

Figure 1

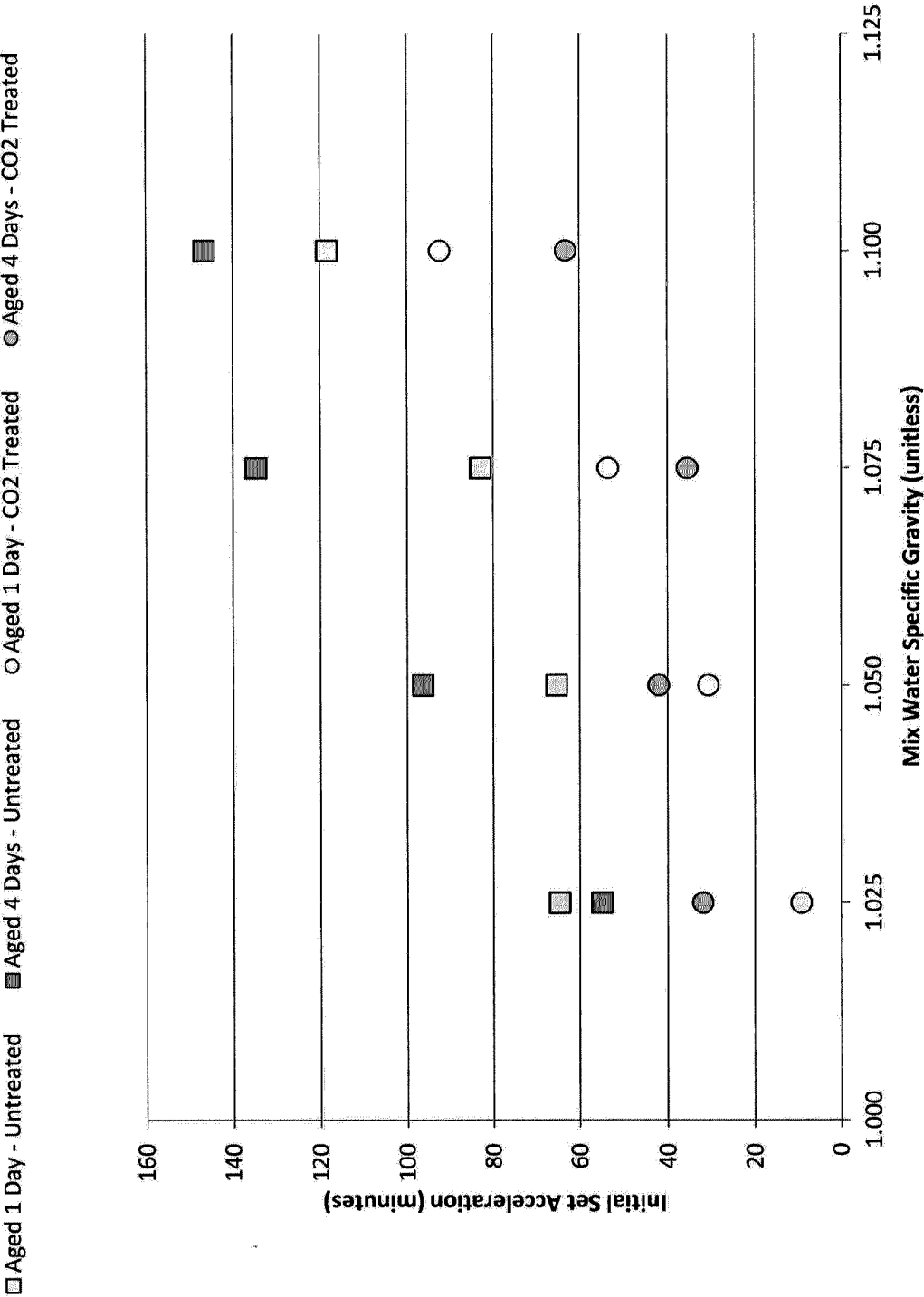


Figure 2

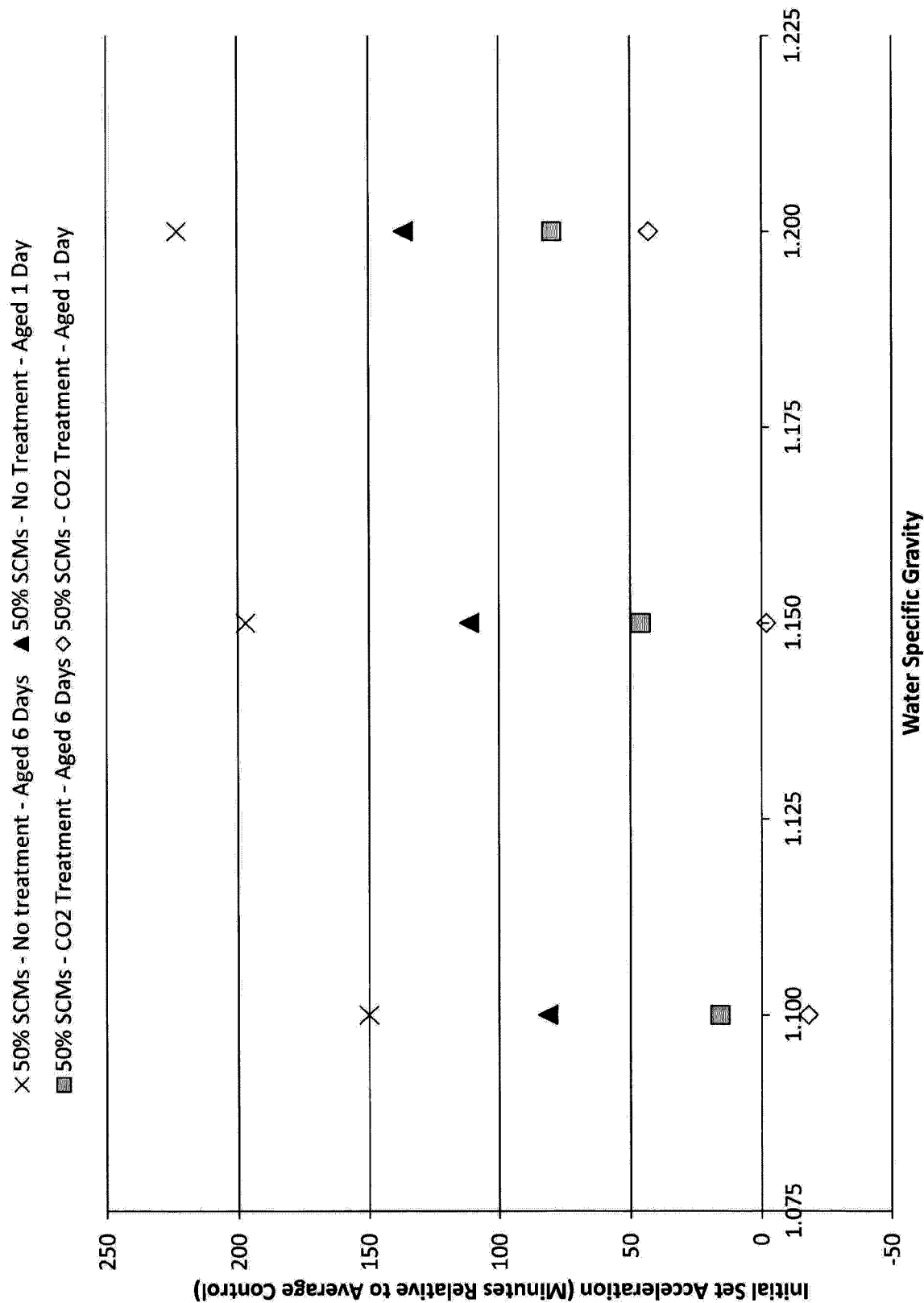


Figure 3

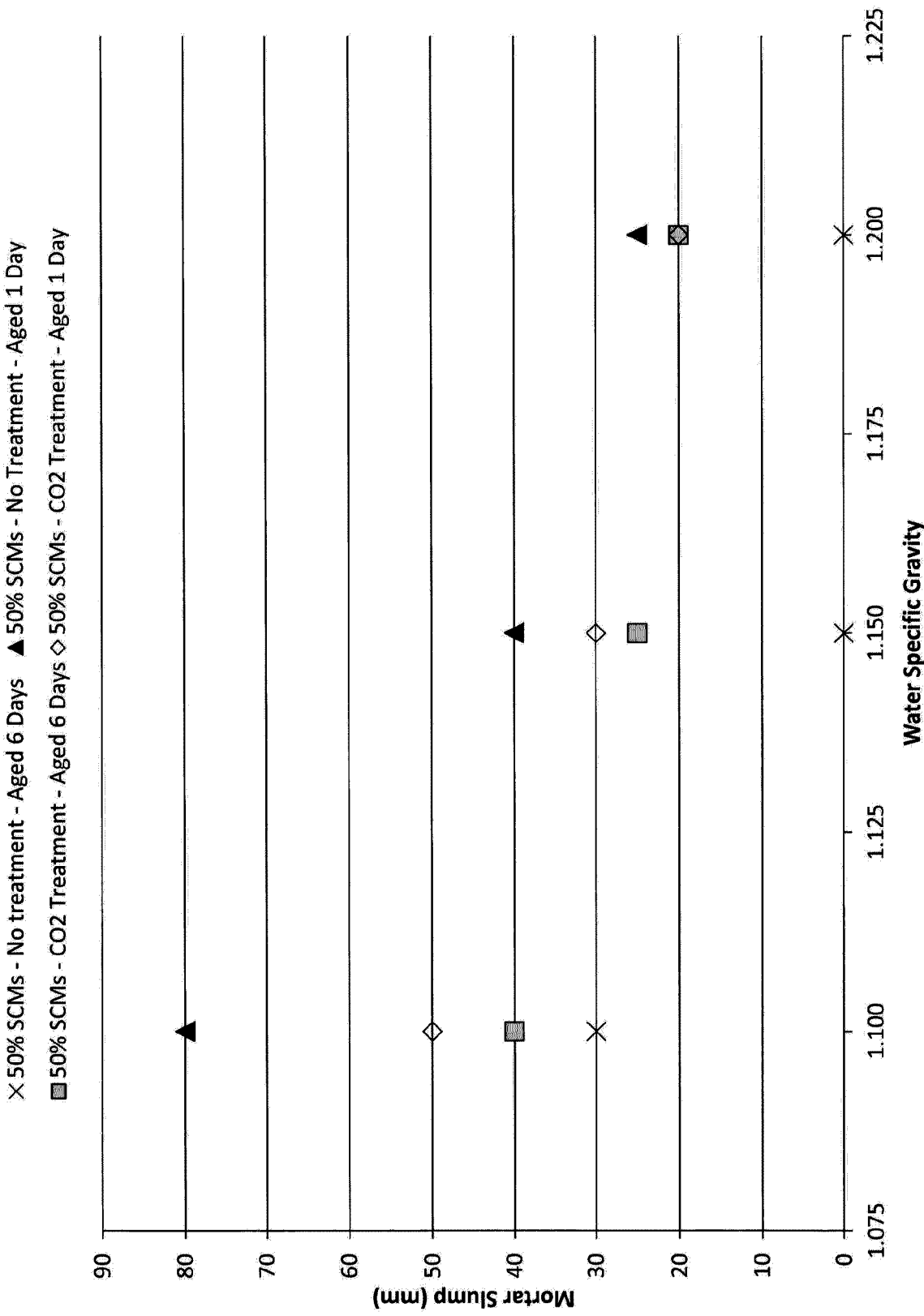


Figure 4

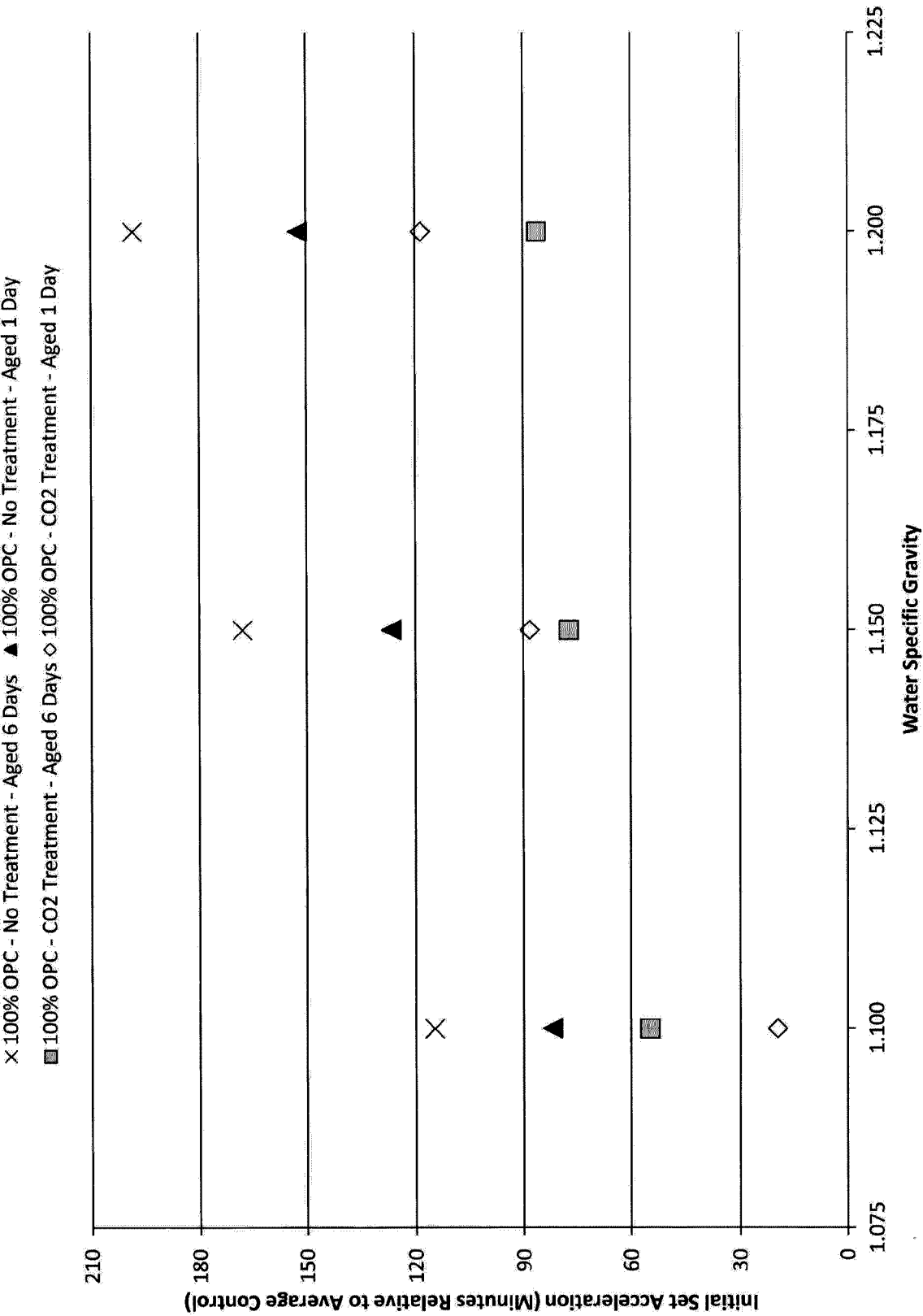


Figure 5

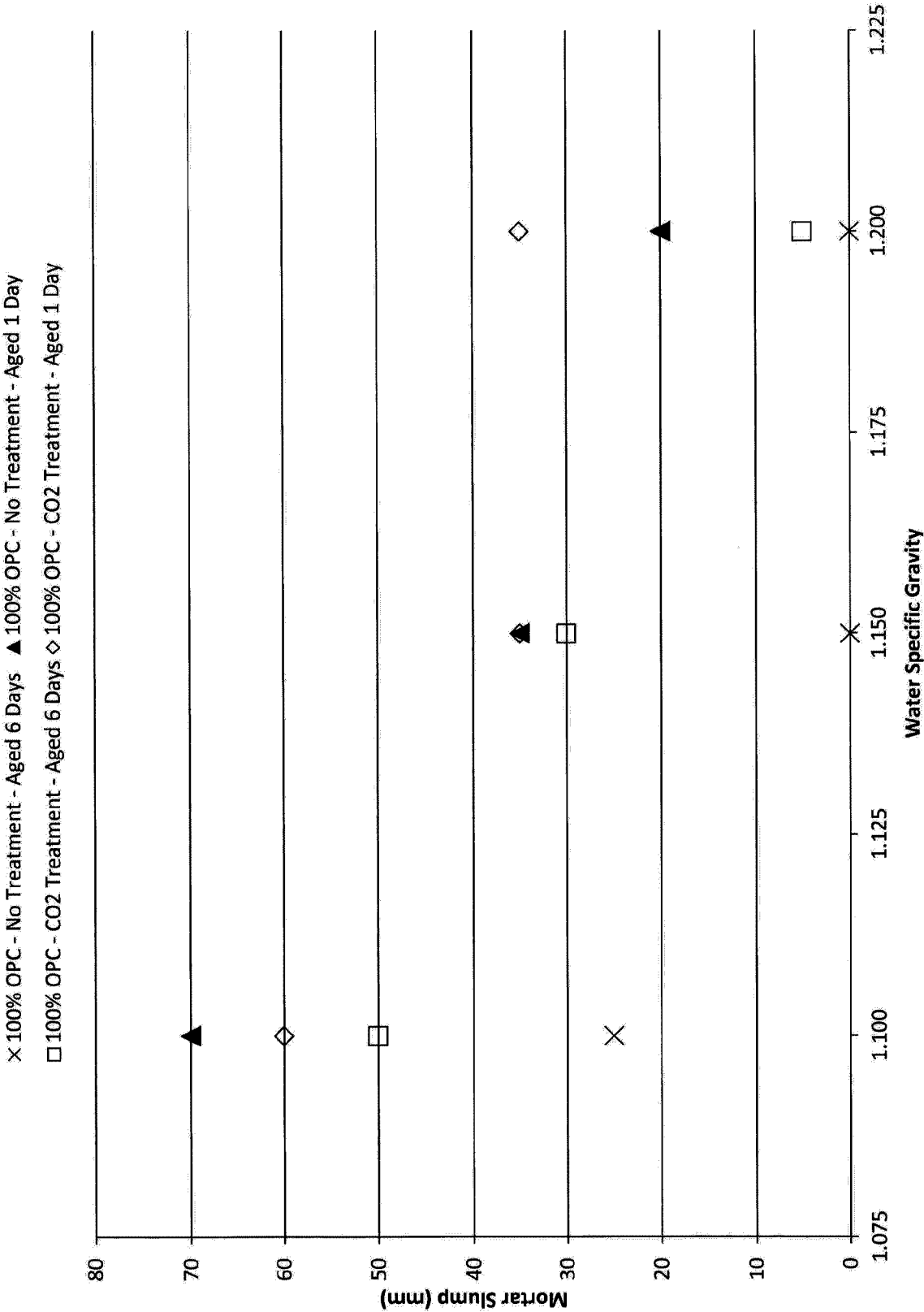


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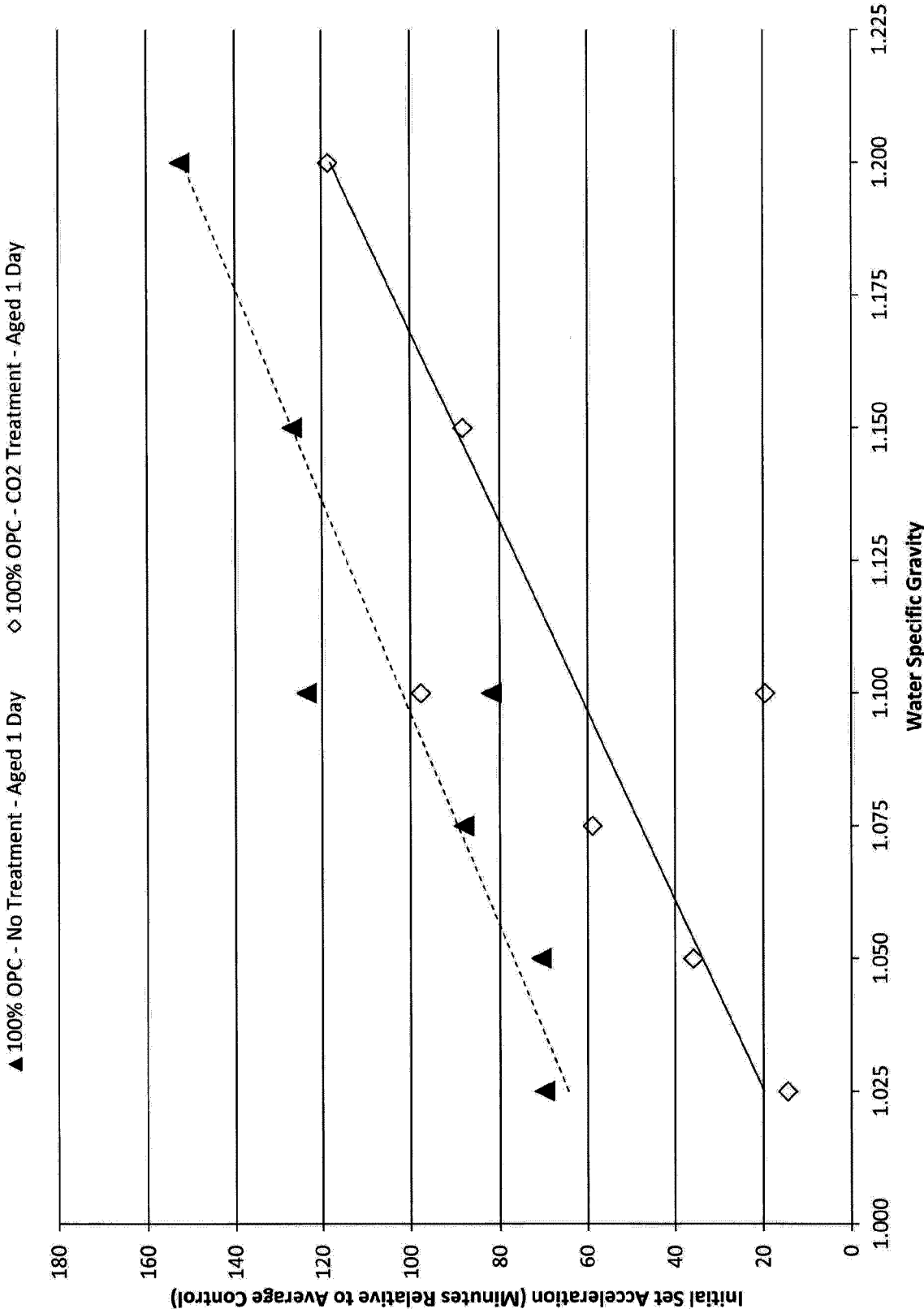


