26 May 2014

Attention: Rob Dickerson
TransNet NZ Ltd
P O Box 39 383
Howick
Auckland 2145

Catenary Wire – Strength in Tension

Client:

TransNet NZ Ltd
Attention: Rob Dickerson

Client Instructions:

To measure the strength in tension of the PVC coated Catenary Wire submitted.
Items Tested: *TNCAT 3.2 BK (Black)* *Catenary Wire*
TNCAT 2.6 (Green) *Catenary Wire*

Test Method:

The tensile Strength of the Catenary Wire samples were measured as follows:
Both the TNCAT 3.2 BK (Black) and the TNCAT 2.6 (Green) wires were tested following the method as described in BS EN 10218-1:2012 Steel Wire and Wire Products Test Methods.
A length of wire was gripped using a jig held in the jaws of a Shimadzu REH100TV Universal testing machine and the load applied until the wire broke.
The load in Newtons was then recorded and converted to kg.

Findings:

Testing carried out 26th May 2014. The values below are the average of three (3) tests.

TNCAT 3.2 BK (Black)	*Catenary Wire*	Applied load = 188.3kg
TNCAT 2.6 (Green)	*Catenary Wire*	Applied Load = 95.1kg

Tested: T Manuela & D Hotham

Checked: D Hotham
Assistant Laboratory Manager/QA Manager