



# Ultracem

## NZS 3122:2009 Type GP (General Purpose Portland) & Type HE (High Early Strength)

Shipment # 2314 to 2405



Ship Arrival Date	Shipment #	Terminal	Water %	I-Set min	F-Set h:mm	False mm	Sound mm	SO <sub>3</sub> * %	NaEq* %	Fine m <sup>2</sup> /kg	45µm %	LOI %	I-3D* MPa	I-7D* MPa	I-28D* MPa	
12/06/2024	2405	AUCKLAND	28.2	120	3:15	10	1	2.5	0.55	345	8.2	2.35	35.4	48.9		
18/05/2024	2404	AUCKLAND	27.7	105	3:00	13	1	2.5	0.49	350	6.5	2.21	37.2	50.2	65.6	
26/04/2024	2403	AUCKLAND	27.7	120	3:15	11	1	2.6	0.51	345	6.6	2.28	34.9	48.9	63.5	
11/04/2024	2402	AUCKLAND	27.8	120	3:15	8	2	2.5	0.52	340	7.9	2.51	34.4	47.5	61.9	
22/03/2024	2401	AUCKLAND	27.7	120	3:15	10	1	2.5	0.52	350	8.3	2.46	35.7	48.8	63.2	
29/02/2024	2320	AUCKLAND	27.7	120	3:00	11	1	2.5	0.52	345	8.6	2.40	35.4	47.2	60.8	
12/02/2024	2319	AUCKLAND	28.0	135	3:15	10	1	2.5	0.54	350	8.0	2.44	36.4	49.0	62.9	
16/01/2024	2318	AUCKLAND	28.3	120	3:00	10	2	2.5	0.55	355	6.7	2.46	39.2	51.6	63.0	
07/12/2023	2317	AUCKLAND	28.0	105	3:15	15	1	2.5	0.52	345	7.3	2.12	37.4	51.2	67.2	
19/11/2023	2316	AUCKLAND	27.9	120	2:45	10	1	2.5	0.50	350	6.3	2.19	36.3	50.2	65.6	
28/10/2023	2315	AUCKLAND	28.0	120	3:00	10	1	2.6	0.55	350	6.4	2.19	37.8	51.0	65.2	
Mean			27.9	118.6	3:06	10.7	1.2	2.5	0.5	348	7.3	2.3	36.4	49.5	63.9	
StdDev			0.2	8.1	0:10	1.8	0.4	0.0	0.0	4	0.9	0.1	1.4	1.5	2.0	
19/06/2024	2405	TIMARU	28.0	120	3:00	10	1				8.1	2.48	36.3			
04/06/2024	2404	TIMARU	27.7	120	3:00	10	2	2.5	0.50	330	6.3	2.41	37.5	51.7		
08/05/2024	2403	TIMARU	27.8	105	3:00	10	1	2.6	0.49	330	8.9	2.30	37.6	50.6	66.5	
17/04/2024	2402	TIMARU	27.7	105	2:30	9	1	2.5	0.53	335	7.5	2.36	35.7	48.4	63.1	
27/03/2024	2401	TIMARU	27.8	120	3:15	10	1	2.5	0.51	340	7.3	2.21	34.3	47.7	62.5	
22/03/2024	2320	TIMARU	27.3	105	2:45	9	1	2.5	0.52	340	8.6	2.30	34.9	47.8	62.2	
24/01/2024	2318	TIMARU	28.3	135	3:00	8	1	2.4	0.54	350	6.7	2.24	36.1	47.4	61.3	
15/12/2023	2317	TIMARU	28.1	120	2:45	10	0	2.6	0.57	340	6.7	2.33	35.5	49.5	65.0	
26/11/2023	2316	TIMARU	28.0	105	2:45	11	1	2.6	0.54	335	7.9	2.06	38.0	52.9	67.9	
02/11/2023	2315	TIMARU	27.8	120	3:15	7	1	2.6	0.52	345	8.6	1.93	36.3	50.2	64.8	
19/10/2023	2314	TIMARU	28.0	120	2:45	14	0	2.6	0.59	355	6.4	2.05	39.3	52.5	66.7	
Mean			27.9	115.9	2:54	9.8	0.9	2.5	0.5	340	7.5	2.2	36.5	49.9	64.4	
StdDev			0.3	9.7	0:13	1.8	0.5	0.1	0.0	8	0.9	0.2	1.5	2.0	2.3	
NZS 3122:2009 Specifications				minimum	maximum		maximum	maximum	maximum				minimum	minimum	minimum	
Type GP				45	6:00		5	3.5	0.64					35		45
Type HE				45	6:00		5	3.5	0.64				25	40		
Holcim New Zealand is registered for the production & distribution of cement in accordance with ISO 9001:2015. Ultracem is a general purpose cement, manufactured by Mitsubishi Ube Cement Company and is tested in accordance with NZS3122:2009 & AS2350:2006. [NOTE: The AS 2350 series of standards cited above were all adopted, with minor amendments, by NZS 3122:2009]. Samples tested as received. This test report may not be reproduced except in full.																
Holcim Auckland Laboratory 23 Plumer Street, Auckland, New Zealand								* Cement Australia, Nata Accreditation Numbers: 187, 188 Darra, Brisbane, Australia								

