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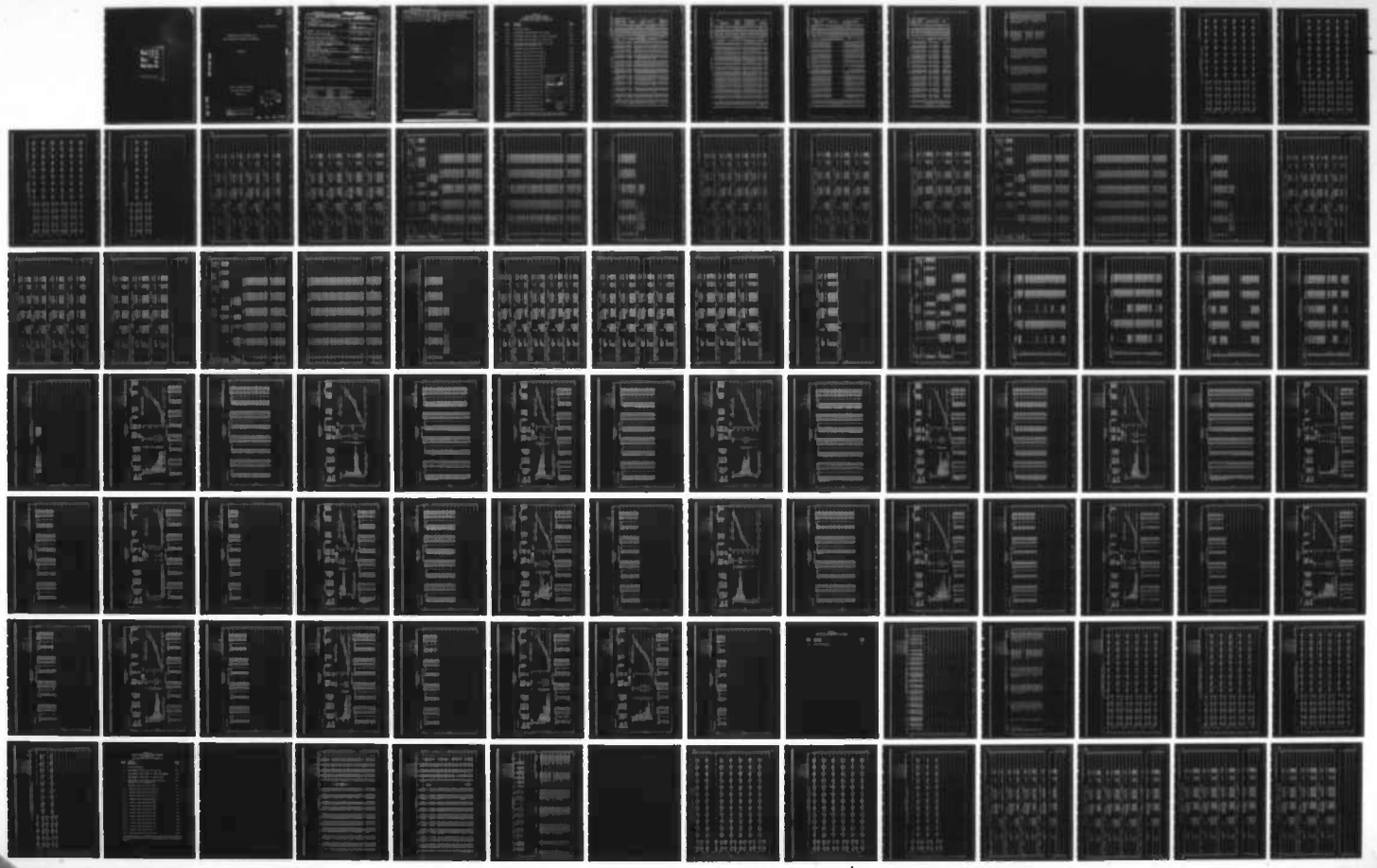

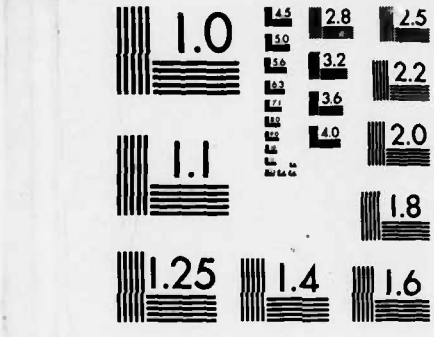

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JOAP-TSC REPORT 84-01

EVALUATION OF USED CRANKCASE OILS USING COMPUTERIZED INFRARED SPECTROMETRY

APPENDICES

JOINT OIL ANALYSIS PROGRAM
TECHNICAL SUPPORT CENTER
PENSACOLA, FL

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1. REPORT NUMBER JOAP-TSC 84-01	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) EVALUATION OF USED CRANKCASE OILS USING COMPUTERIZED INFRARED SPECTROMETRY		5. TYPE OF REPORT & PERIOD COVERED FINAL JAN 82 - JUN 84 6. PERFORMING ORG. REPORT NUMBER
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17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Infrared Spectroscopy	hydroxyl	fuel dilution
transmittance	oxidation	total acid number
absorbance	carboxylates	total solids
integrated area	nitration	viscosity
peak heights	sulfation	carbon loading

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This is the final report of a study to determine whether computerized infrared spectroscopy is a feasible technique for oil condition monitoring. The study addresses the major factors that influence the performance of a lubricant in service and demonstrates that these factors may be monitored with infrared spectroscopy. The study identifies specific regions and peaks within the infrared spectra to be monitored in a routine oil condition monitoring program and proposes abnormal threshold for quantitative measures of these

next page

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20. (cont) regions and peaks. Evaluation criteria for five Army combat and tactical vehicle engines and one Air Force administrative engine are developed. Further the study recommends a field test of the infrared methodology at a single Army installation. This document only includes computer printout with tables and plots.

APPENDIX B
CONTINENTAL LDS-465 ENGINE
4TH SUPPLY AND TRANSPORT BATTALION
4TH INFANTRY DIVISION, FT. CARSON, CO

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*These models were all developed early in the study and are based on a slightly different data collection methodology than that outlined in Table 1.

OBS	CL2	DET11	DET12	DET13	DET14	DET15	FD1	FD2	FD13	FD4	ZN1	SO4	HRS	FE	VIS	TAN	TS	CO8	GC
1	38.99	321.1	612.7	845.7	2076.95	258.29	10.30	2.70	676.8	-0.96	0.24	1.56	422	94	130	3.16	6.8	16.5	10
2	38.49	103.5	570.3	849.5	2228.22	254.69	11.77	0.00	711.2	-0.97	0.04	1.60	425	93	121	2.64	6.8	21.5	12
3	38.43	536.5	636.3	851.0	1883.65	272.02	10.65	3.86	636.0	0.20	-0.09	2.01	445	103	96	2.61	8.8	18.0	18
4	49.06	1669.5	707.8	1042.1	2441.57	353.56	3.86	2.48	821.3	0.09	0.22	2.13	481	93	80	2.82	6.4	20.1	22
5	54.90	-1223.1	650.1	1014.0	2399.39	313.88	0.00	2.18	907.5	0.41	-0.46	2.16	496	105	74	2.93	7.2	20.0	22
6	8.90	1076.6	159.4	352.1	723.64	89.43	2.04	1.25	596.2	-0.16	0.30	0.49	2	25	134	2.18	1.6	8.9	6
7	10.12	606.3	150.7	352.1	714.12	79.81	2.41	1.34	603.8	0.13	0.13	0.54	5	29	122	2.00	2.0	6.2	9
8	10.86	926.3	178.6	382.9	758.18	94.74	2.26	1.06	673.2	0.20	0.46	0.56	7	26	114	1.93	2.0	6.0	10
9	11.31	641.6	191.3	414.2	858.03	101.00	2.68	0.99	699.7	0.20	0.28	0.43	15	27	112	2.00	2.0	6.1	10
10	19.05	326.0	193.9	455.6	970.14	103.14	4.03	1.62	842.4	0.06	0.35	0.86	18	27	99	2.21	2.0	9.6	3
11	112.22	5209.4	-831.6	-129.4	230.81	-450.38	0.00	0.00	771.0	0.88	0.11	1.47	51	42	69	2.18	9.6	15.0	14
12	120.84												52	48	66	1.76	8.8	13.9	10
13	0.36	-783.6	-17.7	-47.6	35.05	-5.44	1.68	0.38	1.9	0.06	-0.69	0.47	7	9	255	1.88	2.8	.	2
14	9.13	-1047.8	-6.2	33.7	47.41	-6.33	2.47	1.23	293.6	0.39	-1.28	0.00	12	23	142	2.11	2.8	.	6
15	9.15	-1135.7	16.9	50.5	41.40	8.89	2.27	1.61	383.4	0.60	-1.40	0.49	16	23	115	2.25	2.8	.	10
16	11.93	-904.8	100.5	121.6	103.23	21.02	4.70	2.70	411.6	0.76	-1.55	0.47	19	21	104	1.90	2.8	.	15
17	105.66	6045.4	-310.1	818.5	3806.38	-145.06	0.00	0.00	1268.7	-1.22	2.40	2.44	8	92	316	2.46	12.8	13.5	.
18	108.22	4551.2	-173.4	955.8	3828.23	-76.11	0.00	0.00	1120.8	-1.21	1.71	2.81	365	75		2.35	12.0	15.0	.
19	190.28	7968.5											380	76	345	2.72	12.0	9.8	.
20	120.31												391	78	330	3.19	9.6	10.0	.
21	1.41	123.7	-1.4	25.7	77.18	15.73	0.60	0.00	-7.8	0.02	-0.49	0.05	15	44	192	3.51	4.0	3.7	.
22	32.77	4440.7	410.9	-174.9	783.65	51.86	6.72	0.00	391.5	0.08	-0.18	0.74	91	84	180	3.18	8.4	7.1	.
23	48.27	5622.5	-297.3	305.0	1290.76	-109.16	0.00	0.00	324.0	-0.05	-0.58	0.53	118	97	162	3.11	13.2	.	.
24	119.89	-3717.5	445.3	209.0	2111.28	12.57	0.00	0.00	-4154.7	-0.29	-9.39	0.56	175	120	195	4.14	20.0	.	.
25	84.32	1202.1	-1105.1	-587.7	1186.31	-506.12	0.00	0.00	-1662.1	-0.02	-4.18	0.45	202	107	207	3.36	15.2	.	.
26	93.48	-741.4	-1445.7	-992.3	651.58	-666.35	0.00	0.00	-2405.2	-0.32	-6.16	0.33	214	115	198	3.14	19.2	.	.
27	107.68	-1073.9	186.5	639.2	1283.42	269.02	0.00	2.37	-2994.0	-0.04	-7.97	0.18	231	112	217	3.16	20.0	.	.
28	59.12	-1104.4	1016.0	1388.1	3418.93	537.79	0.00	2.49	1316.1	0.10	0.17	2.52	483	83	166	3.37	10.8	15.5	.
29	60.92	-154.2	1255.7	1481.3	3816.49	675.58	2.29	1.98	1482.7	0.13	0.41	2.29	508	104	142	3.27	12.0	20.5	.
30	41.05	1371.9	633.7	1170.8	2870.88	346.16	0.00	0.00	1244.3	-1.58	1.17	0.25	542	100	166	3.45	7.6	15.0	.
31	40.39	1273.3	648.9	1196.2	2858.47	358.82	4.65	0.00	1198.6	-1.52	1.23	0.21	543	118	164	2.21	7.6	15.8	.
32	51.64	3005.3	506.6	824.2	2428.58	287.46	0.00	0.00	1195.5	-1.60	0.99	0.74	554	111	174	4.02	8.0	16.0	.
33	92.57	3956.5	1546.4	3255.8	7753.69	1224.54	6.72	0.00	1099.6	0.71	2.82	0.90	565	171	127	4.27	16.0	.	14
34	24.94	1248.3	439.8	1006.5	2437.70	225.98	10.06	0.00	1724.0	0.04	2.05	-0.22	0	67	177	2.63	7.2	.	.
35	83.85	5352.8	533.4	319.2	2270.40	113.45	0.00	0.00	1424.5	-1.36	2.31	2.00		76	171	2.58	16.4	8.5	.
36	96.02	6196.7	-262.3	125.7	2678.00	-170.27	0.00	0.00	1270.4	0.13	1.28	2.13	135	84	167	2.43	17.6	9.0	.
37	85.57	3222.4	788.3	755.6	2734.72	229.65	17.50	2.17	1643.1	0.05	3.27	3.40	142	89	167	2.71	17.2	5.0	.
38	90.01	6693.6	-30.6	152.7	3081.69	-140.06	0.00	0.00	1441.7	-1.59	1.77	1.66	163	87	159	2.56	12.4	7.0	.
39	106.75	4296.9	-639.4	-251.4	2793.35	-352.62	0.00	0.00	719.9	-1.22	0.47	1.15	171	81	171	2.54	12.8	4.8	.
40	110.11	3750.8	-546.2	-117.8	2925.04	-345.83	0.00	0.00	583.9	-1.34	-0.20	1.93	177	80	157	2.59	16.0	5.0	.
41	76.77	84.0	-1123.6	-1344.6	279.86	-650.75	0.00	0.00	-217.2	0.37	-2.57	0.02	226	83	151	2.93	14.8	7.1	.
42	115.28	-3496.0	-1730.4	-1600.5	-141.53	-857.48	0.00	0.00	-2293.6	-0.41	-6.96	0.16	230	95	149	3.11	20.4	6.1	16
43	112.55	-2322.8	-1039.7	-417.9	387.28	-459.66	0.00	0.00	-2064.4	1.16	-5.80	0.54	232	87	152	2.59	20.0	.	.
44	0.43	-157.0	-56.2	-58.7	23.47	-15.73	0.81	0.00	-9.2	-0.26	-0.59	-0.04	65	210	231	2.15	1.2	.	.
45	1.56	-595.1	-25.7	-41.3	57.91	-0.07	0.65	0.13	-19.9	-0.20	-0.92	-0.02	70	13	201	2.20	1.2	.	.
46	6.80	-1613.7	-96.0	-9.7	167.78	-57.09	1.48	0.62	48.8	0.10	-1.74	-0.31	90	17	177	2.20	2.0	.	.
47	7.07	-352.0	-9.0	87.8	37.70	-12.69	0.67	0.82	10.2	0.40	-1.14	0.14	90	17	172	2.32	2.0	.	.
48	49.13	1421.4	463.6	1353.8	2164.76	278.88	0.00	2.12	537.7	-0.74	-0.21	1.76		160	151	2.16	4.8	10.5	.
49	51.27	208.9	623.3	1296.7	1823.41	346.04	1.51	3.64	647.0	0.52	-1.94	1.41	142	200	77	2.85	10.8	15.4	22
50	51.65	-20.8	652.6	1382.3	1935.01	364.63	0.95	3.62	646.8	0.40	-1.36	1.60	147	128	83	3.06	12.0	14.5	20
51	10.18	489.1	290.2	453.4	1174.75	120.29	0.67	0.00	62.3	-0.37	0.10	0.91	1	36	190	2.27	3.2	10.0	.
52	11.09	1389.5	257.7	561.4	1926.36	133.77	1.43	0.00	353.7	-1.18	1.43	0.80		160	151	2.16	12.0	10.5	.
53	10.92	1072.2	262.0	535.1	1809.52	130.68	1.77	0.00	291.6	-1.11	1.14	0.45	2	50	189	1.99	1.6	10.0	.
54	11.42	1126.0	319.4	576.6	1959.09	169.09	1.44	0.00	324.5	-1.10	0.88	0.59	3	55	187	2.23	2.4	6.1	.
55	11.43	699.7	320.8	566.6	1908.32	161.67	0.91	0.00	297.6	-1.04	0.71	0.38	4	52	184	2.23	2.0	6.9	.
56	13.83	599.1	347.3	661.8	2108.58	184.00	1.79	0.00	322.2	-1.14	0.83	0.80	7	58	183	2.58	2.4	7.2	.

B-1

OBS	CL2	DET11	DET12	DET13	DET14	DET15	FD1	FD2	FD13	FD4	ZN1	SO4	HRS	FE	VIS	TAN	TS	COB	GC
57	23.60	1033.3	466.32	882.06	2417.21	252.82	5.31	0.00	579.14	-0.87	1.08	0.96	21	64	172	2.28	3.2	6.1	.
58	34.89	829.9	466.52	1033.96	2558.03	255.52	0.00	0.00	791.57	-1.37	0.82	0.65	42	56	169	2.14	4.4	.	.
59	34.47	514.2	429.36	826.99	2287.24	244.43	0.00	0.00	658.81	-1.19	0.85	0.70	56	57	120	2.39	6.0	.	7
60	38.14	735.3	647.66	1042.14	2534.96	358.18	-13.91	2.00	638.08	-0.39	-0.32	1.22	75	63	119	2.64	5.2	.	7
61	43.02	629.2	639.06	1053.67	2701.23	365.22	0.00	2.12	584.45	-0.47	-0.23	1.63	99	75	116	2.82	6.8	.	9
62	44.54	1202.6	579.14	1080.68	2908.11	330.75	0.00	1.80	657.33	-0.74	-0.33	1.48	105	83	117	3.27	7.2	.	10
63	53.36	-1123.1	720.29	1202.15	2469.28	411.93	0.66	1.40	832.80	-1.23	-0.78	1.33	102	87	153	3.16	12.8	18.0	.
64	54.40	-1510.8	917.82	1372.29	3017.91	511.67	1.33	2.06	999.87	-1.21	-0.17	1.69	114	91	169	3.35	12.4	17.0	.
65	47.45	795.5	975.47	1308.05	2688.57	522.94	0.07	2.91	846.95	0.12	-0.26	1.78	121	103	164	3.06	10.0	12.5	.
66	48.72	1467.5	1094.98	1482.76	3230.96	589.34	0.42	3.40	1006.60	-1.16	0.13	1.81	129	105	176	3.04	8.0	12.0	.
67	52.72	-95.1	912.38	1403.93	3105.47	517.10	0.88	3.12	933.33	-1.14	-0.22	1.57	133	99	.	3.86	8.4	12.0	.
68	11.51	727.1	183.18	359.44	680.48	117.96	-1.57	0.53	259.82	-0.28	-0.05	0.34	1	29	181	2.26	2.4	8.0	.
69	11.63	707.2	228.19	385.01	715.59	143.55	1.68	0.41	265.99	-0.22	-0.05	0.52	3	28	175	2.31	2.4	5.1	.
70	11.83	542.8	210.17	399.48	767.49	135.29	1.27	0.52	280.66	-0.27	0.08	0.41	4	30	174	2.32	2.0	5.0	.
71	20.74	-205.3	333.62	583.80	1094.55	216.26	3.57	1.26	320.37	-0.32	-0.64	0.87	24	44	170	2.83	3.6	6.5	.
72	22.79	13.3	368.77	697.47	1352.78	231.41	-4.84	0.94	413.33	-0.35	-0.76	0.95	25	44	153	2.27	8.4	6.1	.
73	24.38	403.3	402.08	746.72	1338.95	263.09	5.42	0.78	380.50	-0.38	-0.88	0.36	31	42	148	2.17	4.0	.	.
74	25.68	-326.5	413.62	752.38	1410.43	265.77	5.72	0.92	366.94	-0.23	-1.27	0.44	33	46	146	2.25	4.0	.	.
75	26.38	-435.6	400.72	759.35	1527.78	258.38	6.13	0.51	424.05	-0.35	-1.44	0.44	34	50	140	2.42	4.0	.	.
76	32.44	300.1	447.85	841.15	1699.03	280.99	-11.03	0.68	497.91	-0.70	-1.34	0.89	45	58	134	2.42	5.2	.	.
77	34.19	34.9	466.53	883.68	2378.05	267.46	0.00	0.83	927.95	-0.88	-1.22	1.01	48	61	121	2.46	5.2	.	.
78	35.90	502.6	913.38	1393.36	2873.48	460.71	13.82	3.24	1447.31	-1.52	0.12	0.67	26	105	102	3.15	12.0	20.0	15
79	37.15	499.5	1055.13	1500.24	3403.21	538.65	14.28	4.62	1459.05	0.05	0.02	1.31	38	161	124	3.36	15.2	19.9	12
80	39.72	1266.5	1202.39	1839.57	4208.64	648.32	-15.03	3.08	1733.51	-1.31	0.43	0.98	38	161	125	4.28	10.4	19.1	10
81	38.62	1418.1	1181.44	1794.39	4143.39	639.67	14.90	3.96	1681.75	-1.34	0.15	0.97	39	159	124	4.38	10.8	19.1	10
82	39.51	1165.5	1177.07	1775.98	4129.19	638.04	14.81	3.40	1676.60	-1.34	0.21	0.95	43	158	118	3.48	8.0	13.0	10
83	40.69	1271.9	1134.14	1789.77	4136.46	620.55	14.66	2.39	1694.02	-1.66	0.18	0.83	46	159	.	3.45	7.2	12.8	.
84	41.63	1493.0	1128.43	1816.72	4157.16	618.79	-0.00	2.21	1666.64	-1.30	0.22	0.50	49	155	138	3.39	12.0	.	8
85	158.25	.	.	.	.	.	.	.	.	.	.	.	50	98	236	2.76	12.8	.	.
86	39.25	1010.5	439.05	995.02	3209.20	250.84	0.00	0.00	516.34	-1.00	2.23	1.77	53	61	368	3.97	7.2	.	4
87	32.98	207.2	782.52	1430.70	3433.11	393.00	13.83	2.63	1459.04	-1.29	0.17	0.52	54	124	137	3.45	12.0	.	7
88	37.28	1269.3	717.73	1446.77	3496.13	359.89	16.42	3.03	1493.89	-1.44	0.35	0.47	55	141	137	3.00	12.0	.	7
89	21.69	365.4	750.66	1150.53	2664.88	348.85	5.79	3.68	1267.63	-1.28	-0.29	0.99	165	61	125	2.74	5.6	16.5	11
90	19.06	567.3	911.80	1273.40	3030.04	401.02	9.81	6.13	1432.30	0.22	-0.77	1.88	179	69	112	2.59	6.8	19.0	12
91	18.80	1064.6	813.87	1342.00	3324.36	423.83	5.85	4.19	1514.57	-1.44	-0.60	0.57	195	67	103	3.35	4.4	17.0	15
92	19.67	1272.6	828.24	1398.45	3503.98	445.84	5.64	4.79	1604.61	-1.48	-0.61	0.60	198	71	.	3.14	4.4	17.9	14
93	19.90	807.5	810.80	1363.46	3516.70	436.01	5.82	4.22	1598.24	-1.53	-0.52	0.49	201	71	101	3.49	4.4	18.0	13
94	18.70	741.2	773.01	1291.02	3225.60	410.50	5.72	3.65	1490.88	-1.47	-0.56	0.83	203	76	100	3.06	4.4	17.5	14
95	20.21	1261.2	830.16	1413.33	3500.24	449.36	5.71	4.61	1593.13	0.09	-0.41	0.65	211	74	99	2.94	4.0	12.9	14
96	20.84	899.4	796.02	1342.87	3372.50	423.58	5.72	4.38	1515.98	-1.50	-0.59	0.70	215	70	106	2.72	4.0	12.0	14
97	26.83	857.0	945.91	1522.71	3889.29	502.44	10.17	4.47	1697.47	-1.63	-0.42	1.23	245	65	103	2.87	6.0	13.9	15
98	31.95	606.3	984.49	1524.72	4119.69	503.40	14.62	3.80	1830.14	0.12	-0.58	1.43	261	85	90	3.35	6.4	21.0	15
99	29.02	554.8	1043.94	1628.79	3922.21	560.70	13.27	4.72	2010.56	0.29	-0.57	0.59	261	91	74	2.73	8.8	.	21
100	0.41	128.3	67.59	54.15	109.90	36.47	0.38	0.37	40.61	0.07	-0.21	0.00	6	12	162	2.95	0.8	.	.
101	1.26	-590.4	74.44	79.86	132.80	44.36	0.87	0.73	30.81	0.14	-1.33	0.08	14	16	145	2.66	0.8	.	7
102	1.37	-520.5	132.43	165.06	285.48	71.35	1.28	0.62	114.64	0.15	-1.71	0.00	103	18	116	3.61	1.6	.	10
103	1.41	-753.9	160.47	269.20	518.85	74.06	2.07	1.04	272.61	0.14	-1.90	0.00	110	16	114	2.87	1.6	.	14
104	81.63	5492.1	1251.13	1886.44	3901.25	491.99	14.56	11.34	2361.89	0.31	2.59	2.11	239	95	176	3.11	19.2	11.0	.
105	80.74	4553.2	1146.76	1863.65	4199.31	442.84	11.05	8.86	2343.05	0.13	2.23	2.18	239	113	174	3.32	19.2	15.0	.
106	102.81	5700.6	1035.74	2721.08	6616.69	689.40	0.00	0.00	1652.11	0.10	1.80	2.08	259	102	246	4.41	25.2	14.6	.
107	123.01	.	.	.	.	.	.	.	.	.	.	.	262	92	208	4.53	21.2	14.2	.
108	28.58	156.1	277.47	666.43	1679.95	167.31	8.41	0.00	639.70	-0.93	0.49	0.81	3	42	160	2.64	4.0	8.0	.
109	0.14	-74.8	21.70	220.07	434.39	9.37	3.82	0.00	836.50	0.05	0.11	-0.09	1	9	103	1.79	1.6	8.8	13
110	68.26	2896.8	553.61	895.34	2623.98	276.27	0.00	0.00	1133.20	-1.42	-0.07	2.04	37	49	154	3.46	15.6	10.1	.
111	66.63	2403.2	687.22	1000.54	2571.04	377.32	0.00	0.00	1066.40	-0.95	-0.20	1.32	53	63	151	3.53	11.2	11.1	.
112	67.73	2514.6	762.72	1046.67	2707.97	422.12	0.00	0.00	1102.18	-1.09	-0.21	1.57	57	70	140	4.58	11.6	.	9

OBS	CL2	DET11	DET12	DET13	DET14	DETI5	FD1	FD2	FD13	FD4	ZN1	SO4	HRS	FE	VIS	TAN	TS	COB	GC
113	72.09	2171.3	1119.68	1051.07	3186.35	545.47	2.19	70.46	1479.60	-0.79	0.21	0.93	61	73	141	4.28	12.0	.	10
114	69.81	2521.9	957.04	1051.74	2904.10	522.22	6.57	0.00	1317.85	-1.08	-0.33	1.53	63	77	133	5.23	12.0	.	9
115	71.83	3626.3	1010.53	1006.23	3042.26	512.33	7.29	0.00	1351.85	-0.96	0.01	1.33	66	78	130	6.00	12.0	.	11
116	72.42	913.9	1247.91	1095.27	3351.81	597.89	1.26	75.78	1589.46	-0.87	0.36	1.77	72	84	123	4.62	12.0	.	13
117	76.39	2825.0	1221.10	1167.88	2778.26	482.10	15.85	0.00	1781.65	0.59	1.73	3.02	349	88	98	3.05	14.4	16.0	16
118	82.52	3308.1	1127.27	1506.35	4154.69	425.95	15.41	0.00	2132.03	0.19	2.67	2.57	363	95	.	3.70	15.2	18.0	14
119	79.06	4333.8	804.82	766.83	2398.12	283.86	16.74	0.00	1504.85	0.33	1.35	2.17	.	95	89	3.83	14.8	15.0	18
120	15.87	244.6	336.23	352.37	1283.98	135.25	1.14	0.21	45.17	-0.33	-0.21	0.59	12	27	206	2.48	3.6	9.2	.
121	21.29	624.0	373.89	608.29	2404.77	195.75	4.58	0.00	584.89	-1.64	1.59	0.88	12	33	179	2.55	2.8	9.0	.
122	27.81	863.8	374.62	692.25	2564.09	201.26	8.10	0.00	539.26	-1.71	1.50	1.33	21	37	171	2.29	3.6	6.1	.
123	28.37	616.1	427.24	705.27	2614.49	229.70	8.81	0.00	554.91	-1.52	1.49	1.22	62	34	179	2.30	3.6	6.0	.
124	29.22	233.9	415.53	681.04	2404.24	216.61	9.25	0.00	523.85	-1.40	1.02	1.14	101	37	147	2.36	4.0	8.0	8
125	36.01	586.5	434.00	826.78	2649.71	238.79	0.00	0.00	626.23	-1.50	0.80	1.38	106	40	143	2.56	4.8	7.5	10
126	36.25	358.3	488.35	899.60	2535.86	265.86	0.00	0.00	603.97	-1.32	0.39	0.68	116	39	136	2.43	4.8	.	7
127	41.41	565.3	534.23	950.12	2744.95	305.01	0.00	0.00	622.20	-1.13	0.44	1.16	125	39	119	5.00	4.0	.	9
128	48.46	1285.1	667.83	1085.65	2887.35	381.06	0.00	0.00	603.03	-1.37	0.22	1.13	142	47	117	7.60	6.0	.	10
129	62.51	1359.8	591.88	968.38	2540.08	302.02	0.00	0.00	516.44	-1.06	-0.45	0.93	157	56	128	4.67	8.0	.	15
130	57.73	801.1	518.82	1006.01	2854.57	293.98	0.00	0.00	766.36	-1.18	0.38	1.12	183	51	132	2.67	8.0	.	15
131	58.35	-852.2	780.16	1125.51	2922.06	434.80	1.63	2.19	835.12	-1.07	0.33	1.73	192	53	124	3.12	14.0	.	19
132	74.76	4627.9	544.69	750.50	2770.30	218.70	6.00	0.00	1051.95	-1.04	2.80	2.43	181	113	177	2.66	10.4	10.5	.
133	72.50	-1917.4	647.29	794.47	2087.59	269.86	0.00	3.19	831.19	0.08	1.43	2.72	215	119	176	2.75	11.2	9.0	.
134	155.84	.	.	.	.	.	.	.	.	.	.	.	255	128	216	3.11	1.6	8.9	.
135	172.27	.	.	.	.	.	.	.	.	.	.	.	262	132	236	2.30	19.2	6.1	.
136	168.13	.	.	.	.	.	.	.	.	.	.	.	267	145	238	3.05	19.2	6.1	.
137	170.39	.	.	.	.	.	.	.	.	.	.	.	268	123	229	2.87	24.0	6.9	.
138	170.98	.	.	.	.	.	.	.	.	.	.	.	287	130	231	3.43	18.4	8.0	.
139	174.66	.	.	.	.	.	.	.	.	.	.	.	289	154	280	3.56	36.4	9.1	.
140	143.62	.	.	.	.	.	.	.	.	.	.	.	289	84	195	2.89	15.6	6.1	.
141	157.70	.	.	.	.	.	.	.	.	.	.	.	308	100	183	2.61	16.0	.	.
142	157.26	.	.	.	.	.	.	.	.	.	.	.	309	93	180	2.66	16.0	.	.
143	170.13	.	.	.	.	.	.	.	.	.	.	.	320	102	184	2.74	16.4	.	.
144	171.56	.	.	.	.	.	.	.	.	.	.	.	376	97	214	2.99	18.0	.	.
145	177.53	.	.	.	.	.	.	.	.	.	.	.	377	107	236	2.99	16.0	.	.
146	39.73	743.3	381.82	997.24	2421.95	164.40	12.42	0.00	1823.20	-0.82	1.53	0.80	39	38	243	2.11	3.2	.	.
147	182.40	.	.	.	.	.	.	.	.	.	.	.	.	171	334	3.90	20.0	15.0	.
148	32.38	704.4	869.60	1270.08	3603.09	426.85	9.99	3.35	340.67	-0.67	-0.27	2.54	.	87	275	3.22	8.0	14.5	.
149	33.23	458.5	305.53	330.91	1523.74	122.42	0.00	0.00	-58.42	-0.70	-0.11	1.40	.	59	286	3.17	5.6	8.2	.
150	3.10	595.6	-365.16	-103.72	439.74	-277.79	1.35	0.00	524.27	-0.32	0.24	0.00	.	45	168	2.31	1.6	8.3	.
151	94.96	7074.1	889.67	2086.87	4927.37	591.69	0.00	0.00	1262.97	-1.15	2.53	3.23	.	120	232	3.92	20.0	17.0	.
152	105.93	5033.5	-277.37	776.18	5221.76	-108.22	0.00	0.00	403.33	-1.22	0.00	2.40	37	159	236	4.20	19.6	15.0	.
153	98.35	5310.3	-67.02	1087.50	3935.07	42.41	0.00	0.00	643.28	-0.79	1.34	2.60	60	181	.	3.71	18.0	10.0	.
154	96.41	5407.8	75.48	1182.40	4214.21	100.33	0.00	0.00	731.24	-0.83	1.32	2.19	60	155	256	4.01	18.0	13.0	.
155	98.94	5788.5	128.35	1216.64	4178.11	112.73	0.00	0.00	591.79	-0.74	0.90	2.14	1	18	164	2.10	2.0	7.0	.
156	8.54	-185.7	97.26	74.09	250.54	72.97	0.69	1.15	101.01	-0.03	-1.32	0.37	1	22	162	2.45	2.0	8.0	.
157	8.75	390.5	35.34	133.12	289.06	56.65	2.15	11.55	152.76	-0.21	-0.22	0.39	2	25	141	1.91	1.6	7.2	1
158	10.36	623.9	45.50	155.33	245.36	62.24	2.32	0.00	138.30	-0.28	-0.08	0.45	6	28	141	2.14	2.0	4.9	1
159	10.63	308.3	43.45	153.29	289.84	61.66	2.26	0.00	114.76	-0.24	-0.30	0.45	6	23	140	2.17	2.5	5.0	1
160	10.60	150.0	50.61	147.64	251.24	63.37	2.10	0.00	84.33	-0.14	-0.47	0.46	7	23	141	2.14	2.8	5.1	0
161	11.79	-153.7	95.47	191.45	350.47	80.52	2.43	0.00	105.43	-0.22	-0.35	0.40	10	26	143	2.33	24.0	6.0	0
162	18.23	-386.1	100.54	224.29	470.54	87.20	3.58	0.14	90.52	-0.12	-0.66	0.29	15	28	143	2.52	2.8	6.1	1
163	22.22	-190.6	90.81	338.97	710.88	81.04	4.24	0.00	126.16	-0.54	-0.65	0.56	20	31	142	2.06	3.2	.	13
164	23.46	196.9	101.71	400.85	739.53	81.96	4.99	0.00	135.21	-0.47	-0.46	0.37	27	35	139	2.06	4.0	.	2
165	24.13	4.8	75.11	394.42	875.57	51.24	4.91	0.00	195.68	-0.49	-0.44	0.11	41	32	144	2.10	4.0	.	2
166	27.62	-401.9	85.24	447.49	1031.68	49.57	6.32	0.00	198.41	-0.51	-0.93	0.27	49	41	142	2.24	4.0	.	2
167	28.38	-744.6	122.53	478.53	1136.68	72.76	6.96	0.00	222.42	-0.49	-1.19	0.29	53	44	139	2.47	4.0	.	2
168	30.52	-616.3	213.07	482.52	1173.20	131.67	8.59	37.42	174.07	-0.36	-1.04	0.33	61	53	139	2.32	4.0	.	2

OBS	CL2	DET11	DET12	DET13	DET14	DET15	FD1	FD2	FD13	FD4	ZN1	SD4	HRS	FE	VIS	TAN	TS	COB	GC
169	5.86	124.6	215.20	258.75	-220.68	58.61	3.35	3.69	121.44	1.09	-1.62	1.04	.	19	108	2.45	1.2	18.5	13
170	7.23	-216.3	264.80	317.74	39.35	104.77	3.29	3.66	229.49	1.15	-2.02	0.75	22	31	160	2.19	1.2	19.0	.
171	8.99	219.2	362.42	361.01	-215.42	115.24	4.81	5.83	-22.98	1.16	-2.84	1.30	34	29	71	2.14	2.0	22.1	23
172	8.61	-98.1	266.86	196.80	-387.90	82.58	1.93	4.37	-239.25	1.05	-3.01	0.84	47	50	72	2.24	1.6	22.1	20
173	0.67	1468.1	165.50	202.40	371.61	73.33	1.50	0.76	221.71	-0.45	-0.71	0.15	4	10	.	2.34	0.4	9.9	8
174	0.64	914.9	153.16	181.18	419.86	83.40	1.33	0.09	265.07	-0.49	-0.54	0.35	4	11	150	2.29	0.8	11.4	.
175	0.35	791.6	149.06	189.60	416.58	76.77	1.39	0.46	280.84	-0.53	-0.78	0.24	6	11	136	2.04	1.2	7.5	2
176	1.26	1087.2	227.25	310.09	588.58	117.17	2.87	1.52	628.98	0.14	-0.39	0.22	10	15	123	1.99	1.2	8.1	10
177	7.81	296.2	280.18	481.00	597.57	132.23	7.49	3.76	1206.98	1.12	-1.79	0.36	29	21	64	1.84	4.0	12.2	26
178	8.08	304.0	286.30	516.58	649.78	129.08	7.92	3.56	1307.97	1.14	-2.22	0.53	31	21	60	1.82	2.4	12.5	30
179	2.06	124.6	5.86	106.75	-390.58	27.44	3.44	1.40	599.55	0.41	-2.45	-0.07	38	8	107	2.06	1.2	7.5	10
180	2.20	-91.8	-33.40	154.57	-328.64	9.39	4.16	1.08	708.76	0.41	-2.00	0.07	41	10	89	1.68	1.2	7.9	11
181	4.03	-155.9	-46.42	251.20	-119.22	14.73	4.70	1.12	804.29	0.42	-2.05	-0.14	43	10	109	1.51	4.0	.	18
182	14.12	-386.3	-5.59	324.18	-235.88	13.02	4.93	1.72	846.58	0.44	-4.07	0.00	74	27	44	1.86	4.0	.	35
183	14.04	-355.8	-3.93	336.54	-235.21	13.88	5.06	1.72	856.45	0.38	-4.00	0.00	77	26	41	1.78	0.8	.	20
184	-0.08	-118.3	29.12	14.97	-17.77	14.76	0.60	0.18	4.66	0.19	-0.83	0.00	3	5	133	1.94	0.8	.	1
185	205.53	.	.	.	.	.	.	.	.	.	.	.	.	95	328	2.59	35.2	14.5	.
186	189.44	.	.	.	.	.	.	.	.	.	.	.	252	50	342	3.10	36.8	15.0	.
187	66.02	-2634.4	457.57	653.54	1907.33	184.43	0.00	43.69	299.63	-0.37	1.22	1.73	281	56	275	2.68	8.4	7.2	.
188	73.11	-1790.3	527.45	587.38	1836.18	214.40	0.00	0.32	428.83	-0.64	1.12	1.42	286	63	267	2.48	8.4	7.0	.
189	104.50	5401.0	-474.01	364.91	2308.96	-233.03	0.00	0.00	332.41	-1.23	1.93	1.40	287	55	278	2.75	8.0	6.9	.
190	148.20	.	.	.	.	.	.	.	.	.	.	.	289	62	298	2.90	9.6	7.0	.
191	11.00	1239.1	-21.75	44.14	4.67	17.03	2.01	2.55	126.26	-0.24	-0.08	0.16	25	10	.	2.13	1.6	4.9	.
192	27.79	-17.2	49.59	218.41	457.26	58.81	6.16	0.32	183.68	-0.13	0.03	0.23	31	20	159	2.07	2.0	6.1	.
193	37.62	424.2	171.13	418.08	829.40	118.50	0.00	0.35	312.17	-0.38	0.49	0.85	41	126	148	2.09	2.0	4.9	2
194	54.73	-808.2	254.65	615.01	1127.61	156.78	0.00	0.48	456.51	-0.48	0.01	1.30	53	29	142	2.47	2.4	6.0	6
195	73.94	2869.3	289.41	480.41	1048.58	121.68	0.00	0.00	713.29	-0.72	0.85	2.03	56	37	124	2.59	6.8	7.1	5
196	81.49	5317.5	400.89	275.61	1348.06	70.62	0.00	0.00	878.49	-1.01	0.96	1.25	57	41	122	2.96	8.4	8.0	6
197	115.36	3263.0	-837.36	-357.45	1064.90	-429.76	0.00	0.00	-144.19	-0.49	-2.05	1.23	72	49	119	2.91	12.8	8.4	7
198	174.52	.	.	.	.	.	.	.	.	.	.	.	107	68	144	3.44	20.0	.	6
199	154.09	.	.	.	.	.	.	.	.	.	.	.	112	61	109	3.04	14.8	.	6
200	170.85	.	.	.	.	.	.	.	.	.	.	.	129	71	153	3.54	16.8	.	.
201	173.14	.	.	.	.	.	.	.	.	.	.	.	138	83	114	3.61	18.8	.	8
202	16.38	873.2	-201.92	113.16	936.15	-180.28	2.72	0.00	444.51	-0.66	1.07	0.54	27	70	177	2.43	2.4	6.0	.
203	31.04	-382.0	-37.56	358.09	1857.00	-83.79	10.05	27.79	530.56	-0.60	-0.19	1.03	51	97	184	2.59	4.0	5.0	.
204	23.11	117.5	24.25	244.97	1227.82	-14.52	4.11	0.00	341.05	-0.50	-0.11	1.27	71	100	191	2.53	5.2	5.2	.
205	35.25	312.4	38.36	353.45	1752.84	-5.58	0.00	0.00	324.17	-0.68	-0.84	0.77	98	104	214	2.76	7.2	.	.
206	37.90	1022.9	143.89	535.89	2075.17	44.21	0.00	0.00	419.20	-0.65	-0.73	0.97	118	113	220	2.68	7.2	.	.
207	59.11	1383.6	716.67	1353.87	3111.72	430.82	0.00	0.00	889.64	-1.21	0.22	1.12	121	75	132	3.61	8.4	.	12
208	49.62	968.4	384.82	801.64	2755.03	205.44	0.00	0.00	313.14	-0.69	-1.04	1.31	162	157	190	3.08	8.4	.	.
209	55.01	242.5	281.45	613.93	2753.18	120.17	0.00	0.00	164.31	-0.78	-1.75	1.20	213	186	198	4.11	11.2	.	.

VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
CL2	209	55.26540670	50.69860042	11550.4700000	-0.08000000	205.53000000
DETI1	184	1063.57410811	1998.21221070	196761.2100000	-3717.52000000	7968.50000000
DETI2	184	354.72271739	507.11333965	65268.9800000	-1730.42000000	1546.44000000
DETI3	184	693.16233696	639.37308407	127541.8700000	-1600.48000000	3255.79000000
DETI4	184	1950.20695652	1452.54291842	358838.0800000	-390.58000000	7753.69000000
DETI5	184	184.38211957	268.02074205	33926.3100000	-857.48000000	1224.54000000
FD1	184	3.80326087	4.64000591	699.8000000	0	17.50000000
FD2	184	2.63896739	8.89488958	485.5700000	0	75.78000000
FDI3	184	628.43923913	828.70288399	115632.8200000	-4154.74000000	2361.89000000
FD4	184	-0.47527174	0.71034197	-87.4500000	-1.71000000	1.16000000
ZN1	184	-0.26597826	1.73345327	-48.9400000	-9.39000000	3.27000000
SO4	184	0.99353261	0.77151261	182.8100000	-0.31000000	3.40000000
HRS	197	130.30964467	134.77343255	25671.0000000	0	565.00000000
FE	209	72.20095694	44.36667364	15090.0000000	5.00000000	210.00000000
VIS	201	160.26865672	58.93095505	32214.0000000	41.00000000	368.00000000
TAN	209	2.84971292	0.80147695	595.5900000	1.51000000	7.60000000
TS	209	8.63014354	6.90893377	1803.7000000	0.40000000	36.80000000
COB	137	11.03430657	4.91862364	1511.7000000	3.70000000	22.10000000
GC	96	11.10416667	6.60219926	1066.0000000	0	35.00000000

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

CL2

CL2	TS	SO4	DETI1	DETI4	HRS	VIS	FE	TAN	FD4	DETI3	FD1	FD2	ZN1
1.00000	-0.80261	0.63988	-0.55220	0.52807	0.50182	-0.47226	0.45665	0.33272	-0.18650	0.16931	-0.11827	0.06624	-0.06309
209	209	184	185	184	197	201	209	209	184	184	184	184	184

DETI5	DETI2	FD13	GC	COB
-0.05635	-0.05073	-0.02843	-0.00776	0.00507
184	184	184	96	137

DETI1

DETI1	ZN1	CL2	SO4	DETI4	FD13	TS	DETI3	FE	TAN	FD4	VIS	HRS	DETI2
1.00000	0.56332	0.55220	0.51302	0.48751	0.44732	0.40818	0.27569	0.24846	0.24263	-0.23033	0.21839	0.13976	0.09167
185	184	185	184	184	184	185	184	185	185	184	177	175	184

FD2	DETI5	GC	FD1	COB
-0.07295	0.07214	-0.02816	0.02235	0.01164
184	184	92	184	123

DETI2

DETI2	DETI5	DETI3	FD13	DETI4	COB	FD1	ZN1	TAN	SO4	FE	HRS	FD4	FD2
1.00000	0.97243	0.87648	0.65230	0.62905	0.54702	0.44984	0.42659	0.40997	0.37699	0.29789	0.24689	-0.22671	-0.21789
184	184	184	184	184	122	184	184	184	184	184	174	184	184

GC	VIS	TS	DETI1	CL2
0.17724	-0.17017	0.09207	0.09167	-0.05073
92	176	184	184	184

DETI3

DETI3	DETI5	DETI2	DETI4	FD13	COB	ZN1	FE	SO4	TAN	FD1	HRS	FD4	DETI1
1.00000	0.91546	0.87648	0.83783	0.66221	0.58538	0.46616	0.46518	0.46355	0.44385	0.38199	0.33074	-0.30858	0.27569
184	184	184	184	184	122	184	184	184	184	184	174	184	184

TS	GC	CL2	FD2	VIS
0.26216	0.20529	0.16931	0.11240	-0.06664
184	92	184	184	176

DETI4

DETI4	DETI3	DETI5	DETI2	SO4	FE	TAN	FD13	TS	CL2	FD4	DETI1	ZN1	HRS
1.00000	0.83783	0.65479	0.62905	0.61770	0.61702	0.57976	0.54815	0.54426	0.52807	-0.49911	0.48751	0.48430	0.44631
184	184	184	184	184	184	184	184	184	184	184	184	184	174

COB	FD1	VIS	GC	FD2
0.44037	0.26598	0.16919	0.12056	0.09998
122	184	176	92	184

DETI5

DETI5	DETI2	DETI3	DETI4	FD13	COB	TAN	ZN1	FD1	SO4	FE	HRS	FD4	FD2
1.00000	0.97243	0.91546	0.65479	0.60967	0.53493	0.42203	0.39437	0.38797	0.31707	0.30942	0.24429	-0.23660	0.18473
184	184	184	184	184	122	184	184	184	184	184	174	184	184

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

DETI5

VIS	GC	TS	DETI1	CL2
-0.16146	0.14134	0.08729	0.07214	-0.05635
176	92	184	184	184

FD1

FD1	FDI3	DETI2	DETI5	DETI3	COB	VIS	DETI4	GC	ZN1	FE	CL2	SD4	FD2
1.00000	0.45459	0.44984	0.38797	0.38199	0.35821	-0.28314	0.26598	0.18483	0.18294	0.16537	-0.11827	0.09309	0.06798
184	184	184	184	184	122	176	184	92	184	184	184	184	184

HRS	TAN	TS	FD4	DETI1
0.05710	0.04350	0.04166	0.02339	0.02235
174	184	184	184	184

FD2

FD2	DETI2	DETI5	TAN	FDI3	DETI3	DETI4	COB	SD4	DETI1	FD1	CL2	TS	FE
1.00000	0.21789	0.18473	0.14990	0.14179	0.11240	0.09998	0.08744	0.07343	-0.07295	0.06798	0.06624	0.05840	0.04306
184	184	184	184	184	184	184	122	184	184	184	184	184	184

VIS	ZN1	GC	HRS	FD4
-0.03156	0.02895	0.01443	0.01016	0.00479
176	184	92	174	184

FDI3

FDI3	ZN1	DETI3	DETI2	DETI5	DETI4	COB	FD1	DETI1	SD4	GC	VIS	FD4	TAN
1.00000	0.72007	0.66221	0.65230	0.60967	0.54815	0.48517	0.45459	0.44732	0.37896	0.28860	-0.23548	-0.22732	0.17250
184	184	184	184	184	184	122	184	184	184	92	176	184	184

FE	HRS	FD2	CL2	TS
0.16244	0.15646	0.14179	-0.02843	0.02839
184	174	184	184	184

FD4

FD4	DETI4	ZN1	GC	TAN	DETI3	VIS	FE	DETI5	DETI1	FDI3	DETI2	CL2	SD4
1.00000	-0.49911	-0.36931	0.33467	-0.31949	-0.30858	-0.29099	-0.25067	-0.23660	-0.23033	-0.22732	-0.22671	-0.18650	-0.16745
184	184	184	92	184	184	176	184	184	184	184	184	184	184

TS	COB	HRS	FD1	FD2
-0.10983	0.07858	-0.03946	0.02339	0.00479
184	122	174	184	184

ZN1

ZN1	FDI3	DETI1	DETI4	SD4	DETI3	DETI2	DETI5	FD4	GC	VIS	FD1	FE	COB
1.00000	0.72007	0.56332	0.48430	0.47102	0.46616	0.42659	0.39437	-0.36931	-0.33951	0.22879	0.18294	0.09969	-0.09381
184	184	184	184	184	184	184	184	184	92	176	184	184	122

HRS	TAN	CL2	FD2	TS
0.08968	0.08502	0.06309	0.02895	0.01141
174	184	184	184	184

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

SO4

SO4	CL2	DETI4	TS	DETI1	ZN1	DETI3	FE	HRS	FDI3	DETI2	TAN	COB	DETI5
1.00000	0.63988	0.61770	0.54232	0.51302	0.47102	-0.46355	0.42379	0.40690	0.37896	0.37609	0.35478	-0.32650	-0.31707
184	184	184	184	184	184	184	184	174	184	184	184	122	184
GC	VIS	FD4	FD1	FD2									
0.23143	0.18503	-0.16745	0.09309	0.07343									
92	176	184	184	184									

HRS

HRS	CL2	FE	TS	DETI4	COB	SO4	GC	DETI3	TAN	DETI2	DETI5	VIS	FDI3
1.00000	0.50182	0.45391	0.45172	0.44631	0.42027	0.40690	0.39916	0.33074	0.28299	0.24689	0.24429	0.19903	0.15646
197	197	197	197	174	125	174	94	174	197	174	174	189	174
DETI1	ZN1	FD1	FD4	FD2									
0.13976	0.08968	0.05710	-0.03946	0.01016									
175	174	174	174	174									

FE

FE	DETI4	TS	DETI3	CL2	HRS	TAN	SO4	COB	DETI5	DETI2	FD4	VIS	DETI1
1.00000	-0.61702	0.56538	-0.46518	0.45665	0.45391	-0.45062	0.42379	0.35656	0.30942	0.29789	-0.25067	-0.25015	-0.24846
209	184	209	184	209	197	209	184	137	184	184	184	201	185
GC	FD1	FDI3	ZN1	FD2									
0.18927	-0.16537	0.16244	0.09969	0.04306									
96	184	184	184	184									

VIS

VIS	GC	CL2	TS	FD4	FD1	COB	FE	FDI3	ZN1	DETI1	HRS	SO4	DETI2
1.00000	-0.78084	0.47226	0.39863	-0.29099	-0.28314	-0.26094	0.25015	-0.23548	0.22879	0.21839	0.19903	0.18503	-0.17017
201	93	201	201	176	176	129	201	176	176	177	189	176	176
DETI4	DETI5	TAN	DETI3	FD2									
0.16919	-0.16146	0.12612	-0.06664	-0.03156									
176	176	201	176	176									

TAN

TAN	DETI4	FE	DETI3	TS	COB	DETI5	DETI2	SO4	CL2	FD4	HRS	DETI1	FDI3
1.00000	0.57976	0.45062	0.44385	0.43717	0.43032	0.42203	0.40997	0.35478	0.33272	-0.31949	0.28299	-0.24263	-0.17250
209	184	209	184	209	137	184	184	184	209	184	197	185	184
FD2	VIS	ZN1	FD1	GC									
0.14990	0.12612	0.08502	0.04350	0.02825									
184	201	184	184	96									

TS

TS	CL2	FE	DETI4	SO4	HRS	TAN	DETI1	VIS	DETI3	COB	FD4	DETI2	DETI5
1.00000	0.80261	0.56538	0.54426	0.54232	0.45172	0.43717	0.40818	0.39863	0.26216	0.16225	-0.10983	0.09207	0.08729
209	209	209	184	184	197	209	185	201	184	137	184	184	184

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

TS

GC	FD2	FD1	FDI3	ZN1
0.06892	-0.05540	0.04186	0.02839	0.01141
96	184	184	184	184

COB

COB	GC	DETI3	DETI2	DETI5	FDI3	DETI4	TAN	HRS	FD1	FE	SO4	VIS	TS
1.00000	0.63938	0.58538	0.54702	0.53493	0.48517	0.44037	0.43032	0.42027	0.35821	0.35656	0.32650	-0.26094	0.16225
137	57	122	122	122	122	122	137	125	122	137	122	129	137

ZN1	FD2	FD4	DETI1	CL2
-0.09381	0.08744	0.07858	0.01164	0.00507
122	122	122	123	137

GC

GC	VIS	COB	HRS	ZN1	FD4	FDI3	SO4	DETI3	FE	FD1	DETI2	DETI5	DETI4
1.00000	-0.78084	0.63938	0.39916	-0.33951	0.33467	0.28860	0.23143	0.20529	0.18927	0.18483	0.17724	0.14134	0.12056
96	93	57	94	92	92	92	92	92	96	92	92	92	92

TS	TAN	DETI1	FD2	CL2
0.06892	0.02825	-0.02816	0.01443	-0.00776
96	96	92	92	96

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

WARNING: 8 OBSERVATIONS DELETED DUE TO MISSING VALUES.

STEP 1 VARIABLE FD1 ENTERED R SQUARE = 0.51831822 C(P) = 34.42050653

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	165991.71563580	165991.71563580	122.67	0.0001
ERROR	114	154258.99988145	1353.14912177		
TOTAL	115	320250.71551724			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	167.48802668				
FD1	-2383.20032646	215.68963596	165991.71563581	122.67	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE DT1A ENTERED R SQUARE = 0.56494380 C(P) = 22.24731459

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	180923.65696499	90461.82848250	73.37	0.0001
ERROR	113	139327.05855225	1232.98281905		
TOTAL	115	320250.71551724			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	143.20845689				
DT1A	0.95084005	0.27322966	14931.54132920	12.11	0.0007
FD1	-2373.12255690	205.94046949	163710.81123115	132.78	0.0001

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE FD11 ENTERED R SQUARE = 0.60236061 C(P) = 12.87344506

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	192906.41662122	64302.13887374	56.55	0.0001
ERROR	112	127344.29889602	1137.00266871		
TOTAL	115	320250.71551724			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	136.63541923				
DT1A	0.87565766	0.26339860	12567.32768089	11.05	0.0012
FD1	-2912.95326404	239.73785514	156535.66019402	137.67	0.0001
FD11	27095.95815836	8346.54675625	11982.75965623	10.54	0.0015

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE DT122 ENTERED R SQUARE = 0.62074217 C(P) = 9.28586285

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	198793.12514360	49698.28128590	45.42	0.0001
ERROR	111	121457.59037364	1094.21252589		
TOTAL	115	320250.71551724			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	134.97211342				
DT122	-0.86983119	0.04278217	5886.70852238	5.38	0.0222
DT1A	1.47083960	0.36399363	17854.17981209	16.32	0.0001
FD1	-2557.11831893	259.76385367	106034.18481992	96.90	0.0001
FD11	23163.43716043	8361.67590681	8396.92957891	7.67	0.0066

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 4 DETI4 REPLACED BY DETI2 R SQUARE = 0.64234656 C(P) = 2.71861465

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	205711.94521961	51427.98630490	49.84	0.0001
ERROR	111	114538.77039763	1031.88081349		
TOTAL	115	320250.71561724			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	136.15577784				
DETI22	-0.21345712	0.05646794	14745.07153745	14.29	0.0003
DETI2	5.10466952	1.04188221	24772.99998809	24.01	0.0001
EDI	-2713.09513649	240.59734552	131213.31436203	127.16	0.0001
EDI1	16521.44118629	8416.65212155	3966.38196443	3.84	0.0524

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE DETI4 ENTERED R SQUARE = 0.65089384 C(P) = 2.12043306

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	208449.21818133	41689.84363627	41.02	0.0001
ERROR	110	111801.49743591	1016.37724851		
TOTAL	115	320250.71561724			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	130.73862313				
DETI22	-0.21634610	0.05606578	15131.96774637	14.89	0.0002
DETI2	3.90429534	1.26668128	9656.09303773	9.50	0.0026
DETI4	0.70525284	0.42974740	2737.27296172	2.69	0.1036
EDI	-2588.50547866	250.56147432	108473.71318908	106.73	0.0001
EDI1	16384.77518026	8353.48704581	3910.21197417	3.85	0.0524

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE EDII4 ENTERED R SQUARE = 0.65725778 C(P) = 2.18593849

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	210487.27421588	35081.21236998	34.84	0.0001
ERROR	109	109763.44139736	1007.00404860		
TOTAL	115	320250.71561724			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	131.74875253				
DETI22	-0.24873651	0.06027609	17148.26418404	17.03	0.0001
DETI2	4.29833359	1.29089314	11164.64209392	11.09	0.0012
DETI4	0.70271661	0.42776493	2717.57361360	2.70	0.1033
EDI	-3264.74908887	536.80241174	37247.90996632	36.99	0.0001
EDI1	19672.55300945	8968.96104331	4895.28913895	4.86	0.0296
EDII4	24.17136176	16.99059806	2038.05603855	2.02	0.1577

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

STEP 7 VARIABLE EDII3 ENTERED R SQUARE = 0.66297819 C(P) = 2.44706297

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	212319.23891274	30331.31984468	30.35	0.0001
ERROR	108	107931.47660450	999.36552412		
TOTAL	115	320250.71561724			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	130.63750561				
DETI22	-0.24342865	0.06016544	16386.52532145	16.40	0.0001
DETI3	3.88282997	1.32209163	8619.86007885	8.63	0.0041
DETI4	0.85992708	0.44167559	3788.26909720	3.79	0.0541
EDI	-3045.52508678	558.73794192	29691.91716672	29.71	0.0001
EDI1	24920.26434138	9616.28075561	6711.43492541	6.72	0.0109
EDII4	56.21062865	29.09957936	3730.15639059	3.73	0.0560
EDII3	-91.15615840	67.32708892	1831.96469286	1.83	0.1786

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: VIS

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	7	2123[illegible].23691774	30331.31984468	30.35	0.0001	0.662978	20.5588
ERROR	[illegible]	1077931.47663450	999.36552412		STD DEV		VIS MEAN
CORRECTED TOTAL	115	3200[illegible].71451724			31.61274307		153.76724138

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE IV SS	F VALUE	PR > F
DET12	1	9713.57027619	9.72	0.0023	1	16386.52532145	16.40	0.0001
DET13	1	32756.16020740	32.78	0.0001	1	8619.86077885	8.63	0.0041
DET14	1	37153.[illegible]85503	37.18	0.0001	1	3788.26909720	3.79	0.0541
ED1	1	125516.24386547	125.60	0.0001	1	29691.51716672	29.71	0.0001
ED11	1	3913.[illegible]97417	3.91	0.0505	1	6711.43492941	6.72	0.0109
ED114	1	2038.0[illegible]3856	2.04	0.1527	1	3730.15639059	3.73	0.0560
ED113	1	1831.96469286	1.83	0.1786	1	1831.96469286	1.83	0.1786

PARAMETER	ESTIMATE	T FOR H0: PARAMETER=0	PR > |T|	STD ERROR OF ESTIMATE
INTERCEPT	130.6275[illegible]561	17.77	0.0001	7.35309697
DET12	-38.7[illegible]865	-4.05	0.0001	0.06016544
DET13	2.98283987	2.94	0.0041	1.32209163
DET14	1.85992708	1.95	0.0541	0.44167559
ED1	-[illegible].5250[illegible]78	-5.45	0.0001	559.73794192
ED11	24030.[illegible]3478	2.50	0.0109	9616.28075561
ED114	56.[illegible]3865	1.93	0.0560	29.09957936
ED113	-61.1561[illegible]40	-1.35	0.1786	67.32708892

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 95% CL INDIVIDUAL	UPPER 95% CL INDIVIDUAL
1	130.000000000	158.[illegible]2462453	-28.36462453	95.26487132	221.46437774
2	121.000000000	162.18967416	-41.18967416	99.12380727	225.25554104
3	[illegible].000000000	155.72001185	-59.72001185	92.53763734	218.90238636
4	[illegible].000000000	162.[illegible]5596	-82.03605596	98.84950013	225.22261179
5	76.000000000	138.[illegible]8352	-64.98928352	75.80805831	202.16850874
6	[illegible].000000000	152.23855038	-18.23855038	88.77604061	215.70106014
7	122.000000000	125.82306291	-3.82306291	62.22956271	189.41656312
8	114.000000000	125.52884131	-11.52884131	61.93378672	189.12389589
9	[illegible].000000000	105.[illegible]3381	6.30800610	41.68498270	169.69900492
10	[illegible].000000000	108.76286715	-9.76286715	44.91050630	172.67522801
11	[illegible].000000000	141.25211711	-72.29211711	77.52940418	205.04483004
12	314.000000000	204.34050814	109.6594[illegible]86	140.03926101	272.64175527
13 *	257.000000000	257.41157610	.	191.27161199	323.55154021
14	345.000000000	338.[illegible]1358	6.99813358	261.95709671	414.04573613
15	230.000000000	196.65180641	33.34819359	103.13942046	230.16419035
16	[illegible].000000000	168.53[illegible]8904	23.46461096	104.99857751	232.07220056
17	183.000000000	141.46[illegible]8556	38.53419444	77.58088781	205.35072330
18	166.000000000	136.[illegible]1118	29.36188882	73.04539876	200.23082361
19	145.000000000	119.[illegible]7111	22.05122889	54.78905783	185.10848438
20	166.000000000	152.[illegible]9879	13.65060121	86.96513135	217.73366623
21	[illegible].000000000	151.[illegible]7557	12.62[illegible]448	85.86584116	216.88389899
22	174.000000000	147.[illegible]1484	26.48398516	82.58270027	212.44932941
23	171.000000000	139.[illegible]6229	31.09253771	75.64502076	204.16990382
24	167.000000000	171.[illegible]6525	-4.00476525	105.95476875	236.05876175
25	167.000000000	143.06213659	23.93786341	79.11649380	207.00777939
26	[illegible].000000000	167.[illegible]6512	-8.68736512	102.29379788	233.08093235
27	171.000000000	158.[illegible]3056	12.99116944	91.74210589	226.07555522
28	157.000000000	165.[illegible]6522	-8.47236522	98.80609663	232.13863381
29	151.000000000	174.[illegible]0543	-23.57760543	107.09140057	242.06381029
30	191.000000000	194.[illegible]3637	-33.70003632	119.67558581	249.72448283
31	77.000000000	100.[illegible]7749	-23.14217749	34.18222536	166.10212962
32	83.000000000	100.[illegible]4700	-17.57654700	33.94311680	167.30997719
33	100.000000000	194.[illegible]5044	-5.65364036	120.67632669	247.03639259
34	199.000000000	173.[illegible]1340	25.32[illegible]651	100.50998028	226.83023770
35	149.000000000	150.16000499	-1.16000499	126.81222757	253.48778242
36	107.000000000	222.[illegible]5351	-35.88485351	158.43191245	287.33779457
37	194.000000000	188.[illegible]6776	-6.20786776	126.04105317	252.57468235
38	133.000000000	165.[illegible]0760	-17.37399240	102.49482993	228.75738528

DEPENDENT VARIABLE: Y

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 95% CL INDIVIDUAL	UPPER 95% CL INDIVIDUAL
39	172.00000000	166.35254419	2.64874582	106.16054152	232.54196684
40	137.00000000	138.75156817	13.24843183	76.31827798	203.18485837
41	130.00000000	136.32329857	32.67671143	72.84893456	199.79764258
42	164.00000000	149.14317749	63.85682251	34.18222536	166.10212962
43	176.00000000	151.60432732	24.39567268	87.38679472	215.82167991
44 *	.	130.68317015	.	76.19974632	203.17659398
45	181.00000000	150.79257290	30.20742710	87.34965121	214.23609458
46	175.00000000	150.13518960	24.86481040	86.71045833	213.55992086
47	174.00000000	151.97831579	22.01231569	88.59469609	215.38467253
48	170.00000000	155.85677741	14.17322259	93.52156272	219.13201210
49	153.00000000	159.92062406	-6.92063406	96.60749654	223.23377157
50	132.00000000	130.58183300	1.67183700	36.09063729	164.56538871
51	132.00000000	142.41344237	-10.41344237	70.64760563	198.17951911
52	125.00000000	107.98156619	17.00843381	41.53787924	174.44525314
53	124.00000000	119.86631747	4.13368253	55.16921463	184.56342031
54	118.00000000	119.96177510	-1.96177510	55.30399955	184.61955064
55 *	.	104.78544682	.	35.09992059	174.47097264
56	125.00000000	121.21095924	3.78904076	57.91211634	184.50984214
57	113.00000000	123.15433750	-10.15433750	58.56427664	185.74439836
58	118.00000000	133.33094314	-15.33094314	53.56366039	183.09822589
59 *	.	121.61905785	.	56.54595986	186.69215584
60	131.00000000	153.33598421	-22.33598421	57.59701927	188.67494914
61	103.00000000	133.52908735	-30.52908735	66.89243124	194.16574346
62	99.00000000	133.63308194	-34.63308194	69.76507082	197.50109306
63	116.00000000	142.84597608	-26.84597608	69.06940177	196.62255039
64	117.00000000	138.08850046	-21.08850046	68.00713744	190.16986348
65	90.00000000	127.36681949	-37.36681949	59.86768144	194.86595753
66	177.00000000	159.92356400	17.07644600	94.05119493	223.79592307
67	173.00000000	169.71192143	4.28807857	105.37745145	234.04639141
68	237.00000000	270.75329471	-33.79329471	206.17650283	353.41008659
69	160.00000000	165.09073318	-5.09073318	101.84621755	228.33524881
70	138.00000000	135.74507241	2.25492759	36.17199807	165.31814678
71	154.00000000	163.34360271	-9.34360271	100.27562457	226.41158085
72	151.00000000	158.16582762	-7.16582762	95.00415056	221.32751469
73	98.00000000	122.91670802	-24.91670802	56.31157719	189.52143884
74 *	.	154.85774609	.	90.18083712	219.53466106
75	90.00000000	141.18730553	-51.18730553	76.29583513	204.07877593
76	206.00000000	212.07005371	-6.07005371	146.92653363	277.21357379
77	179.00000000	163.41679887	15.58320113	100.27225820	226.56133954
78	171.00000000	167.70962054	3.29037946	104.52155356	230.89768752
79	170.00000000	182.67229047	-12.67229047	128.46108605	254.88549489
80	147.00000000	190.74522933	-43.74522933	127.56082017	253.93763849
81	143.00000000	170.92393484	-27.92393484	107.72627629	234.12159338
82	177.00000000	160.14560120	16.85439880	96.98969458	223.30150782
83	176.00000000	215.31212924	-39.31212924	150.53467331	280.08958517
84	269.00000000	168.53886245	99.47113755	104.98731573	232.0704091?
85	284.00000000	249.08256070	36.91743930	180.31704827	317.84807313
86	168.00000000	145.35474616	22.74525384	81.60691371	208.90257860
87	232.00000000	204.39369126	27.60640874	138.94208554	269.84509699
88	236.00000000	266.27710602	-30.27710602	186.91997096	345.63424109
89 *	.	203.39000620	.	224.02323999	360.47694340
90	256.00000000	235.03038071	20.96961929	169.15902603	300.91973538
91	166.00000000	215.35238880	-49.35238880	146.93476480	279.77001279
92	187.00000000	167.54385578	19.45614421	79.06687585	206.02083574
93	141.00000000	145.41374067	-4.41374067	81.88576902	208.94171233
94	141.00000000	145.21115218	-4.21115218	81.62252032	208.79978405
95	145.00000000	146.95928738	-5.95928738	82.42971895	209.48885584
96	141.00000000	146.36926076	-4.36926076	81.74925490	208.83610661
97	143.00000000	146.17557310	-3.17557310	82.69489650	209.65625971
98	133.00000000	138.21238826	-5.21238826	84.79627526	211.62850127
99	108.00000000	85.86245412	22.13754588	20.22345611	151.56303413
100	97.00000000	91.19166574	68.80833494	26.79127577	156.59205435
101	71.00000000	78.44432179	-7.44432179	12.35629320	144.57235039
102	72.00000000	91.72458678	-19.72458678	27.39792204	156.05125152
103	170.00000000	175.92161609	-5.92161609	112.01979373	239.82344845
104 *	.	143.53098670	.	85.26039169	211.80159171
105	150.00000000	148.77798823	1.22201377	85.53946639	212.01650607
106	122.00000000	135.43124583	-13.43124583	86.20936580	212.66512587
107	123.00000000	151.61856032	-28.61856032	88.43055784	214.80656281
108	64.00000000	79.07408595	-15.07408595	12.18991014	145.95826176
109	60.00000000	73.47784441	-13.47784441	1.60096864	145.35472019

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: Y1C

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 95% CL INDIVIDUAL	UPPER 95% CL INDIVIDUAL
110	107.00000000	77.73327220	29.26672780	11.31544676	144.15109765
111	89.00000000	80.36256223	8.63743777	14.28514108	146.43998338
112	275.00000000	186.64278002	88.35721998	123.36880641	249.91675363
113	247.00000000	231.09340301	15.90659699	182.42603806	319.76076796
114	278.00000000	265.45025926	12.54974726	197.25612105	333.64438443
115 *	.	140.74570889	.	76.94897800	204.54243978
116	150.00000000	140.32219691	9.67780309	85.83103666	212.81335717
117	138.00000000	154.52942864	-6.52942864	91.12120483	217.93765244
118	142.00000000	132.97350544	9.02649456	69.43516424	196.51184664
119	120.00000000	150.65183503	-26.65183503	87.37559284	214.00808721
120	122.00000000	139.85811861	-17.85811861	76.34628126	203.36995596
121	119.00000000	141.96076514	-22.96076514	77.20218927	206.71934100
122	177.00000000	154.70515643	22.29484337	91.27592595	218.13438730
123	136.00000000	168.57923200	15.42075700	105.07069355	232.08771246
124	191.00000000	156.62301125	34.37698875	93.96729011	219.88053238

* OBSERVATION WAS NOT USED IN THIS ANALYSIS

SUM OF RESIDUALS	-0.00000000
SUM OF SQUARED RESIDUALS	107931.47660450
SUM OF SQUARED RESIDUALS - ERROR SS	-0.00000000
PRESS STATISTIC	129187.58582608
FIRST ORDER AUTOCORRELATION	0.29020357
DURBIN-WATSON D	1.40118981

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 1 VARIABLE DET14E3 ENTERED R SQUARE = 0.68875221 C(P) = 28.47468765

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	35.83616018	35.83616018	269.97	0.0001
ERROR	122	16.19438620	0.13274087		
TOTAL	123	52.03054639			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.15190301				
DET14E3	0.25015455	0.01522720	35.83616018	269.97	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE DET14E2 ENTERED R SQUARE = 0.72459972 C(P) = 13.37437353

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	37.70132070	18.85066035	159.18	0.0001
ERROR	121	14.32922569	0.11842337		
TOTAL	123	52.03054639			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.15784914				
DET14E2	0.22598864	0.01562148	24.78590250	209.30	0.0001
DET14E3	-0.08741607	0.02202681	1.86516052	15.75	0.0001

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE ED33 ENTERED R SQUARE = 0.73249660 C(P) = 11.60731799

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	38.11219985	12.70406663	109.53	0.0001
ERROR	120	13.91834654	0.11598624		
TOTAL	123	52.03054639			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.10983944				
ED33	19.98056011	10.61579468	0.41087919	3.54	0.0622
DET14E2	0.22576505	0.01546040	24.73309753	213.24	0.0001
DET14E3	-0.07956751	0.02219424	1.49072491	12.85	0.0005

STEP 3 DET14E3 REPLACED BY ED3 R SQUARE = 0.73271685 C(P) = 11.50225203

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	38.12365562	12.70788654	109.65	0.0001
ERROR	120	13.90688977	0.11589074		
TOTAL	123	52.03054639			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.08525894				
ED33	23.53385170	10.47022636	0.58549423	5.05	0.0264
DET14E2	0.23468626	0.01468233	29.60971466	255.50	0.0001
ED3	-2.31547763	0.64313671	1.50218463	12.96	0.0005

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 4 VARIABLE DET3 ENTERED R SQUARE = 0.74273338 C(P) = 8.72405962

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	38.64482524	9.66120631	85.89	0.0001
ERROR	119	13.38572315	0.11248507		
TOTAL	123	52.03054839			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.93454981				
FD33	28.46900338	10.56697046	0.81646659	7.26	0.0081
DET1SQ2	0.17980230	0.02931515	4.23155350	37.62	0.0001
FD3	-3.02153644	0.71348520	2.01732438	17.93	0.0001
DET13	0.02308936	0.01072683	0.52116562	4.63	0.0334

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE FD1 ENTERED R SQUARE = 0.75473954 C(P) = 4.99675260

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	39.26951241	7.85390248	72.62	0.0001
ERROR	118	12.76103597	0.10814437		
TOTAL	123	52.03054839			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.91523850				
FD1	-4.69431765	1.95305510	0.62469719	5.78	0.0178
FD33	30.41621025	10.39270752	0.92631079	8.57	0.0041
DET1SQ2	0.17522147	0.02880713	4.00109328	37.00	0.0001
FD3	-2.67248219	0.71450324	1.51295204	13.99	0.0003
DET13	0.02282268	0.01070062	0.73111233	6.76	0.0105

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE CL1 ENTERED R SQUARE = 0.75780625 C(P) = 5.53394033

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	39.42907476	6.57151246	61.01	0.0001
ERROR	117	12.60147363	0.10770490		
TOTAL	123	52.03054839			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.92965040				
CL1	-0.00104567	0.00085910	0.15956234	1.48	0.2260
FD1	-6.11450269	2.27177090	0.78024086	7.24	0.0082
FD33	27.38443385	11.84671525	1.07255727	9.96	0.0020
DET1SQ2	0.17470630	0.02875166	3.97668958	36.92	0.0001
FD3	-3.23147473	0.88062047	1.51381873	14.06	0.0003
DET13	0.03265927	0.01123180	0.87749369	8.15	0.0051

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 7 VARIABLE DET1413 ENTERED R SQUARE = 0.76021591 C(P) = 6.38435891

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	39.55445066	5.65063581	52.54	0.0001
ERROR	116	12.47609772	0.10755257		
TOTAL	123	52.03054839			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.84446809				
CL1	-0.00095977	0.00095955	0.14549951	1.35	0.2472
ED1	-6.87993988	2.37828664	0.90003972	8.37	0.0046
ED33	39.12683469	11.94782915	1.15343255	10.72	0.0014
DET1EE2	-0.18874643	0.03153752	3.85232763	35.82	0.0001
DET1413	-0.00037535	0.00034765	0.12537590	1.17	0.2825
ED3	-3.39084454	0.89389052	1.58294272	14.72	0.0002
DET13	0.04791741	0.01848527	0.72269636	6.72	0.0108

STEP 7 CL1 REPLACED BY DET133 R SQUARE = 0.76050548 C(P) = 6.24622489

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	39.56951718	5.65278817	52.62	0.0001
ERROR	116	12.46103121	0.10742268		
TOTAL	123	52.03054839			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.89674908				
DET133	0.00151572	0.00123581	0.16055603	1.49	0.2240
ED1	-6.35227860	2.18823274	0.90524899	8.43	0.0044
ED33	32.29260925	10.53222323	1.00986233	9.40	0.0027
DET1EE2	-0.20483773	0.03376127	3.95438075	36.81	0.0001
DET1413	-0.00094169	0.00056578	0.29758550	2.77	0.0987
ED3	-2.73585429	0.72196772	1.54257525	14.36	0.0002
DET13	0.03166986	0.02116426	0.24038526	2.24	0.1374

STEP 7 ED3 REPLACED BY DET1EE3 R SQUARE = 0.76262550 C(P) = 5.23490999

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	39.67982302	5.66854615	53.24	0.0001
ERROR	116	12.35072536	0.10647177		
TOTAL	123	52.03054839			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.84157453				
DET133	0.00235636	0.00123954	0.38538437	3.62	0.0596
ED1	-6.79831465	2.16398760	1.04980068	9.86	0.0021
ED33	27.77110523	10.51558308	0.74259853	6.97	0.0094
DET1EE2	-0.21732238	0.03246578	4.76919811	44.79	0.0001
DET1EE3	-3.29788763	0.82484416	1.65288110	15.52	0.0001
DET1313	-0.00145146	0.00058256	0.66096169	6.21	0.0141
DET13	0.02950418	0.02091421	0.21393505	2.01	0.1590

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

DEPENDENT VARIABLE: [illegible]

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	7	[illegible]	5.66854615	53.24	0.0001	0.762626	11.8682
ERROR	116	[illegible]	0.10647177		STD DEV		TAN MEAN
CORRECTED TOTAL	123	[illegible]			0.32630012		2.74935484

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE IV SS	F VALUE	PR > F
DET133	1	[illegible]	236.26	0.0001	1	0.38538437	3.62	0.0596
FD1	1	[illegible]	78.65	0.0001	1	1.04989068	9.86	0.0021
FD33	1	[illegible]	19.86	0.0001	1	0.74259853	6.97	0.0094
DET1462	1	[illegible]	82.02	0.0001	1	4.76919811	44.79	0.0001
DET1463	1	[illegible]	10.29	0.0017	1	1.65288110	15.52	0.0001
DET1413	1	[illegible]	5.60	0.0197	1	0.66096169	6.21	0.0141
DET13	1	[illegible]	2.01	0.1590	1	0.21393505	2.01	0.1590

PARAMETER	ESTIMATE	T FOR HO: PARAMETER=0	PR > |T|	STD ERROR OF ESTIMATE
INTERCEPT	[illegible]	15.62	0.0001	0.12432924
DET133	[illegible]	1.90	0.0596	0.00123854
FD1	-0.79531465	-3.14	0.0021	2.16398760
FD33	[illegible]	2.64	0.0094	10.51558308
DET1462	[illegible]	6.69	0.0001	0.03246976
DET1463	[illegible]	-3.94	0.0001	0.02484416
DET1413	[illegible]	-2.49	0.0141	0.00058256
DET13	[illegible]	1.42	0.1590	0.02081421

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 95% CL FOR MEAN	UPPER 95% CL FOR MEAN
1	[illegible]	[illegible]	0.71125380	2.34044536	2.55704704
2	[illegible]	[illegible]	0.20190939	2.33321800	2.54296321
3	[illegible]	[illegible]	0.14480144	2.36466407	2.56573304
4	[illegible]	[illegible]	0.05744631	2.66411386	2.86099352
5	[illegible]	[illegible]	-0.22130700	2.61824148	2.79914451
6	[illegible]	[illegible]	-0.02537573	2.10046763	2.30128382
7	[illegible]	[illegible]	-0.13916242	2.03832412	2.24000071
8	[illegible]	[illegible]	-0.22496655	2.06572732	2.26420578
9	[illegible]	[illegible]	-0.13913708	2.02252945	2.25574471
10	[illegible]	[illegible]	0.02294193	2.06596256	2.29415359
11	[illegible]	[illegible]	0.00306350	2.00332103	2.33855196
12	[illegible]	[illegible]	0.17611417	2.03691117	2.53086050
13	[illegible]	[illegible]	-0.09650705	2.18529536	2.70771875
14	[illegible]	[illegible]	-0.21364319	2.56050196	3.30678443
15	[illegible]	[illegible]	1.63619754	2.49311457	2.69448956
16	[illegible]	[illegible]	-0.27192836	2.50875071	2.71309601
17	[illegible]	[illegible]	0.08370694	2.98183688	3.23074924
18	[illegible]	[illegible]	0.09166827	3.16305512	3.38160835
19	[illegible]	[illegible]	-0.44996997	3.56883230	3.87104763
20	[illegible]	[illegible]	0.29852520	4.15209667	4.53085294
21	[illegible]	[illegible]	0.17273651	3.40165135	4.05287559
22	[illegible]	[illegible]	0.32916617	3.97151040	4.35009726
23	[illegible]	[illegible]	-0.45922398	2.89344622	3.18500174
24	[illegible]	[illegible]	-0.38086513	2.66747061	2.95425965
25	[illegible]	[illegible]	-0.46816256	3.05523389	3.30070124
26	[illegible]	[illegible]	-0.51352319	2.89527835	3.25176804
27	[illegible]	[illegible]	-0.16988885	2.48051337	2.93946433
28	[illegible]	[illegible]	-0.12567904	2.52334743	2.90801065
29	[illegible]	[illegible]	0.13804711	2.65972066	3.02418512
30	[illegible]	[illegible]	-0.61269737	3.07412557	3.44126916
31	[illegible]	[illegible]	0.00537916	2.65227817	3.03696352
32	[illegible]	[illegible]	0.06087988	2.78274031	3.21549994
33	[illegible]	[illegible]	-0.01394299	2.17914598	2.39274001
34	[illegible]	[illegible]	-0.33483422	2.20145786	2.38781058
35	[illegible]	[illegible]	-0.36732139	2.25484892	2.45979387
36	[illegible]	[illegible]	-0.20604788	2.30720385	2.56489192
37	[illegible]	[illegible]	-0.13650902	2.26244047	2.47057756
38	[illegible]	[illegible]	-0.18425682	2.30188771	2.48959864

DEPENDENT VARIABLE: [illegible]

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 95% CL FOR MEAN	UPPER 95% CL FOR MEAN
39	[illegible]	[illegible]	-0.25420250	2.44031344	2.62809156
40	[illegible]	[illegible]	-0.25012603	2.80160902	3.01783892
41	[illegible]	[illegible]	0.18690980	3.05964798	3.26753224
42	[illegible]	[illegible]	0.21537016	2.65227817	3.03696352
43	[illegible]	[illegible]	-0.22182690	3.12111209	3.40254173
44	[illegible]	[illegible]	-0.35765389	3.02414782	3.24054441
45	[illegible]	[illegible]	-0.01197372	2.17999622	2.36395122
46	[illegible]	[illegible]	0.02595582	2.19229201	2.37579634
47	[illegible]	[illegible]	0.00158840	2.23016610	2.40665709
48	[illegible]	[illegible]	0.31327742	2.42217842	2.61126675
49	[illegible]	[illegible]	-0.30487133	2.47109703	2.67865564
50	[illegible]	[illegible]	0.26401025	2.75813711	3.01384239
51	[illegible]	[illegible]	-0.02864108	3.28126029	3.49602187
52	[illegible]	[illegible]	0.32291954	3.77460357	4.13955655
53	[illegible]	[illegible]	0.48154328	3.73657072	4.04834273
54	[illegible]	[illegible]	-0.40165003	3.72858115	4.03471891
55	[illegible]	[illegible]	-0.30138274	3.56023772	3.94252776
56	[illegible]	[illegible]	0.13887899	2.48234164	2.72030437
57	[illegible]	[illegible]	-0.14258139	2.48783624	2.97732644
58	[illegible]	[illegible]	0.50076687	2.71159811	2.98687816
59	[illegible]	[illegible]	0.22444785	2.77622420	3.05487599
60	[illegible]	[illegible]	0.58598376	2.75356559	3.04646689
61	[illegible]	[illegible]	0.16648456	2.78507876	3.00195211
62	[illegible]	[illegible]	-0.17863467	3.00832583	3.22894351
63	[illegible]	[illegible]	-0.27985799	2.89094592	3.10877006
64	[illegible]	[illegible]	-0.25723901	2.66955728	3.28491074
65	[illegible]	[illegible]	-0.08031315	3.20211663	3.57850968
66	[illegible]	[illegible]	-0.38483803	3.19356963	3.79610644
67	[illegible]	[illegible]	-0.30850419	3.45021065	3.80679773
68	[illegible]	[illegible]	-0.07788222	3.99663422	4.19913023
69	[illegible]	[illegible]	-0.12029696	2.64521314	2.87538078
70	[illegible]	[illegible]	-0.24442219	1.90269758	2.16614679
71	[illegible]	[illegible]	-0.03728816	3.31977774	3.67479858
72	[illegible]	[illegible]	-0.04551816	3.20377653	3.66518715
73	[illegible]	[illegible]	-0.08584461	3.01546337	3.25622584
74	[illegible]	[illegible]	-0.08494267	3.65023829	3.91958705
75	[illegible]	[illegible]	0.62045744	3.07390282	3.32518229
76	[illegible]	[illegible]	0.12345194	2.21412250	2.49897362
77	[illegible]	[illegible]	0.19974141	2.24157006	2.45894713
78	[illegible]	[illegible]	-0.19228732	2.37556472	2.58500992
79	[illegible]	[illegible]	-0.25448073	2.44160461	2.66735686
80	[illegible]	[illegible]	-0.18728445	2.43939867	2.65514024
81	[illegible]	[illegible]	-0.10692248	2.57200727	2.75983769
82	[illegible]	[illegible]	-0.42892097	2.97644902	3.22139293
83	[illegible]	[illegible]	-0.20217274	2.80482711	3.09951836
84	[illegible]	[illegible]	0.21195304	2.81229203	3.20380189
85	[illegible]	[illegible]	0.15791686	2.26221892	2.60194735
86	[illegible]	[illegible]	0.26428646	1.86555964	2.22586744
87	[illegible]	[illegible]	0.14209627	3.57133121	3.98447625
88	[illegible]	[illegible]	0.38423522	3.52662962	4.10489993
89	[illegible]	[illegible]	0.21753329	3.24621532	3.73871809
90	[illegible]	[illegible]	0.51210880	3.26436204	3.73142037
91	[illegible]	[illegible]	-1.19110703	3.13574745	3.56646660
92	[illegible]	[illegible]	-0.23355737	2.09560979	2.33727547
93	[illegible]	[illegible]	-0.20044134	2.10990080	2.31149187
94	[illegible]	[illegible]	-0.07547014	2.11664146	2.31429882
95	[illegible]	[illegible]	-0.04872183	2.12063287	2.31682979
96	[illegible]	[illegible]	-0.07690025	2.11829729	2.31550321
97	[illegible]	[illegible]	0.09224624	2.14497846	2.33062907
98	[illegible]	[illegible]	0.29516972	2.22886033	2.40080023
99	[illegible]	[illegible]	0.11047792	2.01952223	2.65952193
100	[illegible]	[illegible]	-0.09221338	2.03509173	2.52934502
101	[illegible]	[illegible]	-0.21695423	2.11039055	2.60359790
102	[illegible]	[illegible]	-0.05684916	2.12993700	2.46776132
103	[illegible]	[illegible]	0.00189939	2.05989951	2.29630172
104	[illegible]	[illegible]	0.14586366	2.08053199	2.30769070
105	[illegible]	[illegible]	-0.13241800	2.05480716	2.26035684
106	[illegible]	[illegible]	-0.11994561	2.05740459	2.26248622
107	[illegible]	[illegible]	-0.21875389	2.09049277	2.32709502
108	[illegible]	[illegible]	-0.18433619	1.85617948	2.19249291
109	[illegible]	[illegible]	-0.14734699	1.76448459	2.17022939

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: TAN

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 95% CL FOR MEAN	UPPER 95% CL FOR MEAN
110	2.06000000	1.94475869	0.11524131	1.78898677	2.10053061
111	1.66000000	1.94283517	-0.28283517	1.81499952	2.12468082
112	2.68000000	2.55763642	0.12236358	2.45663436	2.65863848
113	2.48000000	2.80705101	-0.32705101	2.64591159	2.96819043
114	2.75000000	2.44339136	0.30660864	2.28020694	2.60657578
115	2.13000000	2.08533260	0.04466740	1.95436024	2.21630495
116	2.07000000	2.21431880	-0.14431880	2.11821728	2.31042031
117	2.09000000	2.32590823	-0.23590823	2.23770245	2.41411401
118	2.47000000	2.49605367	-0.02605367	2.39726339	2.59484396
119	2.59000000	2.61538578	-0.02538578	2.50987161	2.72089995
120	2.86000000	2.71913673	0.24086327	2.60657812	2.83169534
121	3.01000000	2.37251613	0.63748387	2.02346353	2.52156873
122	2.63000000	2.15128848	0.23871152	2.06306926	2.31950770
123	2.69000000	2.52755503	0.08244498	2.42664959	2.62846046
124	2.53000000	2.38726050	0.14273950	2.29787609	2.47664492

SUM OF RESIDUALS	0.00000000
SUM OF SQUARED RESIDUALS	12.35072536
SUM OF SQUARED RESIDUALS - ERROR SS	0.00000000
PRESS STATISTIC	14.22629726
FIRST ORDER AUTOCORRELATION	0.02170501
DURBIN-WATSON D	1.91398061

STEP 1 VARIABLE CL1I5 ENTERED R SQUARE = 0.77024573 C(P) = 88.35690480

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	1.78318036	1.78318036	409.00	0.0001
ERROR	122	0.53189548	0.00435983		
TOTAL	123	2.31507584			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.05583630				
CL1I4	0.00004732	0.00000234	1.78318036	409.00	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE CL1 ENTERED R SQUARE = 0.80238485 C(P) = 42.27086864

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	1.85758500	0.92879250	245.65	0.0001
ERROR	121	0.45749484	0.00378095		
TOTAL	123	2.31507584			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.03140375				
CL1	0.00088309	0.00019907	0.07440464	19.68	0.0001
CL1I4	0.00002920	0.00000463	0.15033375	39.76	0.0001

STEP 2 CL1I4 REPLACED BY DET133 R SQUARE = 0.80564608 C(P) = 39.62592953

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	1.86513500	0.93256750	250.79	0.0001
ERROR	121	0.44994484	0.00371855		
TOTAL	123	2.31507984			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.00762285				
CL1	0.00180340	0.00009725	1.27875860	343.89	0.0001
DET133	0.00025311	0.00003885	0.15788376	42.46	0.0001

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE CL1I4 ENTERED R SQUARE = 0.81734740 C(P) = 32.13586724

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	1.89222448	0.63074149	178.99	0.0001
ERROR	120	0.42285536	0.00352379		
TOTAL	123	2.31507584			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.00972667				
CL1	0.00124164	0.00022363	0.10862571	30.83	0.0001
DET133	0.00015918	0.00005677	0.03463949	9.83	0.0022
CL1I4	0.00001664	0.00000600	0.02708948	7.69	0.0064

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 3 DET23 REPLACED BY FD2 R SQUARE = 0.82501011 C(P) = 25.92121030

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	1.90996428	0.63665476	188.58	0.0001
ERROR	120	0.40511556	0.00337596		
TOTAL	123	2.31507984			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.00025831				
CL1	0.00101645	0.00019113	0.09548038	28.28	0.0001
FD2	0.52555956	0.13342616	0.05237929	15.52	0.0001
CL114	0.00002202	0.00000474	0.07285418	21.58	0.0001

STEP 3 CL1 REPLACED BY CL2 R SQUARE = 0.82660905 C(P) = 24.62443687

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	1.91366594	0.63788865	190.69	0.0001
ERROR	120	0.40141390	0.00334512		
TOTAL	123	2.31507984			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.00332958				
CL2	0.00166320	0.00031095	0.09918203	29.65	0.0001
FD2	0.59033336	0.13531266	0.06366266	19.03	0.0001
CL114	0.00002298	0.00000450	0.08731369	26.10	0.0001

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE DET14 ENTERED R SQUARE = 0.83029968 C(P) = 23.63124264

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	1.92221004	0.48055251	145.56	0.0001
ERROR	119	0.39286980	0.00330143		
TOTAL	123	2.31507984			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.01869346				
CL2	0.00148411	0.00033514	0.06474040	19.61	0.0001
DET14	-0.00173060	0.00107575	0.00854419	2.59	0.1103
FD2	0.78950104	0.18276367	0.06160662	18.66	0.0001
CL114	0.00003036	0.00000640	0.07423797	22.49	0.0001

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE FD3 ENTERED R SQUARE = 0.83629480 C(P) = 20.76904624

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	1.93608523	0.38721785	120.56	0.0001
ERROR	118	0.37899061	0.00321178		
TOTAL	123	2.31507584			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.01640568				
CL2	0.00175146	0.00036212	0.07860620	24.47	0.0001
DET14	-0.00235066	0.00110754	0.01496454	4.66	0.0329
FD2	0.91313521	0.18982306	0.07432223	23.14	0.0001
CL114	0.00003109	0.00000632	0.07762886	24.17	0.0001
FD3	0.29625486	0.14251371	0.01387919	4.32	0.0398

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 6 VARIABLE DET111 ENTERED R SQUARE = 0.83914292 C(P) = 20.45914683

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	1.94268286	0.32378048	101.73	0.0001
ERROR	117	0.37239698	0.00318288		
TOTAL	123	2.31507984			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.02105257				
CL2	0.00186956	0.00036455	0.08371304	26.30	0.0001
DET111	-0.00000798	0.00000554	0.00659363	2.07	0.1527
DET14	-0.00262743	0.00111475	0.01768182	5.56	0.0201
FD2	0.83758173	0.19612251	0.05805235	18.24	0.0001
CL114	0.00003611	0.00000720	0.08012692	25.17	0.0001
FD3	0.30137133	0.14191551	0.01435372	4.51	0.0358

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

STEP 7 VARIABLE DET133 ENTERED R SQUARE = 0.84133171 C(P) = 20.68398884

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	1.94775007	0.27825001	87.87	0.0001
ERROR	116	0.36732577	0.00316664		
TOTAL	123	2.31507984			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.02654527				
CL2	0.00198036	0.00037402	0.08877814	28.04	0.0001
DET111	-0.00000777	0.00000553	0.00625385	1.97	0.1626
DET133	0.00008305	0.00006565	0.00506721	1.60	0.2084
DET14	-0.00321105	0.00120382	0.02253037	7.11	0.0087
FD2	0.77445298	0.20187884	0.04660704	14.72	0.0002
CL114	0.00003452	0.00000725	0.07106530	22.44	0.0001
FD3	0.27112674	0.14355785	0.01129506	3.57	0.0614

STEP 7 DET111 REPLACED BY CL113 R SQUARE = 0.85775402 C(P) = 7.36507461

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	1.98576905	0.28368129	99.93	0.0001
ERROR	116	0.32931079	0.00283889		
TOTAL	123	2.31507984			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.06247925				
CL2	0.00186831	0.00035090	0.08047939	28.35	0.0001
DET133	0.00045947	0.00011321	0.04676243	16.47	0.0001
DET14	-0.00776877	0.00164345	0.06246073	22.00	0.0001
FD2	1.20398739	0.20599645	0.09697781	34.16	0.0001
CL114	0.00006438	0.00001065	0.10305708	36.30	0.0001
CL113	-0.00006679	0.00002198	0.04427283	15.60	0.0001
FD3	0.42384373	0.14169020	0.02541349	8.95	0.0034

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: TS

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	7	1.98576905	0.28368129	99.93	0.0001	0.857754	30.5167
ERROR	116	0.32521079	0.00283889		STD DEV		TS MEAN
CORRECTED TOTAL	123	2.31097984			0.05328120		0.17459677

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE IV SS	F VALUE	PR > F
CL2	1	1.63559122	576.28	0.0001	1	0.08047939	28.35	0.0001
DET133	1	0.19605886	69.06	0.0001	1	0.04676243	16.47	0.0001
DET14	1	0.00987591	3.48	0.0647	1	0.06246073	22.00	0.0001
FD2	1	0.02479873	8.73	0.0038	1	0.09697781	34.16	0.0001
CL114	1	0.06356847	22.53	0.0001	1	0.10305708	36.30	0.0001
CL113	1	0.02967233	10.45	0.0016	1	0.04427283	15.60	0.0001
FD3	1	0.02541349	8.95	0.0034	1	0.02541349	8.95	0.0034

PARAMETER	ESTIMATE	T FOR H0: PARAMETER=0	PR > |T|	STD ERROR OF ESTIMATE
INTERCEPT	0.06247826	3.08	0.0026	0.02028271
CL2	0.00186831	5.32	0.0001	0.00035090
DET133	0.00346947	4.06	0.0001	0.00011321
DET14	-0.00770877	-4.69	0.0001	0.00164345
FD2	1.20398739	5.84	0.0001	0.20599645
CL114	0.43795[illegible]E-05	6.01	0.0001	0.00001069
CL113	-0.67980756E-05	-3.05	0.0001	0.00002198
FD3	0.42393373	2.99	0.0034	0.14169020

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 95% CL INDIVIDUAL	UPPER 95% CL INDIVIDUAL
1	0.17000000	0.14617964	0.02382036	0.03873757	0.25362171
2	0.17000000	0.13560927	0.03439073	0.02836060	0.24285794
3	0.22000000	0.14474222	0.07525778	0.03769482	0.25178962
4	0.16000000	0.18669386	-0.02669386	0.08009495	0.29329276
5	0.18000000	0.20011964	-0.02011964	0.09340669	0.30683260
6	0.04000000	0.04966382	-0.00966382	-0.05727955	0.15660719
7	0.05000000	0.05105402	-0.00105402	-0.05580584	0.15791388
8	0.05000000	0.04899008	0.00100992	-0.05793108	0.15591124
9	0.15000000	0.15614801	-0.00614801	-0.05058409	0.16288012
10	0.05000000	0.06472795	-0.01472795	-0.04183162	0.17128751
11	0.24000000	0.20731778	0.03268222	0.08766160	0.32697397
12	0.32000000	0.31973841	0.00026159	0.20779732	0.43167951
13	0.30000000	0.32472958	-0.02472958	0.21202763	0.43743153
14	0.30000000	0.32516369	-0.02516369	0.20390197	0.44642540
15	0.10000000	0.13643204	-0.03643204	0.02942879	0.24343529
16	0.10000000	0.13760614	-0.03760614	0.03053240	0.24467987
17	0.21000000	0.31802916	-0.10802916	0.20919483	0.42686349
18	0.27000000	0.26430058	0.00569942	0.15751491	0.37108625
19	0.30000000	0.30300460	-0.00300460	0.19546796	0.41054124
20	0.25000000	0.29075202	-0.04075202	0.19065706	0.40884697
21	0.24000000	0.35912045	-0.11912045	0.24599015	0.47225075
22	0.21000000	0.31341411	-0.10341411	0.20511256	0.42171565
23	0.41000000	0.35142461	0.05857539	0.24119076	0.46165845
24	0.44000000	0.35223835	0.08776165	0.24259852	0.46187818
25	0.43000000	0.34870487	0.08129513	0.23978833	0.45762141
26	0.31000000	0.34646504	-0.03646504	0.23640412	0.45652595
27	0.32000000	0.36531690	-0.04531690	0.25097947	0.47965434
28	0.40000000	0.36061228	0.03938772	0.24786392	0.47336064
29	0.37000000	0.37721588	-0.00721588	0.26201129	0.49242047
30	0.12000000	0.20329805	-0.08329805	0.09570868	0.31088743
31	0.27000000	0.20524541	0.06475459	0.09763620	0.31285463
32	0.30000000	0.21877884	0.08122116	0.11067060	0.32688707
33	0.08000000	0.10438153	-0.02561847	-0.05263209	0.16139516
34	0.05000000	0.06411031	-0.01411031	-0.07118293	0.14296232
35	0.04000000	0.03968255	0.00031745	-0.06719905	0.14656414
36	0.26000000	0.03464452	0.02535548	-0.07253270	0.14182175
37	0.05000000	0.03556780	0.01443220	-0.07156690	0.14270249
38	0.26000000	0.04388680	0.01611320	-0.06333755	0.15111115

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GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: IS

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 95% CL INDIVIDUAL	UPPER 95% CL INDIVIDUAL
39	0.18000000	0.09533801	-0.01603801	-0.01663245	0.19670848
40	0.20000000	0.11118497	0.08881503	0.12405903	0.33826103
41	0.21000000	0.13987575	0.07012425	0.13317498	0.34657652
42	0.35000000	0.30524541	0.04475459	0.09763620	0.31285463
43	0.20000000	0.15162132	-0.05162132	0.14402139	0.35902125
44	0.21000000	0.23880741	-0.02880741	0.13195570	0.34565981
45	0.26000000	0.25901173	0.00098827	-0.04802551	0.16604897
46	0.06000000	0.05803741	0.00196259	-0.04894674	0.16502155
47	0.15000000	0.15079007	-0.00079007	-0.05630135	0.15788150
48	0.09000000	0.07977269	0.01022731	-0.02696446	0.18650983
49	0.15000000	0.08372738	-0.03672738	-0.02598959	0.18744475
50	0.20000000	0.15095885	0.10904115	0.08424432	0.29767337
51	0.24000000	0.19870833	0.04129167	0.09146087	0.30595578
52	0.26000000	0.25004676	0.00995324	0.14025245	0.35984107
53	0.27000000	0.22980528	0.04019472	0.12036647	0.33924409
54	0.20000000	0.23151161	-0.03151161	0.12233087	0.34069235
55	0.18000000	0.23708596	-0.05708596	0.12791895	0.34625296
56	0.16000000	0.12924723	0.03075277	0.02201349	0.23649098
57	0.17000000	0.13698685	0.03301315	0.02745764	0.24651606
58	0.11000000	0.11361808	-0.00361808	0.00594660	0.22128957
59	0.11000000	0.11095454	-0.00095454	0.00284466	0.21906442
60	0.11000000	0.10637823	0.00362177	-0.00185187	0.21460832
61	0.11000000	0.09198660	0.01801340	-0.01605379	0.20002698
62	0.10000000	0.12263203	-0.02263203	0.01453415	0.23072990
63	0.10000000	0.11022270	-0.01022270	0.00227428	0.21817113
64	0.15000000	0.14984276	0.00015724	0.03218387	0.24950165
65	0.16000000	0.17130637	-0.01130637	0.06251794	0.28009480
66	0.48000000	0.45489059	0.02510941	0.33942511	0.57035606
67	0.48000000	0.42258903	0.05741097	0.31255969	0.53261837
68	0.53000000	0.49511695	0.03488305	0.46803107	0.72220283
69	0.10000000	0.08318284	0.01681716	-0.02454910	0.19091478
70	0.04000000	0.01939604	0.02060396	-0.00874342	0.12753551
71	0.39000000	0.25995378	0.13004622	0.15129795	0.36860961
72	0.28000000	0.24672866	0.03327134	0.13855514	0.35490217
73	0.36000000	0.34178826	0.01821174	0.23227413	0.45130238
74	0.38000000	0.40199253	-0.02199253	0.29207576	0.51190930
75	0.27000000	0.31825320	-0.04825320	0.20922585	0.42728055
76	0.07000000	0.07501294	-0.00501294	-0.03237825	0.18240421
77	0.07000000	0.06983629	0.00016371	-0.04691178	0.16858436
78	0.09000000	0.08258067	0.00741933	-0.02505791	0.19021925
79	0.10000000	0.09269285	0.00730715	-0.02514268	0.19052838
80	0.10000000	0.09155502	0.00844498	-0.01571335	0.19882339
81	0.12000000	0.11509207	0.00490793	0.00783116	0.22235297
82	0.26000000	0.31735610	-0.05735610	0.20848247	0.42622973
83	0.28000000	0.28531883	-0.00531883	0.17677248	0.39386517
84	0.15000000	0.16505834	-0.01505834	0.05648789	0.27362879
85	0.14000000	0.12430247	0.01569753	0.01668754	0.23191740
86	0.04000000	0.04301521	-0.00301521	-0.06472116	0.15075159
87	0.59000000	0.48226543	0.01773458	0.36842207	0.59610877
88	0.62000000	0.45916942	0.03083058	0.34175672	0.57658212
89	0.45000000	0.34508544	0.10491456	0.23520745	0.45496344
90	0.45000000	0.36112009	0.08887991	0.25087877	0.47136141
91	0.03000000	0.34960195	-0.31960195	0.25983002	0.47937389
92	0.15000000	0.07970573	-0.02970573	-0.02837008	0.18778155
93	0.04000000	0.04354986	-0.00354986	-0.06448582	0.15158554
94	0.15000000	0.05168155	-0.00168155	-0.05641732	0.15978042
95	0.05000000	0.04769755	0.00230245	-0.06020898	0.15560408
96	0.17000000	0.04886277	0.02113723	-0.05908857	0.15681411
97	0.05000000	0.04615381	0.00384619	-0.06155179	0.15385942
98	0.17000000	0.04280677	0.00719323	-0.04466895	0.17028249
99	0.03000000	0.07951376	-0.04951376	-0.03106270	0.19009022
100	0.03000000	0.07356755	-0.04356755	-0.03563827	0.18277337
101	0.05000000	0.05740874	-0.00740874	-0.01259878	0.20741626
102	0.04000000	0.08426426	-0.04426426	-0.02579203	0.19104056
103	0.02000000	0.02843802	-0.00843802	-0.07924821	0.13612425
104	0.01000000	0.02873741	-0.01873741	-0.07909397	0.13656880
105	0.02000000	0.00181952	0.00181048	-0.08975841	0.12573745
106	0.03000000	0.01802774	0.01197226	-0.08950665	0.12556212
107	0.03000000	0.01967337	0.01032663	-0.08804773	0.12739447
108	0.10000000	0.05489694	0.04510306	-0.05633951	0.15813339
109	0.06000000	0.05133193	0.00866807	-0.05590446	0.15856830

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: TS

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 95% CL INDIVIDUAL	UPPER 95% CL INDIVIDUAL
110	0.03000000	0.04547565	-0.01547565	-0.06256640	0.15351771
111	0.03000000	0.03706855	-0.00706855	-0.07091722	0.14505431
112	0.21000000	0.21743384	-0.00743384	0.11002433	0.32484335
113	0.21000000	0.24365273	-0.03365273	0.13593379	0.35137166
114	0.20000000	0.24970420	-0.04970420	0.13880234	0.36060607
115	0.04000000	0.05385078	-0.01385078	-0.05465124	0.16235279
116	0.05000000	0.08497618	-0.03497618	-0.02198962	0.19194199
117	0.26000000	0.10832520	-0.05832520	0.00159396	0.21505643
118	0.16000000	0.15617484	-0.09617484	0.04870781	0.26364186
119	0.17000000	0.21197783	-0.04197783	0.10286219	0.32109348
120	0.21000000	0.27281317	-0.06281317	0.16396756	0.38165878
121	0.32000000	0.26639732	0.05360268	0.14866116	0.38413347
122	0.16000000	0.17093189	-0.01093189	-0.03572922	0.17759299
123	0.10000000	0.10129785	-0.00129785	-0.00590716	0.20850286
124	0.13000000	0.07392808	0.05607192	-0.03297619	0.18083235

SUM OF RESIDUALS	0.00000000
SUM OF SQUARED RESIDUALS	0.32531079
SUM OF SQUARED RESIDUALS - ERROR SS	-0.00000000
PRESS STATISTIC	0.38659531
FIRST ORDER AUTOCORRELATION	0.19780022
DURBIN-WATSON D	1.59412915

B

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT ...

