12 February 2025

Our Reference: MM-02B Otello 42-46 Unley Road_DR001

Ms Zoe Steele
Development Manager
Otello
5-9 Rundle St, Kent Town SA 5067
By email: zoe@otello.com.au

RE: 42-46 Unley Road, Unley: Results of Soil Vapour Testing

Dear Zoe,

1. INTRODUCTION

Land & Water Consulting (LWC) was engaged by Otello to undertake a desk top preliminary site investigation (PSI) of 42 – 46 Unley Road, Unley, South Australia (the Site) which was completed 11 April 2023.

The PSI identified:

- The Site was previously used for commercial purposes over time – whereas the existing main eastern Site building was constructed sometime prior to 1935 (and was most recently used as office and showroom space), the western warehouse was constructed during the 1980s (and most recently used for storage purposes).
- With reference to Schedule 3 of the *Environment Protection Regulations 2009* and Schedule 1 of Practice Direction 14, no potentially contaminating activities (PCAs) have been identified as having occurred on the Site.
- Although the following may have been undertaken on the Site, none of these activities are considered likely to represent a potential risk of significant harm with respect to on-site human or environmental receptors under the proposed land use scenario or to represent a potential source of off-site contamination:
    - possible historical importation of soil or fill materials – only considered as a PCA under Schedule 3 of the *Environment Protection Regulations 2009* (but not Schedule 1 of Practice Direction 14) if the material was sourced from another site at which a PCA had occurred;
    - possible historical use of termiticides beneath building slabs;

- possible use of asbestos building products and/or lead-based paints in buildings; and/or
- possible use of weedicides in any unpaved areas.

- For the purposes of Practice Direction 14, which specifies that only Class 1 activities undertaken within 60 m of the Site need to be considered, the following (historical) off-site PCAs have been identified as representing potential off-site sources of Site contamination:
  - several dry cleaning facilities;
  - a metal coating, finishing or spray painting business;
  - a service station;
  - a tyre retreading and/or vulcanising business; and
  - a printing works.
- Although none of the surrounding properties are listed on the SA EPA Site Contamination Index (i.e. of having been notified with respect to identified groundwater contamination), the occurrence of multiple Class 1 PCAs within 60 m of the Site could have resulted in groundwater impacts (possibly including volatile contaminants) that may extend beneath the Site.
- Should volatile contaminants be present within groundwater as a result of the identified off-site PCAs, this could represent a potential source of vapour intrusion into future indoor air spaces on the Site.
- The following were taken into account when assessing potential exposure pathways:
  - future access to soils by Site occupants (i.e. residents and commercial workers) is likely to be limited due to the presence of building slabs and paving;
  - given the proposed use of the Site, and the fact that that a water mains supply is available, future groundwater extraction for any beneficial use is considered unlikely; and
  - as the proposed Site development is all slab on grade, with no basements or other underground features, and the depth to groundwater is assumed to be ≥ 5 m BGL, it is unlikely that the uppermost aquifer will be intercepted during future construction/ maintenance works.

- Whereas the health and safety of the Site construction workers can be covered via the development and instigation of an appropriate Construction Environmental Management Plan (CEMP), future maintenance workers would be expected to adhere to standard Occupational Health & Safety (OH&S) procedures.

For the purposes of Schedule 2 of Practice Direction 14, it was considered that site contamination **may exist** with respect to the proposed sensitive land use (*Item 1: Residential class 1*) – i.e. although there were no identified on-site Class 1, 2 or 3 activities, a number of **off-site** Class 1 activities have been identified as historically undertaken within 60 m of the Site.

Based on the results of the recent PSI, it was recommended that:

- a soil vapour assessment be undertaken at the Site, specifically targeting future indoor air spaces; and
- a CEMP be prepared, and instigated, for the proposed development program.

2. SOIL VAPOUR ASSESSMENT

On 24 January 2025, four soil vapour pins (VP1-4) SGS Australia installed sub-slab vapour pins through concrete slabs located external to the current building, within the footprint of the Site.

The 'sub-slab soil vapour sampling methodology' was adopted to assess vapour concentrations accumulating directly beneath the concrete slab and to target potential shallow off-site sources of volatile contaminants, identified within the 60 m Site buffer zone per the PSI (LWC, 2023).

Each vapour cannister was immediately placed into a chilled esky for transport to the laboratories under standard LWC Chain of Custody protocols which are consistent with the requirements of Schedule B(2) of the ASC NEPM.

All samples were clearly labelled with unique sample identification numbers consisting of the sampling organisation, deployment and retrieval date, climate conditions and project number.

Field QA/QC samples included the following:

- A minimum of one blind coded intra-laboratory duplicate.
- The use of isopropyl alcohol (IPA) shrouding, to identify if leaks occurred during soil vapour sampling.

The sampling canisters were shipped by SGS Australia to their laboratory in Melbourne. This laboratory is appropriately National Association of Testing Authorities (NATA) accredited for the requisite analysis.

The soil vapour analytical results are compared with the following tier 1 soil vapour screening criteria for the protection of human health in a low density residential setting:

1. Table 1A(2) "Interim soil vapour health investigation levels for volatile organic chlorinated compounds, Schedule B1 of the National Environment Protection (Assessment of Site Contamination) Measure 2013 ("ASC NEPM").
2. Table 1A(5) "Soil Vapour Health Screening Levels for vapour intrusion" Schedule B1 of the National Environment Protection (Assessment of Site Contamination) Measure 2013 ("ASC NEPM").

Where the above sources were silent with respect to chemical substances reporting above laboratory limit of detection and not represented in ASC NEPM Table 1A(2) or 1A(5): the hierarchy of guideline levels set out in Table 4 of ASC NEPM Schedule B4 was followed as closely as possible (in brief, toxicity assessment prepared/ provided by):

1. National Health and Medical Research Council documents e.g. Australian drinking water guidelines (ADWGs)
2. National Environmental Protection Council documents e.g. NEPM (Air Toxics), NEPM (Ambient Air Quality) and Air Quality Standard Setting Methodology
3. Other Australian Government sources of toxicity criteria
4. South Australia Health
5. World Health Organisation sources
6. International Agency for Research on Cancer (IARC) documents
7. US Agency for Toxic Substances and Disease Registry (ATSDR)
8. Other governmental sources of information on chemicals and risk assessment, e.g. NICNAS priority existing chemical reports, US EPA IRIS database, UK, Health Canada, Dutch, and New Zealand guidance.
9. Other sources of peer reviewed toxicity criteria including other US EPA sources such as the regional screening levels, the PPRTV or HEAST tables on which the regional screening values are based or state-based US agencies such as California EPA, OEHHA etc.
10. Peer reviewed journals.

A summary of alternative screening levels sourced and applied to soil vapour data in Table 1 (at rear) is presented as Table 8-1.

Where values are sourced from U.S. EPA Regional Screening Levels (RSL), note that U.S. EPA convention is to have an incremental lifetime cancer risk (ILCR) risk target level of 1 in 1,000,000 (1E-6). In Australia the ILCR is 1 in 100,000 (1E-5) so where necessary (RSL presented as non-threshold) the RSL is modified to 1E-5 ILCR.

