



Job No: 8599/41
Our Ref: 8599/41-AA
5 March 2021

Daracon Contractors Pty Ltd
184 Adderley Street
AUBURN NSW 2144
Email: John.Letby@daracon.com.au

Attention: Mr J Letby

Dear Sir

re: **Newpark Precinct 5
Abell Road, Marsden Park
Post Earthworks Salinity Assessment – Exposure Classification**

At your request, Geotech Testing Pty Ltd conducted a salinity assessment at the above site after completion of earthworks. This report provides exposure classification of 289 newly developed residential lots (Lot 5001 to 5289) at the above-mentioned site.

Field Work

The field work for this investigation was carried out on 1, 3, 4 and 8 of February 2021 under the full time supervision of a Geotechnical Engineer from this company and consisted of the followings:

- Carry out a walk over survey to assess existing geological and geotechnical conditions within and in the vicinity of the site.
- Excavate 147 test pits (TP1 to TP147) to depths up to 1.5m using a small 5 tonne excavator. Test pits were excavated along the boundary lines between lots and their locations are shown on the attached Drawings No 8599/40-AA1 and 8599/40-AA2.
- Recovery of the representative soil sample from test pits for laboratory testing.

Site Conditions

The site (Newpark P5) is of irregular shape and is bounded dense forest land to the south and other stages of the newly developed subdivision to all other sides. At the time of investigation, earthworks for the lots and construction of internal roads had been completed. The topography of the site is generally flat with crest towards the middle of the site sloping from the middle. The ground surface was generally void of vegetation.

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Sub-surface Conditions

Sub-surface conditions encountered at the site 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	0.0-0.2	0.2-0.9	0.9-1.5	NE
TP2	1.5	0.0-0.2	0.2-1.5	NE	NE
TP3	1.5	0.0-0.2	0.2-1.5	NE	NE
TP4	1.5	0.0-0.2	0.2-1.5	NE	NE
TP5	1.5	0.0-0.1	0.1-1.5	NE	NE
TP6	1.2	0.0-0.1	0.1-1.2	NE	NE
TP7	1.5	0.0-0.2	0.2-1.5	NE	NE
TP8	1.5	0.0-0.2	0.2-1.5	NE	NE
TP9	1.1	0.0-0.2	0.2-1.1	NE	NE
TP10	1.5	0.0-0.2	0.2-1.5	NE	NE
TP11	1.5	0.0-0.2	0.2-1.5	NE	NE
TP12	1.5	0.0-0.1	0.1-1.5	NE	NE
TP13	1.5	0.0-0.2	0.2-1.5	NE	NE
TP14	1.5	0.0-0.1	0.1-1.5	NE	NE
TP15	1.5	0.0-0.1	0.1-1.5	NE	NE
TP16	1.5	0.0-0.2	0.2-1.5	NE	NE
TP17	1	0.0-0.2	0.2-1.0	NE	NE
TP18	1.5	0.0-0.2	0.2-1.5	NE	NE
TP19	1.5	0.0-0.1	0.1-1.5	NE	NE
TP20	1.5	0.0-0.1	0.1-1.5	NE	NE
TP21	1.5	0.0-0.1	0.1-1.5	NE	NE
TP22	1.5	0.0-0.2	0.2-1.5	NE	NE
TP23	1.5	0.0-0.2	0.2-1.5	NE	NE
TP24	1.5	0.0-0.2	0.2-1.5	NE	NE
TP25	1.5	0.0-0.2	0.2-1.5	NE	NE
TP26	1.5	0.0-0.2	0.2-1.5	NE	NE
TP27	1.5	0.0-0.2	0.2-1.5	NE	NE
TP28	1.5	0.0-0.2	0.2-1.5	NE	NE
TP29	1.5	0.0-0.2	0.2-1.5	NE	NE
TP30	1.5	0.0-0.2	0.2-1.5	NE	NE
TP31	1.5	0.0-0.2	0.2-1.5	NE	NE
TP32	1.5	0.0-0.2	0.2-1.5	NE	NE
TP33	1.5	0.0-0.2	0.2-1.5	NE	NE
TP34	1.5	0.0-0.2	0.2-1.5	NE	NE

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Test Pit	Termination Depth (m)	Topsoil (m)	Fill (m)	Natural (m)	Bedrock (m)
TP35	1.5	0.0-0.2	0.2-1.5	NE	NE
TP36	1.5	0.0-0.2	0.2-1.5	NE	NE
TP37	1.5	0.0-0.2	0.2-1.5	NE	NE
TP38	1.5	0.0-0.2	0.2-1.5	NE	NE
TP39	1.5	0.0-0.2	0.2-1.5	NE	NE
TP40	1.5	0.0-0.2	0.2-1.5	NE	NE
TP41	1.5	0.0-0.2	0.2-1.5	NE	NE
TP42	1.5	0.0-0.2	0.2-1.5	NE	NE
TP43	1.5	0.0-0.2	0.2-1.5	NE	NE
TP44	1.5	0.0-0.2	0.2-1.5	NE	NE
TP45	1.5	0.0-0.2	0.2-1.5	NE	NE
TP46	1.5	0.0-0.2	0.2-1.5	NE	NE
TP47	1.5	0.0-0.2	0.2-1.5	NE	NE
TP48	1.5	0.0-0.2	0.2-1.5	NE	NE
TP49	1.5	0.0-0.2	0.2-1.5	NE	NE
TP50	1.5	0.0-0.2	0.2-1.5	NE	NE
TP51	1.5	0.0-0.2	0.2-1.5	NE	NE
TP52	1.5	0.0-0.2	0.2-1.5	NE	NE
TP53	1.5	0.0-0.2	0.2-1.5	NE	NE
TP54	1.5	0.0-0.2	0.2-1.5	NE	NE
TP55	1.5	0.0-0.2	0.2-1.5	NE	NE
TP56	1.5	0.0-0.2	0.2-1.5	NE	NE
TP57	1.5	0.0-0.2	0.2-1.5	NE	NE
TP58	1.5	0.0-0.2	0.2-1.5	NE	NE
TP59	1.5	0.0-0.2	0.2-1.5	NE	NE
TP60	1.5	0.0-0.2	0.2-1.5	NE	NE
TP61	1.5	0.0-0.2	0.2-1.5	NE	NE
TP62	1.5	0.0-0.2	0.2-1.5	NE	NE
TP63	1.5	0.0-0.2	0.2-1.5	NE	NE
TP64	1.5	0.0-0.2	0.2-1.5	NE	NE
TP65	1.5	0.0-0.2	0.2-1.5	NE	NE
TP66	1.5	0.0-0.2	0.2-1.5	NE	NE
TP67	1.5	0.0-0.2	0.2-1.5	NE	NE
TP68	1.5	0.0-0.2	0.2-1.5	NE	NE
TP69	1.5	0.0-0.2	0.2-1.5	NE	NE
TP70	1.5	0.0-0.2	0.2-1.5	NE	NE
TP71	1.5	0.0-0.2	0.2-1.5	NE	NE
TP72	1.5	0.0-0.2	0.2-1.5	NE	NE

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Test Pit	Termination Depth (m)	Topsoil (m)	Fill (m)	Natural (m)	Bedrock (m)
TP73	1.5	0.0-0.2	0.2-1.5	NE	NE
TP74	1.5	0.0-0.2	0.2-1.5	NE	NE
TP75	1.5	0.0-0.2	0.2-1.5	NE	NE
TP76	1.5	0.0-0.2	0.2-1.5	NE	NE
TP77	1.5	0.0-0.2	0.2-1.5	NE	NE
TP78	1.5	0.0-0.2	0.2-1.5	NE	NE
TP79	1.5	0.0-0.2	0.2-1.5	NE	NE
TP80	1.5	0.0-0.2	0.2-1.5	NE	NE
TP81	1.5	0.0-0.2	0.2-1.5	NE	NE
TP82	1.5	0.0-0.2	0.2-1.5	NE	NE
TP83	1.5	0.0-0.2	0.2-1.5	NE	NE
TP84	1.5	0.0-0.2	0.2-1.5	NE	NE
TP85	1.5	0.0-0.2	0.2-1.5	NE	NE
TP86	1.5	0.0-0.2	0.2-1.5	NE	NE
TP87	1.5	0.0-0.2	0.2-1.5	NE	NE
TP88	1.5	0.0-0.2	0.2-1.5	NE	NE
TP89	1.5	0.0-0.2	0.2-1.5	NE	NE
TP90	1.5	0.0-0.2	0.2-1.1	1.1-1.5	NE
TP91	1.5	0.0-0.2	NE	0.2-1.5	NE
TP92	1.5	0.0-0.2	NE	0.2-1.5	NE
TP93	1.5	0.0-0.2	NE	0.2-1.5	NE
TP94	0.6	0.0-0.2	0.2-0.5	NE	NE
TP95	1.5	0.0-0.2	NE	0.2-1.5	NE
TP96	1.5	0.0-0.2	0.2-1.1	1.1-1.5	NE
TP97	1.5	0.0-0.2	0.2-1.5	NE	NE
TP98	1.5	0.0-0.2	0.2-1.5	NE	NE
TP99	1.5	0.0-0.2	0.2-1.5	NE	NE
TP100	1.5	0.0-0.2	0.2-1.5	NE	NE
TP101	1.5	0.0-0.2	0.2-1.5	NE	NE
TP102	1.5	0.0-0.2	0.2-1.5	NE	NE
TP103	1.5	0.0-0.2	0.2-1.5	NE	NE
TP104	1.5	0.0-0.2	0.2-1.5	NE	NE
TP105	1.5	0.0-0.2	0.2-0.5	0.5-1.5	NE
TP106	1.5	0.0-0.2	0.2-1.5	NE	NE
TP107	1.5	0.0-0.2	0.2-1.5	NE	NE
TP108	0.6	0.0-0.2	0.2-0.5	NE	0.5-0.6
TP109	0.4	0.0-0.2	0.2-0.3	NE	0.3-0.4
TP110	0.5	0.0-0.2	0.2-0.5	NE	NE

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Test Pit	Termination Depth (m)	Topsoil (m)	Fill (m)	Natural (m)	Bedrock (m)
TP111	1.5	0.0-0.2	NE	0.2-1.5	NE
TP112	1.5	0.0-0.2	0.2-0.7	0.7-1.5	NE
TP113	1.5	0.0-0.2	0.2-1.5	NE	NE
TP114	1.5	0.0-0.2	0.2-1.5	NE	NE
TP115	1.5	0.0-0.2	0.2-1.1	1.1-1.5	NE
TP116	1.5	0.0-0.2	0.2-1.5	NE	NE
TP117	1.5	0.0-0.2	0.2-1.5	NE	NE
TP118	1.5	0.0-0.2	0.2-1.3	1.3-1.4	1.4-1.5
TP119	1.5	0.0-0.2	0.2-1.3	1.3-1.4	1.4-1.5
TP120	1.5	0.0-0.2	0.2-1.3	1.3-1.4	1.4-1.5
TP121	1.4	0.0-0.2	0.2-1.3	NE	1.3-1.4
TP122	1	0.0-0.2	0.2-0.9	NE	0.9-1.0
TP123	1.1	0.0-0.2	0.2-1.0	NE	1.0-1.1
TP124	1.5	0.0-0.2	0.2-1.5	NE	NE
TP125	1.5	0.0-0.2	0.2-1.5	NE	NE
TP126	1.5	0.0-0.2	0.2-1.5	NE	NE
TP127	1.5	0.0-0.2	0.2-1.5	NE	NE
TP128	1.5	0.0-0.2	0.2-1.5	NE	NE
TP129	1.5	0.0-0.2	0.2-1.5	NE	NE
TP130	1.5	0.0-0.2	0.2-1.5	NE	NE
TP131	1.5	0.0-0.2	0.2-1.5	NE	NE
TP132	1.5	0.0-0.2	0.2-1.5	NE	NE
TP133	1.5	0.0-0.2	0.2-1.5	NE	NE
TP134	1.5	0.0-0.2	0.2-1.5	NE	NE
TP135	1.5	0.0-0.2	0.2-1.5	NE	NE
TP136	1.5	0.0-0.2	0.2-1.5	NE	NE
TP137	1.5	0.0-0.2	0.2-1.5	NE	NE
TP138	1.5	0.0-0.2	0.2-1.5	NE	NE
TP139	1.5	0.0-0.2	0.2-1.5	NE	NE
TP140	1.5	0.0-0.2	0.2-1.5	NE	NE
TP141	1.5	0.0-0.2	0.2-1.5	NE	NE
TP142	1.5	0.0-0.2	0.2-1.5	NE	NE
TP143	1.5	0.0-0.2	0.2-1.5	NE	NE
TP144	1.5	0.0-0.2	0.2-1.5	NE	NE
TP145	1.5	0.0-0.2	0.2-1.5	NE	NE
TP146	1.5	0.0-0.2	0.2-1.5	NE	NE
TP147	1.5	0.0-0.2	0.2-1.5	NE	NE

NE: Not encountered to the termination depth

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

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

Fill	FILL: Silty Clay, low plasticity, brown FILL: Silt, low plasticity, light grey FILL: Silty Clay, low to medium plasticity, brown-orange FILL: Gravel, medium grain, dark grey FILL: Silty Sand, medium grain, orange FILL: Silty Clay, medium plasticity, mottled brown-orange and grey FILL: Silty Clay, low plasticity, mottled brown-orange and grey FILL: Silty Clay, low plasticity, grey FILL: Silty Clay, high plasticity, brown FILL: Silty Clay, low to medium plasticity, brown-orange FILL: Gravely Silty Cobble, coarse grain, brown
Natural	(CL) Silty CLAY, low plasticity, brown-orange (CI-CH) Silty CLAY, medium to high plasticity, brown-orange (CH) Silty CLAY, high plasticity, grey-orange (CL) Sandy CLAY, low plasticity, brown
Bedrock	SANDSTONE, yellow-white, low strength, distinctly weathered SILTSTONE, light grey, low strength, slightly weathered

Based on information presented in Table 1, the sub-surface profile within the site is anticipated to comprise a sequence of topsoil / deep fill and natural soils underlain by shale / siltstone bedrock.

Groundwater Condition

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 not evident during investigation.

Exposure Classification

Laboratory Testing

During field work, a total of 286 soil samples were collected (approx. two from each test pit) for chemical testing in a NATA accredited laboratory called 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 along with exposure classification.

Table 2: Laboratory Test Results

Test Pit	Depth (m)	pH	EC (µS/cm)	Multiplying Factor (MF)	Ece (dS/m)	Exposure Classification
TP1	0.2-0.3	6.8	150	8	1.2	A1
TP1	0.7-0.8	4.3	120	8	0.96	B1
TP2	0.2-0.3	8.4	520	8	4.16	A2
TP2	0.5-0.8	7.8	350	8	2.8	A1
TP3	0.2-0.3	5.2	130	8	1.04	A2
TP3	0.8-1.0	7	420	8	3.36	A1

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Test Pit	Depth (m)	pH	EC (µS/cm)	Multiplying Factor (MF)	Ece (dS/m)	Exposure Classification
TP4	0.2-0.3	7.1	280	8	2.24	A1
TP4	0.8-0.9	7.5	280	8	2.24	A1
TP5	0.2-0.3	7.9	360	8	2.88	A1
TP5	0.8-0.9	8.2	280	8	2.24	A1
TP6	0.2-0.3	7.7	630	8	5.04	A2
TP6	0.8-0.9	5.8	440	8	3.52	A1
TP7	0.2-0.3	7.3	580	8	4.64	A2
TP7	0.8-0.9	6.9	440	8	3.52	A1
TP8	0.2-0.3	7.8	350	8	2.8	A1
TP8	0.8-0.9	5.9	160	8	1.28	A1
TP9	0.2-0.3	5.4	110	8	0.88	A2
TP9	0.8-0.9	6.1	450	8	3.6	A1
TP10	0.2-0.3	6.8	220	8	1.76	A1
TP10	0.8-0.9	5.6	200	8	1.6	A1
TP11	0.2-0.3	5.5	82	8	0.656	A2
TP11	0.8-0.9	8.2	260	8	2.08	A1
TP12	0.2-0.3	6.5	300	8	2.4	A1
TP12	0.8-0.9	8.9	180	8	1.44	A1
TP13	0.2-0.3	7.7	280	8	2.24	A1
TP13	0.8-0.9	5.3	220	8	1.76	A2
TP14	0.2-0.3	8.5	290	8	2.32	A1
TP14	0.8-0.9	4.7	210	8	1.68	A2
TP15	0.2-0.3	6.6	260	8	2.08	A1
TP15	0.8-0.9	6.5	260	8	2.08	A1
TP16	0.2-0.3	8	350	8	2.8	A1
TP16	0.8-0.9	7.4	450	8	3.6	A1
TP17	0.2-0.3	6.9	180	8	1.44	A1
TP17	0.8-0.9	6.5	220	8	1.76	A1
TP18	0.2-0.3	8.3	370	8	2.96	A1
TP18	0.8-0.9	7.3	230	8	1.84	A1
TP20	0.2-0.3	7.9	370	8	2.96	A1
TP20	0.8-0.9	5	540	8	4.32	A2
TP21	0.2-0.3	4.9	180	8	1.44	A2
TP21	0.8-0.9	8.7	360	8	2.88	A1
TP22	0.2-0.3	5.5	190	8	1.52	A2
TP22	0.8-0.9	5.4	74	8	0.592	A2
TP23	0.2-0.3	6.4	350	8	2.8	
TP23	0.8-0.9	5.3	190	8	1.52	A2

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Test Pit	Depth (m)	pH	EC (µS/cm)	Multiplying Factor (MF)	Ece (dS/m)	Exposure Classification
TP24	0.2-0.3	6.4	160	8	1.28	A1
TP24	0.8-0.9	6.7	440	8	3.52	A1
TP25	0.2-0.3	5.2	200	8	1.6	A2
TP25	0.8-0.9	4.9	170	8	1.36	A2
TP26	0.2-0.3	5.2	170	8	1.36	A2
TP26	0.8-0.9	5.7	210	8	1.68	A1
TP27	0.2-0.3	6	230	8	1.84	A1
TP27	0.8-0.9	6.6	230	8	1.84	A1
TP28	0.2-0.3	8.4	400	8	3.2	A1
TP28	0.8-0.9	8	260	8	2.08	A1
TP29	0.2-0.3	5.3	220	8	1.76	A2
TP29	0.8-0.9	7.7	300	8	2.4	A1
TP30	0.2-0.3	6.9	200	8	1.6	A1
TP30	0.8-0.9	7.3	380	8	3.04	A1
TP31	0.2-0.3	8.3	360	8	2.88	A1
TP31	0.8-0.9	6.3	130	8	1.04	A1
TP32	0.2-0.3	6.7	250	8	2	A1
TP32	0.8-0.9	4	150	8	1.2	A1
TP33	0.2-0.3	4.9	240	8	1.92	A2
TP33	0.8-0.9	7.2	410	8	3.28	A1
TP34	0.2-0.3	7.4	410	8	3.28	A1
TP34	0.8-0.9	5.3	200	8	1.6	A2
TP35	0.2-0.3	6.4	380	8	3.04	A1
TP35	0.8-0.9	7.8	500	8	4	A2
TP36	0.2-0.3	6.2	280	8	2.24	A1
TP36	0.8-0.9	4.8	120	8	0.96	A2
TP37	0.2-0.3	5.3	210	8	1.68	A2
TP37	0.8-0.9	4.6	110	8	0.88	A2
TP38	0.2-0.3	7.4	470	8	3.76	A1
TP38	0.8-0.9	7.4	260	8	2.08	A1
TP39	0.2-0.3	5.1	120	8	0.96	A2
TP39	0.8-0.9	8	330	8	2.64	A1
TP40	0.2-0.3	4.9	150	8	1.2	A2
TP40	0.8-0.9	4.6	78	8	0.624	A2
TP41	0.2-0.3	8.3	320	8	2.56	A1
TP41	0.8-0.9	8.3	210	8	1.68	A1
TP42	0.2-0.3	8.4	200	8	1.6	A1
TP42	0.8-0.9	9.2	340	8	2.72	A1

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Test Pit	Depth (m)	pH	EC (µS/cm)	Multiplying Factor (MF)	Ece (dS/m)	Exposure Classification
TP43	0.2-0.3	6.1	160	8	1.28	A1
TP43	0.8-0.9	5.5	50	8	0.4	A2
TP44	0.2-0.3	4.9	160	8	1.28	A2
TP44	0.8-0.9	8.4	260	8	2.08	A1
TP45	0.2-0.3	7.6	280	8	2.24	A1
TP45	0.8-0.9	8.2	420	8	3.36	A1
TP46	0.2-0.3	8.6	390	8	3.12	A1
TP46	0.8-0.9	6.2	190	8	1.52	A1
TP47	0.2-0.3	8.1	210	8	1.68	A1
TP47	0.8-0.9	8.2	300	8	2.4	A1
TP48	0.2-0.3	8.2	320	8	2.56	A1
TP48	0.8-0.9	6	140	8	1.12	A1
TP49	0.2-0.3	7.2	230	8	1.84	A1
TP49	0.8-0.9	7.8	240	8	1.92	A1
TP50	0.2-0.3	5.9	330	8	2.64	A1
TP50	0.8-0.9	5.1	120	8	0.96	A2
TP51	0.2-0.3	5.3	350	8	2.8	A2
TP51	0.8-0.9	6.2	230	8	1.84	A1
TP52	0.2-0.3	6.5	200	8	1.6	A1
TP52	0.8-0.9	7.8	260	8	2.08	A1
TP53	0.2-0.3	8.3	380	8	3.04	A1
TP53	0.8-0.9	8.3	250	8	2	A1
TP54	0.2-0.3	9.1	230	8	1.84	A1
TP54	0.8-0.9	8.4	300	8	2.4	A1
TP55	0.2-0.3	8.5	290	8	2.32	A1
TP55	0.8-0.9	7.9	320	8	2.56	A1
TP56	0.2-0.3	8	480	8	3.84	A1
TP56	0.8-0.9	8.4	310	8	2.48	A1
TP57	0.2-0.3	7.6	400	8	3.2	A1
TP57	0.8-0.9	7.8	330	8	2.64	A1
TP58	0.2-0.3	5.1	270	8	2.16	A1
TP58	0.8-0.9	5.2	33	8	0.264	A1
TP59	0.2-0.3	6.9	640	8	5.12	A1
TP59	0.8-0.9	6.3	170	8	1.36	A1
TP60	0.2-0.3	7.1	440	8	3.52	A1
TP60	0.8-0.9	8	370	8	2.96	A1
TP61	0.2-0.3	7.9	220	8	1.76	A1
TP61	0.8-0.9	8.6	250	8	2	A1

