



Job No: 8599/95  
Our Ref: 8599/95-AA-R1  
14 September 2022

Daracon Contractors Pty Ltd  
184 Adderley Street  
AUBURN NSW 2144  
Email: [SimpsonW@daracon.com.au](mailto:SimpsonW@daracon.com.au)

Attention: Mr S Wong

Dear Sir

re: **Newpark – Precinct 7 – Stage 7C**  
**Abell Road, Marsden Park**  
**Post Earthworks Salinity Assessment – Exposure Classification**

At your request, Geotech Testing Pty Ltd conducted a salinity and aggressivity assessment at the above site after completion of earthworks. This report provides exposure classification of the proposed lots at Precinct 7C of the above development.

#### **Field Work**

Field work for the investigation was carried out under the full time supervision of a Geotechnical Engineer on 15<sup>th</sup> to the 22<sup>nd</sup> August 2022 and consisted of excavation of fifty six (56) test pits (TP1 to TP56) to depths of the order of 1.5m using a 5 tonne excavator. Test pits at shallow depths were terminated due to refusal on bedrock. The locations of the test pits are shown on the attached Drawing No 8599/95-AA1 in Appendix A. A summary of the field data obtained is presented in Appendix A.

#### **Site Conditions**

The site (Precinct 7C) is irregular in shape and located within the Newpark subdivision. The site is bound by Stage 7A to the east; air services land to the south; Stage 7D to the west and Stage 7B to the north. At the time of investigation, earthworks for the lots had been completed and the construction of internal roads was underway. The topography of the site is generally flat with a mild slope in the northern direction.

8599/95-AB  
Newpark – Precinct 7 – Stage 7C

**Sub-surface Conditions**

Sub-surface conditions encountered in the test pits are detailed in the attached Table A and summarised below in Table 1.

Table 1: Sub-surface conditions

Test Pit	Termination Depth (m)	Topsoil (m)	Fill (m)	Natural (m)	Bedrock (m)
TP1	1.5	NE	NE	0.0-1.5	NE
TP2	1.5	NE	NE	0.0-1.5	NE
TP3	1.5	NE	NE	0.0-1.5	NE
TP4	1.5	NE	NE	0.0-1.5	NE
TP5	1.5	0.0-0.3	NE	0.3-1.5	NE
TP6	1.5	NE	NE	0.0-1.5	NE
TP7	1.5	NE	NE	0.0-1.5	NE
TP8	1.5	NE	NE	0.0-1.5	NE
TP9	1.5	NE	NE	0.0-1.5	NE
TP10	1.5	NE	NE	0.0-1.5	NE
TP11	1.5	NE	NE	0.0-1.5	NE
TP12	1.3	NE	NE	0.0-1.3	1.3
TP13	1.5	NE	NE	0.0-1.5	NE
TP14	1.5	NE	NE	0.0-1.5	NE
TP15	1.5	NE	NE	0.0-1.5	NE
TP16	1.5	0.0-0.2	NE	0.2-1.5	NE
TP17	0.7	0.0-0.1	NE	0.1-0.7	0.7
TP18	0.6	0.0-0.3	NE	NE	0.3-0.6
TP19	1.5	NE	NE	0.0-1.5	NE
TP20	1.5	0.0-0.2	NE	0.2-1.5	NE
TP21	0.6	NE	NE	0.0-0.4	0.4-0.6
TP22	1.5	NE	NE	0.0-1.5	NE
TP23	1.5	NE	NE	0.0-1.5	NE
TP24	1.5	NE	NE	0.0-1.5	NE
TP25	0.5	NE	NE	NE	0.0-0.5
TP26	1.5	NE	NE	0.0-1.5	NE
TP27	1.2	NE	NE	0.0-1.0	1.0-1.2
TP28	1.5	NE	NE	0.0-0.8	0.8-1.5
TP29	1.5	NE	NE	0.0-1.5	NE
TP30	1.5	NE	NE	0.0-0.9	0.9-1.1
TP31	1.1	NE	NE	0.0-1.0	1.1
TP32	1.5	0.0-0.3	NE	0.3-1.5	NE
TP33	1.5	NE	NE	0.0-1.5	NE

8599/95-AB  
Newpark – Precinct 7 – Stage 7C

Test Pit	Termination Depth (m)	Topsoil (m)	Fill (m)	Natural (m)	Bedrock (m)
TP34	1.0	NE	NE	0.0-1.0	1.0
TP35	1.5	NE	NE	0.0-1.5	NE
TP36	1.5	NE	NE	0.0-1.5	NE
TP37	1.1	NE	NE	0.0-1.1	1.1
TP38	1.5	0.0-0.2	NE	0.2-1.5	NE
TP39	0.5	0.0-0.3	NE	0.3-0.5	0.5
TP40	1.5	0.0-0.3	NE	0.3-1.5	NE
TP41	1.5	0.0-0.2	NE	0.2-1.5	NE
TP42	1.4	0.0-0.3	NE	0.3-1.2	1.2-1.4
TP43	1.5	NE	NE	0.0-1.5	NE
TP44	1.5	NE	NE	0.0-1.5	NE
TP45	1.5	0.0-0.2	NE	0.2-1.5	NE
TP46	1.5	NE	NE	0.0-1.5	NE
TP47	1.5	0.0-0.2	NE	0.2-1.5	NE
TP48	1.5	0.0-0.2	NE	0.2-0.6	0.6-0.8
TP49	1.4	0.0-0.3	NE	0.3-1.2	1.2-1.4
TP50	0.5	NE	NE	0.0-0.3	0.3-0.5
TP51	1.5	NE	NE	0.0-1.3	1.3-1.5
TP52	1.2	NE	NE	0.0-1.0	1.0-1.2
TP53	1.2	NE	NE	0.0-1.0	1.0-1.2
TP54	0.7	NE	NE	0.0-0.2	0.2-0.7
TP55	0.7	NE	NE	0.0-0.6	0.6-0.7
TP56	1.5	NE	NE	0.0-0.4	0.4-0.6

NE: Not encountered to the termination depth

The test pit investigation revealed the following generalised sub-surface profile:

Topsoil	
	Silty Clay, high plasticity, dark grey, traces of fine to coarse gravels and rootlets
	Silty Clay, medium to high plasticity, dark grey, traces of fine to coarse gravels and grass roots
	Silty Clay, low to medium plasticity, dark grey-black, traces of fine to coarse gravels and grass roots
	Silty Clay, medium to high plasticity, brown, traces of fine to coarse gravels and rootlets
	Silty Clay, low to medium plasticity, brown-black, traces of gravel and root fibres

8599/95-AB  
Newpark – Precinct 7 – Stage 7C

<p><b>Natural</b></p>	<p>Silty CLAY, high plasticity, brown mottled grey, traces of cobbles and gravel  Silty CLAY, high plasticity, brown  Silty CLAY, low to medium plasticity, brown mottled grey, traces of sand  Silty CLAY, medium to high plasticity, brown, traces of gravels  Silty CLAY, low to medium plasticity, grey mottled yellow, traces of sand  Silty CLAY, medium to high plasticity, brown-black, traces of gravels and cobbles  Silty CLAY, low to medium plasticity, brown-black, traces of sand and fine to coarse gravels  Silty CLAY, low to medium plasticity, grey mottled brown, traces of fine to coarse gravels  Silty CLAY, medium to high plasticity, dark grey, traces of fine to coarse gravels  Silty CLAY, low to medium plasticity, grey  Silty CLAY, low to medium plasticity, grey, traces of fine to coarse gravels (ironstone)  Silty CLAY, low plasticity, grey mottled brown  Shaley CLAY, low plasticity, grey mottled brown, with fine to coarse sandstone  Sandy CLAY, low to medium plasticity, grey mottled brown  Sandy CLAY, low to medium plasticity, brown mottled grey ,with fine to coarse sandstone  Gravelly SAND, fine to coarse grained, brown, fine to coarse sub-angular gravels  Sandy CLAY, low to medium plasticity, grey, fine to medium grained</p>
<p><b>Bedrock</b></p>	<p>SANDSTONE, fine to coarse grained, grey, slightly weathered, high strength, with ironstaining  SILTSTONE/SANDSTONE, fine to coarse grained, light grey, distinctly weathered, low strength  SANDSTONE, fine to coarse grained, brown, distinctly weathered, medium strength  IRONSTONE/SANDSTONE, brown, distinctly weathered, medium strength  SANDSTONE, fine to coarse grained, brown, distinctly weathered, medium strength, with ironstaining  SANDSTONE, fine to coarse grained, grey, highly to extremely weathered, low strength  SANDSTONE, fine to coarse grained, brown, with ironstaining, highly to extremely weathered, medium strength  SANDSTONE, fine to coarse grained, brown mottled grey, extremely weathered, low strength</p>

8599/95-AB  
Newpark – Precinct 7 – Stage 7C

Groundwater was not observed in the test pits during the short time that they remained open. It must be noted that fluctuations in the level of groundwater might occur due to variations in rainfall, temperature and/or other factors.

**Exposure Classification**

**Laboratory Testing**

During field work, a total of twenty-four (24) soil samples were collected for chemical testing in the NATA accredited laboratory of SGS for salinity and acidity properties. The laboratory test results certificates from SGS are attached at the end of this report and summarised in Table 2.

Table 2: Laboratory Tests Results

Test Pit	Depth (m)	pH	EC (µS/cm)	Multiplying Factor	EC <sub>e</sub> (dS/m)	Classification
TP1	0.8-1.0	4.7	360	8	2.88	A2
TP1	1.3-1.5	4.9	310	8	2.48	A2
TP2	0.2-0.4	5.1	160	8	1.28	A2
TP2	1.0-1.2	4.7	180	8	1.44	A2
TP3	0.4-0.6	5.4	450	8	3.6	A2
TP4	0.4-0.6	6	41	8	0.328	A1
TP4	1.0-1.2	5.1	240	8	1.92	A2
TP5	0.5-0.8	4.9	390	8	3.12	A2
TP5	1.3-1.5	4.9	540	8	4.32	A2
TP6	0.5-0.7	5.2	160	8	1.28	A2
TP6	0.7-0.9	5.1	430	8	3.44	B1
TP7	0.3-0.5	4.8	290	8	2.32	A2
TP7	1.0-1.2	5	290	8	2.32	A2
TP8	0.5-0.9	4.9	240	8	1.92	A2
TP8	0.9-1.1	5.3	170	8	1.36	A2
TP9	0.3-0.6	4.7	290	8	2.32	A2
TP9	1.1-1.3	5.2	57	8	0.456	A2
TP10	0.7-0.9	4.7	200	8	1.6	A2
TP10	1.2-1.4	5.2	94	8	0.752	A2
TP11	0.4-0.7	5	140	8	1.12	A2
TP11	1.0-1.2	4.9	150	8	1.2	A2
TP12	0.5-0.8	5.1	220	8	1.76	A2
TP13	0.2-0.4	4.9	570	8	4.56	A2
TP13	1.2-1.4	4.6	1100	8	8.8	B1
TP14	0.4-0.6	4.8	820	8	6.56	A2
TP14	0.8-1.0	4.7	850	8	6.8	A2
TP15	0.3-0.5	4.7	680	8	5.44	A2
TP15	1.0-1.2	4.5	640	8	5.12	A2
TP16	0.6-0.8	4.8	290	8	2.32	A2

8599/95-AB  
Newpark - Precinct 7 - Stage 7C

Test Pit	Depth (m)	pH	EC ( $\mu\text{S/cm}$ )	Multiplying Factor	EC <sub>e</sub> (dS/m)	Classification
TP16	1.2-1.4	4.9	300	8	2.4	A2
TP17	0.2-0.4	5.4	590	8	4.72	A2
TP18	0.3-0.6	5.1	950	8	7.6	A2
TP19	0.2-0.4	4.7	1100	8	8.8	B1
TP19	1.2-1.4	4.6	1400	8	11.2	B1
TP20	0.8-1.0	4.5	1000	8	8	B1
TP20	1.3-1.5	4.8	930	8	7.44	A2
TP21	0.2-0.4	4.8	380	8	3.04	A2
TP22	0.2-0.4	5.8	600	8	4.8	A2
TP22	1.0-1.2	6.3	600	8	4.8	A2
TP23	0.3-0.5	4.8	740	8	5.92	A2
TP23	1.2-1.4	4.7	1100	8	8.8	B1
TP24	0.2-0.4	4.9	700	8	5.6	A2
TP24	1.1-1.4	5.1	750	8	6	A2
TP25	0.1-0.4	5.1	760	8	6.08	A2
TP26	0.2-0.4	5.1	370	8	2.96	A2
TP26	0.9-1.1	4.7	940	8	7.52	A2
TP27	0.3-0.5	4.9	420	8	3.36	A2
TP27	0.8-1.0	4.6	560	8	4.48	A2
TP28	0.5-0.7	5.1	750	8	6	A2
TP28	1.0-1.2	5	940	8	7.52	A2
TP29	0.2-0.4	4.8	320	8	2.56	A2
TP29	1.3-1.5	5.2	560	8	4.48	A2
TP30	0.8-1.0	5	250	8	2	A2
TP31	0.1-0.3	4.8	510	8	4.08	A2
TP32	0.2-0.3	4.6	700	8	5.6	A2
TP32	1.0-1.2	4.6	690	8	5.52	A2
TP33	0.1-0.3	5.3	210	8	1.68	A2
TP33	0.9-1.1	4.9	490	8	3.92	A2
TP34	0-0.3	5.3	450	8	3.6	A2
TP34	0.8-1.0	4.9	670	8	5.36	A2
TP35	0.4-0.6	4.9	760	8	6.08	A2
TP35	1.2-1.4	5	710	8	5.68	A2
TP36	0.6-0.8	5.1	400	8	3.2	A2
TP36	1.1-1.3	5.3	480	8	3.84	A2
TP37	0.3-0.6	4.9	410	8	3.28	A2
TP38	0.2-0.5	5.1	410	8	3.28	A2

