

## LABORATORY REPORT

Perlite Analysis  
 www.perlitgroup.com  
 20 Lavrska Str  
 Kyiv, 01015 Ukraine

Report Date: December 16, 2015  
 Samples Received: November 30, 2015  
 RJ Lee Group Job No.: CUH1038867-1 Rev01  
 Client Project No.: Perlite Deposits Fogosh  
 (Ukraine, village Muzhiyevvo)  
 Purchase Order No.: Perlite Analysis No 511/VED-01

**ANALYSIS: Bulk Chemical Composition by Oxide**  
**METHODS: X-Ray Fluorescence (XRF)**

The as received sample was dried and heated further up to 1000 °C. A certain portion of the calcined material was mixed with a lithium borate flux and made into a glass bead. The glass bead was analyzed using an Axios PANalytical XRF. Results are shown below (reported on a dried basis):

| Client Sample No.:             | Perlite Stone |
|--------------------------------|---------------|
| RJ Lee Group No.:              | 10351030      |
| Oxide                          | (weight%)     |
| Na <sub>2</sub> O              | 1.84          |
| MgO                            | 0.10          |
| Al <sub>2</sub> O <sub>3</sub> | 12.30         |
| SiO <sub>2</sub>               | 71.20         |
| P <sub>2</sub> O <sub>5</sub>  | 0.01          |
| K <sub>2</sub> O               | 5.06          |
| CaO                            | 0.88          |
| TiO <sub>2</sub>               | 0.10          |
| MnO                            | 0.04          |
| Fe <sub>2</sub> O <sub>3</sub> | 2.23          |
| ZnO                            | 0.01          |
| SrO                            | 0.01          |
| ZrO                            | 0.02          |
| LOI**                          | 6.20          |
| Total                          | 100.0         |

\*\*accounts for loss due to C, CO<sub>2</sub>, H<sub>2</sub>O, OH, organic compounds and/or other

Authorized Signature



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Date 12-16-15

*This laboratory operates in accord with ISO 17025:2005 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to <http://www.rjlg.com/about-us/accreditations/> for more information and current status.*