Further, where indoor air criteria (i.e. U.S. EPA RSL) is used to formulate a soil vapour screening criterion, a soil gas to indoor air attenuation factor (AF) of 0.03 is applied to the indoor air value to derive a soil gas screening level. The adopted attenuation factor is 0.03 as per U.S. EPA (2020), which is considered conservative noting Australian tier 1 criteria uses less conservative attenuation factor of 0.005 for petroleum hydrocarbons for soil vapour to indoor air.

Table 2-1 Derived soil vapour screening criteria where not presented in ASC NEPM

Chemical substance	Value (µg/m^3)	Source	Reference / Link
Chloroform	140 = **4,666** after AF of 0.03 applied	WHO Tolerable Concentration for Inhalation (CICAD 58) (2004)	https://www.who.int/ipcs/publications/cicad/en/cicad58.pdf
2-Propanol (or iso-propanol)	210 (threshold hazard quotient of 1) – apply AF of 0.03 = **7,000**	US EPA RSL (based on threshold risk hazard quotient of 1).	https://semspub.epa.gov/work/HQ/400762.pdf

The laboratory data was screened against such criteria in Table 1 (Attachment B at rear). The soil vapour analytical laboratory reports are presented as Attachment C).

Concentrations of vapour analytes were reported either below the respective laboratory limits of reporting (LOR, also referred to as EQL) or below the adopted tier 1 criteria.

3. CONCLUSIONS

No significant concentrations of volatile contaminants were detected from any of the four sub slab vapour pins – all concentrations were below laboratory limits of detection and relevant tier 1 screening criteria for sensitive land use.

There is no indication that any historical offsite potentially contaminating activities have or are affecting the Site. Consequently there is no indication that site contamination exists as a function of offsite activities. The PSI did not identify any relevant on site historical PCA that may be of significance with respect to a proposed future sensitive use (where sensitive is defined in Section 3-1 of the *Environment*

Protection Act 1993). A revised Practice Direction 14 summary of referral triggers is presented below informed by the outcomes of the soil vapour testing.

Table 3-1 Triggers for SA EPA referral

Trigger for SA EPA referral	Yes/No	Detail
Class 1 PCA on-site	**No**	No Class 1 identified on Site via the PSI.
Class 1 PCA off-site, but within 60 m of the Site	**Yes**	However soil vapour testing has identified no relevant / significant concentrations of chemical substances that might migrate onto the Site as a function of offsite activity. Therefore we consider that Class 1 PCA offsite do not present a risk to the proposed future sensitive use of the Site.
Class 2 PCA on-site and proposed use is a sensitive use	**No**	Although the Site is proposed for a sensitive land use, no Class 2 activities have been identified as (or are suspected of) having occurred on the Site.
Section 83A on-site	**No**	There are no Section 83A notifications listed on the Site Contamination Index for the Site or immediate off-site area.
Section 83A off-site, but within 60 m of the Site	**No**	
Site located within a GPA	**No**	The Site is not located within a GPA.
Site included within a notated Site Contamination Audit Report	**No**	The Site has not previously been part of a Site Contamination Audit.

4. LIMITATIONS

Please review the statement of limitations governing this assessment/ report as provided as Attachment D. If you have any questions regarding the above information, please do not hesitate to call the undersigned.

Yours sincerely,

Dr James Fox | Principal Geochemist

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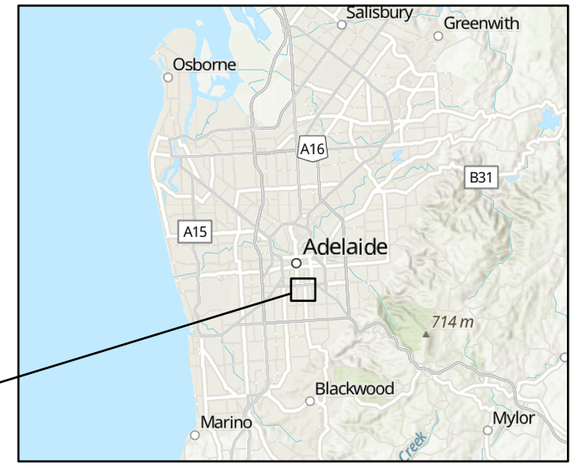
ATTACHMENT A
SOIL VAPOUR PIN LOCATIONS

Land & Water Consulting
Email: enquiries@lwconsulting.com.au
Web: www.lwconsulting.com.au



PROJECT: Preliminary Site Investigation		
FIGURE TITLE: Site Locality Plan		
Site Address: 42-46 Unley Road, Unley, South Australia	FIGURE 1	Date: 28/03/2023
		Projection: GDA2020 Z54
Figure in set: 1 of 2	Revision A	Scale: 1:7,339

N

0 0.050.1 0.2 0.3 0.4
Kilometres

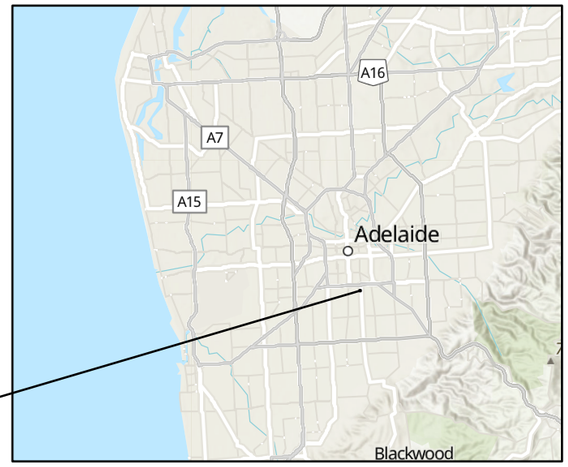
Legend

- Site Boundary

Land Use Generalised 2020

- Agriculture
- Commercial
- Education
- Industry- Food
- Non-Private Residential
- Public Institution
- Recreation
- Reserve
- Residential
- Retail
- Utility
- Vacant
- Vacant Residential

Land & Water Consulting
Email: enquiries@lwconsulting.com.au
Web: www.lwconsulting.com.au



PROJECT: Preliminary Site Investigation		
FIGURE TITLE: Site Layout and Building Locations		
Site Address: 42-46 Unley Road, Unley, South Australia	FIGURE **2**	Date: 28/03/2023
		Projection: GDA2020 Z54
Figure in set: 2 of 2	Revision A	Scale: 1:281

N

0 0 0.01 0.01 0.01 0.02

Kilometres

Legend

- Site Boundary
- Site Features

ATTACHMENT B
TABLE 1 – SOIL VAPOUR RESULTS (TIER 1 SCREEN)

