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PROPOSED EXPLORATION PROGRAM, PROPERTIES OF DITTON, CHESHAM AND EMBERTON

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CACHE EXPLORATIONS INC.

PROPOSED EXPLORATION PROGRAM ON GOLD PLACER PROPERTIES OF DITTON, CHESHAM AND EMBERTON TOWNSHIPS OF QUEBEC

August 18, 1987

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Description, situation et accès:

Les terrains miniers consistent en un bloc contiguë d'une superficie approximative de 198 lots ou 9,110.4 hectares (22,512.5 acres) dans les cantons de Ditton, Chesham et Emberton, soit dans la région de l'Estrie au Québec. Un total de 66 lots ou 2,948.1 hectares (7285 acres) dans les trois cantons est propriété entière de Explorations Cache Inc.,8 lots ou 323.7 hectares (800 acres) dans Ditton est sous option de J.C. Cossette et les autres 124 lots ou 5,838.5 hectares (14,427.5 acres) dans les trois cantons sont détenus par Cache (85%) et Minerais Lac Ltée (15%).

Les terrains miniers sont situés à environ 50 kilomètres directement à l'est de Sherbrooke, Québec. Ils sont facilement accessibles de la route 257 reliant La Patrie à Chartierville et allant vers le sud jusqu'au Maine, Etats-Unis. Un réseau de routes secondaires rend les terrains accessibles en plusieurs endroits.

L'électricité, l'eau, l'hébergement, de la main d'oeuvre qualifiée et non qualifiée sont tous disponibles dans la région.

L'auteur a visité la propriété en trois occasions différentes soit les 30 juin et 14 novembre 1985 et le 3 septembre 1986.

Historique:

Les placers aurifères également de Ditton ont été découverts en 1863 et de l'or a également été découvert dans plusieurs autres rivières de la région mais "Le seul placer aurifère qui fut exploité systéematiquement est celui du ruisseau Mining sur la concession Pope; des statistiques imprécises de Chalmers, Obalski et Goodwin montrent qu'entre 1866 et 1889 l'extraction a rapporté entre 0.4 tonne et 2.2 tonnes d'or au prix de 20$ l'once." (R.A. Marleau, D.Sc. 1984, après une étude complète de l'information disponible dans les dossiers du Ministère de l'Energie et des Ressources du Québec et d'autres sources). Chalmers,R était géologue à la Commission Géologique du Canada,Obalski,J était Surintandant des Mines au département de la Colonisation et des Mines du Québec (1881 à 1909) et Goodwin,W.G. était géologue au bureau des Mines, Ottawa.

Par après et jusqu'en 1940, différentes sociétés minières et particuliers ont exploité les alluvions du ruisseau Mining d'une façon artisanale et avec peu de succès. Digne de mention durant cette période a été le travail de la société

Embergold Mines Ltd., sous la direction du Dr. Robert Harvie (1934-39), laquelle opérant à partir d'un puits de 7.6 m (25') de profondeur sur le lot 14, Rang X de Ditton, a foncé des travers-bancs sur 442 m (1450') et une galerie de plus de 503 m (1650') en suivant l'ancien lit du ruisseau Mining. De 1940 à 1954, il n'y a eu aucune activité minière d'enregistrée. Différentes sociétés ont prospecté la région de 1954 à 1983.En 1981-82 Ressources Claude Inc., et Lac Mineral Exploration procédèrent à un levé aéroporté suivi de levés géophysiques et géochimiques au sol. Ces travaux définirent 14 cibles dont certaines furent forées mais sans grand succès.

Travaux précédents de Explorations Cache Inc.:

Depuis 1983, Explorations Cache Inc., a travaillé de façon intensive sur ses terrains miniers.

Programme de 1983 - 84: ($162,000)

En 1983-84, un total de 110,000$ a été dépensé pour des travaux de géophysique, de déboisage, de coupe de lignes et d'échantillonnage de sols, incluant les analyses en laboratoire. Les autres dépenses ont été reliées aux frais d'incorporation et autres frais connexes.

Un lit de rivière profondément enfoui dans la région de la rivière Ditton a été localisé et ceci est devenu la base du programme d'exploration de 1985.

Programme de 1985: ($840,000.00)

Ce programme a coûté 840 000$ et a consisté en les travaux suivants:

- coupe de lignes (38.91 km)
- relevé de sismique-réfraction (38.915 km)
- relevé électromagnétique (16.88 km)
- relevé magnétique (36.15 km)
- routes d'accès (57.96 km)
- forage au marteau (churn drilling) (501.25 m)
- géologie
- forage au diamant (3 sondages)
- puits d'essai (78 puits)

Le forage dans la région de la rivière Ditton a été peu profond et n'a pas réussi à localiser de graviers aurifères tertiaires profondément enfouis.

Toutefois, l'échantillonnage de la région du ruisseau Mining, lots 39 et 40, Rang IX de Ditton, par des puits d'essai, a permis à D. Parent, ing., de calculer des réserves de graviers aurifères peu profonds à 535,000 m^3 titrant 0,368 gr Au/m^3.

Il est difficile d'estimer avec précision les teneurs de tout placer à moins qu'un échantillon en vrac ne soit traité. Prenant en considération le manque de continuité d'une section à l'autre, le manque d'informations détaillées sur la méthode d'échantillonnage suivie et le fait qu'aucun échantillon en vrac n'ait été traité, ces réserves sont classifiées ici comme géologiques et dans la catégorie possible.

Géologie

Les dépôts de placers aurifères de la région sont pré-glaciaires et constitués d'argile, de fragments de roc plus ou moins décomposés, de quartz, cailloux et sables.

Le type de placers le plus fréquent dans l'Estrie est éluvial et a été formé durant des périodes pré-glaciaires par la désagrégation du roc qui avait été profondément altéré lorsque le climat était chaud et humide.

Le mouvement de la calotte glaciaire a eu peu d'effet sur certains de ces placers. Les glaciers peuvent avoir dispersé certains dépôts éluviaux, les rendant de valeur non économique mais c'est dans les anciens lits de rivière qu'on peut s'attendre à trouver des dépôts pré-glaciaires intacts étant donné qu'ils sont encaissés dans le roc. Un tel lit a été suivi avec succès par Harvie dans la région du ruisseau Mining.

Les réserves de graviers aurifères calculées par D. Parent, ing., sont situées dans la même région. Ces réserves s'étendent sur moins d'un kilomètre et sont situées en ou près de la surface dans du matériel glaciaire partiellement remanié.

Programme d'exploration

La philosophie du programme d'exploration de 1987 est de donner la priorité à la région du Mining Brook où des graviers aurifères ont été localisés sur les lots 39 et 40, Rang IX de Ditton sur moins d'un kilomètre le long du ruisseau Mining Brook.

Le ruisseau Mining Brook coule sur les propriétés de Cache Explorations Inc., de sa source près de la frontière avec les Etats-Unis dans une direction du sud au nord pour environ cinq (5) kilomètres, jusqu'au lot 9, Rang XI de Ditton où il change sa course pour se diriger de l'ouest vers l'est jusqu'au lot 41, Rang IX de Ditton pour un autre cinq (5) kilomètres. Cette dernière section est particulièrement favorable étant plus ou moins perpendiculaire à la direction des glaciers. Des graviers aurifères pré-glaciaires situés dans les lits encaissés perpendiculaires à la direction des glaciers ont pu être exemptés du processus de remobilisation par érosion durant les périodes glaciaires.

La philosophie du programme d'exploration est de procéder du connu vers l'inconnu, utilisant des relevés sismiques par réfraction pour localiser et suivre l'ancien lit enfoui du Mining Brook et de vérifier celui-ci pour l'or avec du forage par circulation inverse. Avec une longueur de dix (10) kilomètres du ruisseau Mining disponible sur la propriété, le potentiel est grand de trouver des graviers aurifères vierges ou non remobilisés, de valeur économique dans l'ancien lit de rivière principal mais aussi dans ses tributaires.

L'interprétation des photographies prises par satellite de toutes les propriétés de Explorations Cache Inc., sera faite suivie d'une visite d'un tel expert sur la propriété. Ceci servira à indiquer par photogrammétrie des anciens lits de rivière enfouis.

En plus de la région du Mining Brook, une autre région qui sera explorée est la rivière Ditton-Est, lots 1 à 14 du Rang I d'Emberton, où des valeurs élevées en or ont été localisées à partir d'échantillonnages de sédiments de ruisseaux. D'autres régions pourront être investiguées dépendant des résultats obtenus sur les premières cibles d'exploration et de l'interprétation des photographies prises par satellite.

L'interprétation des photos-satellite Landsat, le levé sismique-réfraction et le forage par circulation inverse sont toutes des techniques utilisées avec succès sur la propriété de placer aurifère de Valdez Creek en Alaska, U.S.A., dans un environnement géologique et glaciaire semblable.

Les levés sismiques-réfraction devront être complétés avec des espacements de géophones n'excédant pas neuf (9) m ètres. Les équipes de sismique devront fournir leur propre topographie de telle sorte qu'il n'y ait aucun délai dans l'interprétation de leurs résultats. De plus, elles devront avoir accès à un ordinateur portatif afin d'être en mesure de transmettre les résultats dès que les lignes sont complétées.

Les foreuses par circulation inverse devront être équipées d'un compresseur de capacité suffisante et utiliser des forêts modifiés afin d'assurer la récupération des pépites d'or. Les sondages devront avoir un minimum de cinq (5) pouces de diamètre.

Un programme de puits d'essai est planifié dans le but de confirmer premièrement les résultats obtenus durant le programme de 1985 et ensuite d'étendre le volume de graviers aurifères dans les endroits où le roc affleure près de la surface. Le traitement d'un échantillon en vrac suivra.

