

APPENDIX G

GAS CHROMATOGRAPH RESPONSE FACTOR

Table G.1. TCD Weight Response Factor of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 15.2 millipounds/hr,
methane - 6.9 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1247	6.7	0.6186
1.96	0.1454	14.8	0.8866
3.50	0.1670	24.0	0.8206
5.23	0.1771	33.8	0.7957
7.10	0.1951	45.7	0.7824
10.85	0.1858	67.8	0.7658
15.82	0.1726	92.4	0.7522

Table G.2. TCD Weight Response Factor of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 41.4 millipounds/hr,
methane - 6.9 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.0731	6.7	0.3624
1.96	0.0852	14.8	0.5194
3.50	0.0978	24.0	0.4755
5.23	0.1018	33.8	0.4662
7.10	0.1011	45.7	0.4537
10.85	0.0970	67.8	0.4487
15.82	0.0956	92.4	0.4226

Table G.3. TCD Weight Response Factor of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 64.4 millipounds/hr,
methane - 6.9 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.0646	6.7	0.3207
1.96	0.0754	14.8	0.4596
3.50	0.0865	24.0	0.4207
5.23	0.0918	33.8	0.4124
7.10	0.0895	45.7	0.4014
10.85	0.0858	67.8	0.3861
15.82	0.0846	92.4	0.3739

Table G.4. TCD Weight Response Factor of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 86.2 millipounds/hr,
methane - 6.9 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.0605	6.7	0.3001
1.96	0.0706	14.8	0.4301
3.50	0.0810	24.0	0.3938
5.23	0.0859	33.8	0.3860
7.10	0.0838	45.7	0.3757
10.85	0.0803	67.8	0.3614
15.82	0.0792	92.4	0.3499

Table G.5. TCD Weight Response Factor of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 15.2 millipounds/hr,
methane - 17.0 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.2050	6.7	0.5278
1.96	0.2010	14.8	0.8316
3.50	0.2463	24.0	0.4926
5.23	0.2528	33.8	0.7601
7.10	0.2669	45.7	0.7712
10.85	0.2745	67.8	0.8074
15.82	0.2751	92.4	0.8058

Table 6.6. TCD Weight Response Factor of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 41.4 millipounds/hr,
methane - 17.0 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1683	6.7	0.4333
1.96	0.1650	14.8	0.6828
3.50	0.2008	24.0	0.6513
5.23	0.2076	33.8	0.6240
7.10	0.2191	45.7	0.6332
10.85	0.2254	67.8	0.6629
15.82	0.2259	92.4	0.6616

Table 6.7. TCD Weight Response Factor of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 64.4 millipounds/hr,
methane - 17.0 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1549	6.7	0.4036
1.96	0.1497	14.8	0.6194
3.50	0.1822	24.0	0.5908
5.23	0.1883	33.8	0.5661
7.10	0.1988	45.7	0.5744
10.85	0.2045	67.8	0.6014
15.82	0.2049	92.4	0.6002

Table G.8. TCD Weight Response Factor of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 85.2 millipounds/hr,
methane - 17.0 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1259	6.7	0.3242
1.96	0.1235	14.8	0.5108
3.50	0.1512	24.0	0.4906
5.23	0.1553	33.8	0.4668
7.10	0.1639	45.7	0.4736
10.85	0.1686	67.8	0.4959
15.82	0.1690	92.4	0.4949

Table G.9. TCD Weight Response Factor of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 15.2 millipounds/hr,
methane - 28.5 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1873	6.7	0.5511
1.96	0.2090	14.8	0.8427
3.50	0.2706	24.0	0.9585
5.23	0.2911	33.8	0.8784
7.10	0.2758	45.7	0.8569
10.85	0.2951	67.8	0.9293
15.82	0.2903	92.4	0.9117

Table G.10. TCD Weight Response Factor of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 41.4 millipound/hr,
methane - 28.5 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1455	6.7	0.4280
1.96	0.1623	14.8	0.6545
3.50	0.2102	24.0	0.7444
5.23	0.2261	33.8	0.6822
7.10	0.2142	45.7	0.6655
10.85	0.2292	67.8	0.7218
15.82	0.2255	92.4	0.7080