Table 1 - Soil Vapour Pin Analytical Results

Project Reference **MM-02B**
Project **42-46 Unley Road**

Analyte Name	Units	Tier 1 Soil Vapour Criteria for Sensitive Land Use	Sample Name	ME370092.001	ME370092.002	ME370092.003	ME370092.004	ME370092.005	ME370092.006	ME370092.007
			Description	VP3 SC13616	VP4 SC13626	VP1 SC13607	VP1 DUP SC14112	VP4 SC1099	IPA SHROUD 8790	BLANK 8791
			Sample Date	###########	###########	###########	24/1/2025 11:20	###########	24/1/2025	24/1/2025
			Matrix	Canister	Canister	Canister	Canister	Canister	Carbon Tube	Carbon Tube
			Reporting Limit	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
Receipt Pressure (PSIA)	PSIA		0	**12.4**	**12.4**	**13.2**	**13.1**	**12.8**	N.A.	N.A.
Receipt Vacuum (inch Hg below std atmospheric pressure)	Inch Hg		0	**4.49**	**4.49**	**2.86**	**3.06**	**3.67**	N.A.	N.A.
Acrolein	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
Acrylonitrile	µg/m³		0	<10	<8.8	<8.1	<8.3	<8.4	N.A.	N.A.
tert-Amyl Methyl Ether	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
Benzene	µg/m³	**1000 (1)**	0	<2.8	<2.4	<2.3	<2.3	**4.8**	N.A.	N.A.
Bromodichloromethane	µg/m³		0	<5.7	<4.9	<4.5	<4.6	<4.7	N.A.	N.A.
Bromoform	µg/m³		0	<6.8	<5.9	<5.4	<5.6	<5.6	N.A.	N.A.
Bromomethane	µg/m³		0	<5.1	<4.4	<4.1	<4.2	<4.2	N.A.	N.A.
1,3-Butadiene	µg/m³		0	<1.7	<1.5	<1.4	<1.4	<1.4	N.A.	N.A.
2-Butanone (Methyl Ethyl Ketone)	µg/m³		0	<2.8	<2.4	<2.3	<2.3	<2.3	N.A.	N.A.
tert-Butyl Alcohol	µg/m³		0	<2.8	<2.4	<2.3	<2.3	<2.3	N.A.	N.A.
n-Butylbenzene	µg/m³		0	<4.6	<3.9	<3.6	<3.7	<3.7	N.A.	N.A.
sec-Butylbenzene	µg/m³		0	<4.6	<3.9	<3.6	<3.7	<3.7	N.A.	N.A.
tert-Butylbenzene	µg/m³		0	<4.6	<3.9	<3.6	<3.7	<3.7	N.A.	N.A.
Carbon Tetrachloride	µg/m³		0	<5.7	<4.9	<4.5	<4.6	<4.7	N.A.	N.A.
Chlorobenzene	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
Chloroethane	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
Chloroform	µg/m³	**140 (4)**	0	<5.1	<4.4	<4.1	<4.2	**4.8**	N.A.	N.A.
Chloromethane	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
2-Chloroprene	µg/m³		0	<6.3	<5.4	<5	<5.1	<5.2	N.A.	N.A.
3-Chloropropene	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
2-Chlorotoluene	µg/m³		0	<5.1	<4.4	<4.1	<4.2	<4.2	N.A.	N.A.
alpha-Chlorotoluene	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
Cumene	µg/m³		0	<4.6	<3.9	<3.6	<3.7	<3.7	N.A.	N.A.
Cyclohexane	µg/m³		0	<2.3	<2	<1.8	<1.9	<1.9	N.A.	N.A.
o-Cymene	µg/m³		0	<4.6	<3.9	<3.6	<3.7	<3.7	N.A.	N.A.
Dibromochloromethane	µg/m³		0	<6.8	<5.9	<5.4	<5.6	<5.6	N.A.	N.A.
1,2-Dibromoethane (EDB)	µg/m³		0	<6.8	<5.9	<5.4	<5.6	<5.6	N.A.	N.A.
1,2-Dichlorobenzene	µg/m³		0	<7.4	<6.3	<5.9	<6	<6.1	N.A.	N.A.
1,3-Dichlorobenzene	µg/m³		0	<7.4	<6.3	<5.9	<6	<6.1	N.A.	N.A.
1,4-Dichlorobenzene	µg/m³		0	<7.4	<6.3	<5.9	<6	<6.1	N.A.	N.A.
1,1-Dichloroethane	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
1,2-Dichloroethane	µg/m³		0	<5.7	<4.9	<4.5	<4.6	<4.7	N.A.	N.A.
1,1-Dichloroethene	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
cis-1,2-Dichloroethene	µg/m³	**2000 (2)**	0	<4.6	<3.9	<3.6	<3.7	<3.7	N.A.	N.A.
trans-1,2-Dichloroethene	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
1,2-Dichloropropane	µg/m³		0	<10	<8.8	<8.1	<8.3	<8.4	N.A.	N.A.
cis-1,3-Dichloropropene	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
trans-1,3-Dichloropropene	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
Diisopropyl Ether	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
1,4-Dioxane	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
Ethyl Acetate	µg/m³		0	<4.6	<3.9	<3.6	<3.7	<3.7	N.A.	N.A.
Ethyl Benzene	µg/m³	**390,000 (1)**	0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
Ethyl tert-Butyl Ether	µg/m³		0	<2.8	<2.4	<2.3	<2.3	<2.3	N.A.	N.A.
4-Ethyltoluene	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
Freon 11	µg/m³		0	<1.7	<1.5	<1.4	<1.4	<1.4	N.A.	N.A.
Freon 113	µg/m³		0	<5.7	<4.9	<4.5	<4.6	<4.7	N.A.	N.A.
Freon 114	µg/m³		0	<1.7	<1.5	<1.4	<1.4	<1.4	N.A.	N.A.
Freon 12	µg/m³		0	<2.3	<2	<1.8	<1.9	<1.9	N.A.	N.A.
Heptane	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
Hexachlorobutadiene	µg/m³		0	<11	<9.8	<9.1	<9.3	<9.4	N.A.	N.A.
Hexane	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
2-Hexanone	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
m,p-Xylene	µg/m³		0	<7.4	<6.3	<5.9	<6	<6.1	N.A.	N.A.
Methyl Methacrylate	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
Methyl tert-butyl ether	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
4-Methyl-2-pentanone	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
Naphthalene	µg/m³	**900 (1)**	0	<12	<10	<9.5	<9.7	<9.8	N.A.	N.A.
Isopropanol	µg/m³		0	**270**	**210**	**130**	**130**	**1100**	N.A.	N.A.
Propene	µg/m³		0	<5.7	<4.9	<4.5	<4.6	<4.7	N.A.	N.A.
Propylbenzene	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
Styrene	µg/m³	**33,333 (3)**	0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
1,1,1,2-Tetrachloroethane	µg/m³		0	<5.7	<4.9	<4.5	<4.6	<4.7	N.A.	N.A.
1,1,2,2-Tetrachloroethane	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
Tetrachloroethene	µg/m³	**8,000 (2)**	0	<6.3	<5.4	<5	<5.1	<5.2	N.A.	N.A.
Tetrahydrofuran	µg/m³		0	<2.3	<2	<1.8	<1.9	<1.9	N.A.	N.A.
Toluene	µg/m³	**150,000 (1)**	0	<3.4	**3.4**	<2.7	<2.8	<2.8	N.A.	N.A.
1,2,4-Trichlorobenzene	µg/m³		0	<20	<18	<16	<17	<17	N.A.	N.A.
1,1,1-Trichloroethane	µg/m³	**2000 (2)**	0	<4.6	<3.9	<3.6	<3.7	<3.7	N.A.	N.A.
1,1,2-Trichloroethane	µg/m³		0	<4.6	<3.9	<3.6	<3.7	<3.7	N.A.	N.A.
Trichloroethene	µg/m³	**10,000 (2)**	0	<5.1	<4.4	<4.1	<4.2	<4.2	N.A.	N.A.
1,2,4-Trimethylbenzene	µg/m³		0	<4.6	<3.9	<3.6	<3.7	<3.7	N.A.	N.A.
1,3,5-Trimethylbenzene	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
2,2,4-Trimethylpentane	µg/m³		0	<5.1	<4.4	<4.1	<4.2	<4.2	N.A.	N.A.
Vinyl Acetate	µg/m³		0	<4	<3.4	<3.2	<3.2	<3.3	N.A.	N.A.
Vinyl Bromide	µg/m³		0	<4.6	<3.9	<3.6	<3.7	<3.7	N.A.	N.A.
Vinyl Chloride	µg/m³	**300 (2)**	0	<2.3	<2	<1.8	<1.9	<1.9	N.A.	N.A.
o-Xylene	µg/m³		0	<3.4	<2.9	<2.7	<2.8	<2.8	N.A.	N.A.
Xylenes	µg/m³	**260,000 (1)**	0	<7.4	<6.3	<5.9	<6	<6.1	N.A.	N.A.
C6-C10	mg/m³		0	**0.16**	**0.13**	**0.15**	**0.13**	<0.094	N.A.	N.A.
C6-C10 (less BTEX)	mg/m³	**210 (1)**	0	**0.16**	**0.12**	**0.15**	**0.13**	<0.094	N.A.	N.A.
>C10-C12	mg/m³		0	<0.11	<0.098	<0.091	<0.093	<0.094	N.A.	N.A.
>C10-C12 (less naphthalene)	mg/m³		0	<0.11	<0.098	<0.091	<0.093	<0.094	N.A.	N.A.
Isopropanol	mg/m³		0	N.A.	N.A.	N.A.	N.A.	N.A.	**150000**	N.A.
Sample on Hold	No unit		0	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	SAMPLE ON HOLD

