




## Appendix A: Consultant Figures

DRAFT




Project:	Detailed Site Investigation				FIGURE 1	Site Location Plan	 <small>Complete. Professional. Affordable.</small>
Location:	Export Drive, Berrimah NT						
Job Ref: J168829	Drawn: VB	Checked: DB	Date: 25/03/21	Scale: Not To Scale	Source: Google Earth		



Project:	Detailed Site Investigation		
	Export Drive, Berrimah NT		
Location:	Export Drive, Berrimah NT		
Job Ref: J168829	Drawn: VB	Checked: DB	Date: 25/03/21
			Scale: Not To Scale
			Source: NR Maps
FIGURE 2	Site and Spill Location Plan		
Unit 11/14 Winnelle Rd Winnelle NT 0820 Telephone (08) 8879 1300			

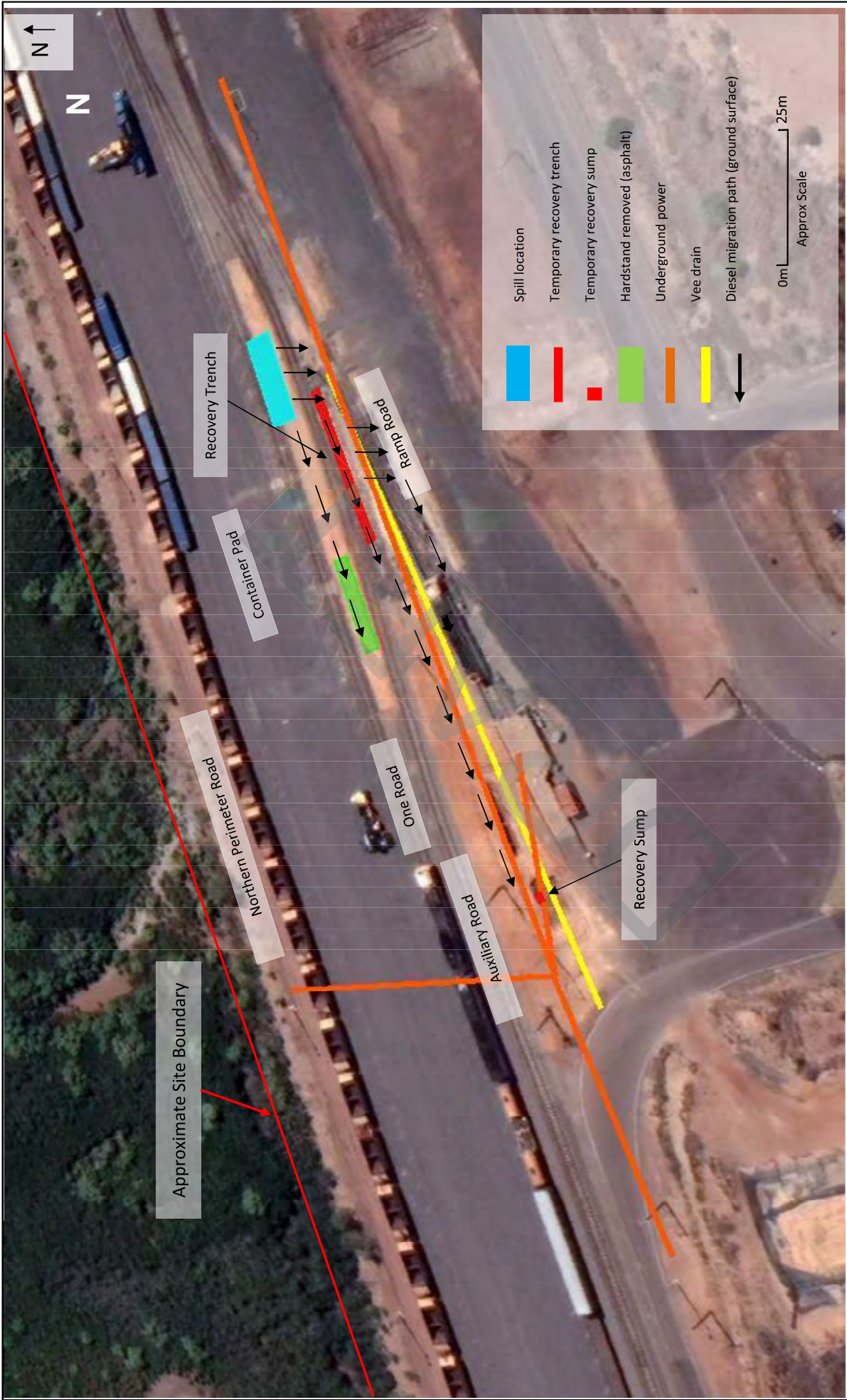



**Legend**  
 Site boundary

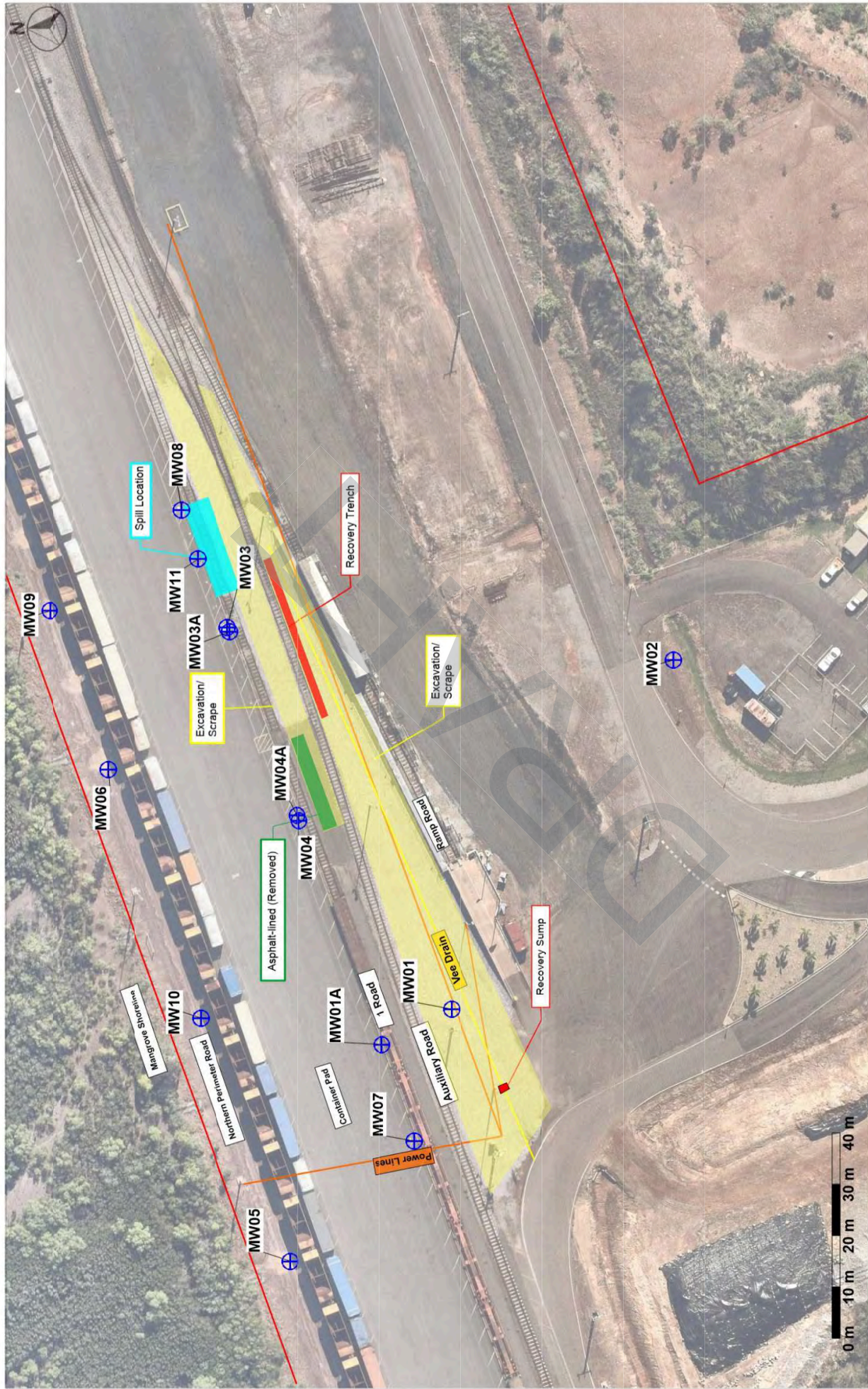
Ortho Data Collected: 28 May, 2020  
 Source: Background PhotoMap courtesy of [necormap.com](http://necormap.com)

