Figure 1. PTA-9695 and Thiamine gradient in TSFM (0.25 g/L tastone, 0.625 g/L NaCl, pH 7.0)

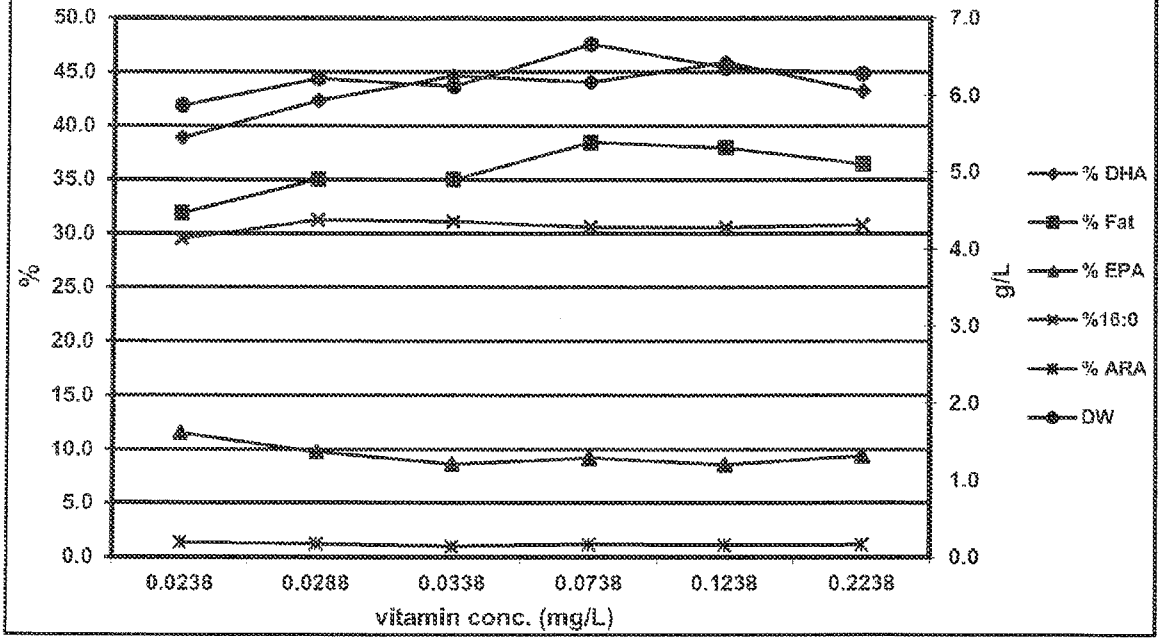


Figure 2. PTA-9695 and B12 gradient in TSFM (0.25 g/L Tastone, 0.625 g/L NaCl, pH 7.0)

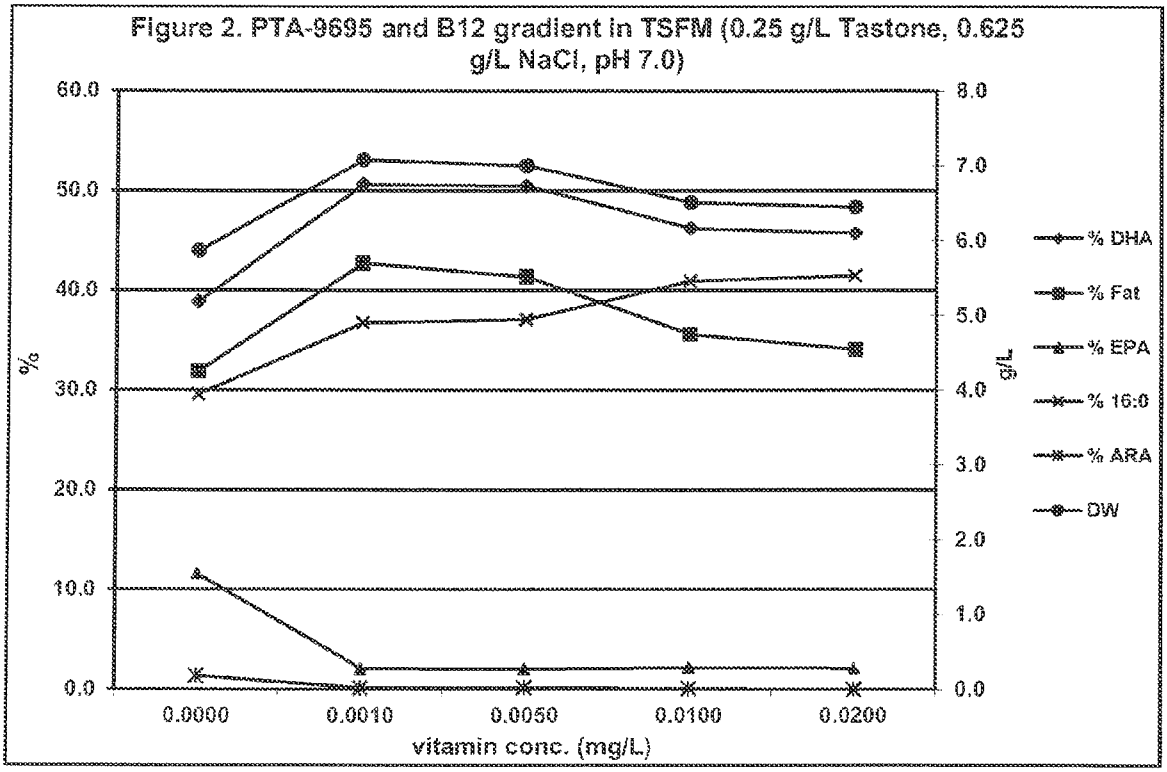


Figure 3. PTA-9695 and Biotin gradient in TSFM (0.25 g/L tastone, 0.625 g/L NaCl, pH 7.0)

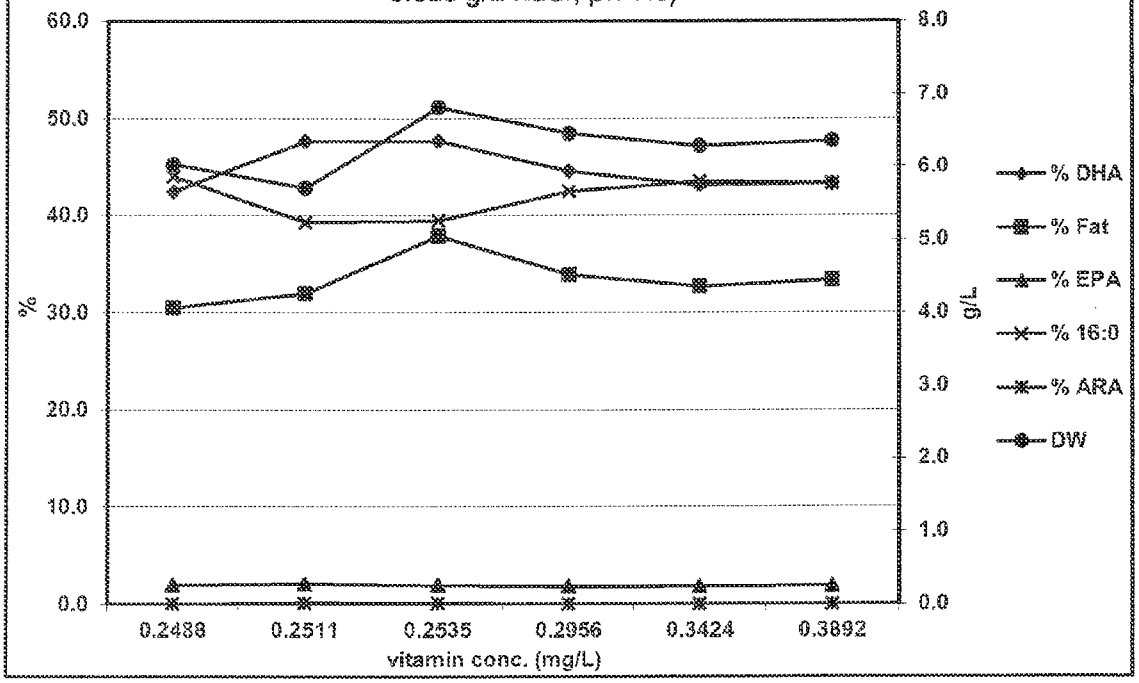


Figure 4. PTA-9695 and Ca-Pantothenate gradient in TSFM (0.25 g/L tastone, 0.625 g/L NaCl, pH 7.0)

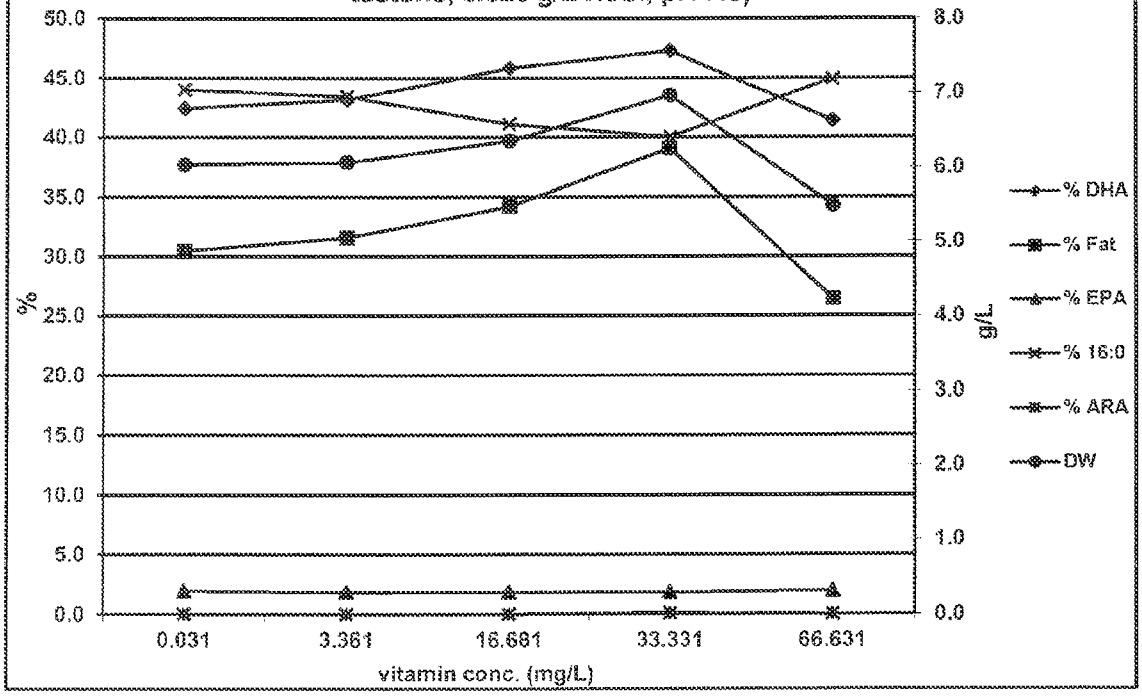


Figure 5. Performance of PTA-9695 in standard TSFM (C1) with 2g/L tastone and 1x thiamine and 1x B12, Tastone-free TSFM without any vitamins (A), and in Tastone-free with 1x thiamine and B12 (B)

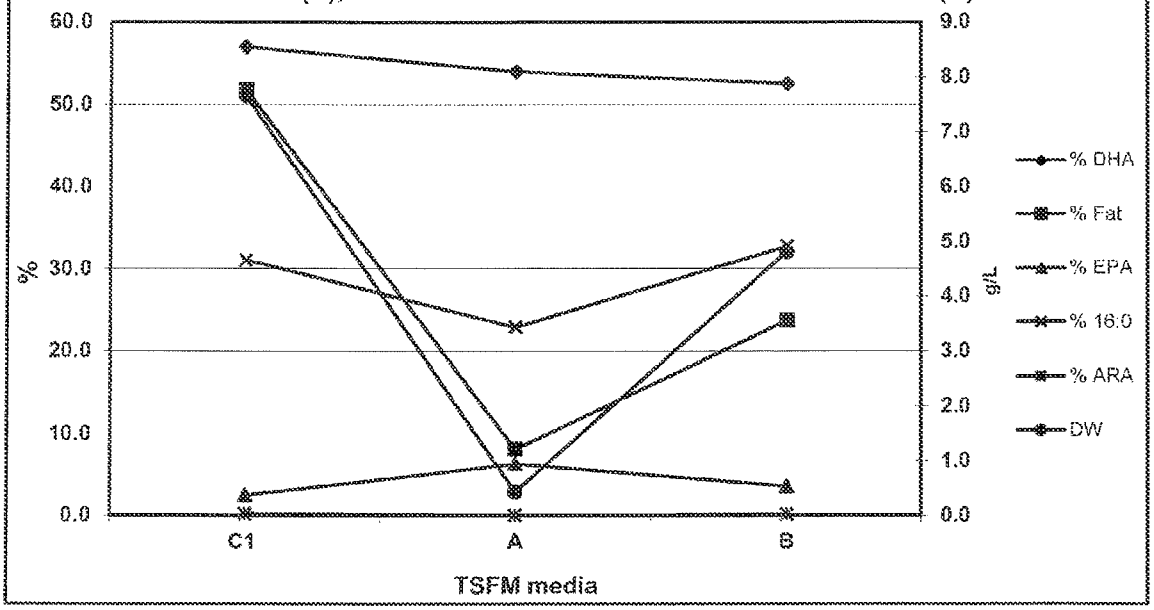
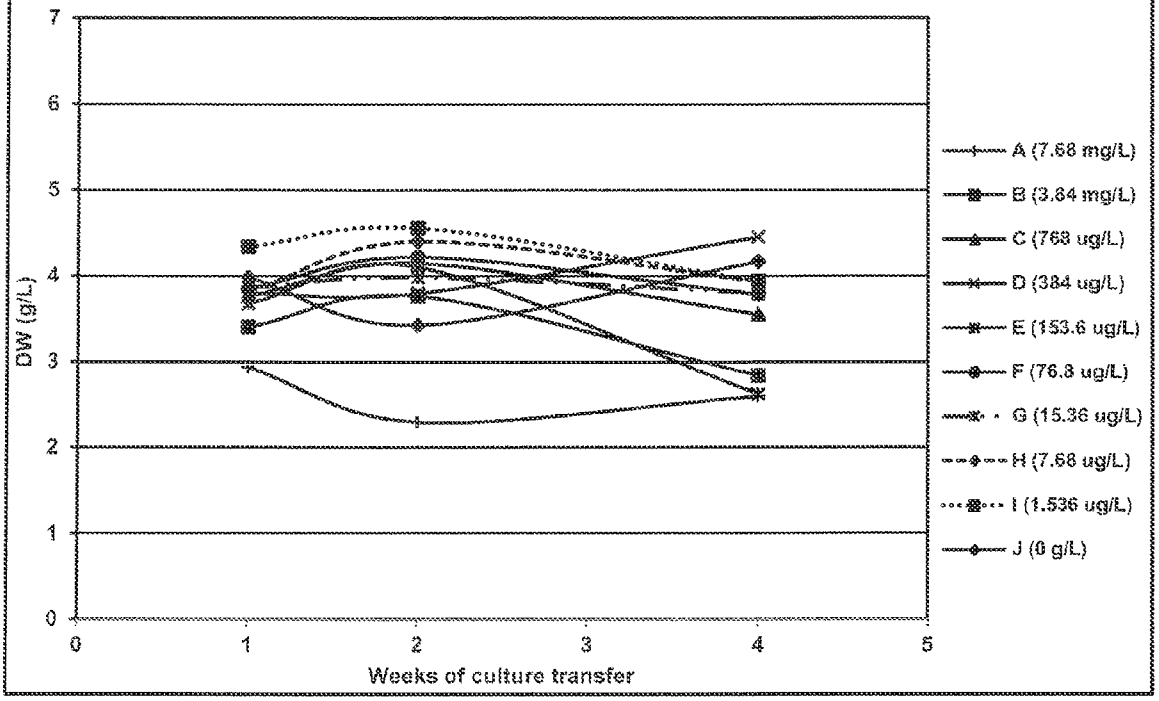
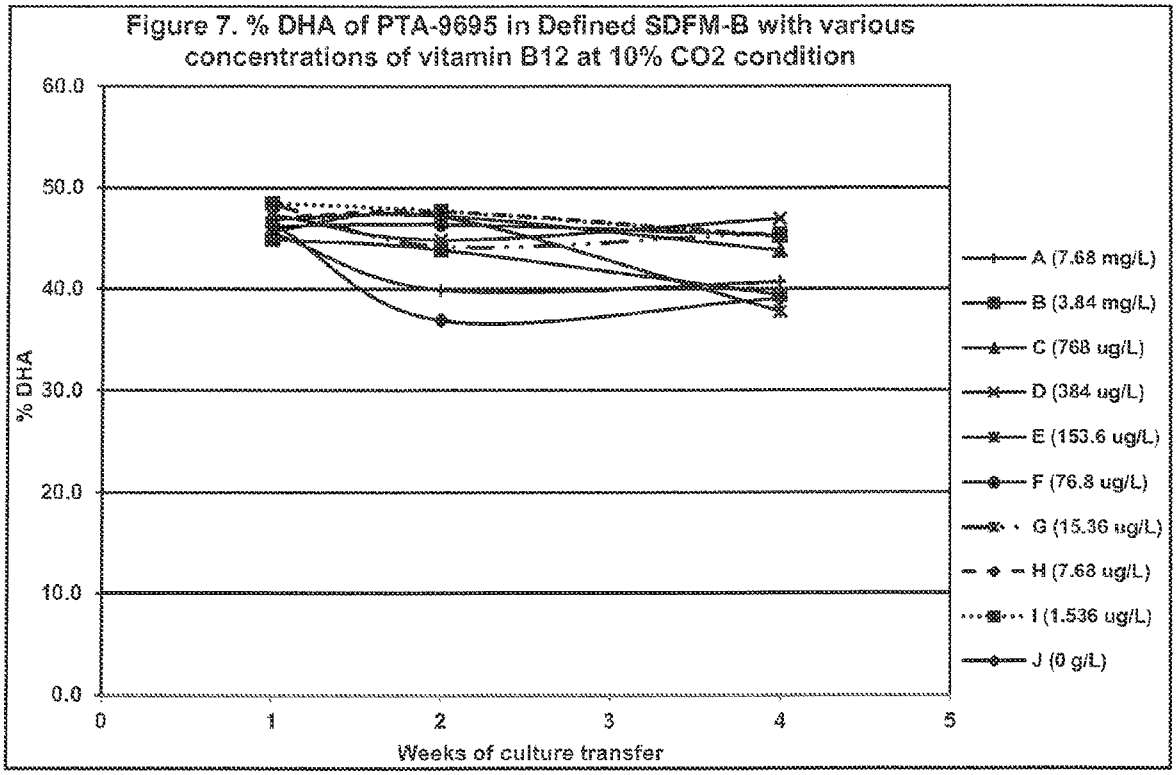


