

Ektimo

Coffey Environments, Newtown

Greenslope Project

Organochlorine Pesticide Report

Report R015358[DRAFT 2]

ektimo.com.au

Document Information

Client Name: Coffey Environments
Report Number: R015358[DRAFT 2]
Date of Issue: 21 November 2023
Attention: Jeremy Wicks
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NEWTOWN VIC 3220
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Report Authorisation

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1 Executive Summary

1.1 Background

Ektimo was engaged by Coffey Environments, Newtown, Geelong to perform ambient monitoring for a contaminated soil remediation project at a location in Greenslopes, Brisbane. Monitoring for Dust and OC Pesticides was carried out over a 6-week work period at 2 x boundary locations at the site.

1.2 Project Objectives

The objectives of the project were to conduct a monitoring programme to determine ambient levels of dust and OC Pesticides at the boundary using high a volume sampling instrument. To achieve the contaminants detection limit, samples were obtained for seven (7) project working days. The below adopted criteria will be achieved for each round of sampling during the remediation project.

Contaminant	USEPA RSL Residential Air Quality x 10 ng/m ³
4,4-DDE	290
Aldrin	5.7
chlordane	280
DDD	410
DDT	290
Dieldrin	6.1
Endrin aldehyde	
Endrin ketone	
Endosulfan I	
Endrin	
Heptachlor	22
Heptachlor epoxide	11

The samples that were obtained represent the sampling period from 28 August to 23 October 2023.

Location	Test Date	Test Parameters*
Northside site location	28 August – 23 October 2023	Total suspended particulates
Southeast site location		Organochlorine pesticides

Sampling technique used for this program is based on US EPA Compendium Method TO-4A – Determination of Pesticides and Polychlorinated Biphenyls in Ambient Air Using High Volume Polyurethane Foam (PUF) Sampling. A high-volume sampler, approximately 13.6 m³/hr, is used to collect common pesticides on a sorbent cartridge containing PUF and are returned to the laboratory for analysis. To achieve the contaminants detection limit, samples were obtained for seven (7) project working days.

1.3 Results Summary

1.3.1 Northside site location

Northside Site Location Date	Unit	USEPA RSL Residential Air Quality x 10 (ng/m ³)	28/08/2023 - 5/09/2023	6/09/2023 - 14/09/2023	15/09/2023 - 25/09/2023	26/09/2023 - 5/10/2023	6/10/2023 - 13/10/2023	16/10/2023 - 23/10/2023
TSP								
Total Suspended Particulates	mg/m ³		54	16	110	190	25	26
Pesticides								
HCB	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
Heptachlor	ng/m ³	22	<0.17	<0.18	<0.16	0.21	0.28	<0.19
Heptachlor epoxide	ng/m ³	11	<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
Aldrin	ng/m ³	5.7	<0.17	<0.18	0.35	<0.16	<0.19	<0.19
gamma-BHC(Lindane)	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
alpha-BHC	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
beta-BHC	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
delta-BHC	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
trans-Chlordane	ng/m ³	280	1.2	0.95	0.27	0.87	1.2	0.56
cis-Chlordane	ng/m ³	280	0.91	0.67	0.21	0.63	0.81	0.37
Oxychlordane	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
Dieldrin	ng/m ³	6.1	2	0.72	0.82	0.35	<0.19	<0.19
p,p-DDE	ng/m ³	290	<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
p,p-DDD	ng/m ³	410	<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
p,p-DDT	ng/m ³	290	<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
Endrin	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
Endrin aldehyde	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
Endrin Ketone	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
alpha-Endosulfan	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
beta-Endosulfan	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
Endosulfan sulfate	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
Methoxychlor	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19
Dicofol	ng/m ³		<0.17	<0.18	<0.16	<0.16	<0.19	<0.19

1.3.2 Southeast site location

Southeast Site Location Date	Unit	USEPA RSL Residential Air Quality x 10 (ng/m ³)	28/08/2023 - 5/09/2023	6/09/2023 - 14/09/2023	15/09/2023 - 25/09/2023	26/09/2023 - 5/10/2023	6/10/2023 - 13/10/2023	16/10/2023 - 23/10/2023
TSP								
Total Suspended Particulates	mg/m ³		8.4	42	30	26	0.076	3.3
Pesticides								
HCB	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
Heptachlor	ng/m ³	22	0.2	<0.14	<0.11	<0.13	<0.085	<0.089
Heptachlor epoxide	ng/m ³	11	<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
Aldrin	ng/m ³	5.7	<0.14	<0.14	0.12	<0.13	<0.085	<0.089
gamma-BHC(Lindane)	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
alpha-BHC	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
beta-BHC	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
delta-BHC	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
trans-Chlordane	ng/m ³	280	1.2	0.56	<0.11	0.34	<0.085	<0.089
cis-Chlordane	ng/m ³	280	0.9	0.41	<0.11	0.24	<0.085	<0.089
Oxychlordane	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
Dieldrin	ng/m ³	6.1	<0.14	<0.14	0.15	0.5	<0.085	<0.089
p,p-DDE	ng/m ³	290	<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
p,p-DDD	ng/m ³	410	<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
p,p-DDT	ng/m ³	290	<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
Endrin	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
Endrin aldehyde	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
Endrin Ketone	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
alpha-Endosulfan	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
beta-Endosulfan	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
Endosulfan sulfate	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
Methoxychlor	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089
Dicofol	ng/m ³		<0.14	<0.14	<0.11	<0.13	<0.085	<0.089

2 Results

2.1 Northside site location

Date	28 August - 25 September 2023	Client	Coffey Environments
Report	R015358	Site ID	Northside
Licence No.	-	Location	Greenslope State QLD
Ektimo Staff	Jhon Araque, Manipal Singh		
Reason for testing:	Client requested testing to determine emissions to air		

Particulate matter (TSP)	Test 1	Test 2	Test 3
Date	28/8/2023- 5/9/2023	6/9/2023-14/9/2023	15/9/2023-25/9/2023
Meter volume (m³)	588.7	559.6	614.9
	Concentration mg/m³	Concentration mg/m³	Concentration mg/m³
Total suspended particulates	54	16	110

