

**METER ERROR REPORT**

Reconcile?	Y
Safety Issue?	N
Thesis Report No.	N/A

**1. EXECUTIVE SUMMARY**

SITE NAME	Ross	
LDZ	SW	
START DATE (actual)	25 <sup>th</sup> March 2010 (11:22)	
LAST GOOD DATE		
END DATE	25 <sup>th</sup> March 2010 (14:29)	
SIZE OF ERROR (No reconciliation required if under 0.1%)	577 SCM under registration (equivalent to 0.343%)	
ESTIMATE – Y/N?		
ROOT CAUSE	The chromatograph mismeasured the composition and an incorrect density was calculated.	
ANALYSIS	HPMIS RBD data	
METER TYPE	Turbine	
AUTHOR	S. Western	
CHECKED BY	C. Stock	
ACCEPTED BY UKD NETWORK		
RECONCILIATION	Distribution	Transportation

## 2. BACKGROUND

Ross is a twin turbine meter stream with a gas chromatograph for CV determination and PTZ correction.

For a period of 2 hrs and 7 minutes during 25<sup>th</sup> March 2010, the chromatograph mismeasured the gas composition and therefore an incorrect density had been calculated.

## 3. ERROR QUANTIFICATION AND IMPACT

The RBD data was reviewed during the periods of the miscalculated density. The density readings, prior to and after each error period were averaged to estimate the actual density reading during the period of the mismeasurement.

Using the HPMIS RBD data the volume flow for each period was calculated. In each instance, the volume flows for the invalid and estimated density readings were calculated. By comparing these calculated flows over the period of the mismeasured density it was estimated that turbine metering system over-registered 577 scm.

Using the Dvol of 0.16814 mscmd from HPMIS, the under registration was calculated as 0.343% for Gas Day 25<sup>th</sup> March 2010.

## 4. RECOMMENDATIONS AND LEARNING

A review of the RBD data should be completed where a suspect analyser alarm has been raised within HPMIS.

## REFERENCES

HPMIS database

Remoteware files

## VERSION HISTORY

<i>Version</i>	<i>Changes</i>	<i>Author</i>	<i>Date</i>
<i>Rev0</i>	<i>First Issue</i>	<b>S Western</b>	<i>19/08/2010</i>
<i>Rev1</i>	<i>First Issue</i>	<b>S Western</b>	<i>30/09/2010</i>