



52P04NE0511 52P04NE0014 ACHAPI LAKE

010

ONTARIO GOLD JOINT VENTURE

MISEHKOW RIVER PROPERTY

1985 Assessment Report

Prepared for:

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

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RECEIVED

NOV - 6 1985

MINING LANDS SECTION

Patricia Mining Division
(Sioux Lookout Office)
Claim Map: Achapi Lake Area/G-1920

N.T.S. Sheet 52 P/4
89°33' Longitude 51°10' Latitude

October, 1985



52P04NE0511 52P04NE0014 ACHAPI LAKE

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SUMMARY

The 32-claim Mischkow River Property in the Achapi Lake Area of the Patricia Mining Division of Ontario is held in trust for the Ontario Gold Joint Venture by Northern Dynasty Explorations Ltd. These claims cover a pyrite-pyrrhotite-gold mineralized, faulted and folded iron formation host. This report discusses the results of the 1985 field season, based on geological, geophysical and geochemical surveys on all or most of the claim block.

- Program Results:
1. Earlier prospected anomalous zones were broadened and improved.
 2. Numerous new gold zones were outlined.
 3. Definition of a major fault offset fold-like structure.

MISEHKOW RIVER

1985 Assessment Report

1. General Information

1.1 Location and Access

The Misehkw River property is located 55 km southeast of Pickle Lake, Ontario (Fig. 1) on the north bank of the Misehkw River. The 32-claim group adjoins to the west of patented claims Pa 396085 to 396092 and Pa 466735, with its centre situated at latitude $51^{\circ}10'$ and longitude $89^{\circ}33'$ on N.T.S. Sheet 52 P/4.

Access to the area is by float or ski equipped aircraft from Pickle Lake. Highway 599 provides paved road access to within 42 km of the property and connects Pickle Lake with Ignace on the Trans Canada Highway approximately 260 km to the south.

1.2 Claim Status and Titles

The property consists of 32 contiguous Crown Land mining claims in the Achapi Lake Area, Sioux Lookout District of the Patricia Mining Division, Ontario. These are:

<u>Claim Numbers</u>	<u>Anniversary Date</u>
Pa 816689-718	July 17, 1986
Pa 840119-120	July 9, 1987

(See Figure 2).

All claims are held by Northern Dynasty Explorations Ltd., 844 West Hastings Street, Vancouver, B.C., V6C 1C8, in trust for the Ontario Gold Joint Venture (Northern Dynasty Explorations Ltd., Westfield Minerals Limited, Newfields Minerals Inc. and Dunlop Explorations). (See Appendix 1).

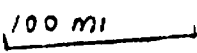
1.3 Survey Dates

The work recorded in this report was completed between June 11 and 19, 1985 and between September 18 and 24, 1985. The claims on which geological, geophysical and geochemical surveys were conducted are listed within each subreport. A total of 7,240 meters of line was cut in September (with baseline azimuths of 094° and crosslines at 004°) on the following 16 claims.



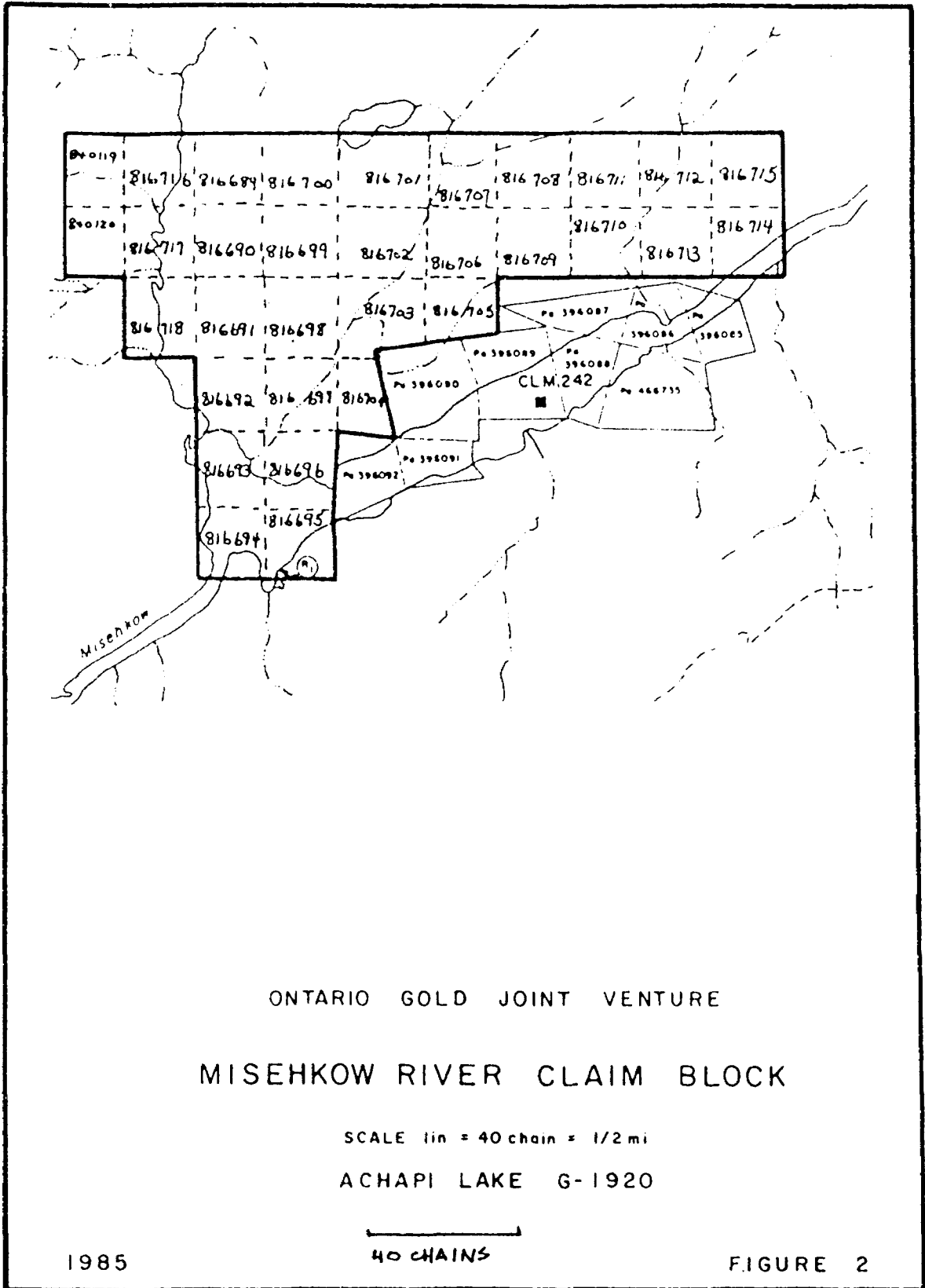
ONTARIO GOLD JOINT VENTURE
PROPERTY LOCATION MAP

SCALE 1" = 100 mi



1985

FIGURE 1



ONTARIO GOLD JOINT VENTURE

MISEHKOW RIVER CLAIM BLOCK

SCALE 1 in = 40 chain = 1/2 mi

ACHAPI LAKE G-1920

40 CHAINS

1985

FIGURE 2

Pa 816689-691
Pa 816697-703
Pa 816706
Pa 816716-718

1.4 Personnel (See Appendix 2)

1.5 Previous Work

In 1971-72, Sturdy Mines Limited conducted an extensive grid controlled magnetic and electromagnetic survey over the adjacent Mischkow River Iron Prospect and surrounding area, including ground now covered by claims Pa 816690 to 816714. No drill testing or other follow-up was reported for anomalies outlined by this early survey to the north of the river. Magnetic anomalies within the adjacent patented claim block were drill tested (2,200 m of EXT and AXT core from 19 holes) by Sturdy Mines (1968) and Algoma Steel Corp. (1977) to outline 71 million tons grading 21% iron to a depth of 150 m. The patented claims are now held by Algoma Steel.

2. Geological Report

2.1 Introduction

Geological mapping at a scale of 1:5,000 was conducted from June 12 to 18, 1985 on claims Pa 816689-718, and from September 19 to 24, 1985 on claims Pa 840119-120 and claim Pa 816717 (see Appendix 3).

2.2 Regional Geology

The Misehkw River claims are underlain by Archean rocks of the Uchi Lake Subprovince in the Pashkokogan-Misehkw "greenstone" belt. The belt is composed primarily of mafic to intermediate metavolcanic rocks with significant felsic to intermediate metavolcanic rocks and lesser clastic metasediments (Sage and Breaks, 1982). The lack of repetition of lithologies across the belt and the general southward progression from mafic through felsic metavolcanics to clastic metasediments suggest that the belt is entirely south facing. Government Airborne Magnetic data (ODM-GSC, 1960) indicates that a magnetite iron formation extends for 40 km along the northern margin of the belt. Aeromagnetic highs clearly distinguish the Misehkw River Iron Prospect and suggest a possible 0.8 km fold flexure and thickening of the iron formation to the north between Smoking Jacket and Non-Smoking Jacket Creeks. The presence of muscovite pseudomorphs after andalusite (Sage and Breaks, 1982) and garnets within chlorite-carbonate schists indicate amphibolite grade metamorphism in the vicinity of the property.

2.3 Physiography and Overburden

Bedrock exposures on the Misehkw River claims are either very good, as found along Smoking Jacket Creek, or very scattered. The south half of the property is covered by low glaciolacustrine clay and sand, and swamps. East of Smoking Jacket Creek bedrock outcrops become more scarce and the terrain builds into generally southwest trending eskers and drumlinoidal ridges subparallel to the direction of glacial advance. East of Non-Smoking Jacket Creek topography flattens into swamps and muskeg.

2.4 Local Geology and Table of Formations

Property mapping (see Plate 1) has outlined 11 basic lithologies as follows:

- GABR - gabbro; green medium to very coarse grained intrusive with abundant disseminated magnetite and local coarse garnets;
- GRAN - granite; grey medium grained, weakly foliated to buff fine grained, highly sheared and altered intrusives;
- CGSC - chlorite-garnet schist; medium grained, well foliated with local magnetite;
- QZIF - siliceous (probable metachert) magnetite iron formation; dark grey to white sugary medium grained foliated, sericitic quartzite/metachert; commonly pyritic with apparent resiliification; generally rusty; often chloritic and locally interbedded with fine garnetiferous argillite and chlorite schist;
- MVOL - mafic volcanic; massive to pillowed fine to medium grained chloritic basalt with local vesicles and amygdules; weakly foliated;
- CHSC - chlorite schist; well foliated massive MVOL equivalent? with local garnets, magnetite, pyrite;
- FVOL - intermediate to felsic volcanic; local pyrite; often interbedded with MVOL;
- GYWK - greywacke;
- SESC - sericite schist; well foliated;
- CSSC - chlorite + sericite schist; well foliated;
- ARGL - argillite; dark grey to black garnetiferous and well foliated.

The succession from mafic through felsic metavolcanics and probable chemical metasediments to clastic metasediments from north to south supports the above discussed south facing nature of the belt.

All units generally strike 050° to 080° azimuth and dip vertically to northward 70° . Minor flexures have been noted as predominantly "Z" symmetry, with axes plunging approximately 60° towards 5° west to 10° east of north. Right-handed shearing across the hinges of these folds at approximately 030° has also been noted. Units exposed along the east bank of Smoking Jacket Creek are locally extremely contorted, folded and sheared.

These above observations, the occurrence of iron formation north of the trend of the Mischkow River Iron Prospect (as exposed on Smoking Jacket Creek) and the Ontario Government Airborne Magnetic data map (ODM-GSC, 1960) mentioned above support the possibility of a major flexure on the property. Ground magnetic and electromagnetic data and a strong lineation from Iron Falls to the southwest through the property along Non-Smoking Jacket Creek to the northeast, however, suggest that the stratigraphy

has been offset by NE-SW oriented shears into an echelon packages. Bedrock exposures on the property are variable but generally very scattered east of Smoking Jacket Creek providing poor mapping control. Structural interpretation therefore must rely heavily on geophysical data, which supports the later hypothesis of shear offset and thickened lithology with right-handed movement (see Geophysical Report).

The highly foliated and altered nature of the granites along Smoking Jacket Creek suggests a pre- to syn-tectonic intrusion. The gabbros found along the entire north boundary of the property appear to be late to post-tectonic as indicated by localized shearing and common lack of foliation.

2.5 Mineralization

Gold mineralization on the Mischkow claims is associated with pyrite and pyrrhotite occurrences in the siliceous iron formation and in sheared sulphide zones of the magnetite-rich gabbro intrusive to the north. Sulphide (mainly pyrite) occurrences in the siliceous iron formation are common and vary from 0.5% as disseminations to 10-20% as shear controlled massive, coarse-grained bands. Gold concentrations are highest where sulphides are most abundant, with values up to 540 ppb gold in a grab sample (TM5-R-104) of 90% pyrite. Mineralized zones appear to be associated with variable amounts of silicification. Orientations of mineralized shear zones are variable, but predominantly trend NE-SW from 030° to 070° azimuth. Geochemistry clearly outlines the siliceous iron formation as a gold source in the area. For details of gold occurrences, see the accompanying Geochemical Report.

3. Geophysical Report

3.1 Introduction

A preliminary ground magnetic survey was conducted on June 17, 1985. A total of 83 stations was established typically at 50 meter spacings along the west claim lines of claims Pa 816689-692 and the east claim lines of claims Pa 816696-700 (see Appendix 3).

On September 21 to 23, 1985, ground magnetic and electromagnetic surveys were run over a 7.2 km cut grid. This latter survey was done at regular spacings of 10 meters (magnetic stations were taken at 5 meter spacings where unusual anomalies occurred) on 200 to 400 meter spaced lines as shown on the geophysical plan map (see Plate 2). A total of 912 magnetometer and 565 electromagnetometer stations was established (see Appendix 3).

3.2 Instruments and Operation

North facing, hand-held operation of the magnetometer provided a precision of ± 10 gammas. Tie-in readings at base stations were generally within 15 gammas and well below anomaly thresholds, therefore no diurnal corrections were calculated (see Plate 2).

The electromagnetic survey utilized VLF transmissions from Seattle, Washington, U.S.A. at a frequency of 18.6 kHz. Dip angles were measured towards azimuth 170° (see Plates 3 and 4).

For technical specifications, refer to Appendix 3.

3.3 Summary of Ground Magnetic Survey

Magnetic Zone A

Strong anomaly with associated low, caused by magnetite-rich chlorite garnet schist. Coincident with Conductive Zone A.

Magnetic Zone B

Very strong anomaly with associated low, in area of muskeg and thick glacial overburden. Probable cause magnetite/pyrrhotite rich gabbroic sill-like body. Coincident with Conductive Zone A.

Magnetic Zone C

Strong anomalous zone caused by highly contorted siliceous magnetite iron formation and lesser interbeds of chlorite schist.

Magnetic Zone D

Strong linear anomaly following a general azimuth of 075° caused by siliceous magnetite iron formation. Coincident with Conductive Zone B.

Magnetic Zone E

Strong to moderate anomaly associated with siliceous magnetite/pyrrhotite iron formation and chlorite schist.

Magnetic Zone F

Broad linear anomaly caused by magnetite/pyrrhotite in gabbro along azimuth 075° .

Magnetic Zone G

Low broad linear anomaly in area of thick glacial overburden and muskeg; following azimuth of 075° . Cause unknown. Coincident with Conductive Zone E.

Magnetic Zone H

Low linear anomaly and low in area of thick glacial overburden and muskeg; following azimuth 075° . Cause unknown. Coincident with Conductive Zone F.

3.4 Summary of Ground Electromagnetic Survey

Conductive Zone A

Moderate to strong two-line conductor; probably caused by magnetite and sulphide occurrence in gabbro and chlorite garnet schist. Coincident with Magnetic Zones A and B. Trend approximately 090° .

Conductive Zone B

Strong two-line anomaly caused by sulphide/magnetite bearing siliceous iron formation. Closely coincident with Magnetic Zone D. Trend approximately 080° .

Conductive Zone C

Moderate one-line conductor, probably caused by magnetite/sulphide occurrence in siliceous iron formation or chlorite schist. Partly coincident with Magnetic Zone E.

Conductive Zone D

Weak two-line anomaly in area of thick glacial overburden, with no coincident magnetic response. Cause unknown. Trend approximately 075° .

Conductive Zone E

Weak but distinctive three-line anomaly coincident with Magnetic Zone G. Cause unknown due to thick glacial overburden and swamps. Trend approximately 065° .

Conductive Zone F

Moderate and distinctive three-line conductor coincident with Magnetic Zone H. Cause unknown due to thick glacial overburden and swamps. Trend approximately 065° .

3.5 General Conclusions

The specific purpose of the ground geophysical surveys was to help establish an overall structural model with regard to the siliceous iron formation on the property. The strong NE-SW linear anomalies outlined by both the magnetometer and electromagnetic surveys suggest right-handed shear offset of en echelon blocks (possibly after initial folding) causing a thickened fold-like structure.

4. Geochemical Report

4.1 Introduction

Geochemical sampling on the Mischkow claims was conducted from June 12 to 18, 1985 and September 18 to 24, 1985 (see Appendix 3).

4.2 Sampling Procedure

Rock samples (outcrop and float), B-horizon soils, A-horizon soils (where B-horizon soils were unavailable) and stream silts were collected at the discretion of the geologist or prospector where bedrock exposures occurred. B-horizon soil samples were collected on three relatively systematic soil lines (SJW 0+00N to 7+60N, SJE 0+00N to 7+50N, RF 0+00S to 2+00S) across outcrop exposures parallel to Smoking Jacket Creek. Systematic soil sampling was not attempted to the east where overburden appeared to thicken considerably.

Soil and stream samples were sieved to -80 mesh for gold fire assay and 30-element I.C.P. (see Appendix 3 for technical information).

Follow-up of soil and base metal soil anomalies was found to fairly consistently reflect bedrock mineralization.

4.3 Discussion of Anomalies

Gold appears to occur most commonly in sulphide-rich shears in the siliceous iron formation and the mafic intrusives and volcanics. Arsenic is the only reliable pathfinder element (see Plates 5 and 6).

The best occurrence to date is located on the east shore of Smoking Jacket Creek at approximately 17+90W, 0+28N. Gold values are as follows:

TM5-S- 4	(B-horizon soil)	3,400 ppb
TM5-R-101	(grab; 30% pyrite)	130 ppb
TM5-R-103	(1.8 m chip, 5% pyrite)	36 ppb
TM5-R-104	(grab; 90% pyrite)	540 ppb

Gold is directly associated with the occurrence of pyrite which, at this site, is shear controlled, and occurs in discontinuous 1.0 cm thick bands across 30 cm. This zone is within a pyritic halo of at least 75 cm width.

Gold and arsenic geochemistry clearly outlines the siliceous iron formation as gold-bearing, with 50 to 120 meter wide anomalous zones highlighted on both sides of Smoking Jacket Creek (SJW 2+25N to 3+30N, SJE 2+75N to 3+90N; SJE 5+25N to 5+80N).

For a full list of chemical analyses see Appendix 4.

5. References

Dyers, W.S.

1933: Geology of the Pashkokogan Mischekow Area, p. 1-20, in ODM Annual Report, V. 42, pt. 6. Accompanied by Map 42e, scale 1 inch to 4 miles.

Goodwin, A.M.

1965: Geology of Pashkokogan Lake-Eastern Lake St. Joseph Area, Ontario Geological Survey Report #42, 58 p., 3 maps.

O.D.M.-G.S.C.

1960: "Achapi Lake - Air Magnetics Map 932G", scale 1 inch to 1 mile.

Sage, R.P. and Breaks, F.W.

1982: Geology of the Cat Lake-Pickle Lake Area, Districts of Kenora and Thunder Bay; Ontario Geological Survey, Report 207, 238 p. Accompanied by Map 2218, Scale 1:253 440 and Charts A, B and C.

