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9 November 2022

Mr John Sabbouh
Richard Crookes Constructions
Level 3, 4 Broadcast Way
Artarmon NSW 2064

**RE: RESULTS OF SOIL SAMPLING FROM NORTH AND WEST SIDES OF THE
UNDERGROUND FUEL STORAGE TANK AT THE REAR OF THE FORMER
MONASTERY BUILDING AT ST JOHN OF GOD RICHMOND HOSPITAL
177 GROSE VALE ROAD, NORTH RICHMOND NSW**

Dear Sir,

INTRODUCTION

We refer to our recent discussions regarding the potential for there to be contamination of the fill soil surrounding the redundant fuel tank that has been identified in the rear area of the former Monastery building located within the St John of God Richmond Hospital at 177 Grose Vale Road, North Richmond NSW (the site).

Whilst the tank contains a very small amount of liquid, no information exists detailing the condition of the tank and whether or not the tank is damaged / corroded and has leaked stored product into the surrounding soil. In order to ascertain the presence / absence of contamination in the fill soil surrounding the tank, soil samples were collected from each side of the tank on Thursday 20 October 2022.

The results of the analysis of the samples collected on 20 October 2022 show total petroleum hydrocarbons to be present in the soil samples taken from the south and west sides of the tank. The presence of these hydrocarbon compounds indicates that there is a leak in the lower part of the tank.

Following receipt of these results, further soil samples were collected from the west and north sides of the tank on Thursday 3 November 2022.

SITE OBSERVATIONS AND SOIL SAMPLING

Fieldwork was undertaken on Thursday 3 November 2022 and comprised the excavation of test pits into the fill soil on the north and west sides of the tank at distances of two and four metres from these sides of the tank to a depth of approximately 1.7 – 2.0 metres (the depth of the base of the tank is approximately 1.7m below ground level) and collection of samples of the fill soil from this depth. The soil at this depth at each of these sample locations comprises shaley clay.



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The soil that was excavated from each of these test pits adjacent to the north and west sides of the tank was found to have no odour or visible evidence of oil staining or other discolouration.

These soil samples were collected for laboratory analysis to ascertain the levels of hydrocarbon compounds in the fill soil on these sides of the tank. We understand that the proposed building to be constructed will be located along this part of the site and these samples were taken to ascertain if there is hydrocarbon contamination in the soil in this area which will be excavated for the new construction.

Four soil samples were collected during this work, two from the west side of the tank at distances of 2m and 4m from the side of the tank and two from the north side of the tank also at distances of 2m and 4m from the side of the tank.

ANALYTICAL REGIME

The soil samples collected on 3 November 2022 were placed into clean laboratory supplied sample jars fitted with Teflon lined lids that were each marked with the date, sample number and project number. The sample jars were filled with soil with no airspace remaining.

The sampled soil was collected using disposable surgical-type gloves. No tools requiring cleaning prior to or following sample collection were used for the sample collection.

Following collection, the samples were placed into a chilled esky and were delivered to Envirolab Services NATA accredited laboratory at Chatswood NSW on 3 November 2022 for analysis for the following suite of potential contaminants including:

- Polycyclic Aromatic Hydrocarbons (PAH);
- Total Recoverable Hydrocarbons (TRH);
- Monocyclic Aromatic Hydrocarbons (Benzene, Toluene, Ethyl benzene and Xylene: BTEX);

RESULTS OF ANALYSIS

The results of the soil sample analysis are summarised in the following table. The NATA endorsed laboratory reports are attached to this letter report.

Analyte	Sample 1	Sample 2	Sample 3	Sample 4
	West side of tank, 2m 309727-1	West side of tank, 4m 309727-2	North side of tank, 2m 309727-3	North side of tank, 4m 309727-4
	Total concentration (mg/kg)	Total concentration (mg/kg)	Total concentration (mg/kg)	Total concentration (mg/kg)
Sample depth	1.7m – 2.0m BGL	1.7m – 2.0m BGL	1.7m – 2.0m BGL	1.7m – 2.0m BGL
Benzene	<0.2	<0.2	<0.2	<0.2
Toluene	<0.5	<0.5	<0.5	<0.5
Ethyl Benzene	<1.0	<1.0	<1.0	<1.0
Total Xylenes	<1.0	<1.0	<1.0	<1.0
TPH C6-9	<25	<25	<25	<25
TPH C10-40	<100	<100	<100	<100
Total PAH	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	<0.05	<0.05	<0.05	<0.05

The results of the analysis show no detectable concentrations of TRH, PAH or BTEX to be present in the soil samples taken from the north and west sides of the tank and distances of 2 and 4 metres from these sides of the tank. These results confirm there is no contamination from the fuel that has been stored in the tank at these locations.

