GM 46915

GEOLOGICAL MAPPING, DESTOR PROPERTY

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Ministère de l'Énergie et des Ressources
Service de la Géoinformation
Date: 22 JUIL 1988
No G.M.: 46915

ELDORADO GOLD MINES INC.

GEOLOGICAL MAPPING

DESTOR PROPERTY

DUPARQUET TOWNSHIP

QUEBEC, CANADA

BY

CHANTAL PATENAUDE, B Sc

MEEGWICH CONSULTANTS INC

ÉNERGIE ET RESSOURCES - SECTEUR MINES
REÇU
- 8 JUIN 1988
BUREAU RÉGIONAL
ROUYN-NORANDA

MAY 1988

2363, Chemin des Côteaux, C.P. 965, Rouyn-Noranda (Québec) J9X 5C8 (819) 762-9670

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SUMMARY

Eldorado Gold Mines Inc. recently acquired a gold property located approximately 25 km north-northwest of the mining center of Rouyn-Noranda, northwestern Quebec. The property is accessibly via highway # 101, which links Rouyn-Noranda to the town of Macamic. Geological mapping and sampling of a portion of the property was performed during the month of May 1988.

The property is underlain by intermediate to mafic metavolcanic rocks of the Blake River group cut by diabase, diorite and quartz feldspar porphyry dykes. Pyrite mineralization is common on the property. The Duparquet-Destor-Porcupine regional gold bearing fault system lies 3 km north of the group of claims. Auriferous shear zones corresponding to splays off this structural feature were noted on the property.

The geological setting and accessibility of this property make it a prime exploration target. However, very little systematic work has taken place in the area of interest, and potential gold bearing structures were never adequately tested.

A second phase of exploration estimated at $ 54,000 is recommended on the Destor property.

INTRODUCTION

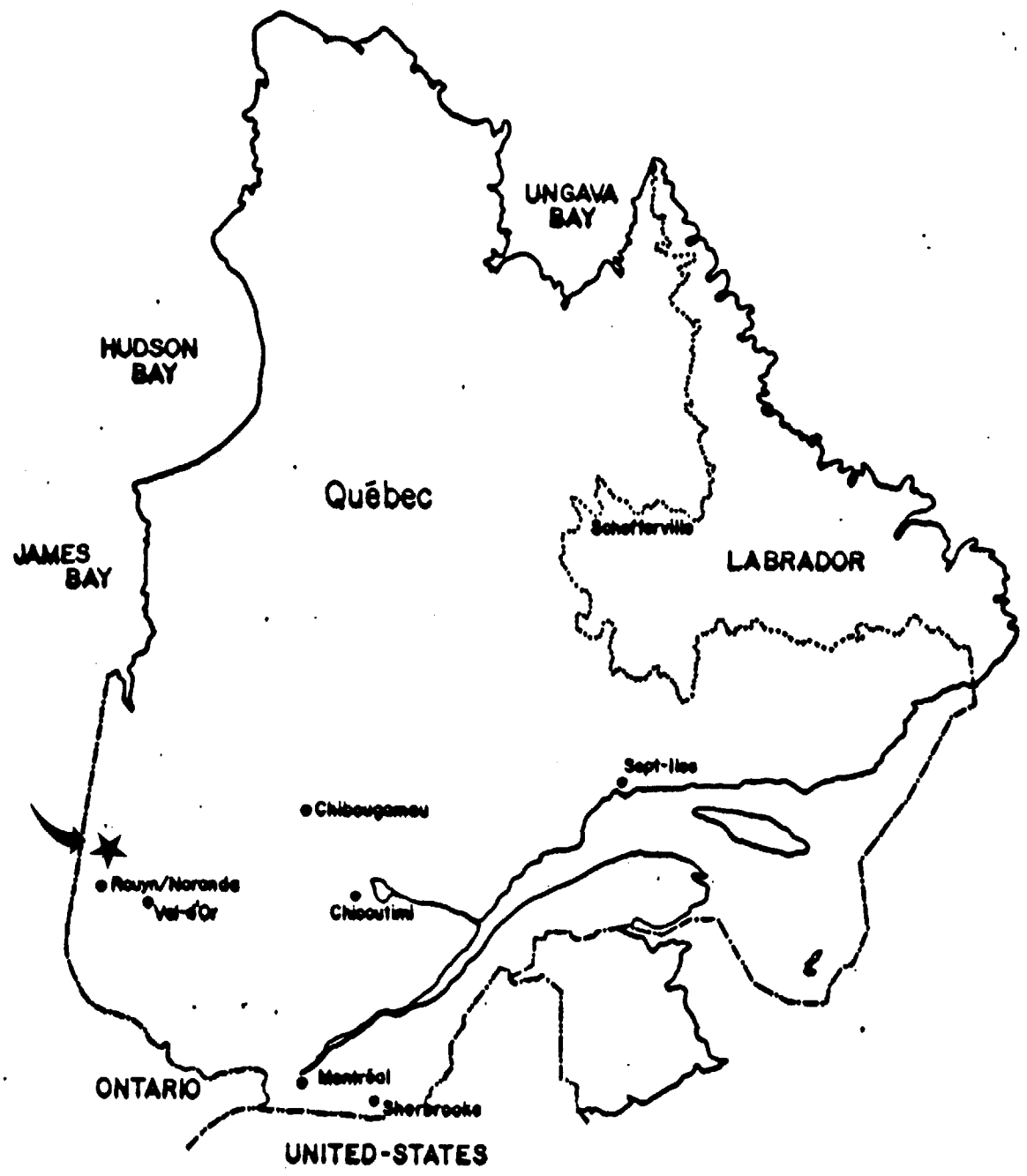
At the request of Mr. M. Smerchanski on behalf of Eldorado Gold Mines Inc., geological mapping and sampling of a portion of the Destor property, located in Duparquet and Destor Townships, northwestern Quebec, was undertaken during the month of May 1988.

