

Figure 1

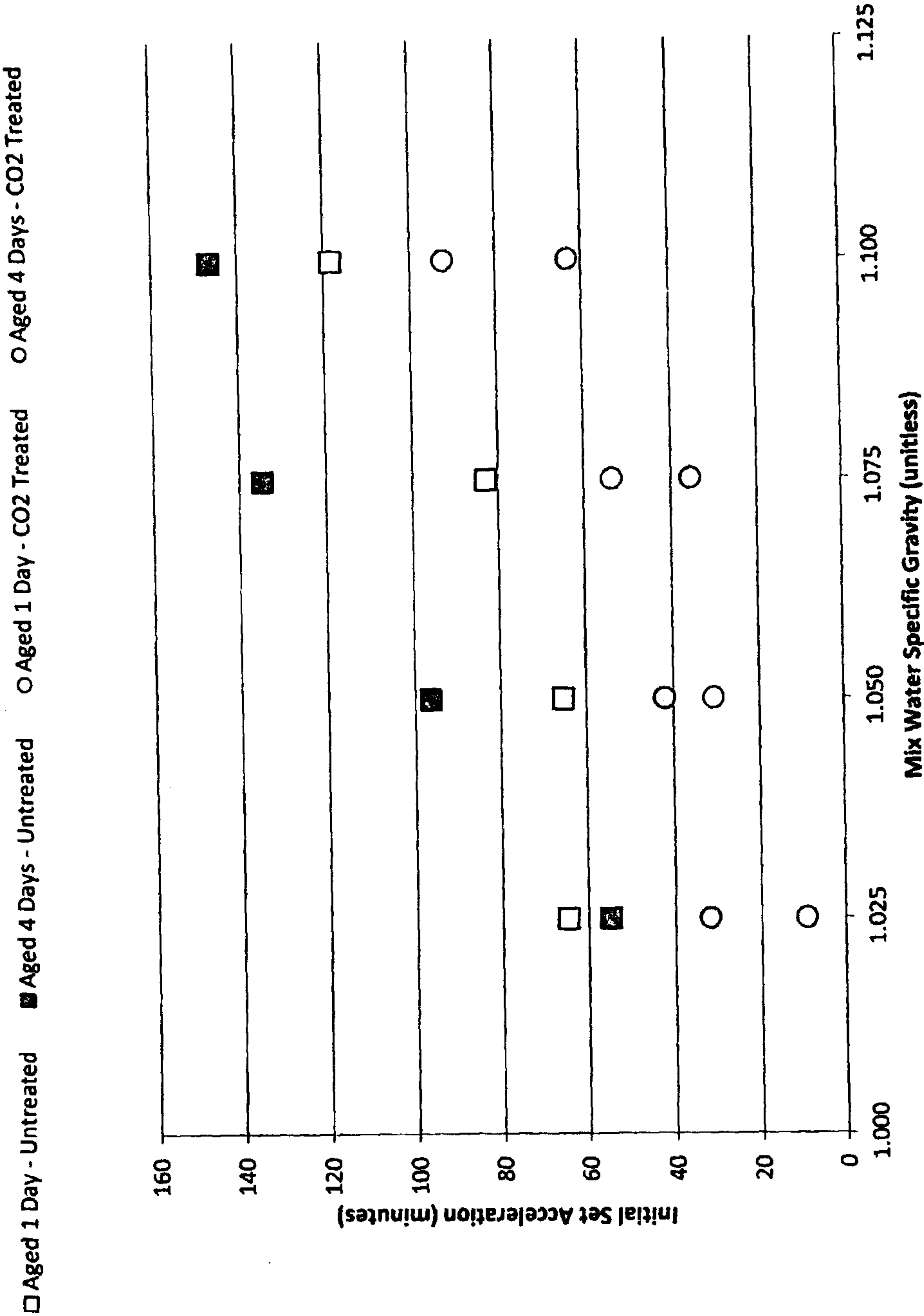


Figure 2

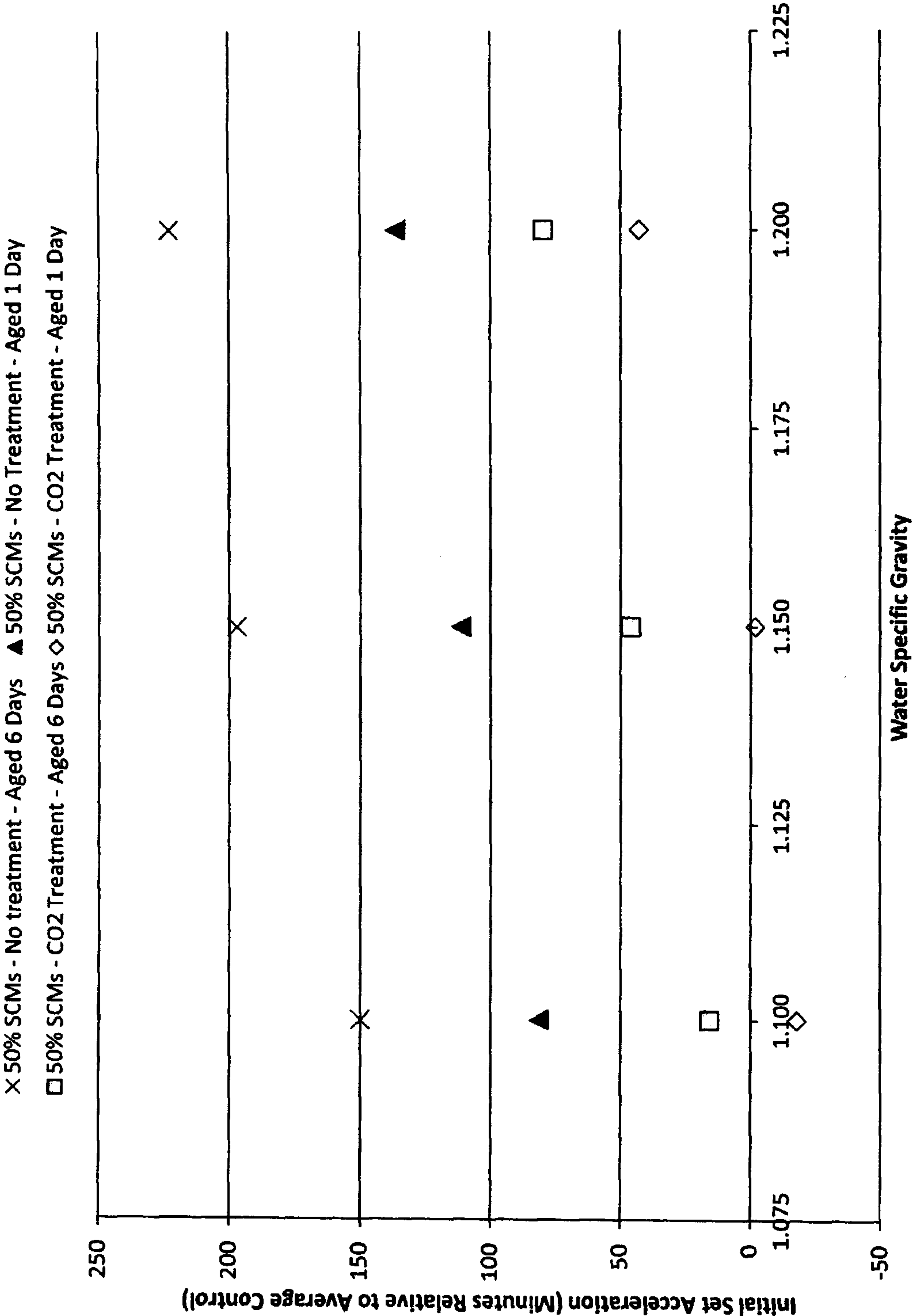


Figure 3

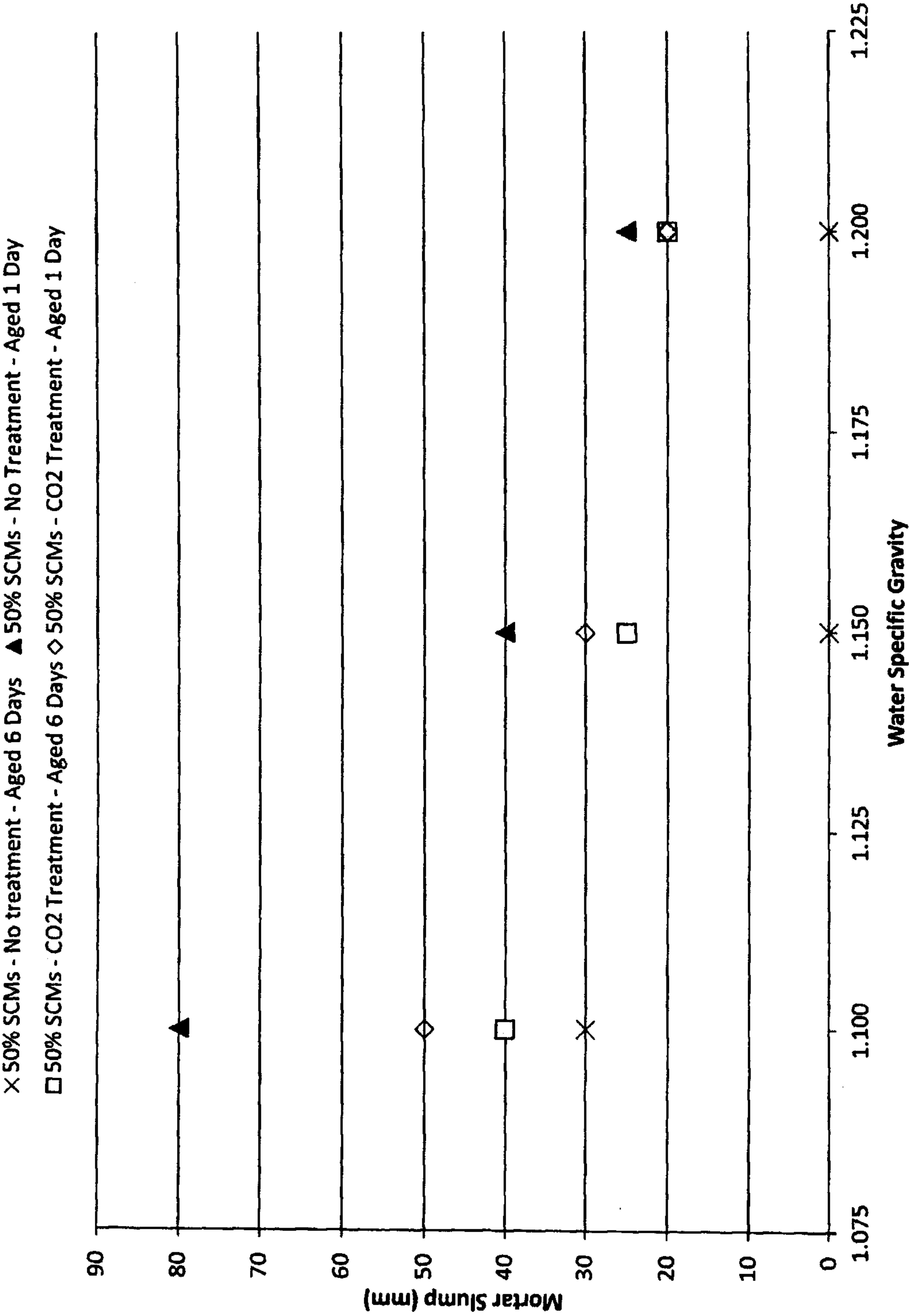


Figure 4

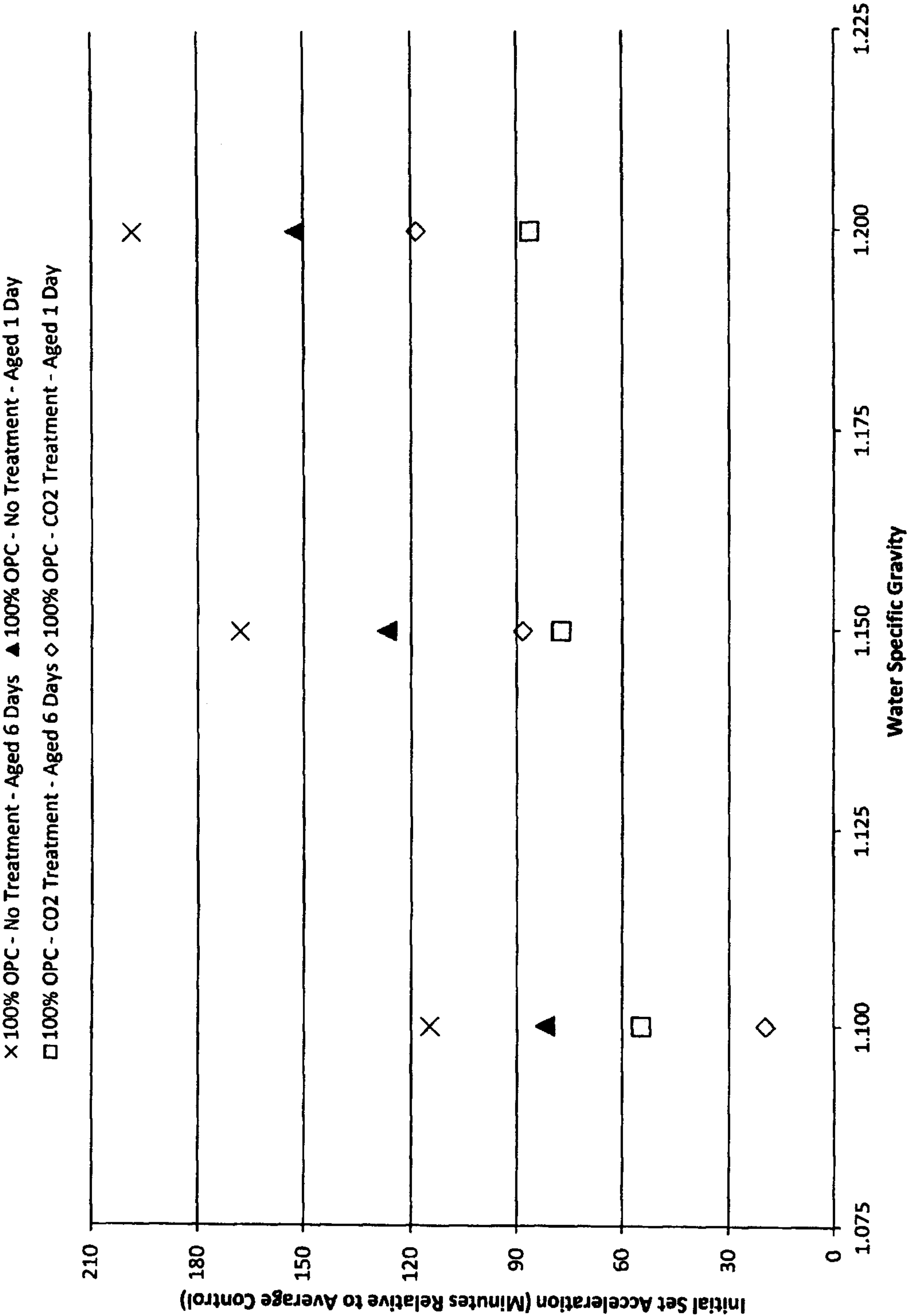


Figure 5

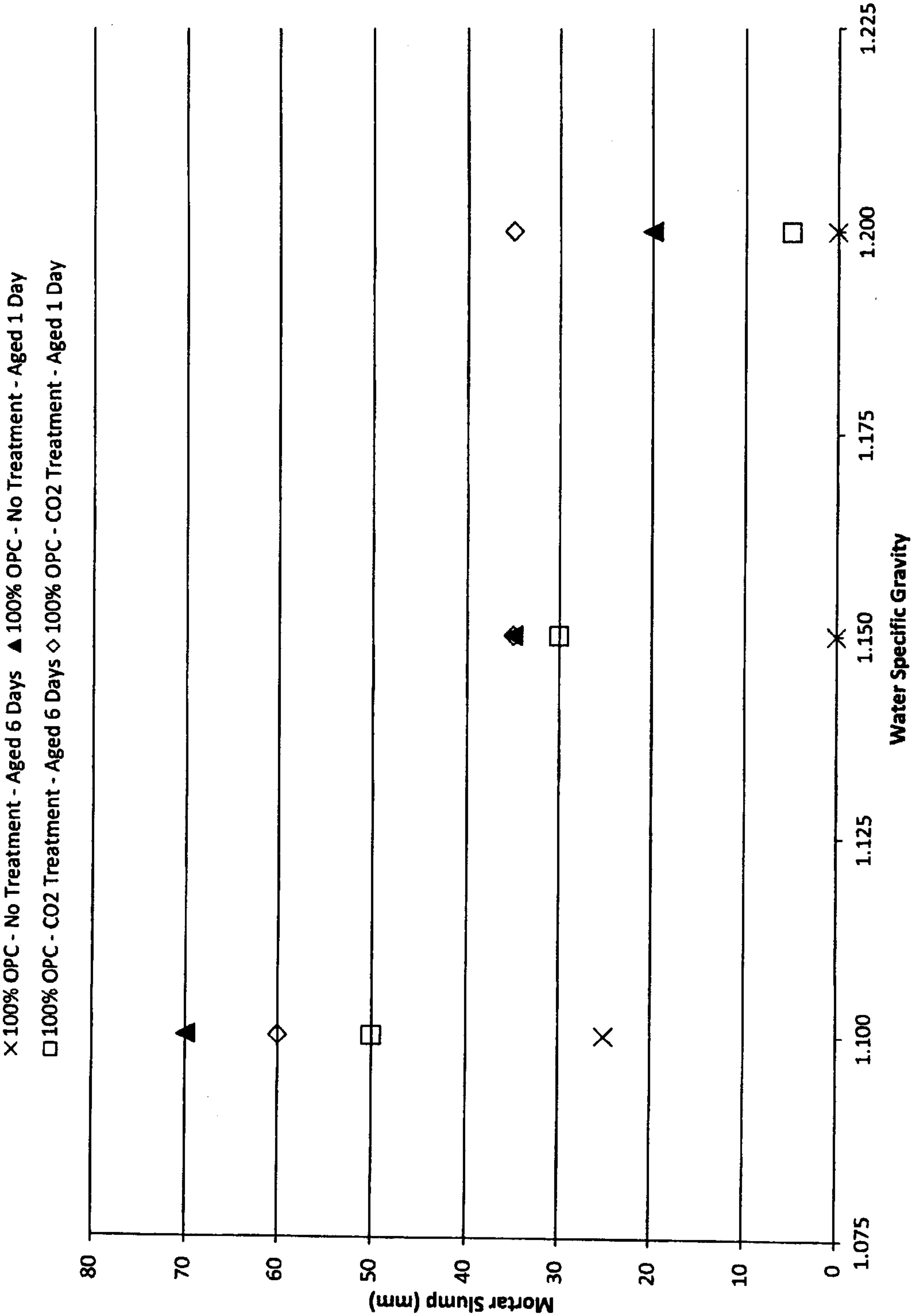


Figure 6

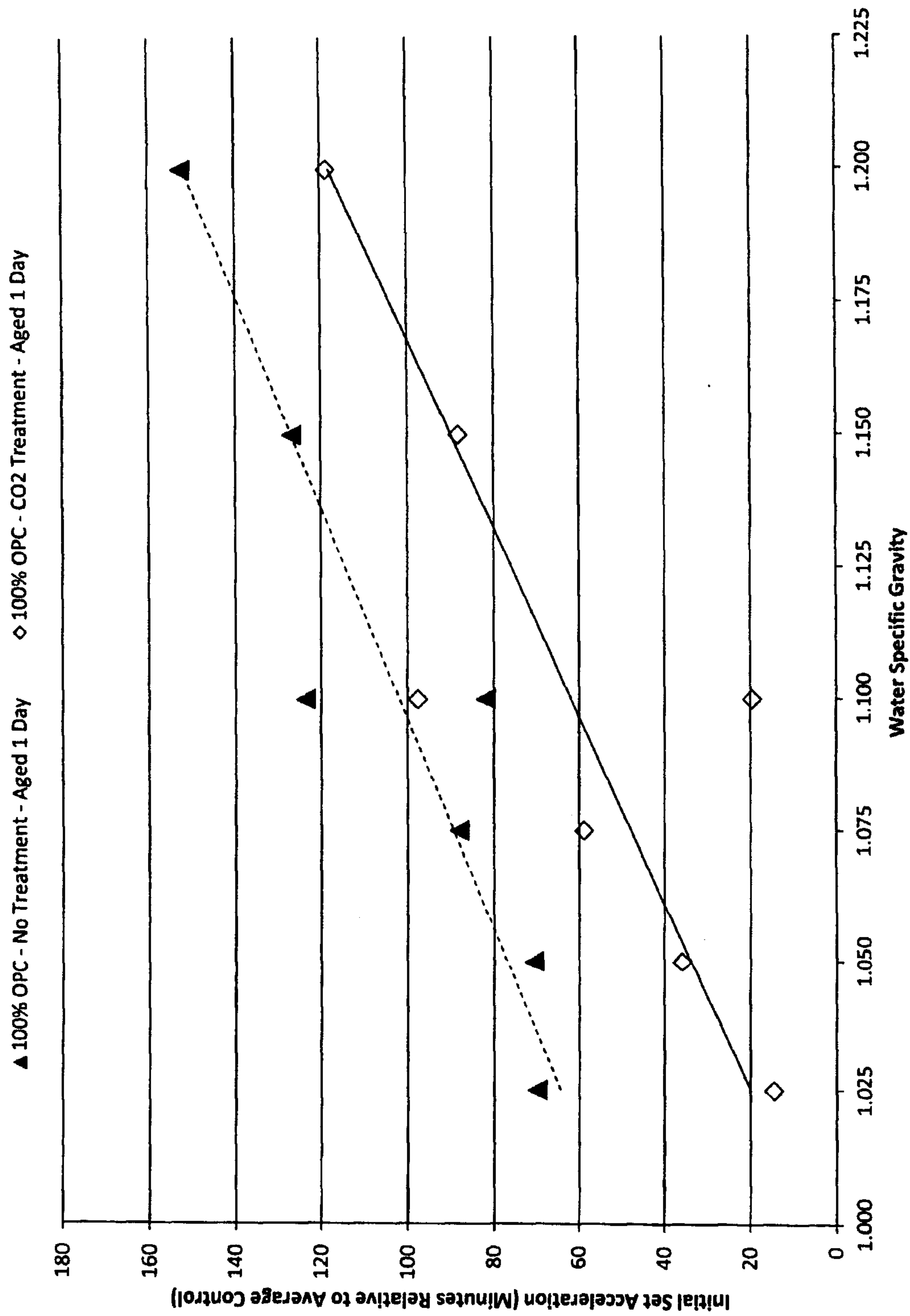


Figure 7

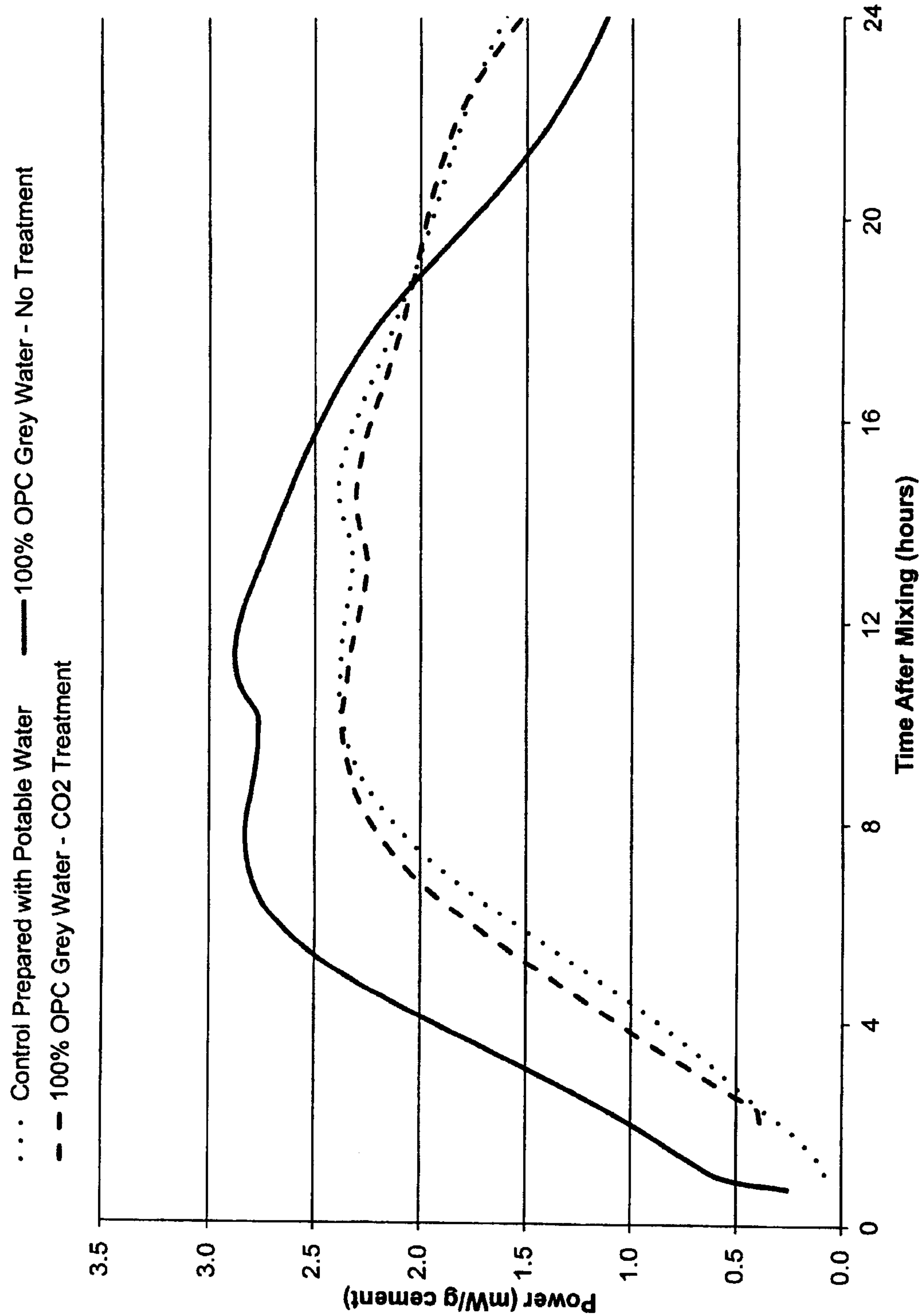
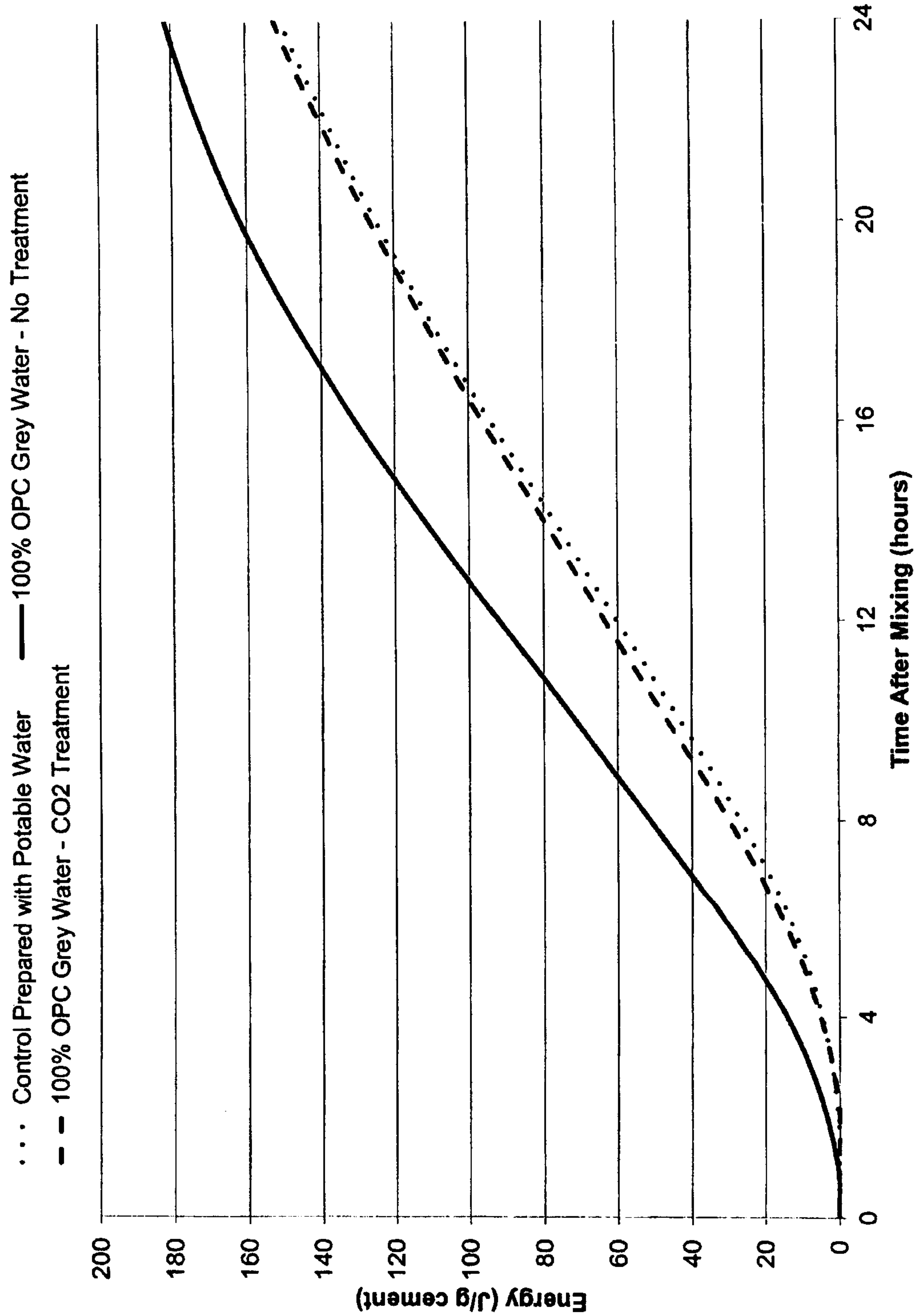
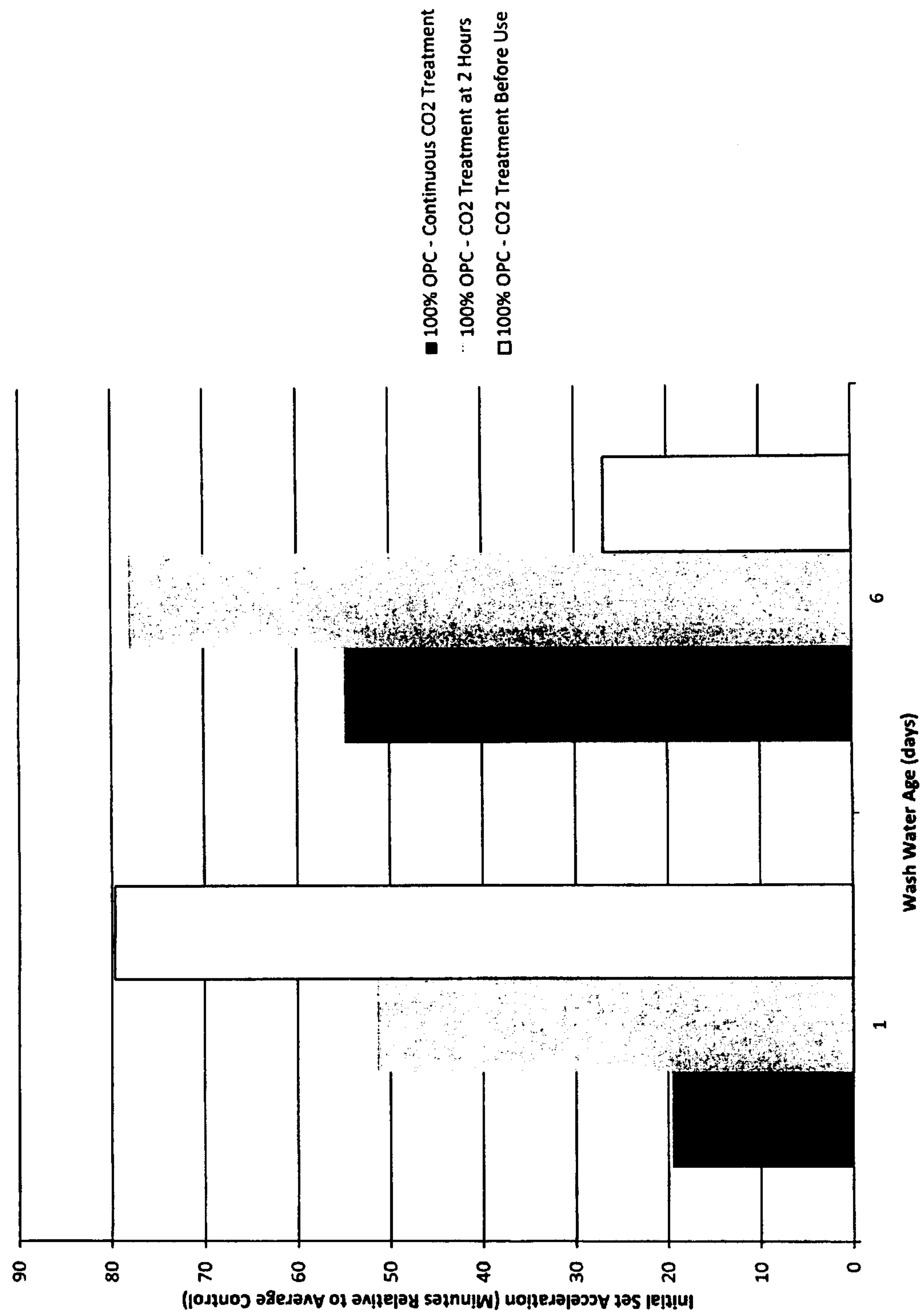


Figure 8



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Figure 9



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Figure 10

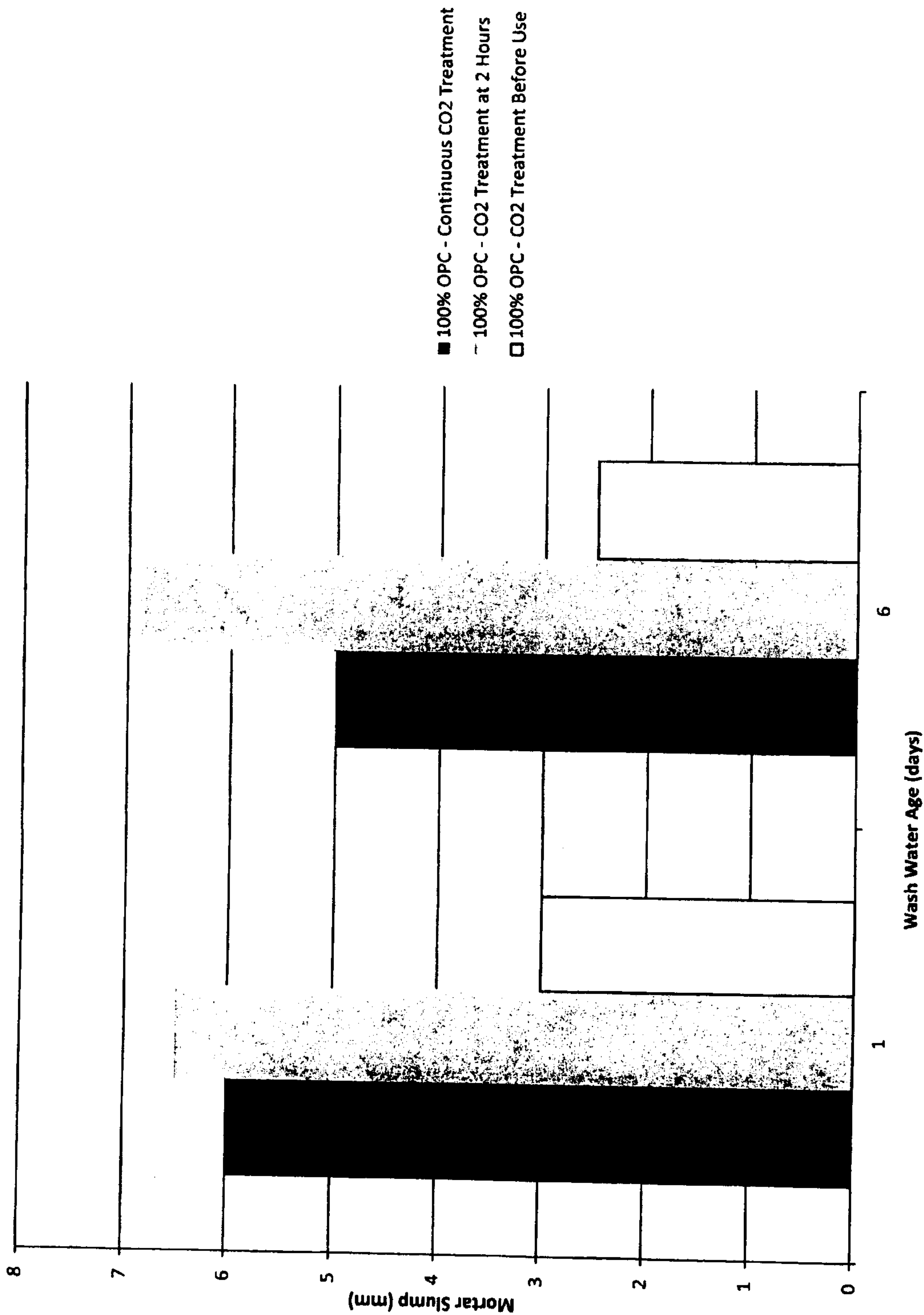
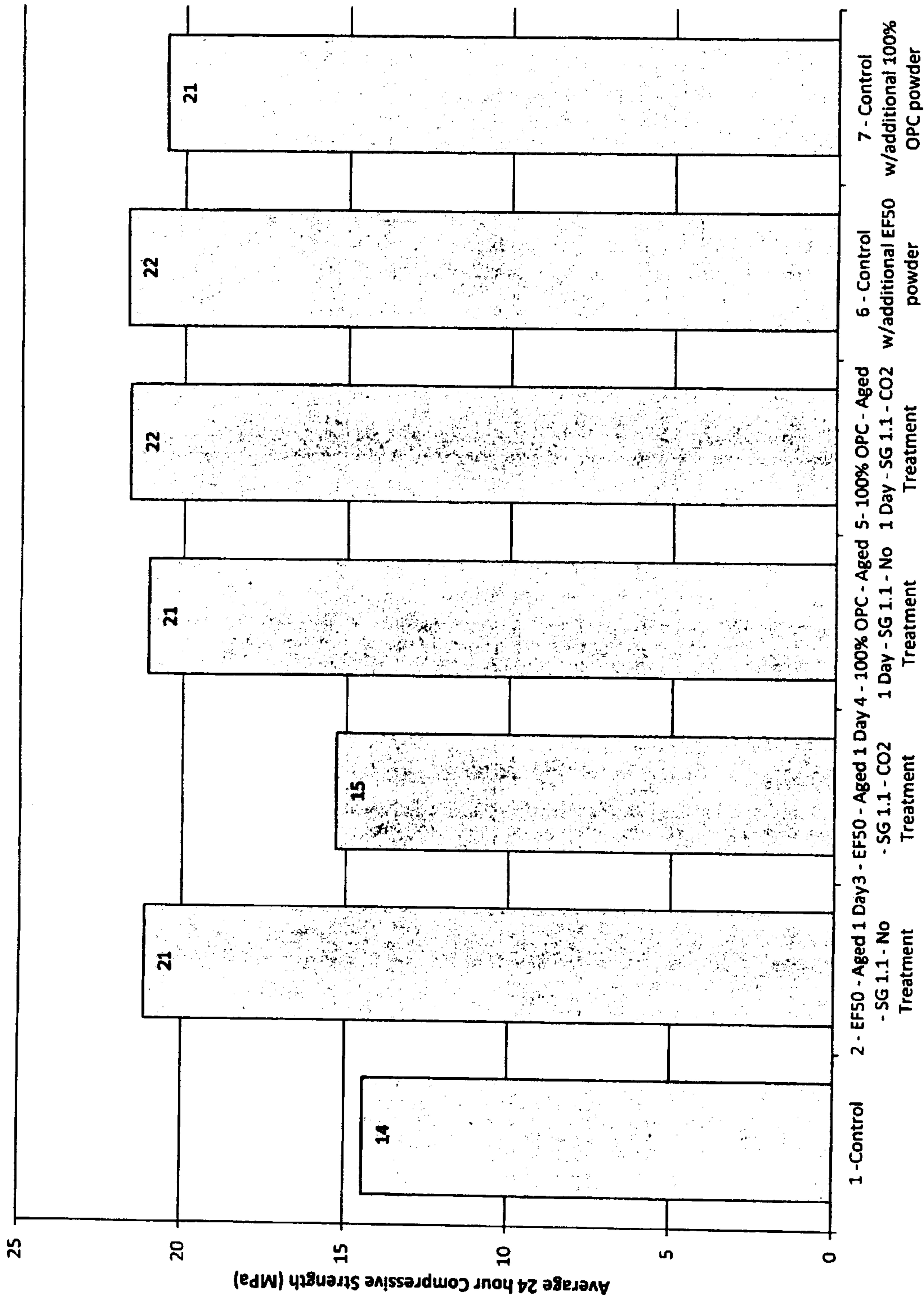