Criteria References

1 Table 1A(5) of Schedule B1 of the ASC NEPM ("Soil vapour HSLs for vapour intrusion") - HSL A (low density residential) Depth 0 m to < 1m, sand.
2 Table 1A(2) of Schedule B1 of the ASC NEPM ("Interim soil vapour health investigation levels for volatile organic chlorinated compounds")
3 US EPA Threshold SL (indoor air) - https://semspub.epa.gov/work/HQ/400762.pdf. USEPA values is 1,000 (based on threshold hazard quotient of 1) – apply Attenuation Factor of 0.03 = 33,333 µg/m3
4 World Health Organisation Concise International Chemical Assessment Document 58 - Chloroform. WHO, Geneva 2004.

ATTACHMENT C
SGS AUSTRALIA LABORATORY REPORT

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	James Fox
Client	LAND AND WATER CONSULTING
Address	SUITE 3 LEVEL 1 4-8 GOODWOOD ROAD WAYVILLE SA 5034
Telephone	0417 58 50 58
Facsimile	(Not specified)
Email	jfox@lwconsulting.com.au
Project	**42-46 Unley RD.**
Order Number	**TBA**
Samples	7

LABORATORY DETAILS

Manager	Adam Atkinson
Laboratory	SGS Melbourne EH&S
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Facsimile	+61395743399
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SGS Reference	**ME370092 R0**
Date Received	29/1/2025
Date Reported	6/2/2025

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562 (14420).

Sampling performed by SGS

SIGNATORIES

Adam ATKINSON
Australian Chemistry Manager

Andrew WRIGHT
LC/VOC Team Leader

Receipt Pressure/Vacuum of Canisters [TO-15] Tested: 31/1/2025

PARAMETER	UOM	LOR	VP3 SC13616 CANISTER - 24/1/25 10:37 ME370092.001	VP4 SC13626 CANISTER - 24/1/25 10:48 ME370092.002	VP1 SC13607 CANISTER - 24/1/25 11:06 ME370092.003	VP1 DUP SC14112 CANISTER - 24/1/25 11:20 ME370092.004	VP4 SC1099 CANISTER - 24/1/25 12:42 ME370092.005
Receipt Pressure (PSIA)*	PSIA	-	**12.4**	**12.4**	**13.2**	**13.1**	**12.8**
Receipt Vacuum (inch Hg below std atmospheric	Inch Hg	-	**4.49**	**4.49**	**2.86**	**3.06**	**3.67**

TO-15 in Air [TO15] Tested: 31/1/2025

PARAMETER	UOM	LOR	VP3 SC13616 CANISTER - 24/1/25 10:37 ME370092.001	VP4 SC13626 CANISTER - 24/1/25 10:48 ME370092.002	VP1 SC13607 CANISTER - 24/1/25 11:06 ME370092.003	VP1 DUP SC14112 CANISTER - 24/1/25 11:20 ME370092.004	VP4 SC1099 CANISTER - 24/1/25 12:42 ME370092.005
Acrolein	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
Acrylonitrile	µg/m³	-	<10	<8.8	<8.1	<8.3	<8.4
tert-Amyl Methyl Ether	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
Benzene	µg/m³	-	<2.8	<2.4	<2.3	<2.3	**4.8**
Bromodichloromethane	µg/m³	-	<5.7	<4.9	<4.5	<4.6	<4.7
Bromoform	µg/m³	-	<6.8	<5.9	<5.4	<5.6	<5.6
Bromomethane	µg/m³	-	<5.1	<4.4	<4.1	<4.2	<4.2
1,3-Butadiene	µg/m³	-	<1.7	<1.5	<1.4	<1.4	<1.4
2-Butanone (Methyl Ethyl Ketone)	µg/m³	-	<2.8	<2.4	<2.3	<2.3	<2.3
tert-Butyl Alcohol	µg/m³	-	<2.8	<2.4	<2.3	<2.3	<2.3
n-Butylbenzene	µg/m³	-	<4.6	<3.9	<3.6	<3.7	<3.7
sec-Butylbenzene	µg/m³	-	<4.6	<3.9	<3.6	<3.7	<3.7
tert-Butylbenzene	µg/m³	-	<4.6	<3.9	<3.6	<3.7	<3.7
Carbon Tetrachloride	µg/m³	-	<5.7	<4.9	<4.5	<4.6	<4.7
Chlorobenzene	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
Chloroethane	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
Chloroform	µg/m³	-	<5.1	<4.4	<4.1	<4.2	**4.8**
Chloromethane	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
2-Chloroprene	µg/m³	-	<6.3	<5.4	<5	<5.1	<5.2
3-Chloropropene	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
2-Chlorotoluene	µg/m³	-	<5.1	<4.4	<4.1	<4.2	<4.2
alpha-Chlorotoluene	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
Cumene	µg/m³	-	<4.6	<3.9	<3.6	<3.7	<3.7
Cyclohexane	µg/m³	-	<2.3	<2	<1.8	<1.9	<1.9
o-Cymene	µg/m³	-	<4.6	<3.9	<3.6	<3.7	<3.7
Dibromochloromethane	µg/m³	-	<6.8	<5.9	<5.4	<5.6	<5.6
1,2-Dibromoethane (EDB)	µg/m³	-	<6.8	<5.9	<5.4	<5.6	<5.6
1,2-Dichlorobenzene	µg/m³	-	<7.4	<6.3	<5.9	<6	<6.1
1,3-Dichlorobenzene	µg/m³	-	<7.4	<6.3	<5.9	<6	<6.1
1,4-Dichlorobenzene	µg/m³	-	<7.4	<6.3	<5.9	<6	<6.1
1,1-Dichloroethane	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
1,2-Dichloroethane	µg/m³	-	<5.7	<4.9	<4.5	<4.6	<4.7
1,1-Dichloroethene	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
cis-1,2-Dichloroethene	µg/m³	-	<4.6	<3.9	<3.6	<3.7	<3.7
trans-1,2-Dichloroethene	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
1,2-Dichloropropane	µg/m³	-	<10	<8.8	<8.1	<8.3	<8.4
cis-1,3-Dichloropropene	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
trans-1,3-Dichloropropene	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
Diisopropyl Ether	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
1,4-Dioxane	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
Ethyl Acetate	µg/m³	-	<4.6	<3.9	<3.6	<3.7	<3.7
Ethyl Benzene	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
Ethyl tert-Butyl Ether	µg/m³	-	<2.8	<2.4	<2.3	<2.3	<2.3
4-Ethyltoluene	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
Freon 11	µg/m³	-	<1.7	<1.5	<1.4	<1.4	<1.4
Freon 113	µg/m³	-	<5.7	<4.9	<4.5	<4.6	<4.7
Freon 114	µg/m³	-	<1.7	<1.5	<1.4	<1.4	<1.4
Freon 12	µg/m³	-	<2.3	<2	<1.8	<1.9	<1.9
Heptane	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
Hexachlorobutadiene	µg/m³	-	<11	<9.8	<9.1	<9.3	<9.4
Hexane	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
2-Hexanone	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
m,p-Xylene	µg/m³	-	<7.4	<6.3	<5.9	<6	<6.1
Methyl Methacrylate	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
Methyl tert-butyl ether	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
4-Methyl-2-pentanone	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8