APPENDIX 1

Property Holders

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

Manager - Dunlop Explorations
208 - 170 East Third Street
North Vancouver, B.C.
V6L 1E6

Other Partner - Newfields Minerals Inc.
1205 - 750 West Pender Street
Vancouver, B.C.
V6C 2T8

APPENDIX 2

Personnel

<u>Personnel</u>	<u>Work Period (1985)</u>
David W. Tupper 2657 West 2nd Avenue Vancouver, B.C. V6K 1K1	June 12 - 18 September 18 - 24 October 7 - 30
George Gorzynski 156 Glenholme Avenue Toronto, Ontario M6E 3C4	June 12 - 18 October 7 - 30
Bruce A. Youngman #208 - 170 East 3rd Street North Vancouver, B.C. V6L 1E6	June 12 - 19 September 18 - 24
H. Eric Ewen 3239 Ganymede Drive Burnaby, B.C. V3J 1A5	June 12 - 18 October 7 - 30
Alcide Thibault Jacqueline Jacques Dany Thibault Claude Audet P. O. Box 173 Pickle Lake, Ontario POV 3A0	September 18 - 24 September 18 - 24 September 18 - 24 September 18 - 24

APPENDIX 4

CHEMICAL ANALYSES

NOTE : APPENDIX 3 FOLLOWS AT END
OF APPENDIX 5 .

NORTHERN DYNASTY FILE # 85-2607

PAGE 1

SAMPLED	Pb	Cu	Zn	As	Ni	Co	Mn	Fe	Ag	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Li	F	Al	Na	K	B	Other	
	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	
TR5-8101	2	28	24	14	1.2	55	170	125	12.13	1043	13	ND	2	1	1	2	5	4	.04	.01	12	1	.06	3	.01	2	.03	.01	.02	1	150
TR5-8102	1	56	11	15	.7	30	19	503	6.40	202	5	ND	5	9	1	2	3	66	.03	.02	8	9	1.01	17	.03	2	1.76	.04	.07	1	31
TR5-8103	2	94	14	27	.4	32	55	252	7.09	63	5	ND	1	1	1	2	2	7	.03	.02	4	1	.07	2	.01	2	.04	.01	.01	1	540
TR5-8104	1	48	20	17	1.4	58	247	177	17.63	119	5	ND	1	1	1	2	7	7	.04	.01	19	4	.07	2	.01	2	.04	.01	.01	1	21
TR5-8100	5	83	23	54	1.6	46	56	435	14.40	25	27	ND	7	8	1	2	6	79	.07	.08	27	7	2.19	24	.03	2	3.29	.02	.04	1	21
TR5-8101	2	477	15	27	.6	105	91	88	10.09	16	22	ND	3	2	1	7	2	32	.13	.07	8	7	.18	2	.01	2	.37	.01	.01	3	14
TR5-8102	1	61	32	428	.7	107	18	786	19.52	18	21	ND	4	30	1	2	15	324	.27	.06	27	285	2.54	5	.05	8	5.29	.01	.07	1	4
STR C/FA-AU	21	58	39	137	2.1	64	27	1182	3.93	39	17	7	38	51	17	15	20	57	.48	.15	34	59	.88	176	.08	19	1.72	.06	.10	11	52

Assay required for correct result _____

See upper limit 10,000 ppm.

ACME ANALYTICAL LABORATORIES LTD.

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

PHONE 253-3158

DATA LINE 251-1

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH JML 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 Pb, Fe, Ca, F, Cr, Mg, Ba, Ti, B, Al, Na, K, V, Si, Zn, Ce, Sm, Y, Nb AND Ta. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: F1-5 SOILS AND SILTS P6-7 ROCKS AUII ANALYSIS BY FA-4A FROM 10 GRAM SAMPLE.

DATE RECEIVED: JUNE 23 1985 DATE REPORT MAILED: *June 28/85* ASSAYER: *V. Saundry* DEAN TOYE OR TOM SAUNDRY, CERTIFIED B.C. ASSAYER

NORTHERN DYNASTY FILE # B5-1088

PAGE 1

SAMPLE#	As	Cd	Co	Cu	Pb	Mn	Ni	Ag	Zn	Al	Fe	Ca	Mg	K	Na	Si	U	V	Cr	Mo	Ba	Ti	B	Al	Na	K	V	AUII			
	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			
ENS-S-1	2	252	11	54	.3	71	45	225	9.25	12	6	ND	10	8	1	2	2	83	.27	.09	5	44	.59	36	.09	2	1.72	.01	.07	1	14
ENS-S-2	4	45	7	5	.1	11	13	351	4.90	4	5	ND	3	1	1	2	2	6	.02	.01	6	2	.04	2	.01	2	.07	.01	.01	2	16
ENS-S-3	15	45	18	35	1.5	5	1	148	10.36	194	7	ND	6	1	1	4	2	23	.03	.05	2	9	.49	2	.32	2	.56	.01	.02	1	50
ENS-S-4	4	56	25	78	.1	12	2	190	10.06	11	5	ND	5	2	1	4	2	95	.01	.11	10	63	.71	29	.18	2	1.97	.01	.19	4	7
ENS-S-5	1	17	11	50	.2	29	11	242	3.43	6	5	ND	13	14	1	2	2	40	.26	.10	14	39	.58	50	.15	2	1.92	.01	.08	1	3
THS-S-1	5	63	23	19	.1	10	4	74	18.56	6	5	ND	10	4	1	2	2	44	.05	.17	9	57	.19	16	.09	8	.55	.01	.04	1	2
THS-S-2	1	31	7	16	.1	5	1	133	6.73	6	5	ND	4	2	1	2	2	17	.02	.07	6	3	.04	8	.02	2	.17	.01	.01	1	250
THS-S-3	5	186	23	121	3.1	99	47	193	11.41	59	5	ND	8	6	1	2	2	46	.07	.14	11	33	.52	27	.07	5	2.61	.01	.05	1	22
THS-S-4	15	59	47	31	3.5	7	3	556	24.67	133	5	ND	10	1	1	2	2	67	.02	.07	2	16	.06	9	.03	2	.25	.01	.04	4	1400
THS-S-5	8	229	44	36	2.6	21	6	373	19.90	14	5	ND	9	6	1	2	2	165	.05	.11	2	112	.79	40	.13	3	1.88	.01	.22	20	270
THS-S-6	5	129	27	18	1.7	4	1	180	26.44	11	5	ND	11	15	1	2	2	67	.01	.23	9	11	.07	17	.01	4	.15	.06	.14	2	66
THS-S-7	9	91	167	47	3.8	12	6	193	17.65	578	5	ND	10	6	1	2	2	50	.13	.12	3	12	.11	21	.04	2	.62	.01	.04	1	80
THS-S-8	3	59	15	26	.1	24	8	87	8.71	11	5	ND	4	2	1	2	2	126	.02	.04	5	47	.38	12	.07	4	1.10	.01	.06	1	17
THS-S-9	2	176	251	253	9.9	133	24	184	4.85	11	5	ND	10	8	1	4	2	37	.13	.07	20	32	.37	22	.09	2	1.87	.01	.04	1	1
THS-S-10	2	18	31	45	.5	15	4	195	7.69	7	5	ND	5	4	1	3	2	95	.05	.04	12	27	.40	29	.07	2	1.25	.01	.02	3	2
THS-S-11	3	50	14	42	.2	11	2	167	7.92	3	5	ND	8	6	1	2	2	52	.08	.08	6	20	.27	20	.09	2	1.07	.01	.05	1	10
THS-S-12	7	53	32	32	.4	6	1	123	26.15	36	5	ND	9	1	1	3	2	39	.02	.27	16	11	.06	7	.03	4	.38	.01	.02	1	13
THS-S-13	6	83	27	20	1.6	3	3	377	27.84	18	5	ND	12	5	1	2	2	49	.07	.31	2	15	.10	21	.01	3	.24	.01	.12	2	20
THS-S-14	2	20	17	30	.1	4	1	95	9.51	5	5	ND	2	3	1	2	2	53	.02	.06	7	6	.04	16	.05	2	.21	.01	.01	1	28
THS-S-15	3	12	13	17	.1	3	4	118	3.58	2	8	ND	5	4	1	3	6	33	.10	.04	6	8	.06	15	.05	2	.49	.01	.03	1	26
THS-S-16	1	4	9	12	.1	2	2	59	1.24	3	5	ND	1	7	1	2	2	18	.13	.05	6	10	.06	25	.04	2	.32	.01	.02	1	1
THS-S-17	1	101	24	49	.2	8	23	469	3.05	4	5	ND	1	16	1	2	2	63	.95	.08	9	10	.13	46	.05	2	.86	.02	.02	1	1
THS-S-18	1	19	14	16	.1	3	3	66	.85	2	5	ND	1	3	1	2	2	20	.12	.02	4	5	.14	23	.02	2	.47	.02	.01	1	2
THS-S-19	1	28	25	46	.1	20	4	188	4.81	3	5	ND	4	3	1	2	2	120	.09	.13	2	99	.72	21	.04	2	1.42	.02	.02	1	20
THS-S-20	1	7	8	36	.1	7	4	271	5.19	5	5	ND	3	4	1	3	2	232	.09	.03	3	54	.94	10	.05	2	1.28	.01	.02	1	2
THS-S-21	1	41	66	34	.1	12	5	107	1.15	8	5	ND	1	15	1	2	2	18	.45	.12	10	17	.25	50	.01	4	.80	.01	.07	1	2
THS-S-22	7	392	16	132	.1	6	165	10987	10.18	32	5	ND	5	22	1	2	2	76	1.04	.26	10	6	.32	181	.04	8	2.34	.02	.04	1	20
THS-S-23	1	41	12	57	.1	11	9	473	3.56	9	5	ND	4	8	1	2	2	55	.22	.12	7	21	.27	44	.11	2	1.80	.01	.02	1	1
THS-S-24	1	40	8	26	.1	15	7	150	1.89	3	5	ND	6	8	1	2	2	31	.17	.05	15	26	.40	21	.12	6	1.64	.02	.02	1	1
THS-S-25	3	92	12	35	.2	29	16	400	6.97	6	5	ND	2	2	1	4	2	77	.18	.10	5	12	1.27	44	.21	2	2.06	.02	.13	2	1
THS-S-26	1	20	11	26	.1	11	4	92	2.45	3	5	ND	4	10	1	2	2	47	.20	.05	10	24	.30	22	.12	2	1.43	.01	.03	1	1
THS-S-27	1	18	16	65	.2	13	8	317	2.65	6	5	ND	1	3	1	2	2	110	.08	.06	4	22	.99	12	.08	2	1.68	.01	.02	1	1
THS-S-28	1	29	4	7	.1	12	4	169	5.16	4	5	ND	1	2	1	2	2	21	.03	.04	6	10	.02	9	.02	2	.19	.01	.01	2	1
THS-S-29	1	23	21	50	.1	18	3	148	2.43	7	5	ND	1	28	1	2	2	46	.14	.05	13	38	.42	26	.12	2	.88	.02	.04	1	2
THS-S-30	7	59	9	16	.4	1	1	135	16.09	40	5	ND	5	1	1	2	2	31	.03	.08	3	3	.10	2	.02	6	.15	.01	.01	1	150
THS-S-31	6	68	28	76	.3	10	1	131	24.71	24	5	ND	9	3	1	3	2	46	.02	.20	4	18	.18	18	.04	8	.46	.01	.07	2	25
STD C/FA-AU	20	60	40	136	7.0	66	28	1176	3.99	36	17	7	36	52	17	16	20	59	.48	.16	37	60	.88	182	.10	40	1.72	.06	.12	12	50

NORTHERN DYNASTY FILE # 85-1088

SAMPLE#	Ni	Cu	Pb	Zn	Ag	Mn	Co	Ni	Fe	As	U	Au	Ta	Sr	Ce	Sb	Bi	V	Ca	F	La	Cr	Mg	Ba	Ti	S	Al	Mo	K	M	Au18
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
GMS-S-3	4	118	45	18	.2	2	1	49	10.42	27	5	ND	3	2	2	2	50	.01	.07	11	10	.08	8	.05	2	.41	.01	.02	4	4	
GMS-S-4	1	12	6	29	.2	6	2	74	1.89	5	5	ND	4	6	1	2	3	40	.07	.02	11	11	.14	26	.09	2	.68	.01	.02	1	22
GMS-S-5	1	2	6	16	.1	1	1	14	.19	4	5	ND	1	2	1	2	3	.02	.01	9	1	.02	10	.01	2	.24	.01	.02	1	2	
GMS-S-6	6	520	14	147	.9	67	42	676	14.07	9	5	ND	8	4	1	3	2	213	.10	.15	9	52	1.61	29	.12	2	4.56	.01	.18	1	8
GMS-S-7	2	43	19	15	1.8	7	5	46	3.61	267	6	ND	4	2	1	2	2	17	.02	.04	5	5	.08	6	.01	2	.47	.01	.02	1	120
GMS-S-8	7	123	20	27	.4	10	3	251	19.96	22	5	ND	6	6	1	2	2	67	.08	.22	7	17	.07	38	.02	2	.40	.01	.02	3	24
R+F 0+005	1	7	7	16	.2	8	2	72	1.32	4	5	ND	5	7	1	4	2	26	.07	.02	10	18	.22	26	.09	2	.98	.01	.07	1	2
R+F 0+205	1	4	4	28	.1	6	2	65	2.41	4	5	ND	3	5	1	2	2	38	.06	.07	10	21	.15	17	.12	2	1.06	.01	.02	1	10
R+F 0+305	1	8	4	16	.2	4	2	48	2.12	4	5	ND	4	4	1	2	2	64	.06	.04	8	16	.11	6	.15	2	.52	.01	.02	1	1
R+F 0+405	1	9	6	21	.1	6	2	52	2.33	7	5	ND	2	3	1	2	3	55	.05	.02	8	15	.17	11	.14	2	.79	.01	.02	1	1
R+F 0+505	1	9	7	20	.2	5	2	75	2.72	3	5	ND	7	5	1	2	2	71	.09	.04	10	16	.18	11	.12	2	.72	.01	.02	1	1
R+F 0+505	1	5	6	34	.2	11	3	122	3.72	3	5	ND	4	3	1	2	2	77	.04	.02	9	20	.28	17	.09	2	.98	.01	.02	2	28
R+F 0+505	1	22	10	68	.1	9	2	100	8.24	5	5	ND	3	2	1	2	2	56	.02	.06	16	11	.06	14	.09	2	.44	.01	.01	1	25
R+F 0+605	1	25	9	100	.2	21	7	128	4.29	7	5	ND	5	5	1	2	2	126	.13	.05	8	17	.19	20	.20	2	1.48	.01	.02	2	18
R+F 0+605	1	5	4	44	.1	3	1	63	1.54	5	5	ND	1	3	1	2	2	82	.05	.02	9	26	.12	12	.12	2	.63	.01	.01	2	20
R+F 0+705	1	4	4	12	.1	2	1	55	.68	3	5	ND	2	3	1	2	2	24	.05	.01	6	9	.10	14	.06	2	.40	.01	.02	1	4
R+F 0+705	1	22	13	36	.1	6	2	133	4.91	6	5	ND	2	4	1	2	2	132	.07	.06	11	52	.42	24	.06	2	1.09	.01	.02	2	235
R+F 0+805	1	17	35	47	.2	19	3	110	5.22	20	5	ND	3	3	1	2	2	107	.07	.08	10	49	.20	18	.06	2	1.13	.01	.02	1	20
R+F 0+905	1	40	25	80	.7	62	8	194	4.41	5	5	ND	3	2	1	2	2	109	.05	.05	4	221	.99	24	.17	2	1.97	.01	.07	3	3
R+F 0+905	4	53	84	97	.7	77	8	251	12.38	10	5	ND	3	2	1	2	2	425	.09	.08	9	184	1.10	20	.06	2	1.83	.01	.02	1	2
R+F 1+005	1	37	51	60	.9	24	4	136	4.23	4	5	ND	1	3	1	2	2	140	.02	.02	11	117	.48	38	.11	2	1.90	.01	.02	1	2
R+F 1+105	1	13	4	14	.4	3	1	51	.73	3	8	ND	1	3	1	2	2	21	.07	.01	6	10	.06	14	.03	2	.27	.01	.02	1	10
R+F 1+205	1	11	8	18	.1	2	1	71	1.71	5	5	ND	2	4	1	2	2	52	.06	.02	5	10	.14	14	.07	2	.42	.01	.02	1	1
R+F 1+405	1	2	8	27	.2	8	2	107	1.23	4	5	ND	4	9	1	2	4	28	.12	.02	12	18	.22	22	.11	4	.76	.01	.04	1	1
R+F 1+605	1	22	17	80	.2	42	12	566	3.81	8	5	ND	10	21	1	3	2	52	.22	.02	19	64	1.12	97	.24	10	2.69	.02	.28	1	1
R+F 1+805	1	14	4	57	.2	22	8	288	2.75	8	5	ND	12	16	1	2	2	41	.22	.06	16	47	.80	77	.18	4	1.95	.01	.15	1	1
R+F 2+005	1	12	12	72	.1	29	8	464	2.75	9	5	ND	12	16	1	2	2	41	.22	.06	18	46	.77	66	.18	4	1.81	.01	.20	1	1
SJM 7+60N	1	20	3	21	.1	22	13	125	2.00	5	5	ND	1	1	1	2	2	237	.02	.01	4	105	.89	15	.26	3	1.17	.01	.02	1	9
SJM 7+40N	1	12	5	34	.2	16	5	152	1.90	7	5	ND	6	8	1	2	2	39	.16	.04	12	20	.52	28	.14	4	1.32	.01	.07	1	2
SJM 7+20N	1	102	12	124	.2	71	28	233	6.96	10	5	ND	4	6	1	2	2	152	.07	.05	15	80	1.07	62	.22	4	3.29	.01	.11	1	1
SJM 7+10N	1	24	10	33	.2	16	7	223	3.84	6	5	ND	1	2	1	2	2	192	.02	.02	9	66	.69	20	.16	2	1.38	.01	.02	1	9
SJM 7+00N	1	69	6	46	.2	20	8	107	3.55	4	5	ND	6	4	1	2	2	76	.07	.03	11	29	.22	21	.14	2	1.69	.01	.02	1	2
SJM 6+90N	1	34	12	43	.2	18	5	128	3.80	7	5	ND	3	5	1	2	2	99	.08	.02	10	40	.42	17	.20	2	1.27	.01	.02	1	4
SJM 6+80N	4	239	21	96	.2	14	4	223	17.99	7	5	ND	7	4	1	2	2	149	.02	.10	12	77	.80	33	.16	2	2.10	.01	.17	2	7
SJM 6+70N	4	87	42	67	.2	8	2	127	12.54	15	5	ND	3	3	1	2	2	97	.02	.14	21	57	.21	20	.17	2	1.10	.01	.02	1	8
SJM 6+60N	1	26	16	69	.2	24	10	216	3.71	10	5	ND	7	9	1	2	2	57	.10	.05	17	44	.56	54	.12	4	2.14	.01	.10	1	15
STD C/FA-AU	19	57	41	131	7.0	68	27	1125	3.79	39	17	6	34	45	17	16	19	56	.46	.16	38	56	.84	174	.10	29	1.64	.06	.10	12	54

