	8	19	7	58	.3	21	27	1237	4.13	144	5	ND	1	44	1	2	2	13	3.97	.145	14	10	.19	157	.01	11	.78	.04	.02	2	1
AL 32E 5+90S A	9	13	11	99	.2	21	39	9673	3.59	436	5	ND	1	56	1	2	3	13	4.37	.104	6	4	.21	352	.01	12	.49	.04	.02	1	4
STB C/AU 0.5	22	.60	.42	139	7.0	75	30	1152	3.98	38	18	7	35	51	19	17	21	72	.43	.108	37	63	.89	181	.09	39	1.73	.09	.14	15	500

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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Hg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	N PPH	Au1 PPH
AL 3ZE 6+005 A	6	26	15	71	.2	31	12	10024	1.85	171	5	ND	2	60	1	2	2	14	4.86	.094	19	15	.22	296	.01	10	.68	.05	.04	1	6
AL 3ZE 6+205 B	2	65	16	117	.2	165	19	1366	4.73	183	5	ND	6	15	1	2	2	43	.70	.031	19	220	.91	84	.11	9	2.34	.05	.06	1	1
AL 3ZE 6+305 A	1	89	16	88	.4	99	10	1801	2.83	123	5	ND	3	31	1	2	2	33	2.17	.067	44	85	.47	111	.05	9	1.46	.04	.05	1	4
AL 3ZE 6+405 A	2	71	15	75	.3	99	12	1052	3.14	139	5	ND	3	29	1	2	2	35	1.95	.088	34	90	.49	99	.05	11	1.50	.04	.07	1	1
AL 3ZE 6+505 A	1	58	16	62	.4	77	10	573	1.13	15	5	ND	2	42	1	4	2	16	2.95	.048	32	54	.33	118	.04	6	.78	.04	.05	1	1
AL 3ZE 6+605 B	1	44	15	62	.1	118	18	239	2.81	33	5	ND	4	10	1	2	2	62	.39	.012	8	200	.92	39	.12	8	1.69	.04	.03	1	4
AL 3ZE 6+805 B	1	37	19	84	.1	168	24	455	3.50	42	5	ND	5	13	1	2	2	60	.51	.017	7	226	1.55	50	.12	11	3.22	.09	.05	1	3
AL 3ZE 6+905 B	1	48	13	119	.1	205	30	474	4.11	29	5	ND	4	18	1	2	2	68	.73	.026	8	207	1.46	54	.15	12	3.41	.08	.07	1	3
AL 3ZE 7+005 B	3	50	18	139	.1	229	41	645	5.03	33	5	ND	5	16	1	2	2	86	.65	.017	8	309	1.93	50	.16	14	3.82	.11	.07	1	3
AL 3ZE 7+105 B	2	57	21	117	.1	275	30	347	4.30	35	5	ND	5	10	1	2	2	79	.34	.014	7	245	1.26	36	.15	8	3.50	.09	.04	1	1
AL 3ZE 7+405 A	1	77	13	43	.6	99	12	805	1.77	22	5	ND	5	61	1	2	2	25	4.92	.083	80	24	.35	142	.03	10	1.28	.05	.09	1	14
AL 3ZE 7+505 B	1	27	14	62	.1	79	12	222	2.28	15	5	ND	5	10	1	5	2	43	.25	.015	11	104	.72	28	.11	12	1.58	.05	.13	1	2
AL 3ZE 7+605 A P	1	32	4	40	.4	49	6	240	.75	6	5	ND	3	63	1	2	2	8	5.75	.081	27	12	.28	108	.01	9	.67	.05	.05	1	1
AL 3ZE 7+705 A P	2	75	3	26	.3	84	4	418	1.20	19	5	ND	2	67	1	2	2	24	5.70	.045	16	16	.19	150	.01	7	.71	.04	.02	1	1
AL 3ZE 7+805 A P	1	21	6	25	.1	38	2	81	1.16	4	5	ND	1	62	1	2	2	4	4.25	.073	6	8	.08	131	.01	7	.38	.04	.02	1	4
AL 3ZE 7+905 A P	1	6	3	41	.2	13	1	16	.18	2	5	ND	1	40	1	5	2	2	2.67	.034	2	10	.07	54	.01	4	.16	.03	.01	1	1
AL 3ZE 8+005 A	1	5	2	33	.3	10	1	15	.21	2	5	ND	1	43	1	2	2	2	3.11	.038	2	5	.09	52	.01	4	.15	.03	.01	1	1
AL 3ZE 4+400 B	1	6	8	25	.1	7	2	80	1.35	6	5	ND	4	6	1	2	2	43	.12	.014	3	18	.18	16	.19	4	.57	.01	.04	1	2
AL 3ZE 3+000 B	1	9	15	32	.1	9	3	94	2.19	2	5	ND	9	5	1	2	2	72	.07	.011	8	23	.19	17	.26	6	.76	.01	.05	1	1
AL 3ZE 2+900 B	1	6	11	16	.1	3	1	35	.81	2	5	ND	4	4	1	2	2	16	.06	.010	6	11	.08	13	.08	3	1.35	.01	.02	1	1
AL 3ZE 2+800 B	1	9	8	23	.1	4	1	38	1.18	2	5	ND	5	5	1	2	2	21	.08	.027	9	13	.08	11	.08	3	.94	.01	.02	1	1
AL 3ZE 2+700 B	1	9	12	50	.1	12	4	120	1.67	3	5	ND	8	6	1	2	2	32	.08	.014	4	21	.31	22	.25	4	.81	.02	.09	1	3
AL 3ZE 2+600 B	1	19	14	56	.1	13	5	150	2.66	2	5	ND	6	7	1	2	2	61	.09	.027	5	21	.38	21	.24	6	1.14	.02	.08	1	2
AL 3ZE 2+500 B	1	6	12	22	.1	6	2	75	1.31	2	5	ND	4	6	1	3	2	35	.08	.011	6	14	.18	17	.16	5	.79	.02	.04	1	1
AL 3ZE 2+400 B	1	6	11	24	.1	5	2	56	1.26	2	5	ND	4	5	1	4	2	43	.07	.005	5	10	.13	12	.17	5	.63	.01	.02	1	2
AL 3ZE 2+300 B	1	41	15	43	.1	34	11	61	4.03	2	5	ND	6	4	1	7	2	122	.08	.022	12	56	.49	17	.15	10	2.93	.03	.02	1	1
AL 3ZE 2+200 B	2	168	25	40	.4	69	23	266	5.54	2	5	ND	8	9	1	2	2	183	.15	.019	20	82	.88	34	.25	13	3.08	.04	.18	2	1
AL 3ZE 2+100 B	1	6	10	12	.1	4	1	26	.32	2	5	ND	2	4	1	5	2	14	.05	.008	6	11	.05	9	.10	2	.35	.01	.02	2	2
AL 3ZE 2+000 A P	1	31	6	60	.6	9	1	30	.78	2	5	ND	6	45	1	2	2	3	2.06	.099	80	5	.11	96	.01	6	.90	.03	.02	1	4
AL 3ZE 1+900 A P	1	51	8	59	.7	15	3	44	1.16	2	5	ND	7	42	1	2	2	4	1.62	.159	90	10	.09	107	.01	6	.98	.03	.02	1	1
AL 3ZE 1+800 A P	1	12	2	62	.4	3	1	9	.23	2	5	ND	1	43	1	4	2	3	3.44	.053	5	4	.13	35	.01	5	.23	.03	.01	1	1
AL 3ZE 1+700 A	1	29	8	40	.6	10	2	16	.83	2	5	ND	2	24	1	3	2	4	1.08	.071	16	18	.08	74	.02	4	.73	.02	.02	1	1
AL 3ZE 1+600 B	2	408	75	5649	1.6	1058	43	935	4.57	2102	5	ND	4	12	13	2	2	71	.71	.038	15	266	.76	52	.15	11	3.01	.04	.06	22	28
AL 3ZE 1+500 A	1	47	4	85	.5	25	2	78	.41	17	5	ND	3	46	1	2	2	4	3.89	.082	21	7	.15	111	.01	7	.35	.04	.02	1	1
AL 3ZE 1+400 B	1	12	7	22	.2	4	1	57	.33	2	8	ND	1	4	1	3	2	12	.15	.017	4	28	.09	17	.03	2	.35	.01	.03	1	1
AL 3ZE 1+300 B	1	5	14	47	.1	9	4	140	1.59	3	5	ND	8	6	1	2	2	68	.11	.006	5	27	.33	20	.24	4	.81	.02	.08	3	1
STB C/AU-0.5	22	60	41	138	7.2	70	29	1099	3.99	38	17	8	35	49	18	16	20	62	.46	.104	38	60	.84	182	.08	40	1.73	.09	.13	14	520

SAMPLE#	Mo	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	Av1
	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
AL 33E 1+20M B	1	4	6	17	.1	3	2	55	.79	2	5	ND	3	5	1	2	2	25	.07	.005	5	13	.13	12	.10	2	.48	.01	.03	1	5
AL 33E 1+10M B	1	4	2	10	.1	2	1	27	.83	2	5	ND	3	4	1	2	2	14	.08	.015	7	10	.06	8	.06	3	1.05	.01	.01	4	1
AL 33E 1+00M B	1	5	8	35	.1	1	1	11	.31	2	5	ND	2	3	1	2	2	9	.04	.004	4	8	.02	5	.04	2	.32	.01	.01	1	1
AL 33E 0+90M B	1	17	8	59	.1	4	2	59	1.93	3	5	ND	3	6	1	2	4	74	.10	.015	10	21	.14	18	.15	3	1.17	.01	.02	2	1
AL 33E 0+80M A P	1	5	3	432	.2	11	2	122	.32	2	5	ND	1	16	1	2	2	1	.38	.023	2	4	.03	37	.01	2	.17	.01	.01	2	1
AL 33E 0+70M A P	1	3	2	361	.1	5	2	88	.17	2	5	ND	1	14	1	2	2	1	.32	.025	2	4	.04	23	.01	2	.13	.01	.01	2	1
AL 33E 0+60M A P	1	2	3	185	.1	1	1	122	.10	3	5	ND	1	11	1	2	2	1	.39	.023	2	1	.04	17	.01	2	.08	.01	.02	1	6
AL 33E 0+50M A P	1	3	2	117	.1	1	1	89	.08	2	5	ND	1	12	1	2	2	1	.56	.025	2	4	.05	18	.01	2	.10	.02	.01	1	8
AL 33E 0+40M A P	1	2	3	118	.1	1	1	41	.17	2	5	ND	1	17	1	2	2	1	.99	.020	2	1	.05	22	.01	3	.10	.02	.02	1	6
AL 33E 0+30M A P	1	3	5	74	.1	1	1	77	.09	2	5	ND	1	12	1	2	2	1	.57	.028	2	2	.04	22	.01	6	.11	.02	.01	1	4
AL 33E 0+20M A P	1	2	2	117	.1	1	1	72	.05	2	5	ND	1	6	1	2	2	1	.20	.017	2	2	.04	10	.01	2	.07	.01	.01	1	4
AL 33E 0+10M A P	1	2	3	111	.1	1	1	45	.04	2	5	ND	1	8	1	4	2	1	.19	.021	2	1	.04	12	.01	2	.07	.01	.01	1	6
AL 33E 0+00M A P	1	2	2	145	.1	1	1	70	.04	2	5	ND	1	8	1	2	2	1	.19	.019	2	1	.04	13	.01	2	.07	.01	.01	1	1
AL 33E 4+005 B	1	4	13	27	.1	6	2	81	.91	5	5	ND	3	20	1	3	2	36	.11	.011	5	27	.27	26	.23	2	.59	.02	.04	2	1
AL 33E 4+105 B	1	11	9	15	.1	5	1	41	1.14	39	5	ND	5	5	1	3	2	34	.06	.021	8	28	.07	22	.09	2	.97	.01	.03	1	2
AL 33E 4+205 B	1	7	9	19	.1	11	2	42	1.89	7	5	ND	4	3	1	2	2	59	.04	.018	5	63	.15	10	.14	2	.93	.01	.02	1	1
AL 33E 4+305 B	1	46	11	33	.1	34	9	112	2.83	7	5	ND	4	3	1	3	3	78	.10	.028	5	61	.27	15	.19	3	1.06	.02	.05	11	2
AL 33E 4+505 B	1	5	6	19	.1	3	1	37	2.15	5	5	ND	3	4	1	2	2	101	.06	.019	5	16	.08	9	.27	3	.46	.01	.02	2	1
AL 33E 4+605 A	1	18	7	67	.1	8	2	46	.23	2	5	ND	1	25	1	2	2	5	.75	.049	5	7	.06	95	.01	2	.17	.02	.05	1	1
AL 33E 4+705 A	3	53	20	199	.4	19	31	7345	8.22	520	11	ND	7	31	1	2	2	76	1.87	.128	70	29	.23	165	.04	9	1.88	.04	.03	2	1
AL 33E 4+905 B	2	41	14	122	.3	35	22	1134	10.83	265	13	ND	16	15	1	2	2	101	.67	.052	47	52	.92	65	.30	3	2.88	.04	.05	2	2
AL 33E 5+005 B	1	53	20	96	.3	35	28	3241	12.89	505	11	ND	30	14	2	2	2	107	.55	.058	80	69	.51	116	.15	7	3.53	.04	.06	1	2
AL 33E 5+205 B	1	124	16	306	.2	102	30	1218	7.39	187	5	ND	16	17	1	2	2	85	.88	.047	39	207	.99	88	.24	2	2.85	.05	.04	1	1
AL 33E 5+405 A	1	41	4	51	.1	129	20	268	3.81	24	5	ND	2	6	1	3	2	102	.17	.013	5	542	1.76	16	.15	3	1.93	.04	.01	1	1
AL 33E 5+505 B	1	19	11	49	.1	34	7	252	2.22	5	5	ND	9	16	1	3	2	44	.37	.021	33	48	.61	75	.10	8	1.49	.03	.13	1	1
AL 33E 5+605 B	1	15	8	48	.1	23	7	109	1.63	8	5	ND	6	5	1	5	2	29	.14	.039	8	37	.26	21	.09	3	1.37	.02	.05	3	1
AL 33E 5+805 B	1	13	9	32	.1	22	4	116	1.49	2	5	ND	3	10	1	2	2	30	.14	.017	11	38	.37	38	.08	3	1.21	.02	.06	1	2
AL 33E 5+905 B	1	32	10	57	.1	98	15	218	2.15	4	5	ND	2	5	1	5	2	55	.08	.011	5	169	.93	20	.10	2	1.50	.02	.04	1	4
AL 33E 6+005 B	1	8	9	29	.1	17	5	117	1.61	5	5	ND	5	9	1	5	2	34	.11	.012	10	32	.33	28	.08	3	1.15	.02	.05	1	3
AL 33E 6+105 B	1	9	9	36	.1	18	4	117	1.49	4	5	ND	3	11	1	3	2	36	.13	.019	10	34	.35	33	.09	4	1.18	.02	.07	1	1
AL 33E 6+405 B	1	18	5	50	.1	74	11	193	1.93	11	5	ND	3	5	1	7	2	59	.08	.015	5	153	.83	17	.13	2	1.22	.02	.05	2	2
AL 33E 6+505 B	1	7	6	34	.1	29	5	127	1.32	5	5	ND	3	4	1	4	2	41	.06	.010	4	99	.51	15	.08	2	.76	.01	.03	1	1
AL 33E 6+605 B	1	14	4	35	.1	37	6	128	1.80	15	5	ND	4	4	1	5	2	35	.06	.012	7	102	.48	13	.12	2	.83	.02	.05	2	1
AL 33E 6+705 B	1	29	9	54	.2	56	12	225	2.14	8	5	ND	11	13	1	4	2	43	.30	.026	34	65	.65	54	.11	4	1.42	.03	.09	1	1
AL 33E 6+805 A P	1	47	9	45	.6	135	19	392	1.96	6	17	ND	8	46	1	2	2	27	1.39	.105	91	47	.44	152	.03	8	2.27	.04	.17	2	4
AL 33E 6+905 A P	1	73	9	37	.5	137	19	122	1.40	10	30	ND	8	38	1	2	2	13	1.57	.120	106	32	.21	103	.02	5	1.46	.03	.07	3	4
STD C/AJ 0.5	21	61	40	144	7.0	72	31	1190	3.99	42	19	8	37	53	20	16	21	75	.48	.113	40	62	.89	179	.09	38	1.73	.09	.14	15	490

SAMPLE#	Mo PPH	Cu PPH	Pb PPH	Zn PPH	Ag PPH	Ni PPH	Co PPH	Mn PPH	Fe %	As PPH	U PPH	Au PPH	Tl PPH	Sr PPH	Cd PPH	Sb PPH	Bi PPH	V PPH	Cr %	P %	La PPH	Cr PPH	Hg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	W PPH	Au1 PPH
AL 33E 7+00S A P	1	70	11	51	.7	172	19	393	1.20	8	7	ND	6	46	1	2	2	12	2.57	.101	77	35	.28	134	.03	2	1.55	.04	.08	1	3
AL 33E 7+10S A P	2	43	5	45	.2	49	7	153	.40	2	5	ND	1	34	1	2	2	7	2.01	.079	16	7	.11	51	.01	2	.41	.03	.03	1	3
AL 33E 7+20S A P	2	40	11	49	.5	122	38	1673	2.29	32	5	ND	3	42	1	2	2	20	1.74	.109	43	36	.33	102	.03	5	1.20	.04	.11	1	2
AL 33E 7+30S A P	3	49	9	60	.4	110	63	2173	3.34	34	5	ND	4	38	1	2	2	30	1.03	.095	55	57	.49	144	.06	7	1.98	.04	.16	1	2
AL 33E 7+40S A P	2	54	6	39	.4	147	35	1758	1.63	9	5	ND	5	58	1	2	2	18	2.65	.129	83	51	.31	148	.03	3	1.61	.04	.08	1	3
AL 33E 7+50S A P	3	65	9	45	.7	158	74	5320	2.54	39	5	ND	6	48	1	2	2	30	2.16	.091	86	38	.25	160	.03	5	1.45	.04	.10	2	4
AL 33E 7+60S A P	1	43	4	45	.1	92	7	523	1.17	7	5	ND	2	53	1	2	2	7	3.90	.080	38	15	.13	112	.01	2	.60	.03	.02	1	1
AL 33E 7+70S A P	1	51	2	26	.4	92	1	204	.32	5	5	ND	3	52	1	2	2	7	5.46	.055	13	10	.12	82	.01	3	.34	.03	.01	1	2
AL 33E 7+80S A P	1	11	2	49	.1	47	1	53	.51	2	5	ND	1	59	1	2	2	2	4.52	.064	4	4	.09	90	.01	2	.20	.03	.02	1	3
AL 33E 7+90S A P	1	4	2	40	.2	14	1	29	.16	5	5	ND	1	31	1	2	2	1	1.87	.033	2	1	.05	41	.01	2	.09	.02	.02	1	3
AL 33E 8+00S A P	1	8	2	37	.1	29	1	138	.37	3	5	ND	1	39	1	2	2	4	2.66	.034	5	6	.06	64	.01	2	.26	.03	.02	1	2
AL 33E 8+10S A P	1	5	5	49	.2	20	1	42	.37	3	5	ND	1	36	1	2	2	2	2.67	.035	2	4	.08	60	.01	2	.16	.03	.02	1	1
AL 33E 8+20S A P	1	3	2	35	.1	21	1	34	.29	2	5	ND	1	41	1	2	2	2	3.42	.037	3	4	.10	65	.01	2	.16	.03	.01	1	2
AL 33E 8+30S A P	1	6	4	32	.1	15	1	46	1.25	4	5	ND	1	49	1	2	2	2	4.43	.076	5	5	.12	103	.01	2	.18	.03	.02	1	3
AL 33E 8+40S A P	1	19	5	33	.2	17	3	187	1.18	7	5	ND	2	44	1	2	2	5	6.28	.073	15	8	.11	107	.02	2	.30	.03	.02	2	1
AL 33E 8+50S A P	1	12	7	41	.1	15	4	593	1.31	8	5	ND	1	50	1	2	2	12	5.11	.087	10	7	.15	90	.01	3	.33	.04	.02	2	3
AL 33E 8+60S A P	1	15	3	32	.2	31	3	181	.69	8	5	ND	1	42	1	2	2	7	4.49	.070	6	9	.14	67	.01	4	.26	.03	.02	1	3
AL 33E 8+70S A P	1	24	2	34	.1	78	2	248	.45	6	5	ND	1	50	1	2	2	4	5.48	.049	7	7	.12	78	.01	2	.32	.03	.01	1	1
AL 33E 8+80S A P	1	19	2	40	.2	59	2	457	.58	7	5	ND	1	52	1	2	2	5	5.98	.084	6	7	.14	81	.01	3	.29	.04	.01	2	1
AL 33E 8+90S A P	1	15	3	23	.1	41	1	55	.29	5	5	ND	1	42	1	2	2	6	4.42	.062	5	18	.15	44	.02	2	.39	.03	.02	1	1
AL 33E 9+20S A P	1	27	5	50	.3	35	4	161	1.22	8	5	ND	2	29	1	3	2	19	3.05	.116	20	42	.32	67	.03	7	.93	.04	.05	1	3
AL 33E 9+40S A P	1	23	10	77	.3	28	8	509	2.58	2	5	ND	6	40	1	2	2	42	2.78	.076	36	43	.71	107	.07	11	1.95	.05	.25	2	2
AL 33E 9+50S A P	1	27	13	64	.3	30	8	380	2.94	2	5	ND	6	38	1	2	2	47	2.85	.060	43	50	.77	124	.07	14	2.38	.05	.28	1	1
AL 33E 9+60S A P	1	21	9	66	.2	26	6	293	2.59	3	5	ND	6	39	1	4	2	36	2.41	.067	46	43	.70	109	.04	12	2.09	.04	.27	1	1
AL 33E 9+70S A P	1	24	11	78	.5	30	8	248	2.60	2	5	ND	6	39	1	2	2	38	2.53	.071	34	44	.71	122	.06	12	2.22	.04	.29	1	1
AL 33E 9+80S A P	1	16	5	58	.2	17	4	156	1.52	2	5	ND	3	46	1	2	2	23	4.38	.071	17	26	.50	91	.04	8	1.34	.04	.18	1	1
AL 33E 9+90S A P	1	17	4	45	.3	18	4	939	.89	4	5	ND	2	47	1	2	2	18	5.70	.083	16	18	.36	99	.03	5	.69	.04	.04	2	1
AL 33E 10+00S A P	2	13	3	89	.3	12	3	1534	.30	2	5	ND	1	56	1	2	2	9	6.52	.085	6	4	.24	106	.01	5	.31	.04	.02	1	3
AL 33E 10+10S A P	3	13	8	92	.4	12	11	4857	.80	6	5	ND	2	56	1	2	2	12	6.72	.132	13	9	.27	193	.01	5	.54	.05	.05	1	1
AL 33E 10+20S A P	1	13	5	39	.2	7	2	339	.42	2	5	ND	1	55	1	2	2	13	6.51	.068	9	5	.24	117	.01	2	.42	.04	.01	1	1
AL 33E 10+30S A	1	31	22	40	.6	30	4	86	.78	4	6	ND	2	15	1	2	2	12	.24	.057	23	10	.07	82	.03	2	.63	.01	.08	2	7
AL 33E 10+40S A P	2	9	5	46	.3	10	3	443	.63	3	5	ND	2	43	1	2	2	10	5.32	.056	8	9	.35	68	.02	5	.49	.04	.07	1	1
AL 33E 10+50S A P	2	4	3	59	.1	6	1	73	.11	2	5	ND	1	41	1	2	2	2	5.85	.034	2	2	.25	48	.01	3	.10	.04	.01	1	1
AL 33E 10+60S A P	3	18	6	67	.3	32	5	187	1.75	2	9	ND	4	42	1	2	2	28	4.21	.058	26	30	.56	106	.04	8	1.48	.04	.19	1	5
AL 33E 10+70S A P	4	5	3	62	.1	9	1	133	.13	2	5	ND	1	38	1	2	2	2	5.09	.051	2	5	.24	54	.01	2	.10	.04	.02	1	4
AL 33E 10+80S A P	3	4	2	39	.1	5	1	122	.12	2	5	ND	1	41	1	2	2	2	5.28	.049	2	2	.27	50	.01	2	.11	.04	.01	1	1
AL 33E 10+90S A P	5	21	5	48	.1	23	10	2997	1.42	21	5	ND	1	55	1	2	2	17	6.04	.105	8	15	.23	200	.01	2	.72	.04	.03	3	1
STD C/AU 0.5	20	60	38	138	7.3	71	28	1122	3.97	39	16	7	33	49	18	15	18	61	.47	.104	38	60	.88	184	.08	38	1.72	.08	.13	13	495

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	Sb PPH	Bi PPH	V PPH	Cr %	P %	La PPH	Cr PPH	Hg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	M PPH	Au PPH
AL 33E 11+00S A P	1	13	2	44	.1	13	3	670	1.06	13	5	ND	1	51	1	2	2	11	5.84	.065	3	7	.19	121	.01	7	.39	.05	.01	1	1
AL 33E 11+10S A P	3	7	2	57	.2	7	1	423	.27	2	5	ND	1	51	1	2	2	3	6.23	.030	2	3	.29	72	.01	8	.16	.05	.01	1	1
AL 33E 11+20S A P	4	7	2	45	.2	8	1	417	.15	2	5	ND	1	47	1	2	2	3	6.23	.030	2	3	.26	71	.01	9	.14	.05	.01	1	1
AL 33E 11+30S A P	8	8	2	35	.1	12	1	111	.11	2	5	ND	1	59	1	2	2	4	8.08	.030	2	4	.32	86	.01	10	.11	.05	.01	2	1
AL 33E 11+40S A P	4	10	2	39	.1	11	1	39	.11	2	5	ND	1	48	1	2	2	2	7.06	.043	2	4	.26	71	.01	10	.12	.05	.01	1	1
AL 33E 11+50S A P	1	9	2	65	.1	6	2	300	.15	2	5	ND	1	40	1	2	2	5	5.93	.065	2	2	.27	62	.01	11	.14	.05	.01	1	1
AL 33E 11+60S A P	1	11	2	55	.2	9	5	898	.57	2	7	ND	1	45	1	2	2	7	6.55	.084	4	3	.25	88	.01	12	.25	.05	.01	1	1
AL 33E 11+70S A P	1	11	4	46	.2	12	6	915	1.47	5	9	ND	2	38	1	2	2	19	3.45	.104	11	19	.31	77	.03	12	.67	.05	.08	2	1
AL 33E 11+80S A P	1	14	5	56	.3	18	9	875	2.09	10	8	ND	4	43	1	2	2	28	3.72	.104	15	24	.36	103	.03	13	.88	.05	.11	1	1
AL 33E 12+10S A P	1	7	4	47	.2	11	4	615	1.36	22	10	ND	2	36	1	2	2	10	3.08	.095	6	10	.17	70	.02	8	.35	.04	.05	1	4
AL 33E 12+70S A P	1	4	4	29	.2	8	1	36	.40	5	5	ND	1	26	1	2	2	3	2.19	.050	2	1	.09	41	.01	6	.12	.03	.01	1	8
AL 33E 13+00S A P	1	3	5	48	.2	11	1	80	.35	9	13	ND	1	20	1	2	2	2	1.27	.077	2	2	.07	33	.01	6	.19	.03	.04	1	2
AL 33E 13+20S A P	1	8	4	25	.2	11	3	460	.80	15	7	ND	1	34	1	2	2	6	3.24	.091	3	3	.14	51	.01	7	.19	.04	.01	2	3
AL 33E 13+30S A P	1	5	3	43	.1	18	1	104	.25	5	7	ND	1	28	1	2	2	3	2.62	.057	2	1	.12	44	.01	7	.12	.04	.01	2	3
AL 33E 13+60S A P	1	2	7	66	.1	10	1	55	.08	5	8	ND	1	10	1	2	2	1	.39	.036	2	3	.06	14	.01	4	.07	.02	.04	1	3
AL 33E 13+90S A P	1	5	6	69	.2	34	2	60	.23	2	5	ND	1	27	1	2	2	2	.62	.044	7	3	.10	52	.01	8	.21	.03	.03	1	3
AL 33E 14+00S A	1	41	15	47	.3	72	5	125	2.45	4	5	ND	6	19	1	2	2	34	.40	.075	46	51	.42	82	.07	10	2.08	.03	.17	1	4
AL 34E 3+00N B	1	11	10	18	.1	10	3	66	1.48	2	5	ND	6	6	1	3	2	30	.08	.010	7	19	.18	22	.10	3	1.32	.01	.04	2	3
AL 34E 2+90N B	1	29	14	28	.1	29	9	107	2.66	2	5	ND	3	2	1	3	3	209	.07	.008	2	36	.45	17	.32	2	1.43	.02	.03	1	5
AL 34E 2+80N B	1	27	5	43	.1	40	14	81	4.18	3	5	ND	1	2	1	3	2	400	.05	.014	2	69	.76	19	.36	3	1.49	.03	.03	1	4
AL 34E 2+70N B	1	123	11	39	.1	38	10	42	3.71	2	5	ND	2	2	1	2	4	214	.03	.021	6	78	.46	39	.15	3	3.25	.02	.04	1	4
AL 34E 2+60N B	1	49	13	27	.1	24	7	98	5.28	2	5	ND	2	2	1	8	2	337	.11	.015	2	45	.37	18	.22	2	1.44	.03	.03	2	5
AL 34E 2+50N B	1	82	13	44	.2	52	16	96	5.31	4	5	ND	1	2	1	5	2	261	.04	.020	2	81	.73	20	.18	2	1.82	.02	.08	1	4
AL 34E 2+40N B	1	23	11	22	.1	28	9	75	4.46	2	5	ND	2	3	1	2	2	355	.06	.018	2	40	.49	16	.25	3	1.14	.02	.05	1	7
AL 34E 2+30N B	1	26	5	20	.1	27	7	76	1.76	2	5	ND	3	5	1	2	2	87	.08	.007	5	39	.36	16	.13	3	1.16	.02	.05	2	4
AL 34E 2+20N B	1	52	17	48	.3	12	2	31	.79	2	7	ND	2	23	1	4	2	12	.37	.079	26	18	.07	68	.01	6	.82	.02	.05	1	4
AL 34E 2+10N B	1	12	11	26	.1	9	4	92	3.14	2	5	ND	8	6	1	2	2	59	.09	.014	7	24	.22	15	.16	7	1.22	.02	.04	1	2
AL 34E 2+00N B	1	6	8	34	.1	10	4	119	2.00	4	5	ND	4	5	1	4	3	64	.07	.005	3	21	.29	14	.23	3	.82	.02	.07	2	3
AL 34E 1+90N B	1	17	7	17	.2	8	3	64	2.73	8	5	ND	6	4	1	4	3	40	.08	.010	5	26	.14	10	.12	3	1.74	.02	.02	1	5
AL 34E 1+80N B	1	38	7	22	.1	23	10	45	2.72	2	5	ND	1	2	1	2	4	212	.04	.011	2	283	.90	43	.18	2	1.60	.02	.08	1	4
AL 34E 1+70N A	1	142	9	37	.8	41	4	102	1.30	4	5	ND	2	26	1	2	2	20	2.17	.086	43	55	.11	126	.02	5	1.43	.03	.03	1	5
AL 34E 1+60N A P	1	134	2	23	.9	54	2	162	.69	2	5	ND	3	23	1	2	2	7	2.40	.103	49	26	.07	85	.01	5	1.19	.03	.01	1	12
AL 34E 1+50N A P	1	142	2	31	1.0	62	4	1475	.76	3	5	ND	3	25	1	2	2	12	2.64	.143	51	43	.09	109	.01	5	1.22	.03	.01	1	8
AL 34E 1+40N A P	1	60	3	44	.8	31	2	512	.65	2	5	ND	3	31	1	2	2	8	3.49	.131	44	25	.12	100	.01	9	.97	.03	.02	2	1
AL 34E 1+30N A P	1	60	3	46	.4	21	2	56	.63	2	5	ND	4	34	1	2	2	7	3.45	.093	58	12	.13	104	.01	6	.73	.04	.02	2	3
AL 34E 1+20N A P	1	20	4	46	.1	11	2	211	.35	3	5	ND	2	29	1	2	2	5	2.07	.049	27	7	.07	59	.01	5	.61	.03	.01	1	2
STD C/AU 0.5	20	63	41	137	7.0	74	30	1142	3.99	40	16	8	37	51	19	17	20	72	.48	.108	39	63	.89	183	.09	37	1.73	.09	.14	15	490

SAMPLED	Mo PPM	Cu PPM	Pb PPM	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 %	N PPM	AuI PPM
AL 34E 1+10N A P	1	7	4	50	.1	3	1	112	.21	2	5	ND	1	15	1	2	2	1	.67	.025	4	3	.04	25	.01	4	.17	.02	.01	1	1
AL 34E 1+00N A P	1	3	2	81	.1	2	1	76	.11	2	5	ND	1	12	1	2	2	1	.46	.030	2	2	.05	20	.01	3	.11	.02	.02	1	1
AL 34E 0+90N A P	1	2	2	72	.1	1	1	56	.08	2	5	ND	1	10	1	3	2	1	.39	.025	2	3	.04	18	.01	2	.08	.01	.01	1	1
AL 34E 0+75N A P	1	2	3	63	.1	1	1	35	.05	3	5	ND	1	8	1	5	2	1	.30	.017	2	4	.03	15	.01	2	.07	.01	.01	1	1
AL 34E 0+60N A P	1	2	3	55	.1	1	1	32	.05	2	8	ND	1	9	1	2	2	1	.38	.024	2	1	.03	18	.01	4	.08	.01	.02	1	1
AL 34E 0+40N A P	1	3	5	67	.1	3	1	43	.06	4	5	ND	1	8	1	2	3	1	.32	.035	2	3	.03	19	.01	2	.09	.01	.02	1	1
AL 34E 0+20N A P	1	2	3	101	.1	2	1	39	.06	4	5	ND	1	6	1	2	2	1	.20	.037	2	3	.02	16	.01	2	.08	.01	.02	1	1
AL 34E 0+00N A P	1	2	5	69	.1	2	1	48	.08	2	9	ND	1	11	1	4	2	1	.26	.024	2	1	.04	15	.01	2	.07	.01	.03	1	1
AL 38E 3+00N B P	1	98	13	31	1.0	21	4	94	1.82	3	5	ND	14	50	1	4	2	10	1.53	.185	187	18	.11	152	.02	5	1.79	.03	.02	2	1
AL 38E 2+90N A	1	77	15	42	.4	22	6	239	1.54	2	5	ND	6	36	1	2	2	18	1.46	.130	76	20	.19	170	.02	4	1.26	.03	.06	2	1
AL 38E 2+80N B	1	21	6	37	.1	16	6	215	1.41	2	5	ND	9	15	1	2	2	26	.06	.055	33	24	.49	54	.00	4	.88	.03	.13	1	1
AL 38E 2+70N B	1	19	10	34	.1	17	5	130	1.98	5	5	ND	5	6	1	5	2	43	.08	.012	5	20	.34	25	.16	4	1.12	.02	.07	1	1
AL 38E 2+60N B	1	3	8	17	.1	3	1	43	.62	2	5	ND	4	4	1	4	2	21	.05	.007	4	7	.10	10	.12	2	.34	.01	.03	1	1
AL 38E 2+50N B	1	7	10	25	.1	5	2	66	.96	5	5	ND	4	5	1	3	2	23	.09	.040	5	9	.16	19	.11	2	.74	.01	.04	1	1
AL 38E 2+40N B	1	12	9	40	.1	10	4	111	2.60	2	5	ND	6	5	1	2	2	56	.08	.091	5	23	.28	19	.17	3	1.63	.02	.06	1	1
AL 38E 2+20N B	1	11	13	45	.2	8	3	84	2.47	2	5	ND	7	5	1	2	3	39	.09	.120	5	31	.19	22	.11	4	2.63	.02	.04	1	1
AL 38E 2+10N B	1	12	9	24	.1	7	2	66	1.90	4	5	ND	7	4	1	2	2	30	.08	.051	7	18	.14	20	.09	2	1.60	.01	.03	1	1
AL 38E 2+00N B	1	14	9	24	.1	8	2	66	1.90	3	5	ND	8	4	1	2	2	30	.08	.094	6	22	.14	15	.09	4	1.94	.01	.03	1	1
AL 38E 1+90N B	1	19	14	49	.1	12	4	123	2.76	3	5	ND	7	6	1	2	2	49	.08	.098	7	29	.30	27	.15	4	2.43	.02	.05	2	3
AL 38E 1+80N B	1	12	8	25	.1	11	4	77	1.69	5	5	ND	7	4	1	2	2	27	.06	.040	8	21	.19	18	.10	3	1.66	.01	.02	1	1
AL 38E 1+70N B	1	24	11	45	.1	18	7	171	2.51	4	5	ND	12	5	1	2	2	40	.12	.068	10	26	.40	32	.14	4	2.02	.02	.06	2	1
AL 38E 1+60N B	1	8	11	18	.1	6	2	51	1.87	2	5	ND	6	4	1	4	2	34	.06	.063	4	17	.12	17	.11	2	1.46	.01	.02	8	1
AL 38E 1+50N B	1	12	8	29	.1	9	3	67	1.63	3	5	ND	5	5	1	3	2	27	.08	.031	6	18	.17	23	.09	4	1.68	.02	.03	1	2
AL 38E 1+40N B	1	19	12	35	.1	18	6	122	2.05	6	5	ND	9	8	1	2	2	30	.16	.050	9	23	.30	29	.11	4	2.16	.02	.06	2	1
AL 38E 1+30N A	1	38	11	14	.3	13	4	10	1.54	3	5	ND	5	39	1	2	2	7	.92	.088	52	9	.06	81	.02	2	2.03	.03	.02	1	1
AL 38E 1+20N A	1	27	15	33	.3	11	2	17	.65	2	5	ND	3	57	1	2	2	2	.66	.080	30	5	.07	167	.01	3	.82	.02	.02	1	1
AL 38E 1+10N A	1	15	5	24	.2	6	2	5	.34	2	5	ND	1	83	1	2	2	2	2.86	.043	10	2	.19	120	.01	4	.41	.04	.01	1	1
AL 38E 1+00N A	1	32	6	26	.3	9	6	290	.83	171	5	ND	3	62	1	2	2	32	6.23	.107	41	11	.24	84	.01	6	1.18	.05	.03	1	4
AL 38E 0+90N A	1	15	4	30	.2	6	1	81	.25	9	5	ND	1	66	1	2	2	37	6.38	.061	9	3	.23	60	.01	6	.36	.05	.02	2	1
AL 38E 0+90N B	1	19	9	40	.2	13	5	191	1.52	4	5	ND	8	11	1	4	2	28	.35	.034	26	22	.39	36	.11	3	.87	.03	.08	1	1
AL 38E 0+80N A	2	6	2	34	.2	3	1	36	.15	7	5	ND	1	53	1	2	2	22	5.00	.042	2	1	.21	38	.01	7	.16	.04	.02	1	1
AL 38E 0+70N A	3	9	3	48	.2	4	1	138	.55	6	5	ND	1	54	1	2	2	15	4.74	.060	2	3	.18	69	.01	8	.20	.04	.03	1	4
AL 38E 0+60N A	10	5	3	55	.1	1	1	110	.20	3	5	ND	1	52	1	2	2	6	4.54	.034	2	1	.20	57	.01	7	.15	.04	.01	1	1
AL 38E 0+50N A	2	6	2	60	.1	3	1	307	.42	8	5	ND	1	56	1	2	2	10	4.18	.075	3	1	.19	52	.01	9	.26	.04	.01	1	1
AL 38E 0+30N A	1	7	6	55	.3	2	1	104	.53	4	5	ND	2	29	1	2	2	4	1.43	.093	13	3	.08	64	.01	3	.28	.02	.02	1	1
AL 38E 0+20N A	1	9	6	34	.4	4	1	62	.43	3	5	ND	2	21	1	2	2	2	.78	.080	18	5	.05	44	.01	4	.29	.02	.02	1	1
STD C/AU 0.5	21	64	39	137	7.0	74	30	1145	3.96	37	18	8	37	51	19	17	19	72	.48	.108	38	61	.09	183	.09	36	1.73	.09	.14	15	510

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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Hg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	M PPH	Au1 PPH
AL 38E 0+10N B	1	10	5	17	.1	7	2	63	1.09	2	5	ND	3	6	1	2	2	23	.11	.026	7	18	.15	15	.09	2	1.05	.02	.03	1	1
AL 38E 0+00N B	1	17	7	22	.1	10	4	88	1.46	3	5	ND	6	6	1	2	2	26	.09	.020	5	20	.22	16	.11	2	1.62	.02	.04	2	1
AL 38E 0+10S B	1	10	6	17	.1	9	3	74	1.20	2	5	ND	5	6	1	2	2	22	.12	.024	6	19	.17	15	.08	2	.93	.02	.02	1	2
AL 38E 0+20S B	1	13	3	17	.1	7	3	96	.97	2	5	ND	6	7	1	2	2	16	.21	.061	22	15	.19	12	.07	2	.67	.02	.04	2	1
AL 38E 0+30S B	1	15	2	18	.1	8	3	66	1.20	2	5	ND	5	5	1	2	2	27	.08	.014	6	17	.15	17	.11	2	1.02	.02	.02	1	1
AL 38E 0+40S B	1	10	5	13	.1	12	2	49	1.64	5	5	ND	4	4	1	2	2	40	.05	.011	4	43	.14	16	.11	2	1.55	.01	.02	1	1
AL 38E 0+50S B	1	10	6	19	.1	10	4	64	1.39	2	5	ND	5	5	1	2	2	24	.09	.026	6	19	.15	21	.08	2	1.96	.02	.02	1	1
AL 38E 0+60S B	1	6	7	14	.1	6	2	60	.69	2	5	ND	2	5	1	2	2	16	.09	.013	4	11	.14	10	.09	2	.49	.01	.02	1	2
AL 38E 0+70S A	1	12	14	65	.1	6	1	20	.56	2	5	ND	1	33	1	2	2	3	.26	.007	13	8	.03	102	.01	2	.76	.01	.02	1	1
AL 38E 0+80S A	1	40	16	67	.6	15	8	389	1.78	2	5	ND	7	32	1	2	2	18	1.37	.139	61	24	.23	117	.03	3	1.40	.03	.09	1	1
AL 38E 1+00S B	1	11	3	23	.1	10	3	112	1.18	2	5	ND	4	7	1	2	2	21	.22	.053	7	16	.24	18	.09	2	.60	.02	.05	1	1
AL 38E 1+10S B	1	10	7	24	.1	9	3	84	1.35	3	5	ND	3	5	1	2	2	27	.10	.021	4	16	.20	17	.10	2	.79	.02	.03	2	1
AL 38E 1+20S B	1	20	11	38	.1	16	6	113	2.09	3	5	ND	5	7	1	2	2	39	.09	.023	4	25	.30	35	.13	2	1.56	.02	.06	1	2
AL 38E 1+30S B	1	8	9	18	.1	6	2	59	1.26	2	5	ND	5	6	1	2	2	27	.09	.015	6	13	.14	15	.12	2	.97	.02	.02	1	1
AL 38E 1+40S B	1	7	9	37	.2	7	3	93	1.66	5	5	ND	4	7	1	2	2	45	.09	.030	2	21	.23	20	.19	2	.74	.02	.06	2	1
AL 38E 1+50S B	1	7	11	32	.1	6	2	62	2.65	3	5	ND	5	5	1	2	2	49	.07	.041	2	25	.14	18	.14	2	1.49	.02	.03	1	1
AL 38E 1+60S B	1	7	11	33	.1	12	4	102	2.64	5	5	ND	5	8	1	2	2	52	.09	.039	3	32	.28	39	.14	2	2.16	.02	.06	1	1
AL 38E 1+70S B	1	8	12	26	.1	7	3	82	2.00	2	5	ND	4	6	1	3	2	53	.07	.025	2	26	.20	20	.20	2	.75	.02	.04	1	1
AL 38E 1+80S B	1	21	5	24	.2	13	4	57	2.07	2	5	ND	3	5	1	2	2	44	.08	.023	3	44	.19	17	.10	2	1.18	.02	.03	1	1
AL 38E 1+90S A	1	18	11	66	.2	8	1	21	.46	2	5	ND	3	28	1	2	2	5	.59	.050	24	11	.07	81	.01	3	.44	.02	.03	1	1
AL 38E 2+00S A	1	15	10	31	.2	8	2	41	.84	2	5	ND	2	23	1	2	2	10	.57	.057	20	14	.15	66	.03	5	.73	.02	.06	1	1
AL 38E 2+10S B	1	6	6	29	.1	7	2	64	1.78	2	5	ND	3	7	1	2	2	50	.08	.012	2	24	.18	24	.14	2	1.11	.02	.05	2	1
AL 38E 2+20S B	1	8	3	19	.1	11	3	67	.89	2	5	ND	2	7	1	2	2	18	.17	.020	5	18	.18	24	.07	2	.56	.02	.03	1	1
AL 38E 2+30S A	1	25	10	64	.3	19	4	232	.88	9	5	ND	3	45	1	2	2	10	2.20	.110	32	16	.18	107	.02	5	.81	.03	.07	1	1
AL 38E 2+40S A	1	34	10	79	.3	27	2	31	.93	7	5	ND	3	51	1	2	2	8	2.58	.106	38	15	.18	95	.02	5	.84	.04	.05	1	1
AL 38E 4+00S A	1	10	8	8	.1	2	1	18	.29	2	5	ND	1	11	1	2	2	6	.13	.017	4	8	.03	32	.02	2	.17	.01	.02	1	2
AL 38E 4+10S B	1	32	13	46	.1	23	6	165	3.42	7	5	ND	5	7	1	2	3	45	.10	.034	5	44	.39	35	.21	3	1.29	.02	.06	1	3
AL 38E 4+20S B	1	5	8	25	.2	7	2	70	1.77	2	5	ND	4	6	1	2	2	38	.07	.032	2	31	.16	18	.13	2	.96	.01	.05	1	1
AL 38E 4+30S B	1	6	9	48	.1	9	3	95	1.64	2	5	ND	6	8	1	2	3	38	.07	.025	6	31	.23	21	.14	2	.87	.02	.03	1	1
AL 38E 4+50S A	1	5	3	20	.1	2	1	31	.45	2	5	ND	1	8	1	2	2	10	.04	.011	3	8	.08	29	.03	2	.22	.01	.03	1	1
AL 38E 4+70S B	1	4	6	29	.1	4	1	57	1.40	2	5	ND	5	6	1	2	2	28	.08	.071	5	15	.13	18	.14	2	.88	.01	.03	1	1
AL 38E 4+80S B	1	13	8	40	.1	10	3	87	2.95	7	5	ND	7	7	1	3	4	49	.09	.096	6	33	.20	19	.14	2	1.05	.02	.03	2	1
AL 38E 4+90S B	1	3	4	14	.1	4	1	40	.82	2	5	ND	4	5	1	2	3	28	.04	.008	4	18	.08	10	.13	2	.31	.01	.01	1	2
AL 38E 5+00S B	1	9	8	27	.2	11	3	91	2.12	5	5	ND	6	5	1	2	2	59	.04	.009	4	40	.24	16	.17	2	.61	.02	.02	2	2
AL 38E 5+20S A	1	40	8	25	.3	13	2	29	1.10	2	5	ND	5	37	1	2	2	9	1.37	.080	50	15	.14	74	.03	4	.89	.03	.03	1	1
AL 38E 5+30S A	1	29	6	19	.5	9	3	41	.72	2	5	ND	4	50	1	2	2	4	2.92	.072	61	7	.09	70	.01	4	.61	.03	.01	1	1
STB C/AL-0.5	22	60	40	137	7.2	72	29	1121	3.80	41	17	8	36	50	18	15	20	63	.46	.107	35	63	.85	184	.08	36	1.64	.09	.13	15	490

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	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	Cr %	P %	La PPM	Cr PPM	Hg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	V PPM	Au# PPB
AL 30E 5+40S A	1	49	18	20	.3	22	4	87	.53	6	5	ND	5	51	1	2	2	4	3.54	.068	79	5	.10	74	.01	2	.59	.03	.02	1	1
AL 30E 5+50S A	1	28	6	26	.4	16	2	421	.35	3	5	ND	3	46	1	2	2	3	3.78	.077	56	2	.08	68	.01	2	.51	.03	.01	1	1
AL 30E 5+60S A	1	49	6	37	.2	25	2	722	.48	2	5	ND	4	57	1	2	2	5	4.83	.094	41	9	.11	102	.01	2	.54	.04	.02	1	1
AL 30E 5+70S A	1	14	6	23	.1	11	2	55	.35	2	5	ND	2	41	1	2	2	4	3.49	.050	7	16	.08	46	.02	2	.26	.03	.03	1	1
AL 30E 5+90S A	1	22	14	28	.1	28	4	101	.89	2	5	ND	3	9	1	2	2	30	.15	.016	10	53	.24	28	.08	2	.78	.01	.02	1	1
AL 30E 6+00S B	1	14	8	32	.1	62	9	154	2.37	2	5	ND	6	9	1	2	2	43	.12	.013	10	89	.40	26	.11	2	1.30	.02	.04	2	1
AL 30E 6+10S B	1	6	7	23	.1	14	3	101	1.50	2	5	ND	5	13	1	2	2	34	.12	.007	10	34	.27	29	.10	2	1.21	.02	.07	1	2
AL 30E 6+20S B	2	59	8	84	.1	121	13	281	4.22	19	5	ND	4	4	1	2	2	87	.07	.043	5	216	.93	20	.10	3	3.11	.02	.02	1	1
AL 30E 6+30S B	1	9	4	54	.1	39	6	197	2.49	15	5	ND	4	4	1	2	2	59	.04	.017	7	119	.76	15	.05	2	1.43	.02	.02	2	2
AL 30E 6+40S B	1	5	6	25	.1	17	4	111	1.80	3	5	ND	4	10	1	2	2	38	.11	.013	9	47	.31	24	.11	2	1.08	.02	.05	1	1
AL 30E 6+60S B	1	23	9	55	.1	105	12	210	3.25	6	5	ND	4	5	1	2	2	52	.07	.019	4	157	.89	16	.10	3	2.28	.02	.03	1	1
AL 30E 6+70S B	1	54	7	40	.1	104	13	190	2.44	9	5	ND	5	6	1	2	2	49	.11	.014	10	170	.73	23	.11	2	1.77	.03	.04	1	2
AL 30E 7+40S B	1	15	12	57	.1	30	8	291	2.10	7	5	ND	8	25	1	3	2	39	.47	.038	17	47	.65	60	.14	5	1.45	.04	.17	1	1
AL 30E 7+50S B	1	24	4	34	.1	42	6	99	1.47	10	5	ND	3	5	1	3	2	27	.11	.029	5	76	.32	10	.08	2	1.34	.02	.03	2	1
AL 30E 7+60S B	1	22	8	75	.1	83	10	209	3.15	15	5	ND	4	4	1	2	3	62	.06	.043	4	233	.92	20	.11	2	2.42	.02	.02	5	1
AL 30E 7+70S B	1	13	7	75	.1	83	10	258	2.52	7	5	ND	3	4	1	2	3	53	.06	.011	5	247	1.16	21	.10	2	1.86	.02	.03	1	1
AL 30E 7+80S B	1	43	8	66	.1	135	17	220	2.82	26	5	ND	3	5	1	3	2	65	.11	.026	5	266	1.03	18	.11	2	1.99	.03	.04	1	1
AL 30E 7+90S A	1	6	2	17	.2	8	1	16	.23	2	5	ND	1	11	1	2	2	3	.22	.043	4	10	.03	38	.01	2	.25	.01	.01	1	1
AL 30E 8+00S A	1	13	5	31	.4	22	4	218	.85	3	5	ND	2	43	1	2	2	10	3.68	.112	13	14	.22	67	.02	5	.72	.04	.07	2	1
AL 30E 8+10S A	2	27	12	61	.3	47	16	2357	2.57	17	5	ND	4	37	1	2	2	40	2.21	.095	31	39	.40	145	.05	12	1.75	.04	.22	1	1
AL 30E 8+20S A	1	19	11	76	.5	34	6	297	2.05	9	5	ND	4	33	1	4	2	32	1.96	.090	23	44	.45	111	.05	15	1.93	.04	.28	1	1
AL 30E 8+30S B	1	15	11	57	.1	34	8	349	2.07	2	5	ND	10	20	1	2	2	40	.47	.035	26	56	.64	72	.13	5	1.52	.04	.15	1	1
AL 30E 8+40S B	1	6	7	29	.1	14	4	131	1.23	2	5	ND	7	15	1	2	2	24	.35	.036	17	26	.30	36	.08	2	.89	.02	.08	1	1
AL 30E 8+50S B	1	5	3	18	.1	13	3	80	.88	2	5	ND	4	10	1	2	2	19	.17	.025	7	27	.23	21	.07	2	.67	.02	.06	1	1
AL 30E 8+60S B	1	16	11	53	.1	34	6	132	2.68	7	5	ND	5	6	1	2	2	48	.09	.073	4	93	.42	22	.13	3	2.35	.02	.05	1	1
AL 30E 8+70S B	1	22	7	49	.1	72	10	168	2.68	9	5	ND	4	6	1	2	4	57	.09	.027	6	154	.72	27	.13	3	1.81	.03	.05	1	1
AL 30E 8+80S B	1	7	10	27	.1	28	4	106	.96	2	5	ND	2	6	1	2	3	29	.07	.014	8	82	.42	15	.12	2	1.80	.01	.04	1	2
AL 30E 9+00S A	3	31	10	70	.2	53	41	5605	2.65	28	5	ND	6	43	1	2	2	39	2.84	.077	51	31	.44	211	.05	11	1.23	.05	.18	1	1
AL 30E 9+10S A	1	21	13	77	.3	85	20	1219	2.86	36	5	ND	3	35	1	2	2	48	1.24	.045	21	186	.75	104	.09	7	1.86	.06	.18	1	1
AL 30E 9+30S B	1	60	8	36	.1	130	15	181	2.17	14	5	ND	6	6	1	2	2	45	.11	.015	12	196	.71	30	.11	2	1.94	.02	.04	4	1
AL 30E 9+40S A	10	66	15	49	.4	102	24	14354	16.83	568	6	ND	14	38	1	2	2	84	2.15	.177	172	60	.16	309	.02	2	1.24	.05	.02	1	2
AL 30E 9+60S A	1	17	3	51	.3	12	1	114	.61	3	6	ND	3	33	1	2	2	5	3.86	.052	7	9	.14	47	.01	5	.23	.04	.03	1	2
AL 30E 9+70S A	1	29	4	41	.2	28	5	791	1.47	31	5	ND	3	28	1	2	2	17	2.35	.081	22	24	.18	75	.02	4	.67	.03	.04	2	1
AL 30E 9+80S A	2	25	9	51	.2	42	15	3537	2.53	39	5	ND	4	40	1	2	2	34	2.82	.079	27	50	.30	139	.05	8	1.34	.05	.14	1	1
AL 30E 9+90S A	1	11	4	29	.3	12	3	588	.65	6	5	ND	3	30	1	2	2	9	2.64	.064	14	10	.19	49	.02	4	.47	.03	.06	1	1
AL 30E 10+00S A	1	33	9	73	.1	49	10	375	2.42	13	5	ND	8	20	1	2	2	36	1.19	.076	33	73	.72	75	.11	4	1.43	.04	.16	1	3
STD C/AU 6.5	22	59	40	138	7.0	71	29	1096	3.93	39	17	7	34	48	18	16	22	61	.47	.102	37	60	.88	180	.08	41	1.71	.09	.13	14	495

NORTHERN DYNASTY FILE # 86-1672

PAGE 20

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	Y	Au1
	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	%	PPH	PPH	%	PPH	%	PPH	%	%	%	PPH	PPH
AL 4ZE 3+00N A P	2	71	2	52	.3	9	3	565	1.89	3	5	ND	5	44	1	2	3	47	3.41	.227	73	15	.14	173	.01	6	1.24	.03	.02	1	1
AL 4ZE 2+90N A P	9	29	21	88	.3	13	24	18483	4.35	22	10	ND	6	50	1	2	4	55	3.78	.173	37	5	.16	380	.01	8	.84	.04	.04	1	1
AL 4ZE 2+80N A P	2	96	3	54	.1	9	1	357	.38	3	5	ND	3	43	1	2	2	15	3.61	.053	32	10	.13	99	.01	5	.63	.03	.01	1	1
AL 4ZE 2+70N A P	1	52	6	31	.3	14	4	708	1.31	7	15	ND	4	49	1	3	2	29	4.27	.088	44	18	.17	157	.02	6	.95	.04	.04	1	1
AL 4ZE 2+60N A P	3	13	9	53	.1	6	6	3756	.50	6	5	ND	1	45	1	2	2	9	4.35	.080	17	4	.13	120	.01	8	.28	.04	.04	1	1
AL 4ZE 2+50N A P	1	39	4	26	.2	9	3	498	.85	2	5	ND	5	46	1	2	2	10	4.24	.126	79	11	.15	96	.01	6	.78	.04	.03	1	1
AL 4ZE 2+40N A P	1	12	3	29	.3	7	1	31	.20	2	5	ND	1	58	1	2	2	5	5.77	.049	7	4	.13	86	.01	7	.28	.04	.02	1	1
AL 4ZE 2+30N A P	1	17	2	56	.1	10	1	81	.22	2	5	ND	1	51	1	2	2	4	4.58	.045	10	5	.13	101	.01	7	.40	.03	.02	1	1
AL 4ZE 2+20N A P	3	15	2	45	.1	9	1	66	.15	2	5	ND	1	48	1	2	2	5	5.70	.043	4	5	.12	94	.01	7	.22	.04	.01	1	1
AL 4ZE 2+10N A P	6	28	2	52	.1	21	1	30	.10	2	5	ND	1	44	1	7	2	3	5.85	.041	2	4	.08	90	.01	8	.13	.04	.01	1	1
AL 4ZE 2+00N A P	2	25	2	52	.1	19	1	8	.11	2	5	ND	1	36	1	2	2	4	5.04	.040	2	4	.08	68	.01	7	.16	.03	.01	1	1
AL 4ZE 1+90N A P	1	81	5	51	.5	91	1	76	.26	3	5	ND	1	40	1	2	2	2	5.81	.060	22	11	.10	91	.01	7	.49	.04	.01	1	1
AL 4ZE 1+60N A	1	13	17	15	.1	12	2	87	.93	2	5	ND	2	3	1	4	2	61	.18	.012	4	70	.17	30	.17	2	.75	.02	.02	1	1
AL 4ZE 1+30N B	1	4	3	13	.1	4	1	50	.85	3	5	ND	3	5	1	2	3	33	.08	.006	4	12	.11	7	.12	2	.34	.01	.01	1	1
AL 4ZE 1+20N B	1	8	6	20	.1	7	2	71	1.47	4	5	ND	5	5	1	2	2	35	.08	.012	5	18	.17	16	.12	2	.84	.01	.04	1	1
AL 4ZE 1+10N B	1	21	14	36	.1	10	4	104	1.97	8	5	ND	4	7	1	2	2	43	.13	.018	7	20	.26	23	.15	2	1.25	.02	.06	2	1
AL 4ZE 1+00N B	1	39	10	51	.1	95	7	168	2.57	114	5	ND	1	3	1	3	2	117	.15	.013	2	635	1.25	46	.23	2	1.64	.03	.05	1	1
AL 4ZE 0+90N B	1	21	19	55	.1	12	5	154	3.42	11	5	ND	11	6	1	3	2	66	.10	.092	11	42	.33	33	.20	2	4.61	.02	.07	1	1
AL 4ZE 0+80N B	1	27	12	68	.1	16	6	194	3.57	2	5	ND	8	6	1	3	2	60	.09	.074	5	36	.48	40	.21	2	3.31	.02	.10	1	1
AL 4ZE 0+70N B	1	23	17	71	.1	22	8	253	4.57	11	5	ND	7	8	1	7	2	96	.11	.052	4	49	.62	39	.27	2	2.65	.02	.17	1	1
AL 4ZE 0+60N B	1	37	16	69	.1	20	8	269	3.68	2	5	ND	6	8	1	2	2	86	.12	.012	9	34	.66	29	.32	2	1.70	.02	.10	1	1
AL 4ZE 0+50N B	1	17	4	18	.1	8	2	60	2.16	2	5	ND	6	4	1	2	2	37	.08	.030	8	24	.14	15	.09	2	1.97	.01	.02	1	1
AL 4ZE 0+40N B	1	23	7	28	.1	15	4	107	2.28	5	5	ND	5	4	1	2	2	48	.09	.026	7	45	.34	18	.12	2	2.12	.02	.03	1	2
AL 4ZE 0+30N B	1	6	7	16	.1	4	2	57	.94	2	6	ND	3	4	1	2	2	26	.07	.010	4	14	.15	10	.10	2	.74	.01	.03	1	1
AL 4ZE 0+20N A P	1	10	3	32	.1	4	1	20	.41	2	5	ND	1	21	1	2	2	4	.23	.097	9	9	.03	60	.02	3	.76	.01	.02	1	1
AL 4ZE 0+10N A P	1	5	2	42	.1	3	1	35	.14	2	7	ND	1	27	1	2	2	2	.61	.046	5	3	.04	66	.01	3	.28	.02	.01	1	6
AL 4ZE 0+00N A P	1	8	2	41	.3	5	1	69	.38	2	11	ND	1	19	1	2	3	4	.53	.053	4	5	.03	53	.01	3	.23	.02	.02	1	1
AL 4ZE 0+80S A P	1	5	2	48	.1	2	1	25	.35	3	5	ND	1	13	1	2	2	3	.25	.053	3	4	.03	36	.01	3	.31	.01	.01	1	1
AL 4ZE 1+00S A P	1	5	2	25	.2	3	1	13	.28	2	5	ND	1	17	1	2	2	2	.18	.069	2	2	.01	71	.01	3	.37	.01	.01	1	1
AL 4ZE 1+10S B	1	7	5	12	.1	7	2	53	.98	4	5	ND	4	5	1	2	2	19	.14	.037	8	13	.12	11	.06	2	.92	.01	.03	2	1
AL 4ZE 1+20S B	1	7	8	25	.1	6	2	66	1.45	3	5	ND	4	4	1	2	4	31	.07	.031	6	19	.16	15	.10	3	2.05	.01	.03	1	1
AL 4ZE 1+30S B	1	11	10	27	.1	6	2	73	2.41	7	5	ND	7	6	1	6	4	44	.09	.084	6	27	.18	18	.14	2	2.78	.01	.04	1	1
AL 4ZE 1+40S B	1	7	9	33	.1	7	3	109	2.35	3	5	ND	5	5	1	2	3	48	.09	.045	3	21	.25	16	.18	2	1.64	.01	.05	1	2
AL 4ZE 1+50S B	1	6	10	21	.1	5	2	58	1.84	4	7	ND	5	5	1	2	3	42	.07	.023	5	17	.14	13	.15	2	.84	.01	.03	1	1
AL 4ZE 1+60S B	1	11	13	27	.2	10	4	96	2.34	5	5	ND	5	6	1	2	2	42	.09	.043	6	23	.24	21	.12	4	1.35	.01	.04	1	1
AL 4ZE 1+70S B	1	10	10	32	.1	14	4	120	1.58	7	5	ND	6	9	1	4	3	34	.13	.018	10	25	.33	38	.10	3	1.21	.02	.05	1	1
AL 4ZE 1+80S B	1	6	6	15	.1	9	3	64	1.16	2	5	ND	4	5	1	2	2	18	.11	.023	6	13	.16	27	.06	3	.90	.01	.03	1	2
STD C/AU 0.5	22	62	39	138	7.0	69	30	1161	3.98	43	18	8	35	50	20	15	21	72	.48	.110	36	65	.89	187	.09	36	1.73	.09	.14	15	510

