

Our Ref: MW/14647/Soakaway

Your Ref:

Contact: Michael Watkins

29th April 2021

Persimmon Homes West Wales
Dragon House
Parc Y Ddraig
Penllergaer Business Park
Penllergaer
Swansea
SA4 9HJ

For the attn. of Mr Mike Williams

Dear Mike,

**SOAKAWAY TESTING: PROPOSED RESIDENTIAL DEVELOPMENT, LAND OFF
CHANNEL VIEW, PORT TALBOT**

We confirm that the required soakaway testing has been completed at the above site and report the following:

1.0 Introduction

Terra Firma (Wales) Limited were commissioned by Persimmon Homes West Wales (The Client) to carry out in-situ soakaway testing at the above site. The site layout is presented on **Drawing 01**.

The soakaway investigation was conducted, and this report has been prepared for the sole internal reliance of the client and their design and construction team. This report shall not be relied upon or transferred to any other parties without the express written authorisation of Terra Firma (Wales) Limited. If an unauthorised third party comes into possession of this report they rely on it at their peril and the authors owe them no duty of care and skill.

The report represents the findings and opinions of experienced geotechnical consultants. Terra Firma (Wales) Limited does not provide legal advice and the advice of lawyers may also be required.

The subsurface geological profiles are generalised by necessity and have been based on the information found at the location of the exploratory holes and depths tested.

The investigation was limited by the presence of underground services.

Whilst on site Terra Firma were also asked by the client to expose and record the foundations of a wall located on the north east boundary of land to the south of Channel View.

2.0 Site Works

The site works were undertaken between 29th March and 8th April 2021 and comprised the excavation of 31 trial pits for soakaway tests, and a further two trial pits alongside the boundary wall on land to the south of Channel View.

Trial pits referenced SA01 to SA31 were excavated using a JCB 3CX backhoe mechanical excavator and the position of the soakage tests was determined by Persimmon Homes West Wales with final position on site by Terra Firma to take into account known or suspected services.

TP01-2021 and TP02-2021 were excavated alongside the north east boundary wall on land to the south of Channel View to uncover its foundation. Foundation sketches are presented in **Annex A**.

The fieldworks were supervised by Terra Firma (Wales) Limited, who also logged the trial pits to the general requirements of BS5930:2015. The soakaway tests were conducted to the general requirements of BRE365.

The trial pit logs are presented in **Annex B** and their locations are shown on **Drawing 01**.

Soakaway tests were carried out in trial pits referenced SA01 to SA31 in general accordance with BRE DG 365:2016. The excavation sides were squared using the excavator bucket and dimensions recorded within the test section. The trial pit was partially filled with clean water using a dedicated bowser with a 75mm diameter outlet and the fall in level recorded against time. The results are presented in **Annex C**.

3.0 Groundwater, Obstructions and Stability

Groundwater was not encountered in any of the trial pits.

No manmade obstructions were encountered in the trial pits apart from a surface covering of asphalt and concrete.

The pits were generally stable for the duration of excavation and testing, with only minor spalling observed.

4.0 Soil Infiltration Testing

Soakaway tests were undertaken at 31 locations across the site. Where infiltration rates are provided, they are for the specific location and depth tested. The following was observed:

Table 4.1 Summary of Soakaway Results

Trial Pit	Depth Range of Test (m)	Infiltration Rate (ms ⁻¹)
SA01	0.1 – 0.65	3.56 x10 ⁻⁰⁵
	0.07 – 0.65	1.52 x10 ⁻⁰⁵
	0.17 – 0.65	8.80 x10 ⁻⁰⁶ *
SA02	0.1 – 0.62	8.75 x10 ⁻⁰⁵
	0.09 – 0.62	3.98 x10 ⁻⁰⁵
	0.05 – 0.62	3.21 x10 ⁻⁰⁵
SA03	0.11 – 0.52	1.35 x10 ⁻⁰⁵
	0.13 – 0.52	1.22 x10 ⁻⁰⁵ *
	0.14 – 0.52	1.51 x10 ⁻⁰⁵
SA04	0.09 – 0.48	3.51 x10 ⁻⁰⁵
	0.14 – 0.48	2.13 x10 ⁻⁰⁵
	0.06 – 0.48	1.92 x10 ⁻⁰⁵ *
SA05	0.23 – 0.60	2.64 x10 ⁻⁰⁵
	0.15 – 0.50	2.49 x10 ⁻⁰⁵
	0.23 – 0.50	1.97 x10 ⁻⁰⁵
SA06	0.30 – 0.60	5.51 x10 ⁻⁰⁵
	0.26 – 0.60	2.93 x10 ⁻⁰⁵
	0.24 – 0.60	4.16 x10 ⁻⁰⁵
SA07	0.14 – 0.60	5.16 x10 ⁻⁰⁵
	0.14 – 0.60	3.29 x10 ⁻⁰⁵
	0.11 - 0.60	1.99 x10 ⁻⁰⁵
SA08	0.18 – 0.60	5.86 x10 ⁻⁰⁵
	0.11 – 0.60	3.21 x10 ⁻⁰⁵
	0.11 – 0.60	3.18 x10 ⁻⁰⁵
SA09	0.10 – 0.55	3.83 x10 ⁻⁰⁵
	0.10 – 0.55	4.25 x10 ⁻⁰⁵
	0.08 – 0.55	3.95 x10 ⁻⁰⁵
SA10	0.18 – 0.60	1.61 x10 ⁻⁰⁵
	0.13 – 0.60	1.21 x10 ⁻⁰⁵
	0.08 – 0.60	9.67 x10 ⁻⁰⁵ *
SA11	0.17 – 0.51	9.20 x10 ⁻⁰⁵
	0.16 – 0.48	5.97 x10 ⁻⁰⁵
	0.16 – 0.48	6.08 x10 ⁻⁰⁵
SA12	0.18 – 0.50	1.05 x10 ⁻⁰⁴
	0.10 – 0.50	7.30 x10 ⁻⁰⁵
	0.11 – 0.45	6.16 x10 ⁻⁰⁵
SA13	0.09 – 0.50	1.65 x10 ⁻⁰⁴
	0.07 – 0.50	1.01 x10 ⁻⁰⁴
	0.12 – 0.50	4.36 x10 ⁻⁰⁵
SA14	0.11 – 0.51	1.61 x10 ⁻⁰⁴

	0.10 – 0.51	1.31×10^{-04}
	0.09 – 0.51	1.27×10^{-04}
SA15	0.09 – 0.46	5.97×10^{-05}
	0.08 – 0.46	3.31×10^{-05}
	0.07 -0.40	2.34×10^{-05}
SA16	0.11 – 0.51	2.96×10^{-04}
	0.08 – 0.51	2.18×10^{-04}
	0.05 – 0.51	1.70×10^{-04}
SA17	0.11 -0.51	6.95×10^{-05}
	0.07 – 0.51	4.42×10^{-05}
	0.07 – 0.51	4.39×10^{-05}
SA18	0.11 – 0.52	7.28×10^{-05}
	0.09 – 0.52	3.49×10^{-05}
	0.10 – 0.52	2.73×10^{-05}
SA19	0.11 – 0.50	5.01×10^{-05}
	0.07 – 0.46	1.74×10^{-05}
	0.07 – 0.43	1.24×10^{-05}
SA20	0.10 – 0.57	4.37×10^{-05}
	0.09 – 0.53	3.24×10^{-05}
	0.05 – 0.51	2.58×10^{-05}
SA21	0.06 – 0.52	2.41×10^{-04}
	0.14 – 0.52	5.97×10^{-05}
	0.13 – 0.48	8.27×10^{-05}
SA22	0.07 – 0.55	4.26×10^{-05}
	0.11 – 0.51	3.20×10^{-05}
	0.10 – 0.49	1.45×10^{-05}
SA23	0.11 – 0.54	9.80×10^{-05}
	0.11 – 0.52	1.38×10^{-05}
	0.14 – 0.49	2.35×10^{-05}
SA24	0.09 – 0.54	2.04×10^{-04}
	0.09 – 0.54	8.58×10^{-05}
	0.07 – 0.54	7.55×10^{-05}
SA25	0.07 – 0.52	1.08×10^{-04}
	0.09 – 0.52	7.10×10^{-05}
	0.08 - 0.52	5.78×10^{-05}
SA26	0.08 – 0.55	1.11×10^{-04}
	0.09 – 0.51	7.72×10^{-05}
	0.08 – 0.48	5.54×10^{-05}
SA27	0.11 – 0.55	1.20×10^{-05}
	0.08 – 0.55	5.00×10^{-05}
	0.15 – 0.55	$3.86 \times 10^{-06} *$
SA28	0.10 – 0.58	4.72×10^{-05}
	0.07 – 0.50	1.24×10^{-05}
	0.07 – 0.48	1.13×10^{-05}
SA29	0.10 – 0.51	1.19×10^{-04}
	0.07 – 0.51	7.76×10^{-05}
	0.07 – 0.51	4.50×10^{-05}
SA30	0.11 – 0.55	3.59×10^{-04}
	0.07 – 0.55	2.91×10^{-04}

	0.08 – 0.55	2.09×10^{-04}
SA31	0.11 – 0.50	3.30×10^{-04}
	0.07 – 0.50	1.12×10^{-04}
	0.07 – 0.50	1.12×10^{-04}

Notes:

* - Soakaway test rate is conjectured due to Vp75 taking place out of working hours.

Soakaway drainage systems should be constructed outside of influencing distance of existing and proposed structures.

We trust that the above is to your satisfaction, however, should you have any queries or require any further information please do not hesitate to contact us.

Yours sincerely

For: Terra Firma (Wales) Limited



Mr Michael Watkins

Enc.

Annex A – Foundation Sketches

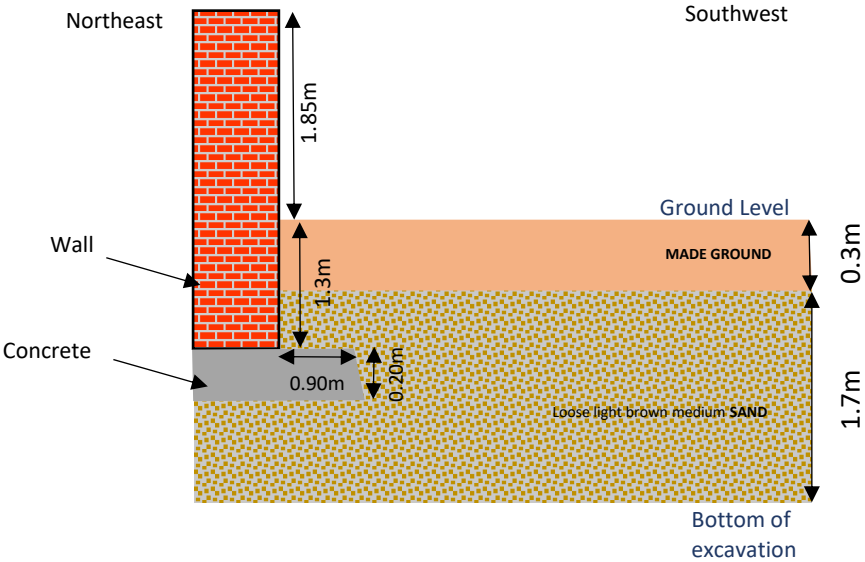
Annex B - Trial Pit Logs

Annex C - Soakaway Calculation Sheets

Drawing 01 – Soakaway Test and Trial Pit Locations

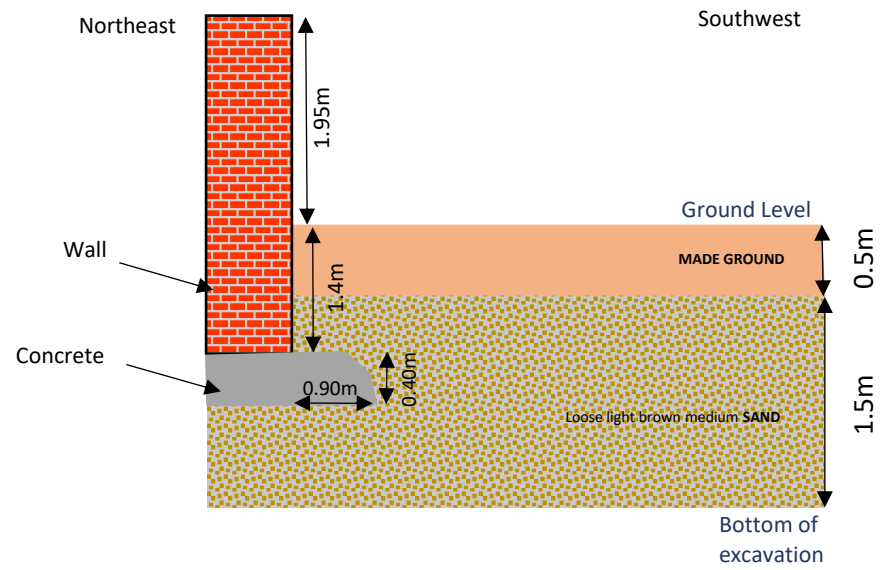
ANNEX A
Foundation Sketches

TP01-2021



Not to scale

TP02-2021



Not to scale

ANNEX B
Trial Pit Logs

Trial Pit Log

Trial Pit No:
 TP01-2021
 Sheet 1 of 1

Project Name: Afan Lido

Project No:
 14647

Co-ords: -
 Level:

Date:
 30/03/2021

Location: Aberavon, Neath Port Talbot

Dimensions: 2.00
 Depth 0.80
 2.00

Scale:
 1:25

Logged:
 MW

Client: Persimmon Homes West Wales

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
				0.30			Grass over brown organic-rich slightly gravelly SAND with low cobble and boulder content. Gravel, cobbles and boulders are angular slag and brick. Boulders up to 300mm.	
				2.00			Loose light brown medium grained SAND.	1
							End of Pit at 2.000m	2
								3
								4
								5

Stability: Unstable

Remarks:

Trial Pit Log

Trial Pit No:
 TP02-2021
 Sheet 1 of 1

Project Name: Afan Lido

Project No:
 14647

Co-ords: -
 Level:

Date:
 30/03/2021

Location: Aberavon, Neath Port Talbot

Dimensions: 2.00

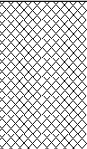
Depth
 2.00

0.80

Scale:
 1:25

Logged:
 MW

Client: Persimmon Homes West Wales

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
				0.50			Grass over brown organic-rich slightly gravelly SAND with low cobble and boulder content. Gravel, cobbles and boulders are angular slag and brick. Boulders up to 300mm.	
				2.00			Loose light brown medium grained SAND.	1
							End of Pit at 2.000m	2
								3
								4
								5

Stability: Unstable

Remarks:



Trial Pit No:
SA01
Sheet 1 of 1

Project Name: Afan Lido

Project No:
14647

Co-ords: -
Level:

Date:
29/03/2021

Location: Aberavon, Neath Port Talbot

Dimensions:

1.60

Depth

0.65

0.75

Scale:

1:25

Logged:
MD

Client: Persimmon Homes West Wales

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.20			MADE GROUND - Dark grey TARMAC.
							MADE GROUND - Loose dark brown gravelly SAND. Gravel is angular clinker and slag.
				0.65			End of Pit at 0.650m

Stability:	Pit was stable.
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Remarks: Pit was stable. No groundwater was present.

Trial Pit Log

Trial Pit No:
SA02
 Sheet 1 of 1

Project Name: Afan Lido

Project No:
 14647

Co-ords: -
 Level:

Date:
 29/03/2021

Location: Aberavon, Neath Port Talbot

Dimensions:

1.30

Depth

0.62

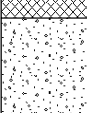
0.65

Scale:

1:25

Logged:
 MD

Client: Persimmon Homes West Wales

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.10			MADE GROUND. TARMAC
				0.30			MADE GROUND. Loose reddish brown GRAVEL of angular slag.
				0.62			Loose light yellowish brown slightly gravelly SAND. Gravel is subangular to subrounded sandstone.
							End of Pit at 0.620m

Stability: Pit was stable.

Remarks: Pit was stable. No groundwater was present.



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Sheet 1 of 1

Remarks: Pit was stable. No groundwater was present.

Trial Pit Log

Trial Pit No:
SA04
Sheet 1 of 1

Project Name: Afan Lido

Project No:
14647

Co-ords: -
Level:

Date:
29/03/2021

Location: Aberavon, Neath Port Talbot

Dimensions:

1.90

Depth
0.60

0.70

Scale:
1:25

Logged:
MD

Client: Persimmon Homes West Wales

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.20			MADE GROUND. Loose brown very gravelly SAND. Gravel is angular to subangular clinker and brick.
				0.25			Medium dense cream slightly gravelly SAND. Gravel is angular to subangular. sandstone.
				0.40			Loose medium dense dark reddish brown gravelly SAND. Gravel is angular to subangular clinker and brick.
				0.60			Loose light brown slightly gravelly SAND. Gravel is subangular to subrounded sandstone.
							End of Pit at 0.600m

Stability: Pit was stable.

Remarks: Pit was stable. No groundwater was present.

Trial Pit Log

Trial Pit No:

SA05

Sheet 1 of 1

Project Name: Afan Lido

Project No:
14647

Co-ords: -
Level:

Date:
29/03/2021

Location: Aberavon, Neath Port Talbot

Dimensions:

1.50

Depth

0.60

0.75

Scale:

1:25

Logged:
MD

Client: Persimmon Homes West Wales

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.10		MADE GROUND. Grass over soft dark brown slightly sandy CLAY. Sand is medium to coarse sandstone. MADE GROUND. Loose dark reddish brown very gravelly medium to coarse SAND. Gravel is angular to subangular clinker.	1 2 3 4 5
				0.40		Loose yellowish brown medium SAND.	
				0.60		End of Pit at 0.600m	

Stability:	Pit was stable.
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Remarks: Pit was stable. No groundwater was present.

Trial Pit Log

Trial Pit No:
SA06
 Sheet 1 of 1

Project Name: Afan Lido

Project No:
 14647

Co-ords: -
 Level:

Date:
 30/03/2021

Location: Aberavon, Neath Port Talbot

Dimensions:

2.20

Depth
 0.60

0.70

Scale:
 1:25

Logged:
 MD

Client: Persimmon Homes West Wales

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.10			MADE GROUND. Grass over loose black very gravelly SAND. Gravel ls subangular to subrounded. sandstone. Contains rootlets.
				0.30			MADE GROUND. Medium dense grey GRAVEL of subangular to angular concrete, clinker and slag.
				0.60			MADE GROUND - Loose slightly gravelly SAND. Gravel is angular to subangular medium to coarse concrete.
							End of Pit at 0.600m
							1
							2
							3
							4
							5

Stability: Pit was stable.

Remarks: Pit was stable. No groundwater was present.



Trial Pit No:
SA07
Sheet 1 of 1

Project Name: Afan Lido

Project No:
14647

Co-ords: -
Level:

Date:
30/03/2021

Location: Aberavon, Neath Port Talbot

Dimensions:

2.07

Scale:

Depth

0.70

1:25

Client: Persimmon Homes West Wales

0.60

Logged:
MD

[illegible]

Stability:	Pit was stable.
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Remarks: Pit was stable. No groundwater was present.



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Sheet 1 of 1

Remarks: Pit was stable. No groundwater was present.



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Logged:
MD

5

Remarks: Pit was stable. No groundwater was present.



Trial Pit No:
SA10
Sheet 1 of 1

Date:
30/03/2021

Logged:
MD

[illegible]

Remarks: Pit was stable. No groundwater was present.



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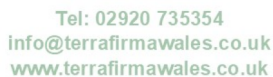
Sheet 1 of 1

Date:
30/03/2021

Logged:
MD

5

Remarks: Pit was stable. No groundwater was present.



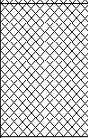
Trial Pit No:
SA12
Sheet 1 of 1

Date:
31/03/2021

0.85

1:25

Logged
MD

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.06			MADE GROUND. Loose dark grey gravelly SAND. Gravel is angular to subrounded clinker and brick. Some rootlets. MADE GROUND - Medium dense black very gravelly SAND with medium cobble and low boulder content. Gravel, cobbles and boulders of clinker, brick and slag.
				0.50			End of Pit at 0.500m

Remarks: Pit was stable. No groundwater was present.

Trial Pit Log

Trial Pit No:

SA13

Sheet 1 of 1

Project Name: Afan Lido

Project No:
14647

Co-ords: -
Level:

Date:
31/03/2021

Location: Aberavon, Neath Port Talbot

Dimensions:

1.40

Depth

0.50

0.70

Scale:

1:25

Logged:
MD

Client: Persimmon Homes West Wales

[illegible]

Stability:	Pit was stable.
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Remarks: Pit was stable. No groundwater was present.



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Remarks: Pit was stable. No groundwater was present.



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5

Remarks: Pit was stable. No groundwater was present.



Trial Pit No:
SA16
Sheet 1 of 1

Date:
31/03/2021

Logged
MD

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.11			Grass over soft brown slightly sandy CLAY. Many rootlets.
							Loose brown sandy slightly gravelly CLAY. Medium cobble content and low boulder content. Gravel, cobbles and boulders are subrounded to angular slag, brick clinker.
				0.51			End of Pit at 0.510m

Remarks: Pit was stable. No groundwater was present.



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Remarks:	Pit was stable. No groundwater was present.
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Trial Pit No:
SA18
Sheet 1 of 1

Project No:
14647

Co-ords: -
Level:

Date:
31/03/2021

Dimensions:

1.60

Scale:

Depth

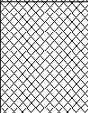
0.52

0.48

1:25

Logged:
MD

Client: Persimmon Homes West Wales

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.15			MADE GROUND. Grass over loose light brown gravelly SAND. Gravel is angular sandstone, concrete and brick. Many rootlets.
							MADE GROUND. Loose light brown very gravelly SAND with medium cobble content. and low boulder content. Gravel, cobbles and boulders are angular brick and concrete. Boulders up to 0.6m in size.
							End of Pit at 0.520m

Stability:	Pit was unstable during excavation.
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Remarks: Pit was unstable during excavation. No groundwater was present.



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Sheet 1 of 1

Remarks: Pit was unstable during excavation. No groundwater was present.

Trial Pit Log

Trial Pit No:
SA20
 Sheet 1 of 1

Project Name: Afan Lido

Project No:
 14647

Co-ords: -
 Level:

Date:
 31/03/2021

Location: Aberavon, Neath Port Talbot

Dimensions:

1.70

Depth

0.57

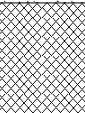
0.70

Scale:

1:25

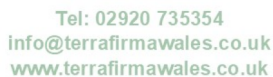
Logged:
 MD

Client: Persimmon Homes West Wales

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
				0.20			Loose light grey CONCRETE.	
				0.57			MADE GROUND. Loose very gravelly SAND. Gravel is angular brick. Occasional rebar.	
							End of Pit at 0.570m	
								1
								2
								3
								4
								5

Stability: Pit was unstable during excavation.

Remarks: Pit was unstable during excavation. No groundwater was present.



Trial Pit No:
SA21
Sheet 1 of 1

Project No:
14647

Co-ords: -
Level:

Date:
31/03/2021

Dimensions:

1.70

Scale:

Depth

0.52

1:25

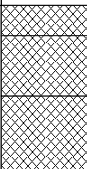
Logged:
MD

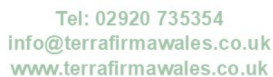
Client: Persimmon Homes West Wales

[illegible]

Stability:	Pit was unstable during excavation.
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Remarks: Pit was unstable during excavation. No groundwater was present.

 Tel: 02920 735354 info@terrafirmawales.co.uk www.terrafirmawales.co.uk Geotechnical & Geoenvironmental Specialists				Trial Pit Log			Trial Pit No: SA22 Sheet 1 of 1		
Project Name: Afan Lido				Project No: 14647		Co-ords: - Level:		Date: 31/03/2021	
Location: Aberavon, Neath Port Talbot						Dimensions: Depth 0.45 1.70		Scale: 1:25	
Client: Persimmon Homes West Wales						0.55		Logged: MD	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
				0.10			MADE GROUND. Grass over soft dark brown slightly sandy CLAY. Sand is fine to medium grained.		
				0.30			MADE GROUND. Soft to firm dark brown sandy slightly gravelly CLAY. Gravel is angular to subangular concrete.		
				0.55			MADE GROUND - Soft light brown slightly sandy slightly gravelly CLAY. Gravel is angular fine to medium concrete, clinker and brick. Occasional wires.		
							End of Pit at 0.550m		
							1 2 3 4 5		
Stability: Pit was unstable during excavation.									
Remarks: Pit was unstable during excavation. No groundwater was present.									



Trial Pit No:
SA23
Sheet 1 of 1

Project No:
14647

Co-ords: -
Level:

Date:
31/03/2021

Dimensions:

1.65

Scale:

Depth

Depth
0.54

1:25

Logged:
MD

[illegible]

Stability:	Pit was unstable during excavation.
------------	-------------------------------------

Remarks: Pit was unstable during excavation. No groundwater was present.

Trial Pit Log

Trial Pit No:
SA24
 Sheet 1 of 1

Project Name: Afan Lido

Project No:
 14647

Co-ords: -
 Level:

Date:
 01/04/2021

Location: Aberavon, Neath Port Talbot

Dimensions:

1.40

Depth

0.54

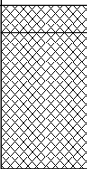
0.46

Scale:

1:25

Logged:
 MD

Client: Persimmon Homes West Wales

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.09			MADE GROUND. Soft light brown very gravelly medium to coarse SAND. Gravel is angular brick. Occasional wood fragments and rootlets. MADE GROUND. Medium dense gravelly SAND. Gravel is angular concrete and brick. Occasional plastic fragments.
				0.54			End of Pit at 0.540m
							1
							2
							3
							4
							5

Stability: Pit was stable.

Remarks: Pit was stable. No groundwater was present.



Geotechnical & Geoenvironmental Specialists

Sheet 1 of 1

Remarks: Pit was stable. No groundwater was present.



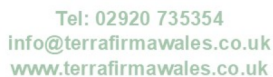
Geotechnical & Geoenvironmental Specialists

Sheet 1 of 1

Logged:
MD

4

Remarks: Pit was stable. No groundwater was present.



Trial Pit No:
SA28
Sheet 1 of 1

Project No:
14647

Co-ords: -
Level:

Date:
01/04/2021

Location: Aberavon, Neath Port Talbot

Dimensions:

1.30

Scale:

Depth

0.40

1:25

Client: Persimmon Homes West Wales

0.58

Logged:
MD

[illegible]

Stability:	Pit is stable.
------------	----------------

Remarks: Pit was stable. No groundwater was present.



Trial Pit No:
SA29
Sheet 1 of 1

Date:
01/04/2021

Logged:
MD

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.10			TARMAC
				0.28			MADE GROUND Very loose yellowish brown very gravelly SAND. Gravel is subrounded brick.
							MADE GROUND Loose dark reddish brown very gravelly SAND. Gravel is angular brick.
				0.51			End of Pit at 0.510m

Remarks: Pit was stable. No groundwater was present.



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Remarks: Pit was stable. No groundwater was present.

Trial Pit Log

Trial Pit No:
SA31
Sheet 1 of 1

Project Name: Afan Lido

Project No:
14647

Co-ords: -
Level:

Date:
06/04/2021

Location: Aberavon, Neath Port Talbot

Dimensions:

1.50

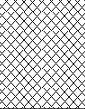
Depth
0.57

0.55

Scale:
1:25

Logged:
MD

Client: Persimmon Homes West Wales

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.20			MADE GROUND. Grass over loose dark brown gravelly medium to coarse SAND. Gravel is subrounded to rounded sandstone.
				0.57			MADE GROUND. Medium dense dark brown very gravelly medium to coarse SAND with medium cobble and boulder content. Gravel, cobbles and boulders are angular to subangular clinker and slag. Occasional metal tent pegs.
							End of Pit at 0.570m
							1
							2
							3
							4
							5

Stability: Pit was stable.

Remarks: Pit was stable. No groundwater was present.