NORTHERN DYNASTY FILE # 85-1088

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	Al	U	As	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	M	Au/Ag
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
SJM 6+50N	1	11	12	25	.2	19	6	219	2.40	3	6	ND	9	16	1	3	3	45	.18	.02	17	37	.53	55	.12	6	1.64	.01	.12	1	26
SJM 6+50N	1	22	20	75	.2	45	14	731	2.74	5	5	ND	18	24	1	3	3	57	.46	.03	28	72	1.18	129	.22	13	2.74	.02	.28	1	5
SJM 6+00N	1	4	6	16	.1	6	2	81	.75	2	5	ND	5	7	1	3	3	20	.16	.02	11	11	.19	17	.10	3	.46	.01	.04	1	23
SJM 5+50N	1	15	15	33	.1	15	7	159	2.35	4	5	ND	7	7	1	3	3	65	.11	.02	14	23	.44	25	.19	7	1.21	.01	.05	1	5
SJM 5+40N	1	8	10	17	.1	8	3	94	1.72	2	5	ND	2	7	1	3	2	40	.09	.02	15	19	.27	18	.12	5	.88	.01	.02	1	3
SJM 5+30N	1	27	10	12	.1	6	3	41	1.25	4	5	ND	3	6	1	4	2	37	.08	.02	12	14	.13	29	.08	6	1.01	.01	.02	1	7
SJM 5+20N	2	123	20	118	.1	47	49	538	5.28	27	5	ND	1	5	1	4	2	239	.23	.10	13	36	1.54	51	.28	6	5.42	.01	.07	1	12
SJM 5+10N	1	15	15	25	.1	12	4	113	2.58	6	5	ND	5	6	1	3	3	66	.09	.04	11	27	.33	18	.15	4	1.09	.01	.05	1	2
SJM 5+00N	1	18	10	22	.1	11	4	90	2.14	4	5	ND	6	5	1	2	2	53	.07	.05	12	17	.21	11	.12	3	.79	.01	.02	1	8
SJM 4+90N	1	24	9	25	.1	14	5	105	2.00	3	5	ND	4	6	1	2	3	32	.15	.06	15	17	.30	17	.11	4	1.57	.01	.02	1	4
SJM 4+80N	1	17	12	27	.2	11	5	101	2.03	4	6	ND	4	6	1	2	2	42	.12	.04	10	17	.30	18	.12	4	1.40	.01	.04	1	1
SJM 4+70N	1	13	14	15	.1	10	3	63	1.03	3	5	ND	2	6	1	3	4	24	.13	.02	10	12	.17	16	.09	4	.94	.01	.02	1	1
SJM 4+60N	1	10	10	12	.1	7	1	54	.60	3	5	ND	4	10	1	2	3	17	.17	.02	14	8	.13	40	.05	4	.80	.01	.02	1	2
SJM 4+50N	1	50	17	94	.1	48	16	485	4.65	6	5	ND	9	12	1	3	2	66	.44	.05	27	42	.93	95	.50	6	2.77	.01	.12	1	12
SJM 4+40N	2	62	16	49	.1	31	9	377	11.72	3	5	ND	6	2	1	2	2	87	.09	.03	16	65	.21	16	.11	2	.58	.01	.02	1	250
SJM 4+30N	1	8	10	15	.1	5	2	43	.78	3	5	ND	2	8	1	3	3	25	.10	.02	13	11	.15	24	.09	4	.72	.01	.02	1	1
SJM 4+20N	3	119	18	114	.5	23	12	284	11.21	8	5	ND	5	3	1	2	2	369	.11	.06	13	25	.65	29	.39	3	2.46	.01	.19	1	1
SJM 4+10N	4	195	27	72	.3	45	31	581	10.31	7	5	ND	6	7	1	2	2	240	.44	.11	18	32	.54	51	.15	5	5.00	.01	.04	1	2
SJM 4+00N	1	35	15	42	.1	8	5	160	4.80	6	5	ND	1	3	1	2	2	180	.12	.04	14	15	.28	25	.11	4	1.56	.01	.01	1	4
SJM 3+90N	1	36	25	32	.2	11	7	252	2.26	3	5	ND	4	4	1	2	2	120	.15	.02	10	14	.46	40	.06	2	1.96	.01	.04	1	9
SJM 3+80N	1	26	12	32	.1	7	7	339	3.23	5	5	ND	3	3	1	2	3	177	.14	.02	9	10	.76	20	.12	2	1.54	.01	.02	1	15
SJM 3+70N	1	26	11	25	.2	50	8	151	4.33	27	5	ND	4	4	1	2	2	48	.10	.03	9	22	.54	11	.11	4	1.54	.02	.02	1	15
SJM 3+60N	2	37	12	20	.5	8	3	51	3.88	56	5	ND	1	2	1	2	6	41	.02	.04	12	8	.08	15	.02	2	.67	.01	.02	1	10
SJM 3+50N	9	44	9	15	.2	43	7	105	6.69	31	12	ND	6	2	1	2	3	21	.01	.05	9	5	.04	7	.04	2	.50	.01	.02	1	5
SJM 3+40N	1	51	15	59	.1	24	11	157	5.61	7	5	ND	3	3	1	2	2	356	.15	.03	11	21	.60	29	.23	5	2.13	.01	.05	1	6
SJM 3+30N	6	50	22	25	.5	6	2	82	21.10	293	5	ND	9	2	1	2	2	56	.02	.17	31	10	.07	12	.10	3	.40	.01	.02	1	26
SJM 3+20N	14	18	16	20	.3	7	1	77	10.16	339	5	ND	2	3	1	2	5	53	.04	.09	19	4	.02	23	.06	6	.16	.01	.01	1	18
SJM 3+10N	1	2	6	7	.2	6	1	103	.82	7	5	ND	4	4	1	2	3	15	.06	.01	9	3	.14	15	.04	2	.54	.01	.01	1	24
SJM 3+00N	1	42	6	38	.2	136	21	217	3.52	10	5	ND	2	3	1	3	2	72	.06	.01	6	52	2.86	43	.17	2	3.01	.01	.05	1	12
SJM 2+75N	2	66	42	29	.1	7	3	90	9.14	20	5	ND	2	2	1	2	2	81	.02	.08	21	19	.13	14	.07	5	.69	.01	.01	3	25
SJM 2+50N	1	33	18	34	.1	30	5	83	2.65	63	5	ND	5	6	1	2	3	59	.08	.03	14	22	.47	45	.05	3	2.48	.01	.02	7	17
SJM 2+25N	1	8	4	21	.2	11	3	88	1.22	6	5	ND	3	8	1	2	2	36	.13	.02	9	15	.31	24	.12	3	.72	.01	.03	1	14
SJM 2+00N	1	49	18	85	.1	30	9	318	4.07	7	5	ND	3	6	1	2	2	85	.14	.04	14	37	.82	46	.05	3	2.70	.01	.02	1	4
SJM 1+75N	1	4	10	24	.2	4	2	57	1.34	4	5	ND	4	5	1	2	2	29	.07	.13	8	14	.13	20	.09	2	1.04	.01	.02	1	5
SJM 1+50N	1	22	16	61	.3	36	11	492	3.18	11	5	ND	15	21	1	2	2	49	.38	.05	21	57	.99	98	.18	15	2.54	.02	.22	1	29
SJM 1+25N	1	19	12	56	.3	32	9	519	2.84	7	5	ND	13	23	1	2	2	45	.04	.04	32	52	.90	103	.17	12	2.14	.02	.18	1	4
STD C/F/A-AU	19	60	40	127	7.0	66	28	1187	3.80	36	18	7	39	48	18	15	20	59	.48	.17	41	59	.88	184	.08	42	1.72	.06	.12	12	54

NORTHERN DYNASTY FILE # BS-1088

SAMPLE#	No PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	Al PPM	U PPM	Au PPM	Ti PPM	Si PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Li %	S PPM	Al %	K %	Na %	Ca PPM	Cl PPM	
SJM 1-00N	1	24	10	76	.1	37	11	491	3.60	9	5	ND	10	27	1	2	2	50	.76	.06	32	66	1.11	91	.21	10	2.45	.07	.28	1	1	
SJM 0-75N	1	17	10	87	.3	31	9	443	2.98	7	5	ND	10	25	1	3	3	47	.71	.05	28	57	.94	70	.20	7	2.15	.07	.19	1	2	
SJM 0-50N	1	17	12	73	.1	30	9	574	2.93	9	5	ND	15	23	1	2	2	58	.77	.04	33	52	.87	60	.20	13	1.88	.07	.19	1	1	
SJM 0-25N	1	20	10	90	.3	42	17	737	3.87	10	5	ND	11	27	1	2	2	54	.92	.05	34	69	1.11	104	.21	15	2.78	.07	.28	1	1	
SJM 0-00N	1	17	10	92	.1	34	11	806	3.89	9	5	ND	17	26	1	2	2	42	.18	.09	13	23	.28	36	.17	2	1.18	.01	.07	1	1	
SJE 7-50N	1	10	7	41	.3	12	4	166	1.93	6	8	ND	7	11	1	4	4	42	.17	.06	10	25	.35	52	.12	7	1.26	.01	.06	1	1	
SJE 7-25N	1	12	7	37	.1	10	5	167	2.25	6	5	ND	5	10	1	2	2	24	.14	.03	9	22	.25	34	.10	2	1.17	.01	.05	1	1	
SJE 7-00N	1	10	4	21	.1	13	4	98	1.79	5	5	ND	5	10	1	2	2	27	.19	.05	11	23	.29	27	.06	2	.96	.01	.05	1	1	
SJE 6-75N	1	10	3	21	.1	11	4	102	1.40	7	5	ND	5	9	1	2	2	20	.11	.06	11	19	.23	23	.09	2	1.04	.01	.05	1	1	
SJE 6-50N	1	9	3	18	.1	11	4	88	1.48	5	5	ND	5	9	1	2	2	27	.03	.05	9	15	.09	10	.11	2	.83	.01	.05	1	1	
SJE 6-25N	1	39	8	10	.1	5	3	34	4.96	6	5	ND	5	5	1	2	2	41	.20	.03	12	35	.32	32	.15	2	1.70	.01	.07	1	14	
SJE 6-00N	1	19	6	32	.1	20	6	157	2.43	5	5	ND	5	10	1	2	2	40	.23	.05	13	28	.63	36	.14	2	1.91	.01	.06	1	2	
SJE 5-90N	1	23	11	39	.2	24	7	187	2.63	8	5	ND	7	10	1	2	2	97	.55	.12	7	50	.53	55	.06	2	1.92	.01	.06	1	20	
SJE 5-80N	1	211	20	78	.4	48	45	649	8.52	14	5	ND	5	5	1	2	2	112	.06	.10	2	80	.69	23	.06	2	1.55	.01	.04	1	60	
SJE 5-70N	7	269	18	75	.6	21	11	502	16.07	16	5	ND	5	5	1	2	2	96	.05	.08	2	55	.44	39	.03	2	1.78	.01	.04	1	50	
SJE 5-60N	5	204	20	116	.5	57	31	281	18.16	8	5	ND	9	4	1	2	2	93	.55	.07	13	51	.77	123	.08	4	3.55	.07	.10	1	44	
SJE 5-50N	1	192	10	200	.4	122	167	1881	3.10	14	5	ND	7	16	1	2	2	90	.50	.63	9	54	.41	30	.03	2	3.28	.01	.04	1	90	
SJE 5-40N	1	182	10	30	.2	57	24	191	3.40	7	5	ND	3	6	1	2	2	239	.41	.05	2	178	1.84	33	.04	2	2.47	.01	.04	1	8	
SJE 5-25N	3	124	8	36	.1	49	39	799	10.72	12	5	ND	4	15	1	2	2	132	.84	.05	2	198	1.10	47	.18	2	5.97	.28	.06	1	8	
SJE 5-00N	1	209	3	33	.1	143	35	305	4.13	23	5	ND	5	8	1	2	2	117	.17	.03	9	82	.63	44	.16	12	2.52	.07	.06	1	20	
SJE 4-75N	1	48	11	78	.1	35	11	200	4.36	9	5	ND	5	8	1	2	2	131	.17	.07	11	84	.74	48	.13	2	2.01	.01	.08	1	3	
SJE 4-50N	1	111	12	363	.7	40	24	507	6.17	23	5	ND	5	11	1	2	2	162	.32	.07	11	58	1.45	80	.15	2	2.64	.01	.06	1	3	
SJE 4-25N	2	115	10	490	.3	46	21	1228	6.17	10	5	ND	8	4	1	2	2	136	.04	.13	2	114	1.12	20	.10	2	2.87	.01	.05	1	8	
SJE 4-00N	4	217	19	253	.5	49	16	609	12.06	10	5	ND	6	8	1	2	2	128	.14	.10	8	94	.94	24	.09	2	2.27	.01	.06	1	10	
SJE 3-90N	3	96	12	91	1.2	47	18	529	10.76	18	5	ND	6	8	1	2	2	74	.05	.09	4	26	.18	15	.07	2	.77	.01	.07	1	22	
SJE 3-70N	3	87	22	45	1.0	12	5	176	10.84	12	5	ND	4	5	1	2	2	149	.06	.11	3	82	1.82	25	.08	6	4.27	.01	.07	1	22	
SJE 3-60N	3	222	23	167	.1	80	25	726	16.12	12	8	ND	4	4	1	2	2	88	.06	.05	2	38	.27	10	.06	2	.86	.01	.07	1	22	
SJE 3-50N	1	44	33	73	1.5	11	4	115	8.10	46	5	ND	5	2	1	2	2	85	.04	.04	2	51	.86	13	.08	4	1.50	.01	.05	1	100	
SJE 3-40N	5	87	27	31	2.1	18	4	253	18.68	46	5	ND	4	4	1	2	2	74	.05	.04	2	153	1.16	82	.12	7	6.01	.01	.27	1	20	
SJE 3-30N	5	60	15	49	.9	23	4	343	16.31	20	5	ND	4	4	1	2	2	96	.35	.14	2	10	.05	20	.01	10	.23	.01	.07	1	18	
SJE 3-20N	5	351	43	60	.4	274	149	967	21.02	17	5	ND	14	12	2	2	2	29	.01	.21	12	46	.18	52	.02	10	.50	.02	.25	9	34	
SJE 3-10N	5	274	23	21	.5	5	5	97	27.56	19	5	ND	8	8	1	4	4	72	.02	.26	5	103	2.33	80	.20	6	5.09	.02	.41	1	17	
SJE 3-00N	5	235	54	33	1.2	10	5	133	28.05	70	5	ND	8	11	1	2	2	115	.17	.16	7	65	.98	23	.19	2	2.41	.05	.05	1	3	
SJE 2-75N	4	257	290	294	4.0	107	28	653	11.95	13	5	ND	5	10	1	2	2	88	.20	.06	2	8	.22	.31	.19	.10	2	1.05	.01	.07	1	3
SJE 2-50N	1	39	18	99	.4	49	12	172	4.47	13	5	ND	5	6	1	2	2	53	.08	.02	39	62	.88	176	.08	39	1.72	.06	.17	12	50	
SJE 2-25N	1	12	8	50	.1	10	3	92	2.02	4	5	ND	5	6	1	2	2	20	.59	.48	.17	2	2	2	2	2	2	2	2	2	2	
STD C774-AU	21	61	41	139	6.9	67	28	1192	3.97	39	16	6	56	48	18	16	16	20	59	.48	.17	39	62	.88	176	.08	39	1.72	.06	.17	12	50

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SAMPLE	Ag	Cu	Pb	Zn	As	Ni	Co	Mn	Fe	Al	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	F	La	Cr	Mg	Ba	Li	B	Al	Na	K	M	ALL
	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
SJE 2+1SN	2	63	37	110	.1	73	21	193	5.09	5	5	ND	2	11	1	3	2	96	.26	.02	9	72	1.20	53	.26	2	2.78	.02	.02	28	1
SJE 2+00N	1	33	8	24	.1	23	9	142	2.15	3	5	ND	4	11	1	2	2	37	.33	.03	10	34	.44	41	.09	4	1.54	.02	.02	1	1
SJE 1+90N	1	40	9	29	.2	31	12	152	2.90	6	5	ND	6	8	1	2	2	47	.18	.03	10	39	.49	41	.14	2	1.93	.02	.02	1	250
SJE 1+75N	1	32	21	38	.1	18	4	140	4.89	5	5	ND	4	6	1	2	2	75	.17	.08	11	59	.24	43	.04	2	2.21	.01	.02	1	2
SJE 1+60N	1	150	29	85	.5	61	16	121	4.71	6	5	ND	4	9	1	2	2	46	.14	.04	16	35	.31	25	.09	2	1.58	.01	.02	1	3
SJE 1+50N	1	4	4	18	.1	2	1	12	.26	2	5	ND	1	3	1	2	3	5	.02	.01	7	5	.03	15	.01	2	.25	.01	.01	1	10
SJE 1+25N	1	28	9	50	.2	21	6	100	2.11	4	5	ND	2	6	1	2	2	34	.12	.02	10	32	.37	15	.08	4	.92	.01	.02	1	2
SJE 1+00N	2	34	19	149	.3	41	9	105	3.87	3	5	ND	5	7	1	2	4	68	.06	.02	12	88	.51	29	.07	2	1.71	.01	.02	1	4
SJE 0+75N	1	2	2	10	.1	2	1	53	.27	2	5	ND	1	2	1	2	2	4	.04	.01	4	3	.15	6	.02	4	.26	.01	.02	1	1
SJE 0+50N	1	17	12	50	.3	40	8	166	2.62	2	5	ND	3	13	1	2	2	60	.23	.02	8	68	.94	97	.19	4	1.57	.01	.11	1	1
SJE 0+25N	1	15	16	39	.1	17	4	114	2.29	2	5	ND	1	6	1	2	2	51	.08	.03	9	40	.37	43	.07	2	1.26	.01	.02	1	2
SJE 0+00N	1	7	8	23	.1	11	3	74	1.24	2	5	ND	4	9	1	4	2	34	.13	.01	8	23	.28	49	.12	2	.81	.01	.02	1	2
YHS-SS-1	1	22	9	36	.3	14	6	907	2.76	2	5	ND	6	25	1	2	2	21	1.99	.10	16	21	.33	82	.04	9	.82	.01	.06	1	1
YHS-SS-2	1	5	7	37	.1	9	4	878	1.41	2	5	ND	5	14	1	2	2	18	.69	.09	13	19	.31	44	.04	7	.65	.01	.05	1	1
STD C/FA-AU	20	58	40	135	2.1	64	27	1145	4.02	38	19	6	37	51	17	15	21	59	.47	.16	38	60	.87	172	.08	26	1.72	.06	.12	12	50
SWS-SS-1	4	41	16	214	.1	63	32	17323	7.59	108	8	ND	8	27	1	2	2	99	.63	.10	14	117	2.14	698	.10	2	2.42	.01	.06	1	7
SWS-SS-2	1	4	4	59	.3	8	4	1421	1.60	11	5	ND	8	15	1	2	2	20	.64	.10	15	20	.30	44	.06	7	.59	.01	.04	1	1

