Hill Labs

ANALYSIS REQUEST

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

Job No: **390 1616**

Date Recv: 28-May-25 11:35

Received by: s9(2)(a)

s9(2)(a)

Quote No | **Lab Order No** ~~677855~~

Primary Contact	s9(2)(a)	310251
Submitted By		310251
Client Name	Beca Limited	76225
Address	PO Box 6345 Wellesley Street, Auckland 1141	
Phone	s9(2)(a) *Mobile*	
Email		
Charge To	Beca Limited	~~76225~~
Client Reference		
Additional Client Ref		
Order No	Supplied Items	

Results To *Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.*

- ☑ Email Primary Contact
- ☐ Email Submitter
- ☐ Email Client
- ☑ Email Other s9(2)(a)
- ☐ Other

Dates of testing are not routinely included in the Certificates of Analysis. Please inform the laboratory if you would like this information reported.

CHAIN OF CUSTODY RECORD

Sent to Hill Labs
Date & Time: 27/5/25
Name: s9(2)(a)
☑ *Tick if you require COC to be emailed back*
Signatu

Received at Hill Labs
Date & Time:
Name:
Signature:

Condition ☐ Room Temp ☐ Chilled ☐ Frozen — *Temp:* 7.6

☐ Sample & Analysis details checked
Signature:

ADDITIONAL INFORMATION / KNOWN HAZARDS

Asbestos P/A to proceed to semi-quant analysis if asbestos detected
Quote Number 138144

Priority ☐ Low ☐ Normal ☑ High
☐ **Urgent** (ASAP, *extra charge applies, please contact lab first*)

Requested Reporting Date:

Quoted Sample Types

No.	Sample Name	Sample Date/Time	Sample Type	Tests Required
1	MRS1_SS01-0.0 ~~B MRSA_SS01~~	27/5/25	Soils	HM7, Asbestos P/A
2	MCG1_SS01-0.3			Hold Cold
3	MRS1_SS01-0.5			" "
4	MRC1_SS02_0.0			HM
5	MRS1_SS02-0.3			Hold Cold
6	MRS1_SS02_0.5			" "
7	MRS1_SS02_0.0			HM7, Asbestos PA
8	MRS1_SS03_0.3			Hold Cold
9	MRS1_SS03_0.5			" "

No.	Sample Name	Sample Date/Time	Sample Type	Tests Required
10	MRS1_SS04_0.0	25_05_25	Soils	HM7, Asbestos PA
11	MRS1_SS04_0.3			Hold cold
12	MRS1_SS04_0.5			" "
13	MRS1_SS05_0.0			HM7, Asbestos PA
14	MRS1_SS05_0.3			Hold cold
15	MRS1_SS05_0.5			" "
16	MRS1_SS06_0.0			HM7, Asbesto PA
17	MRS1_SS06_0.3			Hold Cold
18	MRS1_SS06_0.5			" "
19	MRS1_SS07_0.0			HM7, Asbestos PA
20	MRS1_SS07_0.3			Hold Cold
21	MRS1_SS07_0.5			" " ~~HM7~~
22	MRS1_SS08_0.0			HM7, Abestos PA
23	MRS1_SS09_0.0			HM7, Asbestos PA
24	MRS1_SS09_0.3			Hold Cold
25	MRS1_SS09_0.5			" "
26	MRS1_SS10_0.0			HM7, Asbestos PA
27	MRS1_SS10_0.3			Hold Cold
28	MRS1_SS10_0.5			" "
29	MRS1_SS11_0.0			HM7, Asbestos PA
30	MRS1_SS11_0.3			Hold Cold
31	MRS1_SS11_0.5			" "
32	MRS1_SS12_0.0			HM7, Asbestos PA
33	MRS1_SS12_0.3			Hold Cold
34	MRS1_SS12_0.5			" "

Sample name	Sample Date	Sample Type	Test Required
MRS1_SS03_0.0	27/5/25	Soil	HM7, Asbestos PA
MRS1_SS13_0.3			Hold Cold
MRS1_SS13_0.5			" "
MRS1_SS14_0.0			HM7, Asbesto PA
MRS1_SS14_0.3			Hold Cold
MRS1_SS14_0.5			" "
MRS1_SS16_0.0			HM7, Asbestos PA
MRS1_SS16_0.3			Hold Cold
MRS1_SS16_0.5			" "
MRS1_SS17_0.0			HM7, Asbestos PA
MRS1_SS17_0.3			Hold Cold
MRS1_SS17_0.5			" "
MRS1_SS18_0.0			HM7, Asbestos PA
MRS1_SS18_0.3			Hold cold
MRS1_SS18_0.5			" "
MRS1_SS19_0.0			HM7, Asbestos PA
MRS1_SS19_0.3			Hold Cold
MRS1_SS19_0.5			" "
MRS1_SS20_0.0			HM7, Asbestos PA
MRS1_SS20_0.3			Hold Cold
MRS1_SS20_0.5			" "
MRS1_SS21_0.0			HM7, Asbestos PA
MRS1_SS21_0.3			Hold Cold
MRS1_SS21_0.5			" "

Sample Name	Sample Date	Sample type	Tests Requd.
MRS1_SS38_0.0	25/5/25	soils	HM7, Asbestos PA
MRS1_SS38_0.3			Hold Cold
MRS1_SS38_0.5			" "
MRS1_SS39_0.0			HM7, Asbestos PA
MRS1_SS39_0.3			Hold Cold
MRS1_SS39_0.5			" "
MRS1_SS40_0.0			HM7, Asbestos PA
MRS1_SS40_0.3			Hold Cold
MRS1_SS40_0.5			" "
MRS1_SS44_0.0			HM7, Asbestos PA
MRS1_SS44_0.3			Hold Cold
MRS1_SS44_0.5			" "
MRS1_SS45_0.0			HM7, Asbestos PA
MRS1_SS45_0.3			Hold Cold
MRS1_SS45_0.5			" "
MRS1_SS46_0.0			HM7, Asbestos PA
MRS1_SS46_0.3			Hold Cold
MRS1_SS46_0.5			" "
MRS1_SS47_0.0			HM7, Asbestos PA
MRS1_SS47_0.3			Hold Cold
MRS1_SS47_0.5			" "
QA01			HM7, ~~Asbestos PA~~
QA02			~~Hold Cold~~
QA03			" "

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3901616
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	29-May-2025 10:28 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	03-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS01 0 0 27 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
2	MRS1 SS01 0 3 27 May 2025	Soil	GSoil300	Hold Cold
3	MRS1 SS01 0 5 27 May 2025	Soil	GSoil300	Hold Cold
4	MRS1 SS02 0 0 27 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
5	MRS1 SS02 0 3 27 May 2025	Soil	GSoil300	Hold Cold
6	MRS1 SS02 0 5 27 May 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS03_0.0 27-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
8	MRS1_SS03_0.3 27-May-2025	Soil	GSoil300	Hold Cold
9	MRS1_SS03_0.5 27-May-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS04_0.0 25-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
11	MRS1_SS04_0.3 25-May-2025	Soil	GSoil300	Hold Cold
12	MRS1_SS04_0.5 25-May-2025	Soil	GSoil300	Hold Cold
13	MRS1_SS05_0.0 25-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
14	MRS1 SS05 0 3 25 May 2025	Soil	GSoil300	Hold Cold
15	MRS1 SS05 0 5 25 May 2025	Soil	GSoil300	Hold Cold
16	MRS1 SS06 0 0 25 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
17	MRS1 SS06 0 3 25 May 2025	Soil	GSoil300	Hold Cold
18	MRS1 SS06 0 5 25 May 2025	Soil	GSoil300	Hold Cold
19	MRS1 SS07 0 0 25 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
20	MRS1 SS07 0 3 25 May 2025	Soil	GSoil300	Hold Cold
21	MRS1 SS07 0 5 25 May 2025	Soil	GSoil300	Hold Cold
22	MRS1_SS08_0.0 25-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
23	MRS1_SS09_0.0 25-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
24	MRS1_SS09_0.3 25-May-2025	Soil	GSoil300	Hold Cold
25	MRS1_SS09_0.5 25-May-2025	Soil	GSoil300	Hold Cold
26	MRS1_SS10_0.0 25-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
27	MRS1_SS10_0.3 25-May-2025	Soil	GSoil300	Hold Cold
28	MRS1_SS10_0.5 25-May-2025	Soil	GSoil300	Hold Cold
29	MRS1 SS11 0 0 25 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
30	MRS1 SS11 0 3 25 May 2025	Soil	GSoil300	Hold Cold
31	MRS1 SS11 0 5 25 May 2025	Soil	GSoil300	Hold Cold
32	MRS1 SS12 0 0 25 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
33	MRS1 SS12 0 3 25 May 2025	Soil	GSoil300	Hold Cold
34	MRS1 SS12 0 5 25 May 2025	Soil	GSoil300	Hold Cold
35	MRS1 SS13 0 0 27 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
36	MRS1 SS13 0 3 27 May 2025	Soil	GSoil300	Hold Cold

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
37	MRS1_SS13_0.5 27-May-2025	Soil	GSoil300	Hold Cold
38	MRS1_SS14_0.0 27-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
39	MRS1_SS14_0.3 27-May-2025	Soil	GSoil300	Hold Cold
40	MRS1_SS14_0.5 27-May-2025	Soil	GSoil300	Hold Cold
41	MRS1 SS16 0 0 27 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
42	MRS1 SS16 0 3 27 May 2025	Soil	GSoil300	Hold Cold
43	MRS1 SS16 0 5 27 May 2025	Soil	GSoil300	Hold Cold
44	MRS1 SS17 0 0 27 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
45	MRS1 SS17 0 3 27 May 2025	Soil	GSoil300	Hold Cold
46	MRS1 SS17 0 5 27 May 2025	Soil	GSoil300	Hold Cold
47	MRS1 SS18 0 0 27 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
48	MRS1 SS18 0 3 27 May 2025	Soil	GSoil300	Hold Cold
49	MRS1_SS18_0.5 27-May-2025	Soil	GSoil300	Hold Cold
50	MRS1_SS19_0.0 27-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
51	MRS1_SS19_0.3 27-May-2025	Soil	GSoil300	Hold Cold
52	MRS1_SS19_0.5 27-May-2025	Soil	GSoil300	Hold Cold
53	MRS1_SS20_0.0 27-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
54	MRS1_SS20_0.3 27-May-2025	Soil	GSoil300	Hold Cold
55	MRS1_SS20_0.5 27-May-2025	Soil	GSoil300	Hold Cold
56	MRS1 SS21 0 0 27 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
58	MRS1 SS21 0 5 27 May 2025	Soil	GSoil300	Hold Cold
59	MRS1 SS38 0 0 25 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
60	MRS1 SS38 0 3 25 May 2025	Soil	GSoil300	Hold Cold
61	MRS1 SS38 0 5 25 May 2025	Soil	GSoil300	Hold Cold
62	MRS1 SS39 0 0 25 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
63	MRS1 SS39 0 3 25 May 2025	Soil	GSoil300	Hold Cold
64	MRS1 SS39 0 5 25 May 2025	Soil	GSoil300	Hold Cold
65	MRS1_SS40_0.0 25-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
66	MRS1_SS40_0.3 25-May-2025	Soil	GSoil300	Hold Cold
67	MRS1_SS40_0.5 25-May-2025	Soil	GSoil300	Hold Cold
68	MRS1_SS44_0.0 25-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
69	MRS1_SS44_0.3 25-May-2025	Soil	GSoil300	Hold Cold
70	MRS1_SS44_0.5 25-May-2025	Soil	GSoil300	Hold Cold
71	MRS1_SS45_0.0 25-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
72	MRS1 SS45 0 3 25 May 2025	Soil	GSoil300	Hold Cold
73	MRS1 SS45 0 5 25 May 2025	Soil	GSoil300	Hold Cold
74	MRS1 SS46 0 0 25 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
75	MRS1 SS46 0 3 25 May 2025	Soil	GSoil300	Hold Cold
76	MRS1 SS46 0 5 25 May 2025	Soil	GSoil300	Hold Cold
77	MRS1 SS47 0 0 25 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
78	MRS1 SS47 0 3 25 May 2025	Soil	GSoil300	Hold Cold
79	MRS1 SS47 0 5 25 May 2025	Soil	GSoil300	Hold Cold
80	QA01 25-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
81	QA02 25-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
82	QA03 25-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
83	MRS1_SS15_0.0 27-May-2025	Soil	GSoil300	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22-23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, 59, 62, 65, 68, 71, 74, 77, 80 82
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22-23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, 59, 62, 65, 68, 71, 74, 77, 80 82

Hill Labs

ANALYSIS REQUEST

Quote No 138144

Primary Contact s9(2)(a)

Submitted By s9(2)(a)

Client Name Beca Ltd

Address

Postcode

Phone Mobile s9(2)(a)

Email s9(2)(a)

Charge To Beca Ltd

Client Reference ~~330~~ 3011550/200/2 i

Order No

Results To Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.

☒ Email Primary Contact ☐ Email Submitter ☐ Email Client

☑ Email Other s9(2)(a)

☐ Other

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

s9(2)(a)

Job No: 390 2196 Date Recv: 28-May-25 18:36

Received by: s9(2)(a)

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories

Date & Time: 28/5/25 6:30 pm

Name: s9(2)(a)

Signature s9(2)(a)

☑ Tick if you require COC to be emailed back

Samples will be processed at a Hill Labs site with the appropriate testing capability and capacity. Please infon retained and analysed at the site of i

Received at Hill Laboratories

Date & T

Name:

Signatun

Temperature On Arriva

8.9 °C

Temperature was measured on one o more arbitrarily chosen samples in this batch

ADDITIONAL INFORMATION

PA to NZG

Also report to Beca Es Dat

Priority ☐ Low ☒ Normal ☐ High

☐ **Urgent** (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1_SS22_0.0	Soil		28/5/25	HM7 PA to NZG
2	MRS1_SS22_0.3				Hold cold
3	MRS1_SS22_0.5				" "
4	RRS1_SS23_0.0				HM7, PA to NZG.
5	MRS1_SS23_0.3				HOLD COLD
6	MRS1_SS23_0.5				" "
7	MRS1_SS24_0.0				HM7, PA to NZG
8	MRS1_SS24_0.3				HOLD COLD
9	MRS1_SS24_0.5				" "
10	MRS1_SS25_0.0				HM7, PA to NZG
11	MRS1_SS25_0.3				HOLD COLD
12	MRS1_SS25_05				" "
13	MRS1_SS26_0.0				HM7, PA to NZG

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI - SS26 - 0.3	Soil		28/5/25	HOLD COLD
15	MRSI - SS26 - 0.5				" "
16	MRSI - SS27 - 0.0				HM7, Asbestos PA
17	MRSI - SS27 - 0.3				HOLD COLD
18	MRSI - SS27 - 0.5				" "
19	MRSI - SS28 - 0.0				HM7, Asbestos PA
20	MRSI - SS28 - 0.3				HOLD Cold
21	MRSI - SS28 - 0.5				" "
22	MRSI - SS29 - 0.0				HM7, Asbestos PA
23	MRSI - SS30 - 0.0				HM7, Asbestos PA" ~~HOLD Cold~~
24	MRSI - SS30 - 0.3				Hold Cold
25	MRSI - SS30 - 0.5				" "
26	MRSI - SS31 - 0.0				HM7, Asbestos PA ~~HOLD COLD~~
27	MRSI - SS31 - 0.3				HOLD COLD
28	MRSI - SS31 - 0.5				" "
29	MRSI - SS32 - 0.0				HM7, Asbestos PA
30	MRSI - SS32 - 0.3				HOLD Cold
31	MRSI - SS32 - 0.5				" "
32	MRSI - SS33 - 0.0				HM7, Asbestos PA
33	MRSI - SS33 - 0.3				HM7, Asbestos PA
34	MRSI - SS33 - 0.5				" "
35	MRSI - SS34 - 0.0				HM7, Asbestos PA
36	MRSI - SS34 - 0.3				HOLD COLD ~~HM7, Asbestos PA~~
37	MRSI - SS34 - 0.5				HOLD COLD "
38	MRSI - SS35 - 0.0				Hold Cold
39	MRSI - SS36 - 0.0				HM7, Asbestos PA
40	MRSI - SS36 - 0.3				HOLD COLD
41	MRSI - SS36 - 0.5				" "

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI - SS37 - 0.0	Soil		28/5/25	HM7, PA to NZG
15	MRSI - SS37 - 0.3				Hold Cold
16	MRSI - SS37 - 0.5				" "
17	MRSI - SS48 - 0.0				HM7, PA to NZG
18	MRSI - SS48 - 0.3				Hold Cold
19	MRSI - SS48 - 0.5				" "
20	MRSI - SS49 - 0.0				HM7, PA to NZG
21	MRSI - SS49 - 0.3				Hold Cold
22	MRSI - SS49 - 0.5				" "
23	MRSI - SS50 - 0.0				HM7, PA to NZG
24	MRSI - SS50 - 0.3				Hold Cold
25	MRSI - SS50 - 0.5				" "
26	MRSI - SS51 - 0.0				HM7, PA to NZG
27	MRSI - SS51 - 0.3				Hold Cold
28	MRSI - SS51 - 0.5				" "
29	MRSI - SS52 - 0.0				HM7, PA to NZG
30	MRSI - SS52 - 0.3				Hold Cold
31	MRSI - SS52 - 0.5				" "
32	MRSI - SS53 - 0.0				HM7, PA to NZG
33	MRSI - SS53 - 0.0				" "
34	MRSI - SS53 - 0.3				Hold Cold
35	MRSI - SS54 - 0.5				" "
36	MRSI - SS55 - 0.0				HM7, PA to NZG
37	MRSI - SS55 - 0.3				Hold Cold
38	MRSI - SS55 - 0.5				" "
39	MRSI - SS56 - 0.0				HM7, PA to NZG
40	MRSI - SS56 - 0.3				Hold Cold
41	MRSI - SS56 - 0.5				" "

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI_SS57_0.0	Soil		28/5/25	HM7, PA to NZG
15	MRSI-SS57-0.3				Hold Cold
16	MRSI_SS57_0.5				" "
17	MRSI-SS58-0.0				HM7, PA to NZG
18	MRSI-SS58-0.3				Hold Cold
19	MRSI-SS58_0.5				" "
20	MRSI_SS59_0.0				HM7, PA to NZG
21	MRSI-SS59_0.3				Hold Cold
22	MRSI_SS59-0.5				" "
23	MRSI-SS60_0.0				HM7, PA to NZG
24	MRSI_SS60-0.3				Hold Cold
25	MRSI_SS61_0.0				HM7, PA to NZG
26	MRSI_SS61-0.3				HOLD Cold
27	MRSI_SS61_0.5				" "
28	MRSI_SS62_0.0				HM7, PA to NZG
29	MRSI_SS62_0.3				HOLD Cold
30	MRSI_SS62_0.5				" "
31	MRSI_SS63_0.0				HM7, PA to NZG
32	MRSI_SS63_0.3				HOLD Cold
33	MRSI_SS63_0.5				" "
34	MRSI_QA04				HM7
35	MRSI_QA05				" "
36	MRSI_QA06				" "
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3902196
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	30-May-2025 12:42 pm
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	04-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS22 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
2	MRS1 SS22 0 3 28 May 2025	Soil	cGSoil	Hold Cold
3	MRS1 SS22 0 5 28 May 2025	Soil	cGSoil	Hold Cold
4	MRS1 SS23 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
5	MRS1 SS23 0 3 28 May 2025	Soil	cGSoil	Hold Cold
6	MRS1 SS23 0 5 28 May 2025	Soil	cGSoil	Hold Cold
7	MRS1_SS24_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
8	MRS1_SS24_0.3 28-May-2025	Soil	cGSoil	Hold Cold
9	MRS1_SS24_0.5 28-May-2025	Soil	cGSoil	Hold Cold
10	MRS1_SS25_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
11	MRS1_SS25_0.3 28-May-2025	Soil	cGSoil	Hold Cold
12	MRS1_SS25_0.5 28-May-2025	Soil	cGSoil	Hold Cold
13	MRS1_SS26_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
14	MRS1 SS26 0 3 28 May 2025	Soil	cGSoil	Hold Cold
15	MRS1 SS26 0 5 28 May 2025	Soil	cGSoil	Hold Cold
16	MRS1 SS27 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
17	MRS1 SS27 0 3 28 May 2025	Soil	cGSoil	Hold Cold
18	MRS1 SS27 0 5 28 May 2025	Soil	cGSoil	Hold Cold
19	MRS1 SS28 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
20	MRS1 SS28 0 3 28 May 2025	Soil	cGSoil	Hold Cold
21	MRS1 SS28 0 5 28 May 2025	Soil	cGSoil	Hold Cold
22	MRS1_SS29_0.5 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
23	MRS1_SS30_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
24	MRS1_SS30_0.3 28-May-2025	Soil	cGSoil	Hold Cold
25	MRS1_SS30_0.5 28-May-2025	Soil	cGSoil	Hold Cold
26	MRS1_SS31_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
27	MRS1_SS31_0.3 28-May-2025	Soil	cGSoil	Hold Cold
28	MRS1_SS31_0.5 28-May-2025	Soil	cGSoil	Hold Cold
29	MRS1 SS32 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
30	MRS1 SS33 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
31	MRS1 SS33 0 3 28 May 2025	Soil	cGSoil	Hold Cold
32	MRS1 SS33 0 5 28 May 2025	Soil	cGSoil	Hold Cold
33	MRS1 SS34 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
34	MRS1 SS34 0 3 28 May 2025	Soil	cGSoil	Hold Cold
35	MRS1 SS34 0 5 28 May 2025	Soil	cGSoil	Hold Cold
36	MRS1 SS35 0 0 28 May 2025	Soil	cGSoil	Hold Cold

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
37	MRS1_SS36_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
38	MRS1_SS36_0.3 28-May-2025	Soil	cGSoil	Hold Cold
39	MRS1_SS36_0.5 28-May-2025	Soil	cGSoil	Hold Cold
40	MRS1_SS37_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
41	MRS1 SS37 0 3 28 May 2025	Soil	cGSoil	Hold Cold
42	MRS1 SS37 0 5 28 May 2025	Soil	cGSoil	Hold Cold
43	MRS1 SS48 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
44	MRS1 SS48 0 3 28 May 2025	Soil	cGSoil	Hold Cold
45	MRS1 SS48 0 5 28 May 2025	Soil	cGSoil	Hold Cold
46	MRS1 SS49 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
47	MRS1 SS49 0 3 28 May 2025	Soil	cGSoil	Hold Cold
48	MRS1 SS49 0 5 28 May 2025	Soil	cGSoil	Hold Cold
49	MRS1_SS50_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
50	MRS1_SS50_0.3 28-May-2025	Soil	cGSoil	Hold Cold
51	MRS1_SS50_0.5 28-May-2025	Soil	cGSoil	Hold Cold
52	MRS1_SS51_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
53	MRS1_SS51_0.3 28-May-2025	Soil	cGSoil	Hold Cold
54	MRS1_SS51_0.5 28-May-2025	Soil	cGSoil	Hold Cold
55	MRS1_SS52_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
56	MRS1 SS52 0 3 28 May 2025	Soil	cGSoil	Hold Cold
57	MRS1 SS52 0 5 28 May 2025	Soil	cGSoil	Hold Cold
58	MRS1 SS53 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
59	MRS1 SS54 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
60	MRS1 SS54 0 3 28 May 2025	Soil	cGSoil	Hold Cold
61	MRS1 SS54 0 5 28 May 2025	Soil	cGSoil	Hold Cold
62	MRS1 SS55 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
63	MRS1 SS55 0 3 28 May 2025	Soil	cGSoil	Hold Cold
64	MRS1_SS55_0.5 28-May-2025	Soil	cGSoil	Hold Cold
65	MRS1_SS56_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
66	MRS1_SS56_0.3 28-May-2025	Soil	cGSoil	Hold Cold
67	MRS1_SS56_0.5 28-May-2025	Soil	cGSoil	Hold Cold
68	MRS1_SS57_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
69	MRS1_SS57_0.3 28-May-2025	Soil	cGSoil	Hold Cold
70	MRS1_SS57_0.5 28-May-2025	Soil	cGSoil	Hold Cold
71	MRS1 SS58 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
72	MRS1 SS58 0 3 28 May 2025	Soil	cGSoil	Hold Cold
73	MRS1 SS58 0 5 28 May 2025	Soil	cGSoil	Hold Cold
74	MRS1 SS59 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
75	MRS1 SS59 0 3 28 May 2025	Soil	cGSoil	Hold Cold
76	MRS1 SS59 0 5 28 May 2025	Soil	cGSoil	Hold Cold
77	MRS1 SS60 0 0 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
78	MRS1 SS60 0 3 28 May 2025	Soil	cGSoil	Hold Cold
80	MRS1_SS61_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
81	MRS1_SS61_0.3 28-May-2025	Soil	cGSoil	Hold Cold
82	MRS1_SS61_0.5 28-May-2025	Soil	cGSoil	Hold Cold
83	MRS1_SS62_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
84	MRS1_SS62_0.3 28-May-2025	Soil	cGSoil	Hold Cold
85	MRS1_SS62_0.5 28-May-2025	Soil	cGSoil	Hold Cold
86	MRS1_SS63_0.0 28-May-2025	Soil	cGSoil	Heavy Metals, Screen Level
87	MRS1 SS63 0 3 28 May 2025	Soil	cGSoil	Hold Cold
88	MRS1 SS63 0 5 28 May 2025	Soil	cGSoil	Hold Cold
89	MRS1 QA04 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
90	MRS1 QA05 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level
91	MRS1 QA06 28 May 2025	Soil	cGSoil	Heavy Metals, Screen Level

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22 23, 26, 29-30, 33, 37, 40, 43, 46, 49, 52, 55, 58-59, 62, 65, 68, 71, 74, 77, 80, 83, 86, 89 91
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22 23, 26, 29-30, 33, 37, 40, 43, 46, 49, 52, 55, 58-59, 62, 65, 68, 71, 74, 77, 80, 83, 86, 89 91

Hill Labs

ANALYSIS REQUEST

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

Job No: **390 3454**
Date Recv: 29-May-25 18:24
Received by: s9(2)(a)

s9(2)(a)

Quote No 138144
Primary Contact s9(2)(a)
Submitted By s9(2)(a)
Client Name Becca Ltd
Address
Postcode
Phone *Mobile*
Email
Charge To Becca Ltd
Client Reference 3011550 / 200 / 2.1
Order No

Results To *Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.*

☒ Email Primary Contact ☐ Email Submitter ☐ Email Client
☐ Email Other s9(2)(a)
☐ Other

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories
Date & Time: 29/5/25 6.30
Name: s9(2)(a)
☐ Tick if you require COC to be emailed back
Signature: s9(2)(a)

Samples will be processed at a H capability and capacity. Please in retained and analysed at the site

Received at Hill Laboratories
Date
Nam
Signa

Temperature On Arrival
8.3 °C
Temperature was measured on one o more arbitrarily chosen samples in this batch

ADDITIONAL INFORMATION

Please email Becca Gsdat &

Priority ☐ Low ☒ Normal ☐ High
☐ Urgent (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRSI_SS64_0.0	SOIL		29/5/25	HM7, PA to NZG
2	MRSI_SS64_0.3				Hold Cold
3	MRSI_SS64_0.5				
4	MRSI_SS65_0.0				HM7, PA to NZG
5	MRSI_SS65_0.3				Hold Cold
6	MRSI_SS65_0.5				
7	MRSI_SS66_0.0				HM7, PA to NZG
8	MRSI_SS66_0.3				Hold Cold
9	MRSI_SS66_0.5				
10	MRSI_SS67_0.0				HM7, PA to NZG
11	MRSI_SS67_0.3				Hold Cold
12	MRSI_SS67_0.5				
13	MRSI_SS68_0.0				HM7, PA to NZG

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI_SS68_0.3	Soil		29/5/25	Hold Cold
15	MRSI_SS68_0.5				"
16	MRSI_SS69_0.0				HM7, PA to NZG
17	MRSI_SS69_0.3				Hold Cold
18	MRSI_SS69_0.5				"
19	MRSI_SS70_0.0				HM7, PA to NZG
20	MRSI_SS70_0.3				Hold Cold
21	MRSI_SS70_0.5				"
22	MRSI_SS71_0.0				HM7, PA to NZG
23	MRSI_SS71_0.3				Hold Cold
24	MRSI_SS71_0.5				"
25	MRSI_SS72_0.0				HM7, PA to NZG
26	MRSI_SS72_0.3				Hold Cold
27	MRSI_SS72_0.5				"
28	MRSI_SS73_0.0				HM7, PA to NZG
29	MRSI_SS73_0.3				Hold Cold
30	MRSI_SS73_0.5				"
31	MRSI_SS74_0.0				HM7, PA to NZG
32	MRSI_SS74_0.3				Hold Cold
33	MRSI_SS74_0.5				"
34	MRSI_SS75_0.0				HM7, PA to NZG
35	MRSI_SS75_0.3				Hold Cold
36	MRSI_SS75_0.5				"
37	MRSI_SS76_0.0				HM7, PA to NZG
38	MRSI_SS76_0.3				Hold Cold
39	MRSI_SS76_0.5				"
40	MRSI_SS77_0.0				HM7, PA to NZG
41	MRSI_SS77_0.3				Hold Cold

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI - 5577 _ 0.5	Soil		29/5/25	Hold Cold
15	MRSI - 5578 _ 0.0				HM7, PA to NZG
16	MRSI - 5578 - 0.3				Hold Cold
17	MRSI _ 5578 - 0.5				" "
18	MRSI - 5579 - 0.0				HM7, PA to NZG
19	MRSI - 5579 _ 0.3				Hold Cold
20	MRSI _ 5579 _ 0.5				" "
21	MRSI _ 5580 - 0.0				HM7, PA to NZG
22	MRSI _ 5580 - 0.3				Hold Cold
23	MRSI _ 5580 - 0.5				" "
24	MRSI _ 5581 - 0.0				HM7, PA to NZG
25	MRSI _ 5581 - 0.3				Hold Cold
26	MRSI _ 5581 - 0.5				" "
27	MRSI - 5582 - 0.0				HM7, PA to NZG
28	MRSI _ 5582 _ 0.3				Hold Cold
29	MRSI _ 5582 - 0.5				" "
30	MRSI - 5584 - 0.0				HM7, PA to NZG
31	MRSI - 5584 - 0.3				Hold Cold
32	MRSI - 5584 _ 0.5				" "
33	MRSI _ 5585 _ 0.0				HM7, PA to NZG
34	MRSI _ 5585 _ 0.3				Hold Cold
35	MRSI _ 5585 _ 0.5				" "
36	MRSI _ 5586 _ 0.0				HM7, PA to NZG
37	MRSI _ 5586 _ 0.3				Hold Cold
38	MRSI _ 5586 _ 0.5				" "
39	MRSI - 5587 _ 0.0				HM7, PA to NZG
40	MRSI - 5587 _ 0.3				Hold Cold
41	MRSI _ 5587 _ 0.5				" "

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI_~~SS78~~ SS88 _ 0.0	SOIL		29/5/25	HM7, PA to NZG
15	MRSI_SS89_0.0				" "
16	MRSI_SS89_0.3				Hold Cold
17	MRSI_SS89_0.5				" "
18	MRSI_SS90_0.0				HM7, PA to NZG
19	MRSI_SS90_0.3				Hold Cold
20	MRSI_SS91_0.0				HM7, PA to NZG
21	MRSI_SS91_0.3				Hold Cold
22	MRSI_SS91_0.5				~~PA~~ " "
23	MRSI_SS92_0.0				HM7, PA to NZG
24	MRSI_SS92_0.3				Hold Cold
25	MRSI_SS92_0.5				" "
26	MRSI_QA01				HM7, ~~PA to NZG~~
27	MRSI_QA08				HM7
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3903454
Contact:	s9(2)(a) d PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	31-May-2025 11:04 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	05-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS64 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
2	MRS1 SS64 0 3 29 May 2025	Soil	GSoil300	Hold Cold
3	MRS1 SS64 0 5 29 May 2025	Soil	GSoil300	Hold Cold
4	MRS1 SS65 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
5	MRS1 SS65 0 3 29 May 2025	Soil	GSoil300	Hold Cold
6	MRS1 SS65 0 5 29 May 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS66_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
8	MRS1_SS66_0.3 29-May-2025	Soil	GSoil300	Hold Cold
9	MRS1_SS66_0.5 29-May-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS67_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
11	MRS1_SS67_0.3 29-May-2025	Soil	GSoil300	Hold Cold
12	MRS1_SS67_0.5 29-May-2025	Soil	GSoil300	Hold Cold
13	MRS1_SS68_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
14	MRS1 SS68 0 3 29 May 2025	Soil	GSoil300	Hold Cold
15	MRS1 SS68 0 5 29 May 2025	Soil	GSoil300	Hold Cold
16	MRS1 SS69 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
17	MRS1 SS69 0 3 29 May 2025	Soil	GSoil300	Hold Cold
18	MRS1 SS69 0 5 29 May 2025	Soil	GSoil300	Hold Cold
19	MRS1 SS70 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
20	MRS1 SS70 0 3 29 May 2025	Soil	GSoil300	Hold Cold
21	MRS1 SS70 0 5 29 May 2025	Soil	GSoil300	Hold Cold
22	MRS1_SS71_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
23	MRS1_SS71_0.3 29-May-2025	Soil	GSoil300	Hold Cold
24	MRS1_SS71_0.5 29-May-2025	Soil	GSoil300	Hold Cold
25	MRS1_SS72_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
26	MRS1_SS72_0.3 29-May-2025	Soil	GSoil300	Hold Cold
27	MRS1_SS72_0.5 29-May-2025	Soil	GSoil300	Hold Cold
28	MRS1_SS73_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
29	MRS1 SS73 0 3 29 May 2025	Soil	GSoil300	Hold Cold
30	MRS1 SS73 0 5 29 May 2025	Soil	GSoil300	Hold Cold
31	MRS1 SS74 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
32	MRS1 SS74 0 3 29 May 2025	Soil	GSoil300	Hold Cold
33	MRS1 SS74 0 5 29 May 2025	Soil	GSoil300	Hold Cold
34	MRS1 SS75 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
35	MRS1 SS75 0 3 29 May 2025	Soil	GSoil300	Hold Cold
36	MRS1 SS75 0 5 29 May 2025	Soil	GSoil300	Hold Cold

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
37	MRS1_SS76_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
38	MRS1_SS76_0.3 29-May-2025	Soil	GSoil300	Hold Cold
39	MRS1_SS76_0.5 29-May-2025	Soil	GSoil300	Hold Cold
40	MRS1_SS77_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
41	MRS1 SS77 0 3 29 May 2025	Soil	GSoil300	Hold Cold
42	MRS1 SS77 0 5 29 May 2025	Soil	GSoil300	Hold Cold
43	MRS1 SS78 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
44	MRS1 SS78 0 3 29 May 2025	Soil	GSoil300	Hold Cold
45	MRS1 SS78 0 5 29 May 2025	Soil	GSoil300	Hold Cold
46	MRS1 SS79 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
47	MRS1 SS79 0 3 29 May 2025	Soil	GSoil300	Hold Cold
48	MRS1 SS79 0 5 29 May 2025	Soil	GSoil300	Hold Cold
49	MRS1_SS80_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
50	MRS1_SS80_0.3 29-May-2025	Soil	GSoil300	Hold Cold
51	MRS1_SS80_0.5 29-May-2025	Soil	GSoil300	Hold Cold
52	MRS1_SS81_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
53	MRS1_SS81_0.3 29-May-2025	Soil	GSoil300	Hold Cold
54	MRS1_SS81_0.5 29-May-2025	Soil	GSoil300	Hold Cold
55	MRS1_SS82_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
56	MRS1 SS82 0 3 29 May 2025	Soil	GSoil300	Hold Cold
57	MRS1 SS82 0 5 29 May 2025	Soil	GSoil300	Hold Cold
58	MRS1 SS84 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
59	MRS1 SS84 0 3 29 May 2025	Soil	GSoil300	Hold Cold
60	MRS1 SS84 0 5 29 May 2025	Soil	GSoil300	Hold Cold
61	MRS1 SS85 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
62	MRS1 SS85 0 3 29 May 2025	Soil	GSoil300	Hold Cold
63	MRS1 SS85 0 5 29 May 2025	Soil	GSoil300	Hold Cold
64	MRS1_SS86_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
65	MRS1_SS86_0.3 29-May-2025	Soil	GSoil300	Hold Cold
66	MRS1_SS86_0.5 29-May-2025	Soil	GSoil300	Hold Cold
67	MRS1_SS87_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
68	MRS1_SS87_0.3 29-May-2025	Soil	GSoil300	Hold Cold
69	MRS1_SS87_0.5 29-May-2025	Soil	GSoil300	Hold Cold
70	MRS1_SS88_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
71	MRS1 SS89 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
72	MRS1 SS89 0 3 29 May 2025	Soil	GSoil300	Hold Cold
73	MRS1 SS89 0 5 29 May 2025	Soil	GSoil300	Hold Cold
74	MRS1 SS90 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
75	MRS1 SS90 0 3 29 May 2025	Soil	GSoil300	Hold Cold
76	MRS1 SS91 0 0 29 May 2025	Soil	GSoil300	Heavy Metals, Screen Level
77	MRS1 SS91 0 3 29 May 2025	Soil	GSoil300	Hold Cold
78	MRS1 SS91 0 5 29 May 2025	Soil	GSoil300	Hold Cold
79	MRS1_SS92_0.0 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
80	MRS1_SS92_0.3 29-May-2025	Soil	GSoil300	Hold Cold
81	MRS1_SS92_0.5 29-May-2025	Soil	GSoil300	Hold Cold
82	MRS1_QA07 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level
83	MRS1_QA08 29-May-2025	Soil	GSoil300	Heavy Metals, Screen Level

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 64, 67, 70-71, 74, 76, 79, 82-83
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 64, 67, 70 71, 74, 76, 79, 82 83

Hill Labs

ANALYSIS REQUEST

Quote No 138144

Primary Contact s9(2)(a)

Submitted By s9(2)(a)

Client Name Beca Ltd

Address

Postcode

Phone Mobile

Email s9(2)(a)

Charge To Beca Ltd

Client Reference 3611950 / 200 / 2.1

Order No

Results To Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.

