# Project Description: Enviromine Inc. - Shawmere Anorthosite Bulk Sample

## Background

Enviromine's Shawmere Property is located within the northeastern area of the Shawmere Anorthosite Complex ("SAC"). This area of the complex is centered at latitude 48°15'N, Longitude 82°35'W and covers about 300 km². It is located about 100 km west of Timmins and 90 km northeast of Chapleau in the Porcupine Mining District of Ontario. It includes Carty Township, the southeastern part of Lemoine Township, and small parts of Oates, Foleyet, and Ivanhoe Township. The area is covered by ODM-GSC aeromagnetic maps 2247G and 2248G, Preliminary OGS maps P2383 and P2384 (Riccio, 1981). NTS Map Sheets 42B02W, 42B07W and 42B08W also cover portions of the SAC. The claims held by Enviromine and are located within NTS 42B02W.

Figure 1: Project Location



EnviroMine is a privately held exploration stage mineral company engaged in the acquisition, exploration and development of anorthosite mineral properties located near the town of Foleyet in northern Ontario, Canada. The company holds a 100% interest in 614 single cell mining claims within in the Shawmere Anorthosite Complex covering 13,198.45 ha.

Anorthosite is an intrusive igneous rock characterized by its composition: mostly plagioclase feldspar (90–100%), with a minimal mafic component (0–10%). Anorthosite is dominated by the mineral plagioclase, a sodium-calcium aluminum silicate. The Shawmere Project has excellent potential to produce ground anorthosite as an industrial mineral replacement to traditional raw material inputs across a broad range of end market manufacturers including, but not limited to:

- Glass & Glass fiber
- Paints & coatings
- Cement
- Insulation
- Ceramics

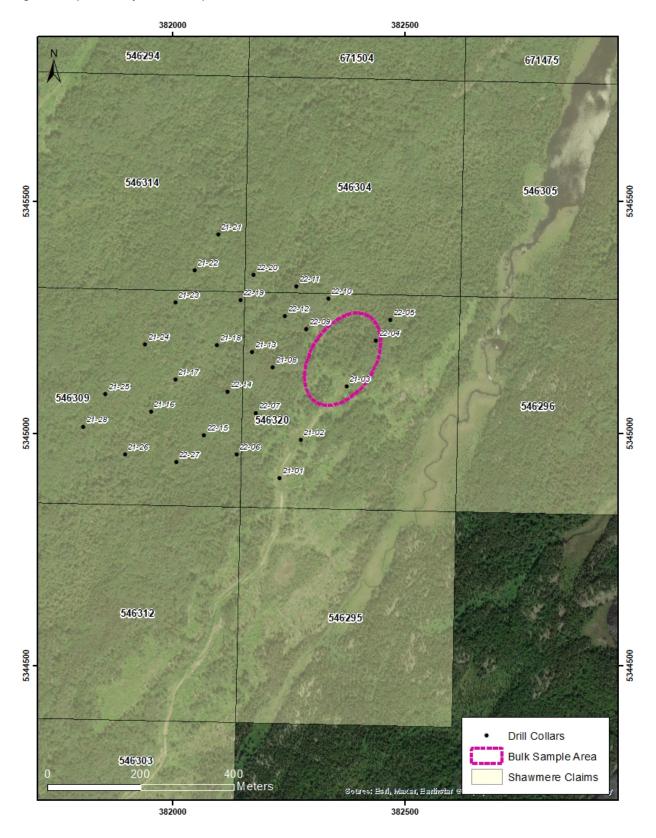
The Shawmere Project's Anorthosite composition (50% Silicon, 30% alumina 15% calcium, low sodium, low iron) provides manufacturers the ability to produce superior end products with reduced energy consumption and zero carbon emissions relative to existing processes in many of the manufacturing methods for these industries today.

## **Bulk Sample**

The proposed work program on the Shawmere Anorthosite project would be a mechanized stripping and a bulk sampling program. The bulk sample would be <1000 tonnes to not qualify as advanced exploration. Access to the proposed area is via light truck, ATV/UTV or by foot. The proposed are for the bulk sampling is accessible by light truck.