Figure 7

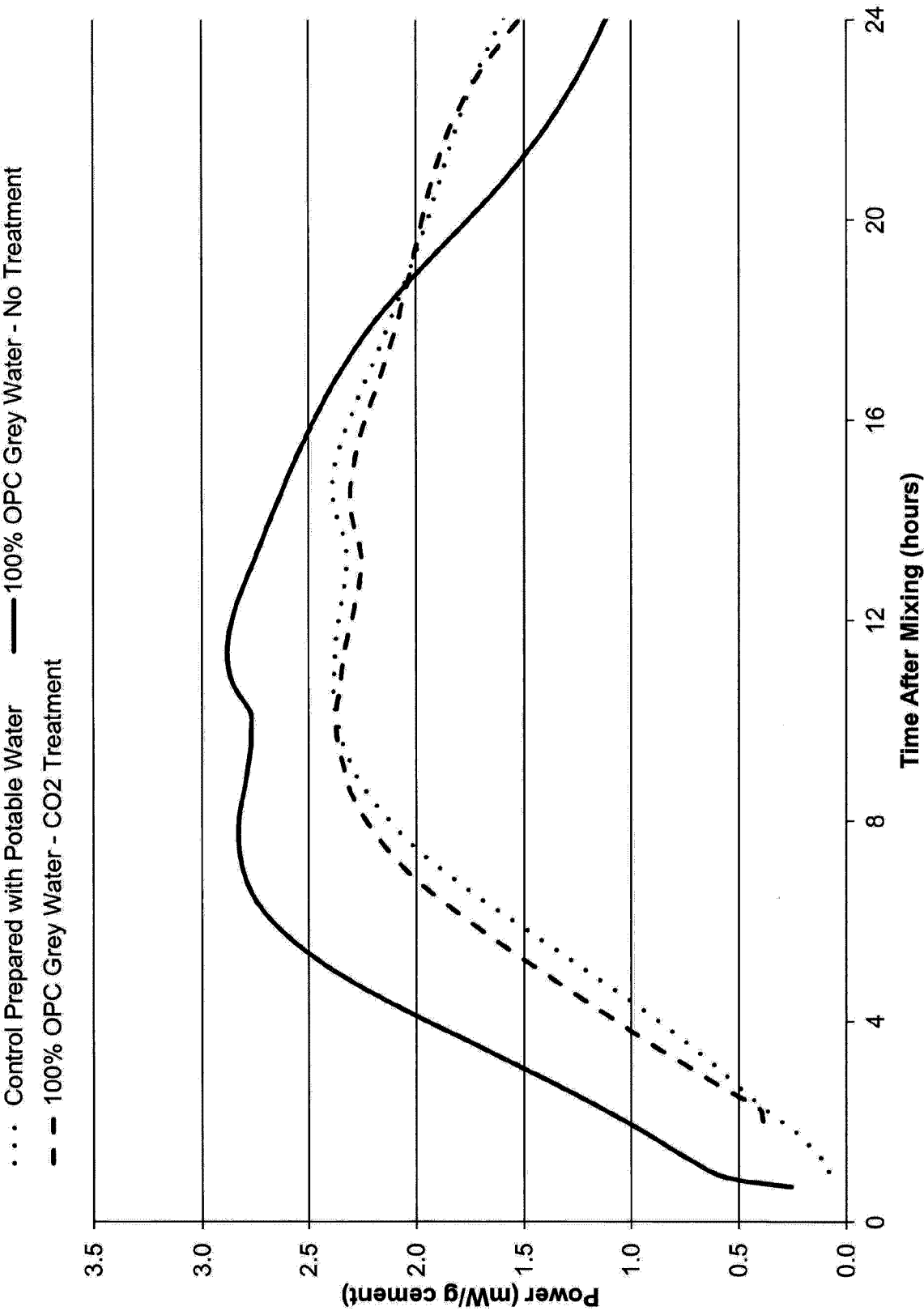


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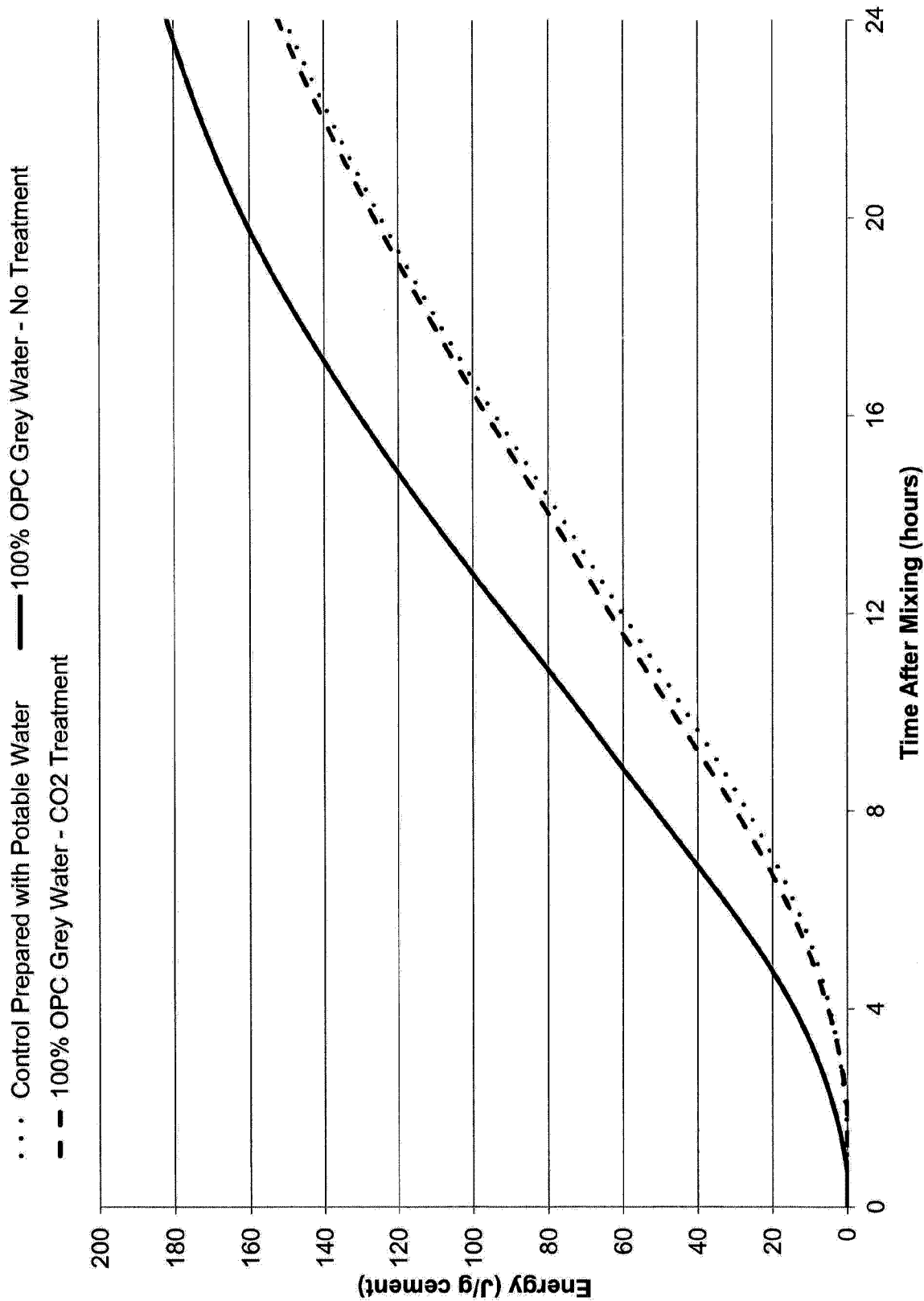


