



## CERTIFICATE OF ANALYSIS

Work Order	: ES2315722	Page	: 1 of 20
Client	: DEPARTMENT OF PLANNING AND ENVIRONMENT (NSW-DPE)	Laboratory	: Environmental Division Sydney
Contact	: OEH	Contact	: Customer Services ES
Address	: [REDACTED] Lidcombe 2141	Address	: [REDACTED]
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 20230152	Date Samples Received	: 11-May-2023 15:45
Order number	: 4500806025	Date Analysis Commenced	: 11-May-2023
C-O-C number	: ----	Issue Date	: 17-May-2023 10:59
Sampler	: ----		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 53		
No. of samples analysed	: 53		



Accreditation No. 825  
Accredited for compliance with  
ISO/IEC 17025 - Testing

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
[REDACTED]	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
[REDACTED]	LCMS Coordinator	Sydney Organics, Smithfield, NSW



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## 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.

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## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233100	233103	233104	233105	233108
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-001	ES2315722-002	ES2315722-003	ES2315722-004	ES2315722-005	
				Result	Result	Result	Result	Result	
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	----	----	0.06	----	----	
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	----	<0.01	0.03	0.02	----	
<b>EK061F: Filtered Total Kjeldahl Nitrogen as N (TKN)</b>									
Dissolved TKN as N	----	0.1	mg/L	----	0.6	----	----	----	
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	----	----	----	1.3	----	
<b>EK062F: Filtered Total Nitrogen as N</b>									
^ Filtered Total Nitrogen as N	----	0.1	mg/L	----	0.6	----	----	----	
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L	----	----	----	1.3	----	
<b>EK067FG: Filtered Total Phosphorus as P by Discrete Analyser</b>									
Filtered Total Phosphorus as P	----	0.01	mg/L	----	0.02	----	----	----	
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	----	----	----	0.13	----	
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	----	----	<0.01	----	----	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS</b>									
4-Chlorophenoxy acetic acid	122-88-3	10	µg/L	<10	----	----	----	<10	
2,4-DB	94-82-6	10	µg/L	<10	----	----	----	<10	
Dicamba	1918-00-9	10	µg/L	<10	----	----	----	<10	
Mecoprop	93-65-2	10	µg/L	<10	----	----	----	<10	
MCPA	94-74-6	10	µg/L	<10	----	----	----	<10	
2,4-DP	120-36-5	10	µg/L	<10	----	----	----	<10	
2,4-D	94-75-7	10	µg/L	<10	----	----	----	<10	
Triclopyr	55335-06-3	10	µg/L	<10	----	----	----	<10	
Silvex (2,4,5-TP/Fenoprop)	93-72-1	10	µg/L	<10	----	----	----	<10	
2,4,5-T	93-76-5	10	µg/L	<10	----	----	----	<10	
MCPB	94-81-5	10	µg/L	<10	----	----	----	<10	
Picloram	1918-02-1	10	µg/L	<10	----	----	----	<10	
Clopyralid	1702-17-6	10	µg/L	<10	----	----	----	<10	
Fluroxypyr	69377-81-7	10	µg/L	<10	----	----	----	<10	
2,6-D	575-90-6	10	µg/L	<10	----	----	----	<10	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233100	233103	233104	233105	233108
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-001	ES2315722-002	ES2315722-003	ES2315722-004	ES2315722-005	
				Result	Result	Result	Result	Result	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS - Continued</b>									
2.4.6-T	575-89-3	10	µg/L	<10	----	----	----	----	<10
<b>EP204: Glyphosate and AMPA</b>									
Glyphosate	1071-83-6	10	µg/L	<10	----	----	----	----	<10
AMPA	1066-51-9	10	µg/L	<10	----	----	----	----	<10
<b>EP202S: Phenoxyacetic Acid Herbicide Surrogate</b>									
2.4-Dichlorophenyl Acetic Acid	19719-28-9	10	%	112	----	----	----	----	101



