

-52P/04NE - 0019

LOAD: 16mm

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52P04NE0015 52P04NE0019 ACHAPI LAKE

010

ONTARIO GOLD JOINT VENTURE

MISEHKOW RIVER PROPERTY

1987 Soil Geochemical Survey

Prepared for:

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

Written by:

B. A. Youngman, B. Sc.

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

September, 1987

RECEIVED

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MINING LANDS SECTION



52P04NE0015 52P04NE0019 ACHAPI LAKE

010C

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1.0 Introduction

On June 27, 1987, a small soil geochemical survey was completed on 2 claims in the southeastern portion of the Misehkow River property, situated in the Sioux Lookout Mining Division of northwestern Ontario. A total of 65 soil samples were collected from an area of poor outcrop exposure, potentially underlain by folded iron formation, as indicated by previous mapping and airborne geophysical surveys.

2.0 Location and Access

The Misehkow River property is located 55 km southeast of Pickle Lake, Ontario (Fig. 1) on the north bank of the Misehkow River. The 32-claim group adjoins to the northwest of patented claims Pa 396085 to 396092 and Pa 466735, with its centre situated at latitude 51°10' and longitude 89°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.

3.0 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 (Fig. 2):

<u>Claim Numbers</u>	<u>Anniversary Date</u>
Pa 816689-716	July 17, 1988
Pa 816717	July 17, 1989
Pa 816718	July 17, 1988
Pa 840119-120	July 9, 1989

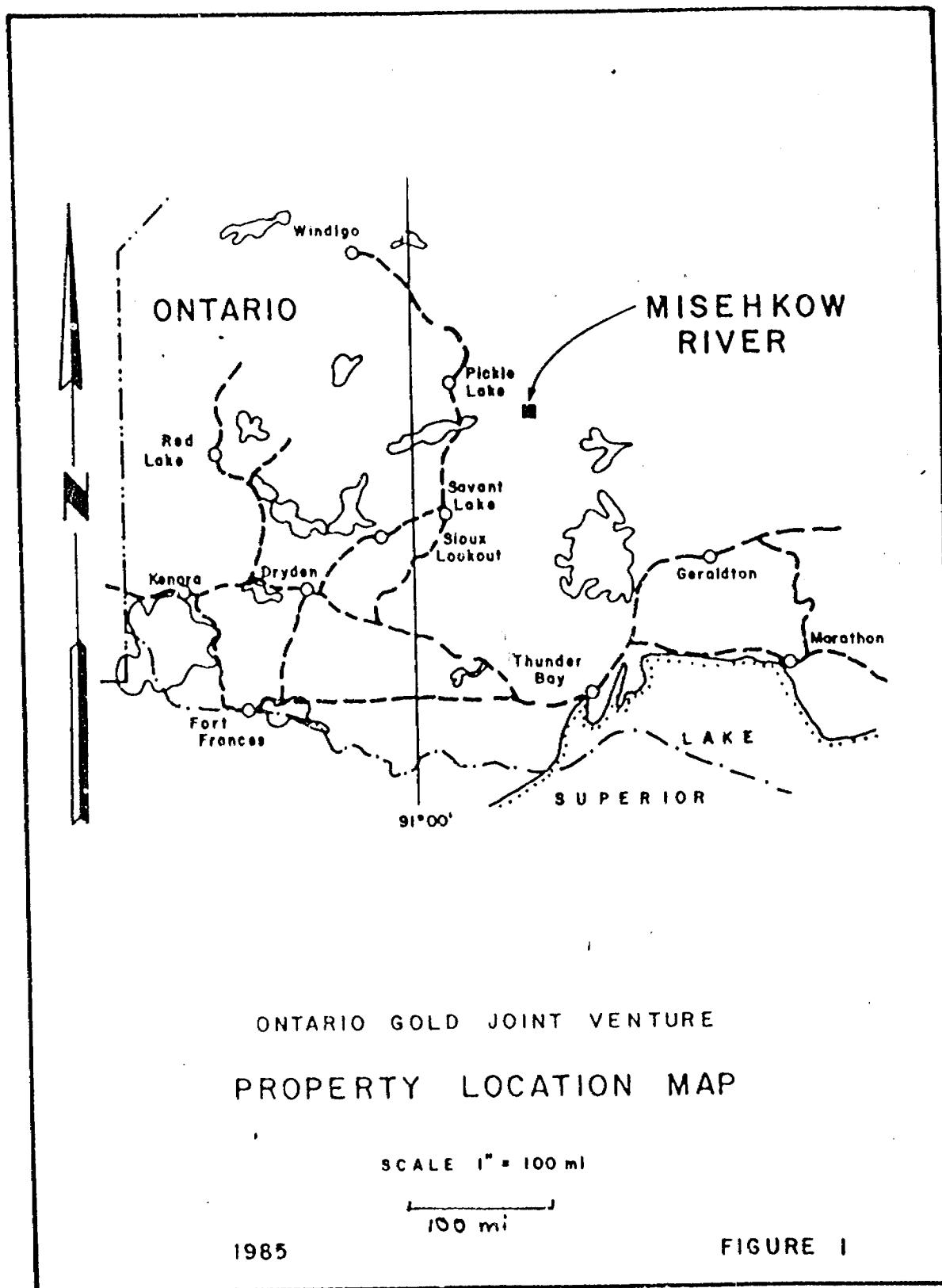
All claims are held by Northern Dynasty Explorations Ltd. in trust for the Ontario Gold Joint Venture (See Appendix 1).

