VI. GLOSSARY

ARB	-Air Resources Board, State of California
BL	-black light
cfm	-cubic feet per minute
CH_4	-methane
CO	-carbon monoxide
EPA	-Environmental Protection Agency
GC	-gas chromatography
GC-ECD	-gas chromatography with electron capture detection
GC-FID	-gas chromatography with flame ionization detection
GPT	-gas-phase titration
HC	-hydrocarbon
HCHO	-formaldehyde
HNO_3	-nitric acid
IR	-infrared
KI	-potassium iodide
LAAPCD	-Los Angeles Air Pollution Control District
LPIR	-long-path infrared
LPO	-low pressure oxygen
NAS-NAE	-National Academy of Sciences-National Academy of Engineering
NBKI	-neutral buffered potassium iodide
nm	-nanometer
NMHC	-nonmethane hydrocarbon
N_2	-nitrogen
NO	-nitric oxide
NO_2	-nitrogen dioxide
NO_x	-oxides of nitrogen, sum of nitric oxide and nitrogen dioxide
O_2	-oxygen
O_3	-ozone
oxidant	-Oxidant is the collective name for those pollutants which are capable of oxidizing aqueous iodide ion to molecular iodine. The principal components of photochemical oxidant are ozone, nitrogen dioxide, and peroxyacetyl nitrate. The various components of oxidant do not all oxidize the iodide ion to

	to molecular iodine with the same efficiency. Ozone is 100% efficient, while NO_2 and PAN are about 15% efficient. Sulfur dioxide is 100% efficient for the reduction of molecular iodine to the iodine ion. Thus, it acts as an interference and lowers oxidant readings.
oxides of nitrogen	-sum of nitric oxide and nitrogen dioxide
PAN	-peroxyacetyl nitrate
ppb	-parts per billion
ppbC	-parts per billion carbon
ppm	-parts per million
ppmC	-parts per million carbon
reactive HC	-Historically, air pollution control agencies and atmospheric scientists have employed a large number of different schemes for classifying hydrocarbons either into graded (numbered) classes or into classes designated as "high reactive," "low reactive," "nonreactive," etc. At present, there is still no universally accepted definition of what constitutes the body of reactive hydrocarbons. SAPRC researchers for the most part have taken the view that, given sufficiently long irradiation times--i.e., midsummer days or even multiple-day irradiations of stagnant air masses--the only hydrocarbon which can be considered truly nonreactive is methane.
RH	-relative humidity
RTP	-room temperature and pressure
SAPRC	-Statewide Air Pollution Research Center, University of California, Riverside
SO_2	-sulfur dioxide
STP	-standard temperature and pressure
UV	-ultraviolet
V	-volts

APPENDIX A

Inorganic Data Sheets for Surrogate Runs

74-G through 158-J

SURROGATE RUN 74-G
GLASS CHAMBER
1974 MAY 17

LIGHTS ON 0945, OFF 1558 INTENSITY = 70% OF MAXIMUM
INITIAL RH = 50% (30.11 DEG C) FINAL RH = 32% (31.5 DEG C, ESTIMATED)
MAST FACTOR 1.6, CO FACTOR 2.84/26.7, PAN CALIBR. 4
AT T = 0: SURROGATE HC = 2484 PPBC; TOTAL NON-METHANE HC = 2685 PPBC;
METHANE = 2960 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
945	0.	0.0	0.009	0.540	0.060	0.600	7.96	0.0	0.102	30.9	30.1	0.0	0.600
1000	15.	0.0	0.006	0.522	0.077	0.600	******	******	******	31.2	30.8	0.0	0.599
1015	30.	0.0	0.010	0.496	0.100	0.599	7.90	******	******	30.7	30.9	0.0	0.595
1030	45.	0.0	0.013	0.468	0.122	0.589	7.88	******	******	30.6	30.9	0.0	0.590
1045	60.	0.0	0.015	0.426	0.155	0.588	7.84	0.0	0.109	30.8	31.1	0.0	0.581
1100	75.	0.002	0.018	0.388	0.185	0.576	7.78	******	******	30.9	31.1	0.003	0.572
1115	90.	0.002	0.024	0.352	0.213	0.569	7.74	******	******	30.9	31.1	0.003	0.565
1130	105.	0.003	0.027	0.312	0.243	0.561	7.67	******	******	31.0	31.1	0.004	0.556
1145	120.	0.005	0.028	0.280	0.266	0.549	7.64	0.000	0.149	31.0	31.1	0.005	0.546
1215	150.	0.010	0.035	0.218	0.314	0.526	7.56	******	******	31.1	31.2	0.007	0.533
1245	180.	0.013	0.078	0.180	0.335	0.514	7.49	0.001	0.184	31.2	31.3	0.007	0.516
1315	210.	0.018	0.047	0.143	0.352	0.492	7.36	******	******	31.2	31.3	0.007	0.496
1345	240.	0.026	0.054	0.114	0.366	0.477	7.30	0.001	0.213	31.2	31.3	0.008	0.481
1415	270.	0.038	0.064	0.090	0.371	0.461	******	******	******	31.2	31.4	0.009	0.462
1445	300.	0.048	0.078	0.073	0.377	0.448	7.17	******	0.235	31.4	31.4	0.009	0.451
1515	330.	0.062	0.086	0.056	0.382	0.433	7.10	******	******	31.4	31.4	0.009	0.439
1545	360.	0.079	0.102	0.049	0.372	0.420	7.03	******	0.224	31.5	31.5	0.010	0.422

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 7.85 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 81.76 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 103.37 PPM-MIN
PAN 240.0 MIN TOTAL DOSAGE = 0.09 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.0 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 24.58 PPM-MIN

T(NC/NO2= 2.0) = 77.9 MIN

SURROGATE RUN 75-G
GLASS CHAMBER
1974 MAY 22

LIGHTS ON 1015, OFF 1625 INTENSITY = 70% OF MAXIMUM
INITIAL RH = 48% (31.53 DEG C) FINAL RH = 29% (32.56 DEG C)
MAST FACTOR 1.6, CO FACTOR 2.84/28.2, PAN CALIBR. 4
AT T = 0: SURROGATE HC = 1884 PPBC; TOTAL NON-METHANE HC = 1998 PPBC;
METHANE = 2830 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1015	0.	0.0	0.004	0.473	0.054	0.526	7.06	0.0	0.046	32.5	31.5	0.0	0.527
1030	15.	0.0	0.004	0.456	0.068	0.524	7.03	******	******	32.9	32.4	0.0	0.524
1045	30.	0.0	0.006	0.431	0.095	0.522	6.99	******	******	32.2	32.3	0.0	0.526
1100	45.	0.0	0.010	0.401	0.118	0.516	6.94	******	******	32.0	32.2	0.0	0.518
1115	60.	0.0	0.012	0.371	0.143	0.514	6.85	0.0	0.124	32.0	32.2	0.0	0.514
1130	75.	0.0	0.013	0.324	0.180	0.504	******	******	******	32.1	32.4	0.0	0.504
1145	90.	0.002	0.017	0.302	0.195	0.498	6.82	******	******	32.2	32.5	0.002	0.498
1200	105.	0.004	0.022	0.264	0.225	0.491	6.76	******	******	32.2	32.4	0.005	0.490
1215	120.	0.004	0.024	0.236	0.240	0.480	******	0.000	0.162	32.1	32.3	0.004	0.476
1245	150.	0.008	0.028	0.191	0.272	0.463	6.61	******	******	32.0	32.0	0.006	0.463
1315	180.	0.013	0.035	0.150	0.298	0.445	6.52	0.000	0.194	32.0	32.0	0.006	0.449
1345	210.	0.020	0.044	0.119	0.313	0.430	******	******	******	32.0	32.0	0.008	0.432
1415	240.	0.028	0.052	0.095	0.323	0.417	6.37	0.001	0.214	32.1	32.1	0.008	0.419
1445	270.	0.042	0.064	0.072	0.329	0.401	6.28	******	******	32.1	32.2	0.009	0.402
1515	300.	0.055	0.077	0.060	0.332	0.389	******	0.001	0.230	32.1	32.2	0.010	0.394
1545	330.	0.072	0.090	0.047	0.325	0.372	6.16	******	******	32.3	32.4	0.010	0.373
1615	360.	0.087	0.102	0.037	0.322	0.360	6.10	0.002	0.235	32.5	32.6	0.010	0.361

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 8.61 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 69.65 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 91.78 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 0.21 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.05 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 14.26 PPM-MIN

T(NO/NO2= 2.0) = 70.6 MIN

SURROGATE RUN 76-G
GLASS CHAMBER
1974 MAY 23

LIGHTS ON 0945, OFF 1545 INTENSITY = 70% OF MAXIMUM
INITIAL RH = 49% (32.00 DEG C) FINAL RH = 29% (31.95 DEG C)
MAST FACTOR 1.6, CO FACTOR 2.84/26.9, PAN CALIBR. 4
AT T = 0: SURROGATE HC = 2610 PPBC; TOTAL NON-METHANE HC = 2718 PPBC;
METHANE = 2880 PPB

CLOCK TIME	ELAPSED TIME (MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
945	0.	0.0	0.004	0.480	0.054	0.534	7.38	0.0	0.031	34.1	32.0	0.0	0.534
1000	15.	0.0	0.005	0.466	0.070	0.529	7.38	******	******	33.0	32.1	0.0	0.535
1015	30.	0.0	0.008	0.443	0.085	0.528	7.32	******	******	31.7	31.8	0.0	0.528
1030	45.	0.0	0.010	0.406	0.120	0.526	7.31	******	******	31.4	31.6	0.0	0.526
1045	60.	0.0	0.013	0.370	0.152	0.518	7.29	0.0	0.082	31.3	31.6	0.0	0.522
1100	75.	0.001	0.015	0.334	0.180	0.511	7.25	******	******	31.4	31.6	0.001	0.514
1115	90.	0.002	0.019	0.298	0.206	0.504	7.23	******	******	31.6	31.9	0.002	0.504
1130	105.	0.005	0.022	0.262	0.231	0.494	7.17	******	******	31.5	31.2	0.005	0.493
1145	120.	0.005	0.026	0.232	0.260	0.492	7.11	0.000	0.122	31.5	31.6	0.004	0.492
1215	150.	0.010	0.031	0.178	0.292	0.470	7.03	******	******	31.5	31.6	0.006	0.470
1245	180.	0.016	0.037	0.136	0.317	0.452	6.97	0.001	0.155	31.6	31.7	0.007	0.454
1315	210.	0.026	0.045	0.101	0.335	0.433	6.90	******	******	31.6	31.7	0.008	0.437
1345	240.	0.037	0.052	0.083	0.341	0.420	6.79	0.001	0.176	31.7	31.7	0.009	0.425
1415	270.	0.051	0.064	0.062	0.344	0.405	6.75	******	******	31.7	31.7	0.009	0.408
1445	300.	0.065	0.073	0.050	0.340	0.390	6.70	0.002	0.180	31.8	31.8	0.010	0.392
1515	330.	0.083	0.086	0.038	0.335	0.374	6.62	******	******	31.8	31.8	0.010	0.376
1545	360.	0.102	0.096	0.036	0.327	0.361	6.52	0.003	0.213	31.9	31.9	0.011	0.366

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 10.40 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 67.44 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 95.95 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 0.35 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.00 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.38 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 17.95 PPM-MIN

T(NO/NO2= 2.0) = 70.7 MIN

SURROGATE RUN 77-G
GLASS CHAMBER
1974 MAY 24

LIGHTS ON 0945, OFF 1653 INTENSITY = 100% OF MAXIMUM
INITIAL RH = 52% (31.81 DEG C) FINAL RH = 28% (34.77 DEG C)
MAST FACTOR 1.6, CO FACTOR 2.84/26.9, PAN CALIBR. 4
AT T = 0: SURROGATE HC = 2088 PPBC; TOTAL NON-METHANE HC = 2202 PPBC;
METHANE = 2860 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
945	0.	0.0	0.003	0.313	0.037	0.348	7.10	0.0	0.020	34.1	31.8	0.0	0.350
1000	15.	0.0	0.008	0.286	0.067	0.348	7.10	******	******	32.3	32.6	0.0	0.353
1015	30.	0.0	0.013	0.245	0.099	0.344	7.08	******	******	32.7	33.0	0.0	0.344
1030	45.	0.003	0.019	0.190	0.150	0.339	7.07	******	******	32.9	33.2	0.004	0.340
1045	60.	0.008	0.026	0.167	0.170	0.332	******	0.000	0.077	32.8	33.2	0.008	0.337
1100	75.	0.014	0.035	0.132	0.191	0.321	7.02	******	******	33.0	33.2	0.010	0.324
1115	90.	0.024	0.049	0.107	0.210	0.312	6.99	******	******	33.1	33.2	0.012	0.318
1130	105.	0.034	0.056	0.083	0.219	0.306	6.94	******	******	33.2	31.3	0.013	0.302
1145	120.	0.046	0.069	0.071	0.228	0.300	6.91	0.001	0.112	33.3	33.4	0.014	0.300
1215	150.	0.074	0.101	0.050	0.235	0.282	6.85	******	******	33.6	33.8	0.016	0.287
1245	180.	0.104	0.128	0.038	0.232	0.271	6.81	0.002	0.120	33.8	33.9	0.017	0.272
1315	210.	0.137	0.155	0.030	0.225	0.257	6.74	******	******	33.9	34.0	0.018	0.258
1345	240.	0.172	0.182	0.025	0.222	0.247	6.69	0.003	0.126	34.1	34.2	0.020	0.251
1415	270.	0.208	0.215	0.018	0.210	0.227	6.65	******	******	34.3	34.4	0.018	0.233
1445	300.	0.244	0.242	0.018	0.199	0.216	6.58	0.005	0.162	34.4	34.5	0.022	0.222
1515	330.	0.286	0.276	0.014	0.186	0.199	6.52	******	******	34.6	34.7	0.022	0.206
1545	360.	0.322	0.305	0.013	0.174	0.187	6.52	0.008	0.152	34.4	34.5	0.024	0.194
1615	390.	0.362	0.334	0.013	0.160	0.174	6.44	******	******	34.4	34.6	0.030	0.182
1645	420.	0.397	0.362	0.012	0.157	0.167	6.38	0.010	0.145	34.6	34.2	0.030	0.179

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 43.85 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 28.10 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 69.90 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 0.95 PPM-MIN
OZONE DOSAGE GT 0.10 = 19.78 PPM-MIN
OZONE DOSAGE GT 0.08 = 23.66 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NC/NO2= 2.0) = 34.4 MIN

SURROGATE RUN 78-G
GLASS CHAMBER
1974 MAY 29

LIGHTS ON 1000, OFF 1800 INTENSITY = 100% OF MAXIMUM
INITIAL RH = 50% (32.06 DEG C) FINAL RH = 28% (34.69 DEG C)
MAST FACTOR 1.6, CO FACTOR 2.84/27.0, PAN CALIBR. 4
AT T = 0: SURROGATE HC = 2023 PPBC; TOTAL NON-METHANE HC = 2118 PPBC;
METHANE = 2770 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1000	0.	0.0	0.004	0.068	0.023	0.090	7.03	0.0	0.031	34.4	32.3	0.0	0.091
1015	15.	0.022	0.064	0.031	0.055	0.085	7.00	******	******	34.0	33.3	0.012	0.089
1030	30.	0.079	0.083	0.017	0.060	0.077	6.97	******	******	33.4	33.6	0.022	0.082
1045	45.	0.128	0.129	0.014	0.056	0.070	6.91	******	******	33.2	33.5	0.033	0.077
1100	60.	0.166	0.170	0.012	0.052	0.064	6.84	0.009	0.109	33.1	33.4	0.038	0.073
1115	75.	0.198	0.200	0.012	0.050	0.059	6.79	******	******	33.1	33.2	0.048	0.072
1130	90.	0.224	0.224	0.011	0.045	0.056	6.78	0.012	******	33.1	33.2	0.053	0.068
1145	105.	0.245	0.244	0.010	0.043	0.052	6.72	******	******	33.1	33.3	0.055	0.066
1200	120.	0.264	0.270	0.010	0.040	0.050	******	0.015	0.125	33.1	33.3	0.063	0.065
1230	150.	0.295	0.294	0.010	0.037	0.047	6.61	******	******	33.3	33.5	0.077	0.062
1300	180.	0.316	0.321	0.010	0.034	0.043	******	0.017	0.157	33.5	33.7	0.090	0.060
1330	210.	0.332	0.334	0.010	0.035	0.043	6.51	******	******	33.6	33.8	0.092	0.060
1400	240.	0.346	0.358	0.010	0.033	0.043	6.43	0.015	0.181	33.8	33.9	0.100	0.058
1430	270.	0.354	0.364	0.010	0.034	0.042	6.35	******	******	33.9	34.1	0.101	0.058
1500	300.	0.362	0.381	0.010	0.032	0.042	6.32	0.014	0.173	33.9	34.0	0.108	0.055
1530	330.	0.369	0.383	0.008	0.033	0.042	6.28	******	******	34.0	34.2	0.093	0.054
1600	360.	0.372	0.397?	0.010	0.033	0.042	6.21	0.011	0.176	34.2	34.3	0.107	0.054
1630	390.	0.378	0.384	0.008	0.035	0.043	6.14	******	******	34.3	34.5	0.092	0.053
1700	420.	0.382	0.385	0.007	0.034	0.042	******	0.009	0.186	34.4	34.5	0.080	0.050
1730	450.	0.382	0.394	0.008	0.034	0.042	6.06	******	******	34.5	34.6	0.094	0.050
1800	480.	0.381	0.397	0.008	0.036	0.043	6.00	0.007	******	34.5	34.7	0.089	0.052

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 98.66 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 4.45 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 14.15 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 4.46 PPM-MIN
OZONE DOSAGE GT 0.10 = 64.81 PPM-MIN
OZONE DOSAGE GT 0.08 = 71.35 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 3.3 MIN

SURROGATE RUN 79-G
GLASS CHAMBER
1974 MAY 30

LIGHTS ON 1000, OFF 1705 INTENSITY = 70% OF MAXIMUM
INITIAL RH = 49% (32.65 DEG C) FINAL RH = 29% (31.69 DEG C)
MAST FACTOR 1.6, CO FACTOR 2.84/26.2, PAN CALIBR. 4
AT T = 0: SURROGATE HC = 1260 PPBC; TOTAL NON-METHANE HC = 1341 PPBC;
METHANE = 2220 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1000	0.	0.0	0.004	0.341	0.038	0.380	3.62	0.0	0.016	35.0	32.9	0.0	0.379
1015	15.	0.0	0.005	0.324	0.058	0.379	3.59	******	******	33.0	32.3	0.0	0.382
1030	30.	0.0	0.009	0.308	0.072	0.377	3.57	******	******	32.8	32.9	0.0	0.380
1045	45.	0.0	0.013	0.284	0.091	0.374	3.57	******	******	32.4	32.8	0.0	0.376
1100	60.	0.0	0.017	0.264	0.109	0.384?	3.56	0.0	0.078	37.8	32.0	0.0	0.373
1115	75.	0.001	0.022	0.236	0.124	0.361	3.53	******	******	31.5	31.6	0.002	0.360
1130	90.	0.002	0.027	0.216	0.144	0.359	3.53	******	******	31.2	31.3	0.002	0.360
1145	105.	0.002	0.027	0.194	0.156	0.349	3.53	******	******	31.1	31.1	0.003	0.350
1200	120.	0.004	0.033	0.179	0.168	0.349	3.48	0.000	0.104	30.9	31.0	0.004	0.347
1230	150.	0.008	0.040	0.145	0.189	0.336	3.48	******	******	30.9	30.9	0.006	0.335
1300	180.	0.014	0.042	0.120	0.205	0.324	******	0.000	0.081?	30.9	31.0	0.008	0.325
1330	210.	0.017	0.051	0.096	0.217	0.311	3.45	******	******	30.9	30.9	0.007	0.313
1400	240.	0.024	0.058	0.082	0.225	0.304	3.45	0.001	0.138	31.1	31.1	0.009	0.307
1430	270.	0.034	0.065	0.071	0.227	0.294	3.43	******	******	31.2	31.2	0.011	0.299
1500	300.	0.046	0.077	0.060	0.228	0.286	3.43	0.001	0.152	31.3	31.3	0.012	0.289
1530	330.	0.054	0.084	0.048	0.229	0.275	3.39	******	******	31.5	31.4	0.011	0.278
1600	360.	0.069	0.093	0.037	0.226	0.264	3.40	0.002	0.155	31.6	31.6	0.011	0.265
1630	390.	0.082	0.105	0.036	0.221	0.254	3.36	******	******	31.7	31.7	0.013	0.259
1700	420.	0.097	0.116	0.031	0.218	0.246	3.35	0.002	0.162	31.7	31.7	0.014	0.251

****** NO DATA TAKEN --- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 7.10 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 53.20 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 64.36 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 0.18 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.0 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 72.2 MIN

SURROGATE RUN 80-G
GLASS CHAMBER
1974 MAY 31

LIGHTS ON 1000, OFF 1614 INTENSITY = 70% OF MAXIMUM
INITIAL RH = 49% (30.83 DEG C) FINAL RH NOT RECORDED
MAST FACTOR 1.6, CO FACTOR 2.84/29.4, PAN CALIBR. 4
AT T = 0: SURROGATE HC = 2608 PPBC; TOTAL NON-METHANE HC = 2756 PPBC;
METHANE = 2820 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1000	0.	0.0	0.014	0.343	0.085	0.430	7.12	0.0	0.0	31.6	30.8	0.0	0.428
1015	15.	0.0	0.013	0.312	0.109	0.422	7.12	******	******	31.9	31.5	0.0	0.421
1030	30.	0.0	0.019	0.278	0.140	0.420	7.11	******	******	31.5	31.8	0.0	0.419
1045	45.	0.001	0.027	0.244	0.168	0.414	7.06	******	******	31.4	31.6	0.001	0.412
1100	60.	0.002	0.028	0.215	0.191	0.406	7.03	0.000	0.013	31.3	31.7	0.003	0.406
1115	75.	0.006	0.036	0.180	0.216	0.396	6.95	******	******	31.5	31.8	0.005	0.396
1130	90.	0.009	0.040	0.146	0.237	0.387	6.92	******	******	31.5	31.8	0.005	0.384
1145	105.	0.013	0.049	0.124	0.255	0.380	6.84	******	******	31.4	31.6	0.006	0.379
1200	120.	0.021	0.054	0.108	0.264	0.370	6.83	0.001	0.119?	31.4	31.3	0.008	0.373
1230	150.	0.034	0.067	0.074	0.278	0.357	6.72	******	******	31.2	31.2	0.009	0.354
1300	180.	0.051	0.086	0.059	0.284	0.340	6.67	0.002	0.0787	31.2	31.2	0.011	0.344
1330	210.	0.071	0.104	0.044	0.283	0.325	6.62	******	******	31.2	31.2	0.011	0.330
1400	240.	0.092	0.124	0.036	0.275	0.311	6.57	0.004	0.101	31.2	31.2	0.012	0.314
1430	270.	0.114	0.143	0.026	0.269	0.297	6.45	******	******	31.3	31.2	0.011	0.300
1500	300.	0.138	0.165	0.025	0.257	0.282	6.42	0.006	0.119	31.3	31.2	0.013	0.288
1530	330.	0.161	0.189	0.023	0.246	0.270	******	******	******	31.4	31.4	0.015	0.275
1600	360.	0.186	0.210	0.022	0.234	0.256	6.32	0.006	0.131	31.3	31.3	0.017	0.262

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 23.54 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 36.45 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 86.56 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 0.94 PPM-MIN
OZONE DOSAGE GT 0.10 = 4.60 PPM-MIN
OZONE DOSAGE GT 0.08 = 7.06 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 4.68 PPM-MIN

T(NO/NO2= 2.0) = 29.6 MIN

SURROGATE RUN 81-G
GLASS CHAMBER
1974 JUNE 4

LIGHTS ON 1045, OFF 1645 INTENSITY = 70% OF MAXIMUM
INITIAL RH = 46% (31.26 DEG C) FINAL RH NOT RECORDED
MAST FACTOR 1.6, CO FACTOR 2.84/28.4; PAN CALIBR. 4
AT T = 0: SURROGATE HC = 2426 PPBC; TOTAL NON-METHANE HC = 2467 PPBC;
METHANE = 2960 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1045	0.	0.0	0.004	0.162	0.029	0.190	6.96	0.0	0.0	32.3	31.3	0.0	0.191
1100	15.	0.0	0.009	0.126	0.061	0.187	******	******	******	31.5	31.2	0.0	0.187
1115	30.	0.007	0.017	0.079	0.101	0.181	6.86	******	******	31.0	31.2	0.006	0.181
1130	45.	0.026	0.040	0.047	0.128	0.174	******	******	******	31.0	31.3	0.009	0.176
1145	60.	0.054	0.063	0.030	0.137	0.166	6.79	0.002	0.097	31.1	31.4	0.012	0.169
1200	75.	0.086	0.091	0.024	0.136	0.159	6.79	******	******	31.3	31.6	0.015	0.163
1215	90.	0.114	0.114	0.019	0.132	0.150	6.77	******	******	31.4	31.8	0.017	0.156
1230	105.	0.142	0.140	0.018	0.125	0.143	6.75	******	******	31.5	31.8	0.020	0.150
1245	120.	0.165	0.161	0.017	0.120	0.136	******	0.008	0.036?	31.4	31.7	0.023	0.145
1315	150.	0.207	0.197	0.014	0.112	0.125	6.64	******	******	31.4	31.6	0.027	0.137
1345	180.	0.244	0.232	0.012	0.101	0.113	6.58	0.013	0.161	31.4	31.6	0.029	0.126
1415	210.	0.281	0.265	0.013	0.092	0.103	******	******	******	31.4	31.6	0.040	0.121
1445	240.	0.311	0.296	0.010	0.082	0.093	******	0.019	0.147?	31.5	31.6	0.036	0.110
1515	270.	0.335	0.332	0.011	0.075	0.084	******	******	******	31.6	31.8	0.048	0.106
1545	300.	0.354	0.347	0.011	0.067	0.077	6.39	0.022	0.209	31.8	31.9	0.057	0.100
1615	330.	0.370	0.358	0.011	0.065	0.074	6.34	******	******	******	******	0.062	0.097
1645	360.	0.378	0.372	0.011	0.059	0.068	6.29	******	0.223	31.9	32.0	0.069	0.091

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 78.88 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 9.35 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 33.92 PPM-MIN
PAN 300.0 MIN TOTAL DOSAGE = 3.15 PPM-MIN
OZONE DOSAGE GT 0.10 = 48.48 PPM-MIN
OZONE DOSAGE GT 0.08 = 54.13 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NC/NO2= 2.0) = 15.5 MIN

SURROGATE RUN 82-G
GLASS CHAMBER
1974 JUNE 5

LIGHTS ON 1230, OFF 1452 INTENSITY = 70% OF MAXIMUM
INITIAL RH = 48% (31.79 DEG C) FINAL RH 30% (31.77 DEG C)
MAST FACTOR 1.6, CO FACTOR 2.84/28.7, PAN CALIBR. 4
AT T = 0: SURROGATE HC = 2680 PPBC; TOTAL NON-METHANE HC = 2998 PPBC;
METHANE = 1040 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1230	0.	0.0	0.006	0.157	0.028	0.184	9.45	0.0	0.057	33.9	31.8	0.0	0.185
1245	15.	0.001	0.013	0.113	0.070	0.180	9.47	******	******	******	33.6	0.001	0.184
1300	30.	0.012	0.028	0.065	0.111	0.173	9.40	******	******	33.1	32.7	0.007	0.178
1315	45.	0.039	0.054	0.031	0.134	0.167	9.37	******	******	32.2	32.1	0.009	0.168
1330	60.	0.079	0.091	0.023	0.132	0.156	9.31	0.003	0.132	31.9	31.9	0.014	0.158
1345	75.	0.114	0.127	0.016	0.129	0.145	9.26	******	******	31.7	31.7	0.014	0.150
1400	90.	0.145	0.156	0.017	0.122	0.138	******	******	******	31.7	31.7	0.020	0.146
1415	105.	0.176	0.187	0.013	0.116	0.130	9.15	******	******	31.7	31.7	0.020	0.139
1431	121.	0.198	0.206	0.014	0.112	0.124	9.12	0.013	0.159	31.7	31.8	0.026	0.139

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE DOSAGE GT 0.10 = 2.79 PPM-MIN
OZONE DOSAGE GT 0.08 = 3.92 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 11.9 MIN

SURROGATE RUN 83-G
GLASS CHAMBER
1974 JUNE 6

LIGHTS ON 1045, OFF 1645 INTENSITY = 70% OF MAXIMUM
INITIAL RH = 49% (32.50 DEG C) FINAL RH = 31% (32.00 DEG C)
MAST FACTOR 1.6, CO FACTOR 2.84/28.5, PAN CALIBR. 4
AT T = 0: SURROGATE HC = 2582 PPBC; TOTAL NON-METHANE HC = 2735 PPBC;
METHANE = 2780 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1045	0.	0.0	0.004	0.390	0.048	0.433	7.26	0.0	0.067	34.0	32.5	0.0	0.438
1100	15.	0.0	0.008	0.360	0.072	0.432	7.27	******	******	33.2	32.4	0.0	0.432
1115	30.	0.0	0.013	0.322	0.110	0.429	7.24	******	******	32.0	31.9	0.0	0.432
1130	45.	0.0	0.017	0.275	0.145	0.421	7.21	******	******	31.4	31.3	0.0	0.420
1145	60.	0.004	0.024	0.218	0.190	0.410	7.18	0.000	0.136	31.2	31.2	0.005	0.409
1200	75.	0.006	0.033	0.182	0.215	0.403	7.16	******	******	31.1	31.1	0.005	0.398
1215	90.	0.011	0.037	0.151	0.239	0.393	7.13	******	******	31.1	31.1	0.007	0.391
1245	120.	0.025	0.052	0.096	0.275	0.372	7.10	0.001	0.164	31.1	31.3	0.009	0.372
1315	150.	0.042	0.073	0.062	0.299	0.364	7.07	******	******	31.3	31.4	0.009	0.364
1345	180.	0.063	0.091	0.050	0.290	0.342	******	0.003	0.189	31.4	31.5	0.011	0.343
1415	210.	0.089	0.116	0.042	0.288	0.326	6.97	******	******	31.5	31.6	0.013	0.334
1446	241.	0.115	0.142	0.035	0.277	0.310	6.92	0.005	******	31.7	31.7	0.014	0.317
1515	270.	0.142	0.164	0.026	0.269	0.296	6.90	******	******	31.8	31.9	0.014	0.301
1546	301.	0.169	0.191	0.024	0.255	0.279	6.83	0.007	0.211	31.8	31.9	0.016	0.287
1617	332.	0.197	0.215	0.022	0.243	0.277	6.79	******	******	31.9	31.9	0.017	0.274
1645	360.	0.222	0.230	0.023	0.228	0.246	6.75	0.010	0.221	31.9	32.0	0.022	0.262

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 28.86 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 37.77 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 86.07 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 1.33 PPM-MIN
OZONE DOSAGE GT 0.10 = 8.31 PPM-MIN
OZONE DOSAGE GT 0.08 = 11.28 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 5.93 PPM-MIN

T(NO/NO2= 2.0) = 43.1 MIN

SURROGATE RUN 84-G
GLASS CHAMBER
1974 JUNE 7

LIGHTS ON 1015, OFF 1615 INTENSITY = 70% OF MAXIMUM
INITIAL RH = 49% (32.60 DEG C) FINAL RH NOT RECORDED
MAST FACTOR 1.6, CO FACTOR 2.84/28.4, PAN CALIBR. 4
AT T = 0: SURROGATE HC = 2670 PPBC; TOTAL NON-METHANE HC = 2836 PPBC;
METHANE = 2770 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1015	0.	0.0	0.004	C.480	0.050	0.530	7.C8	0.0	0.035	34.1	32.3	0.0	0.530
1030	15.	0.0	0.005	C.450	0.079	0.528	7.02	******	******	31.6	31.3	0.0	0.529
1045	30.	0.0	0.006	0.422	0.106	0.523	7.00	******	******	31.0	31.0	0.0	0.528
1100	45.	0.0	0.012	0.384	0.137	0.520	6.99	******	******	30.8	30.8	0.0	0.521
1115	60.	0.0	0.013	0.347	0.168	0.510	******	0.0	0.105	30.6	30.7	0.0	0.515
1130	75.	0.002	0.014	0.308	0.198	0.504	6.91	******	******	30.6	30.8	0.002	0.506
1145	90.	0.002	0.019	0.272	0.223	0.497	6.83	******	******	30.7	30.9	0.003	0.496
1200	105.	0.006	0.024	0.238	0.249	0.490	6.85	******	******	30.8	30.9	0.005	0.487
1215	120.	0.007	0.027	C.205	0.269	0.478	6.83	0.001	0.114	30.8	31.1	0.005	0.475
1245	150.	0.014	0.032	0.156	0.300	0.458	6.78	******	******	30.8	31.0	0.007	0.457
1315	180.	0.020	0.038	0.121	0.324	0.444	6.71	******	0.149	30.7	30.9	0.007	0.446
1345	210.	0.030	0.047	0.095	0.335	0.429	6.69	0.001	******	30.6	30.7	0.009	0.431
1415	240.	0.042	0.056	0.077	0.341	0.417	6.63	0.002	0.172	30.5	30.6	0.010	0.420
1445	270.	0.058	0.065	0.065	0.342	0.401	6.67	******	******	30.5	30.6	0.011	0.409
1515	300.	0.073	0.078	0.054	0.336	0.384	6.52	0.003	0.175	30.4	30.5	0.012	0.394
1545	330.	0.090	0.083	0.047	C.330	0.372	6.47	******	******	30.4	30.5	0.013	0.380
1615	360.	0.107	0.104	0.036	0.320	0.356	6.39	0.005	0.196	30.3	30.4	0.012	0.361

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 11.73 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 63.51 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 97.89 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 0.55 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.05 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.66 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 18.23 PPM-MIN

T(NC/NO2= 2.0) = 61.7 MIN

SURROGATE RUN 85-G
GLASS CHAMBER
1974 JUNE 12

LIGHTS ON 1100, OFF 1700 INTENSITY = 70% OF MAXIMUM
INITIAL RH = 49% (30.55 DEG C) FINAL RH NOT RECORDED
MAST FACTOR 1.6; CO FACTOR 2.84/28.7; PAN CALIBR. 4
AT T = 0: SURROGATE HC = 2061 PPBC; TOTAL NON-METHANE HC = 2250 PPBC;
METHANE = 2820 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1100	0.	0.0	0.008	0.307	0.116	0.433	6.96	0.0	0.099	31.1	30.5	0.0	0.424
1115	15.	0.0	0.012	0.295	0.135	0.429	******	******	******	31.2	31.6	0.0	0.431
1130	30.	0.002	0.014	0.257	0.169	0.423	6.92	******	******	32.6	32.6	0.002	0.426
1145	45.	0.0	0.017	0.216	0.194	0.417	6.88	******	******	32.1	32.2	0.0	0.410
1200	60.	0.006	0.020	0.182	0.225	0.406	6.85	0.001	0.141	31.8	31.9	0.005	0.408
1215	75.	0.010	0.027	0.156	0.241	0.394	6.83	******	******	31.7	31.7	0.006	0.398
1230	90.	0.014	0.029	0.130	0.258	0.383	6.82	******	******	31.6	31.6	0.007	0.389
1245	105.	0.020	0.036	0.107	0.277	0.377	6.78	******	******	31.6	31.6	0.008	0.385
1300	120.	0.027	0.038	0.088	0.284	0.369	6.76	0.002	0.172	31.6	31.6	0.008	0.373
1330	150.	0.045	0.052	0.060	0.296	0.350	6.73	******	******	31.7	31.7	0.009	0.359
1400	180.	0.066	0.067	0.048	0.293	0.339	6.66	0.003	0.204	31.8	31.9	0.011	0.344
1430	210.	0.093	0.087	0.036	0.289	0.320	6.63	******	******	31.9	32.0	0.012	0.329
1500	240.	0.114	0.102	0.030	0.280	0.307	6.61	0.005	0.221	32.0	32.2	0.012	0.316
1530	270.	0.145	0.105	0.024	0.267	0.289	6.54	******	******	32.1	32.2	0.013	0.298
1600	300.	0.177	0.128?	0.019	0.253	0.270	6.52	0.009	0.248	32.3	32.5	0.013	0.281
1700	360.	0.234	0.220?	0.016	0.226	0.242	6.43	0.011	0.283	32.4	32.6	0.016	0.253

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 30.22 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 31.69 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 90.68 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 1.50 PPM-MIN
OZONE DOSAGE GT 0.10 = 9.17 PPM-MIN
OZONE DOSAGE GT 0.08 = 12.22 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 6.57 PPM-MIN

T(NC/NO2= 2.0) = 18.5 MIN

SURROGATE RUN 86-G
GLASS CHAMBER
1974 JUNE 13

LIGHTS ON 1015, OFF 1620 INTENSITY = 70% OF MAXIMUM
INITIAL RH = 42% (31.72 DEG C) FINAL RH NOT RECORDED
MAST FACTOR 1.6, CO FACTOR 2.84/28.7, PAN CALIBR. 4
AT T = 0: SURROGATE HC = 2116 PPBC; TOTAL NON-METHANE HC = 2270 PPBC;
METHANE = 2830 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1015	0.	0.0	0.003	0.314	0.035	0.349	7.20	0.0	0.104	31.7	30.8	0.0	0.349
1030	15.	0.0	0.003	0.299	0.050	0.348	7.19	******	******	31.8	31.3	0.0	0.349
1045	30.	0.0	0.005	0.271	0.077	0.348	7.17	******	******	31.1	31.2	0.0	0.348
1100	45.	0.001	0.012	0.239	0.107	0.347	7.15	******	******	31.0	31.3	0.002	0.346
1115	60.	0.002	0.013	0.204	0.137	0.339	7.12	0.000	0.068	31.1	31.4	0.004	0.341
1130	75.	0.005	0.014	0.169	0.166	0.334	7.08	******	******	31.2	31.5	0.005	0.336
1145	90.	0.009	0.024	0.133	0.189	0.323	7.05	******	******	31.2	31.4	0.006	0.323
1200	105.	0.014	0.028	0.114	0.209	0.317	7.05	******	******	31.2	31.3	0.007	0.324
1215	120.	0.021	0.037	0.090	0.223	0.311	7.02	0.001	0.142	31.2	31.3	0.008	0.314
1246	151.	0.039	0.056	0.060	0.245	0.300	6.99	******	******	31.4	31.5	0.010	0.307
1315	180.	0.061	0.077	0.042	0.245	0.285	6.96	0.003	0.161	31.6	31.7	0.010	0.290
1345	210.	0.086	0.099	0.032	0.242	0.272	6.89	******	******	31.7	31.8	0.012	0.278
1415	240.	0.115	0.122	0.025	0.233	0.258	6.85	0.006	0.177	31.8	31.9	0.012	0.264
1445	270.	0.141	0.143	0.023	0.222	0.246	******	******	******	32.0	32.1	0.014	0.252
1515	300.	0.173	0.173	0.014	0.217	0.233	6.74	0.008	0.215	32.1	32.3	0.011	0.240
1545	330.	0.202	0.197	0.014	0.224?	0.239?	6.69	******	******	32.3	32.4	0.013	0.248
1615	360.	0.234	0.230	0.013	0.190	0.204	6.64	0.012	0.236	32.4	32.6	0.016	0.215

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 28.92 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 32.38 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 71.01 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 1.44 PPM-MIN
OZONE DOSAGE GT 0.10 = 8.82 PPM-MIN
OZONE DOSAGE GT 0.08 = 11.75 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 49.0 MIN

SURROGATE RUN 101-G
GLASS CHAMBER
1974 SEPT 12

LIGHTS ON 1115, INTENSITY = 70% OF MAXIMUM
TEMPERATURE CORRECTED FOR ICE BATH TEMP = 31.7 DEG F
61 GC SAMPLES TAKEN, MAST FACTOR 1.6, CO FACTOR 2.84/25.4, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 2209 PPBC; TOTAL NON-METHANE HC = 2428 PPBC;
METHANE = 2720 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TSI (DEG C)	REL HUM (%)			O3*NC /NO2	TOT N (PPM)
1115	0.	0.0	0.010	0.301	0.036	0.337	6.83	0.0	0.065	30.5	60.5			0.0	0.337
1130	15.	0.0	0.010	0.290	0.048	0.338	6.79	******	******	32.4	******			0.0	0.338
1145	30.	0.0	0.015	0.263	0.073	0.332	6.75	0.0	******	32.2	******			0.0	0.336
1200	45.	0.0	0.015	0.229	0.085	0.323	6.73	******	******	32.7	******			0.0	0.314
1215	60.	0.0	0.025	0.208	0.110	0.323	6.71	0.001	0.098	33.3	54.5			0.0	0.319
1230	75.	0.002	0.025	0.178	0.133	0.314	6.68	******	******	32.9	******			0.003	0.312
1245	90.	0.004	0.030	0.151	0.150	0.305	6.66	0.001	******	32.8	******			0.004	0.302
1300	105.	0.007	0.035	0.126	0.167	0.296	6.64	******	******	33.0	******			0.005	0.295
1315	120.	0.010	0.040	0.108	0.180	0.293	6.61	0.002	0.140	33.0	******			0.006	0.290
1330	135.	0.014	0.045	0.094	0.187	0.284	6.54	******	******	******	46.5			0.007	0.283
1345	150.	0.022	0.055	0.077	0.196	0.276	6.50	0.004	******	31.4	******			0.008	0.276
1400	165.	0.026	0.060	0.067	0.200	0.269	6.50	******	******	32.2	******			0.009	0.271
1415	180.	0.034	0.065	0.048?	0.204	0.259	6.48	0.005	0.162	32.8	40.5			0.008	0.257
1430	195.	0.041	0.075	0.049	0.207	0.256	6.42	******	******	32.5	******			0.010	0.262
1445	210.	0.050	0.085	0.042	0.208	0.251	6.40	0.006	******	32.7	******			0.010	0.256
1500	225.	0.058	0.090	0.035	0.211	0.247	6.38	******	******	32.6	******			0.010	0.252
1515	240.	0.067	0.100	0.031	0.208	0.241	6.37	0.007	0.176	33.0	38.0			0.010	0.246
1530	255.	0.078	0.110	0.028	0.205	0.235	6.32	******	******	32.9	******			0.011	0.240
1545	270.	0.089	0.115	0.025	0.202	0.228	6.31	0.008	******	32.7	******			0.011	0.235
1600	285.	0.102	0.125	0.023	0.200	0.224	6.29	******	******	32.7	******			0.012	0.232
1615	300.	0.111	0.140	0.020	0.196	0.217	6.28	0.010	0.213	32.9	36.5			0.012	0.226
1630	315.	0.123	0.150	0.018	0.190	0.210	6.25	******	******	32.7	******			0.012	0.218
1645	330.	0.134	0.165	0.018	0.186	0.205	6.23	0.012	******	32.5	******			0.013	0.216
1700	345.	0.147	0.175	0.017	0.180	0.198	6.18	******	0.206	32.5	******			0.014	0.210
1715	360.	0.159	0.245	0.014	0.176	0.191	6.18	0.014	******	32.4	36.0			0.013	0.204

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE	360.0 MIN TOTAL DOSAGE =	17.99	PPM-MIN
NO	360.0 MIN TOTAL DOSAGE =	34.53	PPM-MIN
NO2-PAN	360.0 MIN TOTAL DOSAGE =	60.45	PPM-MIN
PAN	360.0 MIN TOTAL DOSAGE =	1.88	PPM-MIN
HCHO	345.0 MIN TOTAL DOSAGE =	52.34	PPM-MIN
OZONE	DOSAGE GT 0.10 =	2.20	PPM-MIN
OZONE	DOSAGE GT 0.08 =	3.98	PPM-MIN
NO2-PAN	DOSAGE GT 0.25 =	0.0	PPM-MIN

SURROGATE RUN 102-G
GLASS CHAMBER
1974 SEPT 13

LIGHTS ON 1045, INTENSITY = 70% OF MAXIMUM
TEMPERATURE CORRECTED FOR ICE BATH TEMP = 31.7 DEG F
58 GC SAMPLES TAKEN, MAST FACTOR 1.6, CO FACTOR 2.84/23.7, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 2254 PPBC; TOTAL NON-METHANE HC = 2372 PPBC;
METHANE = 2880 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	OXIDANT (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
1045	0.	0.0	0.010	0.311	0.044	0.358	7.32	0.0	0.028	30.6	60.5	0.0	0.355
1100	15.	0.0	0.015	0.296	0.058	0.358	7.32	******	******	32.8	******	0.0	0.354
1115	30.	0.0	0.015	0.275	0.074	0.353	7.24	0.0	******	32.4	******	0.0	0.349
1130	45.	0.0	0.015	0.248	0.093	0.344	******	******	******	32.5	******	0.0	0.342
1145	60.	0.0	0.025	0.218	0.116	0.338	7.15	0.001	0.103	32.5	47.0	0.0	0.335
1200	75.	0.001	0.025	0.190	0.138	0.330	7.15	******	******	32.5	******	0.001	0.329
1215	90.	0.004	0.030	0.167	0.155	0.325	7.09	0.002	******	32.9	******	0.004	0.324
1230	105.	0.006	0.035	0.142	0.170	0.314	7.08	******	******	32.4	******	0.005	0.313
1245	120.	0.010	0.040	0.122	0.181	0.305	7.06	0.002	0.131	32.5	41.5	0.007	0.305
1300	135.	0.014	0.045	0.104	0.190	0.298	6.98	******	******	32.5	******	0.007	0.296
1315	150.	0.018	0.050	0.086	0.200	0.289	6.98	0.002	******	32.7	******	0.008	0.289
1330	165.	0.022	0.055	0.073	0.204	0.280	6.94	******	******	32.7	******	0.008	0.281
1345	180.	0.027	0.060	0.064	0.210	0.276	6.90	0.004	0.154	32.7	37.0	0.008	0.277
1400	195.	0.035	0.065	0.055	0.212	0.268	6.88	******	******	32.7	******	0.009	0.271
1415	210.	0.042	0.075	0.049	0.214	0.265	6.85	0.004	******	32.8	******	0.010	0.268
1430	225.	0.050	0.075	0.043	0.216	0.259	6.85	******	******	32.6	******	0.010	0.264
1445	240.	0.060	0.085	0.037	0.214	0.252	6.84	0.006	0.174	32.6	34.5	0.010	0.257
1500	255.	0.066	0.090	0.034	0.209	0.244	6.83	******	******	32.5	******	0.011	0.250
1515	270.	0.078	0.100	0.030	0.208	0.239	6.76	0.007	******	32.5	******	0.011	0.245
1530	285.	0.087	0.115	0.026	0.207	0.236	6.76	******	******	32.5	******	0.011	0.241
1545	300.	0.094	0.120	0.024	0.203	0.230	6.73	0.009	0.176	32.5	33.5	0.011	0.236
1600	315.	0.106	0.115	0.023	0.200	0.224	6.72	******	******	32.5	******	0.012	0.233
1615	330.	0.119	0.135	0.020	0.196	0.219	6.71	0.010	******	32.7	******	0.012	0.227
1630	345.	0.127	0.145	0.019	0.191	0.211	6.70	******	0.209	32.6	******	0.013	0.221
1645	360.	0.139	0.155	0.018	0.185	0.205	6.65	0.011	******	32.6	33.0	0.014	0.215

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 15.54 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 37.67 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 62.62 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 1.58 PPM-MIN
OZONE DOSAGE GT 0.10 = 1.06 PPM-MIN
OZONE DOSAGE GT 0.08 = 2.43 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

SURROGATE RUN 107-G
GLASS CHAMBER
1974 OCT 16

LIGHTS ON 1015, OFF 1615 INTENSITY = 70% OF MAXIMUM
CHAMBER INTERIOR WASHED WITH H2O, ALL LAMPS, REFLECTORS DUSTED, OCT 3-15
CC FACTOR = 2.84/40.0, PAN CALIBR. 6
AT T=0: SURROGATE HC= 2149 PPBC; TOTAL NON-METHANE HC = 2339 PPBC;
METHANE = 2830 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
1015	0.	0.0	0.286	0.046	0.330	******	0.0	0.073	86.5	29.6	60.5	0.0	0.331
1030	15.	0.0	0.266	0.060	0.324	4.69	******	******	90.1	32.4	59.5	0.0	0.326
1045	30.	0.0	0.239	0.084	0.321	4.69	******	******	91.7	32.2	56.5	0.0	0.323
1100	45.	0.0	0.211	0.111	0.319	4.64	******	******	92.7	32.1	48.5	0.0	0.323
1115	60.	0.002	0.180	0.136	0.311	4.61	0.001	0.100	92.8	31.9	45.0	0.002	0.317
1130	75.	0.006	0.162	0.146	0.306	4.58	******	******	92.6	31.6	44.0	0.007	0.310
1145	90.	0.009	0.120	0.178	0.298	4.54	******	******	92.7	31.6	43.0	0.006	0.300
1200	105.	0.014	0.096	0.193	0.288	4.52	******	******	92.8	31.6	42.0	0.007	0.292
1215	120.	0.020	0.078	0.207	0.285	4.50	0.003	******	91.9	31.4	39.5	0.008	0.288
1247	152.	0.042	0.048	0.219	0.268	4.43	******	0.137	90.8	31.2	37.5	0.009	0.271
1315	180.	0.059	0.036	0.219	0.256	4.37	0.005	******	90.5	31.1	37.0	0.010	0.260
1345	210.	0.084	0.032	0.218	0.246	4.33	******	******	91.3	31.6	******	0.012	0.258
1415	240.	0.109	0.025	0.208	0.232	4.27	0.009	0.169	91.4	31.6	35.0	0.013	0.242
1445	270.	0.134	0.020	0.202	0.220	4.26	******	******	91.7	31.8	******	0.013	0.234
1515	300.	0.162	0.023	0.191	0.212	4.19	0.013	0.193	91.8	31.9	33.5	0.015	0.227
1545	330.	0.186	0.014	0.176	0.189	4.14	******	******	92.1	32.0	33.0	0.015	0.205
1615	360.	0.214	0.013	0.163	0.175	4.10	0.017	0.204	91.8	31.9	32.5	0.017	0.193

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 27.37 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 29.23 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 64.04 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 2.41 PPM-MIN
OZONE DOSAGE GT 0.10 = 7.37 PPM-MIN
OZONE DOSAGE GT 0.08 = 10.22 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 43.0 MIN

SURROGATE RUN 111-G
GLASS CHAMBER
1974 OCT 30
LIGHTS ON 0915, OFF 1915, INTENSITY = 70% OF MAXIMUM
NEW SYLVANIA 40 BL LAMPS INSTALLED OCT 29
OXIDANT NOT MEASURED
AT 1020 CHANGE LAMPS NW LOWER PANEL, 3 OFF, 4 ON, PD # 2 DECREASE 0.006
CC FACTOR 2.84/29.4, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 2162 PPBC; TOTAL NON-METHANE HC = 2253 PPBC;
METHANE = 2880 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
915	0.	0.0	0.263	0.035	0.298	6.76	0.0	0.053	0.234	31.3	60.5	0.0	0.298
930	15.	0.0	0.240	0.060	0.298	6.68	******	******	0.226	32.4	******	0.0	0.300
945	30.	0.002	0.192	0.098	0.290	9.54	0.0	******	0.221	32.5	52.0	0.005	0.290
1000	45.	0.007	0.141	0.138	0.280	9.49	******	******	0.219	32.7	******	0.007	0.280
1015	60.	0.015	0.111	0.162	0.271	9.45	0.002	0.077	0.216	32.7	******	0.010	0.275
1030	75.	0.024	0.083	0.182	0.262	9.39	******	******	0.221	32.9	******	0.011	0.268
1045	90.	0.040	0.069	0.195	0.262	6.45	0.005	******	0.219	32.9	******	0.014	0.269
1100	105.	0.055	0.059	0.203	0.255	6.41	******	******	0.217	33.0	******	0.016	0.268
1115	120.	0.073	0.048	0.194	0.243	6.39	0.007	0.104	0.217	33.1	40.0	0.018	0.249
1145	150.	0.110	0.035	0.188	0.221	6.29	******	******	0.215	33.4	******	0.021	0.232
1215	180.	0.149	0.027	0.180	0.208	6.26	0.010	0.126	0.212	33.4	38.0	0.022	0.217
1245	210.	0.190	0.023	0.172	0.195	6.21	0.013	******	0.210	33.5	37.0	0.025	0.208
1315	240.	0.230	0.021	0.161	0.182	6.18	******	******	0.209	33.5	36.5	0.030	0.198
1345	270.	0.269	0.019	0.148	0.267	6.16	0.020	******	0.208	33.7	36.0	0.034	0.187
1415	300.	0.308	0.021	0.137	0.159	6.11	0.022	0.126	0.206	33.6	35.5	0.047	0.180
1445	330.	0.348	0.018	0.116	0.134	6.11	0.025	******	0.205	34.0	35.0	0.054	0.159
1515	360.	0.386	0.019	0.104	0.122	6.06	0.026	0.145	0.204	33.9	******	0.070	0.149
1545	390.	0.426	0.015	0.094	0.108	6.00	0.027	******	0.203	33.9	34.5	0.068	0.136
1618	423.	0.466	0.017	0.080	0.096	5.99	0.032	0.141	0.202	33.8	34.0	0.099	0.129
1645	450.	0.493	0.014	0.071	0.086	5.97	0.034	******	0.200	33.9	34.0	0.097	0.119
1715	480.	0.521	0.022	0.064	0.085	5.91	0.035	0.160	0.200	33.6	34.0	0.180	0.121
1745	510.	0.544	0.025	0.053	0.077	5.90	0.037	******	0.199	33.6	******	0.254	0.115
1815	540.	0.560	0.012	0.051	0.062	5.88	0.037	0.152	0.198	33.5	33.5	0.130	0.100
1845	570.	0.573	0.012	0.044	0.056	5.83	0.038	******	0.198	33.5	33.5	0.157	0.094
1915	600.	0.582	0.014	0.041	0.052	5.84	0.038	0.152	0.197	33.1	34.0	0.197	0.093

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 57.70 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 21.68 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 54.86 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 4.21 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 145.27 PPM-MIN
OZONE DOSAGE GT 0.10 = 31.29 PPM-MIN
OZONE DOSAGE GT 0.08 = 35.82 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NC/NO2= 2.0) = 29.5 MIN

SURROGATE RUN 112-G AGED
GLASS CHAMBER
1974 OCT 31
LIGHTS ON 0930, OFF 1730 INTENSITY = 100 % OF MAXIMUM
SURROGATE (2100 PPBC), NOX (0.27 PPM), CO (7 PPM), CH4 (1.5 PPM) ADDED TO
SURROGATE RUN 111-G WHICH WAS LEFT IN DARK OVERNIGHT IN CHAMBER
AT 0834: OZONE = 0.177, NO = 0.038, NO2 = 0.273, NOX = 0.311 PPM
CC FACTOR 2.84/13.9, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 2941 PPBC; TOTAL NON-METHANE HC = 3709 PPBC;
METHANE = 4130 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	REL HUM (%)	J3*NO /NO2	TOT N (PPM)
830	0.	0.094	0.007	0.291	0.297	******	0.008	0.286	0.357	27.4	48.5	0.002	0.306
845	15.	0.187	0.031	0.257	0.289	12.79	******	0.270	0.347	33.1	******	0.023	0.301
900	30.	0.258	0.025	0.244	0.268	******	******	******	0.339	33.5	******	0.026	0.288
915	45.	0.315	0.020	0.228	0.246	12.99	0.024	******	0.335	34.3	******	0.028	0.272
930	60.	0.376	0.018	0.219	0.235	13.06	******	0.257	0.332	34.6	27.5	0.031	0.264
945	75.	0.429	0.015	0.199	0.214	13.04	0.031	******	0.329	35.1	******	0.032	0.245
1000	90.	0.486	0.011	0.187	0.197	12.99	******	******	0.328	35.6	******	0.029	0.232
1015	105.	0.541	0.011	0.172	0.182	12.91	0.037	******	0.326	35.8	******	0.035	0.220
1030	120.	0.590	0.010	0.159	0.168	12.91	******	0.217	0.323	36.0	******	0.037	0.209
1045	135.	0.634	0.010	0.147	0.156	12.87	0.043	******	0.323	36.4	25.5	0.043	0.200
1100	150.	0.687	0.009	0.140	0.148	12.81	******	******	0.322	36.6	******	0.044	0.194
1130	180.	0.769	0.011	0.122	0.129	******	******	0.190	0.320	25.6	25.0	0.069	0.184
1200	210.	0.832	0.009	0.104	0.113	12.61	0.056	******	0.319	36.8	******	0.072	0.169
1230	240.	0.872	0.010	0.094	0.103	12.53	0.056	0.185	0.317	37.0	24.5	0.093	0.160
1300	270.	0.896	0.013	0.091	0.102	12.44	0.057	******	0.316	37.1	******	0.129	0.161
1330	300.	0.912	0.009	0.087	0.095	12.34	0.056	0.194	0.314	37.1	24.5	0.095	0.152
1400	330.	0.912	0.010	0.081	0.093	18.34	0.054	******	0.314	37.0	******	0.113	0.145
1430	360.	0.920	0.011	0.080	0.090	18.30	0.052	0.187	0.313	36.9	24.5	0.127	0.143
1500	390.	0.920	0.008	0.072	0.080	18.16	0.050	******	0.312	36.9	24.5	0.102	0.130
1530	420.	0.912	0.009	0.076	0.083	12.00	0.043	0.177	0.311	36.8	24.5	0.108	0.128
1600	450.	0.912	0.008	0.071	0.077	11.87	0.045	******	0.311	36.8	24.0	0.103	0.124
1630	480.	0.904	0.010	0.067	0.077	11.81	0.043	0.170	0.309	36.8	24.0	0.135	0.120
1700	510.	0.896	0.010	0.069	0.077	11.63	0.041	******	0.309	36.8	24.0	0.129	0.120
1730	540.	0.880	0.009	0.069	0.075	11.61	0.039	0.177	0.310	36.9	24.5	0.114	0.117

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 242.99 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 4.54 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 51.01 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 15.84 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 406.31 PPM-MIN
OZONE DOSAGE GT 0.10 = 206.99 PPM-MIN
OZONE DOSAGE GT 0.08 = 214.20 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.38 PPM-MIN

SURROGATE RUN 113-G
GLASS CHAMBER
1974 NOV 1-2

LIGHTS ON 1500, OFF 1002 (NOV2) INTENSITY = 100% OF MAXIMUM
CO FACTOR 2.84/29.0, PAN CAL18R. 7
AT T = 0: SURROGATE HC = 2119 PPBC; TOTAL NON-METHANE HC = 2390 PPBC;
METHANE = 2900 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
1500	0.	0.0	0.271	0.032	0.303	6.21	0.0	0.055	0.327	31.6	59.5	0.0	0.303
1515	15.	0.001	0.217	0.082	0.299	6.13	******	******	0.324	32.9	54.0	0.002	0.300
1530	30.	0.013	0.142	0.141	0.285	6.10	0.002	******	0.319	33.9	44.5	0.013	0.285
1545	45.	0.031	0.102	0.177	0.278	6.08	******	******	0.318	34.3	39.0	0.018	0.284
1600	60.	0.058	0.075	0.188	0.263	6.01	0.007	0.055	0.316	34.5	36.5	0.023	0.270
1615	75.	0.084	0.061	0.189	0.250	5.98	******	******	0.314	34.8	35.0	0.027	0.259
1629	89.	0.112	0.052	0.187	0.239	5.96	0.011	******	0.313	35.1	34.0	0.031	0.250
1645	105.	0.141	0.043	0.184	0.227	5.94	******	******	0.311	35.3	33.0	0.033	0.240
1700	120.	0.169	0.039	0.179	0.219	5.95	0.014	******	0.311	35.4	33.0	0.037	0.232
1800	180.	0.280	******	******	******	******	******	******	******	******	******	0.280	******
1900	240.	0.390	******	******	******	******	******	******	******	******	******	0.390	******
2000	300.	0.492	******	******	******	******	******	******	******	******	******	0.492	******
2100	360.	0.595	0.021	0.094	0.113	5.79	******	******	0.303	35.5	29.5	0.133	0.130
2200	420.	0.664	******	******	******	******	******	******	******	******	******	0.664	******
2300	480.	0.706	******	******	******	******	******	******	******	******	******	0.706	******
2400	540.	0.726	******	******	******	******	******	******	******	******	******	0.726	******
100	600.	0.736	******	******	******	******	******	******	******	******	******	0.736	******
200	660.	0.738	******	******	******	******	******	******	******	******	******	0.738	******
300	720.	0.736	******	******	******	******	******	******	******	******	******	0.736	******
400	780.	0.730	******	******	******	******	******	******	******	******	******	0.730	******
500	840.	0.722	******	******	******	******	******	******	******	******	******	0.722	******
600	900.	0.714	******	******	******	******	******	******	******	******	******	0.714	******
700	960.	0.703	******	******	******	******	******	******	******	******	******	0.703	******
800	1020.	0.687	******	******	******	******	******	******	******	******	******	0.687	******
900	1080.	0.670	0.018	0.045	0.063	5.36	0.018	0.093	0.288	35.9	26.5	0.270	0.081
1000	1140.	0.654	0.018	0.043	0.061	5.26	******	******	0.286	35.8	26.5	0.276	0.079

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 100.56 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 19.90 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 51.47 PPM-MIN
PAN 120.0 MIN TOTAL DOSAGE = 0.84 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 222.36 PPM-MIN
OZONE DOSAGE GT 0.10 = 69.94 PPM-MIN
OZONE DOSAGE GT 0.08 = 75.59 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 19.1 MIN

