

Sample: HUX Tank 31
Parameter: C:\HPCHEM\HCE30\CGSB_MULTI FLG

27-Aug-04, 00:17:27
Operator:

Summary by Group

<u>Group</u>	<u>%Wgt</u>	<u>%Vol</u>	<u>%Mol</u>
Aromatics	13.742	11.795	14.415
I-Paraffins	31.192	32.830	29.885
Naphthenes	29.548	28.574	31.154
Olefins	4.963	5.091	4.502
Paraffin	18.858	20.051	18.615
Oxygenates	0.000	0.000	0.000
Unidentified	1.696	1.660	1.430
Pi's	0.000	0.000	0.000

ASTM METHOD

D - 6729

CGSB - Detailed Hydrocarbon Analysis

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Composite by Carbon

<u>Group</u>	<u>C#</u>	<u>%Wgt</u>	<u>%Vol</u>	<u>%Mol</u>
Aromatics	C6	0.109	0.093	0.157
	C7	3.707	3.191	4.510
	C8	4.912	4.223	5.186
	C9	3.881	3.315	3.623
	C10	1.033	0.888	0.863
	C11	0.099	0.085	0.076
I-Paraffins	C6	0.159	0.179	0.206
	C7	7.875	8.611	8.809
	C8	9.781	10.344	9.598
	C9	8.771	9.039	7.664
	C10	4.020	4.079	3.167
	C11	0.578	0.569	0.435
	C12	0.009	0.009	0.006
Naphthenes	C6	1.183	1.159	1.575
	C7	12.754	12.483	14.561
	C8	11.109	10.699	11.100
	C9	3.605	3.396	3.201
	C10	0.897	0.837	0.717
Olefins	C7	0.200	0.210	0.201
	C8	0.860	0.896	0.859
	C9	3.629	3.709	3.223
	C10	0.274	0.277	0.219
Paraffin	C6	0.183	0.207	0.239
	C7	6.727	7.339	7.525
	C8	5.571	5.913	5.466
	C9	4.325	4.495	3.780
	C10	1.893	1.935	1.491
	C11	0.154	0.155	0.110
	C12	0.005	0.005	0.003

Recovery = 100.00

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Component List

<u>Pk#</u>	<u>Time</u>	<u>Group</u>	<u>Component</u>	<u>%Wgt</u>	<u>%Vol</u>	<u>%Mol</u>
1	27.947	I6	64 2,3-Dimethylbutane	0.008	0.009	0.010
2	29.002	I6	74 2-Methylpentane	0.065	0.075	0.085
3	31.636	I6	80 3-Methylpentane	0.086	0.096	0.111
4	35.357	P6	96 n-Hexane	0.183	0.207	0.239
5	40.146	N6	112 McyC5+2,2DMC5	0.679	0.676	0.904
6	41.766	I7	116 2,4-Dimethylpentane	0.143	0.158	0.160
7	45.127	A6	130 Benzene	0.109	0.093	0.157
8	46.727	I7	134 33DMC5+5m1C6ene	0.046	0.050	0.052
9	46.992	N6	136 Cyclohexane	0.504	0.483	0.671
10	50.190	I7	156 2-MethylC6 + C7-Olefin	4.159	4.571	4.652
11	52.019	I7	166 3-Methylhexane	3.284	3.572	3.673
12	52.814	N7	172 t-1,3-DimethylcyC5	1.487	1.472	1.698
13	53.391	N7	174 c-1,3-DMcyclopentane	1.349	1.344	1.540
14	54.007	N7	176 t-1,2-DimethylcycoC5	1.632	1.621	1.863
15	54.168	I7	180 3-Ethylpentane	0.244	0.260	0.273
16	54.624	I8	186 2,2,4-Trimethylpentane	0.040	0.043	0.039
17	55.001	O7	189 C7-Olefin	0.008	0.008	0.009
18	57.634	P7	200 n-Heptane	6.727	7.339	7.525
19	60.995	N7	222 Methylcyclohexane	7.067	6.858	8.068
20	61.881	N8	224 1,1,3-TrimethylcycoC5	0.486	0.485	0.485
21	62.330	I8	226 2,2-Dimethylhexane	0.062	0.066	0.061
22	63.709	N7	234 Ethylcyclopentane	1.219	1.188	1.392
23	64.404	I8	240 2,2,3-Trimethylpentane	0.011	0.012	0.011
24	64.637	I8	245 2,5-DMC6 + C8-olefin	0.504	0.539	0.494
25	64.970	I8	250 2,4-Dimethylhexane	0.594	0.633	0.583
26	65.777	N8	260 t,c-1,2,4-TriMcyC5	0.949	0.948	0.948
27	66.207	I8	265 3,3-DMC6 + C8-olefin	0.078	0.081	0.076
28	67.294	N8	278 t,c-1,2,3-TriMcycoC5	0.659	0.653	0.658
29	67.933	I8	292 2,3,4-Trimethylpentane	0.067	0.069	0.065
30	68.463	A7	300 Toluene	3.707	3.191	4.510
31	69.951	O8	312 C8-Olefin	0.198	0.207	0.197
32	70.283	I8	314 2,3-Dimethylhexane	0.397	0.416	0.390
33	70.428	I8	316 2-M-3-Epentane	0.159	0.166	0.157
34	71.621	I8	326 2-Methylheptane	3.088	3.301	3.030
35	71.845	I8	328 4-Methylheptane	1.026	1.062	1.007
36	72.065	O7	330 C7-Diolefin + C8-Olefin	0.192	0.202	0.192
37	72.188	O8	333 C8-Olefins	0.162	0.170	0.162
38	72.706	N8	335 t-1,4-DiMcycoC6	1.968	1.866	1.967
39	72.903	I8	336 3-Methylheptane	2.529	2.673	2.482