Figure 9

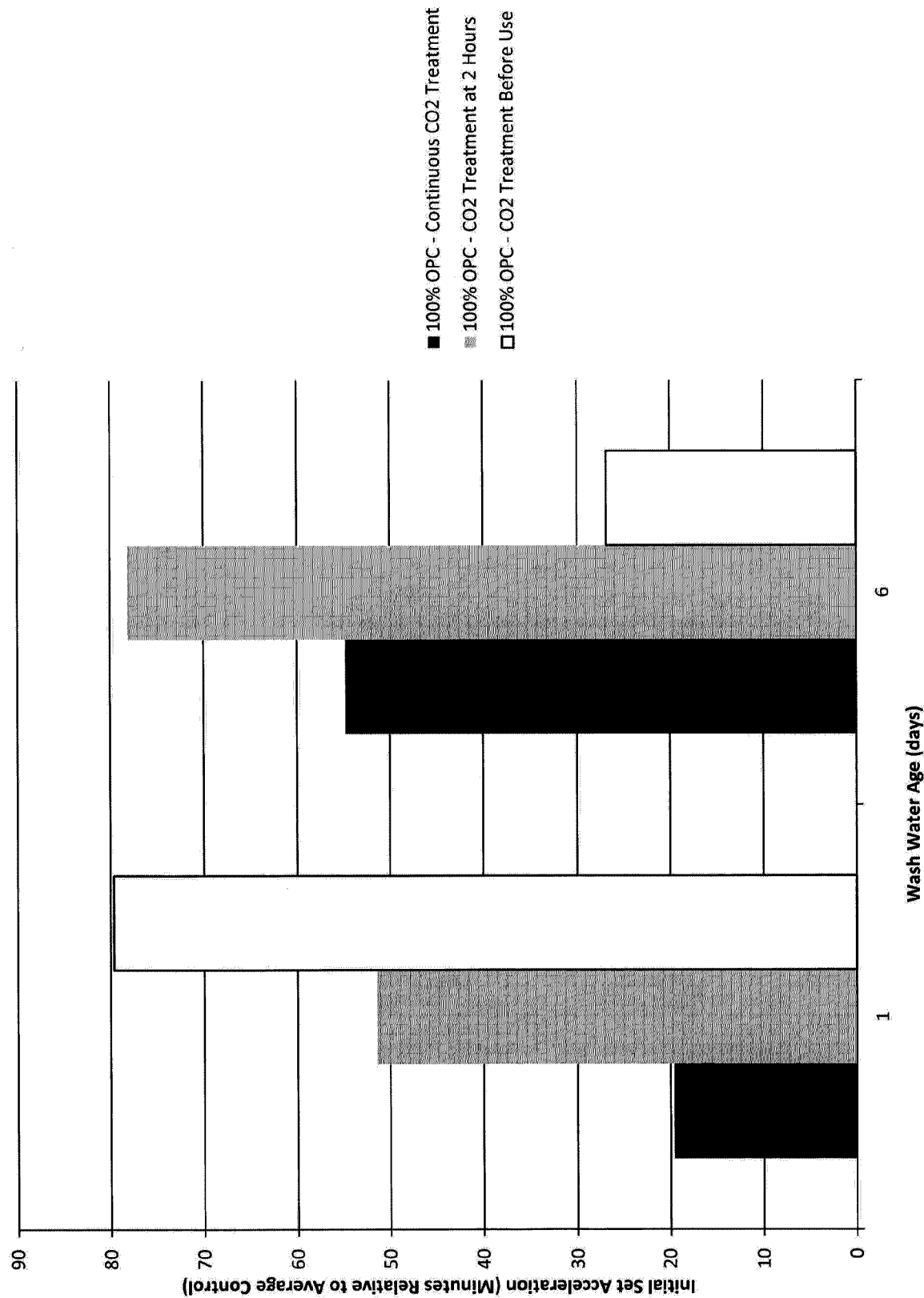


Figure 10

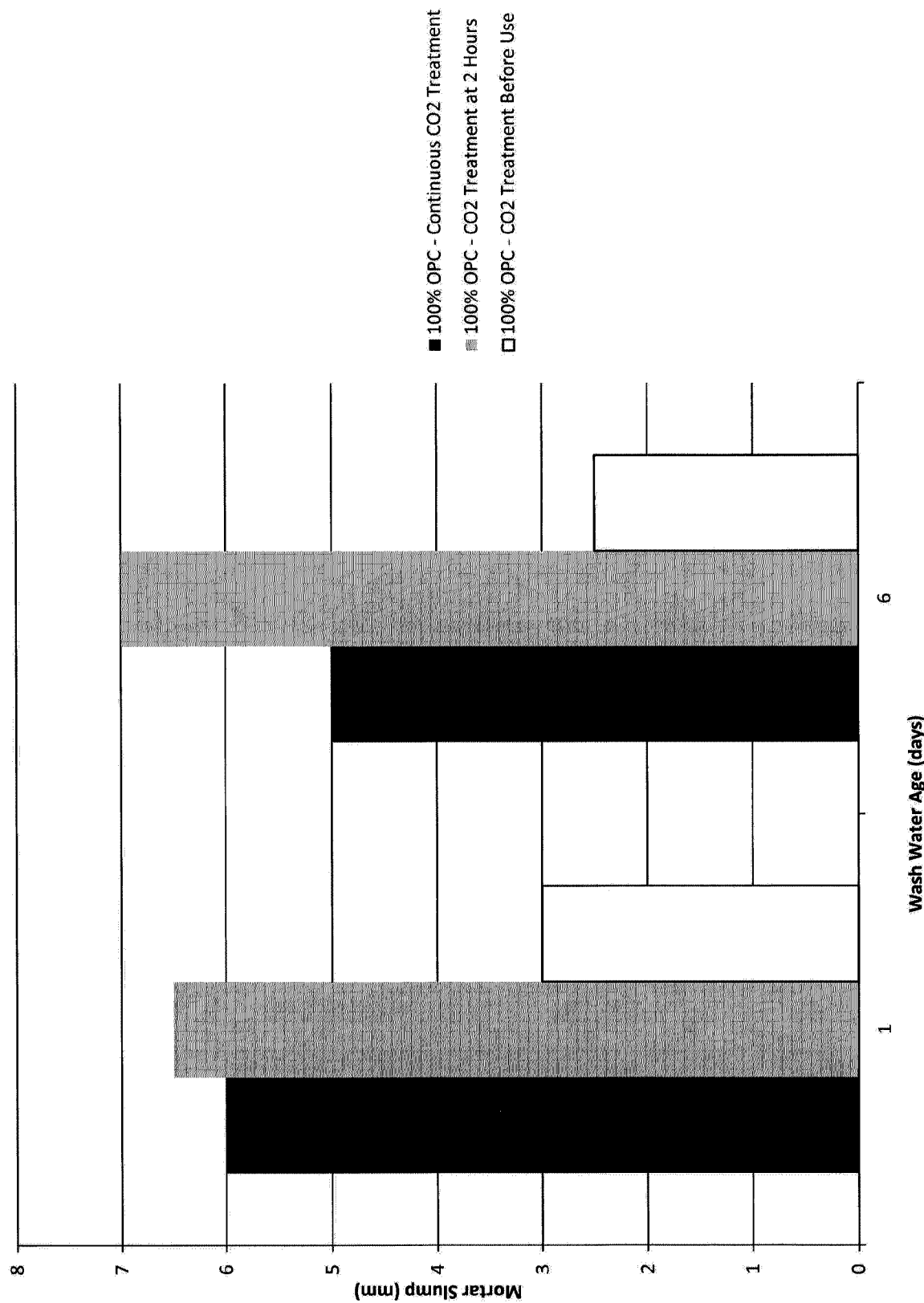


Figure 11

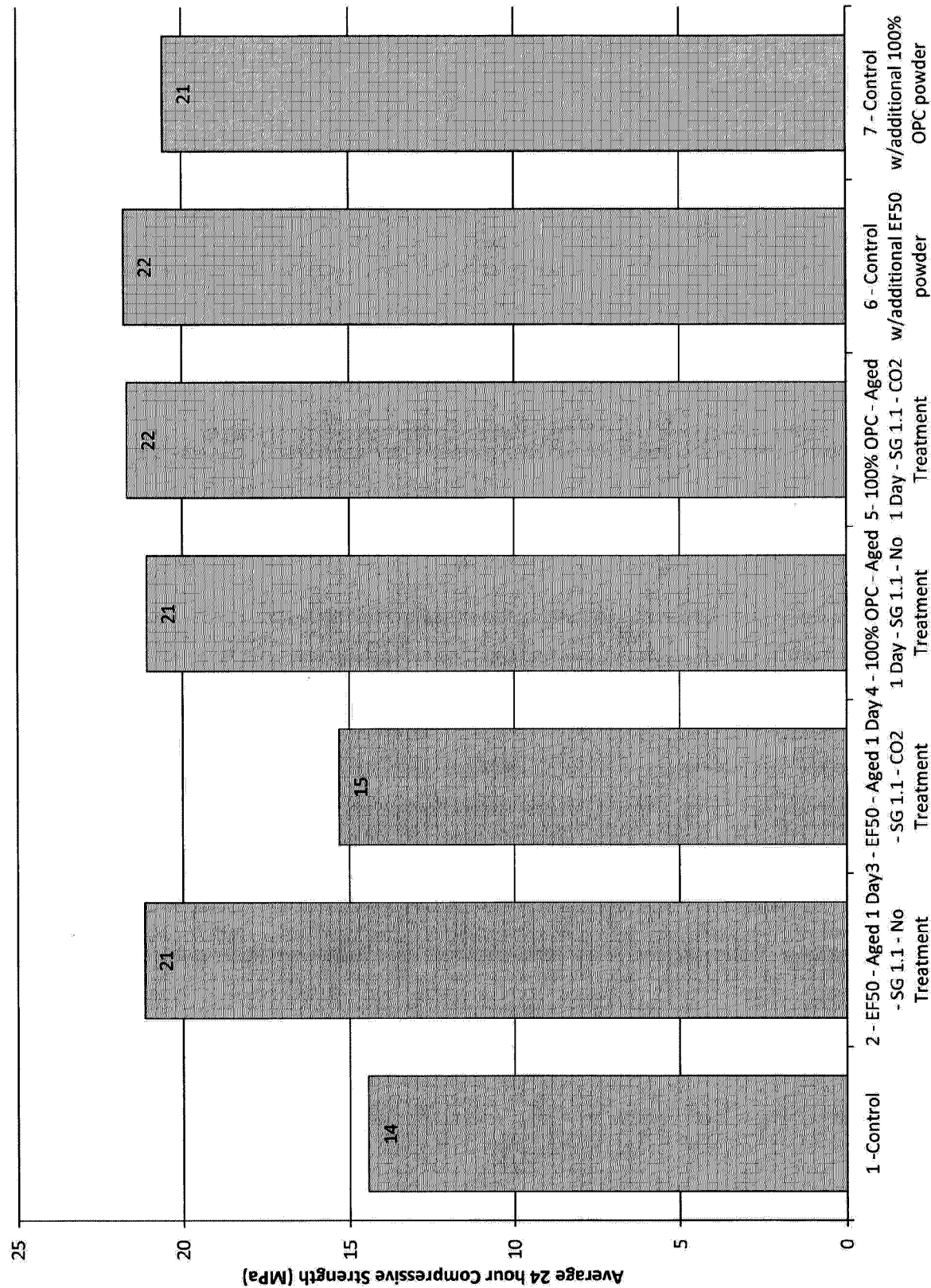


Figure 12

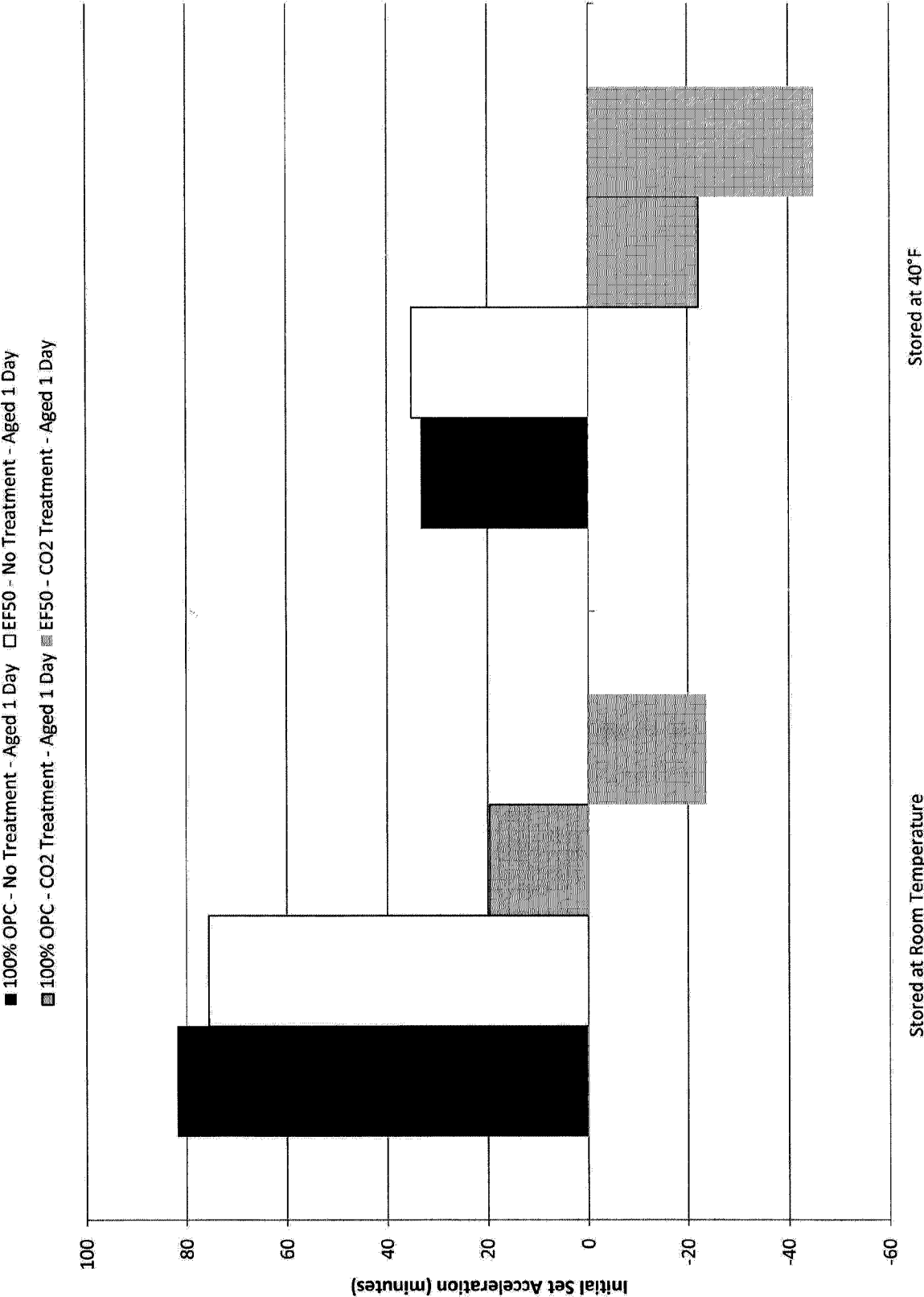


Figure 13

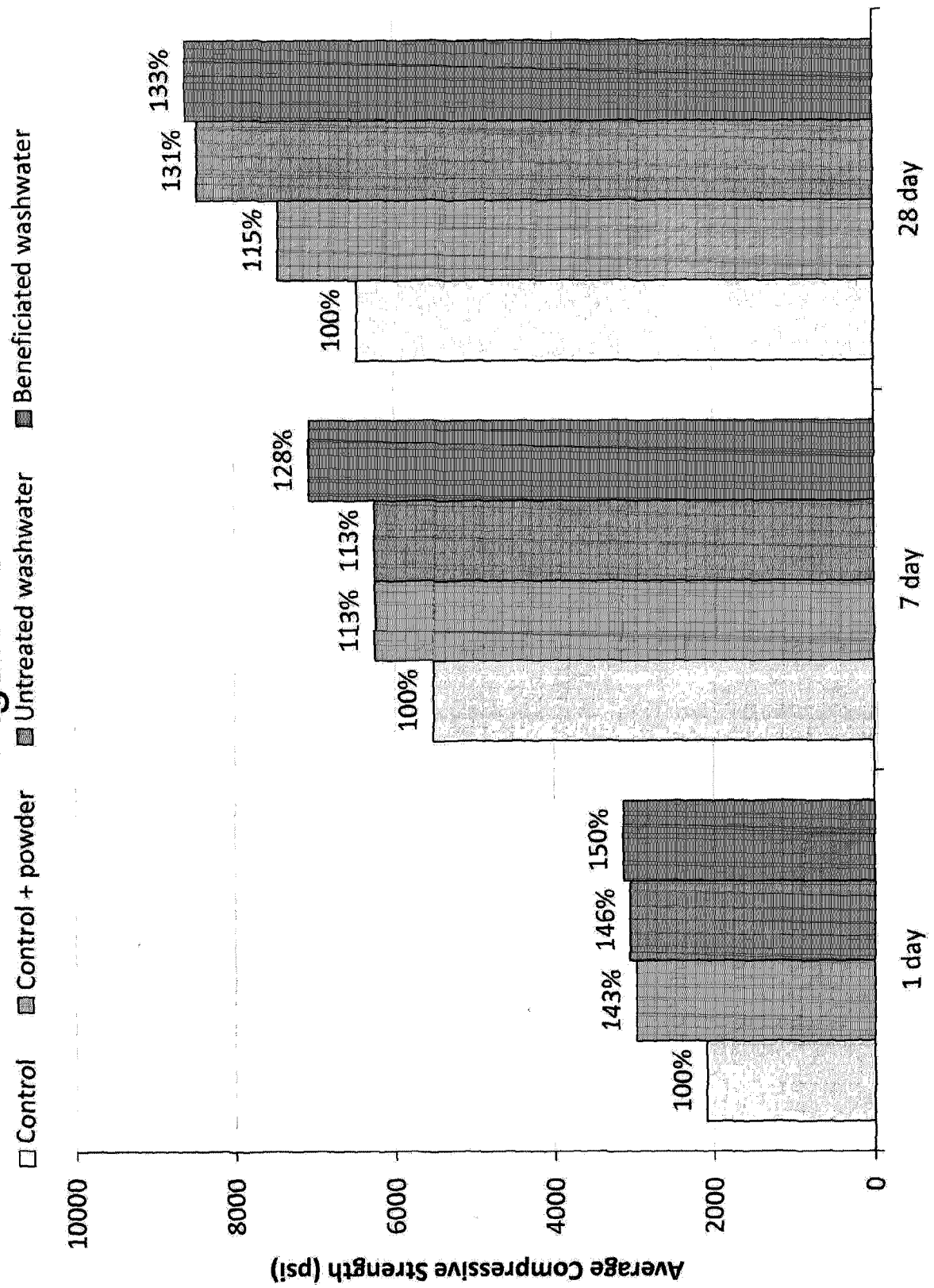


Figure 14

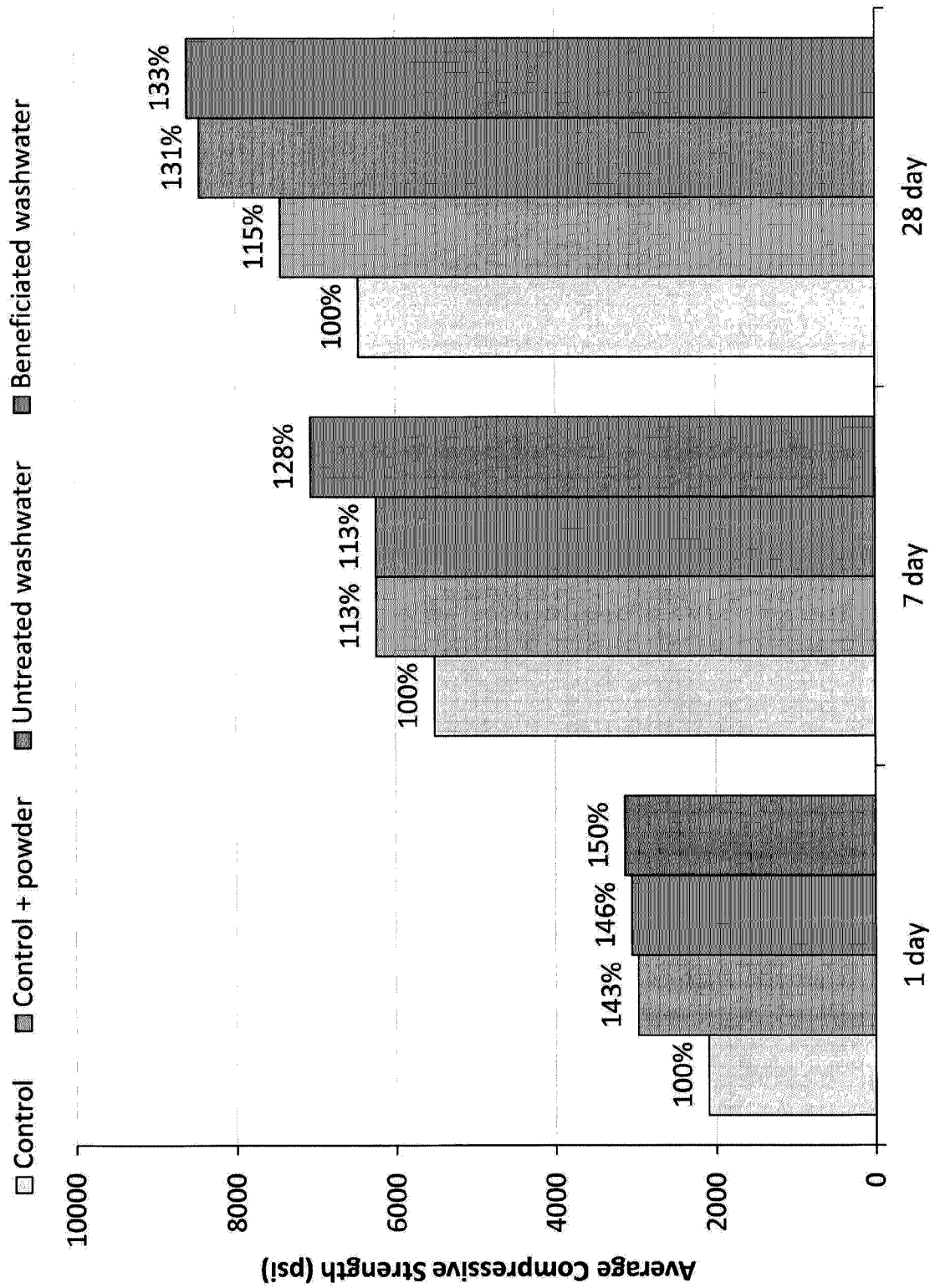


Figure 15

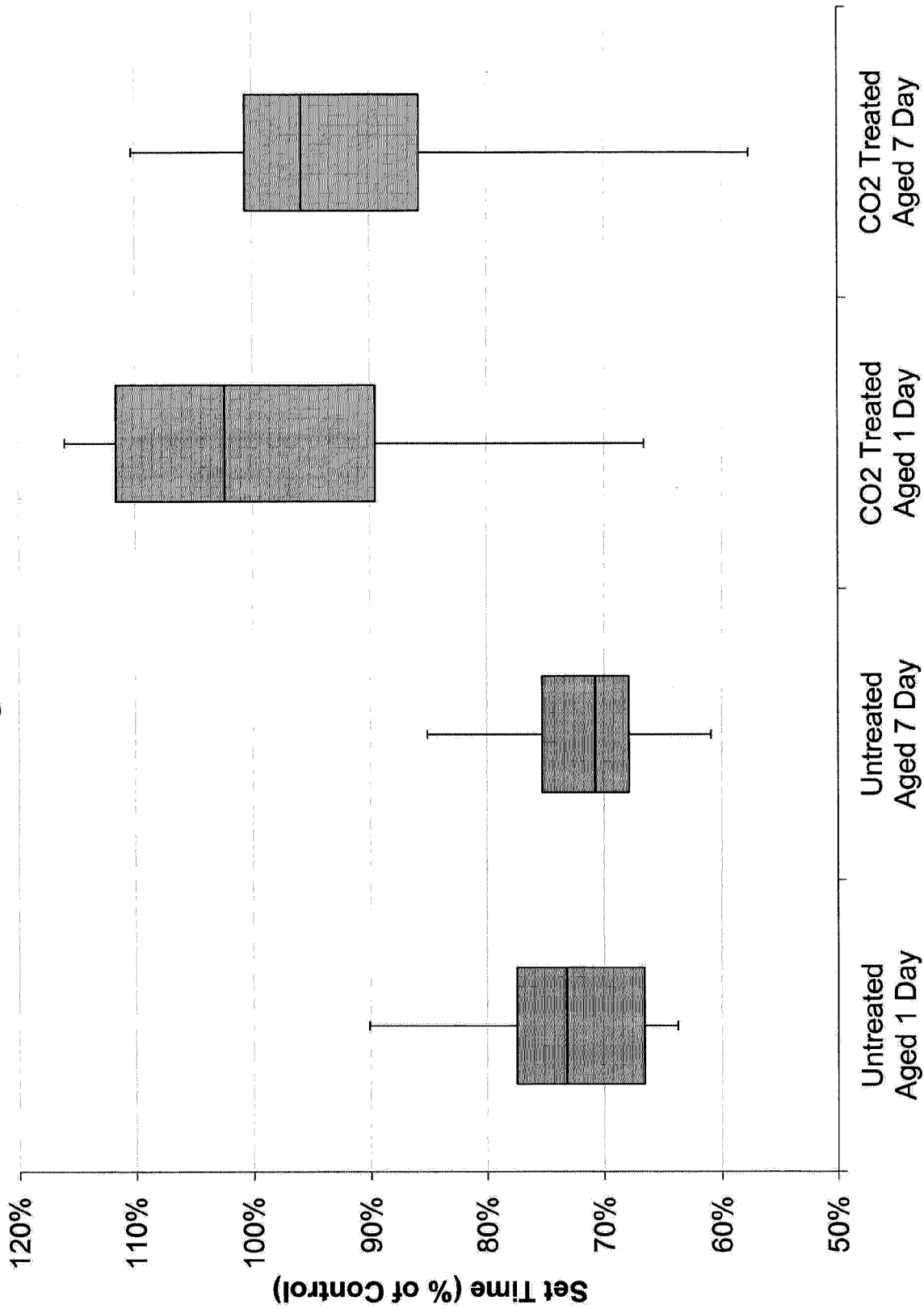


Figure 16

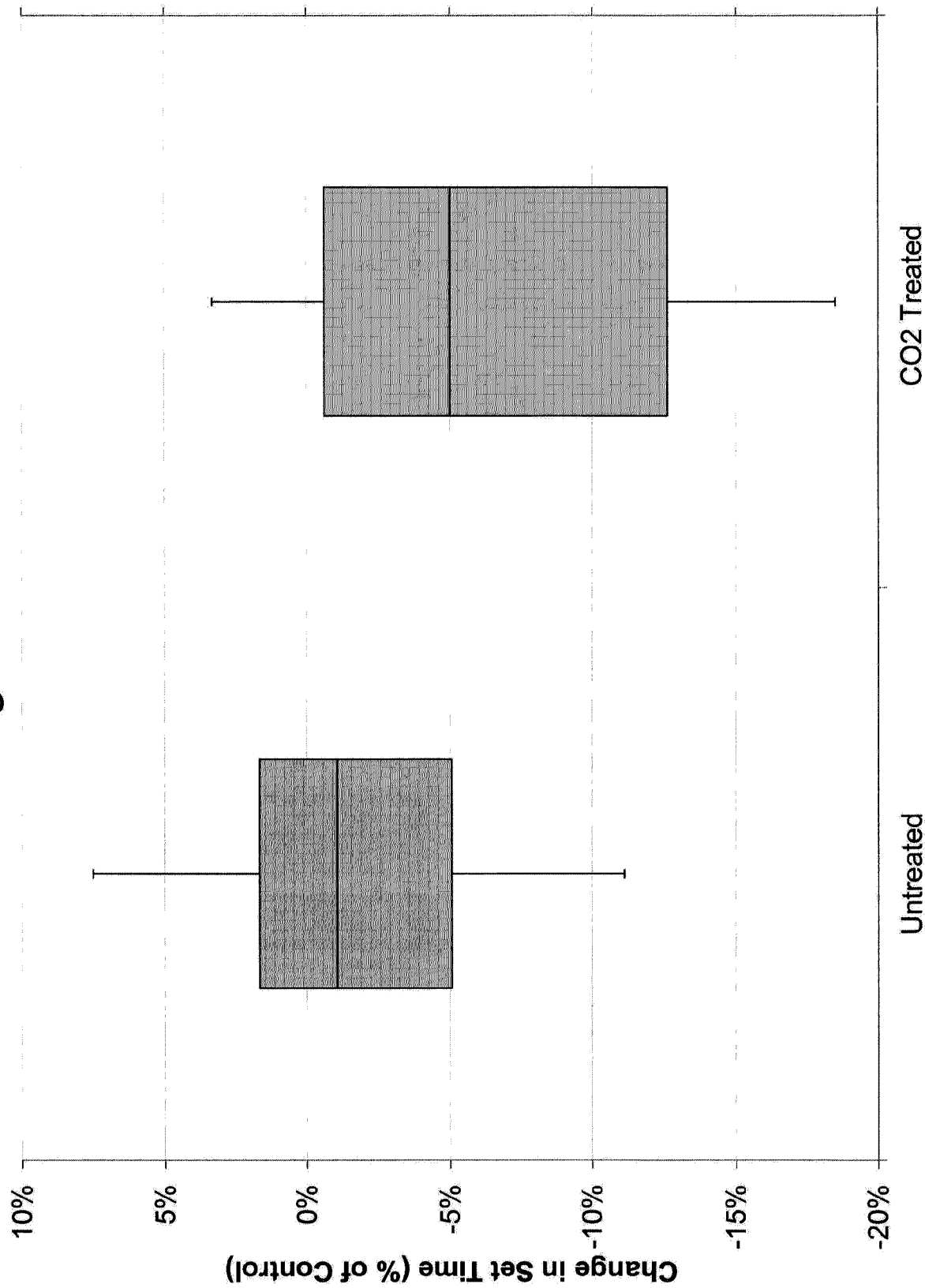


Figure 17

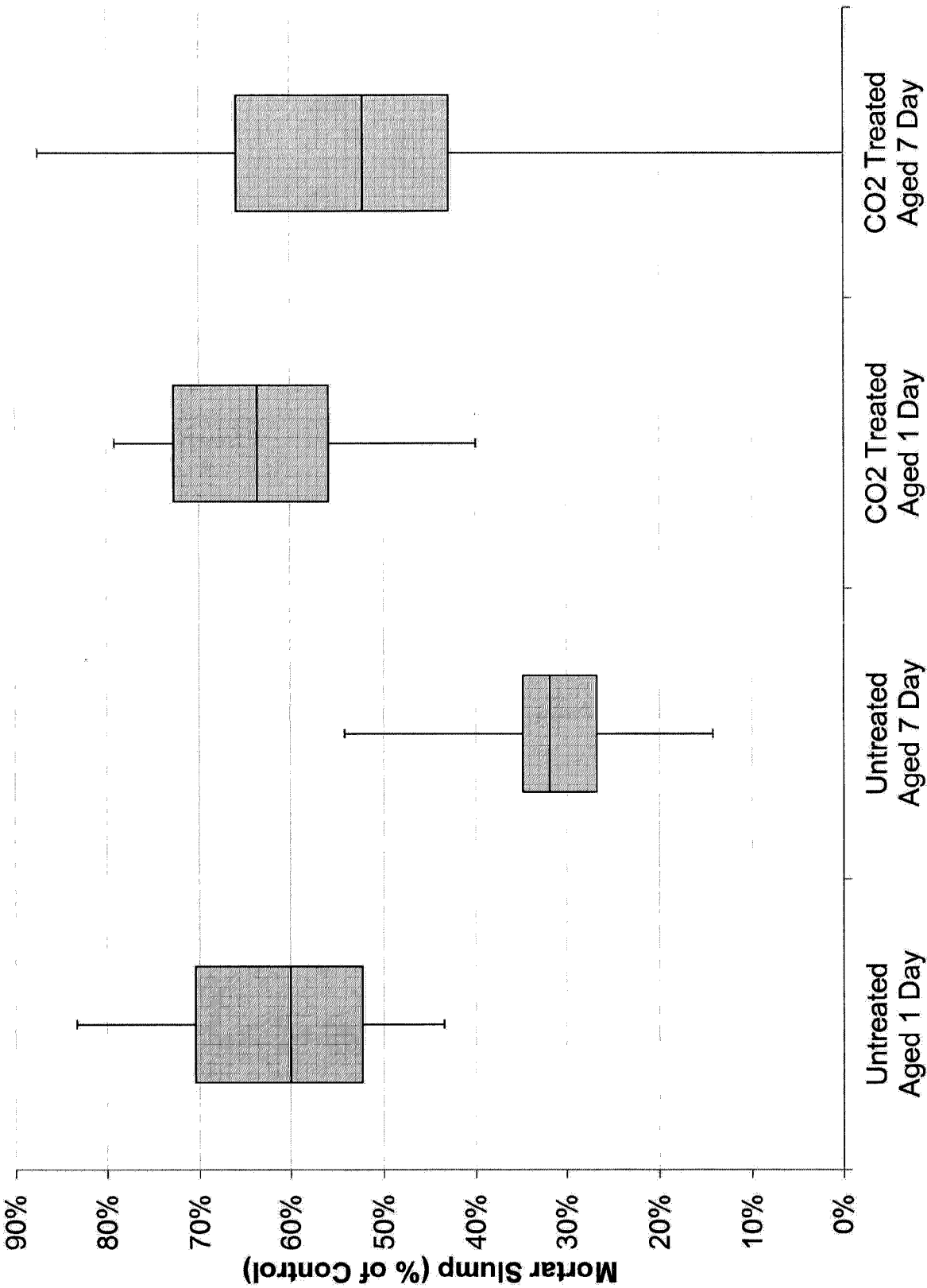


Figure 18

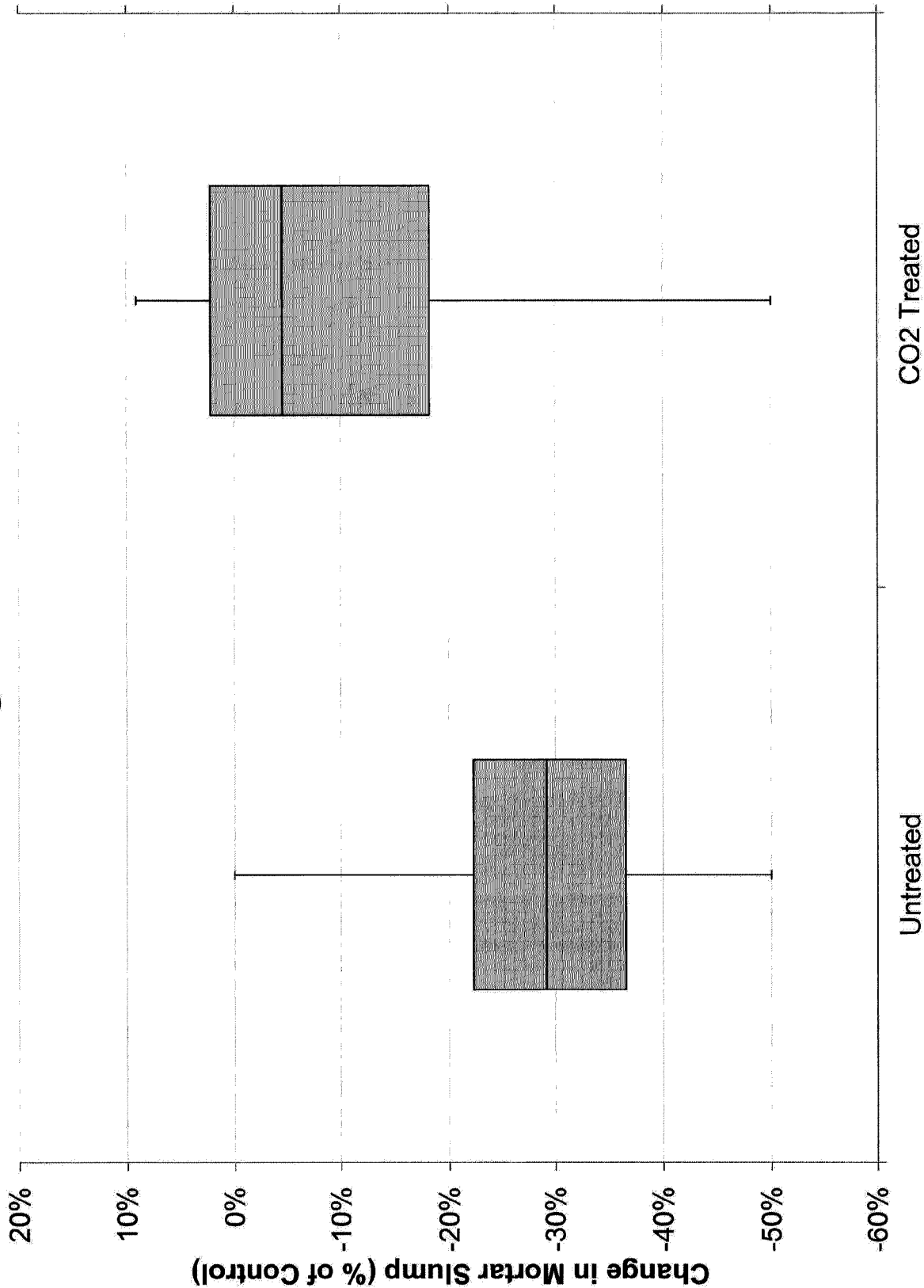


Figure 19

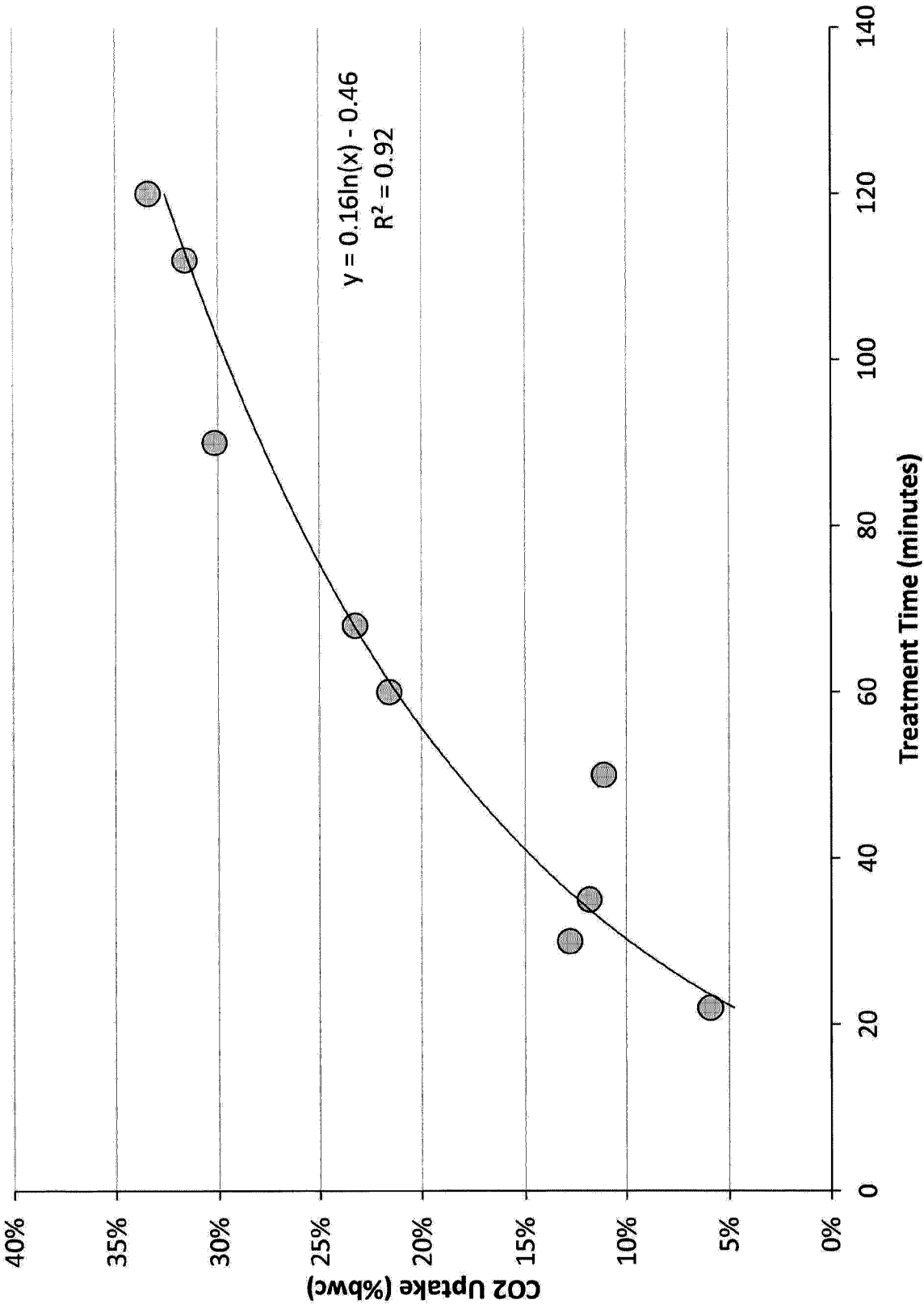


Figure 20

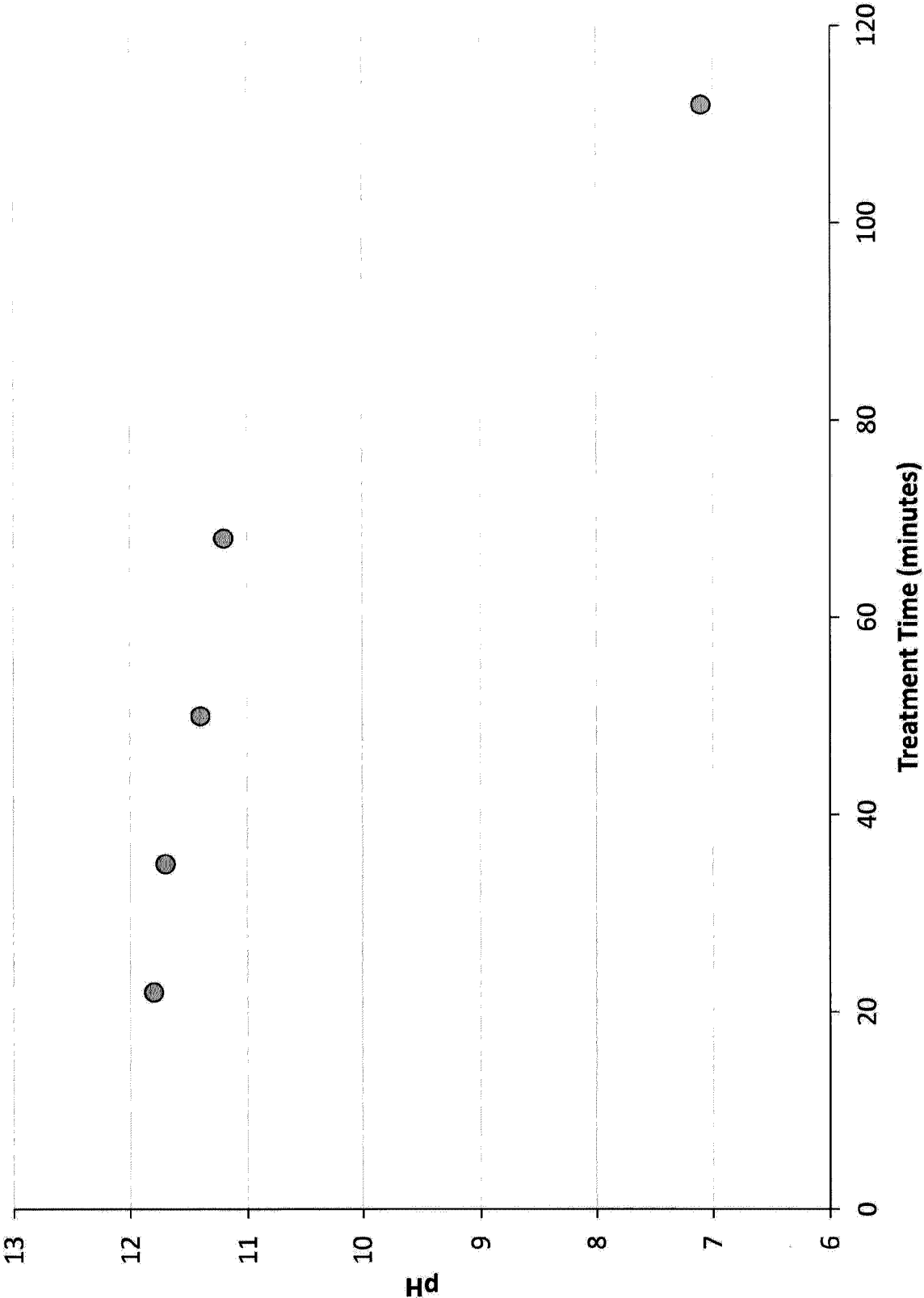


Figure 21

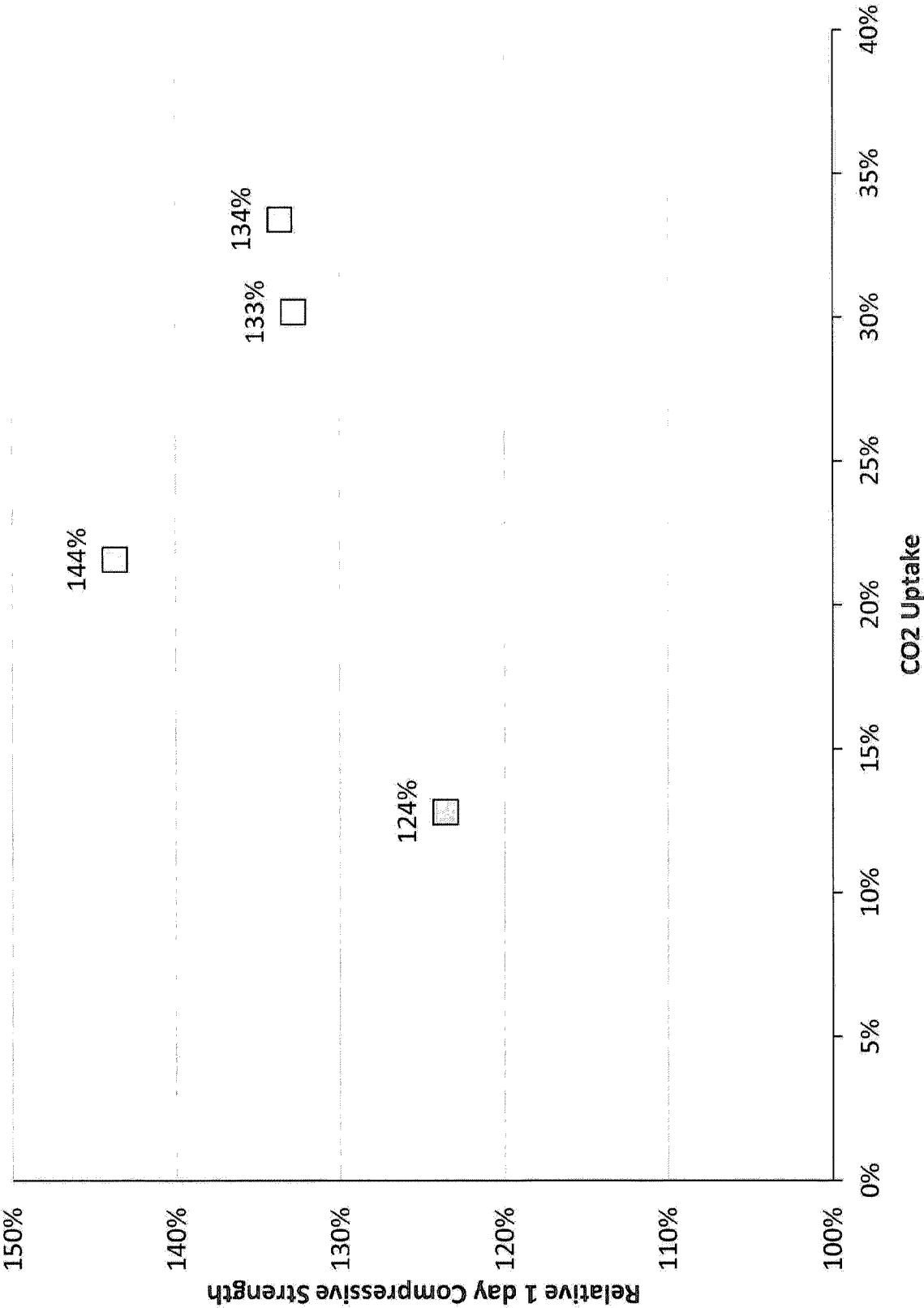


Figure 22

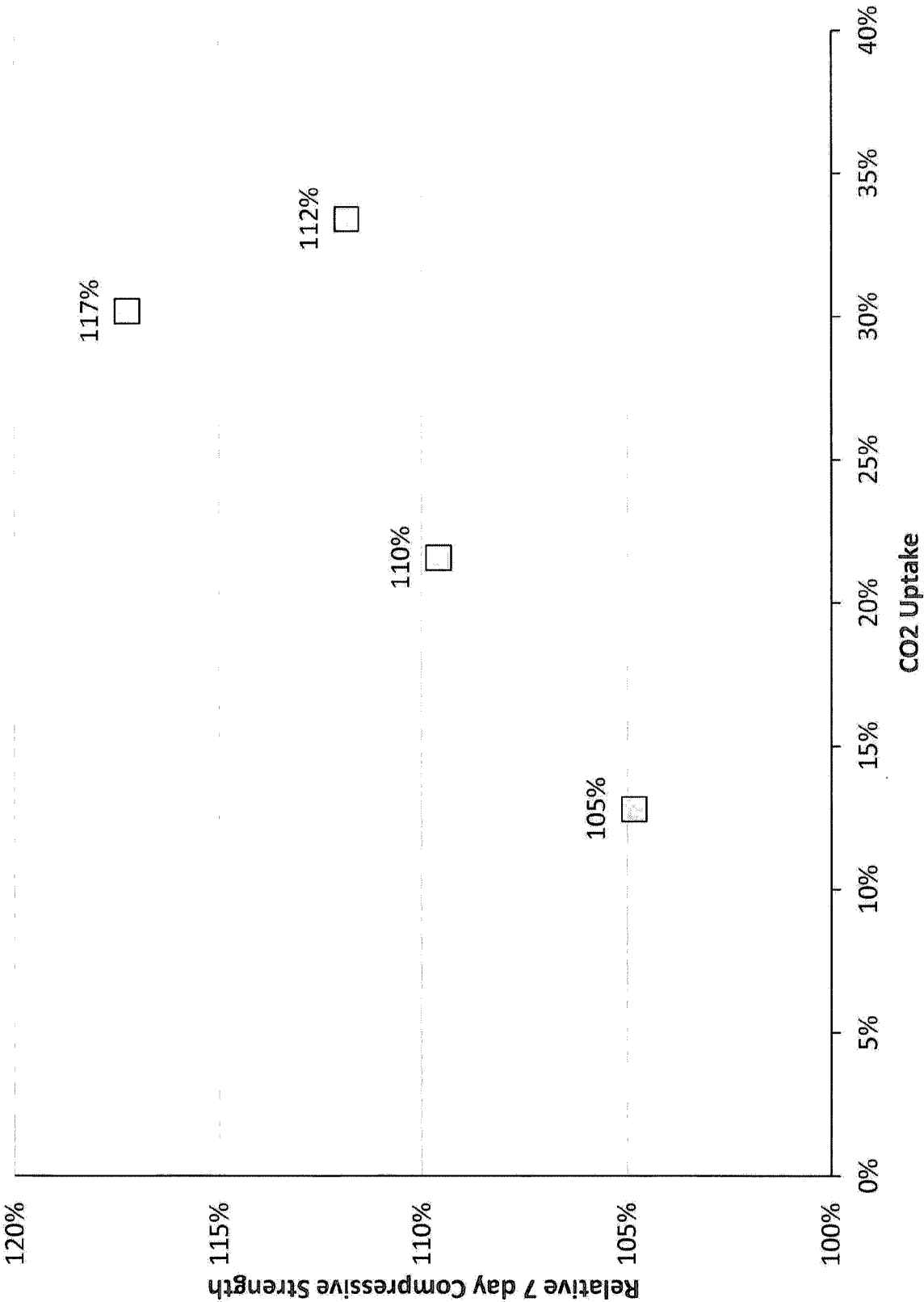


Figure 23

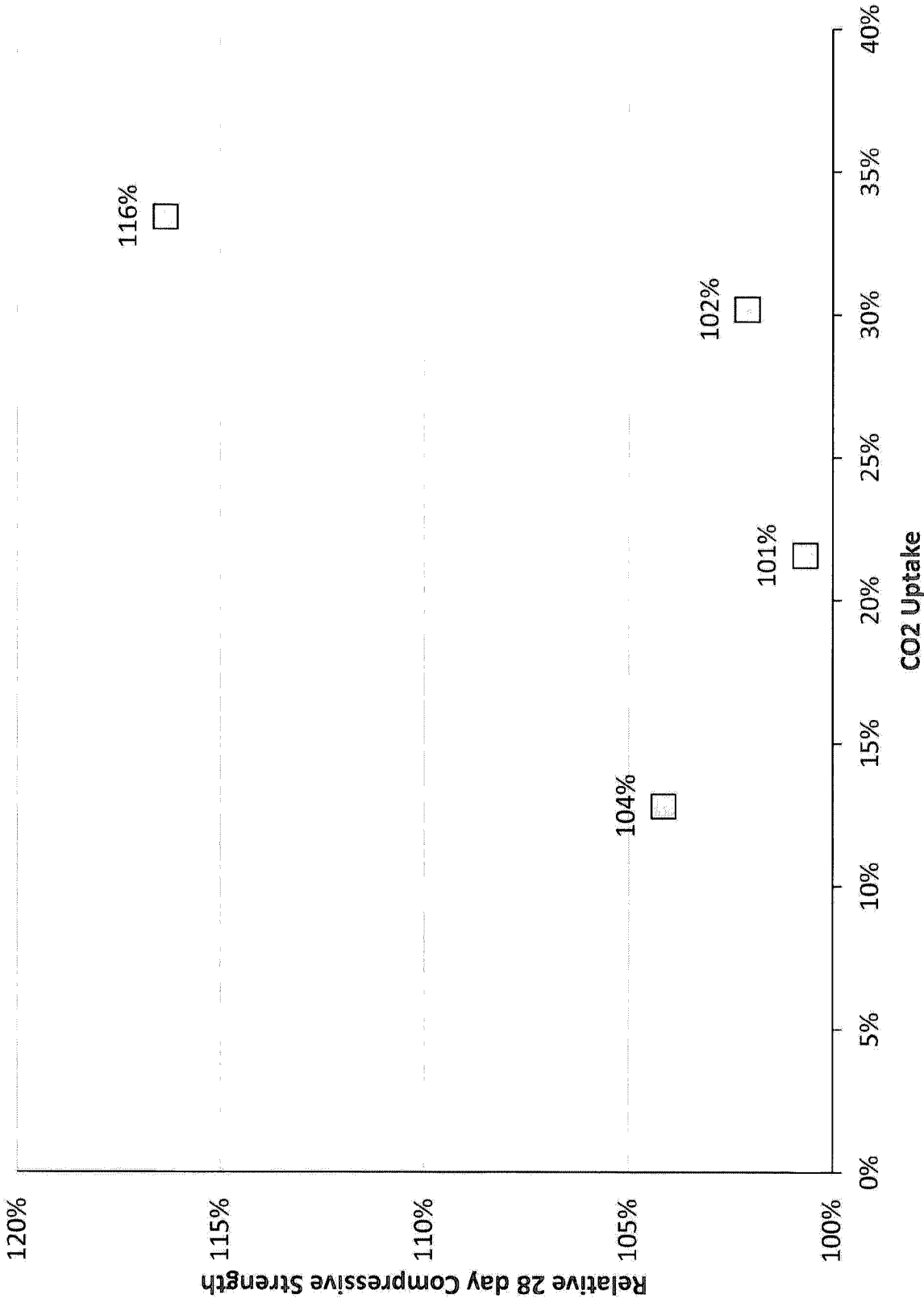


Figure 24

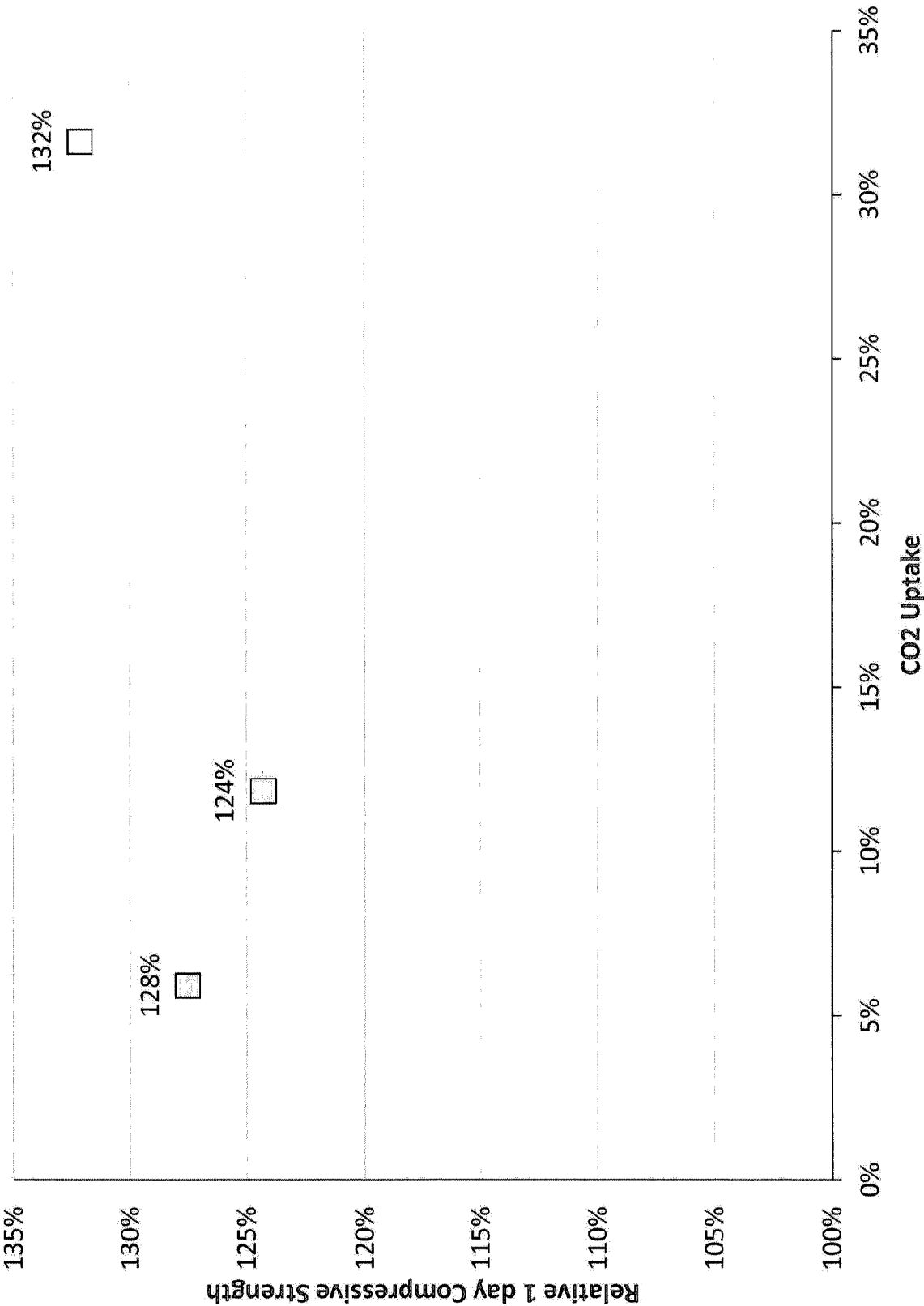


Figure 25

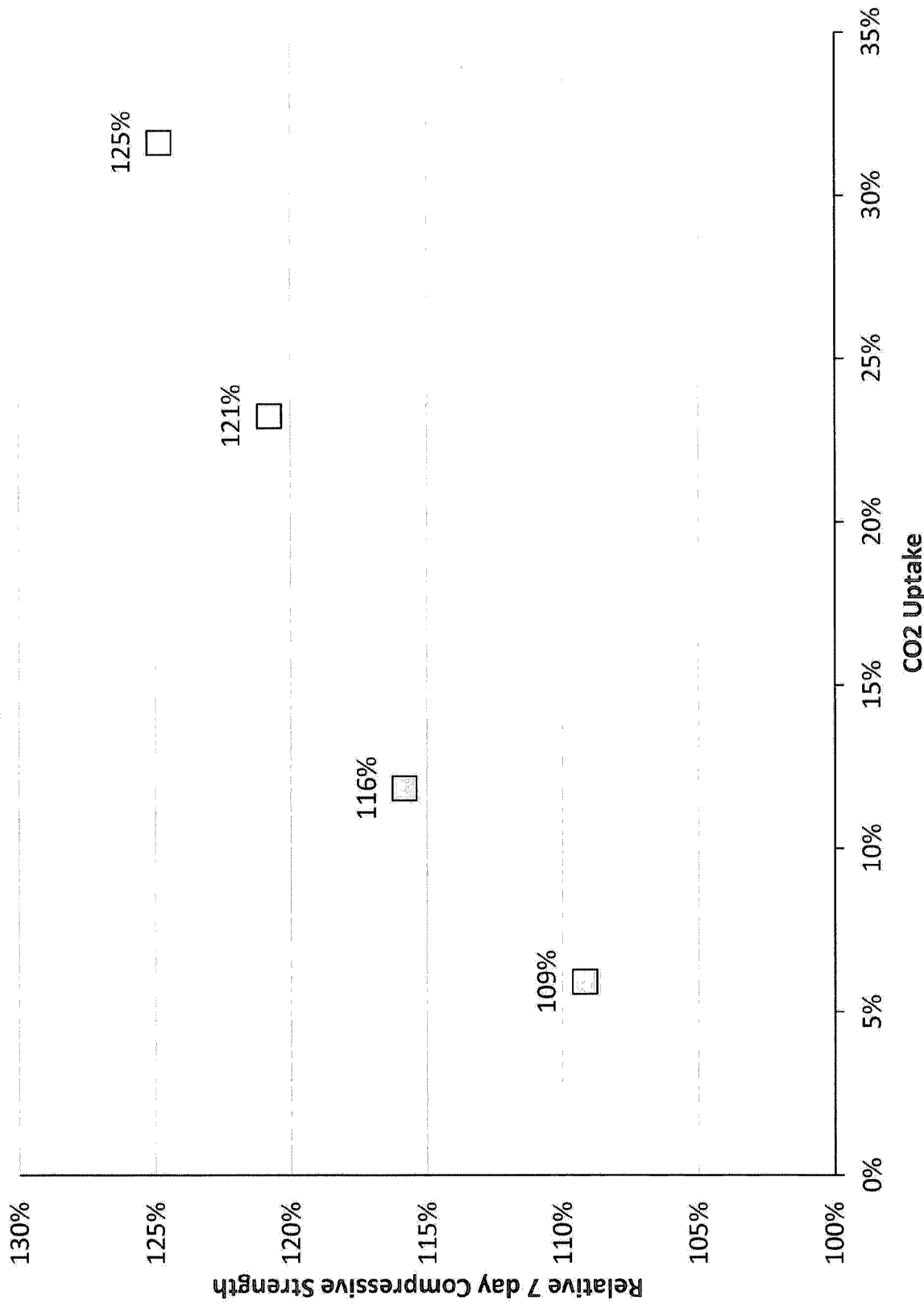


Figure 26



Figure 27

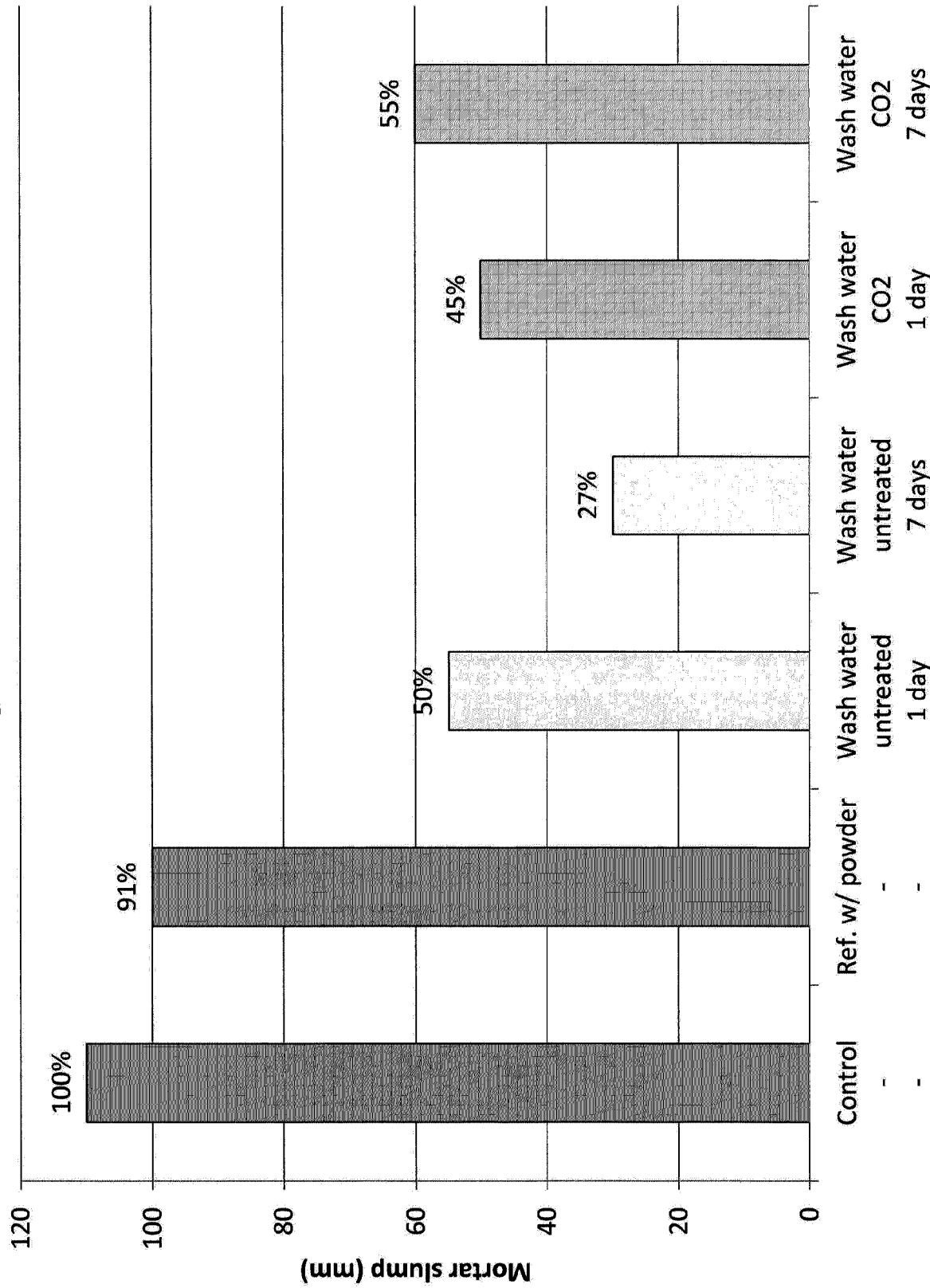


Figure 28

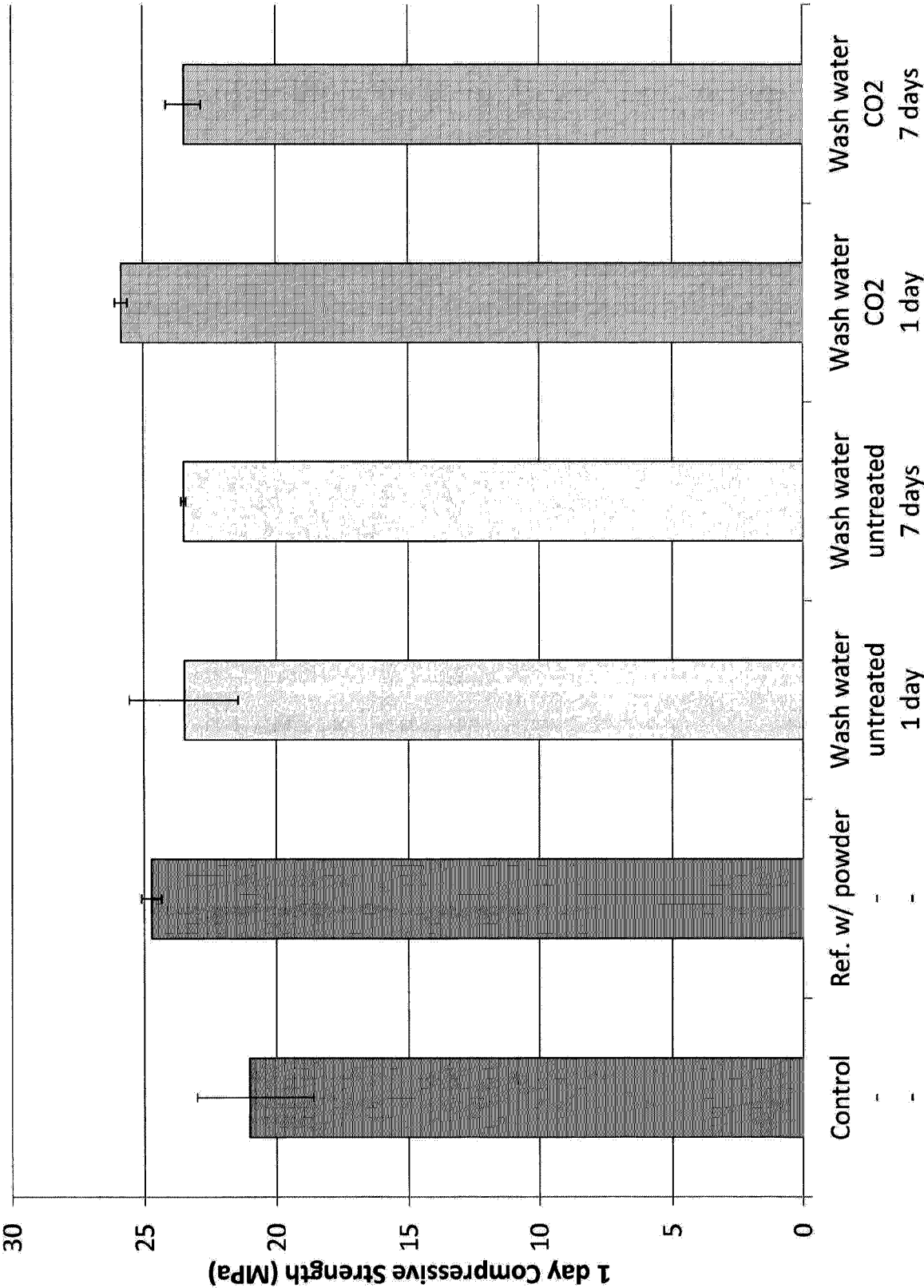


Figure 29

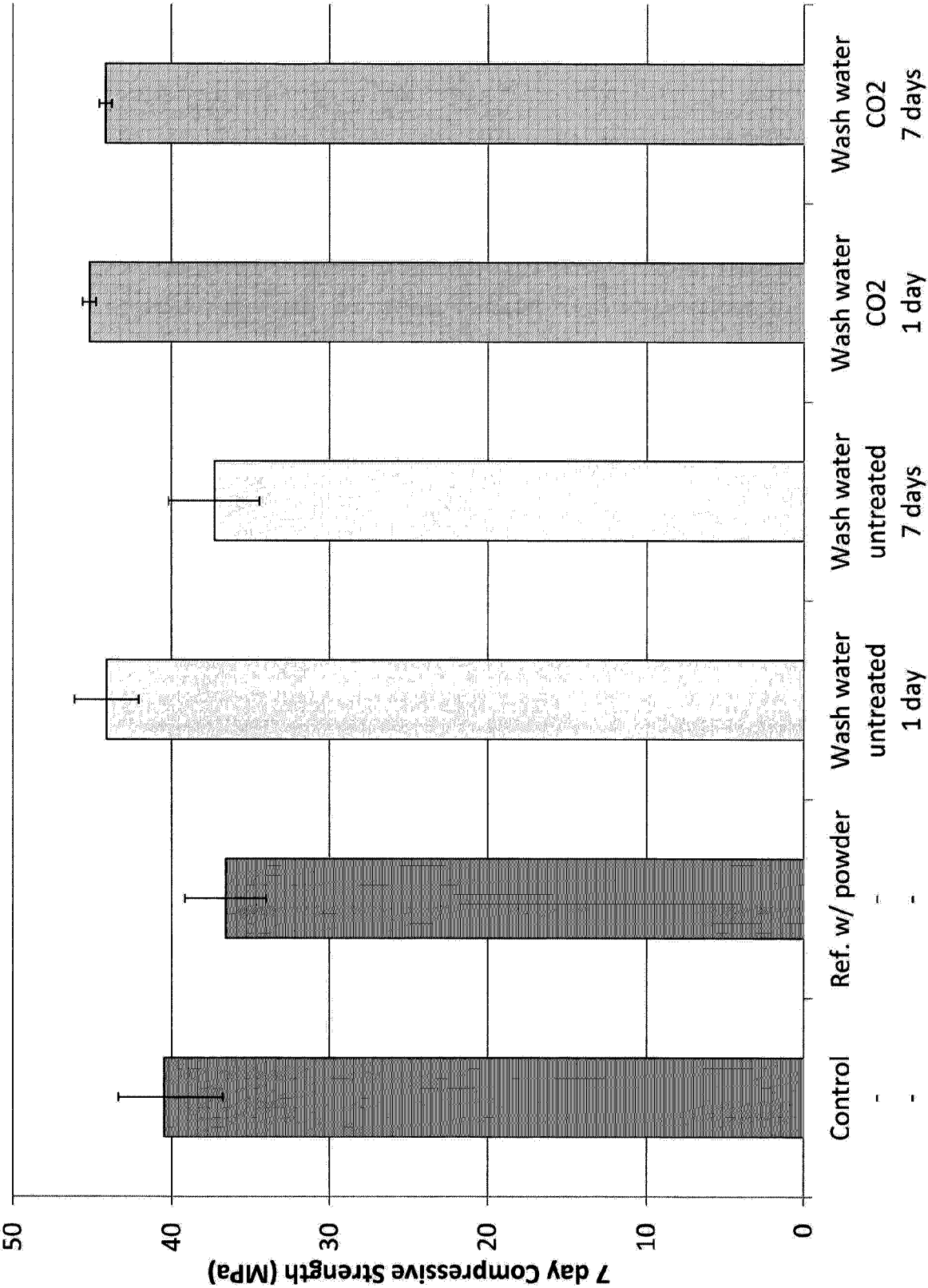


Figure 30