The survey was conducted in order to outline major alteration zones and structural features possibly related to the gold bearing Destor-Porcupine regional fault system. Representative rock samples were collected from the property. Fourteen (14) samples were sent for gold analysis.

PROPERTY DESCRIPTION

The Destor property consists of 85 unsurveyed mining claims located in the southeastern portion of Duparquet Township within the Duparquet town limits and 6 surveyed lots or portions thereof located in the southwestern quadrant of Destor Township. A complete list of licenses is given in Appendix I.

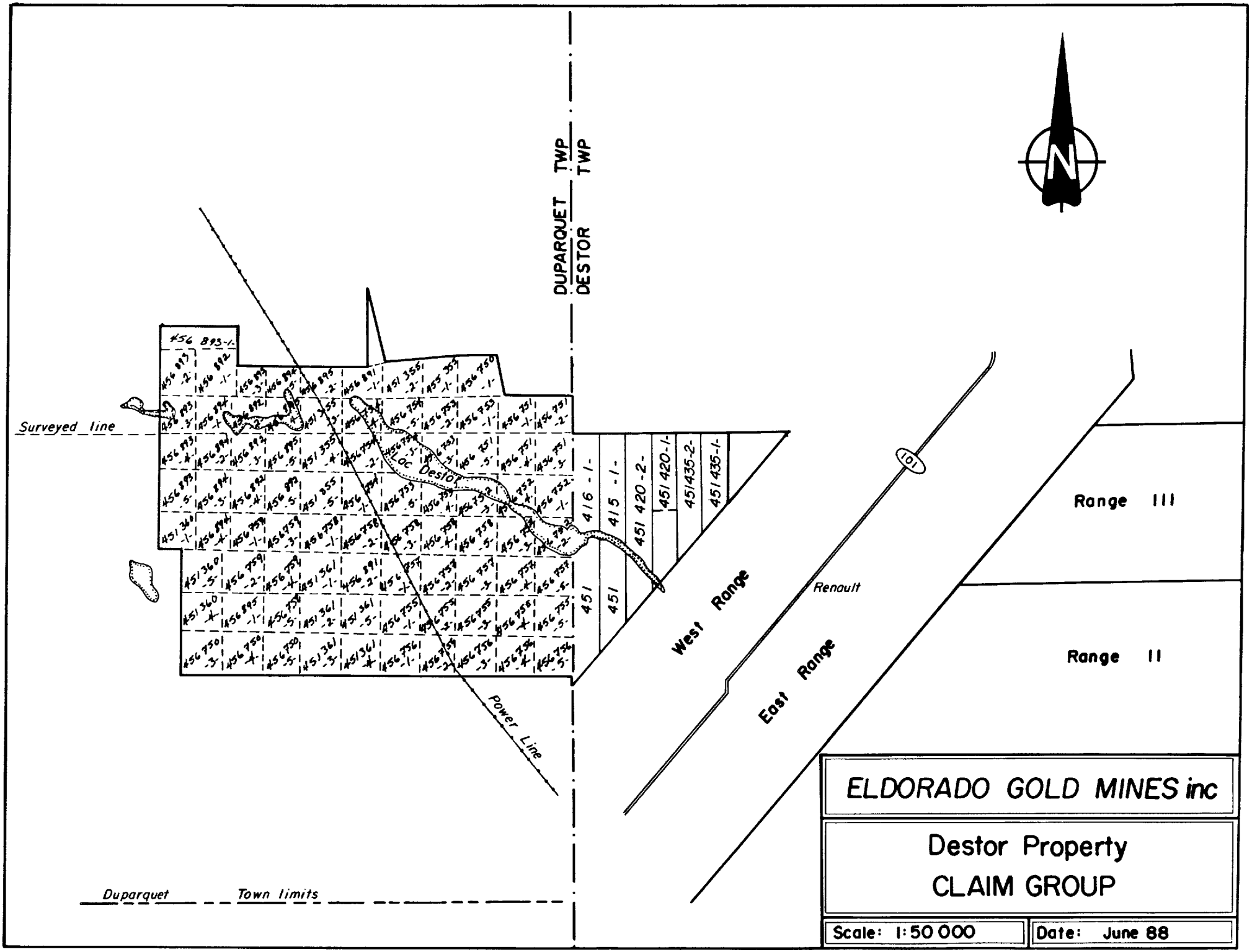
Eldorado Gold Mines Inc. is the registered owner of the claims.