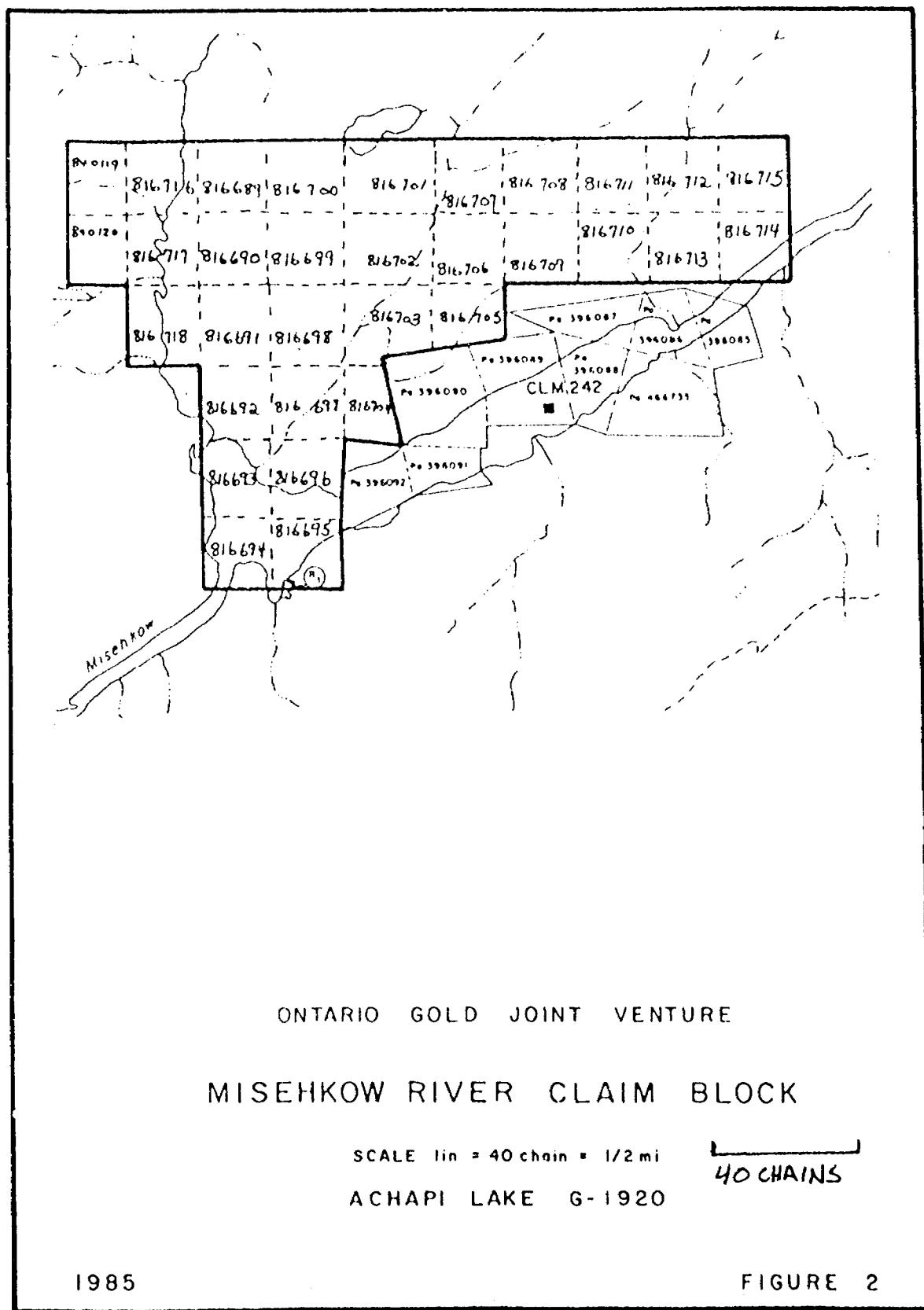
4.0 Survey Dates and Personnel

Field work was completed on June 26, 1987 by:

H. Eric Ewen
3239 Ganymede Drive
Burnaby, British Columbia
V3J 1A5

Jerry Ho
844 West Hastings Street
Vancouver, British Columbia
V6C 1C8





Results were compiled and this report prepared in September by:

Bruce A. Youngman
6565 Wiltshire Street
Vancouver, British Columbia
V6P 5G8

5.0 Previous Work

In 1971-72, Sturdy Mines Limited conducted an extensive grid controlled magnetic and electromagnetic survey over the adjacent Misehkow 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.

In 1984, 30 claims were staked to the north of the Misehkow River Iron Prospect by the Ontario Gold Joint Venture. In 1985, geological, geophysical, and geochemical surveys were completed on all or most of the claim block. In 1986, an airborne VLF-EM and magnetometer survey was completed by Terraquest Surveys Ltd. of Toronto, Ontario.

6.0 Geochemical Survey

6.1 Introduction

A 65 sample soil geochemical survey was completed on claims Pa 816710 and 816713 on June 27, 1987. A single rock sample was also collected.