Client:	One Rail Australia	Title:	Site Location Plan	Approximate Scale	0 50 100 150m
Client No.:	C105292	Address:	Berrimah Freight Terminal - Export Drive, Berrimah NT		
Project:	Diesel Spill Targeted Site Contamination Investigation	Drawn by:	KTK	Date:	19/06/2020
Job No.:	J1168829	File Name:	Site Plan	Figure No.:	4

**GREENCAP**  
 Level 1,  
 477 High Street  
 Kew East, VIC 3102  
 P: (03) 9896 8600  
 F: (03) 9896 8600  
[www.greencap.com.au](http://www.greencap.com.au)



Project:	Detailed Site Investigation		
Location:	Export Drive, Berrimah NT		
Job Ref: J168829	Drawn: VB	Checked: DB	Date: 25/03/21
		Scale: As shown	Source: NR Maps
	FIGURE 5	Spill Location Plan	
			
	Unit 11/14 Winnellie Rd Winnellie NT 0820 Telephone (08) 8879 1300		

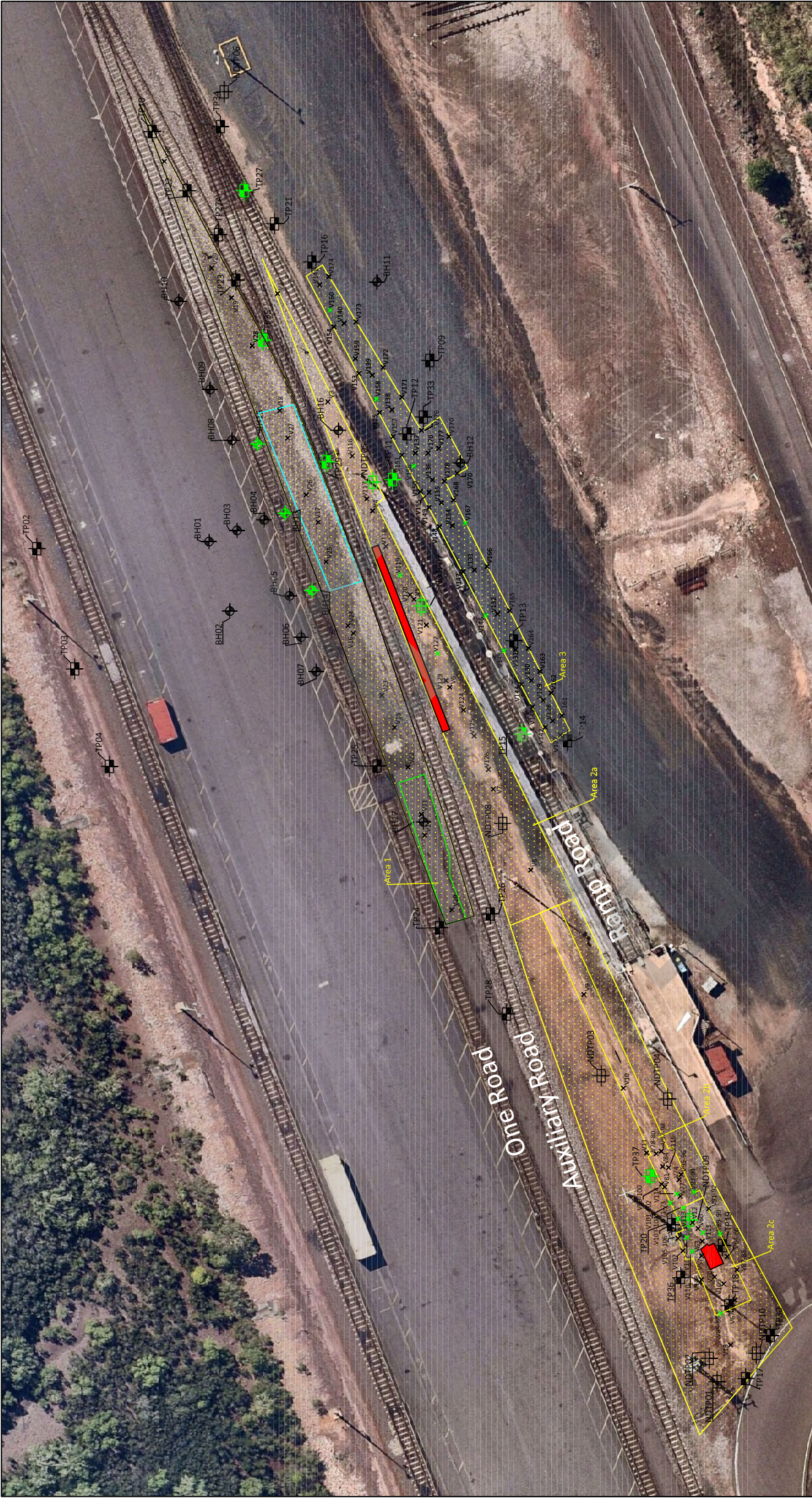


<b>Client:</b> One Rail Australia Client No. C105292 Project: Diesel Spill Targeted Site Contamination Investigation Job No. J168829		<b>Title:</b> Groundwater Monitoring Plan 0 Address: Berimath Freight Terminal - Export Drive, Berimath NT Groundwater Monitoring Well Locations Drawn: AS DB Date: 14/02/2022 File Name: J168829 GW Plan		<b>Approximate Scale:</b> 20 m Figure No. 1	
<b>Legend</b> Site boundary Existing Groundwater Monitoring Well		<b>GREENCAP</b> Level 1, West Kye East, VIC 3102 P: (03) 9894 8600 F: (03) 9894 8602 www.greenmap.com.au			

Date Data Collected: 30 Oct 2020  
 Source: Background Photography courtesy of **nearmap**



Location ID	Description
1	Spill side of culvert. Immediately downgradient from spill
2	Further downgradient from spill and adjacent stockpile of impacted material
3	Stormwater sampling contingency point – this is a drain that goes under the rail line into the mangroves
4	Sediment sampling contingency point – discharge point



**FIGURE 4b**  
**Final Investigation and Validation Results > ESLs**

TP	Test Pit	Spill Location
	Non-destructive Test Pit	Temp Recovery Sump/Trench
	Soil Bore	Spill migration along unlined drain
	Validation Sample	Remediation Footprint
	ESL exceedance	Hardstand Removed

Project: Detailed Site Investigation - Addendum

Location: Berrimah Freight Terminal - Export Dr, Berrimah NT

Job Ref: J168829

Drawn: VB	Checked: DB	Date: 20/06/22	Scale: As shown
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**FIGURE 5b**  
**Final Investigation and Validation Results > VI HSLs**

Symbol	Test Pit	Spill Location
	Test Pit	
	Non-destructive Test Pit	
	Soil Bore	
	Validation Sample	
	HSL exceedance	