Results marked

- \* all results in italics are subcontracted.
- ‡ are not accredited, and are outside of the scope of the laboratory.
- XXX are retested results

Claire Ziegler ( Senior Laboratory Technician)  
Key Technical Person

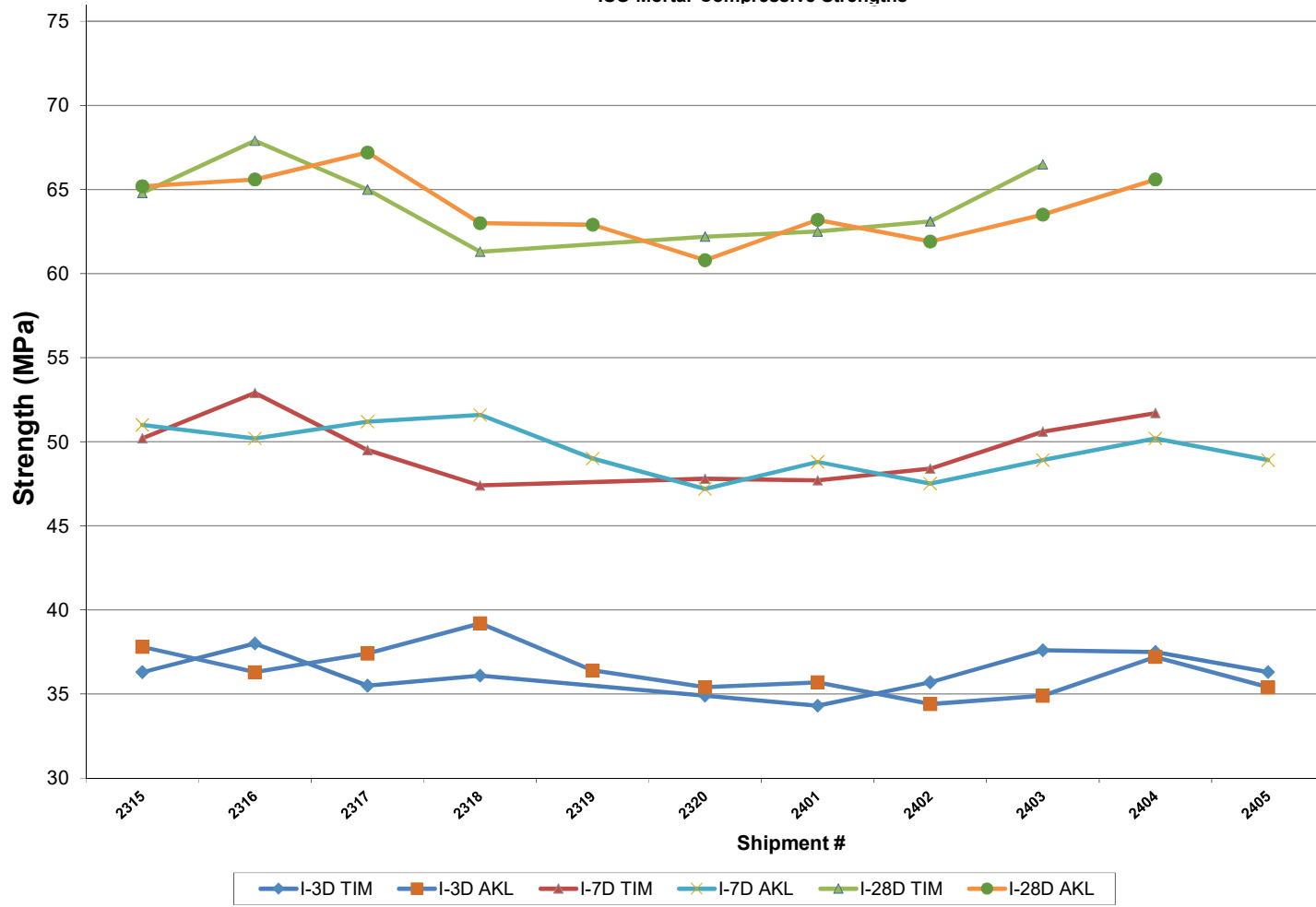
Dave Darlow (National Manager - Sustainable Solutions)  
Key Technical Person