NORTHERN DYNASTY FILE # 86-1672

PAGE 21

SAMPLE#	Mo 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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Hg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	M PPH	Au# PPH
AL 42E 1+90S B	1	2	4	10	.1	4	1	38	.67	2	5	ND	3	4	1	2	2	14	.07	.008	5	7	.09	9	.06	3	.62	.01	.02	1	1
AL 42E 2+00S B	1	4	6	12	.2	4	1	38	.72	2	8	ND	3	5	1	2	2	19	.08	.019	4	14	.09	10	.07	2	1.20	.01	.03	1	1
AL 42E 2+10S B	1	5	7	14	.1	7	2	50	1.18	2	5	ND	4	4	1	2	2	26	.06	.016	6	22	.13	16	.08	4	1.33	.01	.03	1	1
AL 42E 2+20S B	1	4	11	16	.2	5	1	53	.77	2	5	ND	3	5	1	2	2	22	.07	.014	5	13	.14	11	.10	3	.74	.01	.04	1	2
AL 42E 2+30S B	1	4	3	11	.1	4	1	35	1.18	2	5	ND	2	4	1	6	2	27	.05	.024	5	10	.08	13	.08	3	.91	.01	.03	1	1
AL 42E 2+40S B	1	5	5	18	.1	7	3	61	1.47	2	5	ND	4	5	1	2	2	28	.08	.025	4	18	.14	20	.09	3	1.48	.01	.04	3	1
AL 42E 2+50S B	1	5	7	16	.2	8	2	63	.99	3	5	ND	3	5	1	3	2	23	.07	.011	5	16	.17	15	.08	3	.77	.01	.04	1	1
AL 42E 2+60S B	1	8	5	15	.1	8	2	64	1.09	2	5	ND	5	4	1	4	2	18	.12	.032	9	13	.15	13	.07	3	1.02	.01	.03	1	1
AL 42E 2+70S B	1	21	7	22	.1	26	10	148	2.00	2	5	ND	5	23	1	2	2	55	.40	.029	13	69	.59	34	.11	5	2.45	.12	.03	1	1
AL 42E 2+80S A	1	13	12	36	.1	13	4	200	1.02	3	7	ND	3	14	1	2	3	21	.50	.040	26	17	.20	68	.05	4	1.07	.02	.08	1	1
AL 42E 2+90S B	1	13	6	29	.1	12	5	146	1.36	4	6	ND	7	8	1	2	2	26	.29	.035	19	17	.29	30	.09	4	.71	.02	.07	1	2
AL 42E 3+20S A	1	7	2	33	.2	4	2	175	.57	9	5	ND	1	29	1	2	2	6	3.12	.057	7	4	.09	50	.01	5	.24	.02	.02	1	1
AL 42E 3+40S A	1	11	6	44	.3	6	1	171	.62	10	10	ND	1	36	1	2	2	4	3.12	.099	4	4	.12	47	.01	8	.18	.03	.03	2	1
AL 42E 3+60S A	1	19	2	25	.3	20	2	48	.45	13	6	ND	2	34	1	2	4	8	3.33	.056	22	5	.12	92	.01	7	.43	.03	.02	1	1
AL 42E 3+80S A	1	55	3	21	.2	11	2	96	.18	2	5	ND	1	55	1	2	2	5	6.94	.060	3	5	.09	163	.01	9	.19	.04	.02	1	1
AL 42E 4+10S A	1	13	11	22	.2	23	4	84	2.69	7	8	ND	4	6	1	4	2	77	.15	.015	4	44	.25	27	.17	6	1.02	.01	.05	1	1
AL 42E 4+20S B	1	14	8	29	.1	26	5	107	2.25	2	5	ND	2	5	1	2	2	69	.08	.020	3	57	.35	17	.19	5	.91	.01	.04	1	1
AL 42E 4+30S B	1	23	13	47	.2	34	9	176	4.57	12	11	ND	7	5	1	6	2	102	.09	.077	4	84	.47	33	.23	7	1.77	.02	.09	5	1
AL 42E 4+40S B	1	20	13	29	.2	20	5	83	2.08	9	12	ND	5	5	1	2	2	57	.08	.016	7	64	.31	24	.12	4	1.70	.01	.05	1	1
AL 42E 4+60S B	1	13	11	37	.2	17	5	139	1.61	6	7	ND	4	4	1	2	2	58	.08	.006	4	41	.43	12	.19	3	1.06	.02	.03	1	1
AL 42E 4+70S B	1	18	9	45	.1	35	8	146	2.16	21	9	ND	4	4	1	3	3	82	.08	.010	3	85	.48	17	.20	5	1.00	.02	.05	1	2
AL 42E 4+90S B	1	40	11	42	.1	41	12	129	3.97	21	5	ND	3	3	1	2	2	104	.08	.017	2	191	.76	18	.18	5	1.74	.02	.02	1	1
AL 42E 5+00S B	1	44	6	58	.1	54	14	152	2.43	14	5	ND	2	4	1	5	2	63	.11	.013	4	97	.77	24	.16	6	1.41	.02	.05	1	1
AL 42E 5+10S B	1	10	6	33	.1	15	4	60	1.04	40	5	ND	1	3	1	2	2	51	.06	.009	4	77	.33	30	.12	2	.92	.01	.03	2	1
AL 42E 5+20S B	1	23	6	25	.1	15	6	123	2.85	26	5	ND	3	3	1	2	3	107	.08	.014	2	46	.24	16	.14	5	.72	.02	.03	1	1
AL 42E 5+40S B	1	75	43	37	.1	43	13	92	4.08	114	5	ND	7	5	1	5	4	95	.06	.022	16	81	.25	67	.13	7	2.77	.02	.04	2	3
AL 42E 5+50S A	1	34	10	21	.1	19	3	34	.53	3	5	ND	1	16	1	2	4	9	.25	.048	8	12	.05	89	.01	3	.39	.01	.04	1	1
AL 42E 5+70S A	1	133	13	43	.1	14	3	21	1.80	7	5	ND	2	8	1	2	3	17	.10	.072	18	21	.05	65	.02	5	1.20	.01	.02	1	1
AL 42E 5+80S B	2	43	5	22	.1	65	7	113	3.08	164	5	ND	3	2	1	2	3	71	.05	.012	2	128	.36	9	.06	5	.53	.01	.02	2	2
AL 42E 5+90S A	1	49	12	46	.1	56	8	73	1.03	10	5	ND	1	15	1	2	3	20	.48	.040	12	33	.07	51	.03	3	.59	.01	.03	1	1
AL 42E 6+00S B	1	7	4	19	.1	21	3	64	.94	15	5	ND	2	3	1	2	3	54	.07	.003	3	61	.25	6	.11	2	.46	.01	.02	1	1
AL 42E 6+10S A	1	45	7	36	.1	56	4	24	.38	2	5	ND	1	16	1	2	3	7	.60	.039	11	14	.07	38	.01	2	.29	.01	.03	1	1
AL 42E 6+20S B	1	90	13	65	.2	190	29	293	3.70	31	9	ND	3	3	1	2	2	119	.10	.006	2	462	1.65	17	.15	6	2.16	.03	.02	1	2
AL 42E 6+30S A	1	108	9	46	.4	130	10	114	1.57	5	5	ND	2	25	1	2	2	26	1.41	.052	24	166	.52	100	.03	5	1.43	.03	.03	1	1
AL 42E 6+40S A	1	97	5	30	.7	127	18	613	1.26	17	5	ND	2	33	1	2	2	26	3.50	.111	35	50	.21	118	.02	8	1.32	.03	.04	1	1
AL 42E 6+50S A	1	91	3	34	.4	80	16	1777	1.01	10	5	ND	1	26	1	2	2	20	2.90	.065	14	81	.33	100	.02	4	.92	.03	.03	1	8
STD C/AU 0.5	22	62	38	137	7.0	75	30	1145	3.98	41	20	8	35	50	19	16	21	71	.48	.107	37	64	.89	186	.09	60	1.73	.08	.15	14	495

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	Au1
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
AL 42E 6+60S A	1	85	7	55	.5	54	29	1430	1.33	12	5	ND	3	44	1	2	3	21	5.89	.132	25	63	.19	107	.02	6	1.07	.04	.05	2	1
AL 42E 6+70S B	1	11	6	32	.1	28	7	195	1.42	2	5	ND	5	15	1	2	2	32	.31	.014	14	40	.41	40	.10	9	1.04	.03	.06	1	1
AL 42E 6+80S B	1	11	2	52	.1	54	9	264	2.10	3	5	ND	3	2	1	8	2	76	.03	.011	3	248	1.18	10	.10	4	1.28	.02	.02	1	1
AL 42E 7+00S B	1	51	9	47	.1	113	16	157	2.32	9	5	ND	5	7	1	7	2	54	.10	.026	10	156	.56	26	.10	8	2.35	.02	.05	1	4
AL 42E 7+10S A	1	102	22	33	.1	55	7	39	1.24	2	5	ND	2	15	1	4	2	16	.04	.077	19	55	.12	74	.03	4	1.21	.01	.06	1	1
AL 42E 7+20S B	1	37	7	37	.1	58	11	157	1.84	12	5	ND	3	8	1	2	2	50	.12	.013	8	111	.62	23	.13	6	1.49	.03	.06	1	2
AL 42E 7+40S B	1	15	8	52	.1	77	8	214	3.41	18	5	ND	3	4	1	5	2	131	.05	.014	4	275	1.10	14	.16	6	1.56	.02	.03	1	1
AL 42E 7+50S B	1	14	6	19	.1	27	4	90	1.30	8	5	ND	3	4	1	3	2	38	.07	.010	6	72	.30	10	.08	4	.98	.01	.03	2	1
AL 42E 7+60S B	1	40	12	58	.1	150	19	229	3.74	22	5	ND	4	5	1	5	2	113	.06	.014	6	243	.94	24	.17	8	2.04	.02	.04	1	1
AL 42E 7+70S A	1	75	6	23	.4	522	27	114	1.04	15	5	ND	3	53	1	2	2	12	3.16	.111	54	9	.15	107	.01	8	.59	.03	.01	1	1
AL 45E 5+10S A	1	107	2	33	.2	21	1	77	.29	5	5	ND	2	65	1	2	2	14	8.88	.056	8	9	.08	112	.01	14	.39	.05	.01	1	1
AL 45E 5+20S A	1	68	2	31	.3	16	2	170	.15	2	5	ND	1	48	1	2	2	15	7.22	.062	4	4	.07	107	.01	14	.23	.04	.01	2	1
AL 45E 5+30S A	1	371	2	34	.4	39	6	314	.37	6	5	ND	2	63	1	2	2	11	8.96	.086	30	10	.09	161	.01	11	.61	.05	.01	1	4
AL 45E 5+40S A	1	104	2	36	.2	19	4	479	.39	5	5	ND	1	56	1	2	2	7	7.58	.083	8	12	.08	146	.01	9	.51	.04	.02	1	28
AL 45E 5+50S B	1	26	7	29	.1	14	8	107	1.10	8	5	ND	3	7	1	4	2	64	.35	.013	5	36	.35	30	.16	7	.85	.04	.03	3	2
AL 45E 5+60S A	2	563	11	29	.5	48	50	2351	2.52	60	6	ND	5	35	1	3	2	65	5.81	.117	93	26	.08	234	.01	12	1.50	.04	.03	1	6
AL 45E 5+70S A	1	250	8	20	.2	35	19	252	1.09	4	5	ND	3	36	1	2	2	17	5.06	.073	30	20	.09	204	.01	5	1.08	.04	.03	2	1
AL 45E 5+80S A	1	236	2	30	.4	31	3	224	.30	2	5	ND	1	49	1	2	2	5	10.50	.084	12	9	.09	201	.01	10	.44	.05	.02	1	1
AL 45E 5+90S B	1	40	14	61	.1	147	16	298	2.74	148	5	ND	3	11	1	2	2	74	1.06	.024	13	168	.45	77	.17	11	1.89	.04	.05	1	1
AL 45E 6+00S A	1	67	2	40	.1	140	2	22	.32	7	5	ND	2	40	1	2	2	10	8.97	.051	8	12	.07	137	.01	12	.37	.04	.01	3	1
AL 45E 6+10S A	1	168	2	55	.5	191	7	1419	.53	17	5	ND	2	48	1	2	2	9	7.42	.130	48	27	.09	169	.01	10	.82	.04	.02	1	8
AL 45E 6+20S A	1	180	8	66	.4	298	25	540	2.48	35	5	ND	5	36	1	5	2	18	6.75	.139	53	136	.09	168	.01	9	4.32	.05	.02	3	6
AL 45E 6+30S B	5	39	19	92	.1	95	16	437	6.88	6	5	ND	3	4	1	2	2	270	.07	.018	9	866	2.75	20	.23	3	3.05	.03	.04	1	13
AL 45E 6+40S B	1	61	15	90	.1	136	18	436	5.52	8	5	ND	3	3	1	3	2	192	.06	.025	5	653	2.23	22	.19	4	3.24	.04	.06	1	2
AL 45E 6+50S B	1	47	11	108	.1	109	13	386	4.62	36	5	ND	2	2	1	5	2	129	.02	.016	5	328	2.03	14	.10	5	2.45	.02	.03	1	1
AL 45E 6+60S B	1	10	5	58	.1	73	12	342	2.90	4	5	ND	2	2	1	3	2	89	.02	.011	7	355	1.61	8	.07	4	1.78	.02	.02	2	3
AL 45E 6+70S A	1	20	3	82	.2	43	8	80	.27	2	5	ND	1	17	1	3	3	5	.51	.079	13	14	.05	48	.01	3	.63	.02	.02	1	1
AL 45E 7+00S A	1	19	4	32	.2	34	5	171	1.46	2	5	ND	2	4	1	2	2	27	.07	.022	16	108	.62	16	.03	6	.93	.01	.02	2	1
AL 45E 7+10S A	1	16	2	72	.1	59	9	309	2.24	2	5	ND	5	2	1	4	2	53	.04	.010	16	191	1.35	78	.15	4	1.80	.02	.46	1	3
AL 45E 7+20S A	1	22	4	54	.3	29	3	34	.43	2	11	ND	1	11	1	2	3	4	.22	.105	8	23	.03	35	.01	3	.82	.01	.01	1	1
AL 45E 7+30S A	1	92	8	49	.6	106	8	33	.96	4	5	ND	1	20	1	2	4	6	.29	.075	14	50	.05	88	.01	8	.69	.02	.03	1	1
AL 45E 7+40S B	1	28	9	62	.1	99	14	318	3.95	9	5	ND	3	3	1	8	2	115	.05	.015	5	302	1.26	12	.15	5	2.79	.02	.03	2	1
AL 45E 7+50S A	1	172	8	37	.5	67	8	60	1.26	27	5	ND	7	16	1	2	3	11	.28	.113	89	60	.05	50	.01	4	2.69	.01	.02	3	1
AL 45E 7+60S A	1	31	2	73	.3	106	16	59	.74	15	5	ND	3	37	1	2	3	5	.64	.067	29	18	.06	128	.01	5	.71	.03	.01	1	1
AL 45E 7+80S A	1	7	2	60	.1	40	9	74	.12	2	5	ND	1	25	1	2	4	2	.50	.038	3	5	.07	42	.01	3	.22	.02	.01	1	1
AL 45E 8+00S A	1	20	2	54	.1	41	5	62	.32	5	5	ND	1	28	1	2	2	6	2.27	.049	7	17	.09	29	.01	6	.35	.03	.02	1	4
STD C/AU 0.5	21	64	40	136	7.0	70	31	1200	4.01	42	20	9	36	52	20	16	20	75	.48	.114	38	64	.89	175	.09	38	1.73	.09	.14	15	490

NORTHERN DYNASTY FILE # B6-1672

PAGE 23

SAMPLE#	Mo	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	W	Au#
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
AL 4SE 8+70S A P	1	9	3	44	.1	3	1	354	.34	3	5	ND	1	32	1	2	2	3	3.54	.069	2	4	.17	38	.01	6	.14	.03	.02	2	1
AL 4SE 9+00S A P	1	7	2	38	.1	2	1	367	.31	3	5	ND	1	32	1	2	2	3	3.49	.068	2	2	.16	37	.01	7	.13	.03	.01	1	1
AL 4SE 9+30S A P	1	7	2	42	.1	3	1	270	.22	3	5	ND	1	47	1	2	2	4	5.54	.044	2	3	.26	55	.01	8	.16	.04	.01	2	1
AL 4SE 9+50S A P	1	7	2	30	.2	2	1	154	.22	4	6	ND	1	33	1	2	2	3	3.63	.041	2	4	.18	43	.01	6	.13	.03	.01	2	1
AL 4SE 9+80S A P	2	12	2	34	.3	4	1	168	.43	5	5	ND	1	41	1	2	2	2	4.44	.034	2	4	.17	77	.01	6	.14	.04	.01	2	3
AL 4SE 10+00S A P	1	42	8	31	.4	8	1	42	.39	3	5	ND	3	19	1	2	2	5	.50	.041	22	6	.05	35	.02	8	.38	.02	.03	2	1
AL 4SE 10+10S A	1	30	8	34	.2	32	7	67	.69	3	5	ND	3	29	1	2	2	7	.53	.038	35	37	.23	124	.01	2	.76	.02	.03	1	1
AL 4SE 10+20S B	1	24	7	28	.2	39	6	108	2.42	15	5	ND	4	6	1	2	2	53	.10	.018	6	84	.36	27	.11	3	1.33	.02	.04	1	1
AL 4SE 10+30S B	1	25	17	33	.2	43	9	120	2.98	9	5	ND	6	6	1	2	2	50	.10	.034	7	81	.35	43	.12	5	2.55	.02	.06	1	1
AL 4SE 10+40S B	1	19	17	32	.3	34	7	102	2.92	11	5	ND	5	5	1	2	2	43	.07	.055	5	114	.31	30	.11	5	3.05	.02	.03	2	1
AL 4SE 10+50S B	1	29	18	58	.2	40	8	172	3.48	14	5	ND	13	5	1	2	2	74	.07	.064	6	106	.55	26	.17	3	1.61	.02	.06	2	2
AL 4SE 10+60S B	1	7	11	34	.1	18	3	97	2.57	8	5	ND	4	4	1	3	2	58	.05	.061	5	73	.30	15	.14	3	1.07	.01	.03	2	1
AL 4SE 10+70S B	1	7	15	70	.3	25	5	163	3.42	8	5	ND	5	5	1	2	2	75	.06	.102	5	101	.49	28	.16	4	1.85	.02	.05	1	1
AL 4SE 10+80S B	1	8	11	32	.1	17	4	100	2.96	6	5	ND	5	5	1	2	2	49	.07	.047	7	63	.27	19	.16	4	1.33	.02	.03	3	1
AL 4SE 10+90S B	1	9	12	32	.2	20	4	96	2.71	9	5	ND	6	5	1	3	2	49	.06	.041	7	73	.28	33	.12	3	1.85	.02	.03	2	1
AL 4SE 11+00S B	1	4	6	16	.2	12	2	76	1.61	5	5	ND	4	4	1	2	2	33	.05	.021	4	51	.19	14	.10	2	1.13	.01	.02	1	2
AL 4SE 11+10S B	1	10	8	38	.2	35	5	151	2.20	11	5	ND	4	4	1	2	2	62	.05	.020	6	109	.52	18	.15	3	1.17	.02	.04	3	1
AL 4SE 11+20S B	1	2	7	15	.2	11	2	64	.75	2	5	ND	3	4	1	2	2	20	.05	.004	4	39	.20	7	.09	2	.59	.01	.02	1	1
AL 4SE 11+30S B	1	3	6	14	.1	9	1	52	.65	2	6	ND	3	3	1	2	2	21	.04	.006	4	30	.17	8	.09	2	.48	.01	.02	1	1
AL 4SE 11+40S B	1	10	7	23	.1	22	4	80	1.78	7	5	ND	4	4	1	2	2	45	.06	.019	5	64	.25	14	.11	2	1.27	.01	.02	2	1
AL 4SE 11+50S B	1	6	3	13	.1	10	2	54	.88	3	5	ND	2	4	1	2	2	22	.04	.006	6	38	.17	14	.06	2	.87	.01	.02	1	1
AL 4SE 11+60S B	1	5	8	18	.1	10	2	68	1.86	6	5	ND	4	4	1	3	3	60	.05	.024	5	40	.19	10	.19	2	.59	.01	.02	1	1
AL 4SE 11+70S B	1	8	7	21	.1	14	2	73	1.54	2	5	ND	3	3	1	2	2	38	.04	.017	4	47	.21	12	.10	2	.72	.01	.02	1	75
AL 4SE 11+80S B	1	5	4	26	.1	14	2	93	1.27	3	5	ND	4	4	1	2	2	43	.06	.015	4	49	.26	17	.12	2	.54	.01	.03	1	1
AL 4SE 11+90S A	1	22	10	28	.2	17	3	84	.79	2	5	ND	2	5	1	2	2	17	.03	.019	13	51	.26	47	.05	2	.62	.01	.04	1	4
AL 4SE 12+00S B	1	10	11	41	.2	41	6	149	2.53	11	5	ND	3	3	1	2	2	88	.06	.019	4	143	.43	23	.19	3	.98	.02	.08	1	35
AL 4SE 12+10S B	1	14	16	64	.4	37	6	203	3.23	11	5	ND	6	3	1	2	2	66	.04	.044	11	102	.73	22	.17	4	1.60	.02	.04	1	3
AL 4SE 12+20S B	1	32	20	83	.3	62	11	383	4.42	12	5	ND	8	4	1	2	2	80	.05	.136	7	177	.76	40	.18	7	2.89	.02	.08	1	1
AL 4SE 12+30S B	1	16	12	63	.1	47	7	216	2.93	13	5	ND	4	4	1	2	2	71	.07	.047	6	117	.60	26	.17	4	1.34	.02	.06	1	1
AL 4SE 12+40S B	1	3	5	44	.2	57	8	195	1.72	2	5	ND	5	2	1	2	2	38	.02	.015	10	124	1.06	43	.17	3	1.44	.02	.21	1	1
AL 4SE 12+50S B	1	24	14	96	.1	71	15	266	4.18	17	5	ND	4	5	1	2	2	90	.08	.074	9	170	.62	46	.17	7	2.32	.02	.06	1	4
AL 4SE 12+60S B	1	22	11	39	.2	48	9	130	2.54	8	5	ND	4	5	1	2	2	44	.09	.045	7	104	.32	27	.11	5	1.91	.02	.03	2	1
AL 4SE 12+70S B	1	19	12	32	.1	39	6	117	3.08	13	5	ND	4	5	1	2	2	57	.07	.032	7	83	.33	24	.14	6	1.73	.02	.04	1	1
AL 4SE 12+80S B	2	57	14	66	.2	175	30	287	7.02	7	5	ND	6	6	1	2	2	136	.11	.038	12	492	.71	72	.24	5	4.85	.02	.18	2	34
AL 4SE 12+90S B	1	21	14	44	.1	50	9	173	2.93	16	5	ND	2	6	1	5	2	87	.08	.019	10	187	.59	25	.15	7	1.76	.02	.04	4	5
AL 4SE 13+00S A P	1	42	7	53	.7	19	6	535	1.57	23	5	ND	4	41	1	2	2	10	3.63	.130	35	32	.10	106	.01	6	.77	.04	.03	1	1
STD C/AU 0.5	21	61	41	136	7.4	72	29	1137	4.00	40	18	8	35	51	19	14	21	64	.46	.106	40	62	.85	190	.09	39	1.74	.09	.14	15	505

NORTHERN DYNASTY FILE W 86-1672

PAGE 24

SAMPLE#	Mo	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	Au#
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
AL 47E 4+00N B	1	22	18	24	.2	19	5	79	1.42	4	5	ND	1	2	1	4	2	65	.09	.007	2	45	.23	18	.17	2	.60	.02	.02	1	1
AL 47E 3+00N A P	1	38	6	83	.4	13	18	558	.61	2	5	ND	3	46	1	2	2	20	6.00	.082	4	7	.28	167	.01	11	.51	.04	.02	1	1
AL 47E 2+90N A P	1	16	4	31	.1	4	2	66	.66	2	8	ND	3	42	1	2	2	4	2.14	.108	15	7	.11	101	.01	3	.42	.03	.02	1	1
AL 47E 2+80N A P	1	7	2	36	.1	3	1	31	.21	3	5	ND	2	26	1	2	2	5	1.12	.054	9	11	.08	49	.01	2	.24	.01	.01	1	1
AL 47E 2+70N A P	1	3	6	43	.1	1	1	33	.14	2	5	ND	1	19	1	2	2	2	.70	.064	2	3	.08	30	.01	3	.12	.01	.01	1	1
AL 47E 2+60N A P	1	3	2	35	.1	1	1	10	.11	2	5	ND	1	27	1	2	2	2	1.10	.039	2	3	.09	36	.01	2	.15	.02	.01	1	1
AL 47E 2+50N A P	1	2	2	72	.1	2	1	16	.17	2	5	ND	1	32	1	2	2	2	1.34	.038	2	2	.11	35	.01	2	.15	.02	.01	1	1
AL 47E 2+40N A P	1	3	3	49	.1	1	1	28	.18	2	5	ND	1	32	1	2	2	2	1.03	.046	2	2	.10	37	.01	2	.14	.02	.01	2	1
AL 47E 2+20N A P	1	12	4	31	.4	5	2	27	.52	2	5	ND	4	64	1	2	2	4	3.38	.128	14	4	.22	105	.01	3	.70	.03	.01	1	1
AL 47E 2+10N B	1	6	9	25	.1	6	2	78	1.20	2	5	ND	4	6	1	2	2	38	.11	.015	4	18	.19	18	.15	2	.69	.01	.04	1	2
AL 47E 2+00N B	1	10	10	32	.3	6	2	82	1.63	4	5	ND	6	6	1	2	2	40	.08	.027	5	13	.19	21	.16	2	.78	.01	.05	1	1
AL 47E 1+90N B	1	17	16	39	.1	13	4	97	3.29	5	5	ND	8	5	1	2	2	54	.08	.078	3	40	.26	17	.16	2	1.46	.01	.04	1	1
AL 47E 1+80N B	1	22	13	90	.3	21	8	211	4.09	4	5	ND	13	6	1	2	2	67	.13	.142	6	49	.57	39	.19	3	3.24	.02	.12	1	1
AL 47E 1+70N B	1	24	13	77	.2	23	7	210	3.63	6	5	ND	9	6	1	2	3	57	.12	.165	5	45	.45	39	.15	3	3.10	.02	.10	1	1
AL 47E 1+60N B	1	17	12	72	.2	12	4	135	2.64	2	5	ND	7	6	1	2	3	46	.09	.079	4	26	.35	32	.14	3	2.04	.01	.06	1	1
AL 47E 1+50N B	1	15	13	84	.2	17	6	263	3.55	11	5	ND	5	5	1	2	2	58	.09	.162	3	39	.48	37	.16	3	3.87	.02	.09	1	1
AL 47E 1+40N B	1	29	9	90	.1	24	9	230	4.39	2	6	ND	11	6	1	2	2	65	.10	.145	4	48	.58	41	.18	5	3.78	.02	.11	1	1
AL 47E 1+30N B	1	11	9	65	.2	11	4	93	2.83	2	5	ND	8	5	1	2	2	44	.07	.116	2	28	.22	41	.13	2	3.37	.01	.05	1	1
AL 47E 1+20N B	1	9	13	37	.1	11	3	91	3.07	4	5	ND	8	7	1	4	2	51	.08	.101	6	33	.23	24	.15	3	1.87	.01	.05	1	1
AL 47E 1+10N B	1	5	6	26	.1	6	2	63	2.37	8	5	ND	5	5	1	2	2	56	.07	.028	4	23	.15	16	.18	2	1.15	.01	.03	1	1
AL 47E 1+00N B	2	14	12	43	.1	13	5	150	3.43	4	5	ND	4	6	1	4	3	73	.10	.047	4	32	.40	17	.23	4	1.16	.02	.05	3	1
AL 47E 0+90N B	1	7	11	20	.1	4	1	49	2.76	2	5	ND	6	5	1	2	2	72	.07	.022	2	23	.12	11	.17	2	1.20	.01	.02	1	1
AL 47E 0+80N B	1	3	7	14	.1	3	1	26	.49	2	5	ND	1	4	1	4	3	12	.06	.011	4	8	.09	15	.07	2	.41	.01	.02	1	2
AL 47E 0+60N A	1	13	5	38	.1	5	1	17	.34	2	10	ND	4	50	1	2	2	4	1.46	.057	22	7	.09	52	.01	2	.39	.02	.03	1	1
AL 47E 0+50N A P	1	14	5	34	.1	6	2	30	.64	11	9	ND	4	42	1	3	2	7	2.56	.074	40	10	.15	43	.02	2	.61	.03	.03	1	1
AL 47E 0+40N A P	1	13	2	21	.1	6	2	539	.49	21	5	ND	2	61	1	2	2	18	5.82	.115	20	6	.23	78	.01	6	.66	.04	.01	1	1
AL 47E 0+30N A P	1	6	2	21	.1	3	1	253	.21	5	5	ND	2	73	1	2	2	13	5.06	.078	3	3	.24	70	.01	8	.33	.04	.01	1	1
AL 47E 0+20N A P	1	3	2	37	.1	2	1	10	.14	2	5	ND	1	38	1	2	2	2	2.98	.027	2	4	.16	34	.01	2	.09	.03	.01	1	1
AL 47E 0+10N A P	1	5	2	52	.2	2	1	12	.51	14	5	ND	1	35	1	2	2	2	2.75	.055	2	1	.15	43	.01	6	.10	.03	.02	1	1
AL 47E 0+00N A P	1	3	2	31	.1	1	1	10	.17	6	5	ND	1	30	1	2	2	2	1.82	.049	2	3	.12	38	.01	2	.14	.02	.01	1	1
AL 47E 0+10S A P	2	5	4	34	.1	3	2	32	.67	8	5	ND	2	53	1	2	2	9	3.94	.078	5	3	.19	81	.01	4	.26	.03	.01	1	1
AL 47E 0+30S A P	4	5	2	43	.1	3	1	49	.63	6	5	ND	2	59	1	2	2	5	3.70	.054	3	4	.19	88	.01	4	.27	.03	.01	1	1
AL 47E 0+50S A P	2	10	2	24	.1	4	5	412	.64	3	5	ND	2	41	1	2	2	7	3.78	.117	7	5	.15	78	.01	5	.34	.03	.01	1	1
AL 47E 0+70S A P	3	15	5	24	.1	34	3	212	.71	2	5	ND	3	58	1	2	2	9	3.73	.123	6	8	.12	149	.01	6	.47	.03	.02	1	1
AL 47E 0+90S A P	1	8	4	35	.1	9	2	51	.22	2	5	ND	1	30	1	4	2	3	.79	.051	5	5	.07	52	.01	4	.29	.02	.02	1	1
AL 47E 1+40S A P	1	2	4	46	.1	3	1	47	.18	2	5	ND	1	21	1	2	2	1	.55	.034	2	1	.06	35	.01	2	.12	.02	.02	1	1
AL 47E 1+70S A P	1	4	3	63	.1	4	1	36	.17	2	5	ND	1	18	1	2	2	1	.52	.050	2	3	.04	33	.01	4	.12	.02	.01	1	1
STD C/NU 0.5	22	61	42	141	7.2	71	29	1117	3.94	40	19	7	35	49	18	17	21	70	.48	.105	37	60	.88	186	.09	39	1.72	.08	.14	14	495

NORTHERN DYNASTY FILE # B6-1672

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	AuI
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPM
AL 47E 2+00S A	1	2	2	67	.1	2	1	27	.05	2	5	ND	1	9	1	3	2	1	.32	.027	2	4	.03	16	.01	3	.08	.01	.01	1	1
AL 47E 2+50S A	1	11	4	33	.2	18	5	574	1.49	99	5	ND	1	38	1	2	2	3	4.24	.120	2	6	.07	75	.01	11	.16	.04	.02	1	1
AL 47E 2+60S A	2	16	4	27	.1	52	27	3717	5.26	1730	5	ND	1	57	1	2	2	9	4.27	.091	2	18	.06	154	.01	7	.25	.04	.02	1	1
AL 47E 2+70S A	7	36	9	39	.4	123	47	9836	17.17	2946	5	ND	8	58	1	4	2	35	4.51	.086	25	29	.06	287	.01	2	.65	.06	.01	1	1
AL 47E 2+80S B	1	36	6	38	.1	40	9	165	3.28	50	5	ND	3	5	1	3	2	111	.09	.010	2	99	.43	25	.20	5	1.16	.02	.04	1	4
AL 47E 2+90S A	1	12	7	43	.1	10	3	678	.33	19	5	ND	1	57	1	2	2	5	5.94	.060	2	4	.11	68	.01	8	.22	.04	.03	1	1
AL 47E 3+00S A	1	9	2	62	.1	6	2	361	.19	23	5	ND	1	70	1	2	2	2	7.18	.040	2	1	.11	105	.01	11	.13	.05	.01	1	1
AL 47E 3+10S A	1	6	2	40	.1	4	1	59	.13	2	5	ND	1	85	1	2	2	2	8.92	.045	2	4	.11	102	.01	10	.11	.05	.01	1	1
AL 47E 3+30S A	1	6	2	40	.1	2	1	1669	.11	11	5	ND	1	63	1	2	2	2	7.00	.035	2	3	.10	138	.01	9	.08	.04	.01	2	1
AL 47E 3+50S A	1	9	2	37	.1	6	1	647	.10	5	5	ND	1	75	1	2	2	2	8.26	.054	2	3	.10	160	.01	10	.09	.05	.01	1	1
AL 47E 3+60S A	1	15	3	27	.1	9	2	455	.10	4	5	ND	1	74	1	2	2	2	8.08	.050	2	4	.09	162	.01	9	.09	.04	.01	1	1
AL 47E 3+70S A	1	24	9	71	.1	15	1	853	.14	7	5	ND	1	63	1	2	2	5	6.08	.064	2	4	.08	93	.01	12	.12	.04	.04	1	1
AL 47E 3+80S B	1	26	6	25	.1	46	8	99	1.84	15	8	ND	5	8	1	2	2	58	.28	.011	4	115	.41	25	.12	3	.74	.02	.03	1	1
AL 47E 4+10S B	1	16	13	44	.1	28	6	109	2.20	15	5	ND	2	5	1	4	2	109	.07	.011	2	70	.27	29	.19	4	.85	.01	.03	2	1
AL 47E 4+20S B	1	106	4	31	.1	36	11	138	3.72	2	5	ND	1	2	1	2	2	72	.11	.015	2	156	.39	15	.18	5	.86	.02	.01	1	1
AL 47E 4+30S B	1	37	15	87	.1	79	15	171	4.05	31	5	ND	8	4	1	5	2	98	.08	.033	2	185	.59	38	.21	5	2.64	.02	.06	1	1
AL 47E 4+40S B	1	5	6	15	.1	7	2	42	.94	3	5	ND	2	2	1	2	4	58	.04	.009	2	33	.14	19	.18	2	.40	.01	.01	1	270
AL 47E 4+50S B	1	73	9	63	.1	143	22	189	3.60	61	5	ND	3	4	1	2	3	105	.09	.017	2	243	.89	38	.21	5	1.72	.03	.07	1	2
AL 47E 4+60S B	1	22	5	40	.4	32	6	129	1.59	7	5	ND	6	8	1	2	2	39	.11	.033	13	60	.39	54	.09	6	2.12	.02	.05	1	1
AL 47E 4+70S B	1	170	13	75	.1	161	32	370	5.86	26	5	ND	2	4	1	3	2	106	.11	.048	2	155	.55	35	.19	3	1.52	.03	.06	2	2
AL 47E 4+80S B	1	24	10	55	.1	53	11	185	3.15	26	5	ND	4	4	1	3	3	108	.07	.024	2	123	.52	28	.20	6	1.28	.02	.06	2	1
AL 47E 4+90S B	1	33	10	79	.1	58	14	254	3.42	26	5	ND	3	5	1	2	2	91	.08	.025	2	129	.54	41	.15	5	1.57	.02	.07	1	1
AL 47E 5+00S B	1	21	8	27	.1	16	6	121	1.36	4	5	ND	1	2	1	5	2	46	.07	.026	2	35	.18	22	.07	3	.65	.02	.02	1	1
AL 47E 5+10S B	1	13	6	34	.1	20	5	90	1.64	8	5	ND	2	3	1	2	2	103	.06	.014	2	57	.26	26	.16	4	.70	.02	.03	1	1
AL 47E 5+20S B	1	93	18	69	.3	88	18	232	4.69	41	5	ND	6	5	1	4	2	115	.11	.045	2	181	.76	37	.23	7	2.51	.03	.10	1	1
AL 47E 5+30S B	1	113	13	69	.1	102	21	200	3.56	55	5	ND	4	6	1	2	2	114	.14	.025	7	193	.84	37	.18	7	1.88	.04	.06	4	2
AL 47E 5+40S A	1	18	5	16	.1	6	2	36	.46	2	7	ND	1	3	1	2	3	17	.08	.024	3	16	.09	19	.02	2	.40	.02	.02	1	1
AL 47E 5+50S B	1	87	11	38	.1	55	14	136	4.07	37	5	ND	4	3	1	6	2	108	.09	.027	4	120	.45	17	.15	6	1.52	.02	.02	3	1
AL 47E 5+60S B	1	48	6	44	.1	39	10	104	3.52	45	5	ND	3	4	1	5	2	143	.07	.021	2	88	.43	20	.17	7	1.22	.02	.03	3	4
AL 47E 5+70S B	1	24	2	28	.1	16	8	38	1.79	8	5	ND	1	1	1	2	2	117	.05	.010	2	20	.17	17	.10	3	.87	.02	.01	1	1
AL 47E 5+80S B	1	10	5	33	.1	6	4	177	3.37	22	5	ND	1	1	1	5	3	365	.09	.015	2	6	.12	14	.16	6	.55	.02	.02	9	1
AL 47E 5+90S B	1	139	7	78	.3	41	34	340	7.61	596	5	ND	3	4	1	2	2	351	.17	.034	3	14	1.02	61	.29	3	5.16	.03	.19	10	10
AL 47E 6+00S B	1	18	6	66	.1	227	24	235	3.74	142	5	ND	2	5	1	2	2	96	.19	.016	2	312	.96	24	.16	6	2.29	.06	.04	4	4
AL 47E 6+10S A	1	79	17	76	.4	91	6	115	7.86	149	5	ND	3	4	1	5	2	95	.08	.050	2	541	.48	48	.16	2	1.28	.02	.13	1	1
AL 47E 6+20S B	3	45	12	97	.1	133	11	183	8.42	78	5	ND	3	1	1	3	2	117	.04	.015	2	644	1.51	18	.20	2	2.43	.03	.14	1	2
AL 47E 6+30S B	1	16	13	71	.1	79	7	250	3.10	27	5	ND	2	2	1	4	3	114	.04	.008	2	403	1.35	18	.15	6	1.68	.03	.06	1	2
AL 47E 6+40S B	1	18	10	38	.1	35	5	114	2.58	44	9	ND	4	3	1	3	2	116	.04	.009	3	139	.45	17	.15	6	1.03	.02	.04	2	2
STD C/AU 0.5	21	61	40	141	7.0	72	31	1182	4.00	40	19	8	36	52	20	15	21	74	.48	.112	38	64	.89	185	.09	41	1.73	.09	.14	14	495

SAMPLE#	Mo 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	Sb PPH	Bi PPH	V PPH	Ca %	P %	La PPH	Cr PPH	Hg %	Ba PPH	Ti %	B PPH	Al %	Na %	K %	M PPH	Au1 PPH
AL 47E 6+50S B	1	46	7	22	.1	39	4	66	1.56	27	5	ND	5	3	1	2	3	27	.08	.013	12	99	.23	10	.07	2	1.21	.02	.02	2	3
AL 47E 6+60S B	1	31	11	80	.1	129	14	316	3.31	22	5	ND	2	2	1	7	2	89	.02	.008	4	429	1.69	18	.15	3	2.24	.02	.03	2	2
AL 47E 6+70S B	1	19	7	26	.1	36	5	87	1.49	14	5	ND	2	5	1	3	3	35	.08	.011	6	54	.29	16	.08	3	.85	.02	.03	1	1
AL 47E 6+80S B	1	13	7	26	.1	20	4	82	1.59	17	5	ND	2	4	1	2	4	52	.05	.012	2	46	.25	12	.13	2	.61	.02	.04	3	1
AL 47E 6+90S B	1	19	9	38	.1	38	7	99	2.53	15	5	ND	3	5	1	5	4	57	.07	.017	5	70	.31	27	.12	4	1.30	.02	.04	1	2
AL 47E 7+00S B	1	28	9	26	.1	36	6	80	1.84	14	5	ND	3	3	1	2	2	42	.06	.014	5	70	.26	15	.09	2	1.36	.02	.02	1	1
AL 47E 7+10S A	1	53	7	32	.4	106	7	43	.59	5	5	ND	4	27	1	2	2	7	1.02	.088	59	35	.12	101	.01	4	.94	.02	.01	1	1
AL 47E 7+20S A P	1	60	7	54	.4	217	18	342	.46	5	7	ND	5	49	1	2	2	3	3.56	.094	68	15	.12	136	.01	6	.53	.03	.01	1	1
AL 47E 7+30S A P	1	40	9	65	.3	161	35	1063	1.64	27	5	ND	3	54	1	2	2	9	4.51	.123	37	17	.13	113	.01	8	.98	.04	.02	1	1
YA6-5-1	2	17	31	51	.4	24	4	575	6.34	450	5	ND	2	2	1	10	4	215	.06	.060	4	110	.09	20	.23	2	.50	.02	.03	1	3
YA6-5-2	2	110	23	129	.1	149	25	305	8.55	349	5	ND	3	3	1	2	2	129	.15	.027	2	346	.57	51	.22	2	3.47	.03	.06	44	55
STB C/AU 0.5	20	62	41	139	7.4	72	30	1142	3.98	41	17	7	35	50	19	16	20	64	.48	.108	40	62	.86	188	.09	36	1.73	.09	.13	14	490

NORTHERN DYNASTY FILE # 86-1672

PAGE 27
TAJAN

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Ca	Sb	Bi	V	Co	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	V	Au ¹⁴
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
YA6-R-1	3	1204	1917	54748	25.3	228	51	673	15.08	4332	8	ND	2	1	483	10	27	17	.02	.003	7	35	.11	11	.02	4	.21	.02	.11	5	270
YA6-R-2	1	14	5	26	.1	5	1	80	.44	10	5	ND	1	2	1	2	3	1	.11	.001	2	19	.01	8	.01	2	.02	.01	.01	20	7
YA6-R-3	1	8	2	7	.1	4	1	50	.45	4	5	ND	1	1	1	2	2	4	.02	.001	2	18	.08	2	.01	2	.09	.01	.01	14	1

1987

ROCK AND SOIL
GEOCHEMICAL
ASSAYS

GEOCHEMICAL ICP ANALYSIS

.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 N AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1-CORE P2-ROCK P3-BOIL AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 29 1987

DATE REPORT MAILED: *Oct 6/87*ASSAYER: *D. Toyne* DEAN TOYE, CERTIFIED B.C. ASSAYER

NORTHERN DYNASTY PROJECT-ARSENIC File # 87-4482 Page 3

SAMPLES	NO PPM	CU PPM	PB PPM	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 %	N PPM	AU PPM
AL 14+2SE 0+75 D	1	9	16	16	.4	6	2	43	.89	2	5	ND	5	3	1	2	2	14	.07	.005	6	12	.12	6	.06	2	.92	.01	.02	1	5
AL 15+00E 0+45 D	2	204	20	33	.3	6	4	161	18.68	6	5	ND	2	2	1	4	2	178	.04	.041	3	53	.21	20	.11	2	1.33	.01	.02	7	4

SAMPLE#	NO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MM 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	AU11 PPM
ML7-R-503	1	490	34	75	2.8	263	31	510	46.15	6	5	ND	5	1	2	2	7	4	.12	.004	4	5	.13	3	.01	2	.29	.04	.02	2	24
ML7-R-504	1	431	25	159	3.1	291	18	73	41.38	2	5	ND	5	3	2	2	3	13	.20	.006	3	19	.16	4	.01	2	.72	.06	.03	2	26
ML7-R-505	1	599	15	233	3.6	173	38	141	28.45	6	5	ND	3	1	3	2	2	9	.06	.013	4	20	.15	3	.01	2	.28	.02	.01	2	98
ML7-R-700	1	176	85	136	5.4	54	17	821	5.63	7	5	ND	2	13	1	2	2	170	1.35	.035	5	107	1.03	56	.27	2	3.54	.09	.73	3	3
ML7-R-701	2	503	15	46	10.8	89	25	750	15.60	13	5	ND	4	12	1	2	2	80	1.58	.022	5	41	.75	17	.08	2	2.04	.08	.14	4	18
STD C/AU-R	19	58	37	132	7.3	67	26	1026	3.90	37	21	7	38	49	18	18	21	56	.48	.082	37	57	.84	173	.08	38	1.82	.07	.14	14	510

ARSEN

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 NI FE CA P LA CR HG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: P1-S SOIL P6-ROCK AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 31 1987

DATE REPORT MAILED: *P-20 max, P-11 checked* *Sept 12/87*

ASSAYER: *D. J. Jones* DEAN TOYE, CERTIFIED B.C. ASSAYER

NORTHERN DYNASTY PROJECT-ARSEN0 LAKE File # 87-3781 Page 1

SAMPLE#	NO	CU	PB	ZN	AG	NI	CO	MM	FE	AS	U	AJ	TH	SR	CD	SB	BI	V	CA	P	LA	CR	HG	BA	TI	B	ML	NA	K	W	AU
	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
ML7-S-606	3	55	23	64	.8	16	7	203	10.90	55	5	ND	3	2	1	2	2	215	.15	.030	5	30	.32	25	.17	7	1.66	.03	.06	1	26
ML7-S-608	3	85	18	66	1.3	9	3	162	14.30	15	5	ND	3	5	1	2	2	228	.08	.050	6	62	.46	80	.18	4	1.92	.05	.34	1	61
ML7-S-500	6	170	25	139	22.6	54	9	305	21.15	34	5	ND	6	1	1	2	2	66	.02	.040	5	204	.43	17	.12	9	2.73	.01	.04	3	15
ML7-S-501	2	107	17	33	.4	22	5	74	20.16	2	5	ND	12	3	1	2	2	74	.03	.034	6	190	.29	22	.20	3	.79	.01	.12	2	3
ML7-S-502	2	20	15	68	.2	17	5	233	2.85	5	5	ND	6	12	1	2	2	49	.17	.014	5	29	.58	31	.23	4	1.33	.03	.18	1	1
23+15E 0+80S	8	64	24	105	2.3	28	6	335	18.76	2	5	ND	3	1	1	2	2	74	.04	.033	2	119	.14	10	.16	4	.89	.01	.04	1	3
LL L55+50E 6+00S	1	12	19	33	.2	21	4	94	3.17	6	5	ND	6	8	1	2	2	79	.10	.016	8	83	.37	32	.19	3	1.84	.02	.07	1	1
LL L63+00E 0+60M	1	48	23	73	.6	25	8	1277	.73	5	5	ND	5	46	2	2	2	10	2.63	.065	69	6	.16	112	.01	11	.66	.03	.06	1	1
LL L63+00E 0+50M	1	11	7	38	.1	4	1	81	.33	2	5	ND	2	29	1	2	2	4	.59	.043	6	4	.06	67	.01	3	.39	.02	.06	2	1
LL L63+00E 0+40M	1	9	12	14	.2	7	3	68	1.93	3	5	ND	6	6	1	2	2	32	.09	.008	9	22	.15	14	.13	2	1.30	.02	.03	1	1
LL L63+00E 0+30M	1	6	14	12	.1	5	1	39	.69	2	5	ND	3	8	1	2	3	23	.07	.008	6	11	.09	26	.15	4	.58	.02	.03	1	16
LL L63+00E 0+20M	3	78	21	74	6.5	25	5	173	12.22	21	5	ND	5	7	1	2	2	88	.14	.036	8	103	.29	33	.12	2	1.44	.02	.10	1	6
LL L63+00E 0+10M	1	6	8	38	.1	5	2	63	.35	2	5	ND	1	22	1	2	2	4	.48	.062	8	4	.06	51	.01	16	.45	.02	.04	2	8
LL L63+00E 0+00	1	5	6	46	.1	7	2	46	.69	12	5	ND	2	31	1	2	2	3	.90	.047	10	4	.05	72	.01	3	.48	.02	.02	2	1
LL L63+00E 0+10S	1	50	7	41	.5	33	13	278	1.27	14	9	ND	3	37	1	2	2	30	1.86	.073	28	81	.28	102	.02	4	1.41	.02	.06	1	1
LL L63+00E 0+20S	1	2	4	40	.2	1	1	41	.07	2	5	ND	1	16	1	2	2	1	.72	.020	2	3	.05	19	.01	5	.05	.02	.03	1	1
LL L63+00E 0+30S	1	5	8	13	.1	1	1	84	.55	2	5	ND	2	3	1	2	2	25	.09	.012	3	3	.06	24	.12	2	.36	.02	.03	1	1
LL L63+00E 0+40S	1	3	7	6	.1	2	1	25	.43	3	5	ND	3	6	1	2	2	16	.05	.008	7	6	.04	8	.11	5	.41	.01	.02	1	1
LL L63+00E 0+50S	1	10	11	23	.2	7	1	51	.38	2	5	ND	2	25	1	3	2	8	.84	.038	20	4	.05	61	.04	3	.31	.02	.05	1	1
LL L63+00E 0+60S	1	10	4	60	.5	9	3	163	.43	2	5	ND	3	40	1	2	2	3	1.72	.074	31	4	.09	78	.01	5	.47	.02	.02	1	1
LL L63+00E 0+70S	1	18	6	30	.5	10	2	76	.58	3	5	ND	3	36	1	2	2	4	1.37	.088	41	8	.12	83	.01	11	.70	.03	.02	1	2
LL L63+00E 0+80S	1	19	12	38	.1	20	7	154	2.38	9	5	ND	5	9	1	2	2	42	.16	.019	14	29	.41	32	.16	3	1.41	.02	.04	1	2
LL L63+00E 0+90S	1	15	11	20	.1	12	4	73	1.23	2	5	ND	3	6	1	2	2	39	.08	.010	6	20	.23	20	.12	2	.72	.02	.03	1	3
LL L63+00E 1+00S	1	4	3	15	.1	5	2	77	1.19	3	5	ND	4	5	1	2	2	56	.10	.007	3	18	.18	12	.18	2	.47	.02	.04	1	1
LL L63+00E 1+10S	1	10	12	32	.1	26	6	167	3.18	3	5	ND	5	5	1	2	2	72	.13	.013	5	69	.49	16	.18	23	1.67	.03	.05	2	4
LL L63+00E 1+20S	1	9	10	33	.3	5	1	84	.23	2	5	ND	1	25	1	2	2	3	.29	.043	3	1	.03	136	.01	3	.14	.02	.09	1	1
LL L63+00E 1+50S	1	4	17	63	.1	2	1	34	.16	4	5	ND	1	15	1	2	2	2	.26	.033	2	2	.04	36	.01	5	.14	.01	.04	1	1
LL L63+00E 1+80S	1	4	10	27	.1	24	4	144	1.12	2	5	ND	2	3	1	2	2	29	.05	.007	3	122	.58	15	.11	2	.79	.02	.02	1	4
LL L63+00E 1+90S	1	16	14	27	.2	13	6	94	2.41	6	5	ND	6	9	1	2	2	70	.20	.006	7	24	.38	38	.26	3	1.18	.03	.10	2	1
LL L63+00E 2+00S	1	26	7	19	.6	31	3	57	.57	2	5	ND	3	64	1	2	2	5	4.66	.060	28	6	.27	175	.01	6	.75	.02	.03	1	1
LL L63+00E 2+10S	1	6	7	19	.1	10	3	82	1.58	7	5	ND	3	6	1	2	2	61	.09	.007	4	32	.20	17	.21	2	.58	.02	.05	1	1
LL L63+00E 2+20S	3	9	14	46	.1	43	9	87	3.12	6	5	ND	3	2	1	3	2	191	.01	.010	3	364	1.48	13	.15	5	1.84	.02	.02	2	1
LL L63+00E 2+30S	1	51	16	23	.6	38	4	64	.91	5	5	ND	1	13	1	2	3	10	.19	.048	10	44	.07	99	.02	2	.88	.01	.05	1	2
LL L63+00E 2+40S	1	18	9	53	.6	22	3	35	.37	2	5	ND	2	33	1	2	2	2	.77	.049	16	10	.09	79	.01	3	.61	.02	.04	1	1
LL L63+00E 2+50S	1	13	8	38	.6	17	5	37	.46	2	5	ND	1	31	1	2	2	3	.81	.062	16	3	.11	70	.01	4	.56	.02	.05	1	1
LL L63+00E 2+60S	1	53	15	21	.4	25	3	44	.82	3	5	ND	2	20	1	2	2	12	.34	.038	22	16	.06	66	.05	4	.86	.02	.04	1	1
STD C/AU-S	19	59	40	130	7.2	68	28	1033	3.84	41	18	7	39	51	18	18	21	58	.46	.089	39	58	.84	178	.08	37	1.77	.08	.13	13	48

NORTHERN DYNASTY PROJECT-ARSENU LAKE FILE # 87-3781

SAMPLE#	NO	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	V	AU1
	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
LL L63+00E 2+70S	1	40	24	43	.5	29	5	78	.69	6	5	ND	2	27	1	2	2	9	.77	.042	32	12	.12	90	.03	3	.70	.02	.07	1	1
LL L63+00E 2+80S P	1	25	14	33	.4	18	2	39	.37	2	5	ND	2	23	1	2	2	5	.50	.027	26	9	.06	89	.01	2	.42	.02	.06	1	2
LL L63+00E 3+00S P	1	12	7	41	.5	8	1	39	.36	2	5	ND	3	31	1	2	2	1	1.24	.051	29	3	.09	50	.01	33	.49	.03	.04	1	1
LL L64+00E 0+90W	1	17	8	12	.2	8	3	48	1.66	5	5	ND	2	3	1	2	2	67	.07	.006	4	16	.10	6	.12	2	.57	.01	.03	1	2
LL L64+00E 0+80W	1	36	11	30	.2	35	10	162	2.89	4	5	ND	6	8	1	2	2	60	.13	.005	10	47	.51	27	.10	3	1.90	.02	.07	1	1
LL L64+00E 0+70W	1	30	25	41	.1	31	13	145	3.60	5	5	ND	12	6	1	2	2	60	.14	.009	20	30	.50	47	.20	4	3.04	.02	.05	1	1
LL L64+00E 0+60W	1	22	19	27	.1	20	6	106	2.78	7	5	ND	12	6	1	2	2	39	.11	.022	12	31	.28	24	.16	4	2.67	.02	.06	1	2
LL L64+00E 0+50W	1	33	24	32	.1	50	14	120	3.56	8	5	ND	15	6	1	2	2	51	.10	.010	16	101	.50	34	.15	4	2.49	.02	.05	1	2
LL L64+00E 0+40W	1	64	17	41	.4	65	23	160	4.39	7	5	ND	14	13	1	5	2	74	.36	.017	25	138	.64	80	.20	5	5.95	.05	.05	1	1
LL L64+00E 0+30W	1	10	12	20	.1	8	3	70	1.55	5	5	ND	6	5	1	2	2	23	.09	.005	7	16	.20	15	.11	2	.99	.02	.03	1	2
LL L64+00E 0+20W	3	32	20	50	.2	42	7	149	8.94	96	5	ND	2	2	1	3	2	99	.08	.015	2	84	.57	48	.16	4	1.90	.02	.20	1	1
LL L64+00E 0+10W	1	42	15	40	.1	53	10	126	3.12	20	5	ND	2	3	1	2	2	136	.13	.009	3	199	.45	29	.13	2	2.45	.03	.02	1	1
LL L64+00E 0+00	1	25	17	33	.1	48	9	112	2.83	42	5	ND	2	2	1	2	2	130	.08	.007	5	372	.20	32	.11	2	1.68	.02	.02	1	2
LL L64+00E 0+10S	1	10	8	18	.1	14	5	81	1.51	2	5	ND	6	4	1	2	2	20	.08	.009	9	23	.22	19	.10	2	1.35	.01	.03	1	1
LL L64+00E 0+20S	1	37	20	23	.8	10	3	56	1.11	2	5	ND	5	32	1	2	2	10	.75	.074	85	16	.12	108	.02	2	1.85	.02	.03	1	2
LL L64+00E 0+30S	1	9	13	16	.3	3	1	16	.31	4	5	ND	2	11	1	2	2	7	.12	.024	17	9	.03	42	.04	2	.50	.01	.03	1	1
LL L64+00E 0+40S	1	11	9	21	.1	10	2	63	1.25	2	5	ND	4	5	1	2	2	18	.10	.025	12	19	.18	14	.08	2	1.24	.01	.02	1	2
LL L64+00E 0+50S	1	10	12	18	.2	8	3	64	1.34	5	5	ND	5	5	1	2	2	23	.07	.010	11	19	.18	16	.08	2	1.24	.01	.03	1	1
LL L64+00E 0+60S P	1	5	3	57	.2	4	1	36	.42	2	5	ND	1	18	1	2	2	1	.47	.039	4	2	.03	65	.01	4	.18	.02	.01	1	2
LL L64+00E 0+70S P	1	3	3	74	.1	2	1	34	.24	3	5	ND	1	15	1	2	2	2	.50	.039	2	2	.03	38	.01	10	.13	.02	.01	1	1
LL L64+00E 0+80S P	1	3	3	58	.1	3	1	28	.14	2	5	ND	1	18	1	2	2	2	.75	.036	2	1	.04	35	.01	2	.14	.02	.01	1	2
LL L64+00E 0+90S	1	10	10	18	.2	7	3	65	.85	2	5	ND	4	9	1	2	2	17	.20	.017	18	13	.16	37	.08	4	.89	.01	.03	1	2
LL L64+00E 1+00S P	1	4	3	97	.1	2	1	36	.15	3	5	ND	1	16	1	2	2	2	.66	.033	2	6	.05	31	.01	2	.16	.02	.02	1	1
LL L65+00E 0+80W	1	9	7	16	.1	7	2	52	1.75	6	5	ND	3	7	1	2	2	43	.05	.013	5	17	.13	17	.15	4	.53	.01	.03	1	2
STD C/AU-S	20	59	39	129	7.6	68	28	1054	3.99	38	14	8	40	50	18	18	19	57	.47	.088	39	64	.88	176	.07	34	1.80	.08	.13	13	53
LL L65+00E 0+80W	1	26	13	43	.1	21	5	107	1.83	4	5	ND	1	2	1	2	2	77	.15	.010	2	35	.30	22	.12	2	.87	.03	.06	2	2
LL L65+00E 0+50W	1	3	7	12	.1	2	1	28	.50	4	5	ND	2	4	1	2	2	15	.03	.007	6	14	.04	20	.06	2	.27	.01	.01	1	1
LL L65+00E 0+30W P	1	11	7	40	.1	3	1	38	.56	4	5	ND	1	18	1	2	2	1	.43	.076	20	5	.03	58	.01	16	.46	.02	.01	1	2
LL L65+00E 0+20W P	1	7	2	46	.3	3	1	71	.26	4	5	ND	2	23	1	2	2	2	.69	.057	17	4	.04	51	.01	2	.37	.01	.02	1	2
LL L65+00E 0+10W P	1	21	10	44	.6	6	1	51	.31	10	6	ND	2	24	1	2	2	3	.56	.087	29	6	.04	59	.02	2	.77	.01	.02	1	1
LL L65+00E 0+00 P	1	33	13	27	.5	8	1	55	.96	24	7	ND	4	29	1	2	2	4	.75	.084	45	8	.05	75	.02	6	.72	.02	.03	1	2
LL L65+00E 0+10S	1	25	8	34	.3	14	5	120	1.01	40	5	ND	3	21	1	2	2	25	.35	.062	26	23	.19	65	.04	3	1.14	.02	.08	1	1
LL L65+00E 0+20S P	1	9	7	31	.1	3	1	72	.37	2	5	ND	1	21	1	2	2	2	.44	.073	14	4	.03	70	.01	2	.49	.01	.02	1	2
LL L65+00E 0+30S P	1	19	11	34	.5	7	5	1255	1.88	7	5	ND	3	49	1	2	2	8	2.19	.084	35	11	.14	84	.02	4	.86	.02	.06	1	1
LL L65+00E 0+40S P	1	8	7	29	.1	3	1	161	.23	5	5	ND	1	24	1	2	2	2	.81	.058	12	4	.06	49	.01	4	.37	.02	.03	1	1
LL L65+00E 0+50S P	1	5	3	33	.2	4	2	109	.30	2	8	ND	1	20	1	2	2	1	.52	.047	5	1	.03	70	.01	4	.17	.01	.02	1	2
LL L65+00E 0+80S P	1	4	4	32	.1	2	1	47	.16	4	5	ND	1	14	1	2	2	1	.65	.046	2	3	.04	37	.01	2	.15	.01	.01	1	1