Figure 6. Dry weight of PTA-9695 in Defined SDFM-B with various concentrations of vitamin B12 at 10% CO2 condition




Figure 7. % DHA of PTA-9695 in Defined SDFM-B with various concentrations of vitamin B12 at 10% CO2 condition
% DHA
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0
1
2
3
4
5
Weeks of culture transfer
A (7.68 mg/L)
B (3.84 mg/L)
C (768 ug/L)
D (384 ug/L)
E (153.6 ug/L)
F (76.8 ug/L)
G (15.36 ug/L)
H (7.68 ug/L)
I (1.536 ug/L)
J (0 g/L)

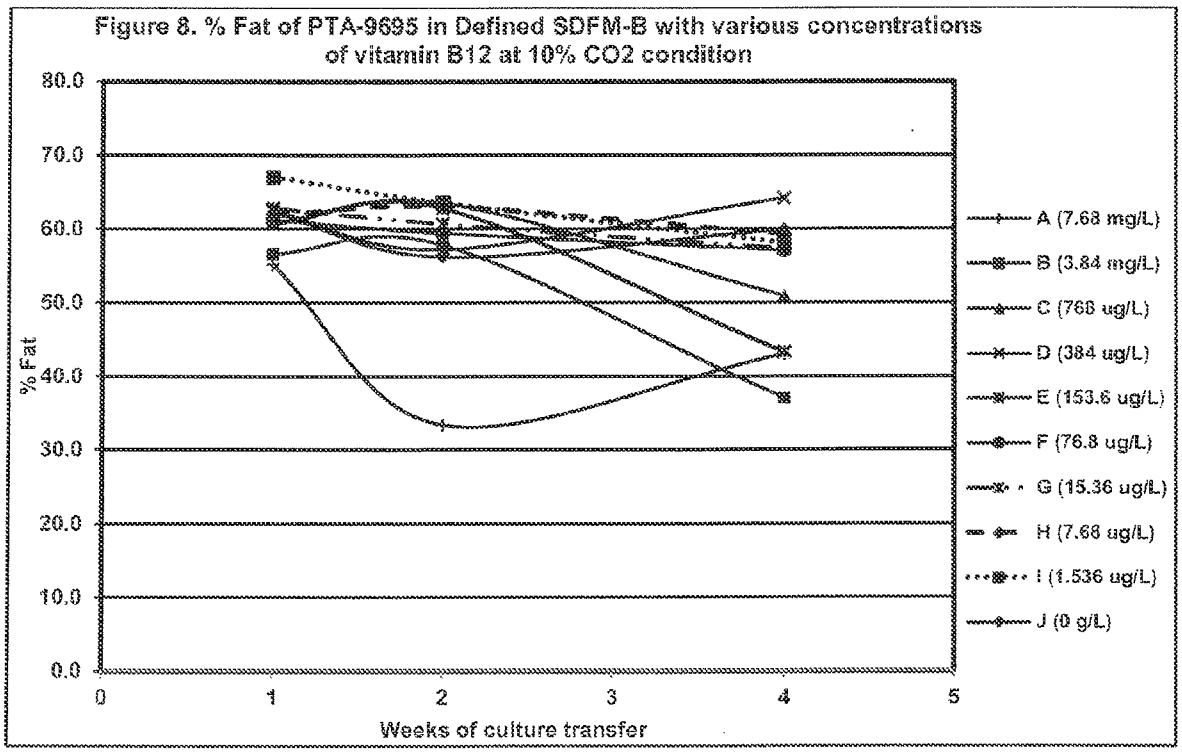

Figure 8. % Fat of PTA-9695 in Defined SDFM-B with various concentrations of vitamin B12 at 10% CO2 condition
% Fat
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0
1
2
3
4
5
Weeks of culture transfer
A (7.68 mg/L)
B (3.84 mg/L)
C (768 ug/L)
D (384 ug/L)
E (153.6 ug/L)
F (76.8 ug/L)
G (15.36 ug/L)
H (7.68 ug/L)
I (1.536 ug/L)
J (0 g/L)

Figure 9. Fat yield (g/L) of PTA-9695 in Defined SDFM-B with various concentrations of vitamin B12 at 10% CO2 condition

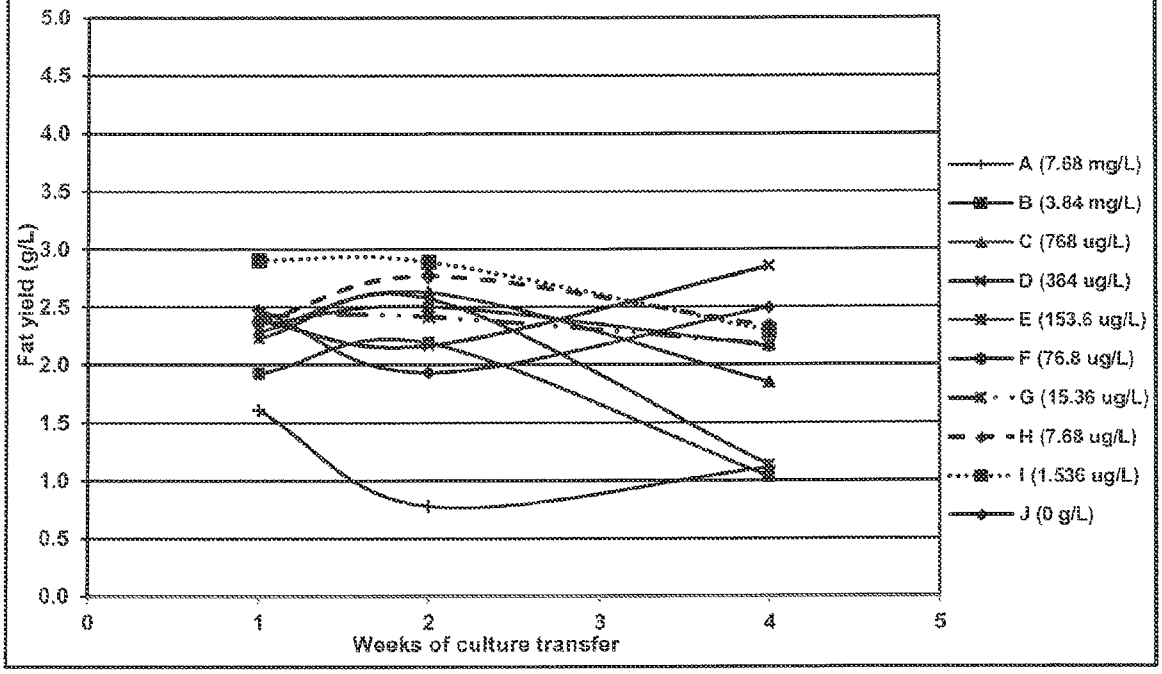


Figure 10. DHA yield (g/L) of PTA-9695 in Defined SDFM-B with various concentrations of vitamin B12 at 10% CO2 condition

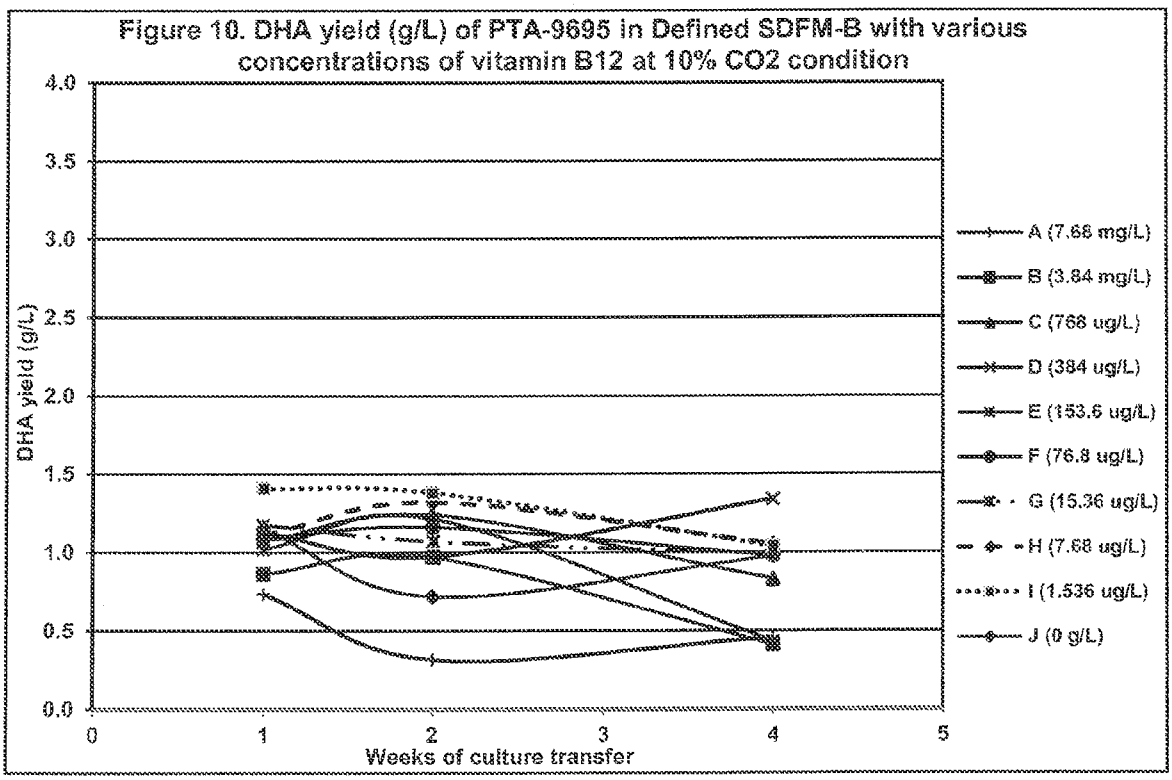


Figure 11. % EPA of PTA-9695 in Defined SDFM-B with various concentrations of vitamin B12 at 10% CO2 condition

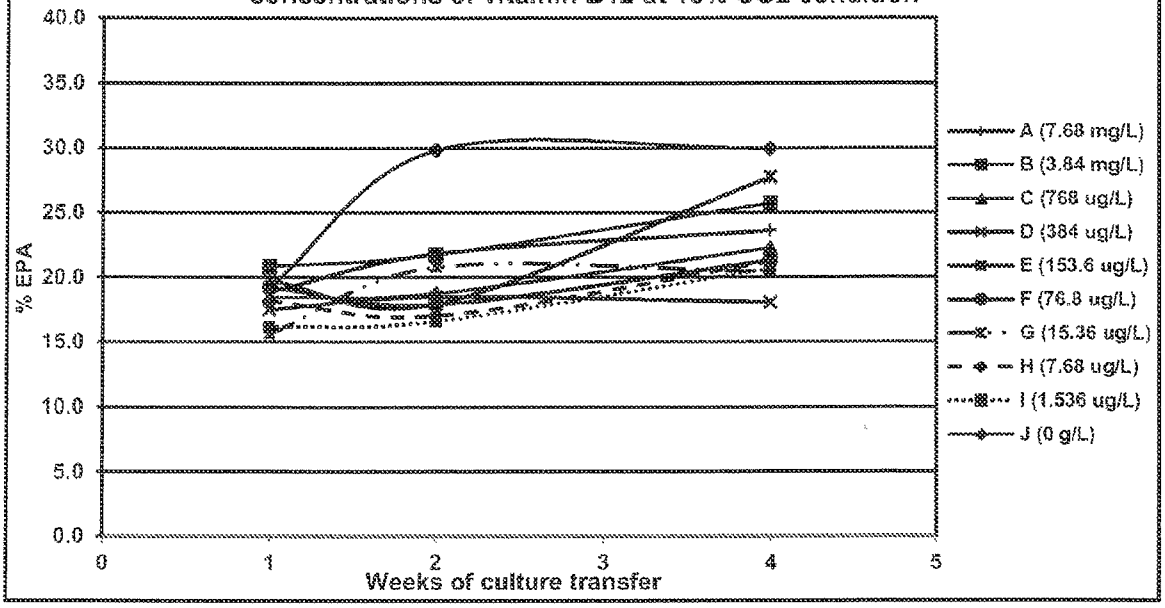


Figure 12. Lipid-free dry weight of PTA-9695 in Defined SDFM-B with various concentrations of vitamin B12 at 10% CO2 condition

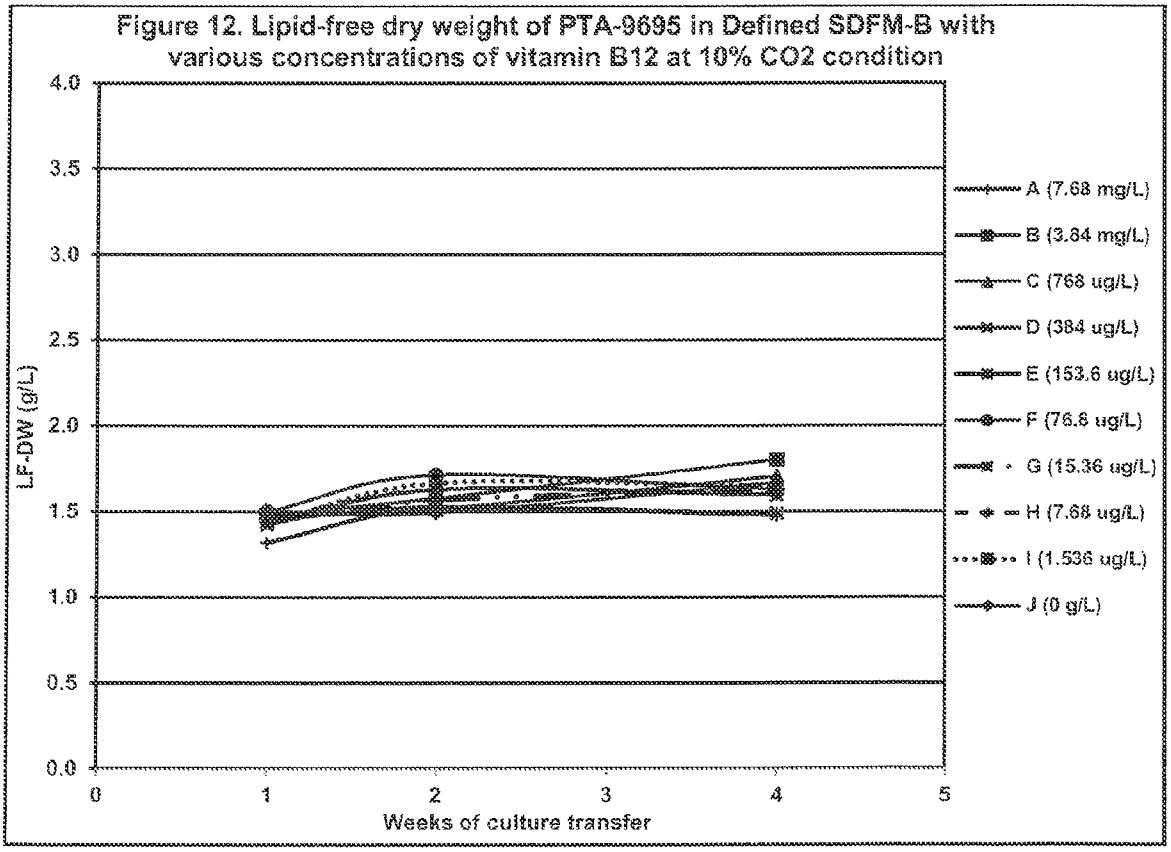


Figure 13. % 16:0 of PTA-9695 in Defined SDFM-B with various concentrations of vitamin B12 at 10% CO2 condition