SURROGATE RUN 116-G
GLASS CHAMBER
1974 NOV 6

LIGHTS ON 0915, OFF 2137 INTENSITY = 100% OF MAXIMUM
PD #2 REPOSITIONED WITH QUARTER OF ORIGINAL 338 NM INTERFERENCE FILTER
CO FACTOR 2.84/29.0, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 2172 PPBC; TOTAL NON-MEHTANE HC = 2380 PPBC;
METHANE = 2910 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
915	0.	0.0	0.272	0.029	0.298	6.92	0.0	0.139	0.255	29.9	52.5	0.0	0.301
930	15.	0.0	0.235	0.066	0.299	6.86	******	******	0.245	32.3	******	0.0	0.301
945	30.	0.004	0.178	0.118	0.294	6.85	0.001	******	0.245	33.2	******	0.006	0.297
1000	45.	0.015	0.127	0.159	0.280	6.80	******	******	0.242	34.0	******	0.012	0.299
1015	60.	0.029	0.093	0.178	0.269	6.77	0.004	0.031	0.241	34.3	32.0	0.015	0.275
1030	75.	0.051	0.073	0.188	0.259	6.76	******	******	0.238	34.7	******	0.020	0.267
1045	90.	0.070	0.060	0.191	0.252	6.72	0.007	******	0.237	35.0	******	0.022	0.258
1100	105.	0.090	0.055	0.186	0.237	6.71	******	******	0.236	35.2	******	0.026	0.250
1115	120.	0.111	0.050	0.185	0.231	6.66	0.010	0.039	0.236	35.3	29.0	0.030	0.245
1145	150.	0.152	0.040	0.177	0.214	6.60	0.012	******	0.234	35.7	******	0.034	0.229
1215	180.	0.190	0.036	0.166	0.199	6.56	0.014	0.079	0.233	35.8	28.0	0.041	0.216
1245	210.	0.235	0.030	0.154	0.183	6.50	0.016	******	0.233	35.8	******	0.046	0.200
1315	240.	0.275	0.030	0.148	0.173	6.47	0.017	0.081	0.231	36.0	27.0	0.056	0.195
1345	270.	0.314	0.023	0.130	0.154	6.46	0.020	******	0.230	36.0	******	0.056	0.173
1415	300.	0.357	0.027	0.119	0.143	6.37	0.022	0.082	0.230	35.9	27.0	0.081	0.168
1445	330.	0.399	0.021	0.107	0.127	6.37	0.024	******	0.230	36.0	******	0.079	0.152
1515	360.	0.439	0.020	0.095	0.115	6.31	0.026	0.091	0.230	36.0	26.5	0.092	0.141
1615	420.	0.522	0.021	0.076	0.094	6.22	0.029	******	0.228	36.1	26.0	0.144	0.126
1705	470.	0.575	0.020	0.062	0.082	******	******	******	0.227	36.2	26.0	0.185	0.111
1715	480.	0.583	0.021	0.062	0.081	6.17	******	******	0.227	36.0	26.0	0.197	0.112
1815	540.	0.615	******	******	******	******	******	******	0.227	******	******	0.615	******
1832	557.	0.624	0.020	0.051	0.069	6.09	******	******	0.226	36.1	******	0.243	0.100
1915	600.	0.638	0.020	0.046	0.064	6.07	******	******	0.225	36.0	******	0.276	0.095
2015	660.	0.648	0.018	0.041	0.058	******	******	******	0.224	36.0	******	0.283	0.088
2137	742.	0.651	0.020	0.038	0.053	5.96	******	******	0.0	35.6	******	0.340	0.087

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 70.67 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 21.99 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 52.13 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 4.81 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 168.71 PPM-MIN
OZONE DOSAGE GT 0.10 = 42.00 PPM-MIN
OZONE DOSAGE GT 0.08 = 47.09 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 24.6 MIN

SURROGATE RUN 116-G
GLASS CHAMBER
1974 NOV 6

LIGHTS ON 0915, OFF 2137 INTENSITY = 100% OF MAXIMUM
PD #2 REPOSITIONED WITH QUARTER OF ORIGINAL 338 NM INTERFERENCE FILTER
CO FACTOR 2.84/29.0, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 2172 PPBC; TOTAL NON-MEHTANE HC = 2380 PPBC;
METHANE = 2910 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
915	0.	0.0	0.272	0.029	0.298	6.92	0.0	0.139	0.255	29.9	52.5	0.0	0.301
930	15.	0.0	0.235	0.066	0.299	6.86	******	******	0.245	32.3	******	0.0	0.301
945	30.	0.004	0.178	0.118	0.294	6.85	0.001	******	0.245	33.2	******	0.006	0.297
1000	45.	0.015	0.127	0.159	0.280	6.80	******	******	0.242	34.0	******	0.012	0.289
1015	60.	0.029	0.093	0.178	0.269	6.77	0.004	0.031	0.241	34.3	32.0	0.015	0.275
1030	75.	0.051	0.073	0.188	0.259	6.76	******	******	0.238	34.7	******	0.020	0.267
1045	90.	0.070	0.060	0.191	0.252	6.72	0.007	******	0.237	35.0	******	0.022	0.258
1100	105.	0.090	0.055	0.186	0.237	6.71	******	******	0.236	35.2	******	0.026	0.250
1115	120.	0.111	0.050	0.185	0.231	6.66	0.010	0.039	0.236	35.3	29.0	0.030	0.245
1145	150.	0.152	0.040	0.177	0.214	6.60	0.012	******	0.234	35.7	******	0.034	0.229
1215	180.	0.190	0.036	0.166	0.199	6.56	0.014	0.079	0.233	35.8	28.0	0.041	0.216
1245	210.	0.235	0.030	0.154	0.183	6.50	0.016	******	0.233	35.8	******	0.046	0.200
1315	240.	0.275	0.030	0.148	0.173	6.47	0.017	0.081	0.231	36.0	27.0	0.056	0.195
1345	270.	0.314	0.023	0.130	0.154	6.46	0.020	******	0.230	36.0	******	0.056	0.173
1415	300.	0.357	0.027	0.119	0.143	6.37	0.022	0.082	0.230	35.9	27.0	0.081	0.168
1445	330.	0.399	0.021	0.107	0.127	6.37	0.024	******	0.230	36.0	******	0.079	0.152
1515	360.	0.439	0.020	0.095	0.115	6.31	0.026	0.091	0.230	36.0	26.5	0.092	0.141
1615	420.	0.522	0.021	0.076	0.094	6.22	0.029	******	0.228	36.1	26.0	0.144	0.126
1705	470.	0.575	0.020	0.062	0.082	******	******	******	0.227	36.2	26.0	0.185	0.111
1715	480.	0.583	0.021	0.062	0.081	6.17	******	******	0.227	36.0	26.0	0.197	0.112
1815	540.	0.615	******	******	******	******	******	******	0.227	******	******	0.215	******
1832	557.	0.624	0.020	0.051	0.069	6.09	******	******	0.226	36.1	******	0.243	0.100
1915	600.	0.638	0.020	0.046	0.064	6.07	******	******	0.225	36.0	******	0.276	0.095
2015	660.	0.648	0.018	0.041	0.058	******	******	******	0.224	36.0	******	0.283	0.088
2137	742.	0.651	0.020	0.038	0.053	5.96	******	******	0.0	35.6	******	0.340	0.087

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 70.67 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 21.99 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 52.13 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 4.81 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 168.71 PPM-MIN
OZONE DOSAGE GT 0.10 = 42.00 PPM-MIN
OZONE DOSAGE GT 0.08 = 47.09 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 24.6 MIN

SURROGATE RUN 117-G
GLASS CHAMBER
1974 NOV 7

LIGHTS ON 0845, OFF 2130 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/28.0, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 1916; TOTAL NON-METHANE HC = 1975 PPBC;
METHANE = 2720 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PC #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
845	0.	0.0	0.261	0.032	0.298	7.03	0.0	0.004	0.113	29.0	53.5	0.0	0.293
900	15.	0.0	0.249	0.049	0.297	6.98	******	******	0.102	31.9	******	0.0	0.298
915	30.	0.0	0.220	0.071	0.291	6.96	0.0	******	0.093	32.4	******	0.0	0.291
930	45.	0.001	0.187	0.100	0.286	6.98	******	******	0.087	32.9	******	0.001	0.288
945	60.	0.005	0.150	0.130	0.280	6.97	0.001	0.005	0.082	33.5	42.5	0.006	0.281
1000	75.	0.008	0.126	0.149	0.276	6.94	******	******	0.078	33.9	******	0.007	0.277
1015	90.	0.015	0.101	0.166	0.266	6.89	0.004	******	0.075	34.2	******	0.009	0.271
1030	105.	0.024	0.081	0.173	0.253	6.89	******	******	0.073	34.7	******	0.011	0.256
1045	120.	0.033	0.069	0.176	0.246	6.86	0.005	0.026	0.078	33.9	35.0	0.013	0.250
1115	150.	0.051	0.052	0.182	0.234	6.76	******	******	0.078	33.1	******	0.015	0.240
1145	180.	0.074	0.047	0.184	0.229	6.73	0.007	0.058	0.078	32.6	32.5	0.019	0.238
1215	210.	0.096	0.040	0.182	0.220	6.67	0.008	******	0.078	32.5	******	0.021	0.230
1245	240.	0.118	0.033	0.174	0.205	6.61	0.010	0.066	0.077	32.6	31.0	0.022	0.217
1315	270.	0.138	0.027	0.164	0.190	6.58	0.011	******	0.077	32.6	******	0.023	0.202
1345	300.	0.163	0.023	0.156	0.178	6.52	0.012	0.042	0.076	32.6	30.5	0.024	0.191
1415	330.	0.186	0.023	0.148	0.172	6.46	0.013	******	0.075	32.7	29.5	0.029	0.184
1445	360.	0.209	0.021	0.134	0.154	6.43	0.025	0.062	0.076	32.7	******	0.033	0.180
1745	540.	0.346	******	******	******	******	******	******	0.075	******	******	0.346	******
1810	565.	0.370	0.020	0.0	0.101	6.25	******	******	0.074	32.2	30.5	******	0.030
2130	765.	0.470	0.019	0.055	0.070	6.15	******	******	0.0	32.3	29.0	0.161	0.099

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 29.43 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 27.88 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 54.44 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 2.72 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 79.33 PPM-MIN
OZONE DOSAGE GT 0.10 = 7.73 PPM-MIN
OZONE DOSAGE GT 0.08 = 10.89 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 42.7 MIN

SURROGATE RUN 118-J
GLASS CHAMBER
1974 NOV 22

LIGHTS ON 1000, OFF 1600 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/28.3, PAN CALIBR. 6
AT T = 0: SURROGATE HC = 2285 PPBC; TOTAL NON-METHANE HC = 2603 PPBC;
METHANE = 2880 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
1000	0.	0.0	0.280	0.037	0.313	6.88	0.0	0.110	0.087	30.2	52.0	0.0	0.317
1015	15.	0.0	0.241	0.065	0.303	6.85	******	******	******	31.3	******	0.0	0.306
1030	30.	0.0	0.200	0.119	0.318	6.81	0.001	******	******	31.7	******	0.0	0.320
1045	45.	0.005	0.144	0.164	0.309	6.80	******	******	0.075	32.2	******	0.004	0.309
1100	60.	0.010	0.101	0.201	0.301	6.78	0.002	0.086	******	32.8	45.5	0.005	0.304
1115	75.	0.023	0.072	0.218	0.289	6.72	******	******	0.073	32.5	******	0.008	0.294
1130	90.	0.035	0.057	0.225	0.280	6.67	0.005	******	0.072	32.0	******	0.009	0.287
1145	105.	0.050	0.041	0.216	0.260	6.67	******	******	0.072	32.0	******	0.009	0.265
1200	120.	0.062	0.038	0.218	0.253	6.60	0.007	0.131	0.073	32.0	36.5	0.011	0.263
1215	135.	0.076	0.030	0.212	0.241	6.59	******	******	0.072	32.5	******	0.011	0.251
1230	150.	0.094	0.026	0.205	0.229	6.55	0.011	******	0.071	32.9	******	0.012	0.242
1300	180.	0.124	0.020	0.209	0.219	6.48	0.012	0.136	0.070	33.1	35.5	0.012	0.241
1330	210.	0.151	0.018	0.193	0.207	6.40	0.015	******	0.070	32.7	33.5	0.014	0.226
1400	240.	0.182	0.015	0.172	0.186	6.36	0.019	0.159	0.069	32.5	33.5	0.016	0.206
1430	270.	0.207	0.012	0.161	0.175	6.30	0.021	******	0.070	32.6	33.0	0.015	0.194
1500	300.	0.237	0.011	0.156	0.166	6.27	0.024	0.168	0.069	32.4	32.5	0.017	0.191
1530	330.	0.265	0.010	0.143	0.152	6.23	0.027	******	0.069	32.3	32.5	0.015	0.180
1600	360.	0.293	0.010	0.130	0.140	6.17	0.028	0.188	0.070	32.2	32.0	0.023	0.168

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 45.38 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 19.27 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 62.45 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 4.74 PPM-MIN
OZONE DOSAGE GT 0.10 = 19.78 PPM-MIN
OZONE DOSAGE GT 0.08 = 24.04 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 5.0) = 8.0 MIN

SURROGATE RUN 119-J
GLASS CHAMBER
1974 DEC 5

LIGHTS ON 1030, OFF 1633 INTENSITY = 70% OF MAXIMUM
BRADY 1121 USED, IN-HOUSE CALIBR. JUNE 28,1974
CC FACTOR 2.84/24.4, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 2250 PPBC; TOTAL NON-METHANE HC = 2534 PPBC;
METHANE = 2740 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
1030	0.	0.0	0.301	0.041	0.340	7.45	0.0	0.038	0.086	30.5	58.5	0.0	0.342
1045	15.	0.001	0.276	0.064	0.338	7.42	******	******	0.083	32.9	57.5	0.003	0.340
1100	30.	0.002	0.230	0.102	0.332	7.41	0.0	******	0.082	32.2	56.5	0.004	0.332
1115	45.	0.004	0.181	0.140	0.322	7.40	******	******	0.078	32.4	56.0	0.005	0.322
1130	60.	0.009	0.139	0.178	0.317	7.34	0.001	0.035	0.078	32.2	55.5	0.007	0.318
1145	75.	0.015	0.108	0.198	0.306	7.31	******	******	0.078	32.5	55.0	0.008	0.309
1200	90.	0.024	0.084	0.208	0.294	7.31	0.004	******	0.078	32.5	54.5	0.010	0.296
1215	105.	0.033	0.070	0.219	0.286	7.28	******	******	0.078	32.5	******	0.010	0.294
1230	120.	0.043	0.057	0.224	0.276	7.25	0.006	0.072	0.078	32.6	54.5	0.011	0.287
1300	150.	0.067	0.039	0.224	0.264	7.20	0.007	******	0.076	32.7	54.5	0.012	0.270
1330	180.	0.091	0.031	0.220	0.250	7.18	0.009	0.090	0.075	32.8	54.5	0.013	0.260
1400	210.	0.115	0.025	0.210	0.236	7.10	0.011	******	0.075	33.0	******	0.014	0.246
1430	240.	0.141	0.021	0.199	0.219	7.06	0.013	0.089	0.074	33.0	54.0	0.015	0.233
1500	270.	0.166	0.019	0.188	0.207	7.03	0.014	******	0.076	33.1	53.5	0.017	0.221
1530	300.	0.193	0.017	0.176	0.193	6.99	0.016	0.101	0.074	33.1	******	0.019	0.209
1600	330.	0.217	0.012	0.170	0.181	6.94	0.018	******	0.074	33.2	53.0	0.015	0.200
1630	360.	0.244	0.016	0.160	0.171	6.88	0.018	0.131	0.072	33.1	53.0	0.024	0.194

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 35.65 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 25.02 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 65.97 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 3.28 PPM-MIN
OZONE DOSAGE GT 0.10 = 12.04 PPM-MIN
OZONE DOSAGE GT 0.08 = 15.67 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 33.1 MIN

SURROGATE RUN 120-J
GLASS CHAMBER
1974 DEC 6

LIGHTS ON 0945, OFF 1318 INTENSITY = 70% OF MAXIMUM
DASIBI NON-FUNCTIONAL FOR FIRST PART OF RUN
BRACY 1121 USED, IN-HOUSE CALIBR. JUNE 28,1974
CC FACTOR 2.64/25.0, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 2322 PPBC; TOTAL NON-METHANE HC = 2588 PPBC(NO HCHO);
METHANE = 2860 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
945	0.	----	0.050	0.010	0.060	7.43	0.0	0.3897	0.084	30.0	69.0	******	0.060
1000	15.	----	0.026	0.031	0.057	7.39	******	******	0.086	30.9	63.5	******	0.060
1015	30.	----	0.013	0.038	0.051	7.39	******	******	0.081	32.0	62.0	******	0.056
1030	45.	----	0.011	0.036	0.046	7.38	0.008	******	0.076	32.6	61.0	******	0.055
1045	60.	----	----	----	----	7.38	******	0.013	0.074	32.5	******	******	******
1100	75.	----	0.012	0.026	0.038	7.31	0.015	******	0.073	32.4	60.5	******	0.053
1115	90.	0.162	0.010	0.026	0.035	7.33	******	******	0.072	32.4	60.5	0.063	0.052
1130	105.	0.178	0.008	0.024	0.032	7.33	******	******	0.071	32.4	60.5	0.059	0.050
1145	120.	0.191	0.008	0.022	0.030	7.24	0.019	0.044	0.071	32.7	60.5	0.070	0.049
1215	150.	0.210	0.008	0.020	0.027	7.11	0.020	******	0.070	32.7	60.5	0.085	0.048
1245	180.	0.227	0.008	0.020	0.027	******	******	******	0.069	32.8	******	0.092	0.048
1317	212.	0.242	******	******	******	******	******	******	0.068	******	******	0.242	******

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

NO 212.0 MIN TOTAL DOSAGE = 2.54 PPM-MIN
NO2-PAN 212.0 MIN TOTAL DOSAGE = 5.27 PPM-MIN
PAN 212.0 MIN TOTAL DOSAGE = 3.14 PPM-MIN
OZONE DOSAGE GT 0.10 = 13.21 PPM-MIN
OZONE DOSAGE GT 0.08 = 15.65 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 6.7 MIN

SURROGATE RUN 121-J
GLASS CHAMBER
1974 DEC 13

LIGHTS ON 0900, OFF 1802 INTENSITY = 70% OF MAXIMUM
BRADY 1121 USED, IN-HOUSE CALIBR. JUNE 28,1974
CC FACTOR 2.84/27.1, PAN CALIBR. 6
AT T = 0: SURROGATE HC = 2285 PPBC; TOTAL NON-METHANE HC = 2427 PPBC(NO HCHO);
METHANE = 2880 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
900	0.	0.0	0.044	0.012	0.056	7.05	0.0	0.738?	******	29.7	******	0.0	0.056
915	15.	0.012	0.024	0.030	0.054	7.00	******	******	******	32.2	******	0.010	0.056
930	30.	0.058	0.012	0.036	0.048	6.99	0.004	******	******	32.2	******	0.019	0.052
945	45.	0.095	0.010	0.032	0.042	6.97	******	******	******	32.5	******	0.030	0.050
1000	60.	0.122	0.009	0.028	0.036	6.90	0.012	0.077	******	32.1	******	0.040	0.049
1015	75.	0.140	0.009	0.023	0.031	6.90	******	******	******	32.2	******	0.054	0.047
1030	90.	0.154	0.008	0.021	0.029	6.85	0.017	******	******	32.2	******	0.059	0.046
1045	105.	0.166	0.008	0.017	0.025	6.85	******	******	******	32.4	******	0.080	0.044
1100	120.	0.177	0.008	0.015	0.022	6.93?	0.022	0.091	******	32.4	******	0.092	0.045
1130	150.	0.196	0.010	0.014	0.023	6.74	0.023	******	******	32.6	******	0.140	0.047
1200	180.	0.210	0.008	0.013	0.021	6.75	0.025	0.107	******	32.3	******	0.128	0.046
1230	210.	0.222	0.008	0.013	0.020	6.70	0.026	******	******	32.6	******	0.140	0.047
1300	240.	0.234	0.008	0.012	0.019	6.63	0.025	0.105	******	32.6	******	0.161	0.045
1330	270.	0.243	0.008	0.010	0.018	6.56	0.026	******	******	32.6	******	0.192	0.044
1400	300.	0.250	0.008	0.011	0.019	6.52	0.025	0.128	******	32.5	******	0.188	0.044
1430	330.	0.258	0.008	0.011	0.019	6.42	0.025	******	******	32.4	******	0.194	0.044
1500	360.	0.264	0.008	0.010	0.019	6.39	0.025	0.126	0.086	32.4	******	0.219	0.043
1530	390.	0.270	0.008	0.011	0.018	6.30	******	******	******	32.4	******	0.204	0.043
1600	420.	0.275	0.008	0.012	0.020	6.28	0.023	0.138	******	32.4	******	0.191	0.043
1630	450.	0.278	0.008	0.013	0.021	6.21	0.023	******	******	32.4	******	0.166	0.044
1700	480.	0.282	0.008	0.012	0.020	6.16	0.022	0.125	******	32.2	******	0.190	0.042
1730	510.	0.286	0.008	0.011	0.019	6.10	0.023	******	******	32.2	******	0.200	0.042
1800	540.	0.290	0.008	0.009	0.017	6.04	0.025	******	0.084	32.2	******	0.255	0.042

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 67.58 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 3.57 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 5.85 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 7.33 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 117.65 PPM-MIN
OZONE DOSAGE GT 0.10 = 34.31 PPM-MIN
OZONE DOSAGE GT 0.08 = 40.66 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NC/NC2= 2.0) = 5.4 MIN

SURROGATE RUN 122-J
GLASS CHAMBER
1974 DEC 16

LIGHTS ON 0900, OFF 1800 INTENSITY = 70% OF MAXIMUM
BRADY 1121 USED, IN-HOUSE CALIBR. JUNE 28,1974
CC FACTOR 2.84/27.6, PAN CALIBR. 6
AT T = 0: SURROGATE HC = 1399 PPBC; TOTAL NON-METHANE HC = 1639 PPBC;
METHANE = 2080 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PC #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
900	0.	0.0	0.086	0.012	0.098	3.76	0.0	0.094	0.106	30.4	63.0	0.0	0.098
915	15.	0.0	0.072	0.024	0.096	3.73	******	******	0.095	31.9	61.5	0.0	0.096
930	30.	0.006	0.048	0.044	0.092	3.71	0.001	******	0.089	32.5	61.5	0.007	0.093
945	45.	0.022	0.029	0.060	0.090	3.69	******	******	0.086	32.4	60.5	0.010	0.091
1000	60.	0.043	0.020	0.063	0.083	3.67	0.003	0.048	0.084	32.4	60.5	0.014	0.086
1015	75.	0.062	0.016	0.062	0.079	3.63	******	******	0.084	32.2	60.5	0.016	0.083
1030	90.	0.081	0.014	0.059	0.073	3.60	0.007	******	0.082	32.1	60.5	0.019	0.080
1045	105.	0.099	0.012	0.057	0.069	3.60	******	******	0.082	32.2	60.5	0.021	0.078
1100	120.	0.113	0.012	0.053	0.063	3.58	0.011	0.058	0.082	32.2	60.5	0.025	0.076
1130	150.	0.146	0.010	0.046	0.056	3.54	0.015	******	0.081	32.5	61.0	0.031	0.071
1200	180.	0.176	0.010	0.040	0.050	3.50	0.018	0.068	0.082	32.7	61.0	0.044	0.068
1230	210.	0.202	0.010	0.034	0.042	3.48	0.022	******	0.081	33.0	60.0	0.059	0.066
1300	240.	0.226	0.008	0.031	0.039	3.43	0.023	0.070	0.080	33.3	60.0	0.059	0.062
1330	270.	0.248	0.008	0.019	0.032	3.40	0.026	******	0.080	33.5	60.0	0.104	0.053
1400	300.	0.268	0.008	0.022	0.030	3.40	0.028	0.081	0.079	33.6	59.5	0.099	0.058
1430	330.	0.283	0.008	0.016	0.024	3.38	0.028	******	0.079	33.7	59.5	0.144	0.052
1500	360.	0.297	0.008	0.017	0.025	3.34	0.029	0.087	0.079	33.9	59.0	0.142	0.054
1530	390.	0.308	0.008	0.014	0.022	3.31	0.030	******	0.079	33.9	59.0	0.174	0.052
1600	420.	0.316	0.008	0.014	0.022	3.30	0.030	0.093	0.078	34.0	58.5	0.185	0.052
1630	450.	0.322	0.008	0.015	0.023	3.29	0.027	******	******	34.0	58.5	0.176	0.050
1700	480.	0.330	0.008	0.015	0.024	3.28	0.026	0.099	******	34.0	58.5	0.180	0.049
1730	510.	0.336	0.008	0.014	0.023	3.23	0.025	******	******	33.9	58.0	0.197	0.047
1800	540.	0.337	0.008	0.016	0.024	3.24	0.023	0.102	******	33.9	58.0	0.174	0.047

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 58.18 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 6.06 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 13.28 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 5.92 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 116.07 PPM-MIN
OZONE DOSAGE GT 0.10 = 28.72 PPM-MIN
OZONE DOSAGE GT 0.08 = 33.97 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 20.6 MIN

SURROGATE RUN 123-J
GLASS CHAMBER
1974 DEC 18

LIGHTS ON 0915, OFF 1100 INTENSITY= 70% OF MAXIMUM
BRADY 1121 USED, IN-HOUSE CALIBR. JUNE 28,1974
CC FACTOR 2.84/27.2, PAN CALIBR. 6
AT T = 0: SURROGATE HC = 1382 PPBC; TOTAL NON-METHANE HC = 1562 PPBC;
METHANE = 2160 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
915	0.	0.0	0.088	0.011	0.099	6.99	0.0	0.049	0.097	28.0	63.0	0.0	0.099
930	15.	0.0	0.076	0.022	0.098	6.96	******	******	0.091	30.6	61.5	0.0	0.098
945	30.	0.006	0.052	0.044	0.096	6.95	0.0	******	0.086	32.7	60.5	0.007	0.096
1000	45.	0.019	0.034	0.056	0.090	6.93	******	******	0.083	32.5	60.5	0.012	0.092
1015	60.	0.037	0.022	0.063	0.085	6.88	0.003	0.035	0.080	32.7	60.5	0.013	0.088
1030	75.	0.057	0.018	0.061	0.079	6.87	******	******	0.078	32.5	******	0.017	0.084
1045	90.	0.076	0.016	0.060	0.076	6.76	0.006	******	0.076	32.4	******	0.020	0.082
1100	105.	0.091	0.014	0.058	0.072	6.76	******	******	0.076	32.4	******	0.022	0.078

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 105.0 MIN TOTAL DOSAGE = 3.60 PPM-MIN
NO 105.0 MIN TOTAL DOSAGE = 4.03 PPM-MIN
NO2-PAN 105.0 MIN TOTAL DOSAGE = 5.10 PPM-MIN
PAN 105.0 MIN TOTAL DOSAGE = 0.29 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.06 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 22.1 MIN

SURROGATE RUN 124-J
GLASS CHAMBER
1974 DEC 18

LIGHTS ON 1430, OFF 2030 INTENSITY = 70% OF MAXIMUM
BRADY 1193 REINSTALLED
CC FACTOR 2.84/27.2, PAN CALIBR. 6
AT T = 0: SURROGATE HC = 1431 PPBC; TOTAL NON-METHANE HC = 1591 PPBC;
METHANE = 2040 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PC #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
1430	0.	0.0	0.082	0.018	0.100	3.58	0.0	0.039	******	27.7	******	0.0	0.100
1445	15.	0.001	0.067	0.033	0.104	3.59	******	******	0.082	31.3	******	0.002	0.100
1500	30.	0.007	0.048	0.049	0.097	3.58	0.001	******	0.079	32.7	******	0.007	0.098
1515	45.	0.024	0.034	0.059	0.094	3.57	******	******	0.078	33.1	******	0.014	0.095
1530	60.	0.042	0.026	0.062	0.089	3.56	0.003	0.038	0.075	32.6	******	0.017	0.091
1545	75.	0.060	0.022	0.061	0.083	3.55	******	******	******	32.3	******	0.022	0.088
1600	90.	0.076	0.020	0.059	0.079	3.54	0.007	******	0.071	32.1	******	0.026	0.086
1615	105.	0.092	0.018	0.057	0.075	3.53	******	******	0.071	32.5	******	0.029	0.084
1630	120.	0.106	0.018	0.053	0.071	3.55	0.011	0.062	0.070	32.5	******	0.037	0.082
1700	150.	0.137	0.016	0.048	0.064	3.54	0.014	******	0.071	32.1	******	0.046	0.078
1730	180.	0.163	0.016	0.043	0.058	3.54	0.016	0.064	0.072	32.5	35.0	0.061	0.075
1800	210.	0.190	0.014	0.036	0.050	3.54	0.020	******	0.071	31.9	32.0	0.075	0.070
1830	240.	0.214	0.014	0.031	0.045	3.55	0.023	0.083	0.072	32.6	33.5	0.098	0.068
1900	270.	0.238	0.014	0.026	0.040	3.56	0.026	******	0.071	32.4	33.0	0.130	0.066
1930	300.	0.257	0.014	0.021	0.035	3.56	0.029	0.083	0.072	32.0	33.5	0.170	0.064
2000	330.	0.274	0.014	0.018	0.032	3.56	0.030	******	0.072	32.5	34.0	0.217	0.062
2030	360.	0.287	0.015	0.017	0.031	3.54	0.031	0.088	0.072	32.0	33.0	0.259	0.063

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE	360.0 MIN	TOTAL DOSAGE =	55.49 PPM-MIN
NO	360.0 MIN	TOTAL DOSAGE =	7.83 PPM-MIN
NO2-PAN	360.0 MIN	TOTAL DOSAGE =	13.94 PPM-MIN
PAN	360.0 MIN	TOTAL DOSAGE =	5.89 PPM-MIN
OZONE	DOSAGE GT 0.10 =	26.19	PPM-MIN
OZONE	DOSAGE GT 0.08 =	31.33	PPM-MIN
NO2-PAN	DOSAGE GT 0.25 =	0.0	PPM-MIN

T(NO/NO2= 2.0) = 15.4 MIN

SURROGATE RUN 125-J
GLASS CHAMBER
1974 DEC 19

LIGHTS ON 0900, OFF 1511 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/24.9, PAN CALIBR. 6
AT T = 0: SURROGATE HC = 1469 PPBC; TOTAL NON-METHANE HC = 1619 PPBC;
METHANE = 2090 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NC /NO2	TOT N (PPM)
900	0.	0.0	0.134	0.016	0.150	3.72	0.0	0.034	0.096	30.8	47.5	0.0	0.150
915	15.	0.0	0.129	0.025	0.149	3.72	******	******	0.087	32.9	******	0.0	0.154
930	30.	0.001	0.102	0.043	0.145	3.70	******	******	0.081	32.5	******	0.002	0.146
945	45.	0.006	0.080	0.062	0.142	3.72	******	******	0.078	32.4	******	0.007	0.143
1000	60.	0.014	0.067	0.076	0.143	3.74	0.001	0.027	0.073	32.0	******	0.012	0.144
1015	75.	0.021	0.050	0.087	0.137	3.70	******	******	0.073	31.9	******	0.012	0.139
1030	90.	0.034	0.043	0.091	0.132	3.68	0.003	******	0.072	32.5	******	0.016	0.137
1045	105.	0.046	0.036	0.091	0.126	3.65	******	******	0.071	32.4	******	0.018	0.131
1100	120.	0.060	0.034	0.090	0.123	3.64	0.005	0.039	0.071	33.2	******	0.023	0.129
1115	135.	0.072	0.030	0.089	0.117	3.64	******	******	0.072	33.2	******	0.024	0.125
1130	150.	0.084	0.028	0.087	0.114	******	0.007	******	0.071	33.3	******	0.027	0.122
1200	180.	0.106	0.025	0.082	0.106	******	0.009	0.041	0.071	33.5	******	0.033	0.116
1230	210.	0.129	0.022	0.079	0.099	3.53	0.011	******	0.070	33.5	******	0.036	0.112
1300	240.	0.150	0.020	0.071	0.091	3.53	0.015	0.069	0.070	33.7	******	0.042	0.106
1330	270.	0.173	0.019	0.067	0.085	3.53	0.015	******	0.070	33.5	******	0.049	0.101
1400	300.	0.196	0.018	0.062	0.079	3.53	0.015	0.082	0.069	33.6	******	0.057	0.095
1430	330.	0.217	0.016	0.058	0.073	3.51	0.016	******	0.069	33.6	******	0.059	0.090
1500	360.	0.238	0.016	0.051	0.066	3.52	0.018	0.085	0.069	33.6	******	0.075	0.085

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE	360.0 MIN TOTAL DOSAGE =	38.41	PPM-MIN
NO	360.0 MIN TOTAL DOSAGE =	14.04	PPM-MIN
NO2-PAN	360.0 MIN TOTAL DOSAGE =	25.20	PPM-MIN
PAN	360.0 MIN TOTAL DOSAGE =	3.22	PPM-MIN
OZONE	DOSAGE GT 0.10 =	13.14	PPM-MIN
OZONE	DOSAGE GT 0.08 =	17.18	PPM-MIN
NO2-PAN	DOSAGE GT 0.25 =	0.0	PPM-MIN

T(NC/NO2= 2.0) = 33.9 MIN

SURROGATE RUN 126-J
GLASS CHAMBER
1974 DEC 20

LIGHTS ON 0900, OFF 1338 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/24.9, PAN CALIBR. 6
AT T = 0: SURROGATE HC = 2303 PPBC; TOTAL NON-METHANE HC = 2573 PPBC;
METHANE = 4720 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	G3*NC /NO2	TOT N (PPM)
900	0.	0.0	0.302	0.040	0.342	4.99	0.0	0.043	0.096	31.0	50.0	0.0	0.342
915	15.	0.0	0.268	0.051	0.339	4.94	******	******	0.087	32.1	47.0	0.0	0.339
930	30.	0.0	0.270	0.070	0.340	4.95	0.0	******	0.081	32.9	43.5	0.0	0.340
945	45.	0.001	0.240	0.098	0.335	4.94	******	******	0.076	32.7	******	0.002	0.339
1000	60.	0.002	0.212	0.119	0.331	4.92	0.001	0.037	0.074	32.5	******	0.003	0.332
1015	75.	0.003	0.185	0.140	0.327	4.95	******	******	0.073	32.6	43.5	0.004	0.326
1030	90.	0.007	0.162	0.158	0.318	4.92	0.002	******	0.074	32.7	37.0	0.007	0.322
1045	105.	0.009	0.138	0.178	0.312	4.91	******	******	0.072	32.9	35.0	0.007	0.318
1100	120.	0.013	0.120	0.189	0.307	4.90	0.002	0.052	0.071	32.9	34.0	0.008	0.311
1115	135.	0.017	0.106	0.195	0.299	4.88	******	******	0.070	33.0	33.5	0.009	0.304
1130	150.	0.022	0.091	0.205	0.296	4.88	0.003	******	******	******	33.0	0.010	0.299
1145	165.	0.029	0.080	0.208	0.287	4.83	******	******	0.069	33.1	32.5	0.011	0.292
1200	180.	0.035	0.070	0.211	0.281	4.81	0.005	0.076	0.069	33.0	32.5	0.012	0.286
1230	210.	0.049	0.059	0.215	0.273	4.79	0.005	******	0.070	33.1	32.0	0.013	0.279
1300	240.	0.065	0.049	0.213	0.260	4.74	0.006	0.092	0.069	33.1	31.0	0.015	0.268
1330	270.	0.082	0.040	0.209	0.245	4.75	0.009	******	0.068	33.3	30.5	0.016	0.258

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 270.0 MIN TOTAL DOSAGE = 6.97 PPM-MIN
NO 270.0 MIN TOTAL DOSAGE = 36.06 PPM-MIN
NO2-PAN 270.0 MIN TOTAL DOSAGE = 45.19 PPM-MIN
PAN 270.0 MIN TOTAL DOSAGE = 0.86 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.00 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NC/NO2= 2.0) = 54.4 MIN

SURROGATE RUN 127-J
GLASS CHAMBER
1974 DEC 30

LIGHTS ON 1200, OFF 1601 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/26.0, PAN CALIBR. 6
AT T = 0: SURROGATE HC = 2300 PPBC; TOTAL NON-METHANE HC = 2544 PPBC;
METHANE = 2480 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	REL HUM (%)	O3*NO NO2	TOT N (PPM)
1200	0.	0.0	0.300	0.041	0.339	7.83	0.0	0.063	0.103	31.9	52.0	0.0	0.341
1215	15.	0.0	0.276	0.062	0.336	7.80	******	******	0.091	32.6	48.5	0.0	0.338
1230	30.	0.001	0.233	0.098	0.331	7.78	0.0	******	0.087	33.0	47.0	0.002	0.331
1245	45.	0.003	0.195	0.129	0.324	7.74	******	******	0.084	33.2	46.5	0.005	0.325
1300	60.	0.006	0.160	0.156	0.316	7.72	0.001	0.079	0.084	33.2	48.0	0.006	0.317
1315	75.	0.010	0.131	0.174	0.305	7.67	******	******	0.083	32.6	52.5	0.008	0.307
1330	90.	0.016	0.109	0.190	0.299	7.63	0.003	******	0.082	******	50.0	0.009	0.302
1345	105.	0.023	0.088	0.205	0.293	7.61	******	******	0.082	32.6	51.5	0.010	0.297
1400	120.	0.034	0.076	0.207	0.283	7.62	0.005	0.105	0.082	32.0	55.0	0.012	0.288
1430	150.	0.054	0.058	0.213	0.271	7.49	0.007	******	0.081	31.6	55.0	0.015	0.278
1500	180.	0.078	0.048	0.214	0.260	7.47	******	******	0.081	32.4	51.5	0.018	0.269
1530	210.	0.102	0.040	0.206	0.246	7.30	******	******	0.080	32.3	51.5	0.020	0.253
1600	240.	0.126	0.033	0.203	0.235	******	******	******	0.077	32.9	46.5	0.021	0.243

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 240.0 MIN TOTAL DOSAGE = 10.57 PPM-MIN
NO 240.0 MIN TOTAL DOSAGE = 26.71 PPM-MIN
NO2-PAN 240.0 MIN TOTAL DOSAGE = 42.18 PPM-MIN
PAN 240.0 MIN TOTAL DOSAGE = 1.04 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.42 PPM-MIN
OZONE DOSAGE GT 0.08 = 1.32 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 35.5 MIN

SURROGATE RUN 128-J
GLASS CHAMBER
1975 JAN 20

LIGHTS ON 1000, OFF 1434 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/26.0, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 2171 PPBC; TOTAL NON-METHANE HC = 2391 PPBC;
METHANE = 2860 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1000	0.	0.0	0.289	0.043	0.332	6.94	0.0	0.002	0.110	31.0	0.0	0.332
1015	15.	0.0	0.265	0.065	0.330	6.90	0.0	******	0.105	32.6	0.0	0.330
1030	30.	0.0	0.228	0.099	0.326	6.87	0.0	******	0.101	33.0	0.0	0.327
1045	45.	0.001	0.192	0.124	0.316	6.80	******	******	0.098	32.4	0.001	0.317
1100	60.	0.005	0.158	0.150	0.309	6.75	0.001	0.0	0.095	32.4	0.005	0.309
1115	75.	0.009	0.129	0.176	0.304	6.71	******	******	******	32.3	0.006	0.307
1130	90.	0.013	0.108	0.187	0.296	6.69	0.003	******	0.093	32.3	0.007	0.298
1145	105.	0.019	0.092	0.196	0.286	6.67	******	******	0.092	32.4	0.009	0.292
1200	120.	0.027	0.079	0.203	0.282	6.63	0.005	0.043	0.092	32.4	0.011	0.287
1230	150.	0.043	0.061	0.210	0.268	6.59	0.006	******	0.086	31.9	0.013	0.277
1300	180.	0.060	0.048	0.212	0.255	6.55	0.007	0.079	0.088	32.0	0.014	0.267
1330	210.	0.080	0.043	0.203	0.246	6.49	0.009	******	0.089	32.5	0.017	0.255

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 210.0 MIN TOTAL DOSAGE = 5.60 PPM-MIN
NO 210.0 MIN TOTAL DOSAGE = 25.44 PPM-MIN
NO2-PAN 210.0 MIN TOTAL DOSAGE = 35.57 PPM-MIN
PAN 210.0 MIN TOTAL DOSAGE = 0.79 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.0 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 35.2 MIN

SURROGATE RUN 129-J
GLASS CHAMBER
1975 JAN 21

LIGHTS ON 1345, OFF 1801 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/25.8, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 2210 PPBC; TOTAL NON-METHANE HC = 2407 PPBC;
METHANE = 2860 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	O3*NC /NO2	TOT N (PPM)
1345	0.	0.0	0.301	0.040	0.340	7.56	0.0	0.024	0.112	29.6	0.0	0.341
1400	15.	0.0	0.290	0.052	0.340	7.56	******	******	0.109	30.8	0.0	0.342
1415	30.	0.0	0.262	0.077	0.338	7.52	0.0	******	0.099	31.1	0.0	0.339
1430	45.	0.0	0.232	0.106	0.338	7.50	******	******	0.096	31.2	0.0	0.338
1445	60.	0.0	0.202	0.130	0.332	7.48	0.0	0.012	0.094	31.5	0.0	0.332
1503	78.	0.004	0.168	0.159	0.323	7.48	******	******	0.091	31.4	0.004	0.328
1515	90.	0.007	0.145	0.175	0.319	7.48	0.001	******	0.091	31.4	0.006	0.321
1530	105.	0.010	0.126	0.187	0.310	7.47	******	******	0.090	31.5	0.006	0.315
1547	122.	0.016	0.104	0.197	0.302	7.35	0.004	0.019	0.087	31.4	0.008	0.305
1615	150.	0.026	0.080	0.214	0.294	7.37	0.004	******	0.087	31.6	0.010	0.298
1645	180.	0.042	0.064	0.216	0.277	7.26	0.005	0.040	0.086	31.6	0.013	0.285
1715	210.	0.057	0.052	0.217	0.269	******	0.007	******	0.086	31.7	0.014	0.276
1745	240.	0.072	0.042	0.214	0.255	7.12	0.008	******	0.085	31.7	0.014	0.264
1757	252.	0.081	******	******	******	******	******	******	******	******	0.081	******

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 252.0 MIN TOTAL DOSAGE = 6.41 PPM-MIN
NO 252.0 MIN TOTAL DOSAGE = 33.12 PPM-MIN
NO2-PAN 252.0 MIN TOTAL DOSAGE = 43.10 PPM-MIN
PAN 252.0 MIN TOTAL DOSAGE = 0.86 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.00 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NC/NO2= 2.0) = 46.8 MIN

SURROGATE RUN C-130-J
GLASS CHAMBER
1975 JAN 23

LIGHTS ON 1000, OFF 1603 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.64/22.0, PAN CALIBR. 7
HCHC CONCENTRATION AT 1000 NOT RECORDED
AT T = 0: SURROGATE HC = 2277 PPBC; TOTAL NON-METHANE HC = 2416 PPBC;
METHANE = 2900 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	PD #2 (VOLTS)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1000	0.	0.0	0.299	0.042	0.340	71.41	0.0	0.126	31.0	0.0	0.341
1015	15.	0.0	0.279	0.062	0.341	71.71	******	0.110	32.1	0.0	0.341
1030	30.	0.0	0.193	0.096	0.336	70.70	******	0.104	32.7	0.0	0.290
1045	45.	0.003	0.150	0.132	0.326	71.00	******	0.098	32.3	0.004	0.283
1100	60.	0.008	0.121	0.167	0.318	70.70	0.001	0.094	32.2	0.006	0.289
1115	75.	0.014	0.099	0.185	0.306	70.70	******	0.092	32.1	0.008	0.286
1130	90.	0.023	0.078	0.198	0.297	69.99	******	0.097	32.5	0.009	0.279
1145	105.	0.030	0.066	0.207	0.286	69.39	******	0.094	33.0	0.010	0.277
1200	120.	0.039	0.050	0.212	0.278	69.59	0.005	0.091	32.9	0.009	0.267
1230	150.	0.060	0.040	0.212	0.262	68.68	******	0.088	32.5	0.011	0.258
1300	180.	0.078	0.032	0.210	0.250	67.47	******	0.087	32.4	0.012	0.250
1330	210.	0.100	0.0	0.205	0.239	67.16	******	0.086	32.3	0.0	0.214
1400	240.	0.122	0.029	0.196	0.225	66.46	0.011	0.085	32.2	0.018	0.236
1430	270.	0.141	0.022	0.187	0.209	65.75	******	0.084	32.2	0.017	0.221
1500	300.	0.164	0.022	0.177	0.197	64.64	0.014	0.083	32.2	0.020	0.213
1530	330.	0.186	0.020	0.167	0.186	64.44	******	0.083	32.2	0.022	0.202
1600	360.	0.206	0.020	0.159	0.175	63.63	0.017	0.083	32.2	0.026	0.196

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 30.68 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 23.41 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 63.75 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 2.85 PPM-MIN
OZONE DOSAGE GT 0.10 = 7.96 PPM-MIN
OZONE DOSAGE GT 0.08 = 11.23 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 30.1 MIN

SURROGATE RUN C-131-J
GLASS CHAMBER
1975 JAN 27

LIGHTS ON 1245, OFF 1747 INTENSITY = 70% OF MAXIMUM
OASIBI 1212 WITH CHARCOAL SCRUBBER USED
PAN & HCHC DATA NOT TAKEN
CC FACTOR 2.84/27.7, PAN CALIBR. 7
AT T = 0: SURROGATE HC = 2207 PPBC; TOTAL NON-METHANE HC = 2345 PPBC;
METHANE = 2660 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1245	0.	----	0.321	0.040	0.360	6.85	31.9	******	0.361
1300	15.	----	0.292	0.068	0.358	6.82	33.5	******	0.360
1315	30.	----	0.233	0.117	0.350	6.77	33.2	******	0.350
1330	45.	----	0.163	0.173	0.337	6.71	32.9	******	0.336
1345	60.	----	0.115	0.208	0.322	6.66	******	******	0.323
1400	75.	0.052	******	******	******	6.60	******	0.052	******
1415	90.	0.059	******	******	******	6.54	******	0.059	******
1430	105.	0.072	******	******	******	6.49	******	0.072	******
1445	120.	0.084	******	******	******	6.46	******	0.084	******
1500	135.	0.094	******	******	******	6.43	******	0.094	******
1515	150.	0.105	******	******	******	6.37	******	0.105	******
1530	165.	0.115	******	******	******	6.36	******	0.115	******
1545	180.	0.129	******	******	******	6.26	******	0.129	******
1600	203.	0.147	******	******	******	6.22	******	0.147	******
1615	210.	0.159	******	******	******	6.18	******	0.159	******
1630	225.	0.170	******	******	******	6.05	******	0.170	******
1645	240.	0.177	******	******	******	6.07	******	0.177	******
1700	255.	0.189	******	******	******	5.98	******	0.189	******
1715	270.	0.203	******	******	******	5.98	******	0.203	******
1745	300.	0.228	******	******	******	******	******	0.228	******

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

NO 300.0 MIN TOTAL DOSAGE = 41.19 PPM-MIN
NO2-PAN 300.0 MIN TOTAL DOSAGE = 57.15 PPM-MIN
OZONE DOSAGE GT 0.10 = 9.96 PPM-MIN
OZONE DOSAGE GT 0.08 = 13.37 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 29.9 MIN

SURROGATE RUN 132-J
GLASS CHAMBER
1975 JAN 29

LIGHTS ON 0915, OFF 1932 INTENSITY = 70% OF MAXIMUM
OZONE AT 1815 READ FROM CHART
CC FACTOR 2.84/27.7, PAN CALIBR. 8
AT T = 0: SURROGATE HC = 1358 PPBC; TOTAL NON-METHANE HC = 1529 PPBC;
METHANE = 2080 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHC (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
915	0.	0.0	0.144	0.018	0.161	3.71	0.0	----	0.126	31.1	32.7	0.0	0.162
930	15.	0.0	0.123	0.036	0.159	3.73	******	******	0.110	31.9	33.7	0.0	0.159
945	30.	0.0	0.089	0.064	0.153	3.68	0.000	******	0.105	32.7	34.6	0.0	0.153
1000	45.	0.006	0.064	0.085	0.150	3.69	******	******	0.098	32.4	34.1	0.005	0.149
1015	60.	0.018	0.045	0.100	0.144	3.67	0.000	0.008	0.094	31.8	33.6	0.008	0.145
1030	75.	0.033	0.035	0.104	0.139	3.65	******	******	0.093	31.4	33.5	0.011	0.139
1045	90.	0.047	0.028	0.105	0.133	3.67	0.000	******	0.091	31.2	33.4	0.013	0.133
1100	105.	0.062	0.023	0.105	0.128	----	******	******	0.089	31.0	33.2	0.014	0.128
1115	120.	0.076	0.021	0.106	0.127	3.60	0.000	0.069	0.089	30.8	33.0	0.015	0.127
1145	150.	0.103	0.019	0.095	0.112	3.62	0.000	******	0.087	30.4	32.8	0.021	0.114
1200	165.	0.118	----	----	----	3.63	******	******	0.088	30.3	32.7	0.118	******
1215	180.	0.132	----	----	----	******	0.000	0.070	0.088	30.3	32.6	0.132	******
1230	195.	0.144	0.015	0.093	0.106	3.60	******	******	0.088	30.4	32.7	0.023	0.108
1248	213.	0.162	0.014	0.087	0.101	3.59	******	******	0.087	******	32.8	0.026	0.101
1300	225.	0.174	0.014	0.084	0.097	3.56	******	******	0.086	30.4	32.7	0.029	0.098
1315	240.	0.185	0.014	0.081	0.095	3.52	0.000	0.081	0.085	******	32.7	0.032	0.095
1345	270.	0.213	0.013	0.076	0.089	3.50	0.000	******	0.085	30.3	32.6	0.036	0.089
1415	300.	0.238	0.013	0.072	0.084	3.45	0.000	0.090	0.086	******	32.7	0.043	0.085
1450	335.	0.266	0.012	0.067	0.078	3.33	0.000	******	0.085	30.4	32.7	0.048	0.079
1515	360.	0.284	0.012	0.064	0.075	3.39	0.000	0.087?	0.084	30.2	32.6	0.053	0.076
1615	420.	0.322	0.010	0.058	0.068	3.36	0.000	******	0.083	30.2	32.7	0.055	0.068
1715	480.	0.348	0.011	0.054	0.065	3.31	0.000	******	0.082	30.1	32.5	0.071	0.065
1745	510.	0.358	0.010	0.051	0.061	3.32	******	******	0.083	30.3	32.6	0.070	0.061
1815	540.	0.368	******	******	******	******	******	******	******	******	******	0.368	******
1930	615.	0.380	0.009	0.046	0.055	3.21	******	******	0.080	30.2	32.7	0.074	0.055

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 47.21 PPM-MIN
NC 360.0 MIN TOTAL DOSAGE = 10.88 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 29.69 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 0.00 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 106.96 PPM-MIN
OZONE DOSAGE GT 0.10 = 23.46 PPM-MIN
OZONE DOSAGE GT 0.08 = 24.95 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NC/NO2= 2.0) = 23.5 MIN

SURROGATE RUN 133-J
GLASS CHAMBER
1975 JAN 30

LIGHTS ON 0900, OFF 1800 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/27.0, PAN CALIBR. 8
AT T = 0: SURROGATE HC = 1418 PPBC: TOTAL NON-METHANE HC = 1581 PPBC;
METHANE = 2080 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
900	0.	0.0	0.084	0.013	0.097	4.05	0.0	0.005	0.124	30.0	31.6	0.0	0.097
915	15.	0.002	0.068	0.030	0.098	4.03	******	******	0.108	30.4	32.2	0.005	0.098
930	30.	0.014	0.045	0.019	0.065	3.99	0.0	******	0.097	30.5	32.5	0.034	0.064
945	45.	0.034	0.032	0.058	0.090	3.97	******	******	0.092	30.5	32.7	0.019	0.050
1000	60.	0.058	0.026	0.061	0.087	3.92	0.0	0.056	0.090	30.5	32.7	0.025	0.087
1015	75.	0.080	0.024	0.057	0.081	3.90	******	******	0.088	30.5	32.7	0.034	0.084
1030	90.	0.100	0.022	0.053	0.075	3.86	0.005	******	0.088	30.5	32.8	0.042	0.080
1045	105.	0.119	0.020	0.050	0.070	3.79	******	******	0.084	30.5	32.8	0.047	0.077
1100	120.	0.136	0.020	0.046	0.065	3.79	0.008	0.071	0.084	30.5	32.9	0.059	0.074
1130	150.	0.169	0.018	0.041	0.059	3.71	0.010	******	0.084	30.5	33.0	0.074	0.069
1200	180.	0.198	0.021	0.037	0.057	3.67	0.012	0.081	0.084	----	33.0	0.113	0.070
1230	210.	0.224	0.018	0.035	0.053	3.52	0.013	******	0.082	30.6	33.0	0.115	0.066
1300	240.	0.246	0.017	0.032	0.048	3.58	0.014	0.082?	0.083	******	33.1	0.129	0.063
1330	270.	0.263	0.016	0.029	0.044	3.52	0.015	******	0.080	30.5	32.9	0.143	0.060
1400	300.	0.279	0.014	0.027	0.041	3.60	0.015	0.109	0.081	******	32.8	0.144	0.056
1430	330.	0.289	0.014	0.027	0.039	3.42	0.015	******	0.079	30.5	32.8	0.150	0.056
1500	360.	0.298	0.012	0.027	0.039	3.42	0.014	0.106	0.079	30.4	32.8	0.133	0.053
1530	390.	0.306	0.012	0.025	0.037	----	0.015	******	0.079	30.4	32.7	0.145	0.052
1600	420.	0.312	0.012	0.025	0.036	3.34	0.014	0.113	0.080	30.5	32.8	0.152	0.051
1630	450.	0.317	0.012	0.024	0.036	----	0.014	******	0.078	30.5	32.9	0.159	0.050
1700	480.	0.320	******	******	******	3.28	0.014	0.113	0.076	******	32.9	0.320	******
1730	510.	0.325	0.009	0.024	0.033	----	0.013	******	******	******	******	0.123	0.046
1800	540.	0.326	0.011	0.024	0.034	3.27	0.012	******	0.077	30.4	33.0	0.152	0.047

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 63.71 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 8.35 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 13.34 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 3.40 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 120.48 PPM-MIN
OZONE DOSAGE GT 0.10 = 33.11 PPM-MIN
OZONE DOSAGE GT 0.08 = 38.66 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 31.2 MIN

SURROGATE RUN 134-J
GLASS CHAMBER
1975 JAN 31

LIGHTS ON 0930, OFF 1835 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/27.4, PAN CALIBR. 8
AT T = 0: SURROGATE HC = 2285 PPBC; TOTAL NON-METHANE HC = 2490 PPBC;
METHANE = 2860 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
930	0.	0.0	0.030	0.008	0.038	7.00	0.0	0.031	0.110	29.1	31.2	0.0	0.038
945	15.	0.021	0.019	0.017	0.036	6.97	******	******	******	28.9	31.0	0.024	0.037
1000	30.	0.054	0.015	0.017	0.032	6.86	******	******	0.093	29.0	31.4	0.046	0.035
1015	45.	0.076	0.014	0.016	0.030	6.90	******	******	0.084	29.0	31.2	0.066	0.034
1030	60.	0.090	0.014	0.015	0.029	6.90	0.005	0.036	0.093	29.1	31.5	0.086	0.034
1045	75.	0.101	0.014	0.014	0.027	6.75	******	******	0.082	29.1	31.4	0.100	0.034
1100	90.	0.109	0.014	0.014	0.027	6.74	0.006	******	0.078	29.0	31.2	0.113	0.034
1115	105.	0.113	0.014	0.012	0.026	6.66	******	******	0.079	28.9	31.1	0.131	0.033
1130	120.	0.119	0.013	0.013	0.026	6.54	0.007	0.063	0.077	28.9	31.2	0.122	0.033
1200	150.	0.130	0.013	0.013	0.026	6.45	0.007	******	0.076	29.0	31.2	0.129	0.033
1230	180.	0.138	0.013	0.013	0.026	6.35	0.007	0.087	0.075	28.9	31.1	0.141	0.033
1300	210.	0.142	0.013	0.012	0.025	6.24	0.008	******	0.075	28.9	31.2	0.151	0.033
1330	240.	0.148	0.010	0.012	0.021	6.19	0.008	0.083	0.073	28.9	31.2	0.119	0.030
1400	270.	0.154	0.011	0.013	0.023	6.10	0.007	******	0.072	28.8	31.1	0.134	0.031
1430	300.	0.158	0.011	0.013	0.023	----	0.008	0.094	0.075	28.8	31.1	0.131	0.032
1500	330.	0.166	0.010	0.013	0.023	5.93	0.008	******	0.073	28.9	31.3	0.125	0.031
1530	360.	0.170	0.010	0.014	0.024	----	0.008	0.092	0.071	28.8	31.1	0.118	0.032
1600	390.	0.174	0.010	0.015	0.025	5.80	0.007	******	0.073	28.9	31.2	0.119	0.032
1630	420.	0.181	0.008	0.014	0.022	----	0.008	0.075	0.072	******	31.3	0.101	0.030
1700	450.	0.185	0.008	0.015	0.022	******	0.008	******	0.071	28.8	31.3	0.097	0.031
1730	480.	0.190	0.009	0.014	0.022	5.58	0.008	******	0.070	28.9	31.4	0.120	0.031
1830	540.	0.198	0.008	0.017	0.025	5.52	0.008	******	0.071	28.8	31.1	0.092	0.033

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 44.79 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 4.66 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 4.82 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 2.33 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 78.07 PPM-MIN
OZONE DOSAGE GT 0.10 = 11.92 PPM-MIN
OZONE DOSAGE GT 0.08 = 17.91 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 7.4 MIN

SURROGATE RUN 135-J
GLASS CHAMBER
1975 FEB 10

LIGHTS ON 1230, OFF 2133 INTENSITY = 70% OF MAXIMUM
DASIBI 1120 USED
CC FACTOR 2.84/28.0, PAN CALIBR. 8
AT T = 0: SURROGATE HC = 1381 PPBC; TOTAL NON-METHANE HC = 1477 PPBC;
METHANE = 2130 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PC #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1230	0.	0.0	0.030	0.007	0.037	3.84	0.0	0.027	******	29.4	30.5	0.0	0.037
1245	15.	0.011	0.015	0.020	0.035	******	******	******	******	30.5	32.4	0.008	0.036
1300	30.	0.041	0.011	0.023	0.034	3.56	0.001	******	******	30.7	32.4	0.020	0.035
1315	45.	0.063	0.010	0.021	0.031	3.53	******	******	******	******	******	0.030	0.034
1330	60.	0.082	0.010	0.018	0.028	3.53	0.005	0.039	******	******	******	0.045	0.033
1345	75.	0.094	0.009	0.018	0.027	3.48	******	******	******	******	******	0.046	0.033
1402	92.	0.106	0.009	0.016	0.025	3.43	0.006	******	******	******	******	0.061	0.031
1417	107.	0.113	0.009	0.016	0.025	3.43	******	******	******	******	******	0.063	0.032
1430	120.	0.120	0.009	0.014	0.023	3.41	0.007	0.077	******	******	******	0.079	0.030
1500	150.	0.130	0.009	0.015	0.024	3.35	0.008	******	0.082	28.6	30.6	0.078	0.032
1531	181.	0.138	0.009	0.014	0.023	3.34	0.008	0.122	0.088	******	31.7	0.090	0.031
1600	210.	0.147	0.009	0.015	0.024	3.33	0.008	******	0.091	29.8	32.1	0.088	0.032
1615	225.	0.152	0.009	0.015	0.023	3.27	******	******	0.091	29.9	32.4	0.090	0.032
1630	240.	0.157	0.009	0.015	0.024	3.28	0.008	0.149	******	******	******	0.092	0.032
1646	256.	0.162	0.009	0.015	0.024	3.24	******	******	******	******	******	0.095	0.032
1700	270.	0.166	0.009	0.015	0.024	3.21	0.008	******	0.089	30.3	32.7	0.098	0.032
1800	330.	0.181	0.008	0.016	0.024	3.23	******	******	0.078	29.3	31.6	0.089	0.032
1815	345.	0.184	0.009	0.016	0.025	******	******	******	0.079	******	31.4	0.102	0.033
1830	360.	0.188	0.008	0.017	0.025	3.17	0.008	******	0.078	29.1	31.3	0.087	0.033
2015	465.	0.207	0.008	0.017	0.025	3.20	******	******	0.078	28.8	31.0	0.097	0.033
2030	480.	0.209	0.008	0.017	0.025	3.17	0.008	******	0.077	28.9	31.2	0.098	0.033
2130	540.	0.218	0.008	0.017	0.025	3.17	0.008	******	0.076	29.0	31.1	0.102	0.033

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 45.91 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 1.50 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 5.79 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 2.36 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 82.59 PPM-MIN
OZONE DOSAGE GT 0.10 = 13.78 PPM-MIN
OZONE DOSAGE GT 0.08 = 19.57 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 5.8 MIN

SURROGATE RUN 136-J
GLASS CHAMBER
1975 FEB 11

LIGHTS ON 0900, OFF 1820 INTENSITY = 70% OF MAXIMUM
DASIBI 1120 USED
CC FACTOR 2.84/27.0, PAN CALIBR. 8
AT T = 0: SURROGATE HC = 2313 PPBC; TOTAL NON-METHANE HC = 2421 PPBC;
METHANE = 2900 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
900	0.	0.0	0.242	0.030	0.271	7.21	0.0	0.015	0.115	29.0	30.4	0.0	0.272
915	15.	0.0	0.225	0.050	0.270	7.14	******	******	0.102	******	30.7	0.0	0.275
930	30.	0.0	0.196	0.074	0.265	7.08	0.0	******	******	******	******	0.0	0.270
945	45.	0.0	0.160	0.108	0.260	7.05	******	******	0.093	29.6	31.7	0.0	0.268
1000	60.	0.004	0.128	0.129	0.252	6.95	0.001	0.036	0.089	29.7	32.2	0.004	0.258
1015	75.	0.012	0.095	0.154	0.244	******	******	******	******	******	******	0.007	0.250
1030	90.	0.022	0.075	0.167	0.230	6.67	0.002	******	0.086	******	32.7	0.010	0.244
1045	105.	0.034	0.060	0.173	0.229	6.73	******	******	******	******	******	0.012	0.236
1100	120.	0.047	0.050	0.176	0.222	6.71	0.004	0.064	0.092	30.2	32.9	0.013	0.230
1130	150.	0.074	0.038	0.175	0.208	6.61	0.005	******	0.078	29.7	32.1	0.016	0.218
1200	180.	0.101	0.030	0.169	0.196	6.54	0.007	0.069	0.074	29.3	31.6	0.018	0.206
1230	210.	0.126	0.027	0.162	0.185	6.45	0.008	******	0.074	29.1	31.4	0.021	0.197
1300	240.	0.151	0.024	0.155	0.175	6.33	0.009	0.126	0.072	29.1	31.3	0.023	0.188
1330	270.	0.178	0.020	0.142	0.162	6.26	0.010	******	0.071	29.0	31.2	0.025	0.172
1400	300.	0.203	0.018	0.136	0.149	6.22	0.013	0.107	0.071	29.0	31.2	0.027	0.167
1430	330.	0.230	0.018	0.126	0.140	6.18	0.014	******	0.071	29.0	31.2	0.033	0.158
1500	360.	0.255	0.018	0.117	0.131	6.13	0.015	0.087	0.068	29.0	31.1	0.039	0.150
1530	390.	0.280	0.015	0.105	0.119	6.05	0.017	******	0.071	28.9	31.1	0.040	0.137
1600	420.	0.306	0.015	0.097	0.108	5.96	0.018	0.086	******	28.9	31.1	0.047	0.130
1630	450.	0.332	0.015	0.090	0.099	5.92	0.020	******	0.068	28.9	31.1	0.055	0.125
1700	480.	0.354	0.013	0.080	0.090	5.88	0.021	0.101	0.069	28.9	30.9	0.058	0.114
1730	510.	0.374	0.013	0.072	0.083	5.83	0.022	******	0.066	28.8	30.9	0.068	0.107
1800	540.	0.394	0.013	0.064	0.074	5.82	0.024	0.117	0.066	28.6	30.8	0.080	0.101

