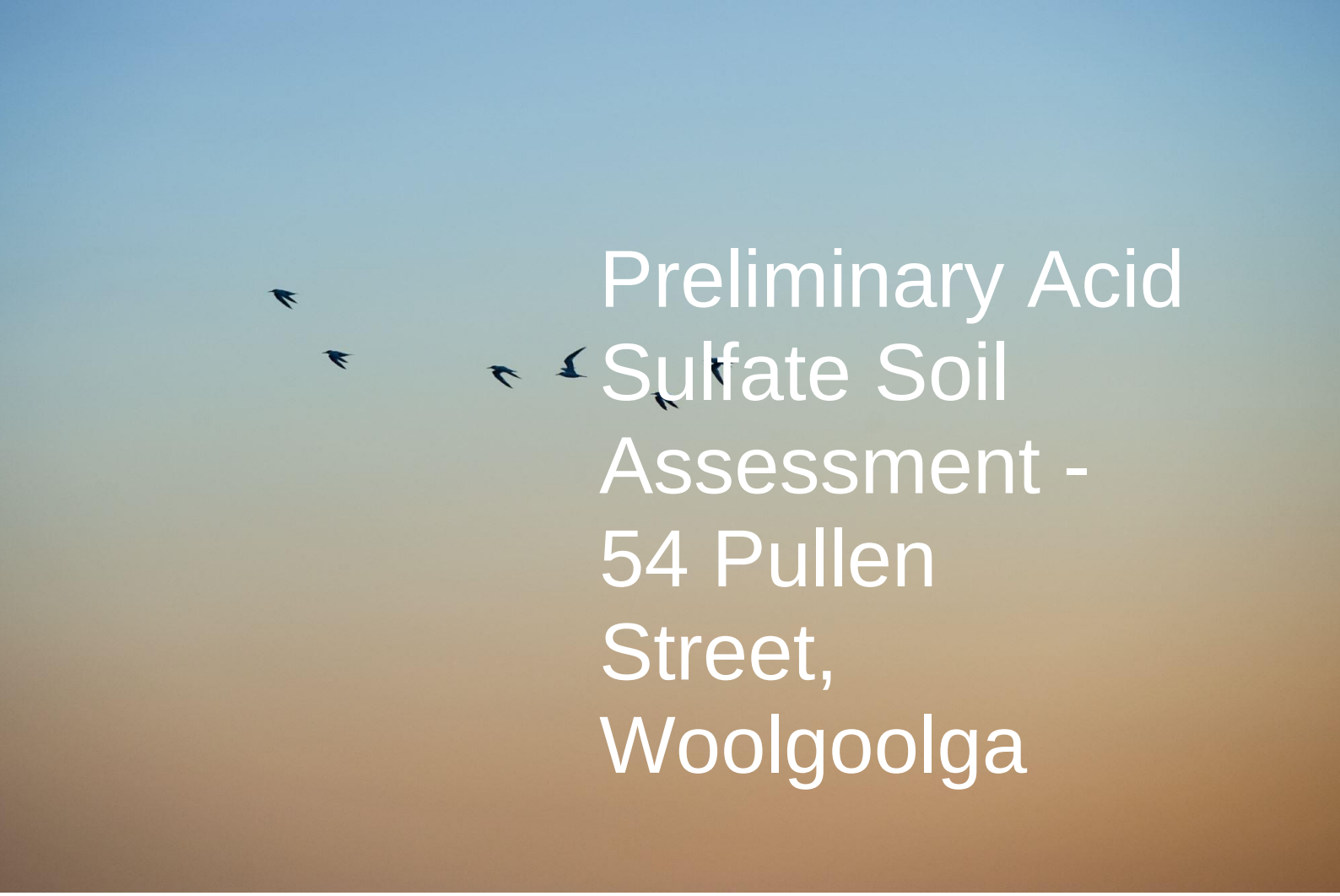

Preliminary Acid Sulfate Soil Assessment - 54 Pullen Street, Woolgoolga

21 June 2024

For: jeff.bulfin@preciseplanning.com.au

Authored by: Strider Duerinckx

Ref	Ver	Date	Distribution
2324-178-03	A	21/6/24	Client
	B		

Table of Contents

Appendices

1 Introduction

Earth Water Consulting Pty Limited (EWC) was engaged by jeff.bulfin@preciseplanning.com.au (the "Client") to undertake a preliminary Acid Sulfate Soil Assessment (PASS) for 54 Pullen Street, Woolgoolga (the "Site") (Figure 1).

2 Proposed Development

Based on plans of the proposed subdivision layout by deGroot & Benson, it is understood that it is proposed to subdivide the subject property into 20 allotments with a bio-retention basin covering 150m^2 basal and 40m^2 bench area in the northeast corner. (Figure 1).

