

# PhazeComp-Generated L<sup>A</sup>T<sub>E</sub>X Report Template

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# 1. Executive Summary

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## 4. Conclusions

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# Nomenclature

# References

# Tables

Table 1: Essential Properties for Characterization “SCN EOS”

Component	MW	Tc (K)	Pc (bar)	AF	VTran	ZcVis	Pchor
<b>N2</b>	28.014	126.200	33.9800	0.03700	−0.16758	0.29178	59.10
<b>CO2</b>	44.010	304.120	73.7400	0.22500	0.00191	0.27433	80.00
<b>C1</b>	16.043	190.560	45.9900	0.01100	−0.14996	0.28620	71.00
<b>C2</b>	30.070	305.320	48.7200	0.09900	−0.06280	0.27924	111.00
<b>C3</b>	44.097	369.830	42.4800	0.15200	−0.06381	0.27630	151.00
<b>I-C4</b>	58.123	407.850	36.4000	0.18600	−0.06197	0.28199	188.80
<b>N-C4</b>	58.123	425.120	37.9600	0.20000	−0.05393	0.27385	191.00
<b>I-C5</b>	72.150	460.390	33.8100	0.22900	−0.05646	0.27231	227.40
<b>N-C5</b>	72.150	469.700	33.7000	0.25200	−0.02928	0.26837	231.00
<b>C6</b>	84.751	513.482	33.2738	0.24565	−0.02474	0.26937	238.40
<b>C7</b>	98.595	548.497	30.6745	0.28230	−0.00820	0.26601	271.63
<b>C8</b>	112.460	579.790	28.5096	0.31809	0.00569	0.26355	304.90
<b>C9</b>	126.496	608.034	26.6688	0.35344	0.01630	0.26245	338.59
<b>C10</b>	140.601	633.638	25.0637	0.38879	0.02551	0.26198	372.44
<b>C11</b>	154.767	656.967	23.6316	0.42389	0.03433	0.26176	406.44
<b>C12</b>	168.989	678.316	22.3551	0.45899	0.04227	0.26179	440.57
<b>C13</b>	183.259	697.934	21.2094	0.49067	0.04946	0.26198	474.82
<b>C14</b>	197.571	716.029	20.1758	0.52390	0.05598	0.26230	509.17
<b>C15</b>	211.919	732.779	19.2390	0.55671	0.06189	0.26271	543.61
<b>C16</b>	226.301	748.334	18.3869	0.58907	0.06723	0.26320	578.12
<b>C17</b>	240.711	762.825	17.6091	0.62093	0.07203	0.26376	612.71
<b>C18</b>	255.149	776.364	16.8968	0.65228	0.07634	0.26438	647.36
<b>C19</b>	269.611	789.048	16.2427	0.68308	0.08018	0.26505	682.07
<b>C20</b>	284.096	800.961	15.6403	0.71332	0.08359	0.26578	716.83
<b>C21</b>	298.601	812.177	15.0840	0.74300	0.08660	0.26655	751.64
<b>C22</b>	313.126	822.761	14.5690	0.77211	0.08923	0.26737	786.50
<b>C23</b>	327.669	832.769	14.0910	0.80064	0.09152	0.26823	821.41
<b>C24</b>	342.230	842.251	13.6463	0.82860	0.09349	0.26912	856.35
<b>C25</b>	356.807	851.252	13.2316	0.85600	0.09518	0.27005	891.34
<b>C26</b>	371.400	859.812	12.8441	0.88284	0.09660	0.27100	926.36
<b>C27</b>	386.007	867.964	12.4812	0.90912	0.09777	0.27198	961.42
<b>C28</b>	400.628	875.742	12.1406	0.93486	0.09873	0.27298	996.51
<b>C29</b>	415.262	883.172	11.8205	0.96007	0.09948	0.27401	1031.63
<b>C30+</b>	602.891	956.060	8.9445	1.23959	0.09809	0.28782	1481.94



Table 2: Binary Interaction Parameters for Characterization “SCN EOS”

	<b>N2</b>	<b>CO2</b>	<b>C1</b>	<b>C2</b>	<b>C3</b>
<b>CO2</b>	−0.01200				
<b>C1</b>	0.03600	0.09600			
<b>C2</b>	0.10000	0.10000	0.00189		
<b>C3</b>	0.10000	0.10000	0.00622	0.00023	
<b>I-C4</b>	0.10000	0.10000	0.01188	0.00079	0.00017
<b>N-C4</b>	0.10000	0.10000	0.01118	0.00071	0.00013
<b>I-C5</b>	0.10000	0.10000	0.01602	0.00127	0.00042
<b>N-C5</b>	0.10000	0.10000	0.01626	0.00130	0.00044
<b>C6</b>	0.10000	0.10000	0.01933	0.00168	0.00067
<b>C7</b>	0.10000	0.10000	0.02346	0.00222	0.00103
<b>C8</b>	0.10000	0.10000	0.02734	0.00275	0.00140
<b>C9</b>	0.10000	0.10000	0.03101	0.00326	0.00178
<b>C10</b>	0.10000	0.10000	0.03450	0.00376	0.00215
<b>C11</b>	0.10000	0.10000	0.03785	0.00425	0.00253
<b>C12</b>	0.10000	0.10000	0.04104	0.00473	0.00290
<b>C13</b>	0.10000	0.10000	0.04408	0.00518	0.00326
<b>C14</b>	0.10000	0.10000	0.04698	0.00563	0.00362
<b>C15</b>	0.10000	0.10000	0.04975	0.00605	0.00396
<b>C16</b>	0.10000	0.10000	0.05239	0.00646	0.00430
<b>C17</b>	0.10000	0.10000	0.05490	0.00686	0.00463
<b>C18</b>	0.10000	0.10000	0.05730	0.00723	0.00494
<b>C19</b>	0.10000	0.10000	0.05958	0.00760	0.00524
<b>C20</b>	0.10000	0.10000	0.06175	0.00794	0.00554
<b>C21</b>	0.10000	0.10000	0.06383	0.00828	0.00582
<b>C22</b>	0.10000	0.10000	0.06580	0.00860	0.00609
<b>C23</b>	0.10000	0.10000	0.06769	0.00891	0.00635
<b>C24</b>	0.10000	0.10000	0.06950	0.00920	0.00660
<b>C25</b>	0.10000	0.10000	0.07122	0.00948	0.00685
<b>C26</b>	0.10000	0.10000	0.07287	0.00976	0.00708
<b>C27</b>	0.10000	0.10000	0.07444	0.01002	0.00730
<b>C28</b>	0.10000	0.10000	0.07596	0.01027	0.00752
<b>C29</b>	0.10000	0.10000	0.07741	0.01051	0.00773
<b>C30+</b>	0.12663	0.12663	0.11847	0.03959	0.03651

Table 2: Binary Interaction Parameters for Characterization “SCN EOS” (cont.)

	<b>I-C4</b>	<b>N-C4</b>	<b>I-C5</b>	<b>N-C5</b>	<b>C6</b>
<b>N-C4</b>	0.00000				
<b>I-C5</b>	0.00006	0.00008			
<b>N-C5</b>	0.00006	0.00009	0.00000		
<b>C6</b>	0.00017	0.00021	0.00003	0.00003	
<b>C7</b>	0.00037	0.00042	0.00013	0.00012	0.00004
<b>C8</b>	0.00060	0.00067	0.00029	0.00027	0.00013
<b>C9</b>	0.00086	0.00094	0.00047	0.00045	0.00026
<b>C10</b>	0.00112	0.00122	0.00067	0.00065	0.00042
<b>C11</b>	0.00140	0.00151	0.00089	0.00087	0.00060
<b>C12</b>	0.00168	0.00180	0.00112	0.00109	0.00079
<b>C13</b>	0.00196	0.00209	0.00135	0.00132	0.00098
<b>C14</b>	0.00224	0.00238	0.00158	0.00155	0.00118
<b>C15</b>	0.00252	0.00266	0.00182	0.00178	0.00139
<b>C16</b>	0.00279	0.00294	0.00205	0.00201	0.00159
<b>C17</b>	0.00305	0.00321	0.00228	0.00224	0.00179
<b>C18</b>	0.00331	0.00347	0.00250	0.00246	0.00199
<b>C19</b>	0.00356	0.00373	0.00272	0.00268	0.00219
<b>C20</b>	0.00380	0.00398	0.00294	0.00289	0.00238
<b>C21</b>	0.00404	0.00422	0.00314	0.00310	0.00257
<b>C22</b>	0.00427	0.00445	0.00335	0.00330	0.00275
<b>C23</b>	0.00449	0.00468	0.00354	0.00349	0.00293
<b>C24</b>	0.00470	0.00490	0.00373	0.00368	0.00311
<b>C25</b>	0.00491	0.00511	0.00392	0.00387	0.00328
<b>C26</b>	0.00511	0.00531	0.00410	0.00405	0.00344
<b>C27</b>	0.00530	0.00551	0.00427	0.00422	0.00360
<b>C28</b>	0.00549	0.00570	0.00444	0.00439	0.00376
<b>C29</b>	0.00567	0.00588	0.00460	0.00455	0.00391
<b>C30+</b>	0.03417	0.03441	0.03294	0.03288	0.03213

Table 2: Binary Interaction Parameters for Characterization “SCN EOS” (cont.)

	<b>C7</b>	<b>C8</b>	<b>C9</b>	<b>C10</b>	<b>C11</b>
<b>C8</b>	0.00003				
<b>C9</b>	0.00010	0.00002			
<b>C10</b>	0.00021	0.00008	0.00002		
<b>C11</b>	0.00033	0.00017	0.00007	0.00002	
<b>C12</b>	0.00048	0.00027	0.00014	0.00006	0.00001
<b>C13</b>	0.00063	0.00039	0.00023	0.00012	0.00005
<b>C14</b>	0.00080	0.00052	0.00033	0.00019	0.00010
<b>C15</b>	0.00097	0.00066	0.00044	0.00028	0.00016
<b>C16</b>	0.00114	0.00081	0.00056	0.00038	0.00024
<b>C17</b>	0.00131	0.00095	0.00068	0.00048	0.00032
<b>C18</b>	0.00148	0.00110	0.00081	0.00058	0.00041
<b>C19</b>	0.00165	0.00125	0.00094	0.00069	0.00050
<b>C20</b>	0.00182	0.00140	0.00107	0.00081	0.00060
<b>C21</b>	0.00199	0.00154	0.00119	0.00092	0.00070
<b>C22</b>	0.00215	0.00169	0.00132	0.00103	0.00079
<b>C23</b>	0.00231	0.00183	0.00145	0.00114	0.00089
<b>C24</b>	0.00246	0.00197	0.00157	0.00125	0.00099
<b>C25</b>	0.00262	0.00210	0.00169	0.00136	0.00109
<b>C26</b>	0.00276	0.00223	0.00181	0.00147	0.00118
<b>C27</b>	0.00291	0.00236	0.00193	0.00157	0.00128
<b>C28</b>	0.00305	0.00249	0.00204	0.00168	0.00137
<b>C29</b>	0.00318	0.00261	0.00215	0.00178	0.00146
<b>C30+</b>	0.03127	0.03058	0.03001	0.02954	0.02913

Table 2: Binary Interaction Parameters for Characterization “SCN EOS” (cont.)

	<b>C12</b>	<b>C13</b>	<b>C14</b>	<b>C15</b>	<b>C16</b>
<b>C13</b>	0.00001				
<b>C14</b>	0.00004	0.00001			
<b>C15</b>	0.00009	0.00004	0.00001		
<b>C16</b>	0.00014	0.00007	0.00003	0.00001	
<b>C17</b>	0.00021	0.00012	0.00006	0.00003	0.00001
<b>C18</b>	0.00028	0.00018	0.00011	0.00006	0.00002
<b>C19</b>	0.00036	0.00024	0.00016	0.00009	0.00005
<b>C20</b>	0.00044	0.00031	0.00021	0.00014	0.00008
<b>C21</b>	0.00052	0.00038	0.00027	0.00018	0.00012
<b>C22</b>	0.00060	0.00045	0.00033	0.00024	0.00016
<b>C23</b>	0.00069	0.00053	0.00040	0.00029	0.00021
<b>C24</b>	0.00078	0.00060	0.00046	0.00035	0.00026
<b>C25</b>	0.00086	0.00068	0.00053	0.00041	0.00031
<b>C26</b>	0.00095	0.00076	0.00060	0.00047	0.00036
<b>C27</b>	0.00104	0.00083	0.00067	0.00053	0.00041
<b>C28</b>	0.00112	0.00091	0.00073	0.00059	0.00047
<b>C29</b>	0.00120	0.00099	0.00080	0.00065	0.00052
<b>C30+</b>	0.02879	0.02850	0.02824	0.02802	0.02783

Table 2: Binary Interaction Parameters for Characterization “SCN EOS” (cont.)

	<b>C17</b>	<b>C18</b>	<b>C19</b>	<b>C20</b>	<b>C21</b>
<b>C18</b>	0.00001				
<b>C19</b>	0.00002	0.00000			
<b>C20</b>	0.00004	0.00002	0.00000		
<b>C21</b>	0.00007	0.00004	0.00002	0.00000	
<b>C22</b>	0.00010	0.00006	0.00003	0.00001	0.00000
<b>C23</b>	0.00014	0.00009	0.00006	0.00003	0.00001
<b>C24</b>	0.00018	0.00013	0.00008	0.00005	0.00003
<b>C25</b>	0.00023	0.00016	0.00011	0.00007	0.00004
<b>C26</b>	0.00027	0.00020	0.00014	0.00010	0.00006
<b>C27</b>	0.00032	0.00024	0.00018	0.00013	0.00009
<b>C28</b>	0.00037	0.00028	0.00021	0.00016	0.00011
<b>C29</b>	0.00041	0.00033	0.00025	0.00019	0.00014
<b>C30+</b>	0.02767	0.02752	0.02740	0.02729	0.02720

Table 2: Binary Interaction Parameters for Characterization “SCN EOS” (cont.)

	<b>C22</b>	<b>C23</b>	<b>C24</b>	<b>C25</b>	<b>C26</b>
<b>C23</b>	0.00000				
<b>C24</b>	0.00001	0.00000			
<b>C25</b>	0.00002	0.00001	0.00000		
<b>C26</b>	0.00004	0.00002	0.00001	0.00000	
<b>C27</b>	0.00006	0.00004	0.00002	0.00001	0.00000
<b>C28</b>	0.00008	0.00005	0.00003	0.00002	0.00001
<b>C29</b>	0.00010	0.00007	0.00005	0.00003	0.00002
<b>C30+</b>	0.02712	0.02704	0.02698	0.02693	0.02688

Table 2: Binary Interaction Parameters for Characterization “SCN EOS” (cont.)

	<b>C27</b>	<b>C28</b>	<b>C29</b>
<b>C28</b>	0.00000		
<b>C29</b>	0.00001	0.00000	
<b>C30+</b>	0.02684	0.02680	0.02677

Table 3: Additional Properties for Characterization “SCN EOS”

<b>Component</b>	<b>SG</b>	<b>Tb (C)</b>	<b>Zc</b>	<b>Visc (cp)</b>
<b>N2</b>	0.28339	−195.90291	0.29178	
<b>CO2</b>	0.76193	−88.26608	0.27433	
<b>C1</b>	0.14609	−161.59338	0.28620	
<b>C2</b>	0.32976	−88.71667	0.27924	
<b>C3</b>	0.50977	−42.21618	0.27630	
<b>I-C4</b>	0.57043	−11.65811	0.28199	
<b>N-C4</b>	0.59055	−0.51619	0.27385	
<b>I-C5</b>	0.62952	28.01296	0.27231	
<b>N-C5</b>	0.63585	36.18684	0.26837	
<b>C6</b>	0.69921	64.83930	0.26937	
<b>C7</b>	0.72940	94.25535	0.26470	0.24166
<b>C8</b>	0.75398	121.35092	0.26056	0.30650
<b>C9</b>	0.77457	146.51023	0.25684	0.38367
<b>C10</b>	0.79195	169.99044	0.25345	0.47437
<b>C11</b>	0.80682	191.98102	0.25031	0.57993
<b>C12</b>	0.81967	212.63178	0.24738	0.70168
<b>C13</b>	0.83088	232.06704	0.24461	0.84092
<b>C14</b>	0.84075	250.39330	0.24195	0.99891
<b>C15</b>	0.84950	267.70376	0.23940	1.17687
<b>C16</b>	0.85730	284.08099	0.23692	1.37598
<b>C17</b>	0.86430	299.59884	0.23450	1.59738
<b>C18</b>	0.87063	314.32372	0.23213	1.84214
<b>C19</b>	0.87636	328.31560	0.22981	2.11132
<b>C20</b>	0.88158	341.62882	0.22754	2.40589
<b>C21</b>	0.88635	354.31270	0.22531	2.72683
<b>C22</b>	0.89074	366.41217	0.22311	3.07503
<b>C23</b>	0.89477	377.96816	0.22096	3.45136
<b>C24</b>	0.89850	389.01807	0.21884	3.85665
<b>C25</b>	0.90196	399.59611	0.21676	4.29169
<b>C26</b>	0.90517	409.73362	0.21472	4.75722
<b>C27</b>	0.90817	419.45935	0.21272	5.25399
<b>C28</b>	0.91096	428.79974	0.21075	5.78268
<b>C29</b>	0.91358	437.77907	0.20882	6.34396
<b>C30+</b>	0.93649	528.47876	0.18723	16.61871

Table 4: Mixture “Lab1\_Oil\_Analysis\_1” Compositions

<b>Component</b>	<b>Mole Fractions</b>	<b>Mass Fractions</b>
<b>N2</b>	0.003056	0.000795
<b>CO2</b>	0.020013	0.008176
<b>C1</b>	0.452604	0.067402
<b>C2</b>	0.054715	0.015272
<b>C3</b>	0.047222	0.019330
<b>I-C4</b>	0.007591	0.004096
<b>N-C4</b>	0.020604	0.011117
<b>I-C5</b>	0.008084	0.005414
<b>N-C5</b>	0.011830	0.007923
<b>C6</b>	0.019433	0.015288
<b>C7</b>	0.023648	0.021643
<b>C8</b>	0.034839	0.036370
<b>C9</b>	0.029556	0.034705
<b>C10</b>	0.028128	0.036712
<b>C11</b>	0.022754	0.032689
<b>C12</b>	0.020663	0.032414
<b>C13</b>	0.018452	0.031389
<b>C14</b>	0.015738	0.028863
<b>C15</b>	0.015525	0.030539
<b>C16</b>	0.012089	0.025395
<b>C17</b>	0.010677	0.023857
<b>C18</b>	0.009989	0.023659
<b>C19</b>	0.009328	0.023346
<b>C20</b>	0.007348	0.019378
<b>C21</b>	0.005284	0.014647
<b>C22</b>	0.004801	0.013956
<b>C23</b>	0.005549	0.016879
<b>C24</b>	0.005054	0.016054
<b>C25</b>	0.004194	0.013892
<b>C26</b>	0.004384	0.015112
<b>C27</b>	0.003343	0.011979
<b>C28</b>	0.004010	0.014913
<b>C29</b>	0.003531	0.013612
<b>C30+</b>	0.055963	0.313189
<b>MW</b>		<b>107.73</b>

Table 5: Mixture “Lab1\_Oil\_Analysis\_2” Compositions

Component	Mole Fractions	Mass Fractions
N2	0.001875	0.000493
CO2	0.012433	0.005141
C1	0.439100	0.066181
C2	0.055257	0.015610
C3	0.052396	0.021707
I-C4	0.009374	0.005119
N-C4	0.027530	0.015033
I-C5	0.011644	0.007892
N-C5	0.017564	0.011905
C6	0.031332	0.024947
C7	0.031656	0.029322
C8	0.038464	0.040638
C9	0.026339	0.031301
C10	0.024253	0.032036
C11	0.018932	0.027527
C12	0.016922	0.026865
C13	0.016301	0.028065
C14	0.013095	0.024306
C15	0.013045	0.025971
C16	0.011325	0.024078
C17	0.009035	0.020432
C18	0.008930	0.021407
C19	0.008182	0.020723
C20	0.006591	0.017590
C21	0.005193	0.014567
C22	0.005959	0.017530
C23	0.004884	0.015034
C24	0.005440	0.017490
C25	0.004675	0.015671
C26	0.004483	0.015642
C27	0.004302	0.015602
C28	0.004492	0.016905
C29	0.003916	0.015279
C30+	0.055083	0.311989
MW		106.44

Table 6: Mixture “Lab1\_Recombined\_Oil” Compositions

<b>Component</b>	<b>Mole Fractions</b>	<b>Mass Fractions</b>
<b>N2</b>	0.001828	0.000497
<b>CO2</b>	0.012150	0.005184
<b>C1</b>	0.447841	0.069648
<b>C2</b>	0.053900	0.015712
<b>C3</b>	0.051208	0.021890
<b>I-C4</b>	0.009176	0.005170
<b>N-C4</b>	0.027044	0.015237
<b>I-C5</b>	0.011497	0.008041
<b>N-C5</b>	0.017422	0.012185
<b>C6</b>	0.031206	0.025638
<b>C7</b>	0.031720	0.030317
<b>C8</b>	0.038652	0.042137
<b>C9</b>	0.026488	0.032480
<b>C10</b>	0.024371	0.033217
<b>C11</b>	0.018994	0.028496
<b>C12</b>	0.016935	0.027742
<b>C13</b>	0.016316	0.028985
<b>C14</b>	0.013152	0.025190
<b>C15</b>	0.013071	0.026852
<b>C16</b>	0.011349	0.024898
<b>C17</b>	0.009015	0.021035
<b>C18</b>	0.008932	0.022091
<b>C19</b>	0.008184	0.021389
<b>C20</b>	0.006638	0.018280
<b>C21</b>	0.005189	0.015021
<b>C22</b>	0.005970	0.018123
<b>C23</b>	0.004945	0.015706
<b>C24</b>	0.005447	0.018069
<b>C25</b>	0.004704	0.016271
<b>C26</b>	0.004518	0.016265
<b>C27</b>	0.004268	0.015972
<b>C28</b>	0.004526	0.017579
<b>C29</b>	0.003894	0.015675
<b>C30+</b>	0.049451	0.289007
<b>MW</b>		<b>103.16</b>



Table 7: Mixture “Lab2\_Recombined\_Oil” Compositions

<b>Component</b>	<b>Mole Fractions</b>	<b>Mass Fractions</b>
<b>N2</b>	0.001369	0.000376
<b>CO2</b>	0.009147	0.003951
<b>C1</b>	0.467469	0.073605
<b>C2</b>	0.051637	0.015239
<b>C3</b>	0.049992	0.021636
<b>I-C4</b>	0.008905	0.005080
<b>N-C4</b>	0.026055	0.014863
<b>I-C5</b>	0.011292	0.007996
<b>N-C5</b>	0.016739	0.011853
<b>C6</b>	0.024060	0.020013
<b>C7</b>	0.033301	0.032224
<b>C8</b>	0.034266	0.037821
<b>C9</b>	0.027117	0.033665
<b>C10</b>	0.024212	0.033411
<b>C11</b>	0.020488	0.031121
<b>C12</b>	0.017281	0.028662
<b>C13</b>	0.015229	0.027390
<b>C14</b>	0.014607	0.028323
<b>C15</b>	0.011824	0.024592
<b>C16</b>	0.010690	0.023744
<b>C17</b>	0.009225	0.021793
<b>C18</b>	0.008838	0.022133
<b>C19</b>	0.008460	0.022387
<b>C20</b>	0.006904	0.019249
<b>C21</b>	0.006192	0.018147
<b>C22</b>	0.005712	0.017553
<b>C23</b>	0.004957	0.015942
<b>C24</b>	0.004645	0.015603
<b>C25</b>	0.004407	0.015434
<b>C26</b>	0.003839	0.013992
<b>C27</b>	0.003559	0.013483
<b>C28</b>	0.003213	0.012635
<b>C29</b>	0.003059	0.012466
<b>C30+</b>	0.051312	0.303616
<b>MW</b>		<b>101.89</b>

Table 8: Mixture “Lab2\_Reported\_Slimtube\_Oil” Compositions

Component	Mole Fractions	Mass Fractions
N2	0.008579	0.002300
CO2	0.011634	0.004900
C1	0.450066	0.069100
C2	0.055947	0.016100
C3	0.053790	0.022700
I-C4	0.008809	0.004900
N-C4	0.025528	0.014200
I-C5	0.010717	0.007400
N-C5	0.015352	0.010600
C6	0.021823	0.017700
C7	0.032112	0.030300
C8	0.034286	0.036900
C9	0.027920	0.033800
C10	0.022444	0.030200
C11	0.018567	0.027500
C12	0.016448	0.026600
C13	0.015680	0.027500
C14	0.014015	0.026500
C15	0.013214	0.026800
C16	0.011497	0.024900
C17	0.009637	0.022200
C18	0.009583	0.023400
C19	0.009030	0.023300
C20	0.007062	0.019200
C21	0.006439	0.018400
C22	0.005907	0.017700
C23	0.005453	0.017100
C24	0.004977	0.016300
C25	0.004715	0.016100
C26	0.004136	0.014700
C27	0.003952	0.014600
C28	0.003782	0.014500
C29	0.003724	0.014800
C30+	0.053174	0.306800
MW		104.49

Table 9: Mixture “Lab2\_Slimtube\_Oil” Compositions

<b>Component</b>	<b>Mole Fractions</b>	<b>Mass Fractions</b>
<b>N2</b>	0.011535	0.003120
<b>CO2</b>	0.015595	0.006627
<b>C1</b>	0.429506	0.066534
<b>C2</b>	0.074702	0.021690
<b>C3</b>	0.070480	0.030010
<b>I-C4</b>	0.011136	0.006250
<b>N-C4</b>	0.031570	0.017718
<b>I-C5</b>	0.012156	0.008468
<b>N-C5</b>	0.016855	0.011742
<b>C6</b>	0.021379	0.017495
<b>C7</b>	0.028832	0.027448
<b>C8</b>	0.029603	0.032146
<b>C9</b>	0.023760	0.029020
<b>C10</b>	0.019003	0.025799
<b>C11</b>	0.015693	0.023451
<b>C12</b>	0.013894	0.022671
<b>C13</b>	0.013243	0.023433
<b>C14</b>	0.011836	0.022579
<b>C15</b>	0.011159	0.022834
<b>C16</b>	0.009709	0.021215
<b>C17</b>	0.008138	0.018915
<b>C18</b>	0.008092	0.019937
<b>C19</b>	0.007626	0.019852
<b>C20</b>	0.005963	0.016359
<b>C21</b>	0.005437	0.015677
<b>C22</b>	0.004988	0.015081
<b>C23</b>	0.004605	0.014569
<b>C24</b>	0.004203	0.013888
<b>C25</b>	0.003982	0.013717
<b>C26</b>	0.003492	0.012525
<b>C27</b>	0.003337	0.012439
<b>C28</b>	0.003194	0.012354
<b>C29</b>	0.003145	0.012610
<b>C30+</b>	0.062155	0.361829
<b>MW</b>		<b>103.56</b>

Table 10: Mixture “Lab1\_Recombined\_Oil” Compositions

<b>Component</b>	<b>Mole Fractions</b>	<b>Mass Fractions</b>
<b>N2</b>	0.001828	0.000497
<b>CO2</b>	0.012150	0.005184
<b>C1</b>	0.447841	0.069648
<b>C2</b>	0.053900	0.015712
<b>C3</b>	0.051208	0.021890
<b>I-C4</b>	0.009176	0.005170
<b>N-C4</b>	0.027044	0.015237
<b>I-C5</b>	0.011497	0.008041
<b>N-C5</b>	0.017422	0.012185
<b>C6</b>	0.031206	0.025638
<b>C7</b>	0.031720	0.030317
<b>C8</b>	0.038652	0.042137
<b>C9</b>	0.026488	0.032480
<b>C10</b>	0.024371	0.033217
<b>C11</b>	0.018994	0.028496
<b>C12</b>	0.016935	0.027742
<b>C13</b>	0.016316	0.028985
<b>C14</b>	0.013152	0.025190
<b>C15</b>	0.013071	0.026852
<b>C16</b>	0.011349	0.024898
<b>C17</b>	0.009015	0.021035
<b>C18</b>	0.008932	0.022091
<b>C19</b>	0.008184	0.021389
<b>C20</b>	0.006638	0.018280
<b>C21</b>	0.005189	0.015021
<b>C22</b>	0.005970	0.018123
<b>C23</b>	0.004945	0.015706
<b>C24</b>	0.005447	0.018069
<b>C25</b>	0.004704	0.016271
<b>C26</b>	0.004518	0.016265
<b>C27</b>	0.004268	0.015972
<b>C28</b>	0.004526	0.017579
<b>C29</b>	0.003894	0.015675
<b>C30+</b>	0.049451	0.289007
<b>MW</b>		<b>103.16</b>

Table 11: Lab1 Single-Stage Separation

<b>Temp</b>	<b>Pres</b>	<b>GOR</b>	
<b>(C)</b>	<b>(barg)</b>	<b>(sm3/m3)</b>	
		<b>Expt</b>	<b>Calc</b>
15.000	0.0	137.00	140.39
<b>RMS % Err</b>			2.47
<b>Ave % Bias</b>			2.47

Table 12: Mixture “Lab1\_Swelling\_Gas” Compositions

Component	Mole Fractions	Mass Fractions
<b>N2</b>	0.003298	0.003597
<b>CO2</b>	0.015292	0.026200
<b>C1</b>	0.685160	0.427904
<b>C2</b>	0.108146	0.126594
<b>C3</b>	0.094353	0.161970
<b>I-C4</b>	0.000000	0.000000
<b>N-C4</b>	0.044478	0.100638
<b>I-C5</b>	0.000000	0.000000
<b>N-C5</b>	0.019290	0.054181
<b>C6</b>	0.029982	0.098916
<b>MW</b>		<b>25.69</b>

Table 13: Lab2 Separator Test #1

Temp (C)	Pres (barg)	Tot Vol 2 (m3)		Cum GOR (sm3/m3)		Liq Den (kg/m3)	
		Expt	Calc	Expt	Calc	Expt	Calc
38.000	40.000	1.0990	1.1038	92.66	91.36		805.91
38.000	12.500	1.0580	1.0639	113.43	110.10		822.08
15.000	0.000	1.0000	1.0110	136.58	129.08	843.80	845.73
<b>RMS % Err</b>			0.53		2.10		0.23
<b>Ave % Bias</b>			0.57		−2.20		0.23

Table 14: Lab2 Separator Test #2

Temp (C)	Pres (barg)	Tot Vol 2 (m3)		Cum GOR (sm3/m3)		Liq Den (kg/m3)	
		Expt	Calc	Expt	Calc	Expt	Calc
38.000	40.000	1.1020	1.1093	92.16	91.36		805.91
15.000	0.000	1.0000	1.0031	137.33	133.97	848.10	848.93
<b>RMS % Err</b>			0.64		0.95		0.10
<b>Ave % Bias</b>			0.57		−1.05		0.10

Table 15: Lab2 Separator Test #3

Temp (C)	Pres (barg)	Tot Vol 2 (m3)		Cum GOR (sm3/m3)		Liq Den (kg/m3)	
		Expt	Calc	Expt	Calc	Expt	Calc
74.000	9.6800	1.0620	1.0644	132.73	130.19		821.36
74.000	3.2200	1.0520	1.0537	137.62	134.85		825.40
15.000	0.0000	1.0000	1.0187	149.12	140.52	853.40	852.46
<b>RMS % Err</b>			0.51		2.28		0.11
<b>Ave % Bias</b>			0.46		-2.43		-0.11

Table 16: Lab2 Separation of Slimtube Sample

Temp (F)	Pres (psig)	Cum GOR (scf/bbl)		Rel Vol 2		Liq Den (g/cm3)	
		Expt	Calc	Expt	Calc	Expt	Calc
68.000	0.0	878.00	878.79		0.67269	0.86280	0.86398
60.000	0.0	881.00	880.44	0.67100	0.67143	0.86600	0.86560
<b>RMS % Err</b>			0.08		0.06		0.10
<b>Ave % Bias</b>			0.01		0.06		0.04

Table 17: Mixture “Lab3\_MDT1\_Oil” Compositions

Component	Mole Fractions	Mass Fractions
N2	0.001755	0.000480
CO2	0.012850	0.005520
C1	0.443321	0.069419
C2	0.054820	0.016090
C3	0.054017	0.023250
I-C4	0.009289	0.005270
N-C4	0.027621	0.015670
I-C5	0.011246	0.007920
N-C5	0.016188	0.011400
C6	0.023742	0.019640
C7	0.033044	0.031800
C8	0.034454	0.037820
C9	0.027375	0.033800
C10	0.024272	0.033310
C11	0.019409	0.029320
C12	0.017012	0.028060
C13	0.017141	0.030660
C14	0.016298	0.031430
C15	0.015050	0.031130
C16	0.013319	0.029420
C17	0.012454	0.029260
C18	0.011412	0.028420
C19	0.009827	0.025860
C20	0.007703	0.021360
C21	0.006420	0.018710
C22	0.005903	0.018040
C23	0.005481	0.017530
C24	0.004748	0.015860
C25	0.004370	0.015220
C26	0.004080	0.014790
C27	0.004087	0.015400
C28	0.003810	0.014900
C29	0.003368	0.013650
C30+	0.044115	0.259597
MW		<b>102.45</b>

Table 18: Separation of Lab3\_MDT1\_Oil

Temp (C)	Pres (bar)	GOR (sm <sup>3</sup> /m <sup>3</sup> )		Liq Den (g/cm <sup>3</sup> )	
		Expt	Calc	Expt	Calc
15.000	1.0000	145.20	140.65	0.85300	0.85266
RMS % Err			3.13		0.04
Ave % Bias			-3.13		-0.04

Table 19: Mixture “Lab3\_Surface\_Oil” Compositions

Component	Mole Fractions	Mass Fractions
N2	0.002882	0.000819
CO2	0.013832	0.006176
C1	0.466309	0.075903
C2	0.056416	0.017212
C3	0.054692	0.024470
I-C4	0.009163	0.005404
N-C4	0.026960	0.015899
I-C5	0.010716	0.007845
N-C5	0.015312	0.011209
C6	0.022243	0.019126
C7	0.031315	0.031326
C8	0.033934	0.038720
C9	0.025741	0.033037
C10	0.022343	0.031874
C11	0.018204	0.028585
C12	0.016131	0.027657
C13	0.015056	0.027995
C14	0.012998	0.026055
C15	0.013255	0.028501
C16	0.010870	0.024959
C17	0.009495	0.023188
C18	0.009185	0.023779
C19	0.008446	0.023104
C20	0.007138	0.020574
C21	0.006374	0.019310
C22	0.005680	0.018045
C23	0.005352	0.017792
C24	0.004760	0.016527
C25	0.004425	0.016021
C26	0.004095	0.015431
C27	0.004048	0.015852
C28	0.003651	0.014841
C29	0.003602	0.015178
C30+	0.045380	0.277587
MW		<b>98.56</b>

Table 20: Separation of Lab3\_Surface\_Oil

Temp (C)	Pres (psig)	GOR (sm <sup>3</sup> /m <sup>3</sup> )		Liq Den (g/cm <sup>3</sup> )	
		Expt	Calc	Expt	Calc
15.000	0.0	156.00	155.67	0.85880	0.85529
RMS % Err			0.21		0.41
Ave % Bias			-0.21		-0.41



Table 21: Mixture “Lab3\_Swelling\_Gas” Compositions

<b>Component</b>	<b>Mole Fractions</b>	<b>Mass Fractions</b>
<b>N2</b>	0.001800	0.002195
<b>CO2</b>	0.013500	0.025866
<b>C1</b>	0.753400	0.526204
<b>C2</b>	0.088100	0.115333
<b>C3</b>	0.080700	0.154926
<b>I-C4</b>	0.011800	0.029859
<b>N-C4</b>	0.029900	0.075659
<b>I-C5</b>	0.007100	0.022302
<b>N-C5</b>	0.007800	0.024500
<b>C6</b>	0.003600	0.013283
<b>C7</b>	0.002300	0.009872
<b>MW</b>		<b>22.97</b>

Table 22: Mixture “Lab3\_MDT2\_Oil” Compositions

Component	Mole Fractions	Mass Fractions
N2	0.002125	0.000600
CO2	0.011044	0.004899
C1	0.449515	0.072685
C2	0.057070	0.017297
C3	0.055563	0.024695
I-C4	0.009728	0.005699
N-C4	0.027307	0.015997
I-C5	0.011136	0.008098
N-C5	0.015948	0.011598
C6	0.023760	0.020296
C7	0.032799	0.032593
C8	0.035812	0.040592
C9	0.027446	0.034993
C10	0.024693	0.034993
C11	0.019741	0.030794
C12	0.017316	0.029494
C13	0.016726	0.030894
C14	0.014862	0.029594
C15	0.013996	0.029894
C16	0.011791	0.026895
C17	0.010344	0.025095
C18	0.009953	0.025595
C19	0.009235	0.025095
C20	0.007577	0.021696
C21	0.006843	0.020596
C22	0.006019	0.018996
C23	0.005631	0.018596
C24	0.005072	0.017497
C25	0.004671	0.016797
C26	0.004354	0.016297
C27	0.004446	0.017297
C28	0.003665	0.014797
C29	0.003798	0.015897
C30+	0.040015	0.243151
MW		<b>99.22</b>

Table 23: Single-Stage Separation of Lab3\_MDT2\_Oil

Temp (C)	Pres (kPa)	GOR (sm3/m3)		Liq Den (g/cm3)		Liq MW	
		Expt	Calc	Expt	Calc	Expt	Calc
15.000	101.33	154.50	147.91	0.85930	0.85071	225.00	220.51
RMS % Err			4.26		1.00		2.00
Ave % Bias			-4.26		-1.00		-2.00

Table 23: Single-Stage Separation of Lab3\_MDT2\_Oil (cont.)