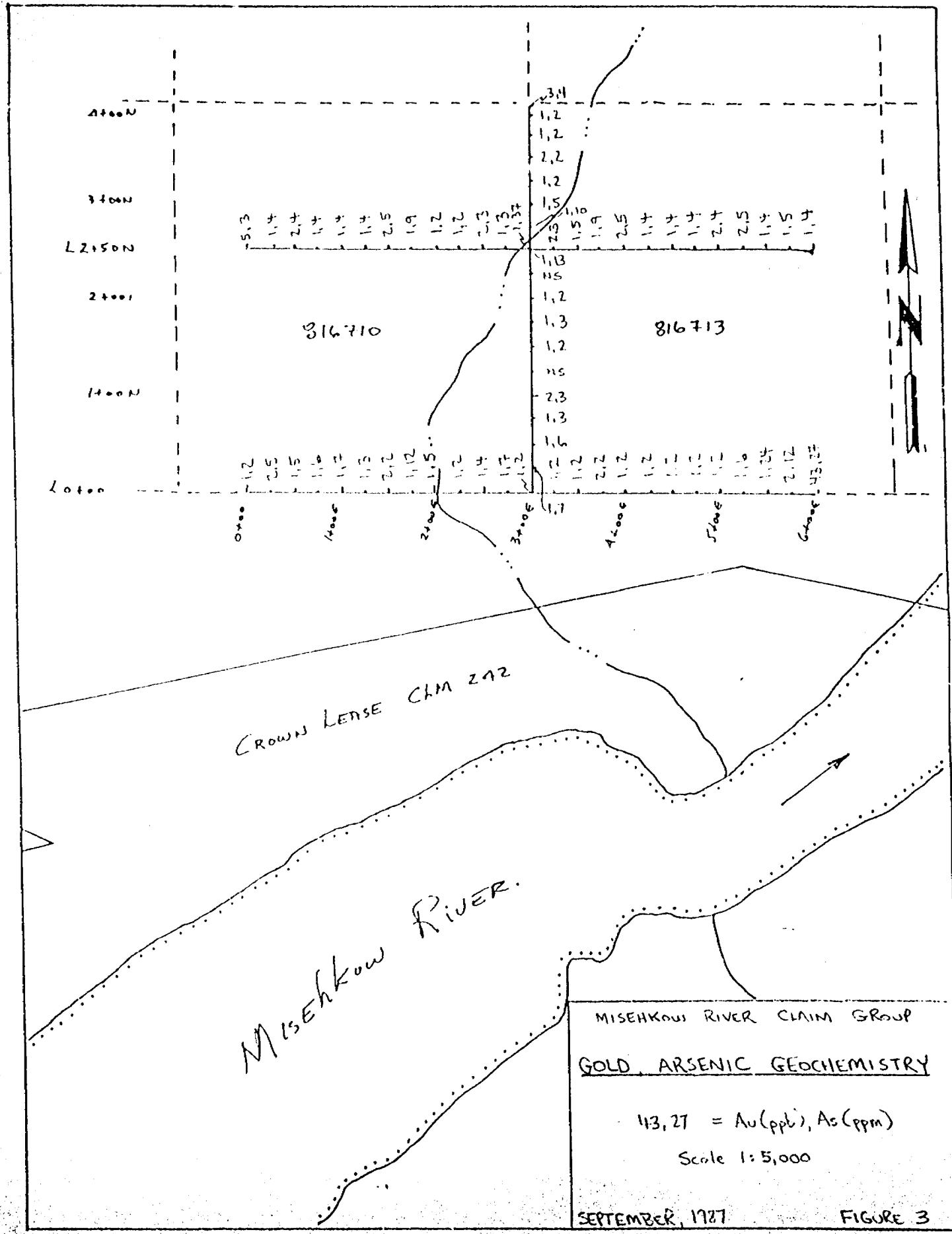
6.2 Sampling Procedures

Soil samples were taken at 25 m intervals along two east-west lines and one north-south line. Where available, the B horizon was selected for sampling. In areas of thick organic cover where the B horizon was not accessible, A horizon soils were collected.

Soil samples were sieved to - 80 mesh. All samples were analyzed for gold by fire assay (with atomic absorption finish) and 30 - element ICP. The Technical Data Statement and Procedure Record is included in Appendix 2.

6.3 Discussion of Results

Gold and arsenic geochemical results are plotted on Figure 3. Appendix 3 contains a complete list of analyses.



SEPTEMBER, 1927

FIGURE 3

In general, gold and arsenic values are low. These results may be largely due to an extensive overburden cover; clay was reported at a number of sample sites and may have provided an impermeable barrier to geochemical dispersion.

Nonetheless, weak arsenic + gold anomalies were outlined in two areas, both of which deserve follow-up investigation. At the southeast edge of the grid, a three station As-Au anomaly is situated on L0+00 from 5+50E to 6+00E. Peak values of 27 ppm As and 43 ppb Au are associated with exposures of siliceous sericite schist. A sample of a rusty quartz vein exposed at L0+00/5+75E yielded 41 ppm As.

The second area of interest is situated on L3+00E from 2+50N to 2+75N, where three samples yielded arsenic values from 10 to 37 ppm. These anomalies are located 50 m to the south of the southernmost observed gabbro outcrop and, based upon geological mapping in an area of better exposure to the west, may be associated with the favourable iron formation horizon.

7.0 Conclusions

The small (65 sample) soil geochemical survey completed in the southeastern portion of the Misehkow River property has yielded weak arsenic + gold anomalies in two areas.

Both anomalous zones should be investigated by follow-up prospecting and geological mapping. As the higher priority anomalous area is situated on the southeast margin of the current grid, additional soil sampling should be undertaken to the east.