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Test Pit	Depth (m)	pH	EC (µS/cm)	Multiplying Factor (MF)	Ece (dS/m)	Exposure Classification
TP62	0.2-0.3	8.4	290	8	2.32	A1
TP62	0.8-0.9	8.6	380	8	3.04	A1
TP63	0.2-0.3	7.1	260	8	2.08	A1
TP63	0.8-0.9	7	270	8	2.16	A1
TP64	0.2-0.3	6.8	430	8	3.44	A1
TP64	0.8-0.9	7.2	250	8	2	A1
TP65	0.2-0.3	5.2	330	8	2.64	A2
TP65	0.8-0.9	7	390	8	3.12	A1
TP66	0.2-0.3	7.5	280	8	2.24	A1
TP66	0.8-0.9	8.1	270	8	2.16	A1
TP67	0.2-0.3	8.5	430	8	3.44	A1
TP67	0.8-0.9	9.3	190	8	1.52	A1
TP68	0.2-0.3	6.9	350	8	2.8	A1
TP68	0.8-0.9	7.5	460	8	3.68	A1
TP69	0.2-0.3	7.6	470	8	3.76	A1
TP69	0.8-0.9	8.3	520	8	4.16	A2
TP70	0.2-0.3	6.8	260	8	2.08	A1
TP70	0.8-0.9	7.7	280	8	2.24	A1
TP71	0.2-0.3	6.7	250	8	2	A1
TP71	0.8-0.9	4.8	150	8	1.2	A2
TP72	0.2-0.3	5.7	220	8	1.76	A1
TP72	0.8-0.9	5.6	190	8	1.52	A1
TP73	0.2-0.3	5.1	180	8	1.44	A2
TP73	0.8-0.9	4.7	180	8	1.44	A2
TP74	0.2-0.3	7.4	260	8	2.08	A1
TP74	0.8-0.9	6.8	180	8	1.44	A1
TP75	0.2-0.3	6.1	110	8	0.88	A1
TP75	0.8-0.9	5.2	190	8	1.52	A2
TP76	0.2-0.3	7.9	290	8	2.32	A1
TP76	0.8-0.9	5.2	300	8	2.4	A2
TP77	0.2-0.3	6.2	210	8	1.68	A1
TP77	0.8-0.9	4.9	230	8	1.84	A2
TP78	0.2-0.3	6.9	290	8	2.32	A1
TP78	0.8-0.9	5.1	310	8	2.48	A2
TP79	0.2-0.3	7.1	500	8	4	A2
TP79	0.8-0.9	5.6	530	8	4.24	A2
TP80	0.2-0.3	5.4	190	8	1.52	A2
TP80	0.8-0.9	5.5	160	8	1.28	A2

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Test Pit	Depth (m)	pH	EC (µS/cm)	Multiplying Factor (MF)	Ece (dS/m)	Exposure Classification
TP81	0.2-0.3	7	280	8	2.24	A1
TP81	0.8-0.9	7.9	170	8	1.36	A1
TP82	0.2-0.3	6.4	260	8	2.08	A1
TP82	0.8-0.9	6.1	120	8	0.96	A1
TP83	0.2-0.3	8.4	380	8	3.04	A1
TP83	0.8-0.9	8.3	330	8	2.64	A1
TP84	0.2-0.3	6.7	210	8	1.68	A1
TP84	0.8-0.9	7.2	300	8	2.4	A1
TP85	0.2-0.3	6.3	480	8	3.84	A1
TP85	0.8-0.9	7.1	140	8	1.12	A1
TP86	0.2-0.3	7.8	310	8	2.48	A1
TP86	0.8-0.9	7.7	350	8	2.8	A1
TP88	0.2-0.3	5.4	300	8	2.4	A2
TP88	0.8-0.9	5.2	94	8	0.752	A2
TP89	0.2-0.3	5	97	8	0.776	A2
TP89	0.8-0.9	4.2	76	8	0.608	B1
TP90	0.2-0.3	6.8	340	8	2.72	A1
TP90	0.8-0.9	6.8	150	8	1.2	A1
TP91	0.2-0.3	4.8	370	8	2.96	A2
TP91	0.8-0.9	4.8	220	8	1.76	A2
TP92	0.2-0.3	4.8	230	8	1.84	A2
TP92	0.8-0.9	4.9	340	8	2.72	A2
TP93	0.2-0.3	4.8	250	8	2	A2
TP94	0.2-0.3	4.7	420	8	3.36	A2
TP94	0.8-0.9	4.9	150	8	1.2	A2
TP95	0.2-0.3	4.8	280	8	2.24	A2
TP95	0.8-0.9	4.8	270	8	2.16	A2
TP96	0.2-0.3	4.7	380	8	3.04	A2
TP96	0.8-0.9	4.6	290	8	2.32	A2
TP97	0.2-0.3	4.7	170	8	1.36	A2
TP97	0.8-0.9	5.1	110	8	0.88	A2
TP98	0.2-0.3	4.8	180	8	1.44	A2
TP98	0.8-0.9	5.1	100	8	0.8	A2
TP99	0.2-0.3	6.3	270	8	2.16	A1
TP99	0.8-0.9	5	150	8	1.2	A2
TP100	0.2-0.3	5.2	300	8	2.4	A2
TP100	0.8-0.9	6.2	110	8	0.88	A1
TP101	0.2-0.3	7.6	360	8	2.88	A1

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Test Pit	Depth (m)	pH	EC (µS/cm)	Multiplying Factor (MF)	Ece (dS/m)	Exposure Classification
TP101	0.8-0.9	6.9	310	8	2.48	A1
TP102	0.2-0.3	5.2	130	8	1.04	A2
TP102	0.8-0.9	8.1	270	8	2.16	A1
TP103	0.2-0.3	7.1	250	8	2	A1
TP103	0.8-0.9	5	78	8	0.624	A2
TP104	0.2-0.3	6.5	230	8	1.84	A1
TP104	0.8-0.9	5.5	130	8	1.04	A2
TP105	0.2-0.3	7.9	230	8	1.84	A1
TP105	0.8-0.9	5.7	480	8	3.84	A1
TP106	0.2-0.3	6.1	200	8	1.6	A1
TP106	0.8-0.9	5.2	190	8	1.52	A2
TP107	0.2-0.3	6.8	180	8	1.44	A1
TP108	0.2-0.3	4.9	360	8	2.88	A2
TP109	0.2-0.3	4.7	390	8	3.12	A2
TP110	0.2-0.3	4.6	440	8	3.52	A2
TP110	0.8-0.9	5	280	8	2.24	A2
TP111	0.2-0.3	4.7	340	8	2.72	A2
TP111	0.8-0.9	4.9	530	8	4.24	A2
TP112	0.2-0.3	5.5	200	8	1.6	A2
TP112	0.8-0.9	4.8	290	8	2.32	A2
TP113	0.2-0.3	7.8	230	8	1.84	A1
TP113	0.8-0.9	4.7	380	8	3.04	A2
TP114	0.2-0.3	6.1	320	8	2.56	A1
TP114	0.8-0.9	7.4	260	8	2.08	A1
TP115	0.2-0.3	4.9	340	8	2.72	A2
TP115	0.8-0.9	5	270	8	2.16	A2
TP116	0.2-0.3	8.4	270	8	2.16	A1
TP116	0.8-0.9	4.8	340	8	2.72	A2
TP117	0.2-0.3	6.6	340	8	2.72	A1
TP117	0.8-0.9	6.5	330	8	2.64	A1
TP118	0.2-0.3	8	600	8	4.8	A2
TP118	0.8-0.9	6.1	340	8	2.72	A1
TP119	0.2-0.3	7.7	580	8	4.64	A2
TP119	0.8-0.9	4.9	630	8	5.04	A2
TP120	0.2-0.3	4.8	770	8	6.16	A2
TP120	0.8-0.9	4.9	510	8	4.08	A2
TP121	0.2-0.3	5	440	8	3.52	A2
TP121	0.8-0.9	5.4	150	8	1.2	A2

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Test Pit	Depth (m)	pH	EC (µS/cm)	Multiplying Factor (MF)	Ece (dS/m)	Exposure Classification
TP122	0.2-0.3	4.9	390	8	3.12	A2
TP122	0.8-0.9	4.9	360	8	2.88	A2
TP123	0.2-0.3	4.5	330	8	2.64	B1
TP123	0.8-0.9	4.6	240	8	1.92	A2
TP124	0.2-0.3	5.5	170	8	1.36	A2
TP124	0.8-0.9	5.8	160	8	1.28	A1
TP125	0.2-0.3	8	240	8	1.92	A1
TP125	0.8-0.9	6.9	28	8	0.224	A1
TP126	0.2-0.3	7.5	330	8	2.64	A1
TP126	0.8-0.9	8	250	8	2	A1
TP127	0.2-0.3	7.7	190	8	1.52	A1
TP127	0.8-0.9	6.8	430	8	3.44	A1
TP128	0.2-0.3	4.7	210	8	1.68	A2
TP128	0.8-0.9	6.1	130	8	1.04	A1
TP129	0.2-0.3	4.7	380	8	3.04	A2
TP129	0.8-0.9	5	95	8	0.76	A2
TP130	0.2-0.3	5.6	350	8	2.8	A1
TP130	0.8-0.9	6	220	8	1.76	A1
TP131	0.2-0.3	8.1	290	8	2.32	A1
TP131	0.8-0.9	7.2	460	8	3.68	A1
TP132	0.2-0.3	6.9	470	8	3.76	A1
TP132	0.8-0.9	5.8	400	8	3.2	A1
TP133	0.2-0.3	5.3	270	8	2.16	A2
TP133	0.8-0.9	5.5	87	8	0.696	A2
TP134	0.2-0.3	5.9	44	8	0.352	A1
TP134	0.8-0.9	5.3	38	8	0.304	A2
TP135	0.2-0.3	6.3	120	8	0.96	A1
TP135	0.8-0.9	4.6	500	8	4	A2
TP136	0.2-0.3	6.1	380	8	3.04	A1
TP136	0.8-0.9	7.2	440	8	3.52	A1
TP137	0.2-0.3	8.2	250	8	2	A1
TP137	0.8-0.9	5.4	59	8	0.472	A2
TP138	0.2-0.3	7.1	400	8	3.2	A1
TP138	0.8-0.9	7.3	510	8	4.08	A2
TP139	0.2-0.3	7.5	530	8	4.24	A2
TP139	0.8-0.9	5.1	550	8	4.4	A2
TP140	0.2-0.3	6.6	360	8	2.88	A1
TP140	0.8-0.9	8.3	160	8	1.28	A1

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Test Pit	Depth (m)	pH	EC (µS/cm)	Multiplying Factor (MF)	Ece (dS/m)	Exposure Classification
TP141	0.2-0.3	5	390	8	3.12	A2
TP141	0.8-0.9	6.7	280	8	2.24	A1
TP142	0.2-0.3	5	120	8	0.96	A2
TP142	0.8-0.9	4.6	66	8	0.528	A2
TP143	0.2-0.3	4	270	8	2.16	A1
TP143	0.8-0.9	7.6	1200	8	9.6	B1
TP144	0.2-0.3	8.4	250	8	2	A1
TP144	0.8-0.9	7.3	280	8	2.24	A1
TP145	0.2-0.3	7.7	420	8	3.36	A1
TP145	0.8-0.9	5.3	210	8	1.68	A2
TP146	0.2-0.3	7.3	270	8	2.16	A1
TP146	0.8-0.9	5.7	130	8	1.04	A1
TP147	0.2-0.3	4.3	95	8	0.76	B1
TP147	0.8-0.9	5.1	16	8	0.128	A2

* The multiplication factor (MF) is a function of the soil texture and description (Site Investigations for Urban Salinity – 2002)

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 (varying from 6 to 17) based on the texture of the soil sample to obtain Corrected Electrical Conductivity designated as EC_e. Based on site observation a multiplication factor of 8 was used for the clayey soil encountered during field work. The DEH publication defines various classes of saline soils as follows:

Classification	EC _e (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

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

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

Table 3 – Site Exposure Classifications (AS2870-2011)

Lot	Exposure Classification						
5001	A2	5074	A2	5147	A2	5220	A2
5002	A2	5075	A2	5148	A2	5221	A2
5003	A2	5076	A2	5149	A2	5222	A2
5004	A2	5077	A2	5150	A2	5223	A2
5005	A2	5078	A2	5151	A2	5224	A2
5006	A2	5079	A2	5152	A2	5225	A2
5007	A2	5080	A2	5153	A2	5226	A2
5008	A2	5081	A2	5154	A2	5227	A2
5009	A2	5082	A2	5155	A2	5228	A2
5010	A2	5083	A2	5156	A2	5229	A2
5011	A2	5084	A2	5157	A2	5230	A2
5012	A2	5085	A2	5158	A2	5231	A2
5013	A2	5086	A2	5159	A2	5232	A2
5014	A2	5087	A2	5160	A2	5233	A2
5015	B1	5088	A2	5161	A2	5234	A2
5016	B1	5089	A2	5162	A2	5235	A2
5017	A2	5090	A2	5163	A2	5236	A2
5018	A2	5091	A2	5164	A2	5237	A2
5019	A2	5092	A2	5165	A2	5238	A2
5020	A2	5093	A2	5166	A2	5239	A2
5021	A2	5094	A2	5167	A2	5240	A2
5022	A2	5095	A2	5168	A2	5241	B1
5023	A2	5096	A2	5169	A2	5242	B1
5024	A2	5097	A2	5170	A2	5243	A2
5025	A2	5098	A2	5171	A2	5244	A2
5026	A2	5099	A2	5172	A2	5245	A2
5027	A2	5100	A2	5173	A2	5246	A2
5028	A2	5101	A2	5174	A2	5247	A2
5029	A2	5102	A2	5175	A2	5248	A2

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Lot	Exposure Classification						
5030	A2	5103	A2	5176	A2	5249	A2
5031	A2	5104	A2	5177	A2	5250	A2
5032	A2	5105	A2	5178	A2	5251	A2
5033	A2	5106	A2	5179	A2	5252	A2
5034	A2	5107	A2	5180	A2	5253	A2
5035	A2	5108	A2	5181	A2	5254	A2
5036	A2	5109	A2	5182	A2	5255	A2
5037	A2	5110	A2	5183	A2	5256	A2
5038	A2	5111	A2	5184	A2	5257	A2
5039	A2	5112	A2	5185	A2	5258	A2
5040	A2	5113	A2	5186	A2	5259	A2
5041	A2	5114	A2	5187	A2	5260	B1
5042	A2	5115	A2	5188	A2	5261	B1
5043	A2	5116	A2	5189	A2	5262	A2
5044	A2	5117	A2	5190	A2	5263	A2
5045	A2	5118	A2	5191	A2	5264	A2
5046	A2	5119	A2	5192	A2	5265	A2
5047	A2	5120	A2	5193	A2	5266	B1
5048	A2	5121	A2	5194	A2	5267	B1
5049	A2	5122	A2	5195	B1	5268	A2
5050	A2	5123	A2	5196	B1	5269	A2
5051	A2	5124	A2	5197	A2	5270	A2
5052	A2	5125	A2	5198	A2	5271	A2
5053	A2	5126	A2	5199	A2	5272	A2
5054	A2	5127	A2	5200	A2	5273	A2
5055	A2	5128	A2	5201	A2	5274	A2
5056	A2	5129	A2	5202	A2	5275	A2
5057	A2	5130	A2	5203	A2	5276	A2
5058	A2	5131	A2	5204	A2	5277	A2
5059	A2	5132	A2	5205	A2	5278	A2
5060	A2	5133	A2	5206	A2	5279	A2
5061	A2	5134	A2	5207	A2	5280	A2
5062	A2	5135	A2	5208	A2	5281	A2
5063	A2	5136	A2	5209	A2	5282	A2
5064	A2	5137	A2	5210	A2	5283	A2

8599/41-AA
Newpark Precinct 5 - Abell Road, Marsden Park

Lot	Exposure Classification						
5065	A2	5138	A2	5211	A2	5284	A2
5066	A2	5139	A2	5212	A2	5285	A2
5067	A2	5140	A2	5213	A2	5286	A2
5068	A2	5141	A2	5214	A2	5287	A2
5069	A2	5142	A2	5215	A2	5288	A2
5070	A2	5143	A2	5216	A2	5289	A2
5071	A2	5144	A2	5217	A2		
5072	A2	5145	A2	5218	A2		
5073	A2	5146	A2	5219	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 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

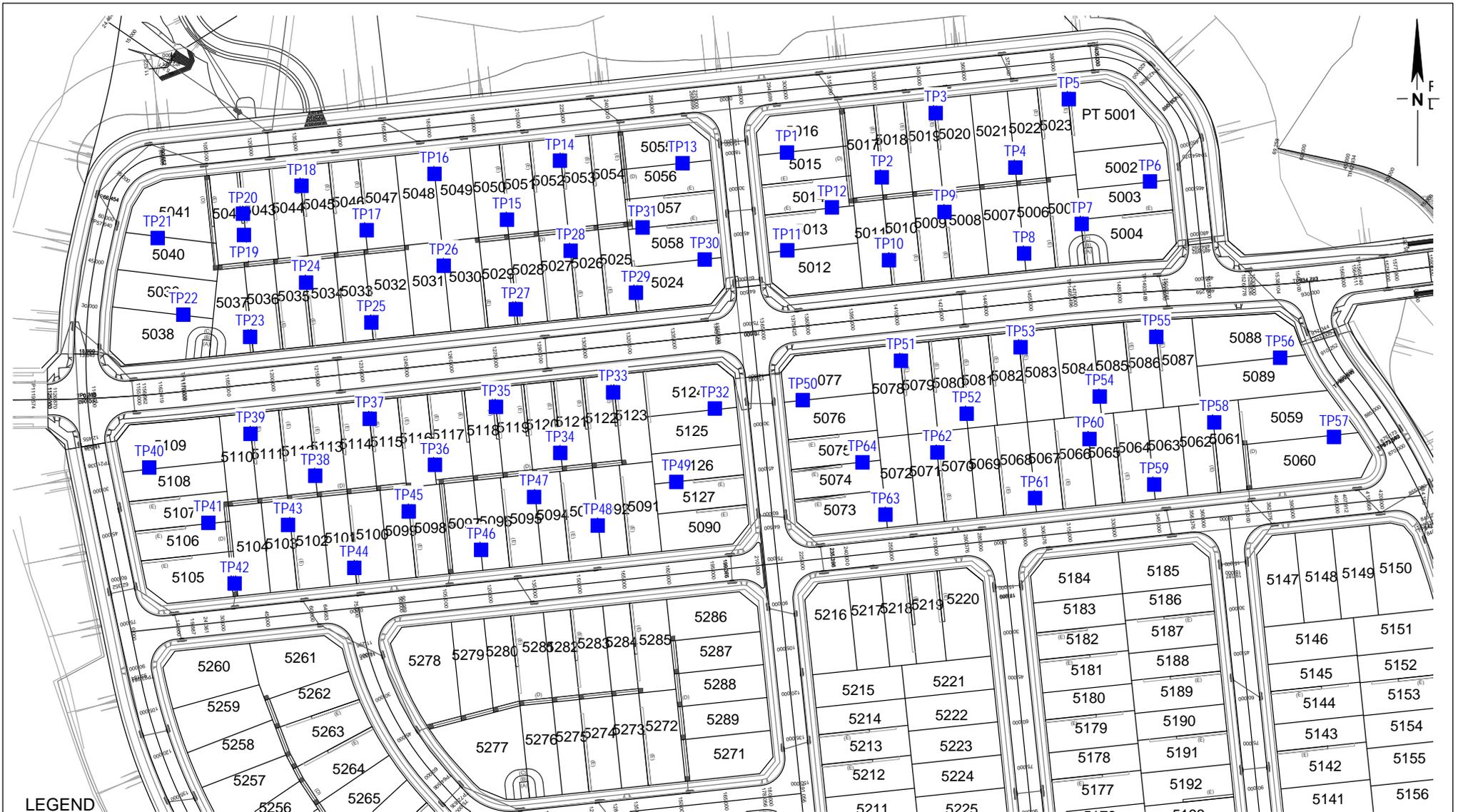
If you have any questions, please do not hesitate to contact the undersigned.