☒ Email Primary Contact ☐ Email Submitter ☐ Email Client

☑ Email Other s9(2)(a)

☐ Other

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

s9(2)(a)

Job No: 390 7851

Date Recv: 04-Jun-25 13:05

Received by: s9(2)(a)

3139078513

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories

Date & Time: 3/6/25 5pm

Name:

Signature s9(2)(a)

☐ Tick if you require COC to be emailed back

Samples will be processed at a Hill Labs site with the appropriate testing capability and capacity. Please inform the lab if ... retained and analysed at the site o...

Received at Hill Laboratories

Date &

Name:

Signatu...

Temperature On Arrival

7.1 °C

Temperature was measured on one or more arbitrarily chosen samples in this batch

ADDITIONAL INFORMATION

Priority ☐ Low ☒ Normal ☐ High

☐ **Urgent** (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1 - SS93 - 0.0	Soil		3/6/25	HM7, PA to NZG
2	MRS1 - SS93 - 0.3				Hold Cold
3	MRS1 - SS93 - 0.5				" "
4	MRS1 - SS94 - 0.0				HM7, PA to NZG
5	MRS1 - SS94 - 0.3				Hold Cold
6	MRS1 - SS94 - 0.5				" "
7	MRS1 - SS96 - 0.0				HM7, PA to NZG
8	MRS1 - SS96 - 0.3				Hold Cold
9	MRS1 - SS96 - 0.5				" "
10	MRS1 - SS97 - 0.0				HM7, PA to NZG
11	MRS1 - SS97 - 0.3				Hold Cold
12	MRS1 - SS97 - 0.5				" "
13	MRS1 - SS98 - 0.0				HM7, PA to NZG

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS98_0.3	Soil		3/6/25	Hold Old
15	MRS1_SS98_0.5				" "
16	MRS1_SS99_0.0				HM7, PA + NZG
17	MRS1_SS99_0.3				Hold Old
18	MRS1_SS99_0.5				" "
19	MRS1_SS100_0.0				HM7, PA + NZG
20	MRS1_SS100_0.3				Hold Old
21	MRS1_SS100_0.5				" "
22	MRS1_SS101_0.0				HM7, PA + NZG
23	MRS1_SS101_0.3				Hold Old
24	MRS1_SS101_0.5				" "
25	MRS1_SS102_0.0				HM7, PA + NZG
26	MRS1_SS102_0.3				Hold Old
27	MRS1_SS102_0.5				" "
28	MRS1_SS103_0.0				HM7, PA + NZG
29	MRS1_SS103_0.3				Hold Old
30	MRS1_SS103_0.5				" "
31	MRS1_SS105_0.0				HM7, PA + NZG
32	MRS1_SS105_0.3				Hold Old
33	MRS1_SS105_0.5				" "
34	MRS1_SS106_0.0				HM7, PA + NZG
35	MRS1_SS106_0.3				Hold Old
36	MRS1_SS106_0.5				" "
37	MRS1_SS107_0.0				HM7, PA + NZG
38	MRS1_SS107_0.3				Hold Old
39	MRS1_SS107_0.5				" "
40	MRS1_SS108_0.0				HM7, PA + NZG
41	MRS1_SS108_0.3				Hold Old

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS108-0.5	Soil		3/6/25	Hold Cld
15	MRS1_SS109_0.0				HM7, PA + NZG
16	MRS1_SS109_0.3				Hold Cld
17	MRS1_SS109_0.5				" "
18	MRS1_SS112_0.0				HM7, PA + NZG
19	MRS1_SS112_0.3				Hold Cld
20	MRS1_SS112_0.5				" "
21	MRS1_SS113_0.0				HM7, PA + NZG
22	MRS1_SS113_0.3				Hold Cld
23	MRS1_SS113_0.5				" "
24	MRS1_SS114_0.0				HM7, PA + NZG
25	MRS1_SS114_0.3				Hold Cld
26	MRS1_SS114_0.5				" "
27	MRS1_SS115_0.0				HM7, PA + NZG
28	MRS1_SS115_0.3				Hold Cld
29	MRS1_SS115_0.5				" "
30	MRS1_SS116_0.0				HM7, PA + NZG
31	MRS1_SS116_0.3				Hold Cld
32	MRS1_SS116_0.5				" "
33	MRS1_QA09				HM7
34	MRS1_QA10				HM7
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3907851
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	05-Jun-2025 10:42 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	09-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS93 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
2	MRS1 SS94 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
3	MRS1 SS94 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold
4	MRS1 SS94 0 5 03 Jun 2025	Soil	GSoil300	Hold Cold
5	MRS1 SS96 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
6	MRS1 SS96 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS96_0.5 03-Jun-2025	Soil	GSoil300	Hold Cold
8	MRS1_SS97_0.0 03-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
9	MRS1_SS97_0.3 03-Jun-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS97_0.5 03-Jun-2025	Soil	GSoil300	Hold Cold
11	MRS1_SS98_0.0 03-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
12	MRS1_SS98_0.3 03-Jun-2025	Soil	GSoil300	Hold Cold
13	MRS1_SS98_0.5 03-Jun-2025	Soil	GSoil300	Hold Cold
14	MRS1 SS99 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
15	MRS1 SS99 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold
16	MRS1 SS99 0 5 03 Jun 2025	Soil	GSoil300	Hold Cold
17	MRS1 SS100 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
18	MRS1 SS100 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold
19	MRS1 SS100 0 5 03 Jun 2025	Soil	GSoil300	Hold Cold
20	MRS1 SS101 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
21	MRS1 SS101 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold
22	MRS1_SS101_0.5 03-Jun-2025	Soil	GSoil300	Hold Cold
23	MRS1_SS102_0.0 03-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
24	MRS1_SS102_0.3 03-Jun-2025	Soil	GSoil300	Hold Cold
25	MRS1_SS102_0.5 03-Jun-2025	Soil	GSoil300	Hold Cold
26	MRS1_SS103_0.0 03-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
27	MRS1_SS103_0.3 03-Jun-2025	Soil	GSoil300	Hold Cold
28	MRS1_SS103_0.5 03-Jun-2025	Soil	GSoil300	Hold Cold
29	MRS1 SS105 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
30	MRS1 SS105 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold
31	MRS1 SS105 0 5 03 Jun 2025	Soil	GSoil300	Hold Cold
32	MRS1 SS106 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
33	MRS1 SS106 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold
34	MRS1 SS106 0 5 03 Jun 2025	Soil	GSoil300	Hold Cold
35	MRS1 SS107 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
36	MRS1 SS107 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
37	MRS1_SS107_0.5 03-Jun-2025	Soil	GSoil300	
38	MRS1_SS108_0.0 03-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
39	MRS1_SS108_0.3 03-Jun-2025	Soil	GSoil300	Hold Cold
40	MRS1_SS108_0.5 03-Jun-2025	Soil	GSoil300	Hold Cold
41	MRS1 SS109 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
42	MRS1 SS109 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold
43	MRS1 SS109 0 5 03 Jun 2025	Soil	GSoil300	Hold Cold
44	MRS1 SS112 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
45	MRS1 SS112 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold
46	MRS1 SS112 0 5 03 Jun 2025	Soil	GSoil300	Hold Cold
47	MRS1 SS113 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
48	MRS1 SS113 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold
49	MRS1_SS113_0.5 03-Jun-2025	Soil	GSoil300	Hold Cold
50	MRS1_SS114_0.0 03-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
51	MRS1_SS114_0.3 03-Jun-2025	Soil	GSoil300	Hold Cold
52	MRS1_SS114_0.5 03-Jun-2025	Soil	GSoil300	Hold Cold
53	MRS1_SS115_0.0 03-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
54	MRS1_SS115_0.3 03-Jun-2025	Soil	GSoil300	Hold Cold
55	MRS1_SS115_0.5 03-Jun-2025	Soil	GSoil300	Hold Cold
56	MRS1 SS116 0 0 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
57	MRS1 SS116 0 3 03 Jun 2025	Soil	GSoil300	Hold Cold
58	MRS1 SS116 0 5 03 Jun 2025	Soil	GSoil300	Hold Cold
59	MRS1 QA09 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
60	MRS1 QA10 03 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1 2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, 59 60
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1-2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, 59-60

ANALYSIS REQUEST

Hill Labs

R J Hill Laboratories Limited
Ground Floor, 28 Heather Stre
Parnell
Auckland 1052, New Zealand

Job No: 390 9082

Date Recv: 05-Jun-25 12:55

Received by: s9(2)(a)

3139090823

Quote No 138144

Primary Contact s9(2)(a)

Submitted By s9(2)(a)

Client Name Beca Ltd

Address

Postcode

Phone Mobile

Email s9(2)(a)

Charge To Beca Ltd

Client Reference B 3011550/200/2.1

Order No

Results To Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.

☑ Email Primary Contact ☐ Email Submitter ☐ Email Client

☑ Email Other s9(2)(a)

☑ Other

ADDITIONAL INFORMATION

Email Beca EsDat

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories

Date & Time: 4/6/25 5pm

Name: s9(2)(a)

☑ Tick if you require COC to be emailed back

Signature: s9(2)(a)

Samples will be processed at a Hill Labs site with the appropriate testing capability and capacity. Please inform the lab if you wish samples to be retained and analysed at the site of receipt.

Received at Hill Laboratories

Date & Time:

Name:

Signature:

Priority ☐ Low ☒ Normal ☐ High

☐ Urgent (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1_SS127_0.0	Soil		4/6/25	HM7, PA + NZG
2	MRS1_SS128_0.0				" "
3	MRS1_SS128_0.3				Hold Hold
4	MRS1_SS128_0.5				" "
5	MRS1_SS128_0.75				" "
6	MRS1_SS128_1.0				" "
7	MRS1_SS129_0.0				HM7, PA + NZG
8	MRS1_SS129_0.3				Hold Hold
9	MRS1_SS129_0.5				" "
10	MRS1_SS129_0.70				" "
11	MRS1_SS129_1.0				" "
12	MRS1_SS130_0.0				HM7, PA + NZG
13	MRS1_SS130_0.3				Hold Hold

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS130.0.5	Soil		4/6/25	Hold Cold
15	MRS1_SS130.1.0				" "
16	MRS1_SS131_0.0				HM7, PA + NZG
17	MRS1_SS131_0.3				Hold Cold
18	MRS1_SS132_0.0				HM7, PA + NZG
19	MRS1_SS132_0.3				Hold Cold
20	MRS1_SS133_0.0				HM7, PA + NZG
21	MRS1_SS134_0.0				" "
22	QA11				HM7
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3909082
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	06-Jun-2025 10:08 am
		Priority:	High
		Quote No:	138144
		Order No:	Required
		Client Reference:	301/550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	10-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS127 0 0 04 Jun 2025	Soil	cGSoil	Heavy Metals, Screen Level
2	MRS1 SS128 0 0 04 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
3	MRS1 SS128 0 3 04 Jun 2025	Soil	cGSoil	Hold Cold
4	MRS1 SS128 0 5 04 Jun 2025	Soil	GSoil300	Hold Cold
5	MRS1 SS128 0 75 04 Jun 2025	Soil	GSoil300	Hold Cold
6	MRS1 SS128 1 0 04 Jun 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS129_0.0 04-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
8	MRS1_SS129_0.3 04-Jun-2025	Soil	GSoil300	Hold Cold
9	MRS1_SS129_0.5 04-Jun-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS129_0.70 04-Jun-2025	Soil	GSoil300	Hold Cold
11	MRS1_SS129_1.0 04-Jun-2025	Soil	GSoil300	Hold Cold
12	MRS1_SS130_0.0 04-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
13	MRS1_SS130_0.3 04-Jun-2025	Soil	GSoil300	Hold Cold
14	MRS1 SS130 0 5 04 Jun 2025	Soil	GSoil300	Hold Cold
15	MRS1 SS130 1 0 04 Jun 2025	Soil	GSoil300	Hold Cold
16	MRS1 SS131 0 0 04 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
17	MRS1 SS131 0 3 04 Jun 2025	Soil	GSoil300	Hold Cold
18	MRS1 SS132 0 0 04 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
19	MRS1 SS132 0 3 04 Jun 2025	Soil	GSoil300	Hold Cold
20	MRS1 SS133 0 0 04 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
21	MRS1 SS134 0 0 04 Jun 2025	Soil	cGSoil	Heavy Metals, Screen Level
22	QA11 04-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1-2, 7, 12, 16, 18, 20 22
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1 2, 7, 12, 16, 18, 20-22

HillLabs

ANALYSIS REQUEST

Quote No 138144

Primary Contact s9(2)(a)

Submitted By

Client Name Beca

Address

Postcode

Phone Mobile

Email s9(2)(a)

Charge To Beca LTM

Client Reference 3011550 / 200 / 2.1

Order No

R J Hill Laboratories Limited
Ground Floor, 28 Heather Stre
Parnell
Auckland 1052, New Zealand

Job No: 391 0155

Date Recv: 06-Jun-25 12:16

s9(2)(a)

Received by: s9(2)(a)

3139101552

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories

☑ Tick if you require COC to be emailed back

Date & Time: 5/6/25 Sp

Name: s9(2)(a)

Signature: s9(2)(a)

Samples will be processed at a Hill Labs site with the appropriate testing capability and capacity. Please inform the lab if you wish samples to be retained and analysed at the site

Received at Hill Laboratories

Date

Nam

Signa

Temperature On Arrival

14.0 °C

Temperature was measured on one or more arbitrarily chosen samples in this batch.

Results To *Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.*

☒ Email Primary Contact ☑ Email Submitter ☐ Email Client

☑ Email Other s9(2)(a)

☑ Other

ADDITIONAL INFORMATION

Email results to Beca ESDAT

Priority ☐ Low

☐ Urgent (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1_SS135_0.0	Soil		5/6/25	HM7, PA to NZG
2	MRS1_SS136_0.0				
3	MRS2_SS137_0.0				
4	MRS1_SS138_0.0				
5	MRS1_SS139_0.0				
6	MRS1_SS139_0.3				Hold Cold
7	MRS1_SS139_0.5				" "
8	MRS1_SS139_1.0				" "
9	MRS1_SS140_0.0				HM7, PA to NZG
10	MRS1_SS140_0.3				Hold Cold
11	MRS1_SS140_0.5				" "
12	MRS1_SS140_1.0				" "
13	MRS1_SS141_0.0				HM7, PA to NZG

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS141_0.3	Soil		5/6/25	Hold Old
15	MRS1_SS141_0.5				" "
16	MRS1_SS141_1.0				" "
17	MRS1_SS142_0.0				HM7, PA to N2G
18	MRS1_SS142_0.3				Hold Old
19	MRS1_SS142_0.5				" "
20	MRS1_SS142_1.0				" "
21	MRS1_SS143_0.0				HM7, PA to N2G
22	MRS1_SS143_0.3				Hold Old
23	MRS1_SS143_0.5				" "
24	MRS1_SS143_1.0				" "
25	MRS1_SS167_0.0				HM7, PA to N2G
26	MRS1_SS167_0.3				Hold Old
27	MRS1_SS167_0.5				" "
28	MRS1_SS168_0.0				HM7, PA to N2G
29	MRS1_SS168_0.3				Hold Old
30	MRS1_SS168_0.5				" "
31	MRS1_SS169_0.0				HM7, PA to N2G
32	MRS1_SS169_0.3				Hold Old
33	MRS1_SS169_0.5				" "
34	MRS1_SS170_0.0				HM7, PA to N2G
35	MRS1_SS170_0.3				Hold Old
36	MRS1_SS170_0.5				" "
37	MRS1_SS171_0.0				HM7, PA to N2G
38	MRS1_SS171_0.3				Hold Old
39	MRS1_SS171_0.5				" "
40	MRS1_SS172_0.0				HM7, PA to N2G
41	MRS1_SS172_0.3				Hold Old

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS172_0.5	Soil		5/6/25	Hold Cold
15	MRS1_SS173_0.0				HM7, PA to NZG
16	MRS1_SS173_0.3				Hold Cold
17	MRS1-SS173_0.5				" "
18	MRS1-QA12				HM7
19	MRS1_QA13				" "
20	MRS1_QA14				
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3910155
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	07-Jun-2025 1:21 pm
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date:	13-Jun-2025 4:30 pm

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1_SS135_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
2	MRS1_SS136_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
3	MRS1_SS137_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
4	MRS1_SS138_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
5	MRS1_SS139_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
6	MRS1_SS139_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
7	MRS1_SS139_0.5 05-Jun-2025	Soil	cGSoil	Hold Cold
8	MRS1 SS139 1 0 05 Jun 2025	Soil	GSoil300	Hold Cold
9	MRS1 SS140 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
10	MRS1 SS140 0 3 05 Jun 2025	Soil	GSoil300	Hold Cold
11	MRS1 SS140 0 5 05 Jun 2025	Soil	GSoil300	Hold Cold
12	MRS1 SS140 1 0 05 Jun 2025	Soil	GSoil300	Hold Cold
13	MRS1 SS141 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
14	MRS1 SS141 0 3 05 Jun 2025	Soil	cGSoil	Hold Cold
15	MRS1_SS141_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
16	MRS1_SS141_1.0 05-Jun-2025	Soil	GSoil300	Hold Cold
17	MRS1_SS142_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
18	MRS1_SS142_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
19	MRS1_SS142_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
20	MRS1_SS142_1.0 05-Jun-2025	Soil	GSoil300	Hold Cold
21	MRS1_SS143_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
22	MRS1_SS143_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
23	MRS1 SS143 0 5 05 Jun 2025	Soil	GSoil300	Hold Cold
24	MRS1 SS143 1 0 05 Jun 2025	Soil	GSoil300	Hold Cold
25	MRS1 SS167 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
26	MRS1 SS167 0 3 05 Jun 2025	Soil	GSoil300	Hold Cold
27	MRS1 SS167 0 5 05 Jun 2025	Soil	GSoil300	Hold Cold
28	MRS1 SS168 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
29	MRS1 SS168 0 3 05 Jun 2025	Soil	GSoil300	Hold Cold
30	MRS1_SS168_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
31	MRS1_SS169_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
32	MRS1_SS169_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
33	MRS1_SS169_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
34	MRS1_SS170_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
35	MRS1_SS170_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
36	MRS1_SS170_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
37	MRS1_SS171_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
38	MRS1_SS171_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
39	MRS1_SS171_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
40	MRS1_SS172_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
41	MRS1_SS172_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
42	MRS1 SS172 0 5 05 Jun 2025	Soil	cGSoil	Hold Cold
43	MRS1 SS173 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
44	MRS1 SS173 0 3 05 Jun 2025	Soil	GSoil300	Hold Cold
45	MRS1 SS173 0 5 05 Jun 2025	Soil	GSoil300	Hold Cold
46	MRS1 QA12 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
47	MRS1 QA13 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
48	MRS1 QA14 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
49	MRS1 SS174 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
50	MRS1_SS174_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
51	MRS1_SS174_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
52	MRS1_SS175_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
53	MRS1_SS175_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
54	MRS1_SS175_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1-5, 7-9, 11 13, 15 17, 19-21, 23 25, 27-28, 30-31, 33 34, 36 37, 39-40, 43, 46 49, 52
Environmental Solids Sample Preparation	Air dried at 35°C and sieved, <2mm fraction. Used for sample preparation May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	27, 30
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1 5, 9, 13, 17, 21, 25, 28, 31, 34, 37, 40, 43, 46-49, 52

HillLabs

ANALYSIS REQUEST

Quote No 138144

Primary Contact s9(2)(a)

Submitted By s9(2)(a)

Client Name Beca

Address

Postcode

Phone Mobile

Email s9(2)(a)

Charge To Beca LTM

Client Reference 3011550 / 200 / 2.1

Order No

Results To Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.

☒ Email Primary Contact ☑ Email Submitter ☐ Email Client

☑ Email Other s9(2)(a)

☑ Other

R J Hill Laboratories Limited
Ground Floor, 28 Heather Stre
Parnell
Auckland 1052, New Zealand

Job No: **391 0155**

Date Recv: 06-Jun-25 12:16

s9(2)(a)

Received by: s9(2)(a)

3139101552

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories ☑ Tick if you require COC to be emailed back

Date & Time: 5/6/25 Sp

Name: s9(2)(a)

Signature: s9(2)(a)

Samples will be processed at a Hill Labs site with the appropriate testing capability and capacity. Please inform the lab if you wish samples to be retained and analysed at the site

Received at Hill Laboratories

Date

Nam

Signa

Temperature On Arrival

14.0 °C

Temperature was measured on one or more arbitrarily chosen samples in this batch.

ADDITIONAL INFORMATION

Email results to Beca ESDAT

Priority ☐ Low

☐ Urgent (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1_SS135_0.0	Soil		5/6/25	HM7, PA to NZG
2	MRS1_SS136_0.0				
3	MRS2_SS137_0.0				
4	MRS1_SS138_0.0				
5	MRS1_SS139_0.0				
6	MRS1_SS139_0.3				Hold Cold
7	MRS1_SS139_0.5				" "
8	MRS1_SS139_1.0				" "
9	MRS1_SS140_0.0				HM7, PA to NZG
10	MRS1_SS140_0.3				Hold Cold
11	MRS1_SS140_0.5				" "
12	MRS1_SS140_1.0				" "
13	MRS1_SS141_0.0				HM7, PA to NZG

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS141_0.3	Soil		5/6/25	Hold Old
15	MRS1_SS141_0.5				" "
16	MRS1_SS141_1.0				" "
17	MRS1_SS142_0.0				HM7, PA to N2G
18	MRS1_SS142_0.3				Hold Old
19	MRS1_SS142_0.5				" "
20	MRS1_SS142_1.0				" "
21	MRS1_SS143_0.0				HM7, PA to N2G
22	MRS1_SS143_0.3				Hold Old
23	MRS1_SS143_0.5				" "
24	MRS1_SS143_1.0				" "
25	MRS1_SS167_0.0				HM7, PA to N2G
26	MRS1_SS167_0.3				Hold Old
27	MRS1_SS167_0.5				" "
28	MRS1_SS168_0.0				HM7, PA to N2G
29	MRS1_SS168_0.3				Hold Old
30	MRS1_SS168_0.5				" "
31	MRS1_SS169_0.0				HM7, PA to N2G
32	MRS1_SS169_0.3				Hold Old
33	MRS1_SS169_0.5				" "
34	MRS1_SS170_0.0				HM7, PA to N2G
35	MRS1_SS170_0.3				Hold Old
36	MRS1_SS170_0.5				" "
37	MRS1_SS171_0.0				HM7, PA to N2G
38	MRS1_SS171_0.3				Hold Old
39	MRS1_SS171_0.5				" "
40	MRS1_SS172_0.0				HM7, PA to N2G
41	MRS1_SS172_0.3				Hold Old

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS172_0.5	Soil		5/6/25	Hold Cold
15	MRS1_SS173_0.0				HM7, PA to NZG
16	MRS1_SS173_0.3				Hold Cold
17	MRS1-SS173_0.5				" "
18	MRS1-QA12				HM7
19	MRS1_QA13				" "
20	MRS1_QA14				
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3910155
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	07-Jun-2025 1:21 pm
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date:	13-Jun-2025 4:30 pm

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1_SS135_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
2	MRS1_SS136_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
3	MRS1_SS137_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
4	MRS1_SS138_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
5	MRS1_SS139_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
6	MRS1_SS139_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
7	MRS1_SS139_0.5 05-Jun-2025	Soil	cGSoil	Hold Cold
8	MRS1 SS139 1 0 05 Jun 2025	Soil	GSoil300	Hold Cold
9	MRS1 SS140 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
10	MRS1 SS140 0 3 05 Jun 2025	Soil	GSoil300	Hold Cold
11	MRS1 SS140 0 5 05 Jun 2025	Soil	GSoil300	Hold Cold
12	MRS1 SS140 1 0 05 Jun 2025	Soil	GSoil300	Hold Cold
13	MRS1 SS141 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
14	MRS1 SS141 0 3 05 Jun 2025	Soil	cGSoil	Hold Cold
15	MRS1_SS141_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
16	MRS1_SS141_1.0 05-Jun-2025	Soil	GSoil300	Hold Cold
17	MRS1_SS142_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
18	MRS1_SS142_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
19	MRS1_SS142_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
20	MRS1_SS142_1.0 05-Jun-2025	Soil	GSoil300	Hold Cold
21	MRS1_SS143_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
22	MRS1_SS143_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
23	MRS1 SS143 0 5 05 Jun 2025	Soil	GSoil300	Hold Cold
24	MRS1 SS143 1 0 05 Jun 2025	Soil	GSoil300	Hold Cold
25	MRS1 SS167 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
26	MRS1 SS167 0 3 05 Jun 2025	Soil	GSoil300	Hold Cold
27	MRS1 SS167 0 5 05 Jun 2025	Soil	GSoil300	Hold Cold
28	MRS1 SS168 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
29	MRS1 SS168 0 3 05 Jun 2025	Soil	GSoil300	Hold Cold
30	MRS1_SS168_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
31	MRS1_SS169_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
32	MRS1_SS169_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
33	MRS1_SS169_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
34	MRS1_SS170_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
35	MRS1_SS170_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
36	MRS1_SS170_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
37	MRS1_SS171_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
38	MRS1_SS171_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
39	MRS1_SS171_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
40	MRS1_SS172_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
41	MRS1_SS172_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
42	MRS1 SS172 0 5 05 Jun 2025	Soil	cGSoil	Hold Cold
43	MRS1 SS173 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
44	MRS1 SS173 0 3 05 Jun 2025	Soil	GSoil300	Hold Cold
45	MRS1 SS173 0 5 05 Jun 2025	Soil	GSoil300	Hold Cold
46	MRS1 QA12 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
47	MRS1 QA13 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
48	MRS1 QA14 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
49	MRS1 SS174 0 0 05 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
50	MRS1_SS174_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
51	MRS1_SS174_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold
52	MRS1_SS175_0.0 05-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
53	MRS1_SS175_0.3 05-Jun-2025	Soil	GSoil300	Hold Cold
54	MRS1_SS175_0.5 05-Jun-2025	Soil	GSoil300	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1-5, 7-9, 11 13, 15 17, 19-21, 23 25, 27-28, 30-31, 33 34, 36 37, 39-40, 43, 46 49, 52
Environmental Solids Sample Preparation	Air dried at 35°C and sieved, <2mm fraction. Used for sample preparation May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	27, 30
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1 5, 9, 13, 17, 21, 25, 28, 31, 34, 37, 40, 43, 46-49, 52

Hill Labs

ANALYSIS REQUEST

Quote No 138144

Primary Contact s9(2)(a)

Submitted By s9(2)(a)

Client Name Beca

Address

Postcode

Phone Mobile

Email s9(2)(a)

Charge To Beca Ltd

Client Reference

Order No

Results To Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below

☒ Email Primary Contact ☑ Email Submitter ☐ Email Client

☑ Email Other s9(2)(a)

☑ Other

R J Hill Laboratories Limited Job No: 391 0557
Ground Floor, 28 Heather St
Parnell
Auckland 1052, New Zealand

Date Recv: 06-Jun-25 16:28

s9(2)(a)

Received by: s9(2)(a)

3139105575

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories

☐ Tick if you require COC to be emailed back

Date & Time: 6/6/25

Name: s9(2)(a)

Signature:

Samples will be processed at a l capability and capacity. Please ir retained and analysed at the site

Temperature On Arrival

11.0 °C

Temperature was measured on one or more arbitrarily chosen samples in this batch.

Received at Hill Laboratories

Date &

Name:

Signatu

ADDITIONAL INFORMATION

Email results to Beca Esdat.

Priority ☐ Low ☒ Normal ☐ High

☐ **Urgent** (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1_SS149_0.0	Soil		6/6/25	HM7, PA + NZG
2	MRS1_SS149_0.3				Hold Old
3	MRS1_SS150_0.0				HM7, PA + NZG
4	MRS1_SS150_0.3				Hold Old
5	MRS1_SS151_0.0				HM7, PA + NZG
6	MRS1_SS151_0.3				Hold Old
7	MRS1_SS152_0.0				HM7, PA + NZG
8	MRS1_SS152_0.3				Hold Old
9	MRS1_SS152_0.5				" "
10	MRS1_SS153_0.0				HM7, PA + NZG
11	MRS1_SS153_0.3				Hold Old
12	MRS1_SS153_0.5				" "
13	MRS1_SS154_0.0				HM7, PA + NZG

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS154_0.3	Soil		6/6/25	Hold Cold
15	MRS1_SS155_0.0				HM7, PA to NZG
16	MRS1_SS155_0.3				Hold Cold
17	MRS1_SS156_0.0				HM7, PA to NZG
18	MRS1_SS156_0.3				Hold Cold
19	MRS1_SS157_0.0				HM7, PA to NZG
20	MRS1_SS157_0.3				Hold Cold
21	MRS1_SS158_0.0				HM7, PA to NZG
22	MRS1_SS158_0.3				Hold Cold
23	MRS1_SS159_0.0				HM7, PA to NZG
24	MRS1_SS159_0.3				Hold Cold
25	MRS1_SS160_0.0				HM7, PA to NZG
26	MRS1_SS160_0.3				Hold Cold
27	MRS1_SS160_0.0				HM7, PA to NZG
28	MRS1_SS161_0.3				Hold Cold
29	MRS1_SS161_0.5				" "
30	MRS1_SS162_0.0				HM7, PA to NZG
31	MRS1_SS162_0.3				Hold Cold
32	MRS1_SS162_0.5				" "
33	MRS1_QA15				HM7
34	MRS1_QA16				" "
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3910557
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	10-Jun-2025 9:44 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	11-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS149 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
2	MRS1 SS149 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
3	MRS1 SS150 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
4	MRS1 SS150 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
5	MRS1 SS151 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
6	MRS1 SS151 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS152_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
8	MRS1_SS152_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
9	MRS1_SS152_0.5 06-Jun-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS153_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
11	MRS1_SS153_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
12	MRS1_SS153_0.5 06-Jun-2025	Soil	GSoil300	Hold Cold
13	MRS1_SS154_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
14	MRS1 SS154 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
15	MRS1 SS155 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
16	MRS1 SS155 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
17	MRS1 SS156 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
18	MRS1 SS156 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
19	MRS1 SS157 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
20	MRS1 SS157 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
21	MRS1 SS158 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
22	MRS1_SS158_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
23	MRS1_SS159_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
24	MRS1_SS159_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
25	MRS1_SS160_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
26	MRS1_SS160_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
27	MRS1_SS161_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
28	MRS1_SS161_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
29	MRS1 SS161 0 5 06 Jun 2025	Soil	GSoil300	Hold Cold
30	MRS1 SS162 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
31	MRS1 SS162 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
32	MRS1 SS162 0 5 06 Jun 2025	Soil	GSoil300	Hold Cold
33	MRS1 QA15 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
34	MRS1 QA16 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
35	MRS1 SS157 0 5 06 Jun 2025	Soil	GSoil300	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 3, 5, 7, 10, 13, 15, 17, 19, 21, 23, 25, 27, 30, 33 34
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 3, 5, 7, 10, 13, 15, 17, 19, 21, 23, 25, 27, 30, 33 34

ANALYSIS REQUEST

R J Hill Laboratories Limited
Ground Floor, 28 Heather St
Parnell
Auckland 1052, New Zealan

Job No: **391 0557**

Date Recv: 06-Jun-25 16:28

Received by: s9(2)(a)

3139105575

Quote No 138144

Primary Contact s9(2)(a)

Submitted By s9(2)(a)

Client Name Beca

Address

Postcode

Phone Mobile

Email s9(2)(a)

Charge To Beca Ltd

Client Reference

Order No

Results To Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below

☒ Email Primary Contact ☑ Email Submitter ☐ Email Client

☑ Email Other s9(2)(a)

☑ Other

ADDITIONAL INFORMATION

Email results to Beca Esdat.

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories

☐ Tick if you require COC to be emailed back

Date & Time: 6/6/25

Name: s9(2)(a)

Signature:

Samples will be processed at a l capability and capacity. Please i retained and analysed at the site

Temperature On Arrival

11.0 °C

Temperature was measured on one or more arbitrarily chosen samples in this batch.

Received at Hill Laboratories

Date &

Name:

Signatu

Priority ☐ Low ☒ Normal ☐ High

☐ Urgent (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1_SS149_0.0	Soil		6/6/25	HM7, PA + NZG
2	MRS1_SS149_0.3				Hold Old
3	MRS1_SS150_0.0				HM7, PA + NZG
4	MRS1_SS150_0.3				Hold Old
5	MRS1_SS151_0.0				HM7, PA + NZG
6	MRS1_SS151_0.3				Hold Old
7	MRS1_SS152_0.0				HM7, PA + NZG
8	MRS1_SS152_0.3				Hold Old
9	MRS1_SS152_0.5				" "
10	MRS1_SS153_0.0				HM7, PA + NZG
11	MRS1_SS153_0.3				Hold Old
12	MRS1_SS153_0.5				" "
13	MRS1_SS154_0.0				HM7, PA + NZG

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS154_0.3	Soil		6/6/25	Hold Cold
15	MRS1_SS155_0.0				HM7, PA to NZG
16	MRS1_SS155_0.3				Hold Cold
17	MRS1_SS156_0.0				HM7, PA to NZG
18	MRS1_SS156_0.3				Hold Cold
19	MRS1_SS157_0.0				HM7, PA to NZG
20	MRS1_SS157_0.3				Hold Cold
21	MRS1_SS158_0.0				HM7, PA to NZG
22	MRS1_SS158_0.3				Hold Cold
23	MRS1_SS159_0.0				HM7, PA to NZG
24	MRS1_SS159_0.3				Hold Cold
25	MRS1_SS160_0.0				HM7, PA to NZG
26	MRS1_SS160_0.3				Hold Cold
27	MRS1_SS160_0.0				HM7, PA to NZG
28	MRS1_SS161_0.3				Hold Cold
29	MRS1_SS161_0.5				" "
30	MRS1_SS162_0.0				HM7, PA to NZG
31	MRS1_SS162_0.3				Hold Cold
32	MRS1_SS162_0.5				" "
33	MRS1_QA15				HM7
34	MRS1_QA16				" "
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3910557
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	10-Jun-2025 9:44 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	11-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS149 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
2	MRS1 SS149 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
3	MRS1 SS150 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
4	MRS1 SS150 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
5	MRS1 SS151 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
6	MRS1 SS151 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS152_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
8	MRS1_SS152_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
9	MRS1_SS152_0.5 06-Jun-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS153_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
11	MRS1_SS153_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
12	MRS1_SS153_0.5 06-Jun-2025	Soil	GSoil300	Hold Cold
13	MRS1_SS154_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
14	MRS1 SS154 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
15	MRS1 SS155 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
16	MRS1 SS155 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
17	MRS1 SS156 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
18	MRS1 SS156 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
19	MRS1 SS157 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
20	MRS1 SS157 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
21	MRS1 SS158 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
22	MRS1_SS158_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
23	MRS1_SS159_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
24	MRS1_SS159_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
25	MRS1_SS160_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
26	MRS1_SS160_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
27	MRS1_SS161_0.0 06-Jun-2025	Soil	GSoil300	Heavy Metals, Screen Level
28	MRS1_SS161_0.3 06-Jun-2025	Soil	GSoil300	Hold Cold
29	MRS1 SS161 0 5 06 Jun 2025	Soil	GSoil300	Hold Cold
30	MRS1 SS162 0 0 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
31	MRS1 SS162 0 3 06 Jun 2025	Soil	GSoil300	Hold Cold
32	MRS1 SS162 0 5 06 Jun 2025	Soil	GSoil300	Hold Cold
33	MRS1 QA15 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
34	MRS1 QA16 06 Jun 2025	Soil	GSoil300	Heavy Metals, Screen Level
35	MRS1 SS157 0 5 06 Jun 2025	Soil	GSoil300	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 3, 5, 7, 10, 13, 15, 17, 19, 21, 23, 25, 27, 30, 33 34
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 3, 5, 7, 10, 13, 15, 17, 19, 21, 23, 25, 27, 30, 33 34

HillLabs

ANALYSIS REQUEST

Quote No Beca Big Route.
Primary Contact s9(2)(a)
Submitted By
Client Name Beca Ltd.
Address

Phone Mobile s9(2)(a)
Email s9(2)(a)
Charge To
Client Reference 30 11550 / 200 / 2-1
Order No As above.

Results To Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.
☒ Email Primary Contact ☐ Email Submitter ☐ Email Client
☒ Email Other s9(2)(a)
☐ Other

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

Job No: 391 3641
Date Recv: 11-Jun-25 10:59
Received by: s9(2)(a)
3139136416

s9(2)(a)

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories
Date & Time: 10/6/25
Name:
Signature: s9(2)(a)
☑ Tick if you require COC to be emailed back

Samples will be processed at a Hill capability and capacity. Please info retained and analysed at the site of

Received at Hill Laboratories
Date &
Name
Signatur

Temperature On Arrival
16.4 °C
Temperature was measured on one or more arbitrarily chosen samples in this batch.