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Component List

<u>Pk#</u>	<u>Time</u>	<u>Group</u>	<u>Component</u>	<u>%Wgt</u>	<u>%Vol</u>	<u>%Mol</u>
40	73.052	I8	338 3-Ethylhexane	1.226	1.281	1.203
41	73.918	O8	348 C8-Olefin	0.252	0.263	0.251
42	74.737	N8	352 c1Ethyl-3-methylcyC5	0.814	0.788	0.813
43	75.091	N8	356 t-1-E-3-McyC5	0.749	0.727	0.748
44	75.307	N8	360 t-1-E-2-McyC5	0.715	0.691	0.714
45	75.575	N8	362 1-M-1-EcycloC5	0.077	0.073	0.077
46	75.992	N3	368 t-1,2-DiMcyC6	0.872	0.839	0.871
47	76.945	N8	385 t-1,3-DiMcyC6	0.070	0.067	0.070
48	77.232	N8	390 c-1,4-DiMcyC6	1.317	1.262	1.316
49	77.480	P8	400 n-Octane	5.571	5.913	5.466
50	78.324	O9	410 C9-Olefin	0.173	0.179	0.153
51	78.461	O9	412 C9-Olefin	0.117	0.121	0.104
52	79.045	I9	418 2,2,4-Trimethylhexane	0.024	0.025	0.021
53	79.375	?	Unidentified	0.053	0.055	0.046
54	79.913	I9	424 2,3,5-Trimethylhexane	0.049	0.051	0.043
55	79.980	O8	426 cis-2-Octene	0.249	0.256	0.248
56	80.445	I9	428 2,2,3,4-TetraMC5	0.056	0.057	0.049
57	80.823	N8	432 c-1,2-DiMcyC6	0.339	0.316	0.339
58	81.055	I9	434 2,4-Dimethylheptane	0.420	0.439	0.367
59	81.333	O9	436 C9-Olefin	0.070	0.072	0.062
60	81.647	N8	440 Ethylcyclohexane	2.095	1.984	2.093
61	81.862	I9	444 2-Methyl-4-Ethylhexane	0.056	0.058	0.049
62	82.017	I9	446 2,6-Dimethylheptane	0.829	0.859	0.724
63	82.179	O9	449 C9-Olefin	0.131	0.135	0.117
64	82.450	O9	452 C9-Olefins	0.941	0.967	0.836
65	82.793	O9	454 C9-Olefins	0.171	0.176	0.152
66	82.940	I9	458 2,5 & 3,5-DMheptane	0.718	0.739	0.628
67	83.106	O9	460 C9-Olefins	0.122	0.126	0.109
68	83.230	I9	462 3,3-Dimethylheptane	0.207	0.214	0.181
69	83.405	?	Unidentified	0.332	0.344	0.290
70	83.633	I9	466 C9-Isoparaffin	0.218	0.223	0.190
71	84.220	A8	475 Ethylbenzene	1.024	0.882	1.082
72	84.401	N9	480 t-1,2,4-TrimethylcyC6	0.352	0.336	0.312
73	84.624	I9	485 2,3,4-Trimethylhexane	0.625	0.631	0.546
74	84.885	O9	490 C9-Olefins	0.087	0.089	0.077
75	85.163	I9	495 3,3,4-Trimethylhexane?	0.153	0.153	0.134
76	85.445	A8	500 m-Xylene	2.000	1.728	2.112
77	85.583	A8	502 p-Xylene	0.710	0.615	0.749
78	85.750	I9	503 2,3-Dimethylheptane	0.518	0.530	0.453

