Project: FY21-XCV-235
Title: North Dakota Rare Earth and Critical Element Resource Evaluation
Submitted By: Microbeam Technologies, Inc.
PM/PI: Alex Benson
4200 James Ray Drive, Suite 193
Grand Forks, ND 58202
701-757-6200
abenson@microbeam.com

Purpose: The proposed project focuses on the development of rare earth element and critical mineral (REE-CM) production from selected North Dakota coal seams and sediments. The Microbeam Technologies, Inc. team would work with Great Northern Properties and Stantec to develop information on the REE-CM content of the coal seams and associated sediment, evaluate the resource potential, and evaluate the REE-CM extractability that can be used to determine potential economic production of 85% mixed REE-CM concentrate. An additional objective of the project would be to collect a large sample to allow simulation full scale REE extraction at UND’s pilot REE processing plant, and conduct a technical and economic assessment of recovery of REE-CM.

Duration: 9 months

Participants & Cost Share:

<table>
<thead>
<tr>
<th>Participants</th>
<th>Cost Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Northern Properties</td>
<td>$529,981 (Cost-share)</td>
</tr>
<tr>
<td>NDIC</td>
<td>$529,529</td>
</tr>
<tr>
<td>Total</td>
<td>$1,059,510</td>
</tr>
</tbody>
</table>

Project Deliverables: Status Report