STEP 1 VARIABLE ZN1 ENTERED R SQUARE = 0.11526925 C(P) = 217.57955412

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	469.80730206	469.80730206	11.73	0.0009
ERROR	90	3605.93182838	40.06590920		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	10.44351725				
ZN1	-1.70281733	0.49727392	469.80730206	11.73	0.0009

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE FDI3 ENTERED R SQUARE = 0.41084899 C(P) = 117.48446478

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	1674.51331029	837.25665515	31.03	0.0001
ERROR	89	2401.22582014	26.98006539		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.56863201				
FDI3	0.00645615	0.00096617	1204.70600823	44.65	0.0001
ZN1	-3.35785552	0.47734906	1335.04178482	49.48	0.0001

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE SO4 ENTERED R SQUARE = 0.54071524 C(P) = 74.63049007

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	2203.81426853	734.60475618	34.53	0.0001
ERROR	88	1871.92486191	21.27187343		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.05288335				
FDI3	0.00574940	0.00086952	930.02005775	43.72	0.0001
ZN1	-4.15687270	0.45311227	1790.30714030	84.16	0.0001
SO4	4.20223534	0.84242627	529.30095824	24.88	0.0001

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE F3F4 ENTERED R SQUARE = 0.60025803 C(P) = 56.06525055

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	2446.49512471	611.62378118	32.66	0.0001
ERROR	87	1629.24400572	18.72694259		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.45057257				
FDI3	0.00696501	0.00088297	1165.24257429	62.22	0.0001
ZN1	-3.96622452	0.42843024	1604.94901260	85.70	0.0001
SO4	3.69291311	0.80299108	396.08063789	21.15	0.0001
F3F4	0.00196316	0.00054535	242.68085618	12.96	0.0005

STEP 4 SO4 REPLACED BY FD44 R SQUARE = 0.62916355 C(P) = 46.08169076

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	2564.30648482	641.07662120	36.90	0.0001
ERROR	87	1511.43264562	17.37278903		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.89106426				
FDI3	0.00712361	0.00084085	1246.91713731	71.77	0.0001
ZN1	-2.93702640	0.38793960	995.76537649	57.32	0.0001
FD44	5.07527003	0.93316405	513.89199799	29.58	0.0001
F3F4	0.00558354	0.00078030	889.54305714	51.20	0.0001

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE GC

STEP 5 VARIABLE SO4 ENTERED R SQUARE = 0.69892662 C(P) = 23.98650854

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	2848.64255803	569.72851161	39.93	0.0001
ERROR	86	1227.09657240	14.26856480		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.42689468				
FOI3	0.00645058	0.00077680	983.91883040	68.96	0.0001
ZN1	-3.58862886	0.38067363	1268.03659671	88.87	0.0001
SO4	3.16074705	0.70804997	284.33607322	19.93	0.0001
FO44	4.53536616	0.85429891	402.14743332	28.18	0.0001
F3F4	0.00486719	0.00072514	642.83228419	45.05	0.0001

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE F3S4 ENTERED R SQUARE = 0.71296296 C(P) = 21.13855299

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	2905.85103368	484.30850561	35.19	0.0001
ERROR	85	1169.88809675	13.76338937		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.58381021				
FOI3	0.00798960	0.00107326	762.71698318	55.42	0.0001
ZN1	-3.62669114	0.37433990	1291.85654100	93.86	0.0001
SO4	5.06410304	1.16411370	260.45917567	18.92	0.0001
FO44	4.17922188	0.85703123	327.28263626	23.78	0.0001
F3F4	0.00487761	0.00071220	645.55441946	46.90	0.0001
F3S4	-0.00191684	0.00094020	57.20847565	4.16	0.0446

STEP 6 SO4 REPLACED BY SO44 R SQUARE = 0.71688289 C(P) = 19.78466292

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	2921.82766266	486.97127711	35.87	0.0001
ERROR	85	1153.91146778	13.57542903		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.87241270				
FOI3	0.00857833	0.00112605	787.85520939	58.04	0.0001
ZN1	-3.46839724	0.36340816	1236.57904247	91.09	0.0001
FO44	4.62026564	0.83169360	418.94859269	30.86	0.0001
SO44	2.78004722	0.61607248	276.43580465	20.36	0.0001
F3F4	0.00452351	0.00072085	534.58116121	39.38	0.0001
F3S4	-0.00333486	0.00118113	108.22186880	7.97	0.0059

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

STEP 7 VARIABLE ZN11 ENTERED R SQUARE = 0.74776331 C(P) = 11.11900073

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	3047.68819681	435.38402812	35.57	0.0001
ERROR	84	1028.05093362	12.23870159		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.24801903				
FOI3	0.01086181	0.00128459	875.00910749	71.50	0.0001
ZN1	-2.42122034	0.47507160	317.89655963	25.97	0.0001
FO44	3.88661788	0.82215686	273.50776724	22.35	0.0001
ZN11	0.36882195	0.11501107	125.86053416	10.28	0.0019
SO44	3.52053535	0.62888133	383.54414508	31.34	0.0001
F3F4	0.00398315	0.00070488	390.80642237	31.93	0.0001
F3S4	-0.00567575	0.00133811	220.18896207	17.99	0.0001

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

STEP 8 VARIABLE Z1S4 ENTERED R SQUARE = 0.75907506 C(P) = 9.21208119

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	3093.79194290	386.72399286	32.69	0.0001
ERROR	83	981.94718754	11.83068901		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.32714122				
FDI3	0.01101655	0.00126542	896.66440267	75.79	0.0001
ZN1	-1.48873076	0.66430480	59.41657011	5.02	0.0277
FD44	3.66548873	0.81606076	238.68703079	20.18	0.0001
ZN11	0.50642830	0.13283678	171.95280552	14.53	0.0003
SO44	3.38985462	0.62184332	351.56872920	29.72	0.0001
F3F4	0.00410503	0.00069581	411.93772494	34.82	0.0001
F3S4	-0.00528691	0.00133028	186.86361200	15.79	0.0001
Z1S4	-1.00780423	0.51052038	46.10374608	3.90	0.0517

STEP 8 ZN1 REPLACED BY FOI33 R SQUARE = 0.75909912 C(P) = 9.20377158

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	3093.89000067	386.73625008	32.69	0.0001
ERROR	83	981.84912977	11.82950759		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.35480348				
FDI3	0.01263347	0.00132059	1082.62288751	91.52	0.0001
FOI33	-0.00000190	0.00000085	59.51462788	5.03	0.0276
FD44	3.28025633	0.80728475	195.31191176	16.51	0.0001
ZN11	0.97330450	0.13268245	636.52676205	53.81	0.0001
SO44	2.52910299	0.73728279	139.19752356	11.77	0.0009
F3F4	0.00376864	0.00072058	323.57574630	27.35	0.0001
F3S4	-0.00335562	0.00168846	46.72281493	3.95	0.0502
Z1S4	-2.02035923	0.36974334	353.20199184	29.86	0.0001

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

STEP 9 VARIABLE ZN1 ENTERED R SQUARE = 0.76888212 C(P) = 7.82486077

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	3133.76296052	348.19588450	30.31	0.0001
ERROR	82	941.97616992	11.48751427		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.10386273				
FDI3	0.01197457	0.00134856	905.74227659	78.85	0.0001
ZN1	-1.24384078	0.66763421	39.87295985	3.47	0.0660
FOI33	-0.00000159	0.00000085	39.97101762	3.48	0.0657
FD44	3.53485294	0.80718171	220.30590520	19.18	0.0001
ZN11	0.73986801	0.18109432	191.74537798	16.69	0.0001
SO44	2.65142841	0.72950789	151.74901681	13.21	0.0005
F3F4	0.00376122	0.00071010	322.29156239	28.06	0.0001
F3S4	-0.00337524	0.00156391	47.26885709	4.11	0.0458
Z1S4	-1.30797760	0.52817274	70.44897937	6.13	0.0153

THE ABOVE MODEL IS THE BEST 9 VARIABLE MODEL FOUND.

F-1

F

STEP 10 VARIABLE F3Z1 ENTERED R SQUARE = 0.77346994 C(P) = 8.24029275

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	3152.46171295	315.24617130	27.66	0.0001
ERROR	81	923.27741748	11.39846664		
TOTAL	91	4075.73913043			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-1.29322626				
FDI3	0.01597115	0.00339724	251.92278396	22.10	0.0001
ZN1	-2.46061319	1.15965237	51.31900791	4.50	0.0369
FDI33	-0.00000326	0.00000156	49.93508614	4.38	0.0395
FD44	3.59243361	0.80530367	226.83253199	19.90	0.0001
ZN11	0.56926887	0.22423739	73.46255165	6.44	0.0130
SD44	2.52997166	0.73283684	135.85133866	11.92	0.0009
F3F4	0.00395979	0.00072413	340.84564674	29.90	0.0001
F3Z1	0.00120459	0.00094050	18.69875243	1.64	0.2039
F3S4	-0.00353455	0.00166211	51.54604016	4.52	0.0365
Z1S4	-1.27632695	0.52670213	66.93309756	5.87	0.0176

THE ABOVE MODEL IS THE BEST 10 VARIABLE MODEL FOUND.

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GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: GC

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	3152.46171295	315.24617130	27.66	0.0001	0.773470	29.9814
ERROR	81	923.27741748	11.39848664		ROOT MSE		GC MEAN
CORRECTED TOTAL	91	4075.73913043			3.37616449		11.26086957

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
FDI3	1	339.47152547	29.78	0.0001	1	251.92278396	22.10	0.0001
ZN1	1	1335.04178482	117.12	0.0001	1	51.31900791	4.50	0.0369
FDI33	1	1.44132137	0.13	0.7231	1	49.93508614	4.38	0.0395
FD44	1	0.40204396	0.04	0.8515	1	226.83253199	19.90	0.0001
ZN11	1	591.91692441	51.93	0.0001	1	73.46255165	6.44	0.0130
SU44	1	369.92964389	32.45	0.0001	1	135.85133866	11.92	0.0009
F3F4	1	328.44494979	28.81	0.0001	1	340.84564674	29.90	0.0001
F3Z1	1	16.62234213	1.46	0.2307	1	18.69875243	1.64	0.2039
F3S4	1	102.25807955	8.97	0.0036	1	51.54604016	4.52	0.0365
Z1S4	1	66.93309756	5.87	0.0176	1	66.93309756	5.87	0.0176

PARAMETER	ESTIMATE	T FOR H0: PARAMETER=0	PR > |T|	STD ERROR OF ESTIMATE
INTERCEPT	-1.29322626	-0.94	0.3509	1.37842287
FDI3	0.01597115	4.70	0.0001	0.00339724
ZN1	-2.46061319	-2.12	0.0369	1.15965237
FDI33	-3.2640641E-06	-2.09	0.0395	0.00000156
FD44	3.59243361	4.46	0.0001	0.80530367
ZN11	0.56926887	2.54	0.0130	0.22423739
SU44	2.52997166	3.45	0.0009	0.73283684
F3F4	0.00395979	5.47	0.0001	0.00072413
F3Z1	0.00120459	1.28	0.2039	0.00094050
F3S4	-0.00353455	-2.13	0.0365	0.00166211
Z1S4	-1.27632695	-2.42	0.0176	0.52670213

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 90% CL INDIVIDUAL	UPPER 90% CL INDIVIDUAL
1	10.00000000	10.34419978	-0.34419978	4.62591278	16.06248677
2	12.00000000	11.37258257	0.62741743	5.65662926	17.08853587
3	18.00000000	14.28225407	3.71774593	8.26389870	20.30060944
4	22.00000000	14.34472616	7.65527384	8.35605261	20.33339972
5	22.00000000	19.48275730	2.51724270	13.50446161	25.46105299
6	6.00000000	5.69883532	0.30116468	-0.05301564	11.45068628
7	9.00000000	6.81189379	2.18810621	1.07523100	12.54855658
8	10.00000000	7.14984820	2.85015180	1.37744314	12.92225327
9	10.00000000	7.82404053	2.17595947	2.04705379	13.60102728
10	3.00000000	8.54774199	-5.54774199	2.77213983	14.32334414
11	14.00000000	15.64209860	-1.64209860	9.80930421	21.47489299
12 *					

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: GC

OBSERVATION		OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 90% CL INDIVIDUAL	UPPER 90% CL INDIVIDUAL
13	*	.	1.68752835	.	-4.13754838	7.51260509
14		6.00000000	7.74449988	-1.74449988	1.96146326	13.52753650
15		10.00000000	11.28777575	-1.28777575	5.51744099	17.05811050
16		15.00000000	13.25985270	1.74014730	7.44003139	19.07967401
17	*	.	10.62151952	.	3.81804613	17.42499290
18	*	.	14.87414376	.	7.56242096	22.18586655
19	*					
20	*					
21	*	.	-0.03122127	.	-5.92805596	5.86561341
22	*	.	5.51398194	.	-0.18943313	11.21739701
23	*	.	5.37229185	.	-0.33586967	11.08045338
24	*	.	17.10219705	.	3.35228314	37.55667724
25	*	.	-2.56523626	.	-10.38518572	5.25471321
26	*	.	5.10710872	.	-3.81172525	14.02594269
27	*	.	10.44351260	.	0.13484551	20.75217970
28	*	.	18.29431240	.	12.21435298	24.37427181
29	*	.	15.92245557	.	9.99171994	21.85319120
30	*	.	13.04849702	.	6.90721707	19.18977696
31	*	.	12.74903146	.	6.60396329	18.89409963
32	*	.	11.62866327	.	5.65718734	17.60013920
33		14.00000000	13.86008664	0.13991336	6.87175766	20.84841561
34	*	.	20.46249716	.	11.88796905	29.03702528
35	*	.	9.27816589	.	2.93749154	15.61884023
36	*	.	12.61941072	.	6.74391896	18.49490247
37	*	.	16.29457174	.	7.27078639	25.31835709
38	*	.	10.21760894	.	4.08628748	16.34893040
39	*	.	9.48857924	.	3.75501675	15.22214173
40	*	.	16.57940619	.	10.52030365	22.63850873
41	*	.	6.09523863	.	0.10239730	12.08807997
42		16.00000000	15.94738652	0.05261348	8.12290779	23.77186525
43	*	.	3.69767975	.	-4.59655234	11.99191185
44	*	.	0.44111627	.	-5.43559514	6.31782768
45	*	.	1.29102308	.	-4.55159547	7.13364164
46	*	.	5.04449199	.	-0.88605576	10.97503975
47	*	.	3.23944091	.	-2.55771487	9.03659669
48	*	.	12.11182985	.	6.25109625	17.97256344
49		22.00000000	20.67836936	1.32163064	14.66385613	26.69288260
50		20.00000000	18.20681113	1.79318887	12.30269468	24.11092758
51	*	.	1.63497989	.	-4.40604122	7.67600099
52	*	.	4.71078185	.	-1.68515760	11.10672130
53	*	.	3.95959901	.	-2.32705785	10.24625587
54	*	.	4.63955661	.	-1.40680897	10.68592218
55	*	.	4.24652185	.	-1.74196041	10.23500411
56	*	.	5.26057510	.	-0.77300453	11.29415472
57	*	.	5.38867062	.	-0.46244821	11.23978945
58	*	.	9.46928335	.	3.62343362	15.31513307
59		7.00000000	7.63944457	-0.63944457	1.83612794	13.44276120
60		7.00000000	9.24182230	-2.24182230	3.53602227	14.94762234
61		9.00000000	10.89931815	-1.89931815	5.11897648	16.67965981
62		10.00000000	11.17494501	-1.17494501	5.46781191	16.88207810
63	*	.	14.49005627	.	8.70504531	20.27506722

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: GC

OBSERVATION		OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 90% CL INDIVIDUAL	UPPER 90% CL INDIVIDUAL
64	*	.	13.73151979	.	7.95934321	19.50369638
65	*	.	14.03736487	.	8.25364731	19.82108244
66	*	.	13.08207837	.	7.31461673	18.84954002
67	*	.	13.04454968	.	7.30465098	18.78444839
68	*	.	2.74035520	.	-3.01864702	8.49935742
69	*	.	3.00300176	.	-2.75260301	8.75860653
70	*	.	2.70449103	.	-3.06773339	8.47671544
71	*	.	6.65176773	.	0.95781718	12.34571828
72	*	.	8.25511294	.	2.55504644	13.95517943
73	*	.	6.70832317	.	0.98617382	12.43047251
74	*	.	8.09772980	.	2.34446168	13.85099793
75	*	.	9.37192794	.	3.59910551	15.14475038
76	*	.	11.70545508	.	5.95913401	17.45177615
77	*	.	13.59133706	.	7.80382417	19.37884995
78		15.00000000	12.10127611	2.89872389	6.28187728	17.92067494
79		12.00000000	12.89733192	-0.89733192	7.04783790	18.74682595
80		10.00000000	9.58933540	0.41066460	3.76848765	15.41018316
81		10.00000000	10.23800087	-0.23800087	4.43713347	16.03886827
82		10.00000000	10.19454045	-0.19454045	4.39632095	15.99275996
83	*	.	11.68476971	.	5.79011008	17.57942933
84		8.00000000	11.22476529	-3.22476529	5.28260661	17.16692396
85	*	.	.	.	.	.
86	*	.	6.01974795	.	-1.19616260	13.23565850
87		7.00000000	11.37253717	-4.37253717	5.54271327	17.20236106
88		7.00000000	11.91801004	-4.91801004	6.02080621	17.81521386
89		11.00000000	11.89711863	-0.89711863	6.14668961	17.64754765
90		12.00000000	18.48335281	-6.48335281	12.34372228	24.62298335
91		15.00000000	13.01547620	1.98452380	7.20305952	18.82789289
92		14.00000000	12.90379804	1.09620196	7.03695190	18.77064418
93		13.00000000	13.21845001	-0.21845001	7.30679858	19.13010144
94		14.00000000	12.86050914	1.13949086	7.06207696	18.65894132
95		14.00000000	14.52997669	-0.52997669	8.59024590	20.46970749
96		14.00000000	13.08429415	0.91570585	7.27310730	18.89548100
97		15.00000000	12.38300233	2.61699767	6.30374824	18.46225641
98		15.00000000	15.24673292	-0.24673292	8.97037364	21.52309220
99		21.00000000	17.55829441	3.44170559	10.86923716	24.24735165
100	*	.	-0.08960089	.	-6.00532383	5.82612205
101		7.00000000	3.65675358	3.34324642	-2.14435368	9.45786084
102		10.00000000	6.27983722	3.72016278	0.44107818	12.11859625
103		14.00000000	9.14593060	4.85406940	3.27516470	15.01669649
104	*	.	12.95324117	.	6.14287858	19.76360376
105	*	.	10.87797405	.	4.23818699	17.51776112
106	*	.	11.89237918	.	5.85889125	17.92586711
107	*	.	.	.	.	.
108	*	.	6.96959666	.	1.26169631	12.67749701
109		13.00000000	10.08122467	2.91877533	4.12128225	16.04116709
110	*	.	16.10521843	.	10.15798870	22.05244816
111	*	.	11.28481977	.	5.54811714	17.02152240
112		9.00000000	12.65932801	-3.65932801	6.89565407	18.42300195
113		10.00000000	9.76337446	0.23662554	3.96257107	15.56417786
114		9.00000000	12.43009911	-3.43009911	6.59572509	18.26447314

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: GC

OBSERVATION		OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 90% CL INDIVIDUAL	UPPER 90% CL INDIVIDUAL
115		11.00000000	10.59921094	0.40078906	4.82296645	16.37545544
116		13.00000000	10.13559030	2.86440970	4.22512195	16.04605864
117		16.00000000	20.76153955	-4.76153955	14.05890819	27.46417091
118		14.00000000	12.58534086	1.41465914	5.86480876	19.30587295
119		18.00000000	14.50195613	3.49804387	8.58482176	20.41909050
120	*	.	1.22875208	.	-4.67282229	7.13032644
121	*	.	9.79658133	.	3.36072798	16.23243468
122	*	.	11.18163544	.	4.59488254	17.76838834
123	*	.	9.17040221	.	2.86538643	15.47541798
124		8.00000000	8.73377162	-0.73377162	2.71048253	14.75706071
125		10.00000000	11.14549258	-1.14549258	5.15077704	17.14020811
126		7.00000000	9.05518245	-2.05518245	3.24457946	14.86578543
127		9.00000000	8.74264569	0.25735431	3.02322760	14.46206378
128		10.00000000	10.77287535	-0.77287535	4.95174631	16.59400440
129		15.00000000	9.92043720	5.07956280	4.21655109	15.62432331
130		15.00000000	9.54523418	5.45476582	3.82814583	15.26232253
131		19.00000000	11.66144525	7.33855475	5.91664832	17.40624219
132	*	.	9.79044263	.	2.30094151	17.27994374
133	*	.	14.85255977	.	7.29349896	22.41162057
134	*					
135	*					
136	*					
137	*					
138	*					
139	*					
140	*					
141	*					
142	*					
143	*					
144	*					
145	*					
146	*	.	9.30067690	.	3.02140787	15.57994593
147	*					
148	*	.	19.21195840	.	11.30828707	27.11562974
149	*	.	5.41450264	.	-1.10452048	11.93352576
150	*	.	5.48016644	.	-0.28063593	11.24096882
151	*	.	15.48473369	.	6.46593438	24.50353301
152	*	.	19.16716883	.	11.85401391	26.48032375
153	*	.	13.36726077	.	5.53352063	21.20100091
154	*	.	10.40240434	.	3.88387189	16.92093680
155	*	.	10.78826467	.	4.26381396	17.31271538
156	*	.	5.19485326	.	-0.55699093	10.94669744
157		1.00000000	1.91390153	-0.91390153	-3.88178194	7.70958499
158		1.00000000	1.50691910	-0.50691910	-4.33250194	7.34634013
159		1.00000000	1.84453611	-0.84453611	-3.96252369	7.65159591
160		0.00000000	1.96273759	-1.96273759	-3.83633386	7.76180904
161		0.00000000	1.75728047	-1.75728047	-4.04832460	7.56288553
162		1.00000000	2.29874183	-1.29874183	-3.47561676	8.07310042
163		13.00000000	4.19693022	8.80306978	-1.54099328	9.93485373
164		2.00000000	2.91266551	-0.91266551	-2.84909362	8.67442464
165		2.00000000	3.29536341	-1.29536341	-2.44182078	9.03254759

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: GC

OBSERVATION		OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 90% CL INDIVIDUAL	UPPER 90% CL INDIVIDUAL
166		2.00000000	5.15484943	-3.15484943	-0.57200036	10.88169922
167	*	.	6.36927027	.	0.63076341	12.10777713
168		2.00000000	5.07260976	-3.07260976	-0.65937193	10.80459144
169		13.00000000	15.07406561	-2.07406561	9.22151580	20.92661543
170	*	.	17.47937983	.	11.50208123	23.45667843
171		23.00000000	23.81815089	-0.81815089	17.64836297	29.98793881
172		20.00000000	16.81885840	3.18114160	10.90201489	22.73570190
173		8.00000000	4.33938322	3.66061678	-1.38403445	10.06280088
174	*	.	4.60467353	.	-1.10337777	10.31272484
175		2.00000000	5.50255977	-3.50255977	-0.21084743	11.21596696
176		10.00000000	8.37368991	1.62631009	2.61178303	14.13559680
177		26.00000000	26.32831559	-0.32831559	20.00037391	32.65625726
178		30.00000000	29.11808902	0.88191098	22.68635151	35.54982652
179		10.00000000	16.30420283	-6.30420283	10.34459210	22.26381356
180		11.00000000	15.64787202	-4.64787202	9.78038742	21.51535663
181		18.00000000	16.94383044	1.05616956	10.94343130	22.94422958
182		35.00000000	27.35283712	7.64716288	20.62510251	34.08057173
183		20.00000000	26.62257896	-6.62257896	19.93886827	33.30628964
184		1.00000000	1.34414040	-0.34414040	-4.48547718	7.17375798
185	*					
186	*					
187	*	.	4.58363200	.	-2.26823134	11.43549534
188	*	.	4.79612435	.	-1.32945410	10.92170280
189	*	.	5.48056717	.	-1.66697754	12.62811189
190	*					
191	*	.	0.95621537	.	-4.89787336	6.81030410
192	*	.	1.40542733	.	-4.42780169	7.23865636
193		2.00000000	2.89710262	-0.89710262	-2.96163852	8.75584375
194		6.00000000	7.41992008	-1.41992008	1.69663652	13.14320364
195		5.00000000	10.42244652	-5.42244652	4.30272078	16.54217226
196		6.00000000	8.08796091	-2.08796091	2.34090992	13.83501190
197		7.00000000	12.94373860	-5.94373860	7.02627509	18.86120212
198	*					
199	*					
200	*					
201	*					
202	*	.	3.30801560	.	-2.68579595	9.30182716
203	*	.	7.66325531	.	1.98693846	13.33957215
204	*	.	6.95726556	.	1.20000565	12.71452546
205	*	.	7.91325941	.	2.22617865	13.60034017
206	*	.	8.84510045	.	3.16249433	14.52770656
207		12.00000000	10.38835949	1.61164051	4.65940928	16.11730970
208	*	.	11.65579223	.	5.91620191	17.39538256
209	*	.	14.25063261	.	8.46523196	20.03603325

* OBSERVATION WAS NOT USED IN THIS ANALYSIS

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: GC

SUM OF RESIDUALS	-0.00000000
SUM OF SQUARED RESIDUALS	923.27741748
SUM OF SQUARED RESIDUALS - ERROR SS	-0.00000000
PRESS STATISTIC	1375.47996823
FIRST ORDER AUTOCORRELATION	0.20625827
DURBIN-WATSON D	1.58454192

UNIVARIATE

VARIABLE=CL2

MOMENTS

N	209	SUM WGTS	209
MEAN	55.2654	SUM	11550.5
STD DEV	50.6986	VARIANCE	2570.35
SKEWNESS	1.16054	KURTOSIS	0.470797
USS	1172974	CSS	534632
CV	91.7366	STD MEAN	3.5069
T:MEAN=0	15.7591	PROB>|T|	0.0001
SGN RANK	10971.5	PROB>|S|	0.0001
NUM ^= 0	209		

QUANTILES(DEF=4)

100% MAX	205.53	99%	190.196
75% Q3	81.115	95%	171.27
50% MED	38.43	90%	148.2
25% Q1	16.125	10%	7.07
0% MIN	-0.08	5%	1.315
		1%	0.159
RANGE	205.61		
Q3-Q1	64.99		
MODE	1.26		

EXTREMES

LOWEST	HIGHEST
-0.08	177.53
0.14	182.4
0.33	189.46
0.36	190.28
0.41	205.53

```
STEM LEAF                            #  BOXPLOT
  20 6                               1     0
  19 0                               1     0
  18 29                              2     0
  17 0011223558                     10     |
  16 8                               1     |
  15 46788                           5     |
  14 48                              2     |
  13                                       |
  12 0013                            4     |
  11 02356                           5     |
  10 3466788                         7     |
   9 03356689                        8     |
   8 1123446                         7     +-----+
   7 02222345679                    11     |     |
   6 13678A                          6     |     |
   5 012233455688899                14     |  +  |
   4 000011123578899916             16     +-----+
   3 11222333445566677888889999     25     *-----*
   2 000111223334445667888889999    26     |     |
   1 00011111111112222244466899999  27     +-----+
   0 11111111222346777809999999     26     |
  -0 00000                           5     |

MULTIPLY STEM.LEAF BY 10**+01
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NORMAL PROBABILITY PLOT

```
 205+                                                    *
    |                                                  **+
    |                                                ***
    |                                              ***
    |                                            ***
    |                                          ***
    |                                        ***
    |                                      ***
    |                                    ***
 135+                                  ***
    |                                ****
    |                              ***
    |                            ***
    |                          ***
    |                        ***
    |                      ***
    |                    ***
    |                  ***
  65+                ***
    |              ***
    |            ***
    |          ***
    |        ***
    |      ***
    |    ***
    |  ***
    |*****
    |***
 -5+**+
    +----+----+----+----+----+----+----+----+----+
        -2   -1   +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-0.08	1	0.5	0.5	2.06	1	0.5	7.2	8.75	1	0.5	12.9	11	1	0.5	18.7
0.14	1	0.5	1.0	2.2	1	0.5	7.7	8.9	1	0.5	13.4	11.09	1	0.5	19.1
0.33	1	0.5	1.4	3.1	1	0.5	8.1	8.99	1	0.5	13.9	11.31	1	0.5	19.6
0.36	1	0.5	1.9	4.03	1	0.5	8.6	9.13	1	0.5	14.4	11.42	1	0.5	20.1
0.41	1	0.5	2.4	5.86	1	0.5	9.1	9.15	1	0.5	14.8	11.43	1	0.5	20.6
0.64	1	0.5	2.9	6.8	1	0.5	9.6	10.12	1	0.5	15.3	11.51	1	0.5	21.1
0.67	1	0.5	3.3	7.07	1	0.5	10.0	10.18	1	0.5	15.8	11.63	1	0.5	21.5
0.95	1	0.5	3.8	7.23	1	0.5	10.5	10.36	1	0.5	16.3	11.79	1	0.5	22.0
1.26	2	1.0	4.8	7.81	1	0.5	11.0	10.6	1	0.5	16.7	11.83	1	0.5	22.5
1.37	1	0.5	5.3	8.08	1	0.5	11.5	10.63	1	0.5	17.2	11.93	1	0.5	23.0
1.41	2	1.0	6.2	8.54	1	0.5	12.0	10.86	1	0.5	17.7	13.83	1	0.5	23.4
1.54	1	0.5	6.7	8.61	1	0.5	12.4	10.92	1	0.5	18.2	14.04	1	0.5	23.9

F

UNIVARIATE

VARIABLE=CL2

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
14.12	1	0.5	24.4
15.87	1	0.5	24.9
16.38	1	0.5	25.4
18.23	1	0.5	25.8
18.7	1	0.5	26.3
18.8	1	0.5	26.8
19.05	1	0.5	27.3
19.06	1	0.5	27.8
19.67	1	0.5	28.2
19.9	1	0.5	28.7
20.21	1	0.5	29.2
20.74	1	0.5	29.7
20.84	1	0.5	30.1
21.29	1	0.5	30.6
21.69	1	0.5	31.1
22.22	1	0.5	31.6
22.79	1	0.5	32.1
23.11	1	0.5	32.5
23.46	1	0.5	33.0
23.6	1	0.5	33.5
24.13	1	0.5	34.0
24.38	1	0.5	34.4
24.94	1	0.5	34.9
25.68	1	0.5	35.4
26.38	1	0.5	35.9
26.83	1	0.5	36.4
27.62	1	0.5	36.8
27.79	1	0.5	37.3
27.81	1	0.5	37.8
28.37	1	0.5	38.3
28.38	1	0.5	38.8
28.58	1	0.5	39.2
29.02	1	0.5	39.7
29.22	1	0.5	40.2
30.52	1	0.5	40.7
31.04	1	0.5	41.1
31.95	1	0.5	41.6
32.38	1	0.5	42.1
32.44	1	0.5	42.6
32.77	1	0.5	43.1
32.98	1	0.5	43.5
33.23	1	0.5	44.0
34.19	1	0.5	44.5
34.47	1	0.5	45.0
34.89	1	0.5	45.5
35.25	1	0.5	45.9
35.9	1	0.5	46.4
36.01	1	0.5	46.9
36.25	1	0.5	47.4
37.15	1	0.5	47.8
37.28	1	0.5	48.3
37.62	1	0.5	48.8
37.9	1	0.5	49.3
38.14	1	0.5	49.8
38.43	1	0.5	50.2
38.49	1	0.5	50.7
38.62	1	0.5	51.2
38.99	1	0.5	51.7
39.25	1	0.5	52.2
39.51	1	0.5	52.6
39.72	1	0.5	53.1
39.73	1	0.5	53.6
40.39	1	0.5	54.1
40.69	1	0.5	54.5
41.05	1	0.5	55.0
41.41	1	0.5	55.5
41.63	1	0.5	56.0
43.02	1	0.5	56.5
44.54	1	0.5	56.9
47.45	1	0.5	57.4
48.27	1	0.5	57.9
48.46	1	0.5	58.4
48.72	1	0.5	58.9
49.06	1	0.5	59.3
49.13	1	0.5	59.8
49.62	1	0.5	60.3
51.27	1	0.5	60.8
51.64	1	0.5	61.2
51.65	1	0.5	61.7
52.72	1	0.5	62.2
53.36	1	0.5	62.7
54.4	1	0.5	63.2
54.73	1	0.5	63.6
54.9	1	0.5	64.1
55.61	1	0.5	64.6
57.73	1	0.5	65.1
58.35	1	0.5	65.6
59.11	1	0.5	66.0
59.12	1	0.5	66.5
60.92	1	0.5	67.0
62.51	1	0.5	67.5
66.02	1	0.5	67.9
66.63	1	0.5	68.4
67.73	1	0.5	68.9
68.26	1	0.5	69.4
69.81	1	0.5	69.9
71.83	1	0.5	70.3
72.09	1	0.5	70.8
72.42	1	0.5	71.3
72.5	1	0.5	71.8
73.11	1	0.5	72.2
73.94	1	0.5	72.7
74.76	1	0.5	73.2
76.39	1	0.5	73.7
76.77	1	0.5	74.2
79.06	1	0.5	74.6
80.74	1	0.5	75.1
81.49	1	0.5	75.6
81.63	1	0.5	76.1
82.52	1	0.5	76.6
83.85	1	0.5	77.0
84.32	1	0.5	77.5
85.57	1	0.5	78.0
90.01	1	0.5	78.5
92.57	1	0.5	78.9
93.48	1	0.5	79.4
94.96	1	0.5	79.9
96.02	1	0.5	80.4
96.41	1	0.5	80.9
98.35	1	0.5	81.3
98.94	1	0.5	81.8
102.81	1	0.5	82.2
104.5	1	0.5	82.8
105.66	1	0.5	83.3
105.93	1	0.5	83.7
106.75	1	0.5	84.2
107.68	1	0.5	84.7
108.22	1	0.5	85.2
110.11	1	0.5	85.6
112.22	1	0.5	86.1
112.55	1	0.5	86.6
115.28	1	0.5	87.1
115.86	1	0.5	87.6
119.89	1	0.5	88.0
120.31	1	0.5	88.5
120.84	1	0.5	89.0
123.01	1	0.5	89.5
143.62	1	0.5	90.0
148.2	1	0.5	90.4
154.09	1	0.5	90.9
155.84	1	0.5	91.4
157.26	1	0.5	91.9
157.7	1	0.5	92.3
158.25	1	0.5	92.8
168.13	1	0.5	93.3
170.13	1	0.5	93.8
170.39	1	0.5	94.3
170.85	1	0.5	94.7
170.98	1	0.5	95.2
171.56	1	0.5	95.7
172.27	1	0.5	96.2
173.14	1	0.5	96.7
174.52	1	0.5	97.1
174.66	1	0.5	97.6
177.53	1	0.5	98.1
182.4	1	0.5	98.6
189.44	1	0.5	99.0
190.28	1	0.5	99.5
205.53	1	0.5	100.0

UNIVARIATE

VARIABLE=DETI1

MOMENTS

N	185	SUM WGTS	185
MEAN	1063.57	SUM	196761
STD DEV	1998.21	VARIANCE	3992852
SKEWNESS	1.16348	KURTOSIS	1.4829
USS	943954904	CSS	734684775
CV	187.877	STD MEAN	146.911
T:MEAN=0	7.23956	PROB>|T|	0.0001
SGN RANK	5212.5	PROB>|S|	0.0001
NUM ^= 0	185		

QUANTILES(DEF=4)

100% MAX	7968.5	99%	7199.27
75% Q3	1322.42	95%	5466.8
50% MED	606.31	90%	4552
25% Q1	-47.825	10%	-765.756
0% MIN	-3717.52	5%	-1196.85
		1%	-3527.04
RANGE	11686		
Q3-Q1	1370.25		
MODE	-3717.52		

EXTREMES

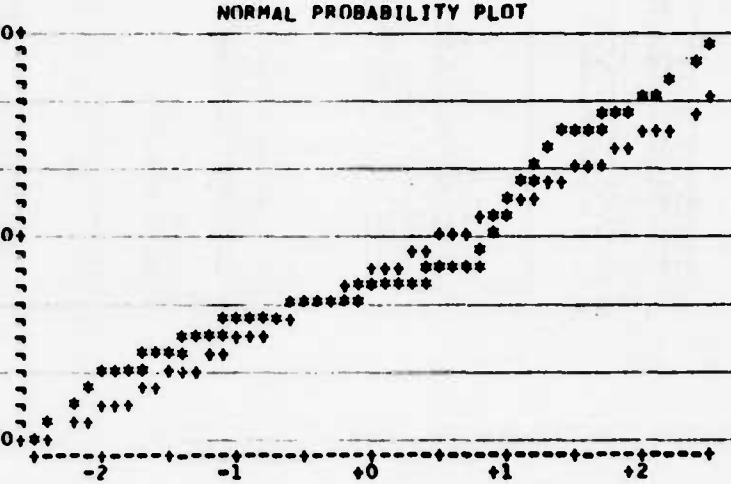
LOWEST	HIGHEST
-3717.52	6045.44
-3496.03	6196.7
-2634.36	6693.56
-2322.8	7074.06
-1917.36	7968.5

MISSING VALUE
COUNT 24
% COUNT/NOBS 11.48

STEM	LEAF	#	BOXPLOT
8	0	1	
7			
7	1	1	
6	7	1	
6	02	2	
5	5678	4	
5	0233444	7	
4	666	3	
4	0334	4	
3	6A	2	
3	0233	4	
2	5689	5	
2	24	2	
1	5557	4	
1	000011111222223333333444444	27	
0	55555566666666666677777888888899999999	38	
0	11111112222222223333333444444	29	
-0	44444432222222221111100000	26	
-0	99888776665	11	
-1	211110	6	
-1	9865	4	
-2	3	1	
-2	6	1	
-3			
-3	75	2	

MULTIPLY STEM.LEAF BY 10**+03

NORMAL PROBABILITY PLOT



F

UNIVARIATE

VARIABLE=DETI1

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-3717.52	1	0.5	0.5	-17.22	1	0.5	25.9	616.11	1	0.5	51.4	1383.64	1	0.5	76.8
-3496.03	1	0.5	1.1	4.82	1	0.5	26.5	623.93	1	0.5	51.9	1389.46	1	0.5	77.3
-2634.36	1	0.5	1.6	13.34	1	0.5	27.0	623.98	1	0.5	52.4	1418.11	1	0.5	77.8
-2322.8	1	0.5	2.2	34.86	1	0.5	27.6	629.24	1	0.5	53.0	1421.37	1	0.5	78.4
-1917.34	1	0.5	2.7	84.01	1	0.5	28.1	641.58	1	0.5	53.5	1467.52	1	0.5	78.9
-1790.26	1	0.5	3.2	103.54	1	0.5	28.6	699.71	1	0.5	54.1	1468.13	1	0.5	79.5
-1613.68	1	0.5	3.8	117.55	1	0.5	29.2	704.45	1	0.5	54.6	1493.02	1	0.5	80.0
-1510.84	1	0.5	4.3	123.69	1	0.5	29.7	707.16	1	0.5	55.1	1669.5	1	0.5	80.5
-1223.07	1	0.5	4.9	124.58	1	0.5	30.3	735.34	1	0.5	55.7	2171.26	1	0.5	81.1
-1135.66	1	0.5	5.4	124.64	1	0.5	30.8	743.29	1	0.5	56.2	2403.18	1	0.5	81.6
-1123.09	1	0.5	5.9	128.33	1	0.5	31.4	781.23	1	0.5	56.8	2514.57	1	0.5	82.2
-1104.45	1	0.5	6.5	150.01	1	0.5	31.9	791.6	1	0.5	57.3	2521.94	1	0.5	82.7
-1073.88	1	0.5	7.0	156.12	1	0.5	32.4	795.53	1	0.5	57.8	2824.96	1	0.5	83.2
-1047.84	1	0.5	7.6	196.87	1	0.5	33.0	797.14	1	0.5	58.4	2869.34	1	0.5	83.8
-904.79	1	0.5	8.1	207.23	1	0.5	33.5	801.07	1	0.5	58.9	2896.78	1	0.5	84.3
-852.18	1	0.5	8.6	208.94	1	0.5	34.1	807.51	1	0.5	59.5	3005.32	1	0.5	84.9
-808.21	1	0.5	9.2	219.24	1	0.5	34.6	829.91	1	0.5	60.0	3222.36	1	0.5	85.4
-783.6	1	0.5	9.7	233.92	1	0.5	35.1	857.02	1	0.5	60.5	3263.01	1	0.5	85.9
-753.86	1	0.5	10.3	242.54	1	0.5	35.7	863.78	1	0.5	61.1	3308.13	1	0.5	86.5
-744.63	1	0.5	10.8	244.6	1	0.5	36.2	873.16	1	0.5	61.6	3626.31	1	0.5	87.0
-741.41	1	0.5	11.4	296.23	1	0.5	36.8	899.41	1	0.5	62.2	3750.75	1	0.5	87.6
-616.35	1	0.5	11.9	300.08	1	0.5	37.3	913.92	1	0.5	62.7	3956.58	1	0.5	88.1
-595.11	1	0.5	12.4	304.05	1	0.5	37.8	914.9	1	0.5	63.2	4296.86	1	0.5	88.6
-590.37	1	0.5	13.0	308.3	1	0.5	38.4	926.34	1	0.5	63.8	4333.82	1	0.5	89.2
-520.53	1	0.5	13.5	312.45	1	0.5	38.9	968.37	1	0.5	64.3	4440.66	1	0.5	89.7
-435.57	1	0.5	14.1	321.12	1	0.5	39.5	1010.48	1	0.5	64.9	4551.21	1	0.5	90.3
-401.95	1	0.5	14.6	325.98	1	0.5	40.0	1022.91	1	0.5	65.4	4553.19	1	0.5	90.8
-386.28	1	0.5	15.1	358.35	1	0.5	40.5	1033.25	1	0.5	65.9	4627.95	1	0.5	91.4
-366.09	1	0.5	15.7	365.38	1	0.5	41.1	1064.56	1	0.5	66.5	5033.54	1	0.5	91.9
-355.79	1	0.5	16.2	390.53	1	0.5	41.6	1072.23	1	0.5	67.0	5209.39	1	0.5	92.4
-352.02	1	0.5	16.8	399.54	1	0.5	42.2	1076.63	1	0.5	67.6	5310.28	1	0.5	93.0
-326.53	1	0.5	17.3	403.31	1	0.5	42.7	1087.18	1	0.5	68.1	5317.55	1	0.5	93.5
-216.27	1	0.5	17.8	424.19	1	0.5	43.2	1125.96	1	0.5	68.6	5352.82	1	0.5	94.1
-205.29	1	0.5	18.4	458.55	1	0.5	43.8	1165.48	1	0.5	69.2	5401	1	0.5	94.6
-190.59	1	0.5	18.9	489.11	1	0.5	44.3	1202.06	1	0.5	69.7	5407.78	1	0.5	95.1
-185.74	1	0.5	19.5	502.58	1	0.5	44.9	1202.58	1	0.5	70.3	5492.09	1	0.5	95.7
-181.99	1	0.5	20.0	514.16	1	0.5	45.4	1239.13	1	0.5	70.8	5622.54	1	0.5	96.2
-157.05	1	0.5	20.5	536.55	1	0.5	45.9	1248.26	1	0.5	71.4	5700.56	1	0.5	96.8
-155.91	1	0.5	21.1	542.77	1	0.5	46.5	1261.24	1	0.5	71.9	5788.47	1	0.5	97.3
-154.21	1	0.5	21.6	554.77	1	0.5	47.0	1266.49	1	0.5	72.4	6045.44	1	0.5	97.8
-153.71	1	0.5	22.2	565.25	1	0.5	47.6	1269.25	1	0.5	73.0	6196.7	1	0.5	98.4
-118.25	1	0.5	22.7	567.26	1	0.5	48.1	1271.87	1	0.5	73.5	6693.56	1	0.5	98.9
-98.11	1	0.5	23.2	586.52	1	0.5	48.6	1272.56	1	0.5	74.1	7074.06	1	0.5	99.5
-95.09	1	0.5	23.8	595.63	1	0.5	49.2	1273.27	1	0.5	74.6	7968.5	1	0.5	100.0
-91.82	1	0.5	24.3	599.06	1	0.5	49.7	1285.08	1	0.5	75.1				
-74.82	1	0.5	24.9	606.31	1	0.5	50.3	1359.77	1	0.5	75.7				
-20.83	1	0.5	25.4	606.33	1	0.5	50.8	1371.93	1	0.5	76.2				

UNIVARIATE

VARIABLE=DETI2

MOMENTS

N	184	SUM WGTS	184
MEAN	354.723	SUM	65269
STD DEV	507.113	VARIANCE	257164
SKEWNESS	-0.800646	KURTOSIS	2.17135
USS	70213391	CSS	47061001
CV	142.96	STD MEAN	37.3849
T:MEAN=0	9.4884	PROB>|T|	0.0001
SGN RANK	6332	PROB>|S|	0.0001
NUM ^= 0	184		

QUANTILES(DEF=4)

100% MAX	1546.44	99%	1299.33
75% Q3	682.372	95%	1143.6
50% MED	354.875	90%	1013.25
25% Q1	-75.2025	10%	-81.5154
0% MIN	-1730.42	5%	-528.122
		1%	-1488.43
RANGE	3276.86		
Q3-Q1	607.17		
MODE	-1730.42		

EXTREMES

LOWEST	HIGHEST
-1730.42	1221.1
-1445.72	1247.91
-1123.63	1251.13
-1105.14	1255.73
-1039.68	1546.44

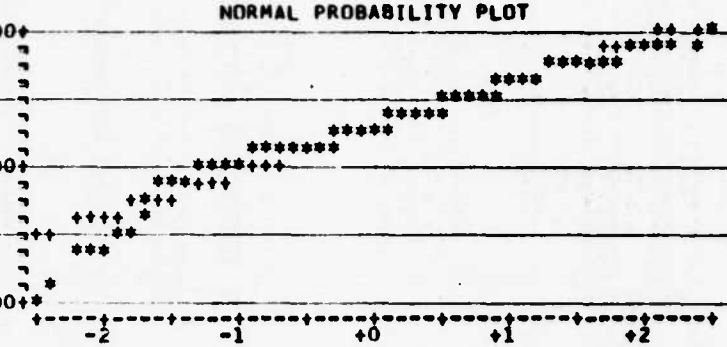
MISSING VALUE

COUNT	25
% COUNT/NOBS	11.96

STEM	LEAF	#	BOXPLOT
14	5	1	
12	02556	5	
10	1244692333588	13	
8	00113379111256888	16	
6	1234455555791222567889	22	
4	000112333445566777912333345789	29	
2	1123356667888999122345677788	28	
0	12223444555778899000002334555667788999	38	
-0	7076543332211100	16	
-2	710860	6	
-4	57	2	
-6	4	1	
-8	43	2	0
-10	214	3	0
-12			
-14	5	1	0
-16	3	1	0

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-1730.42	1	0.5	0.5	-277.37	1	0.5	7.6	-17.67	1	0.5	14.7	43.45	1	0.5	21.7
-1445.72	1	0.5	1.1	-262.31	1	0.5	8.2	-9.02	1	0.5	15.2	45.5	1	0.5	22.3
-1123.63	1	0.5	1.6	-201.92	1	0.5	8.7	-6.23	1	0.5	15.8	49.59	1	0.5	22.8
-1105.14	1	0.5	2.2	-173.39	1	0.5	9.2	-5.59	1	0.5	16.3	50.61	1	0.5	23.4
-1039.68	1	0.5	2.7	-96.01	1	0.5	9.8	-3.93	1	0.5	16.8	67.59	1	0.5	23.9
-837.36	1	0.5	3.3	-67.02	1	0.5	10.3	-1.45	1	0.5	17.4	74.44	1	0.5	24.5
-831.57	1	0.5	3.8	-56.19	1	0.5	10.9	5.86	1	0.5	17.9	75.11	1	0.5	25.0
-639.36	1	0.5	4.3	-46.42	1	0.5	11.4	16.86	1	0.5	18.5	75.48	1	0.5	25.5
-546.16	1	0.5	4.9	-37.56	1	0.5	12.0	21.7	1	0.5	19.0	85.24	1	0.5	26.1
-474.01	1	0.5	5.4	-33.4	1	0.5	12.5	24.25	1	0.5	19.6	90.81	1	0.5	26.6
-365.16	1	0.5	6.0	-30.64	1	0.5	13.0	29.12	1	0.5	20.1	95.47	1	0.5	27.2
-310.1	1	0.5	6.5	-25.68	1	0.5	13.6	35.34	1	0.5	20.7	97.26	1	0.5	27.7
-297.3	1	0.5	7.1	-21.75	1	0.5	14.1	38.36	1	0.5	21.2	100.5	1	0.5	28.2

F

UNIVARIATE

VARIABLE=DETI2

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
100.54	1	0.5	28.8
101.71	1	0.5	29.3
122.53	1	0.5	29.9
128.35	1	0.5	30.4
132.43	1	0.5	31.0
143.89	1	0.5	31.5
149.06	1	0.5	32.1
150.74	1	0.5	32.6
153.16	1	0.5	33.2
159.36	1	0.5	33.7
160.47	1	0.5	34.2
165.5	1	0.5	34.8
171.13	1	0.5	35.3
178.65	1	0.5	35.9
183.18	1	0.5	36.4
186.48	1	0.5	37.0
191.27	1	0.5	37.5
193.88	1	0.5	38.0
210.17	1	0.5	38.6
213.07	1	0.5	39.1
215.2	1	0.5	39.7
227.25	1	0.5	40.2
228.19	1	0.5	40.8
254.65	1	0.5	41.3
257.67	1	0.5	41.8
261.97	1	0.5	42.4
264.8	1	0.5	42.9
266.86	1	0.5	43.5
277.47	1	0.5	44.0
280.18	1	0.5	44.6
281.45	1	0.5	45.1
286.3	1	0.5	45.7
289.41	1	0.5	46.2
290.23	1	0.5	46.7
305.53	1	0.5	47.3
319.39	1	0.5	47.8
320.76	1	0.5	48.4
333.62	1	0.5	48.9
336.23	1	0.5	49.5
347.33	1	0.5	50.0
362.42	1	0.5	50.5
368.77	1	0.5	51.1
373.89	1	0.5	51.6
374.62	1	0.5	52.2
381.82	1	0.5	52.7
384.82	1	0.5	53.3
400.72	1	0.5	53.8
400.89	1	0.5	54.3
402.08	1	0.5	54.9
410.92	1	0.5	55.4
413.62	1	0.5	56.0
415.53	1	0.5	56.5
427.24	1	0.5	57.1
429.36	1	0.5	57.6
434	1	0.5	58.2
439.05	1	0.5	58.7
439.78	1	0.5	59.2
445.29	1	0.5	59.8
447.85	1	0.5	60.3
457.57	1	0.5	60.9
463.58	1	0.5	61.4
466.32	1	0.5	62.0
466.52	1	0.5	62.5
466.53	1	0.5	63.0
488.35	1	0.5	63.6
506.58	1	0.5	64.1
518.82	1	0.5	64.7
527.45	1	0.5	65.2
533.43	1	0.5	65.8
534.23	1	0.5	66.3
544.69	1	0.5	66.8
553.61	1	0.5	67.4
570.32	1	0.5	67.9
579.14	1	0.5	68.5
591.88	1	0.5	69.0
612.66	1	0.5	69.6
623.35	1	0.5	70.1
633.67	1	0.5	70.7
636.26	1	0.5	71.2
639.06	1	0.5	71.7
647.29	1	0.5	72.3
647.66	1	0.5	72.8
648.9	1	0.5	73.4
650.12	1	0.5	73.9
652.65	1	0.5	74.5
667.83	1	0.5	75.0
687.22	1	0.5	75.5
707.79	1	0.5	76.1
716.67	1	0.5	76.6
717.73	1	0.5	77.2
720.29	1	0.5	77.7
750.66	1	0.5	78.3
762.72	1	0.5	78.8
773.01	1	0.5	79.3
780.16	1	0.5	79.9
782.52	1	0.5	80.4
788.35	1	0.5	81.0
796.02	1	0.5	81.5
804.82	1	0.5	82.1
810.8	1	0.5	82.6
813.87	1	0.5	83.2
828.24	1	0.5	83.7
830.18	1	0.5	84.2
869.6	1	0.5	84.8
889.67	1	0.5	85.3
911.8	1	0.5	85.9
912.38	1	0.5	86.4
913.38	1	0.5	87.0
917.82	1	0.5	87.5
945.91	1	0.5	88.0
957.04	1	0.5	88.6
975.47	1	0.5	89.1
984.49	1	0.5	89.7
1010.53	1	0.5	90.2
1015.98	1	0.5	90.8
1035.74	1	0.5	91.3
1043.94	1	0.5	91.8
1055.13	1	0.5	92.4
1094.98	1	0.5	92.9
1119.68	1	0.5	93.5
1127.27	1	0.5	94.0
1128.43	1	0.5	94.6
1134.14	1	0.5	95.1
1146.76	1	0.5	95.7
1177.07	1	0.5	96.2
1181.44	1	0.5	96.7
1202.39	1	0.5	97.3
1221.1	1	0.5	97.8
1247.91	1	0.5	98.4
1251.13	1	0.5	98.9
1255.73	1	0.5	99.5
1546.44	1	0.5	100.0

UNIVARIATE

VARIABLE=DETI3

MOMENTS

N	184	SUM WGTS	184
MEAN	693.162	SUM	127542
STD DEV	639.373	VARIANCE	408798
SKEWNESS	0.173385	KURTOSIS	1.98901
USS	163217744	CSS	74810023
CV	92.24	STD MEAN	47.1352
T:MEAN=0	14.7058	PROB>|T|	0.0001
SGN RANK	7714	PROB>|S|	0.0001
NUM ^= 0	184		

QUANTILES(DEF=4)

100% MAX	3255.79	99%	2801.27
75% Q3	1087.04	95%	1786.32
50% MED	657.67	90%	1438.73
25% Q1	253.087	10%	38.9248
0% MIN	-1600.48	5%	-126.503
		1%	-1382.99
RANGE	4856.27		
Q3-Q1	833.95		
MODE	1042.14		

EXTREMES

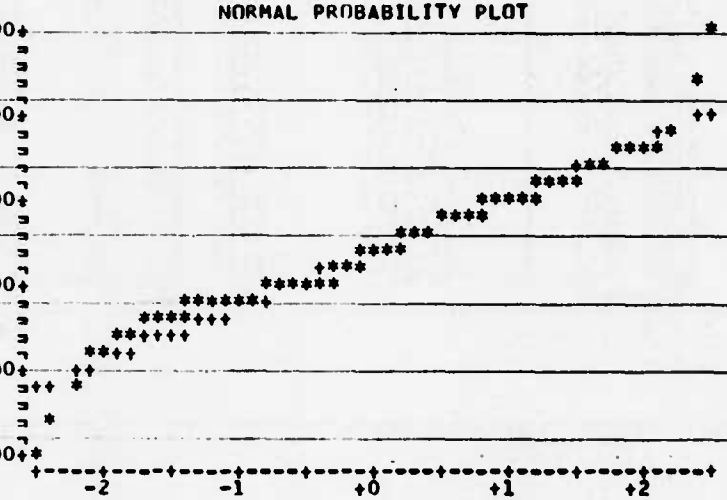
LOWEST	HIGHEST
-1600.48	1863.65
-1344.61	1886.44
-992.27	2086.87
-587.72	2721.08
-417.89	3255.79

MISSING VALUE
COUNT 25
% COUNT/NOBS 11.96

STEM	LEAF	#	BOXPLOT
32	6	1	0
30			
28			
26	2	1	0
24			
22			
20	9	1	
18	2469	4	
16	3899	4	
14	001358880122	11	
12	002779014455567899	17	
10	000111134455558990357778	23	+------+
8	022334555800567	16	
6	11245678901555667789	19	*--+--*
4	00125568888244678889	19	
2	001223456781122234455556666899	30	+------+
0	13345578911233555567899	23	
-0	73206541	8	
-2	65	2	
-4	92	2	
-6			
-8	9	1	
-10			
-12	4	1	0
-14			
-16	0	1	0

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT



UNIVARIATE

VARIABLE=DETI3

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-1600.48	1	0.5	0.5	258.75	1	0.5	25.5	661.8	1	0.5	50.5	1095.27	1	0.5	76.1
-1344.61	1	0.5	1.1	269.2	1	0.5	26.1	666.43	1	0.5	51.1	1125.51	1	0.5	76.6
-992.27	1	0.5	1.6	275.61	1	0.5	26.6	681.04	1	0.5	51.6	1150.53	1	0.5	77.2
-587.72	1	0.5	2.2	305.01	1	0.5	27.2	692.25	1	0.5	52.2	1167.88	1	0.5	77.7
-417.89	1	0.5	2.7	310.09	1	0.5	27.7	697.47	1	0.5	52.7	1170.76	1	0.5	78.3
-357.45	1	0.5	3.3	317.74	1	0.5	28.3	705.27	1	0.5	53.3	1182.4	1	0.5	78.8
-251.42	1	0.5	3.8	319.18	1	0.5	28.8	746.72	1	0.5	53.8	1196.22	1	0.5	79.3
-174.94	1	0.5	4.3	324.18	1	0.5	29.3	750.5	1	0.5	54.3	1202.15	1	0.5	79.9
-129.39	1	0.5	4.9	330.91	1	0.5	29.9	752.38	1	0.5	54.9	1216.64	1	0.5	80.4
-117.84	1	0.5	5.4	336.54	1	0.5	30.4	755.65	1	0.5	55.4	1270.08	1	0.5	81.0
-103.72	1	0.5	6.0	338.97	1	0.5	31.0	759.35	1	0.5	56.0	1273.4	1	0.5	81.5
-58.68	1	0.5	6.5	352.09	1	0.5	31.5	766.83	1	0.5	56.5	1291.02	1	0.5	82.1
-47.62	1	0.5	7.1	352.11	1	0.5	32.1	776.38	1	0.5	57.1	1296.72	1	0.5	82.6
-41.31	1	0.5	7.6	352.37	1	0.5	32.6	794.47	1	0.5	57.6	1308.05	1	0.5	83.2
-9.69	1	0.5	8.2	353.45	1	0.5	33.2	801.64	1	0.5	58.2	1342	1	0.5	83.7
14.97	1	0.5	8.7	358.09	1	0.5	33.7	818.53	1	0.5	58.7	1342.87	1	0.5	84.2
25.74	1	0.5	9.2	359.44	1	0.5	34.2	824.24	1	0.5	59.2	1353.79	1	0.5	84.8
33.71	1	0.5	9.8	361.01	1	0.5	34.8	824.78	1	0.5	59.8	1353.87	1	0.5	85.3
44.14	1	0.5	10.3	364.91	1	0.5	35.3	826.99	1	0.5	60.3	1363.46	1	0.5	85.9
50.52	1	0.5	10.9	382.89	1	0.5	35.9	841.15	1	0.5	60.9	1372.29	1	0.5	86.4
54.15	1	0.5	11.4	385.01	1	0.5	36.4	845.7	1	0.5	61.4	1382.52	1	0.5	87.0
74.99	1	0.5	12.0	394.42	1	0.5	37.0	849.54	1	0.5	62.0	1388.11	1	0.5	87.5
79.86	1	0.5	12.5	399.48	1	0.5	37.5	851.01	1	0.5	62.5	1393.36	1	0.5	88.0
87.85	1	0.5	13.0	400.85	1	0.5	38.0	882.06	1	0.5	63.0	1398.45	1	0.5	88.6
106.75	1	0.5	13.6	414.23	1	0.5	38.6	883.68	1	0.5	63.6	1403.93	1	0.5	89.1
113.16	1	0.5	14.1	418.08	1	0.5	39.1	895.34	1	0.5	64.1	1413.33	1	0.5	89.7
121.62	1	0.5	14.7	447.49	1	0.5	39.7	899.6	1	0.5	64.7	1430.7	1	0.5	90.2
125.69	1	0.5	15.2	453.37	1	0.5	40.2	950.12	1	0.5	65.2	1446.77	1	0.5	90.8
133.12	1	0.5	15.8	455.56	1	0.5	40.8	955.75	1	0.5	65.8	1481.29	1	0.5	91.3
147.64	1	0.5	16.3	478.53	1	0.5	41.3	968.38	1	0.5	66.3	1482.76	1	0.5	91.8
152.7	1	0.5	16.8	480.41	1	0.5	41.8	995.02	1	0.5	66.8	1500.24	1	0.5	92.4
153.29	1	0.5	17.4	481	1	0.5	42.4	997.24	1	0.5	67.4	1506.35	1	0.5	92.9
154.57	1	0.5	17.9	482.52	1	0.5	42.9	1000.54	1	0.5	67.9	1522.71	1	0.5	93.5
155.33	1	0.5	18.5	516.58	1	0.5	43.5	1006.01	1	0.5	68.5	1524.72	1	0.5	94.0
165.06	1	0.5	19.0	535.13	1	0.5	44.0	1006.23	1	0.5	69.0	1628.79	1	0.5	94.6
181.18	1	0.5	19.6	535.89	1	0.5	44.6	1006.48	1	0.5	69.6	1775.98	1	0.5	95.
189.6	1	0.5	20.1	561.44	1	0.5	45.1	1014.04	1	0.5	70.1	1789.77	1	0.5	95.7
191.45	1	0.5	20.7	566.6	1	0.5	45.7	1033.96	1	0.5	70.7	1794.39	1	0.5	96.2
196.8	1	0.5	21.2	576.61	1	0.5	46.2	1042.14	2	1.1	71.7	1816.72	1	0.5	96.7
202.4	1	0.5	21.7	583.8	1	0.5	46.7	1046.67	1	0.5	72.3	1839.57	1	0.5	97.3
208.97	1	0.5	22.3	587.38	1	0.5	47.3	1051.07	1	0.5	72.8	1863.65	1	0.5	97.8
218.41	1	0.5	22.8	608.29	1	0.5	47.8	1051.74	1	0.5	73.4	1886.44	1	0.5	98.4
224.29	1	0.5	23.4	613.93	1	0.5	48.4	1053.67	1	0.5	73.9	2086.87	1	0.5	98.9
229.07	1	0.5	23.9	615.01	1	0.5	48.9	1080.68	1	0.5	74.5	2721.08	1	0.5	99.5
244.97	1	0.5	24.5	639.18	1	0.5	49.5	1085.65	1	0.5	75.0	3255.79	1	0.5	100.0
251.2	1	0.5	25.0	653.54	1	0.5	50.0	1087.5	1	0.5	75.5				

UNIVARIATE

VARIABLE=DET14

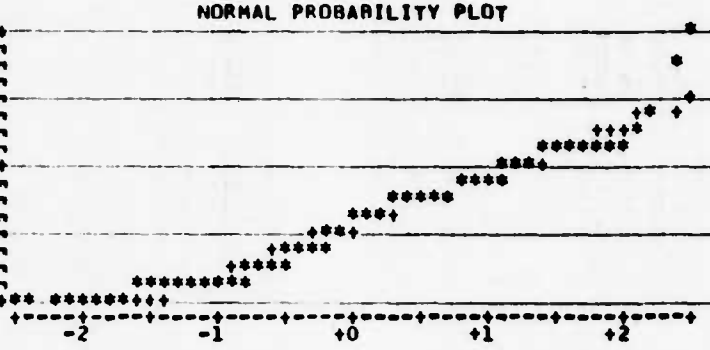
MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	184	SUM WGTS	184	100% MAX	7753.69	99%	6787.21	LOWEST	HIGHEST
MEAN	1950.21	SUM	358838	75% Q3	2899.91	95%	4156.54	-390.58	4214.21
STD DEV	1452.54	VARIANCE	2109881	50% MED	2076.06	90%	3858.76	-387.9	4927.37
SKEWNESS	0.510159	KURTOSIS	-0.481129	25% Q1	688.08	10%	67.5447	-328.64	5221.78
USS	1085916730	CSS	386108210	0% MIN	-390.58	5%	-93.8576	-235.88	6616.69
CV	74.4815	STD MEAN	107.083			1%	-388.302	-235.21	7753.69
T:MEAN=0	18.2121	PROB>|T|	0.0001	RANGE	8144.27				
SGN RANK	8308	PROB>|S|	0.0001	Q3-Q1	2211.83				
NUM ^= 0	184			MODE	-390.58				

MISSING VALUE
COUNT 25
% COUNT/NOBS 11.96

STEM	LEAF	#	BOXPLOT
7	8	1	0
7			
6	6	1	0
6			
5			
5	2	1	
4	9	1	
4	1111222222	10	
3	555568889999	12	
3	0001112222344444	16	
2	55556666667777778888899999999	31	+-----+
2	011111223334444444444	21	*-----*
1	55778888999999	14	+
1	0001111222233333344	18	
0	55566677777778888999	20	+-----+
0	11111222333334444444	21	
-0	4432222110000000000	17	

MULTIPLY STEM.LEAF BY 10**+03

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-390.58	1	0.5	0.5	37.7	1	0.5	7.6	251.24	1	0.5	14.7	470.54	1	0.5	21.7
-387.9	1	0.5	1.1	39.35	1	0.5	8.2	279.86	1	0.5	15.2	518.85	1	0.5	22.3
-328.64	1	0.5	1.6	41.4	1	0.5	8.7	285.48	1	0.5	15.8	588.58	1	0.5	22.8
-235.88	1	0.5	2.2	47.41	1	0.5	9.2	289.06	1	0.5	16.3	597.57	1	0.5	23.4
-235.21	1	0.5	2.7	57.91	1	0.5	9.8	289.84	1	0.5	16.8	649.78	1	0.5	23.9
-220.68	1	0.5	3.3	77.18	1	0.5	10.3	350.47	1	0.5	17.4	651.58	1	0.5	24.5
-215.49	1	0.5	3.8	103.23	1	0.5	10.9	371.61	1	0.5	17.9	680.48	1	0.5	25.0
-141.53	1	0.5	4.3	109.9	1	0.5	11.4	387.28	1	0.5	18.5	710.88	1	0.5	25.5
-119.27	1	0.5	4.9	132.8	1	0.5	12.0	416.58	1	0.5	19.0	713.12	1	0.5	26.1
-17.77	1	0.5	5.4	167.78	1	0.5	12.5	419.86	1	0.5	19.6	715.59	1	0.5	26.6
4.67	1	0.5	6.0	230.81	1	0.5	13.0	434.39	1	0.5	20.1	723.64	1	0.5	27.2
23.47	1	0.5	6.5	245.36	1	0.5	13.6	439.74	1	0.5	20.7	739.53	1	0.5	27.7
35.05	1	0.5	7.1	250.54	1	0.5	14.1	457.26	1	0.5	21.2	758.18	1	0.5	28.3

UNIVARIATE

VARIABLE=DETI4

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
767.49	1	0.5	28.8	1883.65	1	0.5	46.7	2614.49	1	0.5	64.7	3230.96	1	0.5	82.6
783.65	1	0.5	29.3	1907.33	1	0.5	47.3	2623.98	1	0.5	65.2	3324.36	1	0.5	83.2
829.4	1	0.5	29.9	1908.32	1	0.5	47.8	2649.71	1	0.5	65.8	3351.81	1	0.5	83.7
858.03	1	0.5	30.4	1926.36	1	0.5	48.4	2664.88	1	0.5	66.3	3372.5	1	0.5	84.2
875.57	1	0.5	31.0	1935.01	1	0.5	48.9	2678	1	0.5	66.8	3403.21	1	0.5	84.8
936.15	1	0.5	31.5	1959.09	1	0.5	49.5	2688.57	1	0.5	67.4	3418.93	1	0.5	85.3
970.14	1	0.5	32.1	2075.17	1	0.5	50.0	2701.23	1	0.5	67.9	3433.11	1	0.5	85.8
1031.68	1	0.5	32.6	2076.95	1	0.5	50.5	2707.97	1	0.5	68.5	3496.13	1	0.5	86.4
1048.58	1	0.5	33.2	2087.59	1	0.5	51.1	2734.72	1	0.5	69.0	3500.24	1	0.5	87.0
1064.9	1	0.5	33.7	2108.58	1	0.5	51.6	2744.95	1	0.5	69.6	3503.98	1	0.5	87.5
1094.55	1	0.5	34.2	2111.28	1	0.5	52.2	2753.18	1	0.5	70.1	3516.7	1	0.5	88.0
1127.61	1	0.5	34.8	2164.76	1	0.5	52.7	2755.03	1	0.5	70.7	3603.09	1	0.5	88.6
1136.68	1	0.5	35.3	2228.22	1	0.5	53.3	2770.3	1	0.5	71.2	3806.38	1	0.5	89.1
1173.2	1	0.5	35.9	2270.4	1	0.5	53.8	2778.26	1	0.5	71.7	3816.49	1	0.5	89.7
1174.75	1	0.5	36.4	2287.24	1	0.5	54.3	2793.35	1	0.5	72.3	3828.23	1	0.5	90.2
1186.31	1	0.5	37.0	2308.96	1	0.5	54.9	2854.57	1	0.5	72.8	3889.29	1	0.5	90.8
1227.82	1	0.5	37.5	2378.05	1	0.5	55.4	2858.47	1	0.5	73.4	3901.25	1	0.5	91.3
1283.49	1	0.5	38.0	2398.12	1	0.5	56.0	2870.88	1	0.5	73.9	3922.21	1	0.5	91.8
1283.98	1	0.5	38.6	2399.39	1	0.5	56.5	2873.48	1	0.5	74.5	3935.07	1	0.5	92.4
1290.76	1	0.5	39.1	2404.28	1	0.5	57.1	2887.35	1	0.5	75.0	4119.69	1	0.5	92.9
1338.95	1	0.5	39.7	2404.77	1	0.5	57.6	2904.1	1	0.5	75.5	4129.19	1	0.5	93.5
1348.06	1	0.5	40.2	2417.21	1	0.5	58.2	2908.11	1	0.5	76.1	4136.46	1	0.5	94.0
1352.78	1	0.5	40.8	2421.95	1	0.5	58.7	2922.06	1	0.5	76.6	4143.39	1	0.5	94.6
1410.43	1	0.5	41.3	2428.58	1	0.5	59.2	2925.04	1	0.5	77.2	4154.69	1	0.5	95.1
1523.74	1	0.5	41.8	2437.7	1	0.5	59.8	3017.91	1	0.5	77.7	4157.16	1	0.5	95.7
1527.78	1	0.5	42.4	2441.57	1	0.5	60.3	3030.04	1	0.5	78.3	4178.11	1	0.5	96.2
1679.95	1	0.5	42.9	2469.28	1	0.5	60.9	3042.26	1	0.5	78.8	4199.31	1	0.5	96.7
1699.03	1	0.5	43.5	2534.96	1	0.5	61.4	3081.69	1	0.5	79.3	4208.64	1	0.5	97.3
1752.84	1	0.5	44.0	2535.86	1	0.5	62.0	3105.47	1	0.5	79.9	4214.21	1	0.5	97.8
1809.52	1	0.5	44.6	2540.08	1	0.5	62.5	3111.72	1	0.5	80.4	4927.37	1	0.5	98.4
1823.41	1	0.5	45.1	2558.03	1	0.5	63.0	3186.35	1	0.5	81.0	5221.76	1	0.5	98.9
1836.18	1	0.5	45.7	2564.09	1	0.5	63.6	3209.2	1	0.5	81.5	6616.69	1	0.5	99.5
1857	1	0.5	46.2	2571.04	1	0.5	64.1	3225.6	1	0.5	82.1	7753.69	1	0.5	100.0

UNIVARIATE

VARIABLE=DETIS

MOMENTS

N	184	SUM WGTS	184
MEAN	184.382	SUM	33926.3
STD DEV	268.021	VARIANCE	71835.1
SKEWNESS	-0.42413	KURTOSIS	2.48691
USS	19401232	CSS	13145827
CV	145.362	STD MEAN	19.7588
T:MEAN=0	9.33167	PROB>|T|	0.0001
SGN RANK	6289.5	PROB>|S|	0.0001
NUM ^= 0	184		

QUANTILES(DEF=4)

100% MAX	1224.54	99%	769.659
75% Q3	358.66	95%	596.34
50% MED	163.035	90%	514.715
25% Q1	53.0575	10%	-79.6501
0% MIN	-857.48	5%	-328.82
		1%	-695.019
RANGE	2082.02		
Q3-Q1	305.602		
MODE	-857.48		

EXTREMES

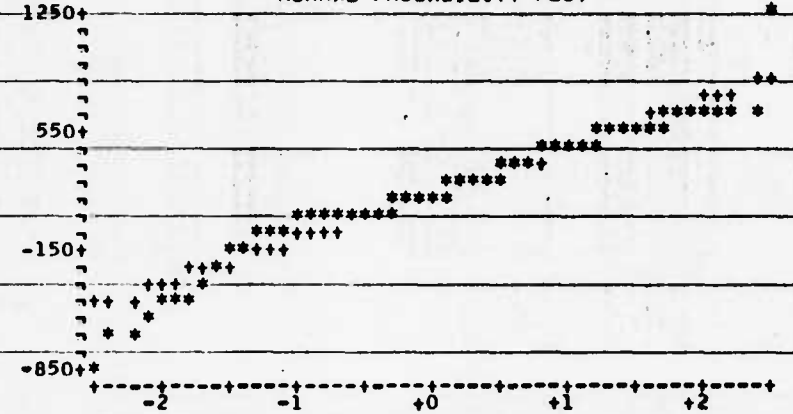
LOWEST	HIGHEST
-857.48	639.67
-666.35	648.32
-650.75	675.58
-506.12	689.4
-459.66	1224.54

MISSING VALUE
COUNT 25
% COUNT/NOBS 11.96

STEM	LEAF	#	BOXPLOT
12	2	1	0
11			
10			
9			
8			
7			
6	02244589	8	
5	0011222445699	13	
4	011222333445689	17	
3	01135555666670 89	16	+-----+
2	00112223333445556666777777888899	32	
1	000011222222223333344466677 88	29	*--+--*
0	1111111122234444555666666777777888888899 9	41	+-----+
-0	8862111110	10	
-1	875411	6	
-2	83	2	
-3	55	2	
-4	653	3	0
-5	1	1	0
-6	75	2	0
-7			
-8	6	1	0

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT



UNIVARIATE

VARIABLE=DET15

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-857.48	1	0.5	0.5
-666.35	1	0.5	1.1
-650.75	1	0.5	1.6
-506.12	1	0.5	2.2
-459.66	1	0.5	2.7
-450.38	1	0.5	3.3
-429.76	1	0.5	3.8
-352.62	1	0.5	4.3
-345.83	1	0.5	4.9
-277.79	1	0.5	5.4
-233.03	1	0.5	6.0
-180.28	1	0.5	6.5
-170.27	1	0.5	7.1
-145.06	1	0.5	7.6
-140.06	1	0.5	8.2
-109.16	1	0.5	8.7
-108.22	1	0.5	9.2
-83.79	1	0.5	9.8
-76.11	1	0.5	10.3
-57.09	1	0.5	10.9
-15.73	1	0.5	11.4
-14.52	1	0.5	12.0
-12.69	1	0.5	12.5
-6.33	1	0.5	13.0
-5.58	1	0.5	13.6
-5.44	1	0.5	14.1
-0.07	1	0.5	14.7
8.89	1	0.5	15.2
9.37	1	0.5	15.8
9.39	1	0.5	16.3
12.57	1	0.5	16.8
13.02	1	0.5	17.4
13.88	1	0.5	17.9
14.73	1	0.5	18.5
14.76	1	0.5	19.0
15.73	1	0.5	19.6
17.03	1	0.5	20.1
21.02	1	0.5	20.7
27.44	1	0.5	21.2
36.47	1	0.5	21.7
42.41	1	0.5	22.3
44.21	1	0.5	22.8
44.36	1	0.5	23.4
49.57	1	0.5	23.9
51.24	1	0.5	24.5
51.86	1	0.5	25.0
56.65	1	0.5	25.5
58.61	1	0.5	26.1
58.81	1	0.5	26.6
61.66	1	0.5	27.2
62.24	1	0.5	27.7
63.37	1	0.5	28.3
70.62	1	0.5	28.8
71.35	1	0.5	29.3
72.76	1	0.5	29.9
72.97	1	0.5	30.4
73.33	1	0.5	31.0
74.06	1	0.5	31.5
76.77	1	0.5	32.1
79.81	1	0.5	32.6
80.52	1	0.5	33.2
81.04	1	0.5	33.7
81.96	1	0.5	34.2
82.58	1	0.5	34.8
83.4	1	0.5	35.3
87.2	1	0.5	35.9
89.43	1	0.5	36.4
94.74	1	0.5	37.0
100.33	1	0.5	37.5
101	1	0.5	38.0
103.14	1	0.5	38.6
104.77	1	0.5	39.1
112.73	1	0.5	39.7
113.45	1	0.5	40.2
115.24	1	0.5	40.8
117.17	1	0.5	41.3
117.96	1	0.5	41.8
118.5	1	0.5	42.4
120.17	1	0.5	42.9
120.29	1	0.5	43.5
121.68	1	0.5	44.0
122.42	1	0.5	44.6
129.08	1	0.5	45.1
130.68	1	0.5	45.7
131.67	1	0.5	46.2
132.23	1	0.5	46.7
133.77	1	0.5	47.3
135.25	1	0.5	47.8
135.29	1	0.5	48.4
143.55	1	0.5	48.9
156.78	1	0.5	49.5
161.67	1	0.5	50.0
164.4	1	0.5	50.5
167.31	1	0.5	51.1
169.09	1	0.5	51.6
184	1	0.5	52.2
184.43	1	0.5	52.7
195.75	1	0.5	53.3
201.26	1	0.5	53.8
205.44	1	0.5	54.3
214.4	1	0.5	54.9
216.26	1	0.5	55.4
216.61	1	0.5	56.0
218.7	1	0.5	56.5
225.98	1	0.5	57.1
229.65	1	0.5	57.6
229.7	1	0.5	58.2
231.41	1	0.5	58.7
238.79	1	0.5	59.2
244.43	1	0.5	59.8
250.84	1	0.5	60.3
252.82	1	0.5	60.9
254.69	1	0.5	61.4
255.52	1	0.5	62.0
258.29	1	0.5	62.5
258.38	1	0.5	63.0
263.09	1	0.5	63.6
265.77	1	0.5	64.1
265.86	1	0.5	64.7
267.46	1	0.5	65.2
269.02	1	0.5	65.8
269.86	1	0.5	66.3
272.02	1	0.5	66.8
276.27	1	0.5	67.4
278.88	1	0.5	67.9
280.99	1	0.5	68.5
283.86	1	0.5	69.0
287.46	1	0.5	69.6
293.98	1	0.5	70.1
302.02	1	0.5	70.7
305.01	1	0.5	71.2
313.88	1	0.5	71.7
330.75	1	0.5	72.3
346.04	1	0.5	72.8
346.16	1	0.5	73.4
348.85	1	0.5	73.9
353.56	1	0.5	74.5
358.18	1	0.5	75.0
358.82	1	0.5	75.5
359.89	1	0.5	76.1
364.63	1	0.5	76.6
365.22	1	0.5	77.2
377.32	1	0.5	77.7
381.06	1	0.5	78.3
393	1	0.5	78.8
401.02	1	0.5	79.3
410.5	1	0.5	79.9
411.93	1	0.5	80.4
422.12	1	0.5	81.0
423.58	1	0.5	81.5
423.83	1	0.5	82.1
425.95	1	0.5	82.6
426.85	1	0.5	83.2
430.82	1	0.5	83.7
434.8	1	0.5	84.2
436.01	1	0.5	84.8
442.84	1	0.5	85.3
445.84	1	0.5	85.9
449.36	1	0.5	86.4
460.71	1	0.5	87.0
482.1	1	0.5	87.5
491.99	1	0.5	88.0
502.44	1	0.5	88.6
503.4	1	0.5	89.1
511.67	1	0.5	89.7
512.33	1	0.5	90.2
517.1	1	0.5	90.8
522.22	1	0.5	91.3
522.94	1	0.5	91.8
537.79	1	0.5	92.4
538.65	1	0.5	92.9
545.47	1	0.5	93.5
560.7	1	0.5	94.0
589.34	1	0.5	94.6
591.69	1	0.5	95.1
597.89	1	0.5	95.7
618.79	1	0.5	96.2
620.55	1	0.5	96.7
638.04	1	0.5	97.3
639.67	1	0.5	97.8
648.32	1	0.5	98.4
675.58	1	0.5	98.9
689.4	1	0.5	99.5
1224.54	1	0.5	100.0

UNIVARIATE

VARIABLE=FD1

MOMENTS

N	184	SUM WGTS	184
MEAN	3.80326	SUM	699.8
STD DEV	4.64001	VARIANCE	21.5297
SKEWNESS	1.31019	KURTOSIS	0.726134
USS	6601.45	CSS	3939.93
CV	122.001	STD MEAN	0.342066
T:MEAN=0	11.1185	PROB>|T|	0.0001
SGN RANK	4000.5	PROB>|S|	0.0001
NUM ^= 0	126		

QUANTILES(DEF=4)

100% MAX	17.5	99%	16.854
75% Q3	5.7725	95%	14.65
50% MED	1.86	90%	11.41
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	17.5		
Q3-Q1	5.7725		
MODE	0		

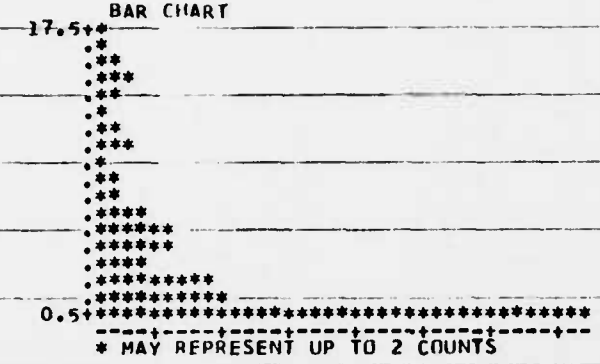
EXTREMES

LOWEST	HIGHEST
0	15.41
0	15.85
0	16.42
0	16.74
0	17.5

MISSING VALUE

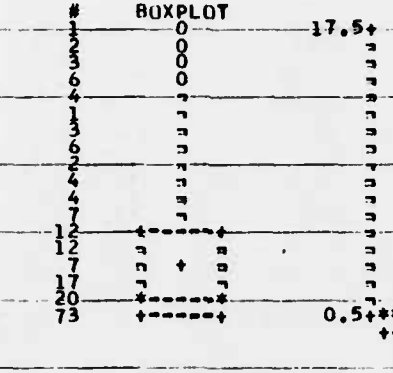
COUNT	25
% COUNT/NOBS	11.96

BAR CHART

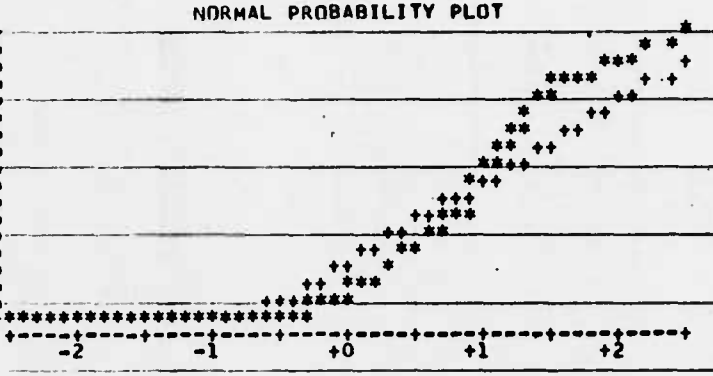


* MAY REPRESENT UP TO 2 COUNTS

BOXPLOT



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	58	31.5	31.5
0.07	1	0.5	32.1
0.38	1	0.5	32.6
0.42	1	0.5	33.2
0.6	2	1.1	34.2
0.65	1	0.5	34.8
0.66	1	0.5	35.3
0.67	2	1.1	36.4
0.69	1	0.5	37.0
0.81	1	0.5	37.5
0.87	1	0.5	38.0
0.88	1	0.5	38.6
0.91	1	0.5	39.1
0.95	1	0.5	39.7
1.14	1	0.5	40.2
1.26	1	0.5	40.8
1.27	1	0.5	41.3
1.28	1	0.5	41.8
1.33	2	1.1	42.9
1.35	1	0.5	43.5
1.39	1	0.5	44.0
1.43	1	0.5	44.6
1.44	1	0.5	45.1
1.48	1	0.5	45.7
1.5	1	0.5	46.2
1.51	1	0.5	46.7
1.57	1	0.5	47.3
1.63	1	0.5	47.8
1.68	2	1.1	48.9
1.77	1	0.5	49.5
1.79	1	0.5	50.0
1.93	1	0.5	50.5
2.01	1	0.5	51.1
2.04	1	0.5	51.6
2.07	1	0.5	52.2
2.1	1	0.5	52.7
2.15	1	0.5	53.3
2.19	1	0.5	53.8
2.26	2	1.1	54.9
2.27	1	0.5	55.4
2.29	1	0.5	56.0
2.32	1	0.5	56.5
2.41	1	0.5	57.1
2.43	1	0.5	57.6
2.47	1	0.5	58.2
2.68	1	0.5	58.7
2.72	1	0.5	59.2
2.87	1	0.5	59.8

UNIVARIATE

VARIABLE=FD1

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
3.29	1	0.5	60.3	4.99	1	0.5	70.7	7.49	1	0.5	82.1	13.27	1	0.5	91.8
3.35	1	0.5	60.9	5.06	1	0.5	71.2	7.92	1	0.5	82.6	13.82	1	0.5	92.4
3.44	1	0.5	61.4	5.31	1	0.5	71.7	8.1	1	0.5	83.2	13.83	1	0.5	92.9
3.57	1	0.5	62.0	5.42	1	0.5	72.3	8.41	1	0.5	83.7	13.91	1	0.5	93.5
3.58	1	0.5	62.5	5.64	1	0.5	72.8	8.59	1	0.5	84.2	14.28	1	0.5	94.0
3.82	1	0.5	63.0	5.71	1	0.5	73.4	8.81	1	0.5	84.8	14.56	1	0.5	94.6
3.86	1	0.5	63.6	5.72	3	1.6	75.0	9.25	1	0.5	85.3	14.62	1	0.5	95.1
4.03	1	0.5	64.1	5.79	1	0.5	75.5	9.81	1	0.5	85.9	14.66	1	0.5	95.7
4.11	1	0.5	64.7	5.82	1	0.5	76.1	9.99	1	0.5	86.4	14.81	1	0.5	96.2
4.16	1	0.5	65.2	5.85	1	0.5	76.6	10.05	1	0.5	87.0	14.9	1	0.5	96.7
4.24	1	0.5	65.8	6	1	0.5	77.2	10.06	1	0.5	87.5	15.03	1	0.5	97.3
4.58	1	0.5	66.3	6.13	1	0.5	77.7	10.17	1	0.5	88.0	15.41	1	0.5	97.8
4.65	1	0.5	66.8	6.16	1	0.5	78.3	10.3	1	0.5	88.6	15.85	1	0.5	98.4
4.7	2	1.1	67.9	6.32	1	0.5	78.8	10.65	1	0.5	89.1	16.42	1	0.5	98.9
4.81	1	0.5	68.5	6.57	1	0.5	79.3	11.03	1	0.5	89.7	16.74	1	0.5	99.5
4.84	1	0.5	69.0	6.72	2	1.1	80.4	11.05	1	0.5	90.2	17.5	1	0.5	100.0
4.91	1	0.5	69.6	6.96	1	0.5	81.0	11.77	1	0.5	90.8				
4.93	1	0.5	70.1	7.29	1	0.5	81.5	12.42	1	0.5	91.3				

UNIVARIATE

VARIABLE=FD2

MOMENTS

N	184	SUM WGTS	184
MEAN	2.638897	SUM	485.57
STD DEV	8.899489	VARIANCE	79.1191
SKEWNESS	6.51792	KURTOSIS	46.1092
USS	15760.2	CSS	14478.8
CV	337.059	STD MEAN	0.65574
T:MEAN=0	4.023441	PROB>|T|	0.0001
SGN RANK	2525	PROB>|S|	0.0001
NUM ^= 0	100		

QUANTILES(DEF=4)

100% MAX	75.78	99%	71.2579
75% Q3	2.385	95%	6.05499
50% MED	0.36	90%	4.205
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	75.78		
Q3-Q1	2.385		
MODE	0		

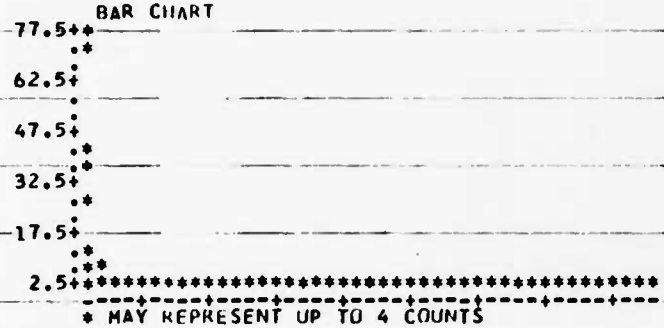
EXTREMES

LOWEST	HIGHEST
0	27.79
0	37.42
0	43.69
0	70.46
0	75.78

MISSING VALUE

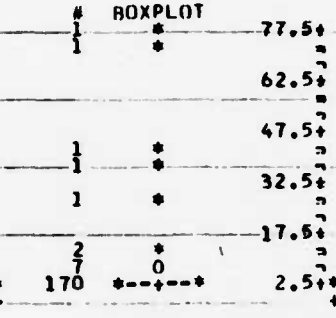
COUNT	25
% COUNT/NOBS	11.96

BAR CHART

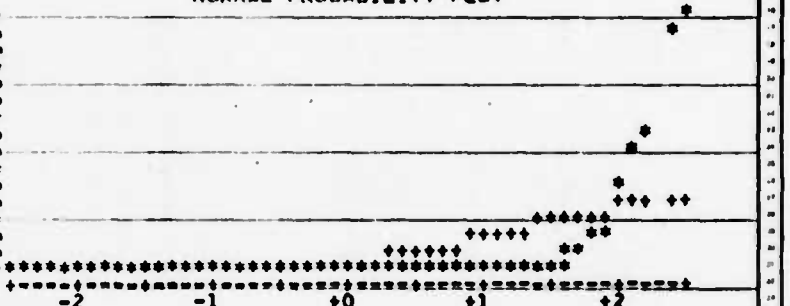


* MAY REPRESENT UP TO 4 COUNTS

BOXPLOT



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	84	45.7	45.7
0.09	1	0.5	46.2
0.13	1	0.5	46.7
0.14	1	0.5	47.3
0.18	1	0.5	47.8
0.21	1	0.5	48.4
0.32	2	1.1	49.5
0.35	1	0.5	50.0
0.37	1	0.5	50.5
0.38	1	0.5	51.1
0.41	1	0.5	51.6
0.46	1	0.5	52.2
0.48	1	0.5	52.7
0.51	1	0.5	53.3
0.52	1	0.5	53.8
0.53	1	0.5	54.3
0.62	2	1.1	55.4
0.68	1	0.5	56.0
0.73	1	0.5	56.5
0.76	1	0.5	57.1
0.78	1	0.5	57.6
0.82	1	0.5	58.2
0.83	1	0.5	58.7
0.92	1	0.5	59.2
0.94	1	0.5	59.8
0.99	1	0.5	60.3
1.04	1	0.5	60.9
1.06	1	0.5	61.4
1.08	1	0.5	62.0
1.12	1	0.5	62.5
1.15	1	0.5	63.0
1.23	1	0.5	63.6
1.25	1	0.5	64.1
1.26	1	0.5	64.7
1.34	1	0.5	65.2
1.4	2	1.1	66.3
1.52	1	0.5	66.8
1.61	1	0.5	67.4
1.62	1	0.5	67.9
1.72	2	1.1	69.0
1.8	1	0.5	69.6
1.98	1	0.5	70.1
2	1	0.5	70.7
2.06	1	0.5	71.2
2.12	2	1.1	72.3
2.17	1	0.5	72.8
2.18	1	0.5	73.4
2.19	1	0.5	73.9
2.21	1	0.5	74.5
2.37	1	0.5	75.0
2.39	1	0.5	75.5
2.48	1	0.5	76.1
2.49	1	0.5	76.6
2.55	1	0.5	77.2
2.63	1	0.5	77.7
2.7	2	1.1	78.8

UNIVARIATE

VARIABLE=FD2

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
2.91	1	0.5	79.3	3.64	1	0.5	85.3	4.22	1	0.5	90.8	8.86	1	0.5	96.2
3.03	1	0.5	79.9	3.65	1	0.5	85.9	4.37	1	0.5	91.3	11.36	1	0.5	96.7
3.08	1	0.5	80.4	3.66	1	0.5	86.4	4.38	1	0.5	91.8	11.55	1	0.5	97.3
3.12	1	0.5	81.0	3.68	1	0.5	87.0	4.47	1	0.5	92.4	27.79	1	0.5	97.8
3.19	1	0.5	81.5	3.69	1	0.5	87.5	4.61	1	0.5	92.9	37.42	1	0.5	98.4
3.24	1	0.5	82.1	3.76	1	0.5	88.0	4.62	1	0.5	93.5	43.69	1	0.5	98.9
3.35	1	0.5	82.6	3.8	1	0.5	88.6	4.72	1	0.5	94.0	70.46	1	0.5	99.5
3.4	2	1.1	83.7	3.86	1	0.5	89.1	4.79	1	0.5	94.6	75.78	1	0.5	100.0
3.56	1	0.5	84.2	3.96	1	0.5	89.7	5.83	1	0.5	95.1				
3.62	1	0.5	84.8	4.19	1	0.5	90.2	6.13	1	0.5	95.7				

UNIVARIATE

VARIABLE=FD13

MOMENTS

N	184	SUM WGTS	184
MEAN	628.439	SUM	115633
STD DEV	828.703	VARIANCE	686748
SKEWNESS	-1.95885	KURTOSIS	8.8547
USS	198343171	CSS	125674970
CV	131.867	STD MEAN	61.0928
T:MEAN=0	10.2866	PROB>|T|	0.0001
SGN RANK	7315	PROB>|S|	0.0001
NUM ^= 0	184		

QUANTILES(DEF=4)

100% MAX	2361.89	99%	2345.88
75% Q3	1130.11	95%	1717.37
50% MED	603.425	90%	1595.68
25% Q1	274.622	10%	35.7098
0% MIN	-4154.74	5%	-122.748
		1%	-3168.11
RANGE	6516.63		
Q3-Q1	855.485		
MODE	-4154.74		

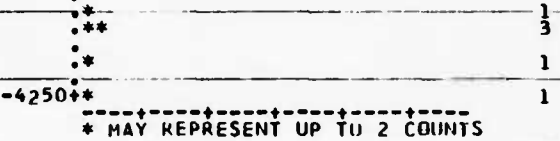
EXTREMES

LOWEST	HIGHEST
-4154.74	1830.14
-2994	2010.56
-2405.21	2132.03
-2293.57	2343.05
-2064.38	2361.89

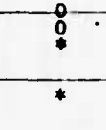
MISSING VALUE .

