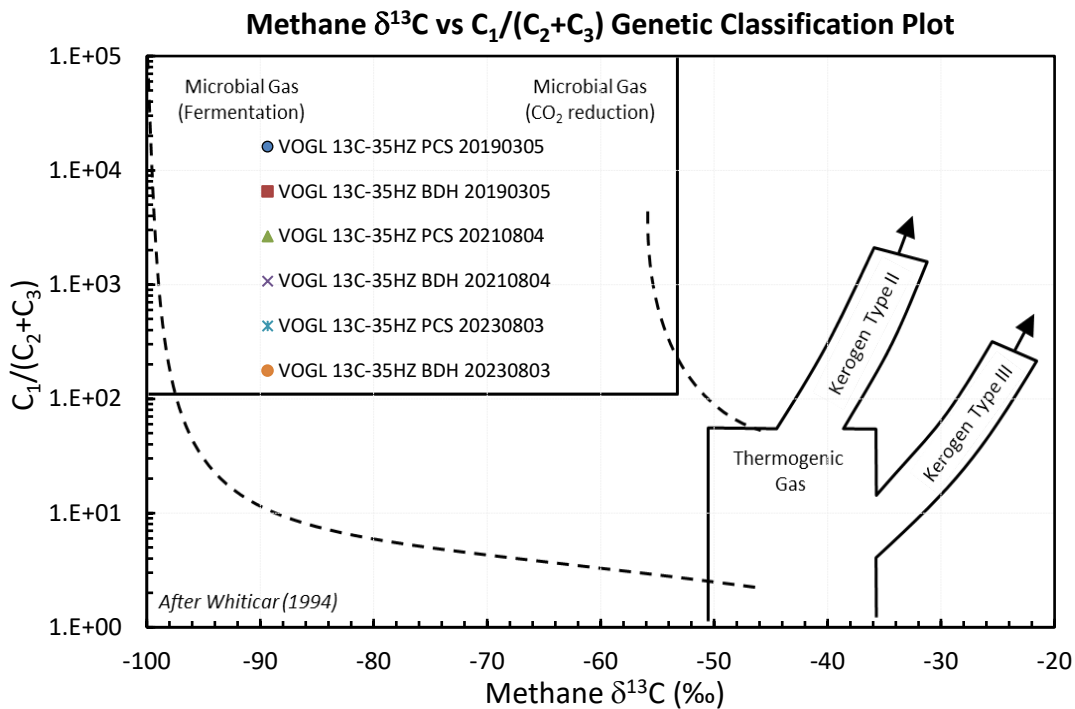
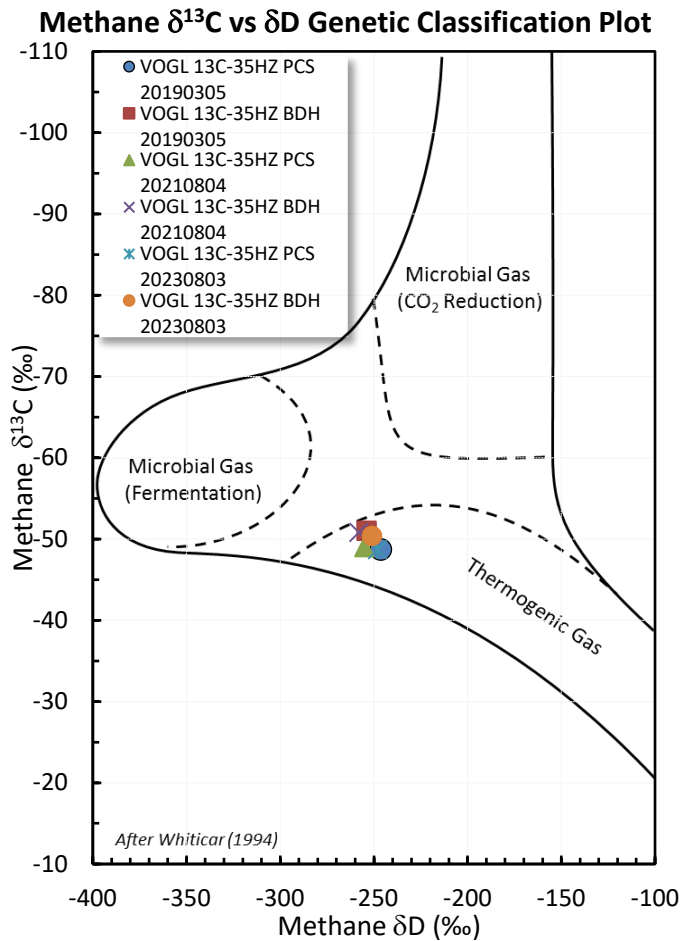
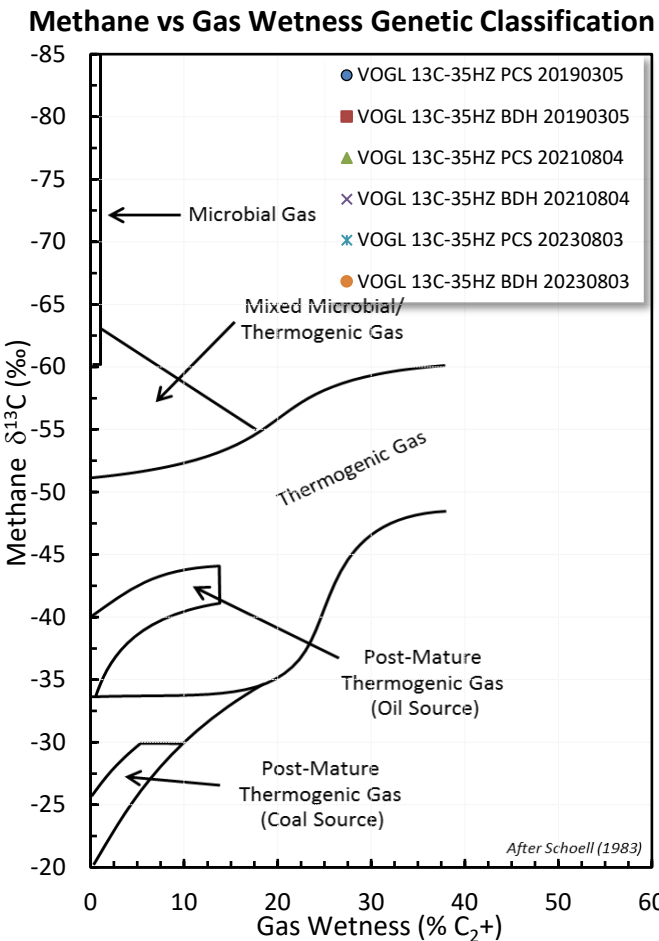
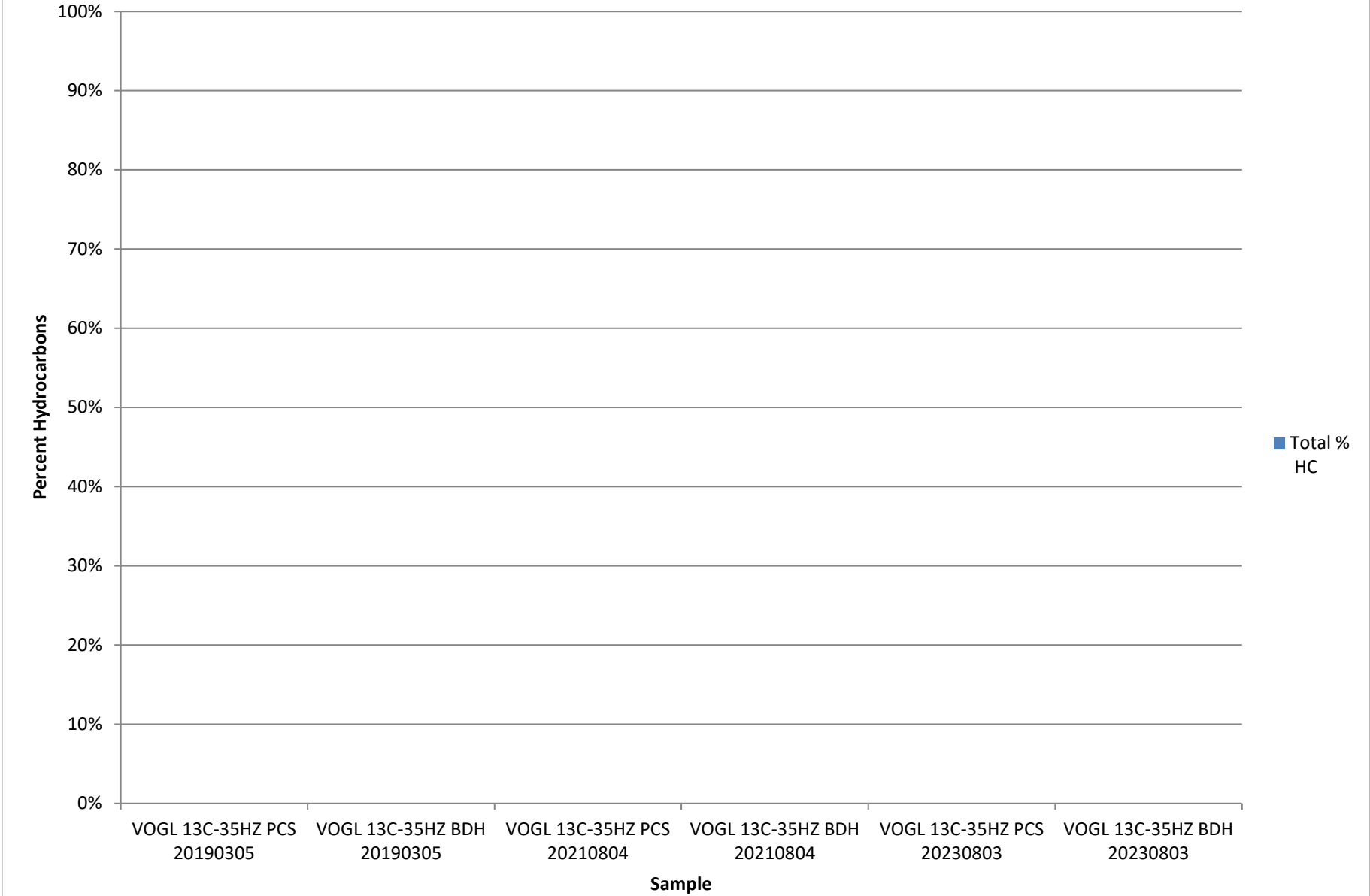


Stable Isotope Interpretive Plots