The overburden depth in the area selected is minimal based on the four drilling holes completed in 2022 that are to the east and west of the selected location. Bulk sample will be taken from the area between holes 22-10, 22-09, 22-05, 22-04, 21-08, and 22-03 as there is minimal overburden in this area and several exposures of bedrock (Figure 2). The project area has been heavily logged in the past thus there is minimal tree cover which allows easy access to areas of bedrock.

Figure 2: Proposed are of the bulk sample.



The bulk sampling could be carried out in a variety of ways with the first being the preferred method;

- a) bring in track mounted RC drilling rigs to drill holes for blasting materials. A blast contractor would be brought in and the area would be blasted. This would be the fastest and easiest method from a labour perspective and would also allow for a small footprint.
- b) Areas would be selected and mechanically stripped (if required) and then personnel would run channel samples ~6"-8" deep and 3" wide and chip out materials until sufficient quantity has been obtained. This would be less cost effective and more labor intensive.

Once the material has been extracted the company plans on utilizing in a small crusher and crush the rock on site prior to it being shipped to the lab for processing.

### **Exploration History**

Exploration of the Shawmere Anorthosite Complex was originally undertaken by the Ontario Geological Survey in 1970 as part of Operation Chapleau (Watkinson et. al., 1972, Thurston et. al, 1977). Follow-up exploration programs (Thurston et. al, 1977), Simmons et. al. (1980), Ricco (1981), Dolan et. al, (1991), Veldhuyzen (1993), and metallurgical research by CANMET (Quon, 1977) indicated the potential for a significant high grade and industrially useful anorthosite deposit.

Purechem undertook an exploration, trenching, drilling and bulk sampling program on anorthosite claims in Warren Township in 1993-2001. This work was extended by Avalon Ventures Limited (now Avalon Rare Metals Inc.) to examine the potential for anorthosite in selected high purity filler applications and in the production of reinforcing glass fibre (Hains, 2007, Hains, 2000).

Enviromine staked claims on portions of the Shawmere Anorthosite Complex in early 2019 and obtained an exploration permit for work on claims in Lemoine and Foleyet Townships in October, 2019. The 2019 work included initial grass roots exploration by way of outcrop sampling and drilling of vertical six percussion drill holes to a maximum depth of 30 m. 40 outcrop samples were collected and analyzed from claims 534038,534059, 534066, 546263, 566312, 546297, 546322, 553042, 553052, 553050, 553051, 553049, 546339, 546358, 546334, 546348, 546303, 546312, 546320 546317 and 546295 and analyzed and 141 percussion samples were collected and analyzed. Analytical work was completed by ALS Canada using method ME-ICP06.

The analytical results from the outcrop sampling undertaken in 2019 are detailed in Table 9-1. The assay results indicate most samples are representative of high quality anorthosite (>30% Al2O3, >15% CaO, <2.5% Na2O, <1.5% Fe2O3). Subsequent to this work, application was made to collect a 100 tonne bulk sample for metallurgical test work purposes.

A follow-up exploration program in 2021 was undertaken to collect a small bulk sample (~60 lbs, 27 kg) for chemical analysis and metallurgical test work. The samples were collected from claims 546295 and 546320 in Foleyet Townsip. The metallurgical test work was undertaken at Process Research Ortech to evaluate a potential process for recovery of alumina from the anorthosite.

Also in 2021, Environme undertook a diamond drill program in support of an initial resource estimate. The drill program consisted of 28 HQ size vertical diamond drill holes for a total of 1,542 m and one angled hole for 150 m and was completed in early 2022. The drill program was undertaken on claims 546320, 546309, 546304 and 546314.

### **Bulk Sample Processing**

Once the bulk sample has been extracted the material will be crushed to different mesh sizes. The mesh size will depend on the testing purpose and end use of the material (Cement, Glass Fibre, Rock Wool, Paints).