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SAMPLE#	No PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	Co PPM	Ni PPM	Fe %	As PPM	U PPM	Au PPM	Hg 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 %	M PPM	Si PPM
ENS-R-1	1	84	4	6	.1	15	6	145	1.63	2	5	ND	1	4	1	2	2	33	.07	.02	2	21	.18	9	.09	5	1.50	.02	.05	1	27
ENS-R-2	1	216	2	7	.1	26	20	212	2.84	6	9	ND	3	2	1	2	2	65	.04	.03	2	18	.73	2	.02	2	1.95	.01	.02	1	11
ENS-R-3	1	141	7	15	.1	19	17	383	5.40	4	5	ND	4	6	1	3	2	80	.02	.03	3	58	1.42	16	.09	2	2.01	.02	.10	1	14
ENS-R-4	1	113	6	16	.2	19	15	189	1.49	3	7	ND	2	2	1	3	2	41	.04	.01	2	15	.61	3	.02	3	1.71	.01	.01	1	13
ENS-R-5	4	52	11	20	.5	22	11	124	7.12	142	5	ND	3	14	1	2	2	14	.52	.01	2	18	.27	2	.01	2	1.93	.02	.01	2	20
ENS-R-5A	1	40	3	4	.1	107	11	179	2.79	11	5	ND	2	1	1	2	2	33	.04	.02	2	47	.39	3	.01	27	1.02	.01	.02	1	60
ENS-R-6	5	276	15	19	.3	104	34	1207	22.83	3	5	ND	5	1	1	2	2	40	.05	.02	2	5	.07	3	.01	6	1.13	.01	.01	1	10
ENS-R-7	3	58	9	52	.1	25	24	1110	11.41	2	5	ND	6	1	1	2	2	19	.39	.01	2	4	1.41	3	.04	2	1.95	.03	.01	1	12
ENS-R-8	3	12	12	94	.1	153	22	902	5.13	5	5	ND	9	130	1	2	2	74	3.98	.15	25	312	3.78	67	.04	3	2.94	.01	.17	1	1
TKS-R-1	4	164	14	251	.4	101	30	1063	11.72	3	5	ND	5	20	1	2	2	187	1.60	.03	2	181	3.05	36	.10	5	5.54	.14	.22	1	16
TKS-R-2	2	13	8	7	.1	10	7	61	1.87	78	5	ND	1	4	1	2	4	4	.08	.02	2	8	.09	7	.01	3	1.11	.01	.02	1	7
TKS-R-3	2	13	6	16	.1	45	22	211	3.64	79	5	ND	5	3	1	2	2	9	.03	.02	4	9	.32	18	.02	2	1.63	.02	.05	1	8
TKS-R-4	1	185	7	25	.6	32	51	452	3.59	4	10	ND	6	44	1	2	5	29	2.13	.06	10	18	1.31	45	.09	6	2.10	.10	.11	1	20
TKS-R-5	1	13	4	64	.1	19	13	613	3.14	2	5	ND	7	33	1	2	2	25	1.94	.09	13	12	1.21	61	.01	2	1.51	.02	.12	1	4
TKS-R-6	2	49	14	38	.4	27	13	409	4.20	19	18	ND	8	15	1	2	2	24	2.71	.08	9	20	.65	15	.09	2	1.68	.02	.07	1	2
TKS-R-7	4	50	28	165	.4	26	28	777	8.64	26	5	ND	8	18	1	2	2	13	2.21	.05	10	8	.80	18	.02	3	1.33	.92	.14	1	4
TKS-R-8	3	88	18	217	.4	51	18	646	6.66	21	5	ND	11	22	1	2	2	20	2.00	.07	14	16	.73	27	.05	2	1.10	.05	.20	1	2
TKS-R-9	4	518	5	398	.3	87	22	302	10.33	3	5	ND	5	3	1	2	2	17	.05	.04	6	10	.41	6	.01	2	1.83	.01	.03	1	58
TKS-R-10	9	105	8	126	.1	4	1	2010	14.75	2	5	ND	8	1	1	2	2	44	.67	.03	2	19	.24	3	.04	2	.92	.01	.01	3	20
TKS-R-11	3	59	11	177	.2	23	14	1232	10.78	5	5	ND	7	2	1	2	2	45	.09	.05	2	7	2.90	3	.03	2	3.08	.01	.01	4	56
TKS-R-12	1	19	4	12	.1	6	2	78	1.45	9	5	ND	1	1	1	2	3	3	.01	.01	2	2	.13	1	.01	2	1.13	.01	.01	3	5
TKS-R-13	1	3	2	2	.1	1	1	36	.79	2	5	ND	3	1	1	2	2	1	.01	.01	6	1	.02	2	.01	5	1.05	.01	.01	1	1
TKS-R-14	4	209	10	27	.6	94	53	313	11.98	7	5	ND	5	2	1	2	2	61	.42	.06	2	43	.38	3	.02	2	1.66	.02	.01	2	42
TKS-R-15	5	70	12	14	.1	55	15	837	13.97	9	5	ND	4	9	1	2	2	148	.20	.02	2	103	1.90	10	.05	5	1.60	.02	.03	1	18
TKS-R-1	1	3623	7	210	3.2	106	44	975	3.66	52	5	ND	2	10	2	2	2	88	1.80	.08	2	91	1.31	31	.10	3	2.42	.21	.17	4	610
TKS-R-2	3	61	19	13	1.2	107	77	144	10.29	212	5	ND	4	1	1	2	2	8	.01	.01	2	2	.12	9	.01	2	1.18	.31	.02	1	64
TKS-R-3	11	93	49	29	1.3	17	7	298	30.70	897	5	ND	10	2	1	2	2	79	.05	.15	7	6	.06	7	.01	12	1.16	.31	.01	2	26
TKS-R-4	1	59	7	35	.3	14	8	392	3.48	5	5	ND	10	11	1	2	4	27	.74	.15	24	5	1.50	31	.04	4	1.1	.02	.10	1	7
TKS-R-5	1	58	15	20	.1	4	1	398	1.11	2	5	ND	14	40	1	2	2	3	1.72	.01	35	3	.82	21	.02	10	2.15	.24	.20	1	5
TKS-R-6	1	24	10	44	.1	1	20	581	8.08	14	5	ND	3	6	1	2	2	11	1.55	.11	2	1	1.50	10	.14	6	1.59	.20	.02	1	2
TKS-R-7	6	69	12	84	.2	211	34	902	6.25	8	10	ND	18	127	1	2	2	122	4.95	.31	47	332	2.38	44	.13	2	2.42	.02	.52	1	10
TKS-R-8	9	41	15	109	.5	268	31	923	11.01	5	5	ND	16	142	1	2	2	133	5.24	.31	29	327	3.08	28	.14	2	3.22	.02	.71	1	5
TKS-R-9	4	70	16	128	.4	32	15	1060	11.60	2	6	ND	8	27	1	2	2	32	3.04	.04	3	29	1.80	43	.10	2	1.12	.02	.28	1	2
TKS-R-10	4	56	20	133	.1	58	13	318	3.17	7	5	ND	13	8	1	2	3	23	.33	.09	25	42	1.20	32	.07	2	1.47	.02	.13	1	1
TKS-R-11	3	127	18	153	.4	56	18	517	7.42	19	5	ND	8	21	1	2	2	25	1.61	.07	19	24	.81	27	.06	4	1.10	.04	.18	1	1
TKS-R-12	3	82	19	43	.1	1	18	523	12.42	3	8	ND	5	5	1	2	2	33	1.05	.19	2	1	.48	14	.09	3	1.79	.11	.02	1	2
STD C/FA-AU	19	57	39	130	7.1	70	27	1116	3.98	37	17	7	35	50	17	16	22	59	.48	.15	38	58	.88	181	.08	39	1.72	.36	.11	12	48

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PAGE

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	Hg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	M PPM	Am** PPM	
YNS-R-13	1	40	7	6	.1	4	1	53	.82	3	5	ND	!	1	1	2	2	6	.04	.01	2	2	.05	4	.01	2	.11	.01	.01	.01	1	12
YNS-R-14	1	295	10	31	.1	312	42	424	7.34	2	5	ND	4	4	1	2	2	103	1.33	.47	2	131	1.80	4	.04	2	2.53	.12	.02	1	4	
YNS-R-15	1	32	7	47	.1	19	7	645	3.29	2	5	ND	5	42	1	2	2	14	2.15	.07	11	14	.64	46	.06	4	1.09	.03	.25	1	1	
YNS-R-16	5	184	14	69	.8	26	10	3483	5.95	7	5	ND	4	28	1	2	2	22	14.82	.06	2	9	4.49	18	.01	2	1.02	.02	.03	1	1	
YNS-R-17	5	45	17	31	.1	44	26	700	16.15	2	5	ND	5	6	1	2	2	433	.34	.01	2	90	2.92	9	.05	2	4.11	.03	.01	1	5	
GRS-R-1	2	74	13	14	.6	54	81	243	11.86	130	7	ND	5	4	1	2	2	18	.19	.05	2	7	.22	11	.01	2	.30	.01	.04	1	26	
GRS-R-2	1	35	2	12	.1	7	2	289	2.45	2	5	ND	1	1	1	2	2	11	.10	.02	2	5	.14	7	.01	3	.14	.01	.01	1	1	
GRS-R-3	1	9	7	30	.1	26	6	471	5.11	2	5	ND	2	13	1	2	2	63	.98	.02	2	95	.74	30	.08	2	2.04	.06	.24	1	1	
GRS-R-4	1	6	2	20	.1	14	2	504	3.47	3	5	ND	1	1	1	2	2	18	.27	.03	2	11	.51	6	.03	6	.97	.02	.01	1	1	
GRS-R-5	1	9	5	5	.1	4	1	156	4.42	44	5	ND	2	1	1	2	2	8	.04	.01	2	2	.06	3	.01	2	.03	.01	.01	1	1	
GRS-R-6	1	9	15	43	.1	26	4	236	1.20	2	5	ND	6	20	1	2	2	25	.75	.04	10	59	.72	204	.08	4	.69	.03	.42	1	1	
GRS-R-7	1	21	7	87	.1	12	18	877	7.53	3	5	ND	12	11	1	2	2	94	.21	.17	36	3	.98	36	.04	2	1.58	.03	.08	1	4	
GRS-R-8	4	2	7	8	.1	2	1	13	.36	9	7	ND	7	3	1	2	2	1	.01	.01	18	1	.02	18	.01	2	.21	.02	.11	1	1	
GRS-R-9	1	34	19	8	.1	11	4	112	3.13	111	5	ND	3	3	1	2	2	14	.03	.02	2	13	.19	9	.02	3	.43	.01	.04	48	25	
GRS-R-10	7	118	84	32	.9	24	17	196	34.90	1166	5	ND	10	2	1	2	2	88	.03	.19	2	6	.09	10	.01	30	.24	.01	.01	3	28	
GRS-R-11	1	525	6	36	.2	57	44	682	3.46	2	5	ND	1	28	1	2	2	98	4.11	.05	2	17	.81	16	.14	6	4.41	.15	.08	1	2	
GRS-R-12	1	17	6	24	.1	12	5	187	.97	2	5	ND	6	20	1	2	2	13	.30	.08	18	9	.32	23	.03	7	.77	.07	.05	1	1	
GRS-R-13	2	64	9	98	.1	50	13	419	6.34	5	5	ND	17	16	1	2	2	55	.11	.07	24	80	1.46	17	.04	2	2.43	.02	.05	1	1	
GRS-R-14	4	548	28	184	.5	54	14	603	15.03	15	6	ND	7	3	1	2	2	121	.11	.05	2	226	1.88	7	.33	2	2.87	.01	.01	1	2	
GRS-R-15	5	121	16	27	.8	48	34	778	16.87	26	5	ND	5	23	1	2	2	174	.11	.03	2	75	.80	15	.02	2	1.59	.01	.03	5	29	
GRS-R-16	5	62	14	13	.1	3	1	157	17.91	5	5	ND	4	1	1	2	2	32	.07	.03	2	4	.12	5	.01	7	.15	.01	.01	1	16	
GRS-R-17	1	33	7	24	.2	2	1	364	7.84	6	5	ND	3	1	1	2	2	12	.03	.03	2	3	.04	3	.01	2	.87	.01	.01	9	11	
STD C/FA-AU	20	59	40	136	7.0	69	27	1154	3.98	39	17	7	38	52	17	15	18	58	.48	.16	37	60	.88	189	.09	60	1.72	.06	.11	11	50	

APPENDIX 5

AUTHORS' CERTIFICATIONS

AUTHOR'S CERTIFICATION

I, David Wilson Tupper, of 2657 West 2nd Avenue, Vancouver, British Columbia, hereby certify as follows:

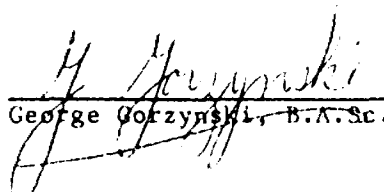
1. That I graduated from the University of British Columbia with a Bachelor of Science degree in geology in 1985.
2. That I have practised by profession continually since that time.
3. That I authored this report based on the 1985 field program on the Miskow River Property.

David Wilson Tupper
David Wilson Tupper, B.Sc.

AUTHOR'S CERTIFICATION

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

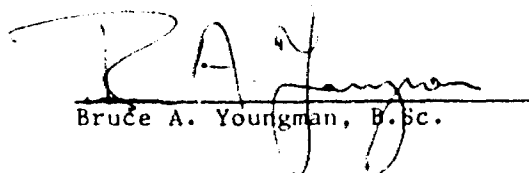
1. That I graduated from the University of Toronto with a Bachelor of Applied Science degree in geological engineering/mineral exploration in 1978.
2. That I have practised my profession continually since that time.
3. That I co-authored this report based on the 1985 field program on the Mieshkw River Property.


George Corzynski, B.A.Sc.

AUTHOR'S CERTIFICATION

I, Bruce A. Youngman, of 208 - 170 East 3rd Street, North Vancouver, British Columbia, hereby certify as follows:

1. That I graduated from the University of British Columbia with a Bachelor of Science degree in geology in 1981.
2. That I have practised my profession continually since that time.
3. That I co-authored this report based on the 1985 field program on the Miskow River Property.


Bruce A. Youngman, B.Sc.

2.8578

APPENDIX 3

TECHNICAL DATA STATEMENTS
AND PROCEDURE RECORDS



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.

Type of Survey(s) Geochemical
Township or Area Achapel Lake Area
Claim Holder(s) Northern Dynasty
Explorations Ltd.
Survey Company Dualop Exploration
Author of Report D. W. Tuppen
Address of Author 844 W. Hastings St, Vancouver, B.C.
Covering Dates of Survey June 12 to Oct 31, 1985
(linecutting to office)
Total Miles of Line Cut _____

MINING CLAIMS TRAVERSED
List numerically

P _a	816690 ✓
P _a	816691 ✓
P _a	816693 ✓
P _a	816695 ✓
P _a	816697 ✓
P _a	816699 ✓
P _a	816700 ✓
P _a	816702 ✓
P _a	816710 ✓
P _a	816711 ✓
P _a	816714 ✓
P _a	816716 ✓
P _a	816717 ✓
P _a	816718 ✓
TOTAL CLAIMS <u>14</u>	

If space insufficient, attach list

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

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

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

DATE: Oct 31, 1985 SIGNATURE: D. W. Tuppen
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

OFFICE USE ONLY

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken 816690-691, 816693, 816695, 816697,
816699-700, 816702, 816710-711, 816714, 816716-718.

Total Number of Samples 178
 Type of Sample Rock, A₁B₂ soil, stream silt.
(Nature of Material)
 Average Sample Weight 0.3 kg.
 Method of Collection hammer, mallet.
 Soil Horizon Sampled A₁, B₂
 Horizon Development A₁-A₂-B₁-B₂-C
 Sample Depth 1-45 cm.
 Terrain bedrock, glacial, swamp,
muskeg
 Drainage Development poor to fair
 Estimated Range of Overburden Thickness 0-50 m.

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 (178 tests)

Name of Laboratory Arma Analytical Lab.

Extraction Method Aqua Regia

Analytical Method see below

Reagents Used _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____
soil - 80 mesh
stream silt - 80 mesh
rock pulp - 100 mesh

General I.C.P.:

0.5 gram sample digested with
3 ml. 3:1-2 HCl-HNO₃-H₂O at 95°C
for 1 hour, then diluted to 10 ml.
with H₂O

General other elements:

Mn, Fe, U, Th, Sr, Cl, Sb, Bi, V
Cu, P, La, Ce, Mg, Ba, Ti, B
Al, Na, K, W, Au

method of analysis:

Au - 10 gram sample

- Fine assay with A.A. finish.

others - 30 element I.C.P.

- 0.5 gram sample.



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.

Type of Survey(s) Geological
Township or Area Archipi Lake Area
Claim Holder(s) Northern Dynasty
Explorations Ltd.
Survey Company Dunlop Exploration
Author of Report D. Tupper
Address of Author 844 W. Hastings St., Vancouver, B.C.
Covering Dates of Survey June 12 to Oct 31, 1985
(linecutting to office)
Total Miles of Line Cut 7240 meters (4.5 miles)

MINING CLAIMS TRAVERSED	
List numerically	
P _a	816689
P _a	816690
P _a	816691
P _a	816692
P _a	816693
P _a	816694
P _a	816695
P _a	816696
P _a	816697
P _a	816698
P _a	816699
P _a	816700
P _a	816701
P _a	816702
P _a	816703
P _a	816704
P _a	816705
P _a	816706
P _a	816707
P _a	816708
P _a	816709
P _a	816710
TOTAL CLAIMS <u>30</u>	

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED	DAYS per claim	
	Geophysical	
ENTER 40 days (includes line cutting) for first survey.	-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: Oct 31, 1985 SIGNATURE: D. W. Tupper
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys			
File No.	Type	Date	Claim Holder

OFFICE USE ONLY

Mining Claims (cont)

Pa 816711
Pa 816712
Pa 816713
Pa 816714
Pa 816715
Pa 816716
Pa 816717
Pa 816718

Total Claims 30



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.

Type of Survey(s) Geophysical
Township or Area Achapi Lake Area
Claim Holder(s) Northern Dynasty Explorations Ltd.
Survey Company Dunlop Exploration
Author of Report D.W. Turner
Address of Author 844 W. Hastings St. Vancouver, B.C.
Covering Dates of Survey June 17 to Oct 31, 1985
Total Miles of Line Cut _____

MINING CLAIMS TRAVERSED
List numerically

Table with columns for prefix and number, listing mining claims: Pa 816 689, Pa 816 695, Pa 816 691, Pa 816 696, Pa 816 701, Pa 816 702, Pa 816 703, Pa 816 704

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED
ENTER 40 days (includes line cutting) for first survey.
ENTER 20 days for each additional survey using same grid.
Geophysical
-Electromagnetic
-Magnetometer
-Radiometric
-Other
Geological
Geochemical

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

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

DATE: Oct 31, 1984 SIGNATURE: D.W. Turner
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Table with columns: File No., Type, Date, Claim Holder

TOTAL CLAIMS 8

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 83 Number of Readings 83

Station interval 50 meters Line spacing ~ 800 meters

Profile scale _____

Contour interval 58000x, 61000x, 63000x, 65000x, 70000x, 80000x

MAGNETIC

Instrument Scintrex MFD-2 Digital Fluxgate Magnetometer

Accuracy - Scale constant ±10 gammas (hand held)

Diurnal correction method none applied

Base Station check-in interval (hours) 1-2 hrs

Base Station location and value 68+00W, 12+75S value 61475x

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 _____



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.

Type of Survey(s) Geological
Township or Area A. Achdipi Lake Area
Claim Holder(s) Northern Dynasty
Explorations Ltd.
Survey Company Dunlop Exploration
Author of Report D. Tupper
Address of Author 844 W Hastings St, Vancouver, BC
Covering Dates of Survey Sept. 18 to Oct 31, 1985
(linecutting to office)
Total Miles of Line Cut: _____

MINING CLAIMS TRAVERSED
List numerically

P. 840119
(prefix) (number)
P. 840120

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

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Oct 31, 1985 SIGNATURE: D. W. Tupper
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

<u>File No.</u>	<u>Type</u>	<u>Date</u>	<u>Claim Holder</u>

Vertical grid area for mining claims, with a total claims count at the bottom.

TOTAL CLAIMS 2

OFFICE USE ONLY

If space insufficient, attach list



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.

Type of Survey(s) Geophysical
Township or Area Achapi Lake Area
Claim Holder(s) Northern Dynasty
Explorations Ltd.
Survey Company Dunlop Exploration
Author of Report D. Tupper
Address of Author 844 W. Hastings St., Vancouver, B.C.
Covering Dates of Survey Sept 21 to Oct 31, 1984
(linecutting to office)
Total Miles of Line Cut 7.240 km (4.5 miles)

MINING CLAIMS TRAVERSED
List numerically

P_a 816689
(prefix) (number)
P_a 816690
P_a 816691
P_a 816693
P_a 816694
P_a 816695
P_a 816697
P_a 816699
P_a 816700
P_a 816702
P_a 816703
P_a 816710
P_a 816711

If space insufficient, attach list

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS
per claim

ENTER 40 days (includes
line cutting) for first
survey.

ENTER 20 days for each
additional survey using
same grid.

- Geophysical
- Electromagnetic _____
- Magnetometer _____
- Radiometric _____
- Other _____
- Geological _____
- Geochemical _____

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

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

DATE: Oct. 31, 1985 SIGNATURE: D. W. Tupper
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 13

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 912 (Mag.) & 565 (E-M) Number of Readings 912 (Mag.) 565 (E-M)
 Station interval 10 meters (Mag. maybe 5m) Line spacing 200 to 400 m (see plan)
 Profile scale 1 cm = 10° = 10% (E-M);
 Contour interval 58000 X, 61000 X, 63000 X, 65000 X, 70000 X, 80000 X (Mag.)

