# TRIGAN RESOURCES INC. ASSESSMENT REPORT FOR CLAIM 1240157 EAST GABBRO PROPERTY METHUEN TOWNSHIP, SOUTHERN ONTARIO DISTRICT

2.31157



Don Phipps December 30<sup>th</sup> 2005

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### SUMMARY

Trigan Resources of Aurora, Ontario owns a block of Mining Leases in the southeast part of Methuen Township, covering the eastern portion of a gabbroic body known as the East Gabbro. Claim 1240157 was staked to cover a portion of the gabbro not covered by the mining leases. Geological mapping was carried out on the eastern half of the claim to determine the location of the northern boundary of the gabbro intrusion and to make a preliminary assessment of the gabbro.

It was found that most of the claim lies within the gabbro intrusion. Further assessment of the gabbro in this area as a high quality aggregate source will require core drilling to obtain fresh material for aggregate testing.

### INTRODUCTION

Trigan Resources owns a block of Mining Leases in Methuen Township South initially obtained to cover ilmenite mineralization hosted by a gabbro body. More recently work has focused on the high quality, bedrock aggregate resource of the gabbro hosting the ilmenite mineralization. Claim 1240157 was staked to cover a northern portion of the gabbro not covered by the mining leases (Figure 2).

A survey of the outcrops on the eastern half of claim 1240157 was undertaken to define precisely the northern limit of the gabbro and to confirm the continuity of the favourable gabbro south of the northern contact. This work was carried out in preparation for future diamond drilling and aggregate testing of the gabbro in this area of the intrusion. This report describes the results of this work.

### **PROPERTY**

## **Location and Access**

Claim 1240157 consists of four units occupying Lot 10 Concession 3 of Methuen Township in Southern Ontario Mining District approximately 25 km north of the town of Havelock (Figures 1 and 2). Regional Road 46 is lies approximately 1 km east of the claim. A gravel road running west from Regional Road 46 gives access to the northeast corner of the claim (Figure 3).

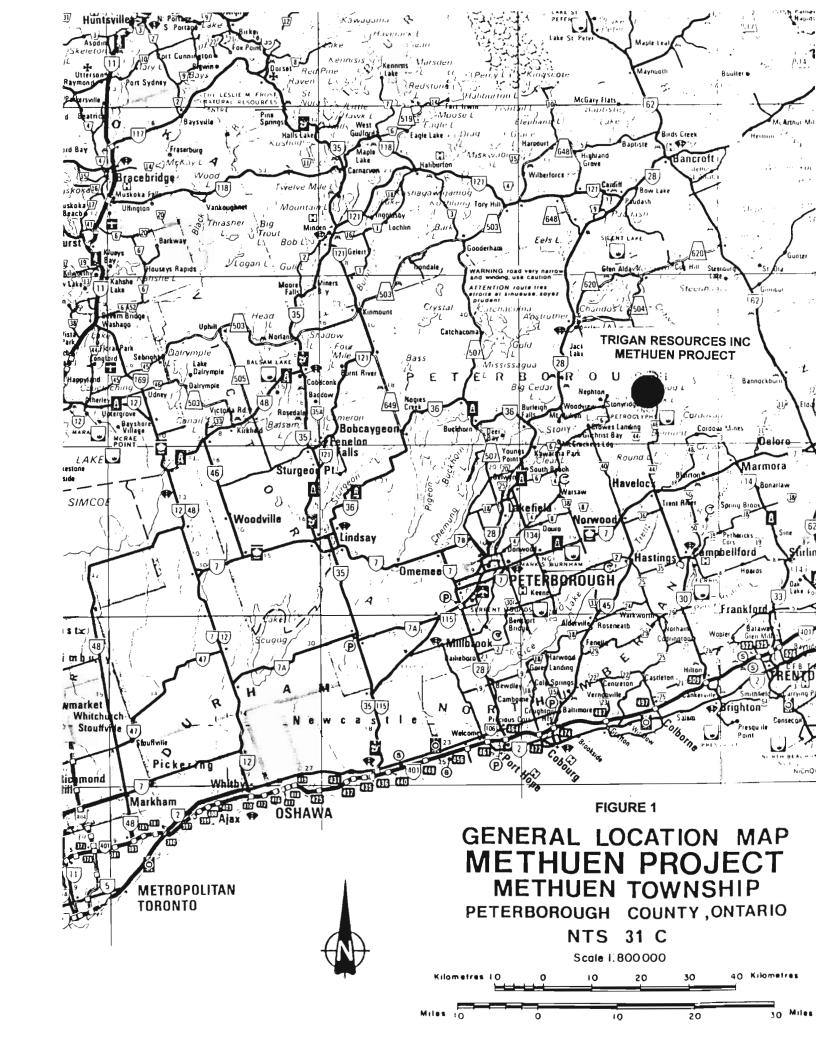
The topography of the property is gently undulating covered by mainly deciduous forest interspersed with frequent areas of swamp. There is 10 to 15% rock exposure which occurs mainly as low inconspicuous outcrops, and areas of in situ frost heaved boulders.

