



Job No: 8599/107
Our Ref: 8599/107-AB
10 October 2023

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

Attention: Mr S Wong

Dear Sir

re: **Newpark – Precinct 7 – Stage 7E**
Marsden Park
Exposure Classification Report

At your request, Geotech Testing Pty Ltd conducted a salinity and aggressivity assessment at the above site after completion of earthworks. A total of eighty-three (83) lots are covered in this report (Lots 8301 to 8383).

Field Work

Field work for the investigation was carried out under the full-time supervision of a Geotechnical Engineer on 13 September 2023, and consisted of excavation of thirty-six (36) test pits (TP1 to TP36) using a rubber-tired backhoe to depths in the order of 1.5m or prior refusal on weathered bedrock. The locations of the test pits are shown on the attached Drawing No 9493/13-AA1. A summary of the field data obtained is also attached.

Site Conditions

The site is of rectangular shape located off Abell Road and Stoney Creek Road, Marsden Park. The site is bound by sandstone block retaining wall to the west, existing Stage 7F to the south, construction of single/dual storey buildings to the east and open grassland with forestry to the south. The topography of the site is relatively flat with gentle slopes downwards from Abell Road westbound. At the time of investigation, bulk earthworks and construction of internal roads were completed. Site activities include ongoing earthworks and construction of retaining wall. Stockpiles consist of topsoil/fill, construction materials and sandstone blocks. Waterway/dam visible to the far north.

Sub-surface Conditions

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

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Table 1: Sub-surface Conditions

Test Pit	Termination Depth (m)	Fill (m)
TP1	1.5	0.0-1.5
TP2	1.5	0.0-1.5
TP3	1.5	0.0-1.5
TP4	1.5	0.0-1.5
TP5	1.5	0.0-1.5
TP6	1.5	0.0-1.5
TP7	1.5	0.0-1.5
TP8	1.5	0.0-1.5
TP9	1.5	0.0-1.5
TP10	1.5	0.0-1.5
TP11	1.5	0.0-1.5
TP12	1.5	0.0-1.5
TP13	1.5	0.0-1.5
TP14	1.5	0.0-1.5
TP15	1.5	0.0-1.5
TP16	1.5	0.0-1.5
TP17	1.5	0.0-1.5
TP18	1.5	0.0-1.5
TP19	1.5	0.0-1.5
TP20	1.5	0.0-1.5
TP21	1.5	0.0-1.5
TP22	1.5	0.0-1.5
TP23	1.5	0.0-1.5
TP24	1.5	0.0-1.5
TP25	1.5	0.0-1.5
TP26	1.5	0.0-1.5
TP27	1.5	0.0-1.5
TP28	1.5	0.0-1.5
TP29	1.5	0.0-1.5
TP30	1.5	0.0-1.5
TP31	1.5	0.0-1.5
TP32	1.5	0.0-1.5
TP33	1.5	0.0-1.5
TP34	1.5	0.0-1.5
TP35	1.5	0.0-1.5
TP36	1.5	0.0-1.5

NE: Not encountered to the termination depth

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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.

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

Fill	Silty Clay, medium plasticity, brown mottled orange, with gravel Gravelly Clay, medium to high plasticity, brown mottled grey-orange, fine to cobbled gravel, trace sand, fragments of siltstone Sandy gravel, fine to coarse grained, brown grey, fine grained sands, trace clay Clayey Gravel, fine to coarse grained, brown mottled grey, fines of medium plasticity clays, with sand, trace cobbles
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Exposure Classification

Laboratory Testing

During field work, 36 soil samples were collected for chemical testing in the NATA accredited laboratory of SGS for salinity and acidity properties. The laboratory test results certificates from SGS are attached and are summarised below in Table 2.

Table 2: Laboratory Tests Results

Test Pit	Depth (m)	PH	EC (µS/cm)	soil description	MF	ECe (dS/m)	Exposure Classification
TP1	0.5-1.0	5.2	340	medium plasticity silty clay	8	2.72	A2
TP2	0.5-1.0	5.1	420	medium plasticity silty clay	8	3.36	A2
TP3	0.5-1.0	4.9	250	medium plasticity silty clay	8	2	A2
TP4	0.5-1.0	4.8	270	medium plasticity silty clay	8	2.16	A2
TP5	0.5-1.0	5	830	medium plasticity silty clay	8	6.64	A2
TP6	0.5-1.0	3.8	380	medium plasticity silty clay	8	3.04	B2
TP7	0.5-1.0	8.5	260	medium plasticity silty clay	8	2.08	A1
TP8	0.5-1.0	7.5	410	medium plasticity silty clay	8	3.28	A1
TP9	0.5-1.0	7.8	330	medium plasticity silty clay	8	2.64	A1
TP10	0.5-1.0	5	550	medium plasticity silty clay	8	4.4	A2
TP11	0.5-1.0	7.7	240	medium plasticity silty clay	8	1.92	A1
TP12	0.5-1.0	7.5	350	medium plasticity silty clay	8	2.8	A1
TP13	0.5-1.0	7	260	medium plasticity silty clay	8	2.08	A1
TP14	0.5-1.0	8.2	360	medium plasticity silty clay	8	2.88	A1
TP15	0.5-1.0	8.5	520	medium plasticity silty clay	8	4.16	A2
TP16	0.5-1.0	8.4	200	medium plasticity silty clay	8	1.6	A1
TP17	0.5-1.0	7.3	360	medium plasticity silty clay	8	2.88	A1
TP18	0.5-1.0	7.5	230	medium plasticity silty clay	8	1.84	A1
TP19	0.5-1.0	7.9	250	medium plasticity silty clay	8	2	A1
TP20	0.5-1.0	7.6	220	medium plasticity silty clay	8	1.76	A1