RECOMMENDATIONS

As the tank is redundant we confirm our previous recommendations that it be removed and disposed of following which the soil below and surrounding the tank can be investigated to ascertain the extent of contamination. This work is to be carried out in accordance with the checklist (copied from the NSW EPA guideline for implementing the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2019) which summarises the steps that are required to be taken for the removal of the tank and validation of the surrounding area as detailed in our letter dated 10 October 2022 (ref: PCA7420-2022_LET09_10Oct22).

The validation sampling and reporting is to be carried out by a duly qualified person with experience in the decommissioning and validation reporting for underground petroleum storage systems (UPSS) sites.



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If you require any further information, please contact the undersigned on 0437 251 358.

Yours faithfully

P. CLIFTON & ASSOCIATES PTY LTD

A handwritten signature in black ink, appearing to read 'P. Clifton'.

Philip Clifton

Principal

Attachment: Laboratory Report and Chain of Custody Documentation



LABORATORY REPORT AND CHAIN OF CUSTODY DOCUMENTATION



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CERTIFICATE OF ANALYSIS 309727

Client Details

Client	P Clifton & Assoc
Attention	Phil Clifton
Address	PO Box 447, Pymble Business Ctre, NSW, 2073

Sample Details

Your Reference	<u>North Richmond</u>
Number of Samples	4 Soil
Date samples received	03/11/2022
Date completed instructions received	03/11/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by 04/11/2022

Date of Issue 04/11/2022

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Results Approved By

Josh Williams, Organics and LC Supervisor

Kyle Gavrily, Senior Chemist

Steven Luong, Senior Chemist

Authorised By

Nancy Zhang, Laboratory Manager

Client Reference: North Richmond

vTRH(C6-C10)/BTEXN in Soil					
Our Reference		309727-1	309727-2	309727-3	309727-4
Your Reference	UNITS	1 W-2.0m	2 W-4.0m	3 N-2.0m	4 N-4.0m
Depth		1.7-2.0	1.7-2.0	-	-
Date Sampled		03/11/2022	03/11/2022	03/11/2022	03/11/2022
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	03/11/2022	03/11/2022	03/11/2022	03/11/2022
Date analysed	-	04/11/2022	04/11/2022	04/11/2022	04/11/2022
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25
vTPH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	94	78	107	75

Client Reference: North Richmond

svTRH (C10-C40) in Soil					
Our Reference		309727-1	309727-2	309727-3	309727-4
Your Reference	UNITS	1 W-2.0m	2 W-4.0m	3 N-2.0m	4 N-4.0m
Depth		1.7-2.0	1.7-2.0	-	-
Date Sampled		03/11/2022	03/11/2022	03/11/2022	03/11/2022
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	03/11/2022	03/11/2022	03/11/2022	03/11/2022
Date analysed	-	04/11/2022	04/11/2022	04/11/2022	04/11/2022
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50
Surrogate o-Terphenyl	%	83	84	82	83

Client Reference: North Richmond

PAHs in Soil					
Our Reference		309727-1	309727-2	309727-3	309727-4
Your Reference	UNITS	1 W-2.0m	2 W-4.0m	3 N-2.0m	4 N-4.0m
Depth		1.7-2.0	1.7-2.0	-	-
Date Sampled		03/11/2022	03/11/2022	03/11/2022	03/11/2022
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	03/11/2022	03/11/2022	03/11/2022	03/11/2022
Date analysed	-	03/11/2022	03/11/2022	03/11/2022	03/11/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	89	90	89	88

Client Reference: North Richmond

Moisture					
Our Reference		309727-1	309727-2	309727-3	309727-4
Your Reference	UNITS	1 W-2.0m	2 W-4.0m	3 N-2.0m	4 N-4.0m
Depth		1.7-2.0	1.7-2.0	-	-
Date Sampled		03/11/2022	03/11/2022	03/11/2022	03/11/2022
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	03/11/2022	03/11/2022	03/11/2022	03/11/2022
Date analysed	-	04/11/2022	04/11/2022	04/11/2022	04/11/2022
Moisture	%	8.0	16	8.3	9.9