Pesticides	Concentration ng/m³	Concentration ng/m³	Concentration ng/m³
HCB	<0.17	<0.18	<0.16
Heptachlor	<0.17	<0.18	<0.16
Heptachlor epoxide	<0.17	<0.18	<0.16
Aldrin	<0.17	<0.18	0.35
gamma-BHC(Lindane)	<0.17	<0.18	<0.16
alpha-BHC	<0.17	<0.18	<0.16
beta-BHC	<0.17	<0.18	<0.16
delta-BHC	<0.17	<0.18	<0.16
trans-Chlordane	1.2	0.95	0.27
cis-Chlordane	0.91	0.67	0.21
Oxychlordane	<0.17	<0.18	<0.16
Dieldrin	2	0.72	0.82
p,p-DDE	<0.17	<0.18	<0.16
p,p-DDD	<0.17	<0.18	<0.16
p,p-DDT	<0.17	<0.18	<0.16
Endrin	<0.17	<0.18	<0.16
Endrin aldehyde	<0.17	<0.18	<0.16
Endrin Ketone	<0.17	<0.18	<0.16
alpha-Endosulfan	<0.17	<0.18	<0.16
beta-Endosulfan	<0.17	<0.18	<0.16
Endosulfan sulfate	<0.17	<0.18	<0.16
Methoxychlor	<0.17	<0.18	<0.16
Dicofol	<0.17	<0.18	<0.16

Date	26 September - 23 October 2023	Client	Coffey Environments
Report	R015358	Site ID	Northside
Licence No.	-	Location	Greenslope
Ektimo Staff	Jhon Araque, Jackson Riley, Manipal Singh	State	QLD
Reason for testing:	Client requested testing to determine emissions to air		

Particulate matter (TSP)	Test 1	Test 2	Test 3
Date	26/9/2023- 5/10/2023	6/10/2023 -13/10/2023	16/10/2023-23/10/2023
Meter volume (m³)	602.5	525.8	516.2
	Concentration mg/m³	Concentration mg/m³	Concentration mg/m³
Total suspended particulates	190	25	26

Pesticides	Concentration ng/m³	Concentration ng/m³	Concentration ng/m³
HCB	<0.16	<0.19	<0.19
Heptachlor	0.21	0.28	<0.19
Heptachlor epoxide	<0.16	<0.19	<0.19
Aldrin	<0.16	<0.19	<0.19
gamma-BHC(Lindane)	<0.16	<0.19	<0.19
alpha-BHC	<0.16	<0.19	<0.19
beta-BHC	<0.16	<0.19	<0.19
delta-BHC	<0.16	<0.19	<0.19
trans-Chlordane	0.87	1.2	0.56
cis-Chlordane	0.63	0.81	0.37
Oxychlordane	<0.16	<0.19	<0.19
Dieldrin	0.35	<0.19	<0.19
p,p-DDE	<0.16	<0.19	<0.19
p,p-DDD	<0.16	<0.19	<0.19
p,p-DDT	<0.16	<0.19	<0.19
Endrin	<0.16	<0.19	<0.19
Endrin aldehyde	<0.16	<0.19	<0.19
Endrin Ketone	<0.16	<0.19	<0.19
alpha-Endosulfan	<0.16	<0.19	<0.19
beta-Endosulfan	<0.16	<0.19	<0.19
Endosulfan sulfate	<0.16	<0.19	<0.19
Methoxychlor	<0.16	<0.19	<0.19
Dicofol	<0.16	<0.19	<0.19

2.2 Southeast site location

Date	28 August - 25 September 2023	Client	Coffey Environments
Report	R015358	Site ID	Southeast side
Licence No.	-	Location	Greenslope State QLD
Ektimo Staff	Jhon Araque, Maniplal Singh		
Reason for testing:	Client requested testing to determine emissions to air		

Particulate matter (TSP)	Test 1	Test 2	Test 3
Date	28/8/2023- 5/9/2023	6/9/2023- 14/9/2023	15/9/2023-25/9/2023
Meter volume (m³)	708.36	689.2	907.3
	Concentration mg/m³	Concentration mg/m³	Concentration mg/m³
Total suspended particulates	8.4	42	30

	Concentration ng/m³	Concentration ng/m³	Concentration ng/m³
Pesticides			
HCB	<0.14	<0.14	<0.11
Heptachlor	0.2	<0.14	<0.11
Heptachlor epoxide	<0.14	<0.14	<0.11
Aldrin	<0.14	<0.14	0.12
gamma-BHC(Lindane)	<0.14	<0.14	<0.11
alpha-BHC	<0.14	<0.14	<0.11
beta-BHC	<0.14	<0.14	<0.11
delta-BHC	<0.14	<0.14	<0.11
trans-Chlordane	1.2	0.56	<0.11
cis-Chlordane	0.9	0.41	<0.11
Oxychlordane	<0.14	<0.14	<0.11
Dieldrin	<0.14	<0.14	0.15
p,p-DDE	<0.14	<0.14	<0.11
p,p-DDD	<0.14	<0.14	<0.11
p,p-DDT	<0.14	<0.14	<0.11
Endrin	<0.14	<0.14	<0.11
Endrin aldehyde	<0.14	<0.14	<0.11
Endrin Ketone	<0.14	<0.14	<0.11
alpha-Endosulfan	<0.14	<0.14	<0.11
beta-Endosulfan	<0.14	<0.14	<0.11
Endosulfan sulfate	<0.14	<0.14	<0.11
Methoxychlor	<0.14	<0.14	<0.11
Dicofol	<0.14	<0.14	<0.11

Date	26 September - 23 October 2023	Client	Coffey Environments
Report	R015358	Site ID	Southeast side
Licence No.	-	Location	Greenslopes
Ektimo Staff	Jhon Arque, Jackson Riley, Manipal Singh	State	QLD
Reason for testing:	Client requested testing to determine emissions to air		

Particulate matter (TSP)	Test 1	Test 2	Test 3
Date	26/9/2023- 5/10/2023	6/10/2023-13/10/2023	16/10/23-23/10/2023
Meter volume (m³)	736.5	1167.2	1123.6
	Concentration mg/m³	Concentration mg/m³	Concentration mg/m³
Total suspended particulates	26	0.076	3.3