8599/95-AB  
Newpark – Precinct 7 – Stage 7C

Test Pit	Depth (m)	pH	EC (µS/cm)	Multiplying Factor	EC <sub>e</sub> (dS/m)	Classification
TP39	0.3-0.5	4.9	390	8	3.12	A2
TP40	0.8-1.0	4.7	710	8	5.68	A2
TP40	1.1-1.3	4.6	790	8	6.32	A2
TP41	0.3-0.5	4.6	660	8	5.28	A2
TP41	1.2-1.4	4.7	570	8	4.56	A2
TP42	0.6-0.8	4.7	570	8	4.56	A2
TP43	0.7-0.9	4.5	920	8	7.36	A2
TP43	1.3-1.5	4.6	850	8	6.8	A2
TP44	0.3-0.6	4.8	720	8	5.76	A2
TP44	0.9-1.1	4.7	780	8	6.24	A2
TP45	0.4-0.6	5.2	380	8	3.04	A2
TP45	0.8-1.0	5	300	8	2.4	A2
TP45	1.1-1.3	4.6	620	8	4.96	A2
TP46	0.4-0.6	4.7	400	8	3.2	A2
TP46	0.7-0.9	5	490	8	3.92	A2
TP47	0.3-0.5	5.2	310	8	2.48	A2
TP47	1.2-1.4	4.9	200	8	1.6	A2
TP48	0.4-0.6	4.6	220	8	1.76	A2
TP49	0.3-0.5	4.7	440	8	3.52	A2
TP49	1.0-1.2	4.8	250	8	2	A2
TP50	0.1-0.3	4.7	330	8	2.64	A2
TP51	0.2-0.4	5.4	210	8	1.68	A2
TP51	0.9-1.1	5.2	230	8	1.84	A2
TP52	0.4-0.6	4.7	800	8	6.4	A2
TP53	0.2-0.4	4.8	740	8	5.92	A2
TP54	0.3-0.5	4.6	800	8	6.4	A2
TP55	0.4-0.6	4.3	970	8	7.76	B1
TP56	0.1-0.3	4.7	530	8	4.24	A2

\* The multiplication factor (MF) is a function of the soil texture and description (Site Investigations for Urban Salinity – 2002)  
EC<sub>e</sub> (Corrected Electrical Conductivity) = MF x EC

### Specifications

Electrical Conductivity (EC) testing was carried out to assess soil salinity, as outlined in the Department of Environment and Heritage (DEH) publication, “Site Investigations for Urban Salinity - 2002”. The test conducted on a soil sample for salinity is generally made up of 1:5 soil water suspension, which is one part air dried soil to five parts distilled water. The determined EC is multiplied by a factor based on the texture of the soil sample (varying from 6 to 17) to obtain Corrected Electrical Conductivity (see Table 2) designated as EC<sub>e</sub>. Based on site observation, a multiplication factor of 8 was used for the soil encountered during field work. The DEH publication defines various classes of saline soils as follows:

8599/95-AB  
Newpark – Precinct 7 – Stage 7C

Classification	EC <sub>e</sub> (dS/m)	Exposure Classification AS2870-2011
Non-saline	<2	A1
Slightly saline	2 – 4	
Moderately saline	4 – 8	A2
Very saline	8 – 16	B1
Highly saline	>16	B2

Acidity (pH) testing was also conducted to determine the aggressivity of the soils to steel and concrete. The various classes of aggressive soils are defined as follows according to AS2870-2011.

Classification	pH	Exposure Classification AS2870-2011
Non-aggressive	>5.5	A1
Mild	4.5-5.5	A2
Moderate	4.0-4.5	B1
Severe	<4.0	B2

Based on the results, it is assessed that soils at the site are generally non-saline to slightly saline and non-aggressive to mildly aggressive to steel and concrete.

### Conclusion

Based on the procedures described in AS2870-2011 the exposure classifications for the proposed lots are shown in Table 3.



8599/95-AB  
Newpark – Precinct 7 – Stage 7C

Table 3 – Site Exposure Classifications (AS2870-2011)

Lot	Exposure Classification	Lot	Exposure Classification	Lot	Exposure Classification
7701	A2	7734	A2	7767	B1
7702	A2	7735	A2	7768	B1
7703	A2	7736	A2	7769	B1
7704	A2	7737	A2	7770	B1
7705	A2	7738	A2	7771	B1
7706	A2	7739	A2	7772	B1
7707	A2	7740	A2	7773	B1
7708	A2	7741	A2	7774	A2
7709	A2	7742	A2	7775	A2
7710	A2	7743	A2	7776	A2
7711	A2	7744	A2	7777	A2
7712	A2	7745	A2	7778	A2
7713	A2	7746	B1	7779	A2
7714	A2	7747	B1	7780	A2
7715	A2	7748	A2	7781	B1
7716	A2	7749	A2	7782	B1
7717	A2	7750	A2	7783	A2
7718	A2	7751	A2	7784	A2
7719	A2	7752	A2	7785	A2
7720	A2	7753	A2	7786	A2
7721	A2	7754	A2	7787	A2
7722	A2	7755	A2	7788	A2
7723	A2	7756	A2	7789	A2
7724	A2	7757	A2	7790	A2
7725	A2	7758	A2	7791	A2
7726	A2	7759	A2	7792	A2
7727	B1	7760	A2	7793	A2
7728	B1	7761	A2	7794	A2
7729	B1	7762	A2	7795	A2
7730	A2	7763	A2	7796	A2
7731	A2	7764	A2	7797	A2
7732	A2	7765	A2	7798	A2
7733	A2	7766	B1	7799	A2

8599/95-AB  
Newpark – Precinct 7 – Stage 7C

Lot	Exposure Classification	Lot	Exposure Classification	Lot	Exposure Classification
7800	A2	7833	A2	7866	A2
7801	B1	7834	A2	7867	A2
7802	B1	7835	A2	7868	B1
7803	A2	7836	A2	7869	B1
7804	A2	7837	A2	7870	A2
7805	A2	7838	A2	7871	A2
7806	A2	7839	A2	7872	A2
7807	A2	7840	A2	7873	A2
7808	A2	7841	A2	7874	A2
7809	A2	7842	A2	7875	A2
7810	A2	7843	A2	7876	A2
7811	A2	7844	A2	7877	A2
7812	A2	7845	A2	7878	A2
7813	A2	7846	A2	7879	A2
7814	A2	7847	A2	7880	A2
7815	A2	7848	A2	7881	A2
7816	A2	7849	A2	7882	A2
7817	A2	7850	A2	7883	A2
7818	A2	7851	A2	7884	A2
7819	A2	7852	A2	7885	A2
7820	A2	7853	A2	7886	A2
7821	A2	7854	A2	7887	A2
7822	A2	7855	A2	7888	A2
7823	A2	7856	A2	7889	A2
7824	A2	7857	A2	7890	A2
7825	A2	7858	A2	7891	A2
7826	A2	7859	A2	7892	A2
7827	A2	7860	A2	7893	A2
7828	A2	7861	A2	7894	A2
7829	A2	7862	B1	7895	A2
7830	A2	7863	B1	7896	A2
7831	A2	7864	A2	7897	A2
7832	A2	7865	A2	7898	A2

8599/95-AB  
Newpark – Precinct 7 – Stage 7C

Lot	Exposure Classification	Lot	Exposure Classification
7899	A2	7921	A2
7900	A2	7922	A2
7901	A2	7923	A2
7902	A2	7924	A2
7903	A2	7925	A2
7904	A2	7926	A2
7905	A2	7927	A2
7906	A2	7928	A2
7907	A2	7929	A2
7908	A2	7930	A2
7909	A2	7931	A2
7910	A2	7932	A2
7911	A2	7933	A2
7912	A2	7934	A2
7913	A2	7935	A2
7914	A2	7936	A2
7915	A2	7937	A2
7916	A2	7938	A2
7917	A2	7939	A2
7918	A2	7940	A2
7919	A2	7941	A2
7920	A2	7942	A2

Based on the results of the post site works salinity assessment, the site is suitable for the residential subdivision development. The construction requirements for A1, A2, B1 and B2 classifications are shown below (AS2870-2011, Table 5.3).

Classification	Minimum Design Characteristic Strength	Minimum Initial Curing
A1	20 MPa	3 days
A2	25 MPa	3 days
B1	32 MPa	7 days
B2	40 MPa	7 days

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8599/95-AB  
Newpark – Precinct 7 – Stage 7C


If you have any questions, please do not hesitate to contact the undersigned.

Yours faithfully  
GEOTECH TESTING PTY LTD



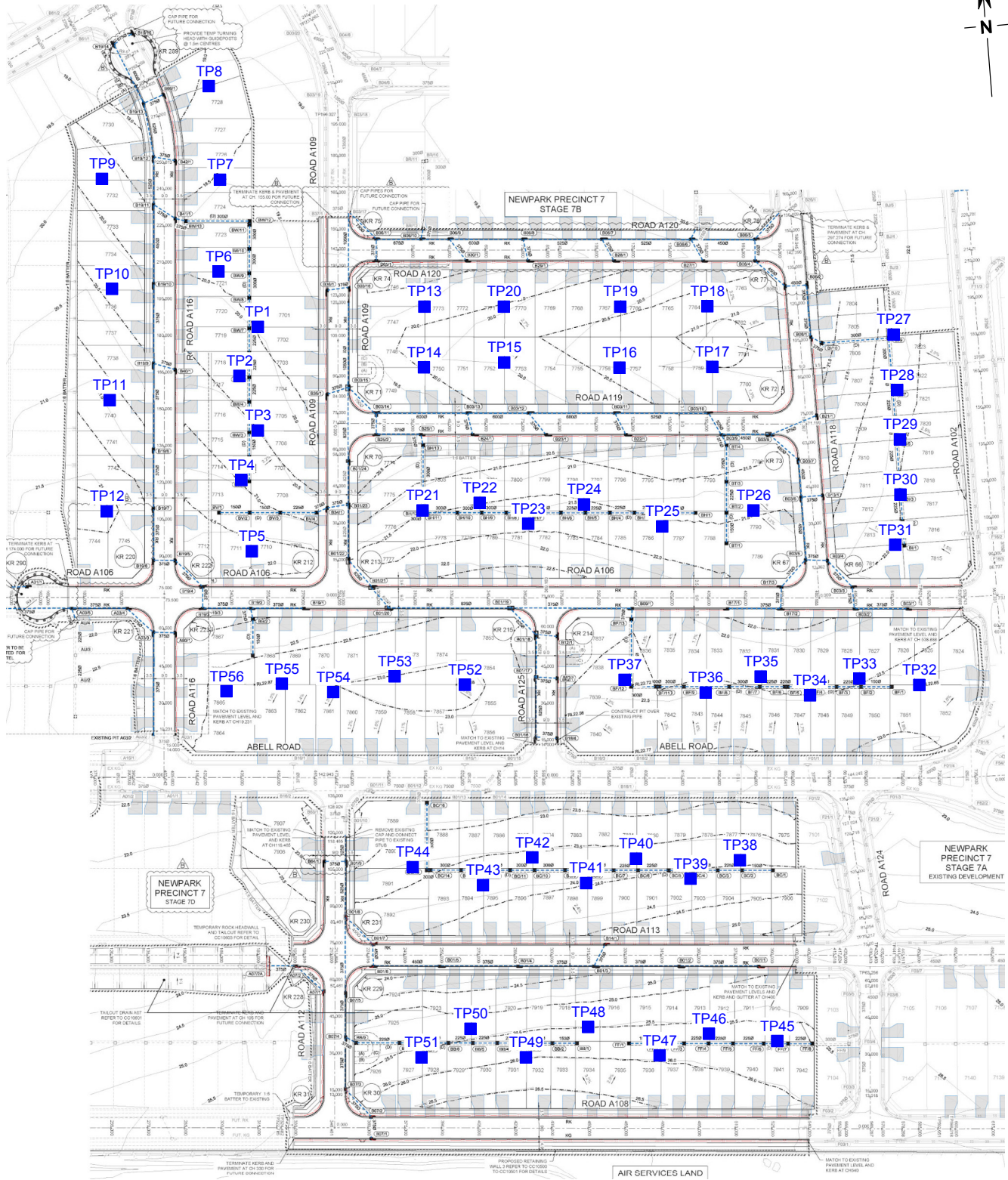
JACK-SCOTT HERBEN  
Geotechnical Engineer

Reviewed by



EMGED RIZKALLA  
Director

Attached      Drawing No 8599/94-AA1 - Test Pit Location Plan  
Table A – Summary of Test Pits  
SGS Laboratory Test Results



**LEGEND**

- Test Pit

PREPARED BY:



34 Borec Road  
Penrith  
NSW 2750  
ABN 71 076 676 321

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Daracon Contractors Pty Ltd  
Residential Development  
Woorong Park Precinct 7C  
Marsden Park

Test Pit Locations

Drawing No: 8599/94-AA1  
Job No: 8599/67  
Drawn By: MH  
Date: 17 August 2022  
Checked By: PP  
File No: 8599-94-AA1  
Layers: 0, AA1

TABLE A

Job No: 8599/94  
Our Ref: 8599/94-AA

Page 1 of 10

TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP1	0.0-0.5		(CH) Silty CLAY, high plasticity, brown mottled grey, traces of cobbles and gravel, M≈PL, F
	0.5-1.3	0.8-1.0 (DS)	(CH) Silty CLAY, high plasticity, brown, M≈PL, St
	1.3-1.5	1.3-1.5 (DS)	Silty CLAY, low to medium plasticity, brown mottled grey, traces of sand, M≈PL, VSt
TP2	0.0-0.4	0.2-0.4 (DS)	Silty CLAY, medium to high plasticity, brown, traces of gravels and root fibres, M≈PL, F
	0.4-0.8	0.6-1.0 (U <sub>50</sub> )	Silty CLAY, medium to high plasticity, brown, M≈PL, St
	0.8-1.5	1.0-1.2 (DS)	Silty CLAY, low to medium plasticity, brown mottled grey, M≈PL, VSt
TP3	0.0-0.3		Silty CLAY, high plasticity, brown, traces of medium to coarse gravels, M<PL, F
	0.3-1.0	0.4-0.6 (DS)	Silty CLAY, medium to high plasticity, grey mottled yellow, M≈PL, St
	1.0-1.5	1.1-1.4 (U <sub>50</sub> )	Silty CLAY, low to medium plasticity, grey mottled yellow, traces of sand, M≈PL, St
TP4	0.0-0.6	0.4-0.6 (DS)	Silty CLAY, medium to high plasticity, brown-black, traces of gravels and cobbles, M>PL, St
	0.6-1.5	1.0-1.2 (DS)	Silty CLAY, low to medium plasticity, grey mottled brown, traces of fine to coarse gravels, M>PL, VSt
TP5	0.0-0.3		TOPSOIL: Silty Clay, medium to high plasticity, brown black, traces of sand and root fibres, M>PL, F
	0.3-1.5	0.5-0.8 (DS) 1.3-1.5 (DS)	Silty CLAY, low to medium plasticity, grey mottled brown, M≈PL, St
TP6	0.0-0.5		Silty CLAY, medium to high plasticity, brown, traces of fine to coarse gravels, M>PL, St
	0.5-0.7	0.5-0.7 (DS)	Silty CLAY, low to medium plasticity, brown-black, traces of sand and fine to coarse gravels, M>PL, F
	0.7-0.9	0.7-0.9 (DS)	Silty SAND, fine to coarse grained, black-brown, M>PL, F
	0.9-1.5		Silty CLAY, medium to high plasticity, mottled grey-brown, M>PL, St

