## NULL METER ERROR REPORT

### **FINAL**

Reconcile?	Ν

Safety Issue?	Ν

### **1. EXECUTIVE SUMMARY**

SITE NAME	Matching Green
LDZ	EA
START DATE (actual)	17/04/2012
LAST GOOD DATE	17/04/2012
END DATE	17/04/2012
SIZE OF ERROR (No reconciliation required if under 0.1%)	0
ESTIMATE – Y/N?	N
ROOT CAUSE	Failure of the CP13 validation test.
ANALYSIS	HPMIS RBD data
METER TYPE	Orifice plate
AUTHOR	Piers Eldridge
CHECKED BY	

### 2. BACKGROUND

Gas is supplied to part of the East Anglia Network at Matching Green FWACV offtake. Matching Green is a single stream orifice plate meter site using a gas chromatograph for RD and CV determination and PTZ correction.

On 17th April 2012 the CP13 test failed with the auditor present. The certified temperature indicator read 20 °C whereas the Omni flow computer indicated a meter tube temperature of 22 °C. Compared with the test temperature indicator the OMNI was reading +2 °C high. The junction box lid was then removed and the terminations found to be badly corroded. On replacement with a new junction box the 0.5°C tolerance required in CP13 was achieved.

## 3. ERROR QUANTIFICATION AND IMPACT

The RBD data was reviewed before and after the ME2 meter validation. The RBD data was compared to the RBD data from Horndon and Luxbororugh Lane. The gas temperatures at the meters have been plotted on the graph in figure 1. It can be seen from the graph that there is no indication of a  $2^{\circ}$  offset before the meter validation.

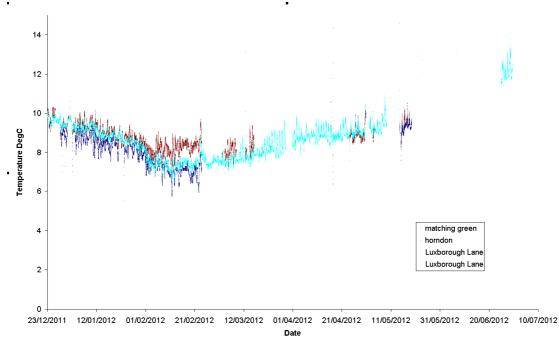


Figure 1 Gas temperature the the meter at Matching Green, Horndon and Luxborough Lane.

# 4. CAUSES

The test failure appears to be cause by corroded teminations on the junction box.

### 5. RECOMMENDATIONS AND LEARNING

Consideration should be given to connecting the temperature element using 4 wires rather than the existing 3-wire connection.

No reconciliation is required as there is no evidence of a temperature offset.

#### REFERENCES

ISO 5167 HPMIS database

#### **VERSION HISTORY**

Version	Changes	Author	Date
Rev 1	Final	Piers Eldridge	20/08/2012

#### DISTRIBUTION

Asset Owner Energy Performance Network Lead Group Asset Strategy