ELDORADO GOLD MINES INC

LOCATION MAP

DUPARQUET TOWNSHIP, QUEBEC


DUPARQUET TWP
DESTOR TWP
N
Surveyed line
Loc. Destor
416 - 1-
415 - 1-
451 420 - 2-
451 420-1-
451435-2-
451435-1-
451
451
West Range
East Range
Renault
101
Range III
Range II
Power Line
Duparquet Town limits
ELDORADO GOLD MINES inc
Destor Property
CLAIM GROUP
Scale: 1:50 000
Date: June 88

LOCATION AND ACCESS

The Destor property straddles Duparquet and Destor Townships approximately 25 km north-northwest of the mining center of Rouyn-Noranda and 10 km southeast of the town of Duparquet. Lac Destor covers a portion of the northeastern quadrant of the group of claims.

Access to the property is provided via highway # 101, for a distance of 24 km north of Rouyn-Noranda. A navigable creek crosses highway # 101 and leads to Lac Destor 3 km west. The property may also be reached in this manner by snowmoblie during the winter months.

GENERAL GEOLOGY

The property overlies Archean rocks within the Abitibi gfeenstone belt which is in the Superior province of the Canadian shield.

The Duparquet-Destor-Porcupine fault system passes through the center of Duparquet and Destor townships in an east-southeasterly direction. This ore bearing structure is 60 mile long and extends from Timmins, Ontario, through Matheson then to Duparquet and on through to the Barraute area in Quebec.

Numerous gold and base metal deposits as well as past and current producers of these metals occur along the Duparquet-Destor-Porcupine fault zone as well as along subsidiary splays associated with this regional structure. The Duquesne Mine which has produced 81,902 t of 10.46 g / T Au and has an estimated reserve of 72,700 t of 12.67 g / T Au occurs along this regional structure, 8 km northeast of the Destor property.

Duparquet and Destor townships are predominantly underlain by intermediate to mafic metavolcanic rocks of the Kinojevis group north of the Duparquet-Destor-Porcupine fault and of the younger Blake River group south of the fault system. Narrow metasedimentary bands belonging to the Duparquet group occur in the central region of

the townships on either sides of this regional fault. Felsic metavolcanics invaded by mafic dykes make up the southern portion of the townships, while the Palmarolle granitic batholith underlies their northern extremity. Diabase, diorite and gabbro dykes cut the rock formations. Younger felsic porphyrytic intrusives often associated with gold mineralization are locally noted along fault and shear zones.