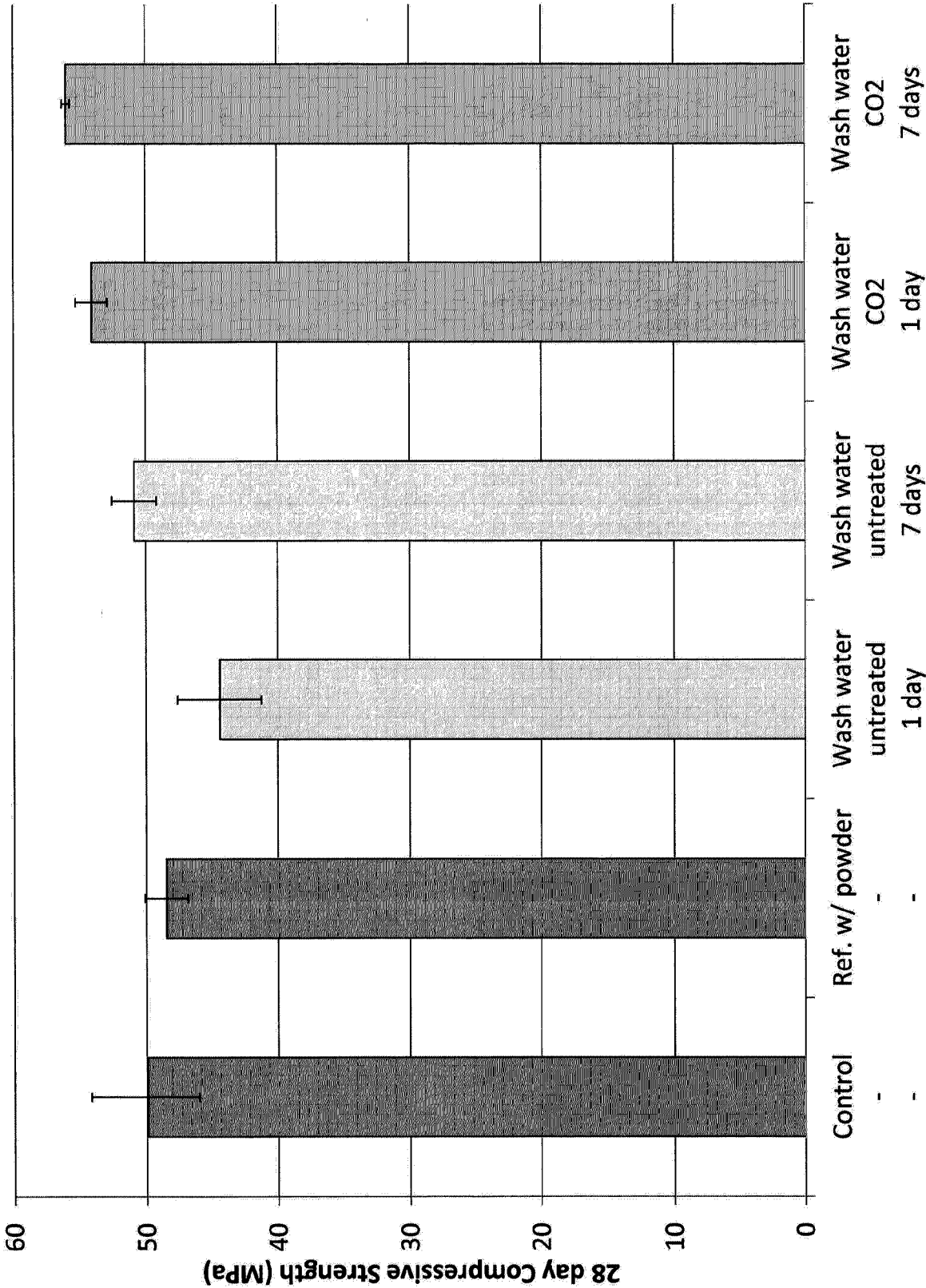


Figure 31

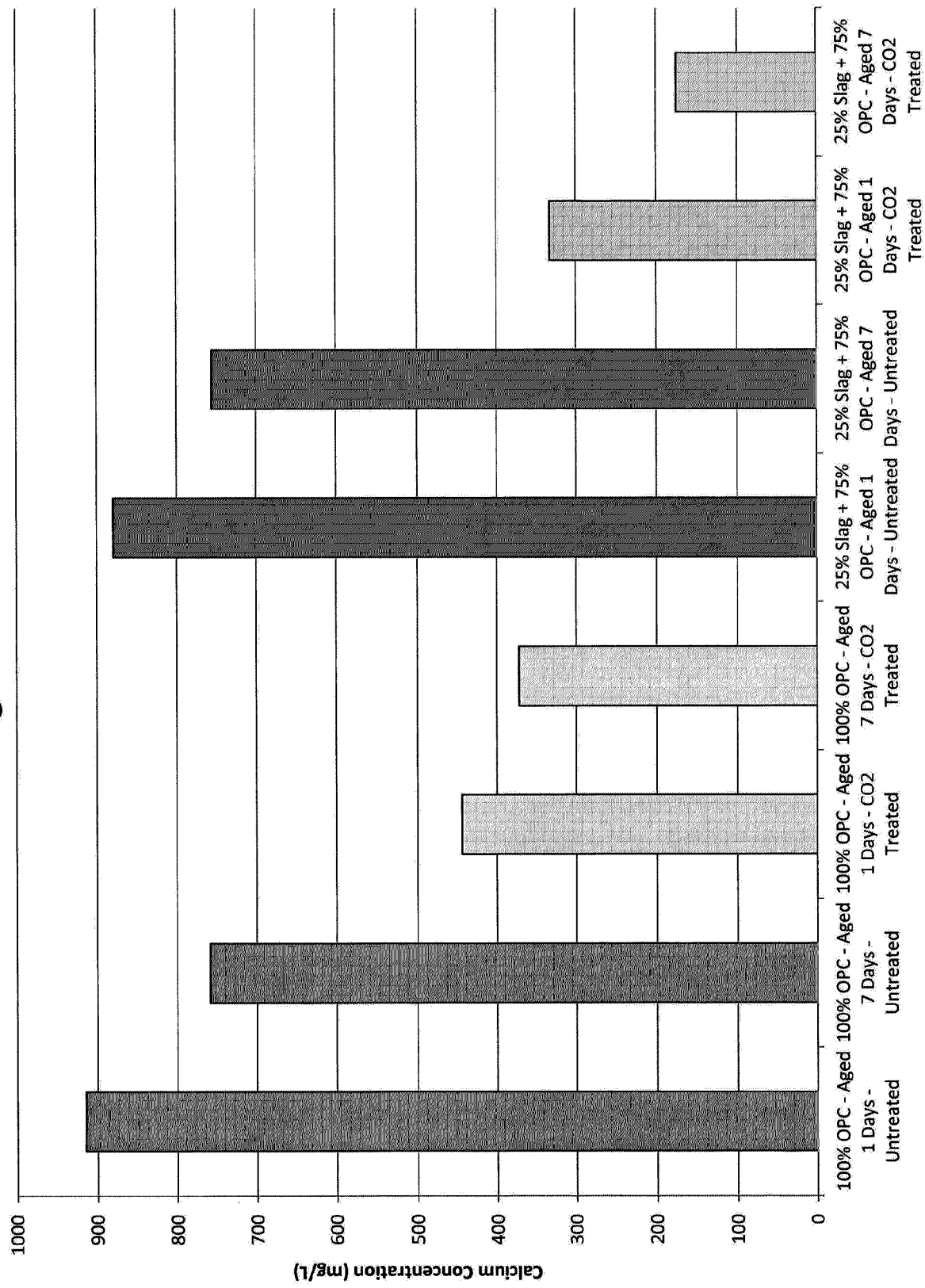


Figure 32

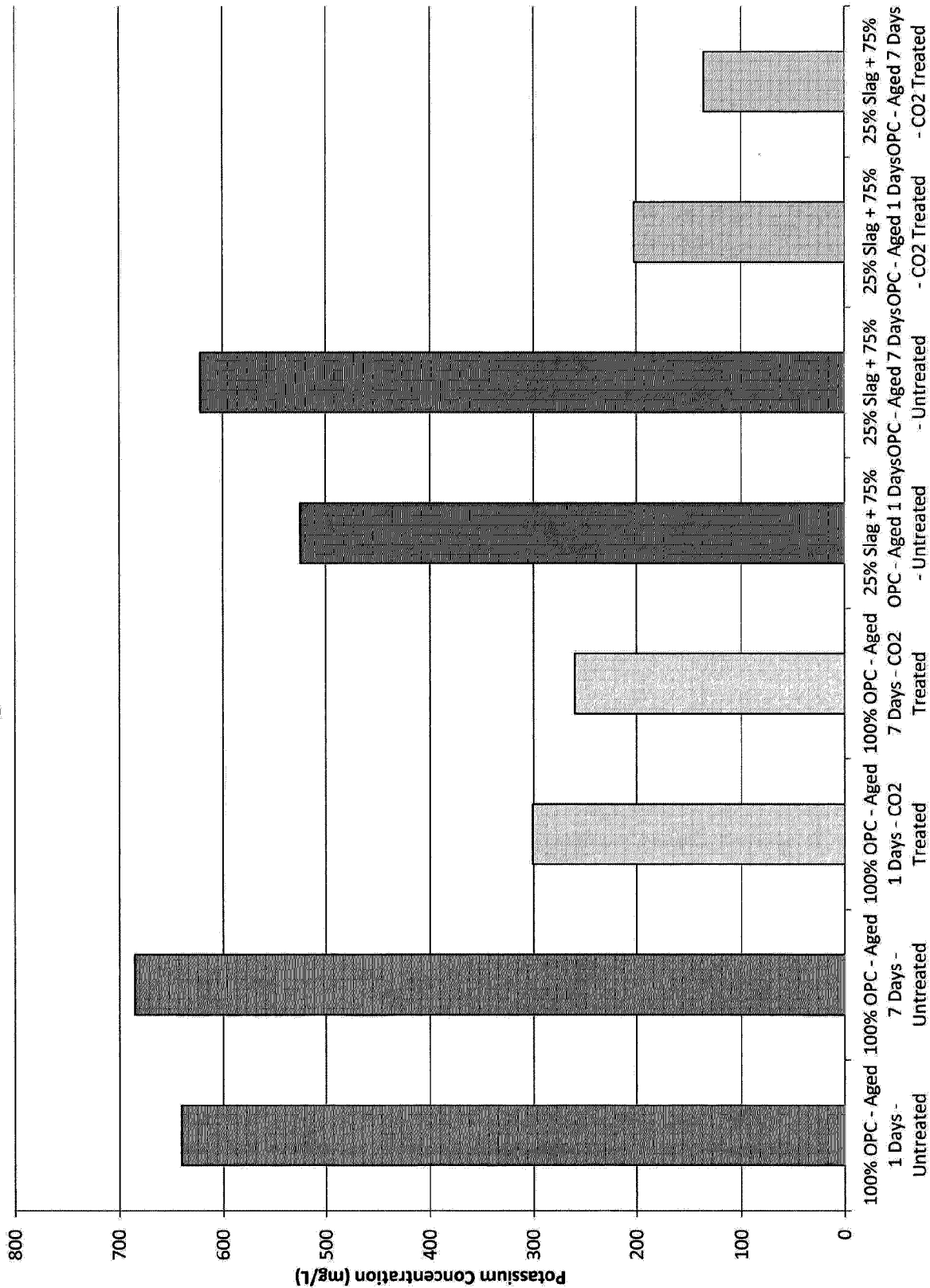


Figure 33

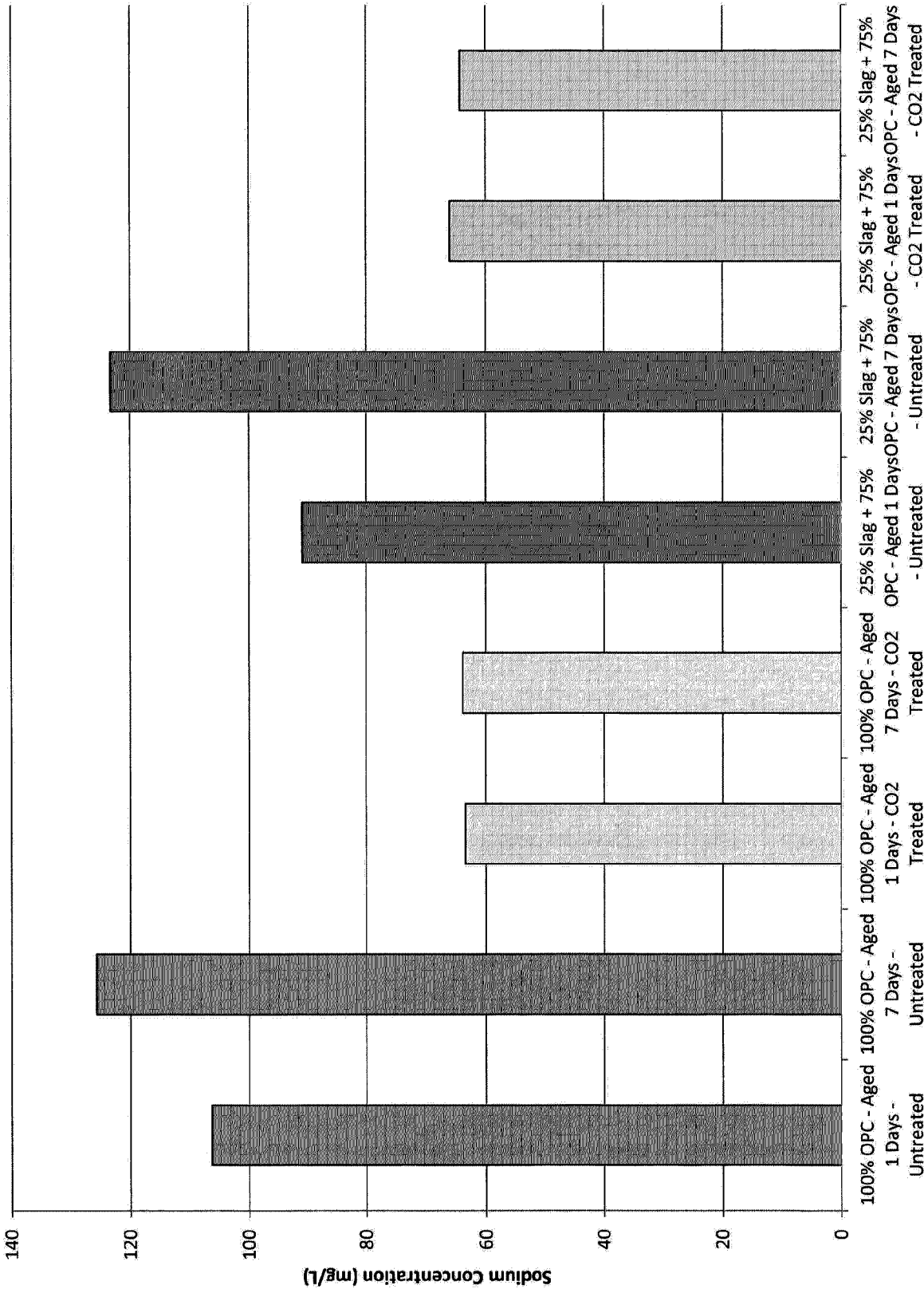


Figure 34

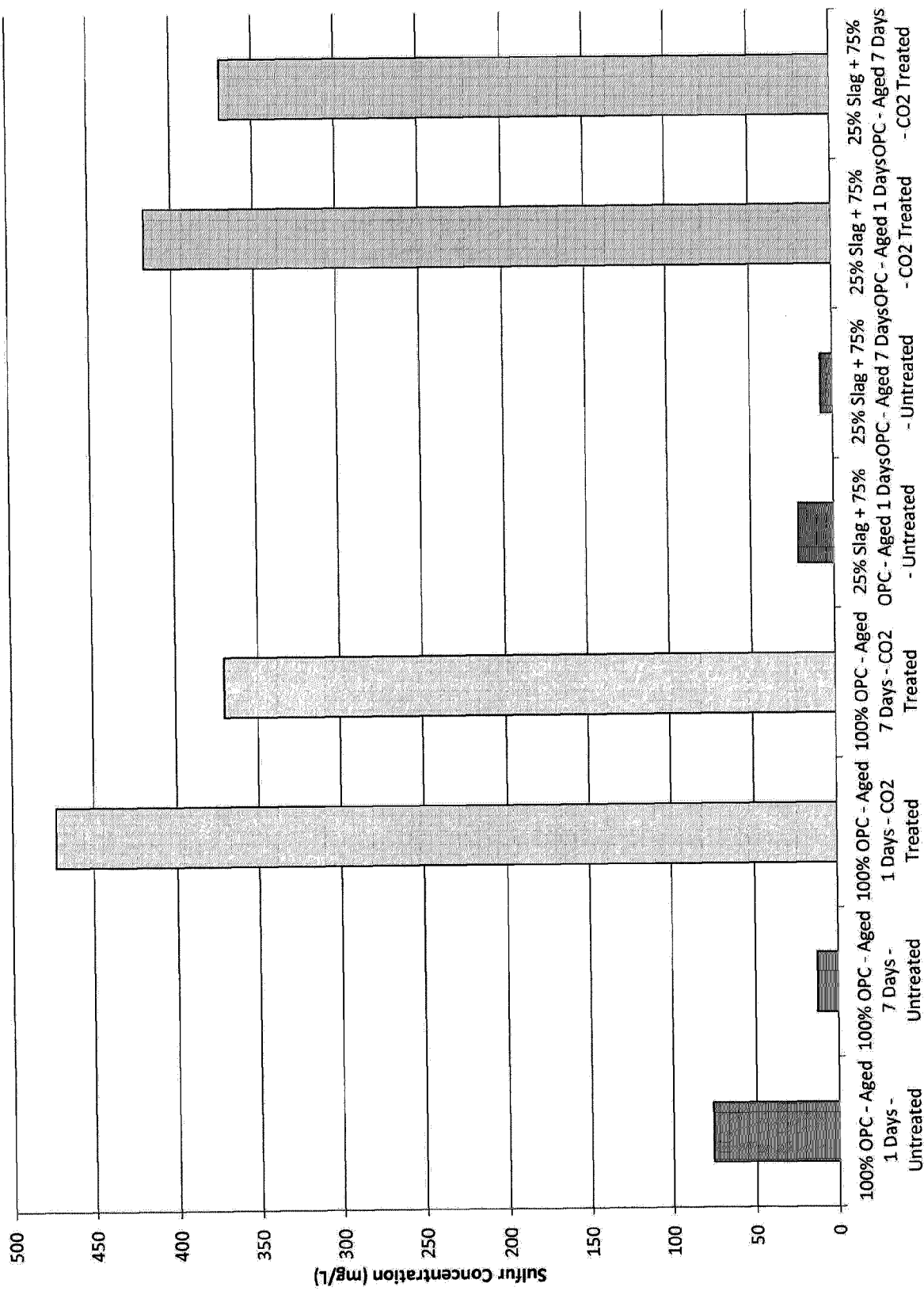


Figure 35

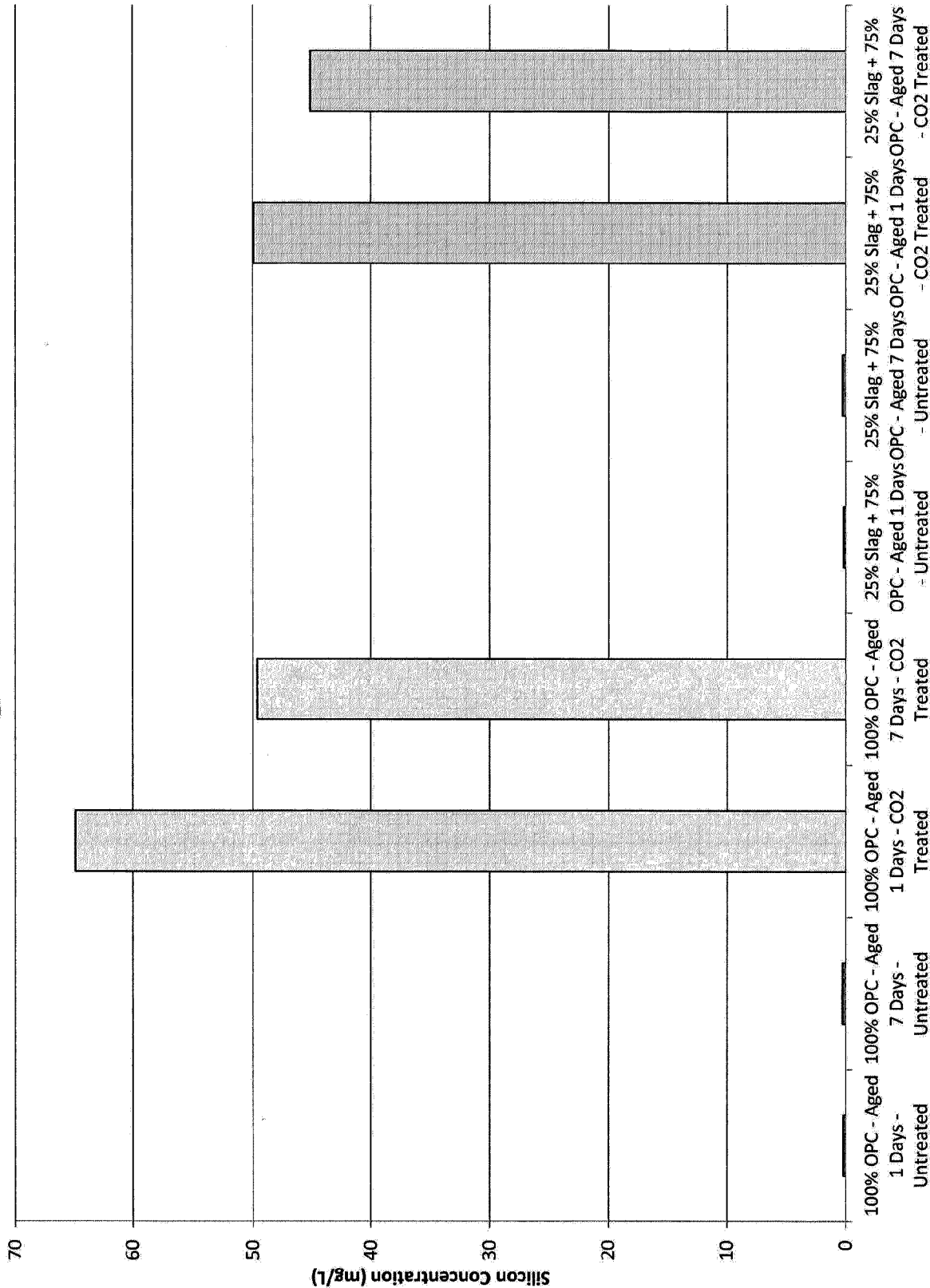


Figure 36

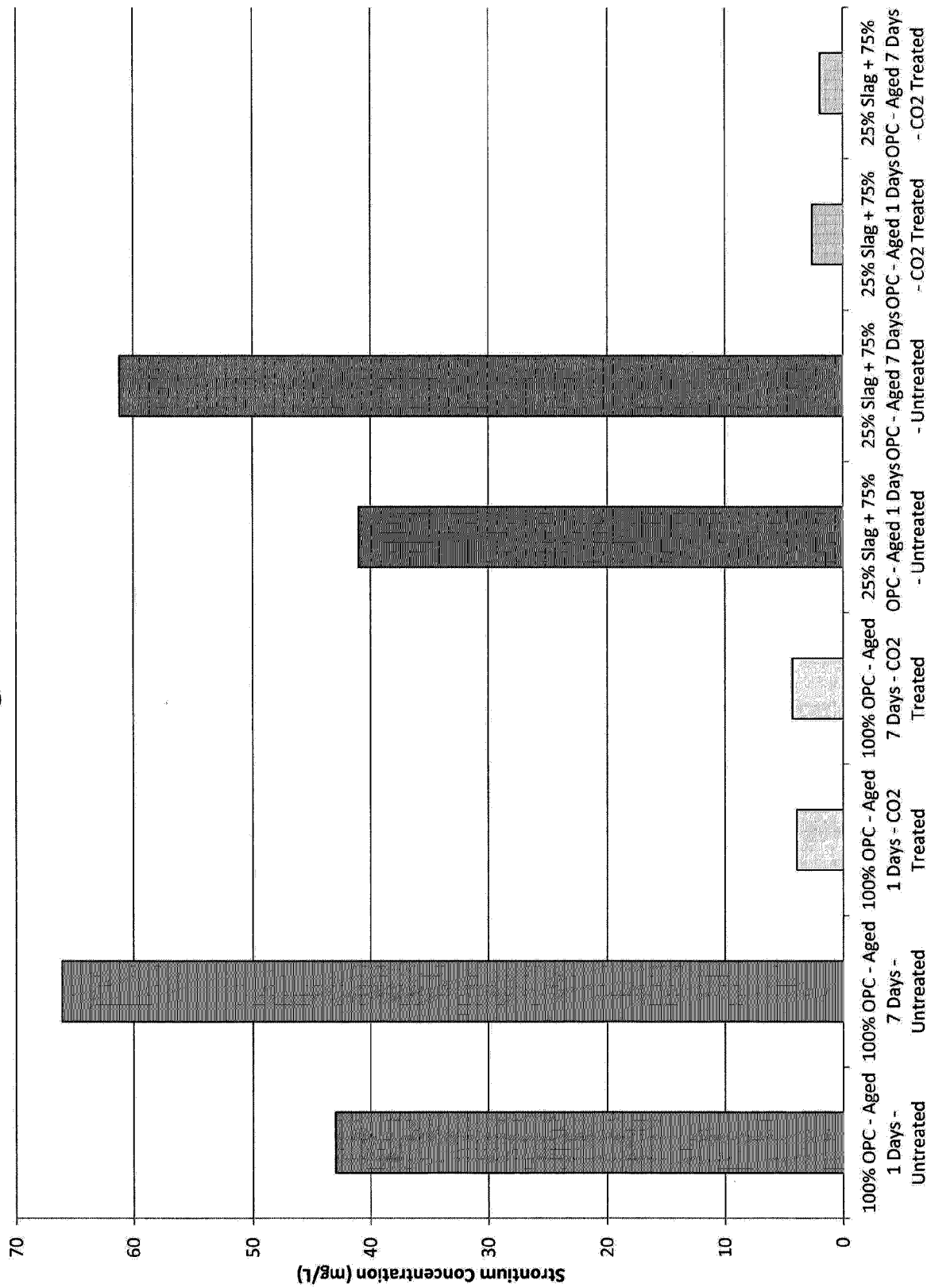


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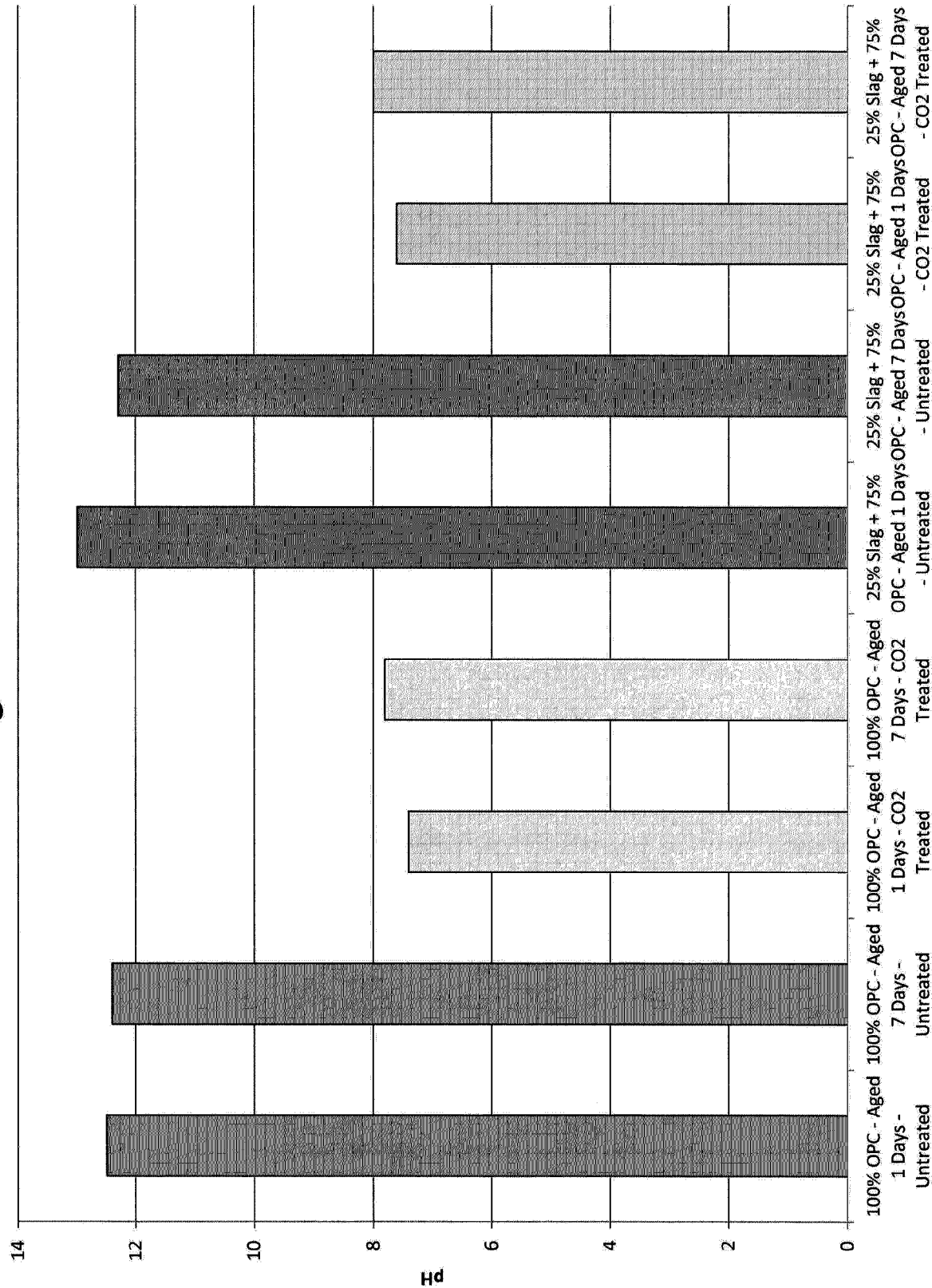


Figure 38

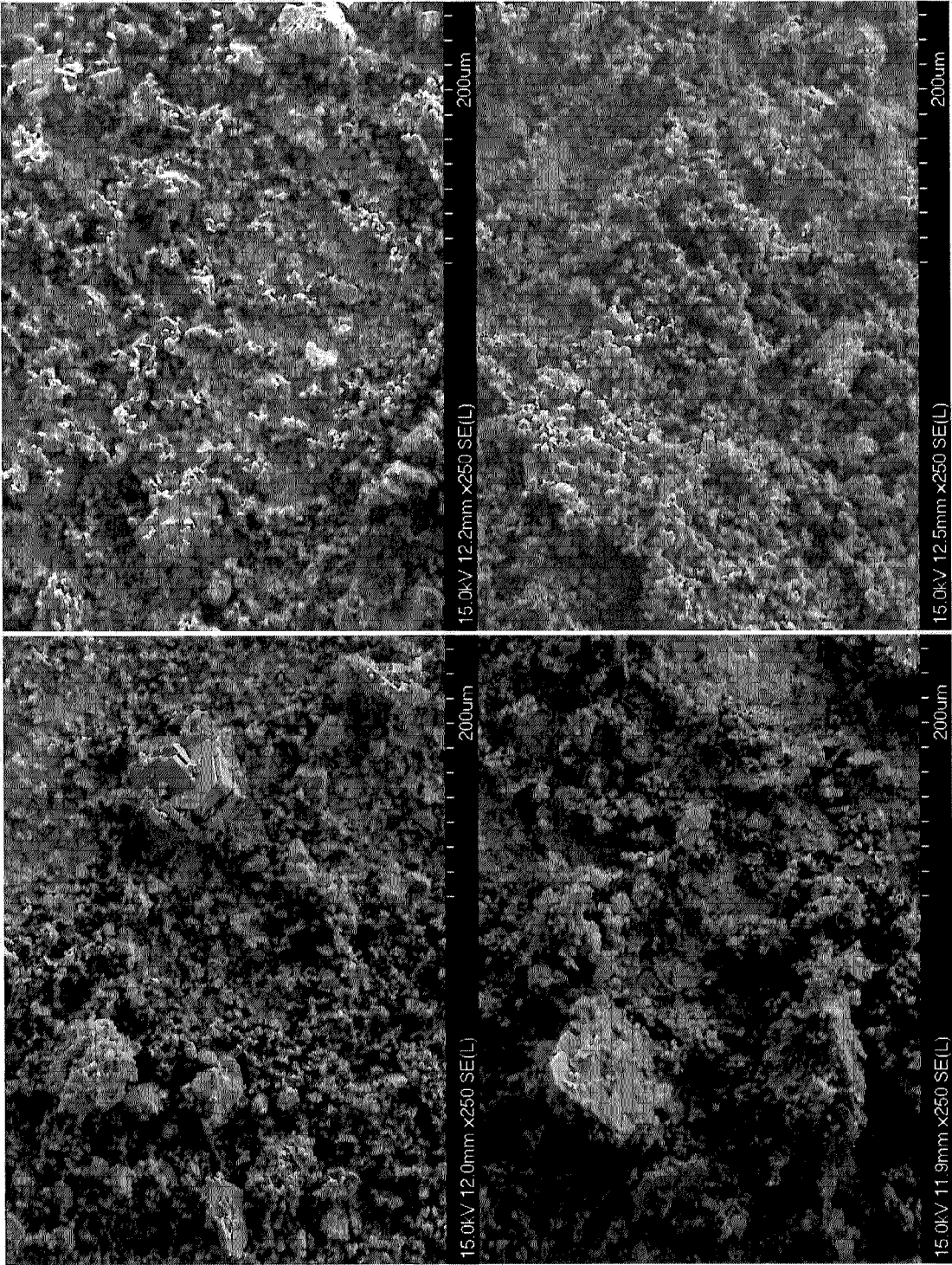
	Analyte Concentration (mg/L)																	
Sample	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	Ga	Ge	In	K	La
100% OPC - Aged 1 Days - Untreated	<0.02	<0.05	<0.2	1.03	<0.01	<0.1	915	<0.01	<0.05	<0.05	0.39	0.01	<0.01	<0.2	<0.5	<0.5	640	<0.05
100% OPC - Aged 7 Days - Untreated	<0.02	<0.05	<0.2	5.33	<0.01	<0.1	759	<0.01	<0.05	<0.05	0.02	<0.01	<0.01	<0.2	<0.5	<0.5	685	<0.05
100% OPC - Aged 1 Days - CO2 Treated	<0.02	0.05	<0.2	0.04	<0.01	<0.1	444	<0.01	<0.05	<0.05	4.54	<0.01	<0.01	<0.2	<0.5	<0.5	301	<0.05
100% OPC - Aged 7 Days - CO2 Treated	<0.02	<0.05	<0.2	0.06	<0.01	<0.1	372	<0.01	<0.05	<0.05	4.90	<0.01	<0.01	<0.2	<0.5	<0.5	260	<0.05
