



CERTIFICATE OF QUALITY

EcoSure® Type GP Cement

NZS3122:2009 (Bulk & Bag Despatch)



Issued to: National Sales Manager

Test Report No: 23#83

info@goldenbay.co.nz

Code	Week Ending / Voyage	Specific Surface Area	Normal Consistency	Initial Set	Final Set	Soundness	Compressive Strength						Free Lime	Sodium Equivalent (NaEq)	Sulphur Trioxide (SO3)	
							ISOCEN			Concrete						
							3 days	7 days	28 days	Slump	3 days	7 days				28 days
Mean		346	29.3	145	3:45	1	33.9	47.3	66.8	92	24.7	34.3	46.9	1.6	0.55	2.30
Standard Deviation		9	0.3	14	0:21	0.4	1.6	1.4	2.0	11	2.7	2.3	3.3	0.2	0.01	0.09
Min		330	28.8	120	3:15	0	31.2	44.6	64.0	70	21.0	30.0	42.0	1.3	0.51	2.14
Max		365	29.9	180	4:30	2	36.8	50.2	69.5	110	27.5	38.0	52.5	2.0	0.57	2.41
NZS 3122:2009 Requirements				45 min	6:00 max	5 max		35.0 min	45.0 min						0.6 max	3.5 max
Units		m2/kg	%	minutes	hrs:mins	mm	MPa	MPa	MPa	mm	MPa	MPa	MPa	%	%	%
230809-298-GP	09/08/23	365	29.1	135	3:30	1	36.8			70	29.0			1.6	0.55	2.37
230807-296-GP	07/08/23	345	29.1	120	3:15	1	36.2							1.8	0.55	2.38
230803-092-GP	03/08/23	350	29.4	150	3:45	1	35.6	47.9						1.8	0.55	2.34
230731-086-GP	31/07/23	350	29.2	135	3:15	1	34.6	46.9		90	25.5	34.5		1.9	0.55	2.36
230728-782-GP	28/07/23	355	29.6	120	3:30	1	33.7	46.6						1.9	0.55	2.35
230723-746-GP	23/07/23	365	29.6	135	3:30	2	36.0	50.2		100	27.5	38.0		1.6	0.55	2.38
230719-382-GP	19/07/23	335	29.5	135	3:15	2	35.6	48.3		100	25.0	35.5		1.9	0.54	2.33
230714-028-GP	14/07/23	335	29.6	150	3:45	1	35.4	47.7	64.7					1.5	0.57	2.36
230712-026-GP	12/07/23	340	29.5	150	3:45	0	35.7	47.9	64.9	80	25.5	36.5	50.0	1.5	0.56	2.31
230704-724-GP	04/07/23	350	29.5	135	3:30	1	34.5	47.3	64.1	90	21.5	33.5	47.0	1.7	0.56	2.39
230702-726-GP	02/07/23	355	29.5	150	3:45	1	34.1	47.3	64.7					1.6	0.57	2.39
230630-339-GP	30/06/23	340	29.6	150	3:45	1	32.7	46.6	65.3	80	27.0	36.5	49.5	1.4	0.54	2.38
230627-337-GP	27/06/23	330	29.4	150	3:45	2	34.4	48.2	64.5					1.4	0.55	2.41
230622-004-GP	22/06/23	340	29.2	150	3:30	1	33.0	47.1	64.0					1.5	0.54	2.35
230617-002-GP	17/06/23	340	29.2	150	3:30	1	34.9	48.9	68.4	80	27.5	36.0	45.0	2.0	0.52	2.30
230615-860-GP	15/06/23	350	29.1	135	3:45	1	34.7	49.4	69.5					1.8	0.53	2.32
230613-715-GP	13/06/23	350	29.1	150	3:45	1	32.7	47.4	68.5	100	21.5	31.5	44.0	1.8	0.51	2.31
230610-401-GP	10/06/23	345	28.9	135	4:15	1	32.4	47.5	68.6					1.7	0.55	2.23
230608-399-GP	08/06/23	340	28.8	135	3:30	1	33.8	48.0	65.6	110	21.5	33.5	42.0	1.4	0.53	2.25
230601-254-GP	01/06/23	330	29.3	150	4:15	1	33.1	47.8	69.4					1.3	0.56	2.15
230531-062-GP	31/05/23	345	28.8	135	4:15	1	31.6	44.6	68.0	90	25.0	34.0	52.5	1.4	0.54	2.14
230524-867-GP	24/05/23	360	28.9	165	4:15	1	31.6	45.6	68.6	100	23.0	32.5	46.5	1.5	0.55	2.16
230522-832-GP	22/05/23	350	29.0	180	4:30	1	31.2	44.9	68.1					1.5	0.55	2.16
230519-741-GP	19/05/23	340	29.0	165	4:15	1	31.4	45.5	68.3	100	21.0	30.0	46.0	1.6	0.56	2.15
230512-679-GP	12/05/23	350	29.9	165	4:00	1	32.3	45.7	67.4					1.7	0.55	2.16

The above samples were tested as received in accordance with the current terms of accreditation and methods stated in NZS 3122:2009 with the exception of:

Chemical composition to ASTM C114-18

All concrete testing conducted in accordance with NZS 3112:1986.