Total Percent Hydrocarbons



GAS COMPOSITION

GAS COMPOSITION (MOL %)

Parameter

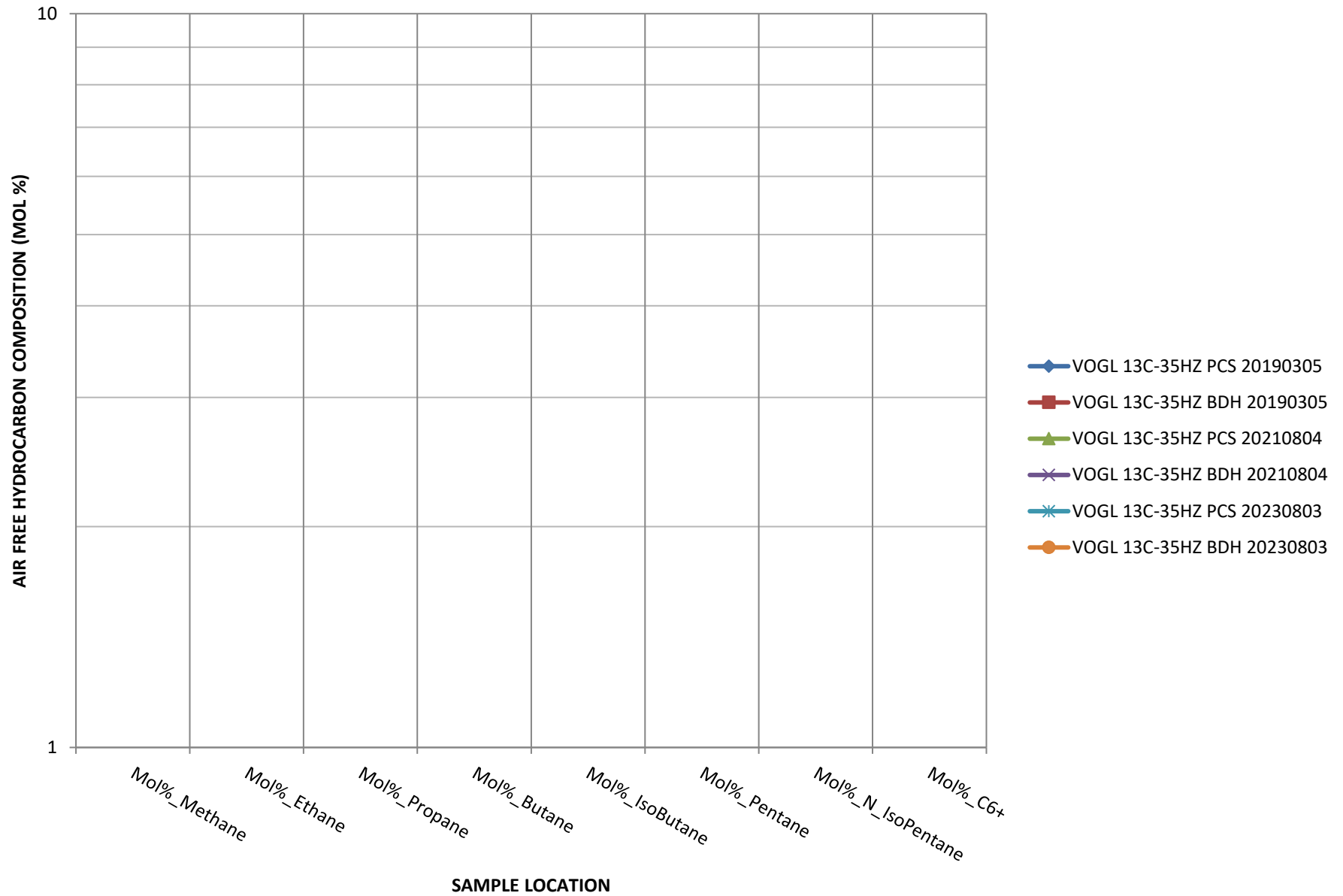
Legend:

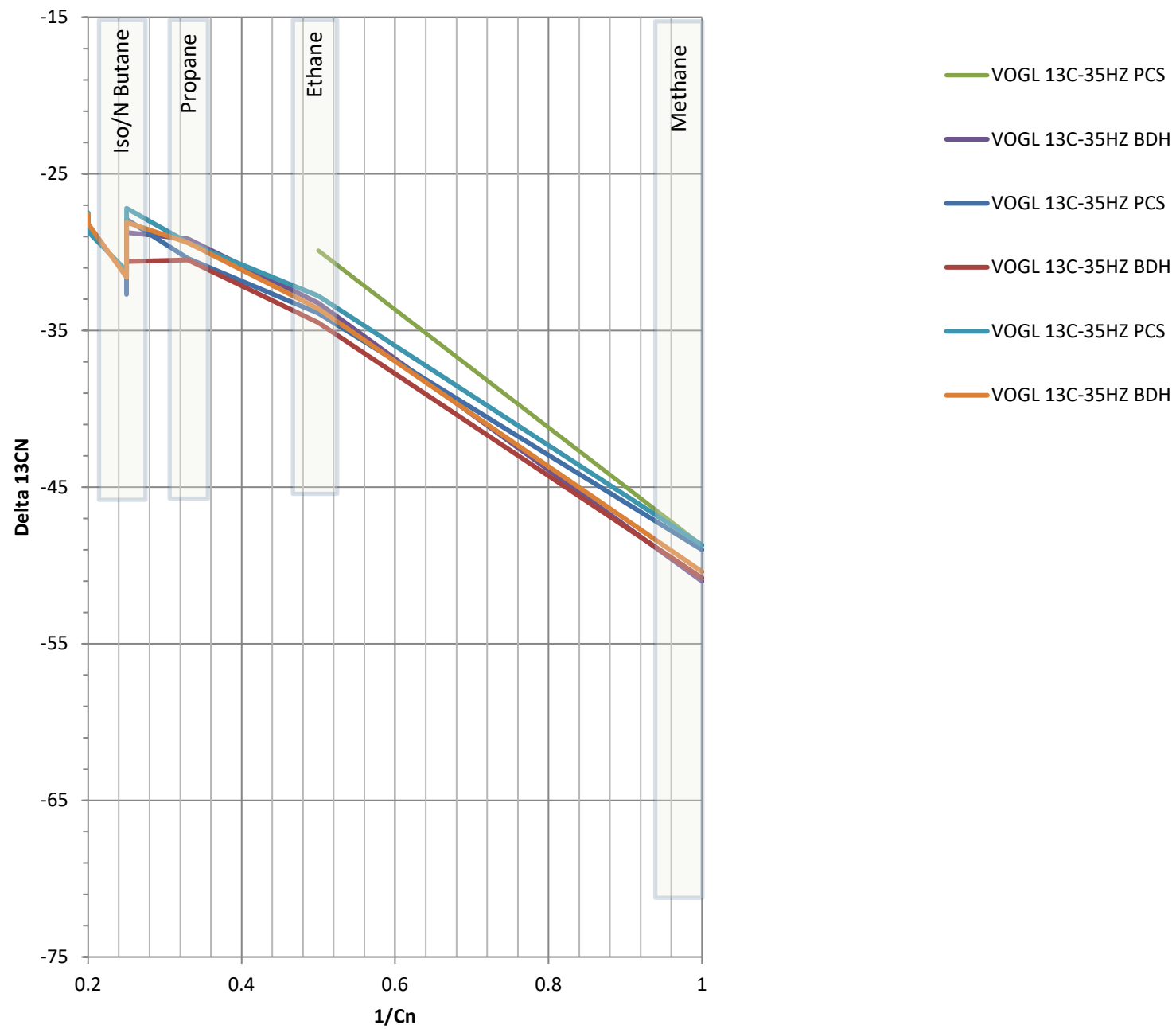
- VOGL 13C-35HZ PCS 20190305
- VOGL 13C-35HZ BDH 20190305