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Test Pit	Depth (m)	PH	EC (µS/cm)	soil description	MF	ECe (dS/m)	Exposure Classification
TP21	0.5-1.0	7.4	400	medium plasticity silty clay	8	3.2	A1
TP22	0.5-1.0	7.1	410	medium plasticity silty clay	8	3.28	A1
TP23	0.5-1.0	5.8	310	medium plasticity silty clay	8	2.48	A1
TP24	0.5-1.0	7.6	470	medium plasticity silty clay	8	3.76	A1
TP25	0.5-1.0	4.8	320	medium plasticity silty clay	8	2.56	A2
TP26	0.5-1.0	6.5	190	medium plasticity silty clay	8	1.52	A1
TP27	0.5-1.0	5.6	160	medium plasticity silty clay	8	1.28	A1
TP28	0.5-1.0	7.3	320	medium plasticity silty clay	8	2.56	A1
TP29	0.5-1.0	5.3	420	medium plasticity silty clay	8	3.36	A2
TP30	0.5-1.0	4.9	560	medium plasticity silty clay	8	4.48	A2
TP31	0.5-1.0	6.5	520	medium plasticity silty clay	8	4.16	A2
TP32	0.5-1.0	7.6	470	medium plasticity silty clay	8	3.76	A1
TP33	0.5-1.0	7.9	270	medium plasticity silty clay	8	2.16	A1
TP34	0.5-1.0	5.4	110	medium plasticity silty clay	8	0.88	A2
TP35	0.5-1.0	5.9	120	medium plasticity silty clay	8	0.96	A1
TP36	0.5-1.0	5.3	350	medium plasticity silty clay	8	2.8	A2

* The multiplication factor (MF) is a function of the soil texture and description (Site Investigations for Urban Salinity - 2002)
 EC_e (Corrected Electrical Conductivity) = MF x EC

Specifications

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

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

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

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

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

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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) Stage 7E

Lot	Exposure Classification	Lot	Exposure Classification	Lot	Exposure Classification
8301	A1	8329	A2	8357	A2
8302	A1	8330	B2	8358	A2
8303	A1	8331	A1	8359	A2
8304	A1	8332	A1	8360	A1
8305	A1	8333	A1	8361	A1
8306	A1	8334	A1	8362	A1
8307	A1	8335	A1	8363	A1
8308	A1	8336	A1	8364	A2
8309	A1	8337	A2	8365	A2
8310	A1	8338	A2	8366	A1
8311	A1	8339	A2	8367	A1
8312	A1	8340	A2	8368	A1
8313	A1	8341	A1	8369	A1
8314	A1	8342	A1	8370	A1
8315	A1	8343	A1	8371	A1
8316	A1	8344	A1	8372	A1
8317	A1	8345	A1	8373	A1
8318	A2	8346	A1	8374	A1
8319	A2	8347	A1	8375	A1
8320	A2	8348	A1	8376	A1
8321	A2	8349	A1	8377	A1
8322	A2	8350	A1	8378	A1
8323	A2	8351	A2	8379	A1
8324	A2	8352	A1	8380	A1
8325	B2	8353	A1	8381	A1
8326	A1	8354	A2	8382	A1
8327	A2	8355	A2	8383	A1
8328	A2	8356	A2		

