Cleveland Potash based on NE Coast.

- ¾ mile deep mine
- Extends under North Sea ~ 4 miles
- Potash layer is under a salt layer.

- Bad conditions for machinery
  - Hot, humid, dusty and salty

- They built up much experience using Vibration Analysis.

- Then they evaluated the MHC….
This example is on a conveyor tension roller bearing

**Monitoring Underground Conveyors**

<table>
<thead>
<tr>
<th>Distress</th>
<th>General Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5</td>
<td>Very Good</td>
</tr>
<tr>
<td>&gt;10</td>
<td>Suspect</td>
</tr>
</tbody>
</table>

**Time (readings taken every 3 weeks)**

Bearing changed
They found that the MHC:
- Found all the problems they found with VA.
- Measurements are 6 times faster.
- Doesn’t require CM specialist.
- PC analysis is far simpler & quicker.

For the first time they were able to monitor all their conveyor drives.

The benefits of the MHC are:
- Lowered CM costs:
  - Takes less time.
  - Uses lower cost instrumentation.
- Improved Maintenance Efficiency:
  - Transferred CM to the underground mechanical fitters.
  - Rectify faults before secondary damage.
- Maximise Production:
  - Reduce unplanned shutdowns.