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79	85.998	I9	506 3,4-Dimethylheptane	0.064	0.066	0.056
80	86.133	?	Unidentified	0.067	0.069	0.060
81	86.189	O9	508 C9-Olefin	0.150	0.154	0.134
82	86.387	I9	510 3-Methyl-3-ethylhexane	0.246	0.248	0.215
83	86.552	I9	516 4-Ethylheptane	0.101	0.104	0.089
84	86.814	I9	518 4-MC8+C9-Olefin	0.884	0.916	0.773
85	86.954	I9	520 2-Methyloctane	1.215	1.275	1.061
86	87.260	?	Unidentified	0.033	0.035	0.029
87	87.318	I9	524 C9-Isoparaffin	0.139	0.144	0.122
88	87.644	I9	528 3-Ethylheptane	0.371	0.379	0.324
89	87.814	I9	530 3-Methyloctane	1.431	1.473	1.250
90	87.888	O9	535 C9-Olefin	0.137	0.139	0.121
91	88.061	N9	540 c-1,2,4-TriMcyC6	0.092	0.088	0.082
92	88.310	N9	545 1,1,2-TriMcyC6	0.149	0.145	0.132
93	88.407	A8	550 o-Xylene	1.178	0.999	1.243
94	88.539	O9	560 C9-Olefin	0.089	0.090	0.079
95	88.658	O9	562 C9-Olefin	0.151	0.154	0.134
96	88.869	O9	564 C9-Olefin	0.021	0.021	0.018
97	88.945	?	Unidentified	0.021	0.021	0.019
98	89.236	N9	568 t-1-E-4-M-cyC6?	0.532	0.498	0.473
99	89.390	N9	570 c-1-E-4-McyC6?	0.820	0.767	0.728
100	89.684	I9	572 C9-Isoparaffin	0.427	0.435	0.373
101	90.006	O9	575 1-Nonene	0.099	0.101	0.088
102	90.177	N9	580 Isobutylcyclopentane	0.146	0.139	0.130
103	90.262	?	Unidentified	0.069	0.066	0.062
104	90.329	?	Unidentified	0.015	0.015	0.014
105	90.965	O9	590 cis-3-Nonene	0.066	0.067	0.058
106	91.096	I9	595 C9-Isoparaffin	0.019	0.019	0.016
107	91.328	P9	600 n-Nonane	4.325	4.495	3.780
108	91.746	O9	604 trans-2-Nonene	0.511	0.516	0.453
109	92.094	N9	606 1-M-1-Ecyclohexane	0.170	0.157	0.151
110	92.300	N9	608 1-M-2-PcycloC5	0.017	0.016	0.015
111	92.577	A9	616 Isopropylbenzene	0.130	0.113	0.122
112	92.830	O9	618 cis-2-Nonene	0.029	0.030	0.026
113	92.901	N9	620 tert-Butylcyclopentane	0.117	0.111	0.104
114	93.051	O9	622 C9-Olefins	0.316	0.320	0.281
115	93.288	O9	624 C9-Olefin	0.249	0.252	0.221
116	93.563	N9	626 Isopropylcyclohexane	0.229	0.213	0.204
117	93.819	I10	630 2,2-Dimethyloctane	0.128	0.131	0.101

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Pk#	Time	Group	Component	%Wgt	%Vol	%Mol
118	93.970	?	Unidentified	0.021	0.021	0.016
119	94.069	?	Unidentified	0.016	0.017	0.013
120	94.290	?	Unidentified	0.102	0.096	0.082
121	94.370	N10	634 1-M-4-isopropylcyC6?	0.247	0.232	0.197
122	94.520	N9	636 sec-Butylcyclopentane	0.567	0.536	0.503
123	94.694	I10	638 2,6-Dimethyloctane	0.097	0.100	0.077
124	94.847	I10	640 2,5-Dimethyloctane?	0.109	0.110	0.086
125	94.956	N9	642 Butylcyclopentane	0.310	0.294	0.275
126	95.143	?	Unidentified	0.099	0.093	0.088
127	95.399	I10	646 3,6-Dimethyloctane	0.730	0.737	0.575
128	95.546	N9	648 1-M-2-EcyloC6	0.104	0.095	0.092
129	95.694	?	Unidentified	0.054	0.050	0.048
130	95.825	O10	650 C10-Olefin	0.133	0.134	0.107
131	96.014	A9	651 Propylbenzene	0.470	0.407	0.438
132	96.232	I10	652 3,6-Dimethyloctane	0.449	0.455	0.354
133	96.471	I10	653 3-Methyl-5-ethylheptane	0.074	0.074	0.058
134	96.607	O10	654 C10-Olefin	0.100	0.101	0.080
135	96.860	A9	655 1-Ethyl-3-methylbenzene	0.733	0.632	0.683
136	97.093	A9	656 1-Ethyl-4-methylbenzene	0.417	0.362	0.389
137	97.276	?	Unidentified	0.026	0.023	0.024
138	97.623	N10	657 C10-Naphthene	0.081	0.076	0.065
139	97.703	A9	658 1,3,5-Trimethylbenzene	0.604	0.521	0.564
140	97.974	I10	659 2,3-Dimethyloctane	0.055	0.055	0.043
141	98.115	?	Unidentified	0.074	0.075	0.058
142	98.212	I10	660 5-Methylnonane	0.231	0.235	0.182
143	98.402	I10	661 4-Methylnonane	0.556	0.563	0.438
144	98.676	I10	662 2-Methylnonane	0.492	0.504	0.387
145	98.783	A9	663 1-Ethyl-2-methylbenzene	0.332	0.280	0.309
146	99.047	N10	666 C10-Naphthene	0.148	0.136	0.118
147	99.231	?	Unidentified	0.025	0.025	0.020
148	99.375	I10	668 3-Methylnonane	0.480	0.489	0.378
149	99.533	?	Unidentified	0.081	0.081	0.065
150	99.554	?	Unidentified	0.093	0.093	0.074
151	99.705	O10	670 C10-Olefin	0.041	0.042	0.033
152	99.854	?	Unidentified	0.118	0.120	0.093
153	100.159	I10	672 C10-Isoparaffin	0.051	0.052	0.040
154	100.404	A9	673 1,2,4-Trimethylbenzene	0.750	0.639	0.700
155	100.579	?	Unidentified	0.156	0.133	0.145
156	100.749	I10	674 C10-Isoparaffin	0.202	0.205	0.159

