

NULL METER ERROR REPORT**FINAL**

Reconcile?	N
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Safety Issue?	N
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Thesis Report No.	N/A
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1. EXECUTIVE SUMMARY

SITE NAME	CARESTON OFFTAKE
LDZ	SCOTLAND
LAST GOOD DATE	22/8/2010
START DATE	22/8/2010
END DATE	22/8/2010
SIZE OF ERROR	NULL
ESTIMATE – Y/N?	N
ROOT CAUSE	Meter Failure / connection fault.
ANALYSIS	Gemini & HPMIS data
METER TYPE	Turbine
AUTHOR	S.Stephenson
CHECKED BY	T. Ryan

2. BACKGROUND

Gas is supplied to part of the Scottish Network at Careston Offtake which employs a single turbine meter to measure the volumetric flow rate. The site maximum design flow is 0.540mscmd.

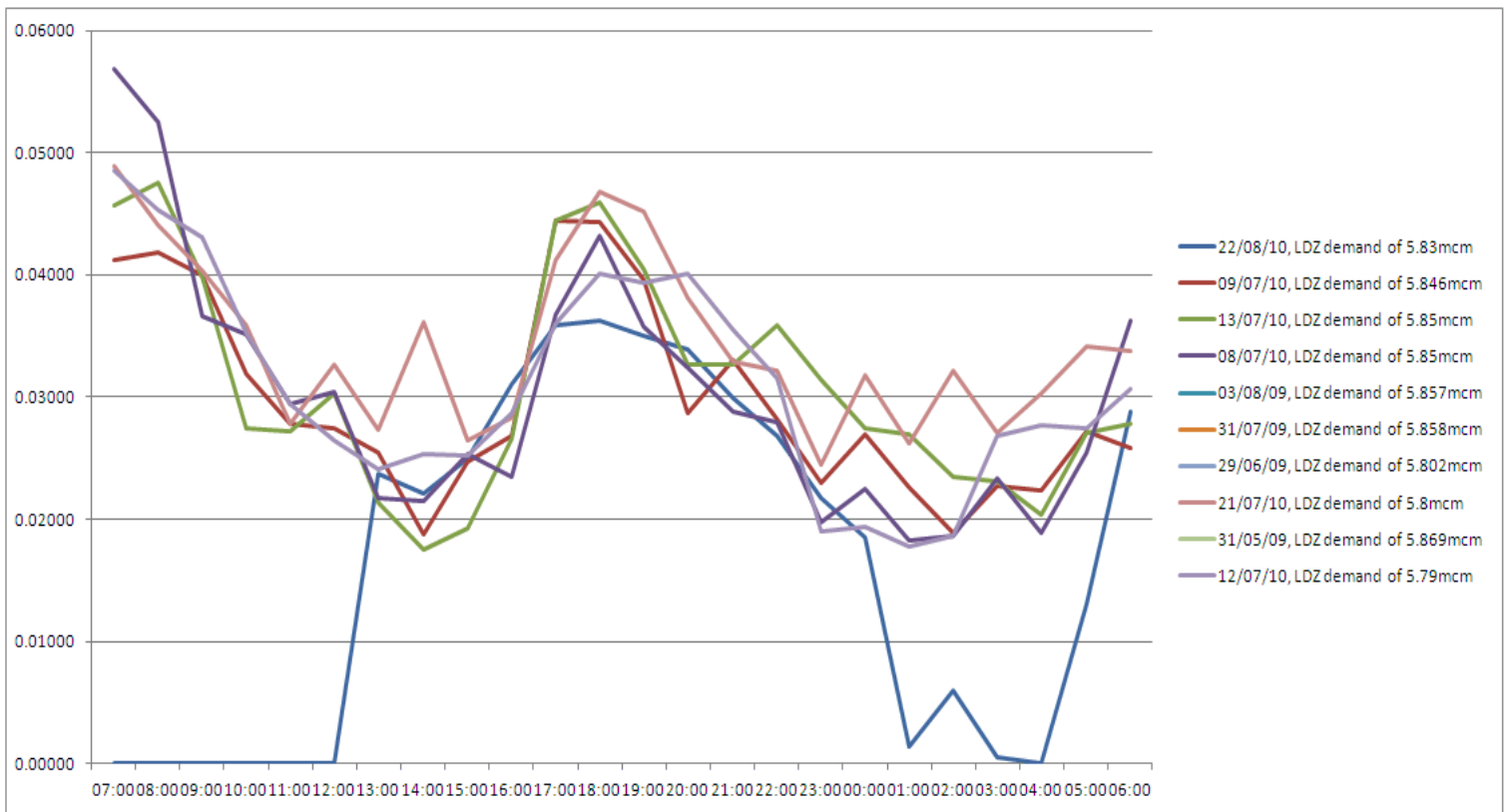
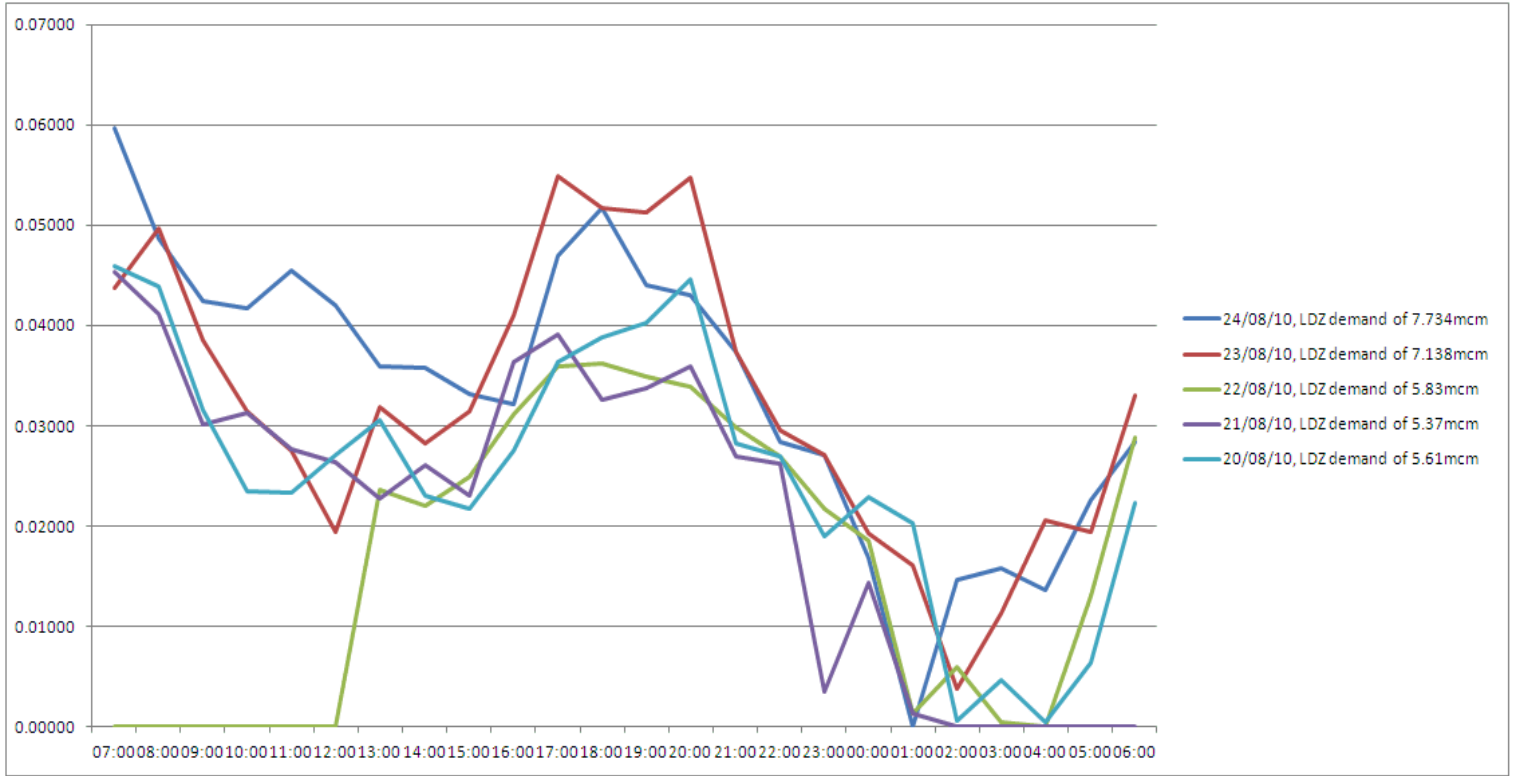
The single stream meter failed at 00:22 on gas day 21st August 2010 . The reason for the failure was identified to a wiring failure within the turbine plug and was repaired at 12:18 on the following gas day 22nd August 2010.