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 37.89 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 22.54 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 50.71 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 2.40 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 96.99 PPM-MIN
OZONE DOSAGE GT 0.10 = 14.00 PPM-MIN
OZONE DOSAGE GT 0.08 = 17.85 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 37.0 MIN

SURROGATE RUN C-137-J
GLASS CHAMBER
1975 FEB 18

LIGHTS ON 0930, OFF 1830 INTENSITY = 70% OF MAXIMUM
NO2 AT 0930 ESTIMATED FROM LOGBOOK
EG&G: 124 AT 1230 HOURS, 124 AT 1530 HOURS
CC FACTOR 2.84/27.9, PAN DATA MISSING DUE TO RECORDER MALFUNTION
AT T = 0: SURROGATE HC = 2250 PPBC; TOTAL NON-METHANE HC = 2330 PPBC;
METHANE = 2700 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
930	0.	0.0	0.473	0.022?	----	7.25	0.002	******	******	31.1	0.0	0.496
945	15.	0.0	0.453	0.064	0.526	7.12	******	0.071	******	31.0	0.0	0.517
1000	30.	0.0	0.417	0.096	0.520	7.17	******	0.073	******	31.5	0.0	0.514
1015	45.	0.0	0.368	0.135	0.514	7.13	******	0.071	******	31.9	0.0	0.504
1030	60.	0.0	0.324	0.172	0.504	7.09	******	0.066	******	31.9	0.0	0.496
1045	75.	0.0	0.285	0.199	0.492	7.08	******	0.064	******	******	0.0	0.484
1100	90.	0.0	0.254	0.223	0.483	7.05	******	0.064	******	******	0.0	0.477
1115	105.	0.0	0.226	0.240	0.472	7.01	******	0.063	******	******	0.0	0.466
1130	120.	0.002	0.199	0.257	0.464	6.98	******	0.061	******	******	0.001	0.456
1200	150.	0.006	0.163	0.277	0.447	6.97	******	0.061	******	******	0.003	0.440
1230	180.	0.008	0.136	0.285	0.429	6.85	0.040	0.058	29.3	31.4	0.004	0.422
1300	210.	0.016	0.112	0.294	0.412	6.78	******	0.058	******	******	0.006	0.406
1330	240.	0.019	0.096	0.294	0.398	6.76	******	0.058	******	******	0.006	0.390
1400	270.	0.026	0.083	0.300	0.388	6.71	******	0.058	******	******	0.007	0.383
1430	300.	0.031	0.071	0.298	0.374	6.67	******	0.056	******	******	0.007	0.369
1500	330.	0.037	0.063	0.296	0.365	6.64	******	0.058	******	******	0.008	0.360
1530	360.	0.045	0.056	0.295	0.357	6.63	0.065	0.058	29.2	31.2	0.008	0.351
1600	390.	0.050	0.050	0.290	0.346	6.54	******	0.058	******	******	0.009	0.340
1630	420.	0.064	0.044	0.289	0.338	6.53	******	0.056	******	******	0.010	0.333
1700	450.	0.066	0.039	0.284	0.328	6.46	******	0.059	******	******	0.009	0.323
1730	480.	0.074	0.036	0.279	0.320	6.45	******	0.056	******	******	0.010	0.316
1800	510.	0.084	0.033	0.273	0.311	6.36	******	0.056	******	******	0.010	0.306
1830	540.	0.094	0.030	0.270	0.304	6.39	******	0.058	******	******	0.011	0.300

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 4.98 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 65.60 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 88.72 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 17.23 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.0 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 9.67 PPM-MIN

T(NO/NO2= 2.0) = 57.5 MIN

SURROGATE RUN 138-J
GLASS CHAMBER
1975 FEB 21

LIGHTS ON 0930, OFF 1530 INTENSITY = 70% OF MAXIMUM
CC FACTOR = 2.84/26.6, PAN CALIBR. 8
EG&G: 126 AT 0934 HOURS, 125 AT 1530 HOURS
AT T = 0: SURROGATE HC = 2197 PPBC; TOTAL NON-METHANE HC = 2331 PPBC;
METHANE = 2820 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PC #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
930	0.	0.0	0.464	0.050	0.523	7.88	0.0	0.060	0.073	29.5	31.1	0.0	0.514
945	15.	0.0	0.443	0.064	0.519	7.76	******	******	0.085	******	******	0.0	0.510
1000	30.	0.0	0.420	0.088	0.515	7.73	******	******	0.078	******	******	0.0	0.508
1015	45.	0.0	0.383	0.118	0.510	7.73	******	******	0.076	******	******	0.0	0.502
1030	60.	0.0	0.351	0.143	0.503	7.69	******	******	0.073	30.1	32.4	0.0	0.495
1045	75.	0.002	0.322	0.162	0.490	7.59	******	******	0.063	******	******	0.003	0.484
1100	90.	0.0	0.290	0.182	0.480	7.57	******	******	0.059	******	******	0.0	0.473
1115	105.	0.0	0.267	0.197	0.472	7.54	******	******	0.059	******	******	0.0	0.465
1130	120.	0.0	0.243	0.215	0.465	7.47	******	******	0.058	29.6	******	0.0	0.459
1200	150.	0.0	0.205	0.236	0.446	7.43	******	******	0.056	******	******	0.0	0.442
1230	180.	0.002	0.174	0.250	0.430	7.38	0.002	0.059	0.056	29.4	31.5	0.001	0.426
1300	210.	0.008	0.149	0.261	0.416	7.24	******	******	0.054	******	******	0.005	0.411
1330	240.	0.010	0.130	0.267	0.403	7.24	0.002	******	0.054	******	31.4	0.005	0.399
1400	270.	0.014	0.114	0.273	0.394	7.16	******	******	0.054	******	******	0.006	0.389
1430	300.	0.019	0.100	0.272	0.377	7.12	******	******	0.051	******	******	0.007	0.374
1500	330.	0.023	0.088	0.271	0.364	7.12	******	******	0.054	******	******	0.008	0.361
1530	360.	0.031	0.078	0.272	0.355	7.07	0.002	******	0.051	29.2	31.4	0.009	0.352

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE	360.0	MIN TOTAL DOSAGE =	2.75 PPM-MIN
NO	360.0	MIN TOTAL DOSAGE =	76.17 PPM-MIN
NO2-PAN	360.0	MIN TOTAL DOSAGE =	78.49 PPM-MIN
PAN	360.0	MIN TOTAL DOSAGE =	0.50 PPM-MIN
OZONE	DOSAGE GT 0.10 =	0.0	PPM-MIN
OZONE	DOSAGE GT 0.08 =	0.0	PPM-MIN
NO2-PAN	DOSAGE GT 0.25 =	3.15	PPM-MIN

T(NO/NO2= 2.0) = 74.6 MIN

SURROGATE RUN C-139-J
GLASS CHAMBER
1975 FEB 24

LIGHTS ON 0915, OFF 1550 . INTENSITY = 70% OF MAXIMUM
CC FACTOR NOT DETERMINED, PAN CALIBR. 8
EG&G: 129 AT 0923 HOURS, 124 AT 1515 HOURS
AT T = 0: SURROGATE HC = 2139 PPBC; TOTAL NON-METHANE HC = 2296 PPBC;
METHANE = 2880 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
915	0.	0.0	0.440	0.062	0.511	7.26	0.0	0.008	0.095	28.9	30.2	0.0	0.502
930	15.	0.0	0.417	0.082	0.508	7.26	******	******	0.085	******	******	0.0	0.499
945	30.	0.0	0.383	0.107	0.499	7.22	******	******	0.078	******	******	0.0	0.491
1000	45.	0.0	0.338	0.144	0.491	7.20	******	******	0.076	29.9	31.9	0.0	0.483
1015	60.	0.0	0.302	0.171	0.483	7.15	******	******	0.071	******	******	0.0	0.474
1030	75.	0.0	0.270	0.196	0.472	7.11	******	******	0.068	******	******	0.0	0.466
1045	90.	0.0	0.239	0.216	0.463	7.07	******	******	0.068	******	******	0.0	0.456
1100	105.	0.0	0.211	0.233	0.452	7.03	******	******	0.066	******	******	0.0	0.445
1115	120.	0.004	0.189	0.249	0.446	6.99	******	******	0.068	******	33.1	0.003	0.439
1145	150.	0.010	0.154	0.266	0.425	6.93	******	******	0.063	******	******	0.006	0.421
1215	180.	0.016	0.128	0.274	0.408	6.85	******	0.038	0.058	29.6	31.9	0.007	0.404
1245	210.	0.019	0.106	0.280	0.392	6.76	******	******	0.058	******	******	0.007	0.388
1315	240.	0.026	0.091	0.283	0.379	6.68	******	******	0.058	******	******	0.008	0.377
1345	270.	----	0.072	0.286	0.369	6.62	******	******	0.056	******	******	******	0.362
1415	300.	0.039	0.067	0.284	0.356	6.58	******	******	0.056	******	******	0.009	0.354
1445	330.	0.058	0.057	0.277	0.340	6.50	******	******	0.054	******	******	0.012	0.338
1515	360.	0.062	0.051	0.277	0.333	6.42	0.004	0.060	0.054	29.2	31.5	0.011	0.332
1545	390.	0.072	0.045	0.273	0.322	6.40	******	******	0.051	******	******	0.012	0.322

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 7.04 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 61.04 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 85.93 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 0.74 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.0 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 6.36 PPM-MIN

T(NO/NO2= 2.0) = 53.2 MIN

SURROGATE RUN 140-J
GLASS CHAMBER
1975 FEB 25

LIGHTS ON 0930, OFF 1510 INTENSITY = 70% OF MAXIMUM
DATA FROM LABBOCK
CC FACTOR 2.84/26.0, PAN CALIBR. 8
AT T = 0: SURROGATE HC = 2247 PPBC; TOTAL NON-METHANE HC = 2417 PPBC;
METHANE = 2880 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
930	0.	0.0	0.303	0.045	0.342	6.05	0.0	0.0	0.084	30.2	32.0	0.0	0.348
945	15.	0.0	0.281	0.060	0.337	6.01	******	******	0.074	29.9	31.7	0.0	0.341
1000	30.	0.0	0.253	0.081	0.331	5.98	0.001	******	0.066	29.4	31.3	0.0	0.335
1015	45.	0.0	0.222	0.105	0.325	5.99	******	******	******	******	******	0.0	0.328
1030	60.	0.002	0.190	0.129	0.319	5.99	0.001	0.008	0.062	29.0	31.1	0.002	0.320
1045	75.	0.005	0.160	0.151	0.311	5.94	******	******	******	******	******	0.005	0.312
1100	90.	0.008	0.136	0.170	0.304	5.93	0.001	******	0.058	29.0	31.0	0.006	0.307
1115	105.	0.014	0.113	0.186	0.298	5.97	******	******	******	******	******	0.008	0.301
1130	120.	0.017	0.100	0.192	0.291	5.91	0.003	0.028	0.056	29.0	31.1	0.009	0.295
1200	150.	0.030	0.072	0.207	0.277	5.89	0.003	******	0.056	29.0	31.3	0.010	0.282
1230	180.	0.047	0.059	0.207	0.263	5.86	0.004	0.065	0.055	29.0	31.1	0.013	0.270
1300	210.	0.062	0.050	0.206	0.251	5.83	0.005	******	0.054	29.1	31.3	0.015	0.261
1330	240.	0.080	0.040	0.202	0.240	5.78	0.006	******	0.053	29.2	31.4	0.016	0.248

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 240.0 MIN TOTAL DOSAGE = 6.15 PPM-MIN
NO 240.0 MIN TOTAL DOSAGE = 30.88 PPM-MIN
NO2-PAN 240.0 MIN TOTAL DOSAGE = 39.49 PPM-MIN
PAN 240.0 MIN TOTAL DOSAGE = 0.65 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.0 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 47.1 MIN

SURROGATE RUN 141-J
GLASS CHAMBER
1975 FEB 26

LIGHTS ON 0900, OFF 1510 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/27.0, PAN CALIBR. 8
AT T = 0: SURROGATE HC = 2216 PPBC; TOTAL NON-METHANE HC = 2374 PPBC;
METHANE = 2880 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NC /NO2	TOT N (PPM)
900	0.	0.0	0.288	0.039	0.333	5.84	0.0	0.0	29.1	31.6	0.0	0.327
915	15.	0.0	0.272	0.053	0.331	5.82	******	******	30.8	33.7	0.0	0.325
930	30.	0.0	0.249	0.074	0.331	5.78	******	******	******	******	0.0	0.324
945	45.	0.0	0.217	0.101	0.324	5.74	******	******	34.2	37.1	0.0	0.319
1000	60.	0.0	0.185	0.126	0.316	5.72	******	******	33.6	36.5	0.0	0.313
1015	75.	0.002	0.152	0.150	0.310	5.72	******	******	******	******	0.002	0.305
1030	90.	0.006	0.128	0.171	0.304	5.68	******	******	******	******	0.004	0.302
1045	105.	0.010	0.110	0.182	0.296	5.70	******	******	******	******	0.006	0.295
1100	120.	0.018	0.094	0.192	0.291	5.68	******	******	******	******	0.009	0.290
1130	150.	0.031	0.068	0.203	0.277	5.64	******	******	30.9	34.0	0.011	0.277
1200	180.	0.046	0.051	0.207	0.264	5.62	******	******	30.8	33.9	0.011	0.264
1230	210.	0.066	0.040	0.209	0.255	5.62	******	******	******	******	0.013	0.256
1300	240.	0.086	0.033	0.207	0.243	5.64	0.008	******	******	******	0.014	0.248
1330	270.	0.106	0.028	0.198	0.231	5.60	******	******	******	******	0.015	0.234
1400	300.	0.134	0.024	0.192	0.220	5.60	******	******	******	******	0.017	0.224
1430	330.	0.156	0.022	0.182	0.208	5.58	******	******	******	******	0.019	0.212
1500	360.	0.176	0.019	0.175	0.198	5.47	******	******	31.5	34.7	0.020	0.202

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 22.06 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 32.29 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 62.07 PPM-MIN
PAN 240.0 MIN TOTAL DOSAGE = 0.98 PPM-MIN
OZONE DOSAGE GT 0.10 = 3.96 PPM-MIN
OZONE DOSAGE GT 0.08 = 6.23 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 47.8 MIN

SURROGATE RUN 142-J
GLASS CHAMBER
1975 FEB 27

LIGHTS ON 1000, OFF 1938 INTENSITY = 70% OF MAXIMUM
ACETALDEHYDE ADDED
CC FACTOR 2.84/26.4, PAN CALIBR. 8
EGBG: -285 AT 1000 HOURS, 123 AT 1900 HOURS
AT T = 0: SURROGATE HC = 2294 PPBC; TOTAL NON-METHANE HC = 2796 PPBC;
METHANE = 3060 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	ACETALD (PPM)	O3*NO /NO2	TOT N (PPM)
1000	0.	0.0	0.288	0.036	0.332	6.83	0.0	0.0	0.092	31.4	33.6	0.162	0.0	0.324
1015	15.	0.002	0.249	0.075	0.330	6.81	******	******	0.076	32.7	34.6	******	0.005	0.324
1030	30.	0.002	0.196	0.121	0.323	6.81	0.001	******	0.068	32.2	34.6	******	0.003	0.318
1045	45.	0.004	0.151	0.158	0.317	6.81	******	******	0.066	31.8	34.1	******	0.004	0.312
1100	60.	0.012	0.113	0.189	0.308	6.77	0.0057	0.013	0.061	31.3	34.0	0.160	0.007	0.307
1115	75.	0.023	0.082	0.209	0.296	6.79	******	******	0.063	31.1	33.9	******	0.009	0.298
1130	90.	0.039	0.062	0.219	0.287	6.77	0.009	******	0.059	30.9	33.8	******	0.011	0.290
1145	105.	----	0.050	0.227	0.279	6.73	******	******	0.059	31.4	34.5	******	******	0.287
1200	120.	0.065	0.041	0.224	0.270	6.73	0.012	----	0.059	31.6	34.6	0.139	0.012	0.277
1230	150.	0.106	0.030	0.218	0.253	6.71	******	******	0.056	******	******	******	0.015	0.263
1300	180.	0.141	0.024	0.211	0.241	6.69	0.018	0.012	0.056	31.1	34.2	0.139	0.016	0.254
1330	210.	0.178	0.021	0.200	0.225	6.63	0.021	******	0.054	30.9	34.1	******	0.019	0.242
1400	240.	0.207	0.019	0.186	0.208	6.56	0.024	0.013	0.054	******	******	******	0.022	0.229
1430	270.	0.244	0.016	0.172	0.193	6.56	0.028	******	0.051	******	******	******	0.023	0.216
1500	300.	0.283	0.014	0.159	0.177	6.52	0.031	0.083	0.056	32.0	35.3	0.101	0.026	0.205
1530	330.	0.317	0.013	0.145	0.161	6.50	0.033	******	0.054	******	******	******	0.030	0.191
1600	360.	0.351	0.012	0.130	0.145	6.42	0.037	0.038	0.054	31.2	34.5	0.108	0.032	0.179
1630	390.	0.385	0.011	0.116	0.131	6.42	******	******	0.054	******	******	******	0.036	0.166
1700	420.	0.420	0.011	0.105	0.119	6.40	******	0.065	0.049	31.5	35.0	******	0.044	0.156
1730	450.	0.453	0.010	0.093	0.107	6.33	******	******	0.046	******	******	******	0.049	0.145
1800	480.	0.486	0.010	0.083	0.094	6.31	******	******	0.044	******	******	******	0.059	0.137
1830	510.	0.519	0.010	0.071	0.082	6.35	******	******	0.039	******	******	******	0.073	0.127
1900	540.	0.541	0.008	0.060	0.071	6.33	0.048	0.025	0.049	33.0	36.5	******	0.076	0.117
1930	570.	0.558	0.008	0.054	0.064	6.31	******	******	0.049	******	******	******	0.087	0.111

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE	360.0 MIN TOTAL DOSAGE =	52.99	PPM-MIN
NO	360.0 MIN TOTAL DOSAGE =	21.03	PPM-MIN
NO2-PAN	360.0 MIN TOTAL DOSAGE =	63.99	PPM-MIN
PAN	360.0 MIN TOTAL DOSAGE =	6.45	PPM-MIN
OZONE	540.0 MIN TOTAL DOSAGE =	134.26	PPM-MIN
OZONE	DOSAGE GT 0.10 =	26.95	PPM-MIN
OZONE	DOSAGE GT 0.08 =	31.38	PPM-MIN
NO2-PAN	DOSAGE GT 0.25 =	0.0	PPM-MIN

T(NO/NO2= 2.0) = 25.4 MIN

SURROGATE RUN 143-J
GLASS CHAMBER
1975 FEB 28

LIGHTS ON 0945, OFF 1330 INTENSITY = 70% OF MAXIMUM
CO NOT CALIBRATED (EST: 2.84/26.6), PAN CALIBR. 8
EG&G: 126 AT 1000 HOURS; 123 AT 1330 HOURS
AT T = 0: SURROGATE HC = 2247 PPBC; TOTAL NON-METHANE HC = 2323 PPBC;
METHANE = 2880 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*HC /NO2	TOT N (PPM)
945	0.	0.0	0.291	0.041	0.338	7.14	0.0	0.0	******	31.5	34.0	0.0	0.333
1000	15.	0.0	0.274	0.056	0.337	7.14	******	******	0.068	31.3	33.0	0.0	0.330
1015	30.	0.0	0.244	0.083	0.334	7.12	******	******	0.063	******	******	0.0	0.328
1030	45.	0.0	0.210	0.114	0.329	7.14	******	******	0.059	******	******	0.0	0.324
1045	60.	0.002	0.178	0.143	0.326	7.10	******	******	0.056	******	******	0.002	0.322
1100	75.	0.002	0.147	0.165	0.319	7.12	******	******	0.054	******	******	0.001	0.314
1115	90.	0.008	0.123	0.184	0.312	7.10	******	******	0.054	******	******	0.005	0.308
1130	105.	0.016	0.100	0.199	0.303	7.10	******	******	0.054	******	******	0.008	0.301
1145	120.	0.018	0.083	0.211	0.298	7.06	******	******	0.051	30.8	33.7	0.007	0.296
1215	150.	0.035	0.057	0.221	0.282	7.08	******	******	0.051	******	******	0.009	0.282
1245	180.	0.050	0.044	0.223	0.272	7.02	0.004	0.020	0.049	31.0	34.1	0.010	0.271
1315	210.	0.074	0.033	0.221	0.258	6.96	******	******	0.049	******	******	0.011	0.259
1330	225.	0.084	0.029	0.218	0.252	6.96	0.005	******	0.049	31.0	34.1	0.011	0.253

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 225.0 MIN TOTAL DOSAGE = 5.68 PPM-MIN
HC 225.0 MIN TOTAL DOSAGE = 27.22 PPM-MIN
NO2-PAN 225.0 MIN TOTAL DOSAGE = 39.17 PPM-MIN
PAN 225.0 MIN TOTAL DOSAGE = 0.54 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.01 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(HC/NO2= 2.0) = 42.3 MIN

SURROGATE RUN 144-J
GLASS CHAMBER
1975 MAR 3

LIGHTS ON 1030, OFF 1645 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/1.40(EST), PAN CALIBR. 8
ECSG: 125 AT 1030 HOURS, 123 AT 1630 HOURS
RH = 74% AT 1643 HOURS
AT T = 0: SURROGATE HC = 2216 PPBC; TOTAL NON-METHANE HC = 2329 PPBC;
METHANE = 2370 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NC /NO2	TOT N (PPM)
1030	0.	0.0	0.290	0.041	0.337	6.88	0.0	0.038	0.089	30.8	32.8	0.0	0.332
1045	15.	0.0	0.271	0.060	0.335	6.84	******	******	0.068	******	******	0.0	0.331
1100	30.	0.0	0.238	0.088	0.329	6.82	******	******	0.063	30.3	32.4	0.0	0.326
1115	45.	0.0	0.200	0.122	0.326	6.82	0.000	******	0.061	******	******	0.0	0.322
1130	60.	0.002	0.162	0.153	0.320	6.80	******	0.021	0.056	31.5	34.1	0.002	0.316
1145	75.	0.008	0.131	0.172	0.309	6.76	******	******	0.059	31.7	34.4	0.006	0.305
1200	90.	0.012	0.106	0.189	0.300	6.74	0.001	******	0.056	31.5	34.2	0.007	0.296
1215	105.	0.019	0.088	0.200	0.290	6.74	******	******	0.056	31.4	34.1	0.008	0.289
1230	120.	0.030	0.069	0.209	0.282	6.70	0.002	0.027	0.054	31.4	34.1	0.010	0.280
1300	150.	0.049	0.050	0.214	0.268	6.58	******	******	0.052	******	******	0.011	0.267
1330	180.	0.070	0.039	0.210	0.254	6.56	0.005	0.024	0.051	******	******	0.013	0.254
1400	210.	0.094	0.030	0.204	0.240	6.50	******	******	0.049	******	******	0.014	0.240
1430	240.	0.117	0.025	0.196	0.224	6.46	0.006	0.060	0.046	31.1	34.2	0.015	0.228
1500	270.	0.142	0.021	0.189	0.213	6.35	0.008	******	0.049	******	******	0.016	0.217
1530	300.	0.166	0.019	0.179	0.202	6.27	0.008	0.075	0.049	31.2	34.4	0.018	0.206
1600	330.	0.191	0.017	0.168	0.189	6.23	0.009	******	0.049	******	******	0.019	0.194
1630	360.	0.218	0.016	0.158	0.176	6.19	0.011	0.067	0.046	31.2	34.5	0.022	0.184
1645	375.	0.230	0.014	0.153	0.171	6.21	******	******	0.046	31.2	34.6	0.022	0.178

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE	360.0	MIN TOTAL DOSAGE =	29.44 PPM-MIN
HC	360.0	MIN TOTAL DOSAGE =	28.01 PPM-MIN
NO2-PAN	360.0	MIN TOTAL DOSAGE =	62.94 PPM-MIN
PAN	360.0	MIN TOTAL DOSAGE =	1.63 PPM-MIN
OZONE	DOSAGE GT 0.10 =	8.21	PPM-MIN
OZONE	DOSAGE GT 0.08 =	11.30	PPM-MIN
NO2-PAN	DOSAGE GT 0.25 =	0.0	PPM-MIN

T(HC/NO2= 2.0) = 38.9 MIN

SURROGATE RUN 145-J
GLASS CHAMBER
1975 MAR 4

LIGHTS ON 1030, OFF 1936 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/1.36, PAN CALIBR. 8
EGGG: 124 AT 1930 HOURS
RH = 86% AT 0900 HOURS; 74% AT 1630 HOURS
AT T = 0: SURROGATE HC = 2257 PPBC; TOTAL NON-METHANE HC = 2510 PPBC;
METHANE = 2360 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1030	0.	0.0	0.291	0.039	0.337	6.87	0.0	0.185	0.072	30.5	32.5	0.0	0.330
1045	15.	----	0.246	0.082	0.334	6.87	******	******	0.066	31.6	33.7	******	0.328
1100	30.	----	0.193	0.129	0.328	6.87	0.0	******	0.056	31.9	34.3	******	0.322
1115	45.	----	0.141	0.170	0.317	6.87	******	******	0.056	******	******	******	0.312
1130	60.	0.008	0.104	0.199	0.306	6.89	0.001	0.064	0.054	31.4	34.0	0.004	0.304
1145	75.	0.023	0.073	0.216	0.294	6.87	******	******	0.049	******	******	0.008	0.291
1200	90.	0.041	0.055	0.225	0.284	6.89	0.004	******	0.049	31.2	34.0	0.010	0.283
1215	105.	0.058	0.045	0.225	0.274	6.87	******	******	0.049	******	******	0.012	0.274
1230	120.	0.078	0.036	0.223	0.265	6.87	0.005	0.046	0.046	31.2	34.0	0.013	0.265
1300	150.	0.114	0.027	0.217	0.250	6.85	0.007	******	0.046	******	******	0.014	0.251
1330	180.	0.149	0.022	0.206	0.233	6.85	0.009	0.040	0.046	******	******	0.016	0.237
1400	210.	0.183	0.019	0.192	0.216	6.82	0.010	******	0.046	******	******	0.019	0.222
1430	240.	0.217	0.016	0.181	0.201	6.82	0.012	0.068	0.046	31.5	34.5	0.019	0.209
1500	270.	0.254	0.014	0.168	0.186	6.74	0.014	******	0.046	******	******	0.022	0.196
1530	300.	0.287	0.012	0.152	0.167	6.76	0.016	0.083	0.044	******	******	0.023	0.180
1600	330.	----	0.012	0.138	0.153	6.74	0.018	******	0.046	******	******	******	0.168
1630	360.	0.351	0.011	0.124	0.139	6.74	0.020	0.029	0.044	31.2	34.4	0.031	0.155
1700	390.	0.385	0.010	0.110	0.122	6.66	0.022	******	0.044	******	******	0.035	0.142
1730	420.	0.412	0.010	0.098	0.110	6.66	0.023	0.040	0.044	31.7	34.7	0.042	0.131
1800	450.	0.442	0.010	0.086	0.098	6.66	0.025	******	0.044	31.7	34.7	0.051	0.121
1830	480.	0.463	0.008	0.078	0.088	6.59	0.026	0.040	0.044	******	******	0.051	0.112
1900	510.	0.484	0.008	0.069	0.079	6.55	0.027	******	0.042	******	******	0.059	0.105
1930	540.	0.496	0.008	0.062	0.072	6.55	0.028	0.024	0.042	31.7	34.7	0.068	0.099

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 54.84 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 19.73 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 63.49 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 3.23 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 133.12 PPM-MIN
OZONE DOSAGE GT 0.10 = 28.31 PPM-MIN
OZONE DOSAGE GT 0.06 = 32.92 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 23.3 MIN

SURROGATE RUN 146-J
GLASS CHAMBER
1975 MAR 5

LIGHTS ON 0915, OFF 1336 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/1.27, PAM CALIBR. 8
EGGG: 125 AT 0930 HOURS; 122 AT 1215 HOURS
RH = 54% AT 0830 HOURS
AT T = 0: SURROGATE HC = 2229 PPBC; TOTAL NON-METHANE HC = 2297 PPBC;
METHANE = 2720 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
915	0.	0.0	0.288	0.040	0.334	7.05	0.0	0.004	******	31.5	33.5	0.0	0.328
930	15.	0.0	0.270	0.057	0.333	6.98	******	******	0.063	32.0	33.8	0.0	0.327
945	30.	0.0	0.239	0.085	0.329	7.01	******	******	0.056	******	******	0.0	0.324
1000	45.	0.0	0.206	0.110	0.320	6.98	******	******	0.054	******	******	0.0	0.317
1015	60.	0.0	0.172	0.138	0.317	6.96	******	******	0.051	******	******	0.0	0.311
1030	75.	0.002	0.146	0.158	0.309	6.96	******	******	0.049	******	******	0.001	0.304
1045	90.	0.010	0.117	0.181	0.301	6.92	******	******	0.046	******	******	0.006	0.299
1100	105.	0.012	0.095	0.194	0.294	6.94	******	******	0.046	******	******	0.006	0.290
1115	120.	0.018	0.080	0.204	0.289	6.92	0.001	******	0.046	31.8	34.4	0.007	0.285
1145	150.	0.034	0.057	0.212	0.274	6.87	******	******	0.044	******	******	0.009	0.272
1215	180.	0.049	0.042	0.217	0.264	6.87	0.004	******	0.044	31.9	34.8	0.010	0.263
1245	210.	0.070	0.033	0.213	0.251	6.80	******	******	0.042	******	******	0.011	0.250
1315	240.	0.092	0.027	0.210	0.242	6.64	******	******	0.039	******	******	0.012	0.240
1330	255.	0.102	0.024	0.206	0.234	6.64	******	******	0.039	******	******	0.012	0.234

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE	255.0	MIN TOTAL DOSAGE =	8.16 PPM-MIN
NO	255.0	MIN TOTAL DOSAGE =	27.43 PPM-MIN
NO2-PAN	255.0	MIN TOTAL DOSAGE =	44.29 PPM-MIN
PAN	255.0	MIN TOTAL DOSAGE =	0.52 PPM-MIN
OZONE	DOSAGE GT 0.10 =	0.00	PPM-MIN
OZONE	DOSAGE GT 0.08 =	0.35	PPM-MIN
NO2-PAN	DOSAGE GT 0.25 =	0.0	PPM-MIN

T(NO/NO2= 2.0) = 42.3 MIN

SURROGATE RUN 147-J
GLASS CHAMBER
1975 MAR 6
LIGHTS ON 0915, OFF 1315
CC FACTOR 2.84/1.35, PAN CALIBR. 8
EGGG: 124 AT 0930 HOURS, 121 AT 1315 HOURS
RH = 100% AT 0915
PHOTODIODE VALUES DOUBTFUL
AT T = 0: SURROGATE HC = 2204 PPBC; TOTAL NON-METHANE HC = 2307 PPBC;
METHANE = 2560 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
915	0.	0.0	0.290	0.038	0.333	5.93	0.0	0.040	30.6	32.4	0.0	0.328
930	15.	******	0.272	0.051	0.329	5.89	******	******	32.4	35.3	******	0.323
945	30.	******	0.244	0.075	0.324	5.89	******	******	******	******	******	0.319
1000	45.	******	0.211	0.105	0.321	5.82	******	******	******	******	******	0.316
1015	60.	******	0.177	0.132	0.313	5.78	0.000	******	31.6	34.0	******	0.309
1030	75.	0.012	0.146	0.152	0.304	5.76	******	******	******	******	0.012	0.299
1045	90.	0.022?	0.122	0.172	0.299	5.74	******	******	******	******	0.015	0.295
1100	105.	0.019	0.104	0.184	0.291	5.68	******	******	******	******	0.011	0.289
1115	120.	0.027	0.086	0.193	0.283	5.70	******	******	******	******	0.012	0.282
1145	150.	0.041	0.061	0.202	0.268	5.63	******	******	******	******	0.012	0.266
1215	180.	0.054	0.046	0.207	0.259	5.57	0.004	0.005	31.6	34.5	0.012	0.257
1245	210.	0.072	0.038	0.203	0.245	5.53	******	******	******	******	0.013	0.245
1315	240.	0.090	0.030	0.199	0.234	5.49	0.005	******	31.5	34.5	0.014	0.234

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 240.0 MIN TOTAL DOSAGE = 8.12 PPM-MIN
NO 240.0 MIN TOTAL DOSAGE = 28.09 PPM-MIN
NO2-PAN 240.0 MIN TOTAL DOSAGE = 39.06 PPM-MIN
PAN 240.0 MIN TOTAL DOSAGE = 0.52 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.08 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 45.3 MIN

SURROGATE RUN 148-J
GLASS CHAMBER
1975 MAR 7

LIGHTS ON 1000, OFF 1901 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/1.37, PAN CALIBR. 8
EG&G: 124 AT 1015 HOURS, 122 AT 1900 HOURS
AT T = 0: SURROGATE HC = 2126 PPBC; TOTAL NON-METHANE HC = 2460 PPBC;
METHANE = 3170 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PC #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NC /NO2	TOT N (PPM)
1000	0.	0.0	0.279	0.036	0.321	5.05	0.0	0.255	******	31.9	34.0	0.0	0.316
1015	15.	0.006	0.210	0.099	0.313	5.01	******	******	0.059	31.8	33.5	0.012	0.309
1030	30.	0.010	0.129	0.165	0.299	5.05	0.001	******	0.051	31.5	33.5	0.008	0.295
1045	45.	0.030	0.071	0.209	0.286	5.09	******	******	0.049	31.3	33.6	0.010	0.282
1100	60.	0.050	0.045	0.220	0.271	5.07	0.003	0.118	0.046	31.3	33.8	0.010	0.268
1115	75.	0.082	0.033	0.217	0.255	5.09	******	******	0.044	31.3	33.9	0.012	0.255
1130	90.	0.110	0.027	0.214	0.244	5.11	0.006	******	0.040	31.3	33.9	0.014	0.247
1145	105.	0.141	0.022	0.206	0.233	5.09	******	******	0.042	31.4	34.0	0.015	0.235
1200	120.	0.164	0.019	0.195	0.221	5.11	0.009	0.111	0.042	31.5	34.2	0.016	0.228
1230	150.	0.218	0.016	0.183	0.201	5.07	0.012	******	0.039	31.5	34.4	0.019	0.210
1300	180.	0.266	0.014	0.162	0.179	5.07	0.014	0.062	0.039	31.5	34.4	0.024	0.190
1330	210.	0.309	0.012	0.146	0.161	5.07	0.017	******	0.042	******	******	0.029	0.175
1400	240.	0.348	0.011	0.128	0.142	5.05	0.019	0.025	0.039	31.6	34.6	0.030	0.157
1430	270.	0.390	0.010	0.111	0.124	5.05	0.022	******	0.037	31.6	34.6	0.035	0.143
1500	300.	0.424	0.011	0.096	0.108	5.01	0.024	0.114	0.037	31.6	34.6	0.049	0.130
1530	330.	0.453	0.010	0.082	0.093	4.99	0.025	******	0.039	31.5	34.5	0.055	0.117
1600	360.	0.480	0.010	0.072	0.084	4.99	0.027	******	0.037	31.5	34.5	0.066	0.109
1630	390.	0.500	0.010	0.065	0.076	4.97	******	******	******	******	******	0.077	0.101
1700	420.	0.518	0.010	0.061	0.071	4.93	******	******	0.034	******	******	0.084	0.098
1730	450.	0.527	0.010	0.056	0.067	4.93	******	******	0.034	******	******	0.093	0.093
1800	480.	0.535	0.010	0.051	0.062	4.93	******	******	0.037	31.4	34.4	0.104	0.088
1830	510.	0.537	0.008	0.048	0.059	4.86	******	******	0.037	******	******	0.095	0.083
1900	540.	0.539	0.008	0.045	0.056	4.82	******	******	0.034	31.4	34.4	0.101	0.080

****** NO DATA TAKEN ---- DATA DISCARDED 7 QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 89.54 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 13.28 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 53.03 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 4.96 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 183.33 PPM-MIN
OZONE DOSAGE GT 0.10 = 59.09 PPM-MIN
OZONE DOSAGE GT 0.08 = 64.70 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 15.9 MIN

SURROGATE RUN 149-J
GLASS CHAMBER
1975 MAR 11

LIGHTS ON 1030, OFF 2152 INTENSITY = 70% OF MAXIMUM
EGBG: 124 AT 1045 HOURS, 122 AT 1630 HOURS
RH = 70% AT 1030 HOURS
CC FACTOR 2.84/1.34, PAN CALIBR. 8
AT T = 0: SURROGATE HC = 2104 PPBC; TOTAL NON-METHANE HC = 2275 PPBC;
METHANE = 2740 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
1030	0.	0.0	0.268	0.039	0.313	6.64	0.0	0.091	******	31.2	33.1	******	0.0	0.307
1045	15.	0.002	0.238	0.069	0.313	6.66	******	******	0.059	31.9	******	******	0.005	0.307
1100	30.	0.004	0.190	0.111	0.306	******	0.0	******	0.056	31.8	******	57.5	0.007	0.301
1115	45.	0.004	0.149	0.143	0.298	******	******	******	0.054	******	******	56.5	0.004	0.292
1130	60.	0.010	0.116	0.168	0.287	******	0.001	******	0.051	31.7	******	56.5	0.007	0.284
1145	75.	0.018	0.090	0.182	0.277	6.59	******	0.108	0.049	******	******	56.5	0.009	0.273
1200	90.	0.027	0.071	0.192	0.268	6.49	0.002	******	0.049	31.7	******	56.0	0.010	0.265
1215	105.	0.037	0.056	0.200	0.260	6.47	******	******	0.046	******	******	55.5	0.010	0.258
1230	120.	0.049	0.050	0.214	0.269	6.44	0.003	0.119	0.046	31.7	******	55.0	0.011	0.267
1300	150.	0.070	0.035	0.207	0.247	6.38	0.004	******	0.044	31.7	******	54.5	0.012	0.246
1330	180.	0.096	0.029	0.205	0.239	6.34	0.005	0.139	0.044	31.8	******	53.5	0.014	0.239
1400	210.	0.123	0.023	0.194	0.220	6.28	0.006	******	0.044	******	******	53.0	0.015	0.223
1430	240.	0.145	0.019	0.182	0.206	6.21	0.007	0.145	0.042	******	******	53.0	0.016	0.208
1500	270.	0.170	0.017	0.171	0.192	6.17	0.008	******	0.042	******	******	52.5	0.017	0.196
1530	300.	0.198	0.014	0.163	0.181	6.15	******	******	0.042	******	******	52.0	0.018	0.186
1600	330.	0.222	0.013	0.149	0.165	6.06	0.011	******	0.042	******	******	51.5	0.020	0.173
1630	360.	0.246	0.012	0.137	0.154	6.06	0.012	0.121	0.039	31.7	34.7	51.0	0.022	0.161
1700	390.	0.274	0.011	0.127	0.142	6.02	******	******	0.039	******	******	51.5	0.024	0.151
1730	420.	0.297	0.011	0.116	0.128	6.00	0.015	******	0.039	******	******	51.0	0.028	0.141
1800	450.	0.320	0.010	0.105	0.117	5.96	******	******	0.039	******	******	50.5	0.030	0.131
1830	480.	0.346	0.010	0.094	0.106	5.91	0.017	******	0.039	******	******	50.5	0.037	0.121
1900	510.	0.367	0.010	0.084	0.095	5.89	******	******	0.037	******	******	50.0	0.043	0.112
1930	540.	0.389	0.010	0.075	0.087	5.87	0.019	******	0.037	******	******	49.5	0.052	0.104
2030	600.	0.426	0.008	0.064	0.074	5.81	******	******	0.037	******	******	49.0	0.057	0.091
2130	660.	0.457	0.008	0.053	0.064	5.75	******	******	0.037	******	******	48.0	0.074	0.080
2145	675.	0.463	0.008	0.050	0.061	5.72	******	******	0.037	******	******	48.0	0.078	0.078

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 37.03 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 21.54 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 61.27 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 1.85 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 94.65 PPM-MIN
OZONE DOSAGE GT 0.10 = 12.67 PPM-MIN
OZONE DOSAGE GT 0.08 = 16.61 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 26.4 MIN

SURROGATE RUN 150-J
GLASS CHAMBER
1975 MAR 12

LIGHTS ON 1000, OFF 1915 INTENSITY = 70% OF MAXIMUM
EG&G: 124 AT 1015, 122 AT 1600
CC FACTOR 2.84/1.25, PAN CALIBR. 8
AT T = 0: SURROGATE HC = 2251 PPBC; TOTAL NON-METHANE HC = 2448 PPBC;
METHANE = 2610 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHC (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
1000	0.	0.0	0.440	0.074	0.523	8.63	0.0	0.134	******	31.7	32.9	55.0	0.0	0.515
1015	15.	0.0	0.412	0.099	0.519	8.60	******	******	0.059	32.1	33.7	53.5	0.0	0.511
1030	30.	0.002	0.376	0.130	0.515	8.56	0.0	******	0.051	31.7	33.6	54.5	0.005	0.506
1045	45.	0.004	0.340	0.158	0.508	8.49	******	******	0.046	******	******	54.5	0.009	0.499
1100	60.	0.004	0.307	0.185	0.500	8.49	0.000	0.151	0.044	31.3	33.6	54.5	0.007	0.493
1115	75.	0.006	0.270	0.213	0.492	8.47	******	******	0.044	******	******	54.5	0.007	0.483
1130	90.	0.006	0.240	0.234	0.481	8.44	0.001	******	0.042	******	******	54.0	0.006	0.475
1145	105.	0.008	0.212	0.251	0.472	8.42	******	******	0.042	******	******	53.5	0.007	0.464
1200	120.	0.010	0.191	0.263	0.463	8.40	0.001	0.171	0.039	31.2	33.9	53.5	0.007	0.455
1230	150.	0.016	0.155	0.282	0.445	8.35	0.001	0.161	0.037	******	******	53.0	0.009	0.432
1300	180.	0.019	0.123	0.296	0.427	8.24	0.002	******	0.037	******	******	52.0	0.008	0.421
1330	210.	0.027	0.102	0.306	0.414	8.24	******	******	0.037	******	******	52.0	0.009	0.410
1400	240.	0.031	0.084	0.310	0.401	8.17	0.002	******	0.037	******	******	51.0	0.008	0.396
1430	270.	0.043	0.069	0.313	0.388	8.10	0.002	0.191	0.034	******	******	50.5	0.010	0.384
1500	300.	0.050	0.058	0.300	0.365	8.06	0.003	******	0.034	31.3	34.2	50.0	0.010	0.361
1530	330.	0.064	0.050	0.297	0.354	8.01	0.003	******	0.034	******	******	49.5	0.011	0.350
1600	360.	0.078	0.044	0.290	0.339	7.94	0.004	0.177	0.034	31.3	34.2	49.0	0.012	0.338
1630	390.	0.092	0.039	0.284	0.328	7.88	******	******	0.034	******	******	48.5	0.013	0.327
1700	420.	0.106	0.033	0.277	0.316	7.79	******	******	0.034	******	******	48.5	0.013	0.314
1730	450.	0.121	0.029	0.269	0.303	7.76	******	******	0.034	******	******	48.0	0.013	0.303
1800	480.	0.133	0.027	0.262	0.294	7.72	******	******	0.032	******	******	47.5	0.014	0.293
1830	510.	0.150	0.024	0.252	0.280	7.70	******	******	0.034	******	******	47.0	0.015	0.281
1900	540.	0.166	0.022	0.245	0.272	7.63	******	******	0.032	******	******	46.5	0.015	0.271
1915	555.	0.172	0.021	0.240	0.264	7.63	******	******	0.029	31.6	34.4	46.5	0.015	0.265

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE	360.0 MIN	TOTAL DOSAGE =	9.36 PPM-MIN
NO	360.0 MIN	TOTAL DOSAGE =	59.94 PPM-MIN
NO2-PAN	360.0 MIN	TOTAL DOSAGE =	93.00 PPM-MIN
PAN	360.0 MIN	TOTAL DOSAGE =	0.57 PPM-MIN
OZONE	540.0 MIN	TOTAL DOSAGE =	31.06 PPM-MIN
OZONE	DOSAGE GT 0.10 =	0.0	PPM-MIN
OZONE	DOSAGE GT 0.06 =	0.0	PPM-MIN
NO2-PAN	DOSAGE GT 0.25 =	11.51	PPM-MIN

T(NO/NO2= 5.01) = 6.8 MIN

SURROGATE RUN 151-J
GLASS CHAMBER
1975 MAR 13

LIGHTS ON 1000, OFF 2016 INTENSITY = 70% OF MAXIMUM
EGEG: 125 AT 1003 HOURS, 121-122 AT 2000 HOURS
CC FACTOR 2.64/1.26, PAN CALIBR. 8
AT T = 0: SURROGATE HC = 2302 PPBC; TOTAL NON-METHANE HC = 2483 PPBC;
METHANE = 2750 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PC #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
1000	0.	0.0	0.215	0.025	0.245	6.79	0.0	0.111	******	32.0	33.9	52.5	0.0	0.240
1015	15.	0.002	0.185	0.052	0.243	6.68	******	******	0.056	******	******	51.5	0.006	0.238
1030	30.	0.004	0.146	0.085	0.237	6.68	----	******	0.049	31.5	33.5	52.5	0.007	0.232
1045	45.	0.008	0.112	0.113	0.229	6.66	******	******	0.044	31.4	33.6	52.5	0.008	0.226
1100	60.	0.016	0.080	0.137	0.221	6.61	0.001	0.173	0.042	31.3	33.6	52.5	0.009	0.218
1115	75.	0.030	0.057	0.150	0.213	6.59	******	******	0.039	******	******	52.0	0.011	0.210
1130	90.	0.045	0.042	0.158	0.204	6.57	0.003	******	0.039	******	******	52.0	0.012	0.203
1145	105.	0.061	0.035	0.159	0.197	6.52	******	******	0.037	******	******	52.0	0.014	0.199
1200	120.	0.078	0.029	0.158	0.191	6.52	0.005	0.192	0.037	******	33.9	51.0	0.014	0.192
1230	150.	0.111	0.024	0.151	0.187	6.48	0.007	******	0.034	31.3	34.1	50.5	0.018	0.182
1300	180.	0.146	0.021	0.143	0.166	6.43	0.009	0.222	0.034	******	******	49.5	0.022	0.172
1330	210.	0.182	0.017	0.133	0.153	6.37	0.010	******	0.032	31.5	34.2	49.0	0.023	0.160
1400	240.	0.213	0.016	0.122	0.140	6.32	0.012	0.181	0.029	31.4	34.2	49.0	0.028	0.150
1430	270.	0.244	0.014	0.113	0.130	6.30	0.014	******	0.029	******	******	48.5	0.031	0.141
1500	300.	0.279	0.013	0.102	0.118	6.25	0.015	0.177	0.029	31.4	34.3	48.0	0.037	0.130
1530	330.	0.309	0.012	0.091	0.105	6.19	0.018	******	0.029	31.3	34.3	47.5	0.041	0.120
1600	360.	0.340	0.012	0.082	0.095	6.12	0.019	0.183	0.029	31.3	34.3	47.0	0.050	0.113
1630	390.	0.367	0.011	0.073	0.086	6.10	******	******	0.029	******	******	46.5	0.055	0.104
1700	420.	0.394	0.011	0.067	0.079	6.07	******	******	0.027	******	******	46.5	0.065	0.099
1730	450.	0.416	0.011	0.060	0.072	6.05	******	******	0.029	******	******	46.0	0.076	0.093
1800	480.	0.434	0.010	0.055	0.066	6.01	******	******	0.029	******	******	45.5	0.079	0.088
1830	510.	0.450	0.010	0.049	0.061	5.96	******	******	0.027	******	******	45.0	0.092	0.083
1900	540.	0.463	0.010	0.044	0.058	5.94	0.025	******	0.027	******	******	45.0	0.104	0.079
1930	570.	0.470	0.010	0.041	0.053	5.87	******	******	0.027	******	******	44.5	0.114	0.076
2000	600.	0.473	0.010	0.039	0.050	5.85	0.025	0.168	0.027	31.4	34.4	44.0	0.121	0.073
2015	615.	0.477	0.010	0.037	0.048	5.80	******	******	0.027	******	******	44.0	0.127	0.072

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE	360.0	MIN TOTAL DOSAGE =	53.86 PPM-MIN
NO	360.0	MIN TOTAL DOSAGE =	15.91 PPM-MIN
NO2-PAN	360.0	MIN TOTAL DOSAGE =	43.39 PPM-MIN
PAN	360.0	MIN TOTAL DOSAGE =	3.15 PPM-MIN
OZONE	540.0	MIN TOTAL DOSAGE =	127.73 PPM-MIN
OZONE	DOSAGE GT 0.10 =		27.01 PPM-MIN
OZONE	DOSAGE GT 0.08 =		31.60 PPM-MIN
NO2-PAN	DOSAGE GT 0.25 =		0.0 PPM-MIN

T(NO/NO2= 2.0) = 26.7 MIN

SURROGATE RUN C-152-J
GLASS CHAMBER
1975 MAR 17

LIGHTS ON 1145, OFF 1735 INTENSITY = 70% OF MAXIMUM
CC FACTOR NOT DETERMINED, PAN NOT MEASURED, ORGANICS NOT MEASURED
EG&G: 126 AT 1145 HOURS, 122 AT 1645 HOURS

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1145	0.	0.0	0.230	0.029	0.265	5.72	0.0	0.080	31.7	33.4	0.0	0.259
1200	15.	0.002	0.205	0.051	0.259	5.68	******	******	******	******	0.006	0.256
1215	30.	0.006	0.166	0.083	0.251	5.64	******	******	******	******	0.011	0.249
1230	45.	0.010	0.121	0.118	0.243	5.57	******	******	******	******	0.010	0.239
1245	60.	0.018	0.088	0.143	0.233	5.57	******	******	******	******	0.011	0.231
1300	75.	0.027	0.066	0.155	0.223	5.54	******	******	******	******	0.012	0.221
1315	90.	0.039	0.051	0.160	0.215	5.49	******	0.047	31.0	33.6	0.012	0.211
1330	105.	0.053	0.042	0.161	0.206	5.47	******	******	******	******	0.014	0.203
1345	120.	******	0.035	0.162	0.201	5.42	******	******	******	******	******	0.198
1415	150.	******	0.028	0.157	0.189	5.35	******	******	******	******	******	0.185
1445	180.	******	0.024	0.151	0.179	5.32	******	******	******	******	******	0.176
1515	210.	******	0.021	0.145	0.171	5.21	******	******	******	******	******	0.166
1545	240.	******	0.019	0.136	0.160	5.18	******	******	******	******	******	0.156
1615	270.	******	0.017	0.129	0.149	5.13	******	******	******	******	******	0.146
1645	300.	0.234	0.016	0.122	0.141	5.04	******	0.038	31.3	34.1	0.031	0.138
1715	330.	0.262	0.016	0.113	0.130	5.03	******	******	******	******	0.037	0.129
1730	345.	0.275	0.014	0.110	0.127	4.99	******	******	******	******	0.036	0.124

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 345.0 MIN TOTAL DOSAGE = 41.38 PPM-MIN
NO 345.0 MIN TOTAL DOSAGE = 17.87 PPM-MIN
NO2-PAN 345.0 MIN TOTAL DOSAGE = 45.58 PPM-MIN
OZONE DOSAGE GT 0.10 = 16.66 PPM-MIN
OZONE DOSAGE GT 0.08 = 20.67 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 30.0 MIN

SURROGATE RUN 153-J
GLASS CHAMBER
1975 MAR 18

LIGHTS ON 0930, OFF 1700 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/25.6, PAN CALIBR. 8
EG&G: 125 AT 0934 HOURS, 122 AT 1530 HOURS
AT T = 0: SURROGATE HC = 2285 PPBC; TOTAL NON-METHANE HC = 2395 PPBC;
METHANE = 2930

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
930	0.	0.0	0.415	0.058	0.481	6.45	0.0	----	******	31.4	33.2	******	0.0	0.473
945	15.	0.0	0.399	0.069	0.477	6.45	******	******	0.061	******	******	52.5	0.0	0.468
1000	30.	0.0	0.372	0.095	0.475	6.41	0.0	******	0.051	31.8	33.8	53.0	0.0	0.467
1015	45.	0.0	0.338	0.123	0.470	6.37	******	******	0.046	******	******	53.0	0.0	0.461
1030	60.	0.002	0.306	0.145	0.460	6.32	******	0.111	0.044	******	******	53.0	0.003	0.451
1045	75.	0.002	0.276	0.171	0.454	6.31	******	******	0.042	******	******	52.5	0.003	0.447
1100	90.	0.004	0.249	0.190	0.445	6.28	0.001	----	0.039	******	******	52.5	0.005	0.439
1115	105.	0.004	0.223	0.207	0.439	6.25	******	******	0.039	******	******	52.0	0.004	0.431
1130	120.	0.008	0.200	0.222	0.428	6.28	0.001	----	0.037	31.4	34.1	51.5	0.007	0.423
1200	150.	0.012	0.163	0.247	0.416	6.20	0.001	******	0.037	******	******	51.0	0.008	0.411
1230	180.	0.016	0.136	0.258	0.401	6.15	0.002	******	0.034	******	******	50.5	0.008	0.396
1300	210.	0.023	0.112	0.272	0.389	6.13	0.002	******	0.034	******	******	49.5	0.010	0.386
1330	240.	0.030	0.094	0.277	0.376	6.11	0.002	0.153	0.032	31.5	34.5	49.0	0.010	0.373
1400	270.	0.035	0.078	0.278	0.362	6.07	0.003	******	0.032	******	******	48.5	0.010	0.359
1430	300.	0.047	0.066	0.279	0.351	6.00	0.003	0.147	0.029	******	******	48.0	0.011	0.348
1500	330.	0.057	0.056	0.278	0.340	5.97	0.003	******	0.032	******	******	47.5	0.011	0.337
1530	360.	0.068	0.049	0.275	0.328	5.98	0.004	0.157	0.029	31.5	34.5	47.0	0.012	0.327
1600	390.	0.080	0.041	0.270	0.316	5.92	******	******	0.029	******	******	46.5	0.012	0.315
1630	420.	0.094	0.038	0.262	0.304	5.87	******	******	0.029	******	******	46.5	0.014	0.304
1645	435.	0.100	0.035	0.261	0.300	5.86	******	******	0.029	******	******	46.5	0.014	0.300

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 7.97 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 62.01 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 81.23 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 0.59 PPM-MIN
OZONE DOSAGE GT 0.10 = 0.0 PPM-MIN
OZONE DOSAGE GT 0.08 = 0.0 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 4.60 PPM-MIN

T(NO/NO2= 2.0) = 63.1 MIN

SURROGATE RUN 154-J
GLASS CHAMBER
1975 MAR 31

LIGHTS ON 0915, OFF 1640 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/26.7, PAN CALIBR. 8
EGEG: 127 AT 1015 HOURS; 124 AT 1615 HOURS
LOWER SOUTHEASTERN GLASS PANE BROKEN AT 1420 HOURS
AT T = 0: SURROGATE HC = 2308 PPBC; TOTAL NON-METHANE HC = 2548 PPBC;
METHANE = 2670 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PC #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	REL HUM (%)	O3*NO /NO2	TOT N (PPM)
1015	0.	0.0	0.411	0.080	0.483	6.70	0.0	0.140	0.060	30.7	33.2	49.0	0.0	0.491
1030	15.	0.002	0.390	0.092	0.480	6.67	******	******	0.039	******	34.3	47.0	0.007	0.482
1045	30.	0.002	0.347	0.132	0.476	6.66	0.0	******	0.034	******	******	46.0	0.004	0.479
1100	45.	0.004	0.316	0.158	0.470	6.62	******	******	0.029	******	******	46.5	0.008	0.474
1115	60.	0.004	0.277	0.188	0.462	6.59	******	******	0.029	******	******	46.5	0.006	0.465
1130	75.	0.006	0.247	0.211	0.457	6.55	******	******	0.027	******	******	46.5	0.007	0.458
1145	90.	0.008	0.220	0.225	0.442	6.55	0.001	0.163	0.024	21.1	34.5	46.5	0.008	0.446
1200	105.	0.010	0.191	0.244	0.437	6.47	******	******	0.027	******	******	45.5	0.008	0.436
1215	120.	0.012	0.169	0.263	0.429	6.43	0.001	0.179	0.024	******	******	45.5	0.008	0.433
1245	150.	0.016	0.132	0.283	0.414	6.32	0.001	******	0.024	******	******	45.0	0.007	0.416
1315	180.	0.023	0.103	0.302	0.402	6.26	0.001	0.195	0.024	31.3	35.1	45.0	0.008	0.406
1345	210.	0.030	0.082	0.302	0.380	6.17	0.002	******	0.022	******	******	44.5	0.008	0.386
1415	240.	0.039	0.060	0.308	0.368	6.11	0.002	0.181	0.022	******	******	44.5	0.008	0.370
1445	270.	0.047	0.048	0.307	0.354	6.02	0.002	******	0.022	******	******	41.0	0.007	0.357
1515	300.	0.058	0.039	0.301	0.340	5.88	0.003	0.173	0.027	0.0	******	41.0	0.008	0.343
1545	330.	0.070	0.029	0.298	0.328	5.78	0.003	******	0.027	******	******	40.5	0.007	0.330
1615	360.	0.078	0.024	0.293	0.313	5.65	0.003	0.157	0.027	31.2	35.2	40.0	0.006	0.320

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE	360.0 MIN TOTAL DOSAGE =	10.48	PPM-MIN
NO	360.0 MIN TOTAL DOSAGE =	51.85	PPM-MIN
NO2-PAN	360.0 MIN TOTAL DOSAGE =	92.64	PPM-MIN
PAN	360.0 MIN TOTAL DOSAGE =	0.56	PPM-MIN
OZONE	DOSAGE GT 0.10 =	0.0	PPM-MIN
OZONE	DOSAGE GT 0.08 =	0.0	PPM-MIN
NO2-PAN	DOSAGE GT 0.25 =	11.39	PPM-MIN

T(NO/NO2= 2.0) = 45.0 MIN

SURROGATE RUN 155
GLASS CHAMBER
1975 APR 16

LIGHTS ON 1000, OFF 1602 INTENSITY = 70% OF MAXIMUM
CC FACTOR 2.84/25.3, PAN CALIBR. 8
EGGG: 121 AT 1015 HOURS; 119 AT 1600 HOURS
TOLUENE ADDED INSTEAD OF LIQUID SURROGATE
AT T = 0: TOTAL NON-METHANE HC = 6872 PPBC; METHANE = 2790 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1000	0.	0.0	0.172	0.028	0.200	6.59	0.0	0.091	******	30.5	32.6	0.0	0.200
1015	15.	0.0	0.141	0.058	0.198	6.59	0.0	******	0.066	31.5	33.7	0.0	0.198
1030	30.	0.008	0.085	0.102	0.187	6.54	******	******	0.066	31.3	33.6	0.007	0.186
1045	45.	0.039	0.039	0.132	0.171	6.44	******	******	0.068	******	******	0.012	0.174
1100	60.	0.092	0.021	0.130	0.152	6.45	0.004	0.099	0.068	30.8	33.6	0.015	0.155
1115	75.	0.149	0.015	0.110	0.126	6.42	******	******	0.068	******	******	0.020	0.134
1130	90.	0.207	0.013	0.084	0.098	6.36	0.014	******	0.068	30.8	33.8	0.032	0.112
1145	105.	0.250	0.011	0.063	0.074	6.33	******	******	0.068	******	******	0.044	0.093
1200	120.	0.282	0.010	0.045	0.056	6.31	0.023	0.107	0.068	30.9	34.0	0.063	0.078
1230	150.	0.306	0.008	0.029	0.045	6.20	0.024	******	0.068	******	******	0.082	0.061
1300	180.	0.310	0.009	0.026	0.035	6.13	0.023	0.141	0.066	31.2	34.5	0.106	0.057
1330	210.	0.306	0.010	0.021	0.031	6.03	0.023	******	0.066	******	******	0.148	0.053
1400	240.	0.302	0.010	0.020	0.030	5.97	0.020	0.145	0.063	31.5	34.8	0.149	0.050
1430	270.	0.297	0.009	0.018	0.028	5.86	0.019	******	0.063	******	******	0.151	0.046
1500	300.	0.289	0.010	0.018	0.027	5.81	0.016	0.157	0.063	******	******	0.161	0.044
1530	330.	0.287	0.008	0.019	0.027	5.69	0.015	******	----	******	******	0.125	0.042
1600	360.	0.279	0.008	0.020	0.029	5.63	0.011	******	----	31.5	34.9	0.112	0.039

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE	360.0 MIN	TOTAL DOSAGE =	84.66 PPM-MIN
NO	360.0 MIN	TOTAL DOSAGE =	8.42 PPM-MIN
NO2-PAN	360.0 MIN	TOTAL DOSAGE =	16.22 PPM-MIN
PAN	360.0 MIN	TOTAL DOSAGE =	5.57 PPM-MIN
OZONE	DOSAGE GT 0.10 =	53.27	PPM-MIN
OZONE	DOSAGE GT 0.08 =	59.28	PPM-MIN
NO2-PAN	DOSAGE GT 0.25 =	0.0	PPM-MIN

T(NO/NO2= 2.0) = 17.7 MIN

SURROGATE RUN 156-J
GLASS CHAMBER
1975 APR 17

LIGHTS ON 0930, OFF 1835 INTENSITY = 70 % OF MAXIMUM
CC FACTOR 2.84/24.5, PAN CALIBR. 8
EGGG: 121 AT 0945 HOURS; 118 AT 1830 HOURS
DATA ACQUISITION SYSTEM NOT FUNCTIONING
AT T = 0: SURROGATE HC = 2138 PPBC; TOTAL NON-METHANE HC = 2226 PPBC;
METHANE = 2710 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	G3*NO /NO2	TOT N (PPM)
930	0.	0.0	0.174	0.032	******	6.79	0.0	0.010	******	30.3	32.2	0.0	0.206
945	15.	0.001	0.144	0.057	0.201	6.68	******	******	0.059	32.1	34.8	0.002	0.201
1000	30.	0.004	0.103	0.097	0.196	6.66	0.000	******	******	31.9	34.4	0.004	0.200
1015	45.	0.014	0.066	0.122	0.189	6.51	******	******	0.051	31.5	34.2	0.007	0.189
1030	60.	0.027	0.047	0.133	0.178	6.47	0.002	0.030	0.048	31.4	34.2	0.010	0.182
1045	75.	0.047	0.034	0.138	0.170	6.37	******	******	0.047	31.2	34.2	0.012	0.175
1100	90.	0.066	0.034	0.137	0.169	6.33	0.005	******	0.046	31.3	34.2	0.016	0.176
1115	105.	0.085	0.025	0.134	0.158	6.32	******	******	0.044	31.3	34.4	0.016	0.165
1130	120.	0.101	0.021	0.129	0.143	6.21	0.007	0.040	0.044	31.2	34.5	0.016	0.157
1200	150.	0.135	0.018	0.123	0.137	6.11	0.008	******	0.043	31.3	34.6	0.020	0.149
1230	180.	0.165	0.020	0.115	0.127	6.03	0.009	0.046	0.041	31.2	34.5	0.029	0.144
1300	210.	0.193	0.014	0.107	0.119	5.92	0.011	******	0.040	31.3	34.5	0.025	0.132
1330	240.	0.220	0.012	0.099	0.109	5.88	0.012	0.046	0.040	31.3	34.7	0.027	0.123
1400	270.	0.246	0.012	0.089	0.100	5.80	0.014?	******	******	******	******	0.033	0.115
1430	300.	0.274	0.011	0.083	0.093	5.75	******	0.060	0.038	31.3	34.6	0.036	0.109
1500	330.	0.298	0.011	0.075	0.085	5.68	0.016	******	0.038	31.3	34.7	0.044	0.102
1530	360.	0.321	0.010	0.068	0.077	5.64	******	0.050	0.038	31.3	34.6	0.047	0.095
1600	390.	0.345	0.010	0.062	0.071	5.57	0.018	******	0.038	31.3	34.6	0.055	0.090
1630	420.	0.365	0.010	0.056	0.065	5.54	0.020	******	0.037	31.3	34.7	0.065	0.086
1700	450.	******	******	******	******	******	******	******	******	******	******	******	******
1730	480.	0.396	0.010	0.049	0.058	5.45	0.021	0.060	0.036	31.4	34.7	0.080	0.080
1800	510.	0.404	0.010	0.046	0.054	5.43	0.021	******	0.036	31.4	34.8	0.088	0.077
1830	540.	0.419	0.009	0.042	0.050	5.34	0.021	******	0.034	31.3	34.7	0.089	0.072