COUNT	25
% COUNT/NOBS	11.96

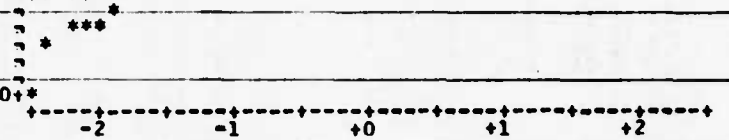
BAR CHART



\# BOXPLOT



NORMAL PROBABILITY PLOT



4	
25	
24	
57	
53	
15	
1	0
3	0
1	
1	

* MAY REPRESENT UP TO 2 COUNTS

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-4154.74	1	0.5	0.5
-2994	1	0.5	1.1
-2405.21	1	0.5	1.6
-2293.57	1	0.5	2.2
-2064.38	1	0.5	2.7
-1662.09	1	0.5	3.3
-239.25	1	0.5	3.8
-217.27	1	0.5	4.3
-144.19	1	0.5	4.9
-58.42	1	0.5	5.4
-22.98	1	0.5	6.0
-19.89	1	0.5	6.5
-9.19	1	0.5	7.1
-7.8	1	0.5	7.6
1.91	1	0.5	8.2
4.64	1	0.5	8.7
10.2	1	0.5	9.2
30.81	1	0.5	9.8
40.61	1	0.5	10.3
45.17	1	0.5	10.9
48.8	1	0.5	11.4
62.27	1	0.5	12.0
84.33	1	0.5	12.5
90.52	1	0.5	13.0
101.01	1	0.5	13.6
105.43	1	0.5	14.1
114.64	1	0.5	14.7
114.76	1	0.5	15.2
121.44	1	0.5	15.8
126.16	1	0.5	16.3
126.26	1	0.5	16.8
135.21	1	0.5	17.4
138.3	1	0.5	17.9
152.76	1	0.5	18.5
164.31	1	0.5	19.0
174.07	1	0.5	19.6
183.68	1	0.5	20.1
195.68	1	0.5	20.7
198.41	1	0.5	21.2
221.71	1	0.5	21.7
222.42	1	0.5	22.3
229.49	1	0.5	22.8
259.82	1	0.5	23.4
265.07	1	0.5	23.9
265.99	1	0.5	24.5
272.61	1	0.5	25.0
280.66	1	0.5	25.5
280.84	1	0.5	26.1
291.57	1	0.5	26.6
293.64	1	0.5	27.2
297.61	1	0.5	27.7
299.63	1	0.5	28.3
312.17	1	0.5	28.8
313.14	1	0.5	29.3
320.37	1	0.5	29.9
322.18	1	0.5	30.4
324.03	1	0.5	31.0
324.17	1	0.5	31.5
324.46	1	0.5	32.1
332.41	1	0.5	32.6
340.67	1	0.5	33.2
341.05	1	0.5	33.7
353.74	1	0.5	34.2
366.94	1	0.5	34.8

UNIVARIATE

VARIABLE=FDI3

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
380.5	1	0.5	35.3	622.2	1	0.5	51.6	846.95	1	0.5	67.9	1447.31	1	0.5	84.2
383.42	1	0.5	35.9	626.23	1	0.5	52.2	856.45	1	0.5	68.5	1459.04	1	0.5	84.8
391.49	1	0.5	36.4	628.98	1	0.5	52.7	878.49	1	0.5	69.0	1459.05	1	0.5	85.3
403.33	1	0.5	37.0	635.97	1	0.5	53.3	889.64	1	0.5	69.6	1479.6	1	0.5	85.9
411.65	1	0.5	37.5	638.08	1	0.5	53.8	907.51	1	0.5	70.1	1482.74	1	0.5	86.4
413.33	1	0.5	38.0	639.7	1	0.5	54.3	927.95	1	0.5	70.7	1490.88	1	0.5	87.0
419.2	1	0.5	38.6	643.28	1	0.5	54.9	933.33	1	0.5	71.2	1493.89	1	0.5	87.5
424.05	1	0.5	39.1	646.84	1	0.5	55.4	999.87	1	0.5	71.7	1504.85	1	0.5	88.0
428.83	1	0.5	39.7	647.04	1	0.5	56.0	1006.6	1	0.5	72.3	1514.57	1	0.5	88.6
444.51	1	0.5	40.2	657.33	1	0.5	56.5	1051.95	1	0.5	72.8	1515.98	1	0.5	89.1
456.51	1	0.5	40.8	658.81	1	0.5	57.1	1066.4	1	0.5	73.4	1589.46	1	0.5	89.7
497.91	1	0.5	41.3	673.2	1	0.5	57.6	1099.62	1	0.5	73.9	1593.13	1	0.5	90.2
516.34	1	0.5	41.8	676.84	1	0.5	58.2	1102.18	1	0.5	74.5	1598.24	1	0.5	90.8
516.44	1	0.5	42.4	699.71	1	0.5	58.7	1120.83	1	0.5	75.0	1604.61	1	0.5	91.3
523.85	1	0.5	42.9	708.76	1	0.5	59.2	1133.2	1	0.5	75.5	1643.07	1	0.5	91.8
524.27	1	0.5	43.5	711.17	1	0.5	59.8	1195.53	1	0.5	76.1	1652.11	1	0.5	92.4
530.56	1	0.5	44.0	713.29	1	0.5	60.3	1198.59	1	0.5	76.6	1666.64	1	0.5	92.9
537.7	1	0.5	44.6	719.88	1	0.5	60.9	1206.98	1	0.5	77.2	1676.6	1	0.5	93.5
539.26	1	0.5	45.1	731.24	1	0.5	61.4	1244.28	1	0.5	77.7	1681.75	1	0.5	94.0
554.91	1	0.5	45.7	766.36	1	0.5	62.0	1262.97	1	0.5	78.3	1694.02	1	0.5	94.6
579.14	1	0.5	46.2	771.02	1	0.5	62.5	1267.63	1	0.5	78.8	1697.47	1	0.5	95.1
583.9	1	0.5	46.7	791.57	1	0.5	63.0	1268.68	1	0.5	79.3	1724	1	0.5	95.7
584.45	1	0.5	47.3	804.29	1	0.5	63.6	1270.45	1	0.5	79.9	1733.51	1	0.5	96.2
584.89	1	0.5	47.8	821.3	1	0.5	64.1	1307.97	1	0.5	80.4	1781.69	1	0.5	96.7
591.79	1	0.5	48.4	831.19	1	0.5	64.7	1316.13	1	0.5	81.0	1823.2	1	0.5	97.3
596.23	1	0.5	48.9	832.8	1	0.5	65.2	1317.85	1	0.5	81.5	1830.14	1	0.5	97.8
599.55	1	0.5	49.5	834.5	1	0.5	65.8	1351.85	1	0.5	82.1	2010.56	1	0.5	98.4
603.03	1	0.5	50.0	835.12	1	0.5	66.3	1424.52	1	0.5	82.6	2132.03	1	0.5	98.9
603.82	1	0.5	50.5	842.41	1	0.5	66.8	1432.3	1	0.5	83.2	2343.05	1	0.5	99.5
603.97	1	0.5	51.1	846.58	1	0.5	67.4	1441.7	1	0.5	83.7	2361.89	1	0.5	100.0

PRINTED IN U.S.A.

UNIVARIATE

VARIABLE=FD4

MOMENTS

N	184	SUM WGTS	184
MEAN	-0.475272	SUM	-87.45
STD DEV	0.710342	VARIANCE	0.504586
SKEWNESS	-0.228637	KURTOSIS	-0.718834
USS	133.902	CSS	92.3392
CV	-149.46	STD MEAN	0.0523671
T:MEAN=0	-9.07577	PROB>|T|	0.0001
SGN RANK	-5429.5	PROB>|S|	0.0001
NUM ^= 0	184		

QUANTILES(DEF=4)

100% MAX	1.16	99%	1.16
75% Q3	0.09	95%	0.747499
50% MED	-0.47	90%	0.405
25% Q1	-1.125	10%	-1.41
0% MIN	-1.71	5%	-1.52
		1%	-1.6675
RANGE	2.87		
Q3-Q1	1.215		
MODE	-0.49		

EXTREMES

LOWEST	HIGHEST
-1.71	1.12
-1.66	1.14
-1.64	1.15
-1.63	1.16
-1.6	1.16

MISSING VALUE

COUNT	25
% COUNT/NOBS	11.96

STEM LEAF # BOXPLOT

```
  10 5924566                    7
   8 8                          1
   6 016                        3
   4 001112429                  9
   2 0002913789                10
   0 24555667889900022333444599 27
  -0 64325432                   8
  -2 9887765532229887644322l0  24
  -4 4310999987751              13
  -6 9984442009876540           16
  -8 7665387732                 10
 -10 98865443109876441O         18
 -12 776444210983322211l        19
 -14 98322200874420             14
 -16 16430                       5
```

MULTIPLY STEM.LEAF BY 10**-01

NORMAL PROBABILITY PLOT

```
 1.1+                                                    *****  **
                                                      *+++
                                                    **
                                                  ****
                                                ***
                                              ******
                                            *++
                                          *****
                                        +++
                                      ***
                                    ++++
                                  +++++
                                +++++
                              *****
                            ********
-0.3+                    *****
                       ++++
                     ***
                   *****
                 +++
               ******
             *++
           ***
         ++
       **
     ****
   ***
 ***
-1.7+** **++++++
    +----+----+----+----+----+----+----+----+----+----+
        -2   -1   +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-1.71	1	0.5	0.5	-1.37	2	1.1	11.4	-1.14	2	1.1	24.5	-0.88	1	0.5	33.7
-1.66	1	0.5	1.1	-1.36	1	0.5	12.0	-1.13	1	0.5	25.0	-0.87	2	1.1	34.8
-1.64	1	0.5	1.6	-1.34	3	1.6	13.6	-1.11	1	0.5	25.5	-0.83	1	0.5	35.3
-1.63	1	0.5	2.2	-1.32	1	0.5	14.1	-1.1	1	0.5	26.1	-0.82	1	0.5	35.9
-1.6	1	0.5	2.7	-1.31	1	0.5	14.7	-1.09	1	0.5	26.6	-0.79	2	1.1	37.0
-1.59	1	0.5	3.3	-1.3	1	0.5	15.2	-1.08	1	0.5	27.2	-0.78	1	0.5	37.5
-1.58	1	0.5	3.8	-1.29	1	0.5	15.8	-1.07	1	0.5	27.7	-0.74	3	1.6	39.1
-1.53	1	0.5	4.3	-1.28	1	0.5	16.3	-1.06	1	0.5	28.3	-0.72	1	0.5	39.7
-1.52	3	1.6	6.0	-1.23	2	1.1	17.4	-1.04	2	1.1	29.3	-0.7	2	1.1	40.8
-1.5	2	1.1	7.1	-1.22	3	1.6	19.0	-1.01	1	0.5	29.9	-0.69	1	0.5	41.3
-1.48	1	0.5	7.6	-1.21	3	1.6	20.7	-1	1	0.5	30.4	-0.68	1	0.5	41.8
-1.47	1	0.5	8.2	-1.19	1	0.5	21.2	-0.97	1	0.5	31.0	-0.67	1	0.5	42.4
-1.44	2	1.1	9.2	-1.18	2	1.1	22.3	-0.96	2	1.1	32.1	-0.66	1	0.5	42.9
-1.42	1	0.5	9.8	-1.16	1	0.5	22.8	-0.95	1	0.5	32.6	-0.65	1	0.5	43.5
-1.4	1	0.5	10.3	-1.15	1	0.5	23.4	-0.93	1	0.5	33.2	-0.64	1	0.5	44.0

UNIVARIATE

VARIABLE=FD4

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-0.6	1	0.5	44.6	-0.28	2	1.1	59.8	0.05	3	1.6	71.7	0.39	1	0.5	89.1
-0.54	1	0.5	45.1	-0.27	1	0.5	60.3	0.06	2	1.1	72.8	0.4	2	1.1	90.2
-0.53	1	0.5	45.7	-0.26	1	0.5	60.9	0.07	1	0.5	73.4	0.41	3	1.6	91.8
-0.51	1	0.5	46.2	-0.24	2	1.1	62.0	0.08	2	1.1	74.5	0.42	1	0.5	92.4
-0.5	1	0.5	46.7	-0.23	1	0.5	62.5	0.09	2	1.1	75.5	0.44	1	0.5	92.9
-0.49	4	2.2	48.9	-0.22	2	1.1	63.6	0.1	3	1.6	77.2	0.52	1	0.5	93.5
-0.48	1	0.5	49.5	-0.21	1	0.5	64.1	0.12	2	1.1	78.3	0.59	1	0.5	94.0
-0.47	2	1.1	50.5	-0.2	1	0.5	64.7	0.13	4	2.2	80.4	0.6	1	0.5	94.6
-0.45	1	0.5	51.1	-0.16	1	0.5	65.2	0.14	3	1.6	82.1	0.71	1	0.5	95.1
-0.41	1	0.5	51.6	-0.14	1	0.5	65.8	0.15	1	0.5	82.6	0.76	1	0.5	95.7
-0.39	1	0.5	52.2	-0.13	1	0.5	66.3	0.19	2	1.1	83.7	0.88	1	0.5	96.2
-0.38	2	1.1	53.3	-0.12	1	0.5	66.8	0.2	3	1.6	85.3	1.05	1	0.5	96.7
-0.37	2	1.1	54.3	-0.05	1	0.5	67.4	0.22	1	0.5	85.9	1.09	1	0.5	97.3
-0.36	1	0.5	54.9	-0.04	1	0.5	67.9	0.29	1	0.5	86.4	1.12	1	0.5	97.8
-0.35	2	1.1	56.0	-0.03	1	0.5	68.5	0.31	1	0.5	87.0	1.14	1	0.5	98.4
-0.33	1	0.5	56.5	-0.02	1	0.5	69.0	0.33	1	0.5	87.5	1.15	1	0.5	98.9
-0.32	3	1.6	58.2	0.02	1	0.5	69.6	0.37	1	0.5	88.0	1.16	2	1.1	100.0
-0.29	1	0.5	58.7	0.04	1	0.5	70.1	0.38	1	0.5	88.6				

UNIVARIATE

VARIABLE=ZN1

MOMENTS

N	184	SUM WGTS	184
MEAN	-0.265978	SUM	-48.94
STD DEV	1.73345	VARIANCE	3.00486
SKEWNESS	-1.91202	KURTOSIS	7.2483
USS	562.906	CSS	549.889
CV	-651.727	STD MEAN	0.127792
T:MEAN=0	-2.08134	PROB>|T|	0.0387947
SGN RANK	-1052.5	PROB>|S|	0.142623
NUM ^= 0	183		

QUANTILES(DEF=4)

100% MAX	3.27	99%	2.88749
75% Q3	0.485	95%	2.23
50% MED	-0.14	90%	1.515
25% Q1	-0.7675	10%	-1.92
0% MIN	-9.39	5%	-2.9675
		1%	-8.183
RANGE	12.66		
Q3-Q1	1.2525		
MODE	-0.21		

EXTREMES

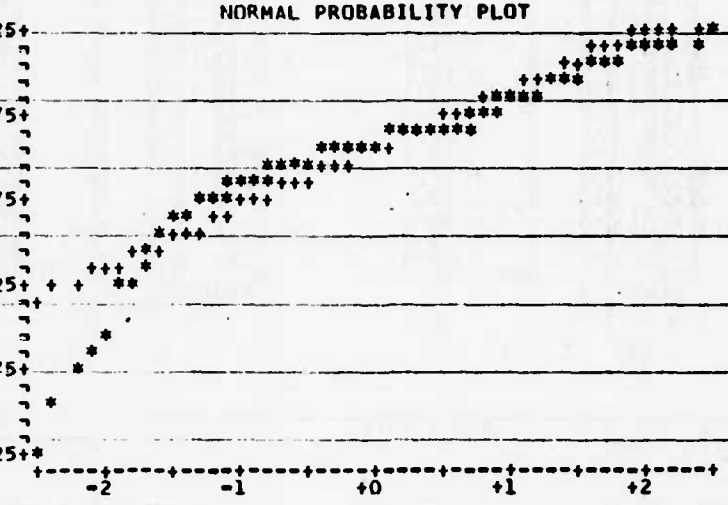
LOWEST	HIGHEST
-9.39	2.59
-7.97	2.67
-6.96	2.8
-6.16	2.82
-5.8	3.27

MISSING VALUE

COUNT	25
% COUNT/NOBS	11.96

STEM	LEAF	#	BOXPLOT
3	3	1	0
2	56788	5	0
2	02234	5	0
1	555677889	9	
1	0001111222333344	16	
0	5555788888899	12	
0	111111112222222222233333444444	30	+--+--+
-0	444443333333322222222222211111100000000	39	*--+--*
-0	9998888887777666666666555555	29	+--+--+
-1	4443333322100	13	
-1	99877765	8	
-2	420000	6	
-2	86	2	0
-3	0	1	0
-3			0
-4	210	3	0
-4			
-5			
-5	8	1	*
-6	2	1	*
-6			*
-7	0	1	
-7			*
-8	0	1	
-8			
-9	4	1	*

NORMAL PROBABILITY PLOT



UNIVARIATE

VARIABLE=ZN1

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-9.39	1	0.5	0.5	-0.84	1	0.5	22.8	-0.18	1	0.5	49.5	0.83	1	0.5	78.3
-7.97	1	0.5	1.1	-0.83	1	0.5	23.4	-0.17	1	0.5	50.0	0.85	2	1.1	79.3
-6.96	1	0.5	1.6	-0.78	2	1.1	24.5	-0.11	2	1.1	51.1	0.88	1	0.5	79.9
-6.16	1	0.5	2.2	-0.77	1	0.5	25.0	-0.09	1	0.5	51.6	0.9	1	0.5	80.4
-5.8	1	0.5	2.7	-0.76	1	0.5	25.5	-0.08	2	1.1	52.7	0.96	1	0.5	81.0
-4.18	1	0.5	3.3	-0.73	1	0.5	26.1	-0.07	1	0.5	53.3	0.99	1	0.5	81.5
-4.07	1	0.5	3.8	-0.71	1	0.5	26.6	-0.05	2	1.1	54.3	1.02	1	0.5	82.1
-4	1	0.5	4.3	-0.69	1	0.5	27.2	0	1	0.5	54.9	1.07	1	0.5	82.6
-3.01	1	0.5	4.9	-0.66	1	0.5	27.7	0.01	2	1.1	56.0	1.08	1	0.5	83.2
-2.84	1	0.5	5.4	-0.65	1	0.5	28.3	0.02	1	0.5	56.5	1.12	1	0.5	83.7
-2.57	1	0.5	6.0	-0.64	1	0.5	28.8	0.03	1	0.5	57.1	1.14	1	0.5	84.2
-2.45	1	0.5	6.5	-0.61	1	0.5	29.3	0.04	1	0.5	57.6	1.17	1	0.5	84.8
-2.22	1	0.5	7.1	-0.6	1	0.5	29.9	0.08	1	0.5	58.2	1.22	1	0.5	85.3
-2.05	2	1.1	8.2	-0.59	2	1.1	31.0	0.1	1	0.5	58.7	1.23	1	0.5	85.9
-2.02	1	0.5	8.7	-0.58	2	1.1	32.1	0.11	2	1.1	59.8	1.28	1	0.5	86.4
-2	1	0.5	9.2	-0.57	1	0.5	32.6	0.12	1	0.5	60.3	1.32	1	0.5	87.0
-1.94	1	0.5	9.8	-0.56	1	0.5	33.2	0.13	2	1.1	61.4	1.34	1	0.5	87.5
-1.9	1	0.5	10.3	-0.54	1	0.5	33.7	0.15	1	0.5	62.0	1.35	1	0.5	88.0
-1.79	1	0.5	10.9	-0.52	1	0.5	34.2	0.17	2	1.1	63.0	1.43	2	1.1	89.1
-1.75	1	0.5	11.4	-0.49	1	0.5	34.8	0.18	1	0.5	63.6	1.49	1	0.5	89.7
-1.74	1	0.5	12.0	-0.47	1	0.5	35.3	0.21	2	1.1	64.7	1.5	1	0.5	90.2
-1.71	1	0.5	12.5	-0.46	2	1.1	36.4	0.22	4	2.2	66.8	1.53	1	0.5	90.8
-1.62	1	0.5	13.0	-0.45	1	0.5	37.0	0.24	2	1.1	67.9	1.59	1	0.5	91.3
-1.55	1	0.5	13.6	-0.44	1	0.5	37.5	0.28	1	0.5	68.5	1.71	1	0.5	91.8
-1.44	1	0.5	14.1	-0.42	1	0.5	38.0	0.3	1	0.5	69.0	1.73	1	0.5	92.4
-1.4	1	0.5	14.7	-0.41	1	0.5	38.6	0.33	1	0.5	69.6	1.77	1	0.5	92.9
-1.36	1	0.5	15.2	-0.39	1	0.5	39.1	0.35	2	1.1	70.7	1.8	1	0.5	93.5
-1.34	1	0.5	15.8	-0.35	1	0.5	39.7	0.36	1	0.5	71.2	1.93	1	0.5	94.0
-1.33	1	0.5	16.3	-0.33	2	1.1	40.8	0.38	1	0.5	71.7	2.05	1	0.5	94.6
-1.32	1	0.5	16.8	-0.32	1	0.5	41.3	0.39	1	0.5	72.3	2.23	2	1.1	95.7
-1.28	1	0.5	17.4	-0.3	1	0.5	41.8	0.41	1	0.5	72.8	2.31	1	0.5	96.2
-1.27	1	0.5	17.9	-0.29	1	0.5	42.4	0.43	1	0.5	73.4	2.4	1	0.5	96.7
-1.22	1	0.5	18.5	-0.27	1	0.5	42.9	0.44	1	0.5	73.9	2.53	1	0.5	97.3
-1.19	1	0.5	19.0	-0.26	1	0.5	43.5	0.46	1	0.5	74.5	2.59	1	0.5	97.8
-1.14	1	0.5	19.6	-0.23	1	0.5	44.0	0.47	1	0.5	75.0	2.67	1	0.5	98.4
-1.04	2	1.1	20.7	-0.22	2	1.1	45.1	0.49	2	1.1	76.1	2.8	1	0.5	98.9
-0.93	1	0.5	21.2	-0.21	4	2.2	47.3	0.71	1	0.5	76.6	2.82	1	0.5	99.5
-0.92	1	0.5	21.7	-0.2	2	1.1	48.4	0.8	1	0.5	77.2	3.27	1	0.5	100.0
-0.89	1	0.5	22.3	-0.19	1	0.5	48.9	0.82	1	0.5	77.7				

UNIVARIATE

VARIABLE=S04

MOMENTS

N	184	SUM WGTS	184
MEAN	0.993533	SUM	182.81
STD DEV	0.771513	VARIANCE	0.595232
SKEWNESS	-0.74309	KURTOSIS	0.011157
USS	290.555	CSS	108.927
CV	77.6535	STD MEAN	0.0568767
T:MEAN=0	17.4682	PROB>|T|	0.0001
SGN RANK	7717	PROB>|S|	0.0001
NUM ^= 0	176		

QUANTILES(DEF=4)

100% MAX	3.4	99%	3.2555
75% Q3	1.46	95%	2.5
50% MED	0.845	90%	2.135
25% Q1	0.4325	10%	0.0740998
0% MIN	-0.31	5%	0
		1%	-0.2335
RANGE	3.71		
Q3-Q1	1.0275		
MODE	0		

EXTREMES

LOWEST	HIGHEST
-0.31	2.72
-0.22	2.81
-0.14	3.02
-0.09	3.23
-0.07	3.4

MISSING VALUE

COUNT	25
% COUNT/NOBS	11.96

STEM	LEAF	#	BOXPLOT
34	0	1	0
32	3	1	0
30	2	1	0
28	1	1	
26	02	2	
24	034247	6	
22	9	1	
20	0134813346789	13	
18	183	3	
16	00369336778	11	
14	00123783677	11	+-----+
12	0223357001123338	16	
10	134223456	9	
8	000133456789013355677789	23	*--+--*
6	0557800445 7	11	
4	013445555677799022334446667999	31	+-----+
2	123457993345667789	18	
0	257814566 8	10	
-0	4974200000000	13	
-2	12	2	

MULTIPLY STEM.LEAF BY 10**-01

NORMAL PROBABILITY PLOT

3.5+ ... -0.3+ ; -2 -1 +0 +1 +2

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-0.31	1	0.5	0.5
-0.29	1	0.5	1.1
-0.14	1	0.5	1.6
-0.09	1	0.5	2.2
-0.07	1	0.5	2.7
-0.04	1	0.5	3.3
-0.02	1	0.5	3.8
0	8	4.3	8.2
0.02	1	0.5	8.7
0.05	1	0.5	9.2
0.07	1	0.5	9.8
0.08	1	0.5	10.3
0.11	1	0.5	10.9
0.14	1	0.5	11.4
0.15	1	0.5	12.0
0.16	2	1.1	13.0
0.18	1	0.5	13.6
0.21	1	0.5	14.1
0.22	1	0.5	14.7
0.23	1	0.5	15.2
0.24	1	0.5	15.8
0.25	1	0.5	16.3
0.27	1	0.5	16.8
0.29	2	1.1	17.9
0.33	2	1.1	19.0
0.34	1	0.5	19.6
0.35	1	0.5	20.1
0.36	2	1.1	21.2
0.37	2	1.1	22.3
0.38	1	0.5	22.8
0.39	1	0.5	23.4
0.4	1	0.5	23.9
0.41	1	0.5	24.5
0.43	1	0.5	25.0
0.44	2	1.1	26.1
0.45	4	2.2	28.3
0.46	1	0.5	28.8
0.47	3	1.6	30.4
0.49	3	1.6	32.1
0.5	1	0.5	32.6

UNIVARIATE

VARIABLE=SO4

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0.52	2	1.1	33.7
0.53	2	1.1	34.8
0.54	3	1.6	36.4
0.56	3	1.6	38.0
0.57	1	0.5	38.6
0.59	3	1.6	40.2
0.6	1	0.5	40.8
0.65	2	1.1	41.8
0.67	1	0.5	42.4
0.68	1	0.5	42.9
0.7	2	1.1	44.0
0.74	2	1.1	45.1
0.75	1	0.5	45.7
0.77	1	0.5	46.2
0.8	3	1.6	47.8
0.81	1	0.5	48.4
0.83	2	1.1	49.5
0.84	1	0.5	50.0
0.85	1	0.5	50.5
0.86	1	0.5	51.1
0.87	1	0.5	51.6
0.88	1	0.5	52.2
0.89	1	0.5	52.7
0.9	1	0.5	53.3
0.91	1	0.5	53.8
0.93	2	1.1	54.9
0.95	2	1.1	56.0
0.96	1	0.5	56.5
0.97	2	1.1	57.6
0.98	1	0.5	58.2
0.99	1	0.5	58.7
1.01	1	0.5	59.2
1.03	1	0.5	59.8
1.04	1	0.5	60.3
1.12	2	1.1	61.4
1.13	1	0.5	62.0
1.14	1	0.5	62.5
1.15	1	0.5	63.0
1.16	1	0.5	63.6
1.2	1	0.5	64.1
1.22	2	1.1	65.2
1.23	2	1.1	66.3
1.25	1	0.5	66.8
1.27	1	0.5	67.4
1.3	2	1.1	68.5
1.31	2	1.1	69.6
1.32	1	0.5	70.1
1.33	3	1.6	71.7
1.38	1	0.5	72.3
1.4	2	1.1	73.4
1.41	1	0.5	73.9
1.42	1	0.5	74.5
1.43	1	0.5	75.0
1.47	1	0.5	75.5
1.48	1	0.5	76.1
1.53	1	0.5	76.6
1.56	1	0.5	77.2
1.57	2	1.1	78.3
1.6	2	1.1	79.3
1.63	1	0.5	79.9
1.66	1	0.5	80.4
1.69	1	0.5	81.0
1.73	2	1.1	82.1
1.76	1	0.5	82.6
1.77	2	1.1	83.7
1.78	1	0.5	84.2
1.81	1	0.5	84.8
1.88	1	0.5	85.3
1.93	1	0.5	85.9
2	1	0.5	86.4
2.01	1	0.5	87.0
2.03	1	0.5	87.5
2.04	1	0.5	88.0
2.08	1	0.5	88.6
2.11	1	0.5	89.1
2.13	2	1.1	90.2
2.14	1	0.5	90.8
2.16	1	0.5	91.3
2.17	1	0.5	91.8
2.18	1	0.5	92.4
2.19	1	0.5	92.9
2.29	1	0.5	93.5
2.4	1	0.5	94.0
2.43	1	0.5	94.6
2.44	1	0.5	95.1
2.52	1	0.5	95.7
2.54	1	0.5	96.2
2.57	1	0.5	96.7
2.6	1	0.5	97.3
2.72	1	0.5	97.8
2.81	1	0.5	98.4
3.02	1	0.5	98.9
3.23	1	0.5	99.5
3.4	1	0.5	100.0

UNIVARIATE

VARIABLE=HRS

MOMENTS

N	197	SUM WGTS	197
MEAN	130.31	SUM	25671
STD DEV	134.773	VARIANCE	18163.9
SKEWNESS	1.33373	KURTOSIS	1.21659
USS	6905299	CSS	3560120
CV	103.426	STD MEAN	9.60221
T:MEAN=0	13.5708	PROB>|T|	0.0001
SGN RANK	9653	PROB>|S|	0.0001
NUM ^= 0	196		

QUANTILES(DEF=4)

100% MAX	565	99%	554.22
75% Q3	207	95%	427
50% MED	72	90%	311.2
25% Q1	30	10%	6
0% MIN	0	5%	2.9
		1%	0.98
RANGE	565		
Q3-Q1	177		
MODE	1		

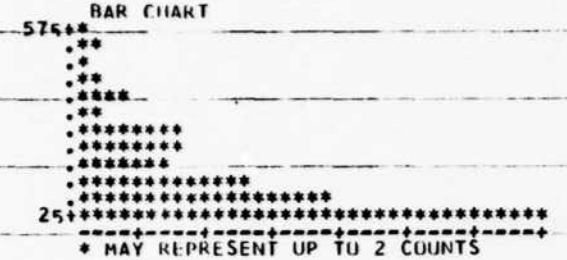
EXTREMES

LOWEST	HIGHEST
0	508
1	542
1	543
1	554
1	565

MISSING VALUE

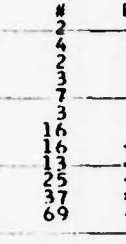
COUNT	12
% COUNT/NOBS	5.74

BAR CHART

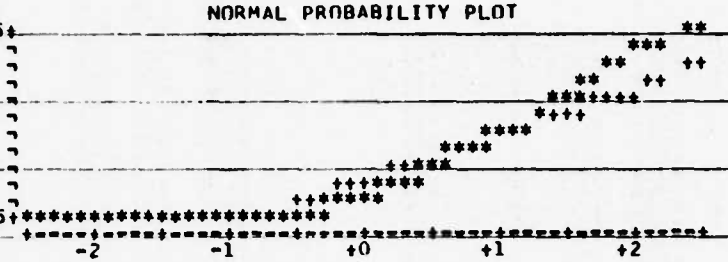


* MAY REPRESENT UP TO 2 COUNTS

BOXPLOT



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	1	0.5	0.5	24	1	0.5	21.8	49	2	1.0	37.6	74	1	0.5	51.3
1	5	2.5	3.0	25	2	1.0	22.8	50	1	0.5	38.1	75	1	0.5	51.8
2	3	1.5	4.6	26	1	0.5	23.4	51	2	1.0	39.1	77	1	0.5	52.3
3	4	2.0	6.6	27	2	1.0	24.4	52	1	0.5	39.6	90	2	1.0	53.3
4	4	2.0	8.6	29	1	0.5	24.9	53	4	2.0	41.6	91	1	0.5	53.8
5	1	0.5	9.1	31	3	1.5	26.4	54	1	0.5	42.1	98	1	0.5	54.3
6	4	2.0	11.2	33	1	0.5	26.9	55	1	0.5	42.6	99	1	0.5	54.8
7	4	2.0	13.2	34	2	1.0	27.9	56	2	1.0	43.7	101	1	0.5	55.3
10	2	1.0	14.2	37	2	1.0	28.9	57	2	1.0	44.7	102	1	0.5	55.8
12	3	1.5	15.7	38	3	1.5	30.5	60	2	1.0	45.7	103	1	0.5	56.3
14	1	0.5	16.2	39	2	1.0	31.5	61	2	1.0	46.7	105	1	0.5	56.9
15	3	1.5	17.8	41	3	1.5	33.0	62	1	0.5	47.2	106	1	0.5	57.4
16	1	0.5	18.3	42	1	0.5	33.5	63	1	0.5	47.7	107	1	0.5	57.9
18	1	0.5	18.8	43	2	1.0	34.5	65	1	0.5	48.2	110	1	0.5	58.4
19	1	0.5	19.3	45	1	0.5	35.0	66	1	0.5	48.7	112	1	0.5	58.9
20	1	0.5	19.8	46	1	0.5	35.5	70	1	0.5	49.2	114	1	0.5	59.4
21	2	1.0	20.8	47	1	0.5	36.0	71	1	0.5	49.7	116	1	0.5	59.9
22	1	0.5	21.3	48	1	0.5	36.5	72	2	1.0	50.8	118	2	1.0	60.9

UNIVARIATE

VARIABLE=HRS

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
121	2	1.0	61.9	192	2	1.0	72.6	255	1	0.5	82.2	377	1	0.5	93.4
125	1	0.5	62.4	196	1	0.5	73.1	259	1	0.5	82.7	380	1	0.5	93.9
129	2	1.0	63.5	198	1	0.5	73.6	261	2	1.0	83.8	391	1	0.5	94.4
133	1	0.5	64.0	201	1	0.5	74.1	262	2	1.0	84.8	422	1	0.5	94.9
135	1	0.5	64.5	202	1	0.5	74.6	267	1	0.5	85.3	425	1	0.5	95.4
138	1	0.5	65.0	203	1	0.5	75.1	268	1	0.5	85.8	445	1	0.5	95.9
142	3	1.5	66.5	211	1	0.5	75.6	281	1	0.5	86.3	481	1	0.5	96.4
147	1	0.5	67.0	213	1	0.5	76.1	286	1	0.5	86.8	483	1	0.5	97.0
157	1	0.5	67.5	214	1	0.5	76.6	287	2	1.0	87.8	496	1	0.5	97.5
163	1	0.5	68.0	215	2	1.0	77.7	289	3	1.5	89.3	508	1	0.5	98.0
165	1	0.5	68.5	226	1	0.5	78.2	308	1	0.5	89.8	542	1	0.5	98.5
171	1	0.5	69.0	230	1	0.5	78.7	309	1	0.5	90.4	543	1	0.5	99.0
175	1	0.5	69.5	231	1	0.5	79.2	320	1	0.5	90.9	554	1	0.5	99.5
177	1	0.5	70.1	232	1	0.5	79.7	349	1	0.5	91.4	565	1	0.5	100.0
179	1	0.5	70.6	239	2	1.0	80.7	363	1	0.5	91.9				
181	1	0.5	71.1	245	1	0.5	81.2	365	1	0.5	92.4				
183	1	0.5	71.6	252	1	0.5	81.7	376	1	0.5	92.9				

UNIVARIATE

VARIABLE=FE

MOMENTS

N	209	SUM WGTS	209
MEAN	72.201	SUM	15090
STD DEV	44.3667	VARIANCE	1968.4
SKEWNESS	0.685329	KURTOSIS	-.00895011
USS	1498940	CSS	409428
CV	61.4489	STD MEAN	3.06891
T:MEAN=0	23.5266	PROB>|T|	0.0001
SGN RANK	10972.5	PROB>|S|	0.0001
NUM ^= 0	209		

QUANTILES(DEF=4)

100% MAX	210	99%	198.6
75% Q3	98.5	95%	159.5
50% MED	68	90%	132
25% Q1	35.5	10%	20
0% MIN	5	5%	11.5
		1%	8.1
RANGE	205		
Q3-Q1	63		
MODE	95		

EXTREMES

LOWEST	HIGHEST
5	171
8	181
9	186
9	200
10	210

```
STEM LEAF                            #    BOXPLOT
  21 0                               1       0
  20 0                               1       0
  19                                 0       |
  18 16                              2       |
  17 11                              2       |
  16 0011                            4       |
  15 45578999                        8       |
  14 15                              2       |
  13 02                              2       |
  12 0034688                         7       |
  11 12333589                        8       |
  10 00022334455577                 14       |
   9 1122333455555777789            18       +------+
   8 0133334444457777789            17       |      |
   7 0001113455566678 8             17       |  +   |
   6 111123334577 89                14       *------*
   5 0000123355666788 9             17       |      |
   4 011122444456789 9              16       |      |
   3 01123456777899                 14       +------+
   2 011123333556667777888 9999     25       |
   1 000011235667788 9              16       |
   0 5899                            4       |
     ----+----+----+----+----+----+
     MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT

```
 215+                                                              *
    |                                                            **
    |                                                          **
    |                                                        ++++++
    |                                                      ***  ++
    |                                                    ***  ++
 145+                                                 *  ++
    |                                               ***
    |                                             ***+
    |                                           ***
    |                                         ***
    |                                       ****
    |                                     ***+
  75+                                   ***
    |                                 ***
    |                               ****
    |                             ****
    |                           +****
    |                         ******
    |                       ******
    |                  ++++++++
    |                ++++++++
   5+** **+++++++
    +----+----+----+----+----+----+----+----+----+----+
        -2        -1        +0        +1        +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
5	1	0.5	0.5	20	1	0.5	10.0	33	1	0.5	23.9	46	1	0.5	34.0
8	1	0.5	1.0	21	3	1.4	11.5	34	1	0.5	24.4	47	1	0.5	34.4
9	2	1.0	1.9	22	1	0.5	12.0	35	1	0.5	24.9	48	1	0.5	34.9
10	4	1.9	3.8	23	4	1.9	13.9	36	1	0.5	25.4	49	2	1.0	35.9
11	2	1.0	4.8	25	2	1.0	14.8	37	3	1.4	26.8	50	4	1.9	37.8
12	1	0.5	5.3	26	3	1.4	16.3	38	1	0.5	27.3	51	1	0.5	38.3
13	1	0.5	5.7	27	4	1.9	18.2	39	2	1.0	28.2	52	1	0.5	38.8
15	1	0.5	6.2	28	3	1.4	19.6	40	1	0.5	28.7	53	2	1.0	39.7
16	2	1.0	7.2	29	4	1.9	21.5	41	2	1.0	29.7	55	2	1.0	40.7
17	2	1.0	8.1	30	1	0.5	22.0	42	3	1.4	31.1	56	3	1.4	42.1
18	2	1.0	9.1	31	2	1.0	23.0	44	4	1.9	33.0	57	1	0.5	42.6
19	1	0.5	9.6	32	1	0.5	23.4	45	1	0.5	33.5	58	2	1.0	43.5

UNIVARIATE

VARIABLE=FE

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
59	1	0.5	44.0	80	1	0.5	59.3	102	2	1.0	78.0	132	1	0.5	90.4
61	4	1.9	45.9	81	1	0.5	59.8	103	2	1.0	78.9	141	1	0.5	90.9
62	1	0.5	46.4	83	4	1.9	61.7	104	2	1.0	79.9	145	1	0.5	91.4
63	3	1.4	47.8	84	4	1.9	63.6	105	3	1.4	81.3	154	1	0.5	91.9
64	1	0.5	48.3	85	1	0.5	64.1	107	2	1.0	82.3	155	2	1.0	92.8
65	1	0.5	48.8	87	4	1.9	66.0	111	1	0.5	82.8	157	1	0.5	93.3
67	2	1.0	49.8	88	1	0.5	66.5	112	1	0.5	83.3	158	1	0.5	93.8
68	1	0.5	50.2	89	1	0.5	67.0	113	3	1.4	84.7	159	3	1.4	95.2
69	1	0.5	50.7	91	2	1.0	67.9	115	1	0.5	85.2	160	2	1.0	96.2
70	3	1.4	52.2	92	2	1.0	68.9	118	1	0.5	85.6	161	2	1.0	97.1
71	3	1.4	53.6	93	3	1.4	70.3	119	1	0.5	86.1	171	2	1.0	98.1
73	1	0.5	54.1	94	1	0.5	70.8	120	2	1.0	87.1	181	1	0.5	98.6
74	1	0.5	54.5	95	5	2.4	73.2	123	1	0.5	87.6	186	1	0.5	99.0
75	3	1.4	56.0	97	3	1.4	74.6	124	1	0.5	88.0	200	1	0.5	99.5
76	3	1.4	57.4	98	1	0.5	75.1	126	1	0.5	88.5	210	1	0.5	100.0
77	1	0.5	57.9	99	1	0.5	75.6	128	2	1.0	89.5				
78	2	1.0	58.9	100	3	1.4	77.0	130	1	0.5	90.0				

UNIVARIATE

VARIABLE=VIS

MOMENTS

N	201	SUM WGTS	201
MEAN	160.269	SUM	32214
STD DEV	58.931	VARIANCE	3472.86
SKEWNESS	-1.05738	KURTOSIS	1.55196
USS	5857466	CSS	694571
CV	36.7701	STD MEAN	4.15667
T:MEAN=0	38.557	PROB>|T|	0.0001
SGN RANK	-10150.5	PROB>|S|	0.0001
NUM ^= 0	201		

QUANTILES(DEF=4)

100% MAX	368	99%	344.94
75% Q3	183	95%	279.8
50% MED	150	90%	236
25% Q1	122	10%	99.2
0% MIN	41	5%	74.3
		1%	44.32
RANGE	327		
Q3-Q1	61		
MODE	142		

EXTREMES

LOWEST	HIGHEST
41	330
44	334
60	342
64	345
66	368

MISSING VALUE .
COUNT 8
% COUNT/NOBS 3.83

```
STEM LEAF                                  #   BOXPLOT
 36 8                                      1       *
 34 25                                     2       0
 32 804                                    3       0
 30 6                                      1       0
 28 068                                    3       0
 26 7558                                   4       0
 24 3656                                   4       |
 22 0911266668                            10       |
 20 16784467                               8       |
 18 0013344479001255 88                   18       +-----+
 16 00222444667789901112244456667777 99   34       |  +  |
 14 0001111222223334456788901111233347 99 36       *-----*
 12 011223344445578002233446678999        31       +-----+
 10 01233346789922444566778999            26       |
  8 039906899                              9       |
  6 046912447                              9       |
  4 14                                     2       |
    ----+----+----+----+----+----+----+-
    MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT

```
 370+                                                          *  *
                                                            ***
                                                          *   ++
 210+                                                   ******
                                                     ++++
                                                  ***
                                              ++++
                                           ++++++
                                        ++++++
                                     ++++++
                                  +++++
                               +++++++
                            ++++++
                         +++++++
                      +++++++
                   +++++++
 50+**********++++++
    +----+----+----+----+----+----+----+----+----+
   -2   -1   +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
41	1	0.5	0.5	90	1	0.5	8.0	112	2	1.0	16.9	127	1	0.5	29.9
44	1	0.5	1.0	96	1	0.5	8.5	114	3	1.5	18.4	128	1	0.5	30.3
60	1	0.5	1.5	98	1	0.5	9.0	115	1	0.5	18.9	130	2	1.0	31.3
64	1	0.5	2.0	99	2	1.0	10.0	116	2	1.0	19.9	132	2	1.0	32.3
66	1	0.5	2.5	100	1	0.5	10.4	117	2	1.0	20.9	133	2	1.0	33.3
69	1	0.5	3.0	101	1	0.5	10.9	118	1	0.5	21.4	134	2	1.0	34.3
71	1	0.5	3.5	102	1	0.5	11.4	119	3	1.5	22.9	136	2	1.0	35.3
72	1	0.5	4.0	103	3	1.5	12.9	120	1	0.5	23.4	137	2	1.0	36.3
74	2	1.0	5.0	104	1	0.5	13.4	121	2	1.0	24.4	138	1	0.5	36.8
77	1	0.5	5.5	106	1	0.5	13.9	122	2	1.0	25.4	139	3	1.5	38.3
80	1	0.5	6.0	107	1	0.5	14.4	123	2	1.0	26.4	140	3	1.5	39.8
83	1	0.5	6.5	108	1	0.5	14.9	124	4	2.0	28.4	141	4	2.0	41.8
89	2	1.0	7.5	109	2	1.0	15.9	125	2	1.0	29.4	142	5	2.5	44.3

UNIVARIATE

VARIABLE=VIS

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
143	3	1.5	45.8
144	2	1.0	46.8
145	1	0.5	47.3
146	1	0.5	47.8
147	1	0.5	48.3
148	2	1.0	49.3
149	1	0.5	49.8
150	1	0.5	50.2
151	4	2.0	52.2
152	1	0.5	52.7
153	3	1.5	54.2
154	1	0.5	54.7
157	1	0.5	55.2
159	2	1.0	56.2
160	2	1.0	57.2
162	3	1.5	58.7
164	3	1.5	60.2
166	2	1.0	61.2
167	2	1.0	62.2
168	1	0.5	62.7
169	2	1.0	63.7
170	1	0.5	64.2
171	3	1.5	65.7
172	2	1.0	66.7
174	3	1.5	68.2
175	1	0.5	68.7
176	3	1.5	70.1
177	4	2.0	72.1
179	2	1.0	73.1
180	2	1.0	74.1
181	1	0.5	74.6
183	2	1.0	75.6
184	3	1.5	77.1
187	1	0.5	77.6
189	1	0.5	78.1
190	2	1.0	79.1
191	1	0.5	79.6
192	1	0.5	80.1
195	2	1.0	81.1
198	2	1.0	82.1
201	1	0.5	82.6
206	1	0.5	83.1
207	1	0.5	83.6
208	1	0.5	84.1
214	2	1.0	85.1
216	1	0.5	85.6
217	1	0.5	86.1
220	1	0.5	86.6
229	1	0.5	87.1
231	2	1.0	88.1
232	1	0.5	88.6
236	4	2.0	90.5
238	1	0.5	91.0
243	1	0.5	91.5
246	1	0.5	92.0
255	1	0.5	92.5
256	1	0.5	93.0
267	1	0.5	93.5
275	2	1.0	94.5
278	1	0.5	95.0
280	1	0.5	95.5
286	1	0.5	96.0
298	1	0.5	96.5
316	1	0.5	97.0
328	1	0.5	97.5
330	1	0.5	98.0
334	1	0.5	98.5
342	1	0.5	99.0
345	1	0.5	99.5
368	1	0.5	100.0

UNIVARIATE

VARIABLE=TAN

MOMENTS

N	209	SUM WGTS	209
MEAN	2.84971	SUM	595.59
STD DEV	0.801477	VARIANCE	0.642365
SKEWNESS	1.7869	KURTOSIS	6.24018
USS	1830.87	CSS	133.612
CV	28.1248	STD MEAN	0.0554393
T:MEAN=0	51.4024	PROB>|T|	0.0001
SGN RANK	10972.5	PROB>|S|	0.0001
NUM ^= 0	209		

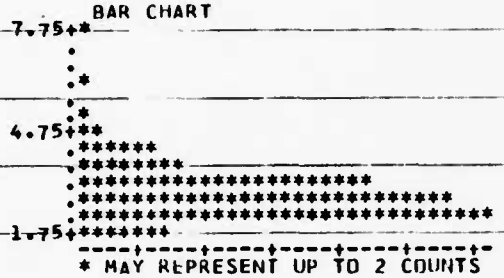
QUANTILES(DEF=4)

100% MAX	7.6	99%	5.92298
75% Q3	3.185	95%	4.33
50% MED	2.67	90%	3.9
25% Q1	2.27	10%	2.06
0% MIN	1.51	5%	1.905
		1%	1.688
RANGE	6.09		
Q3-Q1	0.915		
MODE	2.59		

EXTREMES

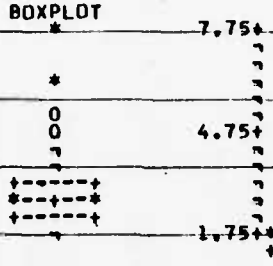
LOWEST	HIGHEST
1.51	4.67
1.68	5
1.76	5.23
1.78	6
1.79	7.6

BAR CHART

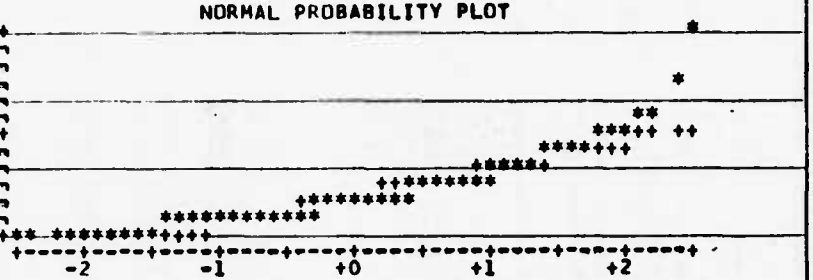


* MAY REPRESENT UP TO 2 COUNTS

BOXPLOT



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
1.51	1	0.5	0.5
1.68	1	0.5	1.0
1.76	1	0.5	1.4
1.78	1	0.5	1.9
1.79	1	0.5	2.4
1.82	1	0.5	2.9
1.84	1	0.5	3.3
1.86	1	0.5	3.8
1.88	1	0.5	4.3
1.9	1	0.5	4.8
1.91	1	0.5	5.3
1.93	1	0.5	5.7
1.94	1	0.5	6.2
1.99	2	1.0	7.2
2	2	1.0	8.1
2.04	1	0.5	8.6
2.06	3	1.4	10.0
2.07	1	0.5	10.5
2.09	1	0.5	11.0
2.1	2	1.0	12.0
2.11	2	1.0	12.9
2.13	1	0.5	13.4
2.14	4	1.9	15.3
2.15	1	0.5	15.8
2.16	2	1.0	16.7
2.17	2	1.0	17.7
2.18	2	1.0	18.7
2.19	1	0.5	19.1
2.2	2	1.0	20.1
2.21	2	1.0	21.1
2.23	2	1.0	22.0
2.24	2	1.0	23.0
2.25	2	1.0	23.9
2.26	1	0.5	24.4
2.27	2	1.0	25.4
2.28	1	0.5	25.8
2.29	2	1.0	26.8
2.3	2	1.0	27.8
2.31	2	1.0	28.7
2.32	3	1.4	30.1
2.33	1	0.5	30.6
2.34	1	0.5	31.1
2.35	1	0.5	31.6
2.36	1	0.5	32.1
2.39	1	0.5	32.5
2.42	2	1.0	33.5
2.43	3	1.4	34.9
2.45	2	1.0	35.9
2.46	2	1.0	36.8
2.47	2	1.0	37.8
2.48	2	1.0	38.8
2.52	1	0.5	39.2
2.53	1	0.5	39.7
2.54	1	0.5	40.2
2.55	1	0.5	40.7
2.56	2	1.0	41.6
2.58	2	1.0	42.6
2.59	6	2.9	45.5
2.61	2	1.0	46.4
2.63	1	0.5	46.9
2.64	3	1.4	48.3
2.66	3	1.4	49.8
2.67	1	0.5	50.2
2.68	2	1.0	51.2
2.71	1	0.5	51.7
2.72	2	1.0	52.6
2.73	1	0.5	53.1
2.74	2	1.0	54.1
2.75	2	1.0	55.0
2.76	2	1.0	56.0
2.82	2	1.0	56.9
2.83	1	0.5	57.4
2.85	1	0.5	57.9
2.87	3	1.4	59.3
2.89	1	0.5	59.8
2.9	1	0.5	60.3
2.91	1	0.5	60.8
2.93	2	1.0	61.7
2.94	1	0.5	62.2
2.95	1	0.5	62.7
2.96	1	0.5	63.2
2.99	2	1.0	64.1
3	1	0.5	64.6
3.04	2	1.0	65.6

UNIVARIATE

VARIABLE=TAN

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
3.05	2	1.0	66.5	3.32	1	0.5	77.5	3.56	1	0.5	86.6	4.27	1	0.5	94.3
3.06	3	1.4	67.9	3.35	3	1.4	78.9	3.61	3	1.4	88.0	4.28	2	1.0	95.2
3.08	1	0.5	68.4	3.36	2	1.0	79.9	3.7	1	0.5	88.5	4.38	1	0.5	95.7
3.1	1	0.5	68.9	3.37	1	0.5	80.4	3.71	1	0.5	89.0	4.41	1	0.5	96.2
3.11	4	1.9	70.8	3.39	1	0.5	80.9	3.83	1	0.5	89.5	4.53	1	0.5	96.7
3.12	1	0.5	71.3	3.43	1	0.5	81.3	3.86	1	0.5	90.0	4.58	1	0.5	97.1
3.14	2	1.0	72.2	3.44	1	0.5	81.8	3.9	1	0.5	90.4	4.62	1	0.5	97.6
3.15	1	0.5	72.7	3.45	3	1.4	83.3	3.92	1	0.5	90.9	4.67	1	0.5	98.1
3.16	3	1.4	74.2	3.46	1	0.5	83.7	3.97	1	0.5	91.4	5	1	0.5	98.6
3.17	1	0.5	74.6	3.48	1	0.5	84.2	4.01	1	0.5	91.9	5.23	1	0.5	99.0
3.18	1	0.5	75.1	3.49	1	0.5	84.7	4.02	1	0.5	92.3	6	1	0.5	99.5
3.19	1	0.5	75.6	3.51	1	0.5	85.2	4.11	1	0.5	92.8	7.6	1	0.5	100.0
3.22	1	0.5	76.1	3.53	1	0.5	85.6	4.14	1	0.5	93.3				
3.27	2	1.0	77.0	3.54	1	0.5	86.1	4.2	1	0.5	93.8				

UNIVARIATE

VARIABLE=TS

MOMENTS

N	209	SUM WGTS	209
MEAN	8.63014	SUM	1803.7
STD DEV	6.90893	VARIANCE	47.7334
SKEWNESS	1.26753	KURTOSIS	2.10376
USS	25494.7	CSS	9928.54
CV	80.0558	STD MEAN	0.477901
T:MEAN=0	18.0584	PROB>¬T¬	0.0001
SGN RANK	10972.5	PROB>¬S¬	0.0001
NUM ^= 0	209		

QUANTILES(DEF=4)

100% MAX	36.8	99%	36.28
75% Q3	12.4	95%	20
50% MED	7.2	90%	18.8
25% Q1	2.8	10%	1.6
0% MIN	0.4	5%	1.2
		1%	0.8
RANGE	36.4		
Q3-Q1	9.6		
MODE	4		

EXTREMES

LOWEST	HIGHEST
0.4	24
0.8	25.2
0.8	35.2
0.8	36.4
0.8	36.8

STEM LEAF

```
36 48
34 2
32
30
28
26
24 n02
22
20 n0000042
18 n00048222226
16 n000044826
14 n488822266
12 n0000000000044888882
10 n448882226
 8 n00000044444444888666
 6 n00448888222222266
 4 n000000000000000000044444888222266
 2 n0000000000000044444445888888822226666
 0 488888222222226666666666
   ----+----+----+----+----+----+----+--
```

BOXPLOT

```
2   0
1   0
    |
    |
    |
    |
    |
3   |
    |
8   |
11  |
10  |
10  |
21  +-----+
10  |     |
21  |  +  |
19  *-----*
32  |     |
37  +-----+
24  |
```

NORMAL PROBABILITY PLOT

```
37+                                                    **
                                                     *
                                                  ***  ++
                                                  +++
                                               ****
                                            *****
                                          ****
                                        ***
                                      ****
19+                                 *****
                                  ++++
                                ++++
                              +++++
                            +++++
                          +++++
                        +++++
                      +++++
                    +++++
                  +++++
                +++++
              +++++
            +++++
          +++++
        +++++
      +++++
    +++++
  +++++
1+++++++++++++++
 +----+----+----+----+----+----+----+----+
-2   -1   +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0.4	1	0.5	0.5
0.8	5	2.4	2.9
1.2	8	3.8	6.7
1.6	10	4.8	11.5
2	14	6.7	18.2
2.4	7	3.3	21.5
2.5	1	0.5	22.0
2.8	7	3.3	25.4
3.2	4	1.9	27.3
3.6	4	1.9	29.2
4	18	8.6	37.8
4.4	5	2.4	40.2
4.8	3	1.4	41.6
5.2	4	1.9	43.5
5.6	2	1.0	44.5
6	3	1.4	45.9
6.4	2	1.0	46.9
6.8	5	2.4	49.3
7.2	7	3.3	52.6
7.6	2	1.0	53.6
8	7	3.3	56.9
8.4	8	3.8	60.8
8.8	3	1.4	62.2
9.6	3	1.4	63.6
10	1	0.5	64.1
10.4	2	1.0	65.1
10.8	3	1.4	66.5
11.2	3	1.4	67.9
11.6	1	0.5	68.4
12	13	6.2	74.6
12.4	2	1.0	75.6
12.8	5	2.4	78.0
13.2	1	0.5	78.5
14	1	0.5	78.9
14.4	1	0.5	79.4
14.8	3	1.4	80.9
15.2	3	1.4	82.3
15.6	2	1.0	83.3
16	5	2.4	85.6
16.4	2	1.0	86.6
16.8	1	0.5	87.1
17.2	1	0.5	87.6
17.6	1	0.5	88.0
18	3	1.4	89.5
18.4	1	0.5	90.0
18.8	1	0.5	90.4
19.2	5	2.4	92.8
19.6	1	0.5	93.3
20	6	2.9	96.2
20.4	1	0.5	96.7
21.2	1	0.5	97.1
24	2	1.0	98.1
25.2	1	0.5	98.6
35.2	1	0.5	99.0
36.4	1	0.5	99.5
36.8	1	0.5	100.0

UNIVARIATE

VARIABLE=COB

MOMENTS

N	137	SUM WGTS	137
MEAN	11.0343	SUM	1511.7
STD DEV	4.91862	VARIANCE	24.1929
SKEWNESS	0.547911	KURTOSIS	-0.911867
USS	19970.8	CSS	3290.23
CV	44.5757	STD MEAN	0.420226
T:MEAN=0	26.258	PROB>|T|	0.0001
SGN RANK	4726.5	PROB>|S|	0.0001
NUM ^= 0	137		

QUANTILES(DEF=4)

100% MAX	22.1	99%	22.1
75% Q3	15	95%	20.01
50% MED	9.8	90%	18.6
25% Q1	6.95	10%	5.84
0% MIN	3.7	5%	5
		1%	4.118
RANGE	18.4		
Q3-Q1	8.05		
MODE	6.1		

EXTREMES

LOWEST	HIGHEST
3.7	20.5
4.8	21
4.9	21.5
4.9	22.1
4.9	22.1

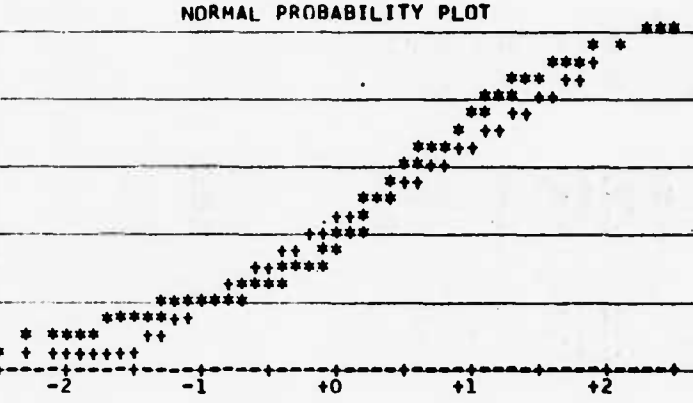
MISSING VALUE

COUNT	72
% COUNT/NOBS	34.45

STEM	LEAF	#
22	11	2
21	05	2
20	0015	4
19	00119	5
18	00005	5
17	00059	5
16	0055	4
15	00000000458	11
14	25556	5
13	00599	5
12	00025589	8
11	014	3
10	00001555	8
9	00012689	8
8	00000012345899	14
7	00001112225559	14
6	000001111111111125999	21
5	00000112	8
4	8999	4
3	7	1

BOXPLOT

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
3.7	1	0.7	0.7	6.9	3	2.2	24.8	8.4	1	0.7	42.3	10	4	2.9	54.0
4.8	1	0.7	1.5	7	4	2.9	27.7	8.5	1	0.7	43.1	10.1	1	0.7	54.7
4.9	3	2.2	3.6	7.1	3	2.2	29.9	8.8	1	0.7	43.8	10.5	3	2.2	56.9
5	5	3.6	7.3	7.2	3	2.2	32.1	8.9	2	1.5	45.3	11	1	0.7	57.7
5.1	2	1.5	8.8	7.5	3	2.2	34.3	9	3	2.2	47.4	11.1	1	0.7	58.4
5.2	1	0.7	9.5	7.9	1	0.7	35.0	9.1	1	0.7	48.2	11.4	1	0.7	59.1
6	5	3.6	13.1	8	6	4.4	39.4	9.2	1	0.7	48.9	12	3	2.2	61.3
6.1	11	8.0	21.2	8.1	1	0.7	40.1	9.6	1	0.7	49.6	12.2	1	0.7	62.0
6.2	1	0.7	21.9	8.2	1	0.7	40.9	9.8	1	0.7	50.4	12.5	2	1.5	63.5
6.5	1	0.7	22.6	8.3	1	0.7	41.6	9.9	1	0.7	51.1	12.8	1	0.7	64.2

UNIVARIATE

VARIABLE=COB

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
12.9	1	0.7	65.0	15	8	5.8	78.1	17.5	1	0.7	86.1	20	2	1.5	95.6
13	2	1.5	66.4	15.4	1	0.7	78.8	17.9	1	0.7	86.9	20.1	1	0.7	96.4
13.5	1	0.7	67.2	15.5	1	0.7	79.6	18	4	2.9	89.8	20.5	1	0.7	97.1
13.9	2	1.5	68.6	15.8	1	0.7	80.3	18.5	1	0.7	90.5	21	1	0.7	97.8
14.2	1	0.7	69.3	16	2	1.5	81.8	19	2	1.5	92.0	21.5	1	0.7	98.5
14.5	3	2.2	71.5	16.5	2	1.5	83.2	19.1	2	1.5	93.4	22.1	2	1.5	100.0
14.6	1	0.7	72.3	17	3	2.2	85.4	19.9	1	0.7	94.2				

APPENDIX C
CONTINENTAL LDT-465 BENCH TEST ENGINE

TABLE	CONTENTS	PAGE
C-1	LDT Data	C-1
C-2	Correlation Matrix.	C-3

TEST ENGINE DATA IN ENGINE SEQUENCE 17:44 MONDAY, JUNE 4, 1984 46

OBS	CL2	DET11	DET12	DET13	DET14	DET15	FD1	FD2	FD13	FD4	ZN1	SM4	HRS	FE	VIS	TAN	TS	COB	GC
1	1.43	-1343.6	131.78	228.92	686.99	82.15	0.97	14.95	-6.39	-0.06	-2.87	0.45	14	12	.	2.8	0.8	13	.
2	6.07	-1143.0	308.87	477.14	1651.50	201.06	2.91	38.49	-165.83	0.17	-3.40	1.70	42	25	.	3.2	1.6	9	.
3	8.00	-2511.2	392.69	555.01	2125.55	241.77	3.18	0.00	-223.76	0.00	-5.11	2.39	56	30	.	3.3	1.6	9	.
4	10.14	-2550.3	463.77	630.85	2544.42	299.42	4.20	0.00	-217.88	0.00	-4.68	2.62	70	41	.	3.5	3.2	10	.
5	12.04	-2577.4	518.59	697.81	2932.42	333.14	5.32	1.14	-217.29	-0.03	-4.66	3.14	84	46	.	3.6	3.6	11	.
6	13.70	-2656.8	612.85	792.36	3403.94	393.46	7.06	1.19	-253.79	-0.07	-4.85	3.29	98	59	.	3.8	3.6	12	.
7	15.42	-2612.9	702.62	929.99	3923.83	446.38	8.98	0.00	-204.77	-0.12	-5.12	3.46	112	65	.	4.2	4.0	12	.
8	17.20	-2504.2	750.33	970.61	4199.25	489.27	10.20	1.48	-198.68	-0.05	-4.72	3.65	126	72	.	4.4	4.0	12	.
9	18.38	-2598.2	797.12	1045.35	4455.79	517.64	9.17	1.50	-232.50	-0.09	-5.08	3.51	140	86	.	4.1	4.4	12	.
10	19.94	-2579.4	996.17	1204.74	5128.11	631.75	0.00	1.25	-192.81	-0.07	-4.87	4.32	154	97	.	4.5	4.8	13	.
11	20.45	-2608.1	1052.27	1277.38	5411.12	668.64	0.00	1.74	-165.84	-0.11	-4.89	4.32	168	103	.	4.5	5.2	13	.
12	21.92	-2345.3	1157.07	1350.13	5815.88	736.52	0.00	2.22	-188.14	-0.26	-4.44	4.58	182	118	.	5.1	4.8	14	.
13	21.42	-2196.5	1215.92	1412.98	5978.65	766.43	0.00	2.40	-159.40	-0.25	-4.30	4.35	196	123	.	4.9	4.8	14	.
14	23.50	358.0	1297.83	1706.84	6531.45	837.52	0.00	2.04	-116.98	-0.12	-3.15	4.16	210	.	.	6.2	.	17	.

VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
CL2	14	14.98000000	6.67408997	209.72000000	1.43000000	23.50000000
DETI1	14	-2133.50714286	861.83972534	-29869.10000000	-2656.85000000	357.99000000
DETI2	14	742.70571429	361.33755177	10397.88000000	131.78000000	1297.83000000
DETI3	14	948.57928571	413.15827531	13280.11000000	228.92000000	1706.84000000
DETI4	14	3913.49285714	1768.35132060	54788.90000000	686.99000000	6531.45000000
DETI5	14	474.65428571	230.55442984	6645.16000000	82.15000000	837.52000000
FD1	14	3.71357143	3.83313611	51.99000000	0	10.20000000
FD2	14	4.88571429	10.36783466	68.40000000	0	38.49000000
FDI3	14	-181.71857143	61.41329058	-2544.06000000	-253.79000000	-6.39000000
FD4	14	-0.07571429	0.10544516	-1.06000000	-0.26000000	0.17000000
ZN1	14	-4.43857143	0.74889516	-62.14000000	-5.12000000	-2.87000000
SO4	14	3.28142857	1.16841021	45.94000000	0.45000000	4.58000000
HRS	14	118.00000000	60.33241252	1652.00000000	14.00000000	210.00000000
FE	13	67.46153846	36.12389649	877.00000000	12.00000000	123.00000000
TAN	14	4.15000000	0.88903578	58.10000000	2.80000000	6.20000000
TS	13	3.56923077	1.40912775	46.40000000	0.80000000	5.20000000
COB	14	12.21428571	2.11872863	171.00000000	9.00000000	17.00000000

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

CL2

CL2	DETI4	HRS	DETI5	DETI2	DETI3	TS	FF	SO4	TAN	FD4	COB	FD2	ZN1
1.00000	0.99083	0.98365	0.97692	0.97428	0.97209	0.96996	0.96926	0.96858	0.91860	-0.69779	0.68809	-0.52128	-0.29794
14	14	14	14	14	14	13	13	14	14	14	14	14	14

FDI3	FD1	DETI1	VIS	GC
-0.26126	-0.14282	-0.01352	0.00000	0.00000
14	14	14	0	0

DETI1

DETI1	ZN1	TS	FDI3	COB	FF	FD2	FD1	TAN	SO4	DETI3	DETI5	DETI2	FD4
1.00000	0.86684	-0.67548	0.63698	0.47251	-0.46405	0.43591	-0.41230	0.34692	-0.19633	0.19424	0.13223	0.12358	0.12196
14	14	13	14	14	13	14	14	14	14	14	14	14	14

HRS	DETI4	CL2	VIS	GC
0.10683	0.07739	-0.01352	0.00000	0.00000
14	14	14	0	0

DETI2

DETI2	DETI5	HRS	FF	DETI4	DETI3	CL2	TAN	TS	SO4	COB	FD4	FD2	FD1
1.00000	0.99963	0.99652	0.99544	0.99533	0.99292	0.97428	0.94950	0.92354	0.92325	0.76729	-0.73932	-0.45389	-0.33500
14	14	14	13	14	14	14	14	13	14	14	14	14	14

ZN1	DETI1	FDI3	VIS	GC
-0.13701	-0.12358	-0.09671	0.00000	0.00000
14	14	14	0	0

DETI3

DETI3	DETI5	DETI2	HRS	FF	DETI4	CL2	TAN	TS	SO4	COB	FD4	FD2	FD1
1.00000	0.99472	0.99292	0.99287	0.99230	0.99210	0.97209	0.97208	0.93941	0.90775	0.77943	-0.69159	-0.44452	-0.29861
14	14	14	14	13	14	14	14	13	14	14	14	14	14

DETI1	ZN1	FDI3	VIS	GC
0.19424	-0.10725	-0.09415	0.00000	0.00000
14	14	14	0	0

DETI4

DETI4	HRS	DETI5	DETI2	DETI3	CL2	FF	TS	TAN	SO4	COB	FD4	FD2	FD1
1.00000	0.99789	0.99639	0.99533	0.99210	0.99083	0.99035	0.95071	0.94675	0.94459	0.74691	-0.72813	-0.49150	-0.24949
14	14	14	14	14	14	13	13	14	14	14	14	14	14

ZN1	FDI3	DETI1	VIS	GC
-0.19928	-0.15887	0.07739	0.00000	0.00000
14	14	14	0	0

DETI5

DETI5	DETI2	HRS	DETI4	FF	DETI3	CL2	TAN	TS	SO4	COB	FD4	FD2	FD1
1.00000	0.99963	0.99756	0.99639	0.99611	0.99472	0.97692	0.95411	0.92966	0.92298	0.77030	-0.73138	-0.45100	-0.32120
14	14	14	14	13	14	14	14	13	14	14	14	14	14

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

DETI5

DETI1	ZN1	FDI3	VIS	GC
0.13223	-0.13211	-0.09926	0.00000	0.00000
14	14	14	0	0

FD1

FD1	FDI3	ZN1	DETI1	COH	DETI2	DETI5	DETI3	TAN	HRS	DETI4	FD4	FE	FD2
1.00000	-0.52708	-0.47054	-0.41230	-0.39933	-0.33500	-0.32120	-0.29861	-0.27908	-0.27056	-0.24949	0.24859	-0.23322	-0.16295
14	14	14	14	14	14	14	14	14	14	14	14	13	14

CL2	SO4	TS	VIS	GC
-0.14282	-0.10639	0.00049	0.00000	0.00000
14	14	13	0	0

FD2

FD2	ZN1	FD4	SO4	TS	CL2	DETI4	HRS	FE	DETI2	DETI5	DETI3	DETI1	TAN
1.00000	0.62353	0.61903	-0.58494	-0.57821	-0.53128	-0.49150	-0.47331	-0.45446	-0.45389	-0.45100	-0.44452	0.43591	-0.40358
14	14	14	14	13	14	14	14	13	14	14	14	14	14

FDI3	COH	FD1	VIS	GC
0.38542	-0.32878	-0.16295	0.00000	0.00000
14	14	14	0	0

FDI3

FDI3	ZN1	DETI1	FD1	TS	SO4	COH	FD2	CL2	FE	DETI4	HRS	DETI5	DETI2
1.00000	0.84161	0.63698	-0.52708	-0.43848	-0.42919	0.42681	0.38542	-0.26126	-0.23875	-0.15887	-0.12213	-0.09926	-0.09671
14	14	14	14	13	14	14	14	14	13	14	14	14	14

DETI3	FD4	TAN	VIS	GC
-0.09415	-0.07330	-0.00787	0.00000	0.00000
14	14	14	0	0

FD4

FD4	FE	DETI2	HRS	DETI5	DETI4	COH	CL2	DETI3	TS	SO4	TAN	FD2	FD1
1.00000	-0.78888	-0.73932	-0.73903	-0.73138	-0.72813	-0.72749	-0.69779	-0.69159	-0.65840	-0.65738	-0.65399	0.61903	0.24859
14	13	14	14	14	14	14	14	14	13	14	14	14	14

ZN1	DETI1	FDI3	VIS	GC
0.15821	0.12196	-0.07330	0.00000	0.00000
14	14	14	0	0

ZN1

ZN1	DETI1	FDI3	FD2	TS	FD1	SO4	FE	COH	CL2	DETI4	HRS	FD4	DETI2
1.00000	0.86684	0.84161	0.62353	-0.61508	-0.47054	-0.46666	-0.42233	0.33964	-0.29794	-0.19928	-0.16037	0.15821	-0.13701
14	14	14	14	13	14	14	13	14	14	14	14	14	14

DETI5	DETI3	TAN	VIS	GC
-0.13211	-0.10725	0.02912	0.00000	0.00000
14	14	14	0	0

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

SO4

SO4	CL2	TS	DETI4	HRS	FE	DETI2	DETI5	DETI3	TAN	FD4	FD2	COB	ZN1
1.00000	0.96858	0.95940	0.94459	0.92734	0.92500	0.92326	0.92298	0.90775	0.83235	-0.65738	-0.58494	0.53619	-0.46666
14	14	13	14	14	13	14	14	14	14	14	14	14	14
FDI3	DETI1	FD1	VIS	GC									
-0.42919	-0.19633	-0.10639	0.00000	0.00000									
14	14	14	0	0									

HRS

HRS	DETI4	DETI5	DETI2	FE	DETI3	CL2	TAN	TS	SO4	COB	FD4	FD2	FD1
1.00000	0.99780	0.99756	0.99652	0.99563	0.99287	0.98365	0.94767	0.93864	0.92734	0.76425	-0.73903	-0.47331	-0.27056
14	14	14	14	13	14	14	14	13	14	14	14	14	14
ZN1	FDI3	DETI1	VIS	GC									
-0.16037	-0.12213	0.10683	0.00000	0.00000									
14	14	14	0	0									

FE

FE	DETI5	HRS	DETI2	DETI3	DETI4	TAN	CL2	SO4	TS	FD4	COB	DETI1	FD2
1.00000	0.99611	0.99563	0.99544	0.99230	0.99035	0.97167	0.96926	0.92500	0.91838	-0.78888	0.73782	-0.46405	-0.45446
13	13	13	13	13	13	13	13	13	13	13	13	13	13
ZN1	FDI3	FD1	VIS	GC									
-0.42233	-0.23875	-0.23322	0.00000	0.00000									
13	13	13	0	0									

VIS

CL2	DETI1	DETI2	DETI3	DETI4	DETI5	FD1	FD2	FDI3	FD4	ZN1	SO4	HRS	FE
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0	0	0	0	0	0	0	0	0	0	0	0	0	0
VIS	TAN	TS	COB	GC									
0.00000	0.00000	0.00000	0.00000	0.00000									
0	0	0	0	0									

TAN

TAN	DETI3	FE	DETI5	DETI2	HRS	DETI4	CL2	TS	SO4	COB	FD4	FD2	DETI1
1.00000	0.97208	0.97167	0.95411	0.94950	0.94767	0.94675	0.91860	0.91222	0.83235	0.82696	-0.65399	-0.40358	0.34692
14	14	13	14	14	14	14	14	13	14	14	14	14	14
FD1	ZN1	FDI3	VIS	GC									
-0.27908	0.02912	-0.00787	0.00000	0.00000									
14	14	14	0	0									

TS

TS	CL2	SO4	DETI4	DETI3	HRS	DETI5	DETI2	FE	TAN	DETI1	FD4	COB	ZN1
1.00000	0.96996	0.95940	0.95071	0.93941	0.93864	0.92966	0.92354	0.91838	0.91222	-0.67548	-0.65840	0.61899	-0.61508
13	13	13	13	13	13	13	13	13	13	13	13	13	13

C-5

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

TS

FD2	FDI3	FD1	VIS	GC
-0.57821	-0.43848	0.00049	0.00000	0.00000
13	13	13	0	0

COB

COB	TAN	DETI3	DETI5	DETI2	HRS	DETI4	FF	FD4	CL2	TS	SO4	DETI1	FDI3
1.00000	0.82696	0.77943	0.77030	0.76729	0.76425	0.74691	0.73782	-0.72749	0.68809	0.61899	0.53619	0.47251	0.42681
14	14	14	14	14	14	14	13	14	14	13	14	14	14

FD1	ZN1	FD2	VIS	GC
-0.39933	0.33964	-0.32878	0.00000	0.00000
14	14	14	0	0

GC

CL2	DETI1	DETI2	DETI3	DETI4	DETI5	FD1	FD2	FDI3	FD4	ZN1	SO4	HRS	FE
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0	0	0	0	0	0	0	0	0	0	0	0	0	0

VIS	TAN	TS	COB	GC
0.00000	0.00000	0.00000	0.00000	0.00000
0	0	0	0	0

APPENDIX D
DETROIT DIESEL ALLISON 6V-53T ENGINE
1ST BATTALION
22ND FIELD ARTILLERY, FT. CARSON, CO.

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* These models were all developed early in the study and are based on a slightly different data collection methodology than that outlined in Table 1.

ENGINE 6V53T 1738 MONDAY, JUNE 4, 1984 1

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FD13	ZN1	HRS	FE	VIS	TAN	TS	COB	GC
1	40.30	177.6	174.41	298.71	1349.13	-2.41	0.00	141.94	0.38	.	86	258	2.53	8.4	14.5	.
2	46.10	714.0	135.98	268.04	1439.80	-2.76	0.00	82.56	0.69	.	98	228	2.76	5.2	9.5	.
3	6.38	321.0	55.38	131.86	40.86	1.53	2.47	-101.33	-0.98	.	5	233	2.43	3.2	8.2	.
4	8.11	-80.9	36.18	190.57	551.94	0.36	2.72	135.41	-0.05	.	74	228	2.50	3.2	8.2	.
5	6.81	1439.2	41.25	252.96	719.77	3.57	0.00	204.57	-0.10	.	55	228	2.52	3.2	8.0	.
6	6.87	1162.7	1.88	166.33	572.21	1.58	0.00	193.03	0.06	.	65	223	2.21	3.2	7.0	.
7	8.09	1085.8	13.91	226.57	836.25	1.74	0.00	279.25	0.15	.	63	202	2.50	3.2	7.0	.
8	19.66	1820.3	-159.35	126.23	329.87	-0.81	0.87	118.77	-0.26	.	61	237	1.97	4.8	.	.
9	20.82	3.5	-153.86	103.76	360.83	-2.13	1.16	5.55	-1.13	.	79	217	2.23	4.8	.	.
10	20.10	584.4	-142.42	154.20	422.03	-1.21	1.37	140.13	-0.51	.	69	198	2.10	4.0	.	.
11	22.98	42.4	-109.97	260.20	746.84	-1.31	3.24	617.30	-1.10	.	87	182	2.17	4.0	.	.
12	36.65	-562.8	107.16	289.54	1530.38	-3.11	0.00	117.37	0.29	.	93	227	2.78	7.2	15.5	.
13	50.16	710.2	103.07	377.88	1696.00	-3.76	0.00	53.22	0.91	403	174	204	2.78	10.8	9.1	.
14	39.70	187.3	176.29	328.90	1550.37	-3.77	0.00	-24.14	0.25	.	117	285	2.65	4.8	8.9	.
15	41.20	117.7	116.99	313.99	1530.82	-3.93	0.00	-22.02	0.52	.	113	232	2.89	8.0	8.1	.
16	44.14	165.4	215.05	463.54	1576.19	-0.63	3.85	-41.76	-0.72	414	143	241	2.55	9.2	8.2	.
17	46.05	651.0	138.07	391.29	1936.44	-2.69	0.00	70.24	0.66	419	159	267	2.52	7.2	8.4	.
18	33.03	-104.5	176.27	454.18	1698.24	-0.16	0.00	550.14	0.75	4	82	278	1.85	4.8	13.8	.
19	62.24	-1058.7	106.87	105.47	1214.51	-10.36	0.00	-16.10	0.32	8	97	278	2.26	2.4	9.0	.
20	39.63	227.1	237.61	508.54	1645.42	-1.06	5.36	488.33	-0.03	12	98	247	2.37	6.0	7.0	.
21	38.11	806.8	149.16	256.55	1137.42	-0.85	0.00	133.84	0.49	520	95	239	2.35	6.0	14.5	.
22	47.39	583.2	184.39	334.23	1302.04	6.42	2.83	-23.19	-0.15	527	123	241	2.46	8.8	10.0	.
23	42.11	-181.7	132.36	255.77	1269.11	-3.75	0.00	-82.81	-0.04	529	119	252	2.63	8.0	9.1	.
24	44.70	1374.2	64.24	368.47	1839.70	-1.63	0.00	194.73	0.83	578	106	251	2.24	6.8	8.1	.
25	15.22	-121.8	126.84	170.13	914.10	0.96	0.00	10.83	-0.27	24	95	152	2.25	2.8	14.3	.
26	19.96	-197.6	136.25	180.09	1024.11	-1.65	0.00	-6.10	-0.18	36	108	153	2.28	4.8	10.0	.
27	22.85	90.9	189.97	249.56	1157.06	-0.35	0.00	-42.72	-0.71	48	117	158	2.51	6.0	8.9	.
28	75.67	765.2	70.95	329.91	1299.35	-2.45	0.00	610.92	2.20	.	106	182	2.39	10.4	16.0	.
29	69.95	-663.4	54.11	168.37	863.16	-2.99	0.00	186.67	1.09	.	97	164	2.48	12.0	12.0	.
30	68.68	-486.2	78.73	161.79	936.64	-3.24	0.00	177.44	0.77	.	96	160	2.40	12.4	13.0	.
31	21.22	-4165.2	162.38	316.80	1052.47	-5.58	0.00	-318.86	-3.62	.	75	215	2.26	1.6	14.5	.
32	-0.23	-2610.8	26.96	-25.84	153.72	0.04	0.00	-59.55	-1.95	.	31	138	2.12	0.4	11.9	5
33	31.63	97.8	135.28	169.87	1165.02	-1.83	0.64	78.81	0.38	.	79	159	1.96	4.0	14.5	.
34	42.85	-124.8	102.91	269.79	1189.47	-4.02	0.00	-34.31	0.05	.	92	252	2.32	6.8	8.9	.
35	33.00	311.9	183.93	270.84	1172.37	-1.61	2.43	-79.16	-0.99	.	94	188	2.72	6.0	8.9	.
36	48.45	716.3	189.01	345.32	1569.25	-1.20	2.86	-26.45	-0.68	.	113	192	2.61	6.0	10.0	.
37	51.46	1317.5	281.87	628.40	1955.59	13.38	5.38	111.85	-0.28	.	105	224	3.60	6.0	7.0	.
38	51.33	1125.9	221.06	571.01	2025.52	-2.34	0.00	125.45	0.06	.	105	201	2.63	4.8	6.5	.
39	49.11	1510.5	270.62	634.27	2233.54	-2.57	0.00	181.88	0.44	.	104	203	2.90	4.8	6.0	.
40	51.45	1114.5	185.04	527.80	2059.86	-2.62	0.00	-8.54	-0.23	.	97	240	2.90	4.8	6.0	.
41	51.65	984.0	166.22	490.00	2096.24	-2.76	0.00	17.33	0.27	.	114	234	2.49	4.8	5.5	.
42	56.75	-116.6	112.39	366.21	1864.33	-5.85	0.00	-0.16	0.21	.	130	214	2.06	6.8	5.0	.
43	58.83	-101.1	63.26	332.42	1969.99	-6.31	0.00	-3.74	0.72	.	140	201	2.48	6.8	5.0	.
44	.	.	.	.	.	.	.	.	.	.	200	346	1.76	16.0	.	.
45	32.71	814.6	-60.20	62.93	594.09	-2.15	0.00	235.74	0.79	.	54	.	2.12	4.0	.	.
46	72.42	.	.	.	.	.	.	.	.	.	67	322	1.94	36.0	.	.
47	67.22	1379.8	-52.16	145.91	785.39	-2.71	0.00	661.32	1.02	.	79	263	2.15	10.0	.	.
48	43.44	-91.6	121.52	114.31	1006.21	-3.66	0.13	378.48	1.43	.	94	173	2.22	4.0	10.5	.
49	35.15	371.8	131.60	57.86	826.69	-2.76	0.00	156.33	0.90	.	98	191	2.34	6.0	6.2	.
50	37.14	-126.3	116.34	51.02	807.18	-3.14	0.00	151.25	1.10	.	124	190	2.41	8.0	6.5	.
51	42.86	4827.1	75.16	273.07	775.91	1.92	0.00	290.70	2.74	.	112	191	2.02	7.2	7.1	.
52	43.48	511.7	1.60	31.45	1511.19	-4.27	0.00	387.60	1.30	.	110	169	3.61	4.8	6.0	.
53	43.48	949.7	21.45	15.27	1316.19	-3.31	0.00	316.50	1.28	.	109	166	2.88	4.8	5.0	.
54	43.50	864.4	-5.01	57.25	1238.00	-3.62	0.00	256.64	0.92	.	106	146	2.71	4.8	6.0	2
55	42.86	520.1	4.18	72.62	1304.17	-3.72	0.00	293.97	0.90	.	103	143	2.29	4.8	6.3	3
56	44.89	950.6	14.92	70.17	1301.72	-3.21	0.00	285.21	0.78	.	111	143	2.23	6.0	6.0	3

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F

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FDI3	ZN1	HRS	FE	VIS	TAN	TS	COB	GC
57	36.44	1550.93	-138.73	41.71	488.36	-0.78	0.00	211.12	1.34	.	62	184	2.36	4.00	.	.
58	36.91	2417.00	-158.04	12.78	410.11	0.97	0.00	170.89	1.40	.	67	208	1.74	3.20	.	.
59	59.23	-170.62	-183.92	13.09	402.88	-8.11	0.00	-145.30	-0.53	.	122	205	2.18	10.00	.	.
60	39.71	6278.68	-61.65	861.63	2926.55	7.96	0.00	1634.54	4.24	.	80	224	1.38	6.00	.	.
61	50.38	949.91	55.26	758.57	2223.97	-2.77	0.00	1196.55	1.32	.	127	271	1.87	7.20	.	.
62	49.77	1152.67	92.15	805.85	2236.54	-2.39	0.00	1331.72	1.29	.	113	280	1.60	8.00	.	.
63	21.58	361.16	25.28	-21.56	378.33	-0.92	0.00	222.12	1.03	.	71	102	2.57	2.80	16.0	3
64	15.23	.	.	.	.	.	.	.	.	.	67	186	2.22	2.80	12.9	.
65	10.75	428.95	71.28	-41.78	423.80	-0.98	0.00	-108.28	0.41	58	59	136	2.39	0.80	10.8	4
66	21.79	.	.	.	.	.	.	.	.	103	65	246	2.34	3.20	11.0	.
67	23.63	1007.18	29.92	123.35	1372.85	-1.16	0.00	193.71	1.11	104	65	132	2.43	2.00	8.0	6
68	26.49	1022.17	2.42	206.68	1287.48	-1.12	0.00	212.42	1.07	.	67	142	2.82	1.60	6.0	4
69	28.91	451.03	-37.79	219.80	1036.16	-2.09	0.00	140.93	0.67	.	65	150	2.59	2.00	4.5	.
70	29.66	393.06	-37.41	264.56	1130.14	-2.25	0.00	193.50	1.22	.	64	142	2.18	2.00	5.0	3
71	35.87	434.06	-58.73	213.09	1146.75	-2.96	0.00	163.06	0.67	.	80	147	2.05	2.00	4.5	3
72	32.12	540.15	-49.56	187.36	1028.47	-2.81	0.00	148.60	0.42	.	70	144	2.33	2.00	4.5	3
73	58.69	-201.93	-144.83	5.36	185.54	-8.40	0.00	-258.63	-0.33	.	81	202	3.22	10.00	.	.
74	63.21	.	.	.	.	.	.	.	.	.	89	217	2.30	16.80	.	.
75	50.58	1044.28	59.74	677.29	1889.72	-2.79	0.00	1241.69	1.35	.	78	291	2.68	8.00	.	.
76	48.57	1008.05	105.49	686.99	1858.68	-2.08	0.00	1138.20	1.40	.	75	268	2.39	8.00	.	.
77	33.18	1061.27	182.78	982.72	2405.90	3.40	0.00	1802.27	1.95	.	64	286	2.74	7.20	.	.
78	16.90	68.49	141.11	188.08	970.20	0.46	0.95	219.08	0.58	.	53	193	2.44	0.03	12.0	.
79	16.12	95.89	137.74	149.34	933.04	-1.16	0.00	-23.79	0.01	.	82	255	2.38	3.20	8.1	.
80	13.49	542.84	143.92	158.60	934.68	-0.99	0.00	-34.25	0.33	.	81	216	2.36	2.40	8.0	.
81	22.89	6139.40	159.59	424.68	1231.16	3.62	0.00	196.59	2.67	.	76	259	2.20	4.00	6.8	.
82	23.06	1046.08	201.75	431.89	2049.66	-0.87	0.00	151.58	0.10	.	71	202	2.64	0.80	5.5	.
83	24.18	988.42	67.27	397.98	1439.39	-1.14	0.00	133.16	0.47	.	63	169	2.77	1.60	4.0	.
84	24.20	736.83	76.90	376.03	1401.32	-1.40	0.00	111.05	0.16	.	61	160	2.29	1.60	48.0	.
85	11.98	734.99	-4.20	217.49	723.74	0.02	0.00	119.55	0.34	.	37	151	2.03	0.40	4.0	.
86	15.88	183.65	-0.67	229.34	818.89	-1.22	0.00	77.40	-0.06	.	41	150	2.08	0.80	3.5	.
87	21.47	1188.92	-17.11	75.14	278.05	1.08	0.65	106.10	-0.29	.	55	137	3.73	2.00	.	4
88	33.63	570.59	57.46	288.56	871.53	-0.12	3.62	247.04	-0.15	.	96	122	3.78	6.00	.	1
89	26.74	435.86	27.12	307.79	875.38	1.86	3.62	481.40	0.31	.	91	138	3.14	4.00	.	1
90	39.82	265.34	92.97	517.42	1286.46	-0.40	6.52	626.43	-0.14	.	120	103	2.86	8.00	.	.
91	17.46	385.59	220.03	324.50	1130.65	-0.32	0.00	8.65	0.20	.	35	232	2.18	6.00	12.5	.
92	23.24	249.09	181.21	361.10	1291.12	-1.40	0.00	-58.57	0.02	.	58	306	2.30	4.80	7.2	.
93	15.02	926.00	90.26	274.84	622.93	0.14	0.00	-110.40	-0.11	.	45	204	2.09	0.10	6.6	.
94	26.88	829.60	152.35	412.08	1258.31	-0.37	4.38	28.44	0.06	.	57	.	2.28	2.00	6.2	.
95	30.12	876.18	128.72	504.94	1810.24	-1.90	0.00	117.74	-0.31	.	50	217	2.18	2.80	4.5	.
96	34.01	1613.45	139.63	555.02	1752.28	-0.20	0.00	70.72	0.32	.	58	.	2.80	3.20	4.0	.
97	37.63	1464.65	77.42	501.79	1483.62	-1.02	0.00	56.38	-0.67	.	53	204	3.05	3.20	3.8	.
98	38.48	1102.68	81.55	494.63	1487.60	-1.65	0.00	49.96	-0.45	.	56	195	2.21	3.20	3.5	.
99	51.88	999.45	28.38	425.33	1184.13	-3.70	0.00	-121.27	-0.62	.	74	199	2.09	3.20	3.5	.
100	49.40	1111.86	-2.79	416.24	1205.55	-2.67	0.00	-108.96	-0.99	.	68	192	2.39	3.20	4.2	.
101	57.84	2095.77	108.54	540.40	1333.37	-0.41	0.00	660.76	1.06	.	62	244	2.09	4.80	.	.
102	63.62	-171.45	143.03	715.55	1550.50	3.21	0.00	815.85	0.39	.	88	280	2.35	9.20	.	.
103	38.06	948.27	186.15	924.44	2072.23	1.03	11.67	1290.24	0.20	.	58	270	2.46	4.80	.	.
104	44.88	1207.33	212.96	1061.65	2334.99	-0.29	0.00	1484.69	-0.11	.	72	280	2.42	8.00	.	.
105	1.93	202.69	-7.21	15.54	-12.99	0.36	0.00	-18.14	-0.38	17	101	163	2.05	3.60	12.9	.
106	29.92	150.99	50.62	210.58	650.31	-2.00	2.70	35.24	-0.88	33	114	138	2.43	4.00	7.5	.
107	30.37	1027.64	-17.37	316.52	982.84	-1.79	0.00	136.00	-0.57	34	111	168	2.46	2.00	5.5	.
108	30.63	1240.70	-0.80	334.17	1041.97	-1.24	0.00	163.68	-0.16	37	111	164	2.41	2.00	5.0	.
109	35.80	1361.60	18.97	395.91	1183.59	-1.38	0.00	48.39	-0.69	40	109	172	2.01	2.80	4.5	.
110	74.87	2069.87	172.10	146.56	1064.29	2.20	0.00	366.63	1.54	.	122	188	2.17	14.00	18.0	.
111	11.20	-275.95	-110.39	-353.68	-221.69	-1.53	0.00	-24.55	0.12	.	103	150	2.14	1.60	12.0	.
112	11.34	-398.77	-107.78	-344.97	-199.54	-1.69	0.00	-16.28	-0.01	.	112	138	1.98	2.00	12.1	.

