



Experts in air quality, odour and emission monitoring.

Emission Testing Report

Report: R020607

CPE Central Park Pty Ltd, Chippendale



Accredited for compliance with ISO/IEC 17025 - Testing. NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, calibration, and inspection reports.

Document Information

Client Name: CPE Central Park Pty Ltd
Report Number: R020607
Date of Issue: 21 July 2026
Attention: Pheroshen Singh
Address: 3 Central Park Ave
Chippendale NSW 2234

Testing Laboratory: Ektimo Pty Ltd, ABN 86 600 381 413

Report Authorisation



Rick Peralta
Air Monitoring Consultant



NATA Accredited Laboratory
No. 14601



Aaron Davis
Ektimo Signatory

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Please note that only numerical results pertaining to measurements conducted directly by Ektimo are covered by Ektimo terms of NATA accreditation as described in the Test Methods table. This does not include calculations that use data supplied by third-parties, comments, conclusions, or recommendations based upon the results. Refer to Test Methods section for full details of testing covered by NATA accreditation.

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1 Executive Summary

1.1 Background

Ektimo was engaged by Clean Peak Energy (CPE) Central Park Pty Ltd to perform emission testing at their Chippendale facility. Testing was carried out in accordance with Environment Protection Licence 20768.

1.2 Project Objective & Overview

The objective of the project was to quantify emissions from two (2) discharge points to determine compliance with CPE Central Park Pty Ltd's environmental licence.

Monitoring was performed as follows:

Location	Test Date	Test Parameters*
EPA ID No. 1 - Engine 1	30 June 2026	Nitrogen oxides (as NO ₂)
EPA ID No. 2 - Engine 2		Ammonia (NH ₃)

* Flow rate, velocity, temperature, and moisture were also determined.

All volume-based concentrations are reported on a dry basis at STP.

Plant operating conditions have been noted in this report.

1.3 Licence Comparison

The following licence comparison table shows that all analytes are within the licence limit set by the NSW EPA as per licence 20768 (last amended on 18 April 2016).

EPA No.	Location Description	Pollutant	Units	Licence Limit	Detected Values
1	Engine 1	Nitrogen Oxides	mg/m ³ at dry STP	57	34
		Ammonia	mg/m ³ at dry STP	4	0.25
2	Engine 2	Nitrogen Oxides	mg/m ³ at dry STP	57	51
		Ammonia	mg/m ³ at dry STP	4	1.7

Please note that the measurement uncertainty associated with the test results was not considered when determining whether the results were compliant or non-compliant.

2 Results

2.1 EPA ID No. 1 - Engine 1

Date	30/06/2026	Client	CPE Central Park Pty Ltd
Report	R020607	Stack ID	EPA ID No.1 - Engine 1
Licence No.	20768	Location	Chippendale
Ektimo Staff	Rick Peralta	State	NSW
Process Conditions	Engine Load: 1114kW, SCR Temp (Deg C): 405.4 ; Exit - 404.1		

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Stack Parameters

Moisture content, %v/v	11	
Gas molecular weight, g/g mole	28.3 (wet)	29.6 (dry)
Gas density at STP, kg/m ³	1.26 (wet)	1.32 (dry)
Gas density at discharge conditions, kg/m ³	0.89	

Gas Flow Parameters

Flow measurement time(s) (hhmm)	1209
Temperature, °C	119
Temperature, K	392
Ambient pressure, kPa	102
Stack pressure, kPa	102
Velocity at sampling plane, m/s	14
Volumetric flow rate, actual, m ³ /s	2
Volumetric flow rate (wet STP), m ³ /s	1.4
Volumetric flow rate (dry STP), m ³ /s	1.2
Mass flow rate (wet basis), kg/h	6300

Gas Analyser Results	Sampling time	Average		Minimum		Maximum	
		1233 - 1333		1233 - 1333		1233 - 1333	
Combustion Gases		Concentration	Mass Rate	Concentration	Mass Rate	Concentration	Mass Rate
		mg/m ³	g/min	mg/m ³	g/min	mg/m ³	g/min
Nitrogen oxides (as NO ₂)		34	2.5	18	1.4	72	5.4
		Concentration		Concentration		Concentration	
		% v/v		% v/v		% v/v	
Carbon dioxide		6.6		5.9		6.7	
Oxygen		10.3		10.2		11.8	