ESTIMES DES COUTS DU PROGRAMME:

		MIN.PROGRAM		MAX.PROGRAM	
		UNITES	COUT	UNITES	COUT
A-	Relevé de sismique-réfraction	20 km	108,500	60 km	318,000
B-	Sondages et échantillonage	1500 m	181,875	5000 m	554,200
C-	Préparation et traitement des échantillons	300	64,700	750	131,900
D-	Puits d'essai	30	33,400	48	50,500
E-	Traitement d'un échantillon en vrac	2000 m^3	81,650	10,000m^3	339,000
F-	Etude environmentale et permis		10,000		10,000
G-	Photogrammétric (Landsat)		15,000		15,000
H-	Rapport final		15,000		25,000
I-	Gérance		45,000		120,000
J-	Divers et imprévus (10%)		55,500		156,400
		TOTAL:	$ 610,625		$1,720,000

Le 18 août 1987

SUMMARY

Description, Location and Access

The property consists of a contiguous block of approximately 198 lots or 9,110.4 hectares (22,512.5 acres)in the townships of Ditton, Chesham and Emberton, in the Eastern Townships of Québec. A total of 66 lots or 2,948.1 hectares (7,285 acres) in the three townships are owned outright by Explorations Cache, Inc., 8 lots or 323.7 hectares (800 acres) in Ditton are under option from J.C. Cosette and 124 lots or 5,838.5 hectares (14,427.5 acres) in the three townships are held by Cache (85%) and Lac Minerals Ltd.,(15%).

The properties are located some 50 kilometers due east from Sherbrooke, Québec. They are easily accessible from highway 257 leading La Patrie to Chartierville then south to Maine USA. A network of secondary roads renders the property accessible in many locations.

Power, water, housing, unskilled and skilled labour are readily available in the area.

The author has visited the property on three different occasions: on June 30 and November 14, 1985 and on September 3, 1986.

History

The Ditton gold placers were discovered in 1863 and gold was also found on various other rivers of the area but "The only gold placer that was exploited systematically is on Mining Brook, that is the Pope's concession. Inaccurate statistics by Chalmers, Obalski and Goodwin show that from 1866 to 1889, some 0.4 ton to 2.2 ton of gold at $20.00 an ounce were extracted from that concession" (R.A. Marleau, 1984, after a complete study of the available information in the files of the Québec Department of Energy and Resources and of other sources). Chalmers, R. was geologist at the Geological Survey of Canada, Obalski, J. was Superintendent of Mines at the Department of Colonization and Mines of Quebec (from 1881 to 1909) and Goodwin, W.G. was Geologist with the Bureau of Mines, Ottawa.

Thereafter and until 1940, various mining companies and individuals have placer mined on Mining Brook. Worth of mention during that period were the work of Embergold Mines, Ltd., under the direction of Dr. Robert Harvie during 1934-39, which operating through a 7.6 m (25') deep shaft on Lot 14 Range X Ditton, cross-cutted some 442 m (1450') and drifted over 503 m (1650') following the old channel of Mining Brook. From 1940 to 1954, there is no record of mining activity. Various companies have prospected the area from 1954 to 1983.

In 1981-82, Claude Resources Inc., and Lac Minerals Exploration have done an airborne survey followed by ground geophysics and geochemistry. These programs have defined anomalies amongst which some were drilled but without much success.

Previous work by Cache Explorations, Inc.

Since 1983, Cache Explorations, Inc., has done extensive work on the properties.

1983-84 Program: ($162,000)

In 1983-84, a total of $110,000 has been spent on geophysical surveys, bush slashing, line cutting and soil sampling including laboratory analysis. The other expenses have been related to incorporation costs and related expenses.

A deep river channel has been located in the Ditton River area and this became the basis for the 1985 exploration program.

1985 Program: ($840,000.00)

This program has cost $840,000. and consisted of :

- Line cutting (38.91 km)
- refraction seismic survey (38.915 km)
- electromagnetic survey (16.88 km)
- magnetic survey (36.15 km)
- access roads (57.96 km)
- churn drilling (501.25 m)
- geology
- diamond drilling (3 holes)
- test pits (78 pits)

The drilling in the Ditton area was shallow and did not locate any deep tertiary gold bearing gravels.

However sampling the Mining Brook area, lots 39 and 40, Range IX of Ditton, by test pitting has permitted D. Parent, P. Eng., to calculate shallow pay gravel reserves of a gold placer at 535,000 M^3 with a grade of 0.368 gr Au/M^3.

It is difficult to estimate accurately the grades of any placer unless a bulk sample is treated. Taking into account the lack of continuity from one section to the next, the lack of detailed information on the sampling method used and the fact that no bulk sample was treated, these reserves are classified here as geological and in the possible category.

Geology

The auriferous placer deposits of the area are pre-glacial and consist of clay, more or less decomposed fragments of bedrock, quartz, pebbles and sand.

The most widespread type of placers in the Eastern Townships is eluvial and was formed in pre-glacial times by the desaggregation of deeply altered bedrock when climatic conditions were warm and damp.

The movement of the ice-sheet has had little effect on some of these placers. The glaciers may have dispersed some of the eluvial deposits rendering those of no economic value, but this is in the old river channels that one can expect to find undisturbed pre-glacial deposits since they are encased in the bedrock. Such channel has been successfully followed by Harvie in Mining Brook area.

The pay gravel reserves calculated by D. Parent, P. Eng. are located in the same area. These reserves extend for less than one kilometre and are located at or near the surface, in glacial material partially remobilized.

Exploration Program:

The philosophy of the 1987 exploration program is to give priority to the Mining Brook area where gold bearing gravels and a pre-glacial channel have been located on lots 39 and 40, Range IX of Ditton for less than one kilometer along Mining Brook.

Mining Brook flows on Cache Properties from its source near the U.S. border in a south to north direction for about five (5) kilometers to lot 9, Range XI of Ditton where it change its course to a west to east direction to lot 41, Range IX of Ditton for another five (5) kilometers. This latter section is especially favourable as it is roughly perpendicular to the direction of the glaciers. Pre-glacial gold bearing gravels located in encaved channels perpendicular to the direction of glaciers could have been left undisturbed by erosion during the glaciation periods.

The philosophy of the work program is to work from the known to the unknown using seismic refraction surveys to locate and follow Mining Brook paleochannel and to test it for gold with reverse circulation drilling. With a ten (10) kilometer length of Mining Brook available on the property, there is a lot of potential to find undisturbed or virgin gold bearing gravels of economic value in the main paleochannel and also in its tributaries.

A satellite imagery interpretation of all the Cache Explorations claims will be done followed-up with a visit of such an expert on the property. This serves to indicate buried paleochannels from photogrammetry.

In addition to Mining Brook area, another area to be explored is on Ditton River East, lots 1 to 14 of Range I, Emberton, where high gold values of stream sediments samples were located. Other areas may be investigated depending on the results obtained on the first exploration targets and the satellite imagery interpretation.

Landsat interpretation, seismic refraction and reverse circulation drilling were all techniques used successfully at the Valdez Creek Gold Placer property in Alaska, U.S.A., in a similar geological and glaciation environment.

The seismic refraction survey should be conducted with geophone spacings not exceeding nine (9) meters. The seismic crews should provide their own topography in order to prevent delays in the interpretation of their results. Furthermore, they should be equipped with a portable computer such that they can provide results as each survey line is completed.

The reverse circulation drills should have adequate compressor capacity and use modified drill bits to ensure gold nuggets recovery. The drill holes should have a minimum of five (5) inches in diameter.

A test pit sampling program is planned in order to confirm first the results obtained during the 1985 program and then to extend the volume of gold bearing gravels in the areas where the bedrock is near surface. A bulk sample treatment should follow.

ESTIMATED COSTS:

	MIN.PROGRAM		MAX.PROGRAM	
	UNITS	COST	UNITS	COST
A- Seismic-Refraction Surveys	20 km	108,500	60 km	318,000
B- Drilling and Sampling	1500 m	181,875	5000 m	554,200
C- Sample prep.and treatment	300	64,700	750	131,900
D- Test Pits	30	33,400	48	50,500
E- Bulk Sampling	2000 m^3	81,650	10,000m^3	339,000
F- Environment Study & Permit		10,000		10,000
G- Landsat survey		15,000		15,000
H- Final Report		15,000		25,000
I- Management		45,000		120,000
J- Contingency (10%)		55,500		156,400
	TOTAL:	$ 610,625		$1,720,000

August 18, 1987

1.0 INTRODUCTION

Mr. Leroy Shaw, President of Cache Explorations Inc., has requested Florent J. Gauthier & Associates, Inc., to review some recent reports done on Cache properties in the Eastern Townships of Quebec and to recommend a work program for 1987.

The reports thus provided are as follows :

- APPLIED INFORMATION RESOURCES INC.
  "RESULTS OF SEISMIC REFRACTION SURVEYS, SAUMON RIVER AND DITTON RIVER AREAS, EASTERN TOWNSHIPS REGION, QUEBEC, CANADA - FINAL REPORT. January 1986.

- HOPKINS, P.M., Consulting Mining Geologist and Engineer, Golder, Colorado. "CACHE EXPLORATIONS INC., - THE LA PATRIE PROJECT AREA, GOLD PLACER CLAIMS, DITTON, CHESHAM AND EMBERTON TOWNSHIPS, PROVINCE OF QUEBEC, CANADA ". December 20, 1985.

- MARLEAU, R.A., D. Sc., Géologue conseil.
  Services Géotechniques Shickshocks Inc.
  "CACHE EXPLORATIONS INC.,
  RAPPORT GEOLOGIQUE SUR LA PROPRIETE DE DITTON-CHESHAM, CANTONS DE DITTON ET CHESHAM, QUEBEC." June 15, 1983.