- VOGL 13C-35HZ PCS 20210804
- VOGL 13C-35HZ BDH 20210804
- VOGL 13C-35HZ PCS 20230803
- VOGL 13C-35HZ BDH 20230803

Parameter	VOGL 13C-35HZ PCS 20190305	VOGL 13C-35HZ BDH 20190305	VOGL 13C-35HZ PCS 20210804	VOGL 13C-35HZ BDH 20210804	VOGL 13C-35HZ PCS 20230803	VOGL 13C-35HZ BDH 20230803
Mol%_Nitrogen	0.6	1.5	0.5	1.3	0.4	0.8
Mol%_Oxygen	0.015	0.05	0.01	0.01	0.015	0.01
Mol%_Argon	0.01	0.01	0.02	0.1	0.01	0.01
Mol%_O2+AR	0.9	0.01	1.8	0.01	1.0	0.01
Mol%_CarbonDiOxide	0.015	0.03	0.01	0.03	0.01	0.02
Mol%_CarbonMonoxide	0.18	0.08	0.015	0.05	0.03	0.03
Mol%_Helium	0.01	0.01	0.01	0.01	0.01	0.01
Mol%_hydrogen	95	85	70	80	80	80
Mol%_Methane	0.7	6	13	9	12	10
Mol%_Ethane	6	0.4	7	4	5	4
Mol%_Propane	0.5	0.5	1.6	0.7	0.7	0.6
Mol%_Butane	0.5	0.04	1.2	0.4	0.6	0.4
Mol%_IsoButane	0.02	0.12	0.01	0.1	0.02	0.07
Mol%_N_Pentane	0.03	0.18	0.01	0.15	0.03	0.1