8.0 References

- Barrie, C.Q.
1986: Report on an Airborne Magnetic and VLF-EM Survey, by Terraguest Ltd., for Northern Dynasty Explorations Ltd.
- Dyers, W.S.
1933: Geology of the Pashkokogan Misehkow 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.
- Tupper, D.W., Gorzynski, G. and Youngman, B.A.
1985: Misehkow River Property, 1985 Assessment Report for Northern Dynasty Explorations Ltd., Westfield Minerals Limited and Newfields Minerals Inc.

APPENDIX 1

Property Holders

Operator:

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

Joint Venture Partners:

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

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

APPENDIX 2

**TECHNICAL DATA STATEMENT
AND PROCEDURE RECORD**



Ontario

Ministry of
Northern Development
and Mines

Geophysical-Geological-Geochemical
Technical Data Statement

File _____

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 Achapi Lake Area
 Claim Holder(s) Northern Dynasty Expl. Ltd.,
Newfields Minerals Inc.,
Westfield Minerals Limited
 Survey Company Northern Dynasty Expl. Ltd.
 Author of Report Bruce A. Youngman
 Address of Author 6565 Wiltshire Street
 Covering Dates of Survey June 27, 1987
 (linecutting to office)
 Total Miles of Line Cut _____

MINING CLAIMS TRAVESED
List numerically

Pa	816710
(prefix)	(number)

Pa	816713
----------	--------------

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..... --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: Sept. 15, 1987 SIGNATURE: B. Youngman Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

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

TOTAL CLAIMS 2

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken Pa 816710

Pa 816713

Total Number of Samples 66

Type of Sample 65-Soil ; 1-Rock

(Nature of Material)

Average Sample Weight 0.3 Kg.

Method of Collection Mattock, hammer

Soil Horizon Sampled A, B

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 - 50m

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 (66 tests)

Name of Laboratory Acme Analytical Labs

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

Rock: -100 mesh

General ICP:

-0.5 gram sample digested with 3ml.

3-1-2 HCl-HNO₃-H₂O at 95°C for

1 hour then diluted to 10 ml

with H₂O.

General Other Elements:

Mo, Fe, U, Th, Sr, Cd, Sb, Bi,

V, Ca, P, La, Cr, Mg, Ba, Ti,

B, Al, Na, K, W, Au.

Method of Analysis:

Au- 10 gm sample

- Fire assay with AA finish

Other - 30 element ICP

- 0.5 gm sample

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

1349

July 28 1987

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APPENDIX 3

CHEMICAL ANALYSES

MISEKHOU.V

ACME ANALYTICAL LABORATORIES

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

PHONE 253-3158

DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.300 GRAM SAMPLE IS DIGESTED WITH 3ML 3:1:2 HCL:HNO3:H2O AT 95 DEG.C. FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR Mn Fe Ca P La Cr Ni Ba Ti B W AND LIMITED FOR Na And K. Au DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SOIL/ROCK AUTO ANALYSIS BY FA+AA FROM 30 GRAM SAMPLE.