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FDI3	ZN1	HRS	FE	VIS	TAN	TS	COB	GC
113	10.19	174.69	-21.00	-240.39	32.10	0.77	0	-14.16	-0.47		107	181	2.18	1.2	11.0	
114	24.20									43	118	171	1.95	2.0	4.7	
115	2.43	1819.11	142.01	171.15	1596.17	1.50	0	70.40	1.00	2	27	220	2.97	0.4	6.0	
116	24.20									4	44	223	2.64	0.4	5.8	
117	24.20									31	137		2.81	0.8	4.5	
118	1.45	1028.18	-41.80	116.04	540.69	1.37	0	155.04	0.04	1	31	160	2.20	0.4	3.5	
119	24.20									38	91	165	2.24	0.4	3.0	
120	24.20										145	182	2.06	6.0	3.8	

VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
CL2	119	34.33647059	17.35052530	4086.0400000	-0.23000000	75.67000000
DET1	110	685.17309091	1196.25622223	75369.0400000	-4165.21000000	6278.68000000
DET2	110	71.57909091	102.99738811	7873.7000000	-183.92000000	281.87000000
DET3	110	288.87409091	244.95400078	31776.1500000	-353.68000000	1061.65000000
DET4	110	1175.32445455	604.82718396	129285.6900000	-221.69000000	2926.55000000
FD1	110	-1.20245455	2.95306098	-132.2700000	-10.36000000	13.38000000
FD2	110	0.63109091	1.69155991	69.4200000	0	11.67000000
FDI3	110	223.06627273	384.83165900	24537.2900000	-318.86000000	1802.27000000
ZN1	110	0.31472727	0.95439467	34.6200000	-3.62000000	4.24000000
HRS	27	150.62962963	205.48032811	4067.0000000	1.00000000	578.00000000
FE	120	87.50833333	30.98278075	10501.0000000	5.00000000	200.00000000
VIS	116	203.21551724	49.28194061	23573.0000000	102.00000000	346.00000000
TAN	120	2.40800000	0.39207614	288.9600000	1.38000000	3.78000000
TS	120	5.10108333	4.33276045	612.1300000	0.03000000	36.00000000
COB	93	8.54301075	5.45079567	794.5000000	3.00000000	48.00000000
GC	14	3.21428571	1.36880472	45.0000000	1.00000000	6.00000000

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CL2	TS	HRS	GC	DET4	FE	DET3	FD1	ZN1	VIS	FDI3	DET2	DET1	TAN	
1.00000	0.67549	0.59777	-0.53249	0.48187	0.46329	0.35185	-0.32005	0.31765	0.30604	0.25214	0.22182	0.08862	0.07531	
119	119	27	14	110	119	110	110	110	115	110	110	110	119	
FD2	COR													
-0.01924	-0.00005													
110	93													

DET1

DET1	ZN1	FD1	FDI3	DET3	DET4	GC	COR	VIS	HRS	TAN	CL2	FE	FD2	
1.00000	0.64822	0.46497	0.35222	0.30869	0.27647	-0.22872	-0.21191	0.13487	0.11491	-0.11268	0.08862	-0.07356	-0.04396	
110	110	110	110	110	110	14	86	107	22	110	110	110	110	

DET1

TS	DET2
0.03553	0.00384
110	110

DET2

DET2	DET4	DET3	VIS	HRS	TS	CL2	FD1	TAN	FD2	FE	COR	FDI3	ZN1	
1.00000	0.63170	0.55325	0.39927	0.31164	0.23638	0.22182	0.21344	0.20748	0.19162	0.17422	0.14574	0.11667	0.04885	
110	110	110	107	22	110	110	110	110	110	110	86	110	110	

GC	DET1
0.02443	0.00384
14	110

DET3

DET3	DET4	FDI3	DET2	VIS	GC	HRS	CL2	DET1	TS	FD2	FD1	COR	ZN1	
1.00000	0.83462	0.63182	0.55325	0.54869	-0.50825	0.36243	0.35185	0.30869	0.26328	0.25690	0.25063	-0.15574	0.15352	
110	110	110	110	107	14	22	110	110	110	110	110	86	110	

TAN	FE
0.03624	0.02027
110	110

DET4

DET4	DET3	DET2	FDI3	CL2	VIS	HRS	ZN1	TS	DET1	FE	COR	GC	TAN	
1.00000	0.83462	0.63170	0.50149	0.48187	0.47077	0.46107	0.32695	0.28979	0.27647	0.25335	-0.14545	-0.13873	0.11433	
110	110	110	110	110	107	22	110	110	110	110	86	14	110	

FD2	FD1
0.07430	0.05057
110	110

FD1

FD1	DET1	FD2	CL2	FDI3	FE	DET3	DET2	ZN1	TS	HRS	DET4	VIS	COR	
1.00000	0.46497	0.32997	-0.32005	0.26536	-0.25882	0.25063	0.21344	0.14619	-0.11421	0.06236	0.05057	0.04881	0.03068	
110	110	110	110	110	110	110	110	110	110	22	110	107	86	

TAN	GC
0.02461	-0.00057
110	14

FD2

FD2	GC	FD1	DET3	TAN	ZN1	DET2	FDI3	HRS	DET4	TS	DET1	COR	FE	
1.00000	-0.66768	0.32997	0.25690	0.23159	-0.21832	0.19162	0.16960	0.09335	0.07430	0.06790	-0.04396	-0.03971	0.02551	
110	14	110	110	110	110	110	110	22	110	110	110	86	110	

CL2	VIS
-0.01924	0.01359
110	107

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

FDI3

FDI3	DET3	GC	ZN1	DET4	DET1	VIS	TS	FD1	CL2	HRS	FD2	TAN	DET2
1.00000	0.63182	-0.62088	0.52808	0.50149	0.35222	0.33168	0.29410	0.26536	0.25214	-0.19731	0.16960	-0.13853	0.11667
110	110	14	110	110	110	107	110	110	110	22	110	110	110
COB	FE												
0.04529	-0.02005												
86	110												

ZN1

ZN1	DET1	FDI3	DET4	CL2	TS	HRS	FD2	DET3	FD1	TAN	GC	VIS	FE
1.00000	0.64822	0.52808	0.32695	0.31765	0.27735	0.23636	-0.21832	0.15352	0.14619	-0.13539	-0.13509	0.10896	0.10862
110	110	110	110	110	110	22	110	110	110	110	14	107	110
DET2	COB												
0.04885	0.00316												
110	86												

HRS

HRS	GC	TS	CL2	VIS	FE	DET4	DET3	DET2	COB	ZN1	TAN	FDI3	DET1
1.00000	1.00000	0.77716	-0.59777	0.49211	-0.47680	-0.46107	0.36243	0.31164	0.27312	-0.23636	0.23533	-0.19731	0.11491
27	2	27	27	26	27	22	22	22	27	22	27	22	22
FD2	FD1												
0.09335	0.06236												
22	22												

FE

FE	GC	HRS	CL2	TS	FD1	DET4	DET2	ZN1	VIS	DET1	FD2	TAN	DET3
1.00000	-0.67327	0.47680	0.46329	0.37079	-0.25882	0.25335	0.17422	0.10862	0.09136	-0.07356	0.02551	0.02288	0.02027
120	14	27	119	120	110	110	110	110	116	110	110	120	110
FDI3	COB												
-0.02005	-0.01180												
110	93												

VIS

VIS	DET3	HRS	DET4	TS	DET2	FDI3	CL2	TAN	DET1	ZN1	FE	GC	FD1
1.00000	0.54869	0.49211	0.47077	0.43504	0.39927	0.33168	0.30604	-0.17656	0.13487	0.10896	0.09136	0.05349	0.04881
116	107	26	107	116	107	107	115	116	107	107	116	14	107
COB	FD2												
-0.02162	0.01359												
90	107												

TAN

TAN	GC	HRS	FD2	DET2	VIS	FDI3	ZN1	COB	DET4	DET1	CL2	TS	DET3
1.00000	-0.39616	0.23533	0.23159	0.20748	-0.17656	-0.13853	-0.13539	-0.12455	0.11433	-0.11268	0.07531	-0.06254	0.03624
120	14	27	110	110	116	110	110	93	110	110	119	120	110

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

TAN

FD1	FE
0.02461	-0.02288
110	120

TS

TS	HRS	GC	CL2	VIS	FE	FD13	DET4	ZN1	DET3	DET2	COB	FD1	FD2
1.00000	0.77716	-0.68485	0.67549	0.43504	0.37079	0.29410	0.28979	0.27735	0.26328	0.23638	0.17535	-0.11421	0.06790
120	27	14	119	116	120	110	110	110	110	110	93	110	110

TAN	DET1
-0.06254	0.03553
120	110

COB

COB	GC	HRS	DET1	TS	DET3	DET2	DET4	TAN	FD13	FD2	FD1	VIS	E
1.00000	0.29562	0.27312	-0.21191	0.17535	-0.15574	0.14574	-0.14545	-0.12455	0.04529	-0.03971	0.03068	-0.02162	-0.01180
93	11	27	86	93	86	86	86	93	86	86	86	90	93

ZN1	CL2
0.00316	-0.00005
86	93

GC

HRS	GC	TS	FE	FD2	FD13	CL2	DET3	TAN	COB	DET1	DET4	ZN1	VIS
1.00000	1.00000	-0.68485	-0.67327	-0.66768	-0.62088	-0.53249	-0.50825	-0.39616	0.29562	-0.22872	-0.13873	-0.13509	0.05349
2	14	14	14	14	14	14	14	14	11	14	14	14	14

DET2	FD1
0.02443	-0.00057
14	14

D-7

F

STEP 1 VARIABLE DET12 ENTERED R SQUARE = 0.68278854 C(P) = 125.33698439

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	665031.60545743	665031.60545743	204.48	0.0001
ERROR	95	308961.89969721	3252.23352313		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	202.68821646				
DET12	0.00000532	0.00000037	665031.60545743	204.48	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE DET13 ENTERED R SQUARE = 0.82474259 C(P) = 29.62986416

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	803293.92306144	401646.96153072	221.18	0.0001
ERROR	94	170699.58209320	1815.95300099		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	195.32363664				
DET12	0.00015813	0.00002210	145972.33421141	80.38	0.0001
DET13	-0.00000730	0.00000084	138262.31760401	76.14	0.0001

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE DET22 ENTERED R SQUARE = 0.83721301 C(P) = 23.04645678

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	815440.03682049	271813.34560683	159.43	0.0001
ERROR	93	158553.46833415	1704.87600359		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	211.18040760				
DET22	-0.00010758	0.00004031	12146.11375905	7.12	0.0090
DET12	0.00026994	0.00003438	105078.43367216	61.63	0.0001
DET13	-0.00001001	0.00000130	101017.66369638	59.25	0.0001

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE CL1 ENTERED R SQUARE = 0.84993732 C(P) = 16.28830408

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	827833.42725798	206958.35681450	130.27	0.0001
ERROR	92	146160.07789666	1588.69849894		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	184.98658082				
CL1	0.39670821	0.14203540	12393.39043749	7.80	0.0064
DET22	-0.00011391	0.00003897	13570.97615370	8.54	0.0044
DET12	0.00026257	0.00003330	98794.99116963	62.19	0.0001
DET13	-0.00000975	0.00000126	95215.02665291	59.93	0.0001

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	829400.57138338	207350.14284584	131.93	0.0001
ERROR	92	144592.93377126	1571.66232360		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	184.03756597				
CL1	0.42672411	0.14103193	14388.60463875	9.16	0.0032
DET22	-0.00011731	0.00003991	14284.38705952	9.09	0.0033
DET12	0.00016397	0.00002028	102700.45753293	65.35	0.0001
DET14	0.00000578	0.00000074	96782.17077831	61.58	0.0001

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE CL2 ENTERED R SQUARE = 0.85951642 C(P) = 11.69500023

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	837163.40719235	167432.68143847	111.35	0.0001
ERROR	91	136830.09796229	1503.62745014		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	189.74110052				
CL1	1.48448116	0.48553616	14055.50553737	9.35	0.0029
CL2	-1.89556807	0.83422953	7762.83580897	5.16	0.0254
DET22	-0.00012938	0.00003843	17044.12572685	11.34	0.0011
DET12	0.00015758	0.00002004	92975.78558335	61.83	0.0001
DET14	0.00000556	0.00000073	88272.91966159	58.71	0.0001

STEP 5 DET12 REPLACED BY DET13 R SQUARE = 0.86123215 C(P) = 10.51405825

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	838834.52159426	167766.90431885	112.95	0.0001
ERROR	91	135158.98356038	1485.26355561		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	188.35190485				
CL1	1.66991926	0.47956463	18009.43894409	12.13	0.0008
CL2	-2.14216922	0.82524095	10008.05149724	6.74	0.0110
DET22	-0.00013188	0.00003824	17666.61720740	11.89	0.0009
DET13	0.00001521	0.00000191	94646.89998527	63.72	0.0001
DET14	0.00001444	0.00000183	92765.44977972	62.46	0.0001

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE DET2 ENTERED R SQUARE = 0.86232271 C(P) = 11.76342773

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	839896.71557818	139982.78592970	93.95	0.0001
ERROR	90	134096.78957645	1489.96432863		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	181.51053913				
CL1	1.81838286	0.51149600	18830.50838929	12.64	0.0006
CL2	-2.33786663	0.85840891	11051.07712995	7.42	0.0078
DET2	0.03662189	0.04337374	1062.19398392	0.71	0.4007
DET22	-0.00018504	0.00007369	9393.90217962	6.30	0.0138
DET13	0.00001596	0.00000210	85713.46478875	57.53	0.0001
DET14	0.00001516	0.00000202	83961.91056204	56.35	0.0001

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	840192.51538658	140032.08589776	94.19	0.0001
ERROR	90	133800.99976806	1486.67766409		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	178.32396873				
CL1	1.72056949	0.51033695	16898.46372937	11.37	0.0011
CL2	-2.20405738	0.85721585	9828.38561085	6.61	0.0118
DET2	-0.06417041	0.04495581	3029.10819424	2.04	0.1569
DET22	-0.00002548	0.00007741	12613.49294745	8.48	0.0045
DET12	0.00017338	0.00002279	86009.26459715	57.85	0.0001
DET14	0.00000614	0.00000083	81753.75360894	54.99	0.0001

STEP 6 DET2 REPLACED BY DET24 R SQUARE = 0.86374802 C(P) = 10.78238521

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	841284.95844377	140214.15974063	95.09	0.0001
ERROR	90	132708.54671087	1474.53940790		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	184.32247403				
CL1	1.77198270	0.51064321	17755.79860808	12.04	0.0008
CL2	-2.29465617	0.85992695	10499.49734888	7.12	0.0090
DET22	-0.00025619	0.00008486	13439.18100937	9.11	0.0033
DET12	0.00022649	0.00004575	36141.68363170	24.51	0.0001
DET14	0.00000807	0.00000166	34685.15971236	23.52	0.0001
DET24	-0.00000523	0.00000313	4121.55125142	2.80	0.0980

STEP 6 DET22 REPLACED BY DET3 R SQUARE = 0.86538609 C(P) = 9.65489913

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	842880.42905207	140480.07150868	96.43	0.0001
ERROR	90	131113.07610257	1456.81195670		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	193.19434026				
CL1	1.45148395	0.47835375	13413.11354019	9.21	0.0032
CL2	-1.79769226	0.81867790	7024.38107321	4.82	0.0307
DET3	-0.01964929	0.00611649	15034.65161767	10.32	0.0018
DET12	0.00022760	0.00004357	39757.17366361	27.29	0.0001
DET14	0.00000811	0.00000158	38209.75372560	26.23	0.0001
DET24	-0.00003549	0.00001213	12478.29835417	8.57	0.0043

STEP 6 DET12 REPLACED BY DET13 R SQUARE = 0.86733256 C(P) = 8.31513980

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	844776.28094505	140796.04682418	98.06	0.0001
ERROR	90	129217.22420959	1435.74693566		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	193.28363935				
CL1	1.66554129	0.47781282	17445.08587501	12.15	0.0008
CL2	-2.08856038	0.81447073	9441.06547678	6.58	0.0120
DET3	-0.01772184	0.00561146	14320.03216212	9.97	0.0022
DET12	0.00022931	0.00000377	41653.02555659	29.01	0.0001
DET14	0.00001934	0.00000362	40962.39228061	28.53	0.0001
DET24	-0.00003098	0.00001099	11399.51956836	7.94	0.0059

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	845050.08717588	140841.68119598	98.30	0.0001
ERROR	90	128943.41797876	1432.70464421		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	192.36833027				
CL1	1.48397119	0.46539463	14566.82391907	10.17	0.0020
CL2	-1.90430019	0.80377788	8041.83941291	5.61	0.0200
DFT3	-0.02646781	0.00858675	13606.06552057	9.50	0.0027
DFT11	0.00002144	0.00000410	39150.13259612	27.33	0.0001
DFT14	0.00002041	0.00000394	38549.24331849	26.91	0.0001
DFT34	-0.00000190	0.00000066	11673.32579919	8.15	0.0054

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

STEP 7 VARIABLE C204 ENTERED R SQUARE = 0.86868374 C(P) = 9.38512301

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	846092.31888633	120870.33126948	84.11	0.0001
ERROR	89	127901.18626831	1437.09198054		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	180.06058056				
CL1	1.47023397	0.46638571	14281.27536237	9.94	0.0022
CL2	-1.59605482	0.88263908	4699.10176050	3.27	0.0739
DFT3	-0.02521773	0.00872624	12001.67565268	8.35	0.0048
C204	0.00003286	0.00003859	1042.23171045	0.73	0.3967
DFT13	0.00002056	0.00000424	33852.86439584	23.56	0.0001
DFT14	0.00001957	0.00000406	33298.06054609	23.17	0.0001
DFT34	-0.00000191	0.00000067	11856.38531329	8.25	0.0051

STEP 7 CL2 REPLACED BY CID4 R SQUARE = 0.86899488 C(P) = 9.17096250

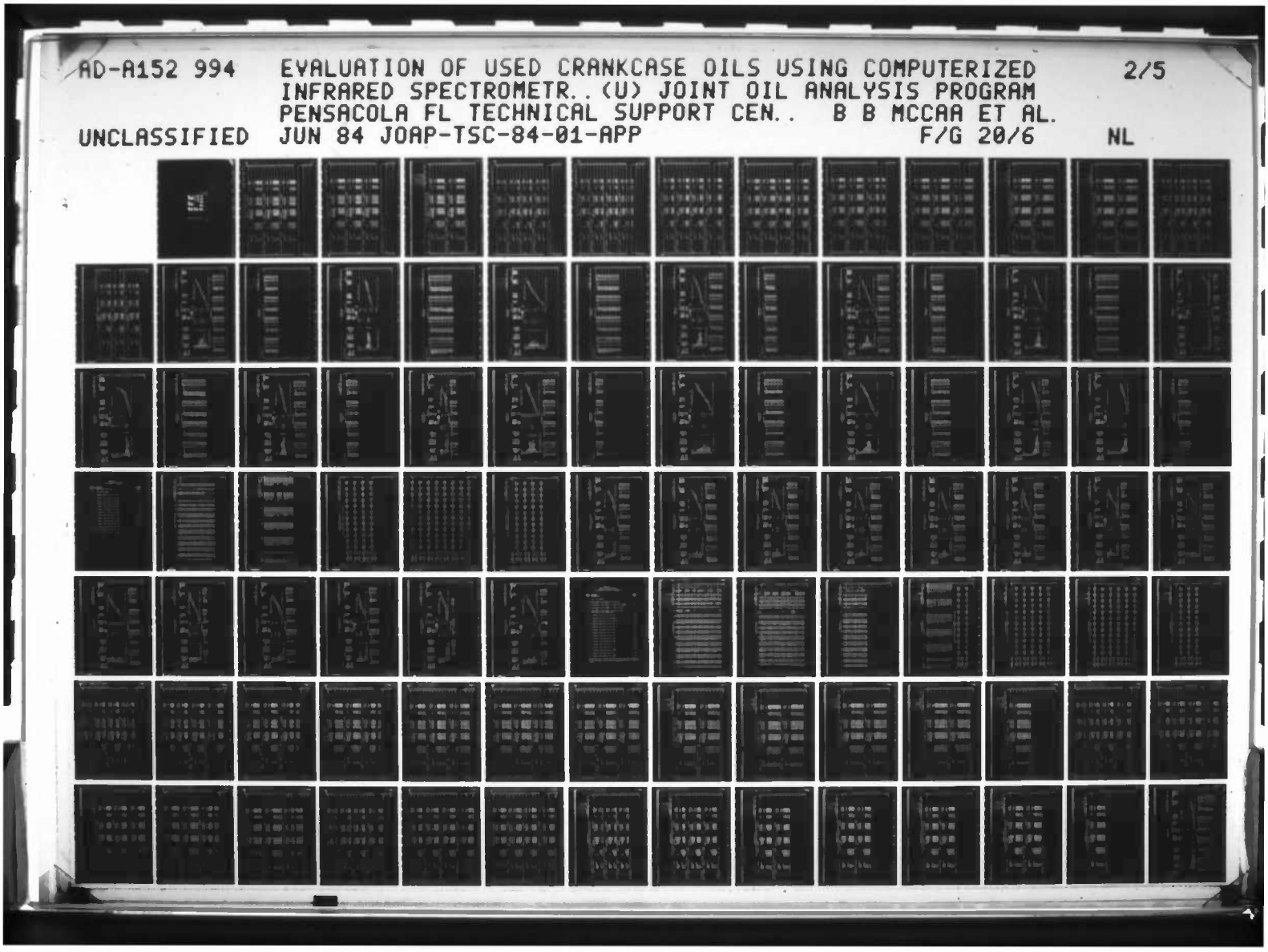
	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	846395.37078229	120913.62439747	84.34	0.0001
ERROR	89	127598.13437235	1433.68690306		
TOTAL	96	973993.50515464			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	180.60170953				
CL1	0.51395569	0.24208426	6463.08938770	4.51	0.0365
DFT3	-0.02101068	0.00863859	8481.03517864	5.92	0.0170
CID4	-0.00008014	0.00004290	5002.15365646	3.49	0.0651
C204	0.00016266	0.00006458	9096.44296232	6.34	0.0136
DFT13	0.00001998	0.00000421	32290.97093841	22.52	0.0001
DFT14	0.00001922	0.00000404	31760.58774237	22.15	0.0001
DFT34	-0.00000157	0.00000068	7700.62870680	5.37	0.0228

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

AD-A152 994 EVALUATION OF USED CRANKCASE OILS USING COMPUTERIZED INFRARED SPECTROMETR..(U) JOINT OIL ANALYSIS PROGRAM PENSACOLA FL TECHNICAL SUPPORT CEN.. B B MCCAA ET AL. 2/5

UNCLASSIFIED JUN 84 JOAP-TSC-84-01-APP F/G 20/6 NL



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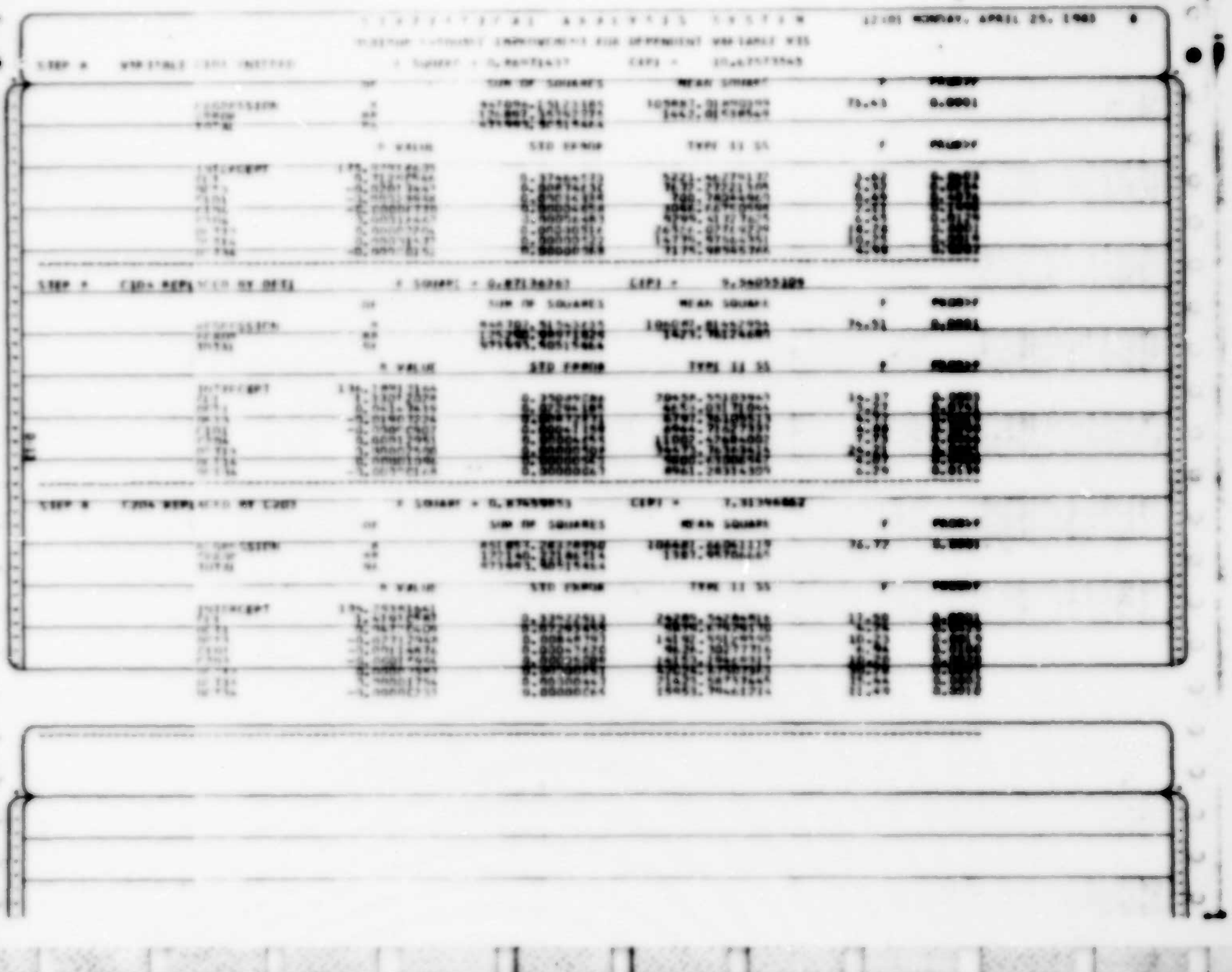
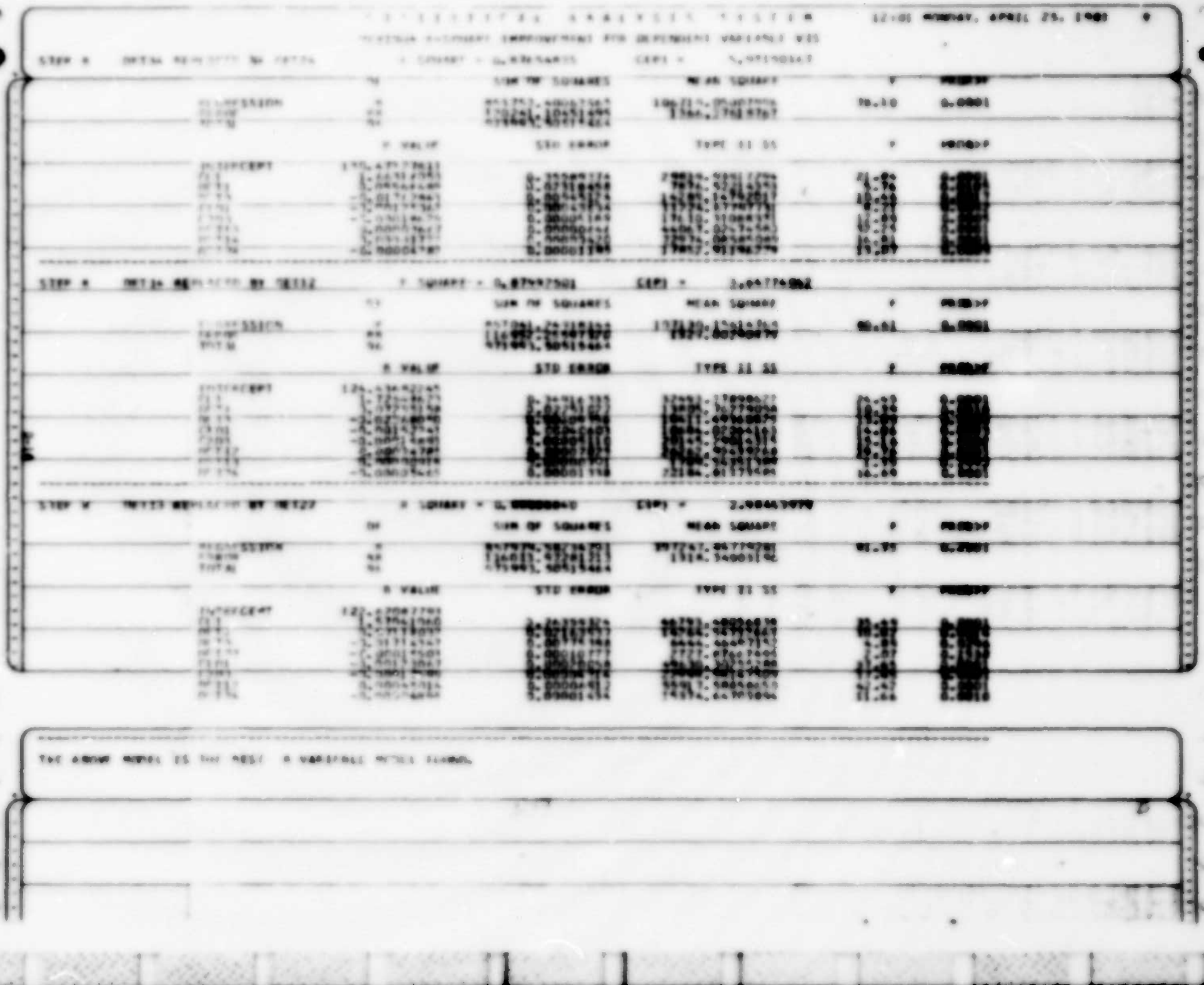




MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE YES

STEP 9 VARIABLE [illegible] ENTERED R-SQUARE = 0.88343724 C(P) = 3.23367855

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	[illegible]	[illegible]	73.24	0.0001
ERROR	67	[illegible]	[illegible]		
TOTAL	76	[illegible]			

	PARAMETER VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

THE [illegible] NOTHING IS THE BEST 9 VARIABLE MODEL FOUND.

STEP 10 VARIABLE [illegible] ENTERED R-SQUARE = 0.88975644 C(P) = 4.19440182

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	[illegible]	[illegible]	66.15	0.0001
ERROR	66	[illegible]	[illegible]		
TOTAL	76	[illegible]			

	PARAMETER VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

THE ABOVE MODEL IS THE BEST 10 VARIABLE MODEL FOUND.

STEP 1 VARIABLE [illegible] ENTERED R-SQUARE = 0.13732474 C(P) = -2.96291544

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	1.33972977	1.33972977	13.59	0.0004
ERROR	49	8.36645736	0.09863583		
TOTAL	199	17.90713713			

		VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT		1.45551137				
[illegible]		-1.51162391	0.40900000	1.33972977	13.59	0.0004

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE [illegible] ENTERED R-SQUARE = 0.14010915 C(P) = -5.19615475

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	[illegible]	[illegible]	9.35	0.0002
ERROR	48	[illegible]	[illegible]		
TOTAL	199	[illegible]			

		VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT		[illegible]				
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

STEP 3 [illegible] ENTERED R-SQUARE = 0.27192290 C(P) = -12.09570847

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	[illegible]	[illegible]	14.80	0.0001
ERROR	47	[illegible]	[illegible]		
TOTAL	199	[illegible]			

		VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT		[illegible]				
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

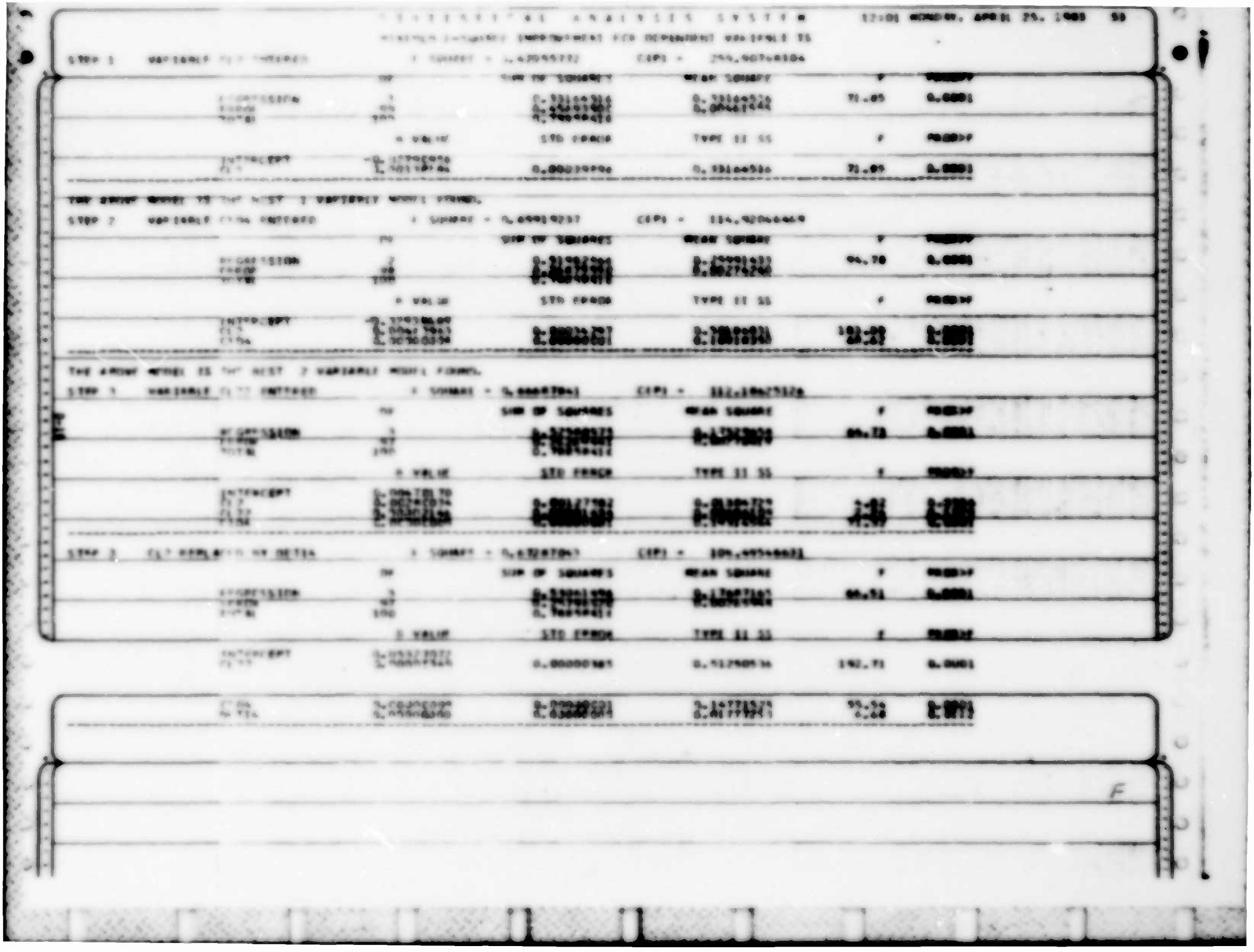
STEP 4 VARIABLE [illegible] ENTERED R-SQUARE = 0.24127773 C(P) = -11.09581534

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	[illegible]	[illegible]	10.29	0.0001
ERROR	46	[illegible]	[illegible]		
TOTAL	199	[illegible]			

		VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT		[illegible]				
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]		-0.21[illegible]	0.20300161	0.10379019	1.20	0.2760

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.



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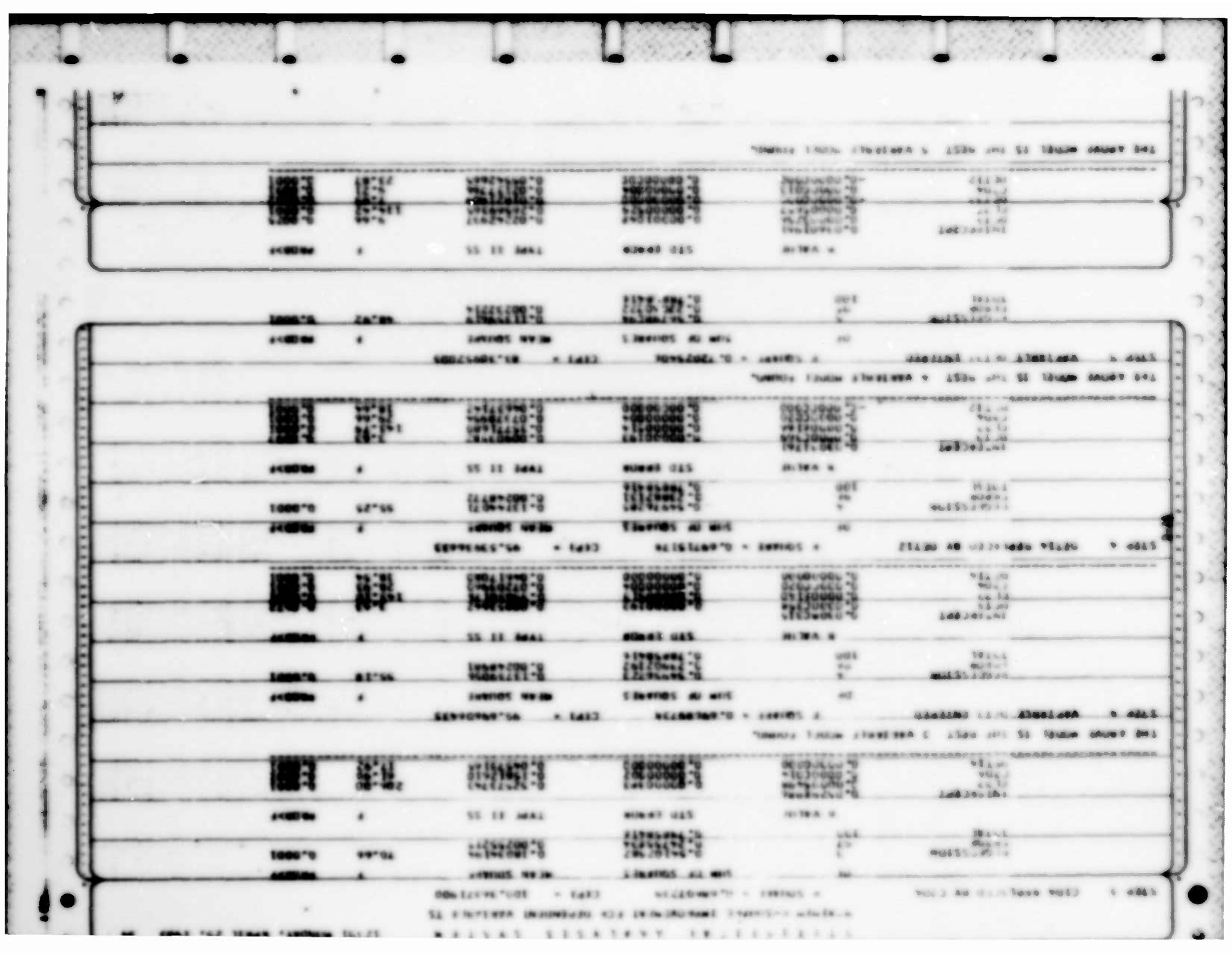

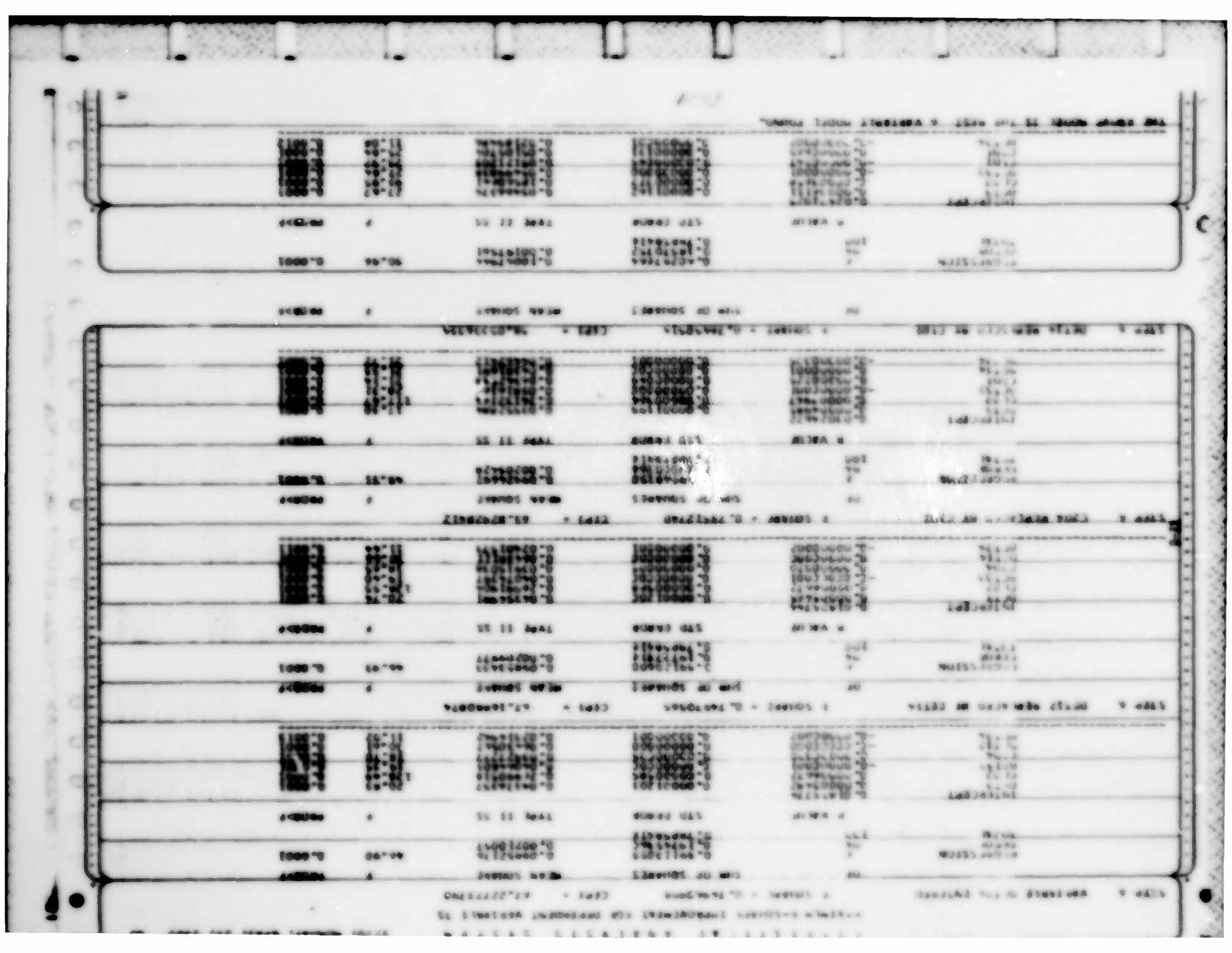

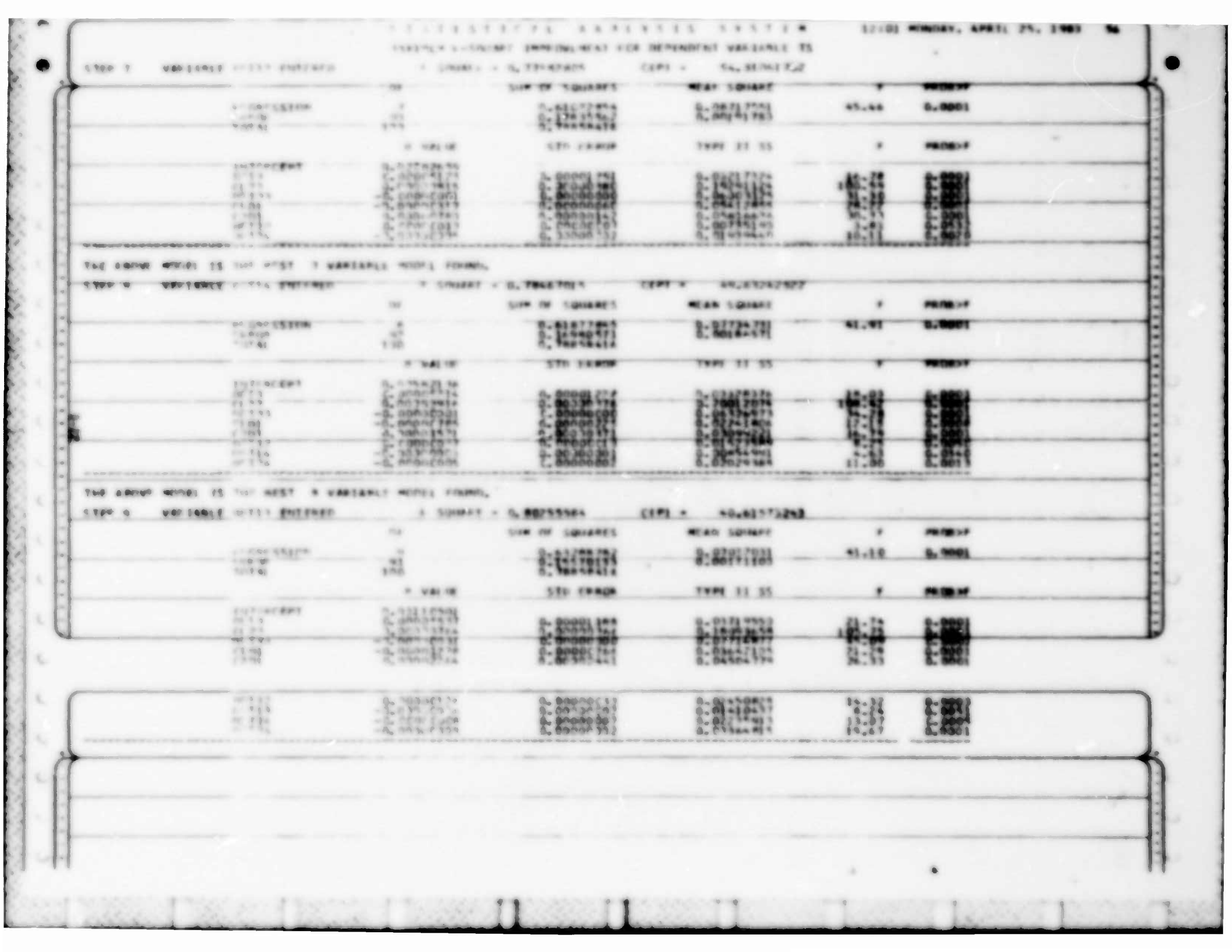

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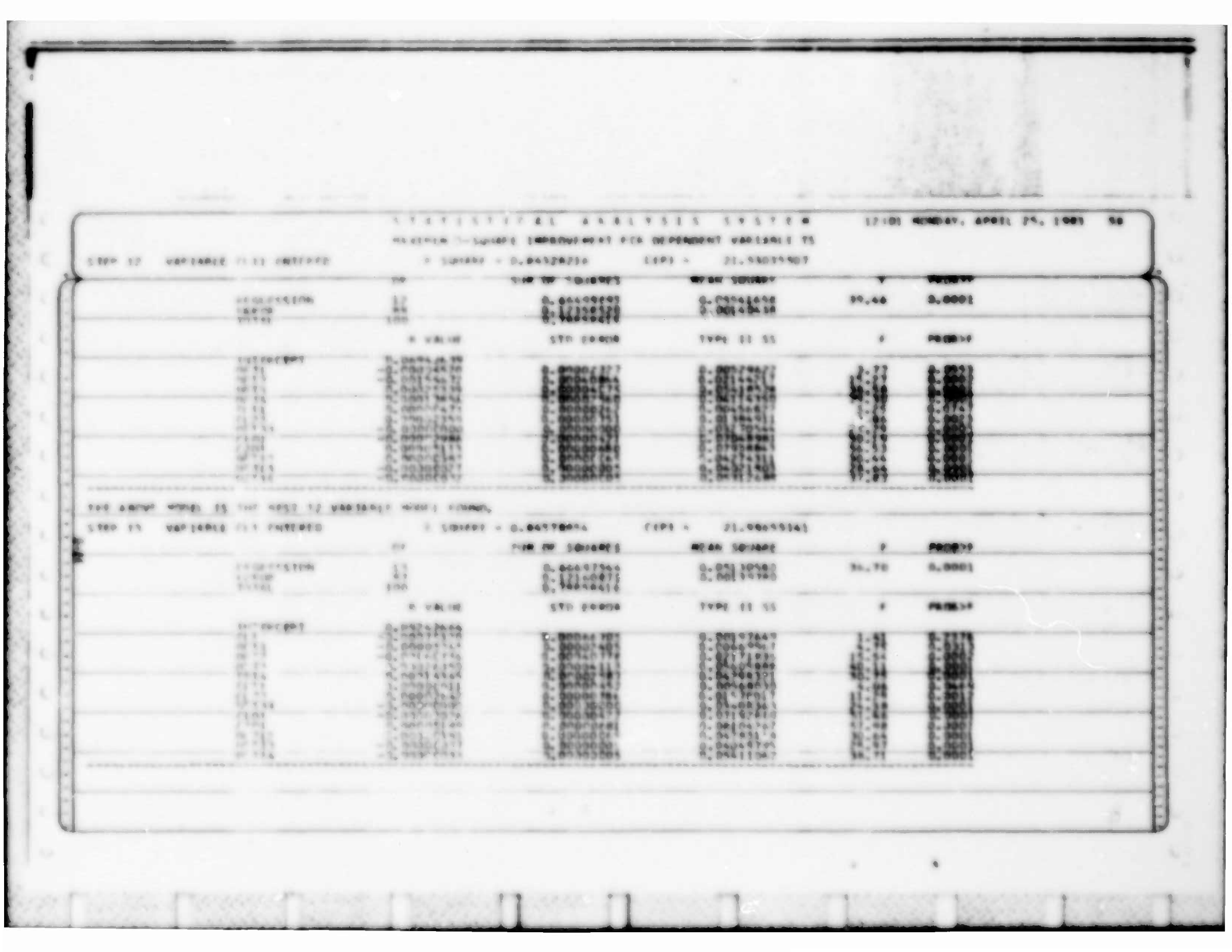
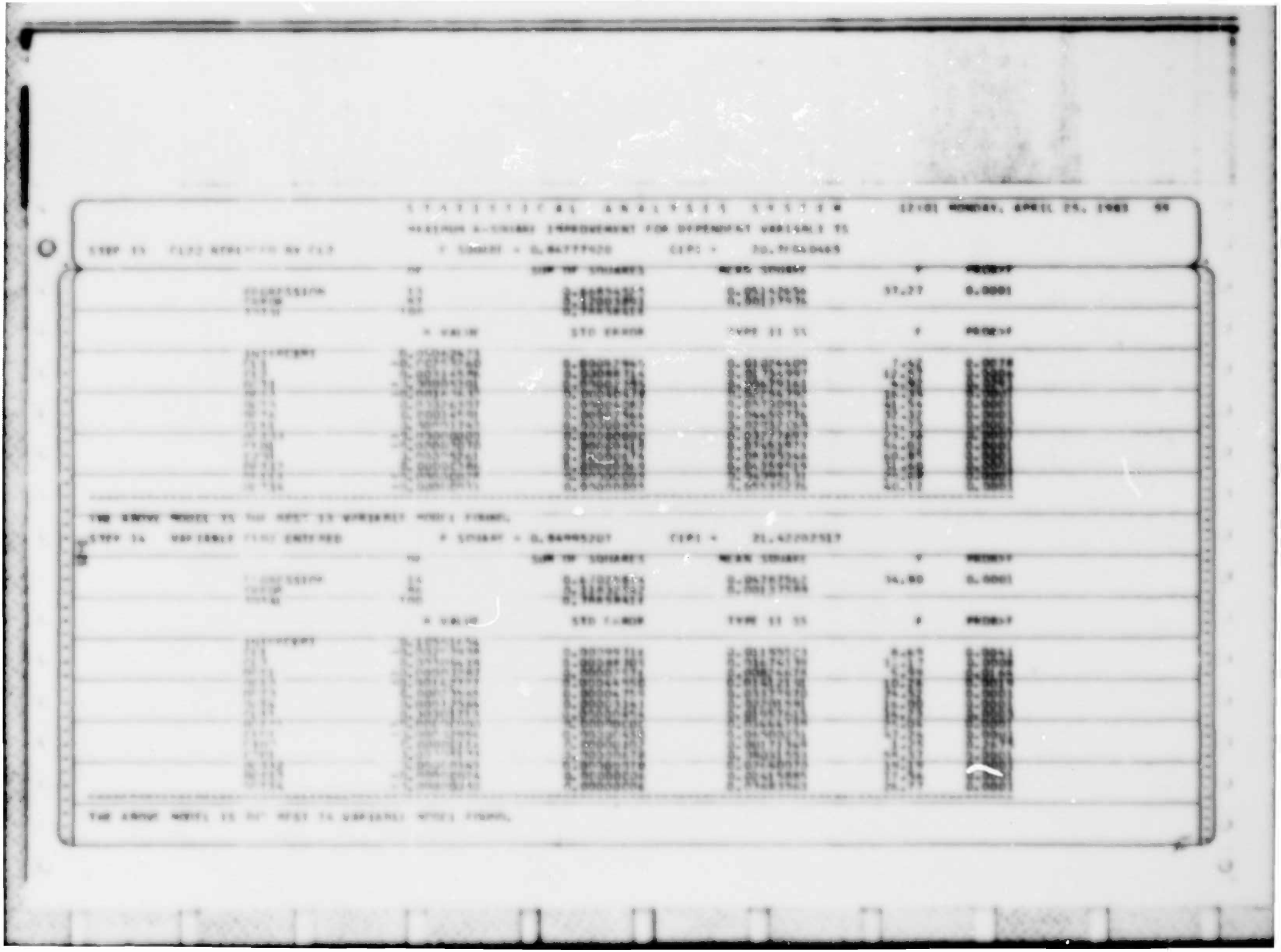
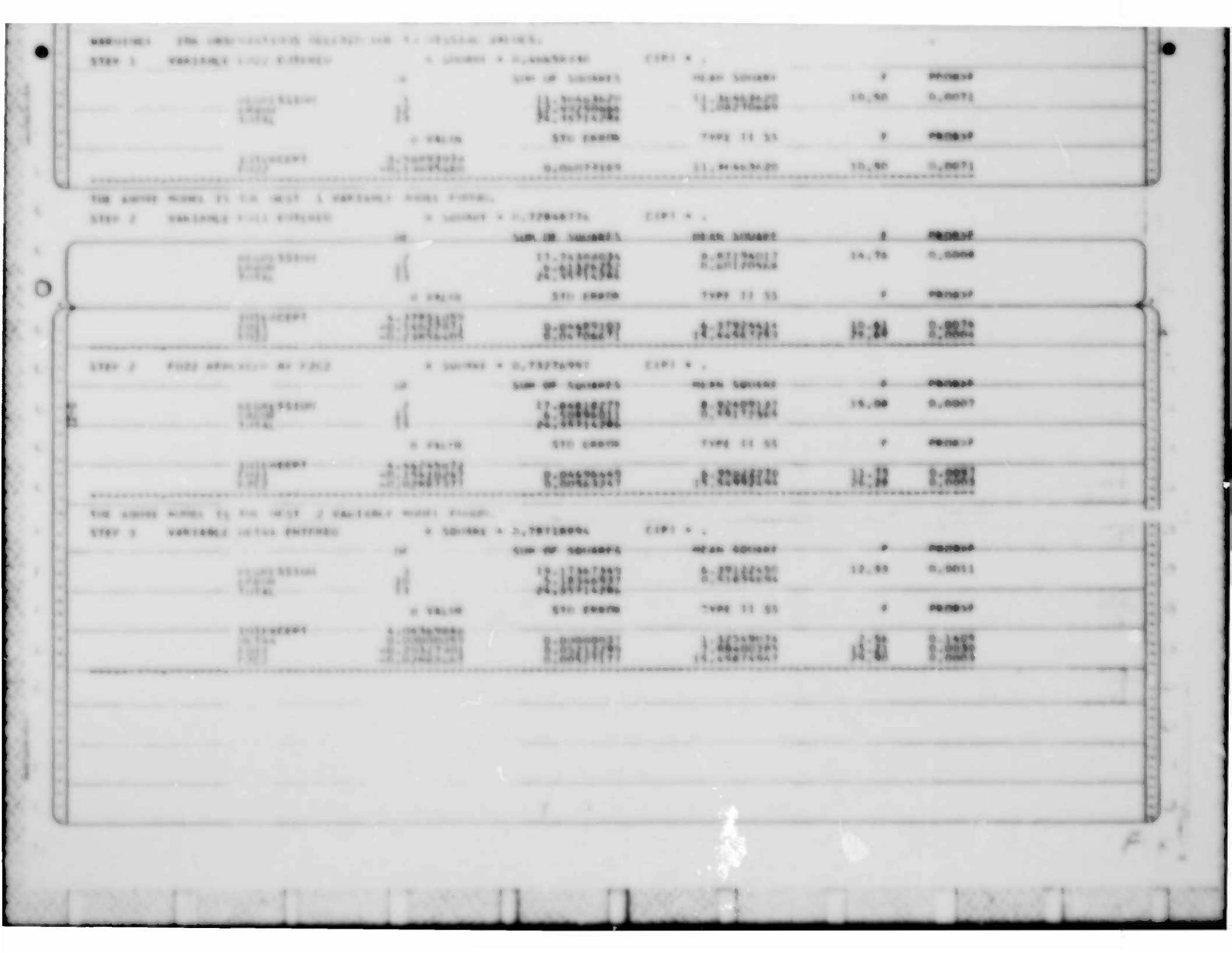






MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE GC

STEP 1 VAR1 ENTERED R-SQUARE = 0.62169017 C(P) = .

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
MODEL	1	20.91317781	8.97106782	30.24	0.0001
ERROR	23	3.29696503	0.14465935		
C TOTAL	24	24.20914284			

VARIABLE	PARAMETER ESTIMATE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-2.77358726	0.81707067	12.08124612	83.46	0.0001
VAR1	-0.00002097	0.00000191	9.99218491	69.12	0.0001
VAR5	0.00000144	0.00000035	1.99218491	13.77	0.0010

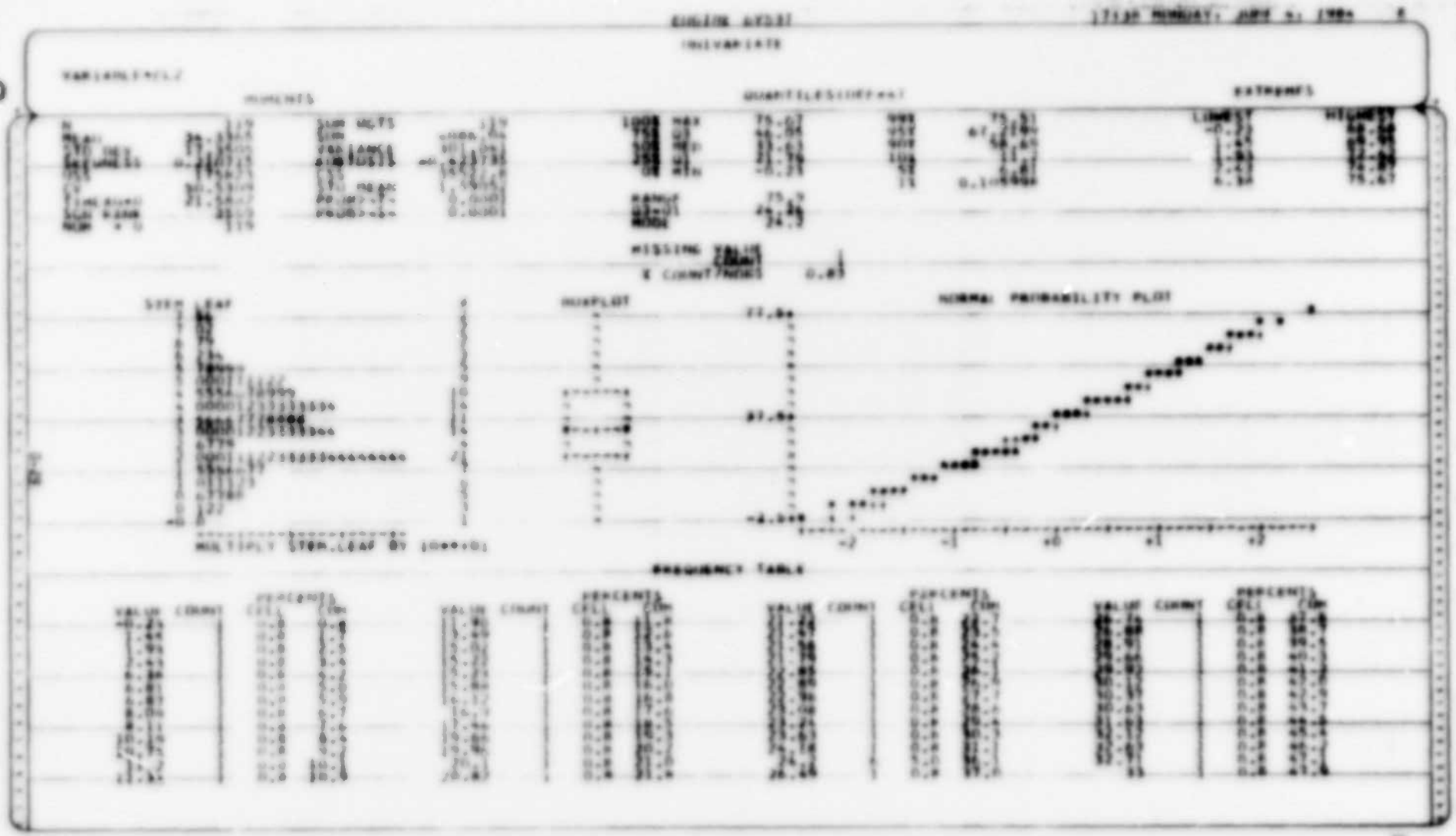
MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE GC

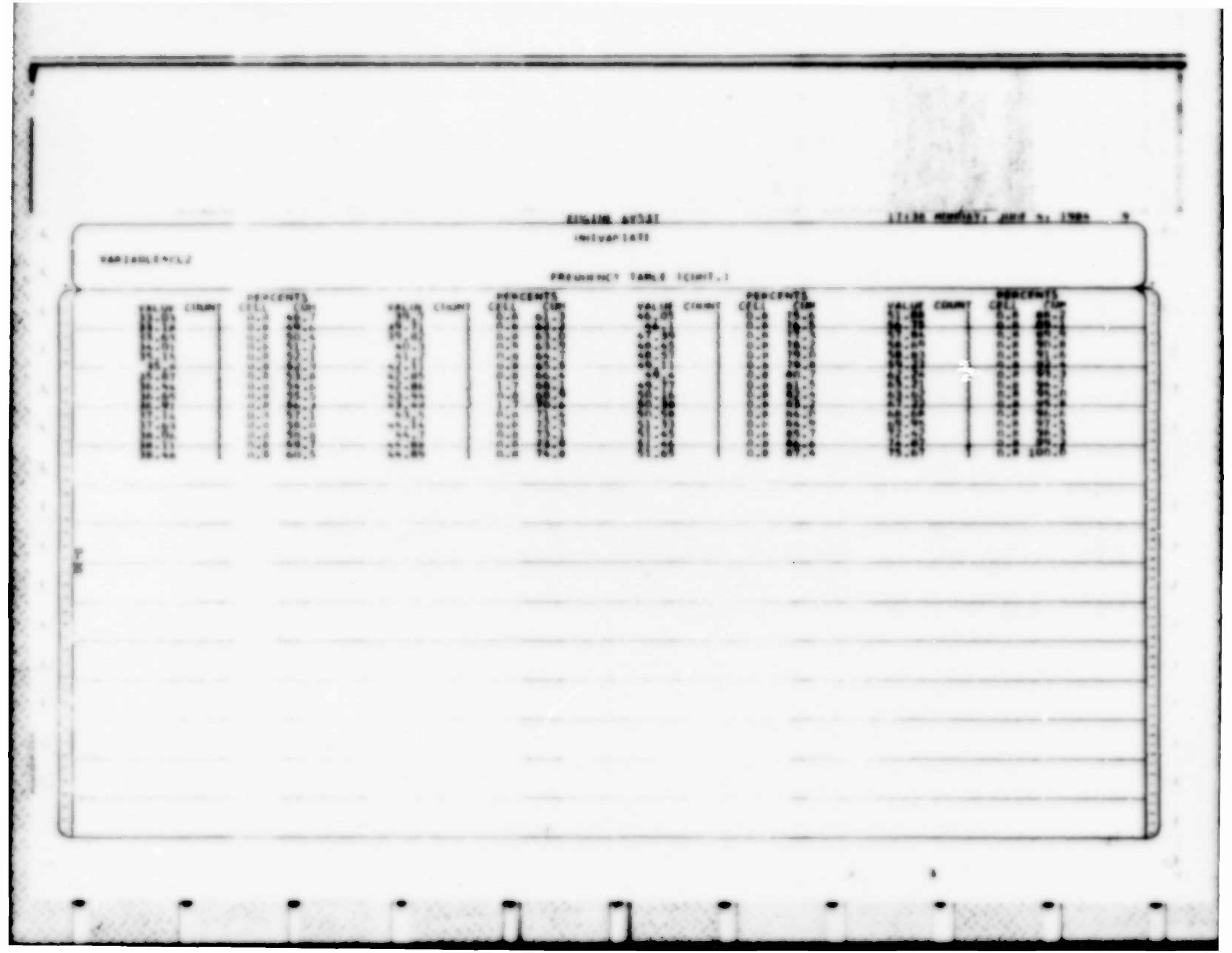
STEP 2 VAR5 ENTERED R-SQUARE = 0.90875264 C(P) = .

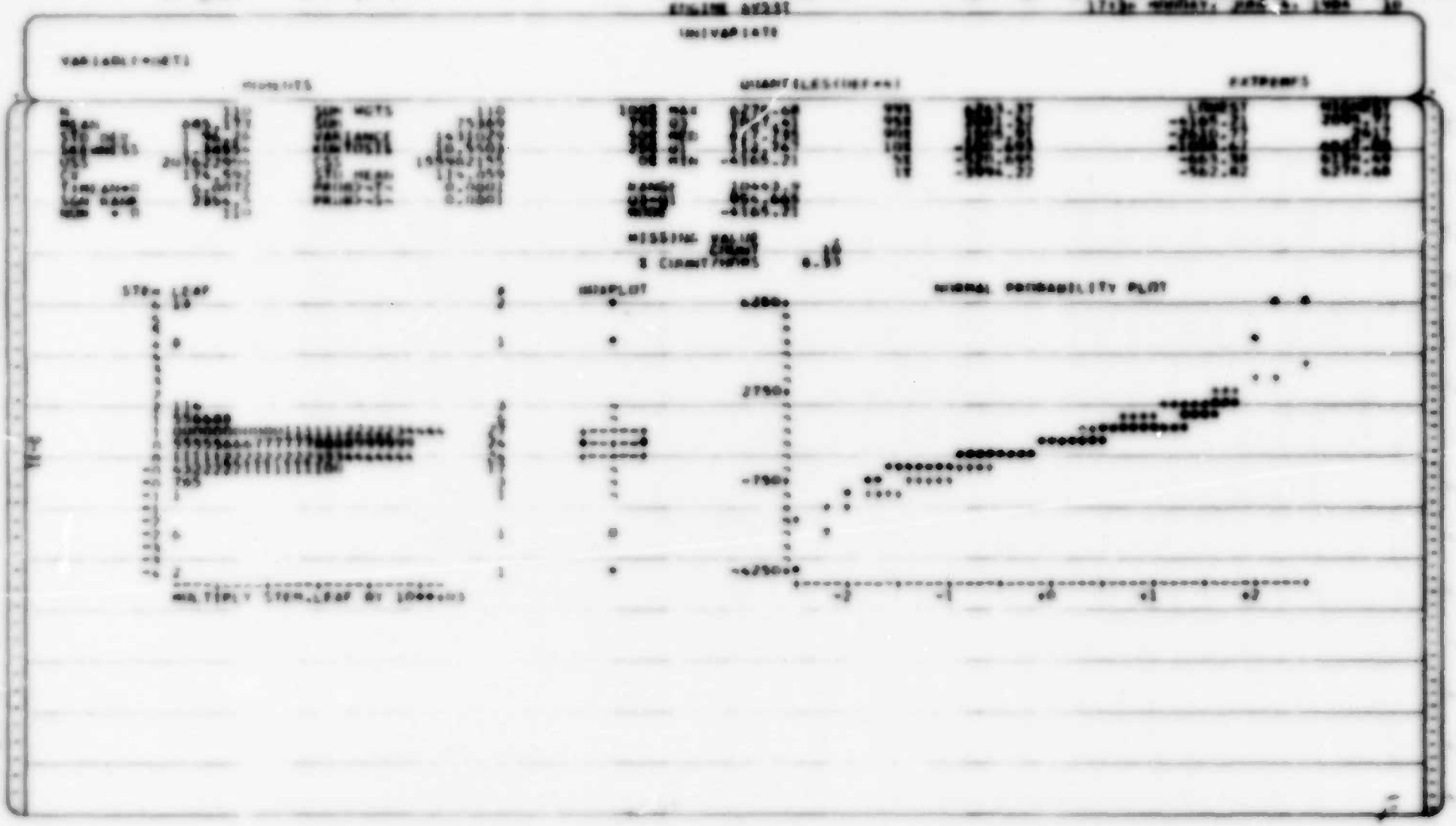
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
MODEL	2	21.99473847	10.99736923	93.10	0.0001
ERROR	22	2.21440437	0.10065474		
C TOTAL	24	24.20914284			

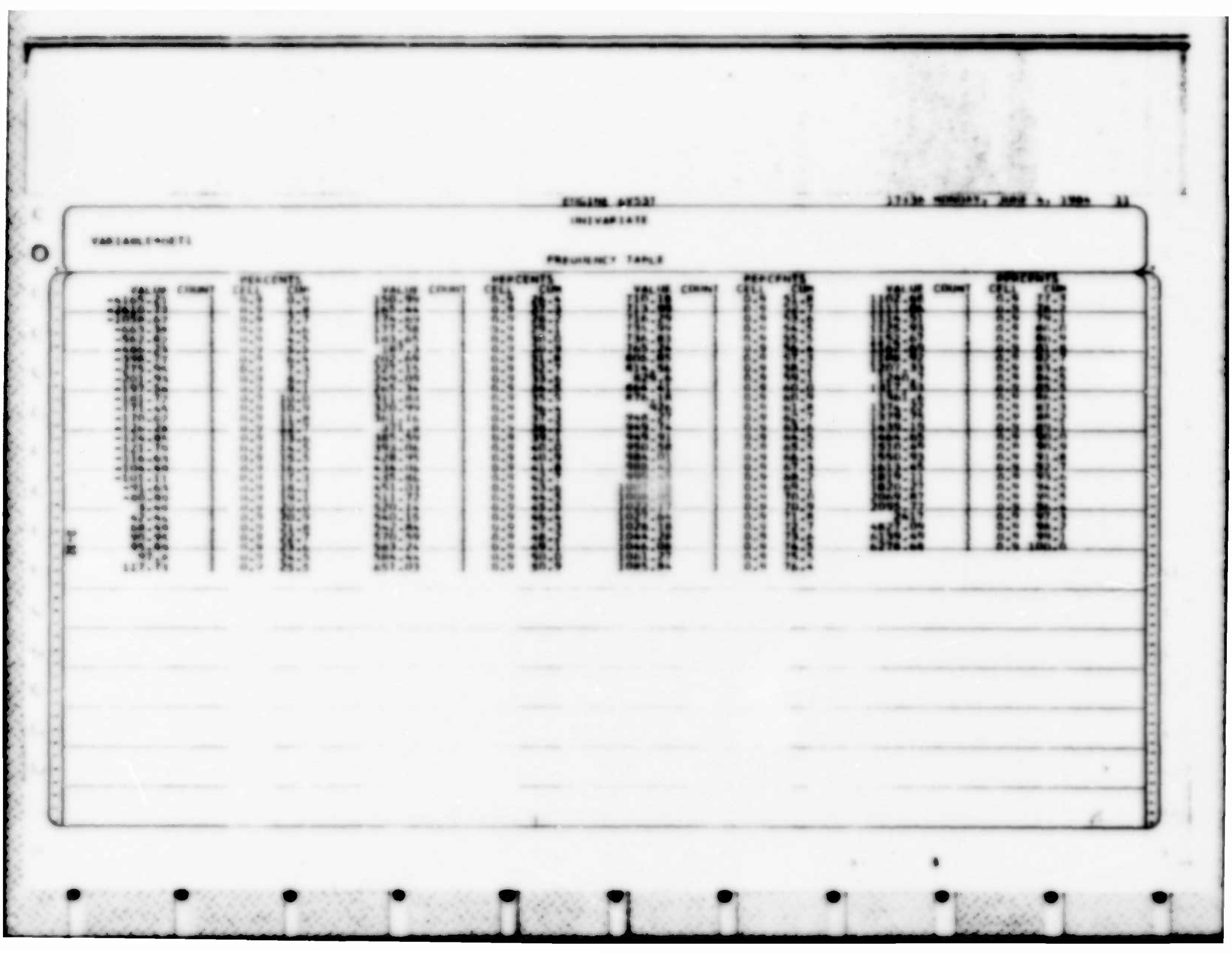
VARIABLE	PARAMETER ESTIMATE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-3.83779214	0.58663496	11.43739733	96.84	0.0001
VAR1	-0.00003184	0.00000269	5.94348041	50.31	0.0001
VAR5	0.00001240	0.00000264	0.90234894	8.97	0.0001

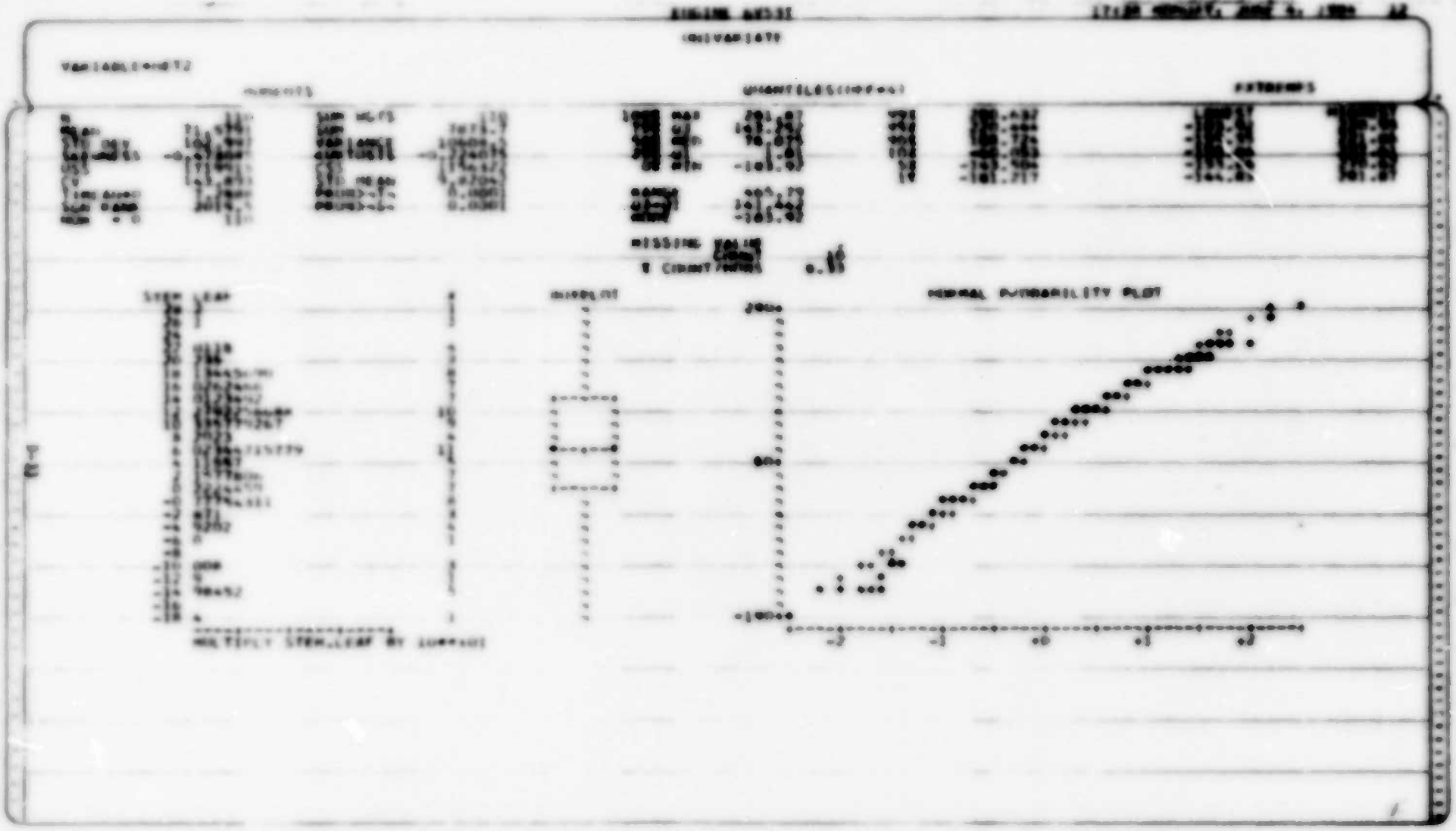
THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

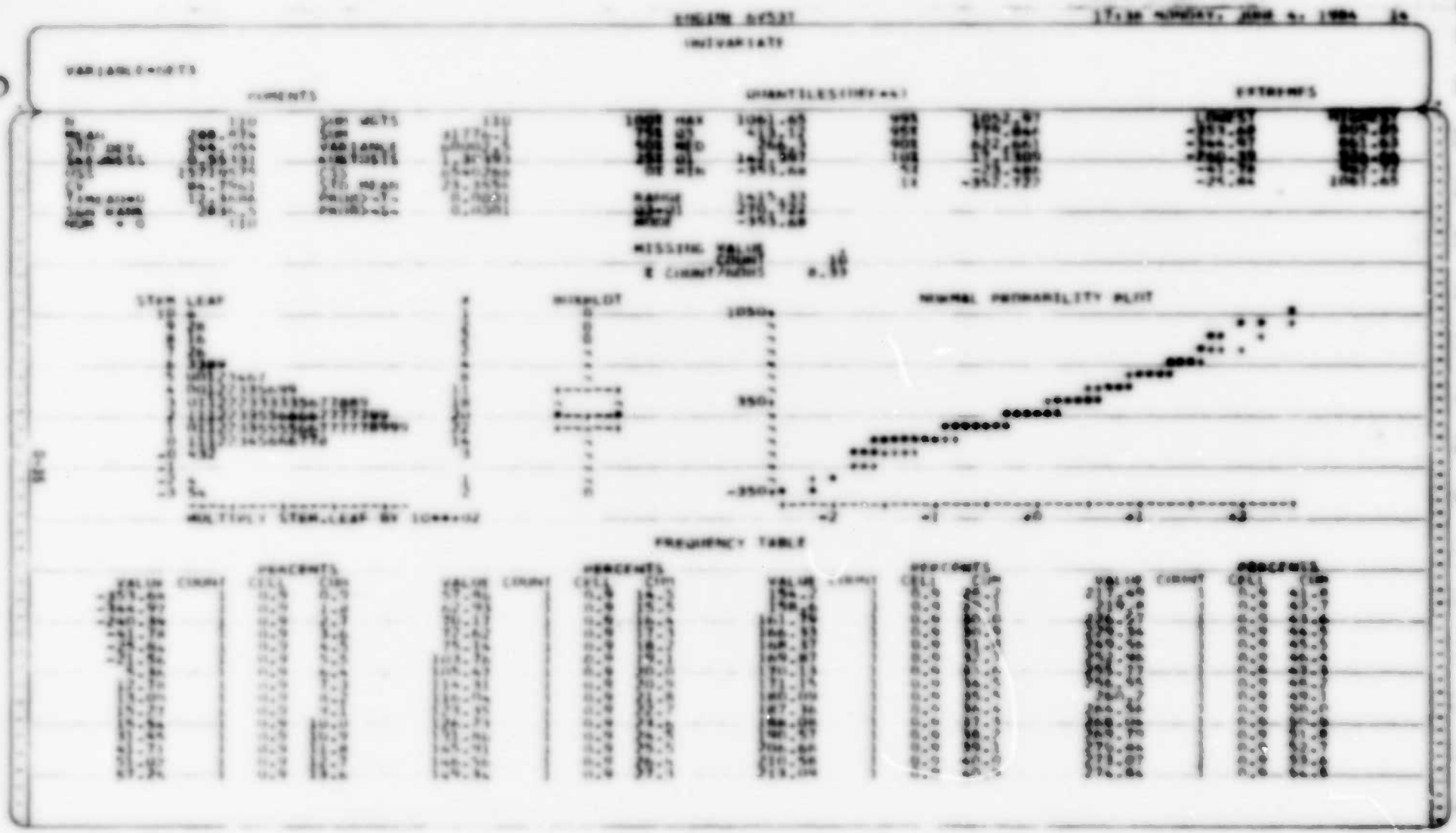








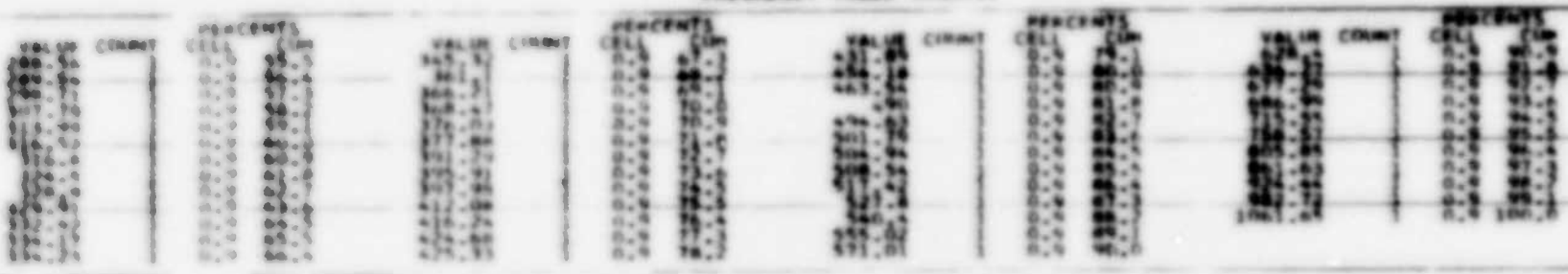


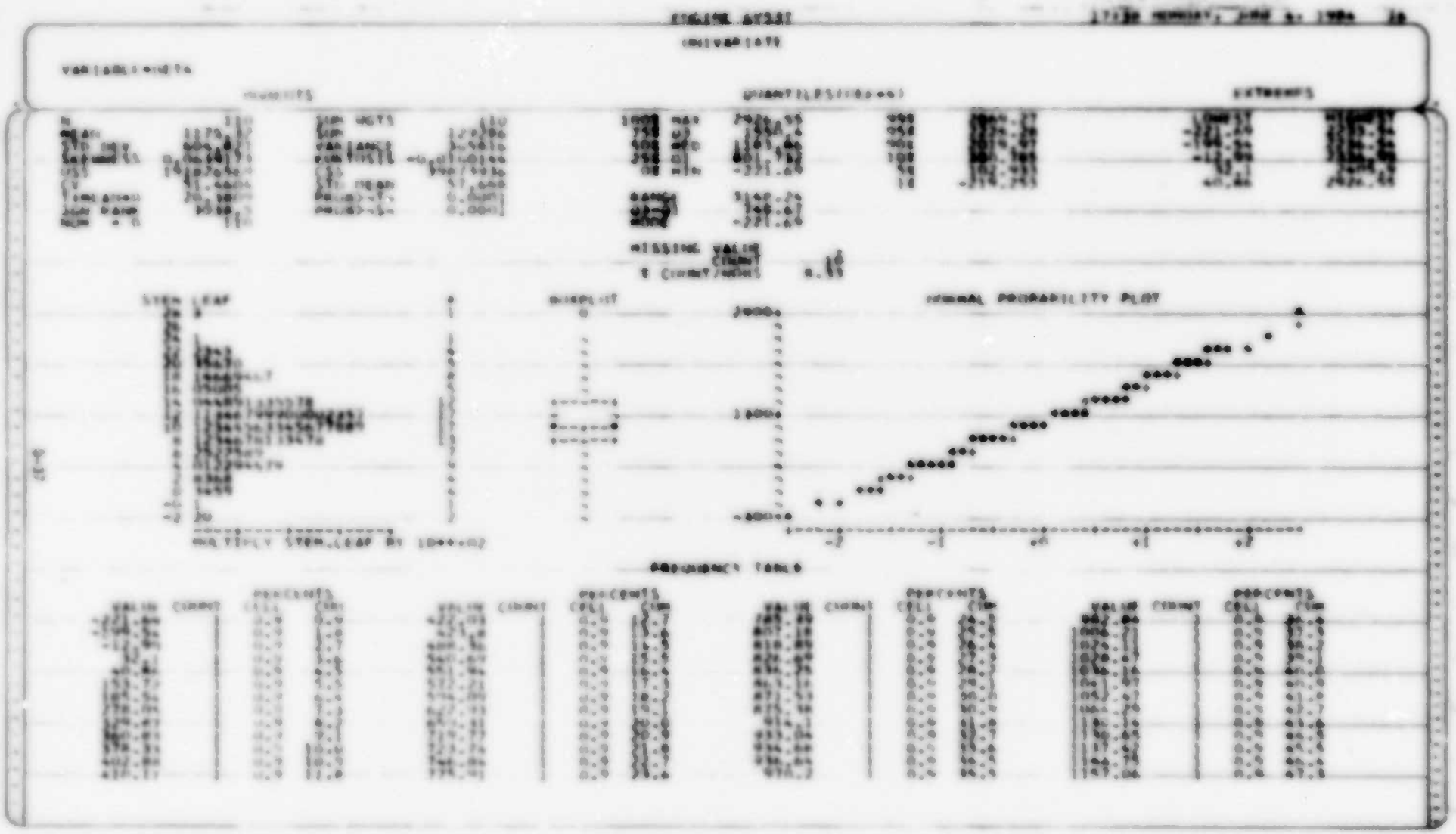

UNIVARIATE
VARIABLE=WGT
MOMENTS
QUANTILES(DEF=4)
EXTREMES
MISSING VALUE
COUNT
N COUNT PCT
STEM LEAF
BOXPLOT
NORMAL PROBABILITY PLOT
MULTIPLY STEM.LEAF BY 10**+2
FREQUENCY TABLE
VALUE
COUNT
PERCENT
CELL
CUM

UNIVARIATE

VARIABLE=VAR13

FREQUENCY TABLE (CONT.)

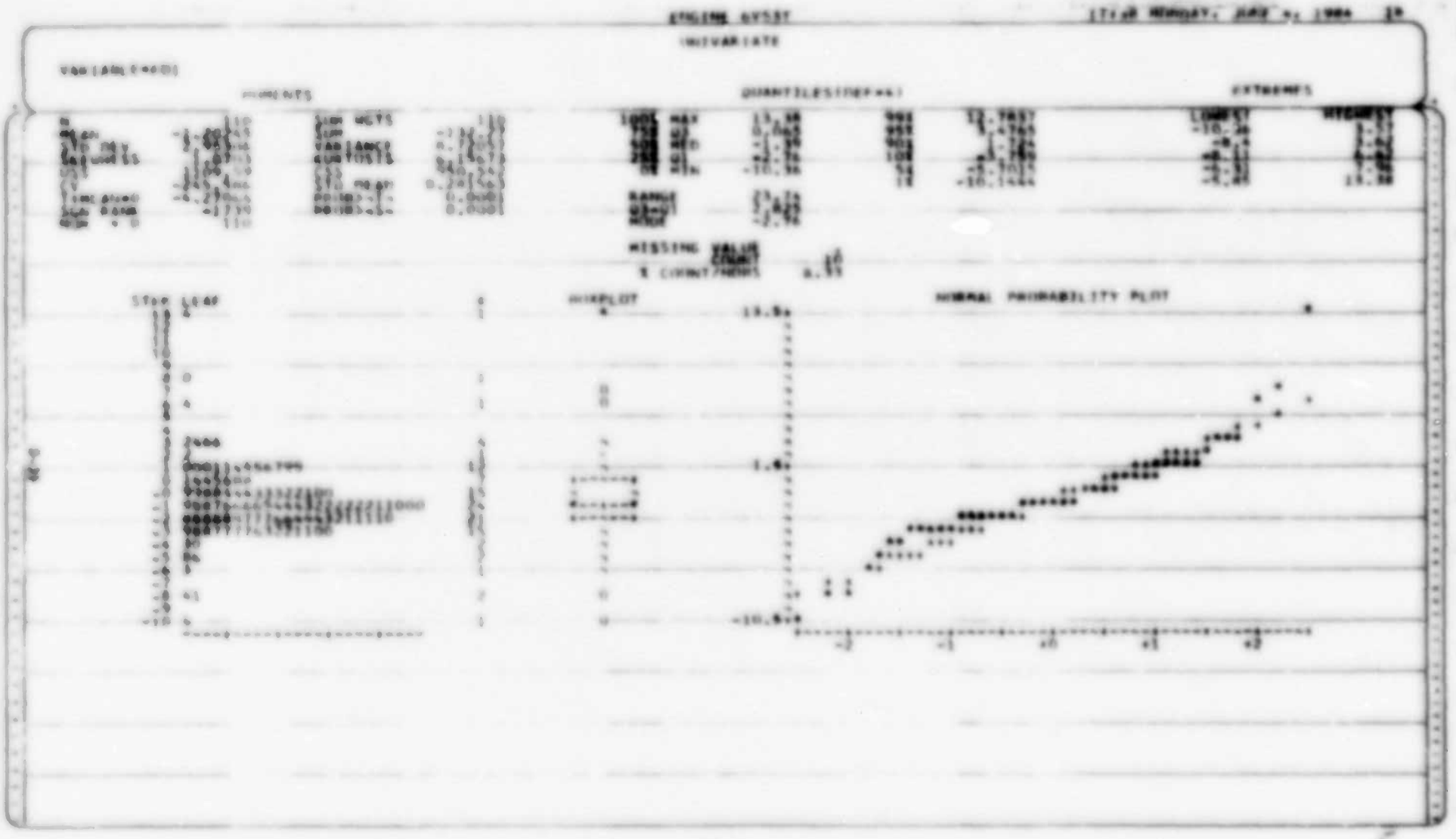




UNIVARIATE

VARIABLE=ETA

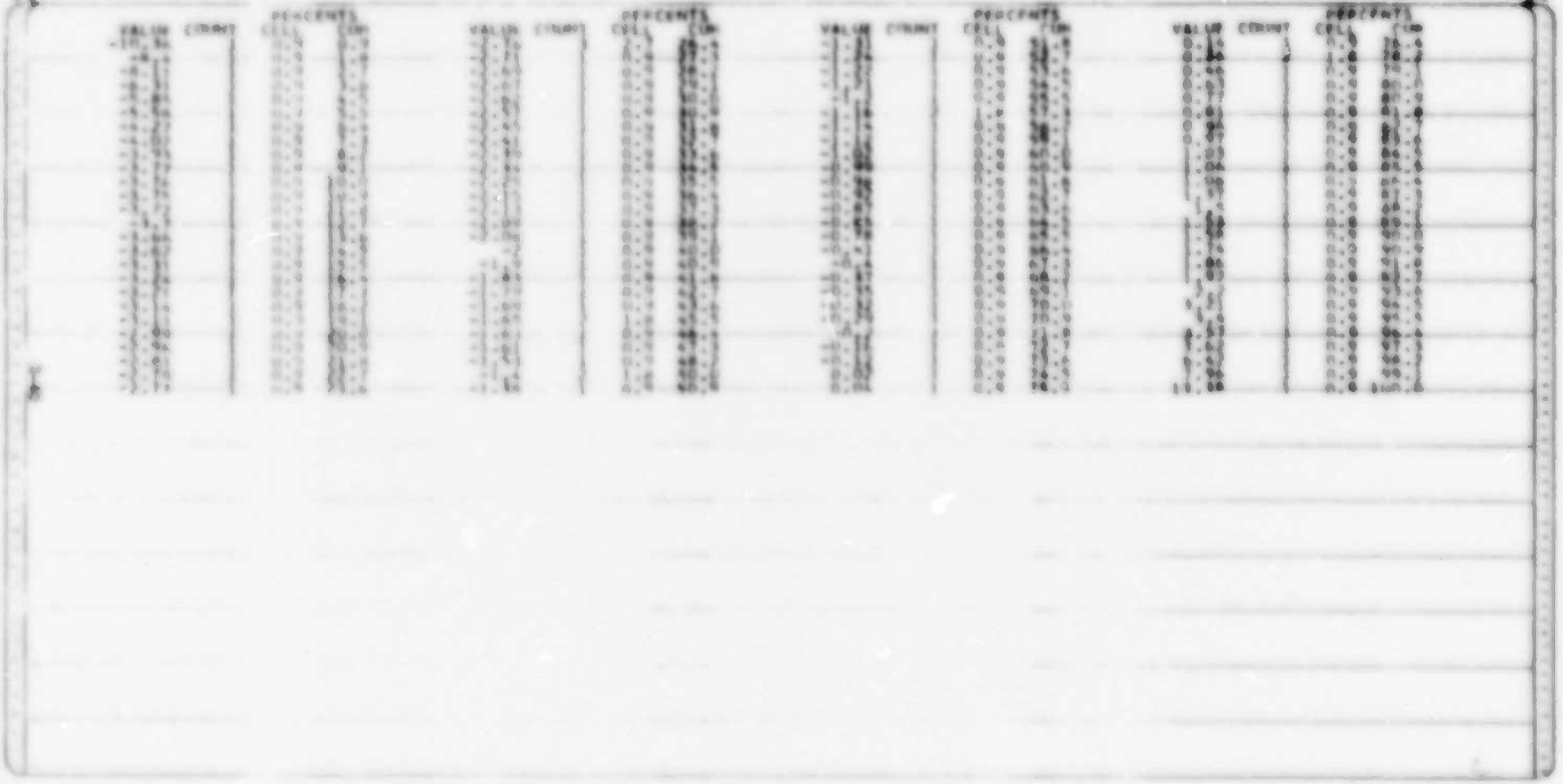
FREQUENCY TABLE (CONT.)