Project: Detailed Site Investigation - Addendum

Location: Berrimah Freight Terminal - Export Dr, Berrimah NT

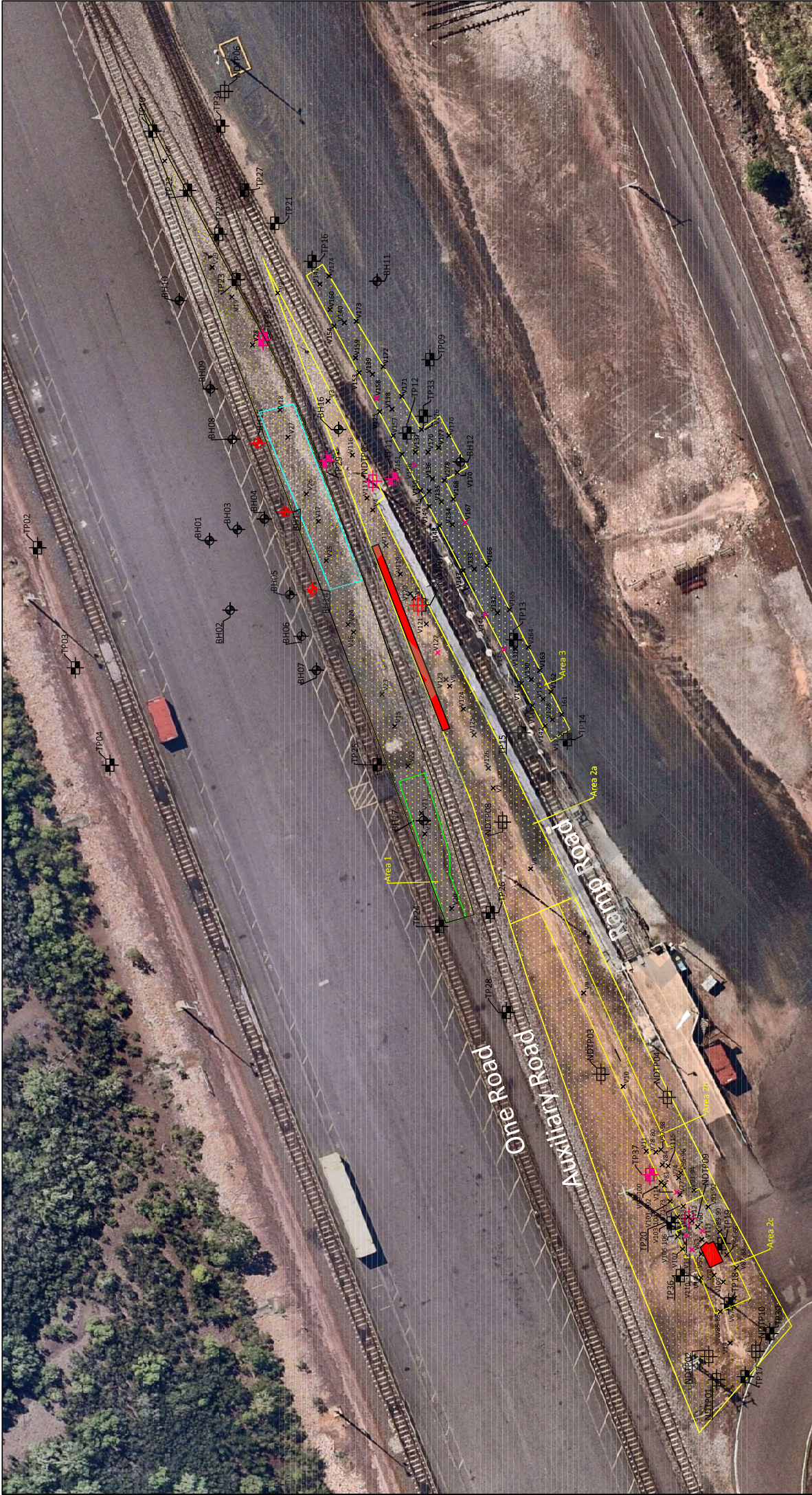
Job Ref: J168829

Drawn: VB

Checked: DB

Date: 20/06/22

Scale: As shown



**FIGURE 6b**  
**Final Investigation and Validation Results > Management Limits and Direct Contact HSLs**

	Test Pit		Spill Location
	Non-destructive Test Pit		Temp Recovery Sump/Trench
