



## IN PIT MUD PUMPING AND DISPOSAL

## PT. DHARMA HENWA

**PROJECT LOCATION:** Bengalon Coal Project - PT. Kalimantan Prima Coal, East Kalimantan Province

**PROBLEM:** PT REI were engaged by our client to recover and dispose of approximately 362,000 m3 of fine slurry and mud generated from mining operations and run off, that had been collected in multiple in pit sumps. Our client had usually undertaken this process with the use trucks and shovels but had found this method was very expensive because of the volume of equipment required, increased maintenance requirements of the equipment and was generally inefficient as trucks and shovels are not the right equipment for transporting liquid products. The removal of the slurry was required to expose a significant coal deposit, according to mining sequence, they had to have the expose coal in 2 months to allow continuation with the clients programmed mining plan.

**SOLUTION:** PT REI were called in by our to undertake the project because they were more than satisfied with our historical performance, the quality of our equipment, service and value we provided during the dewatering of the same pit. PT REI offered PT Dharma Henwa our unique slurry recovery and mud pumping system as an alternative method, which is considerably cheaper and effective.

**SERVICE PROVIDED BY REI:** Conduct site survey, undertake product evaluation, design mobile in-pit submersible recovery pump system and complete ex pit slurry booster, pipeline and management system, select pumps, supply all components including SG and flow measurement equipment, hoses, pipelines and all other components to complete the project. This was in addition to provision of logistics, project management, equipment operation and maintenanc.

## **PROJECT SCOPE:**

Minimum product discharge 97.22 m3/hour. Static head to 110m. Discharge 1,250mt from recovery point. Specific Gravity of Slurry: 1.3 pH: 4.5

## DURATION OF PROJECT: 2 Months

**EQUIPMENT PROVIDED:** 1 x 110mt3/hr Hydraulic Submersible Slurry Pump a Dragflow HY85/160B complete with agitator, rock screen and all attachments to affect complete hook up to PC400 Hitachi Excavator

- 1 x Dragflow Hydraulic Cutter Head
- 2 x Custom Built 36mt3 Slurry Break/Booster Tanks
- 2 x REL Custom HH200 High Chrome Slurry Booster Pumps
- 1250 metres of flanged and bolted 315mm PN12.5 (SDR11) HDPE pipeline

All required High Pressure Custom Hose and High Pressure Layflat

Electronic measurement, metering and management equipment including flow and SG

All required Light and Service Vehicle

All other components, spares and tools etc. required to complete full operational hook up and project

**RESULT:** Our clients were happy with the result and our work, as we had achieved the outcome required in the timeframe required and it was estimated that the removal of the balance of the project was undertaken at 50% of the mud removal costs, compared to the truck and shovel method as had been used previously.



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