MAGNETIC

Instrument Scintrex MED-2 Digital Fluxgate Magnetometer
 Accuracy – Scale constant ± 10 gammas (hand held)
 Diurnal correction method none applied
 Base Station check-in interval (hours) 1-2 hrs.
 Base Station location and value L 8+00 W, 12+75 S ; value 61475 X

ELECTROMAGNETIC

Instrument Geonics E-M 16
 Coil configuration two receiving coils perpendicular to each other + signal
 Coil separation N/A
 Accuracy ± 1° , ± 1%
 Method: Fixed transmitter Shoot back In line Parallel line
 Frequency 18.6 kHz (Seattle, Washington, U.S.A.)
(specify V.L.F. station)
 Parameters measured Inphase signal (degrees); 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 _____

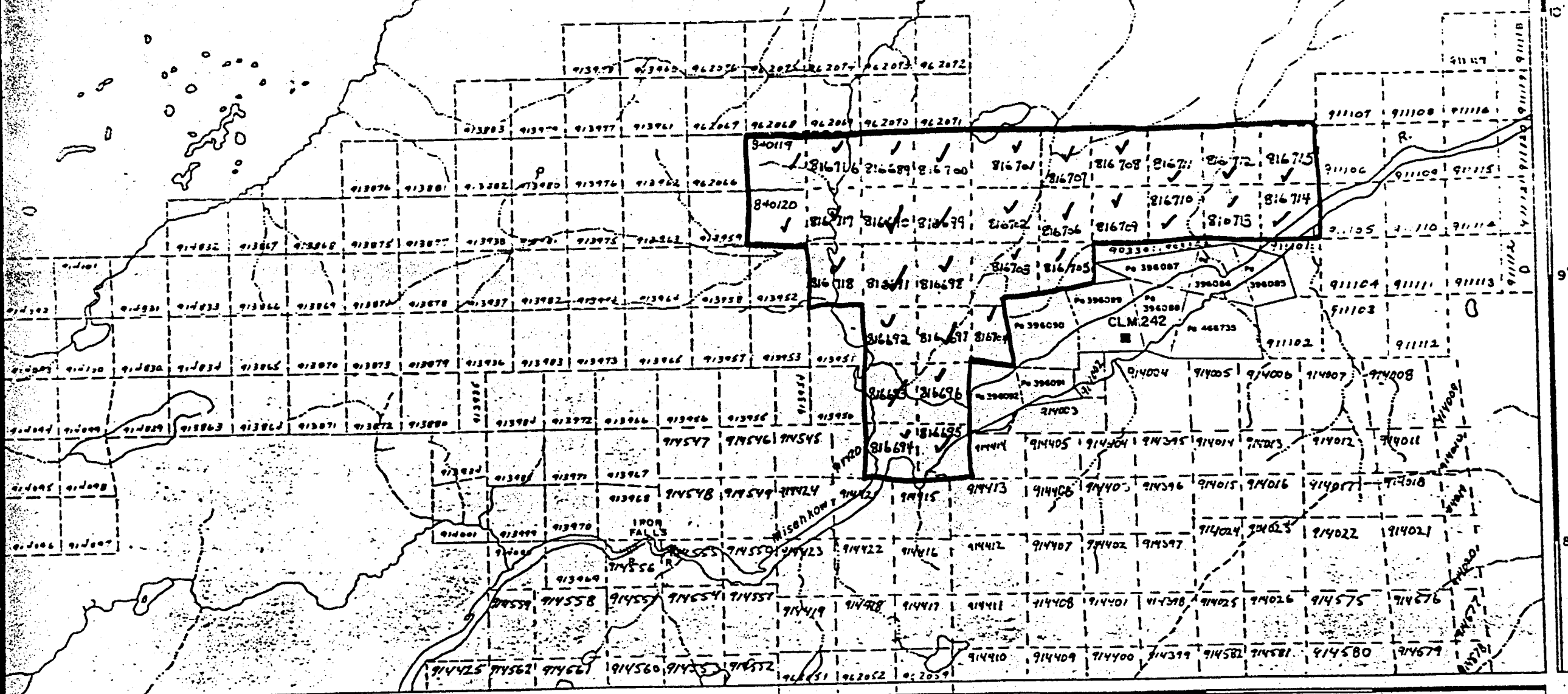


52P04NE0511 52P04NE0014 ACHAPI LAKE

900

FEATHER LAKE

ACHAPI LK
M. 2484
40 CHAINS



39' 38' 37' 36' 35' 34' 33' 32' 31' 89°30'

AUGUST LAKE G-1940

5

PL

DE

R. Pichette
Project Unit

H85-120

Aug 29 1985

RECEIVED

Mining AEP 1985

Type of Survey: **Geological / Geochemical**

Claim Holder: **Northern Dynasty Explorations Ltd.**

Address: **844 West Hastings St, Vancouver, B.C. V6C 1C8**

Survey Commenced: **12 6 85 18 6 85**

Name and Address of Person or Firm: **Bruce Youngman, Dave Tupper, George Gierzynski 844 W Hastings St. Vancouver, BC V6C 1C8**

Location: **Achap Lake (G-1420) T-1884**

Credits Requested per Each Claim in Columns at Right

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

Claim Number	Days	Claim Number	Days
Pa 816684	6.13	Pa 816712	6.13
816690	6.13	816713	6.13
816691	6.13	816714	6.13
816692	6.13	816715	6.13
816693	6.13	816716	6.13
816694	6.13	816717	6.13
816695	6.13	816718	6.13
816696	6.13		
816697	6.13		
816698	6.13		
816699	6.13		
816700	6.13		
816701	6.13		
816702	6.13		
816703	6.13		
816704	6.13		
816705	6.13		
816706	6.13		
816707	6.13		
816708	6.13		
816709	6.13		
816710	6.13		
816711	6.13		

Expenditures (excludes power stripping)

Type of Work Performed: **SECT 77-19 Soil/Rock Geochemical Analyses**

Perform on Claims: **816692 - 816694 - 816693 - 816695 - 816697 - 816698 - 816700 - 816702 - 816703 - 816704 - 816705 - 816706 - 816707 - 816708 - 816709 - 816710 - 816711**

Calculation of Expenditure Days Credits

Total Expenditures: **\$ 2762.50** ÷ **15** = **184** 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.

Date: **July 6/85** Receiver: **[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...

Name and Postal Address of Person Certifying: **Bruce A. Youngman, P.O. Box 350, Picket Lake, Ont. P0V 3A0**

Address: **844 W. Hastings St. Vancouver, B.C. V6C 1C8**

Date Certified: **July 6/85**

Signature: **[Signature]**

PATRICIA MINING DIV.
RECEIVED
JUL - 9 1985
A.M. 10:00 AM 1985 12:12:58 41677

Ear-Office Use Only

Total Days Credited: **604**

Date Recorded: **July 9/85**

Date Approved by Receiver: **[Signature]**

Received Statement

Type of Survey

Ecological

$$\begin{array}{cccccccc}
 \text{Technical Days} & & & & \text{Line cutting Days} & & \text{Total Credits} & \text{No. of Claims} \\
 \boxed{39} & \times & \boxed{7} & = & \boxed{273} & + & \boxed{-} & = & \boxed{273} & \div & \boxed{30} & = & \boxed{9.1}
 \end{array}$$

Type of Survey

Sanitation

$$\begin{array}{cccccccc}
 \text{Technical Days} & & & & \text{Line cutting Days} & & \text{Total Credits} & \text{No. of Claims} \\
 \boxed{21} & \times & \boxed{7} & = & \boxed{147} & + & \boxed{-} & = & \boxed{147} & \div & \boxed{30} & = & \boxed{4.9}
 \end{array}$$

Type of Survey

$$\begin{array}{cccccccc}
 \text{Technical Days} & & & & \text{Line cutting Days} & & \text{Total Credits} & \text{No. of Claims} \\
 \boxed{} & \times & \boxed{7} & = & \boxed{} & + & \boxed{} & = & \boxed{} & \div & \boxed{} & = & \boxed{}
 \end{array}$$

Type of Survey

$$\begin{array}{cccccccc}
 \text{Technical Days} & & & & \text{Line cutting Days} & & \text{Total Credits} & \text{No. of Claims} \\
 \boxed{} & \times & \boxed{7} & = & \boxed{} & + & \boxed{} & = & \boxed{} & \div & \boxed{} & = & \boxed{}
 \end{array}$$



Ministry of
Natural
Resources

Report of Work
(Geophysical, Geological,
Geochemical and Expenditures) **28598**

#85-199

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.

Dec. 25

R. P. Peltte
Mining Lands

The Mining Act

Type of Survey (V) **Geological** Township or Area **Achup, Lake Area G-1920**
 Claim Holder(s) **Northern Dynasty Explorations Ltd** Prospector's Licence No. **T-1884**
 Address **844 W. Hastings St., Vancouver, BC V6C-1C8**
 Survey Company **Dunlop Exploration** Date of Survey (from & to) **9/25/85 to 12/8/85** Total Miles of line Cut **7.240 km (4.5 mi)**
 Name and Address of Author (of Geo-Technical report) **P. Tupper, G. Gruzinski, B. Bismarck, F. E. Egan 844 W. Hastings St Vancouver, BC**

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	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	17.5
	Geochemical	
Airborne Credits	Electromagnetic	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Magnetometer	
	Radiometric	

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
Pa	816717				
	816				
	840119				
	840120				

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.

Date **Oct 31, 1985** Recorded Holder or Agent (Signature) **D.W. Tupper**

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
D.W. Tupper 844 West Hastings St. Vancouver B.C. V6C-1C8

Pa. 816689
 For Office Use Only
 Total Days Cr. Recorded **52.5** Date Recorded **Nov. 5, 1985**
 Mining Recorded **85-12-17**
 Total number of mining claims covered by this report of work. **3**

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>Geological</i>												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
7.5		7		52.5		—		52.5		3		17.5

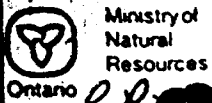
Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
[]		7		[]		[]		[]		[]		[]

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
[]		7		[]		[]		[]		[]		[]

Type of Survey												
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days	=	Total Credits	+	No. of Claims	=	Days per Claim
[]		7		[]		[]		[]		[]		[]

#85-200
28598

Dec. 25



Report of Work
(Geophysical, Geological,
Geochemical and Expenditures)

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.

Ontario R.P. Note
Mining lands

The Mining Act

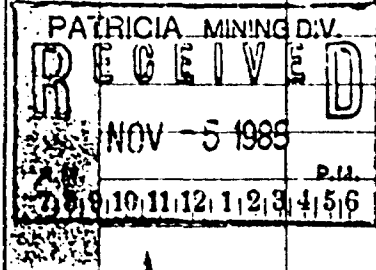
Type of Survey(s) Geophysical (Ground Mag. and E.M.) Township or Area G-1920
 Claim Holder(s) Northern Dynasty Explorations Ltd. Inspector's Licence No. T-1884
 Address 844 W. Hastings St., Vancouver, B.C. V6C 1C8
 Survey Company Dunlop Exploration Date of Survey (from & to) 18.9.85 to 24.9.85 Total Miles of line Cut 7.240 km (4.5 mi)
 Name and Address of Author (of Geo-Technical report) D. Typper, E. F. ... G. ... 844 W. Hastings St. Vancouver, B.C.

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	2.0
	- Magnetometer	2.5 3.3
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	- Electromagnetic	
	- Magnetometer	
	- Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
Pa	816689				
	816690				
	816691				
	816693				
	816694				
	816695				
	816697				
	816699				
	816700				
	816702				
	816703				
	816710				
	816711				



Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$ + 15 =

Total Days Credits

Pa. 816689 Total number of mining claims covered by this report of work

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.

Date Oct 31, 1985 Recorded Holder or Agent (Signature) D.W. Typper

For Office Use Only

Total Days Cr. Date Recorded 68.9 Nov. 5, 1985

Recorded Nov. 5, 1985 Date Approved as Recorded [Signature]

Mining Recorder [Signature] Branch Director [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 D.W. Typper, 844 W. Hastings St. Vancouver, B.C. V6C-1C8

Date Certified Oct 31, 1985 Certified by (Signature) D.W. Typper

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>Ground Magnetometer</i>						
Technical Days		Technical Days Credits	Line cutting Days	Total Credits	No. of Claims	Days per Claim
3.8	x	7	=	26.6	+	16.5
				=	43.1	÷
				=	13	=
				=	2.6	2.5

Type of Survey <i>Ground Electromagnetometer</i>						
Technical Days		Technical Days Credits	Line cutting Days	Total Credits	No. of Claims	Days per Claim
3.8	x	7	=	26.6	+	—
				=	26.6	÷
				=	13	=
				=	2.0	

Type of Survey <i>Ground Magnetometer</i>						
Technical Days		Technical Days Credits	Line cutting Days	Total Credits	No. of Claims	Days per Claim
3.8	x	7	=	26.6	+	16.5
				=	43.1	÷
				=	13	=
				=	3.3	

Type of Survey						
Technical Days		Technical Days Credits	Line cutting Days	Total Credits	No. of Claims	Days per Claim
	x	7	=		+	
				=		÷
				=		=
				=		

PATRICIA MINING DIV.

RECEIVED

NOV - 5 1985

A.M. P.M.

7|8|9|10|11|12|1|2|3|4|5|6



Ministry of Natural Resources

Report of Work (Geophysical, Geological, Geochemical and Expenditures)

#85-201

28598

The Mining Act

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.

Dec 25

R.P. ... Mining Leads

Type of Survey: Geochemical; Township or Area: Achapi Lake Area Q1920

Claim Holder(s): Northern Dynasty Explorations Ltd; Prospector's Licence No.: T-1884

Address: 844 W. Hastings St., Vancouver B.C. V6C 1L8

Survey Company: Dunlop Explorations; Date of Survey: 18 Nov 85; Total Miles of line Cut: 7.240 km (4.5 mi)

Name and Address of Author: D. Typpen, G. Gruzynski, B. Youngman, E. Eves, 844 W. Hastings St., Vancouver, B.C.

Credits Requested per Each Claim in Columns at right; Mining Claims Traversed (List in numerical sequence)

Table with 3 columns: Special Provisions, Geophysical, Days per Claim. Includes rows for first survey and additional surveys.

Table with 3 columns: Man Days, Geophysical, Days per Claim. Includes row for complete reverse side.

Table with 3 columns: Airborne Credits, Geophysical, Days per Claim. Includes note about special provisions.

Main table for Mining Claims Traversed with columns for Prefix, Number, Expend. Days Cr.

Expenditures (excludes power stripping)

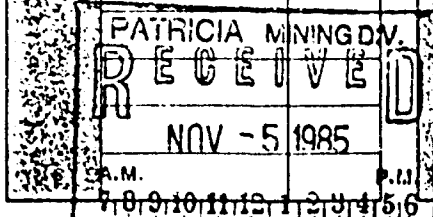
Type of Work Performed: Geochemical Analysis Section 77-19

Performed on Claim(s): 816691, 816747

Calculation of Expenditure Days Credits: Total Expenditures \$105.00 + 15 = Total Days Credits 7

Instructions: Total Days Credits may be apportioned at the claim holder's choice.

Date: Oct 31, 1985; Recorded Holder or Agent (Signature): D.W. Typpen



Pa. 840119; Total number of mining claims covered by this report of work: 2

For Office Use Only: Total Days Cr. Recorded: 7; Date Recorded: Nov. 5, 1985; Mining Recorder: [Signature]

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto...

Name and Postal Address of Person Certifying: D.W. Typpen, 844 W. Hastings St., Vancouver, B.C. V6C 1L8

Date Certified: Oct 31/85; Certified by (Signature): D.W. Typpen



Ministry of
Northern Affairs
and Mines

Technical Assessment
Work Credits

File

2.8598

Date

1985 12 18

Mining Recorder's Report of
Work No.
85-120

Recorded Holder

NORTHERN DYNASTY EXPLORATIONS LTD.

Township or Area

ACHAPI LAKE AREA

Type of survey and number of
Assessment days credit per claim

Mining Claims Assessed

Geophysical

Electromagnetic days

Pa 816690-91

816693 to 700 incl.

Magnetometer days

816702-03-09-10-11-14-16-17-18

Radiometric days

Induced polarization days

Other days

Section 77 (19) See "Mining Claims Assessed" column

Geological days

Geochemical 7.7 days

Man days

Airborne

Special provision

Ground

Credits have been reduced because of partial
coverage of claims.

Credits have been reduced because of corrections
to work dates and figures of applicant.

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

Pa 816689-92

816701

816704 to 708 incl.

816712-13-15

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.



Ministry of
Northern Affairs
and Mines

Technical Assessment
Work Credits

File
2,8598
Mining Recorder's Report of
Work No.
85-120

Date
1985 12 18

Recorded Holder:
NORTHERN DYNASTY EXPLORATIONS LTD.
Township or Area
ACHAPI LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	Pa 816689 to 718 incl.
Electromagnetic days	
Magnetometer days	
Radiometric days	
Induced polarization days	
Other days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 9.1 days	
Geochemical days	
Man days <input checked="" type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input type="checkbox"/> Ground <input checked="" type="checkbox"/>	
<input 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.	

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.



Ministry of
Northern Affairs
and Mines

Technical Assessment
Work Credits

File
2.8598

Date
1986 01 10

Mining Recorder's Report of
Work No.
85-120

Recorded Holder
NORTHERN DYNASTY EXPLORATIONS LTD

Township or Area
ACHAPI LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic days	\$2762.50 SPENT ON ASSAYING SAMPLES TAKEN FROM MINING CLAIMS: PA 816690-91 816693 to 700 inclusive 816702-03-09-11-14-16-17-18
Magnetometer days	
Radiometric days	
Induced polarization days	
Other days	
Section 77 (19) See "Mining Claims Assessed" column	184 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT R.S.O. 1980.
Geological days	
Geochemical days	
Man days Airborne <input type="checkbox"/>	
Special provision <input type="checkbox"/> Ground <input type="checkbox"/>	
<input 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.	

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.



Ministry of
Northern Affairs
and Mines

Technical Assessment
Work Credits

File

2,8598

Date

1985 12 18

Mining Recorder's Report of
Work No.

85-200

Recorded Holder

NORTHERN DYNASTY EXPLORATIONS LTD

Township or Area

ACHAPI LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic 3.3 days	
Magnetometer 5.4 days	PA 816689-90-91-97-99 816700-02-03
Radiometric days	
Induced polarization days	
Other days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological days	
Geochemical days	
Man days <input checked="" type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input type="checkbox"/> Ground <input checked="" type="checkbox"/>	
<input 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 application.	

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

PA 816693-94-95
816710-11

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.



Ministry of
Northern Affairs
and Mines

Technical Assessment
Work Credits

File
2-8598
Mining Recorder's Report of
Work No. 85-201

Date
1986 01 10

Recorded Holder
NORTHERN DYNASTY EXPLORATION LTD
Township or Area
ACHAPI LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic days	\$105.00 SPENT ON ASSAYING SAMPLES TAKEN FROM MINING CLAIMS: PA 816691 816717
Magnetometer days	
Radiometric days	
Induced polarization days	
Other days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological days	7 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT R.S.O. 1980.
Geochemical days	
Man days <input type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input type="checkbox"/> Ground <input type="checkbox"/>	
<input 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	

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.

Nov. 6th



Ministry of
Natural Resources

Order of
the Minister

Room 6643, Whitney Block
Queen's Park
Toronto, Ontario
M7A 1W3
416/965-4888

The Mining Act

In the matter of mining claims:

PA 816689 to 718 inclusive
in the Area of Achapi Lake.

On consideration of an application from the recorded holder, Northern Dynasty Explorations Ltd
under Section 77 Subsection 22 of The Mining Act, I hereby order that the time for filing reports and plans in support of
Geological & Geochemical Survey & Data for Assay & Assessment work recorded on July 9, 1985
be extended until and including November 6, 1985.