ADDITIONAL INFORMATION

Priority ☐ Low ☒ Normal ☐ High
☐ Urgent (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1_SS209_0.0	Soil		10/06/25	HM8, PA to NZG
2	MRS1_SS209_0.3				Hold cold
3	MRS1_SS209_0.5				Hold cold
4	MRS1_SS210_0.0				HM8, PA to NZG
5	MRS1_SS210_0.3				Hold cold
6	MRS1_SS210_0.5				〃
7	MRS1_SS211_0.0				HM8, PA to NZG
8	MRS1_SS211_0.3				Hold cold
9	MRS1_SS211_0.5				〃
10	MRS1_SS212_0.0				HM8, PA to NZG
11	MRS1_SS212_0.3				Hold cold
12	~~MRS1_SS212_0.5~~				〃
13	MRS1_SS213_0.0				HM8, PA to NZG

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1-SS213-0.3	soil	~~10/6/25~~	10/6/25	Hold COLD
15	MRS1_SS213_0.5				HOLD COLD
16	MRS1_SS214_0.0				HMs, PA to IVZG
17	MRS1_SS214_0.3				HOLD COLD
18	MRS1_SS214_0.5				HOLD COLD
19	MRS1_SS215_0.0				HMs, PA to IVZG
20	MRS1_SS215_0.3				Hold COLD
21	MRS1_SS215_0.5				HOLD COLD
22	MRS1_SS216_0.0				HMs, PA to IVZG
23	MRS1_SS216_0.3				HOLD COLD
24	MRS1_SS216_0.5				HOLD COLD
25	MRS1_SS217_0.0				HMs PA to IVZG
26	MRS1_SS217_0.3				HOLD COLD
27	MRS1_SS217_0.5				HOLD COLD
28	MRS1_SS301_0.0				HMs, TPHOI PAH PA to IVZG
29	MRS1_SS301_0.3				HMs, TPHOI PAH
30	MRS1_SS301_0.5				HOLD COLD
31	~~MRS1_SS302_0.0~~				
32	~~MRS1_SS302_0.3~~				
33	~~MRS1_SS302_0.5~~				
34	MRS1_SS303_0.0				HMs, TPHOI PAH, PA to IV
35	MRS1_SS303_0.3				HMs, TPHOI PAH
36	~~MRS1_SS303_0.5~~				HOLD COLD
37	MRS1_SS304_0.0				HMs, TPHOI PAH PA to IV
38	MRS1_SS304_0.3				HMs, TPHOI PAH, ~~PA to~~
39	MRS1_SS304_0.5				HOLD COLD.
40	MRS1_SS305_0.0				HMs, TPHOI PAH, PA
41	MRS1_SS305_0.3				HMs, TPHOI PAH.

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS305_0.5				Hold cold
15	MRS1_SS306_0.0				HMS, PA to NZG
16	MRS1_SS306_0.3				Hold cold
17	MRS1_SS306_0.5				Hold cold
18	MRS1_SS307_0.0				HMS, PA to NZG
19	MRS1_SS307_0.3				Hold cold
20	MRS1_SS307_0.5				Hold cold
21	MRS1_SS308_0.0				HMS, PA to NZG
22	MRS1_SS308_0.3				Hold cold
23	MRS1_SS308_0.5				Hold cold
24	MRS1_SS309_0.0				HMS, PA to NZG
25	MRS1_SS309_0.3				Hold cold
26	MRS1_SS309_0.5				Hold cold
27	MRS1_SS310_0.0				HMS, PA to NZG
28	MRS1_SS310_0.3				Hold cold
29	MRS1_SS310_0.5				Hold cold
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3913641
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	12-Jun-2025 12:07 pm
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	Sampled
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	16-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS209 0 0 10 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
2	MRS1 SS209 0 3 10 Jun 2025	Soil	GSoil300	Hold Cold
3	MRS1 SS209 0 5 10 Jun 2025	Soil	GSoil300	Hold Cold
4	MRS1 SS210 0 0 10 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
5	MRS1 SS210 0 3 10 Jun 2025	Soil	GSoil300	Hold Cold
6	MRS1 SS210 0 5 10 Jun 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS211_0.0 10-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
8	MRS1_SS211_0.3 10-Jun-2025	Soil	GSoil300	Hold Cold
9	MRS1_SS211_0.5 10-Jun-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS212_0.0 10-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
11	MRS1_SS213_0.0 10-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
12	MRS1_SS213_0.3 10-Jun-2025	Soil	GSoil300	Hold Cold
13	MRS1_SS213_0.5 10-Jun-2025	Soil	GSoil300	Hold Cold
14	MRS1 SS214 0 0 10 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
15	MRS1 SS214 0 3 10 Jun 2025	Soil	GSoil300	Hold Cold
16	MRS1 SS214 0 5 10 Jun 2025	Soil	GSoil300	Hold Cold
17	MRS1 SS215 0 0 10 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
18	MRS1 SS215 0 3 10 Jun 2025	Soil	GSoil300	Hold Cold
19	MRS1 SS215 0 5 10 Jun 2025	Soil	GSoil300	Hold Cold
20	MRS1 SS216 0 0 10 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
21	MRS1 SS216 0 3 10 Jun 2025	Soil	GSoil300	Hold Cold
22	MRS1_SS216_0.5 10-Jun-2025	Soil	GSoil300	Hold Cold
23	MRS1_SS217_0.0 10-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
24	MRS1_SS217_0.3 10-Jun-2025	Soil	GSoil300	Hold Cold
25	MRS1_SS217_0.5 10-Jun-2025	Soil	GSoil300	Hold Cold
26	MRS1_SS301_0.0 10-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
27	MRS1 SS301 0 3 10 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
28	MRS1 SS301 0 5 10 Jun 2025	Soil	GSoil300	Hold Cold
29	MRS1 SS303 0 0 10 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
30	MRS1_SS303_0.3 10-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
31	MRS1_SS304_0.0 10-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
32	MRS1 SS304 0 3 10 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
33	MRS1 SS304 0 5 10 Jun 2025	Soil	GSoil300	Hold Cold

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
34	MRS1_SS305_0.0 10-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
35	MRS1_SS305_0.3 10-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
36	MRS1 SS305 0 5 10 Jun 2025	Soil	GSoil300	Hold Cold
37	MRS1 SS306 0 0 10 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
38	MRS1 SS306 0 3 10 Jun 2025	Soil	GSoil300	Hold Cold
39	MRS1 SS306 0 5 10 Jun 2025	Soil	GSoil300	Hold Cold
40	MRS1 SS307 0 0 10 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
41	MRS1_SS307_0.3 10-Jun-2025	Soil	GSoil300	Hold Cold
42	MRS1_SS307_0.5 10-Jun-2025	Soil	GSoil300	Hold Cold
43	MRS1_SS308_0.0 10-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
44	MRS1_SS308_0.3 10-Jun-2025	Soil	GSoil300	Hold Cold
45	MRS1_SS308_0.5 10-Jun-2025	Soil	GSoil300	Hold Cold
46	MRS1_SS309_0.0 10-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
47	MRS1_SS309_0.3 10-Jun-2025	Soil	GSoil300	Hold Cold
48	MRS1 SS309 0 5 10 Jun 2025	Soil	GSoil300	Hold Cold
49	MRS1 SS310 0 0 10 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
50	MRS1 SS310 0 3 10 Jun 2025	Soil	GSoil300	Hold Cold
51	MRS1 SS310 0 5 10 Jun 2025	Soil	GSoil300	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10-11, 14, 17, 20, 23, 26-27, 29 32, 34 35, 37, 40, 43, 46, 49
Total of Reported PAHs in Soil	Sonication extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.03 mg/kg dry wt	26-27, 29-32, 34 35
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	26-27, 29-32, 34 35
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES	BaP Potency Equivalence calculated from; Benzo(a) anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(j) fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Benzo(a) pyrene x 1.0 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Fluoranthene x 0.01 + Indeno(1,2,3-c,d)pyrene x 0.1. Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.	0.024 mg/kg dry wt	26 27, 29 32, 34-35
Benzo[a]pyrene Toxic Equivalence (TEF)	Benzo[a]pyrene Toxic Equivalence (TEF) calculated from; Benzo[a]pyrene x 1.0 + Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Indeno(1,2,3-c,d)pyrene x 0.1. Guidelines for assessing and managing contaminated gasworks sites in New Zealand (GMG) (MfE, 1997).	0.024 mg/kg dry wt	26 27, 29 32, 34-35
TPH Oil Industry Profile + PAHscreen	Sonication extraction, GC-FID and GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8015 and US EPA 8270.	0.010 - 70 mg/kg dry wt	26 27, 29 32, 34-35

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10 11, 14, 17, 20, 23, 26 27, 29-32, 34-35, 37, 40, 43, 46, 49
Total Petroleum Hydrocarbons in Soil			
Client Chromatogram for TPH by FID	Small peaks associated with QC compounds may be visible in chromatograms with low TPH concentrations. QC peaks are as follows: one peak in the C12 - 14 band, the C21 - 25 band and the C30 - 36 band. All QC peaks are corrected for in the reported TPH concentrations.	-	26 27, 29 32, 34-35
C7 - C9	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	26 27, 29 32, 34-35
C10 - C14	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	26 27, 29 32, 34-35
C15 - C36	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	40 mg/kg dry wt	26 27, 29 32, 34-35
Total hydrocarbons (C7 - C36)	Calculation: Sum of carbon bands from C7 to C36. In-house based on US EPA 8015.	70 mg/kg dry wt	26-27, 29-32, 34 35

HillLabs

ANALYSIS REQUEST

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

Job No: **391 4849**

Date Recv: 12-Jun-25 11:18

Received by: s9(2)(a)

3139148498

Quote No

Primary Contact s9(2)(a)

Submitted By s9(2)(a)

Client Name Beca Limited

Address

Postcode

Phone Mobile

Email s9(2)(a)

Charge To ~~3011~~

Client Reference 3011550/200/2.1

Order No 3011550/200/2.1

Results To Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.

☒ Email Primary Contact ☑ Email Submitter ☐ Email Client

☑ Email Other s9(2)(a)

☐ Other

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories

Date & Time: 11/06/25

Name: s9(2)(a)

☑ Tick if you require COC to be emailed back

Signature: s9(2)(a)

Samples will be processed at a Hill ... capability and capacity. Please info... retained and analysed at the site of...

Temperature On Arrival 13.2 °C

Received at Hill Laboratories Date & T... Name: Signature

Temperature was measured on one or more arbitrarily chosen samples in this batch

ADDITIONAL INFORMATION

Priority ☐ Low ☒ Normal ☐ High

☐ Urgent (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (If not as per Quote)
1	MRS1_SS218_0.0	Soil		11/6/25	HMS PA to NZG TPHOI PAH
2	MRS1_SS218_0.3				Hold cold
3	MRS1_SS218_0.5				"
4	MRS1_SS219_0.0				HMS, PA to NZG TPHOI PA...
5	MRS1_SS219_0.3				Hold cold
6	MRS1_SS219_0.5				"
7	MRS1_SS220_0.0				HMS PA to NZG TPHOI PAH
8	MRS1_SS220_0.3				Hold cold
9	MRS1_SS220_0.5				"
10	MRS1_SS221_0.0				HMS, PA to NZG TPHOI PAH
11	MRS1_SS221_0.3				Hold cold
12	MRS1_SS221_0.5				"
13	MRS1_SS222_0.0				HMS PA to NZG TPHOI PA...

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS22_0.3	soil		11/6/25	HOLD COLD
15	MRS1_SS22_0.5				HOLD COLD
16	MRS1_SS23_0.0				HMS PA to NZG
17	MRS1_SS23_0.3				HOLD COLD
18	MRS1_SS23_0.5				"
19	MRS1_SS24_0.0				HMS PA to NZG
20	MRS1_SS24_0.3				HOLD COLD
21	MRS1_SS24_0.5				"
22	MRS1_SS25_0.0				HMS PA to NZG
23	MRS1_SS25_0.3				HOLD COLD
24	MRS1_SS25_0.5				"
25	MRS1_SS26_0.0				HMS PA to NZG
26	MRS1_SS26_0.3				HOLD COLD
27	MRS1_SS26_0.5				"
28	MRS1_SS27_0.0				HMS PA to NZG
29	MRS1_SS27_0.3				HOLD COLD
30	MRS1_SS27_0.5				"
31	MRS1_SS28_0.0				HMS PA to NZG
32	MRS1_SS28_0.3				HOLD COLD
33	MRS1_SS28_0.5				"
34	MRS1_SS33_0.0				HMS PA to NZG
35	MRS1_SS33_0.3				HOLD COLD
36	MRS1_SS33_0.5				"
37	MRS1_SS34_0.0				HMS PA to NZG
38	MRS1_SS34_0.3				HOLD COLD
39	MRS1_SS34_0.5				"
40	MRS1_SS35_0.0				HMS PA to NZG
41	MRS1_SS35_0.3				HOLD COLD

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS325_0.5	Soil		11/6/25	HOLD COLD
15	MRS1_SS326_0.0				HMS PA to N2G
16	MRS1_SS326_0.3				HOLD COLD
17	MRS1_SS326_0.5				"
18	MRS1_SS327_0.0				HMS PA to N2G
19	MRS1_SS327_0.3				HOLD COLD
20	MRS1_SS327_0.5				"
21	MRS1_SS328_0.0				HMS PA to N2G
22	MRS1_SS328_0.3				HOLD COLD
23	MRS1_SS328_0.5				"
24	MRS1_SS329_0.0				HMS PA to N2G
25	MRS1_SS329_0.3				HOLD COLD
26	MRS1_SS329_0.5				HOLD COLD
27	MRS1_SS181_0.0				HMS PA to N2G
28	MRS1_SS181_0.3				HOLD COLD
29	MRS1_SS181_0.5				"
30	MRS1_SS182_0.0				HMS PA to N2G
31	MRS1_SS182_0.3				HOLD COLD
32	MRS1_SS182_0.5				"
33	MRS1_SS183_0.0				HMS PA to N2G
34	MRS1_SS183_0.3				HOLD COLD
35	MRS1_SS183_0.5				"
36	MRS1_SS184_0.0				HMS PA to N2G
37	MRS1_SS184_0.3				HOLD COLD
38	MRS1_SS184_0.5				"
39	MRS1_SS185_0.0				HMS PA to N2G
40	MRS1_SS185_0.3				HOLD COLD
41	MRS1_SS185_0.5				"

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	~~MRS1_SS186_0.0~~				
15	~~MRS1_SS186_0.3~~				
16	~~MRS1_SS186_0.5~~				
17	MRS1_SS187_0.0	Soil		11/6/25	HMS PA to NZG
18	MRS1_SS187_0.3				HOLD COLD
19	MRS1_SS187_0.5				"
20	MRS1_SS188_0.0				HMS PA to NZG
21	MRS1_SS188_0.3				HOLD COLD
22	MRS1_SS188_0.5				"
23	MRS1_SS189_0.0				HMS PA to NZG
24	MRS1_SS189_0.3				HOLD COLD
25	MRS1_SS189_0.5				"
26	MRS1_SS190_0.0				HMS PA to NZG
27	MRS1_SS190_0.3				HOLD COLD
28	MRS1_SS190_0.5				"
29	MRS1_SS191_0.0				HMS PA to NZG
30	MRS1_SS191_0.3				HOLD COLD
31	MRS1_SS191_0.5				"
32	MRS1_SS192_0.0				HMS PA to NZG
33	MRS1_SS192_0.3				HOLD COLD
34	MRS1_SS192_0.5				"
35	MRS1_PA_17				HMS.
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3914849
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	13-Jun-2025 10:06 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	17-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS218 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
2	MRS1 SS218 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
3	MRS1 SS218 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
4	MRS1_SS219_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
5	MRS1_SS219_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
6	MRS1_SS219_0.5 11-Jun-2025	Soil	GSoil300	Hold Cold
7	MRS1_SS220_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
8	MRS1 SS220 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
9	MRS1 SS220 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
10	MRS1 SS221 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
11	MRS1 SS221 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
12	MRS1_SS221_0.5 11-Jun-2025	Soil	GSoil300	Hold Cold
13	MRS1_SS222_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
14	MRS1_SS222_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
15	MRS1_SS222_0.5 11-Jun-2025	Soil	GSoil300	Hold Cold
16	MRS1_SS223_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
17	MRS1 SS223 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
18	MRS1 SS223 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
19	MRS1 SS224 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
20	MRS1 SS224 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
21	MRS1 SS225 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
22	MRS1 SS225 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
23	MRS1 SS225 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
24	MRS1_SS226_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
25	MRS1_SS226_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
26	MRS1_SS226_0.5 11-Jun-2025	Soil	GSoil300	Hold Cold
27	MRS1_SS227_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
28	MRS1_SS227_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
29	MRS1_SS227_0.5 11-Jun-2025	Soil	GSoil300	Hold Cold
30	MRS1_SS228_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
31	MRS1 SS228 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
32	MRS1 SS228 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
33	MRS1 SS323 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
34	MRS1_SS323_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
35	MRS1_SS323_0.5 11-Jun-2025	Soil	GSoil300	Hold Cold
36	MRS1_SS324_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
37	MRS1_SS324_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
38	MRS1 SS324 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
39	MRS1 SS325 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
40	MRS1 SS325 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
41	MRS1 SS325 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
42	MRS1 SS326 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
43	MRS1 SS326 0 3 11 Jun 2025	Soil	cGSoil	Hold Cold
44	MRS1 SS326 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
45	MRS1 SS327 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
46	MRS1_SS327_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
47	MRS1_SS327_0.5 11-Jun-2025	Soil	GSoil300	Hold Cold
48	MRS1_SS328_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
49	MRS1_SS328_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
50	MRS1_SS328_0.5 11-Jun-2025	Soil	GSoil300	Hold Cold
51	MRS1_SS329_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
52	MRS1_SS329_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
53	MRS1 SS329 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
54	MRS1 SS181 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
55	MRS1 SS181 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
56	MRS1 SS181 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
57	MRS1 SS182 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
58	MRS1 SS182 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
59	MRS1 SS182 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
60	MRS1 SS183 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
61	MRS1_SS184_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
62	MRS1_SS184_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
63	MRS1_SS185_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
64	MRS1_SS187_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
65	MRS1_SS187_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
66	MRS1_SS187_0.5 11-Jun-2025	Soil	GSoil300	Hold Cold
67	MRS1_SS188_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
68	MRS1 SS188 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
69	MRS1 SS188 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
70	MRS1 SS189 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
71	MRS1 SS189 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
72	MRS1 SS189 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
73	MRS1 SS190 0 0 11 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
74	MRS1 SS190 0 3 11 Jun 2025	Soil	GSoil300	Hold Cold
75	MRS1 SS190 0 5 11 Jun 2025	Soil	GSoil300	Hold Cold
76	MRS1_SS191_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
77	MRS1_SS191_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
78	MRS1_SS191_0.5 11-Jun-2025	Soil	GSoil300	Hold Cold
79	MRS1_SS192_0.0 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
80	MRS1_SS192_0.3 11-Jun-2025	Soil	GSoil300	Hold Cold
81	MRS1_SS192_0.5 11-Jun-2025	Soil	GSoil300	Hold Cold
82	MRS1_QA_17 11-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60 61, 63 64, 67, 70, 73, 76, 79, 82
Total of Reported PAHs in Soil	Sonication extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.03 mg/kg dry wt	1, 4, 7, 10, 13
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	1, 4, 7, 10, 13
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES	BaP Potency Equivalence calculated from; Benzo(a) anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(j) fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Benzo(a) pyrene x 1.0 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Fluoranthene x 0.01 + Indeno(1,2,3-c,d)pyrene x 0.1. Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.	0.024 mg/kg dry wt	1, 4, 7, 10, 13
Benzo[a]pyrene Toxic Equivalence (TEF)	Benzo[a]pyrene Toxic Equivalence (TEF) calculated from; Benzo[a]pyrene x 1.0 + Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Indeno(1,2,3-c,d)pyrene x 0.1. Guidelines for assessing and managing contaminated gasworks sites in New Zealand (GMG) (MfE, 1997).	0.024 mg/kg dry wt	1, 4, 7, 10, 13
TPH Oil Industry Profile + PAHscreen	Sonication extraction, GC-FID and GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8015 and US EPA 8270.	0.010 - 70 mg/kg dry wt	1, 4, 7, 10, 13
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60-61, 63-64, 67, 70, 73, 76, 79, 82
Total Petroleum Hydrocarbons in Soil			
Client Chromatogram for TPH by FID	Small peaks associated with QC compounds may be visible in chromatograms with low TPH concentrations. QC peaks are as follows: one peak in the C12 - 14 band, the C21 - 25 band and the C30 - 36 band. All QC peaks are corrected for in the reported TPH concentrations.	-	1, 7
C7 - C9	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	1, 4, 7, 10, 13
C10 - C14	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	1, 4, 7, 10, 13
C15 - C36	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	40 mg/kg dry wt	1, 4, 7, 10, 13
Total hydrocarbons (C7 - C36)	Calculation: Sum of carbon bands from C7 to C36. In-house based on US EPA 8015.	70 mg/kg dry wt	1, 4, 7, 10, 13

HillLabs

ANALYSIS REQUEST

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

Job No: **391 5257**
Date Recv: 12-Jun-25 17:35
Received by: s9(2)(a)

s9(2)(a)

Quote No
Primary Contact s9(2)(a)
Submitted By
Client Name Beca Ltd
Address
Postcode
Phone *Mobile*
Email s9(2)(a)
Charge To
Client Reference
Order No

Results To *Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.*

☒ *Email Primary Contact* ☐ *Email Submitter* ☐ *Email Client*
☐ *Email Other* s9(2)(a)
☐ *Other*

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories
Date & Time:
Name:
☐ *Tick if you require COC to be emailed back*
Signature:

Samples will be processed at a Hill La capability and capacity. Please inform retained and analysed at the site of re

Temperature On Arrival
9.7 °C
Temperature was measured on one or more arbitrarily chosen samples in this batch.

Received at Hill Laboratories
Date & Tim
Name:
Signature:

ADDITIONAL INFORMATION

Priority ☐ **Low** ☒ **Normal** ☐ **High**
☐ **Urgent** (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRSI_SS193_0.0	Soil		12/6/25	HMS. PA to NZG
2	MRSI_SS193_0.3				Hold cold
3	MRSI_SS193_0.5				"
4	MRSI_SS194_0.0				HMS PA to NZG
5	MRSI_SS194_0.3				Hold cold
6	MRSI_SS194_0.5				"
7	MRSI_SS195_0.0				HMS PA to NZG
8	MRSI_SS195_0.3				Hold cold
9	MRSI_SS195_0.5				"
10	MRSI_SS196_0.0				HMS PA to NZG
11	MRSI_SS197_0.0				HMS PA to NZG
12	MRSI_SS198_0.0				HMS PA to NZG
13	MRSI_SS198_0.3				Hold cold

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI_SS198_0.5	Soil		2/6/25	HOLD COLD
15	MRSI_SS199_0.0				HMS PA to NZG
16	MRSI_SS199_0.3				HOLD COLD
17	MRSI_SS199_0.5				"
18	MRSI_SS200_0.0				HMS, PA to NZG
19	MRSI_SS200_0.3				HOLD COLD
20	MRSI_SS200_0.5				"
21	MRSI_SS201_0.0				HMS, PA to NZG
22	~~MRSI_SS201_0.3~~				HOLD COLD
23	~~MRSI_SS201_0.5~~				"
24	MRSI_SS202_0.0				HMS, PA to NZG
25	MRSI_SS202_0.3				HOLD COLD
26	MRSI_SS202_0.5				"
27	MRSI_SS203_0.0				HMS PA to NZG
28	MRSI_SS203_0.3				HOLD COLD
29	MRSI_SS203_0.5				"
30	MRSI_SS229_0.0				HMS PA to NZG
31	MRSI_SS229_0.3				HOLD COLD
32	MRSI_SS229_0.5				"
33	MRSI_SS230_0.0				HMS PA to NZG
34	MRSI_SS230_0.3				HOLD COLD
35	MRSI_SS230_0.5				"
36	MRSI_SS231_0.0				HMS PA to NZG
37	MRSI_SS231_0.3				HOLD COLD
38	MRSI_SS231_0.5				"
39	MRSI_SS232_0.0				HMS PA to NZG
40	MRSI_SS232_0.3				HOLD COLD
41	MRSI_SS232_0.5				"

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI_5523_0.0	Soil		12/6/25	HMS PA to NZ
15	MRSI_5523_0.3				HOLD COLD
16	MRSI_5523_0.5				"
17	MRSI_5523_0.0				HMS PA to NZ
18	MRSI_5523_0.3				HOLD COLD
19	MRSI_5523_0.5				"
20	MRSI_5523_0.0				HMS PA to NZ
21	MRSI_5523_0.3				HOLD COLD
22	MRSI_5523_0.5				"
23	MRSI_5523_0.0				HMS PA to NZ
24	MRSI_5523_0.3				HOLD COLD
25	MRSI_5523_0.5				"
26	MRSI_5523_0.0				HMS PA to NZ
27	MRSI_5523_0.3				HOLD COLD
28	MRSI_5523_0.5				"
29	MRSI_5523_0.0				HMS PA to NZ
30	MRSI_5523_0.3				HOLD COLD
31	MRSI_5523_0.5				"
32	MRSI_5523_0.0				HMS PA to NZ
33	MRSI_5523_0.3				HOLD COLD
34	MRSI_5523_0.5				"
35	MRSI_5523_0.0				HMS PA to NZ
36	MRSI_5523_0.3				HOLD COLD
37	MRSI_5523_0.5				"
38	MRSI_5523_0.0				HMS PA to NZ
39	MRSI_5523_0.3				HOLD COLD
40	MRSI_5523_0.5				"
41	MRSI_5523_0.0				HMS PA to NZ

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI-SS243-0.3	SOIL		12/6/25	HOLD COLD
15	MRSI-SS243-0.5				"
16	MRSI-SS244-0.0				HM8 PAH NL
17	MRSI-SS244-0.3				HOLD COLD
18	MRSI-SS244-0.5				"
19	MRSI-SS245-0.0				HM8 PAH NL
20	MRSI-SS245-0.3				HOLD COLD
21	MRSI-SS245-0.5				"
22	MRSI-SS246-0.0				HM8, PAH NL
23	MRSI-SS246-0.3				HOLD COLD
24	MRSI-SS246-0.5				"
25	MRSI-SS247-0.0				HM8 PAH NL
26	MRSI-SS247-0.3				HOLD COLD
27	MRSI-SS247-0.5				"
28	MRSI-QA 18				HM8
29	MRSI-QA 19				HM8
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3915257
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	14-Jun-2025 12:45 pm
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	18-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS193 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
2	MRS1 SS193 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
3	MRS1 SS193 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
4	MRS1 SS194 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
5	MRS1 SS194 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
6	MRS1 SS194 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS195_0.0 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
8	MRS1_SS195_0.3 12-Jun-2025	Soil	GSoil300	Hold Cold
9	MRS1_SS195_0.5 12-Jun-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS197_0.0 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
11	MRS1_SS198_0.0 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
12	MRS1_SS198_0.3 12-Jun-2025	Soil	GSoil300	Hold Cold
13	MRS1_SS198_0.5 12-Jun-2025	Soil	GSoil300	Hold Cold
14	MRS1 SS199 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
15	MRS1 SS199 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
16	MRS1 SS199 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
17	MRS1 SS200 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
18	MRS1 SS200 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
19	MRS1 SS200 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
20	MRS1 SS201 0 0 12 Jun 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
21	MRS1 SS202 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
22	MRS1_SS202_0.3 12-Jun-2025	Soil	GSoil300	Hold Cold
23	MRS1_SS202_0.5 12-Jun-2025	Soil	GSoil300	Hold Cold
24	MRS1_SS203_0.0 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
25	MRS1_SS203_0.3 12-Jun-2025	Soil	GSoil300	Hold Cold
26	MRS1_SS203_0.5 12-Jun-2025	Soil	GSoil300	Hold Cold
27	MRS1_SS229_0.0 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
28	MRS1_SS229_0.3 12-Jun-2025	Soil	GSoil300	Hold Cold
29	MRS1 SS229 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
30	MRS1 SS230 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
31	MRS1 SS230 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
32	MRS1 SS230 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
33	MRS1 SS231 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
34	MRS1 SS231 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
35	MRS1 SS231 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
36	MRS1 SS232 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
37	MRS1_SS232_0.3 12-Jun-2025	Soil	GSoil300	Hold Cold
38	MRS1_SS232_0.5 12-Jun-2025	Soil	GSoil300	Hold Cold
39	MRS1_SS233_0.0 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
40	MRS1_SS233_0.3 12-Jun-2025	Soil	GSoil300	Hold Cold
41	MRS1 SS233 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
42	MRS1 SS235 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
43	MRS1 SS235 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
44	MRS1 SS235 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
45	MRS1 SS236 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
46	MRS1 SS236 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
47	MRS1 SS236 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
48	MRS1 SS237 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
49	MRS1_SS237_0.3 12-Jun-2025	Soil	GSoil300	Hold Cold
50	MRS1_SS237_0.5 12-Jun-2025	Soil	GSoil300	Hold Cold
51	MRS1_SS238_0.0 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
52	MRS1_SS238_0.3 12-Jun-2025	Soil	GSoil300	Hold Cold
53	MRS1_SS238_0.5 12-Jun-2025	Soil	GSoil300	Hold Cold
54	MRS1_SS239_0.0 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
55	MRS1_SS239_0.3 12-Jun-2025	Soil	cGSoil	Hold Cold
56	MRS1 SS239 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
57	MRS1 SS240 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
58	MRS1 SS240 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
59	MRS1 SS240 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
60	MRS1 SS241 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
61	MRS1 SS241 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
62	MRS1 SS241 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
63	MRS1 SS242 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
64	MRS1_SS242_0.5 12-Jun-2025	Soil	GSoil300	Hold Cold
65	MRS1_SS243_0.0 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
66	MRS1_SS243_0.3 12-Jun-2025	Soil	GSoil300	Hold Cold
67	MRS1_SS243_0.5 12-Jun-2025	Soil	cGSoil	Hold Cold
68	MRS1_SS244_0.0 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
69	MRS1_SS244_0.3 12-Jun-2025	Soil	GSoil300	Hold Cold
70	MRS1_SS244_0.5 12-Jun-2025	Soil	GSoil300	Hold Cold
71	MRS1 SS245 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
72	MRS1 SS245 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
73	MRS1 SS246 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
74	MRS1 SS246 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
75	MRS1 SS246 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
76	MRS1 SS247 0 0 12 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
77	MRS1 SS247 0 3 12 Jun 2025	Soil	GSoil300	Hold Cold
78	MRS1 SS247 0 5 12 Jun 2025	Soil	GSoil300	Hold Cold
79	MRS1_QA18 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
80	MRS1_QA19 12-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
81	MRS1_SS24 3011550/200/2.1	Soil	GSoil300	
82	MRS1_SS24 3011550/200	Soil	cGSoil	

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10-11, 14, 17, 20-21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 65, 68, 71, 73, 76, 79 80
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10-11, 14, 17, 20-21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 65, 68, 71, 73, 76, 79 80

HillLabs

ANALYSIS REQUEST

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

Job No: **391 6824**
Date Recv: 16-Jun-25 10:45
Received by s9(2)(a)

s9(2)(a)

Quote No
Primary Contact s9(2)(a)
Submitted By s9(2)(a)
Client Name Beca Limited
Address
Postcode
Phone *Mobile*
Email s9(2)(a)
Charge To
Client Reference 3011550
Order No 3011550

Results To *Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.*

☒ Email Primary Contact ☒ Email Submitter ☐ Email Client
☒ Email Other s9(2)(a)
☐ Other

ADDITIONAL INFORMATION

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories
Date & Time: 13/06
Name: s9(2)(a)
☐ *Tick if you require COC to be emailed back*
Signature: s9(2)(a)

Samples will be processed at a Hill Labs site with the appropriate testing capability and capacity. Please inform th[illegible]ab if you wish samples to be retained and analysed at the site of rec

Received at Hill Laboratories
Date & Ti
Name:
Signat

Temperature On Arrival
12.3 °C
Temperature was measured on one or more arbitrarily chosen samples in this batch.