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

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

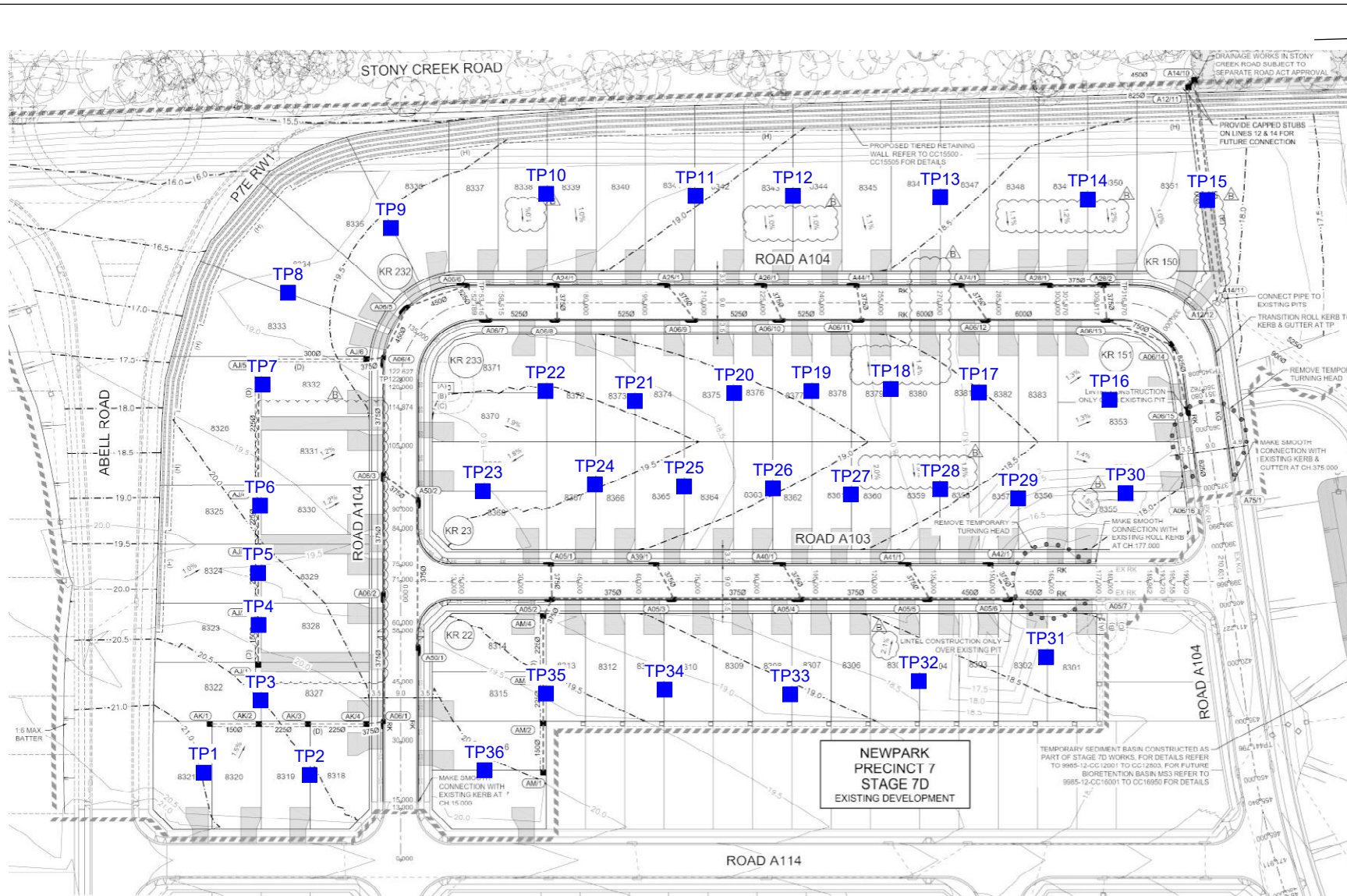
If you have any questions, please do not hesitate to contact the undersigned.

Yours faithfully
GEOTECH TESTING PTY LTD



JOE CHEN
Geotechnical Engineer

Attached Drawing No 8599/107-AA1 - Test Pit Location Plan
Table A – Summary of Test Pits
SGS Laboratory Test Results



LEGEND

■ Test Pit



34 Borec Road
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NSW 2750
ABN 71 076 676 321

Ph: 02 4722 2744
e-mail: info@geotech.com.au
www.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
Newpark Precinct 7E
Marsden Park

Test Pit Locations

Drawing No: 8599/107-AA1
Job No: 8599/107
Drawn By: MH
Date: 19 September 2023
Checked By: JC

File No: 8599-107
Layers: 0, AA1

TABLE A

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TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP1	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse grained gravel, trace sand, M=PL, well compacted
TP2	0.0-0.6	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse grained gravel, trace sand, M=PL, well compacted
	0.6-1.5		FILL: Gravelly Clay, high plasticity, red brown mottled orange, fine to coarse grained gravel, M≥PL, well compacted
TP3	0.0-1.5	0.5-1.0 (DS) 0.6-0.8 (DS)	FILL: Gravelly Clay, high plasticity, red brown mottled orange, fine to coarse grained gravel, trace sub-rounded cobbles, M≤PL, well compacted
TP4	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, high plasticity, red brown mottled orange, fine to coarse grained gravel, trace sand, M<PL, well compacted
TP5	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse grained gravel, trace sub-rounded cobbles, trace sand, M<PL, well compacted
TP6	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse grained gravel, trace sand, M≤PL, well compacted
TP7	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, high plasticity, red brown mottled orange, fine to coarse grained gravel, trace sand, M≤PL, well compacted
TP8	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse grained gravel, trace sand, trace cobbles, M≤PL, well compacted
TP9	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse gravel, fragments of siltstones and sand, M≤PL, well compacted
TP10	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, fragments of siltstones, trace sand, M≤PL, well compacted