Sept 5/85
Date

Signature of Director, Land Management Branch

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

Bruce A. Youngman
P.O. Box 350
Pickle Lake, Ontario
POV 3A0

cc: Mining Recorder
Sioux Lookout, Ontario
File: #85-120

FILE R
D.K.

NORTHERN DYNASTY EXPLORATIONS LTD.
844 WEST HASTINGS STREET
VANCOUVER, B.C. V6C 1C8

Nº 513

July 2 85
19

PAY TO THE ORDER OF

ACME ANALYTICAL LABORATORIES LTD.

\$ 2,817.70

Two thousand, eight hundred and seventeen

⁷⁰/₁₀₀ DOLLARS

THE ROYAL BANK OF CANADA

MAIN BRANCH - ROYAL CENTRE
1025 WEST GEORGIA STREET
VANCOUVER, B.C. V6E 3N9

NORTHERN DYNASTY EXPLORATIONS LTD.

PER

PER

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166⑆899⑆5⑆

⑆0000281770⑆

ROYAL BANK
VANCOUVER REGIONAL
DATA CENTRE
07890-001
JY 03 85
FOR DEPOSIT ONLY
TO THE CREDIT OF
ACME Analytical Laboratories Ltd.

Misehkov Geochemical Expenditure.

\$ 2762.50

ACME ANALYTICAL LABORATORIES LTD.

PHONE: 253-3158

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

File: **B5-2607**

Date: **OCT 8 1985**

RE # 85-201

NORTHERN DYNASTY EXPLORATION
 B44 W. HASTINGS ST
 VANCOUVER B.C.
 V6C 1C8

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

NUMBER	ASSAY	PRICE	AMOUNT
152	ICP ANALYSIS @	6.00	912.00
152	GEOCHEM AU BY FA + AA @	5.50	836.00
126	SOIL SAMPLE PREPARATION @	.60	75.60
26	ROCK SAMPLE PREPARATION @	2.75	71.50

			1895.10
			239.70
TOTAL			2134.80

NORDAIR LTD # 333-21459314

APPROVED FOR PAYMENT

#660

A.L. ARSENOV

PLEASE PAY LAST AMOUNT

[Faint mirrored text from the reverse side of the page]

[Faint mirrored text from the reverse side of the page]

Invoice # 85-201
 1 ICP Analysis
 1 Geochem Au by FA + AA
 1 Rock Sample Preparation

\$11.25
 38.50
 11.25
 \$99.75

RE: # 85-201

NORTHERN DYNASTY FILE # 05-2607

1/10/71

SAMPLE	Ag	Cu	Pb	Zn	As	Bi	Co	Mn	Fe	Ni	U	Au	Th	Sr	Ca	Sb	Si	V	Cr	P	La	Ce	Hg	Ba	Ti	Al	Si	Mo	W	Br	Se	Te	Sn	Cl	PPM			
TNS-8101	2	28	24	14	1.2	55	170	125	12.13	1043	13	ND	2	1	1	2	5	4	.04	.01	12	1	.06	3	.01	2	.03	.01	.02	.02	1	150						
TNS-8102	1	50	11	15	.2	30	19	503	6.60	202	5	ND	5	9	1	2	3	66	.03	.02	8	9	1.01	17	.03	2	1.70	.04	.07									
TNS-8103	2	94	14	27	.4	32	55	252	7.09	63	5	ND	1	1	1	2	2	7	.03	.02	4	1	.07	2	.01	2	.07	.01	.01									
TNS-8104	1	82	20	17	1.4	56	247	177	17.63	119	5	ND	1	1	1	2	7	7	.04	.01	19	4	.07	2	.01	2	.04	.01	.01									
TNS-8100	5	83	23	54	1.0	46	56	635	14.40	25	27	ND	7	8	1	2	6	79	.07	.08	27	7	2.19	24	.03	2	1.26	.02	.04									
TNS-8101	2	677	15	27	.5	105	91	88	10.09	16	22	ND	3	2	1	7	2	32	.13	.07	8	7	.18	2	.01	2	.37	.01	.01									
TNS-8102	1	61	32	428	.7	107	18	766	19.52	18	21	ND	4	30	1	7	15	324	.27	.06	27	285	2.54	5	.05	8	5.29	.01	.07									
STD C/F/A-AU	21	58	35	137	7.1	49	27	1182	3.93	34	17	7	38	51	17	15	20	57	.48	.15	36	59	.88	176	.08	19	1.72	.04	.10									

Assay required for correct result

See upper limit 10,000 ppm

1/10/71

1/10/71

Rec # 35-2-1

NORTHERN DYNASTY EXPLORATIONS LTD.
844 WEST HASTINGS STREET
VANCOUVER, B.C. V6C 1C8

0660

Oct. 10 1985

Pay TO THE ORDER OF

ACME ANALYTICAL LABORATORIES LTD.

\$ 2,306.05

Two thousand, three hundred and six 05 DOLLARS ¹⁰⁰

THE ROYAL BANK OF CANADA
MAIN BRANCH - ROYAL CENTRE
1025 WEST GEORGIA STREET
VANCOUVER, B.C. V6E 3N9

NORTHERN DYNASTY EXPLORATIONS LTD.

PER

PER

Benjamin
De Neuf

#000260# :00010003: 1668995# #0000230605#

1160-001
Bank of Montreal
OCT 11 1985
C. M. L. 1163
Van. 1163
100-87300

OCT 8 11
BK OF MONTREAL
VANCOUVER REGIONAL
DATA CENTRE

07966-001
BANK OF MONTREAL
VANCOUVER
005 0100001

0668 10000

REGISTERED

August 28, 1985

Report of Work #120

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

Dear Sirs:

RE: Mining Claims PA 816689, et al,
in the Area of Achapi Lake

I have not received the reports and maps (in duplicate) for Geological, Geochemical and Analytical Surveys on the above-mentioned claims.

As the assessment "Report of Work" was recorded by the Mining Recorder on July 9, 1985, the 60 day period allowed by Section 77 of the Mining Act for the submission of the technical reports and maps to this office will expire on September 7, 1985.

If the material is not submitted to this office by September 7, 1985, I will have no alternative but to instruct the Mining Recorder to delete the work credits from the claim record sheets.

For further information, please contact Mr. Arthur Barr at (416)965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

A. Barr:mc

cc: Mining Recorder
Sioux Lookout, Ontario



NORTHERN DYNASTY EXPLORATIONS LTD.
844 West Hastings Street, Vancouver, B.C. V6C 1C8 (604) 682-3727

October 30, 1985

The Land Management Branch
Mining Lands Section
Whitney Block, Queen's Park
Toronto, Ontario
M7A 1W3

Attention: Mr. Arthur Barr

Gentlemen:

Enclosed herewith please find two (2) copies of report
entitled "MISEHKOW RIVER PROPERTY - 1985 Assessment Report".

Yours truly,

NORTHERN DYNASTY EXPLORATIONS LTD.

D. W. Tupper

D. W. Tupper

Encl.

RECEIVED

1985

MINING LANDS SECTION

SUBSIDIARY: NEW DYNASTY MINES (U.S.), INC.

November 22, 1985

File: 2.8598

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

Dear Sirs:

RE: Data for Assaying submitted on
Mining Claims PA 816689, et al,
in the Area of Achapi Lake

In order to complete the above-described submission,
please remit (in duplicate) receipts or cancelled
cheques as proof of payment for the \$1762.50 expendi-
ture credits claimed.

Also, please have Mr. Youngman sign both copies of
the enclosed certificate, and return all material
to this office, quoting file 2.8598.

For further information, please contact Susan Hurst
at (416)965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-4888

SH/mc

cc: Mining Recorder
Sioux Lookout, Ontario
File: #85-120

B.A. Youngman
P.O. Box 350
Pickle Lake, Ontario
POV 3A0

Encl.



Ministry of
Natural
Resources

June/86

1985 12 18

Mining Recorder
Ministry of Northern Development and Mines
Court House
P.O. Box 309
Sioux Lookout, Ontario
POV 2T0

Your File: 85-200
85-120
85-201
Our File: 2.8598

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

R. Pichette
S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

R.J. Encls.
SH/bc

cc: Northern Dynasty Explorations Ltd.
844 W. Hastings St., Vancouver
B.C. V6C 1C8

Mr. G.H. Ferguson
Mining & Lands Commissioner

cc: Dunlop Exploration
D. Tupper
844 W Hastings St., Vancouver
V6C 1C8

845



Ministry of
Natural
Resources

Notice of Intent
for Technical Reports

1985 12 18

2.8595/85-200
85-120
85-201

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

1986 01 10

Your File: 85-120, 85-200 85-201
Our File: 2.8598

Mining Recorder
Ministry of Northern Development and Mines
P.O. Box 309
Sioux Lookout, Ontario
POV 2T0

Dear Sir:

RE: Notice of Intent dated December 18, 1985
Geophysical (Electromagnetic & Magnetometer)
Geological and Geochemical Surveys and
Data for Assaying on Mining Claims PA 816689,
et al, in the Area of Achapi 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,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416) 965-4888

SH/mc

cc: Northern Dynasty Exploration Ltd
844 West Hastings Street
Vancouver, B.C.
V6C 1C8

Dunlop Exploration
D. Upper
844 West Hastings St
Vancouver, B.C.
V6C 1C8

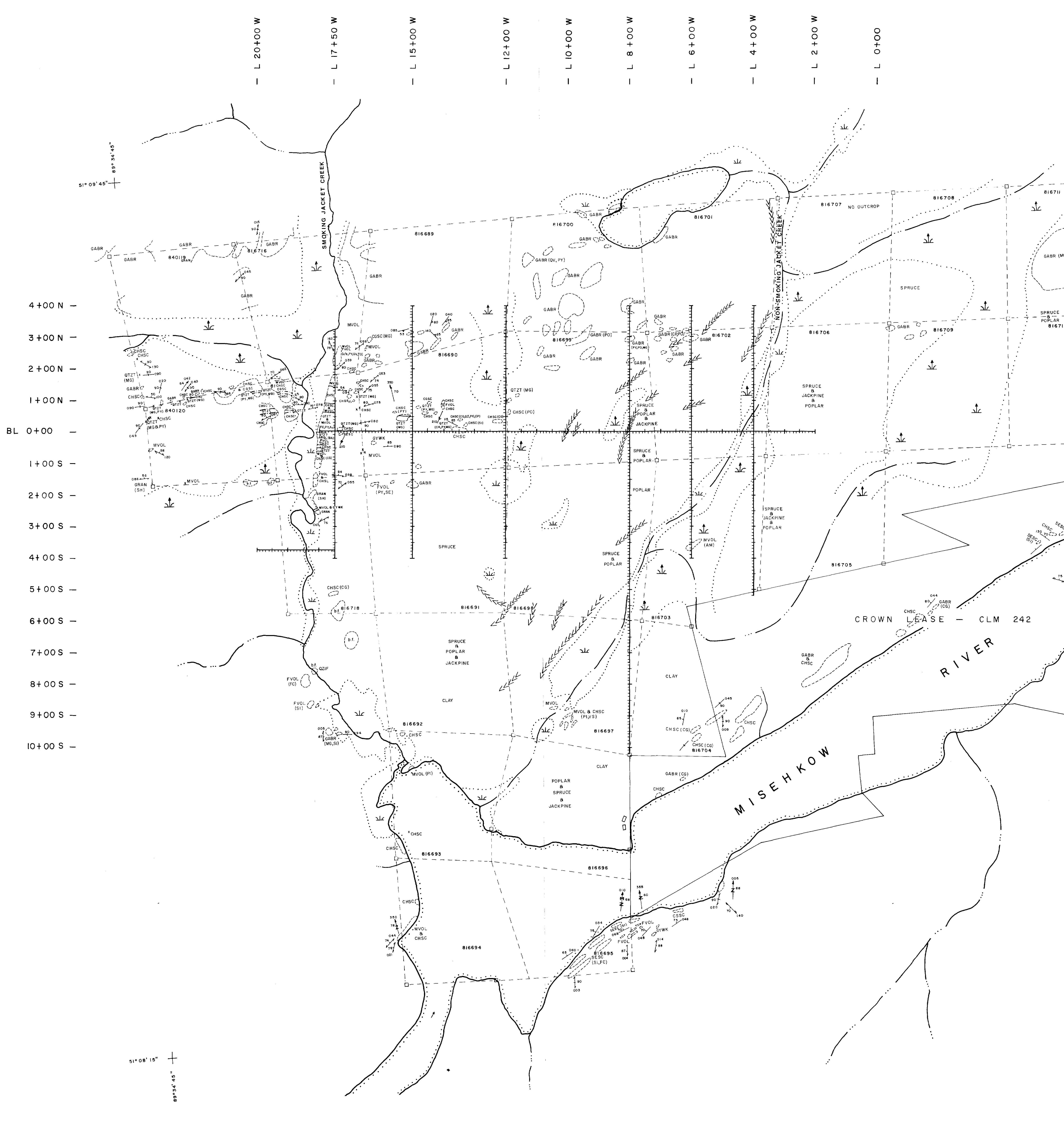
Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario
Resident Geologist
Sioux Lookout, Ontario

Encl.

FOR ADDITIONAL
INFORMATION

SEE MAPS:

SZP/OHNE-0014 #1-6



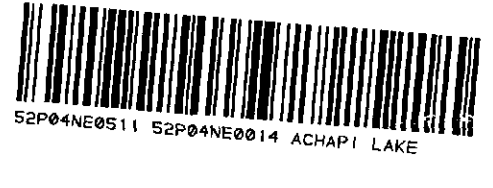
LEGEND

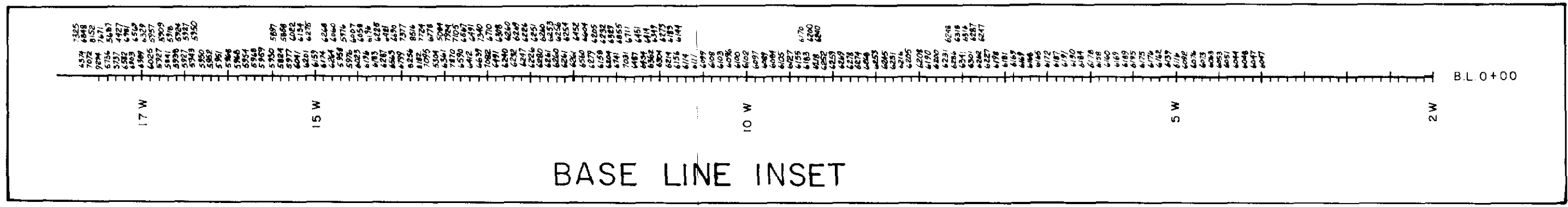
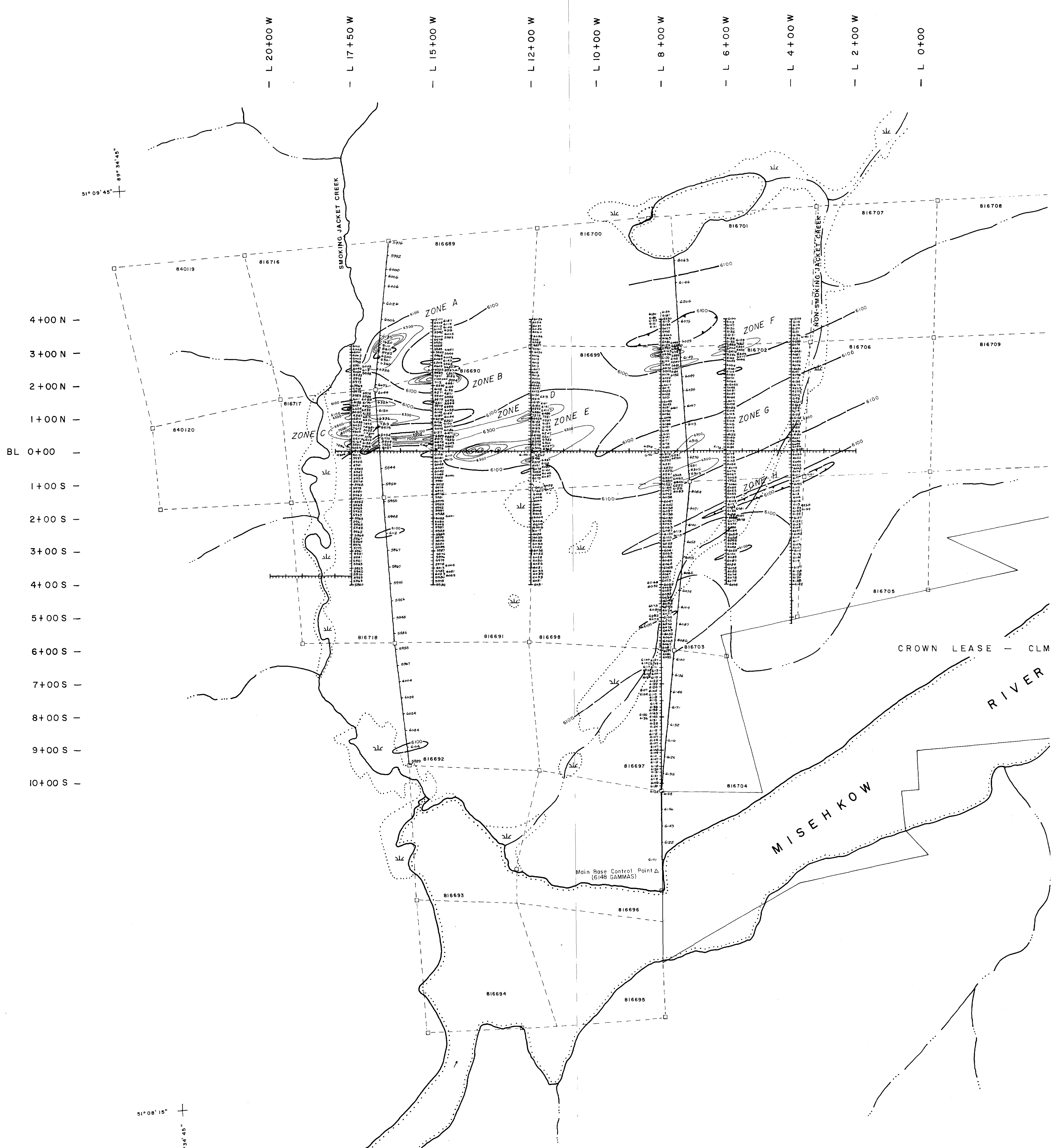
- ARGL** Argillite
- GRAN** Granite
- GABR** Gabbro
- CGSC** Chlorite garnet schist
- QZIF** Siliceous Iron Formation (probable metachert)
- MVOL** Mafic volcanic
- CHSC** Chlorite schist
- FVOL** Felsic volcanic
- CSSC** Chlorite sericite schist
- GYWK** Greywacke
- SESC** Sericite schist

- MG magnetite
- PY pyrite
- PO pyrrhotite
- CP chalcopyrite
- AU gold
- QV quartz vein
- TO tourmaline
- SI silicified
- FC Fe carbonated
- GT garnets
- SE sericite
- AM amygdaloidal
- VS vesicular
- PL pillowed
- SH sheared
- FG fine grained
- CG coarse grained
- i/b interbedded

KEY

- Outcrop
- Bedding (So)
- Main foliation (Sm)
- Subsequent foliation (Sm+1)
- Jointing
- Lincation (minor fold axis)
- Z symmetry minor fold axis
- M symmetry minor fold axis
- S symmetry minor fold axis
- Glacial striation
- Geological contact (observed, inferred)
- Esker
- Boulder field
- Swamp
- Muskeg
- Building
- Claim post and claim lines
- 816693 Claim number





