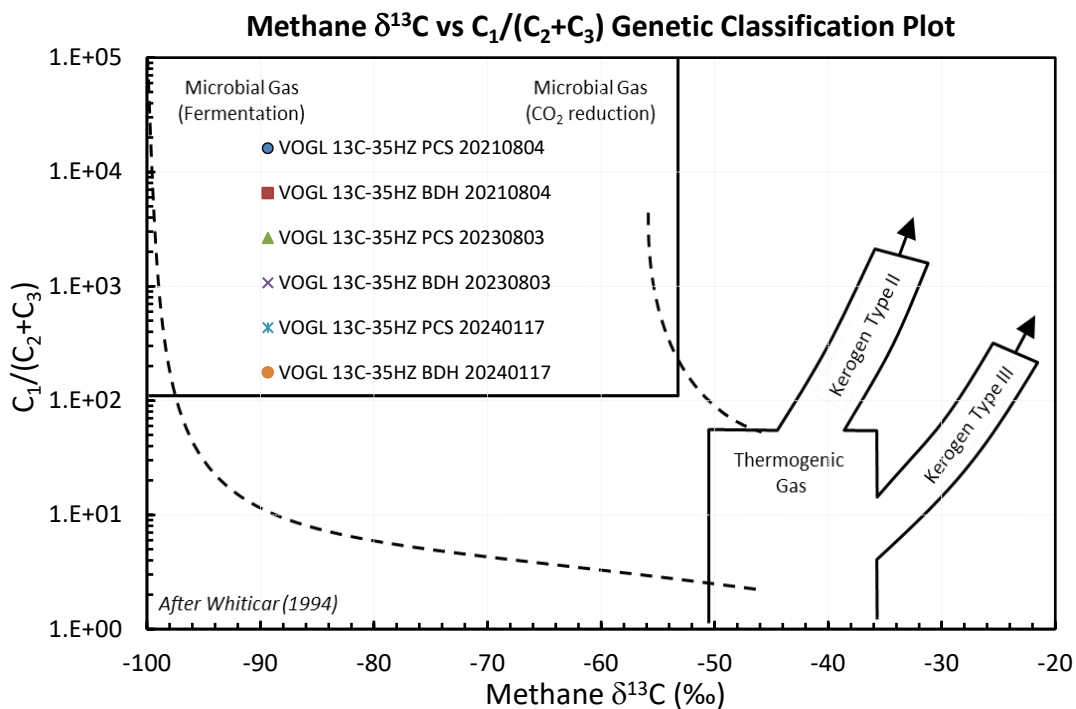
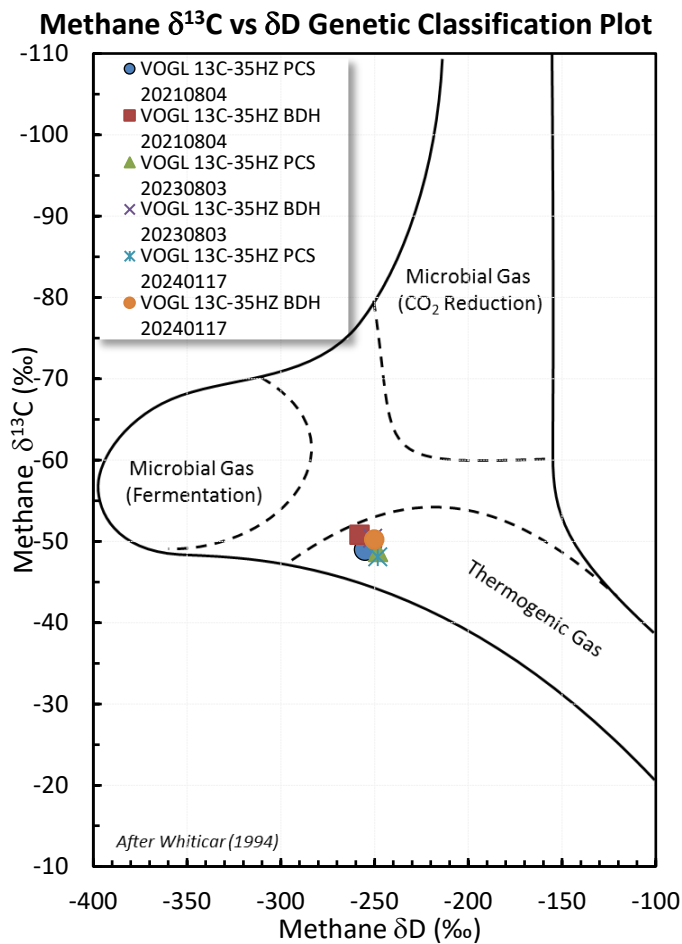
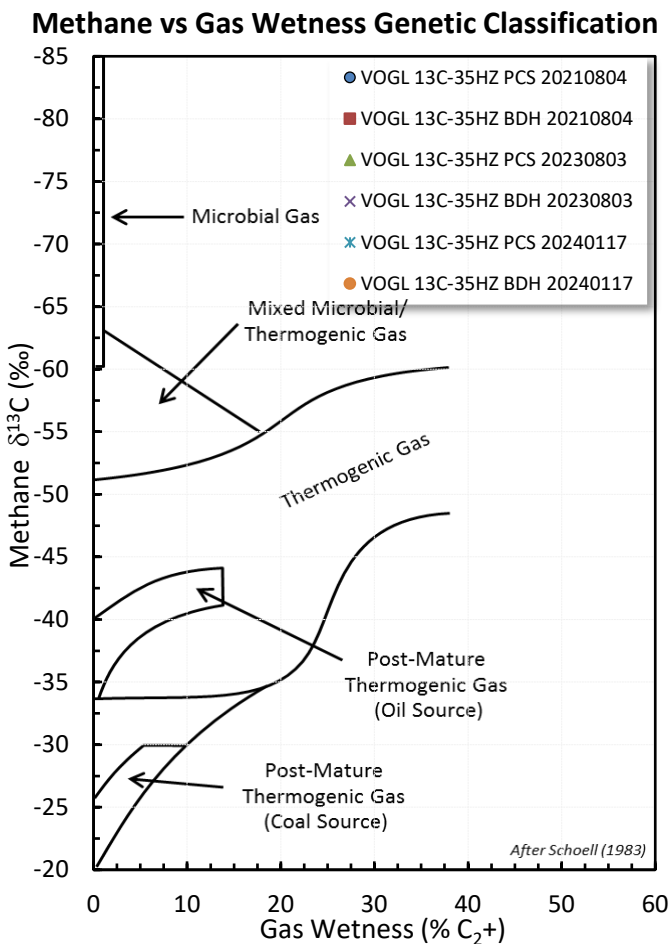
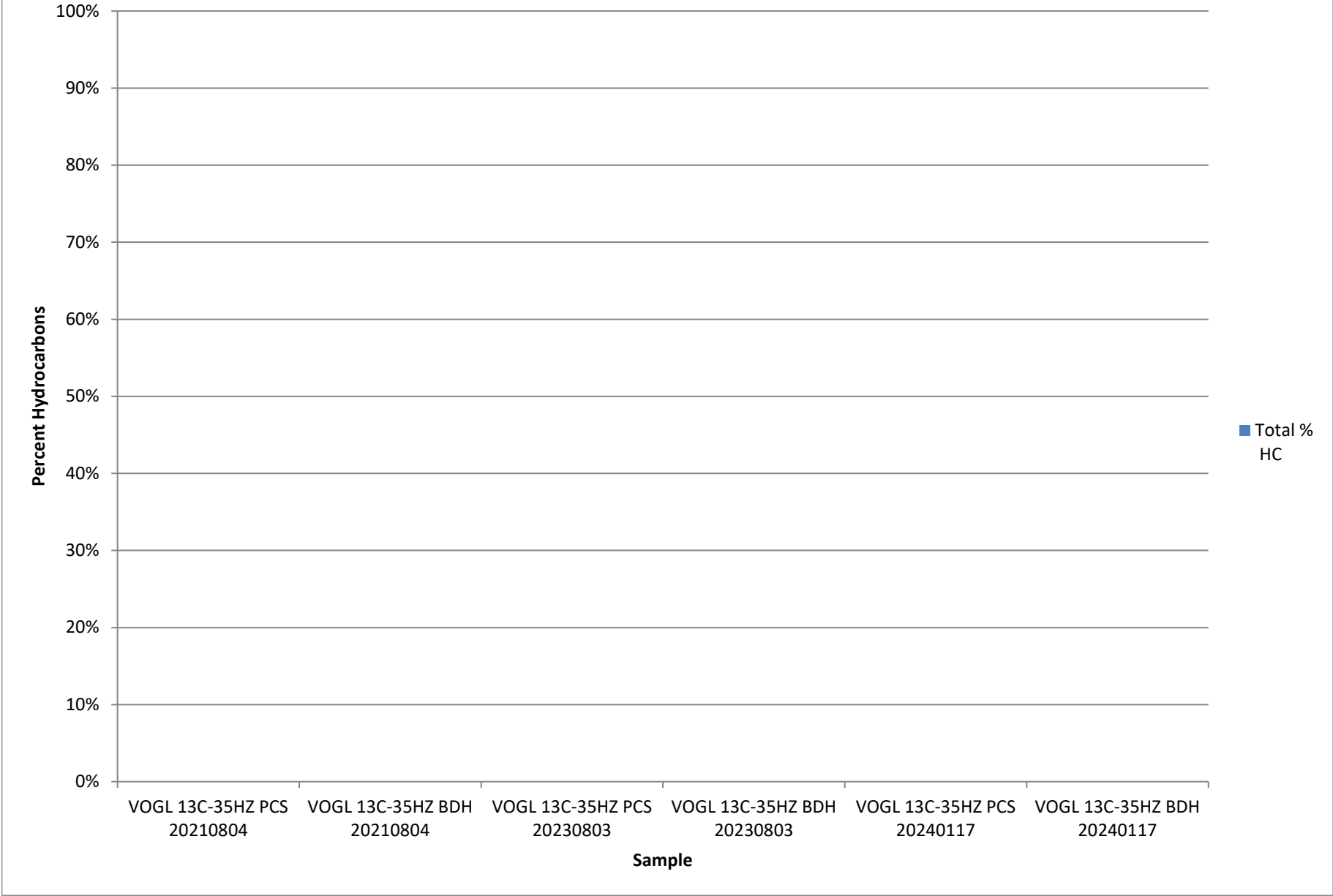


# Stable Isotope Interpretive Plots



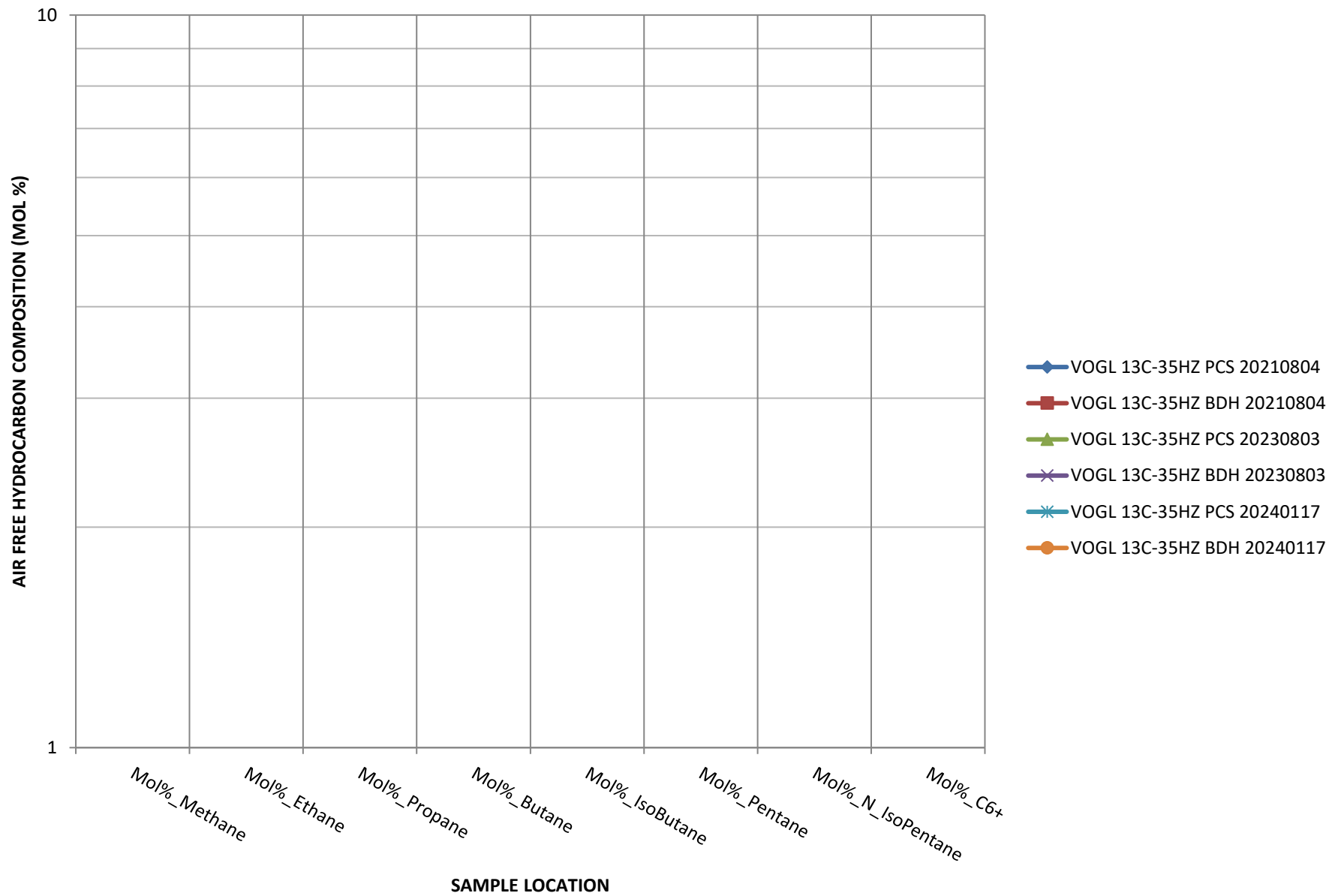
# Total Percent Hydrocarbons

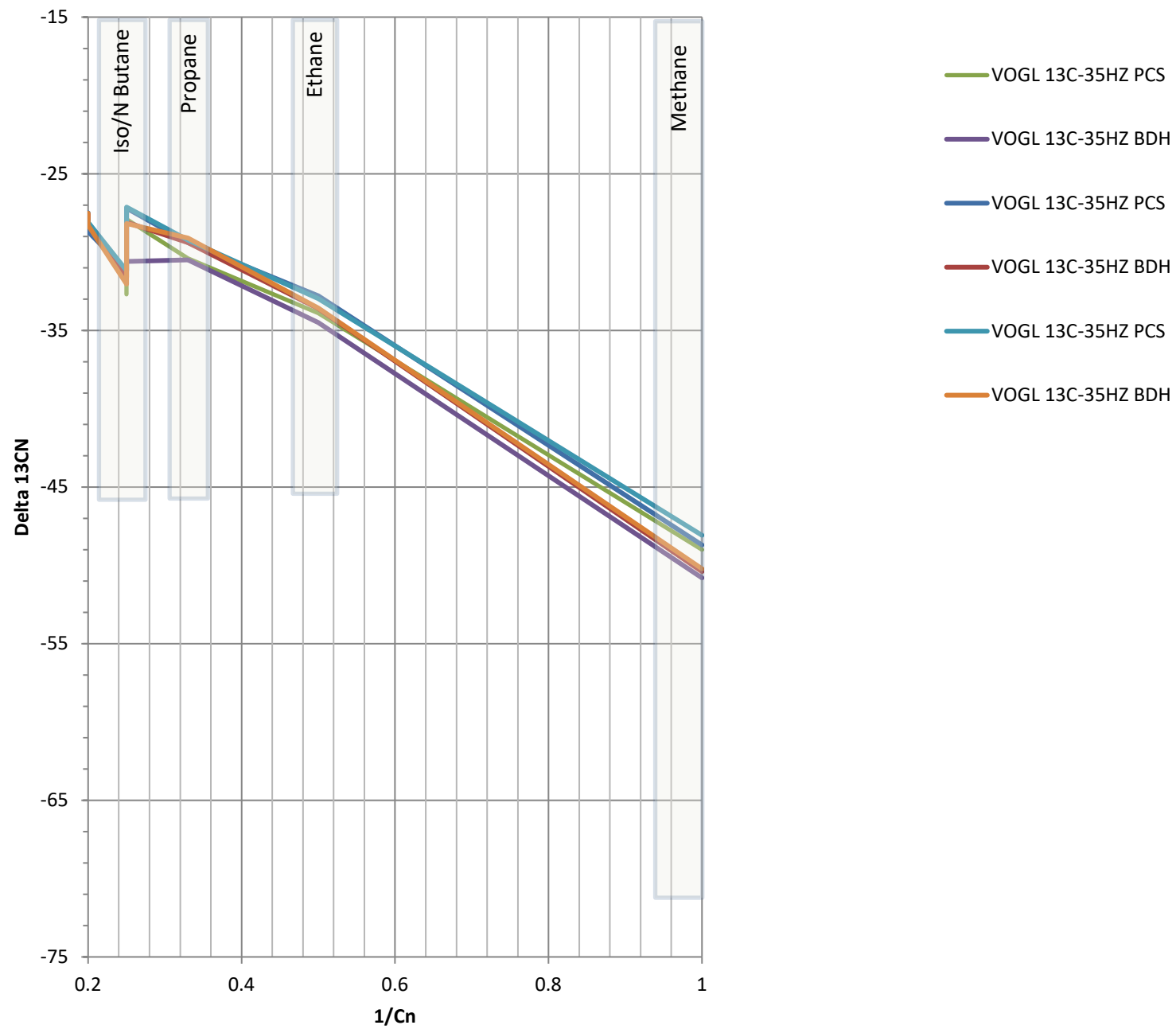


| Parameter          | VOGI 13C-35HZ PCS 20210804 | VOGI 13C-35HZ BDH 20210804 | VOGI 13C-35HZ PCS 20230803 | VOGI 13C-35HZ BDH 20230803 | VOGI 13C-35HZ PCS 20240117 | VOGI 13C-35HZ BDH 20240117 |