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 56.66 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 11.66 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 37.17 PPM-MIN
PAN 330.0 MIN TOTAL DOSAGE = 2.71 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 124.46 PPM-MIN
OZONE DOSAGE GT 0.10 = 28.26 PPM-MIN
OZONE DOSAGE GT 0.08 = 33.26 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 18.8 MIN

SURROGATE RUN 157-J
GLASS CHAMBER
1975 APR 18

LIGHTS ON 0915, OFF 1515 INTENSITY = 70 % OF MAXIMUM
CC FACTOR 2.84/24.8, PAN CALIBR. 8
EG&G: 122 AT 0920 HOURS; 120 AT 1515 HOURS
HCHO INJECTED 1220
AT T = 0: SURROGATE HC = 2161 PPBC; TOTAL NON-METHANE HC = 2309 PPBC;
METHANE = 2880 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	PD #2 (VOLTS)	TS1 (DEG C)	TS2 (DEG C)	G3*NO /NO2	TOT N (PPM)
915	0.	0.0	0.173	0.026	0.198	7.02	0.0	0.040	0.068	30.6	32.8	0.0	0.199
930	15.	0.0	0.152	0.044	0.195	6.90	******	******	0.059	30.9	33.0	0.0	0.196
945	30.	0.003	0.122	0.070	0.193	6.81	0.0	******	0.056	30.8	33.5	0.006	0.192
1000	45.	0.007	0.091	0.096	0.186	6.71	******	******	0.048	31.5	34.5	0.007	0.188
1015	60.	0.018	0.062	0.120	0.179	6.66	0.001	0.064	0.049	31.8	34.7	0.010	0.183
1030	75.	0.031	0.045	0.128	0.170	6.62	******	******	******	******	******	0.011	0.175
1045	90.	0.048	0.034	0.129	0.164	6.56	0.003	******	0.040	31.7	34.8	0.013	0.167
1100	105.	0.065	0.028	0.130	0.158	6.49	******	******	0.040	******	******	0.014	0.161
1115	120.	0.080	0.023	0.127	0.152	6.44	0.005	0.068	0.037	31.6	35.2	0.015	0.155
1130	135.	0.098	0.020	0.126	0.147	6.39	******	******	0.040	******	******	0.016	0.151
1145	150.	0.107	0.019	0.123	0.142	6.35	0.006	******	0.040	******	******	0.016	0.147
1200	165.	0.129	0.018	0.119	0.137	6.28	******	******	0.040	******	******	0.019	0.143
1215	180.	0.141	0.017	0.116	0.132	6.23	******	0.081	0.040	31.8	35.2	0.020	0.140
1230	195.	0.156	0.016	0.111	0.127	6.18	******	******	0.040	******	******	0.022	0.135
1245	210.	0.170	0.014	0.107	0.122	6.13	0.009	0.093	0.040	******	******	0.022	0.130
1300	225.	0.186	0.014	0.105	0.118	6.06	******	******	0.040	******	******	0.024	0.127
1315	240.	0.198	0.013	0.100	0.113	6.07	******	0.103	0.040	******	******	0.025	0.122
1345	270.	0.226	0.012	0.093	0.105	5.96	******	******	0.040	******	******	0.028	0.115
1415	300.	0.256	0.011	0.085	0.096	5.92	******	0.103	0.040	******	******	0.034	0.108
1445	330.	0.282	0.010	0.078	0.088	5.83	0.013	******	0.040	******	******	0.037	0.101
1515	360.	0.309	0.010	0.070	0.080	5.76	0.015	******	0.040	32.0	35.4	0.043	0.094

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

OZONE 360.0 MIN TOTAL DOSAGE = 50.57 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 12.83 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 35.92 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 2.50 PPM-MIN
OZONE DOSAGE GT 0.10 = 23.55 PPM-MIN
OZONE DOSAGE GT 0.08 = 28.18 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 0.0 PPM-MIN

T(NO/NO2= 2.0) = 26.7 MIN

SURROGATE RUN 158-J
GLASS CHAMBER
1975 APR 21
LIGHTS ON 1045, OFF 2012 INTENSITY = 70 % OF MAXIMUM
CC FACTOR 2.84/24.5, PAN CALIBR. 8
EGGG: 122 AT 0920 HOURS; 118 AT 1943 HOURS
PHOTODIODE DISCONNECTED
O3, NO, NO2, NOX & CO DATA FROM DACS TAPE
AT T = 0: SURROGATE HC = 2848 PPBC; TOTAL NON-METHANE HC = 3116 PPBC;
METHANE = 2850 PPB

CLOCK TIME	ELAPSED TIME(MIN)	OZONE (PPM)	NO (PPM)	NO2-PAN (PPM)	NOX-PAN (PPM)	CO (PPM)	PAN (PPM)	HCHO (PPM)	TS1 (DEG C)	TS2 (DEG C)	O3*NO /NO2	TOT N (PPM)
1045	0.	0.0	0.385	0.046	0.430	6.87	0.0	0.107	31.3	34.1	0.0	0.431
1100	15.	0.0	0.358	0.072	0.429	6.82	******	******	******	******	0.0	0.430
1115	30.	0.0	0.319	0.109	0.427	6.75	0.0	******	******	******	0.0	0.427
1130	45.	0.002	0.276	0.145	0.421	6.75	******	******	******	******	0.004	0.421
1145	60.	0.004	0.232	0.179	0.412	6.70	0.001	0.113	32.6	36.6	0.005	0.412
1200	75.	0.006	0.194	0.210	0.406	6.66	******	******	******	******	0.005	0.405
1215	90.	0.008	0.155	0.243	0.399	6.62	0.001	******	******	******	0.005	0.399
1230	105.	0.010	0.128	0.262	0.392	6.65	******	******	******	******	0.008	0.392
1245	120.	0.021	0.106	0.272	0.379	6.59	0.002	0.123	******	******	0.008	0.380
1315	150.	0.033	0.074	0.286	0.362	6.49	0.002	******	******	******	0.009	0.363
1345	180.	0.051	0.053	0.289	0.343	6.46	0.004	0.125	32.0	36.1	0.009	0.346
1415	210.	0.074	0.042	0.285	0.327	6.34	0.005	******	******	******	0.011	0.331
1445	240.	0.094	0.034	0.277	0.313	6.32	0.005	0.119	******	******	0.012	0.316
1515	270.	0.111	0.028	0.271	0.299	6.21	0.006	******	32.1	36.2	0.012	0.305
1545	300.	0.133	0.024	0.260	0.285	6.17	0.007	0.125	******	******	0.012	0.292
1615	330.	0.154	0.021	0.249	0.271	6.12	0.008	******	******	******	0.013	0.277
1645	360.	0.174	0.018	0.239	0.259	6.05	0.009	0.125	******	******	0.013	0.266
1715	390.	0.193	0.016	0.227	0.244	5.96	******	******	******	******	0.014	0.253
1745	420.	0.213	0.015	0.214	0.230	5.91	******	******	******	******	0.015	0.239
1815	450.	0.233	0.013	0.204	0.217	5.86	******	******	******	******	0.015	0.228
1845	480.	0.252	0.012	0.192	0.205	5.78	******	******	******	******	0.016	0.216
1915	510.	0.276	0.011	0.179	0.191	5.74	******	******	******	******	0.017	0.203
1945	540.	0.295	0.011	0.168	0.179	5.68	0.014	0.117	31.9	36.0	0.019	0.193

****** NO DATA TAKEN ---- DATA DISCARDED ? QUESTIONABLE DATA

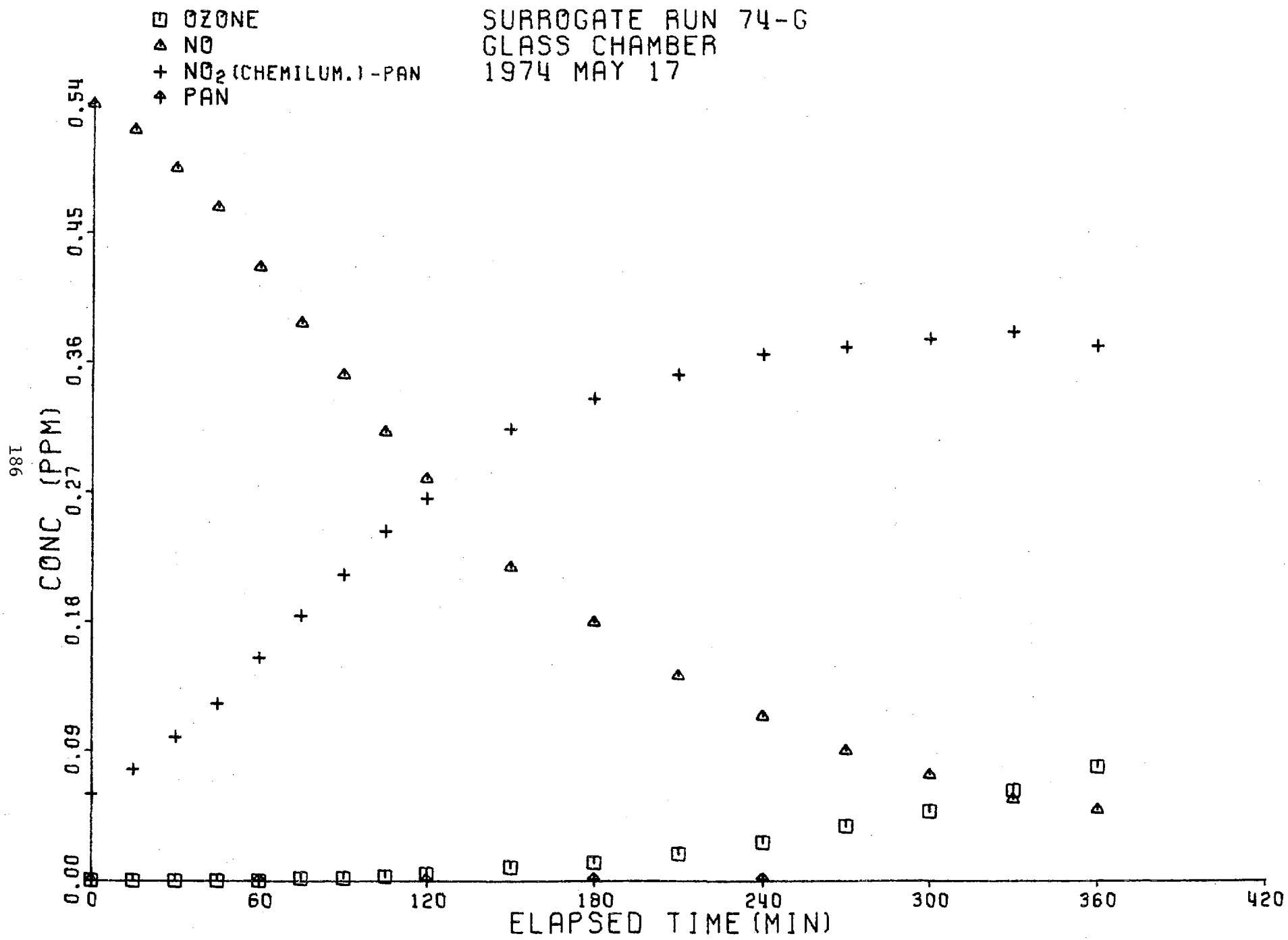
OZONE 360.0 MIN TOTAL DOSAGE = 23.14 PPM-MIN
NO 360.0 MIN TOTAL DOSAGE = 38.76 PPM-MIN
NO2-PAN 360.0 MIN TOTAL DOSAGE = 85.82 PPM-MIN
PAN 360.0 MIN TOTAL DOSAGE = 1.40 PPM-MIN
OZONE 540.0 MIN TOTAL DOSAGE = 65.17 PPM-MIN
OZONE DOSAGE GT 0.10 = 4.01 PPM-MIN
OZONE DOSAGE GT 0.08 = 6.52 PPM-MIN
NO2-PAN DOSAGE GT 0.25 = 5.64 PPM-MIN

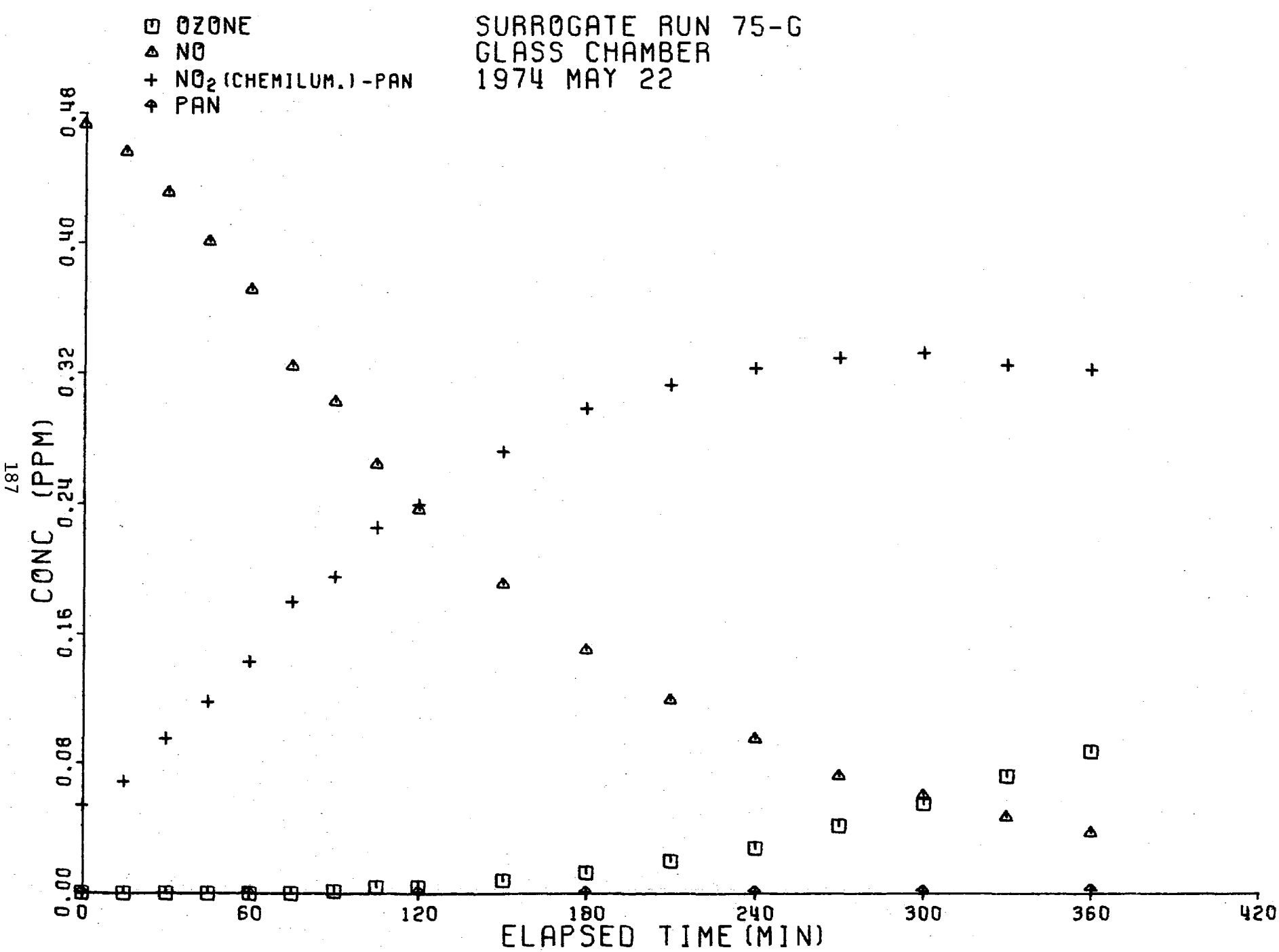
T(NC/NO2= 2.0) = 43.2 MIN

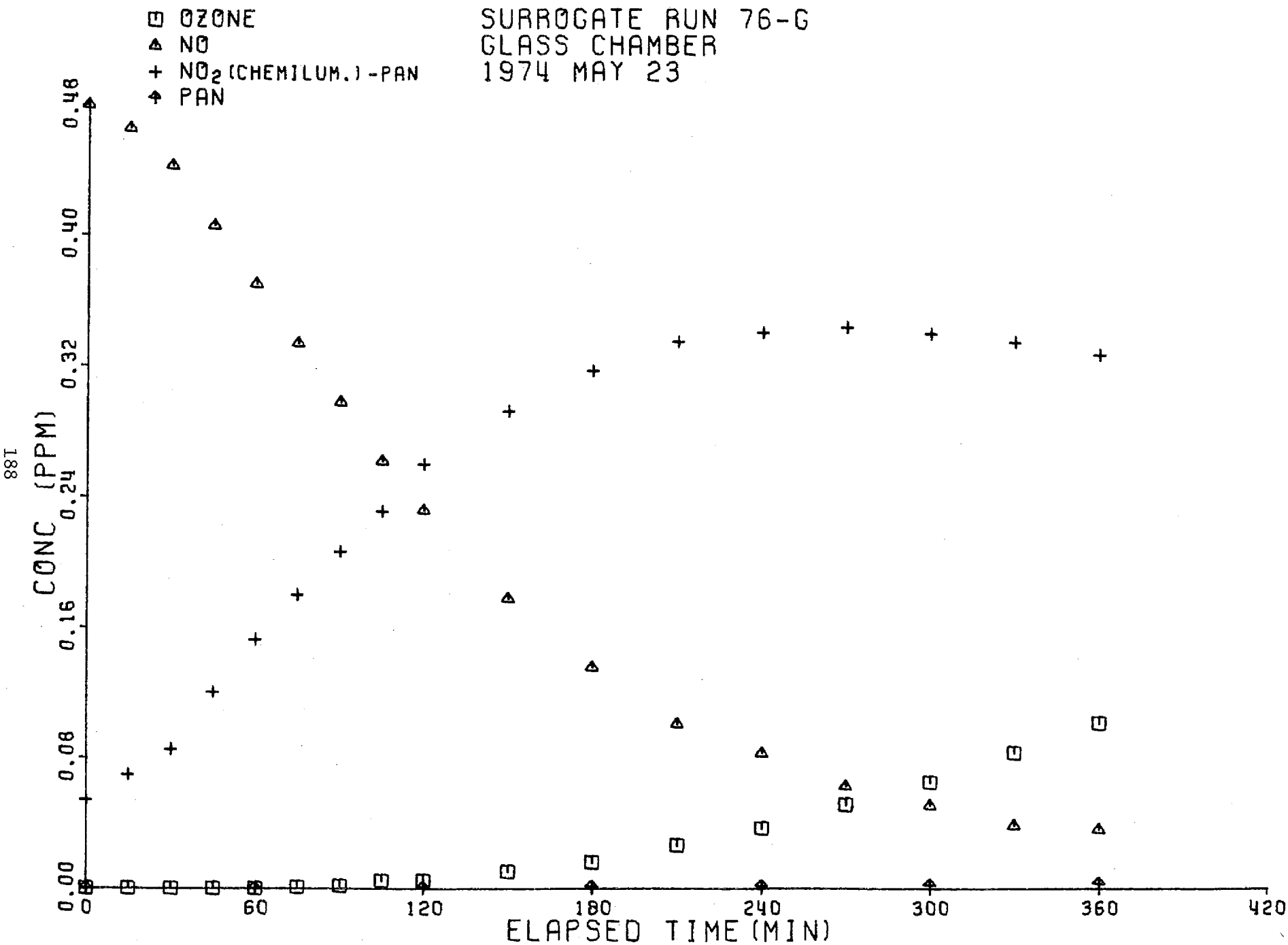
APPENDIX B

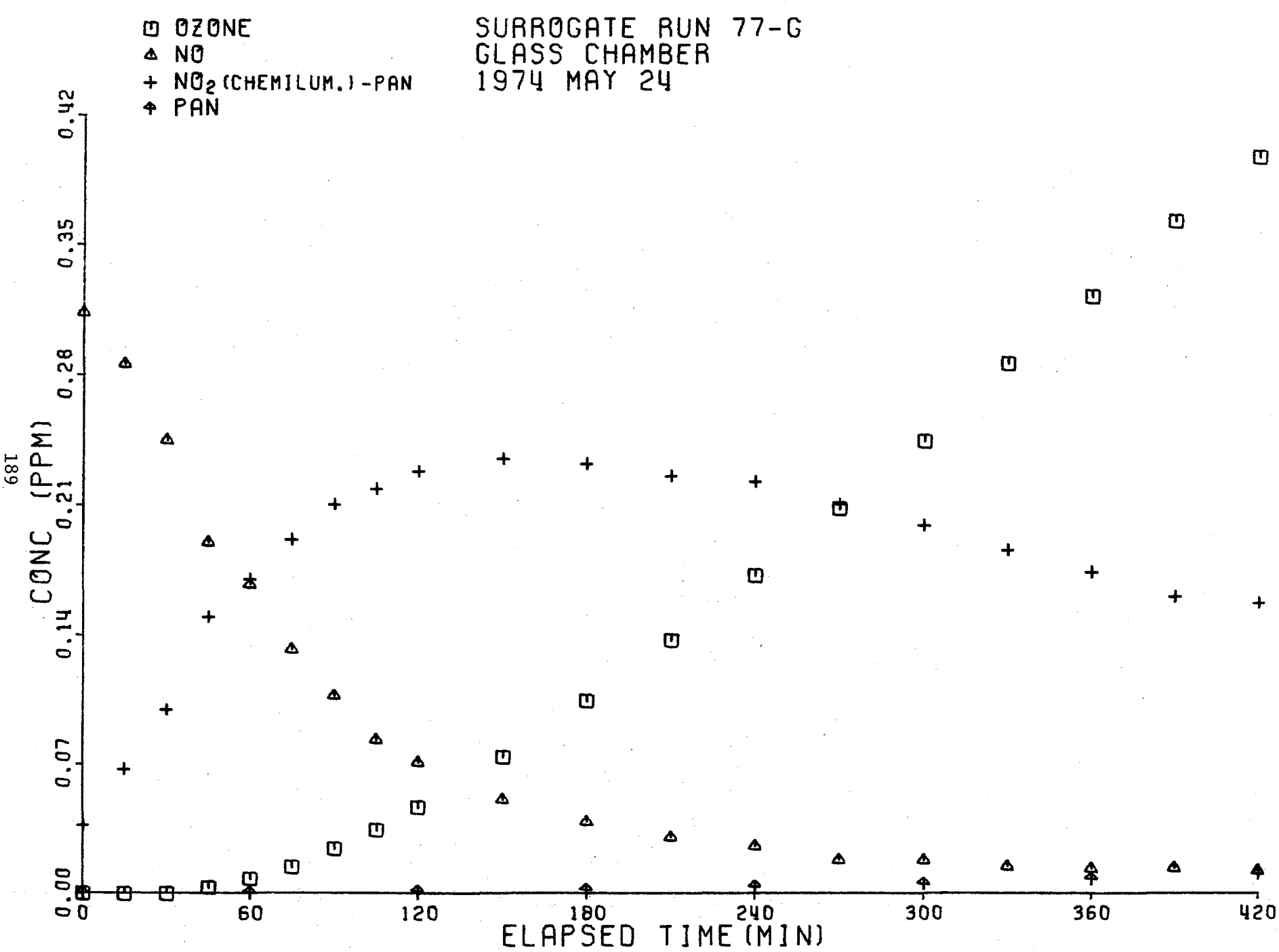
Inorganic Data Plots for Surrogate Runs

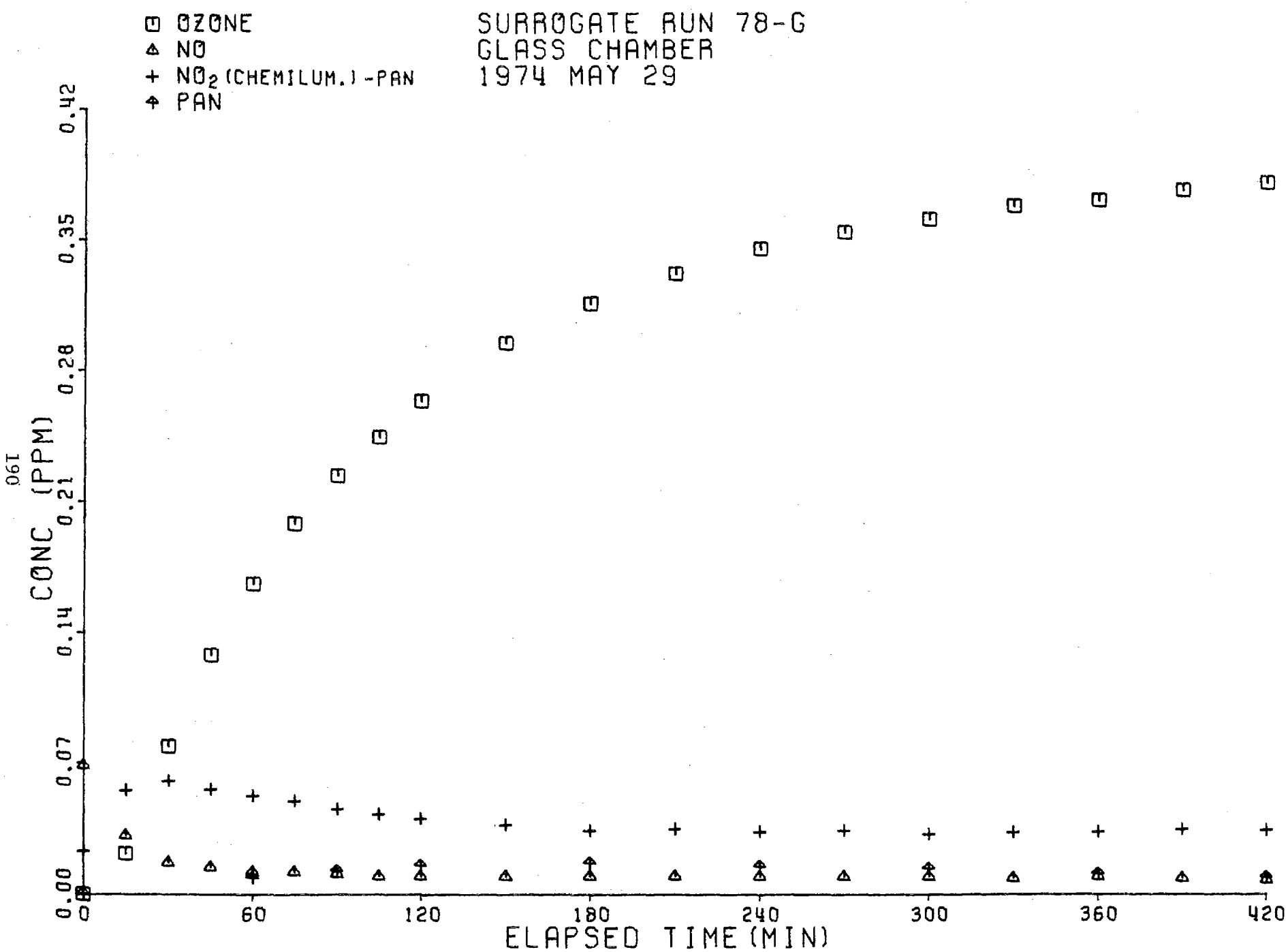
74-G through 158-J

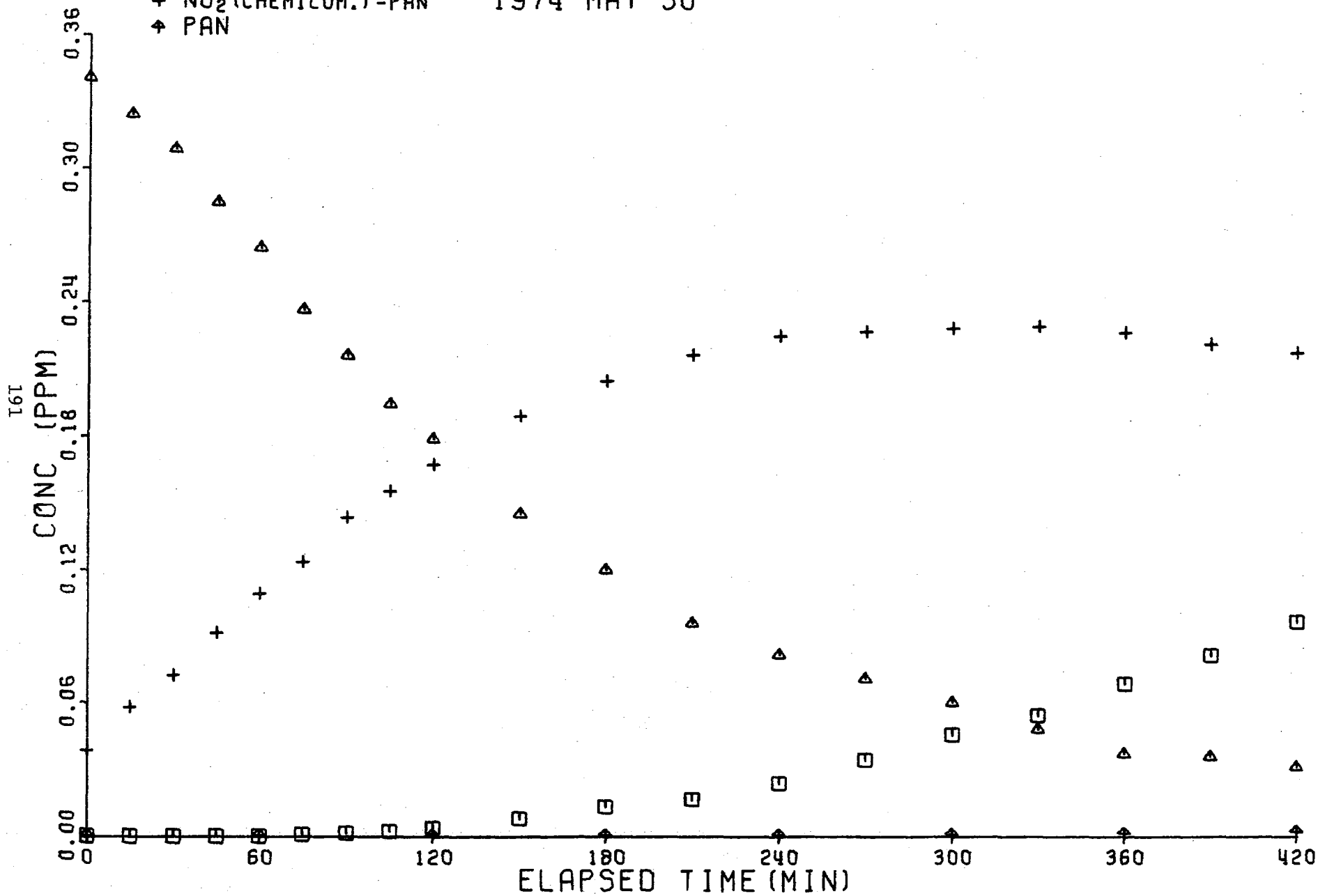

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 74-G
GLASS CHAMBER
1974 MAY 17
CONC (PPM)
0.00
0.09
0.18
0.27
0.36
0.45
0.54
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

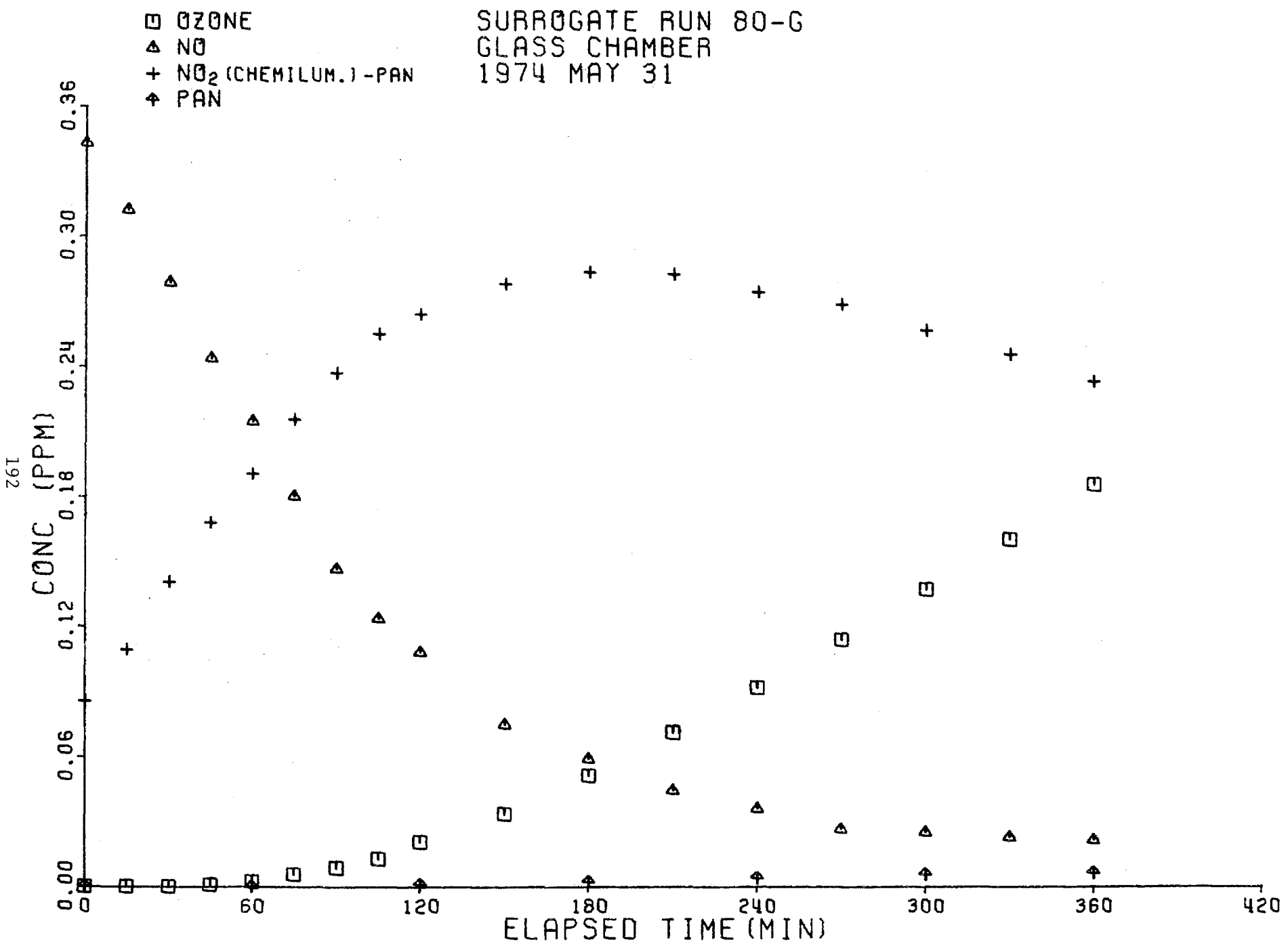

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 75-G
GLASS CHAMBER
1974 MAY 22
CONC (PPM)
0.00
0.08
0.16
0.24
0.32
0.40
0.48
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

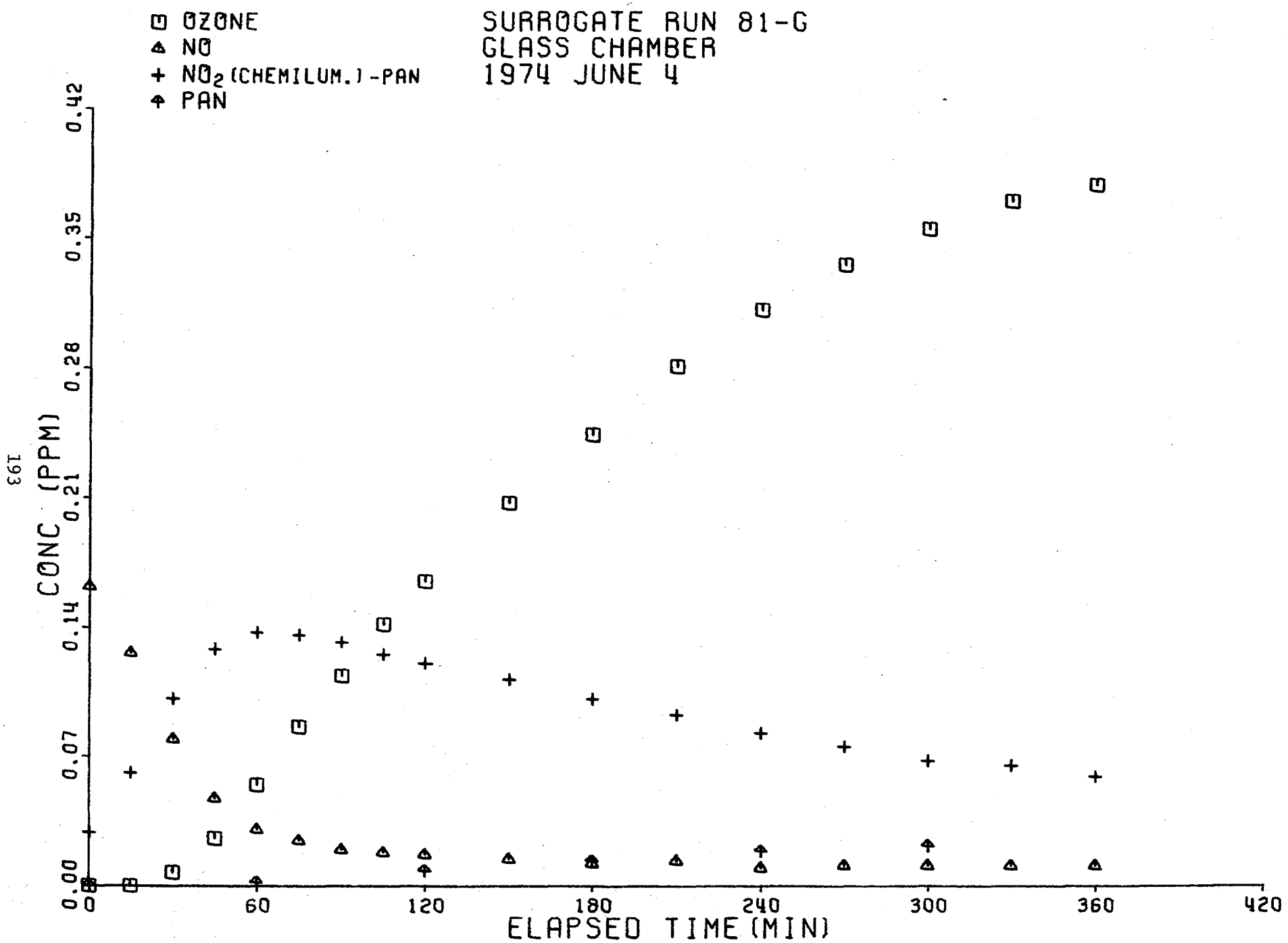

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 76-G
GLASS CHAMBER
1974 MAY 23
CONC (PPM)
0.00
0.08
0.16
0.24
0.32
0.40
0.48
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

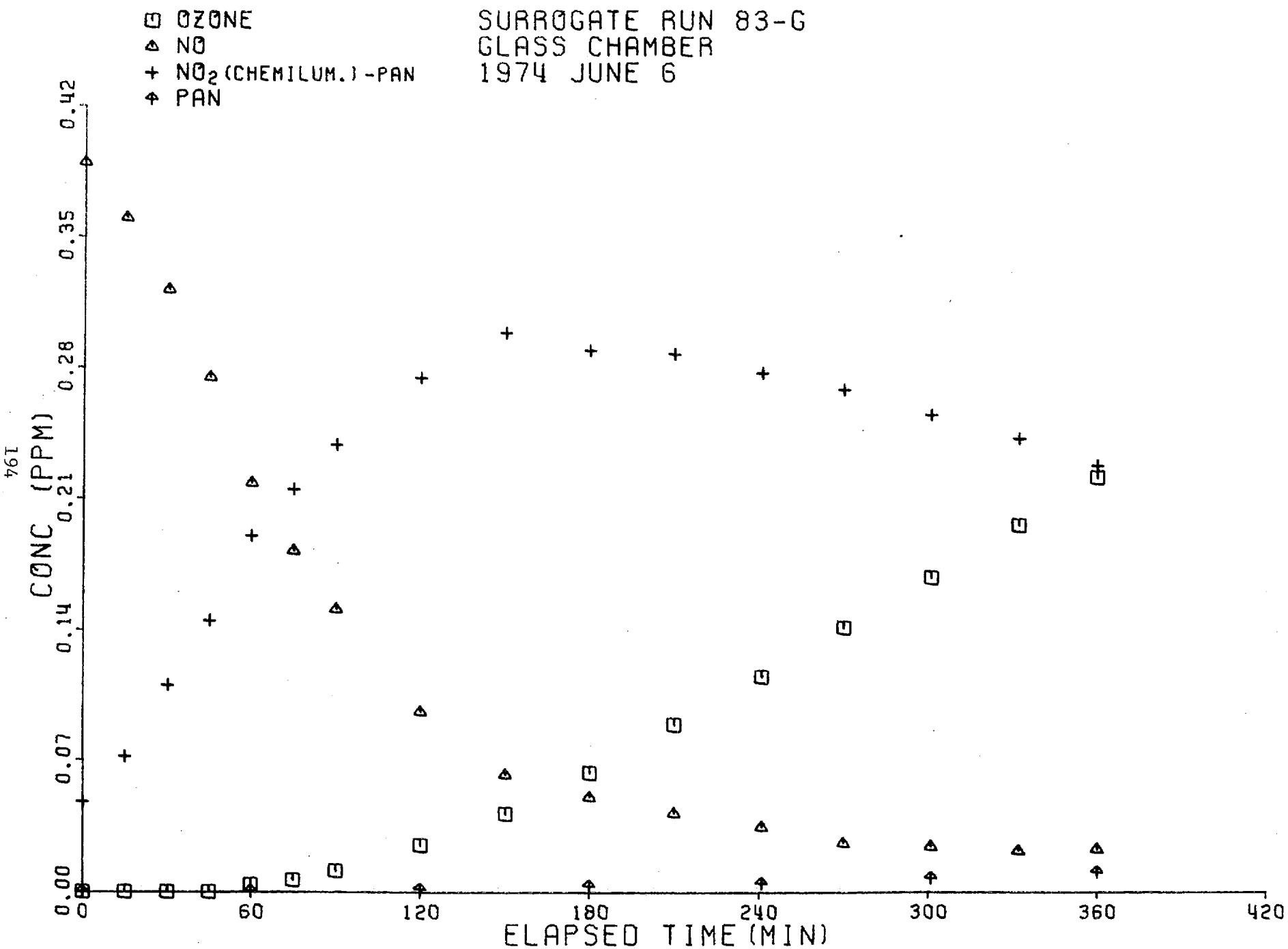

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 77-G
GLASS CHAMBER
1974 MAY 24
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

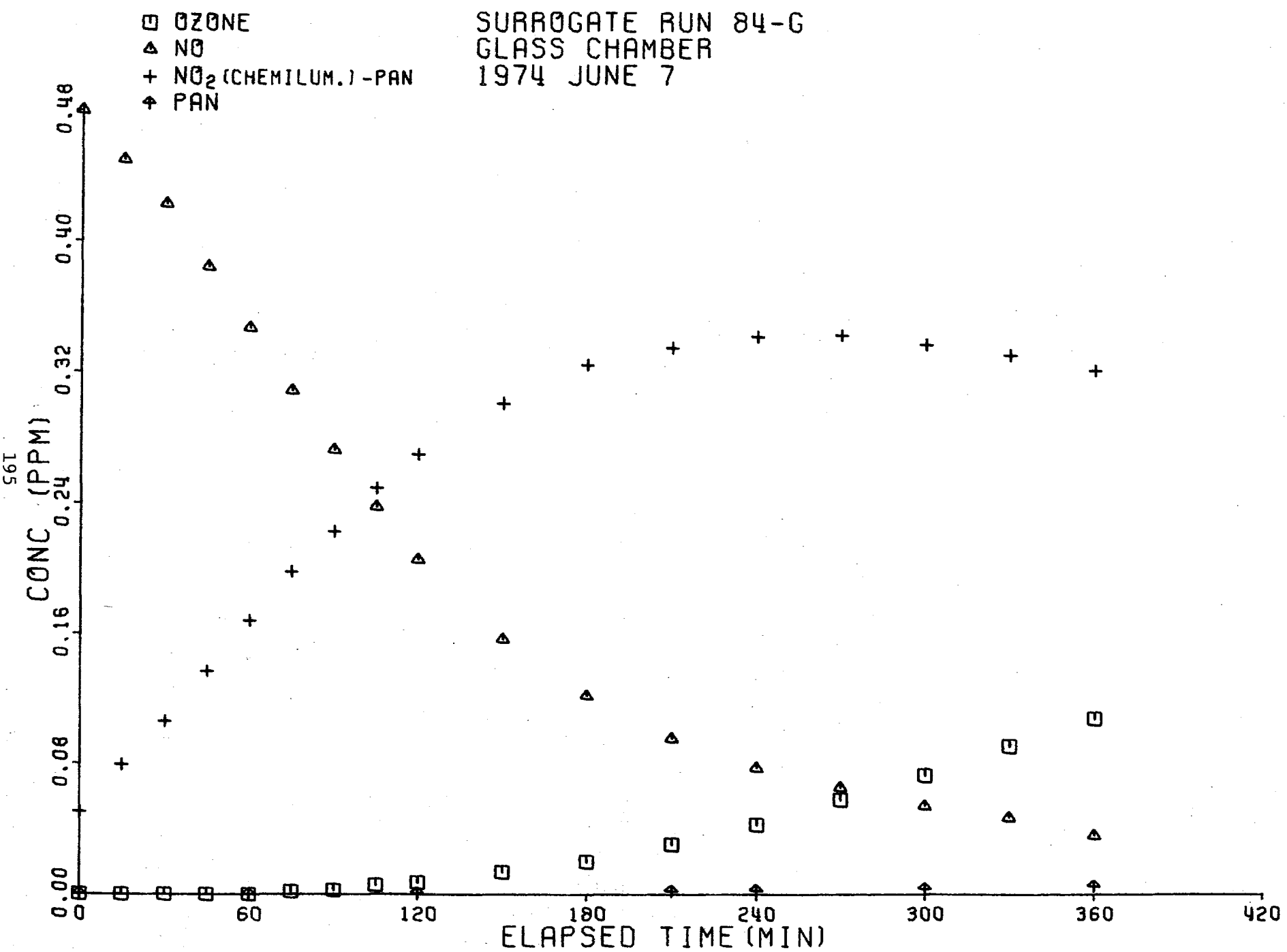

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 78-G
GLASS CHAMBER
1974 MAY 29
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

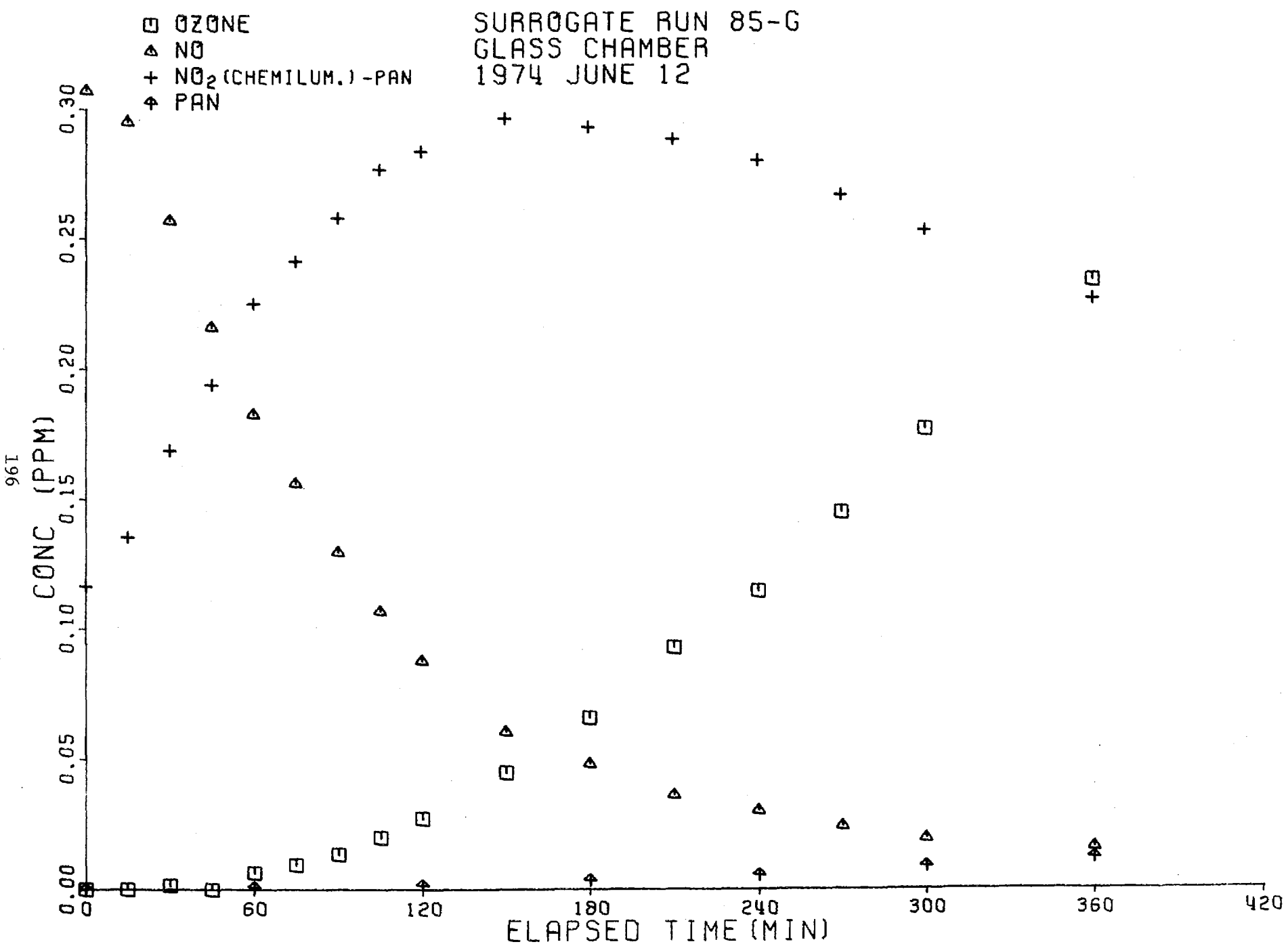

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 79-G
GLASS CHAMBER
1974 MAY 30
CONC (PPM)
0.00
0.06
0.12
0.18
0.24
0.30
0.36
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

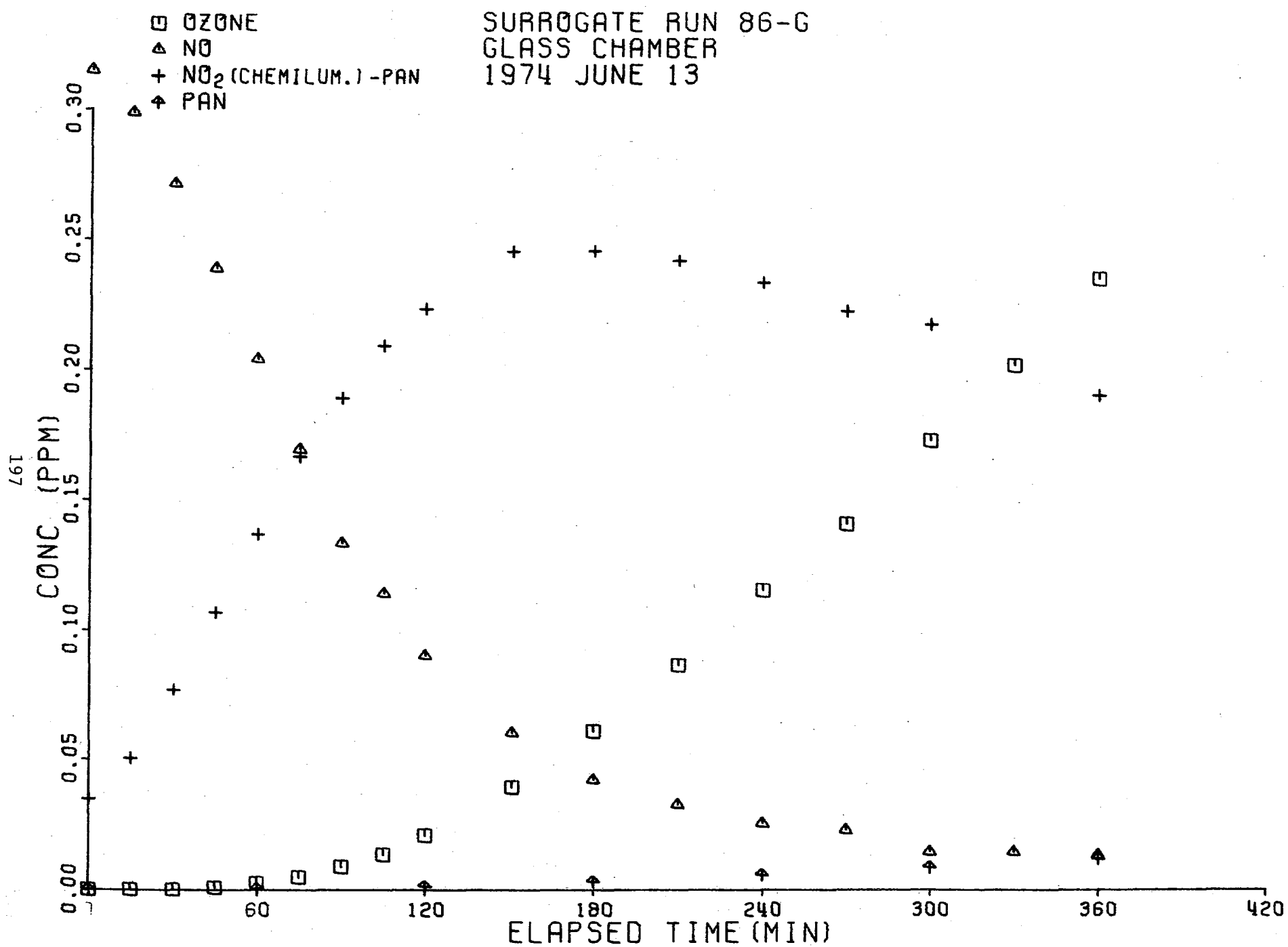

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 80-G
GLASS CHAMBER
1974 MAY 31
CONC (PPM)
0.00
0.06
0.12
0.18
0.24
0.30
0.36
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

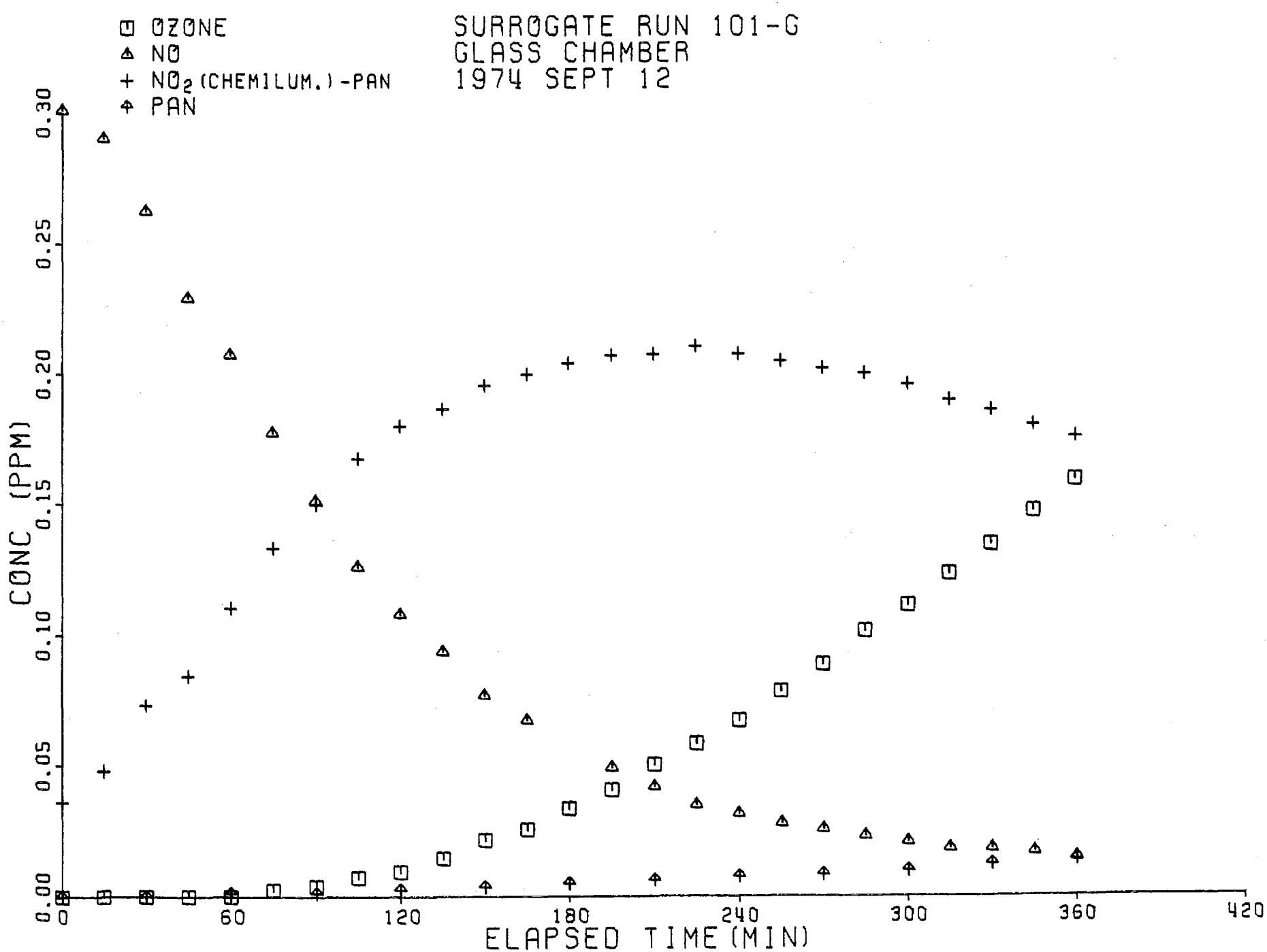

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 81-G
GLASS CHAMBER
1974 JUNE 4
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

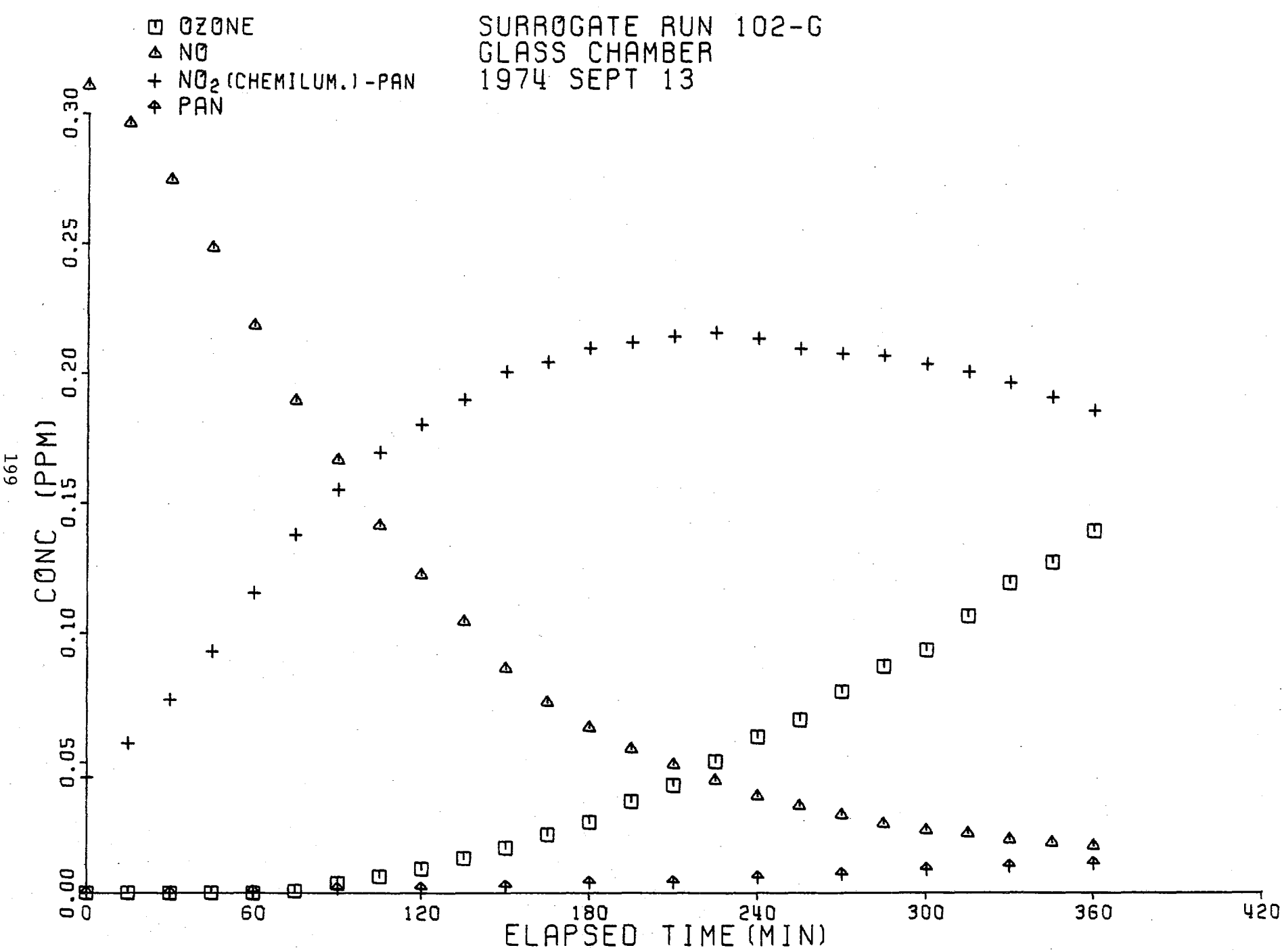

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 83-G
GLASS CHAMBER
1974 JUNE 6
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