Pesticides	Concentration ng/m³	Concentration ng/m³	Concentration ng/m³
HCB	<0.13	<0.085	<0.089
Heptachlor	<0.13	<0.085	<0.089
Heptachlor epoxide	<0.13	<0.085	<0.089
Aldrin	<0.13	<0.085	<0.089
gamma-BHC(Lindane)	<0.13	<0.085	<0.089
alpha-BHC	<0.13	<0.085	<0.089
beta-BHC	<0.13	<0.085	<0.089
delta-BHC	<0.13	<0.085	<0.089
trans-Chlordane	0.34	<0.085	<0.089
cis-Chlordane	0.24	<0.085	<0.089
Oxychlordane	<0.13	<0.085	<0.089
Dieldrin	0.5	<0.085	<0.089
p,p-DDE	<0.13	<0.085	<0.089
p,p-DDD	<0.13	<0.085	<0.089
p,p-DDT	<0.13	<0.085	<0.089
Endrin	<0.13	<0.085	<0.089
Endrin aldehyde	<0.13	<0.085	<0.089
Endrin Ketone	<0.13	<0.085	<0.089
alpha-Endosulfan	<0.13	<0.085	<0.089
beta-Endosulfan	<0.13	<0.085	<0.089
Endosulfan sulfate	<0.13	<0.085	<0.089
Methoxychlor	<0.13	<0.085	<0.089
Dicofol	<0.13	<0.085	<0.089

3 Test Methods

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

Parameter	Sampling method	Analysis method	Uncertainty*	NATA accredited	
				Sampling	Analysis
Organopesticides	USEPA TO-4A	NMI in-house method NR47	not specified	✖	✓ [†]

311023

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

[†] Analysis performed by Australian Government National Measurement Institute, NATA accreditation number 198. Results were reported to Ektimo on:

5 October 2023 in reports RN1407051 and RN1407053.

30 October 2023 in reports RN1409422 and RN1409427.

13 November 2023 in report RN1410826.

15 November 2023 in report RN1410977.

4 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.

5 Definitions

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

% v/v	Volume to volume ratio, dry basis
~	Approximately
<	Less than
>	Greater than
≥	Greater than or equal to
AS	Australian Standard
NT	Not tested or results not required
OM	Other approved method
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.
USEPA	United States Environmental Protection Agency