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TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP11	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse gravel, fragments of siltstone, trace sand, M \leq PL, well compacted
TP12	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, trace cobble, M \leq PL, well compacted
TP13	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, trace sand, M \leq PL, well compacted
TP14	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, trace sand, M \leq PL, well compacted
TP15	0.0-1.5	0.5-1.0 (DS) 0.2-0.5 (U ₅₀)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, M \leq PL, well compacted
TP16	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse gravel, with sand, trace cobbles, M \leq PL, well compacted
TP17	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, with siltstone fragments, M \leq PL, well compacted
TP18	0.0-1.5	0.5-1.0 (DS) 0.3-0.7 (Atterberg)	FILL: Gravelly Clay, high plasticity, brown mottled grey, fine to coarse gravel, trace sand, M $<$ PL, well compacted
TP19	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse gravel, trace cobble, M \leq PL, well compacted
TP20	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, trace cobble fragments, M \leq PL, well compacted
TP21	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, trace cobble fragments and sand, M \leq PL, well compacted

TABLE A

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TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP22	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, trace sand and cobbles fragments, M _s PL, well compacted
TP23	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, trace cobble and sand, M _s PL, well compacted @1.0m colour change to dark grey
TP24	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse gravel, trace sand, M _s PL, well compacted
TP25	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel and trace sand, M _s PL, well compacted
TP26	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel and trace sand, M _s PL, well compacted @ 0.7 to 1.2m sandy gravel, brown grey
TP27	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, trace sand, M _s PL, well compacted
TP28	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse gravel, trace sand, M _s PL, well compacted
TP29	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, trace sand, M _s PL, well compacted
TP30	0.0-1.5	0.5-1.0 (DS)	FILL: Clayey Gravel, fine to coarse grained, brown mottled grey, fines of medium plasticity clays, with sand, trace cobbles, M _s PL, well compacted
TP31	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravel, trace sand and cobbles, M _s PL, well compacted

TABLE A

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TEST PIT	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP32	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, red brown mottled orange, fine to coarse gravels, trace sand, cobbles fragments, M _s PL, well compacted
TP33	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse gravels, trace sand, M _s PL, well compacted
TP34	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse gravels, trace sand, M _s PL, well compacted
TP35	0.0-1.5	0.5-1.0 (DS)	FILL: Gravelly Clay, medium to high plasticity, brown mottled grey, fine to coarse gravels, trace sand, M _s PL, well compacted
TP36	0.0-1.5	0.5-1.0 (DS) 0.4-0.8 (DS)	FILL: Gravelly Clay, high plasticity, brown mottled grey, fine to coarse gravels, trace sand, M _s PL, well compacted

CLIENT DETAILS

Contact **Joe Chen**
 Client **Geotechnique**
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 Project **8599/MARSDEN PARK**
 Order Number **8599/107**
 Samples **36**

LABORATORY DETAILS

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 Laboratory **SGS Alexandria Environmental**
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 SGS Reference **SE253859 R0**
 Date Received **14/9/2023**
 Date Reported **21/9/2023**

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



Ying Ying ZHANG
 Laboratory Technician

pH in soil (1:5) [AN101] Tested: 21/9/2023

			TP1	TP2	TP3	TP4	TP5
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.001	SE253859.002	SE253859.003	SE253859.004	SE253859.005
pH	pH Units	0.1	5.2	5.1	4.9	4.8	5.0

			TP6	TP7	TP8	TP9	TP10
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.006	SE253859.007	SE253859.008	SE253859.009	SE253859.010
pH	pH Units	0.1	3.8	8.5	7.5	7.8	5.0

			TP11	TP12	TP13	TP14	TP15
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.011	SE253859.012	SE253859.013	SE253859.014	SE253859.015
pH	pH Units	0.1	7.7	7.5	7.0	8.2	8.5

			TP16	TP17	TP18	TP19	TP20
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.016	SE253859.017	SE253859.018	SE253859.019	SE253859.020
pH	pH Units	0.1	8.4	7.3	7.5	7.9	7.6

			TP21	TP22	TP23	TP24	TP25
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.021	SE253859.022	SE253859.023	SE253859.024	SE253859.025
pH	pH Units	0.1	7.4	7.1	5.8	7.6	4.8

			TP26	TP27	TP28	TP29	TP30
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.026	SE253859.027	SE253859.028	SE253859.029	SE253859.030
pH	pH Units	0.1	6.5	5.6	7.3	5.3	4.9

