

Refurbishment of TBM for Michels Corporation UNWIS Section 3, Sacramento, California



LOVAT has recently completed refurbishment of a M104PJ/RL Series 11201 Pipe Jacking Tunnel Boring Machine [TBM] for Michels Corporation. The 2.6 meter, mixed face TBM will now be used in the construction of the 10,283 foot (3,134 meter) long Upper Northwest Interceptor Sewer, Section 3 (UNWIS) tunnel project located in Sacramento, California.

The TBM, also known as “Miss Emma”, was thoroughly inspected prior to undergoing a comprehensive refurbishment at LOVAT’s Toronto facilities. In addition, a new Screw Conveyor was retrofitted to allow the TBM to operate in Earth Pressure Balance [EPB] mode for it’s new project.

Basin Deposits and Lower Riverbank Formation consisting of alluvial soils characterize the geology along the tunnel alignment. The formations are composed of complex inter-bedded loose to very dense sands, and stiff to hard silt and clay. Buried meandering stream channel deposits composed of well-graded sand with occasional gravel will also be encountered along the tunnel alignment, which is located entirely under the groundwater level. Groundwater heights above the tunnel invert will vary from 0 to 23 feet (0 – 7 meters), with depth of cover ranging from 10 to 34 feet (3 – 10 meters).