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233111	233112	233113	233116	233119
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-006	ES2315722-007	ES2315722-008	ES2315722-009	ES2315722-010	
				Result	Result	Result	Result	Result	
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	----	0.04	----	----	----	
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.01	0.02	----	0.01	
<b>EK061F: Filtered Total Kjeldahl Nitrogen as N (TKN)</b>									
Dissolved TKN as N	----	0.1	mg/L	0.8	----	----	----	0.8	
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	----	----	1.4	----	----	
<b>EK062F: Filtered Total Nitrogen as N</b>									
^ Filtered Total Nitrogen as N	----	0.1	mg/L	0.8	----	----	----	0.8	
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L	----	----	1.4	----	----	
<b>EK067FG: Filtered Total Phosphorus as P by Discrete Analyser</b>									
Filtered Total Phosphorus as P	----	0.01	mg/L	0.03	----	----	----	0.22	
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	----	----	0.17	----	----	
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	----	<0.01	----	----	----	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS</b>									
4-Chlorophenoxy acetic acid	122-88-3	10	µg/L	----	----	----	<10	----	
2,4-DB	94-82-6	10	µg/L	----	----	----	<10	----	
Dicamba	1918-00-9	10	µg/L	----	----	----	<10	----	
Mecoprop	93-65-2	10	µg/L	----	----	----	<10	----	
MCPA	94-74-6	10	µg/L	----	----	----	<10	----	
2,4-DP	120-36-5	10	µg/L	----	----	----	<10	----	
2,4-D	94-75-7	10	µg/L	----	----	----	<10	----	
Triclopyr	55335-06-3	10	µg/L	----	----	----	<10	----	
Silvex (2,4,5-TP/Fenoprop)	93-72-1	10	µg/L	----	----	----	<10	----	
2,4,5-T	93-76-5	10	µg/L	----	----	----	<10	----	
MCPB	94-81-5	10	µg/L	----	----	----	<10	----	
Picloram	1918-02-1	10	µg/L	----	----	----	<10	----	
Clopyralid	1702-17-6	10	µg/L	----	----	----	<10	----	
Fluroxypyr	69377-81-7	10	µg/L	----	----	----	<10	----	
2,6-D	575-90-6	10	µg/L	----	----	----	<10	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233111	233112	233113	233116	233119
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-006	ES2315722-007	ES2315722-008	ES2315722-009	ES2315722-010	
				Result	Result	Result	Result	Result	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS - Continued</b>									
2.4.6-T	575-89-3	10	µg/L	----	----	----	<10	----	
<b>EP204: Glyphosate and AMPA</b>									
Glyphosate	1071-83-6	10	µg/L	----	----	----	<10	----	
AMPA	1066-51-9	10	µg/L	----	----	----	<10	----	
<b>EP202S: Phenoxyacetic Acid Herbicide Surrogate</b>									
2.4-Dichlorophenyl Acetic Acid	19719-28-9	10	%	----	----	----	100	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233120	233121	233124	233127	233128
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-011	ES2315722-012	ES2315722-013	ES2315722-014	ES2315722-015	
				Result	Result	Result	Result	Result	
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	<0.01	----	----	----	<b>0.02</b>	
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	<b>0.01</b>	<0.01	----	<b>0.01</b>	<b>0.03</b>	
<b>EK061F: Filtered Total Kjeldahl Nitrogen as N (TKN)</b>									
Dissolved TKN as N	----	0.1	mg/L	----	----	----	<b>0.7</b>	----	
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	----	<b>0.8</b>	----	----	----	
<b>EK062F: Filtered Total Nitrogen as N</b>									
^ Filtered Total Nitrogen as N	----	0.1	mg/L	----	----	----	<b>0.7</b>	----	
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L	----	<b>0.8</b>	----	----	----	
<b>EK067FG: Filtered Total Phosphorus as P by Discrete Analyser</b>									
Filtered Total Phosphorus as P	----	0.01	mg/L	----	----	----	<b>0.06</b>	----	
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	----	<b>0.41</b>	----	----	----	
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<b>0.17</b>	----	----	----	<b>0.06</b>	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS</b>									
4-Chlorophenoxy acetic acid	122-88-3	10	µg/L	----	----	<10	----	----	
2,4-DB	94-82-6	10	µg/L	----	----	<10	----	----	
Dicamba	1918-00-9	10	µg/L	----	----	<10	----	----	
Mecoprop	93-65-2	10	µg/L	----	----	<10	----	----	
MCPA	94-74-6	10	µg/L	----	----	<10	----	----	
2,4-DP	120-36-5	10	µg/L	----	----	<10	----	----	
2,4-D	94-75-7	10	µg/L	----	----	<10	----	----	
Triclopyr	55335-06-3	10	µg/L	----	----	<10	----	----	
Silvex (2,4,5-TP/Fenoprop)	93-72-1	10	µg/L	----	----	<10	----	----	
2,4,5-T	93-76-5	10	µg/L	----	----	<10	----	----	
MCPB	94-81-5	10	µg/L	----	----	<10	----	----	
Picloram	1918-02-1	10	µg/L	----	----	<10	----	----	
Clopyralid	1702-17-6	10	µg/L	----	----	<10	----	----	
Fluroxypyr	69377-81-7	10	µg/L	----	----	<10	----	----	
2,6-D	575-90-6	10	µg/L	----	----	<10	----	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233120	233121	233124	233127	233128
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-011	ES2315722-012	ES2315722-013	ES2315722-014	ES2315722-015	
				Result	Result	Result	Result	Result	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS - Continued</b>									
2.4.6-T	575-89-3	10	µg/L	----	----	<10	----	----	
<b>EP204: Glyphosate and AMPA</b>									
Glyphosate	1071-83-6	10	µg/L	----	----	<10	----	----	
AMPA	1066-51-9	10	µg/L	----	----	<10	----	----	
<b>EP202S: Phenoxyacetic Acid Herbicide Surrogate</b>									
2.4-Dichlorophenyl Acetic Acid	19719-28-9	10	%	----	----	105	----	----	





## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233129	233132	233135	233136	233137
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-016	ES2315722-017	ES2315722-018	ES2315722-019	ES2315722-020	
				Result	Result	Result	Result	Result	
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	----	----	----	0.04	----	
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	0.02	----	0.02	0.02	0.03	
<b>EK061F: Filtered Total Kjeldahl Nitrogen as N (TKN)</b>									
Dissolved TKN as N	----	0.1	mg/L	----	----	0.7	----	----	
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	1.1	----	----	----	1.3	
<b>EK062F: Filtered Total Nitrogen as N</b>									
^ Filtered Total Nitrogen as N	----	0.1	mg/L	----	----	0.7	----	----	
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L	1.1	----	----	----	1.3	
<b>EK067FG: Filtered Total Phosphorus as P by Discrete Analyser</b>									
Filtered Total Phosphorus as P	----	0.01	mg/L	----	----	0.11	----	----	
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	0.20	----	----	----	0.22	
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	----	----	----	0.05	----	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS</b>									
4-Chlorophenoxy acetic acid	122-88-3	10	µg/L	----	<10	----	----	----	
2,4-DB	94-82-6	10	µg/L	----	<10	----	----	----	
Dicamba	1918-00-9	10	µg/L	----	<10	----	----	----	
Mecoprop	93-65-2	10	µg/L	----	<10	----	----	----	
MCPA	94-74-6	10	µg/L	----	<10	----	----	----	
2,4-DP	120-36-5	10	µg/L	----	<10	----	----	----	
2,4-D	94-75-7	10	µg/L	----	<10	----	----	----	
Triclopyr	55335-06-3	10	µg/L	----	<10	----	----	----	
Silvex (2,4,5-TP/Fenoprop)	93-72-1	10	µg/L	----	<10	----	----	----	
2,4,5-T	93-76-5	10	µg/L	----	<10	----	----	----	
MCPB	94-81-5	10	µg/L	----	<10	----	----	----	
Picloram	1918-02-1	10	µg/L	----	<10	----	----	----	
Clopyralid	1702-17-6	10	µg/L	----	<10	----	----	----	
Fluroxypyr	69377-81-7	10	µg/L	----	<10	----	----	----	
2,6-D	575-90-6	10	µg/L	----	<10	----	----	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233129	233132	233135	233136	233137
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-016	ES2315722-017	ES2315722-018	ES2315722-019	ES2315722-020	
				Result	Result	Result	Result	Result	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS - Continued</b>									
2.4.6-T	575-89-3	10	µg/L	----	<10	----	----	----	
<b>EP204: Glyphosate and AMPA</b>									
Glyphosate	1071-83-6	10	µg/L	----	<10	----	----	----	
AMPA	1066-51-9	10	µg/L	----	<10	----	----	----	
<b>EP202S: Phenoxyacetic Acid Herbicide Surrogate</b>									
2.4-Dichlorophenyl Acetic Acid	19719-28-9	10	%	----	102	----	----	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233140	233143	233144	233145	233148
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-021	ES2315722-022	ES2315722-023	ES2315722-024	ES2315722-025	
				Result	Result	Result	Result	Result	
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	----	----	0.11	----	----	
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	----	0.05	0.05	0.05	----	
<b>EK061F: Filtered Total Kjeldahl Nitrogen as N (TKN)</b>									
Dissolved TKN as N	----	0.1	mg/L	----	0.9	----	----	----	
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	----	----	----	1.4	----	
<b>EK062F: Filtered Total Nitrogen as N</b>									
^ Filtered Total Nitrogen as N	----	0.1	mg/L	----	1.0	----	----	----	
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L	----	----	----	1.4	----	
<b>EK067FG: Filtered Total Phosphorus as P by Discrete Analyser</b>									
Filtered Total Phosphorus as P	----	0.01	mg/L	----	0.08	----	----	----	
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	----	----	----	0.21	----	
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	----	----	0.04	----	----	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS</b>									
4-Chlorophenoxy acetic acid	122-88-3	10	µg/L	<10	----	----	----	<10	
2,4-DB	94-82-6	10	µg/L	<10	----	----	----	<10	
Dicamba	1918-00-9	10	µg/L	<10	----	----	----	<10	
Mecoprop	93-65-2	10	µg/L	<10	----	----	----	<10	
MCPA	94-74-6	10	µg/L	<10	----	----	----	<10	
2,4-DP	120-36-5	10	µg/L	<10	----	----	----	<10	
2,4-D	94-75-7	10	µg/L	<10	----	----	----	<10	
Triclopyr	55335-06-3	10	µg/L	<10	----	----	----	<10	
Silvex (2,4,5-TP/Fenoprop)	93-72-1	10	µg/L	<10	----	----	----	<10	
2,4,5-T	93-76-5	10	µg/L	<10	----	----	----	<10	
MCPB	94-81-5	10	µg/L	<10	----	----	----	<10	
Picloram	1918-02-1	10	µg/L	<10	----	----	----	<10	
Clopyralid	1702-17-6	10	µg/L	<10	----	----	----	<10	
Fluroxypyr	69377-81-7	10	µg/L	<10	----	----	----	<10	
2,6-D	575-90-6	10	µg/L	<10	----	----	----	<10	



### Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233140	233143	233144	233145	233148
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-021	ES2315722-022	ES2315722-023	ES2315722-024	ES2315722-025	
				Result	Result	Result	Result	Result	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS - Continued</b>									
2.4.6-T	575-89-3	10	µg/L	<10	----	----	----	<10	
<b>EP204: Glyphosate and AMPA</b>									
Glyphosate	1071-83-6	10	µg/L	<10	----	----	----	<10	
AMPA	1066-51-9	10	µg/L	<10	----	----	----	<10	
<b>EP202S: Phenoxyacetic Acid Herbicide Surrogate</b>									
2.4-Dichlorophenyl Acetic Acid	19719-28-9	10	%	102	----	----	----	106	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233151	233152	233153	233156	233159
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-026	ES2315722-027	ES2315722-028	ES2315722-029	ES2315722-030	
				Result	Result	Result	Result	Result	
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	----	0.09	----	----	----	
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	0.06	0.06	0.06	----	0.04	
<b>EK061F: Filtered Total Kjeldahl Nitrogen as N (TKN)</b>									
Dissolved TKN as N	----	0.1	mg/L	1.0	----	----	----	0.7	
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	----	----	1.1	----	----	
<b>EK062F: Filtered Total Nitrogen as N</b>									
^ Filtered Total Nitrogen as N	----	0.1	mg/L	1.1	----	----	----	0.7	
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L	----	----	1.2	----	----	
<b>EK067FG: Filtered Total Phosphorus as P by Discrete Analyser</b>									
Filtered Total Phosphorus as P	----	0.01	mg/L	0.09	----	----	----	0.13	
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	----	----	0.14	----	----	
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	----	0.04	----	----	----	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS</b>									
4-Chlorophenoxy acetic acid	122-88-3	10	µg/L	----	----	----	<10	----	
2,4-DB	94-82-6	10	µg/L	----	----	----	<10	----	
Dicamba	1918-00-9	10	µg/L	----	----	----	<10	----	
Mecoprop	93-65-2	10	µg/L	----	----	----	<10	----	
MCPA	94-74-6	10	µg/L	----	----	----	<10	----	
2,4-DP	120-36-5	10	µg/L	----	----	----	<10	----	
2,4-D	94-75-7	10	µg/L	----	----	----	<10	----	
Triclopyr	55335-06-3	10	µg/L	----	----	----	<10	----	
Silvex (2,4,5-TP/Fenoprop)	93-72-1	10	µg/L	----	----	----	<10	----	
2,4,5-T	93-76-5	10	µg/L	----	----	----	<10	----	
MCPB	94-81-5	10	µg/L	----	----	----	<10	----	
Picloram	1918-02-1	10	µg/L	----	----	----	<10	----	
Clopyralid	1702-17-6	10	µg/L	----	----	----	<10	----	
Fluroxypyr	69377-81-7	10	µg/L	----	----	----	<10	----	
2,6-D	575-90-6	10	µg/L	----	----	----	<10	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	233151	233152	233153	233156	233159
Sampling date / time				09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-026	ES2315722-027	ES2315722-028	ES2315722-029	ES2315722-030	
				Result	Result	Result	Result	Result	
<b>EP202A: Phenoxyacetic Acid Herbicides by LCMS - Continued</b>									
2.4.6-T	575-89-3	10	µg/L	----	----	----	<10	----	
<b>EP204: Glyphosate and AMPA</b>									
Glyphosate	1071-83-6	10	µg/L	----	----	----	<10	----	
AMPA	1066-51-9	10	µg/L	----	----	----	<10	----	
<b>EP202S: Phenoxyacetic Acid Herbicide Surrogate</b>									
2.4-Dichlorophenyl Acetic Acid	19719-28-9	10	%	----	----	----	110	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID		233160	233161	233162	233163	233164	
Sampling date / time			09-May-2023 00:00		09-May-2023 00:00		09-May-2023 00:00		09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-031	ES2315722-032	ES2315722-033	ES2315722-034	ES2315722-035		
				Result	Result	Result	Result	Result		
<b>EK055G: Ammonia as N by Discrete Analyser</b>										
Ammonia as N	7664-41-7	0.01	mg/L	0.05	----	----	0.04	----		
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>										
Nitrite + Nitrate as N	----	0.01	mg/L	0.04	0.04	0.12	0.14	0.12		
<b>EK061F: Filtered Total Kjeldahl Nitrogen as N (TKN)</b>										
Dissolved TKN as N	----	0.1	mg/L	----	----	12.4	----	----		
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>										
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	----	1.2	----	----	15.6		
<b>EK062F: Filtered Total Nitrogen as N</b>										
^ Filtered Total Nitrogen as N	----	0.1	mg/L	----	----	12.5	----	----		
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>										
^ Total Nitrogen as N	----	0.1	mg/L	----	1.2	----	----	15.7		
<b>EK067FG: Filtered Total Phosphorus as P by Discrete Analyser</b>										
Filtered Total Phosphorus as P	----	0.01	mg/L	----	----	0.09	----	----		
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>										
Total Phosphorus as P	----	0.01	mg/L	----	0.27	----	----	0.18		
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>										
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	0.07	----	----	0.02	----		