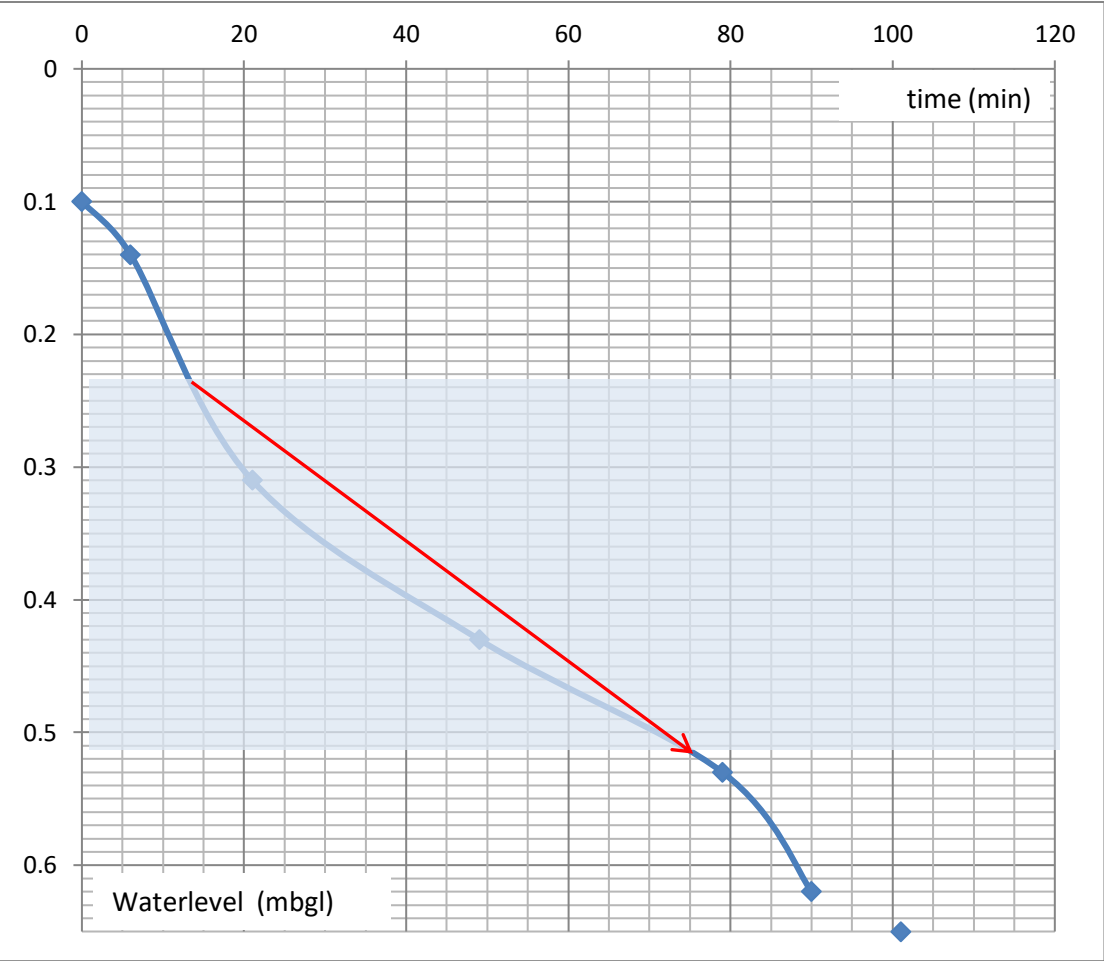
ANNEX C
Soakaway Calculation Sheets

Site Name: Afan Lido
Number: 14647
Date Undertaken: 29/03/2021
Test No.: TP1 (Test 1)

Time (Mins)	Depth to Water (m)
0	0.1
6	0.14
21	0.31
49	0.43
79	0.53
90	0.62
101	0.65
	0.650

Length of Trial Pit (m)	1.60
Width of Trial Pit (m)	0.75
Depth of Trial Pit (m)	0.65
Effective Storage Depth (m)	0.550
Vp25	0.2375
Vp50	0.3750
Vp75	0.5125
Vp75-25	0.330
50% effective depth (m)	0.275
Mean Surface area ap50 (m2)	2.493

Time for 25% Outflow (tp25)	13	Achieved
Time for 75% Outflow (tp75)	75	Achieved
tp75 - 25	62	Achieved
Soil Infiltration Rate (m/s)	3.56E-05	

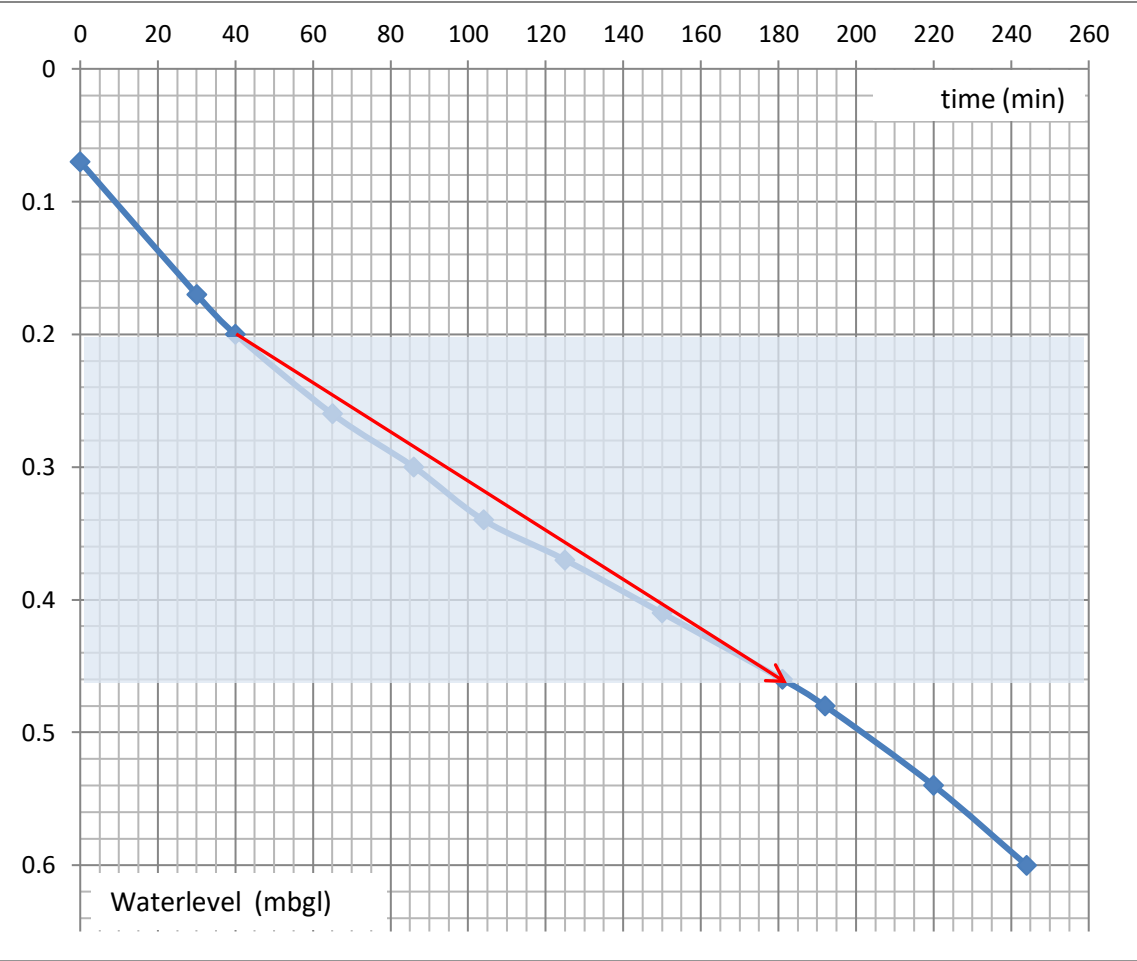


Date Undertaken: 29/03/2021
Test No.: TP1 (Test 2)

Time (Mins)	Depth to Water (m)
0	0.07
30	0.17
40	0.2
65	0.26
86	0.3
104	0.34
125	0.37
150	0.41
181	0.46
192	0.48
220	0.54
244	0.600

Length of Trial Pit (m)	1.60
Width of Trial Pit (m)	0.75
Depth of Trial Pit (m)	0.60
Effective Storage Depth (m)	0.530
Vp25	0.2025
Vp50	0.3350
Vp75	0.4675
Vp75-25	0.318
50% effective depth (m)	0.265
Mean Surface area ap50 (m2)	2.446

Time for 25% Outflow (tp25)	42	Achieved
Time for 75% Outflow (tp75)	185	Achieved
tp75 - 25	143	Achieved
Soil Infiltration Rate (m/s)	1.52E-05	

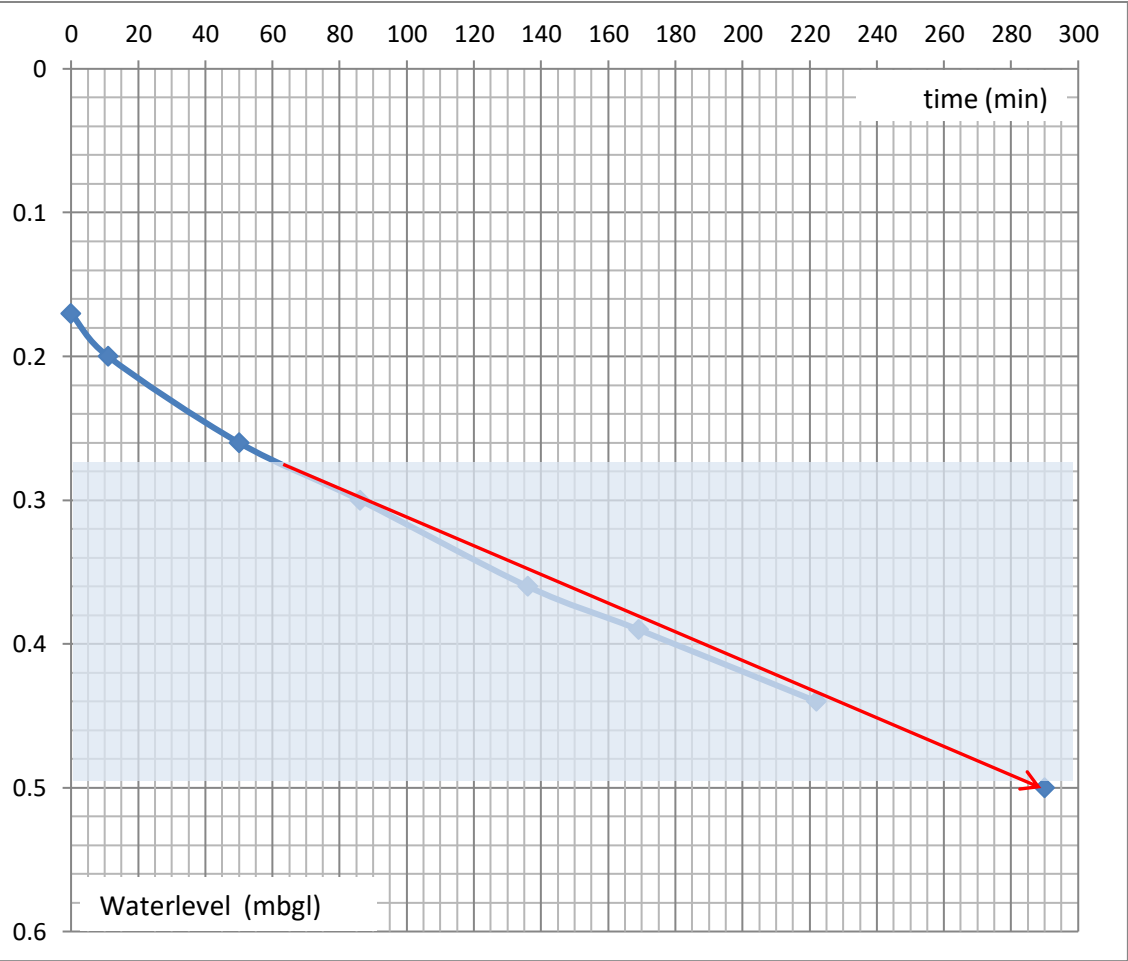


Date Undertaken: 30/03/2021
Test No.: TP1 (Test 3)

Time (Mins)	Depth to Water (m)
0	0.17
11	0.2
50	0.26
86	0.3
136	0.36
169	0.39
222	0.44
290	0.5
	0.600

Length of Trial Pit (m)	1.60
Width of Trial Pit (m)	0.75
Depth of Trial Pit (m)	0.60
Effective Storage Depth (m)	0.430
Vp25	0.2775
Vp50	0.3850
Vp75	0.4925
Vp75-25	0.258
50% effective depth (m)	0.215
Mean Surface area ap50 (m2)	2.211

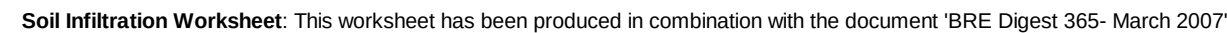
Time for 25% Outflow (tp25)	64	Achieved
Time for 75% Outflow (tp75)	285	Conjectured
tp75 - 25	221	Conjectured
Soil Infiltration Rate (m/s)	8.80E-06	Lowest Measured Infiltration Rate



(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

Soil Infiltration Rate (m/s)

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

Soil Infiltration Rate (m/s)

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Fax: 029 20 735 433
Email: info@terrafirmawales.co.uk

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

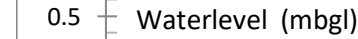
Soil Infiltration Rate (m/s)

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.205
Mean Surface area ap50 (m2)	2.548

Soil Infiltration Rate (m/s)	1.35E-05
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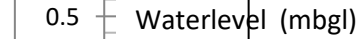
Soil Infiltration Worksheet: This worksheet has been produced in combination with the document 'BRE Digest 365- March 2007'

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.195
Mean Surface area ap50 (m2)	2.498

Soil Infiltration Rate (m/s)	1.22E-05	Lowest Measured Infiltration Rate
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(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.190
Mean Surface area ap50 (m2)	2.473

Soil Infiltration Rate (m/s)	1.51E-05
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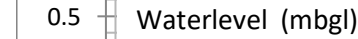


(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.195
Mean Surface area ap50 (m2)	2.344

Soil Infiltration Rate (m/s)	3.51E-05
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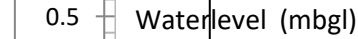


(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

Soil Infiltration Rate (m/s)	2.13E-05
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Terra Firma (Wales) Limited
Wharfedale Road, Pentwyn
Cardiff
CF23 7HB

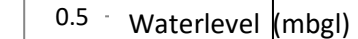
Tel: 029 20 375 354

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

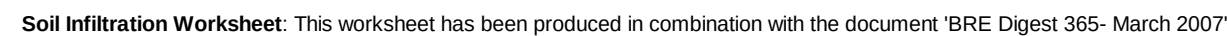
Soil Infiltration Rate (m/s)	1.92E-05
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(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.185
Mean Surface area ap50 (m2)	1.958

Soil Infiltration Rate (m/s)

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

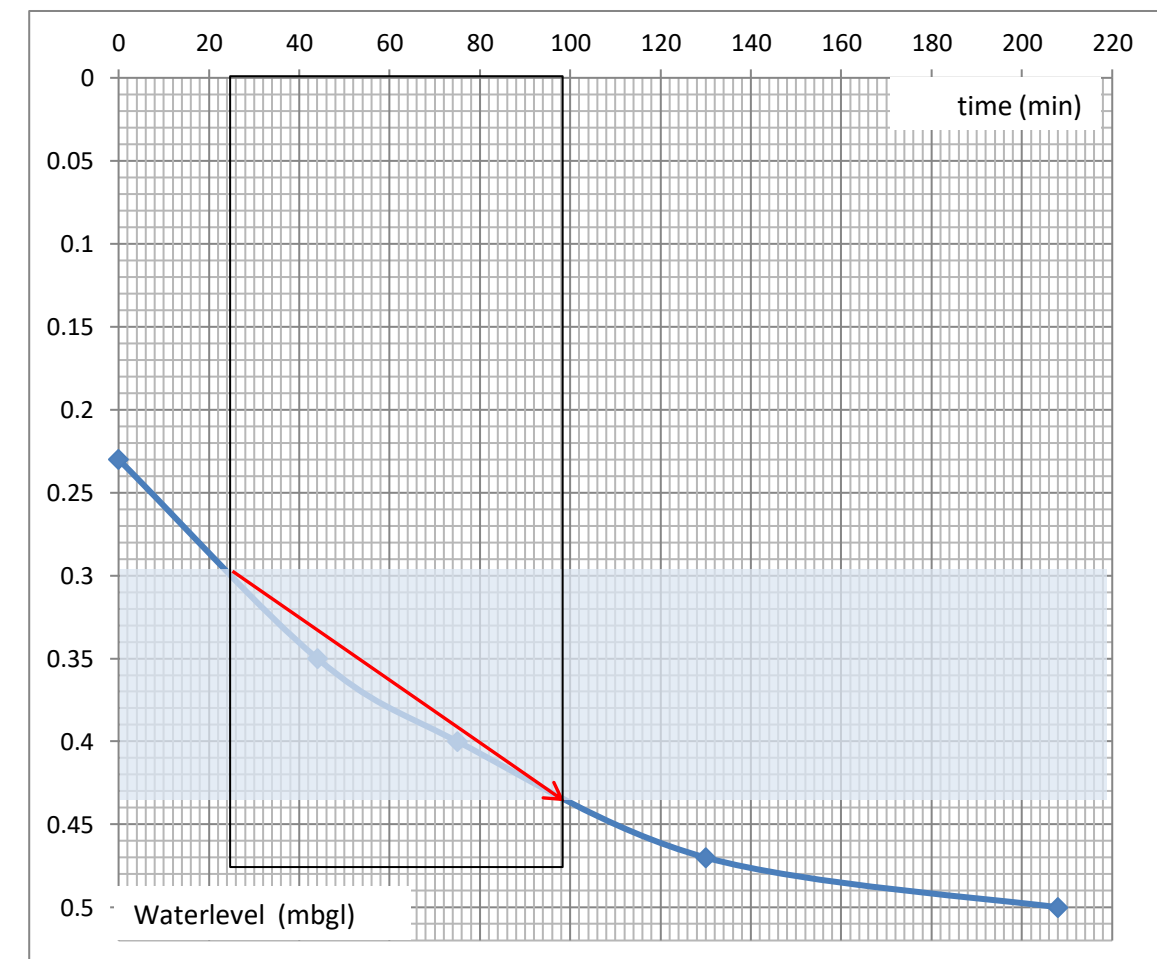
Soil Infiltration Rate (m/s)

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Fax: 029 20 735 433
Email: info@terrafirmawales.co.uk

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

Soil Infiltration Rate (m/s)

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.150
Mean Surface area a_{p50} (m ²)	2.410

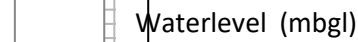
Soil Infiltration Rate (m/s)

Soil Infiltration Worksheet: This worksheet has been produced in combination with the document 'BRE Digest 365- March 2007'

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

Soil Infiltration Rate (m/s)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

Soil Infiltration Rate (m/s)

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.230
Mean Surface area ap50 (m2)	2.723

Soil Infiltration Rate (m/s)

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

Soil Infiltration Rate (m/s)

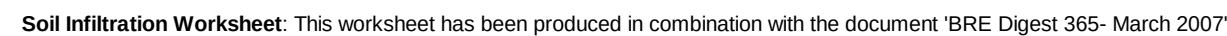
Tel: 029 20 375 354
Fax: 029 20 735 433
Email: info@terrafirmawales.co.uk

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

Soil Infiltration Rate (m/s)

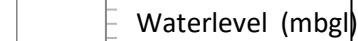


(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.210
Mean Surface area ap50 (m2)	2.534

Soil Infiltration Rate (m/s)



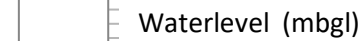
Soil Infiltration Worksheet: This worksheet has been produced in combination with the document 'BRE Digest 365- March 2007'

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.245
Mean Surface area ap50 (m2)	2.723

Soil Infiltration Rate (m/s)



(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.245
Mean Surface area ap50 (m2)	2.723

Soil Infiltration Rate (m/s)

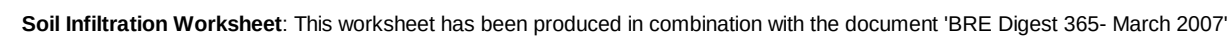


(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.225
Mean Surface area ap50 (m2)	1.838

Soil Infiltration Rate (m/s)	3.83E-05	Lowest Measured Infiltration Rate
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(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.225
Mean Surface area ap50 (m2)	1.838

Soil Infiltration Rate (m/s)	4.25E-05
------------------------------	----------



(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.235
Mean Surface area ap50 (m2)	1.878

Soil Infiltration Rate (m/s)	3.95E-05
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(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.210
Mean Surface area ap50 (m2)	1.638

Soil Infiltration Rate (m/s)

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

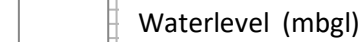
Soil Infiltration Rate (m/s)

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Fax: 029 20 735 433
Email: info@terrafirmawales.co.uk

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)
Mean Surface area ap50 (m2)

Soil Infiltration Rate (m/s)

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

Time for 25% Outflow (tp25)	9.5	Achieved
Time for 75% Outflow (tp75)	28	Achieved
tp75 - 25	18.5	Achieved
Soil Infiltration Rate (m/s)	9.20E-05	

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

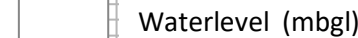
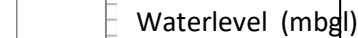
Time for 25% Outflow (tp25)	5.5	Achieved
Time for 75% Outflow (tp75)	33	Achieved
tp75 - 25	27.5	Achieved
Soil Infiltration Rate (m/s)	5.97E-05	Lowest Measured Infiltration Rate

Tel: 029 20 375 354
Fax: 029 20 735 433
Email: info@terrafirmawales.co.uk

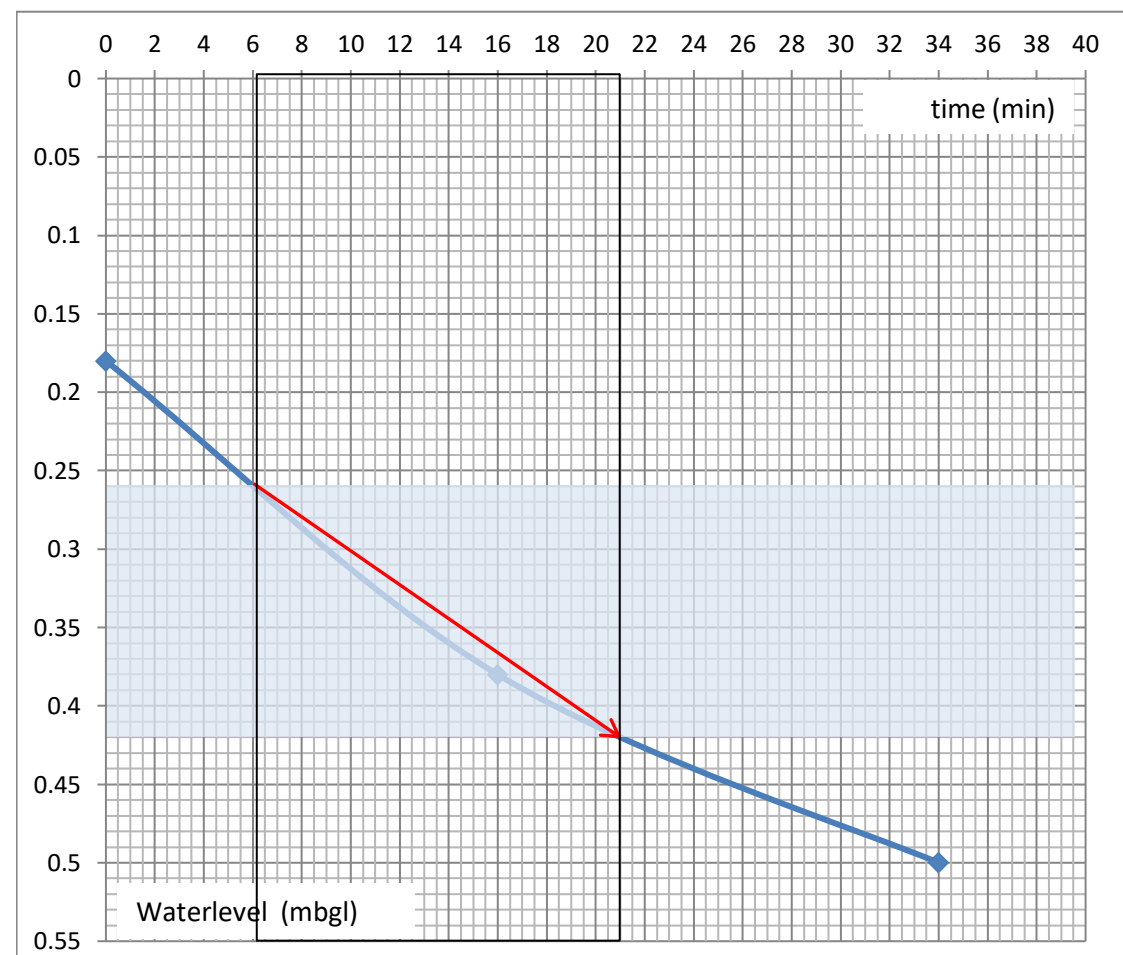
(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

Time for 25% Outflow (tp25)	7	Achieved
Time for 75% Outflow (tp75)	34	Achieved
tp75 - 25	27	Achieved
Soil Infiltration Rate (m/s)	6.08E-05	

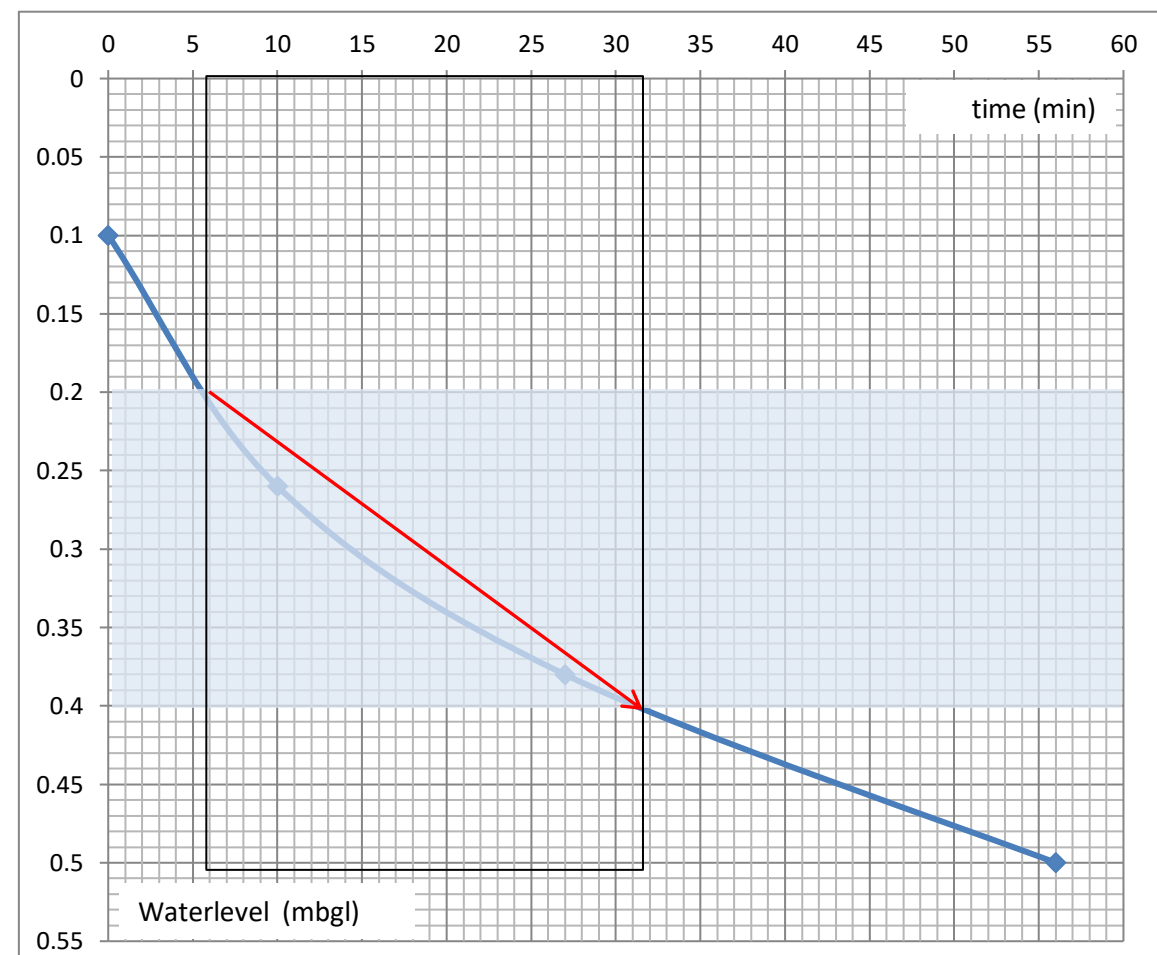


Length of Trial Pit (m)	1.40	
Width of Trial Pit (m)	0.70	
Depth of Trial Pit (m)	0.50	
Effective Storage Depth (m)	0.320	
Vp25	0.2600	
Vp50	0.3400	
Vp75	0.4200	
Vp75-25	0.157	
50% effective depth (m)	0.160	
Mean Surface area ap50 (m2)	1.652	
Time for 25% Outflow (tp25)	6	Achieved
Time for 75% Outflow (tp75)	21	Achieved
tp75 - 25	15	Achieved
Soil Infiltration Rate (m/s)	1.05E-04	

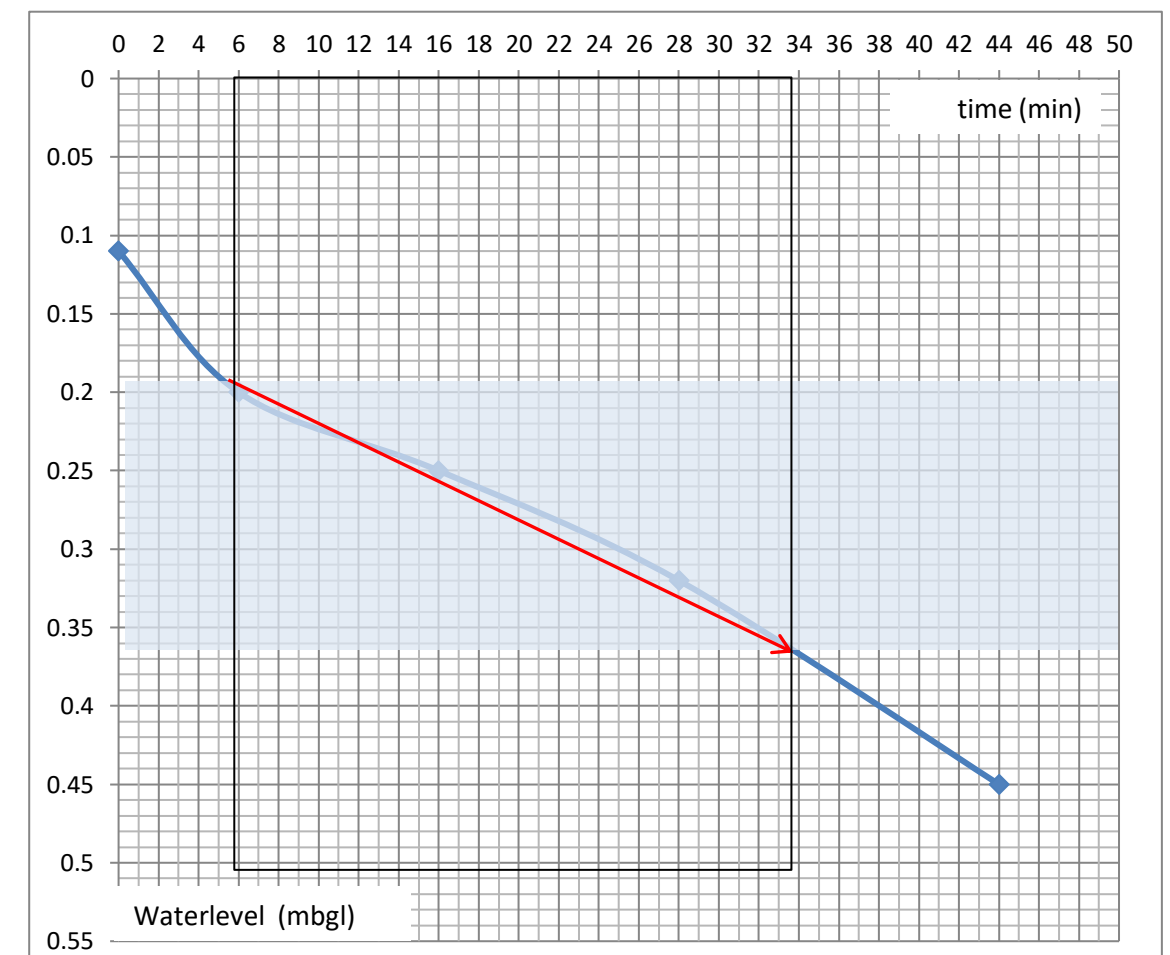


Soil Infiltration Worksheet: This worksheet has been produced in combination with the document 'BRE Digest 365- March 2007'

Length of Trial Pit (m)	1.40	
Width of Trial Pit (m)	0.85	
Depth of Trial Pit (m)	0.50	
Effective Storage Depth (m)	0.400	
Vp25	0.2000	
Vp50	0.3000	
Vp75	0.4000	
Vp75-25	0.238	
50% effective depth (m)	0.200	
Mean Surface area ap50 (m2)	2.090	
Time for 25% Outflow (tp25)	5.5	Achieved
Time for 75% Outflow (tp75)	31.5	Achieved
tp75 - 25	26	Achieved
Soil Infiltration Rate (m/s)	7.30E-05	



