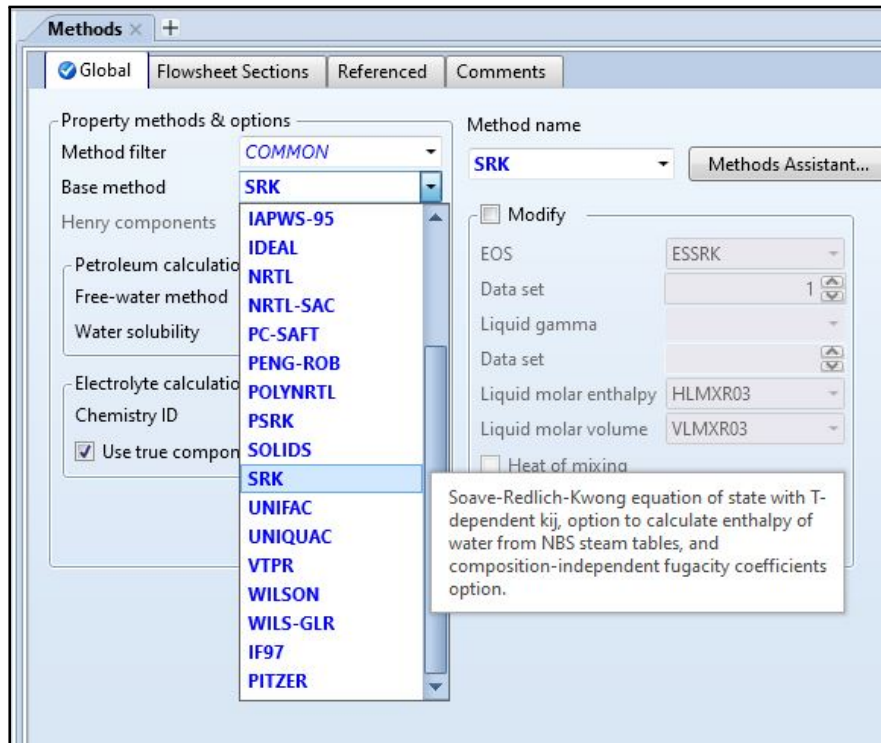
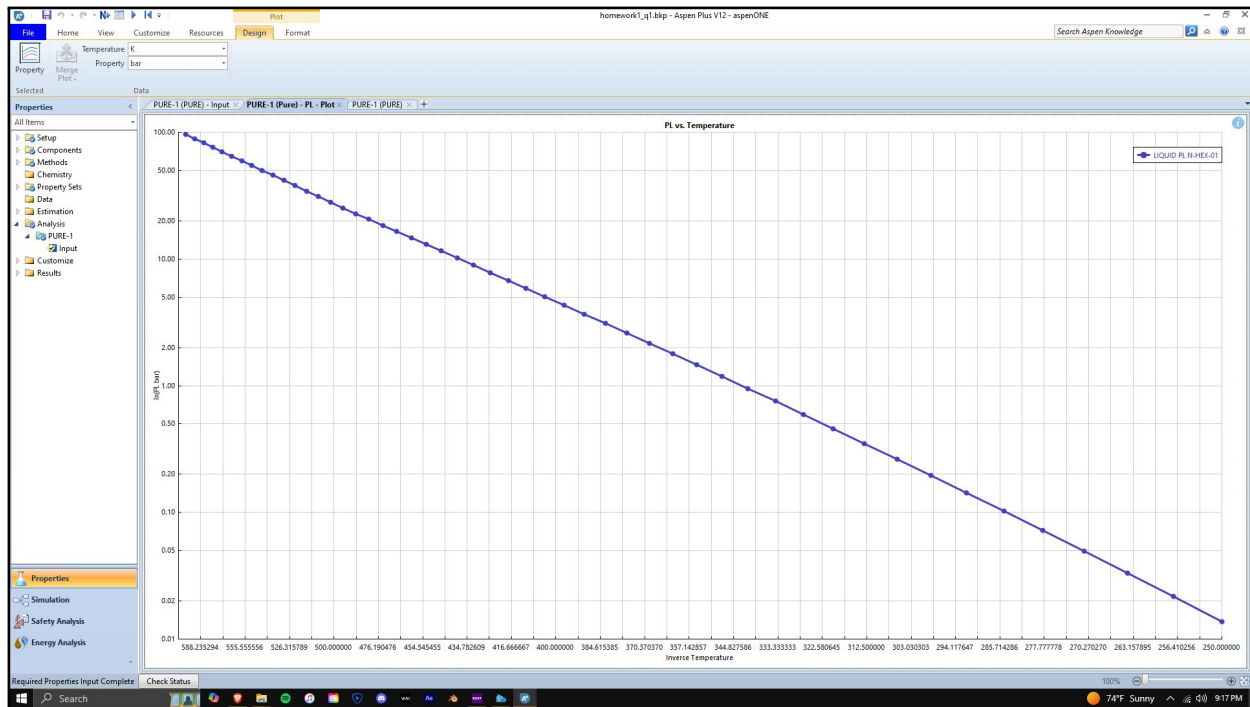


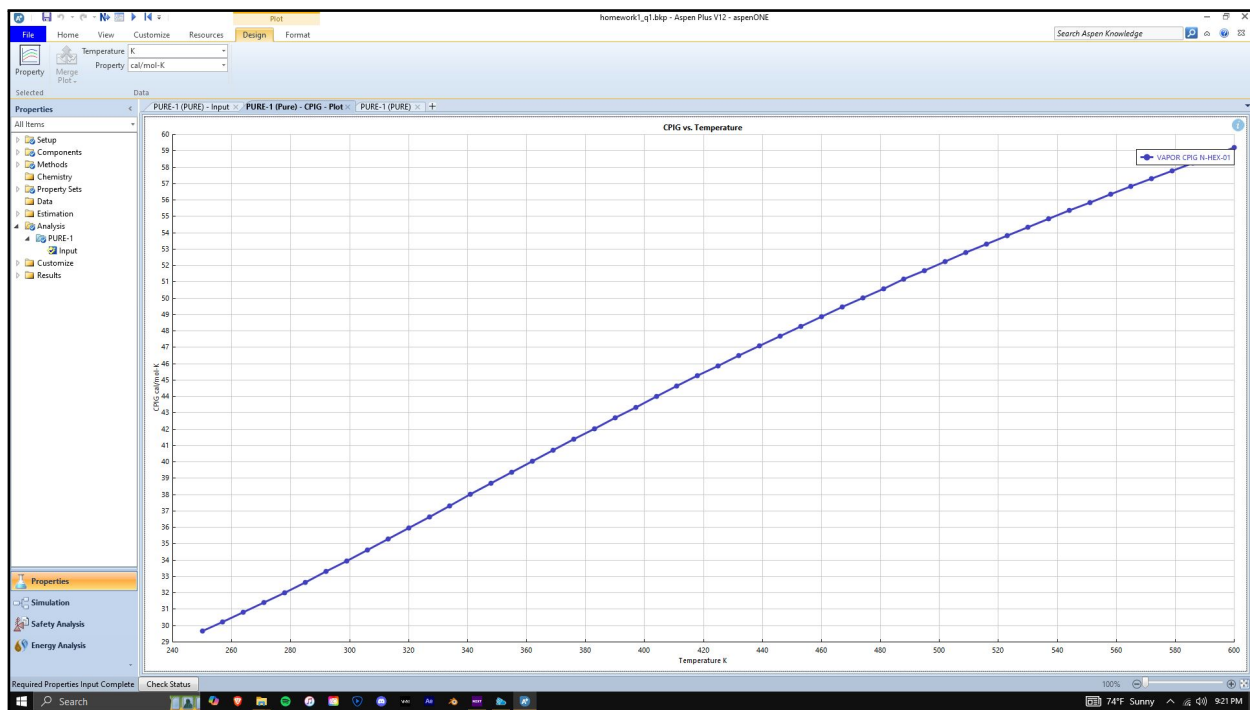
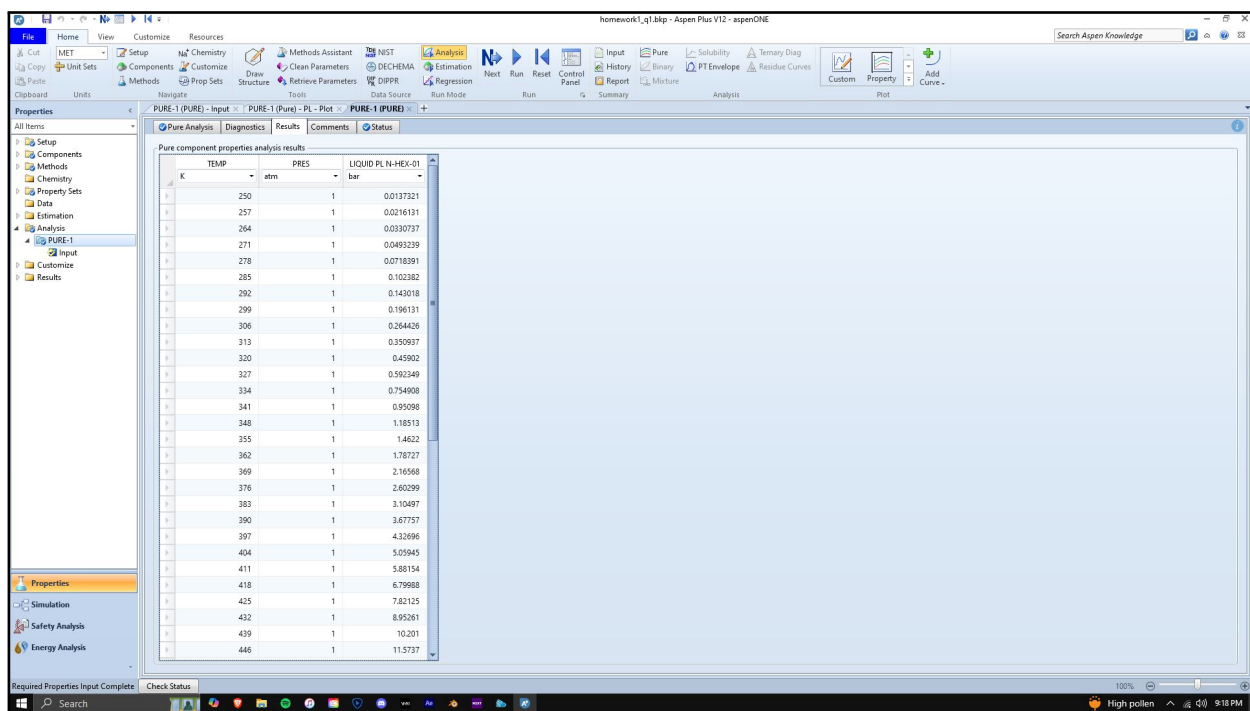
CHEG325 Aspen Homework 1

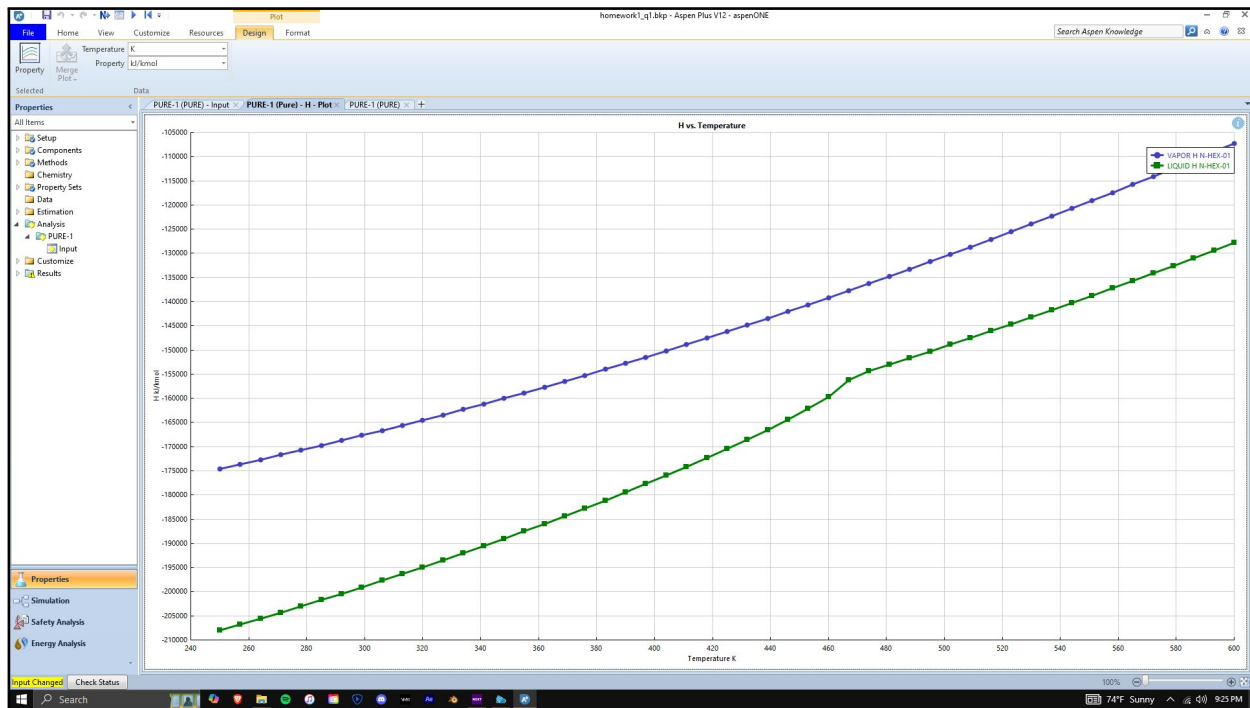
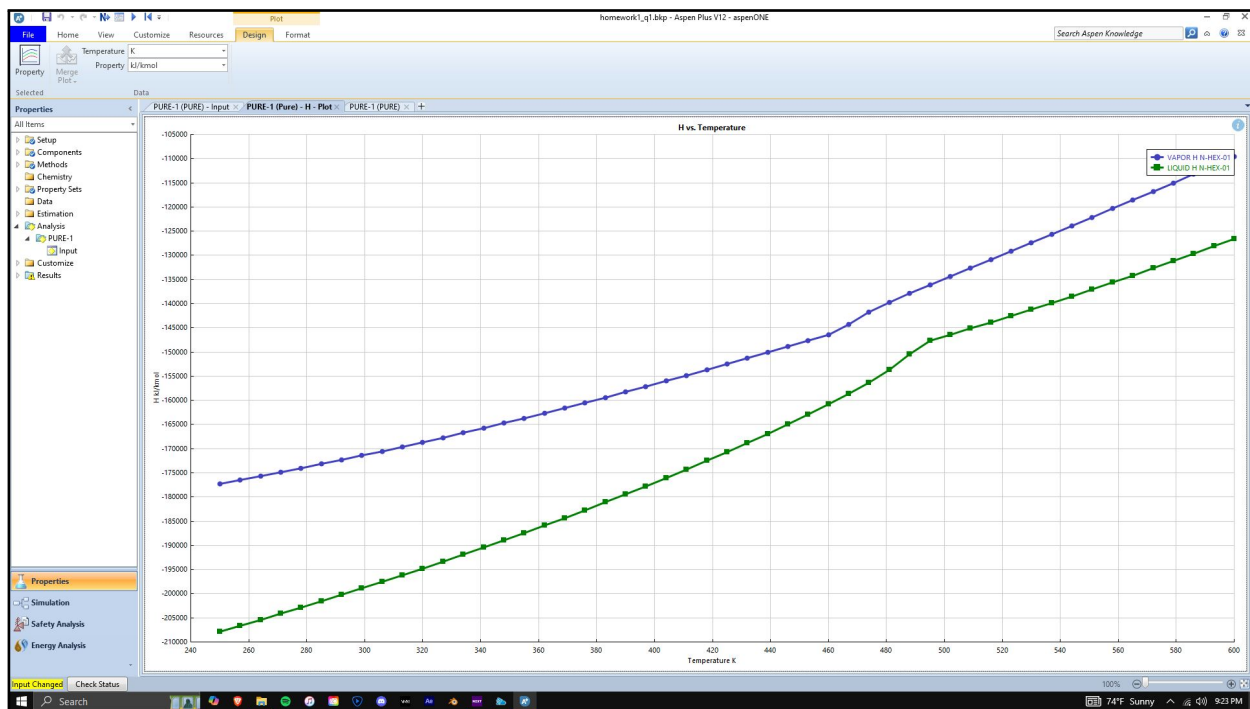