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	233165	233166	233167	233168	233169
Sampling date / time			09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00
Compound	CAS Number	LOR	Unit	ES2315722-036	ES2315722-037	ES2315722-038	ES2315722-039	ES2315722-040
				Result	Result	Result	Result	Result
<b>EK055G: Ammonia as N by Discrete Analyser</b>								
Ammonia as N	7664-41-7	0.01	mg/L	----	0.06	----	----	0.10
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>								
Nitrite + Nitrate as N	----	0.01	mg/L	0.12	0.11	0.12	0.05	0.05
<b>EK061F: Filtered Total Kjeldahl Nitrogen as N (TKN)</b>								
Dissolved TKN as N	----	0.1	mg/L	8.7	----	----	0.9	----
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	----	----	12.4	----	----
<b>EK062F: Filtered Total Nitrogen as N</b>								
^ Filtered Total Nitrogen as N	----	0.1	mg/L	8.8	----	----	1.0	----
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>								
^ Total Nitrogen as N	----	0.1	mg/L	----	----	12.5	----	----
<b>EK067FG: Filtered Total Phosphorus as P by Discrete Analyser</b>								
Filtered Total Phosphorus as P	----	0.01	mg/L	0.09	----	----	0.07	----
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>								
Total Phosphorus as P	----	0.01	mg/L	----	----	0.18	----	----
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>								
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	----	0.03	----	----	0.02





## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)		Sample ID		233170	233171	233172	233173	233174	
Sampling date / time		09-May-2023 00:00		09-May-2023 00:00		09-May-2023 00:00		09-May-2023 00:00	
Compound	CAS Number	LOR	Unit	ES2315722-041	ES2315722-042	ES2315722-043	ES2315722-044	ES2315722-045	
				Result	Result	Result	Result	Result	
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	----	----	0.13	----	----	
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	0.05	0.06	0.07	0.06	0.04	
<b>EK061F: Filtered Total Kjeldahl Nitrogen as N (TKN)</b>									
Dissolved TKN as N	----	0.1	mg/L	----	0.9	----	----	0.7	
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	1.3	----	----	1.4	----	
<b>EK062F: Filtered Total Nitrogen as N</b>									
^ Filtered Total Nitrogen as N	----	0.1	mg/L	----	1.0	----	----	0.7	
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L	1.4	----	----	1.5	----	
<b>EK067FG: Filtered Total Phosphorus as P by Discrete Analyser</b>									
Filtered Total Phosphorus as P	----	0.01	mg/L	----	0.07	----	----	0.12	
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	0.18	----	----	0.25	----	
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	----	----	0.02	----	----	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	233175	233176	233177	233178	233179
Sampling date / time			09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00	09-May-2023 00:00
Compound	CAS Number	LOR	Unit	ES2315722-046	ES2315722-047	ES2315722-048	ES2315722-049	ES2315722-050
				Result	Result	Result	Result	Result
<b>EK055G: Ammonia as N by Discrete Analyser</b>								
Ammonia as N	7664-41-7	0.01	mg/L	0.09	----	----	0.06	----
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>								
Nitrite + Nitrate as N	----	0.01	mg/L	0.05	0.04	0.01	0.02	0.02
<b>EK061F: Filtered Total Kjeldahl Nitrogen as N (TKN)</b>								
Dissolved TKN as N	----	0.1	mg/L	----	----	0.8	----	----
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	----	1.0	----	----	1.5
<b>EK062F: Filtered Total Nitrogen as N</b>								
^ Filtered Total Nitrogen as N	----	0.1	mg/L	----	----	0.8	----	----
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>								
^ Total Nitrogen as N	----	0.1	mg/L	----	1.0	----	----	1.5
<b>EK067FG: Filtered Total Phosphorus as P by Discrete Analyser</b>								
Filtered Total Phosphorus as P	----	0.01	mg/L	----	----	0.04	----	----
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>								
Total Phosphorus as P	----	0.01	mg/L	----	0.21	----	----	0.16
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>								
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	0.07	----	----	<0.01	----



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)		Sample ID		233180	233181	233182	----	----	
Sampling date / time		09-May-2023 00:00		09-May-2023 00:00		09-May-2023 00:00		----	----
Compound	CAS Number	LOR	Unit	ES2315722-051	ES2315722-052	ES2315722-053	-----	-----	
				Result	Result	Result	----	----	
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	----	0.03	----	----	----	
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	0.01	0.03	<0.01	----	----	
<b>EK061F: Filtered Total Kjeldahl Nitrogen as N (TKN)</b>									
Dissolved TKN as N	----	0.1	mg/L	0.7	----	----	----	----	
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	----	----	0.8	----	----	
<b>EK062F: Filtered Total Nitrogen as N</b>									
^ Filtered Total Nitrogen as N	----	0.1	mg/L	0.7	----	----	----	----	
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L	----	----	0.8	----	----	
<b>EK067FG: Filtered Total Phosphorus as P by Discrete Analyser</b>									
Filtered Total Phosphorus as P	----	0.01	mg/L	0.24	----	----	----	----	
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	----	----	0.36	----	----	
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	----	0.15	----	----	----	



### Surrogate Control Limits

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