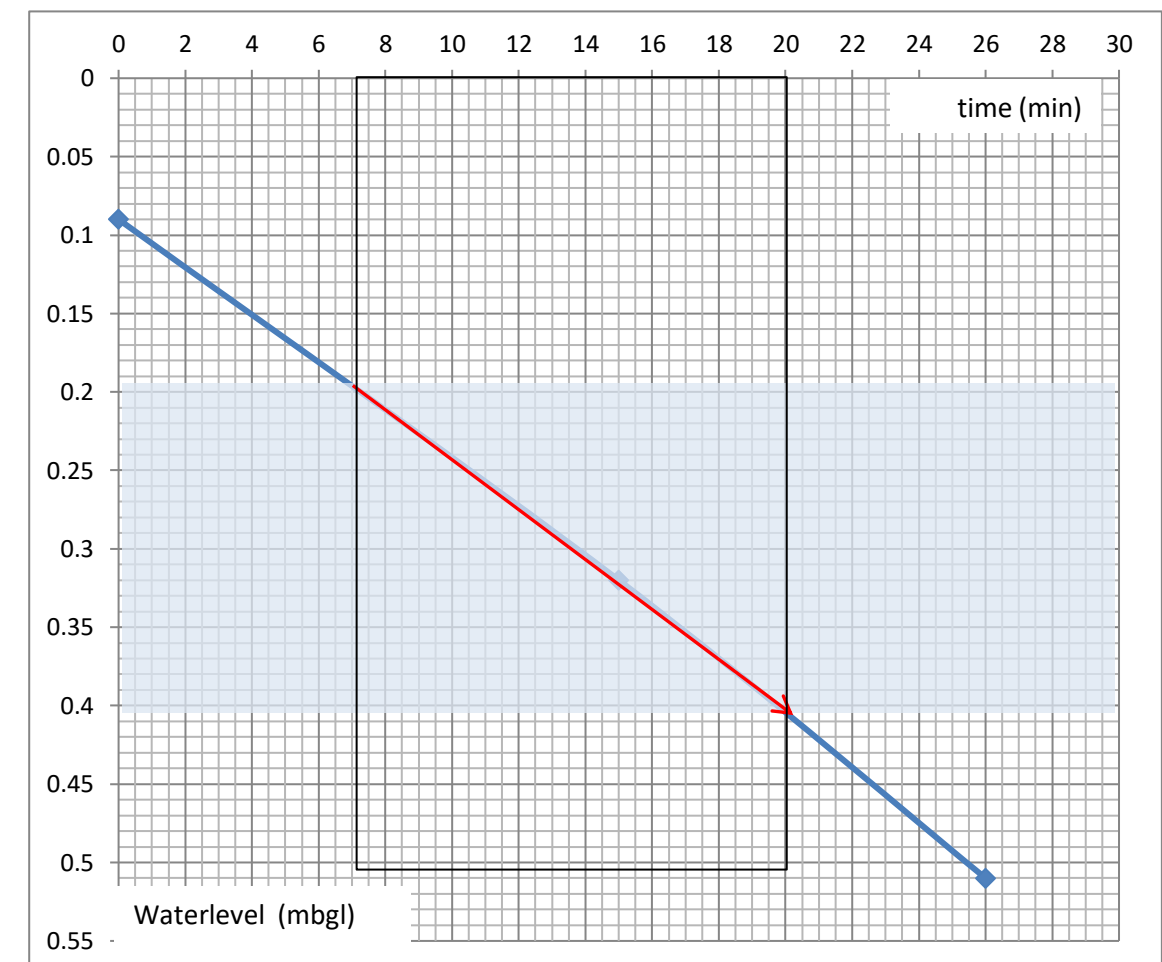
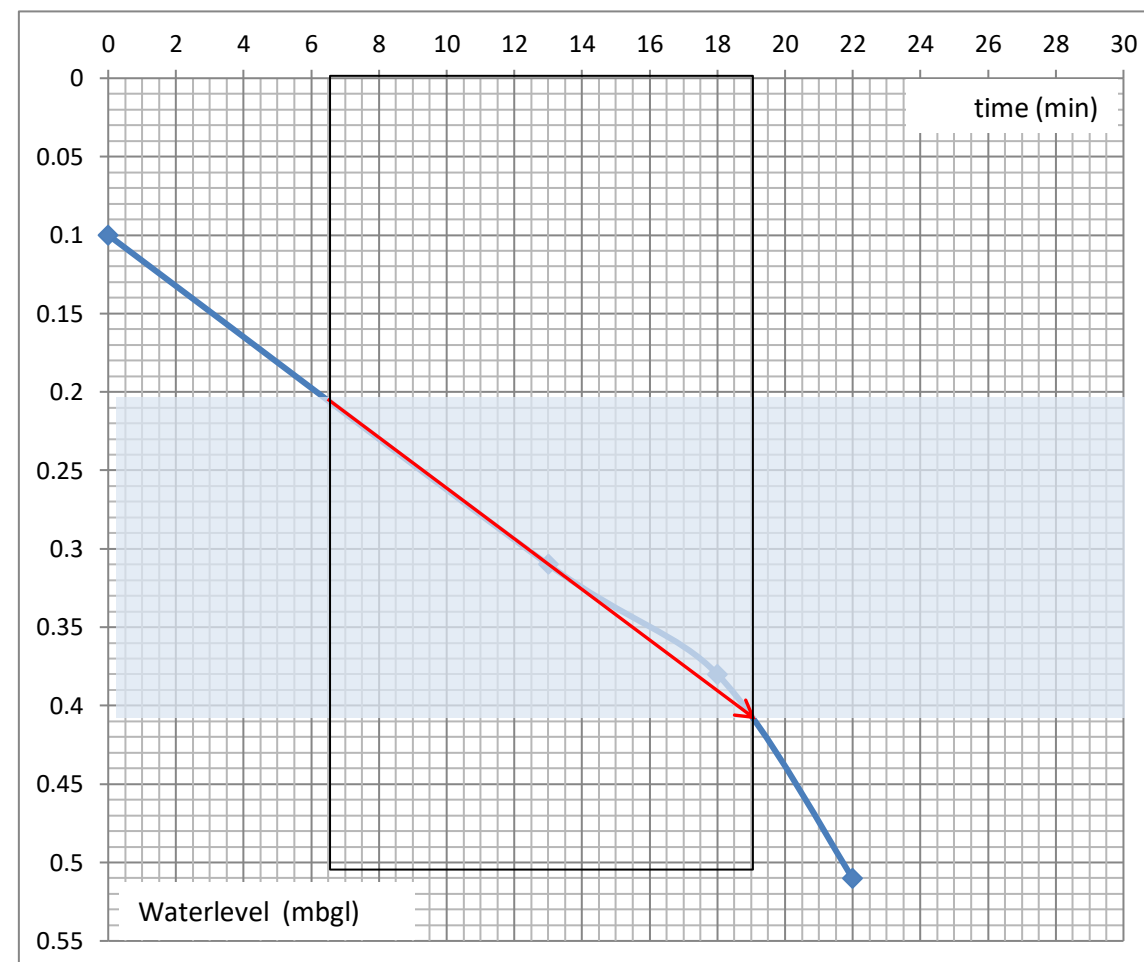
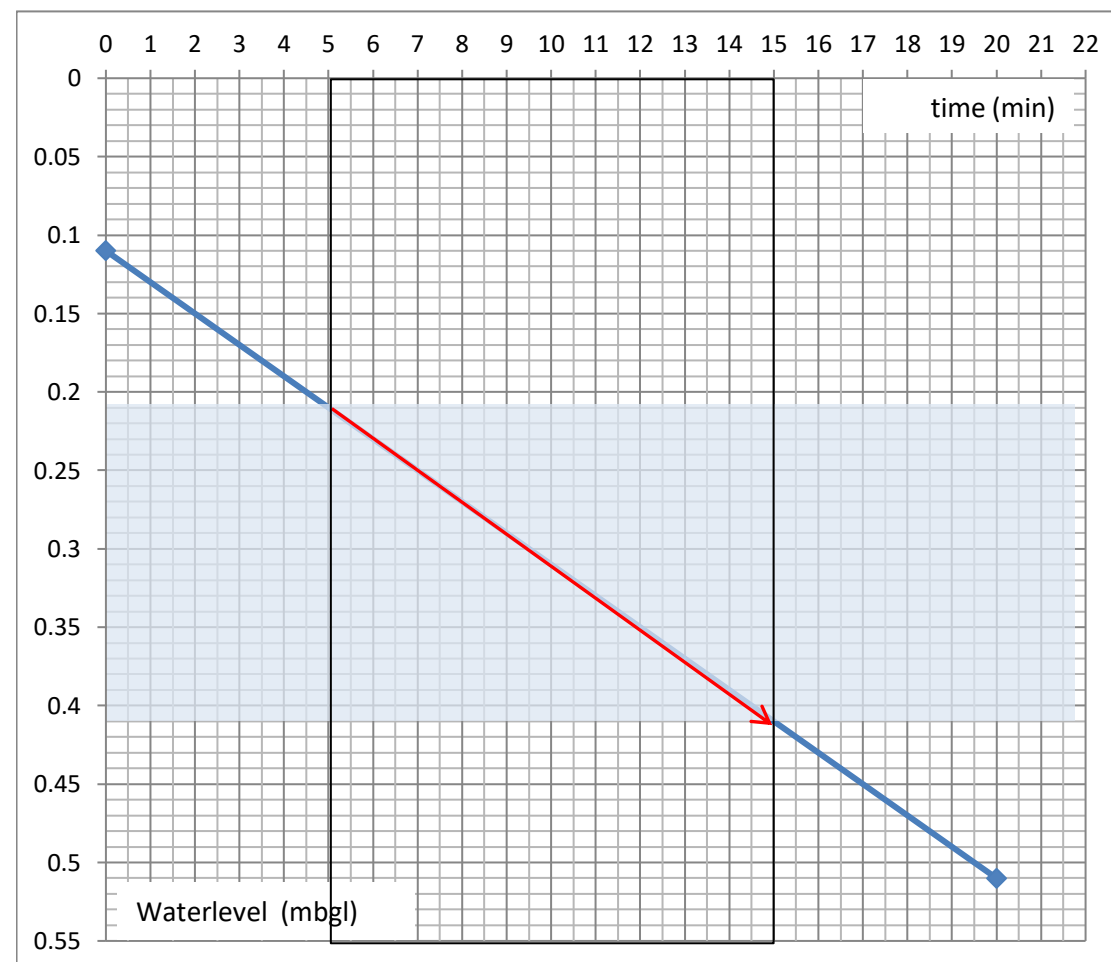
Length of Trial Pit (m)	1.40	
Width of Trial Pit (m)	0.85	
Depth of Trial Pit (m)	0.45	
Effective Storage Depth (m)	0.340	
Vp25	0.1950	
Vp50	0.2800	
Vp75	0.3650	
Vp75-25	0.202	
50% effective depth (m)	0.170	
Mean Surface area ap50 (m2)	1.955	
Time for 25% Outflow (tp25)	5.5	Achieved
Time for 75% Outflow (tp75)	33.5	Achieved
tp75 - 25	28	Achieved
Soil Infiltration Rate (m/s)	6.16E-05	Lowest Measured Infiltration Rate



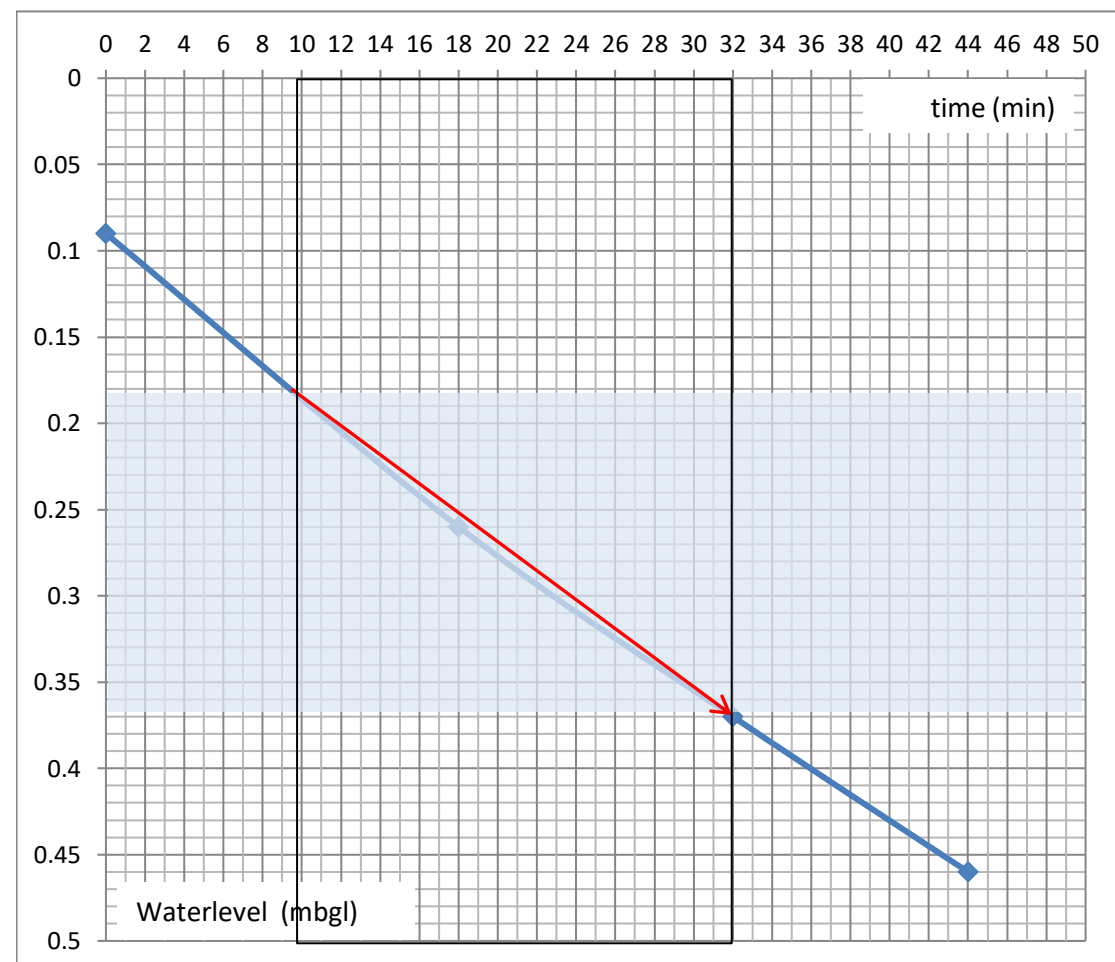
Length of Trial Pit (m)	1.50	
Width of Trial Pit (m)	0.50	
Depth of Trial Pit (m)	0.51	
Effective Storage Depth (m)	0.400	
Vp25	0.2100	
Vp50	0.3100	
Vp75	0.4100	
Vp75-25	0.150	
50% effective depth (m)	0.200	
Mean Surface area ap50 (m2)	1.550	
Time for 25% Outflow (tp25)	5	Achieved
Time for 75% Outflow (tp75)	15	Achieved
tp75 - 25	10	Achieved
Soil Infiltration Rate (m/s)	1.61E-04	

Length of Trial Pit (m)	1.50	
Width of Trial Pit (m)	0.50	
Depth of Trial Pit (m)	0.51	
Effective Storage Depth (m)	0.410	
Vp25	0.2025	
Vp50	0.3050	
Vp75	0.4075	
Vp75-25	0.154	
50% effective depth (m)	0.205	
Mean Surface area ap50 (m2)	1.570	
Time for 25% Outflow (tp25)	6.5	Achieved
Time for 75% Outflow (tp75)	19	Achieved
tp75 - 25	12.5	Achieved
Soil Infiltration Rate (m/s)	1.31E-04	

Length of Trial Pit (m)	1.50	
Width of Trial Pit (m)	0.50	
Depth of Trial Pit (m)	0.51	
Effective Storage Depth (m)	0.420	
Vp25	0.1950	
Vp50	0.3000	
Vp75	0.4050	
Vp75-25	0.158	
50% effective depth (m)	0.210	
Mean Surface area ap50 (m2)	1.590	
Time for 25% Outflow (tp25)	7	Achieved
Time for 75% Outflow (tp75)	20	Achieved
tp75 - 25	13	Achieved
Soil Infiltration Rate (m/s)	1.27E-04	Lowest Measured Infiltration Rate

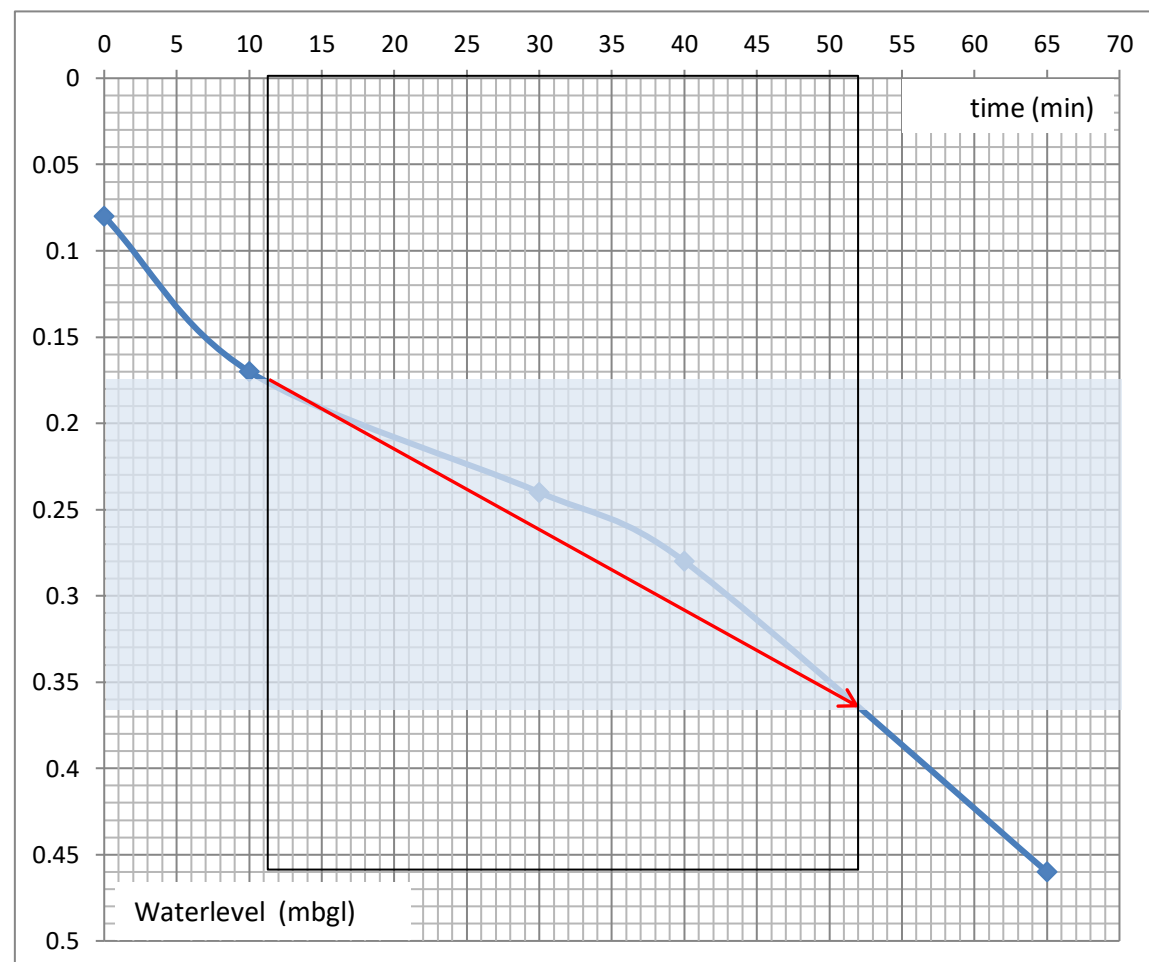


	Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	0	0.09
	18	0.26
	32	0.37
	44	0.46
(Base of pit / effective depth - 0%)		0.460
Length of Trial Pit (m)	1.00	
Width of Trial Pit (m)	0.40	
Depth of Trial Pit (m)	0.46	
Effective Storage Depth (m)	0.370	
Vp25	0.1825	
Vp50	0.2750	
Vp75	0.3675	
Vp75-25	0.074	
50% effective depth (m)	0.185	
Mean Surface area ap50 (m2)	0.918	
Time for 25% Outflow (tp25)	9.5	Achieved
Time for 75% Outflow (tp75)	32	Achieved
tp75 - 25	22.5	Achieved
Soil Infiltration Rate (m/s)	5.97E-05	



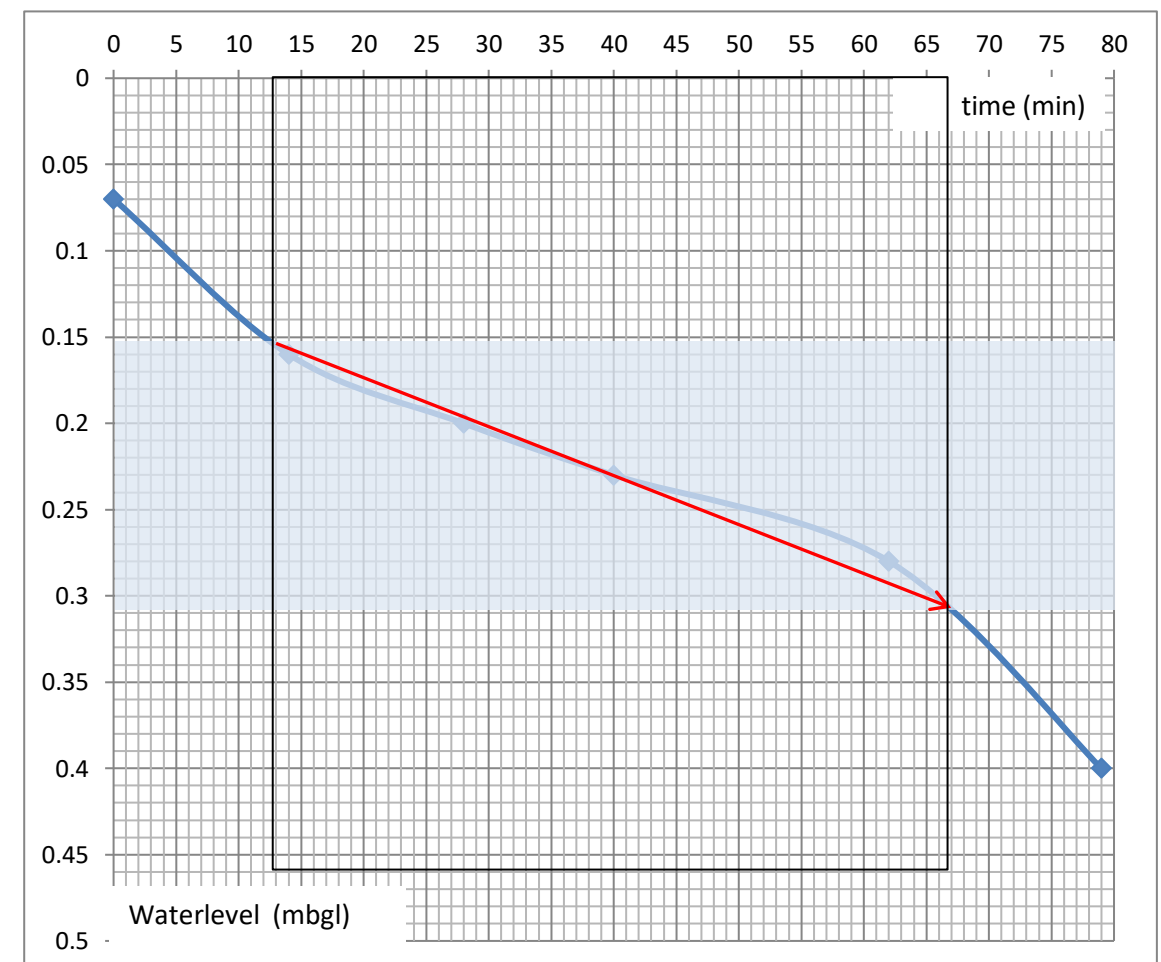
Date Undertaken: 31/03/2021
Test No.: TP15 (Test 2)

	Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	0	0.08
	10	0.17
	30	0.24
	40	0.28
	65	0.46
(Base of pit / effective depth - 0%)		0.460
Length of Trial Pit (m)	1.00	
Width of Trial Pit (m)	0.40	
Depth of Trial Pit (m)	0.46	
Effective Storage Depth (m)	0.380	
Vp25	0.1750	
Vp50	0.2700	
Vp75	0.3650	
Vp75-25	0.076	
50% effective depth (m)	0.190	
Mean Surface area ap50 (m2)	0.932	
Time for 25% Outflow (tp25)	11	Achieved
Time for 75% Outflow (tp75)	52	Achieved
tp75 - 25	41	Achieved
Soil Infiltration Rate (m/s)	3.31E-05	



Date Undertaken: 01/04/2021
Test No.: TP15 (Test 3)

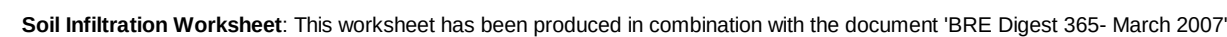
Test No.: TP15 (Test 3)	Time (Mins)	Depth to Water (m)
<i>(Top of test / effective depth - 100%)</i>	0	0.07
	14	0.16
	28	0.2
	40	0.23
	62	0.28
	79	0.4
<i>(Base of pit / effective depth - 0%)</i>		0.400
Length of Trial Pit (m)	1.00	
Width of Trial Pit (m)	0.40	
Depth of Trial Pit (m)	0.40	
Effective Storage Depth (m)	0.330	
Vp25	0.1525	
Vp50	0.2350	
Vp75	0.3175	
Vp75-25	0.066	
50% effective depth (m)	0.165	
Mean Surface area ap50 (m2)	0.862	
Time for 25% Outflow (tp25)	12.5	Achieved
Time for 75% Outflow (tp75)	67	Achieved
tp75 - 25	54.5	Achieved
Soil Infiltration Rate (m/s)	2.34E-05	Lowest Measured Infiltration Rate



(Top of test / effective depth - 100%)

Length of Trial Pit (m)	1.60
Width of Trial Pit (m)	0.40
Depth of Trial Pit (m)	0.51
Effective Storage Depth (m)	0.400
Vp25	0.2100
Vp50	0.3100
Vp75	0.4100
Vp75-25	0.128

Time for 25% Outflow (tp25)	2.5	Achieved
Time for 75% Outflow (tp75)	7.5	Achieved
tp75 - 25	5	Achieved
Soil Infiltration Rate (m/s)	2.96E-04	



(Top of test / effective depth - 100%)

Length of Trial Pit (m)	1.60
Width of Trial Pit (m)	0.40
Depth of Trial Pit (m)	0.51
Effective Storage Depth (m)	0.430
Vp25	0.1875
Vp50	0.2950
Vp75	0.4025
Vp75-25	0.138

Time for 25% Outflow (tp25)	3.5	Achieved
Time for 75% Outflow (tp75)	10.5	Achieved
tp75 - 25	7	Achieved
Soil Infiltration Rate (m/s)	2.18E-04	