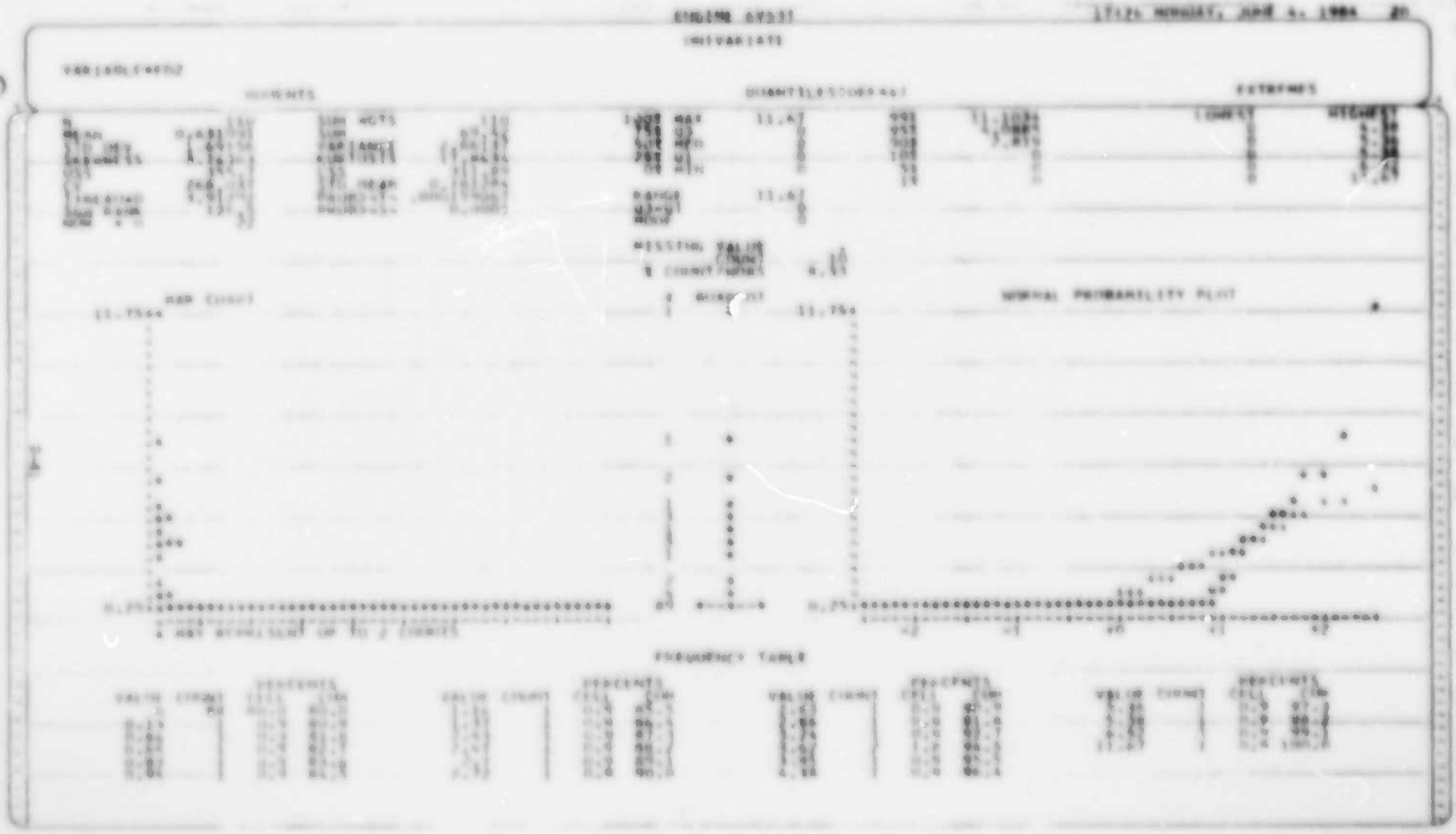


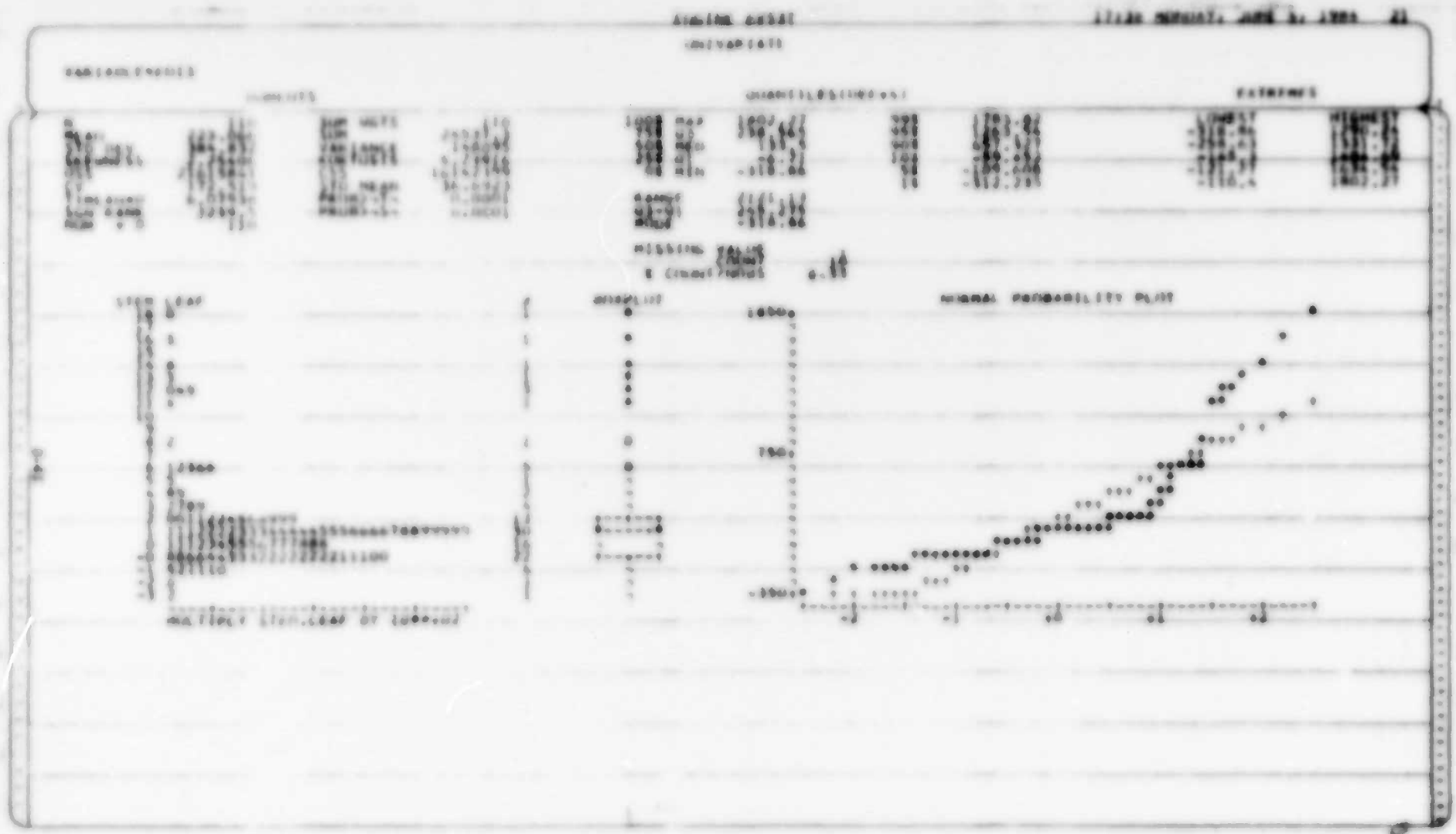
UNIVARIATE

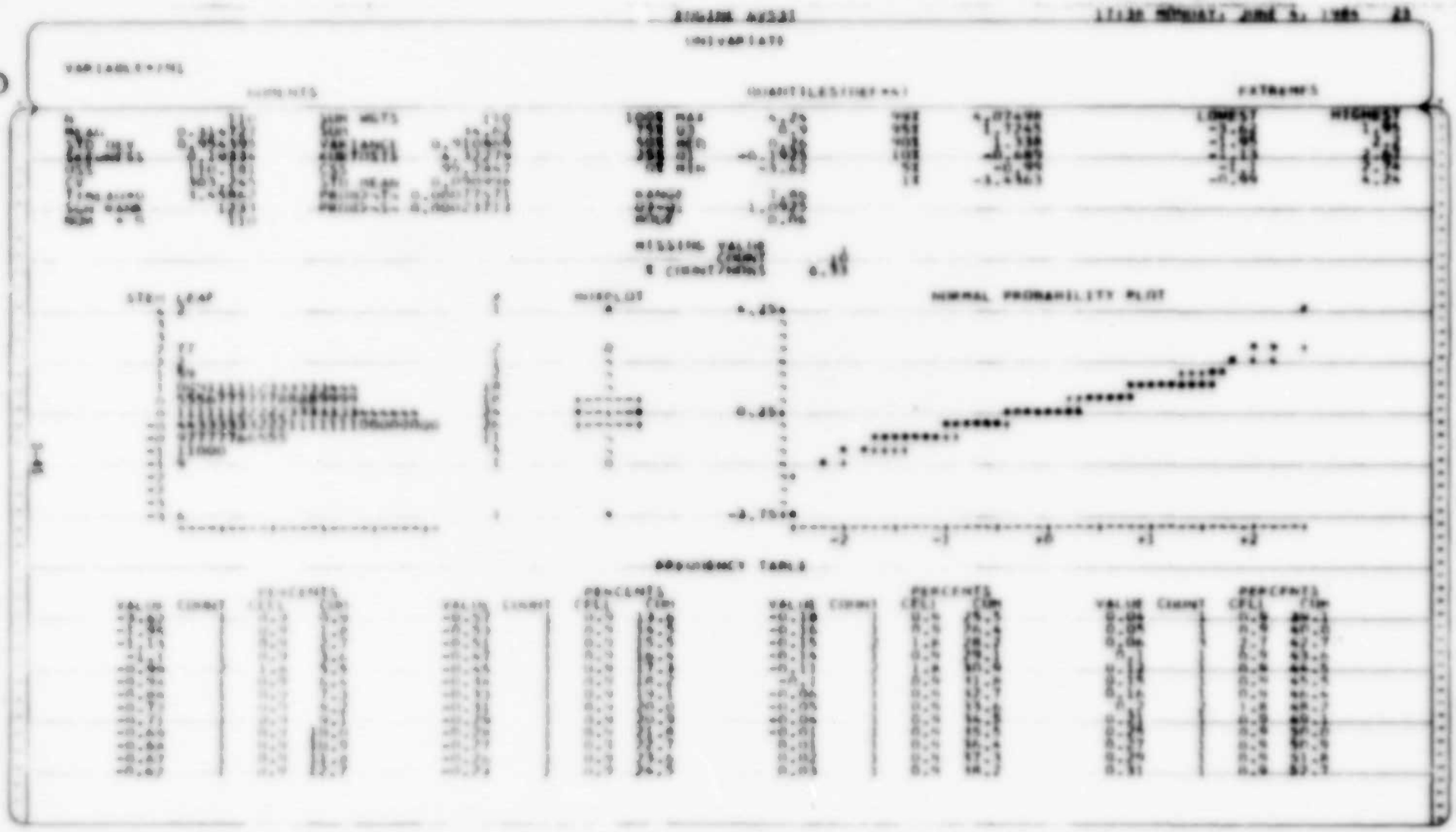
VARIABLE=GWSS1

FREQUENCY TABLE





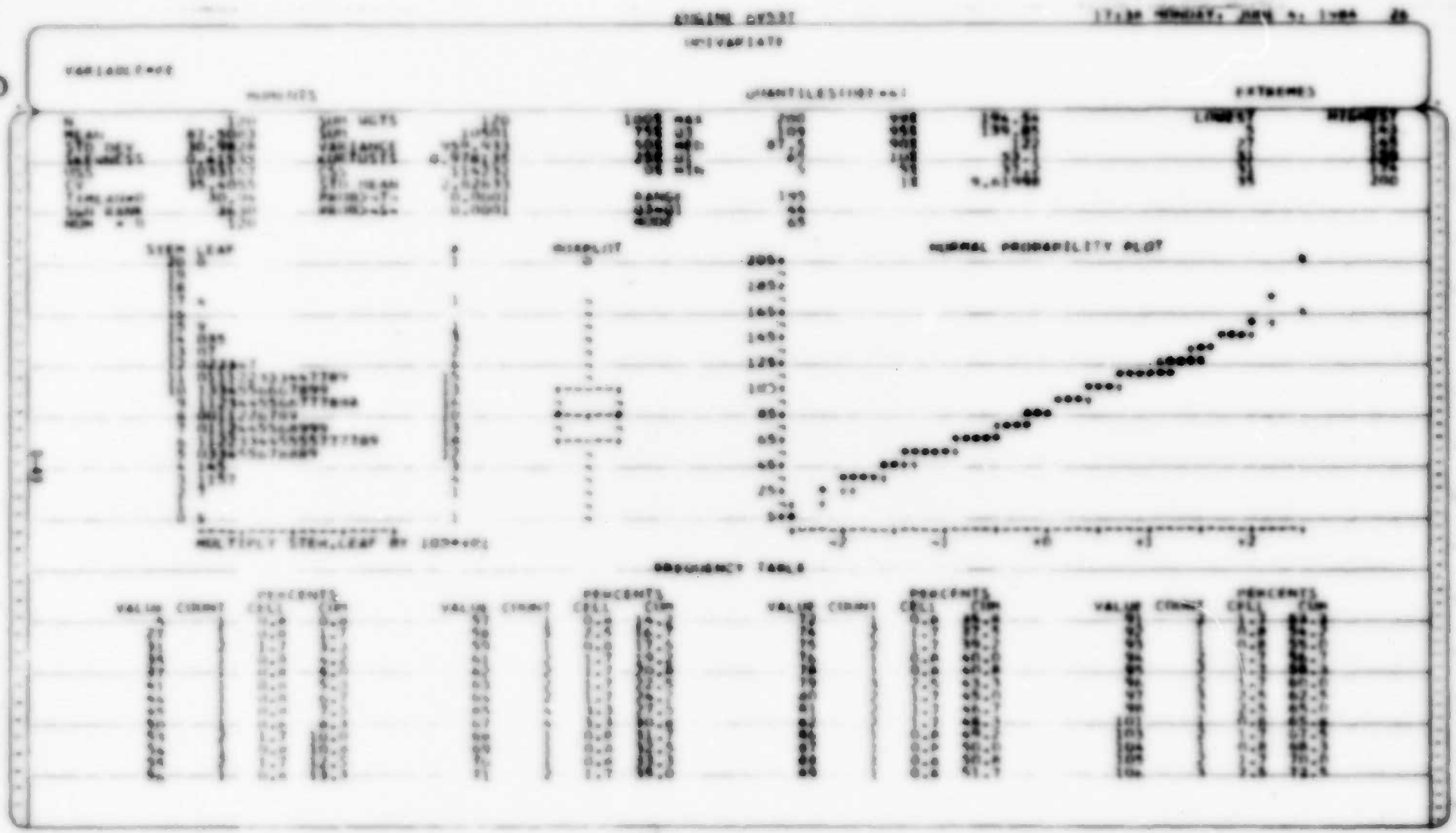


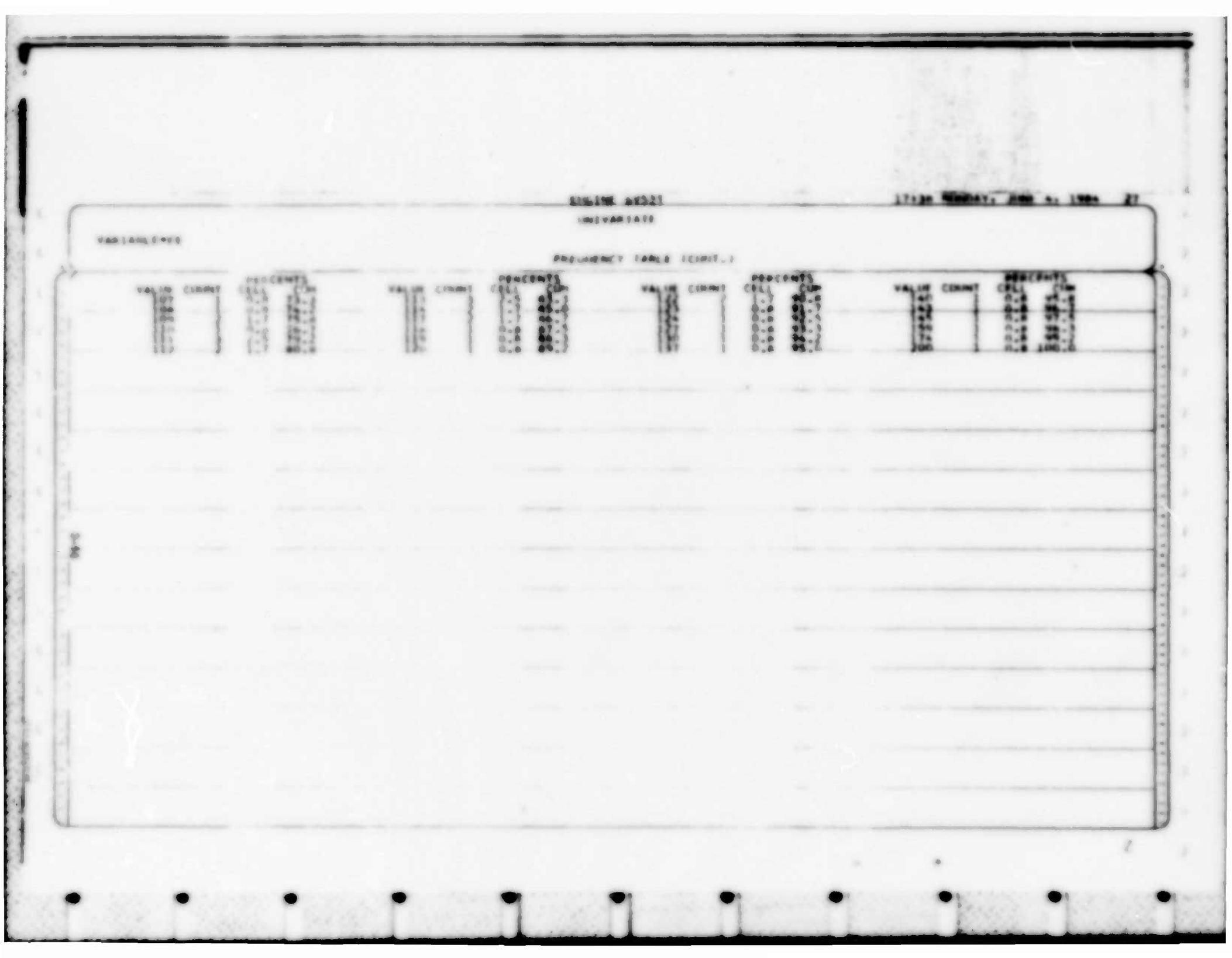

NORMAL PROBABILITY PLOT

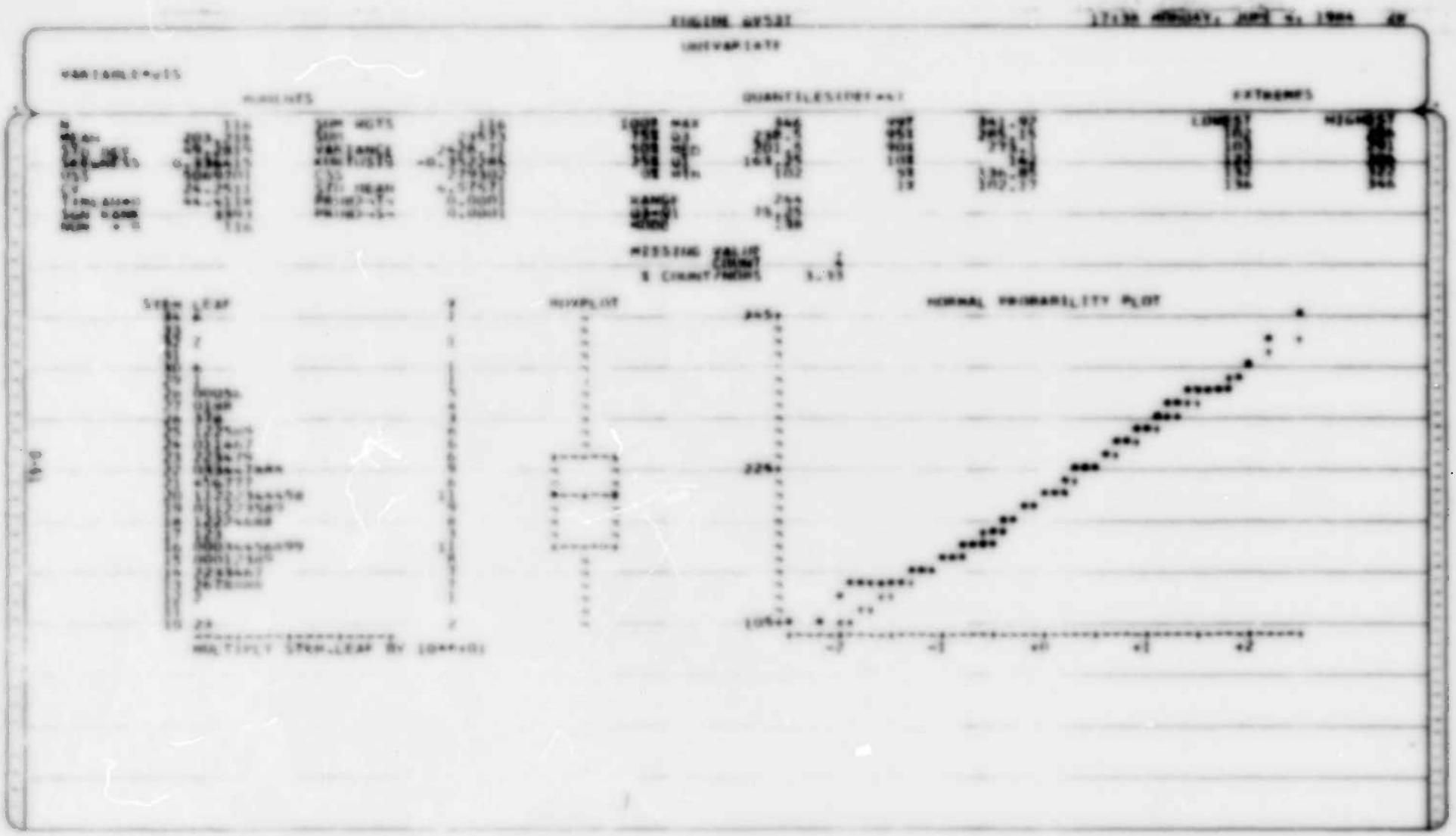
VARIABLE(S)

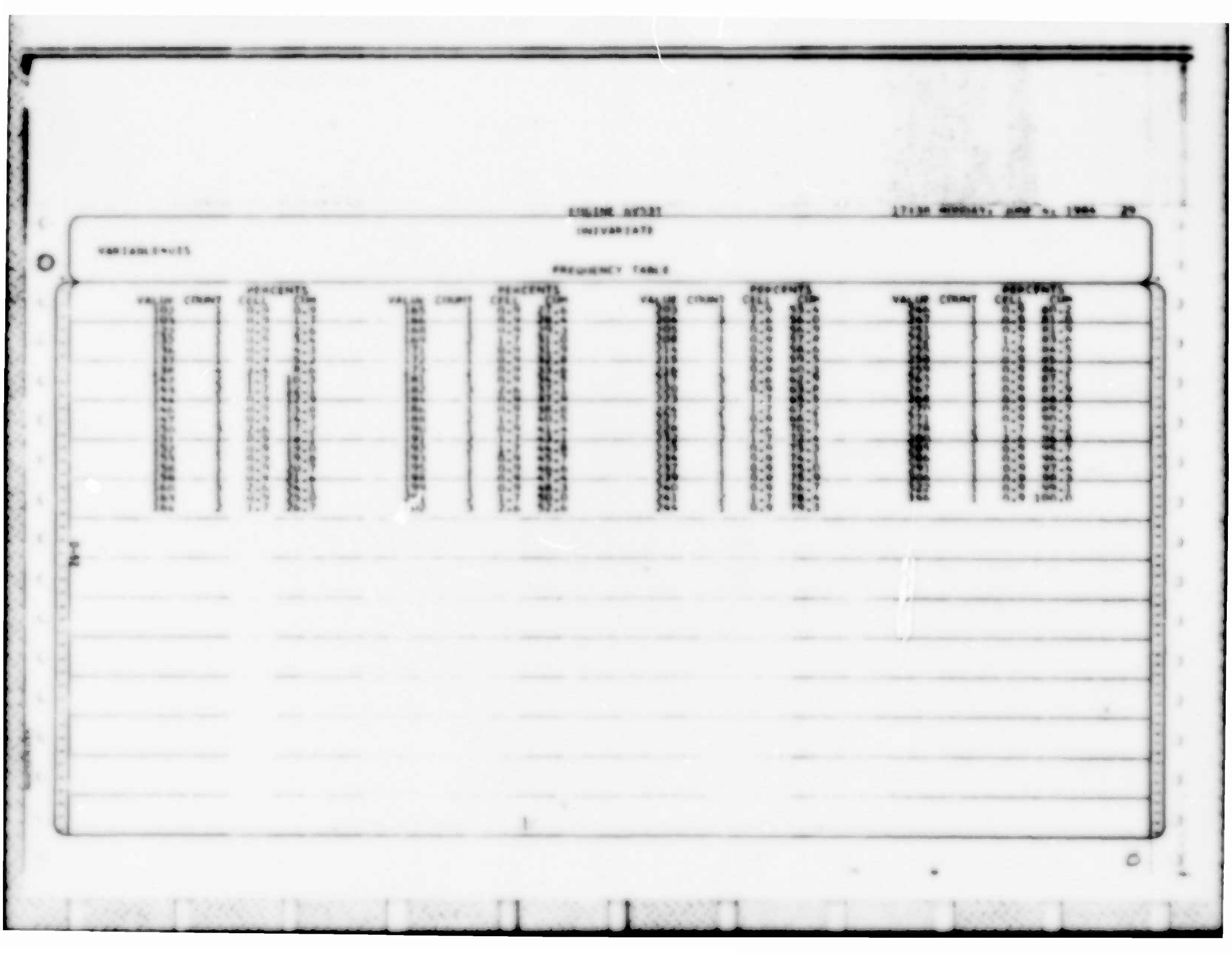
PROPHECY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM


STEM-LEAF
BOXPLOT
NORMAL PROBABILITY PLOT
FREQUENCY TABLE




UNIVARIATE
VARIABLE=US
MOMENTS
QUANTILES(DEF=4)
EXTREMES
MISSING VALUE
COUNT
% COUNT/NOBS
STEM-LEAF
BOXPLOT
NORMAL PROBABILITY PLOT
MULTIPLY STEM.LEAF BY 10**+01

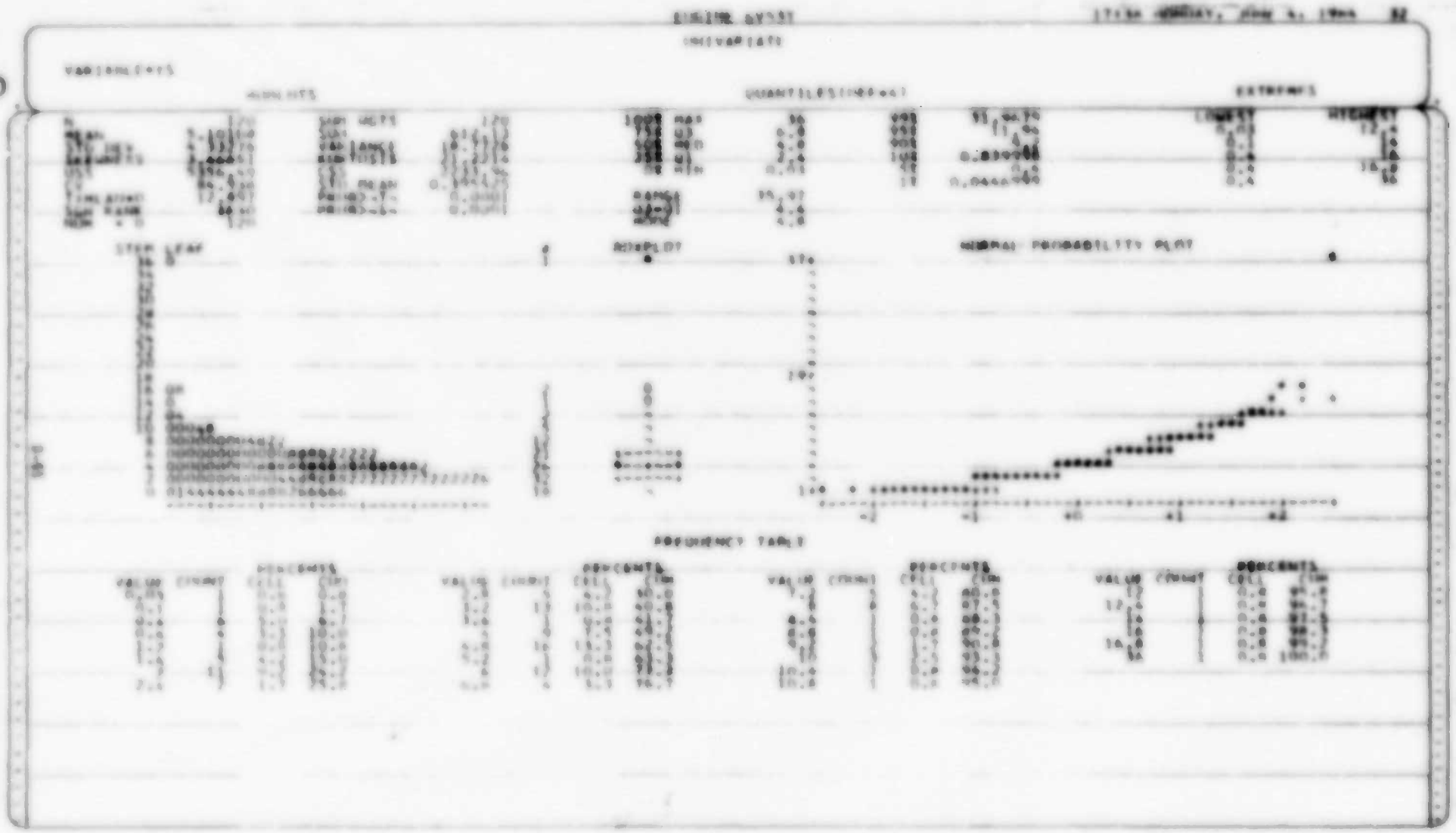


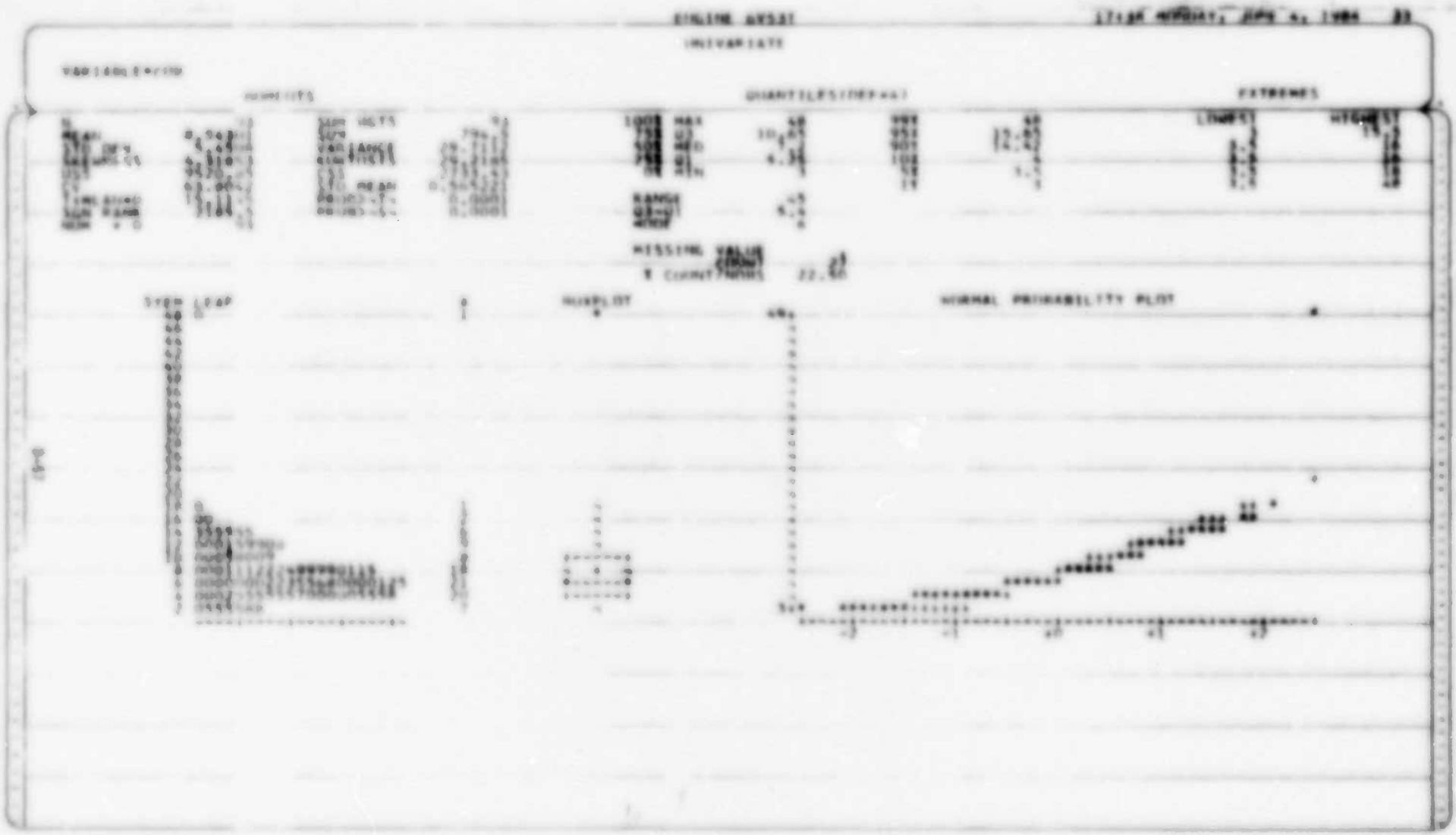
UNIVARIATE

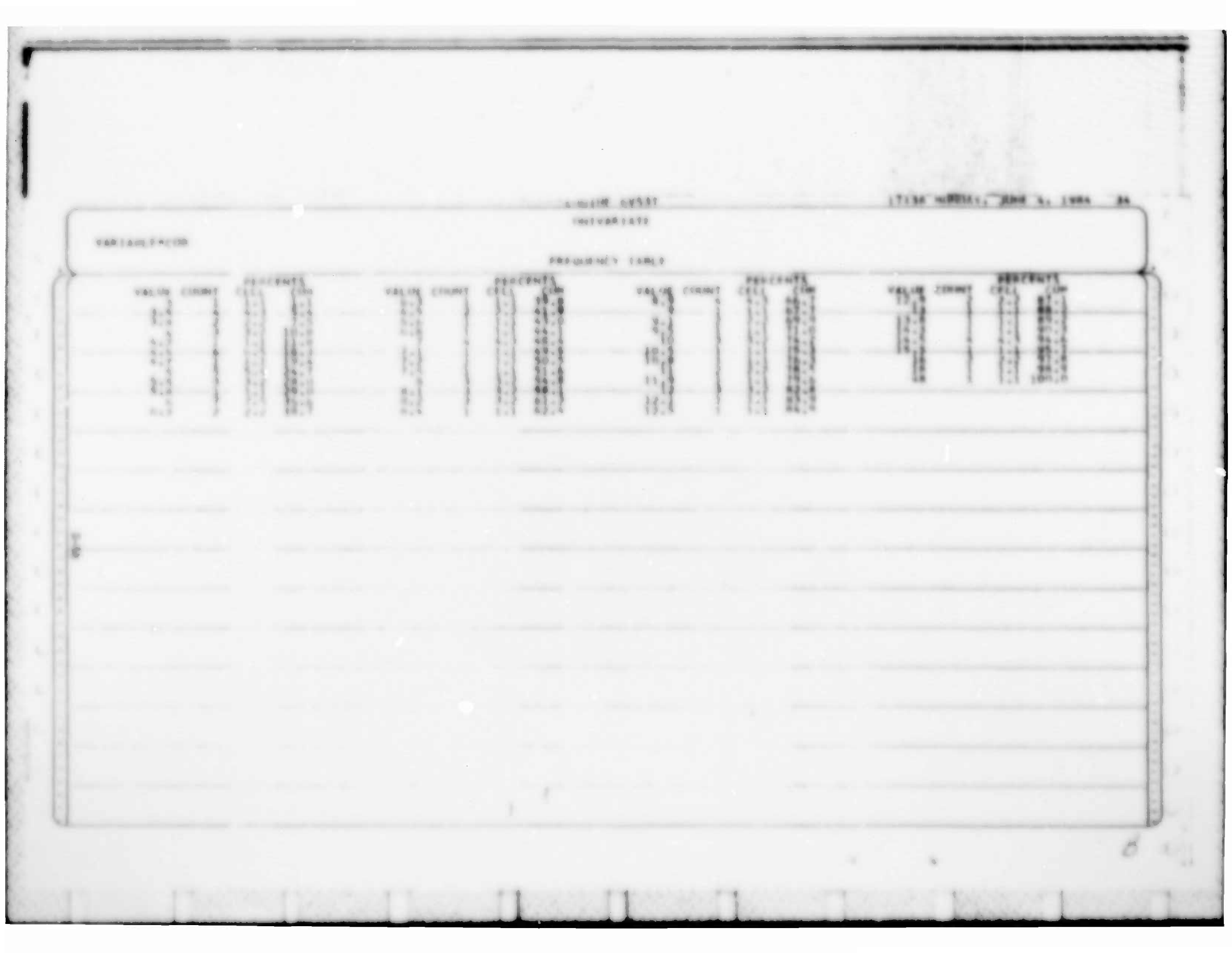
VARIABLE=VAR

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM

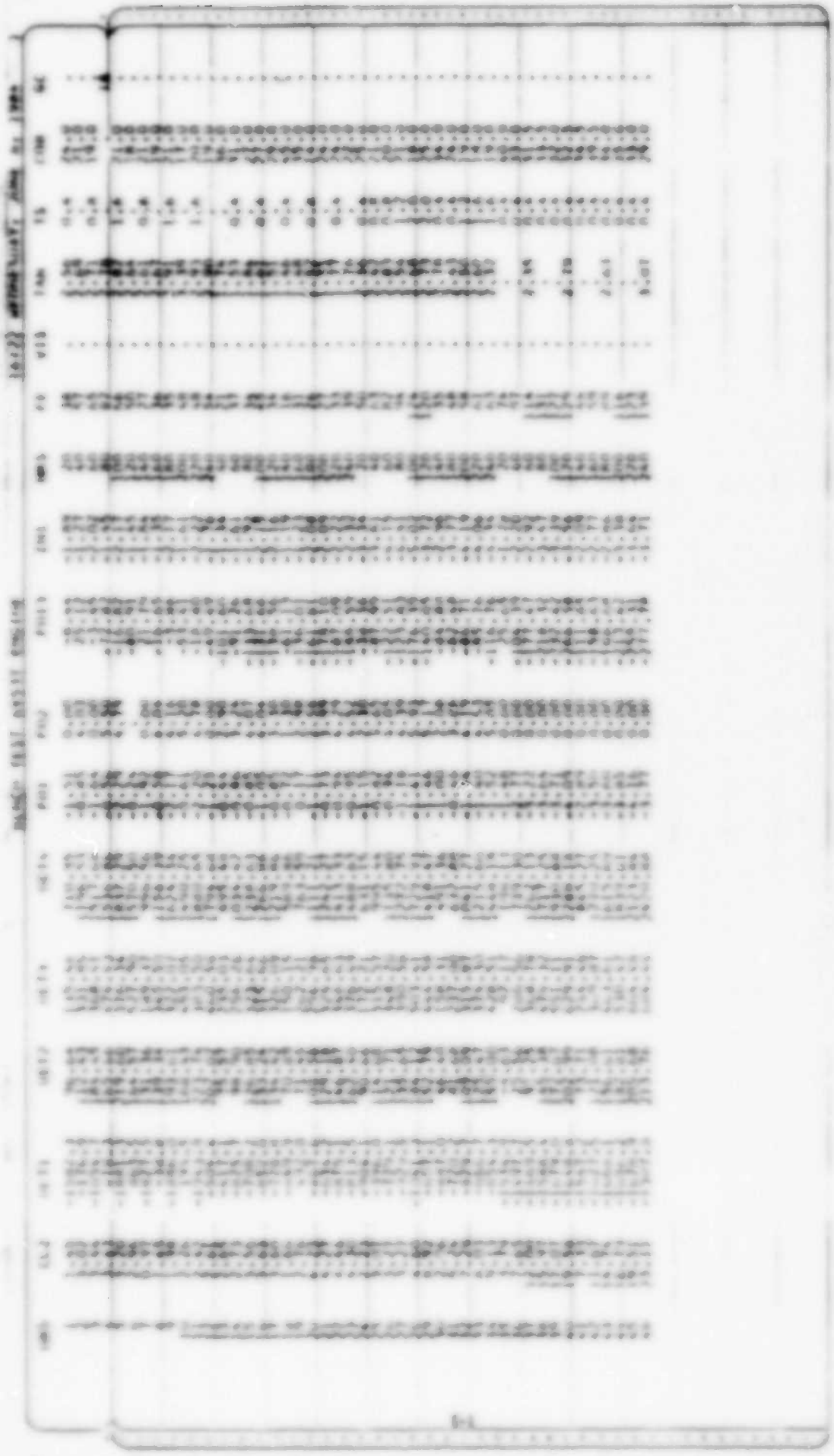


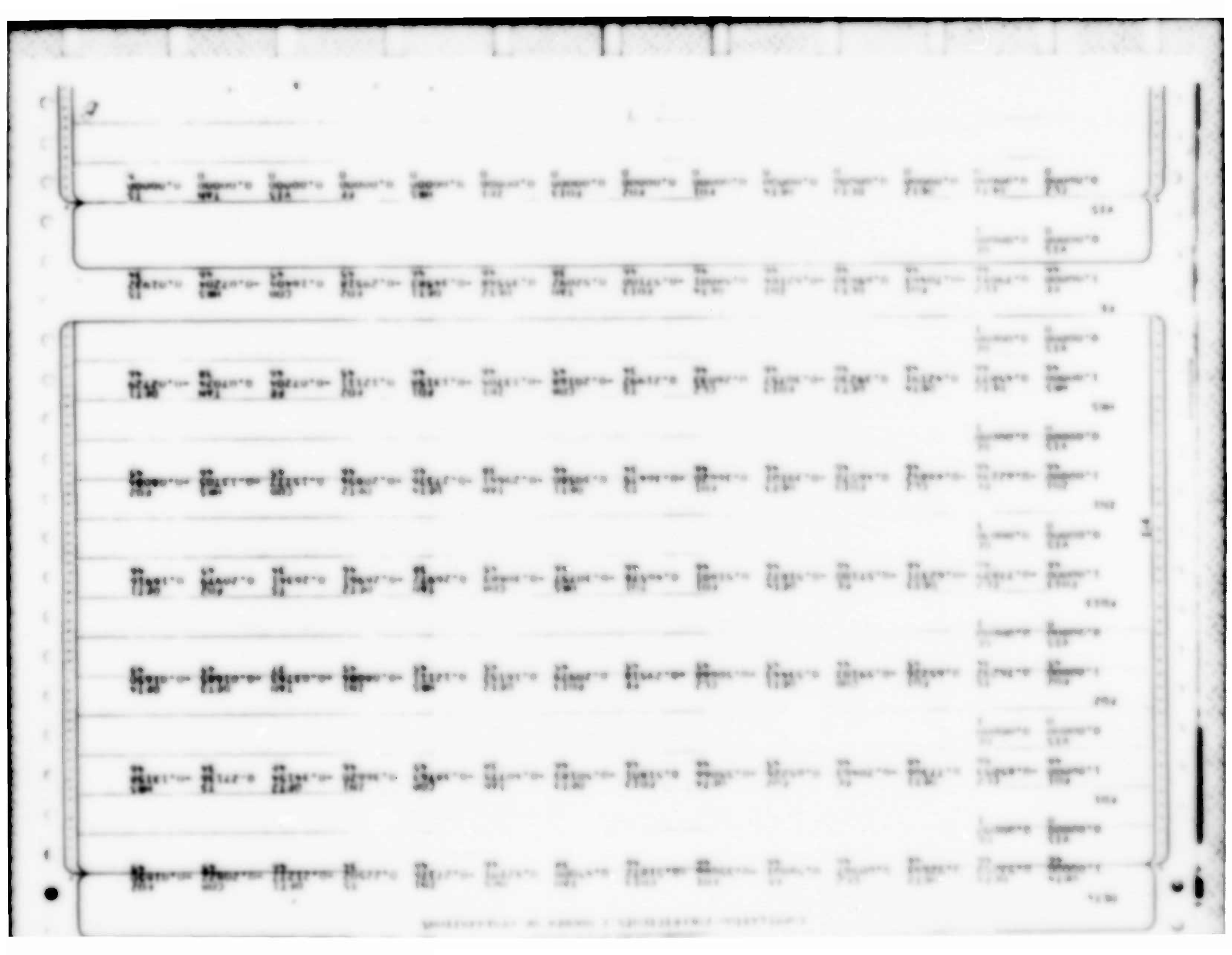




APPENDIX E
6V-53T BENCH TEST ENGINES

TABLE	CONTENTS	PAGE
E-1	6V-53T Bench Test Data	E-1
E-2	Correlation Matrix	E-3
E-3	Frequency Table and Plot for CL2	E-7
E-4	Frequency Table and Plot for DET 11	E-9
E-5	Frequency Table and Plot for DET 12	E-11
E-6	Frequency Table and Plot for DET 13	E-13
E-7	Frequency Table and Plot for DET 14	E-15
E-8	Frequency Table and Plot for FD1	E-17
E-9	Frequency Table and Plot for FD2	E-19
E-10	Frequency Table and Plot for FD13	E-21
E-11	Frequency Table and Plot for IN1	E-23
E-12	Frequency Table and Plot for HRS	E-25
E-13	Frequency Table and Plot for PE	E-27
E-15	Frequency Table and Plot for TAM	E-29
E-16	Frequency Table and Plot for TS	E-31
E-17	Frequency Table and Plot for TDE	E-33





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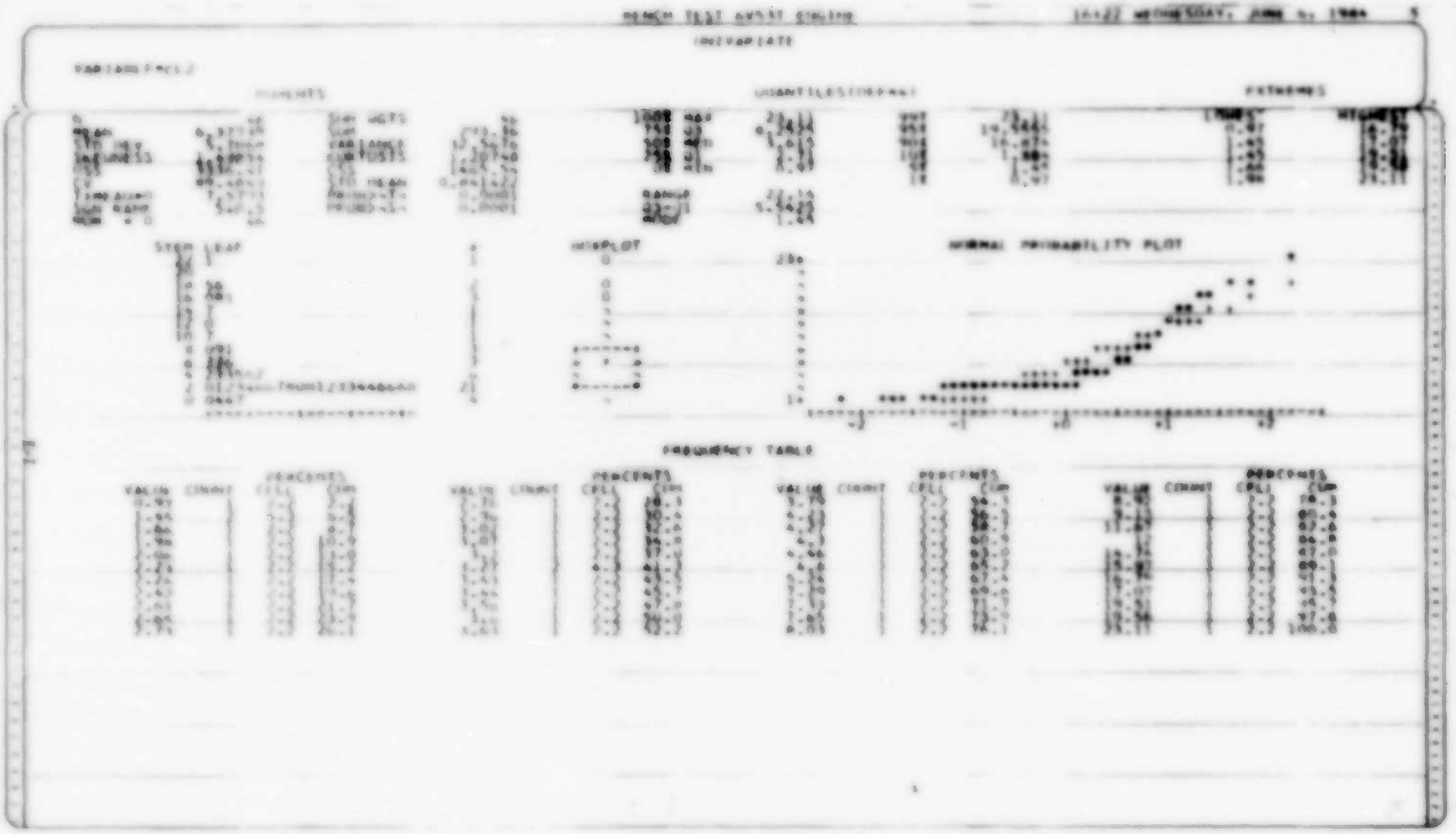
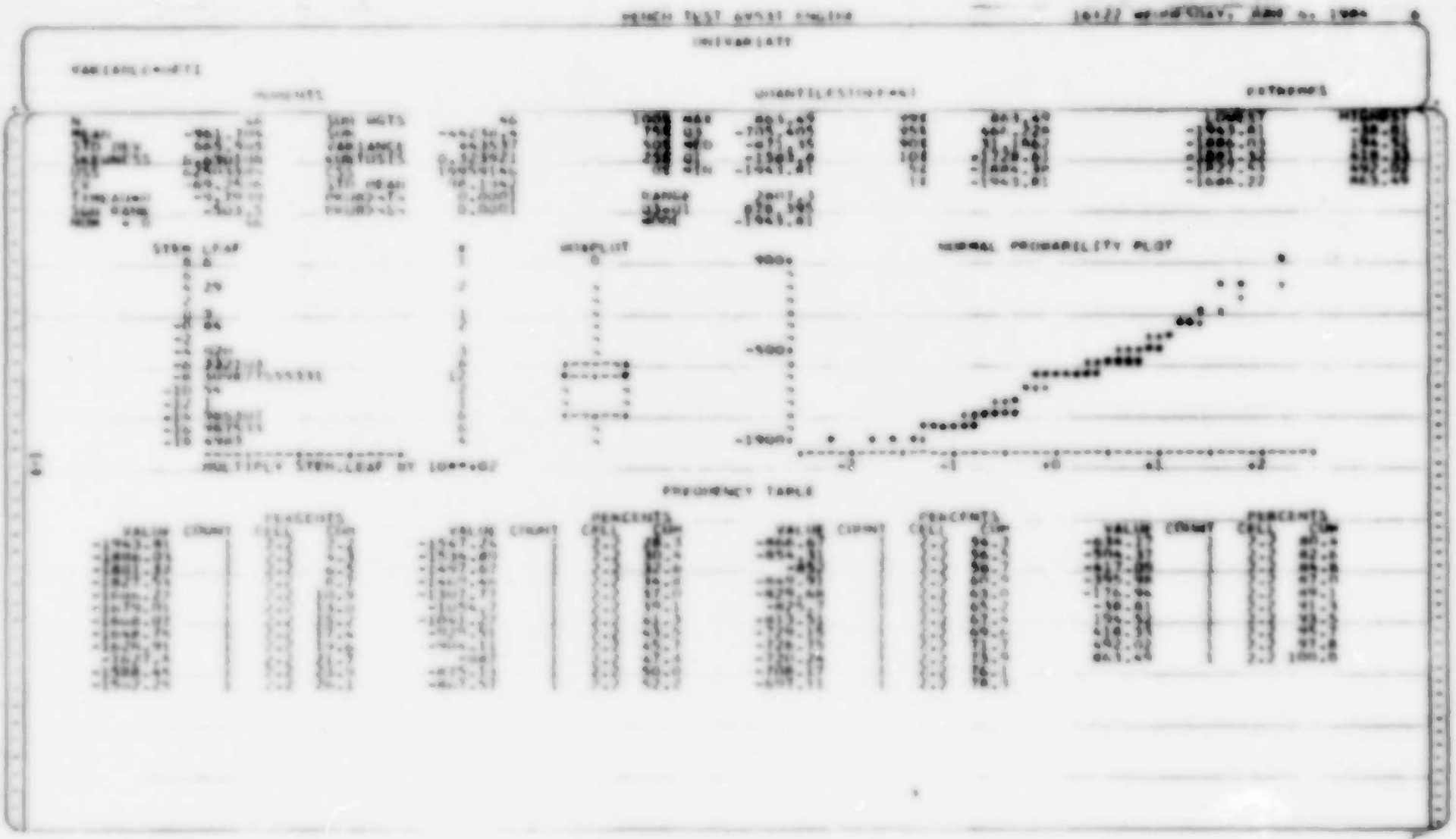
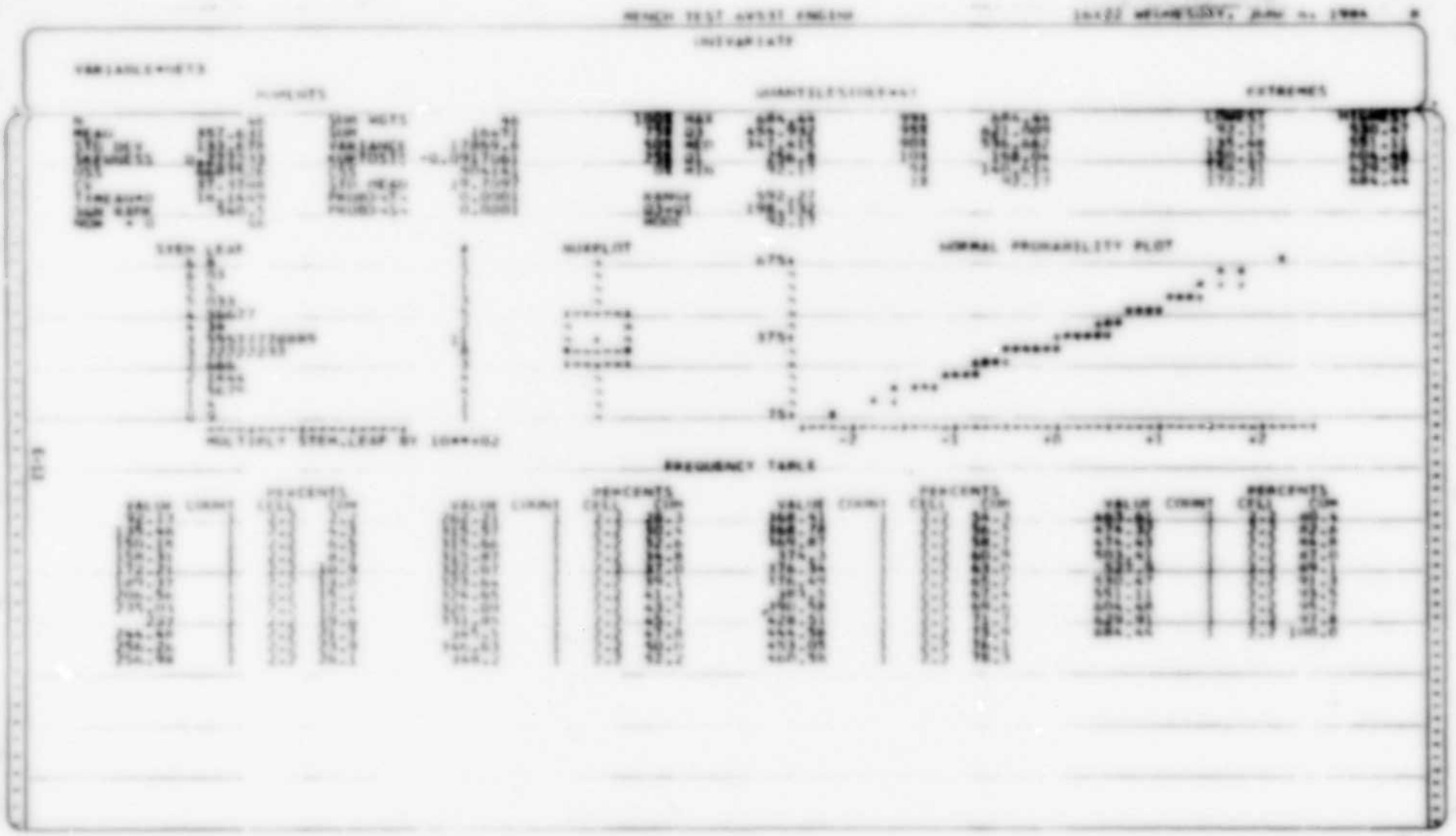
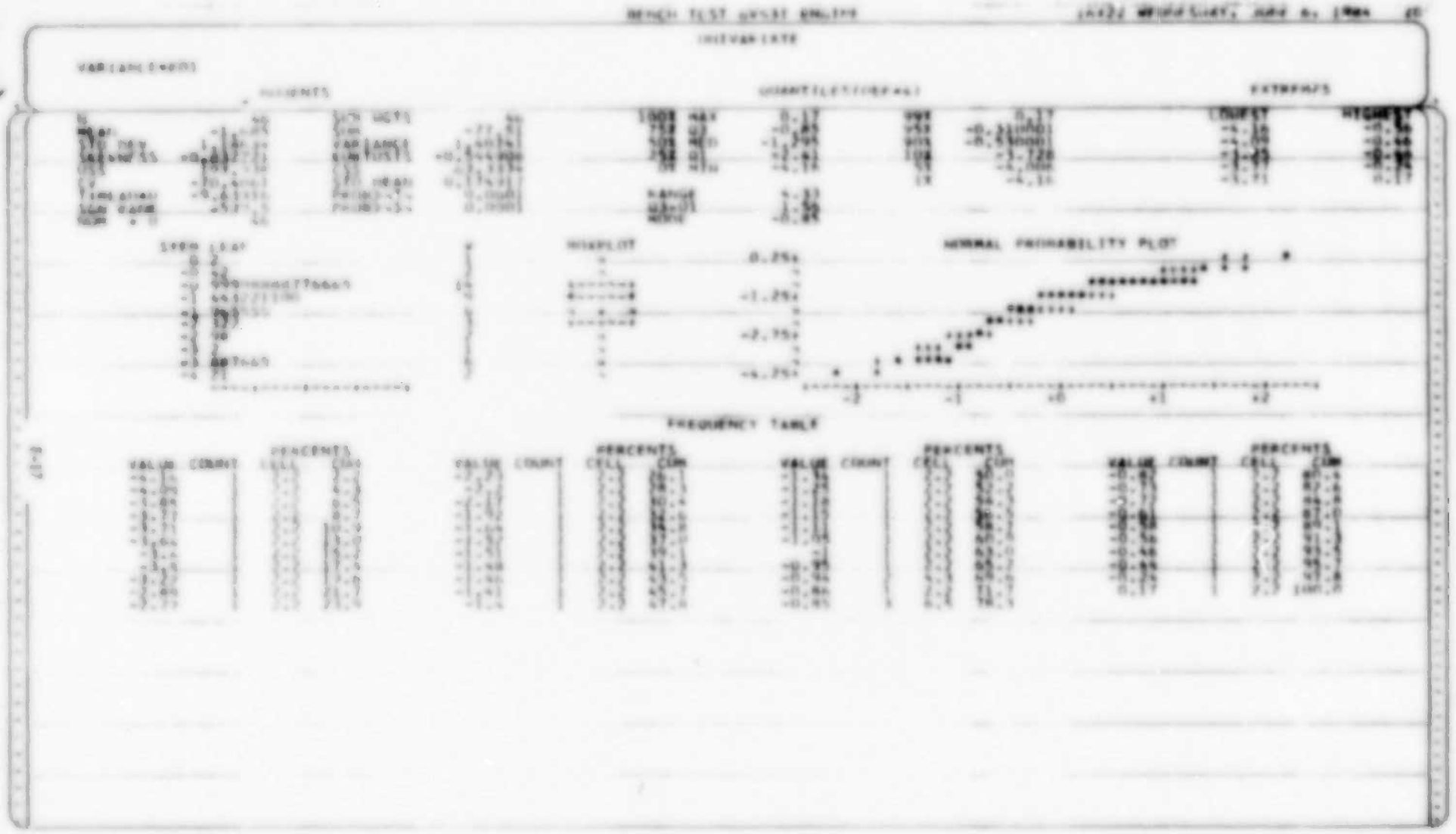
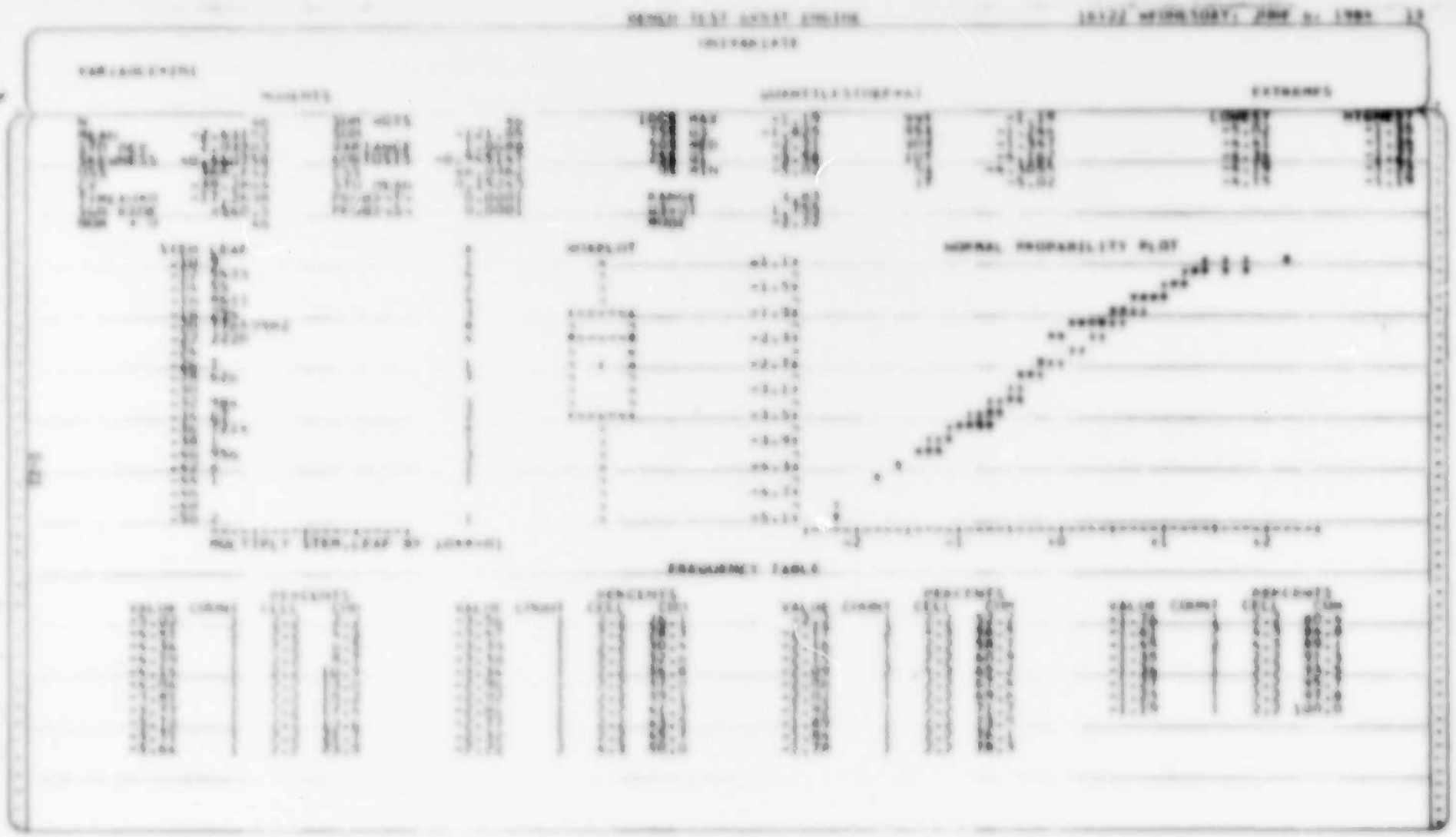
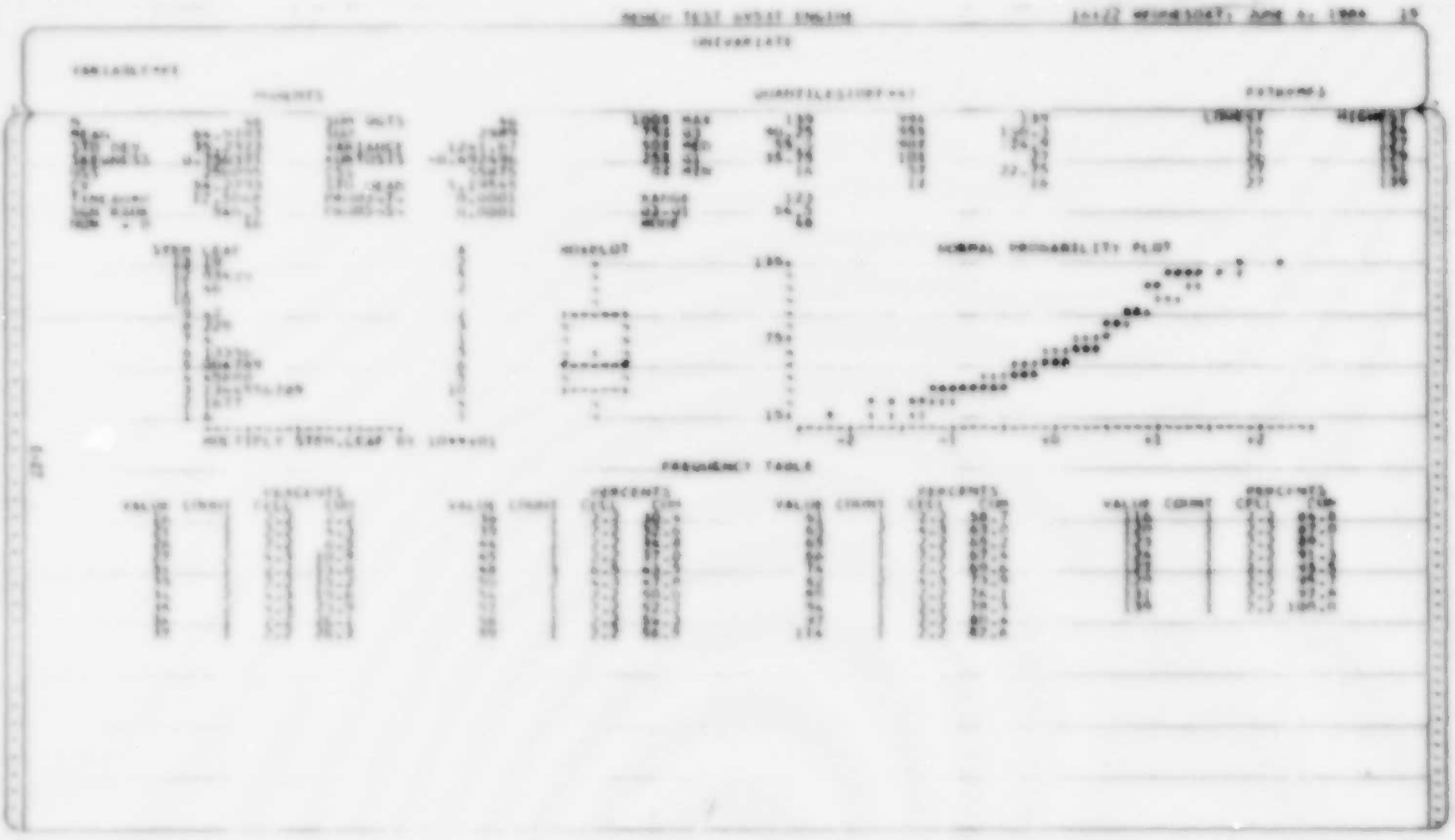

STEM-LEAF
BOXPLOT
NORMAL PROBABILITY PLOT
FREQUENCY TABLE

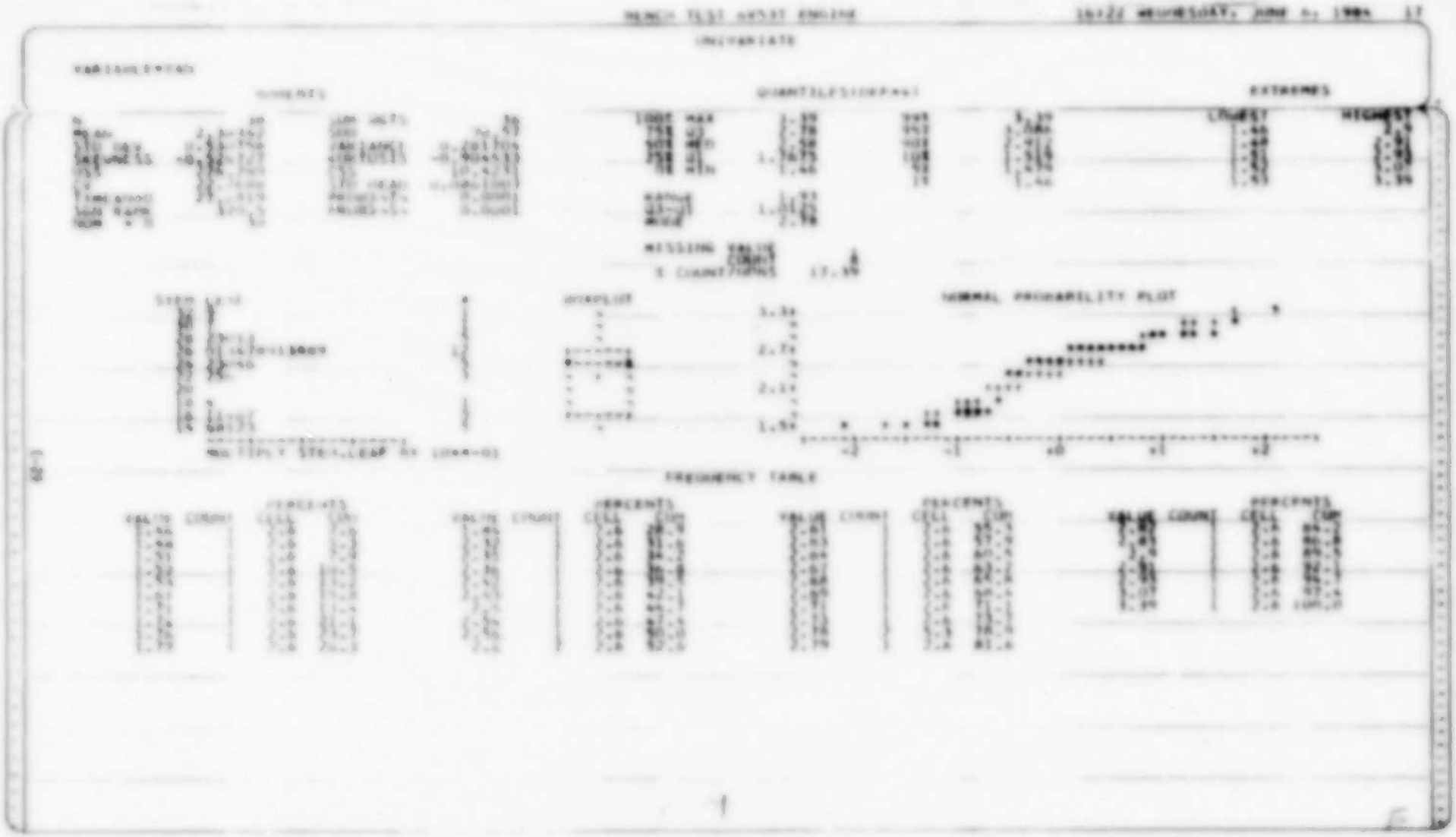







NORMAL PROBABILITY PLOT

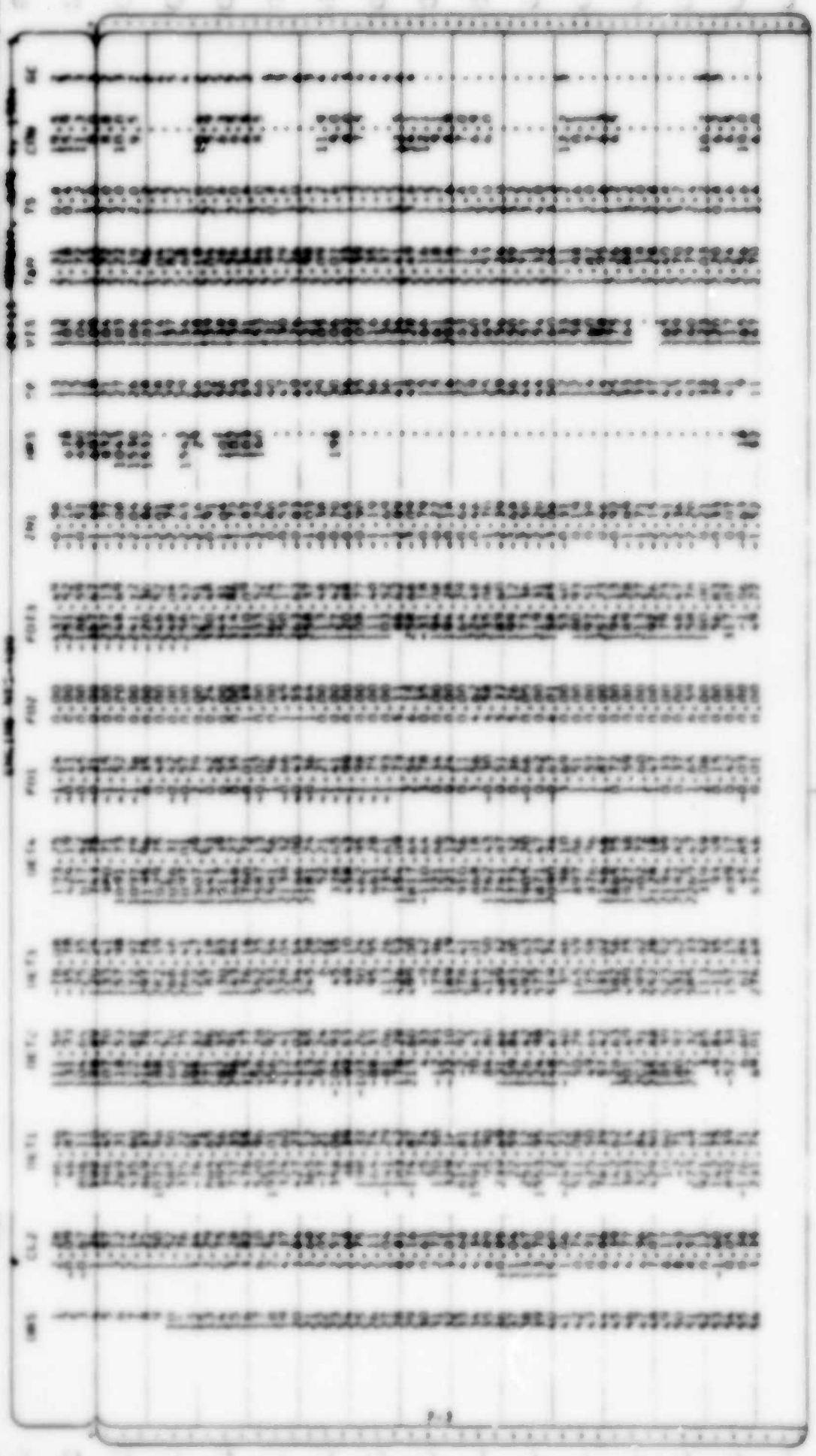


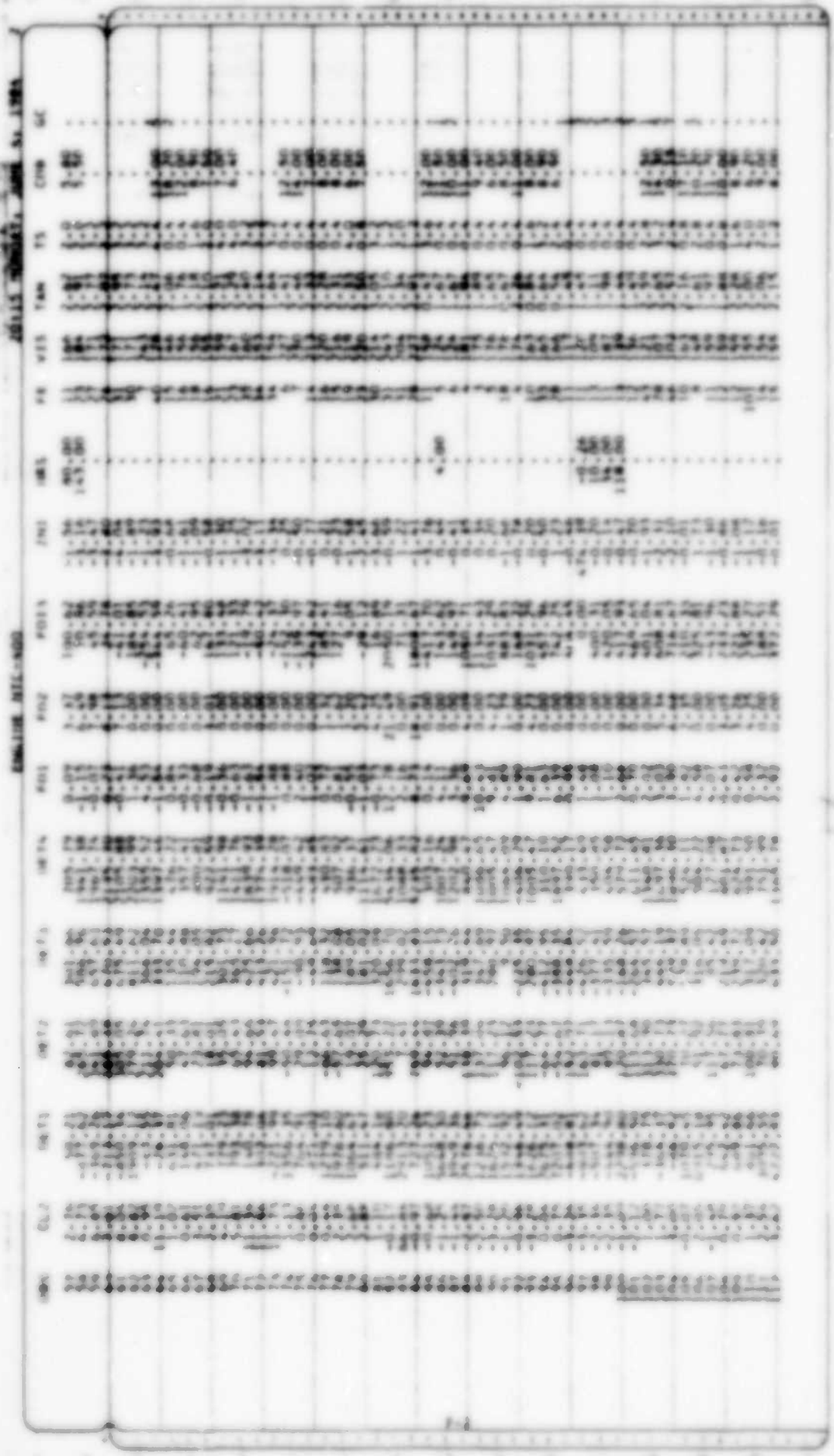
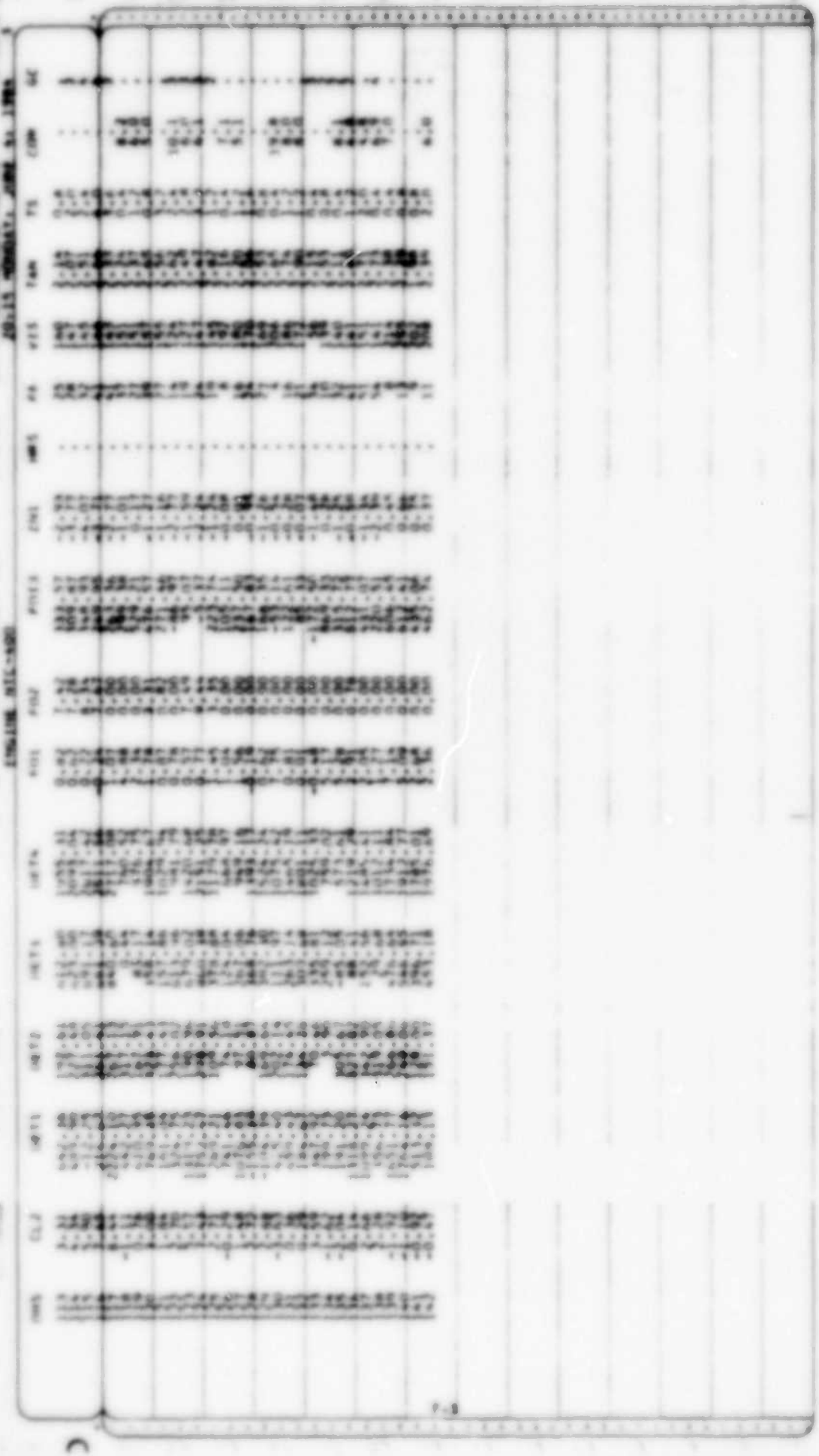


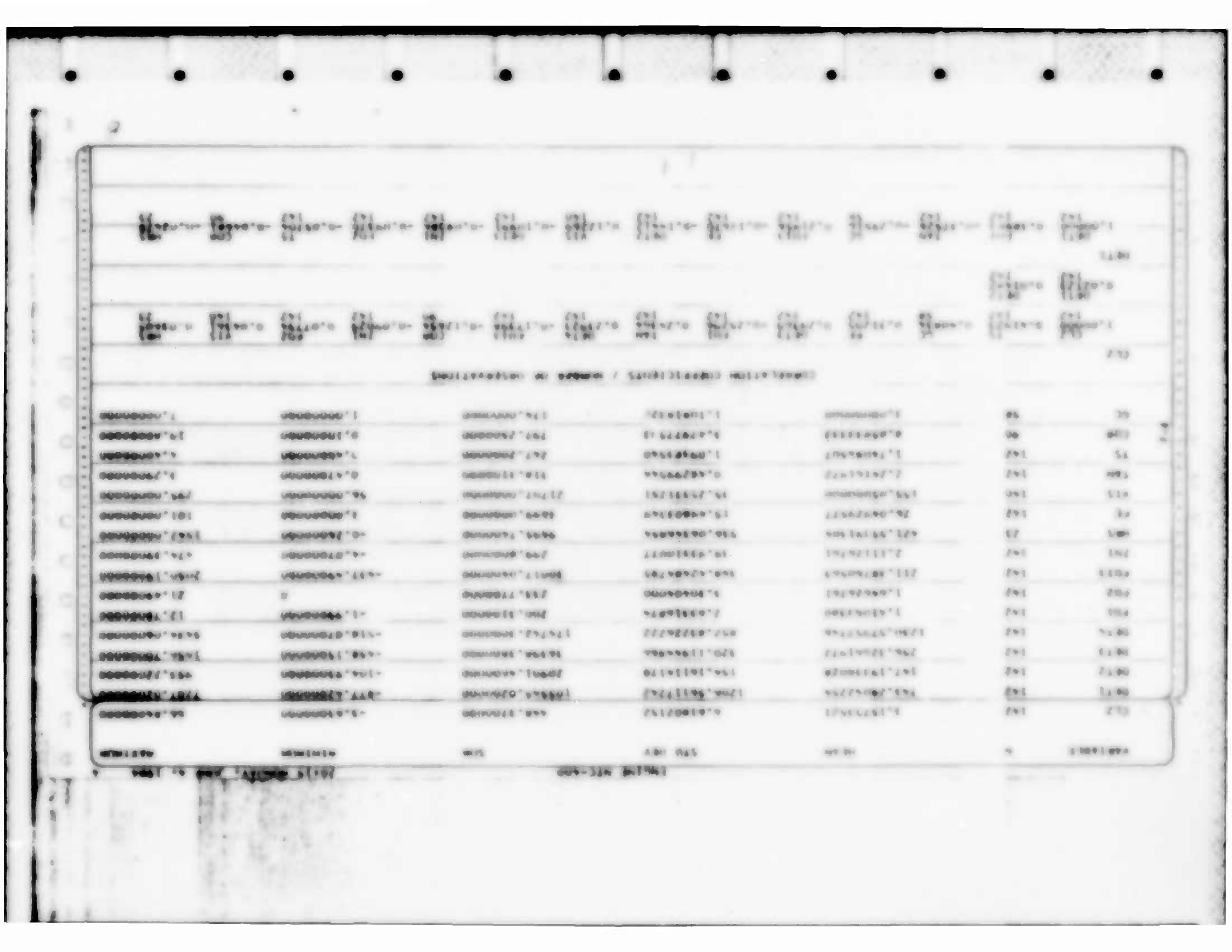
APPENDIX F
CUMMINS NTC-400 ENGINE
52nd ENGINEER BATTALION, FT. CARSON CO.

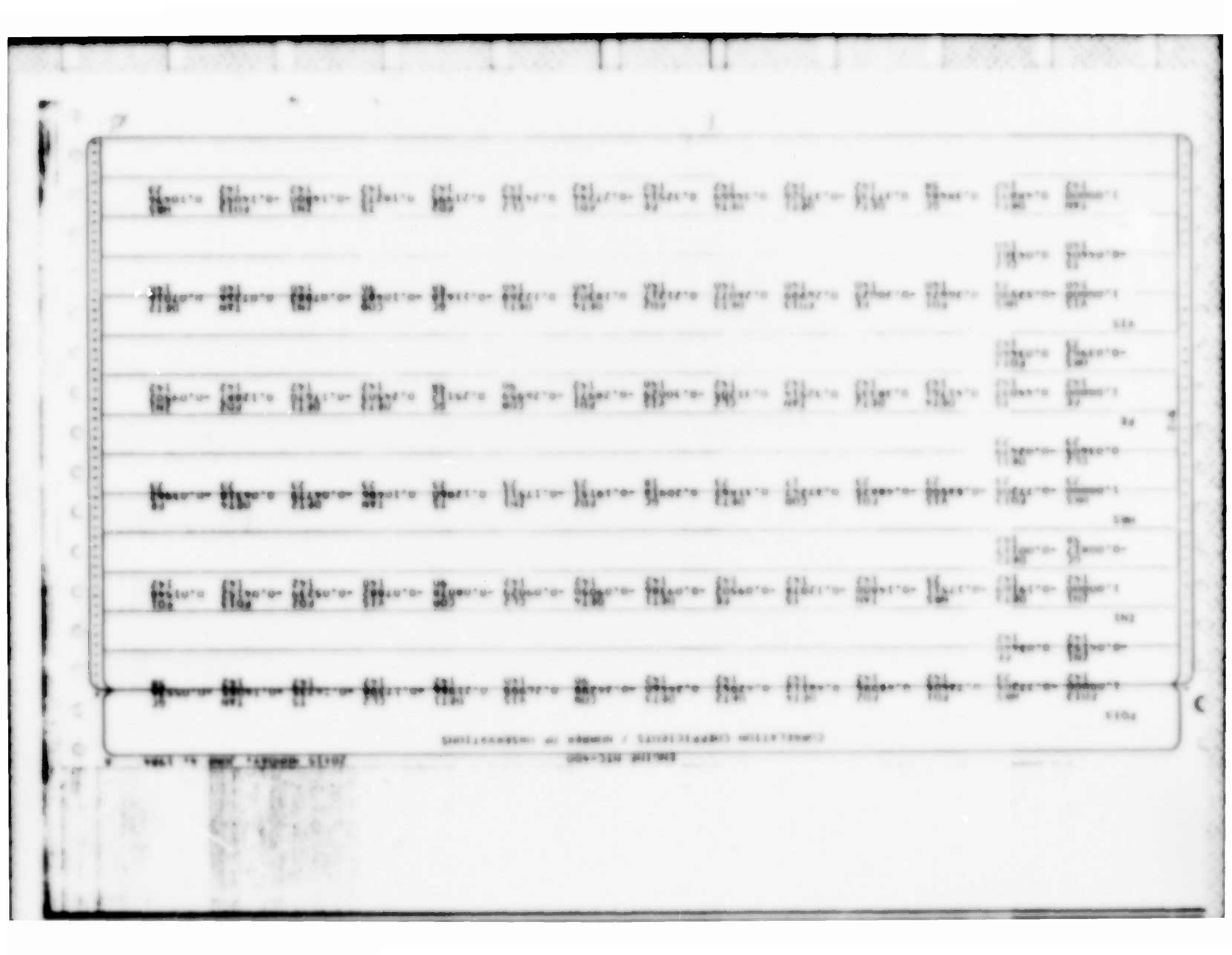
TABLE	CONTENTS	PAGE
F-1	NTC-400 Data	F-1
F-2	Correlation Matrix	F-4
F-3*	Development of Best Model for Viscosity	F-9
F-4*	Development of Best Model for Total Acid Number	F-21
F-5*	Development of Best Model for Total Solids	F-27
F-6*	Development of Best Model for Fuel Dilution (Measured by Gas Chromatograph)	F-31
F-7	Frequency Table and Plot for CL2	F-39
F-8	Frequency Table and Plot for DET 11	F-41
F-9	Frequency Table and Plot for DET 12	F-43
F-10	Frequency Table and Plot for DET 13	F-45
F-11	Frequency Table and Plot for DET 14	F-47
F-12	Frequency Table and Plot for FD1	F-49
F-13	Frequency Table and Plot for FD2	F-51
F-14	Frequency Table and Plot for FD13	F-53
F-15	Frequency Table and Plot for ZN1	F-55
F-16	Frequency Table and Plot for HMS	F-57
F-17	Frequency Table and Plot for FE	F-59
F-18	Frequency Table and Plot for VIS	F-61
F-19	Frequency Table and Plot for TAN	F-63
F-20	Frequency Table and Plot for TS	F-65
F-21	Frequency Table and Plot for CDB	F-67

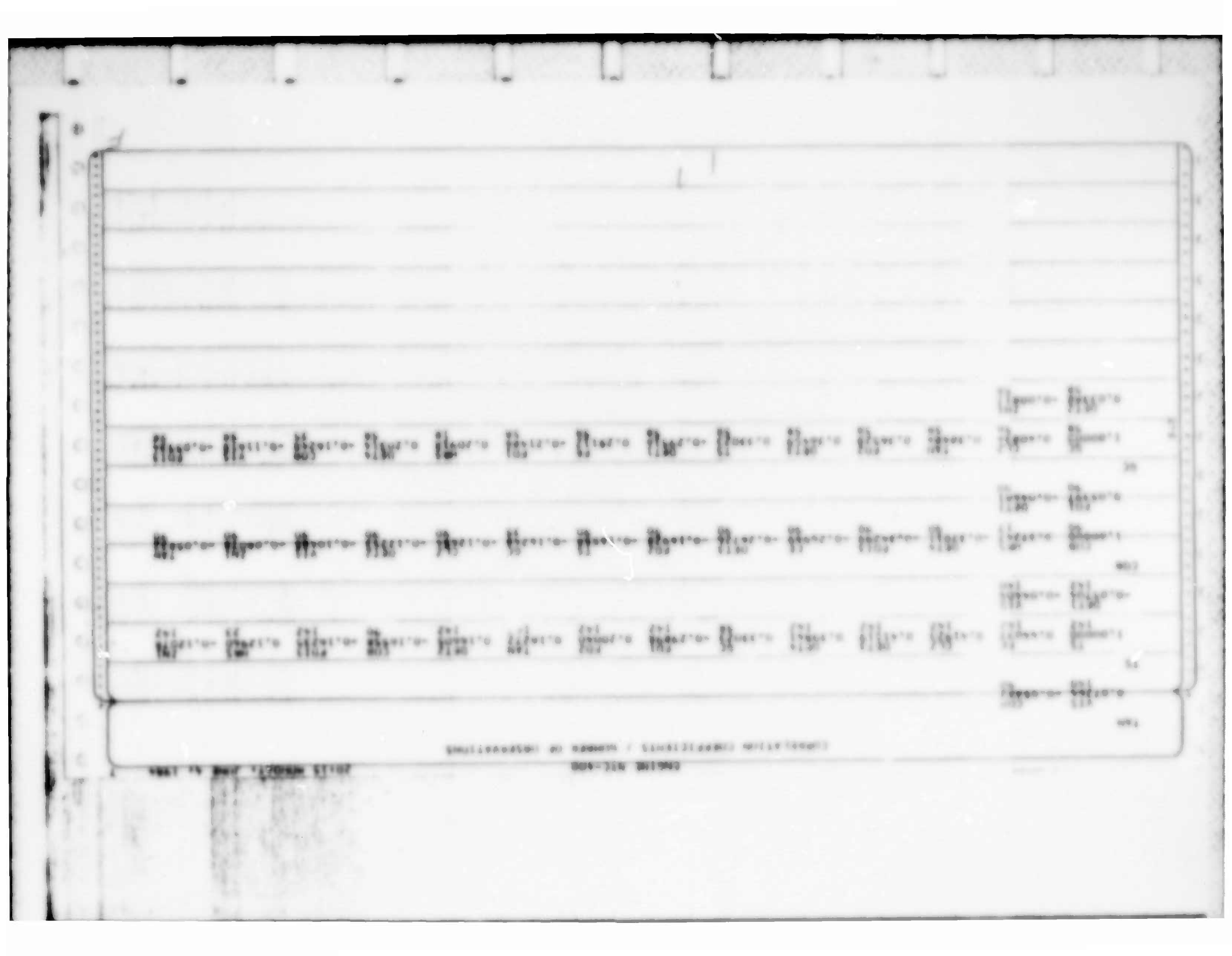
* These models were all developed early in the study and are based on a slightly different data collection methodology than that outlined in Table 1.