Issue Date: 05-Jul-24  
Report ID: 24GP2405a

# Ultracem

## Type GP

ISO Mortar Compressive Strengths



Issue Date: 05-Jul-24  
 Report ID: 24GP2405a



# Ultracem



## NZS 3112:1986 Tests for Concrete Weekly Dispatch Grab Sample Auckland Point of Sale

Sample Date	Temp °C	Slump mm		Slump Loss mm/min	Plastic Density kg/m <sup>3</sup>	Air %	Bleed L/m <sup>3</sup>	Hardened Density kg/m <sup>3</sup>	3 Day	7 Day	28 Day	7-28 Day
		Initial	30min						60min	MPa	MPa	MPa
24/06/2024	23.4	130			2410	1.0		2420	30.5	39.0		
19/06/2024	22.7	140			2420	1.0		2420	29.0	37.0		
11/06/2024	23.6	110			2400	1.0		2410	31.0	40.5		
05/06/2024	22.9	110	90	70	2410	1.0	1.0	2410	31.0	41.0		
27/05/2024	22.1	120			2410	1.0		2410	30.5	43.0	51.5	8.5
23/05/2024	22.1	120			2400	1.0		2420	32.0	42.0	51.0	9.0
16/05/2024	20.8	120	90	70	2400	1.0	1.0	2400	32.0	42.0	51.0	9.0
10/05/2024	22.2	130			2410	1.0		2410	31.0	42.0	51.5	9.5
02/05/2024	21.7	120			2390	1.0		2410	31.0	42.0	53.0	11.0
29/04/2024	20.9	120	90	70	2390	1.0	1.0	2410	29.5	41.0	49.5	8.5
18/04/2024	23.0	90			2390	1.0		2400	30.0	42.0	51.5	9.5
09/04/2024	23.4	90			2400	1.0		2390	31.0	42.0	51.5	9.5
05/04/2024	24.2	130			2400	1.0		2410	30.0	40.5	51.5	11.0
26/03/2024	23.0	140			2410	1.0		2420	29.0	39.5	49.0	9.5
20/03/2024	23.3	130	100	70	2410	1.0	2.5	2420	29.0	39.0	45.0	6.0
15/03/2024	22.3	140			2410	1.0		2410	29.0	38.0	49.0	11.0
04/03/2024	24.3	140			2400	1.0		2410	28.5	36.5	46.5	10.0
27/02/2024	24.0	150			2410	1.0		2420	28.0	36.0	44.5	8.5
20/02/2024	24.8	100			2390	1.0		2390	29.0	39.0	51.0	12.0
14/02/2024	25.1	90			2390	1.0		2400	31.0	40.5	50.5	10.0
Mean	23.0	121			2403	1.0	1.4	2410	30.1	40.1	49.8	9.5
StdDev	1.2	18.4			9	0.0	0.8	9	1.2	2.1	2.5	1.4
CoV%									4.0	5.2	5.0	