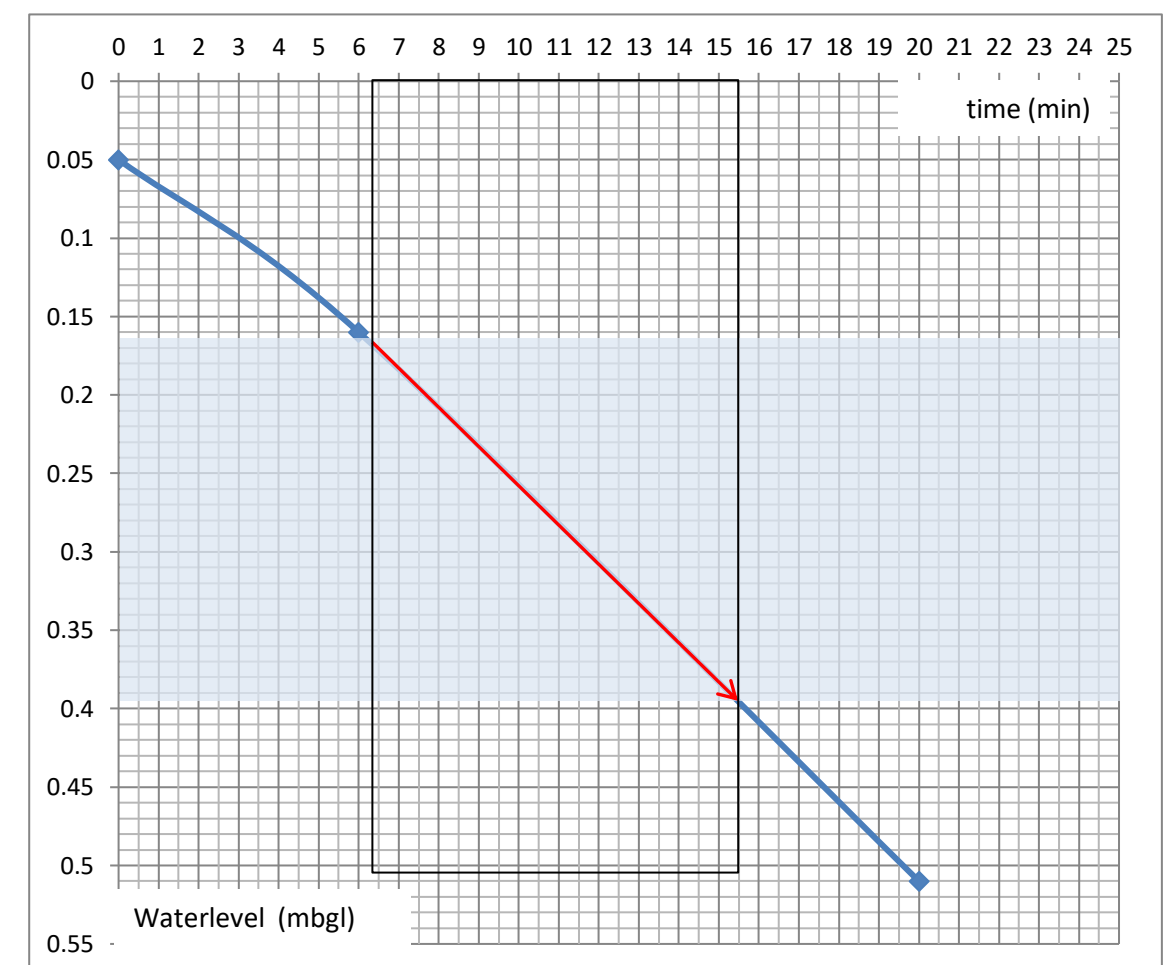


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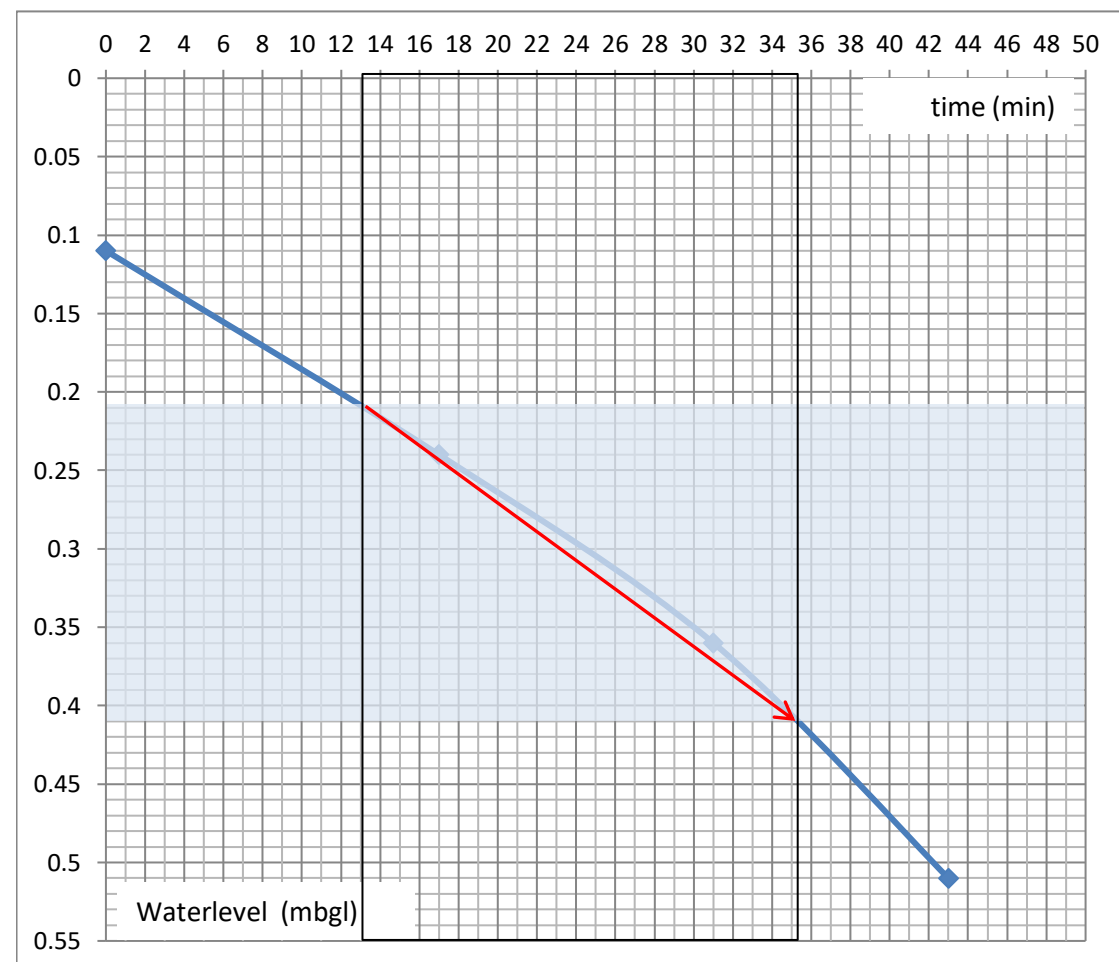
(Top of test / effective depth - 100%)

Length of Trial Pit (m)	1.60
Width of Trial Pit (m)	0.40
Depth of Trial Pit (m)	0.51
Effective Storage Depth (m)	0.460
Vp25	0.1650
Vp50	0.2800
Vp75	0.3950
Vp75-25	0.147

Time for 25% Outflow (tp25)	6.25	Achieved
Time for 75% Outflow (tp75)	15.5	Achieved
tp75 - 25	9.25	Achieved
Soil Infiltration Rate (m/s)	1.70E-04	Lowest Measured Infiltration Rate

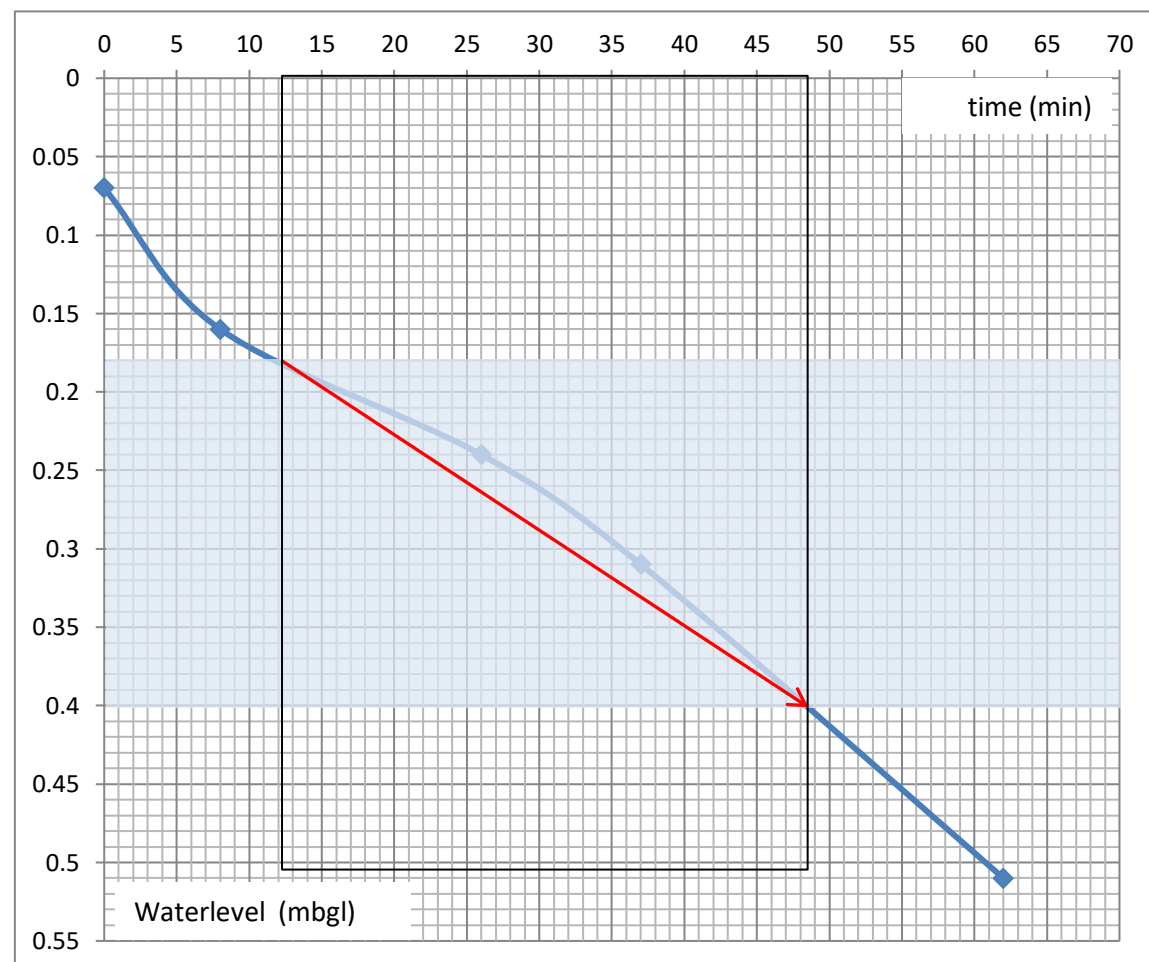


Length of Trial Pit (m)	1.50	
Width of Trial Pit (m)	0.45	
Depth of Trial Pit (m)	0.51	
Effective Storage Depth (m)	0.400	
Vp25	0.2100	
Vp50	0.3100	
Vp75	0.4100	
Vp75-25	0.135	
50% effective depth (m)	0.200	
Mean Surface area ap50 (m2)	1.455	
Time for 25% Outflow (tp25)	13	Achieved
Time for 75% Outflow (tp75)	35.25	Achieved
tp75 - 25	22.25	Achieved
Soil Infiltration Rate (m/s)	6.95E-05	



Soil Infiltration Worksheet: This worksheet has been produced in combination with the document 'BRE Digest 365- March 2007'

Length of Trial Pit (m)	1.50	
Width of Trial Pit (m)	0.45	
Depth of Trial Pit (m)	0.51	
Effective Storage Depth (m)	0.440	
Vp25	0.1800	
Vp50	0.2900	
Vp75	0.4000	
Vp75-25	0.149	
50% effective depth (m)	0.220	
Mean Surface area ap50 (m2)	1.533	
Time for 25% Outflow (tp25)	12	Achieved
Time for 75% Outflow (tp75)	48.5	Achieved
tp75 - 25	36.5	Achieved
Soil Infiltration Rate (m/s)	4.42E-05	



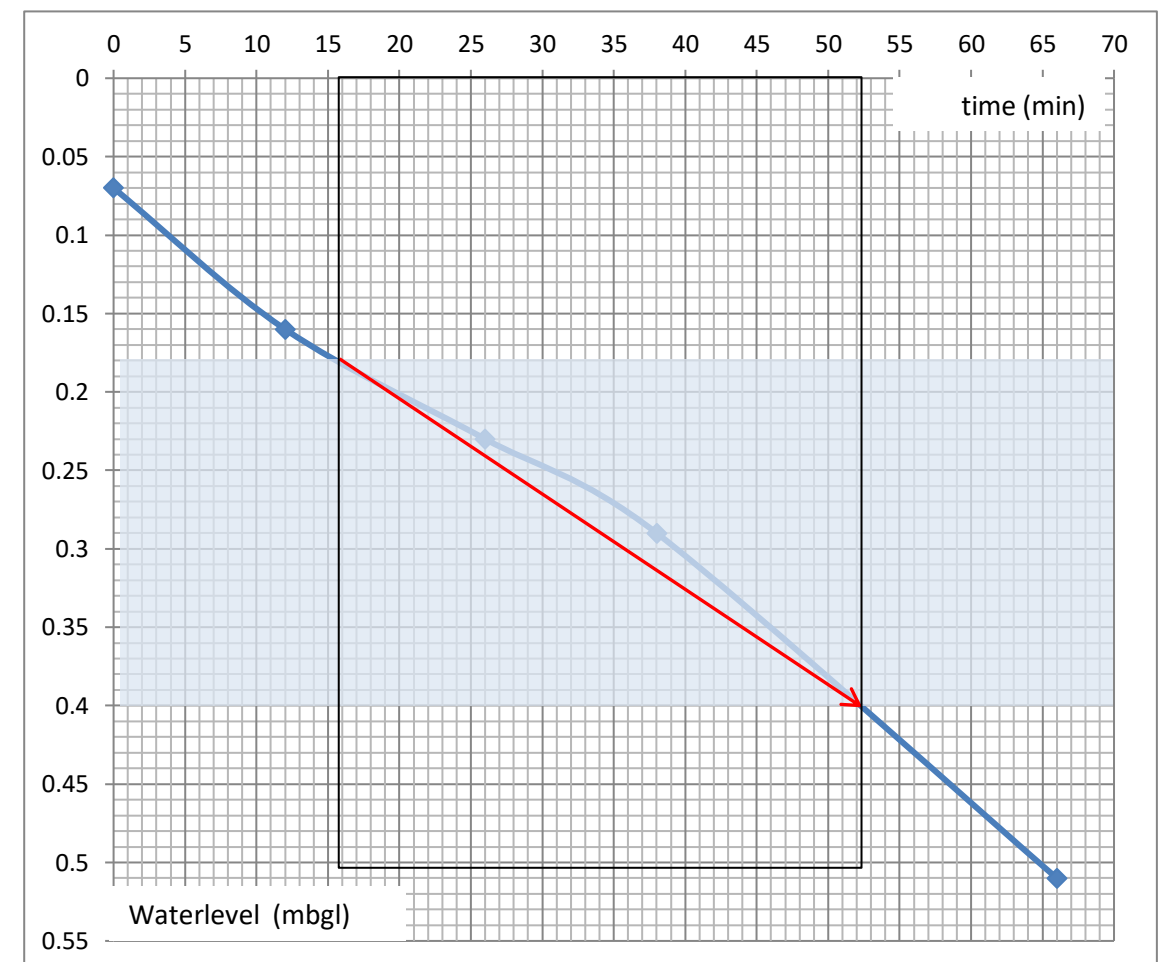
Date Undertaken: 01/04/2021

Test No.: TP17 (Test 3)

(Top of test / effective depth - 100%)

	12	0.16
	26	0.23
	38	0.29
	66	0.51
(Base of pit / effective depth - 0%)		0.510

Length of Trial Pit (m)	1.50	
Width of Trial Pit (m)	0.45	
Depth of Trial Pit (m)	0.51	
Effective Storage Depth (m)	0.440	
Vp25	0.1800	
Vp50	0.2900	
Vp75	0.4000	
Vp75-25	0.149	
50% effective depth (m)	0.220	
Mean Surface area ap50 (m2)	1.533	
Time for 25% Outflow (tp25)	15.5	Achieved
Time for 75% Outflow (tp75)	52.25	Achieved
tp75 - 25	36.75	Achieved
Soil Infiltration Rate (m/s)	4.39E-05	Lowest Measured Infiltration Rate



(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.205
Mean Surface area ap50 (m2)	1.621

tp75 - 25 22.25 **Achieved**



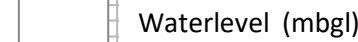
Soil Infiltration Worksheet: This worksheet has been produced in combination with the document 'BRE Digest 365- March 2007'

(Top of test / effective depth - 100%)

(Base of pit / effective depth - 0%)

50% effective depth (m)	0.215
Mean Surface area ap50 (m2)	1.662

tp75 - 25 47.5 **Achieved**



(Base of pit / effective depth - 0%)

50% effective depth (m)	0.210
Mean Surface area ap50 (m2)	1.642

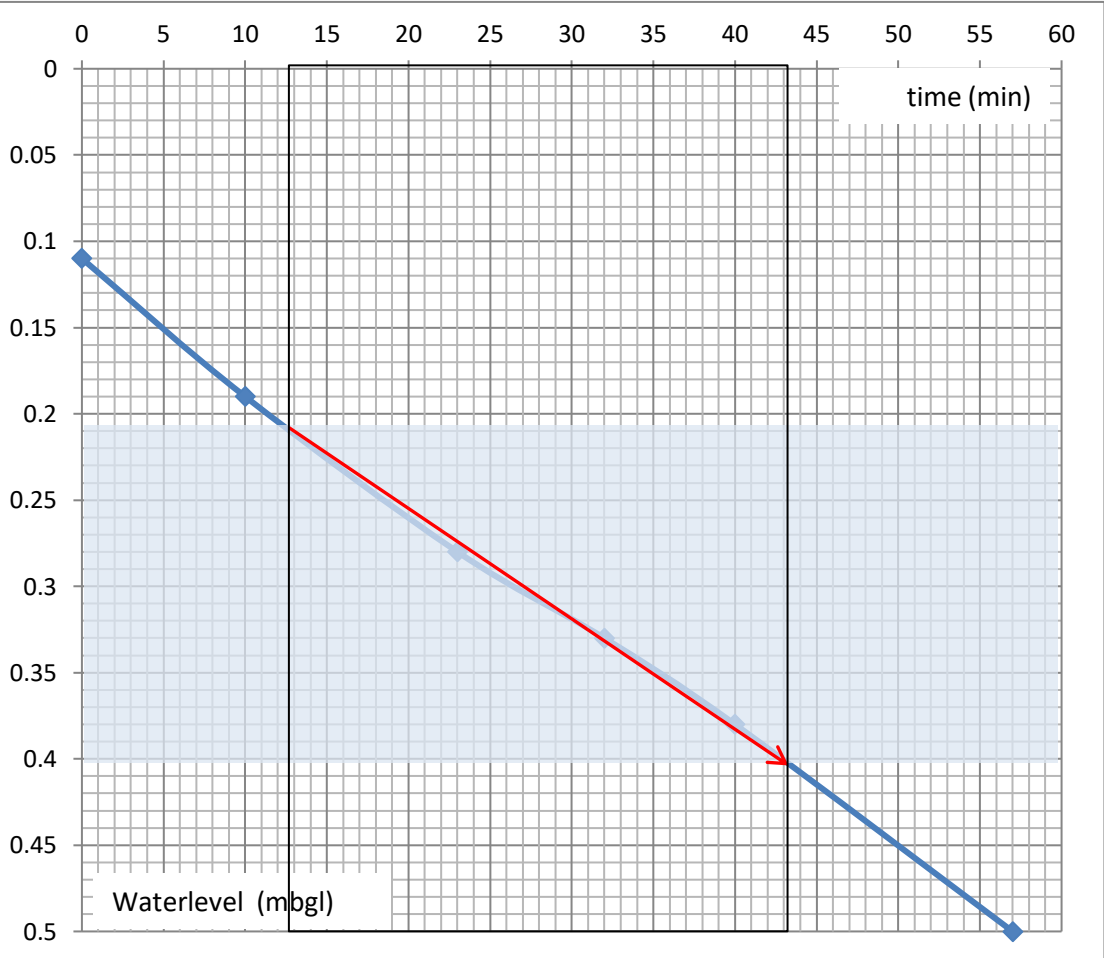
tp75 - 25 60 Achieved



Site Name: Afan Lido
Number: 14647
Date Undertaken: 31/03/2021
Test No.: TP19 (Test 1)

	Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	0	0.11
	10	0.19
	23	0.28
	32	0.33
	40	0.38
	57	0.5
(Base of pit / effective depth - 0%)		0.500

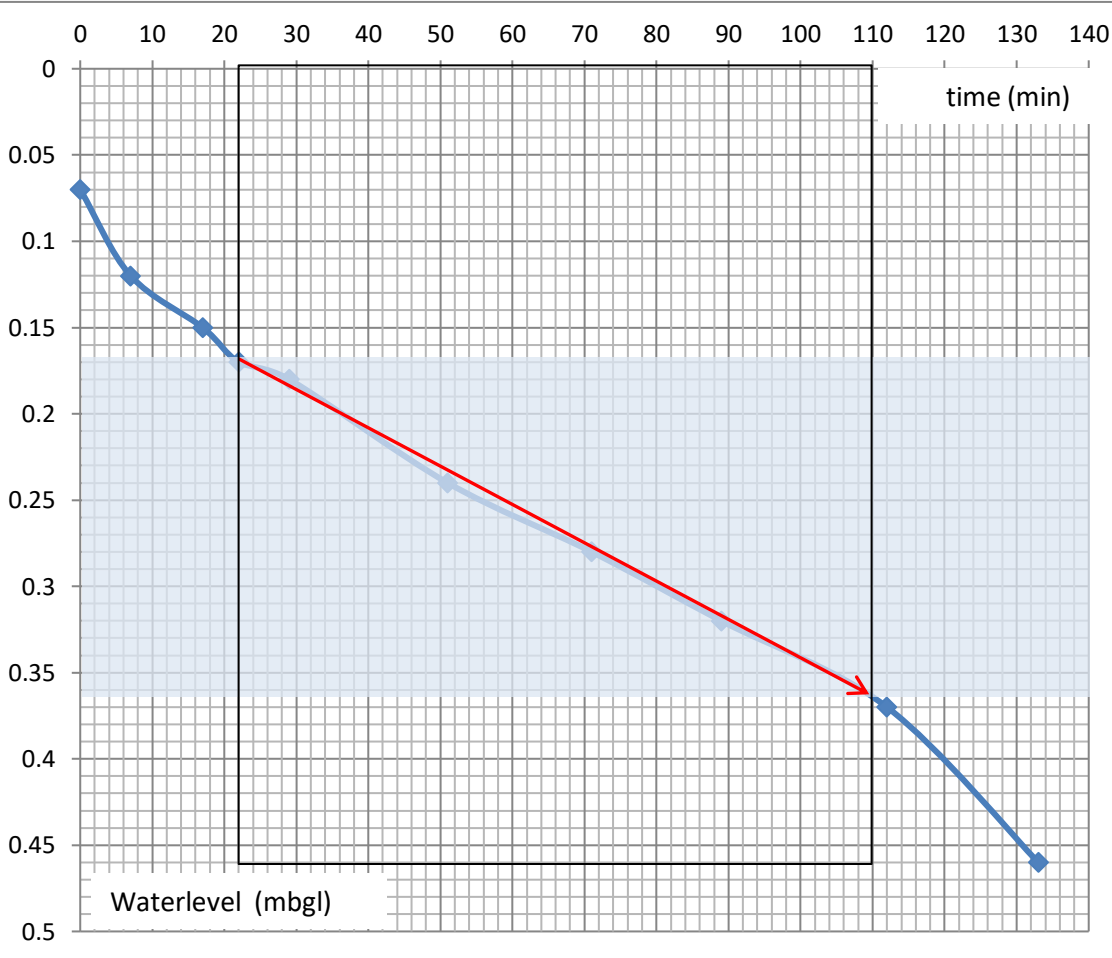
Length of Trial Pit (m)	1.60	
Width of Trial Pit (m)	0.45	
Depth of Trial Pit (m)	0.50	
Effective Storage Depth (m)	0.390	
Vp25	0.2075	
Vp50	0.3050	
Vp75	0.4025	
Vp75-25	0.140	
50% effective depth (m)	0.195	
Mean Surface area ap50 (m2)	1.520	
Time for 25% Outflow (tp25)	12.5	Achieved
Time for 75% Outflow (tp75)	43.25	Achieved
tp75 - 25	30.75	Achieved
Soil Infiltration Rate (m/s)	5.01E-05	



Date Undertaken: 01/04/2021
Test No.: TP19 (Test 2)

	Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	0	0.07
	7	0.12
	17	0.15
	22	0.17
	29	0.18
	51	0.24
	71	0.28
	89	0.32
	112	0.37
	133	0.46
(Base of pit / effective depth - 0%)		0.460

Length of Trial Pit (m)	1.60	
Width of Trial Pit (m)	0.45	
Depth of Trial Pit (m)	0.46	
Effective Storage Depth (m)	0.390	
Vp25	0.1675	
Vp50	0.2650	
Vp75	0.3625	
Vp75-25	0.140	
50% effective depth (m)	0.195	
Mean Surface area ap50 (m2)	1.520	
Time for 25% Outflow (tp25)	21.5	Achieved
Time for 75% Outflow (tp75)	110	Achieved
tp75 - 25	88.5	Achieved
Soil Infiltration Rate (m/s)	1.74E-05	

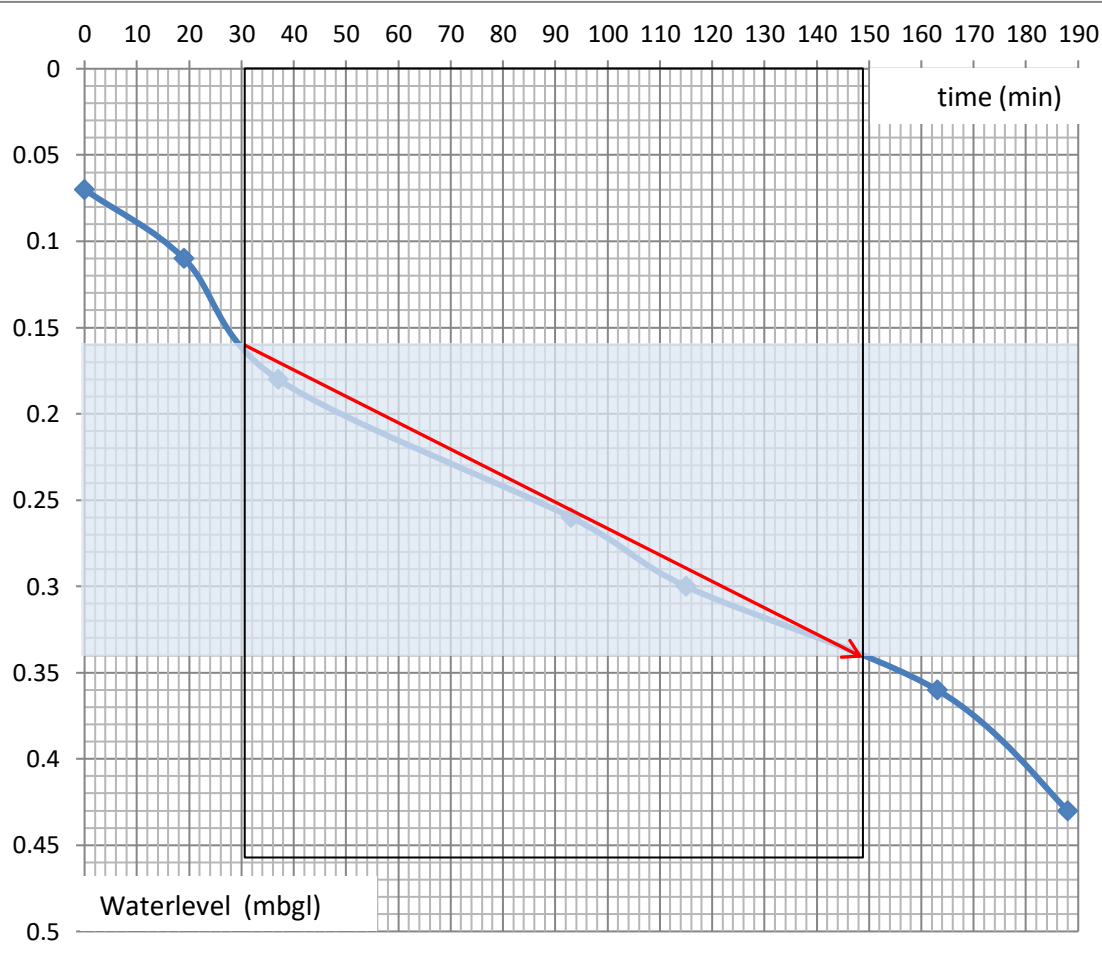


Date Undertaken: 01/04/2021

Test No.: TP19 (Test 3)

	Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	0	0.07
	19	0.11
	37	0.18
	93	0.26
	115	0.30
	163	0.36
(Base of pit / effective depth - 0%)	188	0.43

Length of Trial Pit (m)	1.60	
Width of Trial Pit (m)	0.45	
Depth of Trial Pit (m)	0.43	
Effective Storage Depth (m)	0.360	
Vp25	0.1600	
Vp50	0.2500	
Vp75	0.3400	
Vp75-25	0.130	
50% effective depth (m)	0.180	
Mean Surface area ap50 (m2)	1.458	
Time for 25% Outflow (tp25)	30	Achieved
Time for 75% Outflow (tp75)	149	Achieved
tp75 - 25	119	Achieved
Soil Infiltration Rate (m/s)	1.24E-05	Lowest Measured Infiltration Rate



Date Undertaken: 31/03/2021

Test No.: TP20 (Test 3)

(Top of test / effective depth - 100%)

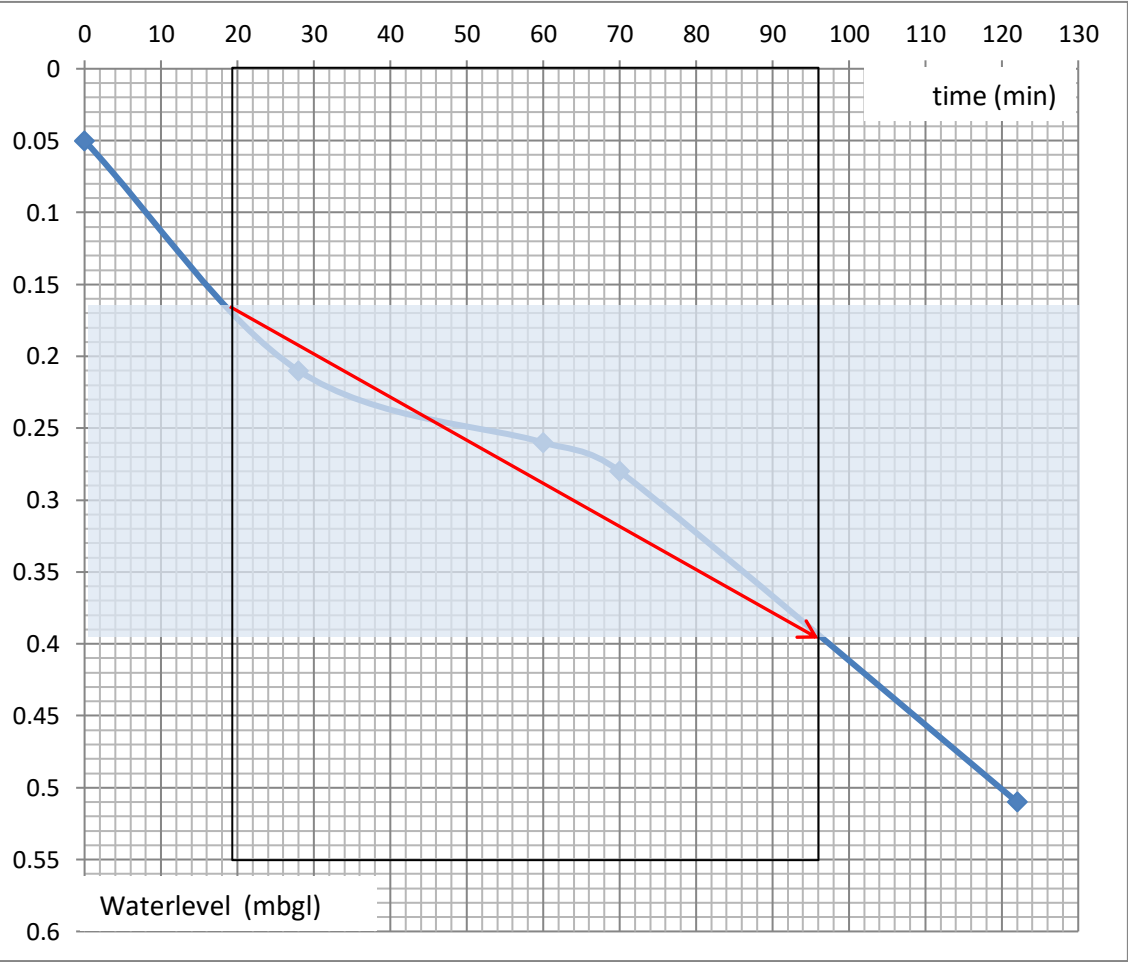
Time (Mins)	Depth to Water (m)
0	0.05
28	0.21
60	0.26
70	0.28
122	0.51
	0.510

(Base of pit / effective depth - 0%)

Length of Trial Pit (m)	1.70
Width of Trial Pit (m)	0.70
Depth of Trial Pit (m)	0.51
Effective Storage Depth (m)	0.460
Vp25	0.1650
Vp50	0.2800
Vp75	0.3950
Vp75-25	0.274