NORTHERN DYNASTY PROJECT-ARSENOL LAKE FILE # 87-3781

SAMPLE#	NO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CO	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	M	AU
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	PPM	%	%	%	PPM	PPM
LL L66+00E 1+00S P	1	5	4	33	.1	2	1	85	.35	5	5	ND	1	20	1	2	2	2	.88	.058	3	4	.04	44	.01	3	.26	.02	.01	1	1
LL L66+00E 2+60N P	1	6	8	36	.3	2	1	42	.21	3	5	ND	1	16	1	2	2	2	.67	.031	2	3	.05	44	.01	2	.19	.02	.03	1	2
LL L66+00E 2+50N	1	26	11	30	.1	31	10	102	3.09	5	5	ND	1	2	1	2	2	154	.15	.009	2	68	.39	23	.20	2	1.66	.02	.09	1	1
LL L66+00E 2+40N	1	61	4	43	.1	90	24	419	4.44	9	5	ND	1	10	1	3	2	211	.61	.014	3	162	1.72	18	.24	3	6.76	.11	.02	1	2
LL L66+00E 2+30N	1	5	7	10	.1	3	1	27	.72	2	5	ND	3	3	1	4	2	17	.04	.008	4	10	.07	12	.07	2	.40	.01	.02	1	1
LL L66+00E 2+20N	1	5	11	10	.1	3	1	31	1.00	2	5	ND	2	3	1	4	2	23	.04	.008	4	8	.08	9	.09	5	.44	.01	.01	1	1
LL L66+00E 2+10N	1	12	13	19	.3	3	2	21	.36	2	5	ND	2	13	1	2	2	5	.04	.033	11	3	.02	34	.02	2	.49	.01	.03	2	2
LL L66+00E 2+00N P	1	16	13	29	.1	4	1	27	.43	3	5	ND	1	22	1	2	2	3	.10	.045	10	5	.03	57	.01	2	.48	.01	.05	2	1
LL L66+00E 1+90N	1	4	10	13	.1	2	1	34	.69	2	5	ND	5	4	1	3	2	27	.03	.006	5	9	.09	9	.14	4	.36	.01	.03	1	2
LL L66+00E 1+80N	1	8	13	20	.1	8	3	78	1.69	5	5	ND	4	4	1	2	2	36	.08	.015	5	16	.21	20	.12	2	1.18	.01	.03	1	1
LL L66+00E 1+70N	1	4	13	17	.1	4	1	51	1.50	4	5	ND	4	4	1	2	2	32	.05	.011	5	11	.14	10	.14	2	.65	.01	.03	1	2
LL L66+00E 1+60N P	1	25	10	34	.2	7	2	55	.43	2	5	ND	2	18	1	2	2	3	.36	.046	10	5	.03	91	.01	2	.36	.01	.04	2	2
LL L66+00E 1+50N	1	7	9	16	.1	10	3	66	1.18	5	5	ND	4	4	1	2	2	26	.06	.006	5	12	.20	13	.11	2	.66	.01	.02	1	1
LL L66+00E 1+40N	1	5	6	13	.1	5	2	59	1.04	3	5	ND	5	4	1	2	2	16	.08	.009	8	14	.16	13	.08	6	.55	.01	.04	1	2
LL L66+00E 1+30N	1	29	16	21	.2	5	3	20	.47	2	5	ND	1	15	1	2	2	4	.09	.031	19	7	.02	103	.01	2	.53	.01	.02	1	1
LL L66+00E 1+20N P	1	10	21	37	.1	2	1	131	.31	3	5	ND	1	15	1	2	2	3	.26	.052	6	4	.03	204	.01	2	.29	.01	.06	1	2
LL L66+00E 1+10N	1	46	16	25	.4	16	4	88	.67	2	5	ND	4	29	1	2	2	9	1.46	.045	56	16	.17	143	.04	3	.65	.02	.05	3	1
LL L66+00E 1+00N	1	20	5	22	.1	12	2	83	.29	4	5	ND	3	42	1	2	2	2	.57	.035	9	9	.04	140	.01	2	.40	.01	.03	1	2
LL L66+00E 0+90N P	1	22	15	78	.1	7	1	325	.30	4	5	ND	1	30	1	2	2	4	2.14	.050	12	5	.12	67	.01	5	.25	.02	.05	1	1
LL L66+00E 0+80N P	3	13	5	20	.1	6	3	4940	.82	3	5	ND	1	48	1	2	2	5	4.69	.067	7	5	.24	174	.01	9	.34	.01	.04	1	1
LL L66+00E 0+70N P	2	16	2	40	.1	8	3	2338	1.99	9	5	ND	1	41	1	2	2	5	4.26	.064	3	1	.15	158	.01	10	.24	.01	.01	1	2
LL L66+00E 0+60N P	14	23	9	63	.4	10	36	5131	7.50	11	5	ND	3	38	1	2	2	19	3.76	.157	14	6	.11	514	.01	19	.60	.01	.02	1	1
LL L66+00E 0+50N P	4	15	7	55	.1	8	9	4061	1.06	2	5	ND	1	42	1	2	2	7	4.38	.086	8	8	.15	221	.01	9	.52	.01	.01	1	2
LL L66+00E 0+40N P	1	16	6	36	.4	9	3	2582	.91	2	5	ND	2	43	1	2	2	5	3.52	.115	32	15	.09	92	.01	9	.81	.01	.01	1	1
LL L66+00E 0+30N P	1	37	8	27	.3	11	1	101	.62	3	5	ND	2	40	1	2	2	5	5.11	.112	35	18	.07	64	.01	6	1.01	.01	.01	1	2
LL L66+00E 0+20N	1	24	13	36	.1	19	5	93	3.07	12	5	ND	2	2	1	2	2	190	.07	.014	4	61	.28	18	.07	2	1.76	.01	.03	2	1
LL L66+00E 0+10N	1	28	8	47	.1	210	56	264	3.69	177	5	ND	2	24	1	2	2	133	.64	.016	4	1000	.96	29	.18	3	6.21	.14	.02	4	1
LL L66+00E 0+00EL	2	33	14	33	.1	113	27	168	5.25	114	5	ND	2	1	1	2	2	88	.10	.011	2	374	.29	24	.11	2	1.45	.01	.03	2	2
LL L66+00E 0+10S	1	20	15	21	.2	15	4	103	3.15	6	5	ND	5	4	1	3	2	44	.05	.007	12	37	.25	17	.14	5	1.77	.02	.03	1	1
LL L66+00E 0+20S	2	21	20	30	.1	6	4	77	4.04	18	5	ND	5	2	1	2	2	110	.03	.013	5	12	.19	25	.18	2	1.55	.01	.06	1	2
LL L66+00E 0+30S	4	23	14	58	.1	15	9	110	7.06	25	5	ND	6	3	1	2	2	85	.03	.019	8	15	.65	51	.21	2	5.07	.02	.15	1	4
LL L66+00E 0+40S	1	31	39	625	.1	39	24	788	13.70	6	5	ND	9	8	1	2	2	138	.17	.023	14	4	2.45	54	.32	2	8.30	.03	.12	1	1
LL L66+00E 0+50S	1	9	9	13	.1	5	2	45	1.31	2	5	ND	4	6	1	2	2	25	.28	.011	11	14	.12	14	.10	2	.99	.02	.01	1	2
LL L66+00E 0+60S P	2	11	12	41	.1	4	15	4544	1.45	33	5	ND	1	32	1	2	2	5	1.94	.083	12	3	.11	62	.01	6	.23	.02	.04	1	1
LL L66+00E 0+70S	1	8	4	26	.2	2	2	214	.89	6	5	ND	2	33	1	2	2	7	2.10	.071	16	5	.06	73	.01	4	.36	.02	.02	1	2
LL L66+00E 0+80S	1	6	6	36	.2	2	1	70	.55	6	5	ND	1	25	1	2	2	3	1.43	.052	5	5	.07	48	.01	6	.19	.02	.01	2	1
STD C/AU-S	18	58	39	134	7.2	69	27	1050	4.03	41	22	7	37	49	18	17	22	56	.47	.088	37	59	.88	178	.08	37	1.87	.08	.12	13	54

NORTHERN DYNASTY PROJECT-ARSEND LAKE FILE # 87-3781

SAMPLE#	MO PPM	CU PPM	PB PPM	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	HG %	BA PPM	TI %	B PPM	AL %	NA %	K %	# PPM	AU1 PPM
LL L66+00E 0+90S	1	9	3	28	.1	3	1	120	.66	7	5	ND	1	42	1	2	2	6	2.60	.045	5	6	.11	70	.01	4	.33	.02	.01	1	1
LL L66+00E 1+00S	1	7	2	24	.1	2	1	123	.64	2	5	ND	1	39	1	3	2	4	2.69	.024	3	3	.09	64	.01	10	.23	.02	.01	2	1
LL L67+00E 3+00W	1	7	15	34	.1	8	7	1960	2.72	6	5	ND	9	14	1	2	2	42	.52	.019	17	19	.28	50	.14	2	.85	.02	.05	3	1
LL L67+00E 2+70W	1	32	2	37	.1	9	1	159	.80	2	5	ND	2	38	1	2	2	6	5.17	.053	12	9	.15	96	.01	8	.57	.01	.01	1	2
LL L67+00E 2+60W	1	40	5	81	.4	16	7	457	1.27	2	5	ND	2	32	1	2	2	17	3.29	.143	19	17	.08	172	.01	5	1.13	.02	.02	1	1
LL L67+00E 2+50W	1	25	14	35	.1	15	6	146	2.45	5	5	ND	6	8	1	2	2	60	.18	.007	9	29	.41	20	.21	39	1.27	.04	.05	2	1
LL L67+00E 2+40W	1	24	10	39	.1	13	5	165	2.40	8	5	ND	4	6	1	2	2	79	.13	.008	5	21	.41	12	.23	2	.98	.02	.03	2	1
LL L67+00E 2+30W	1	34	8	24	.1	10	4	110	3.04	6	5	ND	1	2	1	2	2	97	.16	.010	3	27	.25	16	.09	2	.91	.03	.02	1	1
LL L67+00E 2+20W	1	54	12	50	.1	33	12	156	4.53	7	5	ND	2	5	1	2	2	189	.30	.021	5	96	.37	43	.23	2	3.94	.08	.07	1	1
LL L67+00E 2+10W	2	50	6	91	.1	293	44	709	8.82	94	5	ND	7	3	1	2	2	132	.17	.021	11	335	.99	64	.17	2	5.19	.03	.04	2	1
LL L67+00E 2+00W	3	93	3	48	.1	73	23	171	5.74	7	5	ND	3	3	1	2	2	266	.09	.024	4	142	.83	25	.17	4	5.88	.04	.04	3	1
LL L67+00E 1+90W	2	62	23	80	.1	72	21	242	4.49	6	5	ND	10	9	1	6	2	82	.36	.025	23	49	.56	60	.27	3	3.55	.03	.09	1	1
LL L67+00E 1+80W	1	19	17	38	.1	16	6	132	3.97	4	5	ND	3	3	1	3	2	170	.08	.012	6	59	.41	32	.21	2	1.80	.03	.03	3	2
LL L67+00E 1+70W	2	21	25	60	.1	27	10	239	3.92	7	5	ND	8	8	1	2	2	84	.15	.015	11	54	.72	60	.36	4	2.42	.03	.10	1	2
LL L67+00E 1+60W	4	87	8	345	.1	111	40	391	8.81	8	5	ND	1	1	1	2	2	240	.25	.020	3	132	2.51	161	.35	2	4.54	.08	.34	1	1
LL L67+00E 1+50W	2	106	16	88	.1	50	20	298	7.03	5	5	ND	2	3	1	2	2	164	.40	.019	4	62	.80	41	.27	2	2.68	.09	.09	3	1
LL L67+00E 1+40W	1	63	9	51	.1	28	10	204	3.70	9	5	ND	3	5	1	2	2	66	.14	.014	6	37	.71	50	.22	2	1.78	.03	.10	1	1
LL L67+00E 1+30W	2	19	14	40	.1	15	5	144	3.46	7	5	ND	5	7	1	3	2	66	.12	.026	6	37	.42	24	.21	3	1.28	.02	.09	2	1
LL L67+00E 1+20W	1	12	13	33	.1	11	4	109	2.19	4	5	ND	4	7	1	2	2	43	.10	.023	7	27	.31	16	.20	4	1.06	.02	.04	2	1
LL L67+00E 1+10W	1	7	13	27	.1	12	3	102	1.51	2	5	ND	4	7	1	2	2	46	.10	.006	5	26	.32	15	.24	2	.88	.02	.05	2	1
LL L67+00E 1+00W	1	30	5	27	.6	8	3	30	.63	2	5	ND	1	71	1	2	2	4	5.09	.072	20	5	.19	167	.01	4	.81	.01	.01	1	2
LL L67+00E 0+90W	3	18	2	48	.5	2	1	64	.14	2	5	ND	1	72	1	2	2	12	6.84	.037	2	3	.25	142	.01	10	.17	.01	.01	1	1
LL L67+00E 0+80W	1	20	4	27	.3	4	1	324	.20	2	5	ND	1	68	1	2	2	12	7.31	.047	4	5	.27	135	.01	13	.23	.01	.01	1	1
LL L67+00E 0+70W	5	15	2	30	.3	5	1	21	.11	2	5	ND	1	54	1	2	2	7	5.52	.034	3	1	.27	93	.01	11	.14	.01	.01	2	1
LL L67+00E 0+60W	3	21	5	49	.4	11	13	1203	.97	11	5	ND	1	44	1	2	2	10	4.77	.078	17	5	.17	91	.01	8	.65	.01	.01	2	1
LL L67+00E 0+50W	1	144	7	20	.7	25	3	51	.88	2	5	ND	1	43	1	2	2	9	5.65	.083	23	13	.14	102	.01	5	1.11	.01	.02	1	1
LL L67+00E 0+40W	1	53	23	65	.1	41	16	240	6.07	8	5	ND	2	3	1	2	2	253	.26	.022	3	80	.78	31	.29	2	3.00	.04	.12	1	2
LL L67+00E 0+30W	1	14	10	16	.1	9	3	70	1.36	2	5	ND	7	6	1	2	2	26	.13	.011	10	27	.20	12	.11	2	1.23	.02	.04	1	1
LL L67+00E 0+20W	1	14	9	22	.1	10	3	78	1.90	3	5	ND	5	6	1	2	2	40	.11	.016	11	26	.22	13	.12	4	1.11	.02	.02	2	1
LL L67+00E 0+10W	1	8	6	22	.1	10	3	89	2.63	4	5	ND	4	5	1	2	2	66	.08	.012	5	46	.27	13	.20	3	.83	.02	.03	2	1
LL L67+00E U+00BL	1	9	16	15	.1	6	2	58	1.90	2	5	ND	6	5	1	2	2	29	.08	.016	9	30	.15	13	.11	2	2.14	.01	.02	1	1
LL L67+00E 0+10S	1	9	10	17	.1	7	3	66	1.64	5	5	ND	7	8	1	2	2	30	.12	.023	17	24	.18	10	.12	3	1.36	.02	.03	3	1
LL L67+00E U+20S	1	47	17	24	.5	12	3	24	1.24	9	5	ND	4	51	1	2	2	5	1.41	.074	67	15	.06	108	.02	2	1.64	.02	.03	1	1
LL L67+00E 0+30S	2	12	3	56	.1	10	5	3939	.60	43	5	ND	1	59	1	2	2	7	6.03	.059	10	4	.12	150	.01	7	.57	.01	.02	1	1
LL L67+00E 0+40S	1	10	4	24	.4	4	2	106	.83	4	5	ND	3	41	1	2	2	6	2.52	.061	15	5	.09	92	.01	10	.49	.02	.01	2	1
LL L67+00E U+50S	1	6	2	36	.4	2	1	115	.41	4	5	ND	1	38	1	2	2	2	2.54	.029	5	5	.11	65	.01	4	.20	.02	.01	2	1
STD C/AU-S	19	58	41	128	7.5	66	27	1019	3.86	38	19	7	37	49	17	17	20	56	.48	.086	37	55	.85	174	.08	36	1.78	.07	.12	12	52

NORTHERN DYNASTY PROJECT-ARSENO LAKE FILE # 67-3781

SAMPLE#	NO	CU	PB	ZN	AG	NI	CO	MM	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	HG	BA	TI	B	AL	NA	K	W	AU
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
LL L67+00E 0+60S P	1	5	4	44	.1	3	1	53	.18	3	5	ND	1	15	1	2	2	3	.54	.031	2	9	.08	30	.01	2	.17	.02	.01	1	1
LL L67+00E 0+90S P	1	4	2	60	.1	4	1	38	.15	2	5	ND	1	16	1	2	2	1	.53	.040	2	7	.07	28	.01	7	.13	.02	.01	1	2
LL L67+00E 1+20S P	1	4	2	61	.1	6	1	36	.22	2	5	ND	1	22	1	2	2	1	.70	.041	4	4	.09	38	.01	2	.16	.02	.01	1	6
LL L67+00E 1+50S P	1	5	2	58	.1	6	1	56	.25	2	5	ND	1	24	1	2	2	2	.54	.055	4	9	.08	50	.01	2	.24	.02	.01	1	1
LL L67+00E 1+80S P	1	21	9	43	.3	17	2	33	.50	2	5	ND	2	26	1	2	2	2	.42	.090	23	9	.05	62	.01	7	.74	.02	.03	1	1
LL L67+00E 1+90S P	1	37	10	37	.7	39	3	77	.61	3	9	ND	5	37	1	2	2	3	1.15	.093	76	17	.08	99	.01	3	.96	.02	.01	1	2
LL L67+00E 2+00SA	1	68	11	28	1.3	93	4	38	1.08	19	5	ND	3	37	1	2	2	11	1.34	.049	49	49	.12	112	.02	3	.68	.02	.03	1	7
LL L67+00E 2+00SB	2	138	11	96	.2	132	26	262	11.83	98	5	ND	4	9	1	2	2	163	.38	.019	11	620	2.08	130	.30	2	4.86	.03	.65	1	12
LL L67+00E 2+10S	1	34	24	54	.4	93	10	81	5.27	547	5	ND	3	2	1	4	2	109	.07	.011	7	217	.33	35	.17	2	2.41	.02	.05	2	6
LL L67+00E 2+20S	2	56	18	34	.1	201	15	148	4.92	465	5	ND	2	2	1	7	2	147	.04	.018	4	380	.76	51	.22	2	2.87	.02	.14	2	16
LL L67+00E 2+30S P	1	18	11	29	.1	8	1	31	.60	4	5	ND	1	16	1	2	2	4	.29	.085	22	13	.04	57	.02	4	1.02	.02	.02	1	1
LL L67+00E 2+40S P	1	52	12	26	.5	14	2	33	1.16	2	9	ND	4	31	1	2	2	4	.86	.079	54	14	.08	103	.02	9	.91	.02	.01	1	2
LL L67+00E 2+50S P	1	21	4	30	.5	7	2	37	.96	2	6	ND	3	32	1	2	2	3	1.13	.099	41	8	.09	83	.02	7	.74	.03	.01	1	1
LL L67+00E 2+60S P	1	9	7	39	.3	4	1	22	.53	3	5	ND	2	26	1	2	2	3	.85	.087	20	5	.07	57	.02	3	.62	.02	.02	1	2
LL L67+00E 2+70S P	1	14	8	23	.5	4	1	12	.66	2	5	ND	2	51	1	2	2	2	2.42	.109	31	5	.10	93	.01	8	.68	.02	.02	1	1
LL L67+00E 2+80S	1	5	18	46	.1	12	4	181	2.03	5	5	ND	5	5	1	2	2	48	.07	.009	6	25	.50	23	.28	2	1.29	.02	.09	3	2
LL L67+00E 2+90S	1	6	10	14	.1	3	1	40	.62	2	5	ND	3	4	1	2	2	14	.05	.007	5	8	.10	9	.10	8	.62	.01	.02	1	1
LL L67+00E 3+00E	1	7	9	23	.1	5	2	69	2.31	2	5	ND	4	4	1	2	2	55	.04	.017	5	17	.18	11	.19	2	.71	.01	.02	1	1
LL L67+00E 3+10S	1	7	11	36	.1	9	3	110	2.17	2	5	ND	8	5	1	2	2	41	.06	.020	9	23	.30	17	.17	2	1.08	.02	.07	1	2
LL L67+00E 3+20S	1	7	24	44	.1	11	4	148	2.44	6	5	ND	6	6	1	2	2	61	.07	.014	9	26	.39	24	.24	2	1.29	.01	.07	2	1
LL L67+00E 3+30S	1	8	15	45	.1	11	5	164	2.95	7	5	ND	7	5	1	2	2	58	.06	.025	7	31	.44	20	.23	6	1.13	.02	.09	1	1
LL L67+00E 3+40S	1	10	13	30	.1	10	4	86	2.62	6	5	ND	6	5	1	2	2	36	.07	.057	9	24	.20	22	.10	5	1.93	.01	.03	1	1
LL L67+00E 3+50S	1	6	39	35	.1	9	4	132	1.77	3	5	ND	5	5	1	2	2	35	.06	.022	6	29	.35	18	.20	7	.89	.02	.10	1	2
LL L67+00E 3+60S	1	30	17	85	.1	108	15	300	5.43	8	5	ND	6	3	1	2	2	125	.02	.040	5	291	1.64	30	.31	2	3.39	.02	.08	1	1
LL L67+00E 3+70S	1	6	9	16	.1	6	2	48	1.76	2	5	ND	3	3	1	2	2	38	.03	.014	5	18	.14	12	.15	6	.70	.01	.02	1	2
LL L67+00E 3+80S	1	5	11	21	.1	9	2	61	1.86	4	5	ND	3	3	1	2	2	50	.03	.022	5	31	.19	10	.18	2	.66	.01	.03	1	1
LL L67+00E 3+90S	1	9	13	29	.1	9	3	90	2.57	7	5	ND	5	4	1	2	2	47	.05	.035	6	26	.25	16	.17	6	1.27	.02	.03	1	2
LL L67+00E 4+00S	1	6	13	13	.1	5	1	36	.90	4	5	ND	4	4	1	2	2	19	.04	.006	6	17	.12	12	.11	4	.70	.01	.03	1	1
LL L70+00E 2+00S	1	21	25	43	.1	19	6	111	2.50	7	5	ND	8	7	1	3	2	43	.08	.020	15	25	.33	56	.16	6	2.88	.02	.05	2	2
STD C/AU-S	18	58	42	132	7.1	67	27	1023	3.85	44	20	7	38	49	17	18	21	56	.46	.085	38	57	.85	177	.08	31	1.78	.06	.13	11	51

NORTHERN DYNASTY PROJECT-ARSEND LAKE FILE # 87-3781

SAMPLE#	MO	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	W	AU11	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	PPM
DL7-R-606A	1	131	14	85	.7	59	21	444	8.71	25	5	ND	3	6	1	4	2	89	.49	.027	8	109	.91	75	.09	2	1.18	.09	.29	2	12	
DL7-R-606B	1	145	16	50	.6	4	1	158	8.15	16	5	ND	2	4	1	2	2	174	.04	.028	3	46	.38	97	.15	6	.80	.08	.52	1	41	
DL7-R-607	2	252	12	159	.6	472	69	585	6.41	32	5	ND	4	40	1	2	2	128	2.80	.031	10	619	.74	114	.21	3	6.02	.34	1.16	1	1	
DL7-R-608	1	67	20	56	.7	12	6	195	10.59	9	5	ND	3	6	1	2	2	219	.09	.044	5	62	.52	74	.13	2	1.00	.09	.45	1	19	
DL7-R-609A	1	114	10	34	.2	60	14	756	3.34	6	5	ND	1	27	1	2	2	75	1.42	.028	2	60	.79	68	.11	2	2.09	.16	.31	1	4	
DL7-R-609B	2	67	11	30	.2	76	18	1668	3.84	48	5	ND	2	11	1	2	2	22	.92	.003	5	114	.37	43	.03	3	1.23	.07	.19	1	1	
DL7-R-614	3	189	20	27	2.6	4	3	258	31.17	4	5	ND	3	1	1	2	2	17	.02	.006	2	52	.09	14	.03	2	.19	.01	.10	1	23	
DL7-R-615	3	166	32	73	7.9	31	21	387	24.00	10	5	ND	6	20	1	2	7	56	1.10	.007	7	248	.71	32	.03	4	3.08	.10	.31	1	93	
DL7-R-616	2	145	15	28	1.4	16	4	298	28.27	2	5	ND	3	2	1	2	2	6	.04	.003	2	14	.09	7	.03	2	.13	.01	.04	1	9	
DL7-R-617	2	201	23	48	1.2	118	13	650	22.72	2	5	ND	3	6	1	2	2	5	.44	.003	4	16	.12	5	.02	2	.67	.05	.03	1	1	
ML7-R-500	3	171	26	33	2.5	7	6	299	36.46	12	5	ND	4	1	1	2	6	20	.01	.006	2	56	.09	24	.03	2	.25	.01	.18	1	8	
ML7-R-501	3	102	23	138	9.0	95	37	343	8.23	18	5	ND	9	71	1	2	18	80	5.15	.007	15	415	1.20	49	.05	8	9.27	.31	.58	3	57	
ML7-R-502	2	328	17	32	1.6	263	27	1438	26.36	6	5	ND	3	9	1	2	2	4	2.22	.003	4	8	.14	4	.02	2	.60	.07	.02	1	4	
ML7-R-500	2	89	30	89	1.5	136	35	535	7.95	33	6	ND	7	35	1	2	2	26	1.56	.006	9	54	.34	19	.08	2	2.32	.14	.14	6	7	
ML7-R-501	2	69	21	57	1.0	77	19	328	4.70	10	5	ND	4	27	1	4	2	45	1.47	.004	6	232	.86	42	.06	3	3.16	.21	.49	1	1	
STB C/AU-R	10	59	41	133	7.4	69	28	1061	3.92	42	18	8	40	51	18	19	21	58	.47	.089	38	61	.87	183	.08	37	1.80	.06	.15	12	500	

FLM
L. 8A, 83, 8200E

L. 58100E
TRENCH

ARSENAL

GEOCHEMICAL ICP ANALYSIS

.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 HG BA TI S AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: P1 TO P6-SOIL P7-ROCK AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 20 1987

DATE REPORT MAILED: *Sept 1/87*

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

NORTHERN DYNASTY EXPL. PROJECT-ARSENAL LAKE File # B7-3454 Page 1

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	S	AL	NA	K	M	AU
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	%	PPM	PPM
LL 70+00E 3+00NA P	1	6	2	44	.1	2	1	50	.15	3	5	ND	1	33	1	2	2	3	2.67	.035	2	2	.07	44	.01	4	.20	.02	.01	4	1
LL 70+00E 2+90NA P	1	8	2	46	.1	6	1	130	.29	2	5	ND	1	49	1	2	2	2	4.18	.035	2	4	.11	80	.01	6	.19	.01	.01	3	6
LL 70+00E 2+80NA P	1	20	2	32	.1	13	2	48	.75	4	5	ND	1	37	1	2	2	4	4.32	.063	3	5	.07	90	.01	5	.34	.01	.01	2	1
LL 70+00E 2+70NB	1	25	6	12	.1	15	4	64	1.07	2	5	ND	4	4	1	2	2	20	.10	.006	7	19	.16	12	.08	2	.70	.01	.01	1	1
LL 70+00E 2+60NB	1	60	13	60	.1	45	22	121	5.16	13	5	ND	1	3	1	2	2	203	.15	.016	2	128	.55	35	.16	2	3.67	.05	.01	1	1
LL 70+00E 2+50NB	1	75	14	31	.1	39	18	92	4.16	8	5	ND	1	5	1	2	2	171	.29	.015	3	101	.28	27	.16	2	4.25	.09	.03	1	1
LL 70+00E 2+40NB	1	88	16	51	.1	59	22	174	5.42	11	5	ND	1	2	1	2	2	211	.14	.016	2	116	.72	22	.18	2	3.34	.05	.03	1	1
LL 70+00E 2+30NB	1	82	8	49	.1	49	24	140	5.16	9	5	ND	1	4	1	2	2	182	.18	.024	3	125	.66	24	.15	2	4.90	.06	.02	1	1
LL 70+00E 2+20NB	1	5	12	23	.1	8	3	91	1.14	8	5	ND	3	3	1	2	2	46	.05	.007	5	22	.26	12	.17	2	.65	.01	.03	1	1
LL 70+00E 2+10NB	1	12	22	35	.1	13	6	156	2.55	9	5	ND	5	4	1	2	2	66	.05	.013	5	25	.40	24	.20	2	1.62	.01	.07	1	1
LL 70+00E 2+00NB	1	7	16	38	.1	11	5	158	1.98	4	5	ND	4	5	1	2	2	45	.06	.014	5	24	.41	17	.17	2	1.23	.02	.04	1	2
LL 70+00E 1+90NB	1	4	19	33	.1	9	4	136	1.62	4	5	ND	4	4	1	2	2	41	.05	.007	4	19	.36	20	.20	2	1.07	.01	.05	1	1
LL 70+00E 1+80NB	1	6	9	21	.1	7	3	77	1.97	2	5	ND	3	3	1	2	2	33	.05	.036	4	18	.19	11	.11	2	.83	.01	.03	1	1
LL 70+00E 1+70NB	1	10	11	24	.1	10	4	112	1.25	2	5	ND	3	3	1	2	2	27	.05	.008	5	16	.28	10	.13	6	.73	.01	.03	1	1
LL 70+00E 1+60NB	1	10	31	59	.1	13	8	260	3.27	3	5	ND	4	4	1	2	2	84	.07	.010	4	29	.71	21	.31	2	1.67	.02	.07	1	2
LL 70+00E 1+50NB	1	9	13	22	.2	12	5	95	1.67	2	5	ND	5	4	1	2	2	32	.06	.012	10	17	.25	24	.10	2	1.00	.01	.02	1	1
LL 70+00E 1+40NB	1	5	11	18	.1	7	3	75	1.34	4	5	ND	6	4	1	2	2	36	.05	.008	8	18	.19	11	.12	2	.71	.01	.03	1	1
LL 70+00E 1+30NB	1	5	5	13	.1	6	2	65	1.05	2	5	ND	5	4	1	2	2	17	.07	.016	9	12	.15	8	.07	2	.61	.01	.02	1	3
LL 70+00E 1+20NB	1	15	18	32	.2	47	8	140	2.68	124	5	ND	7	8	1	2	2	70	.13	.018	12	33	.29	28	.16	2	1.29	.02	.04	1	1
LL 70+00E 1+10NA	1	18	15	31	.1	4	1	16	.78	4	5	ND	1	20	1	2	2	5	.12	.043	21	16	.02	73	.02	2	.89	.01	.03	1	2
LL 70+00E 1+00NA P	1	10	10	37	.1	3	1	21	.48	2	5	ND	1	26	1	2	3	2	.36	.119	23	4	.04	62	.01	3	.69	.01	.02	1	3
LL 70+00E 0+90NA P	1	6	3	25	.1	2	1	19	.21	2	5	ND	1	23	1	2	2	1	.45	.069	18	3	.05	54	.01	11	.42	.02	.01	1	1
LL 70+00E 0+80NA P	1	17	6	25	.5	3	1	22	.68	3	5	ND	4	36	1	2	2	2	1.17	.076	34	5	.07	117	.01	2	.66	.02	.02	1	1
LL 70+00E 0+70NA P	1	26	11	15	.2	7	2	84	1.38	2	8	ND	7	20	1	2	2	19	.39	.048	37	12	.11	67	.04	2	.84	.01	.02	2	2
LL 70+00E 0+60NA P	1	6	7	39	.1	1	1	23	.17	2	5	ND	1	22	1	2	2	2	.55	.049	11	3	.07	59	.01	2	.24	.02	.01	1	1
LL 70+00E 0+50NA	1	4	6	20	.1	2	1	17	.16	5	5	ND	1	18	1	2	2	2	.59	.050	20	3	.03	52	.01	3	.40	.01	.02	2	1
LL 70+00E 0+40NA P	1	10	4	38	.1	4	1	15	.32	2	5	ND	1	20	1	2	3	2	.28	.072	17	3	.02	72	.01	2	.63	.01	.01	1	1
LL 70+00E 0+30NB	1	6	17	23	.1	7	3	82	1.77	2	5	ND	8	4	1	2	2	34	.04	.015	12	24	.21	14	.11	2	1.50	.01	.03	1	3
LL 70+00E 0+20NB	1	3	17	26	.1	3	2	55	1.33	4	5	ND	4	3	1	2	2	25	.03	.015	6	12	.13	14	.10	2	.91	.01	.05	2	1
LL 70+00E 0+10NB	1	5	17	26	.1	7	3	79	1.36	2	5	ND	6	4	1	2	2	22	.03	.019	7	18	.20	24	.08	2	1.56	.01	.07	1	1
LL 70+00E 0+00NB	1	5	12	15	.1	5	2	47	2.11	5	5	ND	3	4	1	2	2	55	.02	.016	6	19	.11	12	.14	2	.99	.01	.03	1	2
LL 70+00E 0+10SB	1	6	10	18	.1	7	4	79	1.27	13	5	ND	5	6	1	2	2	22	.13	.018	9	15	.18	15	.09	2	.61	.01	.04	1	1
LL 70+00E 0+20SA P	1	6	2	37	.1	1	1	150	.13	2	5	ND	1	41	1	2	2	3	3.32	.034	4	1	.16	32	.01	8	.22	.01	.03	2	2
LL 70+00E 0+30SA P	1	14	11	44	.2	8	4	275	.66	2	5	ND	3	49	1	2	2	8	2.72	.065	32	4	.12	76	.01	3	.86	.02	.01	3	2
LL 70+00E 0+40SA P	1	5	5	56	.1	2	1	274	.31	2	5	ND	1	35	1	2	2	4	2.20	.036	10	2	.11	46	.01	3	.31	.02	.02	2	3
LL 70+00E 0+70SA P	1	2	4	78	.1	1	1	77	.11	5	5	ND	1	10	1	2	2	1	.40	.035	2	1	.05	17	.01	2	.09	.01	.03	2	2
STD C/AU-S	20	59	39	136	7.5	74	32	1061	3.83	38	19	8	40	51	21	17	18	60	.47	.093	38	60	.85	182	.07	36	1.75	.08	.15	14	47

NORTHERN DYNASTY EXPL. PROJECT-ARSENOLD LAKE FILE # 87-3454

SAMPLE#	MO PPM	CU PPM	PB PPM	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 %	MA %	K %	W PPM	AU# PPM
LL 70+00E 1+00SA P	1	5	2	46	.1	2	1	30	.12	2	5	ND	1	10	1	2	2	2	.37	.039	2	4	.05	13	.01	3	.09	.01	.04	3	1
LL 70+00E 1+30SA P	1	5	2	45	.1	1	1	43	.11	2	5	ND	1	15	1	2	2	1	.47	.027	2	2	.05	19	.01	2	.10	.01	.02	3	1
LL 70+00E 1+60SA P	1	4	2	37	.1	3	1	93	.17	2	5	ND	1	22	1	2	2	1	.47	.043	2	3	.07	19	.01	15	.12	.01	.04	1	1
LL 70+00E 1+70SB	1	5	8	13	.1	6	2	50	1.95	3	5	ND	3	3	1	2	2	36	.05	.010	5	21	.13	9	.13	2	.92	.01	.03	2	1
LL 70+00E 1+80SB	1	6	4	12	.1	6	2	44	2.00	2	5	ND	5	3	1	2	2	29	.08	.026	6	23	.11	9	.09	2	1.32	.01	.02	1	1
LL 70+00E 1+90SB	1	7	7	14	.1	7	3	52	1.69	2	5	ND	6	4	1	2	2	21	.07	.019	9	19	.13	15	.09	2	1.85	.01	.02	1	2
LL 70+00E 2+00SB	2	11	21	35	.1	13	4	88	1.64	2	5	ND	4	5	1	2	2	35	.06	.013	9	20	.25	39	.14	7	1.48	.01	.04	1	1
LL 70+00E 2+10SA	1	35	11	25	.2	5	2	20	.50	2	5	ND	1	20	1	2	2	6	.14	.030	23	4	.02	77	.01	2	.57	.01	.03	2	1
LL 70+00E 2+20SA	1	25	12	18	.1	5	1	16	.40	2	5	ND	1	14	1	2	2	8	.07	.021	17	7	.02	59	.02	6	.48	.01	.06	1	1
LL 70+00E 2+30SB	1	66	10	16	.1	14	5	64	3.45	14	5	ND	1	2	1	2	2	137	.06	.012	2	24	.13	20	.15	2	.53	.01	.04	1	1
LL 70+00E 2+40SB	1	195	22	63	.1	91	26	523	4.45	7	5	ND	2	8	1	2	2	76	.31	.013	6	154	.69	75	.19	2	2.04	.01	.03	1	2
LL 70+00E 2+50SB	4	41	8	32	.1	6	7	151	3.97	17	5	ND	1	2	1	2	2	187	.12	.021	4	16	.17	24	.12	2	.86	.02	.03	2	5
LL 70+00E 2+60SB	1	67	19	41	.1	14	8	184	2.98	4	5	ND	6	6	1	2	2	80	.19	.013	10	21	.29	49	.13	2	1.67	.01	.04	1	1
LL 70+00E 2+70SB	1	15	6	17	.1	7	4	58	1.12	10	5	ND	1	2	1	2	2	67	.13	.005	5	8	.14	11	.07	2	.67	.01	.02	2	2
LL 70+00E 2+80SB	3	23	6	56	.1	6	5	77	2.87	2	5	ND	1	1	1	2	2	132	.12	.013	2	15	.30	10	.10	2	.77	.02	.02	1	1
LL 70+00E 2+90SA	1	50	6	32	.5	10	15	1116	.82	2	5	ND	1	52	1	2	2	16	6.16	.069	13	6	.10	89	.01	14	.90	.01	.02	1	1
LL 70+00E 3+00SA	1	45	2	21	.4	9	1	758	.26	2	5	ND	1	55	1	2	2	10	7.08	.049	5	3	.09	73	.01	11	.31	.01	.02	3	1
LL 70+00E 3+10SA	1	29	7	37	.4	18	1	135	.44	2	5	ND	1	53	1	2	2	4	5.55	.044	20	5	.12	65	.01	18	.61	.01	.02	2	1
LL 70+00E 3+20SA	1	31	2	32	.4	27	2	1426	.93	25	5	ND	1	46	1	2	2	8	4.05	.083	35	9	.12	97	.01	7	.71	.01	.01	1	1
LL 70+00E 3+30SA P	1	21	2	26	.2	19	1	231	.36	2	5	ND	1	36	1	2	2	2	3.27	.075	17	7	.11	48	.01	6	.48	.01	.03	1	1
LL 70+00E 3+40SA	1	44	2	31	.5	39	13	1878	.79	2	5	ND	1	40	1	2	2	3	3.82	.084	26	8	.10	97	.01	5	.70	.01	.02	1	3
LL 70+00E 3+50SA	1	28	2	25	.3	37	1	315	.15	4	5	ND	1	43	1	2	2	3	4.88	.043	5	4	.13	53	.01	10	.22	.01	.02	1	1
LL 70+00E 3+60SA P	1	23	4	34	.2	19	1	392	.17	3	5	ND	1	49	1	2	2	5	6.10	.041	11	5	.19	46	.01	8	.19	.01	.02	2	2
LL 70+00E 3+70SA	1	23	2	26	.3	13	1	133	.16	5	5	ND	1	45	1	2	2	2	5.57	.033	10	3	.17	43	.01	7	.19	.01	.01	1	1
LL 70+00E 3+80SA P	1	22	2	22	.1	17	1	133	.21	6	5	ND	1	45	1	2	2	3	5.50	.047	12	4	.17	45	.01	8	.42	.01	.02	2	1
LL 70+00E 3+90SA P	1	21	2	32	.3	26	1	385	.20	4	5	ND	1	48	1	2	2	5	5.77	.038	9	5	.18	53	.01	26	.33	.01	.02	2	1
LL 70+00E 4+00SA P	1	16	6	30	.2	12	2	464	1.00	24	5	ND	1	38	1	2	2	4	4.29	.065	7	5	.15	40	.01	9	.18	.01	.03	1	1
LL 75+00E 3+00NB	1	11	14	15	.2	10	3	49	2.78	2	5	ND	5	3	1	2	4	48	.07	.018	9	36	.15	12	.12	8	2.18	.01	.02	8	1
LL 75+00E 2+90NB	1	15	19	51	.1	21	8	223	2.92	5	5	ND	3	5	1	2	2	58	.10	.007	8	34	.61	27	.27	12	1.74	.02	.05	1	1
LL 75+00E 2+80NB	1	16	18	41	.1	19	7	169	2.53	2	5	ND	5	5	1	2	2	55	.07	.006	6	27	.49	16	.25	2	1.34	.01	.03	2	1
LL 75+00E 2+70NA	1	12	17	25	.1	7	1	68	.48	3	5	ND	1	9	1	2	2	12	.21	.029	5	15	.08	44	.01	3	.43	.01	.04	1	1
LL 75+00E 2+60NA P	1	52	6	29	.4	9	4	583	.54	2	5	ND	2	47	1	2	3	7	5.61	.113	48	9	.21	72	.01	7	.77	.01	.02	2	1
LL 75+00E 2+50NA P	2	34	4	47	.4	12	4	2705	.47	2	5	ND	2	50	1	2	2	6	5.36	.113	35	5	.19	122	.01	18	.89	.01	.02	2	1
LL 75+00E 2+40NA	1	22	6	33	.4	8	1	190	.25	2	5	ND	2	41	1	2	2	5	5.30	.055	21	4	.17	55	.01	11	.46	.01	.02	2	1
LL 75+00E 2+30NA	1	17	7	36	.6	7	1	178	.45	2	5	ND	2	45	1	2	2	4	4.42	.084	31	1	.16	70	.01	6	.69	.01	.02	4	1
LL 75+00E 2+20NB	1	8	14	11	.2	9	3	53	1.74	2	5	ND	10	4	1	2	2	19	.07	.009	10	20	.13	11	.08	2	1.99	.01	.02	1	1
STD C/AU-S	19	58	40	127	7.2	68	28	1020	3.90	42	21	7	36	50	18	17	23	58	.48	.091	37	58	.87	173	.08	37	1.83	.07	.14	12	49

NORTHERN DYNASTY EXPL. PROJECT-ARBEND LAKE FILE # 87-3454

SAMPLE#	NO	CU	PB	ZH	AS	NI	CO	MM	FE	AS	U	AU	TH	SR	CO	SO	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	MA	K	M	AUS
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
LL 75+00E 2+10MB	1	10	17	20	.1	11	3	75	2.31	3	5	ND	11	4	1	2	2	42	.07	.017	7	26	.21	20	.14	2	2.24	.02	.05	1	1
LL 75+00E 2+00MB	2	7	17	23	.1	9	3	80	2.84	8	5	ND	5	4	1	2	2	94	.05	.011	5	23	.23	13	.26	2	.89	.02	.05	1	1
LL 75+00E 1+90MB	1	36	30	49	.4	40	16	271	4.19	9	5	ND	31	7	1	4	2	70	.11	.034	37	46	.36	54	.17	4	5.17	.02	.07	1	1
LL 75+00E 1+80MB	1	5	8	15	.1	7	2	60	1.34	2	5	ND	3	3	1	4	2	24	.06	.004	5	14	.17	9	.11	7	.64	.02	.04	1	1
LL 75+00E 1+70MB	1	5	7	18	.1	12	3	75	1.26	2	5	ND	4	5	1	2	2	23	.12	.007	8	18	.22	17	.10	2	.72	.02	.04	1	1
LL 75+00E 1+60MB	1	7	5	27	.1	11	4	109	2.14	4	5	ND	6	5	1	2	2	46	.13	.008	9	20	.27	18	.14	15	.97	.02	.05	1	1
LL 75+00E 1+50MA	1	13	9	21	.1	7	2	122	.63	2	5	ND	2	46	1	2	2	3	3.06	.045	18	3	.13	59	.01	5	.71	.02	.03	1	1
LL 75+00E 1+40MA P	1	7	5	21	.1	5	4	170	.56	2	5	ND	1	44	1	2	2	4	3.90	.060	6	6	.19	90	.01	23	.62	.02	.02	1	1
LL 75+00E 1+30MA P	2	3	2	26	.1	1	1	405	.13	2	5	ND	1	31	1	2	2	1	3.37	.028	2	1	.19	35	.01	14	.13	.02	.01	1	1
LL 75+00E 1+20MA P	1	3	2	20	.1	1	1	133	.23	2	5	ND	1	37	1	2	2	1	4.27	.030	2	1	.22	44	.01	9	.10	.01	.02	1	1
LL 75+00E 1+10MA P	1	3	2	28	.1	1	1	49	.12	4	5	ND	1	39	1	2	2	1	4.17	.028	2	1	.28	32	.01	26	.08	.01	.02	1	1
LL 75+00E 1+00MA P	1	2	2	26	.1	1	1	55	.22	2	5	ND	1	34	1	2	2	1	3.54	.026	2	1	.24	28	.01	7	.07	.01	.02	1	1
LL 75+00E 0+90MA P	1	3	2	28	.1	1	1	97	.08	2	5	ND	1	35	1	2	2	1	3.50	.029	2	1	.24	34	.01	12	.09	.02	.01	1	1
LL 75+00E 0+70MA P	1	3	2	21	.2	1	1	391	.19	4	5	ND	1	30	1	2	2	1	3.35	.046	2	1	.16	42	.01	10	.11	.01	.01	1	1
LL 75+00E 0+60MA P	2	4	9	46	.2	4	7	7802	1.30	61	5	ND	1	33	1	2	2	4	3.02	.116	3	5	.17	126	.01	8	.21	.01	.04	2	1
LL 75+00E 0+10MA P	1	2	2	29	.1	1	1	146	.36	3	5	ND	1	37	1	2	2	1	4.94	.038	2	1	.18	30	.01	25	.07	.01	.02	1	1
LL 75+00E 0+00A P	2	3	2	37	.1	1	1	491	4.50	5	5	ND	1	39	1	2	2	1	4.56	.047	2	1	.18	63	.01	7	.06	.01	.02	1	1
LL 75+00E 0+10SA P	1	16	2	24	.1	4	1	133	.28	2	5	ND	1	44	1	2	2	6	6.40	.053	8	5	.24	44	.01	10	.33	.01	.02	1	1
LL 75+00E 0+20SB	1	1	2	6	.1	2	1	14	.60	5	5	ND	2	3	1	2	2	16	.05	.006	4	5	.04	9	.07	13	.30	.01	.03	1	4
LL 75+00E 0+30SB	1	6	10	21	.1	14	5	76	2.18	5	5	ND	7	5	1	2	2	36	.07	.015	10	24	.27	24	.10	10	1.21	.02	.07	1	1
LL 75+00E 0+40SB	1	8	17	32	.1	21	7	121	2.44	8	5	ND	7	9	1	2	2	34	.23	.015	12	32	.39	55	.08	3	1.67	.02	.06	1	1
LL 75+00E 0+50SB	1	10	13	37	.1	22	8	169	2.28	7	5	ND	8	10	1	2	2	30	.19	.017	18	35	.45	68	.08	4	1.90	.02	.07	2	2
LL 75+00E 0+60SB	1	7	11	33	.1	18	5	107	2.46	7	5	ND	5	7	1	4	2	38	.08	.013	10	27	.35	43	.09	3	1.48	.02	.07	1	1
LL 75+00E 0+70SB	1	10	14	31	.1	19	8	104	3.46	8	5	ND	7	5	1	2	2	42	.06	.025	11	33	.32	22	.11	4	1.68	.01	.07	1	1
LL 75+00E 0+80SB	1	11	16	38	.1	21	7	124	3.37	7	5	ND	6	9	1	3	2	49	.10	.019	12	37	.42	52	.11	3	1.91	.02	.08	1	1
LL 75+00E 0+90SB	1	13	24	47	.1	31	14	188	4.80	9	5	ND	16	7	1	3	2	57	.12	.042	19	48	.39	36	.13	5	3.68	.02	.10	1	1
LL 75+00E 1+00SB	1	9	20	50	.1	27	9	253	3.71	10	5	ND	14	7	1	2	2	46	.19	.048	19	41	.47	42	.11	7	2.20	.02	.07	1	1
LL 75+00E 1+10SB	1	9	18	41	.1	13	6	141	4.77	16	5	ND	12	6	1	2	2	78	.06	.019	16	37	.40	24	.18	20	1.36	.02	.07	1	1
LL 75+00E 1+20SB	1	5	12	28	.1	19	7	132	3.25	5	5	ND	12	7	1	2	2	41	.29	.031	22	34	.26	26	.08	4	1.65	.02	.04	1	1
LL 75+00E 1+30SA P	1	9	4	33	.4	5	1	229	.31	6	5	ND	2	38	1	2	2	6	5.02	.051	11	1	.17	41	.01	9	.36	.01	.05	1	1
LL 75+00E 1+40SA P	1	17	2	54	.3	5	1	371	.27	3	5	ND	1	47	1	2	2	4	6.40	.057	16	2	.25	63	.01	9	.36	.01	.01	1	1
LL 75+00E 1+50SA P	1	16	5	24	.2	5	1	88	.31	2	5	ND	2	47	1	2	2	7	6.53	.047	15	4	.18	66	.01	9	.47	.01	.02	1	1
LL 75+00E 1+60SA P	1	24	5	23	.5	7	2	113	.83	4	5	ND	4	45	1	2	2	4	4.46	.062	47	6	.15	84	.01	29	.98	.01	.03	1	1
LL 75+00E 1+70SA P	1	17	2	27	.4	6	2	699	.45	2	5	ND	3	42	1	3	3	4	5.33	.064	15	5	.19	86	.01	7	.56	.01	.02	1	1
LL 75+00E 1+80SA P	1	21	8	22	.6	7	4	563	.87	7	5	ND	3	46	1	2	2	8	4.72	.083	35	10	.21	85	.01	5	.87	.01	.02	1	1
LL 75+00E 1+90SB	1	4	9	28	.1	7	4	131	1.82	2	5	ND	8	6	1	2	2	26	.22	.030	11	14	.31	14	.18	2	.69	.02	.04	1	1
STD C/AU-5	18	57	41	132	7.0	68	27	1039	4.02	41	17	7	36	48	18	16	21	56	.49	.088	36	58	.91	174	.08	35	1.88	.08	.14	13	53

NORTHERN DYNASTY EXPL. PROJ. ARSENO LAKE FILE # 87-3454

SAMPLE#	MO	CU	PB	ZN	AS	NI	CO	MM	FE	AS	V	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	HG	BA	TI	B	AL	MA	K	M	AU#
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
LL 75+00E 2+00SB	1	3	13	43	.1	7	4	108	1.55	6	5	ND	5	5	1	2	2	36	.07	.010	6	13	.28	20	.15	2	.96	.02	.07	1	1
LL 75+00E 2+10SB	1	5	12	35	.1	9	4	100	1.90	3	5	ND	5	5	1	2	2	39	.06	.014	13	19	.30	33	.14	2	1.21	.02	.03	1	1
LL 75+00E 2+20SB	1	7	13	54	.1	11	5	202	3.00	6	5	ND	5	4	1	2	2	45	.06	.040	6	25	.44	20	.24	2	1.52	.02	.08	2	1
LL 75+00E 2+30SB	1	4	7	38	.1	8	3	113	2.33	8	5	ND	4	4	1	2	2	43	.05	.027	5	16	.27	19	.15	2	.90	.02	.04	1	1
LL 75+00E 2+40SB	1	9	18	84	.1	14	8	282	4.01	7	5	ND	6	4	1	2	2	53	.11	.069	9	24	.47	28	.23	5	2.03	.02	.14	1	1
LL 75+00E 2+50SB	1	26	19	84	.1	14	8	321	4.33	6	5	ND	5	4	1	2	2	75	.06	.041	4	34	.81	27	.28	2	2.09	.02	.09	1	1
LL 75+00E 2+60SB	1	7	17	55	.1	11	6	184	4.82	7	5	ND	8	4	1	2	2	76	.05	.048	8	31	.44	23	.24	2	1.55	.02	.10	1	1
LL 75+00E 2+70SB	1	7	12	28	.1	11	4	100	2.24	6	5	ND	5	5	1	2	2	35	.07	.021	10	18	.28	26	.12	2	1.27	.02	.05	1	1
LL 75+00E 2+80SB	1	1	4	11	.1	2	1	29	.56	2	5	ND	4	4	1	3	3	19	.03	.006	7	5	.06	11	.09	2	.35	.01	.02	1	1
LL 75+00E 2+90SB	1	6	15	43	.1	12	5	146	3.18	13	5	ND	5	5	1	2	2	55	.04	.033	8	27	.36	23	.18	3	1.20	.01	.07	3	1
LL 75+00E 3+00SB	1	12	14	61	.1	22	14	322	4.00	9	5	ND	9	12	1	2	2	49	.45	.043	21	27	.56	51	.16	2	2.15	.03	.06	1	2
LL 75+00E 3+10SB	1	12	17	48	.2	12	6	170	3.57	9	5	ND	7	5	1	2	2	50	.06	.025	10	24	.41	21	.18	2	1.72	.02	.06	3	1
LL 75+00E 3+20SB	1	9	16	72	.1	15	7	209	4.25	9	5	ND	6	7	1	2	2	72	.07	.051	6	26	.54	29	.25	3	1.66	.02	.09	1	1
LL 75+00E 3+30SB	1	9	12	31	.1	14	5	130	2.12	4	5	ND	5	10	1	2	2	29	.15	.024	9	27	.28	36	.07	5	1.83	.02	.04	1	1
LL 75+00E 3+40SB	1	12	11	35	.2	13	5	202	2.14	2	5	ND	9	7	1	2	2	31	.13	.031	24	22	.32	29	.08	2	1.20	.02	.07	1	1
LL 75+00E 3+50SB	1	3	5	11	.1	3	1	39	1.17	3	5	ND	5	4	1	3	2	26	.03	.011	8	11	.09	18	.08	2	.59	.01	.02	1	1
LL 75+00E 3+60SB	1	2	6	20	.3	6	2	69	1.10	6	5	ND	5	4	1	2	2	22	.04	.011	9	13	.16	16	.08	2	.58	.01	.03	1	2
LL 75+00E 3+70SB	1	8	11	23	.1	7	3	84	1.77	4	5	ND	7	3	1	2	2	25	.07	.099	7	17	.14	19	.08	2	1.31	.01	.03	2	1
LL 75+00E 3+80SB	1	9	9	39	.1	10	3	110	1.97	3	5	ND	7	4	1	2	2	25	.11	.087	10	19	.23	24	.09	2	1.29	.02	.04	2	1
LL 75+00E 3+90SB	1	8	7	26	.1	7	3	90	1.98	7	5	ND	4	4	1	2	2	36	.04	.046	5	16	.22	18	.14	2	.73	.02	.05	1	1
LL 75+00E 4+00SB	1	4	8	21	.1	6	2	79	1.21	2	5	ND	4	4	1	2	2	23	.04	.023	5	8	.19	23	.12	2	.54	.01	.08	1	1
LL 80+00E 3+00NA P	1	10	2	23	.3	5	1	92	.32	2	8	ND	1	49	1	2	2	4	5.84	.045	6	3	.20	59	.01	7	.42	.01	.02	2	1
LL 80+00E 2+70NA P	1	3	2	55	.2	1	1	37	.07	3	5	ND	1	20	1	3	2	1	1.88	.018	2	1	.15	15	.01	2	.05	.02	.01	1	1
LL 80+00E 2+60NA P	1	4	2	55	.1	3	1	113	.16	2	5	ND	1	34	1	2	2	2	4.04	.038	2	5	.17	42	.01	7	.12	.02	.01	1	1
LL 80+00E 2+50NA P	1	3	2	24	.1	2	1	94	.08	2	5	ND	1	34	1	2	2	1	4.19	.026	2	2	.16	28	.01	7	.09	.01	.01	1	1
LL 80+00E 2+40NA P	1	3	2	32	.1	1	1	67	.10	2	5	ND	1	28	1	2	2	2	3.17	.031	2	1	.14	22	.01	9	.09	.02	.02	1	1
LL 80+00E 2+30NA P	1	2	2	37	.2	1	1	156	.07	3	5	ND	1	33	1	2	2	1	3.54	.043	2	1	.17	22	.01	11	.08	.01	.01	1	1
LL 80+00E 2+20NA P	1	3	2	26	.3	2	1	116	.08	2	7	ND	1	38	1	3	2	1	4.38	.026	2	2	.18	32	.01	8	.10	.01	.01	1	1
LL 80+00E 2+10NA P	1	3	2	20	.2	1	1	85	.11	2	5	ND	2	39	1	2	2	1	4.17	.033	2	1	.19	33	.01	7	.12	.01	.01	1	1
LL 80+00E 2+00NA P	2	7	7	39	.2	5	3	1166	.29	2	5	ND	1	47	1	2	2	5	5.18	.052	8	4	.29	63	.01	8	.27	.01	.01	2	1
LL 80+00E 1+90NA P	2	7	2	26	.1	2	4	1590	.34	2	5	ND	2	38	1	2	2	5	3.93	.060	13	2	.21	75	.02	7	.33	.01	.02	1	1
LL 80+00E 1+80NA P	1	7	3	34	.1	2	2	507	.30	2	5	ND	3	45	1	3	2	4	4.76	.074	20	3	.23	60	.01	7	.38	.01	.02	1	1
LL 80+00E 1+70NA P	1	4	2	14	.1	2	1	104	.19	2	5	ND	2	29	1	2	2	3	2.89	.037	13	3	.15	32	.01	4	.22	.01	.01	1	1
LL 80+00E 1+60NA P	2	5	2	46	.5	2	1	484	.18	4	5	ND	1	37	1	4	2	4	3.68	.048	9	5	.18	44	.01	10	.23	.01	.01	2	2
LL 80+00E 1+50NA P	1	2	3	33	.1	1	1	147	.09	3	5	ND	1	16	1	3	2	2	1.38	.027	3	1	.10	21	.01	8	.09	.02	.02	1	1
LL 80+00E 1+40NA P	1	4	5	18	.1	2	1	31	.33	2	5	ND	1	36	1	2	2	3	3.37	.039	9	3	.19	38	.01	4	.42	.01	.01	2	1
STD C/AU-S	19	57	40	133	7.4	70	29	1057	4.06	43	16	8	38	51	18	19	22	59	.48	.091	38	61	.91	177	.07	36	1.90	.06	.15	12	50

NORTHERN DYNASTY EXPL. PROJECT-ARBENO LAKE FILE # 87-3454

SAMPLE#	NO	CU	PB	ZN	AG	NI	CO	NM	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	MIL
	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	%	PPH	PPH	%	PPH	%	PPH	%	%	%	PPH	
LL 80+00E 1+30NB	1	5	11	30	.1	6	3	85	1.03	2	5	ND	3	9	1	2	2	21	.36	.019	9	14	.19	25	.09	5	.73	.03	.03	2	1
LL 80+00E 1+20NB	1	11	13	34	.1	15	7	145	2.23	9	5	ND	8	8	1	2	2	39	.18	.027	15	30	.41	23	.15	6	1.48	.02	.07	1	1
LL 80+00E 1+10NA	1	10	11	54	.2	3	2	676	.40	7	5	ND	3	27	1	2	2	5	2.26	.062	42	2	.13	44	.01	6	.34	.02	.06	1	3
LL 80+00E 1+00NA	1	9	4	41	.1	6	2	1947	1.23	6	5	ND	2	42	1	2	2	4	3.89	.070	28	5	.17	83	.01	8	.45	.02	.02	1	3
LL 80+00E 0+90NA	1	6	3	27	.1	3	1	563	1.53	9	5	ND	2	43	1	2	2	3	3.90	.096	15	1	.17	60	.01	7	.30	.02	.02	1	2
LL 80+00E 0+50NA	1	.4	8	59	.2	2	2	1718	.93	8	5	ND	1	32	1	2	2	2	3.01	.078	3	1	.16	57	.01	8	.15	.02	.04	1	1
LL 80+00E 0+20NA	1	4	3	28	.1	3	1	187	1.03	2	5	ND	1	39	1	2	2	2	3.45	.060	4	1	.17	71	.01	6	.21	.02	.01	2	6
LL 80+00E 0+10NA P	1	9	8	44	.1	5	4	298	.46	4	5	ND	1	40	1	2	2	5	3.23	.061	7	1	.19	65	.01	6	.31	.02	.03	3	1
LL 80+00E 0+00BLA P	1	14	5	42	.2	7	1	23	.43	4	5	ND	3	49	1	2	2	3	2.58	.051	19	2	.13	85	.02	6	.34	.03	.02	2	4
LL 80+00E 0+10SA P	1	14	7	49	.3	10	5	197	1.14	5	5	ND	4	41	1	2	2	13	2.02	.056	42	16	.34	91	.04	5	.97	.03	.09	2	1
LL 80+00E 0+20SB	1	7	6	14	.1	6	2	70	.85	4	5	ND	3	6	1	2	2	14	.17	.032	8	14	.16	14	.08	9	.47	.02	.05	1	1
LL 80+00E 0+30SB	1	2	8	6	.2	1	1	28	.46	2	5	ND	1	4	1	5	2	15	.06	.007	5	1	.06	7	.11	4	.33	.02	.03	1	1
LL 80+00E 0+40SB	1	6	8	9	.1	7	2	55	1.03	6	5	ND	4	5	1	2	2	14	.13	.029	10	11	.11	13	.08	2	.92	.02	.03	1	1
LL 80+00E 0+50SB	1	4	5	11	.1	4	2	55	1.07	6	5	ND	2	5	1	2	2	20	.12	.021	6	14	.12	10	.10	6	.70	.02	.02	1	1
LL 80+00E 0+60SB	2	9	19	31	.1	7	4	123	3.48	14	5	ND	5	6	1	2	2	70	.05	.023	8	28	.21	30	.22	6	1.36	.02	.05	1	1
LL 80+00E 0+70SB	1	6	13	15	.1	10	2	68	1.29	17	5	ND	3	5	1	2	2	28	.09	.005	6	21	.16	9	.14	2	.67	.02	.04	1	2
LL 80+00E 0+80SB	1	9	8	17	.1	11	3	82	1.61	6	5	ND	4	5	1	3	2	23	.11	.014	9	18	.20	12	.12	5	1.07	.02	.04	1	1
LL 80+00E 0+90SA	1	20	18	31	.2	5	3	19	.67	4	5	ND	3	20	1	3	2	9	.16	.042	43	6	.08	69	.05	2	.88	.02	.05	1	1
LL 80+00E 1+00SB	2	15	27	58	.2	28	12	208	5.08	19	5	ND	16	10	1	2	3	76	.15	.037	33	39	.42	67	.21	3	5.18	.03	.07	2	1
LL 80+00E 1+10SB	1	7	3	13	.1	7	2	69	.83	5	5	ND	3	5	1	2	2	14	.11	.017	8	10	.16	15	.08	2	.52	.02	.04	1	1
LL 80+00E 1+20SB	1	7	4	16	.1	7	3	84	1.05	2	5	ND	4	6	1	2	2	17	.16	.028	11	11	.19	20	.10	2	.71	.02	.05	2	1
LL 80+00E 1+30SB	1	9	14	34	.1	10	6	141	2.58	8	5	ND	4	6	1	2	2	51	.10	.013	8	25	.37	20	.17	6	1.29	.02	.07	2	1
LL 80+00E 1+40SB	2	10	5	18	.1	13	6	345	1.90	18	5	ND	1	2	1	3	2	36	.05	.010	3	86	.09	14	.03	3	.43	.01	.01	1	1
LL 80+00E 1+50SB	1	7	11	23	.1	14	4	72	2.22	18	5	ND	1	2	1	2	2	85	.04	.011	4	72	.16	27	.15	2	.98	.02	.03	1	1
LL 80+00E 1+60SB	1	20	21	26	.2	20	6	127	2.92	45	5	ND	2	2	1	2	2	137	.09	.012	6	55	.17	22	.18	5	.87	.02	.04	1	6
LL 80+00E 1+70SB	1	28	45	59	.2	16	5	124	15.04	33	5	ND	2	4	1	3	2	155	.06	.031	3	106	.41	35	.19	2	1.29	.03	.12	1	5
LL 80+00E 1+80SB	1	3	4	11	.1	2	1	44	.63	4	5	ND	3	7	1	3	2	28	.10	.004	5	5	.11	12	.18	2	.37	.02	.01	1	1
LL 80+00E 2+00SA P	1	66	15	35	.1	45	5	52	.66	34	5	ND	1	12	1	6	2	10	.47	.047	6	39	.11	36	.02	8	.39	.02	.07	2	4
LL 80+00E 2+10SA	1	36	8	24	.1	161	17	72	2.30	420	5	ND	1	2	1	2	2	73	.04	.012	2	510	.98	18	.08	2	.78	.02	.03	2	2
LL 80+00E 2+20SA	1	321	16	63	.1	235	45	250	6.14	525	5	ND	2	7	1	2	2	89	.33	.014	8	105	.82	126	.23	6	2.98	.05	.15	1	3
LL 80+00E 2+30GA	1	110	28	39	.1	167	29	279	4.37	23	5	ND	1	4	1	2	2	66	.21	.012	3	407	.60	26	.18	2	1.72	.03	.04	1	1
LL 80+00E 2+40GA	1	44	13	39	.1	20	8	129	4.80	8	5	ND	1	2	1	2	2	126	.22	.017	2	37	.35	22	.14	2	.99	.04	.06	1	1
LL 80+00E 2+50GA	1	13	16	63	.2	16	7	233	3.99	11	5	ND	5	6	1	2	2	98	.08	.027	4	31	.62	27	.35	3	1.35	.03	.15	1	1
LL 80+00E 2+60GA	1	8	16	48	.1	15	5	176	2.70	14	5	ND	9	7	1	2	2	78	.09	.018	4	33	.52	28	.30	2	1.25	.03	.10	1	1
LL 80+00E 2+70GA	1	62	10	13	.5	20	7	235	1.09	6	5	ND	4	38	1	2	2	7	3.63	.083	61	13	.07	91	.01	7	2.15	.02	.01	1	1
LL 80+00E 2+80SA	1	157	2	27	.5	23	1	98	.23	7	5	ND	2	42	1	3	2	3	6.33	.049	25	5	.10	59	.01	9	.35	.01	.01	1	1
STD C/AU-S	19	60	41	133	7.5	71	29	1063	4.09	44	15	8	38	52	19	18	19	60	.49	.095	39	44	.91	181	.09	37	1.92	.09	.15	14	51