Temp (C)	Pres (kPa)	C1 y (%)		C2 y (%)		C4+ y (%)	
		Expt	Calc	Expt	Calc	Expt	Calc
15.000	101.33	70.770	72.457	9.0000	9.0225	9.7000	8.1537
<b>RMS % Err</b>			2.38	0.25		15.94	
<b>Ave % Bias</b>			2.38	0.25		-15.94	

Table 24: Multi-Stage Separation of Lab3\_MDT2\_Oil

Temp (C)	Pres (kPa)	Liq Vol (m3)		Cum GOR (sm3/m3)		Liq Den (g/cm3)	
		Expt	Calc	Expt	Calc	Expt	Calc
67.000	1599.6	1.1040	1.0818	114.50	121.49	0.80300	0.81037
85.000	179.0	1.0770	1.0306	132.10	143.59	0.79500	0.81959
15.000	101.3	1.0000	0.9926	142.20	149.09	0.85700	0.85096
<b>RMS % Err</b>			2.72	6.14		1.78	
<b>Ave % Bias</b>			-2.30	5.95		1.01	

Table 24: Multi-Stage Separation of Lab3\_MDT2\_Oil (cont.)

Temp (C)	Pres (kPa)	C1 y (%)		C2 y (%)		C4+ y (%)	
		Expt	Calc	Expt	Calc	Expt	Calc
67.000	1599.6	78.172	77.862	8.751	8.584	4.392	4.887
85.000	179.0	28.398	28.034	11.531	12.280	38.405	37.311
15.000	101.3		53.554		9.020		8.930
<b>RMS % Err</b>			0.43	4.70		2.21	
<b>Ave % Bias</b>			-0.43	2.52		-0.78	

Table 25: Mixture “Lab3\_MDT3\_Oil” Compositions

Component	Mole Fractions	Mass Fractions
N2	0.001778	0.000500
CO2	0.011315	0.005002
C1	0.454433	0.073222
C2	0.056638	0.017105
C3	0.055109	0.024407
I-C4	0.009253	0.005402
N-C4	0.026731	0.015605
I-C5	0.010905	0.007902
N-C5	0.015737	0.011403
C6	0.023738	0.020206
C7	0.032729	0.032410
C8	0.035867	0.040512
C9	0.027242	0.034610
C10	0.024368	0.034410
C11	0.019370	0.030109
C12	0.016915	0.028709
C13	0.016304	0.030009
C14	0.014518	0.028809
C15	0.013582	0.028909
C16	0.011487	0.026108
C17	0.010054	0.024307
C18	0.009642	0.024707
C19	0.008977	0.024307
C20	0.007362	0.021006
C21	0.006638	0.019906
C22	0.005853	0.018406
C23	0.005471	0.018005
C24	0.004947	0.017005
C25	0.004634	0.016605
C26	0.004130	0.015405
C27	0.004154	0.016105
C28	0.003754	0.015105
C29	0.003694	0.015405
C30+	0.042671	0.258378
MW		<b>99.57</b>

Table 26: Single-Stage Separation of Lab3\_MDT3\_Oil

Temp (C)	Pres (kPa)	GOR (sm3/m3)		Liq Den (g/cm3)		Liq MW	
		Expt	Calc	Expt	Calc	Expt	Calc
15.000	101.33	149.80	148.41	0.85830	0.85219	228.00	223.40
RMS % Err			0.93		0.71		2.02
Ave % Bias			-0.93		-0.71		-2.02

Table 26: Single-Stage Separation of Lab3\_MDT3\_Oil (cont.)

<b>Temp</b> (C)	<b>Pres</b> (kPa)	<b>C1 y</b> (%)		<b>C2 y</b> (%)		<b>C4+ y</b> (%)	
		<b>Expt</b>	<b>Calc</b>	<b>Expt</b>	<b>Calc</b>	<b>Expt</b>	<b>Calc</b>
15.000	101.33	72.450	72.846	9.0200	8.9076	8.1500	8.0050
<b>RMS % Err</b>			0.55		1.25		1.78
<b>Ave % Bias</b>			0.55		-1.25		-1.78

# Figures

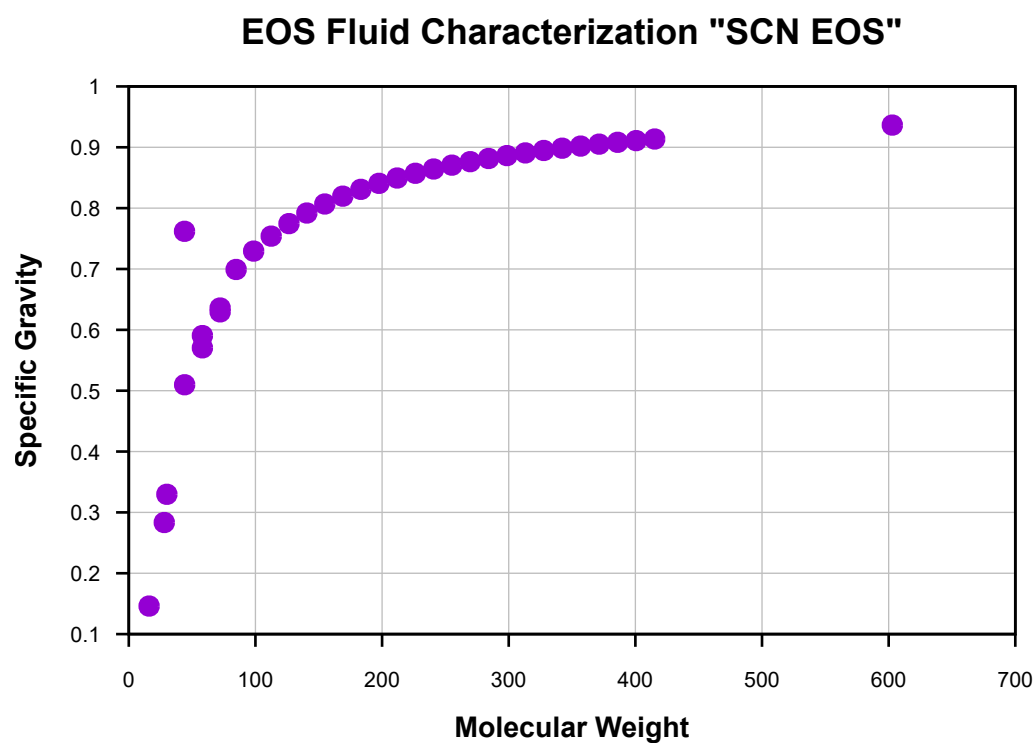


Figure 1: Specific Gravity vs. Molecular Weight for EOS Fluid Characterization "SCN EOS."

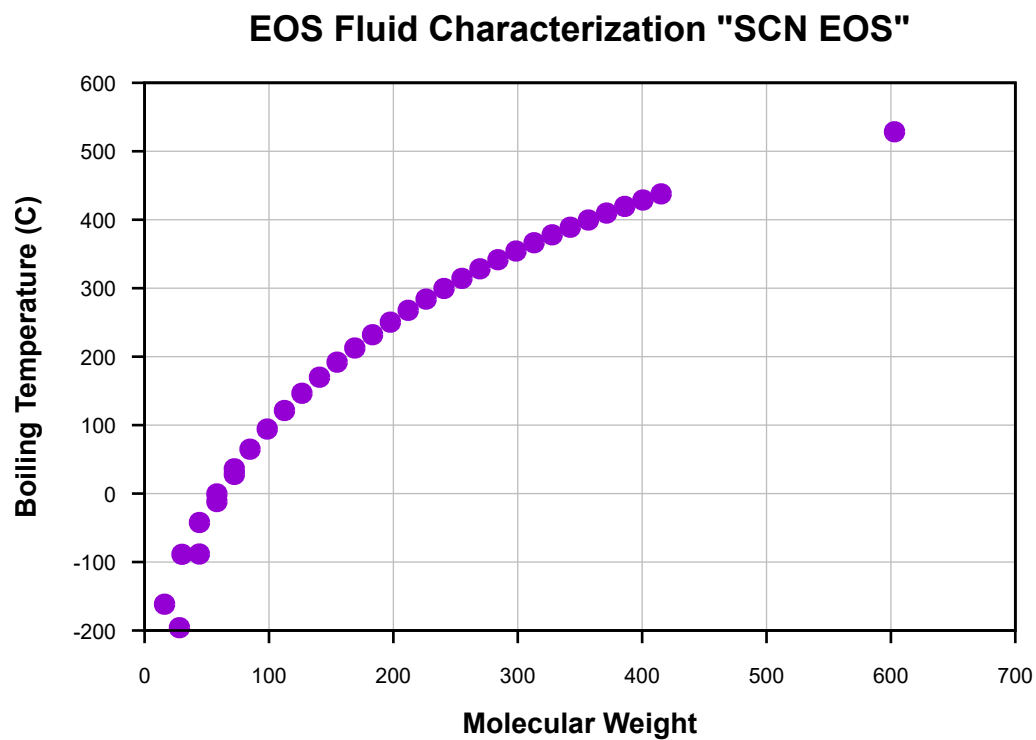


Figure 2: Boiling Temperature vs. Molecular Weight for EOS Fluid Characterization "SCN EOS."

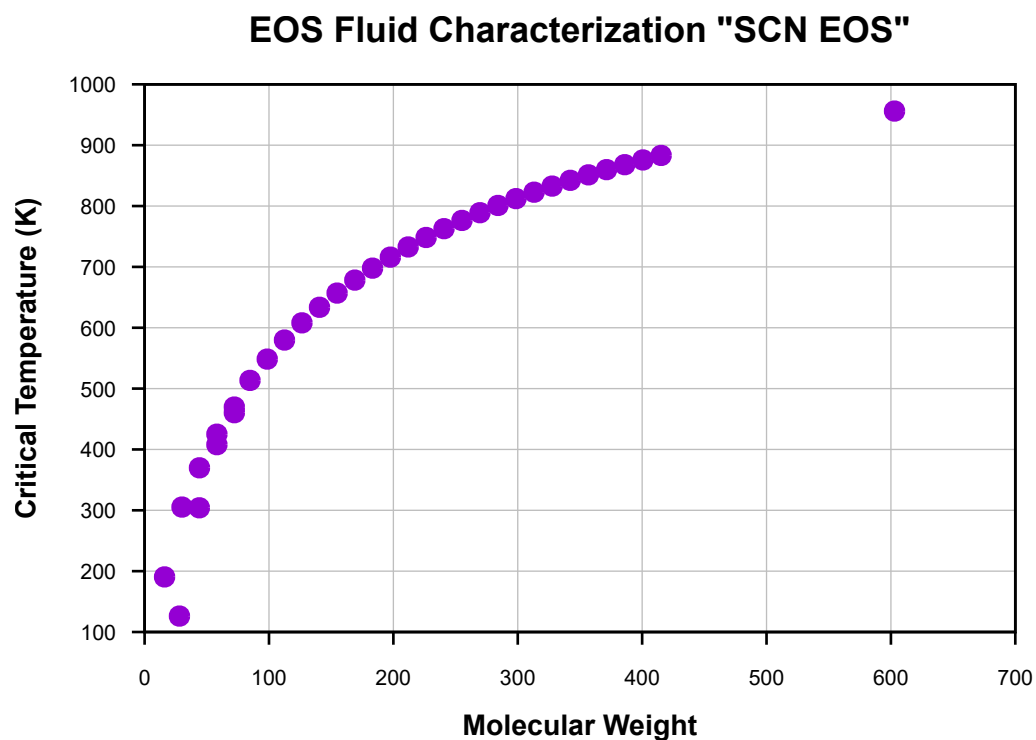


Figure 3: Critical Temperature vs. Molecular Weight for EOS Fluid Characterization "SCN EOS."

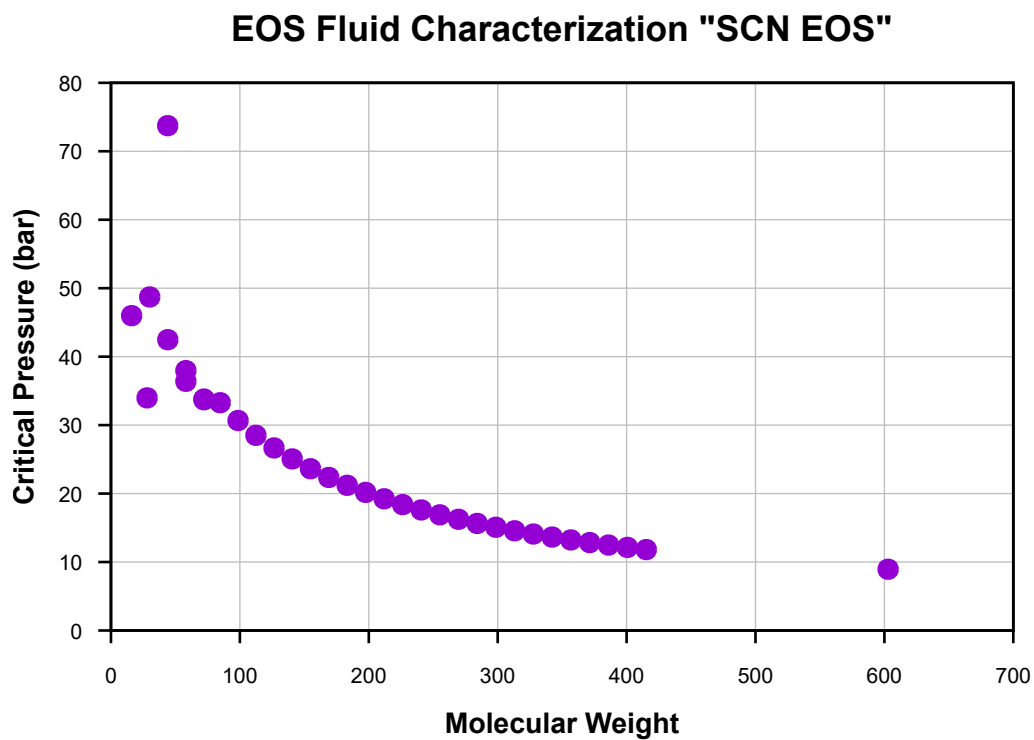


Figure 4: Critical Pressure vs. Molecular Weight for EOS Fluid Characterization "SCN EOS."

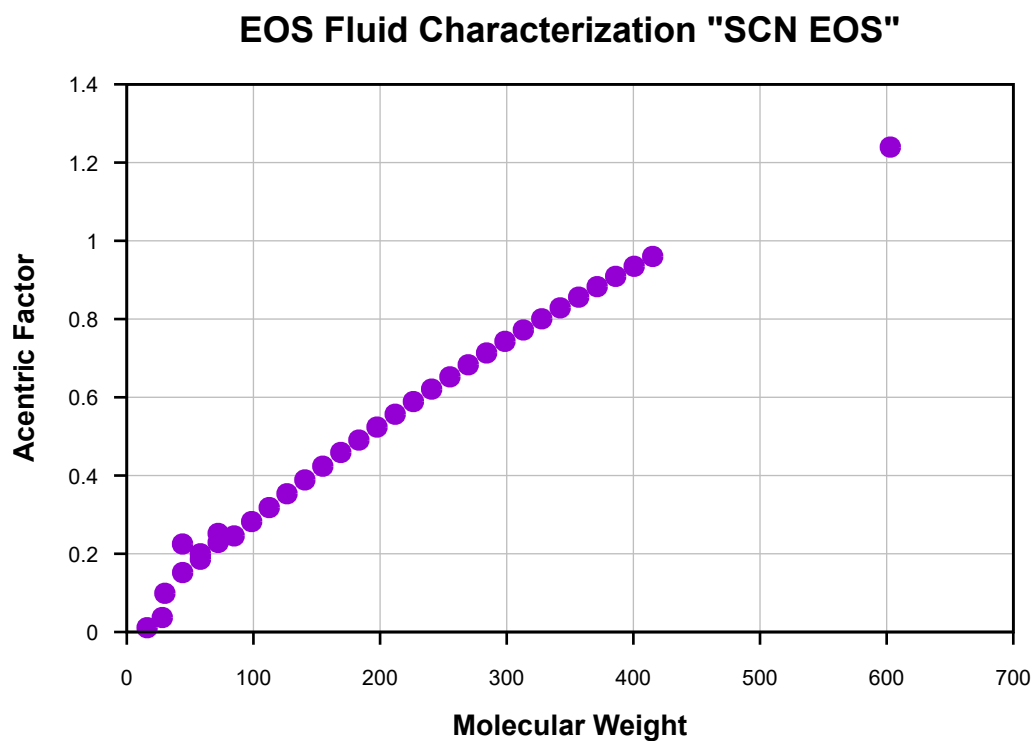


Figure 5: Acentric Factor vs. Molecular Weight for EOS Fluid Characterization "SCN EOS."



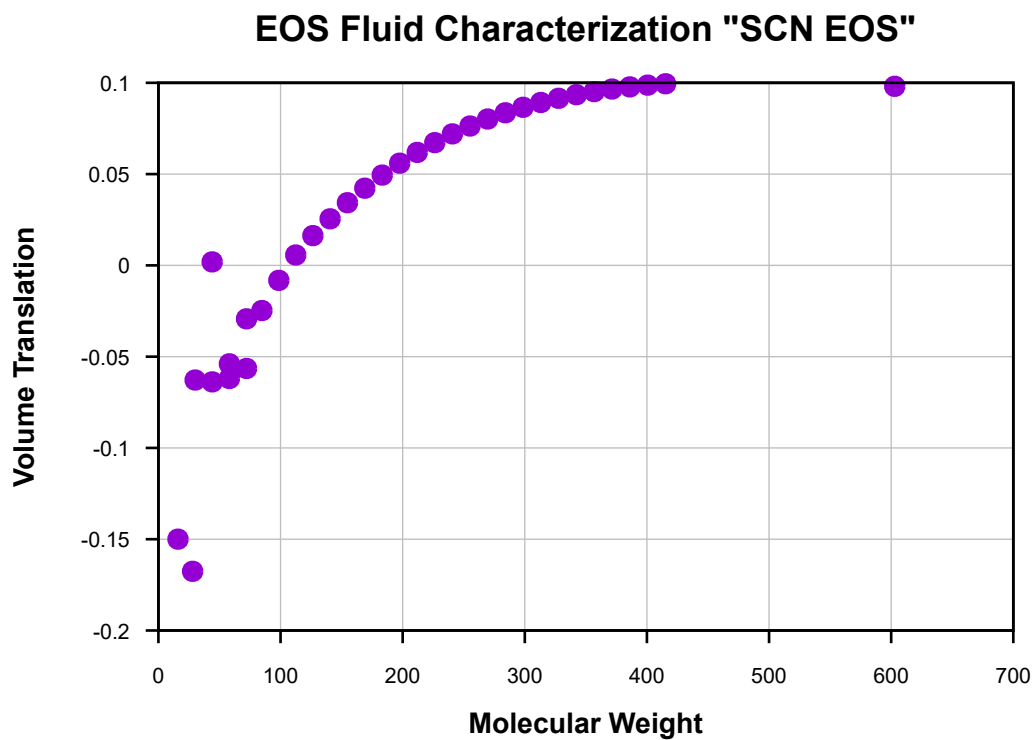


Figure 6: Volume Translation vs. Molecular Weight for EOS Fluid Characterization "SCN EOS."

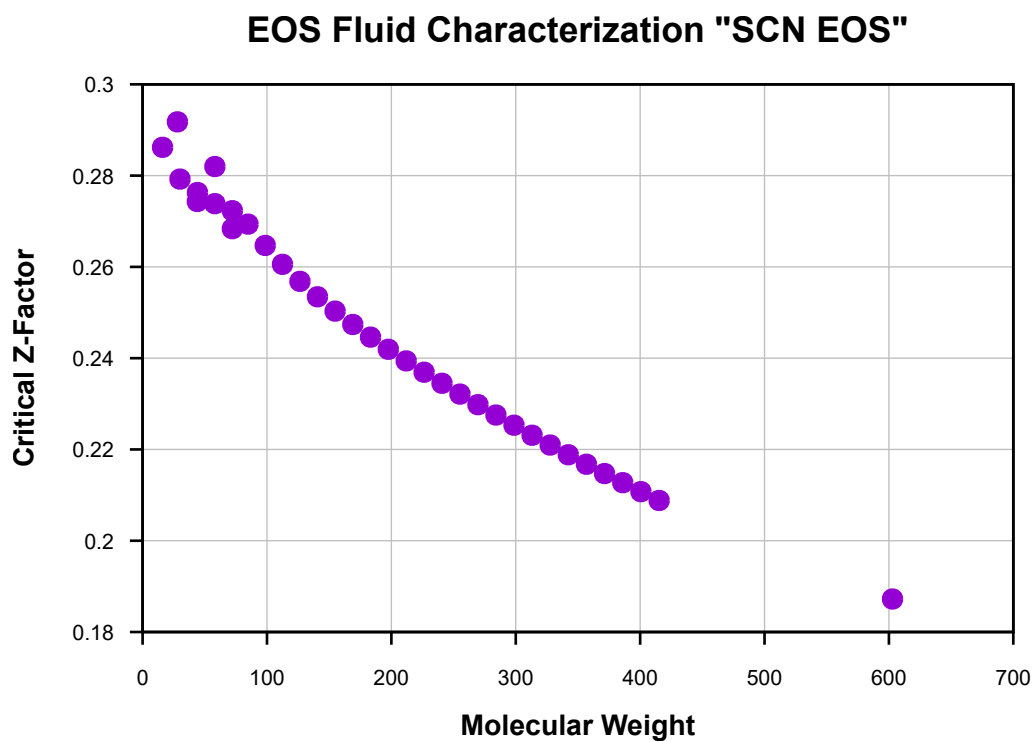


Figure 7: Critical Z-Factor vs. Molecular Weight for EOS Fluid Characterization "SCN EOS."

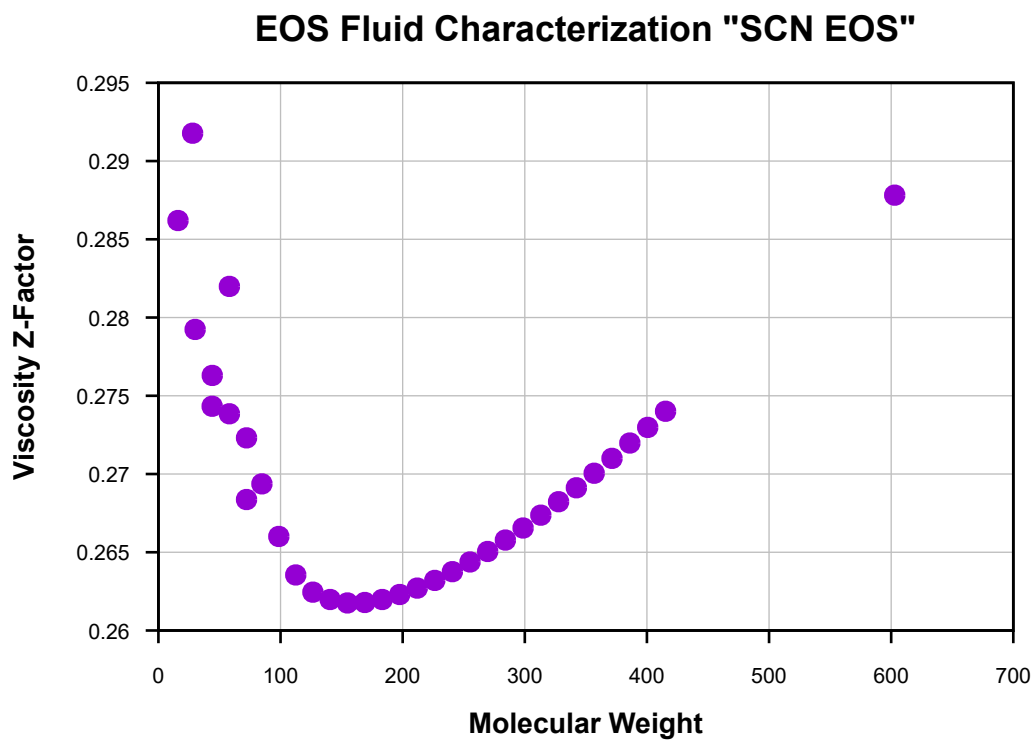


Figure 8: Viscosity Z-Factor vs. Molecular Weight for EOS Fluid Characterization "SCN EOS."

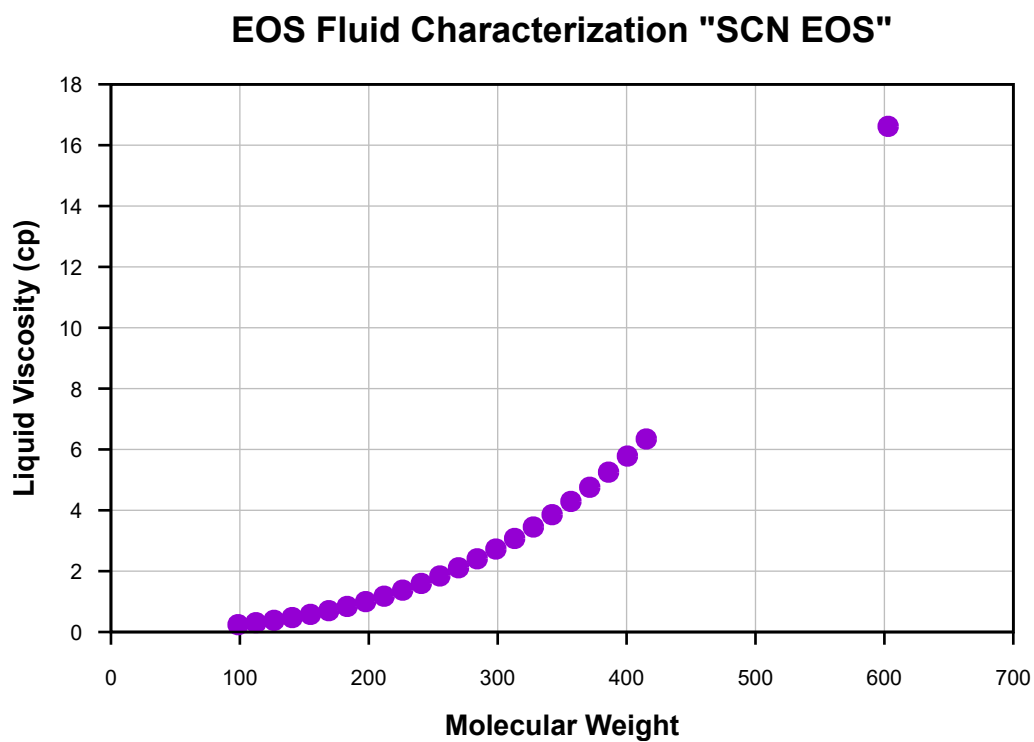


Figure 9: Liquid Viscosity vs. Molecular Weight for EOS Fluid Characterization "SCN EOS."

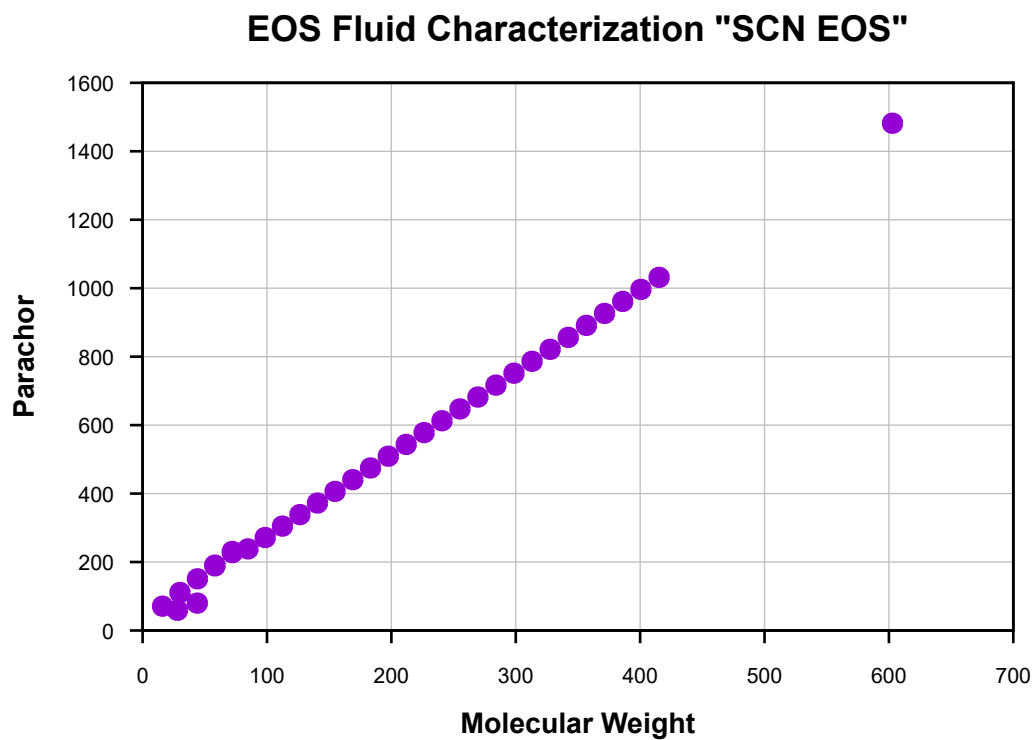


Figure 10: Parachor vs. Molecular Weight for EOS Fluid Characterization “SCN EOS.”