			TP31	TP32	TP33	TP34	TP35
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.031	SE253859.032	SE253859.033	SE253859.034	SE253859.035
pH	pH Units	0.1	6.5	7.6	7.9	5.4	5.9

pH in soil (1:5) [AN101] Tested: 21/9/2023 (continued)

			TP36
			SOIL
			0.5-1.0
			12/9/2023
PARAMETER	UOM	LOR	SE253859.036
pH	pH Units	0.1	5.3

Conductivity and TDS by Calculation - Soil [AN106] Tested: 21/9/2023

PARAMETER	UOM	LOR	TP1	TP2	TP3	TP4	TP5
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.5-1.0 12/9/2023 SE253859.001	0.5-1.0 12/9/2023 SE253859.002	0.5-1.0 12/9/2023 SE253859.003	0.5-1.0 12/9/2023 SE253859.004	0.5-1.0 12/9/2023 SE253859.005
Conductivity of Extract (1:5 as received)	µS/cm	1	280	330	220	230	720
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	340	420	250	270	830

PARAMETER	UOM	LOR	TP6	TP7	TP8	TP9	TP10
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.5-1.0 12/9/2023 SE253859.006	0.5-1.0 12/9/2023 SE253859.007	0.5-1.0 12/9/2023 SE253859.008	0.5-1.0 12/9/2023 SE253859.009	0.5-1.0 12/9/2023 SE253859.010
Conductivity of Extract (1:5 as received)	µS/cm	1	310	230	370	270	430
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	380	260	410	330	550

PARAMETER	UOM	LOR	TP11	TP12	TP13	TP14	TP15
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.5-1.0 12/9/2023 SE253859.011	0.5-1.0 12/9/2023 SE253859.012	0.5-1.0 12/9/2023 SE253859.013	0.5-1.0 12/9/2023 SE253859.014	0.5-1.0 12/9/2023 SE253859.015
Conductivity of Extract (1:5 as received)	µS/cm	1	220	310	230	320	470
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	240	350	260	360	520

PARAMETER	UOM	LOR	TP16	TP17	TP18	TP19	TP20
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.5-1.0 12/9/2023 SE253859.016	0.5-1.0 12/9/2023 SE253859.017	0.5-1.0 12/9/2023 SE253859.018	0.5-1.0 12/9/2023 SE253859.019	0.5-1.0 12/9/2023 SE253859.020
Conductivity of Extract (1:5 as received)	µS/cm	1	180	330	210	230	200
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	200	360	230	250	220

PARAMETER	UOM	LOR	TP21	TP22	TP23	TP24	TP25
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.5-1.0 12/9/2023 SE253859.021	0.5-1.0 12/9/2023 SE253859.022	0.5-1.0 12/9/2023 SE253859.023	0.5-1.0 12/9/2023 SE253859.024	0.5-1.0 12/9/2023 SE253859.025
Conductivity of Extract (1:5 as received)	µS/cm	1	370	380	280	430	290
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	400	410	310	470	320

PARAMETER	UOM	LOR	TP26	TP27	TP28	TP29	TP30
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.5-1.0 12/9/2023 SE253859.026	0.5-1.0 12/9/2023 SE253859.027	0.5-1.0 12/9/2023 SE253859.028	0.5-1.0 12/9/2023 SE253859.029	0.5-1.0 12/9/2023 SE253859.030
Conductivity of Extract (1:5 as received)	µS/cm	1	170	140	290	380	520
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	190	160	320	420	560

PARAMETER	UOM	LOR	TP31	TP32	TP33	TP34	TP35
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.5-1.0 12/9/2023 SE253859.031	0.5-1.0 12/9/2023 SE253859.032	0.5-1.0 12/9/2023 SE253859.033	0.5-1.0 12/9/2023 SE253859.034	0.5-1.0 12/9/2023 SE253859.035
Conductivity of Extract (1:5 as received)	µS/cm	1	480	430	240	100	100
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	520	470	270	110	120

Conductivity and TDS by Calculation - Soil [AN106] Tested: 21/9/2023 (continued)

			TP36
			SOIL
			0.5-1.0
			12/9/2023
PARAMETER	UOM	LOR	SE253859.036
Conductivity of Extract (1:5 as received)	µS/cm	1	320
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	350

Moisture Content [AN002] Tested: 19/9/2023

			TP1	TP2	TP3	TP4	TP5
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.001	SE253859.002	SE253859.003	SE253859.004	SE253859.005
% Moisture	%w/w	1	18.3	20.1	12.4	13.2	13.5

			TP6	TP7	TP8	TP9	TP10
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.006	SE253859.007	SE253859.008	SE253859.009	SE253859.010
% Moisture	%w/w	1	17.3	12.0	9.0	16.1	22.1