DATE RECEIVED: JULY 6 1987

DATE REPORT MAILED: July 13/87

ASSAYER: A. T. TOYE, DEAN TOYE, CERTIFIED B.C. ASSAYER

NORTHERN DYNASTY PROJECT - MISEKHOU File # 87-2238 Page 1

SAMPLE	NO	CU	PB	Zn	Mg	Ni	CO	Mn	FE	AS	U	AU	Ti	SR	CD	SB	SI	V	CA	P	LA	CK	Mg	Ba	Ti	I	N	M	K	W	AUTO
		PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM								
N 2+50M 0+00E8	1	7	9	25	.1	15	6	109	2.34	3	5	ND	2	7	1	2	2	33	.13	.037	0	22	.35	38	.12	3	1.41	.01	.03	2	5
N 2+50M 0+25E8	1	2	5	16	.1	7	3	67	1.55	4	5	ND	3	4	1	2	3	25	.10	.014	9	15	.19	27	.09	2	.84	.01	.01	1	1
N 2+50M 0+50E8	1	4	9	22	.1	10	3	124	1.60	4	5	ND	4	8	1	2	3	26	.14	.022	12	10	.25	20	.09	3	.90	.01	.03	2	2
N 2+50M 0+75E8	1	8	12	27	.1	19	6	155	1.88	4	5	ND	4	10	1	2	4	27	.26	.050	11	27	.42	42	.09	5	1.38	.01	.10	3	1
N 2+50M 1+00E8	2	15	13	57	.1	32	9	349	3.01	4	5	ND	7	19	1	2	2	47	.35	.023	18	40	.96	76	.17	7	2.17	.02	.17	2	1
N 2+50M 1+25E8	1	11	15	48	.1	25	8	403	2.34	4	5	ND	5	17	1	2	2	35	.46	.022	24	38	.72	63	.15	6	1.56	.01	.12	2	1
N 2+50M 1+50E8	1	11	11	49	.1	26	9	275	2.44	5	5	ND	6	17	1	2	2	36	.48	.008	20	39	.72	51	.16	5	1.61	.01	.13	2	2
N 2+50M 1+75E8	2	19	15	55	.1	29	9	346	2.89	9	5	ND	9	28	1	2	2	36	2.50	.026	39	42	1.20	74	.14	8	1.64	.01	.22	1	1
N 2+50M 2+00E8	1	9	7	45	.2	4	1	151	.29	2	5	ND	1	28	1	2	2	9	3.79	.043	2	2	.23	24	.01	14	.13	.01	.02	2	1
N 2+50M 2+25E8	1	7	2	18	.2	3	1	49	.14	2	5	ND	1	43	1	2	2	4	6.16	.036	2	4	.26	39	.01	13	.12	.05	.01	1	1
N 2+50M 2+50E8	1	23	5	24	.4	14	3	199	.76	3	5	ND	1	41	1	2	2	8	5.41	.039	11	13	.38	48	.02	10	.57	.03	.03	1	2
N 2+50M 2+75E8	1	11	2	32	.2	4	1	155	.14	3	5	ND	1	35	1	2	3	8	5.73	.048	2	2	.27	35	.01	16	.07	.04	.01	2	1
N 2+50M 3+00E8	2	16	7	59	.1	18	8	2360	3.91	37	5	ND	3	18	1	2	4	19	1.19	.045	14	20	.41	82	.05	6	.81	.01	.05	1	1
N 2+50M 3+25E8	1	19	4	26	.1	11	3	178	1.09	3	5	ND	2	25	1	2	2	15	4.51	.032	14	17	1.55	29	.06	6	.68	.01	.07	1	2
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N 2+50M 3+75E8	2	20	13	53	.1	32	9	242	2.95	6	5	ND	9	16	1	2	2	40	.32	.022	21	44	.82	83	.15	7	2.29	.02	.18	1	1
N 2+50M 4+00E8	1	9	7	39	.1	18	3	143	2.03	3	5	ND	3	11	1	2	2	29	.21	.032	10	31	.51	50	.10	6	1.60	.01	.09	2	2
N 2+50M 4+25E8	1	4	4	27	.2	10	4	89	1.49	2	5	ND	3	9	1	2	2	22	.15	.017	10	20	.29	26	.09	3	1.07	.01	.06	1	1
N 2+50M 4+50E8	1	4	8	25	.1	10	4	86	1.32	2	5	ND	3	8	1	2	4	21	.15	.014	10	19	.20	27	.09	2	.98	.01	.03	1	1
N 2+50M 4+75E8	1	5	7	29	.1	11	4	96	1.96	2	5	ND	2	8	1	2	3	50	.14	.026	9	24	.27	25	.10	2	1.13	.01	.03	1	1
N 2+50M 5+00E8	1	5	4	26	.1	10	4	89	1.56	3	5	ND	3	8	1	2	3	24	.15	.019	10	23	.27	21	.09	3	1.18	.01	.04	1	2
N 2+50M 5+25E8	1	6	5	24	.1	14	5	103	1.81	6	5	ND	3	8	1	2	4	27	.16	.034	9	25	.30	33	.09	4	1.28	.01	.07	1	2
N 2+50M 5+50E8	1	7	8	24	.1	11	4	170	1.66	2	5	ND	3	8	1	2	3	27	.17	.029	9	20	.26	32	.09	3	1.09	.01	.05	1	1
N 2+50M 5+75E8	1	5	7	30	.1	13	5	168	2.07	7	5	ND	3	8	1	2	4	30	.17	.045	10	30	.34	38	.10	2	1.24	.01	.04	1	1
N 2+50M 6+00E8	1	5	9	28	.1	13	4	122	1.83	5	5	ND	4	9	1	2	3	28	.17	.019	11	24	.36	31	.10	3	1.17	.01	.04	1	1
N 0+00M 0+00E8	1	10	10	57	.1	18	7	273	2.04	2	5	ND	5	15	1	2	2	32	.40	.016	10	33	.56	55	.13	4	1.47	.01	.10	1	1
N 0+00M 0+25E8	1	14	14	56	.1	27	8	269	2.55	5	5	ND	8	16	1	2	3	43	.018	24	38	.76	59	.15	10	1.79	.02	.13	1	2	
N 0+00M 0+50E8	1	13	8	54	.1	26	7	304	2.49	5	5	ND	9	17	1	2	2	34	.52	.013	35	40	.74	47	.15	6	1.01	.01	.11	1	1
N 0+00M 0+75E8	1	17	7	45	.1	19	6	253	2.00	6	5	ND	6	34	1	2	2	28	5.39	.044	27	33	1.93	40	.11	9	1.32	.04	.14	2	1
N 0+00M 1+00E8	1	33	8	60	.5	29	7	705	1.51	7	5	ND	1	39	1	2	2	22	5.06	.075	15	24	.93	50	.05	11	1.11	.02	.05	2	1
N 0+00M 1+25E8	1	15	4	39	.2	16	4	221	1.54	3	5	ND	4	30	1	2	2	21	4.00	.040	21	27	1.77	39	.08	9	1.00	.01	.11	1	1
N 0+00M 1+50E8	1	17	3	42	.3	17	5	237	1.59	2	5	ND	4	30	1	2	2	22	4.79	.042	21	23	1.87	40	.08	9	1.03	.01	.12	1	2
N 0+00M 1+75E8	1	11	7	62	.1	16	7	1823	2.29	12	5	ND	4	20	1	2	2	24	1.15	.049	20	29	.35	70	.07	7	1.08	.01	.07	1	1
N 0+00M 2+00E8	1	11	2	28	.1	12	3	144	1.33	5	5	ND	3	24	1	2	2	19	4.98	.042	19	23	2.29	24	.08	7	.92	.02	.07	1	1
N 0+00M 2+25E8	1	10	5	33	.1	17	6	163	1.90	2	5	ND	6	13	1	2	2	20	.49	.012	22	31	.50	38	.11	5	1.38	.01	.06	1	1
N 0+00M 2+50E8	1	9	6	39	.1	19	5	223	1.85	4	5	ND	6	14	1	2	2	26	.53	.015	22	30	.54	39	.12	4	1.24	.01	.07	1	1
STD C/AU-S	19	58	41	127	7.4	67	20	925	3.97	40	21	0	32	47	10	15	22	56	.50	.009	37	54	.92	170	.06	36	1.74	.06	.13	13	47