Sebastian Blough and Kyle Wodehouse

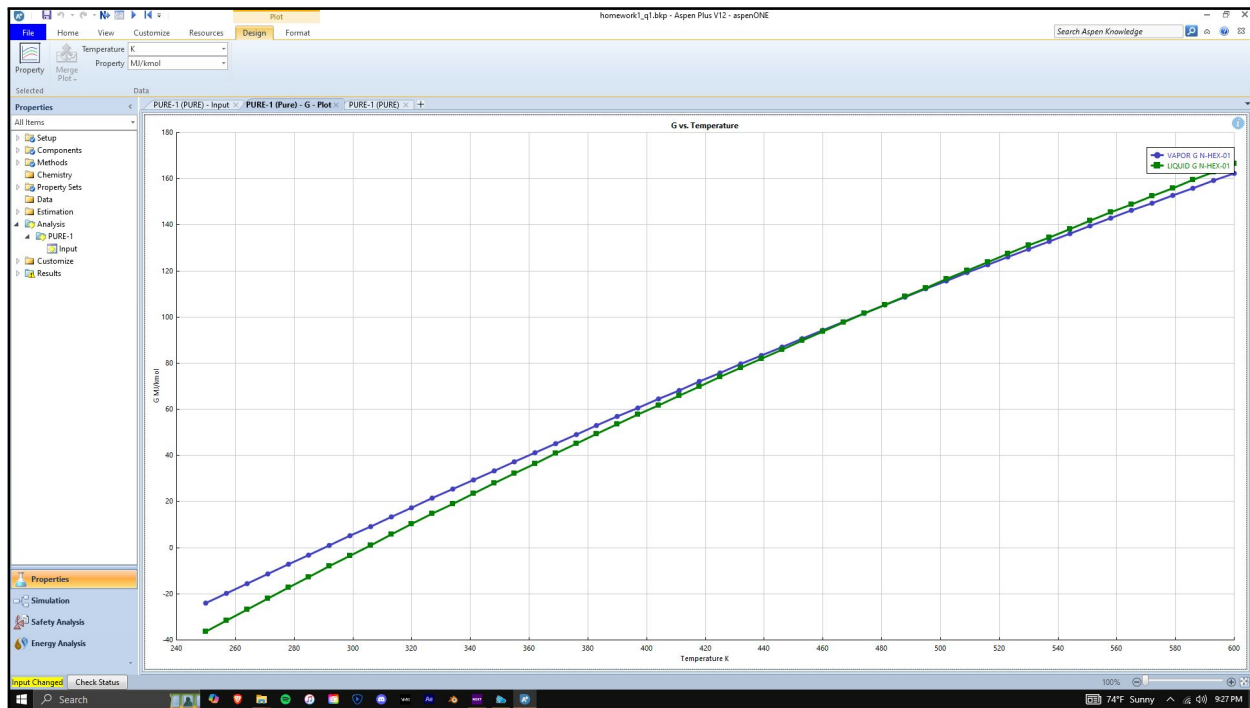
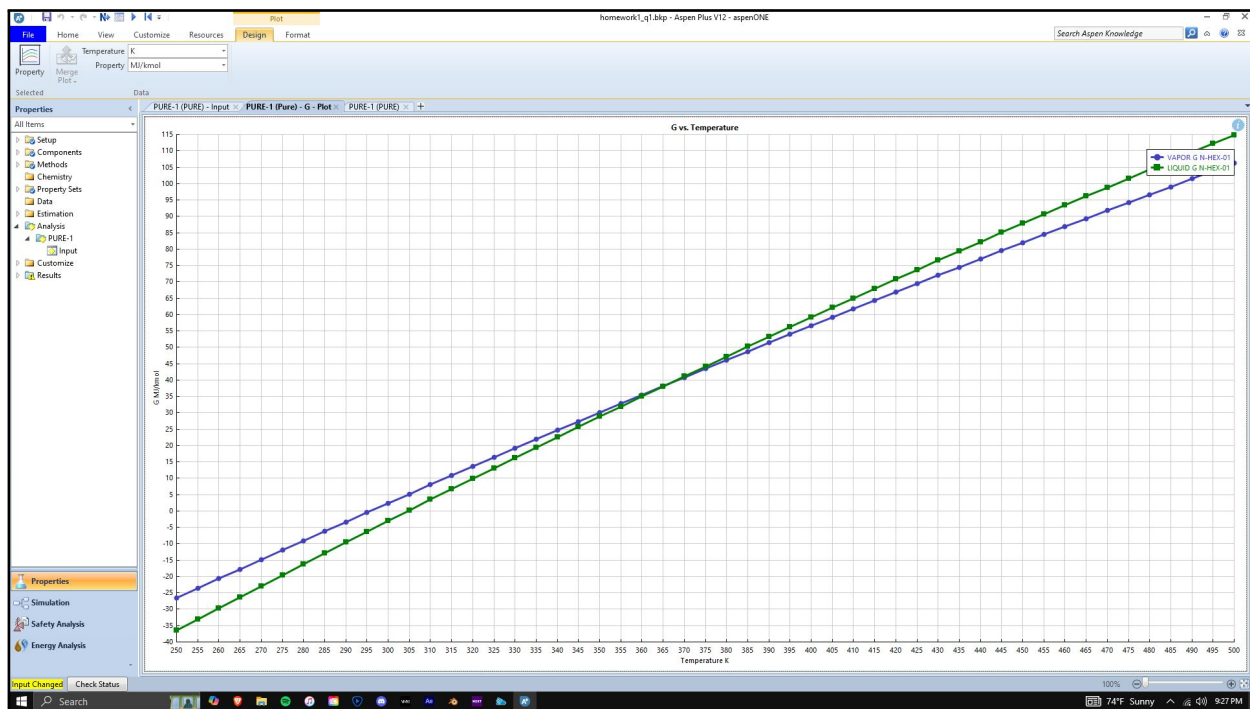


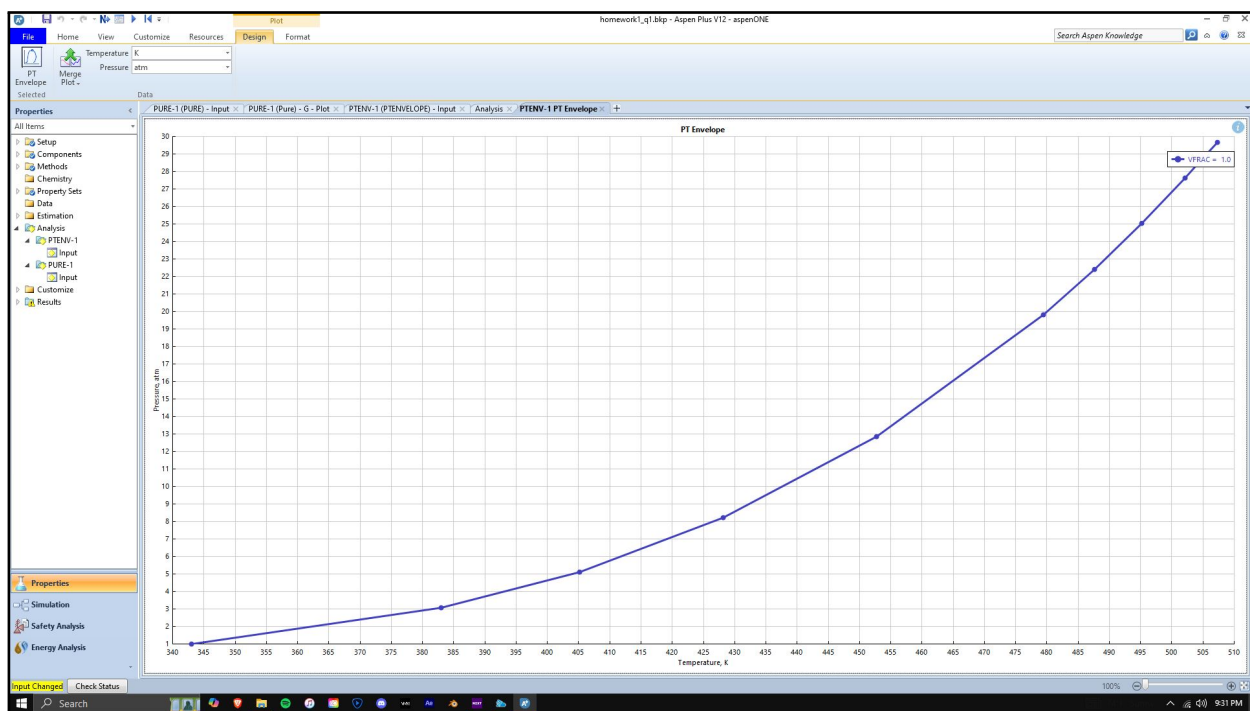
We used the **Soave-Redlich-Kwong (SRK)** equation of state in our calculations.











Aspen Plus V12 Results Summary Table:

Property	Unit	Value
Two-phase critical temperature	K	342.983
Two-phase critical pressure	atm	1
Cricondentherm	K	382.956
Cricondenbar	atm	3.06103
Three-phase critical temperature	K	405.165
Three-phase critical pressure	atm	5.12206
Pressure at cricondentherm	atm	8.21261
Temperature at cricondenbar	K	428.188

VFRAC	TEMP (K)	PRES (atm)	TOTAL TEMP (K)	LIQUID PH N-HEX-01 (kJ/mol)	VAPOR PH N-HEX-01 (kJ/mol)	LIQUID DH N-HEX-01 (kJ/mol)	VAPOR DH N-HEX-01 (kJ/mol)	LIQUID DS N-HEX-01 (kJ/mol-K)	VAPOR DS N-HEX-01 (kJ/mol-K)
1	342.983	1	342.983	0.961357	0.961357	-29975.2	-327.449	-87.0678	-6.627042
1	382.956	3.06103	382.956	0.914468	0.914468	-27675.1	-889.348	-80.8252	-10.6803
1	405.165	5.12206	405.165	0.879499	0.879499	-26251.2	-1419.79	-77.2057	-16.0186
1	428.188	8.21261	428.188	0.837509	0.837509	-24601	-2207.84	-73.4676	-21.1902
1	452.747	12.8559	452.747	0.787619	0.787619	-22534.5	-3432.6	-69.0178	-26.6287
1	479.409	19.8069	479.409	0.728339	0.728339	-19616.3	-5534.22	-63.1204	-33.7466
1	487.622	22.4159	487.622	0.710828	0.710828	-18434.5	-6485.72	-60.8226	-36.3185
1	495.165	23.0248	495.165	0.693682	0.693682	-17099.9	-7617.77	-58.2638	-39.1145
1	502.156	27.6338	502.156	0.677706	0.677706	-15402.5	-9135.24	-55.0337	-42.353
1	504.748	28.6498	504.748	0.671766	0.671766	-14477.6	-9995.33	-53.2708	-44.3906
1	507.274	29.6658	507.274	0.665973	0.665973	-12747.1	-11663.7	-49.9343	-47.7985