TABLE A

Job No: 8599/94  
Our Ref: 8599/94-AA

Page 2 of 10

TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP7	0.0-0.5	0.3-0.5 (DS)	Silty CLAY, medium to high plasticity, grey mottled brown, traces of fine to coarse gravels and cobbles, M>PL, F
	0.5-1.5	1.0-1.2 (DS)	Silty CLAY, medium to high plasticity, brown-black, traces of fine to coarse gravels and cobbles, M<PL, St
TP8	0.0-0.5		Silty CLAY, medium to high plasticity, mottled grey-brown, traces of fine to coarse gravels and cobbles, M<PL, F
	0.5-0.9	0.5-0.9 (DS)	Silty CLAY, medium to high plasticity, brown mottled grey, traces of fine to coarse gravels and cobbles, M>PL, St
	0.9-1.1	0.9-1.1 (DS)	Silty CLAY, low to medium plasticity, brown-grey, trace of fine to coarse gravels, M<PL, St
	1.1-1.5	1.0-1.3 (U <sub>50</sub> )	Silty CLAY, medium to high plasticity, brown-grey, traces of fine to coarse gravels, M<PL, St
TP9	0.0-0.3		Silty CLAY, medium to high plasticity, dark grey, traces of fine to coarse gravels, M<PL, St
	0.3-1.1	0.3-0.6 (DS) 0.7-1.0 (U <sub>50</sub> )	Silty CLAY, low to medium plasticity, grey mottled brown, traces of fine to coarse gravels, M≈PL, St
	1.1-1.5	1.1-1.3 (DS)	Silty CLAY, medium to high plasticity, brown, traces of fine to coarse gravels, M≈PL, St
TP10	0.0-0.3		Silty CLAY, medium to high plasticity, dark grey, traces of fine to coarse gravels, M<PL, F
	0.3-0.7		Silty CLAY, low to medium plasticity, grey mottled brown, traces of fine to coarse gravels, M≈PL, St
	0.7-1.1	0.7-0.9 (DS)	Silty CLAY, medium to high plasticity, brown, traces of fine to coarse gravels, cobbles and boulders, M≈PL, St
	1.1-1.5	1.2-1.4 (DS)	Silty CLAY, medium to high plasticity, brown mottled grey, traces of fine to coarse gravels, M≈PL, St
TP11	0.0-0.3		Silty CLAY, medium to high plasticity, dark grey, traces of fine to coarse gravels, M<PL, F
	0.3-0.7	0.4-0.7 (DS)	Silty CLAY, low to medium plasticity, brown mottled grey, traces of fine to coarse gravels, M≈PL, St
	0.7-1.5	1.0-1.2 (DS)	Silty CLAY, low plasticity, grey mottled brown, traces of fine to coarse gravels, M≈PL, VSt

TABLE A

Job No: 8599/94  
Our Ref: 8599/94-AA

Page 3 of 10

TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP12	0.0-0.3		Silty CLAY, medium to high plasticity, dark grey, traces of fine to coarse gravels, M<PL, F
	0.3-1.0	0.5-0.8 (DS) 0.6-0.9 (U <sub>50</sub> )	Silty CLAY, medium to high plasticity, brown mottled grey, traces of fine to coarse gravels, M≈PL, St
	1.0-1.3		Silty CLAY, low to medium plasticity, grey mottled brown, with fine to coarse gravels, M≈PL, St
	1.3 Refusal		SILTSTONE/SANDSTONE, fine to coarse grained, light grey, distinctly weathered, low strength
TP13	0.0-0.7	0.2-0.4 (DS) 0.4-0.7 (U <sub>50</sub> )	Silty CLAY, low to medium plasticity, grey, M>PL, St
	0.7-1.5	1.2-1.4 (DS)	Silty CLAY, low plasticity, grey mottled brown, traces of fine to coarse gravels (ironstone)
TP14	0.0-0.3		Silty CLAY, low to medium plasticity, grey mottled brown, traces of gravel, MOPL, St
	0.3-1.5	0.4-0.6 (DS) 0.8-1.0 (DS)	Silty CLAY, low to medium plasticity, grey, traces of fine to coarse gravels (ironstone), M>PL, VSt
TP15	0.0-1.5	0.3-0.5 (DS) 1.0-1.2 (DS)	Silty CLAY, low to medium plasticity, grey mottled brown, traces of fine to coarse ironstone, M>PL, St
TP16	0.0-0.2		TOPSOIL: Silty Clay, high plasticity, dark grey, traces of fine to coarse gravels and rootlets, M≈PL, VSt
	0.2-1.2	0.6-0.8 (DS)	Silty CLAY, low to medium plasticity, mottled grey brown, with fine to coarse gravels and cobbles, M>PL, St
	1.2-1.5	1.2-1.4 (DS)	Sandy CLAY, low to medium plasticity, grey mottled brown, with fine to coarse sandstone, M>PL, VSt
TP17	0.0-0.1		TOPSOIL: Silty Clay, medium to high plasticity, dark grey, traces of fine to coarse gravels and grass roots, M≈PL, F
	0.1-0.7	0.2-0.4 (DS)	Sandy CLAY, low to medium plasticity, mottled grey brown, fine to coarse grained, traces of fine to coarse sandstone, M>PL, St
	0.7 Refusal		SANDSTONE, fine to coarse grained, grey, slightly weathered, high strength, with ironstaining



**TABLE A**

Job No: 8599/94  
Our Ref: 8599/94-AA

Page 4 of 10

TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP18	0.0-0.3		TOPSOIL: Silty CLAY, medium to high plasticity, dark grey, traces of fine to coarse gravels and grass roots
	0.3-0.6	0.3-0.6 (DS)	SANDSTONE, fine to coarse grained, brown, distinctly weathered, medium strength
	0.6 Refusal		
TP19	0.0-0.9	0.2-0.4 (DS) 0.3-0.6 (U <sub>50</sub> )	Silty CLAY, low to medium plasticity, mottled grey brown, traces of fine to coarse gravels, M≈PL, VSt
	0.9-1.5	1.2-1.4 (DS)	Silty CLAY, low plasticity, grey mottled brown, M≈PL, VSt
TP20	0.0-0.2		TOPSOIL: Silty Clay, low to medium plasticity, dark grey-black, traces of fine to coarse gravels and grass roots, M>PL, F
	0.2-1.5	0.8-1.0 (DS) 1.3-1.5 (DS)	Silty CLAY, medium to high plasticity, mottled brown grey, with cobbles and gravels
TP21	0.0-0.4	0.2-0.4 (DS)	Silty CLAY, medium to high plasticity, brown mottled grey, traces of fine to coarse gravels, M≈PL, St
	0.4-0.6		IRONSTONE/SANDSTONE, brown, distinctly weathered, medium strength
	0.6 Refusal		
TP22	0.0-0.3	0.2-0.4 (DS)	Silty CLAY, medium to high plasticity, mottled grey brown, traces of sand and fine to coarse gravels, M≈PL, St
	0.3-1.5	1.0-1.2 (DS)	Silty CLAY, medium to high plasticity, mottled grey brown, with fine to coarse sub-rounded gravels, traces of sand, M≈PL, VSt
TP23	0.0-0.5	0.3-0.5 (DS) 0.4-0.7 (U <sub>50</sub> )	Silty CLAY, medium to high plasticity, brown mottled grey, traces of fine to coarse sub-rounded gravels, M>PL, St
	0.5-1.5	1.2-1.4 (DS)	Silty CLAY, low to medium plasticity, grey mottled brown, traces of fine to medium gravels, M≈PL, VSt

TABLE A

Job No: 8599/94  
Our Ref: 8599/94-AA

Page 5 of 10

TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP24	0.0-0.4	0.2-0.4 (DS)	Silty CLAY, low to medium plasticity, mottled yellow grey, traces of fine to coarse gravel and sand, M≈PL, VSt
	0.4-1.1	0.7-1.0 (U <sub>50</sub> )	Silty CLAY, low to medium plasticity, mottled yellow grey, traces of fine to coarse sand, M≈PL, St
	1.1-1.5	1.1-1.4 (DS)	Silty CLAY, low to medium plasticity, mottled grey yellow, with fine to coarse sub angular gravels, cobbles and sand, M>PL, VSt
TP25	0.0-0.5	0.1-0.4 (DS)	IRONSTONE and SANDSTONE, fine to coarse grained, grey brown, distinctly weathered, low strength, with clay
	0.5 Refusal		
TP26	0.0-0.4	0.2-0.4 (DS)	Sandy CLAY, low to medium plasticity, mottled grey yellow, fine to coarse grained, traces of fine to coarse gravels, M>PL, St
	0.4-1.5	0.9-1.1 (DS)	Sandy CLAY, low to medium plasticity, brown mottled grey, with fine to coarse sub angular gravels, M≈PL, VSt
TP27	0.0-0.4	0.3-0.5 (DS)	Silty CLAY, low to medium plasticity, mottled grey brown, traces of sand, M>PL, St
	0.4-1.0	0.8-1.0 (DS)	Sandy CLAY, low to medium plasticity, mottled grey brown, fine to coarse grained, traces of fine to coarse gravels, M≈PL, VSt
	1.0-1.2		SANDSTONE/IRONSTONE, fine to coarse grained, brown, distinctly weathered, medium strength
TP28	0.0-0.8	0.5-0.7 (DS)	Silty CLAY, medium to high plasticity, grey mottled brown, with cobbles, gravels and sand, M≈PL, VSt
	0.8-1.2	1.0-1.2 (DS)	SANDSTONE, fine grained, brown-grey, extremely weathered, low strength, with ironstaining
	1.2-1.5		Shaley CLAY, low plasticity, grey mottled brown, with fine to coarse sandstone
TP29	0.0-0.5	0.2-0.4 (DS)	Sandy CLAY, medium to high plasticity, brown mottled grey, fine to coarse grained, traces of fine to coarse gravels, M>PL, St
	0.5-1.5	0.8-1.0 (U <sub>50</sub> ) 1.3-1.5 (DS)	Silty CLAY, low to medium plasticity, grey mottled brown, traces of sand, M≈PL, VSt

TABLE A

Job No: 8599/94  
Our Ref: 8599/94-AA

Page 6 of 10

TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP30	0.0-0.9	0.8-1.0 (DS)	Sandy CLAY, low to medium plasticity, brown mottled grey, fine to coarse grained, with fine to coarse gravels and cobbles, M≈PL, VSt
	0.9-1.1		SANDSTONE, fine to coarse grained, brown, distinctly weathered, medium strength, with ironstaining
TP31	0.0-0.4	0.1-0.3 (DS) 0.2-0.5 (U <sub>50</sub> )	Sandy CLAY, low to medium plasticity, grey mottled brown, M>PL, St
	0.4-1.0		Sandy CLAY, low to medium plasticity, brown mottled grey, with fine to coarse sandstone, M≈PL, VSt
	1.0 Refusal		SANDSTONE, fine to coarse grained, brown, distinctly weathered, medium strength, with ironstaining
TP32	0.0-0.3	0.2-0.3 (DS)	TOPSOIL: Silty Clay, medium to high plasticity, brown, traces of fine to coarse gravels and rootlets, M≈PL, S
	0.3-1.5	0.3-0.6 (U <sub>50</sub> ) 1.0-1.2 (DS)	Sandy CLAY, low to medium plasticity, grey brown, traces of fine to coarse gravels, M>PL, St
TP33	0.0-0.3	0.1-0.3 (DS)	Gravelly SAND, fine to coarse grained, brown, fine to coarse sub-angular gravels, M>PL H
	0.3-1.5	0.9-1.1 (DS)	Silty CLAY, medium to high plasticity, grey mottled brown, traces of sand and gravels, M>PL, St
TP34	0.0-0.3	0.0-0.3 (DS)	Sandy CLAY, low to medium plasticity, grey, fine to medium grained, M>PL, S
	0.3-1.0	0.8-1.0 (DS)	Silty CLAY, medium to high plasticity, brown mottled grey, traces of sand, extremely weathered fine to coarse sandstone, M>PL, VSt
	1.0 Refusal		
TP35	0.0-0.4		Silty CLAY, low to medium plasticity, grey mottled brown, with fine to medium grained sand, M>PL, F
	0.4-1.5	0.4-0.6 (DS) 0.6-0.9 (U <sub>50</sub> ) 1.2-1.4 (DS)	Silty CLAY, low to medium plasticity, grey mottled brown, with fine to medium grained sand and traces of fine to coarse gravels, St

**TABLE A**

Job No: 8599/94  
Our Ref: 8599/94-AA

Page 7 of 10

TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP36	0.0-1.0	0.6-0.8 (DS)	Sandy CLAY, low to medium plasticity, grey mottled brown, fine to medium grained, M>PL, F
	1.0-1.5	1.1-1.3 (DS)	Sandy CLAY, low to medium plasticity, grey mottled brown, fine to medium grained, traces of fine to coarse gravels, M>PL, VSt
TP37	0.0-0.8	0.3-0.6 (DS) 0.5-0.8 (U <sub>50</sub> )	Silty CLAY, high plasticity, grey mottled brown, M>PL, F
	0.8-1.1		Silty CLAY, low to medium plasticity, brown, with fine to coarse gravels, M<PL VSt
	1.1 Refusal		SANDSTONE, fine to coarse grained, extremely weathered, brown, medium strength, with ironstaining
TP38	0.0-0.2		TOPSOIL: Silty Clay, low to medium plasticity, brown-black, traces of gravel and root fibres, M>PL, S
	0.2-0.5	0.2-0.5 (DS)	Silty CLAY, low to medium plasticity, grey mottled brown, with fine to coarse gravel and traces of sand, M≈PL, St
	0.5-1.5		Silty CLAY, medium to high plasticity, mottled brown grey, with extremely weathered, fine to coarse sandstone, M≈PL, VSt
TP39	0.0-0.3		TOPSOIL: Silty Clay, low to medium plasticity, brown-black, traces of fine to medium gravels and rootlets, M≈PL, S
	0.3-0.5	0.3-0.5 (DS)	Silty CLAY, medium to high plasticity, grey mottled brown, with fine to coarse gravels and fine grained sand, M>PL, St
	0.5 Refusal		SANDSTONE, fine to coarse grained, grey, highly to extremely weathered, low strength
TP40	0.0-0.3		TOPSOIL: Silty Clay, low to medium plasticity, brown-black, traces of gravel and root fibres, M>PL, S
	0.3-1.1	0.8-1.0 (DS)	Silty CLAY, low to medium plasticity, grey mottled brown, with fine to coarse sandstone and sand, M≈PL, St
	1.1-1.5	1.1-1.3 (DS) 1.1-1.4 (U <sub>50</sub> )	Sandy CLAY, low to medium plasticity, grey mottled brown, fine to coarse grained, traces of fine to coarse gravels, M≈PL, VSt

