

BP AUSTRALIA PIPELINE, CARRINGTON

OIL/GAS | SEWER | STORMWATER | POWER | WATER | TELCO

LOCATION	Elizabeth Street, Carrington NSW
CLIENT	AJ Lucas
PIPE	16"/400mm steel
GEOLOGY	Estuarine sand
LENGTH	345 metres
TECHNIQUE	HDD



PROJECT OVERVIEW

BP Australia own and operate a fuel terminal located at the corner of Industrial Drive and Elizabeth Street in Carrington, near Newcastle. The terminal is used for the storage and handling of bulk quantities of diesel and petrol fuels. Due to increases in demand and mining growth in the Hunter region, a need to secure supply was sought. The Newcastle infrastructure project allows fuels to be pumped directly from tankers at Port Hunter via a 2.5 kilometre steel pipeline to the refurbished BP terminal.

CONSTRUCTION

To meet the client's time requirements, UEA mobilised a D100 x 120 (45 tonne) HDD drill rig and DFE 300gal/min cleaning system to undertake the pilot bore. A steering engineer was engaged to ensure the bend radius of the pipe was not compromised. Completion of the pilot bore confirmed that ground conditions were estuarine sand with low clay content at depth. For the reaming process UEA mobilised a D300 x 500 rig and DFE 700 gal/min cleaning system. Scheduling of the reaming works were based on the day and time that pipe could be strung out across the access road, in order to maintain the only heavy vehicle access to Port Hunter.

A 750mm open reamer was utilised for the pre-reaming pass in conjunction with a comprehensive mud program designed to help carry out solids and help to maintain hole stability in the sand. The bore was surprisingly stable with returns maintained for 90% of the ream, a testament to the importance of good mud in these ground conditions.

Pipe was successfully installed with pullback pressures less than 10 tonne.