TO-15 in Air [TO15] Tested: 31/1/2025 (continued)

PARAMETER	UOM	LOR	VP3 SC13616 CANISTER - 24/1/25 10:37 ME370092.001	VP4 SC13626 CANISTER - 24/1/25 10:48 ME370092.002	VP1 SC13607 CANISTER - 24/1/25 11:06 ME370092.003	VP1 DUP SC14112 CANISTER - 24/1/25 11:20 ME370092.004	VP4 SC1099 CANISTER - 24/1/25 12:42 ME370092.005
Naphthalene	µg/m³	-	<12	<10	<9.5	<9.7	<9.8
Isopropanol	µg/m³	-	**270**	**210**	**130**	**130**	**1100**
Propene	µg/m³	-	<5.7	<4.9	<4.5	<4.6	<4.7
Propylbenzene	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
Styrene	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
1,1,1,2-Tetrachloroethane	µg/m³	-	<5.7	<4.9	<4.5	<4.6	<4.7
1,1,2,2-Tetrachloroethane	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
Tetrachloroethene	µg/m³	-	<6.3	<5.4	<5	<5.1	<5.2
Tetrahydrofuran	µg/m³	-	<2.3	<2	<1.8	<1.9	<1.9
Toluene	µg/m³	-	<3.4	**3.4**	<2.7	<2.8	<2.8
1,2,4-Trichlorobenzene	µg/m³	-	<20	<18	<16	<17	<17
1,1,1-Trichloroethane	µg/m³	-	<4.6	<3.9	<3.6	<3.7	<3.7
1,1,2-Trichloroethane	µg/m³	-	<4.6	<3.9	<3.6	<3.7	<3.7
Trichloroethene	µg/m³	-	<5.1	<4.4	<4.1	<4.2	<4.2
1,2,4-Trimethylbenzene	µg/m³	-	<4.6	<3.9	<3.6	<3.7	<3.7
1,3,5-Trimethylbenzene	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
2,2,4-Trimethylpentane	µg/m³	-	<5.1	<4.4	<4.1	<4.2	<4.2
Vinyl Acetate	µg/m³	-	<4	<3.4	<3.2	<3.2	<3.3
Vinyl Bromide	µg/m³	-	<4.6	<3.9	<3.6	<3.7	<3.7
Vinyl Chloride	µg/m³	-	<2.3	<2	<1.8	<1.9	<1.9
o-Xylene	µg/m³	-	<3.4	<2.9	<2.7	<2.8	<2.8
Xylenes	µg/m³	-	<7.4	<6.3	<5.9	<6	<6.1

TO-15 TPH [TO15_TPH] Tested: 31/1/2025

PARAMETER	UOM	LOR	VP3 SC13616 CANISTER - 24/1/25 10:37 ME370092.001	VP4 SC13626 CANISTER - 24/1/25 10:48 ME370092.002	VP1 SC13607 CANISTER - 24/1/25 11:06 ME370092.003	VP1 DUP SC14112 CANISTER - 24/1/25 11:20 ME370092.004	VP4 SC1099 CANISTER - 24/1/25 12:42 ME370092.005
C6-C10	mg/m³	-	**0.16**	**0.13**	**0.15**	**0.13**	<0.094
C6-C10 (less BTEX)	mg/m³	-	**0.16**	**0.12**	**0.15**	**0.13**	<0.094
>C10-C12	mg/m³	-	<0.11	<0.098	<0.091	<0.093	<0.094
>C10-C12 (less naphthalene)	mg/m³	-	<0.11	<0.098	<0.091	<0.093	<0.094

Isopropanol in Sorbent Tubes [MA5] Tested: 3/2/2025

PARAMETER	UOM	LOR	IPA SHROUD 8790 CARBON TUBE - 24/1/2025 ME370092.006
Isopropanol	mg/m³	-	150000

Sample on Hold [] Tested: 6/2/2025

PARAMETER	UOM	LOR	BLANK 8791 CARBON TUBE - 24/1/2025 ME370092.007
Sample on Hold*	No unit	-	SAMPLE ON HOLD

METHOD	METHODOLOGY SUMMARY
MA5-ST	This method is used for the analysis of additional volatile organic compounds which have been sampled from air by the use of solvent desorption tube. Extraction of analytes is achieved by desorption in carbon disulfide which is, in turn, analysed by GC/MS using direct injection.
TO-15	"This method is intended for the analysis of Volatile Organic Compounds (VOCs) for ambient air or soil gas, sampled onto canisters and analysed by gas chromatography mass spectrometry (GCMS) coupled with the Markes sample introduction units. This method is based on the USEPA Method TO-15.
TO-15	This method involves GC-MS analysis of the air sample collected in evacuated canisters. In the lab, a portion of sample is pre-screened if from an unknown source or is suspected to be high. Once the pre-screening is complete the sample is passed onto a sorbent trap, and is desorbed to the GC where the analytes are separated, and are then passed into the MS where fragmentation of the molecules occurs, to produce mass spectra of each analyte. The data is recorded on a Total Ion Chromatogram (TIC) from which each analyte detected can be individually identified (using the Mass Spectra) and quantitated against standards.
TO15-TPH	This method is intended for the analysis of total petroleum hydrocarbon (TPH) fractions for ambient air or soil gas, sampled onto canisters and analysed by gas chromatography mass spectrometry (GCMS) coupled with the Markes sample introduction units. This method is based on the USEPA Method TO-15.
TO15-TPH	This method involves GC-MS analysis of the air sample collected in evacuated canisters. In the lab, a portion of sample is pre-screened if from an unknown source or is suspected to be high. Once the pre-screening is complete the sample is passed onto a sorbent trap, and is desorbed to the GC where the analytes are separated, and are then passed into the MS where fragmentation of the molecules occurs, to produce mass spectra of each analyte. The data is recorded on a Total Ion Chromatogram (TIC) from which each analyte detected can be individually identified (using the Mass Spectra) and quantitated against standards.
TO15-Vacuum	Canisters returned containing samples have the receipt pressure measured using Model 4600A Dynamic Diluter.