6 Appendices

Appendix A: Site Images

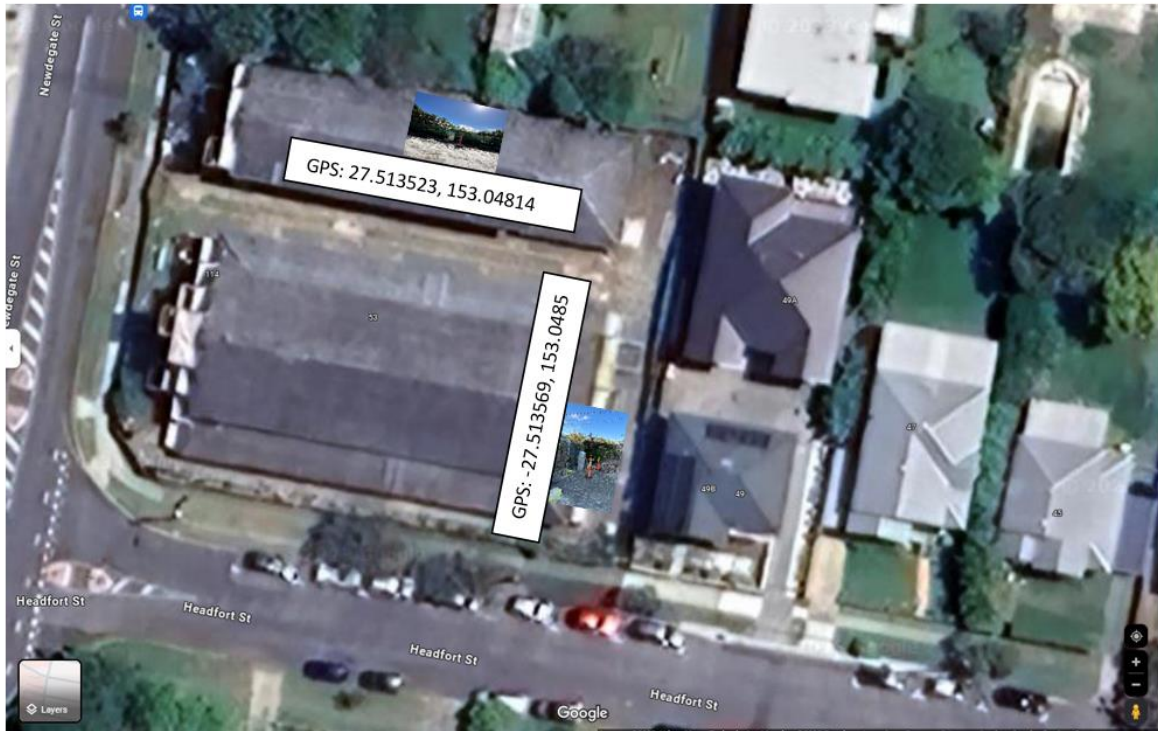


Image 1. Sampling Location



Image 2. Meteorological Station

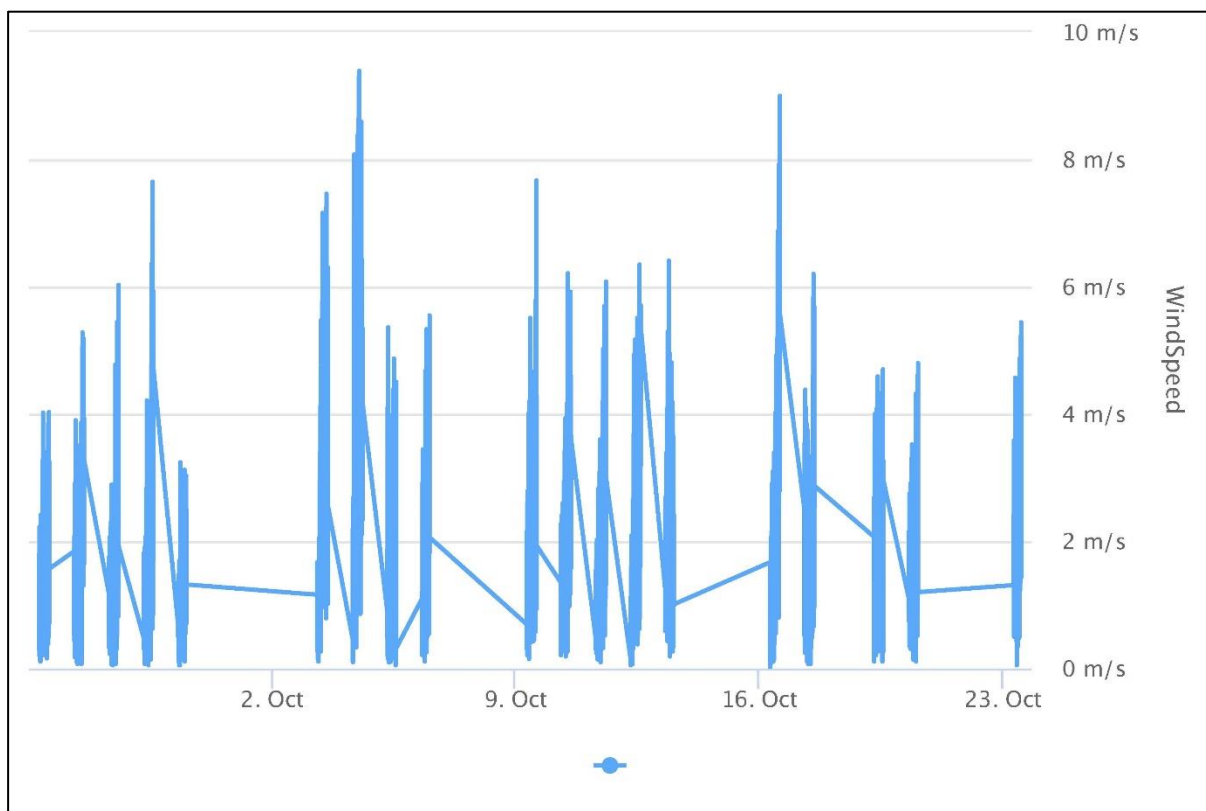
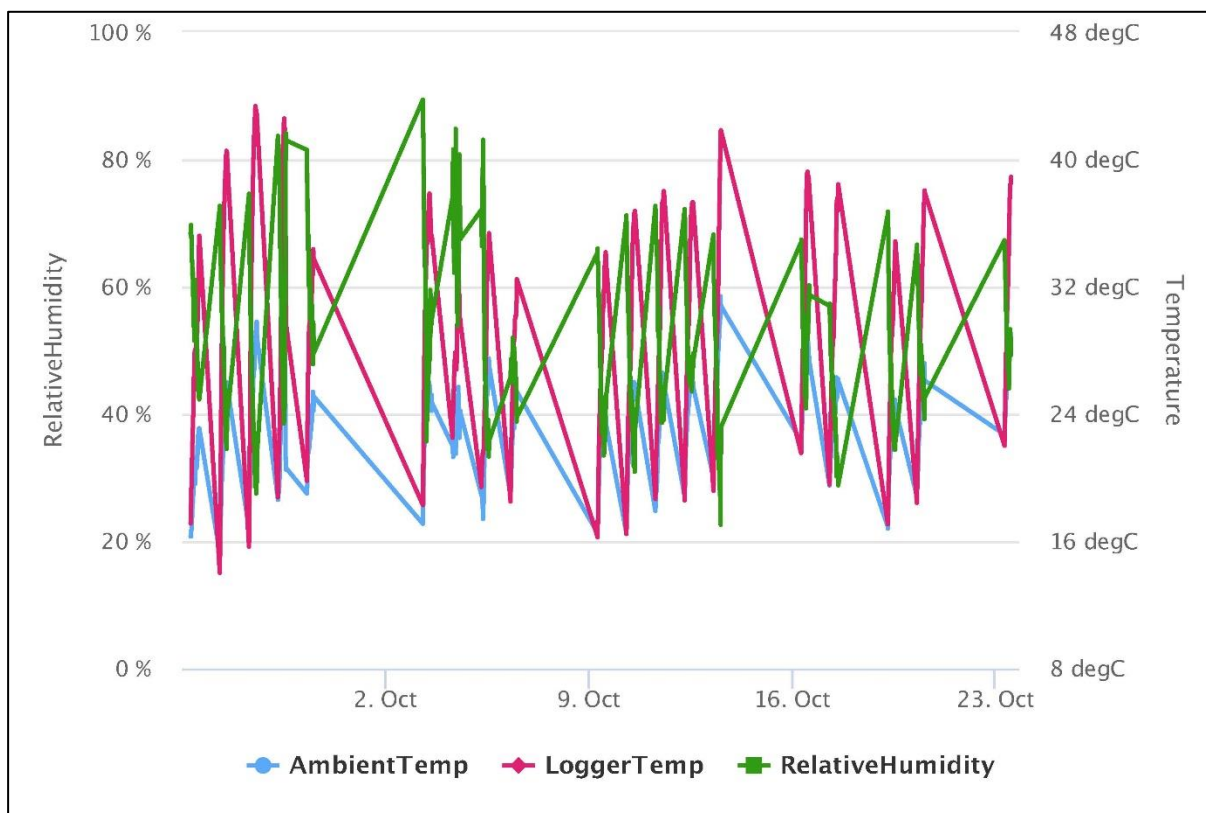


Image 3. LSA PUF (Northside site location)