Ammonia	Sampling time	Results	
		1232-1332	
		Concentration	Mass Rate
		mg/m ³	g/min
Ammonia		0.25	0.018

2.2 EPA ID No. 2 - Engine 2

Date	30/06/2026	Client	CPE Central Park Pty Ltd
Report	R020607	Stack ID	EPA ID No.2 - Engine 2
Licence No.	20768	Location	Chippendale
Ektimo Staff	Rick Peralta	State	NSW
Process Conditions	Engine Load: 1112kW, SCR Temp (Deg C): 398.6 ; Exit - 396.5		

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Stack Parameters			
Moisture content, %v/v	10		
Gas molecular weight, g/g mole	28.4 (wet)	29.5 (dry)	
Gas density at STP, kg/m ³	1.27 (wet)	1.32 (dry)	
Gas density at discharge conditions, kg/m ³	0.91		
Gas Flow Parameters			
Flow measurement time(s) (hhmm)	1020		
Temperature, °C	112		
Temperature, K	385		
Ambient pressure, kPa	102		
Stack pressure, kPa	103		
Velocity at sampling plane, m/s	13		
Volumetric flow rate, actual, m ³ /s	2		
Volumetric flow rate (wet STP), m ³ /s	1.4		
Volumetric flow rate (dry STP), m ³ /s	1.3		
Mass flow rate (wet basis), kg/h	6400		

Gas Analyser Results	Sampling time	Average		Minimum		Maximum	
		1058 - 1158		1058 - 1158		1058 - 1158	
Combustion Gases		Concentration	Mass Rate	Concentration	Mass Rate	Concentration	Mass Rate
		mg/m ³	g/min	mg/m ³	g/min	mg/m ³	g/min
Nitrogen oxides (as NO ₂)		51	3.8	44	3.3	85	6.4
		Concentration		Concentration		Concentration	
		% v/v		% v/v		% v/v	
Carbon dioxide		6.1		5.9		6.3	
Oxygen		10.8		10.6		11.2	

Ammonia	Sampling time	Results	
		1042-1142	
Ammonia		Concentration	Mass Rate
		mg/m ³	g/min
		1.7	0.13

3 Sample Plane Compliance

3.1 EPA ID No. 1 - Engine 1

Sampling Plane Details	
Source tested	Reciprocating engine - gas
Pollution control equipment	No pollution control equipment
Sampling plane dimensions	430 mm
Sampling plane area	0.145 m ²
Sampling port size, number & depth	1" BSP (x2), 55 mm
Duct orientation & shape	Vertical Circular
Downstream disturbance	Bend 7 D
Upstream disturbance	Bend 6 D
No. traverses & points sampled	2 8
Sample plane conformance to AS 4323.1	Ideal sampling plane

3.2 EPA ID No. 2 - Engine 2

Sampling Plane Details	
Source tested	Reciprocating engine - gas
Pollution control equipment	No pollution control equipment
Sampling plane dimensions	430 mm
Sampling plane area	0.145 m ²
Sampling port size, number & depth	1" BSP (x2), 55 mm
Duct orientation & shape	Vertical Circular
Downstream disturbance	Bend 7 D
Upstream disturbance	Bend 6 D
No. traverses & points sampled	2 8
Sample plane conformance to AS 4323.1	Ideal sampling plane

4 Plant Operating Conditions

The below plant operating conditions have been supplied by CPE Central Park Pty Ltd personnel.

Location Description	Date	Sample Collection Time	Operating Load/Condition
EPA ID No. 1 - Engine 1	30 June 2026	1209 - 1333	1114kW, SCR Temp 405.4 °C, Exit Temp 404.1 °C
EPA ID No. 2 - Engine 2	30 June 2026	1020 - 1158	1112kW, SCR Temp 398.6 °C, Exit Temp 396.5 °C

5 Test Methods

All sampling and analysis were performed by Ektimo unless otherwise specified. Specific details of the methods are available upon request.