Priority ☐ Low ☐ Urgent (ASAP, extra charge applies)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1_SS250_0.0	Soil		13/06	HMS, PA NZG
2	MRS1_SS250_0.3				Hold cold
3	MRS1_SS250_0.5				Hold cold
4	MRS1_SS251_0.0				HMS, PA NZG
5	MRS1_SS251_0.3				Hold cold
6	MRS1_SS251_0.5				Hold cold
7	MRS1_SS252_0.0				HMS, PA NZG
8	~~MRS1_SS252_0.3~~				~~Hold cold~~
9	~~MRS1_SS252_0.5~~				~~Hold cold~~
10	MRS1_SS253_0.0				HMS, PA NZG
11	MRS1_SS253_0.3				Hold cold
12	MRS1_SS253_0.5				Hold cold
13					

Surface, 0.5, 1m, surface f HMS, TPH OI PAH, PA NZG

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS254_0.0	Soil		13/6	HM8, TPH, OI, PAH, PA, NZG
15	MRS1_SS254_0.3				Hold Cold
16	MRS1_SS254_0.5				" "
17	MRS1_SS255_0.0				HM8, TPH OI, PAH, PA & NZG
18	MRS1_SS255_0.3				Hold Cold
19	MRS1_SS255_0.5				HM8, TPH OI, PAH, PA & NZG
20	MRS1_SS255_0.8				Hold Cold
21	MRS1_SS255_1.0				HM8, TPH OI, PAH, PA & NZG
22	MRS1_SS256_0.0				" "
23	MRS1_SS256_0.3				Hold Cold
24	MRS1_SS256_0.5				" "
25	MRS1_SS257_0.0				HM8, TPH OI, PAH, PA
26	MRS1_SS257_0.3				Hold Cold
27	MRS1_SS257_0.5				" "
28	MRS1_SS258_0.0				HM8, TPH OI, PAH, PA
29	MRS1_SS258_0.3				Hold Cold
30	MRS1_SS258_0.5				HM8, TPH OI, PAH, PA
31	MRS1_SS258_0.8				Hold Cold
32	MRS1_SS258_1.0				HM8, TPH OI, PAH, PA
33	MRS1_SS259_0.0				"
34	MRS1_SS259_0.3				Hold Cold
35	MRS1_SS259_0.5				" "
36	MRS1_SS260_0.0				HM8, TPH OI, PAH, PA
37	MRS1_SS260_0.3				Hold Cold
38	MRS1_SS260_0.5				" "
39	MRS1_SS261_0.0				HM8, TPH OI, PAH, PA & NZG
40	MRS1_SS261_0.3				Hold Cold
41	MRS1_SS261_0.5				" "

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS262_0.0	Soil		13/6	HM8, TPH OI PAH, PA NZG
15	MRS1_SS262_0.3				Hold cold
16	MRS1_SS262_0.5				Hold cold
17	MRS1_SS176_0.0				HM8, PA NZG
18	MRS1_SS176_0.3				Hold cold
19	MRS1_SS177_0.0				HM8, PA NZG
20	MRS1_SS177_0.3				Hold cold
21	MRS1_SS178_0.0				HM8, PA NZG
22	MRS1_SS178_0.3				Hold cold
23	MRS1_SS179_0.0				HM8, PA NZG
24	MRS1_SS179_0.3				Hold cold
25	MRS1_SS180_0.0				HM8, PA NZG
26	MRS1_SS180_0.3				Hold cold
27	MRS1_SS204_0.0				HM8, PA NZG
28	MRS1_SS204_0.3				Hold cold
29	MRS1_SS248_0.0				HM8, PA NZG
30	MRS1_SS248_0.3				Hold cold
31	MRS1_SS249_0.0				HM8, PA NZG
32	MRS1_SS249_0.3				Hold cold
33					
34					
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3916824
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	17-Jun-2025 9:54 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	19-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS250 0 0 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
2	MRS1 SS250 0 3 13 Jun 2025	Soil	GSoil300	Hold Cold
3	MRS1 SS250 0 5 13 Jun 2025	Soil	GSoil300	Hold Cold
4	MRS1 SS251 0 0 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
5	MRS1 SS251 0 3 13 Jun 2025	Soil	GSoil300	Hold Cold
6	MRS1 SS251 0 5 13 Jun 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS252_0.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
8	MRS1_SS253_0.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
9	MRS1_SS253_0.3 13-Jun-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS253_0.5 13-Jun-2025	Soil	GSoil300	Hold Cold
11	MRS1_SS254_0.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
12	MRS1 SS254 0 3 13 Jun 2025	Soil	GSoil300	Hold Cold
13	MRS1 SS254 0 5 13 Jun 2025	Soil	GSoil300	Hold Cold
14	MRS1 SS255 0 0 13 Jun 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
15	MRS1 SS255 0 3 13 Jun 2025	Soil	GSoil300	Hold Cold
16	MRS1 SS255 0 5 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
17	MRS1_SS255_0.8 13-Jun-2025	Soil	GSoil300	Hold Cold
18	MRS1_SS255_1.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
19	MRS1 SS256 0 0 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
20	MRS1 SS256 0 3 13 Jun 2025	Soil	GSoil300	Hold Cold
21	MRS1 SS257 0 0 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
22	MRS1_SS257_0.3 13-Jun-2025	Soil	GSoil300	Hold Cold
23	MRS1_SS257_0.5 13-Jun-2025	Soil	GSoil300	Hold Cold
24	MRS1_SS258_0.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
25	MRS1_SS258_0.3 13-Jun-2025	Soil	GSoil300	Hold Cold
26	MRS1 SS258 0 5 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
27	MRS1 SS258 0 8 13 Jun 2025	Soil	GSoil300	Hold Cold
28	MRS1 SS258 1 0 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
29	MRS1_SS259_0.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
30	MRS1_SS259_0.3 13-Jun-2025	Soil	GSoil300	Hold Cold

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
31	MRS1_SS259_0.5 13-Jun-2025	Soil	GSoil300	Hold Cold
32	MRS1_SS260_0.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
33	MRS1 SS260 0 3 13 Jun 2025	Soil	GSoil300	Hold Cold
34	MRS1 SS260 0 5 13 Jun 2025	Soil	GSoil300	Hold Cold
35	MRS1 SS261 0 0 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
36	MRS1 SS261 0 3 13 Jun 2025	Soil	GSoil300	Hold Cold
37	MRS1 SS261 0 5 13 Jun 2025	Soil	GSoil300	Hold Cold
38	MRS1_SS262_0.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
39	MRS1_SS262_0.3 13-Jun-2025	Soil	GSoil300	Hold Cold
40	MRS1_SS262_0.5 13-Jun-2025	Soil	GSoil300	Hold Cold
41	MRS1_SS176_0.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
42	MRS1_SS176_0.3 13-Jun-2025	Soil	GSoil300	Hold Cold
43	MRS1 SS177 0 0 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
44	MRS1 SS177 0 3 13 Jun 2025	Soil	GSoil300	Hold Cold
45	MRS1 SS178 0 0 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
46	MRS1 SS178 0 3 13 Jun 2025	Soil	GSoil300	Hold Cold
47	MRS1 SS179 0 0 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
48	MRS1 SS179 0 3 13 Jun 2025	Soil	GSoil300	Hold Cold
49	MRS1 SS180 0 0 13 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
50	MRS1_SS180_0.3 13-Jun-2025	Soil	GSoil300	Hold Cold
51	MRS1_SS204_0.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
52	MRS1_SS204_0.3 13-Jun-2025	Soil	GSoil300	Hold Cold
53	MRS1_SS248_0.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
54	MRS1_SS248_0.3 13-Jun-2025	Soil	GSoil300	Hold Cold
55	MRS1_SS249_0.0 13-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
56	MRS1_SS249_0.3 13-Jun-2025	Soil	GSoil300	Hold Cold
57	MRS1 SS256 0 5 13 Jun 2025	Soil	GSoil300	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7-8, 11, 14, 16, 18 19, 21, 24, 26, 28 29, 32, 35, 38, 41, 43, 45, 47, 49, 51, 53, 55
Total of Reported PAHs in Soil	Sonication extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.03 mg/kg dry wt	11, 14, 16, 18 19, 21, 24, 26, 28-29, 32, 35, 38
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	11, 14, 16, 18-19, 21, 24, 26, 28 29, 32, 35, 38

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES	BaP Potency Equivalence calculated from; Benzo(a) anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(j) fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Benzo(a) pyrene x 1.0 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Fluoranthene x 0.01 + Indeno(1,2,3-c,d)pyrene x 0.1. Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.	0.024 mg/kg dry wt	11, 14, 16, 18-19, 21, 24, 26, 28 29, 32, 35, 38
Benzo[a]pyrene Toxic Equivalence (TEF)	Benzo[a]pyrene Toxic Equivalence (TEF) calculated from; Benzo[a]pyrene x 1.0 + Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Indeno(1,2,3-c,d)pyrene x 0.1. Guidelines for assessing and managing contaminated gasworks sites in New Zealand (GMG) (MfE, 1997).	0.024 mg/kg dry wt	11, 14, 16, 18 19, 21, 24, 26, 28-29, 32, 35, 38
TPH Oil Industry Profile + PAHscreen	Sonication extraction, GC-FID and GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8015 and US EPA 8270.	0.010 - 70 mg/kg dry wt	11, 14, 16, 18 19, 21, 24, 26, 28-29, 32, 35, 38
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7-8, 11, 14, 16, 18 19, 21, 24, 26, 28 29, 32, 35, 38, 41, 43, 45, 47, 49, 51, 53, 55
Total Petroleum Hydrocarbons in Soil			
Client Chromatogram for TPH by FID	Small peaks associated with QC compounds may be visible in chromatograms with low TPH concentrations. QC peaks are as follows: one peak in the C12 - 14 band, the C21 - 25 band and the C30 - 36 band. All QC peaks are corrected for in the reported TPH concentrations.	-	11, 16, 18, 26, 28, 35
C7 - C9	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	11, 14, 16, 18 19, 21, 24, 26, 28-29, 32, 35, 38
C10 - C14	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	11, 14, 16, 18 19, 21, 24, 26, 28-29, 32, 35, 38
C15 - C36	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	40 mg/kg dry wt	11, 14, 16, 18 19, 21, 24, 26, 28-29, 32, 35, 38
Total hydrocarbons (C7 - C36)	Calculation: Sum of carbon bands from C7 to C36. In-house based on US EPA 8015.	70 mg/kg dry wt	11, 14, 16, 18-19, 21, 24, 26, 28 29, 32, 35, 38

1/3

Hill Labs

ANALYSIS REQUEST

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

Job No: **391 9436**
Date Recv: 18-Jun-25 18:29
Received by: s9(2)(a)

Quote No
Primary Contact s9(2)(a)
Submitted By
Client Name Beca Limited
Address
Postcode
Phone *Mobile*
Email s9(2)(a)
Charge To
Client Reference 3011550
Order No 3011550

Results To *Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.*

☒ *Email Primary Contact* ☒ *Email Submitter* ☐ *Email Client*
☒ *Email Other* s9(2)(a)
☐ *Other*

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories
Date & Time: 18/06
Name: s9(2)(a)
☐ *Tick if you require COC to be emailed back*
Signature: s9(2)(a)

Samples will be processed at a Hill L capability and capacity. Please infon retained and analysed at the site of

Received at Hill Laboratories
Date & T
Name:
Signature

Temperature On Arrival
13.1 °C
Temperature was measured on one or more arbitrarily chosen samples in this batch.

ADDITIONAL INFORMATION

Priority ☐ Low ~~☒ Normal~~ ☒ High
☐ **Urgent** (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1_SS169_0.0	Soil		18/06	HMS, PA NZG
2	MRS1_SS169_0.3				Hold cold.
3	MRS1_SS169_0.5				//
4	MRS1_SS170_0.0				HMS, PA NZG
5	MRS1_SS170_0.3				Hold cold
6	MRS1_SS170_0.5				//
7	MRS1_SS171_0.0				HMS, PA NZG
8	MRS1_SS171_0.3				Hold cold
9	MRS1_SS171_0.5				//
10	MRS1_SS172_0.0				HMS PA NZG
11	MRS1_SS172_0.3				Hold cold
12	MRS1_SS172_0.5				//
13	MRS1_SS173_0.0				HMS, PA NZG

continued

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS173_0.3	Soil		18/6/25	Hold cold
15	MRS1_SS173_0.5	↓		↓	//
16	MRS1_SS174_0.0				HMS, PANZG
17	MRS1_SS174_0.3				Hold cold
18	MRS1_SS174_0.5				//
19	MRS1_SS287_0.0				HMS, PANZG
20	MRS1_SS287_0.3				Hold cold
21	MRS1_SS287_0.5				//
22	MRS1_SS288_0.0				HMS, PANZG
23	MRS1_SS288_0.3				Hold cold
24	MRS1_SS288_0.5				//
25	MRS1_SS289_0.0				HMS, PANZG
26	MRS1_SS289_0.3				Hold cold
27	MRS1_SS289_0.5				//
28	MRS1_SS290_0.0				HMS, PANZG
29	MRS1_SS290_0.3				Hold cold
30	MRS1_SS290_0.5				//
31	MRS1_SS291_0.0				HMS, PANZG
32	MRS1_SS291_0.3				Hold cold
33	MRS1_SS291_0.5				//
34					
35					
36					
37					
38					
39					
40					
41					

Continued

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSL_SS311_0.0	Soil		18/6/25	HM8, PA NZG
15	MRSL_SS311_0.3	↓		↓	Hold cold
16	MRSL_SS311_0.5				//
17	MRSL_SS312_0.0				HM8, PA NZG
18	MRSL_SS312_0.3				Hold cold
19	MRSL_SS312_0.5				//
20	MRSL_SS313_0.0				HM8, PA NZG
21	MRSL_SS313_0.3				Hold cold
22	MRSL_SS313_0.5				//
23	MRSL_SS314_0.0				HM8, PA NZG
24	MRSL_SS314_0.3				Hold cold
25	MRSL_SS314_0.5				//
26	MRSL_SS315_0.0				HM8, PA NZG
27	MRSL_SS315_0.3				Hold cold
28	MRSL_SS315_0.5	↓		↓	//
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3919436
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	21-Jun-2025 12:18 pm
		Priority:	High
		Quote No:	138144
		Order No:	3011550
		Client Reference:	3011550
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	25-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS269 0 0 18 Jun 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
2	MRS1 SS269 0 3 18 Jun 2025	Soil	cGSoil	Hold Cold
3	MRS1 SS269 0 5 18 Jun 2025	Soil	cGSoil	Hold Cold
4	MRS1 SS270 0 0 18 Jun 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
5	MRS1 SS270 0 3 18 Jun 2025	Soil	cGSoil	Hold Cold
6	MRS1 SS270 0 5 18 Jun 2025	Soil	cGSoil	Hold Cold
7	MRS1_SS271_0.0 18-Jun-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
8	MRS1_SS271_0.3 18-Jun-2025	Soil	cGSoil	Hold Cold
9	MRS1_SS271_0.5 18-Jun-2025	Soil	cGSoil	Hold Cold
10	MRS1_SS272_0.0 18-Jun-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
11	MRS1_SS272_0.3 18-Jun-2025	Soil	cGSoil	Hold Cold
12	MRS1_SS272_0.5 18-Jun-2025	Soil	cGSoil	Hold Cold
13	MRS1_SS273_0.0 18-Jun-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
14	MRS1 SS273 0 3 18 Jun 2025	Soil	cGSoil	Hold Cold
15	MRS1 SS273 0 5 18 Jun 2025	Soil	cGSoil	Hold Cold
16	MRS1 SS274 0 0 18 Jun 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
17	MRS1 SS274 0 3 18 Jun 2025	Soil	cGSoil	Hold Cold
18	MRS1 SS274 0 5 18 Jun 2025	Soil	cGSoil	Hold Cold
19	MRS1 SS287 0 0 18 Jun 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
20	MRS1 SS287 0 3 18 Jun 2025	Soil	cGSoil	Hold Cold
21	MRS1 SS287 0 5 18 Jun 2025	Soil	cGSoil	Hold Cold
22	MRS1_SS288_0.0 18-Jun-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
23	MRS1_SS288_0.3 18-Jun-2025	Soil	cGSoil	Hold Cold
24	MRS1_SS288_0.5 18-Jun-2025	Soil	cGSoil	Hold Cold
25	MRS1_SS289_0.0 18-Jun-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
26	MRS1_SS289_0.3 18-Jun-2025	Soil	cGSoil	Hold Cold
27	MRS1_SS289_0.5 18-Jun-2025	Soil	cGSoil	Hold Cold
28	MRS1_SS290_0.0 18-Jun-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
29	MRS1 SS290 0 3 18 Jun 2025	Soil	cGSoil	Hold Cold
30	MRS1 SS290 0 5 18 Jun 2025	Soil	cGSoil	Hold Cold
31	MRS1 SS291 0 0 18 Jun 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
32	MRS1 SS291 0 3 18 Jun 2025	Soil	cGSoil	Hold Cold
33	MRS1 SS291 0 5 18 Jun 2025	Soil	cGSoil	Hold Cold
34	MRS1 SS311 0 0 18 Jun 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
35	MRS1 SS311 0 3 18 Jun 2025	Soil	cGSoil	Hold Cold
36	MRS1 SS311 0 5 18 Jun 2025	Soil	cGSoil	Hold Cold

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
37	MRS1_SS312_0.0 18-Jun-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
38	MRS1_SS312_0.3 18-Jun-2025	Soil	cGSoil	Hold Cold
39	MRS1_SS312_0.5 18-Jun-2025	Soil	cGSoil	Hold Cold
40	MRS1_SS313_0.0 18-Jun-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
41	MRS1 SS313 0 3 18 Jun 2025	Soil	cGSoil	Hold Cold
42	MRS1 SS313 0 5 18 Jun 2025	Soil	cGSoil	Hold Cold
43	MRS1 SS314 0 0 18 Jun 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
44	MRS1 SS314 0 3 18 Jun 2025	Soil	cGSoil	Hold Cold
45	MRS1 SS314 0 5 18 Jun 2025	Soil	cGSoil	Hold Cold
46	MRS1 SS315 0 0 18 Jun 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
47	MRS1 SS315 0 3 18 Jun 2025	Soil	cGSoil	Hold Cold
48	MRS1 SS315 0 5 18 Jun 2025	Soil	cGSoil	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46

HillLabs

ANALYSIS REQUEST

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

Job No: **392 0577**
Date Recv: 19-Jun-25 17:12
Received by: s9(2)(a)

Quote No
Primary Contact s9(2)(a)
Submitted By
Client Name Beca Limited
Address
Postcode
Phone *Mobile*
Email s9(2)(a)
Charge To
Client Reference 3011550
Order No 3011550

s9(2)(a)

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories
Date & Time: 19/06
Name:
Signature: s9(2)(a)

☐ *Tick if you require COC to be emailed back*

Samples will be processed at a Hill Labs site with the appropriate testing capability and capacity. Please inform the lab if you wish samples to be retained and analysed at the site of receipt.

Received at Hill Laboratories
Date & Temperature On Arrival
Name:
Signatu 8.1 °C

Results To *Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.*

☒ *Email Primary Contact* ☒ *Email Submitter* ☐ *Email Client*
☒ *Email Other* s9(2)(a)
☐ *Other*

ADDITIONAL INFORMATION

Priority ☐ **Low** ☒ Temperature was measured on one or more arbitrarily chosen samples in this batch.
☐ **Urgent** (ASAP, extra ch… contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1_SS339_0.0	Soil		19/06	HM8, PAN2G
2	MRS1_SS339_0.3				Hold cold
3	MRS1_SS339_0.5				//
4	MRS1_SS340_0.0				HM8, PAN2G
5	MRS1_SS340_0.3				Hold cold
6	MRS1_SS340_0.5				//
7	MRS1_SS341_0.0				HM8, PAN2G
8	MRS1_SS341_0.3				Hold cold
9	MRS1_SS341_0.5				//
10	MRS1_SS342_0.0				HM8, PAN2G
11	MRS1_SS342_0.3				Hold cold
12	MRS1_SS342_0.5				//
13	MRS1_SS343_0.0				HM8, PAN2G

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS343_0.3	Soil		19/06	Hold cold
15	MRS1_SS343_0.5				//
16	MRS1_SS344_0.0				HM8, PA NZG
17	MRS1_SS344_0.3				Hold cold
18	MRS1_SS344_0.5				//
19	MRS1_SS317_0.0				HM8, PA NZG
20	MRS1_SS317_0.3				Hold cold
21	MRS1_SS317_0.5				//
22	MRS1_SS318_0.0				HM8, PA NZG
23	MRS1_SS318_0.3				Hold cold
24	MRS1_SS318_0.5				//
25	MRS1_SS319_0.0				HM8, PA NZG
26	MRS1_SS319_0.3				Hold cold
27	MRS1_SS319_0.5				//
28	MRS1_SS320_0.0				HM8, PA NZG
29	MRS1_SS320_0.3				Hold cold
30	MRS1_SS320_0.5				//
31	MRS1_SS321_0.0				HM8, TPH OI PAH, PA NZG
32	MRS1_SS321_0.3				Hold cold
33	MRS1_SS321_0.5				//
34	MRS1_SS322_0.0				HM8, PA NZG
35	MRS1_SS322_0.3				Hold cold
36	MRS1_SS322_0.5				//
37					
38					
39					
40					
41					

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI_SS330_0	SOIL		19/6/25	HM8, PAN2G
15	~~MRSI_SS330_3~~				
16	~~MRSI_SS330_5~~				
17	MRSI_SS331_0.0				HM8, PAN2G
18	MRSI_SS331_0.3				Hold cold
19	MRSI_SS331_0.5				//
20	MRSI_SS332_0.0				HM8, PAN2G
21	MRSI_SS332_0.3				Hold cold
22	MRSI_SS332_0.5				//
23	MRSI_SS333_0.0				HM8, PAN2G
24	MRSI_SS333_0.3				Hold cold
25	MRSI_SS333_0.5				//
26	MRSI_SS334_0.0				HM8, PAN2G
27	MRSI_SS334_0.3				Hold cold
28	MRSI_SS334_0.5				//
29	MRSI_SS335_0.0				HM8, PAN2G
30	MRSI_SS335_0.3				Hold cold
31	MRSI_SS335_0.5				//
32	MRSI_SS336_0.0				HM8, PAN2G
33	MRSI_SS336_0.3				Hold cold
34	MRSI_SS336_0.5	✓		✓	//
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3920577
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	24-Jun-2025 10:14 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	26-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS339 0 0 19 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
2	MRS1 SS339 0 3 19 Jun 2025	Soil	GSoil300	Hold Cold
3	MRS1 SS339 0 5 19 Jun 2025	Soil	GSoil300	Hold Cold
4	MRS1 SS340 0 0 19 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
5	MRS1 SS340 0 3 19 Jun 2025	Soil	GSoil300	Hold Cold
6	MRS1 SS340 0 5 19 Jun 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS341_0.0 19-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
8	MRS1_SS341_0.3 19-Jun-2025	Soil	GSoil300	Hold Cold
9	MRS1_SS341_0.5 19-Jun-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS342_0.0 19-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
11	MRS1_SS342_0.3 19-Jun-2025	Soil	GSoil300	Hold Cold
12	MRS1_SS342_0.5 19-Jun-2025	Soil	GSoil300	Hold Cold
13	MRS1_SS343_0.0 19-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
14	MRS1 SS343 0 3 19 Jun 2025	Soil	GSoil300	Hold Cold
15	MRS1 SS343 0 5 19 Jun 2025	Soil	GSoil300	Hold Cold
16	MRS1 SS344 0 0 19 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
17	MRS1 SS344 0 3 19 Jun 2025	Soil	GSoil300	Hold Cold
18	MRS1 SS344 0 5 19 Jun 2025	Soil	GSoil300	Hold Cold
19	MRS1 SS317 0 0 19 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
20	MRS1 SS317 0 3 19 Jun 2025	Soil	GSoil300	Hold Cold
21	MRS1 SS317 0 5 19 Jun 2025	Soil	GSoil300	Hold Cold
22	MRS1_SS318_0.0 19-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
23	MRS1_SS318_0.3 19-Jun-2025	Soil	GSoil300	Hold Cold
24	MRS1_SS318_0.5 19-Jun-2025	Soil	GSoil300	Hold Cold
25	MRS1_SS319_0.0 19-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
26	MRS1_SS319_0.3 19-Jun-2025	Soil	GSoil300	Hold Cold
27	MRS1_SS319_0.5 19-Jun-2025	Soil	GSoil300	Hold Cold
28	MRS1_SS320_0.0 19-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
29	MRS1 SS320 0 3 19 Jun 2025	Soil	GSoil300	Hold Cold
30	MRS1 SS320 0 5 19 Jun 2025	Soil	GSoil300	Hold Cold
31	MRS1 SS321 0 0 19 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
32	MRS1 SS321 0 3 19 Jun 2025	Soil	GSoil300	Hold Cold
33	MRS1 SS321 0 5 19 Jun 2025	Soil	GSoil300	Hold Cold
34	MRS1_SS322_0.0 19-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
35	MRS1_SS322_0.3 19-Jun-2025	Soil	GSoil300	Hold Cold
36	MRS1_SS322_0.5 19-Jun-2025	Soil	cGSoil	Hold Cold

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
37	MRS1_SS330_0.0 19-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
38	MRS1_SS331_0.0 19-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
39	MRS1_SS332_0.0 19-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
40	MRS1_SS332_0.3 19-Jun-2025	Soil	cGSoil	Hold Cold
41	MRS1 SS332 0 5 19 Jun 2025	Soil	cGSoil	Hold Cold
42	MRS1 SS333 0 0 19 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
43	MRS1 SS333 0 3 19 Jun 2025	Soil	GSoil300	Hold Cold
44	MRS1 SS333 0 5 19 Jun 2025	Soil	GSoil300	Hold Cold
45	MRS1 SS334 0 0 19 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
46	MRS1 SS334 0 3 19 Jun 2025	Soil	GSoil300	Hold Cold
47	MRS1 SS334 0 5 19 Jun 2025	Soil	GSoil300	Hold Cold
48	MRS1 SS335 0 0 19 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
49	MRS1_SS335_0.3 19-Jun-2025	Soil	GSoil300	Hold Cold
50	MRS1_SS335_0.5 19-Jun-2025	Soil	GSoil300	Hold Cold
51	MRS1_SS336_0.0 19-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
52	MRS1_SS336_0.3 19-Jun-2025	Soil	GSoil300	Hold Cold
53	MRS1_SS336_0.5 19-Jun-2025	Soil	GSoil300	Hold Cold
54	MRS1_SS337_0.0 19-Jun-2025	Soil	GSoil300	Hold Cold
55	MRS1_SS337_0.3 19-Jun-2025	Soil	GSoil300	Hold Cold
56	MRS1 SS337 0 5 19 Jun 2025	Soil	GSoil300	Hold Cold
57	MRS1 SS338 0 0 19 Jun 2025	Soil	GSoil300	Hold Cold
58	MRS1 SS338 0 3 19 Jun 2025	Soil	GSoil300	Hold Cold
59	MRS1 SS338 0 5 19 Jun 2025	Soil	GSoil300	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37-39, 42, 45, 48, 51
Total of Reported PAHs in Soil	Sonication extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.03 mg/kg dry wt	31
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	31
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES	BaP Potency Equivalence calculated from; Benzo(a) anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(j) fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Benzo(a) pyrene x 1.0 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Fluoranthene x 0.01 + Indeno(1,2,3-c,d)pyrene x 0.1. Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.	0.024 mg/kg dry wt	31
Benzo[a]pyrene Toxic Equivalence (TEF)	Benzo[a]pyrene Toxic Equivalence (TEF) calculated from; Benzo[a]pyrene x 1.0 + Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Indeno(1,2,3-c,d)pyrene x 0.1. Guidelines for assessing and managing contaminated gasworks sites in New Zealand (GMG) (MfE, 1997).	0.024 mg/kg dry wt	31
TPH Oil Industry Profile + PAHscreen	Sonication extraction, GC-FID and GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8015 and US EPA 8270.	0.010 - 70 mg/kg dry wt	31

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37 39, 42, 45, 48, 51
Total Petroleum Hydrocarbons in Soil			
C7 - C9	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	31
C10 - C14	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	31
C15 - C36	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	40 mg/kg dry wt	31
Total hydrocarbons (C7 - C36)	Calculation: Sum of carbon bands from C7 to C36. In-house based on US EPA 8015.	70 mg/kg dry wt	31

ANALYSIS REQUEST

Hill Labs

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

Job No: **391 8851**

Date Recv: 18-Jun-25 09:48

Received by: s9(2)(a)

3139188516

Quote No

Primary Contact s9(2)(a)

Submitted By s9(2)(a)

Client Name Beca Limited

Address

Postcode

Phone *Mobile*

Email s9(2)(a)

Charge To 3011550

Client Reference 3011550

Order No

Results To *Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.*

☒ Email Primary Contact ☐ Email Submitter ☐ Email Client

☒ Email Other s9(2)(a)

☐ Other

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories

Date & Time: 18/06

Name: s9(2)(a)

☐ *Tick if you require COC to be emailed back*

Signature: s9(2)(a)

Samples will be processed at a Hill Labs site with the appropriate testing capability and capacity. Please inform the lab if you wish samples to be retained and analysed at the site of receipt.

Received at Hill Laboratories

Date & Time:

Name:

Signature:

ADDITIONAL INFORMATION

Priority ☐ Low ☒ Normal ☐ High

☐ Urgent (ASAP, extra charge [illegible] contact lab first)

Requested Reporting Date:

Temperature On Arrival

4.1 °C

Temperature was measured on one or more arbitrarily chosen samples in this batch.

Please ensure all asbestos ***double bagged*** *upon sub*

No.	Sample Name	Sample Material	Sample Location	Sample Date	(if not a[illegible])
1	MRS1_SS263_0.0	Soil		17/06	HM8, PA NZG
2	MRS1_SS263_0.3				Hold cold
3	MRS1_SS263_0.5				Hold cold
4	MRS1_SS264_0.0				HM8, PA NZG
5	MRS1_SS264_0.3				Hold cold
6	MRS1_SS264_0.5				Hold cold
7	MRS1_SS265_0.0				HM8, PA NZG
8	MRS1_SS265_0.3				Hold cold
9	MRS1_SS265_0.5				Hold cold
10	MRS1_SS266_0.0				HM8, PA NZG
11	MRS1_SS266_0.3				Hold cold
12	MRS1_SS266_0.5				Hold cold
13	MRS1_SS267_0.0				HM8, PA NZG

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS267_0.3	Soil		17/06	Hold cold,
15	MRS1_SS267_0.5				Hold cold
16	MRS1_SS268_0.0				HM8, PA NZG
17	MRS1_SS268_0.3				Hold cold
18	MRS1_SS268_0.5				Hold cold
19	MRS1_SS275_0.0				HM8, PA NZG
20	MRS1_SS275_0.3				Hold cold
21	MRS1_SS275_0.5				Hold cold
22	MRS1_SS276_0.0				HM8, PA NZG
23	MRS1_SS276_0.3				Hold cold,
24	MRS1_SS276_0.5				Hold cold
25	MRS1_SS277_0.0				HM8, PA NZG
26	MRS1_SS277_0.3				Hold cold
27	MRS1_SS277_0.5				Hold cold
28	MRS1_SS278_0.0				HM8, PA NZG
29	MRS1_SS278_0.3				Hold cold
30	MRS1_SS278_0.5				Hold cold
31	MRS1_SS279_0.0				HM8, PA NZG
32	MRS1_SS279_0.3				Hold cold
33	MRS1_SS279_0.5				Hold cold
34	MRS1_SS280_0.0				HM8, PA NZG
35	MRS1_SS280_0.3				Hold cold
36	MRS1_SS280_0.5				Hold cold
37	MRS1_SS281_0.0				HM8, PA NZG
38	MRS1_SS281_0.3				Hold cold
39	MRS1_SS281_0.5				Hold cold
40	MRS1_SS282_0.0				HM8, PA NZG
41	MRS1_SS282_0.3				Hold cold

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS282_0.5	Soil		17/06	Hold cold
15	MRS1_SS283_0.0				HMB, PA NZG
16	MRS1_SS283_0.3				Hold cold
17	MRS1_SS283_0.5				Hold cold
18	MRS1_SS284_0.0				HMB, PA NZG
19	MRS1_SS284_0.3				Hold cold
20	MRS1_SS284_0.5				Hold cold
21	MRS1_SS285_0.0				HMB, PA NZG
22	MRS1_SS285_0.3				Hold cold
23	MRS1_SS285_0.5				Hold cold
24	MRS1_SS286_0.0				HMB, PA NZG
25	MRS1_SS286_0.3				Hold cold
26	MRS1_SS286_0.5				Hold cold
27	MRS1_SS292_0.0				HMB, PA NZG
28	MRS1_SS292_0.3				Hold cold
29	MRS1_SS292_0.5				Hold cold
30	MRS1_SS293_0.0				HMB, PA NZG
31	MRS1_SS293_0.3				Hold cold
32	MRS1_SS293_0.5				Hold cold
33	MRS1_SS294_0.0				HMB, PA NZG
34	MRS1_SS294_0.3				Hold cold
35	MRS1_SS294_0.5				Hold cold
36	MRS1_SS295_0.0				HMB, PA NZG
37	MRS1_SS295_0.3				Hold cold
38	MRS1_SS295_0.5				Hold cold
39	MRS1_SS296_0.0				HMB, PA NZG
40	MRS1_SS296_0.3				Hold cold
41	MRS1_SS296_0.5				Hold cold

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS297_0.0	Soil		17/06	HM8, PA NZG
15	MRS1_SS297_0.3	↓		↓	Hold cold
16	MRS1_SS297_0.5	↓		↓	Hold cold
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3918851
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	19-Jun-2025 11:00 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550
		Client Reference:	3011550
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	24-Jun-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS263 0 0 17 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
2	MRS1 SS263 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
3	MRS1 SS263 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
4	MRS1 SS264 0 0 17 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
5	MRS1 SS264 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
6	MRS1 SS264 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS265_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
8	MRS1_SS265_0.3 17-Jun-2025	Soil	GSoil300	Hold Cold
9	MRS1_SS265_0.5 17-Jun-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS266_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
11	MRS1_SS266_0.3 17-Jun-2025	Soil	GSoil300	Hold Cold
12	MRS1_SS266_0.5 17-Jun-2025	Soil	GSoil300	Hold Cold
13	MRS1_SS267_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
14	MRS1 SS267 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
15	MRS1 SS267 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
16	MRS1 SS268 0 0 17 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
17	MRS1 SS268 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
18	MRS1 SS268 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
19	MRS1 SS275 0 0 17 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
20	MRS1 SS275 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
21	MRS1 SS275 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
22	MRS1_SS276_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
23	MRS1_SS276_0.3 17-Jun-2025	Soil	GSoil300	Hold Cold
24	MRS1_SS276_0.5 17-Jun-2025	Soil	GSoil300	Hold Cold
25	MRS1_SS277_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
26	MRS1_SS277_0.3 17-Jun-2025	Soil	GSoil300	Hold Cold
27	MRS1_SS277_0.5 17-Jun-2025	Soil	GSoil300	Hold Cold
28	MRS1_SS278_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
29	MRS1 SS278 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
30	MRS1 SS278 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
31	MRS1 SS279 0 0 17 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
32	MRS1 SS279 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
33	MRS1 SS279 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
34	MRS1 SS280 0 0 17 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
35	MRS1 SS280 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
36	MRS1 SS280 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
37	MRS1_SS281_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
38	MRS1_SS281_0.3 17-Jun-2025	Soil	GSoil300	Hold Cold
39	MRS1_SS281_0.5 17-Jun-2025	Soil	GSoil300	Hold Cold
40	MRS1_SS282_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
41	MRS1 SS282 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
42	MRS1 SS282 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
43	MRS1 SS283 0 0 17 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
44	MRS1 SS283 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
45	MRS1 SS283 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
46	MRS1 SS284 0 0 17 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
47	MRS1 SS284 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
48	MRS1 SS284 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
49	MRS1_SS285_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
50	MRS1_SS285_0.3 17-Jun-2025	Soil	GSoil300	Hold Cold
51	MRS1_SS285_0.5 17-Jun-2025	Soil	GSoil300	Hold Cold
52	MRS1_SS286_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
53	MRS1_SS286_0.3 17-Jun-2025	Soil	GSoil300	Hold Cold
54	MRS1_SS286_0.5 17-Jun-2025	Soil	GSoil300	Hold Cold
55	MRS1_SS292_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
56	MRS1 SS292 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
57	MRS1 SS292 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
58	MRS1 SS293 0 0 17 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
59	MRS1 SS293 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
60	MRS1 SS293 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
61	MRS1 SS294 0 0 17 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
62	MRS1 SS294 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
63	MRS1 SS294 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold
64	MRS1_SS295_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
65	MRS1_SS295_0.3 17-Jun-2025	Soil	GSoil300	Hold Cold
66	MRS1_SS295_0.5 17-Jun-2025	Soil	GSoil300	Hold Cold
67	MRS1_SS296_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
68	MRS1_SS296_0.3 17-Jun-2025	Soil	GSoil300	Hold Cold
69	MRS1_SS296_0.5 17-Jun-2025	Soil	GSoil300	Hold Cold
70	MRS1_SS297_0.0 17-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
71	MRS1 SS297 0 3 17 Jun 2025	Soil	GSoil300	Hold Cold
72	MRS1 SS297 0 5 17 Jun 2025	Soil	GSoil300	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 64, 67, 70
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 64, 67, 70

ANALYSIS REQUEST

Quote No 135144

Primary Contact s9(2)(a)

Submitted By

Client Name Beca Ltd

Address

Postcode

Phone *Mobile* s9(2)(a)

Email

Charge To

Client Reference 301550/200/2.1

Order No

Results To *Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.*

☒ *Email Primary Contact* ☐ *Email Submitter* ☐ *Email Client*

☒ *Email Other* s9(2)(a)

☐ *Other*

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

s9(2)(a)

Job No: 392 6946

Date Recv: 30-Jun-25 16:09

Received by: s9(2)(a)

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories

Date & Time: 30/6/25 4pm

Name:

Signature: s9(2)(a)

☐ *Tick if you require COC to be emailed back*

Samples will be processed at a l capability and capacity. Please ir retained and analysed at the site

Received at Hill Laboratories

Date

Name

Signa

Temperature On Arrival

7.1 °C

Temperature was measured on one or more arbitrarily chosen samples in this batch.

ADDITIONAL INFORMATION

Priority ☐ Low ☒ Normal ☐ High

☐ **Urgent** (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRSI_SS144_0.0				HM7, PA to N2G
2	MRSI_SS145_0.0				HM7, PA to N2G
3	MRSI-SS145_0.3				Hold Cold
4	MRSI_SS145_0.5				↓
5	MRSI-SS145-0.7				
6	MRSI_SS145_1.0				
7	MRSI_SS146_0.0				HM7, PA to N2G
8	MRSI-SS146-0.3				Hold Cold
9	MRSI_SS146_0.5				↓
10	MRSI_SS146_1.0				
11	MRSI_SS147_0.0				HM7, PA to N2G
12	MRSI-SS351_0.0				
13	MRSI-SS351_0.3				Hold Cold

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI - SS351 - 0.5	Soil		30/6	Hold Old
15	MRSI - SS352 - 0.0				HM7, PA to NZG
16	MRSI - SS352 - 0.3				Hold Old
17	MRSI - SS352 - 0.5				" "
18	MRSI - SS352 - 0.7				" "
19	MRSI - SS352 - 1.0				" "
20	MRSI - SS353 - 0.0				HM7, PA to NZG
21	MRSI - SS353 - 0.3				Hold Old
22	MRSI - SS353 - 0.5				" "
23	MRSI - SS353 - 0.7				" "
24	MRSI - SS353 - 1.0				" "
25	MRSI - SS354 - 0.0				HM7, PA to NZG
26	MRSI - SS354 - 0.3				Hold Old
27	MRSI - SS354 - 0.5				" "
28	MRSI - SS354 - 0.7				" "
29	MRSI - SS354 - 1.0				" "
30	MRSI - SS347 - 0.0				HM7, PA to NZG
31	MRSI - SS347 - 0.3				Hold Old
32	MRSI - SS347 - 0.5				" "
33	MRSI - SS347 - 0.7				" "
34	MRSI - SS347 - 1.0				" "
35	MRSI - QA21 "				HM7
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3926946
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	02-Jul-2025 10:41 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	03-Jul-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS1404 0 0 30 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
2	MRS1 SS145 0 0 30 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
3	MRS1 SS145 0 3 30 Jun 2025	Soil	cGSoil	Hold Cold
4	MRS1 SS145 0 5 30 Jun 2025	Soil	GSoil300	Hold Cold
5	MRS1 SS145 0 7 30 Jun 2025	Soil	GSoil300	Hold Cold
6	MRS1 SS145 1 0 30 Jun 2025	Soil	GSoil300	Hold Cold
7	MRS1_SS146_0.0 30-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
8	MRS1_SS146_0.3 30-Jun-2025	Soil	GSoil300	Hold Cold
9	MRS1_SS146_0.5 30-Jun-2025	Soil	GSoil300	Hold Cold
10	MRS1_SS146_1.0 30-Jun-2025	Soil	GSoil300	Hold Cold
11	MRS1_SS147_0.0 30-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
12	MRS1_SS351_0.0 30-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
13	MRS1_SS351_0.3 30-Jun-2025	Soil	GSoil300	Hold Cold
14	MRS1 SS351 0 5 30 Jun 2025	Soil	GSoil300	Hold Cold
15	MRS1 SS352 0 0 30 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
16	MRS1 SS352 0 3 30 Jun 2025	Soil	GSoil300	Hold Cold
17	MRS1 SS352 0 5 30 Jun 2025	Soil	GSoil300	Hold Cold
18	MRS1 SS352 0 7 30 Jun 2025	Soil	GSoil300	Hold Cold
19	MRS1 SS352 1 0 30 Jun 2025	Soil	GSoil300	Hold Cold
20	MRS1 SS353 0 0 30 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
21	MRS1 SS353 0 3 30 Jun 2025	Soil	GSoil300	Hold Cold
22	MRS1_SS353_0.5 30-Jun-2025	Soil	GSoil300	Hold Cold
23	MRS1_SS353_0.7 30-Jun-2025	Soil	GSoil300	Hold Cold
24	MRS1_SS353_1.0 30-Jun-2025	Soil	GSoil300	Hold Cold
25	MRS1_SS354_0.0 30-Jun-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
26	MRS1_SS354_0.3 30-Jun-2025	Soil	GSoil300	Hold Cold
27	MRS1_SS354_0.5 30-Jun-2025	Soil	GSoil300	Hold Cold
28	MRS1_SS354_0.7 30-Jun-2025	Soil	GSoil300	Hold Cold
29	MRS1 SS354 1 0 30 Jun 2025	Soil	GSoil300	Hold Cold
30	MRS1 SS347 0 0 30 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level
31	MRS1 SS347 0 3 30 Jun 2025	Soil	GSoil300	Hold Cold
32	MRS1 SS347 0 5 30 Jun 2025	Soil	GSoil300	Hold Cold
33	MRS1 SS347 0 7 30 Jun 2025	Soil	GSoil300	Hold Cold
34	MRS1 SS347 1 0 30 Jun 2025	Soil	GSoil300	Hold Cold
35	MRS1 QA21 30 Jun 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1-2, 7, 11-12, 15, 20, 25, 30, 35
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1 2, 7, 11 12, 15, 20, 25, 30, 35

Hill Labs

ANALYSIS REQUEST

Quote No 138144

Primary Contact s9(2)(a)

Submitted By

Client Name Beca Ltd

Address

Postcode

Phone Mobile

Email

Charge To

Client Reference 3011550 / 200 / 2.1

Order No

Results To Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.