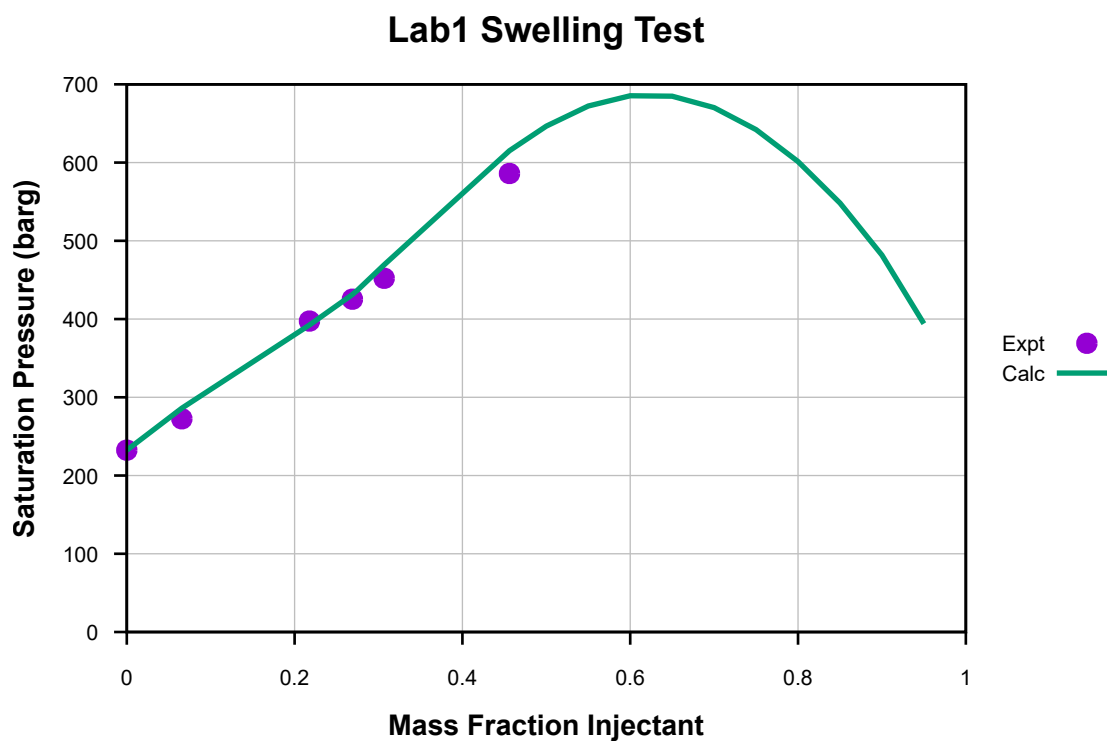


Figure 11: Saturation Pressure vs. Mass Fraction Injectant for Lab1 Swelling Test.

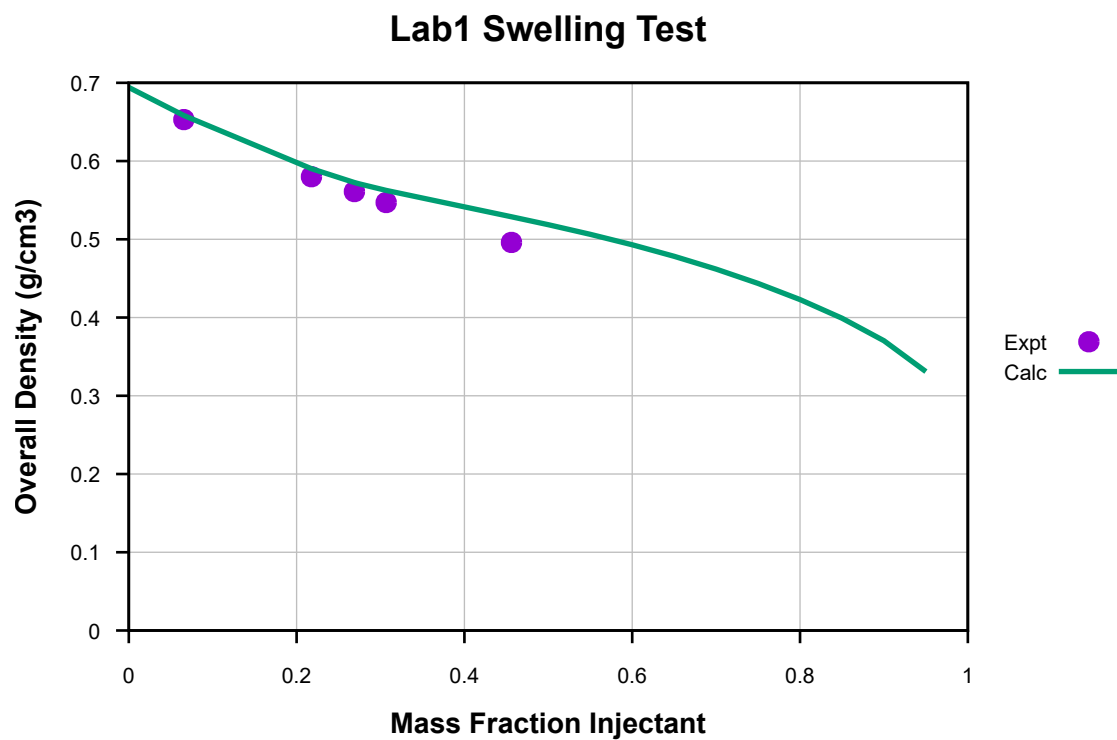


Figure 12: Overall Density vs. Mass Fraction Injectant for Lab1 Swelling Test.



Figure 13: Liquid Volume Fraction vs. Mass Fraction Injectant for Lab1 Swelling Test.

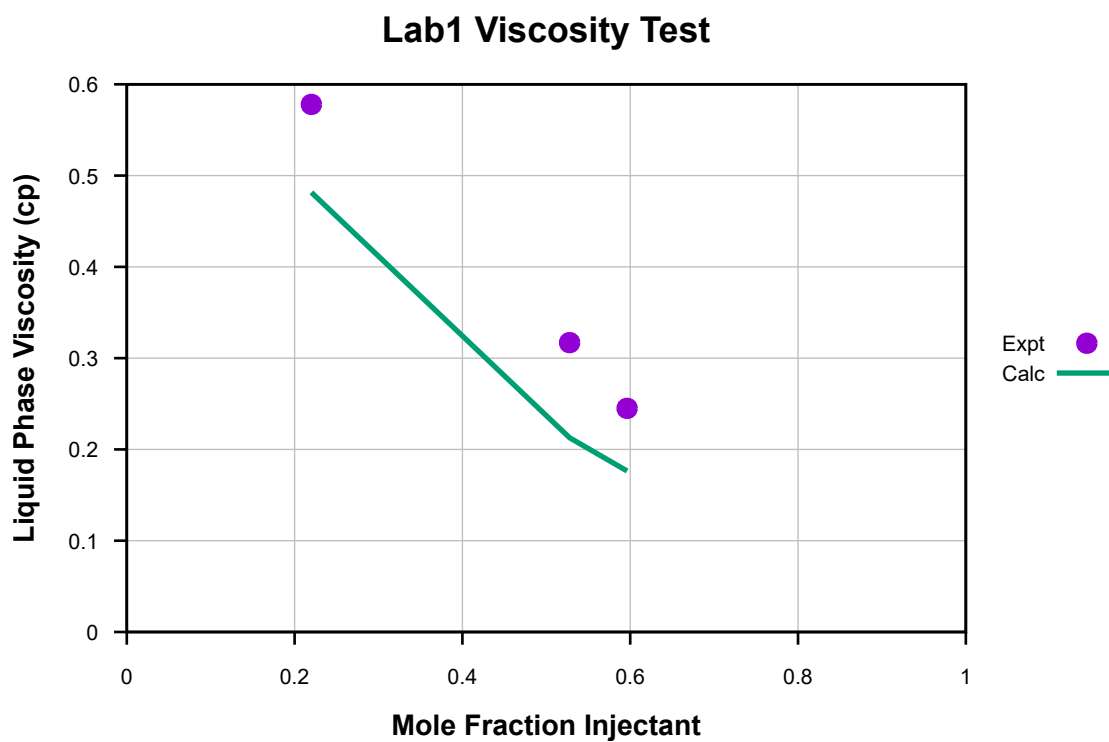


Figure 14: Liquid Phase Viscosity vs. Mole Fraction Injectant for Lab1 Viscosity Test.

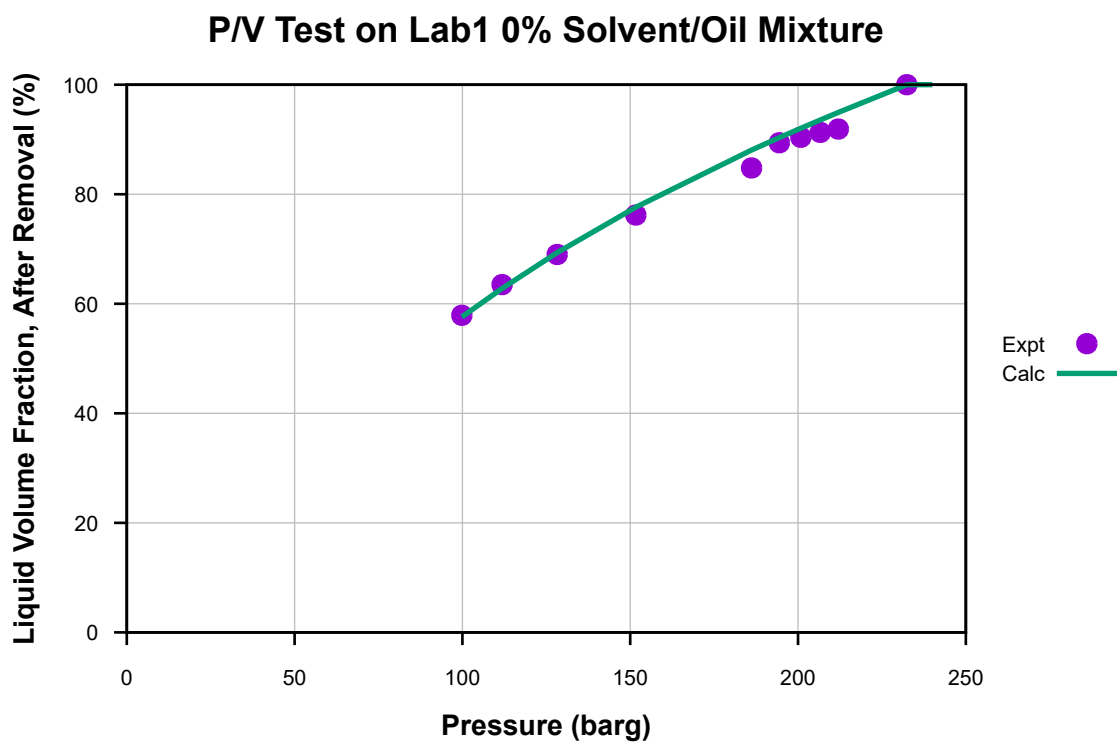


Figure 15: Liquid Volume Fraction, After Removal, vs. Pressure for P/V Test on Lab1 0% Solvent/Oil Mixture.

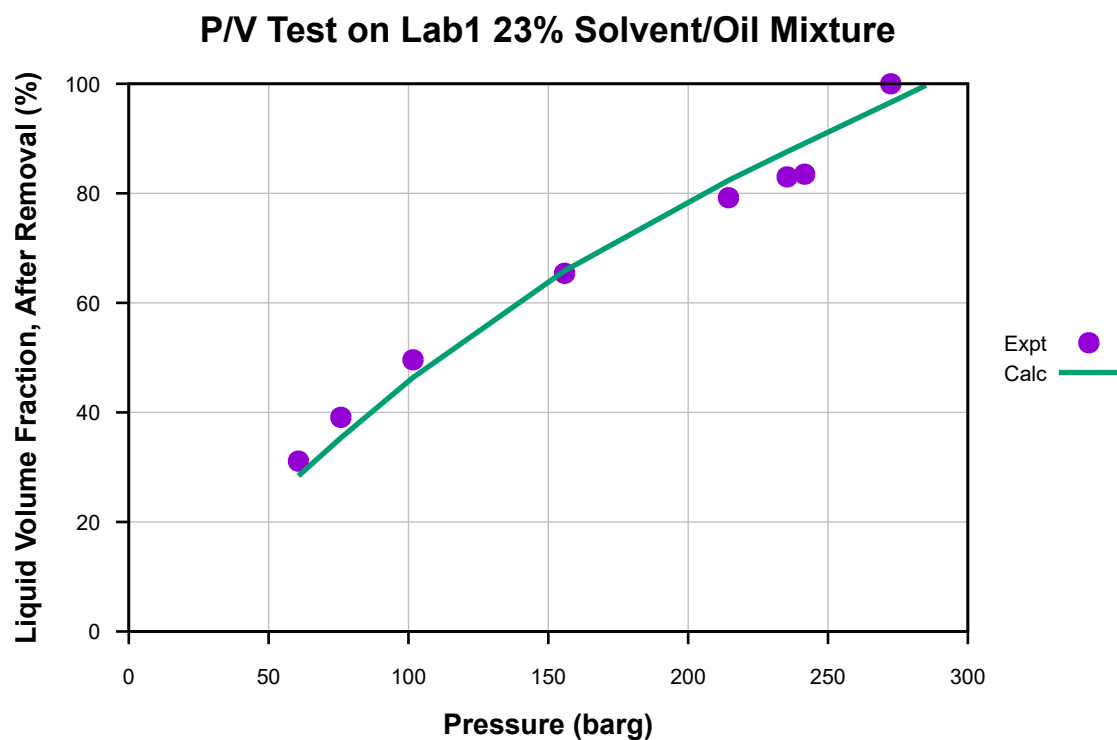


Figure 16: Liquid Volume Fraction, After Removal, vs. Pressure for P/V Test on Lab1 23% Solvent/Oil Mixture.

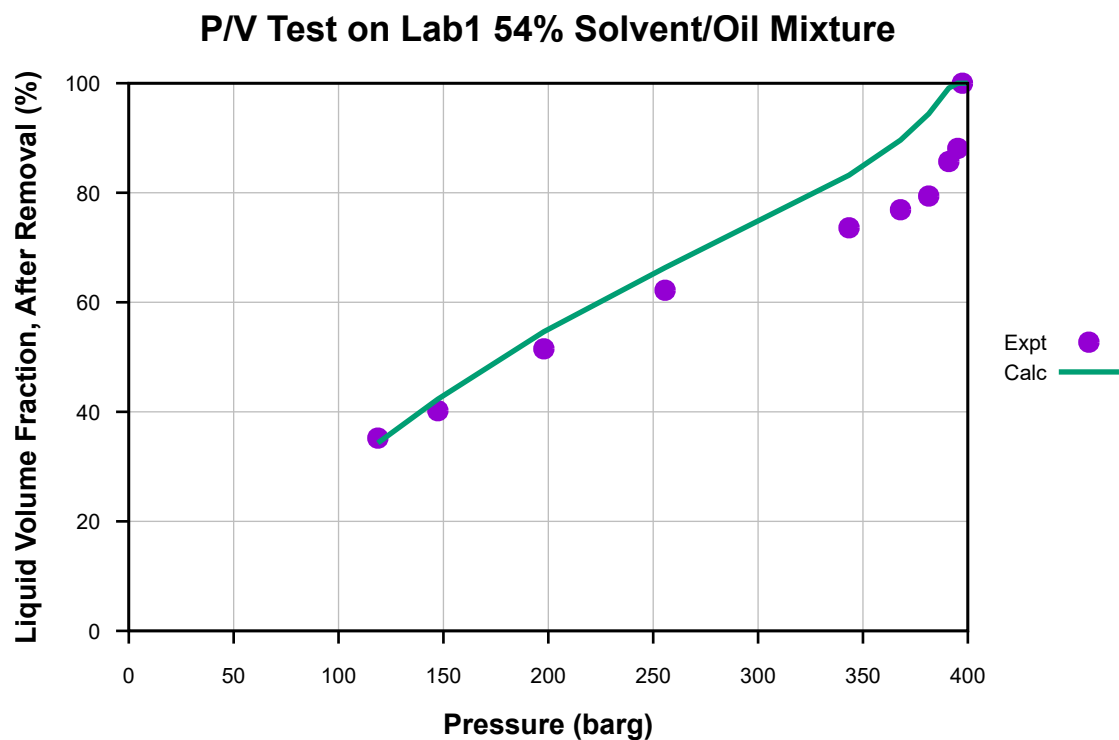


Figure 17: Liquid Volume Fraction, After Removal, vs. Pressure for P/V Test on Lab1 54% Solvent/Oil Mixture.

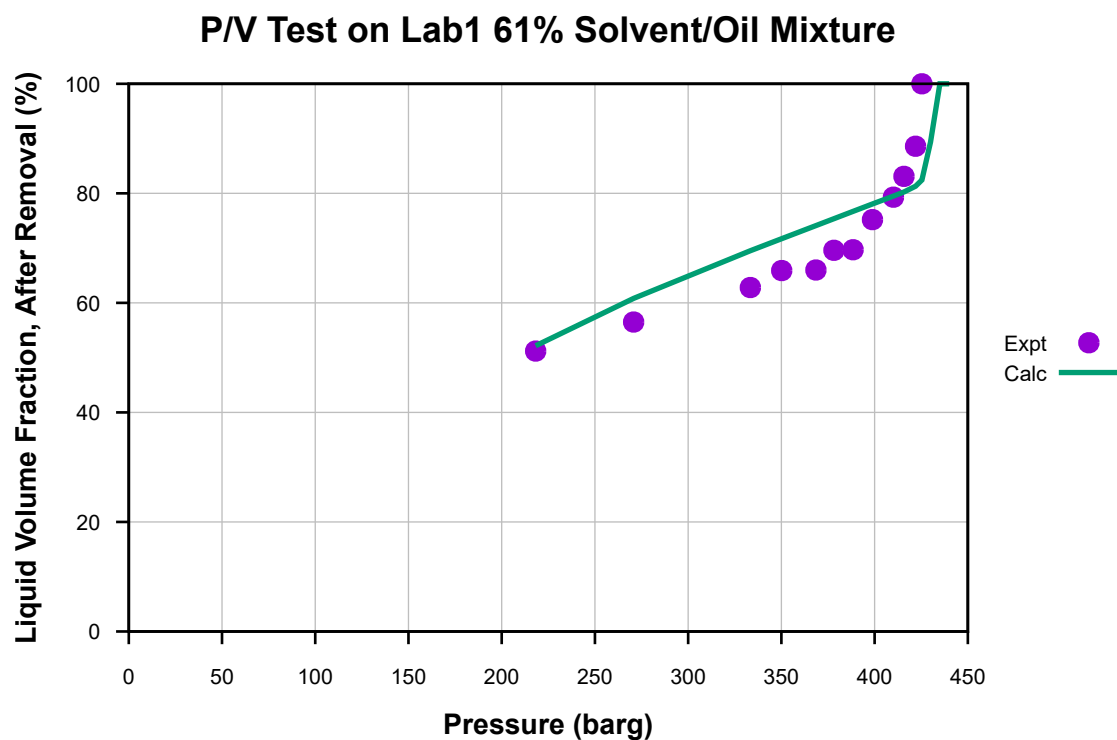


Figure 18: Liquid Volume Fraction, After Removal, vs. Pressure for P/V Test on Lab1 61% Solvent/Oil Mixture.

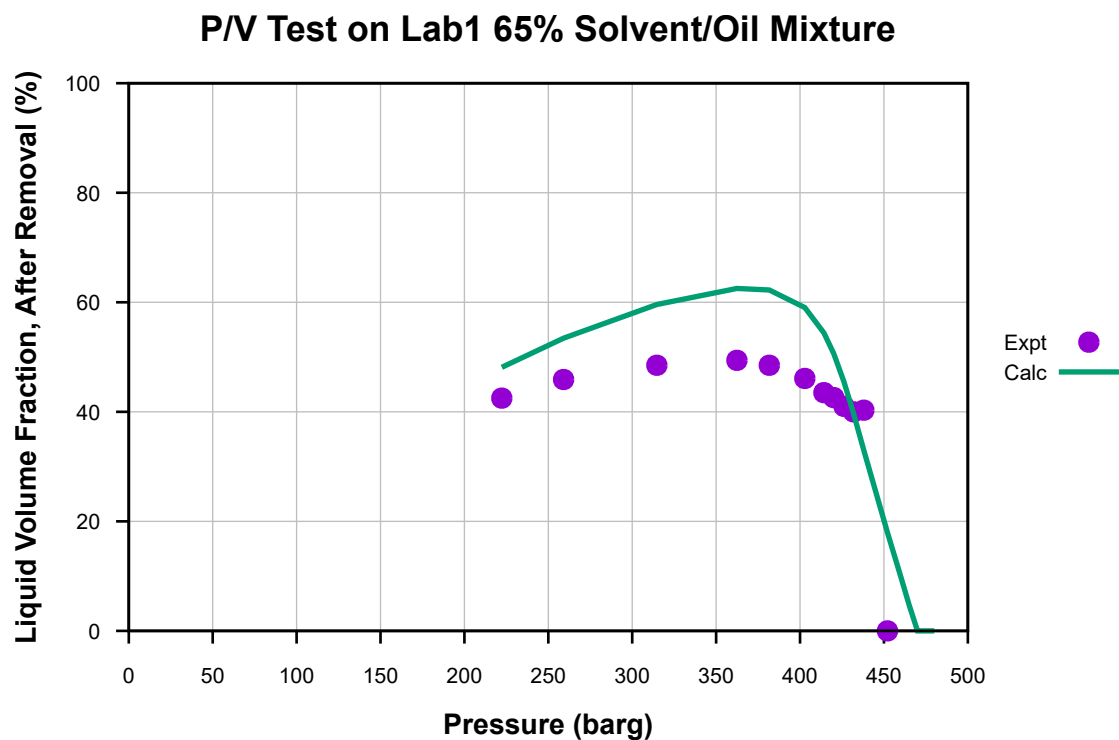


Figure 19: Liquid Volume Fraction, After Removal, vs. Pressure for P/V Test on Lab1 65% Solvent/Oil Mixture.

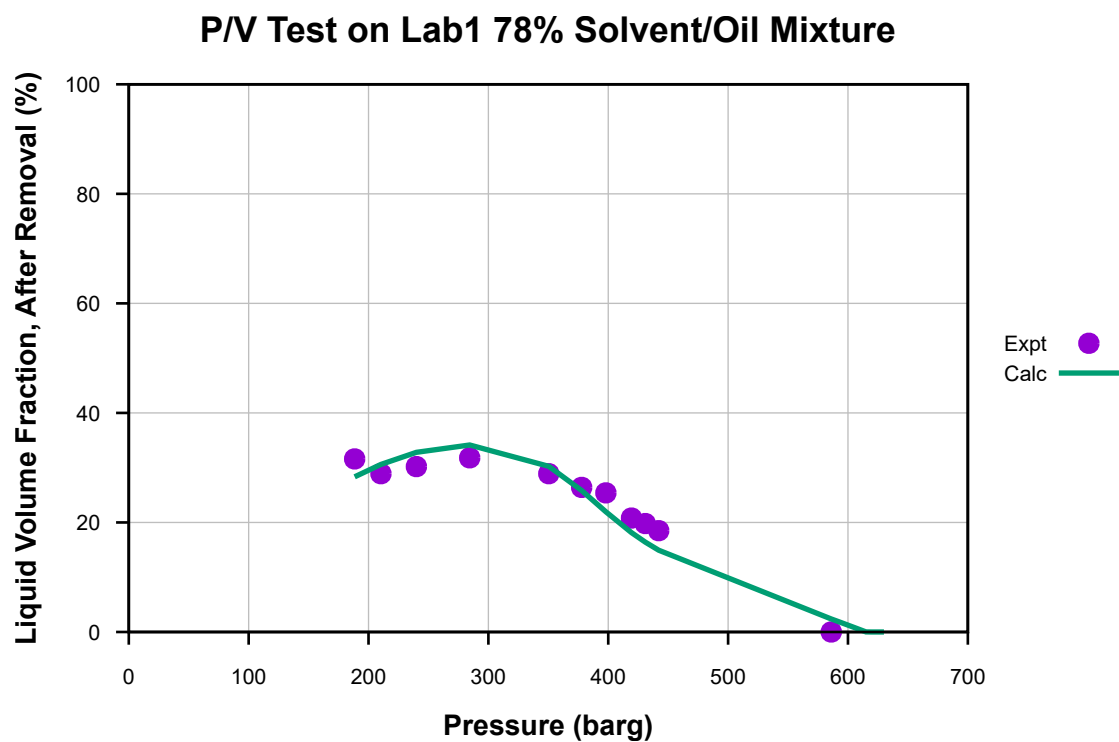


Figure 20: Liquid Volume Fraction, After Removal, vs. Pressure for P/V Test on Lab1 78% Solvent/Oil Mixture.

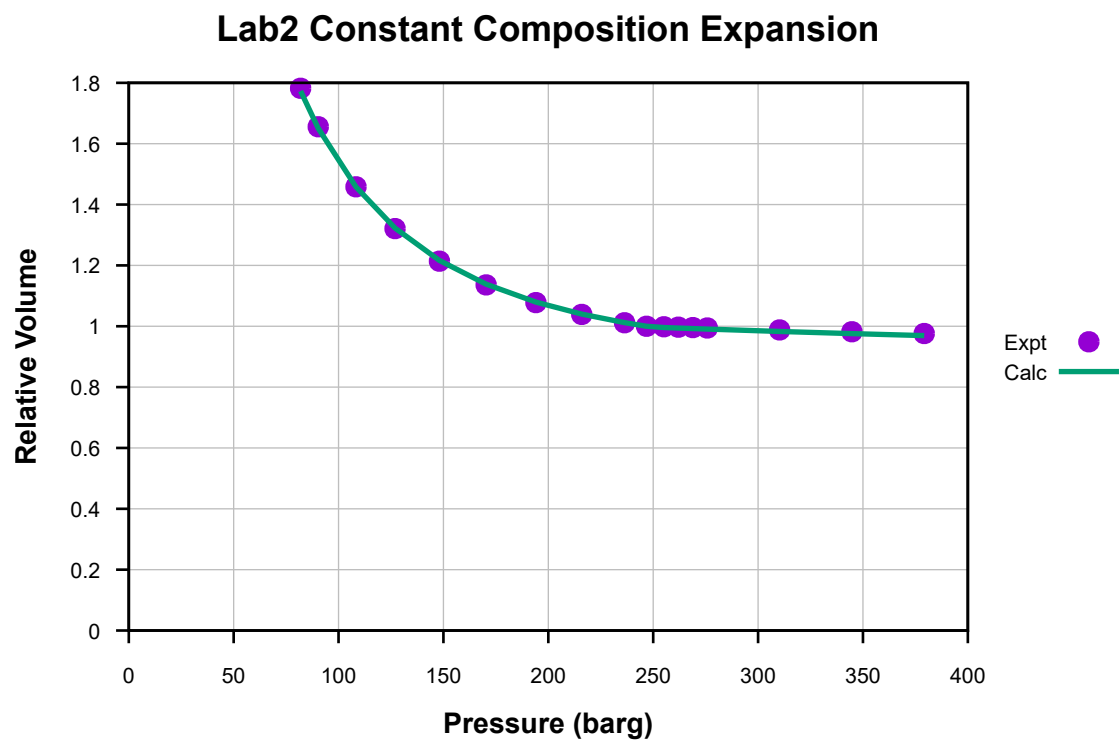


Figure 21: Relative Volume vs. Pressure for Lab2 Constant Composition Expansion.



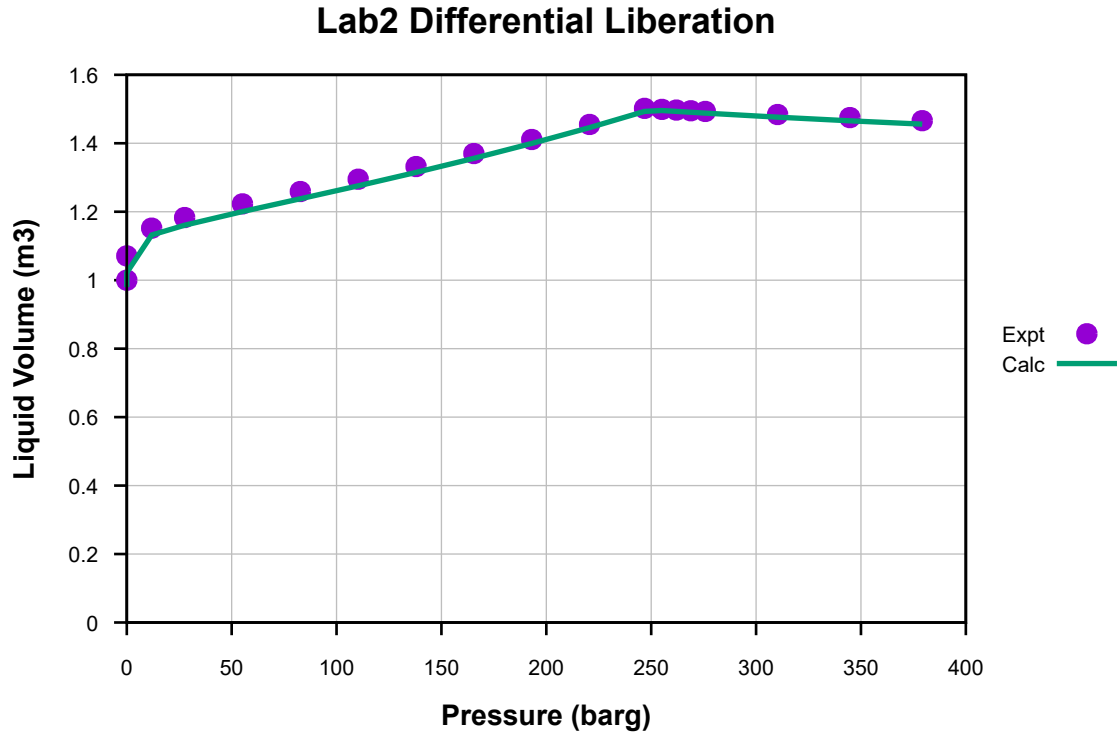


Figure 22: Liquid Volume vs. Pressure for Lab2 Differential Liberation.

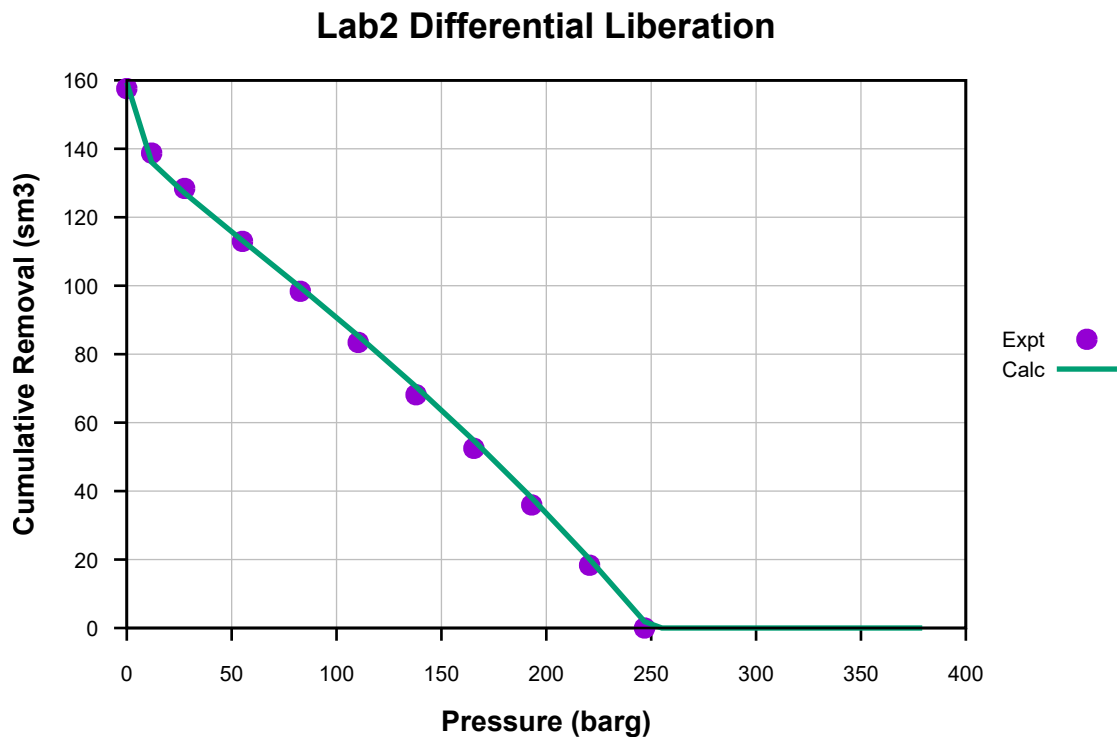


Figure 23: Cumulative Removal vs. Pressure for Lab2 Differential Liberation.

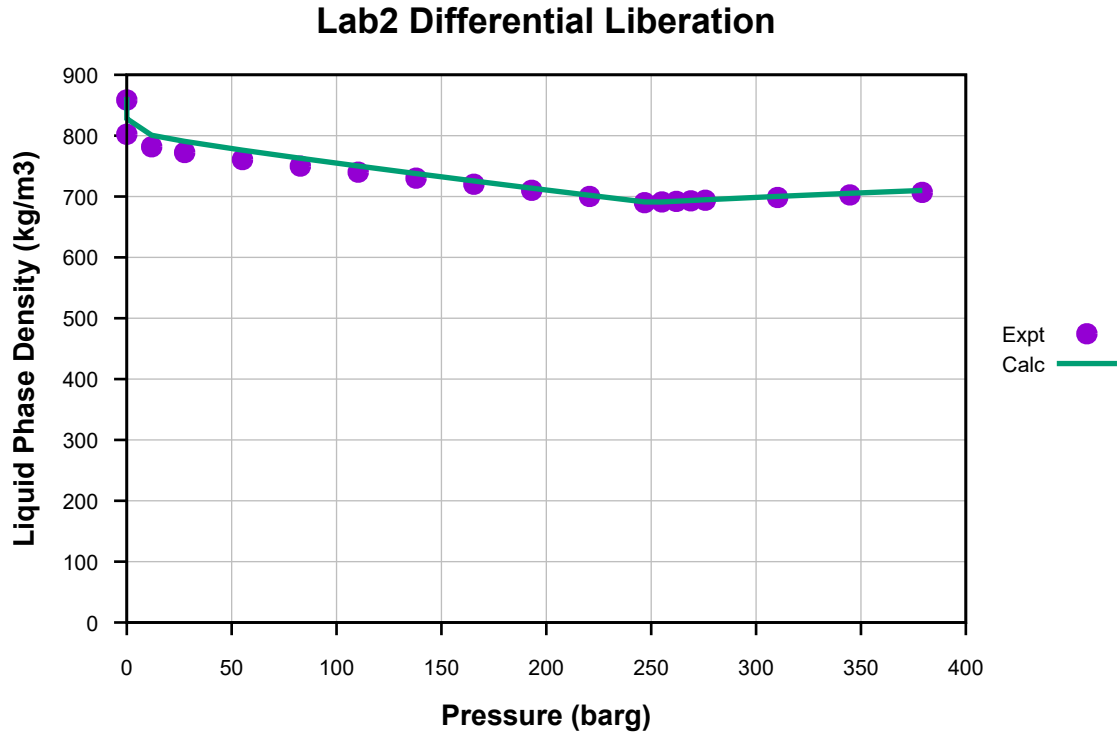


Figure 24: Liquid Phase Density vs. Pressure for Lab2 Differential Liberation.