Figure 1. Proposed Development Layout.

3 Scope of Work

This report presents the results of PASS investigations, undertaken in reference to the Acid Sulfate Soil Manual (ASSMAC, 1998), and BSC LEP Part 7 Acid Sulfate Soils. The scope of work included:

- A desktop review of surface, geology, hydrogeology, geomorphic and ASS risk conditions;
- A site inspection and walkover to assess for indicative ASS biomes and features;
- Drilling of 3 boreholes to 1.2m depth;
- Collection of 12 soil samples at various soil profiles present and screening for ASS; and
- Preparation of this Preliminary ASS report which describes the results of our investigation.

4 Site Description

The Site is located in a semi-rural location on the northern downhill side of Pullen Street. The upper southern boundary of the Site is located at approximately 20m AHD on the hill crest, and lower northern boundary is located between 9.5m AHD and 4.5m AHD (northwestern corner) (Figure 2).

The Site slopes down radially northwards from a central mid slope hill ridge to the north of Pullen Street flanked by gullies draining towards Woolgoolga Creek to the north and alluvial terraces to the northeast (Photographs 1 and 2).

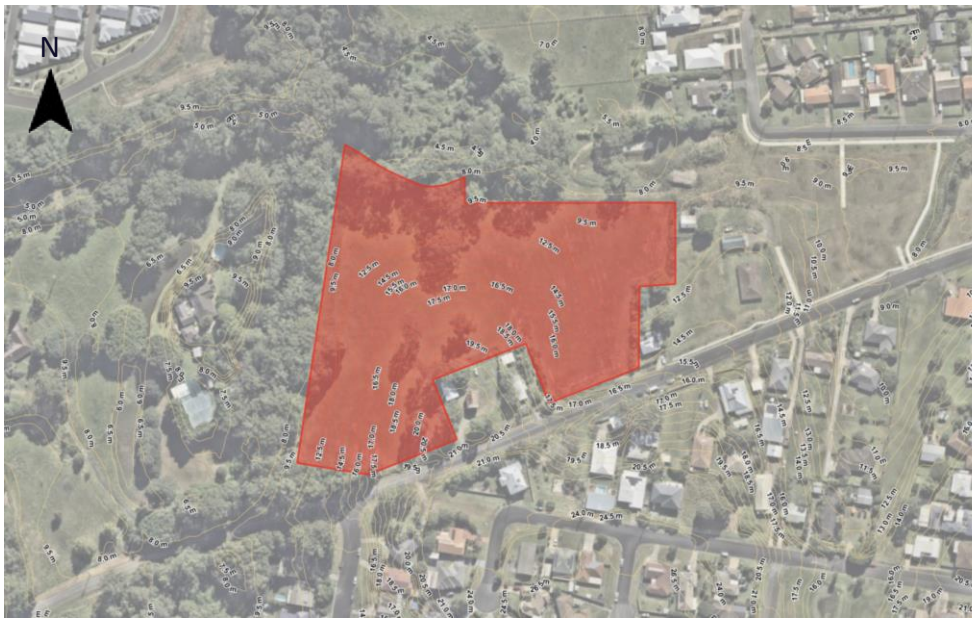

Figure 2. Location of the Site.

Photograph 1. Looking southwest from the northeast boundary corner towards the hill crest of the southern boundary.

Photograph 2. Looking west along the northern boundary from the northeast boundary at 9.5m AHD.

5 Geology and Hydrogeology

5.1 Geology

In review of the Lotsearch report (LS056002 EP), which indicates the majority of the Site is underlain by Coramba beds (Ccoc) Tournaisian (base) to Carboniferous (Pennsylvanian-top) aged sandstone-high-stand facies, comprised of Lithofeldspathic wacke, minor siltstone, siliceous siltstone, mudstone, metabasalt, chert and jasper, rare calcareous siltstone and felsic volcanics (Figure 3). Minor low-lying areas along the western boundary and northwestern corner are associated with alluvial floodplain deposits and terrace deposits zones with silt predominating composition.