FOOTNOTES

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

STATEMENT OF QA/QC PERFORMANCE

ME370092 R0

CLIENT DETAILS

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Project	**42-46 Unley RD.**
Order Number	**TBA**
Samples	7

LABORATORY DETAILS

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SGS Reference	**ME370092 R0**
Date Received	29 Jan 2025
Date Reported	06 Feb 2025

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 (within the SGS Melbourne EH&S laboratory).

SAMPLE SUMMARY

Sample counts by matrix	5 Canisters & 7 Carl	Type of documentation received	COC
Date documentation received	29/1/2025	Sample container provider	SGS
Turnaround time requested	Standard	Samples received in correct containers	Yes
Sample temperature upon receipt	Ambient	Number of eskies/boxes received	1

HOLDING TIME SUMMARY

ME370092 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.

Isopropanol in Sorbent Tubes

Method: MA5

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
IPA SHROUD 8790	ME370092.006	LB085294	24 Jan 2025	29 Jan 2025	23 Feb 2025	03 Feb 2025	23 Feb 2025	05 Feb 2025

TO-15 in Air

Method: TO15

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
VP3 SC13616	ME370092.001	LB085270	24 Jan 2025	29 Jan 2025	23 Feb 2025	31 Jan 2025	23 Feb 2025	03 Feb 2025
VP4 SC13626	ME370092.002	LB085270	24 Jan 2025	29 Jan 2025	23 Feb 2025	31 Jan 2025	23 Feb 2025	03 Feb 2025
VP1 SC13607	ME370092.003	LB085270	24 Jan 2025	29 Jan 2025	23 Feb 2025	31 Jan 2025	23 Feb 2025	03 Feb 2025
VP1 DUP SC14112	ME370092.004	LB085270	24 Jan 2025	29 Jan 2025	23 Feb 2025	31 Jan 2025	23 Feb 2025	03 Feb 2025
VP4 SC1099	ME370092.005	LB085270	24 Jan 2025	29 Jan 2025	23 Feb 2025	31 Jan 2025	23 Feb 2025	03 Feb 2025

TO-15 TPH

Method: TO15_TPH

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
VP3 SC13616	ME370092.001	LB085270	24 Jan 2025	29 Jan 2025	23 Feb 2025	31 Jan 2025	23 Feb 2025	03 Feb 2025
VP4 SC13626	ME370092.002	LB085270	24 Jan 2025	29 Jan 2025	23 Feb 2025	31 Jan 2025	23 Feb 2025	03 Feb 2025
VP1 SC13607	ME370092.003	LB085270	24 Jan 2025	29 Jan 2025	23 Feb 2025	31 Jan 2025	23 Feb 2025	03 Feb 2025
VP1 DUP SC14112	ME370092.004	LB085270	24 Jan 2025	29 Jan 2025	23 Feb 2025	31 Jan 2025	23 Feb 2025	03 Feb 2025
VP4 SC1099	ME370092.005	LB085270	24 Jan 2025	29 Jan 2025	23 Feb 2025	31 Jan 2025	23 Feb 2025	03 Feb 2025

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 identifer 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.

Isopropanol in Sorbent Tubes

Method: MA5

Sample Number	Parameter	Units	LOR	Result
LB085294.001	Isopropanol	mg/m³	-	<100

TO-15 in Air

Method: TO15

Sample Number	Parameter	Units	LOR	Result
LB085270.001	Acrolein	µg/m³	-	<1.4
	Acrylonitrile	µg/m³	-	<3.6
	tert-Amyl Methyl Ether	µg/m³	-	<1.2
	Benzene	µg/m³	-	<1.0
	Bromodichloromethane	µg/m³	-	<2.0
	Bromoform	µg/m³	-	<2.4
	Bromomethane	µg/m³	-	<1.8
	1,3-Butadiene	µg/m³	-	<0.60
	2-Butanone (Methyl Ethyl Ketone)	µg/m³	-	<1.0
	tert-Butyl Alcohol	µg/m³	-	<1.0
	n-Butylbenzene	µg/m³	-	<1.6
	sec-Butylbenzene	µg/m³	-	<1.6
	tert-Butylbenzene	µg/m³	-	<1.6
	Carbon Tetrachloride	µg/m³	-	<2.0
	Chlorobenzene	µg/m³	-	<1.2
	Chloroethane	µg/m³	-	<1.2
	Chloroform	µg/m³	-	<1.8
	Chloromethane	µg/m³	-	<1.4
	2-Chloroprene	µg/m³	-	<2.2
	3-Chloropropene	µg/m³	-	<1.4
	2-Chlorotoluene	µg/m³	-	<1.8
	alpha-Chlorotoluene	µg/m³	-	<1.4
	Cumene	µg/m³	-	<1.6
	Cyclohexane	µg/m³	-	<0.80
	o-Cymene	µg/m³	-	<1.6
	Dibromochloromethane	µg/m³	-	<2.4
	1,2-Dibromoethane (EDB)	µg/m³	-	<2.4
	1,2-Dichlorobenzene	µg/m³	-	<2.6
	1,3-Dichlorobenzene	µg/m³	-	<2.6
	1,4-Dichlorobenzene	µg/m³	-	<2.6
	1,1-Dichloroethane	µg/m³	-	<1.4
	1,2-Dichloroethane	µg/m³	-	<2.0
	1,1-Dichloroethene	µg/m³	-	<1.2
	cis-1,2-Dichloroethene	µg/m³	-	<1.6
	trans-1,2-Dichloroethene	µg/m³	-	<1.2
	1,2-Dichloropropane	µg/m³	-	<3.6
	cis-1,3-Dichloropropene	µg/m³	-	<1.2
	trans-1,3-Dichloropropene	µg/m³	-	<1.4
	Diisopropyl Ether	µg/m³	-	<1.4
	1,4-Dioxane	µg/m³	-	<1.2
	Ethyl Acetate	µg/m³	-	<1.6
	Ethyl Benzene	µg/m³	-	<1.2
	Ethyl tert-Butyl Ether	µg/m³	-	<1.0
	4-Ethyltoluene	µg/m³	-	<1.2
	Freon 11	µg/m³	-	<0.60
	Freon 113	µg/m³	-	<2.0
	Freon 114	µg/m³	-	<0.60
	Freon 12	µg/m³	-	<0.80
	Heptane	µg/m³	-	<1.4
	Hexachlorobutadiene	µg/m³	-	<4.0
	Hexane	µg/m³	-	<1.2
	2-Hexanone	µg/m³	-	<1.2
	m,p-Xylene	µg/m³	-	<2.6
	Methyl Methacrylate	µg/m³	-	<1.4
	Methyl tert-butyl ether	µg/m³	-	<1.2

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.