**TABLE A**

Job No: 8599/94  
Our Ref: 8599/94-AA

Page 8 of 10

TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP41	0.0-0.2		TOPSOIL: Silty Clay, low to medium plasticity, brown-black, traces of gravel and root fibres
	0.2-1.1	0.8-1.0 (DS)	Silty CLAY, medium to high plasticity, grey mottled brown, with fine to coarse sandstone and fine grained sand, M≈PL, VSt
	1.1-1.5	1.1-1.3 (DS)	Sandy CLAY, low to medium plasticity, grey mottled brown, fine to coarse grained, traces of fine to coarse sandstone, M≈PL, VSt
TP42	0.0-0.3		TOPSOIL: Silty Clay, low plasticity, black, traces of fine to coarse gravels and rootlets, M>PL, S
	0.3-1.2	0.6-0.8 (DS)	Silty CLAY, medium to high plasticity, mottled brown-grey, traces of fine to coarse sub-angular sandstone and sand, M>PL, VSt
	1.2-1.4		SANDSTONE, fine to coarse grained, brown, with ironstaining, highly to extremely weathered, medium strength
	1.4 Refusal		
TP43	0.0-1.3	0.5-0.8 (U <sub>50</sub> ) 0.7-0.9 (DS)	Silty CLAY, medium to high plasticity, mottled grey brown, traces of fine grained sand, M≈PL, St
	1.3-1.5	1.3-1.5 (DS)	Silty CLAY, medium to high plasticity, grey, traces of fine to coarse ironstone, M≈PL, VSt
TP44	0.0-0.8	0.3-0.6 (DS) 0.6-0.9 (U <sub>50</sub> )	Silty CLAY, medium to high plasticity, mottled brown-grey, traces of fine to coarse gravels and sand, M≈PL, F
	0.8-1.2	0.9-1.1 (DS)	Silty CLAY, medium to high plasticity, grey mottled brown, traces of fine to coarse gravels and sand, M≈PL, St
	1.2-1.3 Refusal		SANDSTONE, fine to coarse grained, mottled grey brown, highly to extremely weathered, low strength
TP45	0.0-0.2		TOPSOIL: Silty Clay, medium to high plasticity, brown-black, traces of rootlets and fine gravels, M<PL, S
	0.2-0.8	0.4-0.6 (DS)	Silty CLAY, high plasticity, mottled brown-grey, traces of sand, M≈PL, St
	0.8-1.0	0.8-1.0 (DS) 0.8-1.1 (U <sub>50</sub> )	Silty CLAY, high plasticity, mottled brown-grey, traces of sand and gravels, M≈PL, St
	1.0-1.5	1.1-1.3 (DS)	Silty CLAY, high plasticity, brown mottled grey, M>PL, St

TABLE A

Job No: 8599/94  
Our Ref: 8599/94-AA

Page 9 of 10

TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP46	0.0-0.3		Silty CLAY, medium to high plasticity, brown-black, traces of sub-angular fine to coarse gravels, M<PL, F
	0.3-0.8	0.4-0.6 (DS) 0.7-0.9 (DS)	Silty CLAY, high plasticity, mottled brown grey, traces of fine to coarse gravels, M>PL, St
	0.8-1.5	1.0-1.3 (U <sub>50</sub> )	Silty CLAY, high plasticity, mottled grey brown, M>PL, VSt
TP47	0.0-0.2		TOPSOIL: Silty Clay, medium to high plasticity, brown-black, traces of gravels and rootlets, M<PL, S
	0.2-1.0	0.3-0.5 (DS)	Silty CLAY, high plasticity, mottled brown grey, traces of fine to coarse gravels and sand, M≈PL, S
	1.0-1.2		Silty CLAY, high plasticity, brown, M>PL, VSt
	1.2-1.5	1.2-1.4 (DS)	Silty CLAY, high plasticity, brown, traces of sand, M>PL, VSt
TP48	0.0-0.2		TOPSOIL: Silty Clay, medium to high plasticity, brown-black, traces of fine to medium gravels and rootlets, M<PL, S
	0.2-0.6	0.4-0.6 (DS)	Sandy CLAY, medium to high plasticity, brown, fine to coarse grained, M≈PL, F
	0.6-0.8 Refusal		SANDSTONE, fine to coarse grained, grey, distinctly weathered, medium strength
TP49	0.0-0.3		TOPSOIL: Silty Clay, medium to high plasticity, black-brown, traces of fine to medium gravels, M<PL, F
	0.3-0.7	0.3-0.5 (DS)	Silty CLAY, high plasticity, brown mottled grey, traces of fine to medium gravels, M>PL, St
	0.7-1.2	1.0-1.2 (DS)	Silty CLAY, high plasticity, brown, traces of sand, M>PL, St
	1.2-1.4 Refusal		SANDSTONE, fine to coarse grained, grey, distinctly weathered, medium strength
TP50	0.0-0.3	0.1-0.3 (DS)	Sandy CLAY, medium to high plasticity, mottled brown grey, fine to medium grained sand, M>PL, F
	0.3-0.5		SANDSTONE, fine to coarse grained, grey, highly to extremely weathered, low strength
	0.5 Refusal		

TABLE A

Job No: 8599/94  
Our Ref: 8599/94-AA

Page 10 of 10

TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP51	0.0-0.4	0.2-0.4 (DS)	Silty CLAY, medium to high plasticity, black, traces of sand, M>PL, F
	0.4-0.8	0.6-0.9 (U <sub>50</sub> )	Silty CLAY, high plasticity, mottled brown grey, M≈PL, St
	0.8-1.3	0.9-1.1 (DS)	Sandy CLAY, medium to high plasticity, mottled brown grey, fine to medium grained sand, M>PL, St
	1.3-1.5		SANDSTONE, fine to coarse grained, grey-brown, highly to extremely weathered, low strength
TP52	0.0-1.0	0.4-0.6 (DS)	Silty CLAY, medium to high plasticity, grey mottled brown, traces of fine grained sand and fine to coarse gravels, M≈PL, St
	1.0-1.2		SANDSTONE, fine to coarse grained, brown, distinctly weathered, medium strength, with ironstaining
	1.2 Refusal		
TP53	0.0-1.0	0.2-0.4 (DS) 0.4-0.7 (U <sub>50</sub> )	Silty CLAY, medium to high plasticity, grey mottled brown, traces of fine to coarse gravels and sand, M≈PL, St
	1.0-1.2		SANDSTONE, fine to coarse grained, brown mottled grey, extremely weathered, low strength
	1.2 Terminated		
TP54	0.0-0.2		Silty CLAY, medium to high plasticity, mottled grey-brown, with fine to coarse grained, brown, distinctly weathered, low to medium strength, with ironstaining
	0.2-0.7	0.3-0.5 (DS)	SANDSTONE, fine to coarse grained, brown, distinctly weathered, low to medium strength, with ironstaining
	0.7 Terminated		
TP55	0.0-0.6	0.4-0.6 (DS)	Silty CLAY, medium to high plasticity, mottled grey-brown, with fine to coarse sandstone and sand, M≈PL, St
	0.6-0.7 Terminated		SANDSTONE, fine to coarse grained, brown, distinctly weathered, low to medium strength, with ironstaining
TP56	0.0-0.4	0.1-0.3 (DS)	Silty CLAY, medium to high plasticity, mottled grey-brown, with fine to coarse sandstone and sand, M≈PL, St
	0.4-0.6 Terminated		SANDSTONE, fine to coarse grained, brown, distinctly weathered, low to medium strength, with ironstaining

CLIENT DETAILS

LABORATORY DETAILS

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Project **8599/94 Marsden Park**  
 Order Number **8599/94**  
 Samples 94

SGS Reference **SE235558 R0**  
 Date Received 16/8/2022  
 Date Reported 23/8/2022

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES



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pH in soil (1:5) [AN101] Tested: 19/8/2022

PARAMETER	UOM	LOR	TP1	TP1	TP2	TP2	TP3
			SOIL 0.8-1.0 15/8/2022 SE235558.001	SOIL 1.3-1.5 15/8/2022 SE235558.002	SOIL 0.2-0.4 15/8/2022 SE235558.003	SOIL 1.0-1.2 15/8/2022 SE235558.004	SOIL 0.4-0.6 15/8/2022 SE235558.005
pH	pH Units	0.1	<b>4.7</b>	<b>4.9</b>	<b>5.1</b>	<b>4.7</b>	<b>5.4</b>

PARAMETER	UOM	LOR	TP4	TP4	TP5	TP5	TP6
			SOIL 0.4-0.6 15/8/2022 SE235558.006	SOIL 1.0-1.2 15/8/2022 SE235558.007	SOIL 0.5-0.8 15/8/2022 SE235558.008	SOIL 1.3-1.5 15/8/2022 SE235558.009	SOIL 0.5-0.7 15/8/2022 SE235558.010
pH	pH Units	0.1	<b>6.0</b>	<b>5.1</b>	<b>4.9</b>	<b>4.9</b>	<b>5.2</b>

PARAMETER	UOM	LOR	TP6	TP7	TP7	TP8	TP8
			SOIL 0.7-0.9 15/8/2022 SE235558.011	SOIL 0.3-0.5 15/8/2022 SE235558.012	SOIL 1.0-1.2 15/8/2022 SE235558.013	SOIL 0.5-0.9 15/8/2022 SE235558.014	SOIL 0.9-1.1 15/8/2022 SE235558.015
pH	pH Units	0.1	<b>5.1</b>	<b>4.8</b>	<b>5.0</b>	<b>4.9</b>	<b>5.3</b>

PARAMETER	UOM	LOR	TP9	TP9	TP10	TP10	TP11
			SOIL 0.3-0.6 15/8/2022 SE235558.016	SOIL 1.1-1.3 15/8/2022 SE235558.017	SOIL 0.7-0.9 15/8/2022 SE235558.018	SOIL 1.2-1.4 15/8/2022 SE235558.019	SOIL 0.4-0.7 15/8/2022 SE235558.020
pH	pH Units	0.1	<b>4.7</b>	<b>5.2</b>	<b>4.7</b>	<b>5.2</b>	<b>5.0</b>

PARAMETER	UOM	LOR	TP11	TP12	TP13	TP13	TP14
			SOIL 1.0-1.2 15/8/2022 SE235558.021	SOIL 0.5-0.8 15/8/2022 SE235558.022	SOIL 0.2-0.4 15/8/2022 SE235558.023	SOIL 1.2-1.4 15/8/2022 SE235558.024	SOIL 0.4-0.6 15/8/2022 SE235558.025
pH	pH Units	0.1	<b>4.9</b>	<b>5.1</b>	<b>4.9</b>	<b>4.6</b>	<b>4.8</b>

PARAMETER	UOM	LOR	TP14	TP15	TP15	TP16	TP16
			SOIL 0.8-1.0 15/8/2022 SE235558.026	SOIL 0.3-0.5 15/8/2022 SE235558.027	SOIL 1.0-1.2 15/8/2022 SE235558.028	SOIL 0.6-0.8 15/8/2022 SE235558.029	SOIL 1.2-1.4 15/8/2022 SE235558.030
pH	pH Units	0.1	<b>4.7</b>	<b>4.7</b>	<b>4.5</b>	<b>4.8</b>	<b>4.9</b>

PARAMETER	UOM	LOR	TP17	TP18	TP19	TP19	TP20
			SOIL 0.2-0.4 15/8/2022 SE235558.031	SOIL 0.3-0.6 15/8/2022 SE235558.032	SOIL 0.2-0.4 15/8/2022 SE235558.033	SOIL 1.2-1.4 15/8/2022 SE235558.034	SOIL 0.8-1.0 15/8/2022 SE235558.035
pH	pH Units	0.1	<b>5.4</b>	<b>5.1</b>	<b>4.7</b>	<b>4.6</b>	<b>4.5</b>

pH in soil (1:5) [AN101] Tested: 19/8/2022 (continued)

PARAMETER	UOM	LOR	TP20 SOIL 1.3-1.5 15/8/2022 SE235558.036	TP21 SOIL 0.2-0.4 15/8/2022 SE235558.037	TP22 SOIL 0.2-0.4 15/8/2022 SE235558.038	TP22 SOIL 1.0-1.2 15/8/2022 SE235558.039	TP23 SOIL 0.3-0.5 15/8/2022 SE235558.040
pH	pH Units	0.1	<b>4.8</b>	<b>4.8</b>	<b>5.8</b>	<b>6.3</b>	<b>4.8</b>

PARAMETER	UOM	LOR	TP23 SOIL 1.2-1.4 15/8/2022 SE235558.041	TP24 SOIL 0.2-0.4 15/8/2022 SE235558.042	TP24 SOIL 1.1-1.4 15/8/2022 SE235558.043	TP25 SOIL 0.1-0.4 15/8/2022 SE235558.044	TP26 SOIL 0.2-0.4 15/8/2022 SE235558.045
pH	pH Units	0.1	<b>4.7</b>	<b>4.9</b>	<b>5.1</b>	<b>5.1</b>	<b>5.1</b>

PARAMETER	UOM	LOR	TP26 SOIL 0.9-1.1 15/8/2022 SE235558.046	TP27 SOIL 0.3-0.5 15/8/2022 SE235558.047	TP27 SOIL 0.8-1.0 15/8/2022 SE235558.048	TP28 SOIL 0.5-0.7 15/8/2022 SE235558.049	TP28 SOIL 1.0-1.2 15/8/2022 SE235558.050
pH	pH Units	0.1	<b>4.7</b>	<b>4.9</b>	<b>4.6</b>	<b>5.1</b>	<b>5.0</b>