50% effective depth (m)	0.230
Mean Surface area ap50 (m2)	2.294

Time for 25% Outflow (tp25)	19	Achieved
Time for 75% Outflow (tp75)	96	Achieved
tp75 - 25	77	Achieved
Soil Infiltration Rate (m/s)	2.58E-05	Lowest Measured Infiltration Rate



Date Undertaken: 31/03/2021

Test No.: TP20 (Test 2)

(Top of test / effective depth - 100%)

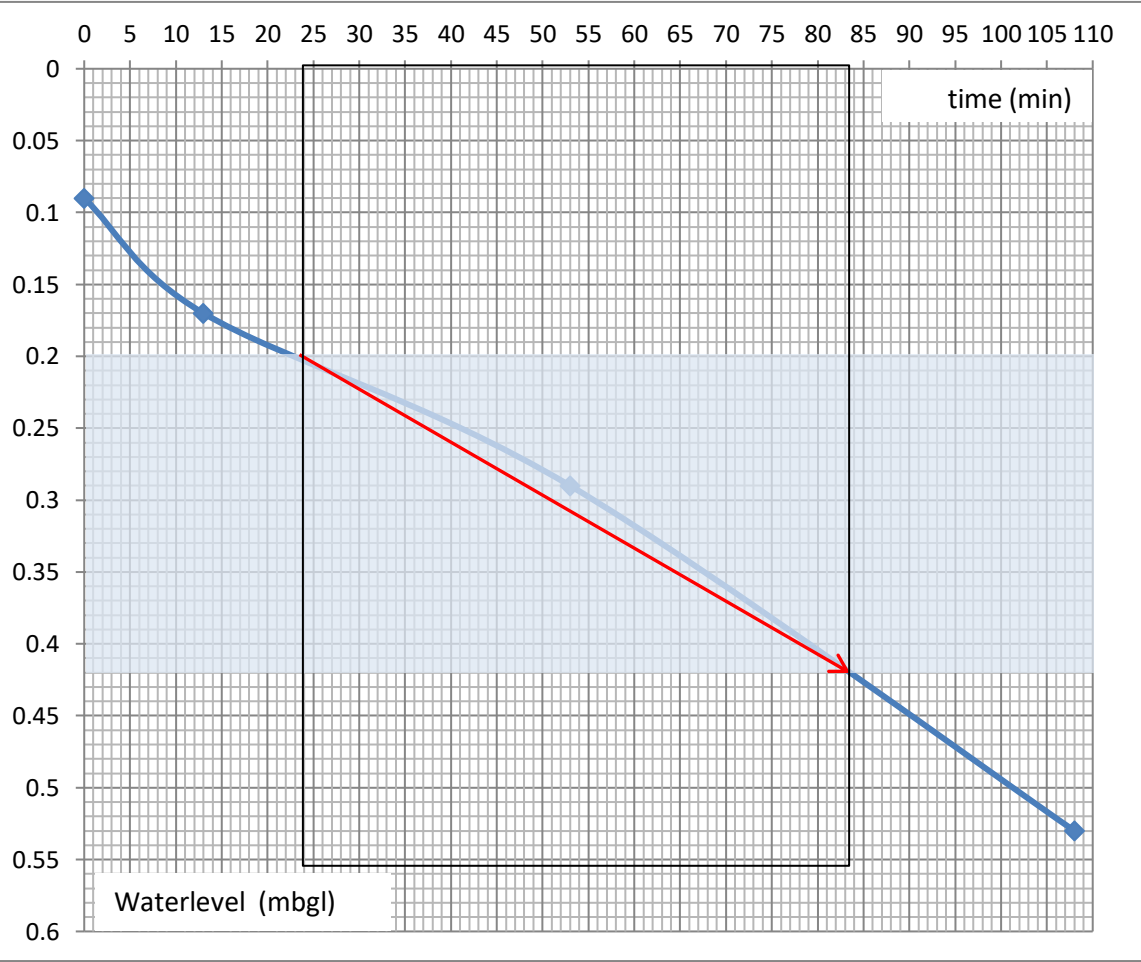
Time (Mins)	Depth to Water (m)
0	0.09
13	0.17
53	0.29
108	0.53
	0.530

(Base of pit / effective depth - 0%)

Length of Trial Pit (m)	1.70
Width of Trial Pit (m)	0.70
Depth of Trial Pit (m)	0.53
Effective Storage Depth (m)	0.440
Vp25	0.2000
Vp50	0.3100
Vp75	0.4200
Vp75-25	0.262

50% effective depth (m)	0.220
Mean Surface area ap50 (m2)	2.246

Time for 25% Outflow (tp25)	23.5	Achieved
Time for 75% Outflow (tp75)	83.5	Achieved
tp75 - 25	60	Achieved
Soil Infiltration Rate (m/s)	3.24E-05	



Site Name: Afan Lido
Number: 14647
Date Undertaken: 31/03/2021
Test No.: TP20 (Test 1)

(Top of test / effective depth - 100%)

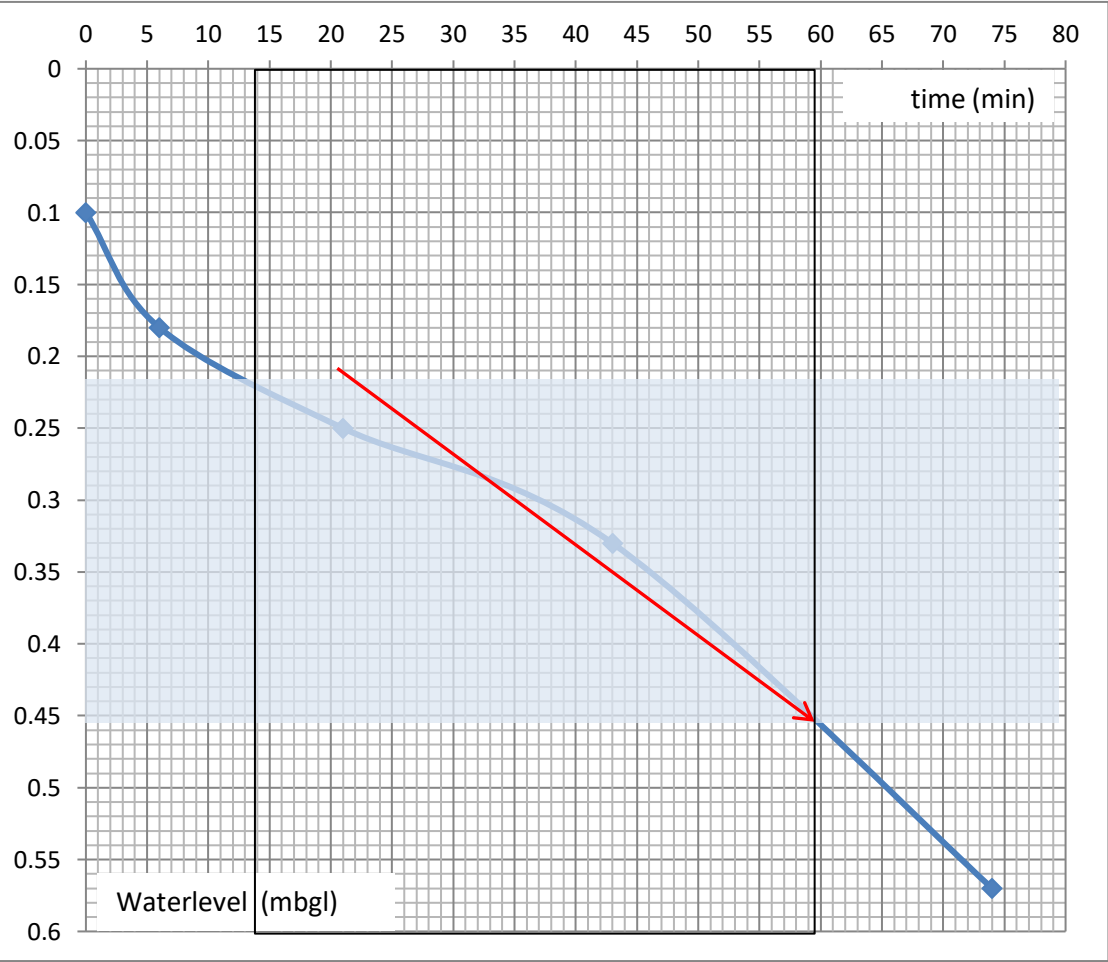
Time (Mins)	Depth to Water (m)
0	0.1
6	0.18
21	0.25
43	0.33
74	0.57
	0.570

(Base of pit / effective depth - 0%)

Length of Trial Pit (m)	1.70
Width of Trial Pit (m)	0.70
Depth of Trial Pit (m)	0.57
Effective Storage Depth (m)	0.470
Vp25	0.2175
Vp50	0.3350
Vp75	0.4525
Vp75-25	0.280

50% effective depth (m)	0.235
Mean Surface area ap50 (m2)	2.318

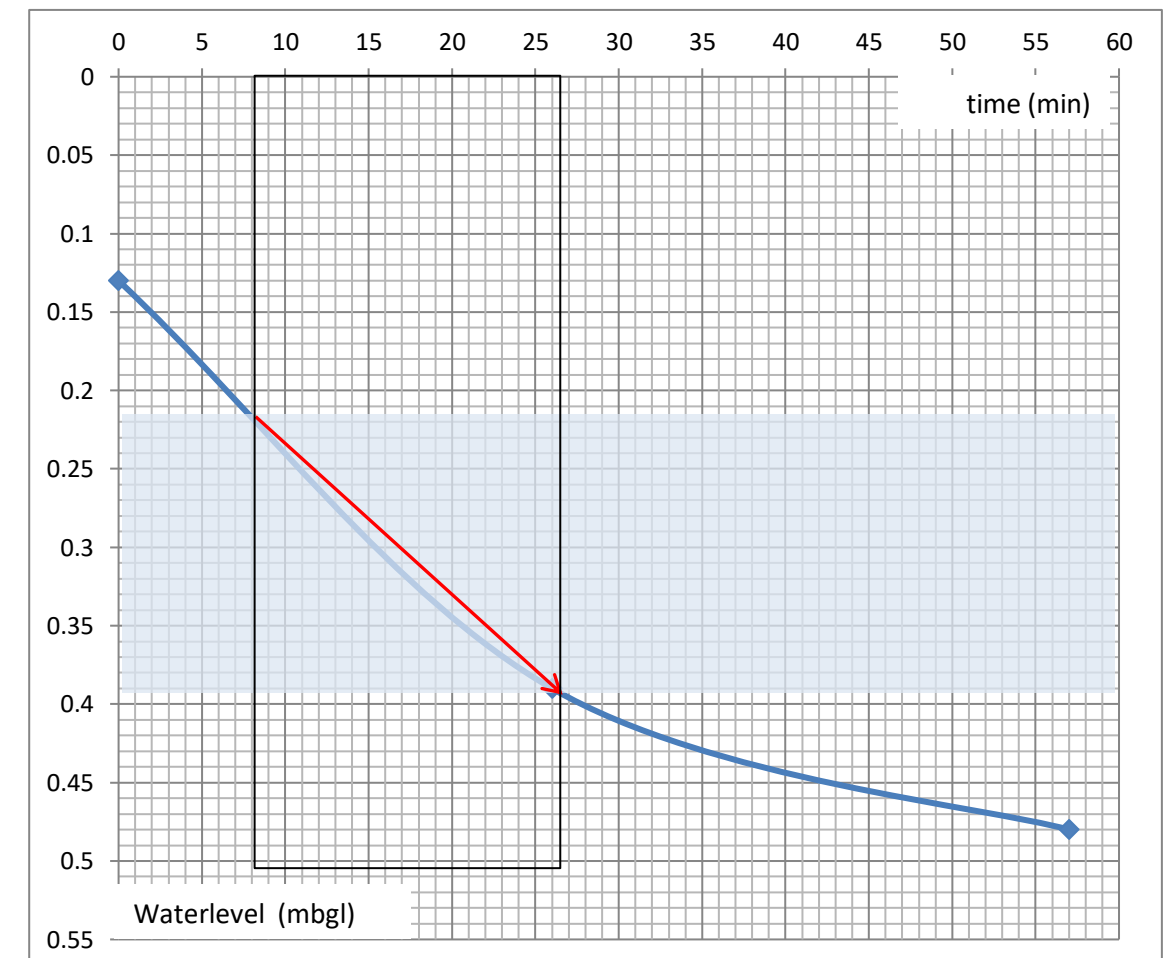
Time for 25% Outflow (tp25)	13.5	Achieved
Time for 75% Outflow (tp75)	59.5	Achieved
tp75 - 25	46	Achieved
Soil Infiltration Rate (m/s)	4.37E-05	



Length of Trial Pit (m)	1.70	
Width of Trial Pit (m)	0.50	
Depth of Trial Pit (m)	0.52	
Effective Storage Depth (m)	0.460	
Vp25	0.1750	
Vp50	0.2900	
Vp75	0.4050	
Vp75-25	0.196	
50% effective depth (m)	0.230	
Mean Surface area ap50 (m2)	1.862	
Time for 25% Outflow (tp25)	3.5	Achieved
Time for 75% Outflow (tp75)	10.75	Achieved
tp75 - 25	7.25	Achieved
Soil Infiltration Rate (m/s)	2.41E-04	

Length of Trial Pit (m)	1.70	
Width of Trial Pit (m)	0.50	
Depth of Trial Pit (m)	0.52	
Effective Storage Depth (m)	0.380	
Vp25	0.2350	
Vp50	0.3300	
Vp75	0.4250	
Vp75-25	0.162	
50% effective depth (m)	0.190	
Mean Surface area ap50 (m2)	1.686	
Time for 25% Outflow (tp25)	1.75	Achieved
Time for 75% Outflow (tp75)	28.5	Achieved
tp75 - 25	26.75	Achieved
Soil Infiltration Rate (m/s)	5.97E-05	Lowest Measured Infiltration Rate

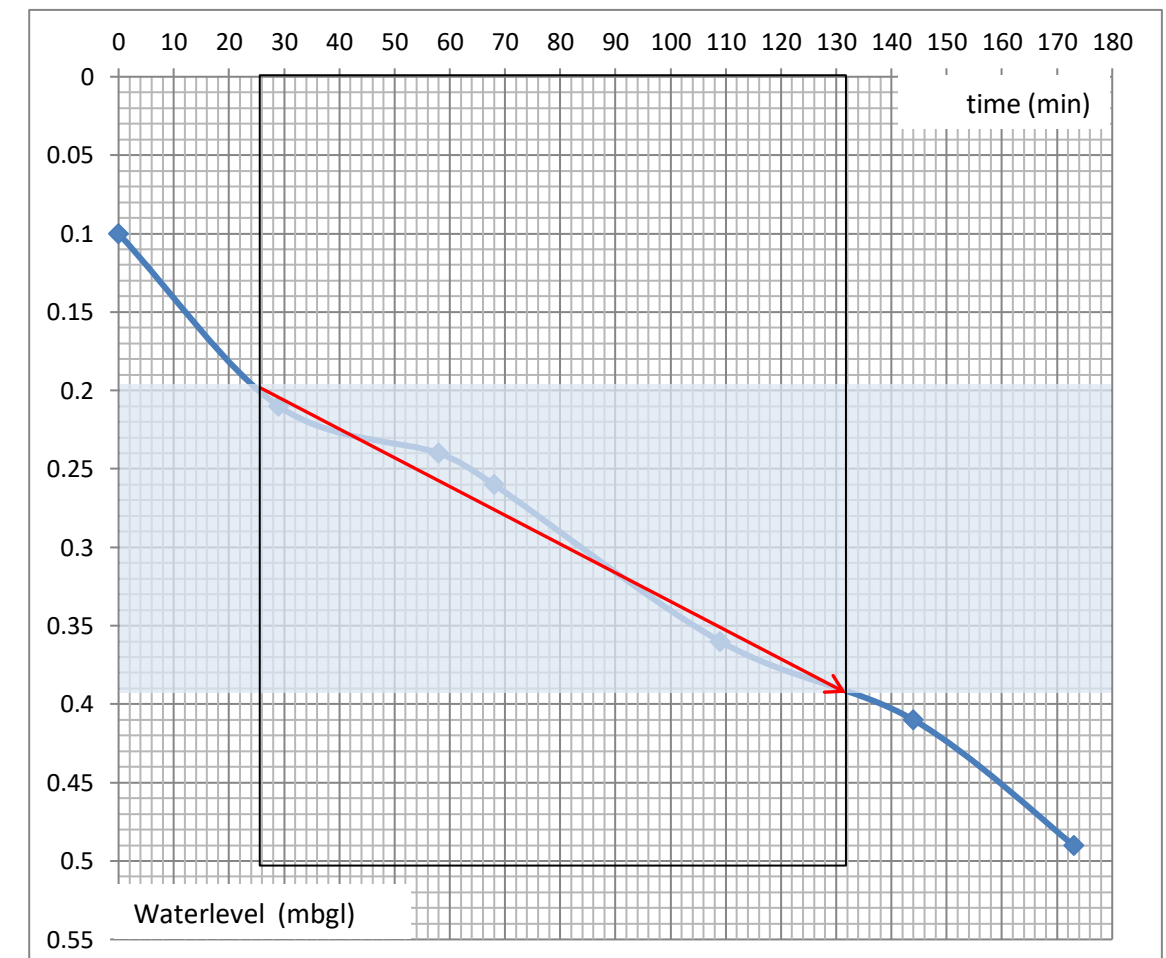
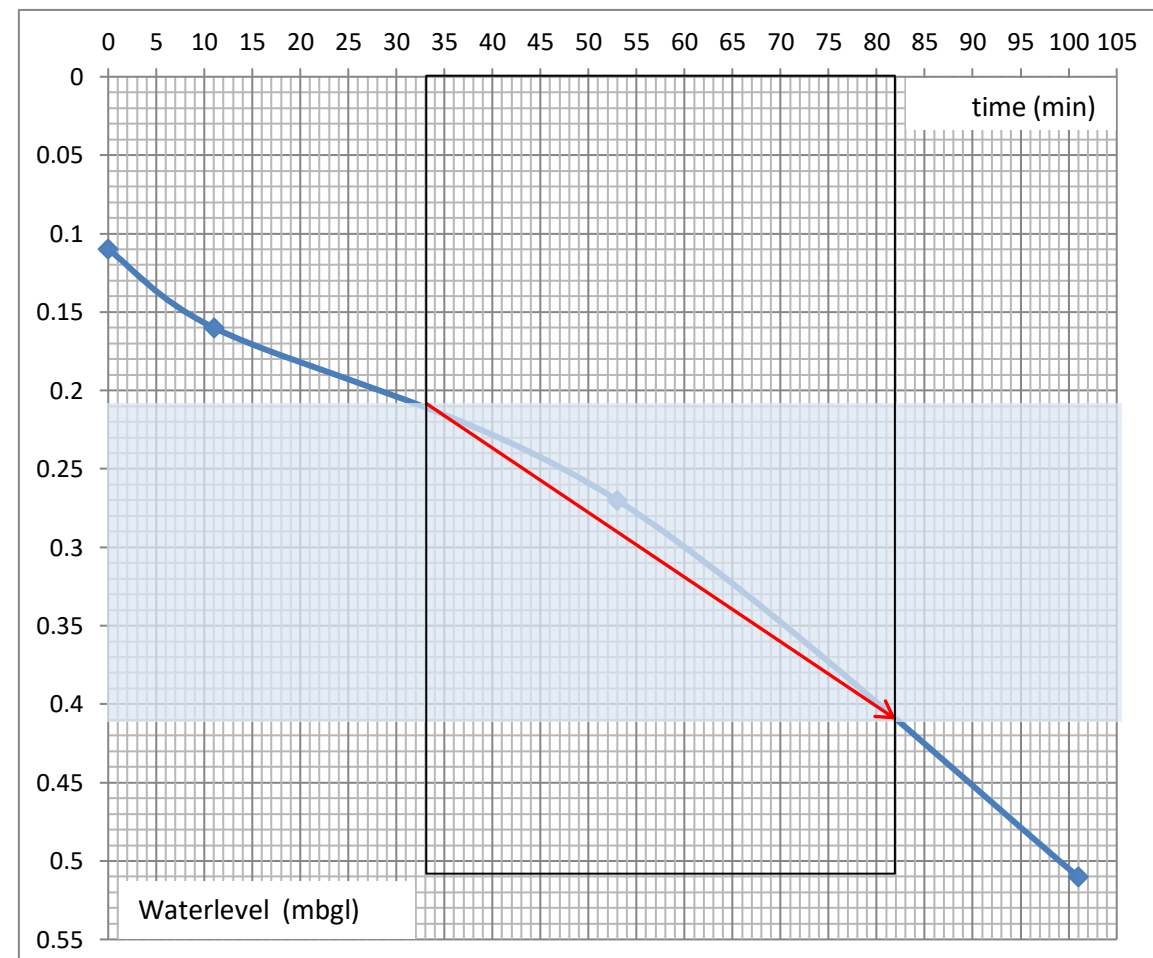
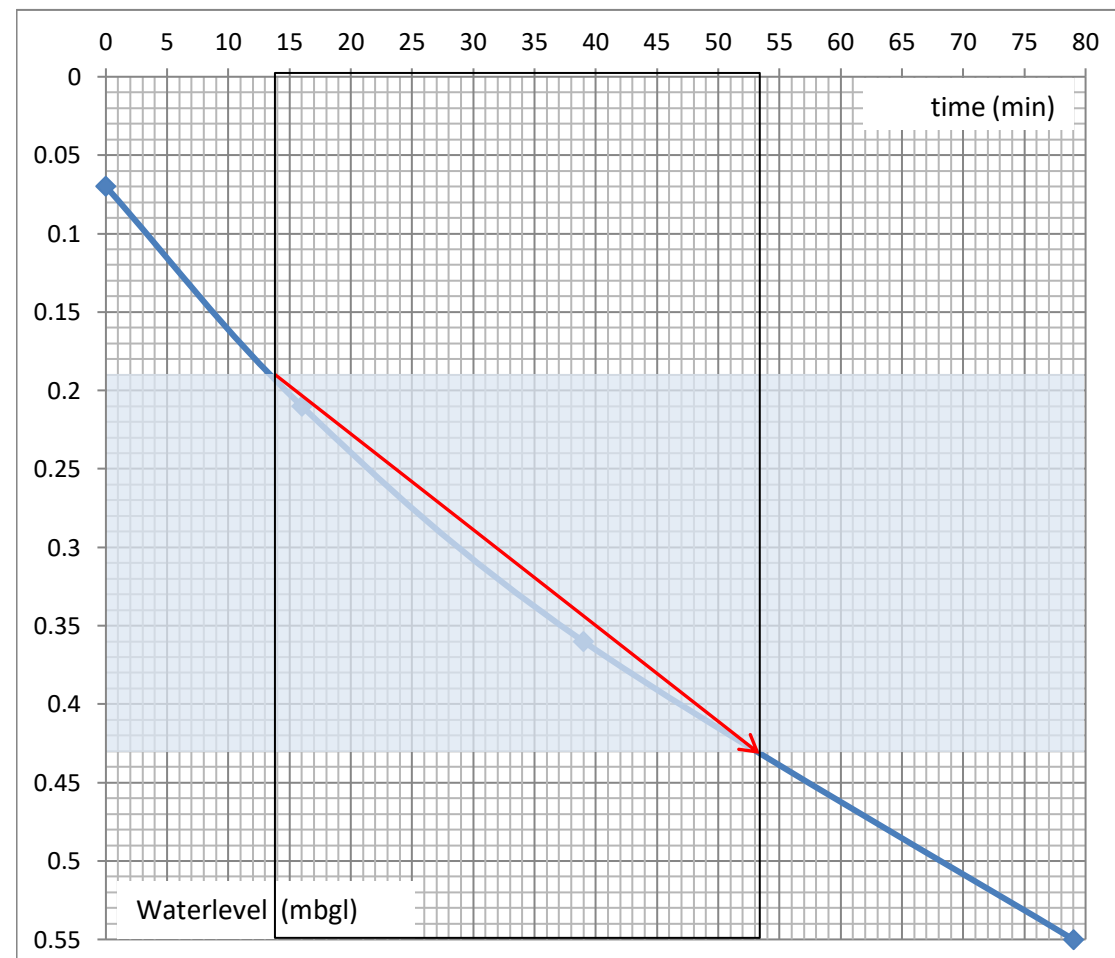
Length of Trial Pit (m)	1.70	
Width of Trial Pit (m)	0.50	
Depth of Trial Pit (m)	0.48	
Effective Storage Depth (m)	0.350	
Vp25	0.2175	
Vp50	0.3050	
Vp75	0.3925	
Vp75-25	0.149	
50% effective depth (m)	0.175	
Mean Surface area ap50 (m2)	1.620	
Time for 25% Outflow (tp25)	8	Achieved
Time for 75% Outflow (tp75)	26.5	Achieved
tp75 - 25	18.5	Achieved
Soil Infiltration Rate (m/s)	8.27E-05	



Length of Trial Pit (m)	1.70	
Width of Trial Pit (m)	0.45	
Depth of Trial Pit (m)	0.55	
Effective Storage Depth (m)	0.480	
Vp25	0.1900	
Vp50	0.3100	
Vp75	0.4300	
Vp75-25	0.184	
50% effective depth (m)	0.240	
Mean Surface area ap50 (m ²)	1.797	
Time for 25% Outflow (tp25)	13.5	Achieved
Time for 75% Outflow (tp75)	53.5	Achieved
tp75 - 25	40	Achieved
Soil Infiltration Rate (m/s)	4.26E-05	

Length of Trial Pit (m)	1.70	
Width of Trial Pit (m)	0.45	
Depth of Trial Pit (m)	0.51	
Effective Storage Depth (m)	0.400	
Vp25	0.2100	
Vp50	0.3100	
Vp75	0.4100	
Vp75-25	0.153	
50% effective depth (m)	0.200	
Mean Surface area ap50 (m2)	1.625	
Time for 25% Outflow (tp25)	33	Achieved
Time for 75% Outflow (tp75)	82	Achieved
tp75 - 25	49	Achieved
Soil Infiltration Rate (m/s)	3.20E-05	

Length of Trial Pit (m)	1.70	
Width of Trial Pit (m)	0.45	
Depth of Trial Pit (m)	0.49	
Effective Storage Depth (m)	0.390	
Vp25	0.1975	
Vp50	0.2950	
Vp75	0.3925	
Vp75-25	0.149	
50% effective depth (m)	0.195	
Mean Surface area ap50 (m2)	1.604	
Time for 25% Outflow (tp25)	25	Achieved
Time for 75% Outflow (tp75)	132	Achieved
tp75 - 25	107	Achieved
Soil Infiltration Rate (m/s)	1.45E-05	Lowest Measured Infiltration Rate

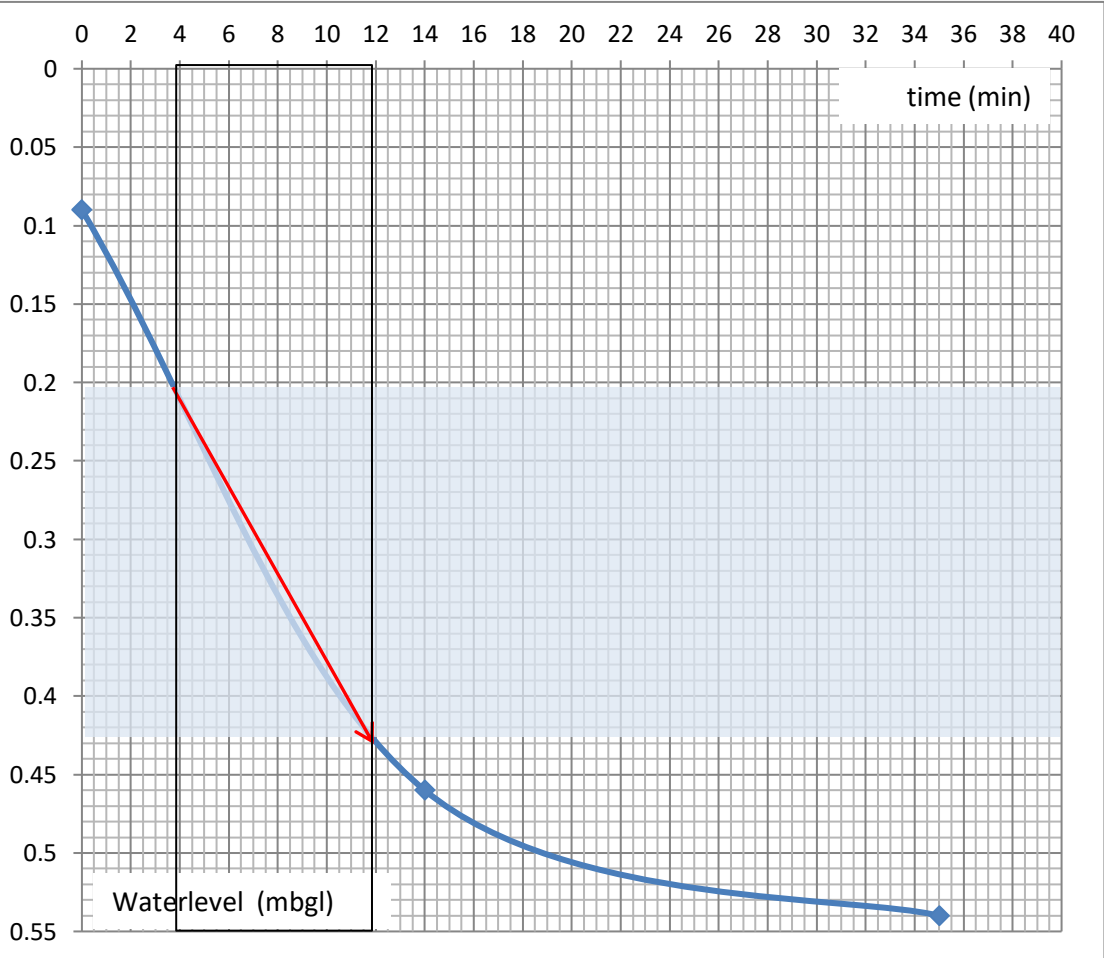


Site Name: Afan Lido
Number: 14647
Date Undertaken: 1/04/2021
Test No.: TP24 (Test 1)

Depth to Water (m)	
(Top of test / effective depth - 100%)	
0	0.09
14	0.46
35	0.54
(Base of pit / effective depth - 0%)	0.540

Length of Trial Pit (m)	1.40
Width of Trial Pit (m)	0.46
Depth of Trial Pit (m)	0.54
Effective Storage Depth (m)	0.450
Vp25	0.2025
Vp50	0.3150
Vp75	0.4275
Vp75-25	0.145
50% effective depth (m)	0.225
Mean Surface area ap50 (m2)	1.481

Time for 25% Outflow (tp25)	4	Achieved
Time for 75% Outflow (tp75)	12	Achieved
tp75 - 25	8	Achieved
Soil Infiltration Rate (m/s)	2.04E-04	