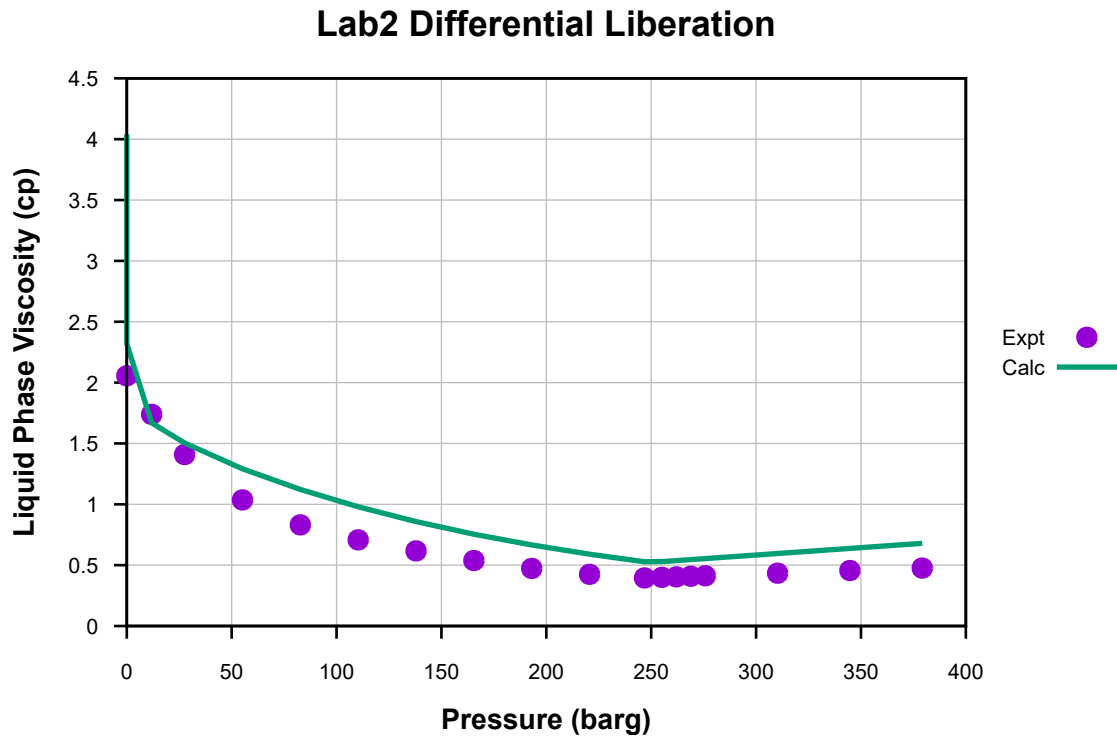


Figure 25: Liquid Phase Viscosity vs. Pressure for Lab2 Differential Liberation.

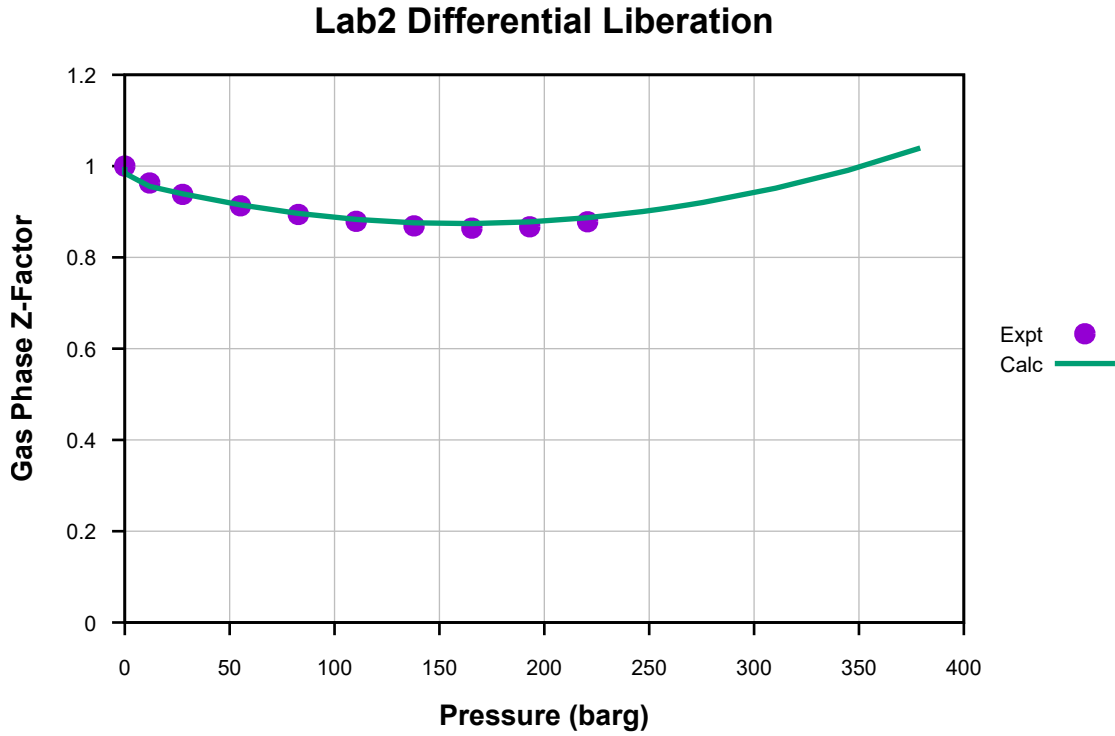


Figure 26: Gas Phase Z-Factor vs. Pressure for Lab2 Differential Liberation.

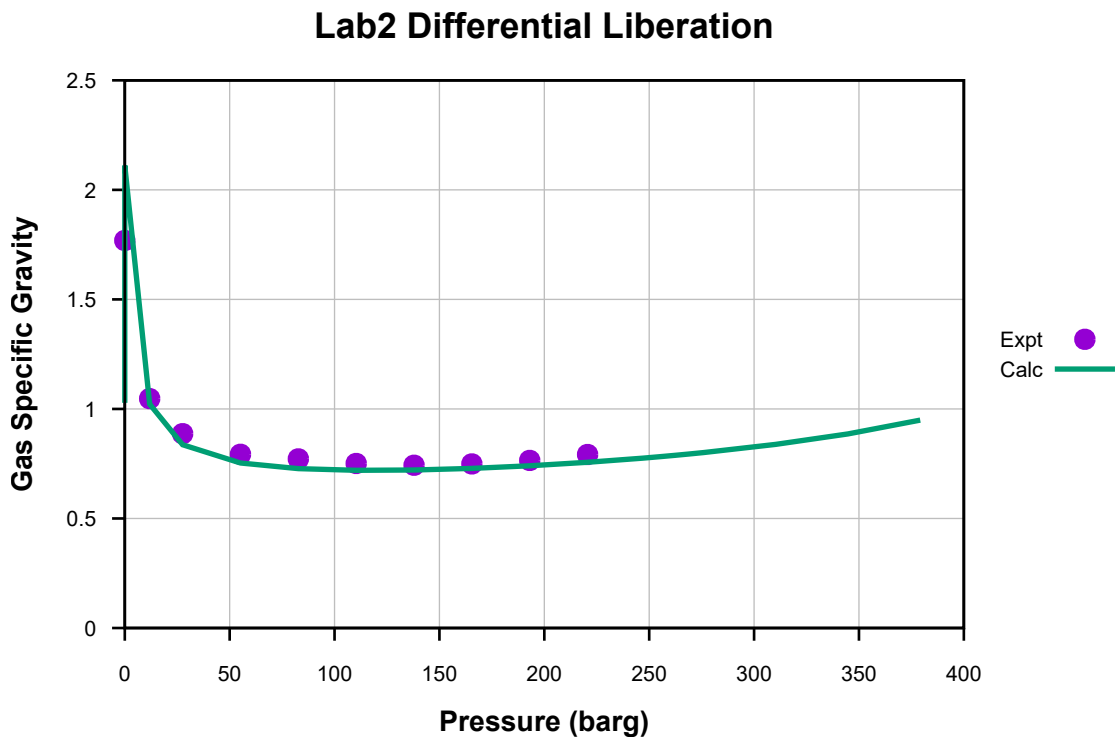


Figure 27: Gas Specific Gravity vs. Pressure for Lab2 Differential Liberation.

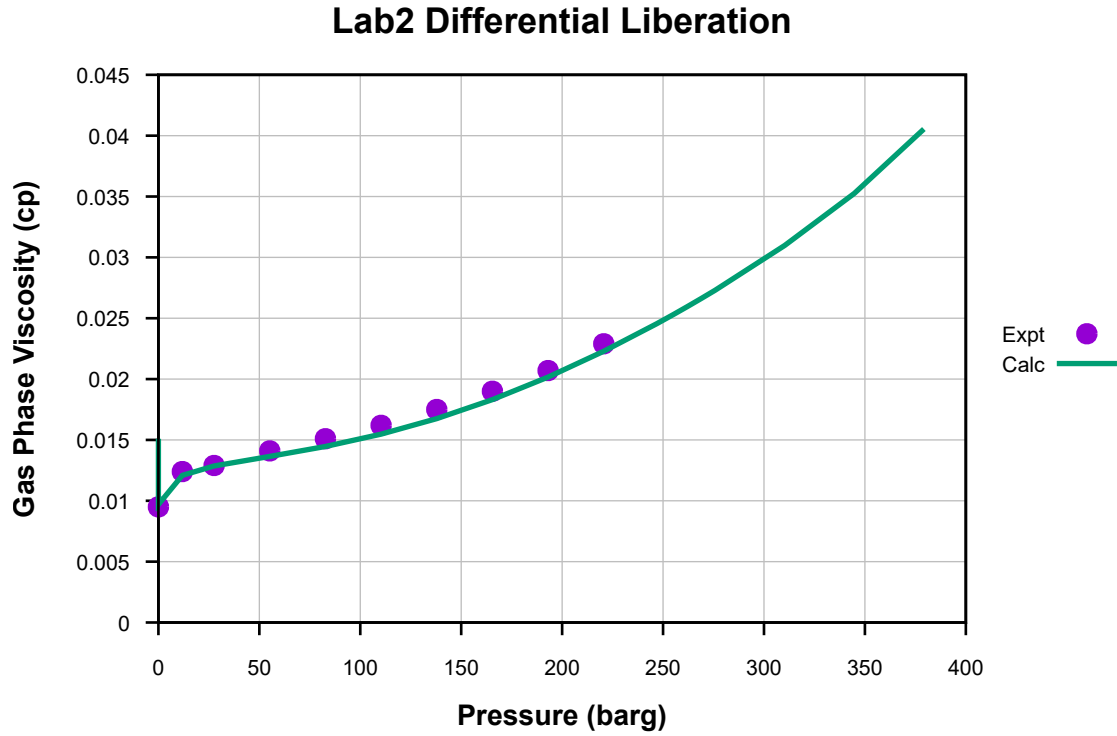


Figure 28: Gas Phase Viscosity vs. Pressure for Lab2 Differential Liberation.

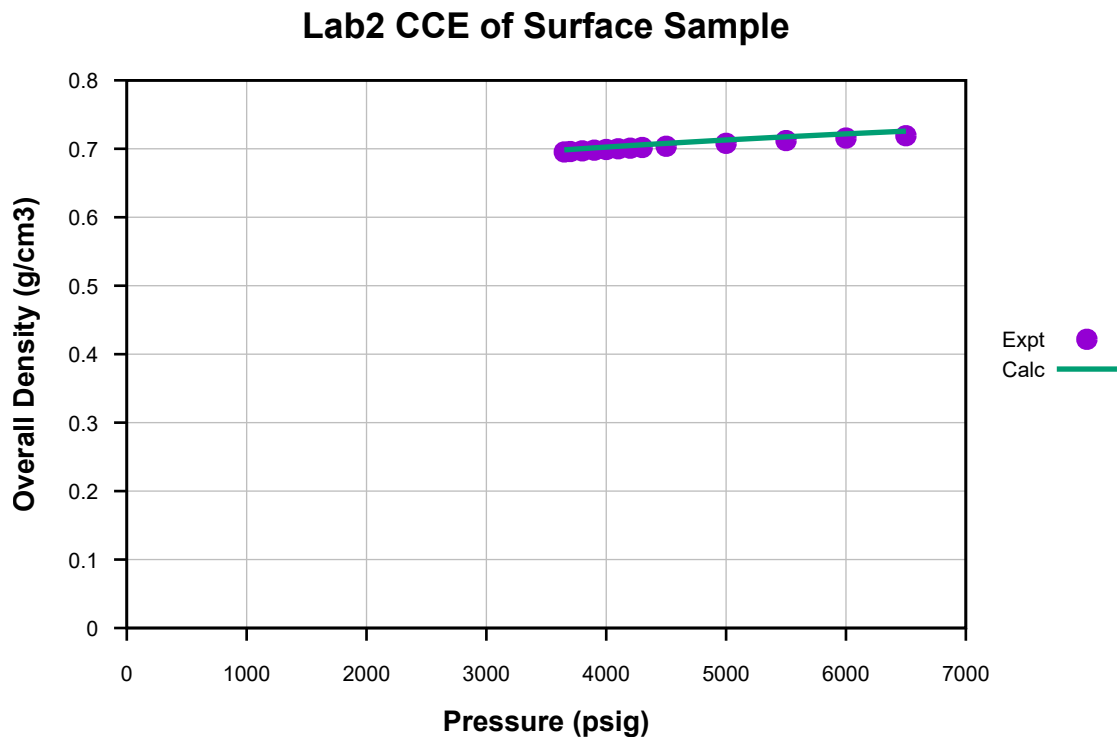


Figure 29: Overall Density vs. Pressure for Lab2 CCE of Surface Sample.

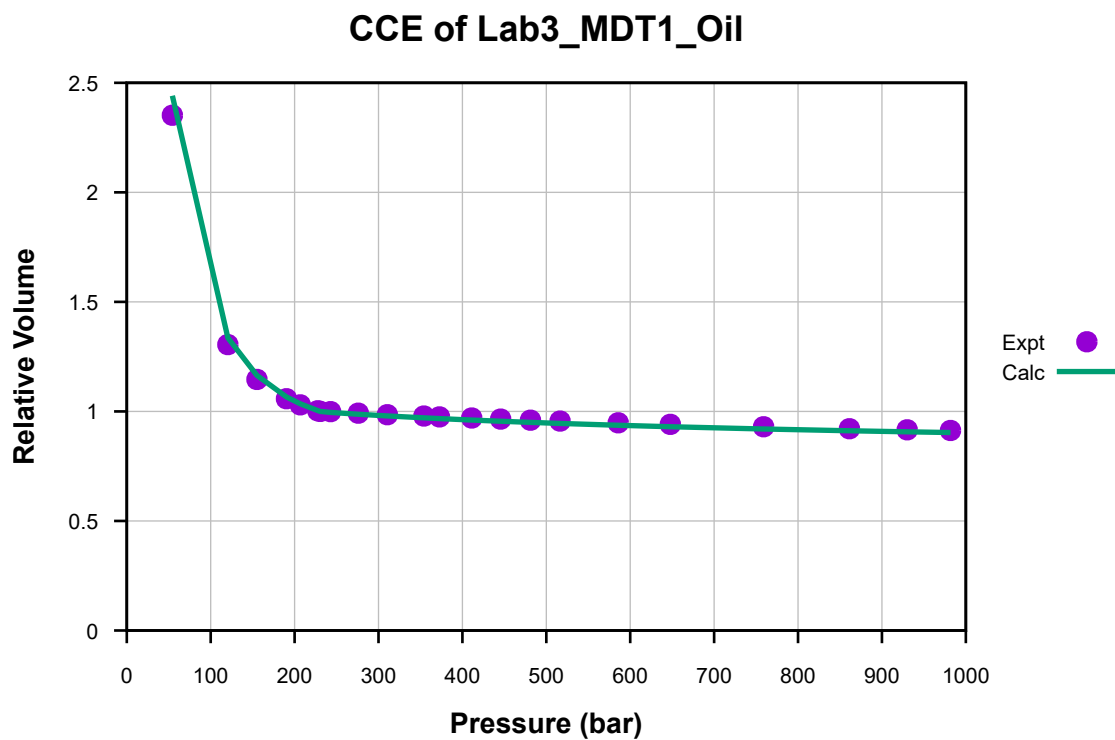


Figure 30: Relative Volume vs. Pressure for CCE of Lab3\_MDT1\_Oil.

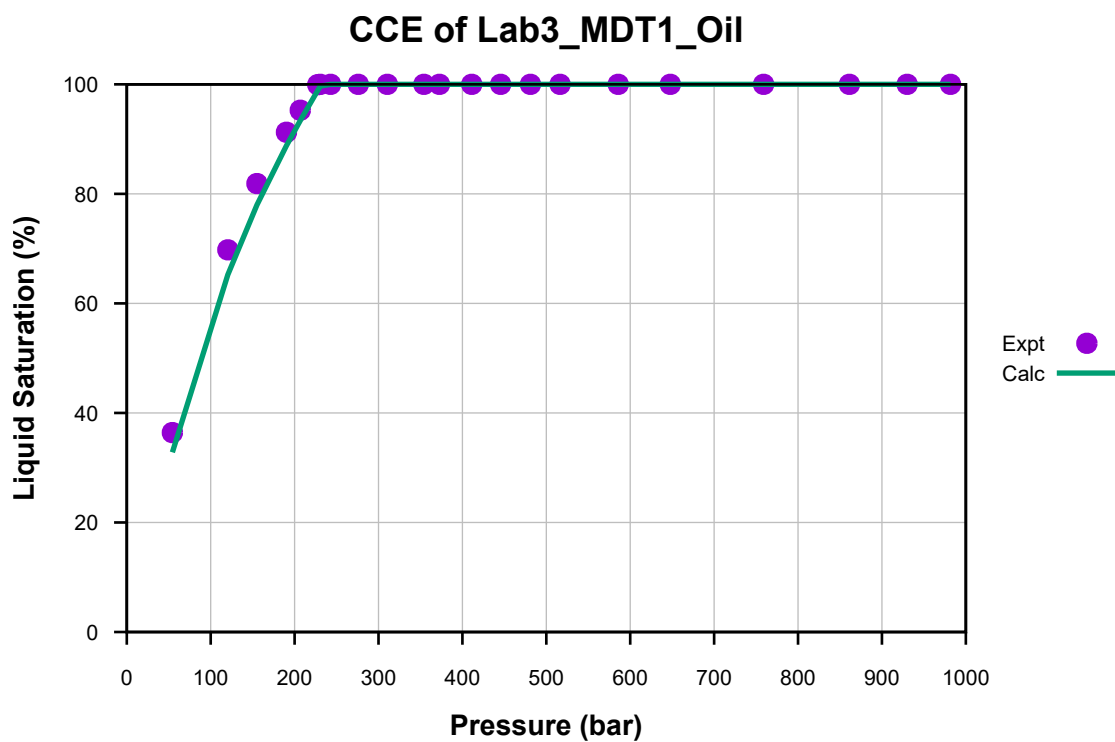


Figure 31: Liquid Saturation vs. Pressure for CCE of Lab3\_MDT1\_Oil.

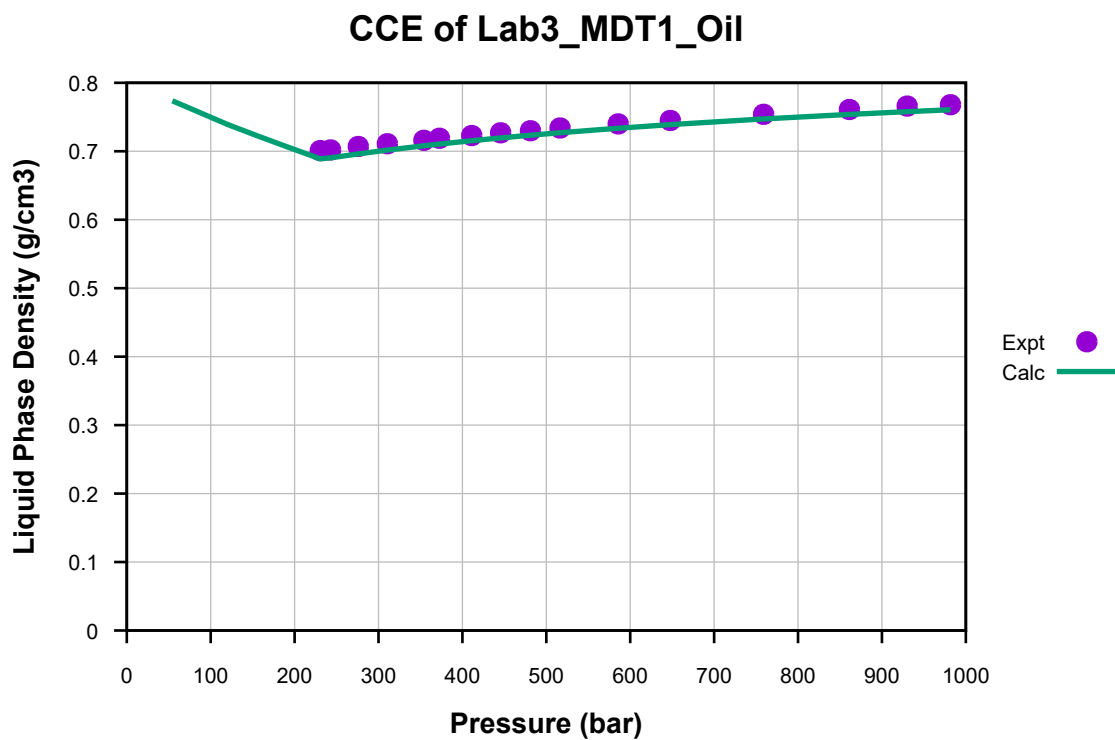


Figure 32: Liquid Phase Density vs. Pressure for CCE of Lab3\_MDT1\_Oil.

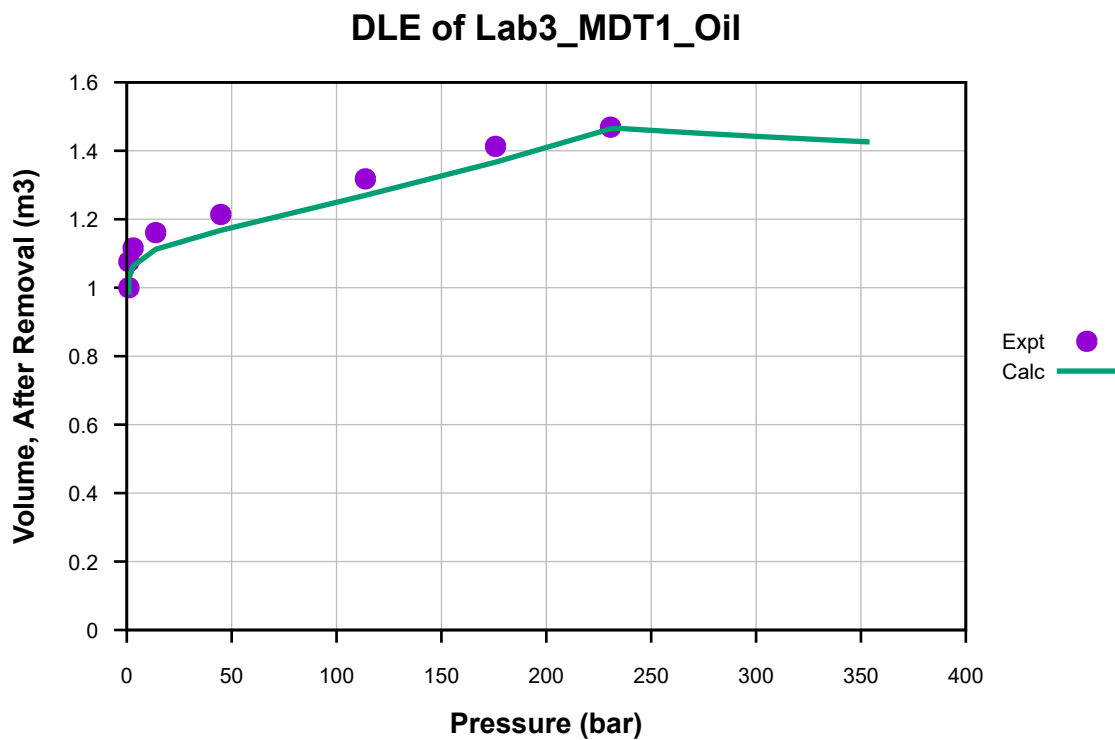


Figure 33: Volume, After Removal, vs. Pressure for DLE of Lab3\_MDT1\_Oil.

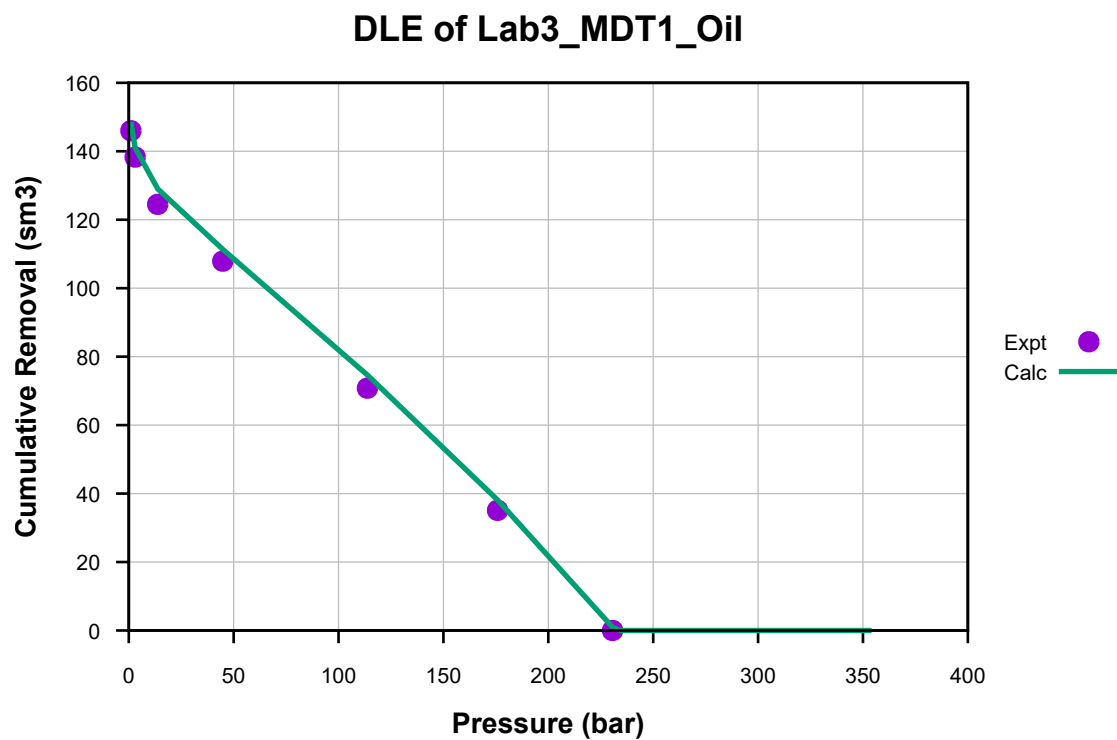


Figure 34: Cumulative Removal vs. Pressure for DLE of Lab3\_MDT1\_Oil.

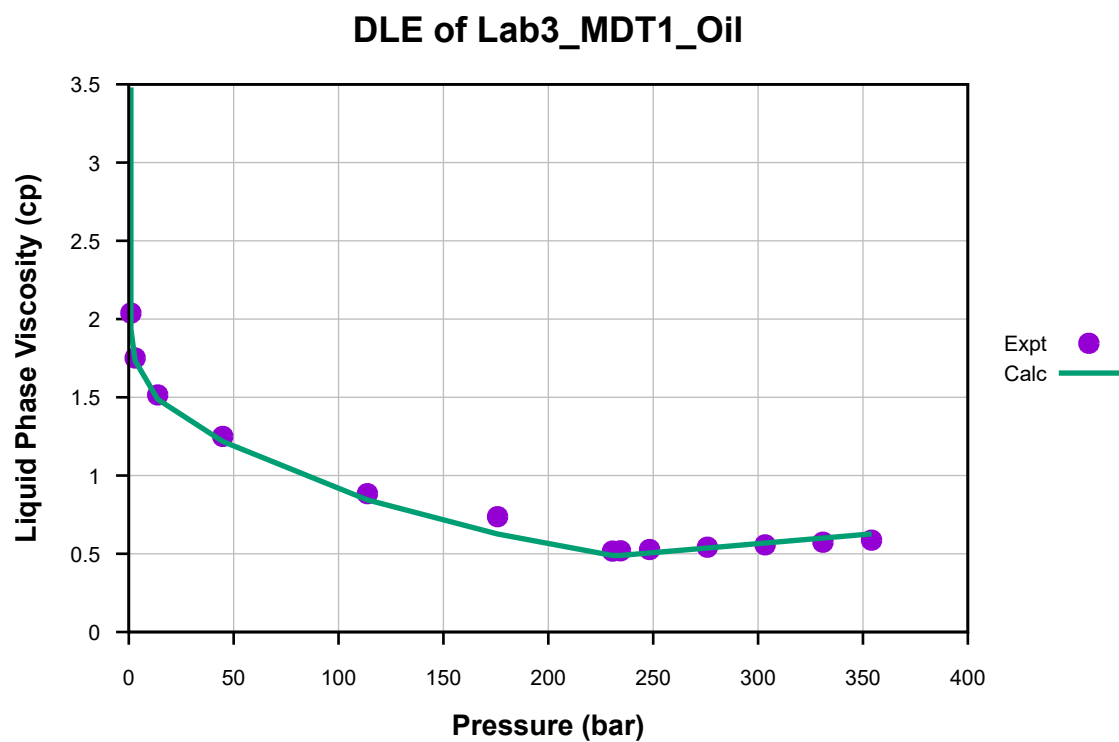


Figure 35: Liquid Phase Viscosity vs. Pressure for DLE of Lab3\_MDT1\_Oil.

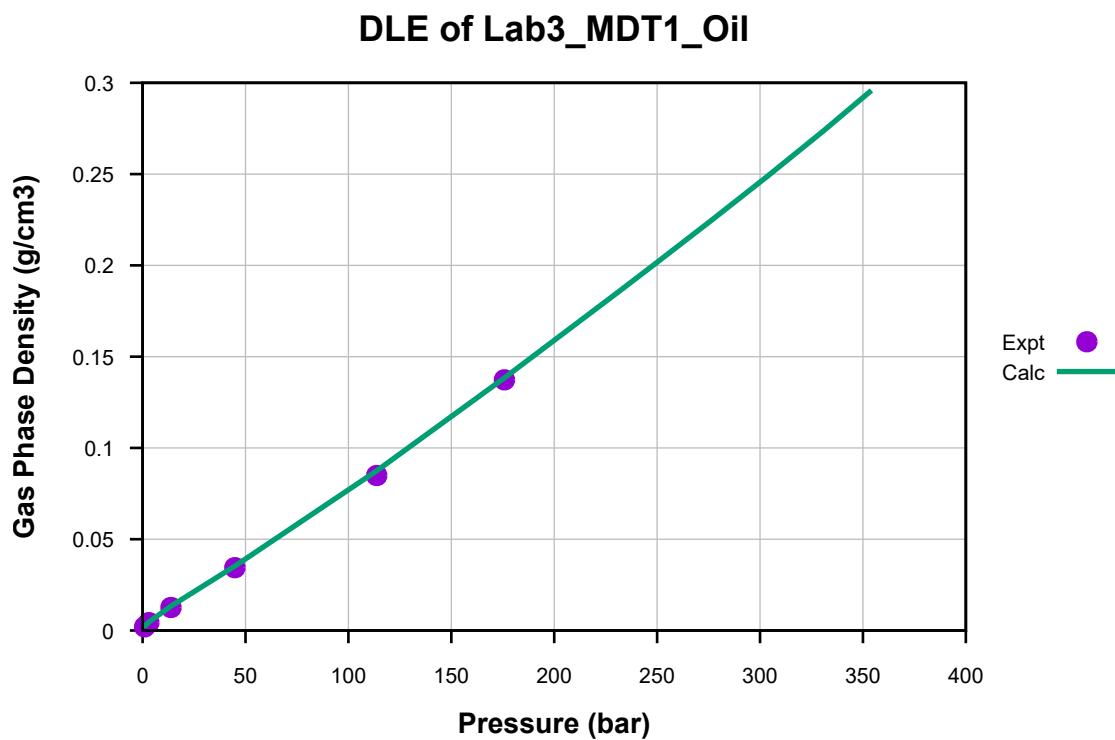


Figure 36: Gas Phase Density vs. Pressure for DLE of Lab3\_MDT1\_Oil.