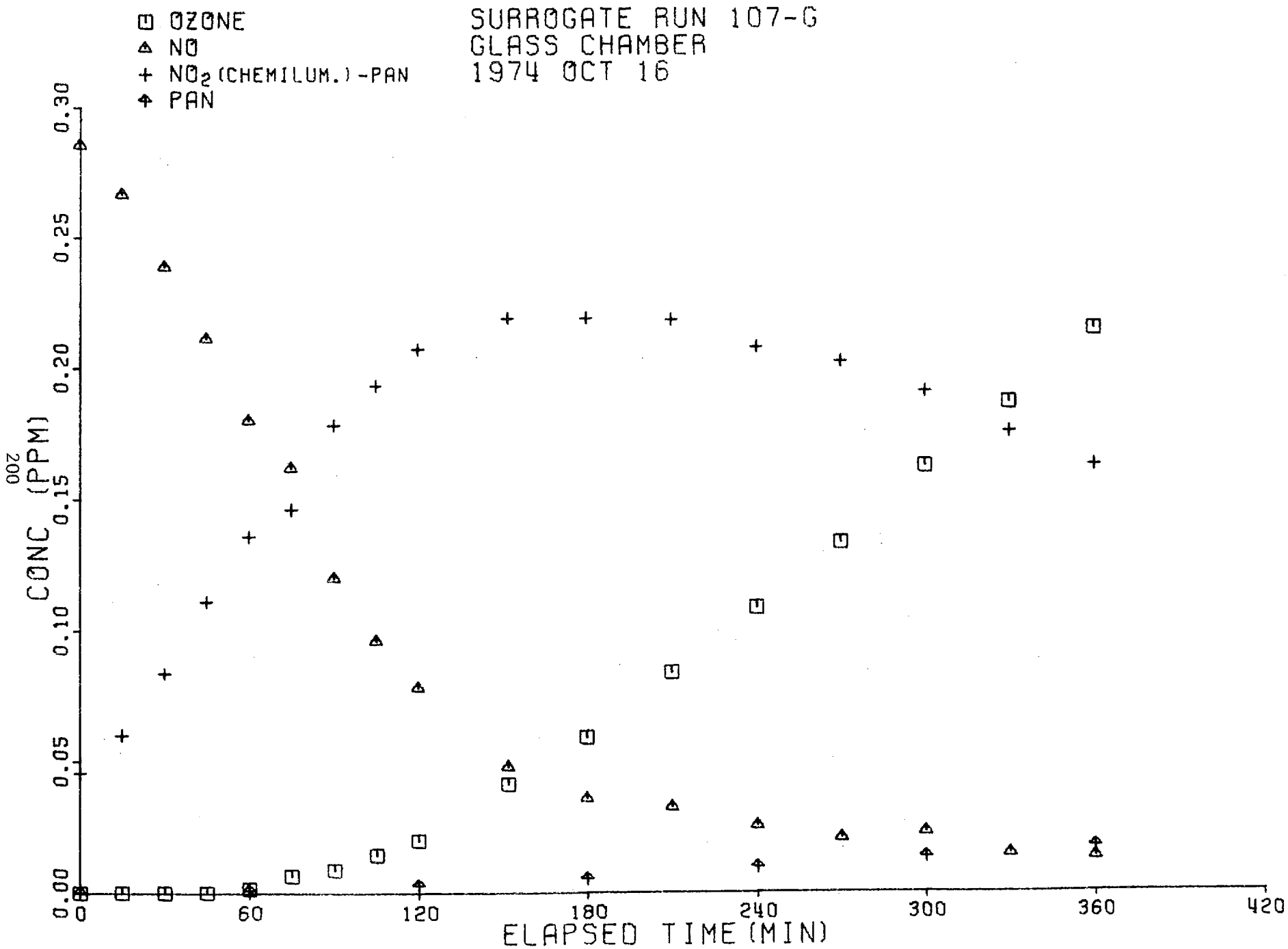

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 84-G
GLASS CHAMBER
1974 JUNE 7
CONC (PPM)
0.00
0.08
0.16
0.24
0.32
0.40
0.48
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

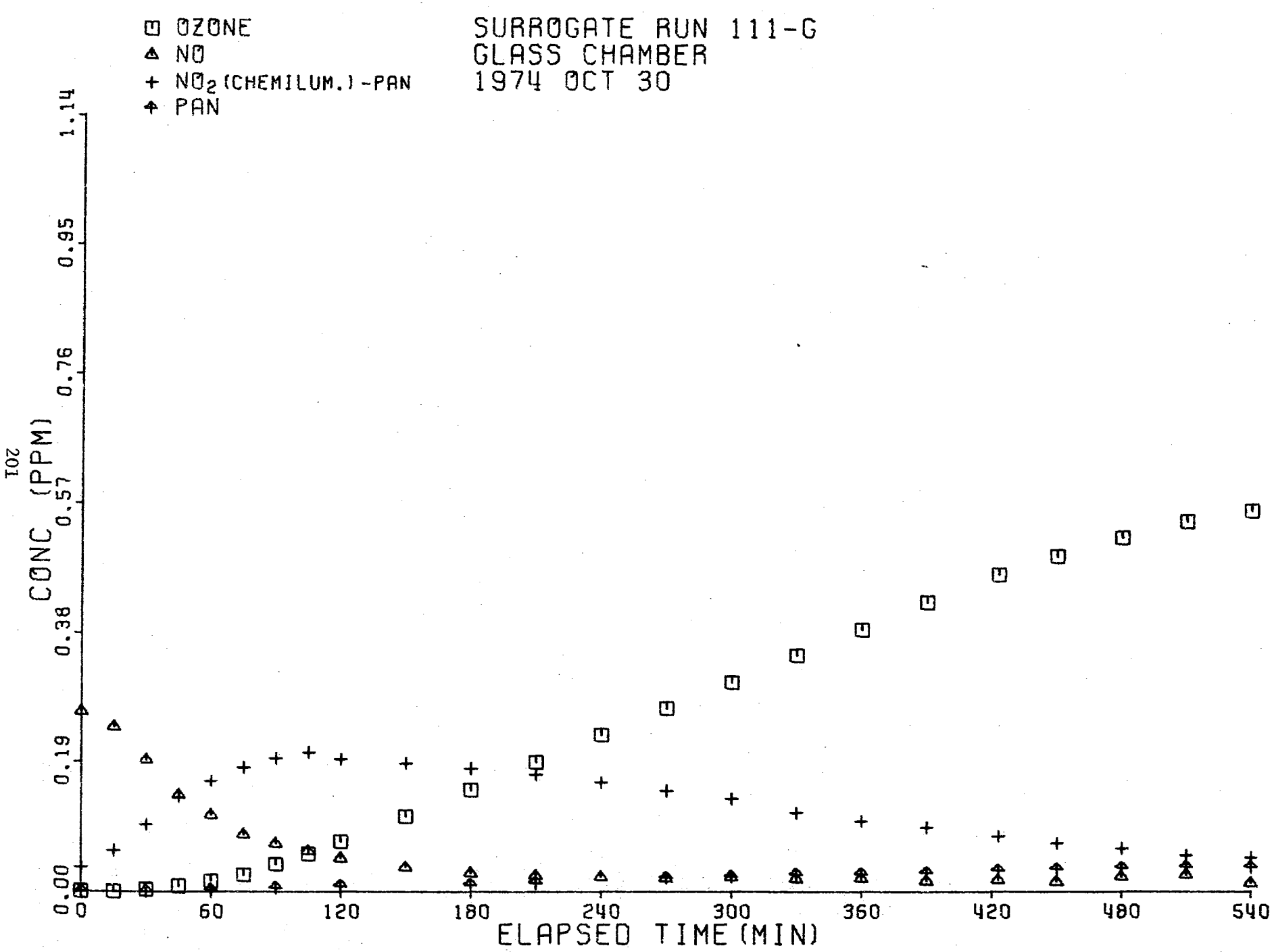

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 85-G
GLASS CHAMBER
1974 JUNE 12
CONC (PPM)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

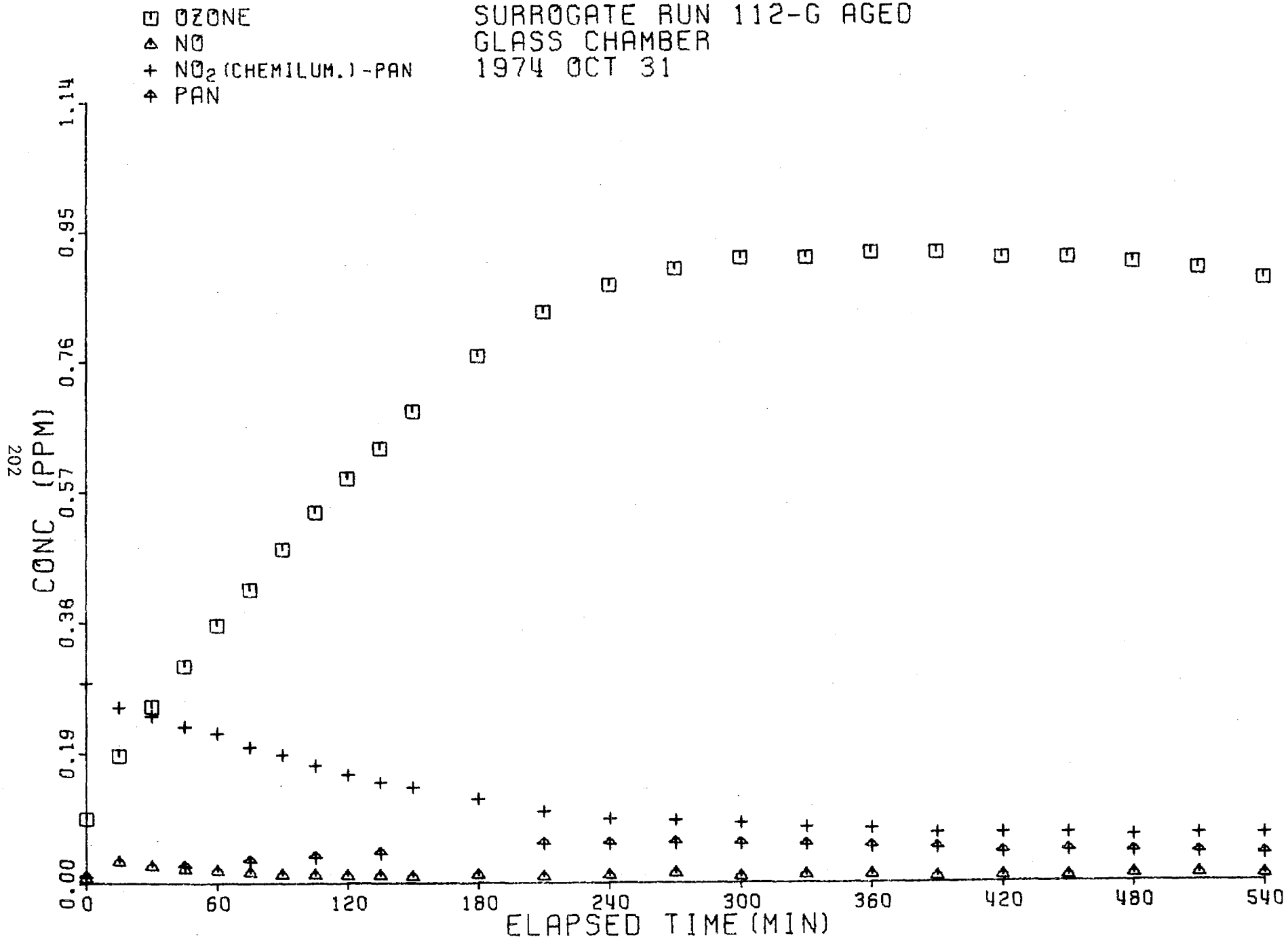

SURROGATE RUN 86-G
GLASS CHAMBER
1974 JUNE 13
OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
CONC (PPM)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

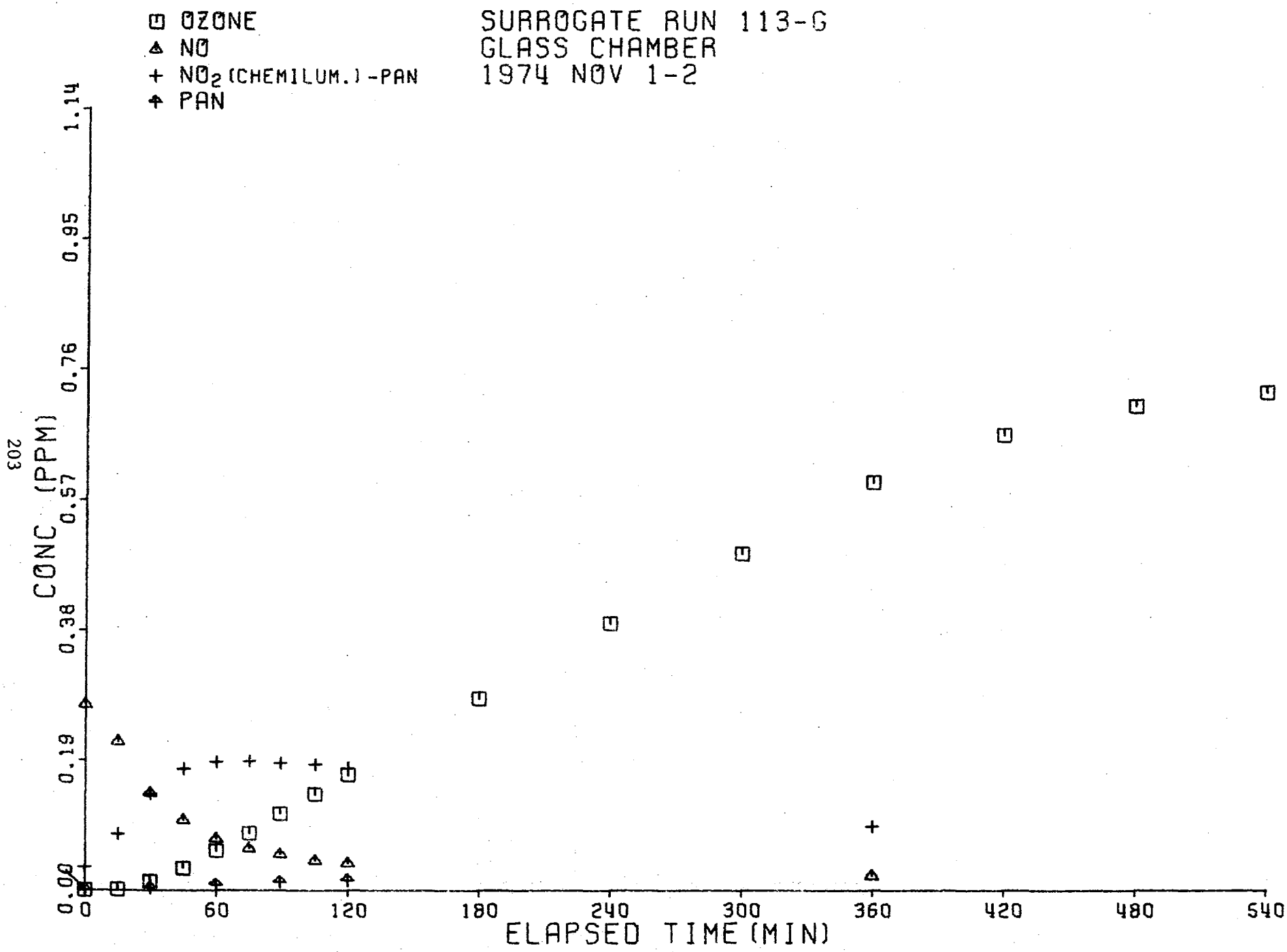

SURROGATE RUN 101-G
GLASS CHAMBER
1974 SEPT 12
OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
CONC (PPM)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

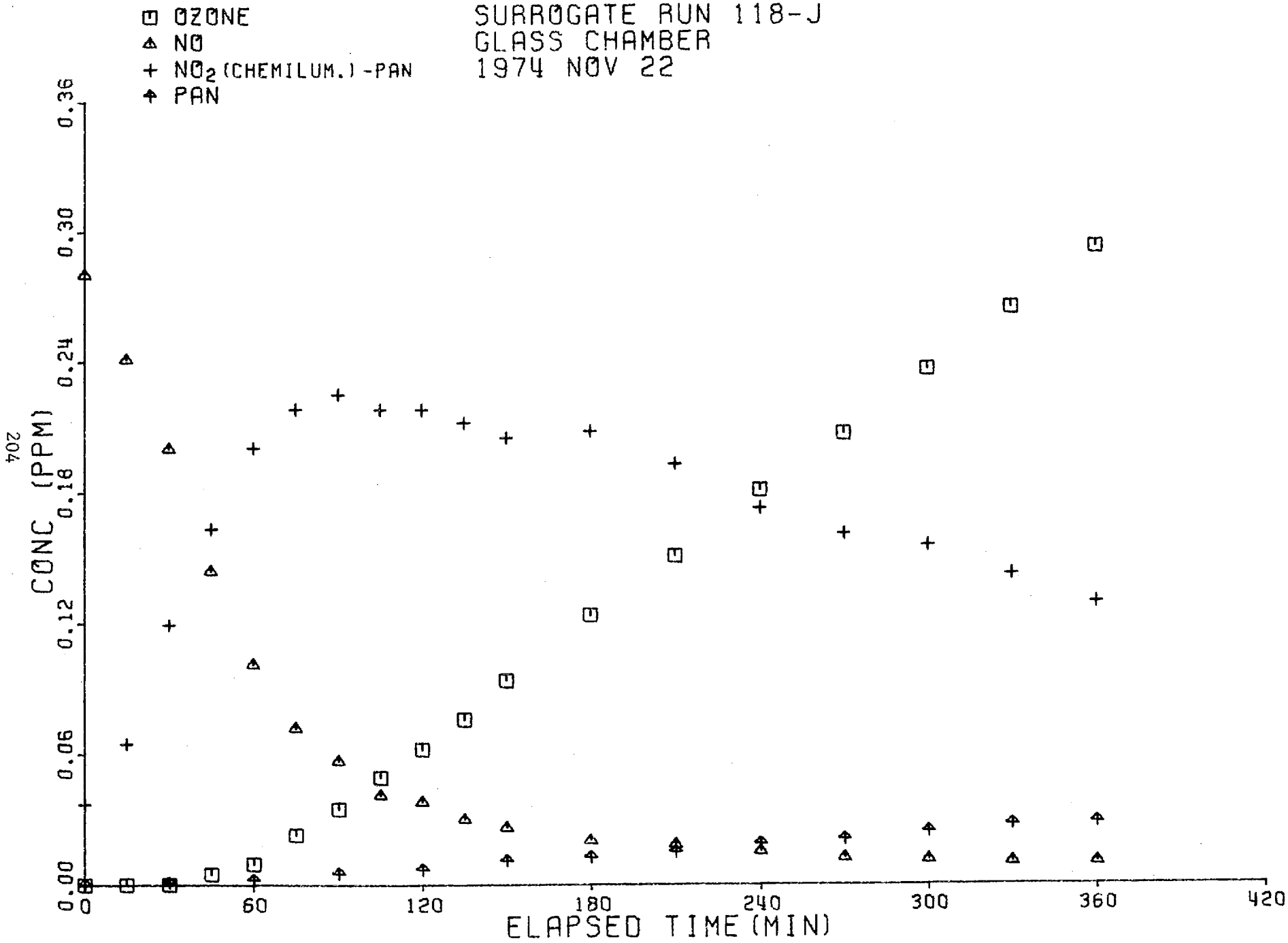

SURROGATE RUN 102-G
GLASS CHAMBER
1974 SEPT 13
OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
CONC (PPM)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

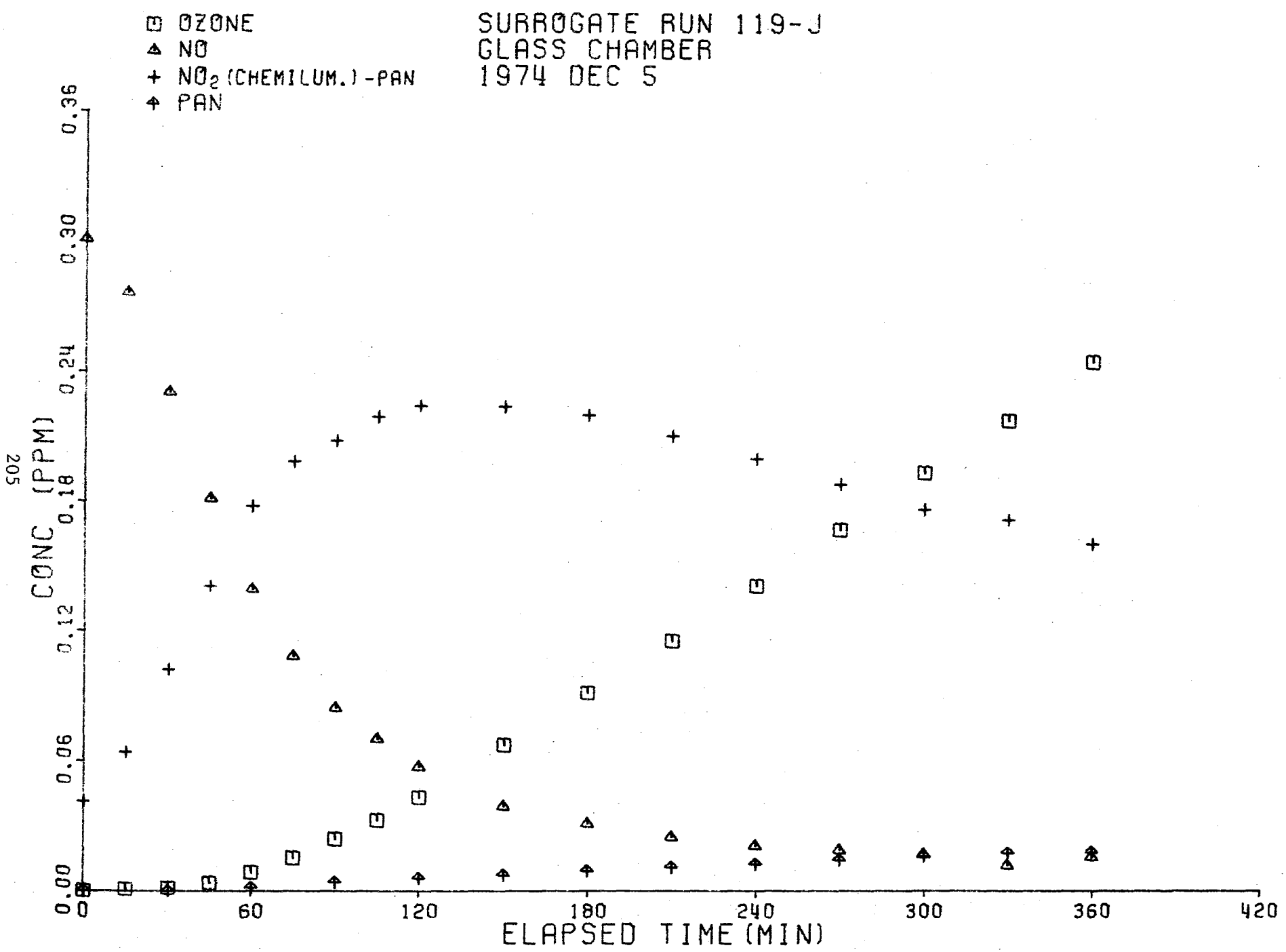

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 107-G
GLASS CHAMBER
1974 OCT 16
CONC (PPM)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

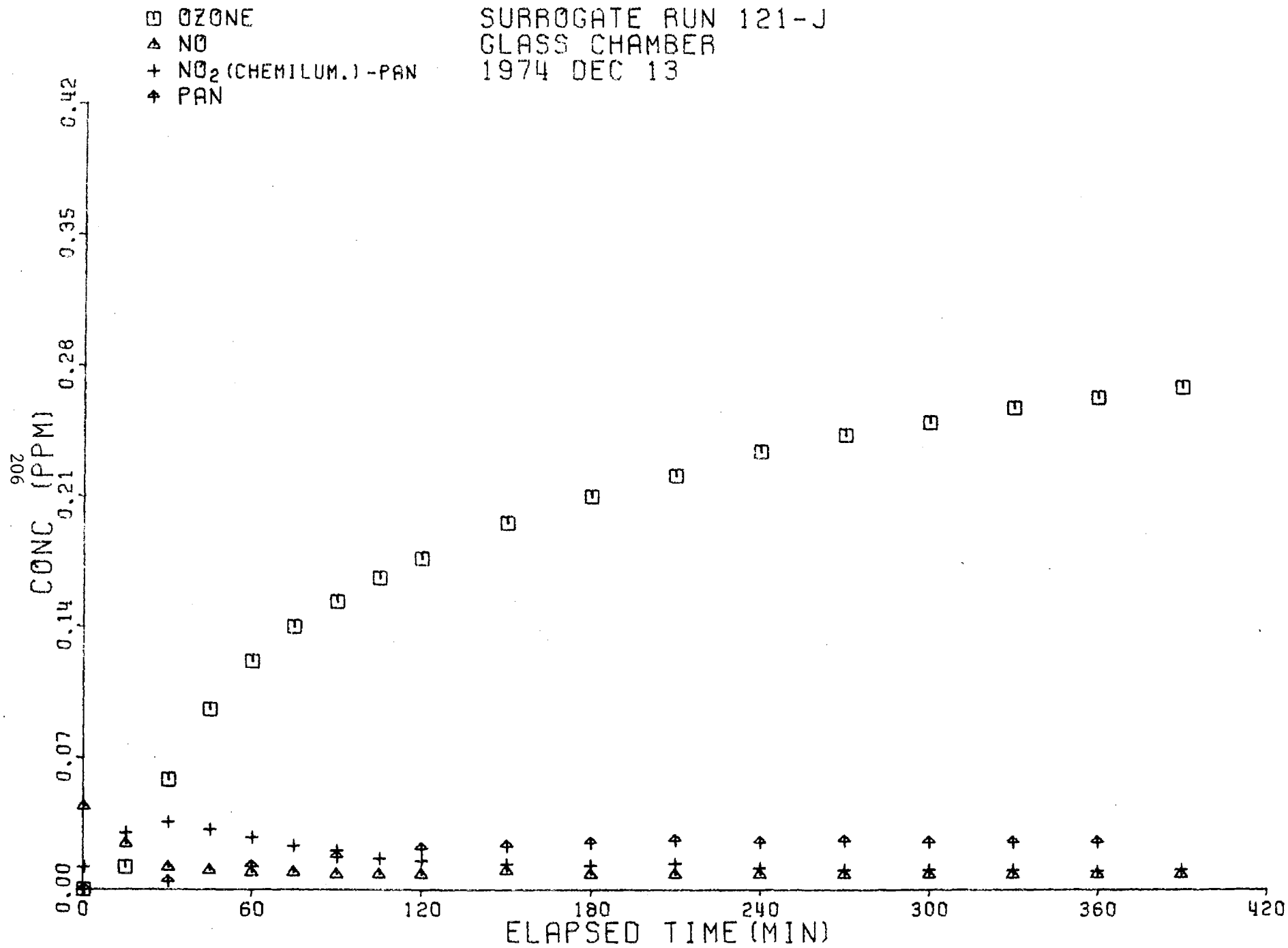

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 111-G
GLASS CHAMBER
1974 OCT 30
CONC (PPM)
0.00
0.19
0.38
0.57
0.76
0.95
1.14
0
60
120
180
240
300
360
420
480
540
ELAPSED TIME (MIN)

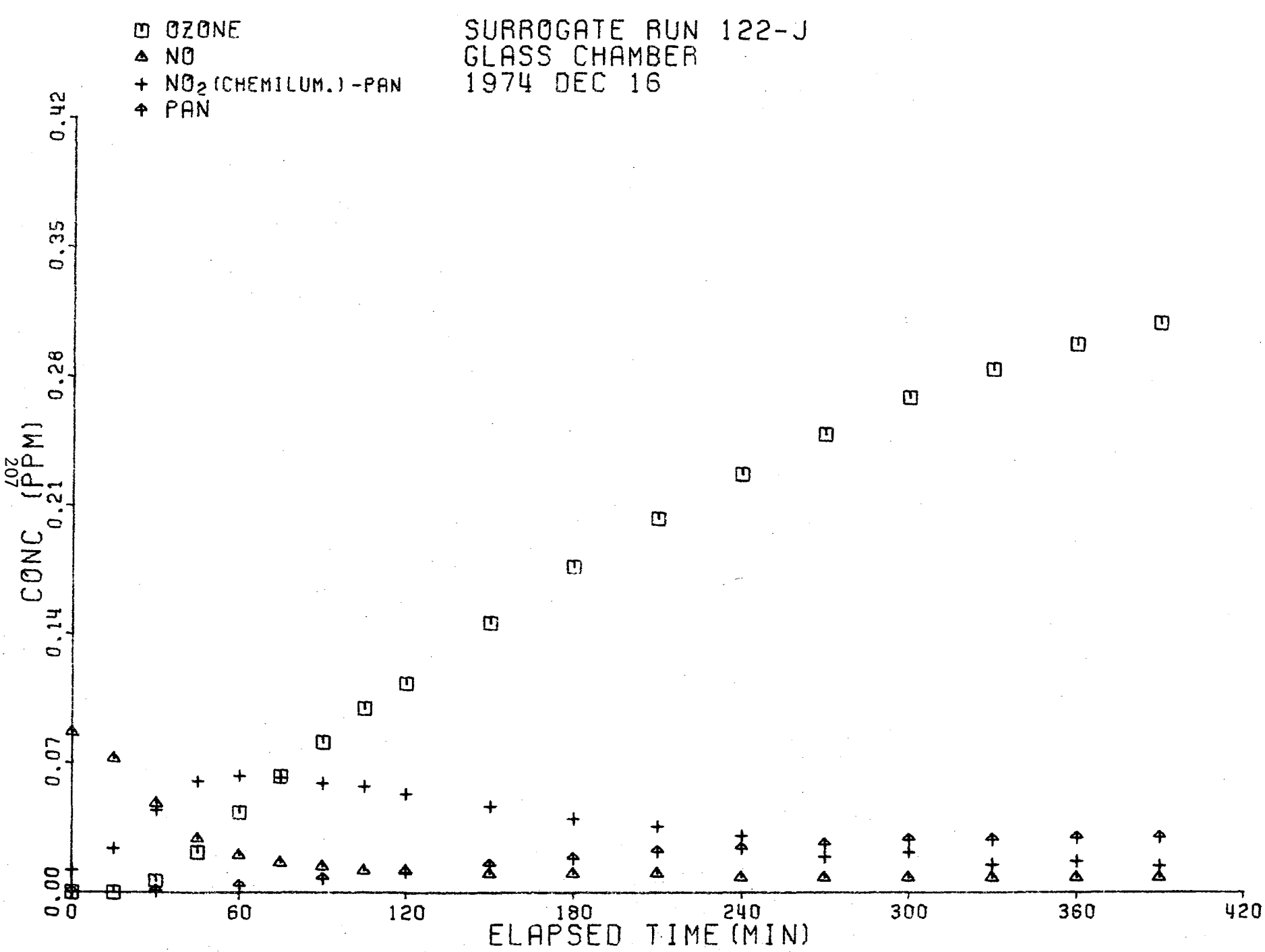

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 112-G AGED
GLASS CHAMBER
1974 OCT 31
CONC (PPM)
0.00
0.19
0.38
0.57
0.76
0.95
1.14
0
60
120
180
240
300
360
420
480
540
ELAPSED TIME (MIN)

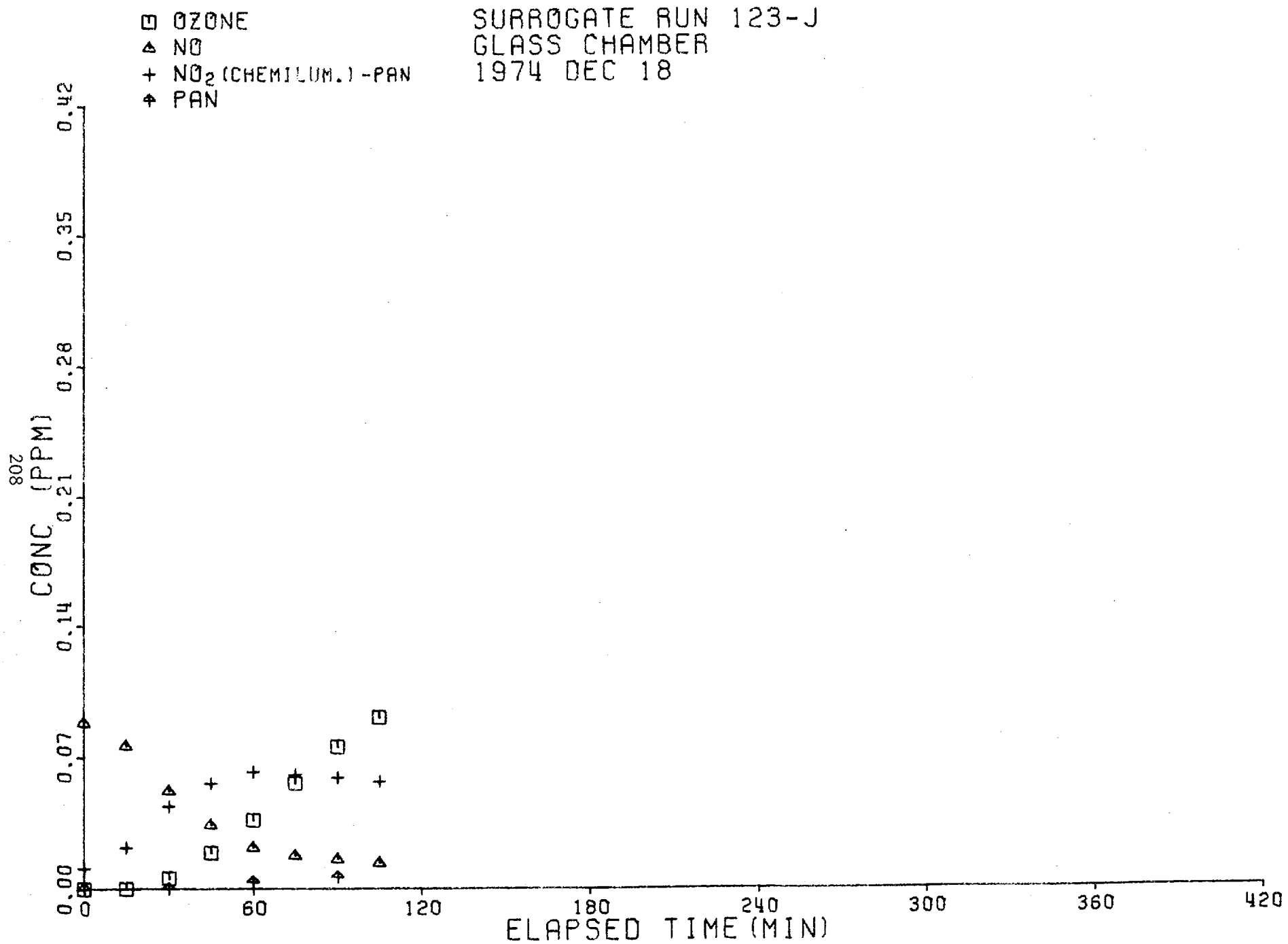

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 113-G
GLASS CHAMBER
1974 NOV 1-2
CONC (PPM)
0.00
0.19
0.38
0.57
0.76
0.95
1.14
0
60
120
180
240
300
360
420
480
540
ELAPSED TIME (MIN)

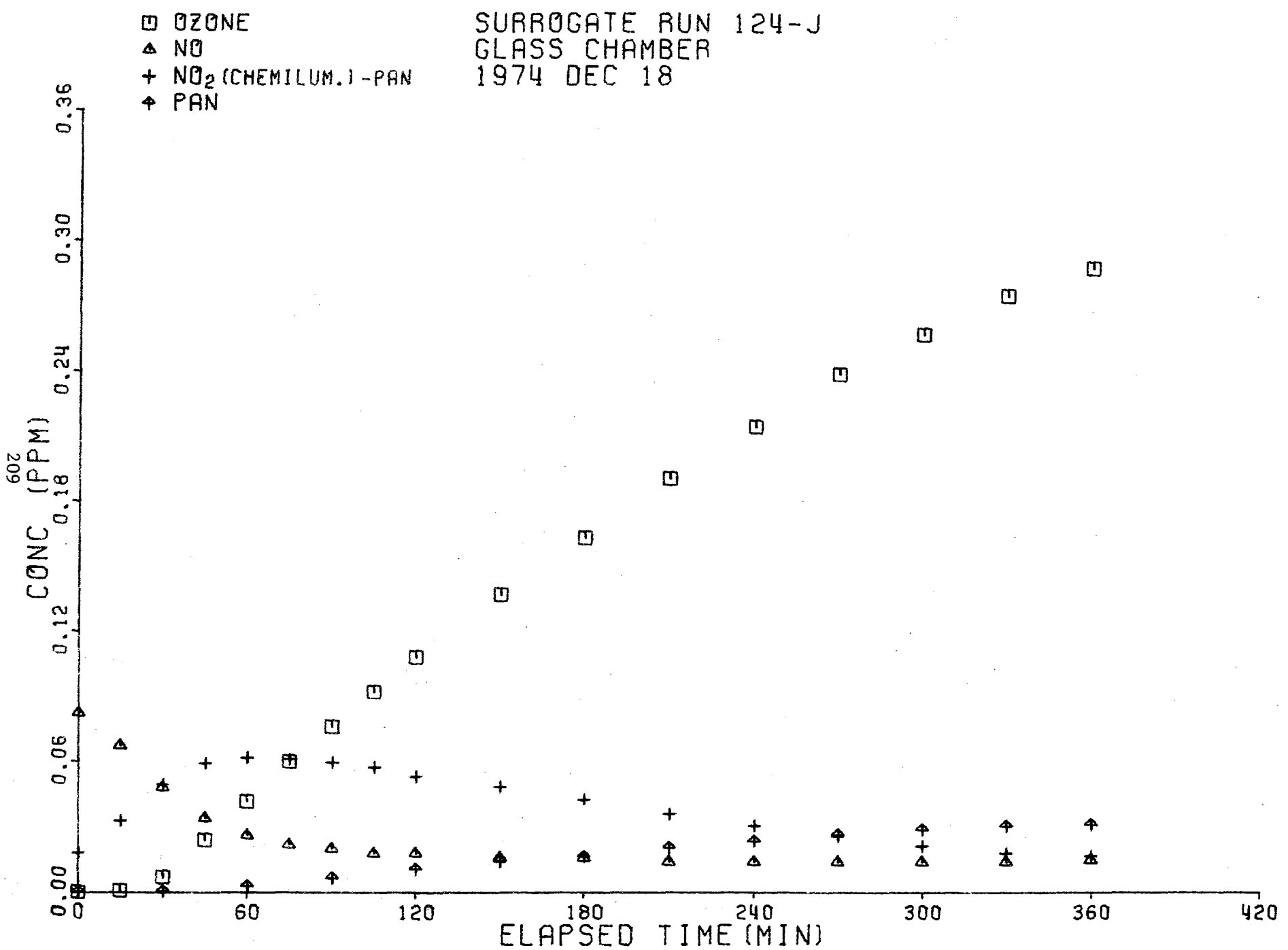

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 118-J
GLASS CHAMBER
1974 NOV 22
CONC (PPM)
0.00
0.06
0.12
0.18
0.24
0.30
0.36
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

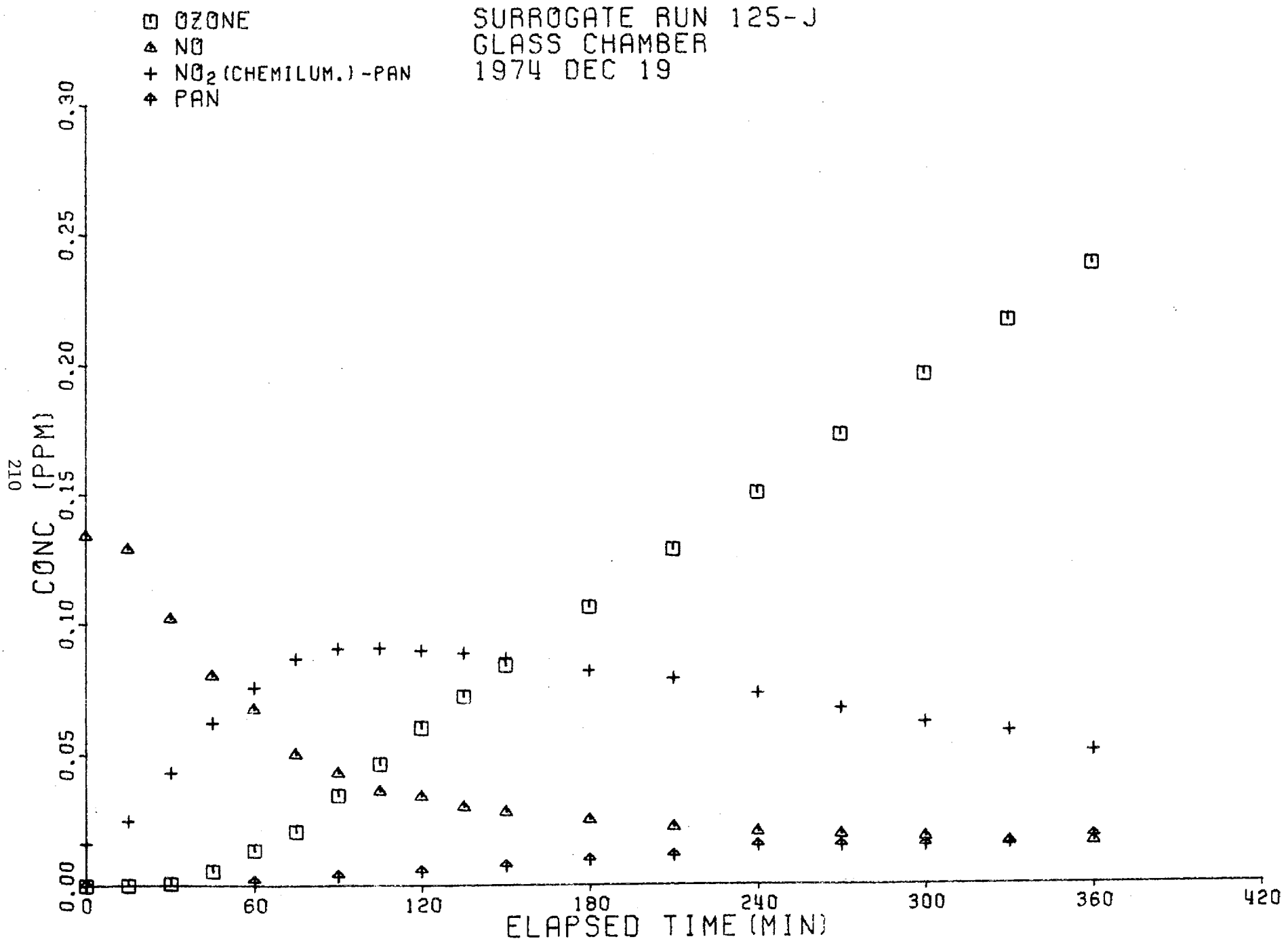

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 119-J
GLASS CHAMBER
1974 DEC 5
CONC (PPM)
0.00
0.06
0.12
0.18
0.24
0.30
0.36
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

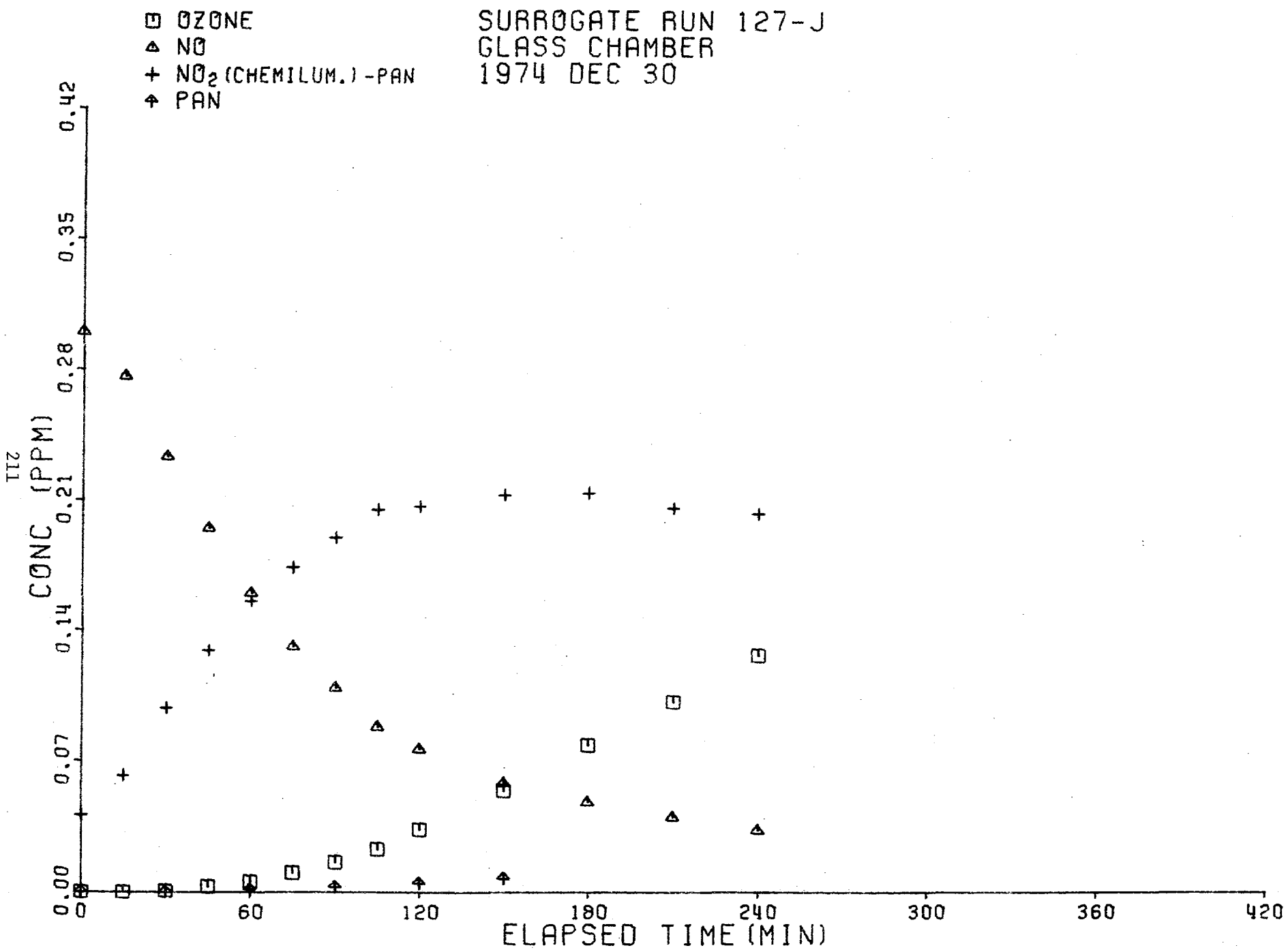

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 121-J
GLASS CHAMBER
1974 DEC 13
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

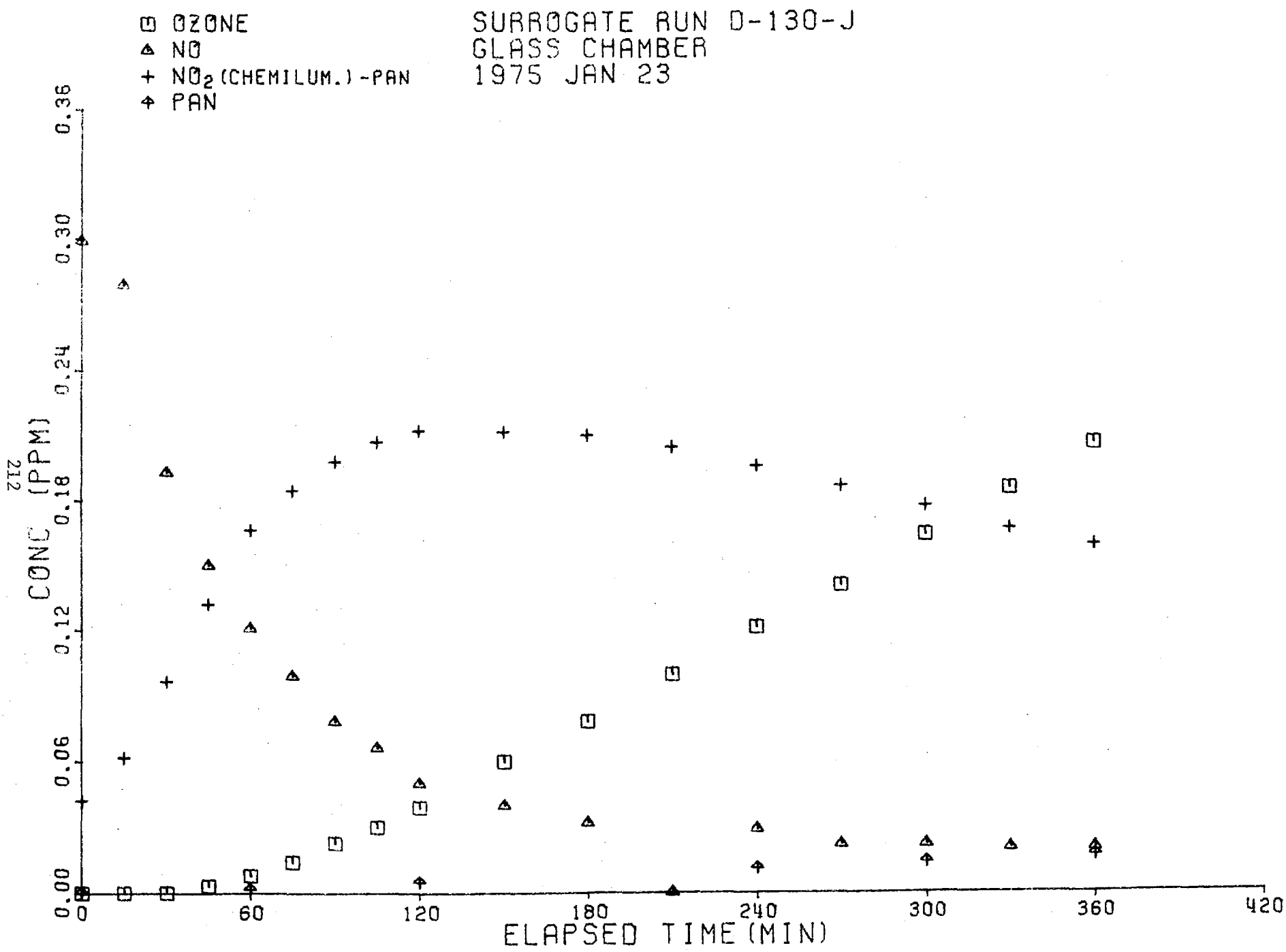

OZONE
NO
NO2 (CHEMILUM.) -PAN
PAN
SURROGATE RUN 122-J
GLASS CHAMBER
1974 DEC 16
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

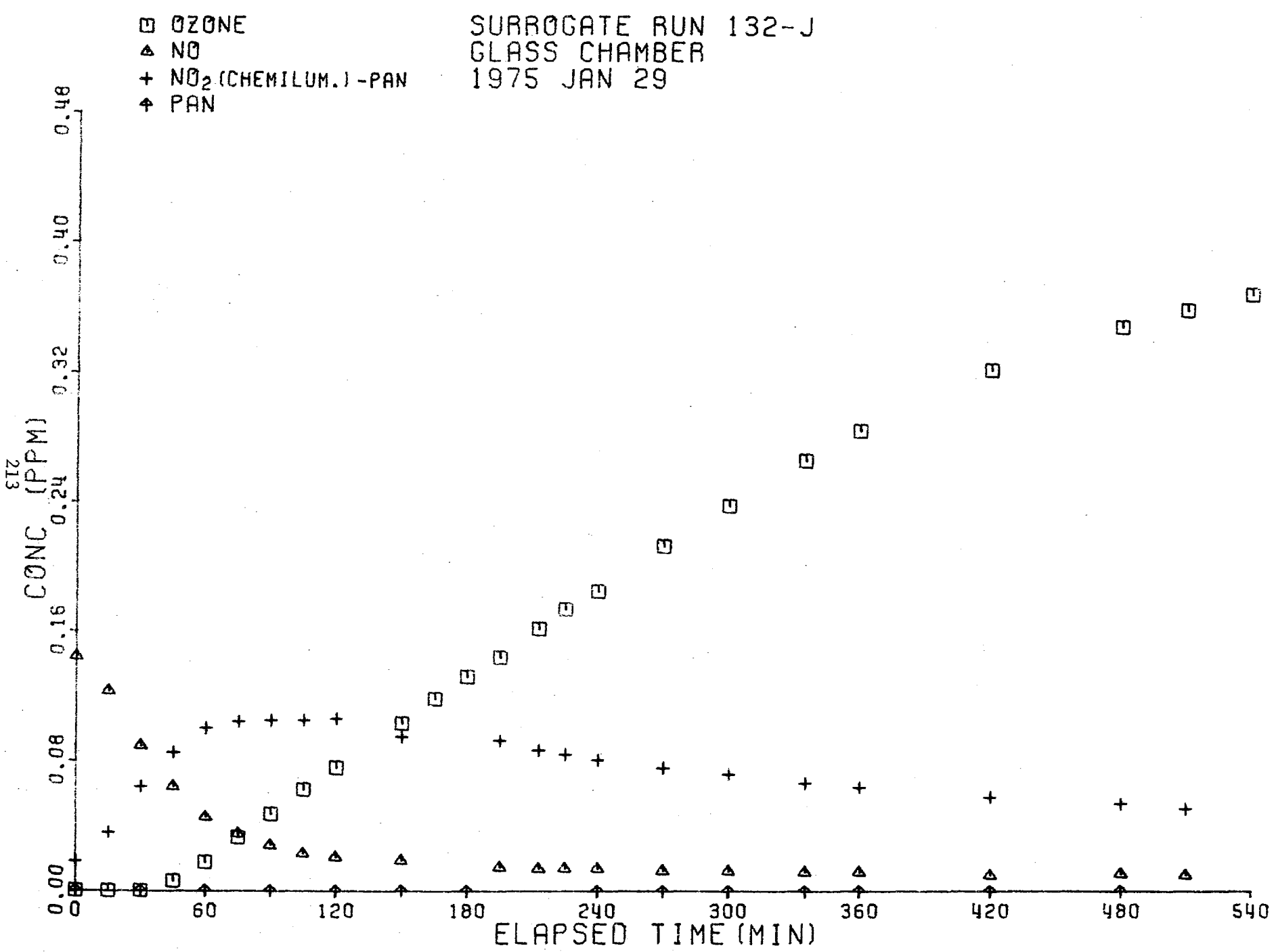

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 123-J
GLASS CHAMBER
1974 DEC 18
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

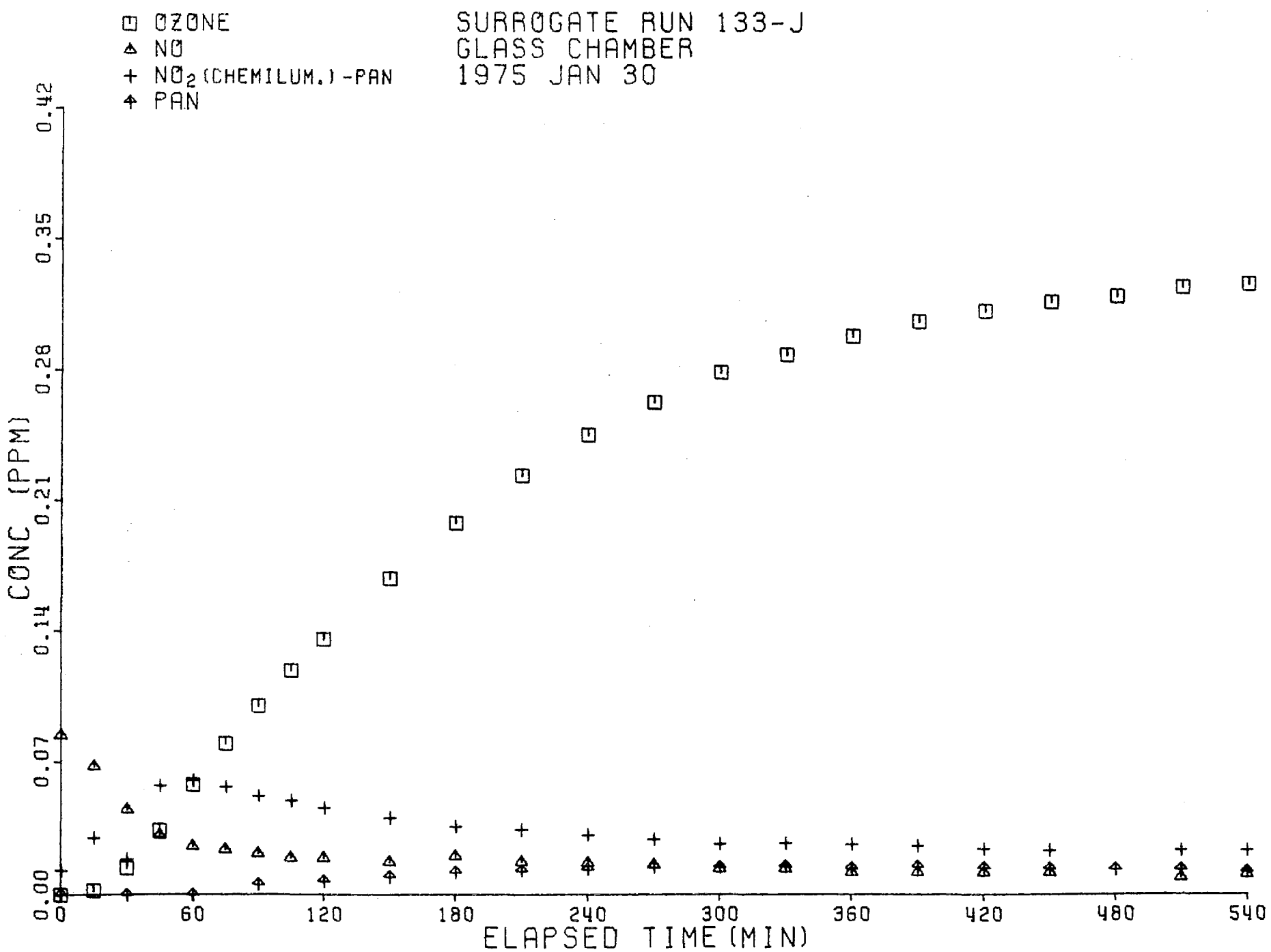

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 124-J
GLASS CHAMBER
1974 DEC 18
CONC (PPM)
0.00
0.06
0.12
0.18
0.24
0.30
0.36
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

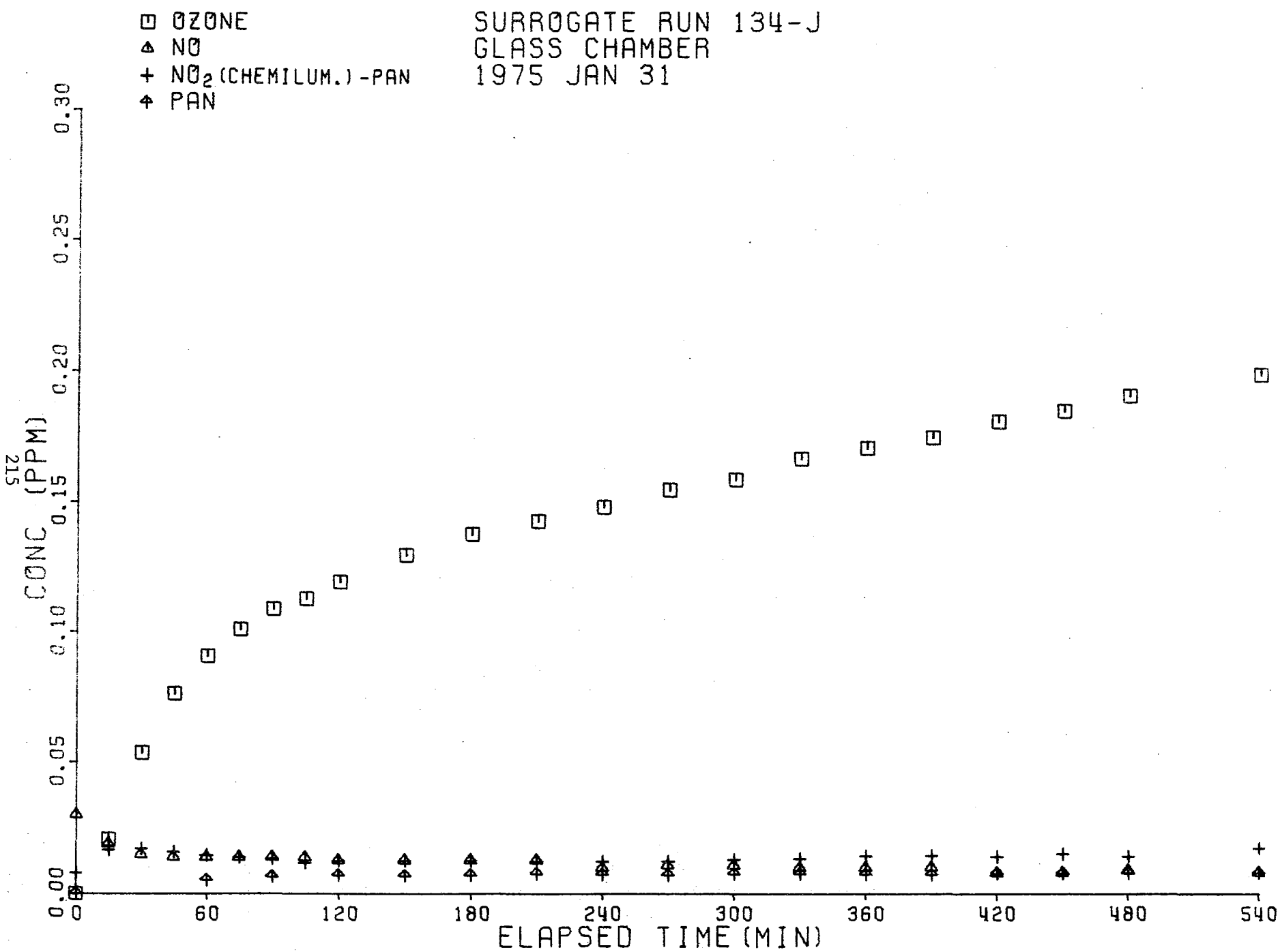

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 125-J
GLASS CHAMBER
1974 DEC 19
CONC (PPM)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