Figure 11



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Figure 12

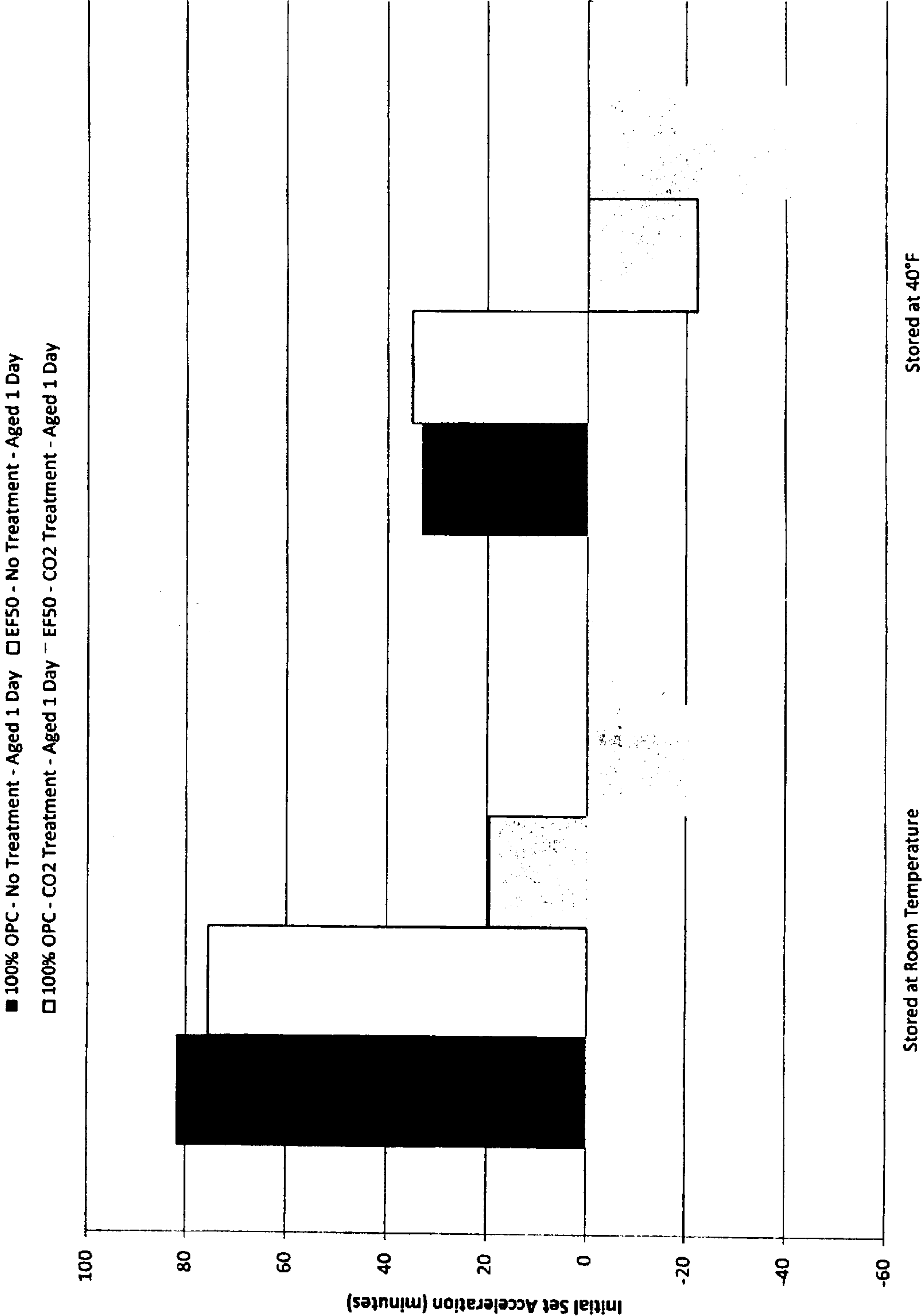


Figure 13

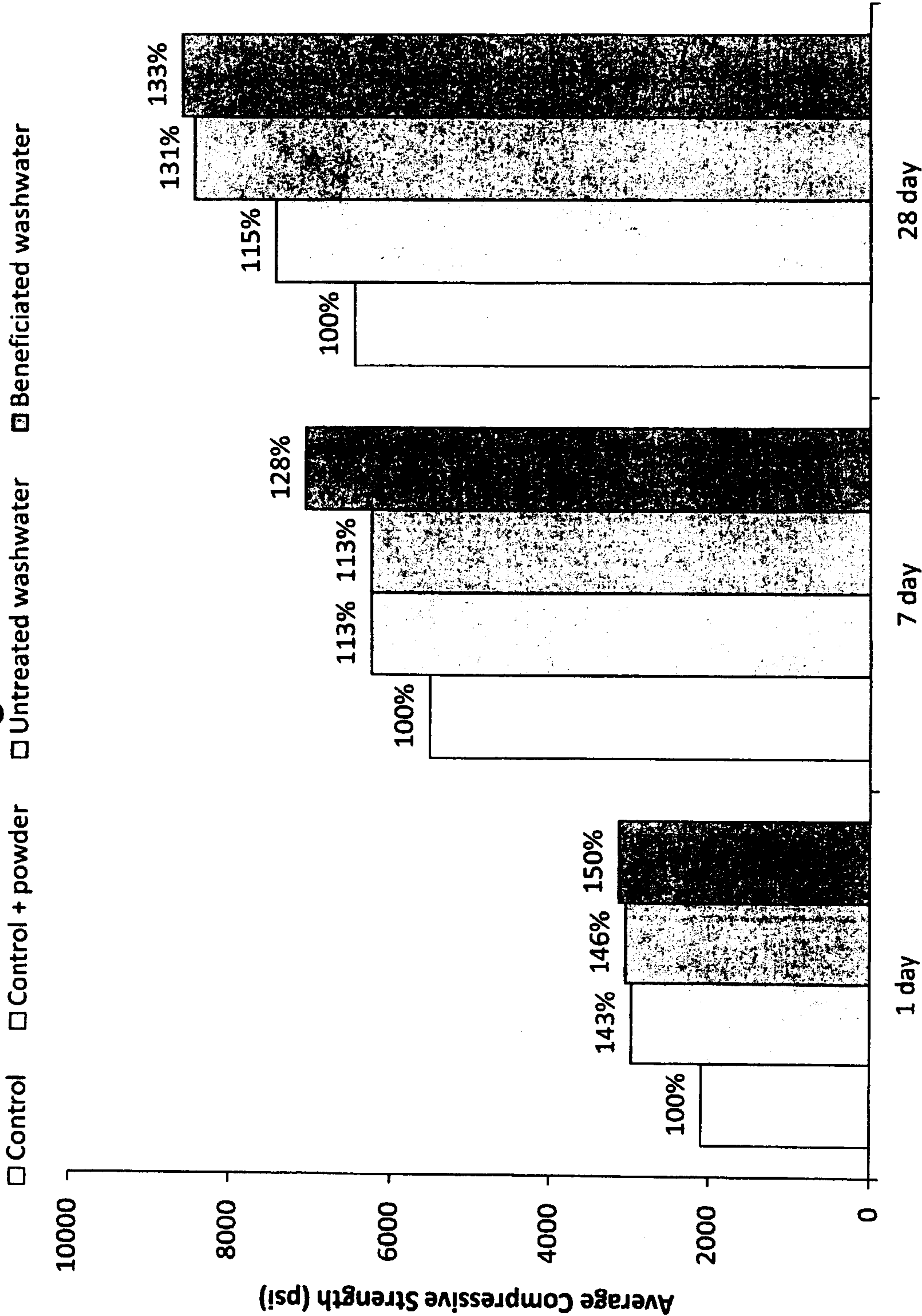


Figure 14

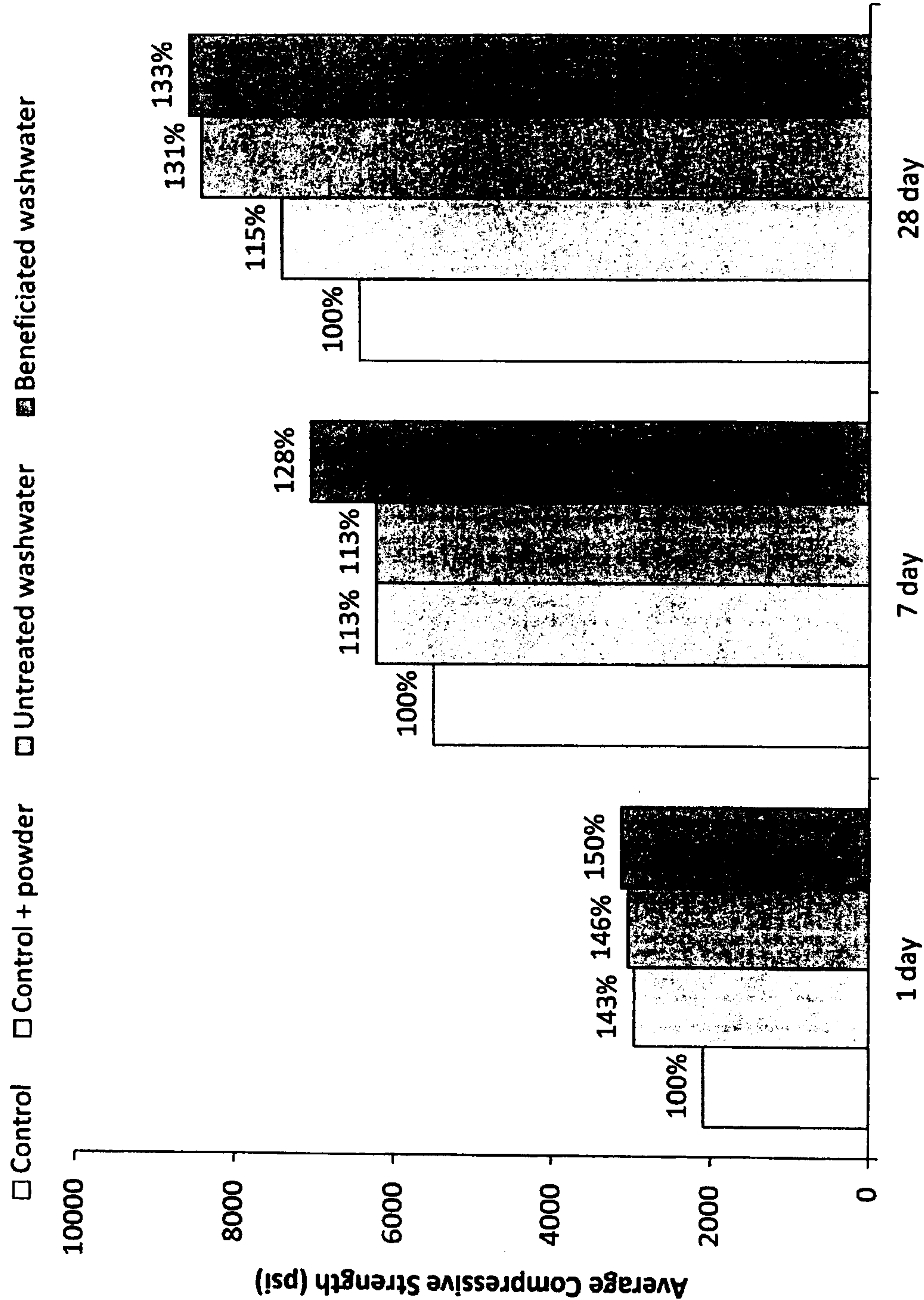


Figure 15

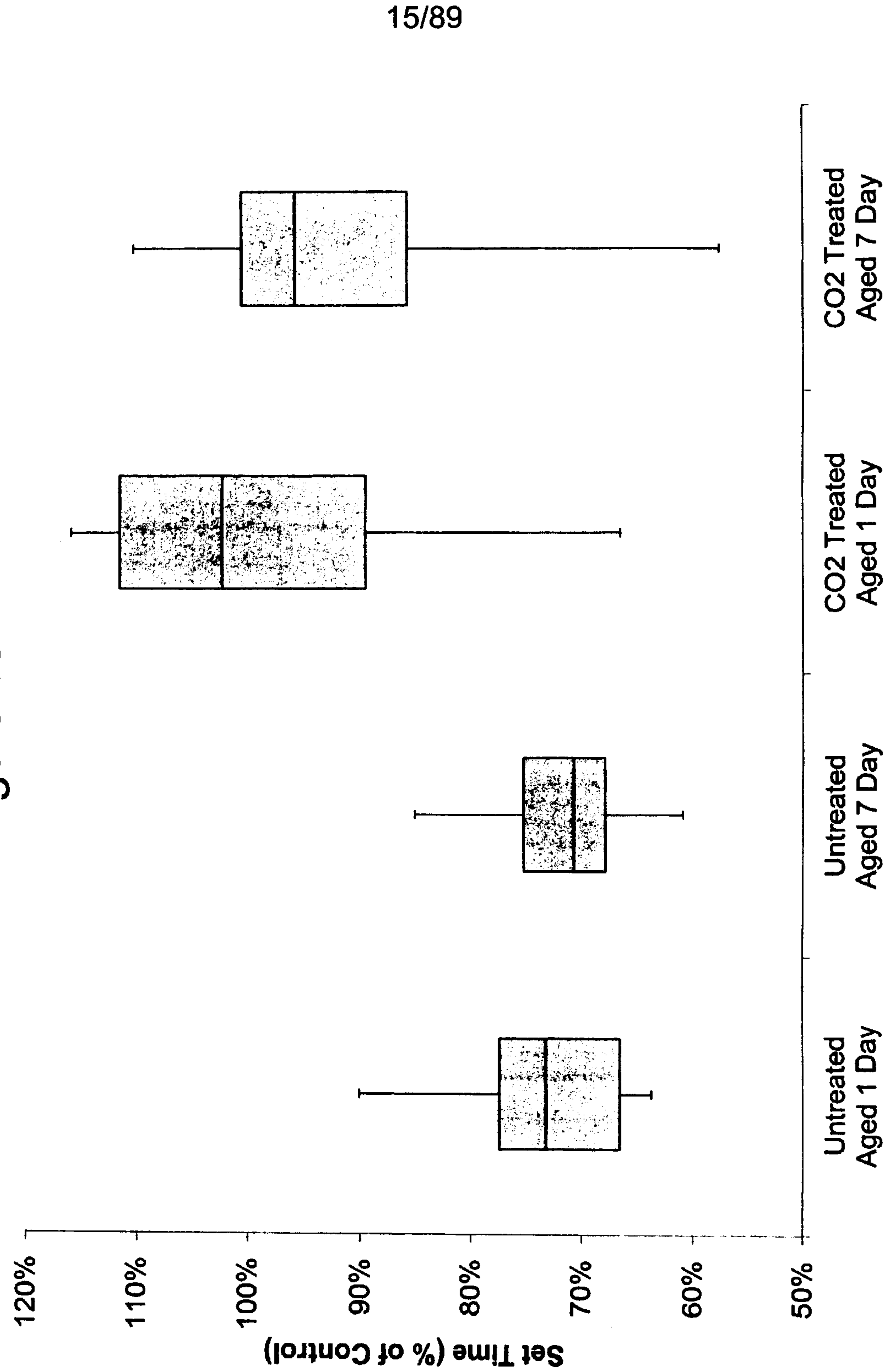
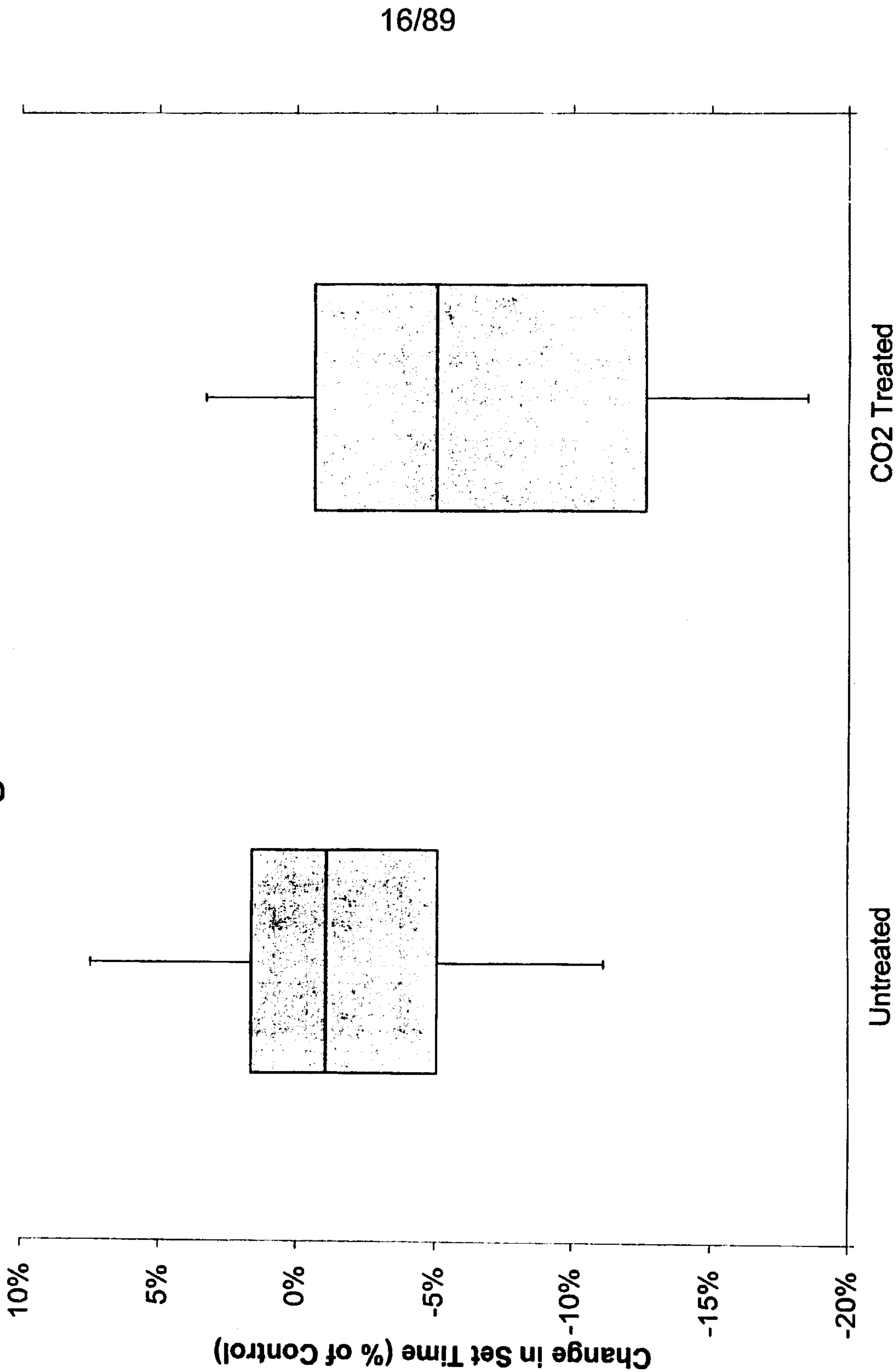


Figure 16



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Figure 17

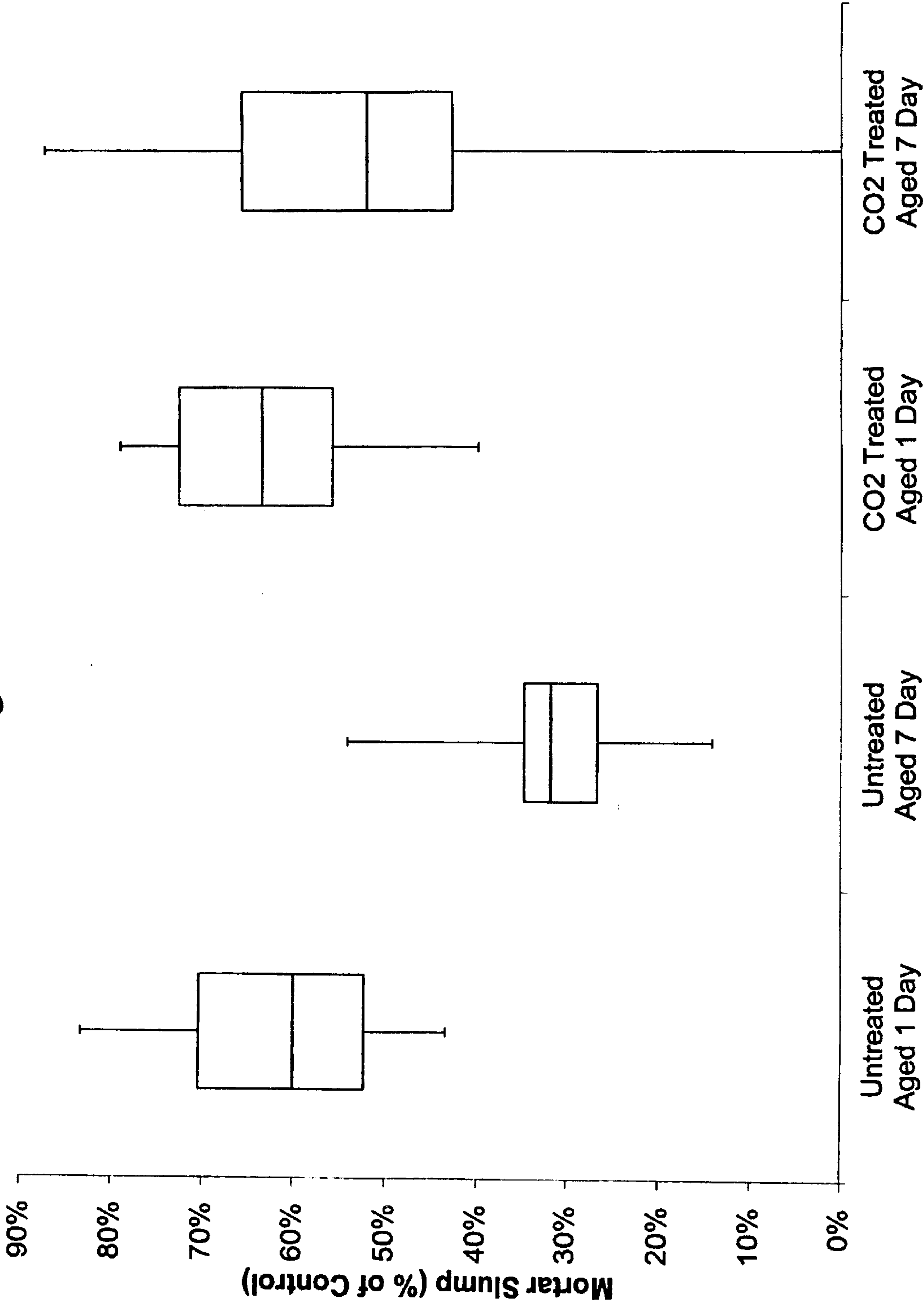
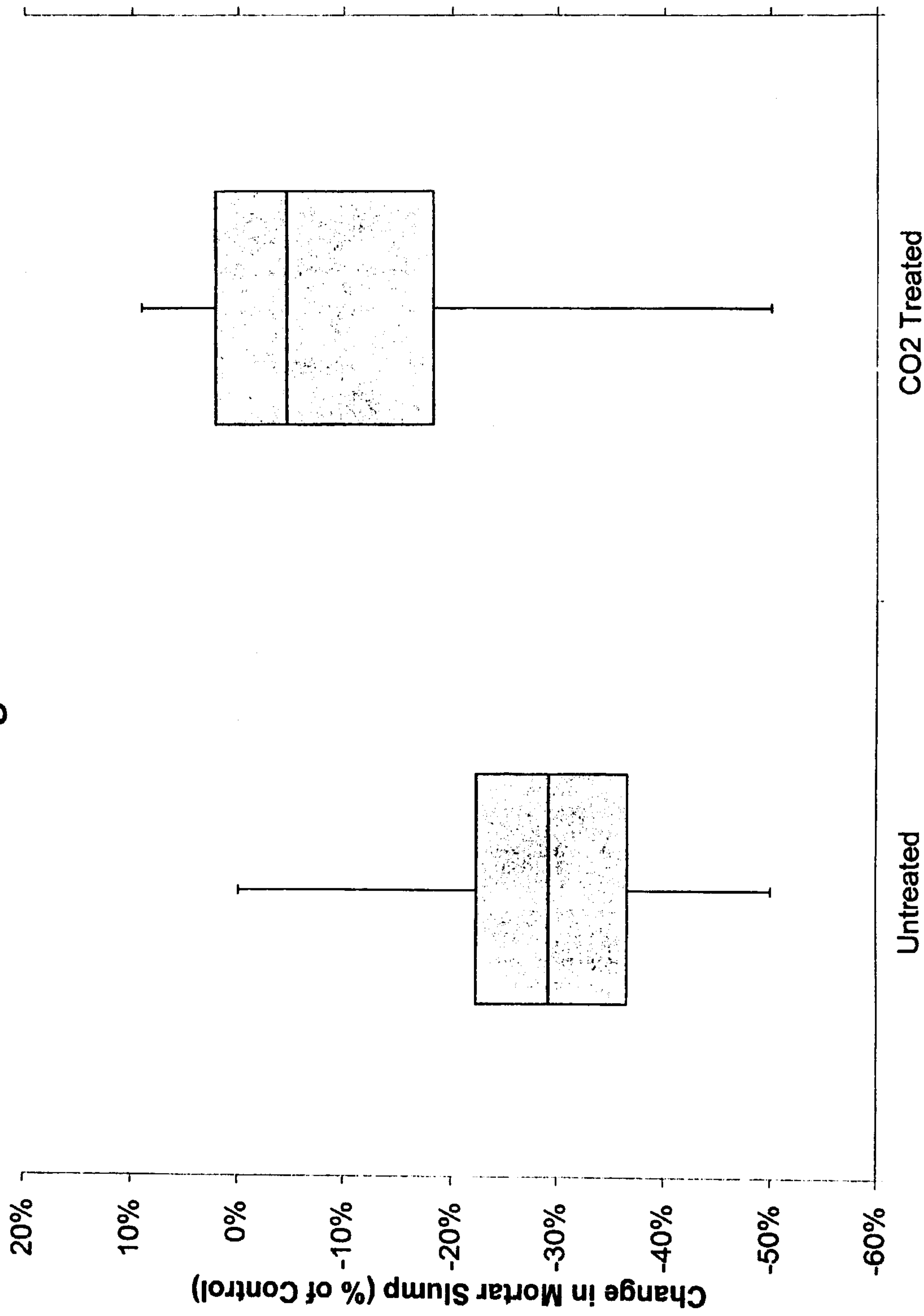
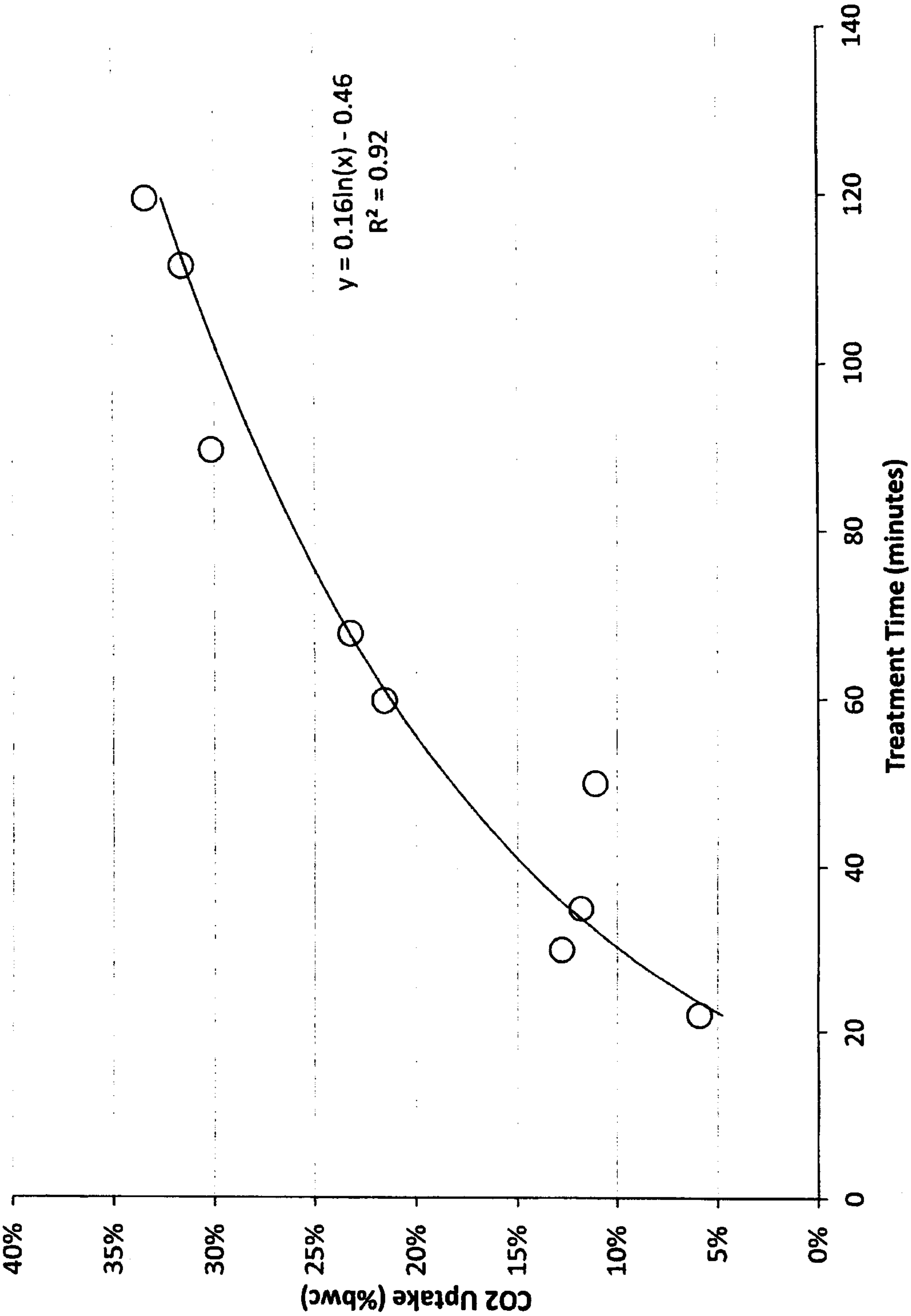


Figure 18



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Figure 19



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Figure 20

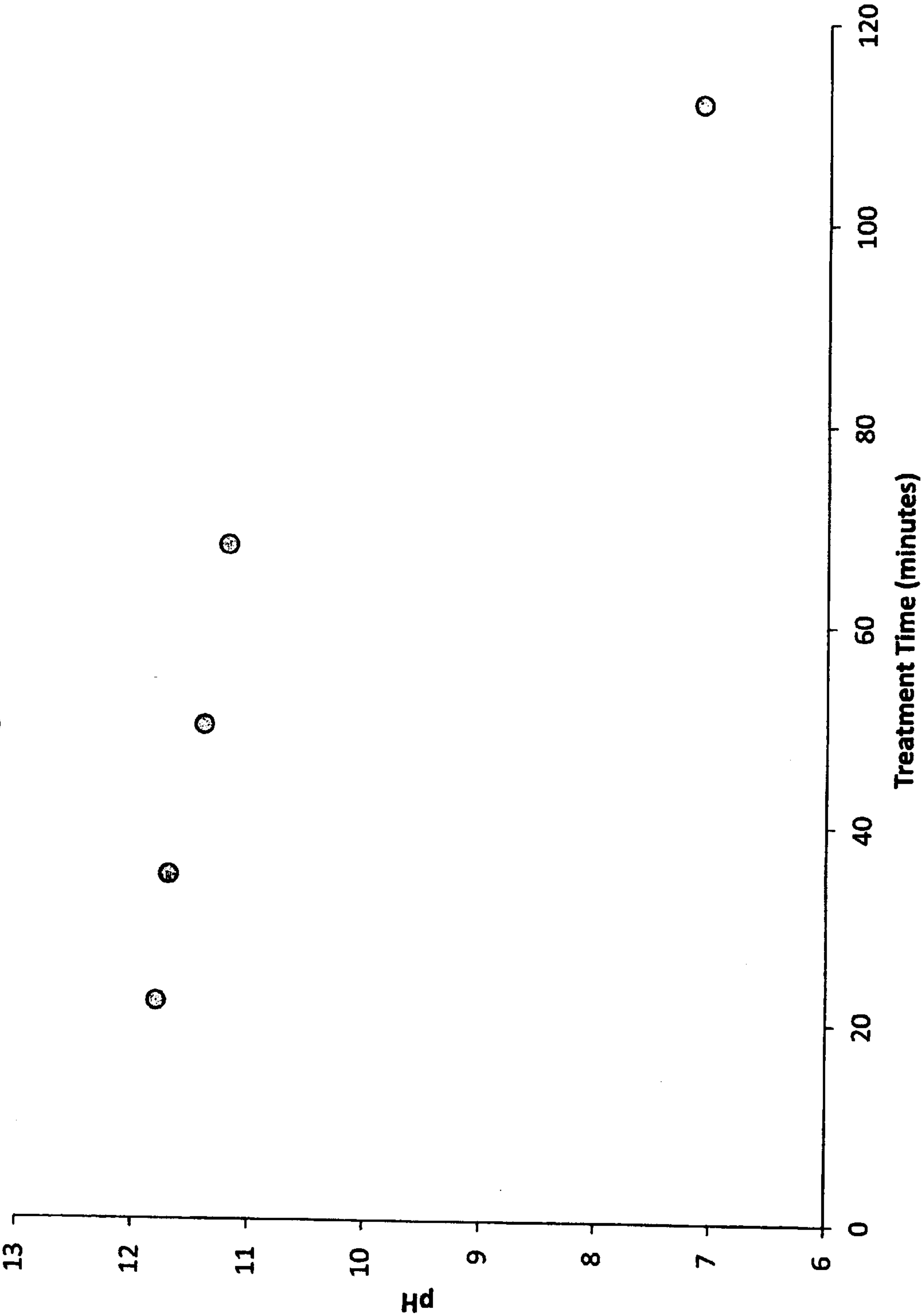


Figure 21

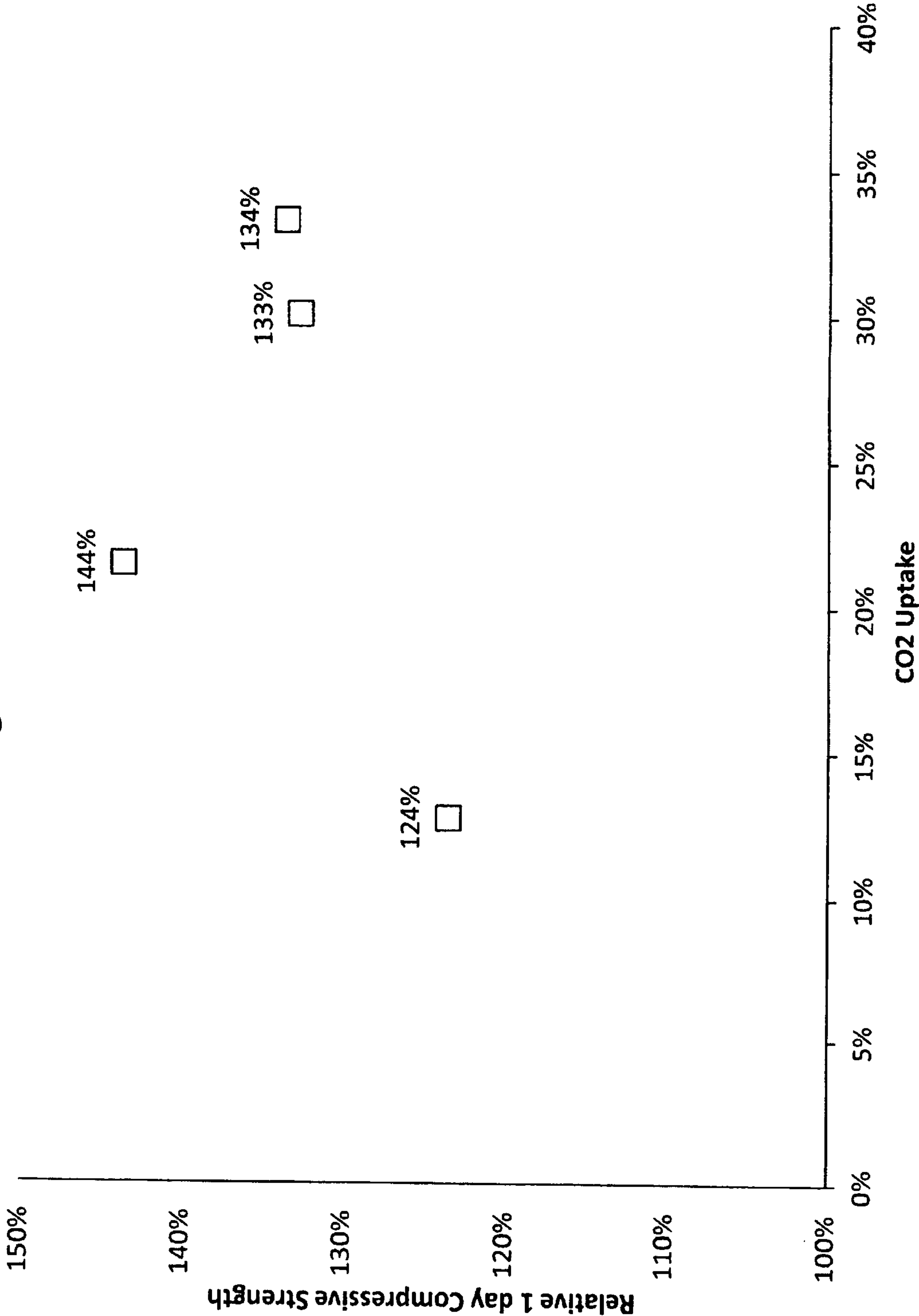
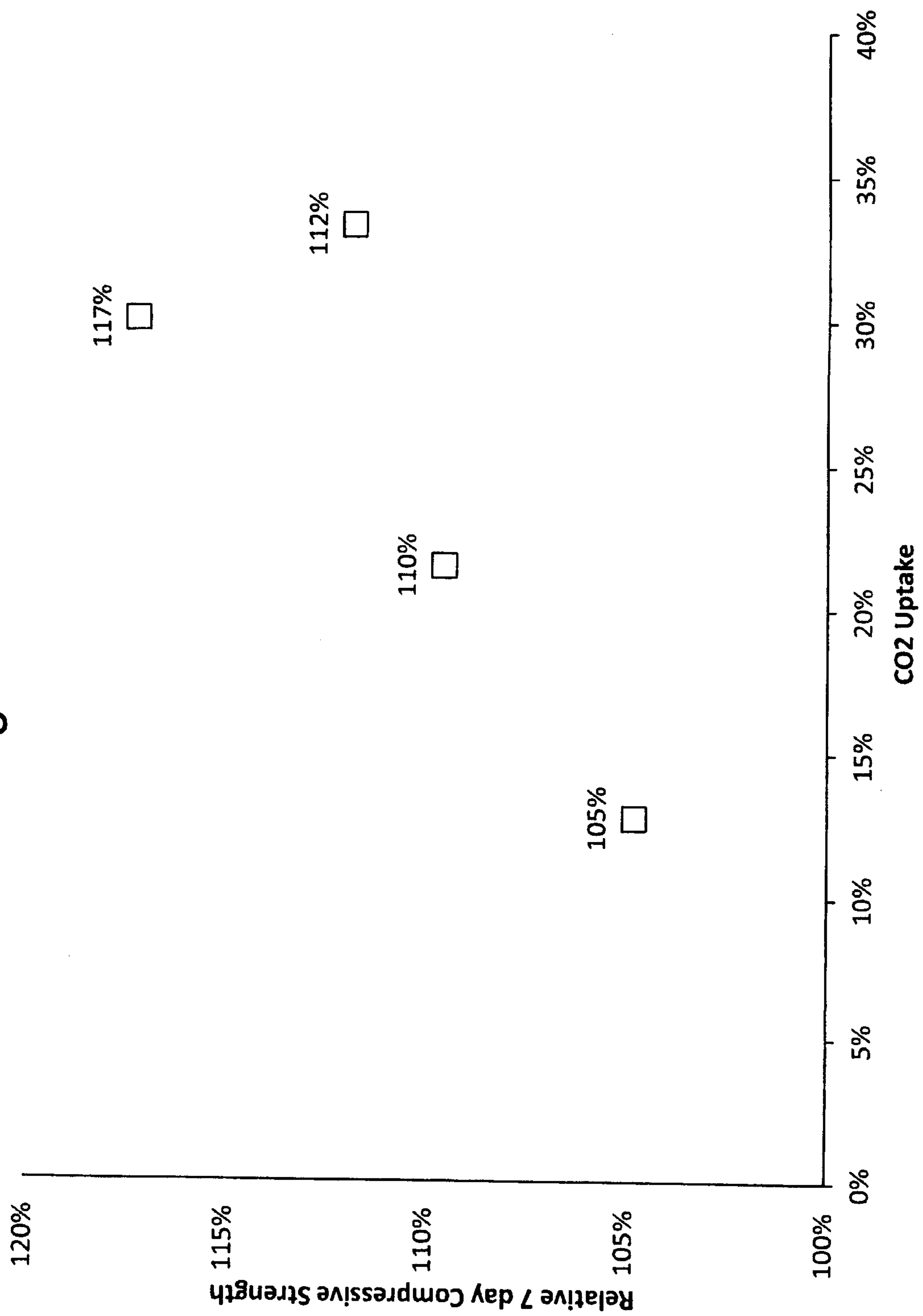