- MARLEAU, R.A., D. Sc., Géologue conseil.
  Services Géotechniques Shickshocks Inc.
  "CACHE EXPLORATIONS INC.,
  RAPPORT GEOLOGIQUE SUR LES PLACERS AURIFERES DE DITTON ET CHESHAM, QUEBEC." March 15, 1984.

- PARENT, D. P. Eng.
  Douglas Parent Consultant Ltd.
  "TECHNICAL REPORT ON THE CACHE EXPLORATIONS INC.
  GOLD PLACER CLAIMS LOCATED IN THE TOWNSHIPS OF CHESHAM, DITTON, AND EMBERTON, IN COMPTON AND FRONTENAC COUNTIES, PROVINCE OF QUEBEC." April 1985.

- PARENT, D. P. Eng.
  Douglas Parent Consultant Ltd.
  "PROGRESS REPORT ON THE GOLD BEARING GRAVELS OF MINING BROOK."
  March 11, 1986.

1.0 INTRODUCTION (Continued)

- PARENT, D. P. Eng.
  Douglas Parent Consultant Ltd.
  "YEAR END REPORT, CACHE EXPLORATIONS INC., IN THE DITTON, CHESHAM & EMBERTON TOWNSHIPS, MEGANTIC - COMPTON COUNTIES, SOUTH-EASTERN QUEBEC." April 1986

- Géochemical Map of Stream Sédiments in Chesham, Ditton, Emberton Townships, property of Cache Explorations Inc. and claims in Option from Lac Minerals Ltd. (1984).

- List of claims held, acquired or optioned by Cache Explorations Inc.

It should be noted that R.A. Marleau's first report "is based largely on a complete study of the data available on the files of the Department of Energy and Resources of Québec and other sources."

In the first report of Douglas Parent, he writes that "this report is based on my intimate knowledge of placer deposits and technical literatures pertinent to the Ditton area."

I have therefore taken generalities, geology and historical parts from the provided reports.

I have added my own observations and comments, and proposed a work program.

I have visited the property on three different occasions: on June 30 and November 13, 1985 and on September 3, 1986.

2.0 PROPERTY AND LOCATION

The properties are located some 50 kilometers due east from Sherbrooke, Quebec. The location is shown on Fig. -1-. They are easily accessible from highway 257 leading La Patrie to Chartierville then south to Maine USA. A network of secondary roads renders the properties accessible in many locations.

Power, water, housing, unskilled and skilled labour are readily available in the area.

The properties consist of three groups of claims as follows:
(See Appendix - I - Claim Map and Appendix -II- List of Claims)

- EXPLORATIONS CACHE INC., (owned outright)

	Lots	Hectares	Acres
Bloc A-1 *Ranges V, VI and VII of Ditton:	14	566.6	1400
" A-2 *Ranges IX and X of Ditton and IX, X and XI of Chesham :	34	1375.9	3400
" A-3 * Ranges IX and X of Ditton	6	485.6	1200
" A-4 * Range X of Ditton	4	155.8	385
" A-5 * Range I and II of Emberton	8	364.2	900
Sub-total	66	2948.1	7285

- CACHE-LAC MINERALS (Owned by Cache 85%, Lac Minerals 15%)

Bloc B-1 *Ranges VI and XI of Chesham, " V, VII,IX and X of Ditton and " I of Emberton :	102	4462.6	11027.5
" B-2 * Ranges X and XI of Ditton	12	971.2	2400
" B-3 * Range I of Emberton	10	404.7	1000
Sub-total	124	5838.5	14427.5

- CACHE OPTION (optioned from J.C. Cossette):

Bloc C-1 * Range IX of Ditton	8	323.7	800
Sub-total	8	323.7	800
TOTAL	198	9110.4	22512.5

INDEX MAP — LIEU DE LA CARTE

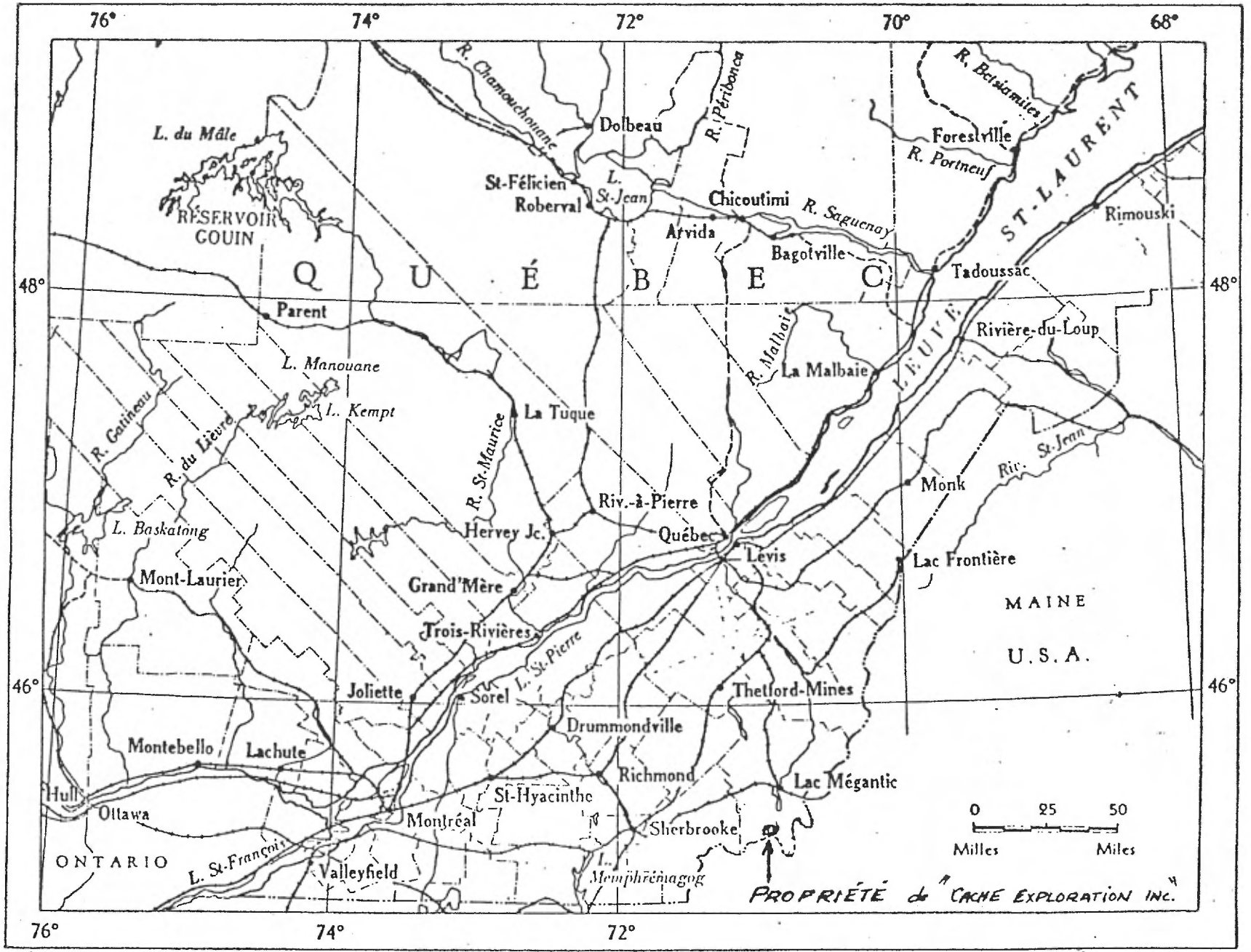

Fig. -1- Reproduced from R.A.Marleau's report dated January 15, 1983 for Cache Explorations Inc.

3.0 TOPOGRAPHY AND DRAINAGE

The area close to the International boundary is rugged with several peaks rising above 850 m. However, the highest peak is Mount Megantic which rises to a height of 1105 m which is some 600 m above the plain which it dominates.

The International boundary marks the divide between northward and southward drainages. Steep slopes are gradually levelling off to the plain-like surface of Ditton-Chesham.

The area drains into three major rivers, the Salmon which follows a general northwesterly course and its main tributaries, the Ditton which drains from the south while the Chesham drains westerly. Mining Brook is a tributary of the Ditton river and drains from the south.

4.0 GEOLOGY OF DITTON GOLD PLACERS

R.A. Marleau (1983) has provided a comprehensive summary of the "Unconsolidated deposits of clay, sand and gravel."

I will list here some of the important points that he has made.

4.1 Pre-Glacial Deposits

- Pre-glacial deposits do not appear in the headwaters of streams, where the flow of water is small and the slopes steep.

- According to McGerrigle (1934), the material consists of clay, more or less decomposed fragments of bedrock, quartz pebbles and sand.

- Where clay is abundant, the yellow color resulting from oxidation of its large content of iron minerals is characteristic.

- The heavy constituents, or those which remain with the gold when the sand is panned, are dominantly black. Magnetite and pyrite are the most common minerals, with ilmenite, garnet, rutile, epidote, and zircon in less abundance.

- Many of the mineral grains are but little worn, as is true also of some of the gold, indicating that transportation by the streams has been over but a short distance.

- The total thickness of pre-glacial deposits seldom exceeds 5' (1.5 m) although greater thicknesses have been reported.

- The fact that these gold-bearing deposits, wherever found, directly overlie bedrock, with the material in some places extending down 2'(0.6 m) or more into bedrock cracks, makes it clear that they are the oldest unconsolidated deposits in the area.

- In summary, evidence points to a pre-glacial age for the gold-bearing deposits in the Ditton-Chesham area.

4.2 Glacial Till

- Till, or ground moraine, is the most widespread of the glacial deposits, occuring as an almost continuous mantle over the area.

- The till consists of boulders and pebbles, either embedded in a matrix of bluish-gray clay or lying loose on the surface of the ground. The boulders and pebbles are mainly of local rock.