NORTHERN DYNASTY EXPL. PROJECT-ARSENIO LAKE FILE # 87-3454

SAMPLE#	NO	CU	PB	ZN	AG	NI	CO	NH	FE	AS	U	AU	TH	SR	CD	SD	BI	V	CA	P	LA	CR	HG	BA	TI	B	AL	MA	K	M	AM
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
LL 80+00E 2+90SA	1	211	8	33	.3	45	2	587	.28	6	5	ND	1	46	1	2	3	3	7.30	.056	34	3	.11	84	.01	7	.50	.01	.02	1	1
LL 80+00E 3+00SA	1	424	8	43	.4	61	3	539	.36	10	5	ND	1	47	1	2	2	4	6.87	.068	87	11	.11	78	.01	8	.64	.01	.02	2	1
LL 80+00E 3+20SA	1	228	6	48	.4	55	1	57	.25	5	5	ND	1	47	1	2	3	3	6.97	.043	24	6	.12	59	.01	7	.29	.01	.02	1	1
LL 80+00E 3+30SA	1	74	2	36	.3	26	1	91	.12	4	5	ND	1	50	1	2	2	4	7.80	.053	4	3	.13	47	.01	14	.15	.01	.02	2	3
LL 80+00E 3+50SA	1	15	8	13	.1	21	4	124	1.10	29	5	ND	6	5	1	2	2	16	.25	.007	9	16	.16	13	.08	5	.41	.02	.02	1	2
LL 80+00E 3+60SA	1	31	8	56	.2	24	5	126	1.11	17	5	ND	2	20	1	2	2	27	2.03	.038	11	90	.48	28	.04	3	.78	.02	.09	1	2
LL 80+00E 3+70SA P	1	127	6	40	.2	59	3	31	.36	6	5	ND	1	30	1	2	2	4	4.18	.036	50	3	.11	30	.01	9	.22	.01	.02	2	1
LL 80+00E 3+90SA P	1	31	4	55	.2	75	54	1079	.23	9	5	ND	1	33	1	2	2	4	4.89	.041	3	3	.12	47	.01	10	.97	.01	.03	2	1
LL 80+00E 4+00SA P	1	12	2	69	.1	20	16	153	.27	11	5	ND	1	32	1	2	2	1	4.60	.044	2	2	.12	31	.01	11	.95	.01	.02	2	1
6L7-S-600	4	40	23	28	.1	26	5	92	8.25	143	5	ND	5	2	1	10	2	81	.04	.020	6	204	.34	18	.13	2	2.21	.01	.04	3	5
6L7-S-601	2	90	11	44	.6	19	4	130	9.96	49	5	ND	8	1	1	2	2	38	.03	.047	6	112	.21	10	.06	2	6.57	.02	.04	1	2
6L7-S-602	4	80	21	177	2.1	140	26	942	10.15	9	5	ND	6	2	1	2	2	44	.07	.019	8	242	.78	21	.15	2	2.14	.02	.05	2	4
6L7-S-603	4	96	21	97	4.9	32	7	349	22.79	5	5	ND	3	1	1	7	2	32	.01	.034	2	70	.06	9	.08	16	.76	.01	.02	3	1
6L7-S-604	6	115	17	34	1.4	5	3	391	29.76	14	5	ND	3	1	1	7	6	5	.01	.019	2	11	.05	1	.03	2	.22	.01	.01	1	11
STB C/AU-S	19	57	41	131	6.9	67	28	1040	4.16	39	20	7	36	49	18	17	20	57	.49	.091	36	59	.90	178	.08	35	1.87	.08	.14	13	50

NORTHERN DYNASTY EXPL. PROJECT-ARSENO LAKE FILE # 87-3454

Handwritten mark

Recs. FA/RA

SAMPLE #	NO	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	V	AUX
Rock	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
DL7-R-600	1	155	12	87	.1	72	32	680	4.53	2	5	ND	1	23	1	2	2	195	2.89	.044	5	122	1.35	120	.25	4	5.64	.28	1.36	1	3
STD C/AU-K	18	59	40	127	7.0	66	27	1011	3.75	38	18	7	36	48	17	19	19	56	.45	.086	37	57	.83	172	.08	36	1.74	.08	.13	13	495
DL7-R-601	1	208	5	38	.2	73	34	282	4.27	2	5	ND	1	27	1	2	2	231	4.16	.056	4	154	1.63	47	.11	2	9.18	.47	.33	1	1
DL7-R-602	1	152	11	36	.1	101	30	662	8.18	8	5	ND	1	4	1	2	2	225	.36	.020	3	222	1.85	9	.13	5	4.20	.12	.10	2	1
DL7-R-603	1	2664	9	60	2.1	88	56	372	2.53	127	5	ND	1	42	1	2	2	42	2.24	.022	3	106	.79	16	.06	2	1.11	.10	.05	1	106
DL7-R-604	1	3	2	7	.1	320	30	93	.66	702	5	ND	1	1	1	3	2	4	.12	.002	2	27	.31	16	.01	17	.06	.02	.02	36	30
DL7-R-605	1	106	4	41	.1	39	22	353	2.31	23	5	ND	2	5	1	2	2	76	1.62	.052	6	45	.74	20	.14	9	.84	.11	.06	1	6
GL7-R-600	2	122	51	60	.5	180	21	734	7.43	31	5	ND	3	18	1	2	2	52	.72	.009	8	292	1.30	53	.12	2	2.63	.13	.93	1	3
GL7-R-601	1	46	8	24	.1	300	34	364	2.30	569	5	ND	1	2	1	7	3	58	.08	.004	2	942	2.11	10	.02	2	1.19	.02	.01	1	1
GL7-R-602	4	16	32	10	.2	10	1	112	.90	19	9	ND	5	2	1	7	2	7	.02	.003	2	40	.16	16	.02	6	.42	.02	.16	1	10
GL7-R-603	1	167	29	93	1.5	56	4	109	9.90	8	5	ND	2	7	1	2	2	12	.36	.010	5	37	.16	8	.01	9	.89	.10	.09	1	36
GL7-R-604	1	403	28	34	2.7	260	43	393	47.05	39	5	ND	4	1	1	13	19	5	.10	.008	4	6	.11	4	.01	2	.38	.04	.04	2	17
GL7-R-605	2	28	9	122	1.9	18	12	184	5.19	35	6	ND	4	3	1	2	2	28	.03	.017	8	110	.39	20	.02	2	.60	.04	.20	1	7
GL7-R-606	2	390	25	222	10.8	150	14	200	21.72	8	5	ND	4	20	2	2	16	17	1.75	.014	4	47	.18	7	.02	3	3.36	.23	.03	1	125
GL7-R-607	2	105	34	105	6.8	106	12	1044	11.14	7	5	ND	4	22	1	2	20	16	1.39	.005	11	111	.37	24	.08	9	1.95	.13	.16	1	22
GL7-R-608	2	73	12	235	.7	150	19	1349	3.22	9	5	ND	8	76	1	2	2	71	3.58	.040	19	126	.70	78	.17	6	5.33	.33	.52	2	4
GL7-R-609	3	98	35	56	2.1	61	6	702	11.70	3	5	ND	6	50	1	2	2	21	2.55	.008	12	91	.28	20	.07	6	4.04	.31	.16	1	8
GL7-R-610	2	169	22	35	1.0	40	7	388	31.74	4	5	ND	4	2	1	2	2	8	.15	.004	2	23	.18	12	.05	2	.24	.02	.07	1	8
GL7-R-611	1	138	20	38	.2	15	4	407	27.01	2	5	ND	3	4	1	2	2	13	.09	.005	2	58	.46	33	.06	3	.42	.02	.26	1	4
GL7-R-612	6	38	36	86	4.6	46	7	316	2.33	13	5	ND	4	25	1	8	11	15	1.06	.004	6	78	.17	21	.03	9	1.91	.22	.13	1	23
GL7-R-613	1	94	5	68	1.3	103	17	385	5.23	5	5	ND	5	56	1	2	2	50	3.94	.006	12	232	.88	37	.16	31	6.98	.24	.44	1	7

GEOCHEMICAL ICP ANALYSIS

.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 AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: SOILS AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

P-20 MESH, FULLER 1360

DATE RECEIVED: AUG 18 1987

DATE REPORT MAILED: Aug 26/87

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

NORTHERN DYNASTY

File # 87-3390

Page 1

SAMPLE#	MO PPM	CU PPM	PB PPM	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 %	W PPM	AU PPM
LL 53+00E 0+10S B	1	18	17	33	.1	9	4	109	1.90	2	5	ND	3	5	1	2	2	47	.08	.008	5	20	.31	15	.22	7	1.08	.01	.04	1	1
LL 53+00E 0+20S B	1	19	11	33	.1	10	4	83	2.90	3	5	ND	5	5	1	2	2	61	.07	.020	5	24	.23	14	.25	3	1.06	.01	.05	1	1
LL 53+00E 0+30S B	2	25	22	42	.1	15	5	116	2.59	2	5	ND	7	9	1	2	2	49	.11	.016	14	27	.34	29	.22	2	1.91	.01	.06	2	1
LL 53+00E 0+40S B	1	15	7	28	.2	12	4	128	1.50	2	5	ND	5	10	1	2	2	26	.25	.023	10	23	.34	19	.13	8	.86	.01	.06	1	1
LL 53+00E 0+50S A	1	113	26	30	.3	44	4	25	1.78	2	5	ND	3	25	1	2	2	10	.59	.116	51	39	.10	105	.01	2	1.86	.01	.05	1	1
LL 53+00E 0+60S B	1	17	15	24	.2	13	4	81	1.89	2	5	ND	5	6	1	2	2	43	.10	.013	8	30	.26	17	.16	4	1.58	.01	.05	2	1
LL 53+00E 0+70S B	1	9	7	15	.1	8	2	52	2.01	3	5	ND	3	6	1	2	2	50	.08	.009	3	30	.14	13	.19	2	1.00	.01	.03	1	1
LL 53+00E 0+80S B	1	15	13	40	.1	23	6	153	2.35	3	5	ND	3	8	1	2	2	53	.11	.005	6	44	.46	24	.23	2	1.33	.01	.07	2	1
LL 53+00E 0+90S B	3	25	21	70	.2	36	9	202	4.01	2	5	ND	7	5	1	2	3	76	.09	.023	7	82	.57	24	.30	2	2.51	.01	.08	1	2
LL 53+00E 1+00S B	1	18	5	12	.1	33	6	67	1.19	2	5	ND	6	5	1	2	2	21	.11	.008	14	58	.26	11	.09	2	.72	.01	.02	1	1
LL 55+00E 4+50N B	4	268	30	57	.2	85	41	1229	6.62	2	5	ND	10	17	1	2	2	97	.84	.042	32	96	.23	119	.18	3	3.48	.01	.04	1	2
LL 55+00E 4+40N B	3	40	24	55	.1	38	11	222	3.77	2	5	2	3	7	1	2	2	125	.33	.011	7	45	.61	39	.65	2	1.41	.02	.04	1	1
LL 55+00E 4+30N B	1	6	5	6	.1	4	2	49	.60	2	5	ND	1	1	1	2	2	41	.20	.005	2	11	.12	4	.20	18	.20	.03	.01	1	1
LL 55+00E 4+00N A	1	12	2	11	.2	6	2	27	.43	2	5	ND	3	5	2	6	2	13	.15	.007	6	14	.10	15	.07	7	.42	.01	.02	1	1
LL 55+00E 3+90N A	1	11	6	16	.1	9	2	35	.48	2	5	ND	1	3	1	2	2	12	.14	.010	3	26	.20	18	.04	2	.48	.01	.03	2	2
LL 55+00E 3+80N A	1	76	21	40	.5	46	20	175	2.08	2	8	ND	4	10	1	2	2	35	.43	.025	17	80	.34	71	.11	4	1.32	.02	.03	1	1
LL 55+00E 3+70N B	1	164	9	38	.1	50	11	60	11.24	4	5	ND	2	2	1	2	2	108	.11	.017	3	208	.36	29	.17	2	2.28	.01	.02	1	1
LL 55+00E 3+40N A	1	68	12	46	.2	19	3	15	.55	2	5	ND	2	13	1	3	2	4	.14	.044	10	5	.03	53	.01	4	.60	.01	.03	1	2
LL 55+00E 3+30N B	1	121	8	50	.1	89	23	78	3.10	3	5	ND	2	4	1	2	3	123	.21	.013	8	102	.51	28	.17	2	4.20	.05	.02	1	1
LL 55+00E 3+20N B	1	25	8	18	.2	19	7	132	1.79	2	5	ND	2	2	1	2	2	99	.21	.006	2	36	.28	15	.20	17	.91	.04	.02	3	1
LL 55+00E 3+10N B	1	122	5	37	.1	60	20	86	4.28	2	5	ND	2	9	1	2	5	207	.46	.020	4	109	.71	23	.22	2	5.83	.15	.05	1	1
LL 55+00E 3+00N A	1	13	2	18	.2	8	2	54	.51	2	5	ND	1	8	1	3	2	9	.16	.025	3	7	.12	22	.03	3	.25	.02	.04	2	1
LL 55+00E 2+90N B	2	33	11	31	.4	31	9	120	3.30	2	5	ND	5	4	2	2	2	120	.14	.015	4	69	.51	18	.29	5	1.42	.02	.06	2	1
LL 55+00E 2+80N A	1	23	5	19	.3	15	4	35	1.08	3	5	ND	2	7	2	2	2	40	.16	.025	2	16	.23	12	.06	5	.57	.02	.03	3	1
LL 55+00E 2+70N	1	53	12	18	.2	29	9	59	1.77	2	5	ND	1	4	1	2	2	53	.13	.017	5	30	.45	24	.03	5	1.16	.01	.03	1	1
STD C/AU-S	19	61	41	137	7.1	71	28	1084	4.18	40	19	7	41	51	18	17	20	61	.50	.089	38	60	.89	183	.09	38	1.85	.06	.13	13	51
LL 55+00E 2+60N B	1	169	13	42	.3	26	9	86	2.52	5	5	ND	3	17	1	2	2	64	.42	.027	3	34	.56	67	.11	2	1.82	.07	.14	1	1
LL 55+00E 2+50N B	1	142	20	53	.3	22	6	70	5.79	14	5	ND	14	3	1	2	5	97	.06	.052	11	65	.23	31	.15	2	6.92	.01	.05	1	1
LL 55+00E 2+40N B	1	163	9	71	.1	58	17	93	4.71	2	5	ND	3	3	1	2	2	157	.13	.022	4	97	.54	38	.21	3	3.64	.02	.07	1	1
LL 55+00E 2+30N B	1	55	20	75	.2	38	13	160	5.21	2	5	ND	3	3	1	2	2	189	.12	.023	5	61	.36	42	.22	10	1.99	.02	.07	2	2
LL 55+00E 2+20N B	1	41	27	45	.1	14	5	94	1.63	2	5	ND	4	6	1	2	2	37	.08	.016	12	21	.22	36	.11	2	1.42	.01	.04	1	1
LL 55+00E 2+10N B	1	19	16	38	.2	12	5	127	2.15	3	5	ND	4	8	1	2	2	43	.10	.009	11	25	.28	39	.13	8	1.68	.01	.05	1	1
LL 55+00E 2+00N B	1	10	10	19	.3	11	3	70	1.23	2	5	ND	5	7	1	2	2	28	.10	.008	9	20	.23	21	.12	6	1.66	.01	.04	2	1
LL 55+00E 1+90N B	1	26	14	28	.1	20	6	101	1.63	2	5	ND	4	6	1	2	2	28	.17	.016	9	30	.35	22	.12	6	1.14	.01	.03	2	2
LL 55+00E 1+80N B	1	13	10	22	.1	11	3	88	1.31	4	5	ND	2	5	1	2	2	42	.09	.004	3	21	.27	12	.22	2	.78	.01	.04	1	1
LL 55+00E 1+70N B	1	27	18	25	.2	14	4	76	4.05	3	5	ND	8	5	1	2	2	63	.08	.017	10	45	.23	18	.18	8	2.90	.01	.04	3	1
LL 55+00E 1+50N A	1	31	16	50	.7	10	3	48	.54	3	5	ND	2	30	1	2	2	4	.80	.999	32	8	.08	66	.01	2	.82	.01	.03	1	1

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	SB PPH	BI PPH	V PPH	CA %	P %	LA PPH	CR PPH	MG %	BA PPH	TI %	B PPH	AL %	NA %	K %	M PPH	AUT PPH
LL 55+00E 1+20NA	1	6	2	60	.1	4	1	19	.34	2	5	ND	1	14	1	2	2	2	.35	.048	3	2	.03	43	.01	2	.23	.01	.02	1	1
LL 55+00E 1+10ND	1	16	9	16	.2	8	2	52	2.09	4	5	ND	4	6	1	2	2	64	.12	.012	4	28	.14	13	.21	5	.90	.01	.04	1	3
LL 55+00E 1+00NA	1	24	10	45	.1	6	3	48	.50	2	5	ND	1	11	1	2	2	7	.20	.044	6	14	.07	45	.01	6	.39	.01	.08	2	4
LL 55+00E 0+00NA P	1	17	2	62	.1	8	1	66	.26	2	5	ND	1	21	1	2	2	2	.75	.057	13	4	.06	49	.01	5	.36	.01	.03	1	3
LL 55+00E 0+70NA	1	47	14	24	.1	10	3	35	1.12	5	5	ND	3	14	1	2	2	18	.17	.033	33	19	.10	45	.07	2	1.05	.01	.04	1	2
LL 55+00E 0+60NB	1	25	13	34	.2	19	6	119	2.40	7	5	ND	7	7	1	2	2	30	.12	.022	17	36	.34	31	.15	2	2.14	.01	.04	2	3
LL 55+00E 0+50NB	1	17	9	17	.1	20	4	73	1.51	6	5	ND	6	5	1	2	2	20	.09	.013	11	35	.19	17	.10	3	1.33	.01	.04	1	1
LL 55+00E 0+40NB	1	18	5	15	.1	29	4	68	1.49	8	5	ND	3	5	1	2	2	26	.08	.008	7	49	.19	11	4	.87	.01	.03	1	1	
LL 55+00E 0+30NA P	2	63	10	86	.3	74	20	6497	.98	11	6	ND	8	57	2	2	2	6	2.70	.092	105	11	.11	158	.01	4	.97	.01	.03	1	1
LL 55+00E 0+20NB P	16	17	17	162	.1	99	112	58407	5.04	251	5	ND	5	55	1	2	2	24	2.54	.108	32	14	.09	779	.01	2	.61	.01	.04	1	1
LL 55+00E 0+10NA P	2	32	2	63	.1	76	23	5763	2.08	99	5	ND	3	60	1	2	2	9	3.27	.164	28	17	.09	241	.01	5	.48	.01	.03	1	2
LL 55+00E 0+10BLA	1	42	4	55	.1	65	15	1533	2.25	34	5	ND	5	48	1	2	2	10	2.62	.124	49	22	.07	269	.01	7	.67	.01	.02	1	1
LL 55+00E 0+10SA	1	100	20	44	.6	70	6	162	1.58	17	13	ND	21	37	4	2	2	2	1.63	.152	240	45	.13	148	.04	4	3.26	.01	.04	1	1
LL 55+00E 0+20SA P	1	61	4	38	.2	75	11	583	1.44	20	5	ND	7	58	1	2	2	15	3.74	.090	55	20	.16	127	.02	3	1.09	.01	.03	1	2
LL 55+00E 0+30SB	1	3	2	6	.1	10	2	39	.36	5	5	ND	2	2	1	2	2	17	.08	.008	4	46	.17	6	.04	7	.29	.01	.01	1	2
LL 55+00E 0+40SB	1	21	12	20	.1	24	6	82	2.30	102	5	ND	9	6	1	2	2	34	.09	.013	11	66	.26	16	.14	11	2.58	.01	.03	1	1
LL 55+00E 0+50SB	1	23	13	26	.1	20	5	101	2.24	8	5	ND	6	5	1	2	2	50	.09	.011	9	43	.33	19	.17	10	1.84	.01	.05	1	1
LL 55+00E 0+60SB	1	22	10	28	.1	15	5	95	3.18	10	5	ND	7	5	1	2	2	57	.08	.013	7	40	.27	17	.19	2	1.80	.01	.04	1	1
LL 55+00E 0+70SB	1	17	13	39	.1	20	6	110	3.50	9	5	ND	8	6	2	2	2	72	.08	.013	8	67	.41	19	.24	3	1.88	.01	.05	1	1
LL 55+00E 0+80SB	1	18	17	48	.1	17	5	124	3.09	9	5	ND	6	7	1	3	2	77	.09	.010	8	41	.35	24	.30	7	1.73	.01	.06	1	2
LL 55+00E 0+90SB	1	28	10	33	.3	38	8	85	4.24	25	5	ND	6	5	1	2	2	79	.07	.012	9	123	.37	14	.23	5	2.20	.01	.04	2	2
LL 55+00E 1+00SB	1	17	13	26	.2	43	7	48	1.68	6	5	ND	4	7	1	2	2	60	.10	.013	10	189	.71	19	.16	9	1.47	.01	.03	1	1
LL 55+00E 1+30SA P	1	4	2	49	.1	9	2	142	.51	3	5	ND	2	30	1	2	2	2	1.65	.043	3	4	.07	65	.01	23	.14	.02	.02	1	2
LL 55+00E 1+50SB	1	15	11	21	.2	30	5	77	2.10	19	5	ND	5	5	1	2	2	38	.09	.010	14	83	.34	14	.12	11	1.62	.01	.05	1	3
LL 55+00E 1+60SB	1	6	7	12	.5	11	2	42	1.12	4	5	ND	4	4	1	2	2	28	.05	.008	5	23	.14	12	.11	11	.65	.01	.03	1	3
LL 55+00E 1+70SB	1	64	13	53	.4	142	26	102	3.67	11	5	ND	9	6	1	3	2	91	.11	.011	39	422	1.34	31	.20	2	2.82	.02	.05	1	96 - in 58
LL 55+00E 1+80SB	1	12	11	17	.2	23	5	55	2.28	11	5	ND	4	4	1	2	2	63	.05	.010	4	80	.30	9	.16	11	1.13	.01	.03	1	6
LL 55+00E 1+90SB	1	12	12	14	.1	24	5	68	1.44	8	5	ND	5	5	1	2	2	29	.10	.018	7	48	.24	16	.11	2	1.25	.01	.03	1	1
LL 55+00E 2+00SB	1	51	12	71	.3	120	13	100	4.73	248	6	ND	3	4	1	2	2	90	.11	.016	3	374	.80	24	.22	3	2.33	.02	.03	3	6
LL 55+00E 2+10SB P	1	9	6	20	.1	21	4	103	1.49	11	5	ND	5	7	1	2	2	26	.16	.013	6	56	.34	13	.12	11	.68	.02	.06	11	2
LL 55+00E 2+20SA P	1	7	9	67	.1	10	1	16	.26	4	5	ND	2	14	1	2	2	3	.14	.068	14	7	.02	50	.01	5	.09	.01	.01	2	5
LL 55+00E 2+30SA P	1	3	2	40	.4	3	1	36	.11	3	5	ND	1	19	2	2	3	1	.42	.037	2	3	.06	37	.01	8	.11	.01	.04	1	14
LL 55+00E 2+40SA	1	28	11	13	.1	8	1	23	.75	4	6	ND	2	5	1	2	2	20	.24	.023	9	50	.11	24	.04	6	.73	.01	.02	2	4
LL 55+00E 2+50SB	1	5	2	7	.2	4	2	65	.73	2	5	ND	1	1	1	2	2	58	.16	.008	2	11	.13	3	.07	4	.24	.02	.02	1	3
LL 55+00E 2+60	1	60	5	24	.1	35	13	105	4.05	5	5	ND	2	1	1	2	2	179	.14	.014	2	66	.40	14	.21	2	1.58	.02	.03	1	1
LL 55+00E 2+70SB	1	154	5	43	.1	96	40	203	3.66	1222	5	ND	3	18	1	4	3	99	.72	.031	5	271	1.17	61	.19	8	5.02	.12	.07	4	3
LL 55+00E 2+80SB	1	41	11	39	.3	46	14	212	2.91	29	7	ND	3	4	1	2	2	134	.25	.010	3	67	.66	17	.29	6	1.59	.05	.06	1	2
STD C/AU-6	18	59	38	133	7.4	71	29	1064	4.16	41	19	7	40	52	19	18	24	61	.48	.091	40	59	.86	182	.09	36	1.80	.06	.13	13	53

SAMPLE#	NO PPM	CU PPM	PB PPM	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 %	W PPM	AU1 PPM
LL 55+00E 2+90SA	1	21	13	7	.2	3	1	23	.45	4	5	ND	1	3	1	2	3	23	.10	.007	6	8	.07	26	.07	2	.51	.01	.01	1	1
LL 55+00E 3+00SB	1	91	20	63	.1	56	11	118	2.00	16	5	ND	2	19	1	2	2	70	.90	.019	22	143	.57	114	.14	2	2.25	.03	.04	1	2
LL 57+00E 3+00NB	1	89	4	41	.2	37	13	84	5.57	3	5	ND	3	3	1	2	2	265	.19	.023	5	81	.41	33	.22	9	4.13	.05	.04	1	1
LL 57+00E 2+90NA	1	192	20	42	.4	22	4	29	1.20	8	5	ND	2	12	1	2	2	22	.30	.031	21	23	.11	71	.08	8	1.03	.01	.04	1	2
LL 57+00E 2+80NB	1	56	10	37	.1	12	4	136	5.98	34	5	ND	1	1	1	2	2	208	.07	.021	4	54	.30	19	.20	2	1.57	.01	.04	1	2
LL 57+00E 2+70NB	1	60	12	32	.2	10	4	71	3.20	4	5	ND	1	1	1	2	3	100	.18	.014	2	27	.30	14	.13	5	1.32	.03	.02	1	1
LL 57+00E 2+60NB	1	24	9	109	.4	16	6	172	2.27	3	5	ND	1	2	1	2	3	82	.26	.009	3	30	.32	18	.18	2	.87	.03	.02	1	1
LL 57+00E 2+50NB	1	18	8	24	.2	12	4	209	1.89	4	5	ND	1	2	1	2	3	91	.27	.007	4	25	.21	22	.18	2	.98	.03	.03	1	2
LL 57+00E 2+40NB	1	58	16	62	.1	36	12	194	4.37	8	5	ND	5	7	1	2	2	118	.16	.025	9	64	.69	31	.38	8	1.85	.02	.09	1	1
LL 57+00E 2+30NB	1	16	15	19	.2	11	3	75	1.54	3	5	ND	4	6	1	2	3	42	.09	.004	6	25	.23	15	.18	2	.79	.01	.03	1	3
LL 57+00E 2+20NA	1	138	20	38	.1	33	7	69	1.64	6	5	ND	1	16	1	2	2	22	.27	.049	30	29	.28	71	.06	10	1.83	.01	.07	1	2
LL 57+00E 2+10NB	1	16	15	29	.3	9	3	85	3.11	7	5	ND	4	5	1	2	2	72	.07	.014	5	28	.26	18	.25	7	1.71	.01	.04	1	1
LL 57+00E 2+00NB	1	34	16	22	.1	17	5	76	3.30	8	5	ND	5	5	1	2	2	50	.09	.014	6	49	.23	21	.19	2	2.35	.01	.03	1	1
LL 57+00E 1+90NA	1	133	2	68	.5	31	7	6	.34	2	5	ND	2	51	1	2	2	4	3.21	.048	9	6	.15	205	.01	17	.37	.01	.02	2	2
LL 57+00E 1+80NA	1	40	3	71	.1	14	5	64	.35	2	5	ND	1	51	1	2	2	8	4.42	.051	3	5	.21	143	.01	5	.31	.01	.01	1	1
LL 57+00E 1+70NA	1	14	40	53	.1	7	4	227	.40	2	5	ND	1	62	1	2	2	4	4.45	.063	2	3	.20	108	.01	13	.21	.01	.02	1	1
LL 57+00E 1+20NA	1	94	22	74	.6	42	8	259	3.15	5	11	ND	17	48	1	2	2	34	1.88	.101	197	44	.30	188	.06	5	2.55	.01	.13	1	2
STD C/AU-S	19	62	41	136	7.2	70	29	1090	4.15	42	18	8	42	53	17	17	22	63	5.01	.091	40	58	.87	187	.10	37	1.86	.07	.14	14	53
LL 57+00E 1+10NB	1	17	12	50	.1	18	7	184	2.67	5	5	ND	6	8	1	2	2	50	.18	.011	10	31	.52	18	.29	7	1.55	.02	.04	1	1
LL 57+00E 1+00NB	1	14	13	19	.1	10	3	80	1.51	3	5	ND	4	6	1	2	2	27	.11	.013	8	20	.22	15	.16	10	1.42	.01	.03	1	2
LL 57+00E 0+90NB	1	8	8	10	.1	6	2	47	1.28	2	5	ND	1	5	1	2	3	29	.07	.008	6	16	.13	13	.12	2	.93	.01	.03	1	1
LL 57+00E 0+80NB	1	16	18	42	.1	27	10	175	2.72	8	5	ND	10	11	1	2	2	44	.28	.017	26	33	.42	68	.19	16	2.10	.02	.07	1	2
LL 57+00E 0+70NB	1	21	10	31	.1	21	7	197	1.94	5	5	ND	7	8	1	2	2	36	.19	.016	16	35	.42	32	.17	2	1.24	.02	.08	1	2
LL 57+00E 0+60NB	1	17	11	76	.1	29	17	409	2.95	10	5	ND	10	11	2	2	2	50	.24	.026	21	36	.37	60	.18	6	1.96	.02	.07	1	1
LL 57+00E 0+50NB	1	16	12	32	.2	16	4	96	2.22	11	5	ND	6	9	1	2	3	31	.26	.012	8	19	.18	11	.12	2	.81	.01	.06	1	1
LL 57+00E 0+40NA	1	41	2	53	.1	21	1	113	.31	5	5	ND	1	59	1	2	2	3	6.22	.063	45	4	.10	27	.01	20	.57	.01	.01	1	2
LL 57+00E 0+30NA	1	45	8	53	.2	21	3	1673	.52	4	5	ND	1	64	1	2	2	4	5.20	.075	47	4	.12	125	.01	9	.73	.01	.02	2	1
LL 57+00E 0+20NB	2	18	24	92	.2	12	7	142	5.69	27	5	ND	6	7	1	2	2	136	.13	.011	6	28	.48	30	.40	4	1.74	.01	.11	1	1
LL 57+00E 0+10NB	1	6	8	18	.2	7	2	73	.90	2	5	ND	3	7	1	2	2	30	.16	.002	4	15	.20	10	.16	7	.53	.01	.03	1	1
LL 57+00E 0+00BLA	1	50	12	32	.8	40	2	27	.96	4	8	ND	5	61	2	2	2	4	2.77	.132	60	14	.20	121	.01	18	.69	.01	.03	1	1
LL 57+00E 0+10SA	1	84	9	32	.5	134	7	259	1.98	11	7	ND	8	62	1	2	2	14	2.93	.104	156	36	.30	161	.03	15	1.93	.01	.07	1	2
LL 57+00E 0+20SA	1	74	13	30	.3	121	11	264	1.73	15	5	ND	5	73	1	2	2	11	3.42	.118	81	37	.25	142	.02	11	1.66	.01	.03	1	1
LL 57+00E 0+30SB	2	7	10	14	.3	17	3	77	1.12	13	5	ND	5	7	1	4	4	38	.13	.006	6	61	.29	14	.19	13	.72	.01	.03	1	1
LL 57+00E 0+40SB	1	13	4	8	.1	11	3	69	1.07	4	5	ND	3	7	1	2	2	20	.16	.023	8	24	.16	11	.09	21	.57	.01	.02	1	2
LL 57+00E 0+50SB	1	5	10	12	.5	10	2	43	.84	112	5	ND	4	6	2	2	3	34	.10	.006	5	29	.16	13	.17	16	.50	.01	.03	1	1
LL 57+00E 0+60SB	1	7	7	10	.4	8	2	39	.99	4	5	ND	4	5	1	2	3	26	.08	.006	7	28	.11	8	.10	6	.57	.01	.02	1	1
LL 57+00E 0+70SA	1	59	20	41	.6	44	4	24	1.28	6	16	ND	12	27	2	2	2	3	.29	.120	120	21	.03	147	.02	16	1.67	.01	.02	1	1

NORTHERN DYNASTY EXP. FILE # 87-3390

SAMPLE#	NO	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	AU#
	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	%	PPH	PPH	%	PPH	%	PPH	%	%	%	PPH	PPH
LL 57+00E 0+80SA P	1	4	3	44	.4	5	1	20	.17	2	5	ND	2	16	1	2	2	2	.35	.039	6	3	.03	40	.01	2	.38	.01	.01	1	1
STD C/AU-5	20	60	39	120	7.2	70	29	1053	4.00	39	10	0	37	50	16	10	24	50	.50	.009	39	59	.91	179	.09	30	1.07	.06	.12	13	49
LL 57+00E 0+90SA P	1	2	2	44	.1	4	1	23	.23	2	5	ND	1	11	1	3	2	1	.40	.028	2	2	.03	34	.01	2	.12	.01	.01	1	1
LL 57+00E 1+10SA P	1	11	2	44	.3	24	3	42	.27	2	5	ND	1	19	1	2	2	2	.68	.036	6	5	.06	82	.01	2	.27	.01	.01	1	1
LL 57+00E 1+20SB	3	15	15	35	.2	53	9	80	2.17	3	5	ND	1	1	1	2	3	98	.03	.006	2	263	1.49	8	.19	5	1.40	.01	.01	1	1
LL 57+00E 1+30SB	1	61	18	32	.2	87	13	73	3.24	7	5	ND	2	2	1	2	2	73	.07	.011	2	271	.59	16	.17	4	1.98	.01	.02	1	5
LL 57+00E 1+40SB	1	20	16	27	.1	21	4	70	2.44	5	5	ND	6	5	1	2	2	47	.00	.016	8	75	.35	19	.12	2	2.31	.01	.03	1	1
LL 57+00E 1+50SB	2	29	23	40	.1	62	11	96	5.00	15	5	ND	1	2	1	2	3	139	.00	.012	2	280	.62	13	.31	2	1.84	.01	.03	3	42
LL 57+00E 1+60SB	1	62	26	62	.3	77	12	154	5.93	4	5	ND	2	2	1	2	2	117	.09	.013	3	383	.93	24	.27	2	3.02	.01	.03	1	21
LL 57+00E 1+70SB	1	13	16	40	.1	34	7	85	3.55	4	5	ND	1	1	1	2	2	99	.02	.011	2	249	1.26	8	.12	2	1.52	.01	.02	1	20
LL 57+00E 1+80SB	2	45	19	57	.2	59	10	71	5.66	8	5	ND	3	3	1	2	2	140	.06	.015	5	330	.97	35	.23	2	3.06	.01	.05	1	4
LL 57+00E 1+90SA	1	56	17	28	.3	61	5	26	1.00	5	5	ND	3	21	1	2	2	0	.62	.065	25	42	.09	103	.03	2	.94	.01	.03	1	1
LL 57+00E 2+00SA P	1	22	3	26	.5	20	3	11	.57	2	5	ND	1	18	1	3	2	2	.49	.089	8	20	.06	74	.01	9	.54	.01	.01	1	1
LL 57+00E 2+10SB	1	32	13	48	.1	183	13	105	3.25	334	5	ND	1	6	1	2	5	102	.15	.014	4	478	1.35	24	.19	2	2.94	.04	.02	1	1
LL 57+00E 2+20SB	1	60	31	84	.4	56	9	109	5.57	7	5	ND	2	1	1	2	2	88	.02	.014	2	546	1.76	6	.11	2	2.49	.01	.01	2	20
LL 57+00E 2+30SB	1	14	28	75	.1	59	9	113	2.50	12	5	ND	2	2	1	2	2	94	.02	.008	4	440	1.89	12	.13	4	1.95	.01	.01	1	14
LL 57+00E 2+40SB	1	41	48	85	.5	35	7	117	5.00	6	5	ND	1	1	1	2	2	77	.03	.016	2	413	1.35	9	.15	2	1.52	.01	.01	1	32
LL 57+00E 2+50SB	1	77	18	28	.1	38	10	165	3.44	82	5	ND	2	2	1	2	2	116	.13	.012	6	69	.17	36	.08	4	1.20	.01	.02	1	2
LL 57+00E 2+60SB	1	122	12	55	.1	277	42	317	6.86	14	5	ND	4	3	1	2	2	118	.31	.022	9	272	.61	56	.23	3	5.72	.02	.05	8	1
LL 57+00E 2+70SB	1	23	7	19	.3	22	3	36	.54	4	5	ND	2	15	1	4	2	12	.79	.030	10	17	.10	61	.02	2	.44	.01	.03	1	1
LL 57+00E 2+80SB P	1	16	8	64	.5	42	6	47	.59	12	5	ND	2	32	1	3	2	3	1.20	.067	13	6	.11	85	.01	5	.43	.01	.03	1	1
LL 57+00E 2+90SB	1	71	21	44	.4	83	10	65	.69	10	5	ND	3	37	1	2	2	11	1.19	.041	24	40	.13	162	.04	2	.60	.01	.05	3	1
LL 57+00E 3+00SB	1	32	20	66	.1	125	15	156	4.09	57	5	ND	3	5	1	2	2	127	.12	.011	5	271	1.13	19	.25	2	2.01	.01	.04	1	1
LL 58+00E 3+00NB	2	36	16	81	.3	43	16	133	4.31	2	5	ND	3	3	1	2	2	195	.15	.013	5	85	.73	31	.28	2	2.73	.02	.03	1	1
LL 58+00E 2+90NA P	1	5	10	35	.1	6	1	31	.16	5	5	ND	1	13	1	3	2	2	.23	.054	3	2	.07	54	.01	2	.19	.01	.09	1	1
LL 58+00E 2+80NB	1	27	9	33	.3	14	4	77	1.69	3	5	ND	3	3	1	2	2	83	.13	.014	5	33	.19	29	.15	2	.91	.01	.02	1	1
LL 58+00E 2+70NB	1	5	6	10	.1	5	2	41	.95	2	5	ND	2	4	1	2	2	36	.07	.005	3	17	.13	9	.15	2	.38	.01	.02	1	1
LL 58+00E 2+60NB	1	19	7	102	.1	17	5	103	2.89	4	5	ND	2	3	1	2	2	92	.12	.020	3	33	.23	15	.18	2	.77	.01	.02	1	3
LL 58+00E 2+50NB	1	8	4	15	.1	9	3	69	1.59	8	5	ND	2	4	1	2	2	60	.09	.014	3	27	.21	9	.20	2	.55	.01	.02	1	2
LL 58+00E 2+40NB	1	30	17	23	.1	16	4	81	2.75	7	5	ND	5	5	1	2	2	54	.13	.049	7	55	.27	20	.15	2	2.53	.01	.03	1	1
LL 58+00E 2+30NB	1	22	15	21	.2	13	6	72	2.80	7	5	ND	5	5	1	2	2	55	.10	.054	6	48	.23	20	.16	2	1.66	.01	.02	1	1
LL 58+00E 2+20NB	1	4	4	10	.2	6	1	51	.77	2	5	ND	2	3	1	2	2	19	.09	.009	4	15	.13	10	.11	4	.35	.01	.03	1	1
LL 58+00E 2+10NB	1	20	15	18	.3	16	4	77	2.59	5	5	ND	3	5	1	2	2	48	.09	.022	5	33	.26	21	.17	2	1.22	.01	.04	1	1
LL 58+00E 2+00NB	1	21	9	17	.2	16	3	80	1.59	12	5	ND	3	6	1	2	2	39	.11	.007	4	26	.25	13	.15	12	.66	.02	.04	3	75
LL 58+00E 1+90NA P	1	50	14	41	.2	49	4	110	.67	16	5	ND	2	22	1	2	2	12	.69	.053	4	8	.13	59	.01	4	.33	.01	.06	1	1
LL 58+00E 1+00NA P	1	17	5	70	.3	17	3	17	.26	3	5	ND	2	25	1	2	2	5	.78	.046	13	7	.06	56	.01	15	.54	.01	.02	1	1
LL 58+00E 0+80NA	1	8	11	26	.4	18	4	61	1.23	5	5	ND	1	2	1	2	2	31	.04	.031	3	47	.29	22	.04	3	.77	.01	.04	1	5

SAMPLE#	MO 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	SB PPH	BI PPH	V PPH	CA %	P %	LA PPH	CR PPH	MG %	BA PPH	TI %	B PPH	AL %	MA %	K %	N PPH	AUS PPH
LL 58+00E 0+70NB	1	6	7	3	.1	2	1	18	.85	4	5	ND	5	3	1	2	2	20	.04	.007	6	13	.05	7	.10	2	.89	.01	.01	1	1
LL 58+00E 0+60NA	1	17	12	27	.1	24	6	132	1.29	5	5	ND	1	4	1	2	2	58	.07	.018	2	65	.52	25	.11	2	1.01	.02	.04	1	1
LL 58+00E 0+50NB	1	10	16	31	.1	12	4	142	1.79	15	5	ND	6	5	1	2	2	71	.10	.009	5	57	.39	20	.41	6	.97	.01	.10	1	1
LL 58+00E 0+40NB	1	45	7	12	1.0	5	2	60	5.87	6	5	ND	3	3	1	2	4	26	.04	.017	5	35	.12	3	.11	2	.29	.01	.02	1	1
LL 58+00E 0+30NB	2	26	19	94	.4	58	8	326	8.22	12	5	ND	3	1	1	3	2	106	.04	.019	3	209	.30	9	.24	2	.96	.01	.03	1	1
STD C/AU-S	19	61	39	127	7.5	70	28	1118	4.06	41	20	8	39	52	18	17	19	62	.46	.092	42	72	.91	172	.10	38	1.76	.06	.14	13	50
LL 58+00E 0+20NB	1	11	8	10	.1	11	2	34	2.78	15	5	ND	3	4	1	3	2	61	.05	.009	4	48	.08	6	.21	2	.54	.01	.03	1	3
LL 58+00E 0+00KLB	1	23	24	35	.1	7	10	82	3.57	8	14	ND	3	4	1	2	2	124	.08	.012	10	10	.33	76	.33	2	2.13	.01	.11	1	1
LL 58+00E 0+10SB	1	16	11	12	.1	10	3	50	3.01	8	5	ND	5	3	1	2	2	54	.06	.009	6	62	.15	9	.18	2	1.82	.01	.03	1	1
LL 58+00E 0+20SA P	1	17	7	33	.1	22	2	21	.28	2	5	ND	1	28	1	2	2	2	.88	.050	16	7	.06	77	.01	2	.32	.01	.03	1	2
LL 58+00E 0+30SA P	1	15	9	27	.2	12	1	11	.34	2	5	ND	2	18	1	2	2	3	.51	.047	12	11	.04	47	.02	2	.35	.01	.02	2	1
LL 58+00E 0+40SA	1	55	9	10	.1	17	2	34	.92	5	5	ND	1	26	1	2	2	5	1.73	.101	20	34	.07	61	.01	2	.82	.01	.02	1	1
LL 58+00E 0+50SB	1	55	12	43	.1	81	18	170	6.38	7	5	ND	1	3	1	2	2	279	.11	.023	3	287	.80	23	.08	2	2.77	.01	.07	1	1
LL 58+00E 0+60SB	1	21	14	20	.1	29	6	46	2.97	8	5	ND	1	3	1	2	2	222	.10	.009	2	150	.53	16	.23	2	1.63	.03	.03	1	1
LL 58+00E 0+70SA	1	59	15	11	.1	19	2	10	.63	3	5	ND	1	12	1	2	2	7	.18	.042	19	44	.06	62	.02	2	.69	.01	.01	1	1
LL 58+00E 0+90SB	1	12	10	17	.1	19	3	95	1.66	27	5	ND	2	1	1	2	2	81	.07	.009	2	126	.30	21	.16	3	.70	.01	.03	1	5
LL 58+00E 1+00SB	1	71	9	67	.1	140	20	302	6.93	33	5	ND	8	6	1	2	2	147	.10	.019	12	402	1.20	41	.47	5	3.82	.01	.10	1	1
LL 59+00E 1+20NA	1	9	12	16	.1	10	2	54	.75	4	5	ND	4	9	1	2	4	17	.17	.010	14	24	.19	20	.11	2	.78	.01	.03	1	1
LL 59+00E 1+10NA P	1	14	11	40	.2	8	3	89	.48	4	5	ND	2	18	1	2	2	8	.69	.039	17	10	.12	28	.02	2	.49	.01	.04	1	1
LL 59+00E 1+00NA	1	15	7	36	.1	22	6	181	1.58	4	5	ND	11	11	1	2	2	26	.33	.027	27	52	.46	37	.15	2	.96	.01	.12	1	1
LL 59+00E 0+90NA	1	26	13	22	.1	18	3	45	1.09	4	5	ND	3	30	1	2	2	12	1.18	.048	38	34	.21	67	.03	2	1.22	.01	.09	1	1
LL 59+00E 0+80NA P	1	6	8	27	.2	3	1	26	.26	2	5	ND	1	11	1	2	2	2	.17	.044	8	5	.03	29	.01	3	.22	.01	.06	1	2
LL 59+00E 0+70NA P	1	10	4	40	.2	5	2	12	.22	2	5	ND	2	21	1	2	2	2	.59	.035	12	4	.05	57	.01	2	.24	.01	.02	1	1
LL 59+00E 0+60NA	1	39	17	27	.3	31	4	33	1.69	7	5	ND	4	26	1	2	2	13	.62	.066	59	26	.16	89	.05	4	1.44	.01	.08	1	1
LL 59+00E 0+50NA P	1	3	2	59	.1	3	1	14	.15	2	5	ND	1	15	1	2	2	1	.45	.023	4	2	.04	21	.01	2	.13	.01	.01	1	1
LL 59+00E 0+40N P	1	8	9	22	.3	6	1	21	.29	2	5	ND	2	14	1	3	2	3	.21	.034	10	6	.03	56	.02	2	.28	.01	.03	1	1
LL 59+00E 0+30NA P	1	25	12	44	.3	42	7	86	.41	3	5	ND	2	36	1	2	2	3	1.27	.037	43	5	.07	76	.01	4	.45	.01	.02	1	1
LL 59+00E 0+20NB	1	47	18	32	.4	57	20	427	1.36	7	5	ND	5	45	1	2	2	8	2.08	.078	74	13	.09	102	.01	3	1.46	.01	.03	1	1
LL 59+00E 0+10NB	1	4	6	6	.1	5	1	28	.88	2	5	ND	3	4	1	3	2	32	.05	.005	4	29	.04	10	.13	2	.27	.01	.01	1	1
LL 59+00E 0+10NA P	1	44	15	19	.2	43	14	303	1.63	7	5	ND	3	23	1	2	2	10	1.10	.054	48	12	.04	60	.02	4	1.53	.01	.02	1	1
LL 59+00E 0+00BLA P	1	28	21	26	.2	9	1	67	.65	3	5	ND	1	9	1	2	2	14	.14	.029	8	5	.05	63	.06	5	.42	.01	.06	1	1
LL 59+00E 0+10SA P	1	55	18	35	.1	17	2	26	.48	3	5	ND	1	9	1	3	2	7	.10	.025	10	8	.03	39	.02	2	.41	.01	.04	1	1
LL 59+00E 0+20SB	2	15	17	45	.2	11	4	84	2.72	47	5	ND	3	5	1	2	2	149	.06	.015	7	25	.35	28	.26	3	1.26	.01	.06	1	1
LL 59+00E 0+30SB	1	13	9	10	.1	13	2	48	.95	5	5	ND	4	4	1	2	2	19	.06	.006	7	19	.14	9	.10	3	.73	.01	.02	1	1
LL 59+00E 0+40SA P	1	23	11	55	.2	8	2	39	.43	3	5	ND	1	19	1	3	2	3	.31	.061	9	6	.05	60	.01	4	.40	.01	.06	1	1
LL 59+00E 0+50SB	1	37	24	37	.1	17	6	124	3.59	10	5	ND	9	7	1	2	2	101	.10	.020	14	69	.42	21	.37	2	2.21	.01	.07	1	1
LL 59+00E 0+60SA P	1	9	18	39	.1	6	1	35	.36	2	5	ND	1	8	1	2	2	6	.18	.056	3	12	.05	27	.01	2	.39	.02	.03	1	1

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	AU1	PPB	
	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	PPM	PPM
LL 59+00E 0+70SA P	1	5	18	40	.3	10	2	39	.13	3	5	ND	1	24	1	2	2	1	.72	.031	2	4	.09	46	.01	3	.15	.01	.03	1	1		
LL 59+00E 0+90SA P	1	28	15	56	.3	28	5	14	.72	14	5	ND	1	8	1	2	2	7	.13	.082	6	33	.05	42	.01	3	1.27	.01	.03	1	2		
LL 60+00E 0+30NB	1	10	16	21	.1	17	4	96	1.50	9	5	ND	6	7	1	2	2	29	.12	.009	8	21	.26	20	.13	4	.84	.01	.06	1	1		
LL 60+00E 0+20NA P	1	18	13	44	.5	15	9	550	.90	7	5	ND	5	42	1	2	2	6	2.55	.064	40	10	.18	86	.02	7	.78	.01	.04	1	1		
LL 60+00E 0+10NA	1	21	18	47	.3	16	19	1040	1.97	10	5	ND	9	18	1	2	2	24	.52	.048	34	30	.39	64	.07	8	1.28	.01	.13	1	1		
LL 60+00E 0+00BLE	2	18	20	21	.1	5	3	60	3.16	11	5	ND	2	2	1	2	2	92	.06	.014	4	4	.15	24	.22	2	.79	.01	.11	2	1		
LL 60+00E 0+10SB	2	14	28	35	.1	5	4	64	4.73	15	5	ND	3	2	1	2	2	157	.07	.011	3	7	.18	21	.23	2	1.16	.03	.06	1	1		
LL 60+00E 0+20SA P	1	30	11	4	.1	6	1	3	.16	6	5	ND	1	5	1	2	2	4	.11	.042	9	8	.01	25	.01	5	.67	.01	.01	1	1		
LL 60+00E 0+30SA	1	31	13	5	.1	4	1	20	.26	7	5	ND	2	4	1	2	2	8	.14	.046	17	12	.01	26	.02	3	.76	.01	.01	1	1		
LL 60+00E 0+40SA P	1	15	6	31	.2	7	1	20	.38	6	5	ND	2	10	1	2	2	5	.16	.062	17	10	.02	42	.01	2	.51	.01	.01	1	1		
LL 60+00E 0+50SA P	1	12	3	44	.1	8	2	22	1.31	8	5	ND	4	13	1	2	2	11	.67	.047	16	9	.02	50	.01	4	.29	.01	.01	1	1		
LL 60+00E 0+60SA P	1	5	2	29	.1	5	1	13	.29	2	5	ND	1	10	1	2	2	1	.28	.027	2	4	.03	33	.01	9	.14	.01	.01	1	1		
LL 60+00E 0+70SA P	1	4	4	43	.1	5	1	15	.27	2	5	ND	1	9	1	2	2	1	.21	.027	2	3	.03	30	.01	17	.12	.01	.01	1	2		
LL 60+00E 0+80SA P	1	4	9	33	.1	6	1	23	.39	2	5	ND	1	11	1	2	2	1	.29	.035	2	3	.03	41	.01	10	.13	.01	.01	1	1		
LL 60+00E 0+90SB	1	7	6	8	.1	3	1	31	.99	4	5	ND	3	3	1	2	3	50	.05	.008	4	13	.08	11	.13	4	.40	.01	.03	1	1		
LL 60+00E 1+20SB	1	81	18	54	.3	94	16	70	4.53	30	5	ND	1	1	1	2	2	254	.02	.016	2	532	1.49	13	.17	2	1.96	.01	.03	1	1		
LL 60+00E 1+30SB	1	15	12	34	.1	44	8	61	2.59	11	5	ND	1	1	1	2	2	96	.01	.005	2	308	1.34	6	.12	2	1.30	.01	.01	1	1		
LL 60+00E 1+40SB	1	13	12	34	.1	15	4	115	3.46	10	5	ND	7	4	1	2	2	87	.04	.020	4	41	.37	20	.29	3	1.20	.01	.07	1	1		
LL 60+00E 1+50SB	1	19	22	49	.2	17	6	134	4.78	14	5	ND	8	4	1	2	2	86	.04	.041	4	42	.33	23	.25	3	1.73	.01	.08	1	1		
LL 60+00E 1+60SB	1	20	13	18	.1	15	4	75	1.47	9	5	ND	5	5	1	2	2	37	.09	.015	9	28	.24	15	.11	3	1.03	.01	.03	1	1		
LL 60+00E 1+70SB	3	18	18	59	.1	24	8	198	4.29	15	5	ND	5	5	1	2	2	117	.06	.019	4	59	.63	28	.32	2	1.68	.01	.13	1	1		
LL 60+00E 1+80SB	2	96	19	136	.7	190	38	229	7.87	15	5	ND	3	4	1	4	2	171	.08	.011	4	463	1.61	43	.33	2	6.18	.01	.08	1	25		
LL 60+00E 1+90SA P	1	47	28	31	.2	22	3	40	.93	7	5	ND	1	14	1	2	2	14	.14	.041	12	15	.08	59	.03	2	.72	.01	.06	1	1		
LL 60+00E 2+00SB	1	12	15	39	.3	47	8	66	2.91	21	5	ND	1	1	1	2	2	134	.02	.013	2	240	1.26	9	.17	2	1.64	.01	.02	1	1		
LL 60+00E 2+10SA	1	113	19	19	1.6	106	66	1153	2.98	63	5	ND	7	19	1	2	2	19	.55	.118	103	96	.06	106	.01	2	2.14	.01	.02	1	3		
LL 60+00E 2+20SA P	1	37	7	16	.1	94	9	17	.40	7	5	ND	3	46	1	2	2	3	1.36	.046	33	10	.11	130	.01	3	.44	.01	.05	1	1		
LL 60+00E 2+30SA P	1	43	12	20	.3	167	10	39	.60	11	5	ND	4	57	1	2	2	3	2.17	.071	45	16	.13	159	.01	5	.64	.01	.03	1	1		
LL 60+00E 2+40SA P	1	11	8	17	.3	28	2	9	.27	8	5	ND	2	17	1	2	2	1	.54	.030	9	8	.04	34	.01	13	.31	.01	.01	1	1		
LL 60+00E 2+50SB	1	108	15	73	.1	141	25	174	4.13	41	5	ND	6	4	1	2	2	152	.12	.016	19	98	.48	45	.11	2	3.22	.01	.03	1	5		
LL 60+00E 2+60SB	1	30	13	26	.1	72	15	249	3.08	443	5	ND	2	2	1	2	2	74	.10	.011	3	195	.25	29	.10	2	.79	.01	.02	4	88		
LL 60+00E 2+70SB	1	56	12	40	.1	43	15	138	3.61	15	5	ND	2	2	1	2	2	168	.10	.009	4	66	.43	69	.18	2	1.81	.01	.05	1	1		
LL 60+00E 2+80SB	1	16	9	23	.1	9	3	75	1.81	8	5	ND	4	4	1	2	2	45	.06	.012	5	20	.22	13	.15	2	.69	.01	.04	1	1		
LL 60+00E 2+90SB	1	24	11	23	.1	14	4	94	2.21	8	5	ND	4	4	1	2	2	49	.09	.015	7	24	.28	14	.13	6	.93	.01	.04	1	1		
LL 60+00E 3+00SB	1	3	7	5	.1	2	1	23	.36	2	5	ND	2	3	1	2	2	14	.03	.006	5	9	.05	11	.08	3	.26	.01	.02	1	1		
LL 61+00E 0+80NB	1	36	17	56	.2	1161	94	671	9.42	1896	5	ND	1	2	1	2	2	48	.11	.023	2	570	.35	20	.12	5	.85	.01	.02	1	1		
LL 61+00E 0+70NB	1	5	6	7	.1	10	1	28	1.49	21	5	ND	1	3	1	2	2	48	.04	.003	4	24	.07	11	.09	2	.56	.01	.01	1	1		
STD C/AU-S	18	61	37	131	7.3	69	28	1058	4.16	38	21	7	40	52	18	17	22	60	.49	.090	39	61	.88	178	.09	36	1.80	.07	.13	13	50		

NORTHERN DYNASTY EXP. FILE # 87-3390

SAMPLE#	NO	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	AU1
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
LL 61+00E 0+60NA P	1	34	15	56	.1	16	3	80	1.39	13	5	ND	2	18	1	2	2	15	.54	.090	37	32	.15	69	.02	4	1.82	.01	.08	1	3
LL 61+00E 0+50NA	1	49	13	24	.3	23	5	77	1.32	10	5	ND	1	12	2	2	2	36	.54	.068	25	114	.48	84	.04	4	1.79	.01	.14	1	1
LL 61+00E 0+40NA P	1	21	16	61	.1	10	2	33	.84	7	5	ND	1	23	1	2	2	5	.52	.080	19	11	.07	62	.01	2	.76	.01	.04	1	1
LL 61+00E 0+30NA	1	18	11	5	.1	11	3	35	.46	5	5	ND	1	6	1	2	2	12	.59	.038	4	60	.14	25	.01	2	.86	.01	.01	1	1
LL 61+00E 0+20NB	1	90	19	63	.1	68	18	248	3.82	56	5	ND	2	4	2	2	2	151	.25	.014	3	175	.40	25	.07	2	4.22	.03	.04	1	3
LL 61+00E 0+10NA1	1	23	8	24	.3	15	1	18	.55	5	5	ND	1	12	2	2	2	4	.22	.052	12	10	.02	55	.01	2	.52	.01	.02	1	5
LL 61+00E 0+10NA2 P	1	12	7	30	.4	9	1	22	.38	6	5	ND	1	13	2	2	2	2	.28	.080	9	6	.03	48	.01	3	.61	.01	.02	1	1
LL 61+00E 0+00BLA	1	22	7	17	.1	15	1	23	.66	4	5	ND	1	12	1	2	2	4	.24	.054	10	11	.03	60	.01	2	.58	.01	.01	1	1
LL 61+00E 0+20SA	1	14	16	25	.3	5	2	26	.76	3	5	ND	2	10	2	2	2	10	.10	.041	16	7	.05	45	.04	5	.92	.01	.06	1	1
LL 61+00E 0+30A P	1	8	7	31	.2	7	1	25	.38	4	5	ND	1	12	2	2	2	2	.23	.063	6	9	.02	60	.02	2	.58	.01	.01	1	1
LL 61+00E 0+40SA P	1	9	4	36	.2	7	1	24	.43	3	5	ND	1	11	1	2	2	2	.26	.058	6	7	.03	50	.01	2	.40	.01	.02	1	1
LL 61+00E 0+50SA P	1	8	4	61	.1	11	1	40	.76	2	5	ND	1	13	1	2	2	1	.44	.055	2	5	.04	73	.01	2	.16	.01	.01	1	1
LL 61+00E 0+60SA P	1	12	5	40	.2	17	2	64	.24	3	5	ND	1	16	1	2	2	3	.58	.034	7	8	.04	102	.01	7	.31	.01	.01	1	2
LL 61+00E 0+70SA P	1	41	6	21	.1	13	1	23	.43	8	5	ND	1	8	1	2	2	11	.24	.064	8	43	.03	74	.01	2	.76	.01	.01	1	1
LL 61+00E 0+80SA	1	53	12	19	.1	42	5	212	2.10	16	5	ND	1	22	1	3	2	24	1.75	.054	6	91	.06	352	.01	2	.96	.01	.02	1	1
LL 61+00E 1+00SA P	1	12	9	51	.3	13	2	18	.28	5	5	ND	1	27	2	2	2	2	.40	.093	14	8	.07	63	.01	17	.83	.01	.02	1	1
LL 62+00E 0+90NB	1	382	19	39	.3	130	36	230	6.07	8	5	ND	16	25	1	2	2	114	1.08	.014	50	99	.81	56	.23	2	11.07	.08	.07	1	2
LL 62+00E 0+80NB	1	22	17	38	.1	24	7	138	2.44	9	5	ND	7	7	2	2	2	46	.11	.010	14	34	.46	73	.15	6	2.25	.01	.07	1	2
LL 62+00E 0+70NB	1	16	11	24	.1	14	4	99	1.49	5	5	ND	2	4	1	2	2	30	.10	.017	6	18	.29	21	.10	2	.93	.01	.03	1	1
LL 62+00E 0+60NB P	1	20	10	39	.1	8	2	21	.84	7	5	ND	1	11	3	2	2	3	.14	.100	15	13	.03	38	.01	3	1.08	.01	.07	1	1
LL 62+00E 0+50NA	1	28	19	42	.1	14	4	104	2.15	10	5	ND	4	8	1	2	2	59	.11	.030	13	59	.29	35	.10	2	1.57	.01	.04	1	1
LL 62+00E 0+40NA	1	51	15	33	.4	17	4	112	1.43	8	5	ND	1	11	3	2	2	34	.16	.041	18	91	.45	90	.05	5	1.45	.01	.17	1	1
LL 62+00E 0+30NA	1	13	12	24	.2	7	3	88	1.69	6	5	ND	3	4	1	2	2	47	.06	.009	6	20	.26	12	.18	2	1.03	.01	.03	1	1
LL 62+00E 0+20NB	1	13	17	11	.1	5	4	120	1.76	4	5	ND	1	1	1	2	2	139	.13	.011	2	5	.21	14	.16	3	.77	.02	.03	1	1
LL 62+00E 0+10NB	1	10	18	39	.1	7	3	90	2.63	6	5	ND	3	5	2	2	2	69	.06	.020	4	19	.24	26	.23	14	1.01	.01	.06	1	1
LL 62+00E 0+00BLB	1	10	17	16	.1	4	2	31	1.99	39	5	ND	6	6	3	3	2	48	.06	.033	10	53	.09	17	.11	28	1.08	.01	.03	1	1
LL 62+00E 0+10SB	1	37	17	53	.1	39	12	162	4.64	80	5	ND	2	3	1	2	2	198	.09	.019	4	277	.72	59	.19	6	4.65	.01	.15	1	1
LL 62+00E 0+20SB	1	24	27	42	.1	12	5	130	2.61	2	5	ND	8	4	1	2	2	40	.06	.019	13	29	.39	31	.15	19	4.15	.01	.07	1	1
LL 62+00E 0+30SB	1	22	15	26	.1	13	5	93	2.00	8	5	ND	4	4	1	2	2	46	.07	.012	14	25	.34	17	.15	2	1.39	.01	.03	1	1
LL 62+00E 0+40SB	1	12	23	26	.1	4	3	62	2.86	36	5	ND	4	3	2	2	2	185	.06	.009	7	17	.17	26	.21	2	1.19	.01	.04	1	1
LL 62+00E 0+50SB	1	19	12	36	.1	13	8	75	3.58	21	5	ND	1	11	2	2	2	155	.17	.011	2	71	.86	23	.29	2	1.91	.05	.05	1	1
LL 62+00E 0+60SB	1	21	21	35	.1	4	3	94	4.25	34	5	ND	2	2	2	2	2	130	.05	.011	4	6	.30	52	.24	2	1.31	.01	.12	1	1
LL 62+00E 0+70SA	1	1	5	2	.1	1	1	12	.17	2	5	ND	1	2	2	2	2	8	.02	.005	3	5	.02	7	.04	5	.23	.01	.02	1	1
LL 62+00E 0+80SB	1	15	12	13	.1	12	3	53	2.65	12	5	ND	1	1	2	2	2	126	.10	.014	2	44	.17	10	.06	2	1.09	.01	.02	1	1
LL 62+00E 0+90SA P	1	7	3	33	.1	4	1	36	.33	3	5	ND	1	8	2	2	2	3	.21	.041	3	6	.03	33	.01	10	.22	.01	.03	1	1
LL 62+00E 1+00SA P	1	9	6	30	.2	4	1	37	.41	2	5	ND	1	8	3	2	2	3	.17	.041	7	6	.02	36	.02	2	.34	.01	.03	1	1
STD C/AU-S	18	60	42	130	7.0	68	28	1039	3.79	40	23	8	40	47	18	17	20	55	.47	.087	37	59	.88	169	.06	37	1.82	.06	.12	13	48