Yours faithfully
GEOTECH TESTING PTY LTD



RAM RAVI-INDRAN
Geotechnical Engineer

Attached Drawing No 8599/40-AA1 and 8599/40-AA2 - Test Pit Location Plan
Table A – Summary of Test Pits
Laboratory Test Results



LEGEND

■ Test Pit



34 Borec Road
Penrith
NSW 2750
ABN 71 076 676 321

Ph: 02 4722 2744
Fx: 02 4722 2777
www.geotech.com.au
e-mail: info@geotech.com.au

NOTES

1. Site features are indicative and are not to scale.
2. This drawing has been produced using a base plan provided by others to which additional information e.g test pits, borehole locations or notes have been added. Some or all of the plan may not be relevant at the time of producing this drawing

Daracon Contractors Pty Ltd
Residential Development
Woorong Park P5 Newpark
Marsden Park

Test Pit Locations

Drawing No: 8599/40-AA1
Job No: 8599/40
Drawn By: MH
Date: 9 February 2021
Checked By: RR

File No: 8599-40
Layers: 0, AA1



LEGEND

■ Test Pit



34 Borec Road
 Penrith
 NSW 2750
 ABN 71 076 676 321

Ph: 02 4722 2744
 Fx: 02 4722 2777
 www.geotech.com.au
 e-mail: info@geotech.com.au

NOTES

1. Site features are indicative and are not to scale.
2. This drawing has been produced using a base plan provided by others to which additional information e.g test pits, borehole locations or notes have been added. Some or all of the plan may not be relevant at the time of producing this drawing

Daracon Contractors Pty Ltd
 Residential Development
 Woorong Park P5 Newpark
 Marsden Park

Test Pit Locations

Drawing No: 8599/40-AA2
 Job No: 8599/40
 Drawn By: MH
 Date: 19 February 2021
 Checked By: RR

File No: 8599-40
 Layers: 0, AA2

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 1 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP1	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, traces of gravel, M<OMC
	0.2-0.7	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, traces of cobble, well compacted, M<OMC
	0.7-0.9	0.7-0.8 (DS)	FILL: Silt, low plasticity, light grey, well compacted, M<OMC
	0.9-1.5		(CL) Silty CLAY, low plasticity, brown-orange, stiff to very stiff, M<PL
TP2	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, traces of gravel, M<OMC
	0.2-0.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, traces of gravel, well compacted, M<OMC
	0.5-1.5		FILL: Silty Clay, low plasticity, brown, with cobble, traces of boulder, well compacted, M<OMC
TP3	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, traces of gravel, M<OMC
	0.2-0.4	0.2-0.3 (DS)	FILL: Silt, low plasticity, light grey, with gravel, well compacted, M<OMC
	0.4-1.5	0.9-1.0 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
TP4	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2-1.5	0.2-0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, with boulders, well compacted, Dry
TP5	0.0-0.1		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.1-0.2		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
	0.2-1.5	0.2-0.3 (DS) 0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 2 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP6	0.0-0.1		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.1-0.2		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
	0.2-1.0	0.2-0.3 (DS) 0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
TP7	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.5	0.2-0.3 (DS) 0.8-0.9 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
TP8	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2-1.5	0.2-0.3 (DS) 0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
TP9	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2-0.9	0.2-0.3 (DS) 0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
	0.9-1.1		FILL: Silty Clay, low plasticity, brown, with boulders, well compacted, M<OMC, refusal

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 3 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP10	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.0	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, traces of gravel, well compacted, M<OMC
		0.5-0.8 (DS)	
		0.8-0.9 (DS)	
	1.0-1.2		FILL: Cobbles and Gravel, medium grain, dark grey , well compacted, Dry
	1.2-1.5		FILL: Silty Clay, low to medium plasticity, brown-orange, traces of gravel, well compacted, M<OMC
TP11	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
	0.5-0.6		FILL: Silt, low plasticity, light grey, well compacted, M<OMC
	0.6-1.2	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
	1.2-1.5		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
TP12	0.0-0.1		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.1-0.3	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
	0.3-1.5	0.8-0.9 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
TP13	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, traces of gravel, well compacted, M<OMC
		0.8-0.9 (DS)	

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 4 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP14	0.0-0.1		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.1-0.2		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
	0.2-0.6	0.2-0.3 (DS)	FILL: Silty Sand, medium grain, orange, well compacted, M<OMC
	0.6-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
TP15	0.0-0.1		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.1-0.2		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
	0.2-1.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
TP16	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2-1.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
TP17	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2-0.9	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, traces of cobble, well compacted, M<OMC
		0.8-0.9 (DS)	
	0.9-1.0		FILL: Silty Clay, low plasticity, brown, with boulders, well compacted, M<OMC, refusal
TP18	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.4	0.2-0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
	0.4-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 5 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP19	0.0-0.1		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.1-0.2		FILL: Cobbles and Gravel, medium grain, dark grey, with boulders, well compacted, Dry, refusal
TP20	0.0-0.1		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.1-0.4	0.2-0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, traces of boulder, well compacted, Dry
	0.4-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, traces of cobble, well compacted, M<OMC
TP21	0.0-0.1		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.1-0.4	0.1-0.4 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
	0.4-1.5	0.2-0.3 (DS) 0.8-0.9 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
TP22	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2-0.3	0.2-0.3 (DS)	FILL: Silt, low plasticity, light grey, well compacted, M<OMC
	0.3-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
TP23	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2-0.4	0.2-0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
	0.4-0.5		FILL: Silt, low plasticity, light grey, well compacted, M<OMC
	0.5-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 6 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP24	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.4	0.2-0.3 (DS)	FILL: Silt, low plasticity, light grey, well compacted, M<OMC
	0.4-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, with cobbles, well compacted, M<OMC
TP25	0.0-0.2		FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2-0.3	0.2-0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
	0.3-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, with gravel, well compacted, M<OMC
TP26	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.5	0.2-0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, traces of boulders, well compacted, Dry
		0.8-0.9 (DS)	
TP27	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.4	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.4-0.5		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
	0.5-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
TP28	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.0	0.2-0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
		0.8-0.9 (DS)	
	1.0-1.5		FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 7 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP29	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.8	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
	0.8-0.9	0.8-0.9 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
	0.9-1.5		FILL: Silty Clay, low plasticity, brown, with cobble, well compacted, M<OMC
TP30	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.3	0.2-0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
	0.3-1.0	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with cobble, well compacted, M<OMC
	1.0-1.1		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
	1.1-1.5		FILL: Silty Clay, low plasticity, brown, with cobble, well compacted, M<OMC
TP31	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.0	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, traces of cobble, well compacted, M<OMC
	1.0-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, traces of boulder, well compacted, M<OMC
TP32	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, traces of cobble, well compacted, M<OMC
		0.8-0.8 (DS)	

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 8 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP33	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
	0.5-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, traces of cobble, well compacted, M<OMC
TP34	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.5	0.2-0.3 (DS)	FILL: Silty Clay, medium plasticity, mottled brown-orange and grey, well compacted, M<OMC
		0.8-0.9 (DS)	
TP35	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with cobbles, with gravels, well compacted, M<OMC
		0.8-0.9 (DS)	
TP36	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with cobble, well compacted, M<OMC
	0.5-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, traces of boulder, well compacted, M<OMC
TP37	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.5	0.2-0.3 (DS)	FILL: Silty Clay, medium plasticity, mottled brown-orange and grey, with ironstone fragments, well compacted, M<OMC
		0.8-0.9 (DS)	

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 9 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP38	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.9	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, traces of cobble, well compacted, M<OMC
		0.8-0.9 (DS)	
	0.9-1.5		FILL: Silty Clay, low plasticity, brown, with gravel, traces of boulder, well compacted, M<OMC
TP39	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.8	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, traces of cobble, well compacted, M<OMC
	0.8-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, traces of boulder, well compacted, M<OMC
TP40	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2-0.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, traces of boulder, well compacted, M<OMC
	0.5-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
TP41	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2-1.0	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with cobbles, well compacted, M<OMC
		0.8-0.9 (DS)	
	1.0-1.5		FILL: Silty Clay, low plasticity, brown, with cobbles, traces of boulder, well compacted, M<OMC
TP42	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.4	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.4-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, with cobble, traces of boulder, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 10 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP43	0.0-0.2	0.2-0.3 (DS)	TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
TP44	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.0	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, mottled brown-orange and grey, well compacted, M<OMC
		0.8-0.9 (DS)	
	1.0-1.5		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
TP45	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.0	0.2-0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, Dry
		0.8-0.9 (DS)	
	1.0-1.5		FILL: Silty Clay, low plasticity, brown, with cobbles, well compacted, M<OMC
TP46	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.6	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.6-1.5	0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, grey, with cobbles, well compacted, M<OMC
TP47	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, mottled brown-orange and grey, with cobbles, well compacted, M<OMC
		0.4-0.7 (DS)	
		0.8-0.9 (DS)	

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 11 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP48	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2-1.0	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, mottled brown-orange and grey, well compacted, M<OMC
		0.8-0.9 (DS)	
	1.0-1.5		FILL: Silty Clay, low plasticity, grey, well compacted, M<OMC
TP49	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.0	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
		0.8-0.9 (DS)	
	1.0-1.5		FILL: Silty Clay, low plasticity, grey, with cobbles, well compacted, M<OMC
TP50	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.0	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
		0.8-0.9 (DS)	
	1.0-1.5		FILL: Silty Clay, low plasticity, grey, trace of ironstone gravels, well compacted, M<OMC
TP51	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.4	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, trace of boulder, well compacted, M<OMC
		0.4-1.5	
			FILL: Silty Clay, low plasticity, grey, with cobbles, well compacted, M<OMC
TP52	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-1.5	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with cobbles, well compacted, M<OMC
		0.8-0.9 (DS)	

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 12 of 12

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP53	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2-1.5	0.2-0.3 (DS) 0.8-0.9 (DS)	FILL: Silty Clay, low plasticity, grey, with cobbles, well compacted, M<OMC
TP54	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, brown, M<OMC
	0.2-0.4	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, grey, with cobbles, well compacted, M<OMC
	0.4-1.5	0.8-0.9	FILL: Silty Clay, low plasticity, brown, with cobbles, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 1 of 11

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP53	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, grey, with cobbles, well compacted, M<OMC
TP54	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.4	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, grey, with cobbles, well compacted, M<OMC
	0.4 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with cobbles, well compacted, M<OMC
TP55	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
TP56	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, trace of cobbles, well compacted, M<OMC
TP57	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, grey, with cobbles, well compacted, M<OMC
	0.5 – 1.5	0.8 – 0.8 (DS)	FILL: Silty Clay, low plasticity, mottled brown-orange and grey, with cobbles, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 2 of 11

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP58	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.0	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
		0.8 – 0.9 (DS)	
	1.0 – 1.5		FILL: Silty Clay, low plasticity, grey, with gravel, well compacted, M<OMC
TP59	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
		0.8 – 0.8 (DS)	
TP60	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.6	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.6 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, grey, trace of cobbles, well compacted, M<OMC
TP61	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.4	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.4 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, grey, with cobbles, well compacted, M<OMC
TP62	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.4	0.2 – 0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, dry
	0.4 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP63	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, grey, with gravel, well compacted, M<OMC
TP64	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.6	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.6 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, grey, with cobbles, well compacted, M<OMC
TP65	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, mottled brown-orange and grey, well compacted, M<OMC
TP66	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, mottled brown-orange and grey, with gravel, well compacted, M<OMC
TP67	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.0	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, wet
	1.0 – 1.5		FILL: Cobbles and Gravel, medium grain, dark grey, traces of boulder, well compacted, wet

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 4 of 11

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP68	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.6	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, mottled brown-orange and grey, with gravels, well compacted, M<OMC
	0.6 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, traces of cobble, well compacted, M<OMC
TP69	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.6	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, mottled brown-orange and grey, well compacted, M<OMC
	0.6 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
TP70	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.6	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, M≤OMC
	0.6 – 1.5	0.6 – 0.9 (DS)	FILL: Silty Clay, medium plasticity, mottled brown-orange and grey, M≤OMC
		0.8 – 0.9 (DS)	
TP71	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.5		FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
	0.5 – 1.5		FILL: Silty Clay, low plasticity, mottled brown-orange and grey, trace of cobble, well compacted, M<OMC
TP72	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.4	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
	0.4 – 0.5		FILL: Silty Clay, low plasticity, mottled brown-orange and grey, M≤OMC
	0.5 – 1.5	0.8 – 0.9 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, with boulder, well compacted, dry

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 5 of 11

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP73	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, grey, trace of boulders, well compacted, M<OMC
TP74	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, trace of boulders, well compacted, M<OMC
TP75	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.8	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
	0.8 – 1.1	0.8 – 0.9 (DS)	FILL: Silty Clay, high plasticity, grey, with gravels, well compacted, M<OMC
	1.1 – 1.5	0.8 – 1.1 (DS)	FILL: Silty Clay, low plasticity, mottled brown-orange and grey, well compacted, M<OMC
TP76	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, with gravel, trace of ironstone, well compacted, M<OMC
TP77	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.6	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, grey, with cobbles, well compacted, M<OMC
	0.6 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 6 of 11

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP78	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, grey, traces of gravel, well compacted, M<OMC
	0.5 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, mottled brown-orange and grey, trace of gravel, well compacted, M<OMC
TP79	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, traces of cobbles, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP80	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, grey, trace of cobbles, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP81	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.6	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, grey, with gravel, well compacted, M<OMC
	0.6 – 1.0	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, grey, with boulder, well compacted, M<OMC
TP82	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, grey, with gravels, well compacted, M<OMC
		0.8 – 0.9 (DS)	

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP83	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, trace of boulders, traces of cobbles, well compacted, M<OMC
TP84	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M≤OMC
TP85	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M≤OMC
TP86	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, with gravel, well compacted, M≤OMC
TP87	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.8		FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
	0.8 – 1.5		FILL: Silty Clay, low plasticity, brown, with gravels, with cobbles, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP88	0.0 – 0.2		FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
TP89	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 1.1 – 1.4 (DS)	FILL: Silty Clay, high plasticity, light grey, with gravels, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP90	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.1	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
	1.1 – 1.5	1.1 – 1.4 (DS)	(CI-CH) Silty CLAY, medium to high plasticity, brown-orange, very stiff, M<PL
TP91	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.5	0.2 – 0.3 (DS)	(CI-CH) Silty CLAY, medium to high plasticity, brown-orange, very stiff, M≤PL
	0.5 – 1.5	0.5 – 0.8 (U50) 0.8 – 0.9 (DS)	(CH) Silty CLAY, high plasticity, grey-orange, stiff to very stiff, M≤PL

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 9 of 11

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP92	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS)	(CH) Silty CLAY, high plasticity, grey-orange, very stiff, M<PL
		0.8 – 0.9 (DS)	
TP93	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.5	0.2 – 0.3 (DS)	(CI-CH) Silty CLAY, medium to high plasticity, brown-orange, very stiff
	0.5 – 1.5	0.8 – 0.9 (DS)	(CH) Silty CLAY, high plasticity, grey-orange, very stiff
TP94	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.5 – 0.6		SILTSTONE, low strength, grey, fresh refusal
TP95	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS)	(CI-CH) Silty CLAY, medium to high plasticity, brown-orange, stiff to very stiff, M≤PL
		0.8 – 0.9 (DS)	
TP96	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.1	0.2 – 0.3 (DS)	FILL: Silty Clay, high plasticity, brown, well compacted, M<OMC
		0.8 – 0.9 (DS)	
	1.1 – 1.5		(CI-CH) Silty CLAY, medium to high plasticity, brown-orange, stiff to very stiff, M≤PL

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 10 of 11

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP97	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, high plasticity, brown, with gravel, well compacted, M<OMC
TP98	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.0	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	1.0 – 1.5		FILL: Silty Clay, low plasticity, brown, with ironstone gravels, well compacted, M<OMC
TP99	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with ironstone gravels, well compacted, M<OMC
TP100	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, grey, traces of ironstone traces of boulder and cobble, well compacted, M<OMC
TP101	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS) 0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, traces of boulder, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP102	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5		FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
TP103	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP104	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, traces boulders, well compacted, M<OMC
		0.8 – 0.9 (DS)	

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 1 of 9

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP105	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.4	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.4 – 0.5		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, dry
	0.5 – 1.5	0.5 – 0.8 (DS) 0.8 – 0.9 (DS)	(CI-CH) Silty CLAY, medium to high plasticity, brown-orange, very stiff, M<PL
TP106	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 0.8 – 0.9	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
TP107	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 1.5	0.2 – 0.3 0.8 – 0.9	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
TP108	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.5 – 0.6		SILTSTONE, light grey, low strength, slightly weathered, refusal
TP109	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.2 – 0.3	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.3 – 0.4		SILTSTONE, light grey, low strength, slightly weathered, refusal

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 2 of 9

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP110	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.5 – 0.7		FILL: Gravely Silty Cobble, coarse grain, brown, well compacted, dry, refusal
TP111	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	(CL) Silty CLAY, low plasticity, brown-orange, stiff, M<PL
		0.8 – 0.9 (DS)	
TP112	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.7	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.7 – 1.5	0.8 – 0.9 (DS)	(CL) Sandy CLAY, low plasticity, brown, firm to stiff, M<PL
TP113	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP114	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5		FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
TP115	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.1	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with cobble, traces of boulder, well compacted, M<OMC
		0.8 – 0.9 (DS)	
	1.1 – 1.5		(CI-CH) Silty CLAY, medium to high plasticity, brown-orange, stiff to very stiff, M<PL

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP116	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.3	0.2 – 0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	0.3 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
TP117	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP118	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.3	0.2 – 0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	0.3 – 1.3	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	1.3 – 1.4		(CL) Sandy CLAY, low plasticity, brown, firm, with ironstone fragments, M<PL
	1.4 – 1.5		SANDSTONE, yellow-white, low strength, distinctly weathered
TP119	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.3	0.2 – 0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	0.3 – 1.3	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	1.3 – 1.4		(CL) Sandy CLAY, low plasticity, brown, firm, M<PL
	1.4 – 1.5		SANDSTONE, yellow-white, low strength, distinctly weathered

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP120	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.3	0.2 – 0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, traces of boulder, traces of cobble, well compacted, M<OMC
		0.8 – 0.9 (DS)	
	1.3 – 1.4		(CL) Sandy CLAY, low plasticity, brown, firm, M<PL
1.4 – 1.5		SANDSTONE, yellow-white, low strength, distinctly weathered	
TP121	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.3	0.2 – 0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
		0.8 – 0.9 (DS)	
1.3 – 1.4		SANDSTONE, yellow-white, low strength, distinctly weathered	
TP122	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.9	0.2 – 0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
	0.9 – 1.0		
TP123	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.5	0.2 – 0.3 (DS)	FILL: Silty Clay, high plasticity, brown, well compacted, M<OMC
		0.2 – 0.5 (DS)	
	0.5 – 1.0	0.8 – 0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
	1.0 – 1.1		SANDSTONE, yellow-white, low strength, distinctly weathered

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 5 of 9

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP124	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.9	0.2 – 0.5 (DS)	FILL: Silty Clay, high plasticity, brown, traces of cobble, well compacted, M<OMC
		0.8 – 0.9 (DS)	
	0.9 – 1.5		FILL: Silty Clay, low to medium plasticity, brown-orange, with cobble, well compacted, M<OMC
TP125	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.6	0.2 – 0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
	0.6 – 0.8		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	0.8 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
TP126	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.4	0.2 – 0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	0.4 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
TP127	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP128	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
		0.8 – 0.9 (DS)	

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

Page 6 of 9

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP129	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP130	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, with gravel, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP131	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, with gravel, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP132	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.3	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
	0.3 – 0.5		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	0.5 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, with gravels, traces of cobble, traces of boulder, well compacted, M<OMC
TP133	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.4	0.2 – 0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	0.4 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP134	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.3	0.2 – 0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	0.3 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted
TP135	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.3	0.2 – 0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	0.3 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
TP136	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.3	0.2 – 0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	0.3 – 0.9	0.8 – 0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
	0.9 – 1.0		FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	1.0 – 1.5		FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
TP137	0.0 – 0.2		FILL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP138	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with gravel, well compacted, M<OMC
		0.8 – 0.9 (DS)	

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP139	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.5	0.2 – 0.3 (DS)	FILL: Silty Clay, medium to high plasticity, brown-orange, well compacted, M<OMC
		0.2 – 0.5 (DS)	
TP140	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP141	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.4	0.2 – 0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
	0.4 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
TP142	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low plasticity, brown, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP143	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, with gravels, well compacted, M<OMC
		0.8 – 0.9 (DS)	

TABLE A

Job No: 8599/40
Our Ref: 8599/40-AA

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP144	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.4	0.2 – 0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey, well compacted, M<OMC
	0.4 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
TP145	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.3	0.2 – 0.3 (DS)	FILL: Cobbles and Gravel, medium grain, dark grey
	0.3 – 1.5	0.8 – 0.9 (DS)	FILL: Silty Clay, low plasticity, brown, with gravels, well compacted, M<OMC
TP146	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 1.5	0.2 – 0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC
		0.8 – 0.9 (DS)	
TP147	0.0 – 0.2		TOPSOIL: Silty Clay, low plasticity, brown
	0.2 – 0.7	0.2-0.3 (DS)	FILL: Silty Clay, low plasticity, brown, with ironstone fragments, well compacted, M<OMC
	0.7 – 1.5	0.8-0.9 (DS)	FILL: Silty Clay, low to medium plasticity, brown-orange, well compacted, M<OMC

CLIENT DETAILS

Contact **Ram Ravi-Indran**
 Client **Geotechnique**
 Address **P.O. Box 880
 NSW 2751**

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

Project **8599/41 Abell RD, Marsden Park**
 Order Number **(Not specified)**
 Samples **78**

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**

SGS Reference **SE216110 R0**
 Date Received **3/2/2021**
 Date Reported **10/2/2021**

COMMENTS

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

SIGNATORIES



Dong LIANG
 Metals/Inorganics Team Leader



Shane MCDERMOTT
 Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 9/2/2021

PARAMETER	UOM	LOR	TP1	TP1	TP2	TP2	TP3
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.7-0.8 2/2/2021	0.2-0.3 2/2/2021	0.5-0.8 2/2/2021	0.2-0.3 2/2/2021
			SE216110.001	SE216110.002	SE216110.003	SE216110.004	SE216110.005
pH	pH Units	0.1	6.8	4.3	8.4	7.8	5.2