25% Slag + 75% OPC - Aged 1 Days - Untreated	<0.02	<0.05	<0.2	3.17	<0.01	<0.1	880	<0.01	<0.05	<0.05	0.12	0.01	<0.01	<0.2	<0.5	<0.5	525	<0.05
25% Slag + 75% OPC - Aged 7 Days - Untreated	<0.02	0.22	<0.2	5.16	<0.01	<0.1	755	<0.01	<0.05	<0.05	0.03	0.02	<0.01	<0.2	<0.5	<0.5	621	<0.05
25% Slag + 75% OPC - Aged 1 Days - CO2 Treated	<0.02	<0.05	<0.2	0.07	<0.01	<0.1	333	<0.01	<0.05	<0.05	0.29	0.01	<0.01	<0.2	<0.5	<0.5	202	<0.05
25% Slag + 75% OPC - Aged 7 Days - CO2 Treated	<0.02	<0.05	<0.2	0.07	<0.01	<0.1	175	<0.01	<0.05	<0.05	0.02	0.03	<0.01	<0.2	<0.5	<0.5	135	<0.05

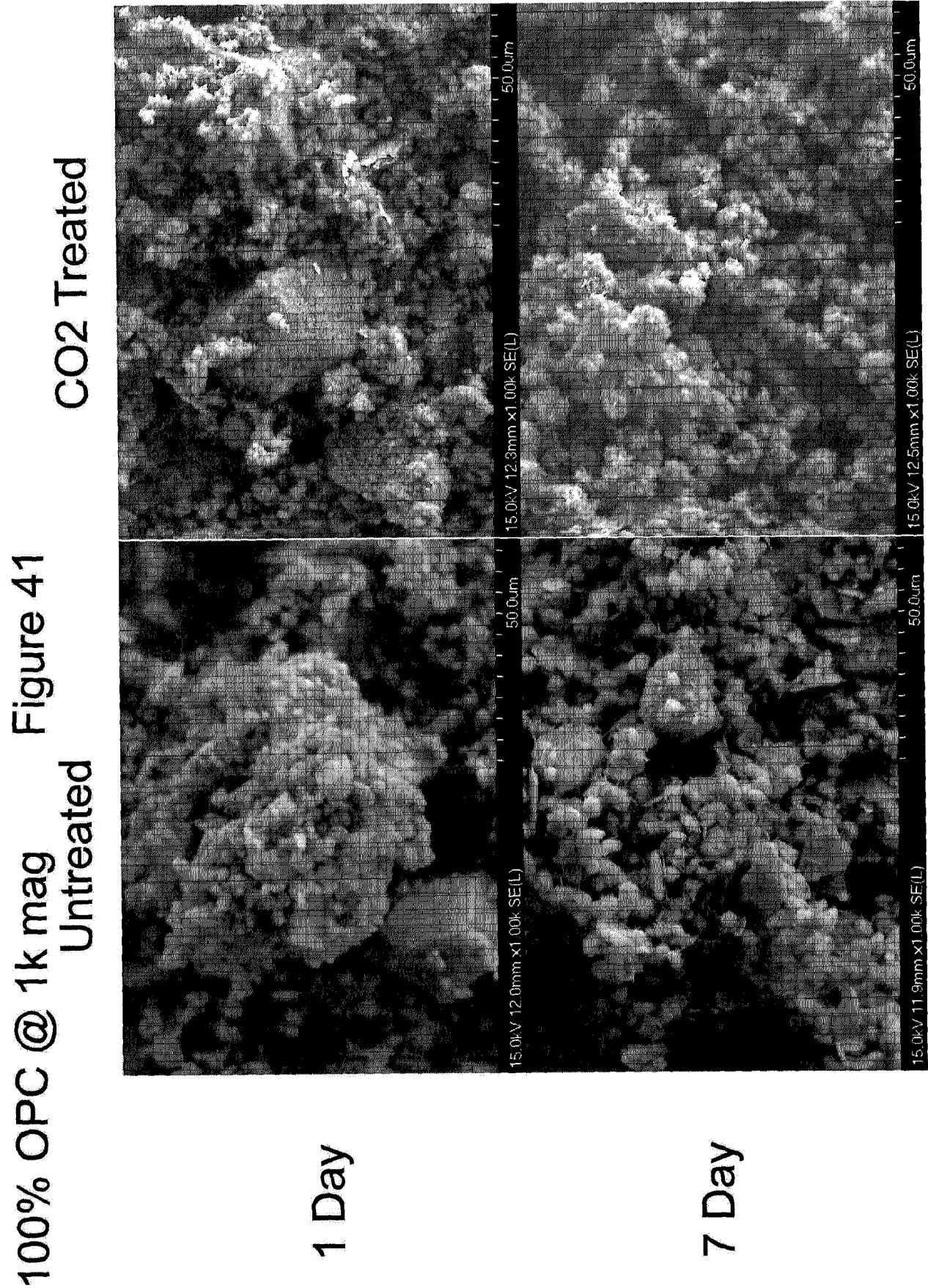
Figure 39

Analyte Concentration (mg/L)																							
Sample	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Sr	Ta	Te	Ti	Ti	V	Zn	Zr	pH
100% OPC - Aged 1 Days - Untreated	2.7	0.01	<0.01	0.1	106	<0.2	<0.01	<0.1	<0.1	76	<0.1	<0.5	0.2	<0.5	43.0	<0.5	<0.5	0.09	<0.5	<0.01	0.02	<0.01	12.5
100% OPC - Aged 7 Days - Untreated	4.0	<0.01	<0.01	<0.1	126	<0.2	<0.01	<0.1	<0.1	13	<0.1	<0.5	0.3	<0.5	66.1	<0.5	<0.5	0.08	<0.5	0.01	<0.01	<0.01	12.4