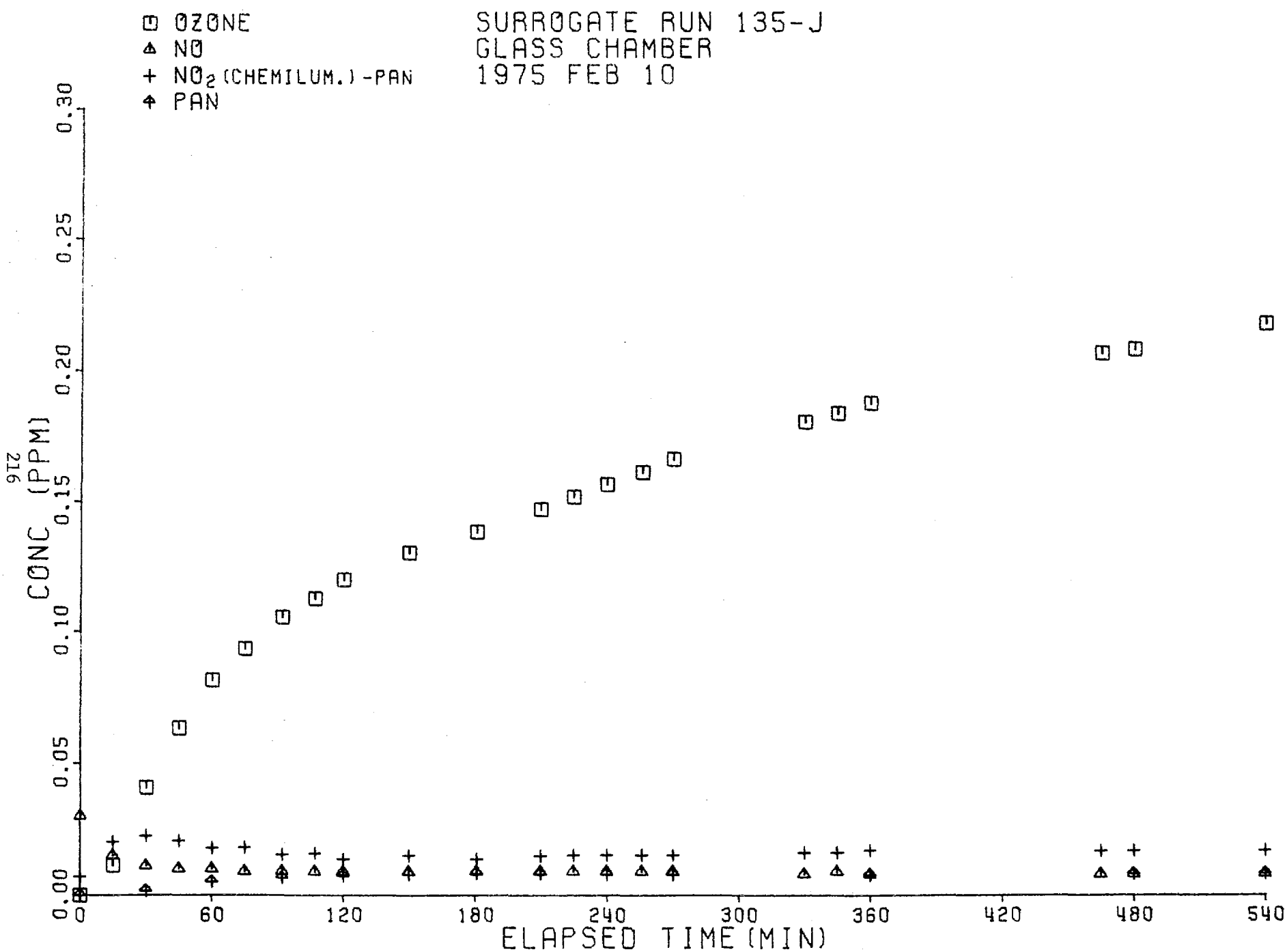

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 127-J
GLASS CHAMBER
1974 DEC 30
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

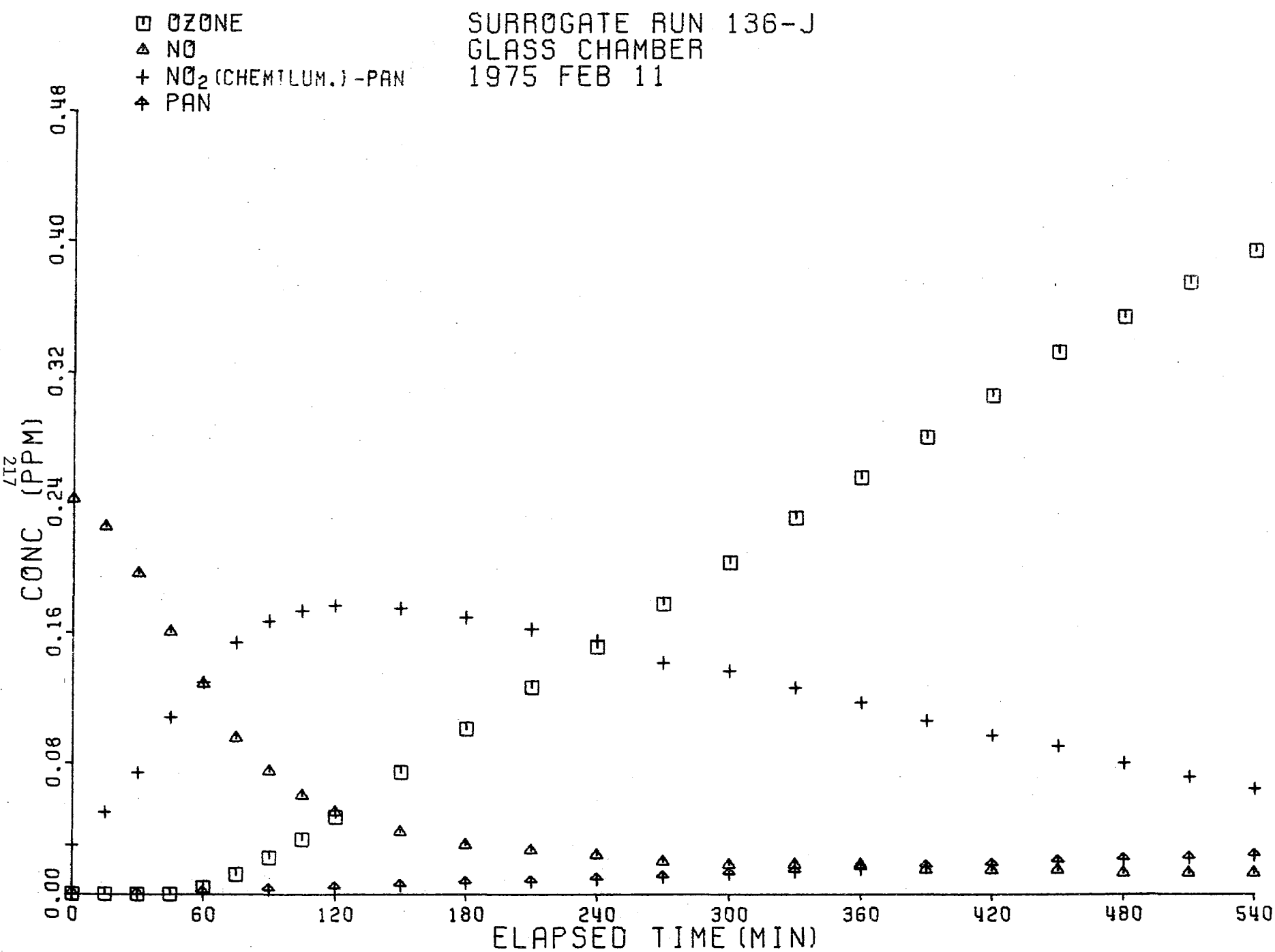

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN D-130-J
GLASS CHAMBER
1975 JAN 23
CONC (PPM)
0.00
0.06
0.12
0.18
0.24
0.30
0.36
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

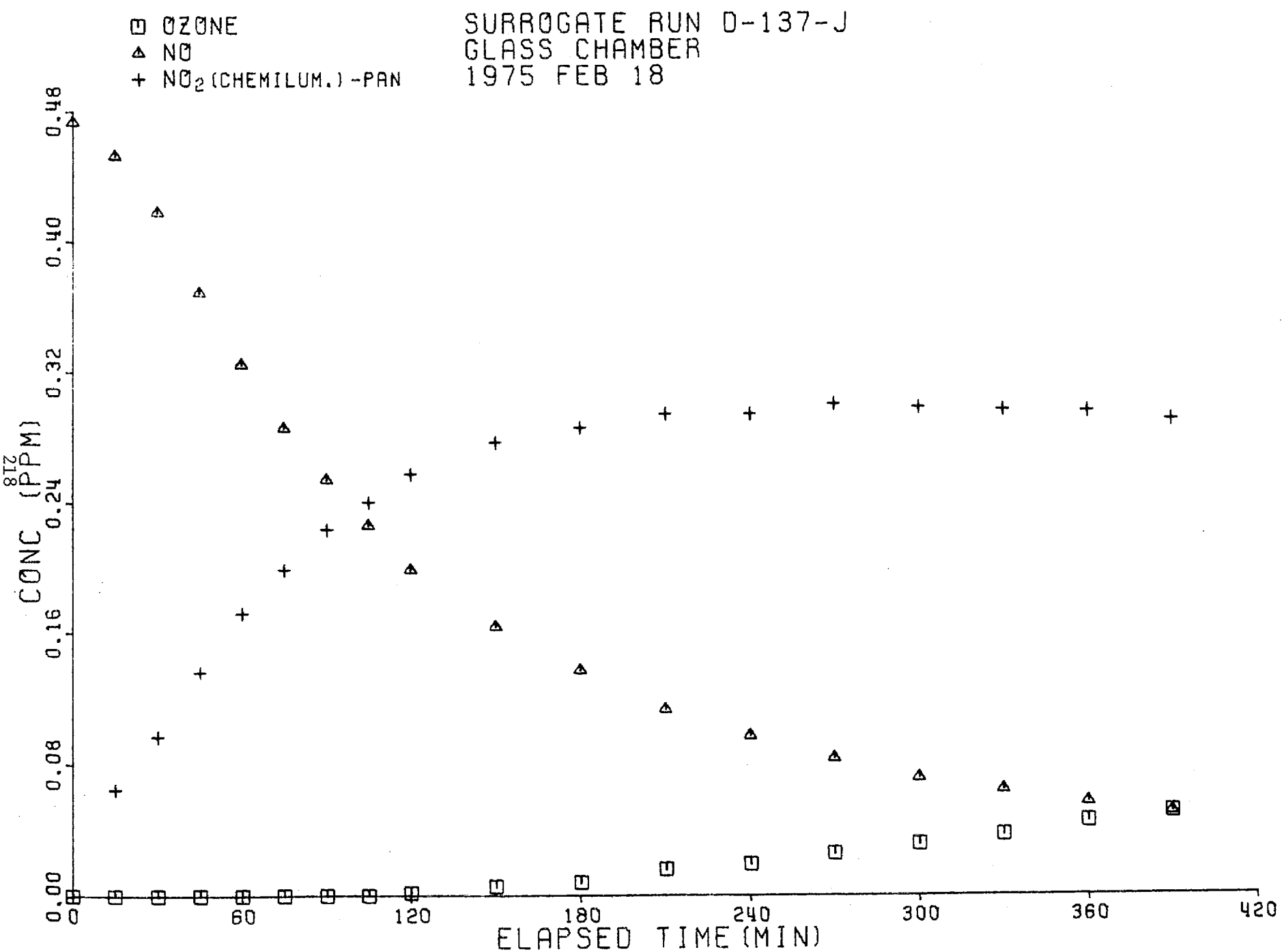

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 132-J
GLASS CHAMBER
1975 JAN 29
CONC (PPM)
213
0.00
0.08
0.16
0.24
0.32
0.40
0.48
0
60
120
180
240
300
360
420
480
540
ELAPSED TIME (MIN)

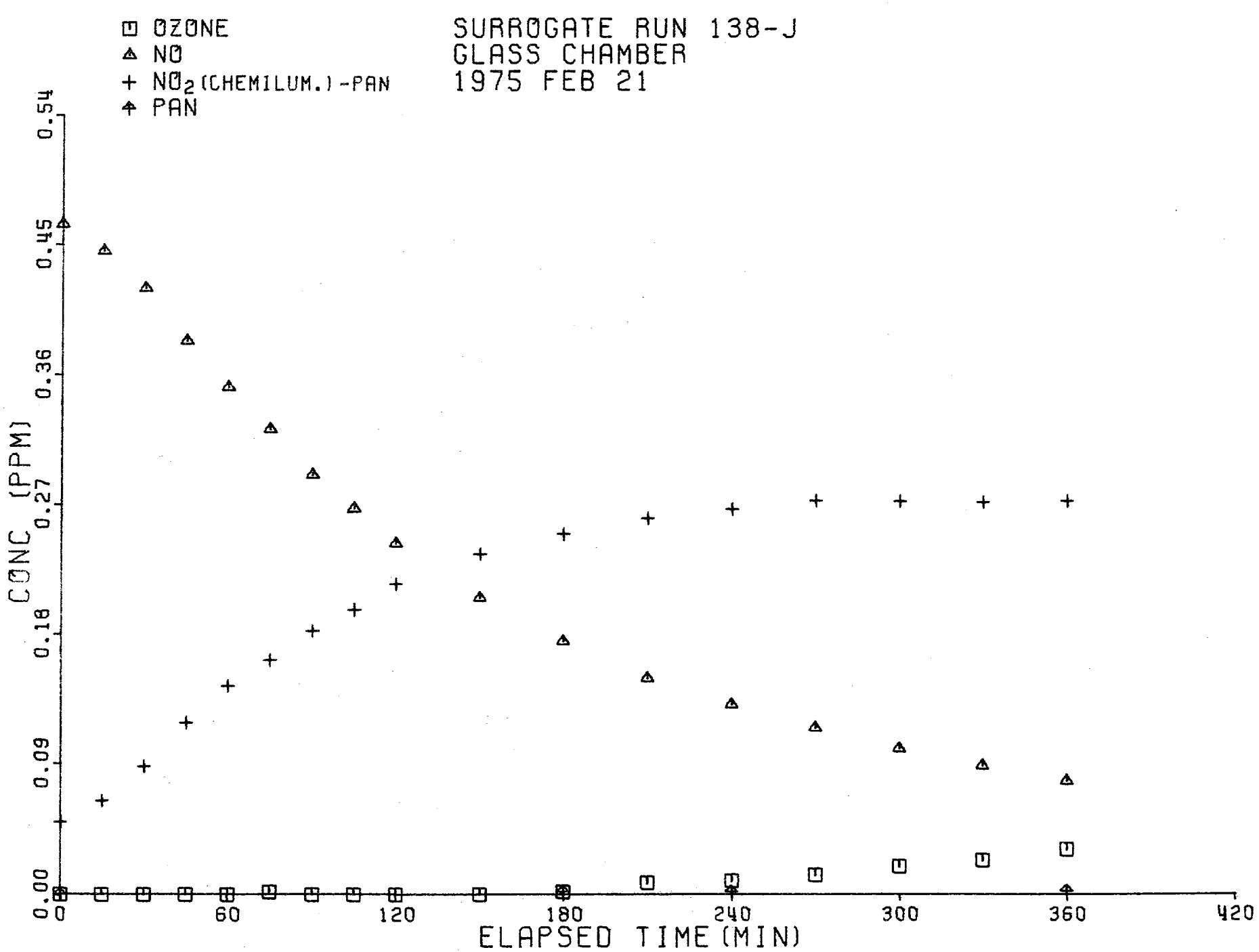

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 133-J
GLASS CHAMBER
1975 JAN 30
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
480
540
ELAPSED TIME (MIN)

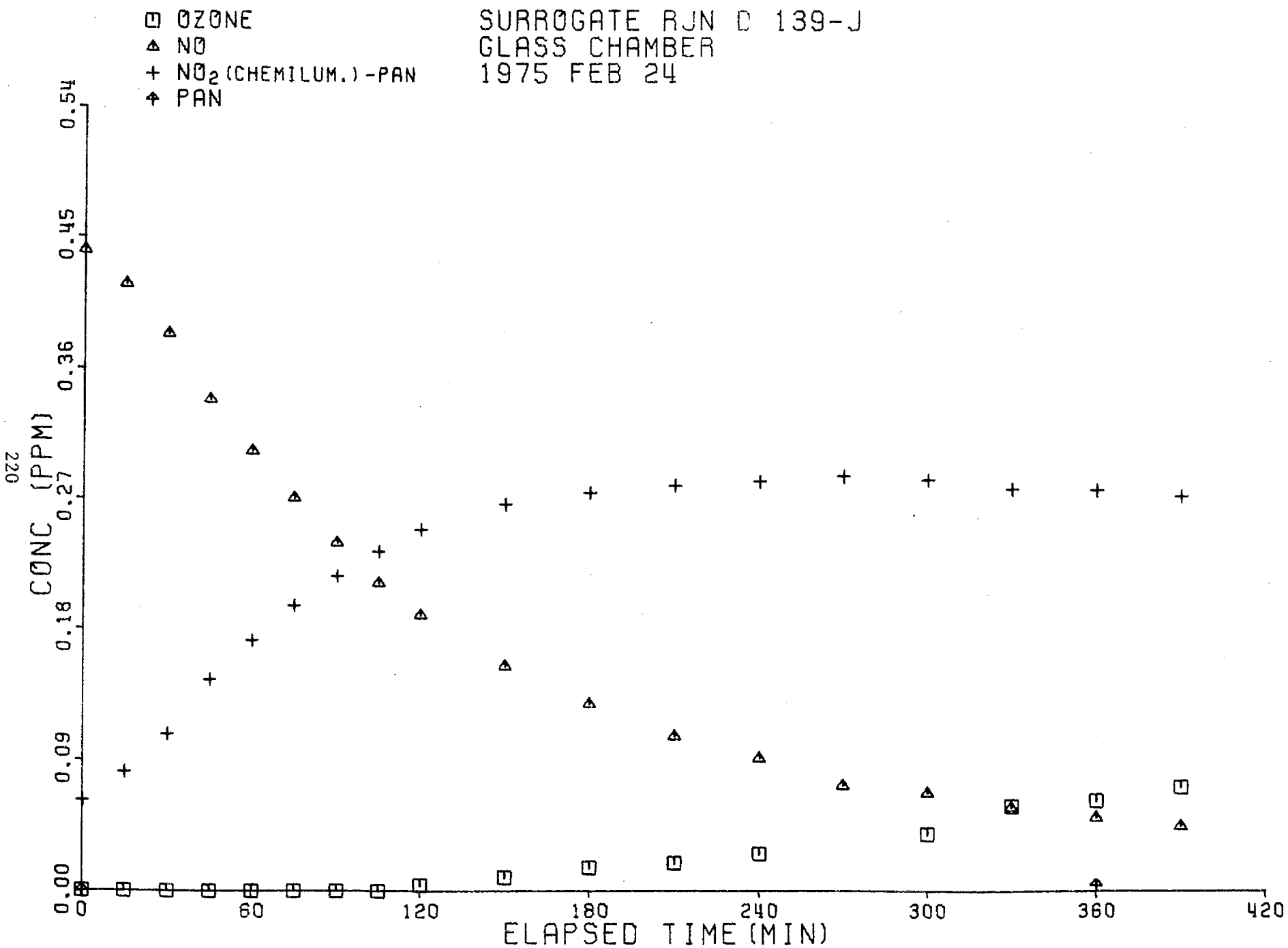

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 134-J
GLASS CHAMBER
1975 JAN 31
CONC (PPM)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0
60
120
180
240
300
360
420
480
540
ELAPSED TIME (MIN)

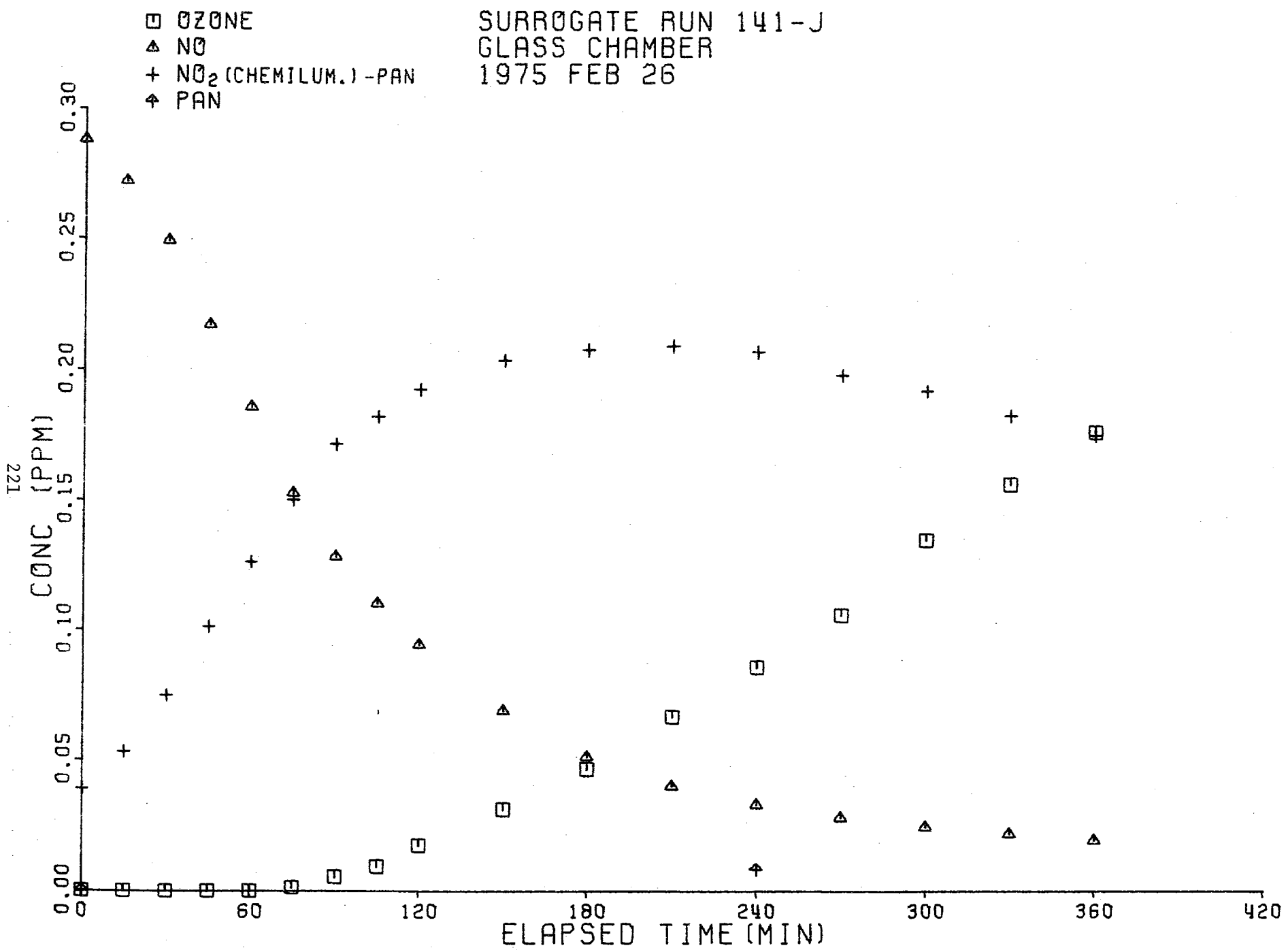

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 135-J
GLASS CHAMBER
1975 FEB 10
CONC (PPM)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0
60
120
180
240
300
360
420
480
540
ELAPSED TIME (MIN)


OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 136-J
GLASS CHAMBER
1975 FEB 11
CONC (PPM)
217
0.00
0.08
0.16
0.24
0.32
0.40
0.48
0
60
120
180
240
300
360
420
480
540
ELAPSED TIME (MIN)

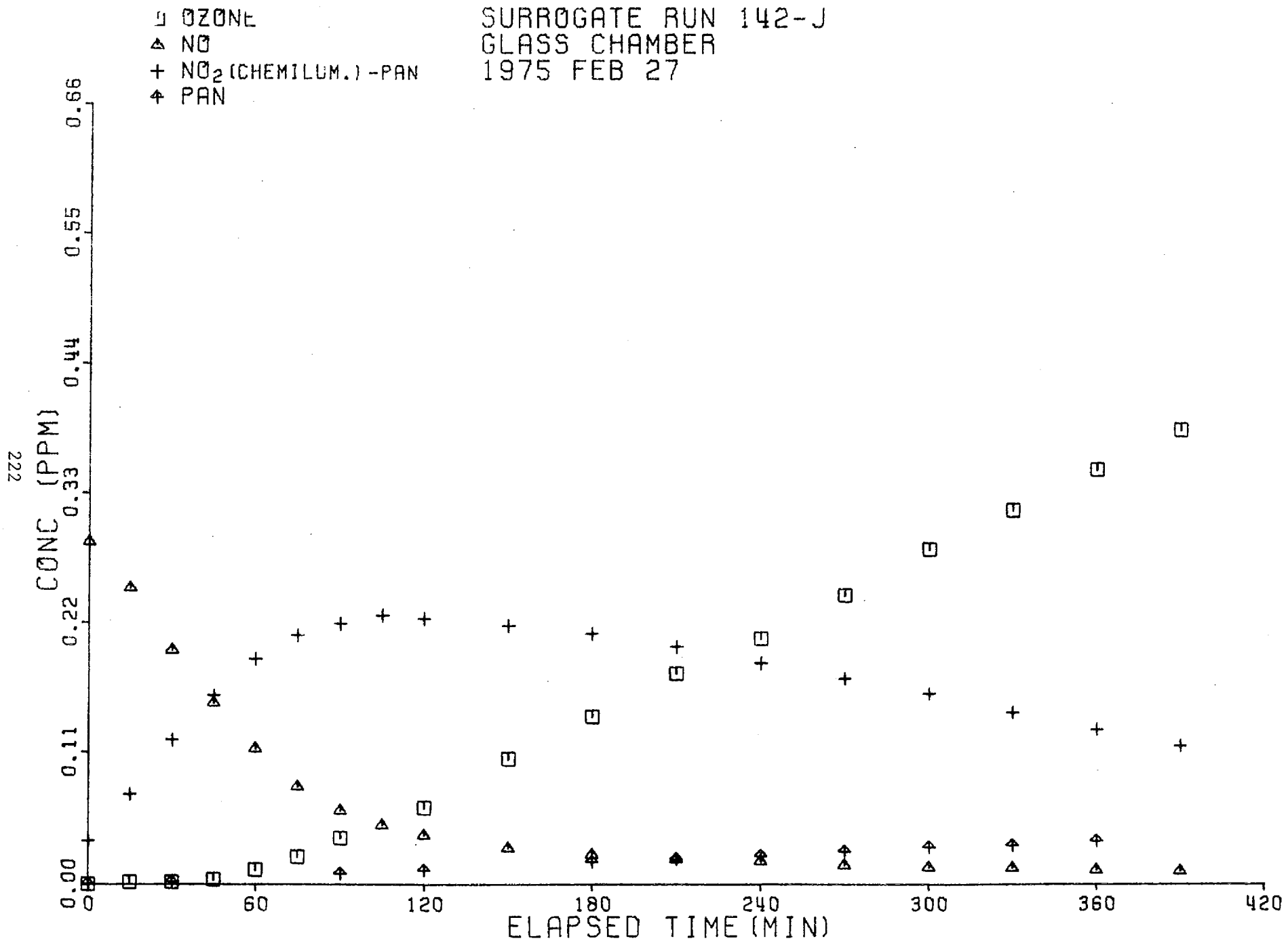

OZONE
NO
NO2 (CHEMILUM.)-PAN
SURROGATE RUN D-137-J
GLASS CHAMBER
1975 FEB 18
CONC (PPM)
0.00
0.08
0.16
0.24
0.32
0.40
0.48
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)


OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 138-J
GLASS CHAMBER
1975 FEB 21
CONC (PPM)
0.00
0.09
0.18
0.27
0.36
0.45
0.54
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)


OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RJN D 139-J
GLASS CHAMBER
1975 FEB 24
CONC (PPM)
0.00
0.09
0.18
0.27
0.36
0.45
0.54
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)
220



OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 141-J
GLASS CHAMBER
1975 FEB 26
CONC (PPM)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)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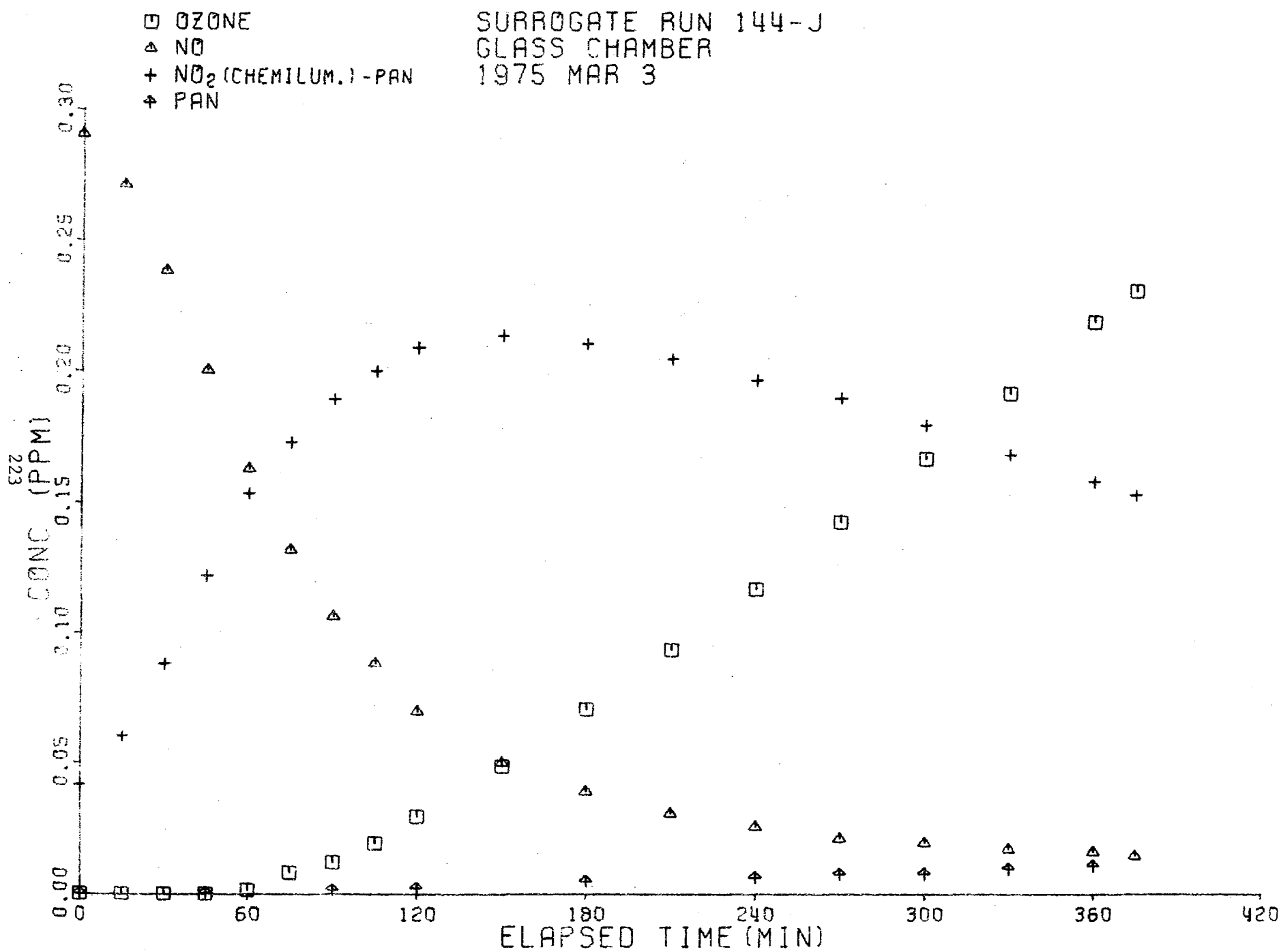
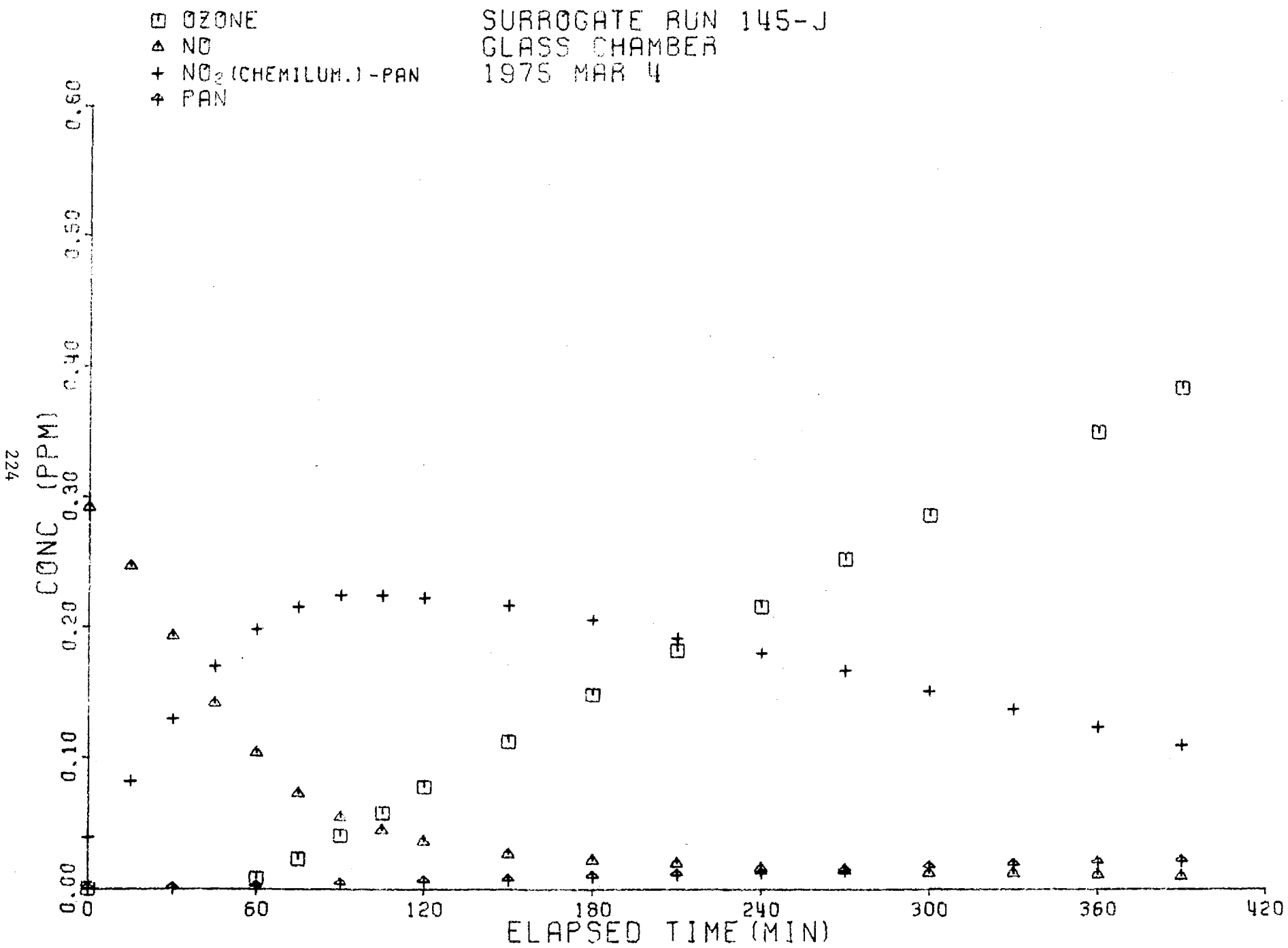
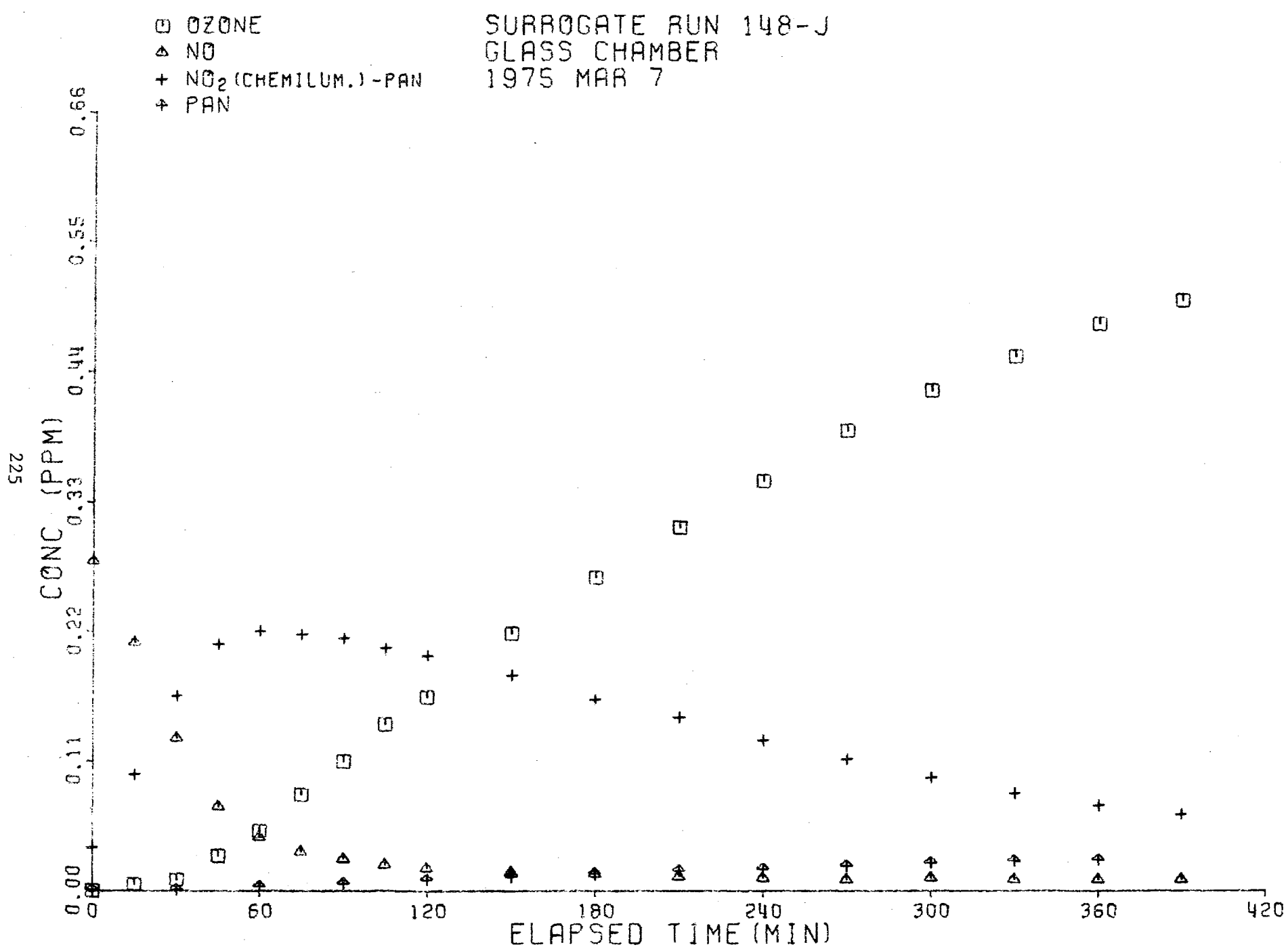
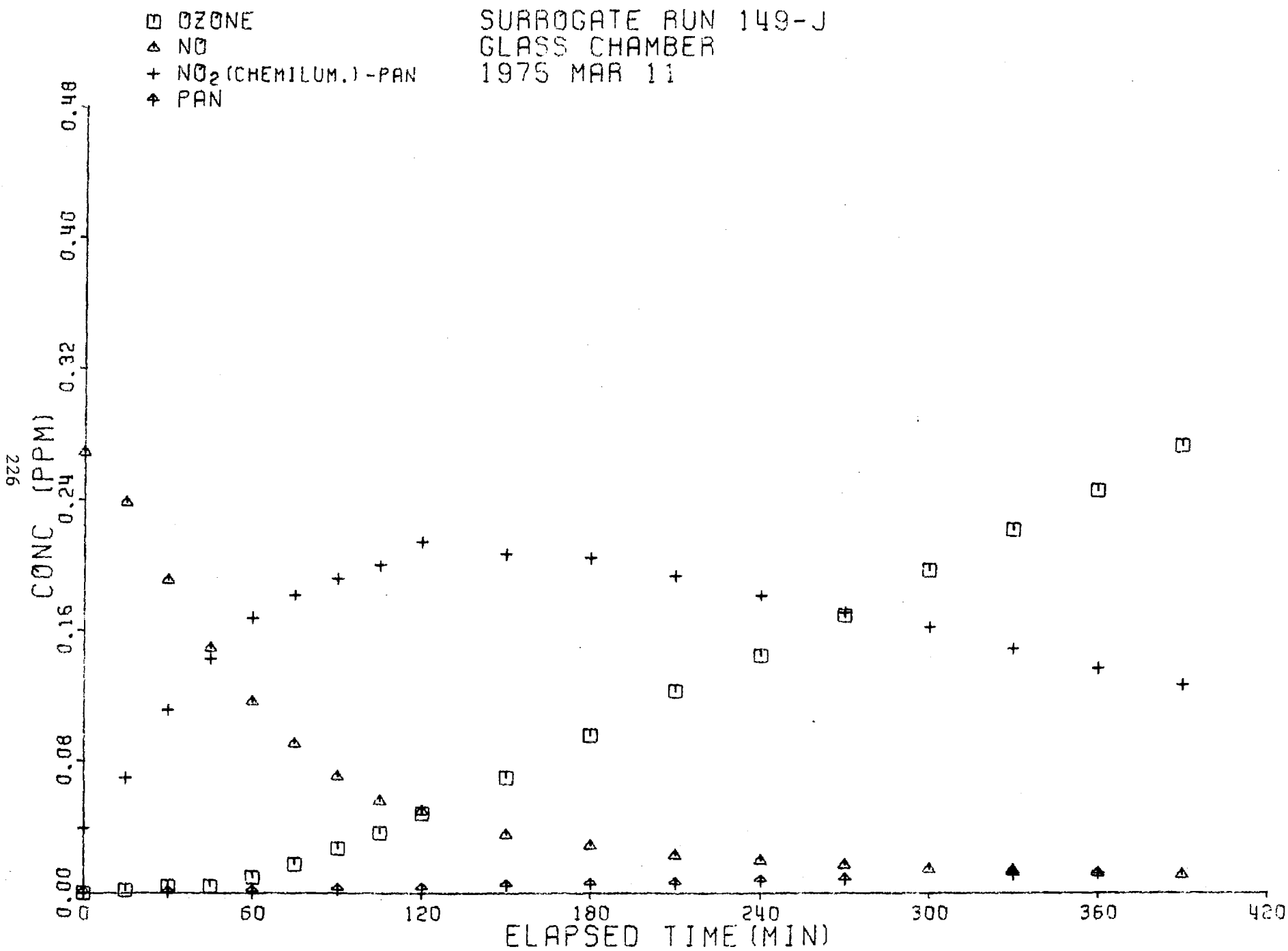
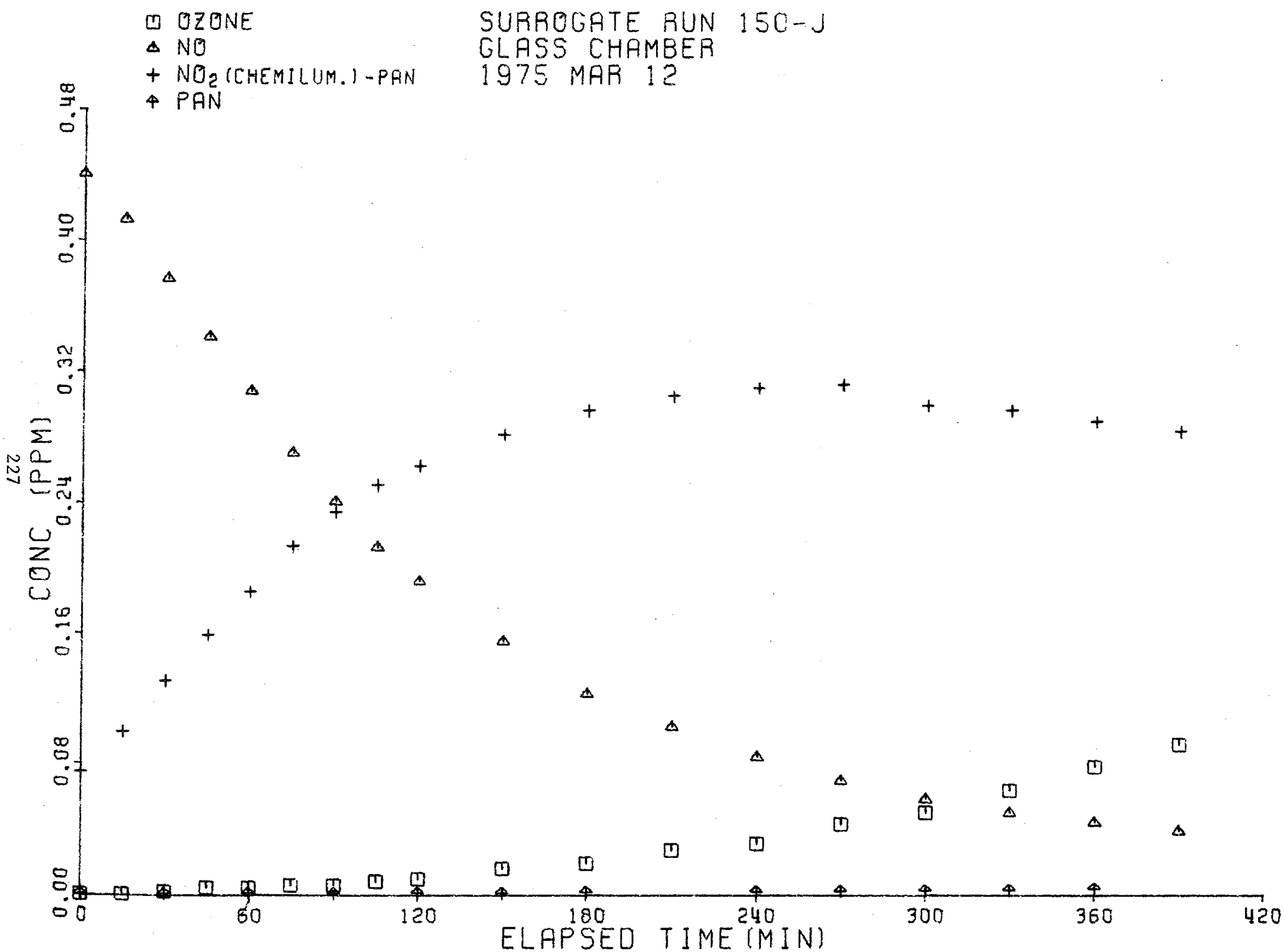
NO
NO2 (CHEMILUM.) -PAN
PAN
SURROGATE RUN 142-J
GLASS CHAMBER
1975 FEB 27
CONC (PPM)
0.00
0.11
0.22
0.33
0.44
0.55
0.66
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

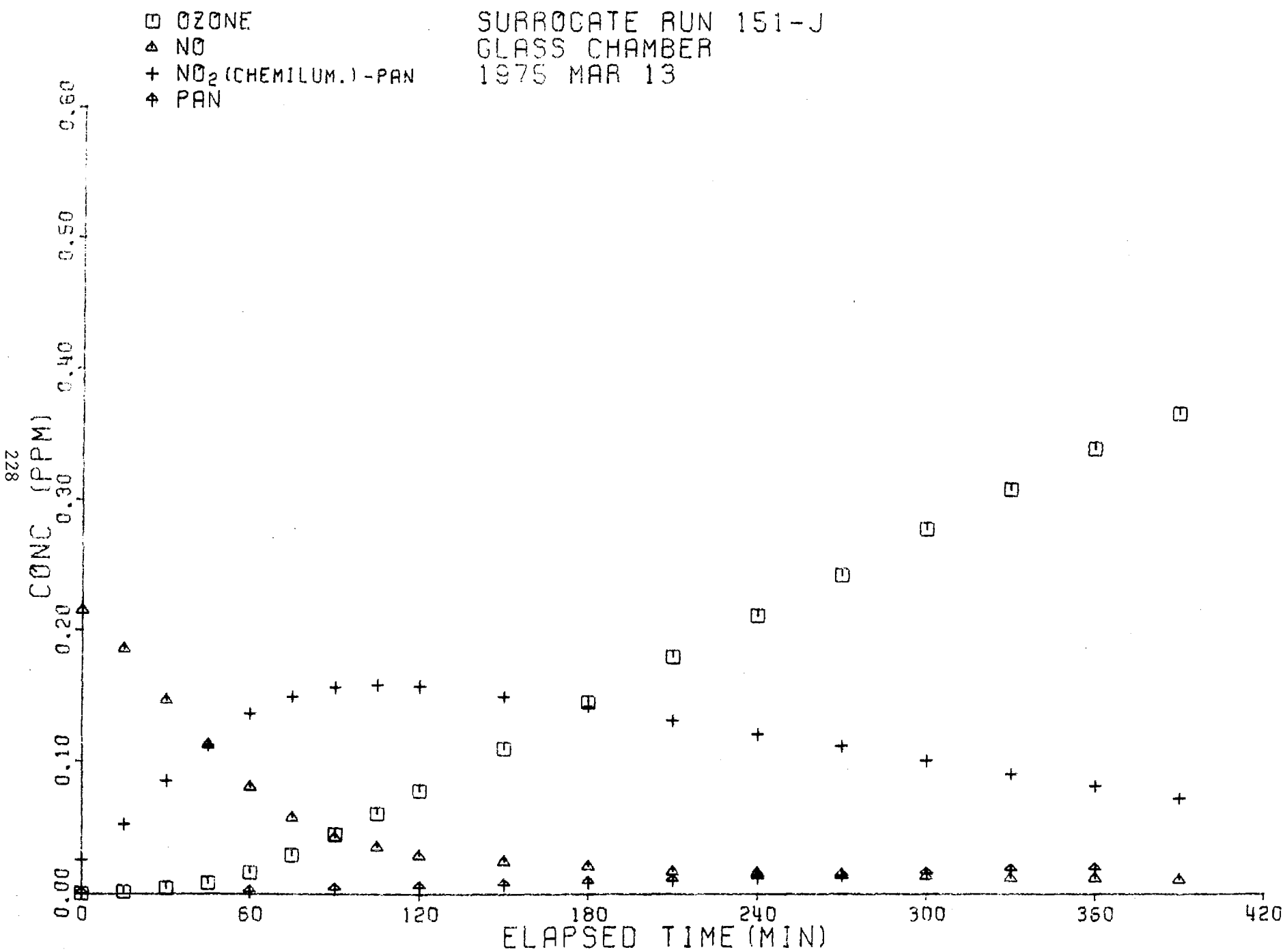

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 144-J
GLASS CHAMBER
1975 MAR 3
CONC (PPM)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

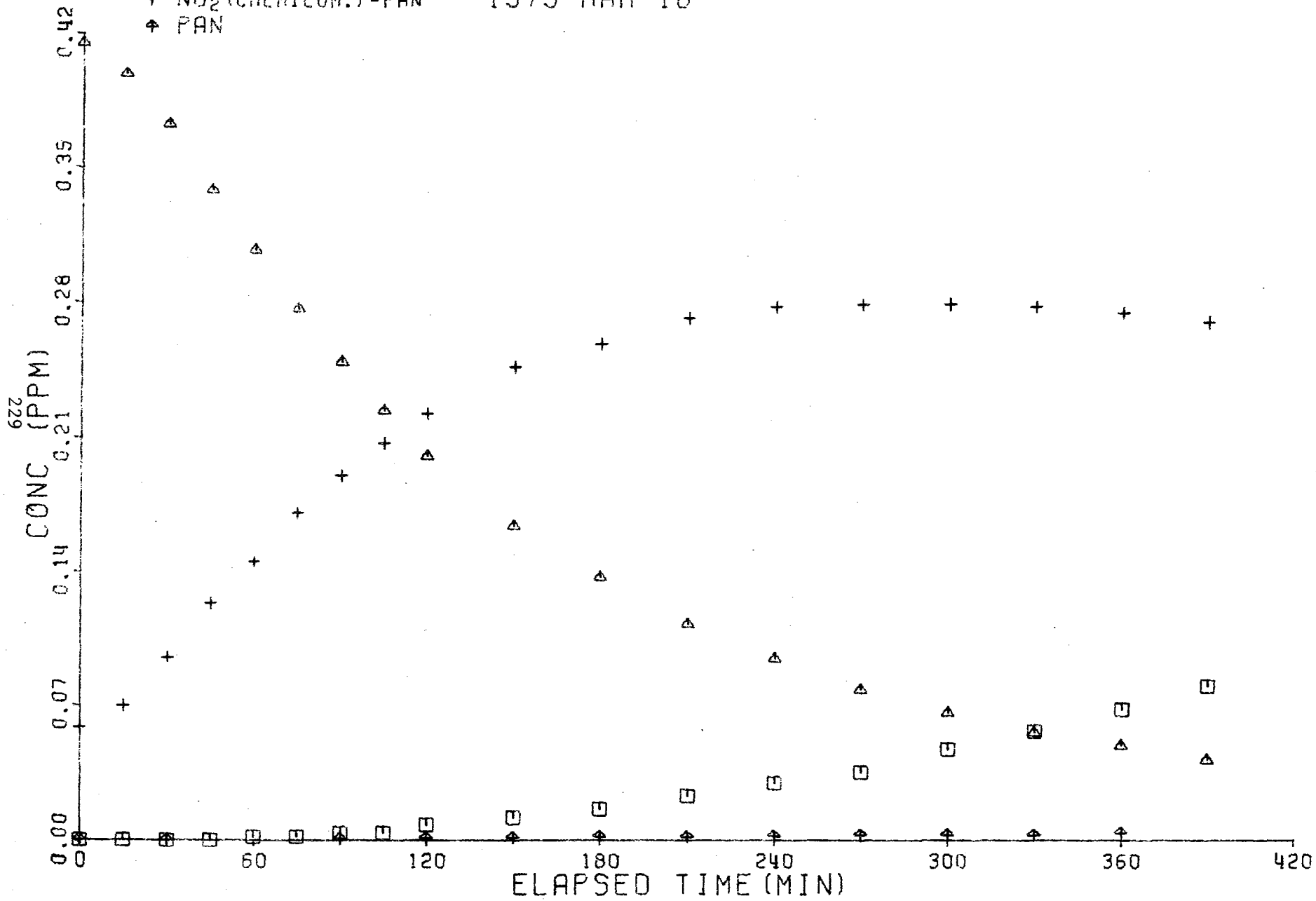

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 145-J
GLASS CHAMBER
1975 MAR 4
CONC (PPM)
0.00
0.10
0.20
0.30
0.40
0.50
0.60
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

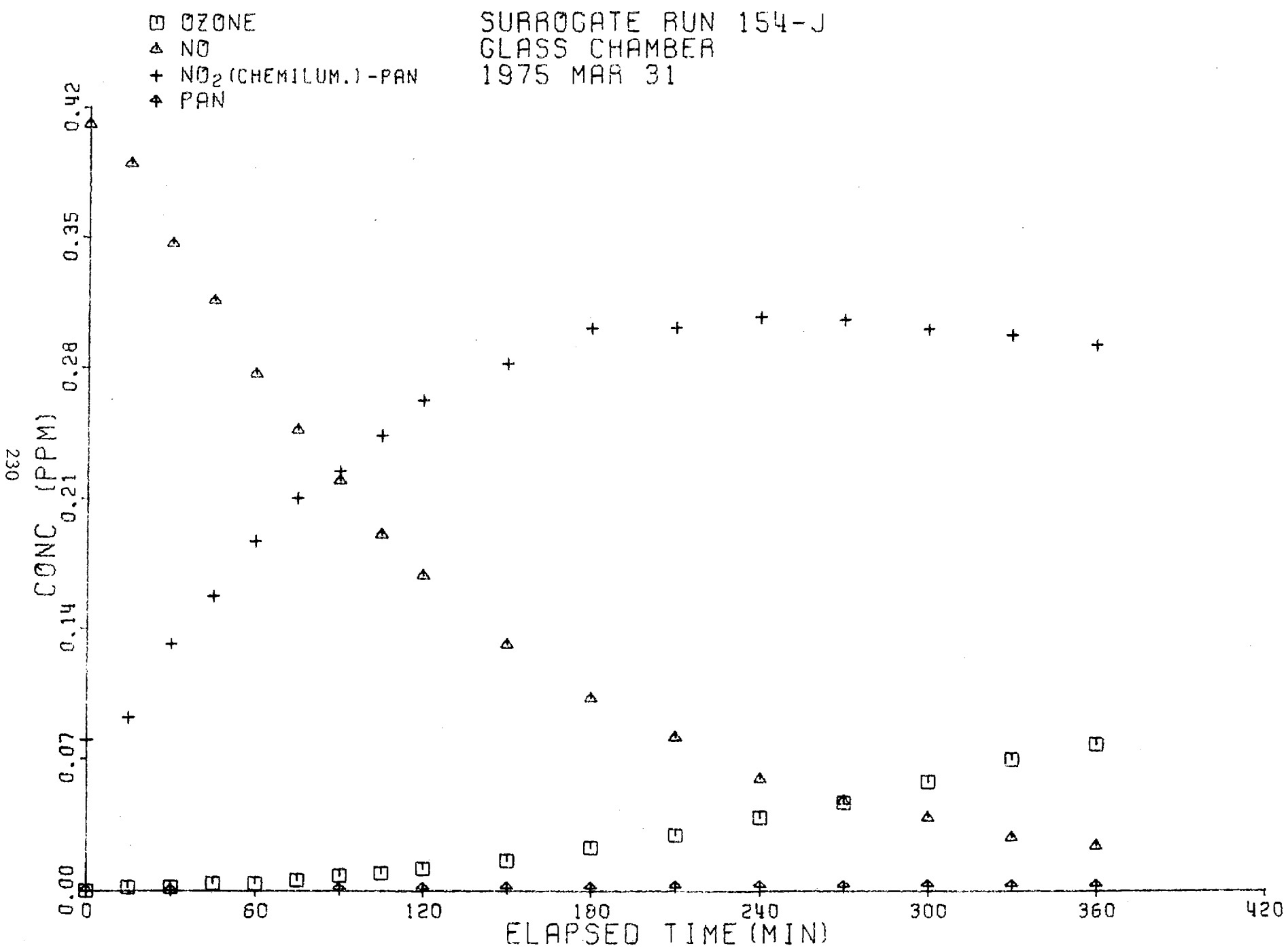

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 148-J
GLASS CHAMBER
1975 MAR 7
CONC (PPM)
0.00
0.11
0.22
0.33
0.44
0.55
0.66
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

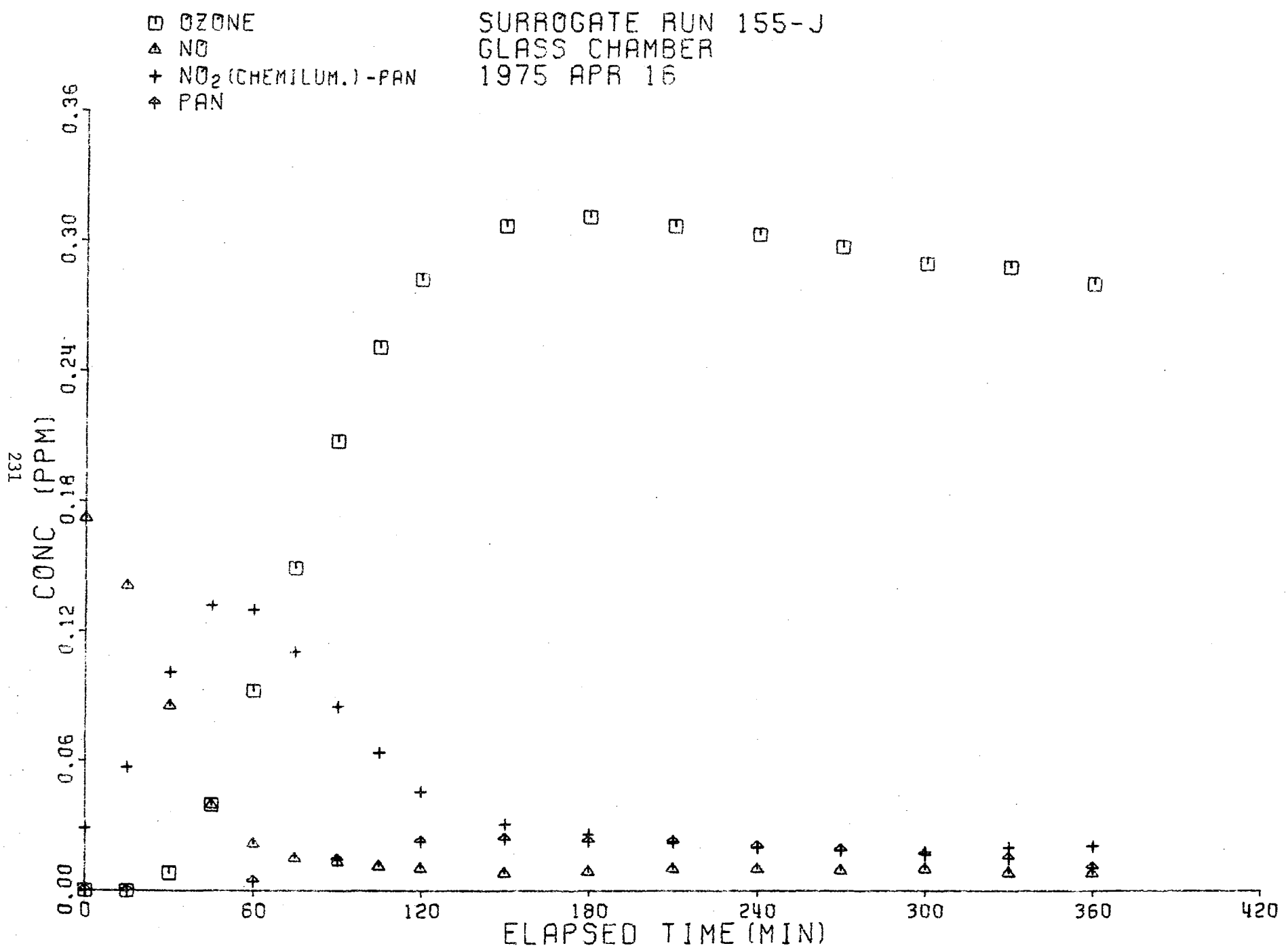

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 149-J
GLASS CHAMBER
1975 MAR 11
CONC (PPM)
0.00
0.08
0.16
0.24
0.32
0.40
0.48
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

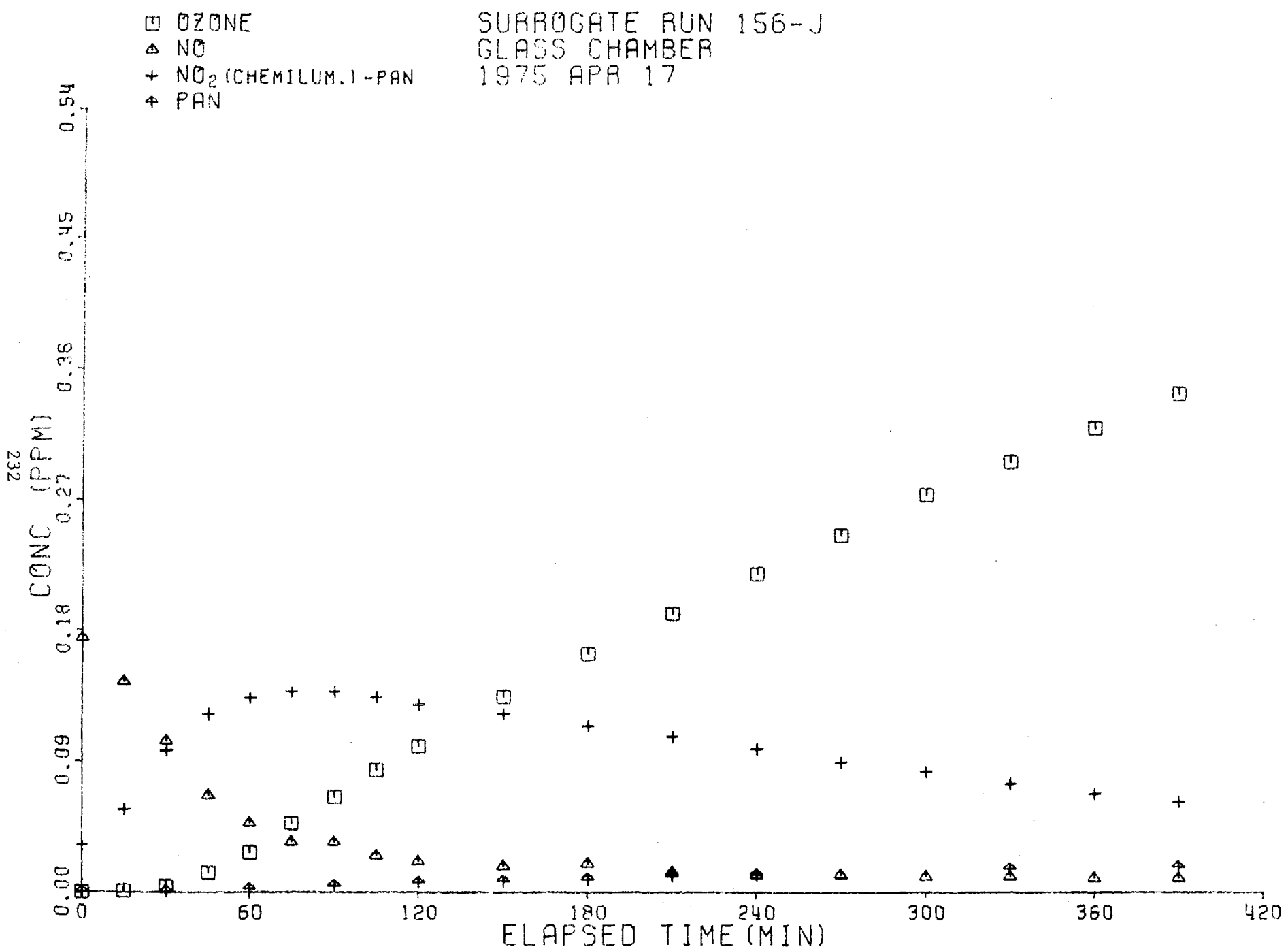

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 150-J
GLASS CHAMBER
1975 MAR 12
CONC (PPM)
0.00
0.08
0.16
0.24
0.32
0.40
0.48
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

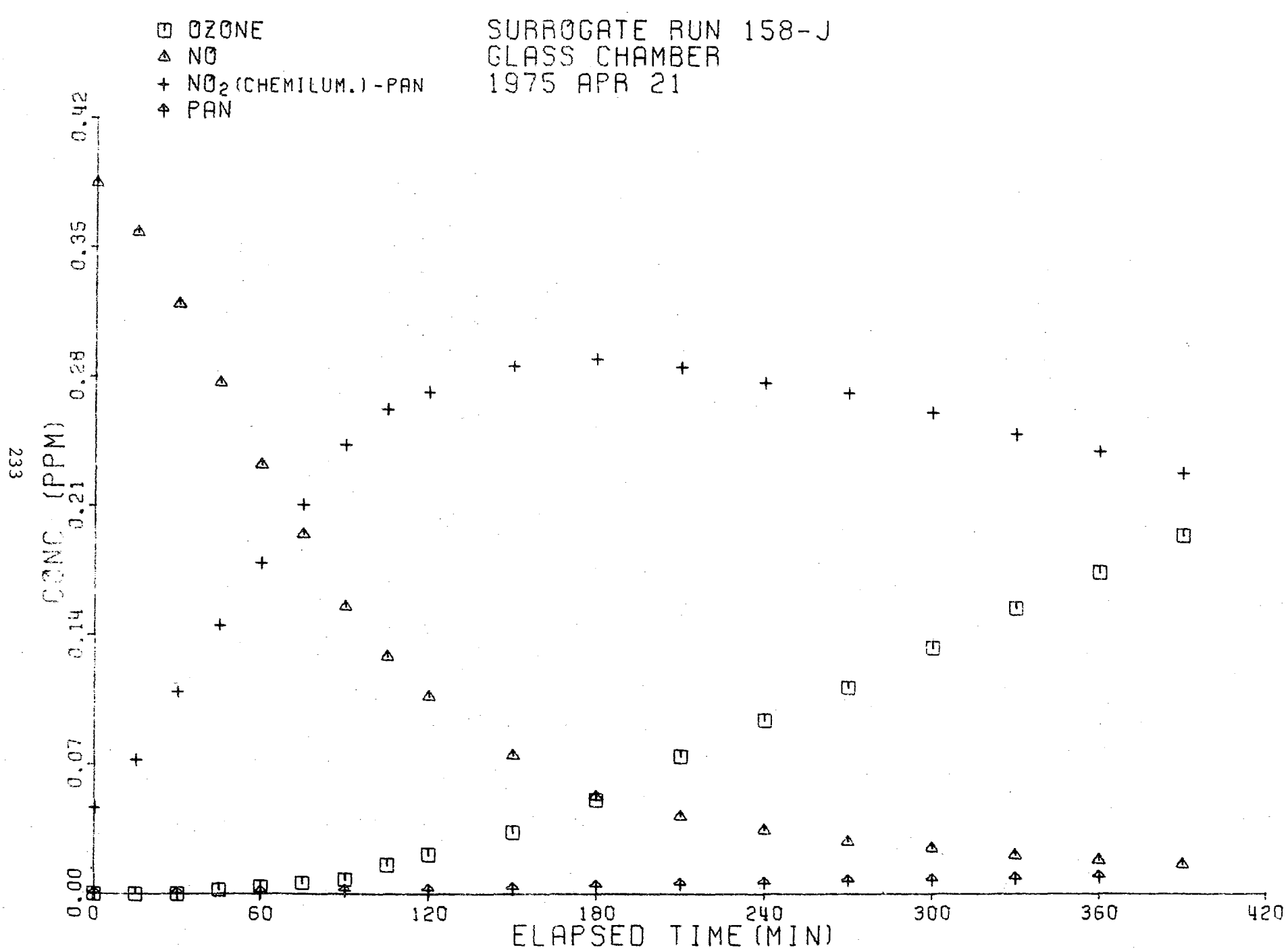

OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 151-J
GLASS CHAMBER
1975 MAR 13
CONC (PPM)
0.00
0.10
0.20
0.30
0.40
0.50
0.60
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)


OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 153-J
GLASS CHAMBER
1975 MAR 18
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)


OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 154-J
GLASS CHAMBER
1975 MAR 31
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)


OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 155-J
GLASS CHAMBER
1975 APR 16
CONC (PPM)
0.00
0.06
0.12
0.18
0.24
0.30
0.36
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)


OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 156-J
GLASS CHAMBER
1975 APR 17
CONC (PPM)
0.00
0.09
0.18
0.27
0.36
0.45
0.54
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)


OZONE
NO
NO2 (CHEMILUM.)-PAN
PAN
SURROGATE RUN 158-J
GLASS CHAMBER
1975 APR 21
CONC (PPM)
0.00
0.07
0.14
0.21
0.28
0.35
0.42
0
60
120
180
240
300
360
420
ELAPSED TIME (MIN)

APPENDIX C

Detailed Hydrocarbon Data for Surrogate Runs

74-G through 158-J

NOTES FOR APPENDIX C

Two laboratories (Rooms 103 and 121) equipped to provide the gas chromatographic (GC) analyses described in Section II are in use at SAPRC. Table 20 describes the GC systems used in these two laboratories and lists the compounds which can be monitored with each system. All systems are operated isothermally and compound identification is based on retention time only. In some experiments analyses were carried out in both laboratories and these results are given as two sets of data for a given time point. As is noted in the comments on the data sheets, the second data set was obtained using the GC systems in Room 103.