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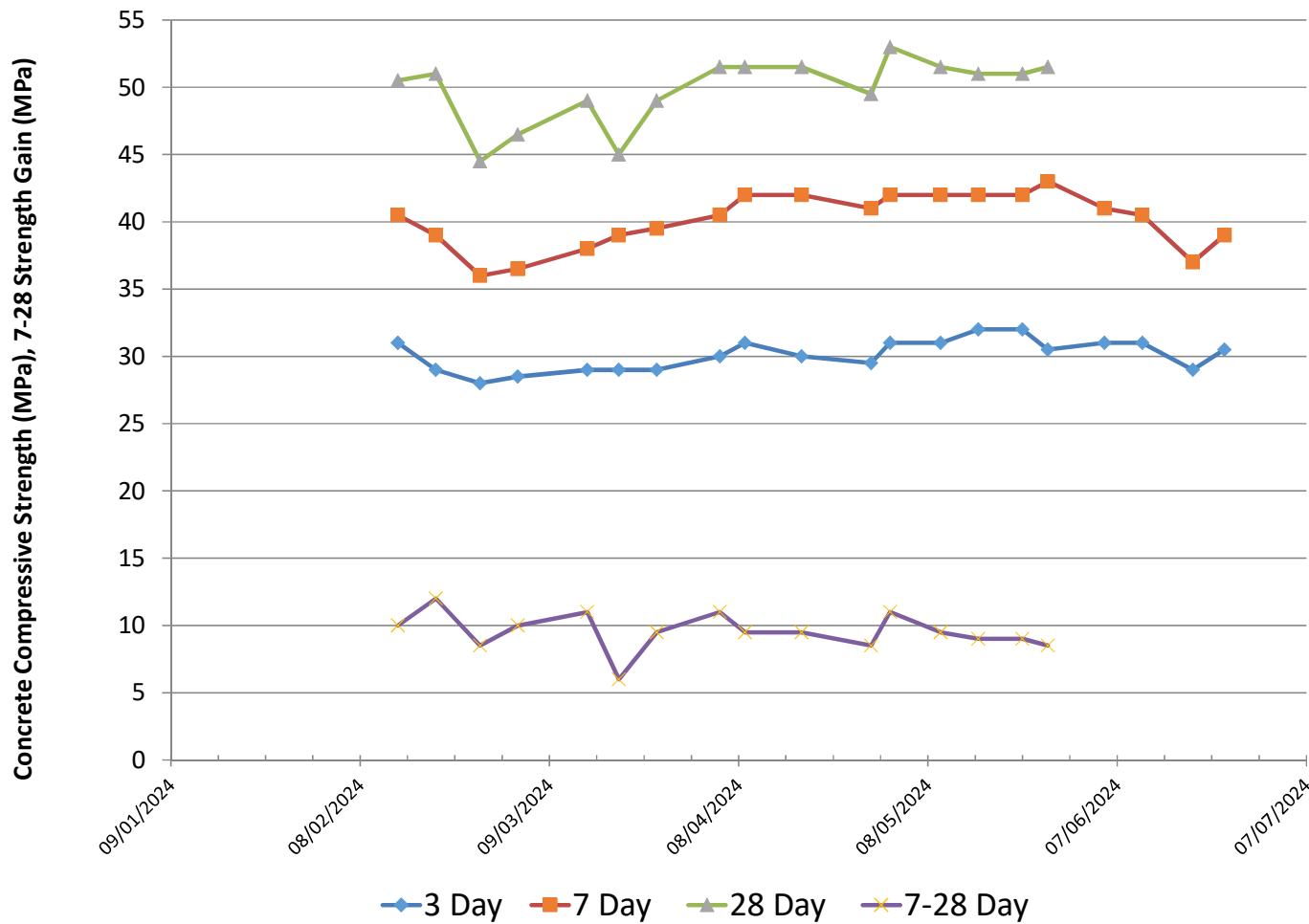
Materials	Cement	H <sub>2</sub> O	Sand	PAP7	13mm	19mm	w/c	Ad. Mix	Density	Slump
Units	kg/m <sup>3</sup>							L/100kg	kg/m <sup>3</sup>	mm
Mix	365	193	350	445	360	725	0.53	0.5 - 0.8	2438	120