NORTHERN DYNASTY PROJECT - MISERKOW FILE # 87-2237

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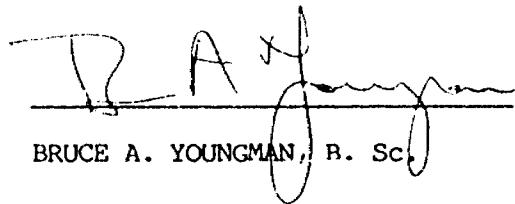
SAMPLE	NO	CU	PB	In	Al	Ni	CO	AN	FE	AS	U	AU	Tn	SR	CD	SB	BI	V	CA	P	LA	CR	Ag	Tl	B	Al	Mn	E	H	MnS	
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM									
N 0+00N 2+7SEB	1	13	14	47	.1	20	6	230	1.96	7	5	ND	6	27	1	2	2	30	2.82	.038	27	31	1.27	47	.13	7	1.37	.01	.12	2	1
N 0+00N J+00EB	1	13	9	45	.1	18	5	220	1.95	2	5	ND	7	24	1	2	2	29	2.65	.047	28	32	1.43	41	.12	9	1.24	.01	.12	1	1
N 0+00N J+2SEB	1	11	12	47	.1	20	6	222	1.97	2	5	ND	7	23	1	2	2	31	1.92	.028	26	30	.99	47	.13	6	1.47	.01	.11	1	1
N 0+00N J+5SEB	1	6	11	42	.1	19	6	203	1.89	2	5	ND	5	15	1	2	2	31	.32	.021	16	30	.52	41	.14	3	1.35	.01	.07	1	1
N 0+00N J+7SEB	1	5	12	46	.1	17	6	194	1.77	2	5	ND	4	14	1	2	2	29	.28	.014	15	31	.53	40	.14	3	1.24	.01	.09	1	2
N 0+00N 4+00EB	1	8	17	48	.1	20	6	215	1.96	2	5	ND	6	17	1	2	2	32	.30	.019	20	31	.57	52	.14	4	1.37	.02	.12	2	1
N 0+00N 4+2SEB	1	22	23	86	.3	40	12	625	3.72	2	7	ND	9	24	1	2	2	53	.57	.048	18	64	1.15	116	.20	10	2.61	.02	.39	1	1
N 0+00N 4+5SEB	1	6	14	43	.1	19	6	242	1.81	2	5	ND	5	15	1	2	2	29	.50	.012	16	31	.54	38	.14	4	1.14	.01	.13	1	1
N 0+00N 4+7SEB	1	8	14	73	.1	26	9	382	2.19	2	5	ND	7	18	1	2	2	38	.39	.025	16	41	.75	66	.18	5	1.59	.01	.21	1	1
N 0+00N 5+00EB	1	16	21	87	.2	39	14	614	3.54	2	6	ND	9	20	1	2	3	50	.42	.043	18	57	1.08	100	.18	10	2.47	.02	.33	1	1
N 0+00N 5+2SEA	1	14	21	70	.1	13	3	110	.76	6	5	ND	1	21	1	2	2	11	.66	.064	8	9	.13	56	.01	4	.47	.01	.07	1	1
N 0+00N 5+5EB	1	9	14	64	.1	24	10	267	2.15	24	5	ND	5	18	1	2	2	35	.37	.023	16	32	.59	61	.12	5	1.35	.01	.12	1	1
N 0+00N 5+7SEA	1	58	28	95	.4	31	7	133	1.12	12	5	ND	2	25	2	2	2	14	.44	.062	27	18	.18	106	.01	3	.48	.01	.05	1	2
N 0+00N 6+00EA	1	23	41	63	.6	18	6	116	2.12	27	5	ND	3	15	1	2	2	35	.24	.038	22	33	.40	60	.04	6	1.66	.01	.16	1	43
N 3+00E 4+10MB	1	20	14	48	.1	19	9	241	2.61	4	5	ND	5	13	1	2	2	43	.42	.018	16	32	.70	91	.16	5	1.91	.01	.07	1	3
N 3+00E 4+00MB	1	25	14	43	.1	20	2	254	2.40	2	5	ND	7	15	1	2	2	35	.81	.011	28	38	.64	92	.13	6	1.76	.01	.08	1	1
N 3+00E 3+7SLB	1	8	4	15	.2	8	3	60	.66	2	5	ND	2	5	1	2	2	18	.10	.006	5	19	.28	10	.03	3	.58	.01	.02	1	1
N 3+00E 3+5CMAB	1	22	7	28	.2	14	4	140	1.43	2	5	ND	2	28	1	2	2	20	3.50	.041	19	23	.47	56	.05	10	.98	.01	.08	1	2
N 3+00E 3+25MB	1	23	10	48	.4	22	2	394	2.07	2	5	ND	5	24	1	2	2	29	1.04	.042	31	33	.40	68	.10	7	1.34	.01	.13	1	1
N 3+00E 3+00MA	1	33	3	55	.2	5	1	485	.28	5	5	ND	1	39	1	2	2	7	6.59	.046	3	3	.28	39	.01	15	.16	.08	.01	1	1
N 3+00E 2+7SMA	1	9	4	80	.1	14	6	386	2.62	10	5	ND	4	21	1	2	2	23	1.11	.074	19	25	.46	80	.07	7	1.00	.01	.08	1	1
N 3+00E 2+50MA	2	9	13	76	.1	15	7	1266	2.50	13	5	ND	3	19	1	2	2	24	1.00	.050	19	29	.49	93	.08	7	1.07	.01	.09	1	1
N 3+00E 2+00MB	1	13	2	33	.1	13	4	241	1.34	2	5	ND	4	58	1	2	2	20	11.08	.039	19	21	2.45	29	.09	10	.76	.24	.10	3	1
N 3+00E 1+75MB	1	12	10	31	.3	13	4	254	1.29	3	5	ND	5	64	1	2	2	20	12.39	.042	18	22	2.74	25	.09	10	.69	.27	.09	3	1
N 3+00E 1+50MB(A)	1	15	9	46	.1	21	6	255	2.08	2	5	ND	7	32	1	2	2	32	4.11	.033	28	36	1.42	50	.13	8	1.46	.01	.14	1	1
N 3+00E 1+00MB	1	13	10	38	.1	18	6	235	1.80	3	5	ND	7	45	1	2	2	28	7.40	.031	23	28	1.80	41	.12	8	1.26	.13	.10	2	2
N 3+00E 0+75MB	1	15	14	41	.2	21	8	282	2.00	3	5	ND	7	31	1	2	2	30	4.02	.038	30	32	1.54	52	.13	8	1.39	.01	.12	1	1
N 3+00E 0+50MB	1	12	9	40	.2	22	6	244	2.08	6	5	ND	7	19	1	2	2	30	1.58	.026	29	34	1.04	46	.13	7	1.48	.01	.11	1	1
N 3+00E 0+25MB	1	12	12	35	.1	17	5	254	1.71	7	5	ND	7	32	1	2	2	26	4.82	.036	24	25	1.68	37	.11	8	1.13	.01	.09	1	1
N 0+00 5+7SE Rock	1	33	15	99	.1	60	19	297	2.05	41	5	ND	3	10	1	2	2	11	.14	.046	12	30	.36	11	.01	2	.80	.03	.05	1	1
STD C/AU-S	20	56	43	129	7.3	70	29	949	3.97	41	16	7	33	48	10	15	21	57	.50	.091	38	56	.70	177	.09	35	1.73	.04	.14	13	47

