

AGL UPSTREAM INVESTMENTS PTY LTD

Emission Testing Report

Report No 88145r

September 2011

EML AIR PTY LTD ABN 98 006 878 342

Melbourne (Head Office) PO Box 466, Canterbury VIC 3126 427 Canterbury Road Surrey Hills VIC 3127 Telephone +61 3 98361999 Facsimile +61 3 9830 0670

> Stack Emission Specialists Melbourne • Sydney • Perth

Test report prepared for AGL Upstream Investments Pty Ltd

Our reference: 88145r Page 2 of 5 20 September 2011

CLIENT	AGL Upstream Investments Pty Ltd Rosalind Park Gas Plant Lot 35 Medhurst Road MENANGLE NSW 2568
CONTACT	Mr Aaron Clifton
PROJECT	Emission Testing
REPORT NUMBER	88145r
DATE REPORTED	7 September 2011
SAMPLED BY	EML Air Pty Ltd
DATE SAMPLED	7 June 2011
AUTHORISED BY	Glenn Trenear Client Manager

CONTENTS

Foreword	3
Test Methods	3
Results	4
Quality Assurance	5
Definitions	5

This document is issued in accordance with NATA's accreditation requirements. Accredited for compliance with ISO/IEC 17025. This document shall not be reproduced except in full.

Test report prepared for AGL Upstream Investments Pty Ltd

FOREWORD

Tests were performed at the request of AGL Upstream Investments Pty Ltd to determine emissions to air as detailed in the test summary below;

TEST METHODS

Parameter	NSW Test Method	Reference Method	Uncertainty*
Sample Plane Criteria	TM-1	AS 4323.1	-
Flow rate, temperature and velocity	TM-2	USEPA 2	not specified
Moisture content	TM-22	USEPA 4	8%
Sulfuric acid mist (including sulfur trioxide and sulfur dioxide)	TM-3	USEPA 8	not specified
Nitrogen oxides (NO _X)	TM-11	USEPA 7E	not specified
Carbon dioxide	TM-24	USEPA 3A	not specified
Oxygen	TM-25	USEPA 3A	not specified
Odour	OM-7	AS 4323.3	not specified

* Uncertainty values cited in this table are calculated at the 95% confidence level (coverage factor = 2)

AS – Australian Standard USEPA – United States Environmental Protection Agency TM - Test Method OM - Other approved method

This document is issued in accordance with NATA's accreditation requirements. Accredited for compliance with ISO/IEC 17025. This document shall not be reproduced except in full.

Test report prepared for AGL Upstream Investments Pty Ltd

RESULTS

Stack Identification	Test Parameters	Concentration mg/m ³	Licence Limit mg/m ³
	Sulfuric acid mist and sulfur trioxide (expressed as sulfur trioxide)	<0.012	5
Point 1 – Engine 1	Sulfur dioxide	<0.081	7
	Nitrogen oxides (as No2) corrected to 7% O2	300	461

Stack Identification	Test Parameters	Concentration mg/m ³	Licence Limit mg/m ³
	Sulfuric acid mist and sulfur trioxide (expressed as sulfur trioxide)	0.048	5
Point 3 – Engine 3	Sulfur dioxide	<0.064	7
	Nitrogen oxides (as No2) corrected to 7% O2	170	461

Stack Identification	Test Parameters	Concentration mg/m ³	Licence Limit mg/m ³
	Sulfuric acid mist and sulfur trioxide (expressed as sulfur trioxide)	0.071	3.5
Point 4 – Reboiler Flue 4	Sulfur dioxide	<0.094	35
	Nitrogen oxides (as No2) corrected to 7% O2	110	110

Stack Identification	Test Parameters	Concentration mg/m ³	Licence Limit mg/m ³
	Sulfuric acid mist and sulfur trioxide (expressed as sulfur trioxide)	0.42	35
Point 5 – Reflux Column Vent 5	Sulfur dioxide	0.24	1042
	Nitrogen oxides (as No2) corrected to 7% O2	<2.9	13

Note: Point 2 – Engine 2 did not run on this day.

This document is issued in accordance with NATA's accreditation requirements. Accredited for compliance with ISO/IEC 17025. This document shall not be reproduced except in full.

Test report prepared for AGL Upstream Investments Pty Ltd

QUALITY ASSURANCE

EML Air is accredited to Australian Standard 17025 – General Requirements for the Competence of Testing and Calibration Laboratories. Australian Standard 17025 requires that a laboratory have a quality system similar to ISO 9002. More importantly it also requires that a laboratory have adequate equipment to perform the testing, as well as laboratory personnel with the competence to perform the testing. This quality assurance system is administered and maintained by the Quality Assurance Manager.

A formal Quality Control program is in place at EML Air to monitor analyses performed in the laboratory and sampling conducted in the field. The program is designed to check where appropriate; the sampling reproducibility, analytical method, accuracy, precision and the performance of the analyst. The Laboratory Manager is responsible for the administration and maintenance of this program.

DEFINITIONS

The following symbols and abbreviations may be used in this test report:

- < Less than
- NA Not applicable