4.3 Stratified Glacial Deposits

- Stratified deposits that are probably in large part related to glacial conditions are conspicuously developed. They consist of gravel and sand in widespread occurence, together with meager deposits of clay and silt.

- At La Patrie village, stratified gravels and sands occur that are notable for their thickness of 200' (61 m) the regularity of dip of the beds, and the fact that definite terraces have developed.

4.4 Direction of Movement of Ice-sheet

- McGerrigle has shown that glacial striae and gouges have an average direction of 37 deg. south of east, or about directly northwest-southeast.

- The vast majority of the boulders that have been glacially moved are southeast of their bedrock sources.

- All of these evidences indicate that the ice moved, in general, from the northwest to the southeast.

- The movement of the ice-sheet has had little effect on some of the placers of the Eastern Townships, simply because the most widespread type of placers is eluvial and was formed in pre-glacial times by the desagregation of deeply altered bedrock when climatic conditions were warm and damp.

- The glaciers may have dispersed some of the eluvial deposits on distances of one (1) or two (2) kilometers and has rendered those of no economic value, therefore of no interest.

- The important point is to outline eluvial placers in situ.

5.0 HISTORY

At the mouth of the Gilbert river, a tributary of the Chaudière in the Beauce area, placer gold was first found in 1823. But it was in 1863 that the real gold rush occured when 72 ounces of gold was found during the same day. Many shafts were sunk in the area but most of the gold came from the Gilbert river.

It was also in 1863 that the Ditton placers were discovered by "an Indian", Archie Anniss, student at Dartmouth College about that time. (L.S.Channell, 1896).

The Hon. J.H. Pope obtained the mining rights over an area of about 5000 acres (2023 hectares) in 1868, and his principal operations were on Mining Brook, near the bridge on the La Patrie-Chartierville road.

R.A. Marleau (1983) states that :
" Placer mining has been carried on at various times along each of the streams, or rivers, mentioned below :

1) Mining Brook (Little Ditton River), from near its junction with the Ditton river for about two miles upstream;

2) Ditton River, from a point about half a mile above Little Canada road to the junction with Mining Brook;

3) Chesham River, on the branch heading in Megantic mountain west of Saint-Joseph's church, for two miles downstream from the edge of the mountain;

4) Salmon River, from a point half a mile above the Little Canada road upstream for three-quarters of a mile;

5) Salmon River, in Chesham township, about half a mile east of the Chesham-Ditton boundary.

Gold has been found elsewhere along the streams mentioned and other streams, but not to the same extent as in the locations mentioned before."

R.A. Marleau (1984) also states after a complete study of the available information on the files of the Québec Department of Energy and Resources and of the other sources that :
"The only gold placer that was exploited systematically is on Mining Brook, that is the Pope's concession. Inaccurate statistics by Chalmers, Obalski and Goodwin show that from 1866 and 1889, some 0.4 ton to 2.2 ton of gold at $20 an ounce were extracted from that concession." Chalmers R. was a Geologist at the Geological Survey of Canada, Obalski, J. was Superintendent of Mines at the Department of Colonization and Mines of Québec (from 1881 to 1909) and Goodwin, W.G. was Geologist with the Bureau of Mines, Ottawa.

5.0 HISTORY (Continued)

It can be read in R.A. Marleau (1983) that "Attempts at mining have been carried out on the original Pope holdings since his death. Obalski reports that, in 1889, three parties of miners were working on small claims, and that on one of these he saw 30$ (717$ at today's price) worth of gold, including a piece worth 15$ (358$), collected in one day. In 1891, the mines were sold to the Ditton Gold Mining Company of Toronto. This company sank some shafts and installed machinery just above the bridge on Mining Brook, but, not meeting with success, it abandonned operations in 1893."

"Then, for almost forty years, any property or mining in the area was done by individuals, except that in 1910 the Alleghany's Gold Mining Company prospected in Ditton township. There is no official record of their findings".

"In the Summer of 1931, Roy Stewart and Robert Harvie, of Montreal, became interested in the Ditton area (and) now control the whole central part of the Ditton placer area."(Goodwin 1933).

"During 1932, the course of the pre-glacial stream was traced by Harvie along the lower part of the valley of Mining Brook."

"Actual mining, by sluicing, was carried out for a part of the 1933 season on Mining Brook a few hundred feet above the bridge (La Patrie-Chartierville road). During 1934 and 1935 no mining was done and only a small amount of development work; by 1938 (GM-9697) the underground drifts and cross cuts had reached 1001 feet and at that stage, R. Harvie still found its work encouraging but commercial production was never recorded."

D. Parent (1985) gives more precision on the work done by Harvie: "From 1934 until 1939, Embergold Mines Limited, under the direction of Dr. Robert Harvie, operating through a 25' deep shaft on lot 14 Range X Ditton, cross-cutted some 1450' and drifted over 1650' following the old channel."

He quotes the Quebec Bureau of Mines report for 1935, part E (McGerrigle) as follows: the alluvial gold deposits of Ditton and Little Ditton (Mining Brook) rivers on Ditton township were the scene of prospecting and testing by the Gold River Syndicate, which was organized for the purpose. A thousand feet of trenching was made on lots 42 and 43 of Range VIII. A shaft was sunk on lot 42 of Range IX, with 40 feet of drifting to the middle of the old bedrock channel. On lot 14 of Ranges X and XI, other excavating and tests by sluicing were conducted."

5.0 HISTORY (Continued)

R.A. Marleau reports other informations as follows: " A property on the Salmon river just east of the boundary between Chesham and Ditton townships was worked several years ago (this is close to the property under study). A few pits and a short tunnel were opened, but there is no official record of the amount of gold taken out. Some development work was done here in 1935-38, but the results are not known to the writer."

"Churn drill exploration on the Ditton-Chesham area was first introduced in 1958-59 when Jacobus Mining (GM-7769, GM-8629) used this method at about the same time as Beauce Placer Mining carried out the evaluation of its gold deposits along the Gilbert river. The writer visited both operations at the time and learned about the difficulty of churn drill sampling - which was the inaccuracy to provide at a specific level a complete sample of the yellowish gold bearing clay."

D. Parent wrote as follows on The Jacobus Mining Program of 1958-59: "This company put down some 6 air track holes to test the river gravels and bedrock contact for its gold content in the following rivers :

Saumon River, Ditton Township: There were 3 holes put down at -45 deg. on a section striking N 45 deg., E to cross the river channel. These holes were located in the north part of lots 51-52 Range VII. Fine flour gold was recovered from the sludges but no quantitative gold values calculated.

Chesham River, Ditton Townships: There were 3 air track holes put down at -45 deg. on a section striking N-S across the river channel. These holes were located on the south part of lot 52; Range VI. Fine flour gold was recovered from the sludges but no quantitative gold values calculated."

R.A. Marleau has summarized as follows the work of Claude Resources Inc. and Lac Mineral Exploration Co.: " In 1981-82, Claude Resources and Lac Mineral Exploration Co. launched an extensive and modern exploration program in the Ditton - Chesham area in view of outlining both placer gold deposits and mother-lode or vein-type deposits. First, an airborne electromagnetic survey (GM-37720) was flown over the entire southern halves of both townships. The airborne survey was followed by networks of line cutting over the conductive zones where detail geology (GM-37718) and detail ground magnetic and electromagnetic surveys were completed. Where conductive zones were present, detail soil sampling and stream sediment sampling were done (GM-37719). The results are that several conductors are associated to geochemical anomalies. These coinciding data constituted at least fourteen (14) targets which were recommended for drilling. The latter program is being completed."

6.0 PREVIOUS WORK BY CACHE EXPLORATIONS INC.

6.1 1983-84 Program: ($162,000.00)

In 1983-84, a total of $110,000 has been spent on geophysical surveys, bush slashing, line cutting, and soil sampling, including laboratory analysis. The other expenses have been related to incorporation costs and related expenses.

The results obtained by the geochemical soil sampling and the certificates of analysis are available in "Report on the Geochemical Sampling Survey" 1984, by R.A. Marleau (GM-42487).

A deep river channel has been located in the Ditton River area and this became the basis for the 1985 exploration program.

6.2 1985 Program: ($840,000.00)

The basis of the program was actually the deep river channel reported on the Ditton river during the 1984 program.

The theory stated by Mr. Parent (1985) was that " The present junction of the Mining Brook and the Ditton is at 420 m elevation (above mean sea level) the deep lead of the Ditton is at 360 m elevation, a difference of 60 meters or 197 feet. From my deduction, this is the reason why no placer gold of any consequence was found in other streams except that of "colluvial trains" washing down the hillsides into the present streams or from till that has been reworked and, which till contained some gold transported from other pre-glacial streams close by and deposited in small amounts, in some of the present stream beds.

From my observations, I believe that the source of gold in Mining Brook was from granite stocks, in the close vicinity southerly of Mining Brook and close to the Ditton and/or from remobilized gold in the sediments."

The work accomplished can be described as follows :

6.2.1 Line cutting

A total of 38.91 km of lines with spacings varying from 30 to 250 m.

6.2.2 Refraction Seismic Survey

The work was done by Applied Information Resources Inc., Syracuse, N.Y., using a Geopro, 24 channel Model 8024 Seismograph and later resorted to an EG & G 12 channel Seismograph Model E.S. 1210 F.

The seismic lines were done in the following areas :

Saumon	3.72 km
Chesham	1.63 "
Ditton	6.40 "
Mining Brook	1.40 "
East Mining Brook	18.50 "
Range X	4.98 "
	Total 37.30 km

In addition to the above work, Aurizon Enrg. Geophysical Company has conducted 1.615 km of seismic-refraction survey over the Mining Brook on two East-West lines using a 24 channel AEM trio Model E.S. 1210 F apparatus.