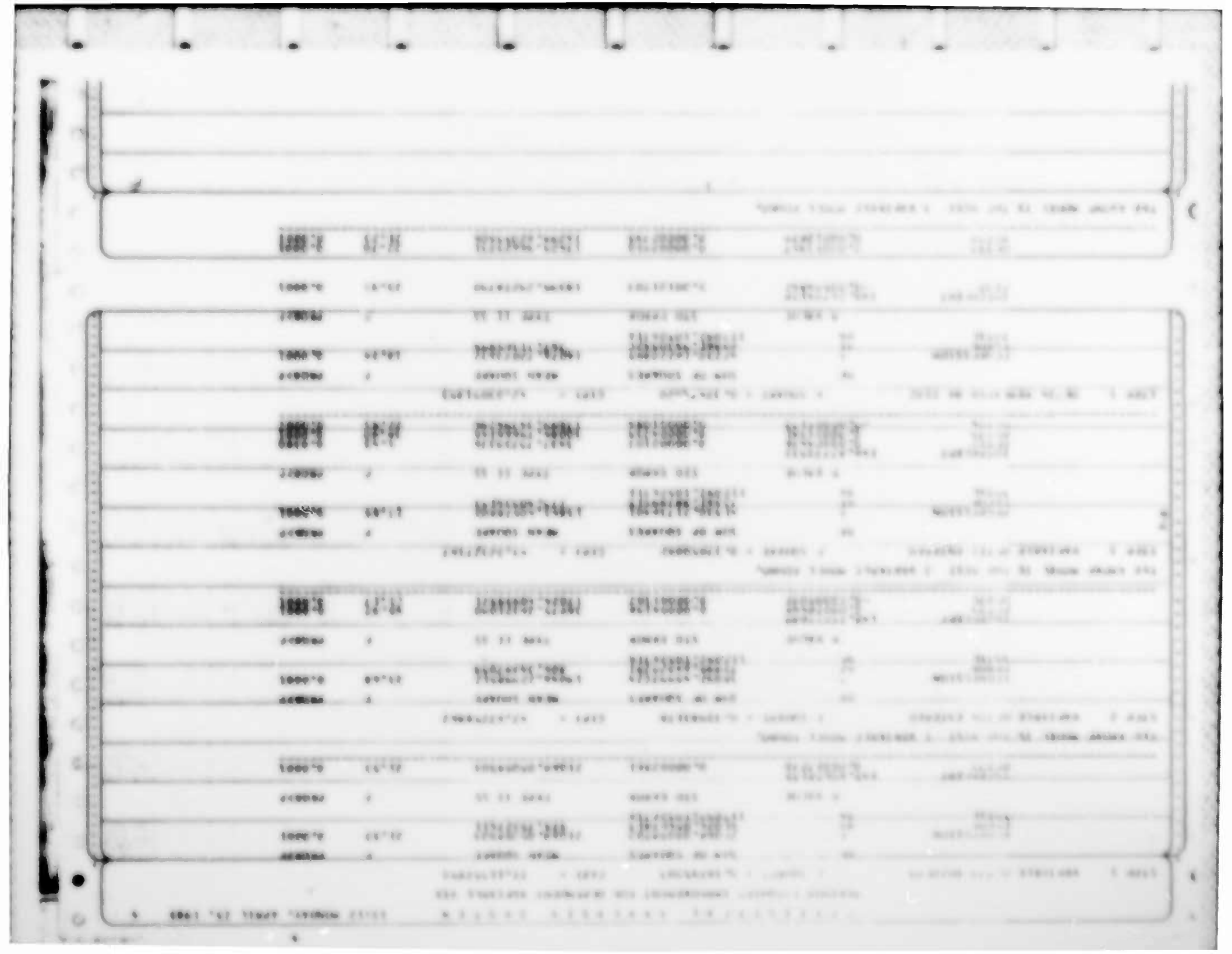


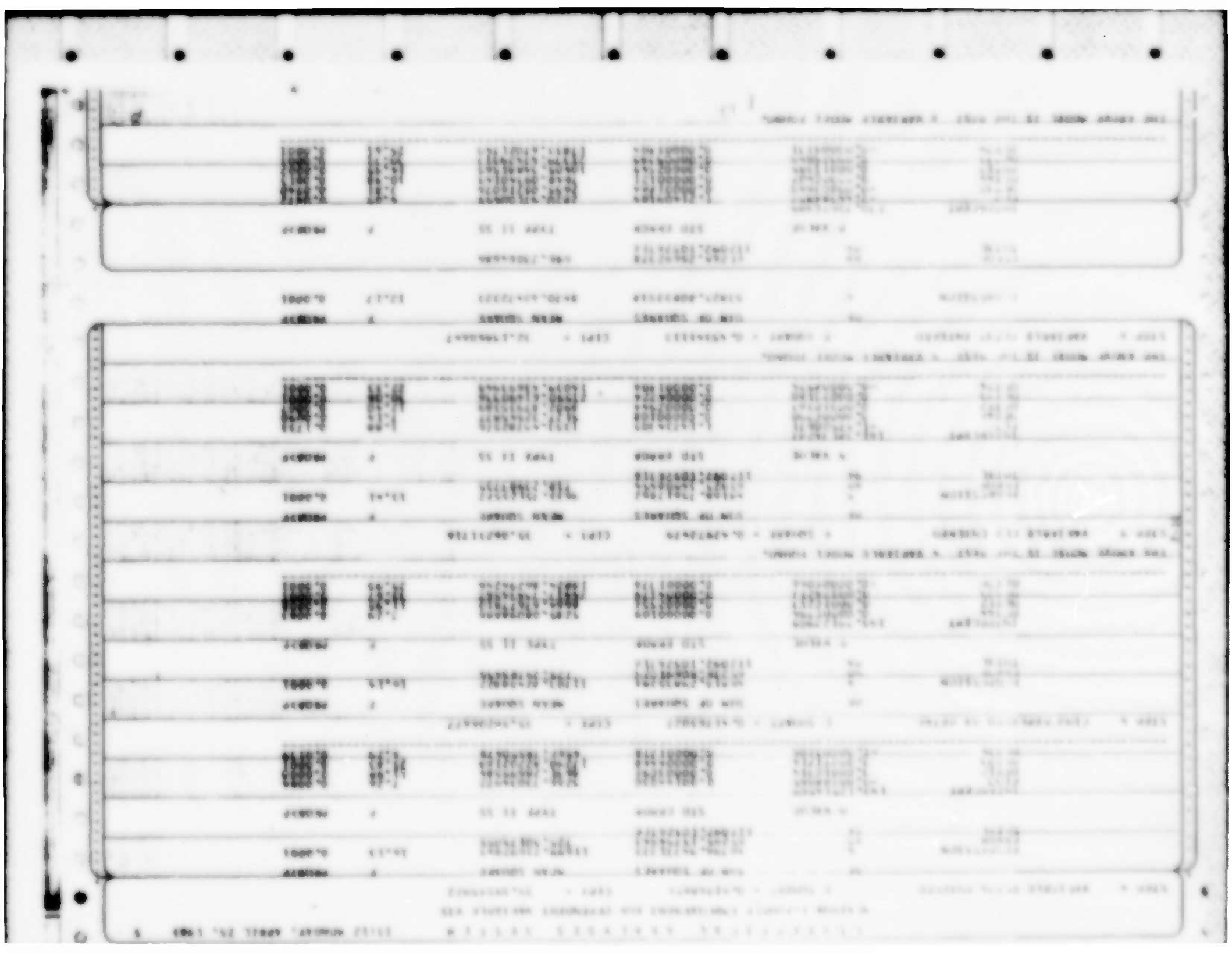


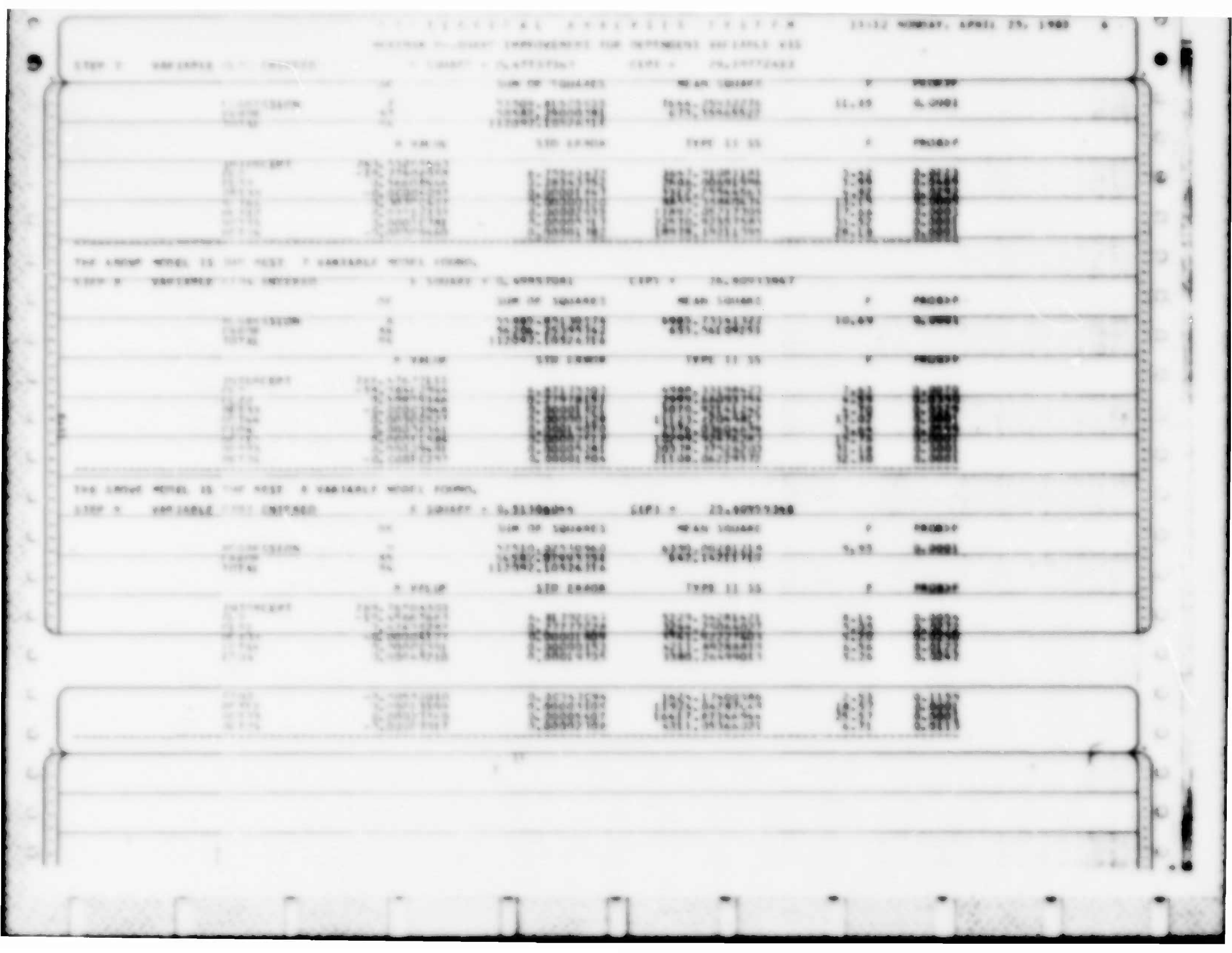


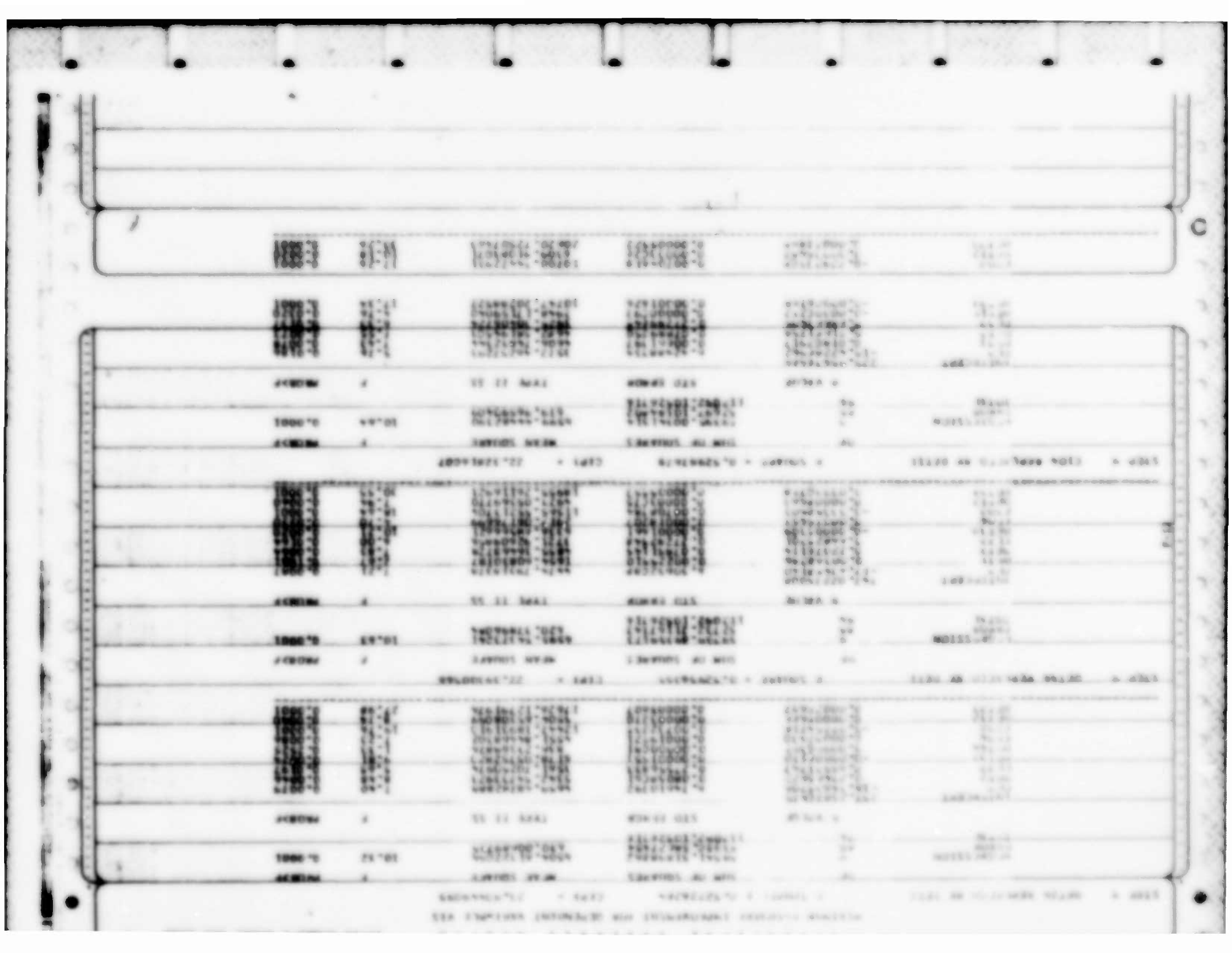


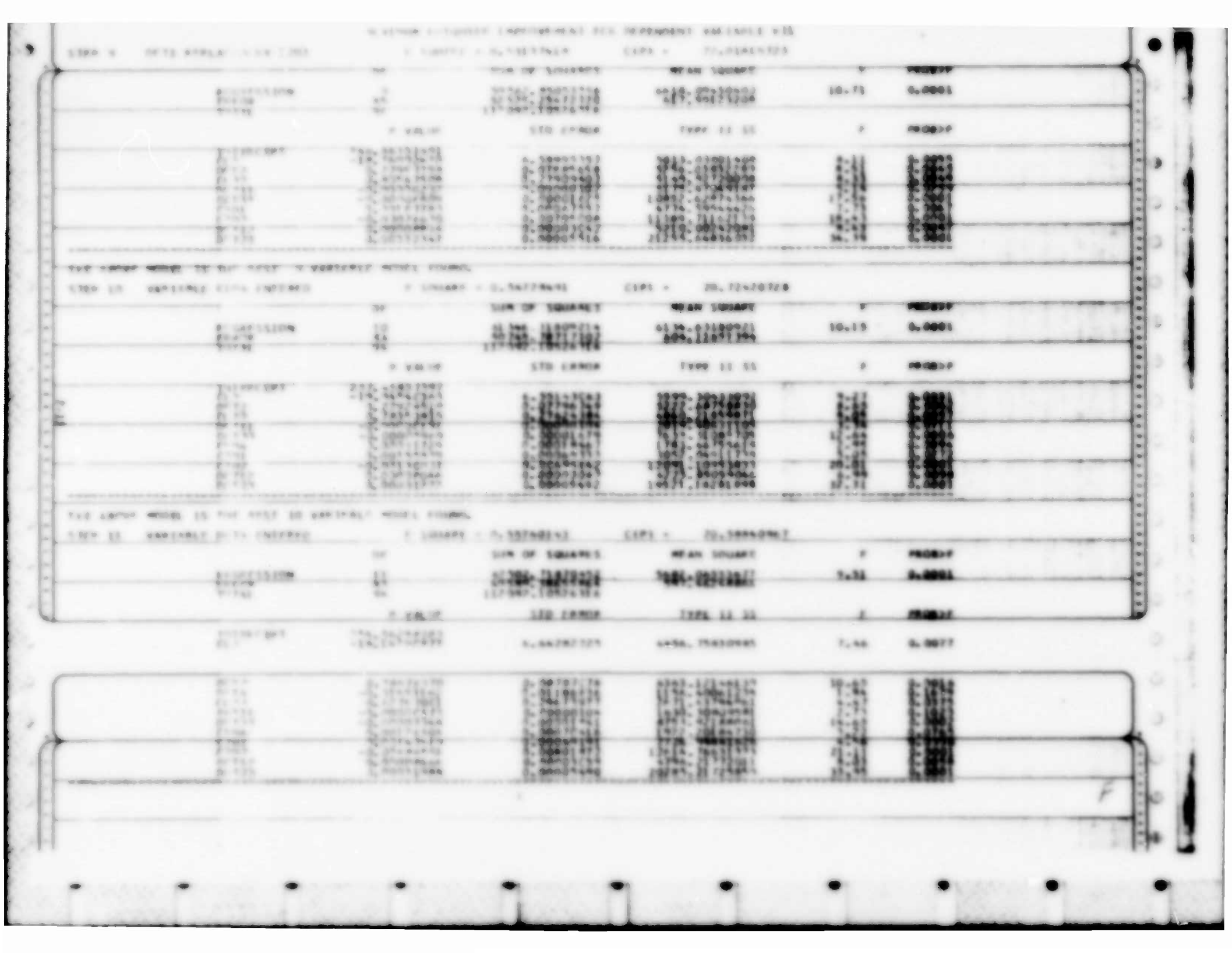


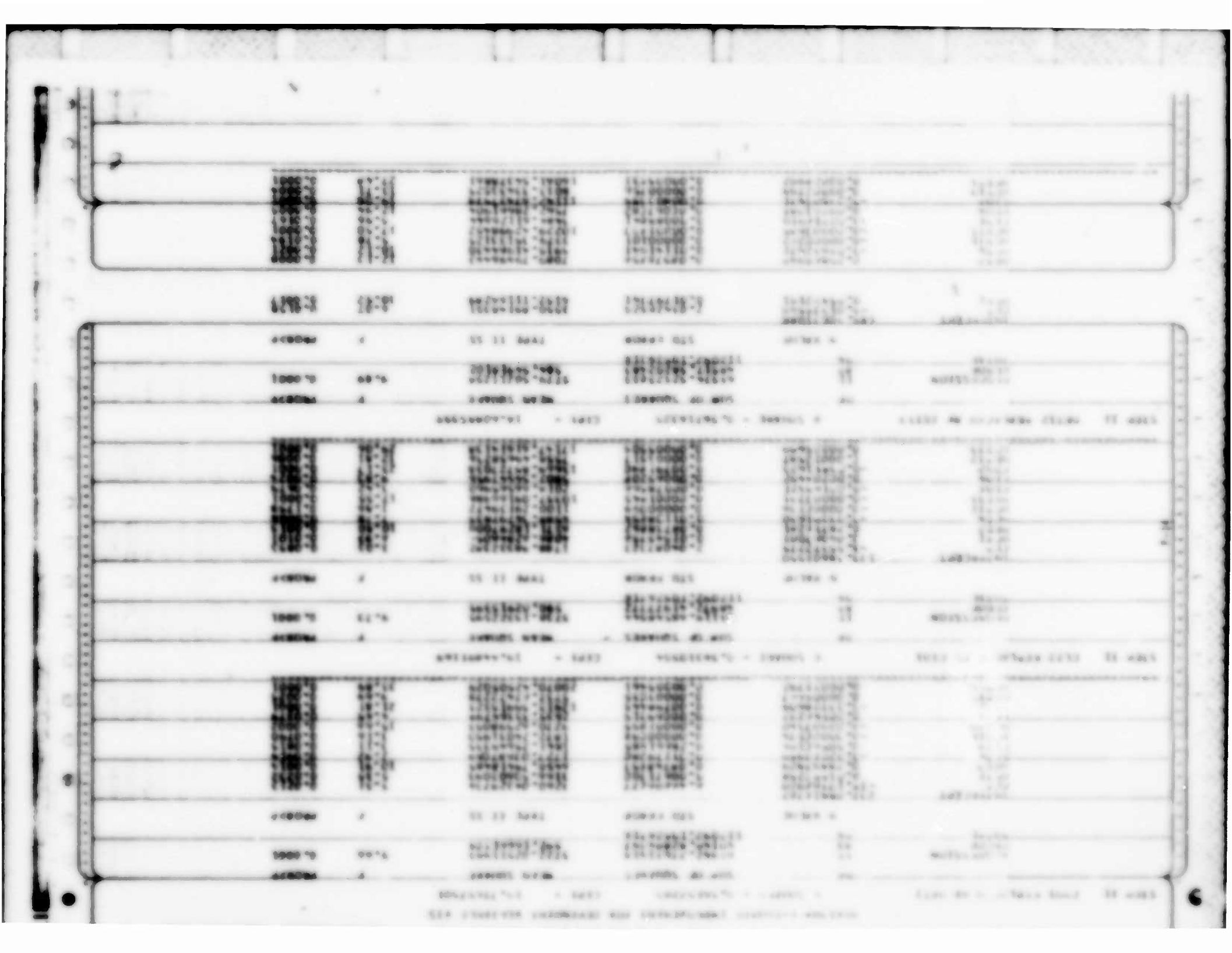


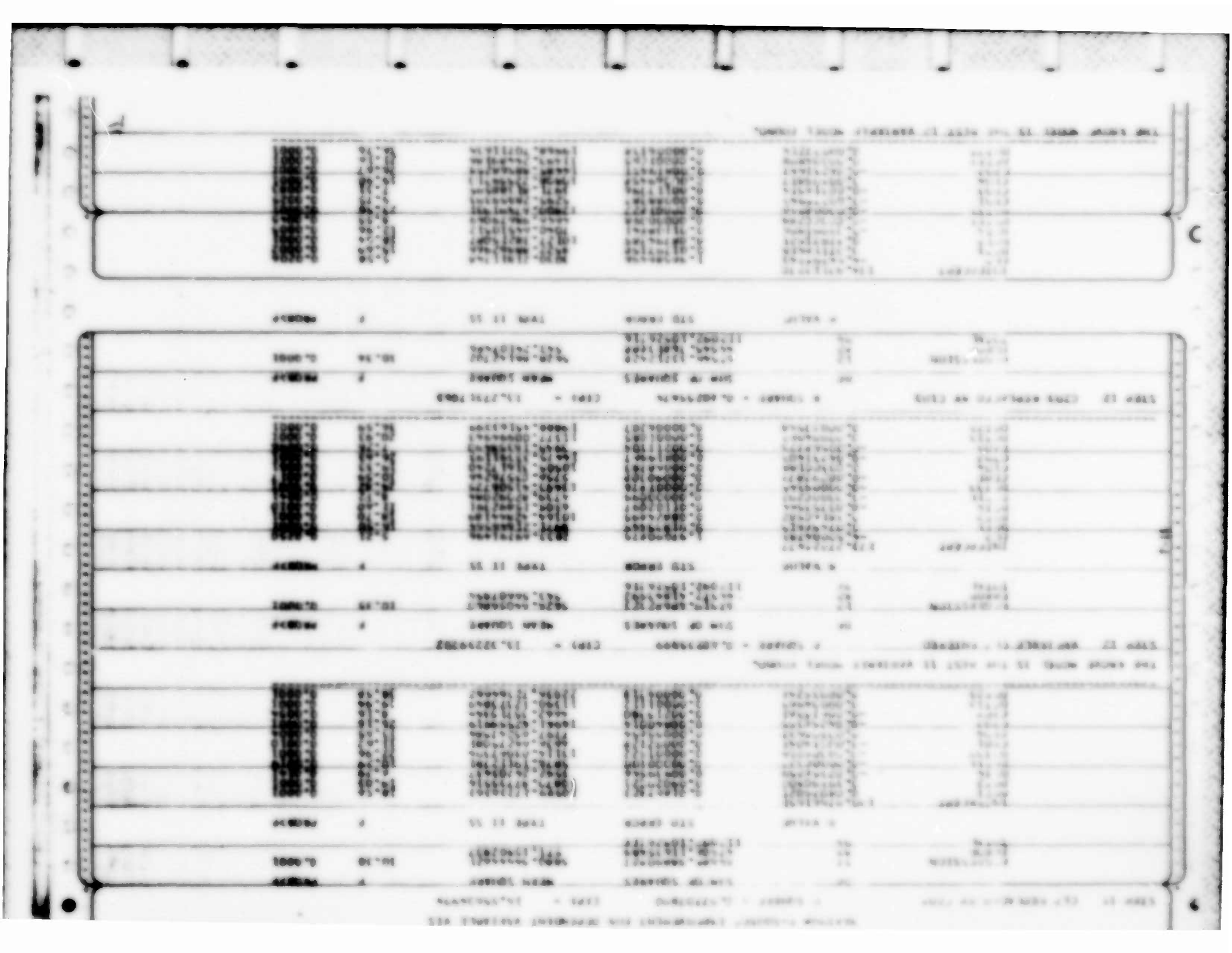


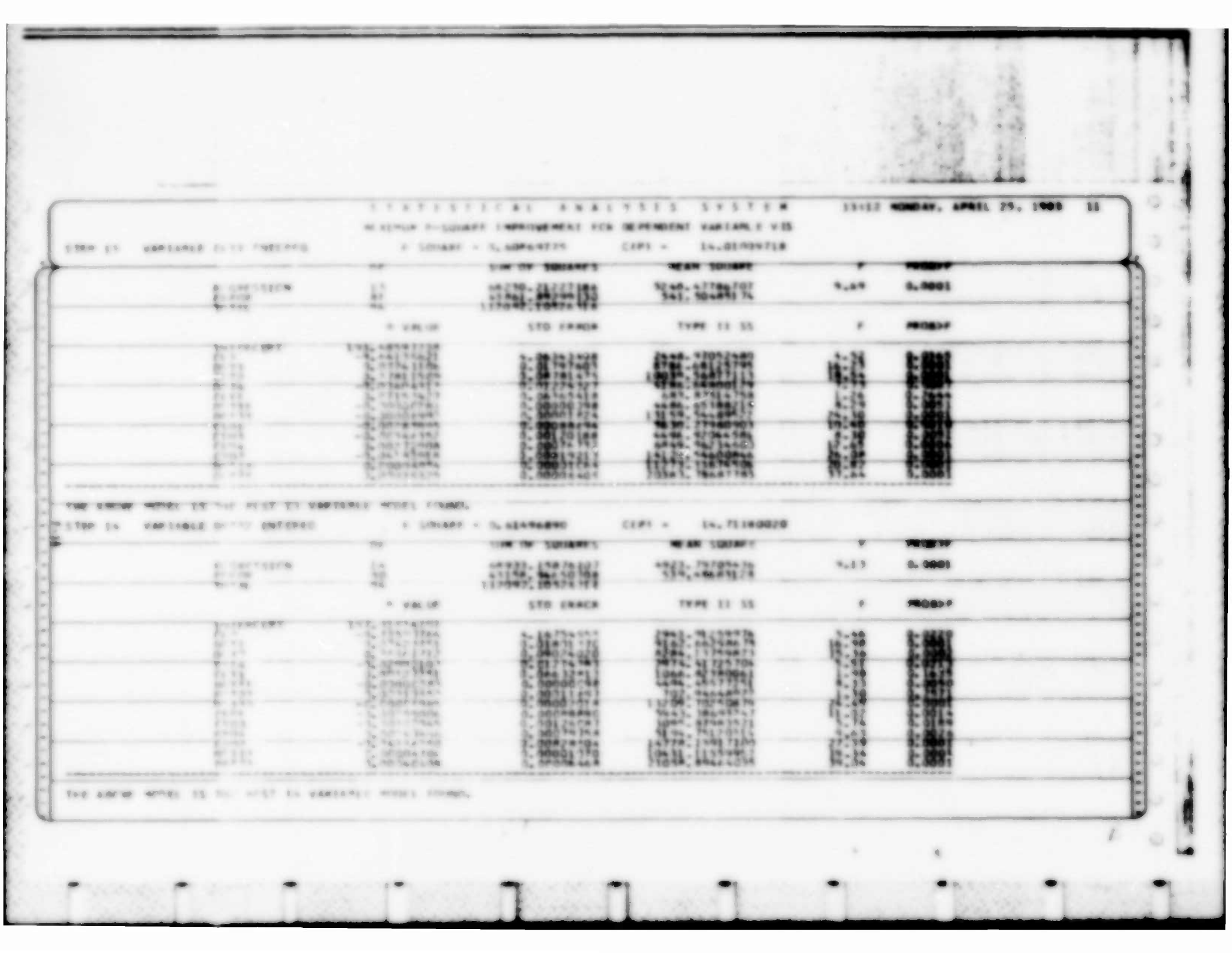


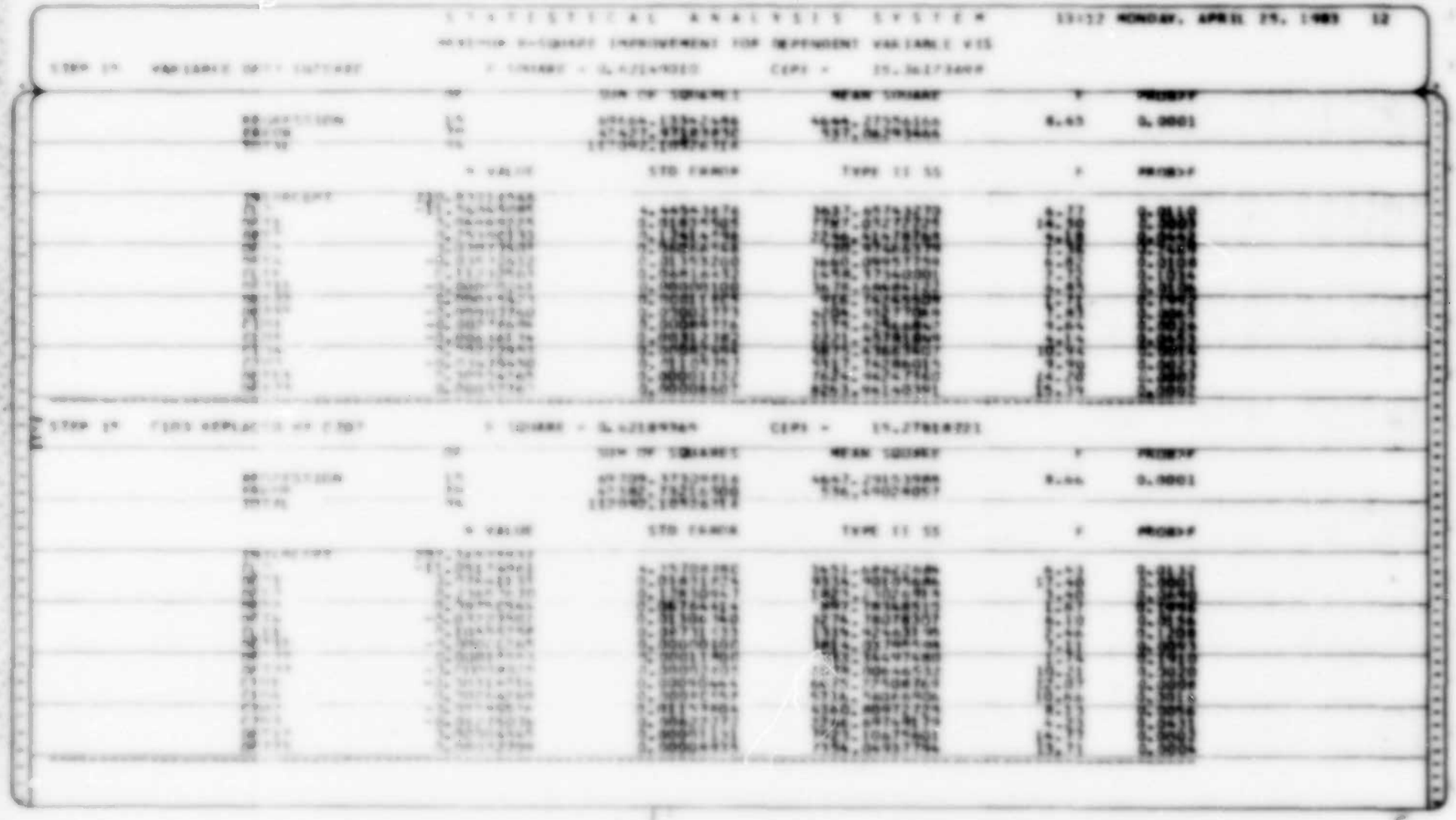


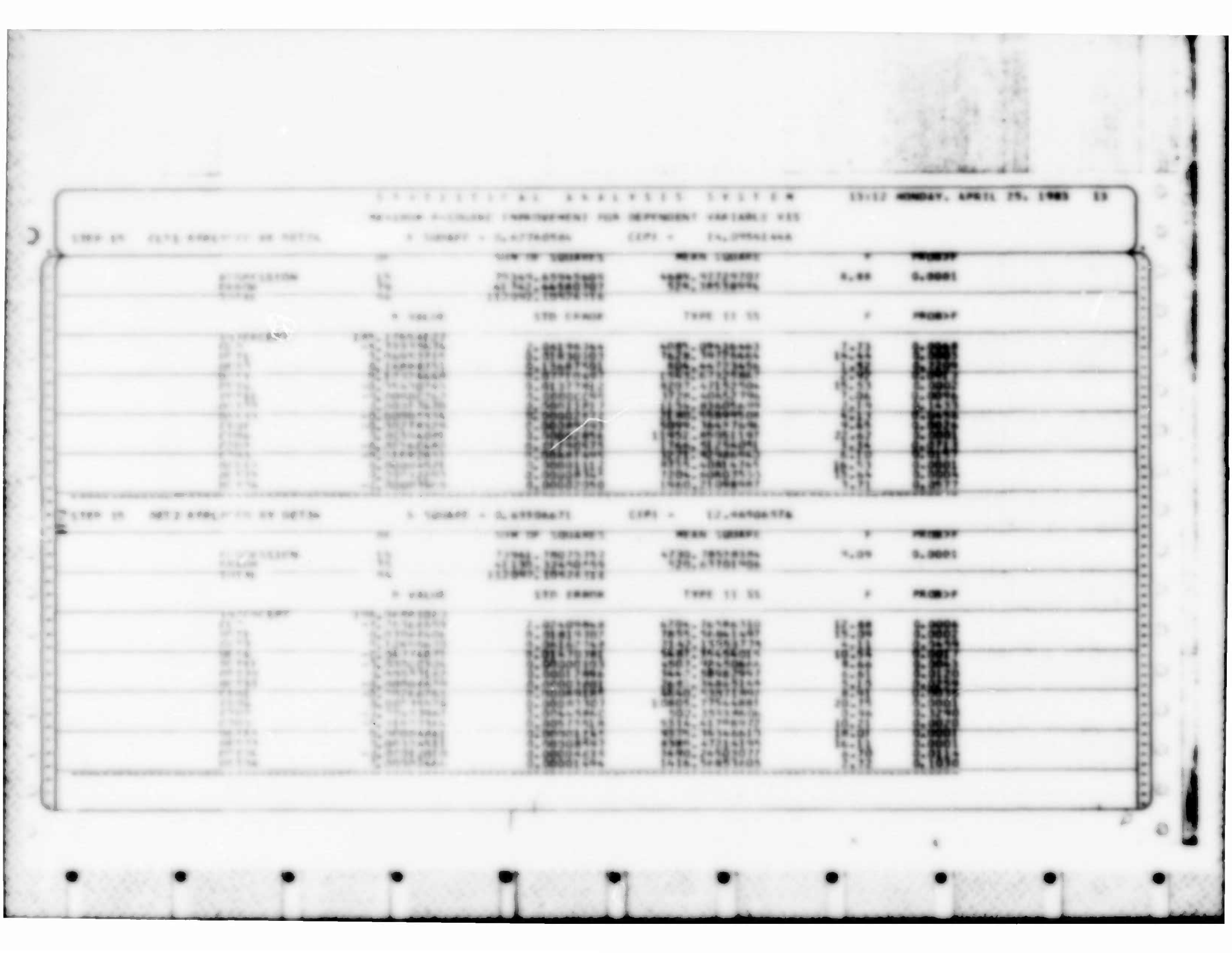


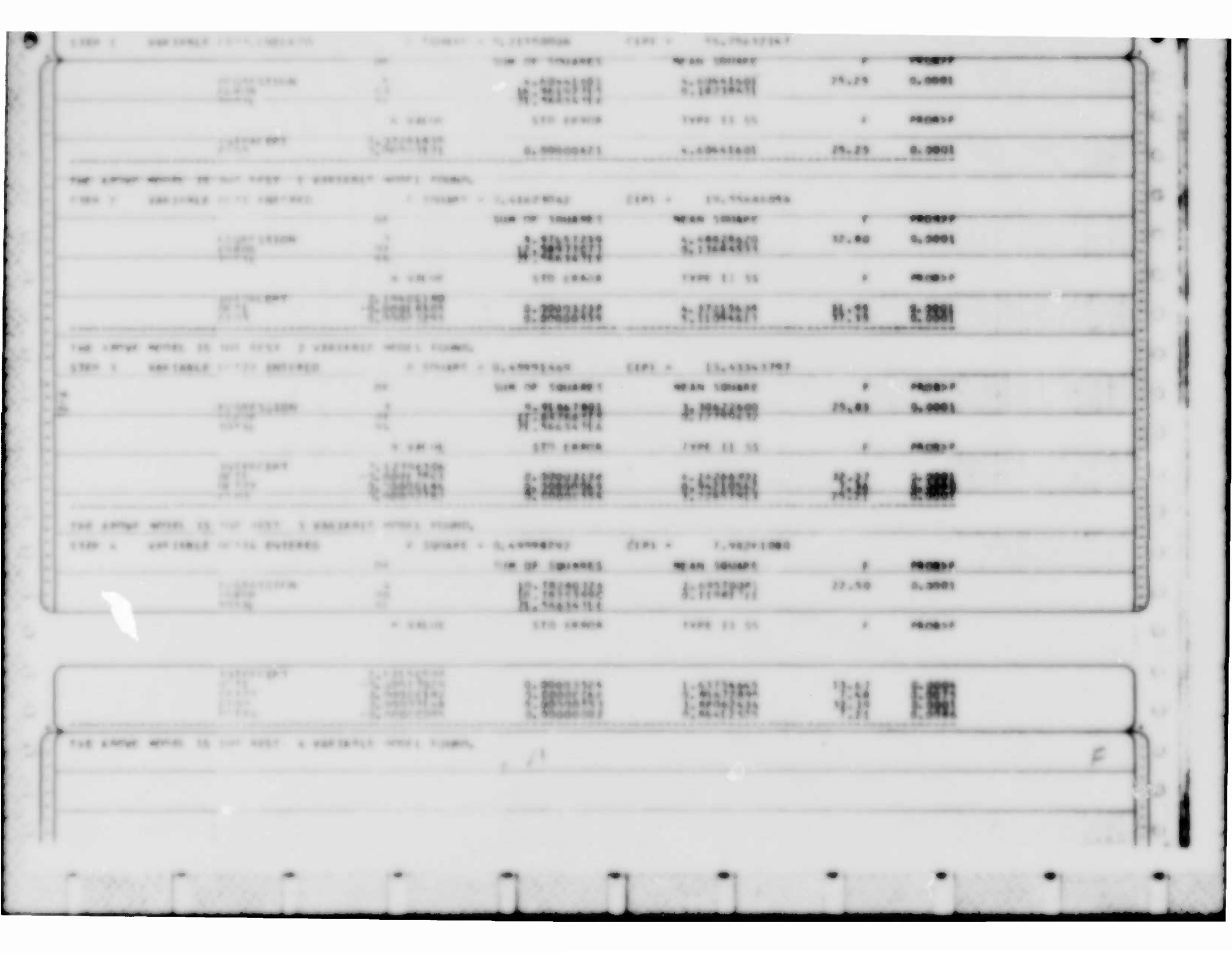


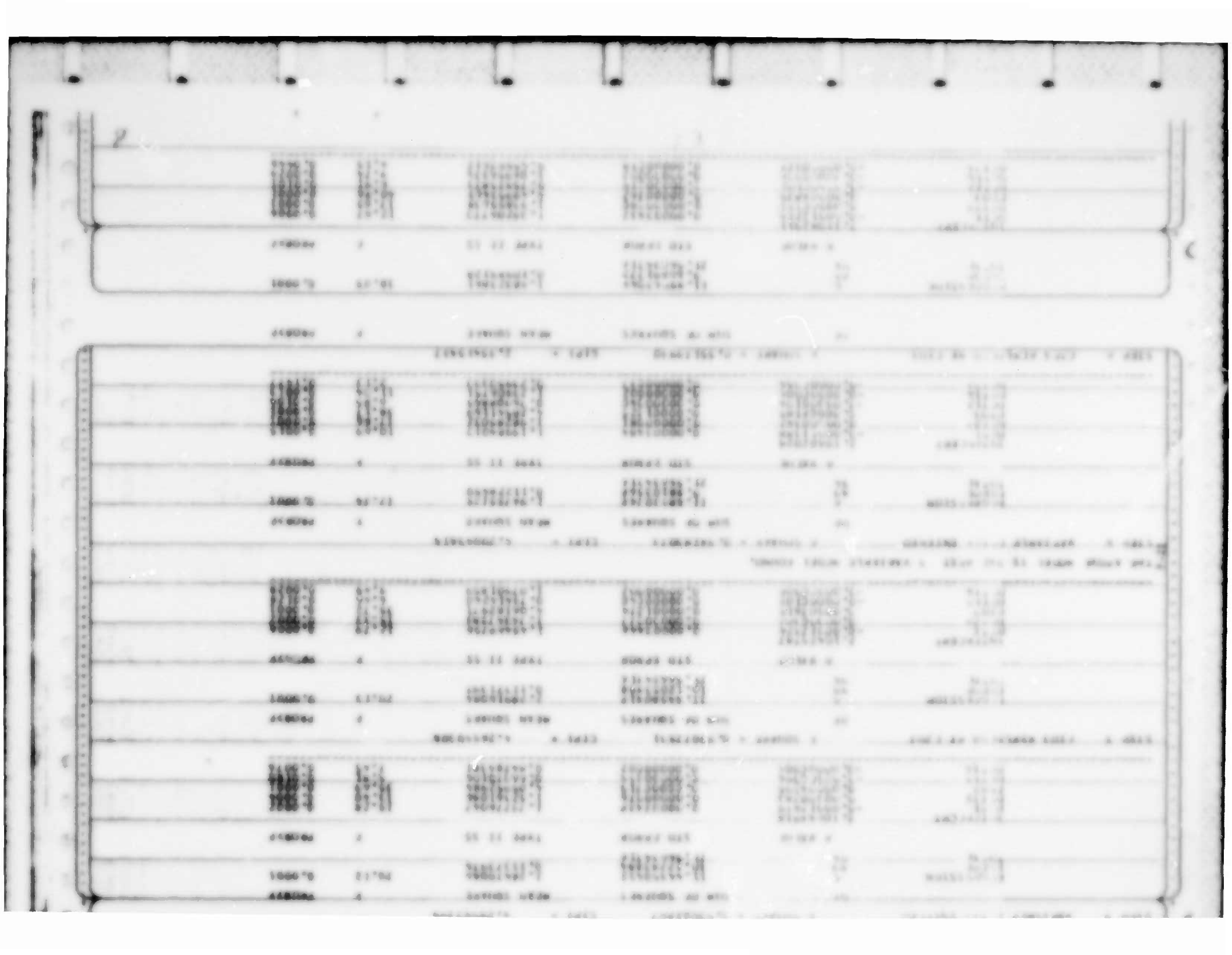


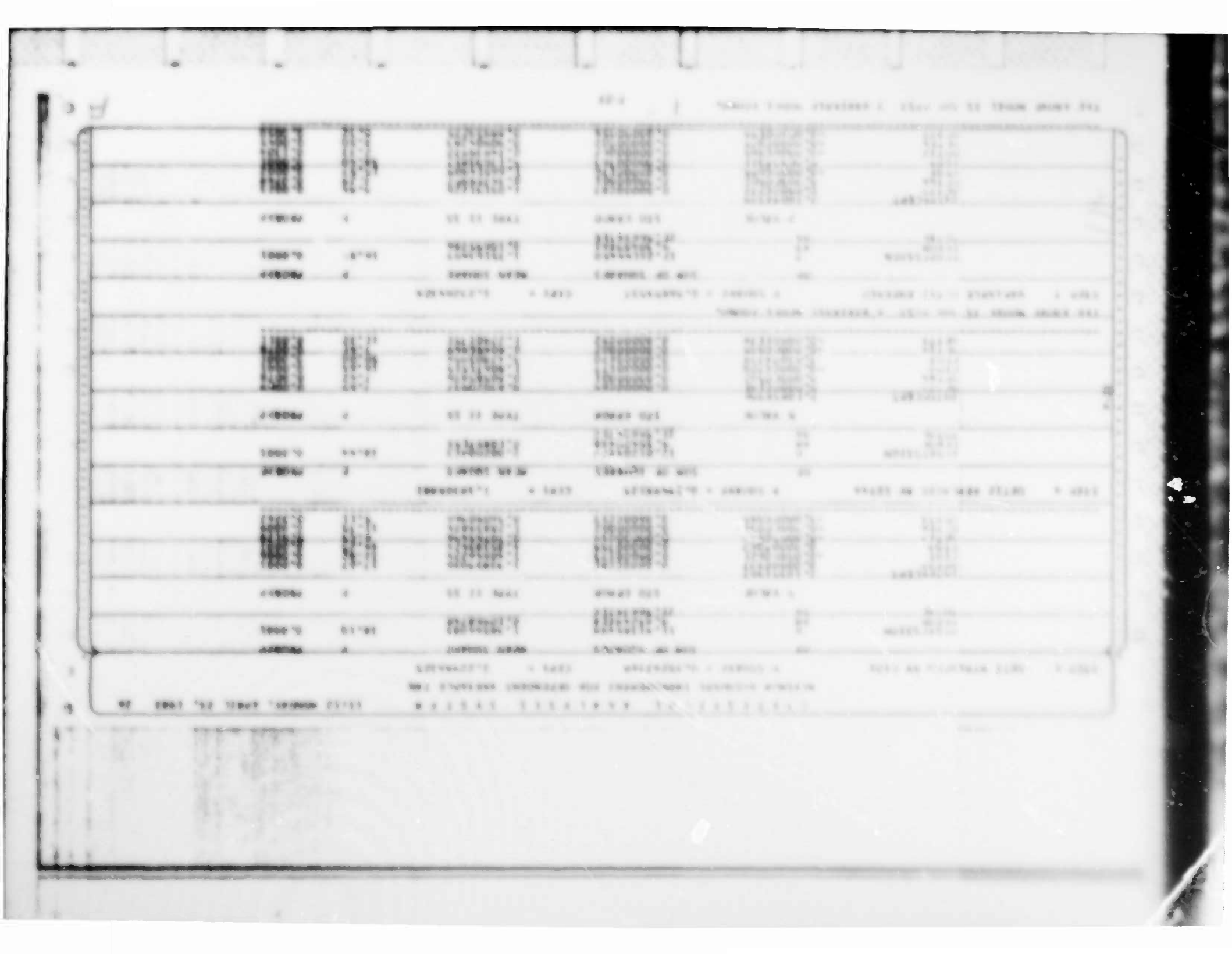


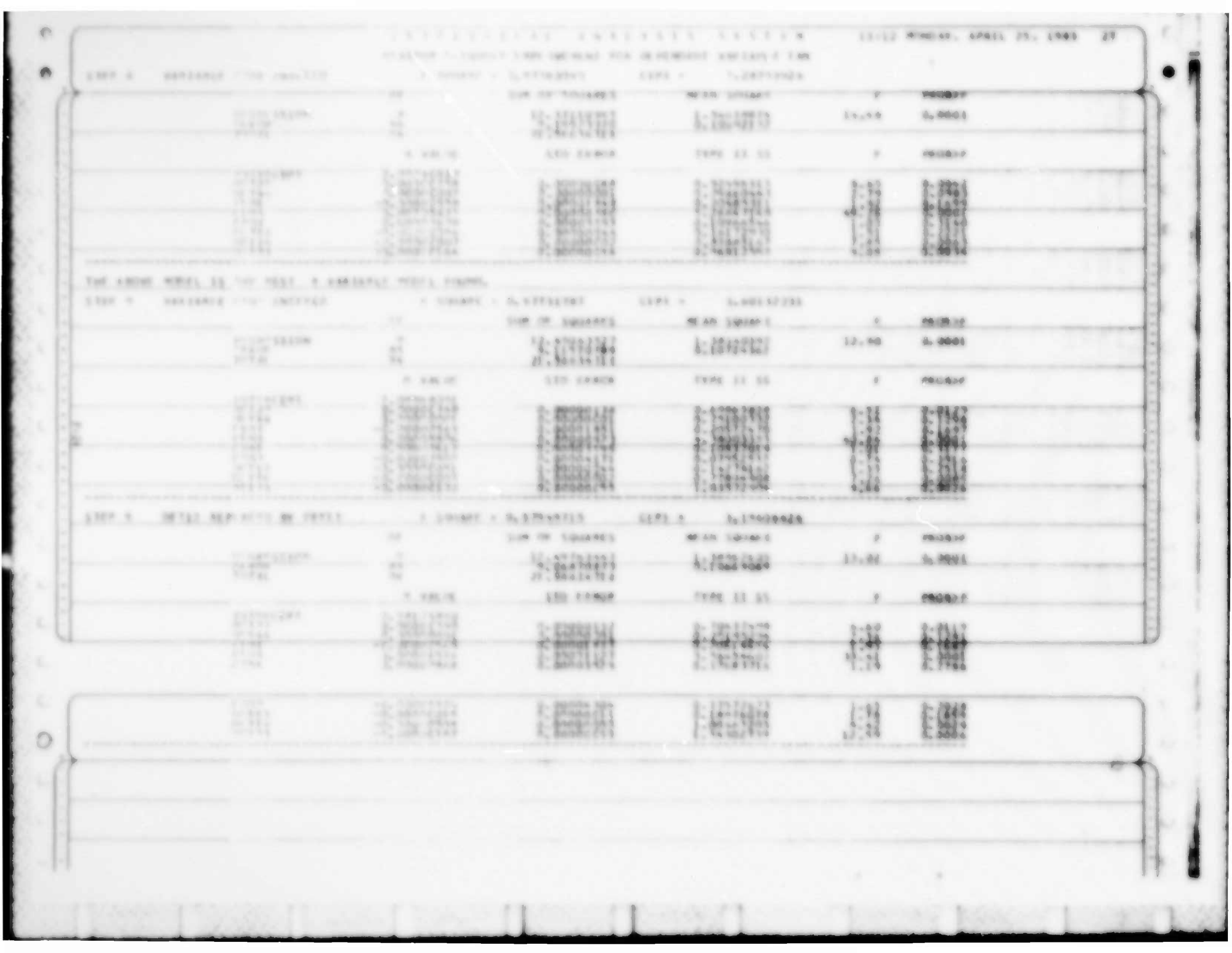


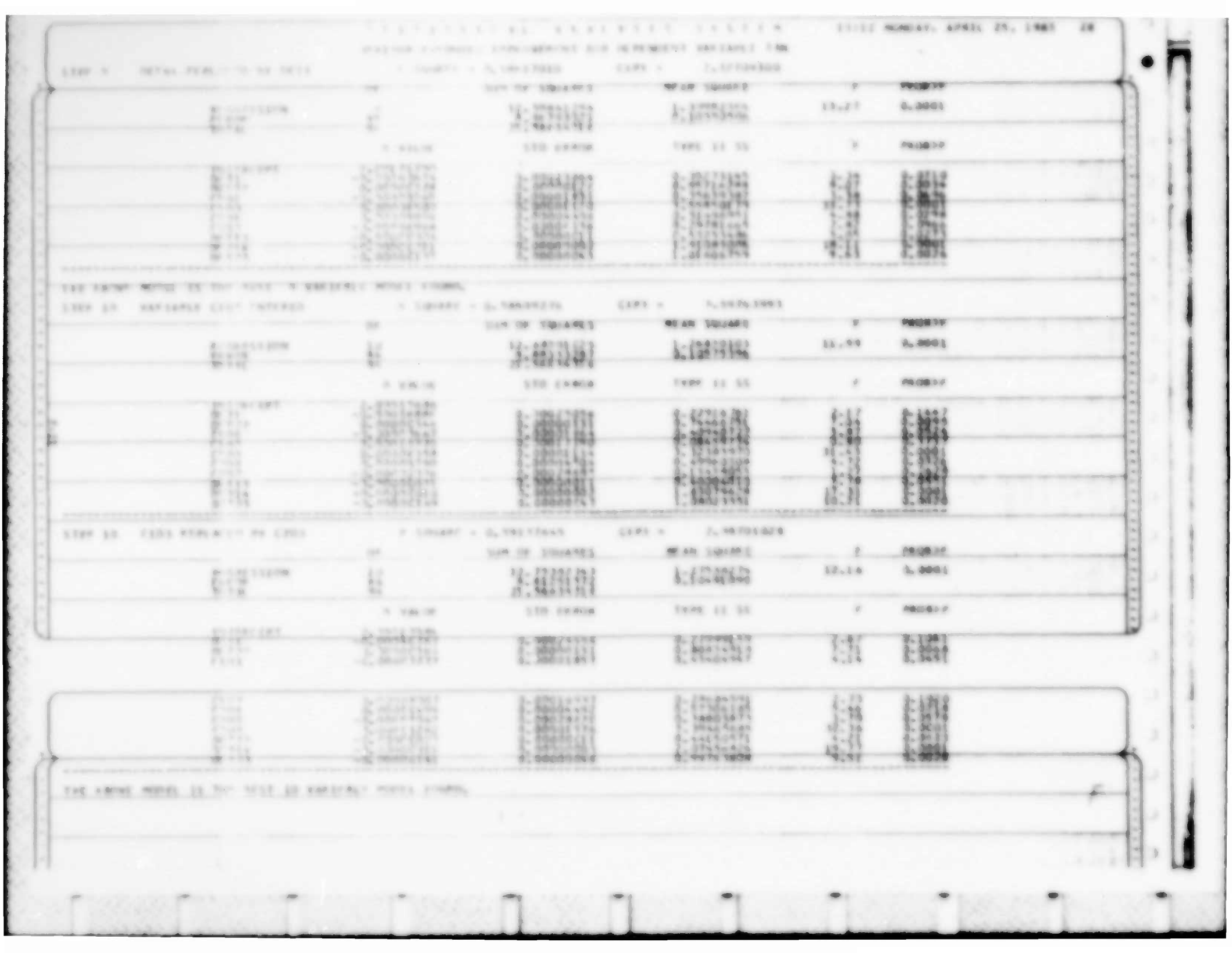


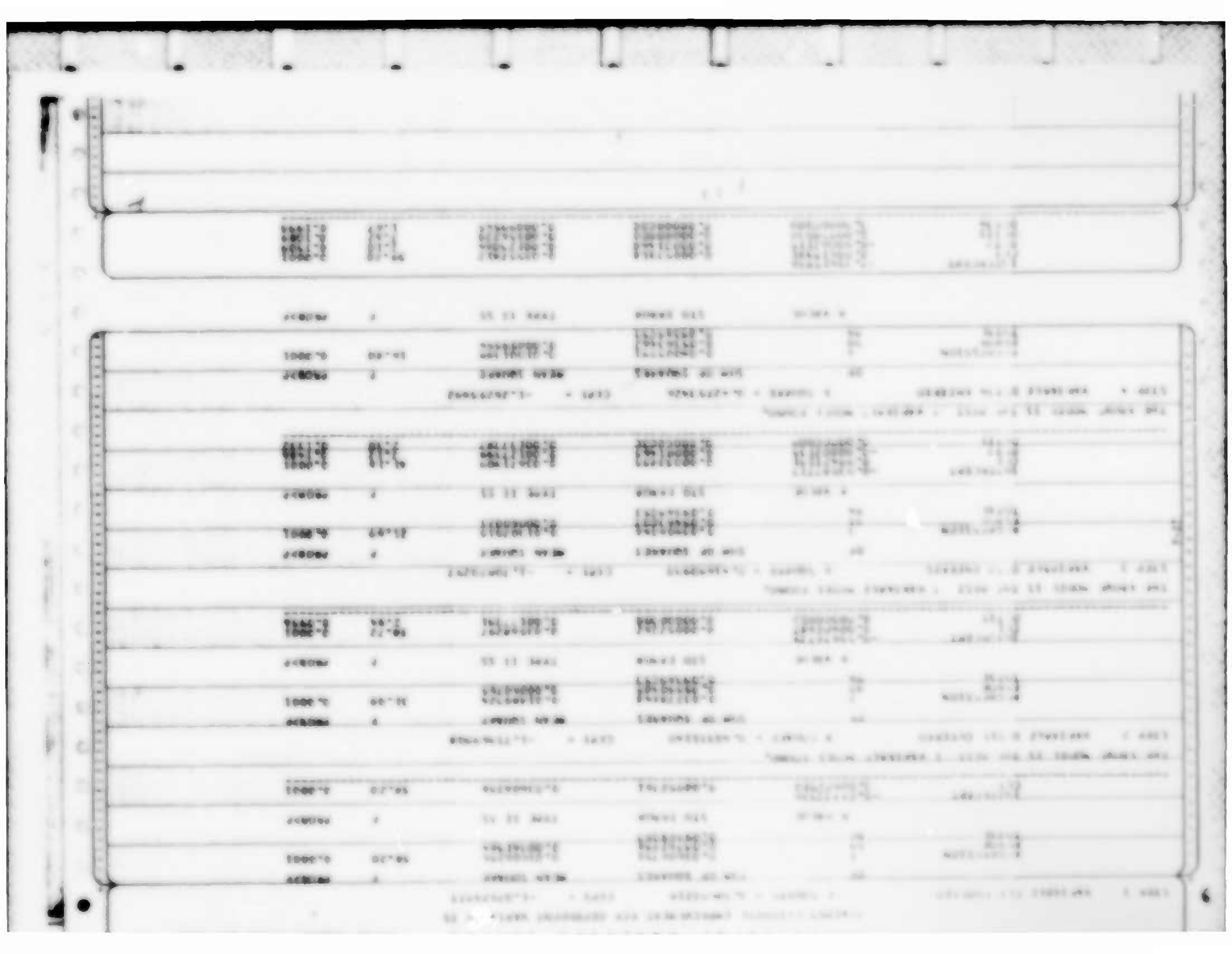


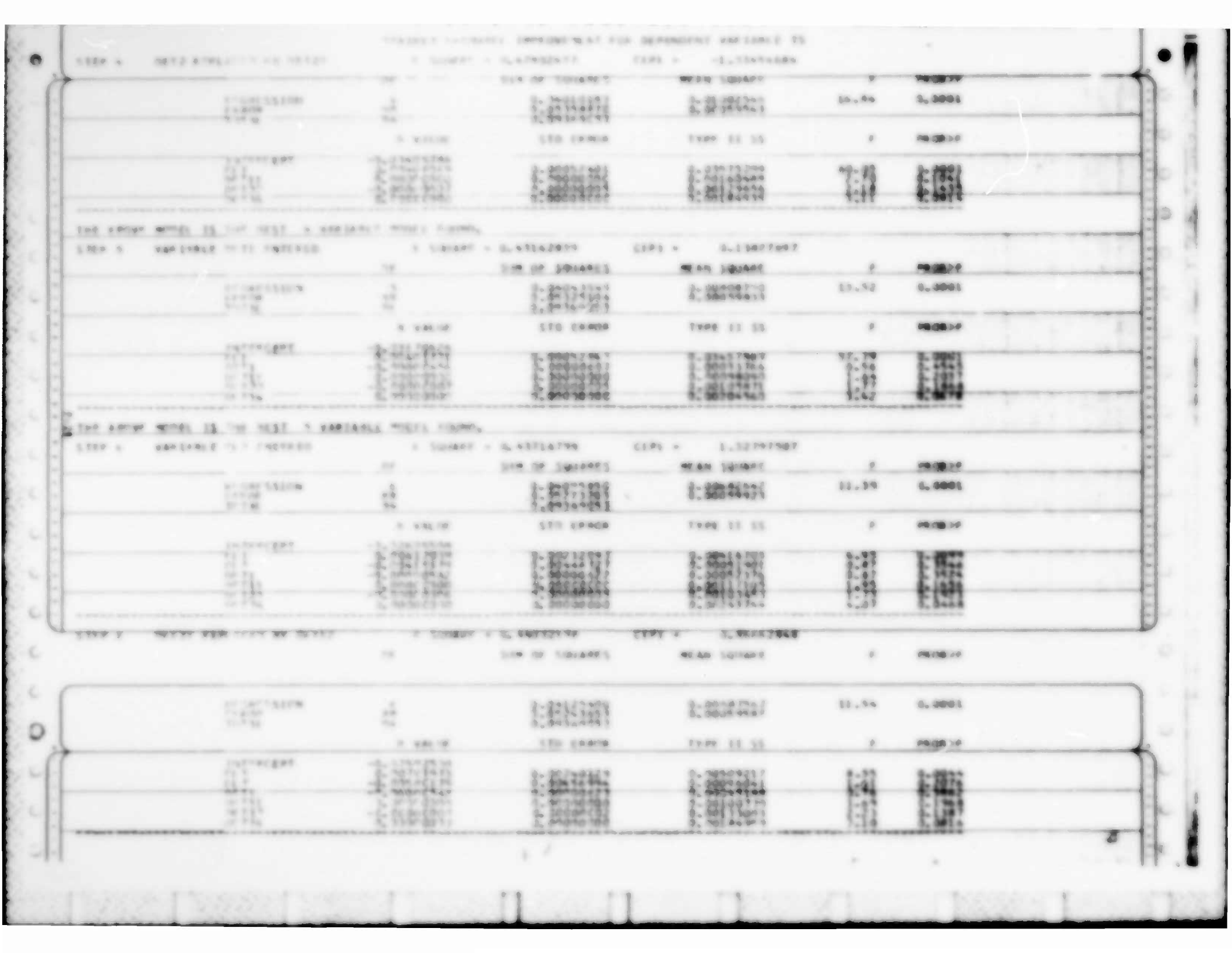


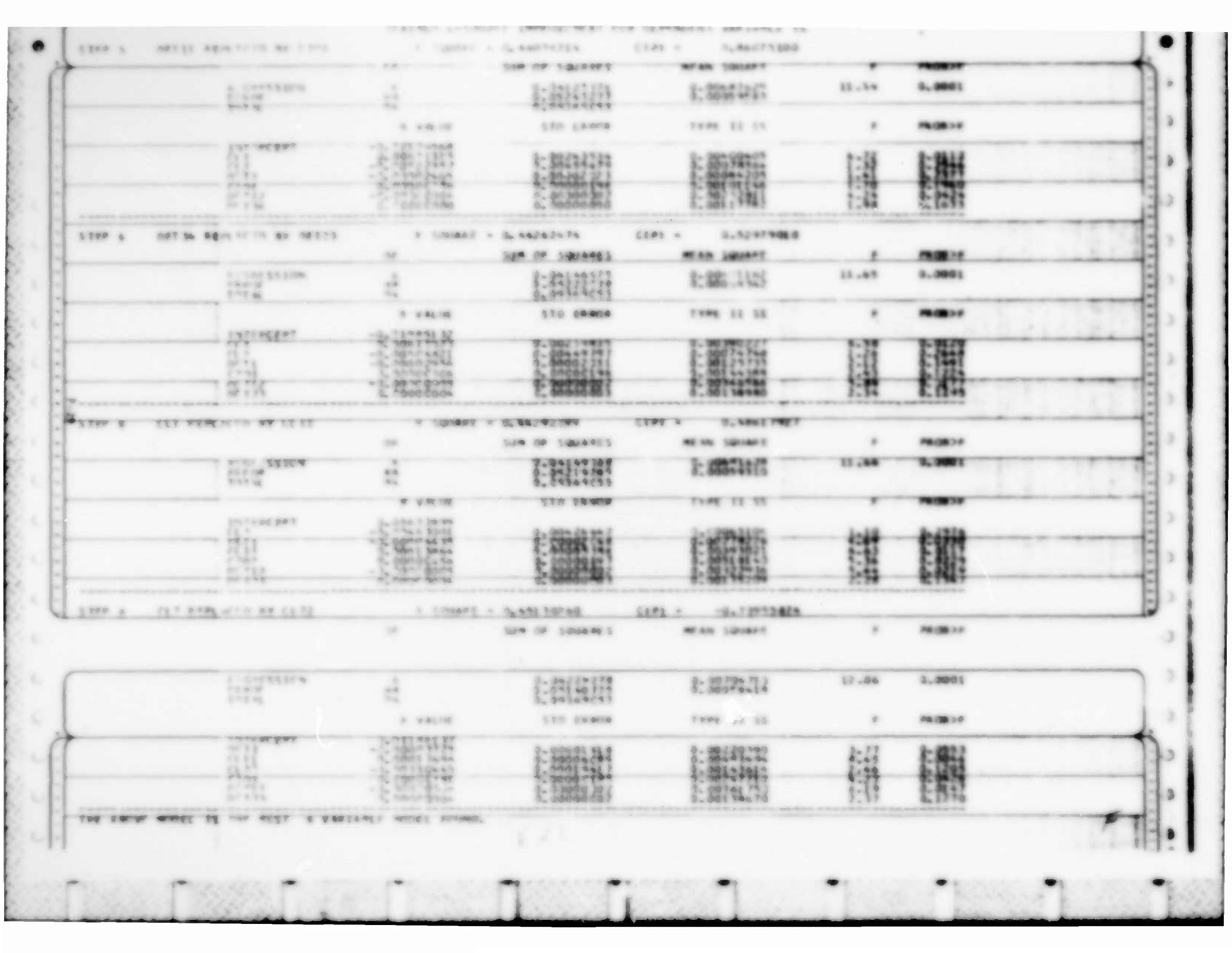












[redacted]

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE QC

STEP 3 VARIABLE HT2 ENTERED R SQUARE = 0.36299649 C(P) = 8.76570418

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	[illegible]	[illegible]	9.44	0.0001
ERROR	57	[illegible]	[illegible]		
TOTAL	60	[illegible]			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HT2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL2I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE HT2J ENTERED R SQUARE = 0.37166453 C(P) = 6.28716324

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	[illegible]	[illegible]	7.84	0.0001
ERROR	56	[illegible]	[illegible]		
TOTAL	60	[illegible]			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HT2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL2I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL2J	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE CL2J ENTERED R SQUARE = 0.40216412 C(P) = 7.55478799

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	[illegible]	[illegible]	7.00	0.0001
ERROR	55	[illegible]	[illegible]		
TOTAL	60	[illegible]			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HT2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL2I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL2J	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CL3J	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE DC

STEP 6 VARIABLE X304 ENTERED R SQUARE = 0.42096720 C(P) = 7.87096101

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	[illegible]	[illegible]	6.18	0.0001
ERROR	24	[illegible]	[illegible]		
TOTAL	30	[illegible]			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

STEP 7 VARIABLE X202 ENTERED R SQUARE = 0.43704221 C(P) = 8.43059921

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	[illegible]	[illegible]	5.55	0.0001
ERROR	23	[illegible]	[illegible]		
TOTAL	30	[illegible]			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE GC

STEP 7 CL22 REPLACED BY CI03 R SQUARE = 0.54364899 C(P) = -1.10600611

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	[illegible]	[illegible]	[illegible]	[illegible]
ERROR	20	[illegible]	[illegible]		
TOTAL	27	[illegible]			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

STEP 7 B104 REPLACED BY D0744 R SQUARE = 0.55124656 C(P) = -1.80004481

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	[illegible]	[illegible]	6.77	0.0001
ERROR	20	[illegible]	[illegible]		
TOTAL	27	[illegible]			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

[illegible]

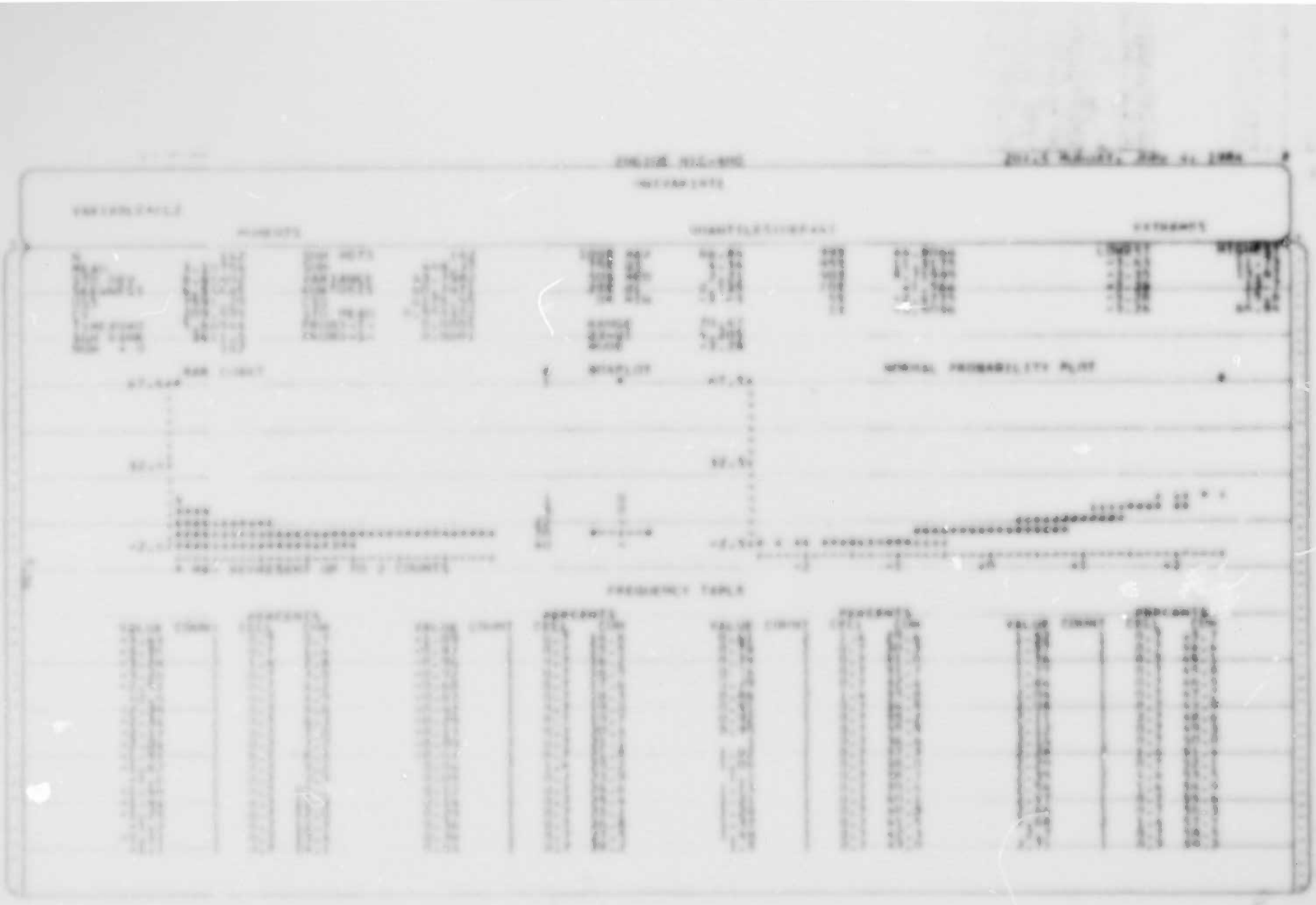
STEP 10 VARIABLE C(1) ENTERED MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE SC

R SQUARE = 0.99488758 C(P) = 0.29999060

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	[illegible]	[illegible]	[illegible]	[illegible]
ERROR	91	[illegible]	[illegible]		
TOTAL	101	[illegible]			

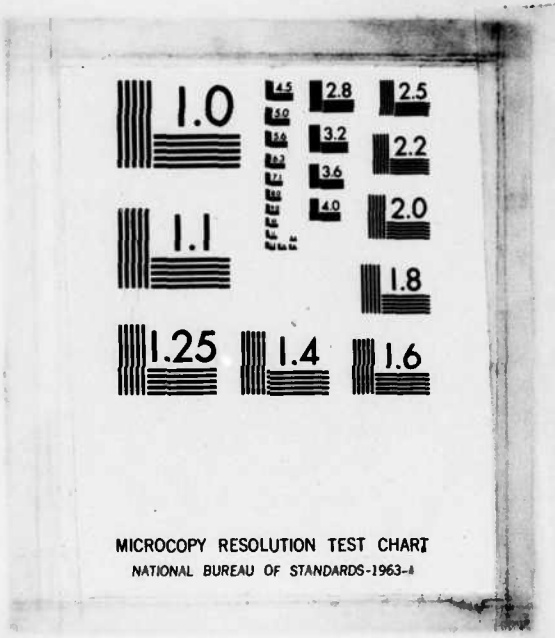
	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

THE LARGEST MODEL IS THE BEST IN VARIABLE MODEL FOUND.



AD-A152 994 EVALUATION OF USED CRANKCASE OILS USING COMPUTERIZED INFRARED SPECTROMETR..(U) JOINT OIL ANALYSIS PROGRAM PENSACOLA FL TECHNICAL SUPPORT CEN.. B B MCCAA ET AL. 3/5

UNCLASSIFIED JUN 84 JOAP-TSC-84-01-APP F/G 20/6 NL


1.0
1.1
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1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6
6.3
7.1
8.0
9.0
10
11
12
14
16
18
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22
25
28
32
36
40
45
50
56
63
71
80
90
100
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

UNIVARIATE

VARIABLE=CL2

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
2.72	2	1.4	60.6
2.75	2	1.4	62.0
2.76	1	0.7	62.7
2.88	2	1.4	64.1
3	2	1.4	65.5
3.01	1	0.7	66.2
3.05	1	0.7	66.9
3.28	1	0.7	67.6
3.31	1	0.7	68.3
3.34	1	0.7	69.0
3.35	1	0.7	69.7
3.51	1	0.7	70.4
3.59	1	0.7	71.1
3.62	1	0.7	71.8
3.68	1	0.7	72.5
3.82	1	0.7	73.2
3.84	1	0.7	73.9
4.19	1	0.7	74.6
4.34	2	1.4	76.1
4.37	1	0.7	76.8
4.39	1	0.7	77.5
4.68	1	0.7	78.2
4.77	1	0.7	78.9
4.96	1	0.7	79.6
5.57	1	0.7	80.3
5.81	1	0.7	81.0
5.9	1	0.7	81.7
6.1	1	0.7	82.4
6.73	1	0.7	83.1
6.85	1	0.7	83.8
7.01	1	0.7	84.5
7.07	1	0.7	85.2
7.43	1	0.7	85.9
7.65	1	0.7	86.6
8.04	1	0.7	87.3
8.17	1	0.7	88.0
8.43	1	0.7	88.7
8.44	1	0.7	89.4
8.51	1	0.7	90.1
8.81	1	0.7	90.8
8.82	1	0.7	91.5
8.89	1	0.7	92.3
9.16	1	0.7	93.0
10.85	1	0.7	93.7
11.04	1	0.7	94.4
11.19	1	0.7	95.1
11.34	1	0.7	95.8
11.56	1	0.7	96.5
11.73	1	0.7	97.2
13.67	1	0.7	97.9
13.7	1	0.7	98.6
15.6	1	0.7	99.3
66.84	1	0.7	100.0

UNIVARIATE

VARIABLE=DET1

MOMENTS

N	142	SUM WGTS	142
MEAN	743.28	SUM	105546
STD DEV	1206.56	VARIANCE	1455790
SKEWNESS	2.91102	KURTOSIS	11.5306
USS	283716512	CSS	205266371
CV	162.329	STD MEAN	101.252
T:MEAN=0	7.34087	PROB>|T|	0.0001
SGN RANK	4015.5	PROB>|S|	0.0001
NUM ^= 0	142		

QUANTILES(DEF=4)

100% MAX	7207.02	99%	7081.53
75% Q3	953.64	95%	2877.51
50% MED	438.935	90%	1865.63
25% Q1	-142.16	10%	-169.026
0% MIN	-877.62	5%	-497.974
		1%	-865.889
RANGE	8084.64		
Q3-Q1	811.48		
MODE	1626.12		

EXTREMES

LOWEST	HIGHEST
-877.62	3949.36
-850.34	4222.83
-803.62	5648.3
-713.17	6915.18
-688.81	7207.02

STEM LEAF

```
  7 2
  6 9
  6
  5 6
  5
  4
  4 2
  3 9
  3 1
  2 679
  2 023
  1 6666678899
  1 1111112233334
  0 555555556666666777777778888889999999
  0 111111112222222222233333333334444444444444
 -0 44422222211111000000000
 -0 99887765
```

MULTIPLY STEM.LEAF BY 10**+03

BOXPLOT

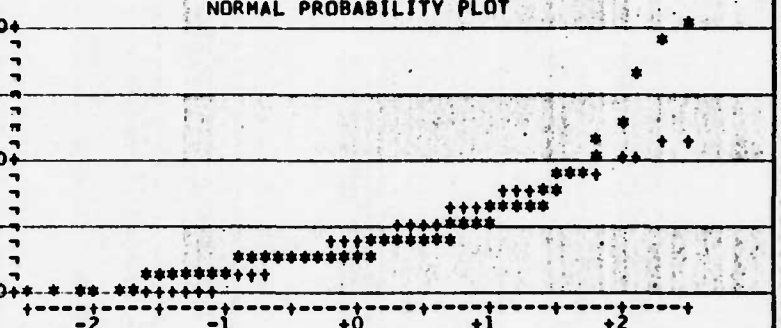
```
1      *
1      *
1      *
1      *
1      0
3      0
3      0
10     +
13     |
35     +--+--+
42     *-----*
23     |
7      |
       +
```

7250+

3250+

-750+

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-877.62	1	0.7	0.7	-96.46	1	0.7	12.7	140.78	1	0.7	24.6	273.48	1	0.7	36.6
-850.34	1	0.7	1.4	-86.52	1	0.7	13.4	142.62	1	0.7	25.4	289.31	1	0.7	37.3
-803.62	1	0.7	2.1	-77.21	1	0.7	14.1	142.75	1	0.7	26.1	295.95	1	0.7	38.0
-713.17	1	0.7	2.8	-76.91	1	0.7	14.8	148.06	1	0.7	26.8	302.06	1	0.7	38.7
-688.81	1	0.7	3.5	-43.55	1	0.7	15.5	161.04	1	0.7	27.5	324.6	1	0.7	39.4
-596.5	1	0.7	4.2	-26.37	1	0.7	16.2	164.74	1	0.7	28.2	324.75	1	0.7	40.1
-507.34	1	0.7	4.9	-12.25	1	0.7	16.9	170.5	1	0.7	28.9	327.84	1	0.7	40.8
-444.9	1	0.7	5.6	-2.71	1	0.7	17.6	183.42	1	0.7	29.6	329.16	1	0.7	41.5
-369.24	1	0.7	6.3	10.6	1	0.7	18.3	184.67	1	0.7	30.3	347.92	1	0.7	42.3
-364.37	1	0.7	7.0	12.21	1	0.7	19.0	191.2	1	0.7	31.0	356.73	1	0.7	43.0
-245.22	1	0.7	7.7	22.59	1	0.7	19.7	198.33	1	0.7	31.7	358.06	1	0.7	43.7
-221.99	1	0.7	8.5	25.74	1	0.7	20.4	199.73	1	0.7	32.4	365.12	1	0.7	44.4
-176.71	1	0.7	9.2	46.87	1	0.7	21.1	214.67	1	0.7	33.1	375.22	1	0.7	45.1
-174.87	1	0.7	9.9	50.21	1	0.7	21.8	231.74	1	0.7	33.8	378.75	1	0.7	45.8
-155.39	1	0.7	10.6	86.39	1	0.7	22.5	239.69	1	0.7	34.5	383.14	1	0.7	46.5
-141.29	1	0.7	11.3	95.9	1	0.7	23.2	251.12	1	0.7	35.2	396.45	1	0.7	47.2
-104.39	1	0.7	12.0	108.13	1	0.7	23.9	269.21	1	0.7	35.9	415.4	1	0.7	47.9

UNIVARIATE

VARIABLE=NET1

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
427.27	1	0.7	48.6	659.43	1	0.7	62.0	921.11	1	0.7	75.4	1752.47	1	0.7	89.4
429.5	1	0.7	49.3	664.65	1	0.7	62.7	1051.23	1	0.7	76.1	1764.16	1	0.7	90.1
435.6	1	0.7	50.0	675.5	1	0.7	63.4	1064.67	1	0.7	76.8	1909.12	1	0.7	90.8
442.27	1	0.7	50.7	689.86	1	0.7	64.1	1070.45	1	0.7	77.5	1933.01	1	0.7	91.5
471.13	1	0.7	51.4	727.26	1	0.7	64.8	1075.98	1	0.7	78.2	1976.6	1	0.7	92.3
476.55	1	0.7	52.1	737.01	1	0.7	65.5	1076.83	1	0.7	78.9	2224.1	1	0.7	93.0
484.18	1	0.7	52.8	737.35	1	0.7	66.2	1099.24	1	0.7	79.6	2298.8	1	0.7	93.7
489.9	1	0.7	53.5	741.46	1	0.7	66.9	1184.8	1	0.7	80.3	2576.66	1	0.7	94.4
511.08	1	0.7	54.2	764.91	1	0.7	67.6	1236.73	1	0.7	81.0	2675.31	1	0.7	95.1
511.47	1	0.7	54.9	769.35	1	0.7	68.3	1279.1	1	0.7	81.7	2913.2	1	0.7	95.8
513.32	1	0.7	55.6	779.23	1	0.7	69.0	1318.27	1	0.7	82.4	3095.55	1	0.7	96.5
520.96	1	0.7	56.3	781.39	1	0.7	69.7	1319.23	1	0.7	83.1	3949.36	1	0.7	97.2
588.5	1	0.7	57.0	793.38	1	0.7	70.4	1346.49	1	0.7	83.8	4222.83	1	0.7	97.9
598.1	1	0.7	57.7	806.11	1	0.7	71.1	1356.35	1	0.7	84.5	5648.3	1	0.7	98.6
610.95	1	0.7	58.5	861.66	1	0.7	71.8	1553.95	1	0.7	85.2	6915.18	1	0.7	99.3
615.81	1	0.7	59.2	869.37	1	0.7	72.5	1591.64	1	0.7	85.9	7207.02	1	0.7	100.0
631.81	1	0.7	59.9	871.02	1	0.7	73.2	1592.92	1	0.7	86.6				
642.36	1	0.7	60.6	892.39	1	0.7	73.9	1626.12	2	1.4	88.0				
642.42	1	0.7	61.3	895.56	1	0.7	74.6	1651.77	1	0.7	88.7				

UNIVARIATE

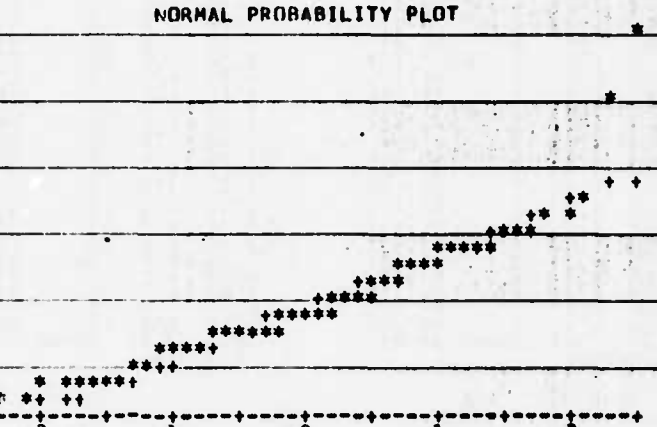
VARIABLE=DET2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	142	SUM WGTS	142	100% MAX	953.22	99%	869.893	LOWEST	HIGHEST
MEAN	147.193	SUM	20901.5	75% Q3	229.58	95%	393.837	-104.93	413.35
STD DEV	154.161	VARIANCE	23765.7	50% MED	121.87	90%	326.503	-103.26	414.02
SKEWNESS	1.49653	KURTOSIS	5.54756	25% Q1	51.95	10%	-19.349	-102.53	456.28
USS	6427514	CSS	3350958	0% MIN	-104.93	5%	-85.7945	-99.53	759.44
CV	104.734	STD MEAN	12.9369			1%	-104.212	-93.24	953.22
T:MEAN=0	11.3778	PROB>|T|	0.0001	RANGE	1058.15				
SGN RANK	4486.5	PROB>|S|	0.0001	Q3-Q1	177.63				
NUM ^= 0	142			MODE	117.23				

STEM	LEAF	#	BOXPLOT
9	5	1	*
8			
7	6	1	0
6			
5			
4	6	1	
4	0111	4	
3	679	3	
3	00111122223344	14	
2	5667777788	10	
2	000011234	9	+-----+
1	555666777888999999	17	
1	000001111222222222333333444	26	*--+--*
0	55555556777777777888889999	26	+-----+
0	111222334	9	
-0	21110000	8	
-0	999866555	9	
-1	0000	4	

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-104.93	1	0.7	0.7	-52.38	1	0.7	8.5	7.41	1	0.7	16.2	50.33	1	0.7	23.9
-103.26	1	0.7	1.4	-50.44	1	0.7	9.2	12.75	1	0.7	16.9	51.92	1	0.7	24.6
-102.53	1	0.7	2.1	-22.1	1	0.7	9.9	18.01	1	0.7	17.6	51.96	1	0.7	25.4
-99.53	1	0.7	2.8	-12.93	1	0.7	10.6	19.07	1	0.7	18.3	52.39	1	0.7	26.1
-93.24	1	0.7	3.5	-12.4	1	0.7	11.3	23.81	1	0.7	19.0	57.42	1	0.7	26.8
-88.33	1	0.7	4.2	-9.84	1	0.7	12.0	25.29	1	0.7	19.7	65.43	1	0.7	27.5
-86.63	1	0.7	4.9	-2.92	1	0.7	12.7	29.09	1	0.7	20.4	67.77	1	0.7	28.2
-81.06	1	0.7	5.6	3.85	1	0.7	13.4	35.05	1	0.7	21.1	69.01	1	0.7	28.9
-64.77	1	0.7	6.3	3.9	1	0.7	14.1	47.63	1	0.7	21.8	70.27	1	0.7	29.6
-57.65	1	0.7	7.0	4.33	1	0.7	14.8	49.64	1	0.7	22.5	70.39	1	0.7	30.3
-54.67	1	0.7	7.7	6.6	1	0.7	15.5	50.28	1	0.7	23.2	70.46	1	0.7	31.0

UNIVARIATE

VARIABLE=DET2

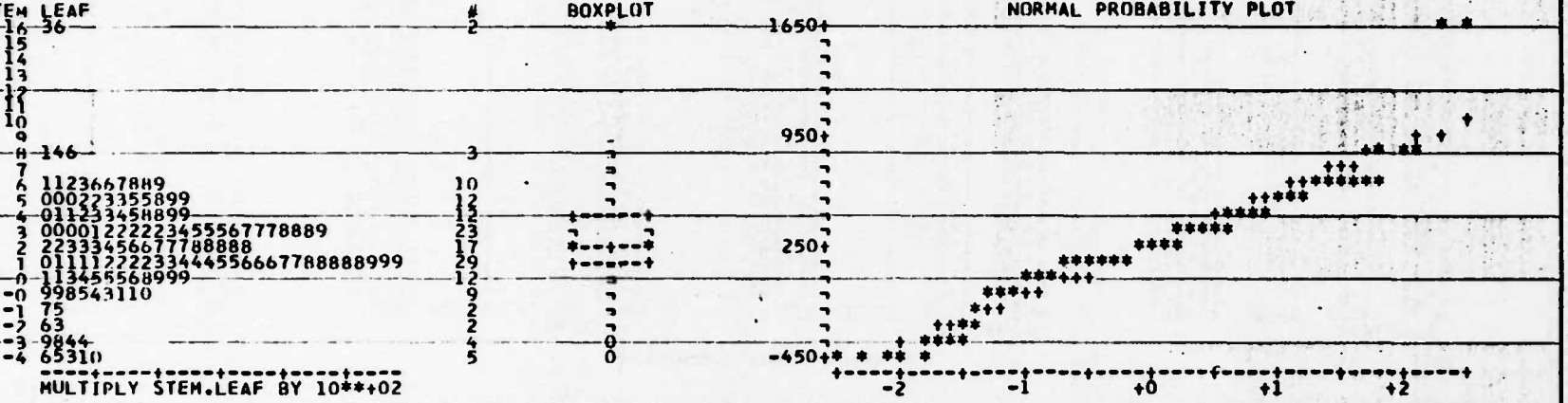
FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
70.47	1	0.7	31.7	120.87	1	0.7	50.0	188.23	1	0.7	67.6	305.05	1	0.7	85.2
73.83	1	0.7	32.4	122.87	1	0.7	50.7	188.89	1	0.7	68.3	305.67	1	0.7	85.9
74.18	1	0.7	33.1	124.98	1	0.7	51.4	190.96	1	0.7	69.0	311.05	1	0.7	86.6
80.87	1	0.7	33.8	126.42	1	0.7	52.1	192.61	1	0.7	69.7	313.9	1	0.7	87.3
81.17	1	0.7	34.5	128	1	0.7	52.8	201.49	1	0.7	70.4	315.77	1	0.7	88.0
81.53	1	0.7	35.2	128.63	1	0.7	53.5	202.14	1	0.7	71.1	317.15	1	0.7	88.7
82.61	1	0.7	35.9	131.66	1	0.7	54.2	202.91	1	0.7	71.8	319.05	1	0.7	89.4
84.8	1	0.7	36.6	131.93	1	0.7	54.9	204.41	1	0.7	72.5	323.43	1	0.7	90.1
89.13	1	0.7	37.3	134.38	1	0.7	55.6	211.74	1	0.7	73.2	327.82	1	0.7	90.8
90.69	1	0.7	38.0	137.04	1	0.7	56.3	213.6	1	0.7	73.9	330.74	1	0.7	91.6
94.66	1	0.7	38.7	138.39	1	0.7	57.0	216.78	1	0.7	74.6	341.89	1	0.7	92.3
94.87	1	0.7	39.4	139.84	1	0.7	57.7	227.48	1	0.7	75.4	342.9	1	0.7	93.0
96.12	1	0.7	40.1	148.67	1	0.7	58.5	235.88	1	0.7	76.1	356.92	1	0.7	93.7
97.51	1	0.7	40.8	151.37	1	0.7	59.2	249.06	1	0.7	76.8	370.73	1	0.7	94.4
99.47	1	0.7	41.5	152.97	1	0.7	59.9	256.02	1	0.7	77.5	385.38	1	0.7	95.1
100.81	1	0.7	42.3	160.7	1	0.7	60.6	261.41	1	0.7	78.2	395.33	1	0.7	95.8
104.64	1	0.7	43.0	162.75	1	0.7	61.3	265.72	1	0.7	78.9	412.41	1	0.7	96.5
107.7	1	0.7	43.7	163.71	1	0.7	62.0	266.86	1	0.7	79.6	413.55	1	0.7	97.2
109.56	1	0.7	44.4	167.91	1	0.7	62.7	267.13	1	0.7	80.3	414.02	1	0.7	97.9
111.58	1	0.7	45.1	169.64	1	0.7	63.4	271.86	1	0.7	81.0	456.28	1	0.7	98.6
113.68	1	0.7	45.8	174.45	1	0.7	64.1	272.32	1	0.7	81.7	759.44	1	0.7	99.3
117.23	2	1.4	47.2	177.43	1	0.7	64.8	279.24	1	0.7	82.4	953.22	1	0.7	100.0
117.56	1	0.7	47.9	178.28	1	0.7	65.5	282.35	1	0.7	83.1				
118.53	1	0.7	48.6	180.97	1	0.7	66.2	296.91	1	0.7	83.8				
120.73	1	0.7	49.3	185.39	1	0.7	66.9	298.91	1	0.7	84.5				

UNIVARIATE

VARIABLE=DET3

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	142	SUM WGTS	142	100% MAX	1656.7	99%	1646.87	LOWEST	HIGHEST
MEAN	256.327	SUM	36398.4	75% Q3	422.9	95%	678.49	-458.15	811.62
STD DEV	320.119	VARIANCE	102476	50% MED	261.13	90%	613.612	-448.84	840.6
SKEWNESS	0.788944	KURTOSIS	4.07897	25% Q1	107.147	10%	-89.166	-426.52	860.38
USS	23779055	CSS	14449181	0% MIN	-458.15	5%	-372.358	-412.95	1633.83
CV	124.887	STD MEAN	26.8638			1%	-454.147	-402.26	1656.7
T:MEAN=0	9.5417	PROB>|T|	0.0001	RANGE	2114.85				
SGN RANK	3906.5	PROB>|S|	0.0001	Q3-Q1	315.752				
NUM ^= 0	142			MODE	280.97				



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-458.15	1	0.7	0.7	-151.72	1	0.7	9.2	29.68	1	0.7	17.6	111.97	1	0.7	26.1
-448.84	1	0.7	1.4	-90.93	1	0.7	9.9	39.86	1	0.7	18.3	113.26	1	0.7	26.8
-426.52	1	0.7	2.1	-85.05	1	0.7	10.6	45.35	1	0.7	19.0	113.32	1	0.7	27.5
-412.95	1	0.7	2.8	-78.08	1	0.7	11.3	49.1	1	0.7	19.7	118.32	1	0.7	28.2
-402.26	1	0.7	3.5	-49.69	1	0.7	12.0	50.24	1	0.7	20.4	120.24	1	0.7	28.9
-388.35	1	0.7	4.2	-35.78	1	0.7	12.7	61.84	1	0.7	21.1	122.47	1	0.7	29.6
-377.41	1	0.7	4.9	-25.35	1	0.7	13.4	83.17	1	0.7	21.8	124.04	1	0.7	30.3
-343.73	1	0.7	5.6	-11.35	1	0.7	14.1	85.42	1	0.7	22.5	130.83	1	0.7	31.0
-335.59	1	0.7	6.3	-9.42	1	0.7	14.8	87.18	1	0.7	23.2	133.41	1	0.7	31.7
-264.57	1	0.7	7.0	0.44	1	0.7	15.5	88.41	1	0.7	23.9	135.44	1	0.7	32.4
-225.35	1	0.7	7.7	6.22	1	0.7	16.2	95.95	1	0.7	24.6	138.08	1	0.7	33.1
-168.26	1	0.7	8.5	9.5	1	0.7	16.9	110.88	1	0.7	25.4	143.84	1	0.7	33.8