			TP11	TP12	TP13	TP14	TP15
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.011	SE253859.012	SE253859.013	SE253859.014	SE253859.015
% Moisture	%w/w	1	9.3	11.6	13.5	10.6	8.5

			TP16	TP17	TP18	TP19	TP20
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.016	SE253859.017	SE253859.018	SE253859.019	SE253859.020
% Moisture	%w/w	1	10.9	7.3	9.5	7.1	10.0

			TP21	TP22	TP23	TP24	TP25
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.021	SE253859.022	SE253859.023	SE253859.024	SE253859.025
% Moisture	%w/w	1	7.6	8.4	8.4	8.9	8.5

			TP26	TP27	TP28	TP29	TP30
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.026	SE253859.027	SE253859.028	SE253859.029	SE253859.030
% Moisture	%w/w	1	9.2	9.5	9.2	9.1	7.4

			TP31	TP32	TP33	TP34	TP35
			SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023	SOIL 0.5-1.0 12/9/2023
PARAMETER	UOM	LOR	SE253859.031	SE253859.032	SE253859.033	SE253859.034	SE253859.035
% Moisture	%w/w	1	8.8	8.4	10.9	8.9	11.0

Moisture Content [AN002] Tested: 19/9/2023 (continued)

			TP36
			SOIL
			0.5-1.0
			12/9/2023
PARAMETER	UOM	LOR	SE253859.036
% Moisture	%w/w	1	9.8

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.

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CLIENT DETAILS

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Project	8599/MARSDEN PARK	SGS Reference	SE253859 R0
Order Number	8599/107	Date Received	14 Sep 2023
Samples	36	Date Reported	21 Sep 2023

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:

Extraction Date	Conductivity and TDS by Calculation - Soil	36 items
	pH in soil (1:5)	36 items
Analysis Date	Conductivity and TDS by Calculation - Soil	36 items
Duplicate	Conductivity and TDS by Calculation - Soil	2 items
	Conductivity and TDS by Calculation - Soil	2 items

SAMPLE SUMMARY

Sample counts by matrix	36 Soil	Type of documentation received	COC
Date documentation received	14/9/2023@01:53PI	Samples received in good order	Yes
Samples received without headspace	N/A	Sample temperature upon receipt	20.7°C
Sample container provider	Client	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	None	Samples clearly labelled	Yes
Complete documentation received	Yes		



HOLDING TIME SUMMARY

SE253859 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

Method: ME-(AU)-ENVJAN106

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE253859.001	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP2	SE253859.002	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP3	SE253859.003	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP4	SE253859.004	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP5	SE253859.005	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP6	SE253859.006	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP7	SE253859.007	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP8	SE253859.008	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP9	SE253859.009	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP10	SE253859.010	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP11	SE253859.011	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP12	SE253859.012	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP13	SE253859.013	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP14	SE253859.014	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP15	SE253859.015	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP16	SE253859.016	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP17	SE253859.017	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP18	SE253859.018	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP19	SE253859.019	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP20	SE253859.020	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP21	SE253859.021	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP22	SE253859.022	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP23	SE253859.023	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP24	SE253859.024	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP25	SE253859.025	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP26	SE253859.026	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP27	SE253859.027	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP28	SE253859.028	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP29	SE253859.029	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP30	SE253859.030	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP31	SE253859.031	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP32	SE253859.032	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP33	SE253859.033	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP34	SE253859.034	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP35	SE253859.035	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†
TP36	SE253859.036	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	19 Sep 2023	21 Sep 2023†

Moisture Content

Method: ME-(AU)-ENVJAN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE253859.001	LB291244	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP2	SE253859.002	LB291244	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP3	SE253859.003	LB291244	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP4	SE253859.004	LB291244	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP5	SE253859.005	LB291244	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP6	SE253859.006	LB291244	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP7	SE253859.007	LB291244	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP8	SE253859.008	LB291244	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP9	SE253859.009	LB291244	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP10	SE253859.010	LB291244	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP11	SE253859.011	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP12	SE253859.012	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP13	SE253859.013	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP14	SE253859.014	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP15	SE253859.015	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP16	SE253859.016	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP17	SE253859.017	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP18	SE253859.018	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP19	SE253859.019	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP20	SE253859.020	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP21	SE253859.021	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023

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
TP22	SE253859.022	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP23	SE253859.023	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP24	SE253859.024	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP25	SE253859.025	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP26	SE253859.026	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP27	SE253859.027	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP28	SE253859.028	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP29	SE253859.029	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP30	SE253859.030	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP31	SE253859.031	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP32	SE253859.032	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP33	SE253859.033	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP34	SE253859.034	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP35	SE253859.035	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023
TP36	SE253859.036	LB291246	12 Sep 2023	14 Sep 2023	26 Sep 2023	19 Sep 2023	24 Sep 2023	21 Sep 2023

pH in soil (1:5)