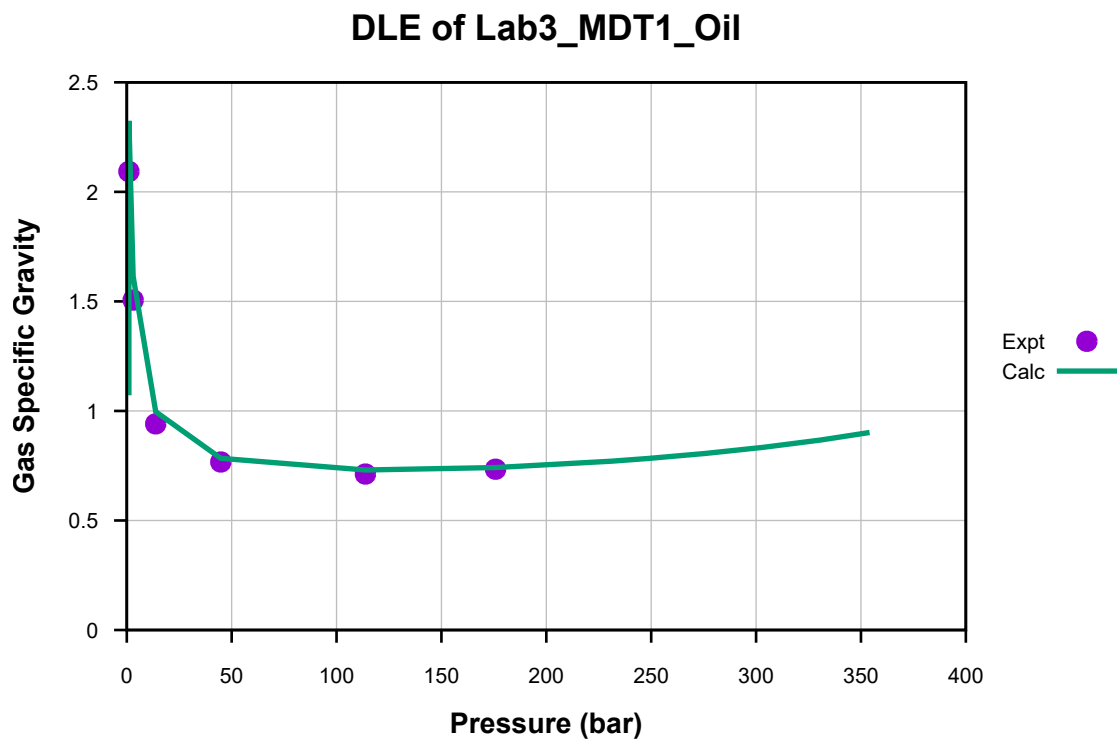


Figure 37: Gas Specific Gravity vs. Pressure for DLE of Lab3\_MDT1\_Oil.



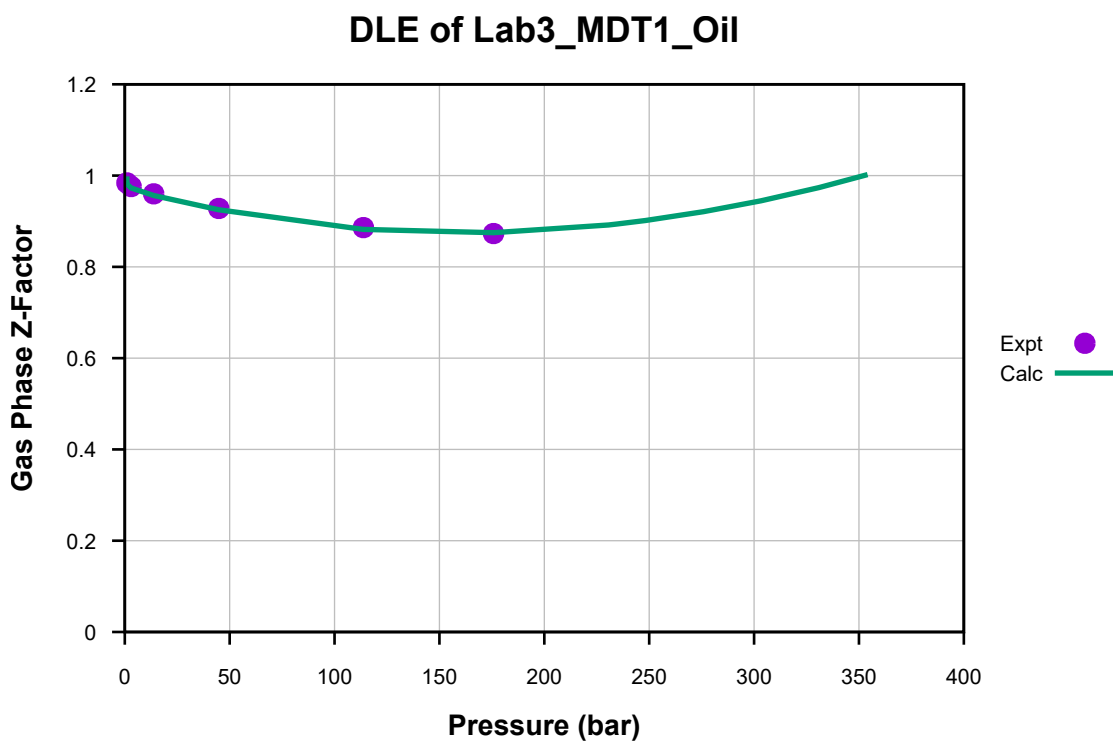


Figure 38: Gas Phase Z-Factor vs. Pressure for DLE of Lab3\_MDT1\_Oil.

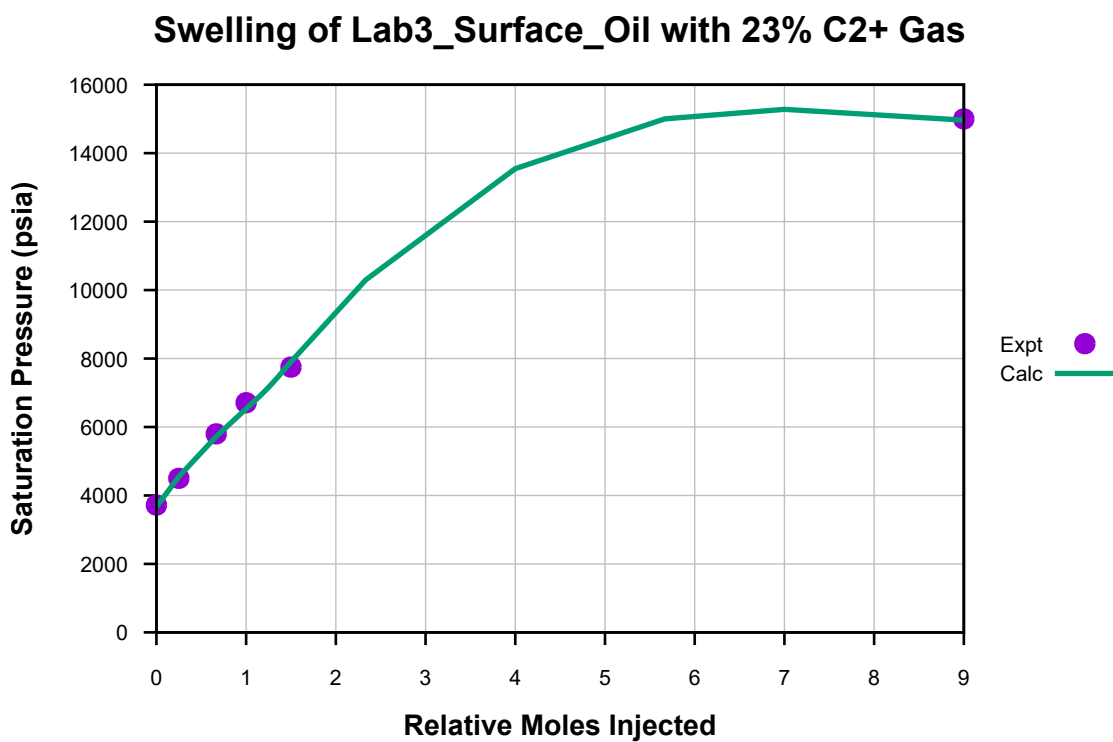


Figure 39: Saturation Pressure vs. Relative Moles Injected for Swelling of Lab3\_Surface\_Oil with 23% C2+ Gas.

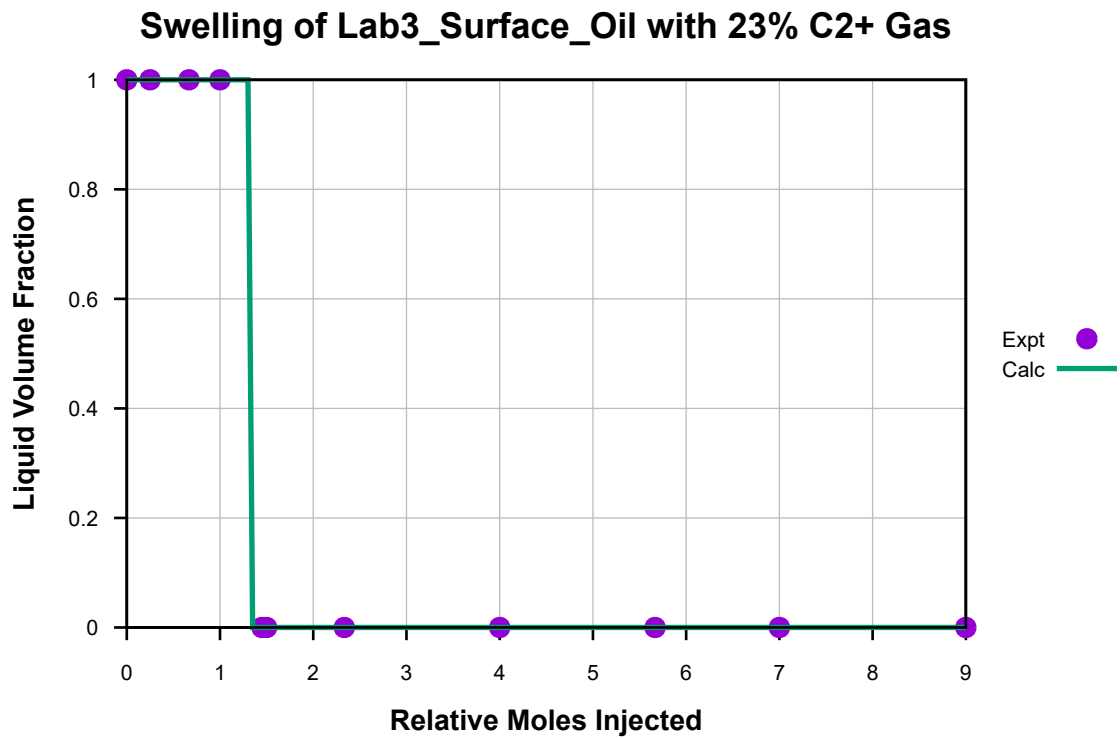


Figure 40: Liquid Volume Fraction vs. Relative Moles Injected for Swelling of Lab3\_Surface\_Oil with 23% C2+ Gas.

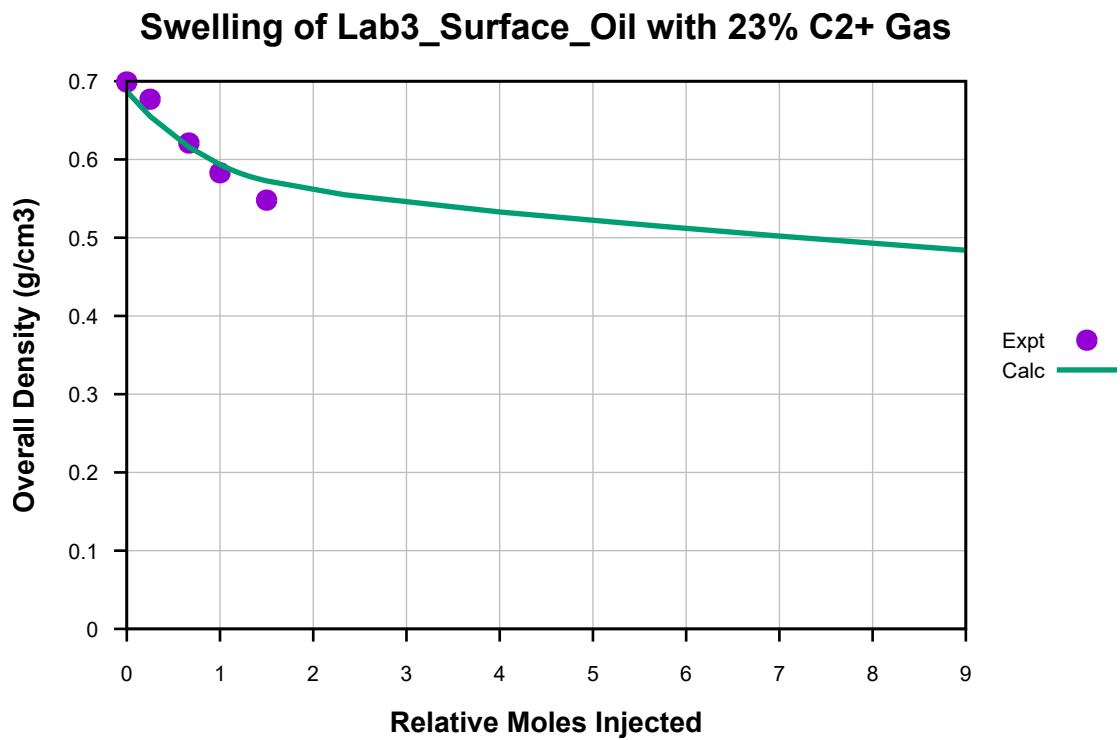


Figure 41: Overall Density vs. Relative Moles Injected for Swelling of Lab3\_Surface\_Oil with 23% C2+ Gas.

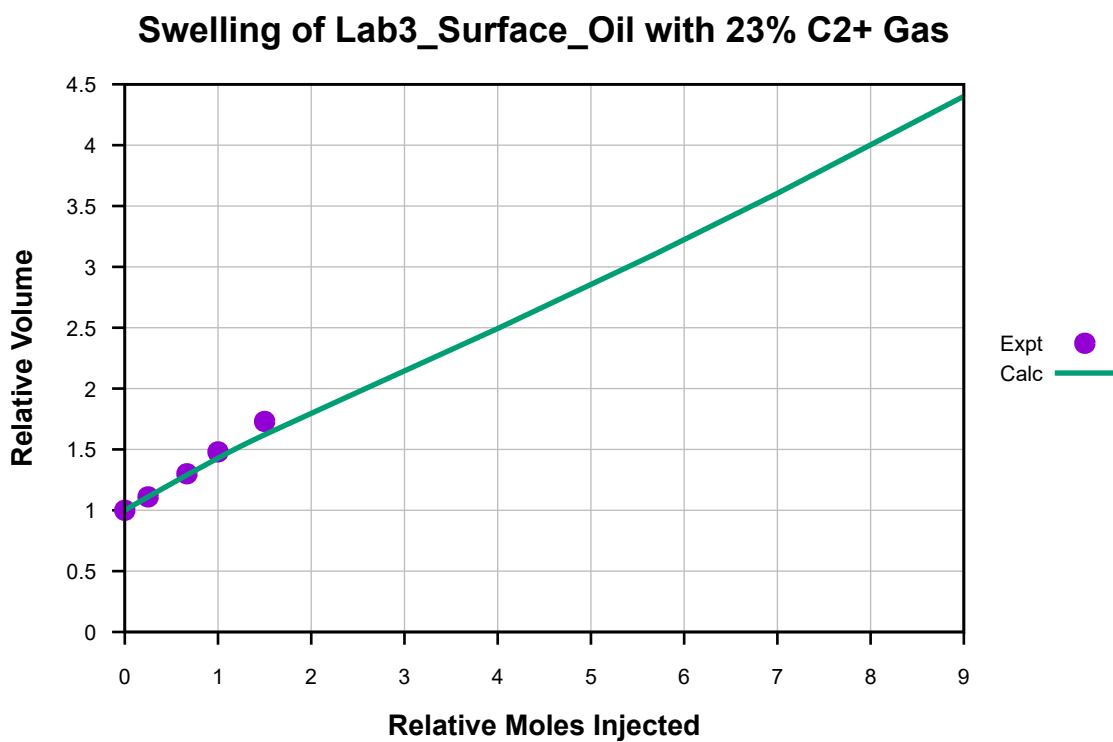


Figure 42: Relative Volume vs. Relative Moles Injected for Swelling of Lab3\_Surface\_Oil with 23% C2+ Gas.

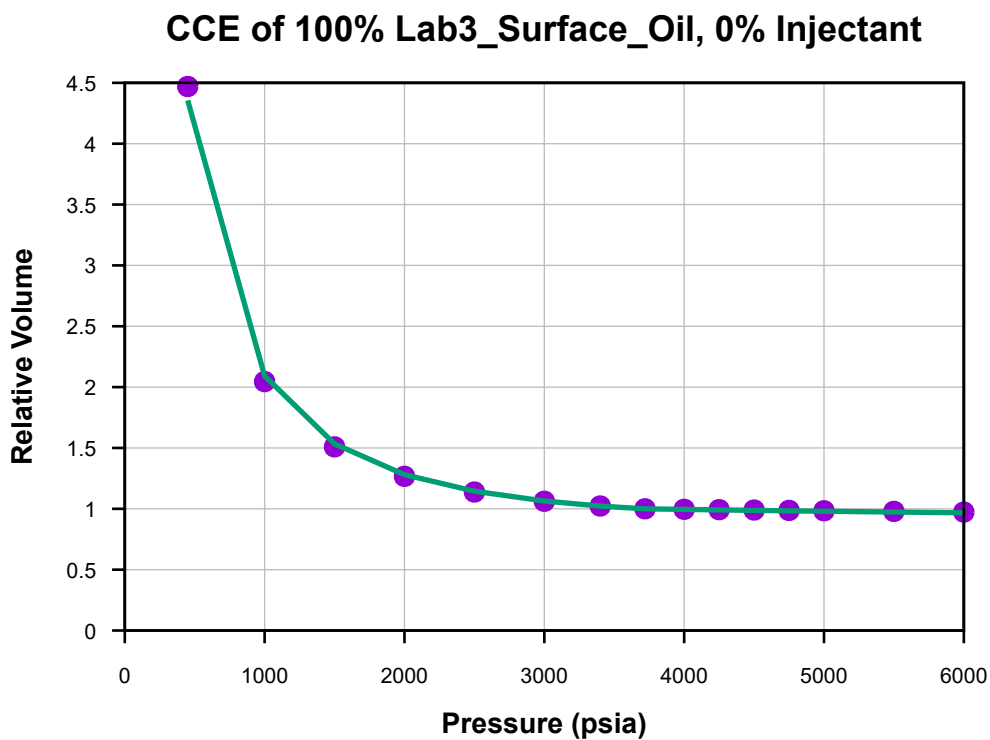


Figure 43: Relative Volume vs. Pressure for CCE of 100% Lab3\_Surface\_Oil, 0% Injectant.

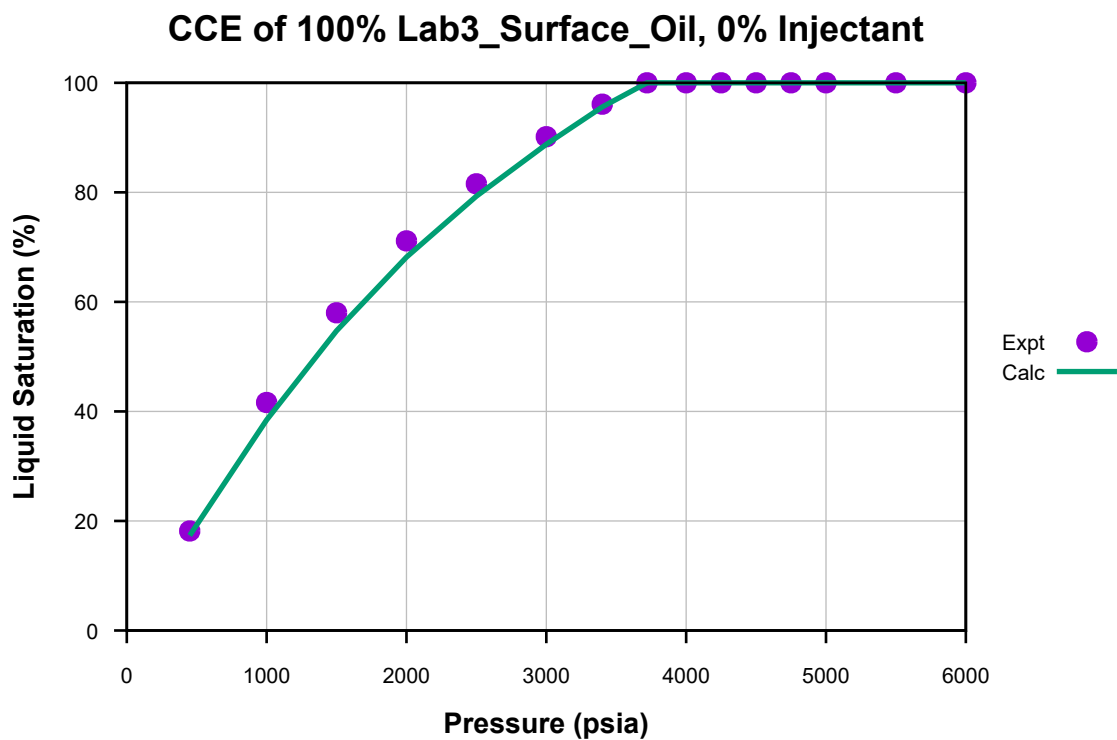


Figure 44: Liquid Saturation vs. Pressure for CCE of 100% Lab3\_Surface\_Oil, 0% Injectant.

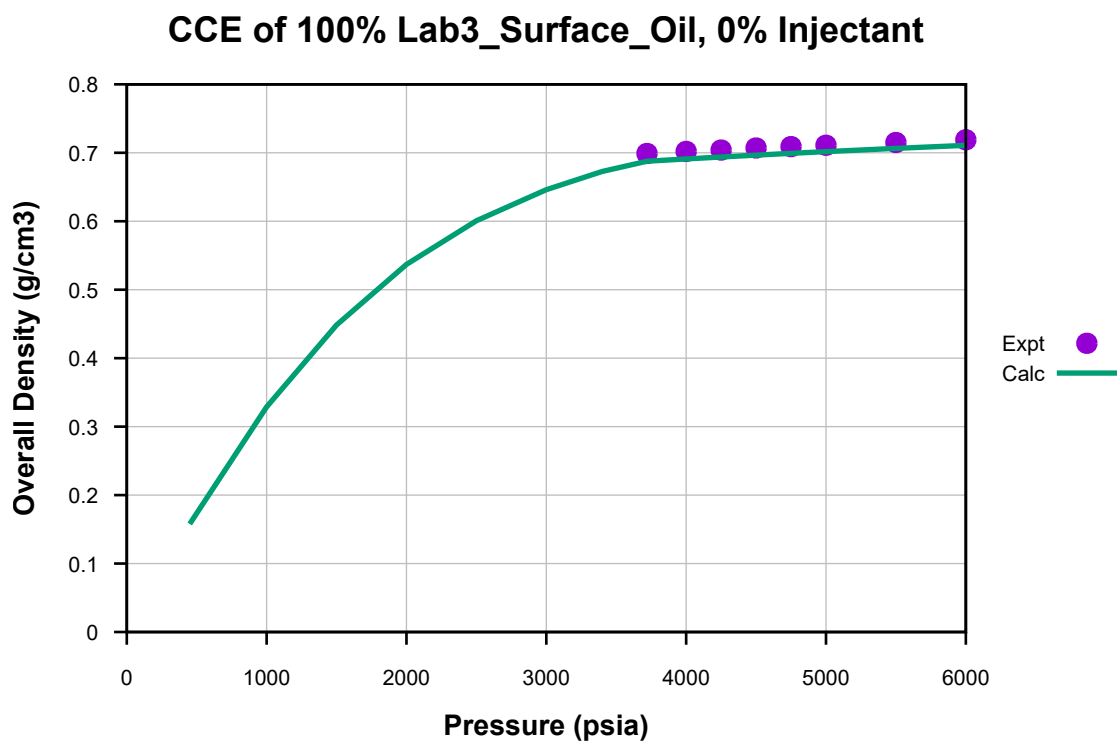


Figure 45: Overall Density vs. Pressure for CCE of 100% Lab3\_Surface\_Oil, 0% Injectant.

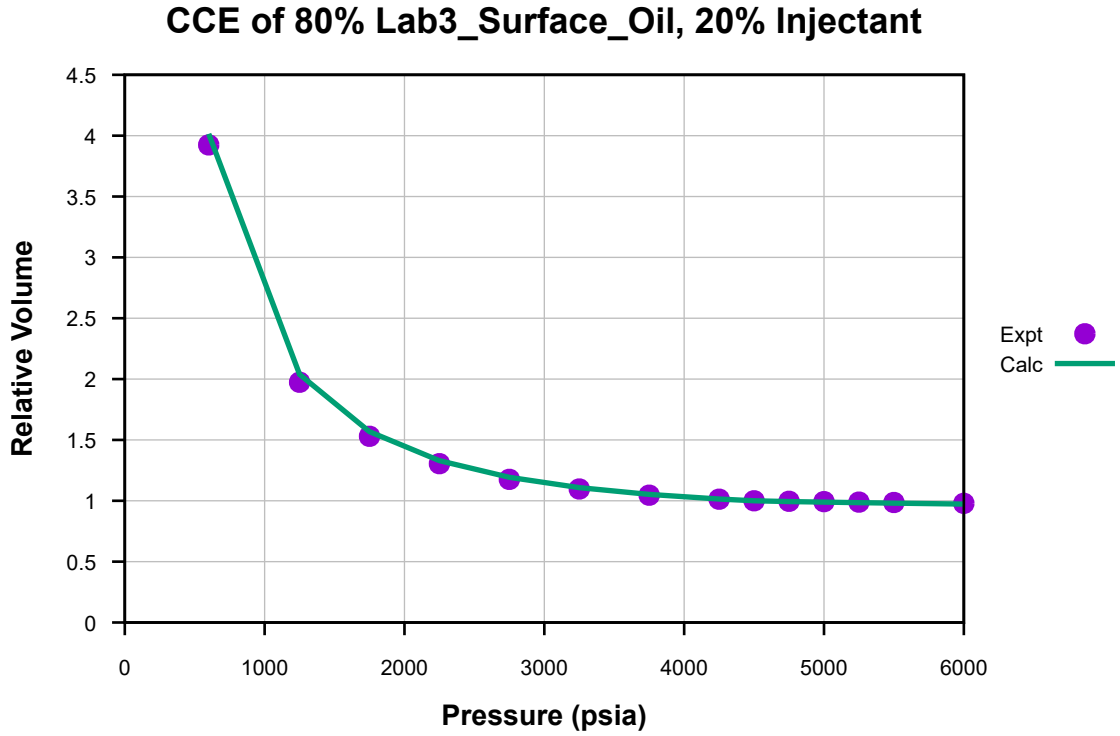


Figure 46: Relative Volume vs. Pressure for CCE of 80% Lab3\_Surface\_Oil, 20% Injectant.

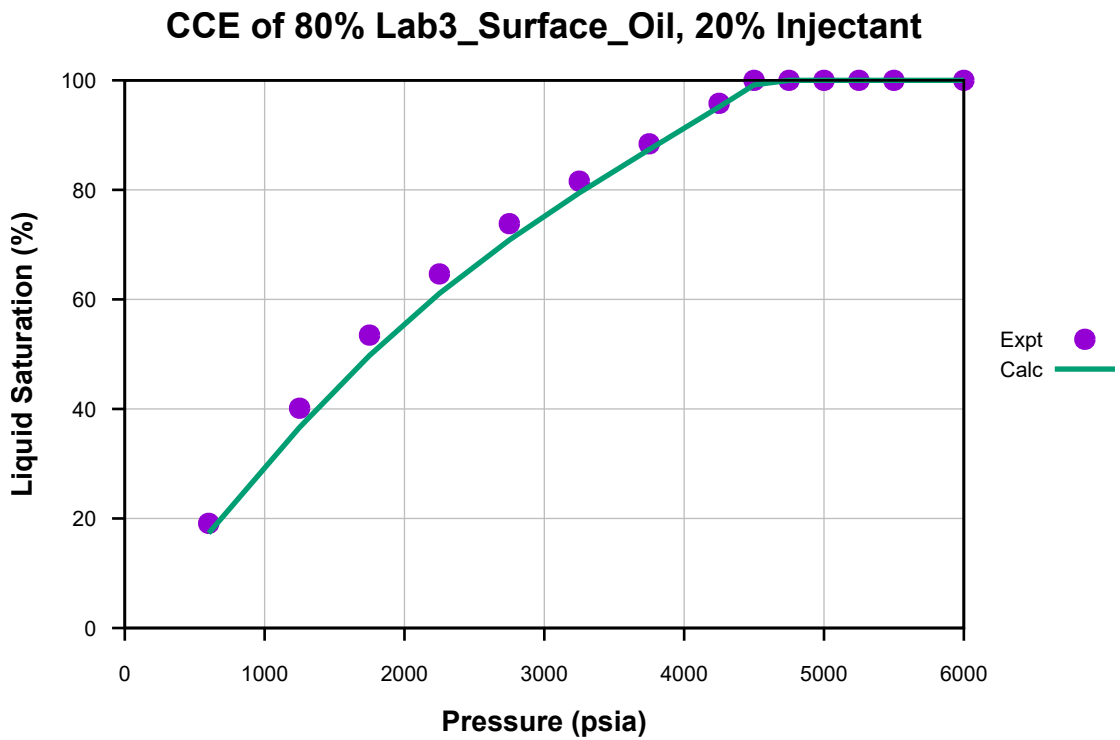


Figure 47: Liquid Saturation vs. Pressure for CCE of 80% Lab3\_Surface\_Oil, 20% Injectant.

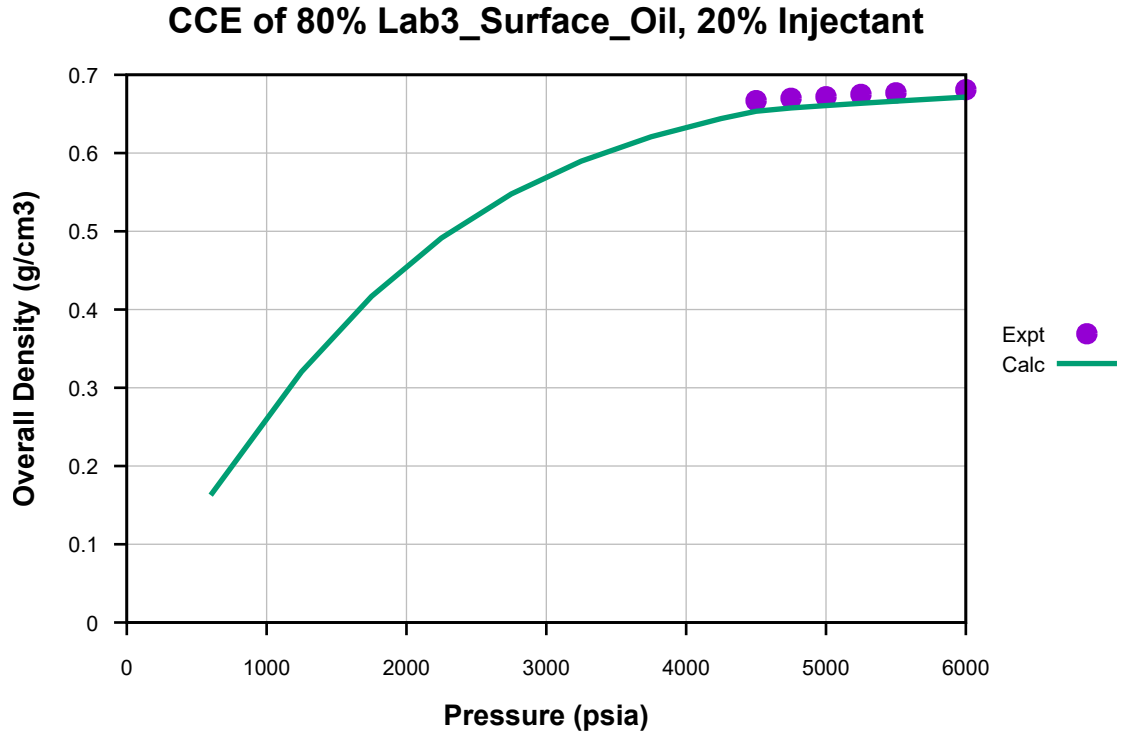


Figure 48: Overall Density vs. Pressure for CCE of 80% Lab3\_Surface\_Oil, 20% Injectant.