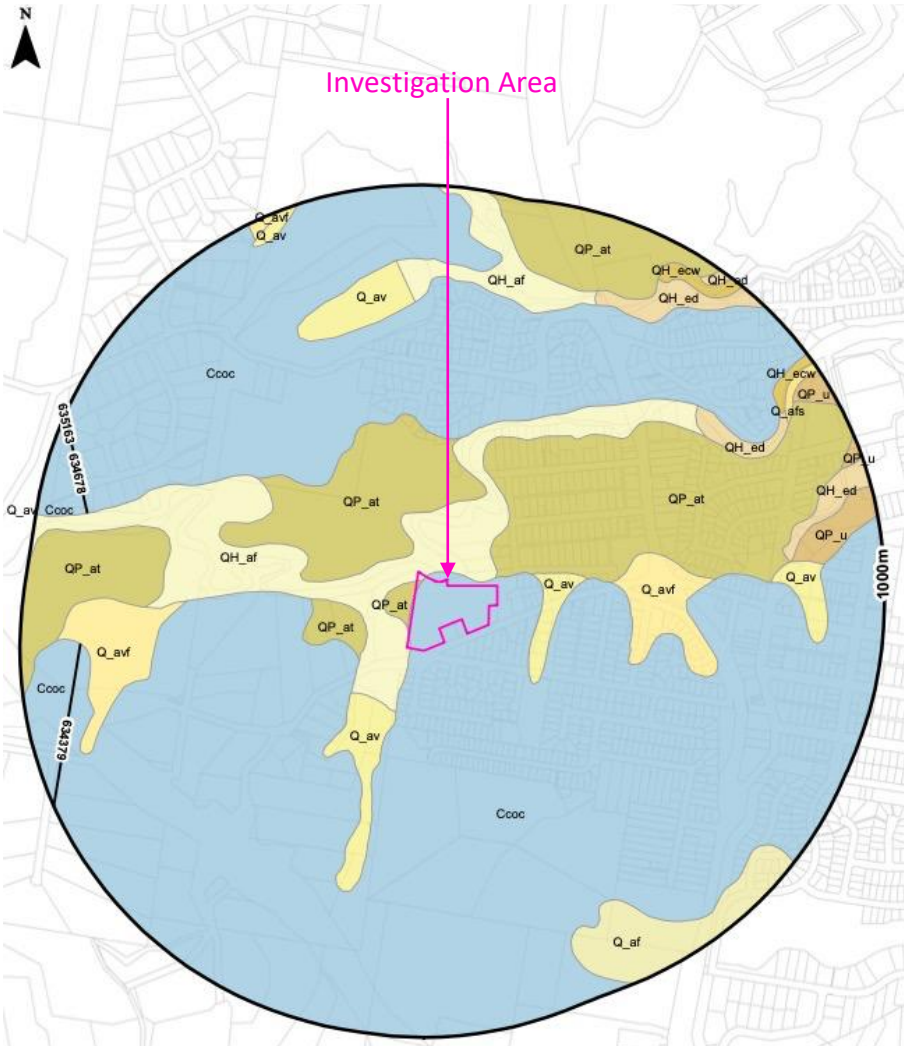

Figure 3. Mapped geological formation and subject property location.

5.2 Soils

According to the Soil Landscapes of Central and Eastern NSW the Site is underlain by the Megan erosional soil landscape (me) across the majority of the Site and the Coffs Creek alluvial landscape (cc) in the low lying riparian areas towards the northeast corner

The Megan Soil Landscape is located on rolling low hills to hills on on Late Carboniferous metasediments of the Coffs Harbour association in the Coast Range and Gleniffer-Bonville Hill, of moderately deep to deep (>100 cm), well-drained, structured Red Earths (Gn3.21), Brown Podzolic Soils (Db4.11) and Red Podzolic Soils (Dr2.11).

6 Acid Sulfate Soils

6.1 Mapped Occurrences of ASS

The published Woolgoolga 1:25,000 ASS Risk Map indicates that the majority of the Site and areas where soil disturbance and excavation is expected from the proposed development is not underlain by ASS soils. The lower northwestern corner of the Site is underlain by mapped low probability soils (Figure 4). The ASS risk mapping identifies that the ASS would inhabit an alluvial plain setting at >4m AHD, with ASS at >3m below the groundsurface.

The CHCC LEP Plan (2013) has identified the majority of the site as ASS Class 5, that is within the 500m buffer of mapped probability ASS soils (Figure 5).