APPENDIX 4

AUTHOR'S CERTIFICATION

I, Bruce A. Youngman, of 6565 Wiltshire Street, 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 authored this report based on the 1987 soil
geochemical program on the Misehkow River Property.

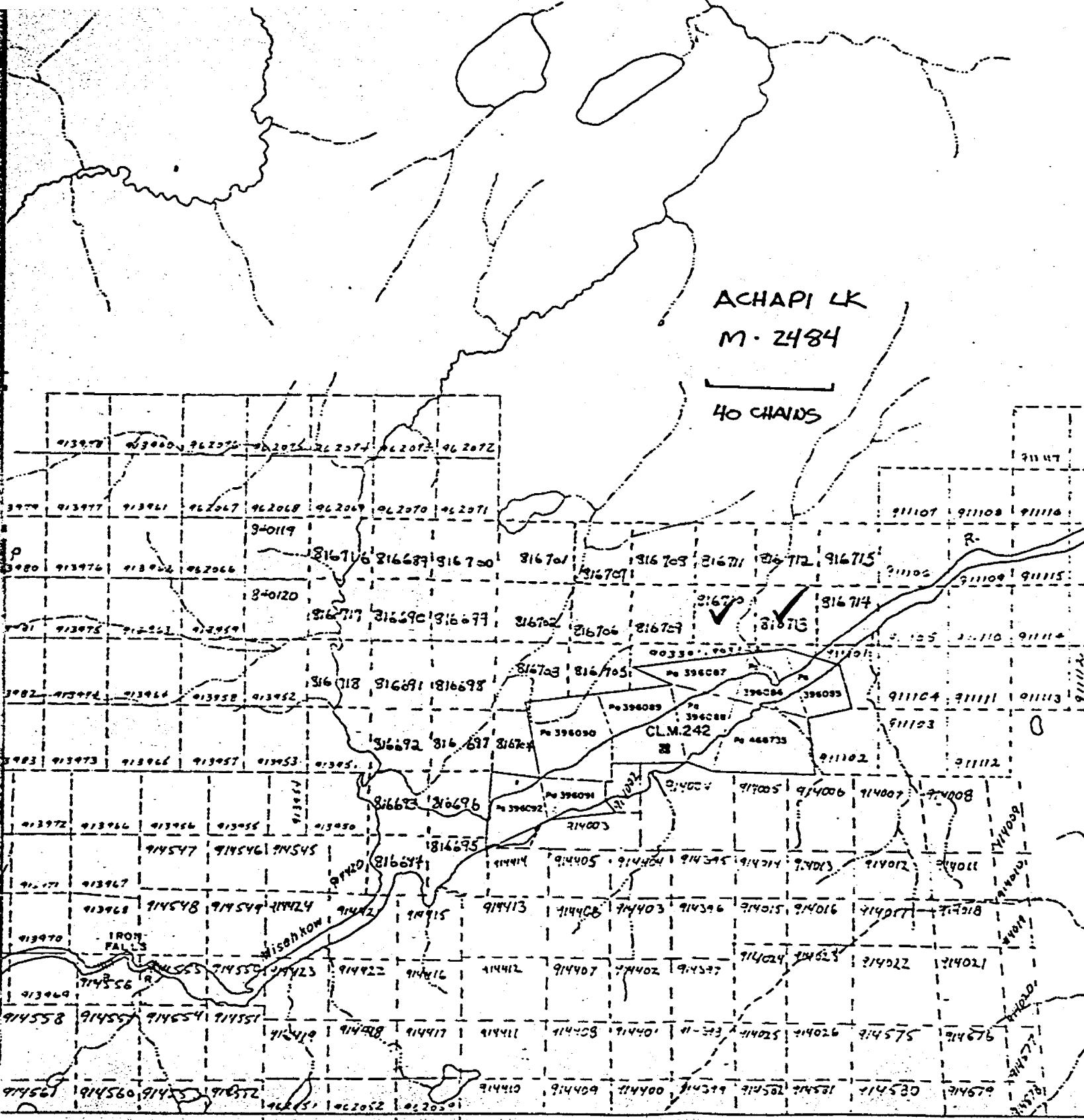


BRUCE A. YOUNGMAN, B. Sc.



52P04NE0015 52P04NE0019 ACHAP1 LAKE

900



L 31°07'30"

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. — MINING RIGHTS ONLY

S.R.O. - SURFACE RIGHTS ONLY

M.+ S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
-------------	-----------	------	-------------	------

② PARK RESERVE # 47/83 9/25/83 W 55 1083.6
DISPOSITION BY EXPLORATORY LICENCE OF OCCUPATION ONLY — APPLY
TO MINING REGIONS

6-31, 1234

2027 9/85

2022-23 1932

Digitized by srujanika@gmail.com

400-2-136

3-27-07

JUNE 16/8

PATRICIA MINING DIV.
RECEIVED JUN 23 1987
A.M. 7-8:9-10:11-12 :
F.M. 1-2:3-4:5-6:7-8:9-10

SCALE: 1 INCH = 40 CHAINS

FEET

0 1000 2000 4000 6000 8000

0 200 1000 2000

METRES (1 KM) (2 KM)

AREA

ACHAPI LAKE

M.N.R. ADMINISTRATIVE DISTRICT

SIOUX LOOKOUT

MINING DIVISION

PATRICIA

LAND TITLES / REGISTRY DIVISION
KENORA (PATRICIA PORTION) THUNDER BAY



**Ministry of Land
Natural Management
Resources Branch**

Ontario

Date **February 20, 1968** Number **1**



Ministry of
Northern Development
and Mines

Technical Assessment
Work Credits

File

2.10359

Date

October 27, 1987

Mining Recorder's Report of
Work No.

135

Recorded Holder

Northern Dynasty Explorations Ltd.

Township or Area

Achapi Lake

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	PA 816710
Magnetometer _____ days	816713
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical 14 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.



Ministry of
Northern Development
and Mines

Technical Assessment
Work Credits

File
2.10359

Date
October 27, 1987

Mining Recorder's Report of
Work No.
135 & 172

Recorded Holder

Northern Dynasty Explorations Ltd.

Township or Area

Achapi Lake

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	\$839.75 SPENT ON ASSAYING SAMPLES TAKEN FROM MINING CLAIMS:
Magnetometer _____ days	PA 816710 816713
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological	_____ days
Geochemical	_____ days
Man days <input type="checkbox"/>	Airborne <input type="checkbox"/>
Special provision <input 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.	

60 Days credit allowed which may be grouped in
accordance with Section 76(6) of the Mining Act
R.S.O. 1980.