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157	100.899	I10	675 C10-Isoparaffin	0.176	0.179	0.138
158	101.052	I10	676 Isobutylcyclohexane	0.075	0.070	0.059
159	101.239	?	Unidentified	0.019	0.020	0.016
160	101.342	N10	677 C10-Isoparaffin	0.071	0.072	0.057
161	101.492	I10	678 C10-Isoparaffin	0.031	0.032	0.025
162	101.616	I10	682 C10-Isoparaffin	0.009	0.009	0.007
163	101.815	A10	690 Isobutylbenzene	0.046	0.040	0.039
164	102.017	I10	694 C10-Isoparaffin	0.077	0.078	0.061
165	102.309	P10	700 n-Decane	1.893	1.935	1.491
166	102.602	I11	702 C11-Isoparaffin	0.019	0.019	0.013
167	102.817	?	Unidentified	0.033	0.034	0.024
168	103.062	I11	704 C11-Isoparaffin	0.025	0.025	0.018
169	103.257	A9	705 1,2,3-Trimethylbenzene	0.276	0.230	0.257
170	103.454	?	Unidentified	0.020	0.017	0.017
171	103.531	A10	706 1-M-3-isopropylbenzene	0.016	0.014	0.014
172	103.688	A10	708 1-M-4-isopropylbenzene	0.039	0.034	0.033
173	103.871	I11	709 C11-Isoparaffin	0.085	0.086	0.061
174	104.089	I11	710 C11-Isoparaffin?	0.012	0.012	0.009
175	104.280	?	Unidentified	0.016	0.012	0.015
176	104.426	A9	712 2,3-Dihydroindene	0.169	0.131	0.160
177	104.724	N10	714 sec-Butylcyclohexane	0.238	0.218	0.191
178	104.804	?	Unidentified	0.036	0.037	0.026
179	104.992	?	Unidentified	0.008	0.007	0.007
180	105.219	I11	720 3-Ethylnonane	0.061	0.062	0.044
181	105.330	I11	721 C11-Isoparaffin	0.038	0.039	0.028
182	105.484	N10	722 C10-Naphthene	0.112	0.103	0.089
183	105.802	I11	723 C11-Isoparaffin	0.122	0.122	0.109
184	105.990	A10	724 1,3-Diethylbenzene	0.051	0.044	0.043
185	106.244	A10	725 1-M-3-propylbenzene	0.197	0.170	0.164
186	106.432	A10	726 1,4-Diethylbenzene	0.019	0.016	0.016
187	106.604	A10	727 1-M-4-propylbenzene	0.059	0.051	0.049
188	106.710	A10	728 Butylbenzene	0.061	0.053	0.051
189	106.836	A10	729 3,5-DM-1-Ebenzene	0.067	0.058	0.056
190	106.996	?	Unidentified	0.029	0.025	0.024
191	107.116	A10	730 1,2-Diethylbenzene?	0.029	0.025	0.024
192	107.371	I11	732 C11-Isoparaffin	0.031	0.031	0.022
193	107.560	A10	736 C10-Aromatic	0.033	0.028	0.028
194	107.670	A10	738 C10-Aromatic	0.087	0.075	0.073
195	107.823	A10	740 1-M-2-propyl benzene	0.064	0.054	0.053

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196	107.977	?	Unidentified	0.005	0.005	0.004
197	108.091	I11	748 4-Methyldecane	0.059	0.055	0.042
198	108.392	I11	754 C11-Isoparaffin	0.065	0.061	0.047
199	108.528	A10	756 1,4-DM-2-Ebenzene	0.059	0.050	0.049
200	108.691	A10	758 1,3-DM-4-Ebenzene	0.053	0.045	0.044
201	108.819	I11	762 3-Methyldecane	0.016	0.016	0.011
202	108.938	?	Unidentified	0.058	0.058	0.042
203	109.198	A10	764 1,2-DM-4-Ebenz+C1indan	0.068	0.058	0.057
204	109.391	I11	766 C11-Isoparaffin	0.010	0.010	0.007
205	109.747	A10	768 1,3-DM-2-Ebenzene	0.029	0.024	0.024
206	109.880	?	Unidentified	0.006	0.005	0.005
207	110.001	?	Unidentified	0.008	0.008	0.006
208	110.178	I11	770 C11-Isoparaffin	0.018	0.017	0.013
209	110.511	I11	775 C11-Isoparaffin	0.015	0.014	0.011
210	110.732	A11	780 1-M-4-tert-butylbenzene	0.021	0.018	0.016
211	110.857	A10	785 1,2-DM-3-ethylbenzene	0.024	0.020	0.020
212	111.189	P11	800 n-Undecane	0.154	0.155	0.110
213	111.367	A11	802 1-E-4-isopropylbenzene	0.020	0.018	0.015
214	111.800	A10	806 1,2,4,5-TetraMbenzene	0.011	0.009	0.009
215	112.062	A10	810 1,2,3,5-TetraMbenzene	0.020	0.017	0.017
216	112.402	I12	812 C12-Isoparaffin	0.009	0.009	0.006
217	112.634	A11	816 C11-Aromatic	0.009	0.007	0.006
218	113.375	A11	826 1-Ethyl-2-propylbenzene	0.012	0.010	0.009
219	113.916	A11	832 C11-Aromatic	0.004	0.004	0.003
220	114.126	A11	834 1-Methyl-3-butylbenzene	0.012	0.010	0.009
221	114.386	A11	836 1,2,3,4-TetraMbz+C11aro	0.010	0.009	0.009
222	114.894	A11	842 C11-Aromatic	0.011	0.009	0.008
223	117.920	P12	895 n-Dodecane	0.005	0.005	0.003

Recovery = 100.00

Sample: HUX Tank 31
 Parameter: C:\HPCHEM\HCE30\CGSB_MULTI FLG

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 Operator:

Components by Group

<u>Group</u>	<u>Time</u>	<u>Component</u>	<u>%Wgt</u>	<u>%Vol</u>	<u>%Mol</u>
Aromatics	45.127	130 Benzene	0.109	0.093	0.157
	68.463	300 Toluene	3.707	3.191	4.510
	84.220	475 Ethylbenzene	1.024	0.882	1.082
	85.445	500 m-Xylene	2.000	1.728	2.112
	85.583	502 p-Xylene	0.710	0.615	0.749
	88.407	550 o-Xylene	1.178	0.999	1.243
	92.577	616 Isopropylbenzene	0.130	0.113	0.122
	96.014	651 Propylbenzene	0.470	0.407	0.438
	96.860	655 1-Ethyl-3-methylbenzene	0.733	0.632	0.683
	97.093	656 1-Ethyl-4-methylbenzene	0.417	0.362	0.389
	97.703	658 1,3,5-Trimethylbenzene	0.604	0.521	0.564
	98.783	663 1-Ethyl-2-methylbenzene	0.332	0.280	0.309
	100.404	673 1,2,4-Trimethylbenzene	0.750	0.639	0.700
	101.815	690 Isobutylbenzene	0.046	0.040	0.039
	103.257	705 1,2,3-Trimethylbenzene	0.276	0.230	0.257
	103.531	706 1-M-3-isopropylbenzene	0.016	0.014	0.014
	103.688	708 1-M-4-isopropylbenzene	0.039	0.034	0.033
	104.426	712 2,3-Dihydroindene	0.169	0.131	0.160
	105.990	724 1,3-Diethylbenzene	0.051	0.044	0.043
	106.244	725 1-M-3-propylbenzene	0.197	0.170	0.164
	106.432	726 1,4-Diethylbenzene	0.019	0.016	0.016
	106.604	727 1-M-4-propylbenzene	0.059	0.051	0.049
	106.710	728 Butylbenzene	0.061	0.053	0.051
	106.836	729 3,5-DM-1-Ebenzene	0.067	0.058	0.056
	107.116	730 1,2-Diethylbenzene?	0.029	0.025	0.024
	107.560	736 C10-Aromatic	0.033	0.028	0.028
	107.670	738 C10-Aromatic	0.087	0.075	0.073
	107.823	740 1-M-2-propyl benzene	0.064	0.054	0.053
	108.528	756 1,4-DM-2-Ebenzene	0.059	0.050	0.049
	108.691	758 1,3-DM-4-Ebenzene	0.053	0.045	0.044
	109.198	764 1,2-DM-4-Ebenz+C1indan	0.068	0.058	0.057
	109.747	768 1,3-DM-2-Ebenzene	0.029	0.024	0.024
	110.732	780 1-M-4-tert-butylbenzene	0.021	0.018	0.016
	110.857	785 1,2-DM-3-ethylbenzene	0.024	0.020	0.020
	111.367	802 1-E-4-isopropylbenzene	0.020	0.018	0.015
	111.800	806 1,2,4,5-TetraMbenzene	0.011	0.009	0.009
112.062	810 1,2,3,5-TetraMbenzene	0.020	0.017	0.017	
112.634	816 C11-Aromatic	0.009	0.007	0.006	
113.375	826 1-Ethyl-2-propylbenzene	0.012	0.010	0.009	
113.916	832 C11-Aromatic	0.004	0.004	0.003	
114.126	834 1-Methyl-3-butylbenzene	0.012	0.010	0.009	
114.386	836 1,2,3,4-TetraMbz+C11aro	0.010	0.009	0.009	

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Components by Group

<u>Group</u>	<u>Time</u>	<u>Component</u>	<u>%Wgt</u>	<u>%Vol</u>	<u>%Mol</u>
Aromatics	114.894	842 C11-Aromatic	0.011	0.009	0.008
I-Paraffins	27.947	64 2,3-Dimethylbutane	0.008	0.009	0.010
	29.002	74 2-Methylpentane	0.065	0.075	0.085
	31.636	80 3-Methylpentane	0.086	0.096	0.111
	41.766	116 2,4-Dimethylpentane	0.143	0.158	0.160
	46.727	134 3,3DMC5+5m1C6ene	0.046	0.050	0.052
	50.190	156 2-MethylC6 + C7-Olefin	4.159	4.571	4.652
	52.019	166 3-Methylhexane	3.284	3.572	3.673
	54.168	180 3-Ethylpentane	0.244	0.260	0.273
	54.624	186 2,2,4-Trimethylpentane	0.040	0.043	0.039
	62.330	226 2,2-Dimethylhexane	0.062	0.066	0.061
	64.404	240 2,2,3-Trimethylpentane	0.011	0.012	0.011
	64.637	245 2,5-DMC6 + C8-olefin	0.504	0.539	0.494
	64.970	250 2,4-Dimethylhexane	0.594	0.633	0.583
	66.207	265 3,3-DMC6 + C8-olefin	0.078	0.081	0.076
	67.933	292 2,3,4-Trimethylpentane	0.067	0.069	0.065
	70.283	314 2,3-Dimethylhexane	0.397	0.416	0.390
	70.428	316 2-M-3-Epentane	0.159	0.166	0.157
	71.621	326 2-Methylheptane	3.088	3.301	3.030
	71.845	328 4-Methylheptane	1.026	1.062	1.007
	72.903	336 3-Methylheptane	2.529	2.673	2.482
	73.052	338 3-Ethylhexane	1.226	1.281	1.203
	79.045	418 2,2,4-Trimethylhexane	0.024	0.025	0.021
	79.913	424 2,3,5-Trimethylhexane	0.049	0.051	0.043
	80.445	428 2,2,3,4-TetraMC5	0.056	0.057	0.049
	81.055	434 2,4-Dimethylheptane	0.420	0.439	0.367
	81.862	444 2-Methyl-4-Ethylhexane	0.056	0.058	0.049
	82.017	446 2,6-Dimethylheptane	0.829	0.859	0.724
	82.940	458 2,5 & 3,5-DMheptane	0.718	0.739	0.628
	83.230	462 3,3-Dimethylheptane	0.207	0.214	0.181
	83.633	466 C9-Isoparaffin	0.218	0.223	0.190
	84.624	485 2,3,4-Trimethylhexane	0.625	0.631	0.546
	85.163	495 3,3,4-Trimethylhexane?	0.153	0.153	0.134
	85.750	503 2,3-Dimethylheptane	0.518	0.530	0.453
	85.998	506 3,4-Dimethylheptane	0.064	0.066	0.056
	86.387	510 3-Methyl-3-ethylhexane	0.246	0.248	0.215
	86.552	516 4-Ethylheptane	0.101	0.104	0.089
	86.814	518 4-MC8+C9-Olefin	0.884	0.916	0.773
	86.954	520 2-Methyloctane	1.215	1.275	1.061
	87.318	524 C9-Isoparaffin	0.139	0.144	0.122
	87.644	528 3-Ethylheptane	0.371	0.379	0.324