GEOCHEMICAL ICP ANALYSIS

.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 NH FE CA P LA CR NG BA TI B N AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-5 SOIL P6 ROCK AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 11 1987

DATE REPORT MAILED: Aug 19/87

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

NORTHERN DYNASTY PROJECT-ARSENOL LAKE File # B7-3179 Page 1

SAMPLE#	NO	CU	PB	ZN	AG	NI	CO	NH	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	NG	BA	TI	B	AL	NA	K	N	AU
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
LL50+00E 0+00A	3	83	24	81	1.2	94	21	9734	6.71	119	5	ND	18	47	1	2	3	46	2.72	.119	216	50	.22	131	.04	6	2.42	.02	.10	1	1
LL50+00E 0+10SA	5	115	28	86	1.4	85	59	19187	6.20	75	5	ND	16	50	2	2	2	49	2.52	.179	198	42	.14	236	.03	6	2.41	.02	.03	2	2
LL50+00E 0+20SA	1	183	18	82	.5	86	11	706	2.59	28	5	ND	6	45	1	2	2	41	2.27	.085	90	55	.37	144	.03	3	1.60	.02	.12	1	1
LL50+00E 0+20SB	1	87	19	66	.2	129	19	303	3.28	39	5	ND	6	11	1	4	.2	55	.40	.021	16	125	.78	56	.14	2	1.77	.03	.14	1	40
LL50+00E 0+30SA	5	165	22	67	2.0	88	45	9109	6.08	124	5	ND	17	34	1	2	2	54	1.84	.190	254	55	.18	205	.03	4	2.82	.02	.07	1	2
LL50+00E 0+40SA	1	11	7	49	.1	12	1	2	.29	2	5	ND	2	40	1	2	2	3	2.24	.037	16	1	.09	59	.01	12	.47	.02	.01	1	2
LL50+00E 0+50SA	1	193	16	36	1.0	56	2	139	1.15	12	5	ND	10	39	1	2	3	9	2.39	.139	217	25	.07	132	.02	4	1.99	.02	.02	1	7
LL50+00E 0+60SA	1	132	13	28	.5	66	3	289	2.75	12	5	ND	8	55	1	3	2	13	3.44	.103	118	16	.09	147	.02	10	1.38	.01	.01	1	2
LL50+00E 0+70SA	1	79	8	42	.4	46	2	195	1.35	6	5	ND	4	52	1	2	2	7	3.22	.079	62	11	.08	151	.01	12	.92	.01	.02	2	1
LL50+00E 0+80SA	1	57	10	51	.5	53	4	139	.60	3	5	ND	4	60	1	2	2	7	3.52	.078	48	9	.08	167	.02	6	.82	.01	.01	1	1
LL50+00E 0+90SA	1	76	32	107	.1	182	35	277	4.56	17	5	ND	2	11	1	4	2	107	.43	.013	6	494	1.21	92	.29	5	2.42	.05	.23	1	2
LL50+00E 1+00SA	1	27	33	53	.1	12	6	166	2.42	11	5	ND	5	8	1	2	2	77	.16	.021	14	11	.47	89	.27	2	1.30	.02	.48	1	1
LL50+00E 1+10SA	1	153	19	36	1.2	124	17	1035	1.87	7	5	ND	8	35	1	2	2	24	1.33	.089	111	60	.16	191	.03	3	1.45	.02	.06	1	1
LL50+00E 1+20SA	1	61	8	47	.7	61	6	1238	.87	5	5	ND	3	73	1	2	2	12	4.86	.098	53	19	.12	204	.01	12	1.14	.01	.02	2	2
LL50+00E 1+30SA	1	47	8	41	.5	29	3	376	2.23	11	5	ND	2	41	1	2	2	12	3.06	.098	48	11	.11	119	.01	8	.70	.01	.01	2	2
LL50+00E 1+40SA	2	87	9	35	.3	41	7	1634	1.24	15	5	ND	4	48	1	2	2	14	2.96	.143	60	17	.08	179	.01	6	1.10	.01	.02	2	3
LL50+00E 1+50SA	2	49	4	36	.1	32	3	520	.67	7	5	ND	3	62	1	2	3	14	5.36	.054	20	14	.12	139	.01	16	.63	.01	.01	2	1
LL50+00E 1+60SA	1	54	6	44	.1	35	2	383	.79	5	5	ND	2	60	1	2	2	12	5.75	.085	34	13	.14	143	.01	9	.76	.01	.01	3	2
LL50+00E 1+70SA	2	34	6	62	.2	26	2	446	.65	7	5	ND	2	61	1	2	2	6	5.46	.066	25	9	.14	138	.01	9	.55	.01	.01	1	1
LL50+00E 2+30SA	1	80	15	26	.5	32	14	3525	1.59	8	5	ND	4	44	1	2	2	16	4.62	.098	73	19	.11	192	.02	5	1.37	.01	.03	1	1
LL50+00E 2+40SB	1	14	19	25	.1	19	4	104	1.41	18	5	ND	6	8	1	2	3	30	.13	.008	11	34	.30	26	.12	3	1.30	.01	.04	1	1
LL50+00E 2+50SB	1	23	24	38	.1	27	6	141	2.77	33	5	ND	7	7	1	2	2	50	.11	.014	10	57	.44	22	.16	6	1.82	.02	.04	1	1
LL50+00E 2+60SB	1	18	24	33	.1	31	5	101	2.58	17	5	ND	6	5	1	2	2	66	.09	.009	8	74	.37	21	.20	2	1.45	.02	.04	1	1
LL50+00E 2+70SB	1	67	23	45	.1	85	13	165	3.17	21	5	ND	7	6	1	2	2	63	.11	.016	17	165	.65	31	.16	2	2.80	.02	.04	1	1
LL50+00E 2+80SB	1	33	17	58	.1	37	9	153	5.27	17	5	ND	9	4	1	2	2	124	.07	.020	9	153	.69	32	.25	5	3.55	.02	.04	1	1
LL50+00E 2+90SB	1	23	26	53	.1	25	7	107	4.90	34	5	ND	8	5	1	2	2	111	.08	.021	11	105	.40	46	.19	2	3.28	.02	.05	1	2
LL50+00E 3+00SB	1	28	14	33	.1	18	10	61	3.46	23	5	ND	2	2	1	2	2	160	.10	.009	4	25	.51	22	.17	2	1.80	.02	.03	1	1
LL50+00E 3+10SB	1	58	22	62	.1	102	17	198	3.88	51	5	ND	5	6	1	2	2	106	.17	.015	11	203	.87	30	.22	2	2.17	.02	.04	1	20
LL50+00E 3+20SB	1	84	19	60	.2	103	22	211	3.65	33	5	ND	7	8	1	2	2	94	.29	.013	15	94	.68	84	.21	2	2.28	.02	.08	1	9
LL50+00E 3+30SB	1	107	23	62	.5	231	31	438	5.23	80	5	ND	17	8	1	2	2	71	.40	.028	57	166	.33	68	.15	7	4.91	.04	.06	1	2
LL50+00E 3+40SB	1	127	21	43	.3	9	4	88	19.60	16	9	2	10	1	1	2	2	64	.02	.031	4	36	.16	10	.28	5	.59	.01	.06	2	8
LL50+00E 3+50SB	1	36	7	49	.1	92	17	294	4.92	34	5	ND	6	4	1	4	2	79	.23	.013	6	172	1.25	11	.17	2	5.00	.06	.02	1	2
LL50+00E 3+60SB	1	19	9	19	.1	29	4	70	1.52	22	5	ND	5	4	1	2	3	43	.10	.008	8	57	.21	10	.09	2	.82	.01	.02	3	3
LL50+00E 3+70SB	1	46	3	27	.2	28	7	699	1.64	37	5	ND	1	38	1	2	2	13	3.60	.087	15	10	.04	161	.01	7	.78	.01	.01	2	1
LL50+00E 3+80SB	1	30	5	54	.1	16	6	768	2.44	95	5	ND	1	43	1	2	2	6	3.44	.105	10	11	.05	200	.01	7	.55	.01	.01	1	1
LL50+00E 3+90SB	1	42	3	31	.1	17	2	373	.70	6	5	ND	1	58	1	2	2	6	5.71	.077	13	16	.09	155	.01	9	.61	.01	.01	2	1
STD C/AU-S	19	61	41	135	7.4	72	29	1016	3.91	38	21	8	38	52	19	17	23	59	.49	.094	38	60	.86	180	.09	39	1.80	.08	.14	12	52

SAMPLE#	NO	CU	PD	ZH	AG	HT	CO	HM	FE	AS	U	AU	TH	SR	CD	GD	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	M	AU
	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	%	PPH	PPH	%	PPH	%	%	%	%	%	PPH	PPH
LL50+00E 4+20SA	1	129	7	52	.3	38	6	722	.71	7	5	ND	1	60	2	2	2	7	4.60	.071	9	19	.04	203	.01	8	.51	.01	.01	1	9
LL50+00E 4+30SA	1	31	14	45	.1	33	8	164	1.94	12	5	ND	2	8	1	2	2	41	.30	.009	6	80	.44	44	.13	2	1.12	.02	.03	1	2
LL50+00E 4+40SB	1	90	18	47	.1	85	14	234	2.93	24	5	ND	3	10	1	2	2	48	.33	.010	9	82	.66	70	.19	3	1.97	.03	.04	1	1
LL50+00E 4+50SB	1	184	57	103	.1	161	33	342	4.21	29	5	ND	2	13	1	2	2	75	.46	.013	6	284	.72	149	.20	2	2.58	.03	.04	1	1
LL50+00E 4+60SB	1	96	56	99	.1	90	33	1932	4.12	26	5	ND	2	16	1	2	2	52	.80	.015	7	105	.32	150	.11	5	1.97	.03	.03	1	1
LL50+00E 4+70SB	1	62	17	57	.1	22	11	137	3.93	63	5	ND	1	3	1	2	2	120	.13	.008	3	83	.13	40	.09	2	1.02	.02	.05	1	3
LL50+00E 4+80SB	1	256	13	40	.1	192	43	663	4.41	42	5	ND	6	7	1	2	2	122	.35	.016	23	92	.86	89	.15	2	2.53	.02	.02	1	2
LL50+00E 4+90SB	1	217	21	79	.5	550	30	1075	4.64	72	5	ND	10	17	1	2	2	58	.93	.029	30	199	.48	205	.19	3	3.57	.03	.05	1	1
LL50+00E 5+00SB	1	59	18	53	.1	102	13	127	2.88	40	5	ND	2	4	1	2	2	79	.18	.024	8	222	.69	38	.17	2	2.52	.02	.03	1	3
LL50+00E 5+10SB	1	376	6	43	.2	188	31	155	3.26	21	5	ND	7	11	1	3	2	71	.46	.025	21	271	.63	57	.15	2	4.96	.07	.01	1	13
LL50+00E 5+20SB	1	25	10	22	.1	20	7	63	1.79	3	5	ND	1	1	1	2	2	95	.09	.008	2	35	.35	7	.10	2	1.09	.02	.03	1	2
LL50+00E 5+30SB	1	71	10	51	.1	41	17	99	2.52	5	5	ND	1	2	1	2	2	88	.16	.010	2	47	.50	13	.15	2	1.99	.03	.01	1	1
LL50+00E 5+40SB	1	146	15	82	.1	69	28	182	4.17	130	5	ND	2	2	1	3	2	120	.18	.017	5	70	.76	30	.18	6	2.77	.03	.04	1	2
LL50+00E 5+50SB	1	47	15	130	.1	29	16	210	2.71	29	5	ND	3	4	1	3	2	104	.18	.011	5	67	.51	35	.18	2	1.58	.02	.04	1	3
LL50+00E 5+60SB	1	29	10	16	.1	5	2	37	.56	2	5	ND	1	3	1	2	2	23	.18	.013	7	10	.11	27	.05	2	.57	.02	.01	1	1
LL50+00E 5+70SB	1	22	8	30	.1	14	5	59	2.18	7	5	ND	1	2	1	2	2	78	.11	.006	2	67	.43	14	.14	2	1.13	.02	.02	1	5
LL50+00E 5+80SB	1	48	11	62	.1	55	12	162	2.63	158	5	ND	3	7	1	2	2	63	.14	.018	10	79	.59	37	.17	8	1.63	.02	.07	2	12
LL50+00E 5+90SB	1	41	16	48	.2	58	12	143	2.40	40	5	ND	3	7	1	2	2	73	.27	.010	8	100	.62	33	.17	4	1.96	.03	.04	2	9
LL50+00E 6+00SB	1	32	4	26	.1	15	6	73	1.96	7	5	ND	1	1	1	2	2	68	.12	.009	2	30	.34	8	.11	2	1.39	.02	.01	1	2
LL50+00E 6+10SB	1	5	6	10	.1	2	1	56	.35	2	5	ND	1	2	1	2	2	20	.06	.006	4	6	.05	14	.07	2	.33	.01	.02	1	1
LL50+00E 6+20SB	1	19	16	34	.1	214	24	155	4.80	36	5	ND	3	3	1	2	2	54	.13	.015	3	490	.55	21	.17	2	2.62	.04	.03	9	3
LL50+00E 6+30SA	1	115	9	22	.5	114	6	331	.70	5	5	ND	1	31	1	2	2	8	4.47	.061	39	49	.09	133	.01	4	1.03	.01	.04	1	2
LL50+00E 6+40SA	1	123	4	16	.3	77	3	193	.45	5	5	ND	1	30	1	2	2	4	3.82	.045	36	15	.06	141	.01	3	.78	.01	.02	1	3
LL50+00E 6+50SA	1	80	2	16	.5	51	3	311	.45	4	5	ND	1	28	1	2	2	5	3.75	.063	31	17	.06	128	.01	4	.73	.01	.03	1	2
LL50+00E 6+60SA	1	137	8	34	.3	80	3	422	.45	7	5	ND	1	36	1	2	2	5	5.00	.080	69	15	.07	158	.01	5	.90	.01	.02	1	1
LL50+00E 6+70SA	1	164	13	62	.5	198	19	397	2.49	16	5	ND	2	25	1	2	2	55	2.70	.049	53	379	1.28	115	.08	2	2.80	.05	.04	1	5
LL50+00E 6+80SB	1	114	13	52	.3	247	54	754	4.61	92	5	ND	3	17	1	3	2	86	1.16	.019	14	497	1.29	83	.19	4	3.63	.10	.07	2	21
LL50+00E 6+90SB	1	118	15	43	.4	175	38	1448	5.32	33	5	ND	9	11	1	2	2	105	.78	.026	19	331	.92	67	.22	2	4.51	.06	.16	2	34
LL50+00E 7+00SB	1	45	16	71	.2	178	34	379	3.81	42	5	ND	4	7	1	2	2	72	.38	.012	9	245	.96	54	.17	2	2.38	.04	.07	1	1
LL51+00E 5+00NB	1	21	19	20	.1	12	4	66	2.53	3	5	ND	9	4	1	2	2	35	.06	.012	14	32	.22	13	.15	2	2.55	.02	.02	2	1
LL51+00E 4+90NB	1	5	6	10	.1	3	1	38	.49	2	5	ND	2	2	1	2	2	19	.09	.008	3	7	.12	12	.07	2	.35	.02	.01	1	1
LL51+00E 4+80NB	1	7	12	16	.1	3	1	41	.72	3	5	ND	5	6	1	2	2	32	.08	.007	5	10	.11	15	.15	2	.58	.01	.02	1	1
LL51+00E 4+70NB	1	14	17	40	.1	10	4	117	2.73	3	5	ND	6	6	1	3	2	47	.09	.021	7	20	.33	23	.21	2	1.41	.02	.05	1	1
LL51+00E 4+60NB	1	10	13	15	.2	5	2	53	1.26	4	5	ND	4	5	1	2	2	53	.08	.007	5	12	.15	8	.17	4	.57	.02	.03	1	1
LL51+00E 4+50NB	1	15	9	13	.1	4	2	35	.58	2	5	ND	1	2	1	2	2	19	.12	.013	2	8	.09	8	.06	2	.32	.02	.03	1	3
LL51+00E 4+40NB	1	78	16	34	.1	66	18	164	5.28	11	5	ND	8	7	1	2	2	100	.23	.019	10	105	.48	36	.24	5	3.61	.02	.06	1	84
STD C/AU-5	19	58	39	131	7.2	73	28	951	3.94	42	21	7	38	50	19	17	19	58	.48	.092	38	61	.88	178	.08	38	1.86	.08	.15	12	51

NORTHERN DYNASTY PROJECT-ARBEND LAKE FILE # 87-3179

SAMPLE#	NO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SD PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	M PPM	AUS PPM
LLS1+00E 7+30NB	2	15	12	52	.1	12	7	927	3.24	10	5	ND	5	13	1	2	2	51	.61	.030	13	24	.41	66	.20	6	1.19	.03	.07	1	2
LLS1+00E 4+20NA	1	15	5	80	.1	6	2	375	.34	2	5	ND	1	24	1	2	2	4	1.86	.032	6	4	.12	46	.01	2	.20	.02	.03	1	2
LLS1+00E 4+10NA	1	21	4	66	.1	10	2	33	.46	2	5	ND	1	9	1	2	2	4	.25	.040	2	7	.05	33	.01	7	.79	.01	.03	1	1
LLS1+00E 4+00NA	1	7	3	39	.1	5	1	25	.10	2	5	ND	1	14	1	2	2	1	.30	.021	2	1	.05	15	.01	5	.17	.02	.03	1	1
LLS1+00E 3+90NB	1	10	2	7	.1	3	1	34	.36	2	5	ND	1	1	1	2	2	12	.16	.008	2	15	.13	6	.03	6	.25	.03	.02	1	1
LLS1+00E 3+80NB	1	84	9	50	.1	60	19	80	4.09	10	5	ND	1	4	1	2	2	159	.14	.021	4	141	.71	34	.16	2	5.06	.04	.02	4	1
LLS1+00E 3+70NA	1	48	14	16	.1	11	3	33	1.57	3	5	ND	1	3	1	2	2	63	.10	.020	5	31	.14	19	.08	2	1.13	.02	.02	11	1
LLS1+00E 3+60NB	1	20	14	16	.1	6	2	33	2.63	9	5	ND	4	4	1	2	3	45	.07	.017	6	24	.11	9	.11	5	2.54	.01	.02	2	2
LLS1+00E 3+50NB	1	37	5	19	.2	11	3	47	2.40	4	5	ND	1	4	1	2	2	114	.11	.010	5	20	.18	24	.10	4	1.20	.01	.02	2	1
LLS1+00E 3+40NB	1	54	14	48	.1	19	7	142	3.46	18	5	ND	5	6	1	2	2	90	.11	.015	6	32	.45	25	.24	2	1.85	.02	.05	1	1
LLS1+00E 3+30NB	1	81	4	32	.1	38	12	139	3.79	8	5	ND	1	2	1	2	2	166	.15	.018	3	53	.40	20	.18	2	1.73	.03	.07	2	1
LLS1+00E 3+20NB	1	51	16	41	.1	31	10	197	3.30	5	5	ND	1	3	1	2	2	123	.20	.014	4	35	.24	45	.13	2	1.37	.03	.04	2	1
LLS1+00E 3+10NB	1	12	5	16	.1	7	2	58	2.14	4	5	ND	1	5	1	2	2	52	.08	.012	4	17	.16	12	.19	2	.76	.02	.03	2	2
LLS1+00E 3+00NB	2	24	14	45	.1	8	4	208	1.99	4	5	ND	4	7	1	2	2	66	.13	.019	8	15	.24	35	.18	2	.96	.01	.07	1	1
LLS1+00E 2+90NB	1	51	16	47	.1	23	8	178	2.84	6	5	ND	5	7	1	2	2	51	.17	.021	11	28	.55	34	.22	8	1.47	.02	.04	2	1
LLS1+00E 2+80NB	1	30	11	29	.1	15	4	95	1.88	6	5	ND	3	5	1	2	2	31	.12	.018	7	27	.33	14	.15	9	1.39	.02	.03	2	1
LLS1+00E 2+70NB	2	40	23	37	.1	14	6	85	3.83	5	5	ND	6	8	1	2	2	78	.11	.033	14	25	.28	38	.23	2	2.33	.02	.07	1	1
LLS1+00E 2+60NA P	1	76	7	27	.7	38	5	60	.99	2	5	ND	2	41	1	2	2	5	3.20	.078	35	1	.18	319	.01	6	1.26	.02	.02	1	1
LLS1+00E 2+30NA P	1	4	2	55	.1	1	1	43	.23	2	5	ND	1	14	1	2	2	2	.73	.017	2	1	.05	47	.01	2	.13	.02	.01	1	1
LLS1+00E 2+00NA P	1	7	3	90	.2	4	1	31	.23	2	5	ND	1	8	1	2	2	2	.31	.037	2	1	.03	27	.01	2	.14	.01	.02	1	1
LLS1+00E 1+70NA P	1	11	4	30	.3	3	1	15	.17	2	5	ND	2	6	1	2	2	7	.11	.030	16	7	.02	18	.02	2	.57	.01	.01	1	2
LLS1+00E 1+40NA P	1	4	4	50	.1	2	1	27	.19	2	5	ND	1	8	1	2	3	1	.26	.029	2	1	.03	21	.01	7	.09	.01	.01	1	1
LLS1+00E 1+10NA P	1	6	4	31	.1	2	1	30	.13	2	5	ND	1	12	1	2	3	2	.73	.021	2	1	.02	27	.01	9	.16	.02	.01	1	1
LLS1+00E 1+00NA P	1	8	6	83	.3	5	1	47	.38	2	5	ND	1	21	1	2	2	2	1.06	.059	5	1	.05	45	.01	2	.18	.02	.01	1	1
LLS1+00E 0+90NB	1	17	8	17	.1	11	3	57	1.30	2	5	ND	1	5	1	2	2	29	.08	.014	9	20	.19	13	.10	7	.66	.02	.02	1	1
LLS1+00E 0+80NB	1	36	14	39	.1	19	6	104	3.36	9	5	ND	4	5	1	3	2	86	.08	.017	6	39	.34	19	.19	6	1.48	.02	.04	3	1
LLS1+00E 0+70NB	1	54	15	35	.1	28	8	112	3.44	8	5	ND	5	5	1	2	2	78	.08	.013	10	40	.44	29	.17	2	2.33	.02	.04	1	1
LLS1+00E 0+60NB	2	174	26	84	.2	56	22	229	9.39	14	8	ND	5	4	1	2	2	257	.11	.031	11	142	1.60	29	.34	2	6.37	.03	.05	2	1
LLS1+00E 0+50NB	1	18	13	38	.2	30	8	76	2.50	6	5	ND	1	2	1	2	2	88	.08	.006	3	41	.70	13	.20	2	1.43	.03	.05	3	2
LLS1+00E 0+40NB	1	32	9	28	.2	18	5	72	2.27	7	5	ND	3	4	1	2	2	65	.07	.006	6	32	.30	12	.14	2	1.07	.02	.05	2	2
LLS1+00E 0+40NA P	1	72	13	25	.5	76	4	38	1.21	3	5	ND	1	34	1	3	2	11	1.64	.039	35	15	.09	90	.02	7	1.02	.02	.01	1	1
LLS1+00E 0+30NA P	1	28	2	22	.3	50	6	20	.31	2	5	ND	1	20	1	2	2	1	.83	.038	10	4	.04	48	.01	2	.33	.02	.01	1	2
LLS1+00E 0+20NA P	2	39	5	23	.5	73	2	311	.43	2	5	ND	1	51	1	3	3	6	3.60	.054	37	6	.10	107	.01	5	.54	.01	.02	1	2
LLS1+00E 0+10NA P	1	44	5	39	.6	23	1	37	.23	2	5	ND	1	49	1	5	3	5	4.21	.039	40	4	.10	64	.01	12	.39	.01	.01	1	1
LLS1+00E 0+00NA P	1	12	2	67	.3	8	1	237	.22	2	5	ND	1	47	1	2	2	3	4.02	.045	6	2	.12	71	.01	4	.25	.01	.04	1	1
LLS1+00E 0+10SA P	1	50	12	60	1.0	24	2	40	.95	4	6	ND	4	32	1	2	3	3	1.58	.112	61	15	.07	81	.01	7	1.29	.02	.02	1	1
STD C/AU-S	19	57	43	131	7.2	69	28	935	3.96	39	22	8	36	49	18	14	19	57	.47	.088	37	60	.89	173	.08	33	1.86	.08	.15	13	48

NORTHERN DYNASTY PROJECT-ARSENO LAKE FILE # 87-3179

SAMPLE#	NO	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	MA	K	M	W
	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH
LL53+00E 3+00NB	1	51	16	74	.1	21	8	150	2.82	4	5	ND	5	7	1	2	2	50	.13	.029	8	33	.47	30	.19	2	1.60	.02	.09	1	1
LL53+00E 2+90NB	1	22	12	60	.2	11	5	94	2.99	2	5	ND	5	4	1	2	2	61	.07	.026	7	20	.27	31	.22	9	1.41	.02	.06	1	2
LL53+00E 2+80NB	1	52	17	37	.1	18	6	84	4.09	2	5	ND	3	3	1	2	2	128	.09	.014	6	39	.24	26	.16	2	2.38	.02	.04	1	2
LL53+00E 2+70NB	1	77	13	33	.1	22	8	64	5.20	2	5	ND	1	2	1	2	2	187	.10	.011	4	41	.34	29	.14	2	2.03	.02	.02	1	1
LL53+00E 2+60NB	1	76	12	30	.1	48	13	52	3.89	2	8	ND	1	2	1	2	2	154	.09	.008	3	62	.24	28	.16	7	1.62	.02	.02	1	1
LL53+00E 2+50NB	1	23	9	30	.1	20	6	75	1.84	2	6	ND	1	2	1	2	6	80	.06	.007	4	33	.31	20	.08	2	1.09	.01	.03	2	3
LL53+00E 2+40NB	1	79	15	28	.1	16	5	84	4.41	2	5	ND	1	2	1	2	3	161	.12	.013	4	39	.16	30	.15	2	1.28	.02	.02	1	1
LL53+00E 2+30NB	1	20	13	35	.1	11	4	119	1.37	6	5	ND	1	5	1	2	2	53	.09	.009	2	20	.39	22	.23	2	.85	.02	.08	1	5
LL53+00E 2+20NB	1	33	9	26	.1	9	3	66	1.60	3	5	ND	2	4	1	2	5	38	.08	.009	4	17	.18	19	.13	7	.57	.02	.03	1	1
LL53+00E 2+10NA P	1	332	5	82	.4	29	7	94	.52	2	5	ND	1	17	1	4	4	5	.61	.067	14	5	.08	107	.01	3	.60	.02	.03	1	6
LL53+00E 1+80NA	1	6	6	30	.1	3	1	38	.16	2	5	ND	1	9	1	2	3	2	.28	.039	2	4	.04	27	.01	2	.17	.01	.02	1	1
LL53+00E 1+50NA P	1	4	3	50	.1	1	1	45	.09	2	5	ND	1	7	1	2	4	1	.23	.025	2	2	.04	18	.01	2	.07	.02	.03	1	1
LL53+00E 1+20NA P	1	5	4	41	.1	3	1	12	.23	2	5	ND	1	23	1	2	4	1	.78	.036	5	3	.04	45	.01	2	.17	.02	.01	1	1
LL53+00E 1+10NB	1	20	17	41	.2	21	7	113	2.61	2	5	ND	5	14	1	2	2	41	.32	.019	11	34	.44	35	.15	5	1.70	.02	.06	1	2
LL53+00E 1+00NB	1	8	9	13	.1	3	1	83	.45	2	10	ND	1	2	1	2	2	14	.05	.010	3	21	.05	11	.06	2	.29	.01	.01	1	8
LL53+00E 0+90NB	1	41	21	48	.1	22	7	130	3.03	2	5	ND	6	6	1	2	2	44	.12	.043	17	30	.41	29	.12	3	2.76	.02	.05	2	1
LL53+00E 0+80NB	1	44	19	38	.2	29	10	126	2.77	5	5	ND	7	9	1	3	2	49	.11	.023	21	38	.51	47	.17	3	2.51	.02	.08	2	1
LL53+00E 0+70NB	1	12	14	39	.1	11	4	87	2.54	9	5	ND	4	5	1	2	2	58	.06	.016	5	26	.28	20	.21	2	1.19	.02	.04	1	1
LL53+00E 0+60NB	1	18	20	48	.1	16	6	116	3.46	3	5	ND	5	5	1	2	2	75	.07	.025	4	35	.42	20	.24	2	1.62	.02	.10	1	1
LL53+00E 0+50NB	1	15	10	36	.1	14	5	107	2.18	3	5	ND	3	4	1	2	2	53	.07	.015	4	24	.37	23	.19	3	1.12	.02	.09	1	2
LL53+00E 0+40NB	1	10	11	37	.1	12	4	108	2.03	3	5	ND	3	6	1	2	2	61	.08	.007	4	24	.39	25	.24	2	.90	.02	.06	1	2
LL53+00E 0+30NB	1	22	27	58	.1	18	7	124	3.37	2	5	ND	5	6	1	2	2	85	.10	.010	5	35	.49	21	.29	2	1.70	.02	.06	1	1
LL53+00E 0+20NB	1	42	15	51	.1	24	8	151	3.65	3	5	ND	7	7	1	2	2	70	.13	.024	15	43	.55	24	.20	3	2.64	.02	.05	1	3
LL53+00E 0+10NB	1	5	13	18	.1	3	1	32	.53	2	5	ND	4	5	1	2	2	22	.05	.007	4	8	.08	15	.12	8	.41	.02	.02	1	4
LL53+00E 0+00B	1	5	7	21	.1	5	2	53	.96	2	5	ND	3	5	1	2	2	33	.06	.008	4	12	.17	20	.18	2	.55	.01	.05	1	2
6L5-S-100	1	87	6	42	.5	329	55	358	5.37	10	5	ND	3	22	1	2	2	132	1.21	.021	10	710	1.66	37	.22	2	5.12	.07	.11	2	25
6L5-S-500	1	74	17	67	.1	22	6	121	9.94	209	5	ND	2	3	1	2	2	111	.04	.054	4	184	.39	46	.11	2	2.14	.01	.13	1	10
6L5-S-501	1	126	17	91	.4	25	8	111	11.14	20	5	ND	3	2	1	2	2	167	.03	.053	3	67	.65	39	.29	2	2.89	.02	.29	1	64
6L5-S-502	1	87	16	59	.1	36	10	141	7.48	33	5	ND	2	2	1	2	2	201	.15	.039	3	68	.36	29	.18	2	2.54	.03	.07	1	2
6L5-S-503	1	149	17	106	.3	39	6	186	12.45	98	5	ND	4	2	1	2	2	124	.04	.023	4	584	2.13	60	.29	2	5.42	.02	.77	1	3
6L5-S-504	1	252	14	126	.4	651	54	231	13.33	407	5	ND	5	4	1	4	2	114	.10	.023	8	902	1.79	49	.32	2	5.74	.02	.18	2	6
6A7-S-101	4	145	33	42	2.4	14	5	83	28.53	20	5	ND	4	1	1	6	2	126	.02	.081	3	199	.19	17	.11	2	1.27	.01	.07	4	7
6A7-S-102	1	58	29	35	.5	22	3	115	3.86	178	5	ND	1	2	1	7	3	153	.03	.023	3	101	.13	15	.11	2	.76	.01	.04	1	2
NA7-S-1	17	172	3073	1705	12.0	110	13	641	17.24	1363	5	ND	146	27	4	28	2	94	2.28	.036	1035	50	.09	65	.03	7	3.28	.02	.02	3	5
NA7-S-2	1	12	15	31	.1	12	4	87	2.20	3	5	ND	5	10	1	2	2	35	.30	.008	10	25	.32	29	.10	3	1.52	.02	.07	1	3
NA7-S-3	1	28	12	23	.8	27	5	22	.96	2	13	ND	5	41	1	2	2	6	1.99	.058	50	12	.13	72	.02	4	2.25	.02	.03	1	1
STD C/AU-S	18	57	42	131	6.9	69	28	913	3.94	39	20	7	37	49	18	14	20	56	.47	.087	37	58	.88	172	.08	32	1.86	.08	.15	11	48

NORTHERN DYNASTY PROJECT-ARBENO LAKE FILE # 87-3179

SAMPLE#	NO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SD PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	MA %	K %	W PPM	AL PPM
47+00W 1+10S B42	1	2	12	30	.1	8	3	101	1.95	13	5	ND	7	4	1	2	2	44	.10	.006	7	21	.24	19	.21	2	.69	.02	.05	1	1
47+00W 2+00S B42	1	46	31	51	.1	196	60	755	6.78	682	5	ND	2	5	1	2	3	78	.33	.028	4	290	.13	19	.06	2	2.36	.02	.04	5	94
47+00W 2+10S B42	1	235	19	81	.1	341	70	280	5.68	223	5	ND	3	5	1	2	2	136	.32	.012	5	429	.75	42	.20	14	3.60	.04	.04	2	63
46+95W 1+95S B	1	92	29	58	.1	350	51	1175	4.90	111	5	ND	4	5	1	2	2	51	.31	.025	7	326	.24	40	.07	2	2.18	.02	.04	1	4
6TB C	19	57	38	131	7.3	70	28	926	3.95	39	16	7	37	49	18	16	22	57	.48	.090	37	60	.88	175	.08	38	1.87	.08	.13	12	-

NORTHERN DYNASTY PROJECT-ARSEND LAKE FILE # 87-3179

SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SO	BI	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
DA7-R-1	1	86	5	31	.3	11	12	432	2.64	9	5	ND	2	5	1	2	2	106	1.53	.078	8	3	.54	8	.12	2	.90	.16	.04	1	3
DL7-R-1	1	300	8	43	.5	140	35	649	7.11	26	5	ND	2	35	1	6	2	168	1.44	.013	3	370	1.84	141	.10	2	6.08	.19	.64	5	9
DL7-R-2	1	1209	9	46	.9	29	11	283	2.09	6	5	ND	1	76	1	3	2	50	2.39	.033	5	29	.69	9	.08	2	3.04	.33	.03	2	41
DL7-R-3	1	160	13	37	.2	157	36	252	4.50	3	5	ND	1	18	1	2	2	46	1.16	.016	2	205	.78	17	.07	2	1.80	.16	.08	1	5
DL7-R-4	1	93	7	37	.3	2686	180	203	2.25	1331	5	ND	1	4	1	8	2	14	.73	.006	2	339	.48	34	.03	4	.40	.05	.12	9	13
DL7-R-5	1	272	15	154	.2	113	18	1092	4.83	6	5	ND	3	36	1	2	2	60	2.24	.014	6	197	1.43	258	.13	2	3.36	.13	.82	1	4
6A7-R-101	1	334	28	31	5.1	23	5	176	44.09	32	5	ND	4	1	1	13	14	80	.01	.011	3	70	.12	19	.06	2	.43	.02	.24	2	32
6A7-R-102	1	80	159	458	4.4	125	27	3163	6.85	285	5	ND	1	2	2	50	2	61	.09	.017	3	54	.44	33	.11	2	1.37	.02	.45	1	5
6L7-R-100	1	185	10	36	.7	500	55	490	4.91	13	5	ND	2	39	1	5	2	103	3.05	.013	7	634	2.07	198	.18	2	4.88	.12	1.18	4	37
6L7-R-500	1	48	12	29	.3	51	17	346	8.28	439	5	ND	1	5	1	3	2	31	.42	.082	5	29	.23	48	.06	12	.81	.04	.29	2	15
6L7-R-501	2	119	16	105	.4	31	11	388	8.17	20	5	ND	5	12	1	7	2	113	.33	.030	9	63	1.05	109	.20	2	3.10	.07	1.40	1	107
6L7-R-502	4	104	14	67	.4	173	22	394	7.90	48	5	ND	2	39	1	2	2	61	.81	.013	7	300	1.18	69	.13	2	3.54	.12	.93	1	5
6L7-R-503	2	82	13	50	.4	235	24	356	5.93	236	5	ND	4	51	1	7	2	44	.98	.013	10	238	.92	64	.11	6	2.61	.06	.84	3	12
6L7-R-504	2	76	17	64	.5	465	38	860	4.91	255	7	ND	5	62	1	7	2	61	2.09	.016	8	466	1.44	99	.15	2	3.21	.10	1.02	1	16
NA7-R-1	29	423	16	16	2.4	68	20	88	1.57	32	5	ND	11	6	1	6	5	8	.15	.014	23	45	.11	24	.01	3	.53	.02	.17	1	205
NA7-R-2	5	134	70	86	.7	104	16	423	2.74	68	5	ND	6	22	1	3	2	25	1.56	.011	19	114	.69	43	.08	2	2.03	.05	.23	2	45
NA7-R-3	3	130	46	69	.5	81	13	379	2.18	54	5	ND	4	16	1	2	2	13	1.18	.010	15	54	.53	20	.05	2	1.29	.04	.11	1	44
NA7-R-4	13	430	42	51	1.2	101	29	205	2.66	55	5	ND	8	20	1	3	2	34	.69	.011	17	140	.64	19	.05	3	1.86	.09	.34	1	64
NA7-R-5	3	498	21	608	1.1	213	61	545	10.64	10	7	ND	5	9	2	5	2	46	.98	.016	6	62	1.88	22	.12	9	3.24	.09	.72	1	7
NA7-R-6	4	215	18	144	.7	143	43	515	7.92	13	9	ND	4	11	1	7	2	71	1.26	.018	6	99	2.34	25	.16	11	3.78	.11	.87	6	7
ML7-R-500	1	240	9	60	.2	402	57	791	4.70	23	5	ND	1	9	1	2	2	53	1.26	.019	3	533	1.04	100	.09	12	2.35	.10	.34	1	2
NR7-R-1	7	1400	8	24	.4	17	43	193	2.68	23	9	ND	8	21	1	2	2	26	.82	.054	17	14	1.03	49	.02	2	1.11	.06	.17	2	46
NR7-R-2	1	16	8	39	.1	168	11	1481	5.06	15	5	ND	1	182	1	3	3	27	7.65	.006	2	180	4.12	79	.01	2	1.18	.01	.09	3	1
NR7-R-3	1	311	9	20	1.8	12	10	500	2.31	57	5	ND	1	29	1	29	2	22	2.76	.016	2	6	.66	78	.02	2	.44	.02	.14	4	250
STD C/AU-R	19	57	38	131	7.3	70	28	926	3.95	39	16	7	37	49	18	16	22	57	.48	.090	37	60	.88	175	.08	38	1.87	.08	.13	12	495

ARSENIC

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 30 ML WITH WATER. THIS LEACH IS PARTIAL FOR NH FE CA P LA CR NG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: P1-SOILS P2-ROCK AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: JUL 11 1987 DATE REPORT MAILED: July 22/87 ASSAYER: D. J. ... DEAN TOYE, CERTIFIED B.C. ASSAYER

NORTHERN DYNASTY PROJECT- ARSENIC LAKE File # B7-2400 Page 1

SAMPLE#	NO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	NG	BA	TI	B	AL	NA	K	W	AU#
	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	%	PPH	PPH	%	PPH	%	%	%	%	%	PPH	PPH
6A7-S-2	8	104	81	125	1.1	5	3	79	4.60	2463	5	ND	5	3	1	6	2	37	.04	.024	7	19	.18	13	.09	7	1.80	.01	.04	2	65
6A7-S-3	2	31	115	41	1.4	3	2	49	1.92	350	5	ND	4	1	1	20	6	16	.01	.009	4	4	.12	8	.05	2	.82	.01	.05	2	30
6A7-S-4	4	149	224	84	3.9	93	10	140	10.90	187	5	ND	3	2	1	8	2	59	.04	.024	3	523	.19	15	.12	10	1.09	.01	.02	7	9
6A7-S-5	1	38	16	20	.3	1	4	57	6.11	8	5	ND	3	3	1	3	2	61	.04	.019	3	14	.05	12	.15	5	.35	.01	.03	1	1
6A7-S-6	1	58	16	67	.1	49	25	389	5.34	39	5	ND	2	9	1	2	2	181	.48	.024	3	140	.91	115	.25	8	4.60	.03	.07	9	6
6A7-S-7	1	122	18	182	.3	66	24	542	7.79	22	7	ND	5	14	1	2	2	105	.87	.014	20	126	3.27	76	.24	18	4.53	.06	.33	2	3
STD C/AU-5	18	57	41	123	7.4	68	29	944	3.94	42	19	8	34	49	17	16	22	55	.47	.086	39	57	.86	179	.09	36	1.86	.07	.14	12	47

NORTHERN DYNABTY PROJECT- ARSENO LAKE FILE # 87-2400

FA/AA

SAMPLE#	NO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE I PPM	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA I I	P I	LA PPM	CR PPM	MG I	BA PPM	TI I	B PPM	AL I	MA I	K I	M PPM	AU11 PPB
6A7-R-2	2	345	1209	490	26.6	21	8	274	2.27	4632	5	ND	10	8	5	230	38	3	.44	.025	8	1	.36	13	.05	6	1.28	.10	.38	2	235
6A7-R-3	1	373	216	115	9.9	8	3	240	2.36	238	5	ND	10	5	1	62	4	3	.20	.020	7	1	.33	20	.05	3	.98	.04	.40	1	98
6A7-R-4	1	204	70	43	4.7	20	27	535	10.49	49	5	ND	2	4	1	10	2	13	.30	.018	2	16	.19	6	.01	5	.26	.01	.07	2	59
6A7-R-5	1	47	8	37	.5	124	60	809	6.08	34884	9	ND	2	23	1	11	2	82	1.82	.028	2	134	1.68	59	.04	5	2.29	.15	.10	67	47
6A7-R-6	1	85	8	55	.1	47	23	1460	5.45	25	13	ND	2	56	1	2	2	201	3.45	.023	4	118	.57	280	.23	3	5.50	.30	1.01	1	122
6A7-R-7	1	135	6	107	.2	78	28	447	5.06	388	5	ND	2	26	1	2	2	81	2.37	.022	5	102	1.34	62	.16	12	4.03	.24	.70	1	46
STD C/AU-R	19	60	38	129	7.5	68	30	989	3.84	42	21	9	36	51	18	15	21	58	.46	.089	40	58	.84	188	.09	36	1.80	.07	.15	12	495

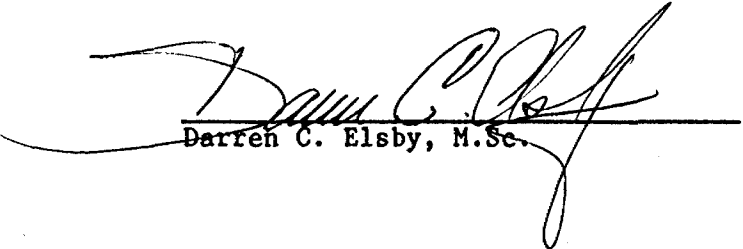
APPENDIX 5

Author's Certifications

Author's Certification

I, Darren C. Elsby, of 6869 - 123rd Street, Surrey, British Columbia, hereby certify as follows:

1. That I graduated from Pomona College, Claremont, California with a Bachelor of Arts Degree in Geology in 1981 and from the University of British Columbia with a Master of Science Degree in Structural Geology in 1985.
2. That I have practised my profession continually since that time.
3. That I authored this report based on the 1986 and 1987 field programs on the Arseno Lake Property.


Darren C. Elsby, M.Sc.

ACME ANALYTICAL LABORATORIES
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158

DATE RECEIVED: SEPT 17 1987

DATA LINE 251-1011 DATE REPORT MAILED:

Sept 24/87

GEOCHEMICAL ICP ANALYSIS

.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 NB BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU** ANALYSIS BY FA+AA FROM 10 GM SAMPLE.

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

NORTHERN DYNASTY PROJECT-ARSEND LAKE File # 87-4209

SAMPLE#	CU PPM	FB PPM	ZN PPM	AG PPM	AU** FPB
F 3047	236	336	97	33.5	69
F 3048	226	48	54	7.9	11
F 3049	131	55	115	7.4	27
F 3050	272	334	119	27.5	50
F 3051	242	117	171	11.2	1
F 3052	183	1945	6948	45.9	16
F 3053	195	4750	13907	150.5 ✓	86
F 3054	143	3076	14684	138.4 ✓	69
STD C/AU-R	57	40	131	7.2	480

87-14

✓ ASSAY REQUIRED FOR CORRECT RESULT -

RECEIVED

APR 14 1988

MINING LANDS SECTION

ARSEND

ACME ANALYTICAL LABORATORIES
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158

DATE RECEIVED: SEPT 17 1987

DATA LINE 251-1011 DATE REPORT MAILED:

Sept 29/87

GEOCHEMICAL ICP ANALYSIS

.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 AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU** ANALYSIS BY FA+AA FROM 10 GM SAMPLE.

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

NORTHERN DYNASTY PROJECT-ARSEND LAKE File # 87-4210

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AU** PPB
F 3022	-	-	-	-	32
F 3023	-	-	-	-	15
F 3024	-	-	-	-	35
F 3025	-	-	-	-	11
F 3026	-	-	-	-	23
F 3027	130	81	1523	2.8	8
F 3028	47	500	636	8.2	10
F 3029	73	470	2626	8.0	14
F 3030	52	3138	2391	52.1	40
F 3031	69	2518	7559	47.1	54
F 3032	110	136	69	2.0	10
F 3033	283	62	103	2.7	47
F 3034	138	28	46	4.8	310
F 3035	122	44	48	5.3	640
F 3036	34	96	72	6.0	156
F 3037	46	36	306	2.9	32
F 3038	18	31	85	3.9	38
F 3039	153	53	213	3.3	43
F 3040	55	255	231	8.7	10
F 3041	43	99	98	1.1	4
F 3042	116	16416 ✓	36224 ✓	99.3 ✓	69
F 3043	234	3255	56249	41.6	29
F 3044	98	815	475	10.3	26
F 3045	468	78	449	4.3	7
F 3046	97	36	58	2.7	9
STD C	58	38	132	7.0	-

✓ ASSAY REQUIRED FOR CORRECT RESULT -

ARSENAL

ALME ANALYTICAL LABORATORIES
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158

DATE RECEIVED: SEPT 29 1987

DATA LINE 251-1011 DATE REPORT MAILED: *Oct 3/87...*

GEOCHEMICAL ICP ANALYSIS

.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 AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU** ANALYSIS BY FA+AA FROM 10 GM SAMPLE.

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

NORTHERN DYNASTY PROJECT-ARSENAL LAKE File # 87-4480

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AU** PPB
F 3055	837	1363	17887	46.3	250
F 3056	130	2743	2189	66.8	480
F 3057	266	7641	8201	140.3	1220
F 3058	72	58	47	.6	8
F 3059	329	39	53	2.7	6
F 3060	666	23	30	2.7	2
F 3061	398	21	251	2.1	8
F 3062	108	19	605	1.2	1
F 3063	906	16	95	4.2	1
F 3064	88	12	54	.5	2
F 3065	153	13	71	1.4	30
F 3066	44	2	13	.2	1
F 3067	250	12	88	1.2	1
F 3068	131	11	82	.6	86
F 3069	64	4	48	.1	10
F 3070	310	10	26	1.8	1
F 3071	395	17	42	2.4	1
F 3072	543	14	29	2.6	1
F 3073	567	14	29	2.0	1
F 3074	401	12	119	2.5	68
F 3075	133	11	622	.9	1
F 3076	182	10	441	1.5	2
STD C/AU-R	58	37	135	7.2	515

ACME ANALYTICAL LABORATORIES DATE RECEIVED: SEPT 29 1987
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE 253-3158 DATA LINE 251-1011 DATE REPORT MAILED: *Oct. 6/87.*

GEOCHEMICAL ICP ANALYSIS

.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 AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1-CORE P2-ROCK P3-SOIL AU** ANALYSIS BY FA+AA FROM 10 GM SAMPLE.

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

NORTHERN DYNASTY PROJECT-ARSENO File # 87-4482 Page 1

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AU** PPB
F 3077	345	9	65	.9	.5
F 3078	337	83	1820	10.9	9
F 3079	199	360	3579	12.4	48
F 3080	263	455	1614	16.9	68
F 3081	244	214	8550	30.9	34
F 3082	136	14910	32821 [✓]	66.3 [✓]	880
F 3083	254	5494	6136	54.4	580
F 3084	91	9039	3774	48.0	545
F 3085	31	363	646	2.9 [✓]	7
F 3086	81	7958	8173	87.7 [✓]	720
F 3087	277	4861	7157	93.0 [✓]	139
F 3088	42	59	625	1.1	8
F 3089	725	4481	9572	48.4	320
F 3090	156	4770	11028	42.4	220
F 3091	96	2030	3749	30.4	81
STD C/AU-R	58	37	132	7.3	490

[✓] - ASSAY REQUIRED FOR CORRECT RESULT -

ACME ANALYTICAL LABORATORIES LTD.
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE (604)253-3158 FAX (604)253-1716

DATE RECEIVED: OCT 6 1987

REPORT MAILED: *Oct. 11/87*

GEOCHEMICAL ICP ANALYSIS

.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 NB BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Core AU** ANALYSIS BY FA-AA FROM 10 GM SAMPLE.

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

NORTHERN DYNASTY PROJECT-ARSENOLD LAKE File # 87-4665 Page 1

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AU** PPB		
F 3092	324	325	740	20.7	7		67.19.
F 3093	510	79	723	10.8	12		
F 3094	957	414	1211	15.4	21		
F 3095	1011	1578	93008	52.7	420	}	26.2 - 33.3 - 5.1
F 3096	1209	2199	71767	58.5	127		
F 3097	1544	2263	55042	55.6	76	}	
F 3098	1015	901	15603	19.9	41		
F 3099	1848	4750	37620	42.3	79	}	33.3 - 39.6 - 6.3
F 3100	1351	391	16369	8.7	105		
F 3101	1021	408	16507	12.9	28		
F 3102	1431	1745	51237	52.5	725	}	39.6 - 40.0 - 4.4
F 3103	210	1136	864	9.0	54		
F 3104	425	1409	826	10.0	7	}	40.4 - 42.9 - 2.9
F 3105	437	2230	29730	22.6	51		
F 3106	733	165	47880	8.3	18		
F 3107	234	275	16562	8.2	5	}	42.9 - 46.6 - 3.7
F 3108	950	3265	34219	35.3	119		
F 3109	263	1373	4575	10.6	14	}	46.6 - 48.5 - 1.9
F 3110	291	103	3303	4.8	8		
F 3111	238	6453	14655	65.3	285	}	48.5 - 51.5 - 3.0
F 3112	245	4033	8777	53.0	425		
F 3113	128	304	1111	3.3	23		
F 3114	165	163	2259	3.8	24		
F 3115	425	87	463	3.4	24		
F 3116	73	70	207	1.2	1		
F 3117	115	55	148	1.5	1		
F 3118	140	77	660	1.4	1		
F 3119	586	256	1453	6.8	47		
F 3120	1667	430	2100	14.0	14		
F 3121	860	1529	27549	53.1	260	}	
F 3122	1920	635	4520	26.9	53		
F 3123	1916	750	16145	38.4	124	}	
F 3124	705	957	8453	39.5	66		
F 3125	1032	339	644	11.1	21		
F 3126	1461	460	39300	19.3	82		
F 3127	1163	874	72309	33.5	23		
STD C/AU-R	58	38	134	7.0	485		44.1 - 55.9.

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AU** PPB	
F 3128	2045	954	7600	23.9	45) 55.9-56.5
F 3129	924	10973	99999	137.0	340	
F 3130	1107	426	9543	12.1	42	
F 3131	1089	245	3308	10.2	50	
F 3132	1294	318	7485	17.0	57	
<i>P_y</i> F 3133	1522	1030	6449	52.1	655) 63.8-64.8?
F 3134	180	399	771	4.6	26	
F 3135	506	5887	32207	78.3	91) 66.2-70.3
F 3136	265	175	17117	5.2	21	
F 3137	620	459	46910	16.2	45	
F 3138	469	1055	53875	15.9	146	
F 3139	183	1335	1333	13.9	68	
F 3140	592	91	2784	3.0	15	
F 3141	286	179	1295	4.5	14	
F 3142	179	942	3359	11.6	54	
F 3143	279	4303	6646	54.2	365	
F 3144	113	4312	7937	57.7	375	
F 3145	143	2302	1629	14.4	206	
F 3146	238	1791	978	23.7	440	
F 3147	137	2458	2060	19.2	127	
F 3148	151	78	179	2.6	41	
F 3149	201	29	86	.9	34	
STD C/AU-R	61	39	133	7.7	505	

- ASSAY REQUIRED FOR CORRECT RESULT *for Zn 720,000 ppm
Ag > 35 ppm*

ARSENIC.

ME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: OCT 9 1987
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: *Oct 22/87*...

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. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU** ANALYSIS BY FA+AA FROM 10 GN SAMPLE.

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

NORTHERN DYNASTY PROJECT-ARSENIC LAKE File # 87-4853

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AU** PPB
3150	134	449	903	6.8	39
3151	168	726	2647	8.4	28
3152	540	741	670	21.8	66
3153	197	670	7958	5.8	116
3154	120	59	112	1.0	780
3155	98	40	95	.8	52
3156	226	29	103	.7	1
3157	201	75	239	1.8	131
3158	173	92	639	3.9	4
3159	189	171	691	3.1	20
3160	132	13	180	2.5	24
STD C/AU-R	58	37	134	7.2	485

ALME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: OCT 20 1987
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: *Oct 26/87.*

ASSAY CERTIFICATE

AG** AND AU** BY FIRE ASSAY.
 - SAMPLE TYPE: Pulp

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

NORTHERN DYNASTY PROJECT-ARSENOL LAKE File # 87-4665 R

SAMPLE#	PB %	ZN %	AG** OZ/T	AU** OZ/T	
					87-19.
F 3095	.21	12.21	1.75	.011	
F 3096	.29	9.16	1.87	.004	
F 3097	.30	7.04	1.81	.002	
F 3098	.12	1.92	.61	.001	
F 3099	.60	4.38	1.33	.003	
F 3100	.05	1.91	.27	.004	
F 3101	.05	1.83	.39	.001	
F 3102	.22	6.42	1.78	.020	
F 3105	.28	3.42	.70	.003	
F 3106	.02	5.73	.21	.001	
F 3107	.03	1.84	.19	.001	
F 3108	.42	4.01	1.23	.005	
F 3111	.75	1.61	1.83	.014	
F 3112	.49	1.02	1.64	.017	
F 3121	.20	3.42	1.77	.004	

F 3122 .04 .50 .15 .007

ALME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: OCT 20 1987
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: *Oct 26/87.*

ASSAY CERTIFICATE

AG** AND AU** BY FIRE ASSAY.
 - SAMPLE TYPE: Pulp

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

NORTHERN DYNASTY PROJECT-ARSENOL LAKE File # 87-4665 R

SAMPLE#	PB %	ZN %	AG** OZ/T	AU** OZ/T
F 3095	.21	12.21	1.75	.011
F 3096	.29	9.16	1.87	.004
F 3097	.30	7.04	1.81	.002
F 3098	.12	1.92	.61	.001
F 3099	.60	4.38	1.33	.003
F 3100	.05	1.91	.27	.004
F 3101	.05	1.83	.39	.001
F 3102	.22	6.42	1.78	.020
F 3105	.28	3.42	.70	.003
F 3106	.02	5.73	.21	.001
F 3107	.03	1.84	.19	.001
F 3108	.42	4.01	1.23	.005
F 3111	.75	1.61	1.83	.014
F 3112	.49	1.02	1.64	.017
F 3121	.20	3.42	1.77	.004
F 3122	.08	.56	.85	.004
F 3123	.10	1.99	1.11	.012
F 3124	.12	1.01	1.29	.009
F 3126	.05	4.55	.63	.004
F 3127	.11	9.24	1.07	.002
F 3128	.11	.87	.68	.001
F 3129	1.37	29.20	4.34	.009
F 3133	.12	.72	1.51	.019
F 3135	.79	4.03	2.57	.002
F 3136	.02	1.87	.09	.001
F 3137	.06	5.91	.37	.002
F 3138	.12	6.22	.42	.004
F 3143	.51	.79	1.72	.012
F 3144	.50	.92	1.53	.010

87-19.

87-20.

ALME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE (604) 253-3158 FAX (604) 253-1716

DATE RECEIVED: OCT 20 1987

DATE REPORT MAILED: *Oct. 26/87*

ASSAY CERTIFICATE

AG** AND AU** BY FIRE ASSAY.

- SAMPLE TYPE: Pulp

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

NORTHERN DYNASTY PROJECT-ARSENAL LAKE File # 87-4482 R

SAMPLE#	FB	ZN	AG**	AU**	<u>87-18</u>	m.
	%	%	OZ/T	OZ/T		
F 3081	.02	.93	.53	.002		
F 3082	1.69	3.65	2.10	.035	85.4-87.4	2.0
F 3083	.60	.70	1.71	.013	87.4-89.4	2.0
F 3084	1.01	.44	1.44	.008	89.4-90.8	1.4
F 3086	.87	.89	2.54	.022	91.7-93.7	2.0
F 3087	.53	.80	2.61	.007	93.7-95.4	1.7
F 3089	.49	1.07	1.09	.011	96.4-96.8	0.4
F 3090	.51	1.21	1.16	.006	96.8-99.0	2.2
F 3091	.21	.41	.71	.002	99.0-99.9	0.9

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: OCT 20 1987
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: *Oct 26/87*

ASSAY CERTIFICATE

AG** AND AU** BY FIRE ASSAY.
- SAMPLE TYPE: Pulp

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

NORTHERN DYNASTY PROJECT-ARSENOLD LAKE File # 87-4209 R

SAMPLE#	PB %	ZN %	AG** OZ/T	AU** OZ/T
F 3052	.23	.82	1.43	.001
F 3053	.59	1.60	4.69	.004
F 3054	.34	1.50	3.83	.003

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: OCT 20 1987
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: *Oct. 26/87.*

ASSAY CERTIFICATE

AG** AND AU** BY FIRE ASSAY.
- SAMPLE TYPE: Pulp

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

NORTHERN DYNASTY PROJECT-ARSEND LAKE File # 87-4480 R

SAMPLE#	PB %	ZN %	AG** OZ/T	AU** OZ/T
F 3055	.17	1.94	1.20	.010
F 3056	.32	.24	1.94	.013
F 3057	.90	.91	4.32	.032

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: OCT 22 1987

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

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: *Oct 29/87*

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 W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: Core AU** ANALYSIS BY FA+AA FROM 10 GM SAMPLE.

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

NORTHERN DYNASTY EXPL. PROJECT-ARSENOL LAKE File # 87-5145

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AU** PPB
F 3161	29	62	48	.5	1
F 3162	23	49	60	.7	7
F 3163	689	6885	6015	112.0 ✓	275
F 3164	1330	5936	53808 ✓	64.5	880
F 3165	672	89	3627	11.1	71
F 3166	789	1655	5696	23.4	128
F 3167	130	798	239	4.8	54
F 3168	140	36	427	2.1	46
F 3169	1245	5617	22039	28.8	515
F 3170	304	1202	7371	10.6	117
F 3171	136	104	365	16.3	62
F 3172	147	77	393	1.9	12
F 3173	201	26	47	1.6	51
F 3174	180	22	50	1.4	46
F 3175	136	16	44	.8	32
F 3176	6	16	47	.1	1
F 3177	169	16	78	1.3	215
F 3178	183	16	156	1.3	73
F 3179	82	202	1164	9.7	39
F 3180	9	10	220	1.7	13
F 3181	9	7	61	.8	8
F 3182	226	24	164	5.0	6
F 3183	82	14	81	1.8	3
F 3184	223	12	133	2.2	7
F 3185	3	9	48	.1	2
F 3186	106	13	66	.3	8
F 3187	134	11	67	.7	7
F 3188	104	14	90	.2	1
F 3189	198	15	87	.5	12
F 3190	183	6	81	.4	9
F 3191	197	10	116	.4	18
F 3192	13	14	95	.2	1
F 3193	168	7	113	.2	14
F 3194	141	15	114	.7	1
STD C/AU-R	60	37	131	7.4	505

✓ ASSAY REQUIRED FOR CORRECT RESULT -

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: OCT 20 1987
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: *Oct 30/87*

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp AU** BY FIRE ASSAY FROM 1/2 A.T.

