# 2.22338

**REPORT ON** 

#### **STRIPPING**

## FLINT LAKE PROPERTY

NTS 52 F/5 SW





52F05SW2013 2.22338

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Timothy J. Twomey H.BSc. Geology

Balmertown, Ontario October 23, 2001

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#### **INTRODUCTION**

The Dogpaw-Cameron Lake area has been subject to gold prospecting since the late 1800's. This area hosts a number of gold deposits which are associated with splay faults off of the regional Pipestone-Cameron Fault. The largest of these deposits is also the most recently discovered. The Cameron Lake deposit (3.1 million tons at 0.17 oz/ton gold) was first found by prospecting in 1960. This surface showing went through three separate exploration programs before deep diamond drilling intersected the Main Zone in 1983. The latest work conducted at the Cameron Lake deposit was surface diamond drilling by Cambior Inc. in the fall of 1996.

The Flint Lake Property contains the strike extension of the shear zone which hosts the Dubenski gold deposit (240,000 tons at 0.25 oz/ton gold) and has not been drill tested for a strike length of 800m within the property. The property is underlain by part of the regional Pipestone-Cameron Fault for a strike length of 1,200 m and is a good drill target as it is covered by Flint Lake and has not been drilled in this area. The Pipestone-Cameron Fault is gold-bearing nearby at the Swell occurrence. It represents a target that is more applicable to a Lightning Zone model than is the Dubenski Deposit as the Lightning Zone is hosted within the regional Destor-Porcupine Fault. It also contains the Meahan Occurrence, which is a splay off the Pipestone-Cameron Fault. Therefore, it is geologically well located and merits a thorough exploration program to evaluate its potential.

#### **PROPERTY DESCRIPTION**

The property consists of three claims, K.1178246 containing 2 claim units, K.1178247 containing 4 claim units and K.1184549 containing 4 units. The property consists of ten units approximately 160 hectares in size. It was recorded on October 18, 1995 to August 16, 1996 and requires \$1,600 assessment work by August 16, 2004.

#### LOCATION AND ACCESS

The property is centered about latitude 49°20'10" and longitude 93°50'10", within the Dogpaw Lake Area claim map G-2613. It is approximately 64 km southeast of the City of Kenora. Access to the property is provided by an all-weather gravel road to the Cameron Lake deposit from Highway 71. The property is located 900 m north of the road at the Cameron River bridge which can then be accessed by boat or by a logging access road just east of the bridge (see Fig. 1). The Cameron Mine Road has restricted access and requires a permit from the Ministry of Natural Resources in Kenora to travel on it as well as an annual user fee payable to Nuinsco Resources.





#### **PROPERTY GEOLOGY**

The property is underlain by the Pipestone-Cameron Fault, a regional fault over 100 km in length. In this area, it is generally characterized by a wide zone of sericite-chlorite schist probably derived from mafic metavolcanics. The property is also underlain by the shear zone which hosts the Dubenski deposit. These are mainly covered by Flint Lake and are poorly defined.

The Dubenski shear zone is characterized by a 75m wide zone of intensely altered and deformed chlorite-sericite schist +- iron carbonate. Nine grab samples assayed from this shear zone along the shore of Dubenski Peninsula returned 3 anomalous results above 100 ppb gold. This shear zone strikes east underneath Flint Lake towards the Pipestone-Cameron Fault and has not been drill tested there for a strike length of 800m. Gabbro and mafic volcanics are present south of the Pipestone-Cameron Fault in other areas and north of it are felsic metavolcanics, mafic metavolcanics and quartz-feldspar porphyry dikes which also exibit high strain due to their proximity to the fault.

The southeast part of the property contains the Meahan showing. The Meahan showing consists of pits and trenches in carbonatized, sheared gabbro with disseminated pyrite. My highest grab assay was 1.96 oz/ton, in a quartz vein 0.5 m wide with visible gold. The Meahan showing was discovered in the 1930's and has never been drill-tested.

#### STRIPPING

An area of anomalous gold values in humus on the south margin of a swamp was stripped of overburden to expose the bedrock. This was done in November 1996 by Crazy Dave Contracting using a John Deere tracked backhoe, type 1280B. The operator was Dave Burt Jr. who stripped for 22 hours at \$80/hour plus GST. The float charge was \$620.60. Total cost for the stripping was \$2,503.80.

The stripped area was mapped by the author in October 2001 (see map in back pocket). The bedrock exposed is Archean gabbro which is cut by a number of shear zones trending at 300 degrees and dipping 60 degrees. The shears are silicified, Fe-carbonatized and contain variable quantities of fine-grained disseminated pyrite. Three old trenches from the 1930's were sunk on these within the stripped area. The gabbro is cut by diorite as well as Proterozoic diabase.

#### **CONCLUSIONS AND RECOMMENDATIONS**

The cause of the humus gold anomaly was found in bedrock as silicified, iron-carbonatized, pyritized, sheared gabbro. This was uncovered along the south margin of the swamp which begs the question – what is the exploration potential of a Lightning Zone type deposit further north under the swamp and clay covered Pipestone-Cameron Fault?

Avalon Ventures was interested in answering that question with an option agreement in the late 1990's but fell short of actually diamond drilling this area. It appears that the Meahan showing as well as the stripped humus anomaly are part of second order structures spatially and genetically related to the regional Cameron-Pipestone Fault Zone (CPFZ). Therefore, their best potential as drill targets is to find out how the Meahan and humus anomaly relate to the CPFZ at depth and to the north. That is where the best potential is to find an orebody.