Three hydrocarbon (HC) totals (in ppbC) are calculated for each time: (1) total HC including methane; (2) total nonmethane HC; (3) total surrogate HC, which includes ethene, ethane, acetylene (average of two values), propane, propene, n-butane, trans- and cis-2-butene, 2,3-dimethylbutane, 2-methyl-butene-2, toluene, and m-xylene. Estimates of missing initial values are made by extrapolation or are obtained from experiments of the same nominal concentration. These estimates are not added to the hydrocarbon data sheets except as noted, but have been included in the HC totals given in the inorganic data sheets in Appendix A and in all tabulations in the text.

The accuracy of the hydrocarbon data is generally within ±5% based on the data from several calibrations. Calibrations are carried out under the best possible conditions and the reliability of data obtained during the experiments themselves may be less satisfactory due to interferences from background or products. Some indication of the difficulties associated with these analyses can be seen in the replicate results. In general, the PN and DMS (see Table 20) chromatographic systems give reproducible results and are relatively free of interferences from unknown or overlapping peaks. Analyses using the 3-Part and Carbowax-600 (see Table 20) GC systems are much more difficult to interpret. These columns do not provide the selectivity of the previous two, and this results in a number of problems due to overlapping and unknown peaks. For example, on the 3-Part column the oxygenates are not extremely well-resolved with the aldehydes showing considerable and variable tailing. Although the C-600 column provides much

Table 20. Description of GC Systems and List of Compounds Monitored by Each

Abbreviation	GC System Description	Compounds Monitored
PN	5' X 1/8" SS Poropak N (100/120 mesh); N_2 flow - 80 ml/min; 60°C; FID	methane, ethene, ethane, acetylene
DMS	36' X 1/8" SS 10% 2,4-Dimethylsulfolane on C-22 Firebrick (60/80 mesh), 0°C and 2' X 1/8" SS 10% Carbowax-E600 on C-22 Firebrick (60/80 mesh), ambient temp; N_2 flow - 26 ml/min; FID	propane, propene, isobutane, n-butane, acetylene, 1-butene, isobutene, trans-2-butene, isopentane, cis-2-butene, n-pentane, 3-methyl-butene-1, 1,3-butadiene, methyl chloride, methylacetylene, 2,2-dimethylbutane, 1-pentene, 2-methyl-butene-1, trans-2-pentene, cis-2-pentene, 2,3-dimethylbutane, 3-methylpentane, 2-methyl-butene-2, 3-methyl-pentane, cyclopentane, n-hexane, cyclopentene, 2-methyl-butadiene-1,3
3-Part	10' X 1/8" SS 5% 1,2,3-tris(2-cyanoethoxy)-propane and 5' X 1/8" SS 5% Bentone 34 + 5% dinonyl phthalate both on HMDS gas chrom W (100/120 mesh); 3' X 1/8" SS 10% Carbowax-E-600 on C-22 Firebrick (30/60 mesh); N_2 flow - 36 ml/min; 65°C; FID	acetaldehyde, propionaldehyde, acetone, methyl ethyl ketone, benzene, toluene, ethyl benzene, p-, m-, and o-xylene, isopropylbenzene, n-propyl-benzene, p-, m-, and o-ethyl toluene, 1,2,3-, 1,2,4-, and 1,3,5-trimethylbenzene, α- and β-pinene
C-600	10' X 1/8" SS 10% Carbowax 600 on C22 Firebrick (100/110 mesh); N_2 flow - 50 ml/min; 70°C; FID (Rm 121)	acetaldehyde, propionaldehyde, acetone, methyl ethyl ketone
C-400	12" X 1/8" Teflon 5% Carbowax E-400 on Chromosorb G (80/100 mesh); N_2 flow - 90 ml/min; 28°C; ECD (Rm 121)	PAN, organic nitrates

better resolution of the oxygenates, the acetaldehyde is lost due to interference from 2,3-dimethylbutane.

Chamber background peaks have complicated the aromatic hydrocarbon data obtained on the 3-Part column in the following respects: (a) although data for several aromatic hydrocarbons which are not surrogate components are reported on the basis of corresponding retention times, it is likely that these are background peaks of unknown composition;* (b) the peaks identified as ethylbenzene and p-xylene have been particularly troublesome because of an apparently variable retention time and a resulting interference with m-xylene (especially in low concentration surrogate runs).† Because of these difficulties, the variation in total NMHC was greater for runs of the same nominal concentration than was to be expected for the precision of the injection procedure and the GC analyses. The calculation of total surrogate HC (see above) provides a somewhat better indication of the reproducibility of the initial NMHC concentrations.

---

*Efforts to identify these unknown compounds using combined gas chromatography-mass spectrometry (GC-MS) have been hampered by the relatively low concentrations found. They are not present in the purified air obtained directly from the air purification system.

†Peaks of similar behavior and variable retention times were observed in relatively high concentration in one of the calibration flasks. GC-MS data showed these peaks to be volatile components of high-vacuum silicone grease.

SURROGATE RUN 74-G
GLASS CHAMBER
1974 MAY 17

1045 ACETALDEHYDE ESTIMATED

PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		835	945	1015	1045	1115	1150	1245	1315	1345	1445	1545
ELAPSED TIME(MIN)		-70	0	30	60	90	125	180	210	240	300	360
		CONCENTRATIONS (PPB)										
METHANE		416	2960	****	****	****	2880	****	****	2820	****	2740
	PPBC	416	2960	****	****	****	2880	****	****	2820	****	2740
ETHENE		5.0	48.0	****	****	****	43.2	****	****	36.8	****	30.4
	PPBC	10.0	96.0	****	****	****	86.4	****	****	73.6	****	60.8
ETHANE		5.6	86.4	****	****	****	88.0	****	****	84.8	****	80.0
	PPBC	11.2	173	****	****	****	176	****	****	170	****	160
ACETYLENE (PORAPAK N)		1.8	52.8	****	****	****	50.4	****	****	50.4	****	46.4
	PPBC	3.6	106	****	****	****	101	****	****	101	****	92.8
PROPANE		1.4	15.2	15.0	14.6	14.4	14.4	14.0	13.9	13.8	12.8	12.0
	PPBC	4.2	45.6	45.0	43.8	43.2	43.2	42.0	41.7	41.4	38.4	36.0
PROPENE		0.2	11.4	11.2	9.8	8.8	7.6	6.0	5.4	5.0	3.8	2.8
	PPBC	0.6	34.2	33.6	29.4	26.4	22.8	18.0	16.2	15.0	11.4	8.4
ISOBUTANE		0.1	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4
	PPBC	0.4	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.0	1.6
N-BUTANE		0.1	202	202	195	189	189	182	179	174	162	150
	PPBC	0.4	808	808	780	756	756	728	716	696	648	600
ACETYLENE (DMS)		1.9	52.8	52.8	51.2	49.6	49.6	48.0	48.0	48.0	46.4	44.8
	PPBC	3.8	106	106	102	99.2	99.2	96.0	96.0	96.0	92.8	89.6
TRANS-2-BUTENE		0.0	0.7	0.5	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0
	PPBC	0.0	2.8	2.0	1.2	0.4	0.4	0.0	0.0	0.0	0.0	0.0
ISOPENTANE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.6
	PPBC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0
CIS-2-BUTENE		0.0	15.0	13.0	9.9	7.3	5.4	2.8	2.0	1.4	0.8	0.4
	PPBC	0.0	60.0	52.0	39.6	29.2	21.6	11.2	8.0	5.6	3.2	1.6
N-PENTANE		0.0	0.2	0.0	0.0	0.0	0.2	0.3	0.3	0.3	0.4	0.4
	PPBC	0.0	1.0	0.0	0.0	0.0	1.0	1.5	1.5	1.5	2.0	2.0
2,3-DIMETHYL BUTANE		0.0	113	111	108	102	101	101	91.8	85.9	80.8	73.2
	PPBC	0.0	678	666	648	612	606	606	551	515	485	439
2-METHYL BUTENE-2		0.0	14.9	11.7	7.8	4.5	2.2	0.6	0.0	0.0	0.0	0.0

SURROGATE RUN 74-G
GLASS CHAMBER
1974 MAY 17

CLOCK TIME		835	945	1015	1045	1115	1150	1245	1315	1345	1445	1545
ELAPSED TIME(MIN)		-70	0	30	60	90	125	180	210	240	300	360
	PPBC	0.0	74.5	58.5	39.0	22.5	11.0	3.0	0.0	0.0	0.0	0.0
ACETALDEHYDE		****	2.0	****	21.0	****	32.8	96.0	****	41.6	45.6	42.4
	PPBC	****	4.0	****	42.0	****	65.6	192	****	83.2	91.2	84.8
PROPIONALDEHYDE		0.4	0.4	****	0.5	****	0.8	2.0	****	1.6	1.6	1.6
	PPBC	1.2	1.2	****	1.5	****	2.4	6.0	****	4.8	4.8	4.8
ACETONE		2.0	8.3	****	18.8	****	28.0	79.2	****	43.2	50.0	62.4
	PPBC	6.0	24.9	****	56.4	****	84.0	238	****	130	150	187
BENZENE		0.3	0.0	****	0.0	****	0.0	0.0	****	0.0	0.0	0.0
	PPBC	1.8	0.0	****	0.0	****	0.0	0.0	****	0.0	0.0	0.0
METHYL ETHYL KETONE		0.4	0.7	****	1.8	****	4.4	6.4	****	6.4	7.2	7.2
	PPBC	1.6	2.8	****	7.2	****	17.6	25.6	****	25.6	28.8	28.8
TOLUENE		0.1	16.0	****	14.8	****	14.8	13.1	****	12.4	12.0	11.8
	PPBC	0.7	112	****	104	****	104	91.7	****	86.8	84.0	82.6
PARA-XYLENE		0.0	3.2	****	2.4	****	1.6	4.4	****	1.6	2.4	2.8
	PPBC	0.0	25.6	****	19.2	****	12.8	35.2	****	12.8	19.2	22.4
META-XYLENE		2.5	36.8	****	30.4	****	24.8	21.6	****	16.8	14.4	12.4
	PPBC	20.0	294	****	243	****	198	173	****	134	115	99.2
ORTHO-XYLENE		0.0	0.1	****	0.0	****	0.0	0.0	****	0.0	0.0	0.0
	PPBC	0.0	0.8	****	0.0	****	0.0	0.0	****	0.0	0.0	0.0
N-PROPYL BENZENE		0.5	0.3	****	0.0	****	0.1	0.0	****	0.2	0.4	0.5
	PPBC	4.5	2.7	****	0.0	****	0.9	0.0	****	1.8	3.6	4.5
META-ETHYL TOLUENE		1.0	0.9	****	0.9	****	0.7	1.5	****	0.6	0.8	1.0
	PPBC	9.0	8.1	****	8.1	****	6.3	13.5	****	5.4	7.2	9.0
1,2,3 TRIMETHYL BENZENE		3.0	3.0	****	2.2	****	2.0	2.8	****	1.0	1.0	2.0
	PPBC	27.0	27.0	****	19.8	****	18.0	25.2	****	9.0	9.0	18.0
PAN		****	0.0	****	0.0	****	0.3	0.7	****	1.0	****	****
	PPBC	****	0.0	****	0.0	****	0.6	1.4	****	2.0	****	****
FORMALDEHYDE		****	102	****	109	****	149	184	****	213	235	224
	PPBC	****	102	****	109	****	149	184	****	213	235	224
3P CCL., 2 MIN 40 SEC		12.0	43.0	****	70.0	****	150	164	****	200	224	260
3P CCL., 3 MIN 10 SEC		0.0	46.0	****	47.0	****	48.0	40.0	****	44.0	40.0	40.0
3P CCL., 4 MIN 10 SEC		0.0	3.0	****	4.0	****	0.0	4.0	****	0.0	0.0	0.0
3P CCL., 4 MIN 50 SEC		4.0	8.0	****	32.0	****	12.0	64.0	****	48.0	58.0	64.0

SURROGATE RUN 74-G
GLASS CHAMBER
1974 MAY 17

CLOCK TIME	835	945	1015	1045	1115	1150	1245	1315	1345	1445	1545
ELAPSED TIME(MIN)	-70	0	30	60	90	125	180	210	240	300	360
3P COL., 5 MIN 30 SEC	0.0	12.0	****	16.0	****	32.0	16.0	****	****	****	****
3P COL., 6 MIN 30 SEC	8.0	0.0	****	0.0	****	0.0	0.0	****	0.0	0.0	0.0
3P COL., 7 MIN 10 SEC	3.0	0.0	****	0.0	****	4.0	4.0	****	6.0	8.0	8.0
3P COL., 11 MIN 40 SEC	3.0	0.0	****	0.0	****	0.0	0.0	****	0.0	0.0	0.0
3P COL., 21 MIN 00 SEC	1.0	1.0	****	1.0	****	2.0	2.0	****	3.0	4.0	3.0
3P COL., 23 MIN 00 SEC	4.0	5.0	****	4.0	****	0.0	0.0	****	0.0	0.0	0.0
3P COL., 44 MIN 00 SEC	0.0	0.0	****	0.0	****	0.0	0.0	****	102	7.0	3.0
3P COL., 49 MIN 00 SEC	8.0	5.0	****	5.0	****	5.0	16.0	****	2.0	8.0	15.0
TOTAL HC PPBC	518.3	5645.2	****	****	****	5365.2	****	****	5147.5	****	4909.1
TOTAL NON-METHANE HC	102.3	2685.2	1772.3	2295.0	1590.5	2485.2	2492.3	1431.8	2327.5	2032.6	2169.1
TOTAL SURROGATE	50.6	2483.9	1770.7	2030.2	1588.9	2125.4	1768.7	1428.7	1836.2	1477.8	1579.0

SURROGATE RUN 75-G
GLASS CHAMBER
1974 MAY 22

PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		910	1015	1045	1115	1145	1215	1245	1315	1345	1415	1515	1615
ELAPSED TIME(MIN)		-65	0	30	60	90	120	150	180	210	240	300	360
		CONCENTRATIONS (PPB)											
METHANE		760	2830	****	****	****	2750	****	****	****	2720	****	2720
	PPBC	760	2830	****	****	****	2750	****	****	****	2720	****	2720
ETHENE		2.6	38.4	****	****	****	30.4	****	****	****	26.4	****	23.2
	PPBC	5.2	76.8	****	****	****	60.8	****	****	****	52.8	****	46.4
ETHANE		4.0	70.4	****	****	****	65.6	****	****	****	63.2	****	63.2
	PPBC	8.0	141	****	****	****	131	****	****	****	126	****	126
ACETYLENE (POROPAK N)		1.4	42.4	****	****	****	39.2	****	****	****	36.8	****	35.2
	PPBC	2.8	84.8	****	****	****	78.4	****	****	****	73.6	****	70.4
PROPANE		1.8	12.4	12.2	12.8	12.6	12.4	12.4	12.3	12.2	12.2	12.2	12.2
	PPBC	5.4	37.2	36.6	38.4	37.8	37.2	37.2	36.9	36.6	36.6	36.6	36.6
PROPENE		0.4	5.8	8.7	8.2	7.0	6.2	5.4	4.9	4.4	3.9	3.2	2.5
	PPBC	1.2	29.4	26.1	24.6	21.0	18.6	16.2	14.7	13.2	11.7	9.6	7.5
ISOBUTANE		0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.6
	PPBC	0.4	0.4	0.8	1.2	1.2	1.2	1.2	1.6	1.6	1.6	1.6	2.4
N-BUTANE		0.1	155	152	157	154	149	147	144	144	142	138	130
	PPBC	0.4	620	608	628	616	596	588	576	576	568	552	520
ACETYLENE (DMS)		1.4	38.4	38.4	42.4	41.6	40.0	38.4	39.2	38.4	36.8	36.0	35.6
	PPBC	2.8	76.8	76.8	84.8	83.2	80.0	76.8	78.4	76.8	73.6	72.0	71.2
TRANS-2-BUTENE		0.0	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PPBC	0.0	1.2	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ISOPENTANE		0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.8	1.0	1.0	1.0
	PPBC	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	4.0	5.0	5.0	5.0
CIS-2-BUTENE		0.0	11.6	9.5	8.2	5.6	4.1	3.0	2.0	1.5	1.2	0.4	0.2
	PPBC	0.0	46.4	38.0	32.8	22.4	16.4	12.0	8.0	6.0	4.8	1.6	0.8
N-PENTANE		0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.6	0.6
	PPBC	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0	3.0	3.0
2,3-DIMETHYL BUTANE		0.0	83.5	89.3	84.9	81.9	78.2	78.0	74.1	72.0	70.6	66.6	62.4
	PPBC	0.0	501	536	509	491	469	468	445	432	424	400	374
2-METHYL BUTENE-2		0.0	11.0	6.7	4.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SURROGATE RUN 75-G
GLASS CHAMBER
1974 MAY 22

CLOCK TIME		910	1015	1045	1115	1145	1215	1245	1315	1345	1415	1515	1615
ELAPSED TIME(MIN)		-65	0	30	60	90	120	150	180	210	240	300	360
	PPBC	0.0	55.0	33.5	22.5	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACETALDEHYDE		0.1	4.0	****	21.0	****	29.0	****	28.0	****	28.0	32.8	29.6
	PPBC	0.2	8.0	****	42.0	****	58.0	****	56.0	****	56.0	65.6	59.2
PROPIONALDEHYDE		0.4	0.4	****	0.4	****	0.8	****	0.6	****	0.8	0.8	1.6
	PPBC	1.2	1.2	****	1.2	****	2.4	****	1.8	****	2.4	2.4	4.8
ACETONE		2.5	6.5	****	16.8	****	10.0	****	18.8	****	26.0	32.0	48.0
	PPBC	7.5	19.5	****	50.4	****	30.0	****	56.4	****	78.0	96.0	144
BENZENE		0.0	0.0	****	0.0	****	2.0	****	0.4	****	0.0	0.0	0.0
	PPBC	0.0	0.0	****	0.0	****	12.0	****	2.4	****	0.0	0.0	0.0
METHYL ETHYL KETONE		0.1	0.0	****	4.0	****	2.4	****	0.0	****	0.0	0.0	0.0
	PPBC	0.4	0.0	****	16.0	****	9.6	****	0.0	****	0.0	0.0	0.0
TOLUENE		0.4	12.0	****	12.0	****	11.2	****	9.6	****	8.8	8.0	8.8
	PPBC	2.8	84.0	****	84.0	****	78.4	****	67.2	****	61.6	56.0	61.6
ETHYL BENZENE		0.0	0.0	****	2.4	****	1.6	****	0.0	****	0.0	0.0	0.0
	PPBC	0.0	0.0	****	19.2	****	12.8	****	0.0	****	0.0	0.0	0.0
PARA-XYLENE		2.2	2.0	****	0.0	****	0.0	****	1.6	****	1.0	2.4	3.4
	PPBC	17.6	16.0	****	0.0	****	0.0	****	12.8	****	8.0	19.2	27.2
META-XYLENE		0.0	26.4	****	24.0	****	22.0	****	13.6	****	11.2	10.0	9.2
	PPBC	0.0	211	****	192	****	176	****	109	****	89.6	80.0	73.6
META-ETHYL TOLUENE		0.6	0.8	****	0.6	****	0.5	****	0.8	****	0.4	0.6	0.8
	PPBC	5.4	7.2	****	5.4	****	4.5	****	7.2	****	3.6	5.4	7.2
1,2,3 TRIMETHYL BENZENE		1.2	1.6	****	1.4	****	1.2	****	1.0	****	1.0	1.4	2.0
	PPBC	10.8	14.4	****	12.6	****	10.8	****	9.0	****	9.0	12.6	18.0
PAN		****	0.0	****	0.0	****	0.3	****	0.3	****	0.7	1.2	2.1
	PPBC	****	0.0	****	0.0	****	0.6	****	0.6	****	1.4	2.4	4.2
FORMALDEHYDE		****	46.0	****	124	****	162	****	194	****	214	230	235
	PPBC	****	46.0	****	124	****	162	****	194	****	214	230	235
3P COL., 2 MIN 30 SEC		18.0	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 2 MIN 40 SEC		18.0	48.0	****	68.0	****	104	****	128	****	176	208	248
3P COL., 3 MIN 10 SEC		0.0	32.0	****	34.0	****	34.0	****	24.0	****	28.0	24.0	28.0
3P COL., 4 MIN 10 SEC		0.0	1.0	****	2.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 5 MIN 00 SEC		2.0	2.0	****	0.0	****	0.0	****	16.0	****	56.0	64.0	72.0
3P COL., 5 MIN 30 SEC		2.0	2.0	****	4.0	****	2.0	****	28.0	****	16.0	40.0	40.0

SURROGATE RUN 75-G
GLASS CHAMBER
1974 MAY 22

CLOCK TIME	910	1015	1045	1115	1145	1215	1245	1315	1345	1415	1515	1615
ELAPSED TIME(MIN)	-65	0	30	60	90	120	150	180	210	240	300	360
3P COL., 7 MIN 00 SEC	0.0	0.0	****	0.0	****	4.0	****	0.0	****	0.0	4.0	2.0
3P COL., 14 MIN 30 SEC	6.0	0.0	****	4.0	****	4.0	****	2.0	****	2.0	2.0	2.0
3P COL., 21 MIN 00 SEC	2.0	1.0	****	1.0	****	2.0	****	3.0	****	6.0	4.0	6.0
3P COL., 23 MIN 00 SEC	3.0	0.0	****	1.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 49 MIN 00 SEC	11.0	4.0	****	6.0	****	9.0	****	8.0	****	9.0	18.0	21.0
TOTAL HC PPBC	829.3	4827.5	****	****	****	4716.9	****	****	****	4549.7	****	4548.1
TOTAL NON-METHANE HC	69.3	1997.5	1356.8	1888.9	1284.0	1966.9	1201.4	1679.4	1147.2	1829.7	1650.6	1828.1
TOTAL SURROGATE	25.8	1883.8	1356.0	1616.9	1282.8	1663.0	1198.2	1334.6	1140.6	1448.7	1207.4	1318.1

SURROGATE RUN 76-G
GLASS CHAMBER
1974 MAY 23

PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		855	945	1015	1045	1115	1145	1215	1245	1315	1345	1445	1545
ELAPSED TIME(MIN)		-50	0	30	60	90	120	150	180	210	240	300	360
		CONCENTRATIONS (PPB)											
METHANE		816	2880	****	****	****	2880	****	****	****	2770	****	2720
	PPBC	816	2880	****	****	****	2880	****	****	****	2770	****	2720
ETHENE		2.4	45.6	****	****	****	40.0	****	****	****	32.0	****	28.8
	PPBC	4.8	91.2	****	****	****	80.0	****	****	****	64.0	****	57.6
ETHANE		5.5	88.0	****	****	****	88.0	****	****	****	80.0	****	88.0
	PPBC	11.0	176	****	****	****	176	****	****	****	160	****	176
ACETYLENE (PORAPAK N)		1.2	52.8	****	****	****	51.2	****	****	****	46.4	****	46.4
	PPBC	2.4	106	****	****	****	102	****	****	****	92.8	****	92.8
PROPANE		1.9	16.4	16.2	16.2	16.2	16.0	16.0	15.6	15.2	15.0	14.6	14.0
	PPBC	5.7	49.2	48.6	48.6	48.6	48.0	48.0	46.8	45.6	45.0	43.8	42.0
PROPENE		0.6	13.3	12.0	10.8	9.4	8.0	7.2	6.4	5.4	4.8	4.0	2.8
	PPBC	1.8	39.9	36.0	32.4	28.2	24.0	21.6	19.2	16.2	14.4	12.0	8.4
ISOBUTANE		0.0	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.6
	PPBC	0.0	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.6	2.4
N-BUTANE		0.2	216	214	211	208	202	198	192	187	182	176	166
	PPBC	0.8	864	856	844	832	808	792	768	748	728	704	664
ACETYLENE (DMS)		1.2	52.8	52.8	51.2	51.2	51.2	49.6	48.0	48.0	46.4	46.4	44.8
	PPBC	2.4	106	106	102	102	102	99.2	96.0	96.0	92.8	92.8	89.6
TRANS-2-BUTENE		0.0	0.5	0.5	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PPBC	0.0	2.0	2.0	1.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ISOPENTANE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	1.0	1.2	1.5
	PPBC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	5.0	6.0	7.5
CIS-2-BUTENE		0.0	16.1	14.0	10.8	7.8	5.8	4.0	2.7	2.0	1.4	0.8	0.4
	PPBC	0.0	64.4	56.0	43.2	31.2	23.2	16.0	10.8	8.0	5.6	3.2	1.6
N-PENTANE		0.0	0.0	0.0	0.1	0.1	0.3	0.2	0.2	0.2	0.4	0.4	0.6
	PPBC	0.0	0.0	0.0	0.5	0.5	1.5	1.0	1.0	1.0	2.0	2.0	3.0
2,3-DIMETHYL BUTANE		0.0	116	116	113	110	106	101	97.1	94.9	92.7	****	79.4
	PPBC	0.0	696	696	678	660	636	606	583	569	556	****	476
2-METHYL BUTENE-2		0.0	16.2	12.3	9.2	6.1	2.2	0.0	0.0	0.0	0.0	0.0	0.0

56 %

0 %

SURROGATE RUN 76-G
GLASS CHAMBER
1974 MAY 23

CLOCK TIME		855	945	1015	1045	1115	1145	1215	1245	1315	1345	1445	1545
ELAPSED TIME(MIN)		-50	0	30	60	90	120	150	180	210	240	300	360
	PPBC	0.0	81.0	61.5	46.0	30.5	11.0	0.0	0.0	0.0	0.0	0.0	0.0
ACETALDEHYDE		1.5	3.4	****	22.5	****	41.6	****	48.0	****	44.0	48.0	48.0
	PPBC	3.0	6.8	****	45.0	****	83.2	****	96.0	****	88.0	96.0	96.0
PROPIONALDEHYDE		0.3	0.4	****	0.7	****	1.0	****	1.6	****	1.6	2.0	2.4
	PPBC	0.9	1.2	****	2.1	****	3.0	****	4.8	****	4.8	6.0	7.2
ACETONE		1.9	7.2	****	19.0	****	27.6	****	36.8	****	40.8	52.8	64.8
	PPBC	5.7	21.6	****	57.0	****	82.8	****	110	****	122	158	194
BENZENE		0.2	0.2	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
	PPBC	1.2	1.2	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
METHYL ETHYL KETONE		0.3	0.6	****	2.0	****	4.0	****	5.6	****	6.4	8.0	10.4
	PPBC	1.2	2.4	****	8.0	****	16.0	****	22.4	****	25.6	32.0	41.6
TOLUENE		0.2	17.2	****	17.2	****	15.6	****	15.2	****	15.0	14.0	13.6
	PPBC	1.4	120	****	120	****	109	****	106	****	105	98.0	95.2
PARA-XYLENE		0.1	2.4	****	2.4	****	2.4	****	2.8	****	3.2	3.6	5.2
	PPBC	0.8	19.2	****	19.2	****	19.2	****	22.4	****	25.6	28.8	41.6
META-XYLENE		3.5	40.0	****	34.0	****	27.2	****	22.8	****	19.2	16.8	14.8
	PPBC	28.0	320	****	272	****	218	****	182	****	154	134	118
ORTHO-XYLENE		0.0	0.0	****	0.0	****	0.0	****	0.1	****	0.1	0.1	0.2
	PPBC	0.0	0.0	****	0.0	****	0.0	****	0.8	****	0.8	0.8	1.6
N-PROPYL BENZENE		1.0	0.4	****	0.4	****	0.4	****	0.3	****	0.4	0.4	0.4
	PPBC	9.0	3.6	****	3.6	****	3.6	****	2.7	****	3.6	3.6	3.6
META-ETHYL TOLUENE		1.3	0.7	****	1.0	****	1.0	****	1.0	****	1.0	1.0	1.5
	PPBC	11.7	6.3	****	9.0	****	9.0	****	9.0	****	9.0	9.0	13.5
1,2,3 TRIMETHYL BENZENE		2.6	1.5	****	2.0	****	1.8	****	2.0	****	2.5	2.0	3.0
	PPBC	23.4	13.5	****	18.0	****	16.2	****	18.0	****	22.5	18.0	27.0
PAN		****	0.0	****	0.0	****	0.3	****	0.6	****	1.2	2.2	3.0
	PPBC	****	0.0	****	0.0	****	0.6	****	1.2	****	2.4	4.4	6.0
FORMALDEHYDE		****	31.0	****	82.0	****	122	****	155	****	176	180	213
	PPBC	****	31.0	****	82.0	****	122	****	155	****	176	180	213
3P COL., 2 MIN 40 SEC		6.0	30.0	****	82.0	****	134	****	176	****	224	256	294
3P COL., 3 MIN 10 SEC		2.0	53.0	****	70.0	****	48.0	****	48.0	****	48.0	48.0	44.0
3P COL., 4 MIN 10 SEC		0.0	0.0	****	2.0	****	4.0	****	2.0	****	2.0	0.0	0.0
3P COL., 5 MIN 00 SEC		4.0	16.0	****	18.0	****	32.0	****	56.0	****	40.0	48.0	56.0

SURROGATE RUN 76-G
GLASS CHAMBER
1974 MAY 23

CLOCK TIME	855	945	1015	1045	1115	1145	1215	1245	1315	1345	1445	1545
ELAPSED TIME(MIN)	-50	0	30	60	90	120	150	180	210	240	300	360
3P COL., 5 MIN 30 SEC	3.0	8.0	****	6.0	****	12.0	****	8.0	****	8.0	8.0	16.0
3P COL., 6 MIN 30 SEC	6.0	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 7 MIN 10 SEC	2.0	0.0	****	2.0	****	4.0	****	8.0	****	8.0	10.0	10.0
3P COL., 11 MIN 40 SEC	2.0	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 21 MIN 00 SEC	3.0	0.0	****	1.0	****	1.0	****	2.0	****	1.0	4.0	4.0
3P COL., 23 MIN 00 SEC	0.0	0.0	****	1.0	****	1.0	****	0.0	****	3.0	0.0	0.0
3P COL., 49 MIN 00 SEC	16.0	4.0	****	6.0	****	8.0	****	11.0	****	14.0	15.0	18.0
TOTAL HC PPBC	928.8	5597.7	****	****	****	5473.3	****	****	****	5183.5	****	5109.2
TOTAL NON-METHANE HC	112.8	2717.7	1862.5	2433.4	1735.0	2593.3	1584.6	2257.7	1487.0	2413.5	1634.8	2389.2
TOTAL SURROGATE	55.9	2609.7	1861.7	2188.2	1733.7	2235.4	1582.8	1812.2	1483.2	1924.6	1088.2	1730.8

SURROGATE RUN 77-G
GLASS CHAMBER
1974 MAY 24

LIGHT INTENSITY = 100% OF MAXIMUM

PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		910	945	1015	1045	1115	1145	1215	1245	1315	1345	1445	1545
ELAPSED TIME(MIN)		-35	0	30	60	90	120	150	180	210	240	300	360
		CONCENTRATIONS (PPB)											
METHANE		720	2860	****	****	****	2850	****	****	****	2770	****	2740
	PPBC	720	2860	****	****	****	2850	****	****	****	2770	****	2740
ETHENE		1.7	36.8	****	****	****	28.8	****	****	****	22.4	****	17.6
	PPBC	3.4	73.6	****	****	****	57.6	****	****	****	44.8	****	35.2
ETHANE		6.3	73.6	****	****	****	70.4	****	****	****	67.2	****	65.6
	PPBC	12.6	147	****	****	****	141	****	****	****	134	****	131
ACETYLENE (PCROPAK N)		1.3	42.4	****	****	****	40.8	****	****	****	38.4	****	36.0
	PPBC	2.6	84.8	****	****	****	81.6	****	****	****	76.8	****	72.0
PROPANE		2.1	14.0	13.6	13.2	13.2	13.0	13.0	12.8	12.7	12.6	12.6	12.5
	PPBC	6.3	42.0	40.8	39.6	39.6	39.0	39.0	38.4	38.1	37.8	37.8	37.5
PROPENE		0.4	10.4	8.8	6.8	5.8	4.8	4.0	2.8	2.7	2.2	1.4	0.7
	PPBC	1.2	31.2	26.4	20.4	17.4	14.4	12.0	8.4	8.1	6.6	4.2	2.1
ISOBUTANE		0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.4	0.5	0.6	0.6
	PPBC	0.0	0.0	0.0	0.0	0.4	0.8	0.8	0.8	1.6	2.0	2.4	2.4
N-BUTANE		0.1	173	166	160	158	154	****	147	142	139	136	126
	PPBC	0.4	692	664	640	632	616	****	588	568	556	544	504
ACETYLENE (DMS)		1.4	41.6	40.0	40.0	40.0	40.0	38.4	36.8	37.6	38.4	38.4	36.8
	PPBC	2.8	83.2	80.0	80.0	80.0	80.0	76.8	73.6	75.2	76.8	76.8	73.6
TRANS-2-BUTENE		0.0	0.6	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PPBC	0.0	2.4	1.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ISOPENTANE		0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.8	0.8	0.9	1.0	1.0
	PPBC	0.0	0.0	0.0	0.0	0.0	1.0	2.5	4.0	4.0	4.5	5.0	5.0
CIS-2-BUTENE		0.0	13.0	9.0	5.6	3.0	2.0	1.0	0.6	0.2	0.0	0.0	0.0
	PPBC	0.0	52.0	36.0	22.4	12.0	8.0	4.0	2.4	0.8	0.0	0.0	0.0
N-PENTANE		0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.4
	PPBC	0.0	0.0	0.0	0.5	0.5	0.5	1.0	1.5	1.5	1.5	2.0	2.0
2,3-DIMETHYL BUTANE		0.0	93.2	89.4	84.7	80.6	76.5	72.6	70.8	67.3	65.9	60.0	54.1
	PPBC	0.0	559	536	508	484	459	436	425	404	395	360	325
2-METHYL BUTENE-2		0.0	13.8	6.4	2.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SURROGATE RUN 77-G
GLASS CHAMBER
1974 MAY 24

CLOCK TIME		910	945	1015	1045	1115	1145	1215	1245	1315	1345	1445	1545
ELAPSED TIME(MIN)		-35	0	30	60	90	120	150	180	210	240	300	360
	PPBC	0.0	69.0	32.0	11.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACETALDEHYDE		1.2	4.0	****	30.0	****	39.2	****	44.0	****	40.8	38.4	36.0
	PPBC	2.4	8.0	****	60.0	****	78.4	****	88.0	****	81.6	76.8	72.0
PROPIONALDEHYDE		0.3	1.0	****	1.2	****	3.2	****	7.2	****	6.4	7.2	7.2
	PPBC	0.9	3.0	****	3.6	****	9.6	****	21.6	****	19.2	21.6	21.6
ACETONE		1.6	6.4	****	19.6	****	34.0	****	45.6	****	58.4	71.2	80.8
	PPBC	4.8	19.2	****	58.8	****	102	****	137	****	175	214	242
BENZENE		0.2	0.1	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
	PPBC	1.2	0.6	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
METHYL ETHYL KETONE		0.4	0.4	****	2.4	****	4.0	****	5.6	****	6.4	8.0	10.4
	PPBC	1.6	1.6	****	9.6	****	16.0	****	22.4	****	25.6	32.0	41.6
TOLUENE		0.2	13.2	****	11.8	****	10.9	****	10.0	****	9.3	9.3	9.1
	PPBC	1.4	92.4	****	82.6	****	76.3	****	70.0	****	65.1	65.1	63.7
PARA-XYLENE		0.1	2.8	****	2.4	****	3.2	****	4.8	****	6.0	6.6	9.8
	PPBC	0.8	22.4	****	19.2	****	25.6	****	38.4	****	48.0	52.8	78.4
META-XYLENE		4.6	30.4	****	22.0	****	15.6	****	12.0	****	9.6	7.8	6.2
	PPBC	36.8	243	****	176	****	125	****	96.0	****	76.8	62.4	49.6
ORTHO-XYLENE		0.0	0.1	****	0.1	****	0.0	****	0.1	****	0.1	0.1	0.1
	PPBC	0.0	0.8	****	0.8	****	0.0	****	0.8	****	0.8	0.8	0.8
N-PROPYL BENZENE		0.8	0.3	****	0.2	****	0.2	****	0.2	****	0.3	0.3	0.3
	PPBC	7.2	2.7	****	1.8	****	1.8	****	1.8	****	2.7	2.7	2.7
META-ETHYL TOLUENE		1.9	0.9	****	1.0	****	1.0	****	1.5	****	2.0	2.0	2.5
	PPBC	17.1	8.1	****	9.0	****	9.0	****	13.5	****	18.0	18.0	22.5
1,2,3 TRIMETHYL BENZENE		4.0	3.0	****	2.0	****	3.0	****	3.0	****	4.0	4.0	5.0
	PPBC	36.0	27.0	****	18.0	****	27.0	****	27.0	****	36.0	36.0	45.0
PAN		****	0.0	****	0.4	****	1.1	****	1.9	****	3.5	5.2	7.6
	PPBC	****	0.0	****	0.8	****	2.2	****	3.8	****	7.0	10.4	15.2
FORMALDEHYDE		****	20.0	****	77.0	****	112	****	120	****	126	162	152
	PPBC	****	20.0	****	77.0	****	112	****	120	****	126	162	152
3P CCL., 2 MIN 40 SEC		9.0	18.0	****	74.0	****	96.0	****	128	****	176	208	268
3P CCL., 3 MIN 10 SEC		0.0	40.0	****	36.0	****	36.0	****	32.0	****	28.0	28.0	28.0
3P CCL., 4 MIN 10 SEC		0.0	3.0	****	4.0	****	2.0	****	2.0	****	0.0	0.0	0.0
3P CCL., 5 MIN 00 SEC		4.0	4.0	****	34.0	****	36.0	****	56.0	****	56.0	56.0	64.0

SURROGATE RUN 77-G
GLASS CHAMBER
1974 MAY 24

CLOCK TIME	910	945	1015	1045	1115	1145	1215	1245	1315	1345	1445	1545
ELAPSED TIME(MIN)	-35	0	30	60	90	120	150	180	210	240	300	360
3P COL., 5 MIN 30 SEC	0.0	18.0	****	****	****	12.0	****	16.0	****	12.0	16.0	20.0
3P COL., 6 MIN 30 SEC	8.0	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 7 MIN 10 SEC	2.0	0.0	****	2.0	****	2.0	****	6.0	****	8.0	8.0	9.0
3P COL., 11 MIN 40 SEC	3.0	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 21 MIN 00 SEC	3.0	1.0	****	1.0	****	2.0	****	2.0	****	3.0	4.0	5.0
3P COL., 23 MIN 00 SEC	2.0	0.0	****	0.0	****	1.0	****	1.0	****	1.0	1.0	1.0
3P COL., 49 MIN 00 SEC	4.0	2.0	****	4.0	****	9.0	****	18.0	****	24.0	24.0	****
TOTAL HC PPBC	856.8	5061.6	****	****	****	4852.6	****	****	****	4711.8	****	4664.3
TOTAL NON-METHANE HC	136.8	2201.6	1417.2	1839.7	1267.0	2002.6	571.7	1782.0	1101.1	1941.8	1786.4	1924.3
TOTAL SURROGATE	64.8	2088.2	1417.2	1580.6	1266.1	1616.7	567.4	1301.6	1094.0	1393.7	1150.3	1220.7

SURROGATE RUN 78-G
GLASS CHAMBER
1974 MAY 29

LIGHT INTENSITY = 100% OF MAXIMUM
0820 CALIBRATION CHECK
PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		820	845	1000	1030	1100	1130	1200	1230	1300	1330	1400	1500	1600	1700	
ELAPSED TIME(MIN)		-100	-75	0	30	60	90	120	150	180	210	240	300	360	420	
CONCENTRATIONS (PPB)																
METHANE		****	720	2770	****	****	****	2850	****	****	****	2700	****	2670	2660	3.6
	PPBC	****	720	2770	****	****	****	2850	****	****	****	2700	****	2670	2660	
ETHENE		****	9.3	43.2	****	****	****	28.8	****	****	****	20.8	****	16.8	14.4	
	PPBC	****	18.6	86.4	****	****	****	57.6	****	****	****	41.6	****	33.6	28.8	
ETHANE		****	13.4	80.0	****	****	****	78.4	****	****	****	73.6	****	72.0	69.6	13.0
	PPBC	****	26.8	160	****	****	****	157	****	****	****	147	****	144	139	
ACETYLENE (POROPAK N)		44.0	3.5	44.0	****	****	****	42.0	****	****	****	38.4	****	36.8	35.2	
	PPBC	88.0	7.0	88.0	****	****	****	84.0	****	****	****	76.8	****	73.6	70.4	
PROPANE		****	3.6	14.8	14.8	14.0	13.6	13.6	13.6	13.2	13.2	13.2	12.9	12.7	12.4	
	PPBC	****	10.8	44.4	44.4	42.0	40.8	40.8	40.8	39.6	39.6	39.6	38.7	38.1	37.2	
PROPENE		****	0.4	9.8	6.8	4.4	2.8	2.0	1.6	1.2	0.8	0.6	0.3	0.2	0.2	
	PPBC	****	1.2	29.4	20.4	13.2	8.4	6.0	4.8	3.6	2.4	1.8	0.9	0.6	0.6	
ISOBUTANE		****	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.3	0.3	0.4	0.4	0.5	
	PPBC	****	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	1.2	1.2	1.6	1.6	2.0	
N-BUTANE		****	0.0	162	157	146	144	138	138	133	130	130	122	118	114	
	PPBC	****	0.0	648	628	584	576	552	552	532	520	520	488	472	456	
ACETYLENE (DMS)		44.0	3.5	40.0	43.2	44.8	44.4	42.4	43.2	41.6	41.2	41.2	39.2	39.2	36.0	
	PPBC	88.0	7.0	80.0	86.4	89.6	88.8	84.8	86.4	83.2	82.4	82.4	78.4	78.4	72.0	
TRANS-2-BUTENE		****	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	PPBC	****	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ISOPENTANE		****	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.5	0.6	0.7	0.8	0.8	
	PPBC	****	0.0	0.0	0.0	0.0	0.5	1.0	2.0	2.0	2.5	3.0	3.5	4.0	4.0	
CIS-2-BUTENE		****	0.0	12.0	4.8	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	PPBC	****	0.0	48.0	19.2	3.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
N-PENTANE		****	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	
	PPBC	****	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.5	1.5	1.5	2.0	
1,3-BUTADIENE		****	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
	PPBC	****	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	
2,2-DIMETHYL BUTANE		****	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

SURROGATE RUN 78-G
GLASS CHAMBER
1974 MAY 29

CLOCK TIME		820	845	1000	1030	1100	1130	1200	1230	1300	1330	1400	1500	1600	1700
ELAPSED TIME(MIN)		-100	-75	0	30	60	90	120	150	180	210	240	300	360	420
	PPBC	****	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-METHYL BUTENE-1		****	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PPBC	****	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2,3-DIMETHYL BUTANE		****	0.0	88.2	82.4	74.1	70.6	65.6	64.1	60.9	57.6	57.1	53.2	50.4	47.0
	PPBC	****	0.0	529	494	445	424	394	385	365	346	343	319	302	282
2-METHYL BUTENE-2		****	0.0	11.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PPBC	****	0.0	57.5	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACETALDEHYDE		****	0.0	0.1	****	****	****	51.2	****	43.5	****	40.8	38.9	34.0	32.8
	PPBC	****	0.0	0.2	****	****	****	102	****	87.0	****	81.6	77.8	68.0	65.6
PROPIONALDEHYDE		****	0.4	0.6	****	2.4	****	2.4	****	3.2	****	4.0	5.6	4.0	4.0
	PPBC	****	1.2	1.8	****	7.2	****	7.2	****	9.6	****	12.0	16.8	12.0	12.0
ACETONE		****	5.0	1.8	****	47.9	****	80.0	****	67.2	****	83.2	91.2	84.8	106
	PPBC	****	15.0	5.4	****	144	****	240	****	202	****	250	274	254	318
BENZENE		****	0.2	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0	0.0
	PPBC	****	1.2	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0	0.0
METHYL ETHYL KETONE		****	0.0	0.0	****	7.0	****	10.4	****	4.8	****	12.0	10.6	9.6	12.4
	PPBC	****	0.0	0.0	****	28.0	****	41.6	****	19.2	****	48.0	42.4	38.4	49.6
TOLUENE		****	0.4	****	****	11.2	****	11.2	****	8.8	****	8.8	9.2	8.0	9.2
	PPBC	****	2.8	****	****	78.4	****	78.4	****	61.6	****	61.6	64.4	56.0	64.4
PARA-XYLENE		****	1.2	3.2	****	6.0	****	6.4	****	6.4	****	9.2	11.0	8.8	10.4
	PPBC	****	9.6	25.6	****	48.0	****	51.2	****	51.2	****	73.6	88.0	70.4	83.2
META-XYLENE		****	0.0	32.0	****	17.6	****	14.0	****	8.8	****	8.5	7.2	5.6	5.2
	PPBC	****	0.0	256	****	141	****	112	****	70.4	****	68.0	57.6	44.8	41.6
META-ETHYL TOLUENE		****	1.2	1.4	****	2.2	****	2.2	****	2.4	****	2.5	3.4	2.8	1.4
	PPBC	****	10.8	12.6	****	19.8	****	19.8	****	21.6	****	22.5	30.6	25.2	12.6
1,2,3 TRIMETHYL BENZENE		****	2.0	2.0	****	4.4	****	5.0	****	4.4	****	6.2	6.0	4.0	2.4
	PPBC	****	18.0	18.0	****	39.6	****	45.0	****	39.6	****	55.8	54.0	36.0	21.6
PAN		****	****	0.0	****	8.7	12.1	15.0	****	16.5	****	14.9	13.6	10.9	8.8
	PPBC	****	****	0.0	****	17.4	24.2	30.0	****	33.0	****	29.8	27.2	21.8	17.6
FORMALDEHYDE		****	****	31.0	****	109	****	125	****	157	****	181	173	176	186
	PPBC	****	****	31.0	****	109	****	125	****	157	****	181	173	176	186
3P COL., 2 MIN 30 SEC		****	12.0	14.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0	0.0
3P COL., 2 MIN 40 SEC		****	14.0	52.0	****	76.0	****	120	****	156	****	200	240	264	320
3P COL., 3 MIN 10 SEC		****	4.0	32.0	****	32.0	****	32.0	****	28.0	****	28.0	28.0	24.0	24.0

SURROGATE RUN 78-G
GLASS CHAMBER
1974 MAY 29

CLOCK TIME	820	845	1000	1030	1100	1130	1200	1230	1300	1330	1400	1500	1600	1700
ELAPSED TIME(MIN)	-100	-75	0	30	60	90	120	150	180	210	240	300	360	420
3P COL., 3 MIN 40 SEC	****	0.0	60.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0	0.0
3P COL., 5 MIN 00 SEC	****	0.0	5.0	****	0.0	****	0.0	****	12.0	****	0.0	42.0	52.0	24.0
3P COL., 5 MIN 30 SEC	****	0.0	0.0	****	20.0	****	16.0	****	16.0	****	8.0	25.0	16.0	42.0
3P COL., 7 MIN 00 SEC	****	0.0	0.0	****	4.0	****	8.0	****	8.0	****	8.0	8.0	8.0	12.0
3P COL., 14 MIN 40 SEC	****	5.0	0.0	****	0.0	****	0.0	****	0.0	****	0.0	1.0	0.0	0.0
3P COL., 20 MIN 00 SEC	****	0.0	0.0	****	1.0	****	2.0	****	0.0	****	2.0	3.0	0.0	0.0
3P COL., 21 MIN 00 SEC	****	2.0	0.0	****	1.0	****	3.0	****	0.0	****	3.0	4.0	3.0	3.0
3P COL., 23 MIN 00 SEC	****	0.0	1.0	****	0.0	****	0.0	****	2.0	****	1.0	0.0	0.0	0.0
3P COL., 49 MIN 00 SEC	****	3.0	0.0	****	17.0	****	48.0	****	43.0	****	45.0	45.0	30.0	26.0
TOTAL HC PPBC	****	843.0	4809.5	****	****	****	4995.3	****	****	****	4761.6	****	4546.8	4555.2
TOTAL NON-METHANE HC	88.0	123.0	2039.5	1303.8	1808.5	1164.7	2145.3	1072.8	1780.2	994.7	2061.6	1837.2	1876.8	1695.2
TOTAL SURROGATE	88.0	67.2	1944.9	1303.8	1395.8	1138.0	1481.6	1068.6	1155.8	990.0	1302.0	1047.2	1167.5	1121.0

SURROGATE RUN 79-G
GLASS CHAMBER
1974 MAY 30

C82C CALIBRATION CHECK

PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		820	845	1000	1030	1100	1130	1200	1230	1300	1330	1400	1500	1600	1700
ELAPSED TIME(MIN)		-100	-75	0	30	60	90	120	150	180	210	240	300	360	420
		CONCENTRATIONS (PPB)													
METHANE		****	752	2220	****	****	****	2250	****	****	****	2280	****	2320	2320
	PPBC	****	752	2220	****	****	****	2250	****	****	****	2280	****	2320	2320
ETHENE		****	6.8	27.2	****	26.4	****	24.0	****	22.4	****	21.6	19.2	18.4	17.6
	PPBC	****	13.6	54.4	****	52.8	****	48.0	****	44.8	****	43.2	38.4	36.8	35.2
ETHANE		****	12.4	56.8	****	56.0	****	56.0	****	57.6	****	56.8	56.0	57.6	57.6
	PPBC	****	24.8	114	****	112	****	112	****	115	****	114	112	115	115
ACETYLENE (PORAPAK N)		45.6	2.6	27.2	****	27.2	****	26.4	****	26.4	****	26.0	24.0	24.8	24.0
	PPBC	91.2	5.2	54.4	****	54.4	****	52.8	****	52.8	****	52.0	48.0	49.6	48.0
PROPANE		****	4.0	11.2	11.1	11.2	11.2	11.2	11.2	11.4	11.3	11.3	11.4	11.6	12.0
	PPBC	****	12.0	33.6	33.3	33.6	33.6	33.6	33.6	34.2	33.9	33.9	34.2	34.8	36.0
PROPENE		****	0.4	6.3	5.6	4.9	4.3	3.7	3.3	2.8	2.6	2.4	1.8	1.6	1.2
	PPBC	****	1.2	18.9	16.8	14.7	12.9	11.1	9.9	8.4	7.8	7.2	5.4	4.8	3.6
ISOBUTANE		****	0.0	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.4	0.4	0.4	0.5	0.6
	PPBC	****	0.0	0.8	0.8	0.8	0.8	1.2	1.2	0.8	1.6	1.6	1.6	2.0	2.4
N-BUTANE		****	0.0	101	99.2	97.6	95.2	94.4	92.8	89.6	86.4	85.6	81.6	80.0	80.0
	PPBC	****	0.0	404	397	390	381	378	371	358	346	342	326	320	320
ACETYLENE (CMS)		46.0	2.5	27.2	27.2	27.2	26.4	26.4	26.4	25.6	25.6	24.0	24.0	24.0	24.0
	PPBC	92.0	5.0	54.4	54.4	54.4	52.8	52.8	52.8	51.2	51.2	48.0	48.0	48.0	48.0
TRANS-2-BUTENE		****	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PPBC	****	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ISOPENTANE		****	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.5	0.5	0.8	0.8	0.8
	PPBC	****	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0	2.5	2.5	4.0	4.0	4.0
CIS-2-BUTENE		****	0.0	7.5	5.8	4.6	3.0	2.2	1.4	1.2	0.6	0.5	0.0	0.0	0.0
	PPBC	****	0.0	30.0	23.2	18.4	12.0	8.8	5.6	4.8	2.4	2.0	0.0	0.0	0.0
N-PENTANE		****	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.6	0.5	0.4
	PPBC	****	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	3.0	2.5	2.0
2,3-DIMETHYL BUTANE		****	0.0	54.9	53.4	52.7	50.1	48.2	46.2	45.3	43.8	41.5	39.4	38.2	36.8
	PPBC	****	0.0	329	320	316	301	289	277	272	263	249	236	229	221
2-METHYL BUTENE-2		****	0.0	5.0	4.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SURROGATE RUN 79-G
GLASS CHAMBER
1974 MAY 30

CLOCK TIME		820	845	1000	1030	1100	1130	1200	1230	1300	1330	1400	1500	1600	1700
ELAPSED TIME(MIN)		-100	-75	0	30	60	90	120	150	180	210	240	300	360	420
	PPBC	****	0.0	25.0	22.5	11.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACETALDEHYDE		****	0.0	0.1	****	16.4	****	23.2	****	23.2	****	22.8	26.0	25.0	23.6
	PPBC	****	0.0	0.2	****	32.8	****	46.4	****	46.4	****	45.6	52.0	50.0	47.2
PROPIONALDEHYDE		****	0.4	0.4	****	0.5	****	1.0	****	1.0	****	1.0	1.2	1.6	2.0
	PPBC	****	1.2	1.2	****	1.5	****	3.0	****	3.0	****	3.0	3.6	4.8	6.0
ACETONE		****	1.5	0.5	****	11.4	****	18.6	****	24.8	****	27.2	33.6	36.0	33.6
	PPBC	****	4.5	1.5	****	34.2	****	55.8	****	74.4	****	81.6	101	108	101
BENZENE		****	0.3	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0	0.0
	PPBC	****	1.8	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0	0.0
METHYL ETHYL KETONE		****	0.0	0.0	****	0.1	****	2.6	****	4.4	****	2.4	1.0	3.2	4.4
	PPBC	****	0.0	0.0	****	0.4	****	10.4	****	17.6	****	9.6	4.0	12.8	17.6
TOLUENE		****	0.4	7.6	****	6.8	****	7.5	****	6.4	****	6.4	6.8	6.4	7.2
	PPBC	****	2.8	53.2	****	47.6	****	52.5	****	44.8	****	44.8	47.6	44.8	50.4
PARA-XYLENE		****	4.0	2.5	****	3.5	****	3.6	****	3.2	****	4.4	5.2	5.6	5.0
	PPBC	****	32.0	20.0	****	28.0	****	28.8	****	25.6	****	35.2	41.6	44.8	40.0
META-XYLENE		****	0.0	18.0	****	14.0	****	11.8	****	9.0	****	7.6	7.6	6.8	6.4
	PPBC	****	0.0	144	****	112	****	94.4	****	72.0	****	60.8	60.8	54.4	51.2
META-ETHYL TOLUENE		****	0.5	2.5	****	0.6	****	1.0	****	0.5	****	1.0	1.0	0.8	1.2
	PPBC	****	4.5	22.5	****	5.4	****	9.0	****	4.5	****	9.0	9.0	7.2	10.8
1,2,3 TRIMETHYL BENZENE		****	1.6	2.0	****	3.0	****	2.0	****	2.5	****	1.2	1.4	1.6	2.4
	PPBC	****	14.4	18.0	****	27.0	****	18.0	****	22.5	****	10.8	12.6	14.4	21.6
PAN		****	****	0.0	****	0.0	****	0.3	****	0.4	****	0.7	0.9	1.5	2.1
	PPBC	****	****	0.0	****	0.0	****	0.6	****	0.8	****	1.4	1.8	3.0	4.2
FORMALDEHYDE		****	****	16.0	****	78.0	****	104	****	81.0	****	138	152	155	162
	PPBC	****	****	16.0	****	78.0	****	104	****	81.0	****	138	152	155	162
3P COL., 2 MIN 40 SEC		****	10.0	40.0	0.0	59.0	0.0	120	0.0	120	0.0	140	192	208	240
3P COL., 3 MIN 10 SEC		****	0.0	38.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3P COL., 3 MIN 40 SEC		****	0.0	20.0	0.0	19.0	0.0	20.0	0.0	16.0	0.0	18.0	16.0	16.0	12.0
3P COL., 4 MIN 10 SEC		****	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	4.0	4.0
3P COL., 5 MIN 00 SEC		****	3.0	2.0	0.0	18.0	0.0	40.0	0.0	4.0	0.0	44.0	54.0	48.0	0.0
3P COL., 5 MIN 30 SEC		****	0.0	0.0	0.0	0.0	0.0	12.0	0.0	6.0	0.0	6.0	8.0	4.0	16.0
3P COL., 7 MIN 10 SEC		****	0.0	0.0	0.0	0.0	0.0	4.0	0.0	2.0	0.0	2.0	4.0	4.0	6.0