	Soil Bore		Spill migration along unlined drain
	Validation Sample		Remediation Footprint
	ML exceedance		Hardstand Removed
	ML + DC HSL exceedance		

Project: Detailed Site Investigation - Addendum	
Location: Berrimah Freight Terminal - Export Dr, Berrimah NT	
Job Ref: J168829	
Drawn: VB	Checked: DB
Date: 20/06/22	Scale: As shown



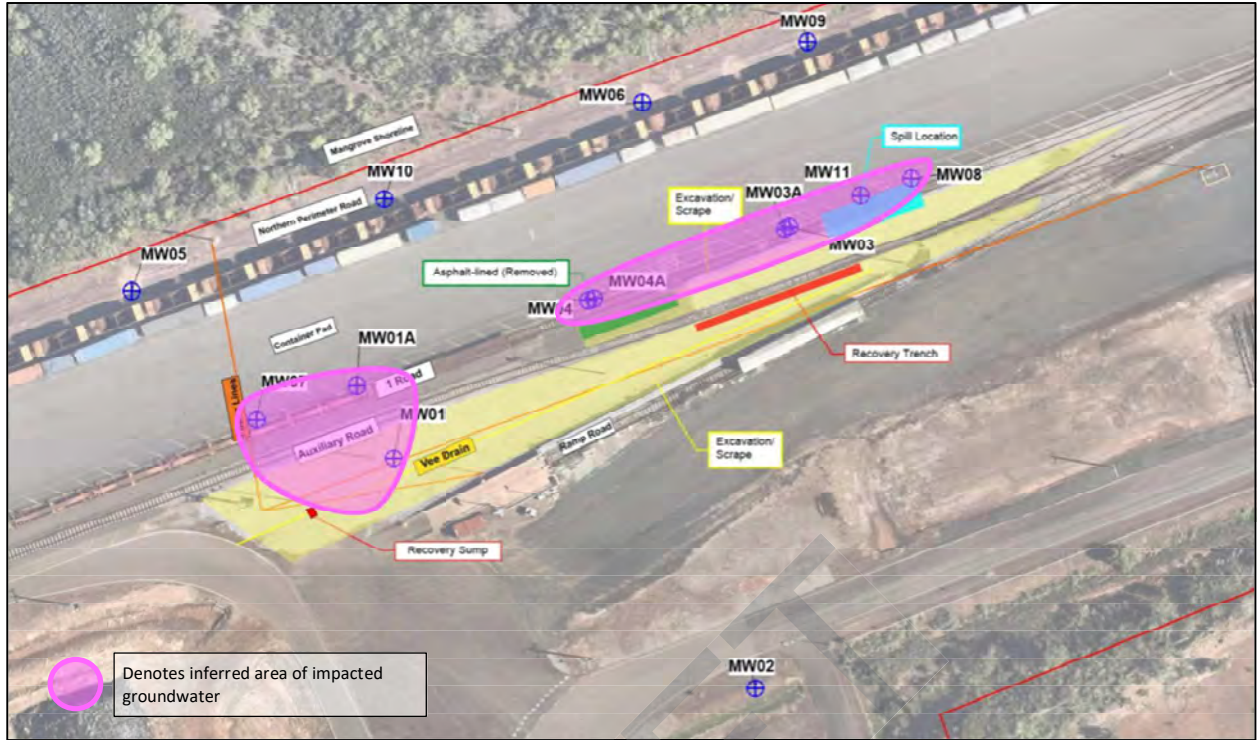
**Figure 3: Soil Investigation Locations**

