

Week Ending	Supplier ID	SO3 (%)	Sodium Equ (NaEq)	Residue (%)	Fineness (m2/kg)	Initial Set (min)	Final Set (hour)	Soundness (%)	Water (%)	LOI (%)	3 D-MS (MPa)	7 D-MS (MPa)	28 D-MS (MPa)
09/11/2018	HRCL	2.90	0.51							3.96			
02/11/2018	HRCL	2.42	0.51							2.81			
26/10/2018	HRCL	2.97	0.51	6.00	340	90	2.75	1.00	28.6	3.39	35.5	47.2	
19/10/2018	HRCL	3.00	0.52	5.40	340	105	3.25	1.00	28.5	3.21	37.3	50.0	
12/10/2018	HRCL	2.88	0.51	6.10	340	105	3.25	2.00	28.5	4.10	37.6	50.4	
05/10/2018	HRCL	2.39	0.52	4.40	335	120	3.25	2.00	28.5	3.60	37.3	54.0	68.7
28/09/2018	HRCL	2.35	0.54	5.60	345	105	3.50	1.00	28.5	4.00	36.4	51.8	66.2
21/09/2018	HRCL	2.50	0.55	6.40	335	105	3.00	2.00	28.5	3.90	35.7	51.7	67.7
14/09/2018	HRCL	2.68	0.56	4.60	330	105	2.75	1.00	28.5	3.40	37.8	53.4	68.1
07/09/2018	HRCL	2.90	0.55	4.90	320	100	2.75	1.00	28.5	2.68	37.6	51.7	66.3
31/08/2018	HRCL	2.85	0.54	4.80	340	90	2.50	1.00	28.5	3.16	37.1	51.0	65.6
24/08/2018	HRCL	2.68	0.56	4.90	340	90	2.50	1.00	28.5	3.89	37.1	51.1	66.8
17/08/2018	HRCL	2.65	0.56	4.90	335	120	3.25	1.00	28.5	3.58	37.2	51.4	67.7
10/08/2018	HRCL	2.65	0.56	5.00	335	105	3.00	1.00	28.4	3.43	37.5	52.4	67.4
03/08/2018	HRCL	2.65	0.54	4.70	335	105	2.75	0.00	28.4	3.24	37.3	52.0	67.8
27/07/2018	HRCL	2.80	0.54	4.90	335	105	3.25	1.00	28.4	3.69	38.2	53.0	69.3
20/07/2018	HRCL	2.70	0.58	4.10	340	90	3.00	2.00	28.3	3.10	39.6	54.1	69.0
13/07/2018	HRCL	2.70	0.56	4.20	325	75	2.75	3.00	28.3	1.00	38.8	53.1	66.4
06/07/2018	HRCL	2.80	0.56	4.70	320	90	2.75	1.00	28.3	0.90	37.7	52.2	63.4
29/06/2018	HRCL	2.70	0.54	4.00	320	90	3.00	3.00	28.3	1.05	37.8	51.5	64.7
22/06/2018	HRCL	2.37	0.54	3.90	320	75	3.00	2.00	28.3	1.45	36.9	52.1	67.0
15/06/2018	HRCL	2.40	0.52	3.90	320	75	2.75	1.00	28.3	1.40	37.9	53.5	65.4
Min		2.35	0.51	3.90	320			0.00	28.3	0.90	35.5	47.2	63.4
Max		3.00	0.58	6.40	345			3.00	28.6	4.10	39.9	54.1	69.3
Mean		2.68	0.54	4.87	333			1.40	28.4	2.95	37.4	51.9	66.9
Std Dev		0.20	0.02	0.73	8.51			0.75	0.10	1.06	0.92	1.58	1.57
NZS 3122:2009		3.50	0.64			45	6.00	5.00				35.0	45.0
Requirements		maximum	maximum			minimum	maximum	maximum				Minimum	Minimum

RT – Retesting Sample

The above samples were tested as received in accordance with NZS3122:2009 & AS2350:2006

Results also on www.hrcl.co.nz website

All testing performed by IANZ / NATA approved Laboratory.