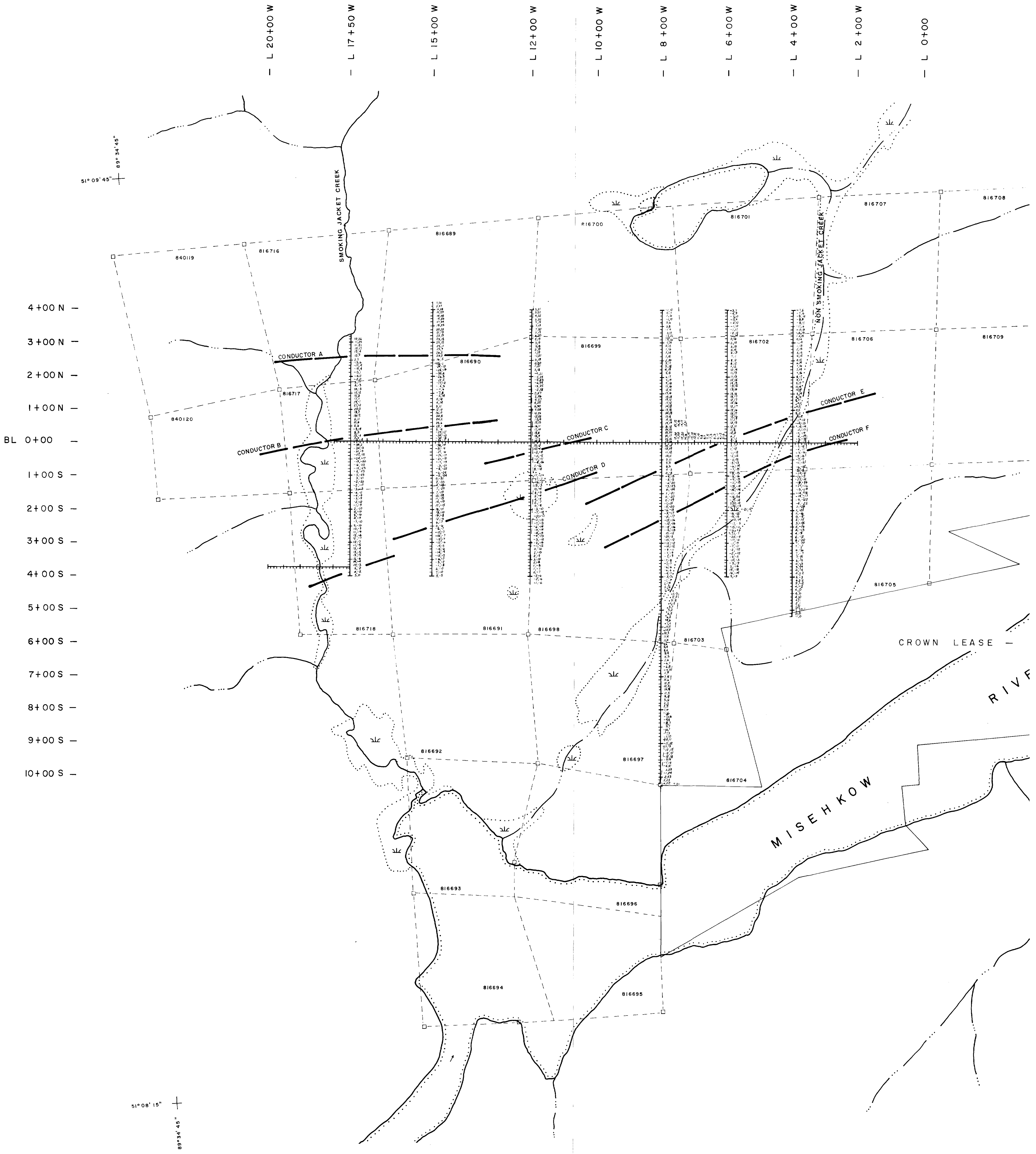
LEGEND:

- SWAMP
- CREEK
- CLAIM CORNER & LINES
- CLAIM NUMBER
- CUT GRID LINES (10 metre stations)
- MAGNETIC FIELD STRENGTH IN GAMMAS (x10)

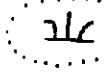
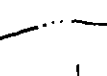
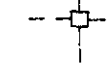
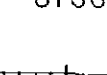

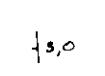

- CONTOUR INTERVAL (GAMMAS x 10)
- 5800 GAMMAS
 - 6100
 - 6300
 - 6500
 - 7000
 - 8000

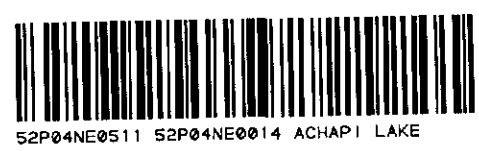
INSTRUMENT USED SCINTREX MFD-2 DIGITAL FLUXGATE MAGNETOMETER

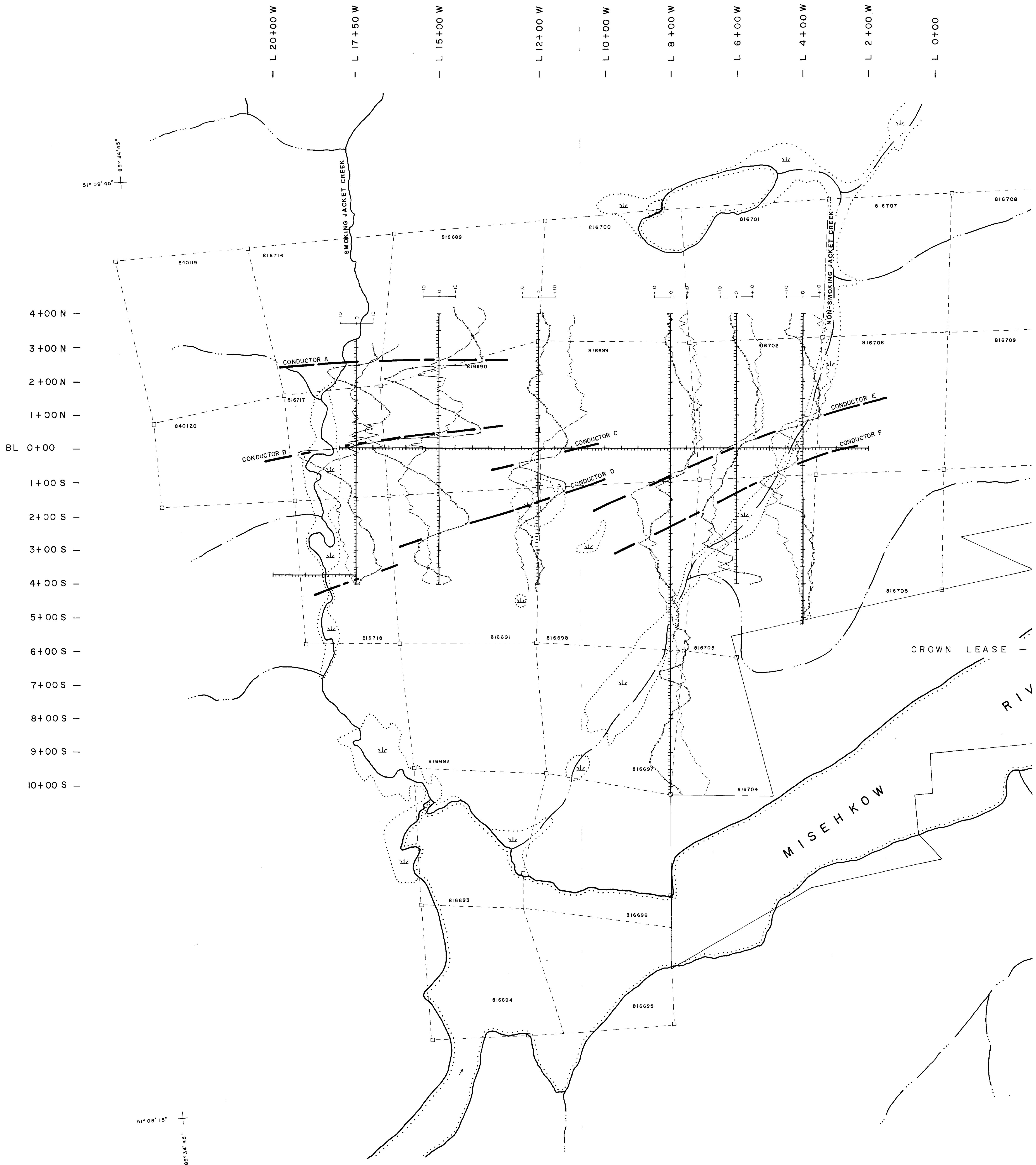




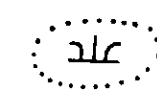
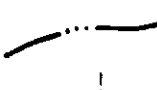
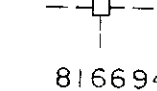
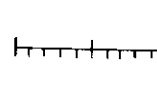

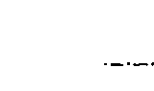
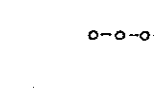

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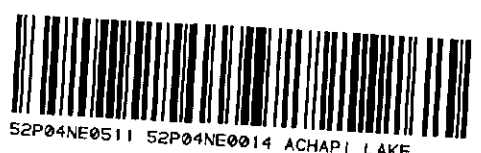
-  Swamp
-  Creek
-  Claim corner & lines
-  Claim number
-  Cut grid lines (10 metre stations)
-  Grid stations with inphase value in degrees, quadrature in percent.
-  EM conductor trace.

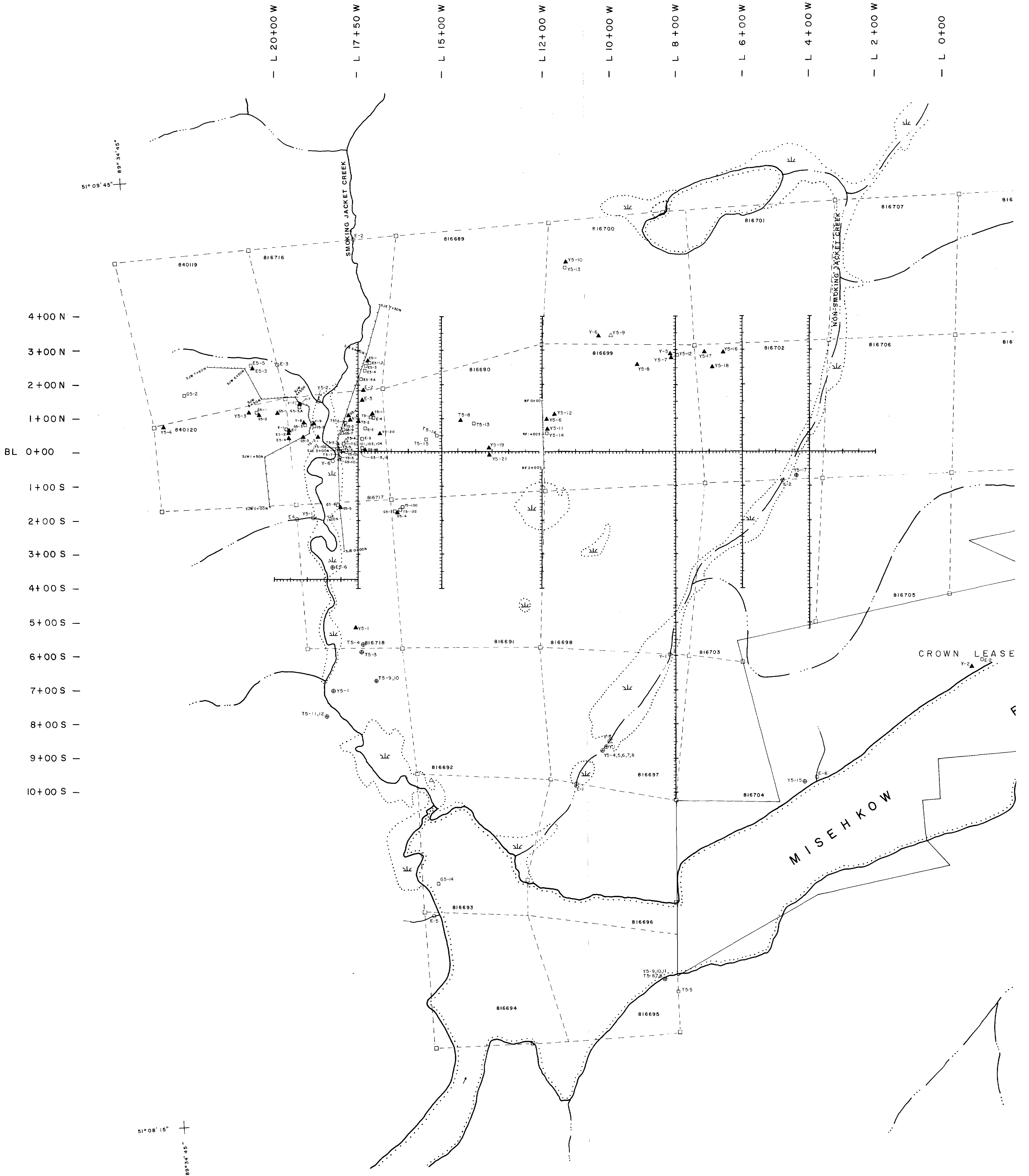




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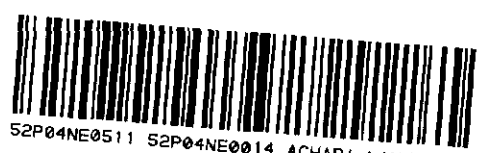
-  SWAMP
-  CREEK
-  CLAIM CORNER & LINES
-  CLAIM NUMBER
-  CUT GRID LINES (10 metre stations)
-  Quadrature point plot (scale 1 cm = 10%).
-  Inphase point plot (scale 1 cm = 10%).
-  EM conductor trace.

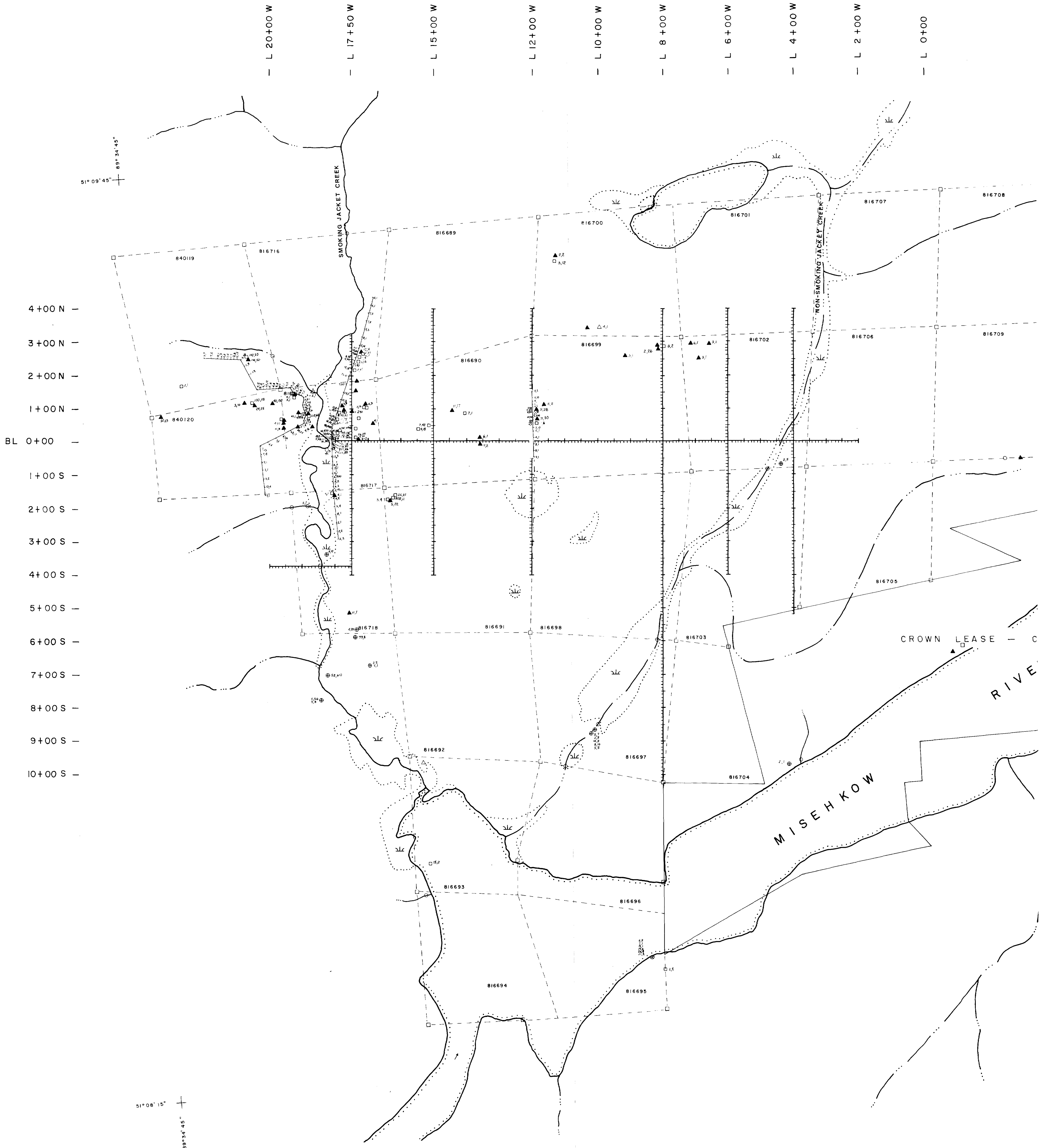




LEGEND:

- ^{ES-3} ROCK SAMPLE SITE and NUMBER
- △^{Y5-3} A-HORIZON SOIL SAMPLE SITE and NUMBER
- ▲^{T5-3} B-HORIZON SOIL SAMPLE SITE and NUMBER
- ^{ES-3} STREAM SEDIMENT SAMPLE SITE and NUMBER
- ⊕^{ES-3} FLOAT BOULDER SAMPLE SITE and NUMBER
- FLAGGED B-HORIZON SOIL SAMPLE LINE and COORDINATES
- ⊠ SWAMP
- CREEK
- ⊠ CLAIM CORNER & LINES
- 816694 CLAIM NUMBER
- CUT GRID LINES (10 metre stations)



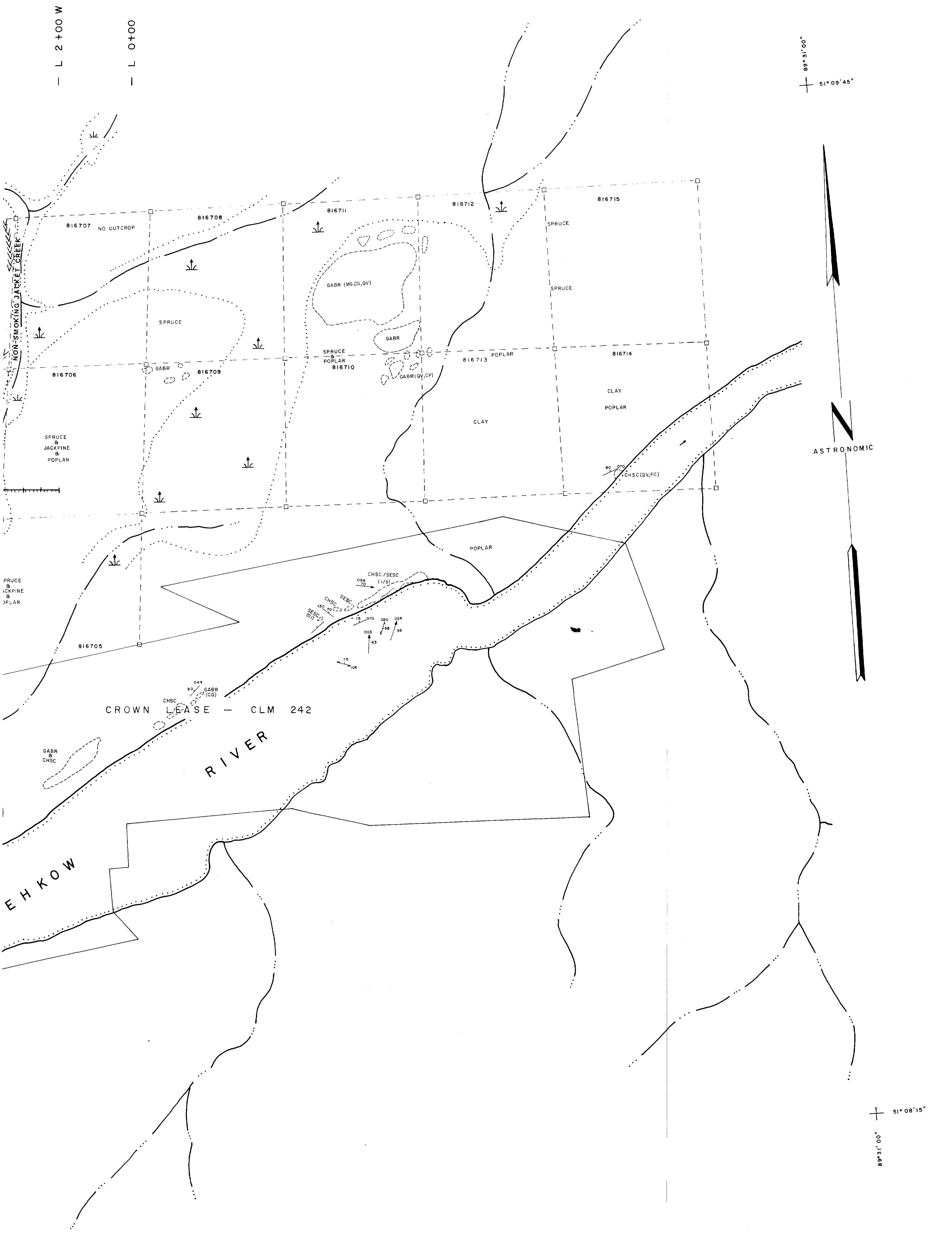


LEGEND:

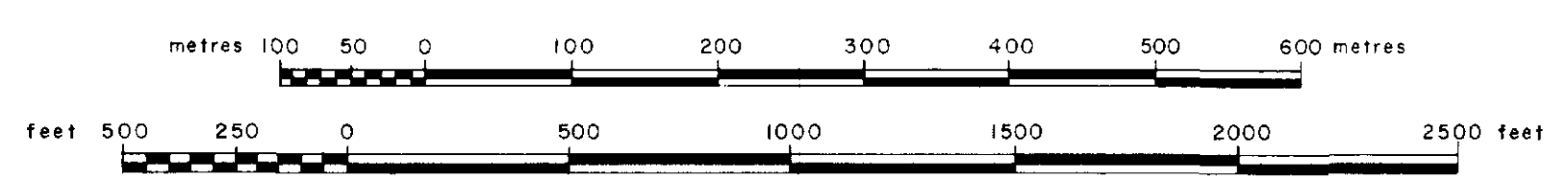
- ROCK SAMPLE SITE
- △ A-HORIZON SOIL SAMPLE SITE
- ▲ B-HORIZON SOIL SAMPLE SITE
- STREAM SEDIMENT SAMPLE SITE
- ⊕ FLOAT BOULDER SAMPLE SITE
- FLAGGED B-HORIZON SOIL SAMPLE LINE
- 150, 20 ARSENIC VALUE ppm, GOLD VALUE ppb

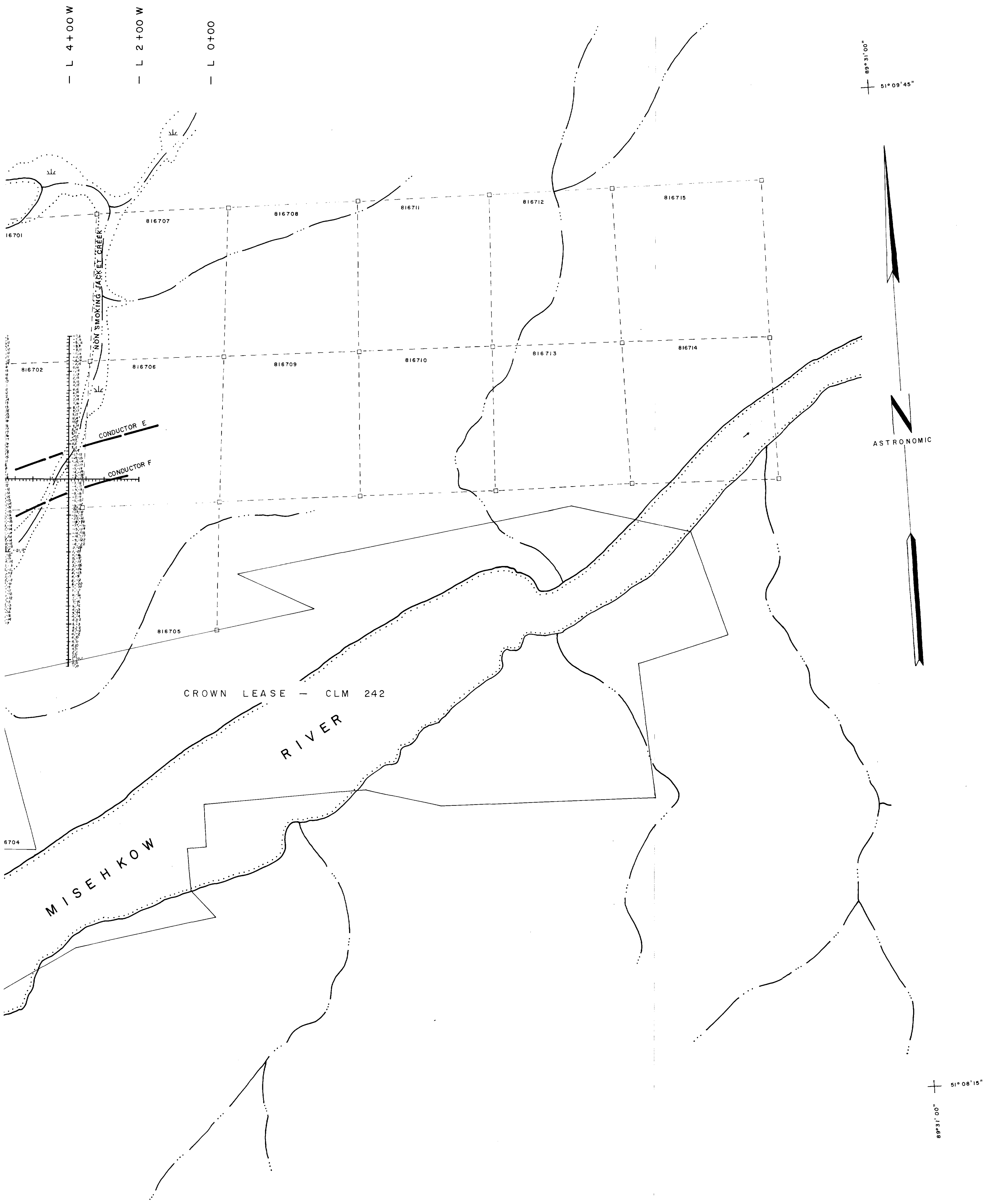
- swamp symbol SWAMP
- CREEK
- CLAIM CORNER & LINES
- 816694 CLAIM NUMBER
- CUT GRID LINES (10 metre stations)





ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD.
 MISEHKOW RIVER CLAIM BLOCK
 GEOLOGY
 NTS 52 P/4, CLAIM MAP G-1920
 SCALE 1:5000

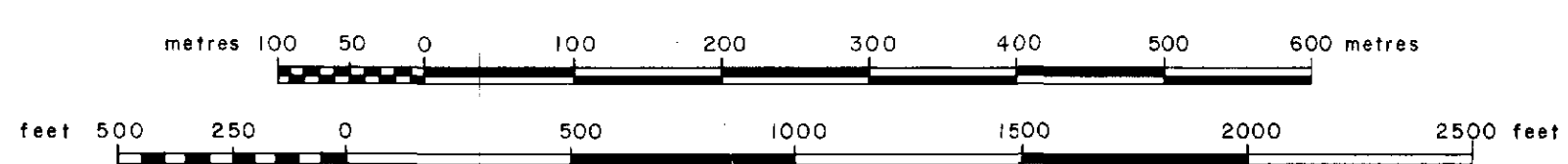




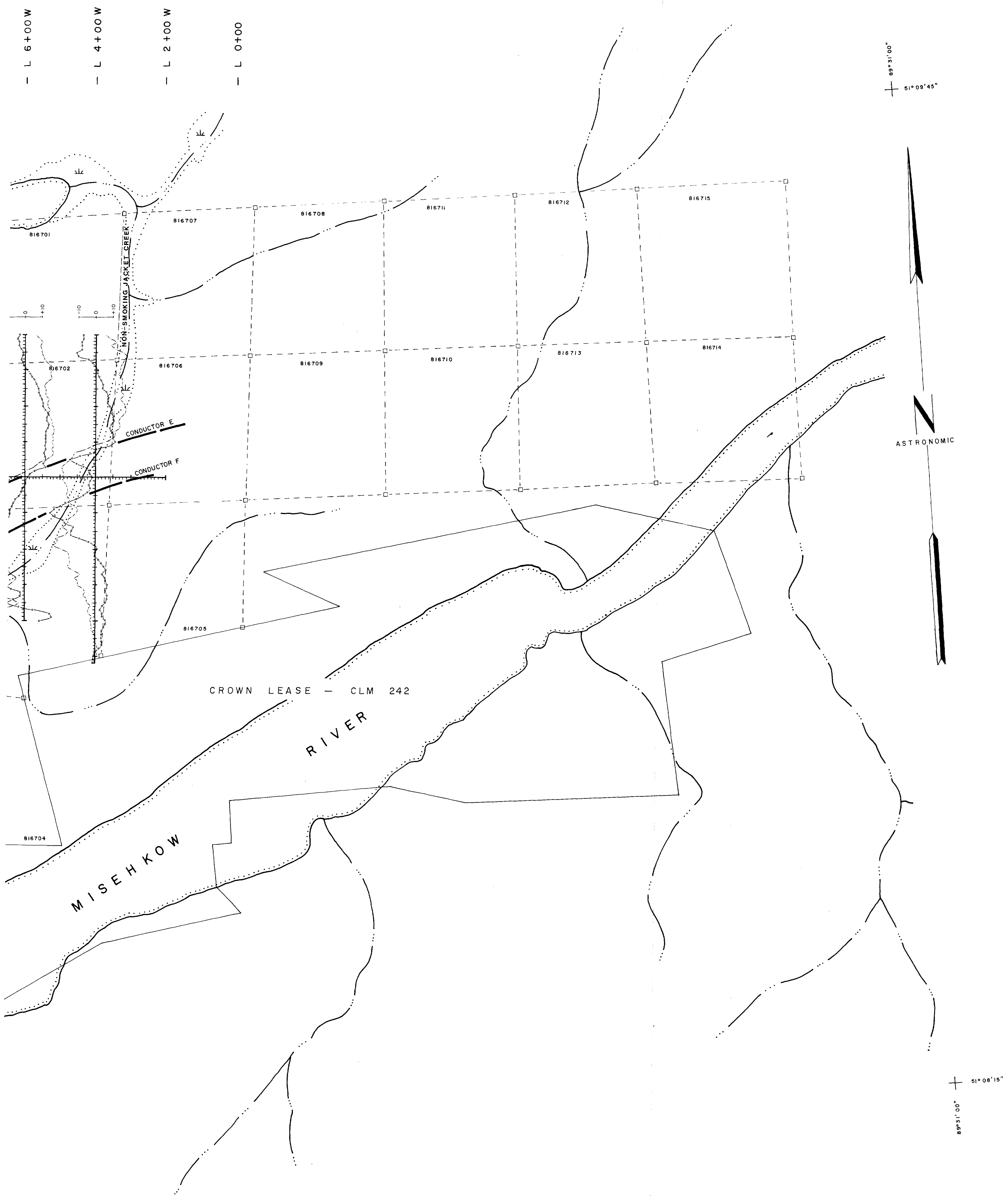
ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD.
 MISEHKOW RIVER CLAIM BLOCK
GROUND ELECTROMAGNETIC SURVEY - VALUES

NTS 52 P/4, CLAIM MAP G-1920

SCALE 1:5000

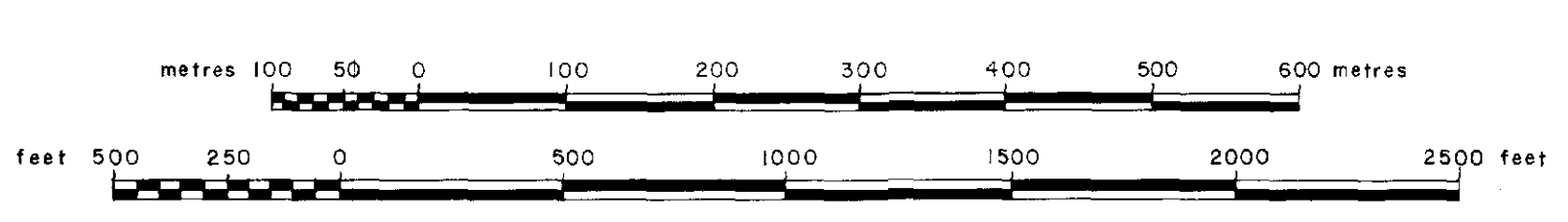


28598



ONTARIO GOLD JOINT VENTURE
 NORTHERN DYNASTY EXPLORATIONS LTD.
 MISEHKOW RIVER CLAIM BLOCK
GROUND ELECTROMAGNETIC SURVEY - PROFILES

NTS 52 P/4, CLAIM MAP G-1920
 SCALE 1:5000



28598

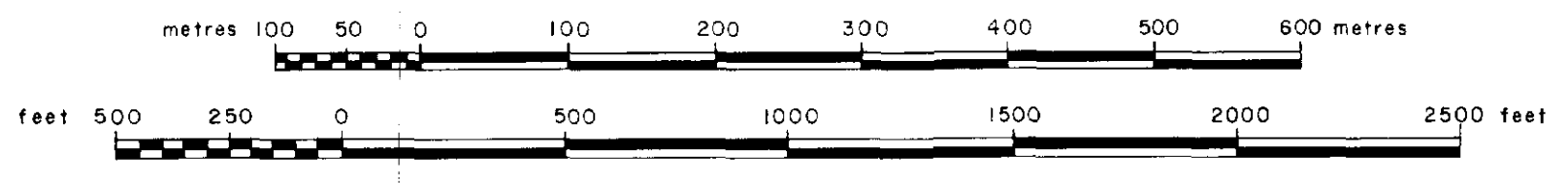
L 6+00 W
L 4+00 W
L 2+00 W
L 0+00



ONTARIO GOLD JOINT VENTURE
NORTHERN DYNASTY EXPLORATIONS LTD.
MISEHKOW RIVER CLAIM BLOCK
SAMPLE LOCATION MAP

NTS 52 P/4, CLAIM MAP G-1920

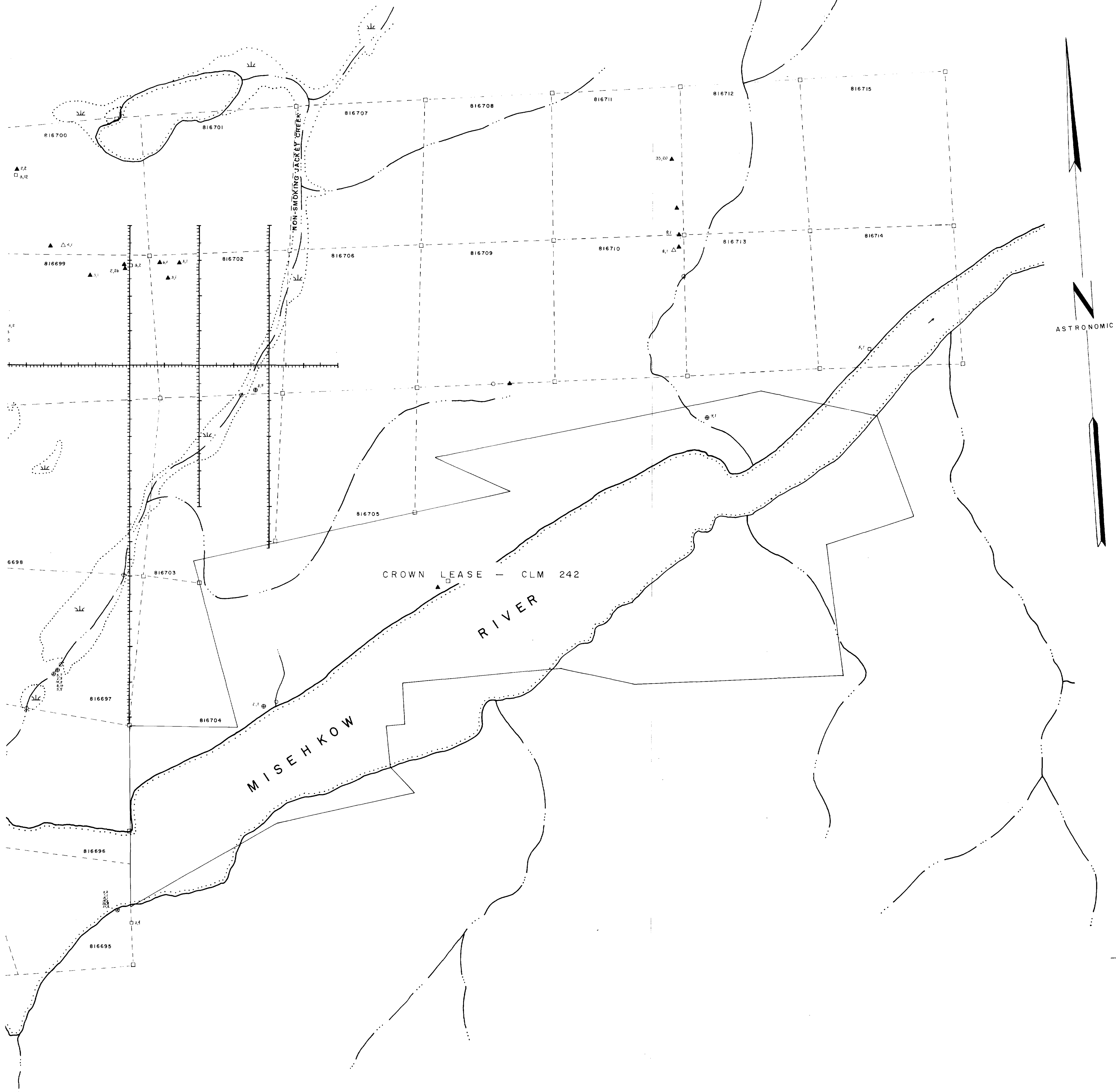
SCALE 1:5000



28598

L 10+00 W
L 8+00 W
L 6+00 W
L 4+00 W
L 2+00 W
L 0+00

89°31'00"
51°09'45"



ASTRONOMIC

CROWN LEASE - CLM 242

MISEHKOW RIVER

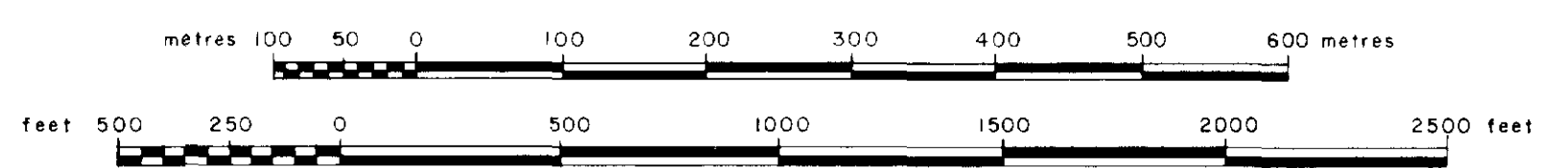
89°31'00"
51°08'15"

ONTARIO GOLD JOINT VENTURE
NORTHERN DYNASTY EXPLORATIONS LTD.
MISEHKOW RIVER CLAIM BLOCK
Au-As GEOCHEMISTRY

28598

NTS 52 P/4, CLAIM MAP G-1920

SCALE 1:5000



ER & LINES
ER
NES (10 metre stations)