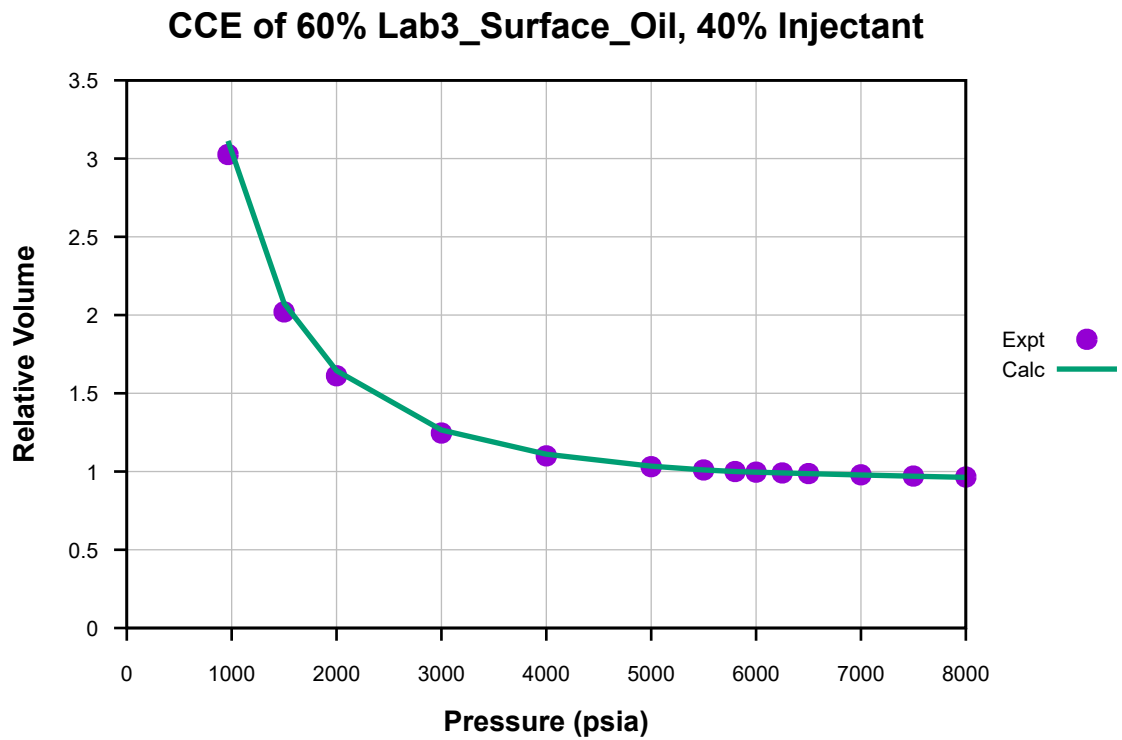


Figure 49: Relative Volume vs. Pressure for CCE of 60% Lab3\_Surface\_Oil, 40% Injectant.

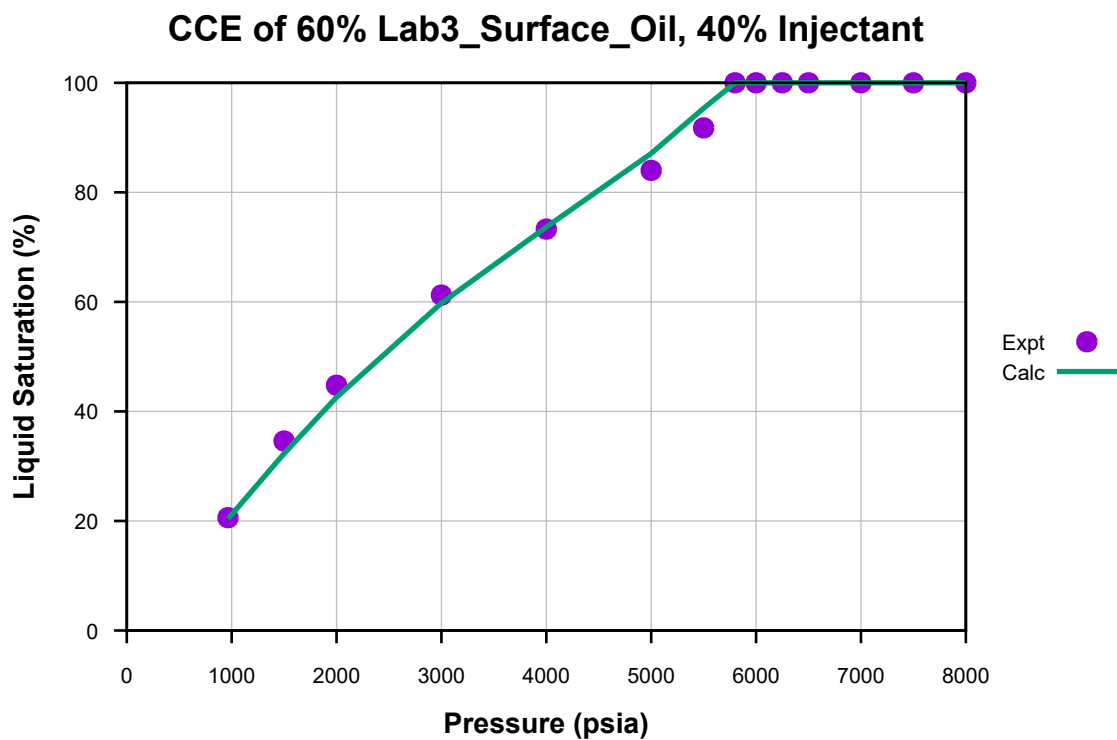


Figure 50: Liquid Saturation vs. Pressure for CCE of 60% Lab3\_Surface\_Oil, 40% Injectant.

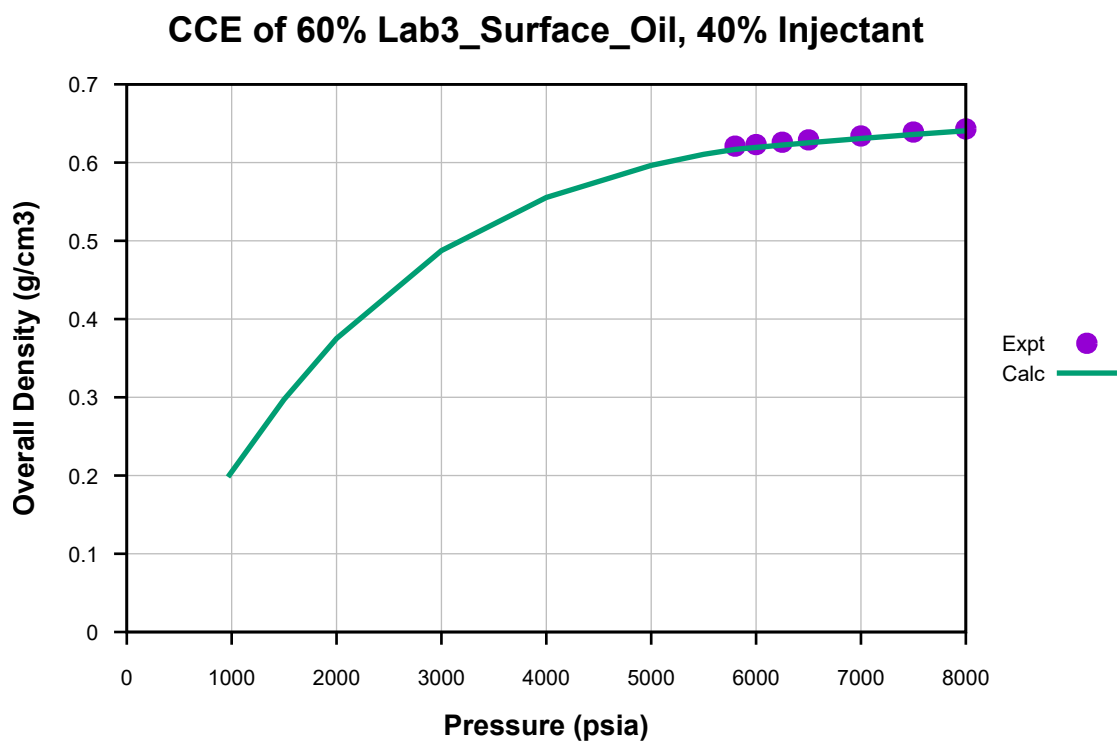


Figure 51: Overall Density vs. Pressure for CCE of 60% Lab3\_Surface\_Oil, 40% Injectant.

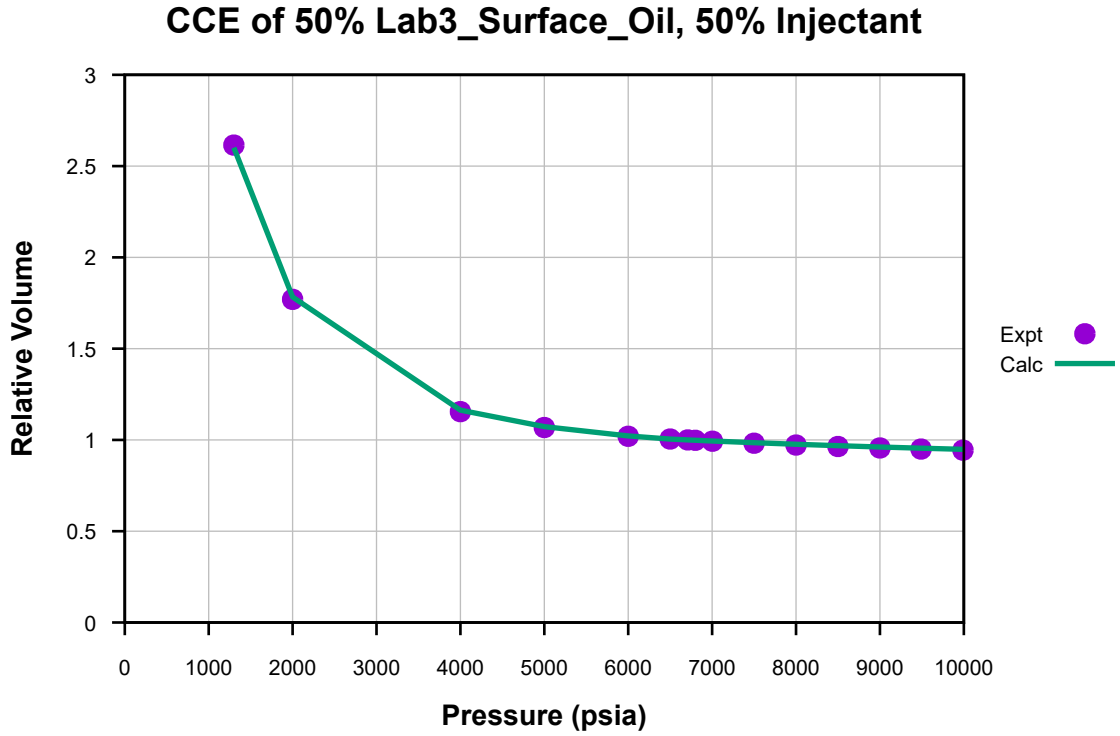


Figure 52: Relative Volume vs. Pressure for CCE of 50% Lab3\_Surface\_Oil, 50% Injectant.

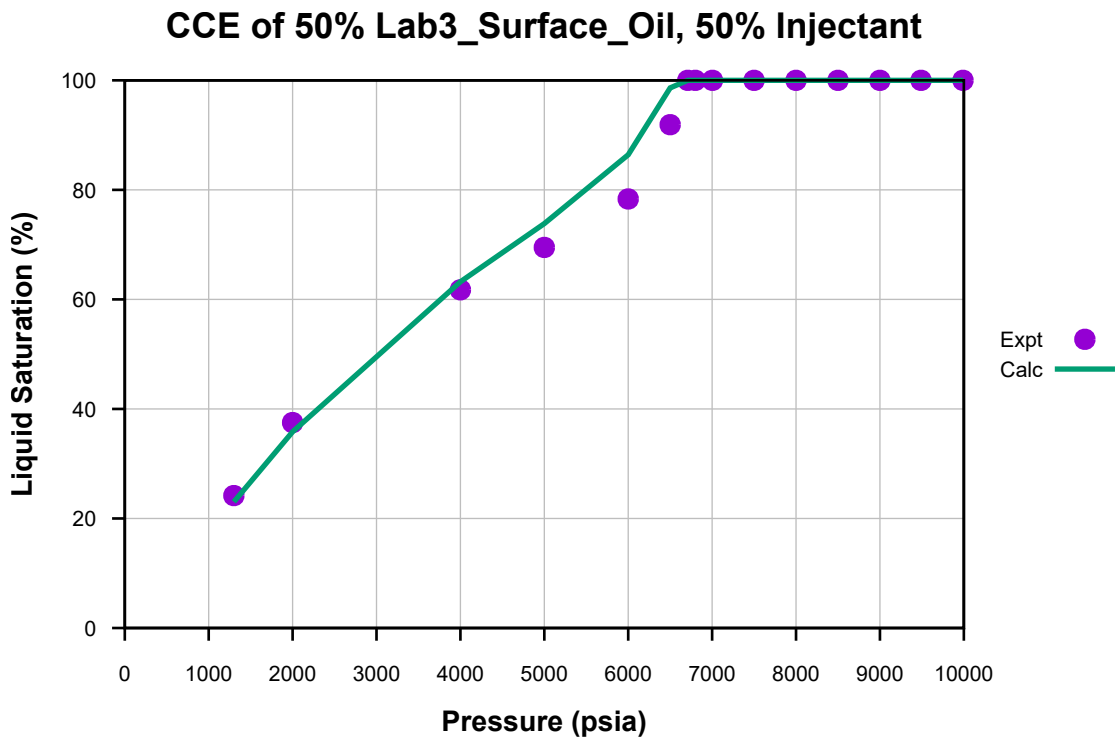


Figure 53: Liquid Saturation vs. Pressure for CCE of 50% Lab3\_Surface\_Oil, 50% Injectant.



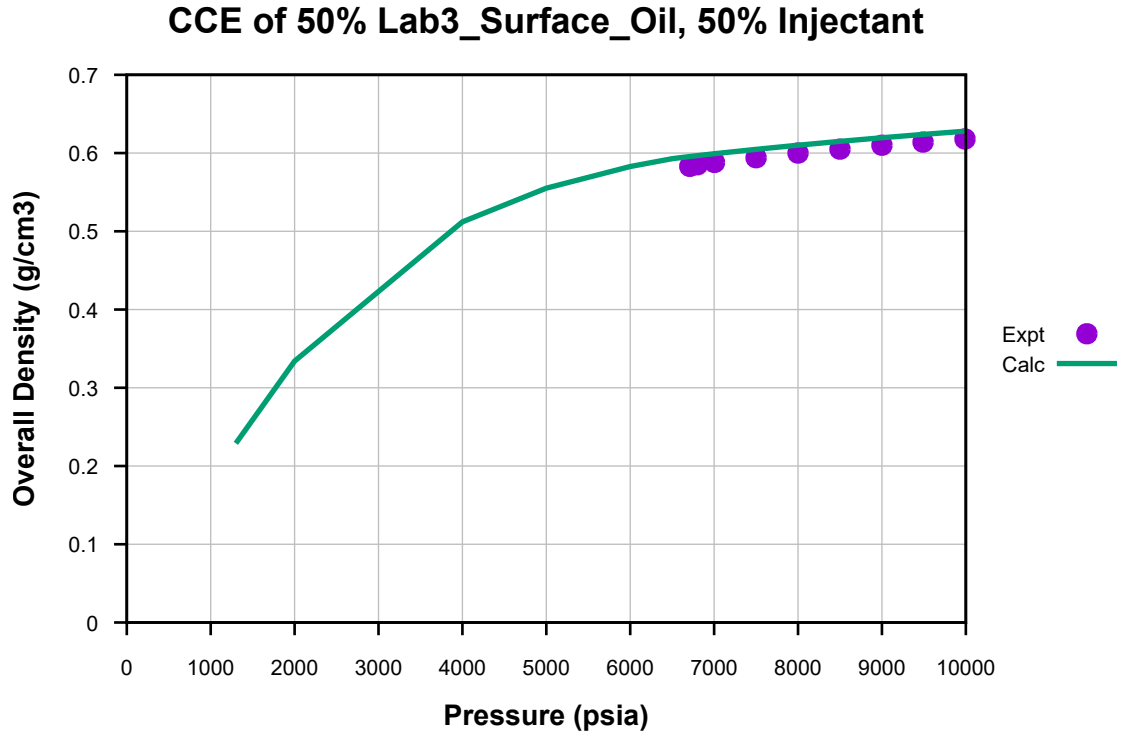


Figure 54: Overall Density vs. Pressure for CCE of 50% Lab3\_Surface\_Oil, 50% Injectant.

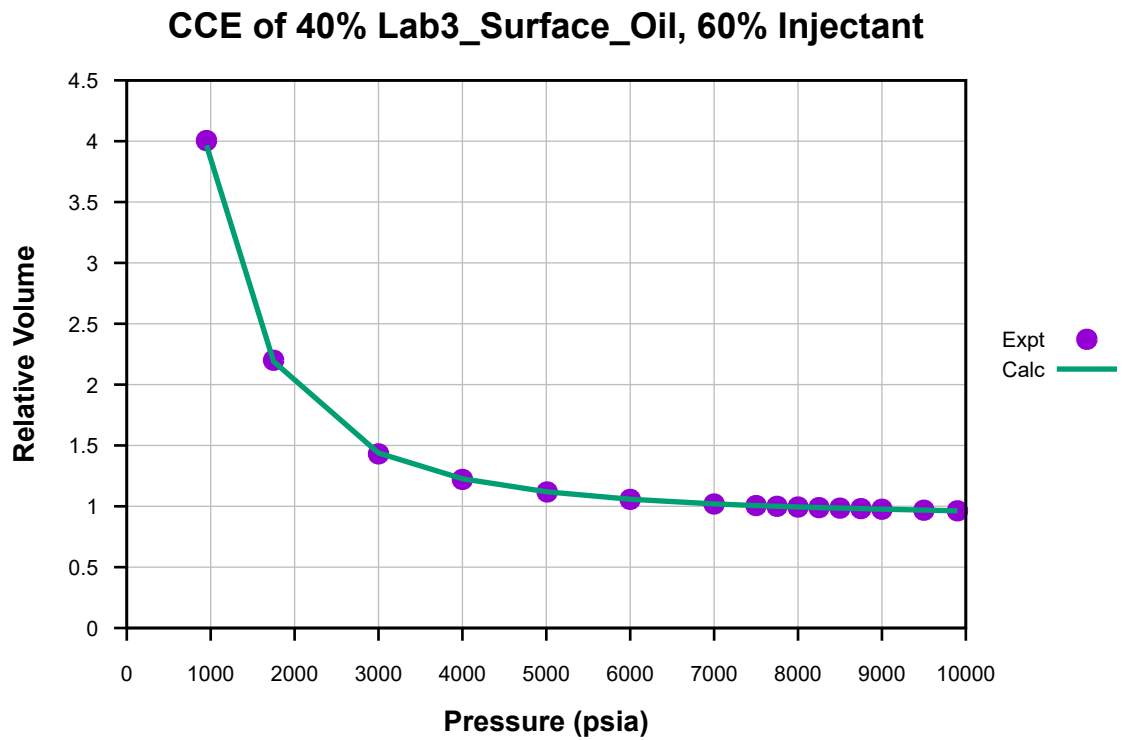


Figure 55: Relative Volume vs. Pressure for CCE of 40% Lab3\_Surface\_Oil, 60% Injectant.

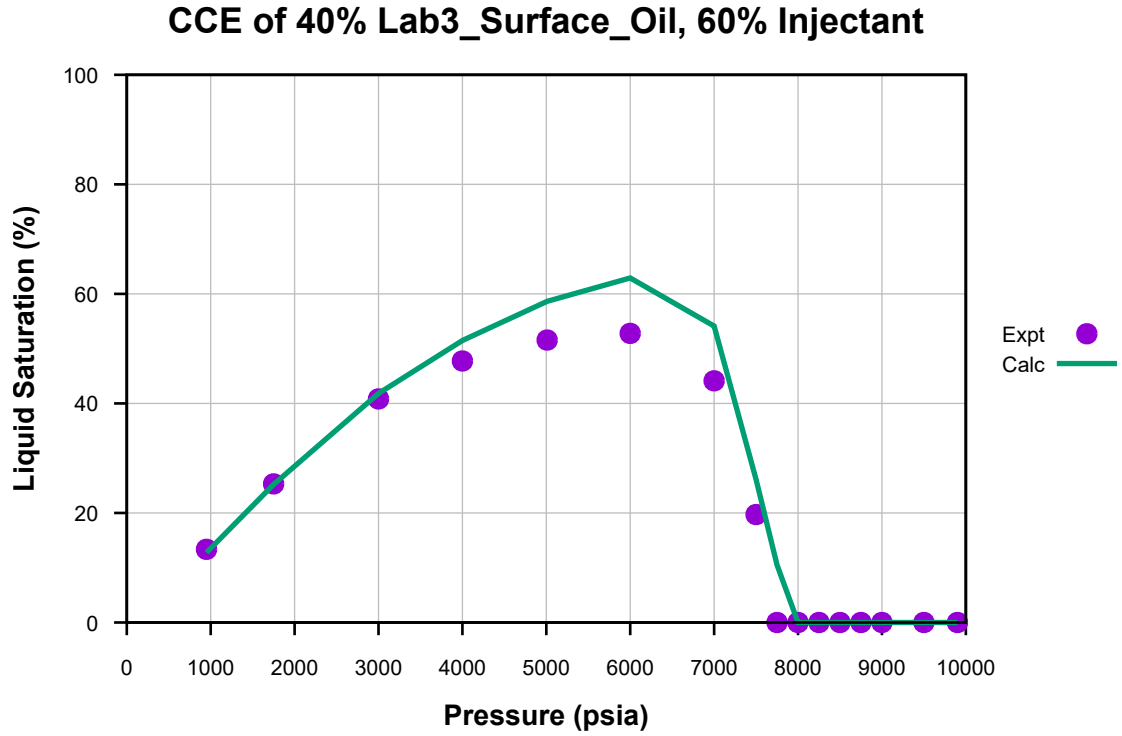


Figure 56: Liquid Saturation vs. Pressure for CCE of 40% Lab3\_Surface\_Oil, 60% Injectant.

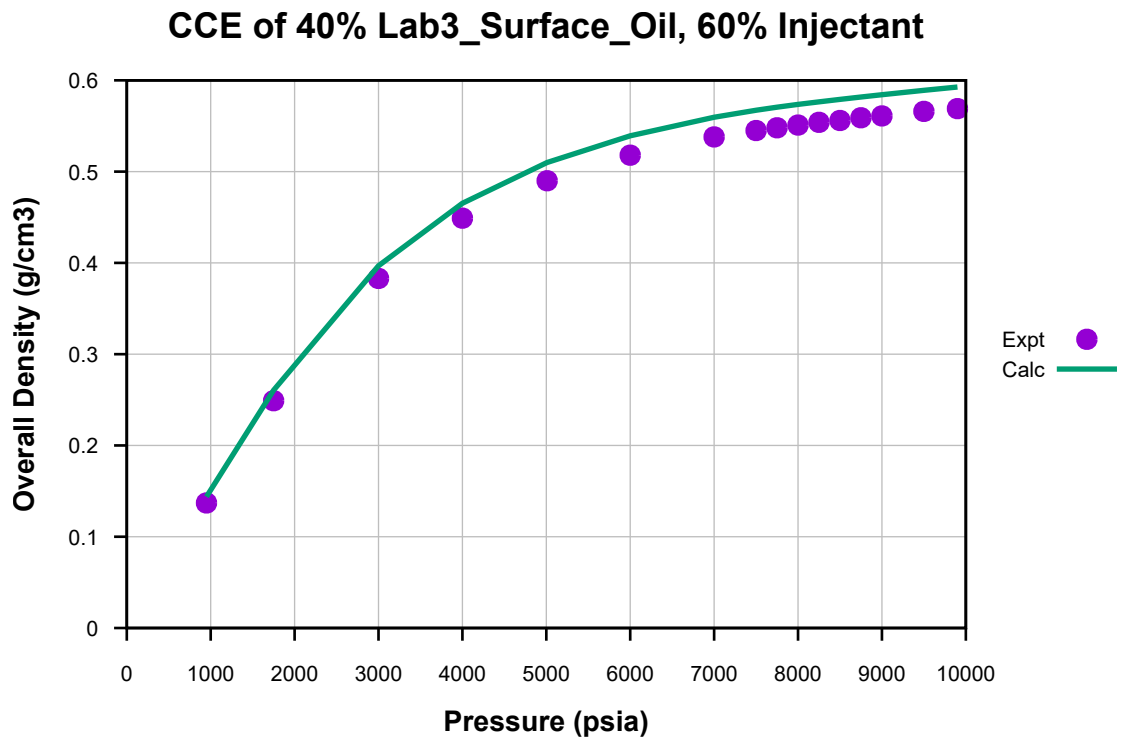


Figure 57: Overall Density vs. Pressure for CCE of 40% Lab3\_Surface\_Oil, 60% Injectant.

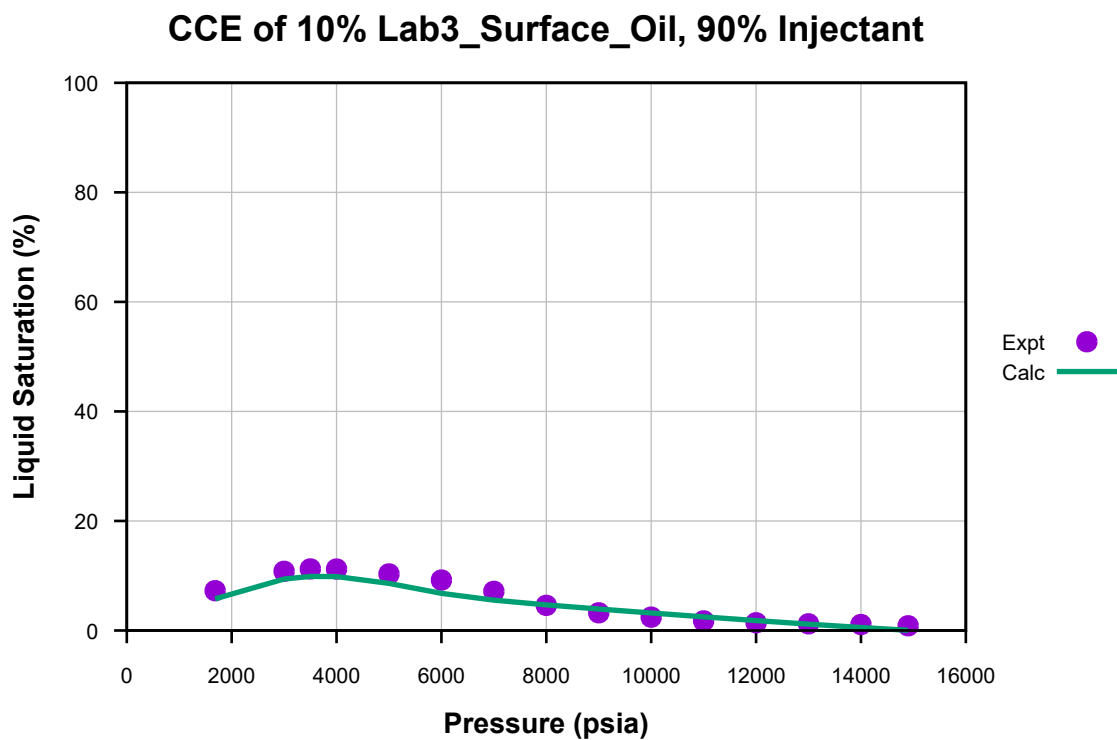


Figure 58: Liquid Saturation vs. Pressure for CCE of 10% Lab3\_Surface\_Oil, 90% Injectant.

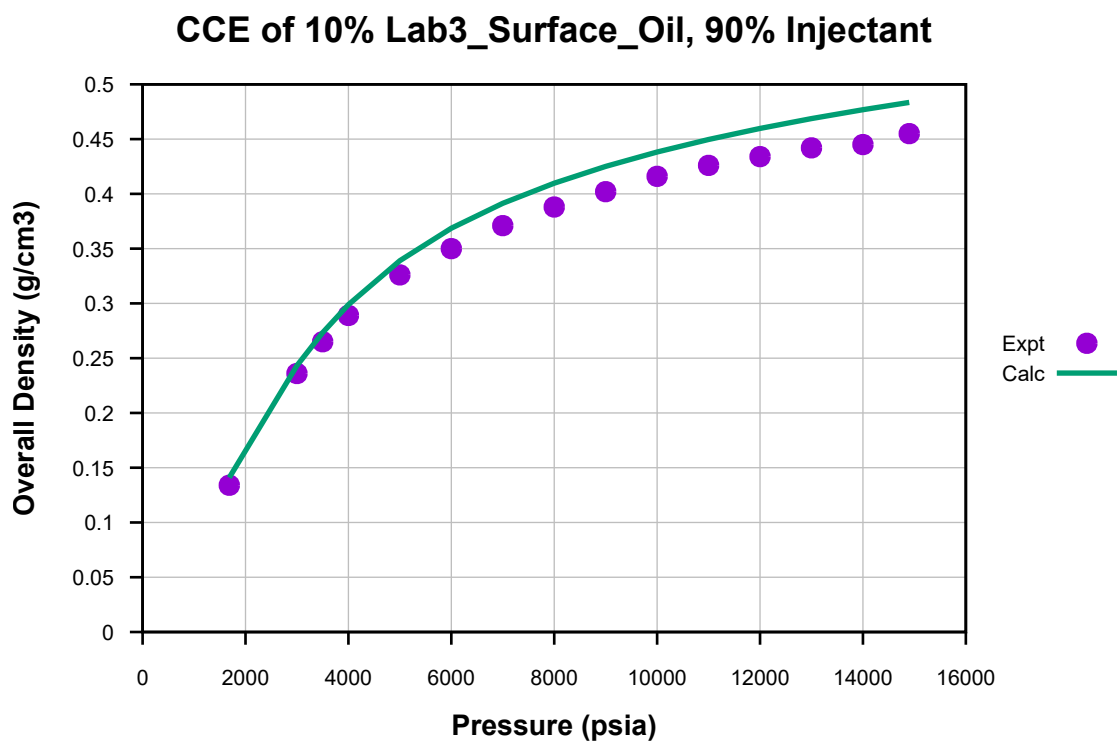


Figure 59: Overall Density vs. Pressure for CCE of 10% Lab3\_Surface\_Oil, 90% Injectant.

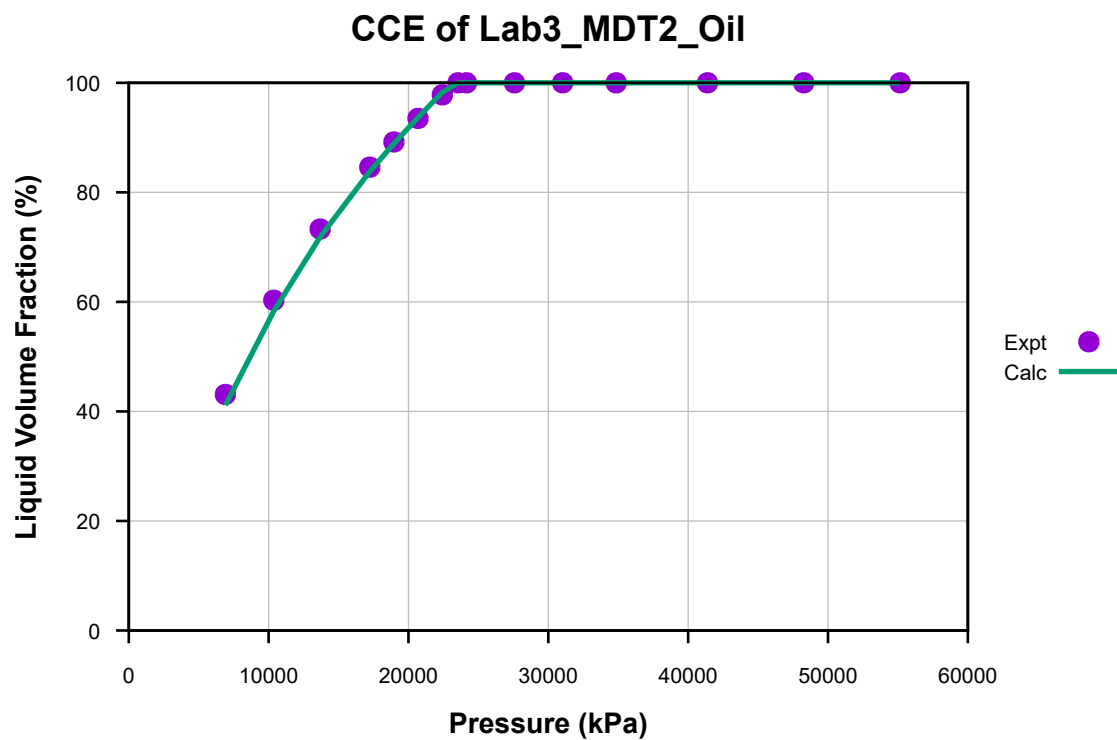


Figure 60: Liquid Volume Fraction vs. Pressure for CCE of Lab3\_MDT2\_Oil.

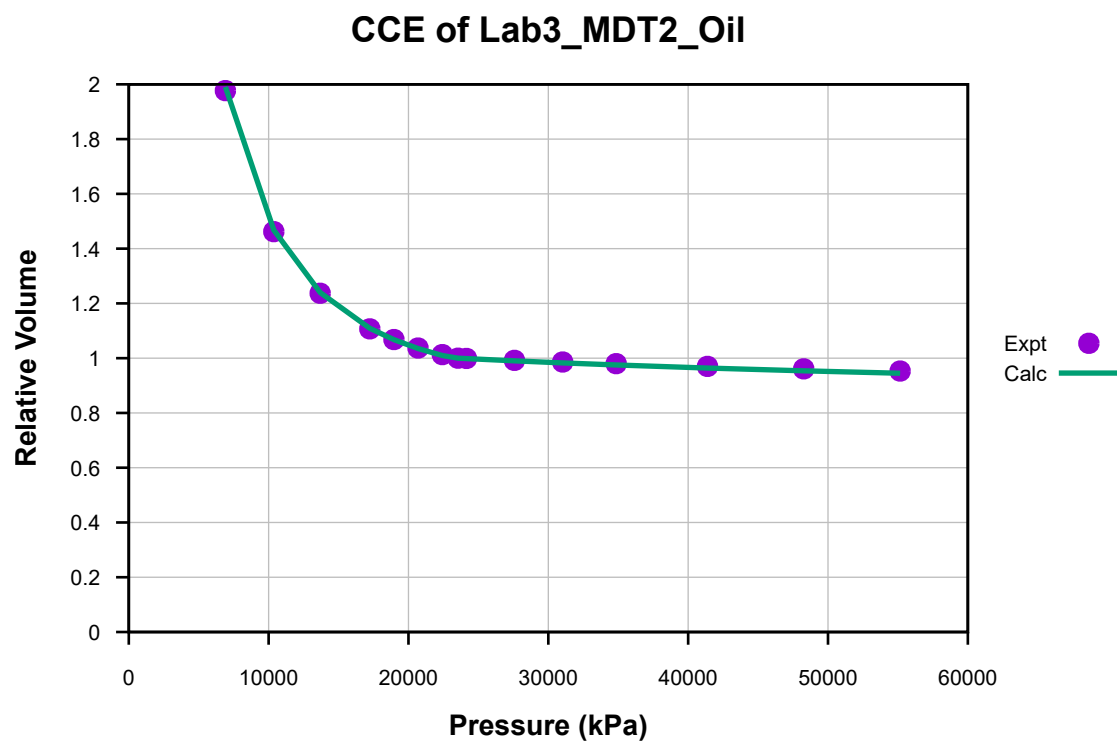


Figure 61: Relative Volume vs. Pressure for CCE of Lab3\_MDT2\_Oil.