☒ Email Primary Contact ☐ Email Submitter ☐ Email Client

☐ Email Other

☐ Other

R J Hill Laboratories Limited
Ground Floor, 28 Heather Street
Parnell
Auckland 1052, New Zealand

Job No: 392 8411

Date Recv: 01-Jul-25 18:13

s9(2)(a)

Received by: s9(2)(a)

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories

Date & Time: 1/7/25 5pm

Name: s9(2)(a)

☐ Tick if you require COC to be emailed back

Signature: s9(2)(a)

Samples will be processed at a ... capability and capacity. Please ... retained and analysed at the sit...

Received at Hill Laboratories

Date

Nam

Sign

Temperature On Arrival

7.7 °C

Temperature was measured on one or more arbitrarily chosen samples in this batch.

ADDITIONAL INFORMATION

Priority ☐ Low ☒ Normal ☐ High

☐ Urgent (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRSI_SS357_0.0	SOIL		1/7/25	HM7, PA + NZG
2	MRSI_SS357_0.3				Hold Cold
3	MRSI_SS357_0.5				" "
4	MRSI_SS358_0.0				HM7, PA + NZG
5	MRSI_SS358_0.3				Hold Cold
6	MRSI_SS358_0.5				" "
7	MRSI_SS359_0.0				HM7, PA + NZG
8	MRSI_SS359_0.3				Hold Cold
9	MRSI_SS359_0.5				" "
10	MRSI_SS360_0.0				HM7 PA + NZG
11	MRSI_SS360_0.3				Hold Cold
12	MRSI_SS360_0.5				" "
13	MRSI_SS361_0.0				HM7, PA + NZG

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI-SS361-0.3	Soil		7/7/25	Hold Cold
15	MRSI_SS345_0.6				HM7, PA to N2G
16	MRSI-SS345-0.3				Hold Cold
17	MRSI-SS345-0.5				" "
18	MRSI_SS345_0.7				" "
19	MRSI_SS345_1.0				" "
20	MRSI_SS355_0.6				HM7, PA to N2G
21	MRSI_SS355_0.3				Hold Cold
22	MRSI_SS355_0.5				" "
23	MRSI_SS355_0.7				" "
24	MRSI_SS355_1.0				" "
25	MRSI_SS356_0.0				HM7, PA to N2G
26	MRSI_SS356_0.3				Hold Cold
27	MRSI_SS356_0.5				" "
28	MRSI_SS356_0.7				" "
29	MRSI_SS356_1.0				" "
30	MRSI_SS354_0.6				HM7, PA to N2G
31	MRSI_SS354_0.3				Hold Cold
32	MRSI_SS354_0.5				" "
33	MRSI_SS354_0.7				" "
34	MRSI_SS354_1.0				" "
35	MRSI_SS348_0.6				HM7, PA to N2G
36	MRSI_SS348_0.3				Hold Cold
37	MRSI_SS348_0.5				" "
38	MRSI_SS348_0.7				" "
39	MRSI_SS348_1.0				" "
40	MRSI_SS349_0.0				HM7, PA to N2G
41	MRSI_SS349_0.3				Hold Cold

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRSI - SS349 - 0.5	SOIL		7/7/25	Hold Cold
15	MRSI - SS349 0.7	↓	↓	↓	↓
16	MRSI - SS349 1.0				
17	MRSI - SS3~~49~~ SO - 0.0				HM7, PA to N2G
18	MRSI - SS3~~49~~ SO - 0.3				Hold Cold
19	MRSI - SS3~~49~~ SO - 0.5				↓
20	MRSI - SS3~~49~~ SO - 0.7				
21	MRSI - SS3~~49~~ SO - 1.0				
22	MRSI - SS 349 - 0.0				
23	MRSI - SS 349 - 0.3				
24	MRSI - SS 349 - 0.5				
25	MRSI - SS 349 - 0.7				
26	MRSI - SS 349 - 1.0				
27	MRSI - ~~SS~~QA22				HM7
28	MRSI - ~~SS~~QA23				↓
29	MRSI - QA24	↓		↓	
30	~~MRSI~~				
31	~~MRSI~~				
32	~~MRSI~~				
33					
34					
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3928411
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	03-Jul-2025 10:37 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	07-Jul-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS357 0 0 01 Jul 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
2	MRS1 SS357 0 3 01 Jul 2025	Soil	cGSoil	Hold Cold
3	MRS1 SS357 0 5 01 Jul 2025	Soil	cGSoil	Hold Cold
4	MRS1 SS358 0 0 01 Jul 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
5	MRS1 SS358 0 3 01 Jul 2025	Soil	cGSoil	Hold Cold
6	MRS1 SS358 0 5 01 Jul 2025	Soil	cGSoil	Hold Cold
7	MRS1_SS359_0.0 01-Jul-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
8	MRS1_SS359_0.3 01-Jul-2025	Soil	cGSoil	Hold Cold
9	MRS1_SS359_0.5 01-Jul-2025	Soil	cGSoil	Hold Cold
10	MRS1_SS360_0.0 01-Jul-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
11	MRS1_SS360_0.3 01-Jul-2025	Soil	cGSoil	Hold Cold
12	MRS1_SS360_0.5 01-Jul-2025	Soil	cGSoil	Hold Cold
13	MRS1_SS361_0.0 01-Jul-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
14	MRS1 SS361 0 3 01 Jul 2025	Soil	cGSoil	Hold Cold
15	MRS1 SS345 0 0 01 Jul 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
16	MRS1 SS345 0 3 01 Jul 2025	Soil	cGSoil	Hold Cold
17	MRS1 SS345 0 5 01 Jul 2025	Soil	cGSoil	Hold Cold
18	MRS1 SS345 0 7 01 Jul 2025	Soil	cGSoil	Hold Cold
19	MRS1 SS345 1 0 01 Jul 2025	Soil	cGSoil	Hold Cold
20	MRS1 SS355 0 0 01 Jul 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
21	MRS1 SS355 0 3 01 Jul 2025	Soil	cGSoil	Hold Cold
22	MRS1_SS355_0.5 01-Jul-2025	Soil	cGSoil	Hold Cold
23	MRS1_SS355_0.7 01-Jul-2025	Soil	cGSoil	Hold Cold
24	MRS1_SS355_1.0 01-Jul-2025	Soil	cGSoil	Hold Cold
25	MRS1_SS356_0.0 01-Jul-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
26	MRS1_SS356_0.3 01-Jul-2025	Soil	cGSoil	Hold Cold
27	MRS1_SS356_0.5 01-Jul-2025	Soil	cGSoil	Hold Cold
28	MRS1_SS356_0.7 01-Jul-2025	Soil	cGSoil	Hold Cold
29	MRS1 SS356 1 0 01 Jul 2025	Soil	cGSoil	Hold Cold
30	MRS1 SS354 0 0 01 Jul 2025	Soil	cGSoil	
31	MRS1 SS354 0 3 01 Jul 2025	Soil	cGSoil	
32	MRS1 SS354 0 5 01 Jul 2025	Soil	cGSoil	
33	MRS1 SS354 0 7 01 Jul 2025	Soil	cGSoil	
34	MRS1 SS354 1 0 01 Jul 2025	Soil	cGSoil	
35	MRS1 SS348 0 0 01 Jul 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
36	MRS1 SS348 0 3 01 Jul 2025	Soil	cGSoil	Hold Cold

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
37	MRS1_SS348_0.5 01-Jul-2025	Soil	cGSoil	Hold Cold
38	MRS1_SS348_0.7 01-Jul-2025	Soil	cGSoil	Hold Cold
39	MRS1_SS348_1.0 01-Jul-2025	Soil	cGSoil	Hold Cold
40	MRS1_SS349_0.0 01-Jul-2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
41	MRS1 SS349 0 3 01 Jul 2025	Soil	cGSoil	Hold Cold
42	MRS1 SS349 0 5 01 Jul 2025	Soil	cGSoil	Hold Cold
43	MRS1 SS349 0 7 01 Jul 2025	Soil	cGSoil	Hold Cold
44	MRS1 SS349 1 0 01 Jul 2025	Soil	cGSoil	Hold Cold
45	MRS1 SS350 0 0 01 Jul 2025	Soil	cGSoil	Heavy Metals with Mercury, Screen Level
46	MRS1 SS350 0 3 01 Jul 2025	Soil	cGSoil	Hold Cold
47	MRS1 SS350 0 5 01 Jul 2025	Soil	cGSoil	Hold Cold
48	MRS1 SS350 0 7 01 Jul 2025	Soil	cGSoil	Hold Cold
49	MRS1_SS350_1.0 01-Jul-2025	Soil	cGSoil	Hold Cold
50	MRS1_QA22 01-Jul-2025	Soil	cGSoil	Hold Cold
51	MRS1_QA23 01-Jul-2025	Soil	cGSoil	Hold Cold
52	MRS1_QA24 01-Jul-2025	Soil	cGSoil	Hold Cold
53	MRS1_SS346_0.0 01-Jul-2025	Soil	cGSoil	Hold Cold
54	MRS1_SS346_0.3 01-Jul-2025	Soil	cGSoil	Hold Cold
55	MRS1_SS346_0.5 01-Jul-2025	Soil	cGSoil	Hold Cold
56	MRS1 SS346 0 7 01 Jul 2025	Soil	cGSoil	Hold Cold
57	MRS1 SS346 1 0 01 Jul 2025	Soil	cGSoil	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 15, 20, 25, 35, 40, 45
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 15, 20, 25, 35, 40, 45

Hill Labs

ANALYSIS REQUEST

Quote No 138144

Primary Contact s9(2)(a)

Submitted By

Client Name Beca

Address

Postcode

Phone Mobile

Email s9(2)(a)

Charge To 3011550 / 200 / 2.1

Client Reference

Order No

Results To Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.

☒ Email Primary Contact ☑ Email Submitter ☐ Email Client

☑ Email Other s9(2)(a)

☑ Other

R J Hill Laboratories Limited
Ground Floor, 28 Heather Stree Job No: 392 9413
Parnell
Auckland 1052, New Zealand

Date Recv: 02-Jul-25 16:33

s9(2)(a)

Received by: s9(2)(a)

CHAIN OF CUSTODY RECORD

Sent to Laboratories ☑ Tick if you require COC to be emailed back

Date & Time: 2/7

Name: s9(2)(a)

Signature:

Samples will be processed at a H. capability and capacity. Please int retained and analysed at the site

Received at Hill Laboratories Date & Name: Signat

Temperature On Arrival

8.0 °C

Temperature was measured on one or more arbitrarily chosen samples in this batch.

ADDITIONAL INFORMATION

Priority ☐ Low ☒ Normal ☐ High

☐ Urgent (ASAP, extra charge applies, please contact lab first)

Requested Reporting Date:

*Please ensure all asbestos samples are **individually double bagged** upon submission to the laboratory.*

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
1	MRS1_SS362_0.0	Soil		2/7	HM8, PAH, TPH, PA + N2
2	MRS1_SS362_0.5				Hold Cold
3	MRS1_SS362_0.5				Hold Cold
4	MRS1_SS364_0.0				HM8, PAH, TPH, PA + N
5	MRS1_SS365_0.0				
6	MRS1_SS366_0.0				
7	MRS1_SS367_0.0				
8	MRS1_SS368_0.0				
9	MRS1_SS369_0.0				
10	MRS1_SS370_0.0				
11	MRS1_SS371_0.0				
12	MRS1_SS372_0.0				
13	MRS1_SS373_0.0				

No.	Sample Name	Sample Material	Sample Location	Sample Date	Tests Required (if not as per Quote)
14	MRS1_SS373_0.3	Soil		2/7	Hold Cold
15	MRS1_SS373_0.5				" "
16	MRS1_SS374_0.0				HM8, PAH, TPH, PA to NZ
17	MRS1_SS374_0.3				Hold Cold
18	MRS1_SS375_0.0				HM8, PAH, TPH, PA to NZG
19	MRS1_SS376_0.0				
20	MRS1_SS377_0.0				
21	MRS1_SS378_0.0				
22	MRS1_SS378_0.3				Hold Cold
23	MRS1_SS379_0.0				HM8, PAH, TPH, PA to NZ
24	MRS1_SS380_0.0				
25	MRS1_SS381_0.0				
26	MRS1_SS381_0.3				Hold Cold
27	MRS1_SS382_0.0				HM8, PAH, TPH, PA to NZ
28	MRS1_SS382_0.3				
29	MRS1_SS382_0.5				
30	QA MRS1_QA25				HM8, PAH, TPH
31	MRS1_QA26				
32	MRS1_QA27				
33					
34					
35					
36					
37					
38					
39					
40					
41					

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Job Information Summary

Client:	Beca Limited	**Lab No:**	3929413
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Registered:**	03-Jul-2025 10:45 am
		Priority:	High
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Add. Client Ref:	
		Submitted By:	s9(2)(a)
		Charge To:	Beca Limited
		Target Date*:	08-Jul-2025 4:30 pm

* As the samples require analysis at a Hill Labs location that is different to where they were received, the Target Date for reporting has been extended

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	MRS1 SS362 0 0 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
2	MRS1_SS362_0.3 02-Jul-2025	Soil	GSoil300	Hold Cold
3	MRS1_SS362_0.5 02-Jul-2025	Soil	GSoil300	Hold Cold
4	MRS1 SS364 0 0 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
5	MRS1_SS365_0.0 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
6	MRS1 SS366 0 0 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
7	MRS1 SS367 0 0 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
8	MRS1_SS368_0.0 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
9	MRS1_SS369_0.0 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
10	MRS1 SS370 0 0 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
11	MRS1 SS371 0 0 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
12	MRS1_SS372_0.0 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
13	MRS1_SS373_0.0 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
14	MRS1 SS373 0 3 02 Jul 2025	Soil	GSoil300	Hold Cold
15	MRS1 SS373 0 5 02 Jul 2025	Soil	GSoil300	Hold Cold
16	MRS1_SS374_0.0 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
17	MRS1 SS374 0 3 02 Jul 2025	Soil	GSoil300	Hold Cold
18	MRS1 SS375 0 0 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
19	MRS1 SS376 0 0 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
20	MRS1_SS377_0.0 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
21	MRS1_SS378_0.0 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
22	MRS1 SS378 0 3 02 Jul 2025	Soil	GSoil300	Hold Cold
23	MRS1 SS379 0 0 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
24	MRS1 SS380 0 0 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
25	MRS1_SS381_0.0 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
26	MRS1 SS381 0 3 02 Jul 2025	Soil	GSoil300	Hold Cold
27	MRS1_SS382_0.0 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
28	MRS1 SS382 0 3 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
29	MRS1 SS382 0 5 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
30	MRS1_QA25 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
31	MRS1_QA26 02-Jul-2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen
32	MRS1 QA27 02 Jul 2025	Soil	GSoil300	Heavy Metals with Mercury, Screen Level, TPH Oil Industry Profile + PAHscreen

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4-13, 16, 18-21, 23 25, 27-32
Total of Reported PAHs in Soil	Sonication extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.03 mg/kg dry wt	1, 4-13, 16, 18-21, 23 25, 27-32
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	1, 4 13, 16, 18 21, 23-25, 27 32
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES	BaP Potency Equivalence calculated from; Benzo(a) anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(j) fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Benzo(a) pyrene x 1.0 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Fluoranthene x 0.01 + Indeno(1,2,3-c,d)pyrene x 0.1. Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.	0.024 mg/kg dry wt	1, 4-13, 16, 18-21, 23 25, 27-32
Benzo[a]pyrene Toxic Equivalence (TEF)	Benzo[a]pyrene Toxic Equivalence (TEF) calculated from; Benzo[a]pyrene x 1.0 + Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Indeno(1,2,3-c,d)pyrene x 0.1. Guidelines for assessing and managing contaminated gasworks sites in New Zealand (GMG) (MfE, 1997).	0.024 mg/kg dry wt	1, 4 13, 16, 18 21, 23-25, 27 32
TPH Oil Industry Profile + PAHscreen	Sonication extraction, GC-FID and GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8015 and US EPA 8270.	0.010 - 70 mg/kg dry wt	1, 4 13, 16, 18 21, 23-25, 27 32
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4-13, 16, 18-21, 23 25, 27-32
Total Petroleum Hydrocarbons in Soil			
Client Chromatogram for TPH by FID	Small peaks associated with QC compounds may be visible in chromatograms with low TPH concentrations. QC peaks are as follows: one peak in the C12 - 14 band, the C21 - 25 band and the C30 - 36 band. All QC peaks are corrected for in the reported TPH concentrations.	-	1, 4-13, 16, 18-21, 23 25, 27-32

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
C7 - C9	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	1, 4 13, 16, 18 21, 23-25, 27 32
C10 - C14	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	1, 4 13, 16, 18 21, 23-25, 27 32
C15 - C36	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	40 mg/kg dry wt	1, 4-13, 16, 18-21, 23 25, 27-32
Total hydrocarbons (C7 - C36)	Calculation: Sum of carbon bands from C7 to C36. In-house based on US EPA 8015.	70 mg/kg dry wt	1, 4 13, 16, 18 21, 23-25, 27 32

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3901616 SPv1
Contact:	s9(2)(a)	**Date Received:**	28-May-2025
	C/- Beca Limited	**Date Reported:**	03-Jun-2025
	PO Box 6345	**Quote No:**	138144
	Wellesley Street	**Order No:**	3011550/200/2.1
	Auckland 1141	**Client Reference:**	3011550/200/2.1
		Submitted By:	s9(2)(a)

Sample Type: Soil

	Sample Name:	MRS1_SS01_0.0 27-May-2025	MRS1_SS02_0.0 27-May-2025	MRS1_SS03_0.0 27-May-2025	MRS1_SS04_0.0 25-May-2025	MRS1_SS05_0.0 25-May-2025
	Lab Number:	3901616.1	3901616.4	3901616.7	3901616.10	3901616.13
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	7	8	7	5	5
Total Recoverable Cadmium	mg/kg dry wt	0.52	0.57	0.66	0.31	0.14
Total Recoverable Chromium	mg/kg dry wt	16	35	26	21	17
Total Recoverable Copper	mg/kg dry wt	44	21	15	7	8
Total Recoverable Lead	mg/kg dry wt	16.3	18.3	19.5	8.9	10.3
Total Recoverable Nickel	mg/kg dry wt	10	34	19	4	6
Total Recoverable Zinc	mg/kg dry wt	90	65	55	26	22

	Sample Name:	MRS1_SS06_0.0 25-May-2025	MRS1_SS07_0.0 25-May-2025	MRS1_SS08_0.0 25-May-2025	MRS1_SS09_0.0 25-May-2025	MRS1_SS10_0.0 25-May-2025
	Lab Number:	3901616.16	3901616.19	3901616.22	3901616.23	3901616.26
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	9	6	9	6
Total Recoverable Cadmium	mg/kg dry wt	0.27	0.19	0.20	0.11	0.23
Total Recoverable Chromium	mg/kg dry wt	23	24	20	19	26
Total Recoverable Copper	mg/kg dry wt	11	17	88	16	17
Total Recoverable Lead	mg/kg dry wt	17.8	17.9	21	14.2	19.1
Total Recoverable Nickel	mg/kg dry wt	4	7	4	11	13
Total Recoverable Zinc	mg/kg dry wt	35	61	80	88	54

	Sample Name:	MRS1_SS11_0.0 25-May-2025	MRS1_SS12_0.0 25-May-2025	MRS1_SS13_0.0 27-May-2025	MRS1_SS14_0.0 27-May-2025	MRS1_SS16_0.0 27-May-2025
	Lab Number:	3901616.29	3901616.32	3901616.35	3901616.38	3901616.41
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	23	3	4	14	6
Total Recoverable Cadmium	mg/kg dry wt	0.30	< 0.10	0.33	0.36	0.29
Total Recoverable Chromium	mg/kg dry wt	22	11	13	41	30
Total Recoverable Copper	mg/kg dry wt	22	5	23	31	15
Total Recoverable Lead	mg/kg dry wt	28	6.0	51	40	24
Total Recoverable Nickel	mg/kg dry wt	9	3	4	22	14
Total Recoverable Zinc	mg/kg dry wt	71	31	87	176	47

	Sample Name:	MRS1_SS17_0.0 27-May-2025	MRS1_SS18_0.0 27-May-2025	MRS1_SS19_0.0 27-May-2025	MRS1_SS20_0.0 27-May-2025	MRS1_SS21_0.0 27-May-2025
	Lab Number:	3901616.44	3901616.47	3901616.50	3901616.53	3901616.56
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	9	5	4	5	3
Total Recoverable Cadmium	mg/kg dry wt	0.35	0.21	0.20	0.20	< 0.10
Total Recoverable Chromium	mg/kg dry wt	34	26	22	21	13
Total Recoverable Copper	mg/kg dry wt	30	16	11	10	8
Total Recoverable Lead	mg/kg dry wt	34	24	23	49	13.7

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		MRS1_SS17_0.0 27-May-2025	MRS1_SS18_0.0 27-May-2025	MRS1_SS19_0.0 27-May-2025	MRS1_SS20_0.0 27-May-2025	MRS1_SS21_0.0 27-May-2025
Lab Number:		3901616.44	3901616.47	3901616.50	3901616.53	3901616.56
Heavy Metals, Screen Level						
Total Recoverable Nickel	mg/kg dry wt	17	26	9	11	6
Total Recoverable Zinc	mg/kg dry wt	70	60	51	48	22

Sample Name:		MRS1_SS38_0.0 25-May-2025	MRS1_SS39_0.0 25-May-2025	MRS1_SS40_0.0 25-May-2025	MRS1_SS44_0.0 25-May-2025	MRS1_SS45_0.0 25-May-2025
Lab Number:		3901616.59	3901616.62	3901616.65	3901616.68	3901616.71
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	3	3	3	5	5
Total Recoverable Cadmium	mg/kg dry wt	0.11	< 0.10	0.18	0.12	0.27
Total Recoverable Chromium	mg/kg dry wt	16	12	25	17	19
Total Recoverable Copper	mg/kg dry wt	10	10	12	14	19
Total Recoverable Lead	mg/kg dry wt	14.1	14.0	17.1	12.8	22
Total Recoverable Nickel	mg/kg dry wt	9	6	19	19	13
Total Recoverable Zinc	mg/kg dry wt	31	25	46	42	73

Sample Name:		MRS1_SS46_0.0 25-May-2025	MRS1_SS47_0.0 25-May-2025	QA01 25-May-2025	QA02 25-May-2025	QA03 25-May-2025
Lab Number:		3901616.74	3901616.77	3901616.80	3901616.81	3901616.82
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	7	8	7	5
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	0.19	0.74	0.20	0.23
Total Recoverable Chromium	mg/kg dry wt	10	22	30	21	26
Total Recoverable Copper	mg/kg dry wt	15	19	18	29	17
Total Recoverable Lead	mg/kg dry wt	8.6	19.6	19.5	21	22
Total Recoverable Nickel	mg/kg dry wt	4	9	22	9	29
Total Recoverable Zinc	mg/kg dry wt	30	56	59	53	60

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22-23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, 59, 62, 65, 68, 71, 74, 77, 80-82
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22-23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, 59, 62, 65, 68, 71, 74, 77, 80-82

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 29-May-2025 and 03-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

s9(2)(a)

s9(2)(a)
Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3902196 SPv1
Contact:	s9(2)(a)	**Date Received:**	28-May-2025
	C/- Beca Limited	**Date Reported:**	04-Jun-2025
	PO Box 6345	**Quote No:**	138144
	Wellesley Street	**Order No:**	3011550/200/2.1
	Auckland 1141	**Client Reference:**	3011550/200/2.1
		Submitted By:	s9(2)(a)

Sample Type: Soil

	Sample Name:	MRS1_SS22_0.0 28-May-2025	MRS1_SS23_0.0 28-May-2025	MRS1_SS24_0.0 28-May-2025	MRS1_SS25_0.0 28-May-2025	MRS1_SS26_0.0 28-May-2025
	Lab Number:	3902196.1	3902196.4	3902196.7	3902196.10	3902196.13
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	3	4	4	3
Total Recoverable Cadmium	mg/kg dry wt	0.13	0.12	0.17	0.10	< 0.10
Total Recoverable Chromium	mg/kg dry wt	19	20	22	27	18
Total Recoverable Copper	mg/kg dry wt	13	9	11	10	9
Total Recoverable Lead	mg/kg dry wt	10.3	11.6	11.0	17.7	12.1
Total Recoverable Nickel	mg/kg dry wt	16	9	15	12	11
Total Recoverable Zinc	mg/kg dry wt	32	27	36	27	25

	Sample Name:	MRS1_SS27_0.0 28-May-2025	MRS1_SS28_0.0 28-May-2025	MRS1_SS29_0.5 28-May-2025	MRS1_SS30_0.0 28-May-2025	MRS1_SS31_0.0 28-May-2025
	Lab Number:	3902196.16	3902196.19	3902196.22	3902196.23	3902196.26
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	3	8	2	3
Total Recoverable Cadmium	mg/kg dry wt	0.14	0.28	0.15	< 0.10	0.10
Total Recoverable Chromium	mg/kg dry wt	18	15	36	18	22
Total Recoverable Copper	mg/kg dry wt	10	6	19	6	16
Total Recoverable Lead	mg/kg dry wt	14.7	16.5	14.8	13.3	18.5
Total Recoverable Nickel	mg/kg dry wt	10	8	30	6	13
Total Recoverable Zinc	mg/kg dry wt	41	31	68	16	34

	Sample Name:	MRS1_SS32_0.0 28-May-2025	MRS1_SS33_0.0 28-May-2025	MRS1_SS34_0.0 28-May-2025	MRS1_SS36_0.0 28-May-2025	MRS1_SS37_0.0 28-May-2025
	Lab Number:	3902196.29	3902196.30	3902196.33	3902196.37	3902196.40
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	5	4	3	5
Total Recoverable Cadmium	mg/kg dry wt	0.11	0.15	0.12	0.20	0.16
Total Recoverable Chromium	mg/kg dry wt	25	34	25	15	11
Total Recoverable Copper	mg/kg dry wt	23	25	21	13	13
Total Recoverable Lead	mg/kg dry wt	25	31	20	28	8.7
Total Recoverable Nickel	mg/kg dry wt	33	28	34	9	5
Total Recoverable Zinc	mg/kg dry wt	51	60	46	45	54

	Sample Name:	MRS1_SS48_0.0 28-May-2025	MRS1_SS49_0.0 28-May-2025	MRS1_SS50_0.0 28-May-2025	MRS1_SS51_0.0 28-May-2025	MRS1_SS52_0.0 28-May-2025
	Lab Number:	3902196.43	3902196.46	3902196.49	3902196.52	3902196.55
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	6	8	7	4
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	0.15	0.19	0.37	0.14
Total Recoverable Chromium	mg/kg dry wt	19	17	20	19	22
Total Recoverable Copper	mg/kg dry wt	17	27	27	95	16
Total Recoverable Lead	mg/kg dry wt	14.2	29	31	87	22

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		MRS1_SS48_0.0 28-May-2025	MRS1_SS49_0.0 28-May-2025	MRS1_SS50_0.0 28-May-2025	MRS1_SS51_0.0 28-May-2025	MRS1_SS52_0.0 28-May-2025
Lab Number:		3902196.43	3902196.46	3902196.49	3902196.52	3902196.55
Heavy Metals, Screen Level						
Total Recoverable Nickel	mg/kg dry wt	12	10	15	10	16
Total Recoverable Zinc	mg/kg dry wt	37	53	58	102	43

Sample Name:		MRS1_SS53_0.0 28-May-2025	MRS1_SS54_0.0 28-May-2025	MRS1_SS55_0.0 28-May-2025	MRS1_SS56_0.0 28-May-2025	MRS1_SS57_0.0 28-May-2025
Lab Number:		3902196.58	3902196.59	3902196.62	3902196.65	3902196.68
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	4	4	5	4
Total Recoverable Cadmium	mg/kg dry wt	0.14	0.14	0.14	0.13	0.16
Total Recoverable Chromium	mg/kg dry wt	26	27	27	25	19
Total Recoverable Copper	mg/kg dry wt	17	16	15	16	15
Total Recoverable Lead	mg/kg dry wt	25	29	25	26	26
Total Recoverable Nickel	mg/kg dry wt	21	17	17	19	11
Total Recoverable Zinc	mg/kg dry wt	54	57	55	53	48

Sample Name:		MRS1_SS58_0.0 28-May-2025	MRS1_SS59_0.0 28-May-2025	MRS1_SS60_0.0 28-May-2025	MRS1_SS61_0.0 28-May-2025	MRS1_SS62_0.0 28-May-2025
Lab Number:		3902196.71	3902196.74	3902196.77	3902196.80	3902196.83
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	7	10	8	8
Total Recoverable Cadmium	mg/kg dry wt	0.23	0.21	0.24	0.18	0.29
Total Recoverable Chromium	mg/kg dry wt	21	23	27	20	25
Total Recoverable Copper	mg/kg dry wt	20	20	22	19	21
Total Recoverable Lead	mg/kg dry wt	46	61	50	33	29
Total Recoverable Nickel	mg/kg dry wt	17	16	18	12	18
Total Recoverable Zinc	mg/kg dry wt	74	133	123	70	109

Sample Name:		MRS1_SS63_0.0 28-May-2025	MRS1_QA04 28-May-2025	MRS1_QA05 28-May-2025	MRS1_QA06 28-May-2025
Lab Number:		3902196.86	3902196.89	3902196.90	3902196.91
Heavy Metals, Screen Level					
Total Recoverable Arsenic	mg/kg dry wt	9	4	4	5
Total Recoverable Cadmium	mg/kg dry wt	0.38	0.12	0.14	0.12
Total Recoverable Chromium	mg/kg dry wt	28	19	28	22
Total Recoverable Copper	mg/kg dry wt	26	8	24	15
Total Recoverable Lead	mg/kg dry wt	56	14.1	30	22
Total Recoverable Nickel	mg/kg dry wt	16	10	25	23
Total Recoverable Zinc	mg/kg dry wt	189	27	52	47

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22-23, 26, 29-30, 33, 37, 40, 43, 46, 49, 52, 55, 58-59, 62, 65, 68, 71, 74, 77, 80, 83, 86, 89-91

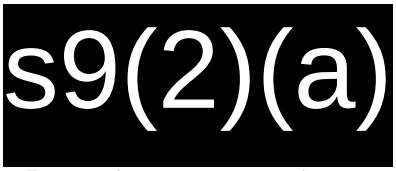
Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22-23, 26, 29-30, 33, 37, 40, 43, 46, 49, 52, 55, 58-59, 62, 65, 68, 71, 74, 77, 80, 83, 86, 89-91

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 30-May-2025 and 04-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.



Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3903454 SPv1
Contact:	s9(2)(a) C/- Beca Limited PO Box 6345 Wellesley Street Auckland 1141	**Date Received:**	29-May-2025
		Date Reported:	04-Jun-2025
		Quote No:	138144
		Order No:	3011550/200/2.1
		Client Reference:	3011550/200/2.1
		Submitted By:	s9(2)(a)

Sample Type: Soil

	Sample Name:	MRS1_SS64_0.0 29-May-2025	MRS1_SS65_0.0 29-May-2025	MRS1_SS66_0.0 29-May-2025	MRS1_SS67_0.0 29-May-2025	MRS1_SS68_0.0 29-May-2025
	Lab Number:	3903454.1	3903454.4	3903454.7	3903454.10	3903454.13
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	5	5	4	4
Total Recoverable Cadmium	mg/kg dry wt	0.23	0.18	0.26	0.14	0.16
Total Recoverable Chromium	mg/kg dry wt	29	24	32	15	21
Total Recoverable Copper	mg/kg dry wt	12	16	14	8	9
Total Recoverable Lead	mg/kg dry wt	12.5	61	32	16.1	18.1
Total Recoverable Nickel	mg/kg dry wt	18	15	14	5	9
Total Recoverable Zinc	mg/kg dry wt	67	68	60	26	45

	Sample Name:	MRS1_SS69_0.0 29-May-2025	MRS1_SS70_0.0 29-May-2025	MRS1_SS71_0.0 29-May-2025	MRS1_SS72_0.0 29-May-2025	MRS1_SS73_0.0 29-May-2025
	Lab Number:	3903454.16	3903454.19	3903454.22	3903454.25	3903454.28
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	3	8	6	6	5
Total Recoverable Cadmium	mg/kg dry wt	0.13	0.28	< 0.10	0.29	< 0.10
Total Recoverable Chromium	mg/kg dry wt	12	39	21	42	17
Total Recoverable Copper	mg/kg dry wt	7	26	26	37	11
Total Recoverable Lead	mg/kg dry wt	26	30	30	46	23
Total Recoverable Nickel	mg/kg dry wt	5	29	13	30	9
Total Recoverable Zinc	mg/kg dry wt	27	76	40	97	46

	Sample Name:	MRS1_SS74_0.0 29-May-2025	MRS1_SS75_0.0 29-May-2025	MRS1_SS76_0.0 29-May-2025	MRS1_SS77_0.0 29-May-2025	MRS1_SS78_0.0 29-May-2025
	Lab Number:	3903454.31	3903454.34	3903454.37	3903454.40	3903454.43
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	7	7	4	8
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	0.15	0.26	0.10	0.12
Total Recoverable Chromium	mg/kg dry wt	15	17	20	18	26
Total Recoverable Copper	mg/kg dry wt	15	13	25	13	18
Total Recoverable Lead	mg/kg dry wt	22	27	41	34	123
Total Recoverable Nickel	mg/kg dry wt	10	10	19	8	11
Total Recoverable Zinc	mg/kg dry wt	38	43	145	53	51

	Sample Name:	MRS1_SS79_0.0 29-May-2025	MRS1_SS80_0.0 29-May-2025	MRS1_SS81_0.0 29-May-2025	MRS1_SS82_0.0 29-May-2025	MRS1_SS84_0.0 29-May-2025
	Lab Number:	3903454.46	3903454.49	3903454.52	3903454.55	3903454.58
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	6	3	15	11
Total Recoverable Cadmium	mg/kg dry wt	0.23	0.17	0.12	0.36	0.84
Total Recoverable Chromium	mg/kg dry wt	44	34	20	25	80
Total Recoverable Copper	mg/kg dry wt	18	17	18	55	65
Total Recoverable Lead	mg/kg dry wt	25	45	25	52	82

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		MRS1_SS79_0.0 29-May-2025	MRS1_SS80_0.0 29-May-2025	MRS1_SS81_0.0 29-May-2025	MRS1_SS82_0.0 29-May-2025	MRS1_SS84_0.0 29-May-2025
Lab Number:		3903454.46	3903454.49	3903454.52	3903454.55	3903454.58
Heavy Metals, Screen Level						
Total Recoverable Nickel	mg/kg dry wt	19	15	9	14	26
Total Recoverable Zinc	mg/kg dry wt	62	61	25	129	250

Sample Name:		MRS1_SS85_0.0 29-May-2025	MRS1_SS86_0.0 29-May-2025	MRS1_SS87_0.0 29-May-2025	MRS1_SS88_0.0 29-May-2025	MRS1_SS89_0.0 29-May-2025
Lab Number:		3903454.61	3903454.64	3903454.67	3903454.70	3903454.71
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	8	8	4	4	4
Total Recoverable Cadmium	mg/kg dry wt	0.70	0.57	0.15	0.16	0.14
Total Recoverable Chromium	mg/kg dry wt	66	39	20	19	17
Total Recoverable Copper	mg/kg dry wt	67	60	12	13	15
Total Recoverable Lead	mg/kg dry wt	82	68	63	41	75
Total Recoverable Nickel	mg/kg dry wt	23	16	13	12	17
Total Recoverable Zinc	mg/kg dry wt	192	173	60	42	68

Sample Name:		MRS1_SS90_0.0 29-May-2025	MRS1_SS91_0.0 29-May-2025	MRS1_SS92_0.0 29-May-2025	MRS1_QA07 29-May-2025	MRS1_QA08 29-May-2025
Lab Number:		3903454.74	3903454.76	3903454.79	3903454.82	3903454.83
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	9	6	7	7	4
Total Recoverable Cadmium	mg/kg dry wt	0.22	0.16	0.29	0.15	< 0.10
Total Recoverable Chromium	mg/kg dry wt	22	19	23	17	18
Total Recoverable Copper	mg/kg dry wt	31	17	68	13	14
Total Recoverable Lead	mg/kg dry wt	95	62	109	25	34
Total Recoverable Nickel	mg/kg dry wt	18	17	17	10	9
Total Recoverable Zinc	mg/kg dry wt	114	69	141	41	53

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

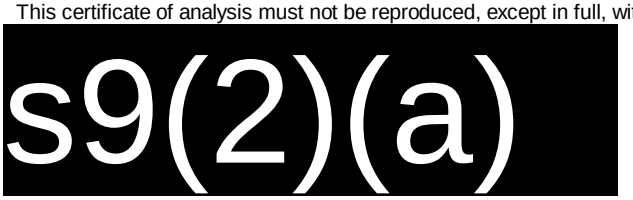
Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 64, 67, 70-71, 74, 76, 79, 82-83
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 64, 67, 70-71, 74, 76, 79, 82-83

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 31-May-2025 and 04-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.



Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3907851 SPv1
Contact:	s9(2)(a)	**Date Received:**	04-Jun-2025
	C/- Beca Limited	**Date Reported:**	09-Jun-2025
	PO Box 6345	**Quote No:**	138144
	Wellesley Street	**Order No:**	3011550/200/2.1
	Auckland 1141	**Client Reference:**	3011550/200/2.1
		Submitted By:	s9(2)(a)

Sample Type: Soil

		Sample Name:	MRS1_SS93_0.0 03-Jun-2025	MRS1_SS94_0.0 03-Jun-2025	MRS1_SS96_0.0 03-Jun-2025	MRS1_SS97_0.0 03-Jun-2025	MRS1_SS98_0.0 03-Jun-2025
		Lab Number:	3907851.1	3907851.2	3907851.5	3907851.8	3907851.11
Heavy Metals, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		7	4	8	3	6
Total Recoverable Cadmium	mg/kg dry wt		0.23	0.14	0.13	0.17	0.16
Total Recoverable Chromium	mg/kg dry wt		33	19	35	48	30
Total Recoverable Copper	mg/kg dry wt		18	12	20	22	19
Total Recoverable Lead	mg/kg dry wt		64	23	17.6	13.8	14.1
Total Recoverable Nickel	mg/kg dry wt		12	15	23	34	22
Total Recoverable Zinc	mg/kg dry wt		86	36	57	64	59

		Sample Name:	MRS1_SS99_0.0 03-Jun-2025	MRS1_SS100_0.0 03-Jun-2025	MRS1_SS101_0.0 03-Jun-2025	MRS1_SS102_0.0 03-Jun-2025	MRS1_SS103_0.0 03-Jun-2025
		Lab Number:	3907851.14	3907851.17	3907851.20	3907851.23	3907851.26
Heavy Metals, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		6	4	4	5	4
Total Recoverable Cadmium	mg/kg dry wt		< 0.10	< 0.10	< 0.10	< 0.10	0.16
Total Recoverable Chromium	mg/kg dry wt		25	14	14	9	21
Total Recoverable Copper	mg/kg dry wt		16	11	12	8	29
Total Recoverable Lead	mg/kg dry wt		16.1	30	48	8.5	41
Total Recoverable Nickel	mg/kg dry wt		13	7	10	2	76
Total Recoverable Zinc	mg/kg dry wt		38	35	38	13	83

		Sample Name:	MRS1_SS105_0.0 03-Jun-2025	MRS1_SS106_0.0 03-Jun-2025	MRS1_SS107_0.0 03-Jun-2025	MRS1_SS108_0.0 03-Jun-2025	MRS1_SS109_0.0 03-Jun-2025
		Lab Number:	3907851.29	3907851.32	3907851.35	3907851.38	3907851.41
Heavy Metals, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		5	5	6	9	3
Total Recoverable Cadmium	mg/kg dry wt		0.10	< 0.10	0.14	0.13	0.13
Total Recoverable Chromium	mg/kg dry wt		18	16	22	23	14
Total Recoverable Copper	mg/kg dry wt		19	13	14	16	7
Total Recoverable Lead	mg/kg dry wt		410	23	48	28	18.9
Total Recoverable Nickel	mg/kg dry wt		7	5	12	10	6
Total Recoverable Zinc	mg/kg dry wt		48	27	47	40	23

		Sample Name:	MRS1_SS112_0.0 03-Jun-2025	MRS1_SS113_0.0 03-Jun-2025	MRS1_SS114_0.0 03-Jun-2025	MRS1_SS115_0.0 03-Jun-2025	MRS1_SS116_0.0 03-Jun-2025
		Lab Number:	3907851.44	3907851.47	3907851.50	3907851.53	3907851.56
Heavy Metals, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		7	3	4	4	3
Total Recoverable Cadmium	mg/kg dry wt		0.20	0.13	< 0.10	0.27	0.21
Total Recoverable Chromium	mg/kg dry wt		31	18	21	23	22
Total Recoverable Copper	mg/kg dry wt		21	12	8	12	16
Total Recoverable Lead	mg/kg dry wt		44	21	24	54	250

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		MRS1_SS112_0.0 03-Jun-2025	MRS1_SS113_0.0 03-Jun-2025	MRS1_SS114_0.0 03-Jun-2025	MRS1_SS115_0.0 03-Jun-2025	MRS1_SS116_0.0 03-Jun-2025
Lab Number:		3907851.44	3907851.47	3907851.50	3907851.53	3907851.56
Heavy Metals, Screen Level						
Total Recoverable Nickel	mg/kg dry wt	29	6	7	12	11
Total Recoverable Zinc	mg/kg dry wt	57	47	26	54	138

Sample Name:		MRS1_QA09 03-Jun-2025	MRS1_QA10 03-Jun-2025
Lab Number:		3907851.59	3907851.60
Heavy Metals, Screen Level			
Total Recoverable Arsenic	mg/kg dry wt	4	5
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	0.10
Total Recoverable Chromium	mg/kg dry wt	13	21
Total Recoverable Copper	mg/kg dry wt	12	18
Total Recoverable Lead	mg/kg dry wt	28	76
Total Recoverable Nickel	mg/kg dry wt	5	11
Total Recoverable Zinc	mg/kg dry wt	28	49

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1-2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, 59-60
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1-2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, 59-60

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 05-Jun-2025 and 09-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

s9(2)(a)

Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3909082	SPv1
Contact:	s9(2)(a)	**Date Received:**	05-Jun-2025	
	C/- Beca Limited	**Date Reported:**	10-Jun-2025	
	PO Box 6345	**Quote No:**	138144	
	Wellesley Street	**Order No:**	3011550/200/2.1	
	Auckland 1141	**Client Reference:**	3011550/200/2.1	
		Submitted By:	s9(2)(a)	

Sample Type: Soil

		Sample Name:	MRS1_SS127_0.0 04-Jun-2025	MRS1_SS128_0.0 04-Jun-2025	MRS1_SS129_0.0 04-Jun-2025	MRS1_SS130_0.0 04-Jun-2025	MRS1_SS131_0.0 04-Jun-2025
		Lab Number:	3909082.1	3909082.2	3909082.7	3909082.12	3909082.16
Heavy Metals, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		29	13	3	10	8
Total Recoverable Cadmium	mg/kg dry wt		0.19	0.21	< 0.10	0.19	0.20
Total Recoverable Chromium	mg/kg dry wt		31	21	12	31	28
Total Recoverable Copper	mg/kg dry wt		45	24	6	28	36
Total Recoverable Lead	mg/kg dry wt		113	200	38	32	82
Total Recoverable Nickel	mg/kg dry wt		25	31	4	35	45
Total Recoverable Zinc	mg/kg dry wt		187	137	59	86	141

		Sample Name:	MRS1_SS132_0.0 04-Jun-2025	MRS1_SS133_0.0 04-Jun-2025	MRS1_SS134_0.0 04-Jun-2025	QA11 04-Jun-2025
		Lab Number:	3909082.18	3909082.20	3909082.21	3909082.22
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt		11	15	10	8
Total Recoverable Cadmium	mg/kg dry wt		0.53	0.18	0.13	0.20
Total Recoverable Chromium	mg/kg dry wt		37	41	35	29
Total Recoverable Copper	mg/kg dry wt		67	94	35	36
Total Recoverable Lead	mg/kg dry wt		96	33	24	84
Total Recoverable Nickel	mg/kg dry wt		58	59	63	42
Total Recoverable Zinc	mg/kg dry wt		220	210	139	137

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1-2, 7, 12, 16, 18, 20-22
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1-2, 7, 12, 16, 18, 20-22

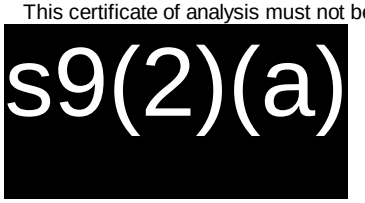
This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 06-Jun-2025 and 10-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.



Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3910155 SPv1
Contact:	s9(2)(a)	**Date Received:**	06-Jun-2025
	C/- Beca Limited	**Date Reported:**	11-Jun-2025
	PO Box 6345	**Quote No:**	138144
	Wellesley Street	**Order No:**	3011550/200/2.1
	Auckland 1141	**Client Reference:**	3011550/200/2.1
		Submitted By:	s9(2)(a)

Sample Type: Soil

		Sample Name:	MRS1_SS135_0.0 05-Jun-2025	MRS1_SS136_0.0 05-Jun-2025	MRS1_SS137_0.0 05-Jun-2025	MRS1_SS138_0.0 05-Jun-2025	MRS1_SS139_0.0 05-Jun-2025
		Lab Number:	3910155.1	3910155.2	3910155.3	3910155.4	3910155.5
Heavy Metals, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		18	11	13	8	3
Total Recoverable Cadmium	mg/kg dry wt		0.22	0.19	0.14	0.13	0.16
Total Recoverable Chromium	mg/kg dry wt		47	38	43	40	11
Total Recoverable Copper	mg/kg dry wt		74	46	47	44	6
Total Recoverable Lead	mg/kg dry wt		105	32	31	17.7	19.3
Total Recoverable Nickel	mg/kg dry wt		84	44	100	114	5
Total Recoverable Zinc	mg/kg dry wt		240	118	137	89	40

		Sample Name:	MRS1_SS140_0.0 05-Jun-2025	MRS1_SS141_0.0 05-Jun-2025	MRS1_SS142_0.0 05-Jun-2025	MRS1_SS143_0.0 05-Jun-2025	MRS1_SS167_0.0 05-Jun-2025
		Lab Number:	3910155.9	3910155.13	3910155.17	3910155.21	3910155.25
Heavy Metals, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		4	3	< 2	< 2	6
Total Recoverable Cadmium	mg/kg dry wt		0.15	0.17	0.12	< 0.10	< 0.10
Total Recoverable Chromium	mg/kg dry wt		9	15	8	7	19
Total Recoverable Copper	mg/kg dry wt		6	9	4	4	12
Total Recoverable Lead	mg/kg dry wt		22	29	17.6	12.8	23
Total Recoverable Nickel	mg/kg dry wt		3	8	4	3	11
Total Recoverable Zinc	mg/kg dry wt		28	56	28	16	32

		Sample Name:	MRS1_SS168_0.0 05-Jun-2025	MRS1_SS169_0.0 05-Jun-2025	MRS1_SS170_0.0 05-Jun-2025	MRS1_SS171_0.0 05-Jun-2025	MRS1_SS172_0.0 05-Jun-2025
		Lab Number:	3910155.28	3910155.31	3910155.34	3910155.37	3910155.40
Heavy Metals, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		5	3	4	3	6
Total Recoverable Cadmium	mg/kg dry wt		0.12	0.11	0.21	0.12	0.22
Total Recoverable Chromium	mg/kg dry wt		22	16	21	16	21
Total Recoverable Copper	mg/kg dry wt		10	6	9	6	10
Total Recoverable Lead	mg/kg dry wt		15.3	23	21	12.0	21
Total Recoverable Nickel	mg/kg dry wt		7	5	10	6	5
Total Recoverable Zinc	mg/kg dry wt		45	35	33	28	76

		Sample Name:	MRS1_SS173_0.0 05-Jun-2025	MRS1_QA12 05-Jun-2025	MRS1_QA13 05-Jun-2025	MRS1_QA14 05-Jun-2025
		Lab Number:	3910155.43	3910155.46	3910155.47	3910155.48
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt		6	4	6	2
Total Recoverable Cadmium	mg/kg dry wt		1.27	0.15	0.10	< 0.10
Total Recoverable Chromium	mg/kg dry wt		230	10	20	17
Total Recoverable Copper	mg/kg dry wt		79	7	14	5
Total Recoverable Lead	mg/kg dry wt		106	20	32	7.9

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil					
Sample Name:		MRS1_SS173_0.0 05-Jun-2025	MRS1_QA12 05-Jun-2025	MRS1_QA13 05-Jun-2025	MRS1_QA14 05-Jun-2025
Lab Number:		3910155.43	3910155.46	3910155.47	3910155.48
Heavy Metals, Screen Level					
Total Recoverable Nickel	mg/kg dry wt	23	5	12	4
Total Recoverable Zinc	mg/kg dry wt	240	41	39	9

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1-5, 7-9, 11-13, 15-17, 19-21, 23-25, 27-28, 30-31, 33-34, 36-37, 39-40, 43, 46-48
Environmental Solids Sample Preparation	Air dried at 35°C and sieved, <2mm fraction. Used for sample preparation May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	27, 30
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1-5, 9, 13, 17, 21, 25, 28, 31, 34, 37, 40, 43, 46-48

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 07-Jun-2025 and 11-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

s9(2)(a)

Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3910557 SPv1
Contact:	s9(2)(a)	**Date Received:**	06-Jun-2025
	C/- Beca Limited	**Date Reported:**	11-Jun-2025
	PO Box 6345	**Quote No:**	138144
	Wellesley Street	**Order No:**	3011550/200/2.1
	Auckland 1141	**Client Reference:**	3011550/200/2.1
		Submitted By:	s9(2)(a)

Sample Type: Soil

	Sample Name:	MRS1_SS149_0.0 06-Jun-2025	MRS1_SS150_0.0 06-Jun-2025	MRS1_SS151_0.0 06-Jun-2025	MRS1_SS152_0.0 06-Jun-2025	MRS1_SS153_0.0 06-Jun-2025
	Lab Number:	3910557.1	3910557.3	3910557.5	3910557.7	3910557.10
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	5	4	3	4
Total Recoverable Cadmium	mg/kg dry wt	0.36	0.38	0.54	0.23	0.18
Total Recoverable Chromium	mg/kg dry wt	19	24	19	9	12
Total Recoverable Copper	mg/kg dry wt	9	10	11	8	8
Total Recoverable Lead	mg/kg dry wt	22	18.4	16.3	11.3	10.8
Total Recoverable Nickel	mg/kg dry wt	13	14	13	5	5
Total Recoverable Zinc	mg/kg dry wt	47	38	43	39	37

	Sample Name:	MRS1_SS154_0.0 06-Jun-2025	MRS1_SS155_0.0 06-Jun-2025	MRS1_SS156_0.0 06-Jun-2025	MRS1_SS157_0.0 06-Jun-2025	MRS1_SS158_0.0 06-Jun-2025
	Lab Number:	3910557.13	3910557.15	3910557.17	3910557.19	3910557.21
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	3	4	6	3
Total Recoverable Cadmium	mg/kg dry wt	0.57	0.35	0.63	0.42	0.58
Total Recoverable Chromium	mg/kg dry wt	18	16	19	23	16
Total Recoverable Copper	mg/kg dry wt	7	7	9	9	7
Total Recoverable Lead	mg/kg dry wt	15.1	14.5	14.1	25	13.7
Total Recoverable Nickel	mg/kg dry wt	11	10	12	14	9
Total Recoverable Zinc	mg/kg dry wt	32	29	39	48	40

	Sample Name:	MRS1_SS159_0.0 06-Jun-2025	MRS1_SS160_0.0 06-Jun-2025	MRS1_SS161_0.0 06-Jun-2025	MRS1_SS162_0.0 06-Jun-2025	MRS1_QA15 06-Jun-2025
	Lab Number:	3910557.23	3910557.25	3910557.27	3910557.30	3910557.33
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	5	< 2	3	4
Total Recoverable Cadmium	mg/kg dry wt	0.65	1.16	0.55	< 0.10	0.56
Total Recoverable Chromium	mg/kg dry wt	23	26	5	10	21
Total Recoverable Copper	mg/kg dry wt	9	10	2	8	12
Total Recoverable Lead	mg/kg dry wt	14.7	18.4	6.8	17.0	18.1
Total Recoverable Nickel	mg/kg dry wt	14	14	< 2	7	14
Total Recoverable Zinc	mg/kg dry wt	37	48	10	26	45

	Sample Name:	MRS1_QA16 06-Jun-2025
	Lab Number:	3910557.34
Heavy Metals, Screen Level		
Total Recoverable Arsenic	mg/kg dry wt	3
Total Recoverable Cadmium	mg/kg dry wt	0.53
Total Recoverable Chromium	mg/kg dry wt	17
Total Recoverable Copper	mg/kg dry wt	7
Total Recoverable Lead	mg/kg dry wt	14.6

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil		
Sample Name:		MRS1_QA16 06-Jun-2025
Lab Number:		3910557.34
Heavy Metals, Screen Level		
Total Recoverable Nickel	mg/kg dry wt	9
Total Recoverable Zinc	mg/kg dry wt	40

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 3, 5, 7, 10, 13, 15, 17, 19, 21, 23, 25, 27, 30, 33-34
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 3, 5, 7, 10, 13, 15, 17, 19, 21, 23, 25, 27, 30, 33-34

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 10-Jun-2025 and 11-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

s9(2)(a)

Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3913641 SPv1
Contact:	s9(2)(a)	**Date Received:**	11-Jun-2025
	C/- Beca Limited	**Date Reported:**	16-Jun-2025
	PO Box 6345	**Quote No:**	138144
	Wellesley Street	**Order No:**	3011550/200/2.1
	Auckland 1141	**Client Reference:**	3011550/200/2.1
		Submitted By:	s9(2)(a)

Sample Type: Soil

		Sample Name:	MRS1_SS209_0.0 10-Jun-2025	MRS1_SS210_0.0 10-Jun-2025	MRS1_SS211_0.0 10-Jun-2025	MRS1_SS212_0.0 10-Jun-2025	MRS1_SS213_0.0 10-Jun-2025
		Lab Number:	3913641.1	3913641.4	3913641.7	3913641.10	3913641.11
Heavy Metals with Mercury, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		9	8	8	5	8
Total Recoverable Cadmium	mg/kg dry wt		0.13	0.30	0.14	< 0.10	< 0.10
Total Recoverable Chromium	mg/kg dry wt		18	12	30	25	16
Total Recoverable Copper	mg/kg dry wt		27	22	26	30	14
Total Recoverable Lead	mg/kg dry wt		23	12.0	16.7	44	19.2
Total Recoverable Mercury	mg/kg dry wt		< 0.10	0.10	< 0.10	< 0.10	< 0.10
Total Recoverable Nickel	mg/kg dry wt		21	10	68	60	10
Total Recoverable Zinc	mg/kg dry wt		84	113	98	85	36

		Sample Name:	MRS1_SS214_0.0 10-Jun-2025	MRS1_SS215_0.0 10-Jun-2025	MRS1_SS216_0.0 10-Jun-2025	MRS1_SS217_0.0 10-Jun-2025	MRS1_SS301_0.0 10-Jun-2025
		Lab Number:	3913641.14	3913641.17	3913641.20	3913641.23	3913641.26
Individual Tests							
Dry Matter	g/100g as rcvd		-	-	-	-	77
Heavy Metals with Mercury, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		11	7	4	4	4
Total Recoverable Cadmium	mg/kg dry wt		0.13	0.16	< 0.10	0.11	0.24
Total Recoverable Chromium	mg/kg dry wt		17	14	13	13	21
Total Recoverable Copper	mg/kg dry wt		16	17	10	13	16
Total Recoverable Lead	mg/kg dry wt		14.2	51	11.3	19.3	19.7
Total Recoverable Mercury	mg/kg dry wt		0.10	0.13	< 0.10	< 0.10	0.12
Total Recoverable Nickel	mg/kg dry wt		12	4	8	9	4
Total Recoverable Zinc	mg/kg dry wt		49	62	29	37	65
Polycyclic Aromatic Hydrocarbons Screening in Soil*							
Total of Reported PAHs in Soil	mg/kg dry wt		-	-	-	-	< 0.4
1-Methylnaphthalene	mg/kg dry wt		-	-	-	-	< 0.013
2-Methylnaphthalene	mg/kg dry wt		-	-	-	-	< 0.014
Acenaphthylene	mg/kg dry wt		-	-	-	-	< 0.013
Acenaphthene	mg/kg dry wt		-	-	-	-	< 0.013
Anthracene	mg/kg dry wt		-	-	-	-	< 0.013
Benzo[a]anthracene	mg/kg dry wt		-	-	-	-	< 0.013
Benzo[a]pyrene (BAP)	mg/kg dry wt		-	-	-	-	< 0.013
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt		-	-	-	-	< 0.031
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt		-	-	-	-	< 0.031
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt		-	-	-	-	< 0.013
Benzo[e]pyrene	mg/kg dry wt		-	-	-	-	< 0.013

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		MRS1_SS214_0.0 10-Jun-2025	MRS1_SS215_0.0 10-Jun-2025	MRS1_SS216_0.0 10-Jun-2025	MRS1_SS217_0.0 10-Jun-2025	MRS1_SS301_0.0 10-Jun-2025
Lab Number:		3913641.14	3913641.17	3913641.20	3913641.23	3913641.26
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Benzo[g,h,i]perylene	mg/kg dry wt	-	-	-	-	< 0.013
Benzo[k]fluoranthene	mg/kg dry wt	-	-	-	-	< 0.013
Chrysene	mg/kg dry wt	-	-	-	-	< 0.013
Dibenzo[a,h]anthracene	mg/kg dry wt	-	-	-	-	< 0.013
Fluoranthene	mg/kg dry wt	-	-	-	-	< 0.013
Fluorene	mg/kg dry wt	-	-	-	-	< 0.013
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	-	-	-	-	< 0.013
Naphthalene	mg/kg dry wt	-	-	-	-	< 0.07
Perylene	mg/kg dry wt	-	-	-	-	< 0.013
Phenanthrene	mg/kg dry wt	-	-	-	-	< 0.013
Pyrene	mg/kg dry wt	-	-	-	-	< 0.013
Total Petroleum Hydrocarbons in Soil						
C7 - C9	mg/kg dry wt	-	-	-	-	< 20
C10 - C14	mg/kg dry wt	-	-	-	-	< 20
C15 - C36	mg/kg dry wt	-	-	-	-	< 40
Total hydrocarbons (C7 - C36)	mg/kg dry wt	-	-	-	-	< 80

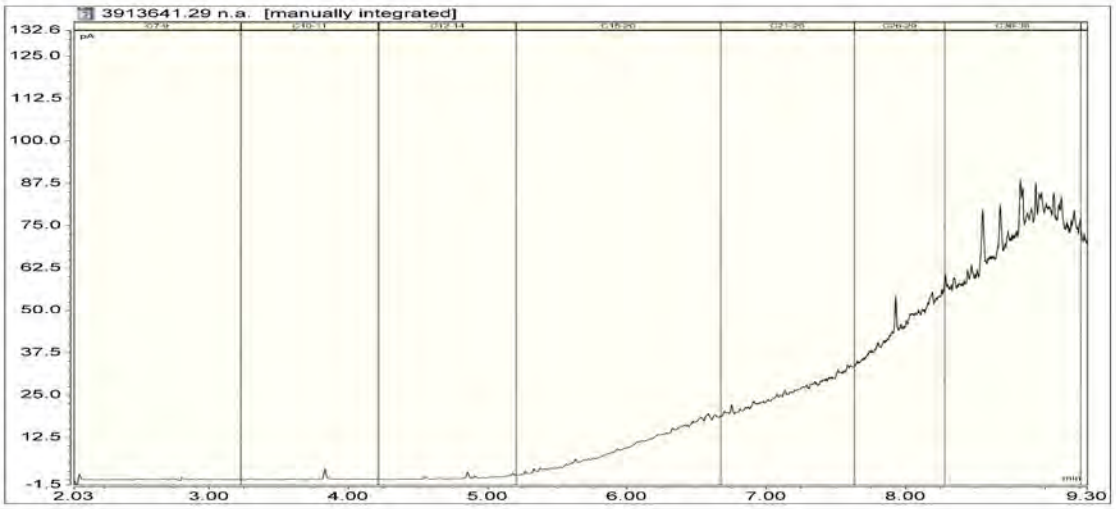
Sample Name:		MRS1_SS301_0.3 10-Jun-2025	MRS1_SS303_0.0 10-Jun-2025	MRS1_SS303_0.3 10-Jun-2025	MRS1_SS304_0.0 10-Jun-2025	MRS1_SS304_0.3 10-Jun-2025
Lab Number:		3913641.27	3913641.29	3913641.30	3913641.31	3913641.32
Individual Tests						
Dry Matter	g/100g as rcvd	79	76	74	77	78
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	2	5	4	6	4
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	< 0.10	< 0.10	0.15	< 0.10
Total Recoverable Chromium	mg/kg dry wt	17	16	22	16	12
Total Recoverable Copper	mg/kg dry wt	3	10	30	8	6
Total Recoverable Lead	mg/kg dry wt	14.1	17.7	13.3	17.8	12.6
Total Recoverable Mercury	mg/kg dry wt	0.10	< 0.10	< 0.10	< 0.10	0.11
Total Recoverable Nickel	mg/kg dry wt	2	4	22	3	4
Total Recoverable Zinc	mg/kg dry wt	17	60	89	60	29
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.4	< 0.4	< 0.4	< 0.4
1-Methylnaphthalene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
2-Methylnaphthalene	mg/kg dry wt	< 0.014	< 0.014	< 0.015	< 0.014	< 0.014
Acenaphthylene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Acenaphthene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Anthracene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Benzo[a]anthracene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.031	< 0.031	< 0.032	< 0.031	< 0.031
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.030	< 0.031	< 0.032	< 0.031	< 0.031
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Benzo[e]pyrene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Benzo[k]fluoranthene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Chrysene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Fluoranthene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Fluorene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013
Naphthalene	mg/kg dry wt	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07
Perylene	mg/kg dry wt	< 0.013	< 0.013	< 0.014	< 0.013	< 0.013

Sample Type: Soil						
Sample Name:		MRS1_SS301_0.3 10-Jun-2025	MRS1_SS303_0.0 10-Jun-2025	MRS1_SS303_0.3 10-Jun-2025	MRS1_SS304_0.0 10-Jun-2025	MRS1_SS304_0.3 10-Jun-2025
Lab Number:		3913641.27	3913641.29	3913641.30	3913641.31	3913641.32
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Phenanthrene	mg/kg dry wt	< 0.013	0.028	0.018	< 0.013	< 0.013
Pyrene	mg/kg dry wt	< 0.013	0.023	< 0.014	< 0.013	< 0.013
Total Petroleum Hydrocarbons in Soil						
C7 - C9	mg/kg dry wt	< 20	< 20	< 20	< 20	< 20
C10 - C14	mg/kg dry wt	< 20	37	< 20	< 20	< 20
C15 - C36	mg/kg dry wt	< 40	9,700	2,000	< 40	< 40
Total hydrocarbons (C7 - C36)	mg/kg dry wt	< 80	9,700	2,000	< 80	< 80

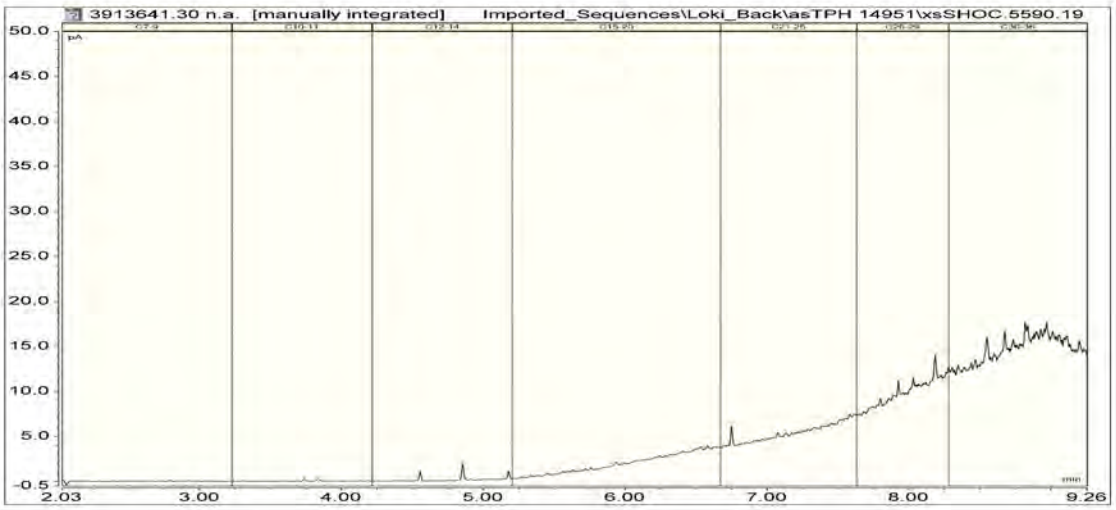
Sample Name:		MRS1_SS305_0.0 10-Jun-2025	MRS1_SS305_0.3 10-Jun-2025	MRS1_SS306_0.0 10-Jun-2025	MRS1_SS307_0.0 10-Jun-2025	MRS1_SS308_0.0 10-Jun-2025
Lab Number:		3913641.34	3913641.35	3913641.37	3913641.40	3913641.43
Individual Tests						
Dry Matter	g/100g as rcvd	72	77	-	-	-
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	3	3	4	3	4
Total Recoverable Cadmium	mg/kg dry wt	0.11	< 0.10	< 0.10	< 0.10	< 0.10
Total Recoverable Chromium	mg/kg dry wt	12	13	11	11	14
Total Recoverable Copper	mg/kg dry wt	7	3	7	7	8
Total Recoverable Lead	mg/kg dry wt	23	9.1	13.8	18.8	21
Total Recoverable Mercury	mg/kg dry wt	< 0.10	0.12	< 0.10	< 0.10	< 0.10
Total Recoverable Nickel	mg/kg dry wt	3	< 2	3	2	3
Total Recoverable Zinc	mg/kg dry wt	39	9	35	38	40
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.4	< 0.4	-	-	-
1-Methylnaphthalene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
2-Methylnaphthalene	mg/kg dry wt	< 0.015	< 0.015	-	-	-
Acenaphthylene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Acenaphthene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Anthracene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Benzo[a]anthracene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.033	< 0.032	-	-	-
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.033	< 0.032	-	-	-
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Benzo[e]pyrene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Benzo[k]fluoranthene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Chrysene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Fluoranthene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Fluorene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Naphthalene	mg/kg dry wt	< 0.07	< 0.07	-	-	-
Perylene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Phenanthrene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Pyrene	mg/kg dry wt	< 0.014	< 0.013	-	-	-
Total Petroleum Hydrocarbons in Soil						
C7 - C9	mg/kg dry wt	< 20	< 20	-	-	-
C10 - C14	mg/kg dry wt	< 20	< 20	-	-	-
C15 - C36	mg/kg dry wt	< 40	< 40	-	-	-
Total hydrocarbons (C7 - C36)	mg/kg dry wt	< 80	< 80	-	-	-

Sample Type: Soil				
	Sample Name:	MRS1_SS309_0.0 10-Jun-2025	MRS1_SS310_0.0 10-Jun-2025	
	Lab Number:	3913641.46	3913641.49	
Heavy Metals with Mercury, Screen Level				
Total Recoverable Arsenic	mg/kg dry wt	3	4	
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	0.11	
Total Recoverable Chromium	mg/kg dry wt	13	11	
Total Recoverable Copper	mg/kg dry wt	6	10	
Total Recoverable Lead	mg/kg dry wt	12.2	18.7	
Total Recoverable Mercury	mg/kg dry wt	< 0.10	< 0.10	
Total Recoverable Nickel	mg/kg dry wt	2	< 2	
Total Recoverable Zinc	mg/kg dry wt	31	43	

3913641.29
MRS1_SS303_0.0 10-Jun-2025
Client Chromatogram for TPH by FID



3913641.30
MRS1_SS303_0.3 10-Jun-2025
Client Chromatogram for TPH by FID



Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

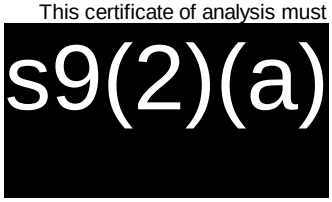
Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10-11, 14, 17, 20, 23, 26-27, 29-32, 34-35, 37, 40, 43, 46, 49
Total of Reported PAHs in Soil	Sonication extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.03 mg/kg dry wt	26-27, 29-32, 34-35
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	26-27, 29-32, 34-35
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	BaP Potency Equivalence calculated from; Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(j)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Benzo(a)pyrene x 1.0 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Fluoranthene x 0.01 + Indeno(1,2,3-c,d)pyrene x 0.1. Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.	0.024 mg/kg dry wt	26-27, 29-32, 34-35
Benzo[a]pyrene Toxic Equivalence (TEF)*	Benzo[a]pyrene Toxic Equivalence (TEF) calculated from; Benzo[a]pyrene x 1.0 + Benzo(a)anthracene x 0.1 + Benzo(b) fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Indeno(1,2,3-c,d)pyrene x 0.1. Guidelines for assessing and managing contaminated gasworks sites in New Zealand (GMG) (MfE, 1997).	0.024 mg/kg dry wt	26-27, 29-32, 34-35
TPH Oil Industry Profile + PAHscreen	Sonication extraction, GC-FID and GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8015 and US EPA 8270.	0.010 - 70 mg/kg dry wt	26-27, 29-32, 34-35
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10-11, 14, 17, 20, 23, 26-27, 29-32, 34-35, 37, 40, 43, 46, 49
Total Petroleum Hydrocarbons in Soil			
Client Chromatogram for TPH by FID	Small peaks associated with QC compounds may be visible in chromatograms with low TPH concentrations. QC peaks are as follows: one peak in the C12 - 14 band, the C21 - 25 band and the C30 - 36 band. All QC peaks are corrected for in the reported TPH concentrations.	-	29-30
C7 - C9	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	26-27, 29-32, 34-35
C10 - C14	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	26-27, 29-32, 34-35
C15 - C36	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	40 mg/kg dry wt	26-27, 29-32, 34-35
Total hydrocarbons (C7 - C36)	Calculation: Sum of carbon bands from C7 to C36. In-house based on US EPA 8015.	70 mg/kg dry wt	26-27, 29-32, 34-35

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 12-Jun-2025 and 16-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.



Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3914849	SPv2
Contact:	s9(2)(a)	**Date Received:**	12-Jun-2025	
	C/- Beca Limited	**Date Reported:**	14-Jul-2025	**(Amended)**
	PO Box 6345	**Quote No:**	138144	
	Wellesley Street	**Order No:**	3011550/200/2.1	
	Auckland 1141	**Client Reference:**	3011550/200/2.1	
		Submitted By:	s9(2)(a)	

Sample Type: Soil

		Sample Name:	MRS1_SS218_0.0 11-Jun-2025	MRS1_SS218_0.3 11-Jun-2025	MRS1_SS219_0.0 11-Jun-2025	MRS1_SS220_0.0 11-Jun-2025	MRS1_SS221_0.0 11-Jun-2025
		Lab Number:	3914849.1	3914849.2	3914849.4	3914849.7	3914849.10
Individual Tests							
Dry Matter	g/100g as rcvd		75	-	76	72	72
Total Recoverable Arsenic	mg/kg dry wt		-	9	-	-	-
Heavy Metals with Mercury, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		22	-	5	6	4
Total Recoverable Cadmium	mg/kg dry wt		0.27	-	0.20	0.33	0.21
Total Recoverable Chromium	mg/kg dry wt		29	-	10	13	13
Total Recoverable Copper	mg/kg dry wt		24	-	7	11	9
Total Recoverable Lead	mg/kg dry wt		30	-	21	50	14.9
Total Recoverable Mercury	mg/kg dry wt		0.13	-	< 0.10	0.11	< 0.10
Total Recoverable Nickel	mg/kg dry wt		11	-	3	4	4
Total Recoverable Zinc	mg/kg dry wt		133	-	21	60	24
Polycyclic Aromatic Hydrocarbons Screening in Soil*							
Total of Reported PAHs in Soil	mg/kg dry wt		< 0.4	-	< 0.4	< 0.4	< 0.4
1-Methylnaphthalene	mg/kg dry wt		< 0.013	-	< 0.013	< 0.014	< 0.014
2-Methylnaphthalene	mg/kg dry wt		< 0.013	-	< 0.013	< 0.014	< 0.014
Acenaphthylene	mg/kg dry wt		< 0.013	-	< 0.013	< 0.014	< 0.014
Acenaphthene	mg/kg dry wt		< 0.013	-	< 0.013	< 0.014	< 0.014
Anthracene	mg/kg dry wt		< 0.013	-	< 0.013	< 0.014	< 0.014
Benzo[a]anthracene	mg/kg dry wt		< 0.013	-	< 0.013	0.018	0.025
Benzo[a]pyrene (BAP)	mg/kg dry wt		< 0.013	-	< 0.013	0.024	0.030
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt		< 0.031	-	< 0.031	< 0.034	0.040
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt		< 0.031	-	< 0.031	< 0.034	0.039
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt		< 0.013	-	0.013	0.028	0.034
Benzo[e]pyrene	mg/kg dry wt		< 0.013	-	< 0.013	< 0.014	0.017
Benzo[g,h,i]perylene	mg/kg dry wt		0.013	-	< 0.013	< 0.014	0.015
Benzo[k]fluoranthene	mg/kg dry wt		< 0.013	-	< 0.013	< 0.014	0.015
Chrysene	mg/kg dry wt		< 0.013	-	< 0.013	0.018	0.021
Dibenzo[a,h]anthracene	mg/kg dry wt		< 0.013	-	< 0.013	< 0.014	< 0.014
Fluoranthene	mg/kg dry wt		< 0.013	-	0.015	0.037	0.053
Fluorene	mg/kg dry wt		< 0.013	-	< 0.013	< 0.014	< 0.014
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt		< 0.013	-	< 0.013	0.017	0.019
Naphthalene	mg/kg dry wt		< 0.07	-	< 0.07	< 0.07	< 0.07
Perylene	mg/kg dry wt		< 0.013	-	< 0.013	< 0.014	< 0.014
Phenanthrene	mg/kg dry wt		< 0.013	-	< 0.013	< 0.014	0.024
Pyrene	mg/kg dry wt		< 0.013	-	0.015	0.038	0.049

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		MRS1_SS218_0.0 11-Jun-2025	MRS1_SS218_0.3 11-Jun-2025	MRS1_SS219_0.0 11-Jun-2025	MRS1_SS220_0.0 11-Jun-2025	MRS1_SS221_0.0 11-Jun-2025
Lab Number:		3914849.1	3914849.2	3914849.4	3914849.7	3914849.10
Total Petroleum Hydrocarbons in Soil						
C7 - C9	mg/kg dry wt	< 20	-	< 20	< 20	< 20
C10 - C14	mg/kg dry wt	< 20	-	< 20	< 20	< 20
C15 - C36	mg/kg dry wt	57	-	< 40	41	< 40
Total hydrocarbons (C7 - C36)	mg/kg dry wt	< 80	-	< 80	< 80	< 80

Sample Name:		MRS1_SS222_0.0 11-Jun-2025	MRS1_SS222_0.3 11-Jun-2025	MRS1_SS223_0.0 11-Jun-2025	MRS1_SS224_0.0 11-Jun-2025	MRS1_SS225_0.0 11-Jun-2025
Lab Number:		3914849.13	3914849.14	3914849.16	3914849.19	3914849.21
Individual Tests						
Dry Matter	g/100g as rcvd	66	-	-	-	-
Total Recoverable Arsenic	mg/kg dry wt	-	17	-	-	-
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	40	-	5	5	5
Total Recoverable Cadmium	mg/kg dry wt	0.48	-	0.15	0.16	0.15
Total Recoverable Chromium	mg/kg dry wt	75	-	33	35	40
Total Recoverable Copper	mg/kg dry wt	69	-	25	26	26
Total Recoverable Lead	mg/kg dry wt	44	-	21	24	22
Total Recoverable Mercury	mg/kg dry wt	0.22	-	0.17	0.18	0.16
Total Recoverable Nickel	mg/kg dry wt	11	-	36	36	43
Total Recoverable Zinc	mg/kg dry wt	116	-	72	74	68
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	0.6	-	-	-	-
1-Methylnaphthalene	mg/kg dry wt	< 0.015	-	-	-	-
2-Methylnaphthalene	mg/kg dry wt	< 0.015	-	-	-	-
Acenaphthylene	mg/kg dry wt	< 0.015	-	-	-	-
Acenaphthene	mg/kg dry wt	< 0.015	-	-	-	-
Anthracene	mg/kg dry wt	< 0.015	-	-	-	-
Benzo[a]anthracene	mg/kg dry wt	0.050	-	-	-	-
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.072	-	-	-	-
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.107	-	-	-	-
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.107	-	-	-	-
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.086	-	-	-	-
Benzo[e]pyrene	mg/kg dry wt	0.044	-	-	-	-
Benzo[g,h,i]perylene	mg/kg dry wt	0.045	-	-	-	-
Benzo[k]fluoranthene	mg/kg dry wt	0.038	-	-	-	-
Chrysene	mg/kg dry wt	0.042	-	-	-	-
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.015	-	-	-	-
Fluoranthene	mg/kg dry wt	0.081	-	-	-	-
Fluorene	mg/kg dry wt	< 0.015	-	-	-	-
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.049	-	-	-	-
Naphthalene	mg/kg dry wt	< 0.08	-	-	-	-
Perylene	mg/kg dry wt	< 0.015	-	-	-	-
Phenanthrene	mg/kg dry wt	0.017	-	-	-	-
Pyrene	mg/kg dry wt	0.086	-	-	-	-
Total Petroleum Hydrocarbons in Soil						
C7 - C9	mg/kg dry wt	< 30	-	-	-	-
C10 - C14	mg/kg dry wt	< 20	-	-	-	-
C15 - C36	mg/kg dry wt	< 40	-	-	-	-
Total hydrocarbons (C7 - C36)	mg/kg dry wt	< 90	-	-	-	-

Sample Name:		MRS1_SS226_0.0 11-Jun-2025	MRS1_SS227_0.0 11-Jun-2025	MRS1_SS228_0.0 11-Jun-2025	MRS1_SS323_0.0 11-Jun-2025	MRS1_SS324_0.0 11-Jun-2025
Lab Number:		3914849.24	3914849.27	3914849.30	3914849.33	3914849.36

Sample Type: Soil						
Sample Name:		MRS1_SS226_0.0 11-Jun-2025	MRS1_SS227_0.0 11-Jun-2025	MRS1_SS228_0.0 11-Jun-2025	MRS1_SS323_0.0 11-Jun-2025	MRS1_SS324_0.0 11-Jun-2025
Lab Number:		3914849.24	3914849.27	3914849.30	3914849.33	3914849.36
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	6	5	4	6	4
Total Recoverable Cadmium	mg/kg dry wt	0.14	0.11	0.13	0.17	0.16
Total Recoverable Chromium	mg/kg dry wt	37	24	22	37	22
Total Recoverable Copper	mg/kg dry wt	25	27	26	11	10
Total Recoverable Lead	mg/kg dry wt	18.3	17.8	16.2	16.7	13.1
Total Recoverable Mercury	mg/kg dry wt	0.16	0.34	0.23	0.13	< 0.10
Total Recoverable Nickel	mg/kg dry wt	37	12	16	12	9
Total Recoverable Zinc	mg/kg dry wt	58	35	65	57	46

Sample Name:		MRS1_SS325_0.0 11-Jun-2025	MRS1_SS326_0.0 11-Jun-2025	MRS1_SS327_0.0 11-Jun-2025	MRS1_SS328_0.0 11-Jun-2025	MRS1_SS329_0.0 11-Jun-2025
Lab Number:		3914849.39	3914849.42	3914849.45	3914849.48	3914849.51
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	4	3	2	3
Total Recoverable Cadmium	mg/kg dry wt	0.14	0.16	0.14	0.16	0.19
Total Recoverable Chromium	mg/kg dry wt	17	17	10	12	13
Total Recoverable Copper	mg/kg dry wt	7	11	8	5	10
Total Recoverable Lead	mg/kg dry wt	11.2	15.8	10.2	9.4	13.9
Total Recoverable Mercury	mg/kg dry wt	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Recoverable Nickel	mg/kg dry wt	6	6	2	< 2	3
Total Recoverable Zinc	mg/kg dry wt	60	67	35	27	47

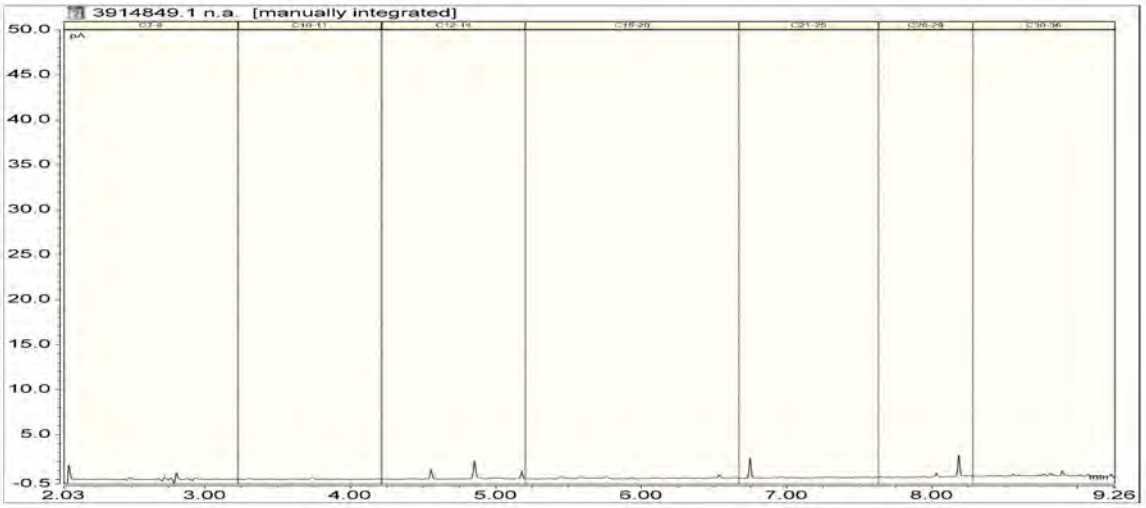
Sample Name:		MRS1_SS181_0.0 11-Jun-2025	MRS1_SS182_0.0 11-Jun-2025	MRS1_SS183_0.0 11-Jun-2025	MRS1_SS184_0.0 11-Jun-2025	MRS1_SS185_0.0 11-Jun-2025
Lab Number:		3914849.54	3914849.57	3914849.60	3914849.61	3914849.63
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	10	13	6	6	6
Total Recoverable Cadmium	mg/kg dry wt	0.22	0.21	0.13	0.14	0.17
Total Recoverable Chromium	mg/kg dry wt	33	40	22	16	24
Total Recoverable Copper	mg/kg dry wt	21	26	18	12	29
Total Recoverable Lead	mg/kg dry wt	18.3	17.3	26	25	31
Total Recoverable Mercury	mg/kg dry wt	0.12	0.13	0.12	< 0.10	0.12
Total Recoverable Nickel	mg/kg dry wt	19	19	17	7	20
Total Recoverable Zinc	mg/kg dry wt	74	54	65	51	66

Sample Name:		MRS1_SS187_0.0 11-Jun-2025	MRS1_SS188_0.0 11-Jun-2025	MRS1_SS188_0.3 11-Jun-2025	MRS1_SS189_0.0 11-Jun-2025	MRS1_SS190_0.0 11-Jun-2025
Lab Number:		3914849.64	3914849.67	3914849.68	3914849.70	3914849.73
Individual Tests						
Total Recoverable Chromium	mg/kg dry wt	-	-	210	-	-
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	7	-	6	5
Total Recoverable Cadmium	mg/kg dry wt	0.12	0.16	-	0.18	0.12
Total Recoverable Chromium	mg/kg dry wt	28	760	-	96	12
Total Recoverable Copper	mg/kg dry wt	11	65	-	44	11
Total Recoverable Lead	mg/kg dry wt	12.3	26	-	34	11.4
Total Recoverable Mercury	mg/kg dry wt	< 0.10	0.14	-	0.13	0.10
Total Recoverable Nickel	mg/kg dry wt	13	410	-	54	7
Total Recoverable Zinc	mg/kg dry wt	37	61	-	58	29

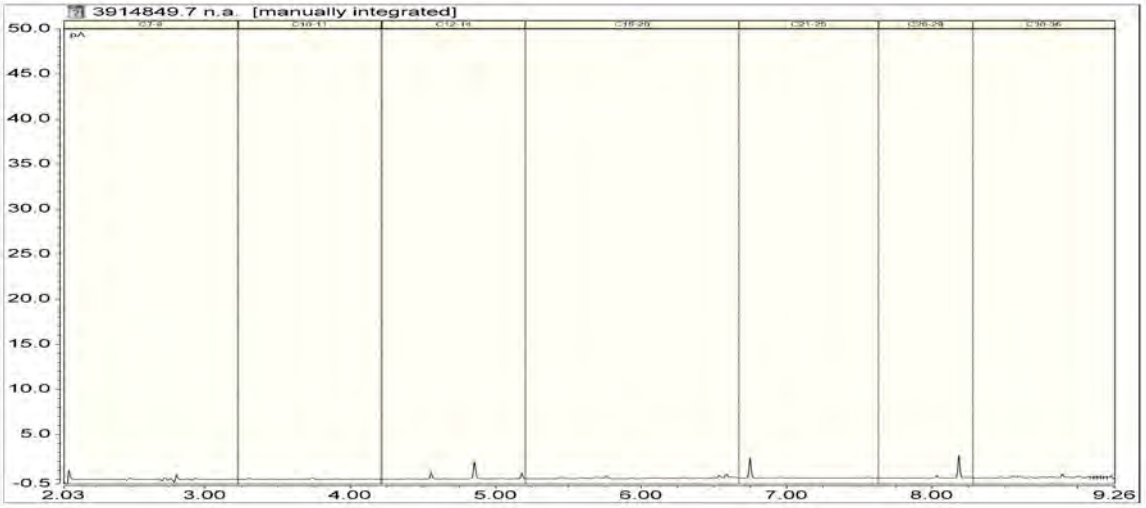
Sample Name:		MRS1_SS191_0.0 11-Jun-2025	MRS1_SS192_0.0 11-Jun-2025	MRS1_QA_17 11-Jun-2025
Lab Number:		3914849.76	3914849.79	3914849.82
Heavy Metals with Mercury, Screen Level				
Total Recoverable Arsenic	mg/kg dry wt	11	7	5
Total Recoverable Cadmium	mg/kg dry wt	0.99	0.64	0.16
Total Recoverable Chromium	mg/kg dry wt	199	119	31
Total Recoverable Copper	mg/kg dry wt	93	53	29

Sample Type: Soil				
	Sample Name:	MRS1_SS191_0.0 11-Jun-2025	MRS1_SS192_0.0 11-Jun-2025	MRS1_QA_17 11-Jun-2025
	Lab Number:	3914849.76	3914849.79	3914849.82
Heavy Metals with Mercury, Screen Level				
Total Recoverable Lead	mg/kg dry wt	113	80	30
Total Recoverable Mercury	mg/kg dry wt	0.71	0.45	0.12
Total Recoverable Nickel	mg/kg dry wt	32	22	25
Total Recoverable Zinc	mg/kg dry wt	260	153	62

3914849.1
MRS1_SS218_0.0 11-Jun-2025
Client Chromatogram for TPH by FID



3914849.7
MRS1_SS220_0.0 11-Jun-2025
Client Chromatogram for TPH by FID



Analyst's Comments

Amended Report: This certificate of analysis replaces report '3914849-SPv1' issued on 17-Jun-2025 at 2:38 pm.
Reason for amendment: Additional testing added as per clients request.

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1-2, 4, 7, 10, 13-14, 16, 19, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60-61, 63-64, 67-68, 70, 73, 76, 79, 82
Environmental Solids Sample Preparation	Air dried at 35°C and sieved, <2mm fraction. Used for sample preparation May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	2, 14, 68
Total of Reported PAHs in Soil	Sonication extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.03 mg/kg dry wt	1, 4, 7, 10, 13
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	1, 4, 7, 10, 13
Total Recoverable digestion	Nitric / hydrochloric acid digestion. US EPA 200.2 (modified).	-	2, 14, 68
Total Recoverable Arsenic	Dried sample, sieved as specified (if required). Nitric/Hydrochloric acid digestion, ICP-MS, screen level. US EPA 200.2 (modified).	2 mg/kg dry wt	2, 14
Total Recoverable Chromium	Dried sample, sieved as specified (if required). Nitric/Hydrochloric acid digestion, ICP-MS, screen level. US EPA 200.2 (modified).	2 mg/kg dry wt	68
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	BaP Potency Equivalence calculated from; Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(j)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Benzo(a)pyrene x 1.0 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Fluoranthene x 0.01 + Indeno(1,2,3-c,d)pyrene x 0.1. Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.	0.024 mg/kg dry wt	1, 4, 7, 10, 13
Benzo[a]pyrene Toxic Equivalence (TEF)*	Benzo[a]pyrene Toxic Equivalence (TEF) calculated from; Benzo[a]pyrene x 1.0 + Benzo(a)anthracene x 0.1 + Benzo(b) fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Indeno(1,2,3-c,d)pyrene x 0.1. Guidelines for assessing and managing contaminated gasworks sites in New Zealand (GMG) (MfE, 1997).	0.024 mg/kg dry wt	1, 4, 7, 10, 13
TPH Oil Industry Profile + PAHscreen	Sonication extraction, GC-FID and GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8015 and US EPA 8270.	0.010 - 70 mg/kg dry wt	1, 4, 7, 10, 13
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60-61, 63-64, 67, 70, 73, 76, 79, 82
Total Petroleum Hydrocarbons in Soil			
Client Chromatogram for TPH by FID	Small peaks associated with QC compounds may be visible in chromatograms with low TPH concentrations. QC peaks are as follows: one peak in the C12 - 14 band, the C21 - 25 band and the C30 - 36 band. All QC peaks are corrected for in the reported TPH concentrations.	-	1, 7
C7 - C9	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	1, 4, 7, 10, 13

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
C10 - C14	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	1, 4, 7, 10, 13
C15 - C36	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	40 mg/kg dry wt	1, 4, 7, 10, 13
Total hydrocarbons (C7 - C36)	Calculation: Sum of carbon bands from C7 to C36. In-house based on US EPA 8015.	70 mg/kg dry wt	1, 4, 7, 10, 13

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 13-Jun-2025 and 14-Jul-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

s9(2)(a)

Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3915257	SPv1
Contact:	s9(2)(a)	**Date Received:**	12-Jun-2025	
	C/- Beca Limited	**Date Reported:**	19-Jun-2025	
	PO Box 6345	**Quote No:**	138144	
	Wellesley Street	**Order No:**	3011550/200/2.1	
	Auckland 1141	**Client Reference:**	3011550/200/2.1	
		Submitted By:	s9(2)(a)	

Sample Type: Soil

Sample Name:		MRS1_SS193_0.0 12-Jun-2025	MRS1_SS194_0.0 12-Jun-2025	MRS1_SS195_0.0 12-Jun-2025	MRS1_SS197_0.0 12-Jun-2025	MRS1_SS198_0.0 12-Jun-2025
Lab Number:		3915257.1	3915257.4	3915257.7	3915257.10	3915257.11
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	6	7	15	9	5
Total Recoverable Cadmium	mg/kg dry wt	0.14	0.12	0.16	< 0.10	< 0.10
Total Recoverable Chromium	mg/kg dry wt	16	12	27	29	14
Total Recoverable Copper	mg/kg dry wt	12	9	20	19	11
Total Recoverable Lead	mg/kg dry wt	25	16.7	20	14.5	9.7
Total Recoverable Mercury	mg/kg dry wt	0.10	< 0.10	< 0.10	0.11	< 0.10
Total Recoverable Nickel	mg/kg dry wt	12	8	38	18	19
Total Recoverable Zinc	mg/kg dry wt	40	48	98	74	26

Sample Name:		MRS1_SS199_0.0 12-Jun-2025	MRS1_SS200_0.0 12-Jun-2025	MRS1_SS201_0.0 12-Jun-2025	MRS1_SS202_0.0 12-Jun-2025	MRS1_SS203_0.0 12-Jun-2025
Lab Number:		3915257.14	3915257.17	3915257.20	3915257.21	3915257.24
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	14	11	21	5	5
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	< 0.10	< 0.10	< 0.10	0.12
Total Recoverable Chromium	mg/kg dry wt	16	18	18	16	15
Total Recoverable Copper	mg/kg dry wt	23	19	23	15	11
Total Recoverable Lead	mg/kg dry wt	14.9	16.6	16.2	18.4	22
Total Recoverable Mercury	mg/kg dry wt	< 0.10	< 0.10	< 0.10	0.11	< 0.10
Total Recoverable Nickel	mg/kg dry wt	17	20	15	14	6
Total Recoverable Zinc	mg/kg dry wt	51	61	50	43	43

Sample Name:		MRS1_SS229_0.0 12-Jun-2025	MRS1_SS230_0.0 12-Jun-2025	MRS1_SS231_0.0 12-Jun-2025	MRS1_SS232_0.0 12-Jun-2025	MRS1_SS233_0.0 12-Jun-2025
Lab Number:		3915257.27	3915257.30	3915257.33	3915257.36	3915257.39
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	3	4	3	5
Total Recoverable Cadmium	mg/kg dry wt	0.20	0.18	0.20	< 0.10	0.21
Total Recoverable Chromium	mg/kg dry wt	13	28	35	18	15
Total Recoverable Copper	mg/kg dry wt	7	19	31	10	10
Total Recoverable Lead	mg/kg dry wt	10.4	21	48	10.2	11.5
Total Recoverable Mercury	mg/kg dry wt	< 0.10	0.11	< 0.10	0.13	0.11
Total Recoverable Nickel	mg/kg dry wt	5	21	36	10	6
Total Recoverable Zinc	mg/kg dry wt	24	73	132	35	41

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		MRS1_SS235_0.0 12-Jun-2025	MRS1_SS236_0.0 12-Jun-2025	MRS1_SS237_0.0 12-Jun-2025	MRS1_SS238_0.0 12-Jun-2025	MRS1_SS239_0.0 12-Jun-2025
Lab Number:		3915257.42	3915257.45	3915257.48	3915257.51	3915257.54
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	4	6	5	3
Total Recoverable Cadmium	mg/kg dry wt	0.21	0.19	0.19	0.21	0.19
Total Recoverable Chromium	mg/kg dry wt	35	27	27	14	15
Total Recoverable Copper	mg/kg dry wt	18	13	21	9	7
Total Recoverable Lead	mg/kg dry wt	21	12.0	22	15.7	13.9
Total Recoverable Mercury	mg/kg dry wt	< 0.10	< 0.10	< 0.10	< 0.10	0.11
Total Recoverable Nickel	mg/kg dry wt	21	13	16	9	5
Total Recoverable Zinc	mg/kg dry wt	58	43	62	24	21

Sample Name:		MRS1_SS240_0.0 12-Jun-2025	MRS1_SS241_0.0 12-Jun-2025	MRS1_SS243_0.0 12-Jun-2025	MRS1_SS244_0.0 12-Jun-2025	MRS1_SS245_0.0 12-Jun-2025
Lab Number:		3915257.57	3915257.60	3915257.65	3915257.68	3915257.71
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	3	4	4	5
Total Recoverable Cadmium	mg/kg dry wt	0.16	< 0.10	0.13	0.21	< 0.10
Total Recoverable Chromium	mg/kg dry wt	18	12	16	15	11
Total Recoverable Copper	mg/kg dry wt	10	6	11	10	5
Total Recoverable Lead	mg/kg dry wt	18.2	6.7	16.4	15.4	6.1
Total Recoverable Mercury	mg/kg dry wt	0.11	0.14	0.11	0.11	0.14
Total Recoverable Nickel	mg/kg dry wt	12	7	9	9	3
Total Recoverable Zinc	mg/kg dry wt	32	17	43	38	14

Sample Name:		MRS1_SS246_0.0 12-Jun-2025	MRS1_SS247_0.0 12-Jun-2025	MRS1_QA18 12-Jun-2025	MRS1_QA19 12-Jun-2025
Lab Number:		3915257.73	3915257.76	3915257.79	3915257.80
Heavy Metals with Mercury, Screen Level					
Total Recoverable Arsenic	mg/kg dry wt	4	4	5	3
Total Recoverable Cadmium	mg/kg dry wt	0.32	0.23	< 0.10	0.17
Total Recoverable Chromium	mg/kg dry wt	10	15	14	15
Total Recoverable Copper	mg/kg dry wt	10	12	11	6
Total Recoverable Lead	mg/kg dry wt	16.4	16.8	10.5	12.4
Total Recoverable Mercury	mg/kg dry wt	< 0.10	0.10	< 0.10	< 0.10
Total Recoverable Nickel	mg/kg dry wt	4	7	12	6
Total Recoverable Zinc	mg/kg dry wt	38	55	27	22

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

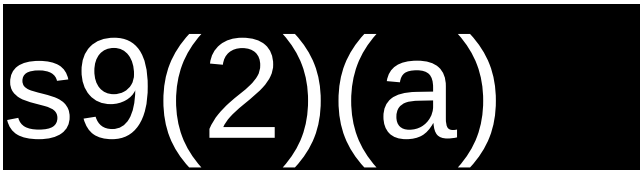
Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10-11, 14, 17, 20-21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 65, 68, 71, 73, 76, 79-80
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10-11, 14, 17, 20-21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 65, 68, 71, 73, 76, 79-80

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 14-Jun-2025 and 18-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.



Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3916824 SPv1
Contact:	s9(2)(a)	**Date Received:**	16-Jun-2025
	C/- Beca Limited	**Date Reported:**	19-Jun-2025
	PO Box 6345	**Quote No:**	138144
	Wellesley Street	**Order No:**	3011550/200/2.1
	Auckland 1141	**Client Reference:**	3011550/200/2.1
		Submitted By:	s9(2)(a)

Sample Type: Soil

Sample Name:		MRS1_SS250_0.0 13-Jun-2025	MRS1_SS251_0.0 13-Jun-2025	MRS1_SS252_0.0 13-Jun-2025	MRS1_SS253_0.0 13-Jun-2025	MRS1_SS254_0.0 13-Jun-2025
Lab Number:		3916824.1	3916824.4	3916824.7	3916824.8	3916824.11
Individual Tests						
Dry Matter	g/100g as rcvd	-	-	-	-	53
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	3	6	3	2	8
Total Recoverable Cadmium	mg/kg dry wt	0.17	0.18	0.11	0.17	0.55
Total Recoverable Chromium	mg/kg dry wt	16	19	16	13	29
Total Recoverable Copper	mg/kg dry wt	8	20	9	5	75
Total Recoverable Lead	mg/kg dry wt	11.7	17.6	11.3	9.4	3,900
Total Recoverable Mercury	mg/kg dry wt	< 0.10	0.32	< 0.10	< 0.10	0.12
Total Recoverable Nickel	mg/kg dry wt	6	6	6	4	31
Total Recoverable Zinc	mg/kg dry wt	36	44	29	19	360
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	-	-	-	-	3.1
1-Methylnaphthalene	mg/kg dry wt	-	-	-	-	< 0.019
2-Methylnaphthalene	mg/kg dry wt	-	-	-	-	< 0.03
Acenaphthylene	mg/kg dry wt	-	-	-	-	0.028
Acenaphthene	mg/kg dry wt	-	-	-	-	< 0.019
Anthracene	mg/kg dry wt	-	-	-	-	0.035
Benzo[a]anthracene	mg/kg dry wt	-	-	-	-	0.21
Benzo[a]pyrene (BAP)	mg/kg dry wt	-	-	-	-	0.34
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	-	-	-	-	0.47
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	-	-	-	-	0.47
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	-	-	-	-	0.35
Benzo[e]pyrene	mg/kg dry wt	-	-	-	-	0.196
Benzo[g,h,i]perylene	mg/kg dry wt	-	-	-	-	0.23
Benzo[k]fluoranthene	mg/kg dry wt	-	-	-	-	0.138
Chrysene	mg/kg dry wt	-	-	-	-	0.21
Dibenzo[a,h]anthracene	mg/kg dry wt	-	-	-	-	0.041
Fluoranthene	mg/kg dry wt	-	-	-	-	0.40
Fluorene	mg/kg dry wt	-	-	-	-	< 0.019
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	-	-	-	-	0.22
Naphthalene	mg/kg dry wt	-	-	-	-	< 0.10
Perylene	mg/kg dry wt	-	-	-	-	0.069
Phenanthrene	mg/kg dry wt	-	-	-	-	0.166
Pyrene	mg/kg dry wt	-	-	-	-	0.47

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		MRS1_SS250_0.0 13-Jun-2025	MRS1_SS251_0.0 13-Jun-2025	MRS1_SS252_0.0 13-Jun-2025	MRS1_SS253_0.0 13-Jun-2025	MRS1_SS254_0.0 13-Jun-2025
Lab Number:		3916824.1	3916824.4	3916824.7	3916824.8	3916824.11
Total Petroleum Hydrocarbons in Soil						
C7 - C9	mg/kg dry wt	-	-	-	-	< 30
C10 - C14	mg/kg dry wt	-	-	-	-	< 30
C15 - C36	mg/kg dry wt	-	-	-	-	55
Total hydrocarbons (C7 - C36)	mg/kg dry wt	-	-	-	-	< 100

Sample Name:		MRS1_SS255_0.0 13-Jun-2025	MRS1_SS255_0.5 13-Jun-2025	MRS1_SS255_1.0 13-Jun-2025	MRS1_SS256_0.0 13-Jun-2025	MRS1_SS257_0.0 13-Jun-2025
Lab Number:		3916824.14	3916824.16	3916824.18	3916824.19	3916824.21
Individual Tests						
Dry Matter	g/100g as rcvd	66	70	69	81	59
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	8	28	5	8
Total Recoverable Cadmium	mg/kg dry wt	0.89	2.3	9.2	0.50	0.21
Total Recoverable Chromium	mg/kg dry wt	21	41	119	24	18
Total Recoverable Copper	mg/kg dry wt	36	240	630	33	30
Total Recoverable Lead	mg/kg dry wt	640	1,420	1,080	81	112
Total Recoverable Mercury	mg/kg dry wt	0.23	0.45	0.23	< 0.10	< 0.10
Total Recoverable Nickel	mg/kg dry wt	11	102	110	28	15
Total Recoverable Zinc	mg/kg dry wt	410	1,560	6,500	111	162
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.4	1.1	1.4	< 0.3	1.6
1-Methylnaphthalene	mg/kg dry wt	< 0.015	< 0.014	< 0.014	< 0.013	< 0.017
2-Methylnaphthalene	mg/kg dry wt	< 0.03	< 0.03	< 0.03	< 0.019	< 0.03
Acenaphthylene	mg/kg dry wt	< 0.015	< 0.014	0.019	< 0.013	< 0.017
Acenaphthene	mg/kg dry wt	< 0.015	< 0.014	< 0.014	< 0.013	< 0.017
Anthracene	mg/kg dry wt	< 0.015	0.024	0.016	< 0.013	< 0.017
Benzo[a]anthracene	mg/kg dry wt	0.021	0.074	0.090	< 0.013	0.112
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.031	0.099	0.144	0.015	0.179
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.040	0.144	0.21	< 0.030	0.26
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.040	0.142	0.21	< 0.030	0.26
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.033	0.103	0.155	0.016	0.22
Benzo[e]pyrene	mg/kg dry wt	0.018	0.063	0.090	< 0.013	0.109
Benzo[g,h,i]perylene	mg/kg dry wt	0.023	0.072	0.101	< 0.013	0.133
Benzo[k]fluoranthene	mg/kg dry wt	< 0.015	0.045	0.071	< 0.013	0.100
Chrysene	mg/kg dry wt	0.023	0.074	0.106	< 0.013	0.117
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.015	< 0.014	0.019	< 0.013	0.025
Fluoranthene	mg/kg dry wt	0.036	0.170	0.191	0.025	0.20
Fluorene	mg/kg dry wt	< 0.015	< 0.014	< 0.014	< 0.013	< 0.017
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.023	0.069	0.097	< 0.013	0.135
Naphthalene	mg/kg dry wt	< 0.08	< 0.07	< 0.07	< 0.07	< 0.09
Perylene	mg/kg dry wt	< 0.015	0.021	0.027	< 0.013	0.040
Phenanthrene	mg/kg dry wt	0.016	0.088	0.093	< 0.013	0.045
Pyrene	mg/kg dry wt	0.043	0.183	0.21	0.022	0.22
Total Petroleum Hydrocarbons in Soil						
C7 - C9	mg/kg dry wt	< 30	< 20	< 20	< 20	< 30
C10 - C14	mg/kg dry wt	< 20	< 20	< 20	< 20	< 20
C15 - C36	mg/kg dry wt	< 40	152	200	< 40	< 40
Total hydrocarbons (C7 - C36)	mg/kg dry wt	< 90	154	210	< 80	< 90

Sample Name:		MRS1_SS258_0.0 13-Jun-2025	MRS1_SS258_0.5 13-Jun-2025	MRS1_SS258_1.0 13-Jun-2025	MRS1_SS259_0.0 13-Jun-2025	MRS1_SS260_0.0 13-Jun-2025
Lab Number:		3916824.24	3916824.26	3916824.28	3916824.29	3916824.32

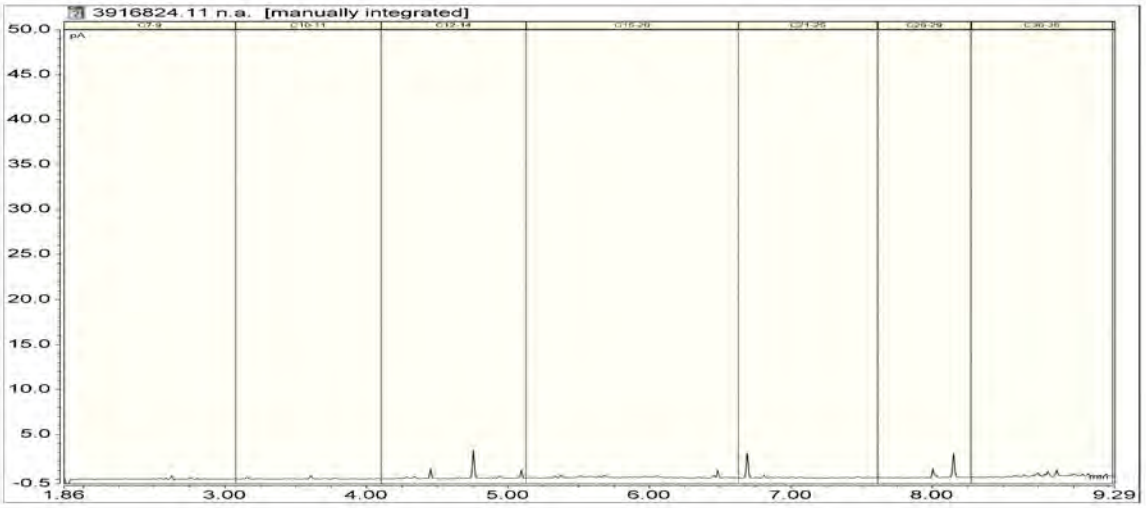
Sample Type: Soil						
Sample Name:		MRS1_SS258_0.0 13-Jun-2025	MRS1_SS258_0.5 13-Jun-2025	MRS1_SS258_1.0 13-Jun-2025	MRS1_SS259_0.0 13-Jun-2025	MRS1_SS260_0.0 13-Jun-2025
Lab Number:		3916824.24	3916824.26	3916824.28	3916824.29	3916824.32
Individual Tests						
Dry Matter	g/100g as rcvd	56	73	66	77	61
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	30	34	3	4
Total Recoverable Cadmium	mg/kg dry wt	0.43	2.3	10.4	< 0.10	0.24
Total Recoverable Chromium	mg/kg dry wt	15	135	130	17	16
Total Recoverable Copper	mg/kg dry wt	23	1,230	2,900	4	12
Total Recoverable Lead	mg/kg dry wt	49	1,180	2,100	11.5	21
Total Recoverable Mercury	mg/kg dry wt	0.15	0.40	0.39	0.15	< 0.10
Total Recoverable Nickel	mg/kg dry wt	6	126	123	3	5
Total Recoverable Zinc	mg/kg dry wt	164	870	6,000	23	67
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.5	9.9	1.3	< 0.4	< 0.4
1-Methylnaphthalene	mg/kg dry wt	< 0.018	< 0.014	< 0.015	< 0.013	< 0.016
2-Methylnaphthalene	mg/kg dry wt	< 0.03	< 0.03	< 0.03	< 0.02	< 0.03
Acenaphthylene	mg/kg dry wt	< 0.018	0.092	0.015	< 0.013	< 0.016
Acenaphthene	mg/kg dry wt	< 0.018	< 0.014	< 0.015	< 0.013	< 0.016
Anthracene	mg/kg dry wt	< 0.018	0.111	< 0.015	< 0.013	< 0.016
Benzo[a]anthracene	mg/kg dry wt	< 0.018	0.66	0.087	< 0.013	< 0.016
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.018	0.99	0.145	< 0.013	< 0.016
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.044	1.45	0.22	< 0.031	< 0.039
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.043	1.44	0.21	< 0.031	< 0.039
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.018	1.08	0.161	< 0.013	< 0.016
Benzo[e]pyrene	mg/kg dry wt	< 0.018	0.59	0.098	< 0.013	< 0.016
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.018	0.77	0.143	< 0.013	< 0.016
Benzo[k]fluoranthene	mg/kg dry wt	< 0.018	0.44	0.062	< 0.013	< 0.016
Chrysene	mg/kg dry wt	< 0.018	0.62	0.086	< 0.013	< 0.016
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.018	0.139	0.025	< 0.013	< 0.016
Fluoranthene	mg/kg dry wt	< 0.018	1.28	0.129	< 0.013	< 0.016
Fluorene	mg/kg dry wt	< 0.018	0.025	< 0.015	< 0.013	< 0.016
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.018	0.81	0.120	< 0.013	< 0.016
Naphthalene	mg/kg dry wt	< 0.09	< 0.07	< 0.08	< 0.07	< 0.08
Perylene	mg/kg dry wt	< 0.018	0.22	0.038	< 0.013	< 0.016
Phenanthrene	mg/kg dry wt	< 0.018	0.47	0.047	< 0.013	< 0.016
Pyrene	mg/kg dry wt	< 0.018	1.50	0.149	< 0.013	< 0.016
Total Petroleum Hydrocarbons in Soil						
C7 - C9	mg/kg dry wt	< 30	< 20	< 30	< 20	< 30
C10 - C14	mg/kg dry wt	< 30	< 20	< 20	< 20	< 20
C15 - C36	mg/kg dry wt	< 50	137	210	< 40	< 40
Total hydrocarbons (C7 - C36)	mg/kg dry wt	< 90	143	210	< 80	< 90