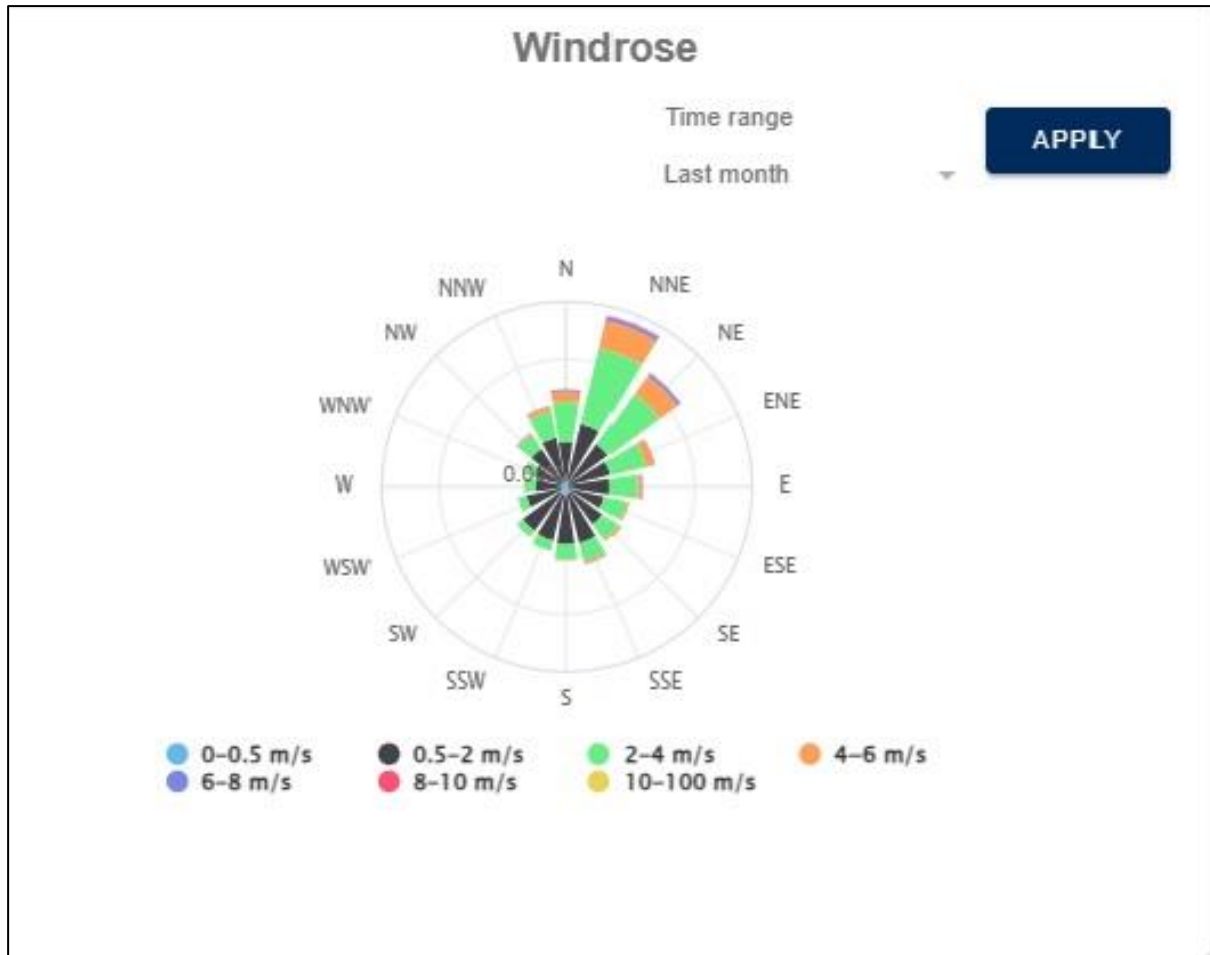


Image 4. Ecotech PUF (Southeast site location)

Appendix B: Weather Observations



Windrose. Daily wind speed and direction based on installed onsite MET station, 28th August 2023 – 23rd October 2023.



Appendix C: Laboratory Results

Sample Log			
Q7538	R015358	Ecotech - South East	Filter (AUT_P2) + PUF (AUT230803B)
Q7539	R015358	LSA - North	Filter (AUT_P3) + PUF (AUT230803A)
Q7540	R015358	Ecotech - South East	Filter (AUT_P11) + PUF (AUT230803C)
Q7541	R015358	LSA - North	Filter (AUT_P10) + PUF (AUT230803F)
Q7655	R015358	Ecotech - Southeast	Filter (AUT_P4) + PUF (AUT230803D)
Q7656	R015358	LSA - North	Filter (AUT_P12) + PUF (AUT230816B)
Q7666	R015358	Ecotech - East	Filter (AUT_P6) + PUF (AUT230816C)
Q7667	R015358	LSA - South	Filter (AUT_P5) + PUF (AUT230816E)
Q7688	R015358	Ecotech - East	Filter (AUT_P8) + PUF (AUT230816F)
Q7689	R015358	LSA - South	Filter (AUT_P7) + PUF (AUT230816D)
Q7724	R015886	Ecotech - East	Filter (AUT_P13) + PUF (AUT230816C)
Q7725	R015886	LSA - South	Filter (AUT_P9) + PUF (AUT230816A)
Q7726	R015886	Field Blank	Filter (AUT_P14) + PUF (AUT230803G)

Particulate Measurement Results

Sample ID	NMI Reference	Job Number	Filter Number	Particulate Mass /g
Q7538	N23/018574	EKT101/230911/1	AUT_P2	0.03167 g
Q7539	N23/018575	EKT101/230911/1	AUT_P3	0.00596 g
Q7540	N23/019335	EKT101/230919	AUT_P11	0.02907 g
Q7541	N23/019336	EKT101/230919	AUT_P10	0.00924 g
Q7655	N23/019956	EKT101/230928	AUT_P4	0.02741 g
Q7656	N23/019957	EKT101/230928	AUT_P12	0.06558 g
Q7666	N23/020719	EKT101/231009/2	AUT_P6	0.01916 g
Q7667	N23/020720	EKT101/231009/2	AUT_P5	0.11692 g
Q7688	N23/021848	EKT101/231018/1	AUT_P8	0.00009 g
Q7689	N23/021849	EKT101/231018/1	AUT_P7	0.01332 g
Q7724	N23/022524	EKT101/231026	AUT_P13	0.00373 g
Q7725	N23/022525	EKT101/231026	AUT_P9	0.01367 g
Q7726	N23/022526	EKT101/231026	AUT_P14	0.00353 g

REPORT OF ANALYSIS

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Report No. RN1407051

Client : EKTIMO PTY LTD 52 COOPER ROAD COCKBURN CENTRAL WA 6164		Job No. : EKTIO1/230919 Quote No. : QT-02083 Order No. : W012147 Date Received : 19-SEP-2023
Attention : HENRY DIONA Project Name : Your Client Services Manager : Tim Reddan		Sampled By : CLIENT Phone :
Lab Reg No.	Sample Ref	Sample Description
N23/019335	Q7540	JOB NO. R015358
N23/019336	Q7541	JOB NO. R015358