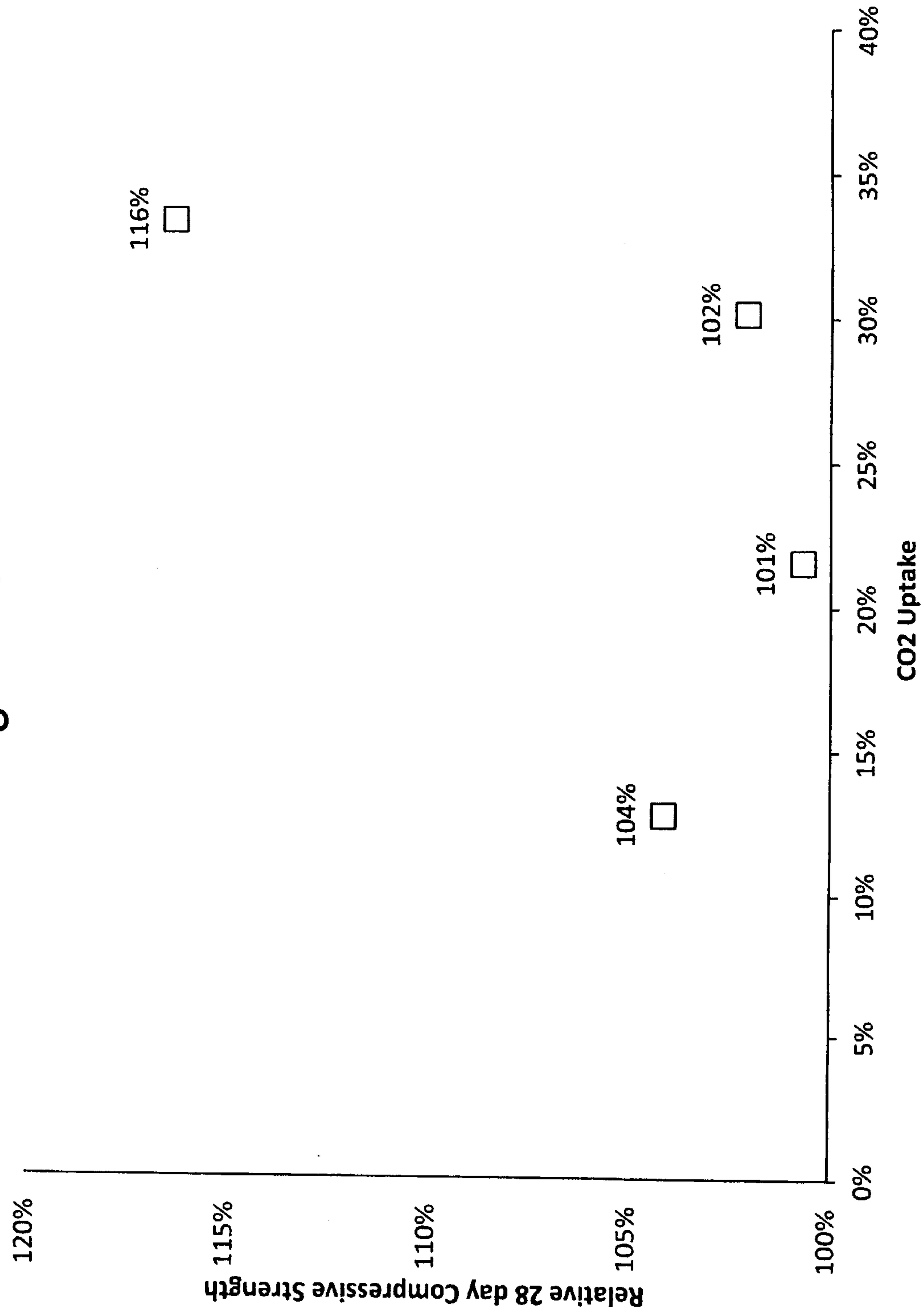
Figure 22



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Figure 23



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Figure 24

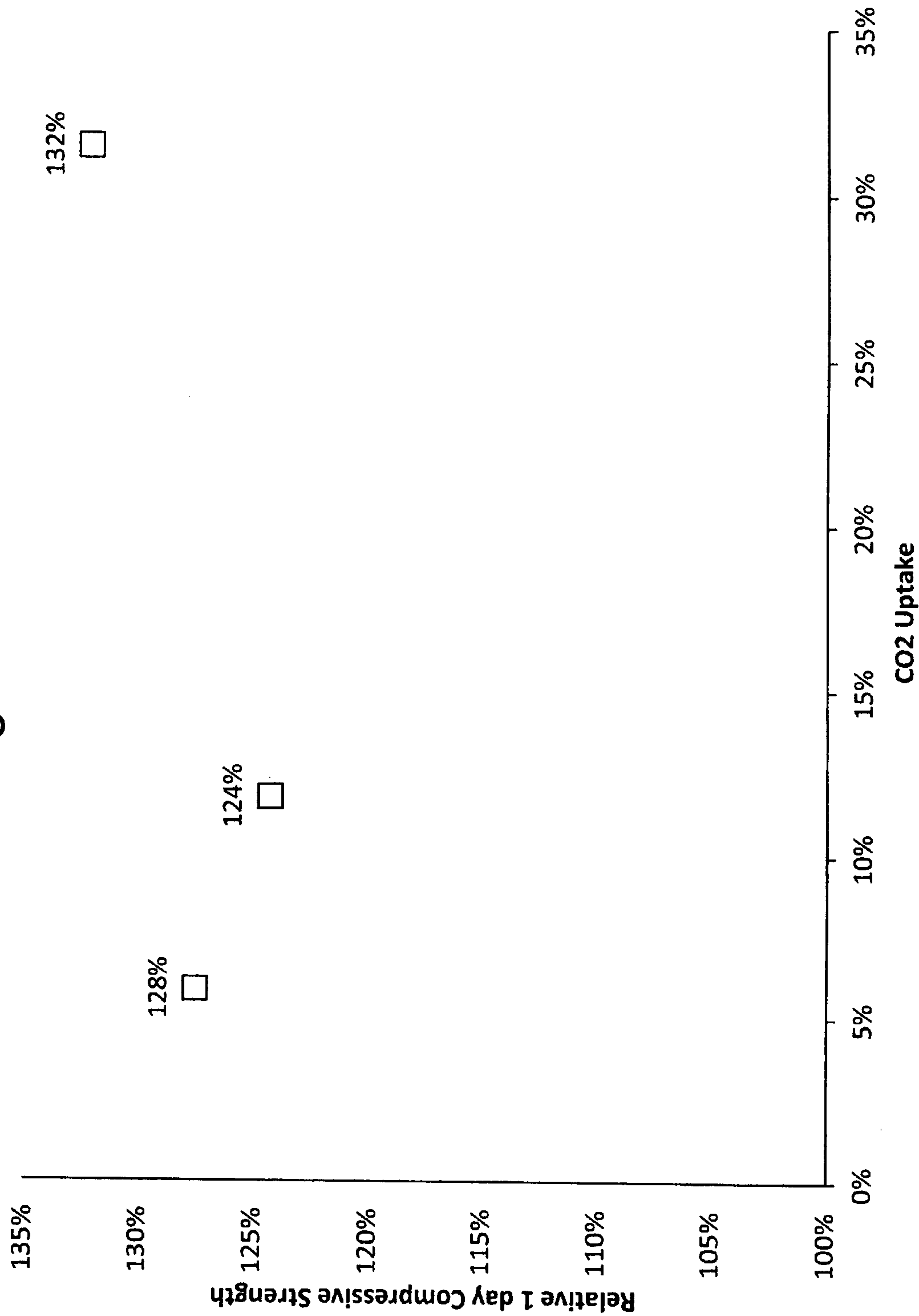
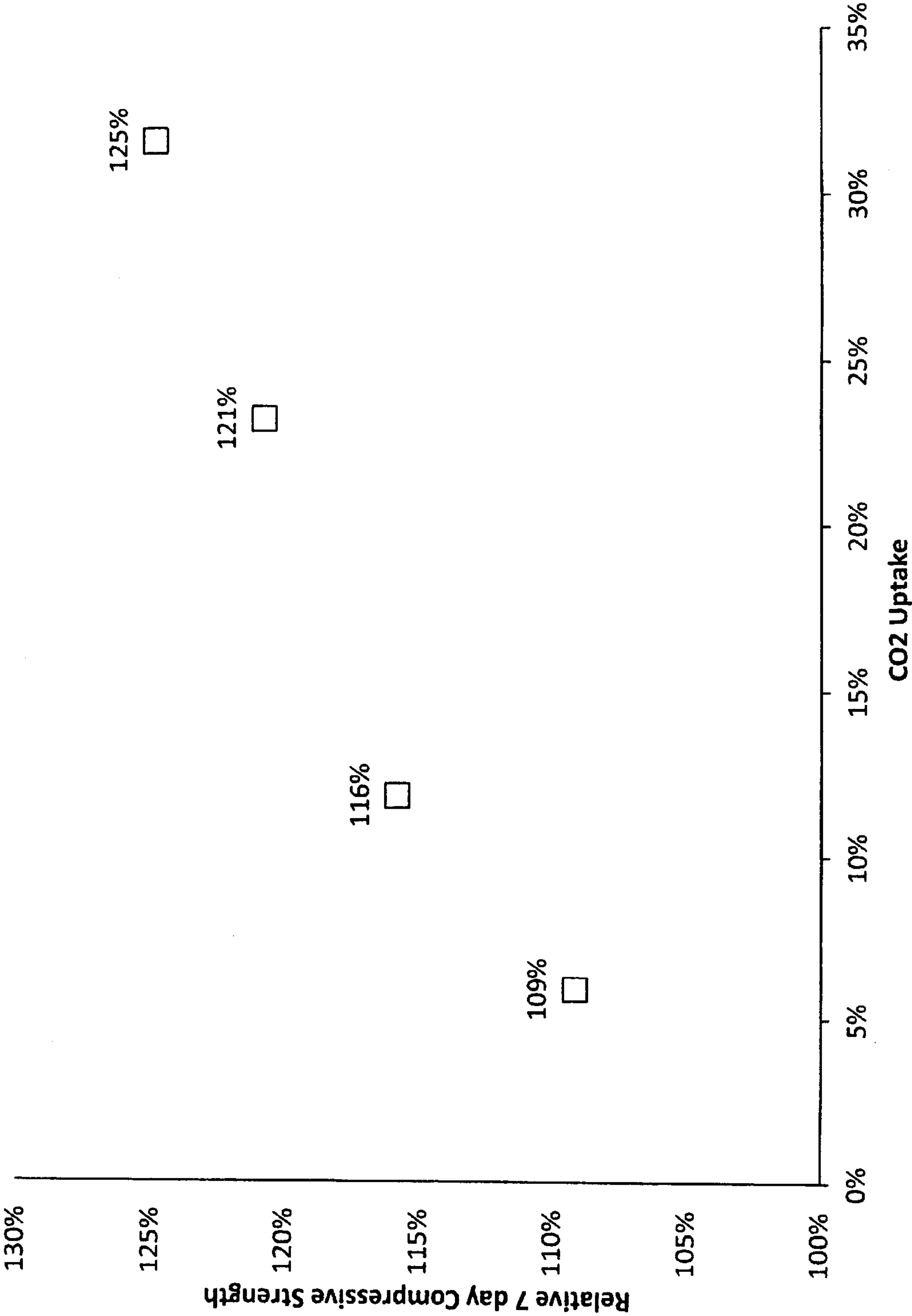
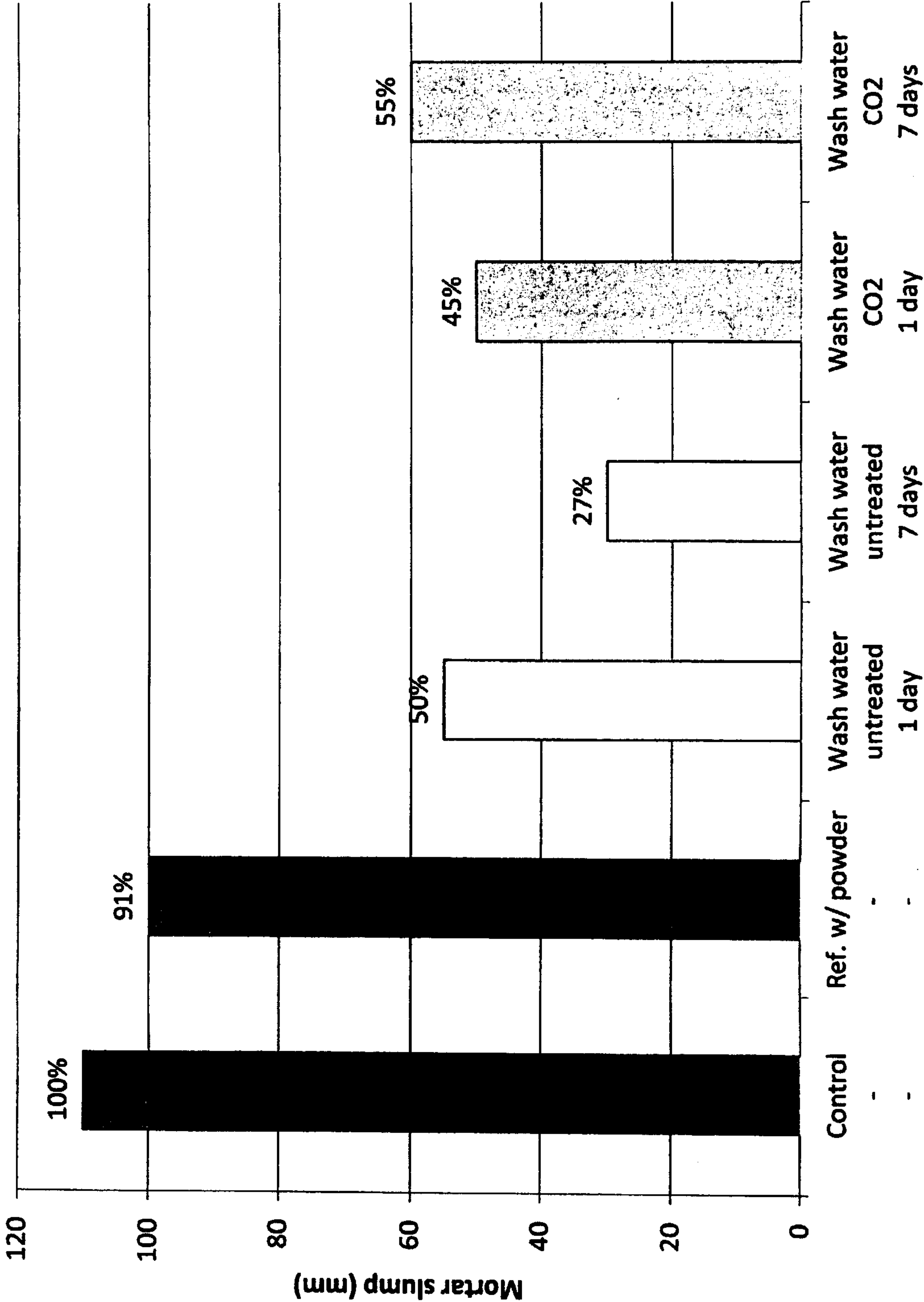


