Annex J

Laboratory Results for NMVOCs



CERTIFICATE OF ANALYSIS					
CLIENT:	Oscar Bioenergy Joint Venture	WORK ORDER:	HK1951146		
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	Siu Ho Wan, Lantau Island, NT, Hong Kong	SUB-BATCH:	0		
		DATE RECEIVED: DATE OF ISSUE:	19 <sup>th</sup> November, 2019 4 <sup>th</sup> December, 2019		
PROJECT:	Stack Gas Sampling for CHP2	SAMPLE TYPE:	Air		
SITE:	ORRC1, Siu Ho Wan, Lantau Island	NO OF SAMPLES:	1		
PO:					

#### COMMENTS

One (1) stack gas sample for CHP-2 was collected by ALS Technichem (HK) staff on 19<sup>th</sup> November, 2019 at the Organic Resources Recovery Centre (Phase 1) in Lantau Island.

Sampling information (Project name, Sample ID) is provided by client.

The sample(s) was analysed and reported on an as received basis.

NOTES

This is the Final Report and supersedes any preliminary report with this batch number.

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Richard Fung Managing Director - Hong Kong

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# 1. Summary of Work

The document is the final report for the stack gas sampling and testing event for Oscar Bioenergy Joint Venture in Siu Ho Wan, North Lantau Island.

Sampling Period:	19 <sup>th</sup> November, 2019
Location of Stack:	ORRC1, Siu Ho Wan
No. of Stack:	1
Name of Stack:	CHP-2

## Methods for Stack Sampling and Analysis:

Parameter	Method Reference	Sampling Time (minutes)
Volatile Organic Compounds (VOCs) <sup>[1]</sup>	US EPA Method 18	60
Non-Methane Volatile Organic Compounds (NMCOCs) ) [1]	US EPA Method 18	60

Note:

[1]: Results expressed as carbon

### 2. Sampling Summary

#### Volatile Organic Compounds (VOCs)

Sample gas was collected by using a stainless steel sampling probe, from the centroid of the stack, into the Tedlar bag by passive sampling technique.

The measurement of total volatile organic compounds (VOCs) content in the sample was conducted in references to BS EN 12619. VOCs content was determined by measuring the methane and non-methane volatile organic compounds of the sample by Gas Chromatograph-Flame Ionisation Detector (GC-FID).

VOCs was reported as the sum of methane and non-methane organics content in the sample.

# 3. Sampling Period

Test Parameters	Sampling Period	
Volatile Organic Compounds (VOCs)	19 November 2019 13:32 – 14:32	



Parameter	Unit	Reporting Limit	Result <sup>[1]</sup>
Gaseous & vaporous organic substances (VOCs) [2]	mg/m³	0.7	957
Methane ( $CH_4$ ) <sup>[2]</sup>	mg/m³	0.5	954
Non-Methane Organic Carbon (NMOC) <sup>[2]</sup>	mg/m³	0.2	3.2
Oxygen [3]	%	0.5	8.5

Note:

[1] Results expressed as dry, at 0 degree Celsius temperature, 101.325 kilopascal pressure and 6% O<sub>2</sub> content conditions.
[2] Results expressed as carbon.
[3] The oxygen content reported was the averaged result during the sampling period.