TO-15 in Air (continued)

Method: TO15

Sample Number	Parameter	Units	LOR	Result
LB085270.001	4-Methyl-2-pentanone	µg/m³	-	<1.2
	Naphthalene	µg/m³	-	<4.2
	Isopropanol	µg/m³	-	<20
	Propene	µg/m³	-	<2.0
	Propylbenzene	µg/m³	-	<1.4
	Styrene	µg/m³	-	<1.2
	1,1,1,2-Tetrachloroethane	µg/m³	-	<2.0
	1,1,2,2-Tetrachloroethane	µg/m³	-	<1.4
	Tetrachloroethene	µg/m³	-	<2.2
	Tetrahydrofuran	µg/m³	-	<0.80
	Toluene	µg/m³	-	<1.2
	1,2,4-Trichlorobenzene	µg/m³	-	<7.2
	1,1,1-Trichloroethane	µg/m³	-	<1.6
	1,1,2-Trichloroethane	µg/m³	-	<1.6
	Trichloroethene	µg/m³	-	<1.8
	1,2,4-Trimethylbenzene	µg/m³	-	<1.6
	1,3,5-Trimethylbenzene	µg/m³	-	<1.2
	2,2,4-Trimethylpentane	µg/m³	-	<1.8
	Vinyl Acetate	µg/m³	-	<1.4
	Vinyl Bromide	µg/m³	-	<1.6
	Vinyl Chloride	µg/m³	-	<0.80
	o-Xylene	µg/m³	-	<1.2
	Xylenes	µg/m³	-	<2.6

TO-15 TPH

Method: TO15_TPH

Sample Number	Parameter	Units	LOR	Result
LB085270.001	C6-C10	mg/m³	-	<0.040
	C6-C10 (less BTEX)	mg/m³	-	<0.040
	>C10-C12	mg/m³	-	<0.040
	>C10-C12 (less naphthalene)	mg/m³	-	<0.040

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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.

TO-15 in Air

Method: TO15

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
ME370092.001	LB085270.004	Isopropanol	µg/m³	-	270	260	30	3

TO-15 TPH

Method: TO15_TPH

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
ME370092.001	LB085270.004	C6-C10	mg/m³	-	0.16	0.20	30	23
		C6-C10 (less BTEX)	mg/m³	-	0.16	0.20	30	24

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.

Isopropanol in Sorbent Tubes

Method: MA5

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB085294.002	Isopropanol	mg/m³	-	17	20	60 - 140	83

TO-15 in Air

Method: TO15

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB085270.002	Acrylonitrile	µg/m³	-	22	22	60 - 140	100
	Benzene	µg/m³	-	29	32.4	60 - 140	89
	1,3-Butadiene	µg/m³	-	17	22.4	60 - 140	76
	Chloroform	µg/m³	-	44	49.4	60 - 140	90
	1,2-Dichloroethane	µg/m³	-	40	41.1	60 - 140	98
	Tetrachloroethene	µg/m³	-	61	68.8	60 - 140	88
	Trichloroethene	µg/m³	-	37	54.5	60 - 140	68
	Vinyl Chloride	µg/m³	-	23	25.93	60 - 140	87

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 identifer 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

ME370092 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 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 x 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 identifer 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	Majority of surrogate recoveries 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).
⑪	Majority of spike recoveries are within acceptance criteria.
†	Refer to relevant report comments for further information.

SGS

TO-15 Canister Chain of Custody Record

Dispatch samples to: Unit 10/585 Blackburn Road, Notting Hill, Victoria 3168, Australia

Attn: Sample Reception - Contact Ph: +613 9574 3311
Email: au.samplereceipt.melbourne@sgs.com

CLIENT NAME: LAND & WATER CONSULTING.
CLIENT ADDRESS: 3/4-8 GOODWOOD RD
WAYVILLE SA 5034.
ABN:
CONTACT: JAMES FOX
SAMPLED BY: K. HANSEN
PROJECT REF: 42-46 UNLEY RD.

CONTACT PHONE No: 0417 585 058
CONTACT FAX No:
RESULTS REQUIRED BY: Std.
EMAIL ADDRESS: jfox@landwater.com.au
LAB QUOTE NUMBER: AQ224030-2. RH
PURCHASE ORDER NUMBER:

PAGE 1 OF 1

Client Sample ID (Field Location)	Canister #	Back up Carbon Tube #	Soil Gas Train/ Mass Flow Controller #	Purge Volume	Leak Test Passed	PID	Vacuum	Carbon Tube Sample Volume	Date of Collection	Collection Time		Canister Pressure/Vacuum		Analysis Requested				
										Time on	Time Off	Inital	Final	TO-15	F1&F2 TRH	IPA	Hold.	
VP3	13616	8794	28	100ml	✓	N/A	-1" Hg	0.5L	24/1/25	10:29	10:37	-30" Hg	-4" Hg	x	x	x		
VP4	13626	8793	02	100ml	✓		0" Hg	0.5L		10:41	10:48	-30" Hg	-4" Hg	x	x	x		
VP1	13607	8795	62	100ml	✓		0" Hg	0.5L		10:52	11:06	-30" Hg	-4" Hg	x	x	x		
VP1 DUP	14112	8796	↓	↓	✓		0" Hg	↓		11:06	11:20	-30" Hg	-4" Hg	x	x	x		
VP4	1099	8799	31	100ml	✓		-0.5" Hg	0.5L		11:27	12:42	-30" Hg	-4" Hg	x	x	x		
IPA SHROUD	—	8790	—	—	—	—	—	0.05L		—	—	—	—			x		
BLANK	-	8791	—	—	—	—	—	—	↓	—	—	—	—				x	

SGS EHS Melbourne COC
ME370092

Notes:

RELEASED BY: (Name) K. HANSEN (Signature) (Date / Time) 24/1/25 2:30 pm

RECEIVED BY: (Name) J. Masutti (Signature) (Date / Time) 29/01/25 14:15

SGS Notting Hill Bottle Map for Air Samples

Temperature	ambient	Ice Brick		Ice		Ice Pack		Esky	1	Bag		Box		Orange Case	
Name + Date	J.M 29/11/25														

	Sample ID	Tray #	Canister	Carbon tube		Other	Gas Bag	Isocyanate Tube	1.4 Canister (TO15)	6L Canister (TO15)	Thermal Radiello Tube (TO17_RAD)	ATD Tube (TO17)	Radiello Tube (MA5_RAD)	Waterloo Sampler (MA5_WL_LU)	Carbon Tube (MA5_ST)	XAD Tube (MA5_ST)	Silica Gel Tube (MA5_ST)	Puffs (TO13)	Number of labels to be printed per sample ID	
	Sample Type																			
1	13616 / 8794	VOC/SVOC	X	X					1						1				1	2
2	13626 / 8793		X	X					1						1				1	2
3	13607 / 8795		X	X					1						1				1	2
4	14112 / 8796		X	X					1						1				1	2
5	1099 / 8799	↓	X	X					1						1					2
6	IPA shroud	SVOC		X											1					1
7	blank	(Hdi)		X											1					1
8																				
9																				
10																				

