

INTER - TECH

B 83, Flatted Factory Complex,
Nr. Modi Mills, Okhla Industrial Estate Ph - III
New Delhi - 110 020 India

Telephone : 011 41020365
Mail : info@intertech.com.co

Earth Resistance Measurement Report (with Marconite)

Report No: **IT/178**

Date: **26/08/2015**

Name & address of the Customer : **Zesco Limited,
Lusaka, Zambia**

Name of the contact person/s : **Mr Francis Namakanda**

Dept: **Project Manager**

Tel: **+260 955 826 074
+260 976 698 378**

Electrode/s Installation undertaken by : **M/s Vijai Electricals Limited,
Hyderabad, India**

Installation Completed on : **Pit 2 - 27/04/15 Pit 1 - 02/07/15,
Pit 3 & 4 - 13/07/15**

Name of the contact person/s : **Mr . K. Ashok**

Dept: **Project Commercial - MFEZ**

Tel: **+260 953423880**

Specifications of the Earth Electrode/s :	Marconite Conductive Concrete Earth Electrodes with Copper Conductor - Dia 16 mm.				
	Type of Electrode/s	Sr. Nos.	Length	Dia	Qty.
	Standard	1,3 & 4	9 m	100 mm	3 nos.
2		9 m	150 mm	1 no	

Use/s of Electrode/s :

Marconite conductive concrete earth electrodes were installed in the yard of 330/132/33kV sub-station at Lusaka South (MFEZ), Lusaka, Zambia to measure their earth resistance performance in rocky soil to connect those to earth mat.

Measurement Carried out by : **Mr K K Gupta, Inter-Tech, India**

Date : **25/08/2015**

Method of Measurement : **Fall of Potential Method**

Standard Applicable : **CI 36 of IS 3043**

Testing Instrument Used : **Digital Earth Tester**

Make: **MEGGER**

Model : **DET4TD2**

Sr. no of Testing Instrument : **101139510**

Calibration ref: **No. CPIPL/15-16/332 Valid upto18/08/16
Copy of certificate attached.**

Earth Resistance Measurement Results :	Electrode no	Value Measured - Ω	Maximum Acceptable Value - Ω	Electrode no	Value Measured - Ω	Maximum Acceptable Value - Ω
	1	157.5 Ω	-	3	128.3 Ω	-
	2	104.7 Ω	-	4	139.5 Ω	-

Earth Resistance Measurement Results :

All the four earth electrodes in interconnected position were also measured from each pit.

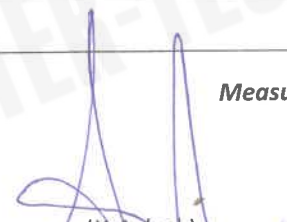
Pit 1) **53.5 Ω** Pit 3) **53.4 Ω**
Pit 2) **54.1 Ω** Pit 4) **54.3 Ω**


Soil Found:

Rocky Soil

Measurement/s witnessed by :


(K K Gupta)
Inter-Tech
Zesco Lusaka South (MFEZ) Site
Zambia


(K. Ashok)
Project Commercial - MFEZ
Vijai Electricals Ltd.,
Zesco Lusaka South (MFEZ) Site, Zambia


(Hope Chanda)
Site Manager - MFEZ
ZESCO
Zesco Lusaka South (MFEZ) Site, Zambia