Parameter	Sampling method	Analysis method	Method detection limit	Uncertainty*	NATA accredited Sampling	NATA accredited Analysis
Sampling points - Selection	NSW EPA TM-1 (AS 4323.1)	NA	NA	NA	✓	NA
Flow rate, temperature & velocity	NSW EPA TM-2 (USEPA Method 2)	NSW EPA TM-2 (USEPA Method 2)	location specific	8%, 2%, 7%	NA	✓
Moisture content	NSW EPA TM-22 (USEPA Alt-Method 008)	NSW EPA TM-22 (USEPA Alt-Method 008)	1.0%	19%	✓	✓
Molecular weight	NA	NSW EPA TM-23 (USEPA Method 3)	NA	not specified	NA	✓
Dry gas density	NA	NSW EPA TM-23 (USEPA Method 3)	NA	not specified	NA	✓
Carbon dioxide	NSW EPA TM-24 (USEPA Method 3A)	NSW EPA TM-24 (USEPA Method 3A)	0.1%	13%	✓	✓
Nitrogen oxides	NSW EPA TM-11 (USEPA Method 7E)	NSW EPA TM-11 (USEPA Method 7E)	0.004 g/m ³	12%	✓	✓
Oxygen	NSW EPA TM-25 (USEPA Method 3A)	NSW EPA TM-25 (USEPA Method 3A)	0.1%	13%	✓	✓
Ammonia	Ektimo 260	Ektimo 260	not specified	not specified	✓	✓ [†]

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* Uncertainties cited in this table are estimated using typical values and are calculated at the 95% confidence level (coverage factor = 2).

[†] Analysis performed by Ektimo. Results were reported to Ektimo on.

- 17 July 2026 in report LV-009234.

6 Deviations to Test Methods

Ektimo notes that Environmental Licence 20768 references the sampling and analysis of ammonia via Special Method 1 i.e. Sampling Method SCAQMD Method 207.1 or USEPA CTM-027.

USEPA CTM-027 is an isokinetic method which was not possible to perform at testing locations EPA ID No. 1 or EPA ID No. 2, due to port size restrictions, out-of-stack obstructions, and positive pressure within the sampling planes at both test locations.

Sampling Method SCAQMD Method 207.1 utilises 0.1N sulfuric acid as a sampling solution and is analysed via ion selective electrode (ISE).

Ektimo utilised NATA accredited in-house method, Ektimo 260. Ektimo 260 is a mini-impinger method, which utilises 0.1N sulfuric acid as a sampling solution and is analysed via an in-house ion selective electrode (ISE) method.

Ektimo considers utilising Ektimo 260 to be a minor deviation.

7 Quality Assurance/Quality Control Information

Ektimo is accredited by the National Association of Testing Authorities (NATA) for the sampling and analysis of air pollutants from industrial sources. Unless otherwise stated test methods used are accredited with the National Association of Testing Authorities. For full details, search for Ektimo at NATA's website www.nata.com.au.

Ektimo is accredited by NATA to ISO/IEC 17025 - Testing. ISO/IEC 17025 - Testing 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 Director.

NATA is a member of APAC (Asia Pacific Accreditation Co-operation) and of ILAC (International Laboratory Accreditation Co-operation). Through mutual recognition arrangements with these organisations, NATA accreditation is recognised worldwide.

Unless specifically noted, all samples were collected and handled in accordance with Ektimo's QA/QC standards.

8 Definitions

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

% v/v	Volume to volume ratio, dry basis (except moisture)
~	Approximately
<	Less than
>	Greater than
≥	Greater than or equal to
AS	Australian Standard
CEM/CEMS	Continuous emission monitoring/Continuous emission monitoring system
CTM	Conditional test method
D	Duct diameter or equivalent duct diameter for rectangular ducts
D ₅₀	'Cut size' of a cyclone is defined as the particle diameter at which the cyclone achieves a 50% collection efficiency i.e. half of the particles are retained by the cyclone and half pass through it. The D ₅₀ method simplifies the capture efficiency distribution by assuming that a given cyclone stage captures all of the particles with a diameter equal to or greater than the D ₅₀ of that cyclone and less than the D ₅₀ of the preceding cyclone.
DECC	Department of Environment & Climate Change (NSW)
Disturbance	A flow obstruction or instability in the direction of the flow which may impede accurate flow determination. This includes centrifugal fans, axial fans, partially closed or closed dampers, louvres, bends, connections, junctions, direction changes or changes in pipe diameter.
EPA	Environment Protection Authority
FTIR	Fourier transform infra-red
ISC	Intersociety Committee, Methods of Air Sampling and Analysis
ISO	International Organisation for Standardisation
Lower bound	When an analyte is not present above the detection limit, the result is assumed to be equal to zero.
Medium bound	When an analyte is not present above the detection limit, the result is assumed to be equal to half of the detection limit.
NA	Not applicable
NATA	National Association of Testing Authorities
NIOSH	National Institute of Occupational Safety and Health
NT	Not tested or results not required
OM	Other approved method
RATA	Relative accuracy test audit
STP	Standard temperature and pressure. Gas volumes and concentrations are expressed on a dry basis at 0 °C, at discharge oxygen concentration and an absolute pressure of 101.325 kPa.
TM	Test method
USEPA	United States Environmental Protection Agency
VDI	Verein Deutscher Ingenieure (Association of German Engineers)
Velocity difference	The percentage difference between the average of initial flows and after flows.
XRD	X-ray diffractometry
Upper bound	When an analyte is not present above the detection limit, the result is assumed to be equal to the detection limit.
95% confidence interval	Range of values that contains the true result with 95% certainty. This means there is a 5% risk that the true result is outside this range