The spacing of the geophones used by Aurizon Enrg. is not mentioned in Mr. Parent's report but Applied Information Resources Inc., state in their report (1986) that during PHASE I, they had used 720 feet (219.5 m) per spread (30' or 9.1 m between geophones) and during PHASE II, it was 550 feet (167/6 m) per trace, (50' or 15.2 m between geophones).

"The purpose of the seismic program was to define depths to bedrock and thickness of the glacial drift, overburden cover (Pleistocene) in order to interpret the substructure bedrock topography."
(D. Parent, 1986)

6.2.2 (Continued)

He also states that : "The area that had been surveyed in Ditton Township in 1985 was the target area on which the present program was launched. Depths of 70 to 90 meters (230 - 295') were indicated suggesting a deep tertiary valley and on which depths I based my report. Subsequent churn drilling and a new seismic survey indicated depths ranging from 13 to 42 m only.

All the drilling done in the Ditton area was shallow and did not locate any deep tertiary gold bearing gravels."

It should be noted here that Applied Resources has made this comment on page 15: "The lack of elevation survey data in areas with undulating topography made the determination of apparent velocities very difficult." The topography was actually done by other people than the seismic crew.

6.2.3 Electromagnetic Survey.

"There were 16.88 km of lines surveyed with a Geonics EM 16 instrument, by Cache technical crew, using two transmitting stations NAA & NSS, 7.4 KH and 21.7 KH on a 30 m spacing of grid lines over the Ditton river and Ditton East Extension area." (Parent, 1986)

6.2.4 Magnetic Survey.

"There were 36.15 km of lines surveyed using a Proton Magnetometer on a 30 m spacing of grid lines over the same area as the EM 16 survey. The above two surveys indicated strong magnetic lineaments and fairly high magnetic geological formations favorable to hosting gold bearing quartz lenses." (Parent, 1986)

6.2.5 Access Roads.

A total of 56 km built in Ditton Township and 1.96 km in Mining Brook.

6.2.6 Churn Drilling.

A total of 26 churn drill holes as follows :

Saumon River	3 holes	for	138.41 m
Chesham River	3 "	"	87.28 m
Ditton River	12 "	"	104.60 m
Range X	8 "	"	90.96 m
Total	26 holes	"	501.25 m

The churn drilling program is commented as follows by Mr. Parent (1986) :

"Only one churn drill hole #17, on range Line X intersected what could be the channel of a tributary stream, this churn drill hole returned important gold values which will be followed up by more drilling in this area at a later date."

The values obtained in hole #17 are not mentioned by Mr. Parent.

6.2.7 Plotted Geology.

"The geology was plotted on those areas of shallow overburden where rock outcrops appeared in the riverbeds."

6.2.8 Diamond Drilling Program.

Three diamond drill holes drilled on a strong shear zone have intersected andesites containing quartz stringers mineralized with pyrite and containing tourmaline.

6.2.9 Sampling Mining Brook.

A total ot 78 pits were dug with a backhoe. From these pits, D. Parent has calculated pay-gravel reserves which are shown here in a summary.

PAY GRAVEL RESERVES

CATEGORY	VOLUME	GRADE		VALUE CONT.
	M^3	gr/M^3	$\$/M^3$	$
Proven	196,636	0.410	6.30	1,238,504
Probable	137,990	0.416	6.40	882,917
Possible	200,000	0.368	5.65	900,000
Total	534,626	0.368	5.65	3,021,421

Gold value at $478. Cdn. per troy oz.

The location of the reserves and cross-sections are shown in Appendix -3-.(One should not that in Appendix -3- the legend is provided only on Plan 3/3 but applies for Plan 1/3 and Plan 2/3) The area sampled is from approximately 50 meters west of highway 257, up to 600 meters in the western direction and extends approximately from Mining Brook to 150 metres north.

The cross-sections illustrate the old buried Mining Brook channel from 3 to 5 meters below surface and 25 to 75 meters north of the present Mining Brook stream.

The lack of continuity from one section to the next suggests that the pay-gravels have been remobilized either during glaciation, the present stream but most likely by former placer miners.

D. Parent's report (March 11, 1986) on the reserves is provided in Appendix -4-.

It is not a practice to do chemical analysis on placer samples as it is usually done on samples of hard rock deposits. Instead, concentrates are done with mechanical methods but generally ending with gold panning and amalgamation. The gold is afterwards weighted on site. The laboratory procedure used at Cache has been well described by Paul M. Hopkins, Consulting Mining Geologist and Engineer, in his report dated December 20, 1985, for Cache Explorations Inc.

6.2.9 Sampling Mining Brook.(Continued)

I have visited the laboratory in La Patrie on November 14, 1985 and I have found that the laboratory installations were adequate.

Commenting on "Pits and Trenches" Hopkins states that "A backhoe, capable of digging to depths of about 7 meters, was mobilized and used in a very intensive program to obtain the indications for the potential grade and reserves in the Mining Brook area. The initial results obtained during the first few days of this program confirmed the occurences of gold, and that there was more than a very limited area where the placer gold is to be found. The details of values recovered, sample descriptions, locations, and interpretation of results require the total data be available for evaluation. No attempt will be made at this time - mid-December - for any evaluation of the program. The reader of any summary of the trench and or pit exploration program must take into consideration the limited number of vertical intervals as compared to the total depth of the alluvial material, the location of the interval "sampled", the underwater digging and the volumes washed being all water saturated. Other factors may have unknown yet finite influences upon the data obtained".

The importance of all the data to be gathered has been well indicated by Hopkins. However, D. Parent does not desbribe in any detail the sampling method that was used, and all the data gathered has not been available from his report.

It is difficult to estimate accurately the grades of any placer unless a bulk sample is treated. Taking into account the lack of continuity from one section to the next, the lack of detailed information on the sampling method used and the fact that no bulk sample was treated, these reserves are classified here as geological and in the possible category.

7.0 DISCUSSIONS

The gold placer deposits of the Ditton area of economic value are geologically described as pre-glacial deposits. They were formed in pre-glacial times by the desagregation of deeply altered bedrock when climatic conditions were warm and damp. Where clay is abundant, the yellow color resulting from oxidation of its large content of iron minerals is characteristic. This yellow color is also very characteristic of the Gilbert River gold placer deposits.

During the Glaciation period, the ice-sheet moved in general from the northwest to the southeast. The glacier may have dispersed some of the eluvial deposits rendering those of no economic value. The important point is therefore to outline eluvial placers in situ.

The only gold placer that was exploited systematically in the area is on Mining Brook.

During the recent Cache Explorations Inc., programs, this is also on Mining Brook that most of the gold was found. D. Parent has calculated pay gravel reserves of 534,626 M^3 at 0.368 gr/m^3 from test pits. Out of this total he classifies 196,636 m^3 at 0.410 gr/m^3 in the proven category. As I do not have all the data available, I cannot confirm these reserves, but from a map and some data supplied by Cache Explorations Inc., I have averaged mathematically the grades obtained by Mr. Parent on the 35 pits sunk outside the actual river bed and obtained a grade of 0.348 gr/m^3. I have also averaged mathematically the results of the 38 test pits done in the actual river bed and have arrived at a grade of 0.977 gr/m^3. I would like here to caution the reader that it is very difficult to estimate accurately the grades of any placer deposit unless bulk sampling is done.

This is the case especially in the actual river bed as some of the values can depend on very local features such as a large boulder in the river causing a local gold concentration etc. My mathematical averages indicate however an order of magnitude. For instance outside the actual stream bed, the values ranged from 0 to 2.028 gr/m^3 and spread out over an area of 130 m x 600 m on the north side of the river while the values taken inside the actual river bed ranged from 0.005 to 6.558 gr/m^3 over a 1100 m length of the river and a width of 15 to 20 meters.

The lack of continuity from one section to the next suggests that in the area sampled, the pay gravels have likely been remobilized either during glaciation, the present stream but most likely by former placer miners.

7.0 DISCUSSIONS (Continued)

It is of the writer's opinion that until more work is done on the property, the reserves calculated by D. Parent should be classified as geological reserves and in the possible category.

The work done by Dr. Harvie in the 1930's is interesting as it is reported that he has located by drifting an old bedrock channel in two different areas of Mining Brook. "A shaft was sunk on lot 42 of Range IX, with 40' (12.3 m) of drifting to the middle of the old bedrock channel" (McGerrigle 1935). It has also been reported that under the direction of Dr. Harvie, Embergold Mines Ltd., operating through a 25' (7.6 m) deep shaft on lot 14, Range X, Ditton cross-cutted some 1450' (442 m) and drifted over 1650' (503 m) following the old channel.

This is in the old channels that one can expect to find undisturbed pre-glacial deposits, as being encaved in the bedrock, they could have been missed by the erosion during the glaciation. This is particularily true when such channels are roughly perpendicular to the direction of the ice movement.

In areas of limited glaciation such as the area concerned, the actual stream courses would have a tendency to follow an offset but general course similar to the pre-glacial channels.

The general course of Mining Brook on Cache Explorations claims is N-75 deg.E while the glaciation is reported at 37 deg. south of east, making an angle of 52 deg. with the course of Mining Brook. The ice-sheet which has obviously missed the channel worked out by Harvie could have also missed parallel channels, abandoned meanders etc. of pre-glacial ages.

At Valdez Creek, Alaska for instance, Tammany channel was discovered in the late 1800's and mined in the early 1900's. Following seismic work a second channel A, at a higher elevation was discovered and this is where the Valdez Creek operations were re-started in 1984. Additionnal seismic work and reverse circulation drilling resulted in the discovery of an additionnal channel, Channel B located still at a higher elevation than Channel A and constituted by abandoned meanders. These channels were encaved in the bedrock and sometimes were narrow canyons. During the early seismic refraction work the spacing of the geophones was 50' (15.2 m). This geophone spacing was reduced to 10 meters during 1984 program and even at that spacing in one instance a very narrow and deep canyon was not detected by the seismic work but in general the channels were well defined by the seismic work.