<p><b>Legend</b></p> <ul style="list-style-type: none"> <li><span style="color: orange;">●</span> Soil Investigation Locations</li> <li><span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px;"></span> Area of Study</li> <li><span style="border: 1px solid yellow; display: inline-block; width: 10px; height: 10px;"></span> Localities</li> <li><span style="background-color: lightgreen; border: 1px solid green; display: inline-block; width: 10px; height: 10px;"></span> Recovery Sump</li> </ul>	<p><b>Areas of Remediation</b></p> <ul style="list-style-type: none"> <li><span style="background-color: purple; display: inline-block; width: 15px; height: 10px;"></span> Area 1</li> <li><span style="background-color: blue; display: inline-block; width: 15px; height: 10px;"></span> Area 2</li> <li><span style="background-color: yellow; display: inline-block; width: 15px; height: 10px;"></span> Area 3</li> </ul>
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<p>Agon Environmental Pty Ltd 1/41 Jessop Crescent, Berrimah North Territory, 0828 agonenviro.com.au</p>	<p>0 10 20 m</p>	<p>REVISION: 2 Date: 24/10/2024 Reference: JC1580 Prepared by Agon</p>
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Berrimah Freight Terminal  
Export Drive, Berrimah, NT  
Prepared for: Aurizon

Projection: Transverse Mercator  
Horizontal Datum: GDA 94  
Grid: GDA 94 / MGA Zone 52  
Aerial Image: Nearmap, 2024



**Figure 4: Hydrocarbon Impacts in Groundwater**

**Table 2: Hydrocarbon Impacts in Groundwater**

Monitoring Well	Sampling Dates	Concentrations (mg/L)				
		F1: TRH (C <sub>6</sub> -C <sub>10</sub> less BTEX)	F2: TRH (C <sub>10</sub> -C <sub>16</sub> less naphthalene)	F3: TRH (>C <sub>16</sub> -C <sub>34</sub> )	F4: TRH (>C <sub>34</sub> -C <sub>40</sub> )	Diesel Range TRH (>C <sub>10</sub> -C <sub>34</sub> )
NEPM HSLs for Vapour Intrusion, Commercial/ Industrial (2 to <4m)		6,000	NL	-	-	-
Marine Aquatic Ecosystem (ANZECC 2000)		-	-	-	-	-
CWB Environmental Screening Levels for Gasoline and Diesel - Aquatic Ecosystem		440	640	640	640	640
ANZECC Primary Contact Recreational		100	900	900	900	900
MW01	Dec-21	<20	860	900	<100	1,760
MW01A	Dec-21	<20	<50	100	<100	<100
MW03	Dec-21	<20	<50	400	<100	400
MW04	Dec-21	<20	<50	400	<100	400
MW07	Dec-21	<20	<50	500	<100	500
MW08	Dec-21	<20	<50	200	<100	200
MW11	Dec-21	<20	<50	300	<100	300