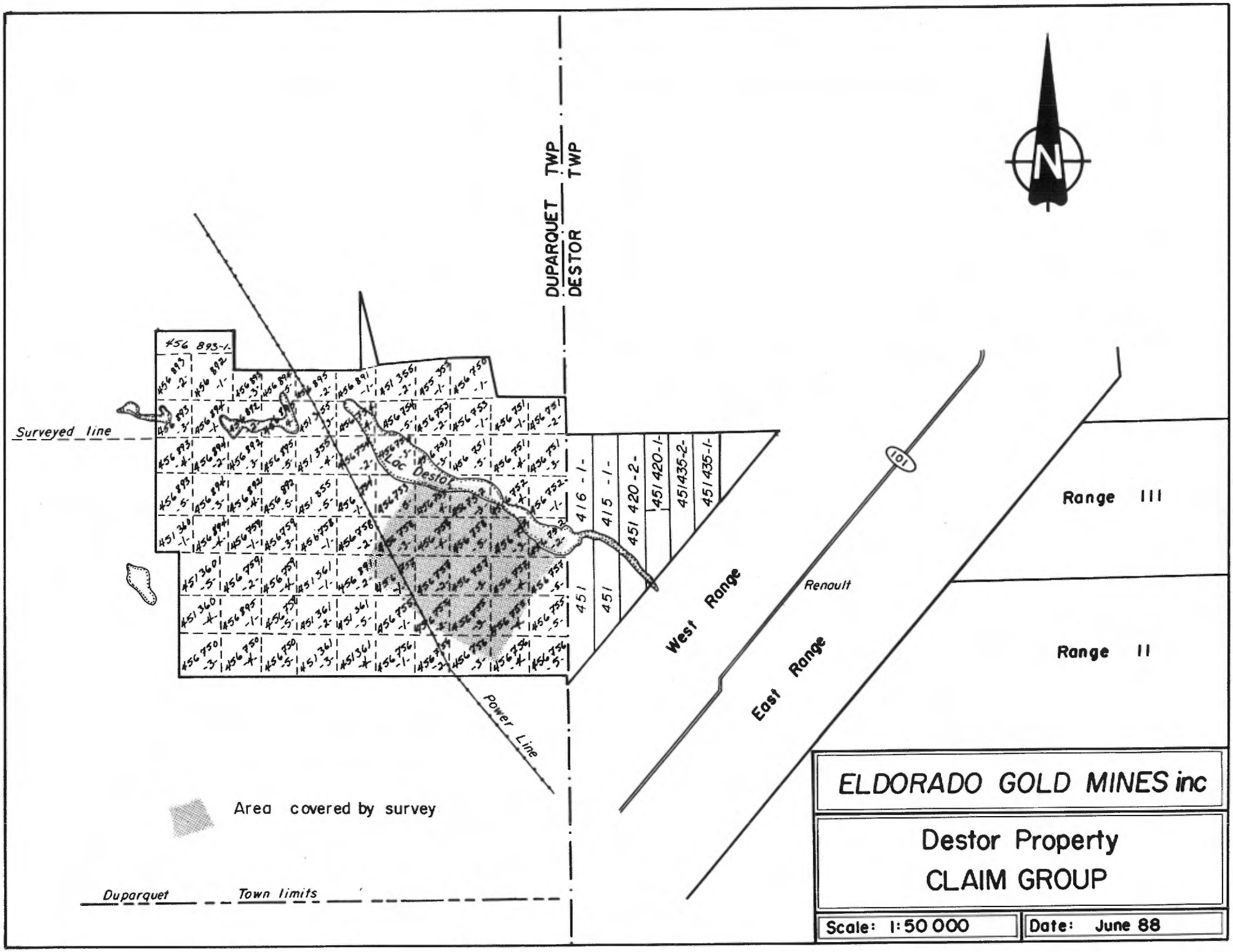
PROPERTY GEOLOGY

The geological survey was conducted on previously cut lines extending southwestward from the shore of Lac Destor. A total of 25 km of line was covered by the present survey.

The topography of the gridded area consists of a series of east-southeasterly trending ridges separated by low lying swampy ground. Outcrops make up 35 % of the surveyed area. The portion of the property covered by the present survey will hereafter be refered to as "the property".

The property lies on the south limb of the Lake Abitibi anticline. It is made up of intermediate, massive to pillowed, metavolcanic rocks of the Blake River group intruded by diabase, diorite and quartz feldspar porphyry dykes.

The predominant rock type found on the property is a fine grain to sugary, light to medium grey, massive, quartz eyed dacitic flow (V4). Pillows with a southeasterly top direction are common in this rock type.


DUPARQUET TWP
DESTOR TWP
N
Surveyed line
Loc Destor
416 -1-
415 -1-
451 420-2-
451420-1-
451435-2-
451435-1-
West Range
East Range
Renault
101
Range III
Range II
Power Line
Area covered by survey
Duparquet
Town limits
ELDORADO GOLD MINES inc
Destor Property
CLAIM GROUP
Scale: 1:50 000
Date: June 88

A wide band of medium grey, sugary, massive andesitic flow (V6) was noted in the southwestern portion of the gridded area.