Lab Reg No.	Units	N23/019335	N23/019336			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7540	Q7541			
Organochlorine (OC) Pesticides						
HCB	ug	< 0.1	< 0.1			NR47
Heptachlor	ug	< 0.1	< 0.1			NR47
Heptachlor epoxide	ug	< 0.1	< 0.1			NR47
Aldrin	ug	< 0.1	< 0.1			NR47
gamma-BHC(Lindane)	ug	< 0.1	< 0.1			NR47
alpha-BHC	ug	< 0.1	< 0.1			NR47
beta-BHC	ug	< 0.1	< 0.1			NR47
delta-BHC	ug	< 0.1	< 0.1			NR47
trans-Chlordane	ug	0.39	0.54			NR47
cis-Chlordane	ug	0.29	0.38			NR47
Oxychlordane	ug	< 0.1	< 0.1			NR47
Dieldrin	ug	< 0.1	0.41			NR47
p,p-DDE	ug	< 0.1	< 0.1			NR47
p,p-DDD	ug	< 0.1	< 0.1			NR47
p,p-DDT	ug	< 0.1	< 0.1			NR47
Endrin	ug	< 0.1	< 0.1			NR47
Endrin aldehyde	ug	< 0.1	< 0.1			NR47
Endrin Ketone	ug	< 0.1	< 0.1			NR47
alpha-Endosulfan	ug	< 0.1	< 0.1			NR47
beta-Endosulfan	ug	< 0.1	< 0.1			NR47
Endosulfan sulfate	ug	< 0.1	< 0.1			NR47
Methoxychlor	ug	< 0.1	< 0.1			NR47
Dicofol	ug	< 0.1	< 0.1			NR47
Dates						
Date extracted		26-SEP-2023	26-SEP-2023			
Date analysed		28-SEP-2023	28-SEP-2023			

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N23/019335



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Accreditation No. 198

05-OCT-2023

Lab Reg No.	Units	N23/019335	N23/019336			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7540	Q7541			
Components						
Cartridge Preparation Charge		Cartridge p	Cartridge p			
Consultation		Particulate	Particulate			



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This Report supersedes reports: *RN1406684*

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Note: Sampling date(s) have been provided by the client.

Note: Where sampling dates are not provided NMI is unable to determine compliance to any applicable Holding Time requirements

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Client : EKTIMO PTY LTD 52 COOPER ROAD COCKBURN CENTRAL WA 6164	Job No. : EKTIO1/230911/1 Quote No. : QT-02083 Order No. : Date Received : 11-SEP-2023 Sampled By : CLIENT
Attention : HENRY DIONA Project Name : Your Client Services Manager : Tim Reddan	Phone : 03 9644 4854
Lab Reg No.	Sample Ref
N23/018574	Q7538
N23/018575	Q7539
	Sample Description
	JOB NO. R015358
	JOB NO. R015358

Lab Reg No.		N23/018574	N23/018575			
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7538	Q7539			
	Units					Method
Organochlorine (OC) Pesticides						
HCB	ug	<0.1	<0.1			NR47
Heptachlor	ug	<0.1	0.14			NR47
Heptachlor epoxide	ug	<0.1	<0.1			NR47
Aldrin	ug	<0.1	<0.1			NR47
gamma-BHC(Lindane)	ug	<0.1	<0.1			NR47
alpha-BHC	ug	<0.1	<0.1			NR47
beta-BHC	ug	<0.1	<0.1			NR47
delta-BHC	ug	<0.1	<0.1			NR47
trans-Chlordane	ug	0.69	0.85			NR47
cis-Chlordane	ug	0.54	0.64			NR47
Oxychlordane	ug	<0.1	<0.1			NR47
Dieldrin	ug	1.2	<0.1			NR47
p,p-DDE	ug	<0.1	<0.1			NR47
p,p-DDD	ug	<0.1	<0.1			NR47
p,p-DDT	ug	<0.1	<0.1			NR47
Endrin	ug	<0.1	<0.1			NR47
Endrin aldehyde	ug	<0.1	<0.1			NR47
Endrin Ketone	ug	<0.1	<0.1			NR47
alpha-Endosulfan	ug	<0.1	<0.1			NR47
beta-Endosulfan	ug	<0.1	<0.1			NR47
Endosulfan sulfate	ug	<0.1	<0.1			NR47
Methoxychlor	ug	<0.1	<0.1			NR47
Dicofol	ug	<0.1	<0.1			NR47
Dates						
Date extracted		26-SEP-2023	26-SEP-2023			
Date analysed		28-SEP-2023	28-SEP-2023			

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Lab Reg No.	Units	N23/018574	N23/018575			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7538	Q7539			



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Lab Reg No.	Units	N23/018574	N23/018575			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7538	Q7539			
Components						
Cartridge Preparation Charge		PUF prepara	PUF prepara			
Consultation		Particulate	Particulate			



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The testing was undertaken at: 105 Delhi Road, North Ryde, NSW, 2113

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Client : EKTIMO PTY LTD 52 COOPER ROAD COCKBURN CENTRAL WA 6164		Job No. : EKTIO1/230928 Quote No. : QT-02083 Order No. : W012203 Date Received : 28-SEP-2023
Attention : JHON ARAQUE Project Name : Your Client Services Manager : Tim Reddan		Sampled By : CLIENT Phone :
Lab Reg No.	Sample Ref	Sample Description
N23/019956	Q7655	JOB NO. R015358
N23/019957	Q7656	JOB NO. R015358

Lab Reg No.	Units	N23/019956	N23/019957			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7655	Q7656			
Organochlorine (OC) Pesticides						
HCB	ug	< 0.1	< 0.1			NR47
Heptachlor	ug	< 0.1	< 0.1			NR47
Heptachlor epoxide	ug	< 0.1	< 0.1			NR47
Aldrin	ug	0.11	0.22			NR47
gamma-BHC(Lindane)	ug	< 0.1	< 0.1			NR47
alpha-BHC	ug	< 0.1	< 0.1			NR47
beta-BHC	ug	< 0.1	< 0.1			NR47
delta-BHC	ug	< 0.1	< 0.1			NR47
trans-Chlordane	ug	< 0.1	0.17			NR47
cis-Chlordane	ug	< 0.1	0.13			NR47
Oxychlordane	ug	< 0.1	< 0.1			NR47
Dieldrin	ug	0.14	0.51			NR47
p,p-DDE	ug	< 0.1	< 0.1			NR47
p,p-DDD	ug	< 0.1	< 0.1			NR47
p,p-DDT	ug	< 0.1	< 0.1			NR47
Endrin	ug	< 0.1	< 0.1			NR47
Endrin aldehyde	ug	< 0.1	< 0.1			NR47
Endrin Ketone	ug	< 0.1	< 0.1			NR47
alpha-Endosulfan	ug	< 0.1	< 0.1			NR47
beta-Endosulfan	ug	< 0.1	< 0.1			NR47
Endosulfan sulfate	ug	< 0.1	< 0.1			NR47
Methoxychlor	ug	< 0.1	< 0.1			NR47
Dicofol	ug	< 0.1	< 0.1			NR47
Dates						
Date extracted		20-OCT-2023	20-OCT-2023			
Date analysed		24-OCT-2023	24-OCT-2023			