Method: ME-(AU)-ENVJAN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE253859.001	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP2	SE253859.002	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP3	SE253859.003	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP4	SE253859.004	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP5	SE253859.005	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP6	SE253859.006	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP7	SE253859.007	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP8	SE253859.008	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP9	SE253859.009	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP10	SE253859.010	LB291419	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP11	SE253859.011	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP12	SE253859.012	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP13	SE253859.013	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP14	SE253859.014	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP15	SE253859.015	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP16	SE253859.016	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP17	SE253859.017	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP18	SE253859.018	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP19	SE253859.019	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP20	SE253859.020	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP21	SE253859.021	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP22	SE253859.022	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP23	SE253859.023	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP24	SE253859.024	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP25	SE253859.025	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP26	SE253859.026	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP27	SE253859.027	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP28	SE253859.028	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP29	SE253859.029	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP30	SE253859.030	LB291420	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP31	SE253859.031	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP32	SE253859.032	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP33	SE253859.033	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP34	SE253859.034	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP35	SE253859.035	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023
TP36	SE253859.036	LB291423	12 Sep 2023	14 Sep 2023	19 Sep 2023	21 Sep 2023†	22 Sep 2023	21 Sep 2023

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)-ENVJAN106

Sample Number	Parameter	Units	LOR	Result
LB291419.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.9
LB291420.001	Conductivity of Extract (1:5 as received)	µS/cm	1	1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	1.03
LB291423.001	Conductivity of Extract (1:5 as received)	µS/cm	1	<1
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.62

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 %
SE253858.008	LB291419.014	Conductivity of Extract (1:5 as received)	µS/cm	1	25	26	38	3
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	31	32	36	3
SE253859.010	LB291419.025	Conductivity of Extract (1:5 as received)	µS/cm	1	430	500	30	14
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	550	640	30	14
SE253859.020	LB291420.014	Conductivity of Extract (1:5 as received)	µS/cm	1	200	300	31	42 @
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	220	330	31	42 @
SE253859.030	LB291420.025	Conductivity of Extract (1:5 as received)	µS/cm	1	520	510	30	3
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	560	550	30	3
SE253859.036	LB291423.026	Conductivity of Extract (1:5 as received)	µS/cm	1	320	460	31	36 @
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	350	510	30	36 @
SE253883.004	LB291423.014	Conductivity of Extract (1:5 as received)	µS/cm	1	22	25	38	12
		Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	24	27	38	12

Moisture Content

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE253858.008	LB291244.011	% Moisture	%w/w	1	17.3	17.2	36	1
SE253859.010	LB291244.022	% Moisture	%w/w	1	22.1	18.1	35	20
SE253859.020	LB291246.011	% Moisture	%w/w	1	10.0	9.2	40	9
SE253859.030	LB291246.022	% Moisture	%w/w	1	7.4	7.6	43	3
SE253859.036	LB291246.029	% Moisture	%w/w	1	9.8	9.8	40	0

pH in soil (1:5)

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

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE253858.008	LB291419.014	pH	pH Units	0.1	6.6	6.5	32	1
SE253859.010	LB291419.025	pH	pH Units	0.1	5.0	5.2	32	3
SE253859.020	LB291420.014	pH	pH Units	0.1	7.6	7.3	31	4
SE253859.030	LB291420.025	pH	pH Units	0.1	4.9	5.0	32	1
SE253859.036	LB291423.026	pH	pH Units	0.1	5.3	5.8	32	8
SE253883.004	LB291423.014	pH	pH Units	0.1	7.3	7.4	31	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]JAN106

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB291419.002	Conductivity of Extract (1:5 as received)	µS/cm	1	310	303	85 - 115	101
	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	101
LB291420.002	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
LB291423.002	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

pH in soil (1:5)

Method: ME-(AU)-[ENV]JAN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB291419.003	pH	pH Units	0.1	7.4	7.415	98 - 102	99
LB291420.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100
LB291423.003	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: $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$

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: $MAD = 100 \times SDL / Mean + LR$

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.

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.