9 Appendices

Appendix A: Chain of Custody



Checked at Ektimo Dispatch by: _____

Sign/Date

Please send all results and queries to laboratory@ektimo.com.au

Samples received in good order: _____

Sign/Date

Sample ID	Job No.	Analysis Required	Units Required	Analytical Lab	Purchase Order No.	Ektimo Contact	Notes	TAT Required (days)
N 24363	R020607	Ammonia	ug/litre	Ektimo		Rick Peralta	Filed Blank	Normal
N 24367	R020607	Ammonia	ug/litre	Ektimo		Rick Peralta	A	Normal
N 24368	R020607	Ammonia	ug/litre	Ektimo		Rick Peralta	B	Normal
N 24372	R020607	Ammonia	ug/litre	Ektimo		Rick Peralta	A	Normal
N 24373	R020607	Ammonia	ug/litre	Ektimo		Rick Peralta	B	Normal

Appendix B: Laboratory Results



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CERTIFICATE OF ANALYSIS

Testing Laboratory: Ektimo
26 Redland Drive
Mitcham, VIC 3132

Report Number: LV-009234
Job Number: R020607
Date of Issue: 17/07/2026

Attention: CPE Central
Address: 3 Central Park Ave
Chippendale NSW 2234

Date samples received: 3/7/2026
Number of samples received: 5
Date samples analysed: 16/07/2026
No of samples analysed: 5

Test method(s) used: Ektimo 260

Comments

QC Acceptance Criteria:	Parameter	Criteria	Pass/Fail
	Standard Curve	$R^2 > 0.99$	Pass
	Range	All samples < 110% of highest standard	Pass
	Repeat samples	Between 80% - 120%	Pass
	Method Blanks	All method blanks < PQL	Pass
	QC sample	2 standard deviations of theoretical	Pass
	Chemical Expiry	All chemicals within expiry date	Pass

This report supersedes any previous report(s) with this reference. Sample(s) have been analysed as received.

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NATA is a member of APAC (Asia Pacific Laboratory Accreditation Co-operation) and of ILAC (International Laboratory Accreditation Co-operation). Through the mutual recognition arrangements with both of these organisations, NATA accreditation is recognised world-wide.

A formal Quality Control program is in place at Ektimo 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.

REPORT AUTHORISATION

Version: 291025


Daniel Balaam
Senior Laboratory Chemist


Matthew Cook
Laboratory Manager



Accredited for compliance with ISO/IEC 17025. NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, calibration and inspection reports.

Analytical Results

Report No. LV-009234
Job No. R020607
Client Name: CPE Central

Parameter	PQL	Units	N 24363 R020607	N 24367 R020607	N 24368 R020607	N 24372 R020607
Volume	1	mL	42	29	25	25
Ammonia as N	0.1	mg/L	<0.1	2.7	<0.1	0.45

* Results marked with an asterisk are outside the acceptable calibration range of the instrument.



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Analytical Results

Report No. LV-009234

Job No. R020607

Client Name: CPE Central

Parameter	PQL	Units	N 24373 R020607
Volume	1	mL	32
Ammonia as N	0.1	mg/L	<0.1

* Results marked with an asterisk are outside the acceptable calibration range of the instrument.



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Results page 3 of 3



Experts in air quality, odour and emission monitoring.

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