Comments:

SAMPLE RECEIPT ADVICE

ME370092

CLIENT DETAILS

Contact	James Fox
Client	LAND AND WATER CONSULTING
Address	SUITE 3 LEVEL 1 4-8 GOODWOOD ROAD WAYVILLE SA 5034
Telephone	0417 58 50 58
Facsimile	(Not specified)
Email	jfox@lwconsulting.com.au
Project	**42-46 Unley RD.**
Order Number	**TBA**
Samples	7

LABORATORY DETAILS

Manager	Adam Atkinson
Laboratory	SGS Melbourne EH&S
Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	+61395743200
Facsimile	+61395743399
Email	Au.SampleReceipt.Melbourne@sgs.com
Samples Received	Wed 29/1/2025
Report Due	Wed 5/2/2025
SGS Reference	**ME370092**

SUBMISSION DETAILS

This is to confirm that 7 samples were received on Wednesday 29/1/2025. Results are expected to be ready by COB Wednesday 5/2/2025.
Please quote SGS reference ME370092 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	5 Canisters & 7 Carbon Tul	Type of documentation received	COC
Date documentation received	29/1/2025	Sample container provider	SGS
Turnaround time requested	Standard	Samples received in correct containers	Yes
Sample temperature upon receipt	Ambient	Number of eskies/boxes received	1

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

Please email purchase order number to au.samplereceipt.melbourne@sgs.com

SAMPLE RECEIPT ADVICE

ME370092

CLIENT DETAILS

Client LAND AND WATER CONSULTING

Project 42-46 Unley RD.

SUMMARY OF ANALYSIS

No.	Sample ID	Isopropanol in Sorbent Tubes	Receipt Pressure/Vacuum of Canisters	Sample on Hold	TO-15 in Air	TO-15 TPH
001	VP3 SC13616	-	2	-	78	4
002	VP4 SC13626	-	2	-	78	4
003	VP1 SC13607	-	2	-	78	4
004	VP1 DUP SC14112	-	2	-	78	4
005	VP4 SC1099	-	2	-	78	4
006	IPA SHROUD 8790	1	-	-	-	-
007	BLANK 8791	-	-	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 .

ATTACHMENT D
LWC STATEMENT OF LIMITATIONS REGARDING YOUR REPORT

STATEMENT OF LIMITATIONS & IMPORTANT INFORMATION REGARDING YOUR REPORT

INTRODUCTION

This report has been prepared by Land & Water Consulting for you, as Land & Water Consulting's client, in accordance with our agreed purpose, scope, schedule and budget.

The report has been prepared using accepted procedures and practices of the consulting profession at the time it was prepared, and the opinions, recommendations and conclusions set out in the report are made in accordance with generally accepted principles and practices of that profession.

The report is based on information gained from environmental conditions (including assessment of some or all of soil, groundwater, vapour and surface water) and supplemented by reported data of the local area and professional experience. Assessment has been scoped with consideration to industry standards, regulations, guidelines and your specific requirements, including budget and timing. The characterisation of site conditions is an interpretation of information collected during assessment, in accordance with industry practice.

This interpretation is not a complete description of all material on or in the vicinity of the site, due to the inherent variation in spatial and temporal patterns of contaminant presence and impact in the natural environment. Land & Water Consulting may have also relied on data and other information provided by you and other qualified individuals in preparing this report. Land & Water Consulting has not verified the accuracy or completeness of such data or information except as otherwise stated in the report. For these reasons the report must be regarded as interpretative, in accordance with industry standards and practice, rather than being a definitive record.

No warranty or guarantee of the site conditions is intended.

This report was prepared for the sole use of you, the Client and may not contain sufficient information for purposes of other parties or for other uses. Any reliance on this report by third parties shall be at such parties sole risk. This report shall only be presented in full and may not be used to support any other objectives than those set out in the report, except where written approval with comments are provided by Land & Water Consulting.

The report does not include the evaluation or assessment of potential geotechnical engineering constraints of the site.

LIMITATIONS OF THE REPORT

The scope of works undertaken and the report prepared to complete the assessment was in accordance with the information provided by the client and the specifications for works required under the contract. As such, works undertaken and statements made are based on those specifications (such as levels of risks and significance of any contamination) and should be considered and interpreted within this context. The analyses, evaluations, opinions and conclusions presented in this report are based on that purpose and scope, requirements, data or information, and they could change if such requirements or data are inaccurate or incomplete.

Your environmental report should not be used without reference to Land & Water Consulting in the first instance:

- When the nature of the proposed development is changed, for example if a residential development is proposed instead of a commercial one;
- When the size or configuration of the proposed development is altered;
- When the location or orientation of the proposed structures are modified;
- When there is a change in ownership;
- For application to an adjacent site.

In addition, advancements in professional practice regarding contaminated land and changes in applicable statues and/or guidelines may affect the validity of this report. Consequently, the currency of conclusions and recommendations in this report should be verified if you propose to use this report more than 6 months after its date of issue.

ENVIRONMENTAL ASSESSMENT "FINDINGS" ARE PROFESSIONAL ESTIMATES

The information in this report is considered to be accurate with respect to conditions encountered at the site at the time of investigation and considering the inherent limitations associated with extrapolating information from a sample set. Note however that site assessment identifies actual subsurface conditions only at those specific points where samples are taken, when they are taken. Environmental data derived through sampling and analysis are interpreted by consultants who then render an opinion about overall subsurface conditions, the nature and extent of contamination and potential impacts on the use of the land. Actual conditions may differ from those inferred to exist as no professional and no subsurface assessment program can reveal every detail within the ground across a site. Subsurface conditions can vary across a particular site and no practical degree of sampling can ever eliminate the possibility that conditions may be present at a site that have not been represented though sampling.

SUBSURFACE CONDITIONS CAN CHANGE

This report is valid as of the date of preparation. The condition of the site (including subsurface conditions) and extent or nature of contamination or other environmental hazards can change over time, as a result of either natural processes or human influence. Land & Water Consulting should be kept appraised of any such events and should be consulted for further investigations if any changes are noted, particularly during construction activities where excavations often reveal subsurface conditions. Since subsurface conditions (including contamination concentrations) can change within a limited period of time and space, this inherent limitation to the representation of site conditions provided by this report should always be taken into consideration particularly if the report is used after a delay in time.

DATA SHOULD NOT BE SEPARATED FROM THE REPORT

The report as a whole presents the findings of the site assessment and the report should not be copied in part or altered in any way. Logs, figures, laboratory data, drawings, etc. are customarily included in our reports and are developed by scientists or engineers based on their interpretation of field logs, field testing and laboratory evaluation of samples. This information should not under any circumstances be redrawn for inclusion in other documents or separated from the report in any way.

This report should be reproduced in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties.

RESPONSIBILITY

Environmental reporting relies on interpretation of factual information using professional judgement and opinion and has a level of uncertainty attached to it, which is much less exact than other design disciplines. As noted earlier, the recommendations and findings set out in this report should only be regarded as interpretive and should not be taken as accurate and complete information about all environmental media at all depths and locations across the site.