



CERTIFICATE OF ANALYSIS

CLIENT:	Douglas Shire Council PO Box 723 Mossman QLD 4873	Laboratory Reference : SSP0074038 Client Project : Logan_P Date Received : 01-Apr-2021 Date Commenced : 08-Apr-2021 Laboratory Number/s : 21KE3290 & 21KE3400
	ATTN: Peter Logan	

Number of Samples : 2

Reason for Analysis : Suspect off target herbicide

Method/s of Analysis : QIS 32456 – Determination of Herbicides in Soil and Sediment by LC-MS/MS
Method Summary – Solvent extraction. LC-MS/MS Analysis.

QIS 32457 – Determination of Herbicides in Vegetation by LC-MS/MS
Method Summary – Solvent extraction. LC-MS/MS Analysis.

Remarks : Samples are reported on a dry weight basis.

The limit of reporting for individual samples may vary depending on such things as sample size, interferences, final volume or injection volume.

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Benjamin Tan
Chemist, Organic Chemistry
11-May-2021



NATA Accredited
Laboratory 41
Accredited for compliance
with ISO/IEC 17025 -
Testing

21KE3290 & 21KE3400

This report overrides all previous reports. The results relate solely to the sample/s as received and are limited to the specific tests undertaken as listed on the report. The results of this report are confidential and are not to be used or disclosed to any other person or used for any other purpose, whether directly or indirectly, unless that use is disclosed or the purpose is expressly authorised in writing by Queensland Health and the named recipient on this report. To the fullest extent permitted by law, Queensland Health will not be liable for any loss or claim (including legal costs calculated on an indemnity basis) which arise because of (a) problems related to the merchantability, fitness or quality of the sample/s, or (b) any negligent or unlawful act or omissions by Queensland Health that is connected with any activities or services provided by Queensland Health under this agreement (including the timing and/or method under which the sample/s were taken, stored or transported).

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Client Reference		DSC1 (soil)	
Sample Type		Soil	
Sampling Time / Date		7:30 am 22-Mar-2021	
Sample Description		Warner St.	
QIS 32456 – Determination of Herbicides in Soil and Sediment by LC-MS/MS	Unit	Limit of Reporting	21KE3400
2,4,5-T	mg/kg	0.001	< 0.001
2,4,5-TP (Fenoprop)	mg/kg	0.001	< 0.001
2,4-D	mg/kg	0.001	< 0.001
2,4-DB	mg/kg	0.001	< 0.001
2,4-DP	mg/kg	0.001	< 0.001
Acifluorfen	mg/kg	0.001	< 0.001
Ametryn	mg/kg	0.001	< 0.001
Atrazine	mg/kg	0.001	< 0.001
Bromacil	mg/kg	0.005	< 0.006
Clomazone	mg/kg	0.001	< 0.001
Clopyralid	mg/kg	0.001	< 0.001
Clothianidin	mg/kg	0.001	< 0.001
Cyanazine	mg/kg	0.001	< 0.001
Desethyl Atrazine	mg/kg	0.001	< 0.001
Desisopropyl Atrazine	mg/kg	0.001	< 0.001
Dicamba	mg/kg	0.005	< 0.006
Diuron	mg/kg	0.001	< 0.001
Ethametsulfuron methyl	mg/kg	0.001	< 0.001
Fluometuron	mg/kg	0.001	< 0.001
Fluroxypyr	mg/kg	0.001	< 0.001
Flusilazole	mg/kg	0.001	< 0.001
Haloxypop	mg/kg	0.001	0.002
Hexazinone	mg/kg	0.001	< 0.001
Imazapic	mg/kg	0.001	< 0.001
Imazapyr	mg/kg	0.001	< 0.001
Imazethapyr	mg/kg	0.001	< 0.001
Imidacloprid	mg/kg	0.001	< 0.001
Imidacloprid urea	mg/kg	0.001	< 0.001
Isoxaflutole	mg/kg	0.001	< 0.001

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Client Reference			DSC1 (soil)
Sample Type			Soil
Sampling Time / Date			7:30 am 22-Mar-2021
Sample Description			Warner St.
QIS 32456 – Determination of Herbicides in Soil and Sediment by LC-MS/MS (continued)	Unit	Limit of Reporting	21KE3400
MCPA	mg/kg	0.001	< 0.001
MCPB	mg/kg	0.001	< 0.001
Mecoprop	mg/kg	0.001	< 0.001
Mesosulfuron methyl	mg/kg	0.001	< 0.001
Metolachlor	mg/kg	0.001	< 0.001
Metribuzin	mg/kg	0.001	< 0.001
Metsulfuron methyl	mg/kg	0.001	< 0.001
Napropamide	mg/kg	0.001	< 0.001
Picloram	mg/kg	0.001	0.089
Prometryn	mg/kg	0.001	< 0.001
Propachlor	mg/kg	0.001	< 0.001
Propazin-2-hydroxy	mg/kg	0.001	< 0.001
Sethoxydim	mg/kg	0.002	< 0.002
Simazine	mg/kg	0.001	< 0.001
Sulfosulfuron	mg/kg	0.001	< 0.001
Tebuthiuron	mg/kg	0.001	< 0.001
Terbuthylazine	mg/kg	0.001	< 0.001
Terbuthylazine desethyl	mg/kg	0.001	< 0.001
Terbutryn	mg/kg	0.001	< 0.001
Thiamethoxam	mg/kg	0.001	< 0.001
Triclopyr	mg/kg	0.001	0.46
Trifloxysulfuron	mg/kg	0.001	< 0.001
Percent Solid	%		90

General Statement: Clopyralid, Dicamba, Imazapic, Imazethapyr, Picloram and Terbutryn consistently give low recoveries (< 40%) when analysed by QIS 32456.