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GEOTECH TESTING PTY LTD

Laboratory Test Request / Chain of Custody Record

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 email: info@geotech.com.au

Tel: (02) 4722 2700
 PENRITH NSW 2751
 Project Manager: JC

TO: **SGS ENVIRONMENTAL SERVICES**
 UNIT 16
 33 MADDOX STREET
 ALEXANDRIA NSW 2015

PH: 02 8594 0400
 ATTN: Ms Emily Yin
 FAX: 02 8594 0499

Project Manager: JC
 Location: MARSDEN PARK

Sampling details										Results required by:		
Location	Depth	Soil	Water	EC (1:5)	pH	Sulphate	Chloride	ESP	Notes	Keep Sample		
TP1	0.5-1.0	DSP		✓	✓				ESP=Exchangeable Sodium Percentage			
TP2	0.5-1.0	DSP		✓	✓							
TP3	0.5-1.0	DSP		✓	✓							
TP4	0.5-1.0	DSP		✓	✓							
TP5	0.5-1.0	DSP		✓	✓							
TP6	0.5-1.0	DSP		✓	✓							
TP7	0.5-1.0	DSP		✓	✓							
TP8	0.5-1.0	DSP		✓	✓							
TP9	0.5-1.0	DSP		✓	✓							
TP10	0.5-1.0	DSP		✓	✓							
TP11	0.5-1.0	DSP		✓	✓							
TP12	0.5-1.0	DSP		✓	✓							
TP13	0.5-1.0	DSP		✓	✓							
TP14	0.5-1.0	DSP		✓	✓							
TP15	0.5-1.0	DSP		✓	✓							
TP16	0.5-1.0	DSP		✓	✓							
TP17	0.5-1.0	DSP		✓	✓							
TP18	0.5-1.0	DSP		✓	✓							
TP19	0.5-1.0	DSP		✓	✓							
TP20	0.5-1.0	DSP		✓	✓							
TP21	0.5-1.0	DSP		✓	✓							
TP22	0.5-1.0	DSP		✓	✓							
TP23	0.5-1.0	DSP		✓	✓							
TP24	0.5-1.0	DSP		✓	✓							
TP25	0.5-1.0	DSP		✓	✓							

Please Use Geotechnical Engineering Template for Reporting

Relinquished by: Name: Joe, Signature: JC, Date: 12/09/2023

Received by: Name: [Signature], Signature: [Signature]

Legend:
 W/G Form No 4.7F2-5 SGS USG Undisturbed soil sample (glass jar) ✓ DSP Disturbed soil sample (small plastic bag) * Purge & Trap
 W/P DSG Disturbed soil sample (glass jar) Test required # Geotechnique Screen



CLIENT DETAILS

Contact **Joe Chen**
 Client **Geotech Testing Pty Ltd**
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 PENRITH NSW 2751**

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 Facsimile **02 4722 6161**
 Email **joe@geotech.com.au**

Project **8599/MARSDEN PARK**
 Order Number **8599/107**
 Samples **36**

LABORATORY DETAILS

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Samples Received **Thu 14/9/2023**
 Report Due **Thu 21/9/2023**
 SGS Reference **SE253859**

SUBMISSION DETAILS

This is to confirm that 36 samples were received on Thursday 14/9/2023. Results are expected to be ready by COB Thursday 21/9/2023. Please quote SGS reference SE253859 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	36 Soil	Type of documentation received	COC
Date documentation received	14/9/2023@01:53PM	Samples received in good order	Yes
Samples received without headspace	N/A	Sample temperature upon receipt	20.7°C
Sample container provider	Client	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	None	Samples clearly labelled	Yes
Complete documentation received	Yes		

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 **Geotech Testing Pty Ltd**

Project **8599/MARSDEN PARK**

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	Moisture Content	pH in soil (1:5)
001	TP1 0.5-1.0	2	1	1
002	TP2 0.5-1.0	2	1	1
003	TP3 0.5-1.0	2	1	1
004	TP4 0.5-1.0	2	1	1
005	TP5 0.5-1.0	2	1	1
006	TP6 0.5-1.0	2	1	1
007	TP7 0.5-1.0	2	1	1
008	TP8 0.5-1.0	2	1	1
009	TP9 0.5-1.0	2	1	1
010	TP10 0.5-1.0	2	1	1
011	TP11 0.5-1.0	2	1	1
012	TP12 0.5-1.0	2	1	1
013	TP13 0.5-1.0	2	1	1
014	TP14 0.5-1.0	2	1	1
015	TP15 0.5-1.0	2	1	1
016	TP16 0.5-1.0	2	1	1
017	TP17 0.5-1.0	2	1	1
018	TP18 0.5-1.0	2	1	1
019	TP19 0.5-1.0	2	1	1
020	TP20 0.5-1.0	2	1	1
021	TP21 0.5-1.0	2	1	1
022	TP22 0.5-1.0	2	1	1
023	TP23 0.5-1.0	2	1	1
024	TP24 0.5-1.0	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 **Geotech Testing Pty Ltd**

Project **8599/MARSDEN PARK**

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	Moisture Content	pH in soil (1:5)
025	TP25 0.5-1.0	2	1	1
026	TP26 0.5-1.0	2	1	1
027	TP27 0.5-1.0	2	1	1
028	TP28 0.5-1.0	2	1	1
029	TP29 0.5-1.0	2	1	1
030	TP30 0.5-1.0	2	1	1
031	TP31 0.5-1.0	2	1	1
032	TP32 0.5-1.0	2	1	1
033	TP33 0.5-1.0	2	1	1
034	TP34 0.5-1.0	2	1	1
035	TP35 0.5-1.0	2	1	1
036	TP36 0.5-1.0	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.