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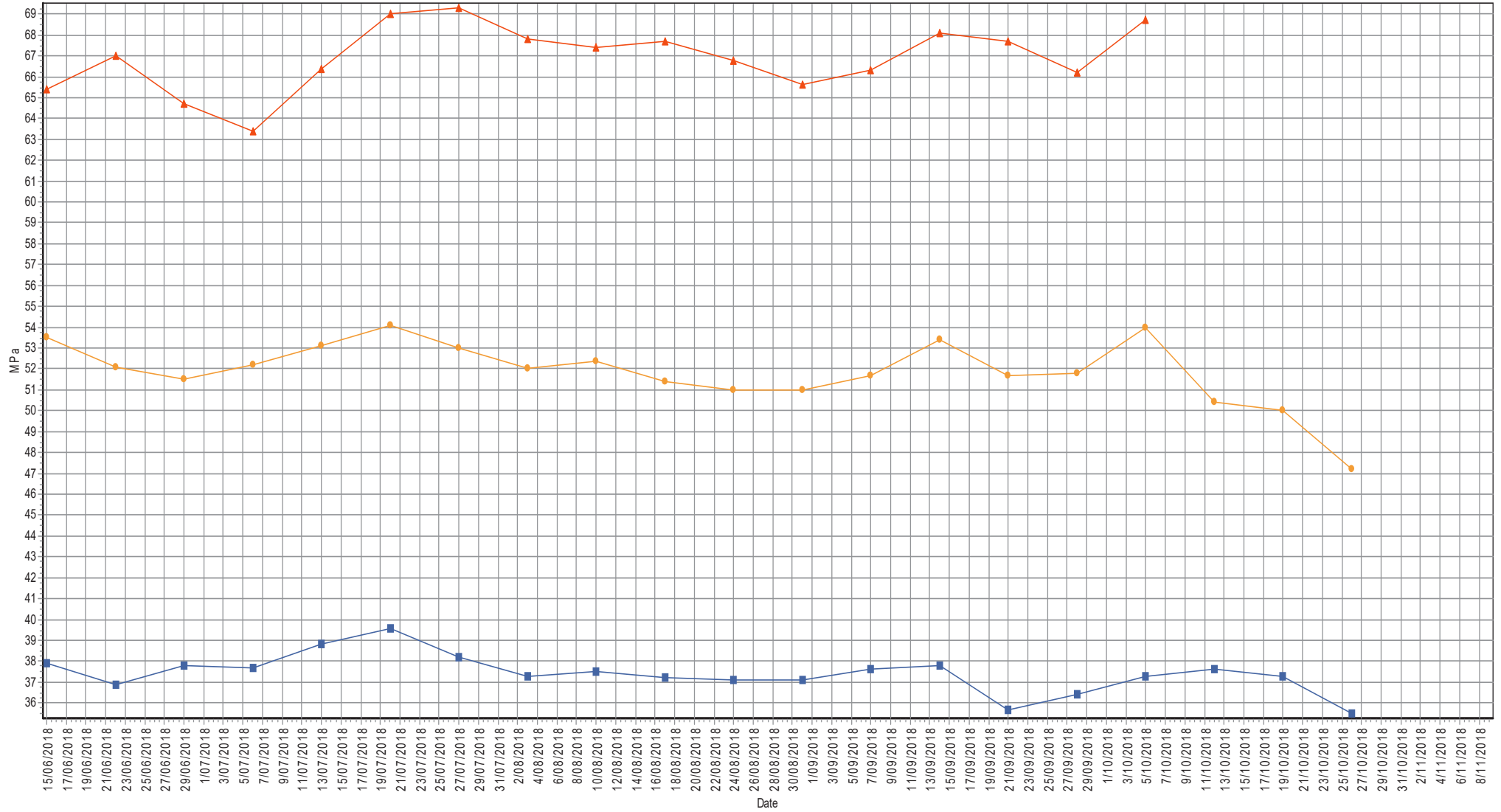
Issue Date 09/11/2018
Report Id: HRGP18 #238



Quality
ISO 9001

HR - Ordinary Portland Cement Type GP

Material Type : Cement
Material Code : GP -
From : 15/06/2018
To : 9/11/2018



■ 3 D-MS ● 7 D-MS ▲ 28 D-MS