Fushun ATP Project – Update on commercial operations October 2015

The ATP Plant of Fushun Mining Group (FMG) has demonstrated reliable performance and longrunning campaigns in its first full year of production.

Progress has allowed FMG to move from 15 day run lengths in May 2014 up to 115 days in the most recent campaign.

First oil was achieved in August 2013 and followed by limited operations in the fall and a winter shutdown.

Throughout 2014 FMG focused their efforts on extending oil production runs, improving their operations knowledge and experience, and resolving equipment challenges.

The ATP processor in particular has been a success.

"The learnings from our demonstration plant in Australia have improved the processor design. Its mechanical reliability and wide range of operability are notable strong points" says Gordon Taciuk, senior engineer and manager at the UMATAC division of TKIS.

The Alberta Taciuk Process is the leading technology for pyrolysis of hydrocarbon bearing ores and an established technology for direct processing of fine sized solids.

Further information and details can be found in presentations at <u>www.umatac.ca</u>

	Fushun Mining Group Liaoning, China
Service: o	il production from oil shale
2013	first oil (August)
2014	full operation commences
82 %	2014-2015 plant on-stream time
115 days	longest campaign (May-Aug 2015)
12,000 h	ATP equipment operation
195 t/h	peak steady throughput

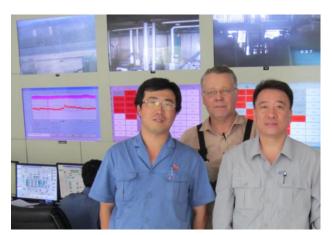


Figure 1: FMG and ThyssenKrupp personnel in the central control room during a recent oil production run



UMATAC Industrial Processes A company of ThyssenKrupp Industrial Solutions