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

NORTHERN DYNASTY PROJECT-ARSEND LAKE File # 87-4210 R

SAMPLE#	PB %	ZN %	AG oz/t	AU** oz/t
F 3034	-	-	-	.016
F 3035	-	-	-	.015
F 3036	-	-	-	.004
F 3042	1.61	3.74	3.20	.002
F 3043	.33	6.45	1.23	.001

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: OCT 22 1987

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

PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: *NOV. 2/87*

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 W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: Core AU** ANALYSIS BY FA+AA FROM 10 GM SAMPLE.

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

NORTHERN DYNASTY PROJECT--ARSENIO LAKE File # 87-5210

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AU** PPB
F 3195	162	10	93	.8	35
F 3196	38	3	10	.8	3
F 3197	200	11	122	.4	19
F 3198	147	19	97	1.2	5
F 3199	81	35	40	.9	1
F 3200	67	21	42	.7	13
F 3201	50	15	28	.4	1
F 3202	56	8	31	.8	1
F 3203	198	20	74	1.1	5
F 3204	39	22	139	.8	4
F 3205	83	4	34	1.6	6
F 3206	170	10	78	.9	9
F 3207	140	10	78	.7	5
STD C/AU-R	58	38	133	7.6	480

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: OCT 27 1987

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

PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: *Nov. 9/87...*

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 HG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: Core AU** ANALYSIS BY FA+AA FROM 10 GR SAMPLE.

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

NORTHERN DYNASTY PROJECT-ARSENOL LAKE File # 87-5394

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AU** PPB
F 3208	186	27	111	2.1	14
F 3209	336	26	76	3.7	18
F 3210	471	4	4	5.2	34
F 3211	388	2008	3492	21.5	240
F 3212	150	30	38	4.4	27
F 3213	275	38	185	12.2	350
F 3214	95	1043	98	43.4	161
F 3215	456	665	1177	28.3	112
F 3216	330	11	9	3.0	21
F 3217	163	3	4	1.7	6
F 3218	145	11	17	2.0	17
F 3219	118	286	694	9.2	14
F 3220	102	65	428	6.4	7
F 3221	61	43	241	3.9	4
F 3222	134	80	474	6.3	29
F 3223	178	2062	7892	35.0	49
F 3224	54	276	615	4.1	26
F 3225	299	8482	21061	61.4	795
F 3226	46	1343	3107	12.7	88
F 3227	391	1964	2090	18.4	137
F 3228	170	475	4639	3.8	41
F 3229	114	4454	17761	38.8	540
F 3230	256	3225	5037	13.2	282
F 3231	119	586	1179	4.7	45
F 3232	71	4574	2772	53.0	565
F 3233	225	586	1530	18.5	69
F 3234	508	1763	7441	53.1	224
F 3235	303	205	1734	7.1	26
F 3236	61	539	2155	8.5	84
F 3237	305	3691	16686	93.2	480
F 3238	186	4494	7492	39.0	124
F 3239	120	1015	1352	16.9	75
F 3240	162	1564	4276	15.8	70
F 3241	166	174	420	3.3	61
F 3242	164	23	207	.5	28
F 3243	105	12	41	1.0	58
F 3244	141	17	61	1.2	27
STD C/AU-R	62	37	132	7.5	490



53B14NE0012 2.11041 SEESEEP LAKE

900

Type of Survey: **GEOPHYSICAL (GROUND MAGNETOMETER & ELECTROMAGNETIC)** SITE: **SEEP LAKE/G-2084**

Claim Holder(s): **NORTHERN DYNASTY EXPLORATIONS LTD.** Inspector's Licence No.: **T-1884**

Address: **844 WEST HASTINGS ST., VANCOUVER, B.C. V6C 1C8**

Survey Company: **NORTHERN DYNASTY EXPLORATIONS LTD.**

Name and Address of Author of Geo. Technical report: **DARREN C. ELSBY, 844 WEST HASTINGS ST., VANCOUVER, B.C., V6C 1C8**

Day of Survey (m & to): **29 04 86** Day Mo. Yr. **30 03 88** Total Miles of line Cut: **42.6**

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	20
	- Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
Man Days Complete reverse side and enter total(s) here	Geological	
	Geochemical	
	Geophysical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
Pa.	912854				
	912855				
	912856				
	912857				
	912858				
	912859				
	912860				
	912861				
	912862				
	912864				
	912865				
	912866				
	912867				
	912870				
	912871				
	912872				
	912873				
	912876				
	912877				
	914061				
	914062				

RECEIVED
APR 27 1988
MINING LANDS SECTION

RECEIVED
APR 17 1988
PATRICIA MINING DIVISION

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$ ÷ 15 = Total Days Credits

Instructions

Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded: **840** Date Recorded: **APRIL 11, 1988** Mining Recorder: *[Signature]*

Date Approved as Recorded: *[Signature]* Branch Director: *[Signature]*

Date: **APRIL 5/88** Recorded Holder or Agent (Signature): *[Signature]*

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: **G. GORZYNSKI, 844 WEST HASTINGS ST. VANCOUVER, B.C. V6C 1C8**

Date Certified: **APRIL 5/88** Certified by (Signature): *[Signature]*





Ministry of Northern Development and Mines
Ontario

ARSENOLD LAKE PROPERTY

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

DOCUMENT NO.
W8803-106

- Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

MINING ACT

2-1104 Mining Act

Type of Survey(s) GEOLOGICAL MAPPING	Township or Area KEEYASK LAKE/G-2085 SEESERP LAKE/G-2204
Claim Holder(s) NORTHERN DYNASTY EXPLORATIONS LTD.	Prospector's Licence No. T-1884
Address 844 WEST HASTINGS ST., VANCOUVER, B.C. V6C 1C8	
Survey Company NORTHERN DYNASTY EXPLORATIONS LTD	Date of Survey (from & to) 29 05 87 30 03 88
Name and Address of Author (of Geop. Technical report) DARREN C. ELSBY 844 WEST HASTINGS ST. VANCOUVER, B.C. V6C 1C8	Total Miles of line Cut 42.6

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

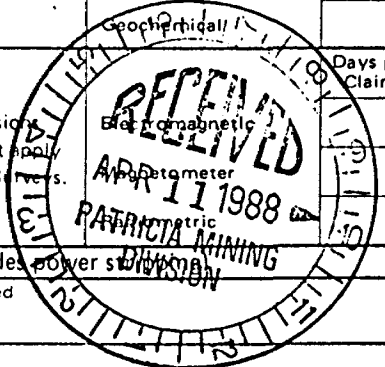
Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic - Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric - Other	
	Geological	40
	Geochemical	

Man Days	Geophysical	Days per Claim
Complete level grid and enter total(s) here	- Electromagnetic - Magnetometer - Radiometric	
	Geological	
	Geochemical	

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
Pa	803210		Pa	818446	
	803211			818447	
	803212			818448	
	803213			818450	
	803214			818453	
	803215			818480	
	803216			818481	
	803217			818482	
	803219			818483	
	816719			818484	
	816720			818485	
	816721			818486	
	816722			818487	
	816723			818488	
	816724			818489	
	816725			818490	
	816726			818491	
	818440			818492	
	818441			818493	
	818442			818494	
	818443			912854	
	818444			912855	
	818445				

RECEIVED
APR 18 1988

MINING LANDS SECTION



Expenditures (excludes power surveys)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded: 2640

Date Recorded: APRIL 11, 1988

Mining Record: *[Signature]*

Date Approved or Recorded: *[Signature]*

Branch Director: *[Signature]*

Date: APRIL 5/88

Recorded Holder or Agent: *[Signature]*

Signature: *[Signature]*

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying
G. GORZYNSKI, 844 WEST HASTINGS ST. VANCOUVER, B.C. V6C 1C8

Date Certified: APRIL 5/88

Certified by (Signature): *[Signature]*

CONTINUED NEXT PAGE

Total number of mining claims covered by this report of work: **66**

REPORT OF WORK ARSENOLD LAKE PROPERTY GEOLOGICAL

Page 2 of 2
APRIL 5, 1988

CONTINUED FROM PAGE 1.
Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
Pa	912856		Pa		
	912857				
	912858				
	912859				
	912860				
	912861				
	912862				
	912864				
	912865				
	912866				
	912867				
	912870				
	912871				
	912872				
	912873				
	912876				
	912877				
	914061				
	914062				
	914539				
	914540				

Total number of mining claims covered by this report of work.

66

J. Jozynski



DOCUMENT No. W8803-126
Mining Act

Mining Lands Section 2.11041

Type of Survey(s) **GEOCHEMICAL (SOILS AND ROCKS)** Township or Area **KELEYASK LAKE/2085**
 Claim Holder(s) **NORTHERN DYNASTY EXPLORATIONS LTD.** Prospector's Licence No. **T-1884**
 Address **844 WEST HASTINGS ST., VANCOUVER, B.C., V6C 1C8**
 Survey Company **NORTHERN DYNASTY EXPLORATIONS LTD.** Date of Survey (from & to) **29 Day 05 Mo. 87 30 Day 03 Mo. 88** Total Miles of line Cut **42.6**
 Name and Address of Author (of Geo-Technical report) **DARREN C. ELSBY, 844 WEST HASTINGS ST. VANCOUVER, B.C., V6C 1C8**

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic Magnetometer	
For each additional survey: using the same grid Enter 20 days (for each)	- Radiometric Other	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total	- Electromagnetic Magnetometer - Radiometric Other	
Airborne Credits	Electromagnetic Magnetometer Radiometric	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.		

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
Pa	803210	52.21	Pa	818453	40.
	803213	52.21		818482	51.11
	803214	52.21		818483	52.21
	803215	52.21		818484	51.11
	803216	40.		818485	51.01
	803217	40.		818486	26.66
	803218	40.		818493	
	803219	40.		818494	
	816719	12.21		818504	30.
	816720	12.21		912854	
	816721	39.		912855	31.21
	816722	38.41		912856	
	816723	12.21		912858	31.21
	816724	38.31		912859	
	816725	12.21		912860	
	816726	38.41		912861	28.68
	818440	52.21		912864	
	818441	40.		912865	
	818443	40.		912866	
	818444	36.3		912867	
	818447	40.		912870	
	818448	40.		912871	
	818450	40.			

Expenditures (excludes power stripping)

Type of Work Performed **SOIL AND ROCK ANALYSES**

Performed on Claim(s) **AS LISTED (33)**

SECTION TT-19 *

Calculation of Expenditure Days Credits

Total Expenditures **\$18,802.80** ÷ Total Days Credits **15** = **1253.52**

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded **1666.39** Date Recorded **APRIL 11, 1988** Mining Record **[Signature]**

Date Approved as Recorded **4 July 88** Branch Director **[Signature]**

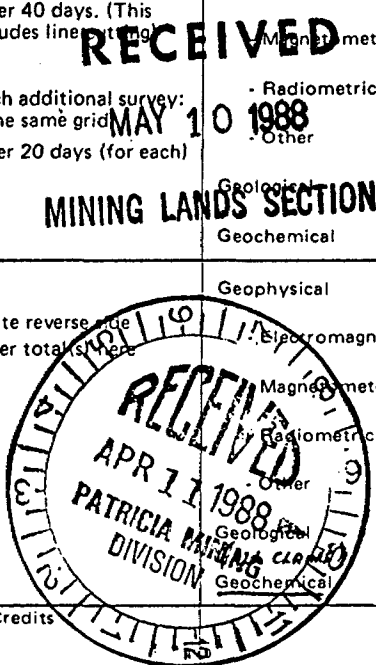
Date **APRIL 5/88** Recorder Holder or Agent (Signature) **[Signature]**

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

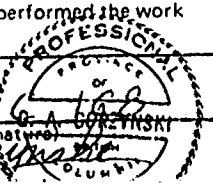
Name and Postal Address of Person Certifying **G. GORZYNSKI, 844 WEST HASTINGS ST. VANCOUVER, B.C., V6C 1C8**

Date Certified **APRIL 5/88** Certified by (Signature) **[Signature]**



CONTINUED NEXT PAGE

Total number of mining claims covered by this report of work. **53**



MINING LANDS

2-1104 Mining Act

Type of Survey(s) **GEOCHEMICAL EXPENDITURE CREDITS** Township or Area **KEEVASK LAKE/G-2005**
SEESKEEP LAKE/G-2204
 Claim Holder(s) **NORTHERN DYNASTY EXPLORATIONS LTD** Prospector's Licence No. **T-1884**
 Address **844 WEST HASTINGS ST., VANCOUVER, B.C. V6C 1C8**
 Survey Company **NORTHERN DYNASTY EXPLORATIONS LTD** Date of Survey (from & to) **20 Day 08, 27 19 Day 08, 27** Total Miles of line Cut **42.6**
 Name and Address of Author (of Geo. Technical report) **DARREN C. ELSBY, 844 WEST HASTINGS ST., VANCOUVER, B.C., V6C 1C8**

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Electromagnetic	
	Magnetometer	
	Radiometric	
For each additional survey: using the same grid: Enter 20 days (for each)	Other	
	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	Electromagnetic	
	Magnetometer	
	Radiometric	
	Other	
	Geological	
	Geochemical	
Airborne Credits	Electromagnetic	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Magnetometer	
	Radiometric	

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
Pa	818442	40.			
	818445	20.			
	818446	20.			
	818449	40.			
	818451	40.			
	818452	40.			
	818457	33.7			
	912864	20.			

RECEIVED
APR 20 1988
MINING LANDS SECTION

RECEIVED
APR 7 1988
PATRICIA MINING DIVISION

Expenditures (excludes power stripping)

Type of Work Performed **DRILLCORE ASSAYS SECTION 77-19**

Performed on Claim(s) **805213, 803214, 816719, 816721, 816725, 912864, 112857**

Calculation of Expenditure Days Credits

Total Expenditures **\$ 3,805.50** ÷ Total Days Credits **15** = **253.7**

Total number of mining claims covered by this report of work. **8**

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded **253.7** Date Recorded **April 11, 1988** Mining Record **[Signature]**

Date Approved as Recorded **14 July 88** Branch Director **[Signature]**

Date **APRIL 5/88** Recorded Holder or Agent (Signature) **[Signature]** S. A. GORZYNSKI

Certification Verifying Report of Work
I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying **S. GORZYNSKI, 844 WEST HASTINGS ST., VANCOUVER, B.C. V6C 1C8**

Date Certified **APRIL 5/88** Certified by (Signature) **[Signature]** GORZYNSKI

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey <i>GEOCHEMICAL (SOIL AND ROCK SAMPLING)</i>												
Technical Days	x	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
59				413		-		413		53		7.79

Type of Survey												
Technical Days	x	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
<input style="width: 50px; height: 20px;" type="text"/>				<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>

Type of Survey												
Technical Days	x	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
<input style="width: 50px; height: 20px;" type="text"/>				<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>

Type of Survey												
Technical Days	x	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
<input style="width: 50px; height: 20px;" type="text"/>				<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>		<input style="width: 50px; height: 20px;" type="text"/>



ARSENO LAKE PROPERTY
Ministry of Natural Resources

File _____

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

RECEIVED

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.

APR

8 1988

MINING LANDS SECTION Page 1 of 2

Type of Survey(s) GEOLOGICAL MAPPING
Township or Area KEYASK LAKE/G-2085; SEESEEP LAKE/G-2204
Claim Holder(s) NORTHERN DYNASTY EXPLORATIONS LTD.
844 WEST HASTINGS ST., VANCOUVER, B.C.
Survey Company NORTHERN DYNASTY EXPLORATIONS LTD.
Author of Report DARREN C. ELSBY, M.Sc.
Address of Author 844 WEST HASTINGS ST., VANCOUVER, B.C.
Covering Dates of Survey MAY, 1987 - MARCH, 1988
(linecutting to office)
Total Miles of Line Cut 42.6 miles

MINING CLAIMS TRAVERSED
List numerically

Pa. (prefix)	(number)
	803210
	803211
	803212
	803213
	803214
	803215
	803216
	803217
	803219
	816719
	816720
	816721
	816722
	816723
	816724
	816725
	816726
	818440
	818441
	818442
	818443
CONTINUED NEXT PAGE	
TOTAL CLAIMS _____	

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED	DAYS per claim
Geophysical	
--Electromagnetic	_____
--Magnetometer	_____
--Radiometric	_____
--Other	_____
Geological	<u>40</u>
Geochemical	_____

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

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

DATE: APRIL 5, 1988 SIGNATURE: [Signature]
Author's Report for Agent

Res. Geol. _____ Qualifications 210629

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 _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy - Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: Fixed transmitter Shoot back In line Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

Instrument _____

Scale constant _____

Corrections made _____

Base station value and location _____

Elevation accuracy _____

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 _____

INDUCED POLARIZATION RESISTIVITY

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____
(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____
(specify for each type of survey)

Accuracy _____
(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

TECHNICAL DATA STATEMENT
 ARSENO LAKE PROPERTY
 GEOLOGICAL MAPPING

Page 2 of 2
 APRIL 5, 1988

MINING CLAIMS TRAVERSED	
List numerically	
Pa.	818444
(prefix)	(number)
	818445
	818446
	818447
	818448
	818450
	818453
	818480
	818481
	818482
	818483
	818484
	818485
	818486
	818487
	818488
	818489
	818490
	818491
	818492
	818493
	818494
TOTAL CLAIMS _____	

MINING CLAIMS TRAVERSED	
List numerically	
Pa.	912854
(prefix)	(number)
	912855
	912856
	912857
	912858
	912859
	912860
	912861
	912862
	912864
	912865
	912866
	912867
	912870
	912871
	912872
	912873
	912876
	912877
	914061
	914062
	914539
	914540
TOTAL CLAIMS 66	



Ontario

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

RECEIVED

APR 8 1988

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

MINING CLAIMS SECTION

Type of Survey(s) GROUND GEOPHYSICS (MAGNETICS & ELECTROMAGNETICS)

Township or Area KEEYASK LAKE/G-2085; SEESEEP LAKE/G-2204

Claim Holder(s) NORTHERN DYNASTY EXPLORATIONS LTD.
844 WEST HASTINGS ST., VANCOUVER, B.C.

Survey Company NORTHERN DYNASTY EXPLORATIONS LTD.

Author of Report DARREN C. ELSBY

Address of Author 844 WEST HASTINGS ST., VANCOUVER, B.C.

Covering Dates of Survey SEPTEMBER 9, 1986 - MARCH 30, 1988
(linecutting to office)

Total Miles of Line Cut 42.6 MILES

MINING CLAIMS TRAVERSED	
List numerically	
Pa. (prefix)	912854 (number)
	912855
	912856
	912857
	912858
	912859
	912860
	912861
	912862
	912864
	912865
	912866
	912867
	912870
	912871
	912872
	912873
	912876
	912877
	914061
	914062
TOTAL CLAIMS <u>21</u>	

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED	Geophysical	DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	--Electromagnetic	<u>20</u>
ENTER 20 days for each additional survey using same grid.	--Magnetometer	<u>20</u>
	--Radiometric	_____
	--Other	_____
	Geological	_____
	Geochemical	_____

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

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

DATE: APRIL 5/88 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 MAG-3750; EM-4815 Number of Readings MAG-3762; EM-4815 x 2 (IN-PHASE & QUAD)
Station interval 10 METRES Line spacing 100 METRES
Profile scale EM - ONE CENTIMETRE = 10' OR 10'
Contour interval FRASER FILTER AT 20

MAGNETIC

Instrument SCINTREX MED-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) ± 30 GAMMAS - NO CORRECTION APPLIED
Base Station location and value MAIN BASE STATION @ 33+20 E, 0+00
READING: 59,500 ± 30 GAMMAS

ELECTROMAGNETIC

Instrument GEONICS RONKA EM-16
Coil configuration TWO PERPENDICULAR RECEIVING COILS
Coil separation
Accuracy ± 1%, ± 1°
Method: [X] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency 24.0 KHZ (TRANSMITTER: CUTLER, MAINE, U.S.A.)
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

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth -- include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

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

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

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____



ARSENO LAKE PROPERTY

Ministry of Natural Resources

File _____

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL TECHNICAL DATA STATEMENT

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.

(#18,802.80)

Type of Survey(s) GEOCHEMICAL (SOILS & ROCKS) + GEOCHEM EXPENDITURE Page 1 of 2
 Township or Area KEEYASK LAKE/G-2085; SEESKEP LAKE/G-2084
 Claim Holder(s) NORTHERN DYNASTY EXPLORATIONS LTD.
844 WEST HASTINGS ST., VANCOUVER, B.C.
 Survey Company NORTHERN DYNASTY EXPLORATIONS LTD.
 Author of Report DARREN C. ELSBIZY
 Address of Author 844 WEST HASTINGS ST., VANCOUVER, B.C.
 Covering Dates of Survey MAY 29¹⁹⁸⁷ - MARCH 30, 1988
(linecutting to office)
 Total Miles of Line Cut 42.6 MILES

MINING CLAIMS TRAVERSED List numerically

Pa. (prefix)	(number)
.....	803210
.....	803213
.....	803214
.....	803215
.....	803216
.....	803217
.....	803218
.....	803219
.....	816719
.....	816720
.....	816721
.....	816722
.....	816723
.....	816724
.....	816725
.....	816726
.....	818440
.....	818441
.....	818443
.....	818444
.....	818447

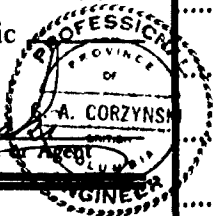
If space insufficient, attach list

<u>SPECIAL PROVISIONS</u> <u>CREDITS REQUESTED</u>	DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	Geophysical -Electromagnetic _____ -Magnetometer _____ -Radiometric _____ -Other _____
ENTER 20 days for each additional survey using same grid.	Geological _____ Geochemical _____

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

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

DATE: APRIL 5/88 SIGNATURE: [Signature]
Author of Report



Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder
.....
.....
.....
.....
.....
.....
.....
.....

CONTINUED NEXT PAGE

TOTAL CLAIMS _____

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations _____ Number of Readings _____
Station interval _____ Line spacing _____
Profile scale _____
Contour interval _____

MAGNETIC

Instrument _____
Accuracy – Scale constant _____
Diurnal correction method _____
Base Station check-in interval (hours) _____
Base Station location and value _____

ELECTROMAGNETIC

Instrument _____
Coil configuration _____
Coil separation _____
Accuracy _____
Method: Fixed transmitter Shoot back In line Parallel line
Frequency _____
(specify V.L.F. station)
Parameters measured _____

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 _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____
(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____
(specify for each type of survey)

Accuracy _____
(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken SEE LIST ON FRONT PAGE

Total Number of Samples 1686 SOILS & 74 ROCKS
Type of Sample SOIL, ROCK
(Nature of Material)
Average Sample Weight 0.3 kg.
Method of Collection MATTOCK, ROCK HAMMER

Soil Horizon Sampled A₂, B₂, (C)
Horizon Development A₁-A₂-B₁-B₂-C
Sample Depth 1-120 cm
Terrain BEDROCK, GLACIAL TILL, MUSKEG
Drainage Development POOR
Estimated Range of Overburden Thickness 0-50m

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis
SOILS: -80 MESH
ROCKS: -100 MESH PULP

General INDUCED CATION PLASMA (ICP)
30 ELEMENT ANALYSIS.
-0.5 GRAM SAMPLE DIGESTED IN
3ml OF 3-1-2 HCl-HNO₃-H₂O AT
95°C FOR 1 HOUR, THEN DILUTED
TO 10ml WITH H₂O FOR I.C.P.
ANALYSIS

ANALYTICAL METHODS

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

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

Others SEE BELOW
Field Analysis (_____ tests)
Extraction Method _____
Analytical Method _____
Reagents Used _____
Field Laboratory Analysis
No. (_____ tests)
Extraction Method _____
Analytical Method _____
Reagents Used _____

Commercial Laboratory (_____ tests)
Name of Laboratory ACME ANALYTICAL LABS
Extraction Method AQUA REGIA
Analytical Method SEE BELOW
Reagents Used _____

General OTHER I.C.P. ELEMENTS:
Mn, Fe, U, Th, Sr, Cd, Sb, Bi, V,
Ca, P, La, Cr, Mg, Ba, Ti, B,
Al, Na, K, W, Au
Au: 10g SAMPLE - FIRE ASSAY
WITH ATOMIC ABSORPTION
FINISH.

TECHNICAL DATA STATEMENT
 ARSENO LAKE PROPERTY
 GEOCHEMISTRY & EXPENDITURES

Page 2 of 2
 APRIL 5, 1988

MINING CLAIMS TRAVERSED List numerically	
Pa	818448
(prefix)	(number)
	818450
	818453
	818482
	818483
	818484
	818485
	818486
	818493
	818494
	818504
	912854
	912855
	912856
	912858
	912859
	912860
	912861
	912864
	912865
	912866
	912867
TOTAL CLAIMS _____	

MINING CLAIMS TRAVERSED List numerically	
Pa	912870
(prefix)	(number)
	912871
	912872
	912873
	912876
	912877
	914061
	914062
	914531
	914540
TOTAL CLAIMS <u>53</u>	

J. Jozynski

ARSENIC LAKE PROPERTY
 DRILLCORE ASSAYS
 GEOCHEMICAL SURVEY - PROCEDURE RECORD

Page 2 of 2
 APRIL 5, 1988

Numbers of claims from which samples taken Pa. 803213, 803214, 816719, 816721,
816725, 818442, 818444, 818445, 818484, 818485, 912858, 912859;

Total Number of Samples 223

Type of Sample DRILL CORE - ROCK
(Nature of Material)

Average Sample Weight VARIABLE (0.5 - 5 lbs)

Method of Collection SPLIT HALF CORE (BQ)

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis -100 MESH
PULP

General T.C.P. AND ATOMIC ABSORPTION ANALYSES: 0.5 GRAM
SAMPLE DIGESTED WITH 3ml OF
3-1-2 HCl-HNO₃-H₂O AT 95°C FOR
ONE HOUR AND DILUTED TO 10ml WITH
WATER PRIOR TO ICP OR AA ANALYSIS

ANALYTICAL METHODS

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

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

Others Au

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory ACME ANALYTICAL LABS

Extraction Method AQUA REGIA

Analytical Method SEE BELOW

Reagents Used _____

General _____

ICP FOR GEOCHEMICAL Cu, Pb, Zn, Ag.

AA FOR Pb & Zn %

WITH AA FINISH
FIRE ASSAY FOR GEOCHEMICAL Au

CLASSICAL-FIRE ASSAY FOR
Au & Ag ASSAY - 10g SAMPLE



Ministry of
Northern Development
and Mines

Ontario

Ministère du
Développement du Nord
et des Mines

June 22, 1988

AMENDED

Your file: W8803-105
W8803-106

Our file: 2.11041

Mining Recorder
Ministry of Northern Development and Mines
Court House
P.O. Box 3000
Sioux Lookout, Ontario
POV 2T0

Dear Sir:

Re: Notice of Intent dated June 7, 1988
Geophysical (Electromagnetic and Magnetometer)
and Geological Survey
submitted on Mining Claims Pa 818442 et al
in the Areas of Keeyask Lake and Seeseep Lake

The assessment work credits, as listed with the above-mentioned
Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so
indicate on your records.

Yours sincerely,

W.R. Cowan, Manager
Mining Lands Section
Mines & Minerals Division

Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

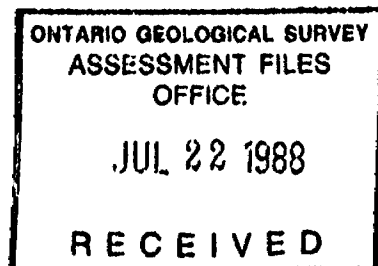
Telephone: (416) 965-4888

SH:pl
Enclosure

cc: Mr. G.H. Ferguson
Mining and Lands Commissioner
Toronto, Ontario

Resident Geologist
Sioux Lookout, Ontario

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





Amended

Recorded Holder	Northern Dynasty Explorations Ltd.
Township or Area	Keyask Lake and Seeseep Lake

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological <u>31</u> days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	PA 803210 to 217 inclusive 803219 816719 to 726 inclusive 818440 to 448 inclusive 818450-53 818480 to 494 inclusive 912854 to 862 inclusive 912865 to 867 inclusive 912870 to 873 inclusive 912876-77 914061-62 914539-40 912864

Special credits under section 77 (16) for the following mining claims

--

No credits have been allowed for the following mining claims

<input type="checkbox"/> not sufficiently covered by the survey	<input type="checkbox"/> insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.



Recorded Holder
Northern Dynasty Explorations Ltd.

~~XXXXXX~~ Area
Keyask Lake and Seeseep Lake

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ 16 _____ days Magnetometer _____ 16 _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	PA 912854 to 862 inclusive 912864 to 867 inclusive 912870 to 873 inclusive 912876-77 914061-62

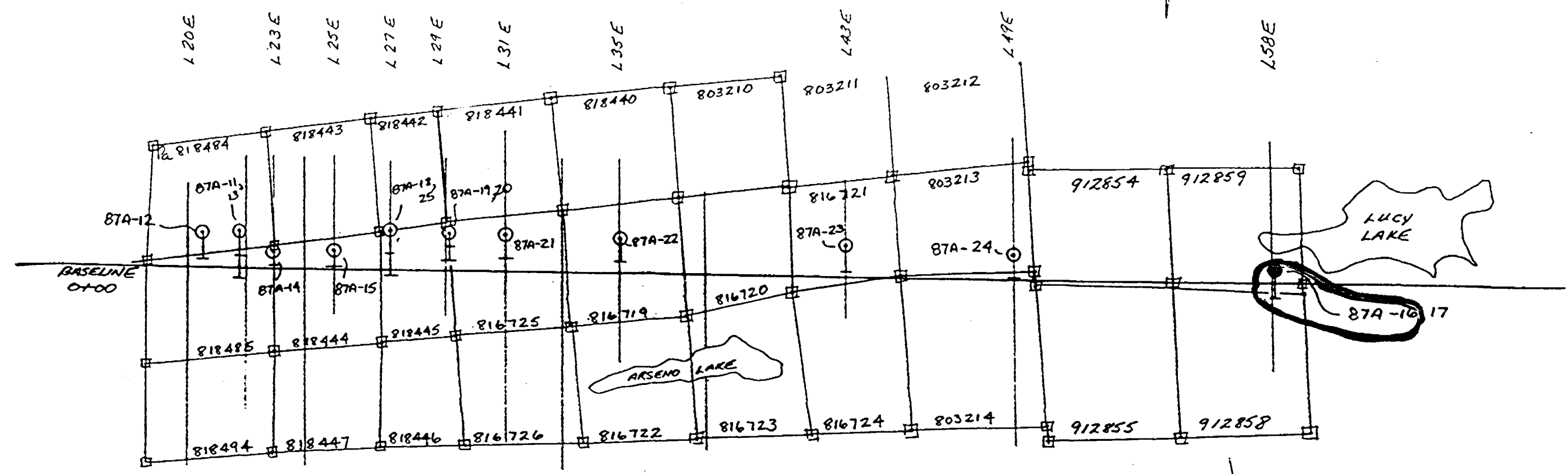
Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.

NORTHERN DYNASTY EXPLORATIONS LTD.



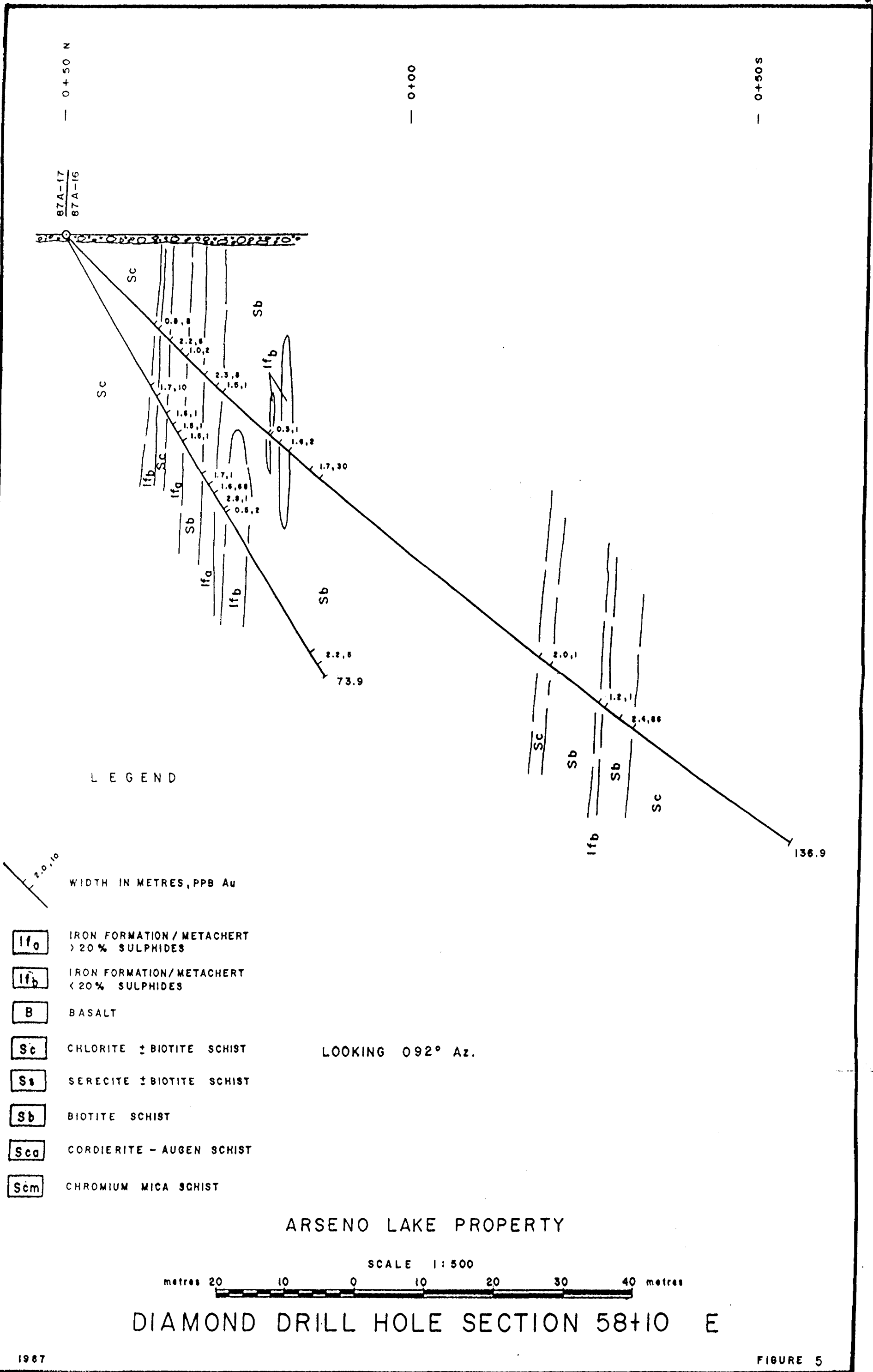
ARSEND LAKE PROPERTY
1987 DIAMOND DRILL HOLE



LOCATION MAP
CLAIM MAPS: KECYASK LAKE/G-2085
SEESKEP LAKE/G-2204
NTS: 53B 14/15

- CLAIM POST.
- 87A-13 DRILL COLLAR & HOLE NUMBER.
- ↖ SURFACE PROJECTION OF DRILLHOLE

2-11041












0+50 N
87A-17
87A-16

0+00

0+50 S

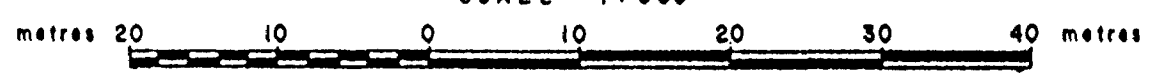
LEGEND

-  WIDTH IN METRES, PPB Au
-  IRON FORMATION/METACHERT
>20% SULPHIDES
-  IRON FORMATION/METACHERT
<20% SULPHIDES
-  BASALT
-  CHLORITE ± BIOTITE SCHIST
-  SERICITE ± BIOTITE SCHIST
-  BIOTITE SCHIST
-  CORDIERITE - AUGEN SCHIST
-  CHROMIUM MICA SCHIST

LOOKING 092° Az.

ARSENO LAKE PROPERTY




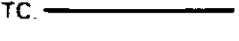
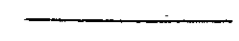
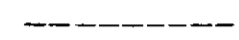
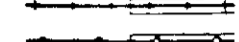
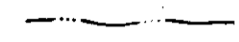


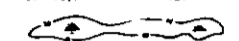




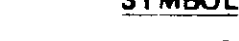

SCALE 1:500



DIAMOND DRILL HOLE SECTION 58+10 E

FARNER LAKE G-2033

LEGEND

- HIGHWAY AND ROUTE No. 
- OTHER ROADS 
- TRAILS 
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC. 
 - LOTS, MINING CLAIMS, PARCELS ETC. 
- UNSURVEYED LINES:
 - LOT LINES 
 - PARCEL BOUNDARY 
 - MINING CLAIMS ETC. 
- RAILWAY AND RIGHT OF WAY 
- UTILITY LINES 
- NON PERENNIAL STREAM 
- FLOODING OR FLOODING RIGHTS 
- SUBDIVISION OR COMPOSITE PLAN RESERVATIONS 
- ORIGINAL SHORELINE 
- MARSH OR MUSKEG 
- MINES 
- TRAVERSE MONUMENT 

DISPOSITION OF CROWN LANDS

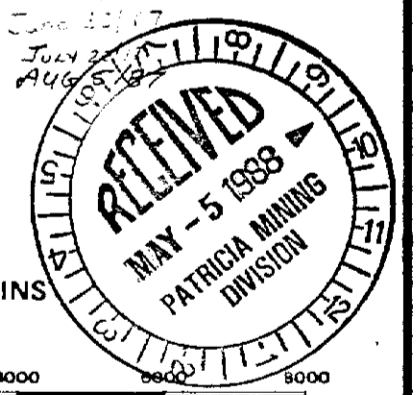
TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	○
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	□
" MINING RIGHTS ONLY	□
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	○
CANCELLED	○
SAND & GRAVEL	○

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1857, VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

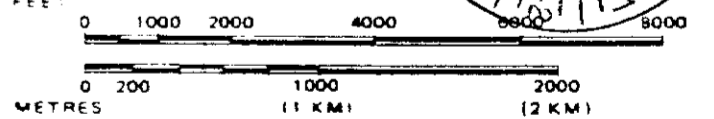
REFERENCES

- AREAS WITHDRAWN FROM DISPOSITION
- M.R.O. - MINING RIGHTS ONLY
 - S.R.O. - SURFACE RIGHTS ONLY
 - M. & S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
Sept 6, 1934				
Oct 12, 1984				
Jan 7, 1985				
Jan 15, 1985				
Feb 11/85				
Jan 30/85				
Jan 15/85				
Dec 11/85				
Dec 14/85			APR 2, 1987	
Sept 25/85			Apr 30/87	
Oct 21, 1985				
			June 29/87	
			July 2	
			AUG	
Jan 7, 1986				
Apr 18/86				
Jan 6/86				




SCALE: 1 INCH = 40 CHAINS



AREA

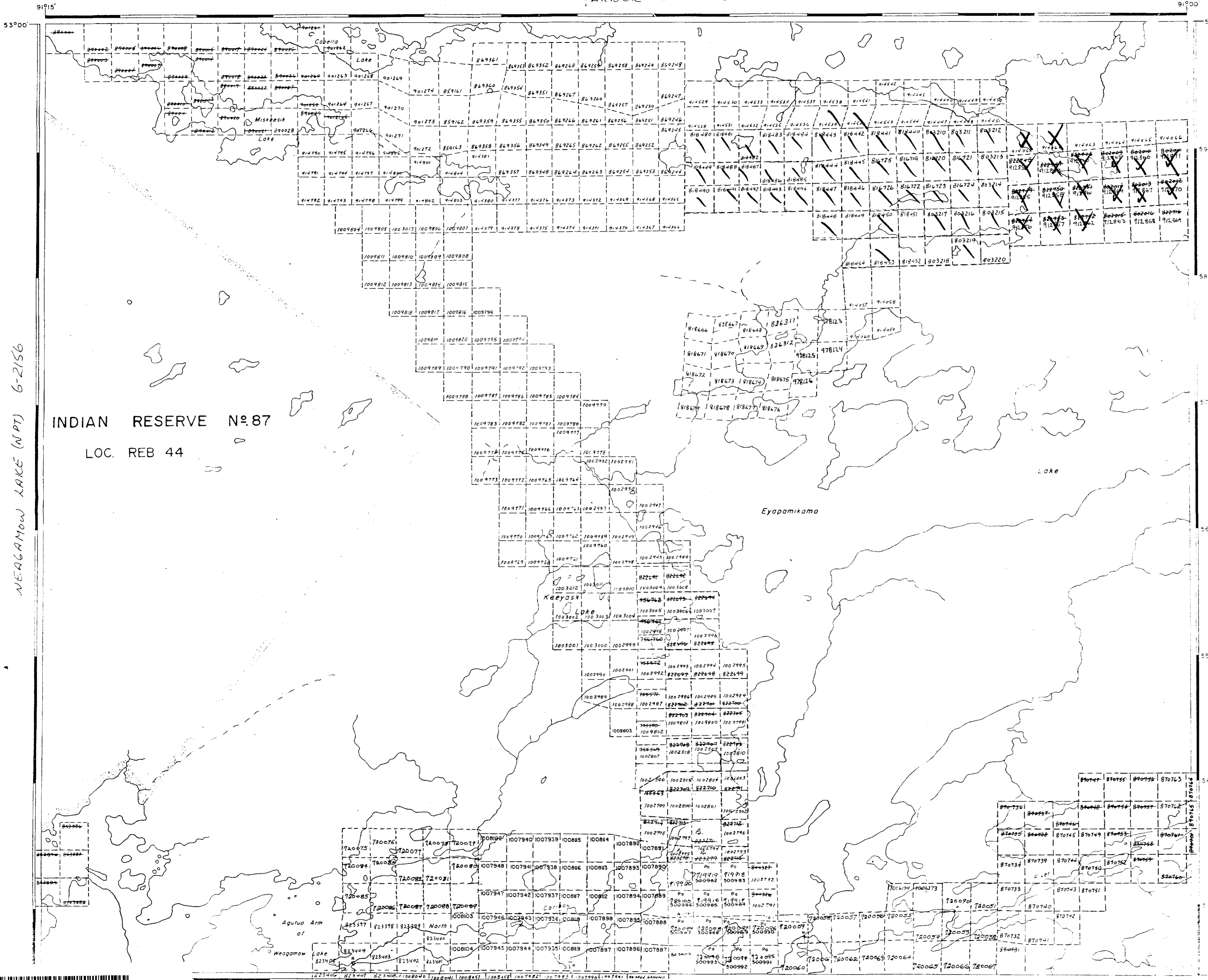
KEYYASK LAKE

M.N.R. ADMINISTRATIVE DISTRICT
 SIOUX LOOKOUT
 MINING DIVISION
 PATRICIA
 LAND TITLES / REGISTRY DIVISION
 KENORA (PATRICIA PORTION)

 Ministry of Natural Resources
 Land Management Branch

Date: FEBRUARY, 1984. Number

G-2085



NEAGAMOW LAKE (NPT) G-2156

WAGAMOW LAKE G-2204

RANDALL LAKE G-2152



200

YARNER LAKE G-2033

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES.
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES.
 - LOT LINES
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER-IN-COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 9, 1913, VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 300, SEC. 63, SUBSEC. 1.

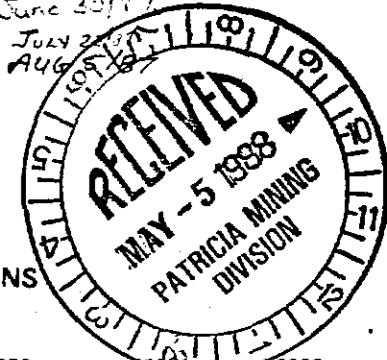
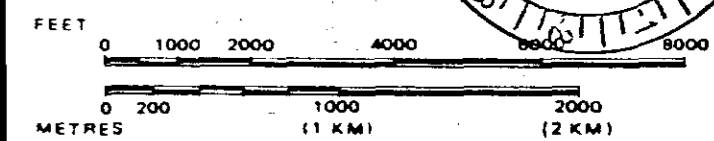
REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M.+S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
Sept 6, 1984		1984		
Oct 12, 1984		1984		
Jan 7, 1985		1985		
Jan 15, 1985		1985		
Feb 11, 85		1985		
Feb 30, 85		1985		
July 15, 85		1985		
Aug 11, 85		1985		
Aug 15, 85		1985		
Aug 19, 85		1985		
Sept 23, 85		1985		
Oct 21, 1985		1985		
Nov 12, 85		1985		
Dec 20, 85		1985		
Jan 9, 86		1986		
Jan 18, 86		1986		
Jan 22, 86		1986		
Jan 27, 86		1986		
Feb 2, 86		1986		
Feb 9, 86		1986		
Feb 16, 86		1986		
Feb 23, 86		1986		
Feb 28, 86		1986		
Mar 6, 86		1986		
Mar 13, 86		1986		
Mar 20, 86		1986		
Mar 27, 86		1986		
Apr 3, 86		1986		
Apr 10, 86		1986		
Apr 17, 86		1986		
Apr 24, 86		1986		
May 1, 86		1986		
May 8, 86		1986		
May 15, 86		1986		
May 22, 86		1986		
May 29, 86		1986		
Jun 5, 86		1986		
Jun 12, 86		1986		
Jun 19, 86		1986		
Jun 26, 86		1986		
Jul 3, 86		1986		
Jul 10, 86		1986		
Jul 17, 86		1986		
Jul 24, 86		1986		
Aug 1, 86		1986		
Aug 8, 86		1986		
Aug 15, 86		1986		
Aug 22, 86		1986		
Aug 29, 86		1986		
Sept 5, 86		1986		
Sept 12, 86		1986		
Sept 19, 86		1986		
Sept 26, 86		1986		
Oct 3, 86		1986		
Oct 10, 86		1986		
Oct 17, 86		1986		
Oct 24, 86		1986		
Oct 31, 86		1986		
Nov 7, 86		1986		
Nov 14, 86		1986		
Nov 21, 86		1986		
Nov 28, 86		1986		
Dec 5, 86		1986		
Dec 12, 86		1986		
Dec 19, 86		1986		
Dec 26, 86		1986		
Jan 2, 87		1987		
Jan 9, 87		1987		
Jan 16, 87		1987		
Jan 23, 87		1987		
Jan 30, 87		1987		
Feb 6, 87		1987		
Feb 13, 87		1987		
Feb 20, 87		1987		
Feb 27, 87		1987		
Mar 6, 87		1987		
Mar 13, 87		1987		
Mar 20, 87		1987		
Mar 27, 87		1987		
Apr 3, 87		1987		
Apr 10, 87		1987		
Apr 17, 87		1987		
Apr 24, 87		1987		
May 1, 87		1987		
May 8, 87		1987		
May 15, 87		1987		
May 22, 87		1987		
May 29, 87		1987		
Jun 5, 87		1987		
Jun 12, 87		1987		
Jun 19, 87		1987		
Jun 26, 87		1987		
Jul 3, 87		1987		
Jul 10, 87		1987		
Jul 17, 87		1987		
Jul 24, 87		1987		
Jul 31, 87		1987		
Aug 7, 87		1987		
Aug 14, 87		1987		
Aug 21, 87		1987		
Aug 28, 87		1987		
Sept 4, 87		1987		
Sept 11, 87		1987		
Sept 18, 87		1987		
Sept 25, 87		1987		
Oct 2, 87		1987		
Oct 9, 87		1987		
Oct 16, 87		1987		
Oct 23, 87		1987		
Oct 30, 87		1987		
Nov 6, 87		1987		
Nov 13, 87		1987		
Nov 20, 87		1987		
Nov 27, 87		1987		
Dec 4, 87		1987		
Dec 11, 87		1987		
Dec 18, 87		1987		
Dec 25, 87		1987		
Jan 1, 88		1988		

SCALE: 1 INCH = 40 CHAINS



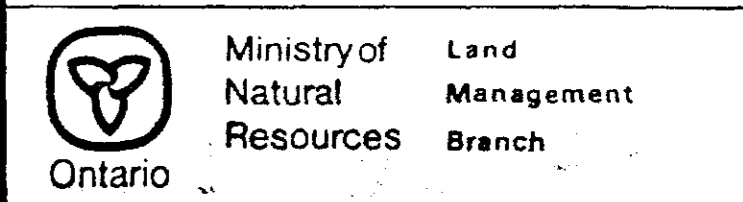
AREA

KEEYASK LAKE

M.N.R. ADMINISTRATIVE DISTRICT
 SIOUX LOOKOUT
 MINING DIVISION

PATRICIA

LAND TITLES / REGISTRY DIVISION
 KENORA (PATRICIA PORTION)



Date FEBRUARY 1984

Number G-208F

53°00'

91°00'

WEGAGOMOW LAKE (NPT) G-2156

SEESERP LAKE G-2204

INDIAN RESERVE No. 87
 LOC. REB 44



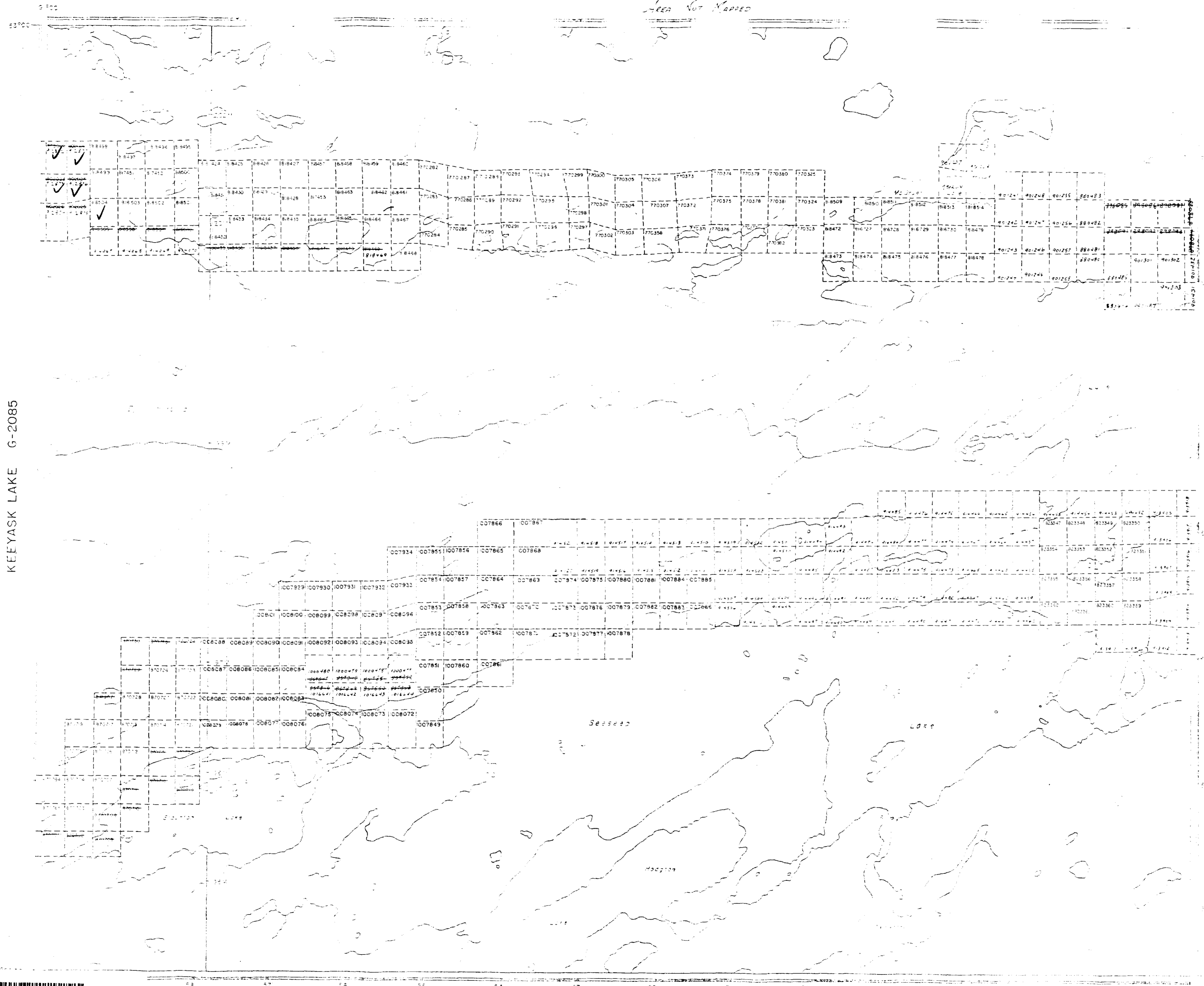
210

RANDALL LAKE G-2182

KEYASK LAKE G-2085

ERICHSEN LAKE - G-2029

Area Not Mapped



1. LOCATION OF STREAM
 2. LOCATION OF FLOODING PRONONE
 3. SUBDIVISION OR COMPOSITE PLAN
 4. RESERVATIONS
 5. OTHER INFORMATION

DOCUMENT	SYMBOL
PA SURFACE & MINING RIGHTS
SURFACE RIGHTS
MINING RIGHTS
RESERVATIONS
OTHER INFORMATION

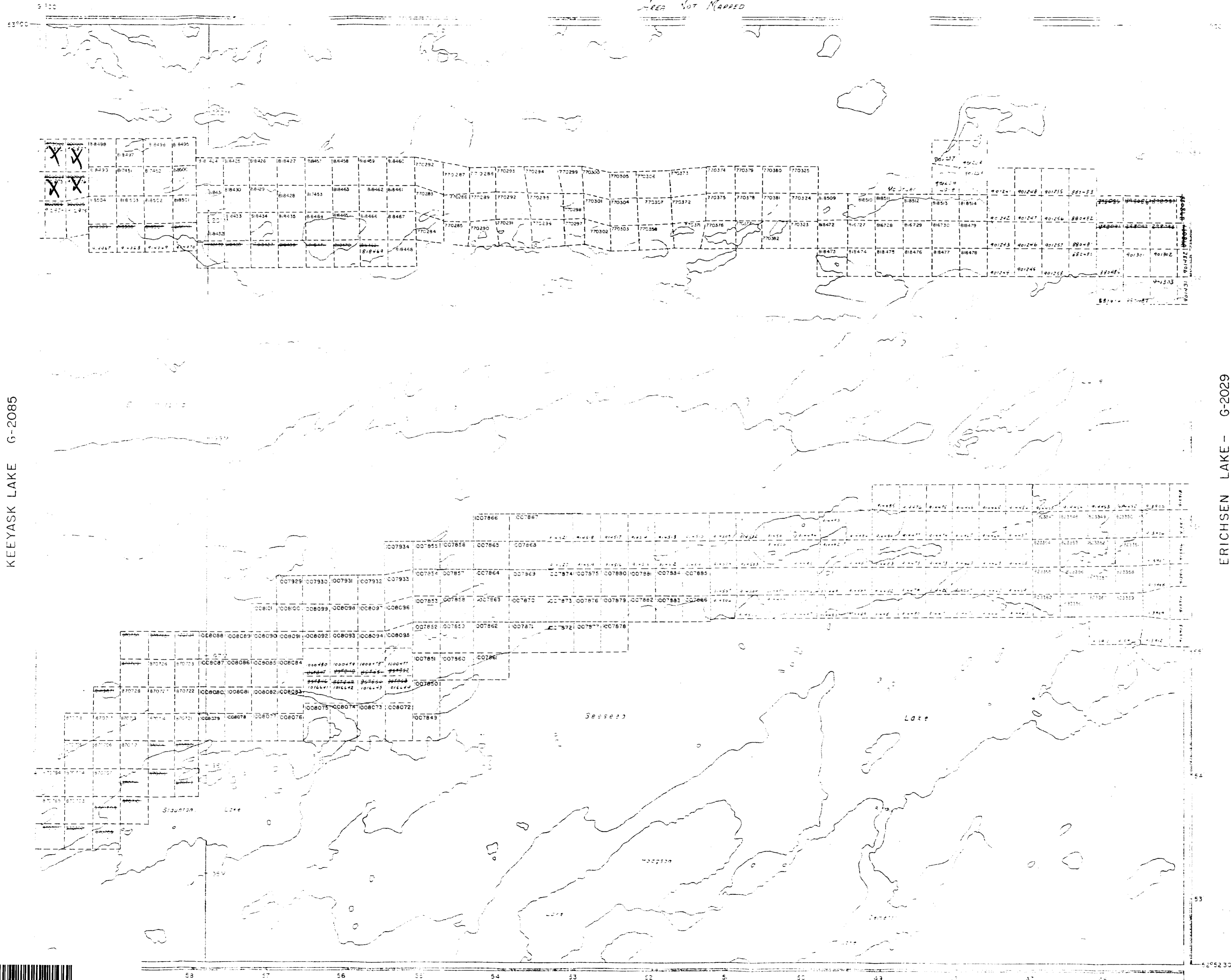
REFERENCES

AREAS DRAWN FROM 1870S TO 1900S
 MINING RIGHTS ONLY
 DATE OF SURVEY: 1870S TO 1900S
 DATE OF DRAWING: 1987

Apr 2 1987
 Nov 10 1987
 RECEIVED
 NOV 10 1987
 PATRICIA MINING
 DIVISION

SCALE 1 INCH = 40 CHAINS





KEEYASK LAKE G-2085

ERICHSEN LAKE - G-2029

Area Not Mapped

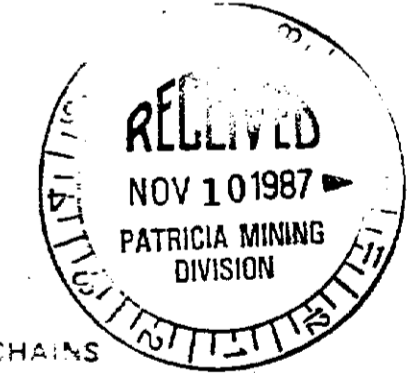
FLOODING
 FLOODING PLANS
 SUBDIVISION OR COMPOSITE PLAN
 RESERVATIONS
 SHORELINE

TYPE OF DOCUMENT	SYMBOL
PATENT SURFACE & MINING RIGHTS
SURFACE RIGHTS
MINING RIGHTS
SURFACE & MINING RIGHTS
RESERVATIONS ONLY
SHORELINE ONLY

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION
 MINING RIGHTS ONLY
 (Symbol description)

April 18 1987
 Date of
 Oct 23 1987
 Date of
 Nov 2 1987
 Date of
 Apr 10 1987
 Date of
 Jul 16 1987



SCALE 1 INCH = 40 CHAINS
 METERS 0 100 200
 CHAINS 0 100 200

SEESEEP LAKE

AND ASSOCIATIVE DISTRICT
 OPEN LOOKOUT
 REGISTRY DIVISION
 PATRICIA DIVISION



230

CEMETERY LAKE G-1989

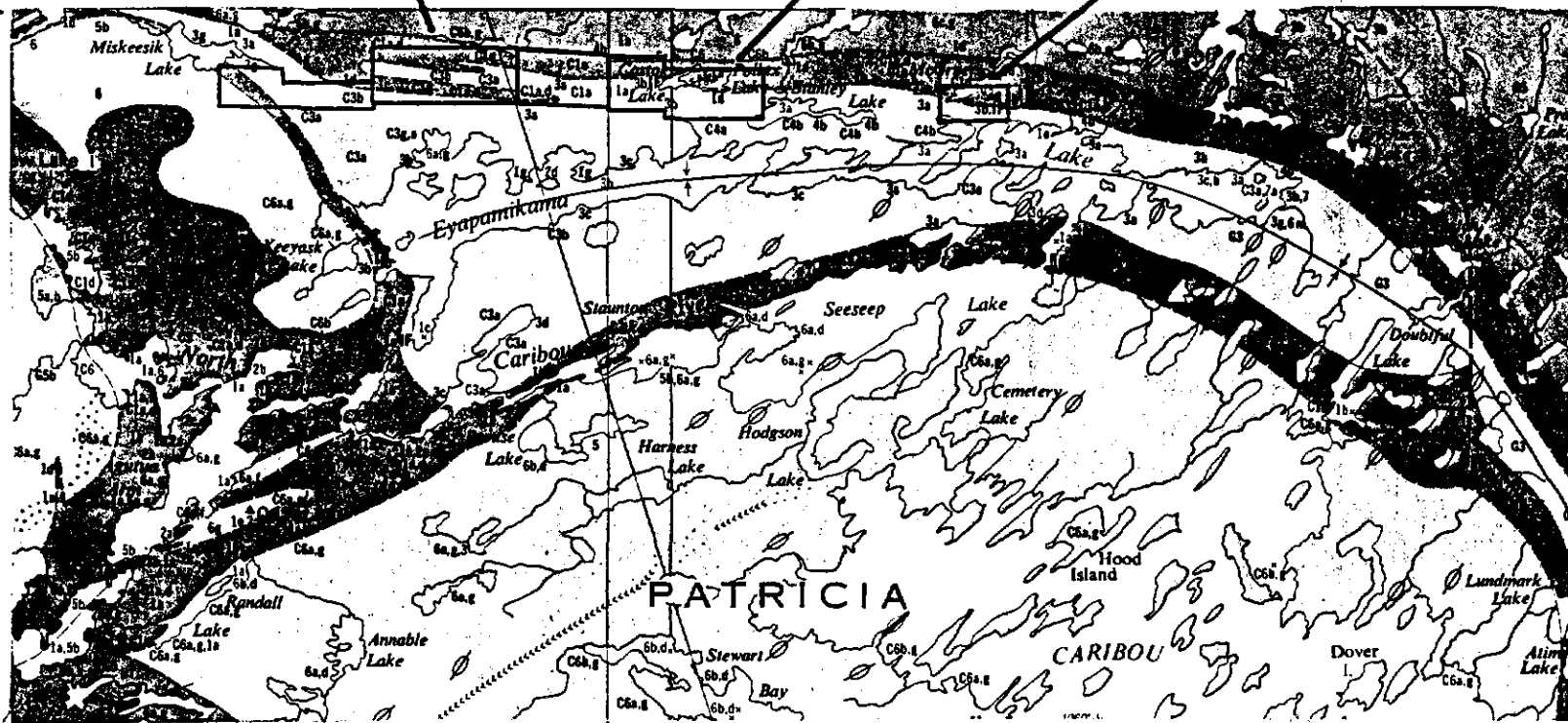
G-2204

ARSENO LAKE

CASTOR LAKE

McGRUER LAKE

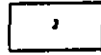
53°00'