SURROGATE RUN 79-G
GLASS CHAMBER
1974 MAY 30

CLOCK TIME	820	845	1000	1030	1100	1130	1200	1230	1300	1330	1400	1500	1600	1700
ELAPSED TIME(MIN)	-100	-75	0	30	60	90	120	150	180	210	240	300	360	420
3P CCL., 14 MIN 40 SEC	****	2.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3P CCL., 21 MIN 00 SEC	****	1.0	0.0	0.0	1.0	0.0	2.0	0.0	2.0	0.0	2.0	6.0	6.0	0.0
3P CCL., 22 MIN 00 SEC	****	0.0	1.0	0.0	1.0	0.0	1.0	0.0	2.0	0.0	2.0	6.0	2.0	2.0
3P CCL., 44 MIN 00 SEC	****	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3P CCL., 49 MIN 00 SEC	****	6.0	2.0	0.0	2.0	0.0	6.0	0.0	5.0	0.0	8.0	12.0	16.0	15.0
TOTAL HC PPBC	****	869.9	3560.7	****	****	****	3609.2	****	****	****	3566.2	****	3617.3	3619.0
TOTAL NON-METHANE HC	91.6	117.9	1340.7	868.2	1371.2	799.0	1359.2	753.5	1285.0	708.8	1286.2	1295.2	1297.3	1299.0
TOTAL SURROGATE	91.6	59.5	1260.5	867.4	1163.1	798.2	1080.0	750.3	1006.4	703.7	946.9	909.2	888.8	880.4

SURROGATE RUN 80-G
GLASS CHAMBER
1974 MAY 31

PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		855	1000	1030	1100	1130	1200	1230	1300	1330	1400	1500	1600
ELAPSED TIME(MIN)		-65	0	30	60	90	120	150	180	210	240	300	360
		CONCENTRATIONS (PPB)											
METHANE		712	2820	****	****	****	2850	****	****	****	2770	****	2750
	PPBC	712	2820	****	****	****	2850	****	****	****	2770	****	2750
ETHENE		4.8	49.6	****	44.8	****	41.6	****	36.8	****	34.4	****	28.8
	PPBC	9.6	99.2	****	89.6	****	83.2	****	73.6	****	68.8	****	57.6
ETHANE		9.5	96.0	****	92.8	****	92.8	****	91.2	****	88.8	****	84.8
	PPBC	19.0	192	****	186	****	186	****	182	****	178	****	170
ACETYLENE (POROPAK N)		2.0	56.0	****	53.6	****	52.0	****	51.2	****	49.6	****	47.2
	PPBC	4.0	112	****	107	****	104	****	102	****	99.2	****	94.4
PROPANE		4.2	18.0	18.6	18.0	17.8	17.6	17.6	17.4	17.0	17.0	16.4	16.1
	PPBC	12.6	54.0	55.8	54.0	53.4	52.8	52.8	52.2	51.0	51.0	49.2	48.3
PROPENE		0.4	12.4	11.4	9.6	8.4	7.6	6.4	5.6	5.0	4.4	3.0	2.0
	PPBC	1.2	37.2	34.2	28.8	25.2	22.8	19.2	16.8	15.0	13.2	9.0	6.0
ISOBUTANE		0.0	0.4	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.4
	PPBC	0.0	1.6	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	1.6
N-BUTANE		0.2	214	208	205	198	195	190	187	182	181	171	166
	PPBC	0.8	856	832	820	792	780	760	748	728	724	684	664
ACETYLENE (DMS)		2.0	56.0	54.4	52.8	52.8	51.2	81.2	49.6	48.0	48.0	48.0	46.4
	PPBC	4.0	112	109	106	106	102	162	99.2	96.0	96.0	96.0	92.8
TRANS-2-BUTENE		0.0	0.7	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PPBC	0.0	2.8	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ISOPENTANE		0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.8	1.0	1.0	1.0
	PPBC	0.0	0.0	0.0	0.0	0.0	0.0	1.5	2.5	4.0	5.0	5.0	5.0
CIS-2-BUTENE		0.0	16.0	13.0	9.0	6.2	4.0	2.6	1.6	0.8	0.6	0.4	0.0
	PPBC	0.0	64.0	52.0	36.0	24.8	16.0	10.4	6.4	3.2	2.4	1.6	0.0
N-PENTANE		0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.4	0.5	0.6
	PPBC	0.0	0.0	0.5	0.5	0.5	0.5	0.5	1.0	2.0	2.0	2.5	3.0
2,3-DIMETHYL BUTANE		0.0	117	112	108	104	100	96.5	94.4	92.1	89.4	83.8	78.9
	PPBC	0.0	702	672	648	624	600	579	566	553	536	503	473
2-METHYL BUTENE-2		0.0	15.6	8.9	5.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2.5%

11.7 %

SURROGATE RUN 80-G
GLASS CHAMBER
1974 MAY 31

CLOCK TIME		855	1000	1030	1100	1130	1200	1230	1300	1330	1400	1500	1600
ELAPSED TIME(MIN)		-65	0	30	60	90	120	150	180	210	240	300	360
	PPBC	0.0	78.0	44.5	25.0	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACETALDEHYDE		1.5	2.4	****	27.2	****	42.8	****	44.8	****	47.2	48.0	51.6
	PPBC	3.0	4.8	****	54.4	****	85.6	****	89.6	****	94.4	96.0	103
PROPIONALDEHYDE		0.4	0.6	****	1.0	****	1.0	****	1.6	****	2.0	2.4	3.2
	PPBC	1.2	1.8	****	3.0	****	3.0	****	4.8	****	6.0	7.2	9.6
ACETONE		1.6	4.3	****	18.8	****	29.6	****	40.8	****	48.0	52.8	53.6
	PPBC	4.8	12.9	****	56.4	****	88.8	****	122	****	144	158	161
BENZENE		0.3	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
	PPBC	1.8	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
METHYL ETHYL KETONE		0.4	11.4	****	14.4	****	10.4	****	10.8	****	11.2	13.2	11.2
	PPBC	1.6	45.6	****	57.6	****	41.6	****	43.2	****	44.8	52.8	44.8
TOLUENE		0.2	17.6	****	13.1	****	14.1	****	13.9	****	13.6	12.9	12.6
	PPBC	1.4	123	****	91.7	****	98.7	****	97.3	****	95.2	90.3	88.2
PARA-XYLENE		0.0	4.8	****	4.8	****	4.8	****	5.6	****	5.2	7.2	8.4
	PPBC	0.0	38.4	****	38.4	****	38.4	****	44.8	****	41.6	57.6	67.2
META-XYLENE		6.5	36.0	****	26.0	****	24.4	****	20.0	****	17.6	15.2	13.6
	PPBC	52.0	288	****	208	****	195	****	160	****	141	122	109
ISOPROPYL BENZENE		0.2	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
	PPBC	1.8	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
N-PROPYL BENZENE		0.8	0.3	****	0.2	****	0.1	****	0.1	****	0.1	0.1	0.0
	PPBC	7.2	2.7	****	1.8	****	0.9	****	0.9	****	0.9	0.9	0.0
META-ETHYL TOLUENE		2.0	1.4	****	1.2	****	1.3	****	1.1	****	1.3	1.8	1.9
	PPBC	18.0	12.6	****	10.8	****	11.7	****	9.9	****	11.7	16.2	17.1
1,2,3 TRIMETHYL BENZENE		4.4	3.0	****	2.4	****	2.0	****	2.0	****	2.1	3.0	4.0
	PPBC	39.6	27.0	****	21.6	****	18.0	****	18.0	****	18.9	27.0	36.0
PAN		****	0.0	****	0.1	****	0.9	****	2.1	****	3.8	5.6	6.4
	PPBC	****	0.0	****	0.2	****	1.8	****	4.2	****	7.6	11.2	12.8
FORMALDEHYDE		****	0.0	****	13.0	****	119	****	78.0	****	101	119	131
	PPBC	****	0.0	****	13.0	****	119	****	78.0	****	101	119	131
3P COL., 2 MIN 40 SEC		8.0	48.0	****	84.0	****	136	****	168	****	200	228	248
3P COL., 3 MIN 10 SEC		0.0	40.0	****	40.0	****	46.0	****	44.0	****	40.0	40.0	36.0
3P COL., 4 MIN 10 SEC		1.0	2.0	****	4.0	****	4.0	****	4.0	****	0.0	0.0	0.0
3P COL., 5 MIN 00 SEC		4.0	156	****	****	****	40.0	****	52.0	****	52.0	64.0	64.0

SURROGATE RUN 80-G
GLASS CHAMBER
1974 MAY 31

CLOCK TIME	855	1000	1030	1100	1130	1200	1230	1300	1330	1400	1500	1600
ELAPSED TIME(MIN)	-65	0	30	60	90	120	150	180	210	240	300	360
3P COL., 5 MIN 30 SEC	0.0	0.0	****	8.0	****	8.0	****	12.0	****	16.0	16.0	16.0
3P COL., 6 MIN 30 SEC	16.0	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 7 MIN 10 SEC	2.0	0.0	****	0.0	****	4.0	****	8.0	****	8.0	8.0	8.0
3P COL., 21 MIN 00 SEC	4.0	2.0	****	1.0	****	2.0	****	3.0	****	4.0	4.0	4.0
3P COL., 23 MIN 00 SEC	5.0	3.0	****	2.0	****	3.0	****	4.0	****	1.0	2.0	3.0
3P COL., 42 MIN 00 SEC	6.0	2.0	****	1.0	****	1.0	****	2.0	****	2.0	2.0	2.0
3P COL., 49 MIN 00 SEC	12.0	6.0	****	3.0	****	2.0	****	7.0	****	8.0	12.0	26.0
TOTAL HC PPBC	891.6	5575.8	****	****	****	5397.6	****	****	****	5155.7	****	5051.6
TOTAL NON-METHANE HC	179.6	2755.8	1801.4	2551.6	1634.0	2547.6	1586.6	2424.0	1452.6	2385.7	2109.1	2301.6
TOTAL SURROGATE	100.6	2608.4	1800.9	2293.9	1633.5	2137.5	1583.8	2003.9	1445.8	1907.0	1554.5	1709.5

SURROGATE RUN 81-G
GLASS CHAMBER
1974 JUNE 4

PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		930	1045	1115	1145	1215	1245	1315	1345	1415	1445	1545	1645
ELAPSED TIME(MIN)		-75	0	30	60	90	120	150	180	210	240	300	360
		CONCENTRATIONS (PPB)											
METHANE		736	2960	****	****	****	2930	****	****	****	2910	****	2880
	PPBC	736	2960	****	****	****	2930	****	****	****	2910	****	2880
ETHENE		5.2	48.8	****	43.2	****	36.8	****	****	****	28.0	24.8	20.0
	PPBC	10.4	97.6	****	86.4	****	73.6	****	****	****	56.0	49.6	40.0
ETHANE		6.3	92.8	****	91.2	****	91.2	****	****	****	86.4	84.8	81.6
	PPBC	12.6	186	****	182	****	182	****	****	****	173	170	163
ACETYLENE (PORAPAK N)		1.4	54.4	****	52.0	****	52.0	****	****	****	49.6	48.0	44.0
	PPBC	2.8	109	****	104	****	104	****	****	****	99.2	96.0	88.0
PROPANE		4.8	19.8	19.6	19.4	19.2	18.8	18.4	18.4	18.4	18.4	18.0	17.6
	PPBC	14.4	59.4	58.8	58.2	57.6	56.4	55.2	55.2	55.2	55.2	54.0	52.8
PROPENE		0.6	12.4	10.4	8.0	6.4	4.8	3.6	2.8	2.0	1.6	0.6	0.4
	PPBC	1.8	37.2	31.2	24.0	19.2	14.4	10.8	8.4	6.0	4.8	1.8	1.2
ISOBUTANE		0.1	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.5	0.8	0.8	1.0
	PPBC	0.4	1.6	1.6	1.6	1.6	1.6	2.4	1.6	2.0	3.2	3.2	4.0
N-BUTANE		0.2	208	205	195	192	186	197	181	176	173	163	159
	PPBC	0.8	832	820	780	768	744	788	724	704	692	652	636
ACETYLENE (DMS)		1.5	54.4	52.8	51.2	49.6	48.0	52.0	53.2	48.0	48.0	44.8	41.6
	PPBC	3.0	109	106	102	99.2	96.0	104	106	96.0	96.0	89.6	83.2
TRANS-2-BUTENE		0.0	0.6	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PPBC	0.0	2.4	1.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ISOPENTANE		0.0	0.0	0.0	0.0	0.5	1.0	0.8	1.0	1.5	1.5	1.6	1.8
	PPBC	0.0	0.0	0.0	0.0	2.5	5.0	4.0	5.0	7.5	7.5	8.0	9.0
CIS-2-BUTENE		0.0	15.5	10.4	5.0	2.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
	PPBC	0.0	62.0	41.6	20.0	8.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
N-PENTANE		0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.6	0.4	0.6	0.8	1.0
	PPBC	0.0	0.0	0.0	0.0	0.0	2.0	4.0	3.0	2.0	3.0	4.0	5.0
2,3-DIMETHYL BUTANE		0.0	106	103	97.4	91.8	82.4	****	81.3	78.6	74.7	69.4	64.7
	PPBC	0.0	636	618	584	551	494	****	488	472	448	416	388
2-METHYL BUTENE-2		0.0	13.3	6.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2.7 %

12.1

SURROGATE RUN 81-G
GLASS CHAMBER
1974 JUNE 4

CLOCK TIME		930	1045	1115	1145	1215	1245	1315	1345	1415	1445	1545	1645
ELAPSED TIME(MIN)		-75	0	30	60	90	120	150	180	210	240	300	360
	PPBC	0.0	66.5	30.5	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACETALDEHYDE		****	0.1	****	38.0	****	36.8	****	52.8	****	49.6	43.2	41.2
	PPBC	****	0.2	****	76.0	****	73.6	****	106	****	99.2	86.4	82.4
PROPIONALDEHYDE		****	0.5	****	1.0	****	2.0	****	2.0	****	2.4	12.4	3.2
	PPBC	****	1.5	****	3.0	****	6.0	****	6.0	****	7.2	37.2	9.6
ACETONE		****	4.8	****	26.4	****	37.6	****	59.2	****	68.0	73.6	72.0
	PPBC	****	14.4	****	79.2	****	113	****	178	****	204	221	216
METHYL ETHYL KETONE		****	0.0	****	2.4	****	4.8	****	17.6	****	9.6	11.2	12.0
	PPBC	****	0.0	****	9.6	****	19.2	****	70.4	****	38.4	44.8	48.0
TOLUENE		****	13.6	****	11.2	****	12.0	****	10.0	****	10.4	9.6	8.8
	PPBC	****	95.2	****	78.4	****	84.0	****	70.0	****	72.8	67.2	61.6
PARA-XYLENE		****	2.4	****	5.6	****	6.4	****	7.6	****	9.0	9.6	10.0
	PPBC	****	19.2	****	44.8	****	51.2	****	60.8	****	72.0	76.8	80.0
META-XYLENE		****	30.4	****	20.0	****	20.0	****	12.4	****	10.8	8.0	6.4
	PPBC	****	243	****	160	****	160	****	99.2	****	86.4	64.0	51.2
META-ETHYL TOLUENE		****	0.5	****	1.2	****	0.6	****	0.8	****	0.8	2.6	2.4
	PPBC	****	4.5	****	10.8	****	5.4	****	7.2	****	7.2	23.4	21.6
1,2,3 TRIMETHYL BENZENE		****	0.0	****	1.5	****	3.4	****	4.0	****	6.0	4.4	****
	PPBC	****	0.0	****	13.5	****	30.6	****	36.0	****	54.0	39.6	****
PAN		****	0.0	****	1.9	****	8.1	****	13.3	****	18.6	21.5	****
	PPBC	****	0.0	****	3.8	****	16.2	****	26.6	****	37.2	43.0	****
FORMALDEHYDE		****	0.0	****	97.0	****	36.0	****	161	****	147	209	223
	PPBC	****	0.0	****	97.0	****	36.0	****	161	****	147	209	223
3P COL., 2 MIN 30 SEC		****	2.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 2 MIN 40 SEC		****	56.0	****	70.0	****	88.0	****	112	****	136	160	188
3P COL., 3 MIN 10 SEC		****	32.0	****	32.0	****	24.0	****	28.0	****	24.0	24.0	24.0
3P COL., 4 MIN 10 SEC		****	2.0	****	1.0	****	2.0	****	0.0	****	2.0	2.0	2.0
3P COL., 5 MIN 00 SEC		****	2.0	****	3.0	****	2.0	****	2.0	****	0.0	32.0	36.0
3P COL., 5 MIN 30 SEC		****	0.0	****	3.0	****	2.0	****	20.0	****	22.0	22.0	26.0
3P COL., 7 MIN 10 SEC		****	0.0	****	1.0	****	8.0	****	6.0	****	12.0	8.0	12.0
3P COL., 21 MIN 00 SEC		****	1.0	****	1.0	****	2.0	****	2.0	****	1.0	3.0	3.0
3P COL., 22 MIN 00 SEC		****	0.0	****	2.0	****	2.0	****	2.0	****	1.0	2.0	2.0

SURROGATE RUN 81-G
GLASS CHAMBER
1974 JUNE 4

CLOCK TIME	930	1045	1115	1145	1215	1245	1315	1345	1415	1445	1545	1645
ELAPSED TIME(MIN)	-75	0	30	60	90	120	150	180	210	240	300	360
3P COL., 23 MIN 00 SEC	****	2.0	0.0	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 49 MIN 00 SEC	****	****	****	9.0	****	20.0	****	28.0	****	32.0	27.0	****
TOTAL HC PPBC	779.3	5427.3	****	****	****	5201.2	****	****	****	5275.7	****	5058.4
TOTAL NON-METHANE HC	43.3	2467.3	1708.9	2423.7	1506.9	2271.2	968.4	2211.8	1344.3	2365.7	2363.6	2178.4
TOTAL SURROGATE	42.9	2425.9	1707.3	2084.4	1502.8	1911.6	958.0	1551.0	1332.8	1685.8	1567.4	1479.8

SURROGATE RUN 82-G
GLASS CHAMBER
1974 JUNE 5

PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		900	1130	1230	1300	1330	1400	1430
ELAPSED TIME(MIN)		-210	-60	0	30	60	90	120
		CONCENTRATIONS (PPB)						
METHANE		768	840	1040	****	936	****	976
	PPBC	768	840	1040	****	936	****	976
ETHENE		3.0	****	49.6	****	38.4	****	32.0
	PPBC	6.0	****	99.2	****	76.8	****	64.0
ETHANE		7.4	****	92.8	****	86.4	****	80.0
	PPBC	14.8	****	186	****	173	****	160
ACETYLENE (PORAPAK N)		2.2	****	57.6	****	52.0	****	46.4
	PPBC	4.4	****	115	****	104	****	92.8
PROPANE		5.4	****	20.8	20.0	19.8	19.2	18.8
	PPBC	16.2	****	62.4	60.0	59.4	57.6	56.4
PROPENE		0.2	****	12.8	10.4	8.0	6.0	4.6
	PPBC	0.6	****	38.4	31.2	24.0	18.0	13.8
ISOBUTANE		0.0	****	0.4	0.4	0.4	0.6	0.8
	PPBC	0.0	****	1.6	1.6	1.6	2.4	3.2
N-BUTANE		0.0	****	214	205	198	192	186
	PPBC	0.0	****	856	820	792	768	744
ACETYLENE (DMS)		2.2	****	58.0	56.8	54.0	54.0	53.6
	PPBC	4.4	****	116	114	108	108	107
TRANS-2-BUTENE		0.0	****	0.5	0.4	0.0	0.0	0.0
	PPBC	0.0	****	2.0	1.6	0.0	0.0	0.0
ISOPENTANE		0.0	****	0.0	0.0	0.8	1.4	1.5
	PPBC	0.0	****	0.0	0.0	4.0	7.0	7.5
CIS-2-BUTENE		0.0	****	15.6	10.5	4.6	1.4	0.0
	PPBC	0.0	****	62.4	42.0	18.4	5.6	0.0
N-PENTANE		0.0	****	0.4	0.5	0.4	0.5	0.5
	PPBC	0.0	****	2.0	2.5	2.0	2.5	2.5
2,3-DIMETHYL BUTANE		0.0	****	122	114	111	****	98.8
	PPBC	0.0	****	732	684	666	****	593
2-METHYL BUTENE-2		0.0	****	16.7	7.8	1.1	0.0	0.0

SURROGATE RUN 82-G
GLASS CHAMBER
1974 JUNE 5

CLOCK TIME		900	1130	1230	1300	1330	1400	1430
ELAPSED TIME(MIN)		-210	-60	0	30	60	90	120
	PPBC	0.0	****	83.5	39.0	5.5	0.0	0.0
ACETALDEHYDE		****	****	0.6	****	46.0	****	47.2
	PPBC	****	****	1.2	****	92.0	****	94.4
PROPIONALDEHYDE		****	****	2.0	****	1.6	****	2.0
	PPBC	****	****	6.0	****	4.8	****	6.0
ACETONE		****	****	9.2	****	36.0	****	52.0
	PPBC	****	****	27.6	****	108	****	156
METHYL ETHYL KETONE		****	****	3.0	****	4.8	****	4.0
	PPBC	****	****	12.0	****	19.2	****	16.0
TOLUENE		****	****	17.6	****	13.6	****	13.6
	PPBC	****	****	123	****	95.2	****	95.2
PARA-XYLENE		****	****	7.2	****	6.4	****	8.8
	PPBC	****	****	57.6	****	51.2	****	70.4
META-XYLENE		****	****	40.0	****	26.0	****	21.6
	PPBC	****	****	320	****	208	****	173
META-ETHYL TOLUENE		****	****	2.0	****	1.8	****	2.4
	PPBC	****	****	16.0	****	16.2	****	21.6
1,2,3 TRIMETHYL BENZENE		****	****	3.8	****	3.6	****	5.0
	PPBC	****	****	34.2	****	32.4	****	45.0
PAN		****	****	0.0	****	3.5	****	12.8
	PPBC	****	****	0.0	****	7.0	****	25.6
FORMALDEHYDE		****	****	57.0	****	132	****	159
	PPBC	****	****	57.0	****	132	****	159
3P COL., 2 MIN 30 SEC		****	****	20.0	****	0.0	****	0.0
3P COL., 2 MIN 40 SEC		****	****	88.0	****	88.0	****	120
3P COL., 3 MIN 10 SEC		****	****	42.0	****	40.0	****	44.0
3P COL., 4 MIN 10 SEC		****	****	6.0	****	8.0	****	4.0
3P COL., 5 MIN 00 SEC		****	****	3.0	****	8.0	****	12.0
3P COL., 5 MIN 30 SEC		****	****	0.0	****	16.0	****	24.0
3P COL., 7 MIN 10 SEC		****	****	0.0	****	4.0	****	8.0
3P COL., 20 MIN 00 SEC		****	****	2.0	****	0.0	****	1.0
3P COL., 21 MIN 00 SEC		****	****	0.0	****	0.0	****	2.0

SURROGATE RUN 82-G
GLASS CHAMBER
1974 JUNE 5

CLOCK TIME	900	1130	1230	1300	1330	1400	1430
ELAPSED TIME(MIN)	-210	-60	0	30	60	90	120
3P COL., 22 MIN 00 SEC	****	****	2.0	****	2.0	****	0.0
3P COL., 23 MIN 00 SEC	****	****	4.0	****	1.0	****	2.0
3P COL., 49 MIN 00 SEC	****	****	9.0	****	12.0	****	20.0
TOTAL HC PPBC	810.0	840.0	3937.5	****	3630.5	****	3582.2
TOTAL NON-METHANE HC	42.0	0.0	2897.5	1795.5	2694.5	969.1	2606.2
TOTAL SURROGATE	42.0	****	2680.3	1791.4	2224.1	957.2	1999.0

SURROGATE RUN 83-G
GLASS CHAMBER
1974 JUNE 6

1030, 1715 CALIBRATION CHECK

PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		910	1030	1045	1115	1145	1215	1245	1315	1345	1415	1445	1545	1645	1715
ELAPSED TIME(MIN)		-95	-15	0	30	60	90	120	150	180	210	240	300	360	390
		CONCENTRATIONS (PPB)													
METHANE		896	****	2780	****	2830	****	2820	****	2820	****	2820	2820	2820	****
	PPBC	896	****	2780	****	2830	****	2820	****	2820	****	2820	2820	2820	****
ETHENE		8.0	****	49.6	****	46.4	****	40.8	****	34.8	****	33.6	28.8	28.8	41.6
	PPBC	16.0	****	99.2	****	92.8	****	81.6	****	69.6	****	67.2	57.6	57.6	83.2
ETHANE		13.0	****	92.8	****	97.6	****	94.4	****	94.4	****	89.6	84.8	84.8	****
	PPBC	26.0	****	186	****	195	****	189	****	189	****	179	170	170	****
ACETYLENE (PORAPAK N)		2.2	44.8	52.0	****	54.4	****	52.8	****	52.0	****	48.0	44.8	44.8	41.6
	PPBC	4.4	89.6	104	****	109	****	106	****	104	****	96.0	89.6	89.6	83.2
PROPANE		6.0	****	20.6	19.8	20.0	19.9	19.6	19.4	19.2	19.6	19.2	19.2	18.4	44.8
	PPBC	18.0	****	61.8	59.4	60.0	59.7	58.8	58.2	57.6	58.8	57.6	57.6	55.2	134
PROPENE		0.4	****	12.0	10.8	9.0	7.6	6.6	5.6	4.8	4.4	3.6	2.8	1.6	****
	PPBC	1.2	****	36.0	32.4	27.0	22.8	19.8	16.8	14.4	13.2	10.8	8.4	4.8	****
ISOBUTANE		0.0	****	0.2	0.4	0.4	0.4	0.5	0.5	0.4	0.6	0.8	0.8	0.8	****
	PPBC	0.0	****	0.8	1.6	1.6	1.6	2.0	2.0	1.6	2.4	3.2	3.2	3.2	****
N-BUTANE		0.0	****	202	198	192	189	181	180	173	174	170	170	158	****
	PPBC	0.0	****	808	792	768	756	724	720	692	696	680	680	632	****
ACETYLENE (DMS)		2.2	44.8	54.4	54.0	53.0	53.0	49.6	52.0	50.6	51.0	49.2	44.8	47.0	43.2
	PPBC	4.4	89.6	109	108	106	106	99.2	104	101	102	98.4	89.6	94.0	86.4
TRANS-2-BUTENE		0.0	****	0.5	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	****
	PPBC	0.0	****	2.0	2.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	****
ISOPENTANE		0.0	****	0.1	0.0	0.1	0.5	1.0	0.8	1.2	1.5	1.5	1.6	1.8	****
	PPBC	0.0	****	0.5	0.0	0.5	2.5	5.0	4.0	6.0	7.5	7.5	8.0	9.0	****
CIS-2-BUTENE		0.0	****	15.4	11.5	8.0	5.5	3.8	2.2	1.2	1.0	0.0	0.0	0.0	****
	PPBC	0.0	****	61.6	46.0	32.0	22.0	15.2	8.8	4.8	4.0	0.0	0.0	0.0	****
N-PENTANE		0.0	****	0.3	0.1	0.1	0.4	0.4	0.6	0.4	0.6	0.6	0.6	0.8	****
	PPBC	0.0	****	1.5	0.5	0.5	2.0	2.0	3.0	2.0	3.0	3.0	3.0	4.0	****
2,3-DIMETHYL BUTANE		0.0	****	121	118	116	108	102	101	97.6	****	90.6	88.8	80.0	****
	PPBC	0.0	****	726	708	696	648	612	606	586	****	544	533	480	****
2-METHYL BUTENE-2		0.0	****	17.8	10.0	3.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	****

SURROGATE RUN 83-G
GLASS CHAMBER
1974 JUNE 6

CLOCK TIME		910	1030	1045	1115	1145	1215	1245	1315	1345	1415	1445	1545	1645	1715
ELAPSED TIME(MIN)		-95	-15	0	30	60	90	120	150	180	210	240	300	360	390
	PPBC	0.0	****	89.0	50.0	16.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	****
ACETALDEHYDE		0.1	****	0.1	****	34.0	****	38.4	****	51.0	****	53.6	56.0	54.8	****
	PPBC	0.2	****	0.2	****	68.0	****	76.8	****	102	****	107	112	110	****
PROPIONALDEHYDE		0.5	****	0.5	****	0.8	****	1.2	****	1.0	****	2.0	2.0	2.4	****
	PPBC	1.5	****	1.5	****	2.4	****	3.6	****	3.0	****	6.0	6.0	7.2	****
ACETONE		3.0	****	5.0	****	24.8	****	34.0	****	44.8	****	52.0	59.2	****	****
	PPBC	9.0	****	15.0	****	74.4	****	102	****	134	****	156	178	****	****
METHYL ETHYL KETONE		0.0	****	0.0	****	3.0	****	6.4	****	6.4	****	7.0	10.4	9.6	****
	PPBC	0.0	****	0.0	****	12.0	****	25.6	****	25.6	****	28.0	41.6	38.4	****
TOLUENE		0.4	****	16.0	****	16.8	****	14.3	****	12.8	****	13.6	12.8	12.0	****
	PPBC	2.8	****	112	****	118	****	100	****	89.6	****	95.2	89.6	84.0	****
PARA-XYLENE		3.0	****	5.6	****	5.6	****	5.6	****	5.6	****	6.0	6.0	6.4	****
	PPBC	24.0	****	44.8	****	44.8	****	44.8	****	44.8	****	48.0	48.0	51.2	****
META-XYLENE		0.5	****	36.8	****	32.0	****	23.2	****	18.0	****	16.0	13.6	11.2	****
	PPBC	4.0	****	294	****	256	****	186	****	144	****	128	109	89.6	****
META-ETHYL TOLUENE		0.5	****	1.0	****	0.8	****	0.9	****	0.8	****	3.2	3.6	2.0	****
	PPBC	4.5	****	9.0	****	7.2	****	8.1	****	7.2	****	28.8	32.4	18.0	****
1,2,3 TRIMETHYL BENZENE		1.0	****	1.4	****	1.8	****	2.0	****	1.6	****	1.2	1.6	4.4	****
	PPBC	9.0	****	12.6	****	16.2	****	18.0	****	14.4	****	10.8	14.4	39.6	****
PAN		****	****	0.0	****	0.3	****	1.4	****	3.3	****	4.6	7.4	10.4	****
	PPBC	****	****	0.0	****	0.6	****	2.8	****	6.6	****	9.2	14.8	20.8	****
FORMALDEHYDE		****	****	67.0	****	136	****	164	****	189	****	****	211	221	****
	PPBC	****	****	67.0	****	136	****	164	****	189	****	****	211	221	****
3P COL., 2 MIN 40 SEC		8.0	****	52.0	****	60.0	****	80.0	****	104	****	138	160	184	****
3P COL., 3 MIN 10 SEC		0.0	****	40.0	****	48.0	****	48.0	****	44.0	****	40.0	36.0	32.0	****
3P COL., 3 MIN 40 SEC		0.0	****	0.0	****	2.0	****	2.0	****	2.0	****	2.0	1.0	2.0	****
3P COL., 4 MIN 10 SEC		6.0	****	2.0	****	2.0	****	2.0	****	2.0	****	2.0	0.0	2.0	****
3P COL., 5 MIN 00 SEC		2.0	****	6.0	****	12.0	****	24.0	****	8.0	****	2.0	2.0	4.0	****
3P COL., 5 MIN 30 SEC		0.0	****	0.0	****	8.0	****	16.0	****	16.0	****	18.0	32.0	24.0	****
3P COL., 7 MIN 10 SEC		0.0	****	0.0	****	1.0	****	4.0	****	8.0	****	12.0	12.0	12.0	****
3P COL., 20 MIN 00 SEC		2.0	****	3.0	****	1.0	****	1.0	****	0.0	****	0.0	1.0	0.0	****
3P COL., 21 MIN 00 SEC		0.0	****	0.0	****	1.0	****	2.0	****	2.0	****	2.0	3.0	3.0	****

SURROGATE RUN 83-G
GLASS CHAMBER
1974 JUNE 6

CLOCK TIME	910	1030	1045	1115	1145	1215	1245	1315	1345	1415	1445	1545	1645	1715
ELAPSED TIME(MIN)	-95	-15	0	30	60	90	120	150	180	210	240	300	360	390
3P COL., 22 MIN 00 SEC	0.0	****	1.0	****	0.0	****	0.0	****	2.0	****	2.0	0.0	0.0	****
3P COL., 23 MIN 00 SEC	3.0	****	4.0	****	2.0	****	2.0	****	2.0	****	0.0	2.0	1.0	****
3P COL., 49 MIN 00 SEC	0.0	****	3.0	****	3.0	****	5.0	****	8.0	****	10.0	14.0	12.0	****
TOTAL HC PPBC	1016.6	****	5514.9	****	5564.3	****	5363.0	****	5305.6	****	5086.5	5286.0	5006.6	****
TOTAL NON-METHANE HC	120.6	89.6	2734.9	1800.3	2734.3	1624.6	2543.0	1522.8	2485.6	886.9	2266.5	2466.0	2186.6	302.4
TOTAL SURROGATE	72.4	89.6	2582.0	1758.2	2370.1	1618.5	2088.3	1513.8	1949.0	874.0	1858.8	1794.0	1664.0	302.4

SURROGATE RUN 84-G
GLASS CHAMBER
1974 JUNE 7

CECO CALIBRATION CHECK
DISREGARD 1145 DATA, HELD IN TRAP TCO LONG
PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		800	930	1015	1045	1115	1145	1215	1245	1315	1345	1415	1515	1615
ELAPSED TIME(MIN)		-135	-45	0	30	60	90	120	150	180	210	240	300	360
		CONCENTRATIONS (PPB)												
METHANE		****	556	2770	****	2830	****	2740	****	2720	****	2740	2770	2770
	PPBC	****	556	2770	****	2830	****	2740	****	2720	****	2740	2770	2770
ETHENE		****	3.4	54.4	****	51.2	****	44.8	****	41.6	****	38.4	36.8	34.4
	PPBC	****	6.8	109	****	102	****	89.6	****	83.2	****	76.8	73.6	68.8
ETHANE		****	8.6	91.2	****	92.8	****	88.8	****	88.0	****	86.4	88.0	87.2
	PPBC	****	17.2	182	****	186	****	178	****	176	****	173	176	174
ACETYLENE (POROPAK N)		41.6	1.6	54.4	****	53.6	****	51.2	****	48.8	****	48.0	48.0	45.6
	PPBC	83.2	3.2	109	****	107	****	102	****	97.6	****	96.0	96.0	91.2
PROPANE		****	5.9	20.0	19.8	19.8	18.8	19.4	18.8	18.8	18.8	18.8	19.0	18.8
	PPBC	****	17.7	60.0	59.4	59.4	56.4	58.2	56.4	56.4	56.4	56.4	57.0	56.4
PROPENE		****	0.3	12.6	11.2	9.6	8.2	7.4	6.4	5.6	5.0	4.6	3.6	2.8
	PPBC	****	0.9	37.8	33.6	28.8	24.6	22.2	19.2	16.8	15.0	13.8	10.8	7.8
ISOBUTANE		****	0.0	0.2	0.2	0.2	1.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6
	PPBC	****	0.0	0.8	0.8	0.8	5.6	1.6	1.6	1.6	1.6	2.0	2.4	2.4
N-BUTANE		****	0.0	208	****	202	186	192	186	179	179	176	173	168
	PPBC	****	0.0	832	****	808	744	768	744	716	716	704	692	672
ACETYLENE (DMS)		42.4	1.5	55.2	54.8	54.8	50.8	53.0	51.0	50.4	50.4	50.0	48.0	48.8
	PPBC	84.8	3.0	110	110	110	102	106	102	101	101	100	96.0	97.6
TRANS-2-BUTENE		****	0.0	****	0.4	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PPBC	****	0.0	****	1.6	1.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ISOPENTANE		****	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.6	0.8	1.0
	PPBC	****	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	2.5	3.0	4.0	5.0
CIS-2-BUTENE		****	0.0	15.8	12.8	9.4	6.2	4.9	3.4	2.3	1.4	0.8	0.2	0.1
	PPBC	****	0.0	63.2	51.2	37.6	24.8	19.6	13.6	9.2	5.6	3.2	0.8	0.4
N-PENTANE		****	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.5
	PPBC	****	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.5
2,3-DIMETHYL BUTANE		****	0.0	128	122	115	106	109	104	101	98.9	95.8	93.1	87.6
	PPBC	****	0.0	768	732	690	636	654	624	606	593	575	559	526
2-METHYL BUTENE-2		****	0.0	16.7	12.2	6.2	****	0.8	0.0	0.0	0.0	0.0	0.0	0.0

SURROGATE RUN 84-G
GLASS CHAMBER
1974 JUNE 7

CLOCK TIME		800	930	1015	1045	1115	1145	1215	1245	1315	1345	1415	1515	1615
ELAPSED TIME(MIN)		-135	-45	0	30	60	90	120	150	180	210	240	300	360
	PPBC	****	0.0	83.5	61.0	31.0	****	4.0	0.0	0.0	0.0	0.0	0.0	0.0
ACETALDEHYDE		****	2.1	3.2	****	27.2	****	38.4	****	46.0	****	46.4	50.4	47.2
	PPBC	****	4.2	6.4	****	54.4	****	76.8	****	92.0	****	92.8	101	94.4
PROPIONALDEHYDE		****	0.4	0.4	****	0.6	****	0.8	****	1.0	****	1.2	1.6	1.6
	PPBC	****	1.2	1.2	****	1.8	****	2.4	****	3.0	****	3.6	4.8	4.8
ACETONE		****	2.6	8.1	****	19.2	****	28.8	****	36.8	****	44.4	54.4	54.4
	PPBC	****	7.8	24.3	****	57.6	****	86.4	****	110	****	133	163	163
BENZENE		****	0.0	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
	PPBC	****	0.0	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
METHYL ETHYL KETONE		****	0.6	0.5	****	2.4	****	4.0	****	6.4	****	7.2	8.8	8.8
	PPBC	****	2.4	2.0	****	9.6	****	16.0	****	25.6	****	28.8	35.2	35.2
TOLUENE		****	0.9	16.5	****	15.2	****	13.4	****	13.2	****	13.2	12.9	12.2
	PPBC	****	6.3	116	****	106	****	93.8	****	92.4	****	92.4	90.3	85.4
PARA-XYLENE		****	6.6	7.2	****	5.5	****	4.8	****	4.8	****	5.2	5.2	5.2
	PPBC	****	52.8	57.6	****	44.0	****	38.4	****	38.4	****	41.6	41.6	41.6
META-XYLENE		****	0.0	38.4	****	30.0	****	22.4	****	19.2	****	16.8	15.0	13.0
	PPBC	****	0.0	307	****	240	****	179	****	154	****	134	120	104
N-PROPYL BENZENE		****	0.2	0.1	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
	PPBC	****	1.8	0.9	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
META-ETHYL TOLUENE		****	1.3	1.3	****	1.0	****	0.9	****	0.9	****	0.9	1.2	1.4
	PPBC	****	11.7	11.7	****	9.0	****	8.1	****	8.1	****	8.1	10.8	12.6
1,2,3 TRIMETHYL BENZENE		****	3.8	3.0	****	1.2	****	1.9	****	3.0	****	2.5	2.5	2.5
	PPBC	****	34.2	27.0	****	10.8	****	17.1	****	27.0	****	22.5	22.5	22.5
PAN		****	****	0.0	****	0.0	****	0.5	****	****	1.4	2.0	3.2	4.8
	PPBC	****	****	0.0	****	0.0	****	1.0	****	****	2.8	4.0	6.4	9.6
FORMALDEHYDE		****	****	35.0	****	105	****	114	****	149	****	172	175	196
	PPBC	****	****	35.0	****	105	****	114	****	149	****	172	175	196
3P COL., 2 MIN 40 SEC		****	12.0	34.0	****	50.0	****	60.0	****	92.0	****	128	144	160
3P COL., 3 MIN 10 SEC		****	1.0	52.0	****	50.0	****	47.0	****	44.0	****	44.0	44.0	44.0
3P COL., 3 MIN 40 SEC		****	40.0	1.0	****	1.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 4 MIN 10 SEC		****	3.0	5.0	****	2.0	****	2.0	****	2.0	****	2.0	2.0	2.0
3P COL., 5 MIN 00 SEC		****	0.0	16.0	****	8.0	****	32.0	****	34.0	****	40.0	56.0	40.0
3P COL., 5 MIN 30 SEC		****	0.0	26.0	****	8.0	****	20.0	****	16.0	****	16.0	20.0	16.0

SURROGATE RUN 84-G
GLASS CHAMBER
1974 JUNE 7

CLOCK TIME	800	930	1015	1045	1115	1145	1215	1245	1315	1345	1415	1515	1615
ELAPSED TIME(MIN)	-135	-45	0	30	60	90	120	150	180	210	240	300	360
3P COL., 7 MIN 10 SEC	****	1.0	0.0	****	0.0	****	4.0	****	6.0	****	6.0	8.0	8.0
3P COL., 11 MIN 40 SEC	****	12.0	0.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 13 MIN 30 SEC	****	0.0	1.0	****	0.0	****	1.0	****	1.0	****	0.0	1.0	1.0
3P COL., 14 MIN 30 SEC	****	0.0	1.0	****	1.0	****	1.0	****	1.0	****	0.0	0.0	0.0
3P COL., 19 MIN 00 SEC	****	0.0	0.0	****	2.0	****	1.0	****	0.0	****	0.0	0.0	0.0
3P COL., 21 MIN 00 SEC	****	4.0	0.0	****	0.0	****	1.0	****	2.0	****	2.0	3.0	4.0
3P COL., 23 MIN 00 SEC	****	4.0	4.0	****	3.0	****	3.0	****	2.0	****	3.0	3.0	4.0
3P COL., 49 MIN 00 SEC	****	0.0	0.0	****	1.0	****	1.0	****	2.0	****	3.0	3.0	4.0
TOTAL HC PPBC	****	724.1	5604.9	****	5521.8	****	5272.2	****	5185.4	****	5179.2	5212.8	5149.0
TOTAL NON-METHANE HC	84.0	168.1	2834.9	1049.2	2691.8	1593.8	2532.2	1560.8	2465.4	1495.1	2439.2	2442.8	2379.0
TOTAL SURROGATE	84.0	52.0	2668.0	1048.4	2398.8	1588.2	2170.4	1559.2	2008.8	1487.2	1926.6	1875.1	1789.2

SURROGATE RUN 85-G
GLASS CHAMBER
1974 JUNE 12

PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		930	1100	1130	1200	1230	1300	1330	1400	1430	1500	1530	1600	1630	1700
ELAPSED TIME(MIN)		-90	0	30	60	90	120	150	180	210	240	270	300	330	360
		CONCENTRATIONS (PPB)													
METHANE		808	2820	****	2800	****	2750	****	2720	****	2740	****	2720	****	2720
	PPBC	808	2820	****	2800	****	2750	****	2720	****	2740	****	2720	****	2720
ETHENE		1.6	36.8	****	32.8	****	28.0	****	24.0	****	25.6	****	22.4	****	20.0
	PPBC	3.2	73.6	****	65.6	****	56.0	****	48.0	****	51.2	****	44.8	****	40.0
ETHANE		5.8	75.2	****	72.8	****	68.8	****	60.8	****	67.2	****	68.0	****	67.2
	PPBC	11.6	150	****	146	****	138	****	122	****	134	****	136	****	134
ACETYLENE (POROPAK N)		1.5	44.0	****	43.2	****	41.6	****	41.6	****	36.8	****	38.4	****	36.0
	PPBC	3.0	88.0	****	86.4	****	83.2	****	83.2	****	73.6	****	76.8	****	72.0
PROPANE		7.0	18.4	18.4	18.2	17.6	18.2	17.4	17.6	17.6	17.4	****	17.4	****	17.6
	PPBC	21.0	55.2	55.2	54.6	52.8	54.6	52.2	52.8	52.8	52.2	****	52.2	****	52.8
PROPENE		0.3	10.0	8.4	7.2	6.2	5.4	4.4	4.0	3.4	2.8	****	2.0	****	1.2
	PPBC	0.9	30.0	25.2	21.6	18.6	16.2	13.2	12.0	10.2	8.4	****	6.0	****	3.6
ISOBUTANE		0.1	0.2	0.2	0.4	0.4	0.4	0.6	0.8	1.0	1.0	****	1.0	****	1.2
	PPBC	0.4	0.8	0.8	1.6	1.6	1.6	2.4	3.2	4.0	4.0	****	4.0	****	4.8
N-BUTANE		0.3	163	163	157	154	150	147	144	142	138	****	134	****	128
	PPBC	1.2	652	652	628	616	600	588	576	568	552	****	536	****	512
ACETYLENE (OMS)		1.5	44.0	44.4	43.0	42.4	42.4	42.0	40.0	40.8	40.0	****	39.2	****	38.4
	PPBC	3.0	88.0	88.8	86.0	84.8	84.8	84.0	80.0	81.6	80.0	****	78.4	****	76.8
TRANS-2-BUTENE		0.0	0.4	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	****	0.0	****	0.0
	PPBC	0.0	1.6	1.2	0.8	0.8	0.0	0.0	0.0	0.0	0.0	****	0.0	****	0.0
ISOPENTANE		0.0	0.0	0.0	0.0	0.1	0.5	1.6	2.2	2.4	2.5	****	3.0	****	3.2
	PPBC	0.0	0.0	0.0	0.0	0.5	2.5	8.0	11.0	12.0	12.5	****	15.0	****	16.0
CIS-2-BUTENE		0.0	12.5	9.0	6.2	4.0	3.0	1.6	0.4	0.4	0.0	****	0.0	****	0.0
	PPBC	0.0	50.0	36.0	24.8	16.0	12.0	6.4	1.6	1.6	0.0	****	0.0	****	0.0
N-PENTANE		0.0	0.4	0.0	0.3	0.4	0.4	0.6	1.0	0.6	1.0	****	1.4	****	1.5
	PPBC	0.0	2.0	0.0	1.5	2.0	2.0	3.0	5.0	3.0	5.0	****	7.0	****	7.5
2,3-DIMETHYL BUTANE		0.0	97.6	95.3	89.4	****	83.5	80.0	77.1	****	71.8	****	67.6	****	63.5
	PPBC	0.0	586	572	536	****	501	480	463	****	431	****	406	****	381
2-METHYL BUTENE-2		0.0	12.2	5.6	3.3	1.1	0.0	0.0	0.0	0.0	0.0	****	0.0	****	0.0

SURROGATE RUN 85-G
GLASS CHAMBER
1974 JUNE 12

CLOCK TIME		930	1100	1130	1200	1230	1300	1330	1400	1430	1500	1530	1600	1630	1700
ELAPSED TIME(MIN)		-90	0	30	60	90	120	150	180	210	240	270	300	330	360
	PPBC	0.0	61.0	28.0	16.5	5.5	0.0	0.0	0.0	0.0	0.0	****	0.0	****	0.0
ACETALDEHYDE		0.1	0.0	****	24.4	****	54.4	****	40.0	****	53.6	****	37.6	****	46.8
	PPBC	0.2	0.0	****	48.8	****	109	****	80.0	****	107	****	75.2	****	93.6
PROPIONALDEHYDE		0.4	0.5	****	0.8	****	1.2	****	1.2	****	2.0	****	2.4	****	3.0
	PPBC	1.2	1.5	****	2.4	****	3.6	****	3.6	****	6.0	****	7.2	****	9.0
ACETONE		0.0	6.4	****	35.4	****	35.2	****	33.6	****	49.6	****	52.8	****	64.0
	PPBC	0.0	19.2	****	106	****	106	****	101	****	149	****	158	****	192
BENZENE		0.0	0.0	****	0.0	****	0.1	****	0.0	****	0.0	****	0.0	****	0.0
	PPBC	0.0	0.0	****	0.0	****	0.6	****	0.0	****	0.0	****	0.0	****	0.0
METHYL ETHYL KETONE		0.0	****	****	3.2	****	6.4	****	4.8	****	11.2	****	11.2	****	11.2
	PPBC	0.0	****	****	12.8	****	25.6	****	19.2	****	44.8	****	44.8	****	44.8
TOLUENE		0.8	12.8	****	12.6	****	12.8	****	11.2	****	11.2	****	10.0	****	9.6
	PPBC	5.6	89.6	****	88.2	****	89.6	****	78.4	****	78.4	****	70.0	****	67.2
PARA-XYLENE		4.5	4.0	****	4.0	****	4.8	****	5.6	****	6.0	****	6.4	****	7.2
	PPBC	36.0	32.0	****	32.0	****	38.4	****	44.8	****	48.0	****	51.2	****	57.6
META-XYLENE		0.3	28.0	****	23.2	****	21.6	****	15.2	****	14.0	****	10.8	****	10.4
	PPBC	2.4	224	****	186	****	173	****	122	****	112	****	86.4	****	83.2
ORTHO-XYLENE		0.0	0.0	****	0.0	****	0.1	****	0.1	****	0.0	****	0.0	****	0.1
	PPBC	0.0	0.0	****	0.0	****	0.8	****	0.8	****	0.0	****	0.0	****	0.8
META-ETHYL TOLUENE		1.5	0.6	****	1.2	****	1.6	****	1.6	****	2.0	****	2.4	****	1.2
	PPBC	13.5	5.4	****	10.8	****	14.4	****	14.4	****	18.0	****	21.6	****	10.8
1,2,3 TRIMETHYL BENZENE		3.4	3.2	****	2.2	****	1.6	****	3.0	****	4.0	****	4.0	****	6.6
	PPBC	30.6	28.8	****	19.8	****	14.4	****	27.0	****	36.0	****	36.0	****	59.4
PAN		****	0.0	****	0.7	****	1.6	****	3.2	****	5.3	****	8.6	****	11.5
	PPBC	****	0.0	****	1.4	****	3.2	****	6.4	****	10.6	****	17.2	****	23.0
FORMALDEHYDE		****	99.0	****	141	****	172	****	204	****	221	****	248	****	283
	PPBC	****	99.0	****	141	****	172	****	204	****	221	****	248	****	283
3P COL., 2 MIN 30 SEC		12.0	18.0	****	0.0	****	0.0	****	0.0	****	0.0	****	0.0	****	0.0
3P COL., 2 MIN 40 SEC		0.0	40.0	****	68.0	****	88.0	****	120	****	152	****	180	****	220
3P COL., 3 MIN 10 SEC		34.0	36.0	****	38.0	****	36.0	****	36.0	****	32.0	****	28.0	****	20.0
3P COL., 3 MIN 40 SEC		34.0	0.0	****	0.0	****	0.0	****	0.0	****	2.0	****	0.0	****	0.0
3P COL., 4 MIN 10 SEC		2.0	2.0	****	1.0	****	16.0	****	0.0	****	2.0	****	0.0	****	0.0
3P COL., 4 MIN 50 SEC		3.0	4.0	****	16.0	****	4.0	****	2.0	****	1.0	****	2.0	****	32.0

SURROGATE RUN 85-G
GLASS CHAMBER
1974 JUNE 12

CLOCK TIME	930	1100	1130	1200	1230	1300	1330	1400	1430	1500	1530	1600	1630	1700
ELAPSED TIME(MIN)	-90	0	30	60	90	120	150	180	210	240	270	300	330	360
3P COL., 5 MIN 30 SEC	0.0	0.0	****	16.0	****	20.0	****	4.0	****	24.0	****	20.0	****	24.0
3P COL., 7 MIN 10 SEC	0.0	0.0	****	0.0	****	4.0	****	2.0	****	8.0	****	6.0	****	12.0
3P COL., 20 MIN 00 SEC	0.0	1.0	****	1.0	****	2.0	****	3.0	****	2.0	****	2.0	****	0.0
3P COL., 21 MIN 00 SEC	0.0	0.0	****	0.0	****	1.0	****	3.0	****	0.0	****	2.0	****	4.0
3P COL., 23 MIN 00 SEC	0.0	2.0	****	2.0	****	2.0	****	2.0	****	4.0	****	2.0	****	2.0
3P COL., 49 MIN 00 SEC	0.0	1.0	****	0.0	****	2.0	****	5.0	****	3.0	****	3.0	****	8.0
TOTAL HC PPBC	938.8	5069.7	****	5032.2	****	4967.3	****	4796.4	****	4898.1	****	4820.2	****	4870.9
TOTAL NON-METHANE HC	130.8	2249.7	1459.0	2232.2	798.6	2217.3	1237.2	2076.4	733.2	2158.1	0.0	2100.2	0.0	2150.9
TOTAL SURROGATE	48.9	2061.0	1458.2	1853.9	794.5	1723.8	1223.8	1556.2	714.2	1496.2	****	1414.6	****	1348.6

SURROGATE RUN 86-G
GLASS CHAMBER
1974 JUNE 13

0830 CALIBRATION CHECK
1245 SAMPLE CONTAMINATED WITH AIR
1515 2,3-DIMETHYLBUTANE ESTIMATED
PEAKS MARKED '3P COL.' FOLLOWED BY A RETENTION TIME ARE UNKNOWNS
MEASURED ON THE 3-PART GC COLUMN USED FOR OXYGENATES AND AROMATICS
--- NUMBERS FOR THOSE PEAKS ARE SIGNAL HEIGHTS ONLY ---

CLOCK TIME		830	905	1015	1045	1115	1145	1215	1245	1315	1345	1415	1515	1615
ELAPSED TIME(MIN)		-105	-70	0	30	60	90	120	150	180	210	240	300	360
		CONCENTRATIONS (PPB)												
METHANE		****	1060	2830	****	2750	****	2720	****	2700	****	2740	2720	2720
	PPBC	****	1060	2830	****	2750	****	2720	****	2700	****	2740	2720	2720
ETHENE		****	3.6	36.8	****	35.2	****	31.2	****	28.0	****	26.4	24.0	20.0
	PPBC	****	7.2	73.6	****	70.4	****	62.4	****	56.0	****	52.8	48.0	40.0
ETHANE		****	8.2	75.2	****	73.6	****	73.6	****	68.8	****	68.8	68.8	67.2
	PPBC	****	16.4	150	****	147	****	147	****	138	****	138	138	134
ACETYLENE (PORAPAK N)		46.0	2.5	44.0	****	44.0	****	42.4	****	40.0	****	40.0	40.0	36.8
	PPBC	92.0	5.0	88.0	****	88.0	****	84.8	****	80.0	****	80.0	80.0	73.6
PROPANE		****	6.2	18.2	18.2	18.2	18.2	18.2	****	18.0	17.8	17.6	17.4	17.0
	PPBC	****	18.6	54.6	54.6	54.6	54.6	54.6	****	54.0	53.4	52.8	52.2	51.0
PROPENE		****	0.3	10.0	9.2	8.0	6.8	6.0	****	4.4	3.6	3.2	1.7	1.2
	PPBC	****	0.9	30.0	27.6	24.0	20.4	18.0	****	13.2	10.8	9.6	5.1	3.6
ISOBUTANE		****	0.1	0.4	0.4	0.4	0.6	0.6	****	0.4	0.5	1.0	1.0	1.2
	PPBC	****	0.4	1.6	1.6	1.6	2.4	2.4	****	1.6	2.0	4.0	4.0	4.8
N-BUTANE		****	0.3	170	165	163	158	155	****	147	144	141	138	****
	PPBC	****	1.2	680	660	652	632	620	****	588	576	564	552	****
ACETYLENE (DMS)		46.4	2.5	46.0	46.0	46.0	45.2	45.0	****	44.0	44.0	43.0	42.0	40.4
	PPBC	92.8	5.0	92.0	92.0	92.0	90.4	90.0	****	88.0	88.0	86.0	84.0	80.8
TRANS-2-BUTENE		****	0.0	0.5	0.4	0.3	0.0	0.0	****	0.0	0.0	0.0	0.0	0.0
	PPBC	****	0.0	2.0	1.6	1.2	0.0	0.0	****	0.0	0.0	0.0	0.0	0.0
ISOPENTANE		****	0.3	0.4	0.3	0.6	1.0	1.0	****	1.5	2.4	2.0	2.5	3.0
	PPBC	****	1.5	2.0	1.5	3.0	5.0	5.0	****	7.5	12.0	10.0	12.5	15.0
CIS-2-BUTENE		****	0.0	12.5	10.5	7.4	5.0	3.2	****	1.4	0.4	0.0	0.0	0.0
	PPBC	****	0.0	50.0	42.0	29.6	20.0	12.8	****	5.6	1.6	0.0	0.0	0.0
N-PENTANE		****	0.0	0.0	0.4	0.5	0.6	0.5	****	0.6	0.6	0.8	1.0	1.2
	PPBC	****	0.0	0.0	2.0	2.5	3.0	2.5	****	3.0	3.0	4.0	5.0	6.0
2,3-DIMETHYL BUTANE		****	****	97.6	95.9	94.1	89.1	85.9	****	80.0	77.1	74.1	68.8	63.5
	PPBC	****	****	586	575	565	535	515	****	480	463	445	413	381
2-METHYL BUTENE-2		****	****	13.3	10.0	6.1	1.7	0.6	****	0.0	0.0	0.0	0.0	0.0

3.9

10.6

SURROGATE RUN 86-G
GLASS CHAMBER
1974 JUNE 13

CLOCK TIME		830	905	1015	1045	1115	1145	1215	1245	1315	1345	1415	1515	1615
ELAPSED TIME(MIN)		-105	-70	0	30	60	90	120	150	180	210	240	300	360
	PPBC	****	****	66.5	50.0	30.5	8.5	3.0	****	0.0	0.0	0.0	0.0	0.0
ACETALDEHYDE		****	0.0	0.1	****	17.8	****	32.0	****	50.4	****	40.0	42.0	39.2
	PPBC	****	0.0	0.2	****	35.6	****	64.0	****	101	****	80.0	84.0	78.4
PROPIONALDEHYDE		****	0.5	0.5	****	0.5	****	0.8	****	1.2	****	2.0	2.0	2.0
	PPBC	****	1.5	1.5	****	1.5	****	2.4	****	3.6	****	6.0	6.0	6.0
ACETONE		****	0.0	0.1	****	12.8	****	23.6	****	35.2	****	35.2	41.6	40.8
	PPBC	****	0.0	0.3	****	38.4	****	70.8	****	106	****	106	125	122
METHYL ETHYL KETONE		****	0.0	0.0	****	0.6	****	3.6	****	8.8	****	5.6	6.4	7.0
	PPBC	****	0.0	0.0	****	2.4	****	14.4	****	35.2	****	22.4	25.6	28.0
TOLUENE		****	0.4	****	****	12.8	****	12.2	****	11.2	****	11.2	9.6	9.6
	PPBC	****	2.8	****	****	89.6	****	85.4	****	78.4	****	78.4	67.2	67.2
PARA-XYLENE		****	1.6	2.4	****	2.4	****	3.2	****	3.2	****	4.8	4.8	3.0
	PPBC	****	12.8	19.2	****	19.2	****	25.6	****	25.6	****	38.4	38.4	24.0
META-XYLENE		****	0.1	30.4	****	24.0	****	18.4	****	15.2	****	12.8	10.0	8.4
	PPBC	****	0.8	243	****	192	****	147	****	122	****	102	80.0	67.2
META-ETHYL TOLUENE		****	0.8	0.8	****	1.2	****	1.4	****	1.5	****	2.0	2.6	2.0
	PPBC	****	7.2	7.2	****	10.8	****	12.6	****	13.5	****	18.0	23.4	18.0
1,2,3 TRIMETHYL BENZENE		****	1.2	2.0	****	3.0	****	4.0	****	2.0	****	3.6	5.4	4.4
	PPBC	****	10.8	18.0	****	27.0	****	36.0	****	18.0	****	32.4	48.6	39.6
PAN		****	****	0.0	****	0.2	****	1.0	****	3.0	****	5.5	8.5	11.9
	PPBC	****	****	0.0	****	0.4	****	2.0	****	6.0	****	11.0	17.0	23.8
FORMALDEHYDE		****	****	104	****	68.0	****	142	****	161	****	177	215	236
	PPBC	****	****	104	****	68.0	****	142	****	161	****	177	215	236
3P COL., 2 MIN 30 SEC		****	12.0	12.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 2 MIN 40 SEC		****	0.0	30.0	****	50.0	****	100	****	112	****	136	146	188
3P COL., 3 MIN 10 SEC		****	0.0	34.0	****	34.0	****	34.0	****	32.0	****	32.0	28.0	24.0
3P COL., 3 MIN 40 SEC		****	24.0	56.0	****	0.0	****	0.0	****	0.0	****	0.0	0.0	0.0
3P COL., 4 MIN 10 SEC		****	6.0	3.0	****	1.0	****	2.0	****	0.0	****	2.0	2.0	0.0
3P COL., 4 MIN 50 SEC		****	3.0	8.0	****	3.0	****	8.0	****	2.0	****	2.0	6.0	6.0
3P COL., 5 MIN 30 SEC		****	0.0	0.0	****	0.0	****	0.0	****	12.0	****	2.0	20.0	6.0
3P COL., 7 MIN 10 SEC		****	0.0	0.0	****	0.0	****	0.0	****	0.0	****	4.0	2.0	8.0
3P COL., 20 MIN 00 SEC		****	0.0	1.0	****	2.0	****	2.0	****	1.0	****	1.0	2.0	1.0