100% OPC - Aged 1 Days - CO2 Treated	1.0	64.1	<0.01	0.8	63	<0.2	<0.01	<0.1	<0.1	473	<0.1	<0.5	64.9	<0.5	3.90	<0.5	<0.5	0.05	<0.5	0.11	<0.01	<0.01	7.4
100% OPC - Aged 7 Days - CO2 Treated	1.5	136	<0.01	0.5	64	<0.2	<0.01	<0.1	<0.1	371	<0.1	0.6	49.6	<0.5	4.27	<0.5	<0.5	0.04	<0.5	0.13	<0.01	<0.01	7.8
25% Slag + 75% OPC - Aged 1 Days - Untreated	2.3	0.01	<0.01	<0.1	91	<0.2	<0.01	<0.1	<0.1	21	<0.1	<0.5	0.2	<0.5	41.0	<0.5	<0.5	0.08	<0.5	<0.01	<0.01	<0.01	13
25% Slag + 75% OPC - Aged 7 Days - Untreated	4.0	<0.01	<0.01	<0.1	123	<0.2	<0.01	<0.1	<0.1	7	<0.1	<0.5	0.3	<0.5	61.2	<0.5	<0.5	0.07	<0.5	<0.01	<0.01	0.01	12.3
25% Slag + 75% OPC - Aged 1 Days - CO2 Treated	1.2	70.8	<0.01	0.7	66	<0.2	<0.01	<0.1	<0.1	416	<0.1	<0.5	49.9	<0.5	2.58	<0.5	<0.5	0.04	<0.5	0.11	0.01	<0.01	7.6
25% Slag + 75% OPC - Aged 7 Days - CO2 Treated	1.6	213	<0.01	0.6	64	<0.2	<0.01	<0.1	<0.1	370	<0.1	0.6	45.2	<0.5	1.90	<0.5	<0.5	0.02	<0.5	0.11	0.01	<0.01	8

100% OPC @ 250 mag Figure 40
Untreated

CO2 Treated





100% OPC @ 25k mag Figure 42 CO₂ Treated
Untreated

1 Day

7 Day

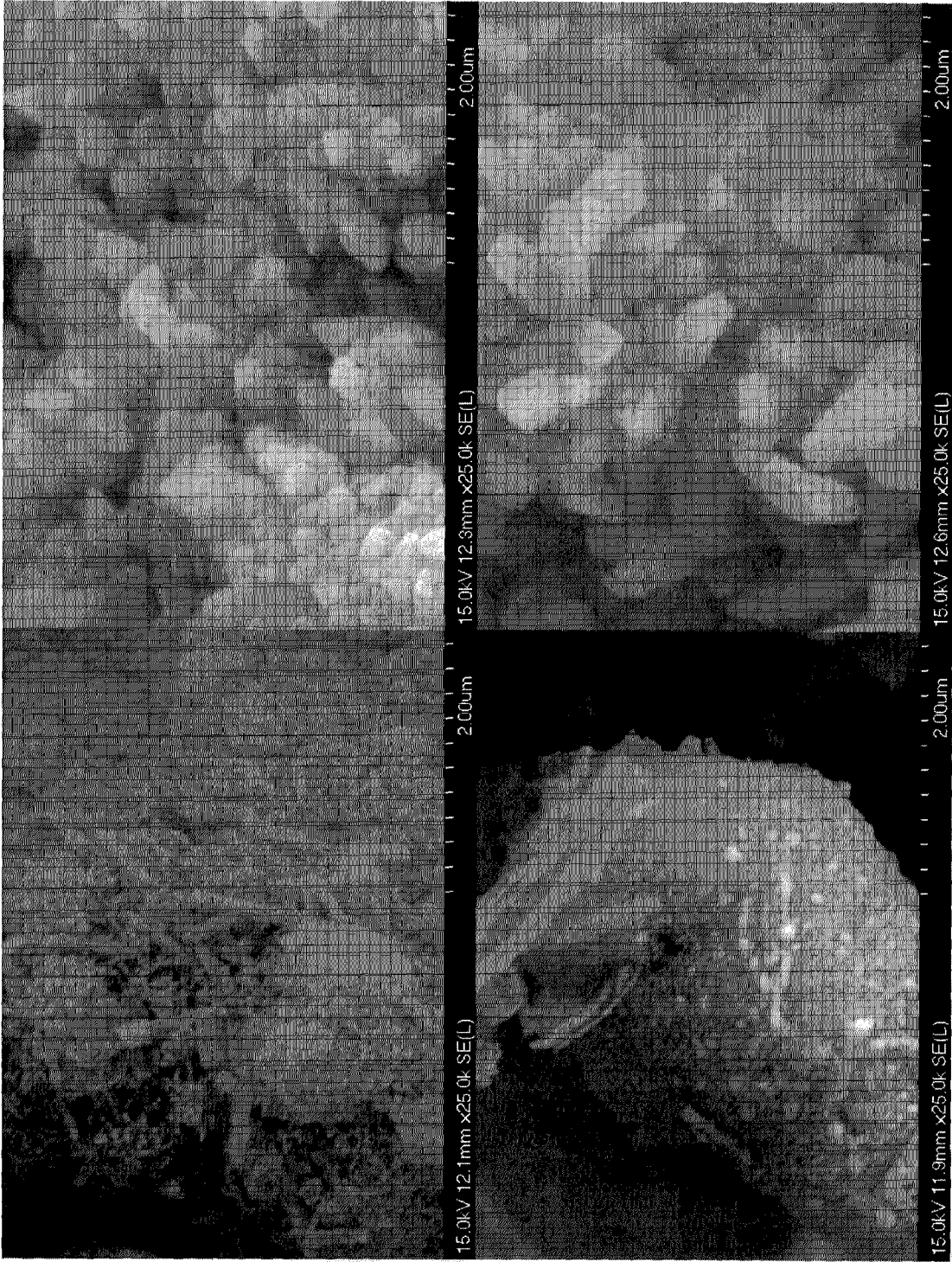
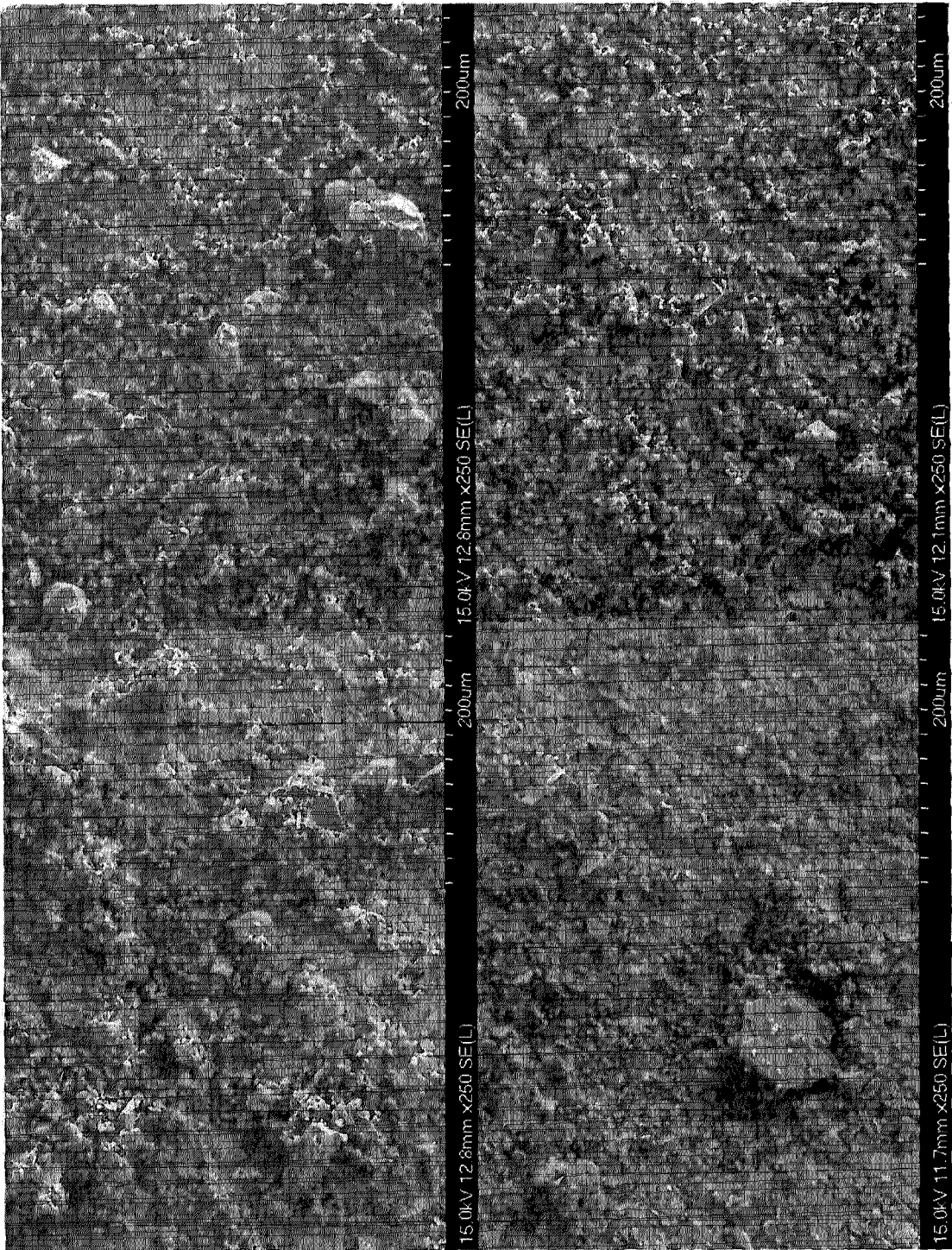