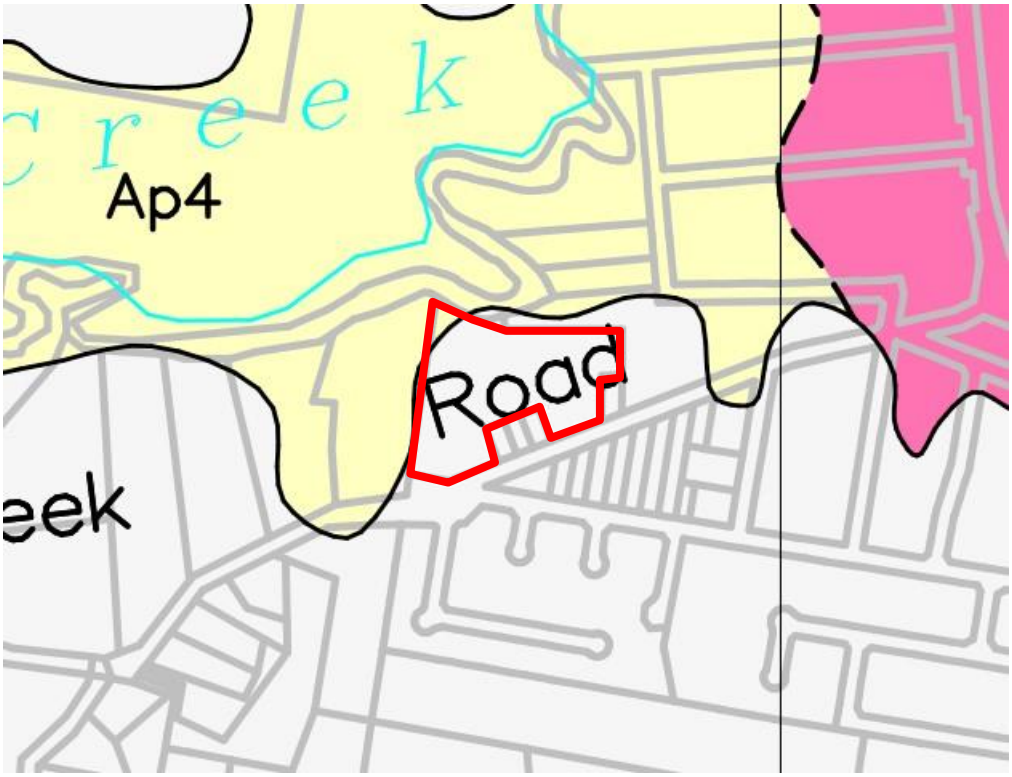

Figure 4. Mapped ASS probability.

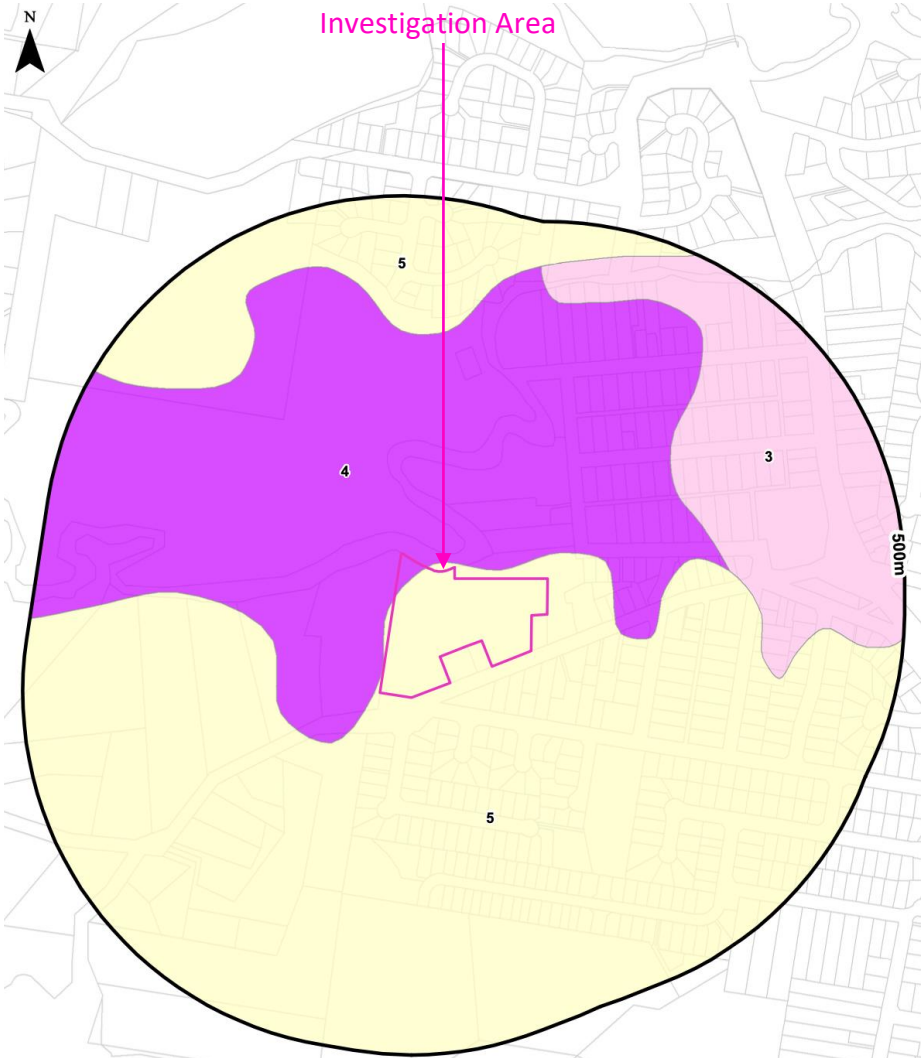

Figure 5. LEP ASS mapping.