PARAMETER	UOM	LOR	TP3	TP4	TP4	TP5	TP5
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-1.0 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.006	SE216110.007	SE216110.008	SE216110.009	SE216110.010
pH	pH Units	0.1	7.0	7.1	7.5	7.9	8.2

PARAMETER	UOM	LOR	TP6	TP6	TP7	TP7	TP8
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.011	SE216110.012	SE216110.013	SE216110.014	SE216110.015
pH	pH Units	0.1	7.7	5.8	7.3	6.9	7.8

PARAMETER	UOM	LOR	TP8	TP9	TP9	TP10	TP10
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.016	SE216110.017	SE216110.018	SE216110.019	SE216110.020
pH	pH Units	0.1	5.9	5.4	6.1	6.8	5.6

PARAMETER	UOM	LOR	TP11	TP11	TP12	TP12	TP13
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.021	SE216110.022	SE216110.023	SE216110.024	SE216110.025
pH	pH Units	0.1	5.5	8.2	6.5	8.9	7.7

PARAMETER	UOM	LOR	TP13	TP14	TP14	TP15	TP15
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.026	SE216110.027	SE216110.028	SE216110.029	SE216110.030
pH	pH Units	0.1	5.3	8.5	4.7	6.6	6.5

PARAMETER	UOM	LOR	TP16	TP16	TP17	TP17	TP18
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.031	SE216110.032	SE216110.033	SE216110.034	SE216110.035
pH	pH Units	0.1	8.0	7.4	6.9	6.5	8.3

pH in soil (1:5) [AN101] Tested: 9/2/2021 (continued)

			TP18	TP20	TP20	TP21	TP21
			SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021
PARAMETER	UOM	LOR	SE216110.036	SE216110.037	SE216110.038	SE216110.039	SE216110.040
pH	pH Units	0.1	7.3	7.9	5.0	4.9	8.7

			TP22	TP22	TP23	TP23	TP24
			SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021
PARAMETER	UOM	LOR	SE216110.041	SE216110.042	SE216110.043	SE216110.044	SE216110.045
pH	pH Units	0.1	5.5	5.4	6.4	5.3	6.4

			TP24	TP25	TP25	TP26	TP26
			SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021
PARAMETER	UOM	LOR	SE216110.046	SE216110.047	SE216110.048	SE216110.049	SE216110.050
pH	pH Units	0.1	6.7	5.2	4.9	5.2	5.7

			TP27	TP27	TP28	TP28	TP29
			SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021
PARAMETER	UOM	LOR	SE216110.051	SE216110.052	SE216110.053	SE216110.054	SE216110.055
pH	pH Units	0.1	6.0	6.6	8.4	8.0	5.3

			TP29	TP30	TP30	TP31	TP31
			SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021
PARAMETER	UOM	LOR	SE216110.056	SE216110.057	SE216110.058	SE216110.059	SE216110.060
pH	pH Units	0.1	7.7	6.9	7.3	8.3	6.3

			TP32	TP32	TP33	TP33	TP34
			SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021
PARAMETER	UOM	LOR	SE216110.061	SE216110.062	SE216110.063	SE216110.064	SE216110.065
pH	pH Units	0.1	6.7	4.0	4.9	7.2	7.4

			TP34	TP35	TP35	TP36	TP36
			SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021
PARAMETER	UOM	LOR	SE216110.066	SE216110.067	SE216110.068	SE216110.069	SE216110.070
pH	pH Units	0.1	5.3	6.4	7.8	6.2	4.8

pH in soil (1:5) [AN101] Tested: 9/2/2021 (continued)

			TP37	TP37	TP38	TP38	TP39
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9	0.2-0.3
			2/2/2021	2/2/2021	2/2/2021	2/2/2021	2/2/2021
PARAMETER	UOM	LOR	SE216110.071	SE216110.072	SE216110.073	SE216110.074	SE216110.075
pH	pH Units	0.1	5.3	4.6	7.4	7.4	5.1

			TP39	TP40	TP40
			SOIL	SOIL	SOIL
			0.8-0.9	0.2-0.3	0.8-0.9
			2/2/2021	2/2/2021	2/2/2021
PARAMETER	UOM	LOR	SE216110.076	SE216110.077	SE216110.078
pH	pH Units	0.1	8.0	4.9	4.6

Conductivity and TDS by Calculation - Soil [AN106] Tested: 9/2/2021

PARAMETER	UOM	LOR	TP1	TP1	TP2	TP2	TP3
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.7-0.8 2/2/2021	0.2-0.3 2/2/2021	0.5-0.8 2/2/2021	0.2-0.3 2/2/2021
			SE216110.001	SE216110.002	SE216110.003	SE216110.004	SE216110.005
Conductivity of Extract (1:5 as received)	µS/cm	1	130	110	500	320	110
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	150	120	520	350	130

PARAMETER	UOM	LOR	TP3	TP4	TP4	TP5	TP5
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-1.0 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.006	SE216110.007	SE216110.008	SE216110.009	SE216110.010
Conductivity of Extract (1:5 as received)	µS/cm	1	350	260	260	320	260
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	420	280	280	360	280

PARAMETER	UOM	LOR	TP6	TP6	TP7	TP7	TP8
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.011	SE216110.012	SE216110.013	SE216110.014	SE216110.015
Conductivity of Extract (1:5 as received)	µS/cm	1	560	400	540	400	320
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	630	440	580	440	350

PARAMETER	UOM	LOR	TP8	TP9	TP9	TP10	TP10
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.016	SE216110.017	SE216110.018	SE216110.019	SE216110.020
Conductivity of Extract (1:5 as received)	µS/cm	1	150	94	380	180	180
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	160	110	450	220	200

PARAMETER	UOM	LOR	TP11	TP11	TP12	TP12	TP13
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.021	SE216110.022	SE216110.023	SE216110.024	SE216110.025
Conductivity of Extract (1:5 as received)	µS/cm	1	76	230	240	160	250
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	82	260	300	180	280

PARAMETER	UOM	LOR	TP13	TP14	TP14	TP15	TP15
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.026	SE216110.027	SE216110.028	SE216110.029	SE216110.030
Conductivity of Extract (1:5 as received)	µS/cm	1	180	270	170	240	240
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	220	290	210	260	260

PARAMETER	UOM	LOR	TP16	TP16	TP17	TP17	TP18
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.031	SE216110.032	SE216110.033	SE216110.034	SE216110.035
Conductivity of Extract (1:5 as received)	µS/cm	1	310	400	160	190	330
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	350	450	180	220	370

Conductivity and TDS by Calculation - Soil [AN106] Tested: 9/2/2021 (continued)

PARAMETER	UOM	LOR	TP18	TP20	TP20	TP21	TP21
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.036	SE216110.037	SE216110.038	SE216110.039	SE216110.040
Conductivity of Extract (1:5 as received)	µS/cm	1	210	320	450	150	330
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	230	370	540	180	360

PARAMETER	UOM	LOR	TP22	TP22	TP23	TP23	TP24
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.041	SE216110.042	SE216110.043	SE216110.044	SE216110.045
Conductivity of Extract (1:5 as received)	µS/cm	1	170	67	320	170	150
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	190	74	350	190	160

PARAMETER	UOM	LOR	TP24	TP25	TP25	TP26	TP26
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.046	SE216110.047	SE216110.048	SE216110.049	SE216110.050
Conductivity of Extract (1:5 as received)	µS/cm	1	380	180	140	150	190
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	440	200	170	170	210

PARAMETER	UOM	LOR	TP27	TP27	TP28	TP28	TP29
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.051	SE216110.052	SE216110.053	SE216110.054	SE216110.055
Conductivity of Extract (1:5 as received)	µS/cm	1	210	210	370	240	200
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	230	230	400	260	220

PARAMETER	UOM	LOR	TP29	TP30	TP30	TP31	TP31
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.056	SE216110.057	SE216110.058	SE216110.059	SE216110.060
Conductivity of Extract (1:5 as received)	µS/cm	1	280	180	330	330	110
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	300	200	380	360	130

PARAMETER	UOM	LOR	TP32	TP32	TP33	TP33	TP34
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.061	SE216110.062	SE216110.063	SE216110.064	SE216110.065
Conductivity of Extract (1:5 as received)	µS/cm	1	220	130	220	370	350
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	250	150	240	410	410

PARAMETER	UOM	LOR	TP34	TP35	TP35	TP36	TP36
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.066	SE216110.067	SE216110.068	SE216110.069	SE216110.070
Conductivity of Extract (1:5 as received)	µS/cm	1	170	350	430	230	110
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	200	380	500	280	120

Conductivity and TDS by Calculation - Soil [AN106] Tested: 9/2/2021 (continued)

PARAMETER	UOM	LOR	TP37	TP37	TP38	TP38	TP39
			SOIL 0.2-0.3 2/2/2021 SE216110.071	SOIL 0.8-0.9 2/2/2021 SE216110.072	SOIL 0.2-0.3 2/2/2021 SE216110.073	SOIL 0.8-0.9 2/2/2021 SE216110.074	SOIL 0.2-0.3 2/2/2021 SE216110.075
Conductivity of Extract (1:5 as received)	µS/cm	1	180	89	430	240	100
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	210	110	470	260	120

PARAMETER	UOM	LOR	TP39	TP40	TP40
			SOIL 0.8-0.9 2/2/2021 SE216110.076	SOIL 0.2-0.3 2/2/2021 SE216110.077	SOIL 0.8-0.9 2/2/2021 SE216110.078
Conductivity of Extract (1:5 as received)	µS/cm	1	300	130	70
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	330	150	78

Moisture Content [AN002] Tested: 4/2/2021

PARAMETER	UOM	LOR	TP1	TP1	TP2	TP2	TP3
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.7-0.8 2/2/2021	0.2-0.3 2/2/2021	0.5-0.8 2/2/2021	0.2-0.3 2/2/2021
			SE216110.001	SE216110.002	SE216110.003	SE216110.004	SE216110.005
% Moisture	%w/w	1	10.6	10.7	5.1	7.8	11.3

PARAMETER	UOM	LOR	TP3	TP4	TP4	TP5	TP5
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-1.0 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.006	SE216110.007	SE216110.008	SE216110.009	SE216110.010
% Moisture	%w/w	1	16.2	5.5	7.7	10.5	8.3

PARAMETER	UOM	LOR	TP6	TP6	TP7	TP7	TP8
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.011	SE216110.012	SE216110.013	SE216110.014	SE216110.015
% Moisture	%w/w	1	12.2	9.7	6.8	9.4	9.3

PARAMETER	UOM	LOR	TP8	TP9	TP9	TP10	TP10
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.016	SE216110.017	SE216110.018	SE216110.019	SE216110.020
% Moisture	%w/w	1	8.7	10.1	14.6	16.5	9.5

PARAMETER	UOM	LOR	TP11	TP11	TP12	TP12	TP13
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.021	SE216110.022	SE216110.023	SE216110.024	SE216110.025
% Moisture	%w/w	1	6.7	9.1	20.4	9.0	9.4

PARAMETER	UOM	LOR	TP13	TP14	TP14	TP15	TP15
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021
			SE216110.026	SE216110.027	SE216110.028	SE216110.029	SE216110.030
% Moisture	%w/w	1	16.2	6.6	16.4	7.3	9.1

PARAMETER	UOM	LOR	TP16	TP16	TP17	TP17	TP18
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021	0.8-0.9 2/2/2021	0.2-0.3 2/2/2021
			SE216110.031	SE216110.032	SE216110.033	SE216110.034	SE216110.035
% Moisture	%w/w	1	12.8	11.5	7.6	12.3	9.2

Moisture Content [AN002] Tested: 4/2/2021 (continued)

			TP18	TP20	TP20	TP21	TP21
			SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021
PARAMETER	UOM	LOR	SE216110.036	SE216110.037	SE216110.038	SE216110.039	SE216110.040
% Moisture	%w/w	1	8.5	14.3	17.5	16.4	8.1

			TP22	TP22	TP23	TP23	TP24
			SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021
PARAMETER	UOM	LOR	SE216110.041	SE216110.042	SE216110.043	SE216110.044	SE216110.045
% Moisture	%w/w	1	11.8	9.2	8.5	10.0	6.6

			TP24	TP25	TP25	TP26	TP26
			SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021
PARAMETER	UOM	LOR	SE216110.046	SE216110.047	SE216110.048	SE216110.049	SE216110.050
% Moisture	%w/w	1	14.6	7.4	17.2	7.9	8.0

			TP27	TP27	TP28	TP28	TP29
			SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021
PARAMETER	UOM	LOR	SE216110.051	SE216110.052	SE216110.053	SE216110.054	SE216110.055
% Moisture	%w/w	1	9.0	10.3	7.5	7.0	9.7

			TP29	TP30	TP30	TP31	TP31
			SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021
PARAMETER	UOM	LOR	SE216110.056	SE216110.057	SE216110.058	SE216110.059	SE216110.060
% Moisture	%w/w	1	7.6	7.1	11.5	7.5	10.2

			TP32	TP32	TP33	TP33	TP34
			SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021
PARAMETER	UOM	LOR	SE216110.061	SE216110.062	SE216110.063	SE216110.064	SE216110.065
% Moisture	%w/w	1	10.2	14.0	9.8	10.6	13.2

			TP34	TP35	TP35	TP36	TP36
			SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021	SOIL 0.2-0.3 2/2/2021	SOIL 0.8-0.9 2/2/2021
PARAMETER	UOM	LOR	SE216110.066	SE216110.067	SE216110.068	SE216110.069	SE216110.070
% Moisture	%w/w	1	16.5	7.0	13.7	15.0	10.1

Moisture Content [AN002] Tested: 4/2/2021 (continued)

PARAMETER	UOM	LOR	TP37	TP37	TP38	TP38	TP39
			SOIL 0.2-0.3 2/2/2021 SE216110.071	SOIL 0.8-0.9 2/2/2021 SE216110.072	SOIL 0.2-0.3 2/2/2021 SE216110.073	SOIL 0.8-0.9 2/2/2021 SE216110.074	SOIL 0.2-0.3 2/2/2021 SE216110.075
% Moisture	%w/w	1	16.2	18.6	9.1	9.8	11.3

PARAMETER	UOM	LOR	TP39	TP40	TP40
			SOIL 0.8-0.9 2/2/2021 SE216110.076	SOIL 0.2-0.3 2/2/2021 SE216110.077	SOIL 0.8-0.9 2/2/2021 SE216110.078
% Moisture	%w/w	1	9.4	10.7	9.9

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 CaCl₂) 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.

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

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This report must not be reproduced, except in full.



STATEMENT OF QA/QC PERFORMANCE

SE216110 R0

CLIENT DETAILS

Contact Ram Ravi-Indran
Client Geotechnique
Address P.O. Box 880
NSW 2751

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

Project **8599/41 Abell RD, Marsden Park**
Order Number (Not specified)
Samples 78

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

SGS Reference **SE216110 R0**
Date Received 03 Feb 2021
Date Reported 10 Feb 2021

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	78 items
	Moisture Content	78 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	78 Soil
Date documentation received	3/2/2021	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	N/A
Sample temperature upon receipt	26°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

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	SE216110.001	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP1	SE216110.002	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP2	SE216110.003	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP2	SE216110.004	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP3	SE216110.005	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP3	SE216110.006	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP4	SE216110.007	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP4	SE216110.008	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP5	SE216110.009	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP5	SE216110.010	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP6	SE216110.011	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP6	SE216110.012	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP7	SE216110.013	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP7	SE216110.014	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP8	SE216110.015	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP8	SE216110.016	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP9	SE216110.017	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP9	SE216110.018	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP10	SE216110.019	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP10	SE216110.020	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP11	SE216110.021	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP11	SE216110.022	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP12	SE216110.023	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP12	SE216110.024	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP13	SE216110.025	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP13	SE216110.026	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP14	SE216110.027	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP14	SE216110.028	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP15	SE216110.029	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP15	SE216110.030	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP16	SE216110.031	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP16	SE216110.032	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP17	SE216110.033	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP17	SE216110.034	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP18	SE216110.035	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP18	SE216110.036	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP20	SE216110.037	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP20	SE216110.038	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP21	SE216110.039	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP21	SE216110.040	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP22	SE216110.041	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP22	SE216110.042	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP23	SE216110.043	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP23	SE216110.044	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP24	SE216110.045	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP24	SE216110.046	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP25	SE216110.047	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP25	SE216110.048	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP26	SE216110.049	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP26	SE216110.050	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP27	SE216110.051	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP27	SE216110.052	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP28	SE216110.053	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP28	SE216110.054	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP29	SE216110.055	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP29	SE216110.056	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP30	SE216110.057	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP30	SE216110.058	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP31	SE216110.059	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP31	SE216110.060	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†



HOLDING TIME SUMMARY

SE216110 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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

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
TP32	SE216110.061	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP32	SE216110.062	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP33	SE216110.063	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP33	SE216110.064	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP34	SE216110.065	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP34	SE216110.066	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP35	SE216110.067	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP35	SE216110.068	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP36	SE216110.069	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP36	SE216110.070	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP37	SE216110.071	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP37	SE216110.072	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP38	SE216110.073	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP38	SE216110.074	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP39	SE216110.075	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP39	SE216110.076	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP40	SE216110.077	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†
TP40	SE216110.078	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021†

Moisture Content

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE216110.001	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP1	SE216110.002	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP2	SE216110.003	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP2	SE216110.004	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP3	SE216110.005	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP3	SE216110.006	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP4	SE216110.007	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP4	SE216110.008	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP5	SE216110.009	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP5	SE216110.010	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP6	SE216110.011	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP6	SE216110.012	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP7	SE216110.013	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP7	SE216110.014	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP8	SE216110.015	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP8	SE216110.016	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP9	SE216110.017	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP9	SE216110.018	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP10	SE216110.019	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP10	SE216110.020	LB217969	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP11	SE216110.021	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP11	SE216110.022	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP12	SE216110.023	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP12	SE216110.024	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP13	SE216110.025	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP13	SE216110.026	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP14	SE216110.027	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP14	SE216110.028	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP15	SE216110.029	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP15	SE216110.030	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP16	SE216110.031	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP16	SE216110.032	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP17	SE216110.033	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP17	SE216110.034	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP18	SE216110.035	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP18	SE216110.036	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP20	SE216110.037	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP20	SE216110.038	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP21	SE216110.039	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP21	SE216110.040	LB217970	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP22	SE216110.041	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP22	SE216110.042	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP23	SE216110.043	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP23	SE216110.044	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP24	SE216110.045	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP24	SE216110.046	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP25	SE216110.047	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP25	SE216110.048	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP26	SE216110.049	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP26	SE216110.050	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP27	SE216110.051	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP27	SE216110.052	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP28	SE216110.053	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP28	SE216110.054	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP29	SE216110.055	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP29	SE216110.056	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP30	SE216110.057	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP30	SE216110.058	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP31	SE216110.059	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP31	SE216110.060	LB217971	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP32	SE216110.061	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP32	SE216110.062	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP33	SE216110.063	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP33	SE216110.064	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP34	SE216110.065	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP34	SE216110.066	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP35	SE216110.067	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP35	SE216110.068	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP36	SE216110.069	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP36	SE216110.070	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP37	SE216110.071	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP37	SE216110.072	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP38	SE216110.073	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP38	SE216110.074	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP39	SE216110.075	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP39	SE216110.076	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP40	SE216110.077	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†
TP40	SE216110.078	LB217972	02 Feb 2021	03 Feb 2021	16 Feb 2021	04 Feb 2021	09 Feb 2021	10 Feb 2021†

pH in soil (1:5)

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE216110.001	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP1	SE216110.002	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP2	SE216110.003	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP2	SE216110.004	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP3	SE216110.005	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP3	SE216110.006	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP4	SE216110.007	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP4	SE216110.008	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP5	SE216110.009	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP5	SE216110.010	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP6	SE216110.011	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP6	SE216110.012	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP7	SE216110.013	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP7	SE216110.014	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP8	SE216110.015	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP8	SE216110.016	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP9	SE216110.017	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP9	SE216110.018	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

pH in soil (1:5) (continued)

Method: ME-(AU)-ENVJAN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP10	SE216110.019	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP10	SE216110.020	LB218182	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP11	SE216110.021	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP11	SE216110.022	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP12	SE216110.023	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP12	SE216110.024	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP13	SE216110.025	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP13	SE216110.026	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP14	SE216110.027	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP14	SE216110.028	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP15	SE216110.029	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP15	SE216110.030	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP16	SE216110.031	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP16	SE216110.032	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP17	SE216110.033	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP17	SE216110.034	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP18	SE216110.035	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP18	SE216110.036	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP20	SE216110.037	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP20	SE216110.038	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP21	SE216110.039	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP21	SE216110.040	LB218183	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP22	SE216110.041	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP22	SE216110.042	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP23	SE216110.043	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP23	SE216110.044	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP24	SE216110.045	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP24	SE216110.046	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP25	SE216110.047	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP25	SE216110.048	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP26	SE216110.049	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP26	SE216110.050	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP27	SE216110.051	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP27	SE216110.052	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP28	SE216110.053	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP28	SE216110.054	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP29	SE216110.055	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP29	SE216110.056	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP30	SE216110.057	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP30	SE216110.058	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP31	SE216110.059	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP31	SE216110.060	LB218232	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	10 Feb 2021
TP32	SE216110.061	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP32	SE216110.062	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP33	SE216110.063	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP33	SE216110.064	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP34	SE216110.065	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP34	SE216110.066	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP35	SE216110.067	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP35	SE216110.068	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP36	SE216110.069	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP36	SE216110.070	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP37	SE216110.071	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP37	SE216110.072	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP38	SE216110.073	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP38	SE216110.074	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP39	SE216110.075	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP39	SE216110.076	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP40	SE216110.077	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021
TP40	SE216110.078	LB218259	02 Feb 2021	03 Feb 2021	09 Feb 2021	09 Feb 2021	10 Feb 2021	09 Feb 2021

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

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
LB218182.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.09
LB218183.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.17
LB218232.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.61
LB218259.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.61

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 give a different calculated RPD.