PARAMETER	UOM	LOR	TP29 SOIL 0.2-0.4 15/8/2022 SE235558.051	TP29 SOIL 1.3-1.5 15/8/2022 SE235558.052	TP30 SOIL 0.8-1.0 15/8/2022 SE235558.053	TP31 SOIL 0.1-0.3 15/8/2022 SE235558.054	TP32 SOIL 0.2-0.3 15/8/2022 SE235558.055
pH	pH Units	0.1	<b>4.8</b>	<b>5.2</b>	<b>5.0</b>	<b>4.8</b>	<b>4.6</b>

PARAMETER	UOM	LOR	TP32 SOIL 1.0-1.2 15/8/2022 SE235558.056	TP33 SOIL 0.1-0.3 15/8/2022 SE235558.057	TP33 SOIL 0.9-1.1 15/8/2022 SE235558.058	TP34 SOIL 0-0.3 15/8/2022 SE235558.059	TP34 SOIL 0.8-1.0 15/8/2022 SE235558.060
pH	pH Units	0.1	<b>4.6</b>	<b>5.3</b>	<b>4.9</b>	<b>5.3</b>	<b>4.9</b>

PARAMETER	UOM	LOR	TP35 SOIL 0.4-0.6 15/8/2022 SE235558.061	TP35 SOIL 1.2-1.4 15/8/2022 SE235558.062	TP36 SOIL 0.6-0.8 15/8/2022 SE235558.063	TP36 SOIL 1.1-1.3 15/8/2022 SE235558.064	TP37 SOIL 0.3-0.6 15/8/2022 SE235558.065
pH	pH Units	0.1	<b>4.9</b>	<b>5.0</b>	<b>5.1</b>	<b>5.3</b>	<b>4.9</b>

PARAMETER	UOM	LOR	TP38 SOIL 0.2-0.5 15/8/2022 SE235558.066	TP39 SOIL 0.3-0.5 15/8/2022 SE235558.067	TP40 SOIL 0.8-1.0 15/8/2022 SE235558.068	TP40 SOIL 1.1-1.3 15/8/2022 SE235558.069	TP41 SOIL 0.3-0.5 15/8/2022 SE235558.070
pH	pH Units	0.1	<b>5.1</b>	<b>4.9</b>	<b>4.7</b>	<b>4.6</b>	<b>4.6</b>

pH in soil (1:5) [AN101] Tested: 19/8/2022 (continued)

PARAMETER	UOM	LOR	TP41 SOIL 1.2-1.4 15/8/2022 SE235558.071	TP42 SOIL 0.6-0.8 15/8/2022 SE235558.072	TP43 SOIL 0.7-0.9 15/8/2022 SE235558.073	TP43 SOIL 1.3-1.5 15/8/2022 SE235558.074	TP44 SOIL 0.3-0.6 15/8/2022 SE235558.075
pH	pH Units	0.1	<b>4.7</b>	<b>4.7</b>	<b>4.5</b>	<b>4.6</b>	<b>4.8</b>

PARAMETER	UOM	LOR	TP44 SOIL 0.9-1.1 15/8/2022 SE235558.076	TP45 SOIL 0.4-0.6 15/8/2022 SE235558.077	TP45 SOIL 0.8-1.0 15/8/2022 SE235558.078	TP45 SOIL 1.1-1.3 15/8/2022 SE235558.079	TP46 SOIL 0.4-0.6 15/8/2022 SE235558.080
pH	pH Units	0.1	<b>4.7</b>	<b>5.2</b>	<b>5.0</b>	<b>4.6</b>	<b>4.7</b>

PARAMETER	UOM	LOR	TP46 SOIL 0.7-0.9 15/8/2022 SE235558.081	TP47 SOIL 0.3-0.5 15/8/2022 SE235558.082	TP47 SOIL 1.2-1.4 15/8/2022 SE235558.083	TP48 SOIL 0.4-0.6 15/8/2022 SE235558.084	TP49 SOIL 0.3-0.5 15/8/2022 SE235558.085
pH	pH Units	0.1	<b>5.0</b>	<b>5.2</b>	<b>4.9</b>	<b>4.6</b>	<b>4.7</b>

PARAMETER	UOM	LOR	TP49 SOIL 1.0-1.2 15/8/2022 SE235558.086	TP50 SOIL 0.1-0.3 15/8/2022 SE235558.087	TP51 SOIL 0.2-0.4 15/8/2022 SE235558.088	TP51 SOIL 0.9-1.1 15/8/2022 SE235558.089	TP52 SOIL 0.4-0.6 15/8/2022 SE235558.090
pH	pH Units	0.1	<b>4.8</b>	<b>4.7</b>	<b>5.4</b>	<b>5.2</b>	<b>4.7</b>

PARAMETER	UOM	LOR	TP53 SOIL 0.2-0.4 15/8/2022 SE235558.091	TP54 SOIL 0.3-0.5 15/8/2022 SE235558.092	TP55 SOIL 0.4-0.6 15/8/2022 SE235558.093	TP56 SOIL 0.1-0.3 15/8/2022 SE235558.094
pH	pH Units	0.1	<b>4.8</b>	<b>4.6</b>	<b>4.3</b>	<b>4.7</b>

Conductivity and TDS by Calculation - Soil [AN106] Tested: 19/8/2022

PARAMETER	UOM	LOR	TP1 SOIL 0.8-1.0 15/8/2022 SE235558.001	TP1 SOIL 1.3-1.5 15/8/2022 SE235558.002	TP2 SOIL 0.2-0.4 15/8/2022 SE235558.003	TP2 SOIL 1.0-1.2 15/8/2022 SE235558.004	TP3 SOIL 0.4-0.6 15/8/2022 SE235558.005
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	<b>360</b>	<b>310</b>	<b>160</b>	<b>180</b>	<b>450</b>

PARAMETER	UOM	LOR	TP4 SOIL 0.4-0.6 15/8/2022 SE235558.006	TP4 SOIL 1.0-1.2 15/8/2022 SE235558.007	TP5 SOIL 0.5-0.8 15/8/2022 SE235558.008	TP5 SOIL 1.3-1.5 15/8/2022 SE235558.009	TP6 SOIL 0.5-0.7 15/8/2022 SE235558.010
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	<b>41</b>	<b>240</b>	<b>390</b>	<b>540</b>	<b>160</b>

PARAMETER	UOM	LOR	TP6 SOIL 0.7-0.9 15/8/2022 SE235558.011	TP7 SOIL 0.3-0.5 15/8/2022 SE235558.012	TP7 SOIL 1.0-1.2 15/8/2022 SE235558.013	TP8 SOIL 0.5-0.9 15/8/2022 SE235558.014	TP8 SOIL 0.9-1.1 15/8/2022 SE235558.015
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	<b>430</b>	<b>290</b>	<b>290</b>	<b>240</b>	<b>170</b>

PARAMETER	UOM	LOR	TP9 SOIL 0.3-0.6 15/8/2022 SE235558.016	TP9 SOIL 1.1-1.3 15/8/2022 SE235558.017	TP10 SOIL 0.7-0.9 15/8/2022 SE235558.018	TP10 SOIL 1.2-1.4 15/8/2022 SE235558.019	TP11 SOIL 0.4-0.7 15/8/2022 SE235558.020
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	<b>290</b>	<b>57</b>	<b>200</b>	<b>94</b>	<b>140</b>

PARAMETER	UOM	LOR	TP11 SOIL 1.0-1.2 15/8/2022 SE235558.021	TP12 SOIL 0.5-0.8 15/8/2022 SE235558.022	TP13 SOIL 0.2-0.4 15/8/2022 SE235558.023	TP13 SOIL 1.2-1.4 15/8/2022 SE235558.024	TP14 SOIL 0.4-0.6 15/8/2022 SE235558.025
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	<b>150</b>	<b>220</b>	<b>570</b>	<b>1100</b>	<b>820</b>

PARAMETER	UOM	LOR	TP14 SOIL 0.8-1.0 15/8/2022 SE235558.026	TP15 SOIL 0.3-0.5 15/8/2022 SE235558.027	TP15 SOIL 1.0-1.2 15/8/2022 SE235558.028	TP16 SOIL 0.6-0.8 15/8/2022 SE235558.029	TP16 SOIL 1.2-1.4 15/8/2022 SE235558.030
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	<b>850</b>	<b>680</b>	<b>640</b>	<b>290</b>	<b>300</b>

PARAMETER	UOM	LOR	TP17 SOIL 0.2-0.4 15/8/2022 SE235558.031	TP18 SOIL 0.3-0.6 15/8/2022 SE235558.032	TP19 SOIL 0.2-0.4 15/8/2022 SE235558.033	TP19 SOIL 1.2-1.4 15/8/2022 SE235558.034	TP20 SOIL 0.8-1.0 15/8/2022 SE235558.035
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	<b>590</b>	<b>950</b>	<b>1100</b>	<b>1400</b>	<b>1000</b>

Conductivity and TDS by Calculation - Soil [AN106] Tested: 19/8/2022 (continued)

PARAMETER	UOM	LOR	TP20 SOIL 1.3-1.5 15/8/2022 SE235558.036	TP21 SOIL 0.2-0.4 15/8/2022 SE235558.037	TP22 SOIL 0.2-0.4 15/8/2022 SE235558.038	TP22 SOIL 1.0-1.2 15/8/2022 SE235558.039	TP23 SOIL 0.3-0.5 15/8/2022 SE235558.040
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	930	380	600	600	740

PARAMETER	UOM	LOR	TP23 SOIL 1.2-1.4 15/8/2022 SE235558.041	TP24 SOIL 0.2-0.4 15/8/2022 SE235558.042	TP24 SOIL 1.1-1.4 15/8/2022 SE235558.043	TP25 SOIL 0.1-0.4 15/8/2022 SE235558.044	TP26 SOIL 0.2-0.4 15/8/2022 SE235558.045
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	1100	700	750	760	370

PARAMETER	UOM	LOR	TP26 SOIL 0.9-1.1 15/8/2022 SE235558.046	TP27 SOIL 0.3-0.5 15/8/2022 SE235558.047	TP27 SOIL 0.8-1.0 15/8/2022 SE235558.048	TP28 SOIL 0.5-0.7 15/8/2022 SE235558.049	TP28 SOIL 1.0-1.2 15/8/2022 SE235558.050
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	940	420	560	750	940

PARAMETER	UOM	LOR	TP29 SOIL 0.2-0.4 15/8/2022 SE235558.051	TP29 SOIL 1.3-1.5 15/8/2022 SE235558.052	TP30 SOIL 0.8-1.0 15/8/2022 SE235558.053	TP31 SOIL 0.1-0.3 15/8/2022 SE235558.054	TP32 SOIL 0.2-0.3 15/8/2022 SE235558.055
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	320	560	250	510	700

PARAMETER	UOM	LOR	TP32 SOIL 1.0-1.2 15/8/2022 SE235558.056	TP33 SOIL 0.1-0.3 15/8/2022 SE235558.057	TP33 SOIL 0.9-1.1 15/8/2022 SE235558.058	TP34 SOIL 0-0.3 15/8/2022 SE235558.059	TP34 SOIL 0.8-1.0 15/8/2022 SE235558.060
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	690	210	490	450	670

PARAMETER	UOM	LOR	TP35 SOIL 0.4-0.6 15/8/2022 SE235558.061	TP35 SOIL 1.2-1.4 15/8/2022 SE235558.062	TP36 SOIL 0.6-0.8 15/8/2022 SE235558.063	TP36 SOIL 1.1-1.3 15/8/2022 SE235558.064	TP37 SOIL 0.3-0.6 15/8/2022 SE235558.065
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	760	710	400	480	410

PARAMETER	UOM	LOR	TP38 SOIL 0.2-0.5 15/8/2022 SE235558.066	TP39 SOIL 0.3-0.5 15/8/2022 SE235558.067	TP40 SOIL 0.8-1.0 15/8/2022 SE235558.068	TP40 SOIL 1.1-1.3 15/8/2022 SE235558.069	TP41 SOIL 0.3-0.5 15/8/2022 SE235558.070
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	410	390	710	790	660

Conductivity and TDS by Calculation - Soil [AN106] Tested: 19/8/2022 (continued)

PARAMETER	UOM	LOR	TP41 SOIL 1.2-1.4 15/8/2022 SE235558.071	TP42 SOIL 0.6-0.8 15/8/2022 SE235558.072	TP43 SOIL 0.7-0.9 15/8/2022 SE235558.073	TP43 SOIL 1.3-1.5 15/8/2022 SE235558.074	TP44 SOIL 0.3-0.6 15/8/2022 SE235558.075
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	570	570	920	850	720

PARAMETER	UOM	LOR	TP44 SOIL 0.9-1.1 15/8/2022 SE235558.076	TP45 SOIL 0.4-0.6 15/8/2022 SE235558.077	TP45 SOIL 0.8-1.0 15/8/2022 SE235558.078	TP45 SOIL 1.1-1.3 15/8/2022 SE235558.079	TP46 SOIL 0.4-0.6 15/8/2022 SE235558.080
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	780	380	300	620	400

PARAMETER	UOM	LOR	TP46 SOIL 0.7-0.9 15/8/2022 SE235558.081	TP47 SOIL 0.3-0.5 15/8/2022 SE235558.082	TP47 SOIL 1.2-1.4 15/8/2022 SE235558.083	TP48 SOIL 0.4-0.6 15/8/2022 SE235558.084	TP49 SOIL 0.3-0.5 15/8/2022 SE235558.085
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	490	310	200	220	440

PARAMETER	UOM	LOR	TP49 SOIL 1.0-1.2 15/8/2022 SE235558.086	TP50 SOIL 0.1-0.3 15/8/2022 SE235558.087	TP51 SOIL 0.2-0.4 15/8/2022 SE235558.088	TP51 SOIL 0.9-1.1 15/8/2022 SE235558.089	TP52 SOIL 0.4-0.6 15/8/2022 SE235558.090
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	250	330	210	230	800

PARAMETER	UOM	LOR	TP53 SOIL 0.2-0.4 15/8/2022 SE235558.091	TP54 SOIL 0.3-0.5 15/8/2022 SE235558.092	TP55 SOIL 0.4-0.6 15/8/2022 SE235558.093	TP56 SOIL 0.1-0.3 15/8/2022 SE235558.094
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	740	800	970	530