7 Subsurface Conditions

Site soils were observed by drilling three boreholes (BH1-BH3). The boreholes of BH1 and BH3 were drilled to termination at 1.2m depth and BH2 was drilled to refusal at 0.8m depth. The location of the boreholes are shown in Figure 6 and a copy of the borehole logs are presented in Appendix A.

Natural residual clay soil profiles were observed in the boreholes, and were found to be representative of the Megan Soil Landscape, low to mid slope (dry) position. The lithology encountered included a brownish black to dark brown clay loam to 0.3m depth and brown mottled orange and white light clay to 1.2m depth. Extremely weathered bedrock was below the grey mottled white clay in BH2.

No rotten egg odours, shell pieces, dark grey to black anaerobic soils or muds were encountered. No groundwater inflow was observed in the boreholes to the maximum depth drilled.

Figure 6. Borehole Locations.

7.1 Biophysical Indicators

The proposed subdivision development is situated between 20m AHD and 9.5m AHD. No residential allotments are proposed near the riparian area of Woolgoolga Creek in the northwest corner and the alluvial terrace margins at the northeast of the Site.

No swamp type vegetation was observed on the proposed allotments. No surface water seepage was observed. Some standing surface water was observed at the northeast boundary corner and on the upper slope entrance from Pullen ST, possibly due to recent rainfall events.

7.2 ASS Screening Test Results

Eleven soil samples collected from BH1-BH3 and selected for field screening tests to determine their likelihood of containing Potential or Actual ASS (Pass/Aass) and whether further laboratory analyses would be necessary. The selected soil samples were placed in a chilled container (~4 C) and shipped to Eurofins for screening analysis.

The screening report is included in Appendix B and summarised in **Table 1**. In summary, the pH_f, pH_{fox} of all analysed samples were found to be below the Aass and Pass indicator threshold limits. An elevated pH change was observed in all samples with some reaction rate, but is considered to be associated with generation of organic acids and not ASS.

Table 1 – Summary of Field Screening

Sample ID	Sample Depth (m)	pH $_f$ (1:5)	pH $_{fox}$ (1:5)	pH Change	Reaction
S-1	0.0-0.3	6.1	5.1	1.0	4
S-2	0.3-0.6	6.2	5.1	1.1	4
S-3	0.6-0.8	6.0	4.3	1.7	4
S-4	0.8-1.0	5.7	4.4	1.3	4
S-5	0.0-0.3	5.8	3.8	2.0	4
S-6	0.3-0.55	5.7	4.2	1.5	2
S-7	0.55-0.8	5.6	4.1	1.5	4
S-8	0.0-0.3	6.0	4.5	1.5	4
S-9	0.3-0.5	6.2	4.6	1.6	2
S-10	0.5-0.75	5.6	4.4	1.2	2
S-11	0.75-1.0	5.5	4.3	1.2	2
Threshold		<4.5	<3	<1-2	1-3

8 Conclusions and Recommendations

Broadscale ASS risk mapping shows no ASS probability beneath the majority of the Site, with mapped low probability in the lower northwestern corner at >3m depth. The site inspections of biophysical indicators indicates soils no ASS risk, borehole drilling confirmed residual soils only were encountered, and screening confirmed no ASS indicators.

As such no further investigations or plans of management are required.

If on the unlikely event that during he proposed development dark grey to black, odorous or waterlogged alluvial sands or clays are encountered, then works should be halted until confirmation of the presence of ASS is undertaken and/or remedial strategies developed.

9 References

Stone Y, Ahern C.R., and Blunden B (1998), *Acid Sulfate Soil Manual 1998*. Acid Sulfate Soil Management Advisory Committee (ASSMAC), Wollongbar, NSW, Australia.

APPENDIX A

Soil Borelog

Borehole No:	**BH1**
Logged by:	RL
Drilling date:	13/06/2024
Drilling method:	Powered Auger
Borehole location:	Figure 2
Borehole coords:	517904, 6668679

Project ref:	2324-178
Client:	Jeff Bulfin
Address:	54 Pullen Street, Woolgoolga

PROFILE DESCRIPTION

Depth (m)	Sampling depth/name	Graphic Log	Horizon	Texture	Structure	Colour	Mottles	Coarse Fragments	Moisture Condition	Comments
0.1	S1		A1	Clay Loam	Strong	Brownish Black	Nil	< 5%	SM	Topsoil
0.2										
0.3										
0.4	S2		B1	Light Clay	Strong	Brown	Nil	Nil	SM	Tranferral
0.5										
0.6										
0.7	S3		B2	Light Clay	Strong	Dull Brown	Nil	Nil	SM	Transferral
0.8										
0.9	S4									
1.0										
1.1										
1.2										
1.3					Borehole terminated at 1.2m					
1.4										
1.5										