Conductivity and TDS by Calculation - Soil

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE216110.010	LB218182.014	Conductivity of Extract (1:5 as received)	µS/cm	1	260	240	31	10
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	280	57.328870292	31	10
SE216110.020	LB218182.025	Conductivity of Extract (1:5 as received)	µS/cm	1	180	180	31	1
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	200	97.738923556	31	1
SE216110.030	LB218183.014	Conductivity of Extract (1:5 as received)	µS/cm	1	240	240	31	2
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	260	264	31	2
SE216110.040	LB218183.025	Conductivity of Extract (1:5 as received)	µS/cm	1	330	310	31	6
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	360	37.359938603	31	6
SE216110.050	LB218232.014	Conductivity of Extract (1:5 as received)	µS/cm	1	190	190	31	3
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	210	01.292281303	31	3
SE216110.060	LB218232.025	Conductivity of Extract (1:5 as received)	µS/cm	1	110	120	32	6
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	130	33.653444676	32	6
SE216110.070	LB218259.014	Conductivity of Extract (1:5 as received)	µS/cm	1	110	110	32	2
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	120	19.359146841	32	2
SE216110.078	LB218259.023	Conductivity of Extract (1:5 as received)	µS/cm	1	70	77	33	9
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	78	35.528494623	32	9

Moisture Content

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE216110.010	LB217969.011	% Moisture	%w/w	1	8.3	8.6	42	4
SE216110.020	LB217969.022	% Moisture	%w/w	1	9.5	9.2	41	3
SE216110.030	LB217970.011	% Moisture	%w/w	1	9.1	8.4	41	8
SE216110.040	LB217970.022	% Moisture	%w/w	1	8.1	7.6	43	6
SE216110.050	LB217971.011	% Moisture	%w/w	1	8.0	7.8	43	4
SE216110.060	LB217971.022	% Moisture	%w/w	1	10.2	10.4	40	1
SE216110.070	LB217972.011	% Moisture	%w/w	1	10.1	10.5	40	4
SE216110.078	LB217972.020	% Moisture	%w/w	1	9.9	10.2	40	4

pH in soil (1:5)

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE216110.010	LB218182.014	pH	pH Units	0.1	8.2	8.1	31	1
SE216110.020	LB218182.025	pH	pH Units	0.1	5.6	5.3	32	4
SE216110.030	LB218183.014	pH	pH Units	0.1	6.5	6.5	32	1
SE216110.040	LB218183.025	pH	pH Units	0.1	8.7	8.7	31	0
SE216110.050	LB218232.014	pH	pH Units	0.1	5.7	5.7	32	0
SE216110.060	LB218232.025	pH	pH Units	0.1	6.3	6.2	32	2
SE216110.070	LB218259.014	pH	pH Units	0.1	4.8	4.7	32	2
SE216110.078	LB218259.023	pH	pH Units	0.1	4.6	4.5	32	2

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 %
LB218182.002	Conductivity of Extract (1:5 as received)	µS/cm	1	310	303	85 - 115	104
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	104
LB218183.002	Conductivity of Extract (1:5 as received)	µS/cm	1	320	303	85 - 115	105
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	105
LB218232.002	Conductivity of Extract (1:5 as received)	µS/cm	1	310	303	85 - 115	104
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	104
LB218259.002	Conductivity of Extract (1:5 as received)	µS/cm	1	310	303	85 - 115	104
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	104

pH in soil (1:5)

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB218182.003	pH	pH Units	0.1	7.4	7.415	98 - 102	99
LB218183.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100
LB218232.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100
LB218259.003	pH	pH Units	0.1	7.4	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 end of this report for failure reasons.

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

- * 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.

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

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This test report shall not be reproduced, except in full.

Lemko Place P.O. Box 880 Tel: (02) 4722 2700
 PENRITH NSW 2750 PENRITH NSW 2751 Fax: (02) 4722 6161 email: info@geotech.com.au Page 1 of 1

TO: SGS ENVIRONMENTAL SERVICES
 UNIT 18
 33 MADDOX STREET
 ALEXANDRIA NSW 2016
 PH: 02 8994 0400 FAX: 02 8994 0489
 ATTN: Ms Emily Yin
 Sampling By: JSH Job No: 869941
 Project: residential development
 Project Manager: RR Location: Abell RD, Marsden Park

SGS EHS Sydney COC
SE216110



Sampling details				Results required by:									
Location	Depth	Soil	Water	EC (1:5)	pH	Sulphate	Chloride	ESP				Notes	Keep Sample
TP1	0.2-0.3	DSP		✓	✓							ESP=Exchangeable Sodium Percentage	✓
	0.7-0.8	DSP		✓	✓								✓
TP2	0.2-0.3	DSP		✓	✓								✓
	0.5-0.8	DSP		✓	✓								✓
TP3	0.2-0.3	DSP		✓	✓								✓
	0.8-1.0	DSP		✓	✓								✓
TP4	0.2-0.3	DSP		✓	✓								✓
	0.5-0.8	DSP		✓	✓								✓
TP5	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP6	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP7	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP8	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP9	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP10	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP11	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP12	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP13	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP14	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP15	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP16	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP17	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP18	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP19	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP20	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP21	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP22	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP23	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP24	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP25	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP26	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP27	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP28	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP29	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP30	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP31	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP32	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP33	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP34	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP35	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP36	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP37	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP38	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP39	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓
TP40	0.2-0.3	DSP		✓	✓								✓
	0.8-0.9	DSP		✓	✓								✓

Please Use Geotechnical Engineering Template for Reporting

Rethoughted by Name: Jack Herben Signature: [Signature] Date: 2022/02/11		Received by Name: George Zhu Signature: [Signature] Date: 3/2/21 @ 4:05pm	
Legend	USG Undisturbed soil sample (glass jar)	DSP Disturbed soil sample (small plastic bag)	* Pure & Trad
WP	DISG Disturbed soil sample (glass jar)	Test required	# Geotechnique Screen



SAMPLE RECEIPT ADVICE

SE216110

CLIENT DETAILS

Contact Ram Ravi-Indran
Client Geotechnique
Address P.O. Box 880
NSW 2751

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

Project **8599/41 Abell RD, Marsden Park**
Order Number (Not specified)
Samples 78

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 Wed 3/2/2021
Report Due Wed 10/2/2021
SGS Reference **SE216110**

SUBMISSION DETAILS

This is to confirm that 78 samples were received on Wednesday 3/2/2021. Results are expected to be ready by COB Wednesday 10/2/2021. Please quote SGS reference SE216110 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	78 Soil
Date documentation received	3/2/2021	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	N/A
Sample temperature upon receipt	26°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. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

CLIENT DETAILS

Client **Geotechnique**

Project **8599/41 Abell RD, Marsden Park**

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	Moisture Content	pH in soil (1:5)
001	TP1 0.2-0.3	2	1	1
002	TP1 0.7-0.8	2	1	1
003	TP2 0.2-0.3	2	1	1
004	TP2 0.5-0.8	2	1	1
005	TP3 0.2-0.3	2	1	1
006	TP3 0.8-1.0	2	1	1
007	TP4 0.2-0.3	2	1	1
008	TP4 0.8-0.9	2	1	1
009	TP5 0.2-0.3	2	1	1
010	TP5 0.8-0.9	2	1	1
011	TP6 0.2-0.3	2	1	1
012	TP6 0.8-0.9	2	1	1
013	TP7 0.2-0.3	2	1	1
014	TP7 0.8-0.9	2	1	1
015	TP8 0.2-0.3	2	1	1
016	TP8 0.8-0.9	2	1	1
017	TP9 0.2-0.3	2	1	1
018	TP9 0.8-0.9	2	1	1
019	TP10 0.2-0.3	2	1	1
020	TP10 0.8-0.9	2	1	1
021	TP11 0.2-0.3	2	1	1
022	TP11 0.8-0.9	2	1	1
023	TP12 0.2-0.3	2	1	1
024	TP12 0.8-0.9	2	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 **Geotechnique**

Project **8599/41 Abell RD, Marsden Park**

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	Moisture Content	pH in soil (1:5)
025	TP13 0.2-0.3	2	1	1
026	TP13 0.8-0.9	2	1	1
027	TP14 0.2-0.3	2	1	1
028	TP14 0.8-0.9	2	1	1
029	TP15 0.2-0.3	2	1	1
030	TP15 0.8-0.9	2	1	1
031	TP16 0.2-0.3	2	1	1
032	TP16 0.8-0.9	2	1	1
033	TP17 0.2-0.3	2	1	1
034	TP17 0.8-0.9	2	1	1
035	TP18 0.2-0.3	2	1	1
036	TP18 0.8-0.9	2	1	1
037	TP20 0.2-0.3	2	1	1
038	TP20 0.8-0.9	2	1	1
039	TP21 0.2-0.3	2	1	1
040	TP21 0.8-0.9	2	1	1
041	TP22 0.2-0.3	2	1	1
042	TP22 0.8-0.9	2	1	1
043	TP23 0.2-0.3	2	1	1
044	TP23 0.8-0.9	2	1	1
045	TP24 0.2-0.3	2	1	1
046	TP24 0.8-0.9	2	1	1
047	TP25 0.2-0.3	2	1	1
048	TP25 0.8-0.9	2	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 **Geotechnique**

Project **8599/41 Abell RD, Marsden Park**

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	Moisture Content	pH in soil (1:5)
049	TP26 0.2-0.3	2	1	1
050	TP26 0.8-0.9	2	1	1
051	TP27 0.2-0.3	2	1	1
052	TP27 0.8-0.9	2	1	1
053	TP28 0.2-0.3	2	1	1
054	TP28 0.8-0.9	2	1	1
055	TP29 0.2-0.3	2	1	1
056	TP29 0.8-0.9	2	1	1
057	TP30 0.2-0.3	2	1	1
058	TP30 0.8-0.9	2	1	1
059	TP31 0.2-0.3	2	1	1
060	TP31 0.8-0.9	2	1	1
061	TP32 0.2-0.3	2	1	1
062	TP32 0.8-0.9	2	1	1
063	TP33 0.2-0.3	2	1	1
064	TP33 0.8-0.9	2	1	1
065	TP34 0.2-0.3	2	1	1
066	TP34 0.8-0.9	2	1	1
067	TP35 0.2-0.3	2	1	1
068	TP35 0.8-0.9	2	1	1
069	TP36 0.2-0.3	2	1	1
070	TP36 0.8-0.9	2	1	1
071	TP37 0.2-0.3	2	1	1
072	TP37 0.8-0.9	2	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 **Geotechnique**

Project **8599/41 Abell RD, Marsden Park**

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	Moisture Content	pH in soil (1:5)
073	TP38 0.2-0.3	2	1	1
074	TP38 0.8-0.9	2	1	1
075	TP39 0.2-0.3	2	1	1
076	TP39 0.8-0.9	2	1	1
077	TP40 0.2-0.3	2	1	1
078	TP40 0.8-0.9	2	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.

CLIENT DETAILS

Contact Ram Ravi-Indran
 Client Geotechnique
 Address P.O. Box 880
 NSW 2751

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

Project **8599-41 Abell Rd Marsden Park**
 Order Number (Not specified)
 Samples 148

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

SGS Reference **SE216260 R1**
 Date Received 5/2/2021
 Date Reported 23/2/2021

COMMENTS

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

This report cancels and supersedes the report No.SE216260 R0 dated 12/02/21 issued by SGS Environment, Health and Safety due to amended sample IDs as requested.

SIGNATORIES



Dong LIANG
 Metals/Inorganics Team Leader



Shane MCDERMOTT
 Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 10/2/2021

PARAMETER	UOM	LOR	TP41	TP41	TP42	TP42	TP43
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.001	SE216260.002	SE216260.003	SE216260.004	SE216260.005
pH	pH Units	0.1	8.3	8.3	8.4	9.2	6.1

PARAMETER	UOM	LOR	TP43	TP44	TP44	TP45	TP45
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.006	SE216260.007	SE216260.008	SE216260.009	SE216260.010
pH	pH Units	0.1	5.5	4.9	8.4	7.6	8.2

PARAMETER	UOM	LOR	TP46	TP46	TP47	TP47	TP48
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.011	SE216260.012	SE216260.013	SE216260.014	SE216260.015
pH	pH Units	0.1	8.6	6.2	8.1	8.2	8.2

PARAMETER	UOM	LOR	TP48	TP49	TP49	TP50	TP50
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.016	SE216260.017	SE216260.018	SE216260.019	SE216260.020
pH	pH Units	0.1	6.0	7.2	7.8	5.9	5.1

PARAMETER	UOM	LOR	TP51	TP51	TP52	TP52	TP53
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.021	SE216260.022	SE216260.023	SE216260.024	SE216260.025
pH	pH Units	0.1	5.3	6.2	6.5	7.8	8.3

PARAMETER	UOM	LOR	TP53	TP54	TP54	TP55	TP55
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.026	SE216260.027	SE216260.028	SE216260.029	SE216260.030
pH	pH Units	0.1	8.3	9.1	8.4	8.5	7.9

PARAMETER	UOM	LOR	TP56	TP56	TP57	TP57	TP58
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.031	SE216260.032	SE216260.033	SE216260.034	SE216260.035
pH	pH Units	0.1	8.0	8.4	7.6	7.8	5.1

pH in soil (1:5) [AN101] Tested: 10/2/2021 (continued)

			TP58	TP59	TP59	TP60	TP60
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.036	SE216260.037	SE216260.038	SE216260.039	SE216260.040
pH	pH Units	0.1	5.2	6.9	6.3	7.1	8.0

			TP61	TP61	TP62	TP62	TP63
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.041	SE216260.042	SE216260.043	SE216260.044	SE216260.045
pH	pH Units	0.1	7.9	8.6	8.4	8.6	7.1

			TP63	TP64	TP64	TP65	TP65
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.046	SE216260.047	SE216260.048	SE216260.049	SE216260.050
pH	pH Units	0.1	7.0	6.8	7.2	5.2	7.0

			TP66	TP66	TP67	TP67	TP68
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.051	SE216260.052	SE216260.053	SE216260.054	SE216260.055
pH	pH Units	0.1	7.5	8.1	8.5	9.3	6.9

			TP68	TP69	TP69	TP70	TP70
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.056	SE216260.057	SE216260.058	SE216260.059	SE216260.060
pH	pH Units	0.1	7.5	7.6	8.3	6.8	7.7

			TP71	TP71	TP72	TP72	TP73
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.061	SE216260.062	SE216260.063	SE216260.064	SE216260.065
pH	pH Units	0.1	6.7	4.8	5.7	5.6	5.1

			TP73	TP74	TP74	TP75	TP75
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.066	SE216260.067	SE216260.068	SE216260.069	SE216260.070
pH	pH Units	0.1	4.7	7.4	6.8	6.1	5.2

pH in soil (1:5) [AN101] Tested: 10/2/2021 (continued)

			TP76	TP76	TP77	TP77	TP78
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.071	SE216260.072	SE216260.073	SE216260.074	SE216260.075
pH	pH Units	0.1	7.9	5.2	6.2	4.9	6.9

			TP78	TP79	TP79	TP80	TP80
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.076	SE216260.077	SE216260.078	SE216260.079	SE216260.080
pH	pH Units	0.1	5.1	7.1	5.6	5.4	5.5

			TP81	TP81	TP82	TP82	TP83
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.081	SE216260.082	SE216260.083	SE216260.084	SE216260.085
pH	pH Units	0.1	7.0	7.9	6.4	6.1	8.4

			TP83	TP84	TP84	TP85	TP85
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.086	SE216260.087	SE216260.088	SE216260.089	SE216260.090
pH	pH Units	0.1	8.3	6.7	7.2	6.3	7.1

			TP86	TP86	TP88	TP88	TP89
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.091	SE216260.092	SE216260.093	SE216260.094	SE216260.095
pH	pH Units	0.1	7.8	7.7	5.4	5.2	5.0

			TP89	TP90	TP90	TP91	TP91
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.096	SE216260.097	SE216260.098	SE216260.099	SE216260.100
pH	pH Units	0.1	4.2	6.8	6.8	4.8	4.8

			TP92	TP92	TP93	TP94	TP94
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.101	SE216260.102	SE216260.103	SE216260.104	SE216260.105
pH	pH Units	0.1	4.8	4.9	4.8	4.7	4.9

pH in soil (1:5) [AN101] Tested: 10/2/2021 (continued)

			TP95	TP95	TP96	TP96	TP97
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9	0.2-0.3
			4/2/2021	4/2/2021	4/2/2021	4/2/2021	4/2/2021
PARAMETER	UOM	LOR	SE216260.106	SE216260.107	SE216260.108	SE216260.109	SE216260.110
pH	pH Units	0.1	4.8	4.8	4.7	4.6	4.7

			TP97	TP98	TP98	TP99	TP99
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9	0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9
			4/2/2021	4/2/2021	4/2/2021	4/2/2021	4/2/2021
PARAMETER	UOM	LOR	SE216260.111	SE216260.112	SE216260.113	SE216260.114	SE216260.115
pH	pH Units	0.1	5.1	4.8	5.1	6.3	5.0

			TP100	TP100	TP101	TP101	TP102
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9	0.2-0.3
			4/2/2021	4/2/2021	4/2/2021	4/2/2021	4/2/2021
PARAMETER	UOM	LOR	SE216260.116	SE216260.117	SE216260.118	SE216260.119	SE216260.120
pH	pH Units	0.1	5.2	6.2	7.6	6.9	5.2

			TP102	TP103	TP103	TP104	TP104
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9	0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9
			4/2/2021	4/2/2021	4/2/2021	4/2/2021	4/2/2021
PARAMETER	UOM	LOR	SE216260.121	SE216260.122	SE216260.123	SE216260.124	SE216260.125
pH	pH Units	0.1	8.1	7.1	5.0	6.5	5.5

			TP105	TP105	TP106	TP106	TP107
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9	0.2-0.3
			4/2/2021	4/2/2021	4/2/2021	4/2/2021	4/2/2021
PARAMETER	UOM	LOR	SE216260.126	SE216260.127	SE216260.128	SE216260.129	SE216260.130
pH	pH Units	0.1	7.9	5.7	6.1	5.2	6.8

			TP108	TP109	TP110	TP110	TP111
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3	0.2-0.3	0.2-0.3	0.8-0.9	0.2-0.3
			4/2/2021	4/2/2021	4/2/2021	4/2/2021	4/2/2021
PARAMETER	UOM	LOR	SE216260.131	SE216260.132	SE216260.133	SE216260.134	SE216260.135
pH	pH Units	0.1	4.9	4.7	4.6	5.0	4.7

			TP111	TP112	TP112	TP113	TP113
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9	0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9
			4/2/2021	4/2/2021	4/2/2021	4/2/2021	4/2/2021
PARAMETER	UOM	LOR	SE216260.136	SE216260.137	SE216260.138	SE216260.139	SE216260.140
pH	pH Units	0.1	4.9	5.5	4.8	7.8	4.7

pH in soil (1:5) [AN101] Tested: 10/2/2021 (continued)

PARAMETER	UOM	LOR	TP114	TP114	TP115	TP115	TP116
			SOIL 0.2-0.3 4/2/2021 SE216260.141	SOIL 0.8-0.9 4/2/2021 SE216260.142	SOIL 0.2-0.3 4/2/2021 SE216260.143	SOIL 0.8-0.9 4/2/2021 SE216260.144	SOIL 0.2-0.3 4/2/2021 SE216260.145
pH	pH Units	0.1	6.1	7.4	4.9	5.0	8.4

PARAMETER	UOM	LOR	TP116	TP117	TP117
			SOIL 0.8-0.9 4/2/2021 SE216260.146	SOIL 0.2-0.3 4/2/2021 SE216260.147	SOIL 0.8-0.9 4/2/2021 SE216260.148
pH	pH Units	0.1	4.8	6.6	6.5

Conductivity and TDS by Calculation - Soil [AN106] Tested: 10/2/2021

PARAMETER	UOM	LOR	TP41	TP41	TP42	TP42	TP43
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.001	SE216260.002	SE216260.003	SE216260.004	SE216260.005
Conductivity of Extract (1:5 as received)	µS/cm	1	290	180	180	300	140
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	320	210	200	340	160

PARAMETER	UOM	LOR	TP43	TP44	TP44	TP45	TP45
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.006	SE216260.007	SE216260.008	SE216260.009	SE216260.010
Conductivity of Extract (1:5 as received)	µS/cm	1	46	130	240	270	370
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	50	160	260	280	420

PARAMETER	UOM	LOR	TP46	TP46	TP47	TP47	TP48
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.011	SE216260.012	SE216260.013	SE216260.014	SE216260.015
Conductivity of Extract (1:5 as received)	µS/cm	1	350	170	180	260	290
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	390	190	210	300	320

PARAMETER	UOM	LOR	TP48	TP49	TP49	TP50	TP50
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.016	SE216260.017	SE216260.018	SE216260.019	SE216260.020
Conductivity of Extract (1:5 as received)	µS/cm	1	130	210	220	280	110
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	140	230	240	330	120

PARAMETER	UOM	LOR	TP51	TP51	TP52	TP52	TP53
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.021	SE216260.022	SE216260.023	SE216260.024	SE216260.025
Conductivity of Extract (1:5 as received)	µS/cm	1	300	210	180	230	350
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	350	230	200	260	380

PARAMETER	UOM	LOR	TP53	TP54	TP54	TP55	TP55
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.026	SE216260.027	SE216260.028	SE216260.029	SE216260.030
Conductivity of Extract (1:5 as received)	µS/cm	1	240	220	290	260	290
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	250	230	300	290	320