Data reported as per requirements of NZS 3112:1986 & ASTM C114-18

This Report must not be reproduced except in full

Vincent Lane
Works Chemist



Portland Works, Portland, Whangarei 0178

Date issued: 18/08/2023

Page 1 of 3

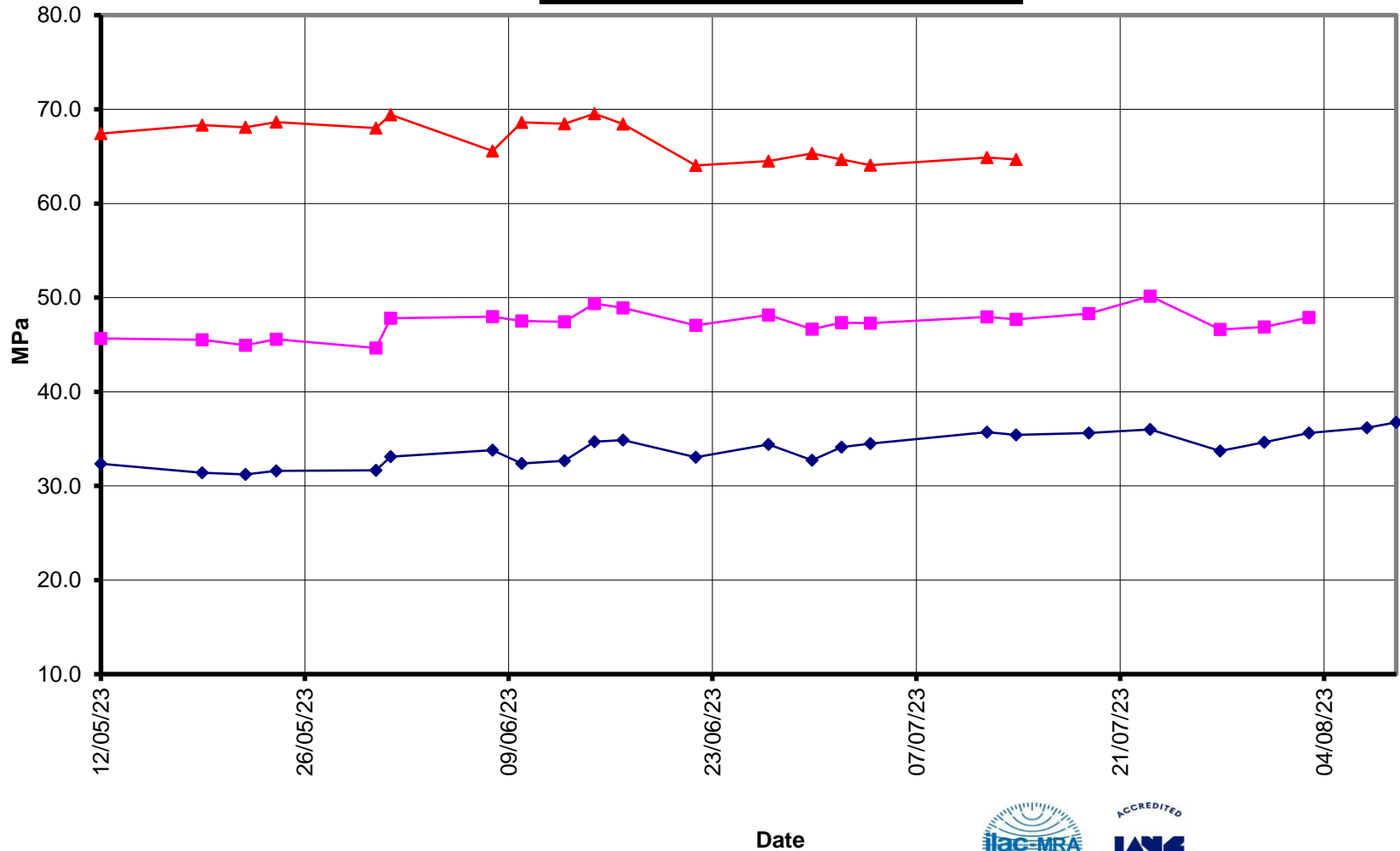


EcoSure® Type GP Cement

Compressive Strength ISO-CEN Mortar (Bulk Dispatch)



28 Days 7 Days 3 Days





EcoSure® Type GP Cement

Compressive Strength Concrete (Bulk Dispatch)



—x— 28 Days —■— 7 Days —◆— 3 Days —x— Slump