Mol%_C6+	0.012	0.03	0.015	0.04	0.02	0.03

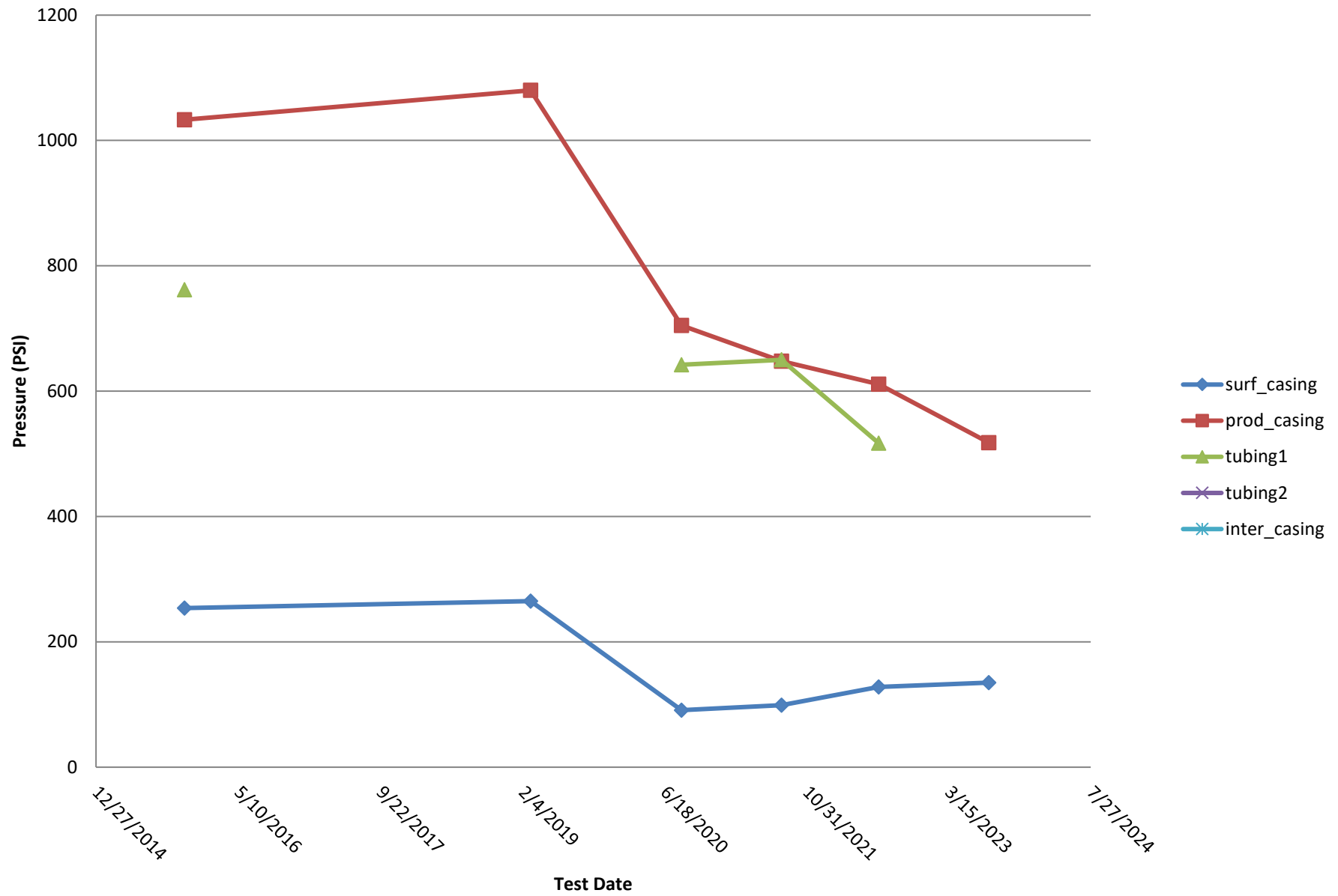
- VOGL 13C-35HZ PCS
20190305
- VOGL 13C-35HZ BDH
20190305
- VOGL 13C-35HZ PCS
20210804
- VOGL 13C-35HZ BDH
20210804
- VOGL 13C-35HZ PCS