Rocks on both the north side and the south side of this swamp are sheared and altered. North of the swamp beside the beaver pond is observed bleached, carbonatized mafic (volcanic?) rock containing fine disseminated pyrite. The Meahan, as well as the three anomalous bedrock samples 100m further west (from Avalon's work: 490, 1320 and 2420 ppb gold) suggest that this length of the CPFZ is the area to test for a first order structure hosted orebody such as the Lightning Zone. The swamp in this vicinity is 200 to 300 m wide. Indirect surveys such as IP were the logical first choice in assessing the potential of this area, which Avalon contracted for exploration there. However the IP contractor basically admitted on p.7 of his report that the survey failed to test to bedrock through the thick overburden. It appeared that all electrical current was sucked up by a 30 m (+?) thick conductive clay layer. In order to test the bedrock below it, a large loop (600m x 600m) Pulse EM survey would penetrate the clay. This would test for moderate to strong conductors only, such as "connected" sulphides in contact with each other and would not be appropriate to test for a gold mineralized body.

This leaves diamond drilling as the most effective direct method to test this exploration model. As the fabrics in that area dip 80 degrees north it would be easiest to drill southward to test the Meahan. However, based on the above, the more effective direction would be to drill north underneath Meahan and continue drilling under the swamp. The humus anomaly as well as the mineralized rocks along the edge of the swamp would also be tested at the same time. The depth to bedrock under the swamp/clay overburden is unknown but could easily be 30m or more, therefore collaring the drillholes in bedrock would ensure that the holes remained in bedrock their entire length northward.

#### **CERTIFICATE OF QUALIFICATIONS**

I, Timothy J. Twomey, of Box 88, Balmertown, Ontario, POV 1C0, do hereby certify as follows concerning my Report on Geology and Humus Surveys, Flint Lake Property, dated October 23, 2001:

- 1) I am a 1983 graduate of Lakehead University, Thunder Bay, Ontario, holding a Bachelor of Science (Honours) degree in geology.
- 2) I hold a 100% interest in the Flint Lake Property.
- 3) This report is based on my own work on the property as well as literature review of Assessment Files, Resident Geologists Office, MNDM, Kenora, ON.

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Timothy J. Twomey B.Sc (Hons) Geology

October 23, 2001 Balmertown, Ontario

#### APPENDIX TO

### **REPORT ON**

#### STRIPPING

#### FLINT LAKE PROPERTY

NTS 52 F/5 SW

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Timothy J. Twomey H.BSc. Geology

Balmertown, Ontario December 27, 2001





# Work Report Summary

Transaction No	: W0110.	31011		Status: APPROVED					
Recording Date	: 2001-00	2001-OCT-29 2001-DEC-30			rom: 199	6-NOV-02			
Approval Date:	2001-DI				to: 1996-NOV-			)V-11	
Client(s): 203 Suprey Type(s)	יד 959 די	WOMEY, TIM	IOTHY J						
Survey Type(3)	•	PSTRIP							
Work Report D	etails:	Borform		Annlied		Assian		Reserve	
Claim#	Perform	Approve	Applied	Approve	Assign	Approve	Reserve	Approve	Due Date
K 1184549	\$1,252	\$1,252	\$0	\$0	\$0	0	\$1,252	\$1,252	2006-AUG-16
	\$1,252	\$1,252	\$0	\$0	\$0	\$0	\$1,252	\$1,252	_

Status of claim is based on information currently on record.



DOGPAW LAKE 52F05SW2013 2.22338

Ministry of Northern Development and Mines Ministère du Développement du Nord et des Mines



TIMOTHY J TWOMEY

**BALMERTOWN, ONTARIO** 

CANADA

P.O. BOX 88

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GEOSCIENCE ASSESSMENT OFFICE 933 RAMSEY LAKE ROAD, 6th FLOOR SUDBURY, ONTARIO P3E 6B5

Tel: (888) 415-9845 Fax:(877) 670-1555

Submission Number: 2.22338 Transaction Number(s): W0110.31011

Dear Sir or Madam

#### Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

The revisions outlined in the Notice dated November 15, 2001 have for the most part been corrected (hours and dates the equipment was used should provide specific dates when the work was performed). Accordingly, assessment work credit has been approved as outlined on the Declaration of Assessment Work Form that accompanied this submission.

If you have any question regarding this correspondence, please contact BRUCE GATES by email at bruce.gates@ndm.gov.on.ca or by phone at (705) 670-5856.

Yours Sincerely,

mc codit.

Ron Gashinski Supervisor, Geoscience Assessment Office

Cc: Resident Geologist

Timothy J Twomey (Claim Holder) Assessment File Library

Timothy J Twomey (Assessment Office)



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LSE 1 mag ...E West End of stripping ¥ Ł TITO1-02 Ł Ł M610769 -> sheared 6a, 1% py slicken - horizontal TUT01-01 ¥ 17-2 1 carb +py. filled fractures 6a ficified Diabase 1700 etz. tension gashes PY fractures diorite chor. fracture filling dike backhoe road silicifica down - slope 0/B CLAY Legend 0/3 gtz. veinlet 04D 0LD PIT cutting PIT OLD TRENCH 6a - sheared overburden OB limits of stripping silicified 0.5 m wide white gtz. vein cliff 1% py 11----HIGH Ground shear  $\sim$ 6a - gabbro fracture shear joint 25.0 outcrop 62 Scale 1:500 pit, trench  $\Box$ A sample location 52F05SW2013 2.22338 DOGPAW LAKE 210