Several outcrops in the central and eastern regions of the property display intermediate metavolcanic characteristics typical of a transition zone between dacite and andesite (V6-V4). These rocks have been grouped with the dacitic flows.

East-west striking diabase and diorite dykes cut the rock formations. A southeasterly striking quartz-feldspar porphyry intrusive was noted on lines 4+00 E / 2+50 S, 11+00 E / 2+40 S and 12+00 E / 1+00 S. This dyke seems to be faulted off between lines 11+00 E and 12+00 E.

Weak to moderate carbonatization, weak silicification and weak chloritization was noted on the property.

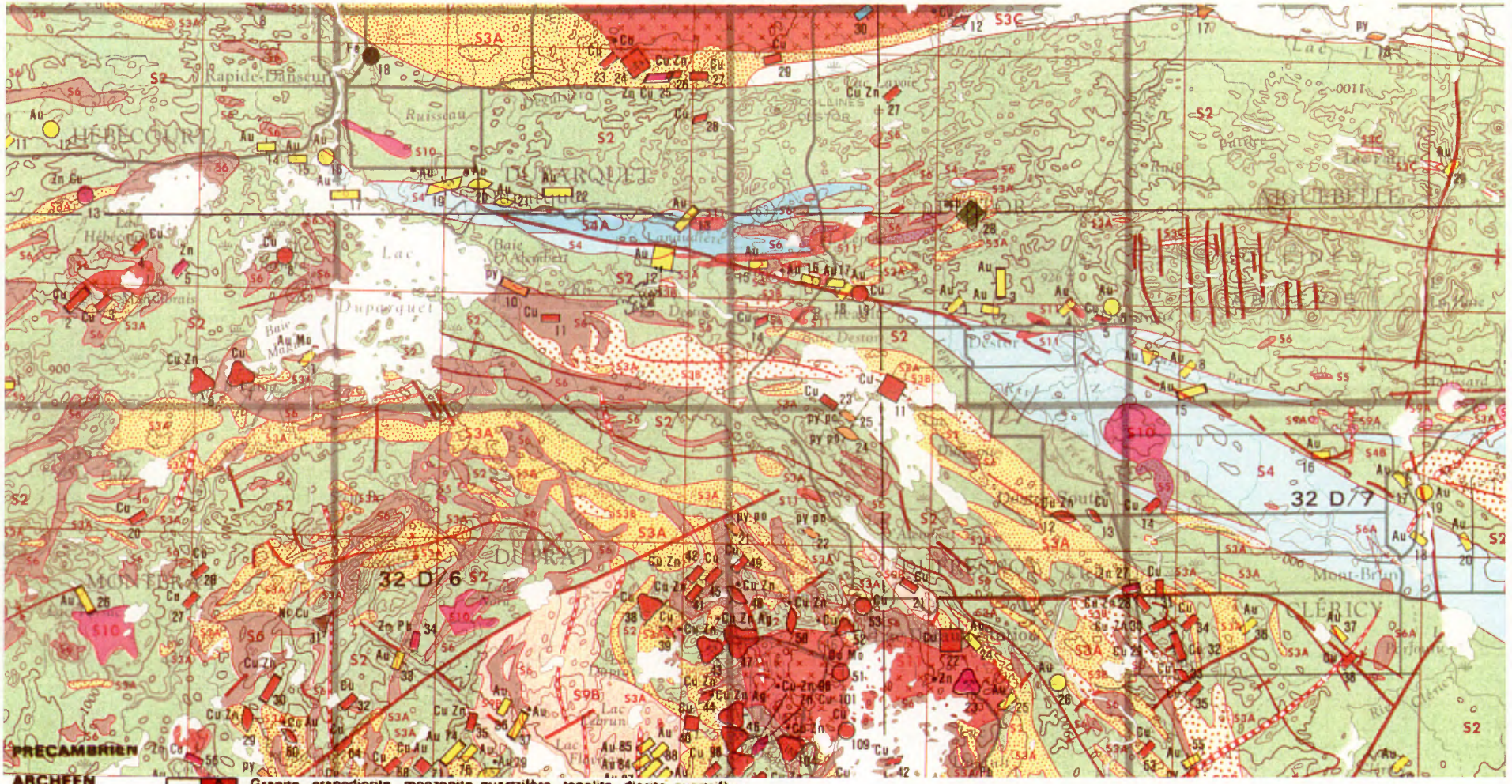
The rocks on the property are cut by sub-vertical jointing oriented between 340 and 014 degrees. East-southeasterly trending shear zones were observed on lines 12+00 E / lakeshore, 16+00 E / 4+50 S and 17+00 E / 5+25 S. These shears could correspond to subsidiary splays off the glod bearing Duparquet-Destor-Porcupine fault system 3 km to the north.