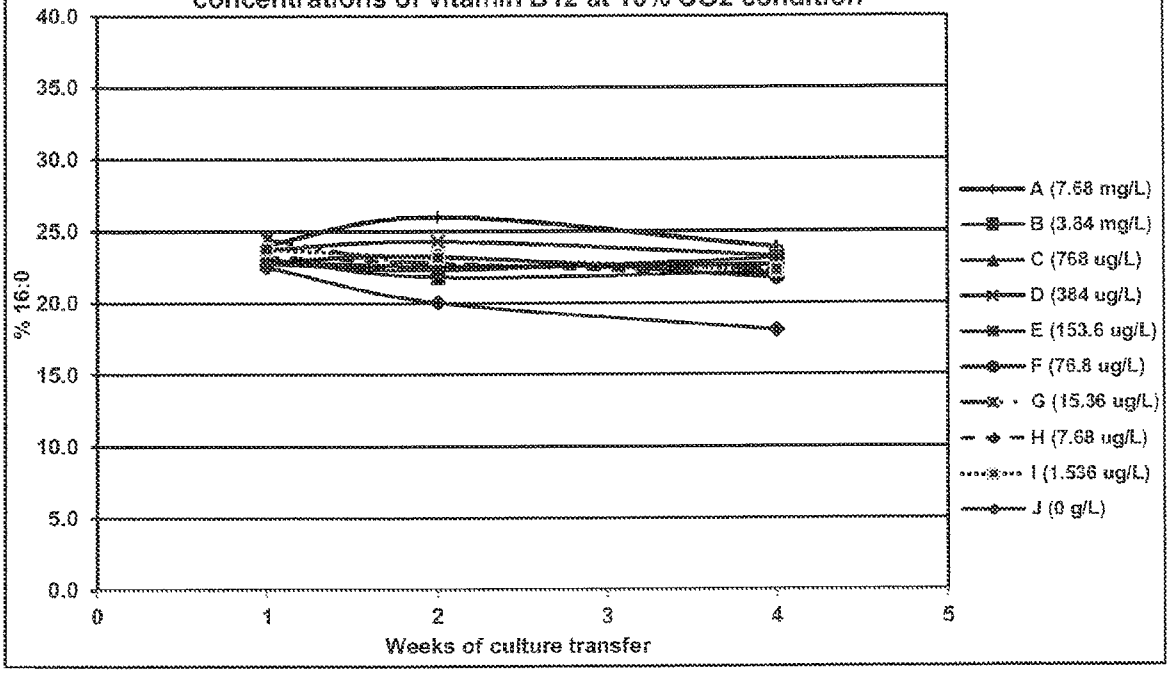


Figure 14. % Total omega-3 of PTA-9695 in Defined SDFM-B with various concentrations of vitamin B12 at 10% CO2 condition

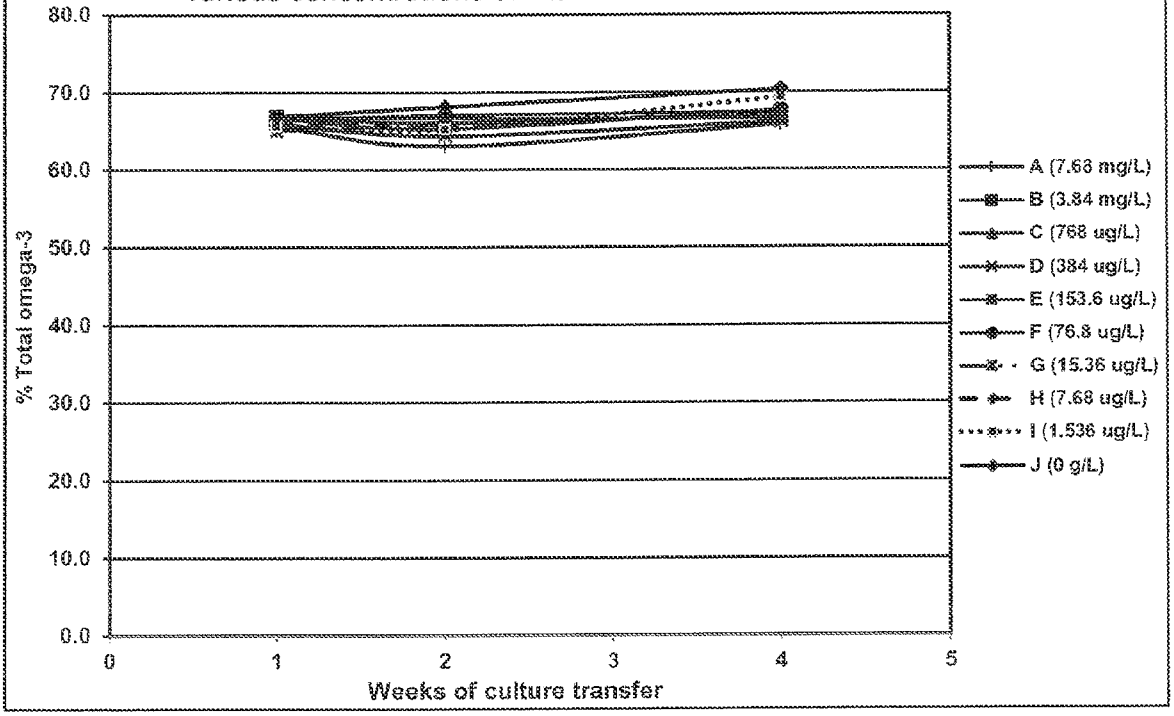


Figure 15. Dry weight of PTA-9695 as a function of various concentrations of vitamin B12 in defined SDFM-B at 10% CO2

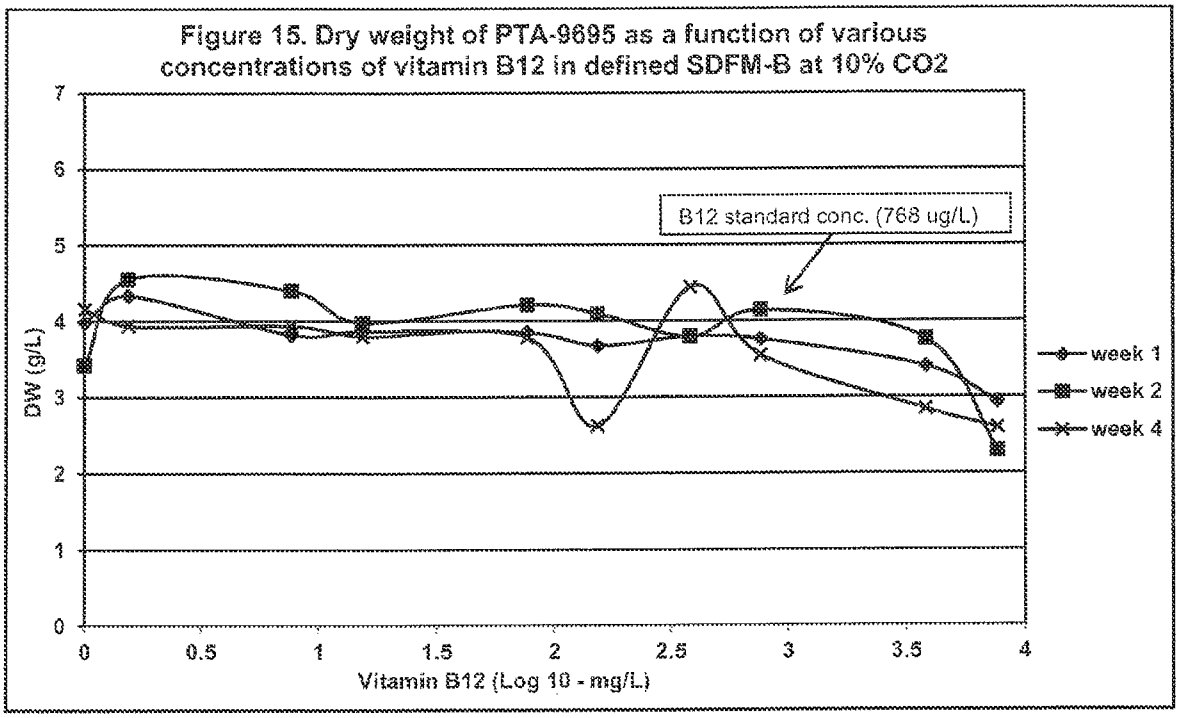


Figure 16. % DHA of PTA-9695 as a function of various concentrations of vitamin B12 in defined SDFM-B at 10% CO2

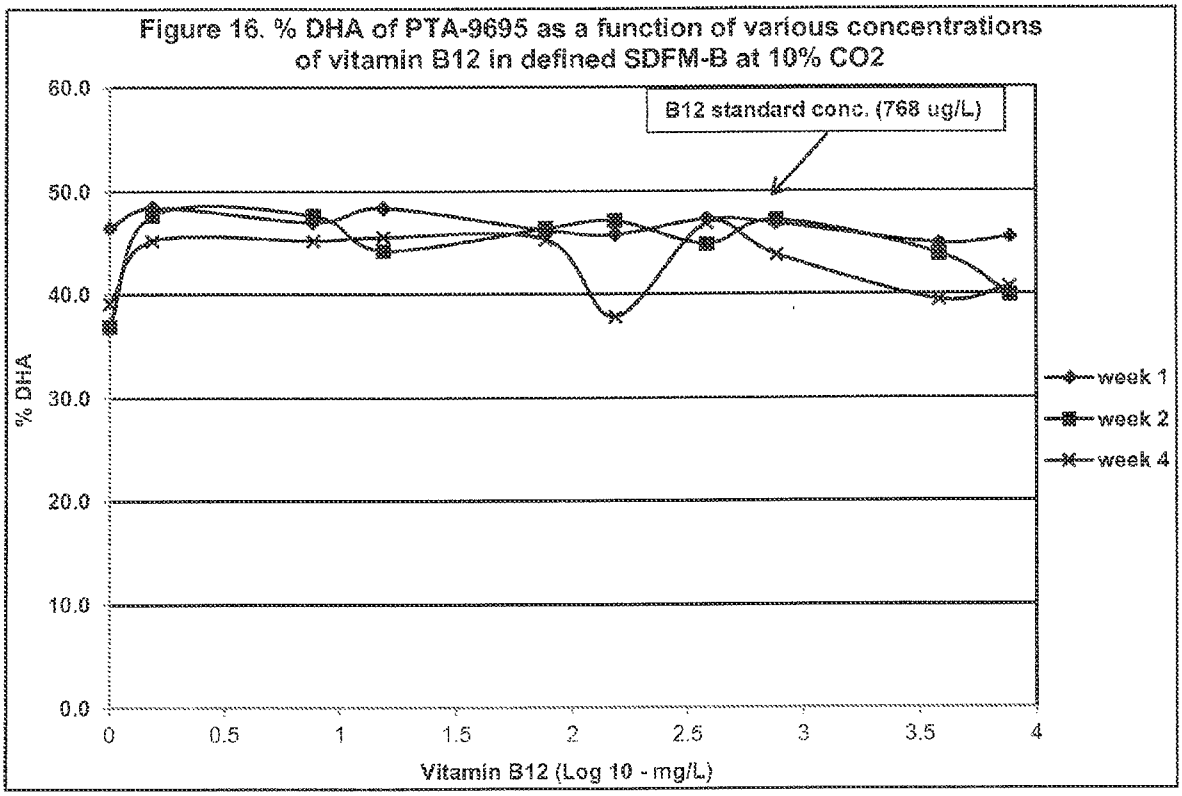


Figure 17. % Fat PTA-9695 as a function of various concentrations of vitamin B12 in defined SDFM-B at 10% CO2

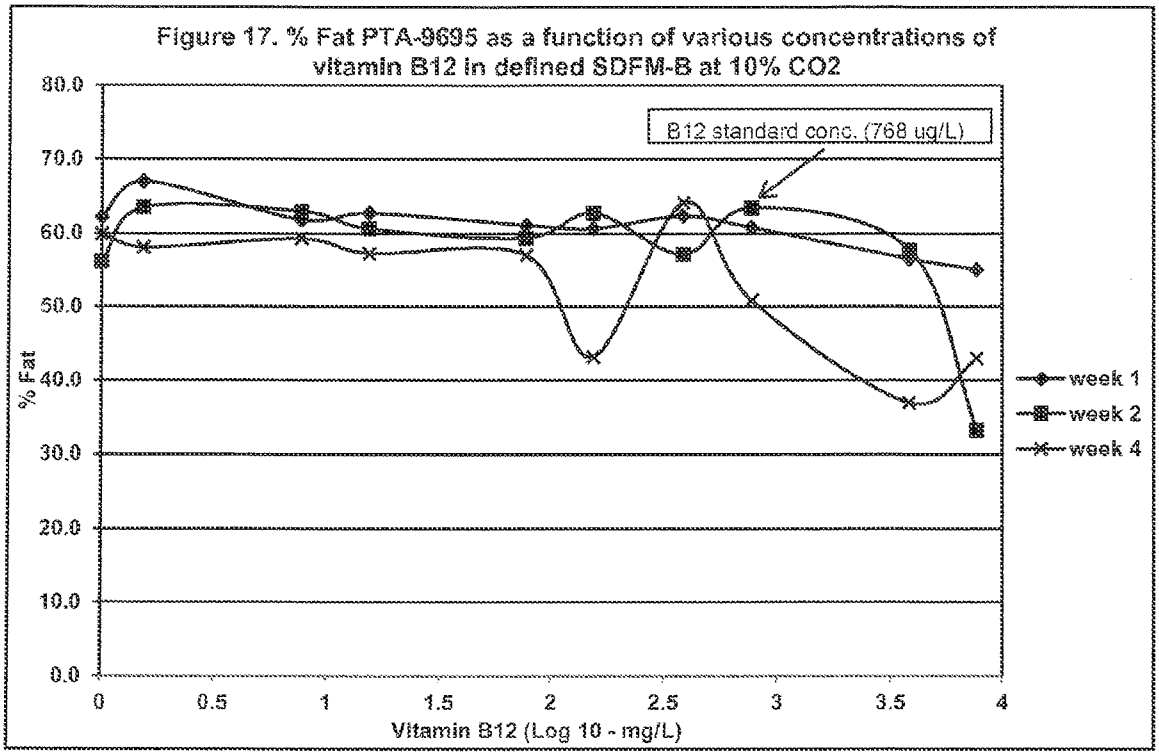


Figure 18. DHA yield of PTA-9695 as a function of various concentrations of vitamin B12 in defined SDFM-B at 10% CO2

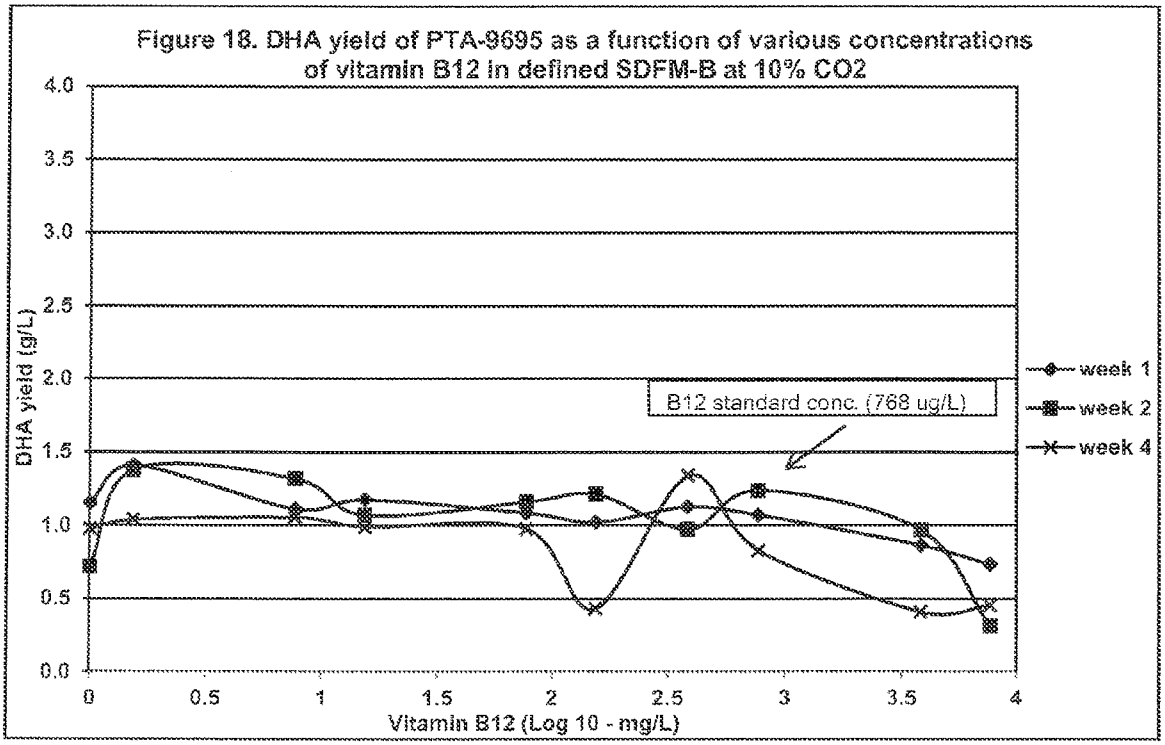


Figure 19. % EPA of PTA-9695 as a function of various concentrations of vitamin B12 in defined SDFM-B at 10% CO2