3. ERROR QUANTIFICATION AND IMPACT

The daily volume reading dropped to zero at around 00:09 then was intermittently reading to 01:49 then zero till 12:14. The measured daily volume from HPMIS was a value of 15835 scm and was corrected by DNCC to value of 21350 scm, in line with section D of the Offtake Arrangement Document within Uniform Network Code.

As a consequence there would only have been minimal impact on odorant supplies.

LDZ demand trends



Daily volumes from HPMIS.

Gas Day

20th August – 26,517 scmd

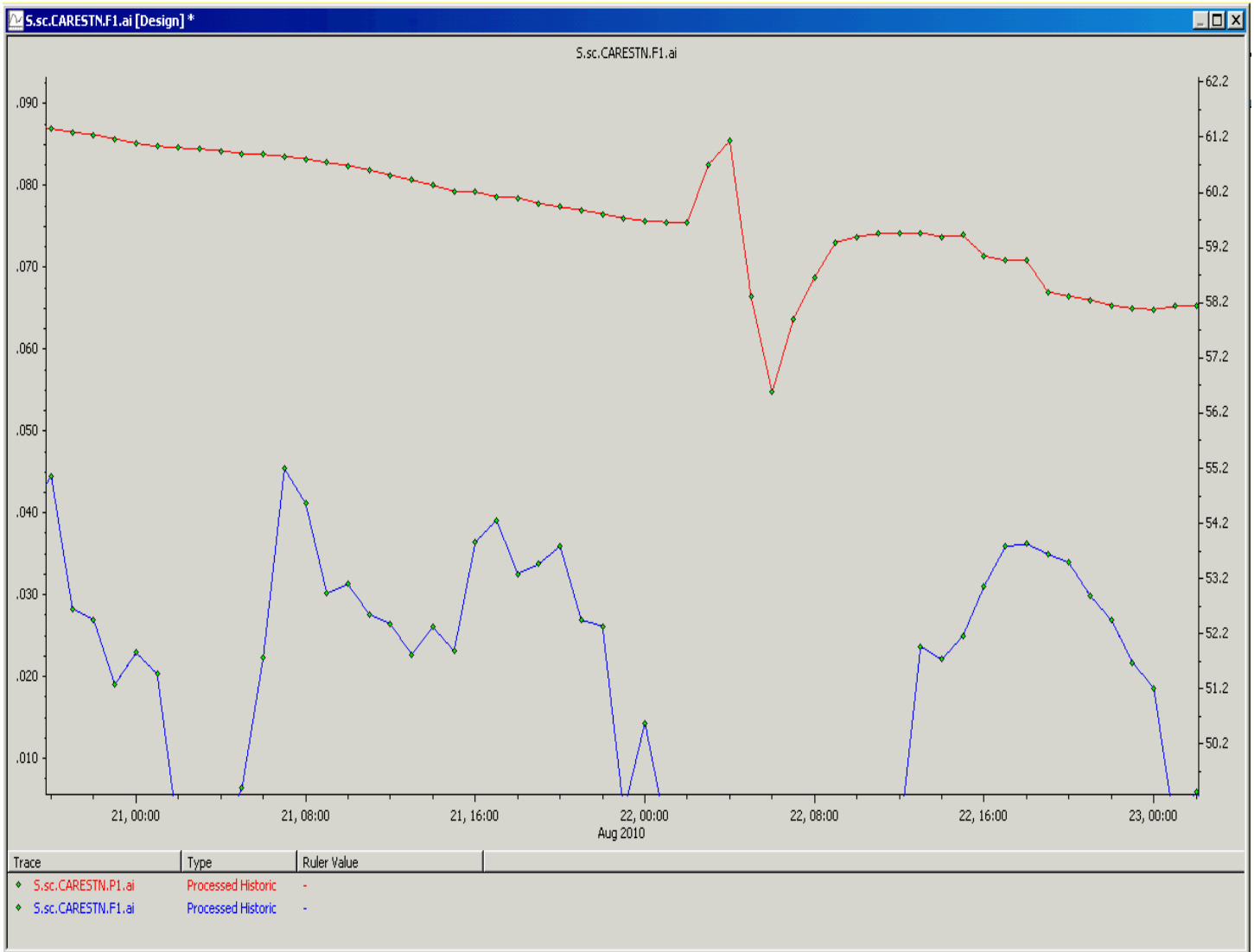
21st August – 23,531 scmd

22nd August – 15,835 scmd corrected to 21,354 scmd

23rd August – 32,388 scmd

24th August – 34,335 scmd

Flow & Pressure trend for 21st to 23rd August 2010.