Table G.11. TCD Weight Response Factor of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 64.4 millipounds/hr,
methane - 28.5 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1519	6.7	0.4470
1.96	0.1695	14.8	0.6835
3.50	0.2195	24.0	0.7774
5.23	0.2361	33.8	0.7248
7.10	0.2236	45.7	0.6950
10.85	0.2393	67.8	0.7538
15.82	0.2355	92.4	0.7394

Table G.12. TCD Weight Response Factors of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 86.2 millipounds/hr,
methane - 28.5 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1179	6.7	0.3468
1.96	0.1315	14.8	0.5303
3.50	0.1703	24.0	0.6031
5.23	0.1832	33.8	0.5582
7.10	0.1735	45.7	0.5392
10.85	0.1857	67.8	0.5848
15.82	0.1827	92.4	0.5737

Table G.13. TCD Weight Response Factors of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 15.2 millipounds/hr,
methane - 42.2 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1794	6.7	0.5493
1.96	0.1731	14.8	0.5839
3.50	0.2040	24.0	0.6269
5.23	0.2053	33.8	0.8179
7.10	0.2169	45.7	0.8490
10.85	0.2821	67.8	0.8734
15.82	0.2713	92.4	0.8733

Table G.14. TCD Weight Response Factors of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 41.4 millipounds/hr,
methane - 42.2 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1577	6.7	0.4830
1.96	0.1522	14.8	0.5134
3.50	0.1794	24.0	0.5513
5.23	0.1805	33.8	0.7192
7.10	0.1908	45.7	0.7466
10.85	0.2480	67.8	0.7680
15.82	0.2385	92.4	0.7679

Table G.15. TCD Weight Response Factors of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 64.4 millipounds/hr,
methane - 42.2 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1503	6.7	0.4603
1.96	0.1451	14.8	0.4893
3.50	0.1710	24.0	0.5254
5.23	0.1720	33.8	0.6855
7.10	0.1818	45.7	0.7116
10.85	0.2364	67.8	0.7320
15.82	0.2273	92.4	0.7320

Table G.16. TCD Weight Response Factors of Hydrogen and Carbon Monoxide
for Carle Analytical Gas Chromatograph 111.

Amounts of references: carbon dioxide - 86.2 millipounds/hr,
methane - 42.2 millipounds/hr.

<u>Hydrogen</u>		<u>Carbon Monoxide</u>	
Amount (millipounds/hr)	Response Factor	Amount (millipounds/hr)	Response Factor
0.81	0.1396	6.7	0.4274
1.96	0.1347	14.8	0.4543
3.50	0.1587	24.0	0.4878
5.23	0.1597	33.8	0.6364
7.10	0.1688	45.7	0.6606
10.85	0.2195	67.8	0.6795
15.82	0.2111	92.4	0.6795

