



halcyan  
water conditioners

## Boliden Mines, Water Seals, Case Study



ROY TALLON  
DEVELOPMENT MINE CAPTAIN,  
BOLIDEN TARA MINES,  
NAVAN, MEATH,  
IRELAND

### Halcyan

In 2006 we changed our development face jumbo technology from Sandvik-Tamrock to Atlas Copco. We still use a Tamrock AXERA 7 in a different part of the mine, but most of the development drifting is now done with Atlas Copco rocket boomers M2C. The change to Atlas Copco was made by the then MD Bert ove Johansson who had worked with Atlas Copco equipment at previous mines which he managed. The M2C rocket boomers incorporate the latest rig control systems and tunnel management systems.

The rock drill on the Atlas Copco differed somewhat from the Tamrock drifters. At the start we had difficulty keeping water box seals intact. The failure of water box seals could result in water contamination of the oil in the rock drill. This could lead to increased down time spent cleaning the oil. Contributory to this was the moderate alkalinity and particulate level in the service water.

An Atlas Copco service engineer on site mentioned to us that he was aware of a product to help with "hard water conditions". We contacted MCS Systems and they supplied us with a Halcyan unit. We at Boliden Tara Mines decided to trial a Halcyan before fitting out the whole boomer fleet.

The unit was very easy to fit and is small and robust. The unit is maintenance free. The first results were good. We had previously achieved one to two shifts of drilling before changing water box seals. Now with improvements from Atlas Copco and the use of the Halcyan we can expect to run a full week without a water box change. This suits our weekly

planned maintenance of the rocket boomers.

In summary, we have reduced our down time due to water box seal wear and this has had a major impact on running costs. We are currently working with MCS Systems to improve the filtration of the service water. It is also worth noting that the Halcyan will increase the life of other components such as water coolers and the condition of water hoses on the drill rig.

Yours sincerely,

ROY TALLON,

Boliden Tara Mines Limited  
Knockumber,  
Navan, Co. Meath,  
Ireland.