Careston MER SC005 Rev1.2

End Of Day Summary

End Of Day

	From Database		From File Header	
Location	CARESTON		CARESTON	
Instrument	EUROMETERS PEM 1 E120433 3		E120433	
Gas Day	23-AUG-2010	SC95 Ref. CARE OF_O	Sample Point	O SC
File Name	H6225.10100823.Y03		Stream	3

Gas Day	<	<<	>>	>	23-aug-2010	22-aug-2010	21-aug-2010
Summary Date					24-aug-2010 06:00	23-aug-2010 06:00	22-aug-2010 06:00
Collected					24-aug-2010 06:31	23-aug-2010 06:31	22-aug-2010 06:31
Official 24 Hour Validity					Y	Y	Y
Number Chromatograph Records					330	246	275
Chromatograph Official Daily Avg CV (MJ/m ³)					40.3	40.3	40.1
Chromatograph Official Daily Avg RD					.6407	.641	.6388
Number of Tracker Records					330	246	275
Tracker Daily Average CV (MJ/m ³)					40.3	40.3	40.1
Tracker Daily Average RD					.6407	.641	.6388
CV Attribution Valid					Y	N	N
Number of Flow Records					331	247	275
Daily Standard Volume (mcsm)					32388	15835	23531
Daily Standard Energy (GJ)					1305	637	944
Minimum Sample Gas Pressure (BarG)					1.68	1.4	1.52
Minimum Sample Gas Temperature (°C)					14.67	13.86	13.82
Calibration Gas Pressure (end of day) (BarG)					-99.99	-99.99	-99.99
Calibration Gas Temp (at recalibration) (°C)					-999	-999	-999
Test Gas Pressure (end of day) (BarG)					-99.99	-99.99	-99.99
Test Gas Temperature (min for day) (°C)					-99.99	-99.99	-99.99
Carrier Gas Pressure1 (at e.o.d) (BarG)					-99.99	-99.99	-99.99
Carrier Gas Pressure2 (at e.o.d) (BarG)					-99.99	-99.99	-99.99

CARESTON GEMINI BILLED VALUES

CAREOF

10/08/2010 to **30/08/2010**

LATEST

	ENERGY	VOLUME
DATE	kWh	mcm
10/08/2010	404,026	0.03701
11/08/2010	393,327	0.03603
12/08/2010	313,147	0.02854
13/08/2010	283,632	0.02585
14/08/2010	267,064	0.02434
15/08/2010	296,933	0.02720
16/08/2010	336,452	0.03082
17/08/2010	308,178	0.02823
18/08/2010	337,417	0.03083
19/08/2010	302,176	0.02761
20/08/2010	290,983	0.02652
21/08/2010	260,248	0.02354
22/08/2010	235,443	0.02135
23/08/2010	358,989	0.03239
24/08/2010	379,758	0.03435
25/08/2010	403,333	0.03630
26/08/2010	386,697	0.03489
27/08/2010	439,011	0.03961
28/08/2010	394,000	0.03546
29/08/2010	445,333	0.03998
30/08/2010	458,961	0.04141

4. CAUSES

Meter connection fault.

5. RECOMMENDATIONS AND LEARNING

It is a recommendation of this report that no reconciliation is carried out based on the comparison results from Gemini & HPMIS and correction was carried out by DNCC for the 22nd Aug. 2010 in line with current trends.

REFERENCES

Gemini data

HPMIS EOD summary data

WebX trending

VERSION HISTORY

<i>Version</i>	<i>Changes</i>	<i>Author</i>	<i>Date</i>
<i>Rev 1.2</i>		<i>S.Stephenson</i>	<i>26/03/14</i>

DISTRIBUTION

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