Date Undertaken: 1/04/2021
Test No.: TP24 (Test 2)

Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	
0	0.09
27	0.42
43	0.54
(Base of pit / effective depth - 0%)	0.540

Length of Trial Pit (m)	1.40
Width of Trial Pit (m)	0.46
Depth of Trial Pit (m)	0.54
Effective Storage Depth (m)	0.450
Vp25	0.2025
Vp50	0.3150
Vp75	0.4275
Vp75-25	0.145
50% effective depth (m)	0.225
Mean Surface area ap50 (m2)	1.481

Time for 25% Outflow (tp25)	9	Achieved
Time for 75% Outflow (tp75)	28	Achieved
tp75 - 25	19	Achieved
Soil Infiltration Rate (m/s)	8.58E-05	



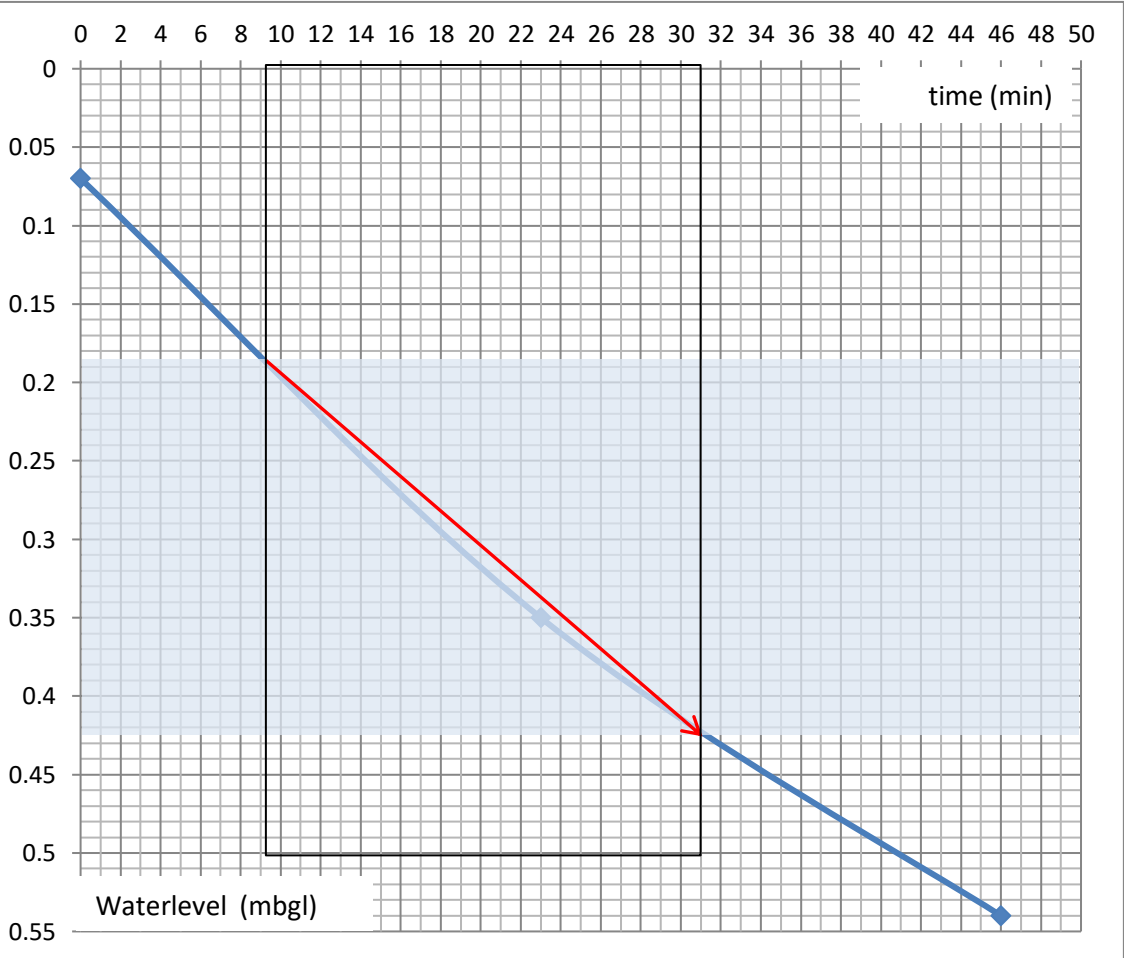
Date Undertaken: 1/04/2021

Test No.: TP24 (Test 3)

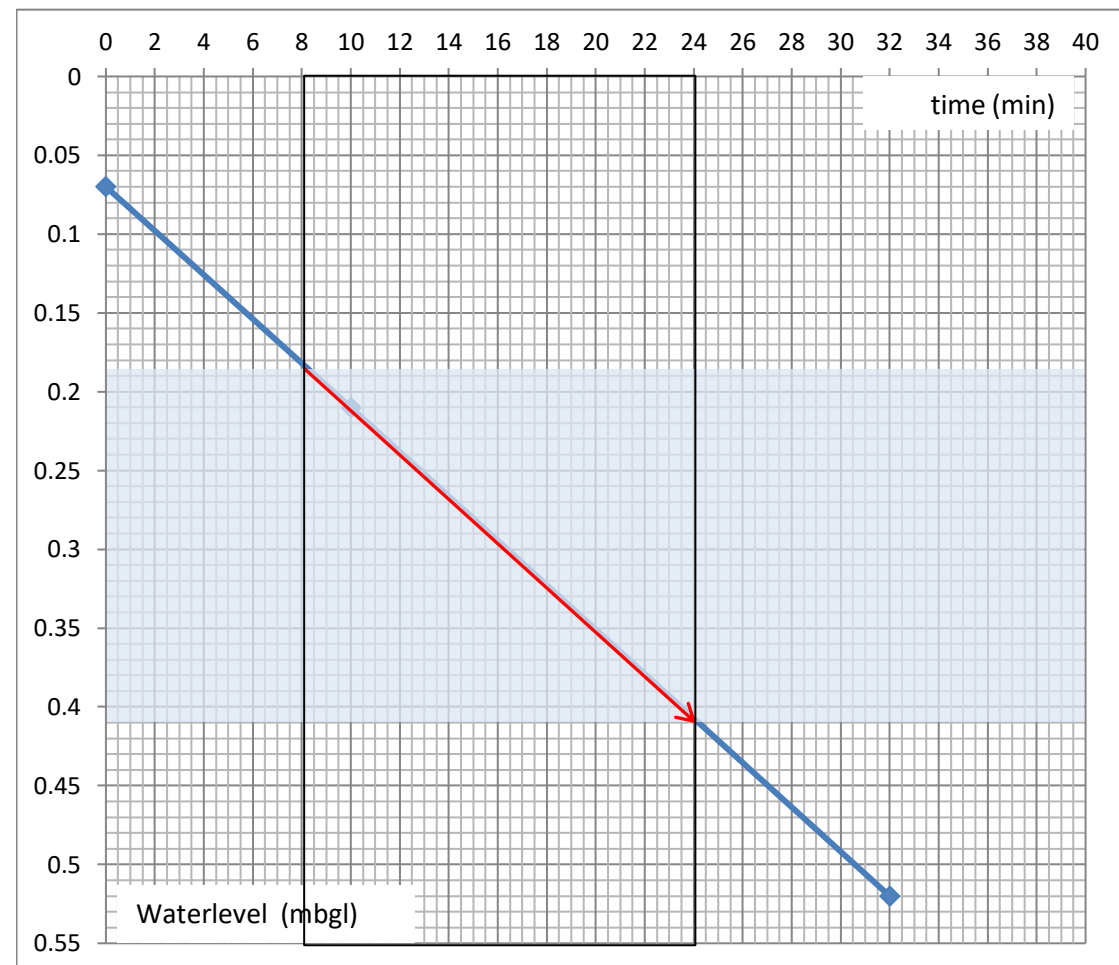
Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	
0	0.07
23	0.35
46	0.54
(Base of pit / effective depth - 0%)	0.540

Length of Trial Pit (m)	1.40
Width of Trial Pit (m)	0.46
Depth of Trial Pit (m)	0.54
Effective Storage Depth (m)	0.470
Vp25	0.1875
Vp50	0.3050
Vp75	0.4225
Vp75-25	0.151
50% effective depth (m)	0.235
Mean Surface area ap50 (m2)	1.518

Time for 25% Outflow (tp25)	9	Achieved
Time for 75% Outflow (tp75)	31	Achieved
tp75 - 25	22	Achieved
Soil Infiltration Rate (m/s)	7.55E-05	Lowest Measured Infiltration Rate



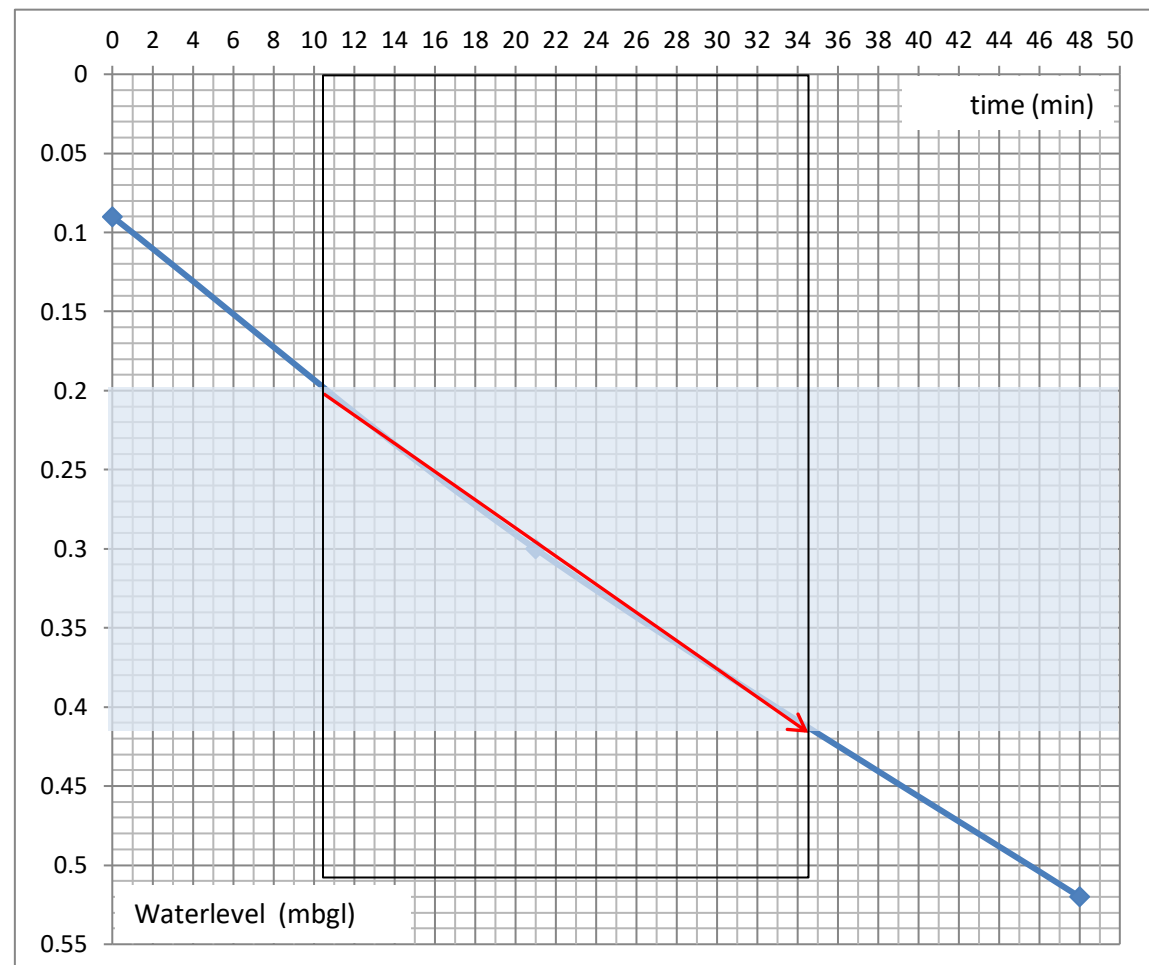
Length of Trial Pit (m)	1.25	
Width of Trial Pit (m)	0.55	
Depth of Trial Pit (m)	0.52	
Effective Storage Depth (m)	0.450	
Vp25	0.1825	
Vp50	0.2950	
Vp75	0.4075	
Vp75-25	0.155	
50% effective depth (m)	0.225	
Mean Surface area ap50 (m2)	1.498	
Time for 25% Outflow (tp25)	8	Achieved
Time for 75% Outflow (tp75)	24	Achieved
tp75 - 25	16	Achieved
Soil Infiltration Rate (m/s)	1.08E-04	



Soil Infiltration Worksheet: This worksheet has been produced in combination with the document 'BRE Digest 365- March 2007'

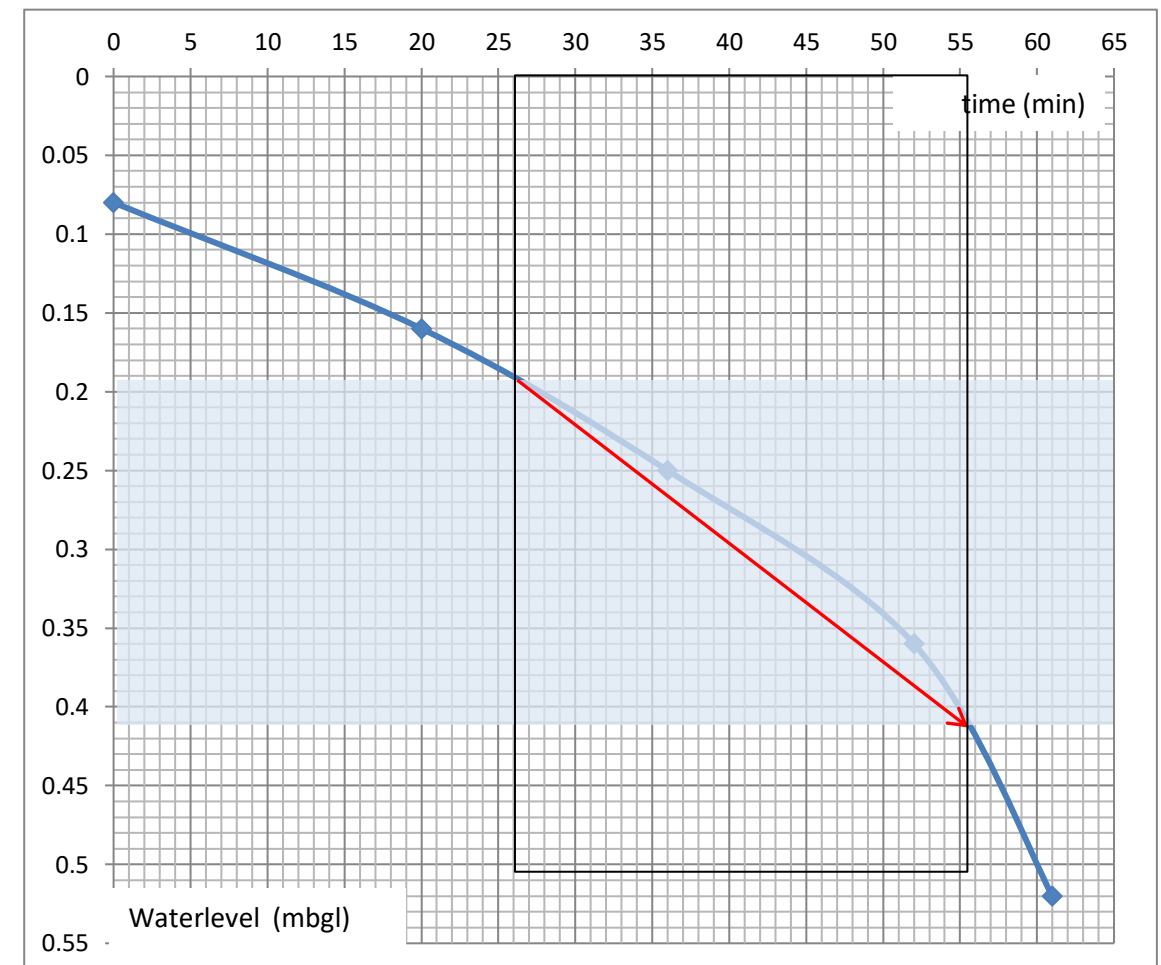
	Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	0	0.09
	21	0.30
	48	0.52
(Base of pit / effective depth - 0%)		0.520

Length of Trial Pit (m)	1.25	
Width of Trial Pit (m)	0.55	
Depth of Trial Pit (m)	0.52	
Effective Storage Depth (m)	0.430	
Vp25	0.1975	
Vp50	0.3050	
Vp75	0.4125	
Vp75-25	0.148	
50% effective depth (m)	0.215	
Mean Surface area ap50 (m2)	1.462	
Time for 25% Outflow (tp25)	11	Achieved
Time for 75% Outflow (tp75)	34.75	Achieved
tp75 - 25	23.75	Achieved
Soil Infiltration Rate (m/s)	7.10E-05	



Test No.: TP125 (Test 3)	Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	0	0.08
	20	0.16
	36	0.25
	52	0.36
	61	0.52
(Base of pit / effective depth - 0%)		0.520

Length of Trial Pit (m)	1.25	
Width of Trial Pit (m)	0.55	
Depth of Trial Pit (m)	0.52	
Effective Storage Depth (m)	0.440	
Vp25	0.1900	
Vp50	0.3000	
Vp75	0.4100	
Vp75-25	0.151	
50% effective depth (m)	0.220	
Mean Surface area ap50 (m2)	1.480	
Time for 25% Outflow (tp25)	26	Achieved
Time for 75% Outflow (tp75)	55.5	Achieved
tp75 - 25	29.5	Achieved
Soil Infiltration Rate (m/s)	5.78E-05	Lowest Measured Infiltration Rate

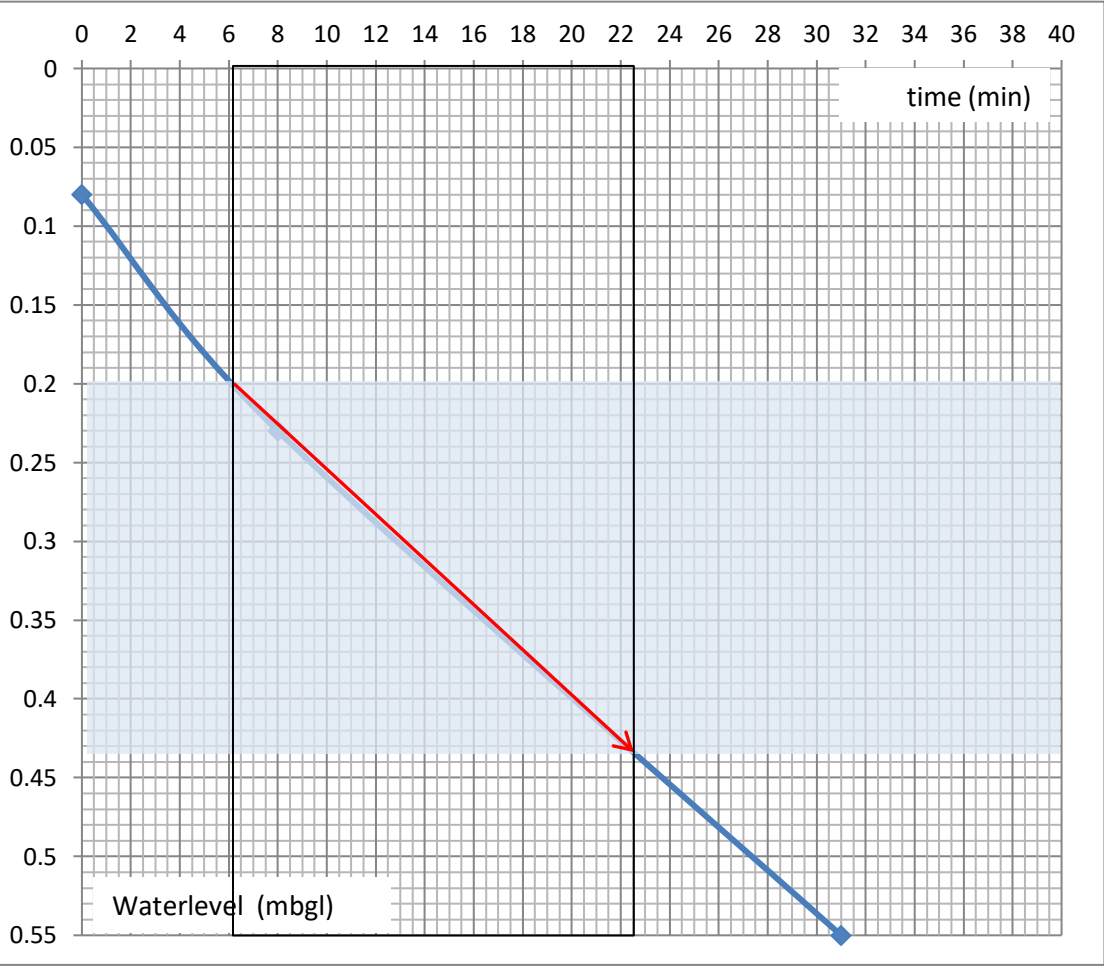


Site Name: Afan Lido
Number: 14647
Date Undertaken: 01/04/2021
Test No.: TP26 (Test 1)

(Top of test / effective depth - 100%)	Depth to Water (m)	
	0	0.08
	8	0.23
	31	0.55
(Base of pit / effective depth - 0%)		0.550

Length of Trial Pit (m)	1.30
Width of Trial Pit (m)	0.60
Depth of Trial Pit (m)	0.55
Effective Storage Depth (m)	0.470
Vp25	0.1975
Vp50	0.3150
Vp75	0.4325
Vp75-25	0.183
50% effective depth (m)	0.235
Mean Surface area ap50 (m2)	1.673

Time for 25% Outflow (tp25)	6	Achieved
Time for 75% Outflow (tp75)	22.5	Achieved
tp75 - 25	16.5	Achieved
Soil Infiltration Rate (m/s)	1.11E-04	

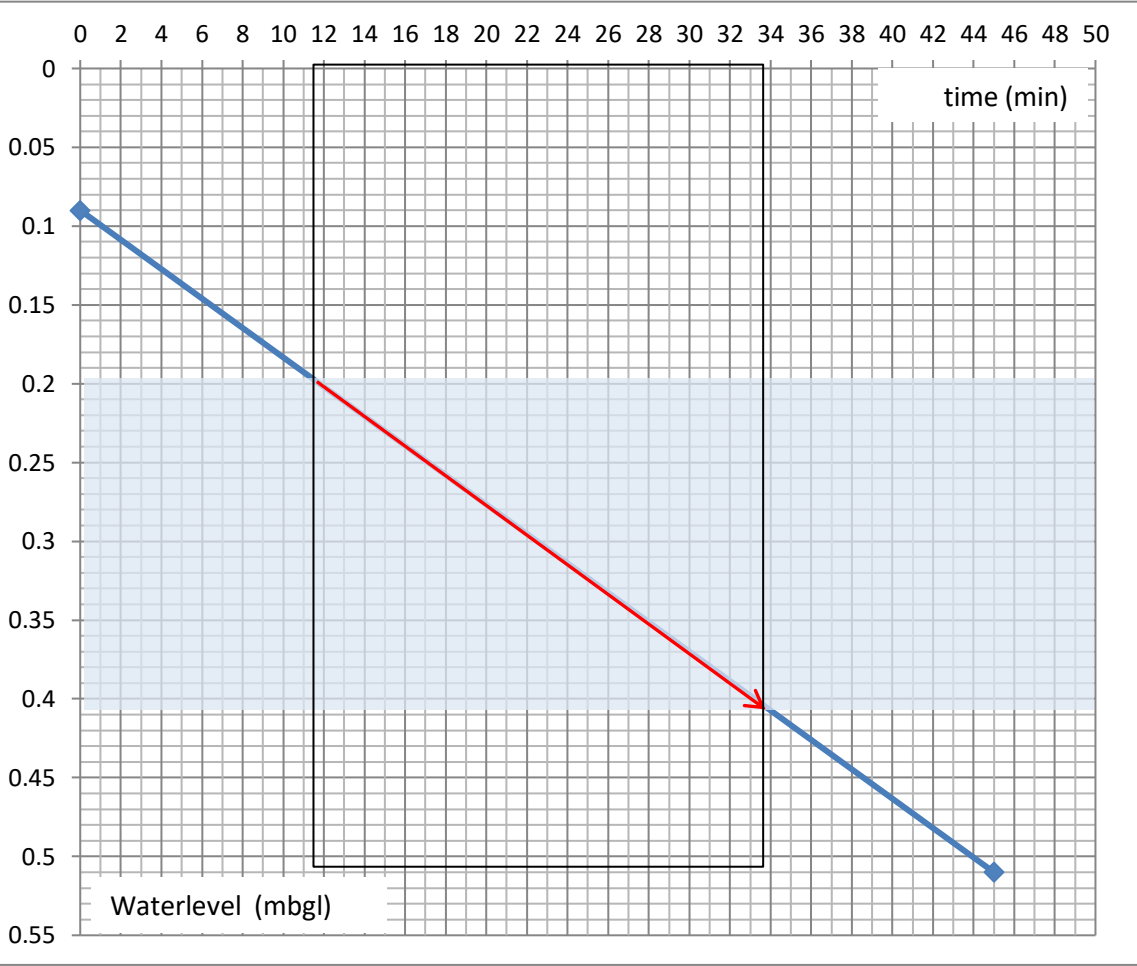


Date Undertaken: 01/04/2021
Test No.: TP26 (Test 2)

(Top of test / effective depth - 100%)	Time (Mins)	Depth to Water (m)
	0	0.09
	45	0.51
(Base of pit / effective depth - 0%)		0.510

Length of Trial Pit (m)	1.30
Width of Trial Pit (m)	0.60
Depth of Trial Pit (m)	0.51
Effective Storage Depth (m)	0.420
Vp25	0.1950
Vp50	0.3000
Vp75	0.4050
Vp75-25	0.164
50% effective depth (m)	0.210
Mean Surface area ap50 (m2)	1.578

Time for 25% Outflow (tp25)	11.3	Achieved
Time for 75% Outflow (tp75)	33.7	Achieved
tp75 - 25	22.4	Achieved
Soil Infiltration Rate (m/s)	7.72E-05	



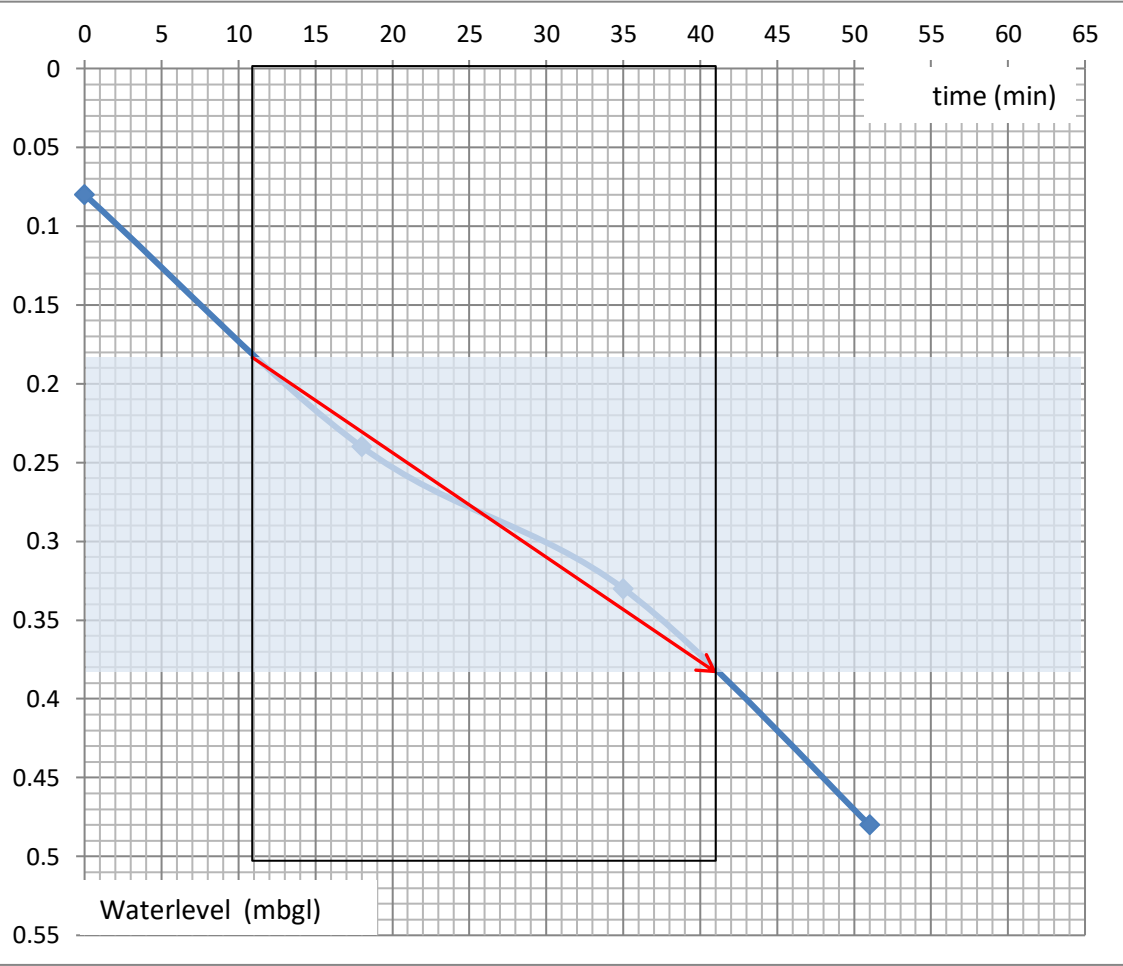
Date Undertaken: 01/04/2021

Test No.: TP126 (Test 3)

(Top of test / effective depth - 100%)	Time (Mins)	Depth to Water (m)
	0	0.08
	18	0.24
	35	0.33
	51	0.48
(Base of pit / effective depth - 0%)		0.480

Length of Trial Pit (m)	1.30
Width of Trial Pit (m)	0.60
Depth of Trial Pit (m)	0.48
Effective Storage Depth (m)	0.400
Vp25	0.1800
Vp50	0.2800
Vp75	0.3800
Vp75-25	0.156
50% effective depth (m)	0.200
Mean Surface area ap50 (m2)	1.540

Time for 25% Outflow (tp25)	10.5	Achieved
Time for 75% Outflow (tp75)	41	Achieved
tp75 - 25	30.5	Achieved
Soil Infiltration Rate (m/s)	5.54E-05	Lowest Measured Infiltration Rate



Date Undertaken: 07/04/2021

Test No.: TP27 (Test 3)

(Top of test / effective depth - 100%)