Moisture condition

D	Dry	M	Moist	W	Wet / saturated
SM	Slightly moist	VM	Very moist		

Soil Borelog

Borehole No:	**BH2**
Logged by:	RL
Drilling date:	13/06/2024
Drilling method:	Powered Auger
Borehole location:	Figure 2
Borehole coords:	517804, 6668609

Project ref:	2324-178
Client:	Jeff Bulfin
Address:	54 Pullen Street, Woolgoolga

PROFILE DESCRIPTION

Depth (m)	Sampling depth/name	Graphic Log	Horizon	Texture	Structure	Colour	Mottles	Coarse Fragments	Moisture Condition	Comments
0.1	S5		A1	Clay Loam	Strong	Dark Brown	Nil	< 5%	D	Topsoil
0.2										
0.3										
0.4	S6		B1	Light Clay grading to XWB	Moderate	Light Brownish Grey	White	Nil	D	Residual XWB
0.5										
0.6	S7									
0.7										
0.8										
0.9					Borehole refusalat 0.8m					Refusal @ 0.8m
1.0										
1.1										
1.2										
1.3										
1.4										
1.5										

Moisture condition

D	Dry	M	Moist	W	Wet / saturated
SM	Slightly moist	VM	Very moist		

Soil Borelog

Borehole No:	**BH3**
Logged by:	RL
Drilling date:	13/06/2024
Drilling method:	Powered Auger
Borehole location:	Figure 2
Borehole coords:	517747, 6668579

Project ref:	2324-178
Client:	Jeff Bulfin
Address:	54 Pullen Street, Woolgoolga

PROFILE DESCRIPTION

Depth (m)	Sampling depth/name	Graphic Log	Horizon	Texture	Structure	Colour	Mottles	Coarse Fragments	Moisture Condition	Comments
0.1	S8		A1	Clay Loam	Strong	Dark Brown	Brown	< 5%	SM	Topsoil
0.2										
0.3										
0.4	S9		B1	Light Clay	Strong	Bright Brown	Orange	Nil	SM	Residual
0.5										
0.6	S10									
0.7										
0.8										
0.9	S11									
1.0						Orange	Light Grey			
1.1										
1.2										
1.3					Borehole terminated at 1.2m					
1.4										
1.5										

Moisture condition

D	Dry	M	Moist	W	Wet / saturated
SM	Slightly moist	VM	Very moist		

APPENDIX B

Earth Water Consulting Pty Limited
2-16 Lourdes Avenue
Urunga
NSW 2455

Attention: **Strider Duerinckx**

Report **1108049-S**
Project name PULLEN ST
Project ID 2324 - 178
Received Date Jun 13, 2024

Client Sample ID			S-1	S-2	S-3	S-4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S24-Jn0035802	S24-Jn0035803	S24-Jn0035804	S24-Jn0035805
Date Sampled			Jun 13, 2024	Jun 13, 2024	Jun 13, 2024	Jun 13, 2024
Test/Reference	LOR	Unit				
Acid Sulfate Soils Field pH Test						
pH-F (Field pH test)*	0.1	pH Units	6.1	6.2	6.0	5.7
pH-FOX (Field pH Peroxide test)*	0.1	pH Units	5.1	5.1	4.3	4.4
Reaction Ratings*[S05]	0	comment	4.0	4.0	4.0	4.0

Client Sample ID			S-5	S-6	S-7	S-8
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S24-Jn0035806	S24-Jn0035807	S24-Jn0035808	S24-Jn0035809
Date Sampled			Jun 13, 2024	Jun 13, 2024	Jun 13, 2024	Jun 13, 2024
Test/Reference	LOR	Unit				
Acid Sulfate Soils Field pH Test						
pH-F (Field pH test)*	0.1	pH Units	5.8	5.7	5.6	6.0
pH-FOX (Field pH Peroxide test)*	0.1	pH Units	3.8	4.2	4.1	4.5
Reaction Ratings*[S05]	0	comment	4.0	2.0	4.0	4.0

Client Sample ID			S-9	S-10	S-11
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			S24-Jn0035810	S24-Jn0035811	S24-Jn0035812
Date Sampled			Jun 13, 2024	Jun 13, 2024	Jun 13, 2024
Test/Reference	LOR	Unit			
Acid Sulfate Soils Field pH Test					
pH-F (Field pH test)*	0.1	pH Units	6.2	5.6	5.5
pH-FOX (Field pH Peroxide test)*	0.1	pH Units	4.6	4.4	4.3
Reaction Ratings*[S05]	0	comment	2.0	2.0	2.0

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Acid Sulfate Soils Field pH Test	Sydney	Jun 17, 2024	7 Days