Client Reference: North Richmond

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

Client Reference: North Richmond

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date extracted	-			03/11/2022	[NT]	[NT]	[NT]	[NT]	03/11/2022	[NT]
Date analysed	-			04/11/2022	[NT]	[NT]	[NT]	[NT]	04/11/2022	[NT]
TRH C ₆ - C ₉	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	77	[NT]
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	77	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	78	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	73	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	76	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	78	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	81	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	65	[NT]	[NT]	[NT]	[NT]	83	[NT]

Client Reference: North Richmond

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date extracted	-			03/11/2022	[NT]	[NT]	[NT]	[NT]	03/11/2022	[NT]
Date analysed	-			03/11/2022	[NT]	[NT]	[NT]	[NT]	03/11/2022	[NT]
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	118	[NT]
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	103	[NT]
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	114	[NT]
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	118	[NT]
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	103	[NT]
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	114	[NT]
Surrogate o-Terphenyl	%		Org-020	89	[NT]	[NT]	[NT]	[NT]	99	[NT]

Client Reference: North Richmond

QUALITY CONTROL: PAHs in Soil				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date extracted	-			03/11/2022	[NT]	[NT]	[NT]	[NT]	03/11/2022	[NT]
Date analysed	-			03/11/2022	[NT]	[NT]	[NT]	[NT]	03/11/2022	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	90	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	85	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	90	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	93	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	71	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	[NT]	[NT]	[NT]	[NT]	84	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	92	[NT]	[NT]	[NT]	[NT]	87	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.



CHAIN OF CUSTODY FORM - Client

ENVIROLAB GROUP

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☎ 08 8967 1201 | ✉ darwin@envirolab.com.au

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Company: Phil Clifton ASSOC		Client Project Name/Number/Site etc (ie report title): North Richmond	
Contact Person:		PO No. (if applicable):	
Project Mgr:		Envirolab Quote No. :	
Sampler:		Date results required:	
Address:		Or choose: <input type="checkbox"/> Standard <input type="checkbox"/> Same Day <input checked="" type="checkbox"/> 1 day <input type="checkbox"/> 2 day <input type="checkbox"/> 3 day	
Phone:	Mob:	Note: Inform lab in advance if urgent turnaround is required - surcharges apply	
Email Results to: PhilClifton@pclifton.com		Additional report format: <input type="checkbox"/> Esdat <input type="checkbox"/> Equis	
Email Invoice to:		Lab Comments:	

Sample information					Tests Required										Comments				
Envirolab Sample ID (Lab use only)	Client Sample ID or Information	Depth	Date Sampled	Type of Sample	PAH	TRH	BTEX												Provide as much information about the sample as you can
1	1 W-2.0m	1.7-2.0m	3.11.22	Soil	✓	✓	✓												
2	2 W-4.0m	1.7-2.0m	"	"	✓	✓	✓												
3	3 N-2.0m	"	"	"	✓	✓	✓												
4	4 N-4.0m	"	"	"	✓	✓	✓												

Please tick the box if observed settled sediment present in water samples is to be included in the extraction and/or analysis

Relinquished by (Company): Phil Clifton ASSOC		Received by (Company): EUS SYDNEY		Lab Use Only	
Print Name: Edwin Babela	Print Name: JOHN	Job number: 309727	Cooling: Ice <input checked="" type="checkbox"/> Ice pack <input type="checkbox"/> None		
Date & Time: 3.11.22 3.10pm	Date & Time: 3/11/22 5.00	Temperature: 19	Security seal: Intact / Broken / None		
Signature:	Signature:	TAT Req - SAME day <input checked="" type="checkbox"/> / 2 / 3 / 4 / STD			

SAMPLE RECEIPT ADVICE

Client Details

Client	P Clifton & Assoc
Attention	Phil Clifton

Sample Login Details

Your reference	North Richmond
Envirolab Reference	309727
Date Sample Received	03/11/2022
Date Instructions Received	03/11/2022
Date Results Expected to be Reported	04/11/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	4 Soil
Turnaround Time Requested	1 day
Temperature on Receipt (°C)	19
Cooling Method	None
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: ahie@envirolab.com.au

Jacinta Hurst

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: jhurst@envirolab.com.au

Analysis Underway, details on the following page:



Sample ID	VTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil
1 W-2.0m-1.7-2.0	✓	✓	✓
2 W-4.0m-1.7-2.0	✓	✓	✓
3 N-2.0m	✓	✓	✓
4 N-4.0m	✓	✓	✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.

Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.

TAT for Micro is dependent on incubation. This varies from 3 to 6 days.