Moisture Content [AN002] Tested: 18/8/2022

			TP1	TP1	TP2	TP2	TP3
			SOIL 0.8-1.0 15/8/2022	SOIL 1.3-1.5 15/8/2022	SOIL 0.2-0.4 15/8/2022	SOIL 1.0-1.2 15/8/2022	SOIL 0.4-0.6 15/8/2022
PARAMETER	UOM	LOR	SE235558.001	SE235558.002	SE235558.003	SE235558.004	SE235558.005
% Moisture	%w/w	1	<b>22.7</b>	<b>16.1</b>	<b>18.4</b>	<b>13.3</b>	<b>17.3</b>

			TP4	TP4	TP5	TP5	TP6
			SOIL 0.4-0.6 15/8/2022	SOIL 1.0-1.2 15/8/2022	SOIL 0.5-0.8 15/8/2022	SOIL 1.3-1.5 15/8/2022	SOIL 0.5-0.7 15/8/2022
PARAMETER	UOM	LOR	SE235558.006	SE235558.007	SE235558.008	SE235558.009	SE235558.010
% Moisture	%w/w	1	<b>9.4</b>	<b>16.5</b>	<b>14.7</b>	<b>17.1</b>	<b>10.2</b>

			TP6	TP7	TP7	TP8	TP8
			SOIL 0.7-0.9 15/8/2022	SOIL 0.3-0.5 15/8/2022	SOIL 1.0-1.2 15/8/2022	SOIL 0.5-0.9 15/8/2022	SOIL 0.9-1.1 15/8/2022
PARAMETER	UOM	LOR	SE235558.011	SE235558.012	SE235558.013	SE235558.014	SE235558.015
% Moisture	%w/w	1	<b>14.1</b>	<b>23.6</b>	<b>14.6</b>	<b>15.5</b>	<b>15.4</b>

			TP9	TP9	TP10	TP10	TP11
			SOIL 0.3-0.6 15/8/2022	SOIL 1.1-1.3 15/8/2022	SOIL 0.7-0.9 15/8/2022	SOIL 1.2-1.4 15/8/2022	SOIL 0.4-0.7 15/8/2022
PARAMETER	UOM	LOR	SE235558.016	SE235558.017	SE235558.018	SE235558.019	SE235558.020
% Moisture	%w/w	1	<b>19.0</b>	<b>14.6</b>	<b>16.4</b>	<b>16.1</b>	<b>15.9</b>

			TP11	TP12	TP13	TP13	TP14
			SOIL 1.0-1.2 15/8/2022	SOIL 0.5-0.8 15/8/2022	SOIL 0.2-0.4 15/8/2022	SOIL 1.2-1.4 15/8/2022	SOIL 0.4-0.6 15/8/2022
PARAMETER	UOM	LOR	SE235558.021	SE235558.022	SE235558.023	SE235558.024	SE235558.025
% Moisture	%w/w	1	<b>18.4</b>	<b>15.0</b>	<b>22.4</b>	<b>16.6</b>	<b>17.6</b>

			TP14	TP15	TP15	TP16	TP16
			SOIL 0.8-1.0 15/8/2022	SOIL 0.3-0.5 15/8/2022	SOIL 1.0-1.2 15/8/2022	SOIL 0.6-0.8 15/8/2022	SOIL 1.2-1.4 15/8/2022
PARAMETER	UOM	LOR	SE235558.026	SE235558.027	SE235558.028	SE235558.029	SE235558.030
% Moisture	%w/w	1	<b>17.7</b>	<b>16.5</b>	<b>14.2</b>	<b>17.8</b>	<b>17.2</b>

			TP17	TP18	TP19	TP19	TP20
			SOIL 0.2-0.4 15/8/2022	SOIL 0.3-0.6 15/8/2022	SOIL 0.2-0.4 15/8/2022	SOIL 1.2-1.4 15/8/2022	SOIL 0.8-1.0 15/8/2022
PARAMETER	UOM	LOR	SE235558.031	SE235558.032	SE235558.033	SE235558.034	SE235558.035
% Moisture	%w/w	1	<b>6.0</b>	<b>13.8</b>	<b>17.0</b>	<b>17.0</b>	<b>20.0</b>

Moisture Content [AN002] Tested: 18/8/2022 (continued)

			TP20	TP21	TP22	TP22	TP23
			SOIL 1.3-1.5 15/8/2022	SOIL 0.2-0.4 15/8/2022	SOIL 0.2-0.4 15/8/2022	SOIL 1.0-1.2 15/8/2022	SOIL 0.3-0.5 15/8/2022
PARAMETER	UOM	LOR	SE235558.036	SE235558.037	SE235558.038	SE235558.039	SE235558.040
% Moisture	%w/w	1	<b>19.4</b>	<b>16.7</b>	<b>20.2</b>	<b>18.1</b>	<b>18.6</b>

			TP23	TP24	TP24	TP25	TP26
			SOIL 1.2-1.4 15/8/2022	SOIL 0.2-0.4 15/8/2022	SOIL 1.1-1.4 15/8/2022	SOIL 0.1-0.4 15/8/2022	SOIL 0.2-0.4 15/8/2022
PARAMETER	UOM	LOR	SE235558.041	SE235558.042	SE235558.043	SE235558.044	SE235558.045
% Moisture	%w/w	1	<b>14.1</b>	<b>14.9</b>	<b>13.7</b>	<b>20.1</b>	<b>11.4</b>

			TP26	TP27	TP27	TP28	TP28
			SOIL 0.9-1.1 15/8/2022	SOIL 0.3-0.5 15/8/2022	SOIL 0.8-1.0 15/8/2022	SOIL 0.5-0.7 15/8/2022	SOIL 1.0-1.2 15/8/2022
PARAMETER	UOM	LOR	SE235558.046	SE235558.047	SE235558.048	SE235558.049	SE235558.050
% Moisture	%w/w	1	<b>14.2</b>	<b>12.7</b>	<b>14.2</b>	<b>15.2</b>	<b>15.1</b>

			TP29	TP29	TP30	TP31	TP32
			SOIL 0.2-0.4 15/8/2022	SOIL 1.3-1.5 15/8/2022	SOIL 0.8-1.0 15/8/2022	SOIL 0.1-0.3 15/8/2022	SOIL 0.2-0.3 15/8/2022
PARAMETER	UOM	LOR	SE235558.051	SE235558.052	SE235558.053	SE235558.054	SE235558.055
% Moisture	%w/w	1	<b>12.8</b>	<b>17.1</b>	<b>7.6</b>	<b>15.3</b>	<b>15.4</b>

			TP32	TP33	TP33	TP34	TP34
			SOIL 1.0-1.2 15/8/2022	SOIL 0.1-0.3 15/8/2022	SOIL 0.9-1.1 15/8/2022	SOIL 0-0.3 15/8/2022	SOIL 0.8-1.0 15/8/2022
PARAMETER	UOM	LOR	SE235558.056	SE235558.057	SE235558.058	SE235558.059	SE235558.060
% Moisture	%w/w	1	<b>11.3</b>	<b>7.4</b>	<b>13.4</b>	<b>16.0</b>	<b>13.7</b>

			TP35	TP35	TP36	TP36	TP37
			SOIL 0.4-0.6 15/8/2022	SOIL 1.2-1.4 15/8/2022	SOIL 0.6-0.8 15/8/2022	SOIL 1.1-1.3 15/8/2022	SOIL 0.3-0.6 15/8/2022
PARAMETER	UOM	LOR	SE235558.061	SE235558.062	SE235558.063	SE235558.064	SE235558.065
% Moisture	%w/w	1	<b>13.3</b>	<b>12.1</b>	<b>12.7</b>	<b>11.6</b>	<b>11.8</b>

			TP38	TP39	TP40	TP40	TP41
			SOIL 0.2-0.5 15/8/2022	SOIL 0.3-0.5 15/8/2022	SOIL 0.8-1.0 15/8/2022	SOIL 1.1-1.3 15/8/2022	SOIL 0.3-0.5 15/8/2022
PARAMETER	UOM	LOR	SE235558.066	SE235558.067	SE235558.068	SE235558.069	SE235558.070
% Moisture	%w/w	1	<b>15.9</b>	<b>15.1</b>	<b>13.7</b>	<b>11.8</b>	<b>13.9</b>



Moisture Content [AN002] Tested: 18/8/2022 (continued)

			TP41	TP42	TP43	TP43	TP44
			SOIL 1.2-1.4 15/8/2022	SOIL 0.6-0.8 15/8/2022	SOIL 0.7-0.9 15/8/2022	SOIL 1.3-1.5 15/8/2022	SOIL 0.3-0.6 15/8/2022
PARAMETER	UOM	LOR	SE235558.071	SE235558.072	SE235558.073	SE235558.074	SE235558.075
% Moisture	%w/w	1	<b>13.6</b>	<b>13.8</b>	<b>17.6</b>	<b>14.9</b>	<b>12.7</b>

			TP44	TP45	TP45	TP45	TP46
			SOIL 0.9-1.1 15/8/2022	SOIL 0.4-0.6 15/8/2022	SOIL 0.8-1.0 15/8/2022	SOIL 1.1-1.3 15/8/2022	SOIL 0.4-0.6 15/8/2022
PARAMETER	UOM	LOR	SE235558.076	SE235558.077	SE235558.078	SE235558.079	SE235558.080
% Moisture	%w/w	1	<b>12.2</b>	<b>15.7</b>	<b>11.7</b>	<b>20.5</b>	<b>18.6</b>

			TP46	TP47	TP47	TP48	TP49
			SOIL 0.7-0.9 15/8/2022	SOIL 0.3-0.5 15/8/2022	SOIL 1.2-1.4 15/8/2022	SOIL 0.4-0.6 15/8/2022	SOIL 0.3-0.5 15/8/2022
PARAMETER	UOM	LOR	SE235558.081	SE235558.082	SE235558.083	SE235558.084	SE235558.085
% Moisture	%w/w	1	<b>15.7</b>	<b>11.8</b>	<b>15.9</b>	<b>14.0</b>	<b>13.6</b>

			TP49	TP50	TP51	TP51	TP52
			SOIL 1.0-1.2 15/8/2022	SOIL 0.1-0.3 15/8/2022	SOIL 0.2-0.4 15/8/2022	SOIL 0.9-1.1 15/8/2022	SOIL 0.4-0.6 15/8/2022
PARAMETER	UOM	LOR	SE235558.086	SE235558.087	SE235558.088	SE235558.089	SE235558.090
% Moisture	%w/w	1	<b>16.9</b>	<b>15.4</b>	<b>12.7</b>	<b>10.0</b>	<b>19.6</b>

			TP53	TP54	TP55	TP56
			SOIL 0.2-0.4 15/8/2022	SOIL 0.3-0.5 15/8/2022	SOIL 0.4-0.6 15/8/2022	SOIL 0.1-0.3 15/8/2022
PARAMETER	UOM	LOR	SE235558.091	SE235558.092	SE235558.093	SE235558.094
% Moisture	%w/w	1	<b>12.7</b>	<b>16.2</b>	<b>17.2</b>	<b>19.0</b>

METHOD

METHODOLOGY SUMMARY

**AN002**

The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.

**AN101**

pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl<sub>2</sub>) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.

**AN106**

Conductivity and TDS by Calculation: Conductivity is measured by meter with temperature compensation and is calibrated against a standard solution of potassium chloride. Conductivity is generally reported as µmhos/cm or µS/cm @ 25°C. For soils, an extract of as received sample with water is made at a ratio of 1:5 and the EC determined and reported on the extract, or calculated back to the as-received sample. Salinity can be estimated from conductivity using a conversion factor, which for natural waters, is in the range 0.55 to 0.75. Reference APHA 2510 B.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received. Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- a. 1 Bq is equivalent to 27 pCi
- b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: [www.sgs.com.au/en-gb/environment-health-and-safety](http://www.sgs.com.au/en-gb/environment-health-and-safety).

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## STATEMENT OF QA/QC PERFORMANCE

SE235558 R0

### CLIENT DETAILS

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Order Number **8599/94**  
Samples 94

### LABORATORY DETAILS

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Facsimile +61 2 8594 0499  
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SGS Reference **SE235558 R0**  
Date Received 16 Aug 2022  
Date Reported 23 Aug 2022

### COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.  
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.  
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Analysis Date

Conductivity and TDS by Calculation - Soil

20 items

### SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	Client	Sample cooling method	None
Samples received in correct containers	Yes	Sample counts by matrix	94 Soil
Date documentation received	16/8/2022	Type of documentation received	COC
Number of eskies/boxes received		Samples received in good order	Yes
Samples received without headspace	N/A	Sample temperature upon receipt	18.4°C
Sufficient sample for analysis	Yes	Turnaround time requested	Standard



# HOLDING TIME SUMMARY

## SE235558 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

### Conductivity and TDS by Calculation - Soil

Method: ME-(AU)-[ENV]AN106

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE235558.001	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP1	SE235558.002	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP2	SE235558.003	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP2	SE235558.004	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP3	SE235558.005	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP4	SE235558.006	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP4	SE235558.007	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP5	SE235558.008	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP5	SE235558.009	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP6	SE235558.010	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP6	SE235558.011	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP7	SE235558.012	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP7	SE235558.013	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP8	SE235558.014	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP8	SE235558.015	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP9	SE235558.016	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP9	SE235558.017	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP10	SE235558.018	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP10	SE235558.019	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP11	SE235558.020	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	22 Aug 2022	23 Aug 2022†
TP11	SE235558.021	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP12	SE235558.022	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP13	SE235558.023	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP13	SE235558.024	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP14	SE235558.025	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP14	SE235558.026	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP15	SE235558.027	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP15	SE235558.028	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP16	SE235558.029	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP16	SE235558.030	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP17	SE235558.031	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP18	SE235558.032	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP19	SE235558.033	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP19	SE235558.034	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP20	SE235558.035	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP20	SE235558.036	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP21	SE235558.037	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP22	SE235558.038	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP22	SE235558.039	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP23	SE235558.040	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP23	SE235558.041	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP24	SE235558.042	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP24	SE235558.043	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP25	SE235558.044	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP26	SE235558.045	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP26	SE235558.046	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP27	SE235558.047	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP27	SE235558.048	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP28	SE235558.049	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP28	SE235558.050	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP29	SE235558.051	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP29	SE235558.052	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP30	SE235558.053	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP31	SE235558.054	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP32	SE235558.055	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP32	SE235558.056	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP33	SE235558.057	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP33	SE235558.058	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP34	SE235558.059	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP34	SE235558.060	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022

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Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