- Method: LTM-GEN-7060 Determination of field pH (pHF) and field pH peroxide (pHFOX) tests

eurofins

web: www.eurofins.com.au
email: EnviroSales@eurofins.com

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079 & 25289

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370

Eurofins ProMicro Pty Ltd
ABN: 47 009 120 549

Perth ProMicro
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2561
Site# 2554

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

Auckland	Auckland (Focus)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise,	43 Detroit Drive	1277 Cameron Road,
Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Earth Water Consulting Pty Limited
Address: 2-16 Lourdes Avenue
Urunga
NSW 2455

Project Name: PULLEN ST
Project ID: 2324 - 178

Order No.: 2324-178
Report #: 1108049
Phone: 0402 6083 96
Fax:

Received: Jun 13, 2024 2:05 PM
Due: Jun 18, 2024
Priority: 3 Day
Contact Name: Strider Duerinckx

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Acid Sulfate Soils Field pH Test
Sydney Laboratory - NATA # 1261 Site # 18217						X
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	S-1	Jun 13, 2024		Soil	S24-Jn0035802	X
2	S-2	Jun 13, 2024		Soil	S24-Jn0035803	X
3	S-3	Jun 13, 2024		Soil	S24-Jn0035804	X
4	S-4	Jun 13, 2024		Soil	S24-Jn0035805	X
5	S-5	Jun 13, 2024		Soil	S24-Jn0035806	X
6	S-6	Jun 13, 2024		Soil	S24-Jn0035807	X
7	S-7	Jun 13, 2024		Soil	S24-Jn0035808	X
8	S-8	Jun 13, 2024		Soil	S24-Jn0035809	X
9	S-9	Jun 13, 2024		Soil	S24-Jn0035810	X
10	S-10	Jun 13, 2024		Soil	S24-Jn0035811	X
11	S-11	Jun 13, 2024		Soil	S24-Jn0035812	X
Test Counts						11

eurofins | Environment Testing

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the sampling date; therefore, compliance with these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether, the holding time is seven days; however, for all other VOCs, such as BTEX or C6-10 TRH, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ppm:** parts per million
µg/L: micrograms per litre	**ppb:** parts per billion	**%:** Percentage
org/100 mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100 mL:** Most Probable Number of organisms per 100 millilitres
CFU: Colony Forming Unit	**Colour:** Pt-Co Units (CU)	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples, these are performed on laboratory-certified clean sands and in the case of water samples, these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is ≤30%; however, the following acceptance guidelines are equally applicable:

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Acid Sulfate Soils Field pH Test				Result 1	Result 2	RPD			
pH-F (Field pH test)*	S24-Jn0035802	CP	pH Units	6.1	6.0	pass	20%	Pass	
pH-FOX (Field pH Peroxide test)*	S24-Jn0035802	CP	pH Units	5.1	5.2	pass	0%	Pass	
Duplicate									
Acid Sulfate Soils Field pH Test				Result 1	Result 2	RPD			
pH-F (Field pH test)*	S24-Jn0035812	CP	pH Units	5.5	5.6	pass	20%	Pass	
pH-FOX (Field pH Peroxide test)*	S24-Jn0035812	CP	pH Units	4.3	4.3	pass	0%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	No
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
S05	Field Screen uses the following fizz rating to classify the rate the samples reacted to the peroxide: 1.0; No reaction to slight. 2.0; Moderate reaction. 3.0; Strong reaction with persistent froth. 4.0; Extreme reaction.

Authorised by:

Nileshni Goundar — Analytical Services Manager

Glenn Jackson
Managing Director

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

CHAIN OF CUSTODY RECORD

Eurofins | mgt ABN 50 005 085 521

- [x] Sydney Laboratory — Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066 — 02 9900 8400 EnviroSampleNSW@eurofins.com
- [ ] Brisbane Laboratory — Unit 1 21 Smallwood Place Murarrie QLD 4172 — 07 3902 4600 EnviroSampleQLD@eurofins.com
- [ ] Perth Laboratory — Unit 2 91 Leach Highway Kewdale WA 6105 — 08 9251 9600 EnviroSampleWA@eurofins.com
- [ ] Melbourne Laboratory — 2 Kingston Town Close Oakleigh VIC 3166 — 03 8564 5000 EnviroSampleVic@eurofins.com

Company	Earth Water Consulting Pty Limited
Address	Unit 6 / 1A MArina Crescent, Urunga NSW 2455
Contact Name	Strider Duerinckx
Phone №	0402608396
Special Directions	
Purchase Order	2324-178
Quote ID №	Earth Water Consulting
Project №	2324-178
Project Name	PULLEN ST
Project Manager	SD
EDD Format (ESdat, EQuIS etc)	
Sampler(s)	RL
Handed over by	
Email for Invoice	strider@ewcon.com.au
Email for Results	strider@ewcon.com.au