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 Development
and Mines

Technical Assessment
Work Credits

File
2.10359

Date
November 5, 1987

Mining Recorder's Report of
Work No.
135 & 172

AMENDED

Recorded Holder

Northern Dynasty Explorations Ltd.

Township or Area

Achapi Lake

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	\$839.75 SPENT ON ASSAYING SAMPLES TAKEN FROM KINING CLAIMS:
Magnetometer _____ days	PA 816710 816713
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/>	Airborne <input type="checkbox"/>
Special provision <input 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.	

55.08 Days credit allowed which may be grouped
in accordance with Section 76(6) of the Mining
Act R.S.O. 1980.

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.



Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

October 27, 1987

Your File: 135 & 172
Our File: 2.10359

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

Dear Sir:

RE: Data for Assaying and Geochemical Survey submitted
under Section 77(19) of the Mining Act R.S.O. 1980
on Mining Claims PA-816710, et al,
in the Area of Achapi Lake

The enclosed statements of assessment work credits for Assaying
and Geochemical Survey 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,

R.M. Charnesky (Mrs.)
Acting Manager
Mining Lands Section
Mineral Development and Lands Branch
Mines and Minerals Branch

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

Telephone: (416) 965-4888

AB:p1
Enclosure

cc: Resident Geologist
Sioux Lookout, Ontario

Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

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



Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

November 5, 1987

Your File: 135 & 172
Our File: 2.10359

AMENDED

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

Dear Sir:

RE: Data for Assaying submitted under Section 77(19) of the
Mining Act R.S.O. 1980 on Mining Claims PA-816710 et al
in the Area of Achapi Lake

The enclosed statement of assessment work credits for Assaying
has been approved as of the above date.

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

Yours sincerely,

A handwritten signature in black ink, appearing to read "W.R. Cowan".

W.R. Cowan, Manager
Mining Lands Section
Mines and Minerals Branch

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

Telephone: (416) 965-4888

AB:p1
Enclosure

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Sioux Lookout, Ontario

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