Pyrite mineralization varying between trace to 10 % is common on the property. Semi-massive, 3 cm wide, pyrite veins were noted on line 16+00 E in a 1 meter wide sheared, rusty dacite. Chalcopyrite and pyrrhotite mineralization were occasionaly noted.

ECONOMIC GEOLOGY

The Destor property has never been the object of a detailed exploration program probably due its geographic location with respect to the Duparquet-Destor-Porcupine fault system. Previous exploration efforts have mostly been concentrated north or very close to this structural disturbance which hosts numerous gold deposits, zones and showings. Gold is found associated with finely disseminated pyrite along fracture and shear zones near porphyrytic dykes, in pyrite-chlorite-carbonate veinlets and in highly silicified breccia zones. Secondary cross-cutting faults (N-NE direction) and acute angle faults (+/- E-W direction) also seem to localize mineralized zones. Such mineral localizing structures known to occur on the Destor property have not been explored adequately.

Between 1950 and 1974, sporadic work consisting of reconnaissance mapping and geophysical surveys performed on portions of the Destor property indicated the presence of shear zones, quartz feldspar porphyry dykes and strong southeasterly trending electromagnetic conductors. Limited drilling (825 feet) returned values of 0.01 oz / T Au over 10 feet in a strongly sheared mineralized zone.



S11 Granite, granodiorite, monzonite quartzifère, tonalite, diorite quartzifère, pegmatite; un peu de syénite et monzonite; roches hybrides par endroits

S2 Roches volcaniques intermédiaires et mafiques indifférenciées; roches volcaniques felsiques, roches sédimentaires, intrusions mafiques par endroits

S4 Roches sédimentaires clastiques indifférenciées: conglomérat, arkose, grauwacke, argilite, ardoise, siltstone, shale, formation ferrifère; équivalents plus métamorphiques et roches mafiques intrusives et volcaniques par endroits

S9A Granodiorite: monzonite quartzifère, diorite quartzifère et syénite par endroits

S3A Rhyolite, rhyodacite, dacite; roches pyroclastiques et/ou sédimentaires par endroits

S3B Roches pyroclastiques felsiques; laves felsiques par endroits

ELDORADO GOLD MINES INC

REGIONAL + ECONOMIC GEOLOGY MAP

scale: 1: 250,000
source: QDM Map M 308

Representative rock samples were collected during the mapping program. Fourteen samples were assayed for gold. A value of 0.02 oz / T Au was obtained in a quartz eye dacite containing 5 % disseminated pyrite, 50 meters south of a quartz feldspar porphyry dyke (DES - 06, L 11+00 E / 2+80 S). The other samples returned gold values ranging between a trace and 0.005 oz / T (see Appendix III for assay results).

GEOPHYSICS

In 1986 government sponsored airborne magnetometer and INPUT surveys (DP 86-17 A and DP 86-17 B) were conducted on a region covering the Destor property.

The magnetometer survey revealed a homogeneous east-southeasterly trending pattern parallel to stratigraphy across the entire property. Values obtained ranged, from south to north, between 750 and 1150 gammas above local background. A ground geophysical survey performed during the fall of 1987 on the area mapped returned similar results. The diabase dykes noted on the gridded area do not have a magnetic signature.

The INPUT survey detected the presence of two east-southeasterly trending conductors in the western and south-central portions of the group of claims. The present geological survey did not cover this area. The INPUT conductors were never tested and remain to be explained.

In 1974, Saxony Mines Inc. conducted a magnetometer and VLF electromagnetic survey south of Lac Destor, within the gridded portion of the property. Three southeasterly trending conductors were outlined. The western extention of the northernmost conductor was

Microfilm

PAGES DE DIMENSION HORS STANDARD

MICROFILMÉE SUR 35 MM ET

POSITIONNÉE À LA SUITE DES

PRÉSENTES PAGES STANDARDS

Numérique

PAGES DE DIMENSION HORS STANDARD

NUMÉRISÉES ET POSITIONNÉES À LA

SUITE DES PRÉSENTES PAGES STANDARDS

tested by two drill holes. According to the Quebec Government Geocompilation map 32 D / 06, these drill holes would be located in the vicinity of Eldorado's base line at 6+00 E. The conductor was attributed to a major mineralized shear zone which returned gold values of 0.01 oz / T over 10 feet. The other conductors obtained were never tested. No follow up work is filed.