7.0 DISCUSSIONS (Continued)

Applied Information Resources Inc., has used a spacing of 9.1 m during Phase I for 2.41 km but most of their work was during Phase II for 37.30 km where they had used 15.2 m spacing. Such a spacing would detect general profiles but would miss very narrow bedrock channels.

Concerning topographic elevations that seismic crews need for their calculations, it is generally more practical to have them to provide their own elevations under contract.

At Valdez Creek, Alaska churn drilling as well as reverse circulation drilling were used in 1983. During 1984 program all drilling was done with reverse circulation, and I would like to mention that the grades predicted from drilling were matching very closely those obtained by actual mining.

Reverse circulation drilling has also been used successfully in the Beauce area on three different projects that I was involved in including the Gilbert River deposit.

Another useful technique applied in exploration at Valdez Creek has been the satellite imagery interpretation from which paleochannels were located and later successfully verified by seismic surveys and reverse circulation drilling.As Valdez Creek is in a similar glaciation environment, Landsat interpretation should also be applied to Cache properties.

8.0 CONCLUSIONS

The philosophy of the 1987 exploration program is to give priority to the Mining Brook area where gold bearing gravels and a pre-glacial channel have been located on lots 39 and 40, Range IX of Ditton for less than one kilometer along Mining Brook.

Mining Brook flows on Cache Properties from its source near the U.S. border in a south to north direction for about five (5) kilometers to lot 9, Range XI of Ditton where it change its course to a west to east direction to lot 41, Range IX of Ditton for another five (5) kilometers. This latter section is especially favourable as it is roughly perpendicular to the direction of the glaciers. Pre-glacial gold bearing gravels located in encaved channels perpendicular to the direction of glaciers could have been left undisturbed by erosion during the glaciation periods.

The philosophy of the work program is to work from the known to the unknown using seismic refraction surveys to locate and follow Mining Brook paleochannel and to test it for gold with reverse circulation drilling. With a ten (10) kilometer length of Mining Brook available on the property, there is a lot of potential to find undisturbed or virgin gold bearing gravels of economic value in the main paleochannel and also in its tributaries.

A satellite imagery interpretation of all the Cache Explorations claims will be done followed-up with a visit of such an expert on the property. This serves to indicate buried paleochannels from photogrammetry.

In addition to Mining Brook area, another area to be explored is on Ditton River East, lots 1 to 14 of Range I, Emberton, where high gold values of stream sediments samples were located. The results of stream sediment samples referred to are shown in Appendix -5-. Other areas may be investigated depending on the results obtained on the first exploration targets and the satellite imagery interpretation.

Landsat interpretation, seismic refraction and reverse circulation drilling were all techniques used successfully at the Valdez Creek Gold Placer property in Alaska, U.S.A. in a similar geological and glaciation environment.

8.0 CONCLUSIONS (Continued)

The seismic refraction survey should be conducted with geophone spacings not exceeding nine (9) meters. The seismic crews should provide their own topography in order to prevent delays in the interpretation of their results. Furthermore, they should be equipped with a portable computer such that they can provide results as each survey line is completed.

The reverse circulation drills should have adequate compressor capacity and use modified drill bits to ensure gold nuggets recovery. The drill holes should have a minimum of five (5) inches in diameter.

A test pit sampling program is planned in order to confirm first the results obtained during the 1985 program and then to extend the volume of gold bearing gravels in the areas where the bedrock is near surface. A bulk sample treatment should follow.

9.0 RECOMMANDATIONS

The recommended program is detailed as follows:

	MIN. PROGRAM		MAX. PROGRAM	
	UNITS	COST	UNITS	COST
A- SEISMIC-REFRACTION SURVEY				
Line cutting @ $125/km	20 km	2,500	60 km	7,500
Seismic refraction @ $5000/km	20 km	100,000	60 km	300,000
Geophysical report		4,000		6,000
Miscellaneous		2,000		4,500
		108,500		318,000
B- DRILLING AND SAMPLING				
Drilling footage @ $80/m	1500 m	120,000	5,000 m	400,000
Mobilization & demobilization		5,000		5,000
Senior Eng.Geol.(1) @ $500/day	20 days	10,000	32 days	16,000
Geologist (1) @ $325/day	25 days	8,125	80 days	26,000
Technicians (2) @ $250/day	20 days	10,000	60 days	30,000
Samplers (2) @ $140/day	20 days	5,600	60 days	16,800
Draftsman (1) @ $200/day	20 days	4,000	50 days	10,000
Room and Board @ $50/day	145 days	7,250	402 days	20,100
Pick-ups (3) @ $60/day	65 days	3,900	172 days	10,300
Payment to Land holders & repairs to damages		8,000		20,000
		181,875		554,200

9.0 RECOMMANDATIONS (Continued)

	MIN.PROGRAM		MAX.PROGRAM	
	UNITS	COST	UNITS	COST
C- SAMPLE PREP. AND TREATMENT	300		750	
Rental of equipment (goldsaver etc)		20,000		30,000
Lab location $500/month	4 months	2,000	4 months	2,000
Heating & electricity		1,000		1,000
Senior Engineer,Geologist (1) @ $500/day	10 days	5,000	20 days	10,000
Chemist (1) @ $300/day	30 days	9,000	80 days	24,000
Panners (2) @ $150/day	30 days	9,000	72 days	21,600
Gold Saver oper. (2) @ $150/day	30 days	9,000	72 days	21,600
Room and Board @ $50/day	170 days	8,500	398 days	19,900
Pick-=up truck @ $60/day	20 days	1,200	30 days	1,800
		64,700		131,900
D- TEST PITS:	30		48	
Bulldozer $75/hr (4hr/day)	15 days	4,500	24 days	7,200
Backhoe $85/hrs (8hr/day)	15 days	10,200	24 days	16,300
Fabrication Grizzly & Rocker		3,000		3,000
Senior Eng.Geol.(1) @ $500/day	20 days	10,000	30 days	15,000
Rocker operators (2) @ 150/day	15 days	4,500	24 days	7,200
Pick-up @ $60/day	20 days	1,200	30 days	1,800
		33,400		50,500

9.0 RECOMMANDATIONS (Continued)

	MIN.PROGRAM UNITS	MIN.PROGRAM COST	MAX.PROGRAM UNITS	MAX.PROGRAM COST
E- BULK SAMPLING	2000m^3		10,000m^3	
Rental of aggregate plant		5,000		10,000
Fabrication sluice,chute, transp. install.		9,000		9,000
Rental of pump & other equip.		2,500		5,000
Materials(pipes,clamps etc. and install.)		8,000		8,000
Preparation of Settling pond		4,000		10,000
Loader @ $70/hr (24/hrs/day)	5 days	8,400	24 days	40,000
Trucks (4) @ $50/hr (24hrs/day)	5 days	6,000	24 days	115,000
Backhoe @ $85/hr (24hrs/day)	5 days	10,200	24 days	49,000
Bulldozer @ $75/hr (8hrs/day)	3 days	1,800	12 days	7,000
Senior Engineer, Geologist(1) @ $500/day	18 days	9,000	40 days	20,000
Operator Screen Plant (2) @ $210/day (12hrs/day)	5 days	2,100	24 days	10,100
Sluice Box & pump operator (2) @ $168/day (12hrs/day)	5 days	1,700	24 days	8,100
Labourers (2) @ $112/day (12hrs/day)	5 days	1,100	24 days	5,400
Experienced technician (1) @ $350/day (12 hrs./day)	11 days	3,850	30 days	10,500
Chemist (1) Conc.Prep @$300/day	5 days	1,500	17 "	5,100
Panners (2) Conc.Prep.@$150/day	4 days	1,200	16 "	4,800
Gold Saver oper. (2)@ $150/day	4 days	1,200	16 "	4,800
Room & Board @ $50/day	80	4,000	295 "	14,800
Pick-up truck (1) @ $60/day	18 days	1,100	40 "	2,400
		81,650		339,000
F- ENVIRONMENT STUDY AND PERMIT		10,000		10,000
G- LANDSAT SURVEY		15,000		15,000
H- FINAL REPORT		15,000		25,000
I- MANAGEMENT		45,000		120,000
J- CONTINGENCY (10%)		55,500		156,400
	TOTAL:	610,625		1,720,000

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CERTIFICATE

I, Florent J. Gauthier, of 86 Creswell Drive, Beaconsfield, Quebec, Canada, H9W 1C9, do certify that :

1. I am a consultant providing engineering services in mining engineering, mine evaluations and related geological engineering and exploration.

2. I am a graduate from Laval University, Quebec City, having received the degree B.A. Sc in Geological Engineering in 1965.

3. I am a member in good standing of the Order of Professional Engineers of Quebec, certificate No. 16937. I am also a member of the Association of Professional Engineers of Ontario, certificate No. 15700115.

4. I was instrumental in bringing the Valdez Creek Gold Placer property into production in Alaska, U.S.A., and I have served as President of Valdez Creek Mining. I have gained experience in tin and diamond placers in Brazil. I have consulted on gold placer properties in Brazil, and in Quebec including consulting on the Gilbert River deposit of the Beauce area. I have visited other placer mines including gold dredging operations in Columbia, S.A.

5. I have no interest, direct or indirect, in Cache Explorations Inc., nor any direct or indirect interest in any of its mining properties, nor do I anticipate such an interest.

6. This report is based on my knowledge of placer deposits and technical reports provided to me by Cache Explorations Inc.

Beaconsfield, Québec
August 18, 1987

Florent J. Gauthier, P. Eng.
FLorent J. Gauthier & Associates Inc.

Florent J. Gauthier & Assoc. Inc.

Beaconsfield, le 18 août 1987

AUTORISATION

Commission des Valeurs
Mobilières du Québec
C.P. 246, Tour de la Bourse
Montréal (Qué)
H4Z 1G3

SUJET : EXPLORATIONS CACHE INC.