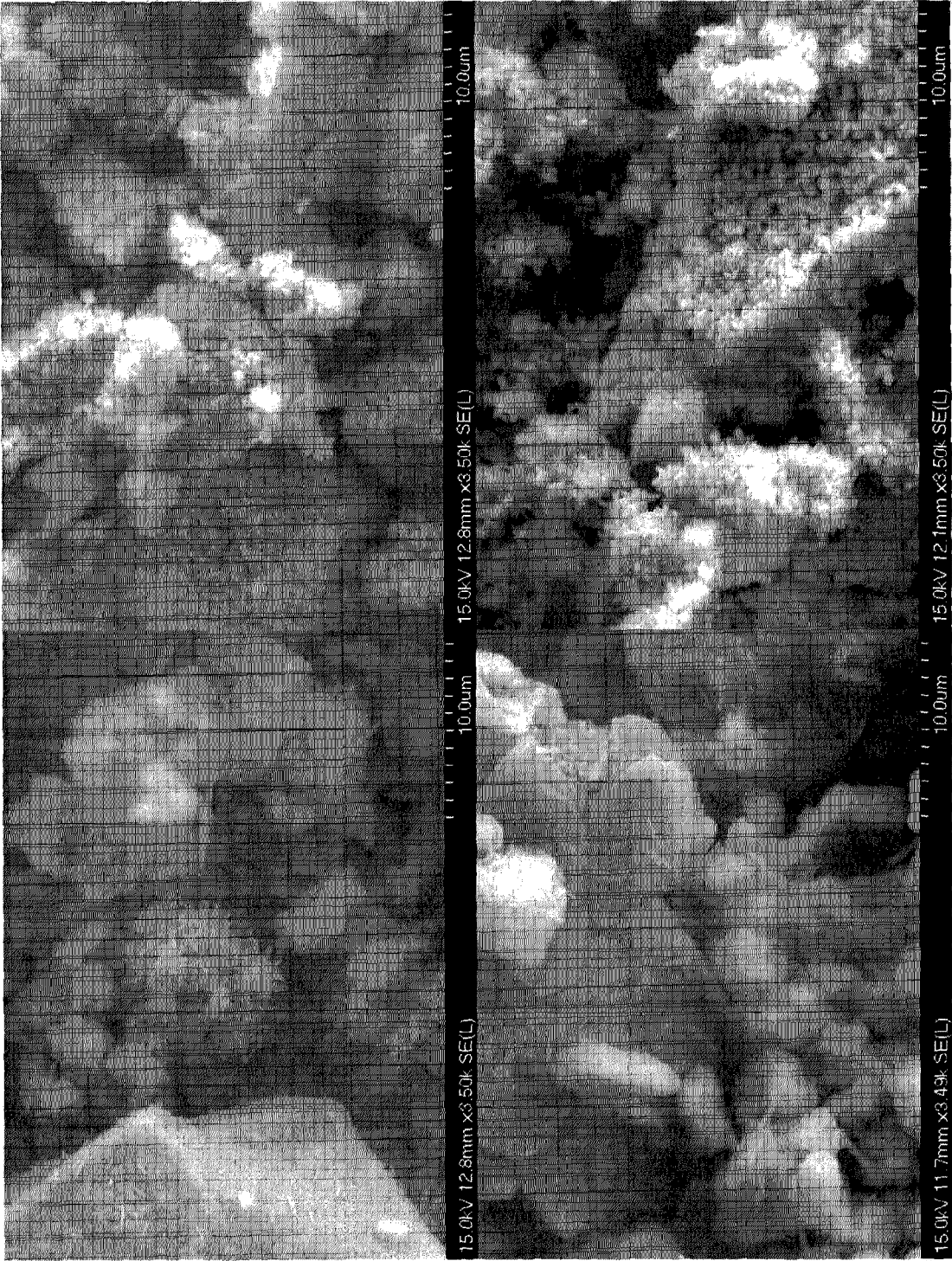
Figure 43
75% OPC + 25% Slag @ 250 mag
Untreated
CO2 Treated



1 Day

7 Day

Figure 44
75% OPC + 25% Slag @ 3.5 k mag
Untreated
CO2 Treated



1 Day

7 Day

Figure 45
75% OPC + 25% Slag @ 25 k mag
Untreated
CO2 Treated

1 Day

7 Day

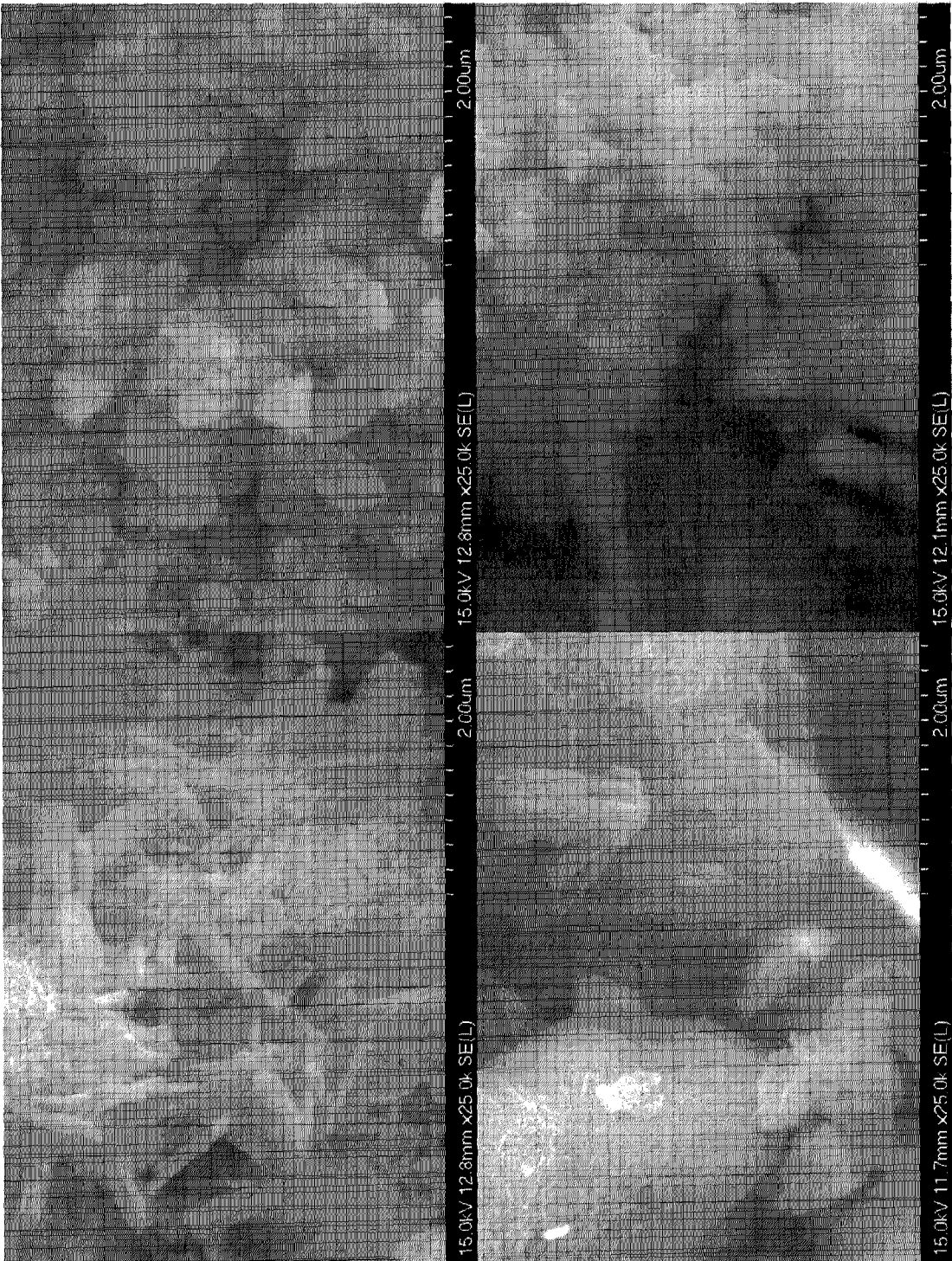


Figure 46

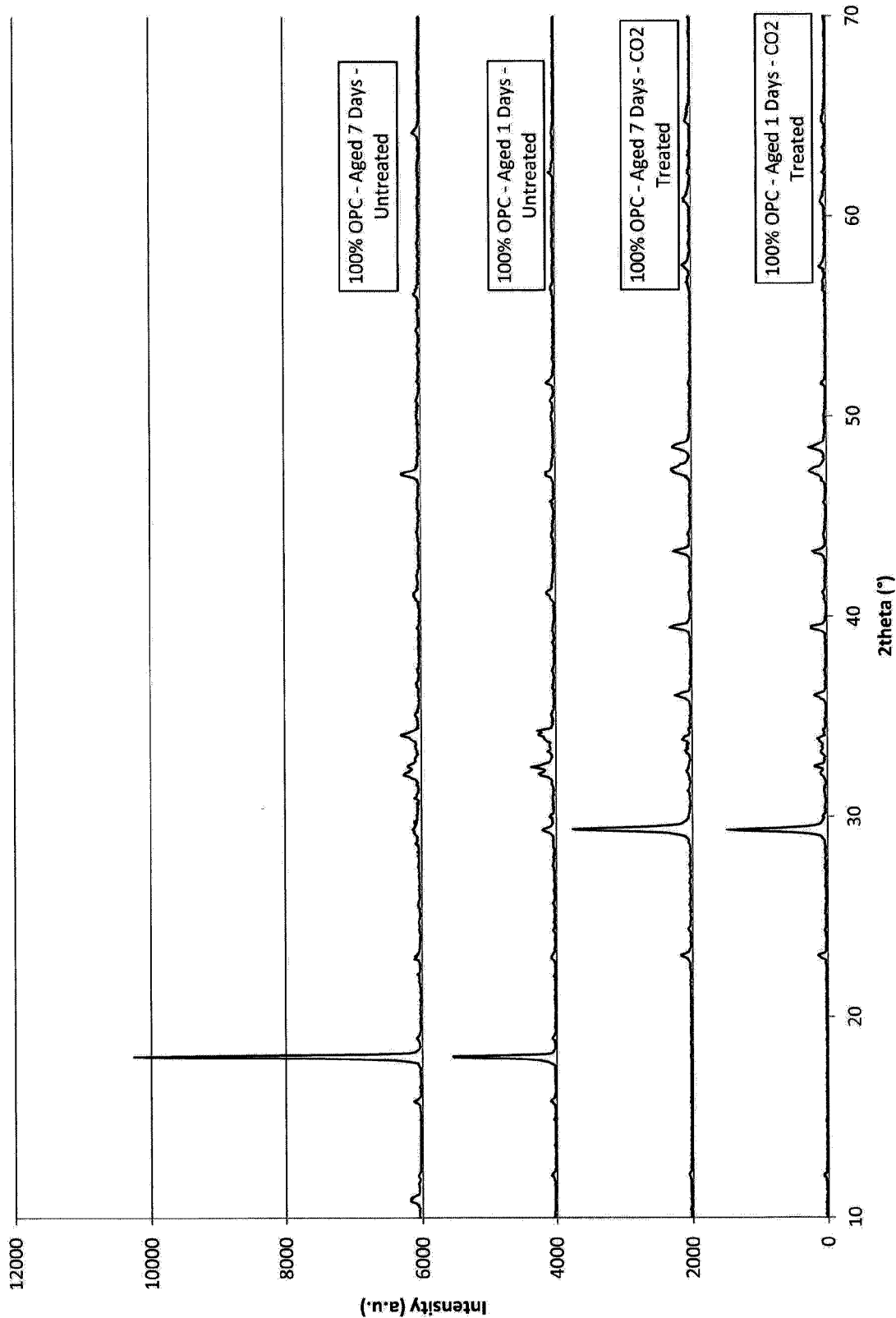


Figure 47

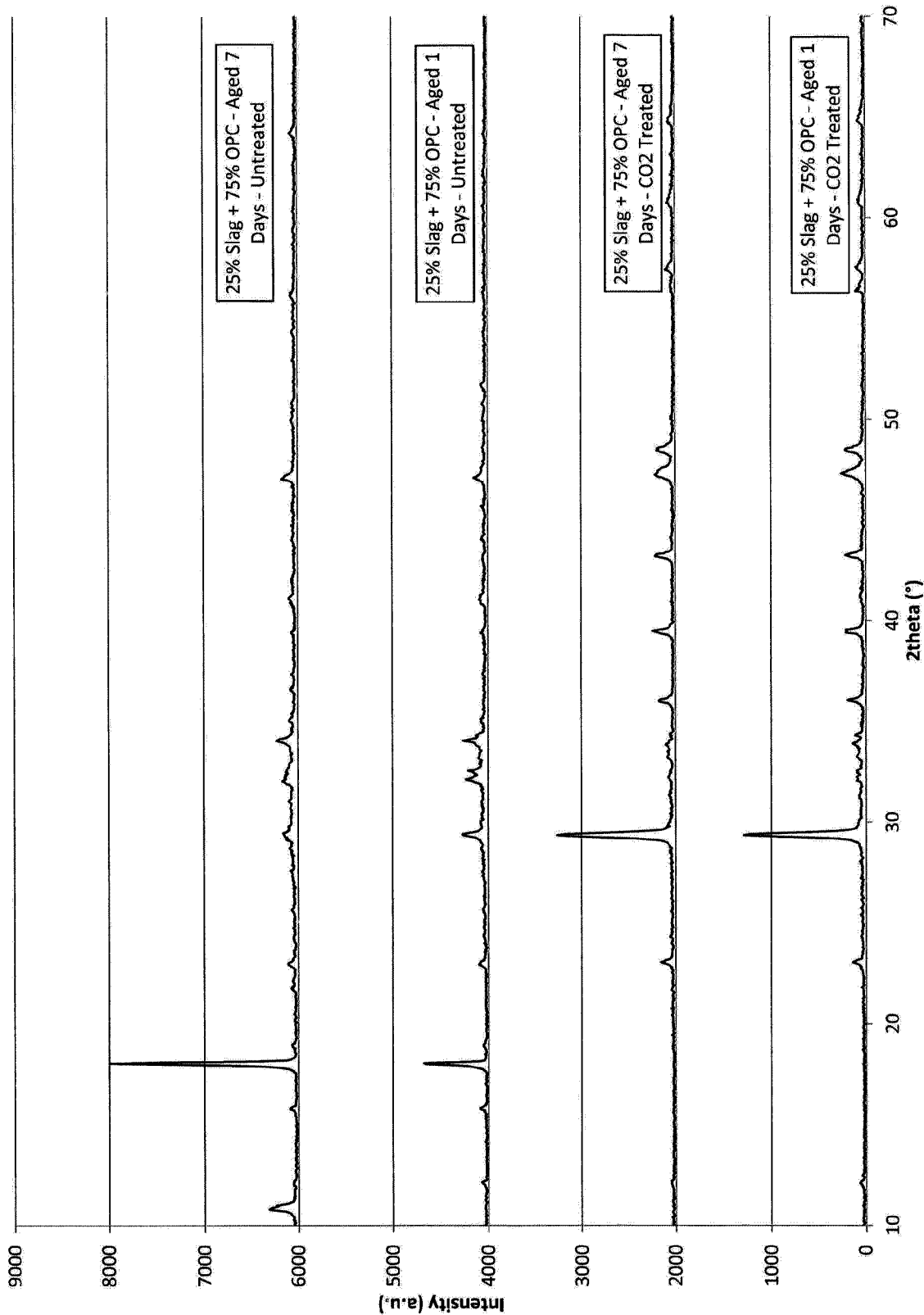


Figure 48

100% OPC Series

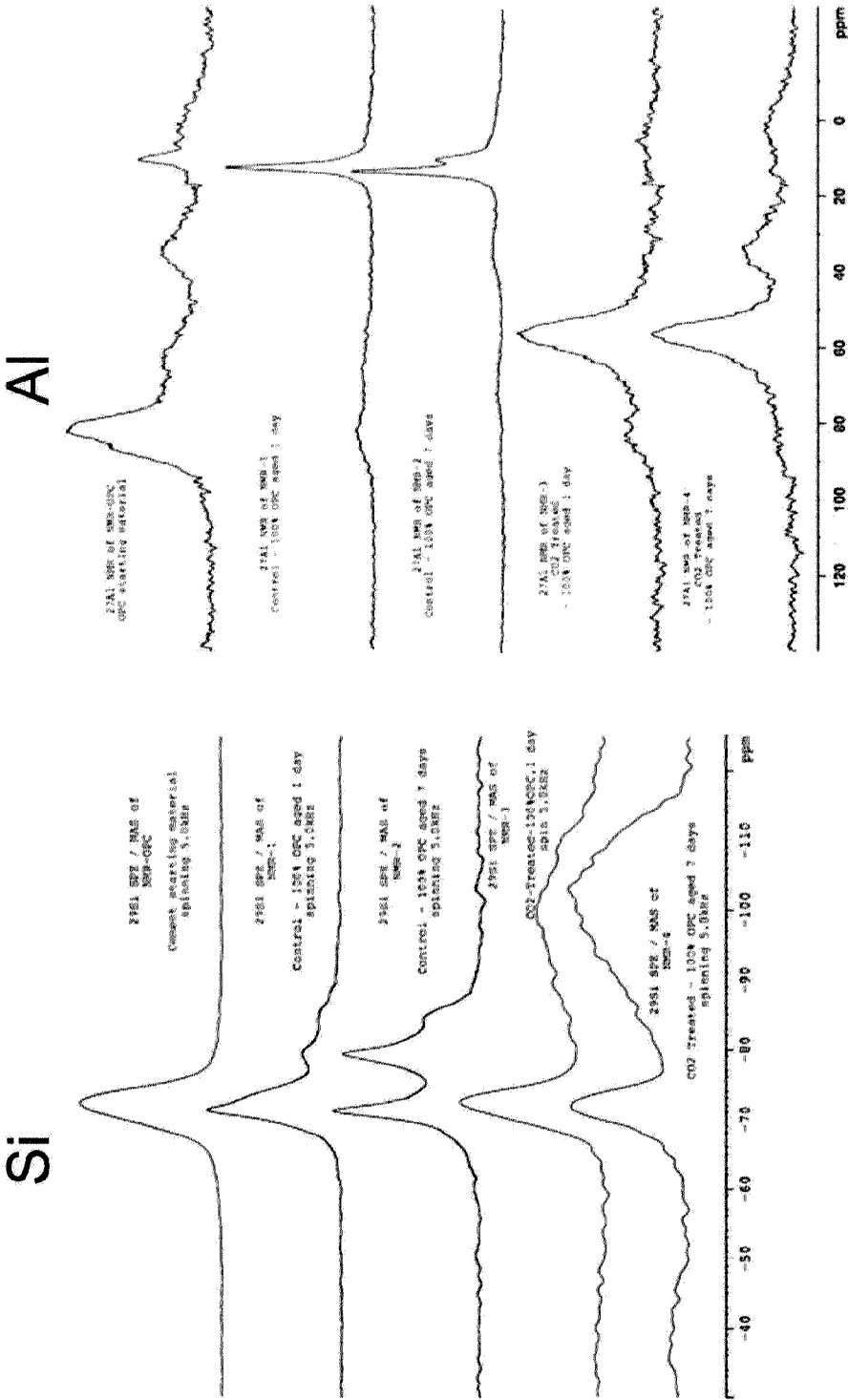


Fig. 5. ^{29}Si NMR spectra of 100% OPC based samples undergone various treatments (SLNMR-mc-Slag.pdf)

Fig. 10. ^{27}Al NMR spectra of 100% OPC based samples undergone various treatments (AL100.OPC.pdf)

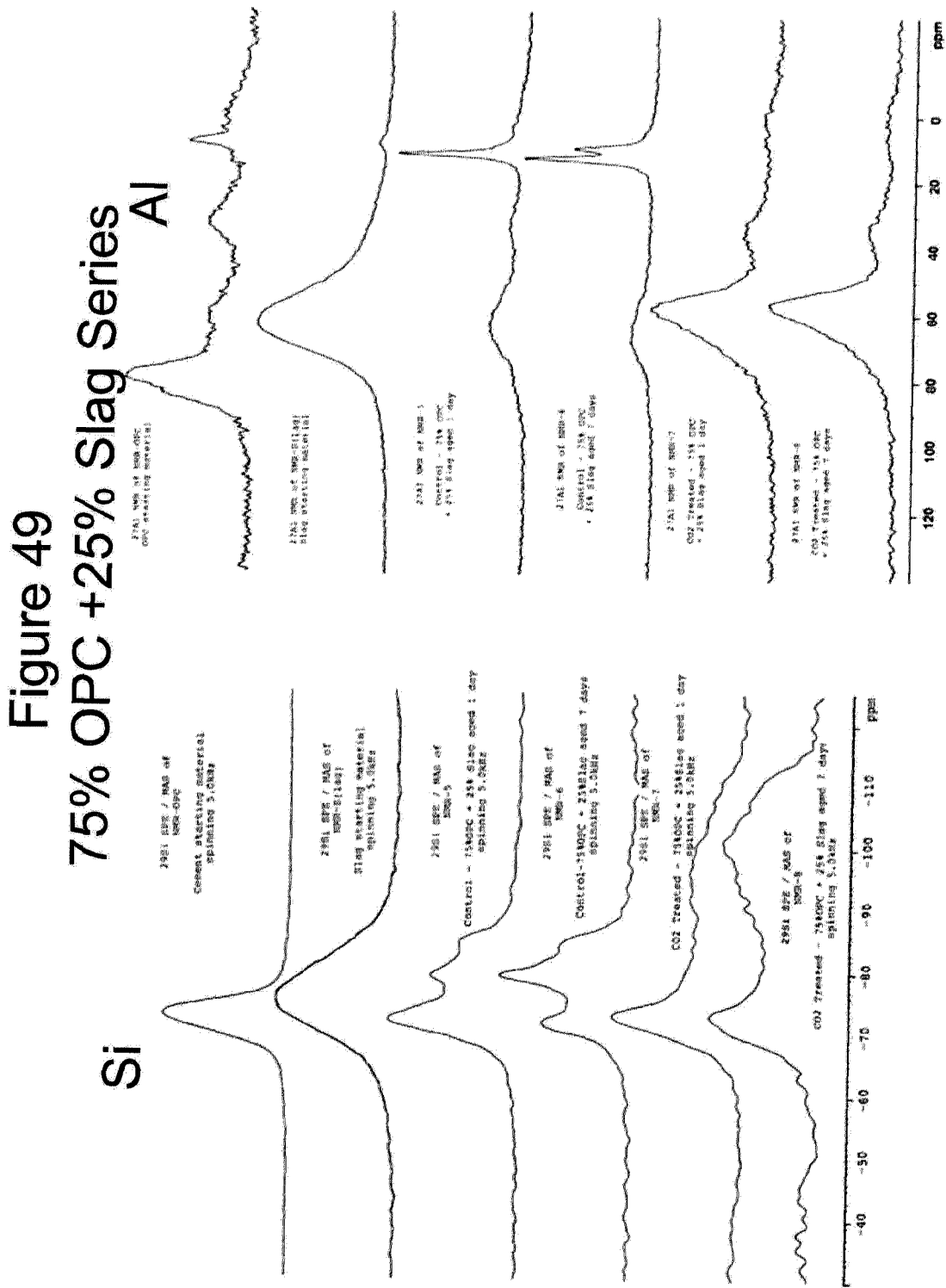


Fig. 6. ²⁹Si NMR spectra of 75% OPC + 25% Slag based samples undergone various treatments (Si_Slag_samples.pdf)

Fig. 9. ²⁷Al NMR spectra of 75% OPC + 25% Slag based samples undergone various treatments (Al_Slag.pdf)