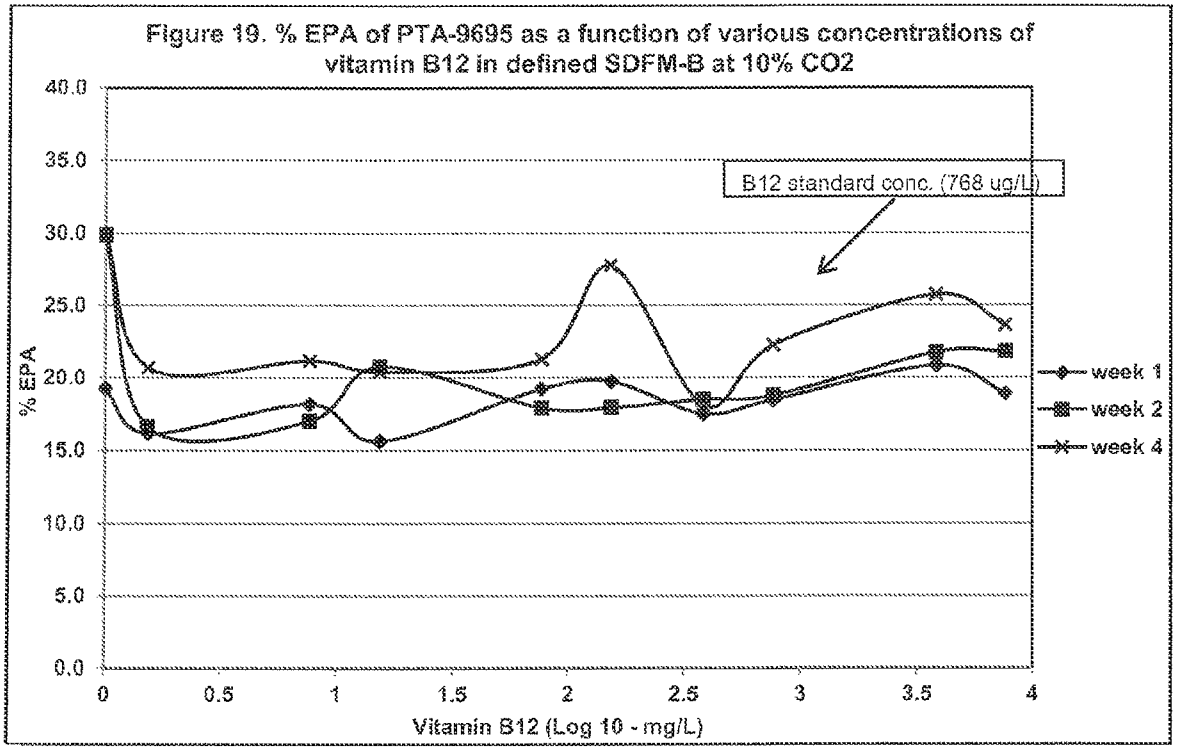


Figure 20. PTA-10208 Dry Weight in Vitamin B12 Gradients at 10% CO2

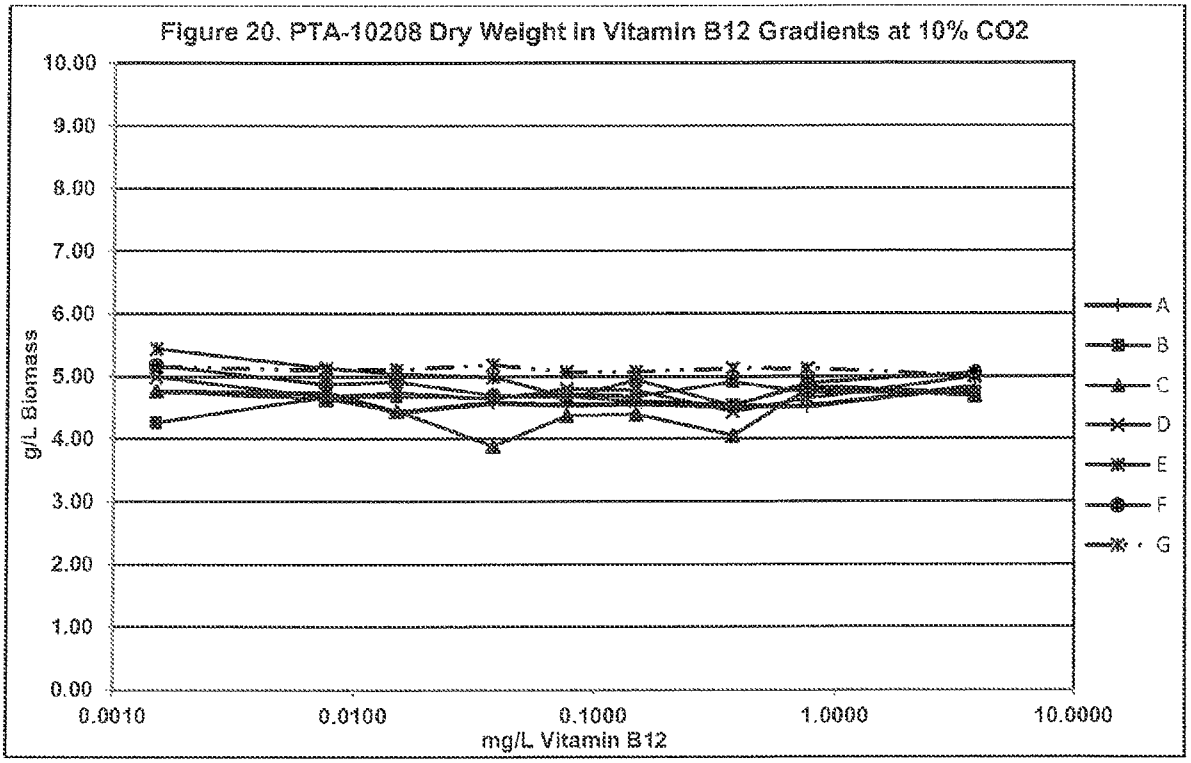


Figure 21. PTA-10208 Dry Weight vs. Time at Different Vitamin B12 Levels

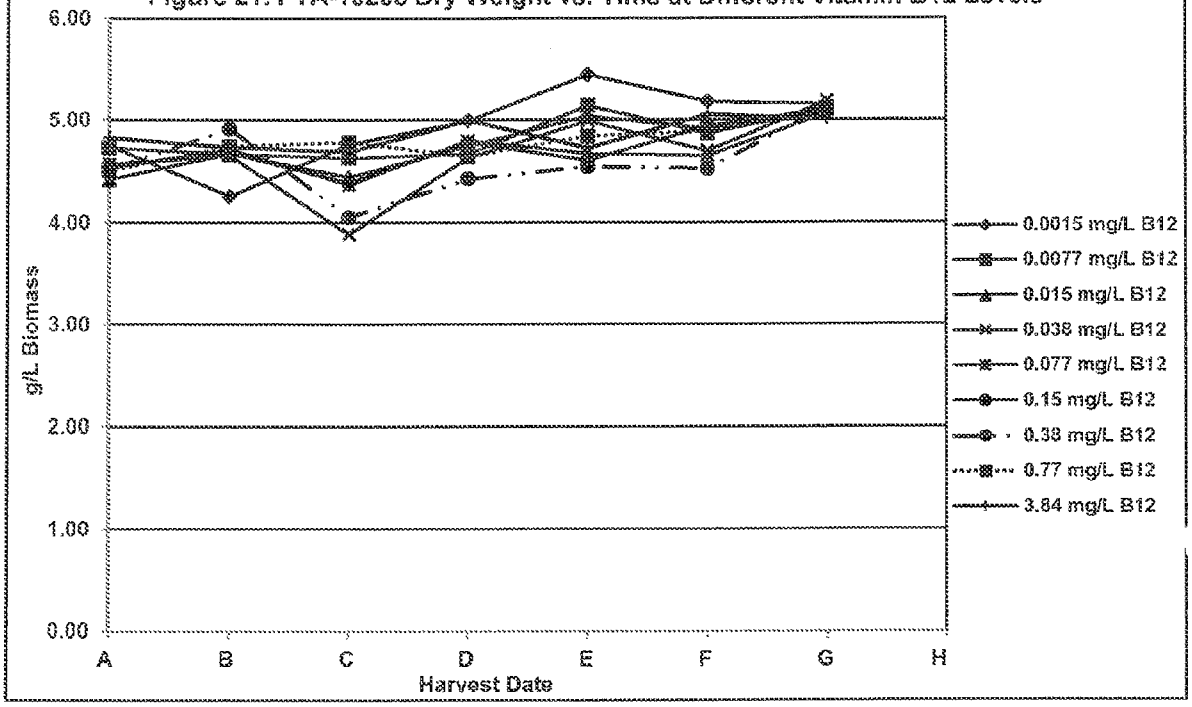


Figure 22. PTA-10208 %16:0 in Vitamin B12 Gradients at 10% CO2

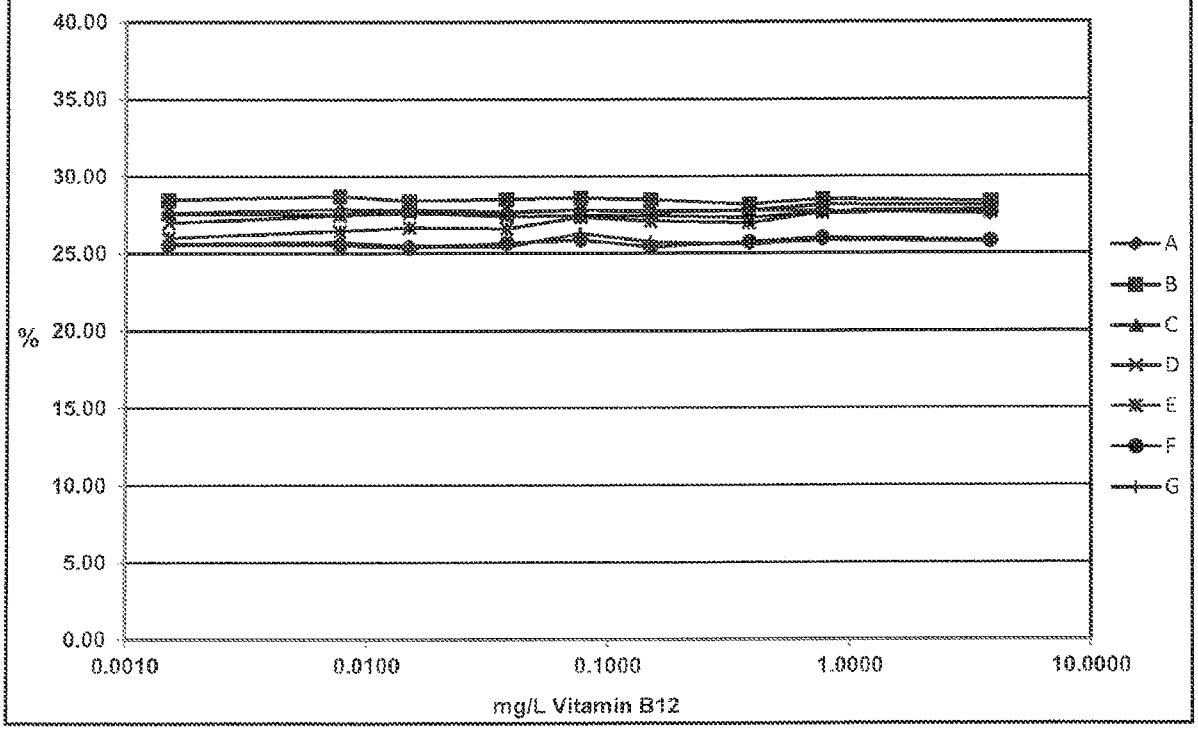


Figure 23. PTA 10208 W6 % ARA in Vitamin B12 Gradients at 10% CO2

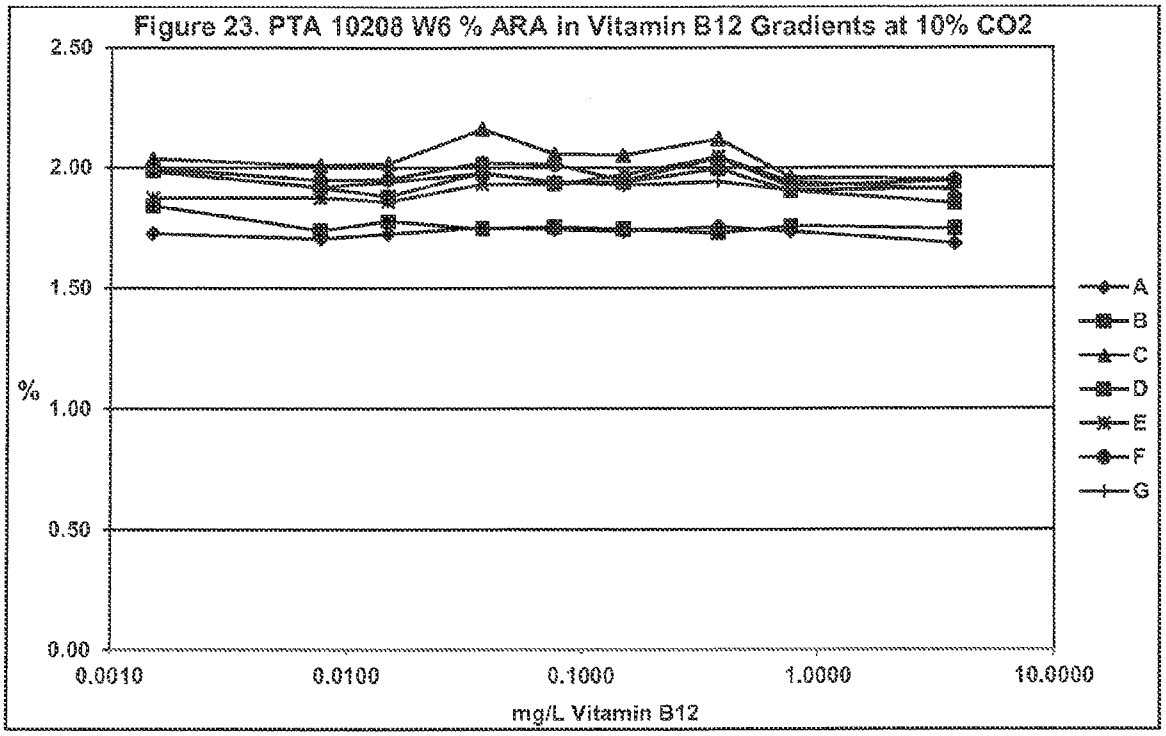


Figure 24. PTA-10208 % EPA in Vitamin B12 Gradients at 10% CO2

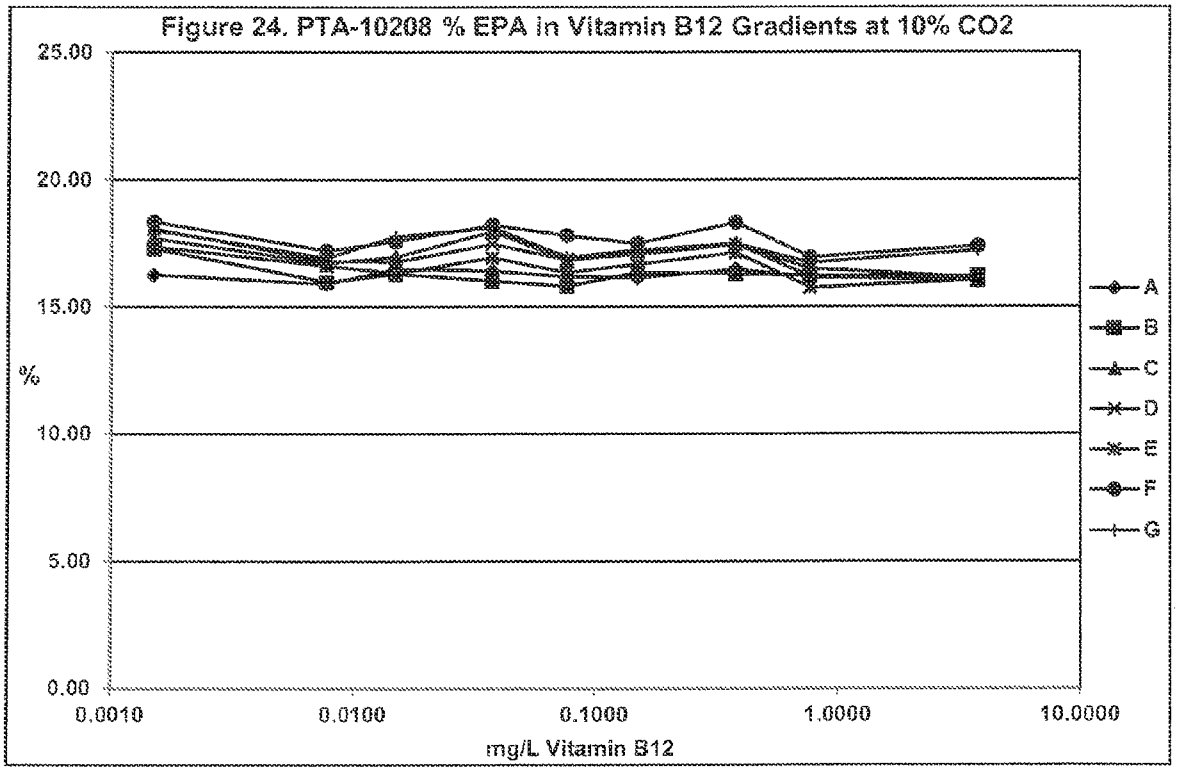


Figure 25. PTA-10208 % EPA vs. Time at Different Vitamin B12 Levels

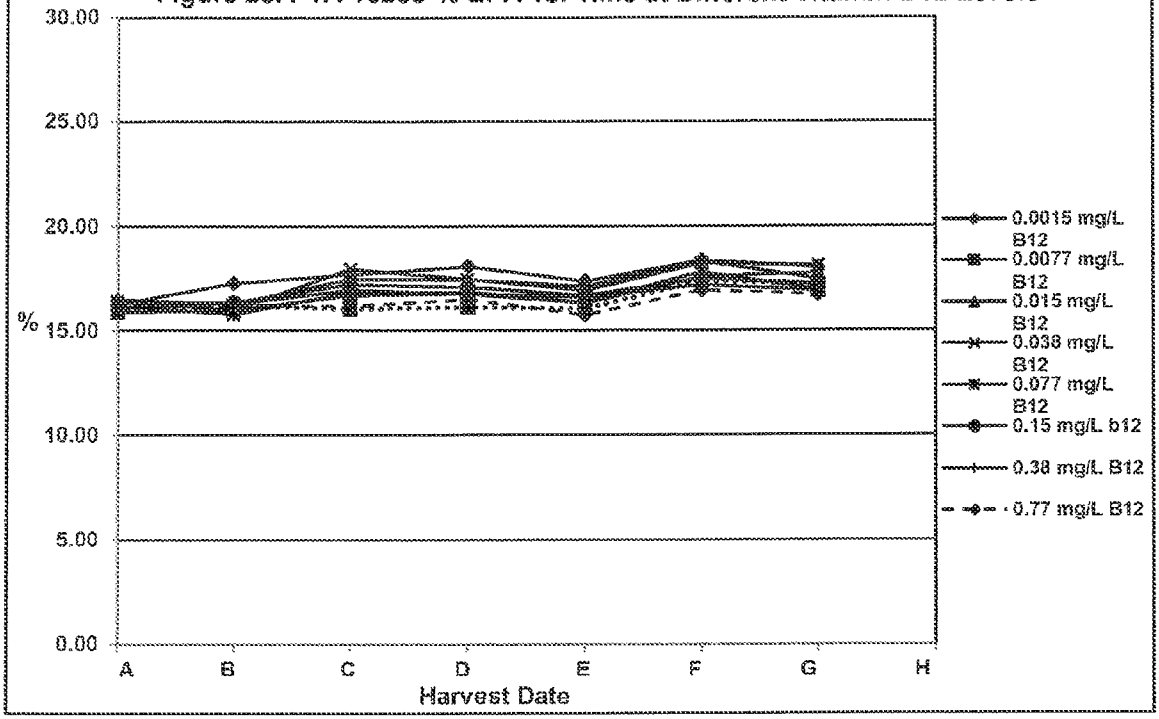