A qui de droit,

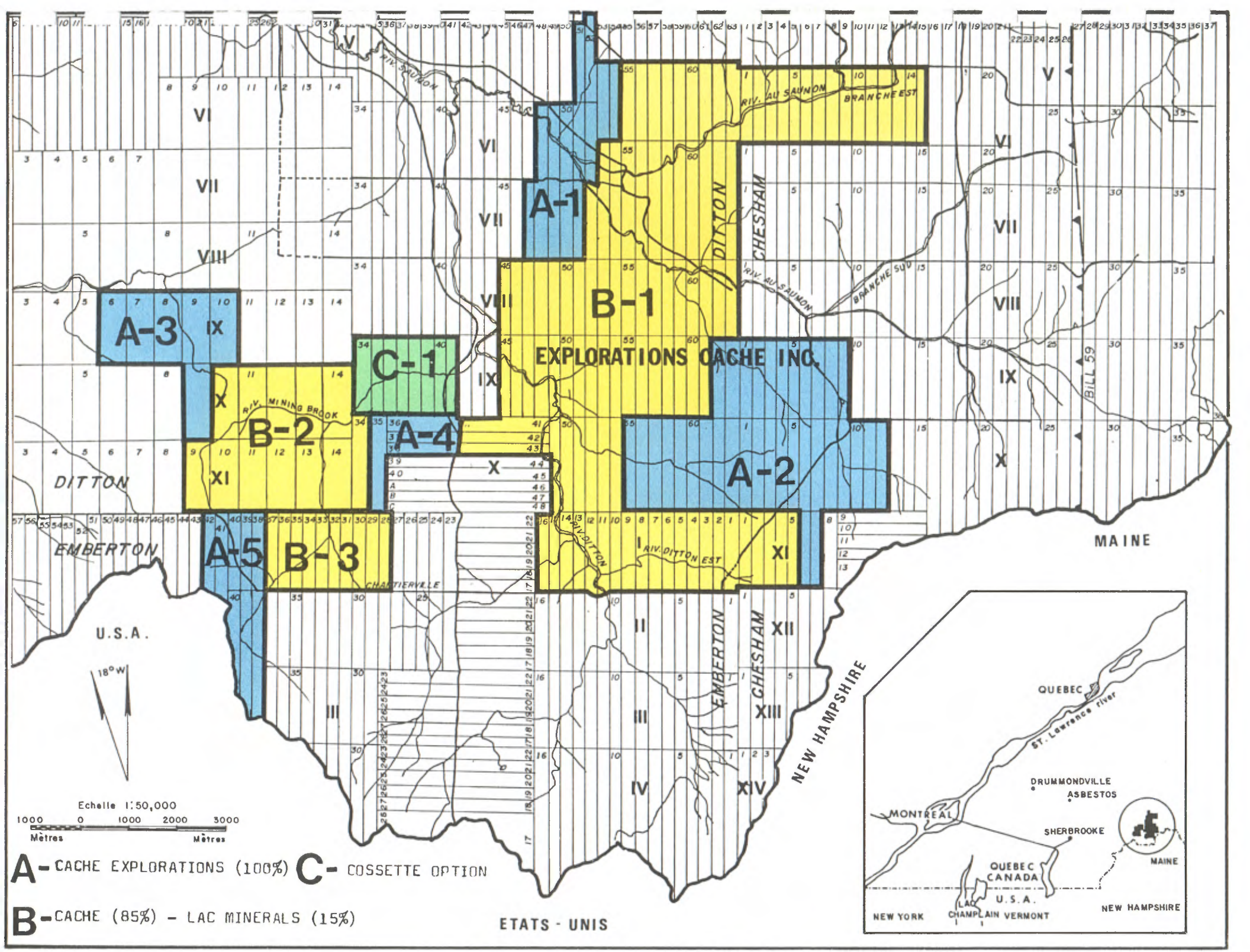
J'autorise que soit utilisé dans un prospectus à être soumis à la Commission des Valeurs Mobilières du Québec, par Explorations Cache Inc., mon rapport daté du 18 août 1987, ainsi que l'extrait ou sommaire qui en a été tiré, daté du 18 août 1987.

Je déclare qu'aucun des éléments extraits de mon rapport et présentés au prospectus ne sont faux ou trompeurs.

Florent J. Gauthier, ing. géologue

86 Creswell, Beaconsfield, Québec, CANADA H9W 1C9 Tél.: (514) 694-8107

APPENDIX -I-


A-1
A-2
A-3
A-4
A-5
B-1
B-2
B-3
C-1
EXPLORATIONS CACHE INC.
DITTON
CHESHAM
EMBERTON
RIV. AU SAUMON
BRANCHE EST
BRANCHE SUD
RIV. MINING BROOK
RIV. DITTON
RIV. DITTON EST
CHARTIERVILLE
BILL 59
MAINE
NEW HAMPSHIRE
U.S.A.
ETATS - UNIS
18° W
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1000 0 1000 2000 3000
Mètres Mètres
A- CACHE EXPLORATIONS (100%)
B- CACHE (85%) - LAC MINERALS (15%)
C- COSSETTE OPTION
QUEBEC
St. Lawrence river
DRUMMONDVILLE
ASBESTOS
MONTREAL
SHERBROOKE
MAINE
QUEBEC
CANADA
U.S.A.
NEW YORK
LAC CHAMPLAIN
VERMONT
NEW HAMPSHIRE

LIST OF CLAIMS HELD BY CACHE EXPLORATIONS INC.

BLOC A-1

PERMIT #	LOT #	RANGE	TOWNSHIP	ACRES	HECTARES	EXPIRES
P00184	51	V	Ditton	100	40.5	Jun 12 89
P00185	52	V	Ditton	100	"	Jun 12 89
P00186	53	V	Ditton	100	"	Jun 12 89
P00187	54	V	Ditton	100	"	Jun 12 89
P00188	48	VI	Ditton	100	"	Jun 12 89
P00189	49	VI	Ditton	100	"	Jun 12 89
P00190	50	VI	Ditton	100	"	Jun 12 89
P00191	51	VI	Ditton	100	"	Jun 12 89
P00192	52	VI	Ditton	100	"	Jun 12 89
P00193	47	VII	Ditton	100	"	Jun 12 89
P00194	48	VII	Ditton	100	"	Jun 12 89
P00195	49	VII	Ditton	100	"	Jun 12 89
P00196	50	VII	Ditton	100	"	Jun 12 89
P00197	51	VII	Ditton	100	"	Jun 12 89
TOTAL:	14 lots			1400	566.6	

BLOC A-2

P00205-213	55-63	X	Ditton	900	364.2	Jun 12 89
P00203-204	62-63	IX	Ditton	200	80.9	Jun 12 89
P00161-169	1-9	IX	Chesham	900	"	Jun 12 89
P00170-181	1-12	X	Chesham	1200	485.6	Jun 12 89
P00182-183	6-7	XI	Chesham	200	80.9	Jun 12 89
TOTAL:	34 lots			3400	1375.9	

LIST OF CLAIMS HELD BY CACHE EXPLORATIONS INC

(Continued)

BLOC A-3

PO1933 - 37	6-10	IX	Ditton	1000	404.7	Sep 14 89
PO2846	9	X	Ditton	200	80.9	Oct 19 88
TOTAL:	6 lots			1200	485.6	

BLOC A-4

PO2847 - 50	35-38	X	Ditton	385	155.8	Oct 19 88
TOTAL:	4 lots			385	155.8	

BLOC A-5

PO2663 - 64	41-42	I	Emberton	200	80.9	Jul 21 88
PO2785 - 87	38-40	I	Emberton	300	121.4	Sep 4 88
PO2788 - 90	38-40	II	Emberton	400	161.9	Jul 4 88
TOTAL:	8 lots			900	364.2	

TOTAL BLOCS A: 66 lots 7285acrs. 2948.1 hectares

LIST OF CLAIMS HELD BY CACHE (85%) & LAC MINERALS LTD.(15%)