Figure 25

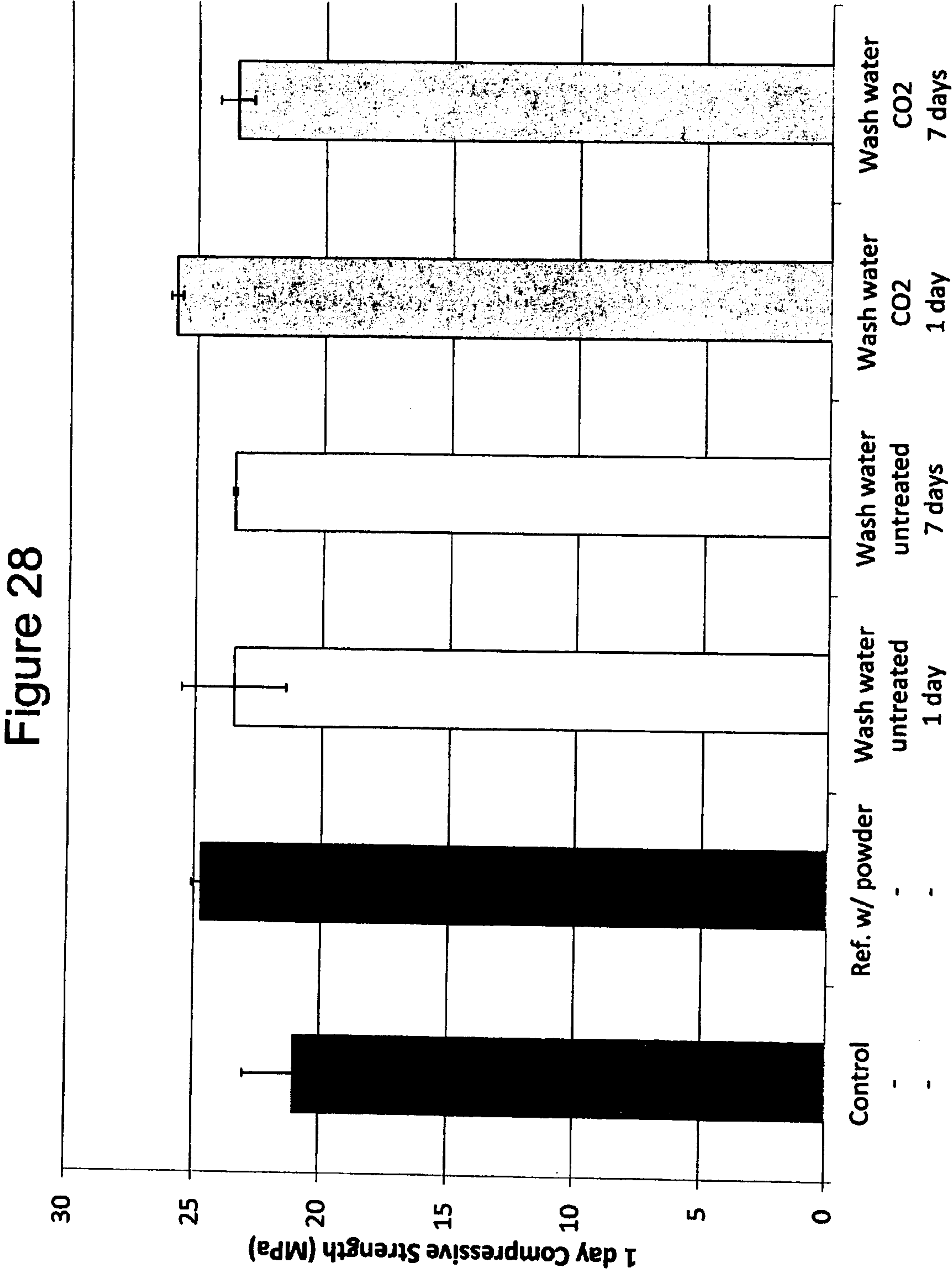


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Figure 27

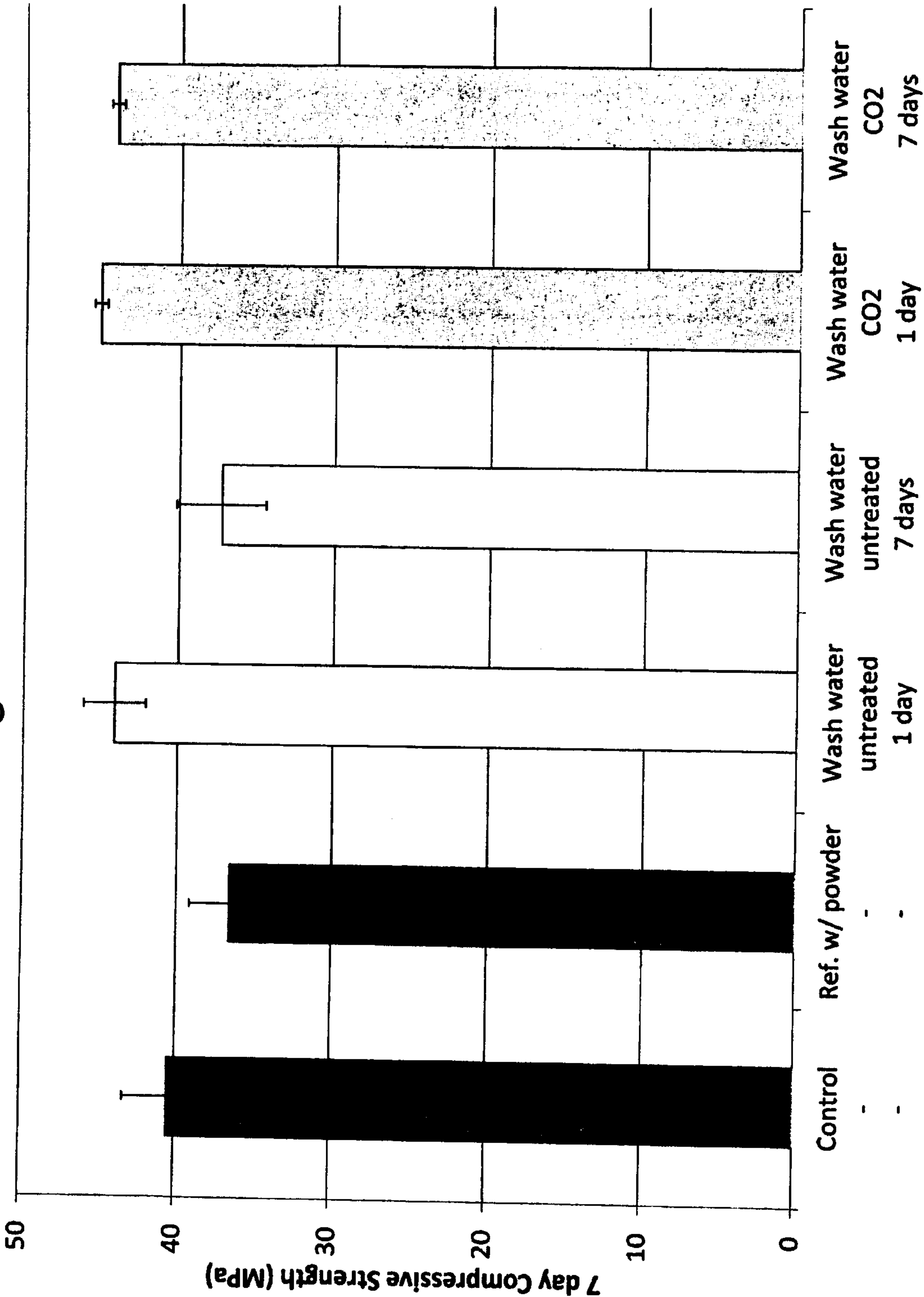


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Figure 29



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Figure 30

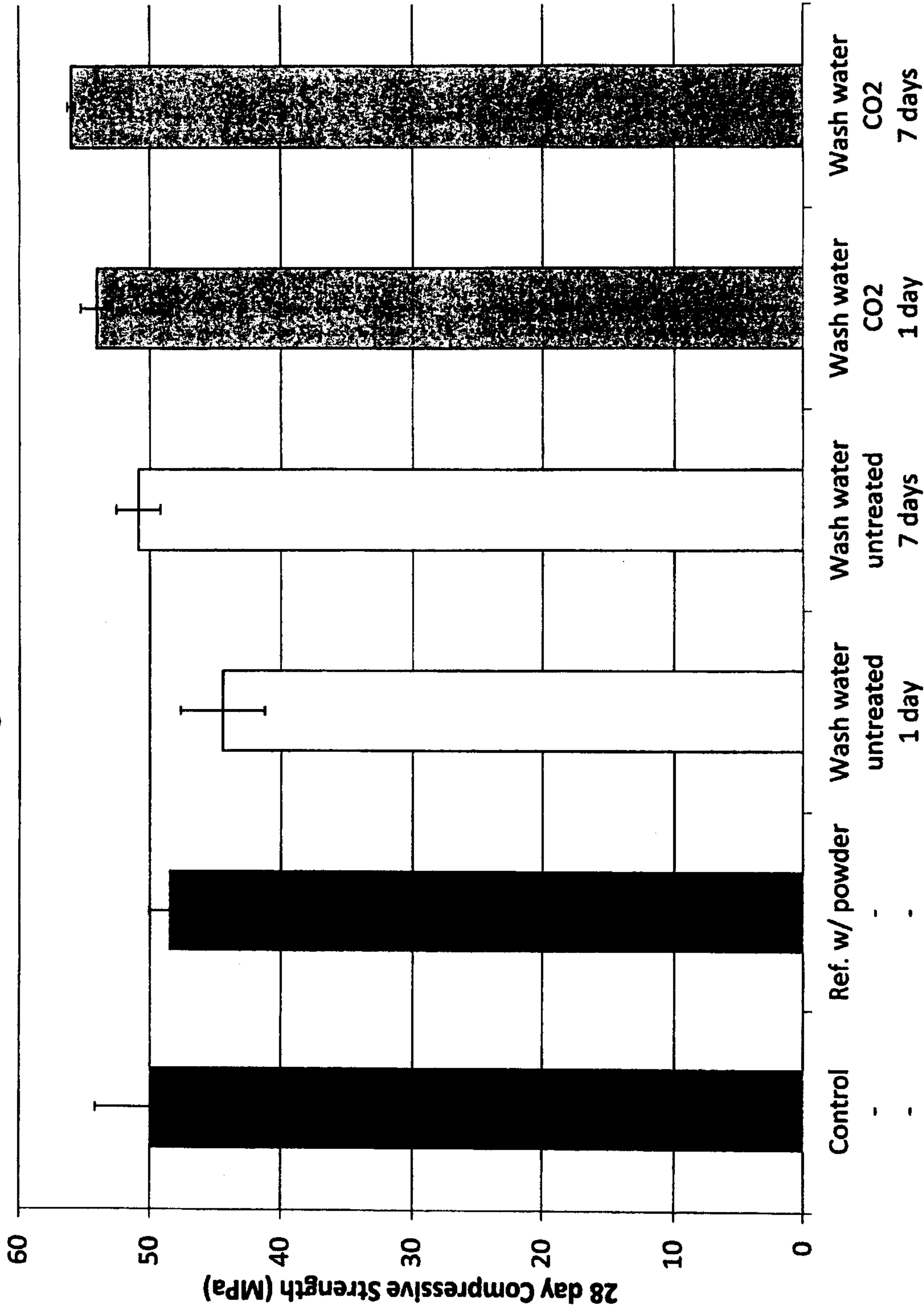


Figure 31

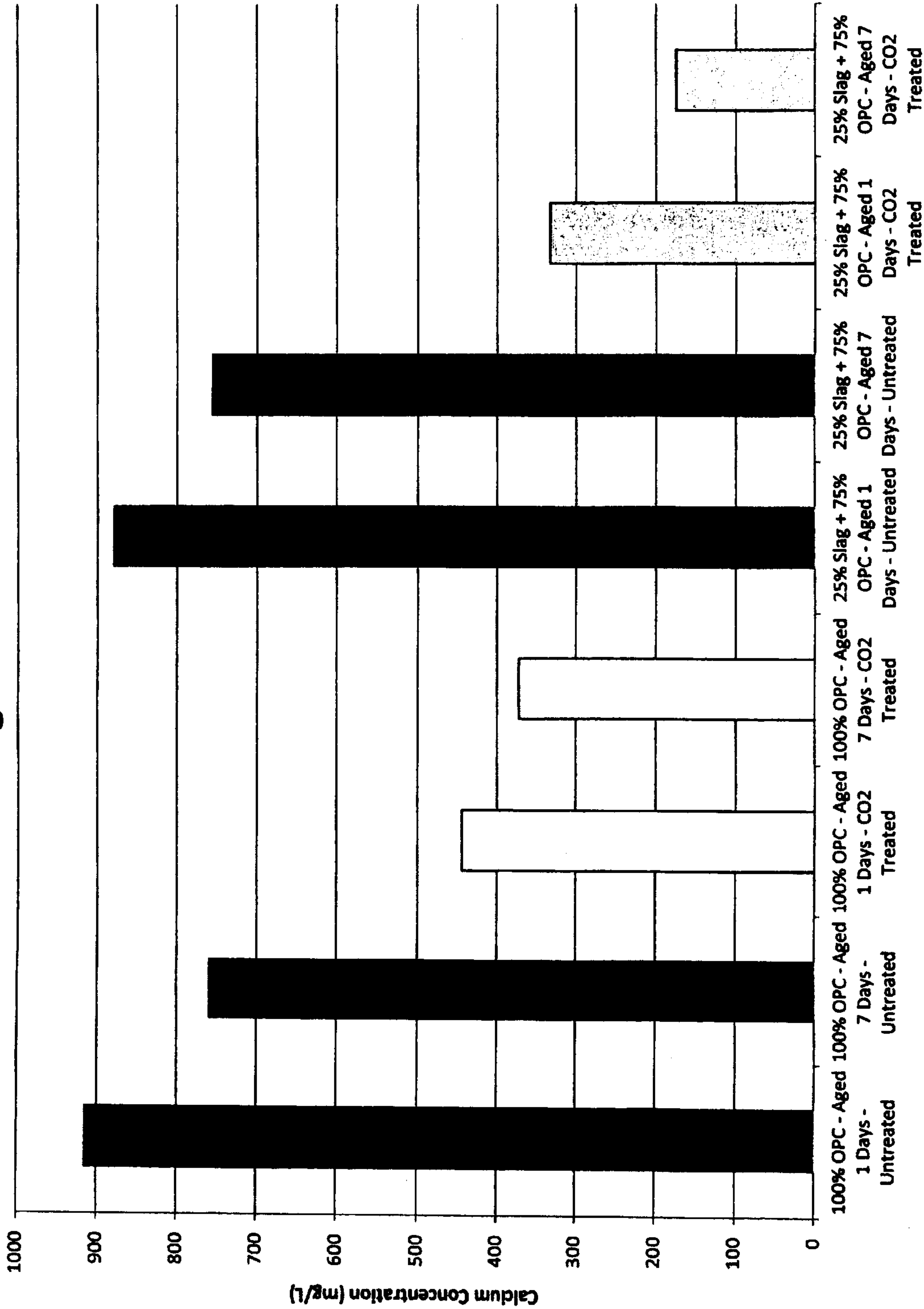


Figure 32

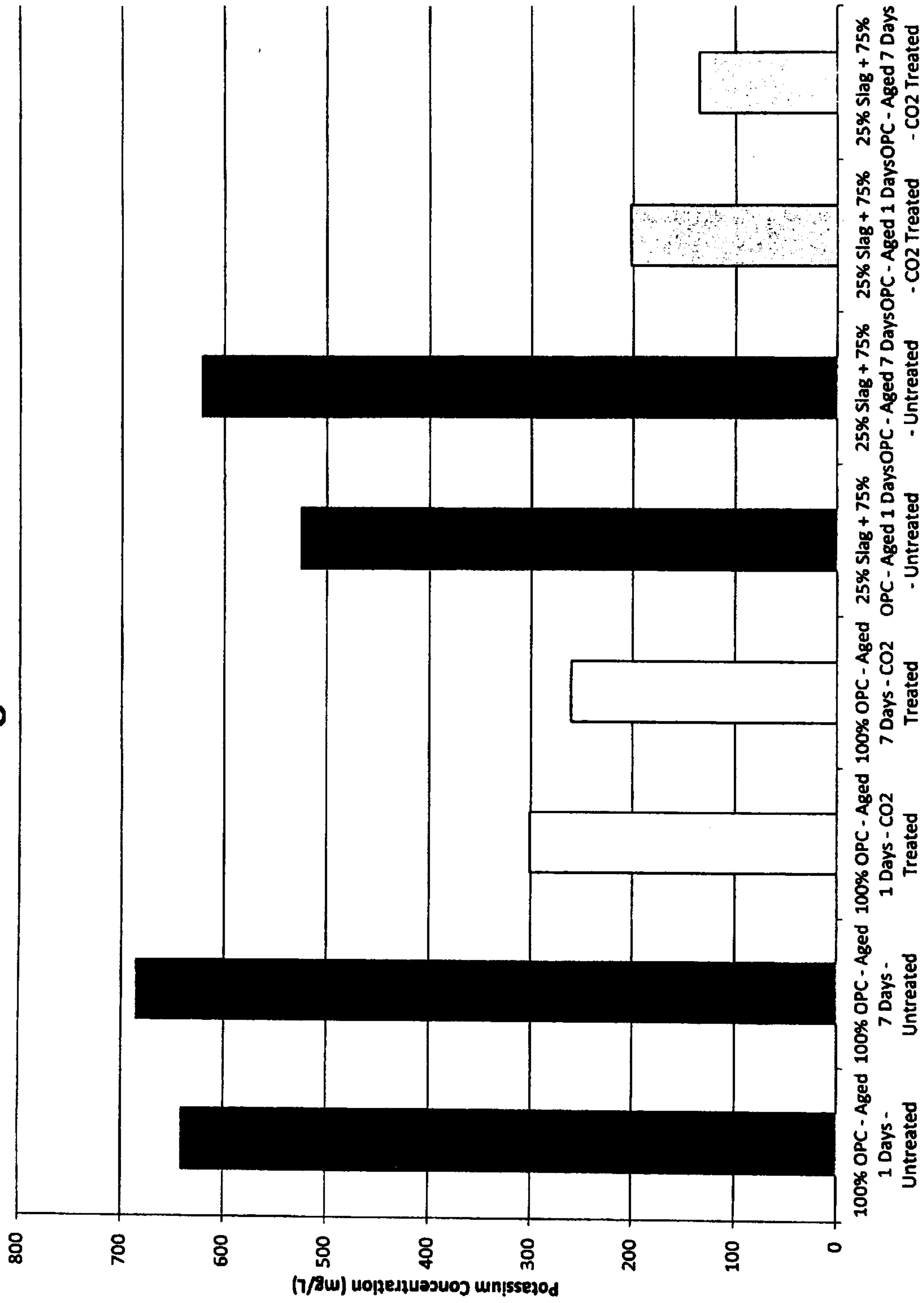


Figure 33

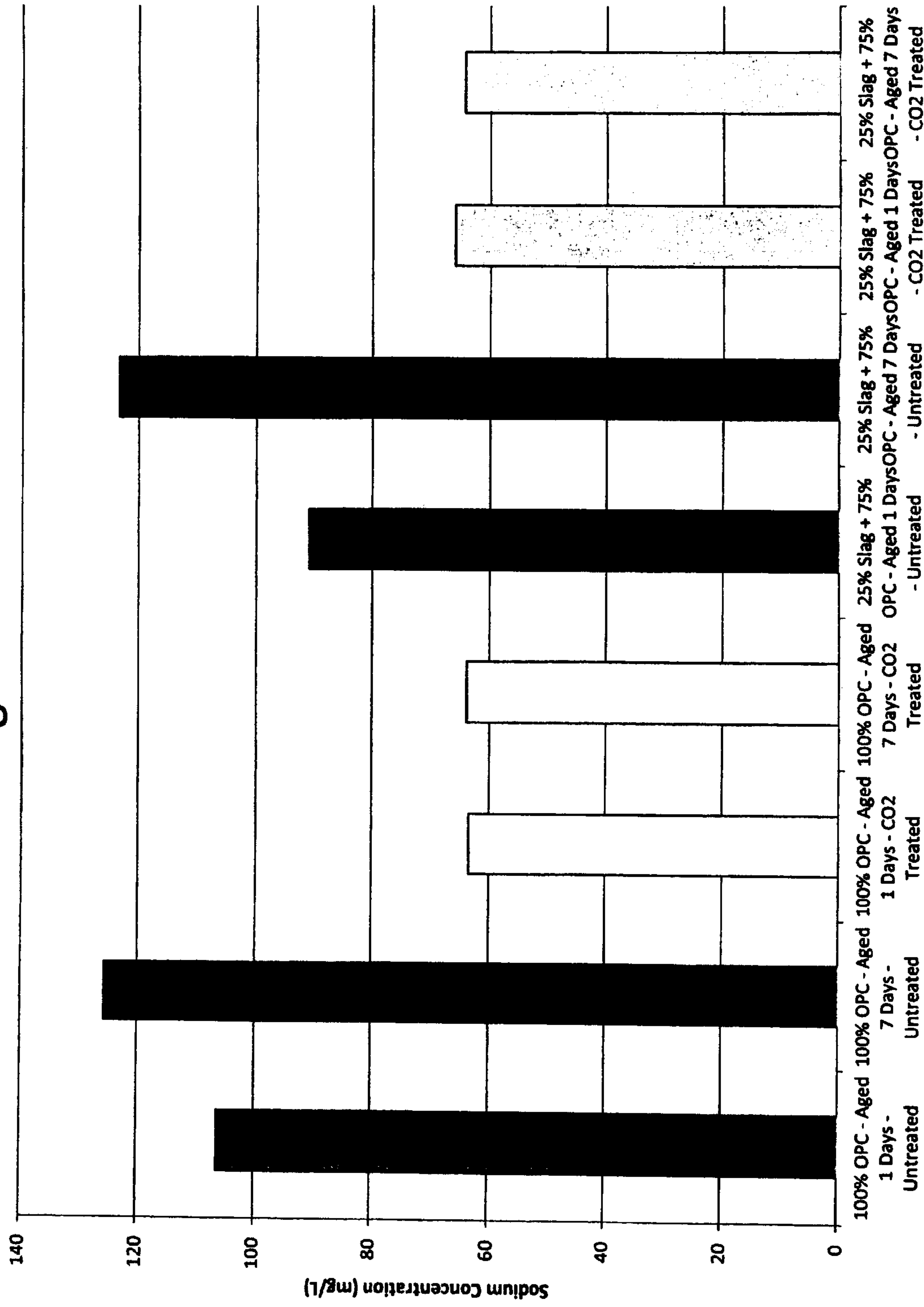


Figure 34

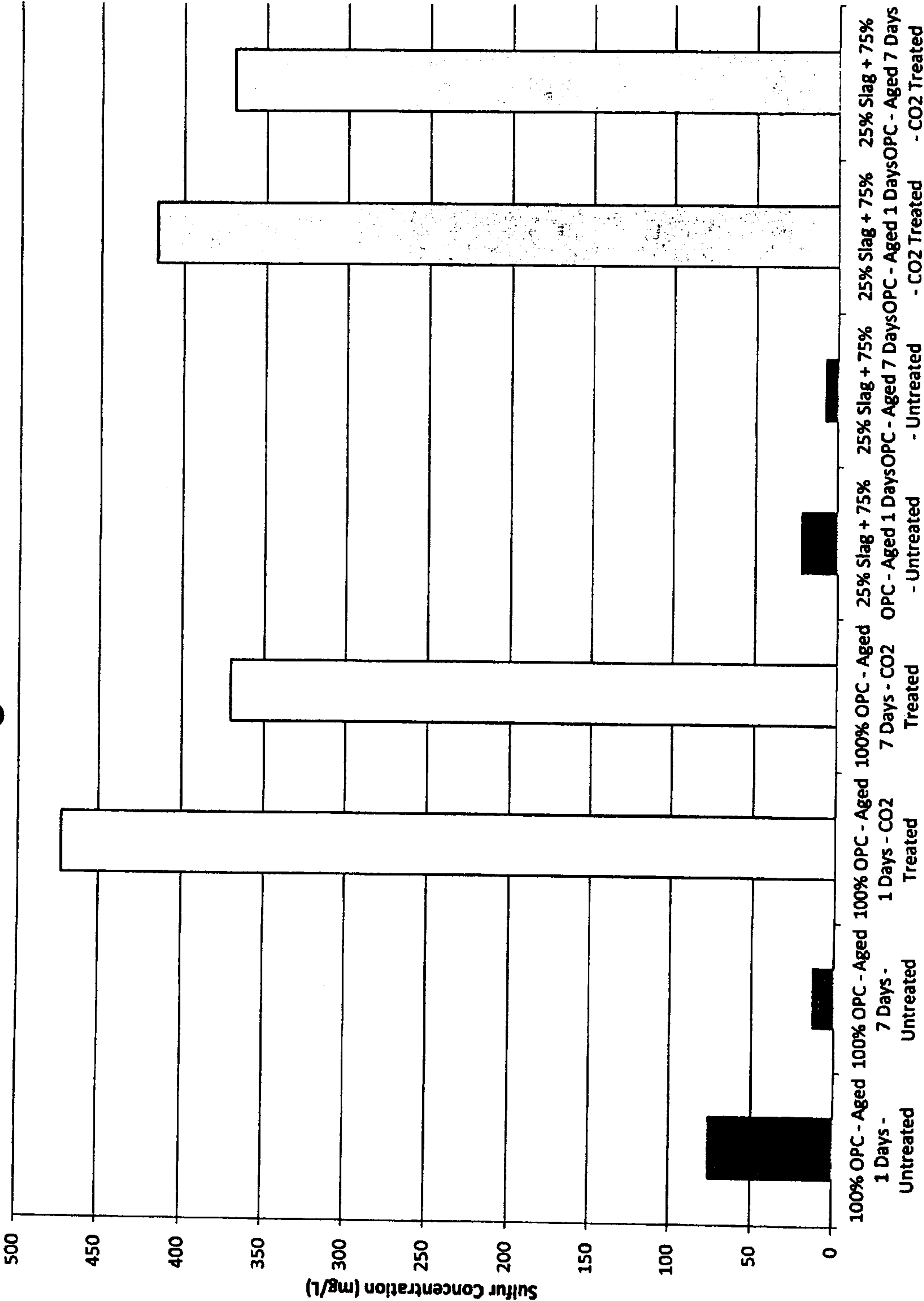


Figure 35

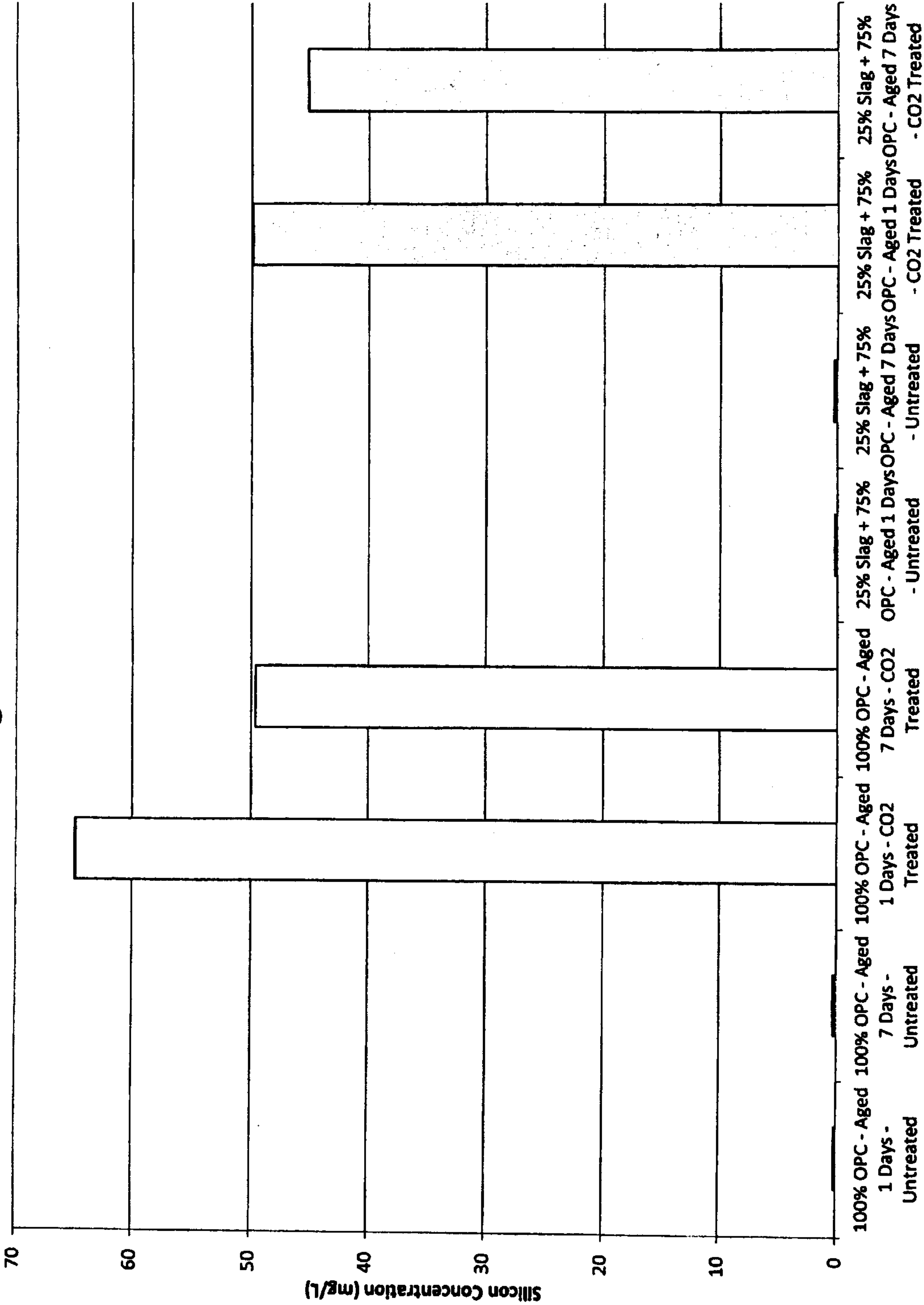


Figure 36

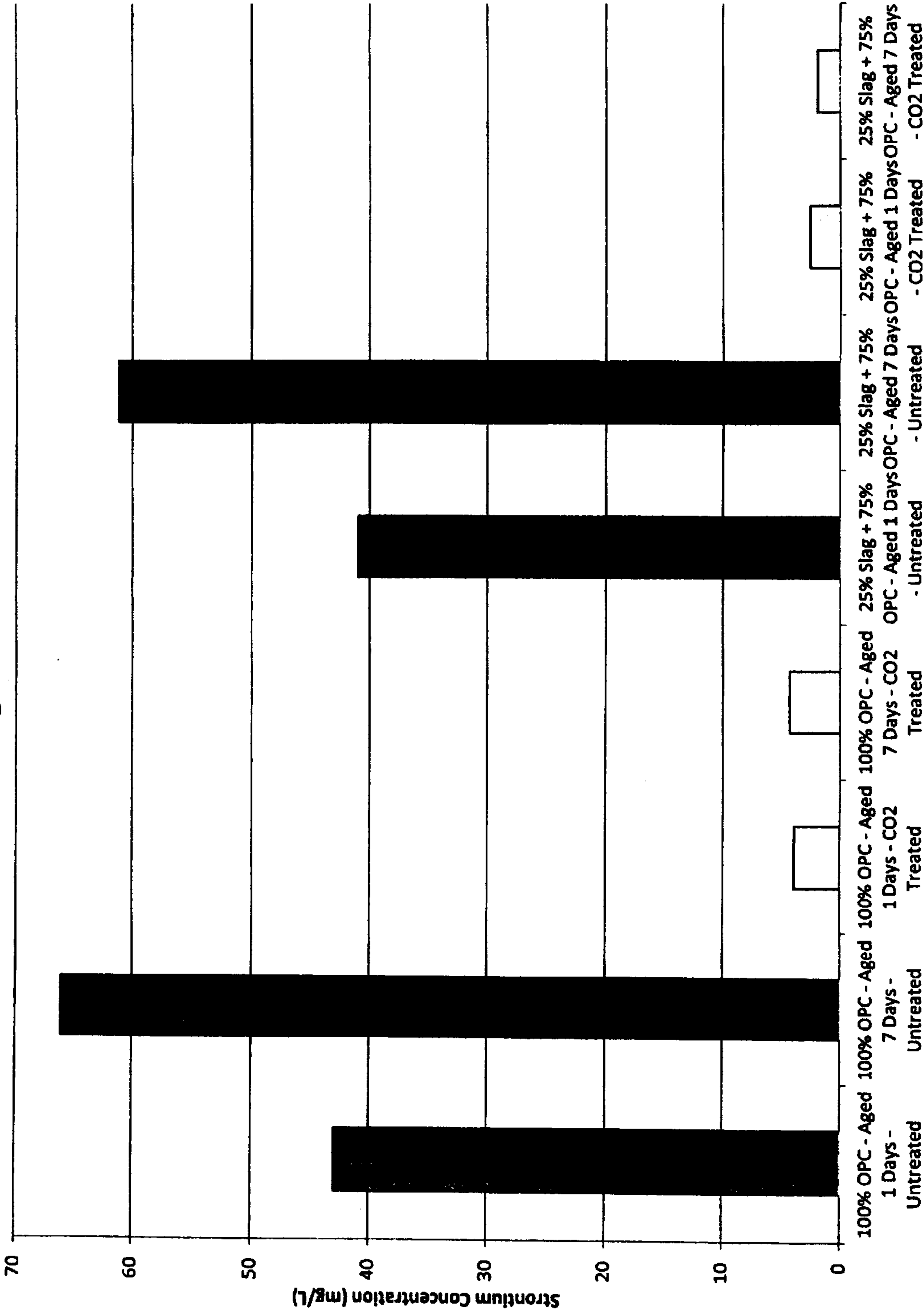


Figure 37

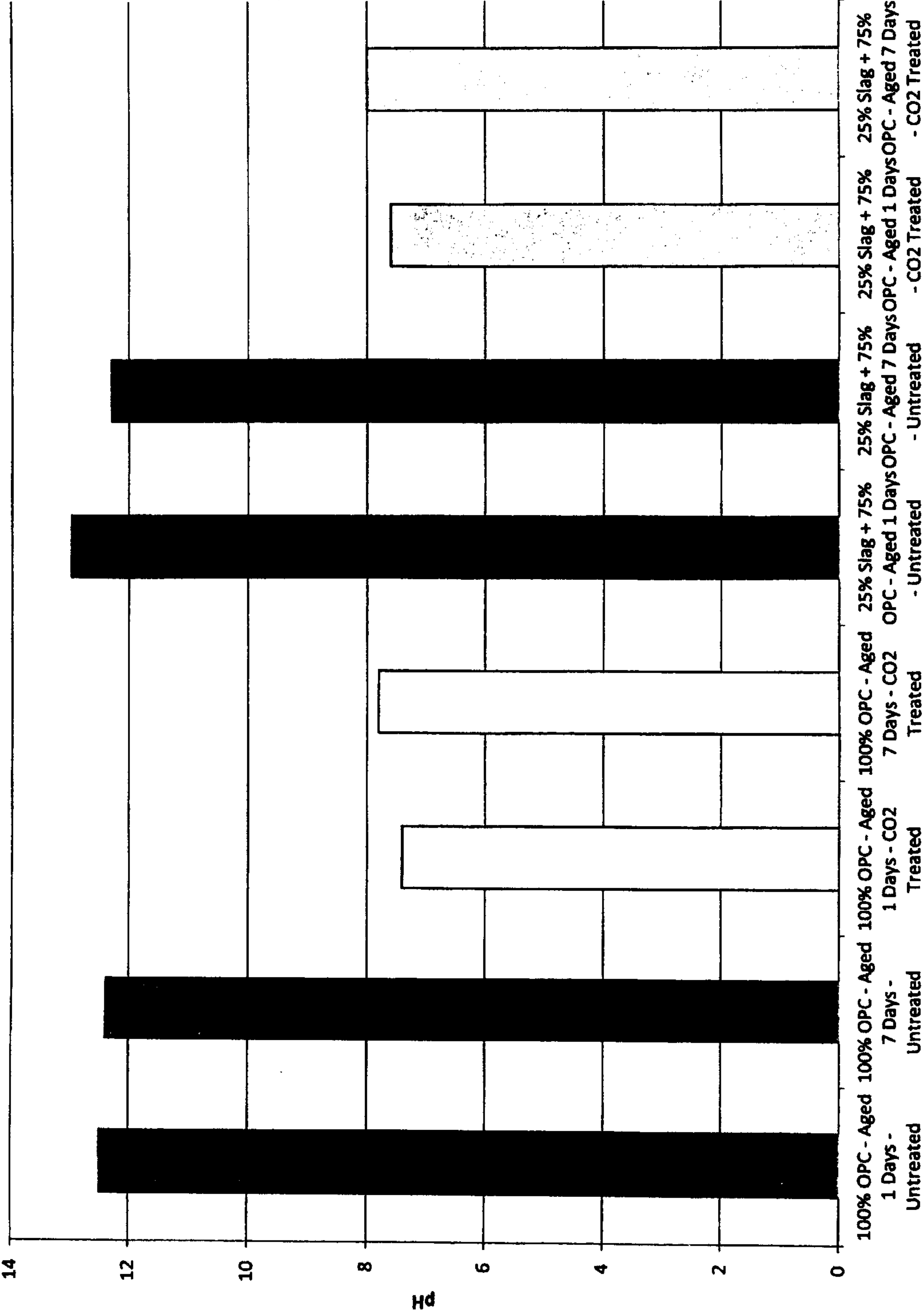


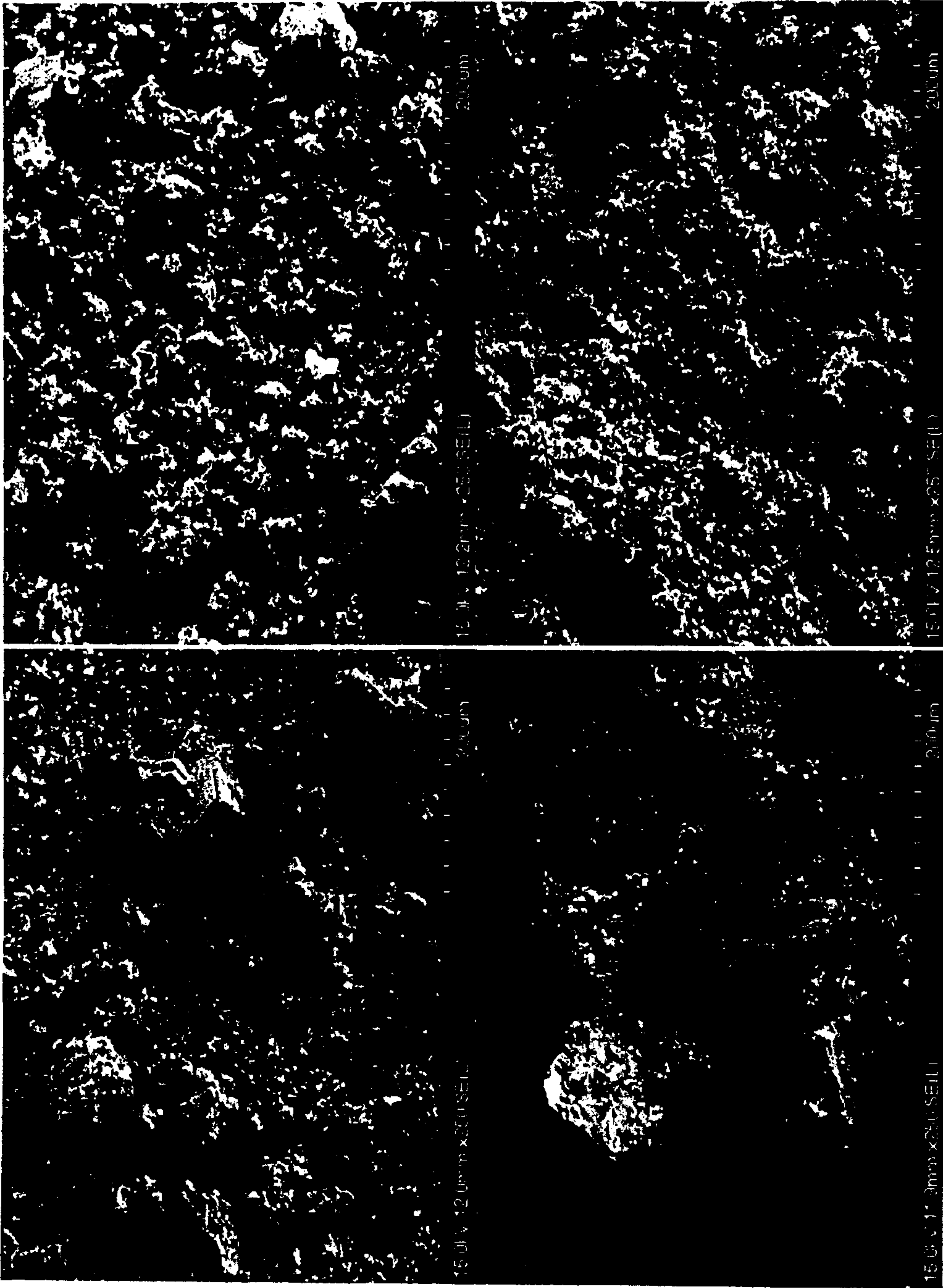
Figure 38

Sample	Analyte Concentration (mg/L)																	La
	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	Ga	Ge	In	K	
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

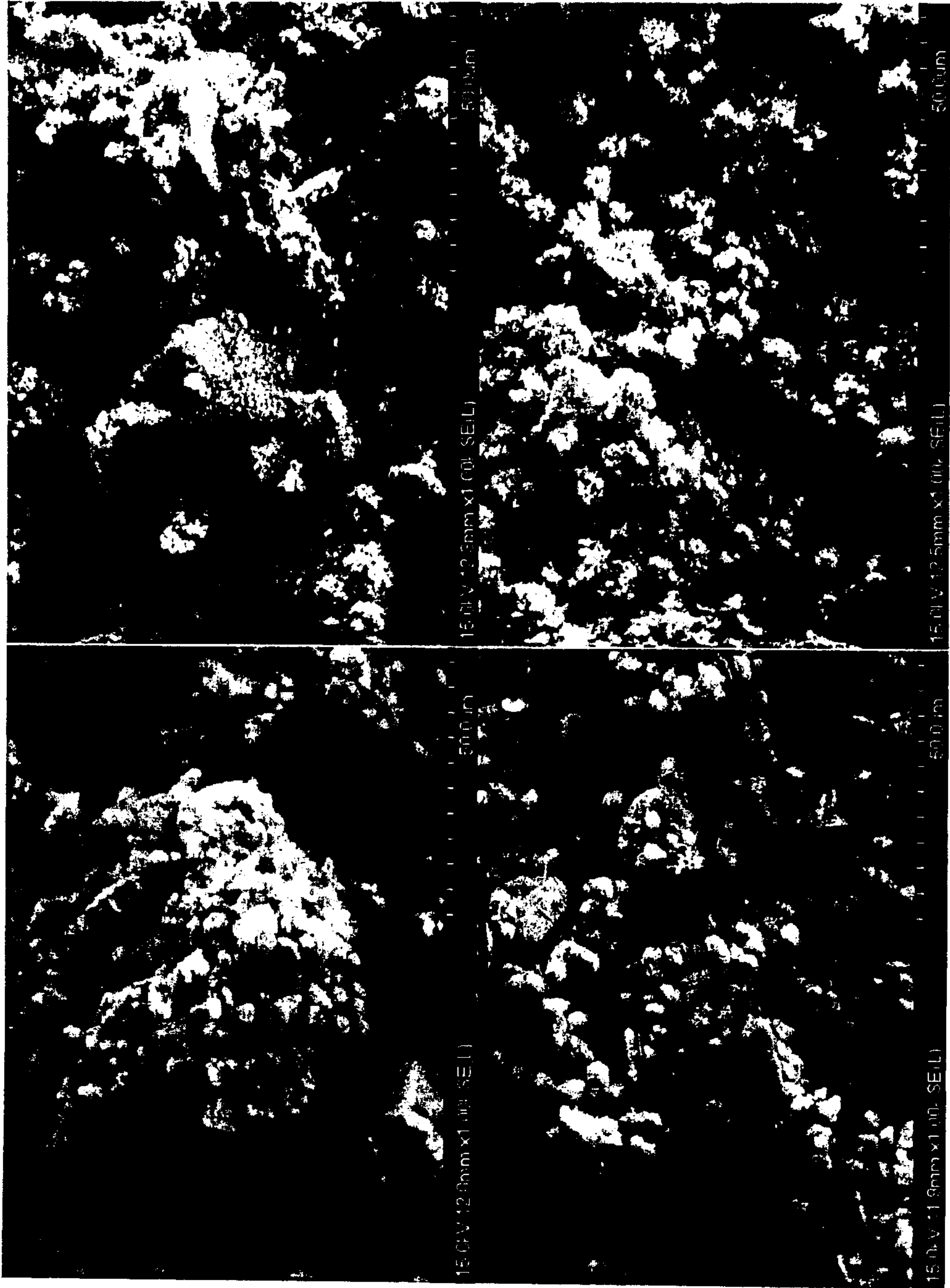
Figure 39

		Analyte Concentration (mg/L)																							
		Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Sr	Ta	Te	Ti	Tl	V	Zn	Zr	pH	
Sample																									
100% OPC - Aged 1 Days - Untreated	2.7	0.01	<0.01	0.1	106	<0.2	<0.01	<0.1	<0.1	<0.1	76	<0.1	<0.5	0.2	<0.5	43.0	<0.5	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<0.01	8

100% OPC @ 250 mag Figure 40 CO₂ Treated
Untreated



100% OPC @ 1k mag Figure 41 CO₂ Treated
Untreated



1 Day

7 Day

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

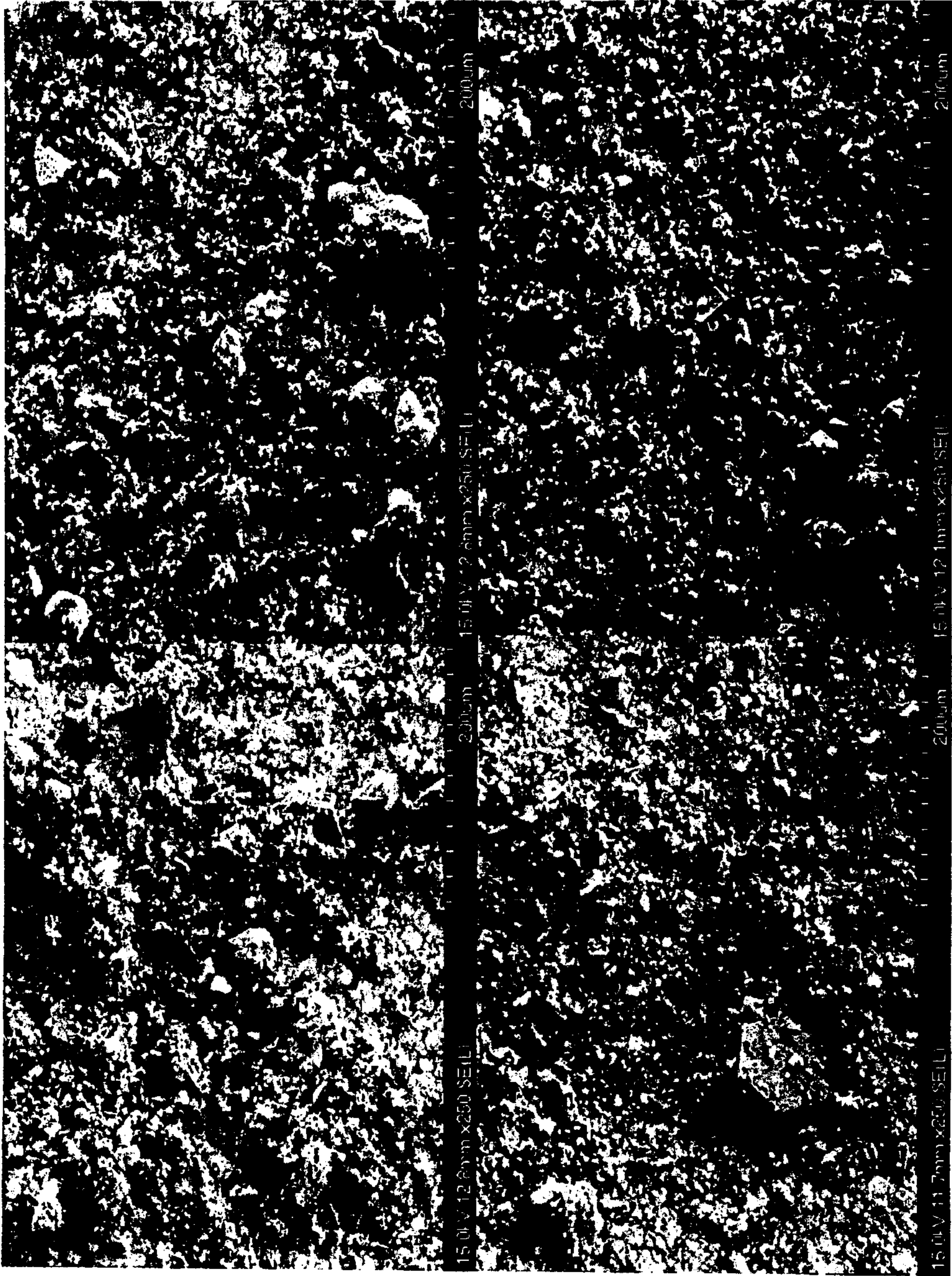


Figure 44
75% OPC + 25% Slag @ 3.5 k mag
Untreated CO2 Treated

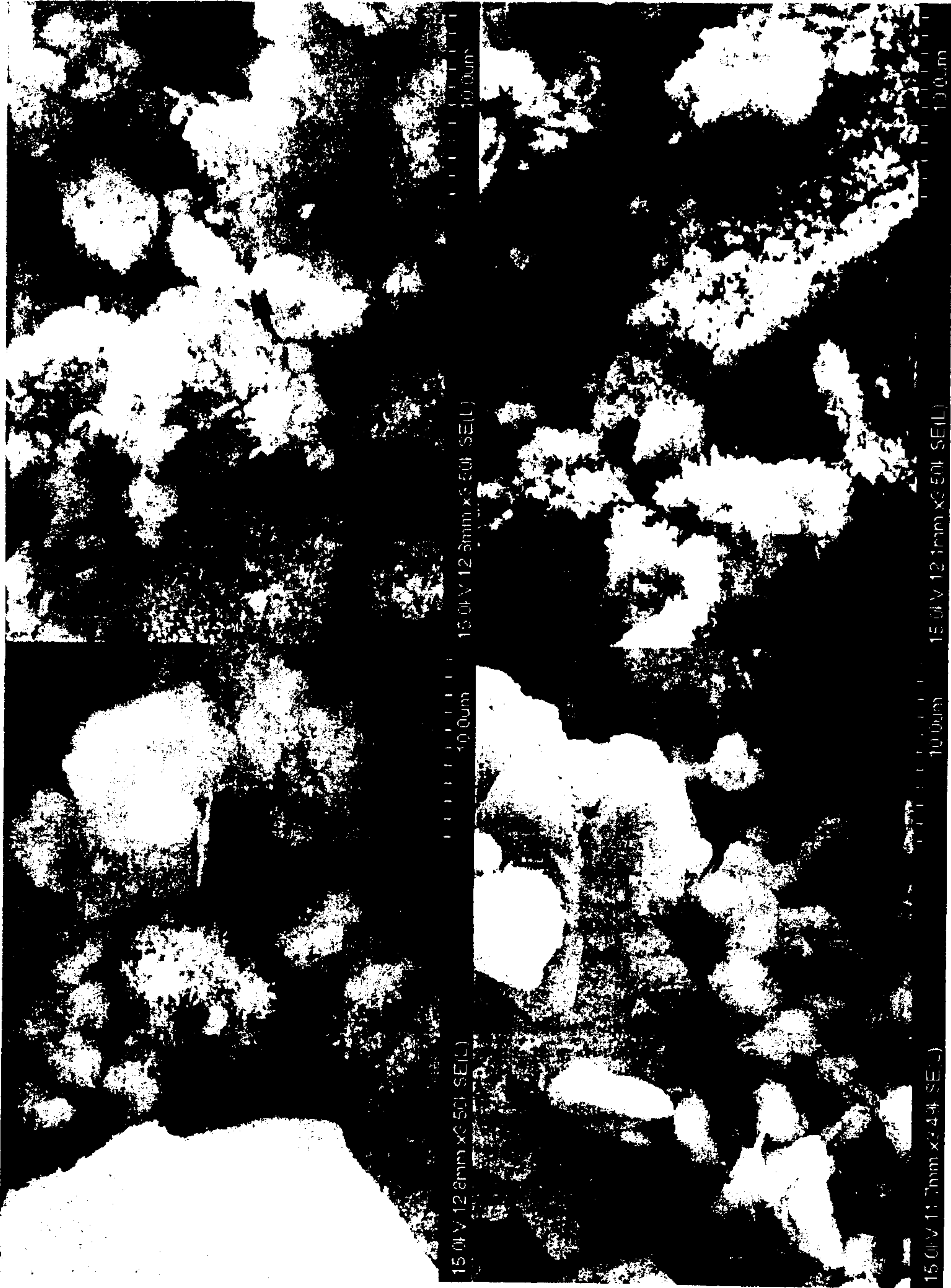


Figure 45
75% OPC + 25% Slag @ 25 k mag
Untreated CO2 Treated

1 Day

7 Day



Figure 46

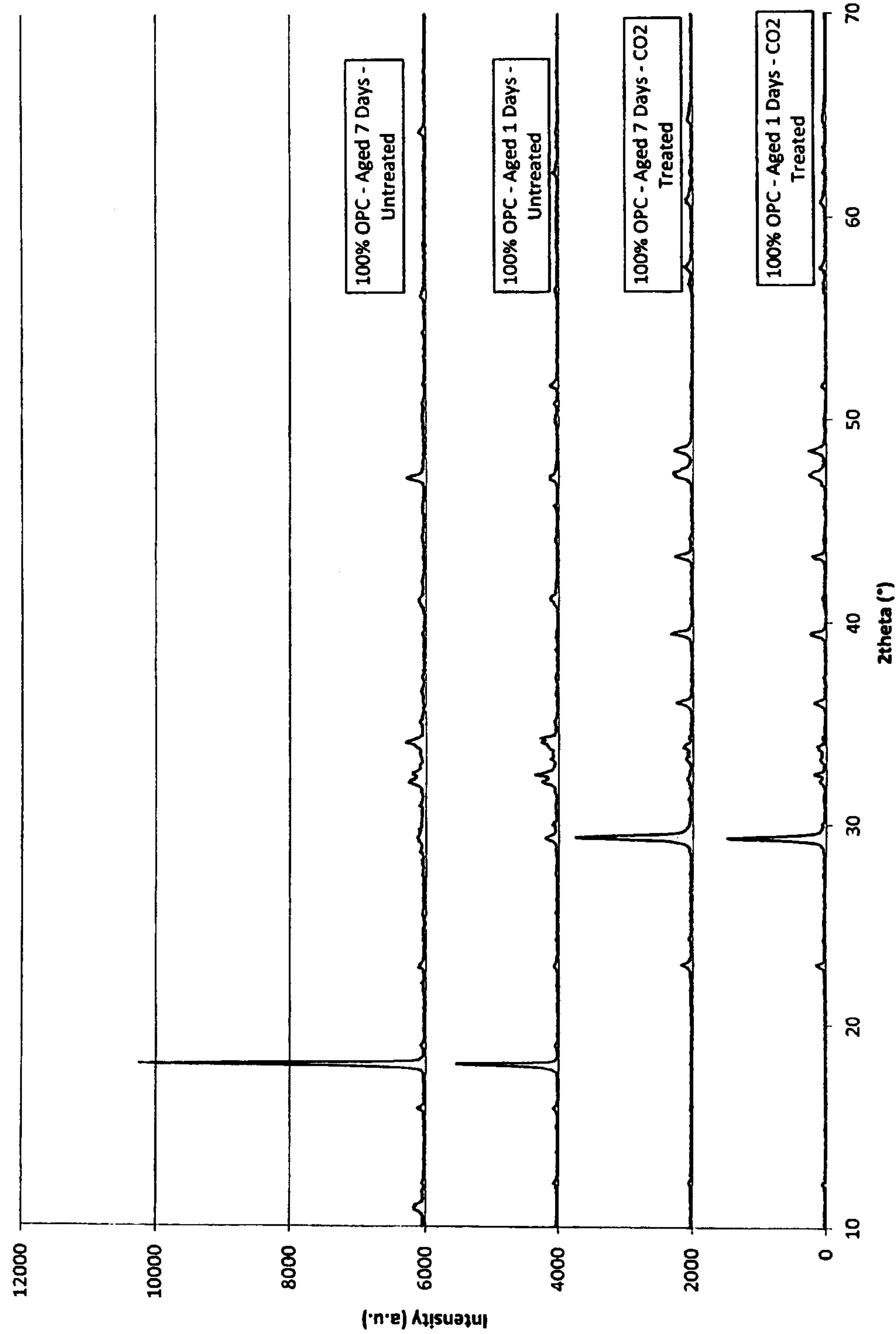


Figure 47

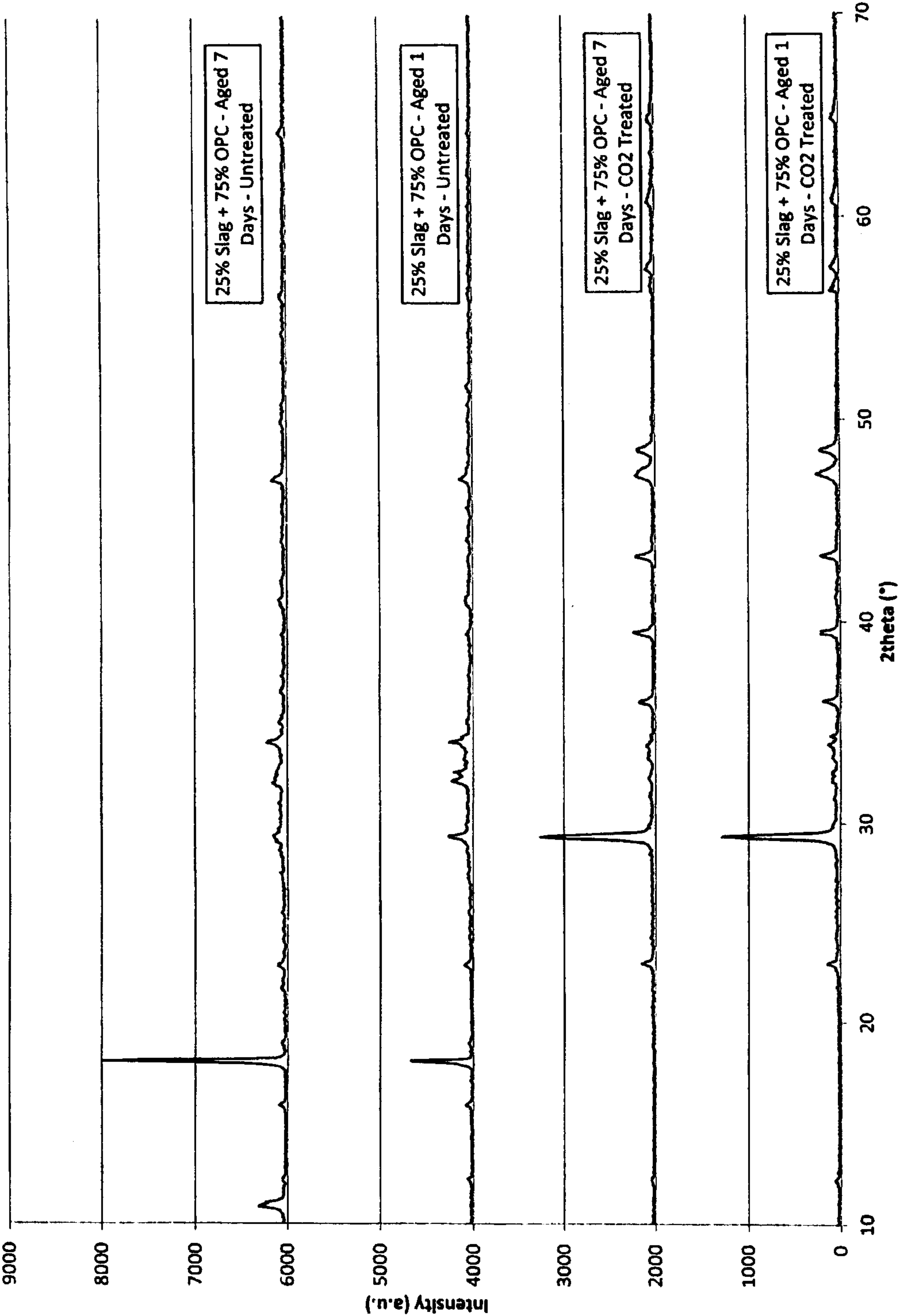


Figure 48
100% OPC Series

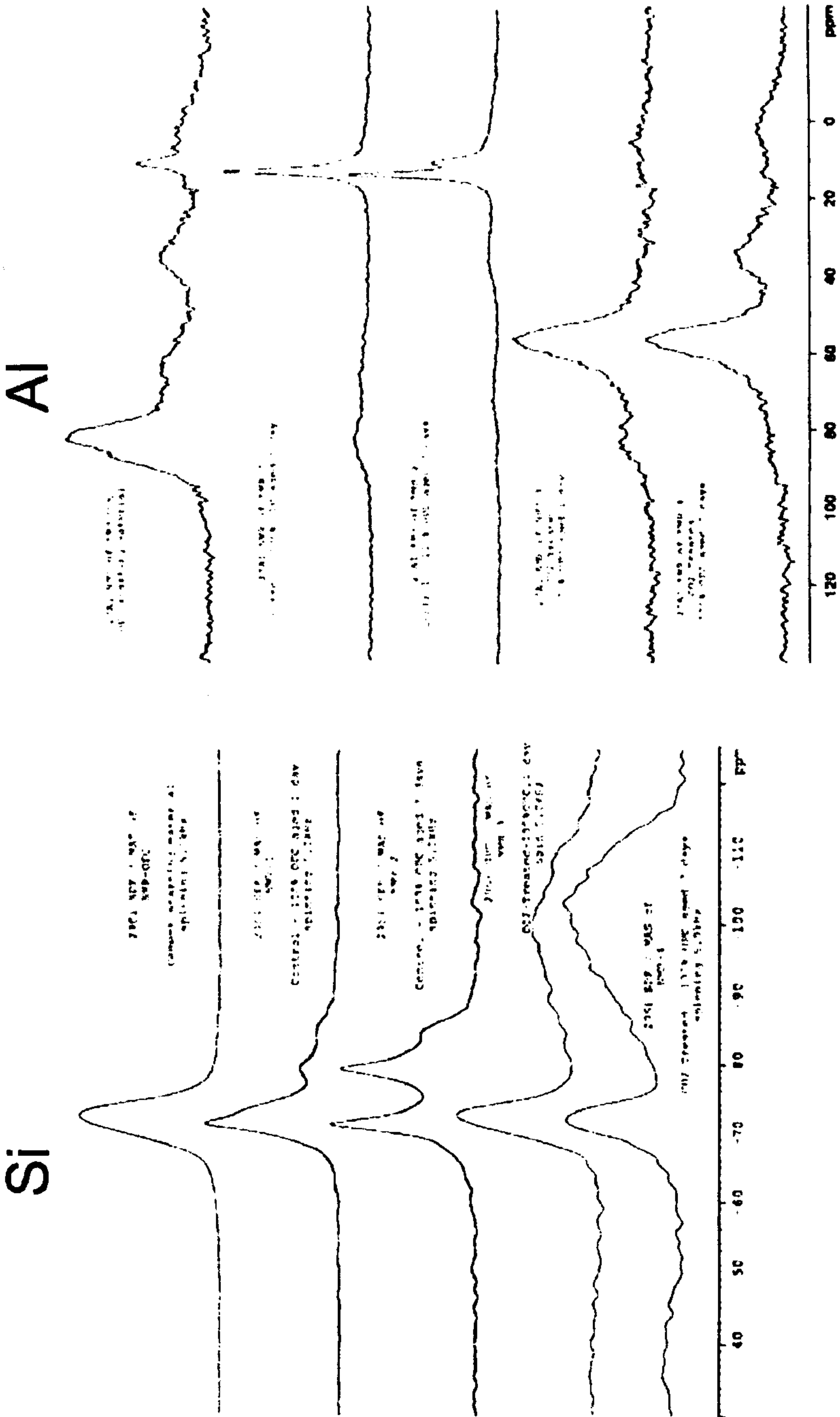


Fig. 5. ^{29}Si NMR spectra of 100% OPC based samples undergone various curing times (SI-NMR-no-Slag.pdf)