20230803

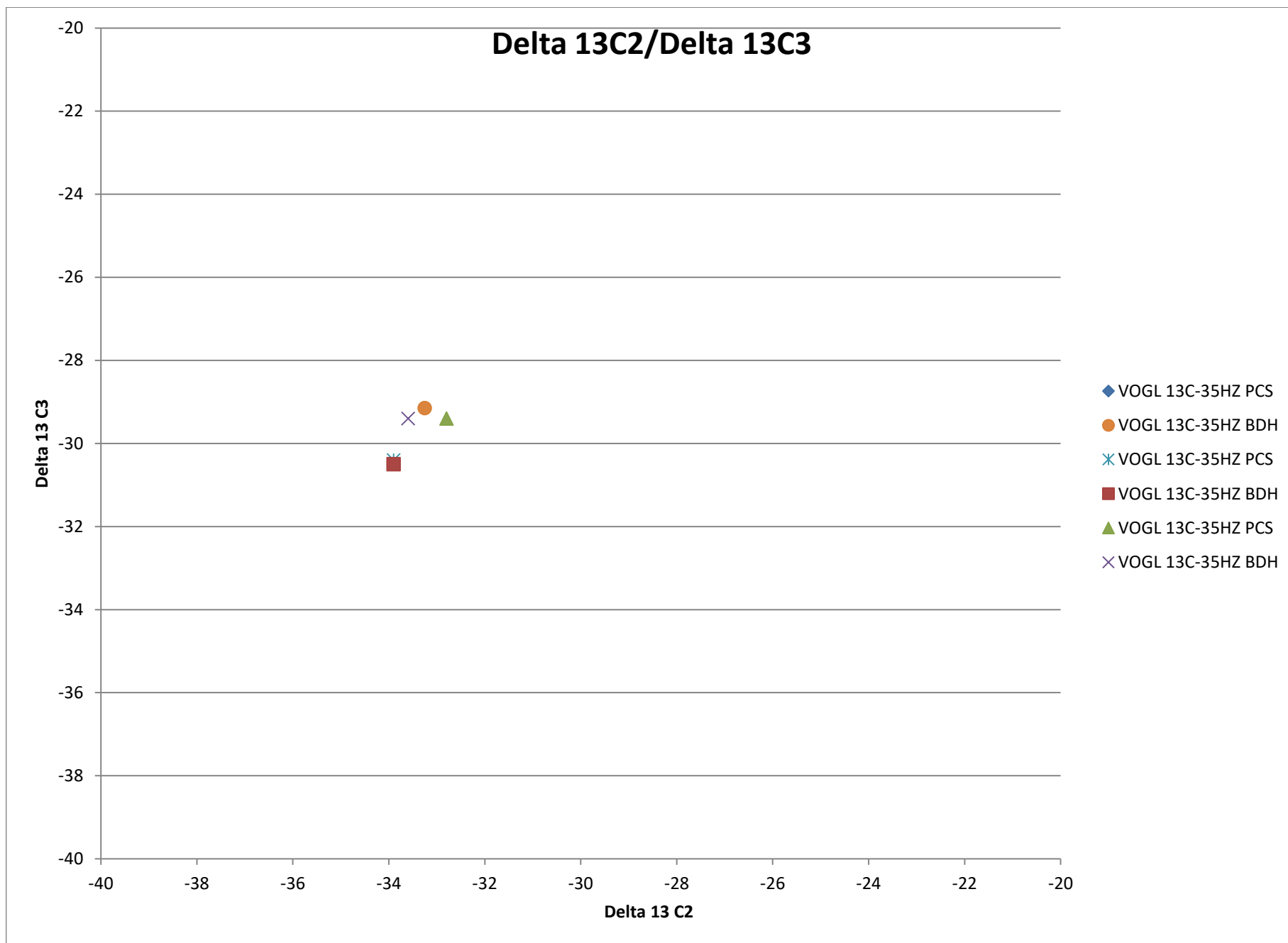
HYDROCARBON COMPOSITION



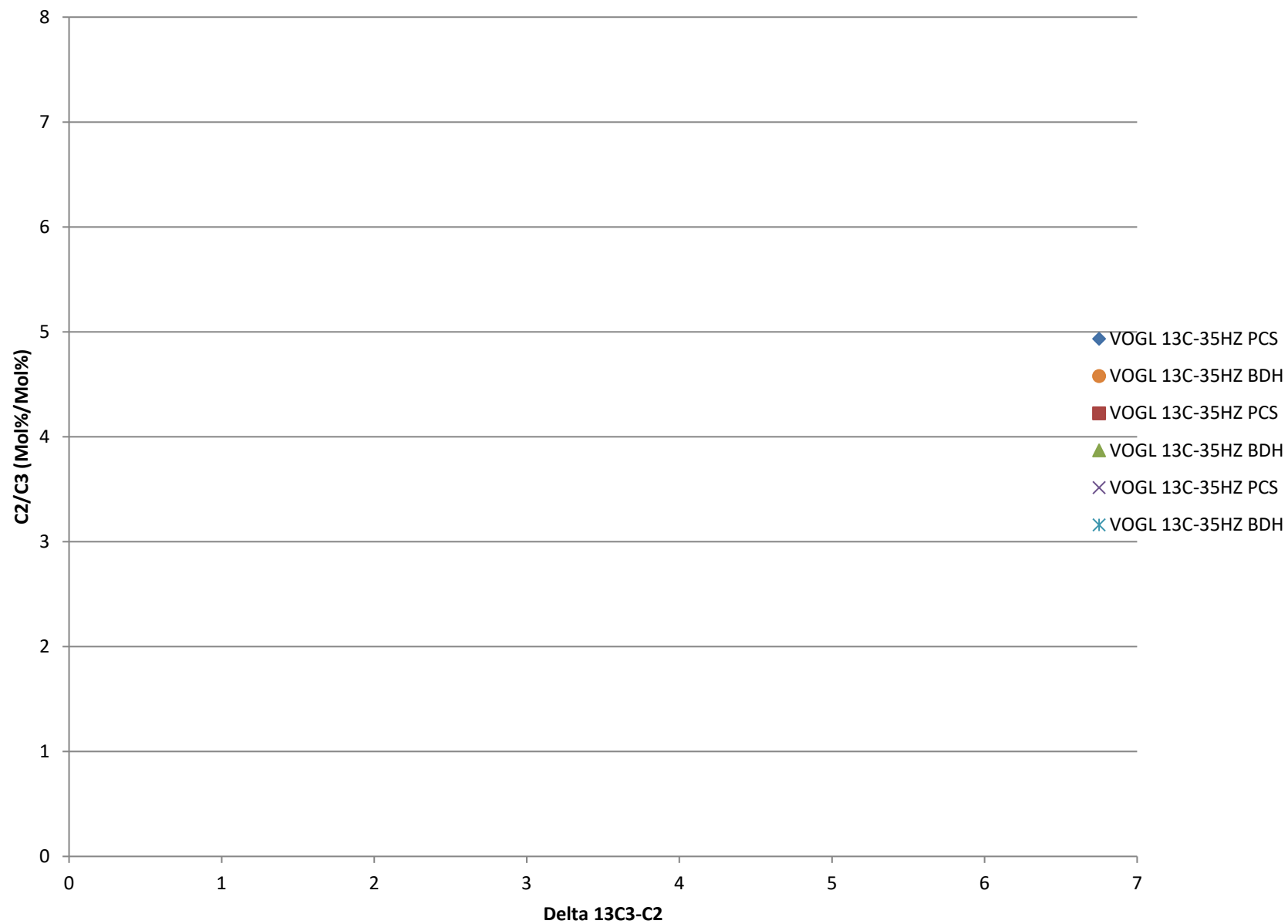


Bradenhead Test Summary





Delta13 C2/C3 vs. Delta 13C3-C2



Delta 13 IC4/ Delta NC4