Figure 50

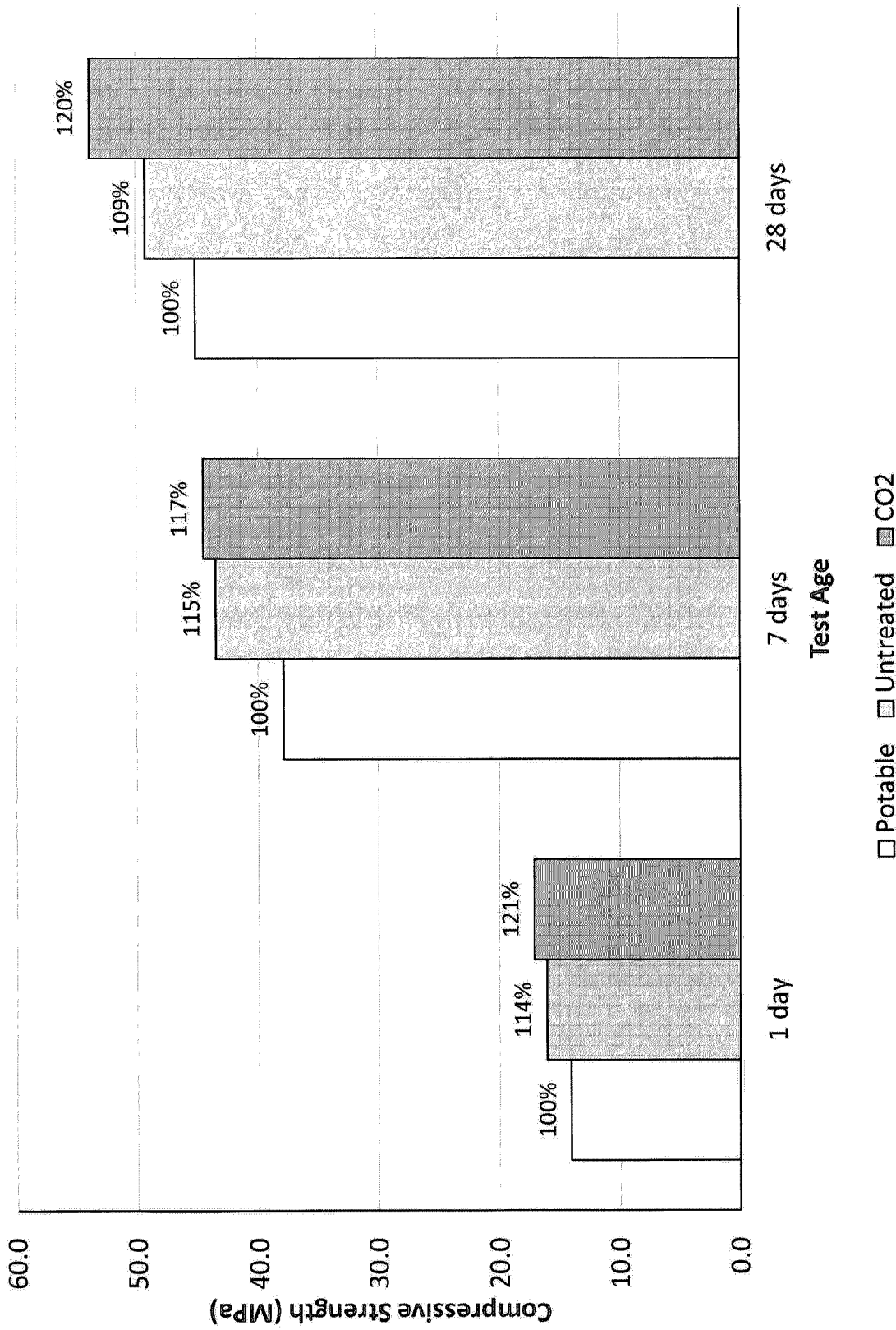


Figure 51

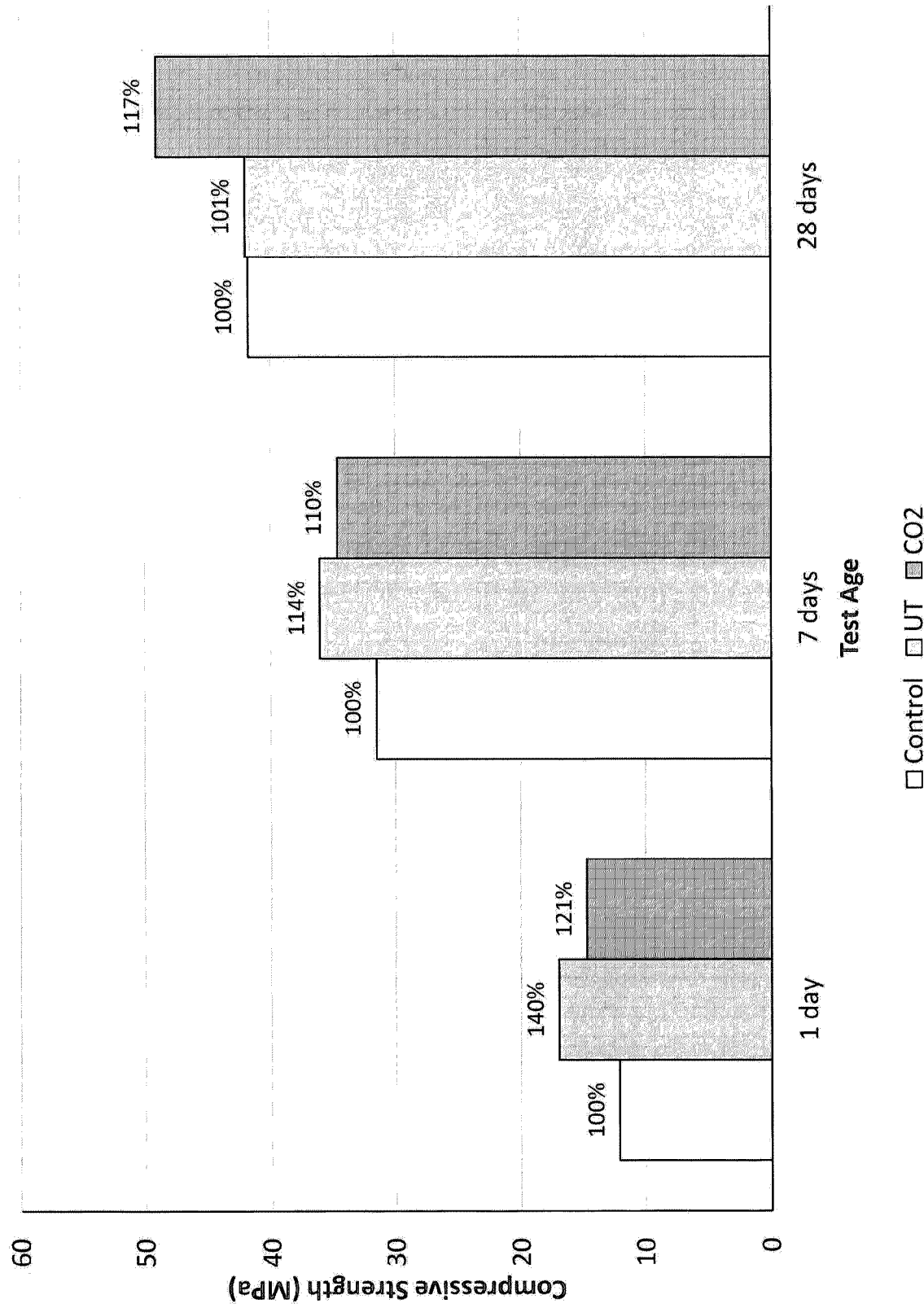


Figure 52

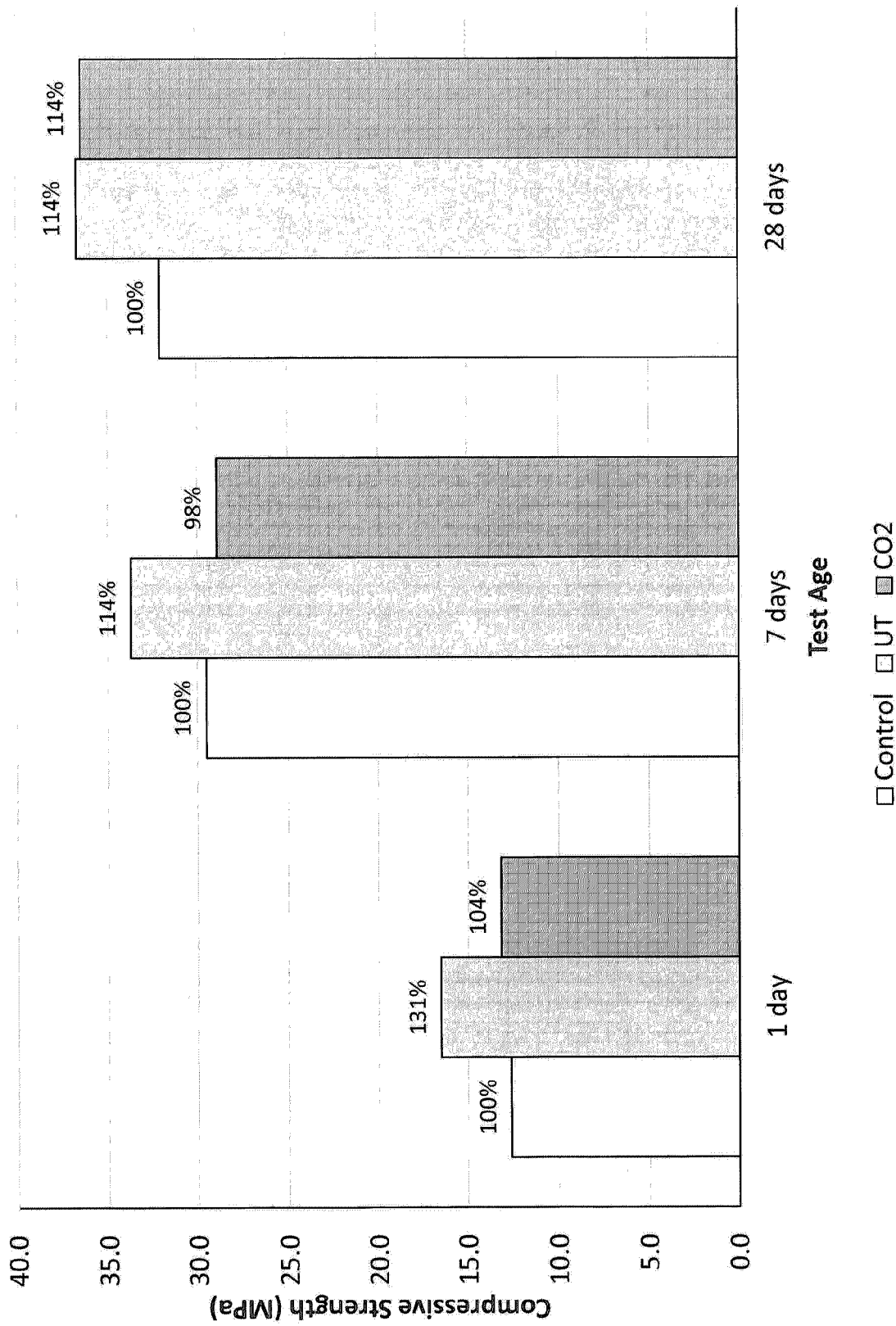


Figure 53

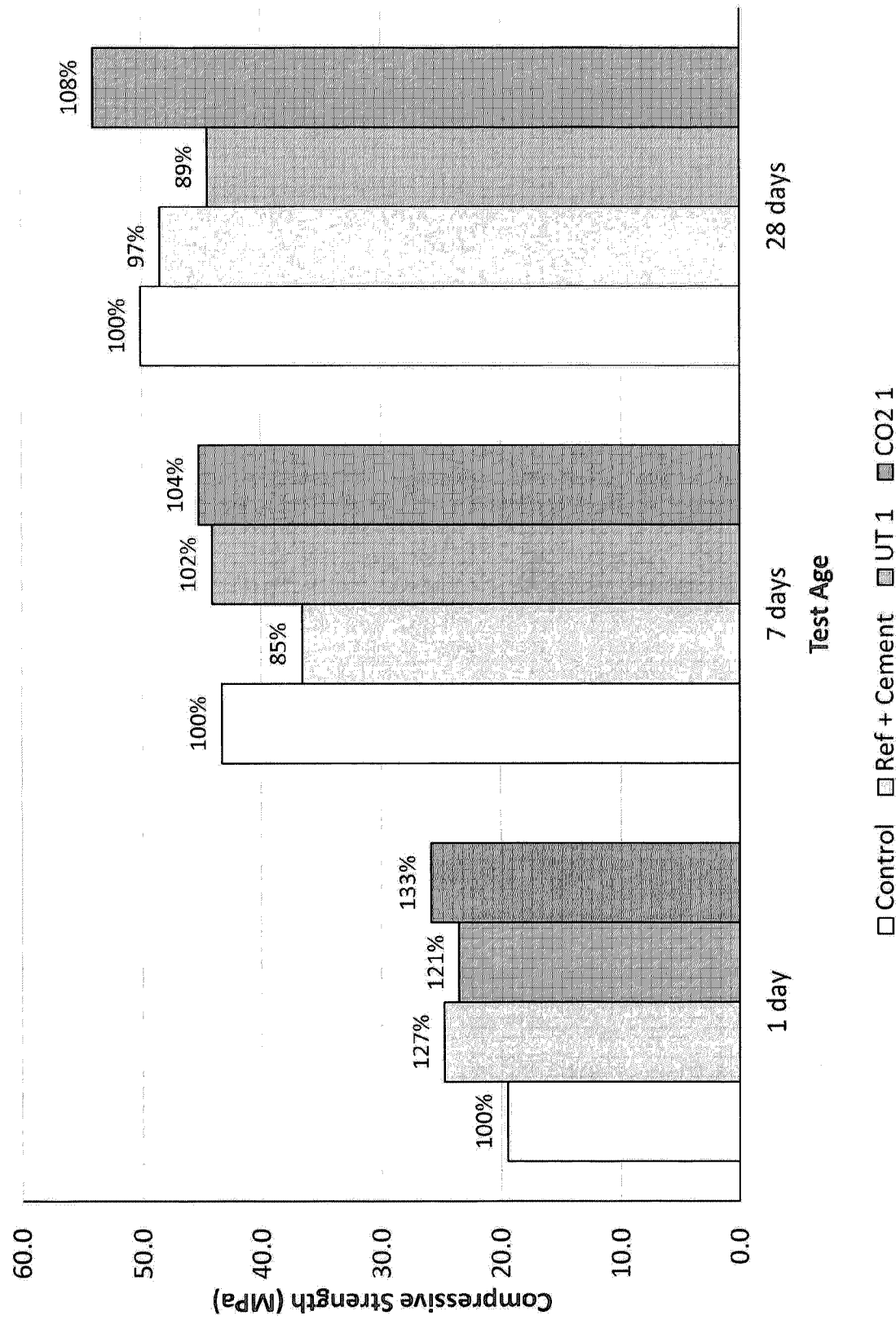


Figure 54

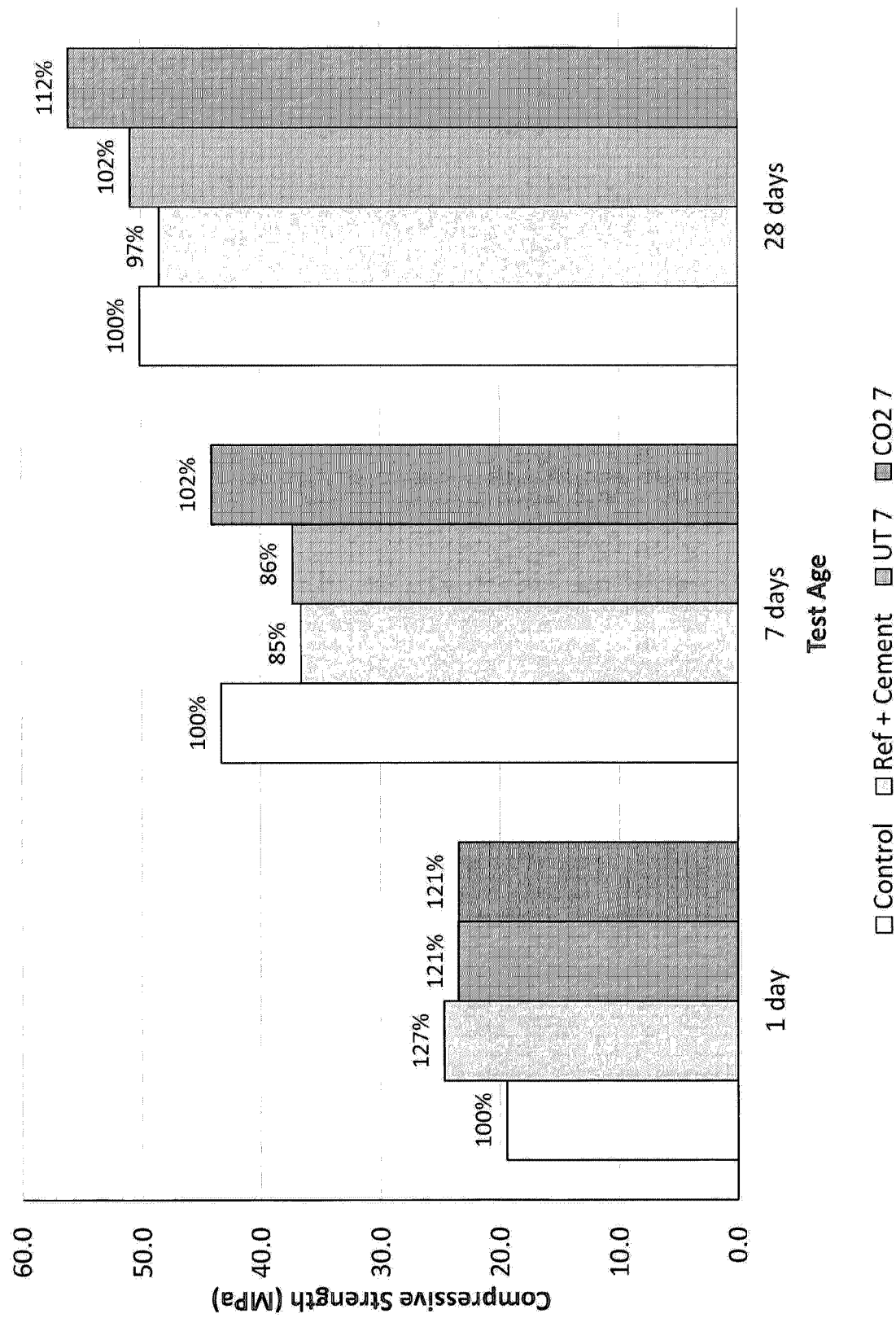


Figure 55

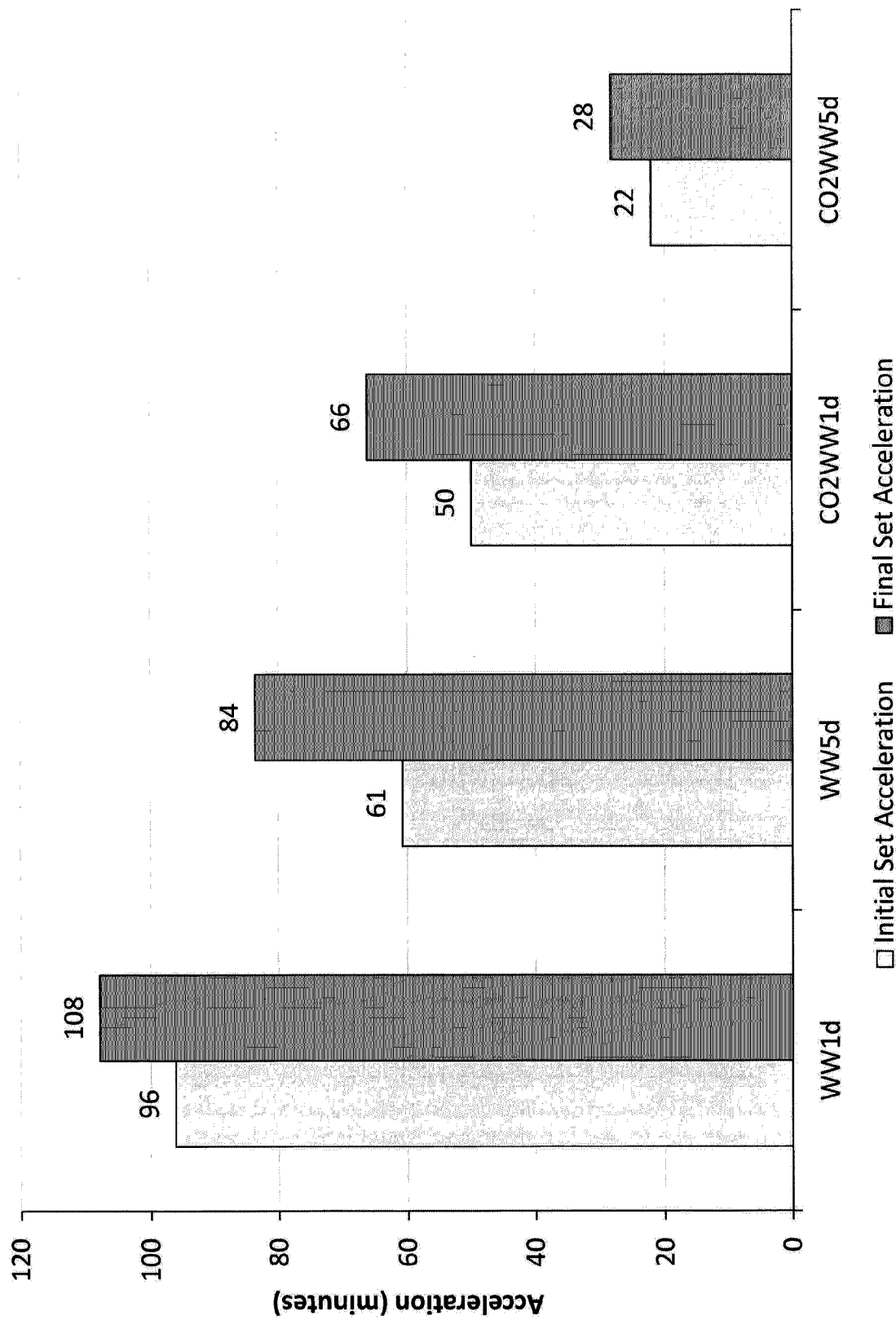


Figure 56

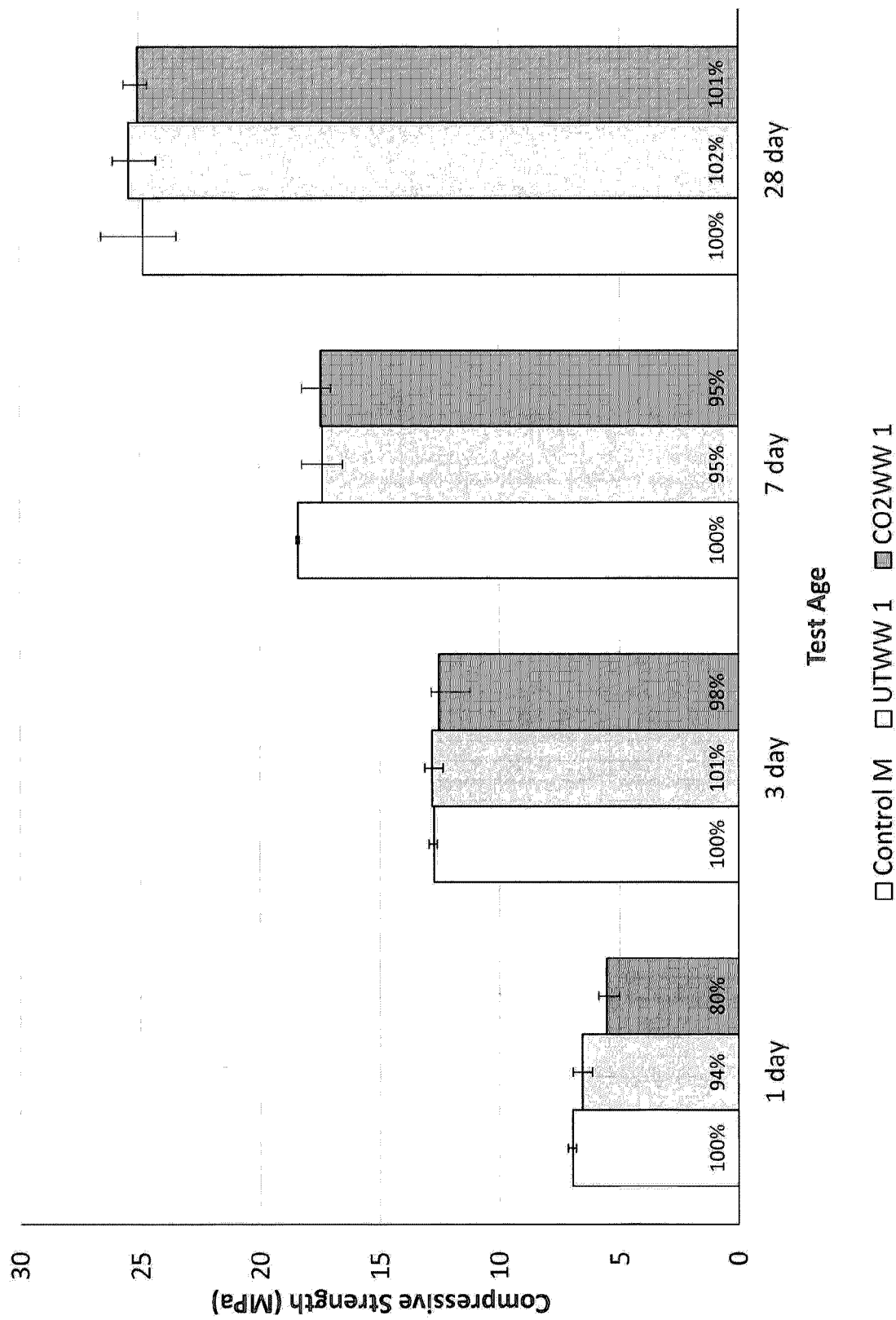


Figure 57

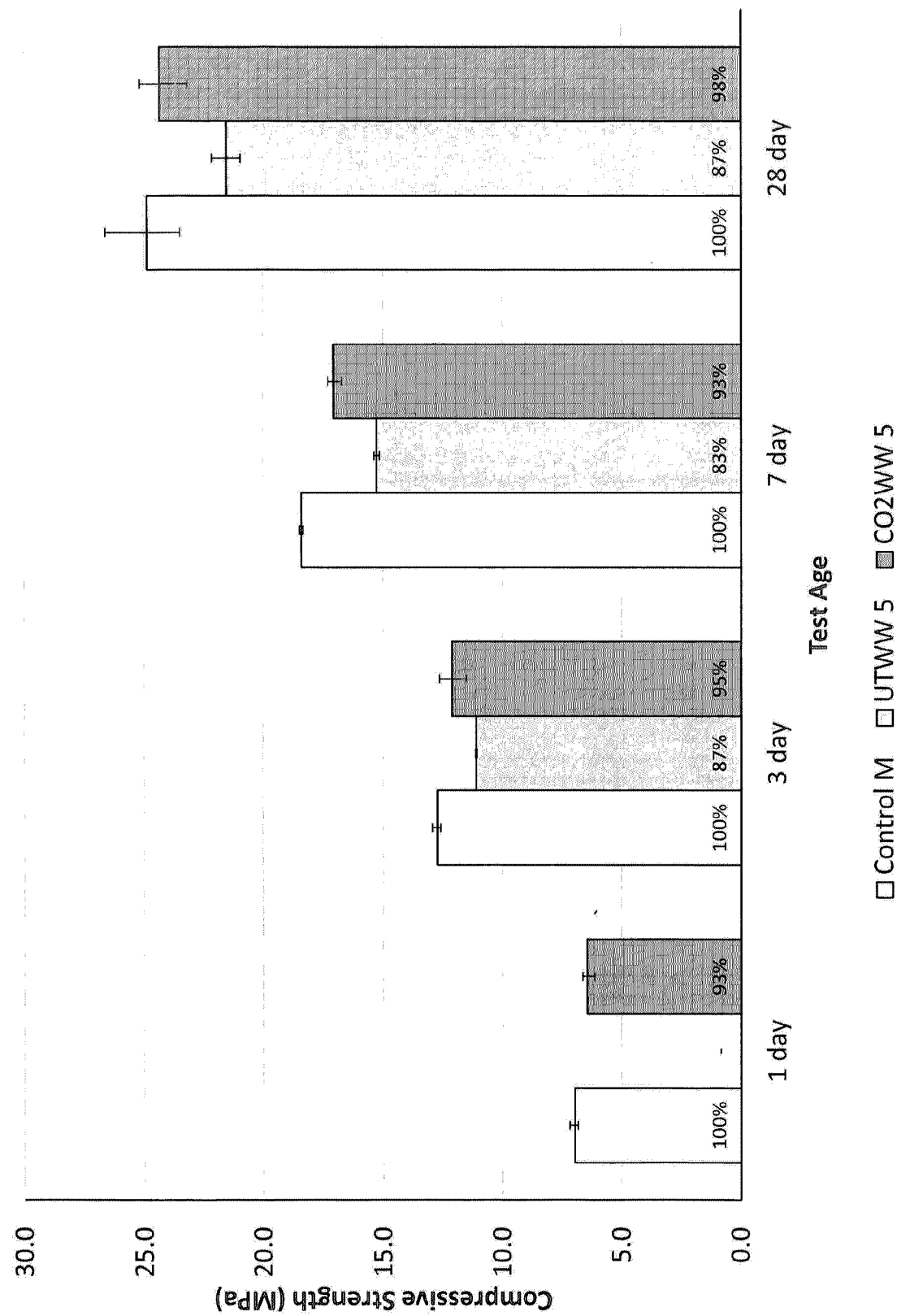


Figure 58