Fig. 10. ^{27}Al NMR spectra of 100% OPC based samples undergone various curing times (Al100.OPC.pdf)

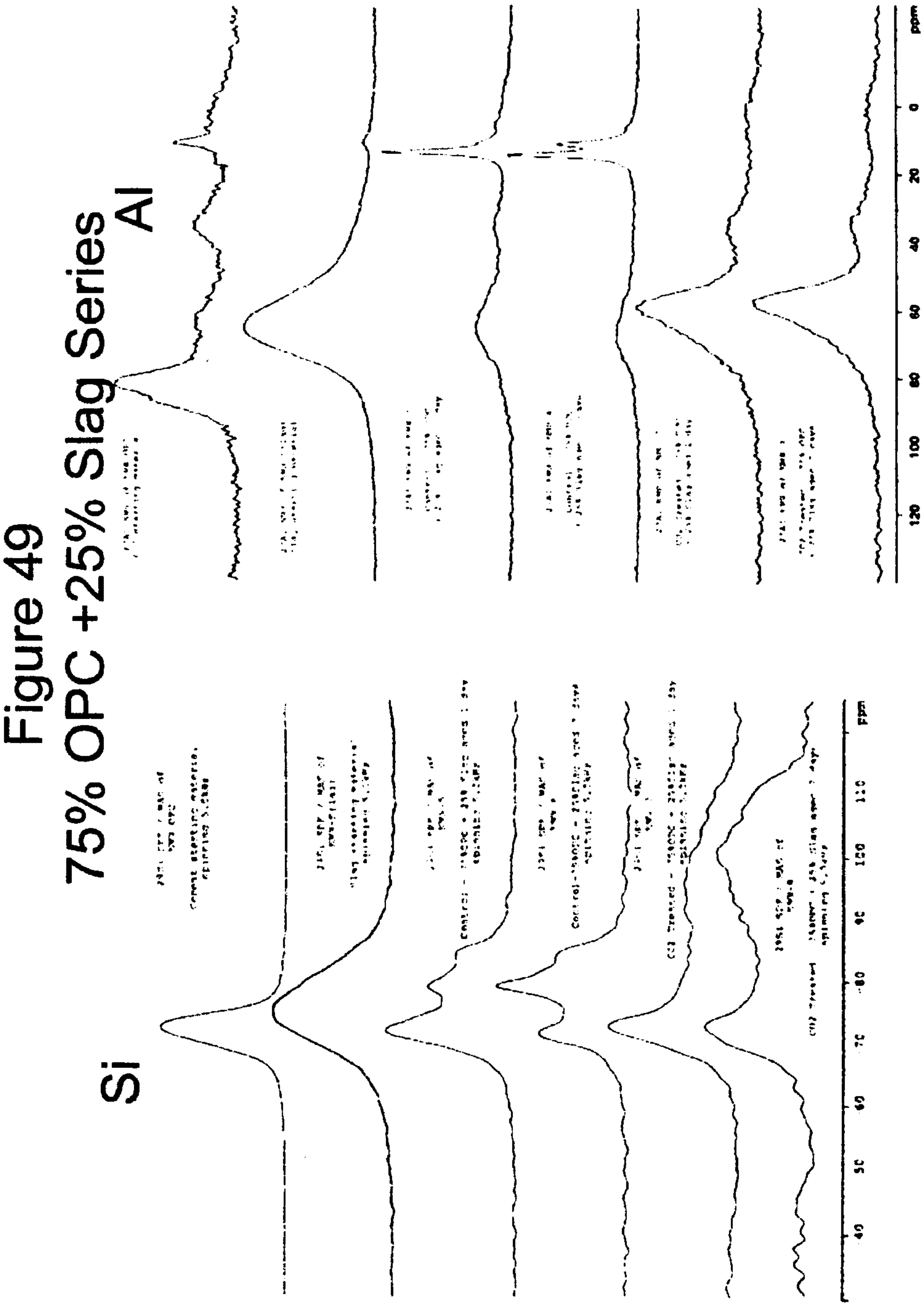


Fig. 6. ²⁹Si NMR spectra of 75% OPC + 25% Slag based samples undergone various treatments (Si_Slag_samples.pdf)

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

Figure 50

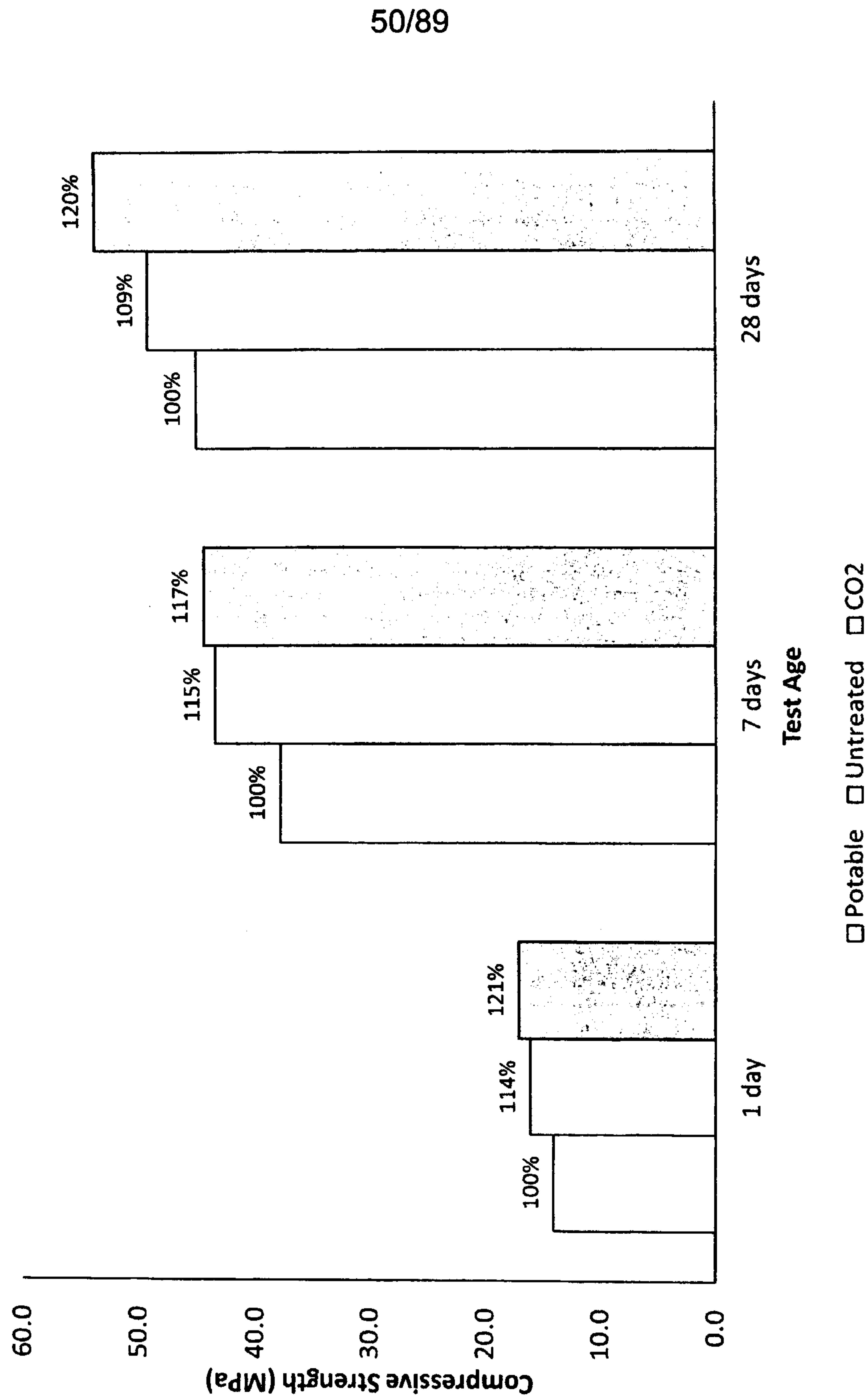


Figure 50

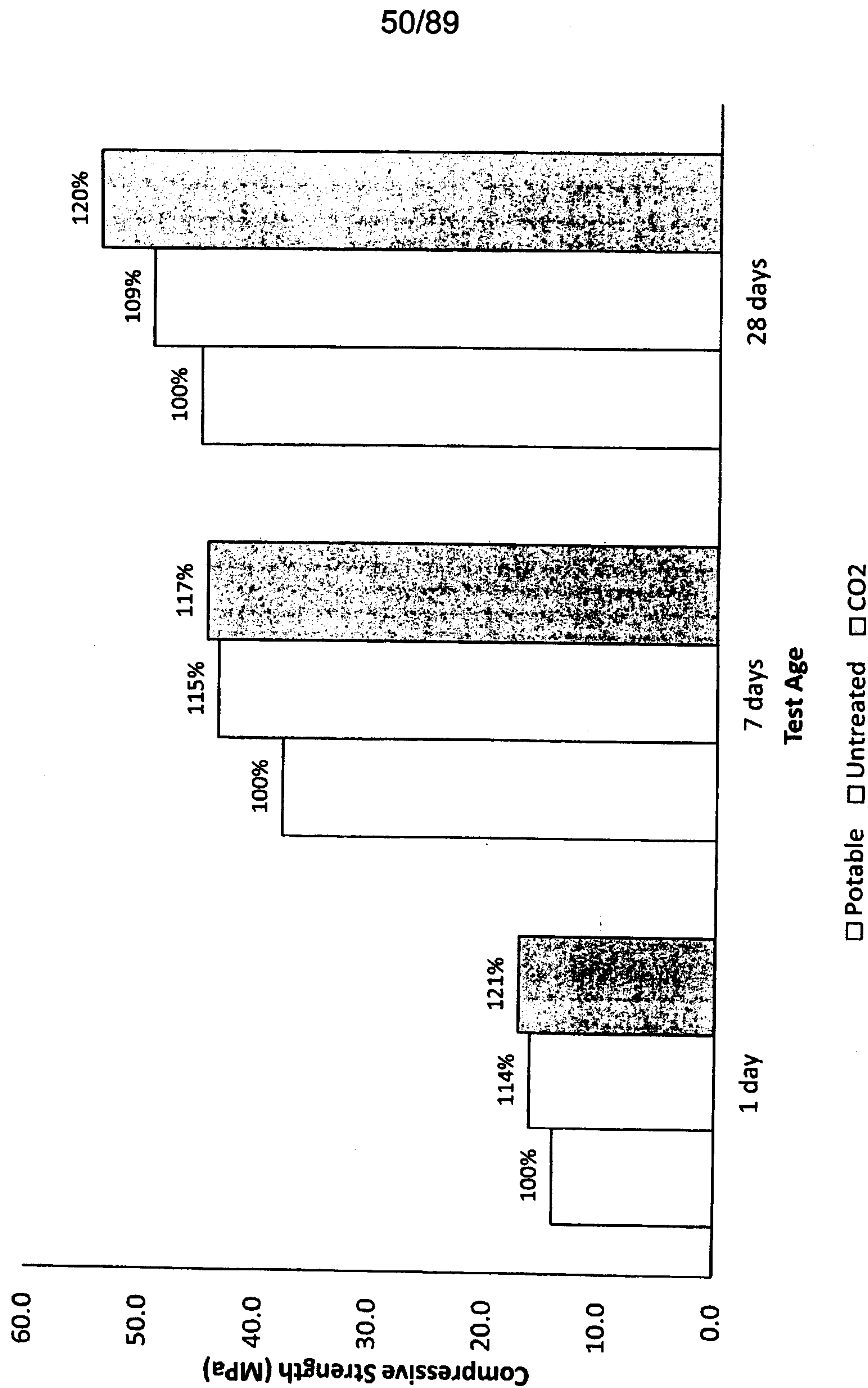


Figure 51

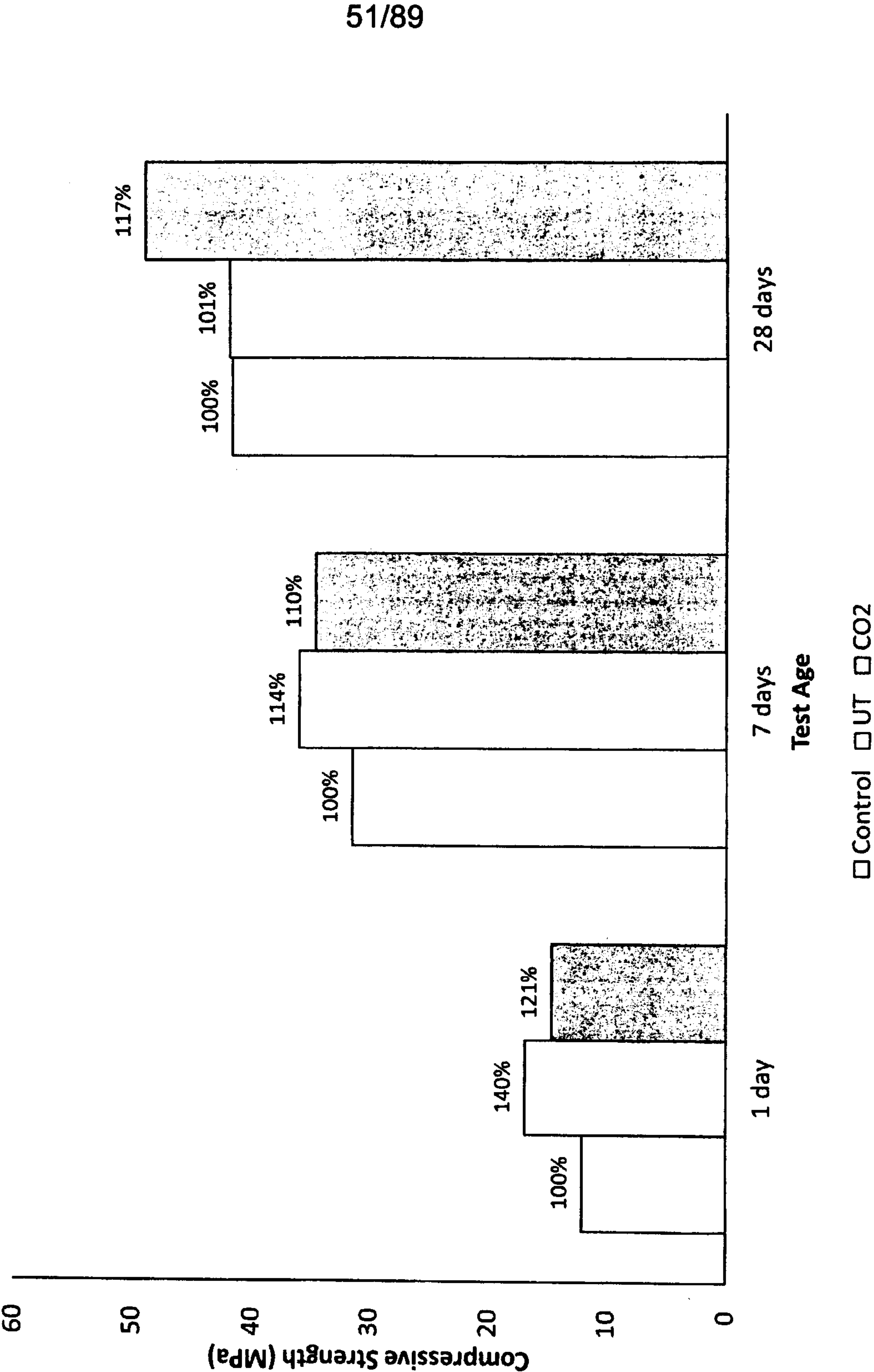
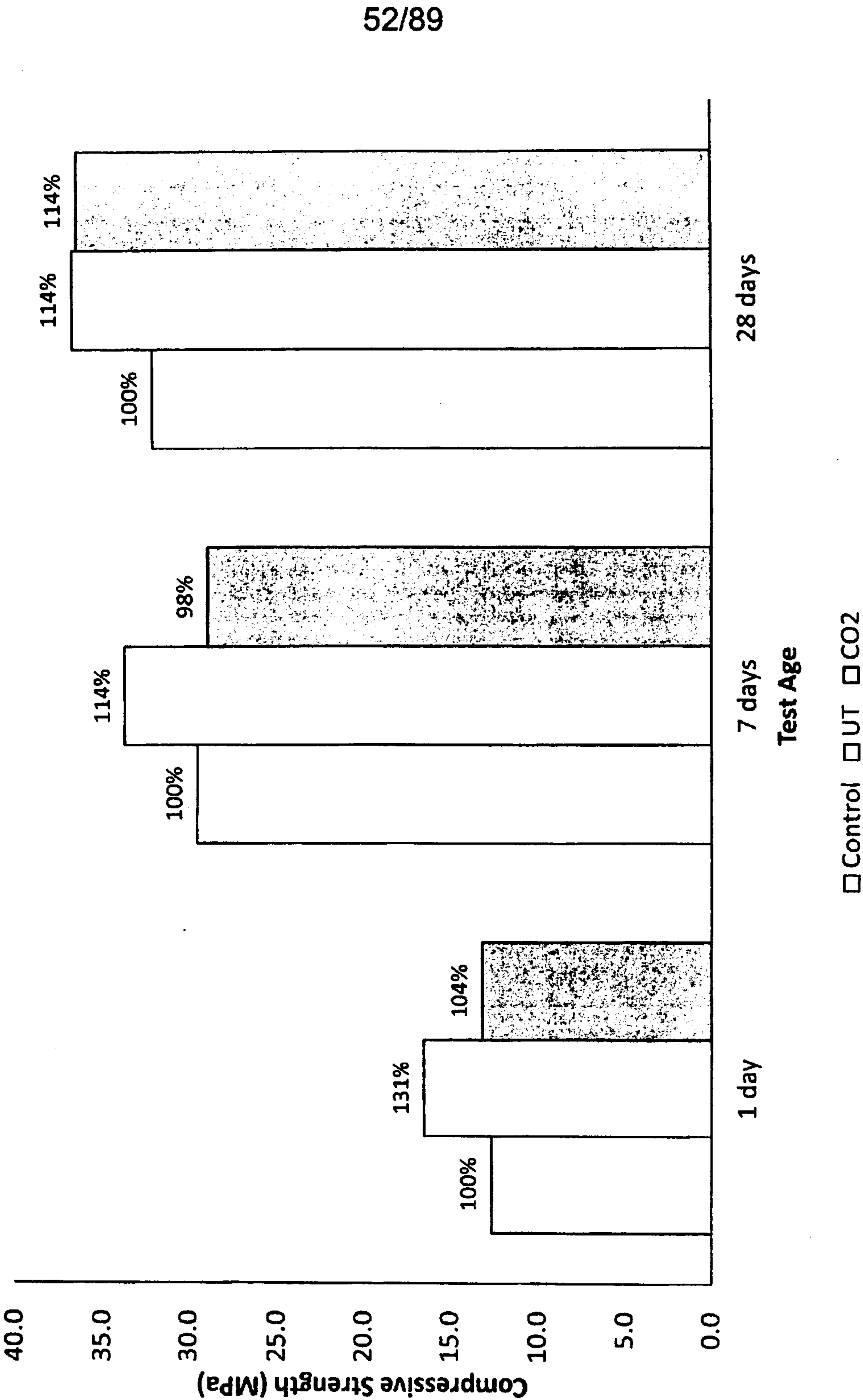
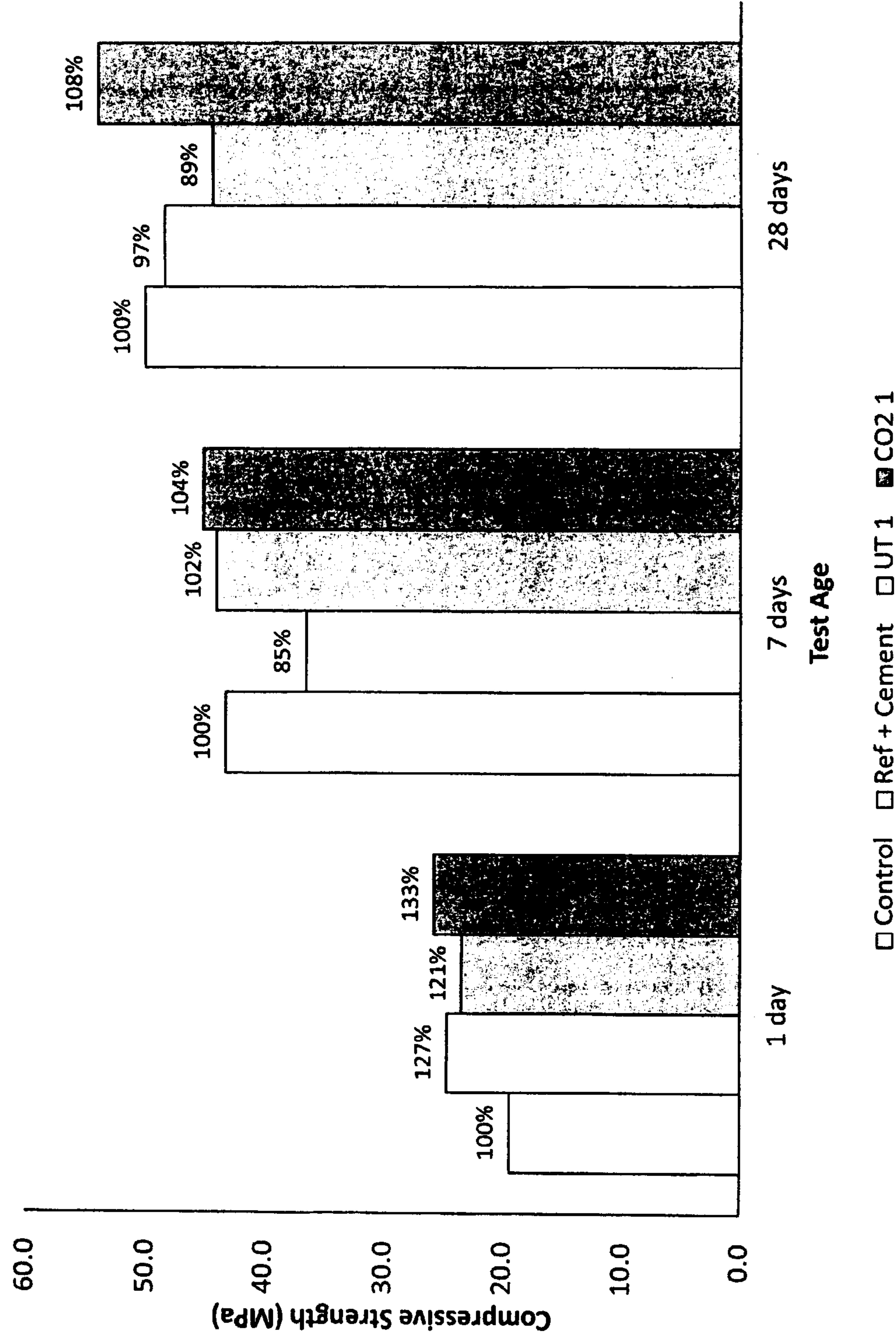