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Lab Reg No.	Units	N23/019956	N23/019957			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7655	Q7656			



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Lab Reg No.	Units	N23/019956	N23/019957			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7655	Q7656			
Components						
Cartridge Preparation Charge		PUF prepara	PUF prepara			
Consultation		Particulate	Particulate			



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Report No. RN1409427

Client : EKTIMO PTY LTD 52 COOPER ROAD COCKBURN CENTRAL WA 6164	Job No. : EKTIO1/231009/2 Quote No. : QT-02083 Order No. : W012272 Date Received : 09-OCT-2023 Sampled By : CLIENT
Attention : JHON ARAQUE Project Name : Your Client Services Manager : Tim Reddan	Phone : 03 9644 4854
Lab Reg No. Sample Ref Sample Description	
N23/020719 Q7666 FILTER (AUT-PF6) + PUF(AUT230816C) JOB NO R015358	
N23/020720 Q7667 FILTER (AUT-PF5) + PUF(AUT230816E) JOB NO R015358	

Lab Reg No.		N23/020719	N23/020720			
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7666	Q7667			
	Units					Method
Organochlorine (OC) Pesticides						
HCB	ug	<0.1	<0.1			NR47
Heptachlor	ug	<0.1	0.13			NR47
Heptachlor epoxide	ug	<0.1	<0.1			NR47
Aldrin	ug	<0.1	<0.1			NR47
gamma-BHC(Lindane)	ug	<0.1	<0.1			NR47
alpha-BHC	ug	<0.1	<0.1			NR47
beta-BHC	ug	<0.1	<0.1			NR47
delta-BHC	ug	<0.1	<0.1			NR47
trans-Chlordane	ug	0.25	0.53			NR47
cis-Chlordane	ug	0.18	0.38			NR47
Oxychlordane	ug	<0.1	<0.1			NR47
Dieldrin	ug	0.37	0.21			NR47
p,p-DDE	ug	<0.1	<0.1			NR47
p,p-DDD	ug	<0.1	<0.1			NR47
p,p-DDT	ug	<0.1	<0.1			NR47
Endrin	ug	<0.1	<0.1			NR47
Endrin aldehyde	ug	<0.1	<0.1			NR47
Endrin Ketone	ug	<0.1	<0.1			NR47
alpha-Endosulfan	ug	<0.1	<0.1			NR47
beta-Endosulfan	ug	<0.1	<0.1			NR47
Endosulfan sulfate	ug	<0.1	<0.1			NR47
Methoxychlor	ug	<0.1	<0.1			NR47
Dicofol	ug	<0.1	<0.1			NR47
Dates						
Date extracted		20-OCT-2023	20-OCT-2023			
Date analysed		24-OCT-2023	24-OCT-2023			

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Lab Reg No.	Units	N23/020719	N23/020720			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7666	Q7667			



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Lab Reg No.	Units	N23/020719	N23/020720			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7666	Q7667			
Components						
Cartridge Preparation Charge		PUF prepara	PUF prepara			
Consultation		Particulate	Particulate			



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This Report supersedes reports: *RN1409424*

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The testing was undertaken at: 105 Delhi Road, North Ryde, NSW, 2113



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Report No. RN1410826

Client : EKTIMO PTY LTD 52 COOPER ROAD COCKBURN CENTRAL WA 6164	Job No. : EKTIO1/231018/1 Quote No. : QT-02083 Order No. : W012272 Date Received : 18-OCT-2023 Sampled By : CLIENT
Attention : JHON ARAQUE Project Name : Your Client Services Manager : Tim Reddan	Phone :

Lab Reg No.	Sample Ref	Sample Description
N23/021848	Q7688	JOB NO. R015358
N23/021849	Q7689	JOB NO. R015358

Lab Reg No.		N23/021848	N23/021849			
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7688	Q7689			
	Units					Method
Organochlorine (OC) Pesticides						
HCB	ug	<0.1	<0.1			NR47
Heptachlor	ug	<0.1	0.15			NR47
Heptachlor epoxide	ug	<0.1	<0.1			NR47
Aldrin	ug	<0.1	<0.1			NR47
gamma-BHC(Lindane)	ug	<0.1	<0.1			NR47
alpha-BHC	ug	<0.1	<0.1			NR47
beta-BHC	ug	<0.1	<0.1			NR47
delta-BHC	ug	<0.1	<0.1			NR47
trans-Chlordane	ug	<0.1	0.63			NR47
cis-Chlordane	ug	<0.1	0.43			NR47
Oxychlordane	ug	<0.1	<0.1			NR47
Dieldrin	ug	<0.1	<0.1			NR47
p,p-DDE	ug	<0.1	<0.1			NR47
p,p-DDD	ug	<0.1	<0.1			NR47
p,p-DDT	ug	<0.1	<0.1			NR47
Endrin	ug	<0.1	<0.1			NR47
Endrin aldehyde	ug	<0.1	<0.1			NR47
Endrin Ketone	ug	<0.1	<0.1			NR47
alpha-Endosulfan	ug	<0.1	<0.1			NR47
beta-Endosulfan	ug	<0.1	<0.1			NR47
Endosulfan sulfate	ug	<0.1	<0.1			NR47
Methoxychlor	ug	<0.1	<0.1			NR47
Dicofol	ug	<0.1	<0.1			NR47
Dates						
Date extracted		1-NOV-2023	1-NOV-2023			
Date analysed		3-NOV-2023	3-NOV-2023			

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Lab Reg No.	Units	N23/021848	N23/021849			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7688	Q7689			



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14-NOV-2023

Lab Reg No.	Units	N23/021848	N23/021849			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7688	Q7689			
Components						
Cartridge Preparation Charge		PUF prepara	PUF prepara			
Consultation		Particulate	Particulate			



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This Report supersedes reports: *RN1410385*

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Note: Sampling date(s) have been provided by the client.