## **Property Description and Status**

Claim 1240157 is registered in the name of Trigan Resources Inc. 445 Beacon Hall Drive, Aurora, Ontario, L4G 3G8. The Claim consists of four units located in Concession 3 Lot 10 of the southern half of Methuen Twp in Southern Ontario. The claim was recorded January 13<sup>th</sup>, 2004 and is due for renewal January 13<sup>th</sup>, 2006.

### REGIONAL GEOLOGY

Methuen Township is underlain by mainly northeast-trending Late Precambrian, Grenville metasedimentary rocks intruded by younger granitic gneisses, granites syenites and gabbros. The metasedimentary rocks have been subjected to multiphase deformation and regional metamorphism. Contact metamorphism is evident especially around some of the gabbroic intrusives. Flat lying



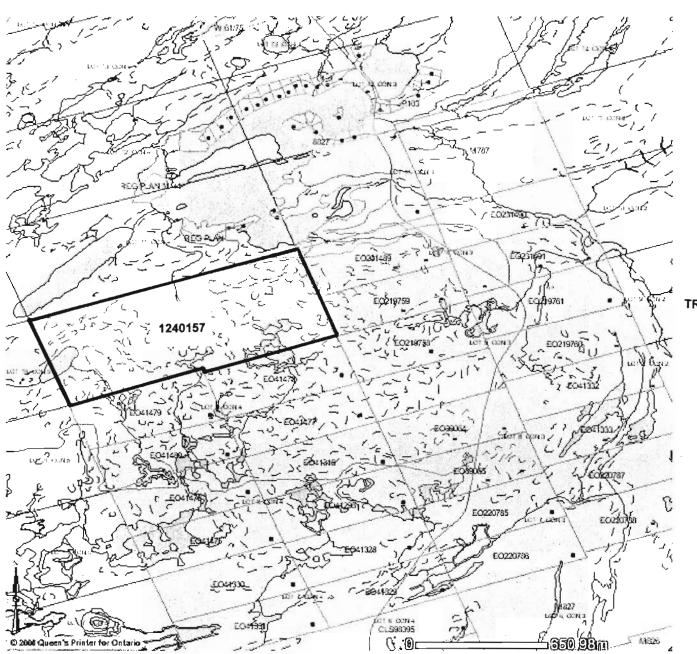


FIGURE 2

TRIGAN RESOURCES METHUEN PROJECT
CLAIM 1240157 LOCATION MAP

Ordovician limestone and dolomitic limestone occurs as isolated outliers in the southern part of the Township (ODM Map 1960e).

Two ovoid-shaped, easterly-trending, basic to intermediate intrusions semi-conformably intrude the Grenville metasediments in the area of the property. These two intrusions, referred to as the East Gabbro and the West Gabbro, vary in composition through gabbroic anorthosite to gabbro to monzonite. The gabbroic anorthosite and gabbro portions of the intrusions are the focus for the establishment of an aggregate resource. In the easternmost part of the Eastern Gabbro, gabbroic anorthosite hosts a pipe-like occurrence of semi-massive to massive ilmenite mineralization.