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Components by Group

<u>Group</u>	<u>Time</u>	<u>Component</u>	<u>%Wgt</u>	<u>%Vol</u>	<u>%Mol</u>
I-Paraffins	87.814	530 3-Methyloctane	1.431	1.473	1.250
	89.684	572 C9-Isoparaffin	0.427	0.435	0.373
	91.096	595 C9-Isoparaffin	0.019	0.019	0.016
	93.819	630 2,2-Dimethyloctane	0.128	0.131	0.101
	94.694	638 2,6-Dimethyloctane	0.097	0.100	0.077
	94.847	640 2,5-Dimethyloctane?	0.109	0.110	0.086
	95.399	646 3,6-Dimethyloctane	0.730	0.737	0.575
	96.232	652 3,6-Dimethyloctane	0.449	0.455	0.354
	96.471	653 3-Methyl-5-ethylheptane	0.074	0.074	0.058
	97.974	659 2,3-Dimethyloctane	0.055	0.055	0.043
	98.212	660 5-Methylnonane	0.231	0.235	0.182
	98.402	661 4-Methylnonane	0.556	0.563	0.438
	98.676	662 2-Methylnonane	0.492	0.504	0.387
	99.375	668 3-Methylnonane	0.480	0.489	0.378
	100.159	672 C10-Isoparaffin	0.051	0.052	0.040
	100.749	674 C10-Isoparaffin	0.202	0.205	0.159
	100.899	675 C10-Isoparaffin	0.176	0.179	0.138
	101.052	676 Isobutylcyclohexane	0.075	0.070	0.059
	101.492	678 C10-Isoparaffin	0.031	0.032	0.025
	101.616	682 C10-Isoparaffin	0.009	0.009	0.007
	102.017	694 C10-Isoparaffin	0.077	0.078	0.061
	102.602	702 C11-Isoparaffin	0.019	0.019	0.013
	103.062	704 C11-Isoparaffin	0.025	0.025	0.018
	103.871	709 C11-Isoparaffin	0.085	0.086	0.061
	104.089	710 C11-Isoparaffin?	0.012	0.012	0.009
	105.219	720 3-Ethylnonane	0.061	0.062	0.044
	105.330	721 C11-Isoparaffin	0.038	0.039	0.028
	105.802	723 C11-Isoparaffin	0.122	0.122	0.109
	107.371	732 C11-Isoparaffin	0.031	0.031	0.022
	108.091	748 4-Methyldecane	0.059	0.055	0.042
108.392	754 C11-Isoparaffin	0.065	0.061	0.047	
108.819	762 3-Methyldecane	0.016	0.016	0.011	
109.391	766 C11-Isoparaffin	0.010	0.010	0.007	
110.178	770 C11-Isoparaffin	0.018	0.017	0.013	
110.511	775 C11-Isoparaffin	0.015	0.014	0.011	
112.402	812 C12-Isoparaffin	0.009	0.009	0.006	
Naphthenes	40.146	112 McyC5+2,2DMC5	0.679	0.676	0.904
	46.992	136 Cyclohexane	0.504	0.483	0.671
	52.814	172 t-1,3-DimethylcyC5	1.487	1.472	1.698
	53.391	174 c-1,3-DMcyclopentane	1.349	1.344	1.540
	54.007	176 t-1,2-DimethylcycloC5	1.632	1.621	1.863

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 Operator:

Components by Group

<u>Group</u>	<u>Time</u>	<u>Component</u>	<u>%Wgt</u>	<u>%Vol</u>	<u>%Mol</u>
Naphthenes	60.995	222 Methylcyclohexane	7.067	6.858	8.068
	61.881	224 1,1,3-TrimethylcycloC5	0.486	0.485	0.485
	63.709	234 Ethylcyclopentane	1.219	1.188	1.392
	65.777	260 t,c-1,2,4-TriMcyC5	0.949	0.948	0.948
	67.294	278 t,c-1,2,3-TriMcyC5	0.659	0.653	0.658
	72.706	335 t-1,4-DiMcyC6	1.968	1.866	1.967
	74.737	352 c1Ethyl-3-methylcyC5	0.814	0.788	0.813
	75.091	356 t-1-E-3-McyC5	0.749	0.727	0.748
	75.307	360 t-1-E-2-McyC5	0.715	0.691	0.714
	75.575	362 1-M-1-EcycloC5	0.077	0.073	0.077
	75.992	368 t-1,2-DiMcyC6	0.872	0.839	0.871
	76.945	385 t-1,3-DiMcyC6	0.070	0.067	0.070
	77.232	390 c-1,4-DiMcyC6	1.317	1.262	1.316
	80.823	432 c-1,2-DiMcyC6	0.339	0.316	0.339
	81.647	440 Ethylcyclohexane	2.095	1.984	2.093
	84.401	480 t-1,2,4-TrimethylcyC6	0.352	0.336	0.312
	88.061	540 c-1,2,4-TriMcyC6	0.092	0.088	0.082
	88.310	545 1,1,2-TriMcyC6	0.149	0.145	0.132
	89.236	568 t-1-E-4-M-cyC6?	0.532	0.498	0.473
	89.390	570 c-1-E-4-McyC6?	0.820	0.767	0.728
	90.177	580 Isobutylcyclopentane	0.146	0.139	0.130
	92.094	606 1-M-1-Ecyclohexane	0.170	0.157	0.151
	92.300	608 1-M-2-PcycloC5	0.017	0.016	0.015
	92.901	620 tert-Butylcyclopentane	0.117	0.111	0.104
	93.563	626 Isopropylcyclohexane	0.229	0.213	0.204
	94.370	634 1-M-4-isopropylcyC6?	0.247	0.232	0.197
	94.520	636 sec-Butylcyclopentane	0.567	0.536	0.503
94.956	642 Butylcyclopentane	0.310	0.294	0.275	
95.546	648 1-M-2-EcycloC6	0.104	0.095	0.092	
97.623	657 C10-Naphthene	0.081	0.076	0.065	
99.047	666 C10-Naphthene	0.148	0.136	0.118	
101.342	677 C10-Isoparaffin	0.071	0.072	0.057	
104.724	714 sec-Butylcyclohexane	0.238	0.218	0.191	
105.484	722 C10-Naphthene	0.112	0.103	0.089	
Olefins	55.001	189 C7-Olefin	0.008	0.008	0.009
	69.951	312 C8-Olefin	0.198	0.207	0.197
	72.065	330 C7-Diolefin + C8-Olefin	0.192	0.202	0.192
	72.188	333 C8-Olefins	0.162	0.170	0.162
	73.918	348 C8-Olefin	0.252	0.263	0.251
	78.324	410 C9-Olefin	0.173	0.179	0.153
	78.461	412 C9-Olefin	0.117	0.121	0.104

Recovery = 100.00

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Components by Group

Group	Time	Component	%Wgt	%Vol	%Mol
Olefins	79.980	426 cis-2-Octene	0.249	0.256	0.248
	81.333	436 C9-Olefin	0.070	0.072	0.062
	82.179	449 C9-Olefin	0.131	0.135	0.117
	82.450	452 C9-Olefins	0.941	0.967	0.836
	82.793	454 C9-Olefins	0.171	0.176	0.152
	83.106	460 C9-Olefins	0.122	0.126	0.109
	84.885	490 C9-Olefins	0.087	0.089	0.077
	86.189	508 C9-Olefin	0.150	0.154	0.134
	87.888	535 C9-Olefin	0.137	0.139	0.121
	88.539	560 C9-Olefin	0.089	0.090	0.079
	88.658	562 C9-Olefin	0.151	0.154	0.134
	88.869	564 C9-Olefin	0.021	0.021	0.018
	90.006	575 1-Nonene	0.099	0.101	0.088
	90.965	590 cis-3-Nonene	0.066	0.067	0.058
	91.746	604 trans-2-Nonene	0.511	0.516	0.453
	92.830	618 cis-2-Nonene	0.029	0.030	0.026
	93.051	622 C9-Olefins	0.316	0.320	0.281
	93.288	624 C9-Olefin	0.249	0.252	0.221
	95.825	650 C10-Olefin	0.133	0.134	0.107
96.607	654 C10-Olefin	0.100	0.101	0.080	
99.705	670 C10-Olefin	0.041	0.042	0.033	
Paraffin	35.357	96 n-Hexane	0.183	0.207	0.239
	57.634	200 n-Heptane	6.727	7.339	7.525
	77.480	400 n-Octane	5.571	5.913	5.466
	91.328	600 n-Nonane	4.325	4.495	3.780
	102.309	700 n-Decane	1.893	1.935	1.491
	111.189	800 n-Undecane	0.154	0.155	0.110
117.920	895 n-Dodecane	0.005	0.005	0.003	
Oxygenates Unidentified	79.375	Unidentified	0.053	0.055	0.046
	83.405	Unidentified	0.332	0.344	0.290
	86.133	Unidentified	0.067	0.069	0.060
	87.260	Unidentified	0.033	0.035	0.029
	88.945	Unidentified	0.021	0.021	0.019
	90.262	Unidentified	0.069	0.066	0.062
	90.329	Unidentified	0.015	0.015	0.014
	93.970	Unidentified	0.021	0.021	0.016
	94.069	Unidentified	0.016	0.017	0.013
	94.290	Unidentified	0.102	0.096	0.082
95.143	Unidentified	0.099	0.093	0.088	

