

## Office of Surface Mining Reclamation and Enforcement

Technical Innovation and Professional Services Team (TIPS)



## RTK 500 GPS Land Survey System, Leica, Model1200



**<u>Description</u>**: The Leica RTK 500 GPS survey system is a high-accuracy GPS/GNSS system for field surveying and data/point collection. The system consists of:

- Base station with tripod.
- Two rovers.
- Radio unit (positioning data link) with tripod, antenna, and battery.
- Leica analysis software for post-processing available at manufacturer's website http://www.geosonicsvibratech.com/seismic-analysis-software.html.
- GeoOffice software dongle.
- Cables, batteries, and chargers.

<u>Uses:</u> This instrument performs accurate GPS field surveys using the main (base unit) and two rovers to acquire field data. Leica GeoOffice Software is required for post-processing and importation of the field data.

## **Maintenance:**

- Keep batteries charged for base, rovers, and radio.
- Radio must be set up and functional to use rovers.
- Up-to-date software required for data post-processing
- Requires unique memory card reader.
- Rechargeable batteries should be tested annually and replaced as needed.
- Maintain service contract and/or relationship with local Leica distributor for software and hardware support.

## **Check-out & Contact Information:**

The main unit, rovers, radio, etc. are kept at the Technical Services Branch of the Mid-Continent Region of OSMRE in Alton, Illinois. Rather detailed knowledge and training is required to use this equipment and to use the Leica software for data post-processing. This equipment is not available for shipping. It is available for use subject to the availability of MCR engineering staff to accompany the equipment to train the user. Contact Chris Kiser at 202-513-0383 or at ckiser@osmre.gov for more information.