|--------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Mol%_Nitrogen      | 0.5                        | 1.3                        | 0.5                        | 0.8                        | 0.5                        | 0.9                        |
| Mol%_Oxygen        | 0.015                      | 0.01                       | 0.015                      | 0.025                      | 0.03                       | 0.012                      |
| Mol%_Argon         | 0.01                       | 0.01                       | 0.01                       | 0.01                       | 0.01                       | 0.01                       |
| Mol%_O2+AR         | 0.025                      | 0.1                        | 0.01                       | 0.01                       | 0.01                       | 0.01                       |
| Mol%_CarbonDioxide | 1.8                        | 1.0                        | 1.0                        | 1.2                        | 1.2                        | 1.2                        |
| Mol%_Helium        | 0.012                      | 0.01                       | 0.01                       | 0.01                       | 0.01                       | 0.01                       |
| Mol%_hydrogen      | 70                         | 80                         | 80                         | 80                         | 80                         | 80                         |
| Mol%_Methane       | 13                         | 10                         | 12                         | 10                         | 14                         | 9                          |
| Mol%_Ethane        | 7.5                        | 4.5                        | 6                          | 4.5                        | 6.5                        | 1.3                        |
| Mol%_Propane       | 1.6                        | 0.8                        | 0.8                        | 0.7                        | 0.7                        | 0.8                        |
| Mol%_Butane        | 1.2                        | 0.5                        | 0.6                        | 0.45                       | 0.6                        | 0.12                       |
| Mol%_IsoButane     | 0.025                      | 0.1                        | 0.03                       | 0.08                       | 0.015                      | 0.12                       |