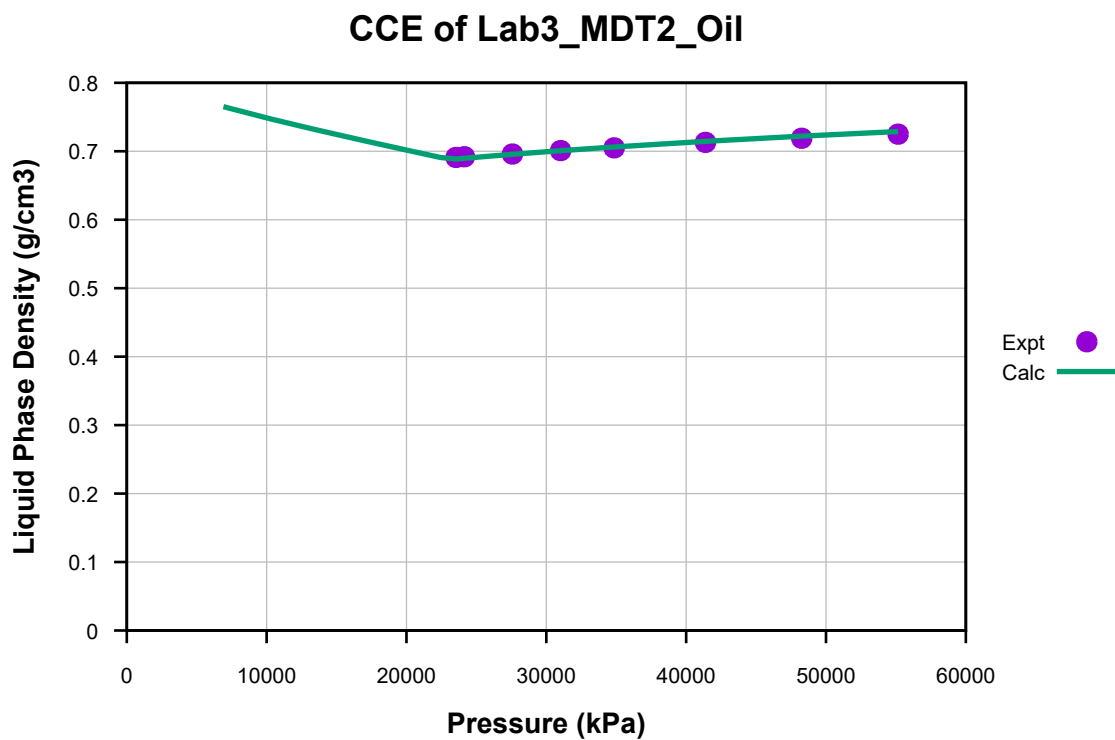


Figure 62: Liquid Phase Density vs. Pressure for CCE of Lab3\_MDT2\_Oil.

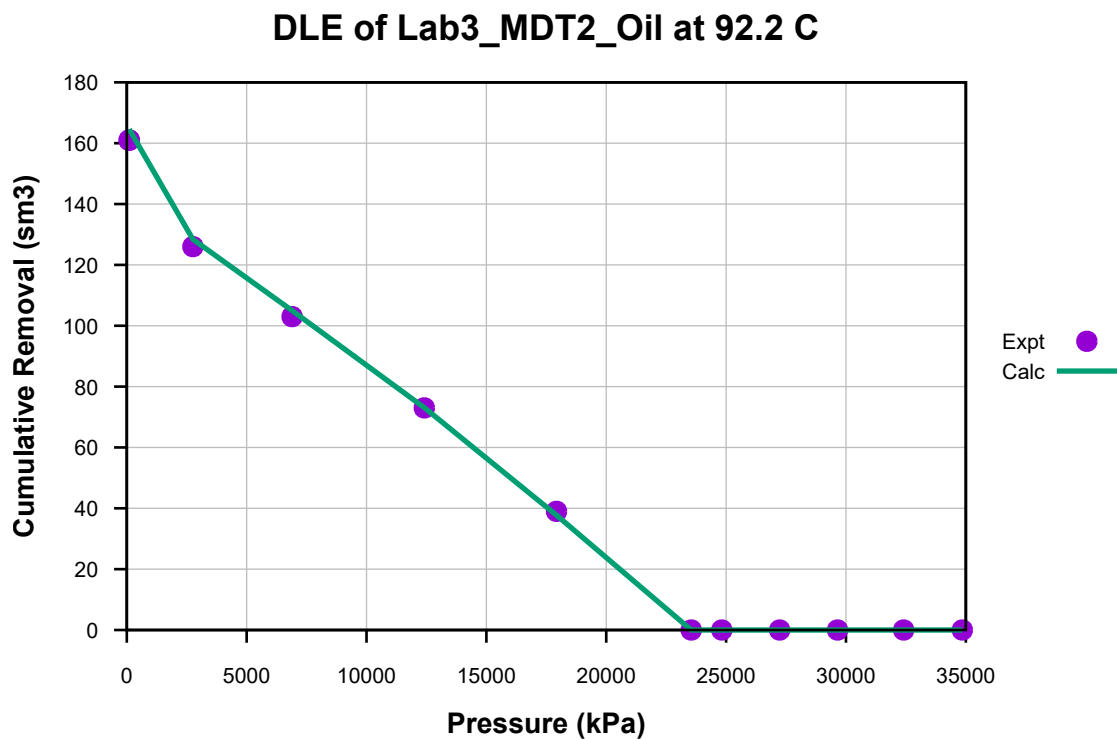


Figure 63: Cumulative Removal vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.

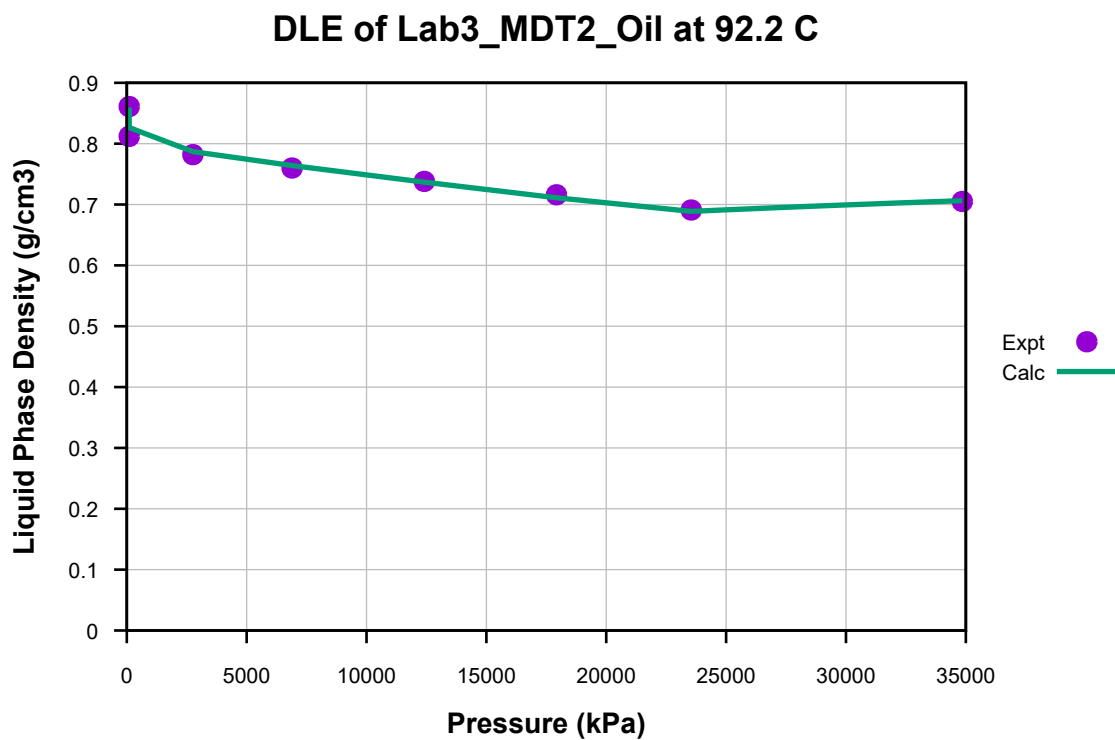


Figure 64: Liquid Phase Density vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.

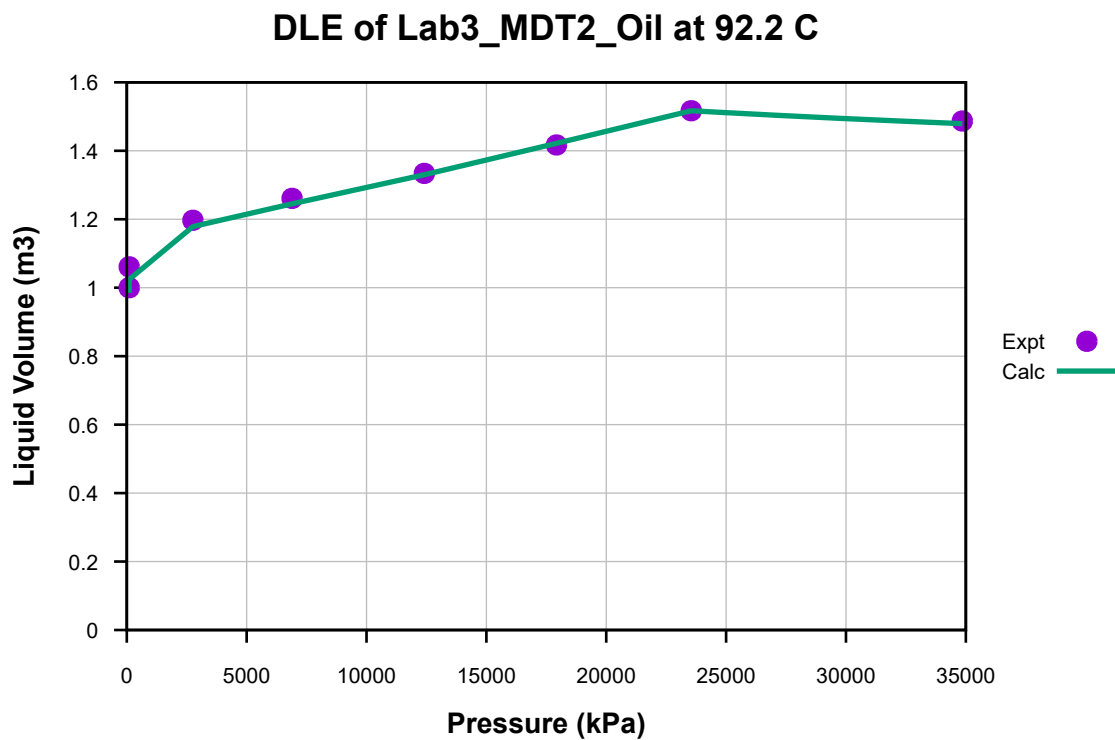


Figure 65: Liquid Volume vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.

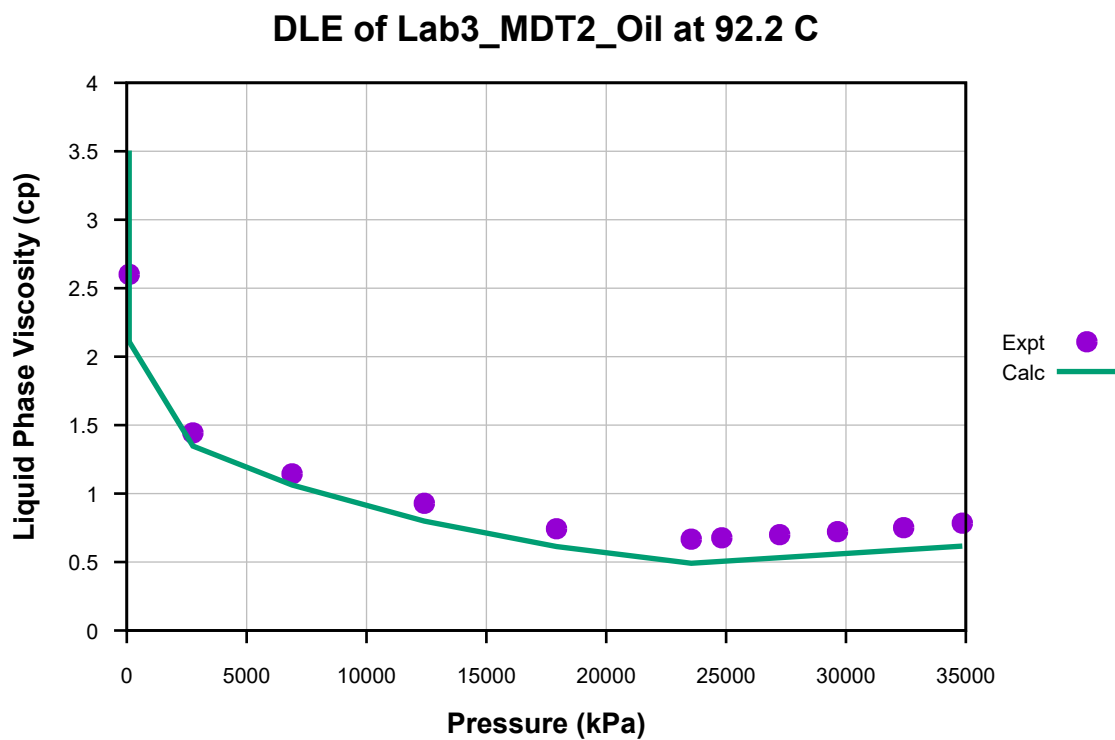


Figure 66: Liquid Phase Viscosity vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.

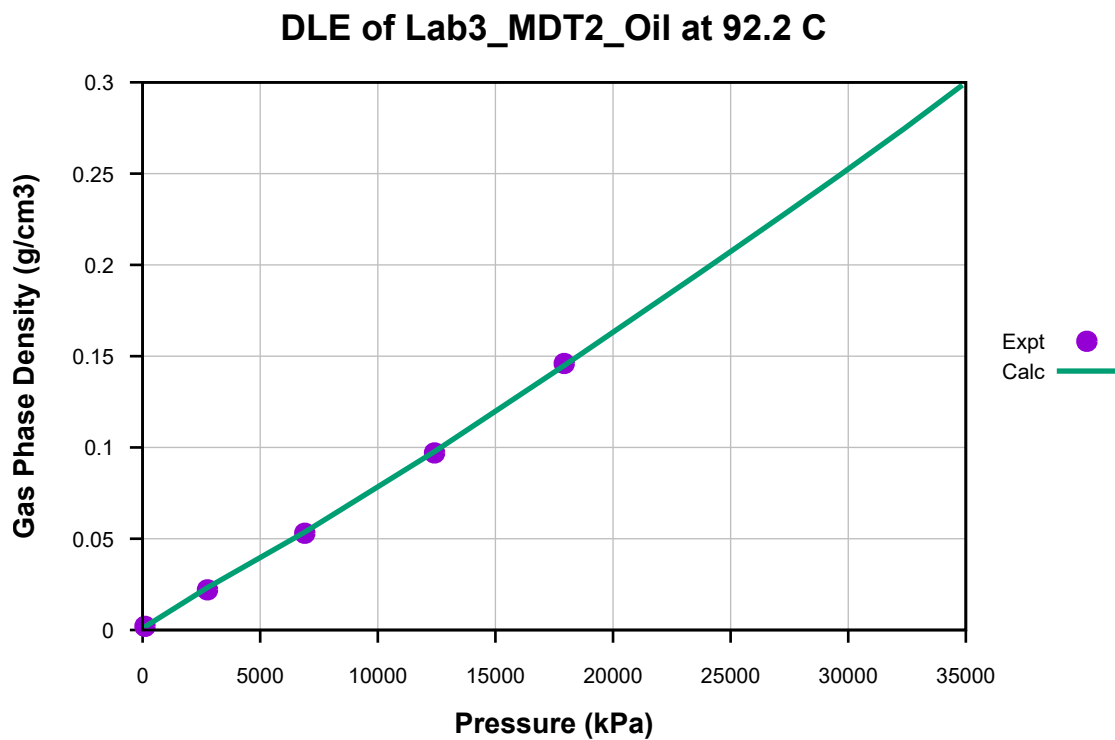


Figure 67: Gas Phase Density vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.

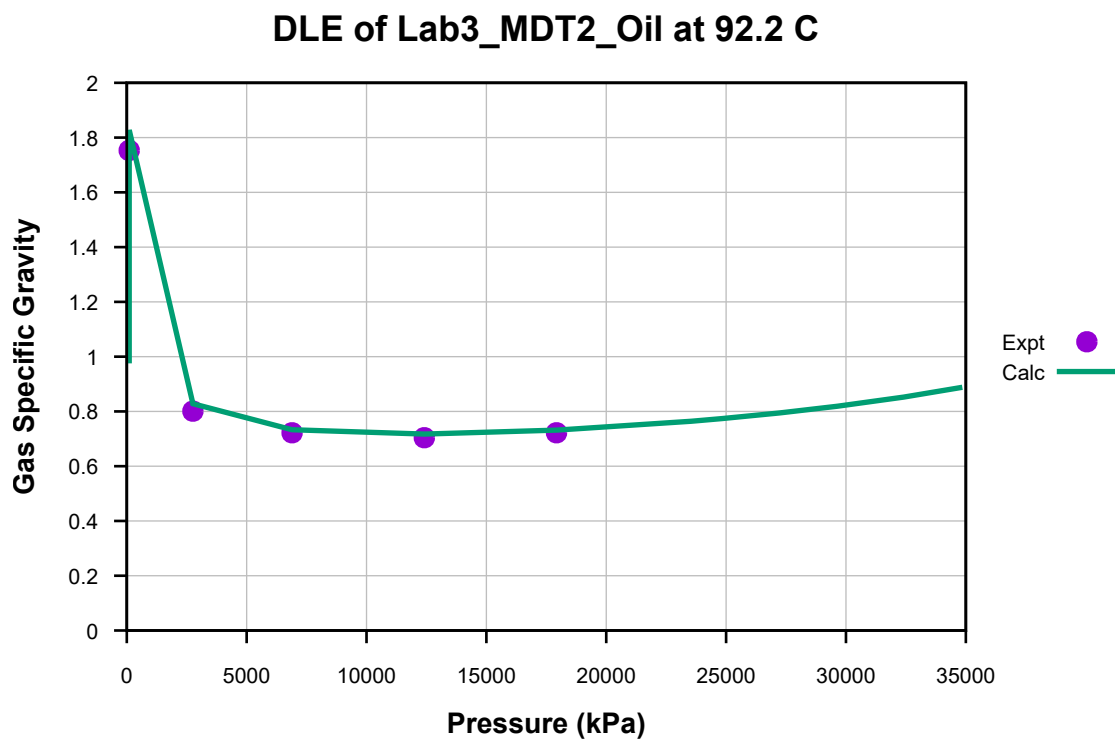


Figure 68: Gas Specific Gravity vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.

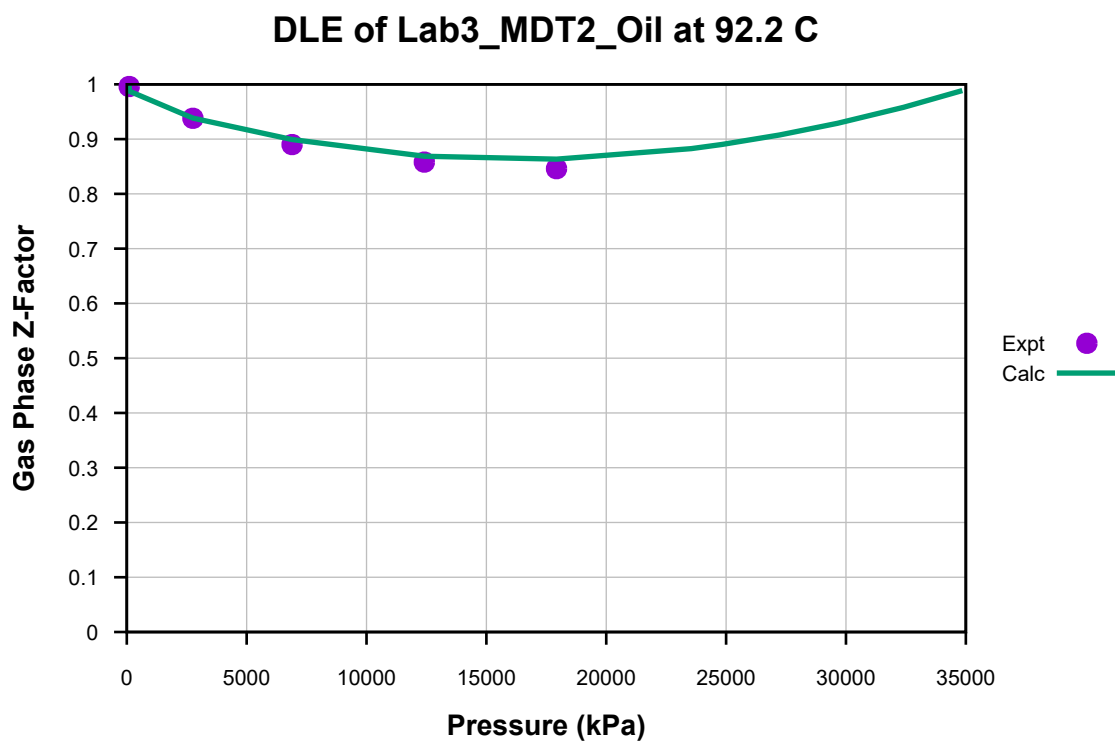


Figure 69: Gas Phase Z-Factor vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.



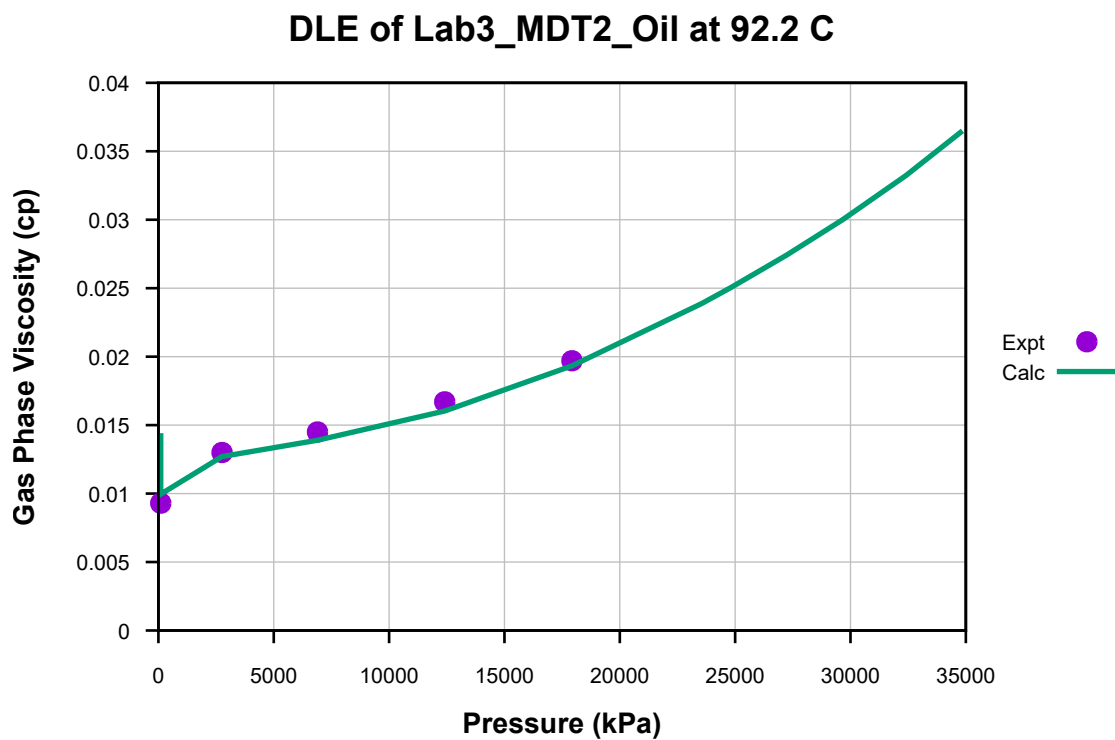


Figure 70: Gas Phase Viscosity vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.

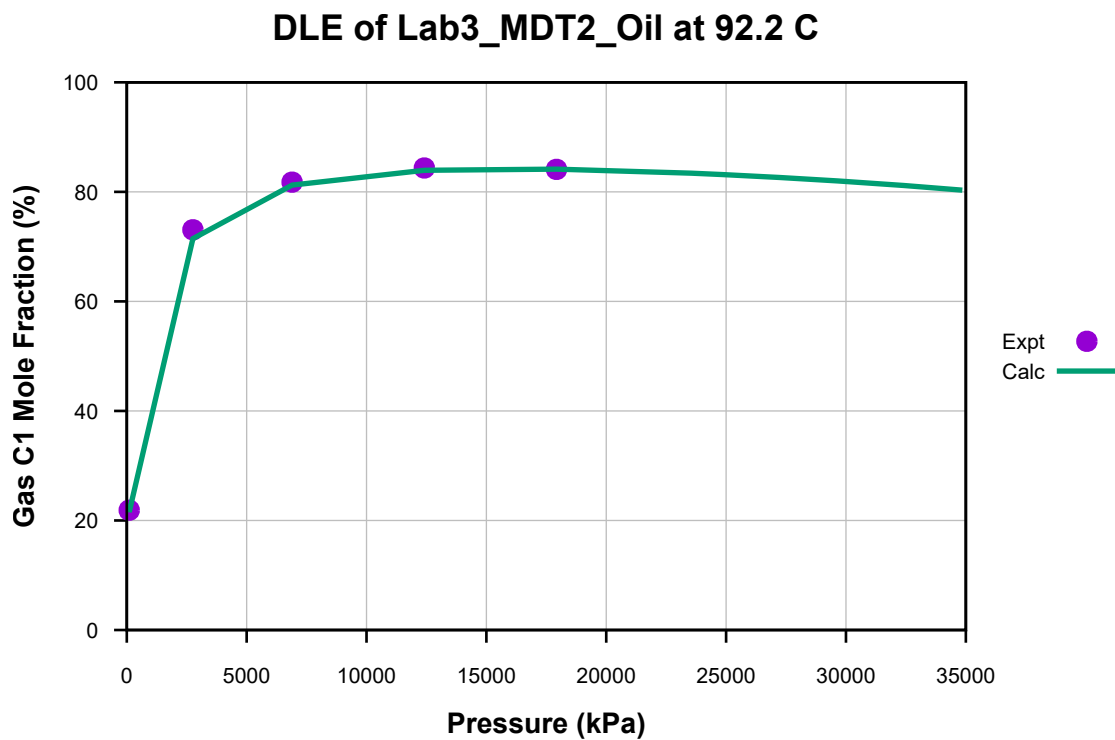


Figure 71: Gas C1 Mole Fraction vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.

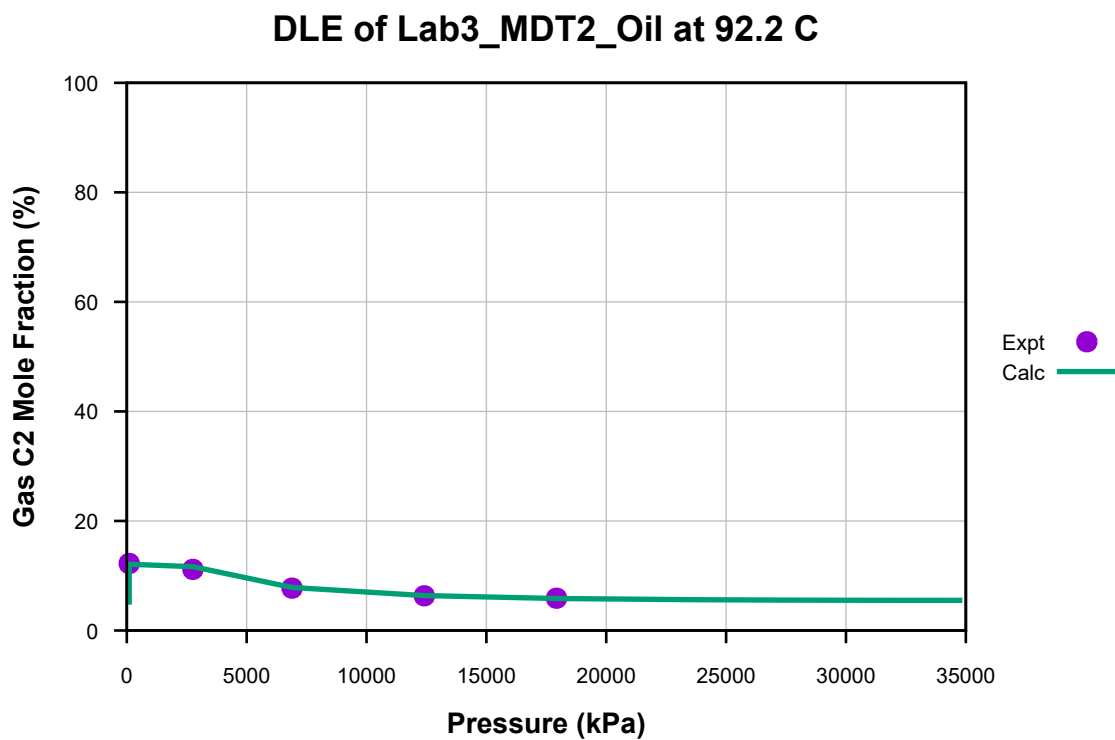


Figure 72: Gas C2 Mole Fraction vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.

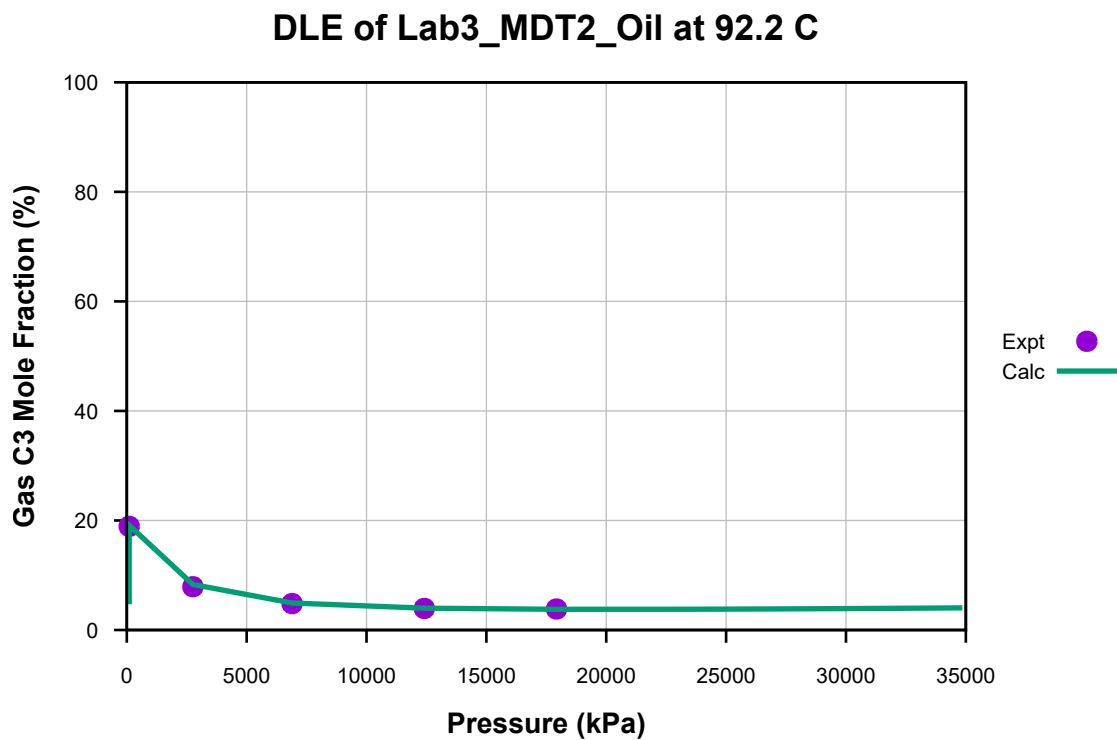


Figure 73: Gas C3 Mole Fraction vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.

