METAL MINING CONSULTANTS INC.
Committed partner to the success of your project

3D VOLUMETRIC SURVEY

3d Volumetric Survey

MMC Engineering and Geology Services

Geological Services
- NI 43-101 Technical Reports
- 3D Geology Modeling
- Cost Estimations
- Resource Estimation
- QA/QC for Exploration Drilling and Assaying
- Pit Mapping
- Field Mapping

Engineering Services
- Capital and Operating Cost Requirements
- Equipment Requirements
- Feasibility Studies
- Whittle Pit Optimization
- Ultimate Pit Designs - Phased Pit Designs
- Detailed Solar Planning
- Mine Schedules
- Strategy Schedules
- Short Range, Mid Range, and Long Range Mine Plans
- Waste - Water Reclamation Planning
- Leach Pad Development and Scheduling
- Tailings Pond Volume Calculations
- Stockpile Volume Calculations
- Month End and Year End Reports

3d Laser Scanning Service Providers

Laser Technology

Lasers
- Smaller
- Faster
- Power Efficient

Detectors
- Able to capture pulse with no reflectors

Photo Provided by National Oceanic and Atmospheric Administration/Department of Commerce
Maptek I-Site 8810

- Long Range Laser Range Finder (4000 Feet)
- Tilt Compensator
- 70 Megapixel Digital Camera
- 8800 Points Per Second (pps)
- Vehicle Mounted
- 1 CM Accuracy

Efficient Mobile Mapping

- Cover Ground Quickly
- Works well on rugged terrain
- Scan targets from 7ft to 4000ft away
- Accurate
- Convert from vehicle to tripod quickly for hard to access areas

Scanner Deliverables
Scanning Workflow

Landfill Mapping

- Affordable
- Quick
- Accurate
- Safer than traditional survey methods

Waste Management – Conservation Services Inc.
Bennett, Co

- Approximately 6 hours in the field
- 30 scan locations
- Accurate DTM, and contours delivered in a .dwg format
10/7/2013

**Fill Volume**

**Waste Management – Dudleyville Landfill, Az**
- 4 hours in the Field
- Complete DTM and Contours

**Deliverables**
Site Topo
- 5 Square Miles of Desert
- 200+ Scans
- 4 Days in the Field
- No Panel Points
- Triangulation and Contours quickly

Pit Topography - Update

Change Detection
WHY
Metal Mining Consultants?

- Knowledgeable Experienced Staff
- Accurate results at a low cost
- Safety

Contact Info

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