PARAMETER	UOM	LOR	TP56	TP56	TP57	TP57	TP58
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.031	SE216260.032	SE216260.033	SE216260.034	SE216260.035
Conductivity of Extract (1:5 as received)	µS/cm	1	420	290	360	300	220
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	480	310	400	330	270

Conductivity and TDS by Calculation - Soil [AN106] Tested: 10/2/2021 (continued)

PARAMETER	UOM	LOR	TP58	TP59	TP59	TP60	TP60
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.036	SE216260.037	SE216260.038	SE216260.039	SE216260.040
Conductivity of Extract (1:5 as received)	µS/cm	1	30	570	150	380	330
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	33	640	170	440	370

PARAMETER	UOM	LOR	TP61	TP61	TP62	TP62	TP63
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.041	SE216260.042	SE216260.043	SE216260.044	SE216260.045
Conductivity of Extract (1:5 as received)	µS/cm	1	200	230	270	340	240
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	220	250	290	380	260

PARAMETER	UOM	LOR	TP63	TP64	TP64	TP65	TP65
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.046	SE216260.047	SE216260.048	SE216260.049	SE216260.050
Conductivity of Extract (1:5 as received)	µS/cm	1	240	370	230	310	330
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	270	430	250	330	390

PARAMETER	UOM	LOR	TP66	TP66	TP67	TP67	TP68
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.051	SE216260.052	SE216260.053	SE216260.054	SE216260.055
Conductivity of Extract (1:5 as received)	µS/cm	1	250	240	410	180	320
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	280	270	430	190	350

PARAMETER	UOM	LOR	TP68	TP69	TP69	TP70	TP70
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.056	SE216260.057	SE216260.058	SE216260.059	SE216260.060
Conductivity of Extract (1:5 as received)	µS/cm	1	390	410	440	230	250
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	460	470	520	280	280

PARAMETER	UOM	LOR	TP71	TP71	TP72	TP72	TP73
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.061	SE216260.062	SE216260.063	SE216260.064	SE216260.065
Conductivity of Extract (1:5 as received)	µS/cm	1	220	130	190	170	160
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	250	150	220	190	180

PARAMETER	UOM	LOR	TP73	TP74	TP74	TP75	TP75
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.066	SE216260.067	SE216260.068	SE216260.069	SE216260.070
Conductivity of Extract (1:5 as received)	µS/cm	1	150	220	150	110	160
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	180	260	180	110	190

Conductivity and TDS by Calculation - Soil [AN106] Tested: 10/2/2021 (continued)

PARAMETER	UOM	LOR	TP76	TP76	TP77	TP77	TP78
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.071	SE216260.072	SE216260.073	SE216260.074	SE216260.075
Conductivity of Extract (1:5 as received)	µS/cm	1	260	270	200	190	260
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	290	300	210	230	290

PARAMETER	UOM	LOR	TP78	TP79	TP79	TP80	TP80
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.076	SE216260.077	SE216260.078	SE216260.079	SE216260.080
Conductivity of Extract (1:5 as received)	µS/cm	1	290	440	460	160	140
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	310	500	530	190	160

PARAMETER	UOM	LOR	TP81	TP81	TP82	TP82	TP83
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.081	SE216260.082	SE216260.083	SE216260.084	SE216260.085
Conductivity of Extract (1:5 as received)	µS/cm	1	250	150	230	110	360
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	280	170	260	120	380

PARAMETER	UOM	LOR	TP83	TP84	TP84	TP85	TP85
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.086	SE216260.087	SE216260.088	SE216260.089	SE216260.090
Conductivity of Extract (1:5 as received)	µS/cm	1	300	190	250	440	120
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	330	210	300	480	140

PARAMETER	UOM	LOR	TP86	TP86	TP88	TP88	TP89
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.091	SE216260.092	SE216260.093	SE216260.094	SE216260.095
Conductivity of Extract (1:5 as received)	µS/cm	1	270	310	290	84	88
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	310	350	300	94	97

PARAMETER	UOM	LOR	TP89	TP90	TP90	TP91	TP91
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.096	SE216260.097	SE216260.098	SE216260.099	SE216260.100
Conductivity of Extract (1:5 as received)	µS/cm	1	69	320	140	310	190
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	76	340	150	370	220

PARAMETER	UOM	LOR	TP92	TP92	TP93	TP94	TP94
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.101	SE216260.102	SE216260.103	SE216260.104	SE216260.105
Conductivity of Extract (1:5 as received)	µS/cm	1	210	290	230	370	140
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	230	340	250	420	150

Conductivity and TDS by Calculation - Soil [AN106] Tested: 10/2/2021 (continued)

PARAMETER	UOM	LOR	TP95	TP95	TP96	TP96	TP97
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.106	SE216260.107	SE216260.108	SE216260.109	SE216260.110
Conductivity of Extract (1:5 as received)	µS/cm	1	220	220	310	230	150
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	280	270	380	290	170

PARAMETER	UOM	LOR	TP97	TP98	TP98	TP99	TP99
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.111	SE216260.112	SE216260.113	SE216260.114	SE216260.115
Conductivity of Extract (1:5 as received)	µS/cm	1	97	170	92	240	130
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	110	180	100	270	150

PARAMETER	UOM	LOR	TP100	TP100	TP101	TP101	TP102
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.116	SE216260.117	SE216260.118	SE216260.119	SE216260.120
Conductivity of Extract (1:5 as received)	µS/cm	1	270	100	330	290	110
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	300	110	360	310	130

PARAMETER	UOM	LOR	TP102	TP103	TP103	TP104	TP104
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.121	SE216260.122	SE216260.123	SE216260.124	SE216260.125
Conductivity of Extract (1:5 as received)	µS/cm	1	250	230	70	220	120
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	270	250	78	230	130

PARAMETER	UOM	LOR	TP105	TP105	TP106	TP106	TP107
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.126	SE216260.127	SE216260.128	SE216260.129	SE216260.130
Conductivity of Extract (1:5 as received)	µS/cm	1	220	390	190	160	160
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	230	480	200	190	180

PARAMETER	UOM	LOR	TP108	TP109	TP110	TP110	TP111
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.2-0.3 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.131	SE216260.132	SE216260.133	SE216260.134	SE216260.135
Conductivity of Extract (1:5 as received)	µS/cm	1	310	350	390	250	300
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	360	390	440	280	340

PARAMETER	UOM	LOR	TP111	TP112	TP112	TP113	TP113
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.136	SE216260.137	SE216260.138	SE216260.139	SE216260.140
Conductivity of Extract (1:5 as received)	µS/cm	1	450	170	270	220	310
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	530	200	290	230	380

Conductivity and TDS by Calculation - Soil [AN106] Tested: 10/2/2021 (continued)

PARAMETER	UOM	LOR	TP114	TP114	TP115	TP115	TP116
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.141	SE216260.142	SE216260.143	SE216260.144	SE216260.145
Conductivity of Extract (1:5 as received)	µS/cm	1	290	230	300	210	260
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	320	260	340	270	270

PARAMETER	UOM	LOR	TP116	TP117	TP117
			SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.146	SE216260.147	SE216260.148
Conductivity of Extract (1:5 as received)	µS/cm	1	300	310	300
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	340	340	330

Moisture Content [AN002] Tested: 9/2/2021

PARAMETER	UOM	LOR	TP41	TP41	TP42	TP42	TP43
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.001	SE216260.002	SE216260.003	SE216260.004	SE216260.005
% Moisture	%w/w	1	10.0	13.8	10.8	9.7	11.4

PARAMETER	UOM	LOR	TP43	TP44	TP44	TP45	TP45
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.006	SE216260.007	SE216260.008	SE216260.009	SE216260.010
% Moisture	%w/w	1	9.6	16.8	8.2	6.0	13.5

PARAMETER	UOM	LOR	TP46	TP46	TP47	TP47	TP48
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.011	SE216260.012	SE216260.013	SE216260.014	SE216260.015
% Moisture	%w/w	1	10.3	10.9	12.6	12.7	11.1

PARAMETER	UOM	LOR	TP48	TP49	TP49	TP50	TP50
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.016	SE216260.017	SE216260.018	SE216260.019	SE216260.020
% Moisture	%w/w	1	10.0	7.0	9.6	15.4	8.8

PARAMETER	UOM	LOR	TP51	TP51	TP52	TP52	TP53
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.021	SE216260.022	SE216260.023	SE216260.024	SE216260.025
% Moisture	%w/w	1	14.7	9.8	7.1	11.8	8.4

PARAMETER	UOM	LOR	TP53	TP54	TP54	TP55	TP55
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.026	SE216260.027	SE216260.028	SE216260.029	SE216260.030
% Moisture	%w/w	1	7.0	4.1	3.8	10.1	8.1

PARAMETER	UOM	LOR	TP56	TP56	TP57	TP57	TP58
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.031	SE216260.032	SE216260.033	SE216260.034	SE216260.035
% Moisture	%w/w	1	12.9	5.8	8.8	7.3	19.2

Moisture Content [AN002] Tested: 9/2/2021 (continued)

			TP58	TP59	TP59	TP60	TP60
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.036	SE216260.037	SE216260.038	SE216260.039	SE216260.040
% Moisture	%w/w	1	9.5	10.9	9.8	13.0	10.2

			TP61	TP61	TP62	TP62	TP63
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.041	SE216260.042	SE216260.043	SE216260.044	SE216260.045
% Moisture	%w/w	1	12.3	6.7	7.1	10.2	9.7

			TP63	TP64	TP64	TP65	TP65
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.046	SE216260.047	SE216260.048	SE216260.049	SE216260.050
% Moisture	%w/w	1	10.0	15.1	6.5	4.0	13.3

			TP66	TP66	TP67	TP67	TP68
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.051	SE216260.052	SE216260.053	SE216260.054	SE216260.055
% Moisture	%w/w	1	10.4	11.4	6.3	6.1	9.0

			TP68	TP69	TP69	TP70	TP70
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.056	SE216260.057	SE216260.058	SE216260.059	SE216260.060
% Moisture	%w/w	1	13.9	14.5	15.0	11.3	12.2

			TP71	TP71	TP72	TP72	TP73
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.061	SE216260.062	SE216260.063	SE216260.064	SE216260.065
% Moisture	%w/w	1	11.7	14.7	10.8	12.3	14.6

			TP73	TP74	TP74	TP75	TP75
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.066	SE216260.067	SE216260.068	SE216260.069	SE216260.070
% Moisture	%w/w	1	15.7	14.7	13.7	6.8	16.0

Moisture Content [AN002] Tested: 9/2/2021 (continued)

			TP76	TP76	TP77	TP77	TP78
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.071	SE216260.072	SE216260.073	SE216260.074	SE216260.075
% Moisture	%w/w	1	9.9	11.7	6.8	16.1	8.8

			TP78	TP79	TP79	TP80	TP80
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.076	SE216260.077	SE216260.078	SE216260.079	SE216260.080
% Moisture	%w/w	1	8.2	12.8	13.0	13.3	14.8

			TP81	TP81	TP82	TP82	TP83
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.081	SE216260.082	SE216260.083	SE216260.084	SE216260.085
% Moisture	%w/w	1	10.7	11.2	10.9	6.6	6.3

			TP83	TP84	TP84	TP85	TP85
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.086	SE216260.087	SE216260.088	SE216260.089	SE216260.090
% Moisture	%w/w	1	8.8	8.2	16.6	8.8	9.8

			TP86	TP86	TP88	TP88	TP89
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021
PARAMETER	UOM	LOR	SE216260.091	SE216260.092	SE216260.093	SE216260.094	SE216260.095
% Moisture	%w/w	1	13.7	12.5	4.1	10.2	9.0

			TP89	TP90	TP90	TP91	TP91
			SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.096	SE216260.097	SE216260.098	SE216260.099	SE216260.100
% Moisture	%w/w	1	8.6	6.8	8.5	17.1	15.6

			TP92	TP92	TP93	TP94	TP94
			SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.2-0.3 4/2/2021	SOIL 0.8-0.9 4/2/2021
PARAMETER	UOM	LOR	SE216260.101	SE216260.102	SE216260.103	SE216260.104	SE216260.105
% Moisture	%w/w	1	9.3	15.5	8.4	10.6	8.4

Moisture Content [AN002] Tested: 9/2/2021 (continued)

PARAMETER	UOM	LOR	TP95	TP95	TP96	TP96	TP97
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.106	SE216260.107	SE216260.108	SE216260.109	SE216260.110
% Moisture	%w/w	1	21.0	20.2	19.1	19.5	14.3

PARAMETER	UOM	LOR	TP97	TP98	TP98	TP99	TP99
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.111	SE216260.112	SE216260.113	SE216260.114	SE216260.115
% Moisture	%w/w	1	12.0	7.4	8.9	12.5	12.8

PARAMETER	UOM	LOR	TP100	TP100	TP101	TP101	TP102
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.116	SE216260.117	SE216260.118	SE216260.119	SE216260.120
% Moisture	%w/w	1	10.8	11.2	10.6	8.2	10.2

PARAMETER	UOM	LOR	TP102	TP103	TP103	TP104	TP104
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.121	SE216260.122	SE216260.123	SE216260.124	SE216260.125
% Moisture	%w/w	1	8.3	8.2	10.2	7.7	8.3

PARAMETER	UOM	LOR	TP105	TP105	TP106	TP106	TP107
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.126	SE216260.127	SE216260.128	SE216260.129	SE216260.130
% Moisture	%w/w	1	5.2	18.8	5.2	15.8	13.2

PARAMETER	UOM	LOR	TP108	TP109	TP110	TP110	TP111
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.2-0.3 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.131	SE216260.132	SE216260.133	SE216260.134	SE216260.135
% Moisture	%w/w	1	15.7	10.5	10.5	11.8	10.5

PARAMETER	UOM	LOR	TP111	TP112	TP112	TP113	TP113
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.136	SE216260.137	SE216260.138	SE216260.139	SE216260.140
% Moisture	%w/w	1	15.4	13.7	7.6	8.0	19.5

Moisture Content [AN002] Tested: 9/2/2021 (continued)

PARAMETER	UOM	LOR	TP114	TP114	TP115	TP115	TP116
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021	0.2-0.3 4/2/2021
			SE216260.141	SE216260.142	SE216260.143	SE216260.144	SE216260.145
% Moisture	%w/w	1	9.3	11.9	10.8	22.4	5.3

PARAMETER	UOM	LOR	TP116	TP117	TP117
			SOIL	SOIL	SOIL
			0.8-0.9 4/2/2021	0.2-0.3 4/2/2021	0.8-0.9 4/2/2021
			SE216260.146	SE216260.147	SE216260.148
% Moisture	%w/w	1	12.4	8.1	10.3

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 CaCl₂) 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.

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

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This report must not be reproduced, except in full.



STATEMENT OF QA/QC PERFORMANCE

SE216260 R1

CLIENT DETAILS

Contact Ram Ravi-Indran
Client Geotechnique
Address P.O. Box 880
NSW 2751

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

Project **8599-41 Abell Rd Marsden Park**
Order Number (Not specified)
Samples 148

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

SGS Reference **SE216260 R1**
Date Received 05 Feb 2021
Date Reported 23 Feb 2021

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 88 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	148 Soil
Date documentation received	5/2/2021 @3:46PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	N/A
Sample temperature upon receipt	19.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

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
TP41	SE216260.001	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP41	SE216260.002	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP42	SE216260.003	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP42	SE216260.004	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP43	SE216260.005	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP43	SE216260.006	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP44	SE216260.007	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP44	SE216260.008	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP45	SE216260.009	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP45	SE216260.010	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP46	SE216260.011	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP46	SE216260.012	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP47	SE216260.013	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP47	SE216260.014	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP48	SE216260.015	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP48	SE216260.016	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP49	SE216260.017	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP49	SE216260.018	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP50	SE216260.019	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP50	SE216260.020	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP51	SE216260.021	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP51	SE216260.022	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP52	SE216260.023	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP52	SE216260.024	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP53	SE216260.025	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP53	SE216260.026	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP54	SE216260.027	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP54	SE216260.028	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP55	SE216260.029	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP55	SE216260.030	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP56	SE216260.031	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP56	SE216260.032	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP57	SE216260.033	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP57	SE216260.034	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP58	SE216260.035	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP58	SE216260.036	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP59	SE216260.037	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP59	SE216260.038	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP60	SE216260.039	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP60	SE216260.040	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	11 Feb 2021
TP61	SE216260.041	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP61	SE216260.042	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP62	SE216260.043	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP62	SE216260.044	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP63	SE216260.045	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP63	SE216260.046	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP64	SE216260.047	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP64	SE216260.048	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP65	SE216260.049	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP65	SE216260.050	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP66	SE216260.051	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP66	SE216260.052	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP67	SE216260.053	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP67	SE216260.054	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP68	SE216260.055	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP68	SE216260.056	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP69	SE216260.057	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP69	SE216260.058	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP70	SE216260.059	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021
TP70	SE216260.060	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

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
TP71	SE216260.061	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP71	SE216260.062	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP72	SE216260.063	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP72	SE216260.064	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP73	SE216260.065	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP73	SE216260.066	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP74	SE216260.067	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP74	SE216260.068	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP75	SE216260.069	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP75	SE216260.070	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP76	SE216260.071	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP76	SE216260.072	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP77	SE216260.073	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP77	SE216260.074	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP78	SE216260.075	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP78	SE216260.076	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP79	SE216260.077	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP79	SE216260.078	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP80	SE216260.079	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP80	SE216260.080	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP81	SE216260.081	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP81	SE216260.082	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP82	SE216260.083	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP82	SE216260.084	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP83	SE216260.085	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP83	SE216260.086	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP84	SE216260.087	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP84	SE216260.088	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP85	SE216260.089	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP85	SE216260.090	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP86	SE216260.091	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP86	SE216260.092	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP88	SE216260.093	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP88	SE216260.094	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP89	SE216260.095	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP89	SE216260.096	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP90	SE216260.097	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP90	SE216260.098	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP91	SE216260.099	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP91	SE216260.100	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP92	SE216260.101	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP92	SE216260.102	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP93	SE216260.103	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP94	SE216260.104	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP94	SE216260.105	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP95	SE216260.106	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP95	SE216260.107	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP96	SE216260.108	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP96	SE216260.109	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP97	SE216260.110	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP97	SE216260.111	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP98	SE216260.112	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP98	SE216260.113	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP99	SE216260.114	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP99	SE216260.115	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP100	SE216260.116	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP100	SE216260.117	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP101	SE216260.118	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP101	SE216260.119	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP102	SE216260.120	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

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
TP102	SE216260.121	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP103	SE216260.122	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP103	SE216260.123	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP104	SE216260.124	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP104	SE216260.125	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP105	SE216260.126	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP105	SE216260.127	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP106	SE216260.128	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP106	SE216260.129	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP107	SE216260.130	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP108	SE216260.131	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP109	SE216260.132	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP110	SE216260.133	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP110	SE216260.134	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP111	SE216260.135	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP111	SE216260.136	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP112	SE216260.137	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP112	SE216260.138	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP113	SE216260.139	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP113	SE216260.140	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP114	SE216260.141	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP114	SE216260.142	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP115	SE216260.143	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP115	SE216260.144	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP116	SE216260.145	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP116	SE216260.146	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP117	SE216260.147	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†
TP117	SE216260.148	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021†

Moisture Content

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP41	SE216260.001	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP41	SE216260.002	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP42	SE216260.003	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP42	SE216260.004	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP43	SE216260.005	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP43	SE216260.006	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP44	SE216260.007	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP44	SE216260.008	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP45	SE216260.009	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP45	SE216260.010	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP46	SE216260.011	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP46	SE216260.012	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP47	SE216260.013	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP47	SE216260.014	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP48	SE216260.015	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP48	SE216260.016	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP49	SE216260.017	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP49	SE216260.018	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP50	SE216260.019	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP50	SE216260.020	LB218205	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP51	SE216260.021	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP51	SE216260.022	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP52	SE216260.023	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP52	SE216260.024	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP53	SE216260.025	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP53	SE216260.026	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP54	SE216260.027	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP54	SE216260.028	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP55	SE216260.029	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-ENVJAN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP55	SE216260.030	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP56	SE216260.031	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP56	SE216260.032	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP57	SE216260.033	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP57	SE216260.034	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP58	SE216260.035	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP58	SE216260.036	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP59	SE216260.037	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP59	SE216260.038	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP60	SE216260.039	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP60	SE216260.040	LB218206	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP61	SE216260.041	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP61	SE216260.042	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP62	SE216260.043	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP62	SE216260.044	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP63	SE216260.045	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP63	SE216260.046	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP64	SE216260.047	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP64	SE216260.048	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP65	SE216260.049	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP65	SE216260.050	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP66	SE216260.051	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP66	SE216260.052	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP67	SE216260.053	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP67	SE216260.054	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP68	SE216260.055	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP68	SE216260.056	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP69	SE216260.057	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP69	SE216260.058	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP70	SE216260.059	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP70	SE216260.060	LB218207	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	11 Feb 2021
TP71	SE216260.061	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP71	SE216260.062	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP72	SE216260.063	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP72	SE216260.064	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP73	SE216260.065	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP73	SE216260.066	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP74	SE216260.067	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP74	SE216260.068	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP75	SE216260.069	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP75	SE216260.070	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP76	SE216260.071	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP76	SE216260.072	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP77	SE216260.073	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP77	SE216260.074	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP78	SE216260.075	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP78	SE216260.076	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP79	SE216260.077	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP79	SE216260.078	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP80	SE216260.079	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP80	SE216260.080	LB218208	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP81	SE216260.081	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP81	SE216260.082	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP82	SE216260.083	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP82	SE216260.084	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP83	SE216260.085	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP83	SE216260.086	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP84	SE216260.087	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP84	SE216260.088	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP85	SE216260.089	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-ENVJAN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP85	SE216260.090	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP86	SE216260.091	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP86	SE216260.092	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP88	SE216260.093	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP88	SE216260.094	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP89	SE216260.095	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP89	SE216260.096	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP90	SE216260.097	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP90	SE216260.098	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP91	SE216260.099	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP91	SE216260.100	LB218209	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP92	SE216260.101	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP92	SE216260.102	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP93	SE216260.103	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP94	SE216260.104	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP94	SE216260.105	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP95	SE216260.106	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP95	SE216260.107	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP96	SE216260.108	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP96	SE216260.109	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP97	SE216260.110	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP97	SE216260.111	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP98	SE216260.112	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP98	SE216260.113	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP99	SE216260.114	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP99	SE216260.115	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP100	SE216260.116	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP100	SE216260.117	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP101	SE216260.118	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP101	SE216260.119	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP102	SE216260.120	LB218212	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP102	SE216260.121	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP103	SE216260.122	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP103	SE216260.123	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP104	SE216260.124	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP104	SE216260.125	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP105	SE216260.126	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP105	SE216260.127	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP106	SE216260.128	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP106	SE216260.129	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP107	SE216260.130	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP108	SE216260.131	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP109	SE216260.132	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP110	SE216260.133	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP110	SE216260.134	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP111	SE216260.135	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP111	SE216260.136	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP112	SE216260.137	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP112	SE216260.138	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP113	SE216260.139	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP113	SE216260.140	LB218213	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP114	SE216260.141	LB218245	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP114	SE216260.142	LB218245	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP115	SE216260.143	LB218245	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP115	SE216260.144	LB218245	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP116	SE216260.145	LB218245	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP116	SE216260.146	LB218245	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP117	SE216260.147	LB218245	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021
TP117	SE216260.148	LB218245	04 Feb 2021	05 Feb 2021	18 Feb 2021	09 Feb 2021	14 Feb 2021	12 Feb 2021