Sample Name:		MRS1_SS261_0.0 13-Jun-2025	MRS1_SS262_0.0 13-Jun-2025	MRS1_SS176_0.0 13-Jun-2025	MRS1_SS177_0.0 13-Jun-2025	MRS1_SS178_0.0 13-Jun-2025
Lab Number:		3916824.35	3916824.38	3916824.41	3916824.43	3916824.45
Individual Tests						
Dry Matter	g/100g as rcvd	63	69	-	-	-
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	6	5	87	10
Total Recoverable Cadmium	mg/kg dry wt	0.17	0.16	0.37	0.53	0.31
Total Recoverable Chromium	mg/kg dry wt	14	18	11	19	12
Total Recoverable Copper	mg/kg dry wt	16	17	10	32	14
Total Recoverable Lead	mg/kg dry wt	35	36	16.7	300	40
Total Recoverable Mercury	mg/kg dry wt	< 0.10	0.13	< 0.10	0.11	< 0.10
Total Recoverable Nickel	mg/kg dry wt	4	11	5	5	6

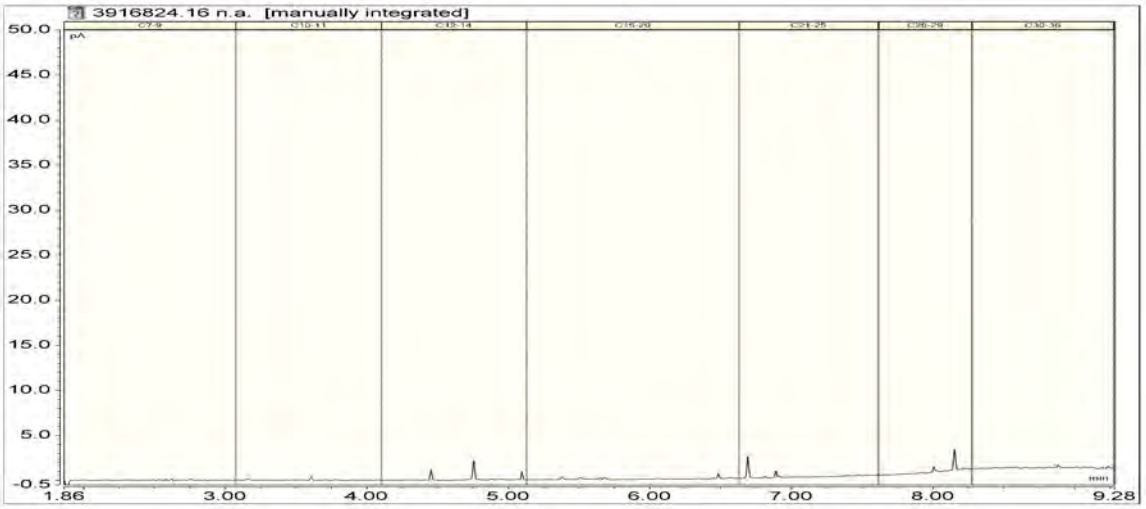
Sample Type: Soil						
Sample Name:		MRS1_SS261_0.0 13-Jun-2025	MRS1_SS262_0.0 13-Jun-2025	MRS1_SS176_0.0 13-Jun-2025	MRS1_SS177_0.0 13-Jun-2025	MRS1_SS178_0.0 13-Jun-2025
Lab Number:		3916824.35	3916824.38	3916824.41	3916824.43	3916824.45
Heavy Metals with Mercury, Screen Level						
Total Recoverable Zinc	mg/kg dry wt	65	64	45	290	68
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.4	< 0.4	-	-	-
1-Methylnaphthalene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
2-Methylnaphthalene	mg/kg dry wt	< 0.03	< 0.03	-	-	-
Acenaphthylene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Acenaphthene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Anthracene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Benzo[a]anthracene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.038	< 0.034	-	-	-
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.038	< 0.034	-	-	-
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Benzo[e]pyrene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Benzo[k]fluoranthene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Chrysene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Fluoranthene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Fluorene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Naphthalene	mg/kg dry wt	< 0.08	< 0.07	-	-	-
Perylene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Phenanthrene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Pyrene	mg/kg dry wt	< 0.016	< 0.014	-	-	-
Total Petroleum Hydrocarbons in Soil						
C7 - C9	mg/kg dry wt	< 30	< 20	-	-	-
C10 - C14	mg/kg dry wt	< 20	< 20	-	-	-
C15 - C36	mg/kg dry wt	68	< 40	-	-	-
Total hydrocarbons (C7 - C36)	mg/kg dry wt	< 90	< 80	-	-	-

Sample Name:		MRS1_SS179_0.0 13-Jun-2025	MRS1_SS180_0.0 13-Jun-2025	MRS1_SS204_0.0 13-Jun-2025	MRS1_SS248_0.0 13-Jun-2025	MRS1_SS249_0.0 13-Jun-2025
Lab Number:		3916824.47	3916824.49	3916824.51	3916824.53	3916824.55
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	10	6	5	19	5
Total Recoverable Cadmium	mg/kg dry wt	0.16	0.26	< 0.10	0.49	0.45
Total Recoverable Chromium	mg/kg dry wt	13	12	13	13	12
Total Recoverable Copper	mg/kg dry wt	13	13	10	61	9
Total Recoverable Lead	mg/kg dry wt	52	43	12.6	149	21
Total Recoverable Mercury	mg/kg dry wt	0.10	< 0.10	0.12	< 0.10	< 0.10
Total Recoverable Nickel	mg/kg dry wt	4	5	9	6	5
Total Recoverable Zinc	mg/kg dry wt	38	52	35	76	47

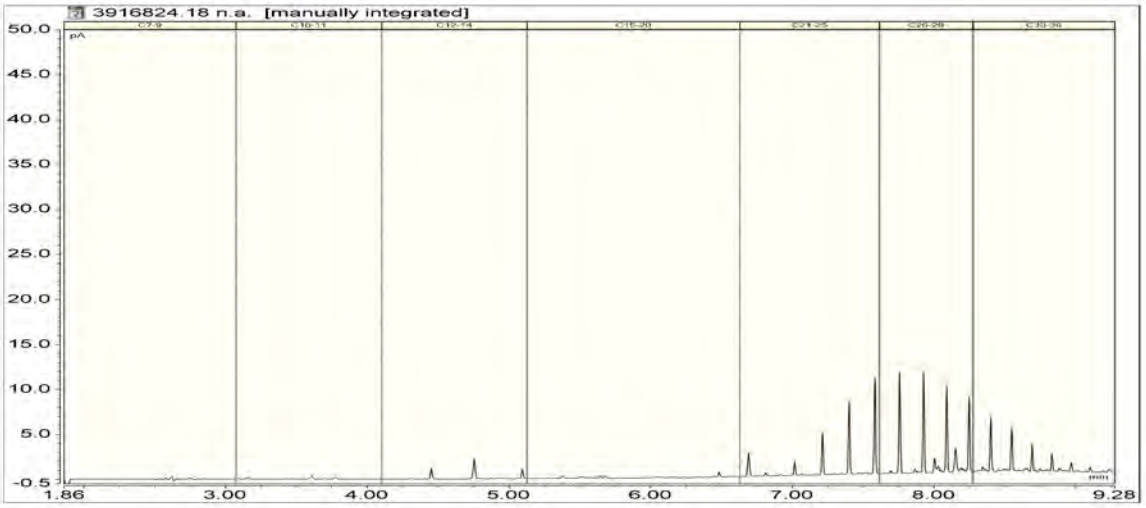
3916824.11
MRS1_SS254_0.0 13-Jun-2025
Client Chromatogram for TPH by FID



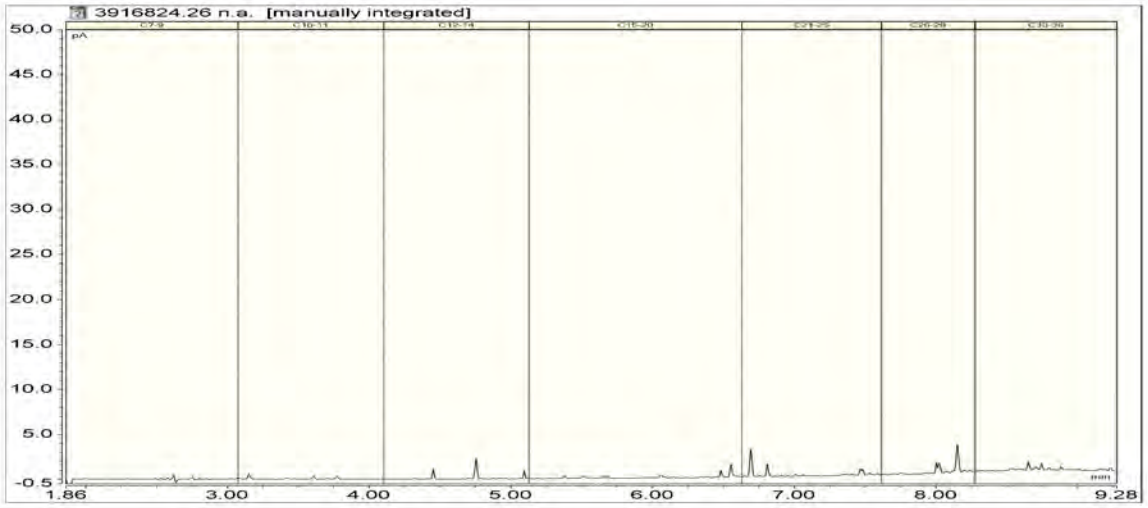
3916824.16
MRS1_SS255_0.5 13-Jun-2025
Client Chromatogram for TPH by FID



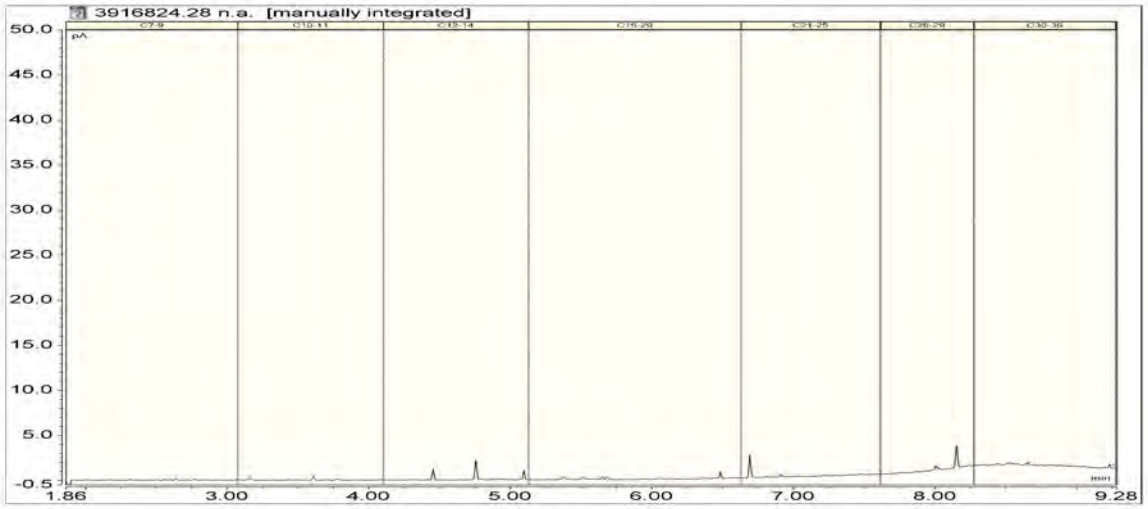
3916824.18
MRS1_SS255_1.0 13-Jun-2025
Client Chromatogram for TPH by FID



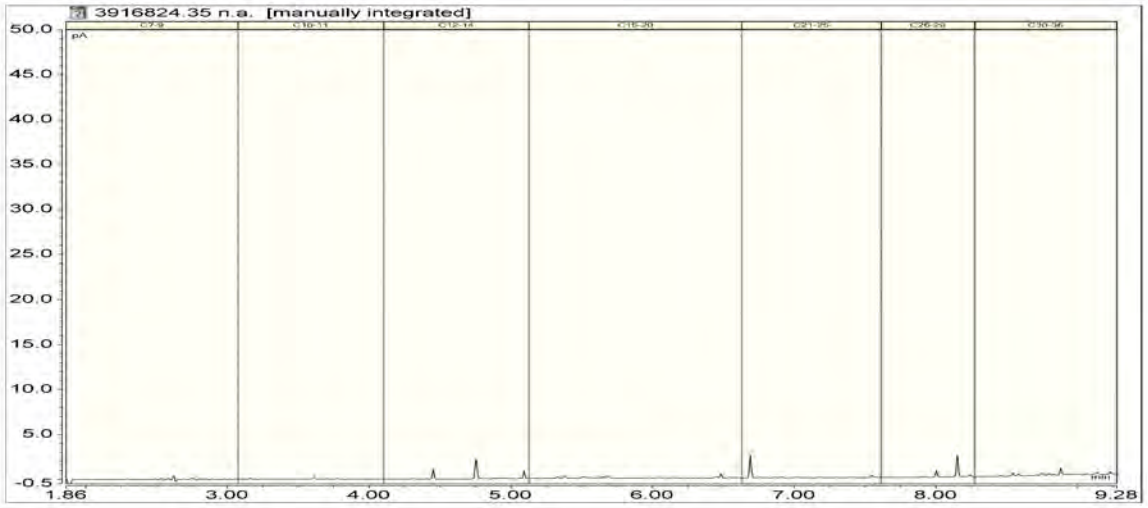
3916824.26
MRS1_SS258_0.5 13-Jun-2025
Client Chromatogram for TPH by FID



3916824.28
MRS1_SS258_1.0 13-Jun-2025
Client Chromatogram for TPH by FID



3916824.35
MRS1_SS261_0.0 13-Jun-2025
Client Chromatogram for TPH by FID



Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7-8, 11, 14, 16, 18-19, 21, 24, 26, 28-29, 32, 35, 38, 41, 43, 45, 47, 49, 51, 53, 55
Total of Reported PAHs in Soil	Sonication extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.03 mg/kg dry wt	11, 14, 16, 18-19, 21, 24, 26, 28-29, 32, 35, 38
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	11, 14, 16, 18-19, 21, 24, 26, 28-29, 32, 35, 38
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	BaP Potency Equivalence calculated from; Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(j)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Benzo(a)pyrene x 1.0 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Fluoranthene x 0.01 + Indeno(1,2,3-c,d)pyrene x 0.1. Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.	0.024 mg/kg dry wt	11, 14, 16, 18-19, 21, 24, 26, 28-29, 32, 35, 38
Benzo[a]pyrene Toxic Equivalence (TEF)*	Benzo[a]pyrene Toxic Equivalence (TEF) calculated from; Benzo[a]pyrene x 1.0 + Benzo(a)anthracene x 0.1 + Benzo(b) fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Indeno(1,2,3-c,d)pyrene x 0.1. Guidelines for assessing and managing contaminated gasworks sites in New Zealand (GMG) (MfE, 1997).	0.024 mg/kg dry wt	11, 14, 16, 18-19, 21, 24, 26, 28-29, 32, 35, 38
TPH Oil Industry Profile + PAHscreen	Sonication extraction, GC-FID and GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8015 and US EPA 8270.	0.010 - 70 mg/kg dry wt	11, 14, 16, 18-19, 21, 24, 26, 28-29, 32, 35, 38
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7-8, 11, 14, 16, 18-19, 21, 24, 26, 28-29, 32, 35, 38, 41, 43, 45, 47, 49, 51, 53, 55
Total Petroleum Hydrocarbons in Soil			
Client Chromatogram for TPH by FID	Small peaks associated with QC compounds may be visible in chromatograms with low TPH concentrations. QC peaks are as follows: one peak in the C12 - 14 band, the C21 - 25 band and the C30 - 36 band. All QC peaks are corrected for in the reported TPH concentrations.	-	11, 16, 18, 26, 28, 35
C7 - C9	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	11, 14, 16, 18-19, 21, 24, 26, 28-29, 32, 35, 38
C10 - C14	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	11, 14, 16, 18-19, 21, 24, 26, 28-29, 32, 35, 38

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
C15 - C36	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	40 mg/kg dry wt	11, 14, 16, 18-19, 21, 24, 26, 28-29, 32, 35, 38
Total hydrocarbons (C7 - C36)	Calculation: Sum of carbon bands from C7 to C36. In-house based on US EPA 8015.	70 mg/kg dry wt	11, 14, 16, 18-19, 21, 24, 26, 28-29, 32, 35, 38

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 17-Jun-2025 and 19-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

s9(2)(a)

Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3919436 SPv1
Contact:	s9(2)(a)	**Date Received:**	18-Jun-2025
	C/- Beca Limited	**Date Reported:**	24-Jun-2025
	PO Box 6345	**Quote No:**	138144
	Wellesley Street	**Order No:**	3011550
	Auckland 1141	**Client Reference:**	3011550
		Submitted By:	s9(2)(a)

Sample Type: Soil

Sample Name:		MRS1_SS269_0.0 18-Jun-2025	MRS1_SS270_0.0 18-Jun-2025	MRS1_SS271_0.0 18-Jun-2025	MRS1_SS272_0.0 18-Jun-2025	MRS1_SS273_0.0 18-Jun-2025
Lab Number:		3919436.1	3919436.4	3919436.7	3919436.10	3919436.13
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	6	5	3	4	5
Total Recoverable Cadmium	mg/kg dry wt	0.30	0.23	0.17	0.16	0.26
Total Recoverable Chromium	mg/kg dry wt	22	22	18	12	27
Total Recoverable Copper	mg/kg dry wt	15	27	6	12	26
Total Recoverable Lead	mg/kg dry wt	35	23	21	10.2	21
Total Recoverable Mercury	mg/kg dry wt	0.11	0.11	0.13	0.12	0.13
Total Recoverable Nickel	mg/kg dry wt	8	7	4	4	24
Total Recoverable Zinc	mg/kg dry wt	75	49	24	46	70

Sample Name:		MRS1_SS274_0.0 18-Jun-2025	MRS1_SS287_0.0 18-Jun-2025	MRS1_SS288_0.0 18-Jun-2025	MRS1_SS289_0.0 18-Jun-2025	MRS1_SS290_0.0 18-Jun-2025
Lab Number:		3919436.16	3919436.19	3919436.22	3919436.25	3919436.28
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	3	4	4	3	3
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	0.24	0.20	0.31	0.25
Total Recoverable Chromium	mg/kg dry wt	15	14	21	14	17
Total Recoverable Copper	mg/kg dry wt	11	6	5	6	7
Total Recoverable Lead	mg/kg dry wt	14.8	18.9	12.3	10.7	12.5
Total Recoverable Mercury	mg/kg dry wt	< 0.10	< 0.10	0.12	< 0.10	0.12
Total Recoverable Nickel	mg/kg dry wt	13	4	7	6	6
Total Recoverable Zinc	mg/kg dry wt	44	22	20	24	22

Sample Name:		MRS1_SS291_0.0 18-Jun-2025	MRS1_SS311_0.0 18-Jun-2025	MRS1_SS312_0.0 18-Jun-2025	MRS1_SS313_0.0 18-Jun-2025	MRS1_SS314_0.0 18-Jun-2025
Lab Number:		3919436.31	3919436.34	3919436.37	3919436.40	3919436.43
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	3	5	3	9	12
Total Recoverable Cadmium	mg/kg dry wt	0.28	0.17	0.18	0.18	0.36
Total Recoverable Chromium	mg/kg dry wt	14	22	20	20	24
Total Recoverable Copper	mg/kg dry wt	7	10	8	9	17
Total Recoverable Lead	mg/kg dry wt	14.0	14.2	14.9	18.5	24
Total Recoverable Mercury	mg/kg dry wt	0.12	< 0.10	< 0.10	< 0.10	< 0.10
Total Recoverable Nickel	mg/kg dry wt	6	6	4	4	5
Total Recoverable Zinc	mg/kg dry wt	22	45	26	39	69

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil		
Sample Name:		MRS1_SS315_0.0 18-Jun-2025
Lab Number:		3919436.46
Heavy Metals with Mercury, Screen Level		
Total Recoverable Arsenic	mg/kg dry wt	18
Total Recoverable Cadmium	mg/kg dry wt	0.29
Total Recoverable Chromium	mg/kg dry wt	25
Total Recoverable Copper	mg/kg dry wt	30
Total Recoverable Lead	mg/kg dry wt	23
Total Recoverable Mercury	mg/kg dry wt	0.15
Total Recoverable Nickel	mg/kg dry wt	7
Total Recoverable Zinc	mg/kg dry wt	82

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 21-Jun-2025 and 24-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

s9(2)(a)

Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3920577 SPv1
Contact:	s9(2)(a)	**Date Received:**	19-Jun-2025
	C/- Beca Limited	**Date Reported:**	26-Jun-2025
	PO Box 6345	**Quote No:**	138144
	Wellesley Street	**Order No:**	3011550/200/2.1
	Auckland 1141	**Client Reference:**	3011550/200/2.1
		Submitted By:	s9(2)(a)

Sample Type: Soil

		Sample Name:	MRS1_SS339_0.0 19-Jun-2025	MRS1_SS340_0.0 19-Jun-2025	MRS1_SS341_0.0 19-Jun-2025	MRS1_SS342_0.0 19-Jun-2025	MRS1_SS343_0.0 19-Jun-2025
		Lab Number:	3920577.1	3920577.4	3920577.7	3920577.10	3920577.13
Heavy Metals with Mercury, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		3	3	15	4	9
Total Recoverable Cadmium	mg/kg dry wt		0.13	0.16	0.23	0.32	0.56
Total Recoverable Chromium	mg/kg dry wt		10	9	18	13	23
Total Recoverable Copper	mg/kg dry wt		3	5	23	15	30
Total Recoverable Lead	mg/kg dry wt		8.1	8.0	29	199	470
Total Recoverable Mercury	mg/kg dry wt		< 0.10	< 0.10	< 0.10	0.15	0.19
Total Recoverable Nickel	mg/kg dry wt		< 2	< 2	2	5	11
Total Recoverable Zinc	mg/kg dry wt		12	16	88	134	360

		Sample Name:	MRS1_SS344_0.0 19-Jun-2025	MRS1_SS317_0.0 19-Jun-2025	MRS1_SS318_0.0 19-Jun-2025	MRS1_SS319_0.0 19-Jun-2025	MRS1_SS320_0.0 19-Jun-2025
		Lab Number:	3920577.16	3920577.19	3920577.22	3920577.25	3920577.28
Heavy Metals with Mercury, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		10	4	3	4	5
Total Recoverable Cadmium	mg/kg dry wt		0.40	0.19	0.17	0.20	0.16
Total Recoverable Chromium	mg/kg dry wt		20	24	17	28	18
Total Recoverable Copper	mg/kg dry wt		38	9	7	14	8
Total Recoverable Lead	mg/kg dry wt		119	16.6	15.8	13.8	17.2
Total Recoverable Mercury	mg/kg dry wt		0.14	< 0.10	< 0.10	< 0.10	0.11
Total Recoverable Nickel	mg/kg dry wt		9	4	3	25	3
Total Recoverable Zinc	mg/kg dry wt		260	32	39	35	35

		Sample Name:	MRS1_SS321_0.0 19-Jun-2025	MRS1_SS322_0.0 19-Jun-2025	MRS1_SS330_0.0 19-Jun-2025	MRS1_SS331_0.0 19-Jun-2025	MRS1_SS332_0.0 19-Jun-2025
		Lab Number:	3920577.31	3920577.34	3920577.37	3920577.38	3920577.39
Individual Tests							
Dry Matter	g/100g as rcvd		63	-	-	-	-
Heavy Metals with Mercury, Screen Level							
Total Recoverable Arsenic	mg/kg dry wt		17	4	4	3	4
Total Recoverable Cadmium	mg/kg dry wt		0.21	0.17	0.18	0.19	0.24
Total Recoverable Chromium	mg/kg dry wt		36	17	12	9	11
Total Recoverable Copper	mg/kg dry wt		29	8	7	7	8
Total Recoverable Lead	mg/kg dry wt		34	11.6	17.0	17.2	12.7
Total Recoverable Mercury	mg/kg dry wt		< 0.10	< 0.10	< 0.10	0.10	< 0.10
Total Recoverable Nickel	mg/kg dry wt		4	3	2	4	4
Total Recoverable Zinc	mg/kg dry wt		51	31	26	26	32

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		MRS1_SS321_0.0 19-Jun-2025	MRS1_SS322_0.0 19-Jun-2025	MRS1_SS330_0.0 19-Jun-2025	MRS1_SS331_0.0 19-Jun-2025	MRS1_SS332_0.0 19-Jun-2025
Lab Number:		3920577.31	3920577.34	3920577.37	3920577.38	3920577.39
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.4	-	-	-	-
1-Methylnaphthalene	mg/kg dry wt	< 0.016	-	-	-	-
2-Methylnaphthalene	mg/kg dry wt	< 0.016	-	-	-	-
Acenaphthylene	mg/kg dry wt	< 0.016	-	-	-	-
Acenaphthene	mg/kg dry wt	< 0.016	-	-	-	-
Anthracene	mg/kg dry wt	< 0.016	-	-	-	-
Benzo[a]anthracene	mg/kg dry wt	< 0.016	-	-	-	-
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.016	-	-	-	-
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.038	-	-	-	-
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.037	-	-	-	-
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.016	-	-	-	-
Benzo[e]pyrene	mg/kg dry wt	< 0.016	-	-	-	-
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.016	-	-	-	-
Benzo[k]fluoranthene	mg/kg dry wt	< 0.016	-	-	-	-
Chrysene	mg/kg dry wt	< 0.016	-	-	-	-
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.016	-	-	-	-
Fluoranthene	mg/kg dry wt	< 0.016	-	-	-	-
Fluorene	mg/kg dry wt	< 0.016	-	-	-	-
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.016	-	-	-	-
Naphthalene	mg/kg dry wt	< 0.08	-	-	-	-
Perylene	mg/kg dry wt	< 0.016	-	-	-	-
Phenanthrene	mg/kg dry wt	< 0.016	-	-	-	-
Pyrene	mg/kg dry wt	< 0.016	-	-	-	-
Total Petroleum Hydrocarbons in Soil						
C7 - C9	mg/kg dry wt	< 30	-	-	-	-
C10 - C14	mg/kg dry wt	< 20	-	-	-	-
C15 - C36	mg/kg dry wt	< 40	-	-	-	-
Total hydrocarbons (C7 - C36)	mg/kg dry wt	< 90	-	-	-	-

Sample Name:		MRS1_SS333_0.0 19-Jun-2025	MRS1_SS334_0.0 19-Jun-2025	MRS1_SS335_0.0 19-Jun-2025	MRS1_SS336_0.0 19-Jun-2025
Lab Number:		3920577.42	3920577.45	3920577.48	3920577.51
Heavy Metals with Mercury, Screen Level					
Total Recoverable Arsenic	mg/kg dry wt	3	3	4	3
Total Recoverable Cadmium	mg/kg dry wt	0.26	0.17	0.12	0.16
Total Recoverable Chromium	mg/kg dry wt	12	12	13	13
Total Recoverable Copper	mg/kg dry wt	7	3	8	5
Total Recoverable Lead	mg/kg dry wt	11.5	15.1	10.7	12.2
Total Recoverable Mercury	mg/kg dry wt	< 0.10	< 0.10	0.13	< 0.10
Total Recoverable Nickel	mg/kg dry wt	3	2	6	3
Total Recoverable Zinc	mg/kg dry wt	32	38	25	25

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Individual Tests			
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37-39, 42, 45, 48, 51

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Total of Reported PAHs in Soil	Sonication extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.03 mg/kg dry wt	31
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	31
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	BaP Potency Equivalence calculated from; Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(j)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Benzo(a)pyrene x 1.0 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Fluoranthene x 0.01 + Indeno(1,2,3-c,d)pyrene x 0.1. Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.	0.024 mg/kg dry wt	31
Benzo[a]pyrene Toxic Equivalence (TEF)*	Benzo[a]pyrene Toxic Equivalence (TEF) calculated from; Benzo[a]pyrene x 1.0 + Benzo(a)anthracene x 0.1 + Benzo(b) fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Indeno(1,2,3-c,d)pyrene x 0.1. Guidelines for assessing and managing contaminated gasworks sites in New Zealand (GMG) (MfE, 1997).	0.024 mg/kg dry wt	31
TPH Oil Industry Profile + PAHscreen	Sonication extraction, GC-FID and GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8015 and US EPA 8270.	0.010 - 70 mg/kg dry wt	31
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37-39, 42, 45, 48, 51
Total Petroleum Hydrocarbons in Soil			
C7 - C9	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	31
C10 - C14	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	20 mg/kg dry wt	31
C15 - C36	Solvent extraction, GC-FID analysis. Tested on as received sample. In-house based on US EPA 8015.	40 mg/kg dry wt	31
Total hydrocarbons (C7 - C36)	Calculation: Sum of carbon bands from C7 to C36. In-house based on US EPA 8015.	70 mg/kg dry wt	31

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 24-Jun-2025 and 26-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

s9(2)(a)

Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3918851 SPv1
Contact:	s9(2)(a)	**Date Received:**	18-Jun-2025
	C/- Beca Limited	**Date Reported:**	24-Jun-2025
	PO Box 6345	**Quote No:**	138144
	Wellesley Street	**Order No:**	3011550
	Auckland 1141	**Client Reference:**	3011550
		Submitted By:	s9(2)(a)

Sample Type: Soil

	Sample Name:	MRS1_SS263_0.0 17-Jun-2025	MRS1_SS264_0.0 17-Jun-2025	MRS1_SS265_0.0 17-Jun-2025	MRS1_SS266_0.0 17-Jun-2025	MRS1_SS267_0.0 17-Jun-2025
	Lab Number:	3918851.1	3918851.4	3918851.7	3918851.10	3918851.13
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	9	7	7	4	8
Total Recoverable Cadmium	mg/kg dry wt	0.24	0.16	0.21	< 0.10	0.21
Total Recoverable Chromium	mg/kg dry wt	53	21	23	17	18
Total Recoverable Copper	mg/kg dry wt	26	13	22	7	12
Total Recoverable Lead	mg/kg dry wt	33	68	25	9.6	18.0
Total Recoverable Mercury	mg/kg dry wt	0.15	0.14	0.13	0.14	0.11
Total Recoverable Nickel	mg/kg dry wt	28	11	16	3	3
Total Recoverable Zinc	mg/kg dry wt	90	43	50	53	44

	Sample Name:	MRS1_SS268_0.0 17-Jun-2025	MRS1_SS275_0.0 17-Jun-2025	MRS1_SS276_0.0 17-Jun-2025	MRS1_SS277_0.0 17-Jun-2025	MRS1_SS278_0.0 17-Jun-2025
	Lab Number:	3918851.16	3918851.19	3918851.22	3918851.25	3918851.28
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	6	4	3	5	4
Total Recoverable Cadmium	mg/kg dry wt	0.17	0.19	0.24	0.11	0.12
Total Recoverable Chromium	mg/kg dry wt	19	16	14	18	19
Total Recoverable Copper	mg/kg dry wt	11	9	11	5	9
Total Recoverable Lead	mg/kg dry wt	14.8	19.3	18.2	9.6	22
Total Recoverable Mercury	mg/kg dry wt	0.12	0.11	< 0.10	0.14	0.12
Total Recoverable Nickel	mg/kg dry wt	8	5	8	4	5
Total Recoverable Zinc	mg/kg dry wt	56	55	58	26	45

	Sample Name:	MRS1_SS279_0.0 17-Jun-2025	MRS1_SS280_0.0 17-Jun-2025	MRS1_SS281_0.0 17-Jun-2025	MRS1_SS282_0.0 17-Jun-2025	MRS1_SS283_0.0 17-Jun-2025
	Lab Number:	3918851.31	3918851.34	3918851.37	3918851.40	3918851.43
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	3	5	3	3
Total Recoverable Cadmium	mg/kg dry wt	0.15	< 0.10	0.33	0.19	0.25
Total Recoverable Chromium	mg/kg dry wt	20	12	16	12	14
Total Recoverable Copper	mg/kg dry wt	40	9	7	5	6
Total Recoverable Lead	mg/kg dry wt	40	14.7	14.7	14.0	17.2
Total Recoverable Mercury	mg/kg dry wt	0.11	< 0.10	0.10	< 0.10	< 0.10
Total Recoverable Nickel	mg/kg dry wt	18	6	4	3	4
Total Recoverable Zinc	mg/kg dry wt	77	28	30	25	86

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		MRS1_SS284_0.0 17-Jun-2025	MRS1_SS285_0.0 17-Jun-2025	MRS1_SS286_0.0 17-Jun-2025	MRS1_SS292_0.0 17-Jun-2025	MRS1_SS293_0.0 17-Jun-2025
Lab Number:		3918851.46	3918851.49	3918851.52	3918851.55	3918851.58
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	3	6	5	8
Total Recoverable Cadmium	mg/kg dry wt	0.20	0.19	0.18	0.17	0.27
Total Recoverable Chromium	mg/kg dry wt	15	17	16	15	20
Total Recoverable Copper	mg/kg dry wt	6	3	7	9	17
Total Recoverable Lead	mg/kg dry wt	11.3	8.3	15.3	12.5	12.1
Total Recoverable Mercury	mg/kg dry wt	0.13	0.11	< 0.10	0.13	0.12
Total Recoverable Nickel	mg/kg dry wt	3	3	4	8	10
Total Recoverable Zinc	mg/kg dry wt	19	12	26	34	31

Sample Name:		MRS1_SS294_0.0 17-Jun-2025	MRS1_SS295_0.0 17-Jun-2025	MRS1_SS296_0.0 17-Jun-2025	MRS1_SS297_0.0 17-Jun-2025
Lab Number:		3918851.61	3918851.64	3918851.67	3918851.70
Heavy Metals with Mercury, Screen Level					
Total Recoverable Arsenic	mg/kg dry wt	5	3	14	5
Total Recoverable Cadmium	mg/kg dry wt	0.24	0.21	0.35	0.17
Total Recoverable Chromium	mg/kg dry wt	32	19	32	17
Total Recoverable Copper	mg/kg dry wt	13	5	42	8
Total Recoverable Lead	mg/kg dry wt	15.1	12.3	19.3	18.0
Total Recoverable Mercury	mg/kg dry wt	0.14	< 0.10	0.11	0.13
Total Recoverable Nickel	mg/kg dry wt	22	6	25	6
Total Recoverable Zinc	mg/kg dry wt	43	20	119	57

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 64, 67, 70
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 64, 67, 70

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 19-Jun-2025 and 24-Jun-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

s9(2)(a)

Client Services Manager - Environmental

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand
s9(2)(a)

Certificate of Analysis

Client:	Beca Limited	**Lab No:**	3926946 SPv1
Contact:	s9(2)(a)	**Date Received:**	30-Jun-2025
	C/- Beca Limited	**Date Reported:**	03-Jul-2025
	PO Box 6345	**Quote No:**	138144
	Wellesley Street	**Order No:**	3011550/200/2.1
	Auckland 1141	**Client Reference:**	3011550/200/2.1
		Submitted By:	s9(2)(a)

Sample Type: Soil

Sample Name:		MRS1_SS1404_0.0 30-Jun-2025	MRS1_SS145_0.0 30-Jun-2025	MRS1_SS146_0.0 30-Jun-2025	MRS1_SS147_0.0 30-Jun-2025	MRS1_SS351_0.0 30-Jun-2025
Lab Number:		3926946.1	3926946.2	3926946.7	3926946.11	3926946.12
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	8	4	280	4
Total Recoverable Cadmium	mg/kg dry wt	0.14	0.14	0.13	1.25	0.18
Total Recoverable Chromium	mg/kg dry wt	24	20	12	142	33
Total Recoverable Copper	mg/kg dry wt	20	19	8	440	20
Total Recoverable Lead	mg/kg dry wt	30	34	18.5	220	18.2
Total Recoverable Mercury	mg/kg dry wt	0.12	0.14	0.19	0.36	0.11
Total Recoverable Nickel	mg/kg dry wt	34	18	4	70	36
Total Recoverable Zinc	mg/kg dry wt	56	66	27	600	72

Sample Name:		MRS1_SS352_0.0 30-Jun-2025	MRS1_SS353_0.0 30-Jun-2025	MRS1_SS354_0.0 30-Jun-2025	MRS1_SS347_0.0 30-Jun-2025	MRS1_QA21 30-Jun-2025
Lab Number:		3926946.15	3926946.20	3926946.25	3926946.30	3926946.35
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	4	3	4	4
Total Recoverable Cadmium	mg/kg dry wt	0.20	0.19	< 0.10	0.13	0.23
Total Recoverable Chromium	mg/kg dry wt	33	34	18	18	37
Total Recoverable Copper	mg/kg dry wt	21	23	7	7	24
Total Recoverable Lead	mg/kg dry wt	19.3	26	8.0	8.8	19.0
Total Recoverable Mercury	mg/kg dry wt	0.12	0.12	< 0.10	0.12	0.13
Total Recoverable Nickel	mg/kg dry wt	38	30	14	4	57
Total Recoverable Zinc	mg/kg dry wt	67	77	18	24	78

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1-2, 7, 11-12, 15, 20, 25, 30, 35
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1-2, 7, 11-12, 15, 20, 25, 30, 35

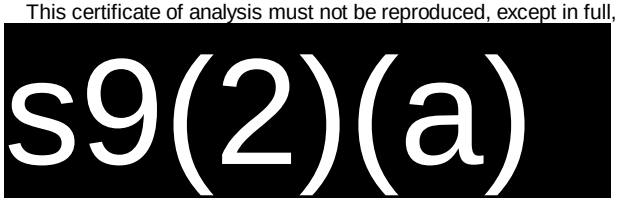
This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 02-Jul-2025 and 03-Jul-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.



Client Services Manager - Environmental