### Conductivity and TDS by Calculation - Soil (continued)

Method: ME-(AU)-[ENV]AN106

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP35	SE235558.061	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP35	SE235558.062	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP36	SE235558.063	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP36	SE235558.064	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP37	SE235558.065	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP38	SE235558.066	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP39	SE235558.067	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP40	SE235558.068	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP40	SE235558.069	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP41	SE235558.070	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP41	SE235558.071	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP42	SE235558.072	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP43	SE235558.073	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP43	SE235558.074	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP44	SE235558.075	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP44	SE235558.076	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP45	SE235558.077	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP45	SE235558.078	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP45	SE235558.079	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP46	SE235558.080	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP46	SE235558.081	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP47	SE235558.082	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP47	SE235558.083	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP48	SE235558.084	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP49	SE235558.085	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP49	SE235558.086	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP50	SE235558.087	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP51	SE235558.088	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP51	SE235558.089	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP52	SE235558.090	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP53	SE235558.091	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP54	SE235558.092	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP55	SE235558.093	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022
TP56	SE235558.094	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022	22 Aug 2022

### Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE235558.001	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP1	SE235558.002	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP2	SE235558.003	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP2	SE235558.004	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP3	SE235558.005	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP4	SE235558.006	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP4	SE235558.007	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP5	SE235558.008	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP5	SE235558.009	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP6	SE235558.010	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP6	SE235558.011	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP7	SE235558.012	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP7	SE235558.013	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP8	SE235558.014	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP8	SE235558.015	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP9	SE235558.016	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP9	SE235558.017	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP10	SE235558.018	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP10	SE235558.019	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP11	SE235558.020	LB256095	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP11	SE235558.021	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP12	SE235558.022	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP13	SE235558.023	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

**Moisture Content (continued)**

Method: ME-(AU)-ENVJAN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP13	SE235558.024	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP14	SE235558.025	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP14	SE235558.026	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP15	SE235558.027	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP15	SE235558.028	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP16	SE235558.029	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP16	SE235558.030	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP17	SE235558.031	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP18	SE235558.032	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP19	SE235558.033	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP19	SE235558.034	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP20	SE235558.035	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP20	SE235558.036	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP21	SE235558.037	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP22	SE235558.038	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP22	SE235558.039	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP23	SE235558.040	LB256096	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP23	SE235558.041	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP24	SE235558.042	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP24	SE235558.043	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP25	SE235558.044	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP26	SE235558.045	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP26	SE235558.046	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP27	SE235558.047	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP27	SE235558.048	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP28	SE235558.049	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP28	SE235558.050	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP29	SE235558.051	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP29	SE235558.052	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP30	SE235558.053	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP31	SE235558.054	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP32	SE235558.055	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP32	SE235558.056	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP33	SE235558.057	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP33	SE235558.058	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP34	SE235558.059	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP34	SE235558.060	LB256097	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP35	SE235558.061	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP35	SE235558.062	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP36	SE235558.063	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP36	SE235558.064	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP37	SE235558.065	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP38	SE235558.066	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP39	SE235558.067	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP40	SE235558.068	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP40	SE235558.069	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP41	SE235558.070	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP41	SE235558.071	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP42	SE235558.072	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP43	SE235558.073	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP43	SE235558.074	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP44	SE235558.075	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP44	SE235558.076	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP45	SE235558.077	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP45	SE235558.078	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP45	SE235558.079	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP46	SE235558.080	LB256098	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP46	SE235558.081	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP47	SE235558.082	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP47	SE235558.083	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022



# HOLDING TIME SUMMARY

SE235558 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

### Moisture Content (continued)

Method: ME-(AU)-ENVJAN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP48	SE235558.084	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP49	SE235558.085	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP49	SE235558.086	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP50	SE235558.087	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP51	SE235558.088	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP51	SE235558.089	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP52	SE235558.090	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP53	SE235558.091	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP54	SE235558.092	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP55	SE235558.093	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022
TP56	SE235558.094	LB256099	15 Aug 2022	16 Aug 2022	29 Aug 2022	18 Aug 2022	23 Aug 2022	22 Aug 2022

### pH in soil (1:5)

Method: ME-(AU)-ENVJAN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE235558.001	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP1	SE235558.002	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP2	SE235558.003	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP2	SE235558.004	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP3	SE235558.005	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP4	SE235558.006	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP4	SE235558.007	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP5	SE235558.008	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP5	SE235558.009	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP6	SE235558.010	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP6	SE235558.011	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP7	SE235558.012	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP7	SE235558.013	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP8	SE235558.014	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP8	SE235558.015	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP9	SE235558.016	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP9	SE235558.017	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP10	SE235558.018	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP10	SE235558.019	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP11	SE235558.020	LB256179	15 Aug 2022	16 Aug 2022	22 Aug 2022	19 Aug 2022	20 Aug 2022	19 Aug 2022
TP11	SE235558.021	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP12	SE235558.022	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP13	SE235558.023	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP13	SE235558.024	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP14	SE235558.025	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP14	SE235558.026	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP15	SE235558.027	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP15	SE235558.028	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP16	SE235558.029	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP16	SE235558.030	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP17	SE235558.031	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP18	SE235558.032	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP19	SE235558.033	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP19	SE235558.034	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP20	SE235558.035	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP20	SE235558.036	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP21	SE235558.037	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP22	SE235558.038	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP22	SE235558.039	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP23	SE235558.040	LB256259	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP23	SE235558.041	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP24	SE235558.042	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP24	SE235558.043	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP25	SE235558.044	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP26	SE235558.045	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP26	SE235558.046	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

**pH in soil (1:5) (continued)**

Method: ME-(AU)-ENVJAN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP27	SE235558.047	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP27	SE235558.048	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP28	SE235558.049	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP28	SE235558.050	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP29	SE235558.051	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP29	SE235558.052	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP30	SE235558.053	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP31	SE235558.054	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP32	SE235558.055	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP32	SE235558.056	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP33	SE235558.057	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP33	SE235558.058	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP34	SE235558.059	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP34	SE235558.060	LB256263	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP35	SE235558.061	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP35	SE235558.062	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP36	SE235558.063	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP36	SE235558.064	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP37	SE235558.065	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP38	SE235558.066	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP39	SE235558.067	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP40	SE235558.068	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP40	SE235558.069	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP41	SE235558.070	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP41	SE235558.071	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP42	SE235558.072	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP43	SE235558.073	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP43	SE235558.074	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP44	SE235558.075	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP44	SE235558.076	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP45	SE235558.077	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP45	SE235558.078	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP45	SE235558.079	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP46	SE235558.080	LB256268	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP46	SE235558.081	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP47	SE235558.082	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP47	SE235558.083	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP48	SE235558.084	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP49	SE235558.085	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP49	SE235558.086	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP50	SE235558.087	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP51	SE235558.088	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP51	SE235558.089	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP52	SE235558.090	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP53	SE235558.091	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP54	SE235558.092	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP55	SE235558.093	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022
TP56	SE235558.094	LB256269	15 Aug 2022	16 Aug 2022	22 Aug 2022	22 Aug 2022	23 Aug 2022	22 Aug 2022



Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Conductivity and TDS by Calculation - Soil

Method: ME-(AU)-[ENV]AN106

Sample Number	Parameter	Units	LOR	Result
LB256179.001	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.21
LB256259.001	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0
LB256263.001	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	-0.17
LB256268.001	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	-0.19
LB256269.001	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.02

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula:  $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times SDL / Mean + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

### Conductivity and TDS by Calculation - Soil

Method: ME-(AU)-[ENV]AN106

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235558.010	LB256179.014	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	160	200	31	22
SE235558.020	LB256179.025	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	140	160	31	10
SE235558.030	LB256259.014	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	300	340	31	12
SE235558.040	LB256259.025	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	740	740	30	1
SE235558.050	LB256263.014	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	940	940	30	0
SE235558.060	LB256263.025	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	670	690	30	2
SE235558.070	LB256268.014	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	660	700	30	6
SE235558.080	LB256268.025	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	400	430	30	8
SE235558.090	LB256269.014	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	800	770	30	3
SE235558.094	LB256269.019	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	530	530	30	0

### Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235558.010	LB256095.011	% Moisture	%w/w	1	10.2	7.7	41	28
SE235558.020	LB256095.022	% Moisture	%w/w	1	15.9	14.1	37	12
SE235558.030	LB256096.011	% Moisture	%w/w	1	17.2	17.9	36	4
SE235558.040	LB256096.022	% Moisture	%w/w	1	18.6	18.6	35	0
SE235558.050	LB256097.011	% Moisture	%w/w	1	15.1	15.4	37	1
SE235558.060	LB256097.022	% Moisture	%w/w	1	13.7	12.8	38	7
SE235558.070	LB256098.011	% Moisture	%w/w	1	13.9	14.2	37	2
SE235558.080	LB256098.022	% Moisture	%w/w	1	18.6	19.4	35	4
SE235558.090	LB256099.011	% Moisture	%w/w	1	19.6	17.4	35	12
SE235558.094	LB256099.016	% Moisture	%w/w	1	19.0	18.2	35	4

### pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE235558.010	LB256179.014	pH	pH Units	0.1	5.2	5.4	32	2
SE235558.020	LB256179.025	pH	pH Units	0.1	5.0	4.9	32	2
SE235558.030	LB256259.014	pH	pH Units	0.1	4.9	4.9	32	1
SE235558.040	LB256259.025	pH	pH Units	0.1	4.8	4.7	32	2
SE235558.050	LB256263.014	pH	pH Units	0.1	5.0	5.1	32	1
SE235558.060	LB256263.025	pH	pH Units	0.1	4.9	4.9	32	0
SE235558.070	LB256268.014	pH	pH Units	0.1	4.6	4.4	32	3
SE235558.080	LB256268.025	pH	pH Units	0.1	4.7	4.7	32	0
SE235558.090	LB256269.014	pH	pH Units	0.1	4.7	4.7	32	0
SE235558.094	LB256269.019	pH	pH Units	0.1	4.7	4.7	32	1

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

**Conductivity and TDS by Calculation - Soil**

Method: ME-(AU)-[ENV]AN106

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB256179.002	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	108
LB256259.002	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	105
LB256263.002	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	107
LB256268.002	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	108
LB256269.002	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	105

**pH in soil (1:5)**

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB256179.003	pH	pH Units	0.1	7.4	7.415	98 - 102	99
LB256259.003	pH	pH Units	0.1	7.4	7.415	98 - 102	99
LB256263.003	pH	pH Units	0.1	7.4	7.415	98 - 102	99
LB256268.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100
LB256269.003	pH	pH Units	0.1	7.3	7.415	98 - 102	99

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula:  $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: [https://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022\\_QA\\_QC\\_Plan.pdf](https://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022_QA_QC_Plan.pdf)

- \* NATA accreditation does not cover the performance of this service.
- \*\* Indicative data, theoretical holding time exceeded.
- \*\*\* Indicates that both \* and \*\* apply.
- Sample not analysed for this analyte.
- IS Insufficient sample for analysis.
- LNR Sample listed, but not received.
- LOR Limit of reporting.
- QFH QC result is above the upper tolerance.
- QFL QC result is below the lower tolerance.
- ① At least 2 of 3 surrogates are within acceptance criteria.
- ② RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
- ⑥ LOR was raised due to sample matrix interference.
- ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
- ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
- ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
- ⑩ LOR was raised due to high conductivity of the sample (required dilution).
- † Refer to relevant report comments for further information.

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# GEOTECH TESTING PTY LTD

## Laboratory Test Request / Chain of Custody Record

Lanoko Place  
 PENRITH NSW 2750  
 P O Box 880  
 PENRITH NSW 2751  
 Tel: (02) 4722 2700  
 Fax: (02) 4722 6161  
 email: info@geotech.com.au

SGS ENVIRONMENTAL SERVICES  
 UNIT 16  
 33 MADDOX STREET  
 ALEXANDRIA NSW 2015

PH: 02 8594 0400 FAX: 02 8594 0499  
 ATTN: Ms Emily Yin  
 Project Manager: KB Location: Marsden Park

Sampling details							Results required by:			
Location	Depth	Soil	Water	EC (1:5)	pH	Sulphate	Chloride	ESP	Notes	Keep Sample
TP1	0.8-1.0	DSP		✓	✓				ESP=Exchangeable Sodium Percentage	✓
	1.3-1.5	DSP		✓	✓					✓
TP2	0.2-0.4	DSP		✓	✓					✓
	1.0-1.2	DSP		✓	✓					✓
TP3	0.4-0.6	DSP		✓	✓					✓
TP4	0.4-0.6	DSP		✓	✓					✓
	1.0-1.2	DSP		✓	✓					✓
TP5	0.5-0.8	DSP		✓	✓					✓
	1.3-1.5	DSP		✓	✓					✓
TP6	0.5-0.7	DSP		✓	✓					✓
	0.7-0.9	DSP		✓	✓					✓
TP7	0.3-0.5	DSP		✓	✓					✓
	1.0-1.2	DSP		✓	✓					✓
TP8	0.5-0.9	DSP		✓	✓					✓
	0.9-1.1	DSP		✓	✓					✓
TP9	0.3-0.6	DSP		✓	✓					✓
	1.1-1.3	DSP		✓	✓					✓
TP10	0.7-0.9	DSP		✓	✓					✓
	1.2-1.4	DSP		✓	✓					✓
TP11	0.4-0.7	DSP		✓	✓					✓
	1.0-1.2	DSP		✓	✓					✓
TP12	0.5-0.8	DSP		✓	✓					✓
	0.2-0.4	DSP		✓	✓					✓
TP13	0.2-0.4	DSP		✓	✓					✓
	1.2-1.4	DSP		✓	✓					✓
TP14	0.4-0.6	DSP		✓	✓					✓
	0.8-1.0	DSP		✓	✓					✓
TP15	0.3-0.5	DSP		✓	✓					✓
	1.0-1.2	DSP		✓	✓					✓
TP16	0.6-0.8	DSP		✓	✓					✓
	1.2-1.4	DSP		✓	✓					✓
TP17	0.2-0.4	DSP		✓	✓					✓
	0.3-0.6	DSP		✓	✓					✓
TP18	0.2-0.4	DSP		✓	✓					✓
	1.2-1.4	DSP		✓	✓					✓
TP19	0.2-0.4	DSP		✓	✓					✓

Relinquished by: Name: PRAATIK Signature: PP Date: 8-9 August

Received by: Name: George Thi Signature: Date: 16/8/2009

16/8/2009 3pm

Please Use Geotechnical Engineering Template for Reporting



Legend: USG Undisturbed soil sample (glass jar) ✓ DSP Disturbed soil sample (small plastic bag) \* Purge & Trap  
 WGS Disturbed soil sample (glass jar) ✓ DSP Test required # Geotechnique Screen