Figure 26. PTA-10208 EPA Yield in Vitamin B12 Gradients at 10% CO2

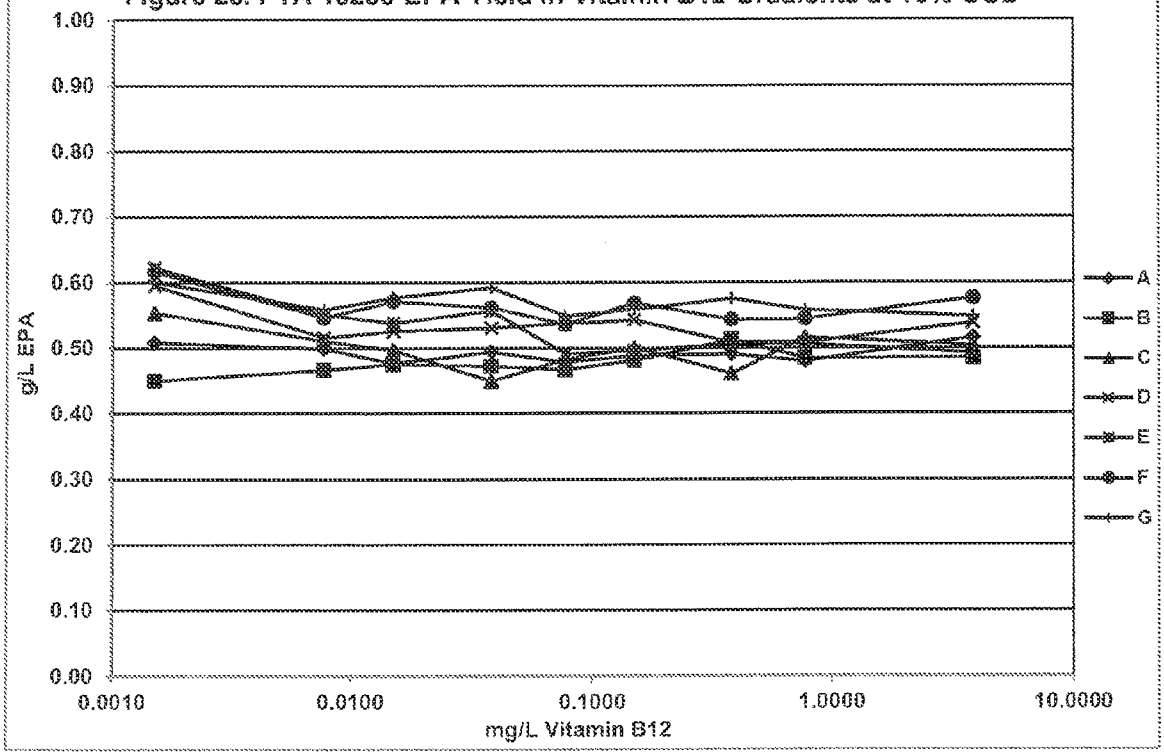


Figure 27. PTA-10208 EPA Yield vs. Time at Different Vitamin B12 Levels

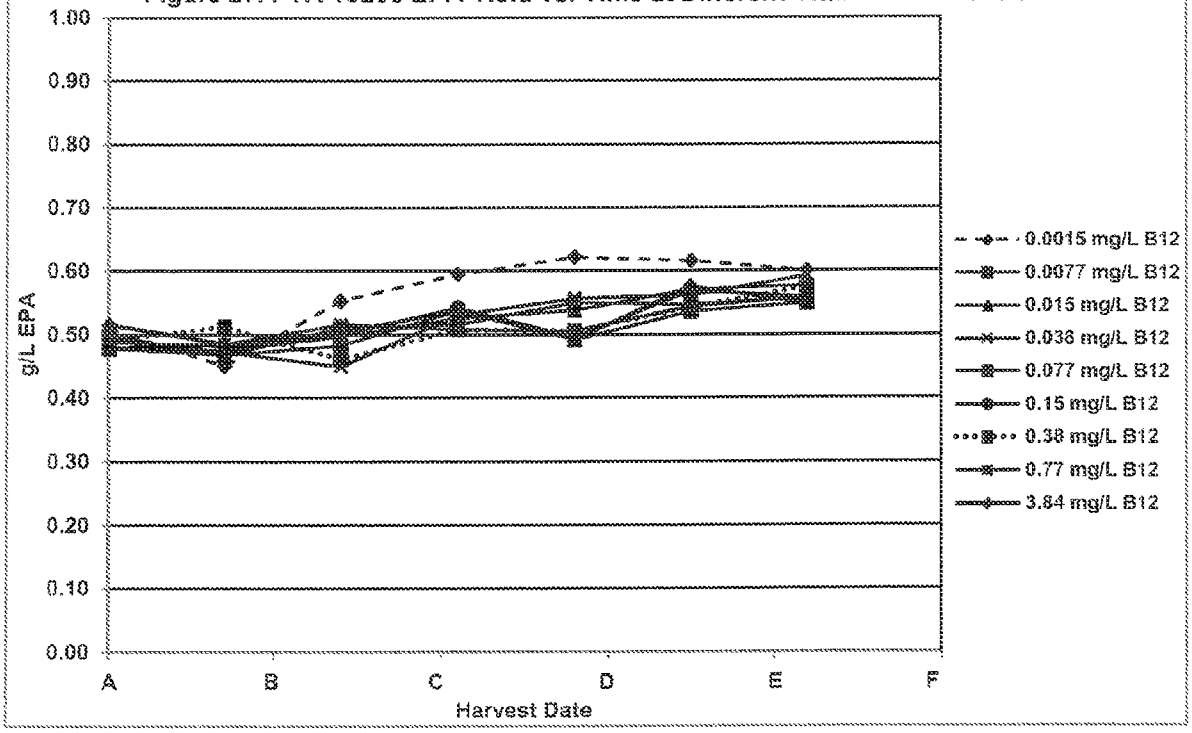


Figure 28. PTA-10208 mg/g EPA in Vitamin B12 Gradients at 10% CO2

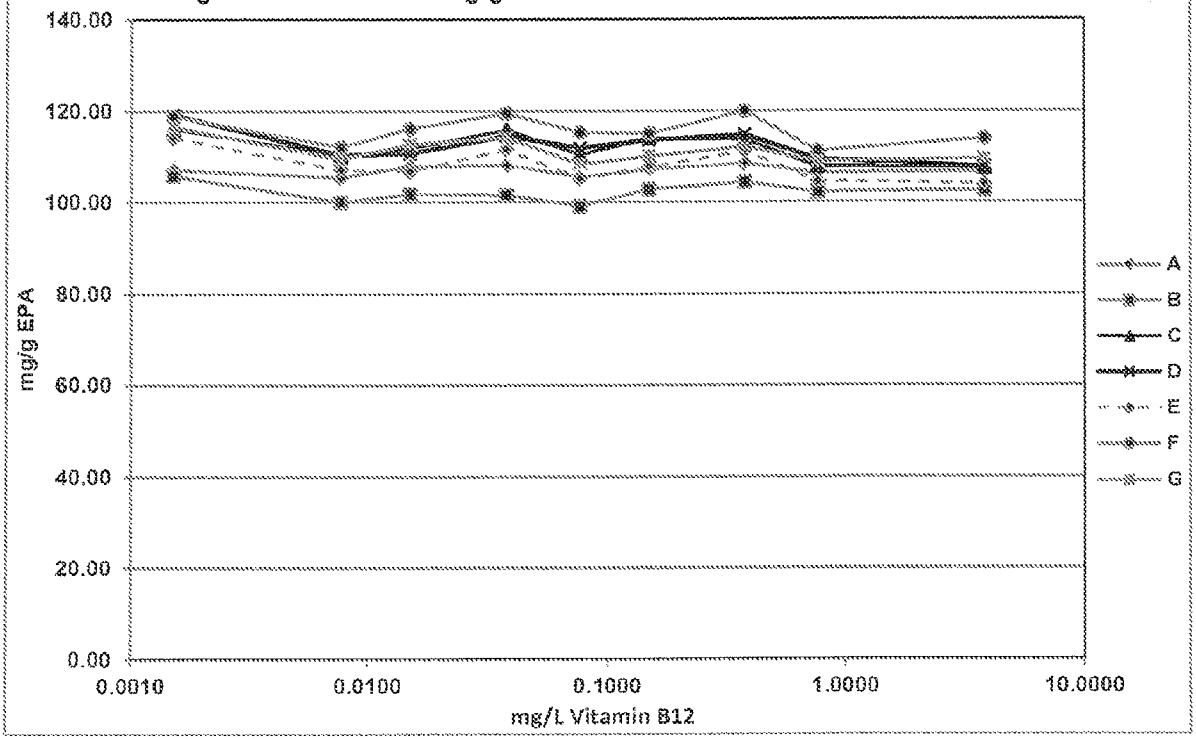


Figure 29. PTA-10208 % DPA (n-6) in Vitamin B12 Gradients at 10% CO2

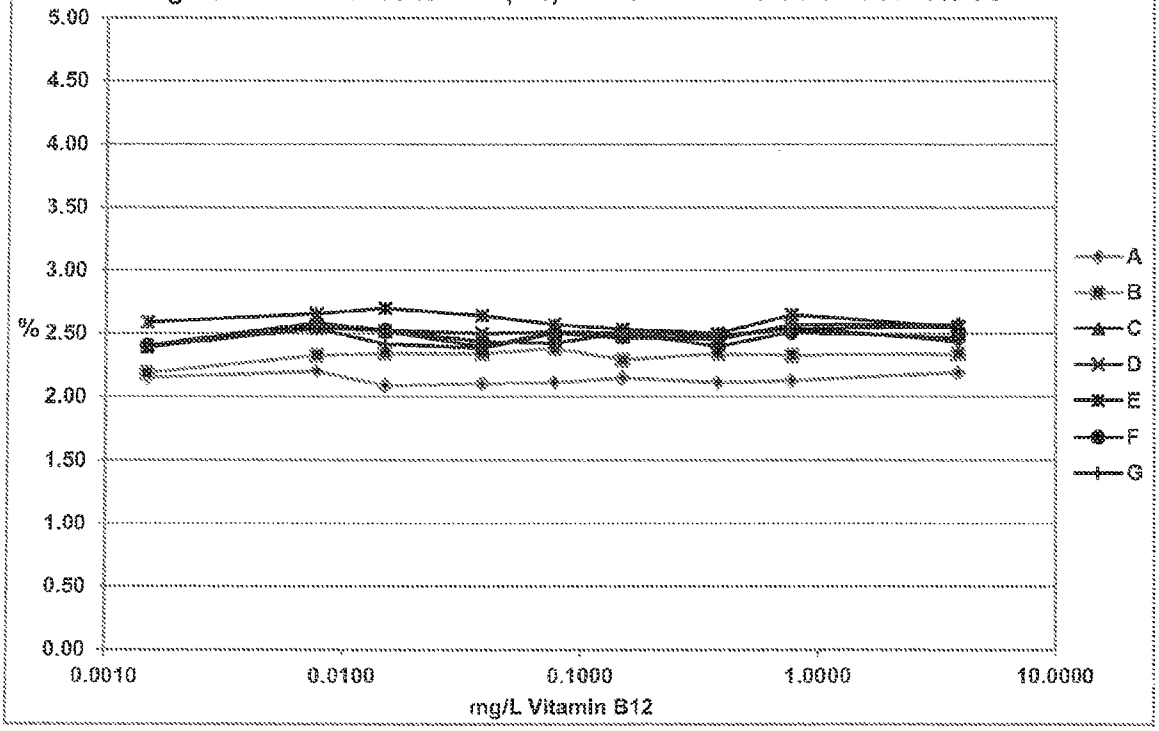


Figure 30. PTA-10208 % DPA (n-3) in Vitamin B12 Gradients at 10% CO2

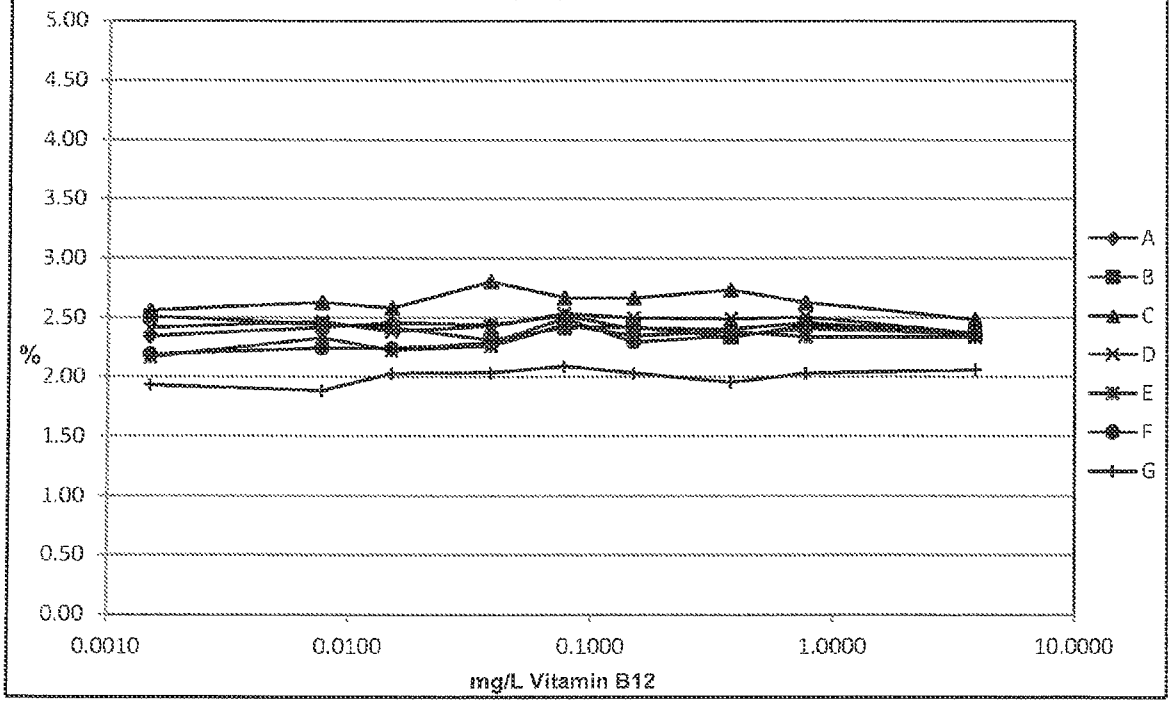


Figure 31. PTA-10208 % DHA in Vitamin B12 Gradients at 10% CO2

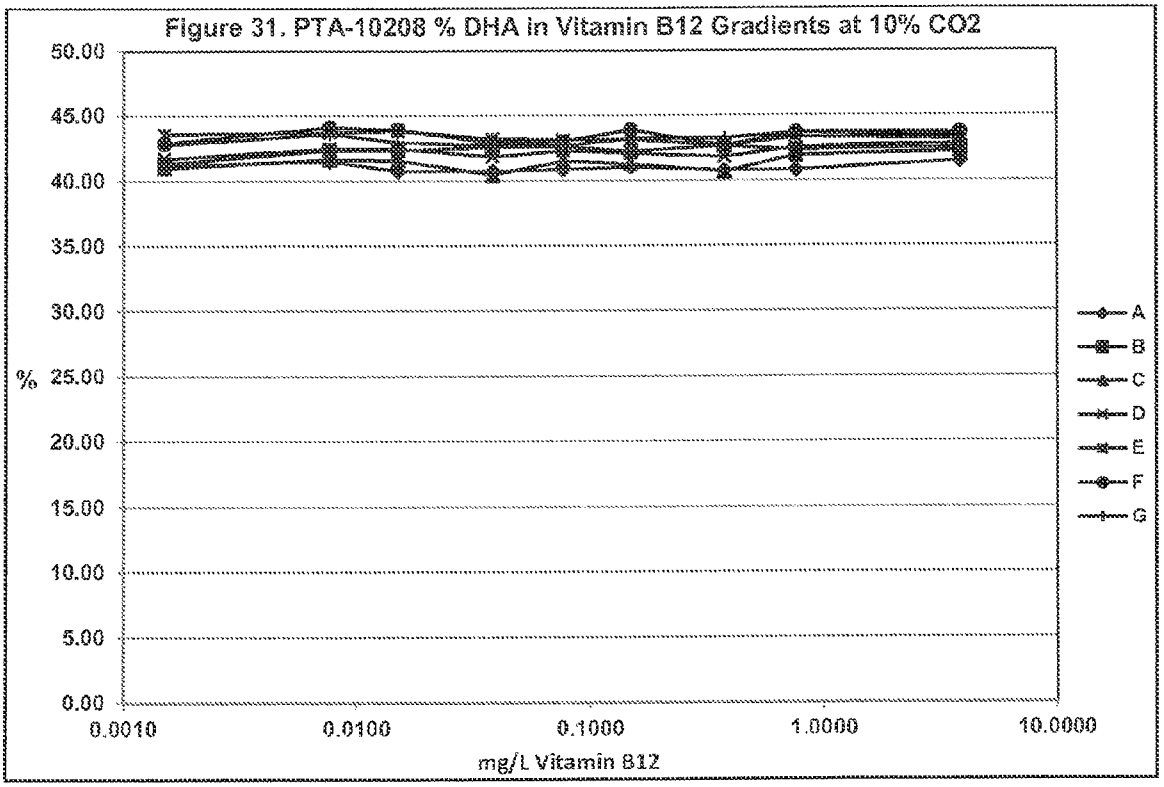


Figure 32. PTA-10208 DHA Yield in Vitamin B12 Gradients at 10% CO2