Figure 52



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Figure 53



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Figure 54

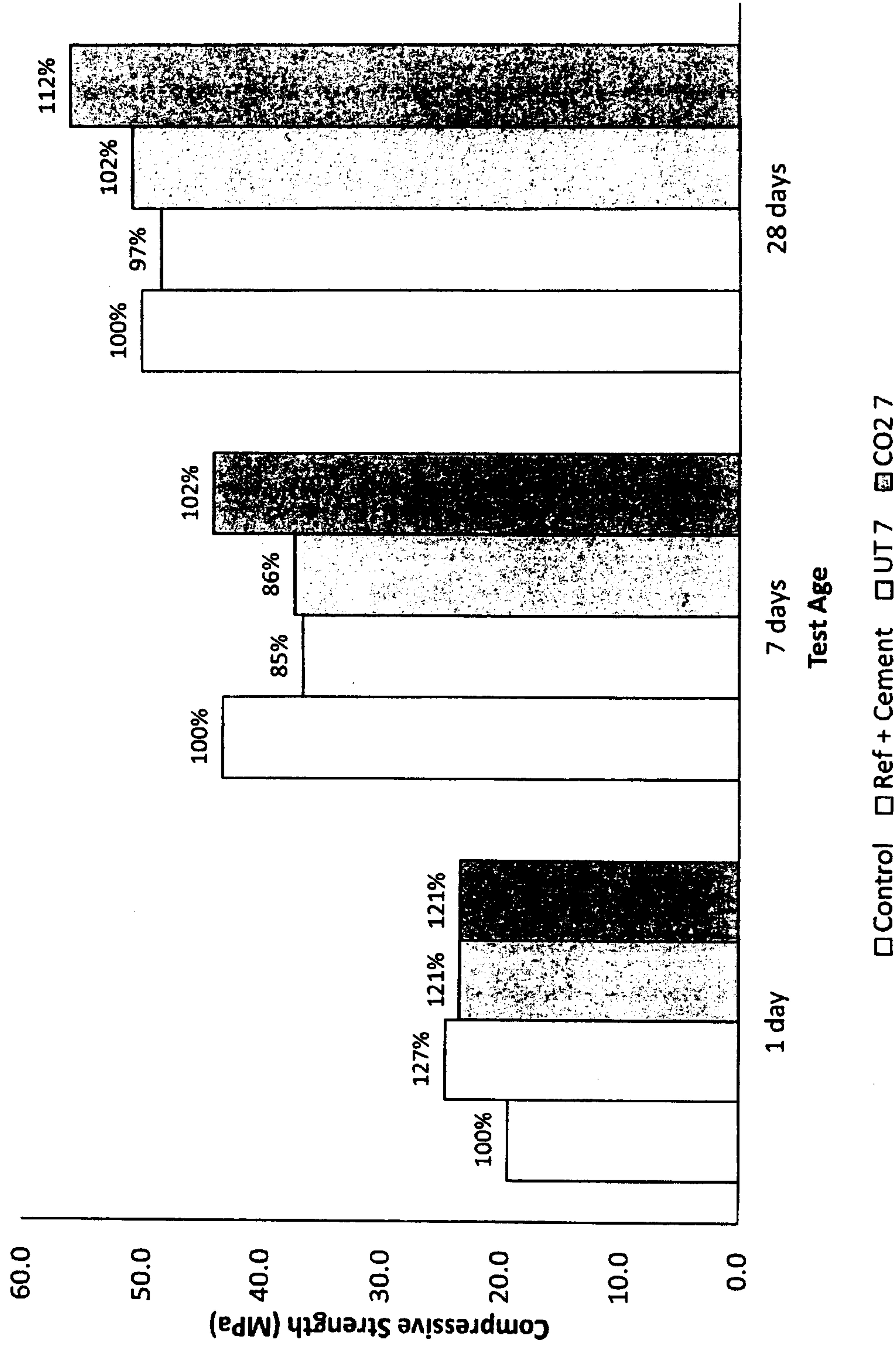


Figure 55

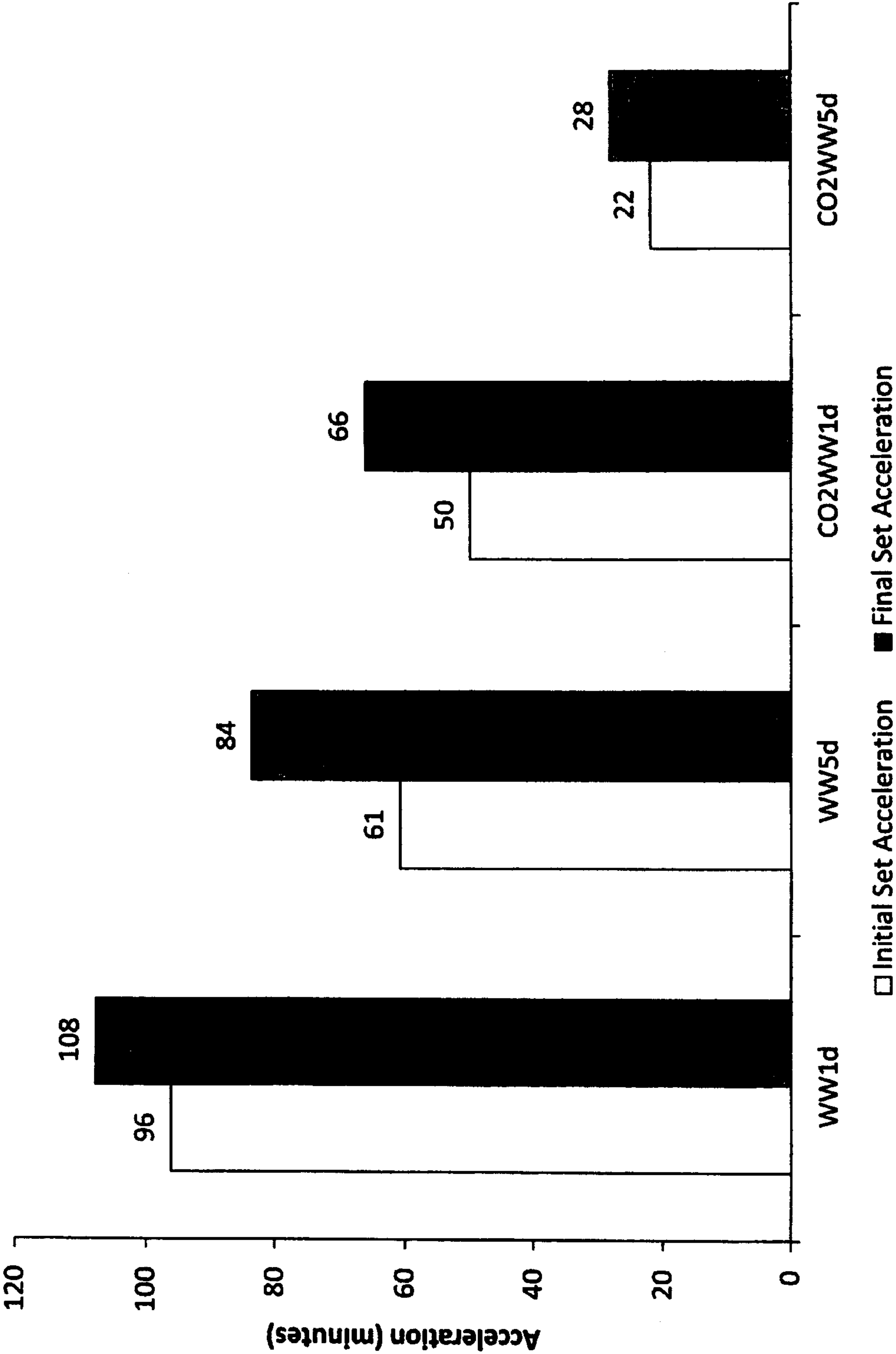


Figure 56

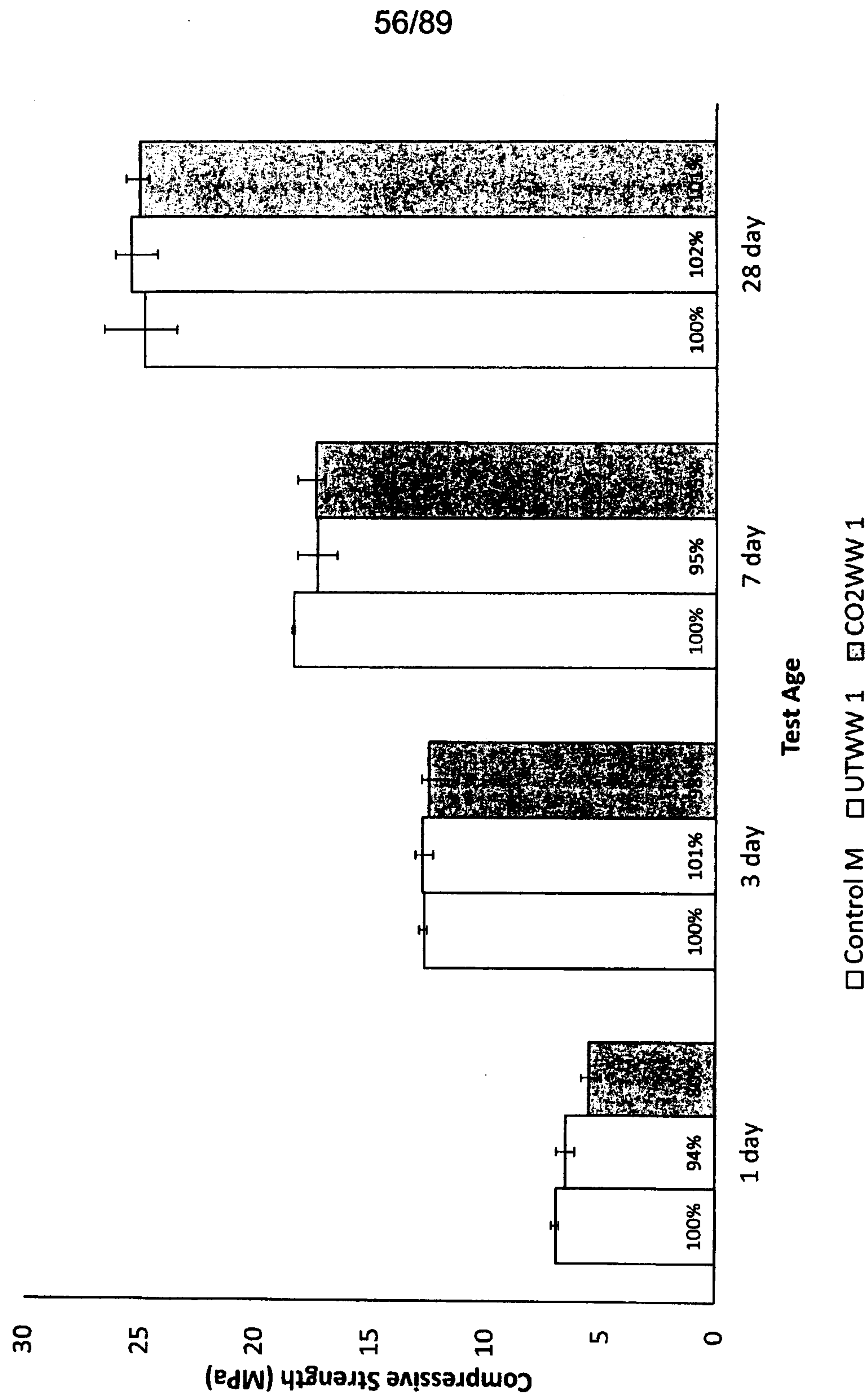


Figure 57

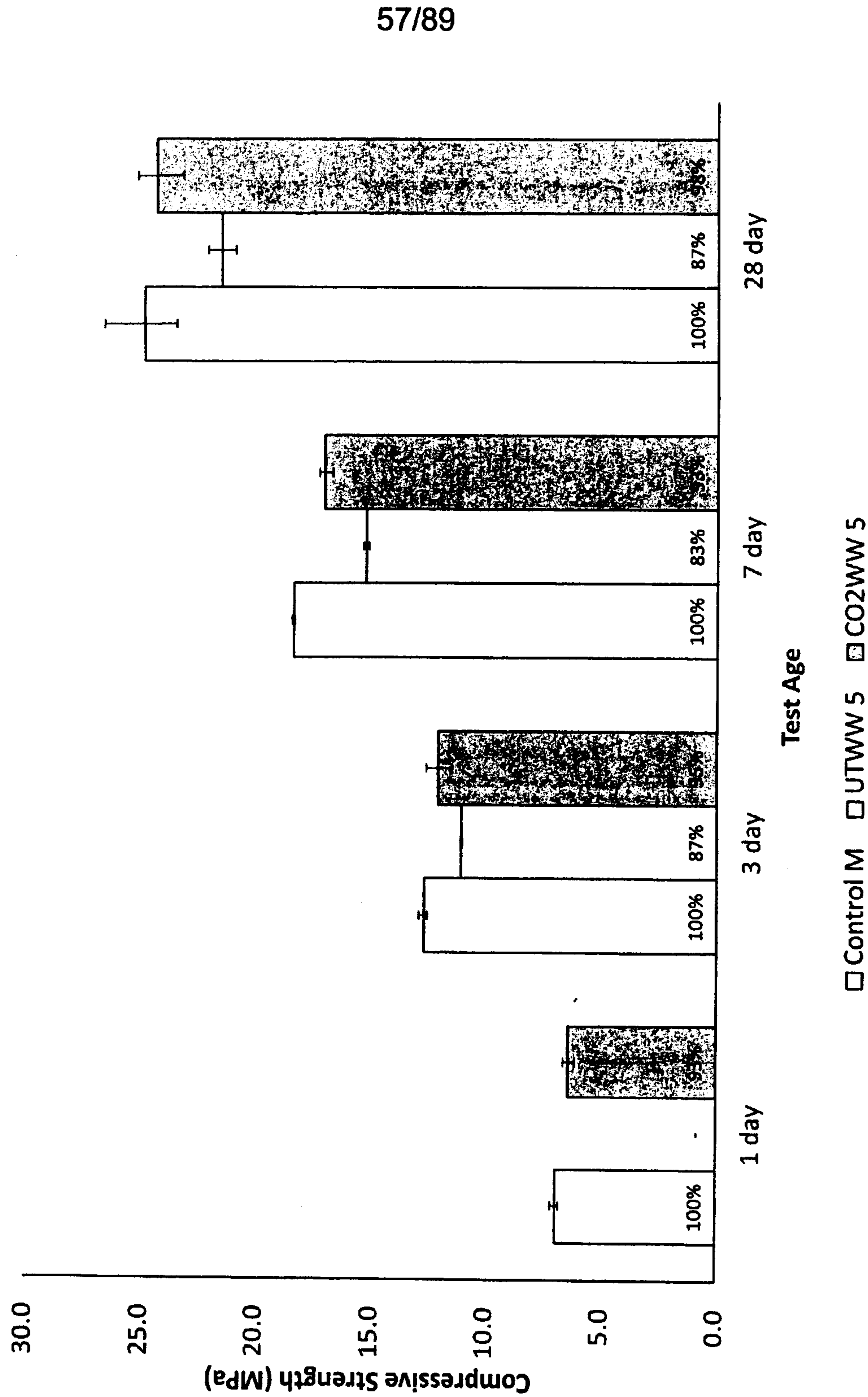
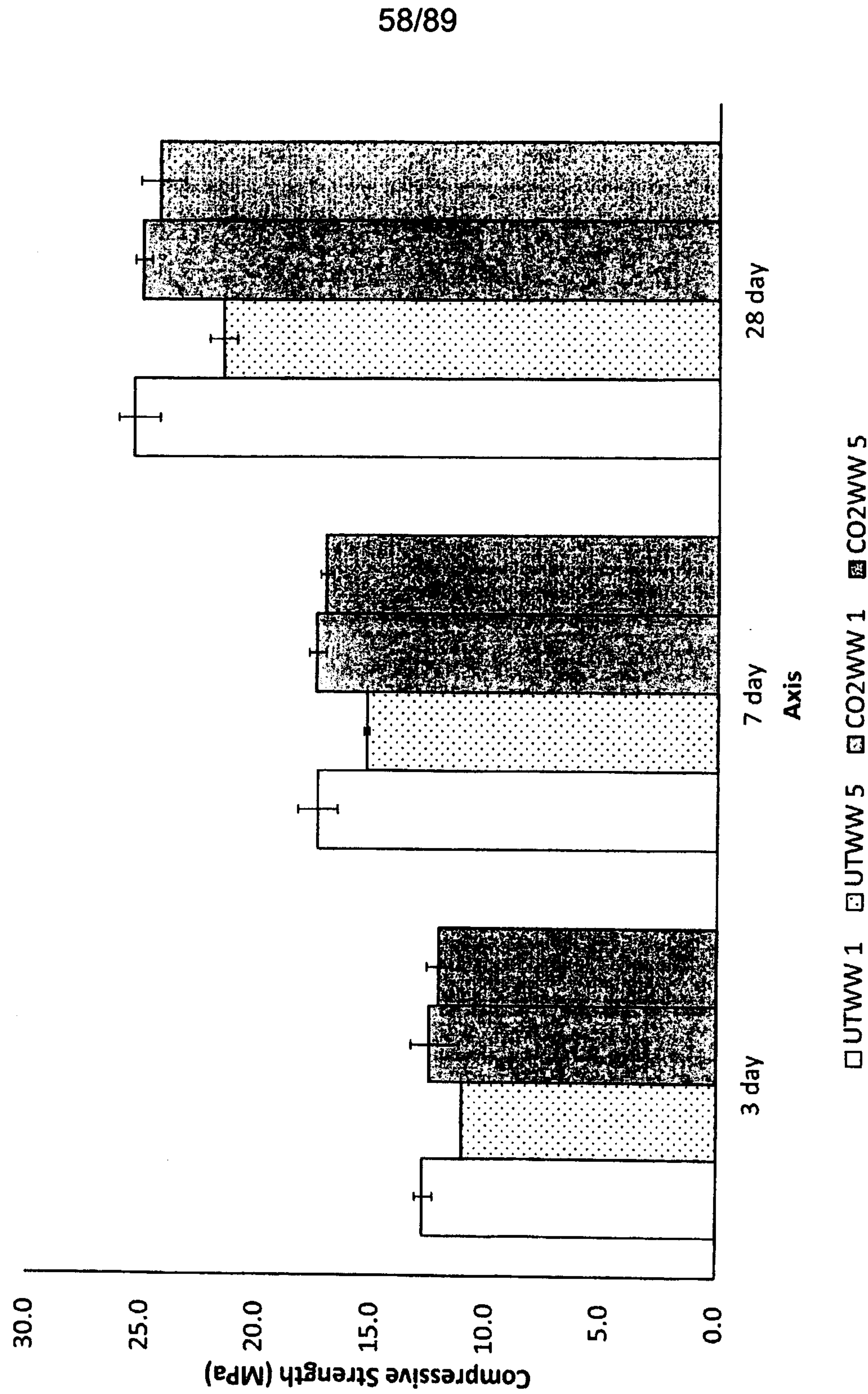
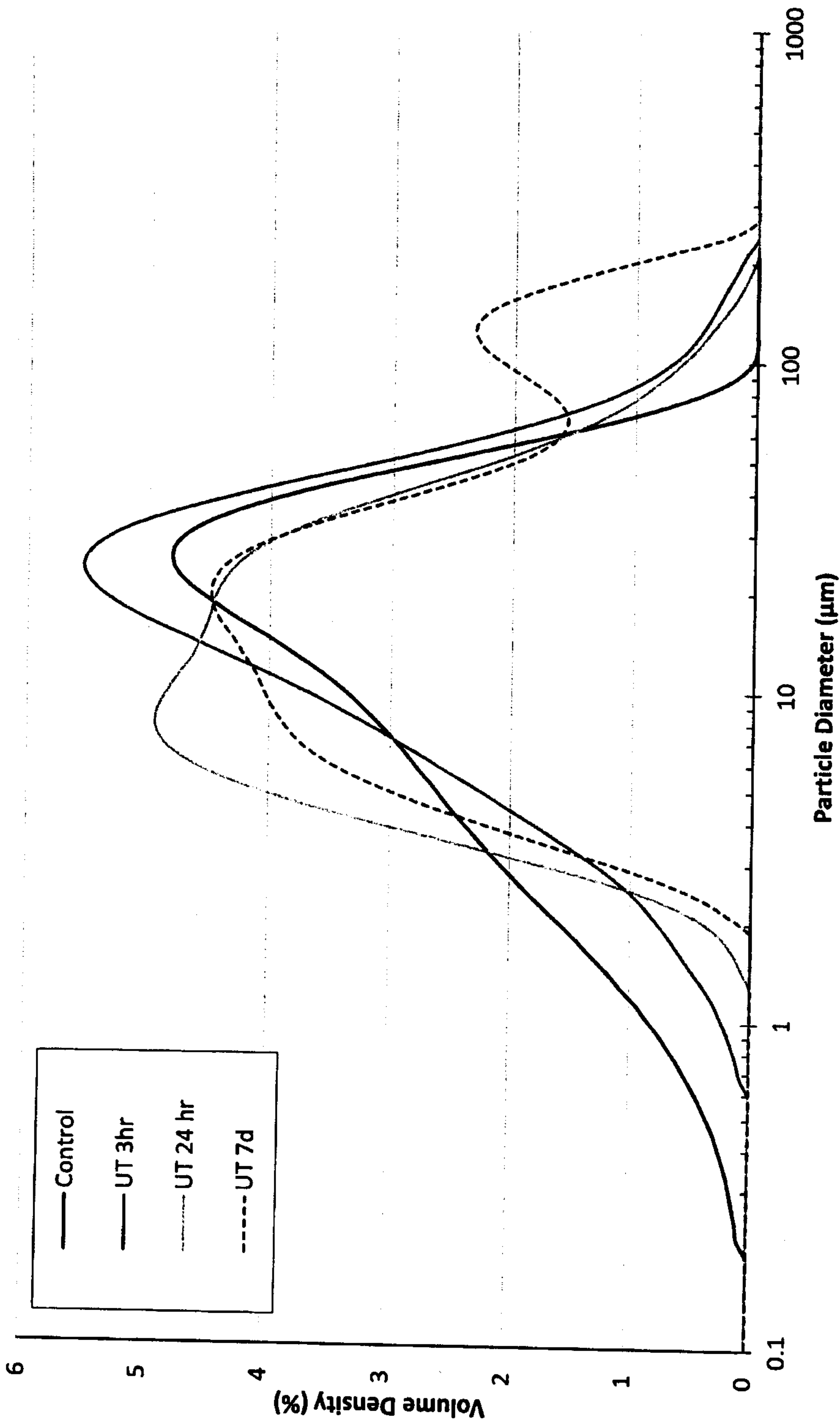


Figure 58

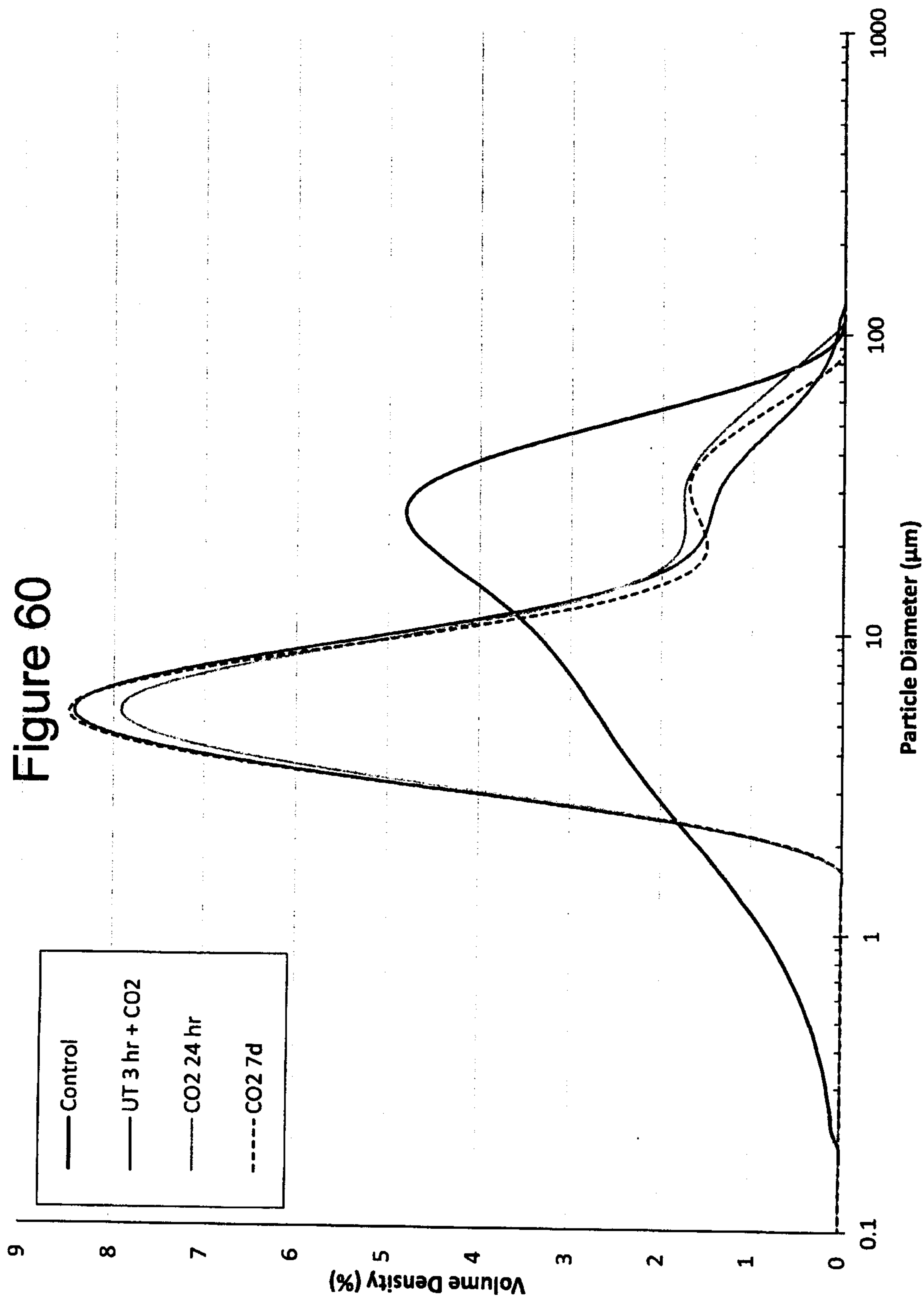


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Figure 59



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25

20

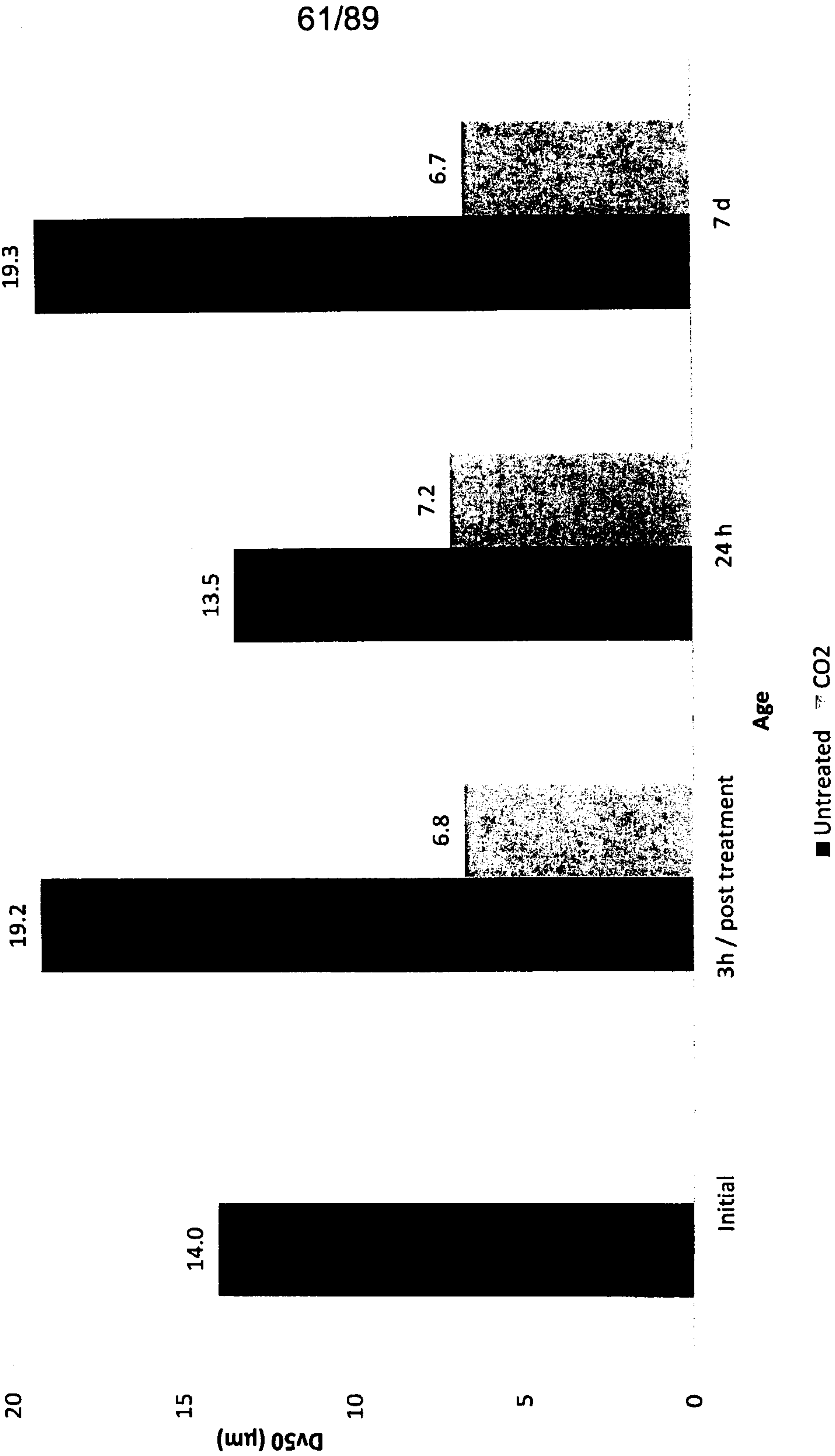
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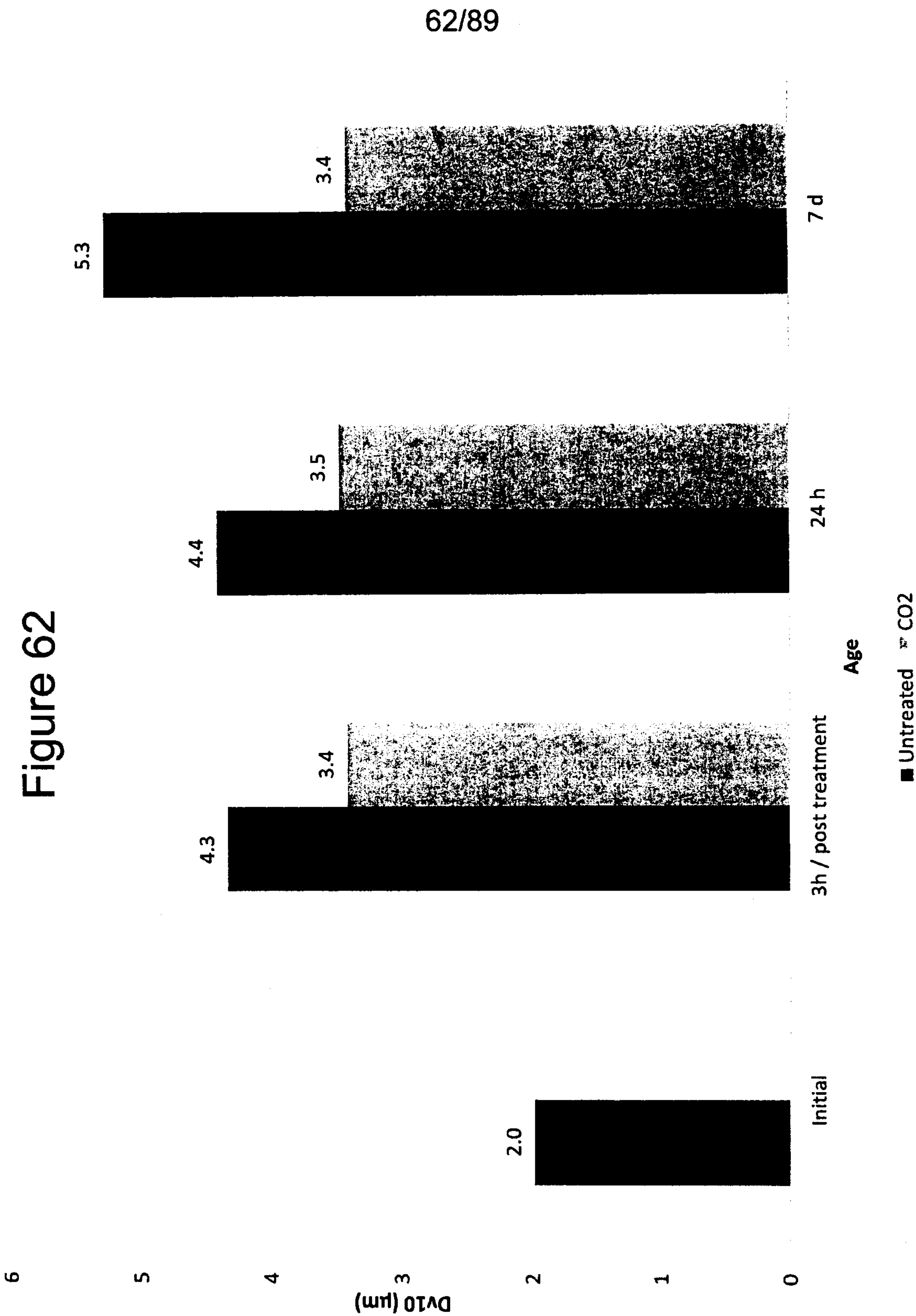
10