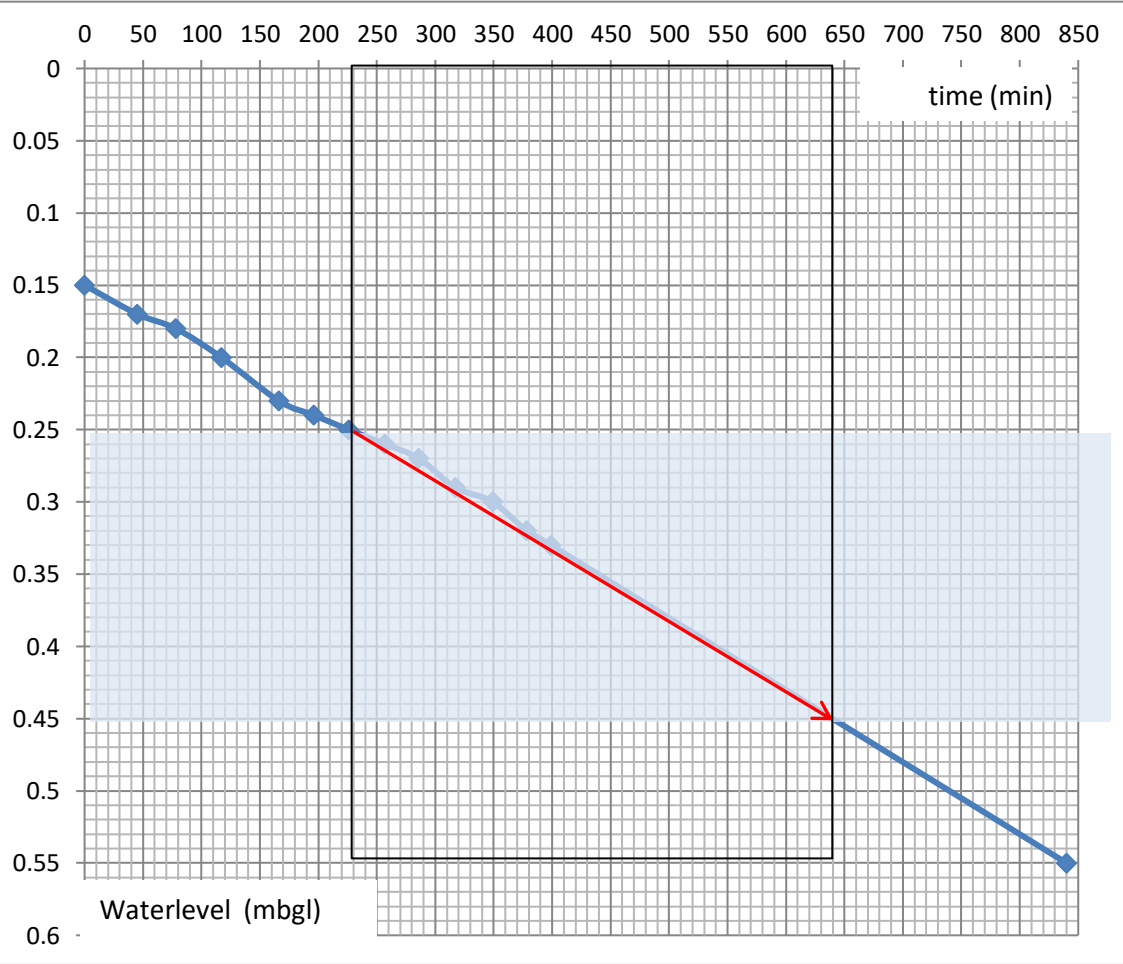
Time (Mins)	Depth to Water (m)
0	0.15
45	0.17
78	0.18
117	0.20
166	0.23
196	0.24
226	0.25
257	0.26
286	0.27
317	0.29
349	0.30
378	0.32
399	0.33
840	0.55
	0.550

(Base of pit / effective depth - 0%)

Length of Trial Pit (m)	1.40
Width of Trial Pit (m)	0.50
Depth of Trial Pit (m)	0.55
Effective Storage Depth (m)	0.400
Vp25	0.2500
Vp50	0.3500
Vp75	0.4500
Vp75-25	0.140

50% effective depth (m)	0.200
Mean Surface area ap50 (m2)	1.460

Time for 25% Outflow (tp25)	226	Achieved
Time for 75% Outflow (tp75)	640	Conjectured
tp75 - 25	414	Conjectured
Soil Infiltration Rate (m/s)	3.86E-06	Lowest Measured Infiltration Rate



Date Undertaken: 06/04/2021

Test No.: TP27 (Test 2)

(Top of test / effective depth - 100%)

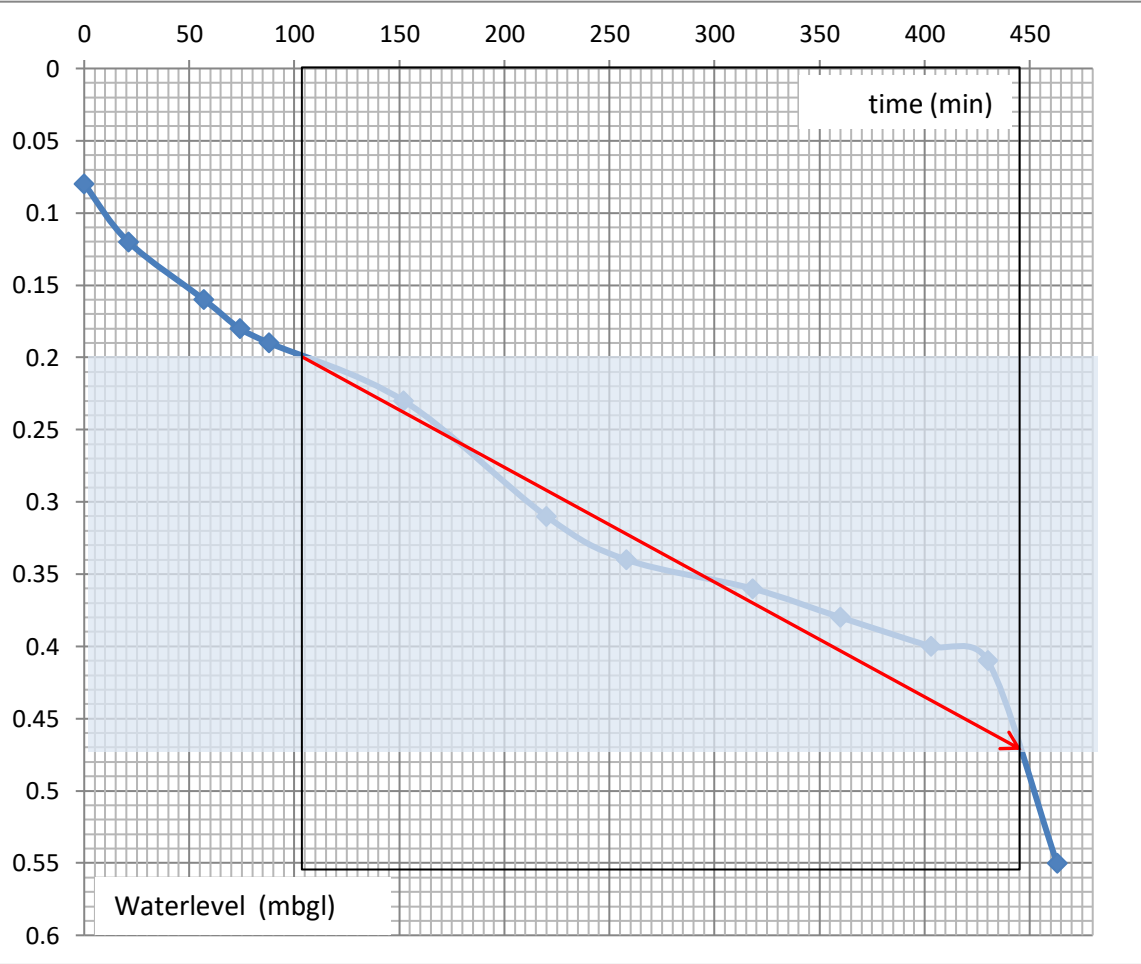
Time (Mins)	Depth to Water (m)
0	0.08
21	0.12
57	0.16
74	0.18
88	0.19
152	0.23
220	0.31
258	0.34
318	0.36
360	0.38
403	0.40
430	0.41
463	0.550

(Base of pit / effective depth - 0%)

Length of Trial Pit (m)	1.40
Width of Trial Pit (m)	0.50
Depth of Trial Pit (m)	0.55
Effective Storage Depth (m)	0.470
Vp25	0.1975
Vp50	0.3150
Vp75	0.4325
Vp75-25	0.165

50% effective depth (m)	0.235
Mean Surface area ap50 (m2)	1.593

Time for 25% Outflow (tp25)	102	Achieved
Time for 75% Outflow (tp75)	446	Achieved
tp75 - 25	344	Achieved
Soil Infiltration Rate (m/s)	5.00E-06	



Site Name: Afan Lido
Number: 14647
Date Undertaken: 01/04/2021
Test No.: TP27 (Test 1)

(Top of test / effective depth - 100%)

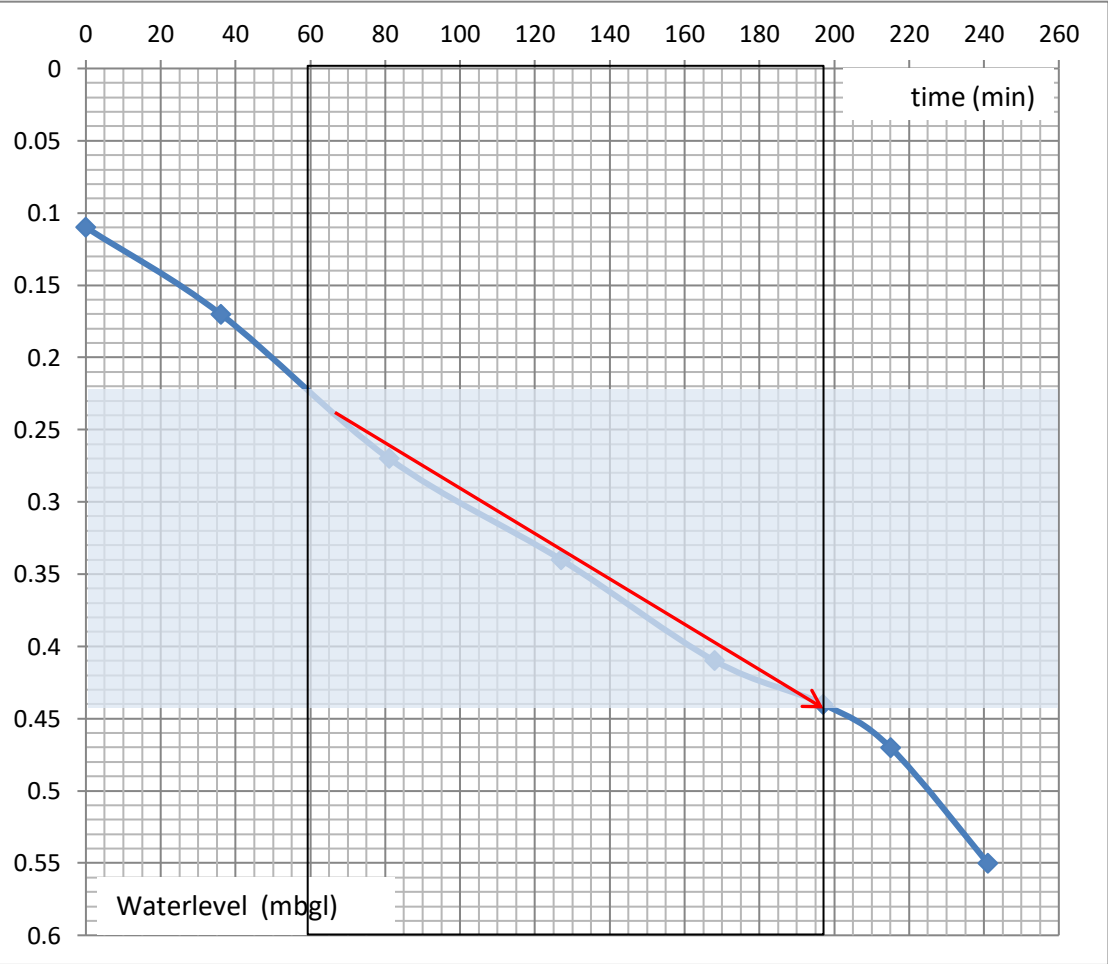
Time (Mins)	Depth to Water (m)
0	0.11
36	0.17
81	0.27
127	0.34
168	0.41
197	0.44
215	0.47
241	0.55
	0.550

(Base of pit / effective depth - 0%)

Length of Trial Pit (m)	1.40
Width of Trial Pit (m)	0.50
Depth of Trial Pit (m)	0.55
Effective Storage Depth (m)	0.440
Vp25	0.2200
Vp50	0.3300
Vp75	0.4400
Vp75-25	0.154

50% effective depth (m)	0.220
Mean Surface area ap50 (m2)	1.536

Time for 25% Outflow (tp25)	58	Achieved
Time for 75% Outflow (tp75)	197	Achieved
tp75 - 25	139	Achieved
Soil Infiltration Rate (m/s)	1.20E-05	

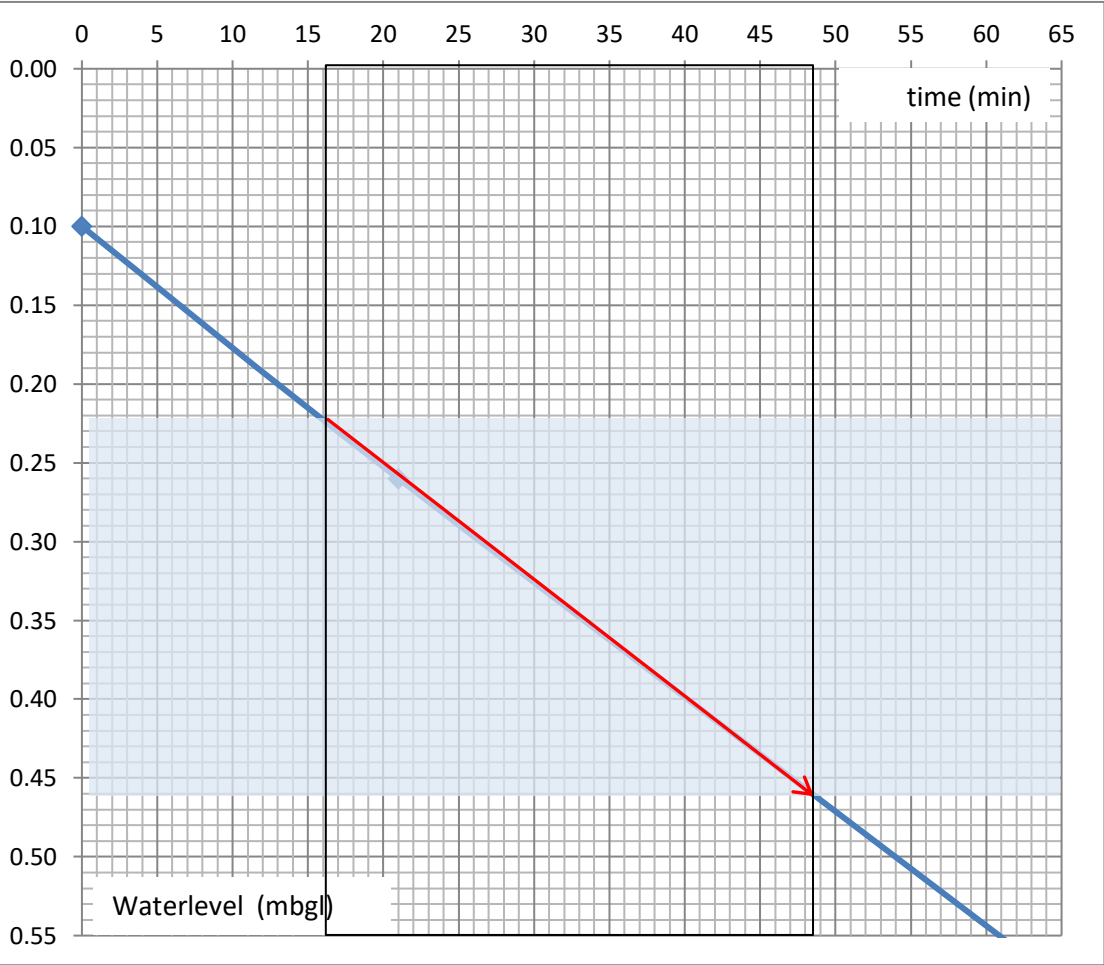


Site Name: Afan Lido
Number: 14647
Date Undertaken: 01/04/2021
Test No.: TP28 (Test 1)

Depth to Water (m)	
(Top of test / effective depth - 100%)	
0	0.10
21	0.26
65	0.58
(Base of pit / effective depth - 0%)	0.580

Length of Trial Pit (m)	1.30
Width of Trial Pit (m)	0.40
Depth of Trial Pit (m)	0.58
Effective Storage Depth (m)	0.480
Vp25	0.2200
Vp50	0.3400
Vp75	0.4600
Vp75-25	0.125
50% effective depth (m)	0.240
Mean Surface area ap50 (m2)	1.336

Time for 25% Outflow (tp25)	15.5	Achieved
Time for 75% Outflow (tp75)	48.5	Achieved
tp75 - 25	33	Achieved
Soil Infiltration Rate (m/s)	4.72E-05	



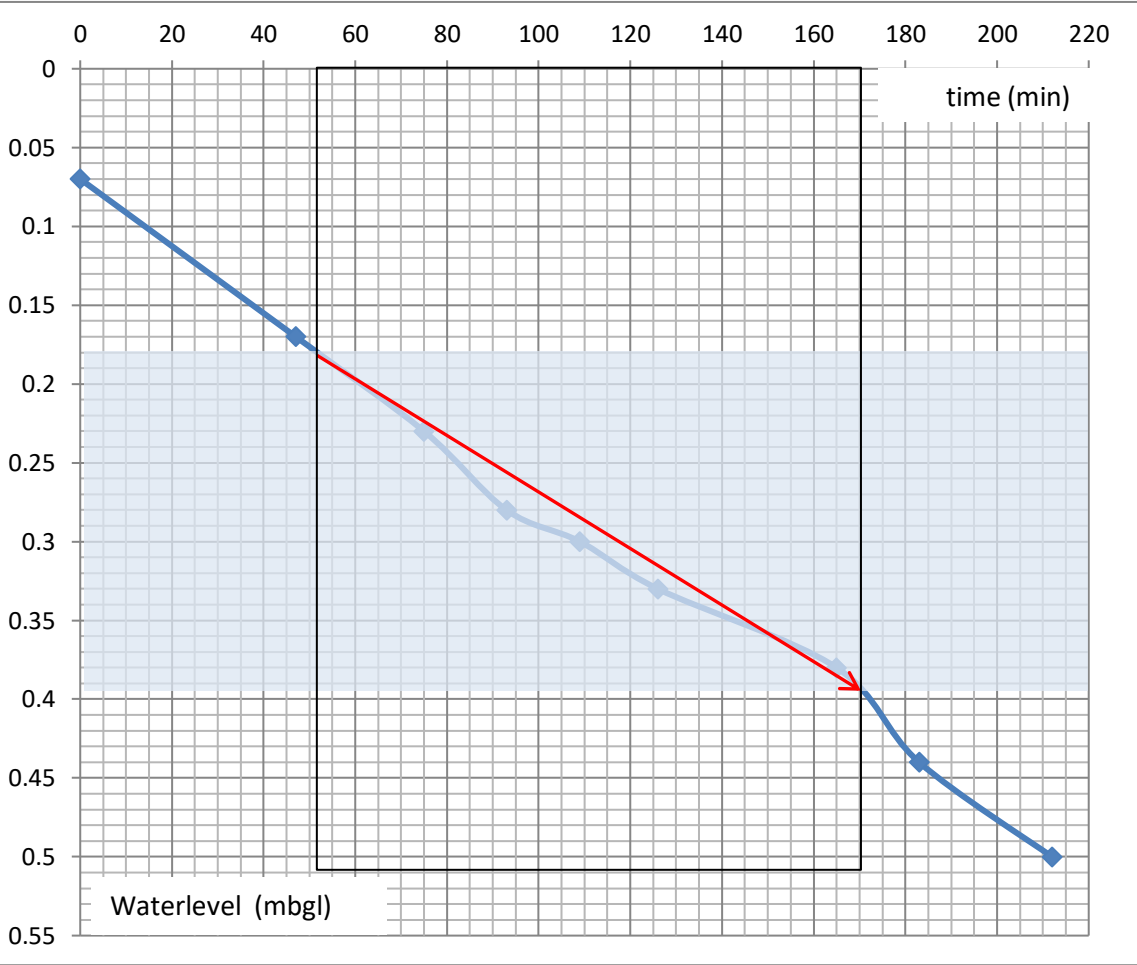
Soil Infiltration Worksheet: This worksheet has been produced in combination with the document 'BRE Digest 365- March 2007'

Date Undertaken: 01/04/2021
Test No.: TP28 (Test 2)

Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	
0	0.07
47	0.17
75	0.23
93	0.28
109	0.30
126	0.33
165	0.38
183	0.44
212	0.50
(Base of pit / effective depth - 0%)	0.500

Length of Trial Pit (m)	1.30
Width of Trial Pit (m)	0.40
Depth of Trial Pit (m)	0.50
Effective Storage Depth (m)	0.430
Vp25	0.1775
Vp50	0.2850
Vp75	0.3925
Vp75-25	0.112
50% effective depth (m)	0.215
Mean Surface area ap50 (m2)	1.251

Time for 25% Outflow (tp25)	51	Achieved
Time for 75% Outflow (tp75)	171	Achieved
tp75 - 25	120	Achieved
Soil Infiltration Rate (m/s)	1.24E-05	



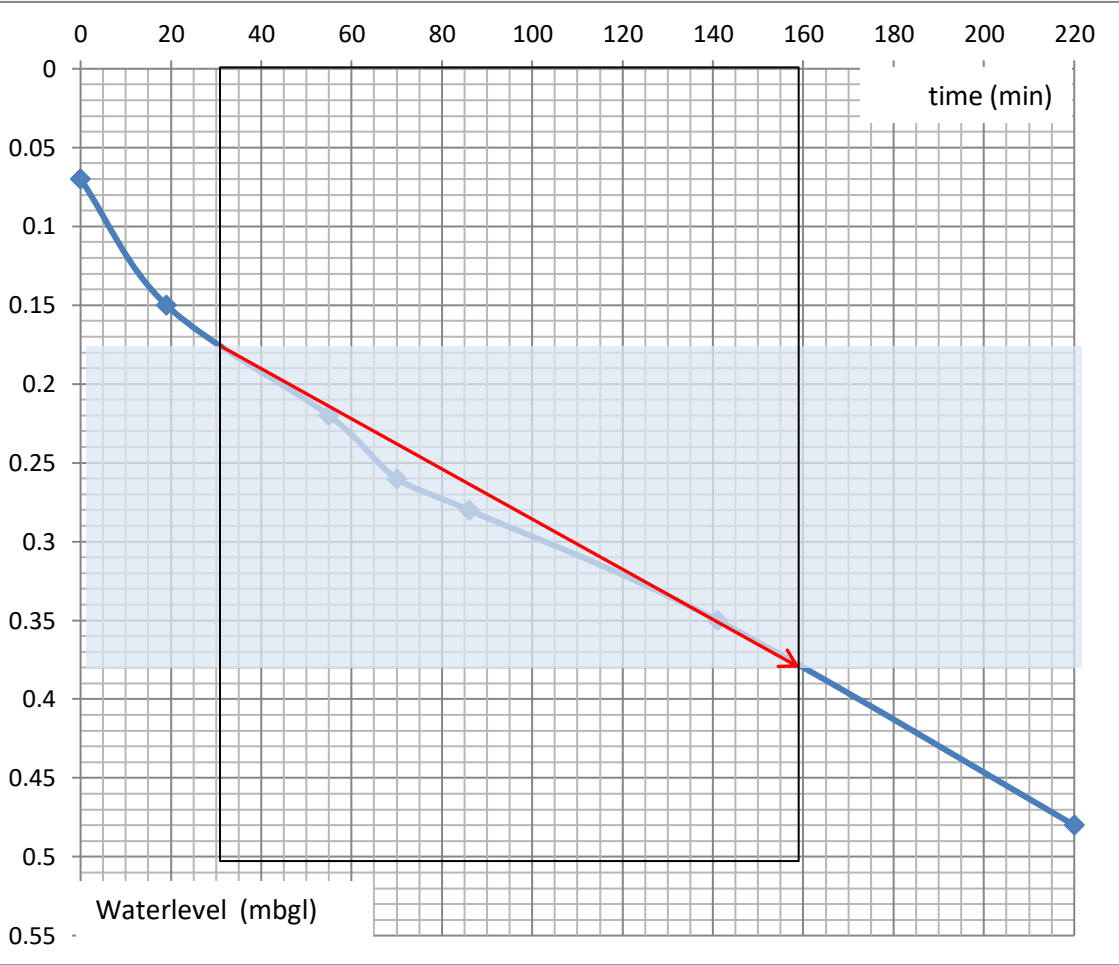
Date Undertaken: 06/04/2021

Test No.: TP128 (Test 3)

Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	
0	0.07
19	0.15
55	0.22
70	0.26
86	0.28
141	0.35
220	0.48
(Base of pit / effective depth - 0%)	0.480

Length of Trial Pit (m)	1.30
Width of Trial Pit (m)	0.40
Depth of Trial Pit (m)	0.48
Effective Storage Depth (m)	0.410
Vp25	0.1725
Vp50	0.2750
Vp75	0.3775
Vp75-25	0.107
50% effective depth (m)	0.205
Mean Surface area ap50 (m2)	1.217

Time for 25% Outflow (tp25)	30	Achieved
Time for 75% Outflow (tp75)	159	Achieved
tp75 - 25	129	Achieved
Soil Infiltration Rate (m/s)	1.13E-05	Lowest Measured Infiltration Rate

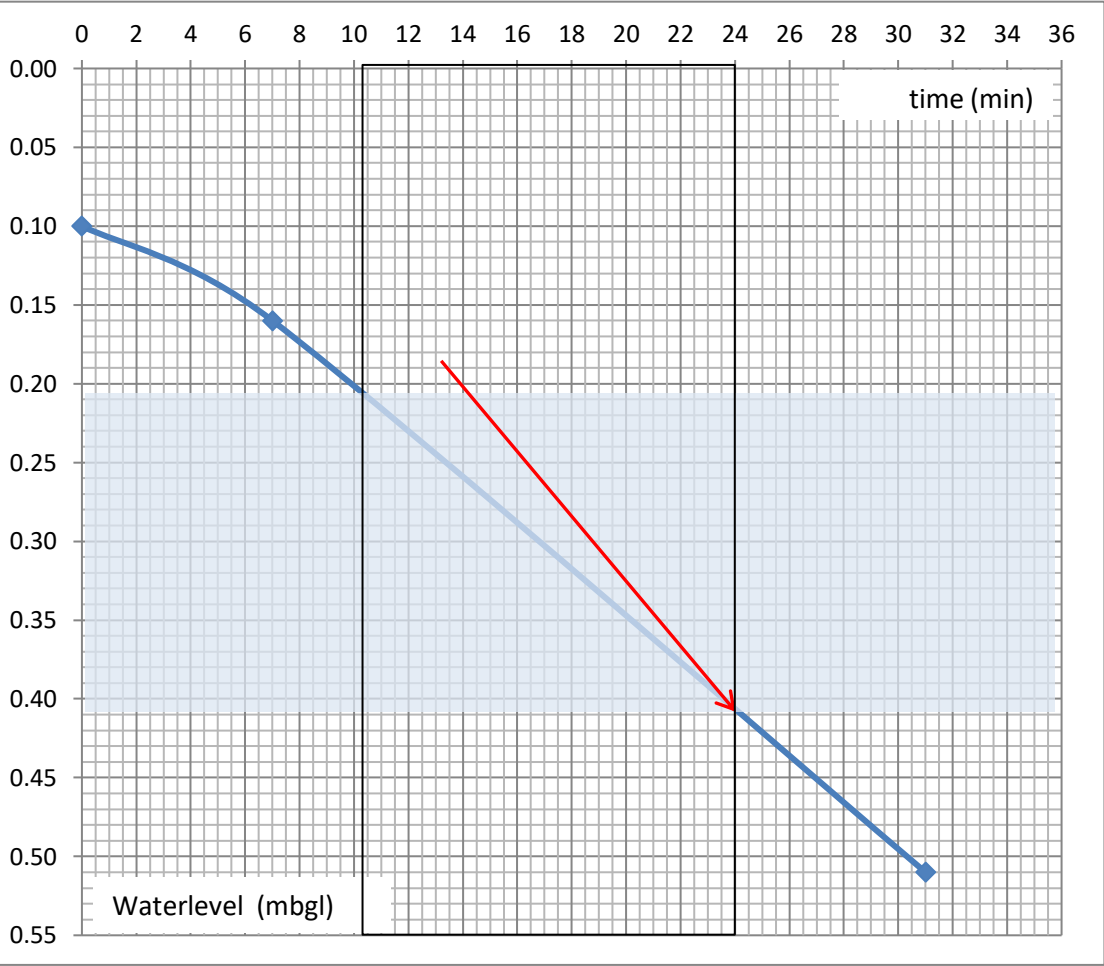


Site Name: Afan Lido
Number: 14647
Date Undertaken: 01/04/2021
Test No.: TP28 (Test 1)

Depth to Water (m)	
(Top of test / effective depth - 100%)	
0	0.10
7	0.16
31	0.51
(Base of pit / effective depth - 0%)	0.510

Length of Trial Pit (m)	1.51
Width of Trial Pit (m)	0.50
Depth of Trial Pit (m)	0.51
Effective Storage Depth (m)	0.410
Vp25	0.2025
Vp50	0.3050
Vp75	0.4075
Vp75-25	0.155
50% effective depth (m)	0.205
Mean Surface area ap50 (m2)	1.579

Time for 25% Outflow (tp25)	10.25	Achieved
Time for 75% Outflow (tp75)	24	Achieved
tp75 - 25	13.75	Achieved
Soil Infiltration Rate (m/s)	1.19E-04	