Sample: HUX Tank 31

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Operator:

Components by Group

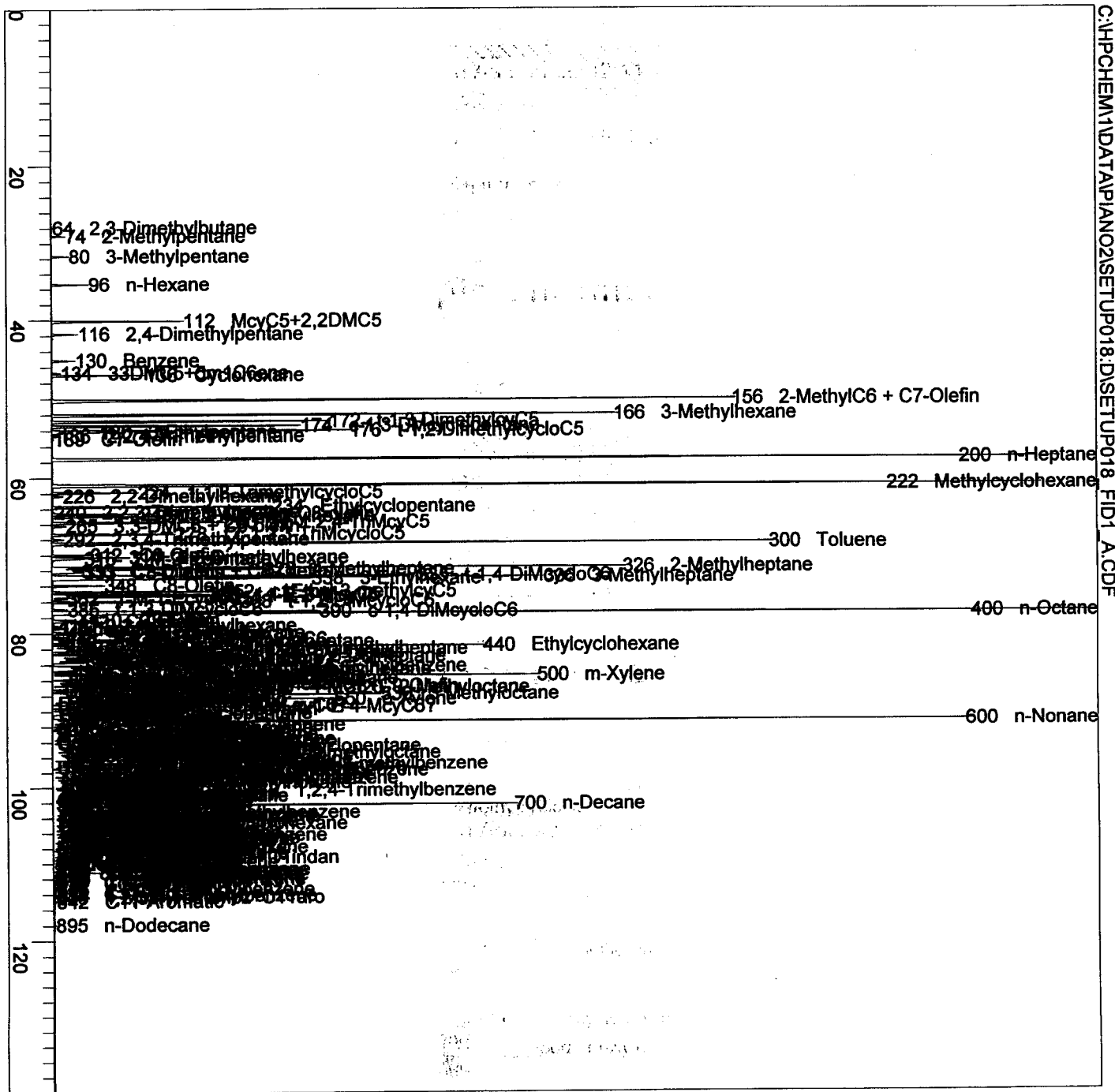
<u>Group</u>	<u>Time</u>	<u>Component</u>	<u>%Wgt</u>	<u>%Vol</u>	<u>%Mol</u>
Unidentified	95.694	Unidentified	0.054	0.050	0.048
	97.276	Unidentified	0.026	0.023	0.024
	98.115	Unidentified	0.074	0.075	0.058
	99.231	Unidentified	0.025	0.025	0.020
	99.533	Unidentified	0.081	0.081	0.065
	99.554	Unidentified	0.093	0.093	0.074
	99.854	Unidentified	0.118	0.120	0.093
	100.579	Unidentified	0.156	0.133	0.145
	101.239	Unidentified	0.019	0.020	0.016
	102.817	Unidentified	0.033	0.034	0.024
	103.454	Unidentified	0.020	0.017	0.017
	104.280	Unidentified	0.016	0.012	0.015
	104.804	Unidentified	0.036	0.037	0.026
	104.992	Unidentified	0.008	0.007	0.007
	106.996	Unidentified	0.029	0.025	0.024
	107.977	Unidentified	0.005	0.005	0.004
	108.938	Unidentified	0.058	0.058	0.042
	109.880	Unidentified	0.006	0.005	0.005
	110.001	Unidentified	0.008	0.008	0.006

Plus

Sample: HUX Tank 31
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Operator:

Sample Chromatogram



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