BLOC B-1

PERMIT #	CLAIM #	LOT #	RANGE	TOWNSHIP	ACRES	HECTARES	EXPIRES
PO1456		45	VIII	Ditton	100	40.5	Feb 18 89
PO1457		46	VIII	Ditton	100	"	Feb 18 89
PO1458		47	VIII	Ditton	100	"	Feb 18 89
PO1459		48	VIII	Ditton	100	"	Feb 18 89
PO1460		49	VIII	Ditton	100	"	Feb 18 89
PO1461		50	VIII	Ditton	100	"	Feb 18 89
PO1462		51	VIII	Ditton	100	"	Feb 18 89
PO1463		52	VIII	Ditton	100	"	Feb 18 89
PO1464		53	VIII	Ditton	100	"	Feb 18 89
PO2180		54	VIII	Ditton	100	"	Nov 24 87
PO2181		55	VIII	Ditton	100	"	Nov 24 87
PO2182		56	VIII	Ditton	100	"	Nov 24 87
PO2183		57	VIII	Ditton	100	"	Nov 24 87
PO2184		58	VIII	Ditton	100	"	Nov 24 87
PO2185		59	VIII	Ditton	100	"	Nov 24 87
PO2186		60	VIII	Ditton	100	"	Nov 24 87
PO2187		61	VIII	Ditton	100	"	Nov 24 87
PO1134		62	VIII	Ditton	100	"	Aug 29 88
PO1465		63	VIII	Ditton	127.5	51.6	Feb 18 89
402326	1,2	60-61	V	Ditton	200	80.9	Jun 09 88
402327	1,2	62-63	V	Ditton	217.5	88.0	Jun 09 88
PO1914		1	VI	Chesham	100	40.5	Sep 14 89
PO1915		2	VI	Chesham	100	"	Sep 14 89
PO1916		3	VI	Chesham	100	"	Sep 14 89
PO1917		4	VI	Chesham	100	"	Sep 14 89
PO1918		5	VI	Chesham	100	"	Sep 14 89
PO1919		1/2Sof6	VI	Chesham	50	20.2	Sep 14 89
PO1482		62	VII	Ditton	150	60.7	Mar 20 89
PO1483		63	VII	Ditton	177.5	71.8	Mar 20 89
PO1466		54	IX	Ditton	100	40.5	Feb 18 89
PO2278	1	41	X	Ditton	100	"	Aug 01 88
PO2279	2	42	X	Ditton	105	42.5	Aug 01 88
PO2280	1	43	X	Ditton	105	"	Jul 31 88
PO2174		49	X	Ditton	120	48.6	Nov 24 87
PO2175		50	X	Ditton	120	"	Nov 24 87
PO2176		51	X	Ditton	120	"	Nov 24 87
PO2177		52	X	Ditton	120	"	Nov 24 87
PO2178		53	X	Ditton	120	"	Nov 24 87
PO2179		54	X	Ditton	120	"	Nov 24 87
PO2200		14	I	Emberton	100	40.5	Nov 24 87
PO2199		13	I	Emberton	100	"	Nov 24 87
PO2198		12	I	Emberton	100	"	Nov 24 87
PO2197		11	I	Emberton	100	"	Nov 24 87
PO2196		10	I	Emberton	100	"	Nov 24 87
PO2195		9	I	Emberton	100	"	Nov 24 87
PO2194		8	I	Emberton	100	"	Nov 24 87
PO2193		7	I	Emberton	100	"	Nov 24 87
PO2192		6	I	Emberton	100	"	Nov 24 87
PO2191		5	I	Emberton	100	"	Nov 24 87
PO2190		4	I	Emberton	100	"	Nov 24 87

LIST OF CLAIMS HELD BY CACHE (85%) & LAC MINERALS (15%)

(Continued)

BLOC B-1

PERMIT #	CLAIM #	LOT #	RANGE	TOWNSHIP	ACRES	HECTARES	EXPIRES
PO2189		3	I	Emberton	100	40.5	Nov 24 87
PO2188		2	I	Emberton	100	"	Nov 24 87
PO2213		1	I	Emberton	100	"	Nov 28 87
PO2173		1	XI	Chesham	70	28.3	Nov 24 87
PO1480		2	XI	Chesham	100	40.5	Mar 07 89
PO2202		16	I	Emberton	100	"	Nov 24 87
PO2201		15	I	Emberton	100	"	Nov 24 87
PO1479		3	XI	Chesham	100	"	Mar 07 89
PO1478		4	XI	Chesham	102.5	41.5	Mar 07 89
PO1477		5	XI	Chesham	102.5	"	Mar 07 89
PO1135-1143		45-53	IX	Ditton	900	364.2	Aug 29 88
PO1125-1133		53-61	VII	Ditton	1450	586.8	Aug 29 88
PO1096		1/2Nof6	VI	Chesham	50	20.2	Jul 23 88
PO1097		7	VI	Chesham	100	40.5	Jul 23 88
PO1098		8	VI	Chesham	100	"	Jul 23 88
PO1099		9	VI	Chesham	100	"	Jul 23 88
PO1100		10	VI	Chesham	100	"	Jul 23 88
PO1101		11	VI	Chesham	100	"	Jul 23 88
PO1102		12	VI	Chesham	100	"	Jul 23 88
PO1103		13	VI	Chesham	100	"	Jul 23 88
PO1104		14	VI	Chesham	100	"	Jul 23 88
PO1105		15	VI	Chesham	100	"	Jul 23 88
PO1106		55	V	Ditton	100	"	Jul 23 88
PO1107		56	V	Ditton	100	"	Jul 23 88
PO1108		57	V	Ditton	100	"	Jul 23 88
PO1109		58	V	Ditton	100	"	Jul 23 88
PO1123		59	V	Ditton	100	"	Aug 05 88
PO1124		52	VII	Ditton	100	"	Aug 29 88
PO1110		55	IX	Ditton	100	"	Jul 23 88
PO1111		56	IX	Ditton	100	"	Jul 23 88
PO1112		57	IX	Ditton	100	"	Jul 23 88
PO1113		58	IX	Ditton	100	"	Jul 23 88
PO1114		59	IX	Ditton	100	"	Jul 23 88
PO1115		60	IX	Ditton	100	"	Jul 23 88
PO1116		61	IX	Ditton	100	"	Jul 23 88
TOTAL:		102 lots			11,027.5	4462.6	

LIST OF CLAIMS HELD BY CACHE (85%) & LAC MINERALS (15%)

BLOC B-2

PERMIT #	CLAIM #	LOT #	RANGE	TOWNSHIP	ACRES	HECTARES	EXPIRES
410494	1	9	XI	Ditton	200	80.9	25/06/88
410495	1	10	XI	Ditton	200	"	25/06/88
410496	1	11	XI	Ditton	200	"	25/06/88
410497	1	12	XI	Ditton	200	"	26/06/88
410498	1	13	XI	Ditton	200	"	26/06/88
410499	1	14	XI	Ditton	200	"	26/06/88
411004	1	10	X	Ditton	200	"	28/06/88
411003	1	11	X	Ditton	200	"	28/06/88
411002	1	12	X	Ditton	200	"	28/06/88
411001	1	13	X	Ditton	200	"	27/06/88
410500	1	14	X	Ditton	200	"	27/06/88
411009	1	34	X	Ditton	200	"	30/06/88
TOTAL:		12 lots			2400 acr.	971.2 hec.	

LIST OF CLAIMS HELD BY CACHE (85%) & LAC MINERALS (15%)

BLOC B-3

PERMIT #	CLAIM #	LOT #	RANGE	TOWNSHIP	ACRES	HECTARES	EXPIRES
393226	2	28	V	Emberton	100	40.5	Aug 01 88
393227	1,2	29-30	"	"	200	80.9	"
393228	1,2	31-32	"	"	200	"	Aug 02 88
393229	1,2	33-34	"	"	200	"	"
393237	1,2	35-36	"	"	200	"	"
393238	1	37	"	"	100	40.5	"
		10 lots			1000	404.7	
TOTAL BLOCS B:		124 lots			14427.5acr.	5838.5 hec.	

LIST OF CLAIMS OPTIONED FROM J.C. COSSETTE

BLOC C-1

PERMIT #	LOT #	RANGE	TOWNSHIP	ACRES	HECTARES	EXPIRES
PO2942	34	IX	Ditton	100	40.5	Dec 14 88
PO2943	35	IX	Ditton	100	"	Dec 14 88
PO2944	36	IX	Ditton	100	"	Dec 14 88
PO2945	37	IX	Ditton	100	"	Dec 14 88
PO2946	38	IX	Ditton	100	"	Dec 14 88
PO2947	39	IX	Ditton	100	"	Dec 14 88
PO2948	40	IX	Ditton	100	"	Dec 14 88
PO2949	41	IX	Ditton	100	"	Dec 14 88
TOTAL:	8 lots			800	323.7	

TOTAL BLOCS A,B,C,:

LOTS	ACRES	HECTARES
198	22512.5	9110.4

DOUGLAS PARENT
MINING ENGINEER

PROGRESS REPORT ON THE GOLD BEARING GRAVELS OF MINING BROOK

Cache Explorations Inc. have under option eight contiguous mining claims covering Mining Brook. They consist of lots 34 to 41 inclusively range IX Ditton Township, Quebec.

The above claims cover some 2.4 kms. of river bed where recent exploration work by Cache Explorations Inc., consisting of test pitting, for some 800 m along the north shore of the river proper has exposed gold bearing gravels. Test pitting further west in the river proper indicates that gold values are continuous for another 1130 m. At a point 2500 m westward two more pits in the river have returned gold values indicating continuous values along the whole river tested to date.

Gold values have also been found in a tributary flowing south westerly into Mining Brook at a point 250 m from the bridge, (point O), this tributary may be one of the feeders and will be further explored in due course. Statistically there has been 33% of the north shore explored and 47% of the river explored to date; the south shore remains to be test-pitted.

At this early exploration stage from 78 test pits we find the following quantities and values of gold bearing gravel expressed in Canadian dollars per cubic meter (1 cubic meter = 1.3079, cubic yards or 1 cubic yard = 0.7645 cubic meter).

Proven: Reserves	M^3	$/M^3	Total $	Mgs/M^3
East River Bed	34,505	14.04	484,285	914.
North Shore Terrace				
Flood Plain	162,131	4.65	754,215	302.
	196,636	$6.30	1,238,504	410.

.../2

Probable:	M^3	$/M^3	Total $	Mgs/M^3
North West Tributary	42,986	10.93	469,847	715.
West Terrace Flood Plain	84,000	4.00	336,000	260.
West Extension River Bed	11,000	7.00	77,070	456.
Possible:				
South Shore Terrace F.P.	100,000	4.00	400,000	260.
Tributaries N. Shore	50,000	5.00	250,000	326.
Tributaries S. Shore	50,000	5.00	250,000	326.

Prospective:

Far west end Mining Brook proper	1270 m
Far west end Mining Brook northshore	1600 m
Far west end Mining Brook southshore	1600 m
Far west end Mining Brook tributaries	?

Note: The weight of one cubic meter is two short tons.

Total				
Proven	196,636	6.30	1,238,504	410.
Probable	137,990	6.40	882,917	417.
Possible	200,000	4.50	900,000	293.
	534,626	$5.65	3,021,421	368.

Respectively submitted,

Douglas Parent

Douglas Parent, M.E.
Consultant Ltd.
March 11, 1986

1310 Greene Avenue
Suite 750
Westmount, Quebec
H3Z 2B2