



CERTIFICATE OF ANALYSIS

Work Order	: ES2315347	Page	: 1 of 5
Client	: NSW OFFICE OF ENVIRONMENT AND HERITAGE	Laboratory	: Environmental Division Sydney
Contact	: Oeh Forensics	Contact	: Customer Services ES
Address	: [REDACTED]	Address	: [REDACTED]
	Sydney 2000		
Telephone	: +61 02 9995 5000	Telephone	: +61-2-8784 8555
Project	: 20230149	Date Samples Received	: 09-May-2023 16:35
Order number	: 4500806025	Date Analysis Commenced	: 11-May-2023
C-O-C number	: ----	Issue Date	: 16-May-2023 13:07
Sampler	: ----		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 8		
No. of samples analysed	: 8		



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
[REDACTED]	Organic Chemist	Sydney Organics, Smithfield, NSW



General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP202: Poor matrix spike recoveries for Picloram and Clopyralid due to matrix effects.



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	232977	232979	232981	232983	232985
Sampling date / time				06-May-2023 00:00	06-May-2023 00:00	06-May-2023 00:00	06-May-2023 00:00	06-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315347-001	ES2315347-002	ES2315347-003	ES2315347-004	ES2315347-005	
				Result	Result	Result	Result	Result	
EP202A: Phenoxyacetic Acid Herbicides by LCMS									
4-Chlorophenoxy acetic acid	122-88-3	10	µg/L	<10	<10	<10	<10	<10	
2,4-DB	94-82-6	10	µg/L	<10	<10	<10	<10	<10	
Dicamba	1918-00-9	10	µg/L	<10	<10	<10	<10	<10	
Mecoprop	93-65-2	10	µg/L	<10	<10	<10	<10	<10	
MCPA	94-74-6	10	µg/L	<10	<10	<10	<10	<10	
2,4-DP	120-36-5	10	µg/L	<10	<10	<10	<10	<10	
2,4-D	94-75-7	10	µg/L	<10	<10	<10	<10	<10	
Triclopyr	55335-06-3	10	µg/L	<10	<10	<10	<10	<10	
Silvex (2,4,5-TP/Fenoprop)	93-72-1	10	µg/L	<10	<10	<10	<10	<10	
2,4,5-T	93-76-5	10	µg/L	<10	<10	<10	<10	<10	
MCPB	94-81-5	10	µg/L	<10	<10	<10	<10	<10	
Picloram	1918-02-1	10	µg/L	<10	<10	<10	<10	<10	
Clopyralid	1702-17-6	10	µg/L	<10	<10	<10	<10	<10	
Fluroxypyr	69377-81-7	10	µg/L	<10	<10	<10	<10	<10	
2,6-D	575-90-6	10	µg/L	<10	<10	<10	<10	<10	
2,4,6-T	575-89-3	10	µg/L	<10	<10	<10	<10	<10	
EP204: Glyphosate and AMPA									
Glyphosate	1071-83-6	10	µg/L	<10	<10	<10	<10	<10	
AMPA	1066-51-9	10	µg/L	<10	<10	<10	<10	<10	
EP202S: Phenoxyacetic Acid Herbicide Surrogate									
2,4-Dichlorophenyl Acetic Acid	19719-28-9	10	%	103	106	110	102	109	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	232987	232989	232991	----	----
Sampling date / time				06-May-2023 00:00	06-May-2023 00:00	06-May-2023 00:00	----	----	
Compound	CAS Number	LOR	Unit	ES2315347-006	ES2315347-007	ES2315347-008	-----	-----	
				Result	Result	Result	----	----	
EP202A: Phenoxyacetic Acid Herbicides by LCMS									
4-Chlorophenoxy acetic acid	122-88-3	10	µg/L	<10	<10	<10	----	----	
2,4-DB	94-82-6	10	µg/L	<10	<10	<10	----	----	
Dicamba	1918-00-9	10	µg/L	<10	<10	<10	----	----	
Mecoprop	93-65-2	10	µg/L	<10	<10	<10	----	----	
MCPA	94-74-6	10	µg/L	<10	<10	<10	----	----	
2,4-DP	120-36-5	10	µg/L	<10	<10	<10	----	----	
2,4-D	94-75-7	10	µg/L	<10	<10	<10	----	----	
Triclopyr	55335-06-3	10	µg/L	<10	<10	<10	----	----	
Silvex (2,4,5-TP/Fenoprop)	93-72-1	10	µg/L	<10	<10	<10	----	----	
2,4,5-T	93-76-5	10	µg/L	<10	<10	<10	----	----	
MCPB	94-81-5	10	µg/L	<10	<10	<10	----	----	
Picloram	1918-02-1	10	µg/L	<10	<10	<10	----	----	
Clopyralid	1702-17-6	10	µg/L	<10	<10	<10	----	----	
Fluroxypyr	69377-81-7	10	µg/L	<10	<10	<10	----	----	
2,6-D	575-90-6	10	µg/L	<10	<10	<10	----	----	
2,4,6-T	575-89-3	10	µg/L	<10	<10	<10	----	----	
EP204: Glyphosate and AMPA									
Glyphosate	1071-83-6	10	µg/L	<10	<10	<10	----	----	
AMPA	1066-51-9	10	µg/L	<10	<10	<10	----	----	
EP202S: Phenoxyacetic Acid Herbicide Surrogate									
2,4-Dichlorophenyl Acetic Acid	19719-28-9	10	%	112	107	114	----	----	



Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP202S: Phenoxyacetic Acid Herbicide Surrogate			
2,4-Dichlorophenyl Acetic Acid	19719-28-9	64	140