GRANITIC ROCKS



MIGMATITIC ROCKS



METASEDIMENTARY ROCKS



MAFIC METAVOLCANIC ROCKS

91°00'

ONTARIO GOLD JOINT VENTURE
 EYAPAMIKAMA LAKE
 REGIONAL GEOLOGY

NTS 53 B/14, 15

1 inch = 4 miles

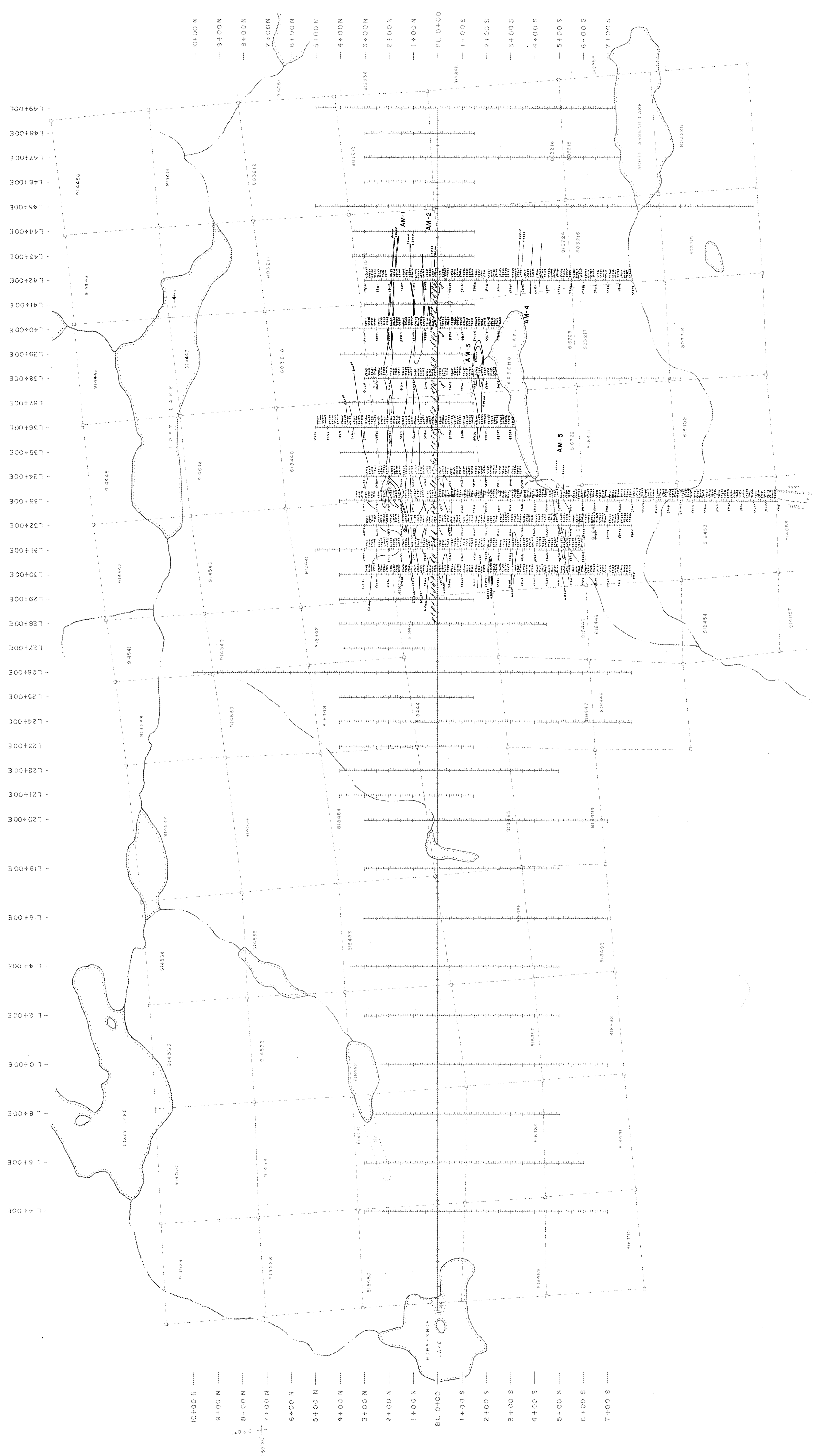
1 : 253,440

NOVEMBER 1987

FIGURE 4

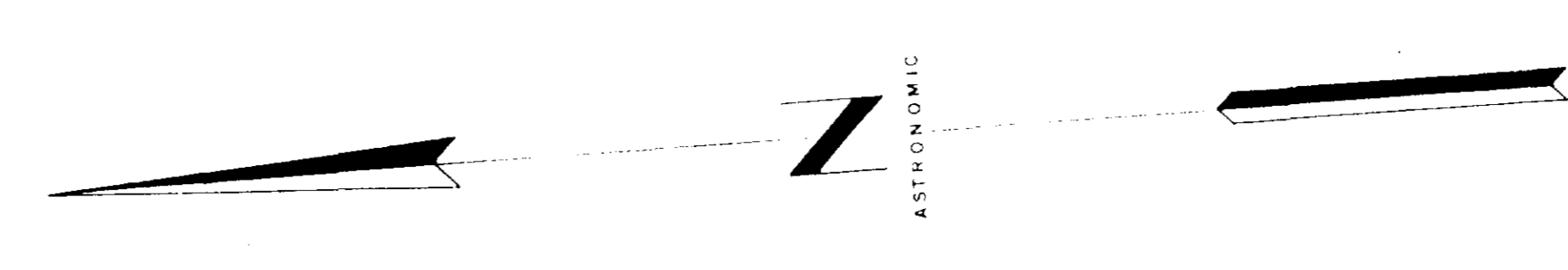


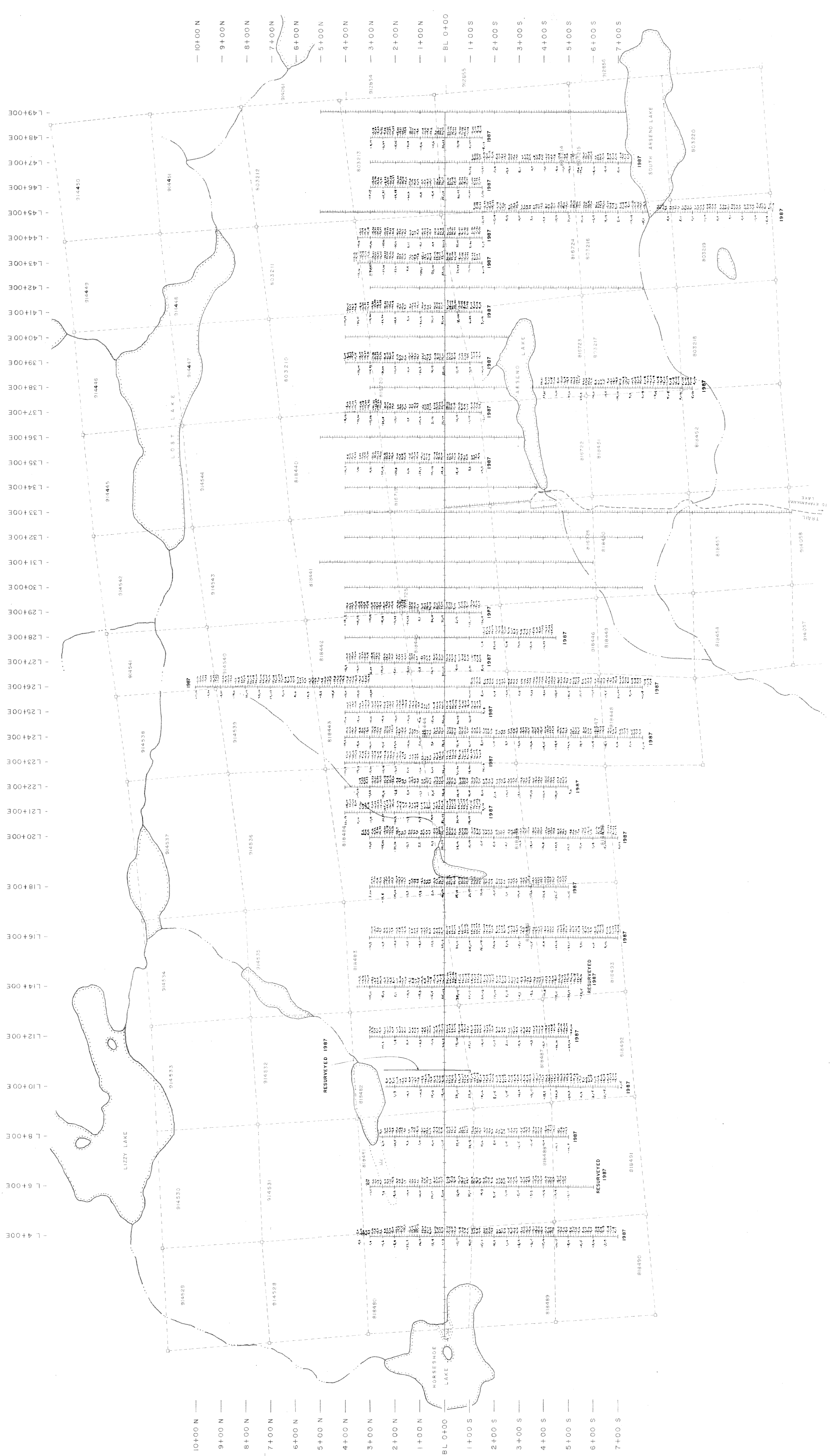
53B14NE0012 2.11041 SEESEEP LAKE



91°01'30" W
52°58'20" N

91°01'30" W
52°58'55" N



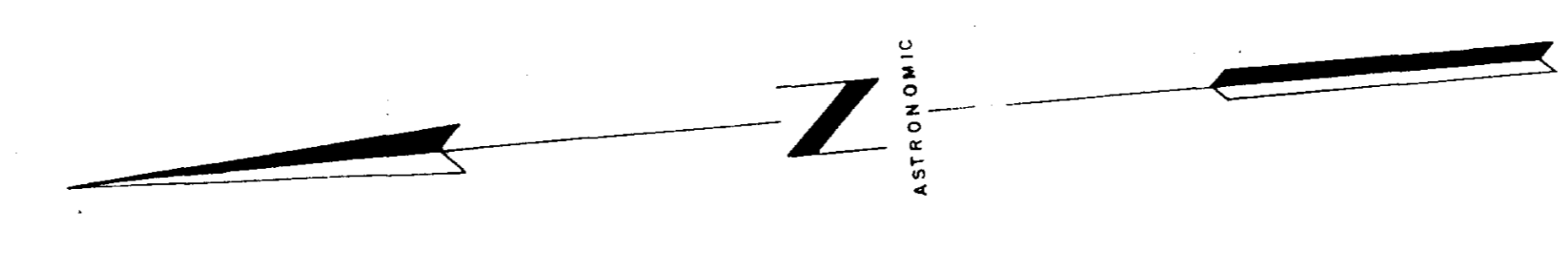


10+00 N
 9+00 N
 8+00 N
 7+00 N
 6+00 N
 5+00 N
 4+00 N
 3+00 N
 2+00 N
 1+00 N
 BL 0+00
 1+00 S
 2+00 S
 3+00 S
 4+00 S
 5+00 S
 6+00 S
 7+00 S

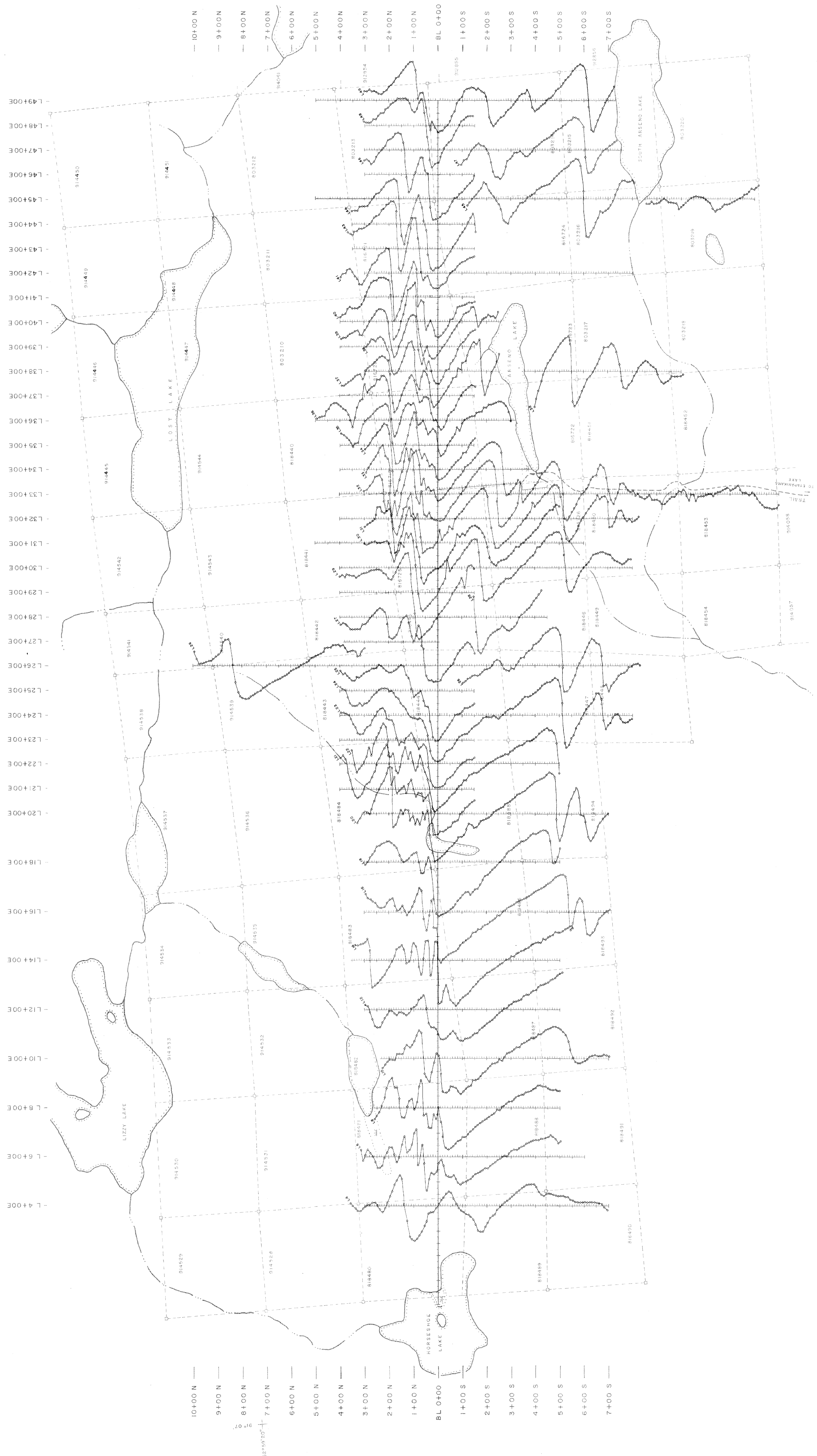
L 49+00E
 L 48+00E
 L 47+00E
 L 46+00E
 L 45+00E
 L 44+00E
 L 43+00E
 L 42+00E
 L 41+00E
 L 40+00E
 L 39+00E
 L 38+00E
 L 37+00E
 L 36+00E
 L 35+00E
 L 34+00E
 L 33+00E
 L 32+00E
 L 31+00E
 L 30+00E
 L 29+00E
 L 28+00E
 L 27+00E
 L 26+00E
 L 25+00E
 L 24+00E
 L 23+00E
 L 22+00E
 L 21+00E
 L 20+00E
 L 19+00E
 L 18+00E
 L 17+00E
 L 16+00E
 L 15+00E
 L 14+00E
 L 13+00E
 L 12+00E
 L 11+00E
 L 10+00E
 L 9+00E
 L 8+00E
 L 7+00E
 L 6+00E
 L 5+00E
 L 4+00E

91° 01' 30"
 98° 59' 20"

91° 07'
 98° 49' 20"



91° 01' 30"
 98° 59'

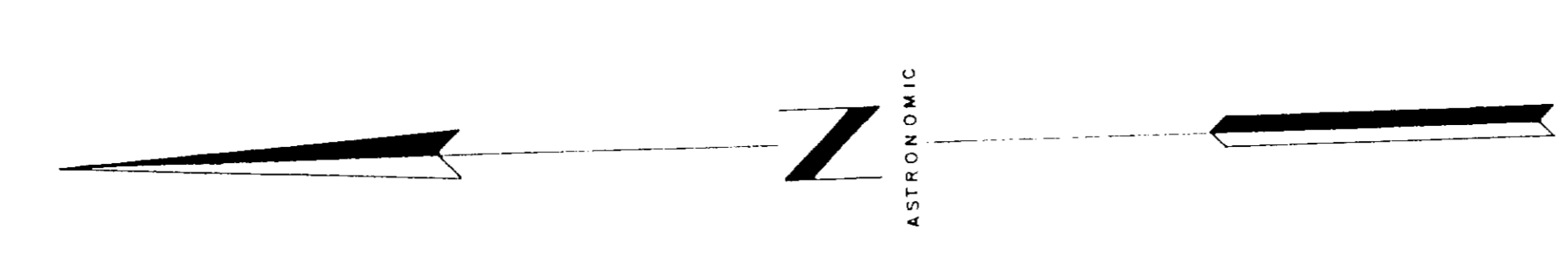


10+00 N —
 9+00 N —
 8+00 N —
 7+00 N —
 6+00 N —
 5+00 N —
 4+00 N —
 3+00 N —
 2+00 N —
 1+00 N —
 BL 0+00 —
 1+00 S —
 2+00 S —
 3+00 S —
 4+00 S —
 5+00 S —
 6+00 S —
 7+00 S —

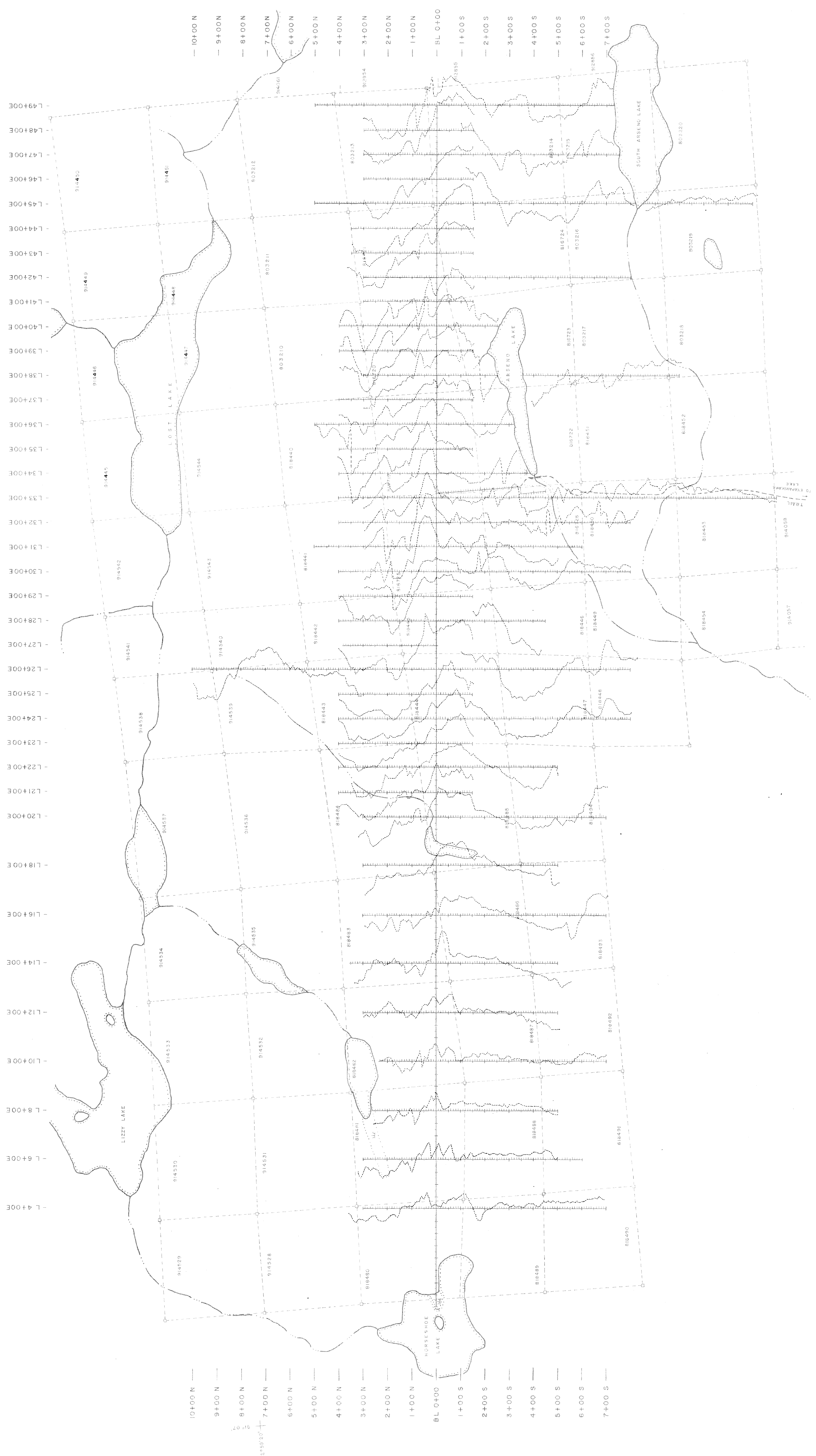
L-4+00E —
 L-6+00E —
 L-8+00E —
 L-10+00E —
 L-12+00E —
 L-14+00E —
 L-16+00E —
 L-18+00E —
 L-20+00E —
 L-22+00E —
 L-23+00E —
 L-24+00E —
 L-25+00E —
 L-26+00E —
 L-27+00E —
 L-29+00E —
 L-29+00E —
 L-30+00E —
 L-31+00E —
 L-32+00E —
 L-33+00E —
 L-34+00E —
 L-35+00E —
 L-36+00E —
 L-37+00E —
 L-38+00E —
 L-39+00E —
 L-40+00E —
 L-41+00E —
 L-42+00E —
 L-43+00E —
 L-44+00E —
 L-45+00E —
 L-46+00E —
 L-47+00E —
 L-48+00E —
 L-49+00E —

91° 01' 30" —
 52° 59' 20" —

92° 01' 30" —
 52° 59' 20" —



LEGEND



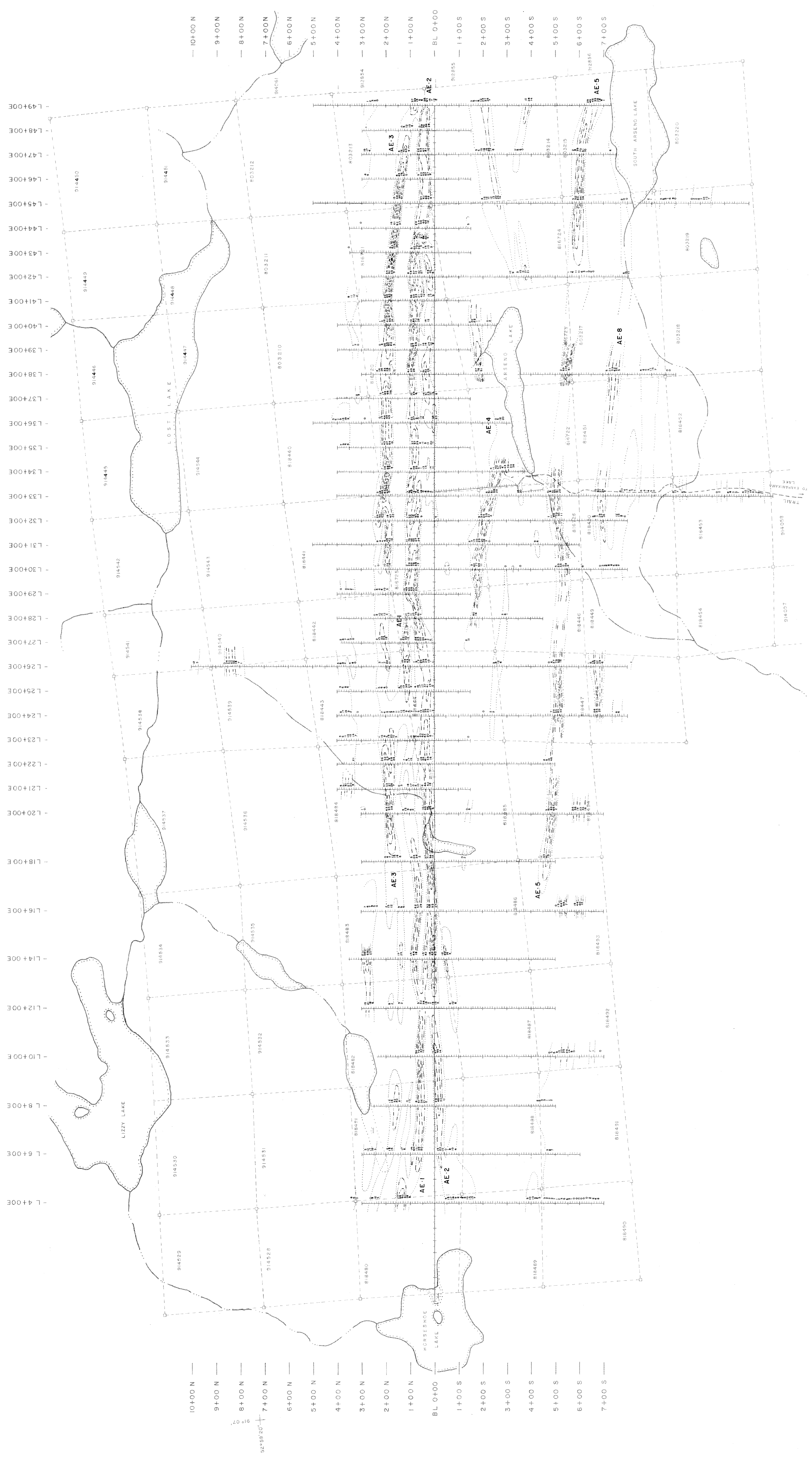
10+00 N
 9+00 N
 8+00 N
 7+00 N
 6+00 N
 5+00 N
 4+00 N
 3+00 N
 2+00 N
 1+00 N
 BL 0+00
 1+00 S
 2+00 S
 3+00 S
 4+00 S
 5+00 S
 6+00 S
 7+00 S

L-4+00
 L-6+00
 L-8+00
 L-10+00
 L-12+00
 L-14+00
 L-16+00
 L-18+00
 L-20+00
 L-21+00
 L-22+00
 L-23+00
 L-24+00
 L-25+00
 L-26+00
 L-27+00
 L-28+00
 L-29+00
 L-30+00
 L-31+00
 L-32+00
 L-33+00
 L-34+00
 L-35+00
 L-36+00
 L-37+00
 L-38+00
 L-39+00
 L-40+00
 L-41+00
 L-42+00
 L-43+00
 L-44+00
 L-45+00
 L-46+00
 L-47+00
 L-48+00
 L-49+00

52° 59' 20"
 91° 01' 30"

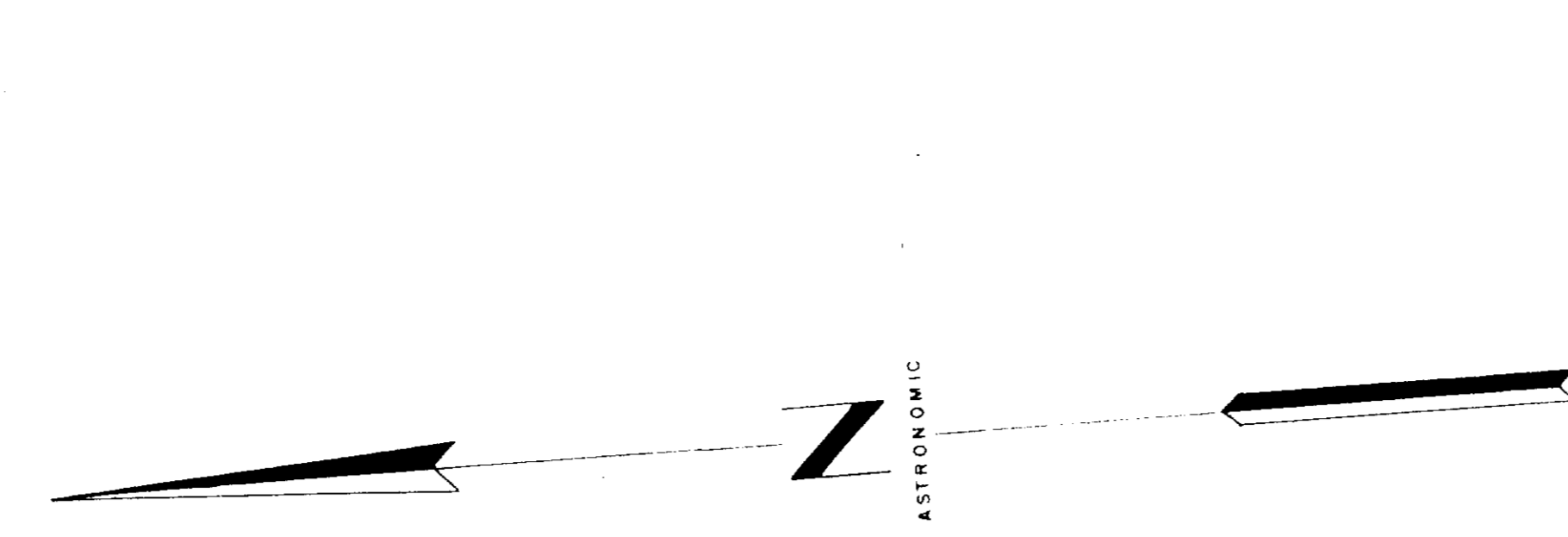


91° 01' 30"
 52° 59' 20"



10+00 N
 9+00 N
 8+00 N
 7+00 N
 6+00 N
 5+00 N
 4+00 N
 3+00 N
 2+00 N
 1+00 N
 BL 0+00
 1+00 S
 2+00 S
 3+00 S
 4+00 S
 5+00 S
 6+00 S
 7+00 S

L-49+00E
 L-48+00E
 L-47+00E
 L-46+00E
 L-45+00E
 L-44+00E
 L-43+00E
 L-42+00E
 L-41+00E
 L-40+00E
 L-39+00E
 L-38+00E
 L-37+00E
 L-36+00E
 L-35+00E
 L-34+00E
 L-33+00E
 L-32+00E
 L-31+00E
 L-30+00E
 L-29+00E
 L-28+00E
 L-27+00E
 L-26+00E
 L-25+00E
 L-24+00E
 L-23+00E
 L-22+00E
 L-21+00E
 L-20+00E
 L-18+00E
 L-16+00E
 L-14+00E
 L-12+00E
 L-10+00E
 L-8+00E
 L-6+00E
 L-4+00E



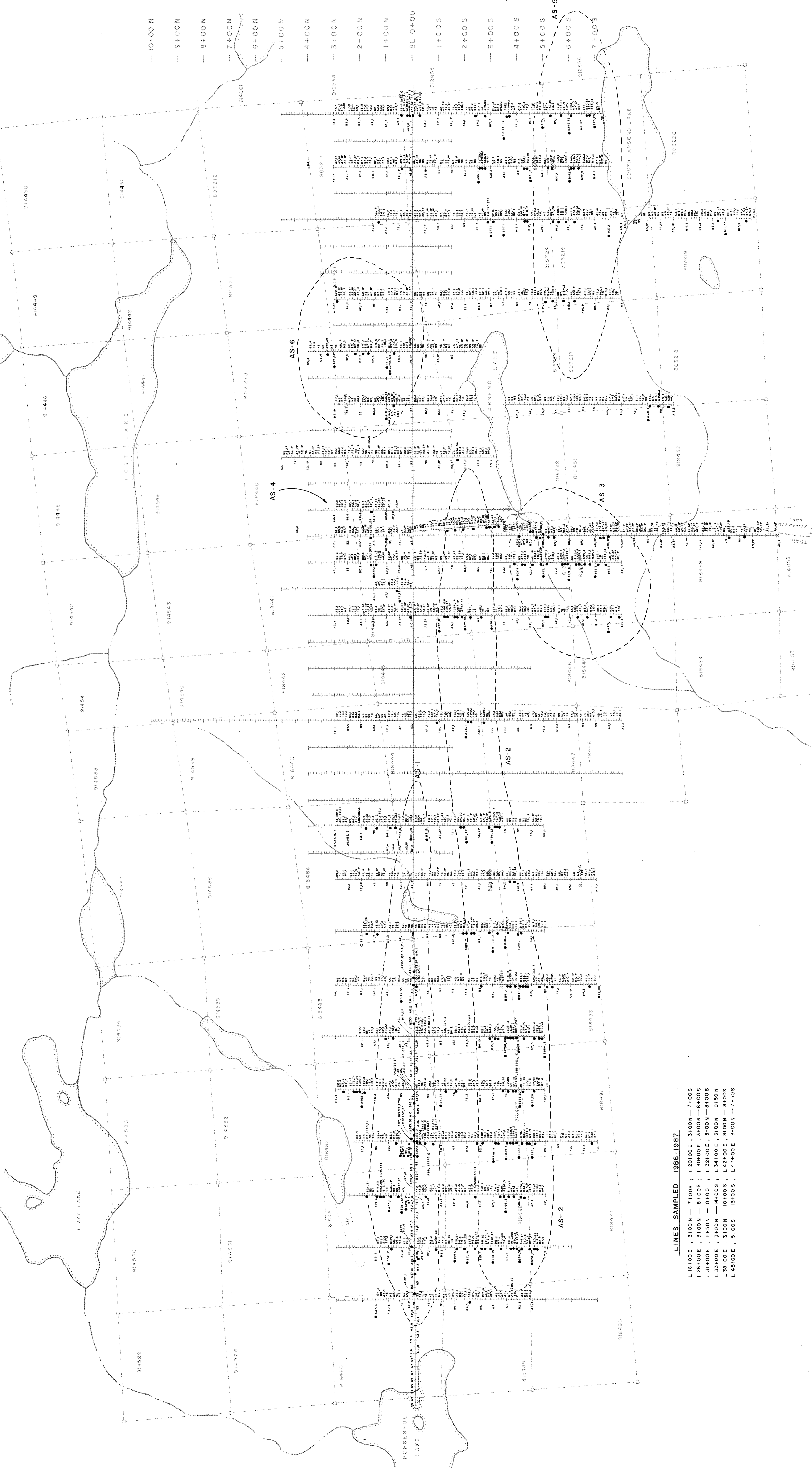
91° 01' 30"
 68° 59' 20"

92° 58'
 05° 10' 16"

10+00 N
 9+00 N
 8+00 N
 7+00 N
 6+00 N
 5+00 N
 4+00 N
 3+00 N
 2+00 N
 1+00 N
 BL 0+00
 1+00 S
 2+00 S
 3+00 S
 4+00 S
 5+00 S
 6+00 S
 7+00 S

92° 59' 20"
 7+00 N

L-4+00
L-6+00
L-8+00
L-10+00
L-12+00
L-14+00
L-16+00
L-18+00
L-20+00
L-21+00
L-22+00
L-23+00
L-24+00
L-25+00
L-26+00
L-27+00
L-28+00
L-29+00
L-30+00
L-31+00
L-32+00
L-33+00
L-34+00
L-35+00
L-36+00
L-37+00
L-38+00
L-39+00
L-40+00
L-41+00
L-42+00
L-43+00
L-44+00
L-45+00
L-46+00
L-47+00
L-48+00
L-49+00



10+00 N
9+00 N
8+00 N
7+00 N
6+00 N
5+00 N
4+00 N
3+00 N
2+00 N
1+00 N
BL 0+00
1+00 S
2+00 S
3+00 S
4+00 S
5+00 S
6+00 S
7+00 S

52°39'20" 31°07'

52°39'20" 31°07'30"

ASTRONOMIC

LINES SAMPLED 1986-1987
L18400E, 3100N - 7+00S ; L20400E, 3100N - 7+00S
L28400E, 3100N - 8+00S ; L30400E, 3100N - 8+00S
L31400E, 1150N - 0+00 ; L32400E, 3100N - 8+00S
L33400E, 3100N - 0+00S ; L34400E, 3100N - 0+00N
L38400E, 3100N - 0+00S ; L42400E, 3100N - 8+00S
L43000E, 5100S - 13+00S ; L47+00E, 3100N - 7+00S

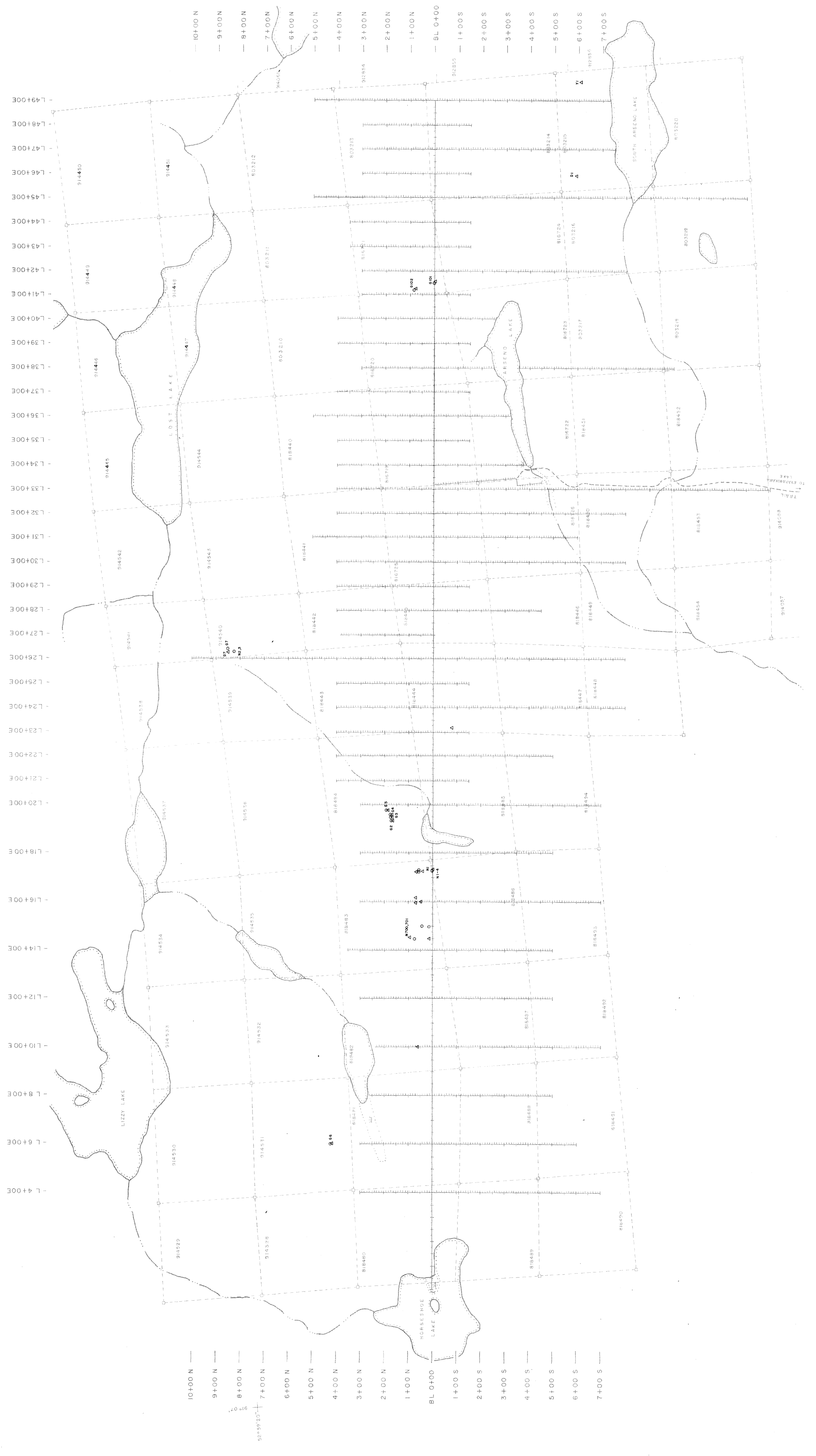


91°01'30" + 82°59'20"

91°01'30" + 82°59'20"

10+00 N
9+00 N
8+00 N
7+00 N
6+00 N
5+00 N
4+00 N
3+00 N
2+00 N
1+00 N
BL 0+00
1+00 S
2+00 S
3+00 S
4+00 S
5+00 S
6+00 S
7+00 S

L-49+00E
L-48+00E
L-47+00E
L-46+00E
L-45+00E
L-44+00E
L-43+00E
L-42+00E
L-41+00E
L-40+00E
L-39+00E
L-38+00E
L-37+00E
L-36+00E
L-35+00E
L-34+00E
L-33+00E
L-32+00E
L-31+00E
L-30+00E
L-29+00E
L-28+00E
L-27+00E
L-26+00E
L-25+00E
L-24+00E
L-23+00E
L-22+00E
L-21+00E
L-20+00E
L-19+00E
L-18+00E
L-17+00E
L-16+00E
L-15+00E
L-14+00E
L-13+00E
L-12+00E
L-11+00E
L-10+00E
L-9+00E
L-8+00E
L-7+00E
L-6+00E
L-5+00E
L-4+00E



91° 01' 30" W
52° 55' 20" N

91° 01' 30" W
52° 55' 20" N



10+00 N
9+00 N
8+00 N
7+00 N
6+00 N
5+00 N
4+00 N
3+00 N
2+00 N
1+00 N
BL 0+00
1+00 S
2+00 S
3+00 S
4+00 S
5+00 S
6+00 S
7+00 S

52° 55' 20" N
91° 01' 30" W

90° 59' 10" 52° 53' 10" 90° 59' 15" 52° 53' 10"



52° 58' 51.55-06

GEOLOGICAL LEGEND

METAMORPHIC LITHOLOGIES

- Pt** PHYLIC TURBIDITE ± QUARTZ-BIOTITE-CHLORITE SCHIST
- Dc** DEBRIS FLOW (CONTAINS SCHISTOSE FLATTENED AND SHEARED SEDIMENTARY DEBRIS) BRECCIA LOCALIZED Mylonites and CHROMIUM-MICA ALTERATION
- Sc** PELTIC SCHIST
- SI** SCHISTOSE TURBIDITE (CHLORITE-BIOTITE-QUARTZ-BARNET SCHIST) LOCAL CHROMIUM-MICA ALTERATION, LOCAL SERICITE
- Sc** CHLORITE SCHIST ± BARNET ± BIOTITE ± SERICITE LOCAL CHROMIUM-MICA ALTERATION
- Scf** CHLORITE SCHIST CONTAINING POSITIVE RELIEF RIBS OF CHLORITE AND AMPHIBOLE ± BARNET ± BIOTITE ± LOCAL CHROMIUM-MICA ALTERATION ± SERICITE
- Sq** QUARTZ-BIOTITE SCHIST, OFTEN CONTAINING QUARTZ AUGEN ± POSSIBLY A QUARTZ-EYE PORPHYRY DIKE
- If** QUARTZ-AMPHIBOLE IRON FORMATION, MOSTLY RECRYSTALLIZED; ALSO INCLUDES METACHERT HORIZONS ± ANOILITE
- Vm** MAFIC VOLCANICS
- Vg** CHLORITE SCHIST - MASSIVE TO AMPHIBOLIC, MAY CONTAIN FLATTENED FOLIATED SERICITE
- Um** COARSE GRAINED CHLORITE SCHIST CONTAINING AMPHIBOLE AND PYROXENE, OFTEN DISPLAYS A GABBROIC TEXTURE (POSSIBLE REMAINS OF DIKES AND/OR SILLS)
- Uc** CARBONATE-TALC-SERPENTINE SCHIST ± ACTINOLITE
- Uc** IRON-CARBONATE SCHIST ± CHROMIUM MICA

LEGEND

- 420 CONTOUR LINES, ELEVATION IN METRES
- 420 SPOT ELEVATION IN METRES
- OPEN SWAMP (MARKED)
- FRESH SWAMP (MARKED)
- LAKE SHORE
- CLAIM POST AND CLAIM LINE (NORTHERN DYNASTY)
- CLAIM POST AND CLAIM LINE
- RECONNAISSANCE SOIL LINE
- PIT OR TRENCH
- ROCK SAMPLE LOCATION
- SOIL SAMPLE LOCATION
- DIAMOND DRILL HOLE, YEAR & NUMBER
- TRENCH
- SMALL OUTCROP/BOULDER

ACCESSORY MINERALS

- As — STEREOBLIND
- Py — PYRITE
- Sp — SPHALERITE
- Mn — MANGANESE
- Gr — GRANATE
- To — TOURMALINE
- Cm — CHROMIUM MICA
- Gl — GARNET
- Al — ALUMINUM
- St — STAUROSLITE
- Ag — AGAPITE (SAPPHIRE)
- Cp — CHRYSOPHANE

STRUCTURAL GEOLOGICAL SYMBOLS

- S₀ BEDDING/COMPOSITIONAL LAYERING
- S₁ PHASE-ONE REGIONAL TRANSPPOSED FOLIATION
- S₂ PHASE-TWO FOLIATION/CLEAVAGE (DIP-SLIP FOLIATION IN PHASE-TWO FOLIATION WITH MINOR FOLD AND MINORITY)
- S₃ PHASE-THREE SPACED PRESSURE-SOLUTION CLEAVAGE
- L₁ PHASE-TWO MINERAL LINEATION (ORIENTED PARALLEL TO PHASE-2 FOLD AXIS)
- L₂ PHASE-TWO MINOR FOLD AXIS WITH SENSE OF ROTATION
- L₃ PHASE-THREE INTERSECTION LINEATION
- J — JOINT PLANE
- S₁ PHASE-TWO, ANTI-FORMAL, SYNFORMAL AXIAL TRACE
- S₂ PHASE-ONE, ANTI-FORMAL, SYNFORMAL AXIAL TRACE
- — — — — GEOLOGICAL CONTACT
- — — — — INFERRED GEOLOGICAL CONTACT
- — — — — FAULT

ONTARIO GOLD JOINT VENTURE

NORTHERN DYNASTY EXPLORATIONS LTD.

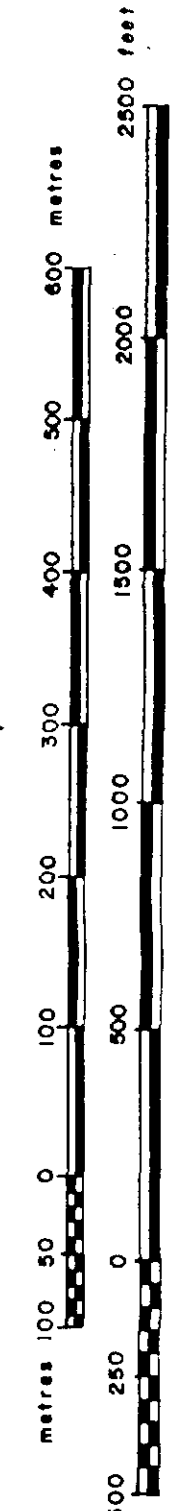
LUCY LAKE CLAIM BLOCK

GEOLOGY

2.11041

NTS-53B/14/15, KEETASK LAKE G-2085, SEESBEE LAKE G-2204

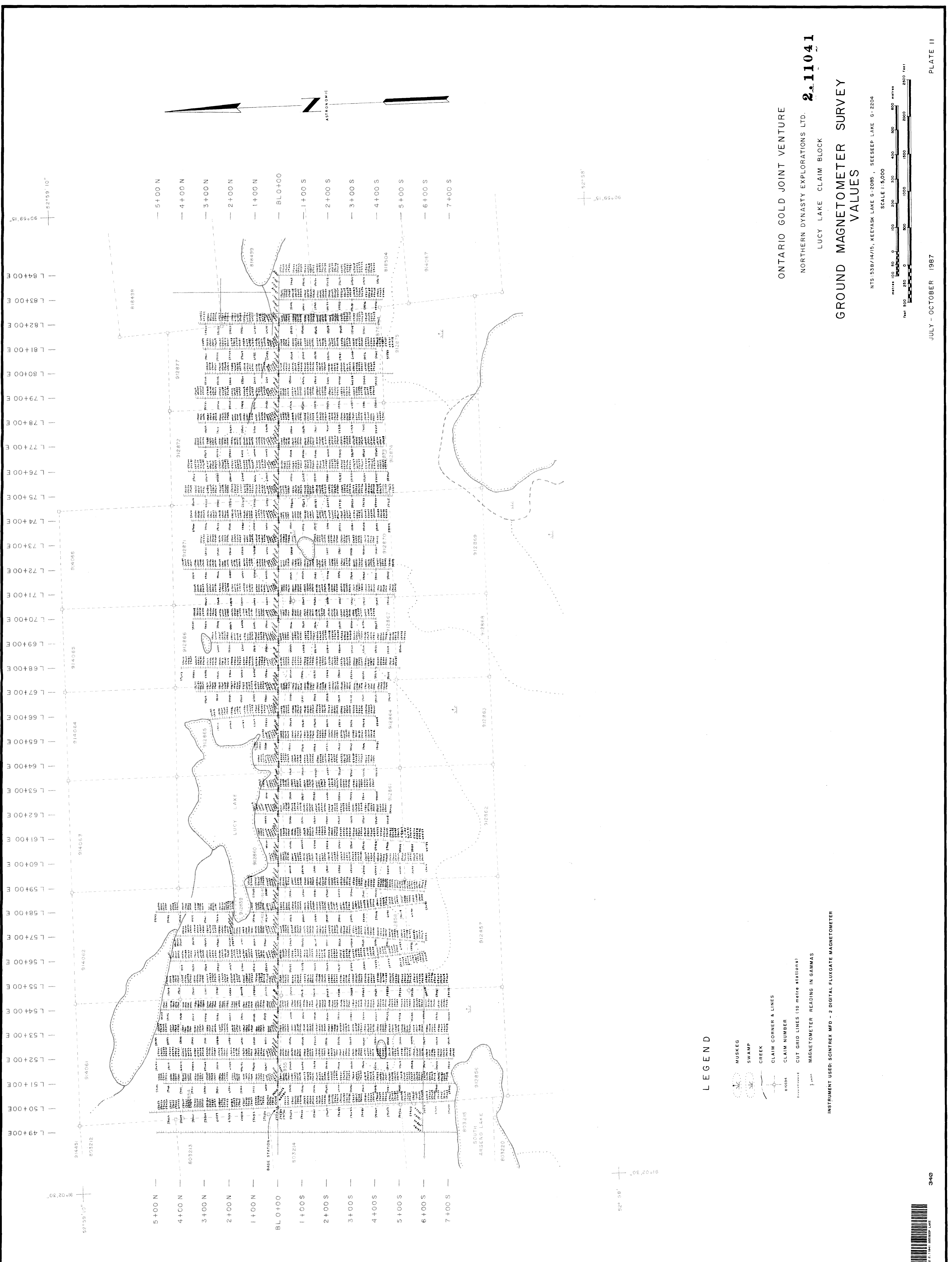
SCALE 1:8,000



3300

JULY - OCTOBER 1987

PLATE 10



ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD. **2.11041**
 LUCY LAKE CLAIM BLOCK
**GROUND MAGNETOMETER SURVEY
 VALUES**

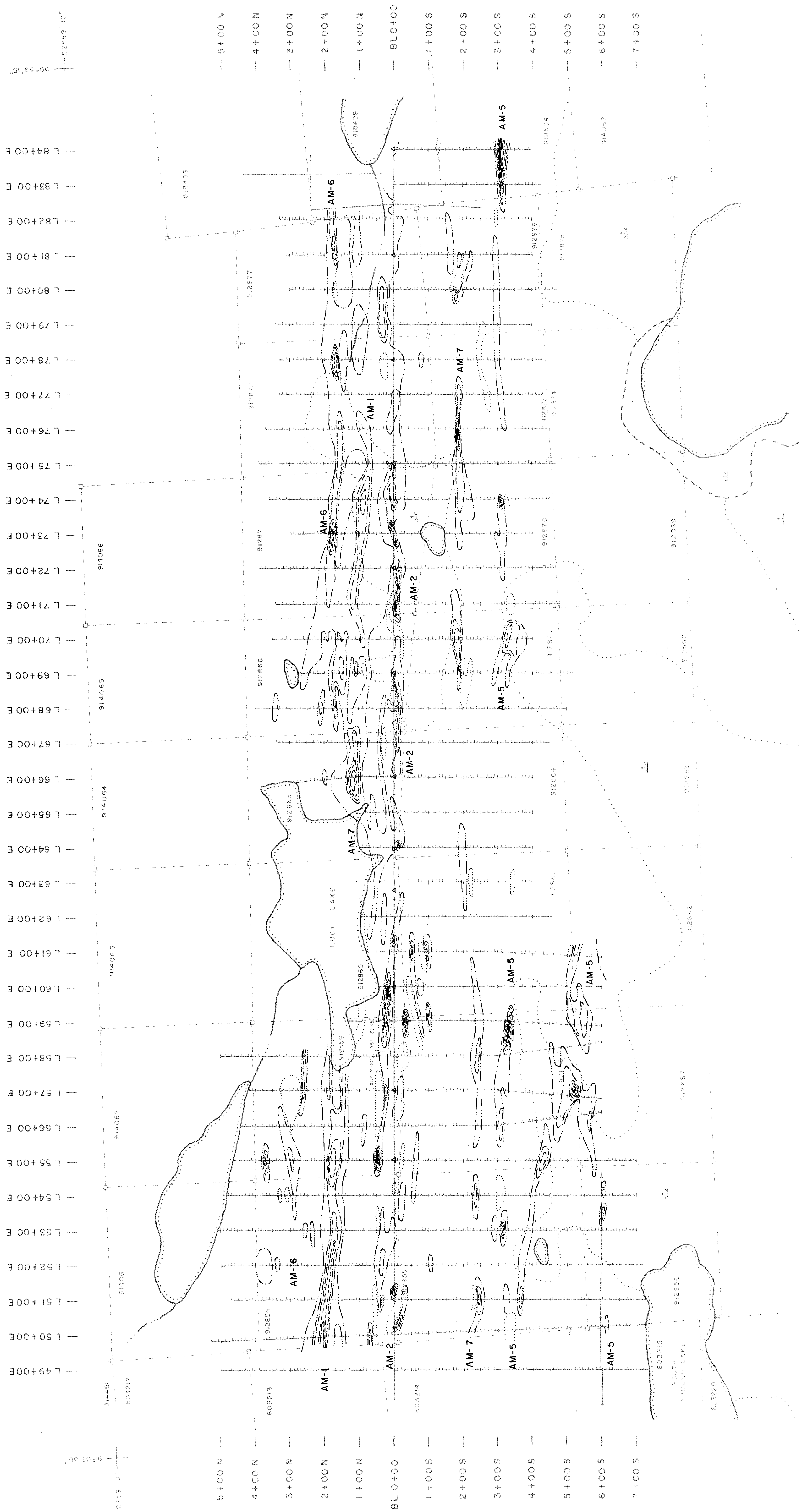
NTS 53B/14/15, KEELY LAKE G-2085, SEESEEP LAKE G-2204
 SCALE 1:5,000
 METERS 0 100 200 300 400 500 600 700 800 900 1000 1500 2000 2500
 FEET 0 100 200 300 400 500 600 700 800 900 1000 1500 2000 2500

LEGEND

- MUSKEG SWAMP
- CREEK
- CLAIM CORNER & LINES
- CLAIM NUMBER
- CUT GRID LINES (10 metre stations)
- MAGNETOMETER READING IN GAMMAS

INSTRUMENT USED: SCINTREX MFD - 2 DIGITAL FLUXGATE MAGNETOMETER





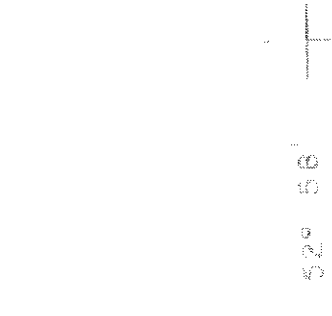
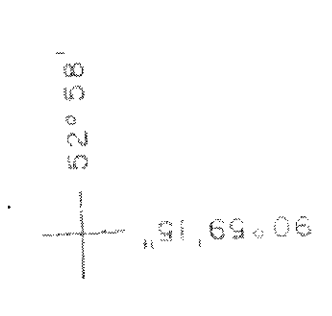
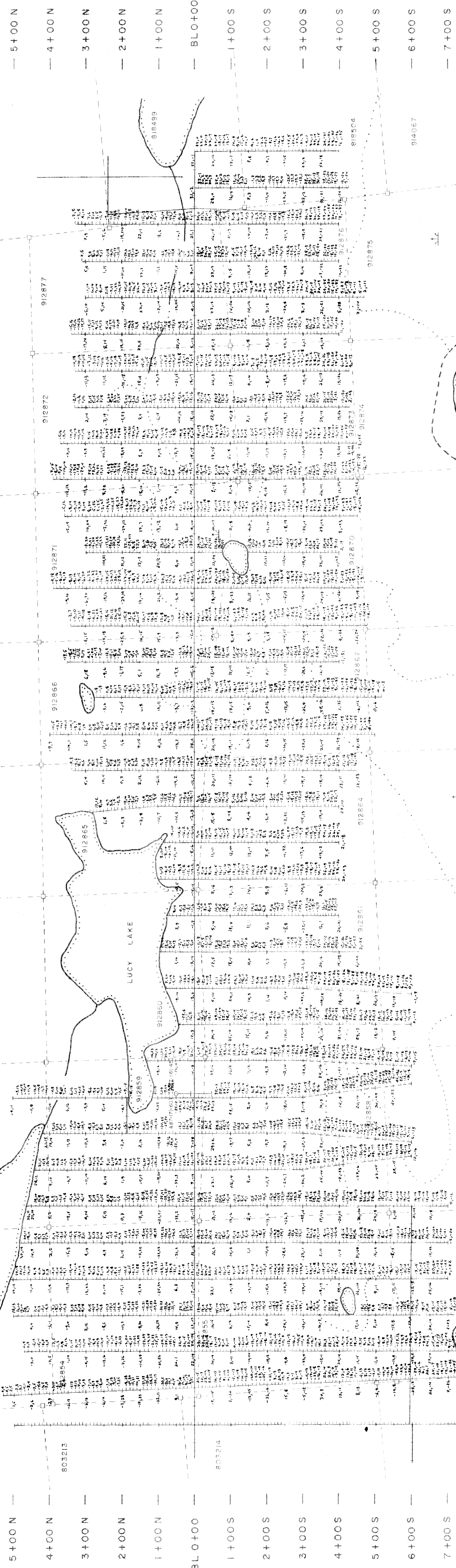
- LEGEND**
- MUSKOG SWAMP
 - CREEK
 - CLAIM CORNER & LINES
 - CLAIM NUMBER
 - CUT GRID LINES (10 metre stations)
 - BASE STATION
 - 59000 GAMMA CONTOUR
 - 60000
 - 61000
 - 62000
 - 63000
 - 64000
 - >65000
- INSTRUMENT USED: SCINTREX MFD-2 DIGITAL FLUXGATE MAGNETOMETER
- AM-1 ANOMALY

ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD.
 LUCY LAKE CLAIM BLOCK
2.11041
 GROUND MAGNETOMETER SURVEY
 CONTOURS

NTS 5.38/14/15, KEEYASK LAKE G-2085, SEESEEP LAKE G-2204
 SCALE 1:5000
 METRE 0 100 200 300 400 500 600 METRES
 FEET 0 100 200 300 400 500 600 FEET



90°59'10" 52°59'10" 90°59'15" 52°59'10"



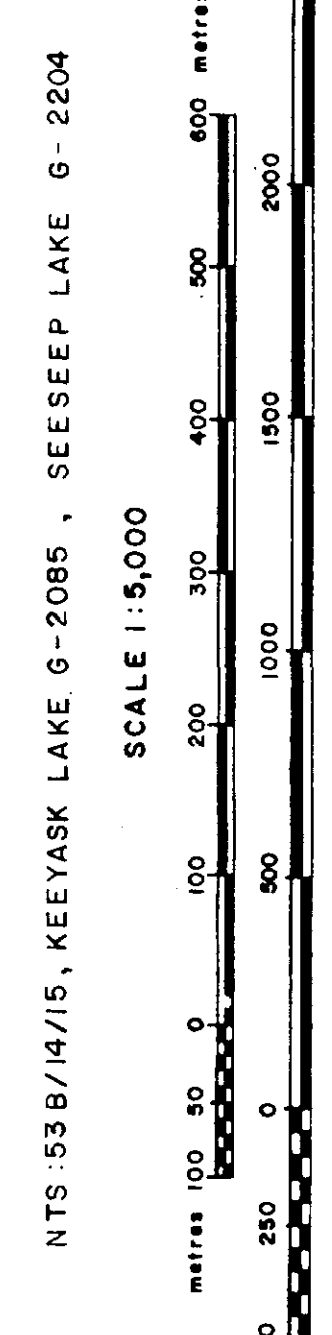
LEGEND:

- MUSKEG
- SWAMP
- CREEK
- CLAIM CORNER & LINES
- CLAIM NUMBER
- CUT GRID LINES (10 metre stations)
- GRID STATIONS WITH IMPHASE VALUES IN DEGREES, QUADRATURE IN PERCENT
- INSTRUMENT : GEONICS RONKA EM-16
- TRANSMITTER : CUTLER, MAINE, U.S.A.