Results marked

- \* are subcontracted.
- ‡ are not accredited, and are outside of the scope of the laboratory.
- XXX are retested results

Issue Date: 05-Jul-24  
Report ID: 24GP2405a

**Weekly Dispatch Grab Sample Auckland Point of Sale Concrete Compressive Strength**





# Ultracem



## NZS 3112:1986 Tests for Concrete

### Weekly Dispatch Grab Sample Timaru Point of Sale

Sample Date	Temp °C	Slump mm		Slump Loss mm/min	Plastic Density kg/m <sup>3</sup>	Air %	Bleed L/m <sup>3</sup>	Hardened Density kg/m <sup>3</sup>	3 Day	7 Day	28 Day	7-28 Day
		Initial	30min						60min	MPa	MPa	MPa
24/06/2024	20.0	140			2410	1.0		2430	28.5			
19/06/2024	21.7	130			2420	1.0		2430	28.0			
13/06/2024	22.9	110			2400	1.0		2410	31.5	40.5		
05/06/2024	22.0	110			2410	1.0		2410	32.0	41.5		
27/05/2024	21.6	110			2400	1.0		2410	32.0	41.0	52.0	11.0
20/05/2024	23.2	150	120	100	2420	1.0	1.0	2430	30.0	39.5	47.0	7.5
14/05/2024	22.5	150			2410	1.0		2440	29.0	37.5	44.0	6.5
08/05/2024	23.3	120			2390	1.0		2410	31.0	41.0	50.5	9.5
29/04/2024	22.0	120			2400	1.0		2400	29.5	40.5	51.0	10.5
22/04/2024	23.4	110			2400	1.0		2410	30.5	41.0	51.5	10.5
16/04/2024	22.6	100	80	40	2390	1.0	1.0	2400	29.0	41.0	51.5	10.5
09/04/2024	23.5	110			2400	1.0		2400	31.0	41.0	53.0	12.0
04/04/2024	23.9	120			2390	1.0		2400	29.5	41.0	52.0	11.0
25/03/2024	23.7	130			2400	1.0		2410	28.0	38.5	48.0	9.5
18/03/2024	23.5	140	90	70	2390	1.0	1.5	2410	29.0	39.0	48.5	9.5
11/03/2024	24.2	130			2400	1.0		2400	29.0	40.0	48.0	8.0
04/03/2024	23.8	140			2400	1.0		2410	29.0	39.0	46.0	7.0
26/02/2024	24.0	140			2410	1.0		2430	27.0	36.0	46.0	10.0
19/02/2024	23.8	120			2400	1.0		2410	29.5	39.0	48.5	9.5
15/02/2024	23.3	90			2390	1.0		2390	30.0	40.5	50.0	9.5
Mean	22.9	124			2402	1.0	1.2	2412	29.7	39.9	49.2	9.5
StdDev	1.0	16.6			9	0.0	0.3	13	1.4	1.5	2.6	1.5
CoV%									4.6	3.7	5.3	

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23 Plumer Street, Auckland, New Zealand

Materials	Cement	H <sub>2</sub> O	Sand	PAP7	13mm	19mm	w/c	Ad. Mix	Density	Slump
Units	kg/m <sup>3</sup>							L/100kg	kg/m <sup>3</sup>	mm
Mix	365	193	350	445	360	725	0.53	0.5 - 0.8	2438	120