UNIVARIATE

VARIABLE=DET3

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
152.56	1	0.7	34.5
153.54	1	0.7	35.2
157.15	1	0.7	35.9
157.86	1	0.7	36.6
157.98	1	0.7	37.3
165.59	1	0.7	38.0
172.97	1	0.7	38.7
175.58	1	0.7	39.4
176.16	1	0.7	40.1
178.89	1	0.7	40.8
179.96	1	0.7	41.5
181.02	1	0.7	42.3
189.05	1	0.7	43.0
189.19	1	0.7	43.7
194.05	1	0.7	44.4
215.82	1	0.7	45.1
219.49	1	0.7	45.8
228.04	1	0.7	46.5
231.07	1	0.7	47.2
234.54	1	0.7	47.9
239.72	1	0.7	48.6
245.24	1	0.7	49.3
259.12	1	0.7	50.0
263.14	1	0.7	50.7
266.41	1	0.7	51.4
266.46	1	0.7	52.1
267.06	1	0.7	52.8
276.68	1	0.7	53.5
278.41	1	0.7	54.2
280.97	2	1.4	55.6
282.59	1	0.7	56.3
297.75	1	0.7	57.0
299.02	1	0.7	57.7
301.66	1	0.7	58.5
301.73	1	0.7	59.2
309.68	1	0.7	59.9
316.05	1	0.7	60.6
317.09	1	0.7	61.3
319.44	1	0.7	62.0
320.09	1	0.7	62.7
320.42	1	0.7	63.4
333.7	1	0.7	64.1
335.81	1	0.7	64.8
345.57	1	0.7	65.5
347.69	1	0.7	66.2
352.25	1	0.7	66.9
358.14	1	0.7	67.6
365.27	1	0.7	68.3
366.04	1	0.7	69.0
368.76	1	0.7	69.7
378.88	1	0.7	70.4
382.56	1	0.7	71.1
384.01	1	0.7	71.8
392.3	1	0.7	72.5
396.71	1	0.7	73.2
412.5	1	0.7	73.9
413.26	1	0.7	74.6
421.98	1	0.7	75.4
425.66	1	0.7	76.1
426.53	1	0.7	76.8
444.19	1	0.7	77.5
453.18	1	0.7	78.2
476.64	1	0.7	78.9
483	1	0.7	79.6
489.32	1	0.7	80.3
492.63	1	0.7	81.0
499	1	0.7	81.7
499.75	1	0.7	82.4
499.82	1	0.7	83.1
519.74	1	0.7	83.8
523.52	1	0.7	84.5
529.37	1	0.7	85.2
531.62	1	0.7	85.9
546.55	1	0.7	86.6
552.28	1	0.7	87.3
577.23	1	0.7	88.0
585.33	1	0.7	88.7
586.96	1	0.7	89.4
612.8	1	0.7	90.1
613.96	1	0.7	90.8
623	1	0.7	91.5
633.5	1	0.7	92.3
657.63	1	0.7	93.0
661.09	1	0.7	93.7
670.53	1	0.7	94.4
675.49	1	0.7	95.1
679.02	1	0.7	95.8
691.17	1	0.7	96.5
811.62	1	0.7	97.2
840.6	1	0.7	97.9
860.38	1	0.7	98.6
1633.83	1	0.7	99.3
1656.7	1	0.7	100.0

UNIVARIATE

VARIABLE=OET4

MOMENTS

N	142	SUM WGTS	142
MEAN	1230.58	SUM	174742
STD DEV	852.832	VARIANCE	727323
SKEWNESS	-1.42759	KURTOSIS	6.07798
USS	317586830	CSS	102552524
CV	69.3033	STD MEAN	71.5681
T:MEAN=0	17.1945	PROB>|T|	0.0001
SGN RANK	4985.5	PROB>|S|	0.0001
NUM ^= 0	142		

QUANTILES(DEF=4)

100% MAX	5434.06	99%	5348.81
75% Q3	1805.24	95%	2259.65
50% MED	1090.03	90%	2137.41
25% Q1	696.585	10%	328.968
0% MIN	-518.07	5%	58.4169
		1%	-503.355
RANGE	5952.13		
Q3-Q1	1108.66		
MODE	1005.47		

EXTREMES

LOWEST	HIGHEST
-518.07	2587.13
-483.85	2617.42
-449.42	2717.08
-406.29	5235.82
-110.64	5434.06

STEM LEAF # BOXPLOT NORMAL PROBABILITY PLOT

```
  5  34                    2     *          5250+                                  * *
  4                        .     |           |                                     |
  4                        .     |           |                                     |
  3                        .     |           |                                     |
  3                        .     |           |                                     |      + + +
  2  5667                 4      |           |                                  ++++ **
  2  000111111222222233   16     |           2250+                              *******
  1  555556677778888888899999999999999   30  +-----+                          ********
  1  000000000001111111111222234444444444  35  *--+--*                       *******
  0  555555666667777777888888899999999   33  +-----+                      ********
  0  111223334444444          16     |           |                    *********+
 -0  4410                     4      |           |              * ** ++++
 -0  55                       2      |           -750+*  +  +
     ----+----+----+----+----+----+----+                +----+----+----+----+----+----+----+
     MULTIPLY STEM.LEAF BY 10**+03                      -2   -1   +0   +1   +2
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FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-518.07	1	0.7	0.7	433.49	1	0.7	15.5	760.52	1	0.7	30.3	1029.75	1	0.7	45.8
-483.85	1	0.7	1.4	458.43	1	0.7	16.2	800.81	1	0.7	31.0	1029.94	1	0.7	46.5
-449.42	1	0.7	2.1	462.95	1	0.7	16.9	801.87	1	0.7	31.7	1056.31	1	0.7	47.2
-406.29	1	0.7	2.8	476.22	1	0.7	17.6	824.73	1	0.7	32.4	1064.09	1	0.7	47.9
-110.64	1	0.7	3.5	504.22	1	0.7	18.3	840.47	1	0.7	33.1	1075.42	1	0.7	48.6
45.85	1	0.7	4.2	507.92	1	0.7	19.0	868.18	1	0.7	33.8	1086.65	1	0.7	49.3
52.21	1	0.7	4.9	524.11	1	0.7	19.7	876.96	1	0.7	34.5	1088.33	1	0.7	50.0
93.59	1	0.7	5.6	573.61	1	0.7	20.4	889.17	1	0.7	35.2	1091.73	1	0.7	50.7
127.08	1	0.7	6.3	574.46	1	0.7	21.1	897.06	1	0.7	35.9	1097.01	1	0.7	51.4
193.25	1	0.7	7.0	579.72	1	0.7	21.8	910.56	1	0.7	36.6	1097.79	1	0.7	52.1
198.1	1	0.7	7.7	611.45	1	0.7	22.5	922.59	1	0.7	37.3	1114.61	1	0.7	52.8
303.16	1	0.7	8.5	617.42	1	0.7	23.2	936.37	1	0.7	38.0	1141.98	1	0.7	53.5
310.1	1	0.7	9.2	661.28	1	0.7	23.9	949.16	1	0.7	38.7	1146.66	1	0.7	54.2
319.59	1	0.7	9.9	668.97	1	0.7	24.6	976.75	1	0.7	39.4	1179.78	1	0.7	54.9
350.85	1	0.7	10.6	705.79	1	0.7	25.4	980.71	1	0.7	40.1	1195.96	1	0.7	55.6
357.41	1	0.7	11.3	721.12	1	0.7	26.1	981.79	1	0.7	40.8	1202.98	1	0.7	56.3
378.65	1	0.7	12.0	721.66	1	0.7	26.8	991.5	1	0.7	41.5	1219.29	1	0.7	57.0
390.17	1	0.7	12.7	735.61	1	0.7	27.5	1005.47	2	1.4	43.0	1340.81	1	0.7	57.7
404.58	1	0.7	13.4	743.75	1	0.7	28.2	1007.24	1	0.7	43.7	1354.09	1	0.7	58.5
424.19	1	0.7	14.1	751.99	1	0.7	28.9	1012.11	1	0.7	44.4	1355.52	1	0.7	59.2
430.83	1	0.7	14.8	759.02	1	0.7	29.6	1025.33	1	0.7	45.1	1365.78	1	0.7	59.9

UNIVARIATE

VARIABLE=DET4

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
1393.17	1	0.7	60.6	1741.87	1	0.7	71.1	1905.2	1	0.7	81.7	2166	1	0.7	92.3
1397.46	1	0.7	61.3	1760.72	1	0.7	71.8	1912.77	1	0.7	82.4	2181.24	1	0.7	93.0
1411.76	1	0.7	62.0	1762.43	1	0.7	72.5	1914.28	1	0.7	83.1	2182.82	1	0.7	93.7
1420.68	1	0.7	62.7	1773.32	1	0.7	73.2	1927.38	1	0.7	83.8	2194.99	1	0.7	94.4
1441.53	1	0.7	63.4	1774.39	1	0.7	73.9	1941.38	1	0.7	84.5	2203.99	1	0.7	95.1
1465.19	1	0.7	64.1	1785.01	1	0.7	74.6	1955.31	1	0.7	85.2	2269.47	1	0.7	95.8
1485.41	1	0.7	64.8	1801.11	1	0.7	75.4	1967.74	1	0.7	85.9	2511.56	1	0.7	96.5
1507.29	1	0.7	65.5	1817.64	1	0.7	76.1	1976.69	1	0.7	86.6	2587.13	1	0.7	97.2
1517.39	1	0.7	66.2	1839.93	1	0.7	76.8	2090.94	1	0.7	87.3	2617.42	1	0.7	97.9
1524.24	1	0.7	66.9	1865.75	1	0.7	77.5	2093.04	1	0.7	88.0	2717.08	1	0.7	98.6
1581.56	1	0.7	67.6	1871.47	1	0.7	78.2	2105.88	1	0.7	88.7	5235.82	1	0.7	99.3
1648.27	1	0.7	68.3	1896.3	1	0.7	78.9	2128.18	1	0.7	89.4	5434.06	1	0.7	100.0
1672.23	1	0.7	69.0	1897.52	1	0.7	79.6	2133.3	1	0.7	90.1				
1697.36	1	0.7	69.7	1902.72	1	0.7	80.3	2138.32	1	0.7	90.8				
1734.84	1	0.7	70.4	1904.67	1	0.7	81.0	2151.25	1	0.7	91.5				

UNIVARIATE

VARIABLE=FD1

MOMENTS

N	142	SUM WGTS	142
MEAN	1.41063	SUM	200.31
STD DEV	2.63317	VARIANCE	6.93358
SKEWNESS	1.86478	KURTOSIS	4.18715
USS	1260.2	CSS	977.634
CV	186.666	STD MEAN	0.220971
T:MEAN=0	6.38381	PROB>|T|	0.0001
SGN RANK	2979	PROB>|S|	0.0001
NUM ^= 0	142		

QUANTILES(DEF=4)

100% MAX	12.78	99%	11.7695
75% Q3	2.1	95%	7.65849
50% MED	0.42	90%	4.78999
25% Q1	-0.195	10%	-1.15
0% MIN	-1.99	5%	-1.54
		1%	-1.9857
RANGE	14.77		
Q3-Q1	2.295		
MODE	0.42		

EXTREMES

LOWEST	HIGHEST
-1.99	9.69
-1.98	9.81
-1.93	9.81
-1.88	10.43
-1.75	12.78

STEM LEAF

```
 12 8                                  1
 11
 10 4                                  1
  9 788                                3
  8 7                                  1
  7 17                                 2
  6 4                                  1
  5 123                                3
  4 115699                             6
  3 046789                             6
  2 000123344577899                   15
  1 001113445556666678899             22
  0 111122233334444445556666677788888999 37
 -0 777776655444444332222110000       28
 -1 009976555442110                   16
    ----+----+----+----+----+----+----+--
```

BOXPLOT

```
  12.5+
      |
      |
      |
```

UNIVARIATE

VARIABLE=FD1

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
1.47	1	0.7	63.4	1.9	1	0.7	72.5	2.79	1	0.7	81.7	4.88	1	0.7	90.8
1.48	1	0.7	64.1	1.96	1	0.7	[illegible]	2.91	1	0.7	82.4	4.89	1	0.7	91.5
1.51	1	0.7	64.8	2.02	1	0.7	[illegible]	2.92	1	0.7	83.1	5.09	1	0.7	92.3
1.56	1	0.7	65.5	2.05	1	0.7	[illegible]	3.[illegible]	1	0.7	83.8	5.17	1	0.7	93.0
1.57	1	0.7	66.2	2.08	1	0.7	75.4	3.36	1	0.7	84.5	5.28	1	0.7	93.7
1.59	1	0.7	66.9	2.16	1	0.7	[illegible]	3.56	1	0.7	[illegible]	6.39	1	0.7	94.4
1.6	1	0.7	67.6	2.32	1	0.7	[illegible]	3.69	1	0.7	85.9	7.14	1	0.7	95.1
1.63	1	0.7	68.3	2.34	1	0.7	77.5	3.78	1	0.7	86.6	7.75	1	0.7	95.8
1.65	1	0.7	69.0	2.36	1	0.7	78.2	3.[illegible]	1	0.7	87.3	8.73	1	0.7	96.5
1.73	1	0.7	69.7	2.4	1	0.7	78.9	4.07	1	0.7	88.0	8.89	1	0.7	97.2
1.78	1	0.7	70.4	2.54	1	0.7	79.6	4.11	1	0.7	88.7	9.81	2	1.4	98.6
1.82	1	0.7	71.1	2.66	1	0.7	80.3	4.53	1	0.7	89.4	10.43	1	0.7	99.3
1.87	1	0.7	71.8	2.68	1	0.7	81.0	4.58	1	0.7	90.1	12.78	1	0.7	100.0

F-50

UNIVARIATE

VARIABLE=FD2

MOMENTS

N	142	SUM WGTS	142
MEAN	1.64627	SUM	233.77
STD DEV	3.30404	VARIANCE	10.9167
SKEWNESS	3.1248	KURTOSIS	13.2554
USS	1924.1	CSS	1539.25
CV	200.699	STD MEAN	0.277269
T:MEAN=0	5.93744	PROB>|T|	0.0001
SGN RANK	564	PROB>|S|	0.0001
NUM ^= 0	47		

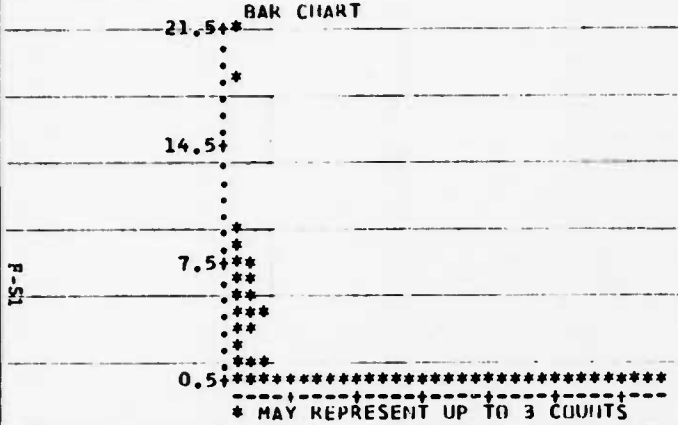
QUANTILES(DEF=4)

100% MAX	21.49	99%	20.3806
75% Q3	2.2375	95%	7.643
50% MED	0	90%	6.38799
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	21.49		
Q3-Q1	2.2375		
MODE	0		

EXTREMES

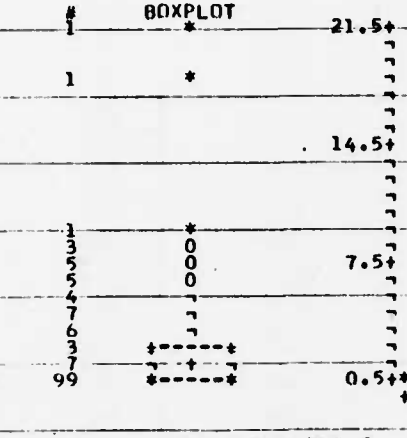
LOWEST	HIGHEST
0	8.13
0	8.34
0	9.44
0	18.91
0	21.49

BAR CHART

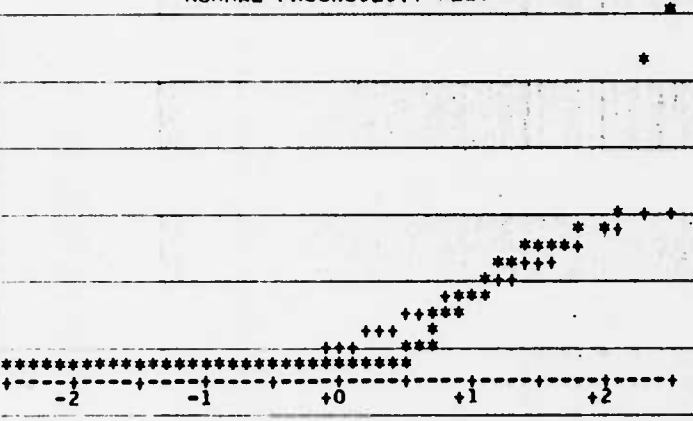


* MAY REPRESENT UP TO 3 COUNTS

BOXPLOT



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	95	66.9	66.9
0.24	1	0.7	67.6
0.35	1	0.7	68.3
0.78	1	0.7	69.0
0.82	1	0.7	69.7
1.32	1	0.7	70.4
1.39	1	0.7	71.1
1.49	1	0.7	71.8
1.55	1	0.7	72.5
1.62	1	0.7	73.2
1.64	1	0.7	73.9
1.79	1	0.7	74.6
2.2	1	0.7	75.4
2.35	1	0.7	76.1
2.42	1	0.7	76.8
3.01	1	0.7	77.5
3.05	1	0.7	78.2
3.26	1	0.7	78.9
3.31	1	0.7	79.6
3.35	1	0.7	80.3
3.37	1	0.7	81.0
4.09	1	0.7	81.7
4.23	2	1.4	83.1
4.25	2	1.4	84.5
4.58	1	0.7	85.2
4.62	1	0.7	85.9
5.11	1	0.7	86.6
5.26	1	0.7	87.3
5.32	1	0.7	88.0
5.34	1	0.7	88.7
6.01	1	0.7	89.4
6.15	1	0.7	90.1
6.49	1	0.7	90.8
6.59	1	0.7	91.5
6.66	1	0.7	92.3
7.13	1	0.7	93.0
7.28	1	0.7	93.7
7.42	1	0.7	94.4
7.49	1	0.7	95.1
7.67	1	0.7	95.8
7.98	1	0.7	96.5
8.13	1	0.7	97.2
8.34	1	0.7	97.9
9.44	1	0.7	98.6
18.91	1	0.7	99.3
21.49	1	0.7	100.0

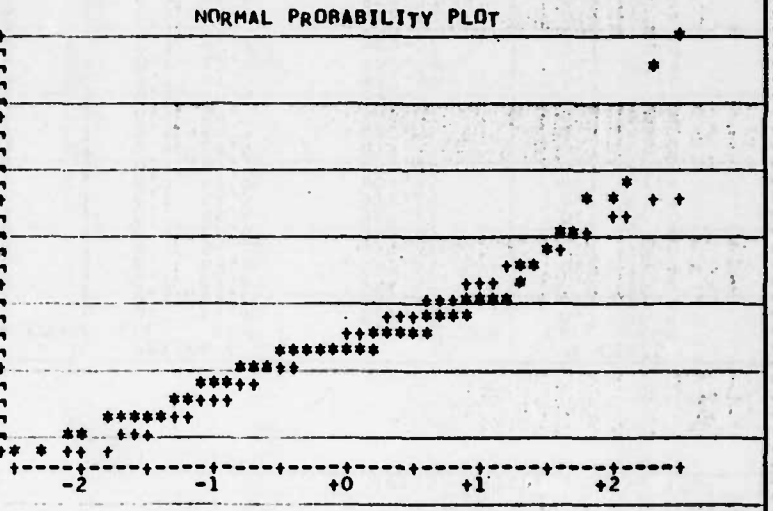
UNIVARIATE

VARIABLE=FDI3

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	142	SUM WGTS	142	100% MAX	2050.19	99%	1946.33	LOWEST	HIGHEST
MEAN	211.388	SUM	30017	75% Q3	319.255	95%	881.655	-437.49	1031.29
STD DEV	348.425	VARIANCE	121400	50% MED	182.89	90%	524.278	-417.7	1050.71
SKEWNESS	1.99738	KURTOSIS	7.90319	25% Q1	48.3125	10%	-210.187	-357.67	1134.63
USS	23462613	CSS	17117382	0% MIN	-437.49	5%	-251.095	-344.59	1808.67
CV	164.827	STD MEAN	29.2392			1%	-428.98	-256.43	2050.19
T:MEAN=0	7.22961	PROB>|T|	0.0001	RANGE	2487.68				
SGN RANK	3401.5	PROB>|S|	0.0001	Q3-Q1	270.942				
NUM ^= 0	141			MODE	1031.29				

STEM	LEAF	#	BOXPLOT
20	5	1	*
19			
18	1	1	*
17			
16			
15			
14			
13			
12			
11	3	1	*
10	335	3	0
9			
8	78	2	0
7	24	2	0
6	111	3	|
5	13	2	|
4	00223466678	11	|
3	011122333334567	15	+-----+
2	00112222234445566666 7	21	| + |
1	000111122233345566677777888899999999	36	*-----*
0	122556677799	13	+-----+
-0	9655443322100	13	|
-1	9754	4	|
-2	6555554442	10	|
-3	44	2	|
-4	42	2	0

MULTIPLY STEM.LEAF BY 10**+02



UNIVARIATE

VARIABLE=FDI3

FREQUENCY TABLE

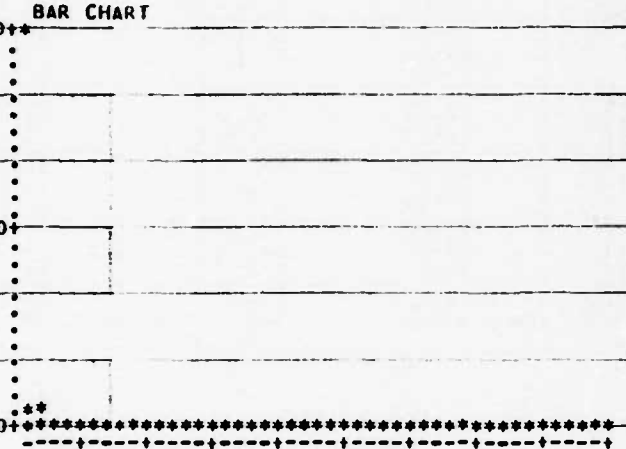
VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-437.49	1	0.7	0.7	53.4	1	0.7	26.1	185.41	1	0.7	51.4	327.51	1	0.7	76.8
-417.7	1	0.7	1.4	56.83	1	0.7	26.8	188.51	1	0.7	52.1	330.48	1	0.7	77.5
-357.67	1	0.7	2.1	62.95	1	0.7	27.5	189.28	1	0.7	52.8	333.52	1	0.7	78.2
-344.59	1	0.7	2.8	65.26	1	0.7	28.2	189.6	1	0.7	53.5	333.57	1	0.7	78.9
-256.43	1	0.7	3.5	70.86	1	0.7	28.9	192.26	1	0.7	54.2	344.31	1	0.7	79.6
-254.53	1	0.7	4.2	71.31	1	0.7	29.6	194.08	1	0.7	54.9	348.93	1	0.7	80.3
-251.57	1	0.7	4.9	85.33	1	0.7	30.3	194.13	1	0.7	55.6	360.24	1	0.7	81.0
-248.69	1	0.7	5.6	86.62	1	0.7	31.0	194.28	1	0.7	56.3	372.29	1	0.7	81.7
-248.04	1	0.7	6.3	95.07	1	0.7	31.7	197.51	1	0.7	57.0	400.31	1	0.7	82.4
-246.57	1	0.7	7.0	100.62	1	0.7	32.4	199.12	1	0.7	57.7	401.04	1	0.7	83.1
-243.62	1	0.7	7.7	103.52	1	0.7	33.1	210.33	1	0.7	58.5	417.93	1	0.7	83.8
-241.72	1	0.7	8.5	105.11	1	0.7	33.8	213.27	1	0.7	59.2	420.05	1	0.7	84.5
-237.13	1	0.7	9.2	108.77	1	0.7	34.5	219.31	1	0.7	59.9	431.07	1	0.7	85.2
-220.3	1	0.7	9.9	111.48	1	0.7	35.2	220.51	1	0.7	60.6	435.06	1	0.7	85.9
-186.59	1	0.7	10.6	113.48	1	0.7	35.9	221.88	1	0.7	61.3	457.96	1	0.7	86.6
-172.5	1	0.7	11.3	120.88	1	0.7	36.6	223.74	1	0.7	62.0	462.74	1	0.7	87.3
-152.3	1	0.7	12.0	121.33	1	0.7	37.3	224.48	1	0.7	62.7	464.45	1	0.7	88.0
-139.97	1	0.7	12.7	122.61	1	0.7	38.0	233.23	1	0.7	63.4	469.65	1	0.7	88.7
-86.97	1	0.7	13.4	127.16	1	0.7	38.7	235.06	1	0.7	64.1	476.57	1	0.7	89.4
-60.41	1	0.7	14.1	127.42	1	0.7	39.4	235.27	1	0.7	64.8	512.77	1	0.7	90.1
-53.14	1	0.7	14.8	133.48	1	0.7	40.1	237.5	1	0.7	65.5	529.21	1	0.7	90.8
-50.49	1	0.7	15.5	143.62	1	0.7	40.8	249.95	1	0.7	66.2	606.43	1	0.7	91.5
-43.96	1	0.7	16.2	146.47	1	0.7	41.5	250.17	1	0.7	66.9	608.81	1	0.7	92.3
-41.01	1	0.7	16.9	149.97	1	0.7	42.3	257.23	1	0.7	67.6	612.41	1	0.7	93.0
-31.18	1	0.7	17.6	158.78	1	0.7	43.0	258.37	1	0.7	68.3	716.67	1	0.7	93.7
-29.12	1	0.7	18.3	158.85	1	0.7	43.7	258.66	1	0.7	69.0	742.25	1	0.7	94.4
-24.37	1	0.7	19.0	164.29	1	0.7	44.4	263.36	1	0.7	69.7	869.33	1	0.7	95.1
-19.79	1	0.7	19.7	167.8	1	0.7	45.1	263.63	1	0.7	70.4	883.83	1	0.7	95.8
-5.37	1	0.7	20.4	167.83	1	0.7	45.8	271.46	1	0.7	71.1	1031.29	2	1.4	97.2
-1.86	1	0.7	21.1	168.22	1	0.7	46.5	299.38	1	0.7	71.8	1050.71	1	0.7	97.9
0	1	0.7	21.8	168.35	1	0.7	47.2	309.87	1	0.7	72.5	1134.43	1	0.7	98.6
9.05	1	0.7	22.5	173.36	1	0.7	47.9	310.09	1	0.7	73.2	1808.67	1	0.7	99.3
16.89	1	0.7	23.2	179.23	1	0.7	48.6	314.86	1	0.7	73.9	2050.19	1	0.7	100.0
24.78	1	0.7	23.9	180	1	0.7	49.3	315.72	1	0.7	74.6				
45.59	1	0.7	24.6	180.93	1	0.7	50.0	317.07	1	0.7	75.4				
49.27	1	0.7	25.4	184.85	1	0.7	50.7	325.81	1	0.7	76.1				

UNIVARIATE

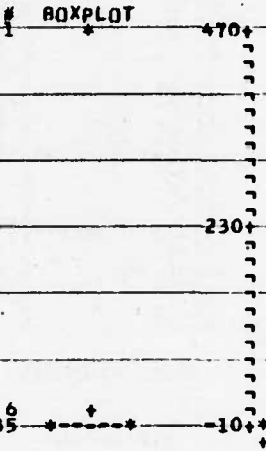
VARIABLE=ZN1

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
								LOWEST	HIGHEST
N	142	SUM WGTS	142	100% MAX	474.39	99%	271.142	-4.07	0.8
MEAN	2.11127	SUM	299.8	75% Q3	-0.3025	95%	0.629998	-4.04	1.22
STD DEV	39.9331	VARIANCE	1594.65	50% MED	-1.105	90%	0.321999	-3.93	1.23
SKEWNESS	11.8989	KURTOSIS	141.72	25% Q1	-2.1125	10%	-3.048	-3.8	1.73
USS	225479	CSS	224846	0% MIN	-4.07	5%	-3.7025	-3.77	474.39
CV	1891.43	STD MEAN	3.35111			1%	-4.0571		
T:MEAN=0	0.63002	PROB>|T|	0.529701	RANGE	478.46				
SGN RANK	-4220	PROB>|S|	0.0001	Q3-Q1	1.81				
NUM ^= 0	142			MODE	-2.77				

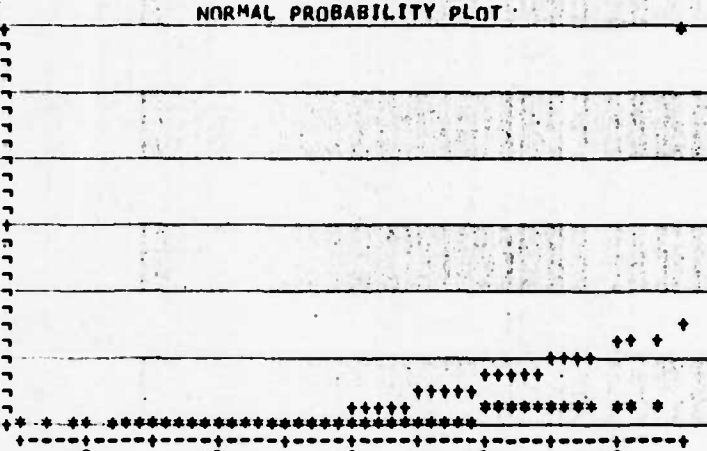
BAR CHART



BOXPLOT



NORMAL PROBABILITY PLOT



UNIVARIATE

VARIABLE=ZN1

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-4.07	1	0.7	0.7	-2.1	1	0.7	25.4	-1.08	1	0.7	51.4	-0.23	1	0.7	76.8
-4.04	1	0.7	1.4	-2.08	1	0.7	26.1	-1.04	1	0.7	52.1	-0.22	1	0.7	77.5
-3.93	1	0.7	2.1	-2.04	1	0.7	26.8	-1.03	1	0.7	52.8	-0.2	1	0.7	78.2
-3.8	1	0.7	2.8	-2.01	1	0.7	27.5	-1.01	1	0.7	53.5	-0.18	1	0.7	78.9
-3.77	1	0.7	3.5	-1.93	1	0.7	28.2	-0.98	1	0.7	54.2	-0.16	1	0.7	79.6
-3.76	1	0.7	4.2	-1.89	2	1.4	29.6	-0.95	1	0.7	54.9	-0.14	1	0.7	80.3
-3.71	1	0.7	4.9	-1.87	1	0.7	30.3	-0.92	1	0.7	55.6	-0.08	1	0.7	81.0
-3.66	1	0.7	5.6	-1.86	1	0.7	31.0	-0.91	1	0.7	56.3	-0.07	1	0.7	81.7
-3.47	1	0.7	6.3	-1.77	1	0.7	31.7	-0.9	1	0.7	57.0	-0.01	2	1.4	83.1
-3.34	1	0.7	7.0	-1.72	1	0.7	32.4	-0.86	1	0.7	57.7	0.01	1	0.7	83.8
-3.16	1	0.7	7.7	-1.71	1	0.7	33.1	-0.83	1	0.7	58.5	0.07	1	0.7	84.5
-3.11	1	0.7	8.5	-1.7	1	0.7	33.8	-0.79	1	0.7	59.2	0.17	1	0.7	85.2
-3.09	1	0.7	9.2	-1.69	2	1.4	35.2	-0.78	1	0.7	59.9	0.19	1	0.7	85.9
-3.06	1	0.7	9.9	-1.66	1	0.7	35.9	-0.77	1	0.7	60.6	0.2	2	1.4	87.3
-3.02	1	0.7	10.6	-1.61	1	0.7	36.6	-0.7	2	1.4	62.0	0.21	2	1.4	88.7
-2.93	1	0.7	11.3	-1.59	1	0.7	37.3	-0.68	1	0.7	62.7	0.25	1	0.7	89.4
-2.89	1	0.7	12.0	-1.58	1	0.7	38.0	-0.65	1	0.7	63.4	0.28	1	0.7	90.1
-2.77	2	1.4	13.4	-1.56	1	0.7	38.7	-0.64	1	0.7	64.1	0.34	1	0.7	90.8
-2.75	1	0.7	14.1	-1.52	1	0.7	39.4	-0.63	1	0.7	64.8	0.35	1	0.7	91.5
-2.68	1	0.7	14.8	-1.48	1	0.7	40.1	-0.59	2	1.4	66.2	0.37	1	0.7	92.3
-2.63	1	0.7	15.5	-1.41	1	0.7	40.8	-0.58	1	0.7	66.9	0.39	1	0.7	93.0
-2.5	1	0.7	16.2	-1.34	1	0.7	41.5	-0.54	1	0.7	67.6	0.44	1	0.7	93.7
-2.45	1	0.7	16.9	-1.3	2	1.4	43.0	-0.53	1	0.7	68.3	0.45	1	0.7	94.4
-2.41	1	0.7	17.6	-1.27	1	0.7	43.7	-0.51	1	0.7	69.0	0.46	1	0.7	95.1
-2.39	2	1.4	19.0	-1.26	1	0.7	44.4	-0.5	2	1.4	70.4	0.66	1	0.7	95.8
-2.36	1	0.7	19.7	-1.25	2	1.4	45.8	-0.47	1	0.7	71.1	0.75	1	0.7	96.5
-2.31	1	0.7	20.4	-1.24	1	0.7	46.5	-0.46	2	1.4	72.5	0.8	1	0.7	97.2
-2.29	1	0.7	21.1	-1.23	1	0.7	47.2	-0.41	1	0.7	73.2	1.22	1	0.7	97.9
-2.24	1	0.7	21.8	-1.19	1	0.7	47.9	-0.38	1	0.7	73.9	1.23	1	0.7	98.6
-2.2	2	1.4	23.2	-1.16	2	1.4	49.3	-0.33	1	0.7	74.6	1.73	1	0.7	99.3
-2.16	1	0.7	23.9	-1.12	1	0.7	50.0	-0.31	1	0.7	75.4	474.39	1	0.7	100.0
-2.15	1	0.7	24.6	-1.09	1	0.7	50.7	-0.28	1	0.7	76.1				

B

UNIVARIATE

VARIABLE=HRS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	23	SUM WGTS	23	100% MAX	1542	99%	1542	LOWEST	HIGHEST
MEAN	421.554	SUM	9695.74	75% Q3	697	95%	1540	-0.26	832
STD DEV	536.063	VARIANCE	287364	50% MED	118	90%	1531.2	4	1043
SKEWNESS	1.23944	KURTOSIS	0.194588	25% Q1	34	10%	6.39999	10	1530
USS	10409286	CSS	6322009	0% MIN	-0.26	5%	0.591999	18	1532
CV	127.164	STD MEAN	111.777			1%	-0.26	29	1542
T:MEAN=0	3.77138	PROB>|T|	0.00106814	RANGE	1542.26				
SGN RANK	137	PROB>|S|	0.0001	Q3-Q1	663				
NUM ^= 0	23			MODE	-0.26				

MISSING VALUE
COUNT 114
% COUNT/NOBS 83.80

STEM	LEAF	#	BOXPLOT
14	334	3	
12			
10	4	1	
8	3	1	
6	890	3	
4			
2	0	1	
0	123358000246	12	
-0	00	2	

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT

1500
700
-100
-2 -1 +0 +1 +2

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-0.26	1	4.3	4.3	52	1	4.3	30.4	143	1	4.3	56.5	832	1	4.3	82.6
4	1	4.3	8.7	80	1	4.3	34.8	160	1	4.3	60.9	1043	1	4.3	87.0
10	1	4.3	13.0	101	1	4.3	39.1	198	1	4.3	65.2	1530	1	4.3	91.3
18	1	4.3	17.4	102	1	4.3	43.5	678	1	4.3	69.6	1532	1	4.3	95.7
29	1	4.3	21.7	103	1	4.3	47.8	690	1	4.3	73.9	1542	1	4.3	100.0
34	1	4.3	26.1	118	1	4.3	52.2	697	1	4.3	78.3				

F-57

1

F

UNIVARIATE

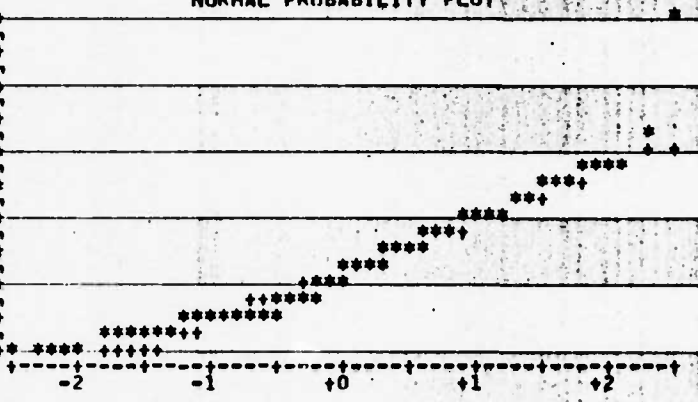
VARIABLE=FE

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
								LOWEST	HIGHEST
N	142	SUM WGTS	142	100% MAX	101	99%	85.9497	3	56
MEAN	26.0493	SUM	3699	75% Q3	36	95%	53.7	4	56
STD DEV	15.498	VARIANCE	240.189	50% MED	25	90%	45	4	59
SKEWNESS	1.09177	KURTOSIS	2.69846	25% Q1	13	10%	9	4	66
USS	130223	CSS	33866.7	0% MIN	3	5%	6	4	66
CV	59.495	STD MEAN	1.30057			1%	3.43	5	101
T:MEAN=0	20.0292	PROB>|T|	0.0001	RANGE	98				
SGN RANK	5076.5	PROB>|S|	0.0001	Q3-Q1	23				
NUM ^= 0	142			MODE	11				

STEM	LEAF	#	BOXPLOT
10	1	1	0
9			
9			
8			
8			
7			
7			
6	6	1	*
6			
5	669	3	
5	01244	5	
4	55679	5	
4	0011111233344	13	+
3	55666777999	11	+-----+
3	000111223333444	15	| |
2	55566777778888888999	19	*--+--*
2	111233344	9	| |
1	55555666666868999999	18	| |
1	00011111111222222233344444	27	+-----+
0	55667788899	11	|
0	3444	4	|

MULTIPLY STEM.LEAF BY 10**+01

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
3	1	0.7	0.7	16	6	4.2	37.3	31	3	2.1	66.2	45	2	1.4	90.8
4	3	2.1	2.8	18	2	1.4	38.7	32	2	1.4	67.6	46	1	0.7	91.5
5	2	1.4	4.2	19	5	3.5	42.3	33	4	2.8	70.4	47	1	0.7	92.3
6	2	1.4	5.6	21	3	2.1	44.4	34	3	2.1	72.5	49	1	0.7	93.0
7	2	1.4	7.0	22	1	0.7	45.1	35	2	1.4	73.9	50	1	0.7	93.7
8	3	2.1	9.2	23	3	2.1	47.2	36	4	2.8	76.8	51	1	0.7	94.4
9	2	1.4	10.6	24	2	1.4	48.6	37	2	1.4	78.2	52	1	0.7	95.1
10	3	2.1	12.7	25	3	2.1	50.7	39	3	2.1	80.3	54	2	1.4	96.5
11	8	5.6	18.3	26	2	1.4	52.1	40	2	1.4	81.7	56	2	1.4	97.9
12	7	4.9	23.2	27	5	3.5	55.6	41	5	3.5	85.2	59	1	0.7	98.6
13	4	2.8	26.1	28	6	4.2	59.9	42	1	0.7	85.9	66	1	0.7	99.3
14	5	3.5	29.6	29	3	2.1	62.0	43	3	2.1	88.0	101	1	0.7	100.0
15	5	3.5	33.1	30	3	2.1	64.1	44	2	1.4	89.4				

UNIVARIATE

VARIABLE=VIS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	140	SUM WGTS	140	100% MAX	295	99%	273.679	LOWEST	HIGHEST
MEAN	155.05	SUM	21707	75% Q3	169.75	95%	220	56	227
STD DEV	35.2533	VARIANCE	1242.8	50% MED	155	90%	207.8	102	230
SKEWNESS	0.702106	KURTOSIS	1.50337	25% Q1	131.5	10%	109	102	243
USS	3538419	CSS	172749	0% MIN	56	5%	104.05	103	243
CV	22.7367	STD MEAN	2.97945			1%	74.8599	103	295
T:MEAN=0	52.0398	PROB>|T|	0.0001	RANGE	239				
SGN RANK	4935	PROB>|S|	0.0001	Q3-Q1	38.25				
NUM ^= 0	140			MODE	160				

MISSING VALUE
COUNT 2
% COUNT/NOBS 1.41

STEM	LEAF	#	BOXPLOT
29	5	1	*
28			
27			
26			
25			
24	33	2	0
23	0	1	0
22	0077	4	
21	34469	5	
20	23468	5	
19	2	1	
18	01467	5	
17	01112245566	11	
16	00000013334556667799	21	+-----+
15	011133444555566677888999999	26	*--+--*
14	01134556778	11	
13	011344667888999	15	+-----+
12	001134446788	12	
11	34677	5	
10	22334455566799	14	
9			
8			
7			
6			
5	6	1	0

MULTIPLY STEM.LEAF BY 10**+01

NORMAL PROBABILITY PLOT

295+ 175+ 55+

-2 -1 +0 +1 +2

F-91

UNIVARIATE

VARIABLE=VIS

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
56	1	0.7	0.7	131	2	1.4	25.0	156	3	2.1	52.9	184	1	0.7	85.0
102	2	1.4	2.1	133	1	0.7	25.7	157	2	1.4	54.3	186	1	0.7	85.7
103	2	1.4	3.6	134	2	1.4	27.1	158	3	2.1	56.4	187	1	0.7	86.4
104	2	1.4	5.0	136	2	1.4	28.6	159	5	3.6	60.0	192	1	0.7	87.1
105	3	2.1	7.1	137	1	0.7	29.3	160	6	4.3	64.3	202	1	0.7	87.9
106	2	1.4	8.6	138	3	2.1	31.4	161	1	0.7	65.0	203	1	0.7	88.6
107	1	0.7	9.3	139	3	2.1	33.6	163	3	2.1	67.1	204	1	0.7	89.3
109	2	1.4	10.7	140	1	0.7	34.3	164	1	0.7	67.9	206	1	0.7	90.0
113	1	0.7	11.4	141	2	1.4	35.7	165	3	2.1	70.0	208	1	0.7	90.7
114	1	0.7	12.1	143	1	0.7	36.4	166	3	2.1	72.1	213	1	0.7	91.4
116	1	0.7	12.9	144	1	0.7	37.1	167	2	1.4	73.6	214	2	1.4	92.9
117	2	1.4	14.3	145	2	1.4	38.6	169	2	1.4	75.0	216	1	0.7	93.6
120	2	1.4	15.7	146	1	0.7	39.3	170	1	0.7	75.7	219	1	0.7	94.3
121	2	1.4	17.1	147	2	1.4	40.7	171	3	2.1	77.9	220	2	1.4	95.7
123	1	0.7	17.9	148	1	0.7	41.4	172	2	1.4	79.3	227	2	1.4	97.1
124	3	2.1	20.0	150	1	0.7	42.1	174	1	0.7	80.0	230	1	0.7	97.9
126	1	0.7	20.7	151	3	2.1	44.3	175	2	1.4	81.4	243	2	1.4	99.3
127	1	0.7	21.4	153	2	1.4	45.7	176	2	1.4	82.9	295	1	0.7	100.0
128	2	1.4	22.9	154	3	2.1	47.9	180	1	0.7	83.6				
130	1	0.7	23.6	155	4	2.9	50.7	181	1	0.7	84.3				

UNIVARIATE

VARIABLE=TAN

MOMENTS

N	142	SUM WGTS	142
MEAN	2.24162	SUM	318.31
STD DEV	0.482995	VARIANCE	0.233285
SKEWNESS	-1.19004	KURTOSIS	2.98082
USS	746.423	CSS	32.8931
CV	21.5467	STD MEAN	0.0405321
T:MEAN=0	55.3048	PROB>|T|	0.0001
SGN RANK	5076.5	PROB>|S|	0.0001
NUM ^= 0	142		

QUANTILES(DEF=4)

100% MAX	3.29	99%	3.2771
75% Q3	2.53	95%	2.944
50% MED	2.26	90%	2.784
25% Q1	2.0675	10%	1.67
0% MIN	0.47	5%	1.4415
		1%	0.5001
RANGE	2.82		
Q3-Q1	0.4625		
MODE	2.14		

EXTREMES

LOWEST	HIGHEST
0.47	2.98
0.54	2.99
0.64	3.05
0.67	3.26
0.84	3.29

```
  STEM LEAF                            #  BOXPLOT
    32 69                              2     0
    30 5                               1     |
    28 2240115789                     10     |
    26 2245558001133479               17     |
    24 000116779901333666 79          19  +-----+
    22 00122234446666888991123334457789 99 34  *--+--*
    20 03446667790011444445566678888 89  31  +-----+
    18 7888945678 8                    11     |
    16 1457726                          7     |
    14 4559                             4     |
    12                                        |
    10 1                                1     0
     8 4                                1     0
     6 47                               2     *
     4 74                               2     *
       ----+----+----+----+----+----+----
       MULTIPLY STEM.LEAF BY 10**-01
```

NORMAL PROBABILITY PLOT

```
3.3+                                                    +++ * *
                                                  ++++++* *
                                              ******
                                          *****
                                      *******
                                  *******++
1.9+                          *******+
                          *****
                      ****
                  ++ +
0.5+* *
     +----+----+----+----+----+----+----+----+----+----+
         -2   -1   +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0.47	1	0.7	0.7	1.95	1	0.7	16.9	2.21	1	0.7	43.7	2.49	2	1.4	72.5
0.54	1	0.7	1.4	1.96	1	0.7	17.6	2.22	3	2.1	45.8	2.5	1	0.7	73.2
0.64	1	0.7	2.1	1.97	1	0.7	18.3	2.23	1	0.7	46.5	2.51	1	0.7	73.9
0.67	1	0.7	2.8	1.98	2	1.4	19.7	2.24	3	2.1	48.6	2.53	3	2.1	76.1
0.84	1	0.7	3.5	2	1	0.7	20.4	2.26	4	2.8	51.4	2.56	2	1.4	77.5
1.11	1	0.7	4.2	2.03	1	0.7	21.1	2.28	3	2.1	53.5	2.57	1	0.7	78.2
1.44	1	0.7	4.9	2.04	2	1.4	22.5	2.29	2	1.4	54.9	2.59	1	0.7	78.9
1.45	2	1.4	6.3	2.06	3	2.1	24.6	2.31	2	1.4	56.3	2.62	2	1.4	80.3
1.49	1	0.7	7.0	2.07	2	1.4	26.1	2.32	1	0.7	57.0	2.64	2	1.4	81.7
1.61	1	0.7	7.7	2.09	1	0.7	26.8	2.33	3	2.1	59.2	2.65	3	2.1	83.8
1.64	1	0.7	8.5	2.1	2	1.4	28.2	2.34	2	1.4	60.6	2.68	1	0.7	84.5
1.65	1	0.7	9.2	2.11	2	1.4	29.6	2.35	1	0.7	61.3	2.7	2	1.4	85.9
1.67	2	1.4	10.6	2.14	5	3.5	33.1	2.37	2	1.4	62.7	2.71	2	1.4	87.3
1.72	1	0.7	11.3	2.15	2	1.4	34.5	2.38	1	0.7	63.4	2.73	2	1.4	88.7
1.76	1	0.7	12.0	2.16	3	2.1	36.6	2.39	3	2.1	65.5	2.74	1	0.7	89.4
1.87	1	0.7	12.7	2.17	1	0.7	37.3	2.4	3	2.1	67.6	2.77	1	0.7	90.1
1.88	3	2.1	14.8	2.18	5	3.5	40.8	2.41	2	1.4	69.0	2.79	1	0.7	90.8
1.89	1	0.7	15.5	2.19	1	0.7	41.5	2.46	1	0.7	69.7	2.82	2	1.4	92.3
1.94	1	0.7	16.2	2.2	2	1.4	43.0	2.47	2	1.4	71.1	2.84	1	0.7	93.0

UNIVARIATE

VARIABLE=TAN

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
2.9	1	0.7	93.7	2.97	1	0.7	96.5	3.05	1	0.7	98.6
2.91	2	1.4	95.1	2.98	1	0.7	97.2	3.26	1	0.7	99.3
2.95	1	0.7	95.8	2.99	1	0.7	97.9	3.29	1	0.7	100.0

B

UNIVARIATE

VARIABLE=TS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	142	SUM WGTS	142	100% MAX	4.4	99%	4.228	LOWEST	HIGHEST
MEAN	1.74085	SUM	247.2	75% Q3	2.4	95%	3.94	0.4	4
STD DEV	1.09384	VARIANCE	1.19648	50% MED	1.6	90%	3.2	0.4	4
SKEWNESS	0.499522	KURTOSIS	-0.784211	25% Q1	0.8	10%	0.4	0.4	4
USS	599.04	CSS	168.703	0% MIN	0.4	5%	0.4	0.4	4
CV	62.8336	STD MEAN	0.0917926			1%	0.4	0.4	4.4
T:MEAN=0	18.965	PROB>|T|	0.0001	RANGE	4				
SGN RANK	5076.5	PROB>|S|	0.0001	Q3-Q1	1.6				
NUM ^= 0	142			MODE	0.4				

STEM	LEAF	#	BOXPLOT
44	0	1	
42			
40	000000	6	
38			
36	000	3	
34			
32	00000000000000000000	19	
30			
28	00000	5	
26			
24	0000000	7	
22			
20	000000000000000000000000	22	
18			
16	00000000000000	14	
14			
12	000000000000000000000000000	24	
10			
8	000000000000	12	
6			
4	00000000000000000000000000000000	29	
2			

MULTIPLY STEM.LEAF BY 10**-01

NORMAL PROBABILITY PLOT

4.5+
3.1+
1.7+
0.3+
-2 -1 +0 +1 +2

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0.4	29	20.4	20.4	1.6	14	9.9	55.6	2.8	5	3.5	79.6	4	6	4.2	99.3
0.8	12	8.5	28.9	2	22	15.5	71.1	3.2	19	13.4	93.0	4.4	1	0.7	100.0
1.2	24	16.9	45.8	2.4	7	4.9	76.1	3.6	3	2.1	95.1				

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UNIVARIATE

VARIABLE=COB

MOMENTS

N	90	SUM WGTS	90
MEAN	8.855833	SUM	797.25
STD DEV	3.47978	VARIANCE	12.1088
SKEWNESS	0.839045	KURTOSIS	1.78011
USS	8139.99	CSS	1077.69
CV	39.2825	STD MEAN	0.3668
T:MEAN=0	24.1503	PROB>|T|	0.0001
SGN RANK	2047.5	PROB>|S|	0.0001
NUM ^= 0	90		

QUANTILES(DEF=4)

100% MAX	19.8	99%	19.8
75% Q3	10.55	95%	16.44
50% MED	8.05	90%	12.95
25% Q1	6.475	10%	5.91
0% MIN	0.1	5%	4.91
		1%	0.1
RANGE	19.7		
Q3-Q1	4.075		
MODE	6		

EXTREMES

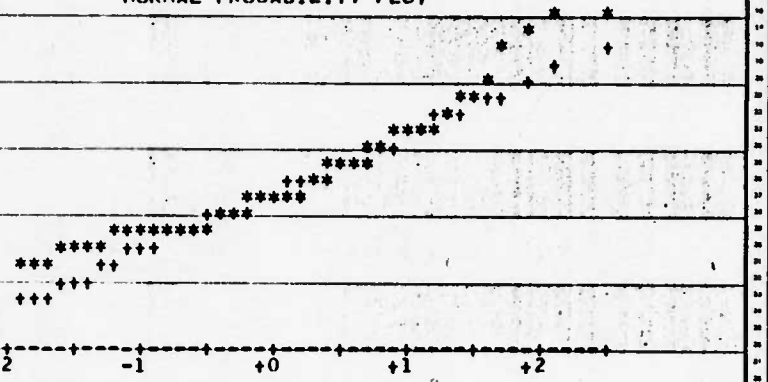
LOWEST	HIGHEST
0.1	15.9
0.15	17.1
4.8	18.2
4.8	19.5
5	19.8

MISSING VALUE

COUNT	5
% COUNT/NOBS	36.62

STEM	LEAF	#	BOXPLOT
19	58	2	0
18	2	1	0
17	1	1	0
16			
15	9	1	
14	013	3	
13	0	1	
12	0012555	7	
11	002359	6	
10	00001224	8	+-----+
9	000145	6	
8	00000001255899999	16	*--+--*
7	0000011555	9	
6	000000012233455555999	20	+-----+
5	01589	5	
4	88	2	
3			
2			
1			
0	11	2	0

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0.1	1	1.1	1.1
0.15	1	1.1	2.2
4.8	2	2.2	4.4
5	1	1.1	5.6
5.1	1	1.1	6.7
5.5	1	1.1	7.8
5.8	1	1.1	8.9
5.9	1	1.1	10.0
6	7	7.8	17.8
6.1	1	1.1	18.9
6.2	2	2.2	21.1
6.3	2	2.2	23.3
6.4	1	1.1	24.4
6.5	4	4.4	28.9
6.9	3	3.3	32.2
7	4	4.4	36.7
7.1	2	2.2	38.9
7.5	3	3.3	42.2
7.8	7	7.8	50.0
8.1	1	1.1	51.1
8.2	1	1.1	52.2
8.5	2	2.2	54.4
8.8	1	1.1	55.6
8.9	4	4.4	60.0
9	3	3.3	63.3
9.1	1	1.1	64.4
9.4	1	1.1	65.6
9.5	1	1.1	66.7
10	4	4.4	71.1
10.1	1	1.1	72.2
10.2	2	2.2	74.4
10.4	1	1.1	75.6
11	2	2.2	77.8
11.2	1	1.1	78.9
11.3	1	1.1	80.0
11.5	1	1.1	81.1
11.9	1	1.1	82.2
12	2	2.2	84.4
12.1	1	1.1	85.6
12.2	1	1.1	86.7

F.67

F.

UNIVARIATE

VARIABLE=COB

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
12.5	3	3.3	90.0	14.1	1	1.1	93.3	17.1	1	1.1	96.7	19.8	1	1.1	100.0
13	1	1.1	91.1	14.3	1	1.1	94.4	18.2	1	1.1	97.8				
14	1	1.1	92.2	15.9	1	1.1	95.6	19.5	1	1.1	98.9				

APPENDIX G
DETROIT DIESEL ALLISON 8V-71T ENGINE
1ST BATTALION OF THE 29TH FIELD ARTILLERY
4TH INFANTRY DIVISION, FT. CARSON CO.

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* These models were all developed early in the study and are based on a slightly different data collection methodology than that outlined in Table 1.

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FD13	ZN1	HRS	FE	VIS	TAN	TS	COR	GC
1	24.80	105.72	233.52	453.13	1335.61	2.16	5.63	490.83	-0.44	.	106	190	2.70	4.0	11.0	.
2	26.97	-614.08	190.69	530.35	1787.91	0.25	5.24	564.35	-0.82	.	140	190	2.61	4.4	8.9	.
3	28.79	-212.91	202.28	543.64	1819.50	-0.55	5.52	458.34	-0.67	134	217	180	2.54	6.0	8.2	.
4	23.88	-1.32	159.78	455.20	1406.26	0.19	4.98	347.16	-0.56	134	171	170	2.57	4.0	8.0	.
5	29.84	471.40	285.13	525.74	1635.67	2.55	7.60	341.82	-1.68	147	185	178	2.51	4.0	10.0	.
6	32.98	588.08	225.23	555.65	1694.34	1.69	8.21	306.69	-1.03	160	249	177	3.42	4.8	5.5	.
7	33.06	335.21	220.49	587.71	1789.24	0.25	8.05	352.36	-0.91	160	277	165	2.99	4.4	6.0	.
8	31.15	1810.33	179.40	612.42	1645.09	2.24	7.95	442.01	-0.26	172	205	145	2.50	4.0	6.0	1
9	9.72	1452.08	10.49	225.70	420.49	2.07	3.07	220.83	-0.28	8	74	148	2.14	1.6	4.0	2
10	9.99	1322.73	8.58	209.50	405.62	1.91	2.78	194.76	-0.48	9	84	148	1.94	1.6	4.0	2
11	12.24	1038.82	22.17	258.39	494.92	1.59	3.27	177.80	-0.19	18	15	149	2.07	1.2	4.0	2
12	19.59	-267.08	-24.54	233.47	587.12	-0.74	0.00	134.98	-0.94	35	143	159	2.17	4.0	.	.
13	24.49	-53.11	-22.16	292.92	693.17	-1.91	0.00	111.68	-1.68	45	142	143	2.12	4.8	.	5
14	27.56	-329.95	-25.19	302.45	691.17	-2.69	0.00	133.91	-1.73	63	161	124	2.16	4.8	.	5
15	33.89	142.46	15.36	369.49	1020.81	-3.58	0.00	146.53	-2.09	85	186	118	3.65	6.0	.	11
16	17.37	-85.15	339.84	604.63	1968.78	4.69	6.94	903.57	+0.57	30	137	205	2.47	2.8	10.5	.
17	17.23	-342.51	270.80	586.92	2081.43	2.96	6.35	810.37	-0.87	60	124	195	2.34	3.2	8.1	.
18	22.49	966.33	198.49	586.42	2075.88	2.20	7.10	624.39	-0.62	1	151	196	2.50	3.2	6.5	.
19	24.63	-55.07	252.51	661.69	2263.13	1.17	7.03	676.91	-1.34	2	206	201	2.60	4.8	8.1	.
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	24	145	1.71	0.4	6.5	5
21	0.99	774.90	39.48	14.88	-10.28	2.27	0.00	32.11	-0.71	10	23	158	1.72	0.4	8.0	.
22	31.03	1823.74	194.06	838.24	2317.11	1.80	10.36	688.45	0.06	82	228	174	2.35	4.0	4.5	.
23	2.97	1571.69	23.06	200.10	484.53	2.30	2.17	239.12	-0.25	3	27	165	1.58	0.4	3.5	.
24	4.51	1843.92	-57.33	301.51	869.61	2.56	3.34	275.99	0.57	13	41	163	1.82	0.4	3.0	.
25	9.83	1514.22	73.03	381.57	1060.81	2.24	4.34	303.19	0.29	16	63	154	1.56	1.2	3.0	.
26	6.94	1695.49	-1.14	94.31	259.53	1.87	0.53	228.82	0.40	2	40	161	2.25	1.2	5.0	.
27	5.27	1578.36	-19.55	17.38	121.19	1.85	0.00	217.99	0.02	2	33	155	2.21	1.2	5.0	.
28	5.88	1612.86	-6.37	47.58	181.50	2.09	0.18	282.46	0.09	4	37	145	2.31	1.2	5.0	4
29	11.39	465.67	-39.55	72.74	220.07	-0.06	0.00	198.02	-0.35	32	100	145	2.45	2.0	.	4
30	1.97	500.46	-114.04	-169.09	-356.95	0.64	0.00	-13.01	-1.09	1	18	167	2.57	1.2	.	.
31	4.25	393.98	-118.18	-135.85	-270.54	0.00	0.00	24.59	-1.08	3	29	143	2.64	2.0	.	3
32	18.85	166.56	-61.69	1.88	6.19	-1.23	0.00	70.92	-0.88	25	66	120	2.26	4.4	.	8
33	25.00	-88.22	-34.41	187.02	329.63	-1.24	0.86	230.57	-1.54	77	86	80	2.58	4.4	.	13
34	12.53	-220.73	89.32	-113.87	151.57	-0.55	0.00	-16.47	-0.49	19	165	53	2.14	1.2	10.0	5
35	27.99	-517.08	124.37	148.13	894.94	-1.34	0.00	199.02	-0.59	40	217	104	2.10	3.6	6.9	7
36	23.90	-189.44	-99.12	125.46	770.48	-0.29	0.00	150.28	+0.29	58	199	100	2.42	3.6	7.0	7
37	10.35	-422.25	-33.94	12.05	-122.06	-2.04	0.00	-102.58	-0.80	58	96	71	2.15	0.4	5.5	2
38	18.85	2927.93	-43.17	174.69	119.43	1.40	0.00	130.25	1.04	32	122	92	1.75	0.4	7.0	2
39	32.79	981.65	-26.37	372.83	863.57	-2.01	3.74	168.95	0.02	63	197	160	2.62	1.6	3.5	.
40	32.90	1041.39	-36.34	380.37	843.68	-1.94	3.48	164.34	0.24	63	200	157	2.09	3.2	4.0	.
41	9.37	777.78	-76.41	140.43	153.83	0.19	0.00	131.95	-0.54	1	69	152	1.68	1.6	3.5	.
42	9.66	1919.59	82.17	70.27	268.89	1.56	0.00	271.54	0.51	2	101	144	2.19	1.2	3.0	3
43	-0.11	1512.82	90.04	124.67	1033.64	2.48	0.00	173.18	0.40	1	64	164	2.04	0.4	7.0	.
44	10.72	-268.76	153.11	322.58	850.49	3.50	3.85	398.27	-0.88	15	142	140	2.36	1.6	11.5	3
45	14.40	-291.05	137.99	444.82	1407.00	2.81	5.30	503.20	-1.92	30	191	135	2.70	2.8	9.2	3
46	16.78	-252.82	153.19	461.37	1488.52	2.40	5.33	518.57	-1.92	45	189	133	2.75	4.0	10.0	3
47	8.80	-187.94	-8.66	134.37	117.40	-1.28	0.00	-16.67	-1.23	78	126	156	2.19	0.4	6.5	.
48	16.19	-42.43	1.96	226.80	430.84	-1.30	0.00	29.69	-1.39	84	131	148	2.02	4.0	7.0	2
49	21.60	789.08	-36.60	372.30	818.99	-1.27	3.47	266.63	-0.08	94	171	155	2.77	2.8	4.5	.
50	22.98	587.77	-26.86	371.00	824.48	-1.05	0.00	259.93	-0.70	104	157	150	2.29	2.8	5.0	.
51	37.72	1504.00	-31.99	433.10	1119.46	-1.27	3.45	271.54	-0.75	144	281	155	2.49	4.4	5.0	.
52	11.61	658.74	-82.37	-103.40	-7.54	-0.60	0.00	84.81	-0.20	11	110	165	2.42	2.4	6.0	.
53	37.69	860.15	-43.13	83.18	529.29	-2.72	0.00	180.03	0.24	12	299	176	2.37	3.2	5.0	.
54	8.37	657.10	-93.26	-180.45	-221.45	-0.24	0.00	64.39	-0.62	2	161	167	2.56	1.6	6.0	.
55	7.03	1317.42	-107.55	-99.10	167.50	1.05	0.00	352.71	-0.64	1	155	175	2.86	1.2	.	.
56	8.89	-26.71	-124.36	-223.82	-376.62	-1.16	0.00	-111.82	-1.19	5	155	166	2.52	4.0	.	.

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FDI3	ZN1	HRS	FE	VIS	TAN	TS	COB	GC
57	34.90	277.1	-89.82	16.05	144.8	-4.14	0.00	-46.4	-1.11	14	325	151	2.30	6.0	.	.
58	10.76	-87.6	-129.36	-191.20	-385.4	-1.41	0.00	-81.0	-0.80	14	110	126	2.35	6.0	.	7.0
59	20.70	-358.2	-103.83	-84.28	-170.2	-3.07	0.00	-212.8	-1.44	31	191	141	3.06	6.0	.	3.0
60	9.11	-20.3	25.88	89.58	84.2	0.52	0.00	59.1	-0.72	8	94	.	2.10	1.2	9.5	3.0
61	10.81	-545.9	60.60	249.67	483.4	1.00	0.00	76.9	-1.68	16	137	.	2.62	2.4	7.4	4.0
62	12.11	-424.4	43.69	257.14	408.6	-1.52	0.00	-33.2	-1.85	25	181	128	2.63	3.2	8.0	3.0
63	-1.02	1568.2	-94.96	-294.17	-664.8	4.51	0.00	-20.5	-1.49	2	24	188	2.81	4.0	6.0	.
64	1.47	518.3	-153.93	-290.61	-365.2	0.01	0.00	-35.9	-0.52	15	50	167	2.03	1.2	.	.
65	2.89	492.0	-153.03	-292.83	-329.0	-0.14	0.00	-50.1	-0.49	17	51	175	2.24	1.2	.	.
66	-0.24	973.6	-152.97	-336.84	-527.8	0.82	0.00	-32.1	-0.63	1	19	174	3.01	0.8	.	.
67	1.06	588.0	-128.50	-278.39	-323.2	0.18	0.00	-60.6	-0.61	2	22	159	1.99	0.8	.	.
68	4.95	-169.2	-135.45	-202.66	-278.7	-1.22	0.00	-67.2	-1.04	13	59	163	2.23	2.0	.	.
69	7.81	-316.9	-120.06	-164.70	-132.3	-1.74	0.00	-95.6	-1.21	18	65	163	2.11	4.0	.	.
70	9.93	-149.0	-121.63	-171.10	-88.0	-1.90	0.00	-86.4	-1.38	25	90	171	1.88	4.0	.	.
71	2.93	251.7	118.46	535.44	1568.7	7.59	0.00	1487.0	0.89	1	39	216	2.05	2.0	.	.
72	53.19	-474.6	-9.41	137.26	733.0	-5.46	0.00	127.9	-0.25	42	125	175	2.47	8.4	11.0	3.0
73	50.65	247.8	13.14	199.63	977.0	-3.67	0.00	229.0	-0.52	85	133	173	2.50	8.0	8.7	4.0
74	49.67	393.4	72.77	302.49	1108.5	-3.73	0.00	235.0	-0.55	1235	200	155	2.64	8.8	8.0	5.0
75	45.32	111.9	83.32	279.22	1039.2	-4.07	0.00	202.4	0.21	68	193	160	2.51	8.4	6.9	.
76	50.61	449.0	60.71	342.61	1493.2	-4.34	0.00	228.6	-0.36	82	187	178	2.49	8.8	7.0	4.0
77	58.08	-1257.4	44.18	411.72	1273.3	-1.89	0.00	170.2	-0.27	101	196	183	2.91	8.0	4.5	.
78	18.89	.	.	.	.	.	.	.	.	0	54	220	1.85	3.2	4.5	.
79	19.74	2398.0	250.13	774.94	1976.0	8.15	8.44	1213.0	1.08	5	70	220	2.00	0.4	5.0	.
80	26.59	1028.6	274.35	757.43	2213.7	5.22	8.52	1136.1	0.63	17	68	206	2.13	4.0	5.0	.
81	24.57	817.4	190.97	639.32	1760.4	4.17	6.66	894.0	0.35	18	79	186	1.91	4.0	5.0	.
82	44.62	1090.3	158.19	674.70	1930.6	-0.02	6.93	854.9	0.42	36	115	185	2.29	4.0	4.0	.
83	33.05	1325.4	101.85	451.53	1522.9	1.86	5.32	745.4	0.61	39	90	171	2.24	4.0	4.0	.
84	46.11	1054.4	-3.39	338.08	1168.5	-3.40	0.00	356.0	-0.38	47	129	183	2.67	6.0	.	.
85	39.07	2537.5	-272.40	-887.60	-2795.1	2.06	0.00	-1049.3	-1.08	53	117	181	2.19	6.0	.	.
86	53.02	509.8	-96.98	207.30	980.5	-5.20	0.00	173.0	-0.88	63	159	168	2.75	8.0	.	.
87	65.31	1208.2	-40.66	61.21	670.6	-3.02	0.00	111.6	-0.95	75	161	164	2.69	10.0	.	.
88	5.01	162.2	221.47	24.83	832.4	1.47	0.00	-4.2	0.01	40	93	187	2.05	1.2	9.5	.
89	4.84	60.2	213.67	69.03	1135.3	2.61	0.00	81.4	-0.27	80	92	191	2.16	1.2	5.5	.
90	12.74	-187.8	196.22	211.44	1562.9	-2.10	0.00	-136.6	-0.80	175	162	198	2.16	2.8	5.5	.
91	15.22	223.0	226.59	184.17	1090.5	3.74	0.00	-157.0	-1.46	80	827	152	2.30	1.2	9.0	.
92	15.14	232.5	210.18	173.00	1132.5	1.05	0.00	-113.9	-1.39	175	959	150	2.32	0.8	8.0	.
93	-2.23	1692.3	169.28	67.05	587.0	2.20	0.00	-56.5	-0.05	1	76	110	2.21	0.4	9.5	21.0
94	-2.18	1627.0	190.70	67.17	470.9	2.57	0.00	41.1	-0.01	2	78	74	1.88	0.4	11.0	40.0
95	0.11	1630.6	-12.75	-81.46	-500.4	2.53	0.00	186.3	-0.81	5	59	91	1.63	0.4	2.5	16.0
96	0.37	1437.6	4.15	-48.40	-435.3	2.89	0.48	264.5	-0.84	15	50	76	1.47	0.4	3.0	20.0
97	23.69	-107.5	191.08	279.93	1228.4	-0.48	0.00	216.7	-0.89	58	117	138	2.62	4.8	9.0	3.0
98	24.56	-366.2	188.66	334.67	1592.1	-0.23	3.32	331.8	-0.74	117	187	133	2.97	4.8	8.5	3.0
99	21.08	6064.0	2.01	264.54	458.3	3.74	0.00	345.8	2.97	175	116	85	2.84	1.6	16.1	3.0
100	27.53	-24.8	186.15	284.16	980.5	0.81	0.00	29.7	-1.44	31	190	88	2.86	3.6	12.0	3.0
101	33.30	1763.8	58.42	462.33	1511.3	-0.57	3.59	320.8	0.51	40	201	84	3.92	6.4	12.0	2.0
102	37.59	1439.9	64.07	457.60	1538.1	-1.64	0.00	282.3	-0.09	88	214	87	3.15	7.6	9.5	4.0
103	37.73	1637.8	77.50	470.32	1428.1	-0.91	3.84	161.3	-0.02	90	221	88	2.70	8.0	10.0	3.0
104	10.86	891.6	5.12	146.63	335.8	3.02	0.00	67.7	-0.82	2	71	121	1.96	8.0	4.5	2.0
105	21.91	765.7	31.21	279.14	622.6	0.79	0.00	56.4	-0.61	14	85	121	2.22	2.8	4.5	2.0
106	25.31	214.0	31.05	239.68	603.9	0.03	0.00	65.8	-1.21	14	90	127	2.34	0.4	5.0	2.0
107	25.08	396.5	0.03	179.67	462.5	0.33	0.00	48.9	-1.13	14	81	129	2.58	0.4	4.5	2.0
108	27.21	445.5	9.77	191.37	513.0	-0.11	2.76	48.3	-1.44	16	90	125	2.62	0.4	4.5	2.0
109	31.51	585.4	-84.27	181.88	673.6	-3.03	0.00	43.5	-0.71	27	100	129	2.87	7.2	7.5	3.0
110	30.03	177.2	-90.32	162.75	616.3	-3.17	0.00	54.2	-0.79	29	104	130	2.96	8.0	7.5	7.5
111	33.22	563.4	-35.04	206.06	731.5	-3.38	0.00	35.2	-1.04	38	112	127	2.59	8.0	7.5	3.0
112	38.27	262.8	-42.44	270.04	881.6	-3.83	0.00	26.9	-1.73	47	133	124	2.60	8.0	7.0	4.0

G-2

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FOI3	ZN1	HRS	FE	VIS	TAN	TS	COB	GC
113	24.34	-15.84	234.34	264.42	1298.76	0.09	0.00	157.31	-0.44	12	187	187	2.24	4.0	9.0	.
114	21.24	-827.17	254.81	376.61	1945.86	-0.99	0.00	291.34	-0.79	18	207	188	2.64	4.0	9.0	.
115	21.83	249.67	366.49	475.35	1895.54	1.82	0.00	154.13	-1.24	18	244	190	2.68	4.8	6.9	.
116	23.98	426.60	332.89	461.25	1964.70	0.72	5.68	217.89	-0.86	76	275	185	2.59	4.0	10.0	.
117	1.64	.	.	.	.	.	.	.	.	.	4	187	1.74	4.0	7.0	.
118	3.32	3837.78	261.05	133.10	443.03	7.31	0.00	49.53	0.62	12	47	181	1.87	4.0	6.0	.
119	30.98	-367.87	183.51	392.44	1391.83	-0.97	0.00	421.63	-0.21	4	29	180	2.75	6.8	9.0	.
120	28.16	-143.61	310.82	550.71	1887.10	-2.88	0.00	488.27	-1.27	8	200	169	2.82	7.2	6.9	.
121	22.94	-0.74	208.75	570.01	1988.06	-1.22	5.76	312.02	-0.46	13	199	173	2.89	6.0	6.2	.
122	22.71	597.33	248.73	524.48	1720.84	1.31	6.69	285.19	-0.60	80	196	153	2.95	3.6	6.0	.
123	28.59	1917.64	192.83	705.90	2106.98	1.41	0.00	387.24	-0.03	90	226	153	4.29	4.8	5.5	.
124	1.58	1512.93	223.80	239.56	1373.76	7.84	0.00	49.71	-0.79	3	99	205	2.41	0.4	5.0	.
125	15.53	877.09	63.54	397.35	973.44	3.31	5.18	414.02	-0.45	14	64	161	2.31	2.4	3.5	.
126	-1.43	2045.37	-83.64	-219.08	-675.07	6.89	0.00	-44.37	-1.72	.	29	58	2.51	4.0	3.9	2
127	26.02	530.04	61.05	415.99	1020.54	1.42	4.98	374.48	-0.55	14	72	147	2.14	3.2	4.0	.
128	30.12	336.18	52.94	374.00	1008.29	0.01	0.00	316.31	-0.29	19	86	163	2.43	3.2	4.0	.
129	31.46	593.10	43.35	385.52	1098.86	-0.47	0.00	348.15	-0.28	46	84	159	2.63	4.0	4.0	.
130	34.04	682.44	-11.45	341.14	1222.42	-3.30	0.00	283.56	-0.49	57	110	156	2.47	4.8	.	.
131	40.70	944.94	-32.25	455.65	1382.47	-2.95	0.00	276.17	-0.88	62	135	153	2.62	6.0	.	.
132	43.95	353.14	-41.10	468.27	1363.87	-2.14	5.28	327.99	-1.00	64	153	136	2.51	6.0	.	4
133	50.73	751.25	-25.64	487.59	1254.69	-2.83	5.16	172.25	-1.53	90	156	116	2.87	8.4	.	4
134	9.20	6058.38	195.17	478.04	1005.78	6.80	0.00	579.29	3.47	3	58	227	1.96	1.6	10.0	.
135	13.93	300.30	312.05	596.75	1804.68	6.61	6.58	702.97	-0.47	5	88	220	2.34	2.8	7.0	.
136	15.19	-225.01	189.18	567.52	1799.65	0.50	0.00	617.47	-0.25	10	101	231	2.43	3.2	7.1	.
137	18.51	197.70	163.57	485.16	1415.94	0.92	5.45	395.96	-0.11	55	105	210	2.32	1.2	7.0	.
138	29.57	1302.24	227.57	705.28	1918.32	2.55	8.22	480.02	-0.29	66	139	207	3.26	2.0	4.5	.
139	31.71	1308.94	204.13	716.98	2030.83	2.03	8.52	494.80	-0.30	66	114	197	2.77	4.4	4.0	.
140	33.52	911.12	164.45	626.04	1747.30	1.40	7.91	398.55	-0.77	78	106	189	2.32	6.0	4.0	.
141	38.82	943.05	171.94	643.81	1824.76	-0.04	7.86	367.41	-0.61	78	103	188	2.75	6.8	4.0	.
142	42.76	1125.84	128.47	594.96	1722.39	0.09	7.80	315.82	-1.06	83	135	182	2.47	4.4	4.0	.
143	40.92	557.25	107.36	551.97	1618.66	-0.89	7.14	270.21	-0.76	85	124	176	2.41	6.4	4.0	.
144	25.42	-106.98	92.45	125.66	630.68	-0.79	0.00	134.84	-0.17	3	70	179	2.61	2.0	4.5	.
145	36.31	-476.93	179.50	290.30	1261.03	-1.25	3.67	194.12	-0.98	9	44	179	2.37	4.8	6.9	.
146	34.18	-100.31	113.07	363.50	1321.45	-3.58	0.00	148.87	-0.41	14	105	169	2.68	6.8	6.8	.
147	45.98	1584.00	67.81	633.65	2107.64	-1.29	0.00	448.96	0.02	73	121	190	2.71	3.2	6.0	.
148	47.97	1694.21	195.16	677.86	1802.29	-6.52	7.56	302.06	-0.46	80	125	162	3.55	8.0	4.5	.
149	44.97	1427.61	159.54	588.72	1686.27	-0.07	0.00	241.97	-0.67	108	103	166	2.96	6.4	4.5	.
150	63.20	-590.27	174.48	576.38	1792.54	6.48	0.00	254.42	-0.24	120	125	174	2.88	10.4	5.0	.
151	73.21	909.71	261.93	573.39	1885.66	-0.48	3.52	496.47	0.76	124	153	184	2.83	10.8	5.0	.
152	73.48	761.28	287.87	591.91	1956.98	-1.20	3.80	519.44	0.74	124	139	184	3.02	10.8	5.0	.
153	81.20	5572.45	336.50	297.16	1680.80	12.28	0.00	646.11	1.09	126	181	175	2.91	12.0	.	.
154	28.11	556.17	-31.14	114.02	478.42	-1.02	0.00	57.81	0.11	8	67	169	2.77	3.6	.	.
155	38.25	300.93	-13.20	214.12	708.23	-2.78	0.00	-4.95	-1.15	10	87	187	2.97	7.2	.	.
156	43.46	-270.58	-51.63	173.35	618.47	-3.68	0.00	-128.35	-1.58	39	89	169	2.87	7.2	.	.
157	80.29	3840.53	254.37	276.01	1058.92	8.08	0.00	708.09	0.43	100	137	184	2.17	1.6	8.5	.
158	13.83	-239.71	283.63	453.65	1610.97	3.78	5.32	539.48	-1.34	10	199	160	2.08	2.8	7.3	.
159	15.22	336.54	312.09	506.93	1755.48	3.31	6.02	382.49	-1.61	20	252	163	2.77	4.0	8.0	.
160	8.38	672.33	87.86	139.59	374.24	0.91	0.00	44.31	-0.50	61	86	159	2.18	1.6	8.0	.
161	14.66	75.13	158.04	396.11	1308.12	0.56	4.61	297.12	-1.20	78	207	148	2.31	0.8	7.0	3
162	16.13	-117.79	197.19	456.53	1519.15	0.18	5.04	314.93	-1.03	79	251	156	2.59	2.0	7.0	.
163	1.44	731.79	96.52	44.77	580.92	1.62	0.00	-19.20	-0.03	1	49	194	2.28	0.4	9.0	.
164	27.66	-310.61	69.30	37.86	432.06	-2.09	0.00	-27.53	-1.00	-6	143	129	2.50	4.0	7.5	3
165	37.22	-664.48	109.54	163.71	1106.90	-2.86	0.00	45.32	-1.98	11	175	134	2.77	8.4	6.9	3
166	29.16	0.80	164.48	226.62	1056.64	-0.88	0.00	-78.04	-1.70	17	181	135	2.90	4.0	7.0	2
167	28.81	-131.13	90.96	202.74	1162.76	-2.11	0.00	113.43	-1.16	68	164	117	2.50	4.0	9.0	7
168	29.89	2018.28	141.34	441.22	1411.72	2.13	0.00	301.29	-0.57	94	182	115	3.78	4.0	7.0	8

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FDI3	ZN1	HRS	FE	VIS	TAN	TS	COB	GC
169	30.23	1685.88	140.36	427.35	1391.69	1.29	0.00	292.20	-0.52	94	151	100	2.53	4.8	6.0	10
170	37.43	1822.51	121.85	458.60	1550.04	0.41	6.28	281.83	-0.58	106	172	115	2.69	6.8	5.5	5
171	6.25	899.34	28.93	163.58	591.28	4.57	0.00	155.72	-0.87	107	43	145	1.95	0.4	3.5	2
172	4.84	1217.18	80.27	213.76	890.05	6.04	0.00	131.19	-0.22	113	35	162	1.81	0.4	3.5	.
173	45.73	1325.99	342.04	908.20	2954.09	-0.49	0.00	159.13	-1.15	4	146	166	3.61	7.2	7.0	.
174	10.73	449.58	-11.93	141.55	745.74	-0.36	0.00	-14.26	-0.70	38	59	178	1.79	4.0	.	.
175	13.67	353.61	3.16	198.51	996.23	-0.82	0.00	17.13	-0.61	43	73	172	1.85	4.0	.	.
176	6.96	376.04	-64.28	20.35	268.82	-0.29	0.00	20.49	-0.38	45	37	168	2.31	4.0	.	2
177	25.20	-432.15	26.08	307.16	1294.83	-2.77	0.00	0.62	-1.78	72	105	149	1.97	4.0	.	3

VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
CL2	177	23.59519774	16.87226369	4176.3500000	-2.23000000	81.20000000
DET1	175	705.17771429	1070.82048402	123406.1000000	-1257.39000000	6063.97000000
DET2	175	78.96834286	129.49281351	13819.4600000	-272.40000000	366.49000000
DET3	175	274.26114286	270.56652817	47995.7000000	-887.60000000	908.20000000
DET4	175	938.51554286	788.82771296	164240.2200000	-2795.10000000	2954.09000000
FD1	175	0.52794286	2.88991156	92.3900000	-5.46000000	12.28000000
FD2	175	1.90862857	2.87223998	334.0100000	0	10.36000000
FDI3	175	227.09874286	278.05985462	39742.2800000	-1049.29000000	1486.96000000
ZN1	175	-0.57188571	0.77765592	-100.0800000	-2.09000000	3.47000000
HRS	173	53.58959538	100.56982595	9271.0000000	0	1235.00000000
FE	177	133.66101695	104.56135816	23658.0000000	4.00000000	959.00000000
VIS	175	156.64000000	33.80916015	27412.0000000	53.00000000	231.00000000
TAN	177	2.45790960	0.44490631	435.0500000	1.47000000	4.29000000
TS	177	3.86892655	2.61168604	684.8000000	0.40000000	12.00000000
CUB	139	6.54964029	2.35972776	910.4000000	2.50000000	16.10000000
GC	66	5.17424242	5.86940727	341.5000000	1.00000000	40.00000000

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

CL2

CL2	TS	TAN	DET4	DET3	HRS	GC	FD1	FE	DET2	FDI3	FD2	VIS	DFT1
1.00000	0.77619	0.49210	0.46510	0.45429	0.31425	-0.28353	-0.26494	0.24451	0.21765	0.21319	0.16900	0.10513	0.06699
177	177	177	175	175	173	66	175	177	175	175	175	175	175

ZN1	CUB
0.06072	-0.00203
175	139

DET1

DET1	ZN1	FD1	FDI3	GC	FE	TS	CL2	CUB	DET2	DET4	DFT3	TAN	HRS
1.00000	0.66272	0.52420	0.17347	0.14768	-0.13321	-0.09047	0.06699	-0.05640	0.04923	-0.04473	0.04012	-0.03156	0.02968
175	175	175	175	66	175	175	175	137	175	175	175	175	172

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

DET1

FD2	VIS
0.02844	-0.02514
175	173

DET2

DET2	DET4	DET3	FD13	FD2	FD1	VIS	FE	COR	CL2	TAN	GC	ZN1	HRS
1.00000	0.80992	0.72333	0.57211	0.49178	0.45096	0.33234	0.29374	0.26209	0.21765	0.19418	0.18630	0.15006	0.10545
175	175	175	175	175	175	173	175	137	175	175	66	175	172

TS	DET1
0.10279	0.04923
175	175

DET3

DET3	DET4	FD13	DET2	FD2	CL2	TAN	TS	VIS	GC	FE	HRS	ZN1	FD1
1.00000	0.94005	0.73664	0.72333	0.64719	0.45429	0.34295	0.29204	0.29107	-0.21360	0.20910	0.16609	0.16410	0.15183
175	175	175	175	175	175	175	175	173	66	175	172	175	175

DET1	COR
0.04012	-0.03910
175	137

DET4

DET4	DET3	DET2	FD13	FD2	CL2	TAN	VIS	TS	FE	HRS	GC	FD1	ZN1
1.00000	0.94005	0.80992	0.69024	0.57127	0.46510	0.38063	0.36448	0.34051	0.29055	0.17703	-0.16159	0.12416	0.12180
175	175	175	175	175	175	175	173	175	175	172	66	175	175

COR	DET1
0.09435	-0.04473
137	175

FD1

FD1	DET1	DET2	FD13	ZN1	TS	CL2	FD2	VIS	TAN	DET3	GC	DET4	HRS
1.00000	0.52420	0.45096	-0.41738	0.36032	-0.34278	-0.26494	-0.25384	-0.20333	-0.18251	0.15183	-0.14361	0.12416	-0.12078
175	175	175	175	175	175	175	175	173	175	175	66	175	172

FE	COR
-0.11108	-0.08739
175	137

FD2

FD2	DET3	FD13	DET4	DET2	VIS	FD1	GC	CL2	COR	TAN	FE	HRS	TS
1.00000	0.64719	0.58110	0.57127	0.49178	0.29676	0.25384	-0.18407	0.16900	-0.13382	0.12581	0.10657	0.06695	0.05400
175	175	175	175	175	173	175	66	175	137	175	175	172	175

ZN1	DET1
0.05023	0.02844
175	175

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

FDI3

FDI3	DET3	DET4	FD2	DET2	FD1	ZN1	VIS	CL2	DET1	TAN	TS	GC	COR
1.00000	0.73664	0.69024	0.58110	0.57211	0.41738	0.40349	0.37287	0.21319	0.17347	0.07087	0.04924	-0.04720	-0.04321
175	175	175	175	175	175	175	173	175	175	175	175	66	137

FE	HRS
-0.04271	0.03834
175	172

ZN1

ZN1	DET1	FDI3	FD1	FE	VIS	DET3	TAN	DET2	DET4	TS	GC	CL2	FD2
1.00000	0.66272	0.40349	0.35032	-0.21585	0.21202	0.16410	-0.15403	0.15006	0.12180	-0.11564	0.07807	0.06072	0.05023
175	175	175	175	175	173	175	175	175	175	175	66	175	175

HRS	COR
0.01053	0.00007
172	137

HRS

HRS	CL2	TS	FE	DET4	DET3	TAN	FD1	DET2	COR	FD2	GC	FDI3	DET1
1.00000	0.31425	0.26926	0.23521	0.17703	0.16609	0.16455	-0.12078	0.10545	0.08082	0.06695	-0.04523	0.03834	0.02968
173	173	173	173	172	172	173	172	172	135	172	65	172	172

VIS	ZN1
-0.02878	-0.01053
171	172

FE

FE	DET2	DET4	TAN	CL2	COR	HRS	ZN1	DET3	GC	TS	DFT1	FD1	FD2
1.00000	0.29374	0.29055	0.26849	0.24451	0.24190	0.23521	-0.21585	0.20910	-0.15646	0.14618	-0.13321	-0.11108	0.10657
177	175	175	177	177	139	173	175	175	66	177	175	175	175

VIS	FDI3
-0.06597	-0.04271
175	175

VIS

VIS	GC	FDI3	DET4	DET2	FD2	DFT3	ZN1	FD1	COR	CL2	FE	TAN	TS
1.00000	-0.38878	0.37287	-0.36448	0.33234	0.29676	-0.29107	0.21202	-0.20333	-0.15610	0.10513	-0.06597	-0.04717	0.03732
175	64	173	173	173	173	173	173	173	137	175	175	175	175

HRS	DET1
-0.02878	-0.02516
171	173

TAN

TAN	TS	CL2	DET4	DET3	FE	COR	GC	DET2	FD1	HRS	ZN1	FD2	FDI3
1.00000	0.50616	0.49210	0.38063	0.34295	0.26849	0.22491	-0.21454	0.19418	-0.18251	0.16455	-0.15403	0.12581	0.07087
177	177	177	175	175	177	139	66	175	175	173	175	175	175

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

TAN

VIS	DET1
-0.04717	-0.03156
175	175

TS

TS	CL2	TAN	FD1	DET4	DET3	HRS	GC	FE	ZN1	DET2	COB	DET1	FD2
1.00000	0.77619	0.50616	-0.34278	0.34051	0.29204	0.26926	-0.19097	0.14618	-0.11564	0.10279	0.09645	-0.09047	0.05400
177	177	177	175	175	175	173	66	177	175	175	139	175	175

FD13	VIS
0.04924	0.03732
175	175

COB

COB	DET2	FE	TAN	VIS	FD2	TS	DET4	FD1	HRS	GC	DET1	FD13	DET3
1.00000	0.26209	0.24190	-0.22491	-0.15610	-0.13382	0.09645	0.09435	-0.08739	0.08082	0.08030	-0.05640	-0.04321	-0.03910
139	137	139	139	137	137	139	137	137	135	53	137	137	137

CL2	ZN1
-0.00203	0.00007
139	137

GC

GC	VIS	CL2	TAN	DET3	TS	DET2	FD2	DET4	FE	DET1	FD1	COB	ZN1
1.00000	-0.38878	-0.26353	-0.21454	-0.21360	-0.19097	0.18630	-0.18407	-0.16159	-0.15646	0.14768	0.14361	0.08030	0.07807
66	64	66	66	66	66	66	66	66	66	66	66	53	66

FD13	HRS
-0.04720	-0.04523
66	65

B

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

WARNING: 2 OBSERVATIONS DELETED DUE TO MISSING VALUES.

STEP 1 VARIABLE DFT22 ENTERED R SQUARE = 0.13667988 C(P) = 39.00494209

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	27177.19586337	27177.19586337	27.23	0.0001
ERROR	172	171661.10873433	998.02970194		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	146.21515492				
DFT22	0.00038630	0.00007403	27177.19586337	27.23	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE DFT3 ENTERED R SQUARE = 0.14771015 C(P) = 38.33457604

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	29370.43585154	14685.21792577	14.82	0.0001
ERROR	171	169467.86874616	991.04016811		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	143.11594339				
DFT3	0.01022933	0.00687622	2193.23998817	2.21	0.1387
DFT22	0.00037278	0.00007433	24929.62603677	25.16	0.0001

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE C104 ENTERED R SQUARE = 0.17192378 C(P) = 34.47259168

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	34185.03365853	11395.01121951	11.77	0.0001
ERROR	170	164653.27093917	968.54465258		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	141.56456252				
DFT3	0.02350550	0.00903697	6552.62172695	6.77	0.0101
DFT22	0.00037638	0.00007350	25400.66036682	26.23	0.0001
C104	-0.00004175	0.00001873	4814.59780700	4.97	0.0271

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE CL1 ENTERED R SQUARE = 0.17419151 C(P) = 35.92358900

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	34635.54360642	8658.98590211	8.91	0.0001
ERROR	169	164202.76098128	971.61160349		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	144.21256504				
CL1	-0.06185689	0.09085948	450.90954989	0.46	0.4967
DFT3	0.02659647	0.01012482	6704.49408741	6.90	0.0094
DFT22	0.00038383	0.00007442	25845.73551962	26.60	0.0001
C104	-0.00004639	0.00001595	5251.58070828	5.41	0.0213

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 4 C104 REPLACED BY CL11 R SQUARE = 0.18347980 C(P) = 33.67494578

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	36482.81184245	9120.70296061	9.49	0.0001
ERROR	168	162355.49275525	960.68338908		
TOTAL	172	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	164.27325262				
CL1	-0.85998678	0.33120606	6476.90116855	6.74	0.0102
DET3	0.02615502	0.00929539	7629.25666937	7.94	0.0054
CL11	0.00556845	0.00204853	7098.44894232	7.39	0.0072
DET22	0.00035896	0.00007396	22628.11634115	23.55	0.0001

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE C202 ENTERED R SQUARE = 0.20437705 C(P) = 30.61583786

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	40637.98667208	8127.59733442	8.63	0.0001
ERROR	168	158200.31792562	941.66855908		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	162.46448474				
CL1	-0.88114953	0.32806662	6793.18119792	7.21	0.0080
DET3	0.04120330	0.01168005	11775.45696432	12.50	0.0005
CL11	0.00557965	0.00202816	7126.97218824	7.57	0.0066
DET22	0.00049322	0.00009720	24247.52329047	25.75	0.0001
C202	-0.00155941	0.00074236	4155.17482963	4.41	0.0372

STEP 5 CL11 REPLACED BY CL22 R SQUARE = 0.20777452 C(P) = 29.79333122

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	41313.53242505	8262.70648501	8.81	0.0001
ERROR	168	157524.77216865	937.64745338		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	163.84962844				
CL1	-0.96146488	0.34075565	7464.83462997	7.96	0.0054
DET3	0.03966658	0.01125662	11643.21152266	12.42	0.0005
CL22	0.01555108	0.00677758	7802.51794521	8.32	0.0044
DET22	0.00051875	0.00009700	26818.26359902	28.60	0.0001
C202	-0.00170602	0.00074264	4948.18922944	5.28	0.0228

STEP 5 C202 REPLACED BY C204 R SQUARE = 0.20832089 C(P) = 29.66105647

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	41422.17306785	8284.43461359	8.84	0.0001
ERROR	168	157416.13152981	937.00078292		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	165.88555677				
CL1	-0.95312245	0.34028334	7351.16153268	7.85	0.0057
DET3	0.03927176	0.01108700	11756.34498663	12.55	0.0005
CL22	0.01852064	0.00675823	7036.98504915	7.51	0.0068
DET22	0.00036222	0.00007304	25661.29117549	27.39	0.0001
C204	-0.00008347	0.00003593	5056.82986828	5.40	0.0214

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 6 VARIABLE C202 ENTERED R SQUARE = 0.21197613 C(P) = 30.77614354

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	42148.97471140	7024.82911857	7.49	0.0001
ERROR	167	156689.32988630	938.25946040		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	164.94846958				
CL1	-0.96817485	0.34094104	7566.09825519	8.06	0.0051
DET3	0.04211720	0.01155590	12463.32938805	13.28	0.0004
CL22	0.01911016	0.00679484	7419.31123892	7.91	0.0055
DET22	0.00048047	0.00011505	15026.62742906	16.02	0.0001
C202	-0.00095691	0.00108124	726.80164351	0.77	0.3801
C204	-0.00004966	0.00005262	835.44228235	0.89	0.3467

STEP 6 C204 REPLACED BY C203 R SQUARE = 0.21315062 C(P) = 30.49180613

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	42382.50829697	7063.75138316	7.54	0.0001
ERROR	167	156455.79629873	936.86105568		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	164.17335784				
CL1	-0.96534076	0.34063205	7524.28689893	8.03	0.0052
DET3	0.04850097	0.01396446	11301.29121729	12.06	0.0007
CL22	0.02011004	0.00679489	8206.08311058	8.76	0.0035
DET22	0.00047620	0.00010482	19334.59436416	20.64	0.0001
C202	-0.00111771	0.00092769	1345.40122329	1.44	0.2325
C203	-0.00037095	0.00034727	1068.97586993	1.14	0.2870

STEP 6 C202 REPLACED BY DET33 R SQUARE = 0.21554146 C(P) = 29.91299715

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	42857.89893415	7142.98315569	7.65	0.0001
ERROR	167	155980.40566355	934.01440517		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	165.36290856				
CL1	-0.98707974	0.34202151	7937.91621563	8.50	0.0040
DET3	0.05681873	0.01550598	12549.30114845	13.44	0.0003
CL22	0.02292196	0.00681452	8804.14246923	9.43	0.0025
DET22	0.00032136	0.00008660	12860.85739937	13.77	0.0003
DET33	0.00020180	0.00009845	1820.79185847	1.95	0.1645
C203	-0.00062508	0.00023776	6458.68063510	6.91	0.0093

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

F

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE V15

STEP 7 VARIABLE DET34 ENTERED R SQUARE = 0.23390736 C(P) = 27.46671628

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	46509.74322347	6644.24903192	7.24	0.0001
ERROR	166	152329.56137423	917.64193599		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	161.45927576				
CL1	-0.82756251	0.34949548	5144.83315420	5.61	0.0190
DET3	0.03916699	0.01773029	4477.97886163	4.88	0.0285
CL22	0.01966331	0.00678394	7709.43582851	8.40	0.0043
DET22	0.00036703	0.00008884	15662.34869829	17.07	0.0001
DET33	0.00004115	0.00003576	4725.92847143	5.15	0.0245
C203	-0.00367335	0.00031641	8468.87724203	9.23	0.0028
DET34	-0.00001556	0.00000780	3651.84428931	3.98	0.0477

STEP 7 DET3 REPLACED BY DET4 R SQUARE = 0.24824819 C(P) = 23.99498317

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	49361.24862310	7051.60694616	7.83	0.0001
ERROR	166	149477.05597460	900.46419262		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	154.54465588				
CL1	-0.64742580	0.31174009	3883.83832518	4.31	0.0394
DET4	0.01123896	0.00393933	7329.48426126	8.14	0.0049
CL22	0.02016098	0.00657184	8499.76599021	9.44	0.0025
DET22	0.00031478	0.00009257	10411.57472249	11.56	0.0008
DET33	0.00015871	0.00003636	17154.75762187	19.05	0.0001
C203	-0.00168099	0.00047080	11479.70820307	12.75	0.0005
DET34	-0.00002877	0.00000689	15705.04072056	17.44	0.0001

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

STEP 8 VARIABLE DET44 ENTERED R SQUARE = 0.26306892 C(P) = 22.40686723

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	52308.17795276	6538.52224422	7.36	0.0001
ERROR	165	146530.12664494	888.06137360		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	157.22494196				
CL1	-0.72148580	0.31224381	4741.44681923	5.34	0.0221
DET4	0.01845187	0.00420265	3594.14015782	4.05	0.0458
CL22	0.01856096	0.00658923	7041.06011453	7.93	0.0055
DET33	0.00032645	0.00009216	11143.80848326	12.55	0.0005
DET33	0.00019294	0.00004071	19950.24405529	22.46	0.0001
DET44	0.00000249	0.00000160	2946.92933066	3.32	0.0703
C203	-0.00113245	0.00055612	3682.44228409	4.15	0.0433
DET34	-0.00005171	0.00001433	11557.70933890	13.01	0.0004

612

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 8 DET4 REPLACED BY CL2 R SQUARE = 0.26362236 C(P) = 22.27288248

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	52418.22305655	6552.27788196	7.38	0.0001
ERROR	165	146420.08154212	887.39443369		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	150.62975794				
CL1	-2.21775277	0.83610667	6243.57273809	7.04	0.0088
CL2	3.27381901	1.60216800	3705.18525964	4.18	0.0426
CL22	0.00827719	0.00666395	1369.04833828	1.54	0.2160
DET22	0.00062079	0.00008457	23024.99524396	25.95	0.0001
DET33	0.00021643	0.00004440	21089.38958828	23.77	0.0001
DET44	0.00010537	0.00000162	9791.73624950	11.03	0.0011
C2D3	-0.00043122	0.00031360	1677.90888691	1.89	0.1710
DET34	-0.00007303	0.00001582	18910.34042059	21.31	0.0001

STEP 8 CL22 REPLACED BY CL11 R SQUARE = 0.26522462 C(P) = 21.88498429

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	52736.81376849	6592.10172106	7.44	0.0001
ERROR	165	146101.49082922	885.46358078		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	151.13577276				
CL1	-2.83467994	0.92877551	8248.16336328	9.32	0.0026
CL2	4.32316928	1.48231819	7531.68783400	8.51	0.0040
CL11	0.00274963	0.00199168	1687.63905119	1.91	0.1693
DET22	0.00042933	0.00008449	22854.33602170	25.81	0.0001
DET33	0.00021667	0.00004428	21197.55120131	23.94	0.0001
DET44	0.00010538	0.00000161	9867.07407189	11.14	0.0010
C2D3	-0.00041251	0.00031463	1522.22370785	1.72	0.1916
DET34	-0.00007316	0.00001576	19071.16403381	21.54	0.0001

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

STEP 9 VARIABLE DET4 ENTERED R SQUARE = 0.27661723 C(P) = 21.12689761

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	55002.10095720	6111.34455080	6.97	0.0001
ERROR	164	143836.20364050	877.05002220		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	151.88521442				
CL1	-2.90646357	0.92543095	8650.99526912	9.86	0.0020
CL2	4.19824278	1.47730548	7083.02618278	8.08	0.0051
DET4	0.00711849	0.00442934	2265.28718871	2.58	0.1100
CL11	0.00445474	0.00224575	3446.46894357	3.93	0.0491
DET22	0.00035611	0.00009561	12168.11085778	13.87	0.0003
DET33	0.00022106	0.00004416	21979.93071471	25.06	0.0001
DET44	0.00010409	0.00000175	4563.63440487	5.20	0.0238
C2D3	-0.00114845	0.00055474	3758.99489583	4.29	0.0400
DET34	-0.00006438	0.00001661	13169.41633362	15.02	0.0002

THE ABOVE MODEL IS THE BEST 9 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE V15

STEP 10 VARIABLE CL22 ENTERED R SQUARE = 0.28092071 C(P) = 22.08505015

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	55857.79694274	5585.77969427	6.37	0.0001
ERROR	162	142980.50765496	877.18102856		
TOTAL	172	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	148.37290356				
CL1	-5.76804797	3.04151693	3154.76320070	3.60	0.0597
CL2	9.44224149	5.51114736	2574.87049116	2.94	0.0886
DET4	0.00776115	0.00446361	2584.07040719	2.95	0.0880
CL11	0.01778678	0.01308078	1514.29680649	1.73	0.1907
CL22	-0.04261444	0.04314611	855.69598554	0.98	0.3248
DET22	0.00034345	0.00009647	11118.48105533	12.68	0.0005
DET33	0.00022581	0.00004442	22665.73155856	25.84	0.0001
DET44	0.00000420	0.00000180	4788.98692671	5.46	0.0207
C2D3	-0.00118160	0.00055579	3964.63837518	4.52	0.0350
DET34	-0.00006581	0.00001668	13659.13909094	15.57	0.0001

THE ABOVE MODEL IS THE BEST 10 VARIABLE MODEL FOUND.