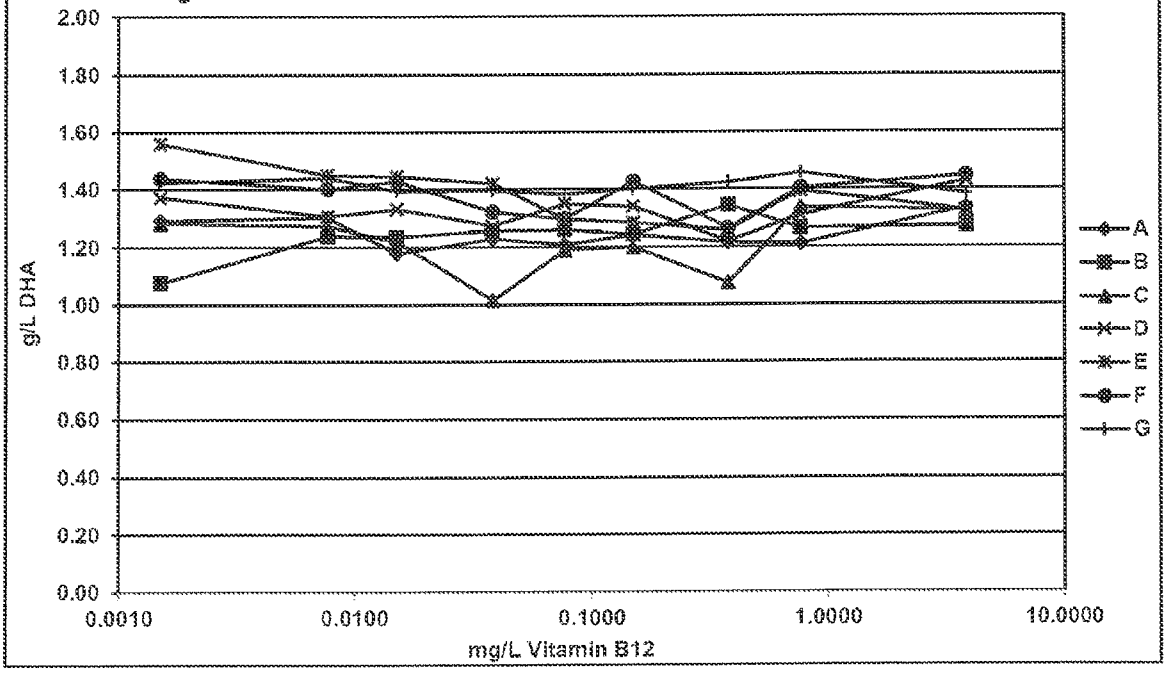


Figure 33. PTA-10208 mg/g DHA in Vitamin B12 Gradients at 10% CO2

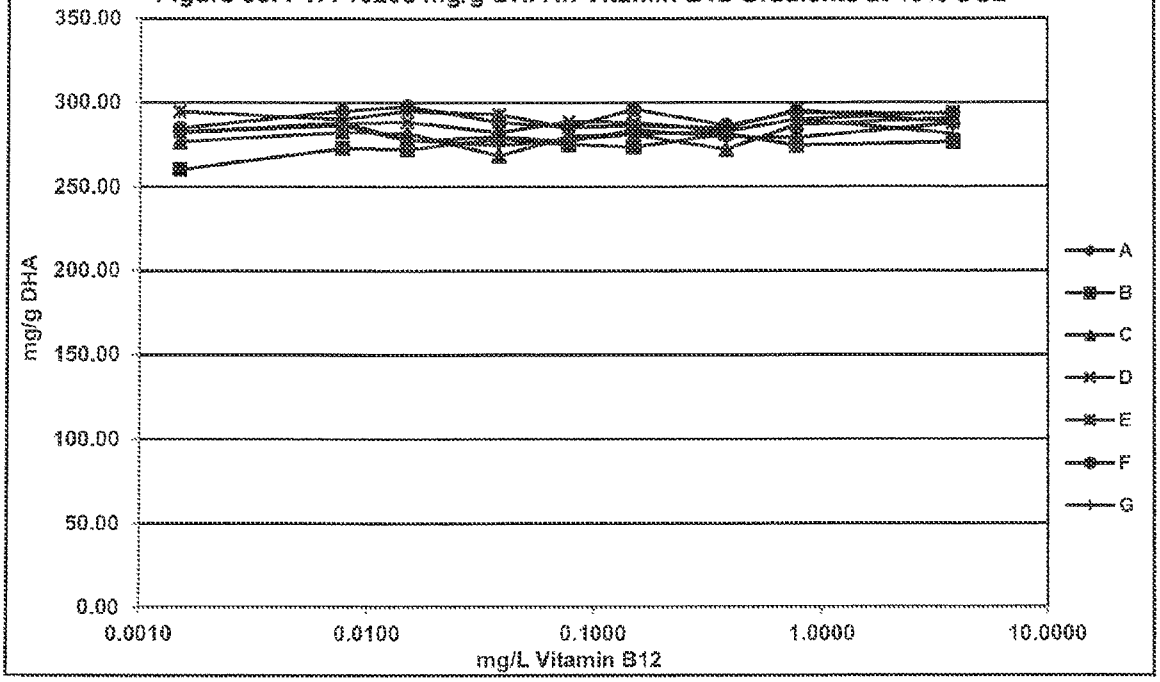


Figure 34. PTA-10208 % Fat in Vitamin B12 Gradients at 10% CO2

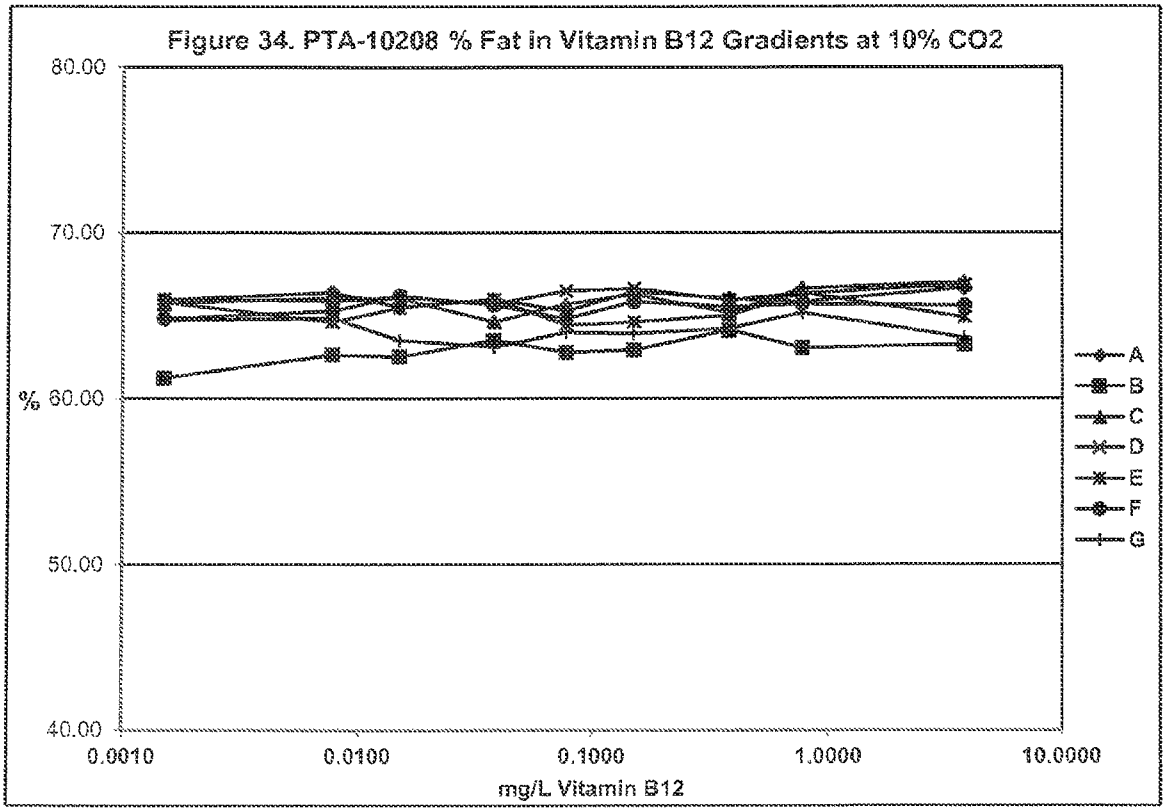


Figure 35. PTA-10208 % Fat vs. Time at Different Vitamin B12 Levels

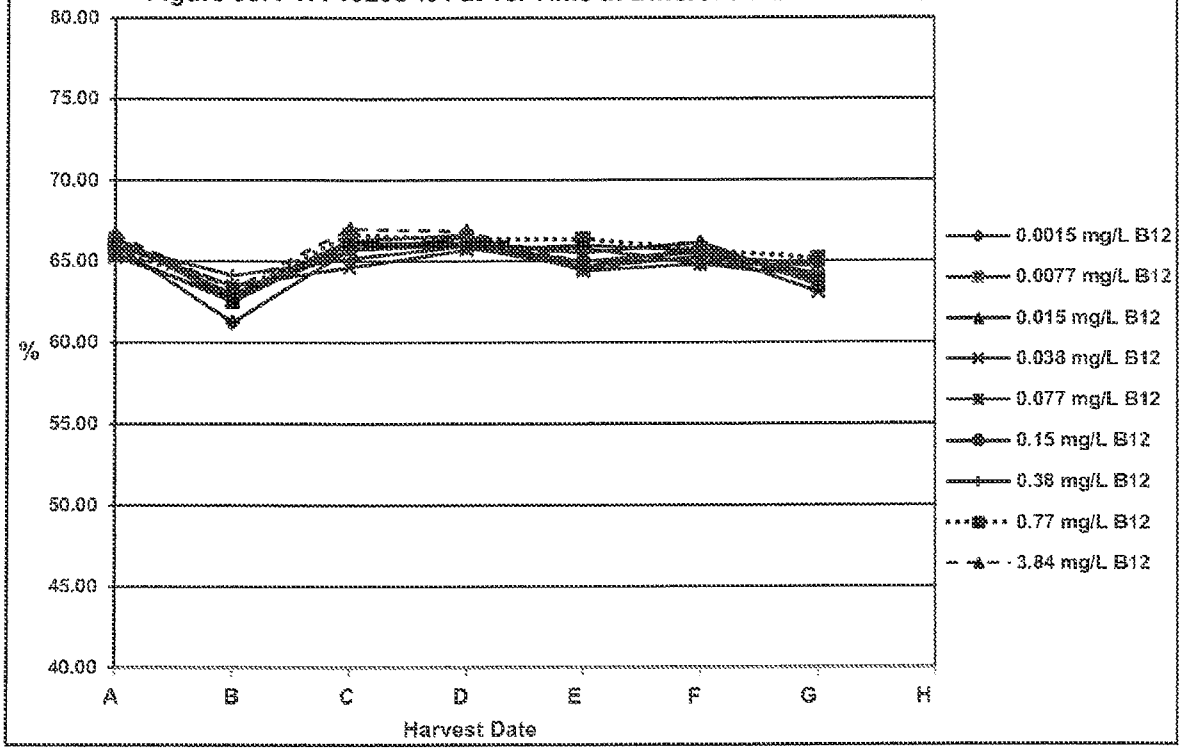


Figure 36. PTA-10208 g/L Fat in Vitamin B12 Gradients at 10% CO2

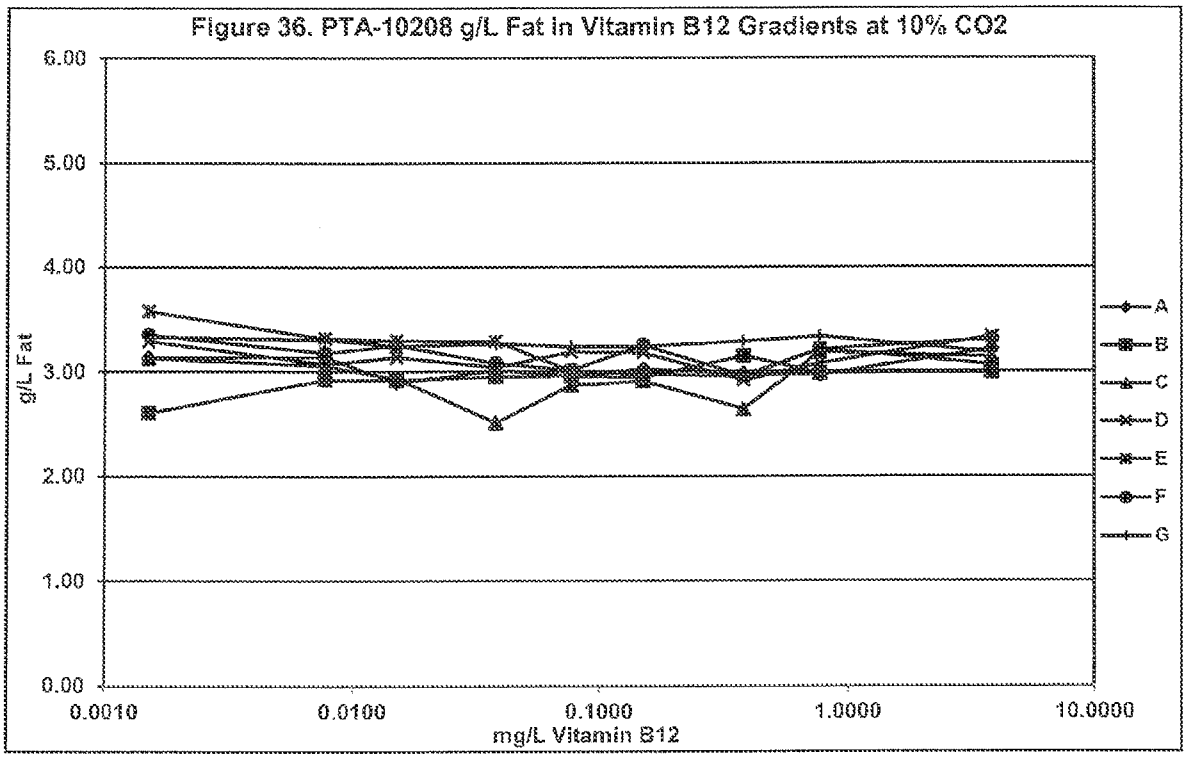


Figure 37. PTA-10208 Lipid Free Dry Weight in Vitamin B12 Gradients at 10% CO2

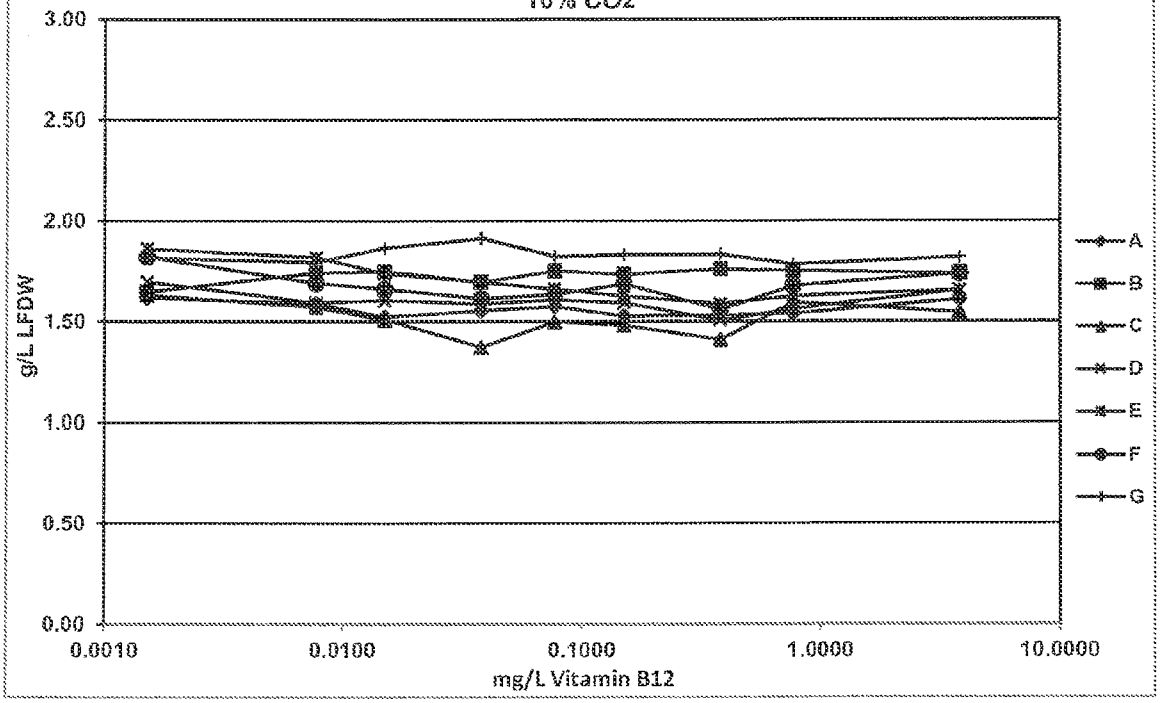


Figure 38. PTA-10208 Dry Weight with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2