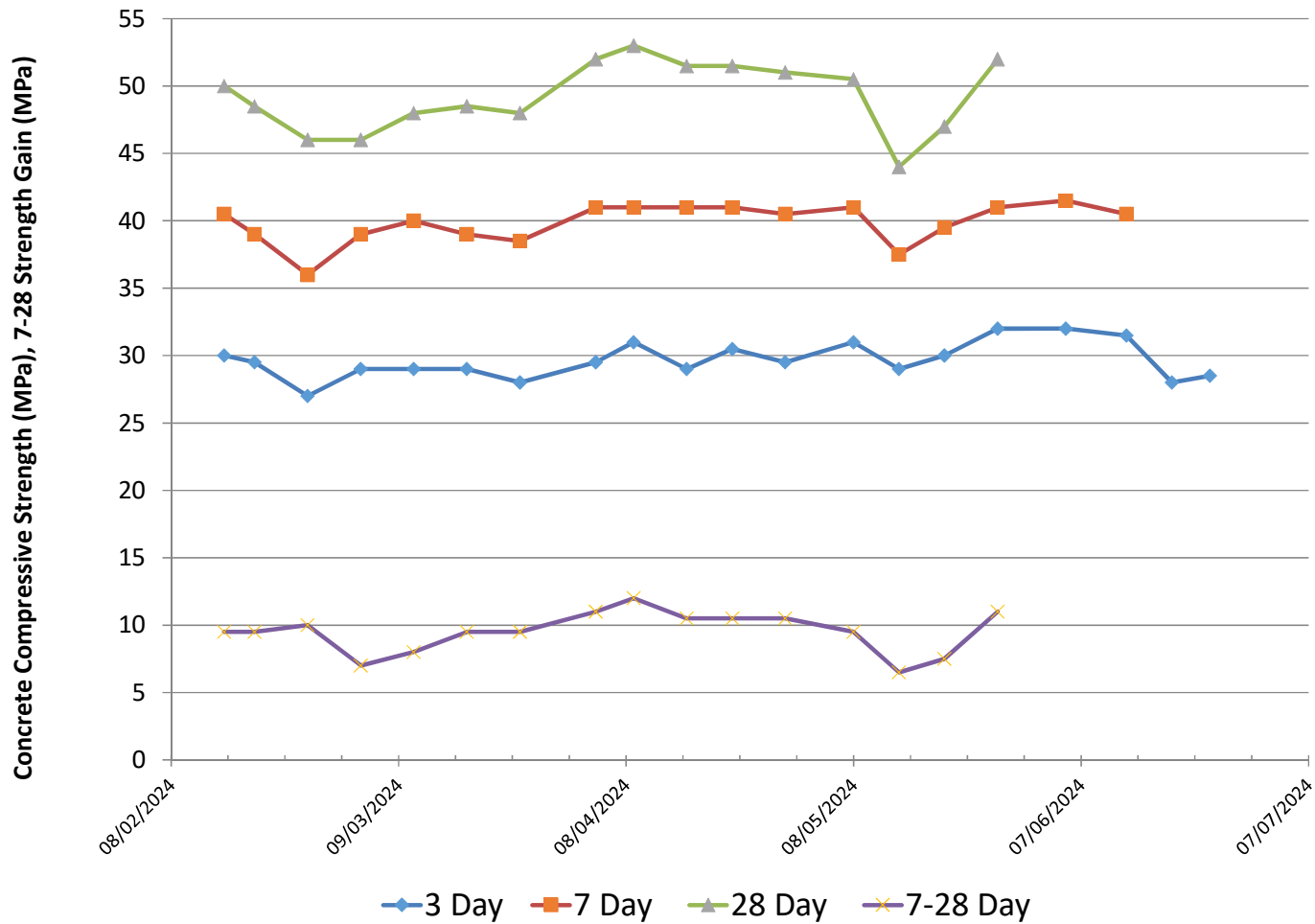
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XXX are retested results

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### Weekly Dispatch Grab Sample Timaru Point of Sale Concrete Compressive Strength



Issue Date: 05-Jul-24  
 Report ID: 24GP2405a