CONCLUSIONS AND RECOMMENDATIONS

The Destor property occurs in a geological setting conducive to the formation and accumulation of mineral deposits. The portion of the property covered by the present survey consists of intermediate to mafic metavolcanic flows cut by diabase, diorite and quartz feldspar porphyry dykes. Pyrite mineralization is common throughout the gridded area and grab samples returned values ranging between trace and 0.02 oz / T in gold.

Airborne and ground geophysical surveys covering the property, or portions thereof, indicated the presence of strong southeasterly trending electromagnetic conductors. Drill holes testing a portion of one of these anomalies returned values of 0.01 oz / T Au over 10 feet.

In the light of the data presented above, a second phase of exploration is recommended on the Destor property. The work will consist of extending the existing grid to cover the INPUT electromagnetic conductors mentionned above, followed by a Max Min II electromagnetic survey in an attempt to accurately locate these conductors with respect to the Eldorado grid. A VLF electromagnetic survey should take place over a portion of the already existing grid to relocate

the shear zone detected by Saxony Mines and which yielded anomalous gold values. Geological mapping and sampling of the newly cut grid as well as further sampling of the area covered by the present survey could assist in explaining the nature of the geophysical conductors.

Encouraging results from this phase of exploration would justify a diamond drilling program.

The second phase of exploration is estimated at $ 54,000. A proposed budget has been enclosed.

Respectfully submitted,

Chantal Patenaude, B. Sc.
Meegwich Consultants Inc.

BUDGET

PHASE II

LINE CUTTING	60 KM @ $ 225 / KM	$ 13,500
MAX MIN II SURVEY	75 KM @ $ 135 / KM	$ 10,125
VLF SURVEY	35 KM @ $ 85 / KM	$ 2,975
MAPPING AND SAMPLING including report, drafting, assays etc..		$ 15,500
SUPERVISION, COMPILATION AND SUMMARY REPORT		$ 5,000
SUB TOTAL OF PHASE II		$ 47,100
CONTINGENCIES ~ 15 %		$ 6,900
TOTAL OF PHASE II		$ 54,000

C E R T I F I C A T E

I, CHANTAL PATENAUDE, OF ROUYN-NORANDA, QUEBEC, CERTIFY THAT:

I am a Consulting Geologist and reside at 212 Perreault St. Ouest, # 1, Rouyn-Noranda, Province of Quebec

I graduated from McGill University in 1983 with a BSc degree in geology

I am a member of the Prospectors and Devolopers Association of Canada, the Association des Prospecteurs du Quebec, the Association Professionnelle des Geologues et des Geophysiciens du Quebec and the Geological Association of Canada

I have no interest, direct or indirect, in the property of Eldorado Gold Mines Inc. nor do I expect to receive any.

The ownership of the claims has been verified with the Ministry of Natural Resources of Quebec.

Signed in Rouyn-Noranda, this seventh day of June nineteen eighty eight (1988)

Chantal Patenaude, Geologist
Meegwich Consultants Inc.

APPENDIX I

LIST OF LICENSES

LICENSE	CLAIMS	LOT	RANGE	TOWNSHIP
451416	1	1	III	
461415	1	2	III	
451420	1	3	III	DESTOR
451420	2	4	III	
451435	1	5	III	
451435	2	6	III	
451354	1			
451355	1,2,3,4,5			
451360	1,4,5			
451361	1,2,3,4,5			
456750	1,3,4,5			
456751	1,2,3,4,5			
456752	1,2,3,4,5			
456753	1,2,3,4,5			
456754	1,2,3,4,5			
456755	1,2,3,4,5			DUPARQUET
456756	1,2,3,4,5			
456757	1,2,3,4,5			
456758	1,2,3,4,5			
456759	1,2,3,4,5			
456891	1,2			
456892	1,2,3,4,5			
456893	1,2,3,4,5			
456894	1,2,3,4,5			
456895	1,2,3,4,5			

APPENDIX II

SAMPLE DESCRIPTION

DES - 01 A

Medium grey, fine to medium grain, siliceous dacitic flow. Mineralization consists of 1 - 2 % pyrite. Rock not assayed.