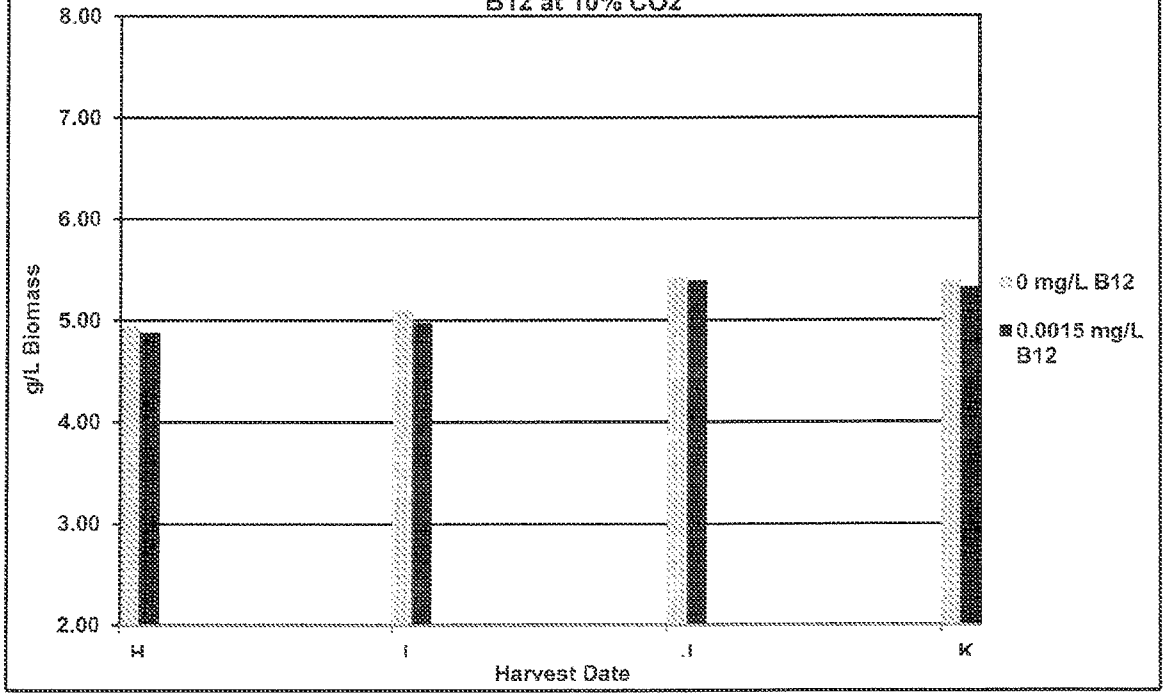


Figure 39. PTA-10208 %16:0 with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2

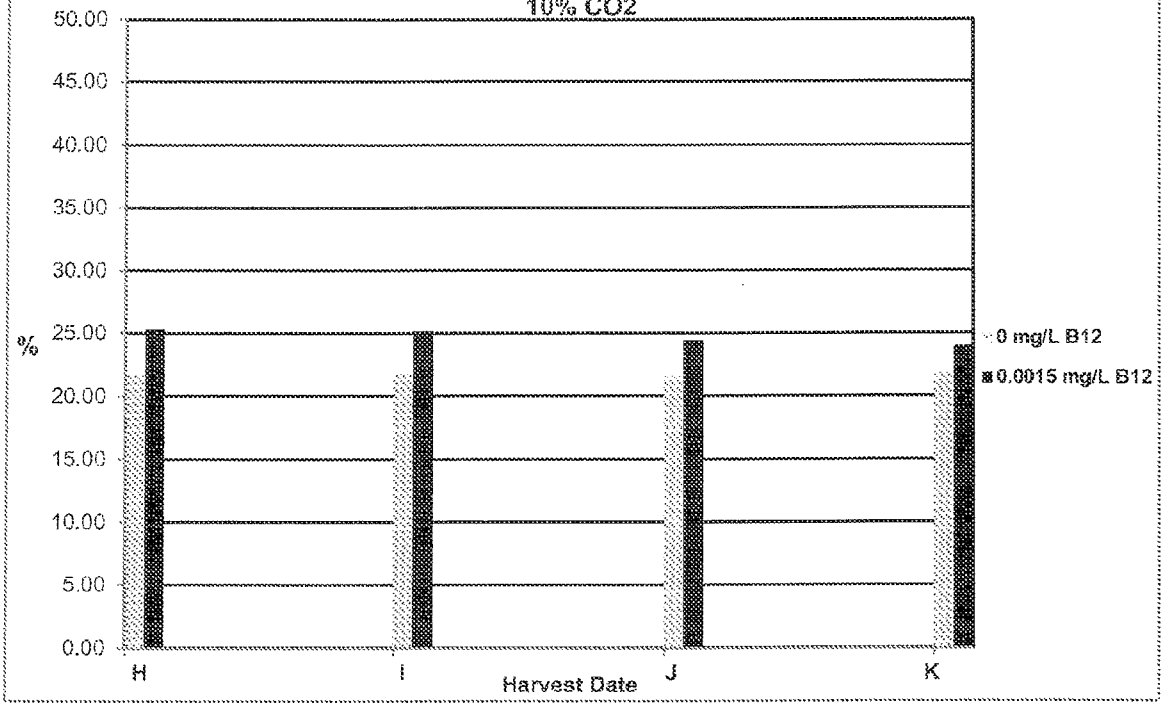


Figure 40. PTA-10208 %ARA with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2

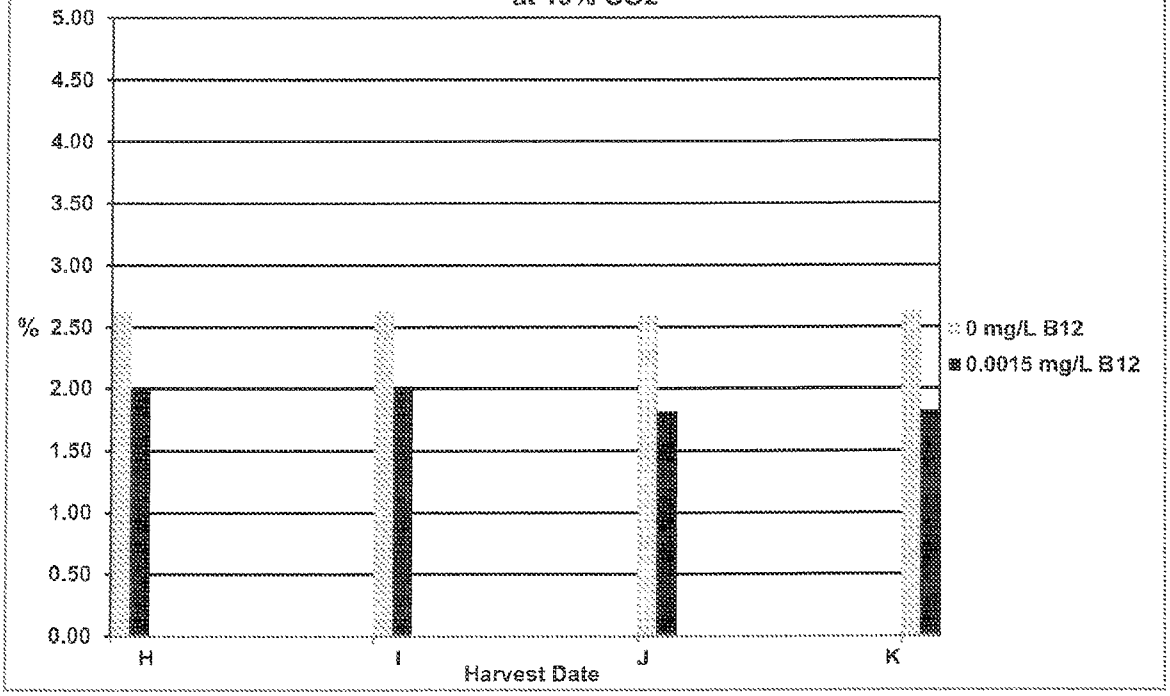


Figure 41. PTA-10208 %EPA with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2

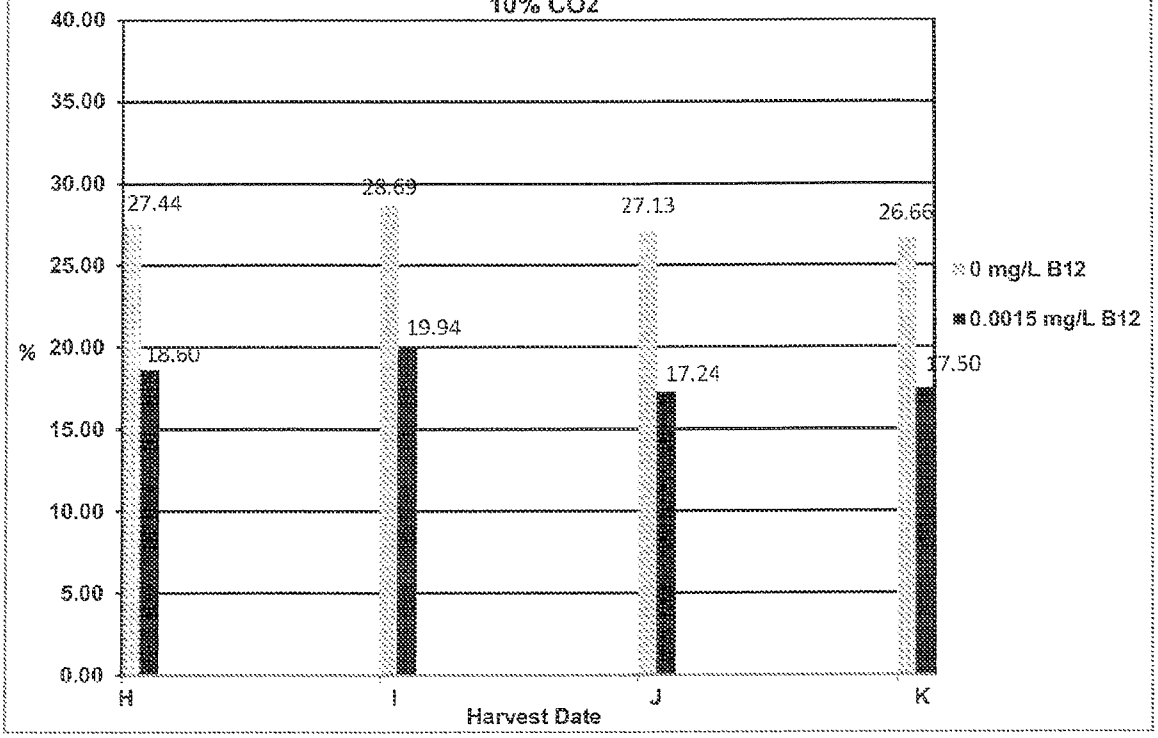


Figure 42. PTA-10208 EPA Yield with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2

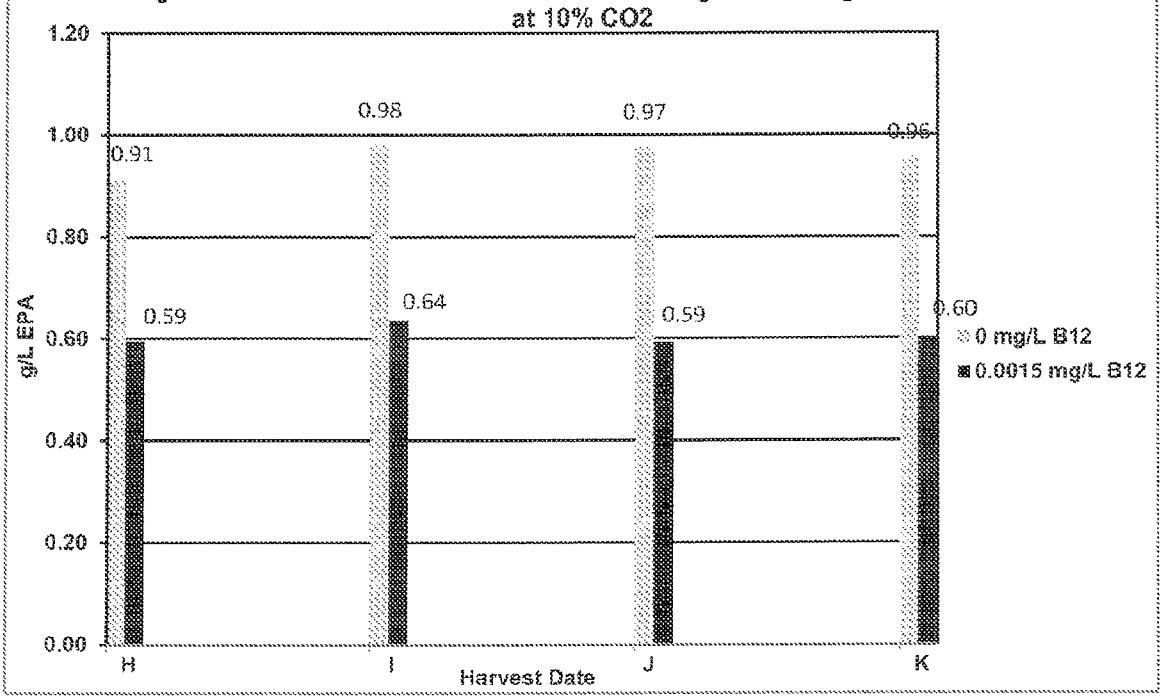


Figure 43. PTA-10208 %DPA (n-6) with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2

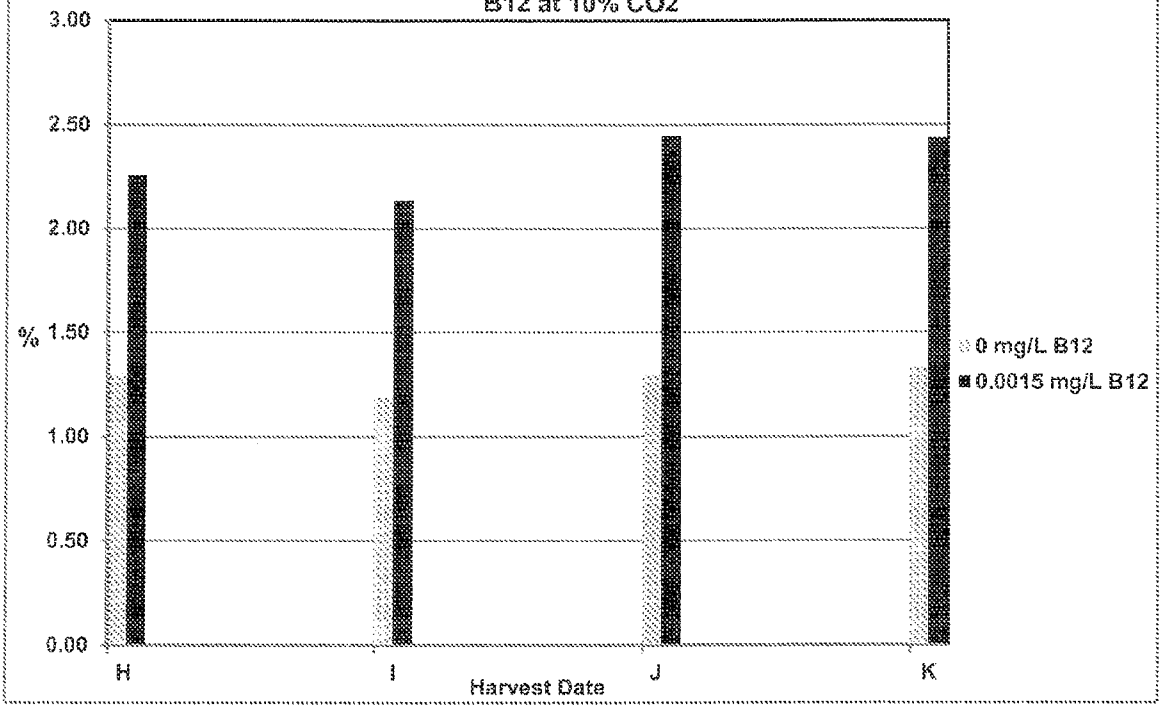


Figure 44. PTA-10208 %DPA (n-3) with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2