2.11041
 ONTARIO GOLD JOINT VENTURE

NORTHERN DYNASTY EXPLORATIONS LTD.
 LUCY LAKE CLAIM BLOCK

GROUND ELECTROMAGNETIC SURVEY - VALUES

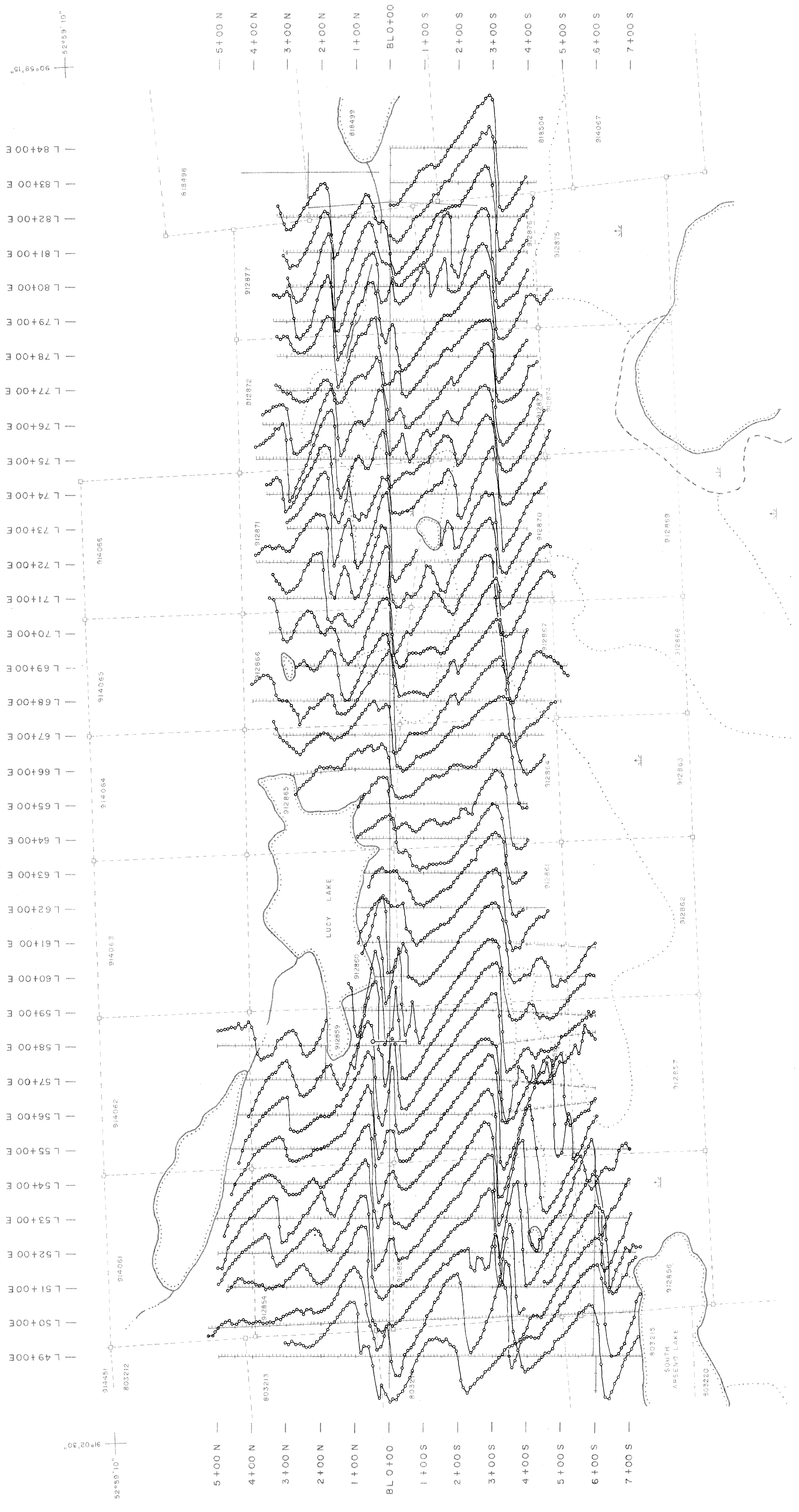


NTS 53B/14/15, KEEYASK LAKE 6-2085, SEESEEP LAKE 6-2204
 SCALE 1:5,000



ENTRANCE 2, 11041 SEESEEP LAKE

380



LEGEND:

- MUSKEG
- SWAMP
- CREEK
- CLAIM CORNER & LINES
- CLAIM NUMBER
- CUT GRID LINES (10 metre stations)

IMPULSE PROFILE (1 cm = 10 m)
 QUADRATURE PROFILE (1 cm = 10 m)

TRANSMITTER : CUTLER, MAINE, U.S.A.
 INSTRUMENT : GEONICS RONKA EM-16

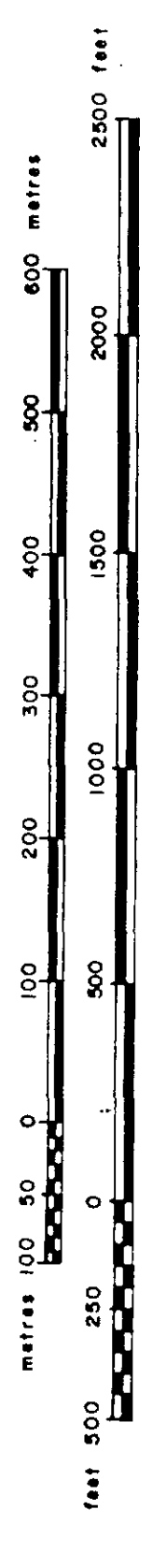
1" = 100' PROFILE SCALE

ONTARIO GOLD JOINT VENTURE
 2.11041
 NORTHERN DYNASTY EXPLORATIONS LTD.
 LUCY LAKE CLAIM BLOCK

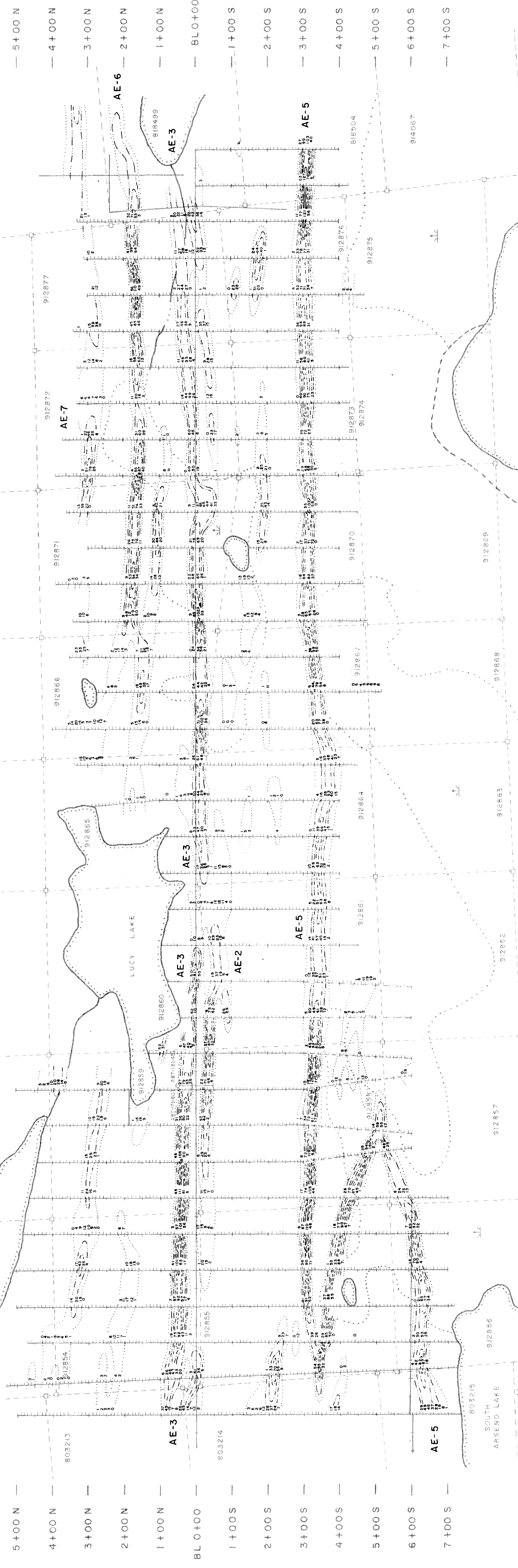
**GROUND ELECTROMAGNETIC SURVEY - PROFILES
 IN - PHASE**

NTS 53B/H/15, KEEWASK LAKE G-2085, SEESEEP LAKE G-2204

SCALE 1:5,000



90° 59' 15" 52° 59' 10" 90° 59' 10" 52° 59' 10"



52° 58' 51.55" 06

52° 58' 51.55" 06

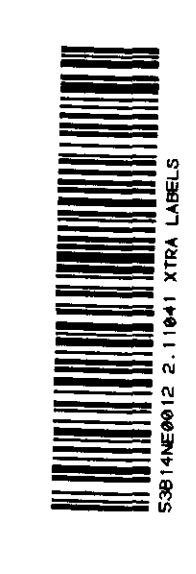
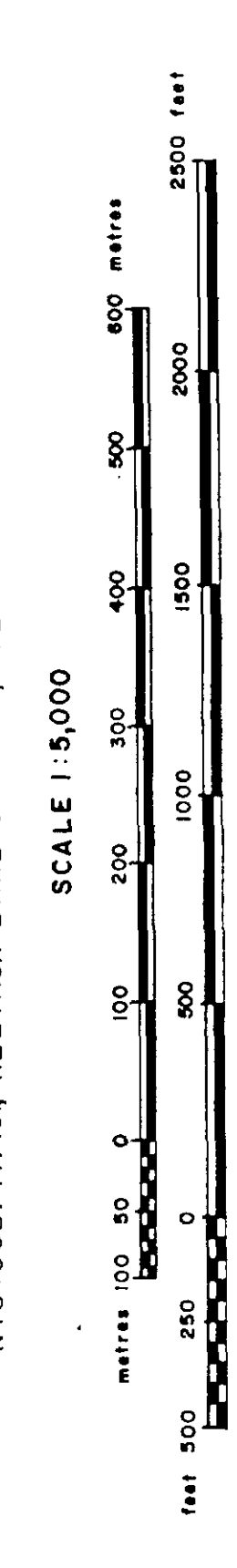
LEGEND

- MUSKEG SWAMP
- CREEK
- CLAIM CORNER B LINES
- CLAIM NUMBER
- CUT GRID LINES (10 metre stations)
- TRANSMITTER : CUTLER, MAINE, U.S.A.
- INSTRUMENT : GEONICS ROMKA EM-16
- FRASER FILTER CONTOUR INTERVALS
- 0
- 20
- 40
- 60
- 80
- 100
- 120
- CE-3 CONDUCTORS

ONTARIO GOLD JOINT VENTURE **2.11041**
 NORTHERN DYNASTY EXPLORATIONS LTD.
 LUCY LAKE CLAIM BLOCK

**GROUND ELECTROMAGNETIC SURVEY
 FRASER FILTER PLOT**

NTS: 538/4/15, KEEYASK LAKE G-2085, SEESEEP LAKE G-2204





91° 02' 30" 52° 59' 10" 90° 59' 15" 52° 59' 10"

5+00 N
4+00 N
3+00 N
2+00 N
1+00 N
BLO+00
1+00 S
2+00 S
3+00 S
4+00 S
5+00 S
6+00 S
7+00 S

803212 803213 803214 803215 803220

914451 914062 914063 914064 914065 914085 914498

L 49+00 E
L 50+00 E
L 51+00 E
L 52+00 E
L 53+00 E
L 54+00 E
L 55+00 E
L 56+00 E
L 57+00 E
L 58+00 E
L 59+00 E
L 60+00 E
L 61+00 E
L 62+00 E
L 63+00 E
L 64+00 E
L 65+00 E
L 66+00 E
L 67+00 E
L 68+00 E
L 69+00 E
L 70+00 E
L 71+00 E
L 72+00 E
L 73+00 E
L 74+00 E
L 75+00 E
L 76+00 E
L 77+00 E
L 78+00 E
L 79+00 E
L 80+00 E
L 81+00 E
L 82+00 E
L 83+00 E
L 84+00 E

912851 912852 912853 912854 912855 912856 912857 912858 912859 912860 912861 912862 912863 912864 912865 912866 912867 912868 912869 912870 912871 912872 912873 912874 912875 912876 912877 912878 912879 912880 912881 912882 912883 912884 912885 912886 912887 912888 912889 912890 912891 912892 912893 912894 912895 912896 912897 912898 912899 912900 912901 912902 912903 912904 912905 912906 912907 912908 912909 912910 912911 912912 912913 912914 912915 912916 912917 912918 912919 912920 912921 912922 912923 912924 912925 912926 912927 912928 912929 912930 912931 912932 912933 912934 912935 912936 912937 912938 912939 912940 912941 912942 912943 912944 912945 912946 912947 912948 912949 912950 912951 912952 912953 912954 912955 912956 912957 912958 912959 912960 912961 912962 912963 912964 912965 912966 912967 912968 912969 912970 912971 912972 912973 912974 912975 912976 912977 912978 912979 912980 912981 912982 912983 912984 912985 912986 912987 912988 912989 912990 912991 912992 912993 912994 912995 912996 912997 912998 912999 913000

LEGEND

- MUSKEG
 - SWAMP
 - CREEK
 - CLAIM CORNER & LINES
 - CLAIM NUMBER
 - CUT GRID LINES (10 metre stations)
- SOIL SAMPLE POINT WITH Au in ppm, B Au in ppb.
 Au or B PRECEDING THE VALUE INDICATES SOIL HORIZON SAMPLED.
 Au or B FOLLOWING THE VALUE INDICATES SAMPLE WAS PULVERIZED TO OBTAIN SUFFICIENT 80 MESH MATERIAL.
- SOIL ANOMALY THRESHOLDS
- | | | |
|-------------|----|----|
| "A" Horizon | 7 | 20 |
| "B" Horizon | 15 | 30 |
- ANOMALY

ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD.
 LUCY LAKE CLAIM BLOCK

2.11041

As Au GRID SOIL GEOCHEMISTRY

NTS 5387/M/15, KEELY LAKE G-2085, SEESEEP LAKE G-2204
 SCALE 1:5,000
 METRES 0 100 200 300 400 500 600 700 800 900 1000 1500 2000 2500
 FEET 0 100 200 300 400 500 600 700 800 900 1000 1500 2000 2500

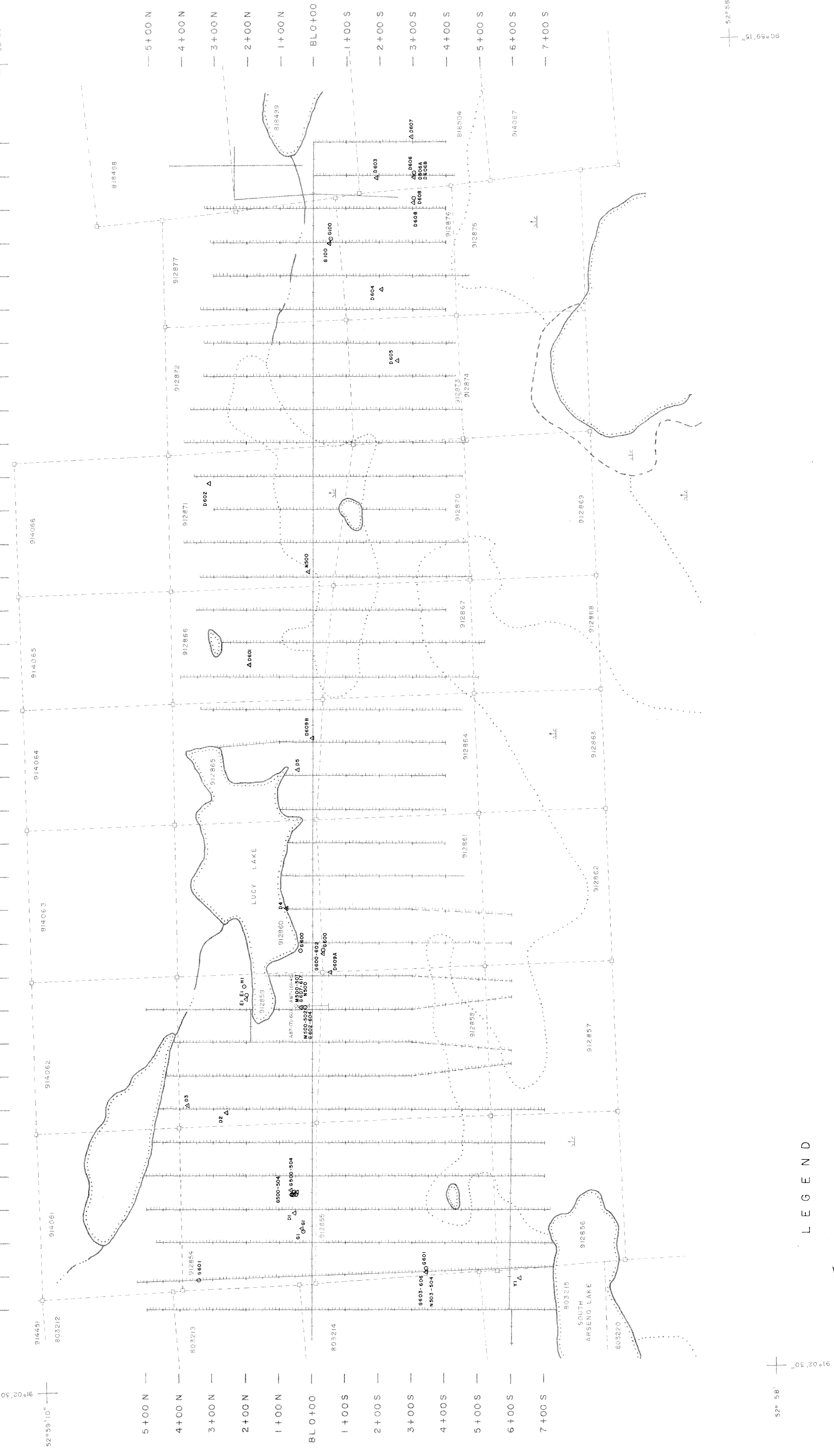


100

JULY - OCTOBER 1987

PLATE 16

91°02'30" 52°59'10" 90°59'15" 52°59'10"



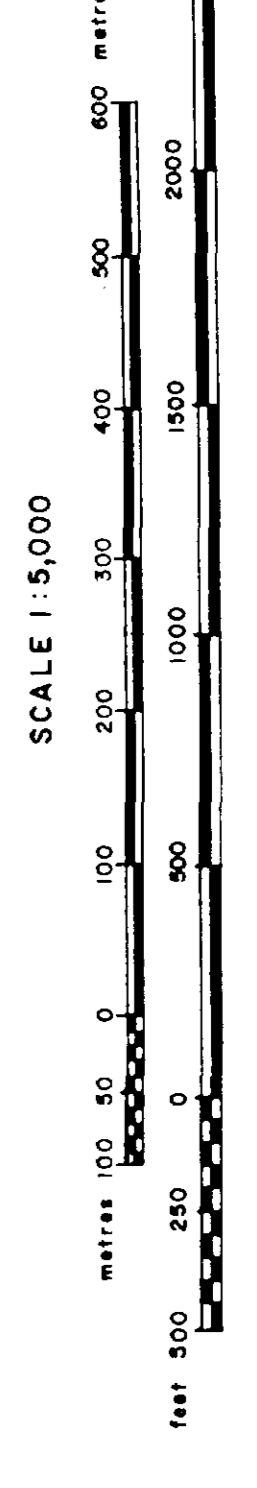
LEGEND

- CONTOUR LINES ELEVATION IN METRES
- SPOT ELEVATION IN METRES
- OPEN SWAMP (MUSKIE)
- TREED SWAMP (MUSKIE)
- LAKE SHORE
- CREEK
- CLAW POST AND CLAW LINE (NORTHERN DYNASTY)
- CLAW POST AND CLAW LINE
- RECONNAISSANCE SOIL LINE
- PIT OR TRENCH
- △ ROCK SAMPLE LOCATION
- SOIL SAMPLE LOCATION

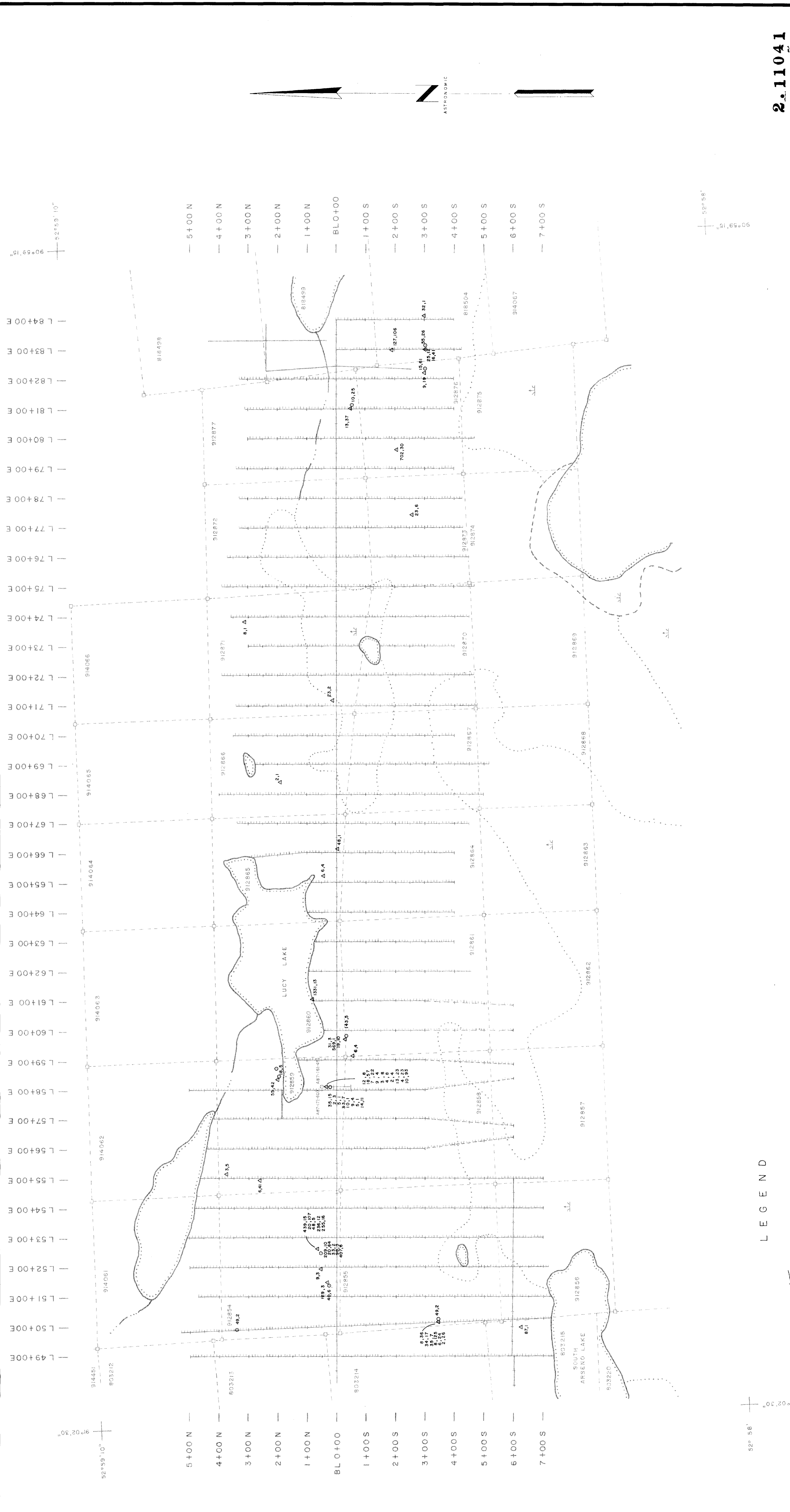
ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD.
 LUCY LAKE CLAIM BLOCK
SAMPLE LOCATION MAP

2.11041

NTS: 53B/14/15, KEEYASK LAKE, G-2085, SEESKEP LAKE, G-2204

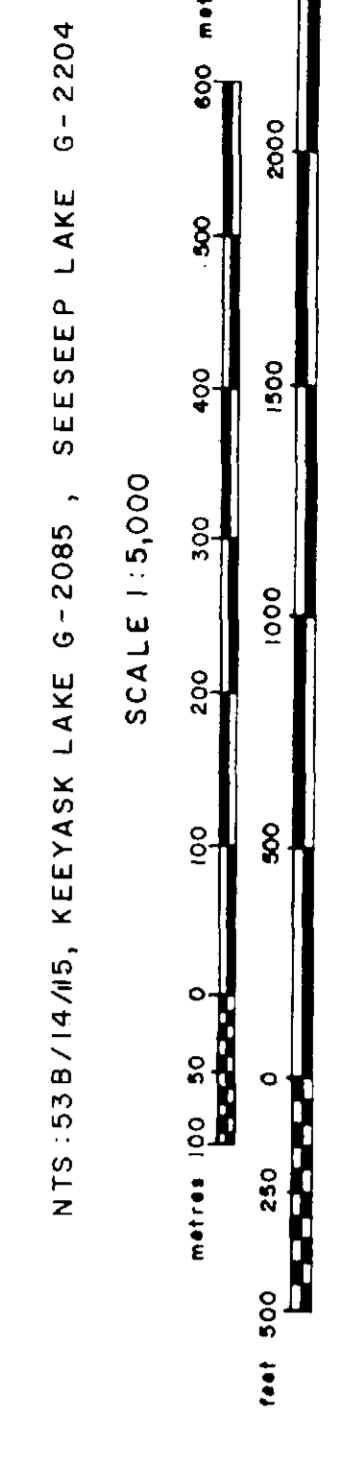


410



2.11041

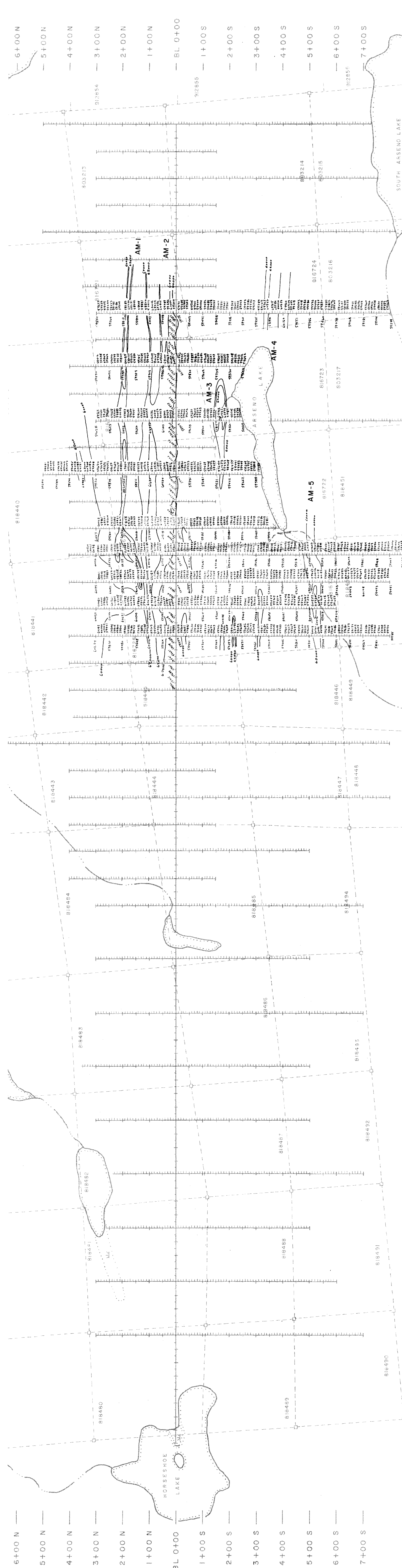
ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD.
 LUCY LAKE CLAIM BLOCK
As, Au GEOCHEMISTRY



LEGEND

- 480' CONTOUR LINES - ELEVATION IN METRES
- 420' CONTOUR LINES - ELEVATION IN METRES
- SOIL SAMPLE LOCATION
- △ SOIL SAMPLE LOCATION
- ROCK SAMPLE LOCATION
- △ ROCK SAMPLE LOCATION
- CLAIM POST AND CLAIM LINE (NORTHERN DYNASTY)
- CLAIM POST AND CLAIM LINE
- REGIONAL BOUNDARY
- REGIONAL BOUNDARY
- SOIL SAMPLE LOCATION
- △ SOIL SAMPLE LOCATION





LEGEND:

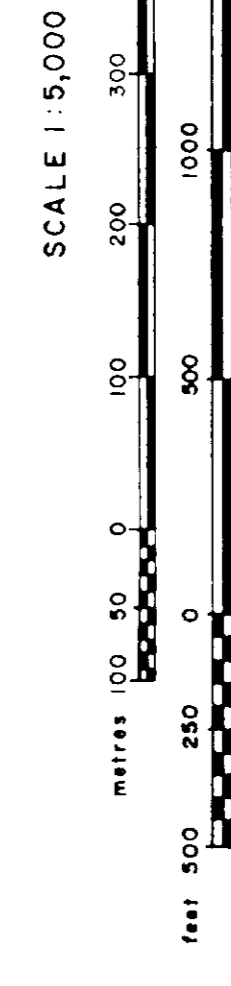
- MUSKEG
- SWAMP
- CREEK
- CLAIM CORNER & LINES
- CLAIM NUMBER
- CUT GRID LINES (10 METRE STATIONS)
- MAGNETOMETER READING IN GAMMAS
- MAGNETOMETER CONTOUR INTERVAL
- INSTRUMENT USED: SCINTREX MFD - 2 DIGITAL FLUXGATE MAGNETOMETER

ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD.

ARSENDE LAKE CLAIM BLOCK
**GROUND MAGNETOMETER SURVEY
 CONTOURS**

2.11041

NTS: 538/14, KEETASK LAKE 6-2085



1986-1987

PLATE 2



2500

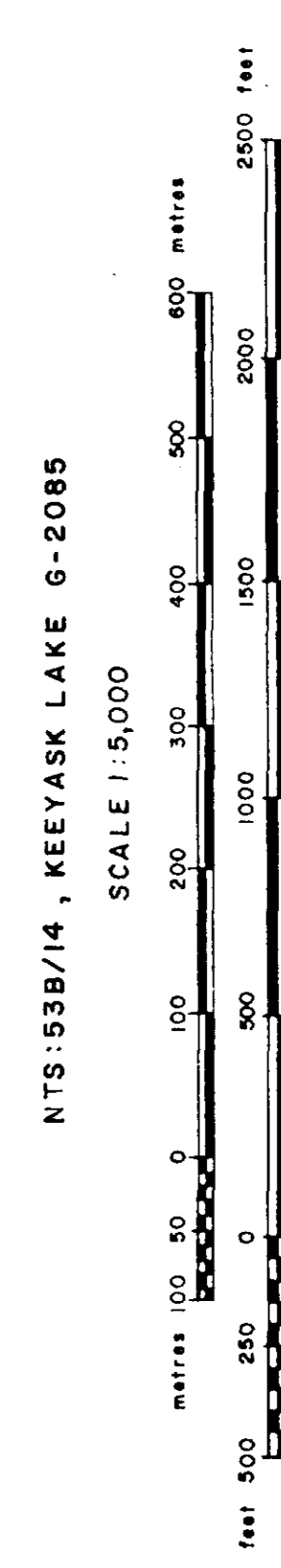


52°58' 10.00" N
 100°10' 16" W



ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD. **2.11041**
 ARSENO LAKE CLAIM BLOCK

GROUND ELECTROMAGNETIC SURVEY - VALUES



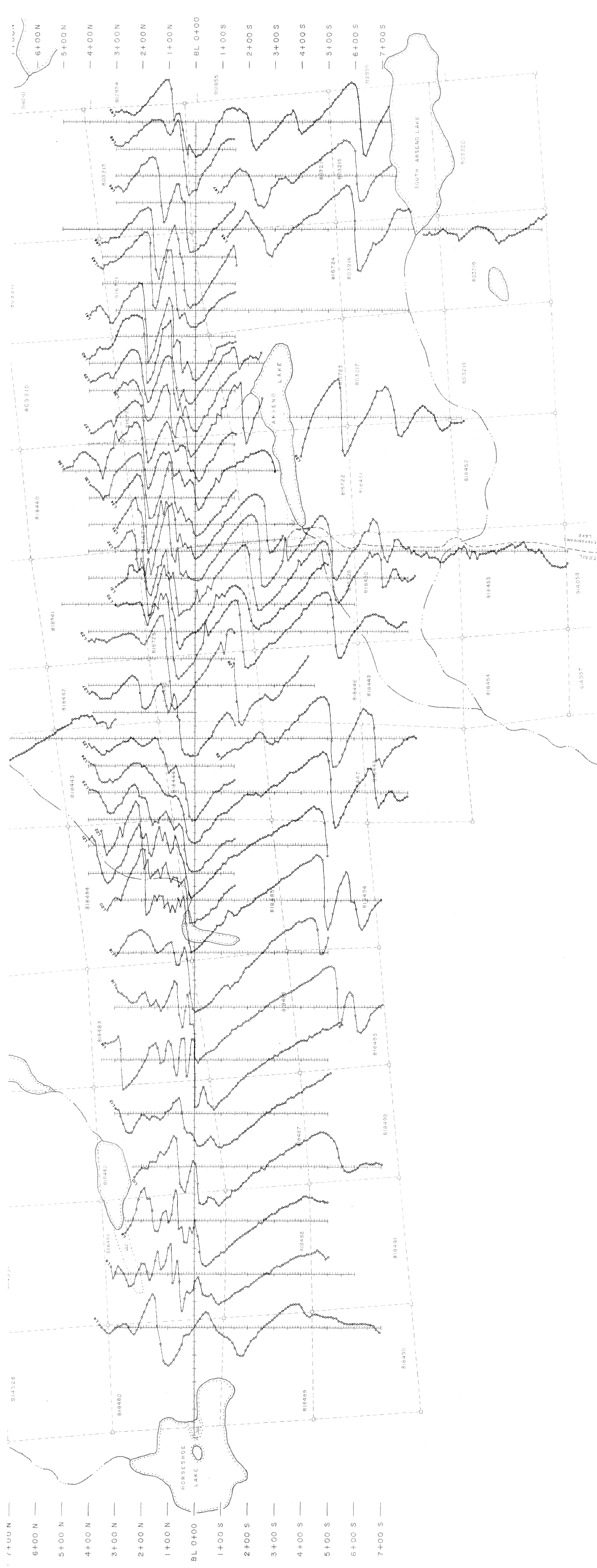
LEGEND:

- MUSKEG
- SWAMP
- CREEK
- CLAIM CORNER & LINES
- CLAIM NUMBER
- CUT GRID LINES (10 METERS DISTANCE)
- GRID STATIONS WITH INPHASE VALUES IN DEGREES, QUADRATURE IN PERCENT
- INSTRUMENT : GEONICS RONKA EM-16
- TRANSMITTER : CUTLER, MAINE, U.S.A.

NOTE: ONLY LINES LABELLED 1987 WERE SURVEYED IN 1987



260

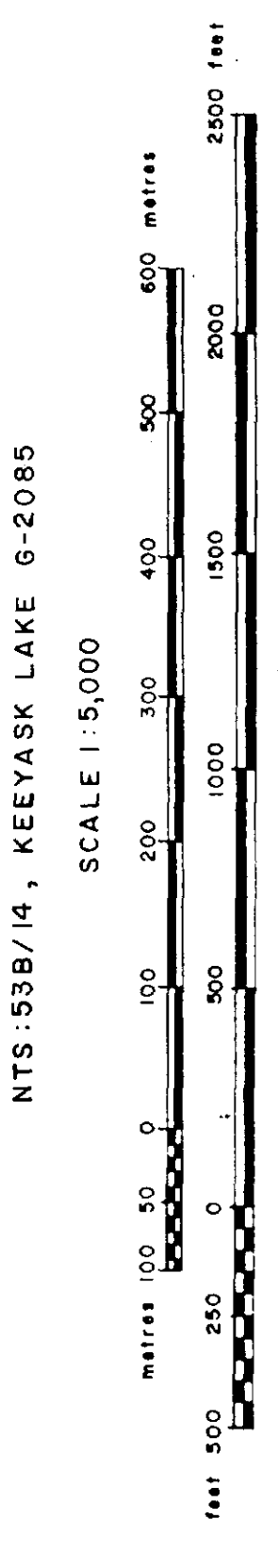


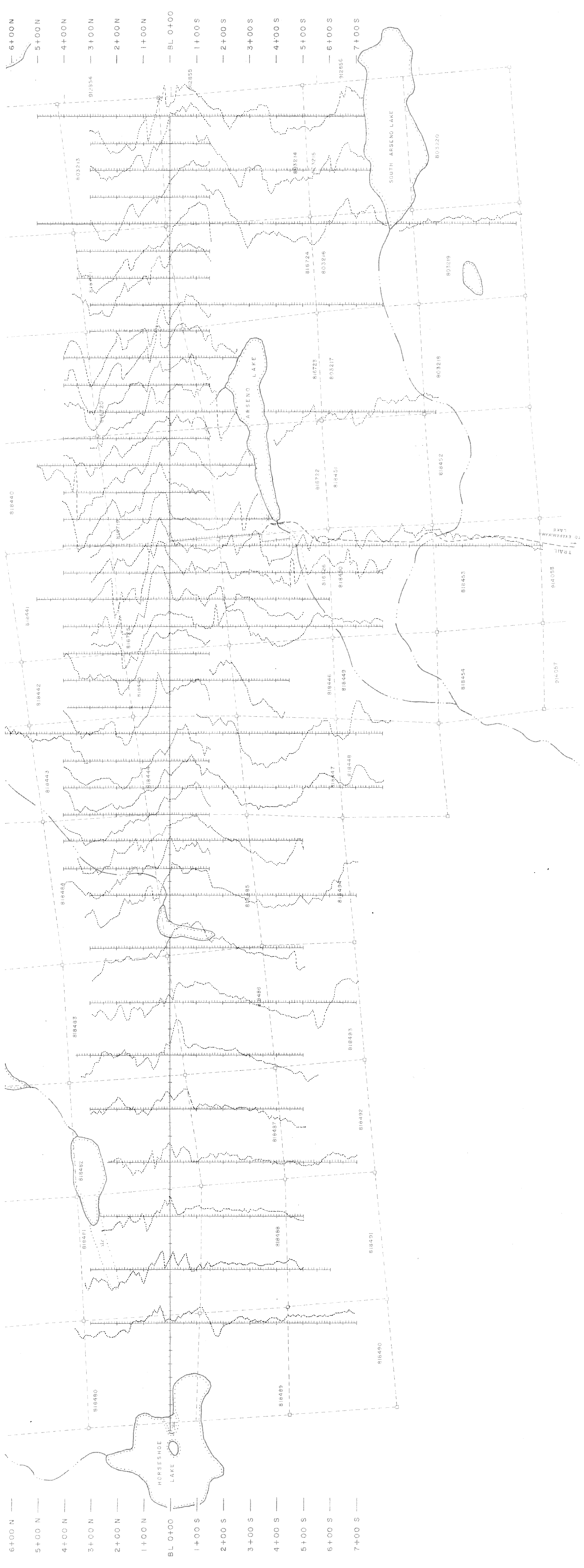
LEGEND:

- MUSKEG
- SWAMP
- CREEK
- CLAIM CORNER & LINES
- CLAIM NUMBER
- CUT GRID LINES (10 METRE STATIONS)
- INPHASE PROFILE (1 cm * 10 * 1)
- QUADRATURE PROFILE (1 cm * 10 * 1)

TRANSMITTER : CUTLER, MAINE, U.S.A.
 INSTRUMENT : GEONICS RONKA EM-16
 1" = 100' PROFILE SCALE

ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD.
 ARSENO LAKE CLAIM BLOCK
2.11041
 GROUND ELECTROMAGNETIC SURVEY - PROFILES
 IN - PHASE



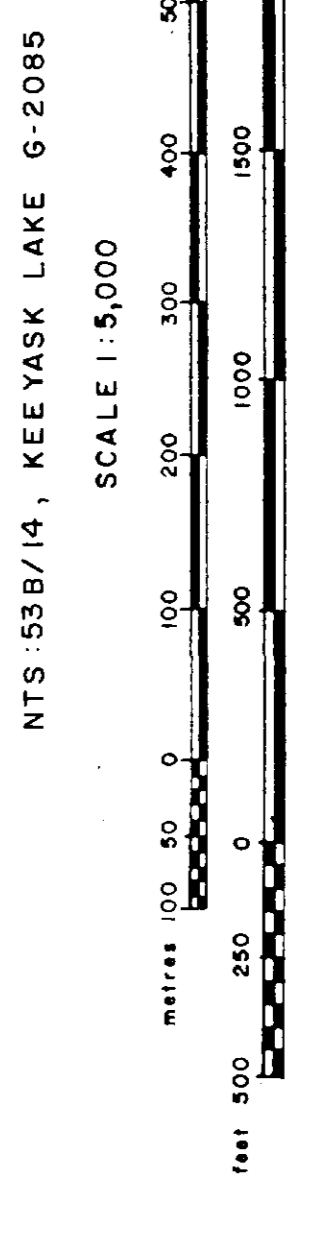


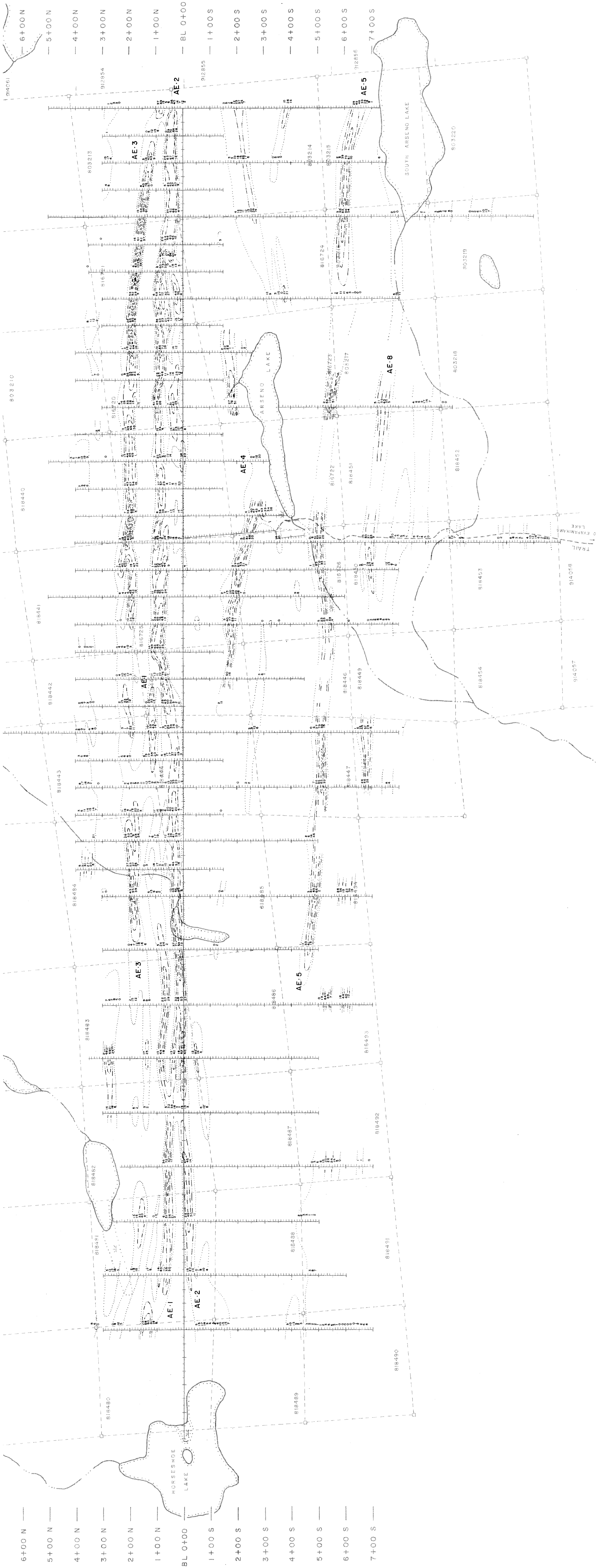
52° 58' 10" N
105° 10' 16" W

- LEGEND:**
- MUSKEG SWAMP
 - CREEK
 - CLAIM CORNER & LINES
 - CLAIM NUMBER
 - CUT GRID LINES (10 metre stations)

..... IMPHASE PROFILE (1 cm - 10 *)
 QUADRATURE PROFILE (1 cm - 10 *)
 TRANSMITTER : CUTLER, MAINE, U.S.A.
 INSTRUMENT : GEONICS RONKA EM-16
 * 1:5000 PROFILE SCALE

ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD. **2.11041**
 ARSENO LAKE CLAIM BLOCK
 GROUND ELECTROMAGNETIC SURVEY - PROFILES
 QUADRATURE



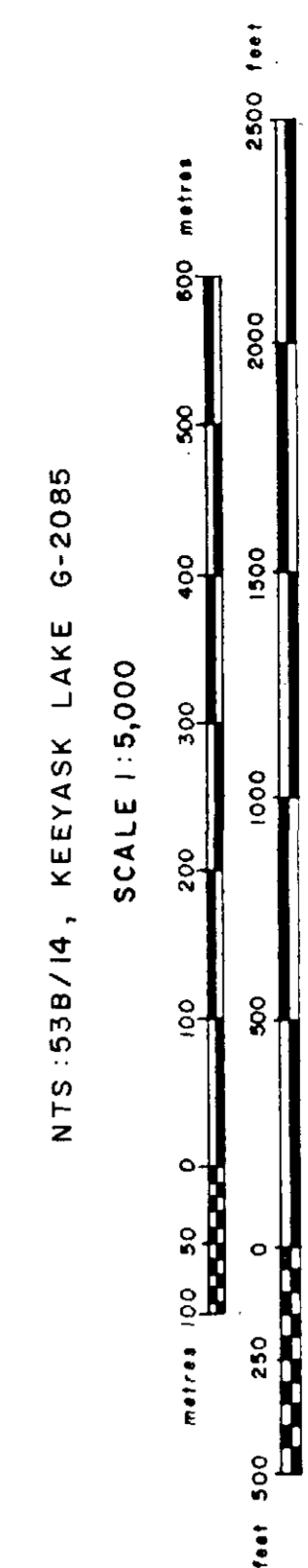


LEGEND

- MUSKEG
- SWAMP
- CREEK
- CLAIM CORNER B LINES
- CLAIM NUMBER
- CUT GRID LINES (10 metre stations)
- TRANSMITTER : CUTLER, MAINE, U.S.A.
- INSTRUMENT : GEONICS RONKA EM-16
- FRASER FILTER CONTOUR INTERVALS
- 0
- 20
- 40
- 60
- 80
- 100
- 120
- CE-3 CONDUCTORS

ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD.
 ARSENO LAKE CLAIM BLOCK

**GROUND ELECTROMAGNETIC SURVEY
 FRASER FILTER PLOT**



2.11041

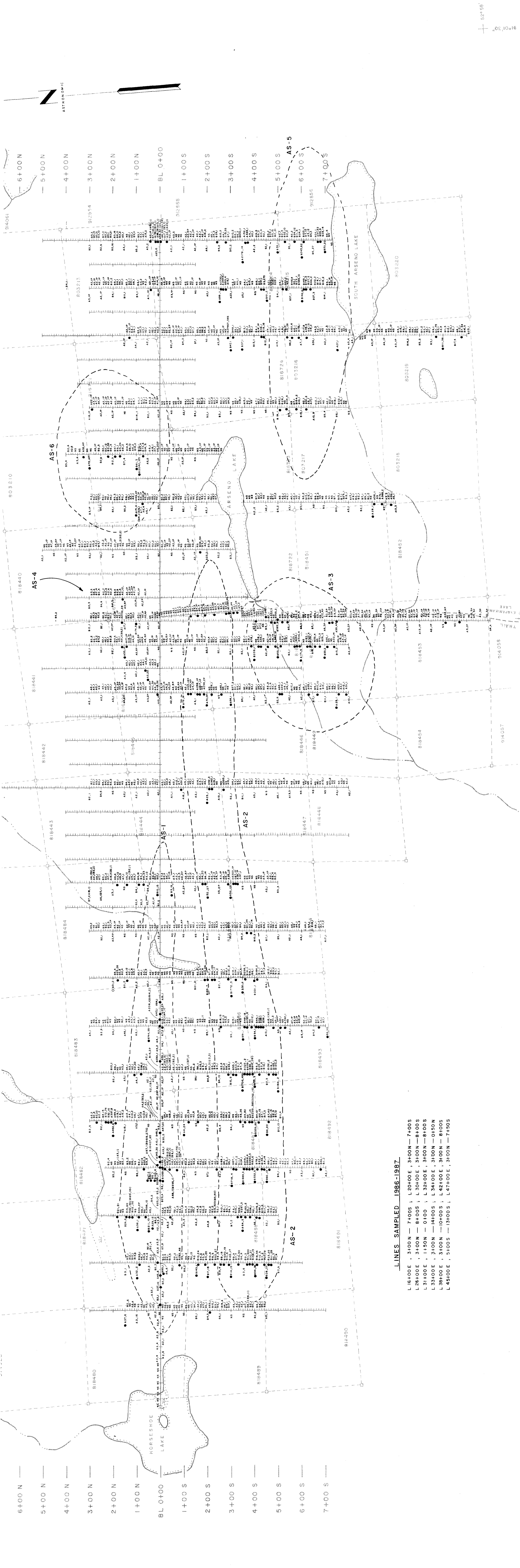
JUNE-OCTOBER 1987

PLATE 6

230



2590



LINES SAMPLED 1986-1987

- L 16+00E, 3+00N - 7+00S; L 20+00E, 3+00N - 7+00S
- L 26+00E, 3+00N - 8+00S; L 30+00E, 3+00N - 8+00S
- L 31+00E, 1+00N - 0+00S; L 32+00E, 3+00N - 8+00S
- L 33+00E, 3+00N - 1+00S; L 34+00E, 3+00N - 0+00S
- L 38+00E, 3+00N - 0+00S; L 42+00E, 3+00N - 8+00S
- L 45+00E, 5+00S - 13+00S; L 47+00E, 3+00N - 7+00S

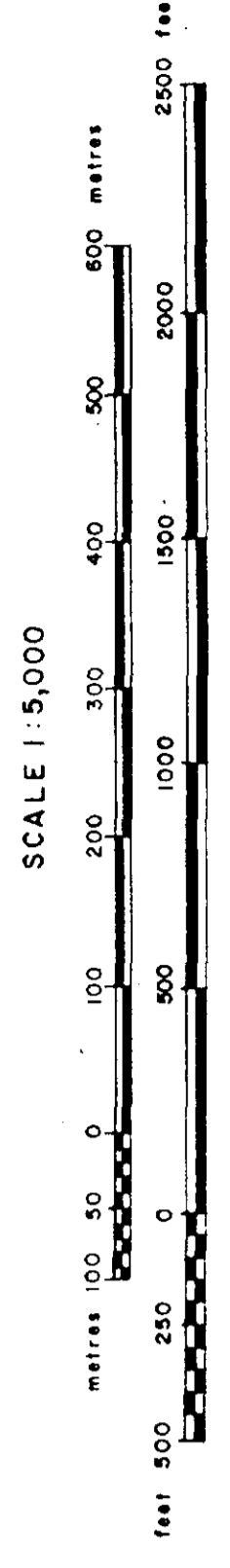
LEGEND

- MUSKEG
 - SWAMP
 - CREEK
 - CLAIM CORNER & LINES
 - CLAIM NUMBER
 - CUT GRID LINES (10 metre stations)
 - SOIL SAMPLE POINT WITH As in ppm & Au in ppb. AN 'A' PRECEDING THE VALUE INDICATES SOIL HORIZON SAMPLED. A 'B' PRECEDING THE VALUE INDICATES THE SAMPLE WAS PULVERIZED TO OBTAIN SUFFICIENT -80 MESH MATERIAL.
 - SOIL ANOMALY THRESHOLDS
- | | Au in ppb | As in ppm |
|--------------|-----------|-----------|
| "A" HORIZON | 7 | 20 |
| "B" HORIZON | 15 | 30 |
| AS-2 ANOMALY | | |

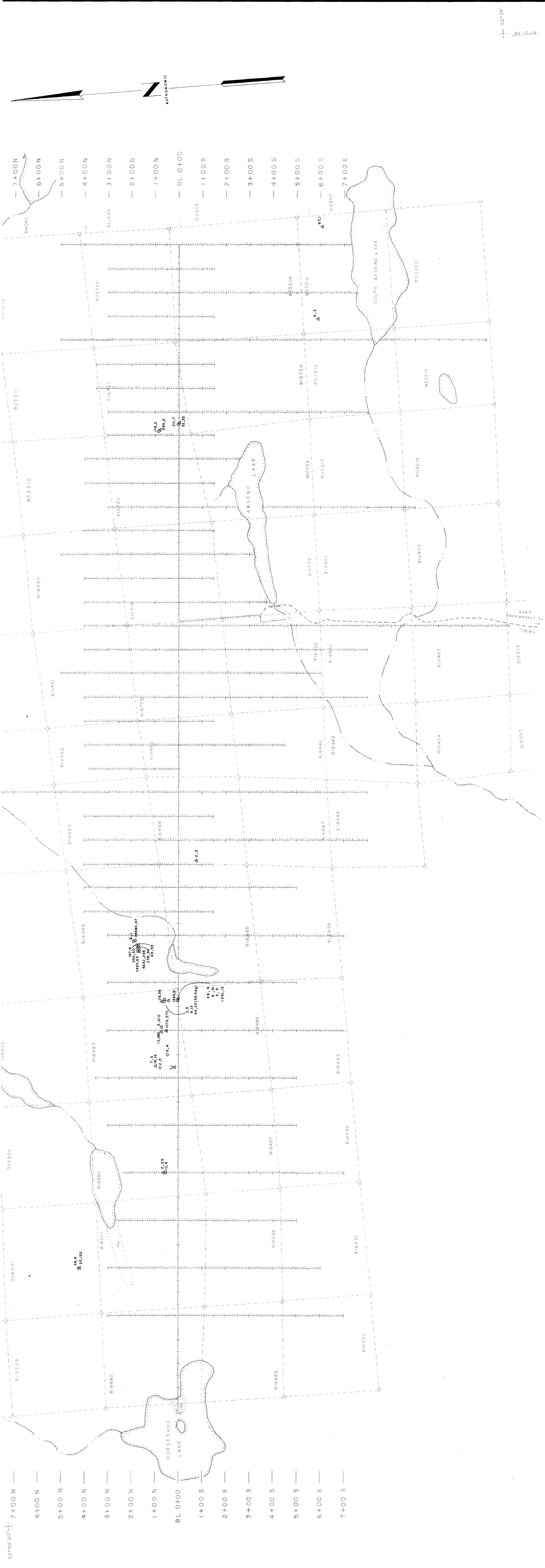
ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD. **2.11041**
 ARSENO LAKE CLAIM BLOCK

As Au GRID SOIL GEOCHEMISTRY

NTS-5387/4, KEEWASK LAKE G-2085



AUG-SEPT 1985
 JULY 1986
 JUNE-OCTOBER 1987

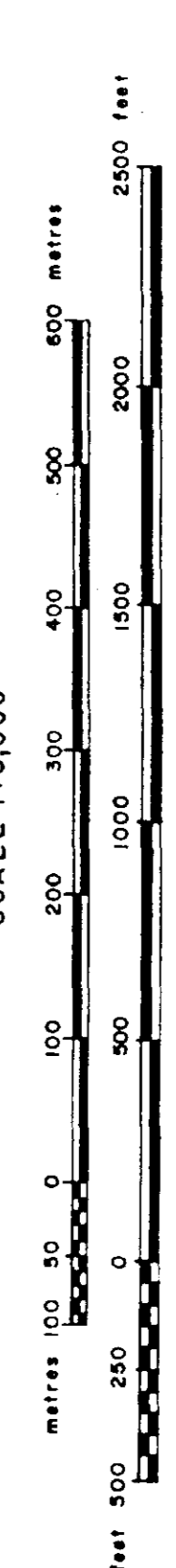


LEGEND

- 450 — CONTOUR LINES, ELEVATION IN METRES
- 420 — CONTOUR LINES, ELEVATION IN METRES
- 390 — CONTOUR LINES, ELEVATION IN METRES
- 360 — CONTOUR LINES, ELEVATION IN METRES
- 330 — CONTOUR LINES, ELEVATION IN METRES
- 300 — CONTOUR LINES, ELEVATION IN METRES
- 270 — CONTOUR LINES, ELEVATION IN METRES
- 240 — CONTOUR LINES, ELEVATION IN METRES
- 210 — CONTOUR LINES, ELEVATION IN METRES
- 180 — CONTOUR LINES, ELEVATION IN METRES
- 150 — CONTOUR LINES, ELEVATION IN METRES
- 120 — CONTOUR LINES, ELEVATION IN METRES
- 90 — CONTOUR LINES, ELEVATION IN METRES
- 60 — CONTOUR LINES, ELEVATION IN METRES
- 30 — CONTOUR LINES, ELEVATION IN METRES
- 0 — CONTOUR LINES, ELEVATION IN METRES
- 100 — CONTOUR LINES, ELEVATION IN METRES
- 200 — CONTOUR LINES, ELEVATION IN METRES
- 300 — CONTOUR LINES, ELEVATION IN METRES
- 400 — CONTOUR LINES, ELEVATION IN METRES
- 500 — CONTOUR LINES, ELEVATION IN METRES
- 600 — CONTOUR LINES, ELEVATION IN METRES
- 700 — CONTOUR LINES, ELEVATION IN METRES
- 800 — CONTOUR LINES, ELEVATION IN METRES
- 900 — CONTOUR LINES, ELEVATION IN METRES
- 1000 — CONTOUR LINES, ELEVATION IN METRES
- 1100 — CONTOUR LINES, ELEVATION IN METRES
- 1200 — CONTOUR LINES, ELEVATION IN METRES
- 1300 — CONTOUR LINES, ELEVATION IN METRES
- 1400 — CONTOUR LINES, ELEVATION IN METRES
- 1500 — CONTOUR LINES, ELEVATION IN METRES
- 1600 — CONTOUR LINES, ELEVATION IN METRES
- 1700 — CONTOUR LINES, ELEVATION IN METRES
- 1800 — CONTOUR LINES, ELEVATION IN METRES
- 1900 — CONTOUR LINES, ELEVATION IN METRES
- 2000 — CONTOUR LINES, ELEVATION IN METRES
- 2100 — CONTOUR LINES, ELEVATION IN METRES
- 2200 — CONTOUR LINES, ELEVATION IN METRES
- 2300 — CONTOUR LINES, ELEVATION IN METRES
- 2400 — CONTOUR LINES, ELEVATION IN METRES
- 2500 — CONTOUR LINES, ELEVATION IN METRES
- 2600 — CONTOUR LINES, ELEVATION IN METRES
- 2700 — CONTOUR LINES, ELEVATION IN METRES
- 2800 — CONTOUR LINES, ELEVATION IN METRES
- 2900 — CONTOUR LINES, ELEVATION IN METRES
- 3000 — CONTOUR LINES, ELEVATION IN METRES
- 3100 — CONTOUR LINES, ELEVATION IN METRES
- 3200 — CONTOUR LINES, ELEVATION IN METRES
- 3300 — CONTOUR LINES, ELEVATION IN METRES
- 3400 — CONTOUR LINES, ELEVATION IN METRES
- 3500 — CONTOUR LINES, ELEVATION IN METRES
- 3600 — CONTOUR LINES, ELEVATION IN METRES
- 3700 — CONTOUR LINES, ELEVATION IN METRES
- 3800 — CONTOUR LINES, ELEVATION IN METRES
- 3900 — CONTOUR LINES, ELEVATION IN METRES
- 4000 — CONTOUR LINES, ELEVATION IN METRES
- 4100 — CONTOUR LINES, ELEVATION IN METRES
- 4200 — CONTOUR LINES, ELEVATION IN METRES
- 4300 — CONTOUR LINES, ELEVATION IN METRES
- 4400 — CONTOUR LINES, ELEVATION IN METRES
- 4500 — CONTOUR LINES, ELEVATION IN METRES
- 4600 — CONTOUR LINES, ELEVATION IN METRES
- 4700 — CONTOUR LINES, ELEVATION IN METRES
- 4800 — CONTOUR LINES, ELEVATION IN METRES
- 4900 — CONTOUR LINES, ELEVATION IN METRES
- 5000 — CONTOUR LINES, ELEVATION IN METRES
- 5100 — CONTOUR LINES, ELEVATION IN METRES
- 5200 — CONTOUR LINES, ELEVATION IN METRES
- 5300 — CONTOUR LINES, ELEVATION IN METRES
- 5400 — CONTOUR LINES, ELEVATION IN METRES
- 5500 — CONTOUR LINES, ELEVATION IN METRES
- 5600 — CONTOUR LINES, ELEVATION IN METRES
- 5700 — CONTOUR LINES, ELEVATION IN METRES
- 5800 — CONTOUR LINES, ELEVATION IN METRES
- 5900 — CONTOUR LINES, ELEVATION IN METRES
- 6000 — CONTOUR LINES, ELEVATION IN METRES
- 6100 — CONTOUR LINES, ELEVATION IN METRES
- 6200 — CONTOUR LINES, ELEVATION IN METRES
- 6300 — CONTOUR LINES, ELEVATION IN METRES
- 6400 — CONTOUR LINES, ELEVATION IN METRES
- 6500 — CONTOUR LINES, ELEVATION IN METRES
- 6600 — CONTOUR LINES, ELEVATION IN METRES
- 6700 — CONTOUR LINES, ELEVATION IN METRES
- 6800 — CONTOUR LINES, ELEVATION IN METRES
- 6900 — CONTOUR LINES, ELEVATION IN METRES
- 7000 — CONTOUR LINES, ELEVATION IN METRES
- 7100 — CONTOUR LINES, ELEVATION IN METRES
- 7200 — CONTOUR LINES, ELEVATION IN METRES
- 7300 — CONTOUR LINES, ELEVATION IN METRES
- 7400 — CONTOUR LINES, ELEVATION IN METRES
- 7500 — CONTOUR LINES, ELEVATION IN METRES
- 7600 — CONTOUR LINES, ELEVATION IN METRES
- 7700 — CONTOUR LINES, ELEVATION IN METRES
- 7800 — CONTOUR LINES, ELEVATION IN METRES
- 7900 — CONTOUR LINES, ELEVATION IN METRES
- 8000 — CONTOUR LINES, ELEVATION IN METRES
- 8100 — CONTOUR LINES, ELEVATION IN METRES
- 8200 — CONTOUR LINES, ELEVATION IN METRES
- 8300 — CONTOUR LINES, ELEVATION IN METRES
- 8400 — CONTOUR LINES, ELEVATION IN METRES
- 8500 — CONTOUR LINES, ELEVATION IN METRES
- 8600 — CONTOUR LINES, ELEVATION IN METRES
- 8700 — CONTOUR LINES, ELEVATION IN METRES
- 8800 — CONTOUR LINES, ELEVATION IN METRES
- 8900 — CONTOUR LINES, ELEVATION IN METRES
- 9000 — CONTOUR LINES, ELEVATION IN METRES
- 9100 — CONTOUR LINES, ELEVATION IN METRES
- 9200 — CONTOUR LINES, ELEVATION IN METRES
- 9300 — CONTOUR LINES, ELEVATION IN METRES
- 9400 — CONTOUR LINES, ELEVATION IN METRES
- 9500 — CONTOUR LINES, ELEVATION IN METRES
- 9600 — CONTOUR LINES, ELEVATION IN METRES
- 9700 — CONTOUR LINES, ELEVATION IN METRES
- 9800 — CONTOUR LINES, ELEVATION IN METRES
- 9900 — CONTOUR LINES, ELEVATION IN METRES
- 10000 — CONTOUR LINES, ELEVATION IN METRES

ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD.
 ARSENO LAKE CLAIM BLOCK
As, Au GEOCHEMISTRY

NTS: 538/15, KEEYASK LAKE G-2085
 SCALE 1:5,000



2.11041



310

JUNE - OCTOBER 1987

PLATE 8