DES - 01 B

Medium grey, fine to medium grain, dacitic flow, rusty along fracture planes. Mineralization consists of 1 - 2 % pyrite and 1 % pyrrhotite.

DES - 02

Medium grey, sugary intermediate to mafic metavolcanic rock, transition between dacite and andesite, contains 1 % quartz eyes being replaced by pyrite. Rock not assayed.

DES - 03

Light grey, fine grain, dacitic flow, contains 4 % quartz eyes. Mineralization consists of 3 % pyrite rosettes.

DES - 04

Chloritized diabase dyke. Mineralization consists of a trace of fine grain pyrite. Rock not assayed.

DES - 05

Buff to rusty color, strongly altered rock. Fracturing well developed. Mineralization consists of 1 % pyrite.

DES - 06

Light grey, fine grain, fresh looking, quartz eyed dacite. Mineralization consists of 3 % pyrite. Assay result = 0.02 oz / T Au.

DES - 07

Light to medium grey, sugary intermediate to mafic rock, transition between dacite and andesite, contains 1 % pyroxene crystals. Mineralization consists of 2 % pyrite occasionally replacing the mafic crystals.

DES - 08

Light grey, sugary, fresh looking, dacitic flow. Mineralization consists of 2 % disseminated pyrite. Rock not assayed.

DES - 09

Strongly altered, broken up, sheared, rusty, siliceous rock. Mineralization consists of 1 % very fine grain pyrite.

DES - 10

Greenish-grey, fine grain, dacitic to andesitic flow. Mineralization consists of 2 % pyrite cubes and 1 % fine grain pyrite.

DES -11

Light grey, fine grain, dacitic flow. 10 % quartz eyes, 2 % chlorite blebs, weak epidote alteration of the quartz eyes. Mineralization consists of 2 % pyrite.

DES - 12

Strongly altered, sheared, rusty along fracture planes, bleached rock. Mineralization consists of 5 % to semi-massive pyrite, 2 % chalcopyrite and pods of graphite. Assay result = 0.005 oz / T Au.

DES - 13

Medium grey, sugary, intermediate to mafic rock, transitional between dacitic and andesitic flows. 3 % quartz and plagioclase crystals, cut by thin calcite veins. Mineralization consists of 2 % fine grain pyrite. Assay result = 0.005 oz / T Au.

DES - 14

Light to medium grey, fine grain, moderatly sheared intermediate rock. Rusty weathering along fracture planes. Mineralization consists of 2 - 4 % pyrite, trace of chalcopyrite and graphite pods. Assay result = 0.005 oz / T Au.

DES - 15

Medium grey, sugary, sheared dacitic flow. Mineralization consists of 5 % to semi-massive pyrite in veinlets and disseminated.

DES - 16

Light grey, fine grain, pitted, siliceous dacitic flow, cut by calcite veinlets. Mineralization consists of 3 % pyrite blotches.

DES - 17

Medium grey, sugary, strongly altered, sheared, siliceous, dacite. Cut by quartz-calcite veinlets, rusty weathering along fracture planes. Mineralization consists of 8 % disseminated pyrite. Assay result = 0.005 oz / T Au.

APPENDIX III

ASSAYERS LIMITED

QUEBEC: 183 RUE GAMBLE O., C.P. 665 · ROUYN-NORANDA, J9X 2R8 TEL.: (819) 762-3010 FAX : 762-0471

ONTARIO: 8 KING STREET EAST, SUITE 1709, TORONTO · M5C 1B5 TEL.: (416) 366-3100

CERTIFICATE OF ANALYSIS

FOR *Meegwich Inc.*

LAB NO.	SAMPLE NO.	GOLD OZ. PER TON	SILVER OZ. PER TON	COPPER %	ZINC %			
55716	DES 1	Trace	GOLD CHECKS					
7	3	Trace						
8	5	Trace						
9	6	0.02						
55720	7	Trace						
1	9	Trace						
2	10	Trace	Trace, Trace					
3	11	Trace						
4	12	0.005						
5	13	0.005						
6	14	0.005						
7	15	Trace						
8	16	Trace						
55729	DEs 17	0.005						

DATE June 3, 1988

CERTIFIED CORRECT

UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.
SAUF MENTION CONTRAIRE, LES ESSAIS POUR L'OR ET L'ARGENT, NE SONT PAS CORRIGES POUR LES PERTES ET GAINS QUI SONT INHERENTS AU PROCEDE D'ANALYSE.

ETA

APPENDIX IV