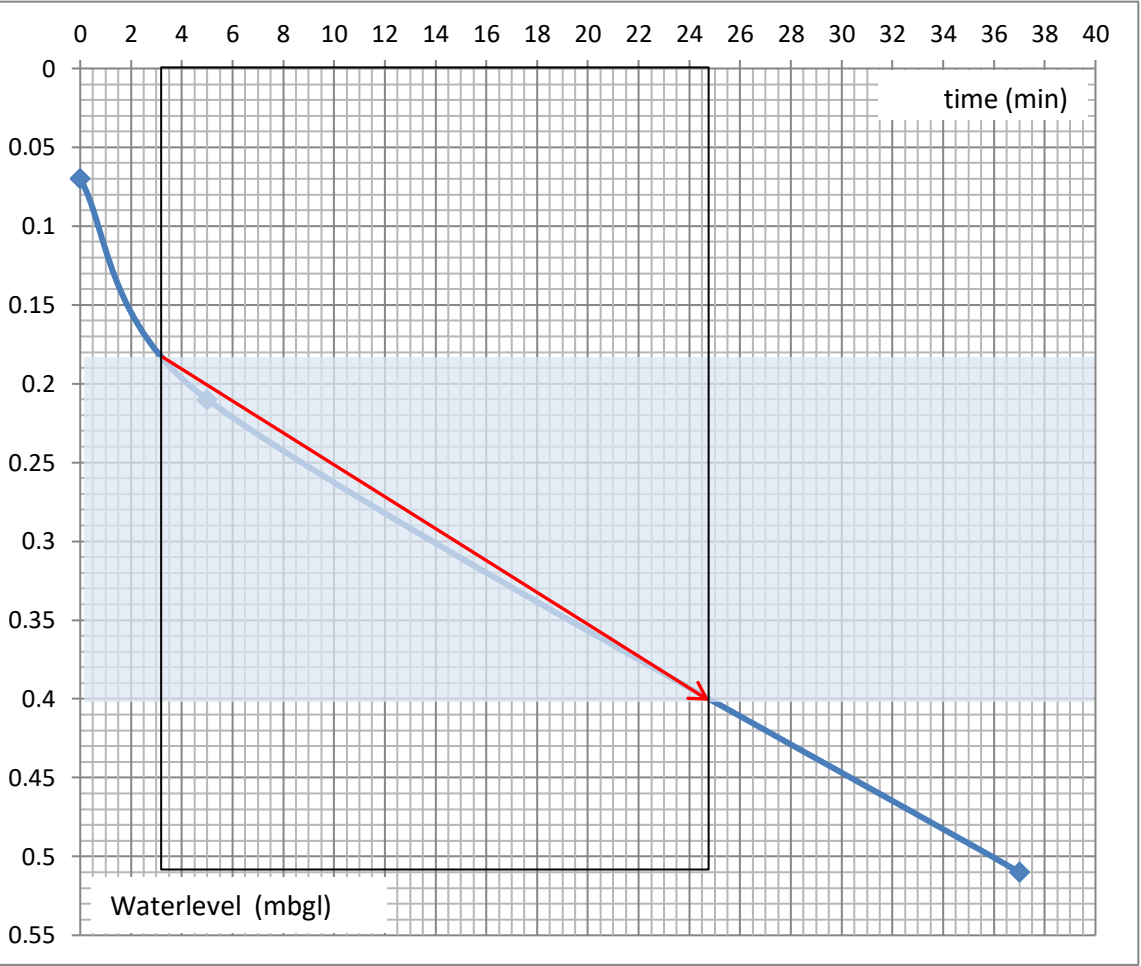
Soil Infiltration Worksheet: This worksheet has been produced in combination with the document 'BRE Digest 365- March 2007'

Date Undertaken: 01/04/2021
Test No.: TP28 (Test 2)

Time (Mins) Depth to Water (m)	
(Top of test / effective depth - 100%)	
0	0.07
5	0.21
37	0.51
(Base of pit / effective depth - 0%)	0.510

Length of Trial Pit (m)	1.51
Width of Trial Pit (m)	0.50
Depth of Trial Pit (m)	0.51
Effective Storage Depth (m)	0.440
Vp25	0.1800
Vp50	0.2900
Vp75	0.4000
Vp75-25	0.166
50% effective depth (m)	0.220
Mean Surface area ap50 (m2)	1.639

Time for 25% Outflow (tp25)	3	Achieved
Time for 75% Outflow (tp75)	24.75	Achieved
tp75 - 25	21.75	Achieved
Soil Infiltration Rate (m/s)	7.76E-05	



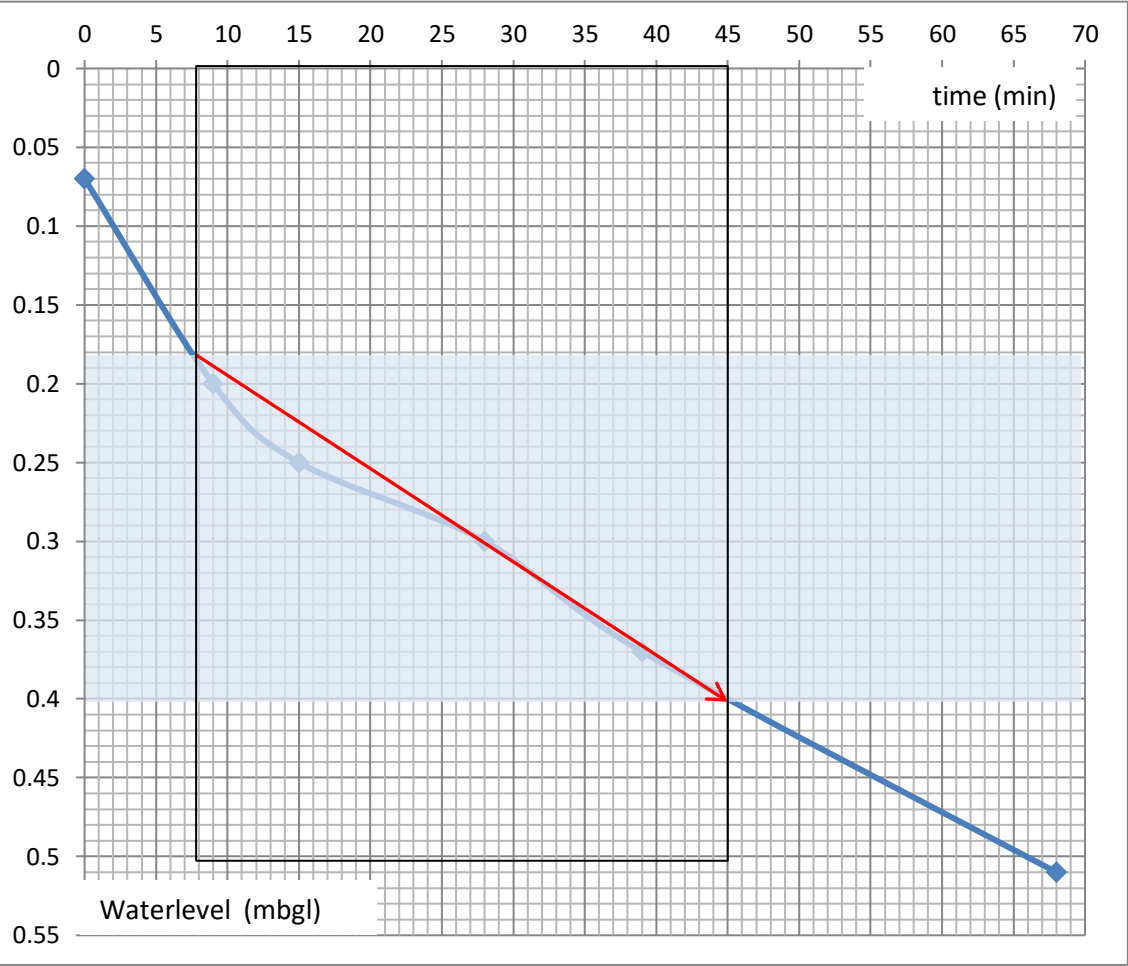
Date Undertaken: 06/04/2021

Test No.: TP128 (Test 3)

Time (Mins) Depth to Water (m)	
(Top of test / effective depth - 100%)	
0	0.07
9	0.20
15	0.25
28	0.30
39	0.37
68	0.51
(Base of pit / effective depth - 0%)	0.510

Length of Trial Pit (m)	1.51
Width of Trial Pit (m)	0.50
Depth of Trial Pit (m)	0.51
Effective Storage Depth (m)	0.440
Vp25	0.1800
Vp50	0.2900
Vp75	0.4000
Vp75-25	0.166
50% effective depth (m)	0.220
Mean Surface area ap50 (m2)	1.639

Time for 25% Outflow (tp25)	7.5	Achieved
Time for 75% Outflow (tp75)	45	Achieved
tp75 - 25	37.5	Achieved
Soil Infiltration Rate (m/s)	4.50E-05	Lowest Measured Infiltration Rate

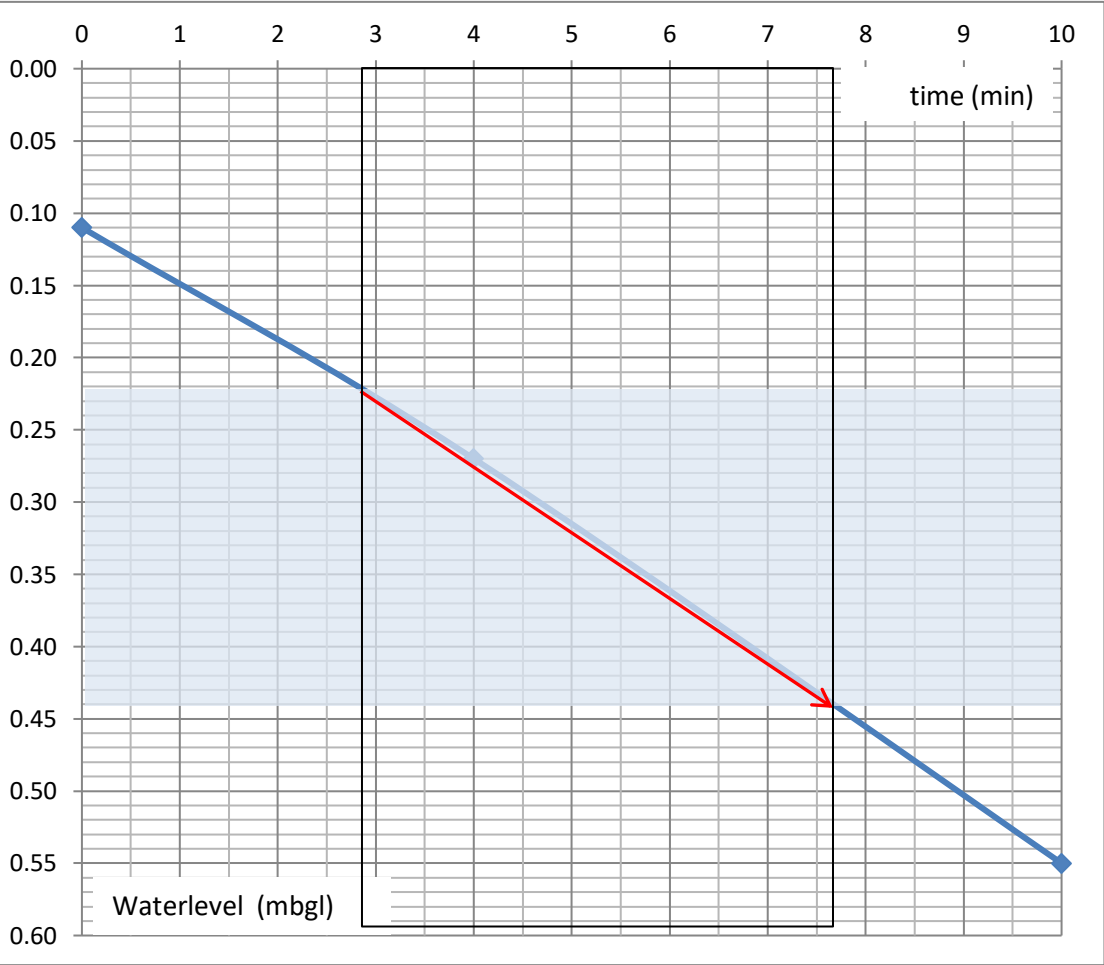


Site Name: Afan Lido
Number: 14647
Date Undertaken: 06/04/2021
Test No.: TP30 (Test 1)

Depth to Water (m)	
(Top of test / effective depth - 100%)	
0	0.11
4	0.27
10	0.55
(Base of pit / effective depth - 0%)	0.550

Length of Trial Pit (m)	1.55
Width of Trial Pit (m)	0.55
Depth of Trial Pit (m)	0.55
Effective Storage Depth (m)	0.440
Vp25	0.2200
Vp50	0.3300
Vp75	0.4400
Vp75-25	0.188
50% effective depth (m)	0.220
Mean Surface area ap50 (m2)	1.777

Time for 25% Outflow (tp25)	2.8	Achieved
Time for 75% Outflow (tp75)	7.7	Achieved
tp75 - 25	4.9	Achieved
Soil Infiltration Rate (m/s)	3.59E-04	



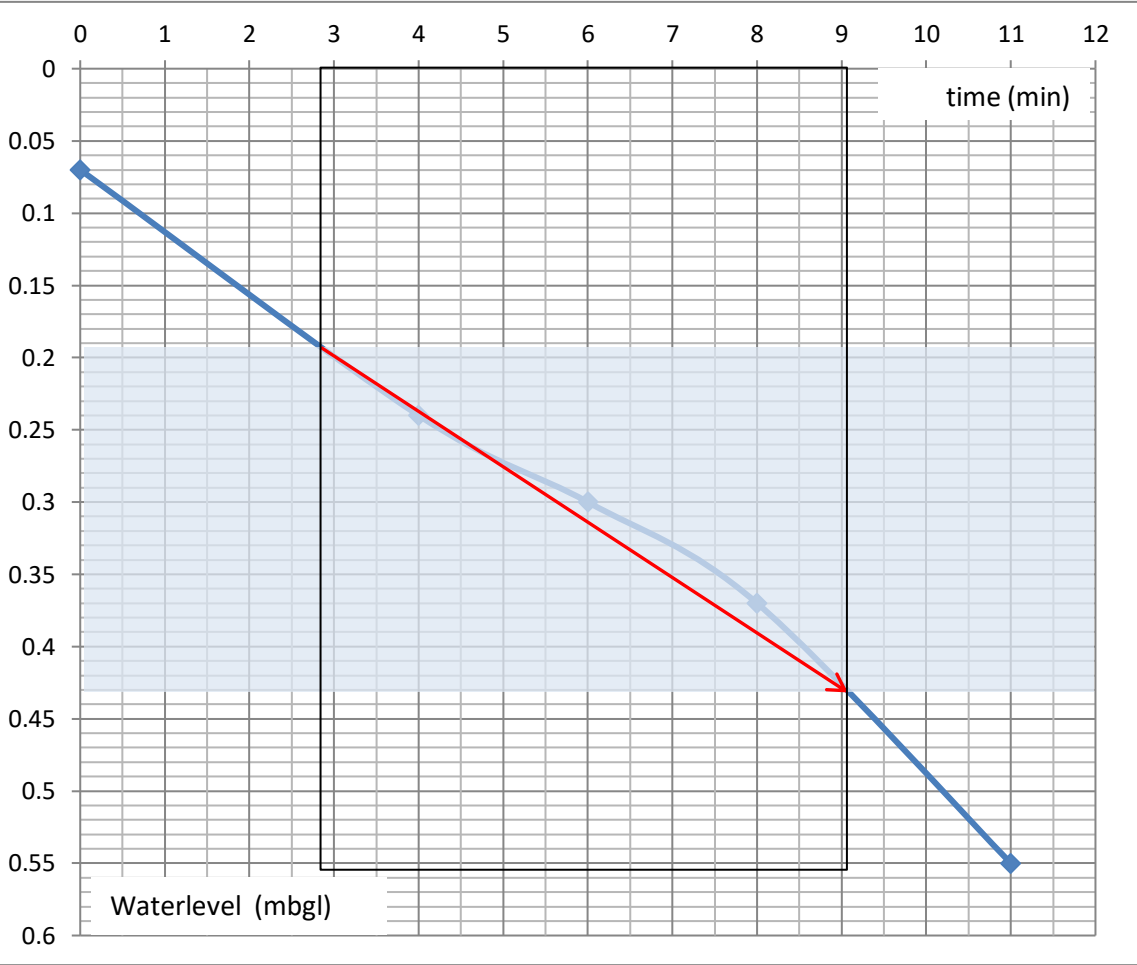
Soil Infiltration Worksheet: This worksheet has been produced in combination with the document 'BRE Digest 365- March 2007'

Date Undertaken: 06/04/2021
Test No.: TP30 (Test 2)

Time (Mins) Depth to Water (m)	
(Top of test / effective depth - 100%)	
0	0.07
4	0.24
6	0.30
8	0.37
11	0.55
(Base of pit / effective depth - 0%)	0.550

Length of Trial Pit (m)	1.55
Width of Trial Pit (m)	0.55
Depth of Trial Pit (m)	0.55
Effective Storage Depth (m)	0.480
Vp25	0.1900
Vp50	0.3100
Vp75	0.4300
Vp75-25	0.205
50% effective depth (m)	0.240
Mean Surface area ap50 (m2)	1.861

Time for 25% Outflow (tp25)	2.8	Achieved
Time for 75% Outflow (tp75)	9.1	Achieved
tp75 - 25	6.3	Achieved
Soil Infiltration Rate (m/s)	2.91E-04	



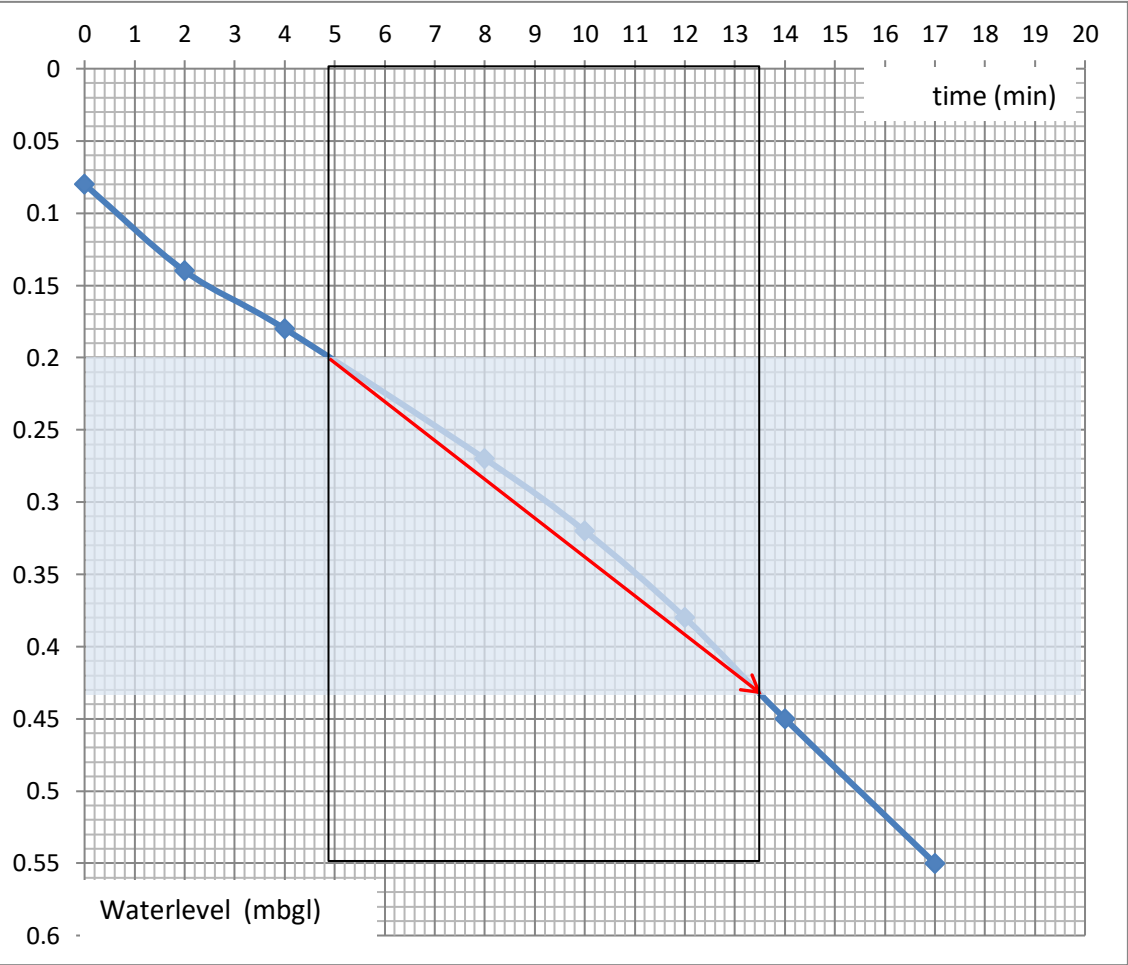
Date Undertaken: 06/04/2021

Test No.: TP30 (Test 3)

Time (Mins) Depth to Water (m)	
(Top of test / effective depth - 100%)	
0	0.08
2	0.14
4	0.18
8	0.27
10	0.32
12	0.38
14	0.45
17	0.55
(Base of pit / effective depth - 0%)	0.550

Length of Trial Pit (m)	1.55
Width of Trial Pit (m)	0.55
Depth of Trial Pit (m)	0.55
Effective Storage Depth (m)	0.470
Vp25	0.1975
Vp50	0.3150
Vp75	0.4325
Vp75-25	0.200
50% effective depth (m)	0.235
Mean Surface area ap50 (m2)	1.840

Time for 25% Outflow (tp25)	4.8	Achieved
Time for 75% Outflow (tp75)	13.5	Achieved
tp75 - 25	8.7	Achieved
Soil Infiltration Rate (m/s)	2.09E-04	Lowest Measured Infiltration Rate

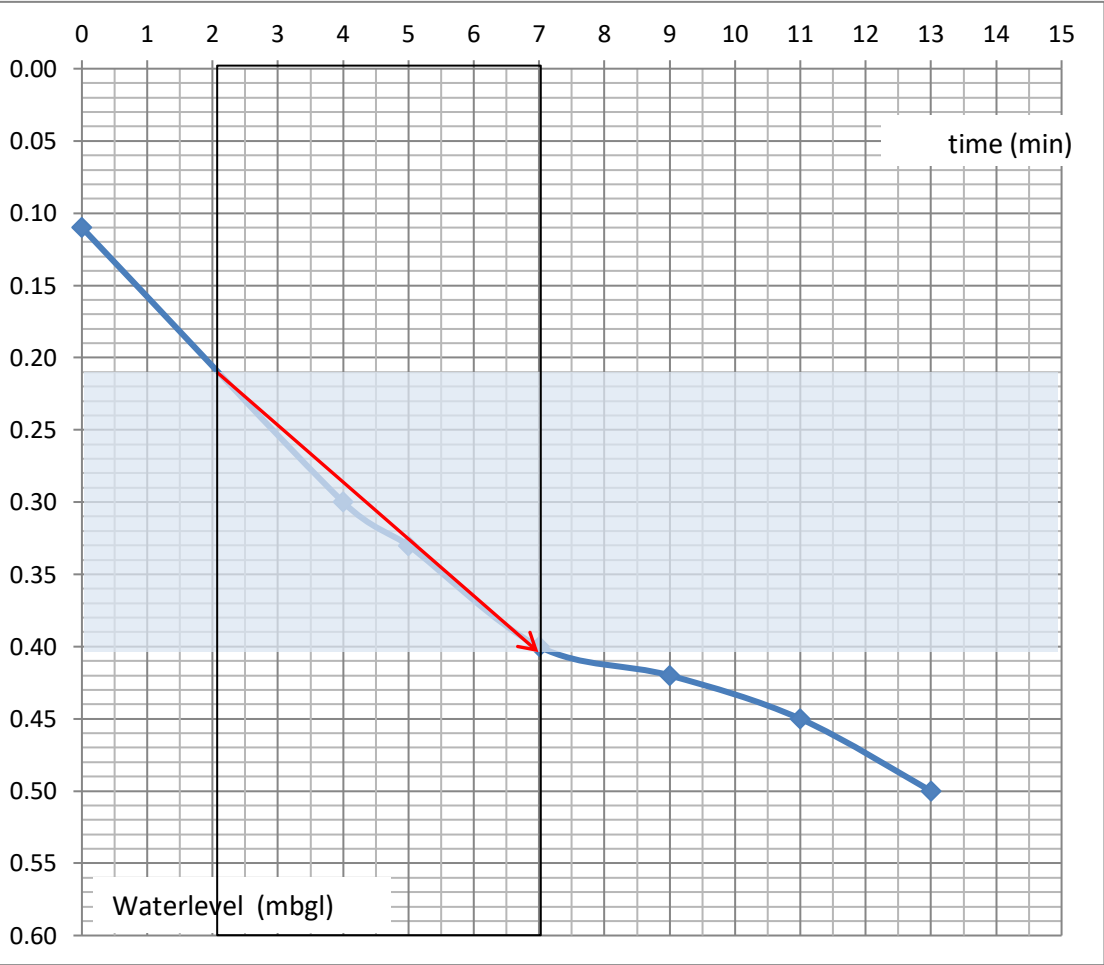


Site Name: Afan Lido
Number: 14647
Date Undertaken: 06/04/2021
Test No.: TP31 (Test 1)

Depth to Water (m)	
(Top of test / effective depth - 100%)	
0	0.11
4	0.30
5	0.33
7	0.4
9	0.42
11	0.45
13	0.5
(Base of pit / effective depth - 0%)	0.500

Length of Trial Pit (m)	1.50
Width of Trial Pit (m)	0.55
Depth of Trial Pit (m)	0.50
Effective Storage Depth (m)	0.390
Vp25	0.2075
Vp50	0.3050
Vp75	0.4025
Vp75-25	0.161
50% effective depth (m)	0.195
Mean Surface area ap50 (m2)	1.625

Time for 25% Outflow (tp25)	2	Achieved
Time for 75% Outflow (tp75)	7	Achieved
tp75 - 25	5	Achieved
Soil Infiltration Rate (m/s)	3.30E-04	

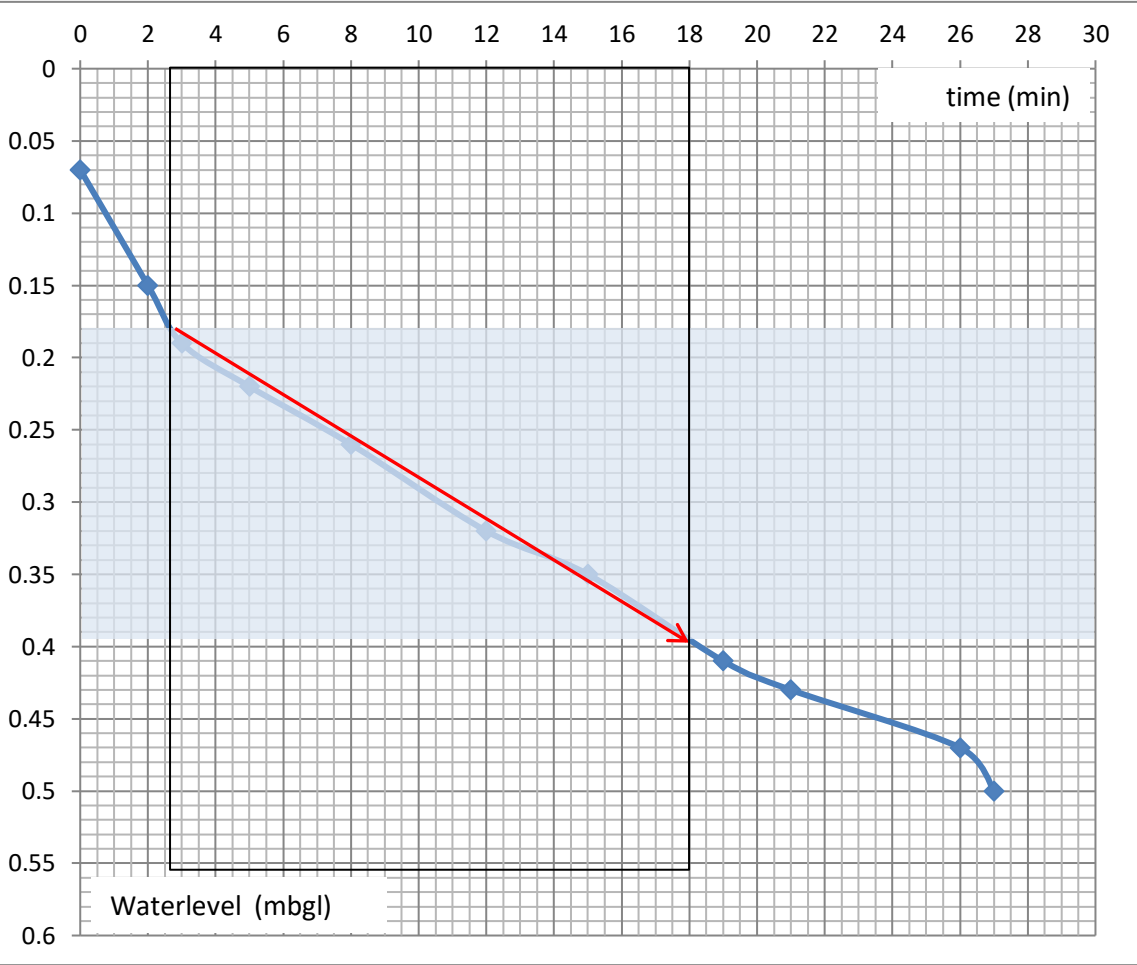


Date Undertaken: 06/04/2021
Test No.: TP31 (Test 2)

Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	
0	0.07
2	0.15
3	0.19
5	0.22
8	0.26
12	0.32
15	0.35
19	0.41
21	0.43
26	0.47
27	0.50
(Base of pit / effective depth - 0%)	0.500

Length of Trial Pit (m)	1.50
Width of Trial Pit (m)	0.55
Depth of Trial Pit (m)	0.50
Effective Storage Depth (m)	0.430
Vp25	0.1775
Vp50	0.2850
Vp75	0.3925
Vp75-25	0.177
50% effective depth (m)	0.215
Mean Surface area ap50 (m2)	1.707

Time for 25% Outflow (tp25)	2.5	Achieved
Time for 75% Outflow (tp75)	18	Achieved
tp75 - 25	15.5	Achieved
Soil Infiltration Rate (m/s)	1.12E-04	



Date Undertaken: 06/04/2021

Test No.: TP31 (Test 3)

Time (Mins)	Depth to Water (m)
(Top of test / effective depth - 100%)	
0	0.07
5	0.16
10	0.27
16	0.33
21	0.39
27	0.45
33	0.50
(Base of pit / effective depth - 0%)	0.500

Length of Trial Pit (m)	1.50
Width of Trial Pit (m)	0.55
Depth of Trial Pit (m)	0.50
Effective Storage Depth (m)	0.430
Vp25	0.1775
Vp50	0.2850
Vp75	0.3925
Vp75-25	0.177
50% effective depth (m)	0.215
Mean Surface area ap50 (m2)	1.707

Time for 25% Outflow (tp25)	5.8	Achieved
Time for 75% Outflow (tp75)	21.25	Achieved
tp75 - 25	15.45	Achieved
Soil Infiltration Rate (m/s)	1.12E-04	Lowest Measured Infiltration Rate



DRAWINGS



Project No:
14647

Drawing 01

Soakaway and Trial Pit Locations