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

pH in soil (1:5)

Method: ME-(AU)-ENVJAN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP41	SE216260.001	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP41	SE216260.002	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP42	SE216260.003	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP42	SE216260.004	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP43	SE216260.005	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP43	SE216260.006	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP44	SE216260.007	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP44	SE216260.008	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP45	SE216260.009	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP45	SE216260.010	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP46	SE216260.011	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP46	SE216260.012	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP47	SE216260.013	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP47	SE216260.014	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP48	SE216260.015	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP48	SE216260.016	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP49	SE216260.017	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP49	SE216260.018	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP50	SE216260.019	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP50	SE216260.020	LB218312	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP51	SE216260.021	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP51	SE216260.022	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP52	SE216260.023	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP52	SE216260.024	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP53	SE216260.025	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP53	SE216260.026	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP54	SE216260.027	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP54	SE216260.028	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP55	SE216260.029	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP55	SE216260.030	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP56	SE216260.031	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP56	SE216260.032	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP57	SE216260.033	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP57	SE216260.034	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP58	SE216260.035	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP58	SE216260.036	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP59	SE216260.037	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP59	SE216260.038	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP60	SE216260.039	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP60	SE216260.040	LB218320	04 Feb 2021	05 Feb 2021	11 Feb 2021	10 Feb 2021	11 Feb 2021	10 Feb 2021
TP61	SE216260.041	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP61	SE216260.042	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP62	SE216260.043	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP62	SE216260.044	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP63	SE216260.045	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP63	SE216260.046	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP64	SE216260.047	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP64	SE216260.048	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP65	SE216260.049	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP65	SE216260.050	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP66	SE216260.051	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP66	SE216260.052	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP67	SE216260.053	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP67	SE216260.054	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP68	SE216260.055	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP68	SE216260.056	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP69	SE216260.057	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP69	SE216260.058	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP70	SE216260.059	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP70	SE216260.060	LB218396	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021



HOLDING TIME SUMMARY

SE216260 R1

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

pH in soil (1:5) (continued)

Method: ME-(AU)-ENVJAN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP71	SE216260.061	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP71	SE216260.062	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP72	SE216260.063	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP72	SE216260.064	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP73	SE216260.065	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP73	SE216260.066	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP74	SE216260.067	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP74	SE216260.068	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP75	SE216260.069	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP75	SE216260.070	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP76	SE216260.071	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP76	SE216260.072	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP77	SE216260.073	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP77	SE216260.074	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP78	SE216260.075	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP78	SE216260.076	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP79	SE216260.077	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP79	SE216260.078	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP80	SE216260.079	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP80	SE216260.080	LB218408	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP81	SE216260.081	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP81	SE216260.082	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP82	SE216260.083	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP82	SE216260.084	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP83	SE216260.085	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP83	SE216260.086	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP84	SE216260.087	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP84	SE216260.088	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP85	SE216260.089	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP85	SE216260.090	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP86	SE216260.091	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP86	SE216260.092	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP88	SE216260.093	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP88	SE216260.094	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP89	SE216260.095	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP89	SE216260.096	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP90	SE216260.097	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP90	SE216260.098	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP91	SE216260.099	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP91	SE216260.100	LB218409	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP92	SE216260.101	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP92	SE216260.102	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP93	SE216260.103	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP94	SE216260.104	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP94	SE216260.105	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP95	SE216260.106	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP95	SE216260.107	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP96	SE216260.108	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP96	SE216260.109	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP97	SE216260.110	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP97	SE216260.111	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP98	SE216260.112	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP98	SE216260.113	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP99	SE216260.114	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP99	SE216260.115	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP100	SE216260.116	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP100	SE216260.117	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP101	SE216260.118	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP101	SE216260.119	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP102	SE216260.120	LB218426	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

pH in soil (1:5) (continued)

Method: ME-(AU)-ENVJAN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP102	SE216260.121	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP103	SE216260.122	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP103	SE216260.123	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP104	SE216260.124	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP104	SE216260.125	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP105	SE216260.126	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP105	SE216260.127	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP106	SE216260.128	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP106	SE216260.129	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP107	SE216260.130	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP108	SE216260.131	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP109	SE216260.132	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP110	SE216260.133	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP110	SE216260.134	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP111	SE216260.135	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP111	SE216260.136	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP112	SE216260.137	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP112	SE216260.138	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP113	SE216260.139	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP113	SE216260.140	LB218444	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP114	SE216260.141	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP114	SE216260.142	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP115	SE216260.143	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP115	SE216260.144	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP116	SE216260.145	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP116	SE216260.146	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP117	SE216260.147	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021
TP117	SE216260.148	LB218447	04 Feb 2021	05 Feb 2021	11 Feb 2021	11 Feb 2021	12 Feb 2021	11 Feb 2021

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
LB218312.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0
LB218320.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.56
LB218396.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0
LB218408.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.02
LB218409.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.5
LB218426.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.5
LB218444.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.6
LB218447.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.55

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 give a different calculated RPD.

Conductivity and TDS by Calculation - Soil

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE216260.010	LB218312.014	Conductivity of Extract (1:5 as received)	µS/cm	1	370	360	31	1
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	420	420	30	1
SE216260.020	LB218312.025	Conductivity of Extract (1:5 as received)	µS/cm	1	110	140	32	23
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	120	150	31	23
SE216260.030	LB218320.014	Conductivity of Extract (1:5 as received)	µS/cm	1	290	270	31	10
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	320	290	31	10
SE216260.040	LB218320.025	Conductivity of Extract (1:5 as received)	µS/cm	1	330	280	31	16
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	370	310	31	16
SE216260.050	LB218396.014	Conductivity of Extract (1:5 as received)	µS/cm	1	330	320	31	5
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	390	370	31	5
SE216260.060	LB218396.025	Conductivity of Extract (1:5 as received)	µS/cm	1	250	230	31	5
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	280	260	31	5
SE216260.070	LB218408.014	Conductivity of Extract (1:5 as received)	µS/cm	1	160	150	31	4
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	190	180	31	4
SE216260.080	LB218408.025	Conductivity of Extract (1:5 as received)	µS/cm	1	140	160	31	12
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	160	180	31	12
SE216260.090	LB218409.014	Conductivity of Extract (1:5 as received)	µS/cm	1	120	130	32	5
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	140	140	31	5
SE216260.100	LB218409.025	Conductivity of Extract (1:5 as received)	µS/cm	1	190	230	31	18
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	220	270	31	18
SE216260.110	LB218426.014	Conductivity of Extract (1:5 as received)	µS/cm	1	150	170	31	12
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	170	190	31	12
SE216260.120	LB218426.025	Conductivity of Extract (1:5 as received)	µS/cm	1	110	130	32	9
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	130	140	31	9
SE216260.130	LB218444.014	Conductivity of Extract (1:5 as received)	µS/cm	1	160	150	31	2
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	180	180	31	2
SE216260.140	LB218444.025	Conductivity of Extract (1:5 as received)	µS/cm	1	310	330	31	8
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	380	410	31	8
SE216260.148	LB218447.012	Conductivity of Extract (1:5 as received)	µS/cm	1	300	260	31	14
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	330	290	31	14

Moisture Content

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE216260.010	LB218205.011	% Moisture	%w/w	1	13.5	12.7	38	7
SE216260.020	LB218205.022	% Moisture	%w/w	1	8.8	10.3	40	15
SE216260.030	LB218206.011	% Moisture	%w/w	1	8.1	8.3	42	2
SE216260.040	LB218206.022	% Moisture	%w/w	1	10.2	9.9	40	2
SE216260.050	LB218207.011	% Moisture	%w/w	1	13.3	12.7	38	5
SE216260.060	LB218207.022	% Moisture	%w/w	1	12.2	12.8	38	5
SE216260.070	LB218208.011	% Moisture	%w/w	1	16.0	16.0	36	0
SE216260.080	LB218208.022	% Moisture	%w/w	1	14.8	16.8	36	13
SE216260.090	LB218209.011	% Moisture	%w/w	1	9.8	8.3	41	16
SE216260.100	LB218209.022	% Moisture	%w/w	1	15.6	16.7	36	7
SE216260.110	LB218212.011	% Moisture	%w/w	1	14.3	12.6	37	13
SE216260.120	LB218212.022	% Moisture	%w/w	1	10.2	11.0	39	7
SE216260.130	LB218213.011	% Moisture	%w/w	1	13.2	14.1	37	7
SE216260.140	LB218213.022	% Moisture	%w/w	1	19.5	20.1	35	3
SE216260.144	LB218245.011	% Moisture	%w/w	1	22.4	20.1	35	11
SE216262.001	LB218245.017	% Moisture	%w/w	1	2.9	2.9	65	0

pH in soil (1:5)

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE216260.010	LB218312.014	pH	pH Units	0.1	8.2	8.3	31	1
SE216260.020	LB218312.025	pH	pH Units	0.1	5.1	5.1	32	0
SE216260.030	LB218320.014	pH	pH Units	0.1	7.9	8.1	31	2
SE216260.040	LB218320.025	pH	pH Units	0.1	8.0	8.3	31	4
SE216260.050	LB218396.014	pH	pH Units	0.1	7.0	7.0	31	1
SE216260.060	LB218396.025	pH	pH Units	0.1	7.7	8.0	31	4
SE216260.070	LB218408.014	pH	pH Units	0.1	5.2	5.1	32	2
SE216260.080	LB218408.025	pH	pH Units	0.1	5.5	5.2	32	6
SE216260.090	LB218409.014	pH	pH Units	0.1	7.1	7.3	31	3
SE216260.100	LB218409.025	pH	pH Units	0.1	4.8	4.6	32	4

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 give a different calculated RPD.

pH In soil (1:5) (continued)

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE216260.110	LB218426.014	pH	pH Units	0.1	4.7	4.6	32	2
SE216260.120	LB218426.025	pH	pH Units	0.1	5.2	5.0	32	3
SE216260.130	LB218444.014	pH	pH Units	0.1	6.8	7.3	31	7
SE216260.140	LB218444.025	pH	pH Units	0.1	4.7	4.7	32	1
SE216260.148	LB218447.012	pH	pH Units	0.1	6.5	6.3	32	3

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 %
LB218312.002	Conductivity of Extract (1:5 as received)	µS/cm	1	300	303	85 - 115	99
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	99
LB218320.002	Conductivity of Extract (1:5 as received)	µS/cm	1	300	303	85 - 115	99
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	99
LB218396.002	Conductivity of Extract (1:5 as received)	µS/cm	1	310	303	85 - 115	102
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	102
LB218408.002	Conductivity of Extract (1:5 as received)	µS/cm	1	300	303	85 - 115	98
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	98
LB218409.002	Conductivity of Extract (1:5 as received)	µS/cm	1	290	303	85 - 115	97
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	97
LB218426.002	Conductivity of Extract (1:5 as received)	µS/cm	1	290	303	85 - 115	97
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	97
LB218444.002	Conductivity of Extract (1:5 as received)	µS/cm	1	290	303	85 - 115	96
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	96
LB218447.002	Conductivity of Extract (1:5 as received)	µS/cm	1	290	303	85 - 115	96
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	96

pH in soil (1:5)

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB218312.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100
LB218320.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100
LB218396.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100
LB218408.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100
LB218409.003	pH	pH Units	0.1	7.3	7.415	98 - 102	99
LB218426.003	pH	pH Units	0.1	7.4	7.415	98 - 102	99
LB218444.003	pH	pH Units	0.1	7.4	7.415	98 - 102	99
LB218447.003	pH	pH Units	0.1	7.4	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 end of this report for failure reasons.

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

- * 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.

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

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This test report shall not be reproduced, except in full.



SAMPLE RECEIPT ADVICE

SE216259

CLIENT DETAILS

Contact Mitchell Tofler
Client DIRT DOCTORS GEOTECHNICAL TESTING SERVICES PTY
Address 14 DAPHNE STREET
COLO VALE NSW 2575

Telephone 0424 639 602
Facsimile (Not specified)
Email mitch@dirtdoctors.com.au

Project **DDE-759**
Order Number **6204505**
Samples 15

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 Mon 8/2/2021
Report Due Fri 12/2/2021
SGS Reference **SE216259**

SUBMISSION DETAILS

This is to confirm that 15 samples were received on Monday 8/2/2021. Results are expected to be ready by COB Friday 12/2/2021. Please quote SGS reference SE216259 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	15 Soil
Date documentation received	8/2/2021	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	17°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. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

CLIENT DETAILS

Client **DIRT DOCTORS GEOTECHNICAL TESTING SERVICES PTY LTD** Project **DDE-759**

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	pH in soil (1:5)	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	E13	-	-	26	-	1	10	11	7
002	E14	29	14	26	11	1	10	11	7
003	E15	-	-	26	-	1	10	11	7
004	E16	29	14	26	11	1	10	11	7
005	E17	-	-	26	-	1	10	11	7
006	E18	29	14	26	11	1	10	11	7
007	E19	-	-	26	-	1	10	11	7
008	E20	29	14	26	11	1	10	11	7
009	E21	-	-	26	-	1	10	11	7
010	E22	29	14	26	11	1	10	11	7
011	E23	-	-	26	-	1	10	11	7
012	E24	29	14	26	11	1	10	11	7
013	E25	-	-	26	-	1	10	11	7
014	Trip Blank	-	-	-	-	-	-	11	-
015	Trip Spike	-	-	-	-	-	-	11	-

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 **DIRT DOCTORS GEOTECHNICAL TESTING SERVICES PTY LTD** Project **DDE-759**

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	Fibre Identification in soil	Mercury in Soil	Total Recoverable Elements in Soil/Waste
001	E13	1	2	1	7
002	E14	1	2	1	7
003	E15	1	2	1	7
004	E16	1	2	1	7
005	E17	1	2	1	7
006	E18	1	2	1	7
007	E19	1	2	1	7
008	E20	1	2	1	7
009	E21	1	2	1	7
010	E22	1	2	1	7
011	E23	1	2	1	7
012	E24	1	2	1	7
013	E25	1	2	1	7

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

LABORATORY DETAILS

Contact Ram Ravi-Indran
 Client Geotechnique
 Address P.O. Box 880
 NSW 2751

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

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

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

Project **8599-41 Abell Rd, Marsden Park**
 Order Number (Not specified)
 Samples 60

SGS Reference **SE216375 R1**
 Date Received 9/2/2021
 Date Reported 23/2/2021

COMMENTS

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

This report cancels and supersedes the report No.SE216375 R0 dated 16/02/21 issued by SGS Environment, Health and Safety due to amended sample IDs as requested.

SIGNATORIES



Dong LIANG
 Metals/Inorganics Team Leader

pH in soil (1:5) [AN101] Tested: 15/2/2021

PARAMETER	UOM	LOR	TP118	TP118	TP119	TP119	TP120
			SOIL 0.2-0.3 8/2/2021 SE216375.001	SOIL 0.8-0.9 8/2/2021 SE216375.002	SOIL 0.2-0.3 8/2/2021 SE216375.003	SOIL 0.8-0.9 8/2/2021 SE216375.004	SOIL 0.2-0.3 8/2/2021 SE216375.005
pH	pH Units	0.1	8.0	6.1	7.7	4.9	4.8

PARAMETER	UOM	LOR	TP120	TP121	TP122	TP122	TP123
			SOIL 0.8-0.9 8/2/2021 SE216375.006	SOIL 0.2-0.3 8/2/2021 SE216375.007	SOIL 0.2-0.3 8/2/2021 SE216375.008	SOIL 0.8-0.9 8/2/2021 SE216375.009	SOIL 0.2-0.3 8/2/2021 SE216375.010
pH	pH Units	0.1	4.9	5.0	4.9	4.9	4.5

PARAMETER	UOM	LOR	TP123	TP124	TP124	TP125	TP125
			SOIL 0.8-0.9 8/2/2021 SE216375.011	SOIL 0.2-0.3 8/2/2021 SE216375.012	SOIL 0.8-0.9 8/2/2021 SE216375.013	SOIL 0.2-0.3 8/2/2021 SE216375.014	SOIL 0.8-0.9 8/2/2021 SE216375.015
pH	pH Units	0.1	4.6	5.5	5.8	8.0	6.9

PARAMETER	UOM	LOR	TP126	TP126	TP127	TP127	TP128
			SOIL 0.2-0.3 8/2/2021 SE216375.016	SOIL 0.8-0.9 8/2/2021 SE216375.017	SOIL 0.2-0.3 8/2/2021 SE216375.018	SOIL 0.8-0.9 8/2/2021 SE216375.019	SOIL 0.2-0.3 8/2/2021 SE216375.020
pH	pH Units	0.1	7.5	8.0	7.7	6.8	4.7

PARAMETER	UOM	LOR	TP128	TP129	TP129	TP130	TP130
			SOIL 0.8-0.9 8/2/2021 SE216375.021	SOIL 0.2-0.3 8/2/2021 SE216375.022	SOIL 0.8-0.9 8/2/2021 SE216375.023	SOIL 0.2-0.3 8/2/2021 SE216375.024	SOIL 0.8-0.9 8/2/2021 SE216375.025
pH	pH Units	0.1	6.1	4.7	5.0	5.6	6.0

PARAMETER	UOM	LOR	TP131	TP131	TP132	TP132	TP133
			SOIL 0.2-0.3 8/2/2021 SE216375.026	SOIL 0.8-0.9 8/2/2021 SE216375.027	SOIL 0.2-0.3 8/2/2021 SE216375.028	SOIL 0.8-0.9 8/2/2021 SE216375.029	SOIL 0.2-0.3 8/2/2021 SE216375.030
pH	pH Units	0.1	8.1	7.2	6.9	5.8	5.3

PARAMETER	UOM	LOR	TP133	TP134	TP134	TP135	TP135
			SOIL 0.8-0.9 8/2/2021 SE216375.031	SOIL 0.2-0.3 8/2/2021 SE216375.032	SOIL 0.8-0.9 8/2/2021 SE216375.033	SOIL 0.2-0.3 8/2/2021 SE216375.034	SOIL 0.8-0.9 8/2/2021 SE216375.035
pH	pH Units	0.1	5.5	5.9	5.3	6.3	4.6

pH in soil (1:5) [AN101] Tested: 15/2/2021 (continued)

PARAMETER	UOM	LOR	TP136	TP136	TP137	TP137	TP138
			SOIL 0.2-0.3 8/2/2021 SE216375.036	SOIL 0.8-0.9 8/2/2021 SE216375.037	SOIL 0.2-0.3 8/2/2021 SE216375.038	SOIL 0.8-0.9 8/2/2021 SE216375.039	SOIL 0.2-0.3 8/2/2021 SE216375.040
pH	pH Units	0.1	6.1	7.2	8.2	5.4	7.1

PARAMETER	UOM	LOR	TP138	TP139	TP139	TP140	TP140
			SOIL 0.8-0.9 8/2/2021 SE216375.041	SOIL 0.2-0.3 8/2/2021 SE216375.042	SOIL 0.8-0.9 8/2/2021 SE216375.043	SOIL 0.2-0.3 8/2/2021 SE216375.044	SOIL 0.8-0.9 8/2/2021 SE216375.045
pH	pH Units	0.1	7.3	7.5	5.1	6.6	8.3

PARAMETER	UOM	LOR	TP141	TP141	TP142	TP142	TP143
			SOIL 0.2-0.3 8/2/2021 SE216375.046	SOIL 0.8-0.9 8/2/2021 SE216375.047	SOIL 0.2-0.3 8/2/2021 SE216375.048	SOIL 0.8-0.9 8/2/2021 SE216375.049	SOIL 0.2-0.3 8/2/2021 SE216375.050
pH	pH Units	0.1	5.0	6.7	5.0	4.6	4.0

PARAMETER	UOM	LOR	TP143	TP144	TP144	TP145	TP145
			SOIL 0.8-0.9 8/2/2021 SE216375.051	SOIL 0.2-0.3 8/2/2021 SE216375.052	SOIL 0.8-0.9 8/2/2021 SE216375.053	SOIL 0.2-0.3 8/2/2021 SE216375.054	SOIL 0.8-0.9 8/2/2021 SE216375.055
pH	pH Units	0.1	7.6	8.4	7.3	7.7	5.3