| Mol%_N_Pentane     | 0.015                      | 0.13                       | 0.04                       | 0.11                       | 0.025                      | 0.16                       |
| Mol%_IsoPentane    | 0.012                      | 0.05                       | 0.025                      | 0.04                       | 0.015                      | 0.035                      |
| Mol%_C6+           | 0.01                       | 0.01                       | 0.01                       | 0.01                       | 0.01                       | 0.01                       |

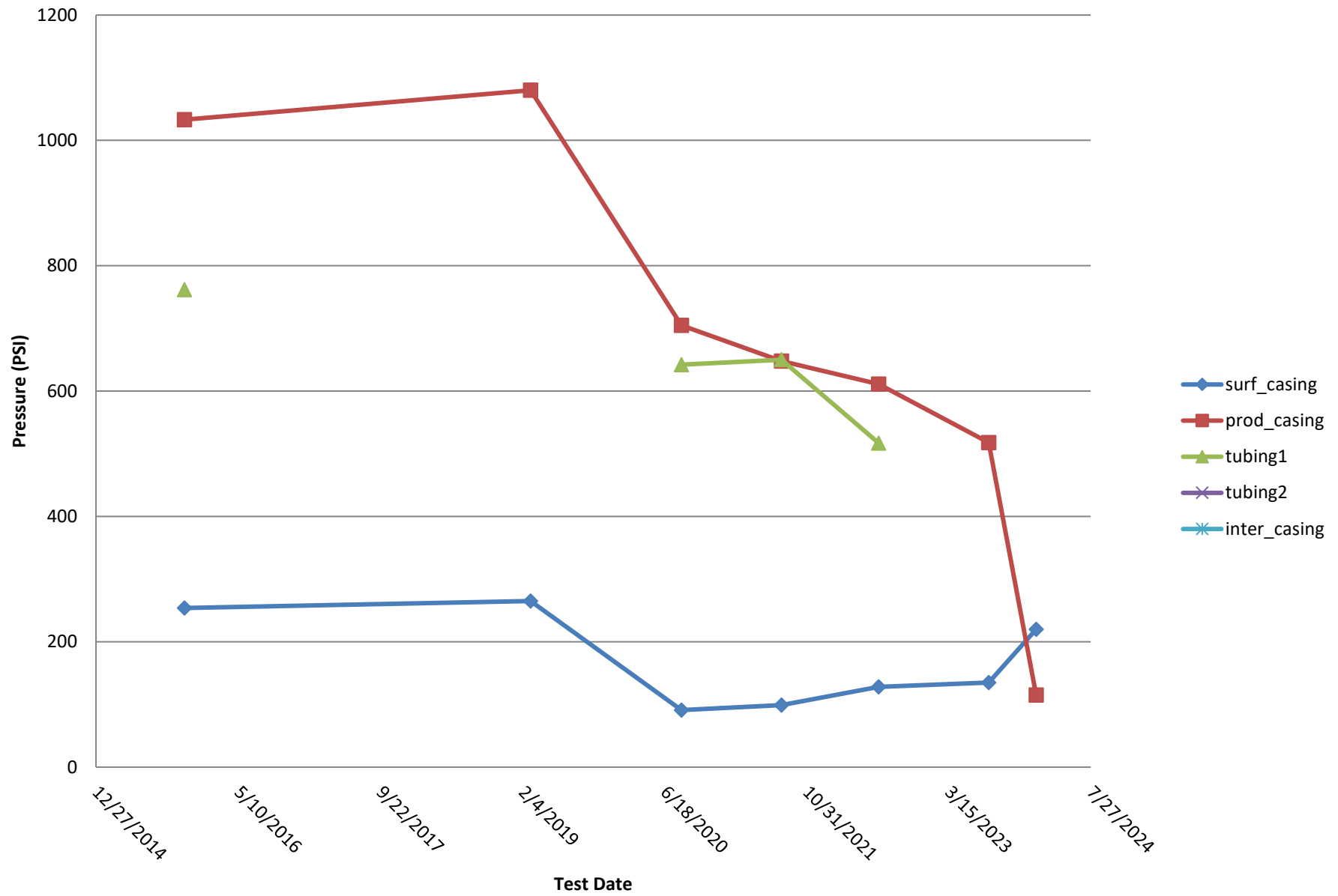
- VOGL 13C-35HZ PCS  
20210804
- VOGL 13C-35HZ BDH  
20210804
- VOGL 13C-35HZ PCS  
20230803
- VOGL 13C-35HZ BDH  
20230803
- VOGL 13C-35HZ PCS  
20240117

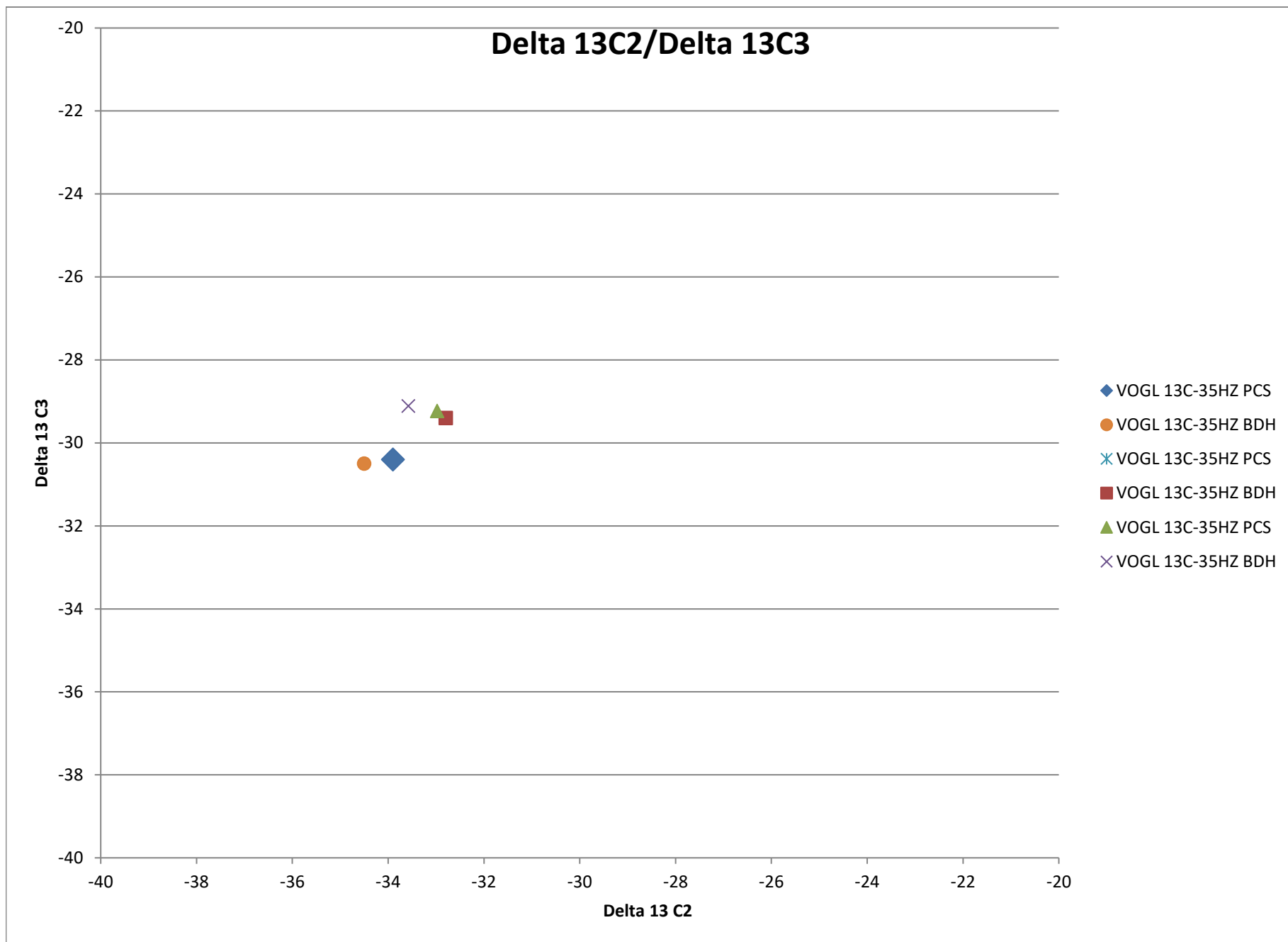
# HYDROCARBON COMPOSITION



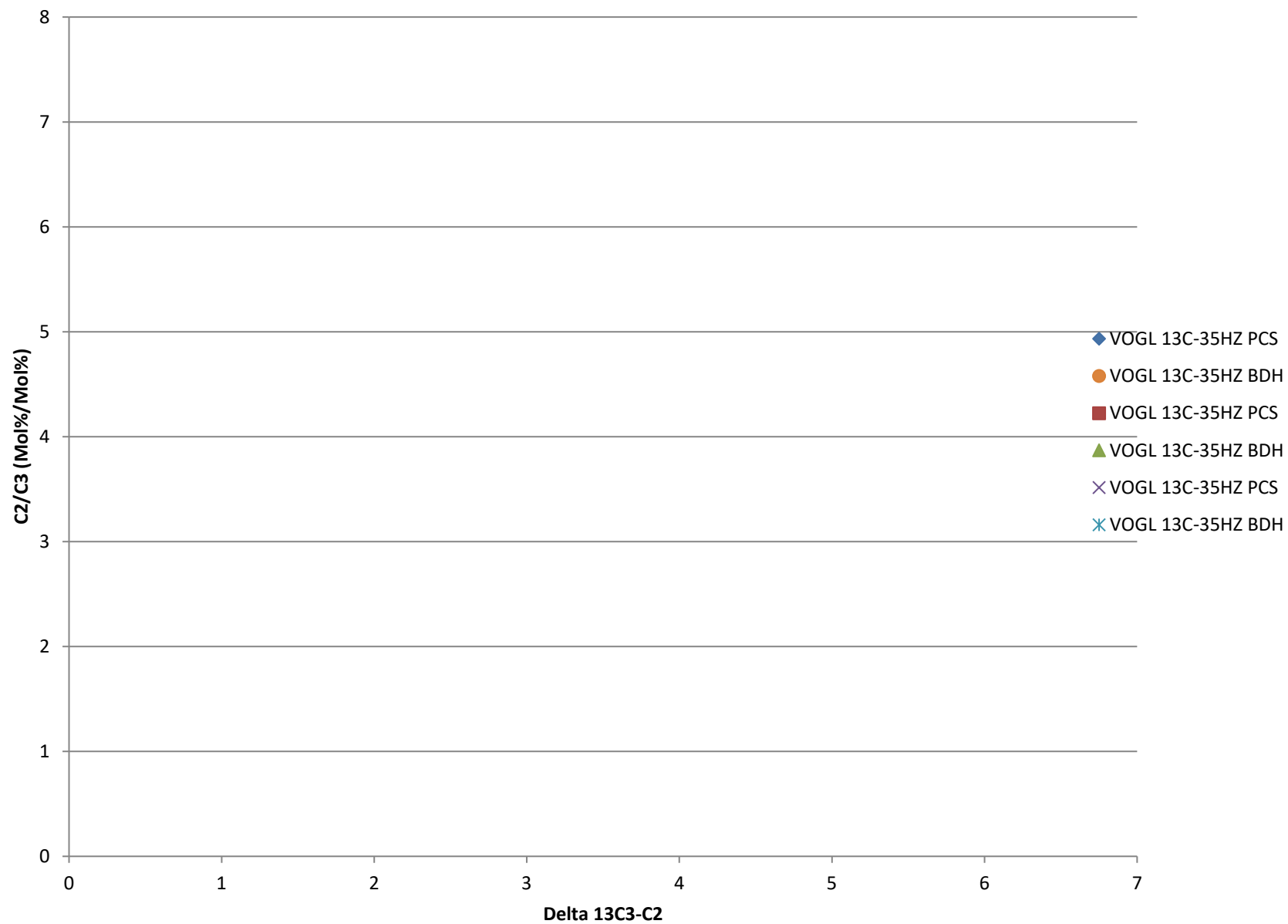


## Bradenhead Test Summary





## Delta13 C2/C3 vs. Delta 13C3-C2





## Delta 13 IC4/ Delta NC4