**GEOTECH TESTING PTY LTD**

**Laboratory Test Request / Chain of Custody Record**

Lemko Place  
PENRITH NSW 2750  
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SGS ENVIRONMENTAL SERVICES  
UNIT 16  
33 MADDOX STREET  
ALEXANDRIA NSW 2015

Page

2 of 2

PH: 02 8594 0400 FAX: 02 8594 0499  
ATTN: Ms Emily Yin  
Project Manager: KB Location: Marsden Park  
Sampling By: PP Job No: 8599/94  
Project: New Park Precinct 7 Area C

Sampling details										Results required by:	
Location	Depth	Soil	Water	EC (1:5)	pH	Sulphate	Chloride	ESP	Notes	Keep Sample	
TP20	0.8-1.0	DSP		✓	✓				ESP=Exchangeable Sodium Percentage	✓	
	1.3-1.5	DSP		✓	✓					✓	
TP21	0.2-0.4	DSP		✓	✓					✓	
TP22	0.2-0.4	DSP		✓	✓					✓	
	1.0-1.2	DSP		✓	✓					✓	
TP23	0.3-0.5	DSP		✓	✓					✓	
	1.2-1.4	DSP		✓	✓					✓	
TP24	0.2-0.4	DSP		✓	✓					✓	
	1.1-1.4	DSP		✓	✓					✓	
TP25	0.1-0.4	DSP		✓	✓					✓	
TP26	0.2-0.4	DSP		✓	✓					✓	
	0.9-1.1	DSP		✓	✓					✓	
TP27	0.3-0.5	DSP		✓	✓					✓	
	0.8-1.0	DSP		✓	✓					✓	
TP28	0.5-0.7	DSP		✓	✓					✓	
	1.0-1.2	DSP		✓	✓					✓	
TP29	0.2-0.4	DSP		✓	✓					✓	
	1.3-1.5	DSP		✓	✓					✓	
TP30	0.8-1.0	DSP		✓	✓					✓	
TP31	0.1-0.3	DSP		✓	✓					✓	
TP32	0.2-0.3	DSP		✓	✓					✓	
	1.0-1.2	DSP		✓	✓					✓	
TP33	0.1-0.3	DSP		✓	✓					✓	
	0.9-1.1	DSP		✓	✓					✓	
TP34	0-0.3	DSP		✓	✓					✓	
	0.8-1.0	DSP		✓	✓					✓	
TP35	0.4-0.6	DSP		✓	✓					✓	
	1.2-1.4	DSP		✓	✓					✓	
TP36	0.6-0.8	DSP		✓	✓					✓	
	1.1-1.3	DSP		✓	✓					✓	
TP37	0.3-0.6	DSP		✓	✓					✓	

**Please Use Geotechnical Engineering Template for Reporting**

Relinquished by: Name: PRATIK Signature: PP Date: 8-9 August  
Received by: Name: Signature: Date: 10-8-22 5.20

Legend: USG Undisturbed soil sample (glass jar) DSP Disturbed soil sample (small plastic bag)  
DSG Disturbed soil sample (glass jar) ✓ Test required  
\* Purge & Trap  
# Geotechnique Screen

**GEOTECH TESTING PTY LTD**

**Laboratory Test Request / Chain of Custody Record**

Lenko Place  
PENRITH NSW 2750

P O Box 880  
PENRITH NSW 2751

Tel: (02) 4722 2700  
Fax: (02) 4722 6161  
email: info@geotech.com.au

Project: New Park Precinct 7 Area C

Page 1 of 2

SGS ENVIRONMENTAL SERVICES  
UNIT 16  
33 MADDOX STREET  
ALEXANDRIA NSW 2015

PH: 02 8594 0400  
ATTN: Ms Emily Yin

FAX: 02 8594 0499

Project Manager: KB  
Location: Marsden Park

PH: 02 8594 0400  
ATTN: Ms Emily Yin

FAX: 02 8594 0499

Project Manager: KB  
Location: Marsden Park

**Sampling details**

**Results required by:**

Location	Depth	Soil	Water	EC (1:5)	pH	Sulphate	Chloride	ESP	Notes	Keep Sample
TP38	0.8-1.0	DSP		✓	✓				ESP=Exchangeable Sodium Percentage	✓
TP39	1.3-1.5	DSP		✓	✓					✓
TP40	0.8-1.0	DSP		✓	✓					✓
TP41	1.1-1.3	DSP		✓	✓					✓
TP42	1.2-1.4	DSP		✓	✓					✓
TP43	0.6-0.8	DSP		✓	✓					✓
TP44	0.7-0.9	DSP		✓	✓					✓
TP45	1.3-1.5	DSP		✓	✓					✓
TP46	0.3-0.6	DSP		✓	✓					✓
TP47	0.9-1.1	DSP		✓	✓					✓
TP48	0.4-0.6	DSP		✓	✓					✓
TP49	0.8-1.0	DSP		✓	✓					✓
TP50	1.1-1.3	DSP		✓	✓					✓
TP51	0.4-0.6	DSP		✓	✓					✓
TP52	0.3-0.5	DSP		✓	✓					✓
TP53	1.0-1.2	DSP		✓	✓					✓
TP54	0.9-1.1	DSP		✓	✓					✓
TP55	0.4-0.6	DSP		✓	✓					✓
TP56	0.2-0.4	DSP		✓	✓					✓

**Please Use Geotechnical Engineering Template for Reporting**

Relinquished by: Name: PRAATIK Signature: [Signature] Date: 11/08/2022

Received by: Name: [Signature] Signature: [Signature] Date: 16.8.22 3:00

Legend: USG Undisturbed soil sample (glass jar) ✓ DSP Disturbed soil sample (small plastic bag) \* Purge & Trap  
 SSG Disturbed soil sample (glass jar) ✓ Test required # Geotechnique Screen  
 WP

## Yin, Emily (Sydney)

---

**From:** Pratik Pahadi <pratik@geotech.com.au>  
**Sent:** Thursday, 18 August 2022 12:49 PM  
**To:** Yin, Emily (Sydney)  
**Subject:** [EXTERNAL] RE: SE235558 - 5899/94

\*\*\* WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. \*\*\*

---

Hi Emily,

The correct ID to use in the report would be TP\_38\_0.2-0.5 and TP\_39\_0.3-0.5.

Thank you.

---

**From:** Yin, Emily (Sydney) [mailto:Emily.Yin@sgs.com]  
**Sent:** Thursday, 18 August 2022 11:46 AM  
**To:** Pratik Pahadi; Pratik Pahadi  
**Subject:** SE235558 - 5899/94

Dear All,

TP38\_0.8-1.0 labelled as TP38\_0.2-0.5 and TP39 1.3-1.5 labelled as TP39\_0.3-0.5.  
Please advise which ID to use on the report.  
Thank You.

Regards,

**Emily Yin**  
**Environment, Health & Safety**  
Sample Receipt

SGS Australia Pty Ltd  
Unit 16, 33 Maddox Street  
Alexandria NSW 2015

Phone: +61 (0)2 8594 0400  
Fax: +61 (0)2 8594 0499  
E-mail: [au.samplereceipt.sydney@sgs.com](mailto:au.samplereceipt.sydney@sgs.com)

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## SAMPLE RECEIPT ADVICE

SE235558

### CLIENT DETAILS

Contact Kushal Bajracharya  
Client Geotech Testing Pty Ltd  
Address P.O. Box 880  
PENRITH  
NSW 2751

Telephone 02 4722 2700  
Facsimile 02 4722 6161  
Email kushal@geotech.com.au

Project **8599/94 Marsden Park**  
Order Number **8599/94**  
Samples 94

### LABORATORY DETAILS

Manager Huong Crawford  
Laboratory SGS Alexandria Environmental  
Address Unit 16, 33 Maddox St  
Alexandria NSW 2015

Telephone +61 2 8594 0400  
Facsimile +61 2 8594 0499  
Email au.environmental.sydney@sgs.com

Samples Received Tue 16/8/2022  
Report Due Tue 23/8/2022  
SGS Reference **SE235558**

### SUBMISSION DETAILS

This is to confirm that 94 samples were received on Tuesday 16/8/2022. Results are expected to be ready by COB Tuesday 23/8/2022. Please quote SGS reference SE235558 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	Client	Sample cooling method	None
Samples received in correct containers	Yes	Sample counts by matrix	94 Soil
Date documentation received	16/8/2022	Type of documentation received	COC
Number of eskies/boxes received		Samples received in good order	Yes
Samples received without headspace	N/A	Sample temperature upon receipt	18.4°C
Sufficient sample for analysis	Yes	Turnaround time requested	Standard

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

### COMMENTS

This document is issued by the Company under its General Conditions of Service accessible at [www.sgs.com/en/Terms-and-Conditions.aspx](http://www.sgs.com/en/Terms-and-Conditions.aspx). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

CLIENT DETAILS

Client **Geotech Testing Pty Ltd**

Project **8599/94 Marsden Park**

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	Moisture Content	pH in soil (1:5)
001	TP1 0.8-1.0	1	1	1
002	TP1 1.3-1.5	1	1	1
003	TP2 0.2-0.4	1	1	1
004	TP2 1.0-1.2	1	1	1
005	TP3 0.4-0.6	1	1	1
006	TP4 0.4-0.6	1	1	1
007	TP4 1.0-1.2	1	1	1
008	TP5 0.5-0.8	1	1	1
009	TP5 1.3-1.5	1	1	1
010	TP6 0.5-0.7	1	1	1
011	TP6 0.7-0.9	1	1	1
012	TP7 0.3-0.5	1	1	1
013	TP7 1.0-1.2	1	1	1
014	TP8 0.5-0.9	1	1	1
015	TP8 0.9-1.1	1	1	1
016	TP9 0.3-0.6	1	1	1
017	TP9 1.1-1.3	1	1	1
018	TP10 0.7-0.9	1	1	1
019	TP10 1.2-1.4	1	1	1
020	TP11 0.4-0.7	1	1	1
021	TP11 1.0-1.2	1	1	1
022	TP12 0.5-0.8	1	1	1
023	TP13 0.2-0.4	1	1	1
024	TP13 1.2-1.4	1	1	1

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document. The numbers shown in the table indicate the number of results requested in each package. Please indicate as soon as possible should your request differ from these details. Testing as per this table shall commence immediately unless the client intervenes with a correction.

CLIENT DETAILS

Client **Geotech Testing Pty Ltd**

Project **8599/94 Marsden Park**

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	Moisture Content	pH in soil (1:5)
025	TP14 0.4-0.6	1	1	1
026	TP14 0.8-1.0	1	1	1
027	TP15 0.3-0.5	1	1	1
028	TP15 1.0-1.2	1	1	1
029	TP16 0.6-0.8	1	1	1
030	TP16 1.2-1.4	1	1	1
031	TP17 0.2-0.4	1	1	1
032	TP18 0.3-0.6	1	1	1
033	TP19 0.2-0.4	1	1	1
034	TP19 1.2-1.4	1	1	1
035	TP20 0.8-1.0	1	1	1
036	TP20 1.3-1.5	1	1	1
037	TP21 0.2-0.4	1	1	1
038	TP22 0.2-0.4	1	1	1
039	TP22 1.0-1.2	1	1	1
040	TP23 0.3-0.5	1	1	1
041	TP23 1.2-1.4	1	1	1
042	TP24 0.2-0.4	1	1	1
043	TP24 1.1-1.4	1	1	1
044	TP25 0.1-0.4	1	1	1
045	TP26 0.2-0.4	1	1	1
046	TP26 0.9-1.1	1	1	1
047	TP27 0.3-0.5	1	1	1
048	TP27 0.8-1.0	1	1	1

CONTINUED OVERLEAF

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CLIENT DETAILS

Client **Geotech Testing Pty Ltd**

Project **8599/94 Marsden Park**

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	Moisture Content	pH in soil (1:5)
049	TP28 0.5-0.7	1	1	1
050	TP28 1.0-1.2	1	1	1
051	TP29 0.2-0.4	1	1	1
052	TP29 1.3-1.5	1	1	1
053	TP30 0.8-1.0	1	1	1
054	TP31 0.1-0.3	1	1	1
055	TP32 0.2-0.3	1	1	1
056	TP32 1.0-1.2	1	1	1
057	TP33 0.1-0.3	1	1	1
058	TP33 0.9-1.1	1	1	1
059	TP34 0-0.3	1	1	1
060	TP34 0.8-1.0	1	1	1
061	TP35 0.4-0.6	1	1	1
062	TP35 1.2-1.4	1	1	1
063	TP36 0.6-0.8	1	1	1
064	TP36 1.1-1.3	1	1	1
065	TP37 0.3-0.6	1	1	1
066	TP38 0.2-0.5	1	1	1
067	TP39 0.3-0.5	1	1	1
068	TP40 0.8-1.0	1	1	1
069	TP40 1.1-1.3	1	1	1
070	TP41 0.3-0.5	1	1	1
071	TP41 1.2-1.4	1	1	1
072	TP42 0.6-0.8	1	1	1

CONTINUED OVERLEAF

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CLIENT DETAILS

Client **Geotech Testing Pty Ltd**

Project **8599/94 Marsden Park**

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	Moisture Content	pH in soil (1:5)
073	TP43 0.7-0.9	1	1	1
074	TP43 1.3-1.5	1	1	1
075	TP44 0.3-0.6	1	1	1
076	TP44 0.9-1.1	1	1	1
077	TP45 0.4-0.6	1	1	1
078	TP45 0.8-1.0	1	1	1
079	TP45 1.1-1.3	1	1	1
080	TP46 0.4-0.6	1	1	1
081	TP46 0.7-0.9	1	1	1
082	TP47 0.3-0.5	1	1	1
083	TP47 1.2-1.4	1	1	1
084	TP48 0.4-0.6	1	1	1
085	TP49 0.3-0.5	1	1	1
086	TP49 1.0-1.2	1	1	1
087	TP50 0.1-0.3	1	1	1
088	TP51 0.2-0.4	1	1	1
089	TP51 0.9-1.1	1	1	1
090	TP52 0.4-0.6	1	1	1
091	TP53 0.2-0.4	1	1	1
092	TP54 0.3-0.5	1	1	1
093	TP55 0.4-0.6	1	1	1
094	TP56 0.1-0.3	1	1	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document. The numbers shown in the table indicate the number of results requested in each package. Please indicate as soon as possible should your request differ from these details. Testing as per this table shall commence immediately unless the client intervenes with a correction.