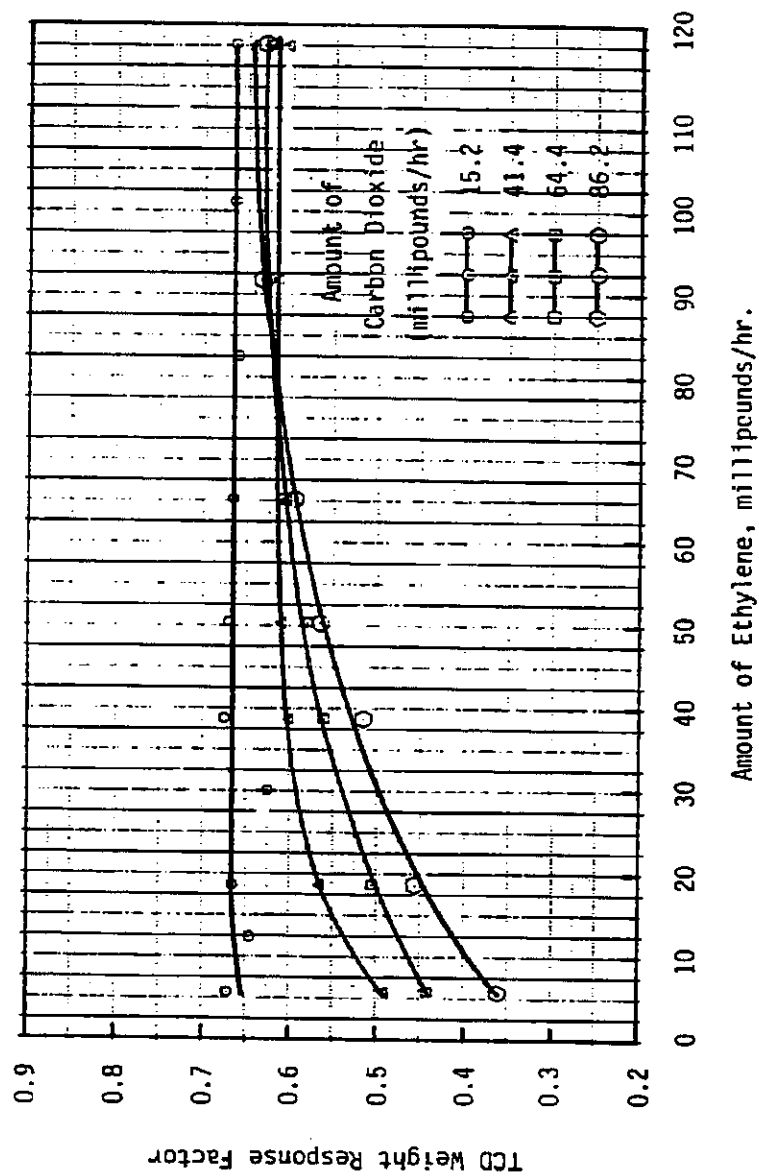


Figure G.1. TCD Weight Response Factor of Ethylene for
Carle Analytical Gas Chromatograph 111.

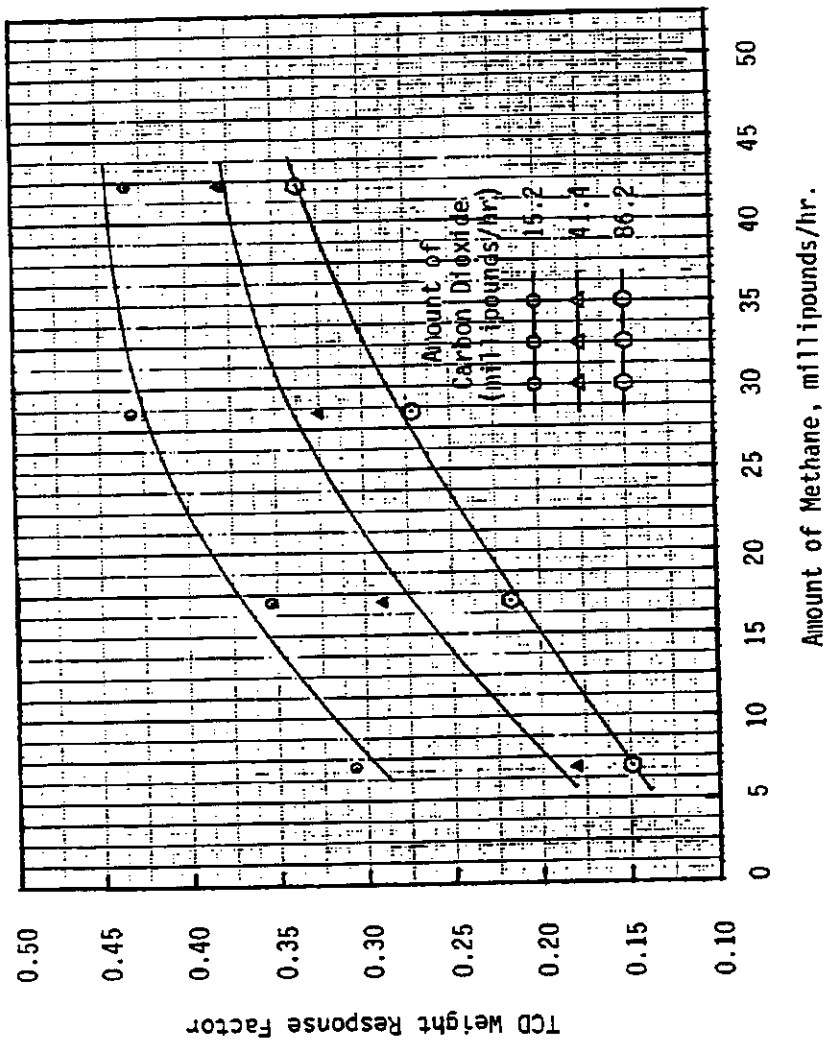


Figure G.2. TCD Weight Response Factor of Methane for
Carle Analytical Gas Chromatograph 111.