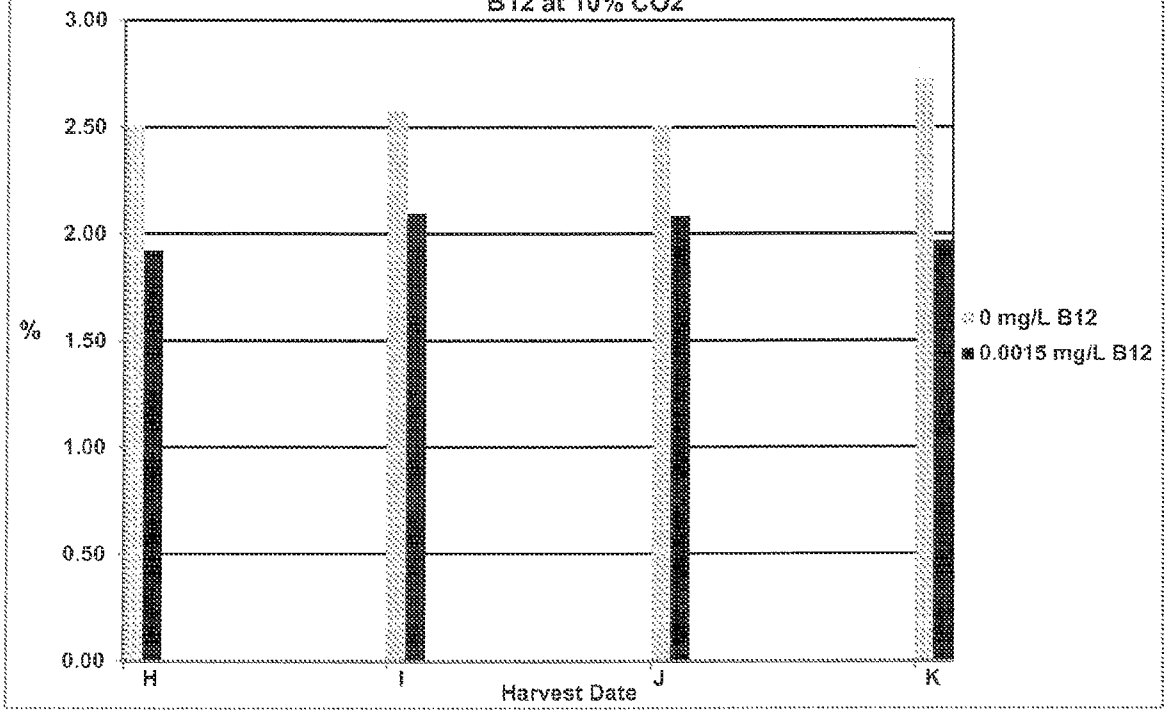


Figure 45. PTA-10208 %DHA with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2

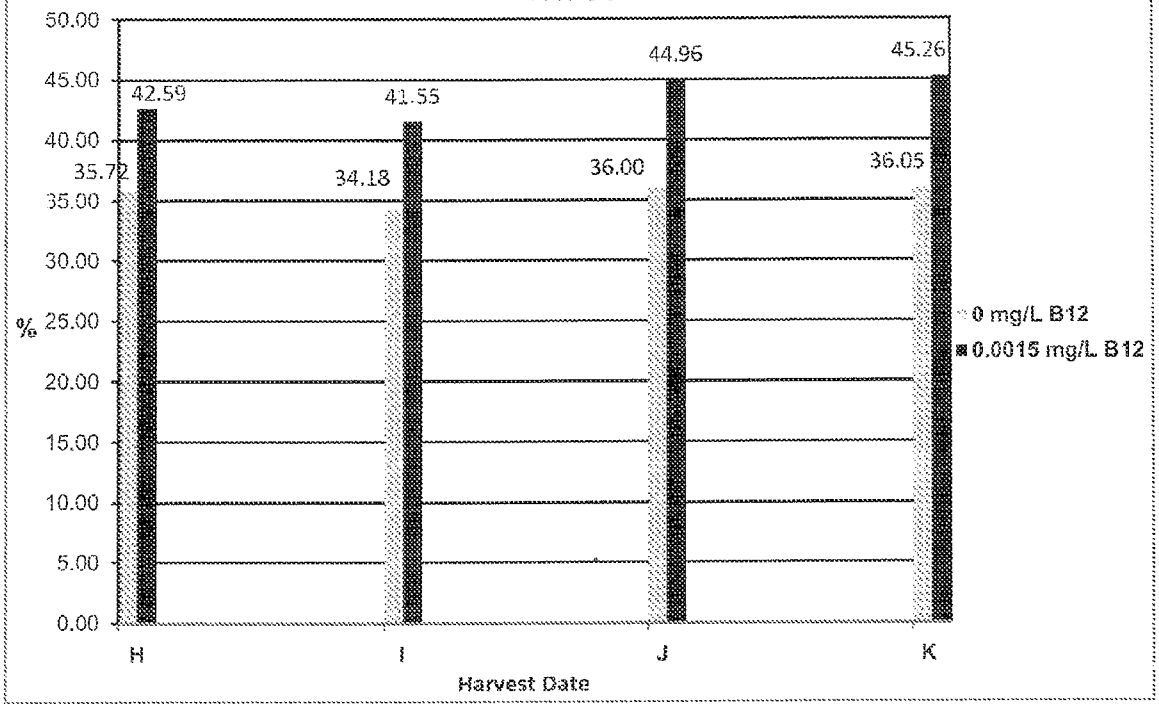


Figure 46. PTA-10208 %Fat with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2

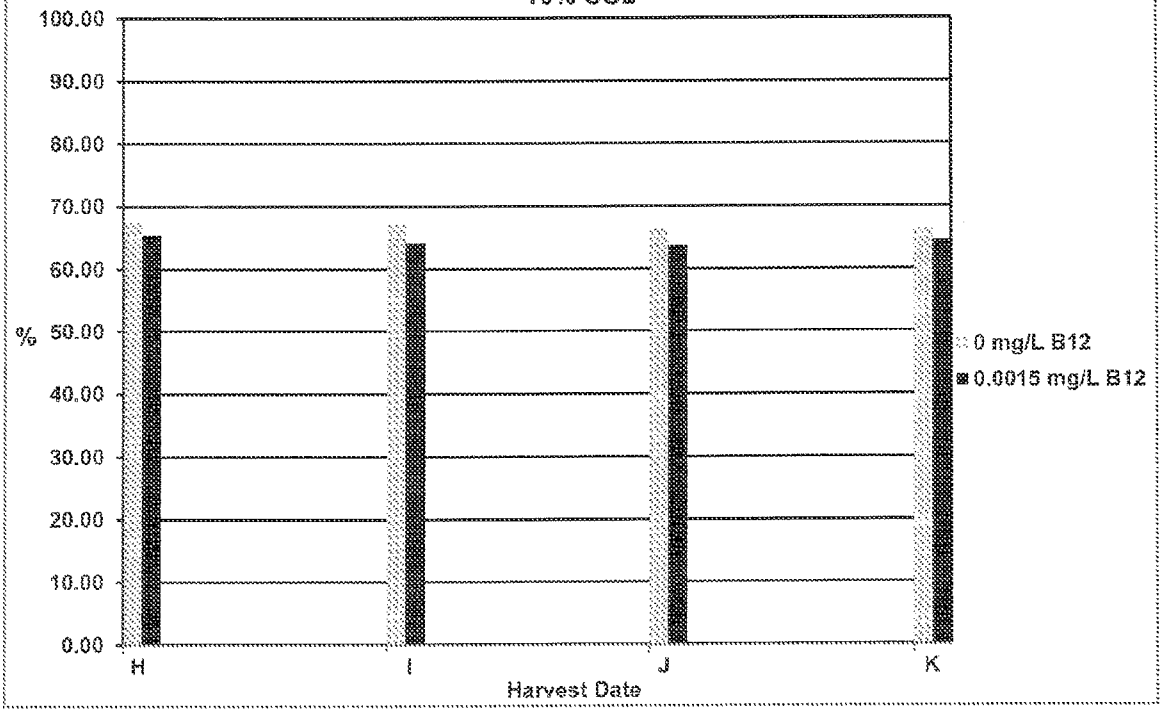


Figure 47. PTA-10208 mg/g EPA with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2

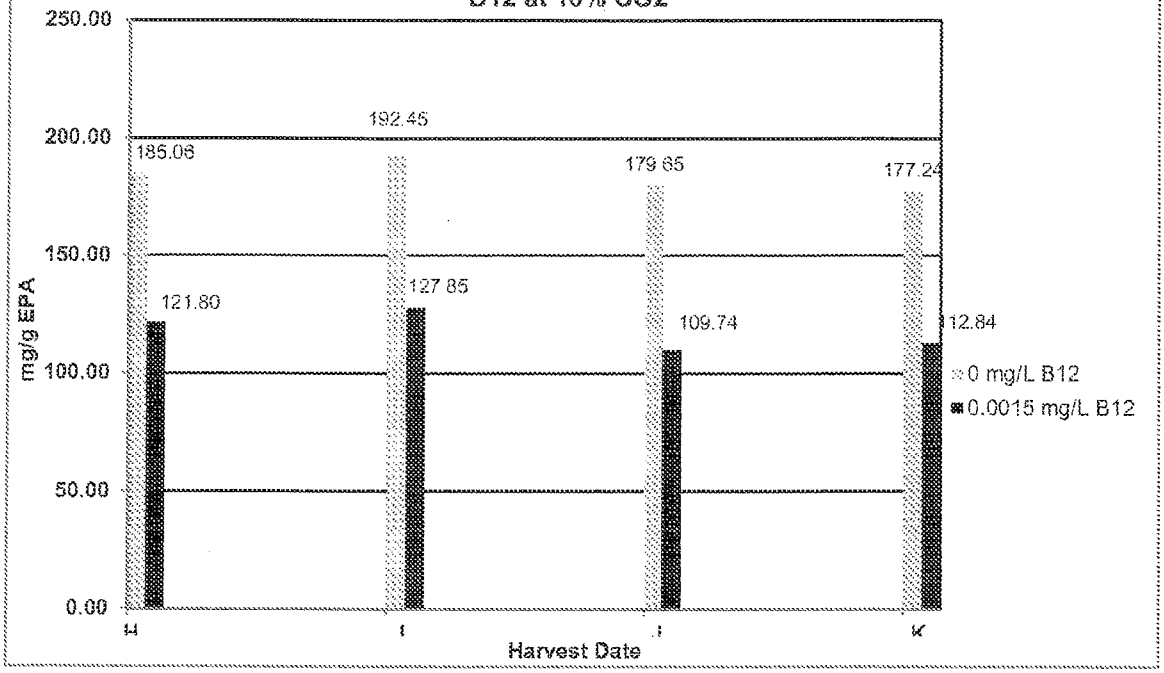
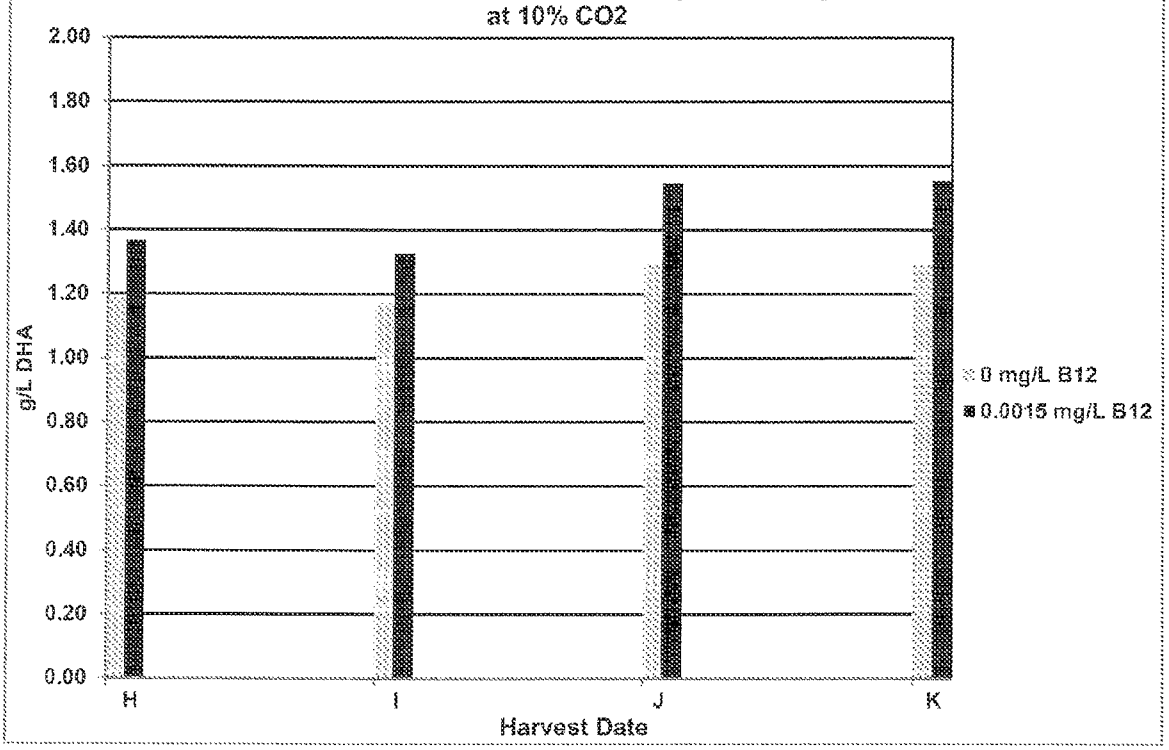
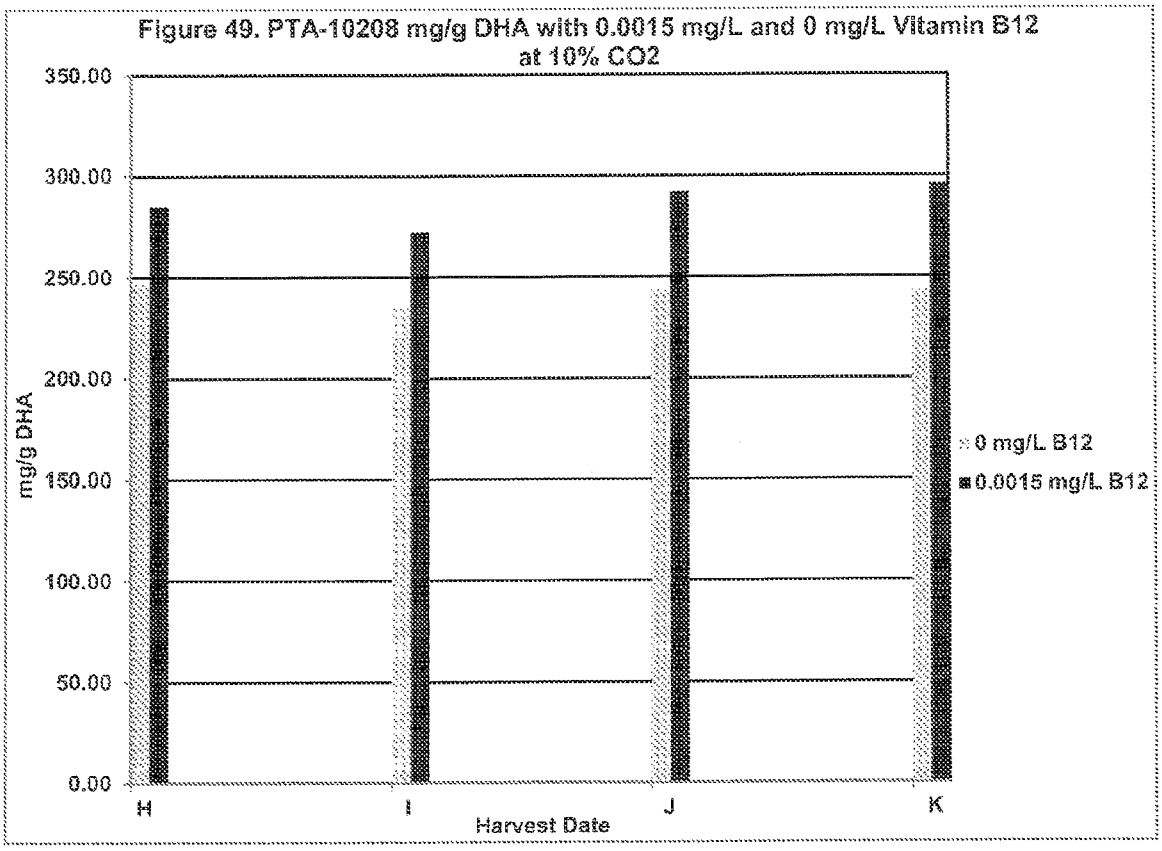


Figure 48. PTA-10208 DHA Yield with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2




Figure 49. PTA-10208 mg/g DHA with 0.0015 mg/L and 0 mg/L Vitamin B12 at 10% CO2
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
mg/g DHA
H
I
J
K
Harvest Date
0 mg/L B12
0.0015 mg/L B12