PARAMETER	UOM	LOR	TP146	TP146	TP147	TP147	TP121
			SOIL 0.2-0.3 8/2/2021 SE216375.056	SOIL 0.8-0.9 8/2/2021 SE216375.057	SOIL 0.2-0.3 8/2/2021 SE216375.058	SOIL 0.8-0.9 8/2/2021 SE216375.059	SOIL 0.8-0.9 8/2/2021 SE216375.060
pH	pH Units	0.1	7.3	5.7	4.3	5.1	5.4

Conductivity and TDS by Calculation - Soil [AN106] Tested: 15/2/2021

PARAMETER	UOM	LOR	TP118 SOIL 0.2-0.3 8/2/2021 SE216375.001	TP118 SOIL 0.8-0.9 8/2/2021 SE216375.002	TP119 SOIL 0.2-0.3 8/2/2021 SE216375.003	TP119 SOIL 0.8-0.9 8/2/2021 SE216375.004	TP120 SOIL 0.2-0.3 8/2/2021 SE216375.005
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	600	340	580	630	770

PARAMETER	UOM	LOR	TP120 SOIL 0.8-0.9 8/2/2021 SE216375.006	TP121 SOIL 0.2-0.3 8/2/2021 SE216375.007	TP122 SOIL 0.2-0.3 8/2/2021 SE216375.008	TP122 SOIL 0.8-0.9 8/2/2021 SE216375.009	TP123 SOIL 0.2-0.3 8/2/2021 SE216375.010
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	510	440	390	360	330

PARAMETER	UOM	LOR	TP123 SOIL 0.8-0.9 8/2/2021 SE216375.011	TP124 SOIL 0.2-0.3 8/2/2021 SE216375.012	TP124 SOIL 0.8-0.9 8/2/2021 SE216375.013	TP125 SOIL 0.2-0.3 8/2/2021 SE216375.014	TP125 SOIL 0.8-0.9 8/2/2021 SE216375.015
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	240	170	160	240	28

PARAMETER	UOM	LOR	TP126 SOIL 0.2-0.3 8/2/2021 SE216375.016	TP126 SOIL 0.8-0.9 8/2/2021 SE216375.017	TP127 SOIL 0.2-0.3 8/2/2021 SE216375.018	TP127 SOIL 0.8-0.9 8/2/2021 SE216375.019	TP128 SOIL 0.2-0.3 8/2/2021 SE216375.020
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	330	250	190	430	210

PARAMETER	UOM	LOR	TP128 SOIL 0.8-0.9 8/2/2021 SE216375.021	TP129 SOIL 0.2-0.3 8/2/2021 SE216375.022	TP129 SOIL 0.8-0.9 8/2/2021 SE216375.023	TP130 SOIL 0.2-0.3 8/2/2021 SE216375.024	TP130 SOIL 0.8-0.9 8/2/2021 SE216375.025
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	130	380	95	350	220

PARAMETER	UOM	LOR	TP131 SOIL 0.2-0.3 8/2/2021 SE216375.026	TP131 SOIL 0.8-0.9 8/2/2021 SE216375.027	TP132 SOIL 0.2-0.3 8/2/2021 SE216375.028	TP132 SOIL 0.8-0.9 8/2/2021 SE216375.029	TP133 SOIL 0.2-0.3 8/2/2021 SE216375.030
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	290	460	470	400	270

PARAMETER	UOM	LOR	TP133 SOIL 0.8-0.9 8/2/2021 SE216375.031	TP134 SOIL 0.2-0.3 8/2/2021 SE216375.032	TP134 SOIL 0.8-0.9 8/2/2021 SE216375.033	TP135 SOIL 0.2-0.3 8/2/2021 SE216375.034	TP135 SOIL 0.8-0.9 8/2/2021 SE216375.035
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	87	44	38	120	500

Conductivity and TDS by Calculation - Soil [AN106] Tested: 15/2/2021 (continued)

PARAMETER	UOM	LOR	TP136 SOIL 0.2-0.3 8/2/2021 SE216375.036	TP136 SOIL 0.8-0.9 8/2/2021 SE216375.037	TP137 SOIL 0.2-0.3 8/2/2021 SE216375.038	TP137 SOIL 0.8-0.9 8/2/2021 SE216375.039	TP138 SOIL 0.2-0.3 8/2/2021 SE216375.040
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	380	440	250	59	400

PARAMETER	UOM	LOR	TP138 SOIL 0.8-0.9 8/2/2021 SE216375.041	TP139 SOIL 0.2-0.3 8/2/2021 SE216375.042	TP139 SOIL 0.8-0.9 8/2/2021 SE216375.043	TP140 SOIL 0.2-0.3 8/2/2021 SE216375.044	TP140 SOIL 0.8-0.9 8/2/2021 SE216375.045
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	510	530	550	360	160

PARAMETER	UOM	LOR	TP141 SOIL 0.2-0.3 8/2/2021 SE216375.046	TP141 SOIL 0.8-0.9 8/2/2021 SE216375.047	TP142 SOIL 0.2-0.3 8/2/2021 SE216375.048	TP142 SOIL 0.8-0.9 8/2/2021 SE216375.049	TP143 SOIL 0.2-0.3 8/2/2021 SE216375.050
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	390	280	120	66	270

PARAMETER	UOM	LOR	TP143 SOIL 0.8-0.9 8/2/2021 SE216375.051	TP144 SOIL 0.2-0.3 8/2/2021 SE216375.052	TP144 SOIL 0.8-0.9 8/2/2021 SE216375.053	TP145 SOIL 0.2-0.3 8/2/2021 SE216375.054	TP145 SOIL 0.8-0.9 8/2/2021 SE216375.055
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	1200	250	280	420	210

PARAMETER	UOM	LOR	TP146 SOIL 0.2-0.3 8/2/2021 SE216375.056	TP146 SOIL 0.8-0.9 8/2/2021 SE216375.057	TP147 SOIL 0.2-0.3 8/2/2021 SE216375.058	TP147 SOIL 0.8-0.9 8/2/2021 SE216375.059	TP121 SOIL 0.8-0.9 8/2/2021 SE216375.060
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	270	130	95	16	150

Moisture Content [AN002] Tested: 11/2/2021

PARAMETER	UOM	LOR	TP118	TP118	TP119	TP119	TP120
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 8/2/2021	0.8-0.9 8/2/2021	0.2-0.3 8/2/2021	0.8-0.9 8/2/2021	0.2-0.3 8/2/2021
			SE216375.001	SE216375.002	SE216375.003	SE216375.004	SE216375.005
% Moisture	%w/w	1	10.3	11.9	9.7	10.2	18.0

PARAMETER	UOM	LOR	TP120	TP121	TP122	TP122	TP123
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 8/2/2021	0.2-0.3 8/2/2021	0.2-0.3 8/2/2021	0.8-0.9 8/2/2021	0.2-0.3 8/2/2021
			SE216375.006	SE216375.007	SE216375.008	SE216375.009	SE216375.010
% Moisture	%w/w	1	10.9	18.5	13.3	9.8	20.9

PARAMETER	UOM	LOR	TP123	TP124	TP124	TP125	TP125
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 8/2/2021	0.2-0.3 8/2/2021	0.8-0.9 8/2/2021	0.2-0.3 8/2/2021	0.8-0.9 8/2/2021
			SE216375.011	SE216375.012	SE216375.013	SE216375.014	SE216375.015
% Moisture	%w/w	1	17.0	6.9	7.3	6.5	6.0

PARAMETER	UOM	LOR	TP126	TP126	TP127	TP127	TP128
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 8/2/2021	0.8-0.9 8/2/2021	0.2-0.3 8/2/2021	0.8-0.9 8/2/2021	0.2-0.3 8/2/2021
			SE216375.016	SE216375.017	SE216375.018	SE216375.019	SE216375.020
% Moisture	%w/w	1	8.2	9.1	9.5	11.3	10.8

PARAMETER	UOM	LOR	TP128	TP129	TP129	TP130	TP130
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 8/2/2021	0.2-0.3 8/2/2021	0.8-0.9 8/2/2021	0.2-0.3 8/2/2021	0.8-0.9 8/2/2021
			SE216375.021	SE216375.022	SE216375.023	SE216375.024	SE216375.025
% Moisture	%w/w	1	6.4	17.8	9.2	19.2	8.8

PARAMETER	UOM	LOR	TP131	TP131	TP132	TP132	TP133
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3 8/2/2021	0.8-0.9 8/2/2021	0.2-0.3 8/2/2021	0.8-0.9 8/2/2021	0.2-0.3 8/2/2021
			SE216375.026	SE216375.027	SE216375.028	SE216375.029	SE216375.030
% Moisture	%w/w	1	13.9	9.4	7.8	7.6	8.8

PARAMETER	UOM	LOR	TP133	TP134	TP134	TP135	TP135
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9 8/2/2021	0.2-0.3 8/2/2021	0.8-0.9 8/2/2021	0.2-0.3 8/2/2021	0.8-0.9 8/2/2021
			SE216375.031	SE216375.032	SE216375.033	SE216375.034	SE216375.035
% Moisture	%w/w	1	13.2	5.6	12.8	7.2	15.8

Moisture Content [AN002] Tested: 11/2/2021 (continued)

			TP136	TP136	TP137	TP137	TP138
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9	0.2-0.3
			8/2/2021	8/2/2021	8/2/2021	8/2/2021	8/2/2021
PARAMETER	UOM	LOR	SE216375.036	SE216375.037	SE216375.038	SE216375.039	SE216375.040
% Moisture	%w/w	1	9.8	8.8	7.9	10.1	11.0

			TP138	TP139	TP139	TP140	TP140
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9	0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9
			8/2/2021	8/2/2021	8/2/2021	8/2/2021	8/2/2021
PARAMETER	UOM	LOR	SE216375.041	SE216375.042	SE216375.043	SE216375.044	SE216375.045
% Moisture	%w/w	1	6.8	18.2	13.7	10.8	9.3

			TP141	TP141	TP142	TP142	TP143
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9	0.2-0.3
			8/2/2021	8/2/2021	8/2/2021	8/2/2021	8/2/2021
PARAMETER	UOM	LOR	SE216375.046	SE216375.047	SE216375.048	SE216375.049	SE216375.050
% Moisture	%w/w	1	16.4	9.1	9.0	9.0	13.5

			TP143	TP144	TP144	TP145	TP145
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.8-0.9	0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9
			8/2/2021	8/2/2021	8/2/2021	8/2/2021	8/2/2021
PARAMETER	UOM	LOR	SE216375.051	SE216375.052	SE216375.053	SE216375.054	SE216375.055
% Moisture	%w/w	1	22.3	6.8	12.7	9.9	15.5

			TP146	TP146	TP147	TP147	TP121
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.2-0.3	0.8-0.9	0.2-0.3	0.8-0.9	0.8-0.9
			8/2/2021	8/2/2021	8/2/2021	8/2/2021	8/2/2021
PARAMETER	UOM	LOR	SE216375.056	SE216375.057	SE216375.058	SE216375.059	SE216375.060
% Moisture	%w/w	1	11.7	6.3	11.3	8.0	9.2

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 CaCl₂) 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.

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

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This report must not be reproduced, except in full.



STATEMENT OF QA/QC PERFORMANCE

SE216375 R1

CLIENT DETAILS

Contact Ram Ravi-Indran
Client Geotechnique
Address P.O. Box 880
NSW 2751

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

Project **8599-41 Abell Rd, Marsden Park**
Order Number (Not specified)
Samples 60

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

SGS Reference **SE216375 R1**
Date Received 09 Feb 2021
Date Reported 23 Feb 2021

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 60 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	60 soil
Date documentation received	9/2/2021	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	N/A
Sample temperature upon receipt	19.8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

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
TP118	SE216375.001	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP118	SE216375.002	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP119	SE216375.003	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP119	SE216375.004	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP120	SE216375.005	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP120	SE216375.006	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP121	SE216375.007	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP122	SE216375.008	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP122	SE216375.009	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP123	SE216375.010	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP123	SE216375.011	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP124	SE216375.012	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP124	SE216375.013	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP125	SE216375.014	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP125	SE216375.015	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP126	SE216375.016	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP126	SE216375.017	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP127	SE216375.018	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP127	SE216375.019	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP128	SE216375.020	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP128	SE216375.021	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP129	SE216375.022	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP129	SE216375.023	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP130	SE216375.024	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP130	SE216375.025	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP131	SE216375.026	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP131	SE216375.027	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP132	SE216375.028	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP132	SE216375.029	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP133	SE216375.030	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP133	SE216375.031	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP134	SE216375.032	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP134	SE216375.033	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP135	SE216375.034	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP135	SE216375.035	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP136	SE216375.036	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP136	SE216375.037	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP137	SE216375.038	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP137	SE216375.039	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP138	SE216375.040	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP138	SE216375.041	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP139	SE216375.042	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP139	SE216375.043	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP140	SE216375.044	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP140	SE216375.045	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP141	SE216375.046	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP141	SE216375.047	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP142	SE216375.048	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP142	SE216375.049	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP143	SE216375.050	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP143	SE216375.051	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP144	SE216375.052	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP144	SE216375.053	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP145	SE216375.054	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP145	SE216375.055	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP146	SE216375.056	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP146	SE216375.057	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP147	SE216375.058	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP147	SE216375.059	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†
TP121	SE216375.060	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021†

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-ENVJAN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP118	SE216375.001	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP118	SE216375.002	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP119	SE216375.003	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP119	SE216375.004	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP120	SE216375.005	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP120	SE216375.006	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP121	SE216375.007	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP122	SE216375.008	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP122	SE216375.009	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP123	SE216375.010	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP123	SE216375.011	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP124	SE216375.012	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP124	SE216375.013	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP125	SE216375.014	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP125	SE216375.015	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP126	SE216375.016	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP126	SE216375.017	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP127	SE216375.018	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP127	SE216375.019	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP128	SE216375.020	LB218437	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP128	SE216375.021	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP129	SE216375.022	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP129	SE216375.023	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP130	SE216375.024	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP130	SE216375.025	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP131	SE216375.026	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP131	SE216375.027	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP132	SE216375.028	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP132	SE216375.029	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP133	SE216375.030	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP133	SE216375.031	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP134	SE216375.032	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP134	SE216375.033	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP135	SE216375.034	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP135	SE216375.035	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP136	SE216375.036	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP136	SE216375.037	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP137	SE216375.038	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP137	SE216375.039	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP138	SE216375.040	LB218438	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP138	SE216375.041	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP139	SE216375.042	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP139	SE216375.043	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP140	SE216375.044	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP140	SE216375.045	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP141	SE216375.046	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP141	SE216375.047	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP142	SE216375.048	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP142	SE216375.049	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP143	SE216375.050	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP143	SE216375.051	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP144	SE216375.052	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP144	SE216375.053	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP145	SE216375.054	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP145	SE216375.055	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP146	SE216375.056	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP146	SE216375.057	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP147	SE216375.058	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP147	SE216375.059	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021
TP121	SE216375.060	LB218439	08 Feb 2021	09 Feb 2021	22 Feb 2021	11 Feb 2021	16 Feb 2021	16 Feb 2021

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

pH in soil (1:5)

Method: ME-(AU)-ENVJAN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP118	SE216375.001	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP118	SE216375.002	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP119	SE216375.003	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP119	SE216375.004	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP120	SE216375.005	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP120	SE216375.006	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP121	SE216375.007	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP122	SE216375.008	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP122	SE216375.009	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP123	SE216375.010	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP123	SE216375.011	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP124	SE216375.012	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP124	SE216375.013	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP125	SE216375.014	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP125	SE216375.015	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP126	SE216375.016	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP126	SE216375.017	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP127	SE216375.018	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP127	SE216375.019	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP128	SE216375.020	LB218595	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP128	SE216375.021	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP129	SE216375.022	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP129	SE216375.023	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP130	SE216375.024	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP130	SE216375.025	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP131	SE216375.026	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP131	SE216375.027	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP132	SE216375.028	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP132	SE216375.029	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP133	SE216375.030	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP133	SE216375.031	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP134	SE216375.032	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP134	SE216375.033	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP135	SE216375.034	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP135	SE216375.035	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP136	SE216375.036	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP136	SE216375.037	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP137	SE216375.038	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP137	SE216375.039	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP138	SE216375.040	LB218596	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP138	SE216375.041	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP139	SE216375.042	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP139	SE216375.043	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP140	SE216375.044	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP140	SE216375.045	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP141	SE216375.046	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP141	SE216375.047	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP142	SE216375.048	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP142	SE216375.049	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP143	SE216375.050	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP143	SE216375.051	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP144	SE216375.052	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP144	SE216375.053	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP145	SE216375.054	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP145	SE216375.055	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP146	SE216375.056	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP146	SE216375.057	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP147	SE216375.058	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP147	SE216375.059	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021
TP121	SE216375.060	LB218597	08 Feb 2021	09 Feb 2021	15 Feb 2021	15 Feb 2021	16 Feb 2021	16 Feb 2021

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 sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

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
LB218595.001	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0
LB218596.001	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0
LB218597.001	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0

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 give a different calculated RPD.

Conductivity and TDS by Calculation - Soil

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE216375.010	LB218595.014	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	330	340	31	4
SE216375.020	LB218595.025	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	210	220	31	2
SE216375.030	LB218596.014	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	270	240	31	10
SE216375.040	LB218596.025	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	400	390	31	3
SE216375.050	LB218597.014	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	270	270	31	1
SE216375.060	LB218597.025	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	150	150	31	1

Moisture Content

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE216375.010	LB218437.011	% Moisture	%w/w	1	20.9	20.2	35	3
SE216375.020	LB218437.022	% Moisture	%w/w	1	10.8	10.5	39	2
SE216375.030	LB218438.011	% Moisture	%w/w	1	8.8	8.9	41	1
SE216375.040	LB218438.022	% Moisture	%w/w	1	11.0	12.3	39	12
SE216375.050	LB218439.011	% Moisture	%w/w	1	13.5	13.4	37	1
SE216375.060	LB218439.022	% Moisture	%w/w	1	9.2	9.3	41	1

pH in soil (1:5)

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE216375.010	LB218595.014	pH	pH Units	0.1	4.5	4.4	32	2
SE216375.020	LB218595.025	pH	pH Units	0.1	4.7	4.6	32	4
SE216375.030	LB218596.014	pH	pH Units	0.1	5.3	5.3	32	0
SE216375.040	LB218596.025	pH	pH Units	0.1	7.1	7.2	31	1
SE216375.050	LB218597.014	pH	pH Units	0.1	4.0	4.0	33	0
SE216375.060	LB218597.025	pH	pH Units	0.1	5.4	5.3	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 %
LB218595.002	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	100
LB218596.002	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	100
LB218597.002	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	101

pH in soil (1:5)

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB218595.003	pH	pH Units	0.1	7.3	7.415	98 - 102	99
LB218596.003	pH	pH Units	0.1	7.3	7.415	98 - 102	99
LB218597.003	pH	pH Units	0.1	7.4	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 end of this report for failure reasons.

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

- * 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.

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

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This test report shall not be reproduced, except in full.

unless otherwise required.

SGS		CHAIN OF CUSTODY & ANALYSIS REQUEST (FOR INTERLAB WORK)										Receiving Laboratory:			Sydney – Project Group											
Initiating Laboratory:		Initiating Contact:																								
Final Report Required:		Yes / No / NATA			Prelim Report Due:						Special Prices Apply:			Yes / No												
Send to:		Sydney Project Group/Client			Final Report Due:			estimate			Quote No:			Client:** Project												
ORORA (Amcors) Recycling																										
Address To:		Matrix			Preservation Method			Analysis Subcontracted to Env.			Analysis Performed by Project Group															
SGS LIMS Job No		ENV No: SP033156																								
Sample No.	Description	Water	Soil	Other			Ice	Acid	Other	None	BOD 5	COD	TDS	Dissolved Calcium	TDS(EC)	EC										
1	Orora (Amcors) Recycling - Effluent 09/02/2021	X								X	X	X	X	X	X											
Relinquished By:		BT			Date/Time:			10/02/2021			Received By:			Date/Time: 10/02/21 02.10												

SGS EHS Sydney COC
SE216374



NOTES Please use sparingly, priority tests to be confirmed by Elsa ** Special Pricces, Quotes, Clients **MUST BE** Referred to.

For solid samples, please report "as received" basis unless otherwise required



SAMPLE RECEIPT ADVICE

SE216374

CLIENT DETAILS

Contact Bob Maghbooli
Client ORORA LIMITED
Address 1891 BOTANY ROAD
NSW 2036

Telephone 61 2 96953472
Facsimile (Not specified)
Email Andres.Haluska@sgs.com

Project **SP033156 - Amcor Recycling - Effluent**
Order Number **45430776 - SP033156**
Samples 1

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 Wed 10/2/2021
Report Due Wed 17/2/2021
SGS Reference **SE216374**

SUBMISSION DETAILS

This is to confirm that 1 sample was received on Wednesday 10/2/2021. Results are expected to be ready by COB Wednesday 17/2/2021. Please quote SGS reference SE216374 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	None
Samples received in correct containers	Yes	Sample counts by matrix	1 Water
Date documentation received	10/2/2021	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	N/A
Sample temperature upon receipt	20.3°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. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.



SAMPLE RECEIPT ADVICE

SE216374

CLIENT DETAILS

Client **ORORA LIMITED**

Project **SP033156 - Amcor Recycling - Effluent**

SUMMARY OF ANALYSIS

No.	Sample ID	BOD5	COD in Water	Conductivity and TDS by Calculation - Water	Metals in Water (Dissolved) by ICPOES	Total Dissolved Solids (TDS) in water
001	Orora (Amcor) Recycling-Effluent 09/02/	1	1	2	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.