5

0

Figure 61





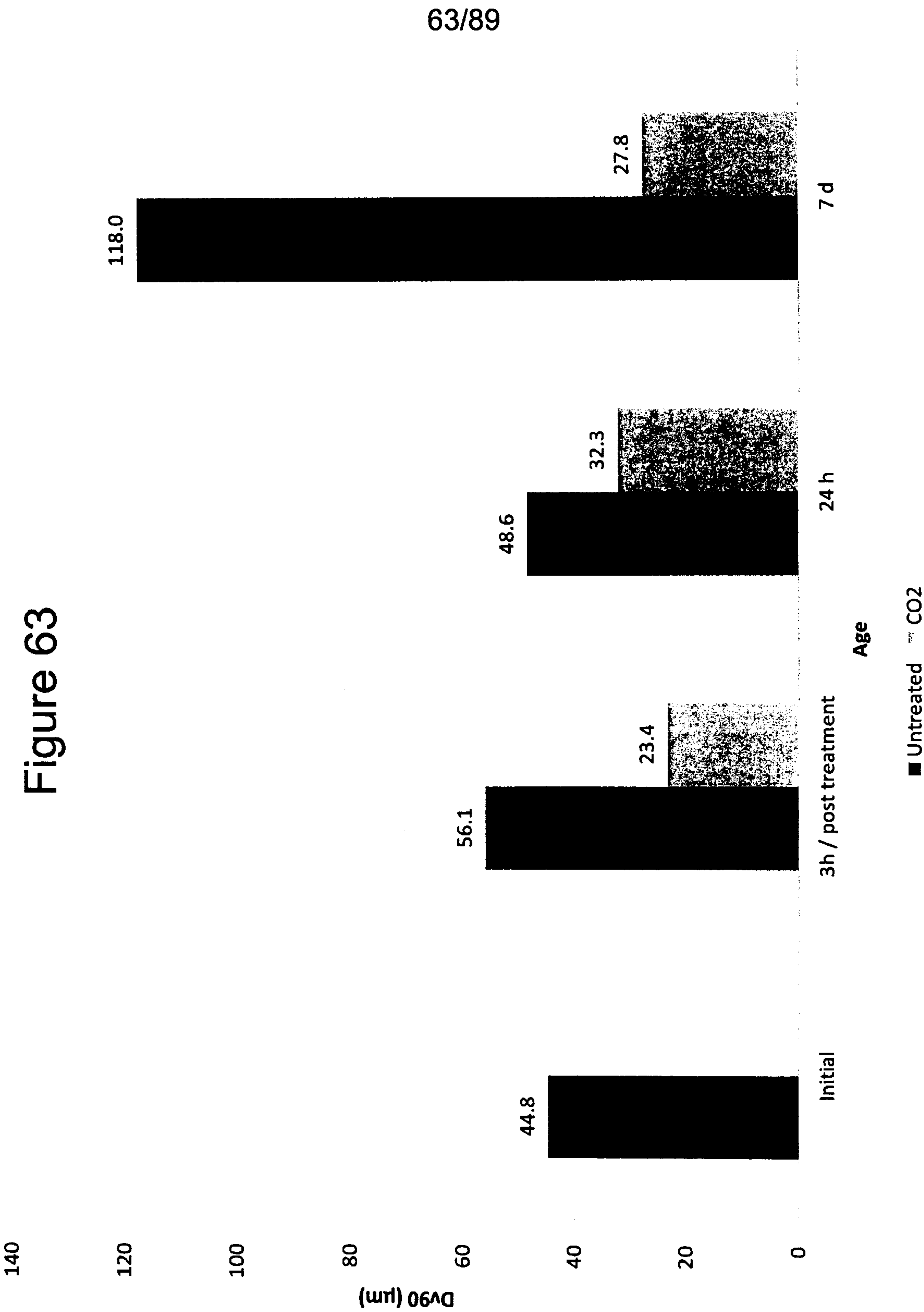


Figure 64

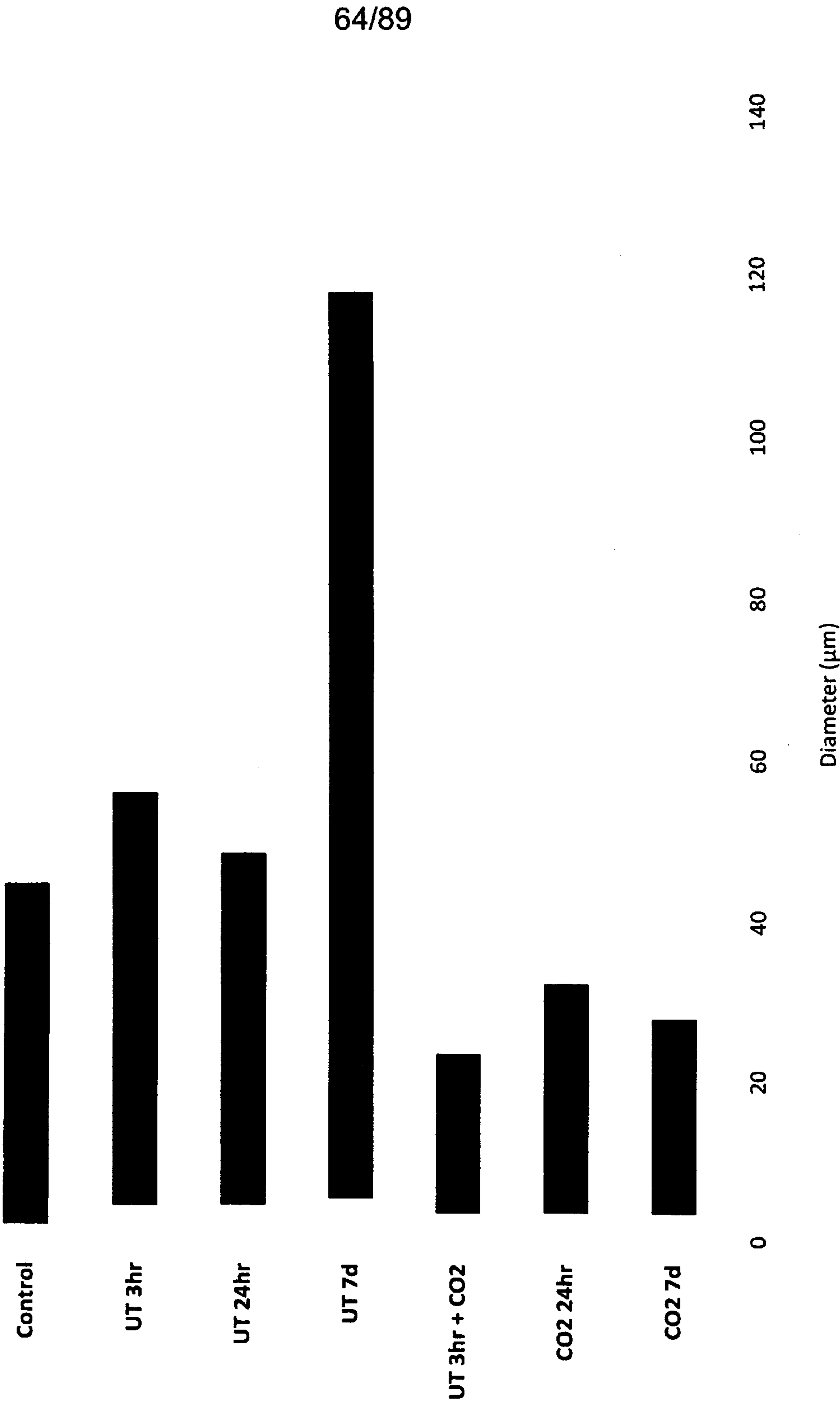


Figure 65

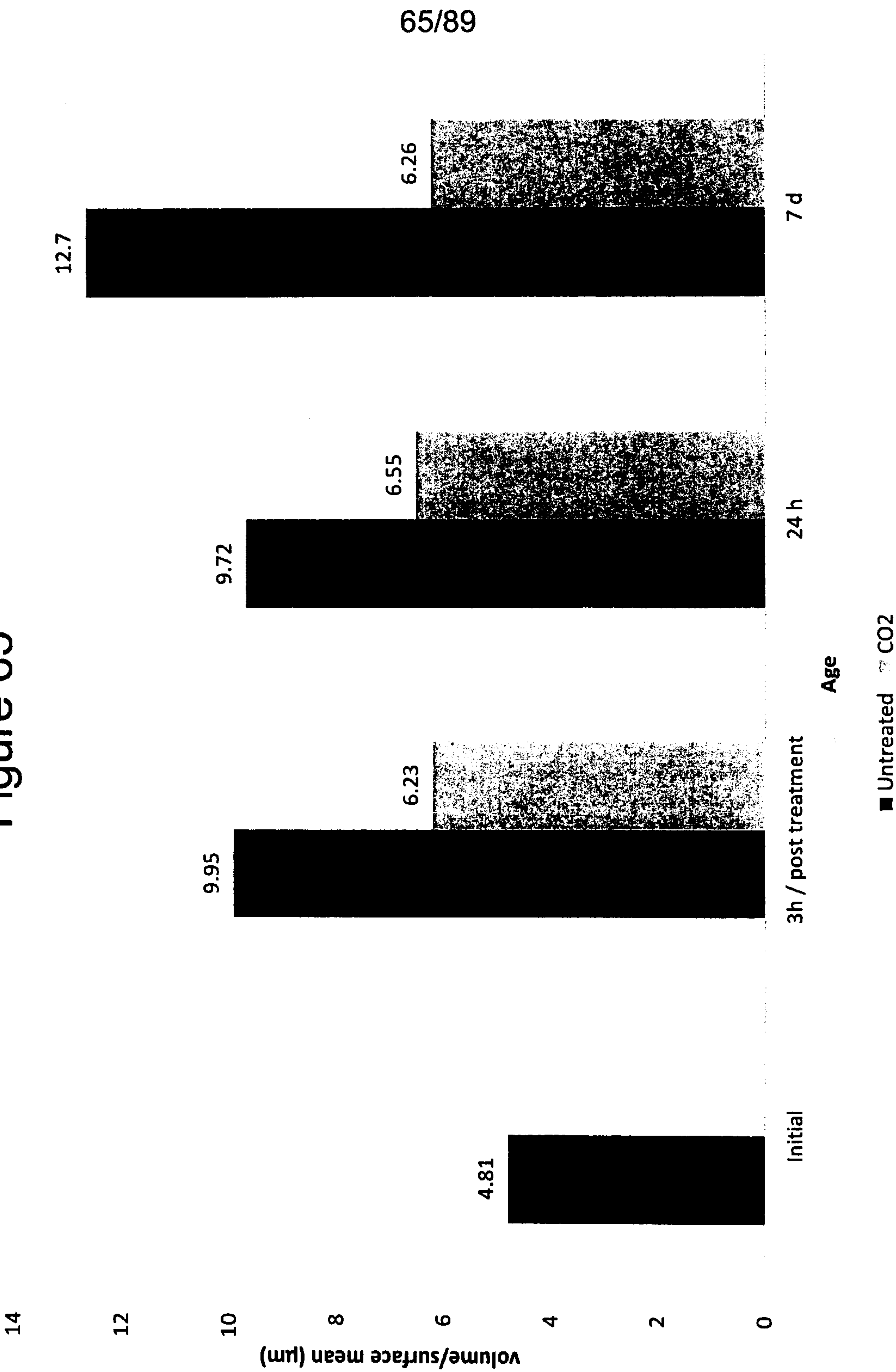


Figure 66

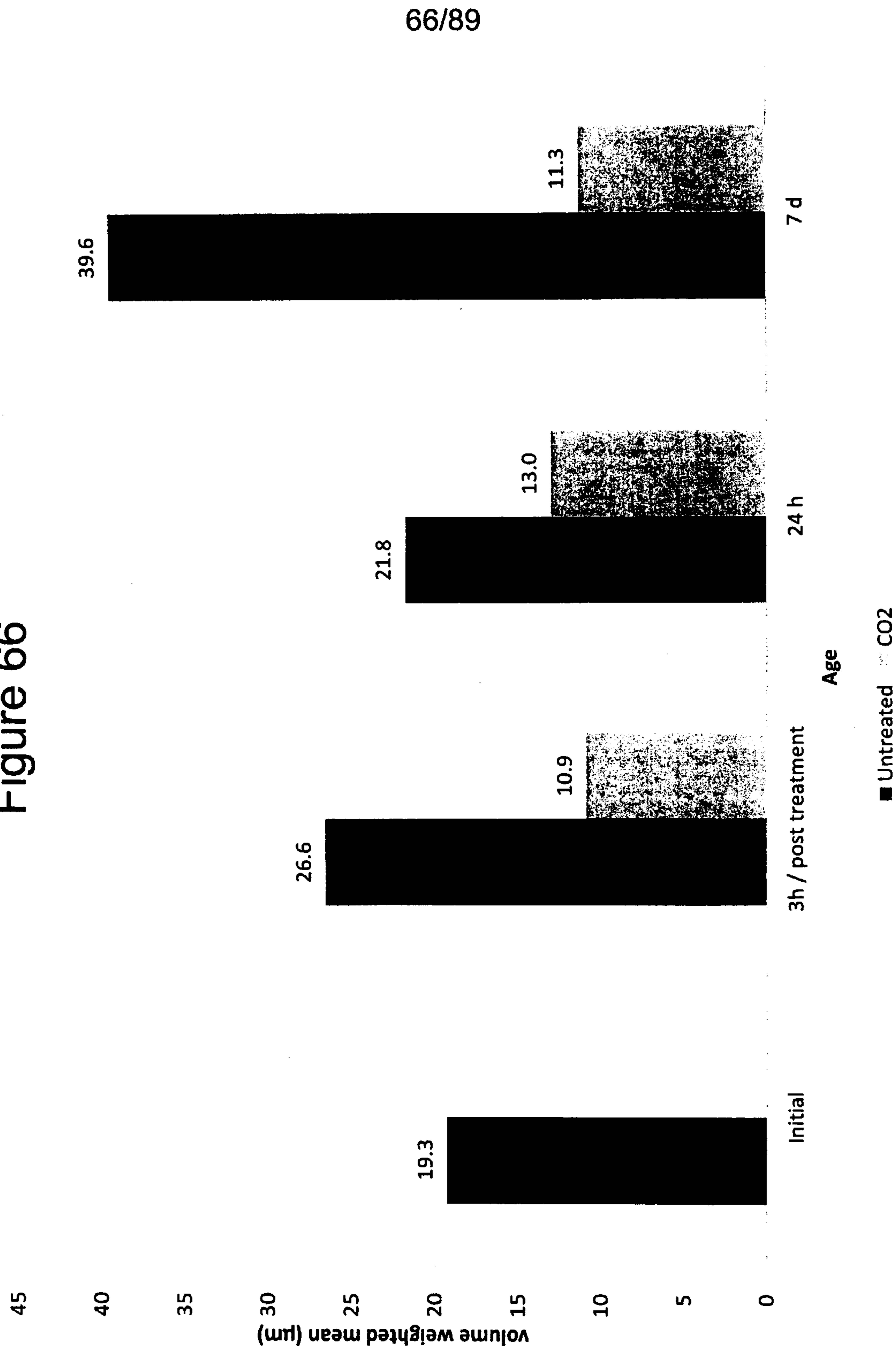


Figure 67

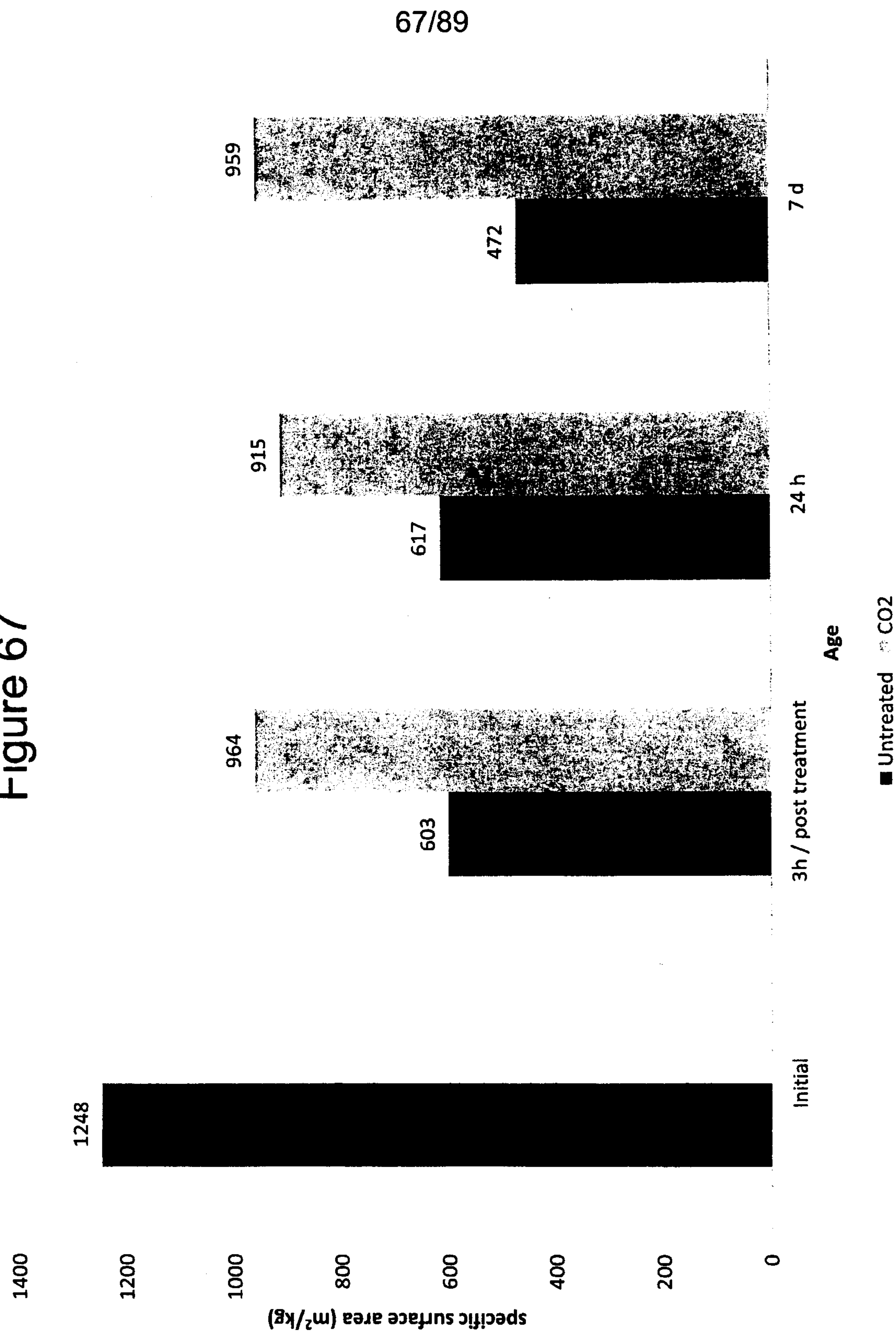
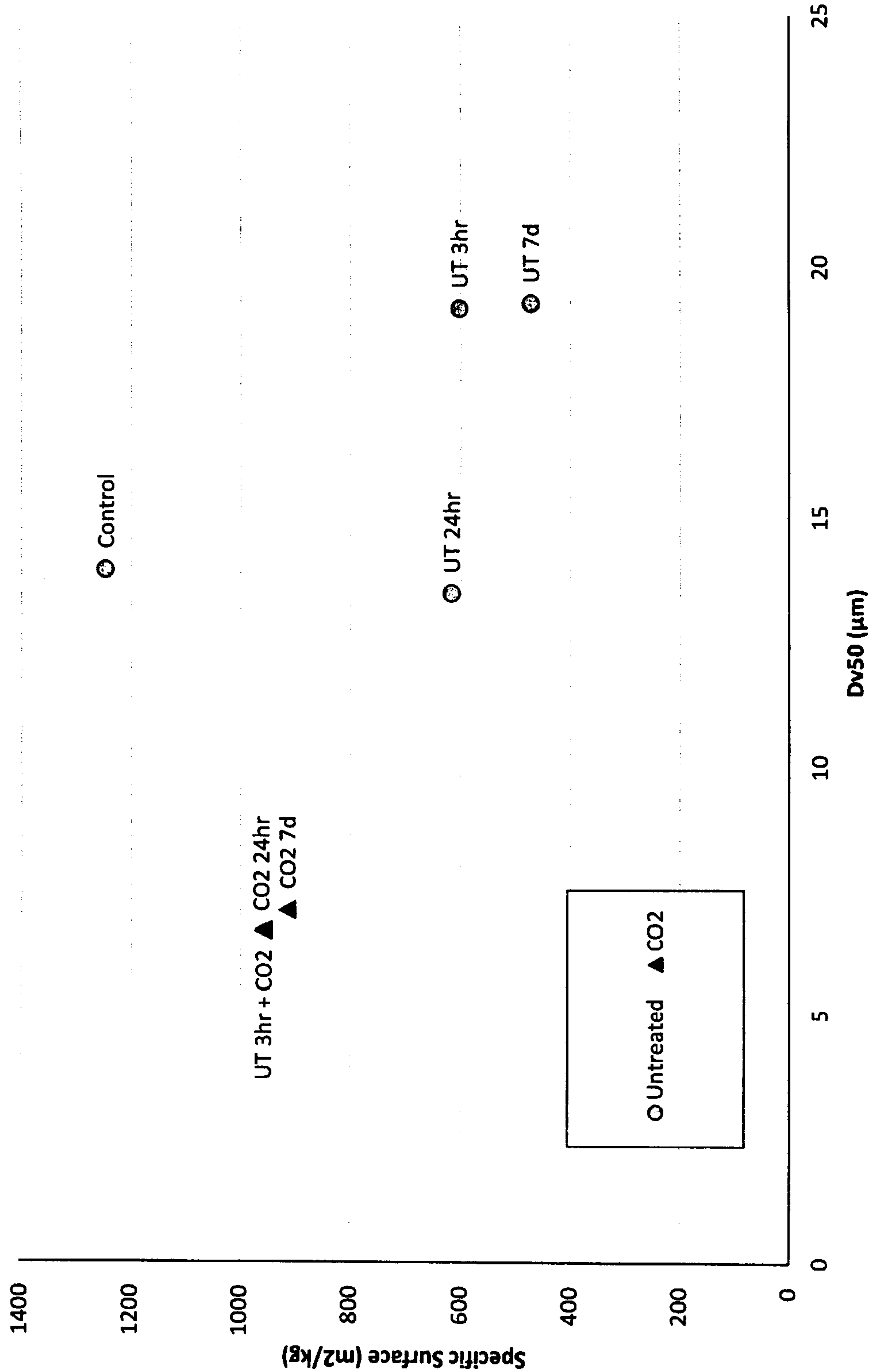
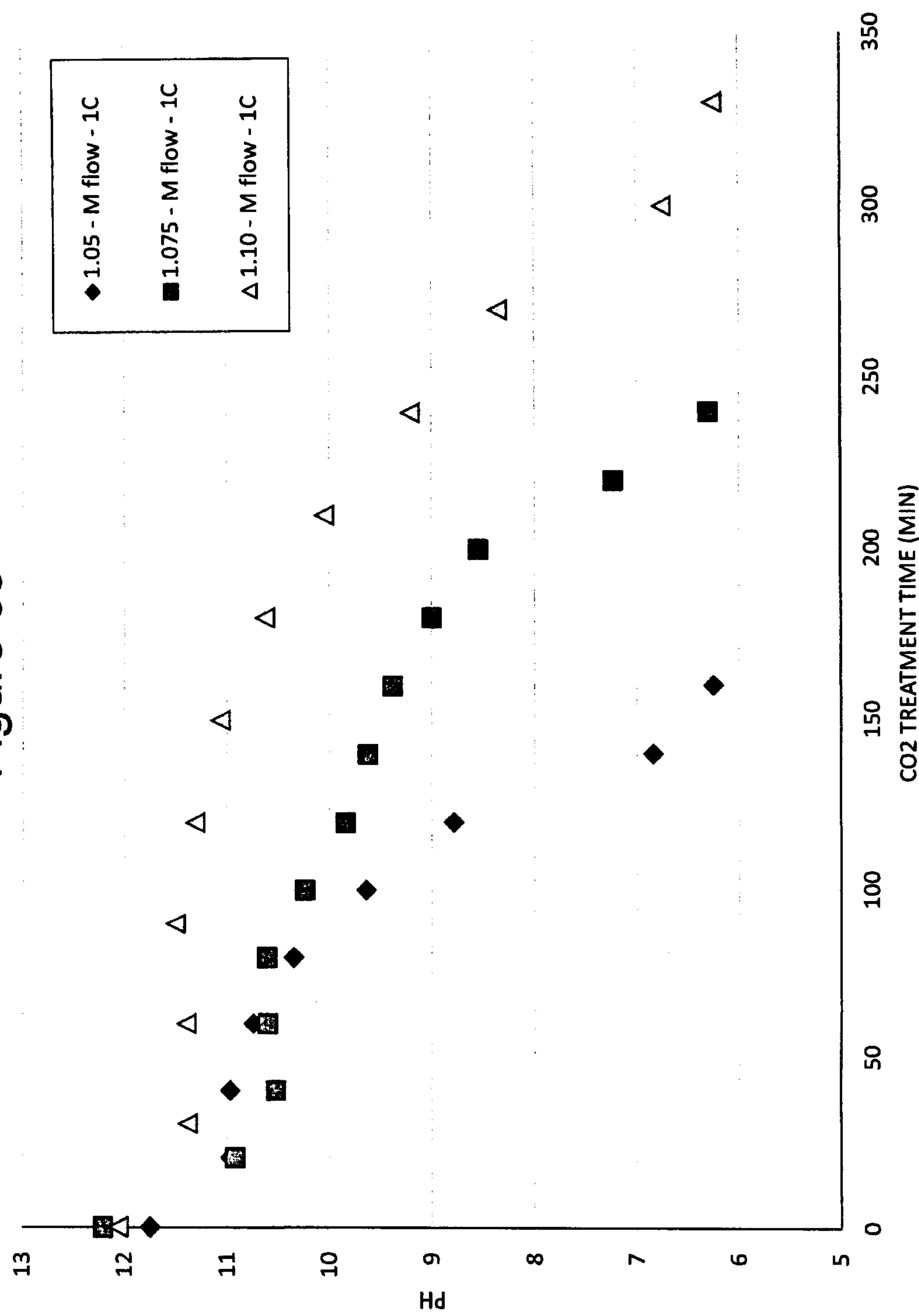


Figure 68

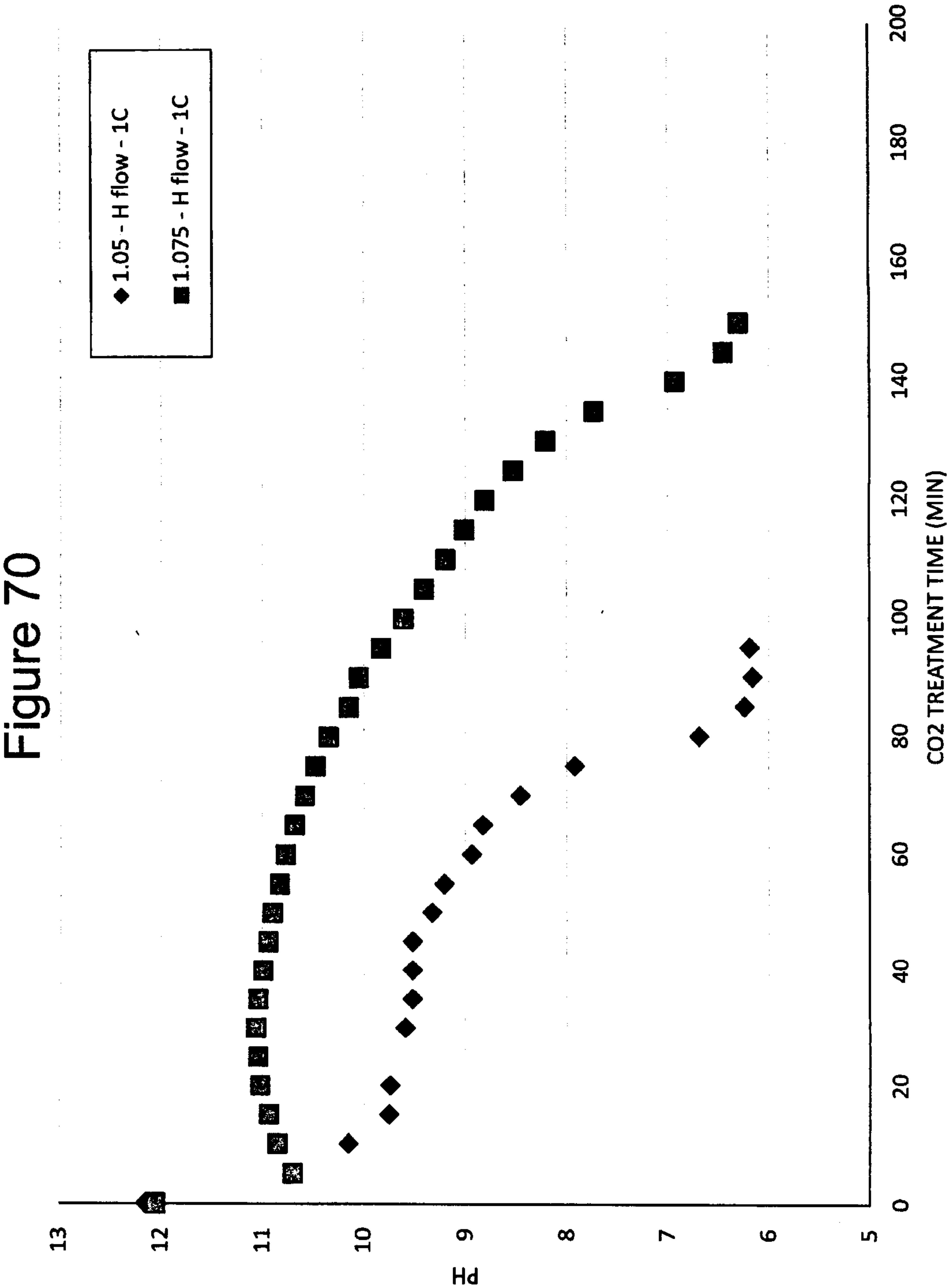


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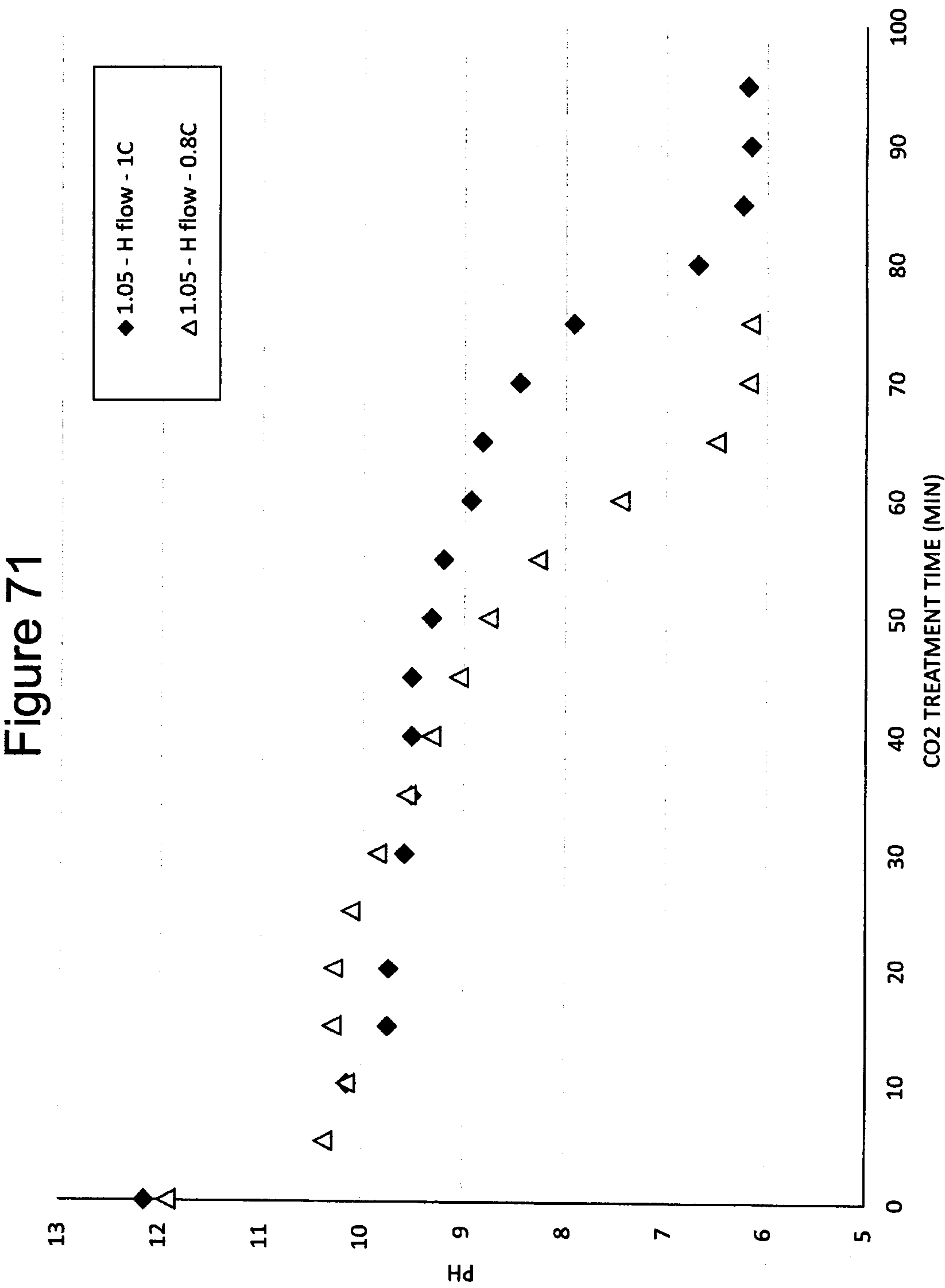
Figure 69



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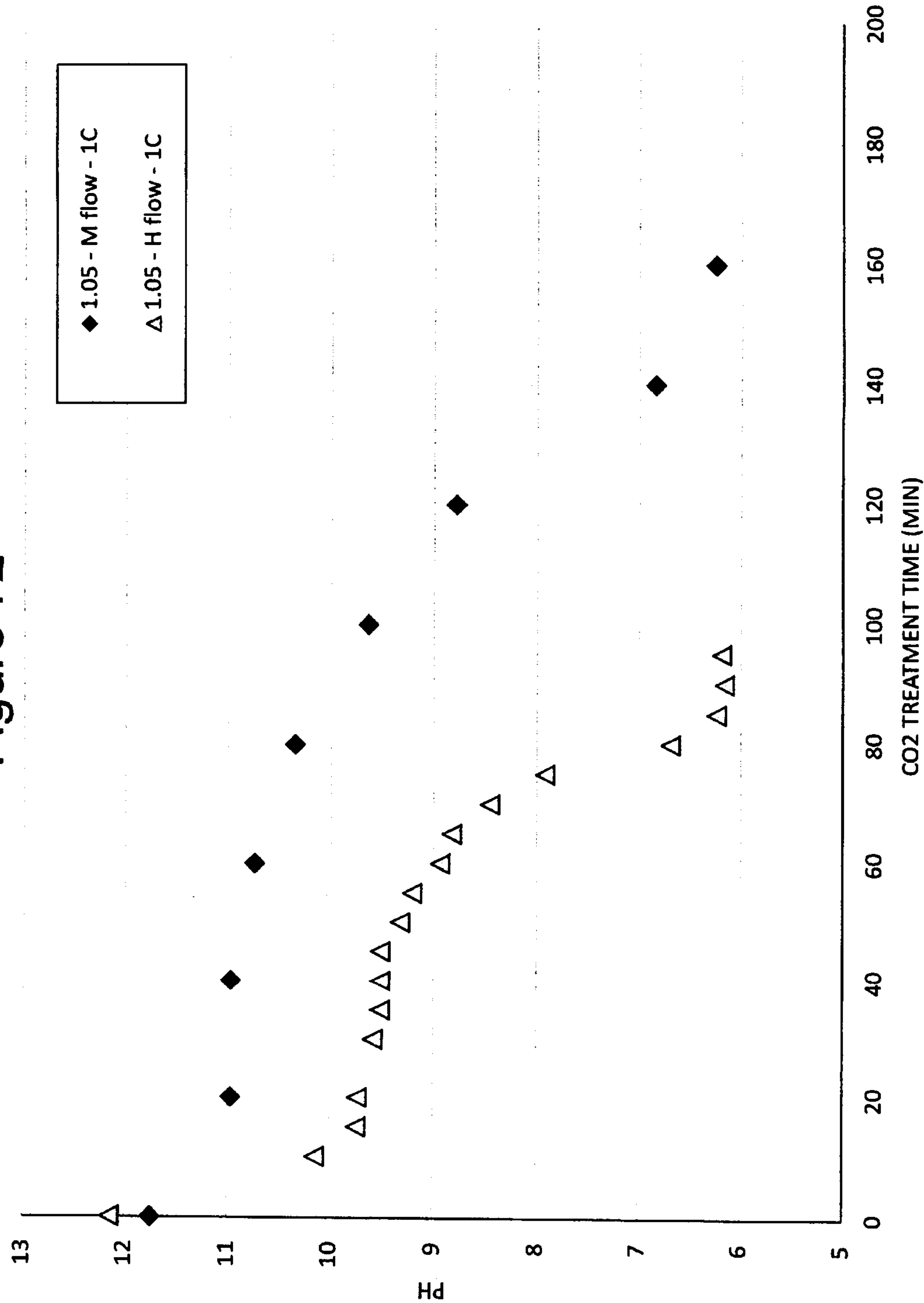


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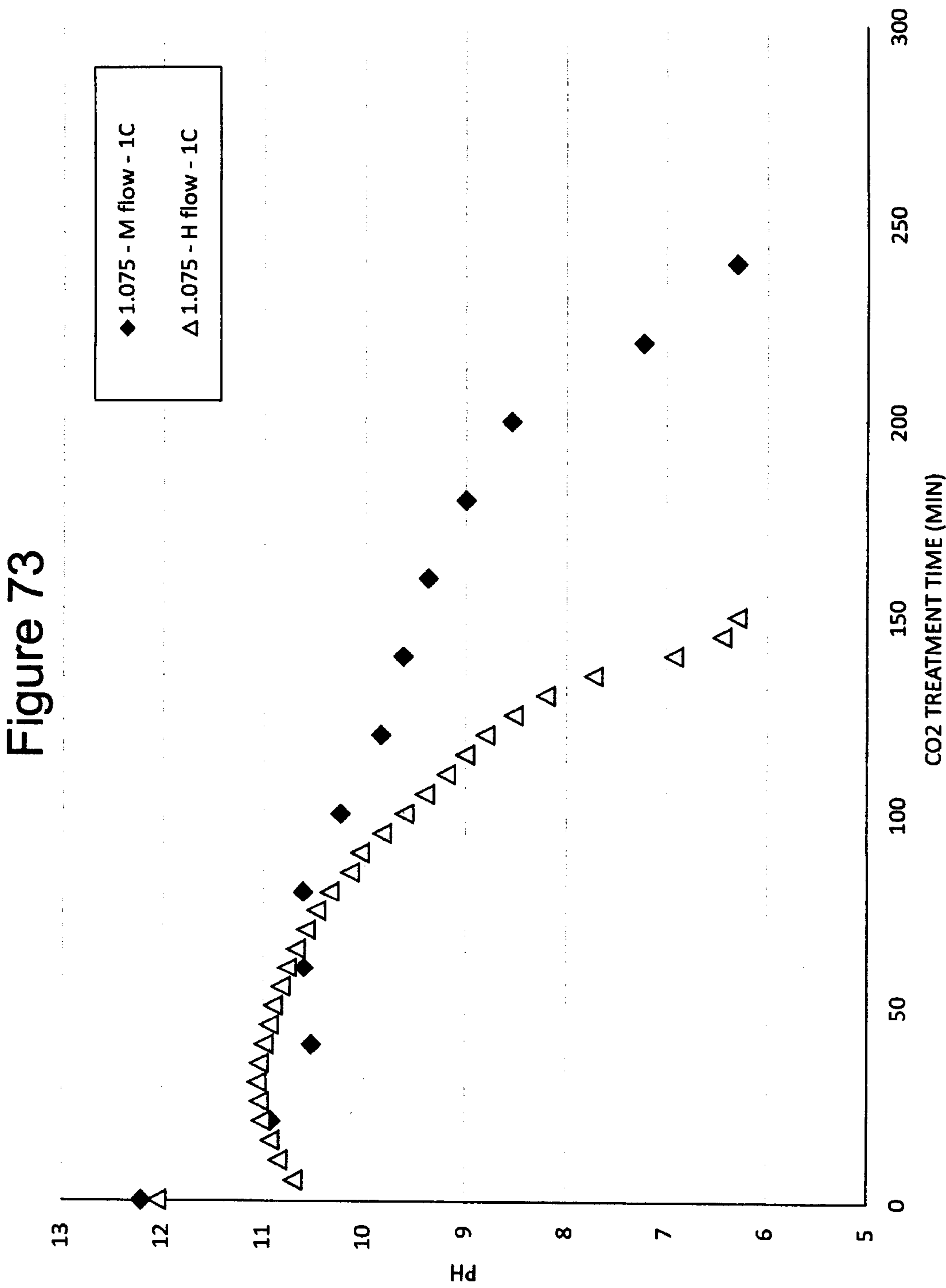


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Figure 72

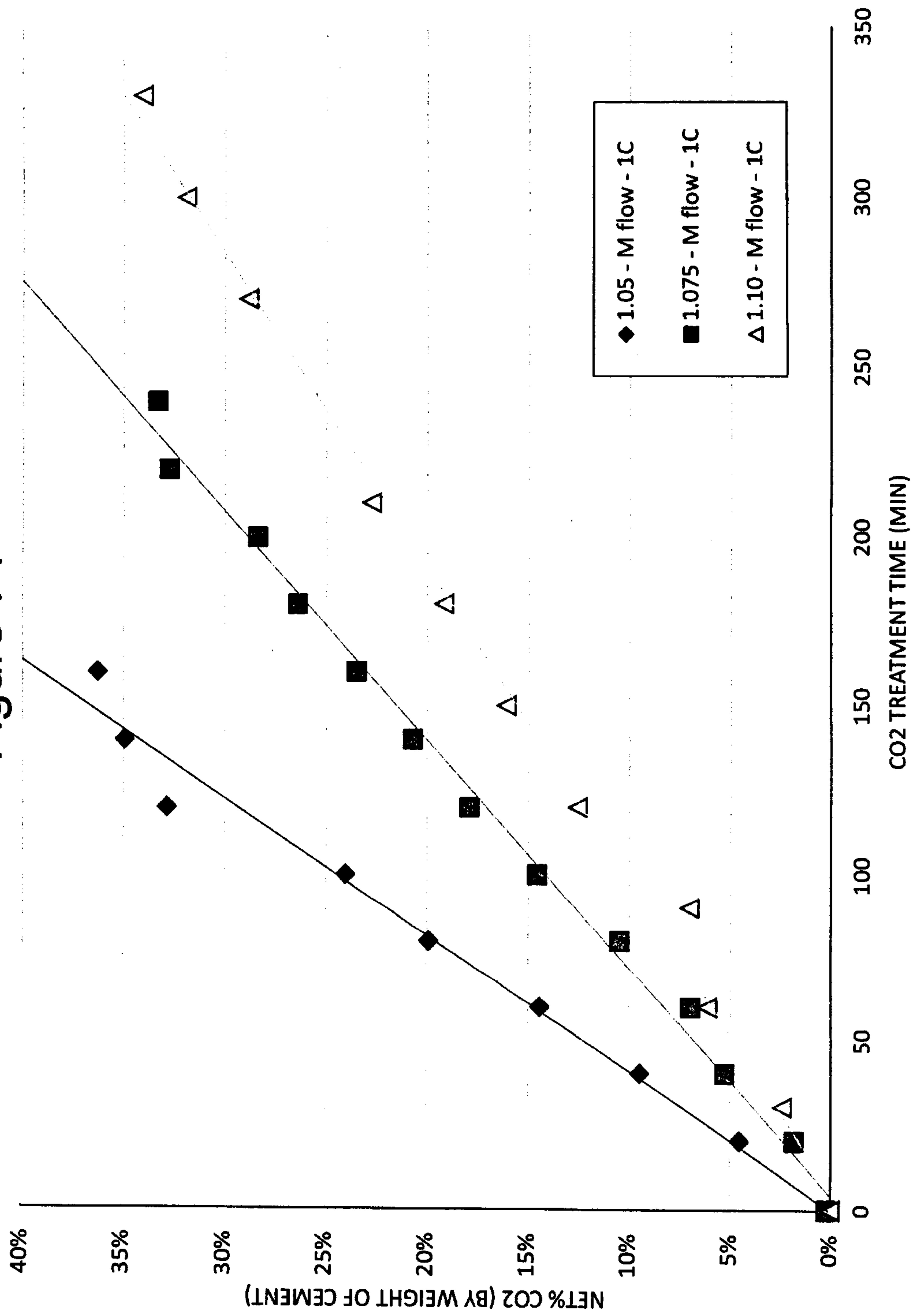


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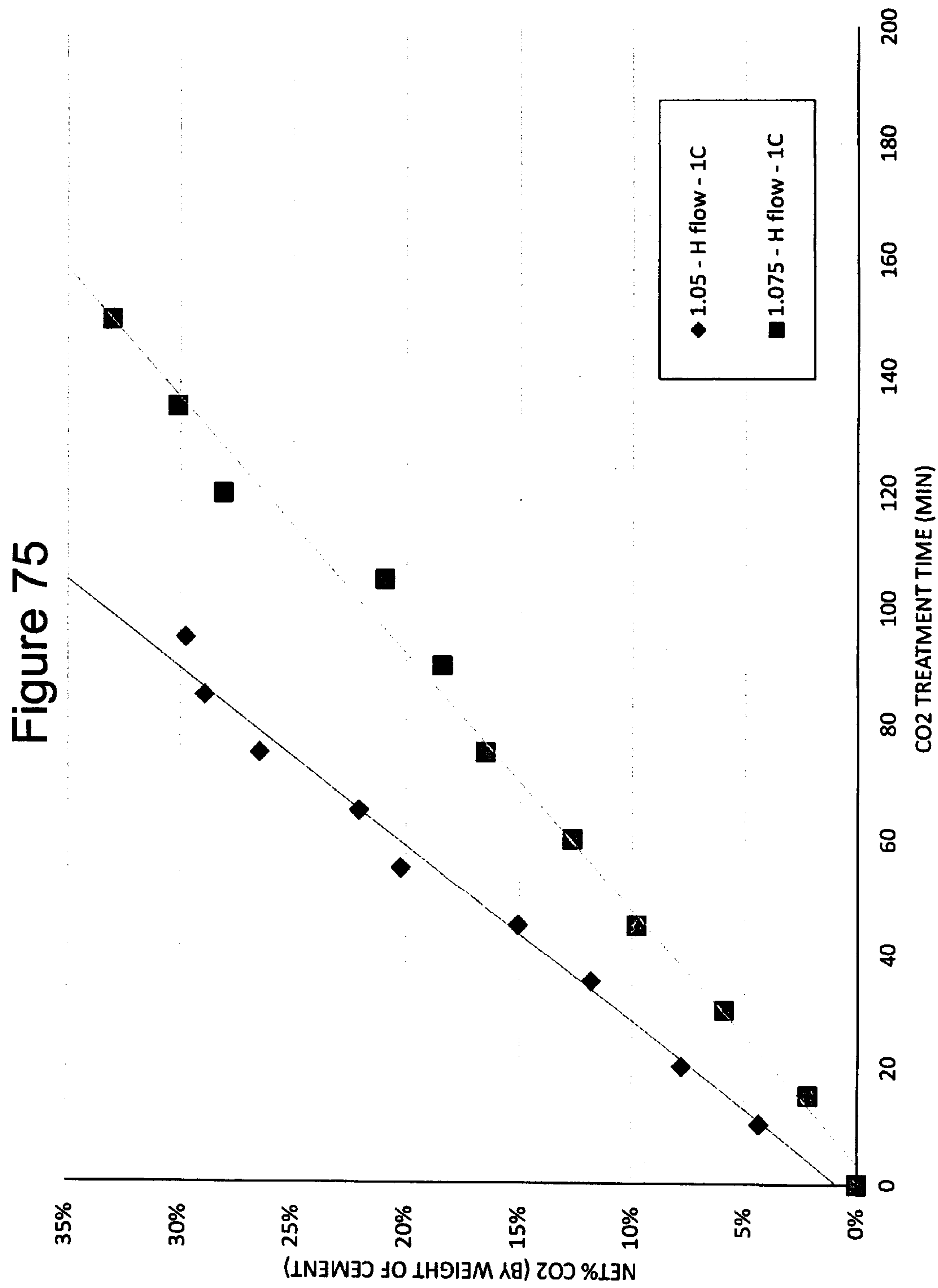


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Figure 74

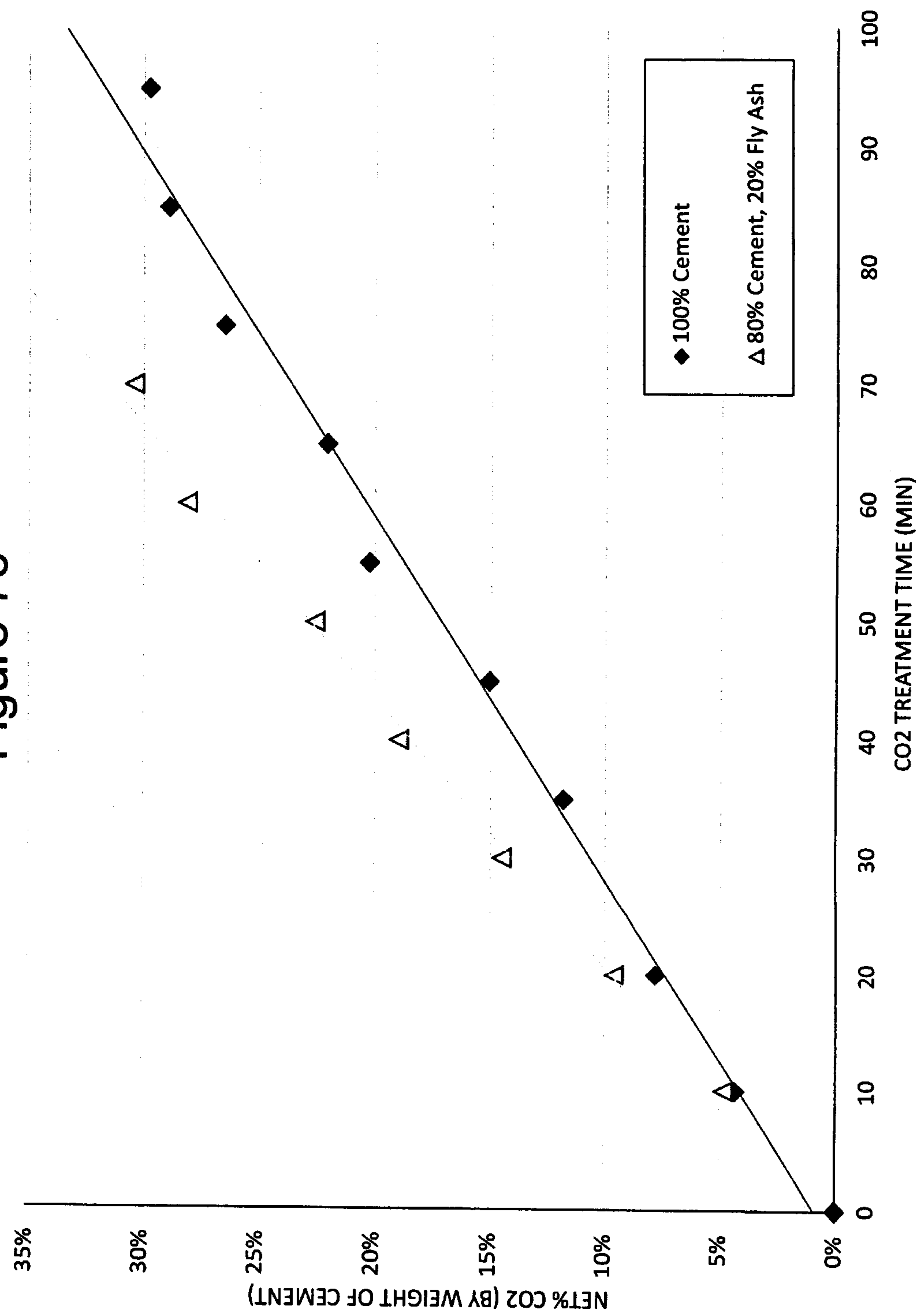


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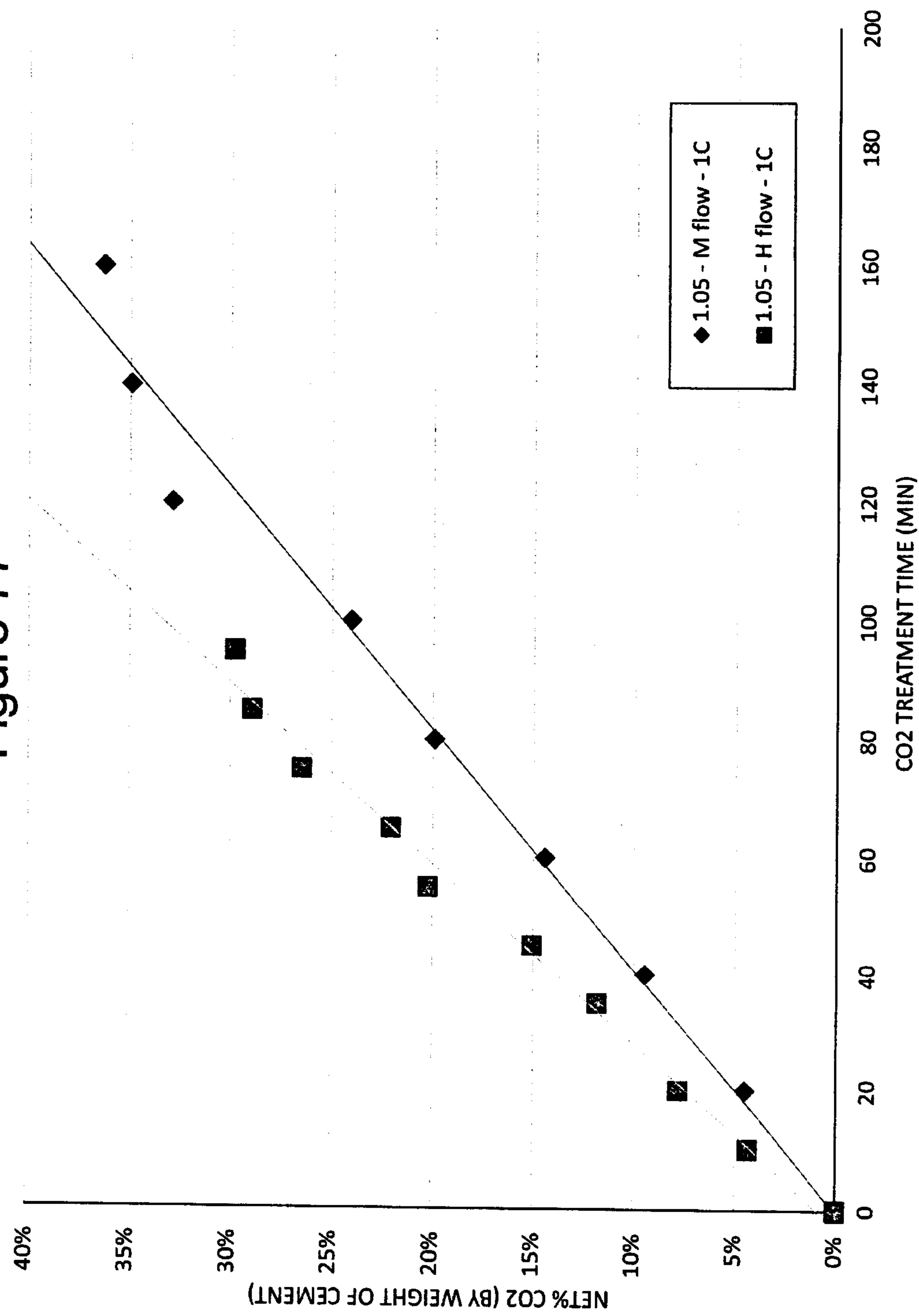
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Figure 76