Analyses: FIELD ASS SCREEN

(Where metals are requested, please specify "Total" or "Filtered". SUITE codes must be used to attract SUITE pricing)

Containers (Change container type & size if necessary): 500mL Plastic, 250mL Plastic, 125mL Plastic, 200mL Amber Glass, 40mL Vial, 500mL PFAS PET, Jar (Glass or HDPE) — BAG

Required Turnaround Time (Default will be 5 days if not ticked) ♦Surcharge will apply
- [ ] Overnight (reporting by 9am)♦
- [ ] Same day♦
- [ ] 1 day♦
- [ ] 2 days♦
- [x] 3 days♦
- [ ] 5 days (Standard)
- [ ] Other( )

№	Client Sample ID	Sampled Date/Time (dd/mm/yy hh:mm)	Matrix (Solid (S) Water (W))	FIELD ASS SCREEN	BAG	Sample Comments / Dangerous Goods Hazard Warning
1	S-1	13-6-24	S	✓	✓	
2	S-2	↓	↓	✓	✓	
3	S-3	↓	↓	✓	✓	
4	S-4	↓	↓	✓	✓	
5	S-5	↓	↓	✓	✓	
6	S-6	↓	↓	✓	✓	
7	S-7	↓	↓	✓	✓	
8	S-8	↓	↓	✓	✓	
9	S-9	↓	↓	✓	✓	
10	S-10	↓	↓	✓	✓	
			Total Counts	10	10	

Method of Shipment: [x] Courier (#) [ ] Hand Delivered [ ] Postal — Name: Rob — Signature: [signature] — Date: 13-6-24 — Time:

Eurofins | mgt Laboratory Use Only — Received By: Shoreline Sandy — (SYD) | BNE | MEL | PER | ADL | NTL | DRW — Signature: SJ — Date: 13/6 — Time: 2:05PM — Temperature: 18.2 chill

Received By — SYD | BNE | MEL | PER | ADL | NTL | DRW — Signature — Date — Time — Report №

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

1108049

QS0605_R# Maintained by: S. Kojima Approved by: C. D. Preuz Approved on: 12 June 2018

CHAIN OF CUSTODY RECORD

Eurofins | mgt ABN 50 005 085 521

☑ **Sydney Laboratory**
Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066
02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory**
Unit 1 21 Smallwood Place Murarrie QLD 4172
07 3902 4600 EnviroSampleQLD@eurofins.com

☐ **Perth Laboratory**
Unit 2 91 Leach Highway Kewdale WA 6105
08 9251 9600 EnviroSampleWA@eurofins.com

☐ **Melbourne Laboratory**
2 Kingston Town Close Oakleigh VIC 3166
03 8564 5000 EnviroSampleVic@eurofins.com

Company	Earth Water Consulting Pty Limited	Project №	2324-178
Address	Unit 6 / 1A MArina Crescent, Urunga NSW 2455	Project Name	PULLEN ST
Contact Name	Strider Duerinckx	Project Manager	SD
Phone №	0402608396	EDD Format (ESdat, EQuIS etc)	
Special Directions		Sampler(s)	QL
Purchase Order	2324-178	Handed over by	
Quote ID №	Earth Water Consulting	Email for Invoice	strider@ewcon.com.au
		Email for Results	strider@ewcon.com.au

Analyses (Where metals are requested, please specify 'Total' or 'Filtered'. Suite code must be used to select BTEX pricing)

№	Client Sample ID	Sampled Date/Time (dd/mm/yy hh:mm)	Matrix Soil (S) Water (W)	Analyses: FIELD ASS SCREEN	Containers: 500mL Plastic (BTEX)	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL Vial	500mL PFAS PET	Jar (Glass or HDPE)	Sample Comments / Dangerous Goods Hazard Warning
1	S-11	13-6-24	S	/	✓							
2												
3												
4												
5												
6												
7												
8												
9												
10												
	Total Counts				✓							

Containers — Change container type & size if necessary

Required Turnaround Time — Default will be 5 days if not ticked

♦Surcharge will apply

- ☐ Overnight (reporting by 9am)♦
- ☐ Same day♦
- ☐ 1 day♦
- ☐ 2 days♦
- ☑ 3 days♦
- ☐ 5 days (Standard)
- ☐ Other( )

Method of Shipment							
☒ Courier (#)	☐ Hand Delivered	☐ Postal	Name	ROB	Signature	Date	13-6-24	Time	

Eurofins | mgt Laboratory Use Only — Received by / Signature / Date / Time / Temperature / Report №

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

Submission of samples to the laboratory will be deemed as acceptance of Eurofins | mgt Standard Terms and Conditions unless agreed otherwise. A copy of Eurofins | mgt Standard Terms and Conditions is available on request.