### PROPERTY GEOLOGY

Claim 1240157 covers a portion of the northern part of the East Gabbro where it is in contact with mainly arenaceous metasediments.

The gabbro typically is a medium grained, grey, melanocratic rock consisting of mainly plagioclase with lesser amounts of mafic minerals (augite and/or hornblende); at some locations it could be described as an anorthositic gabbro. In the area of the current mapping, a variety of gabbro with poikolitic porphyroblasts of biotite was observed in some outcrops.

Near surface, weathering of this rock imparts a pinkish hue to the plagioclase, misleadingly giving it the appearance of a more acidic rock.

The contact between the gabbro and the country rock metasediments is diffuse. In the contact area, inclusions of metasediments become very common and the gabbro is notably finer grained. Compositional differences, in the gabbro, especially in the contact zone, are present due to contamination of the gabbroic magma by absorbed metasediments.

### WORK CARRIED OUT

### Introduction

Previous work by Trigan Resources on the East Gabbro east of Regional Road 46, has established a resource of high quality bedrock aggregate in the area of the gabbro southeast of the titanium occurrence. It is Trigan's intention to determine if the same quality of the gabbro extends west of Regional Road 46. The work on Claim 1240157 is a part of this evaluation.

A survey of the outcrops on the eastern half of claim 1240157 and on the adjacent Mining Lease 231489 to the east of Claim 1240157 was undertaken to define precisely the northern limit of the gabbro and to confirm the continuity of the favourable gabbro in the area south of the northern contact.

The work was carried out over a period of two days (Sept 15-16, 2005) by Don Phipps with assistant Mark Phipps.

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Don Phipps wrote this assessment report. Drafting requirements were carried out by Wes Marsaw, 1699 Virginia Drive, Sudbury P3E 4T7. Phone: 705-522-2102.

### Geological Mapping

Because of the many swamps in the area, straight line traversing was not practical. Instead, in the areas between swamps a random walk was made searching out areas of outcrop and locating UTM position using a GPS. GPS points and results of the geological mapping are plotted on a 1:2500 topographic map blown up from the 1:10,000 published map (Figure 3).

The northern contact of the East Gabbro was traced westward from Mining Lease 231489 onto claim 1240157. Metasediments were mapped north of the contact, and gabbro south of the contact. The gabbro traverses the northernmost part of Mining Lease 231489 and nicks the northeast corner of Claim 1240157. The contact continues westward to the north of Claim 1240157 such that the claim has now been shown to lie almost completely within the gabbro.

The results of the mapping are described in the "Property Geology" section above.

In addition the collars of two boreholes previously drilled on Mining Lease 231489 were located and plotted (Figure 3).

### CONCLUSIONS AND RECOMMENDATIONS

It has been determined that almost all of Claim 1240157 lies within the gabbro intrusion with the northern contact of the intrusion lying to the north of the claim. The rock type is predominantly gabbro with varying concentrations of metasedimentary inclusions. The frequency of these inclusions tends to increase towards the northern contact. Outcrops of the gabbro show some surficial weathering. Variations in the colour of the gabbro are believed to be more an indication of the degree of weathering rather than variations in composition. Accurate assessment of the gabbro as a high quality aggregate will require the testing of unweathered material.

It is recommended that core drilling be carried out on the claim to obtain fresh gabbro samples for aggregate testing.

# STATEMENT OF QUALIFICATIONS

The writer of this report, Don Phipps, is the Geological Consultant to Trigan Resources Inc. He is a certified member of the APGO, a member of the Canadian Institute of Mining and Metallurgy, and the Prospectors and Developers Association of Canada. The professional qualifications of the writer include the following.

Graduate of the Camborne School of Mines with Mining Diploma (1954)

Graduate of McGill University, B.Sc.Honours Geology (1962)

Graduate of the Massachusetts Institute of Technology, M.Sc. in Oceanography (1964)

Over 35 years as a practicing geologist, mainly in the field of mineral exploration.