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Figure 77



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Figure 78

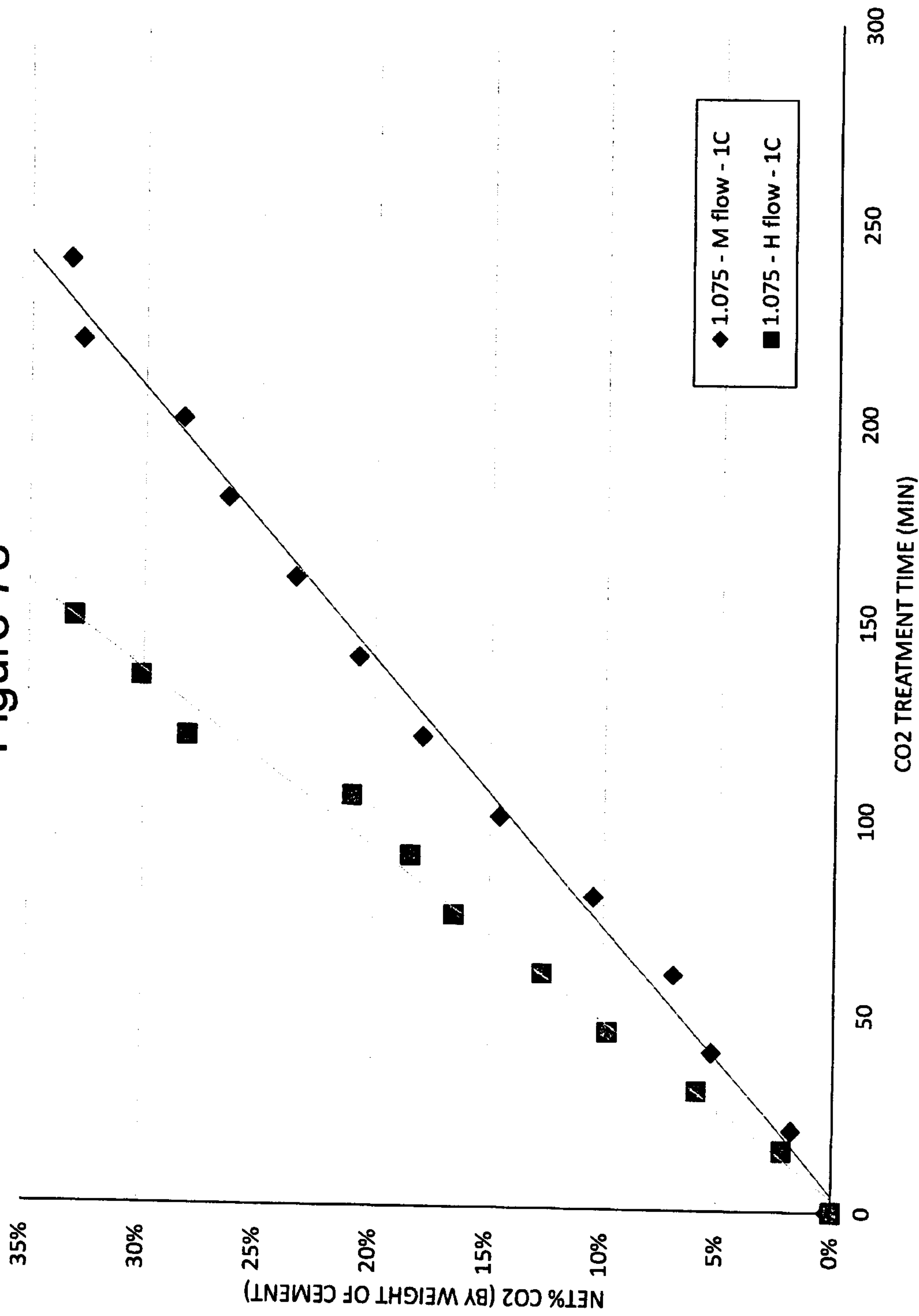
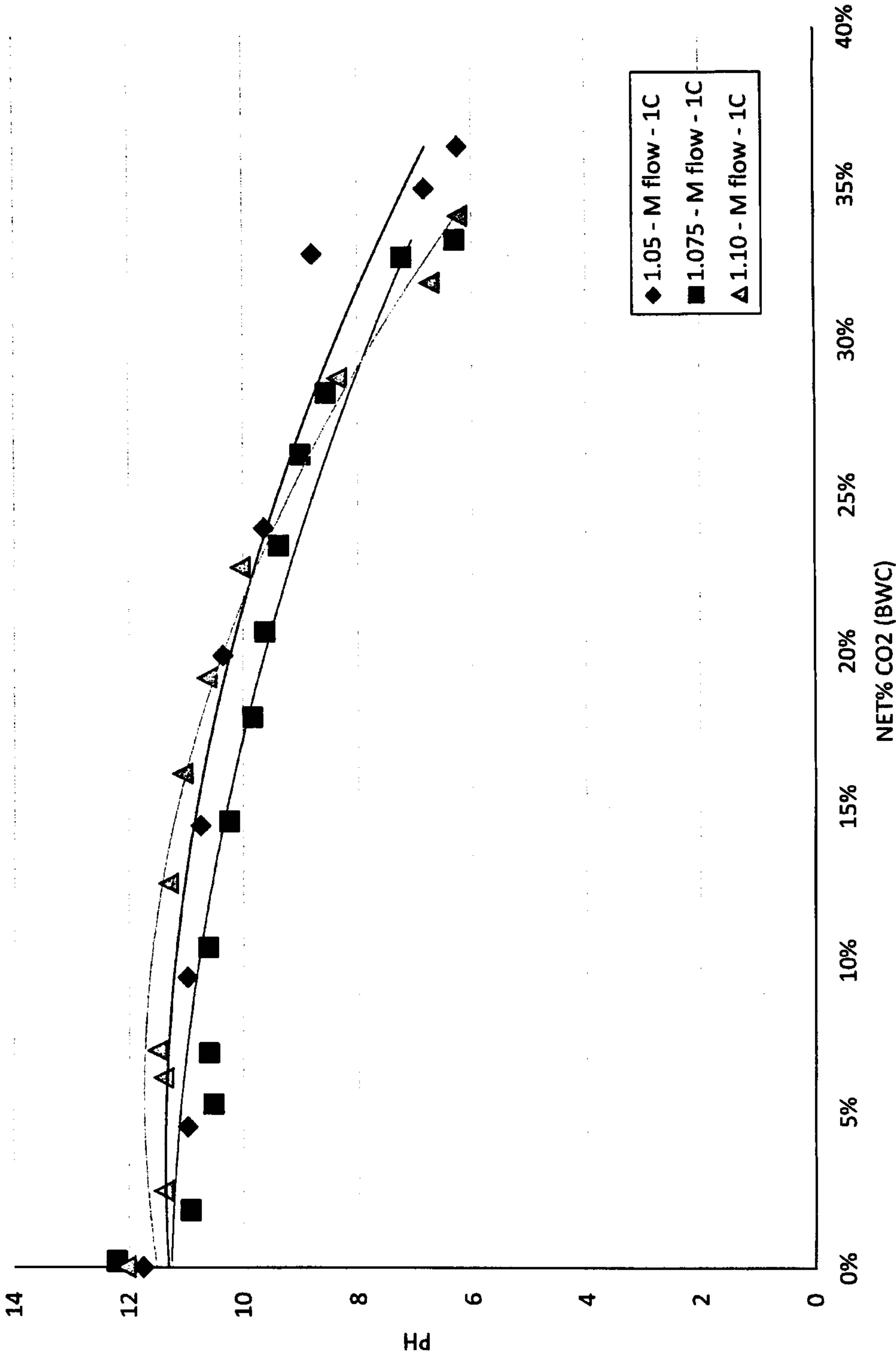
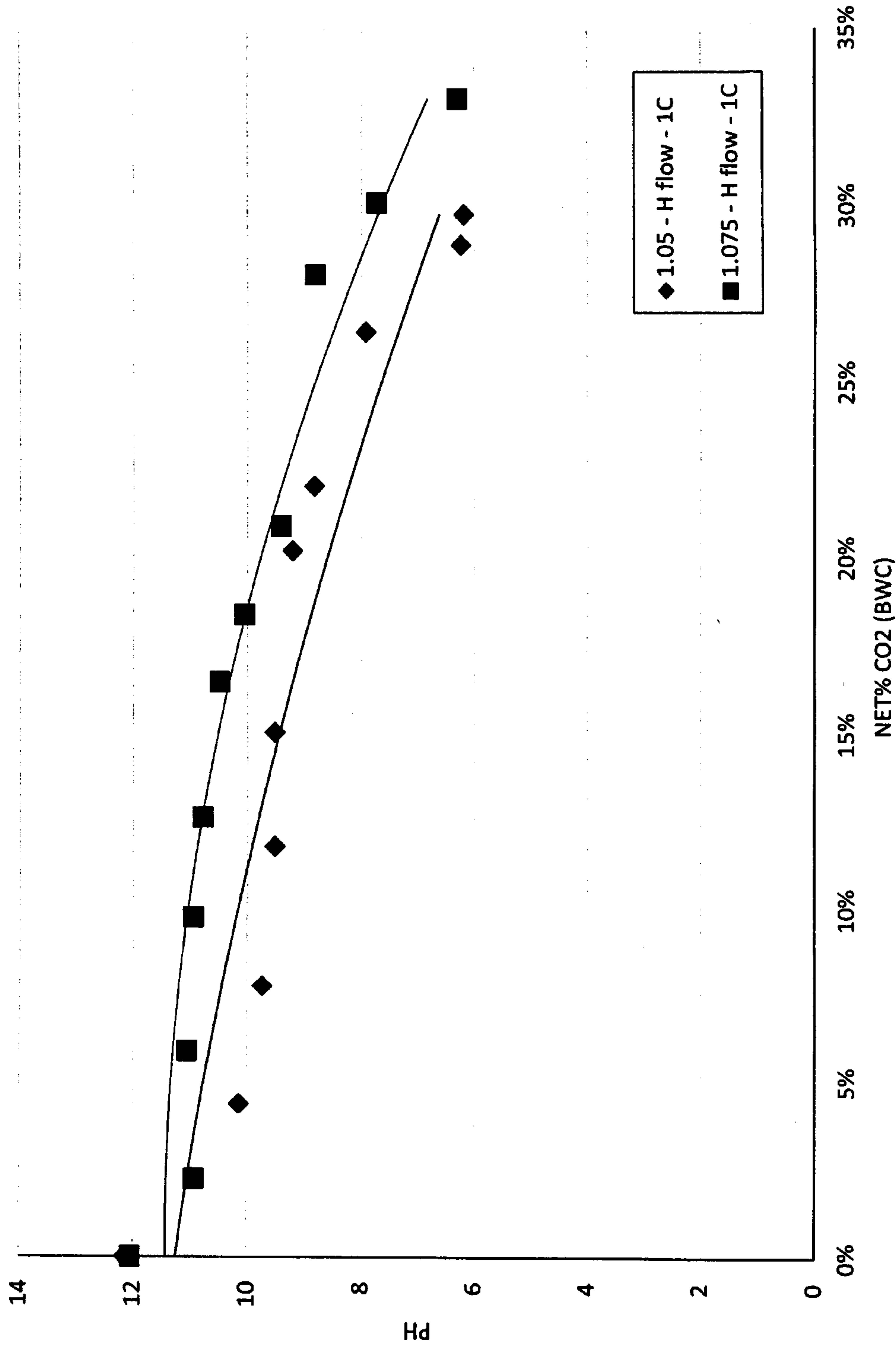


Figure 79



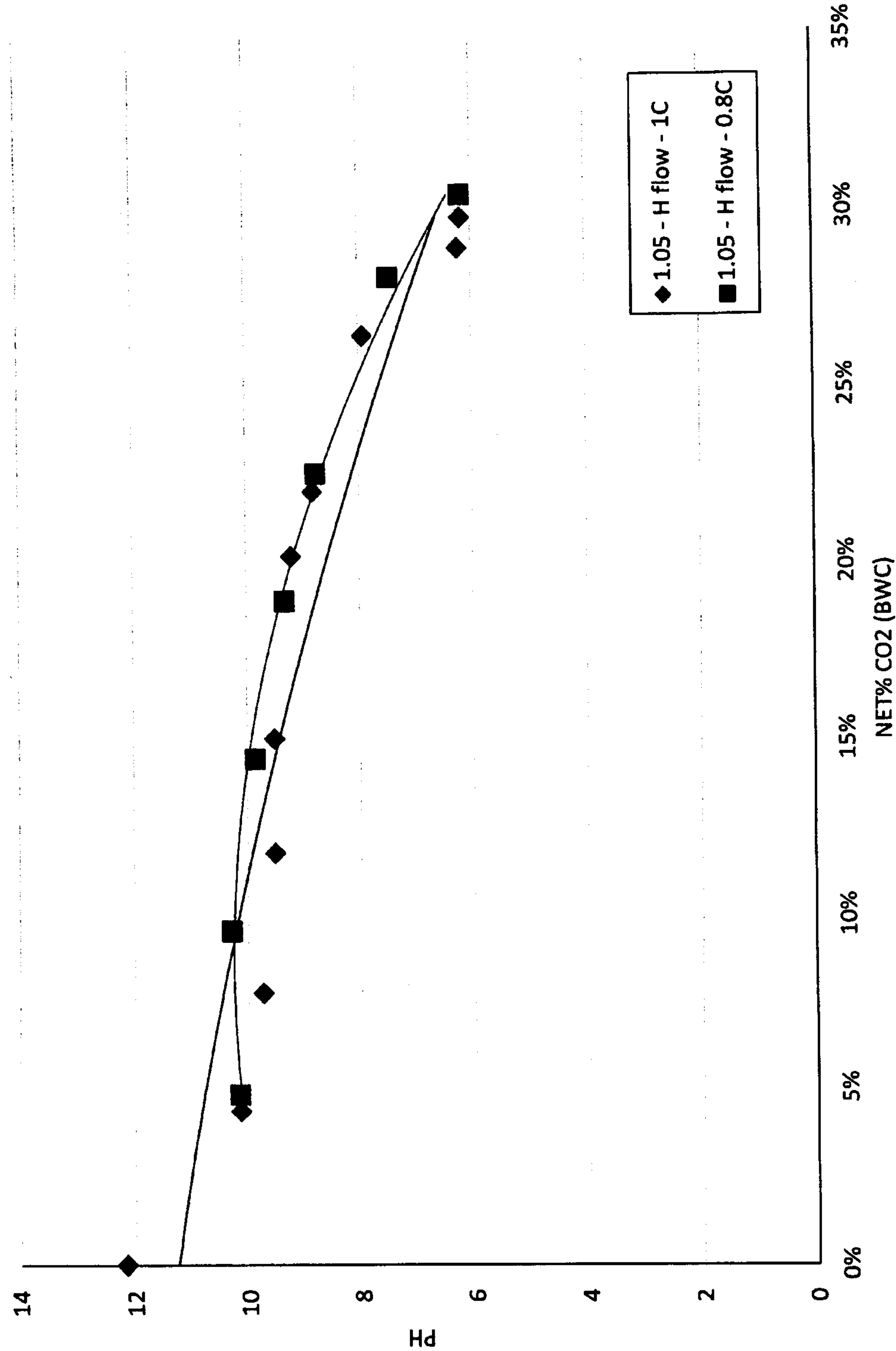
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Figure 80



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Figure 81



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Figure 82

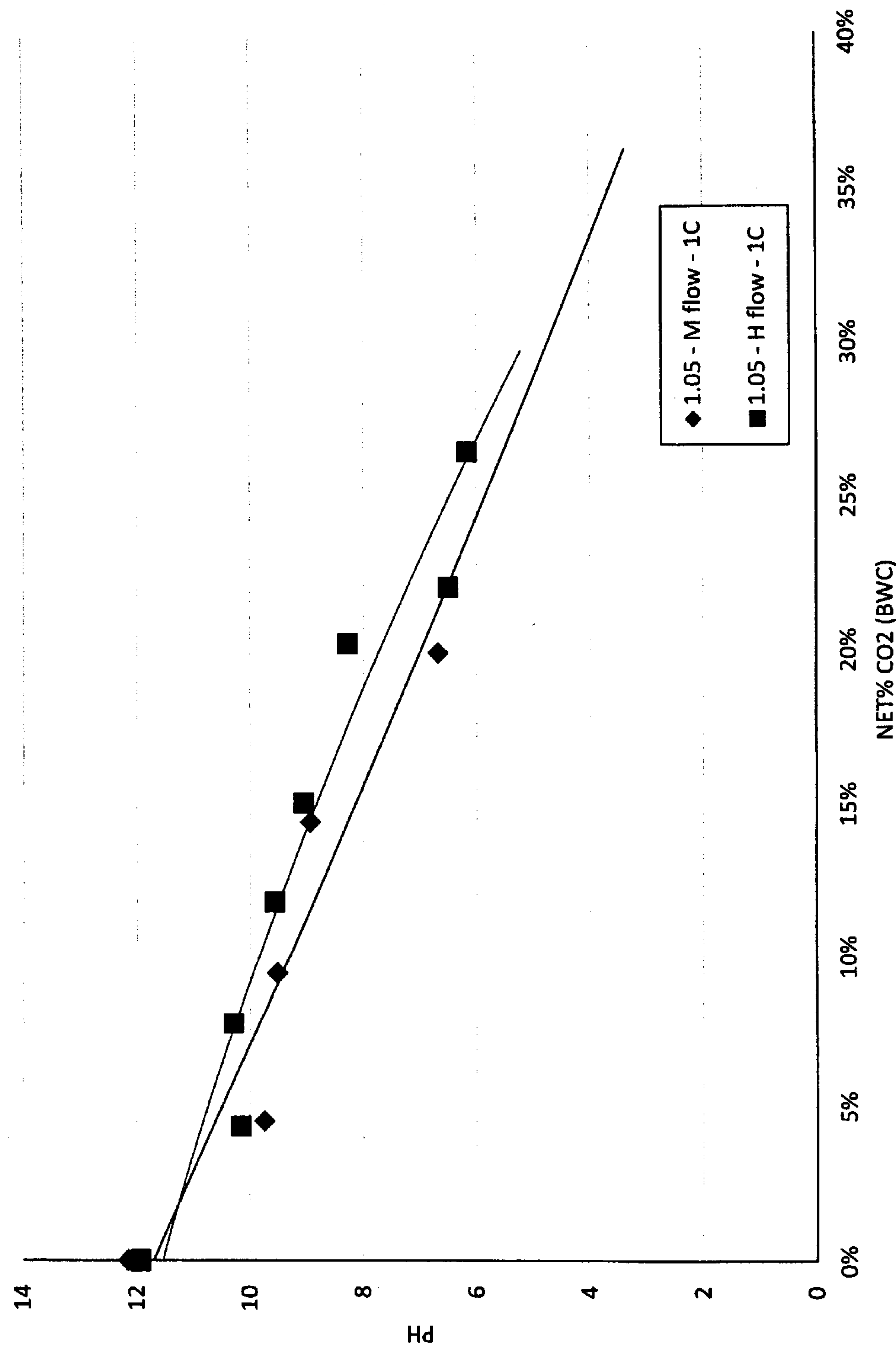


Figure 83

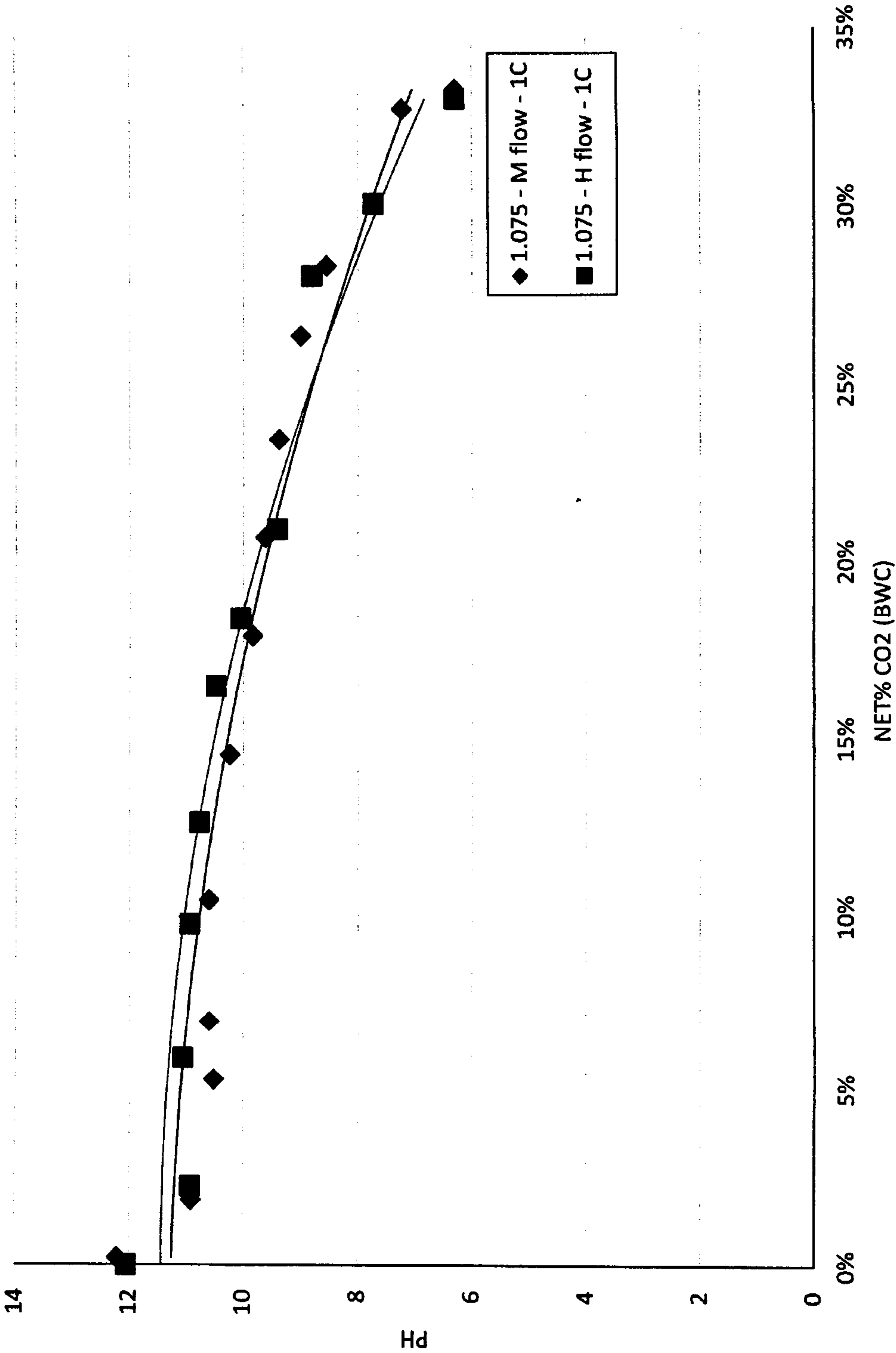
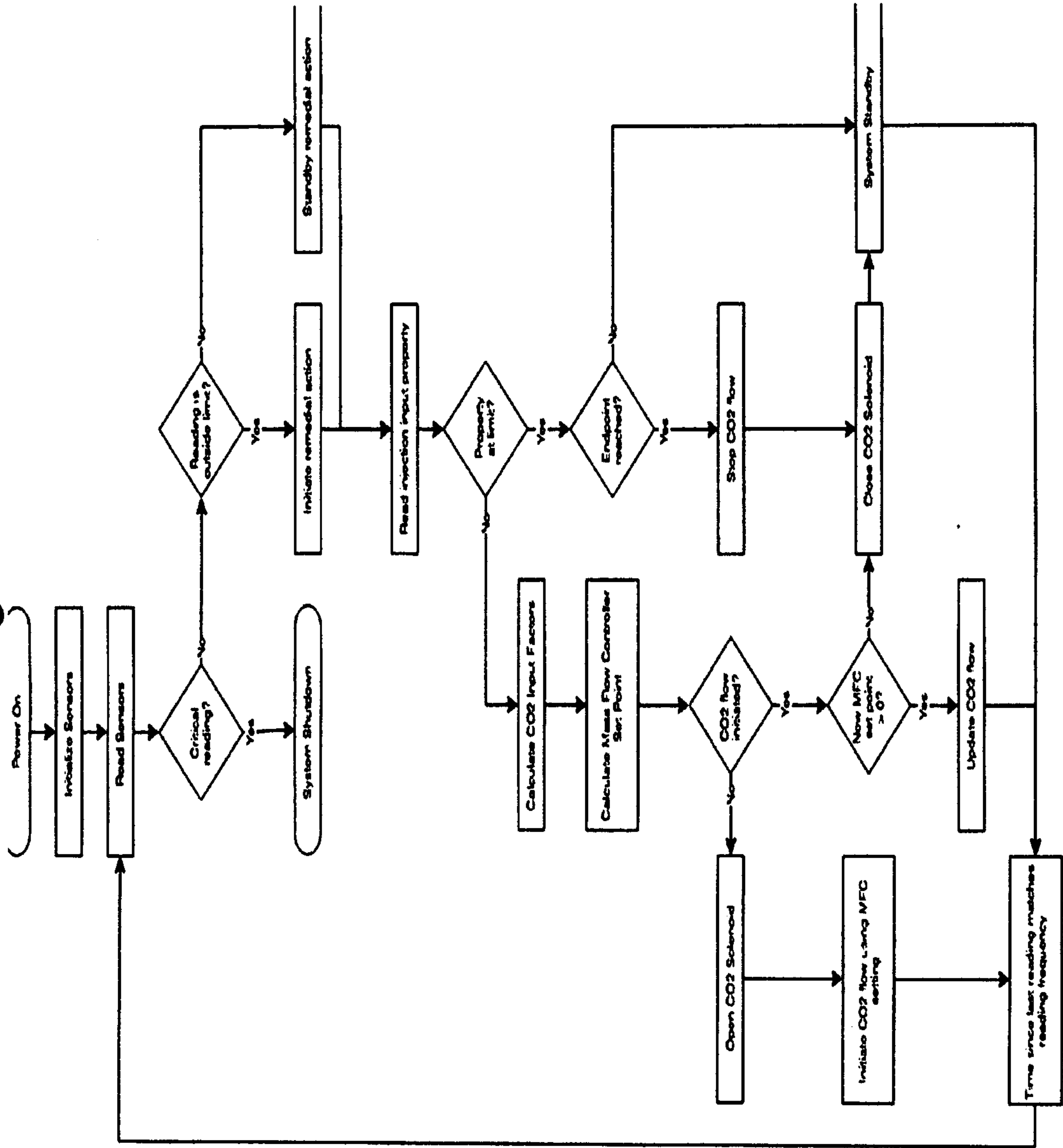
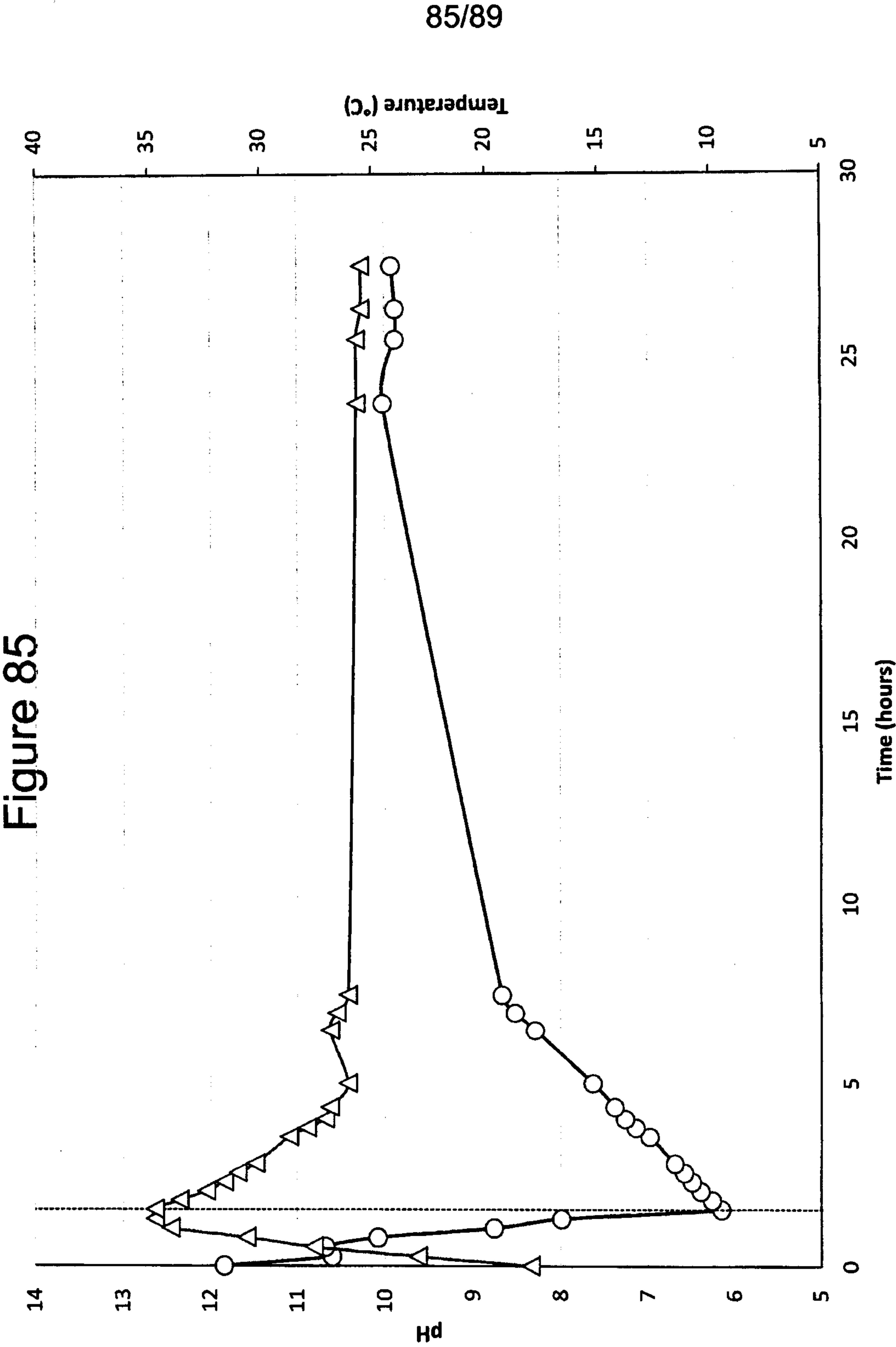


Figure 84





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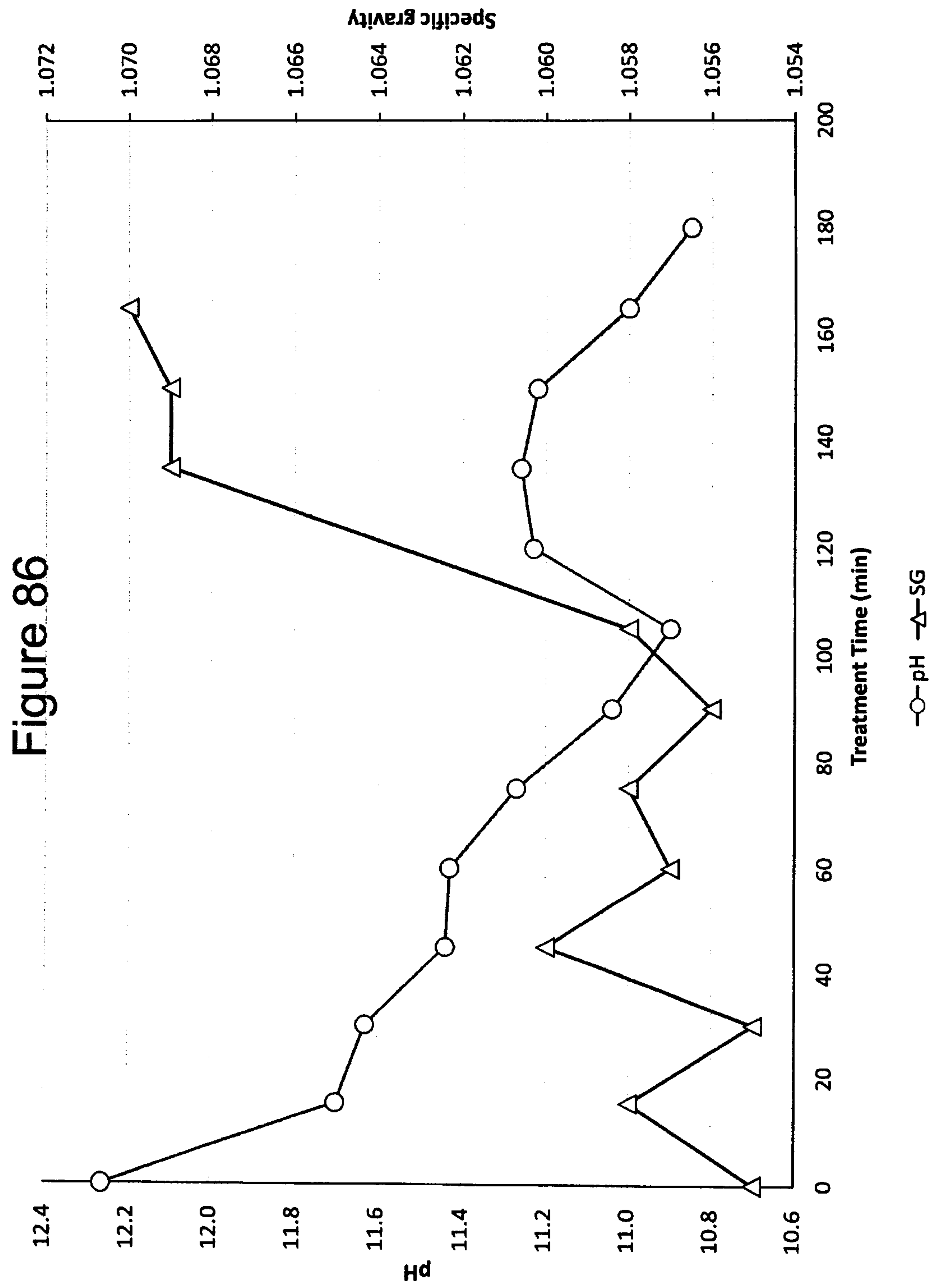
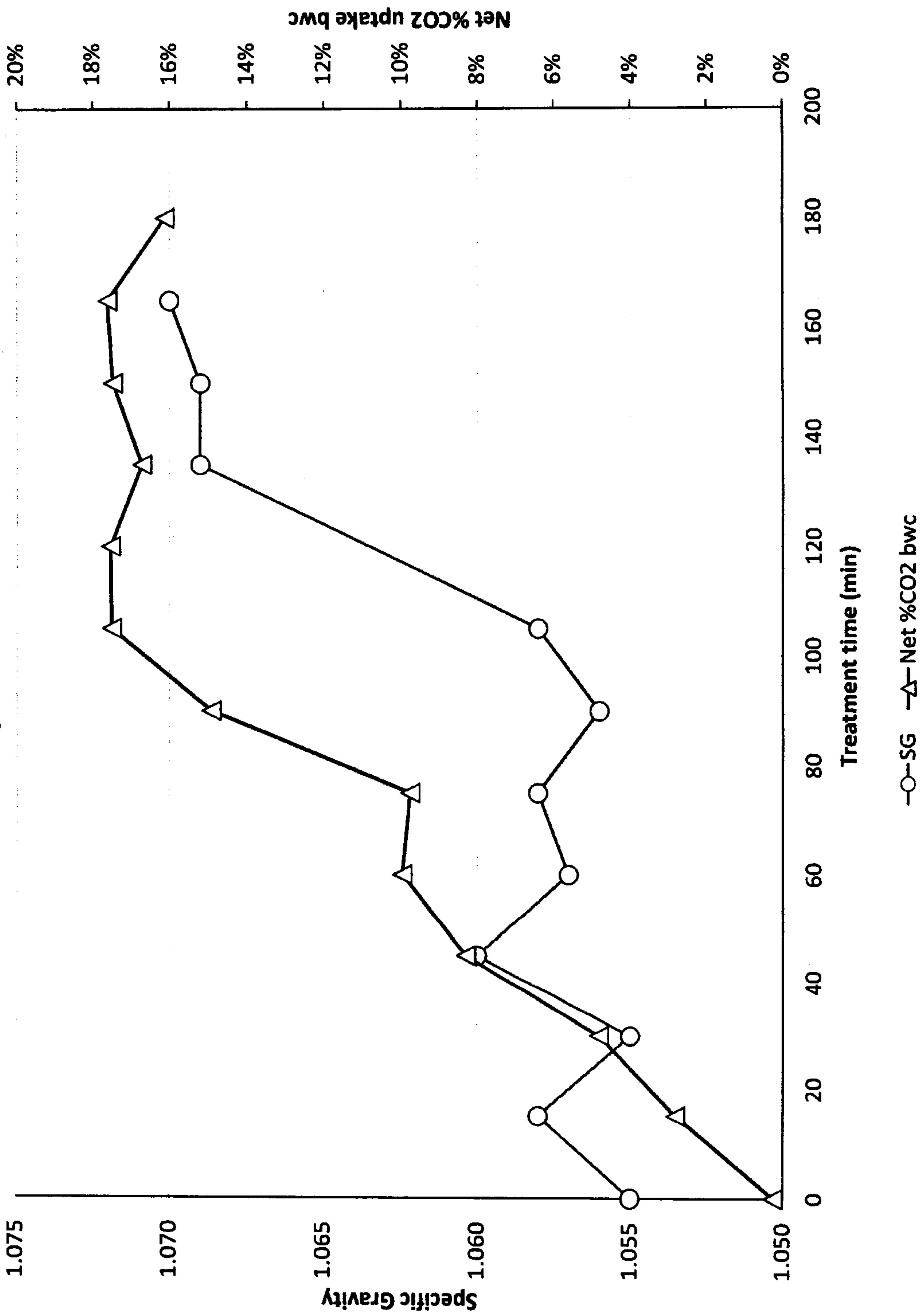


Figure 87



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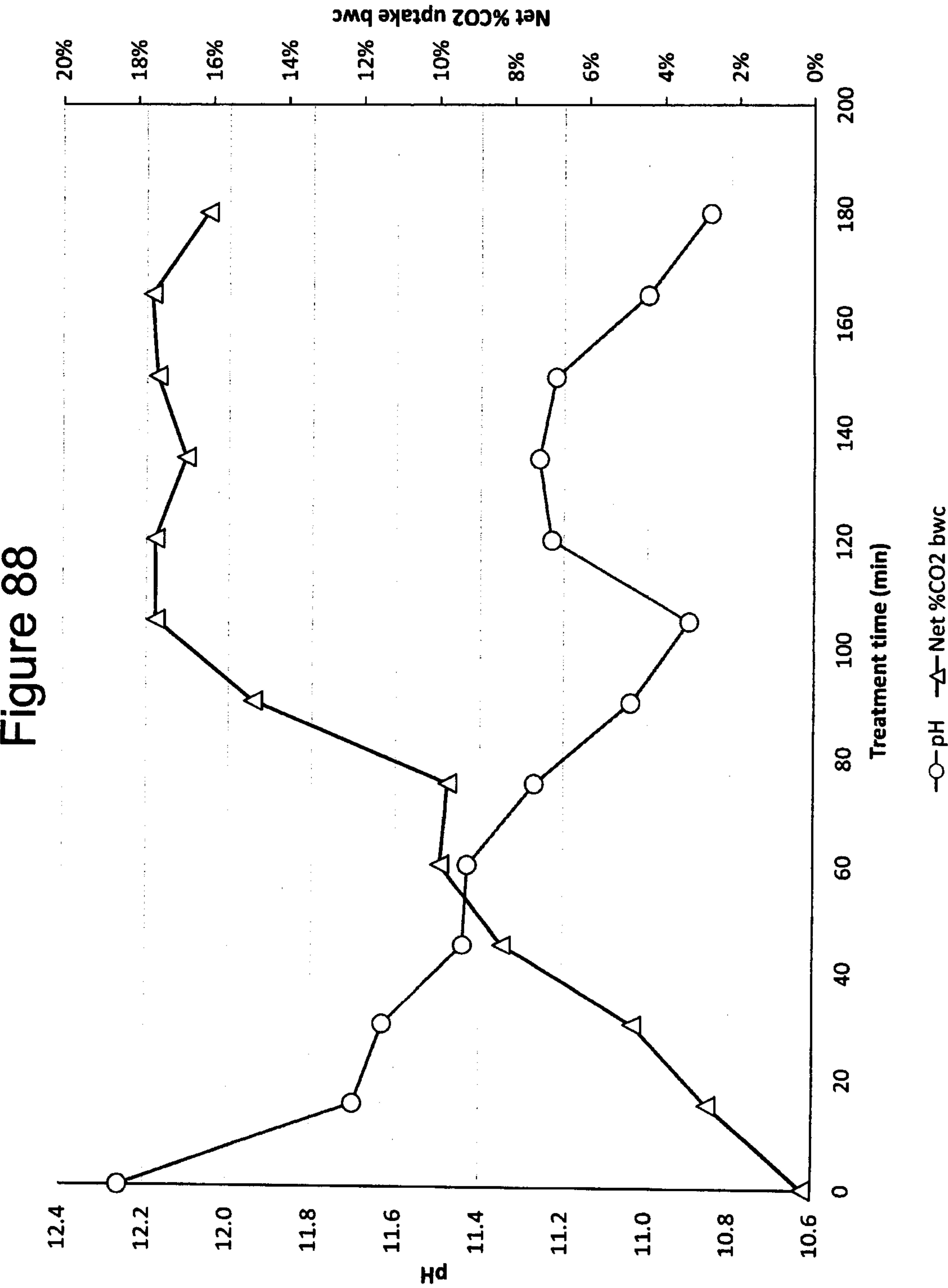


Figure 89