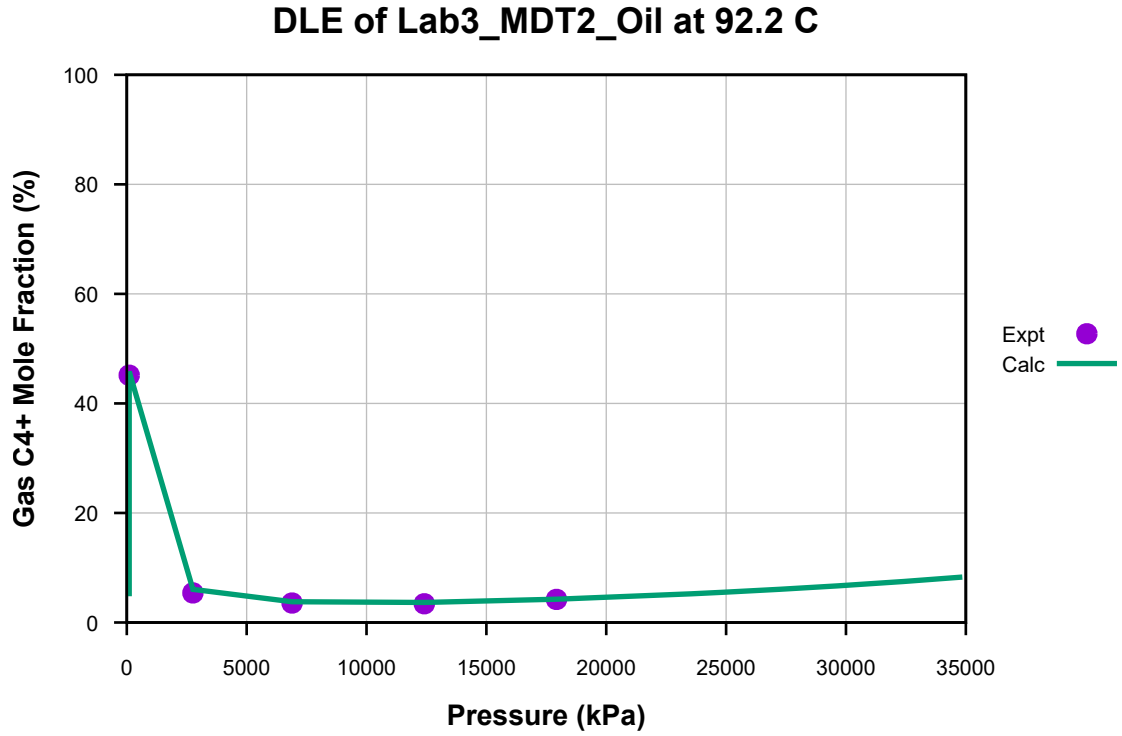


Figure 74: Gas C4+ Mole Fraction vs. Pressure for DLE of Lab3\_MDT2\_Oil at 92.2 C.

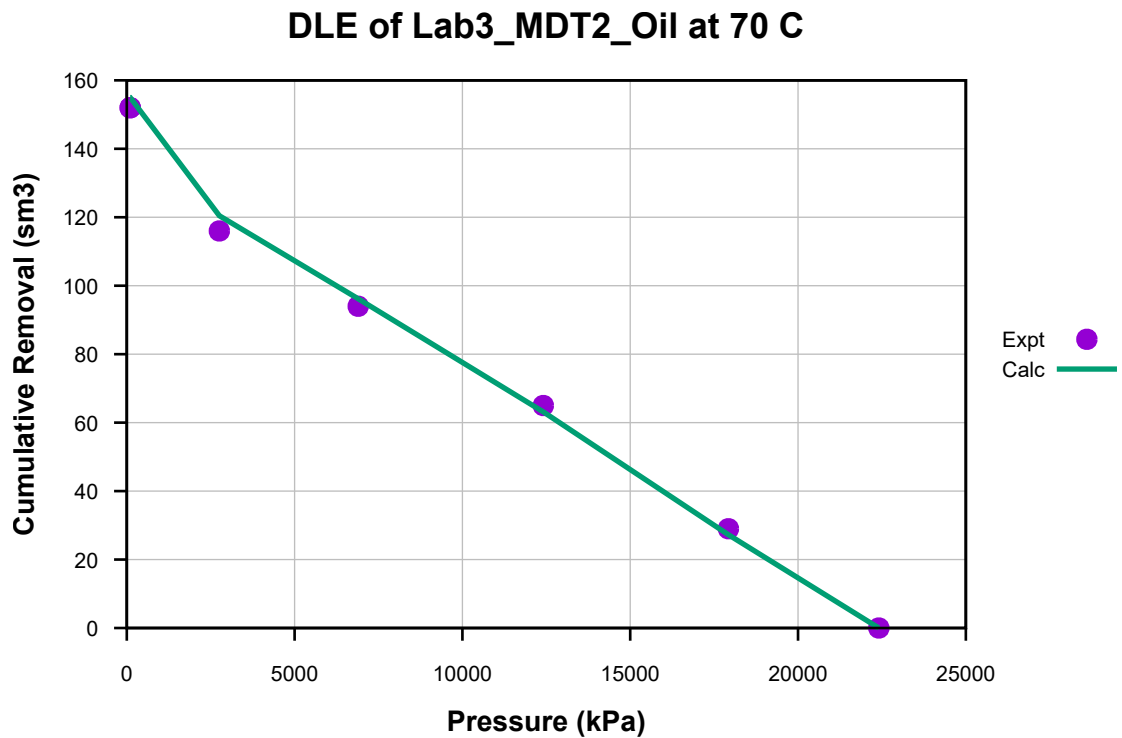


Figure 75: Cumulative Removal vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.

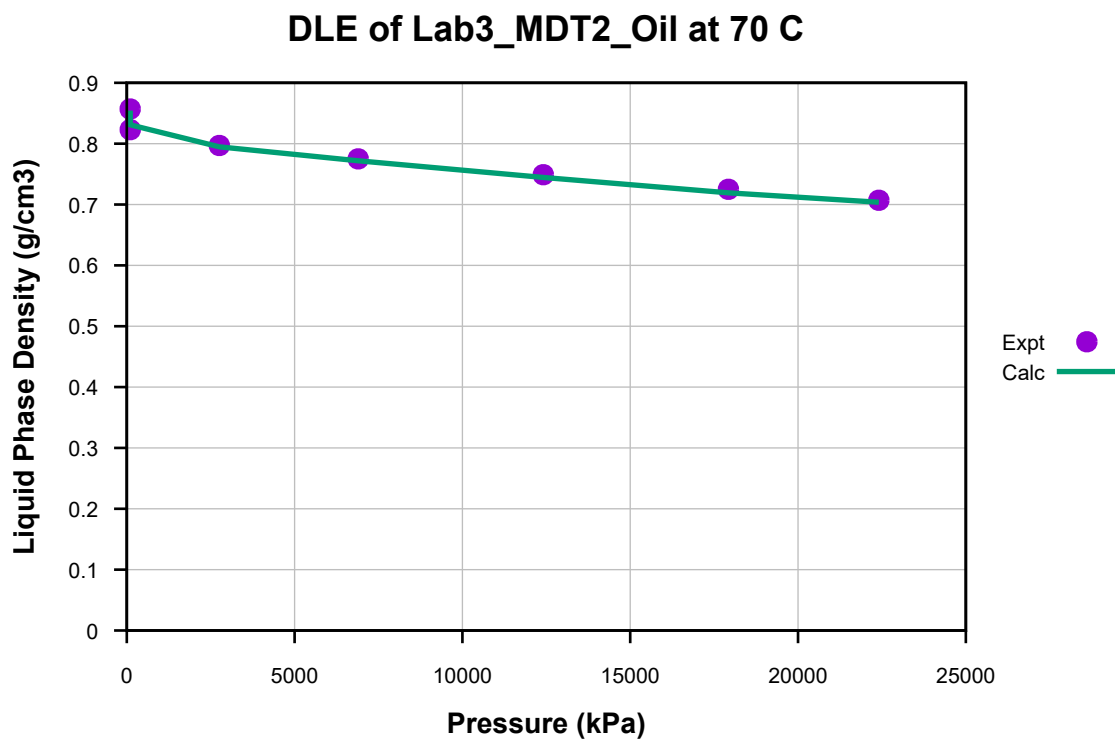


Figure 76: Liquid Phase Density vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.

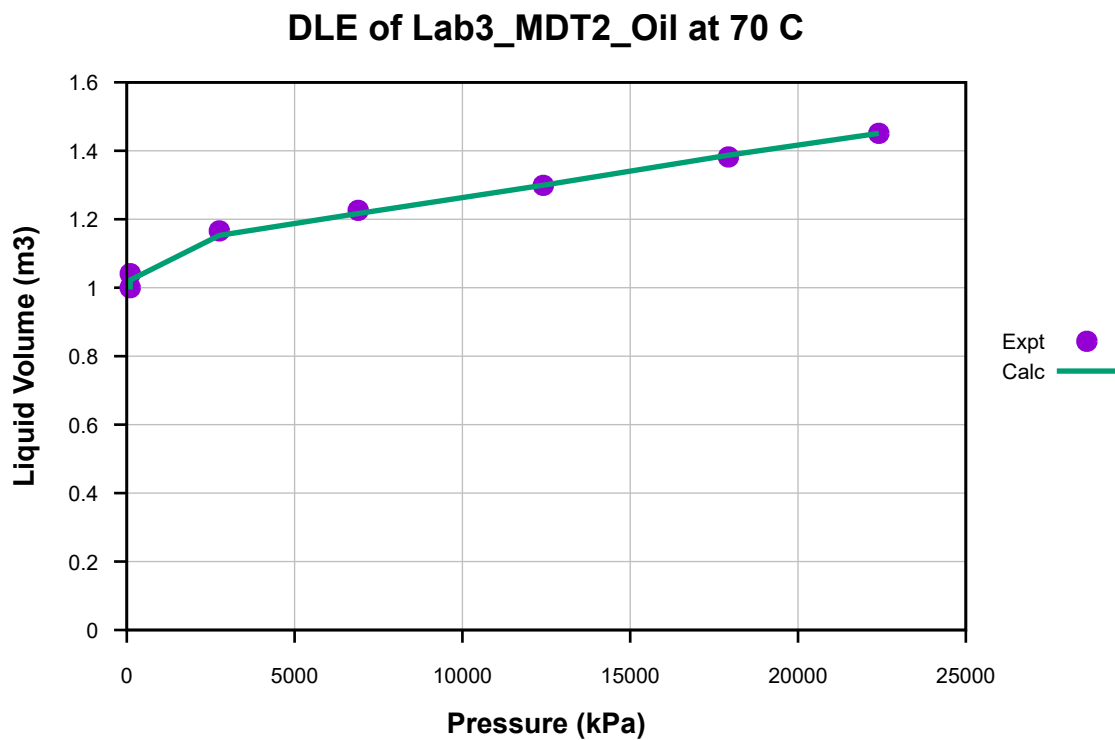


Figure 77: Liquid Volume vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.

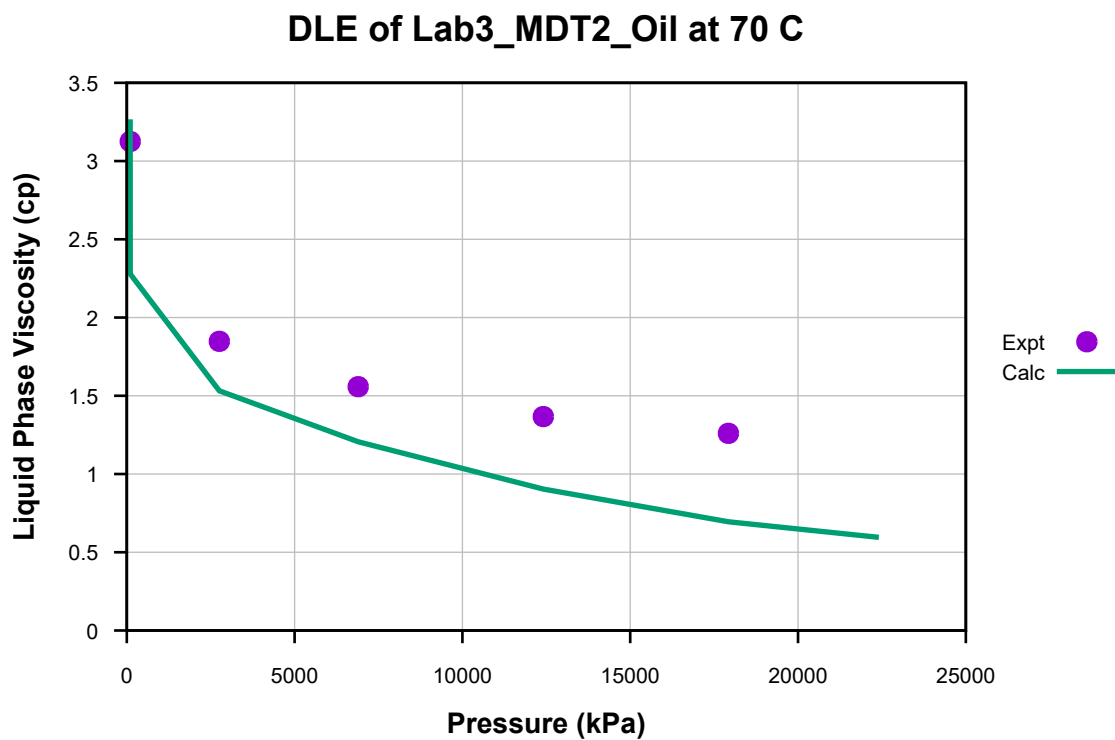


Figure 78: Liquid Phase Viscosity vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.

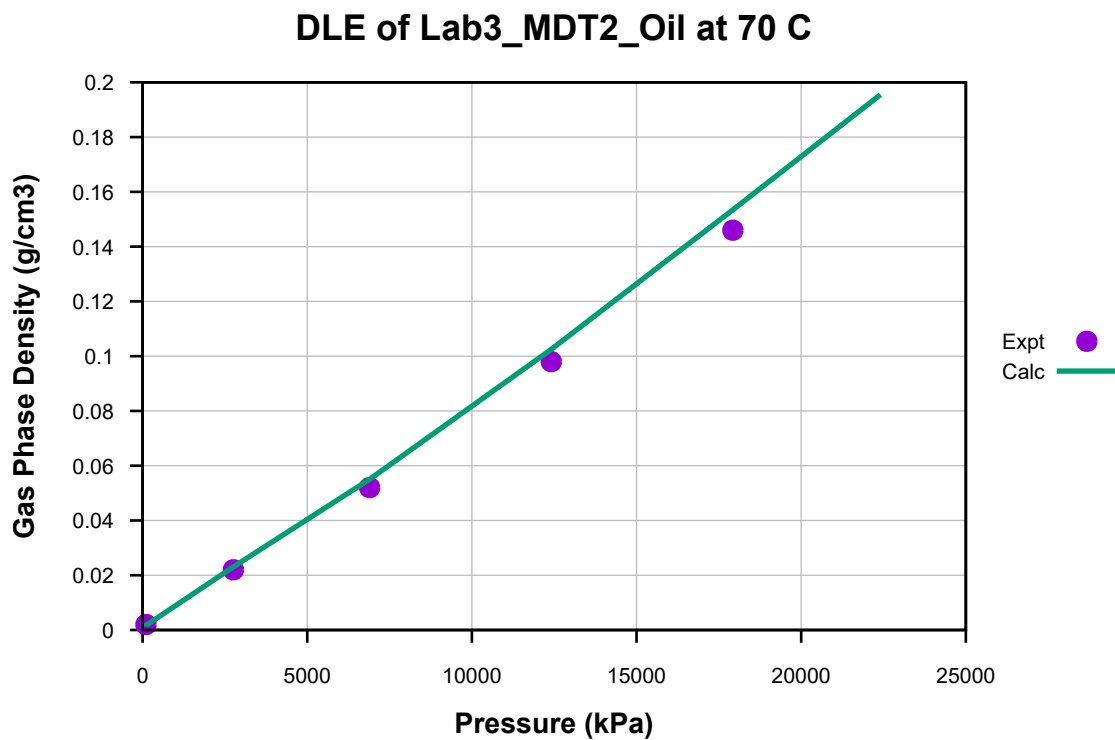


Figure 79: Gas Phase Density vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.

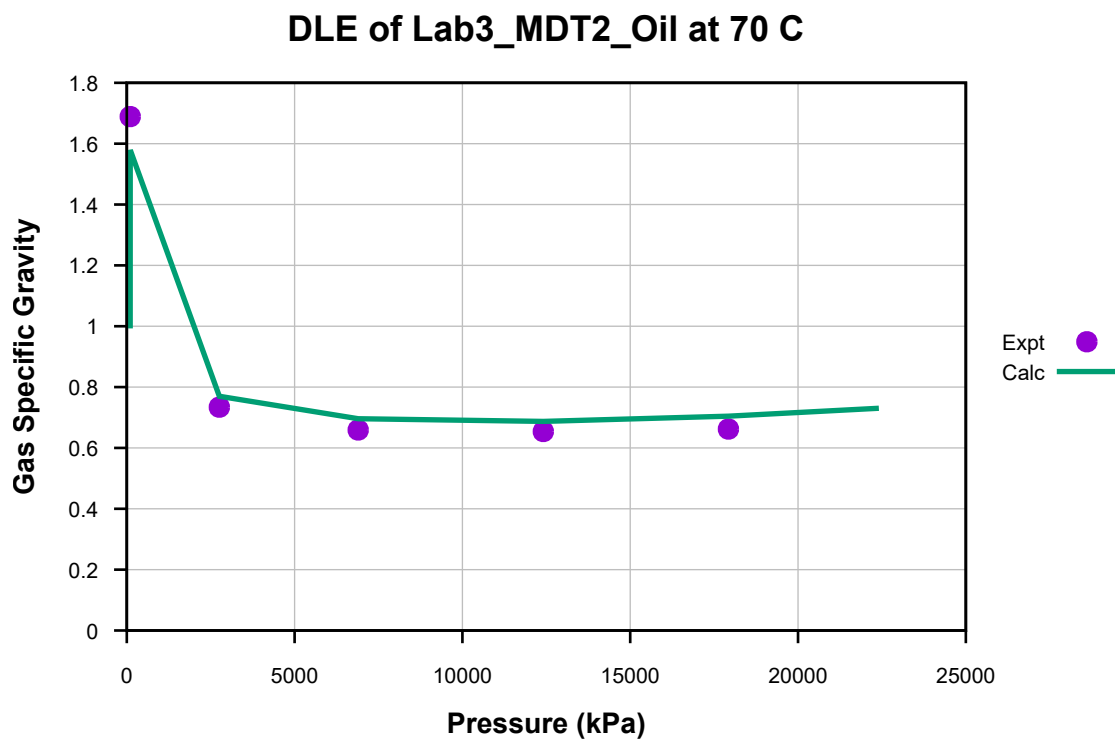


Figure 80: Gas Specific Gravity vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.

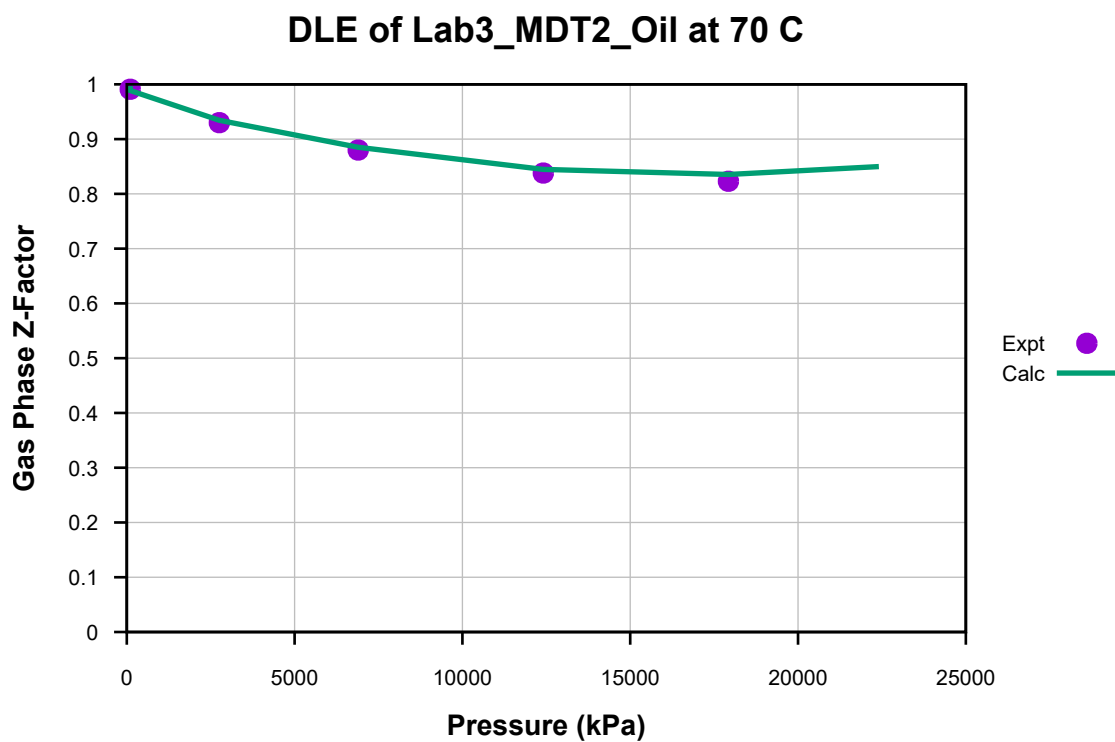


Figure 81: Gas Phase Z-Factor vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.

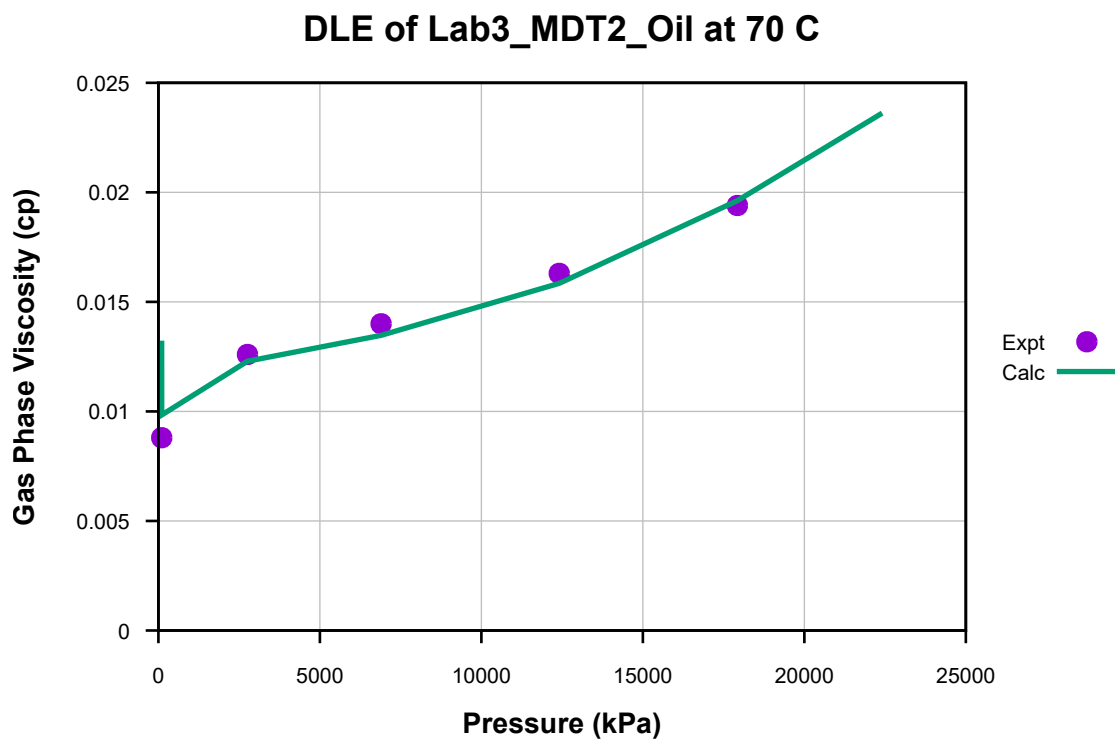


Figure 82: Gas Phase Viscosity vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.

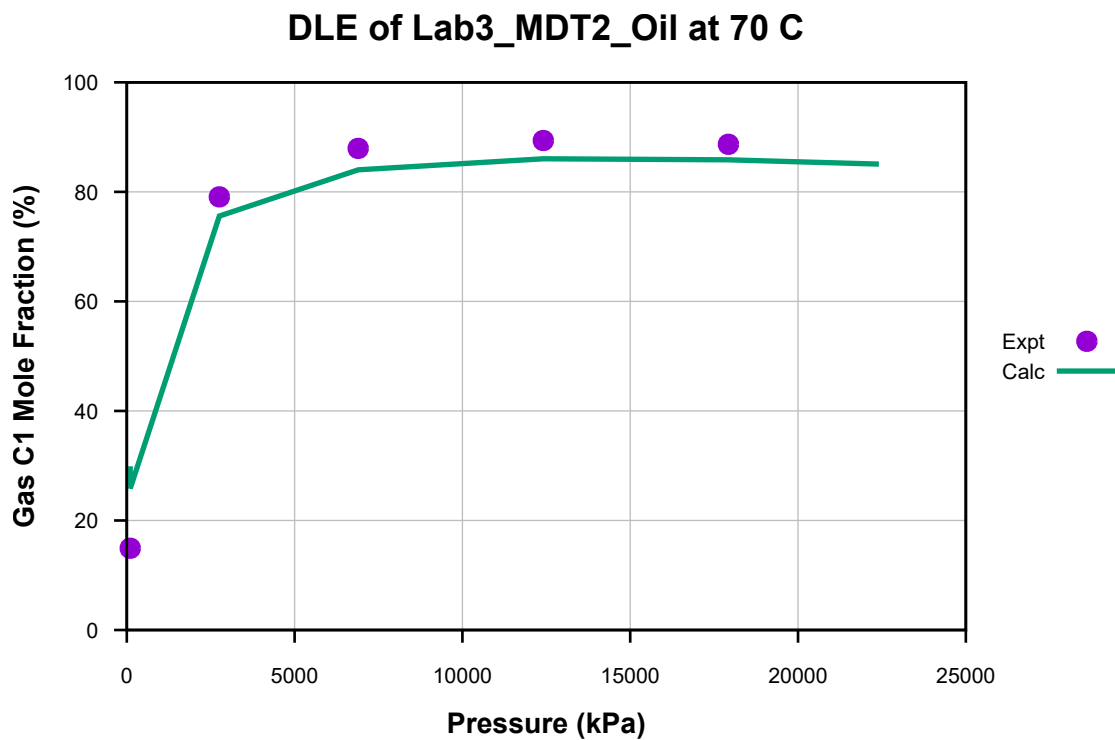


Figure 83: Gas C1 Mole Fraction vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.

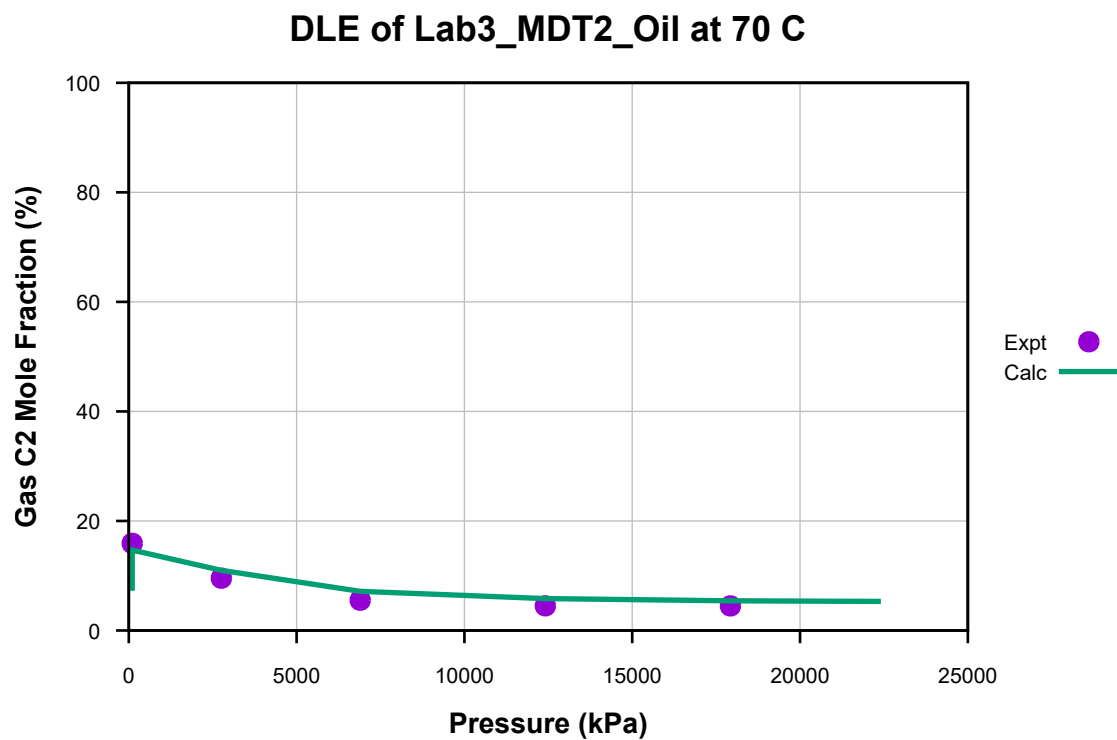


Figure 84: Gas C2 Mole Fraction vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.

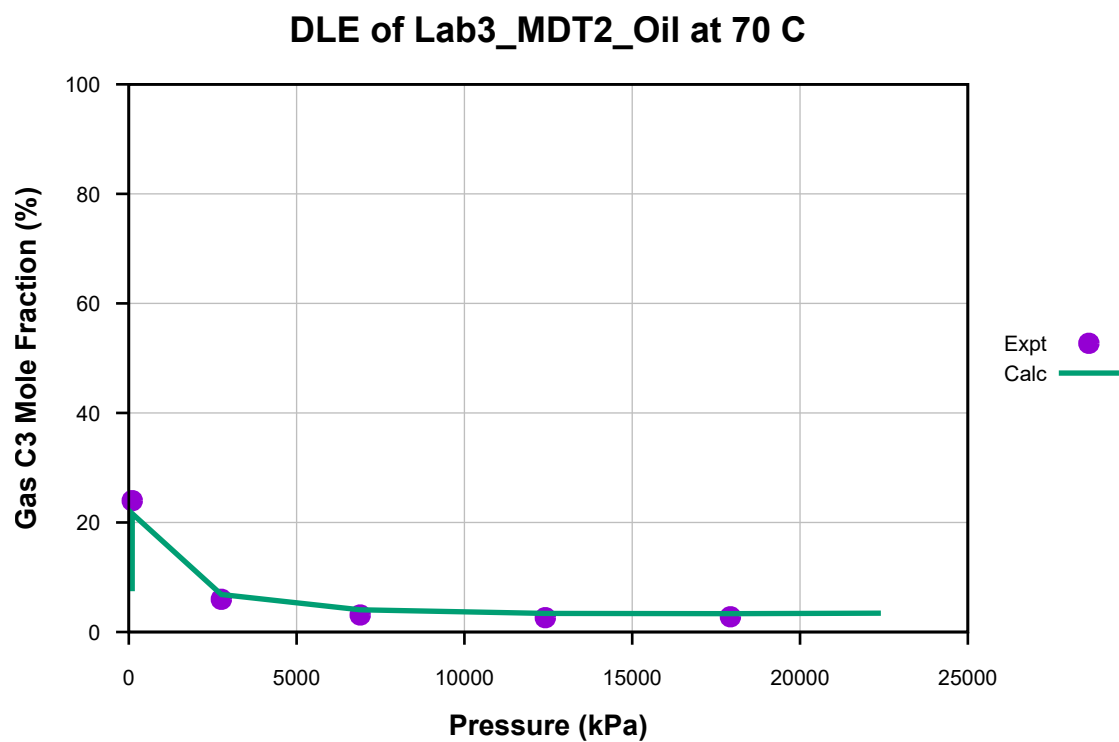


Figure 85: Gas C3 Mole Fraction vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.



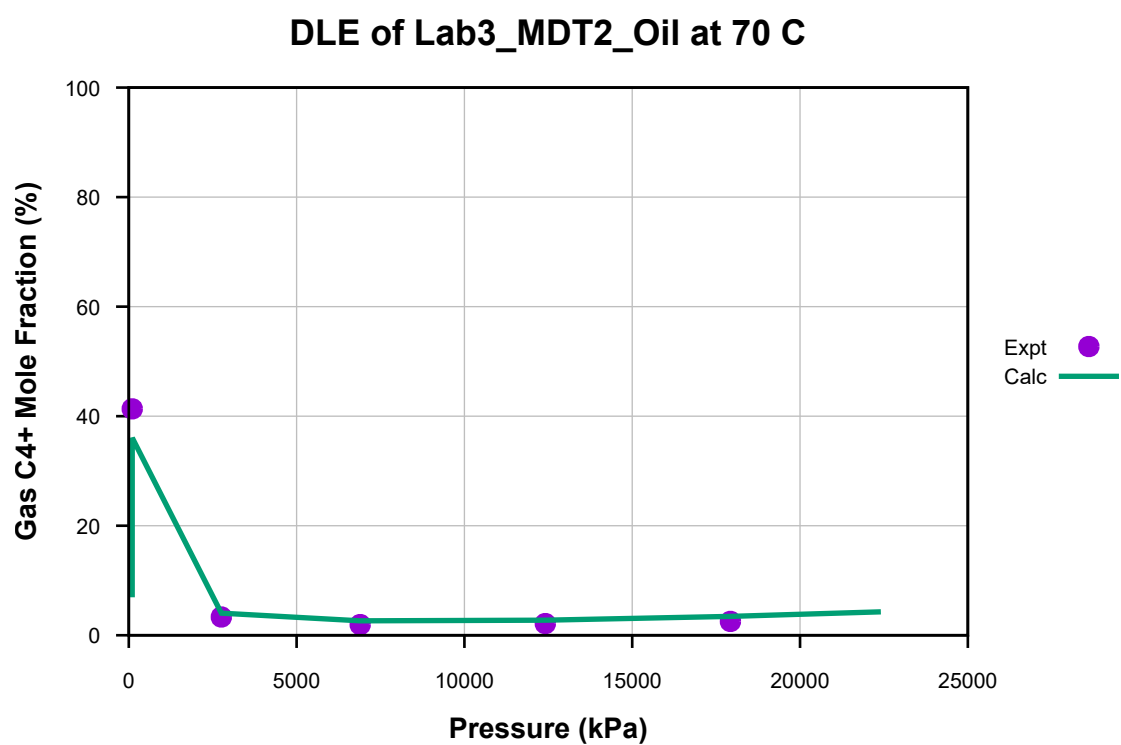


Figure 86: Gas C4+ Mole Fraction vs. Pressure for DLE of Lab3\_MDT2\_Oil at 70 C.