Client Reference			DSC1 (leaves, stem)
Sample Type			Vegetation
Sampling Time / Date			7:30 am 22-Mar-2021
Sample Description			Warner St.
QIS 32456 – Determination of Herbicides in Vegetation by LC-MS/MS	Unit	Limit of Reporting	21KE3290
2,4-D	mg/kg	0.5	< 0.5
2,4-DB	mg/kg	0.2	< 0.2
2,4-DP	mg/kg	0.2	< 0.2
2,4,5-T	mg/kg	0.2	< 0.2
2,4,5-TP (Fenoprop)	mg/kg	0.2	< 0.2
Acetamiprid	mg/kg	0.2	< 0.2
Acetamiprid-N-desmethyl	mg/kg	0.2	< 0.2
Acifluorfen	mg/kg	0.2	< 0.2
Ametryn	mg/kg	0.2	< 0.2
Atrazine	mg/kg	0.2	< 0.2
Atrazine-2-hydroxy	mg/kg	0.2	< 0.2
Bromacil	mg/kg	0.2	< 0.2
Chlorpyrifos	mg/kg	0.2	< 0.2
Chlorpyrifos oxon	mg/kg	0.2	< 0.2
Clomazone	mg/kg	0.2	< 0.2
Clothianidin	mg/kg	0.2	< 0.2
Cyanazine	mg/kg	0.2	< 0.2
DCPMU	mg/kg	0.2	< 0.2
DCPU	mg/kg	0.2	< 0.2
Desethyl Atrazine	mg/kg	0.2	< 0.2
Desisopropyl Atrazine	mg/kg	0.2	< 0.2
Diazinon	mg/kg	0.2	< 0.2
Dicamba	mg/kg	0.2	0.2
Diuron	mg/kg	0.2	< 0.2
Ethametsulfuron methyl	mg/kg	0.2	< 0.2
Fipronil	mg/kg	0.2	< 0.2
Fipronil sulfide	mg/kg	0.2	< 0.2
Fipronil sulfone	mg/kg	0.2	< 0.2
Fluometuron	mg/kg	0.2	< 0.2
Fluroxypyr	mg/kg	0.2	< 0.2
Flusilazole	mg/kg	0.2	< 0.2
Halosulfuron methyl	mg/kg	0.2	< 0.2
Haloxyfop (acid)	mg/kg	0.2	< 0.2

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Client Reference			DSC1 (leaves, stem)
Sample Type			Vegetation
Sampling Time / Date			7:30 am 22-Mar-2021
Sample Description			Warner St.
QIS 32456 – Determination of Herbicides in Vegetation by LC-MS/MS (continued)	Unit	Limit of Reporting	21KE3290
Hexazinone	mg/kg	0.2	< 0.2
Imazapic	mg/kg	0.2	< 0.2
Imazapyr	mg/kg	0.2	< 0.2
Imazethapyr	mg/kg	0.2	< 0.2
Imidacloprid	mg/kg	0.2	< 0.2
Imidacloprid urea	mg/kg	0.2	< 0.2
Total Imidacloprid	mg/kg	0.5	< 0.5
Total Isoxaflutole	mg/kg	0.5	< 0.5
MCPA	mg/kg	0.2	< 0.2
MCPB	mg/kg	0.2	< 0.2
Mecoprop	mg/kg	0.2	< 0.2
Mesosulfuron methyl	mg/kg	0.2	< 0.2
Methoxyfenozide	mg/kg	0.2	< 0.2
Metolachlor	mg/kg	0.2	< 0.2
Metolachlor OXA	mg/kg	0.2	0.7
Metribuzin	mg/kg	0.2	< 0.2
Metsulfuron methyl	mg/kg	0.2	< 0.2
Napropamide	mg/kg	0.2	< 0.2
Prometryn	mg/kg	0.2	< 0.2
Propachlor	mg/kg	0.2	< 0.2
Propazine-2-hydroxy	mg/kg	0.2	< 0.2
Sethoxydim (including Clethodim)	mg/kg	0.2	< 0.2
Simazine	mg/kg	0.2	< 0.2
Sulfosulfuron	mg/kg	0.2	< 0.2
Tebuthiuron	mg/kg	0.2	< 0.2
Terbutylazine	mg/kg	0.2	< 0.2
Terbutylazine desethyl	mg/kg	0.2	< 0.2
Terbutryn	mg/kg	0.2	< 0.2
Thiacloprid	mg/kg	0.2	< 0.2
Thiamethoxam	mg/kg	0.2	< 0.2
Triclopyr	mg/kg	0.2	< 0.2
Trifloxysulfuron	mg/kg	0.2	< 0.2
Percent Solid	%		38

General Statement: Imazapyr and Dicamba consistently give low recoveries (< 40%) when analysed by QIS 32457.