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The testing was undertaken at: 105 Delhi Road, North Ryde, NSW, 2113



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Report No. RN1410977

Client : EKTIMO PTY LTD 52 COOPER ROAD COCKBURN CENTRAL WA 6164	Job No. : EKTIO1/231026 Quote No. : QT-02083 Order No. : W012394 Date Received : 26-OCT-2023 Sampled By : CLIENT
Attention : JHON ARAQUE Project Name : Your Client Services Manager : Tim Reddan	Phone : 03 9644 4854
Lab Reg No. Sample Ref	Sample Description
N23/022524 Q7724	FILTER (AUT_PF13) + PUF (AUT230816C) JOB NO. R015886
N23/022525 Q7725	FILTER (AUT_PF9) + PUF (AUT230816A) JOB NO. R015886

Lab Reg No.		N23/022524	N23/022525			
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7724	Q7725			
	Units					Method
Organochlorine (OC) Pesticides						
HCB	ug	<0.1	<0.1			NR47
Heptachlor	ug	<0.1	<0.1			NR47
Heptachlor epoxide	ug	<0.1	<0.1			NR47
Aldrin	ug	<0.1	<0.1			NR47
gamma-BHC(Lindane)	ug	<0.1	<0.1			NR47
alpha-BHC	ug	<0.1	<0.1			NR47
beta-BHC	ug	<0.1	<0.1			NR47
delta-BHC	ug	<0.1	<0.1			NR47
trans-Chlordane	ug	<0.1	0.29			NR47
cis-Chlordane	ug	<0.1	0.19			NR47
Oxychlordane	ug	<0.1	<0.1			NR47
Dieldrin	ug	<0.1	<0.1			NR47
p,p-DDE	ug	<0.1	<0.1			NR47
p,p-DDD	ug	<0.1	<0.1			NR47
p,p-DDT	ug	<0.1	<0.1			NR47
Endrin	ug	<0.1	<0.1			NR47
Endrin aldehyde	ug	<0.1	<0.1			NR47
Endrin Ketone	ug	<0.1	<0.1			NR47
alpha-Endosulfan	ug	<0.1	<0.1			NR47
beta-Endosulfan	ug	<0.1	<0.1			NR47
Endosulfan sulfate	ug	<0.1	<0.1			NR47
Methoxychlor	ug	<0.1	<0.1			NR47
Dicofol	ug	<0.1	<0.1			NR47
Dates						
Date extracted		7-NOV-2023	7-NOV-2023			
Date analysed		14-NOV-2023	14-NOV-2023			

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Lab Reg No.	Units	N23/022524	N23/022525			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7724	Q7725			



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Lab Reg No.	Units	N23/022524	N23/022525			Method
Date Sampled		Not Provided	Not Provided			
Sample Reference		Q7724	Q7725			
Components						
Cartridge Preparation Charge		Preparation	Preparation			
Consultation		Particulate	Particulate			

N23/022524



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Client : EKTIMO PTY LTD 52 COOPER ROAD COCKBURN CENTRAL WA 6164	Job No. : EKTIO1/231026 Quote No. : QT-02083 Order No. : W012394 Date Received : 26-OCT-2023 Sampled By : CLIENT
Attention : JHON ARAQUE Project Name : Your Client Services Manager : Tim Reddan	Phone : 03 9644 4854
Lab Reg No. N23/022526	Sample Ref Q7726
Sample Description FILTER (AUT_PF14) + PUF (AUT230816E) JOB NO. R015886	

Lab Reg No.			N23/022526				
Date Sampled			Not Provided				
Sample Reference			Q7726				
		Units					Method
Organochlorine (OC) Pesticides							
HCB	ug	<0.1					NR47
Heptachlor	ug	<0.1					NR47
Heptachlor epoxide	ug	<0.1					NR47
Aldrin	ug	<0.1					NR47
gamma-BHC(Lindane)	ug	<0.1					NR47
alpha-BHC	ug	<0.1					NR47
beta-BHC	ug	<0.1					NR47
delta-BHC	ug	<0.1					NR47
trans-Chlordane	ug	<0.1					NR47
cis-Chlordane	ug	<0.1					NR47
Oxychlordane	ug	<0.1					NR47
Dieldrin	ug	<0.1					NR47
p,p-DDE	ug	<0.1					NR47
p,p-DDD	ug	<0.1					NR47
p,p-DDT	ug	<0.1					NR47
Endrin	ug	<0.1					NR47
Endrin aldehyde	ug	<0.1					NR47
Endrin Ketone	ug	<0.1					NR47
alpha-Endosulfan	ug	<0.1					NR47
beta-Endosulfan	ug	<0.1					NR47
Endosulfan sulfate	ug	<0.1					NR47
Methoxychlor	ug	<0.1					NR47
Dicofol	ug	<0.1					NR47
Dates							
Date extracted		7-NOV-2023					
Date analysed		14-NOV-2023					

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Lab Reg No.		Units	N23/022526				
Date Sampled			Not Provided				
Sample Reference			Q7726				Method



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Lab Reg No.		Units	N23/022526				
Date Sampled			Not Provided				
Sample Reference			Q7726				Method
Components							
Cartridge Preparation Charge			Preparation				



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Report No. RN1410977

Client : EKTIMO PTY LTD 52 COOPER ROAD COCKBURN CENTRAL WA 6164	Job No. : EKTIO1/231026 Quote No. : QT-02083 Order No. : W012394 Date Received : 26-OCT-2023 Sampled By : CLIENT
Attention : JHON ARAQUE Project Name : Your Client Services Manager : Tim Reddan	Phone : 03 9644 4854
Lab Reg No. N23/022527	Sample Ref AUT230803G
Sample Description FIELD BLANK	

Lab Reg No.			N23/022527				
Date Sampled			Not Provided				
Sample Reference			AUT230803G				
		Units					Method
Components							
Cartridge Preparation Charge			Preparation				



Alan Yates, Analyst
Australian Ultra Trace Laboratory
Accreditation No. 198

15-NOV-2023



Accredited for compliance with ISO/IEC 17025 - Testing.
This report shall not be reproduced except in full.
Results relate only to the sample(s) as received and tested.

Measurement Uncertainty is available upon request.

Note: Sampling date(s) have been provided by the client.

Note: Where sampling dates are not provided NMI is unable to determine compliance to any applicable Holding Time requirements

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The testing was undertaken at: 105 Delhi Road, North Ryde, NSW, 2113



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