STEP 11 VARIABLE C1D3 ENTERED R SQUARE = 0.28705911 C(P) = 22.59897679

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	57078.34703334	5188.94063939	5.93	0.0001
ERROR	161	141759.95756437	875.06146645		
TOTAL	172	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	147.35110848				
CL1	-7.69251115	3.44727373	4357.35844898	4.98	0.0270
CL2	12.79061385	6.19172026	3734.20951400	4.27	0.0404
DET4	0.00835463	0.00450126	3043.49414237	3.48	0.0640
CL11	0.02256022	0.01383453	2327.00000169	2.66	0.1049
CL22	-0.05787424	0.04498625	1448.07418177	1.65	0.2001
DET22	0.00033193	0.00009684	10279.79727371	11.75	0.0008
DET33	0.00023930	0.00004583	23870.66589072	27.28	0.0001
DET44	0.00000483	0.00000187	5823.44048732	6.65	0.0108
C1D3	0.00223073	0.00188881	1220.55009060	1.39	0.2393
C2D3	-0.00513649	0.00339445	2003.76101439	2.29	0.1322
DET34	-0.00007185	0.00001742	14878.89855983	17.00	0.0001

STEP 11 DET4 REPLACED BY DET3 R SQUARE = 0.29285847 C(P) = 21.19498519

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	58231.48127294	5293.77102481	6.10	0.0001
ERROR	162	140606.82332476	867.94335386		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	153.59305340				
CL1	-9.60925023	3.65520676	5998.59624566	6.91	0.0094
CL2	15.68596763	6.45404192	5126.84806671	5.91	0.0162
DET3	0.04617516	0.02099525	4196.62838197	4.84	0.0293
CL11	0.02614817	0.01409283	2987.97814630	3.44	0.0654
CL22	-0.06665324	0.04536155	1873.95039803	2.16	0.1437
DET22	0.00034511	0.00009076	12548.45189377	14.46	0.0002
DET33	0.00018469	0.00004992	11875.34127501	13.68	0.0003
DET44	0.00000568	0.00000174	9225.72561165	10.63	0.0014
C1D3	0.00405856	0.00213974	3122.56387748	3.60	0.0596
C2D3	-0.00795367	0.00386087	3720.60495294	4.29	0.0400
DET34	-0.00006634	0.00001792	11899.47774190	13.71	0.0003

THE ABOVE MODEL IS THE BEST 11 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE V15

STEP 12 VARIABLE DET24 ENTERED R SQUARE = 0.29691884 C(P) = 22.21199144

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	12	59038.83919580	4919.90326632	5.67	0.0001
ERROR	161	139799.46540190	868.31966088		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	152.06896443				
CL1	-9.35594477	3.66543702	5657.10352959	6.52	0.0116
CL2	15.18284646	6.47645297	4772.06375909	5.50	0.0203
DET3	0.05280450	0.02210037	4957.03959323	5.71	0.0180
CL11	0.02494990	0.01416004	2674.23671900	3.08	0.0812
CL22	-0.06233589	0.04559177	1623.24135855	1.87	0.1734
DET22	0.00055846	0.00023916	4734.78498291	5.45	0.0208
DET33	0.00017953	0.00005521	11100.55048287	12.78	0.0005
DET44	0.00000696	0.00000218	8813.32711509	10.15	0.0017
CL03	0.00436076	0.00216303	3529.20984567	4.06	0.0455
CL203	-0.00850389	0.00389137	4131.10389059	4.76	0.0306
DET24	-0.00004094	0.00004245	807.35792286	0.93	0.3364
DET34	-0.00006448	0.00001602	11113.13652026	12.80	0.0005

STEP 12 CL22 REPLACED BY DET23 R SQUARE = 0.30073229 C(P) = 21.28877637

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	12	59797.09936635	4983.09161386	5.77	0.0001
ERROR	161	139041.20523135	863.60997039		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	153.60550977				
CL1	-4.84103217	1.34669329	11159.79428674	12.92	0.0004
CL2	7.17966337	2.06502560	10439.34500138	12.09	0.0007
DET3	0.04481631	0.02174988	3666.70463485	4.25	0.0410
CL11	0.02517868	0.00248317	3756.16392979	4.35	0.0386
DET22	0.00060404	0.00023570	5672.02679293	6.57	0.0113
DET33	0.00012617	0.00005614	4067.05824272	4.71	0.0315
DET44	0.00000890	0.00000251	10603.84032802	12.28	0.0006
CL03	0.00404244	0.00207874	3265.91503603	3.78	0.0536
CL203	-0.00771145	0.00372603	3699.10970578	4.28	0.0401
DET23	0.00027834	0.00016761	2381.50152910	2.76	0.0987
DET24	-0.00015093	0.00005641	3219.98842325	3.73	0.0552
DET34	-0.00006128	0.00001783	10201.91056156	11.81	0.0007

THE ABOVE MODEL IS THE BEST 12 VARIABLE MODEL FOUND.

STEP 13 VARIABLE CL22 ENTERED R SQUARE = 0.30865314 C(P) = 21.37118393

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	61372.06712549	4720.92824042	5.49	0.0001
ERROR	160	137466.23747221	859.16398420		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	149.85464873				
CL1	-9.43076972	3.64634484	5747.17969724	6.69	0.0106
CL2	15.44709747	6.44425333	4936.56236286	5.75	0.0177
DET3	0.05011526	0.02204403	4440.51987375	5.17	0.0243
CL11	0.02396601	0.01409540	2483.77669147	2.89	0.0910
CL22	-0.06142672	0.04535428	1574.96775915	1.83	0.1777
DET22	0.00056465	0.00023790	4669.99502947	5.44	0.0210
DET33	0.00013067	0.00005908	4348.39107094	5.06	0.0258
DET44	0.00000903	0.00000251	11112.87765032	12.93	0.0004
CL03	0.00496610	0.00218273	4447.39822756	5.18	0.0242
CL203	-0.00936576	0.00391213	4924.20292535	5.73	0.0178
DET23	0.00027553	0.00016720	2333.22792969	2.72	0.1013
DET24	-0.00010269	0.00005646	2842.25268764	3.31	0.0708
DET34	-0.00006437	0.00001793	11075.56484134	12.89	0.0004

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

THE ABOVE MODEL IS THE BEST 13-VARIABLE MODEL FOUND.

STEP 14 VARIABLE DET4 ENTERED R SQUARE = 0.31314833 C(P) = 22.28292387

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	14	62265.88296094	4447.56306864	5.18	0.0001
ERROR	159	136572.42163676	858.94604803		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	147.05125766				
CL1	-9.07831920	3.66221689	5278.23424633	6.15	0.0142
CL2	14.92378708	6.46382526	4578.72710043	5.33	0.0222
DET3	0.03386831	0.02722190	1324.29418107	1.54	0.2162
DET4	0.00588912	0.00577310	893.81583544	1.04	0.3092
CL11	0.02439222	0.01409981	2570.64572866	2.99	0.0856
CL22	-0.06183150	0.04535043	1596.69686471	1.86	0.1747
DET22	0.00056071	0.00023790	4602.65209587	5.36	0.0219
DET33	0.00014914	0.00006083	5162.65053074	6.01	0.0153
DET44	0.00000864	0.00000254	9929.11459084	11.56	0.0009
CL03	0.00454674	0.00222092	3599.17606718	4.19	0.0423
CL03	-0.00902299	0.00392604	4536.89364423	5.28	0.0229
DET23	0.00029811	0.00016863	2684.26910906	3.13	0.0790
DET24	-0.00011364	0.00005746	3359.57206027	3.91	0.0497
DET34	-0.00006335	0.00001795	10693.09071329	12.45	0.0005

STEP 14 DET3 REPLACED BY DET2 R SQUARE = 0.31444190 C(P) = 21.96975842

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	14	62523.09376686	4465.93526906	5.21	0.0001
ERROR	159	136315.21083084	857.32837001		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	141.75467233				
CL1	-7.96324844	3.46720545	4522.38539318	5.27	0.0229
CL2	13.32406743	6.22242393	3930.99915985	4.59	0.0338
DET2	0.06943970	0.05112821	1581.50498699	1.84	0.1763
DET4	0.00959968	0.00468901	3526.28260789	4.11	0.0442
CL11	0.02133244	0.01381043	2045.56703801	2.39	0.1244
CL22	-0.05440948	0.04487298	1260.45278337	1.47	0.2271
DET22	-0.00035936	0.00024568	2193.34411563	2.56	0.1117
DET33	0.00018330	0.00005494	9541.20620856	11.13	0.0011
DET44	0.00000899	0.00000259	10529.79303462	12.28	0.0006
CL03	0.03362115	0.00195425	2943.60245844	3.43	0.0657
CL03	-0.00760305	0.00350798	4027.24468674	4.70	0.0317
DET23	0.00023809	0.00016111	3509.27548716	4.09	0.0447
DET24	-0.00013457	0.00005592	4324.36957096	5.04	0.0261
DET34	-0.00006798	0.00001733	13183.56585978	15.38	0.0001

THE ABOVE MODEL IS THE BEST 14 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 15 VARIABLE C1D2 ENTERED R SQUARE = 0.31931026 C(P) = 22.79115445

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	15	63491.11137069	4232.74075805	4.94	0.0001
ERROR	158	135347.19322701	856.62780523		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	144.36734466				
C1 1	-8.93744499	3.58490846	5324.30331670	6.22	0.0137
C1 2	14.75172537	6.36321781	4603.88244838	5.37	0.0217
DET2	0.09062511	0.05485385	2338.16450452	2.73	0.1005
DET4	0.00923297	0.00469431	3313.83767095	3.87	0.0510
C1 11	0.02525839	0.01430104	2681.04254985	3.13	0.0788
C1 22	-0.06339912	0.04564486	1652.62717818	1.93	0.1668
DET22	0.00042320	0.00025058	2443.28060542	2.85	0.0932
DET33	0.00015330	0.00006175	5280.08558810	6.16	0.0141
DET44	0.00000860	0.00000263	9135.14029864	10.66	0.0013
C1D2	-0.00100449	0.00094493	968.01760383	1.13	0.2894
C1D3	0.00511742	0.00240773	3869.70270882	4.52	0.0351
C2D3	-0.00977512	0.00402568	4978.68685317	5.81	0.0171
DET23	0.00036752	0.00016932	4035.98117637	4.71	0.0315
DET24	-0.00012505	0.00006056	3652.50826820	4.26	0.0406
DET34	-0.00006317	0.00001791	10662.50091396	12.45	0.0005

THE ABOVE MODEL IS THE BEST 15 VARIABLE MODEL FOUND.

STEP 16 VARIABLE C2D2 ENTERED R SQUARE = 0.32405464 C(P) = 23.63288398

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	64442.42855839	4027.65178490	4.71	0.0001
ERROR	157	134395.87603931	856.02468815		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	146.59672425				
C1 1	-9.30895616	3.60093260	5720.81988720	6.68	0.0106
C1 2	15.11203615	6.37015327	4817.61948592	5.63	0.0189
DET2	0.08674047	0.05495821	2132.38050673	2.49	0.1165
DET4	0.01125433	0.00506525	4219.21722977	4.93	0.0278
C1 11	0.02503305	0.01429722	2624.28346935	3.07	0.0819
C1 22	-0.05781299	0.04593544	1355.94274037	1.58	0.2101
DET22	0.00045710	0.00025255	2804.22475543	3.28	0.0722
DET33	0.00015932	0.00006199	5654.63881777	6.61	0.0111
DET44	0.00000898	0.00000266	9771.38690496	11.41	0.0009
C1D2	-0.01257734	0.01098070	1115.93028019	1.30	0.2553
C1D3	0.00871033	0.00417241	3730.61863982	4.36	0.0384
C2D2	0.02045090	0.01939661	951.31718769	1.11	0.2934
C2D3	-0.01611240	0.00728942	4182.35412270	4.89	0.0285
DET23	0.00034842	0.00017023	3586.08802191	4.19	0.0423
DET24	-0.00013534	0.00006132	4169.96359674	4.87	0.0288
DET34	-0.00006331	0.00001790	10709.06082688	12.51	0.0005

THE ABOVE MODEL IS THE BEST 16 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 17 VARIABLE DET11 ENTERED R SQUARE = 0.32464742 C(P) = 25.49905974

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	17	64552.34182913	3797.19657818	4.41	0.0001
ERROR	156	134285.96276857	860.80745364		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	145.07348856				
C11	-9.24113034	3.61596342	5622.22410401	6.53	0.0116
C12	15.12186739	6.38798233	4823.80025101	5.60	0.0191
DET2	0.09344704	0.05821971	2217.67044586	2.58	0.1105
DET6	0.01042359	0.00559581	2993.27107836	3.48	0.0641
C111	0.02330255	0.01513292	2041.11391151	2.37	0.1256
C122	-0.05493967	0.04676016	1188.30006118	1.38	0.2418
DET11	0.00000000	0.00000000	109.91327075	0.13	0.7213
DET22	0.00045704	0.00025326	2803.45053709	3.26	0.0731
DET33	0.00015982	0.00006218	5687.42208665	6.61	0.0111
DET44	0.00000955	0.00000310	8149.68922226	9.47	0.0025
C1D2	-0.01616443	0.01497604	1002.84281001	1.17	0.2821
C1D3	0.00954387	0.00477276	3432.66641801	3.99	0.0476
C2D2	0.03633506	0.02548739	919.01788482	1.07	0.3031
C2D3	-0.01736005	0.00810085	3953.18723671	4.59	0.0337
DET23	0.00036217	0.00017496	3687.31212701	4.28	0.0401
DET24	-0.00013506	0.00006150	4152.05253277	4.82	0.0296
DET34	-0.00006717	0.00002094	8853.83132463	10.29	0.0016

STEP 17 C2D2 REPLACED BY DET14 R SQUARE = 0.36359602 C(P) = 16.06982286

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	17	72296.81543812	4252.75384930	5.24	0.0001
ERROR	156	126541.48915958	811.16339205		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	139.05212521				
C11	-12.48838572	3.65822646	9453.22329230	11.65	0.0008
C12	20.85118511	6.46294792	8443.09737970	10.41	0.0015
DET2	0.08668580	0.05579623	1957.92212147	2.41	0.1223
DET6	0.02110442	0.00632876	9020.23008063	11.12	0.0011
C111	0.03612236	0.01461570	4949.25771625	6.10	0.0146
C122	-0.10334570	0.05034171	3434.93822053	4.23	0.0413
DET11	0.00000000	0.00000000	8628.00586676	10.64	0.0014
DET33	0.00030574	0.00024171	1235.69901953	1.52	0.2190
DET35	0.00008336	0.00003827	13683.20088864	16.87	0.0001
DET44	0.00000784	0.00000278	10156.03296055	12.52	0.0005
C1D2	-0.00034883	0.00112680	77.74054296	0.10	0.7573
C1D3	0.00607915	0.00239613	5221.24458248	6.44	0.0122
C2D3	-0.01252327	0.00416803	7334.58253391	9.04	0.0031
DET14	-0.00110929	0.00030254	8663.49149383	10.68	0.0013
DET23	0.00025066	0.00017415	1302.39022384	1.61	0.2070
DET24	-0.00110831	0.00005561	2677.69797266	3.30	0.0712
DET34	-0.00010160	0.00002301	15818.36335735	19.50	0.0001

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 17 C102 REPLACED BY DET12 R SQUARE = 0.37355575 C(P) = 13.65862791

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	17	74277.19156803	4369.24656283	5.47	0.0001
ERROR	156	124561.11302967	798.46867327		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	137.04255738				
C11	-14.31240398	3.80572653	11292.96264700	14.14	0.0002
C12	24.17508889	6.74268644	10265.03533226	12.86	0.0004
DET2	0.02667271	0.05926386	161.73805245	0.20	0.6533
DET4	0.07647181	0.01856557	12980.16122633	16.26	0.0001
C111	0.04425360	0.01539351	6598.73079773	8.26	0.0046
C122	-0.11874322	0.04779602	4928.24261333	6.17	0.0140
DET11	0.00000006	0.00000201	86.60731789	0.11	0.7423
DET22	0.00026854	0.00024558	1260.38567256	1.58	0.2109
DET33	0.00037814	0.00009214	13354.48385051	16.73	0.0001
DET44	0.00000282	0.00000202	5357.37539795	6.71	0.0105
C103	0.00635356	0.00225076	6362.92385669	7.97	0.0054
C203	-0.01322783	0.00410112	8299.20141113	10.39	0.0015
DET12	0.00007020	0.00004373	2058.11667287	2.58	0.1104
DET14	-0.00001416	0.00000439	8311.91543987	10.41	0.0015
DET23	0.00013413	0.00017170	487.25160952	0.61	0.4359
DET24	-0.00006487	0.00006057	1567.52484430	1.96	0.1632
DET34	-0.00008922	0.00002412	10928.16326391	13.69	0.0003

STEP 17 DET11 REPLACED BY DET13 R SQUARE = 0.37681563 C(P) = 12.86942918

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	17	74925.38068715	4407.37533454	5.55	0.0001
ERROR	156	123912.92391055	794.31361481		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	134.94905404				
C11	-13.27802105	3.96413251	8911.73748154	11.22	0.0010
C12	22.54553521	6.95821727	8340.09649085	10.50	0.0015
DET2	0.03543508	0.05463468	334.13506193	0.42	0.5176
DET4	0.02473219	0.00682115	10442.32558042	13.15	0.0004
C111	0.03948808	0.01620302	4717.72316059	5.94	0.0159
C122	-0.10611548	0.04950182	3650.12004545	4.60	0.0336
DET22	0.00031491	0.00024391	1340.92612313	1.69	0.1958
DET33	0.00037089	0.00009439	12278.71736651	15.46	0.0001
DET44	0.00000312	0.00000212	6433.25131198	8.10	0.0050
C103	-0.00566409	0.00236865	4549.57069801	5.73	0.0179
C203	-0.01313887	0.00425124	6476.16829465	8.15	0.0049
DET13	0.00007738	0.00002299	8996.63155746	11.33	0.0010
DET13	-0.00001052	0.00001093	734.79643702	0.93	0.3376
DET14	-0.00001144	0.00000513	4109.06502402	5.17	0.0243
DET23	0.00011865	0.00017026	385.73945477	0.49	0.4869
DET24	-0.00006835	0.00005692	1727.13411113	2.17	0.1423
DET34	-0.00010345	0.00002285	10931.74076165	13.76	0.0003

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 17 DET2 REPLACED BY C101 R SQUARE = 0.37693670 C(P) = 12.84011802

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	17	74949.45468575	4408.79145234	5.55	0.0001
ERROR	156	123888.84990791	794.15929428		
TOTAL	173	198838.30459770			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	135.14504647				
CL1	-13.19414173	3.98118352	8722.59114995	10.98	0.0011
CL2	22.46164822	6.97180050	8243.29729541	10.38	0.0016
DET4	0.02496383	0.00669448	11043.23748956	13.91	0.0003
DET11	-0.04013463	0.01601530	4987.42211455	6.28	0.0132
CL22	-0.10772007	0.04902308	3834.42074377	4.83	0.0295
DET22	0.00025548	0.00023516	1814.78259694	2.29	0.1326
DET33	0.00036430	0.00009307	12167.03273955	15.32	0.0001
DET44	0.00000816	0.00000285	6335.91816005	7.98	0.0054
C101	-0.00304149	0.00006178	358.20906457	0.45	0.5028
C103	0.00560123	0.00239236	4199.28243837	5.29	0.0228
C203	-0.01179807	0.00429755	5985.31523757	7.54	0.0068
DET12	0.00010503	0.00004031	5390.92570541	6.79	0.0101
DET13	-0.00001218	0.00001196	822.97682946	1.04	0.3103
DET14	-0.00001219	0.00000483	5065.05851329	6.38	0.0126
DET23	0.00000065	0.00017107	223.01976656	0.28	0.5969
DET24	-0.00007475	0.00005605	1412.22471722	1.78	0.1843
DET34	-0.00010076	0.00002749	10665.91266814	13.43	0.0003

STEP 17 DET23 REPLACED BY DET1 R SQUARE = 0.37834853 C(P) = 12.49832168

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	17	75230.18077465	4425.30475145	5.58	0.0001
ERROR	156	123608.12382301	792.35976810		
TOTAL	173	198838.30459770			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	129.46056989				
CL1	-13.96174059	4.06501851	9347.09144110	11.80	0.0008
CL2	23.91746806	7.15744549	8847.82906306	11.17	0.0010
DET1	0.00694276	0.00870738	503.74585146	0.64	0.4265
DET4	0.02667485	0.00688150	11905.84486964	15.03	0.0002
CL11	-0.04435848	0.01658621	5667.36391635	7.15	0.0083
CL22	-0.12355774	0.05101748	4427.05805000	5.59	0.0193
DET22	0.00023084	0.00023462	1771.72175154	2.24	0.1368
DET33	0.00040038	0.00008351	18187.31355335	22.95	0.0001
DET44	0.00000733	0.00000268	5934.03989683	7.49	0.0069
C101	-0.00307713	0.00007237	900.08981884	1.14	0.2882
C103	0.00527111	0.00237351	3907.89456479	4.93	0.0278
C203	-0.01166015	0.00427795	5886.54033857	7.43	0.0072
DET12	0.00010803	0.00003895	6083.39355983	7.68	0.0063
DET13	-0.00002146	0.00001573	1474.69855047	1.86	0.1745
DET14	-0.00001134	0.00000501	4053.36341329	5.12	0.0251
DET24	-0.00005405	0.00004121	1363.10550380	1.72	0.1916
DET34	-0.00010389	0.00002727	11502.51729950	14.52	0.0002

THE ABOVE MODEL IS THE BEST 17 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 18 VARIABLE DET11 ENTERED R SQUARE = 0.38189539 C(P) = 13.63964809

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	18	75935.43137488	4218.63507638	5.32	0.0001
ERROR	155	122902.87322282	792.92176273		
TOTAL	173	198838.30459770			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	128.91404801				
CL1	-14.76814011	4.15538368	10015.20139147	12.63	0.0005
CL2	25.12009687	7.27265230	9459.91659260	11.93	0.0007
DET1	0.01655873	0.01344249	1208.98362132	1.52	0.2188
DET4	0.02751940	0.00694195	12460.84705859	15.72	0.0001
C111	0.05055611	0.01784610	6363.42745431	8.03	0.0052
C122	-0.13132904	0.05229020	5001.62608170	6.31	0.0130
DET11	0.00000004	0.00000004	705.25060019	0.89	0.3471
DET22	0.00032131	0.00023678	1460.06544918	1.84	0.1768
DET33	0.00040832	0.00008399	18739.12574982	23.63	0.0001
DET44	0.00000689	0.00000272	5093.58347256	6.42	0.0123
C101	-0.00033389	0.00028171	1113.86069669	1.40	0.2377
C103	0.00572764	0.00242320	4430.00387091	5.59	0.0193
C203	-0.01264427	0.00440485	6531.64901022	8.24	0.0047
DET12	0.00007809	0.00005028	1912.58319561	2.41	0.1224
DET13	-0.00001650	0.00001659	784.92311526	0.99	0.3213
DET14	-0.00000977	0.00000530	2664.78475348	3.36	0.0687
DET24	-0.00004804	0.00004172	1051.32117375	1.33	0.2513
DET34	-0.00010373	0.00002728	11466.71715691	14.46	0.0002

THE ABOVE MODEL IS THE BEST 18 VARIABLE MODEL FOUND.

F

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 1 VARIABLE CL2 ENTERED R SQUARE = 0.23093467 C(P) = 42.03221617

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	7.89740717	7.89740717	52.25	0.0001
ERROR	174	26.30017408	0.15115043		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.04912571				
CL2	0.01260121	0.00174331	7.89740717	52.25	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE CL2D3 ENTERED R SQUARE = 0.28130518 C(P) = 30.01401482

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	9.61995690	4.80997845	33.86	0.0001
ERROR	173	24.57762435	0.14206719		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.03973761				
CL2	0.01025126	0.00181987	4.50780321	31.73	0.0001
CL2D3	0.00000378	0.00000109	1.72254973	12.12	0.0006

STEP 2 CL2 REPLACED BY CL1 R SQUARE = 0.28534953 C(P) = 28.88846567

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	9.75826382	4.87913191	34.54	0.0001
ERROR	173	24.43931743	0.14126773		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.03700649				
CL1	0.00584285	0.00101883	4.64611014	32.89	0.0001
CL1D3	0.00000404	0.00000106	2.03331176	14.39	0.0002

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE DET23 ENTERED R SQUARE = 0.30747704 C(P) = 24.73034281

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	10.51497095	3.50499032	25.46	0.0001
ERROR	172	23.68261030	0.13768959		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.02142403				
CL1	0.00546731	0.00101852	3.96743478	28.81	0.0001
CL1D3	0.00000354	0.00000107	1.50349524	10.92	0.0012
DET23	0.00000075	0.00000032	0.75670713	5.50	0.0202

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 4 VARIABLE C123 ENTERED R SQUARE = 0.31963183 C(P) = 23.34764195

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	10.93063558	2.73265889	20.08	0.0001
ERROR	171	23.26694567	0.13606401		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.85738616				
C11	0.01180778	0.00376626	1.33739067	9.83	0.0020
C122	-0.00013227	0.00007568	0.41566463	3.05	0.0823
C103	0.00000265	0.00000118	0.68539473	5.04	0.0261
DET23	0.00000078	0.00000032	0.82008114	6.03	0.0151

STEP 4 DET23 REPLACED BY DET3 R SQUARE = 0.32859496 C(P) = 20.85318954

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	11.23715267	2.80928817	20.92	0.0001
ERROR	171	22.96042858	0.13427151		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.81161292				
C11	0.01615181	0.00405168	2.14439291	15.97	0.0001
DET3	-0.00046784	0.00016151	1.12659823	8.39	0.0043
C122	-0.00020937	0.00008094	0.89838255	6.69	0.0105
C103	0.00000745	0.00000185	2.17007209	16.16	0.0001

STEP 4 C103 REPLACED BY C203 R SQUARE = 0.32965075 C(P) = 20.55936099

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	11.27325818	2.81831455	21.02	0.0001
ERROR	171	22.92432307	0.13406037		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.80019650				
C11	0.01686085	0.00405457	2.31784619	17.29	0.0001
DET3	-0.00049592	0.00016004	1.19591276	8.92	0.0032
C122	-0.00022746	0.00008121	1.05179818	7.85	0.0057
C203	0.00001341	0.00000330	2.20617759	16.46	0.0001

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE DET23 ENTERED R SQUARE = 0.34392028 C(P) = 18.58812472

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	11.76124178	2.35224835	17.82	0.0001
ERROR	170	22.43633950	0.13197847		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.78926257				
C11	0.01622090	0.00403710	2.13066050	16.14	0.0001
DET3	-0.00042691	0.00016861	0.84607184	6.41	0.0122
C122	-0.00022087	0.00008065	0.98995664	7.50	0.0068
C203	0.00001154	0.00000342	1.50167839	11.38	0.0009
DET23	0.00000061	0.00000032	0.48798357	3.70	0.0562

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 6 VARIABLE DET24 ENTERED R SQUARE = 0.36163412 C(P) = 15.65833138

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	12.36701235	2.06116872	15.96	0.0001
ERROR	169	21.83056890	0.12917496		
TOTAL	175	34.19758125			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.73721931				
CL1	0.01862349	0.00414522	2.60738191	20.18	0.0001
DET3	-0.00056931	0.00017630	1.30227309	10.08	0.0018
CL22	-0.00024260	0.00008041	1.17566772	9.10	0.0029
[illegible]	0.00000988	0.00000347	1.04841343	8.12	0.0049
DET23	0.00000281	0.00000106	0.90315426	6.99	0.0090
DET24	-0.00000050	0.00000023	0.60577060	4.69	0.0317

STEP 6 C203 REPLACED BY DET4 R SQUARE = 0.36783924 C(P) = 13.93143589

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	12.57921242	2.09653540	16.39	0.0001
ERROR	169	21.61836883	0.12791934		
TOTAL	175	34.19758125			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.64074326				
CL1	0.02100437	0.00420537	3.19114640	24.95	0.0001
DET3	-0.00030725	0.00025299	1.64501134	12.86	0.0004
DET4	0.00012661	0.00004033	1.26061350	9.85	0.0020
CL22	-0.00023724	0.00007588	1.12834936	8.82	0.0034
DET23	0.00000529	0.00000113	2.79269317	21.83	0.0001
DET24	-0.00000093	0.00000024	1.91471184	14.97	0.0002

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

STEP 7 VARIABLE C203 ENTERED R SQUARE = 0.37398182 C(P) = 14.22194740

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	12.78927353	1.82703908	14.34	0.0001
ERROR	168	21.40830772	0.12743040		
TOTAL	175	34.19758125			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.67291702				
CL1	0.02336471	0.00422679	2.95806520	23.21	0.0001
DET3	-0.00085560	0.00025267	1.60096001	12.56	0.0005
DET4	0.00009899	0.00004538	0.42226119	3.31	0.0705
CL22	-0.00024343	0.00007587	1.18369359	9.29	0.0027
C203	0.00000543	0.00000423	0.21006111	1.65	0.2009
DET23	0.00000434	0.00000135	1.31865585	10.35	0.0016
DET24	-0.00000077	0.00000027	1.01502453	7.97	0.0053

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 7 DET24 REPLACED BY C2D4 R SQUARE = 0.37482571 C(P) = 13.98709054

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	12.81803263	1.83116180	14.39	0.0001
ERROR	169	21.37954862	0.12725862		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.78735761				
CL1	0.01660308	0.00397047	2.22525701	17.49	0.0001
DET3	-0.00138512	0.00037938	1.69635842	13.33	0.0003
DET4	0.00022663	0.00007512	0.86797597	6.82	0.0098
CL22	-0.00028037	0.00008218	1.48136356	11.64	0.0008
C1D3	0.00003772	0.00001004	1.79536769	14.11	0.0002
C2D4	-0.00000486	0.00000170	1.04388362	8.20	0.0047
DET23	0.00000066	0.00000035	0.47049723	3.70	0.0562

STEP 7 C2D3 REPLACED BY C1D3 R SQUARE = 0.37625058 C(P) = 13.59054543

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	12.86685590	1.83812284	14.48	0.0001
ERROR	168	21.33072135	0.12696859		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.82165254				
CL1	0.01466272	0.00397579	1.72694658	13.60	0.0003
DET3	-0.00142082	0.00038328	1.74477746	13.74	0.0003
DET4	0.00022939	0.00008281	0.97414350	7.67	0.0062
CL22	-0.00023245	0.00007536	1.08934374	8.58	0.0039
C1D3	0.00002271	0.00000596	1.84409496	14.52	0.0002
C2D4	-0.00000536	0.00000180	1.12885253	8.89	0.0033
DET23	0.00000065	0.00000034	0.45343317	3.57	0.0605

STEP 7 CL1 REPLACED BY CL2 R SQUARE = 0.38200928 C(P) = 11.98799148

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	13.06379323	1.86625618	14.84	0.0001
ERROR	168	21.13378802	0.12579636		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.77420488				
CL2	0.02885565	0.00737863	1.92387991	15.29	0.0001
DET3	-0.00156275	0.00038660	2.05557423	16.34	0.0001
DET4	0.00026455	0.00008253	1.29266336	10.28	0.0016
CL22	-0.00027826	0.00008638	1.30544200	10.38	0.0015
C1D3	0.00002521	0.00000691	2.28812987	18.19	0.0001
C2D4	-0.00000657	0.00000179	1.69899318	13.51	0.0003
DET23	0.00000066	0.00000034	0.46042540	3.66	0.0574

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 7 DET23 REPLACED BY CL03 R SQUARE = 0.38371362 C(P) = 11.51357009

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	13.12207761	1.87458252	14.94	0.0001
ERROR	168	21.07550364	0.12544943		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.75417991				
CL2	0.03201239	0.00748866	2.29243384	18.27	0.0001
DET3	-0.00163517	0.00038628	2.08600971	16.63	0.0001
DET4	0.00123120	0.00008086	1.02561528	8.18	0.0048
CL22	-0.00032144	0.00008814	1.66834721	13.30	0.0004
CL03	0.00000934	0.00000460	0.51870978	4.13	0.0436
CL03	0.00002638	0.00000584	2.56309416	20.43	0.0001
CL04	-0.00000715	0.00000180	1.97253917	15.72	0.0001

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

STEP 8 VARIABLE DET2 ENTERED R SQUARE = 0.38771425 C(P) = 12.40018614

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	13.25888565	1.65736121	13.22	0.0001
ERROR	167	20.93869156	0.12538139		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.76224785				
CL2	0.03253936	0.00750361	2.35782286	18.81	0.0001
DET2	-0.00067598	0.00064713	0.13681209	1.09	0.2977
DET3	-0.00142330	0.00041264	1.49170118	11.90	0.0007
DET4	0.00092478	0.00008091	1.05571409	8.42	0.0042
CL22	-0.00033429	0.00008897	1.76989828	14.12	0.0002
CL03	0.00001962	0.00001000	0.43482716	3.47	0.0643
CL03	0.00002452	0.00000610	2.02710055	16.17	0.0001
CL04	-0.00000738	0.00000182	2.06999463	16.51	0.0001

STEP 8 CL22 REPLACED BY CL11 R SQUARE = 0.38983934 C(P) = 11.80877035

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	13.33156257	1.66644532	13.34	0.0001
ERROR	167	20.86601868	0.12494622		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.81990267				
CL2	0.02923292	0.00654484	2.49269738	19.95	0.0001
DET2	-0.00118054	0.00067621	0.38081393	3.05	0.0827
DET3	-0.00148369	0.00041552	1.59301070	12.75	0.0005
DET4	0.00092425	0.00008403	1.42964527	11.44	0.0009
CL11	-0.00031193	0.00002654	1.84257116	14.75	0.0002
CL03	0.00006320	0.00001102	0.93870162	7.51	0.0068
CL03	0.00002677	0.00000620	2.32934574	18.64	0.0001
CL04	-0.00000957	0.00000205	2.71591381	21.74	0.0001

... IN THE R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE FAN

STEP 8 C12 REPLACED BY C11 R SQUARE = 0.39104521 C(P) = 11.47317404

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	13.37280048	1.67160006	13.41	0.0001
ERROR	167	20.82478077	0.12469929		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.77213544				
C11	0.01946573	0.00429417	2.53393529	20.32	0.0001
DET2	-0.00083085	0.00066168	0.19661337	1.58	0.2110
DET3	-0.00151122	0.00041612	1.64467793	13.19	0.0004
DET4	0.00025738	0.00008300	1.19902634	9.62	0.0023
C111	-0.00012932	0.00002786	1.91934443	15.39	0.0001
C1D2	0.00002263	0.00001050	0.57990612	4.65	0.0325
C1D3	0.00002611	0.00000619	2.22166445	17.82	0.0001
C1D4	-0.00000835	0.00000198	2.22437479	17.84	0.0001

STEP 9 C2D4 REPLACED BY C1D4 R SQUARE = 0.39252305 C(P) = 11.06189000

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	13.42333886	1.67791736	13.49	0.0001
ERROR	167	20.77424235	0.12439666		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.76511942				
C11	0.01952632	0.00414520	2.76030871	22.19	0.0001
DET2	-0.00109286	0.00067525	0.32584510	2.62	0.1075
DET3	-0.00142188	0.00039741	1.59239806	12.80	0.0005
DET4	0.00023512	0.00007169	1.13924189	9.16	0.0029
C111	-0.00012191	0.00002911	2.17798339	17.51	0.0001
C1D2	0.00002838	0.00001092	0.83992933	6.75	0.0102
C1D3	0.00002400	0.00000572	2.18824327	17.59	0.0001
C1D4	-0.00000447	0.00000104	2.27491317	18.29	0.0001

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

STEP 9 VARIABLE DET23 ENTERED R SQUARE = 0.39594468 C(P) = 12.10964496

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	13.54035027	1.50448336	12.09	0.0001
ERROR	166	20.65723098	0.12444115		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.76696948				
C11	0.01978888	0.00421512	2.47255883	19.87	0.0001
DET2	-0.00117423	0.00068056	0.37045564	2.98	0.0863
DET3	-0.00139021	0.00039882	1.51205595	12.15	0.0006
DET4	0.00025277	0.00007581	1.24823307	10.03	0.0018
C111	-0.00011587	0.00002975	1.88703717	15.16	0.0001
C1D2	0.00002627	0.00001114	0.69236267	5.56	0.0195
C1D3	0.00002261	0.00000590	1.82746722	14.69	0.0002
C1D4	-0.00000431	0.00000106	2.06809209	16.62	0.0001
DET23	0.00000041	0.00000042	0.11701140	0.94	0.3336

STEP 9 DET2 REPLACED BY C1D1 R SQUARE = 0.39694107 C(P) = 11.83234789

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	13.57442435	1.50826938	12.14	0.0001
ERROR	166	20.62315686	0.12423588		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.64104977				
C11	0.02344052	0.00518711	2.53705631	20.42	0.0001
DET3	-0.00192770	0.00043253	2.46774572	19.86	0.0001
DET4	0.00030763	0.00009005	1.44981123	11.67	0.0008
C111	-0.00013458	0.00004027	1.83085322	14.74	0.0002
C1D1	0.00000001	0.00000000	0.40452977	3.26	0.0730
C1D2	0.00000556	0.00000640	0.09373757	0.75	0.3863
C1D3	0.00003075	0.00000665	2.65901031	21.40	0.0001
C1D4	-0.00000504	0.00000122	2.12683081	17.12	0.0001
DET23	0.00000052	0.00000043	0.18137417	1.46	0.2287

STEP 9 C1D2 REPLACED BY DET24 R SQUARE = 0.39971575 C(P) = 11.06014927

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	13.66931178	1.51881242	12.28	0.0001
ERROR	166	20.52826947	0.12366427		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.62910152				
C11	0.02327120	0.00517303	2.50260231	20.24	0.0001
DET3	-0.00193633	0.00043144	2.49097000	20.14	0.0001
DET4	0.00032123	0.00008778	1.65616494	13.39	0.0003
C111	-0.00013873	0.00004204	1.34662445	10.89	0.0012
C1D1	0.00000001	0.00000000	0.33927592	2.74	0.0995
C1D3	0.00002598	0.00000774	1.39377739	11.27	0.0010
C1D4	-0.00000430	0.00000133	1.30102663	10.52	0.0014
DET23	0.00000251	0.00000147	0.36089290	2.92	0.0894
DET24	-0.00000037	0.00000030	0.18862496	1.53	0.2186

STEP 9 C1D1 REPLACED BY DET11 R SQUARE = 0.39972811 C(P) = 11.05670894

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	13.66973453	1.51885939	12.28	0.0001
ERROR	166	20.52784672	0.12366173		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.62932134				
C11	0.02326406	0.00516520	2.50472334	20.25	0.0001
DET3	-0.00193535	0.00043111	2.49212934	20.15	0.0001
DET4	0.00032105	0.00008772	1.65644151	13.39	0.0003
C111	-0.00013865	0.00004198	1.34862293	10.91	0.0012
DET11	0.00000000	0.00000000	0.33969866	2.75	0.0993
C1D3	0.00002597	0.00000773	1.39458723	11.28	0.0010
C1D4	-0.00000430	0.00000132	1.30201066	10.53	0.0014
DET23	0.00000251	0.00000147	0.36101946	2.92	0.0894
DET24	-0.00000037	0.00000030	0.18872600	1.53	0.2184

THE ABOVE MODEL IS THE BEST 9 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 10 VARIABLE DET13 ENTERED R SQUARE = 0.40588605 C(P) = 11.34294341

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	13.88032120	1.38803212	11.27	0.0001
ERROR	165	20.31726005	0.12313491		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.65782408				
C11	0.02180041	0.00527820	2.10057586	17.06	0.0001
DET3	-0.00171424	0.00046223	1.69362934	13.75	0.0003
DET4	0.00028126	0.00009045	1.27681340	10.37	0.0015
C111	-0.00012591	0.00004301	1.05527573	8.57	0.0039
DET11	0.00000000	0.00000000	0.23122185	1.87	0.1734
C103	0.00002264	0.00000799	1.09662238	8.91	0.0033
C104	-0.00000389	0.00000136	1.01373070	8.23	0.0047
DET13	-0.00000007	0.00000005	0.21058667	1.71	0.1928
DET23	0.00000289	0.00000149	0.45931733	3.73	0.0552
DET24	-0.00000045	0.00000030	0.26582041	2.16	0.1437

STEP 10 DET11 REPLACED BY DET1 R SQUARE = 0.41012157 C(P) = 10.16419036

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	14.02516580	1.40251658	11.47	0.0001
ERROR	165	20.17241545	0.12225706		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.61254824				
C11	0.02248688	0.00517803	2.30570100	18.86	0.0001
DET1	0.00004695	0.00002680	0.37506645	3.07	0.0817
DET3	-0.00174775	0.00044452	1.88992765	15.46	0.0001
DET4	0.00031203	0.00008770	1.54759982	12.66	0.0005
C111	-0.00013171	0.00004214	1.19441848	9.77	0.0021
C103	0.00002410	0.00000779	1.16949472	9.57	0.0023
C104	-0.00000405	0.00000133	1.13141404	9.25	0.0027
DET13	-0.00000013	0.00000008	0.36825247	2.93	0.0888
DET23	0.00000308	0.00000150	0.51587909	4.22	0.0415
DET24	-0.00000048	0.00000030	0.30847598	2.52	0.1141

STEP 10 C104 REPLACED BY C204 R SQUARE = 0.41027617 C(P) = 10.12116693

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	14.03045250	1.40304525	11.48	0.0001
ERROR	165	20.16712875	0.12222502		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.65056837				
C11	0.02018432	0.00486991	2.09964664	17.18	0.0001
DET1	0.00014893	0.00002674	0.40914530	3.35	0.0691
DET3	-0.00169949	0.00043099	1.90050546	15.55	0.0001
DET4	0.00031550	0.00008648	1.55394941	12.71	0.0005
C111	-0.00010750	0.00003688	1.03836336	8.50	0.0041
C103	0.00002335	0.00000754	1.17178227	9.59	0.0023
C204	-0.00000734	0.00000231	1.13670074	9.30	0.0027
DET13	-0.00000014	0.00000007	0.39864486	3.26	0.0727
DET23	0.00000339	0.00000147	0.60881411	4.98	0.0270
DET24	-0.00000354	0.00000330	0.39658465	3.25	0.0733

THE ABOVE MODEL IS THE BEST 10 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 11 VARIABLE DFT13 ENTERED R SQUARE = 0.41311374 C(P) = 11.33146571

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	14.12749060	1.28431733	10.49	0.0001
ERROR	163	20.07009065	0.12237860		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.59075113				
C111	0.02094347	0.00494698	2.19342028	17.92	0.0001
DFT1	0.00011782	0.00008186	0.25351856	2.07	0.1520
DFT3	-0.00181986	0.00045161	1.98505024	16.22	0.0001
DFT4	0.00075965	0.00021648	1.53721005	12.56	0.0005
C111	-0.00011458	0.00003775	1.12727935	9.21	0.0028
C1D3	0.00002427	0.00000762	1.24254049	10.15	0.0017
C2D4	-0.00000756	0.00000238	1.23174687	10.07	0.0018
DFT12	-0.00000020	0.00000022	0.09703810	0.79	0.3745
DFT13	-0.00000016	0.00000008	0.48232055	3.94	0.0488
DFT23	0.00000355	0.00000150	0.68262164	5.58	0.0194
DFT24	-0.00000057	0.00000030	0.44541605	3.64	0.0582

THE ABOVE MODEL IS THE BEST 11 VARIABLE MODEL FOUND.

STEP 12 VARIABLE DFT14 ENTERED R SQUARE = 0.41554520 C(P) = 12.65478581

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	12	14.21064065	1.18422006	9.66	0.0001
ERROR	163	19.98694056	0.12261927		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.61872802				
C111	0.01985757	0.00511214	1.85760552	15.15	0.0001
DFT1	0.00012808	0.00008248	0.29282580	2.39	0.1242
DFT3	-0.00165787	0.00049253	1.38931377	11.33	0.0010
DFT4	0.00031802	0.00011746	0.96337148	7.86	0.0057
C111	-0.00011563	0.00003932	0.88509235	7.22	0.0080
C1D3	0.00002241	0.00000795	0.97314526	7.94	0.0054
C2D4	-0.00000715	0.00000243	1.05627538	8.61	0.0038
DFT12	-0.00000040	0.00000033	0.17895842	1.46	0.2288
DFT13	-0.00000022	0.00000011	0.49126944	4.01	0.0470
DFT14	0.00000004	0.00000005	0.08315009	0.68	0.4114
DFT23	0.00000373	0.00000152	0.73896878	6.03	0.0151
DFT24	-0.00000059	0.00000030	0.46553230	3.80	0.0531

STEP 12 C111 REPLACED BY C122 R SQUARE = 0.41744252 C(P) = 12.12675734

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	12	14.27552457	1.18962705	9.73	0.0001
ERROR	163	19.92205668	0.12222121		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.65665854				
C111	0.01802614	0.00434636	2.10231294	17.20	0.0001
DFT1	0.00013639	0.00008313	0.32901311	2.69	0.1028
DFT3	-0.00131477	0.00043326	1.12550670	9.21	0.0028
DFT4	0.00032874	0.00010096	0.62743358	5.13	0.0248
C122	-0.00024092	0.00008642	0.94997623	7.77	0.0059
C1D3	0.00001399	0.00000672	0.53044984	4.34	0.0388
C2D4	-0.00000415	0.00000192	0.56938329	4.66	0.0324
DFT12	-0.00000054	0.00000023	0.32327325	2.64	0.1058
DFT13	-0.00000027	0.00000011	0.76216378	6.24	0.0135
DFT14	-0.00000007	0.00000005	0.25596403	2.09	0.1498
DFT23	0.00000478	0.00000149	1.26304694	10.33	0.0016
DFT24	-0.00000080	0.00000030	0.88788057	7.26	0.0078

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 12 C204 REPLACED BY C1D4 R SQUARE = 0.41943567 C(P) = 11.57206050

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	12	14.34368545	1.19530712	9.81	0.0001
ERROR	163	19.85389580	0.12180304		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.83626251				
C11	0.01922537	0.00432637	2.40524852	19.75	0.0001
DET1	0.00013916	0.00008307	0.34185537	2.81	0.0958
DET3	-0.00134166	0.00042835	1.19493425	9.81	0.0021
DET4	0.00022450	0.00009646	0.65980429	5.42	0.0212
C122	-0.00027914	0.00009095	1.14745506	9.42	0.0025
C1D3	0.00001419	0.00000647	0.58551283	4.81	0.0298
C1D4	-0.00000233	0.00000102	0.63754417	5.23	0.0234
DET12	-0.00000057	0.00000033	0.36387385	2.99	0.0858
DET13	-0.00000027	0.00000011	0.79478889	6.53	0.0116
DET14	0.00000005	0.00000005	0.30055090	2.47	0.1182
DET23	0.00000476	0.00000148	1.25625696	10.31	0.0016
DET24	-0.00000078	0.00000030	0.85816152	7.05	0.0087

THE ABOVE MODEL IS THE BEST 12 VARIABLE MODEL FOUND.

STEP 13 VARIABLE C111 ENTERED R SQUARE = 0.42124705 C(P) = 13.06795160

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	14.40563010	1.10812539	9.07	0.0001
ERROR	162	19.79195115	0.12217254		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.58462471				
C11	0.02155926	0.00546707	1.90696558	15.61	0.0001
DET1	0.00013960	0.00008320	0.33905288	2.78	0.0977
DET3	-0.00154609	0.00051621	1.09596713	8.97	0.0032
DET4	0.00027050	0.00011621	0.66190240	5.42	0.0212
C111	-0.00005440	0.00007640	0.06194485	0.51	0.4775
C122	-0.00018946	0.00015543	0.18151594	1.49	0.2247
C1D3	0.00001858	0.00000895	0.52649873	4.31	0.0395
C1D4	-0.00000319	0.00000155	0.49506123	4.05	0.0458
DET12	-0.00000052	0.00000034	0.28605103	2.34	0.1279
DET13	-0.00000025	0.00000011	0.60566109	4.96	0.0274
DET14	0.00000006	0.00000006	0.17844579	1.46	0.2286
DET23	0.00000425	0.00000165	0.81032223	6.63	0.0109
DET24	-0.00000068	0.00000033	0.51723907	4.23	0.0412

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 13 CL22 REPLACED BY C1D2 R SQUARE = 0.42195417 C(P) = 12.87115684

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	14.42981215	1.10998555	9.10	0.0001
ERROR	162	19.76776910	0.12202327		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.57391435				
CL1	0.02225245	0.00544405	2.03870012	16.71	0.0001
DET1	0.00016771	0.00008833	0.43989008	3.60	0.0594
DET3	-0.00167036	0.00050098	1.35652652	11.12	0.0011
DET4	-0.00178086	0.00011362	0.74562993	6.11	0.0145
CL11	-0.00012279	0.00004480	1.07202391	8.79	0.0035
C1D2	0.00000984	0.00000758	0.20569799	1.69	0.1960
C1D3	0.00002334	0.00000813	1.00626592	8.25	0.0046
C1D4	-0.00000443	0.00000141	1.20386029	9.87	0.0020
DET12	-0.00000068	0.00000039	0.37974740	3.11	0.0796
DET13	-0.00000026	0.00000011	0.63131261	5.17	0.0242
DET14	0.00000008	0.00000006	0.23167571	1.90	0.1701
DET23	0.00000300	0.00000159	0.43464588	3.56	0.0609
DET24	-0.00000048	0.00000331	0.29192556	2.39	0.1239

THE ABOVE MODEL IS THE BEST 13 VARIABLE MODEL FOUND.

STEP 14 VARIABLE DET23 ENTERED R SQUARE = 0.42629771 C(P) = 13.66234349

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	14	14.57835054	1.04131075	8.55	0.0001
ERROR	161	19.61923071	0.12185858		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.55965990				
CL1	0.02084213	0.00558833	1.69502254	13.91	0.0003
DET1	0.00015739	0.00009227	0.55766690	4.58	0.0339
DET3	-0.00153999	0.00051438	1.09226224	8.96	0.0032
DET4	-0.00031836	0.00011851	0.87935645	7.22	0.0080
CL11	-0.00011212	0.00004853	0.65053842	5.34	0.0221
DET33	0.00000063	0.00000057	0.14853839	1.22	0.2712
C1D2	0.00002262	0.00001383	0.32583655	2.67	0.1040
C1D3	0.00001528	0.00001094	0.23696641	1.94	0.1651
C1D4	-0.00000425	0.00000142	1.09336205	8.97	0.0032
DET12	-0.00000074	0.00000039	0.43985320	3.61	0.0592
DET13	-0.00000032	0.00000013	0.77826178	6.39	0.0125
DET14	0.00000008	0.00000006	0.27135270	2.23	0.1376
DET23	0.00000211	0.00000179	0.17044675	1.40	0.2387
DET24	-0.00000079	0.00000042	0.43501980	3.57	0.0606

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 14 CL11 REPLACED BY CL22 R SQUARE = 0.42889111 C(P) = 12.94059417

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	14	14.66703874	1.04764562	8.64	0.0001
ERROR	161	19.53054251	0.12130773		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.59486600				
CL1	0.01835535	0.00438556	2.12115687	17.49	0.0001
DET1	0.00020076	0.00009210	0.57643740	4.75	0.0307
DET3	-0.00124115	0.00043401	0.99207389	8.18	0.0048
DET4	0.00027109	0.00011205	0.71470845	5.89	0.0163
CL22	-0.00022418	0.00009686	0.73922662	6.09	0.0146
DET33	0.00000079	0.00000054	0.26263417	2.17	0.1431
CL02	0.00002226	0.00001377	0.31713213	2.61	0.1079
CL03	0.00001591	0.00000844	0.05950821	0.49	0.4847
CL04	-0.00000266	0.00000104	0.79954789	6.59	0.0112
DET12	-0.00000078	0.00000035	0.49344070	4.07	0.0454
DET13	-0.00000027	0.00000012	1.11293543	9.17	0.0029
DET14	0.00000010	0.00000006	0.39136659	3.23	0.0743
DET23	0.00000207	0.00000101	0.35150478	2.90	0.0906
DET24	-0.00000109	0.00000037	1.03302663	8.52	0.0040

STEP 14 CL03 REPLACED BY DET34 R SQUARE = 0.43023808 C(P) = 12.56573215

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	14	14.71310161	1.05093583	8.68	0.0001
ERROR	161	19.48447564	0.12102161		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.56197597				
CL1	0.01865223	0.00440360	2.18058310	18.02	0.0001
DET1	0.00021584	0.00008590	0.69763356	5.76	0.0175
DET3	-0.00115199	0.00036606	1.19854739	9.90	0.0020
DET4	0.00026491	0.00011132	0.69574822	5.75	0.0176
CL22	-0.00020669	0.00008625	0.69430755	5.74	0.0178
DET33	0.00000178	0.00000090	0.47308569	3.91	0.0497
CL02	0.00002289	0.00001247	0.40745169	3.37	0.0684
CL04	-0.00000211	0.00000085	0.73911992	6.11	0.0145
DET12	-0.00000076	0.00000035	0.46429386	3.84	0.0519
DET13	-0.00000046	0.00000012	1.60266788	13.23	0.0004
DET14	0.00000010	0.00000005	0.43796135	3.62	0.0589
DET23	0.00000221	0.00000198	0.15110699	1.25	0.2655
DET24	-0.00000081	0.00000047	0.45438770	3.75	0.0544
DET34	-0.00000020	0.00000021	0.10557107	0.87	0.3517

THE ABOVE MODEL IS THE BEST 14 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 15 VARIABLE C2D4 ENTERED R SQUARE = 0.43128175 C(P) = 14.27527540

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	15	14.74879275	0.98325285	8.09	0.0001
ERROR	160	19.44878846	0.12155493		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.54333916				
C1 1	0.02006460	0.00510685	1.88015288	15.47	0.0001
DET1	0.00021392	0.00009017	0.68419263	5.63	0.0189
DET3	-0.00115432	0.00036689	1.20323636	9.90	0.0020
DET4	0.00024388	0.00011538	0.50728488	4.17	0.0427
C1 2 2	-0.00024642	0.00011338	0.57416119	4.72	0.0312
DET33	0.00000189	0.00000093	0.50731706	4.17	0.0427
C1D2	0.00002050	0.00001325	0.29096422	2.39	0.1238
C1D4	-0.00000450	0.00000449	0.17221516	1.01	0.3175
C2D4	0.00000464	0.00000857	0.03569118	0.29	0.5887
DET13	-0.00000178	0.00000039	0.48149898	3.96	0.0483
DET13	-0.00000046	0.00000013	1.63561954	13.45	0.0003
DET24	0.00000011	0.00000006	0.47182484	3.88	0.0505
DET23	0.00000215	0.00000198	0.14322477	1.18	0.2793
DET34	-0.00000079	0.00000052	0.28289984	2.33	0.1291
DET34	-0.00000024	0.00000023	0.13852821	1.14	0.2873

THE ABOVE MODEL IS THE BEST 15 VARIABLE MODEL FOUND.

STEP 16 VARIABLE C2D2 ENTERED R SQUARE = 0.43275378 C(P) = 15.86560802

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	14.79913252	0.92494578	7.58	0.0001
ERROR	159	19.39844873	0.12200282		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.55033866				
C1 1	0.01986841	0.00511544	1.85614204	15.21	0.0001
DET1	0.00020856	0.00009072	0.64479487	5.29	0.0228
DET3	-0.00114082	0.00036817	1.17141003	9.60	0.0023
DET4	0.00023752	0.00012001	0.47787772	3.92	0.0495
C1 2 2	-0.00025007	0.00011373	0.58083704	4.83	0.0293
DET33	0.00000187	0.00000093	0.49511189	4.06	0.0456
C1D2	0.00010770	0.00013640	0.07606784	0.62	0.4309
C1D4	-0.00000806	0.00000714	0.15552233	1.27	0.2606
C2D2	-0.00009110	0.00023524	0.05033973	0.41	0.5216
C2D4	0.00001298	0.00001298	0.08598415	0.70	0.4024
DET13	-0.00000379	0.00000035	0.49439342	4.05	0.0458
DET13	-0.00000047	0.00000013	1.67381184	13.72	0.0003
DET14	0.00000012	0.00000006	0.51208002	4.20	0.0421
DET23	0.00005221	0.00010199	0.15041172	1.23	0.2685
DET34	-0.00000079	0.00000052	0.28251374	2.32	0.1301
DET34	-0.00000024	0.00000023	0.13411782	1.10	0.2960

THE ABOVE MODEL IS THE BEST 16 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 17 VARIABLE CL11 ENTERED R SQUARE = 0.43306231 C(P) = 17.77974273

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	17	14.80968360	0.87115786	7.10	0.0001
ERROR	158	19.38789765	0.12270821		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.52792669				
CL1	0.02082982	0.00591524	1.52160044	12.40	0.0006
DET1	0.00021213	0.00009175	0.65532226	5.34	0.0221
DET3	-0.00115903	0.00037442	1.17583984	9.58	0.0023
DET4	0.00024288	0.00012174	0.48842373	3.98	0.0478
CL11	-0.00001852	0.00006316	0.01055109	0.09	0.7697
CL22	-0.00021447	0.00016655	0.20337107	1.66	0.1998
DET33	0.00000197	0.00000100	0.48245220	3.93	0.0491
CL02	0.00011669	0.00014019	0.08502659	0.69	0.4064
CL04	-0.00000869	0.00000748	0.16586334	1.35	0.2467
C202	-0.00016520	0.00024077	0.05777201	0.47	0.4936
C204	0.00001176	0.00001335	0.09530685	0.78	0.3795
DET12	-0.00000379	0.00000095	0.49639289	4.05	0.0460
DET13	-0.00000048	0.00000013	1.67045072	13.61	0.0003
DET14	0.00000012	0.00000006	0.50844364	4.14	0.0435
DET23	0.00000198	0.00000213	0.10589467	0.86	0.3543
DET24	-0.00000075	0.00000054	0.24012067	1.96	0.1638
DET34	-0.00000026	0.00000024	0.14466888	1.18	0.2792

STEP 17 CL22 REPLACED BY CL2 R SQUARE = 0.43390095 C(P) = 17.54634752

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	17	14.83836309	0.87284489	7.12	0.0001
ERROR	158	19.35921816	0.12252670		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.54466099				
CL1	0.03855533	0.01515086	0.79510626	6.49	0.0118
CL2	-0.03114145	0.02262887	0.23205056	1.89	0.1707
DET1	0.00020231	0.00009230	0.58861966	4.80	0.0299
DET3	-0.00115412	0.00037408	1.16629091	9.52	0.0024
DET4	0.00023424	0.00012444	0.39824263	3.25	0.0733
CL11	-0.00006856	0.00004391	0.49828536	4.07	0.0454
DET33	0.00000198	0.00000099	0.48597103	3.97	0.0481
CL02	0.00011445	0.00014013	0.08173392	0.67	0.4153
CL04	-0.00000991	0.00000759	0.20894795	1.71	0.1935
C202	-0.00016200	0.00024066	0.05551896	0.45	0.5018
C204	0.00001408	0.00001366	0.13023876	1.06	0.3041
DET12	-0.00000381	0.00000095	0.51767282	4.22	0.0415
DET13	-0.00000049	0.00000013	1.73438916	14.16	0.0002
DET14	0.00000013	0.00000006	0.58352191	4.76	0.0306
DET23	0.00000201	0.00000213	0.10917364	0.89	0.3466
DET24	-0.00000073	0.00000054	0.22458560	1.83	0.1777
DET34	-0.00000026	0.00000024	0.15219348	1.24	0.2668

THE ABOVE MODEL IS THE BEST 17 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 18 VARIABLE C1D3 ENTERED R SQUARE = 0.42453303 C(P) = 19.37043930

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	18	14.85997861	0.82555437	6.70	0.0001
ERROR	157	19.33760264	0.12316944		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.54267191				
C1I	0.03621869	0.01621535	0.61449185	4.99	0.0269
C1J	-0.02585245	0.02591812	0.12292556	1.00	0.3193
DFT1	0.00019575	0.00009386	0.53566632	4.35	0.0386
DFT3	-0.00132809	0.00055558	0.69379917	5.63	0.0188
DFT4	0.00325156	0.00014367	0.39391216	3.20	0.0757
C1I1	-0.00010226	0.00005485	0.42807611	3.48	0.0642
DFT33	0.00000159	0.00000136	0.16795704	1.36	0.2447
C1D2	0.00012082	0.00014132	0.09002743	0.73	0.3939
C1D3	0.00000593	0.00001416	0.02161552	0.18	0.6758
C1D4	-0.00006997	0.00000761	0.21159931	1.72	0.1919
C2D2	-0.00017600	0.00024359	0.06430021	0.52	0.4710
C2D5	0.00001285	0.00001400	0.10374719	0.84	0.3601
DFT12	-0.00000078	0.00000040	0.47320751	3.84	0.0518
DFT13	-0.00000044	0.00000017	0.80669316	6.55	0.0114
DFT14	0.00000012	0.00000006	0.41694206	3.39	0.0677
DFT23	0.00000207	0.00000214	0.11559354	0.94	0.3342
DFT24	-0.00000067	0.00000056	0.18025768	1.46	0.2282
DFT34	-0.00000021	0.00000027	0.06995270	0.57	0.4522

THE ABOVE MODEL IS THE BEST 18 VARIABLE MODEL FOUND.

STEP 19 VARIABLE C2D3 ENTERED R SQUARE = 0.43486857 C(P) = 21.27705792

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	19	14.87145327	0.78270807	6.32	0.0001
ERROR	156	19.32612798	0.12388544		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.54357981				
C1I	0.03179473	0.02181210	0.26323002	2.12	0.1469
C1J	-0.01837744	0.03585228	0.03255045	0.26	0.6090
DFT1	0.00019490	0.00009418	0.53058683	4.28	0.0401
DFT3	-0.00122376	0.00056138	0.68884772	5.56	0.0196
DFT4	0.00032342	0.00014121	0.39903657	3.22	0.0746
C1I1	-0.00010296	0.00005506	0.43319151	3.50	0.0634
DFT33	0.00000156	0.00000137	0.15700104	1.27	0.2620
C1D2	0.00005563	0.00016412	0.04206389	0.34	0.5609
C1D3	0.00002896	0.00007695	0.01752925	0.14	0.7073
C1D4	-0.00001323	0.00001065	0.16356635	1.32	0.2523
C2D2	-0.00013426	0.00028017	0.02844728	0.23	0.6325
C2D3	-0.00003914	0.00012860	0.01147465	0.09	0.7613
C2D4	0.00001676	0.00001502	0.09612251	0.78	0.3798
DFT12	-0.00000079	0.00000040	0.48287307	3.90	0.0501
DFT13	-0.00000044	0.00000017	0.79967087	6.45	0.0120
DFT14	0.00000012	0.00000006	0.42738667	3.45	0.0651
DFT23	0.00000197	0.00000217	0.10279840	0.83	0.3637
DFT24	-0.00000061	0.00000059	0.13350341	1.08	0.3008
DFT34	-0.00000021	0.00000028	0.06937178	0.56	0.4554

STEP 19 C12 REPLACED BY DET44 R SQUARE = 0.43520901 C(P) = 21.18231258

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	19	14.88309563	0.78332082	6.33	0.0001
ERROR	156	19.31448672	0.12381081		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.51418430				
C11	0.02252865	0.00658165	1.45063897	11.72	0.0008
DET1	0.00015616	0.00009418	0.53712518	4.34	0.0389
DET3	-0.00139776	0.00054513	0.81401002	6.57	0.0113
DET4	0.00026934	0.00013326	0.50581849	4.09	0.0450
C111	-0.00012138	0.00005946	0.51595661	4.17	0.0429
DET33	0.00000163	0.00000140	0.16882205	1.36	0.2447
DET44	0.00000002	0.00000003	0.04419271	0.36	0.5511
C102	0.00006496	0.00016050	0.02028292	0.16	0.6862
C103	0.00025234	0.00005257	0.12269879	0.99	0.3210
C104	-0.00001349	0.00000589	0.23038574	1.86	0.1745
C202	-0.00007829	0.00027603	0.01003212	0.08	0.7763
C203	-0.00007338	0.00009506	0.07376735	0.60	0.4414
C204	0.00001784	0.00001843	0.11608989	0.94	0.3344
DET12	-0.00000080	0.00000040	0.48699433	3.93	0.0491
DET13	-0.00000045	0.00000017	0.81100341	6.55	0.0114
DET14	0.00000012	0.00000006	0.43658911	3.53	0.0623
DET23	0.00000213	0.00000222	0.11383263	0.92	0.3391
DET24	-0.00000071	0.00000064	0.14942497	1.21	0.2736
DET34	-0.00000032	0.00000035	0.09955954	0.80	0.3712

THE ABOVE MODEL IS THE BEST 19 VARIABLE MODEL FOUND.

STEP 20 VARIABLE DET11 ENTERED R SQUARE = 0.43547078 C(P) = 23.10946073

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	20	14.89204753	0.74460238	5.98	0.0001
ERROR	155	19.30553372	0.12455183		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.49684176				
C11	0.02316695	0.00701755	1.35742695	10.90	0.0012
DET1	0.00120220	0.00009711	0.53997498	4.34	0.0390
DET3	-0.00142152	0.00055389	0.82036421	6.59	0.0112
DET4	0.00027106	0.00013381	0.51111924	4.10	0.0445
C111	-0.00012596	0.00006204	0.51345482	4.12	0.0440
DET11	-0.00000000	0.00000000	0.00895200	0.07	0.7890
DET33	0.00000166	0.00000141	0.17334154	1.39	0.2399
DET44	0.00000002	0.00000003	0.04473849	0.36	0.5498
C102	0.00006697	0.00016103	0.02096884	0.17	0.6821
C103	0.00025274	0.00005273	0.12176118	0.98	0.3243
C104	-0.00001370	0.00000595	0.23632978	1.90	0.1704
C202	-0.00008056	0.00027598	0.01061403	0.09	0.7707
C203	-0.00007240	0.00009542	0.07171465	0.58	0.4491
C204	0.00001810	0.00001851	0.11912227	0.96	0.3296
DET12	-0.00000068	0.00000061	0.15610082	1.25	0.2647
DET13	-0.00000048	0.00000022	0.58502487	4.70	0.0317
DET14	0.00000012	0.00000007	0.44422080	3.57	0.0608
DET23	0.00000205	0.00000225	0.10336496	0.83	0.3637
DET24	-0.00000070	0.00000065	0.14595400	1.17	0.2807
DET34	-0.00000032	0.00000035	0.10215907	0.82	0.3665

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 20 C202 REPLACED BY C101 R SQUARE = 0.43905794 C(P) = 22.11114841

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	20	15.01471966	0.75073598	6.07	0.0001
ERROR	155	19.18286159	0.12376040		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.50273288				
C11	0.02426208	0.00708089	1.45298961	11.74	0.0008
DFT1	0.00007188	0.00015553	0.02512550	0.20	0.6529
DFT3	-0.00141061	0.00054586	0.82647654	6.68	0.0107
DFT4	0.00072026	0.00013221	0.54783125	4.43	0.0370
C111	-0.00015534	0.00006951	0.63616653	5.14	0.0248
DFT11	-0.00000000	0.00000000	0.14163927	1.14	0.2864
DFT33	0.00000171	0.00000140	0.18638746	1.51	0.2216
DFT44	0.00000003	0.00000003	0.07571786	0.61	0.4353
C101	0.00000382	0.00000368	0.13328616	1.08	0.3010
C102	0.00002397	0.00001578	0.28557556	2.31	0.1308
C103	0.00003934	0.00005150	0.07221036	0.58	0.4461
C104	-0.00001048	0.00000584	0.14049345	1.14	0.2883
C203	-0.00005257	0.00009126	0.04105978	0.33	0.5655
C204	0.00001278	0.00001850	0.05905981	0.48	0.4907
DFT12	-0.00000039	0.00000067	0.04282077	0.35	0.5572
DFT13	-0.00000052	0.00000022	0.66792541	5.40	0.0215
DFT14	0.00000009	0.00000007	0.17483599	1.41	0.2364
DFT23	0.00000212	0.00000224	0.11128088	0.90	0.3445
DFT24	-0.00000088	0.00000066	0.21639254	1.75	0.1880
DFT34	-0.00000033	0.00000035	0.11251963	0.91	0.3418

STEP 20 C204 REPLACED BY C201 R SQUARE = 0.44713697 C(P) = 19.86274153

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	20	15.29100279	0.76455014	6.27	0.0001
ERROR	155	18.90657846	0.12197793		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.55624836				
C11	0.02265255	0.00702591	1.27100888	10.42	0.0015
DFT1	0.00006825	0.00015673	0.02313418	0.19	0.6638
DFT3	-0.00115544	0.00056578	0.50872237	4.17	0.0428
DFT4	0.00016005	0.00014376	0.21316447	1.75	0.1881
C111	-0.00011620	0.00007207	0.31704686	2.60	0.1090
DFT11	-0.00000000	0.00000000	0.32143042	2.64	0.1066
DFT33	0.00000182	0.00000138	0.21359241	1.75	0.1877
DFT44	-0.00000001	0.00000004	0.00284892	0.02	0.8787
C101	0.00002464	0.00001959	0.42326561	3.47	0.0644
C102	0.00002297	0.00001501	0.28546872	2.34	0.1281
C103	-0.00002981	0.00003682	0.07953511	0.65	0.4206
C104	-0.00000184	0.00000198	0.10598861	0.87	0.3527
C201	-0.00005466	0.00003297	0.33534295	2.75	0.0993
C202	0.00005050	0.00005160	0.11685987	0.96	0.3292
DFT12	-0.00000056	0.00000067	0.08555264	0.70	0.4036
DFT13	-0.00000067	0.00000024	0.91963958	7.54	0.0068
DFT14	0.00000018	0.00000010	0.43422611	3.56	0.0611
DFT23	0.00000211	0.00000221	0.11163324	0.92	0.3402
DFT24	-0.00000082	0.00000062	0.21463033	1.76	0.1866
DFT34	-0.00000019	0.00000035	0.03525521	0.29	0.5916

STEP 20 CID3 REPLACED BY CI22 R SQUARE = 0.45979472 C(P) = 16.34306642

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	20	15.72196139	0.78609807	6.60	0.0001
ERROR	155	18.47371286	0.11918525		
TOTAL	175	34.19567425			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.60235039				
CI1	0.02395708	0.00695171	1.41548972	11.88	0.0007
DET1	0.00021425	0.00015148	0.00097612	0.01	0.9280
DET3	-0.00135844	0.00050231	0.87169025	7.31	0.0076
DET4	0.00017638	0.00012555	0.17356301	1.46	0.2294
CI11	-0.00042743	0.00016484	0.80140068	6.72	0.0104
CI22	0.00086991	0.00041550	0.51239971	4.30	0.0398
DET11	-0.00000000	0.00000000	0.66365332	5.57	0.0195
DET22	0.00000184	0.00000118	0.23026226	1.93	0.1665
DET44	0.00000001	0.00000004	0.01191569	0.10	0.7523
CI101	0.00009360	0.00003026	0.84566919	7.10	0.0085
CI202	0.00030835	0.00015170	0.42036448	3.53	0.0623
DET55	-0.00000476	0.00000185	0.79359731	6.66	0.0108
CI303	-0.00013543	0.00005340	0.76667876	6.43	0.0122
CI303	0.00001800	0.00001694	0.10756309	0.90	0.3436
DET12	-0.00000073	0.00000067	0.14343085	1.20	0.2743
DET33	-0.00000087	0.00000025	1.46777211	12.32	0.0006
DET14	0.00000034	0.00000012	0.86777936	7.28	0.0077
DET23	0.00000155	0.00000219	0.05940484	0.50	0.4813
DET24	-0.00000073	0.00000062	0.16858628	1.41	0.2361
DET25	-0.00000073	0.00000033	0.05589251	0.47	0.4953

STEP 20 DET1 REPLACED BY DET22 R SQUARE = 0.46146166 C(P) = 15.87615464

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	20	15.78097264	0.78904363	6.64	0.0001
ERROR	155	18.41670861	0.11881747		
TOTAL	175	34.19768125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.60454999				
CI1	0.02345965	0.00695754	1.35086387	11.37	0.0009
DET3	-0.00125752	0.00052199	0.68958450	5.80	0.0172
DET4	0.00017982	0.00013118	0.11290559	0.95	0.3312
CI11	-0.00043833	0.00015437	0.93362681	7.86	0.0057
CI22	0.00091476	0.00041382	0.58060987	4.89	0.0285
DET11	-0.00000000	0.00000000	1.38946197	11.69	0.0008
DET22	0.00000207	0.00000296	0.05798137	0.49	0.4859
DET33	0.00000162	0.00000116	0.22963970	1.93	0.1665
DET44	0.00000002	0.00000004	0.03046646	0.26	0.6133
CI101	0.00008567	0.00003028	0.95130077	8.01	0.0053
CI202	0.00032732	0.00001514	0.38678416	3.26	0.0731
CI303	-0.00000407	0.00000167	0.70189365	5.91	0.0162
CI303	-0.00014398	0.00005421	0.83826700	7.06	0.0087
CI303	0.00001661	0.00001886	0.09217267	0.78	0.3798
DET12	-0.00000078	0.00000060	0.19776263	1.66	0.1989
DET13	-0.00000000	0.00000025	1.53335031	12.91	0.0004
DET14	0.00000036	0.00000013	0.94469282	7.95	0.0054
DET23	0.00000157	0.00000219	0.06135373	0.52	0.4735
DET24	-0.00000132	0.00000074	0.22786875	1.92	0.1681
DET25	-0.00000022	0.00000033	0.05033433	0.42	0.5161

STEP 20 CL1 REPLACED BY CL2 R SQUARE = 0.46222394 C(P) = 15.66471087

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	20	15.80604776	0.79034704	6.66	0.0001
ERROR	155	18.39064049	0.11864929		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.58886202				
CL2	0.04182094	0.01227637	1.37693199	11.61	0.0008
DET3	-0.00115829	0.00050896	0.65767638	5.54	0.0198
DET4	0.00012243	0.00013233	0.10151361	0.86	0.3564
CL11	-0.00025961	0.00014584	0.72134794	6.08	0.0148
CL22	0.00026135	0.00041178	0.31525581	2.66	0.1051
DET11	-0.00000000	0.00000000	1.49915322	12.64	0.0005
DET22	0.00010185	0.00020297	0.04612765	0.39	0.5339
DET33	0.00000176	0.00000117	0.26889402	2.27	0.1343
DET44	0.00000002	0.00000004	0.02183292	0.18	0.6685
C101	0.00005212	0.00003030	1.09665732	9.24	0.0028
C102	0.00002704	0.00001513	0.37888044	3.19	0.0759
DET4	-0.00005385	0.00001183	0.66466932	5.60	0.0192
C201	-0.00015522	0.00005420	0.97311349	8.20	0.0048
C203	0.00001316	0.00001822	0.06183696	0.52	0.4714
DET13	-0.00000078	0.00000060	0.20153172	1.70	0.1944
DET13	-0.00000093	0.00000025	1.61703868	13.63	0.0003
DET14	0.00000037	0.00000013	1.00523498	8.47	0.0041
DET23	0.00000142	0.00000218	0.05090013	0.43	0.5135
DET24	-0.00000085	0.00000074	0.19707142	1.66	0.1994
DET34	-0.00000023	0.00000033	0.05796053	0.49	0.4856

STEP 20 DET44 REPLACED BY C202 R SQUARE = 0.46310973 C(P) = 15.41749491

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	20	15.83723253	0.79186163	6.68	0.0001
ERROR	155	18.36034872	0.11845386		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.62414184				
CL2	0.04702247	0.01147071	1.44203725	12.17	0.0006
DET3	-0.00134611	0.00055978	0.68496580	5.78	0.0174
DET4	0.00015195	0.00013958	0.14241863	1.20	0.2746
CL11	-0.00027074	0.00014606	0.76312303	6.44	0.0121
CL22	0.00032712	0.00042424	0.34796756	2.94	0.0885
DET11	-0.00000000	0.00000000	1.42481260	12.03	0.0007
DET22	0.00000142	0.00000286	0.02899721	0.24	0.6215
DET33	0.00000119	0.00000121	0.11390834	0.96	0.3283
C101	0.00005461	0.00003037	1.14983649	9.71	0.0022
C102	0.00002982	0.00001365	0.09131262	0.77	0.3813
DET4	-0.00026456	0.00000707	0.57428289	4.85	0.0292
C201	-0.00016045	0.00005437	1.03136528	8.71	0.0037
C202	-0.00012961	0.00019538	0.05212468	0.44	0.5081
C203	0.00002091	0.00002274	0.10008061	0.84	0.3594
DET13	-0.00000078	0.00000060	0.20115701	1.70	0.1945
DET13	-0.00000087	0.00000025	1.43072136	12.08	0.0007
DET14	0.00000037	0.00000013	0.99757549	8.42	0.0042
DET23	0.00000133	0.00000213	0.04590806	0.39	0.5345
DET24	-0.00000078	0.00000062	0.18380585	1.55	0.2148
DET34	-0.00000026	0.00000026	0.00716628	0.06	0.8060

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 20 DET34 REPLACED BY CL1 R SQUARE = 0.46336641 C(P) = 15.34605972

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	20	15.84601045	0.79230052	6.69	0.0001
ERROR	155	18.35157080	0.11839723		
TOTAL	175	34.19758125			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.62495033				
CL1	-0.01863969	0.05079349	0.01594420	0.13	0.7141
CL2	0.07243715	0.09030600	0.07617826	0.64	0.4237
DET3	-0.00132781	0.00056223	0.66036563	5.58	0.0194
DET4	-0.00015293	0.00013840	0.14455850	1.22	0.2709
CL11	-0.00031928	0.00020575	0.28510447	2.41	0.1228
CL22	0.00056593	0.00062201	0.09801115	0.83	0.3643
DET11	-0.00000000	0.00000000	1.38595173	11.71	0.0008
DET22	0.00000155	0.00000274	0.03786116	0.32	0.5726
DET33	0.00000093	0.00000059	0.29470885	2.49	0.1167
CL101	0.00010051	0.00003377	1.04896815	8.86	0.0034
CL102	0.00013364	0.00011544	0.14821145	1.25	0.2649
CL104	-0.00005478	0.00002200	0.67724774	5.72	0.0180
CL201	-0.00017097	0.00006035	0.95026690	8.03	0.0052
CL202	-0.00018681	0.00020642	0.09697515	0.82	0.3669
CL203	0.00002245	0.00002164	0.12737813	1.08	0.3012
DET12	-0.00000083	0.00000060	0.22780597	1.92	0.1674
DET13	-0.00000087	0.00000024	1.49660656	12.64	0.0005
DET14	0.00000028	0.00000013	1.01670361	8.59	0.0039
DET23	0.00000151	0.00000196	0.07073657	0.60	0.4407
DET24	-0.00000087	0.00000048	0.39003340	3.29	0.0715

THE ABOVE MODEL IS THE BEST 20 VARIABLE MODEL FOUND.

STEP 1 VARIABLE C12 ENTERED R SQUARE = 0.61782733 C(P) = 59.01572361

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	0.48926840	0.48926840	279.67	0.0001
ERROR	173	0.30264931	0.00174942		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01112014				
C12	0.00314149	0.00018785	0.48926840	279.67	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE C204 ENTERED R SQUARE = 0.84894512 C(P) = 42.28706514

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	0.67291113	0.25695557	158.98	0.0001
ERROR	172	0.27800658	0.00161632		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01491315				
C12	0.00305097	0.00018102	0.47123759	291.55	0.0001
C204	0.00000013	0.00000003	0.02464273	15.25	0.0001

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE DET3 ENTERED R SQUARE = 0.86080635 C(P) = 37.14822385

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	0.68230426	0.17443475	111.05	0.0001
ERROR	171	0.26861346	0.00157084		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01403083				
C12	0.00428782	0.00019580	0.44296507	281.99	0.0001
DET3	-0.00003160	0.00001292	0.00939312	5.98	0.0155
C204	0.00000021	0.00000005	0.03226908	20.54	0.0001

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE C104 ENTERED R SQUARE = 0.87214558 C(P) = 32.32355478

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	0.69078400	0.17269600	113.13	0.0001
ERROR	170	0.25963372	0.00152726		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.00743702				
C12	0.00302016	0.00022242	0.28160742	184.39	0.0001
DET3	-0.00003925	0.00001313	0.01365059	8.94	0.0032
C104	-0.00000084	0.00000035	0.00897974	5.88	0.0164
C204	0.00000175	0.00000064	0.01150001	7.53	0.0067

F

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 4 CL2 REPLACED BY CL1 R SQUARE = 0.67239573 C(P) = 32.17300377

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	0.53248209	0.13312052	87.23	0.0001
ERROR	170	0.25943563	0.00152609		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.00585786				
CL1	0.00166875	0.00012501	0.28180552	184.66	0.0001
DFT3	-0.00004697	0.00001326	0.01913975	12.54	0.0005
CL04	-0.00000108	0.00000034	0.01552664	10.17	0.0017
C204	0.00000223	0.00000062	0.01969154	12.90	0.0004

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE DFT44 ENTERED R SQUARE = 0.68123405 C(P) = 28.85354153

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	0.53948131	0.10789626	72.23	0.0001
ERROR	169	0.25243640	0.00149371		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.00591868				
CL1	0.00182870	0.00013748	0.26429559	176.94	0.0001
DFT3	-0.00005974	0.00001436	0.02575709	17.24	0.0001
DFT44	-0.00000000	0.00000000	0.00699922	4.69	0.0318
CL04	-0.00000105	0.00000033	0.01472033	9.85	0.0020
C204	0.00000218	0.00000061	0.01886440	12.63	0.0005

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE DFT22 ENTERED R SQUARE = 0.68985916 C(P) = 25.66240172

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	0.54631169	0.09105195	62.28	0.0001
ERROR	168	0.24560602	0.00146194		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.00878625				
CL1	0.00185448	0.00013653	0.26972583	184.50	0.0001
DFT3	-0.00006968	0.00001496	0.03172848	21.70	0.0001
DFT22	0.00000024	0.00000011	0.00683038	4.67	0.0321
DFT44	-0.00000000	0.00000000	0.01342708	9.18	0.0028
CL04	-0.00000114	0.00000033	0.01720444	11.77	0.0008
C204	0.00000235	0.00000061	0.02154850	14.74	0.0002

STEP 6 DFT44 REPLACED BY DFT24 R SQUARE = 0.69540610 C(P) = 22.32390367

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	0.55070441	0.09178407	63.93	0.0001
ERROR	168	0.24121331	0.00143579		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01111493				
CL1	0.00185006	0.00013295	0.28058666	195.42	0.0001
DFT3	-0.00006573	0.00001390	0.03208164	22.34	0.0001
DFT22	0.00000048	0.00000015	0.01422614	9.91	0.0019
CL04	-0.00000108	0.00000033	0.01536969	10.70	0.0013
C204	0.00000224	0.00000061	0.01961704	13.66	0.0003
DFT24	-0.00000004	0.00000001	0.01781981	12.41	0.0005

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 6 CL1 REPLACED BY CL2 R SQUARE = 0.69691972 C(P) = 21.41291294

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	0.55190307	0.09198384	64.38	0.0001
ERROR	168	0.24001466	0.00142866		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01331633				
CL2	0.00331953	0.00023636	0.28178532	197.24	0.0001
DFT3	-0.00005809	0.00001368	0.02575956	18.03	0.0001
DFT22	0.00000051	0.00000015	0.01570059	10.99	0.0011
C1D4	-0.00000082	0.00000034	0.00837076	5.86	0.0166
C2D4	0.00000171	0.00000062	0.01082909	7.58	0.0066
DFT24	-0.00000004	0.00000001	0.01905371	13.34	0.0003

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

STEP 7 VARIABLE DFT2 ENTERED R SQUARE = 0.70364014 C(P) = 19.36813746

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	0.55722509	0.07960358	56.64	0.0001
ERROR	167	0.23469262	0.00140535		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01324661				
CL2	0.00323785	0.00023816	0.25976033	184.84	0.0001
DFT2	-0.00011592	0.00005957	0.00532202	3.79	0.0533
DFT3	-0.00003770	0.00001714	0.00679453	4.83	0.0293
DFT22	0.00000093	0.00000027	0.01729982	12.31	0.0006
C1D4	-0.00000083	0.00000034	0.00860016	6.12	0.0144
C2D4	0.00000174	0.00000062	0.01118269	7.96	0.0054
DFT24	-0.00000004	0.00000001	0.02412442	17.17	0.0001

STEP 7 CL2 REPLACED BY CL1 R SQUARE = 0.70451604 C(P) = 19.84096745

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	0.55791873	0.07970268	56.88	0.0001
ERROR	167	0.23399899	0.00140119		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01136059				
CL1	0.00181267	0.00013295	0.26045397	185.88	0.0001
DFT2	-0.00013445	0.00005825	0.00721432	5.15	0.0245
DFT3	-0.00004211	0.00001723	0.00836348	5.97	0.0156
DFT22	0.00000098	0.00000027	0.01900028	13.56	0.0003
C1D4	-0.00000108	0.00000033	0.01531942	10.93	0.0012
C2D4	0.00000224	0.00000060	0.01969990	14.06	0.0002
DFT24	-0.00000004	0.00000001	0.02501477	17.85	0.0001

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 8 VARIABLE DET1 ENTERED R SQUARE = 0.70729634 C(P) = 19.16760409

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	0.56012050	0.07001506	50.14	0.0001
ERROR	166	0.23179721	0.00139637		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.21506353				
CL1	0.00191043	0.00015387	0.21524959	154.15	0.0001
DET1	-0.00000006	0.00000204	0.00220177	1.58	0.2110
DET2	-0.00013208	0.00005918	0.00695546	4.98	0.0270
DET3	-0.00004790	0.00001781	0.01009775	7.23	0.0079
DET22	0.00000103	0.00000027	0.02060865	14.76	0.0002
CL04	-0.00000096	0.00000034	0.01106039	7.92	0.0055
C204	0.00000204	0.00000062	0.01505616	10.78	0.0012
DET24	-0.00000006	0.00000001	0.02719603	19.48	0.0001

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

STEP 9 VARIABLE DET12 ENTERED R SQUARE = 0.70933533 C(P) = 19.94040950

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	0.56173521	0.06241502	44.74	0.0001
ERROR	165	0.23018250	0.00139505		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01095057				
CL1	0.00191190	0.00015381	0.21556493	154.52	0.0001
DET1	-0.00000728	0.00000672	0.00163990	1.18	0.2799
DET2	-0.00015270	0.00006218	0.00841352	6.03	0.0151
DET3	-0.00004428	0.00001812	0.00833180	5.97	0.0156
DET22	0.00000104	0.00000027	0.02072734	14.86	0.0002
CL04	-0.00000097	0.00000034	0.01124112	8.06	0.0051
C204	0.00000204	0.00000062	0.01508043	10.81	0.0012
DET12	0.00000002	0.00000002	0.00161471	1.16	0.2836
DET24	-0.00000006	0.00000001	0.02564158	18.38	0.0001

STEP 9 DET3 REPLACED BY DET4 R SQUARE = 0.70942458 C(P) = 19.88669555

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	0.56180585	0.06242288	44.76	0.0001
ERROR	165	0.23011182	0.00139462		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.00475773				
CL1	0.00183695	0.00014309	0.22985727	164.82	0.0001
DET1	-0.00001383	0.00000675	0.00584773	4.19	0.0422
DET2	-0.00017082	0.00005602	0.01428401	10.31	0.0016
DET4	-0.00001280	0.00000522	0.00840248	6.02	0.0151
DET22	0.00000113	0.00000026	0.02669484	19.14	0.0001
CL04	-0.00000100	0.00000034	0.01203356	8.63	0.0038
C204	0.00000218	0.00000063	0.01672465	11.99	0.0007
DET12	0.00000004	0.00000002	0.00581021	4.17	0.0428
DET24	-0.00000007	0.00000002	0.03092281	22.17	0.0001

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 9 DET12 REPLACED BY C2D3 R SQUARE = 0.71219623 C(P) = 18.21853971

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	0.56400681	0.06266676	45.37	0.0001
ERROR	165	0.22791690	0.00139131		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01750404				
CL1	0.00201790	0.00016890	0.19716726	142.74	0.0001
DET1	-0.00003067	0.00002005	0.00303727	2.20	0.1400
DET2	-0.00013367	0.00005708	0.00757671	5.49	0.0204
DET4	-0.00001225	0.00000512	0.00790696	5.72	0.0179
DET22	0.00000109	0.00000026	0.02433244	17.62	0.0001
C1D4	-0.00000116	0.00000035	0.01527833	11.06	0.0011
C2D3	-0.00000133	0.00000055	0.00800513	5.80	0.0172
C2D4	-0.00000267	0.00000067	0.02196224	15.90	0.0001
DET24	-0.00000007	0.00000002	0.02959222	21.42	0.0001

STEP 9 DET1 REPLACED BY C1D3 R SQUARE = 0.71484635 C(P) = 16.62352684

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	0.56609545	0.06289994	45.96	0.0001
ERROR	165	0.22581822	0.00136860		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01324846				
CL1	0.00184898	0.00014701	0.21650729	158.20	0.0001
DET2	-0.00015859	0.00005195	0.01025112	7.49	0.0069
DET4	-0.00000835	0.00000507	0.00371073	2.71	0.1015
DET22	0.00000104	0.00000025	0.02291893	16.75	0.0001
C1D3	0.00000813	0.00000420	0.00513588	3.75	0.0544
C1D4	-0.00000766	0.00000075	0.01552906	11.35	0.0009
C2D3	-0.00001560	0.00000747	0.00596873	4.36	0.0383
C2D4	0.00000533	0.00000145	0.01851552	13.53	0.0003
DET24	-0.00000006	0.00000001	0.02311866	16.89	0.0001

STEP 9 DET4 REPLACED BY CL2 R SQUARE = 0.72535201 C(P) = 10.30055672

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	0.57441511	0.06382435	48.42	0.0001
ERROR	165	0.21749861	0.00131817		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01954858				
CL1	-0.00245252	0.00142739	0.00401298	3.04	0.0829
CL2	0.00762305	0.00252334	0.01203035	9.13	0.0029
DET2	-0.00016610	0.00004960	0.01478597	11.22	0.0010
DET22	0.00000150	0.00000025	0.02127955	16.14	0.0001
C1D3	0.00002010	0.00000531	0.01885925	14.31	0.0002
C1D4	-0.00000396	0.00000086	0.02789889	21.16	0.0001
C2D3	-0.00002648	0.00000940	0.01987544	15.08	0.0001
C2D4	0.00000747	0.00000156	0.03007137	22.81	0.0001
DET24	-0.00000005	0.00000001	0.01698380	12.88	0.0004

THE ABOVE MODEL IS THE BEST 9 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 10 VARIABLE DFT44 ENTERED R SQUARE = 0.72638558 C(P) = 11.67824941

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	0.57523792	0.05752379	43.54	0.0001
ERROR	164	0.21667979	0.00132122		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.03101482				
C11	-0.00247012	0.00142528	0.00394621	2.99	0.0858
C12	0.00754704	0.00252810	0.01177441	8.91	0.0033
DFT2	-0.00013929	0.00006021	0.00706965	5.35	0.0220
DFT22	0.00000113	0.00000030	0.01882459	14.25	0.0002
DFT44	0.00000003	0.00000000	0.00081882	0.62	0.4323
C103	0.00001941	0.00000539	0.01713969	12.97	0.0004
C104	-0.00000377	0.00000090	0.02330887	17.64	0.0001
C203	-0.00002513	0.00000956	0.01784036	13.50	0.0003
C204	0.00000710	0.00000163	0.02506901	18.97	0.0001
DFT24	-0.00000009	0.00000005	0.00372206	2.82	0.0952

THE ABOVE MODEL IS THE BEST 10 VARIABLE MODEL FOUND.

STEP 11 VARIABLE DFT33 ENTERED R SQUARE = 0.72838754 C(P) = 12.47358576

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	0.57682299	0.05243845	39.74	0.0001
ERROR	163	0.21509472	0.00131960		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01507076				
C11	-0.00367932	0.00180488	0.00548378	4.16	0.0431
C12	0.00930124	0.00299087	0.01276228	9.67	0.0022
DFT2	-0.00011578	0.00006325	0.00851538	6.45	0.0120
DFT22	0.00000118	0.00000030	0.02005833	15.20	0.0001
DFT33	-0.00000005	0.00000004	0.00158507	1.20	0.2747
DFT44	0.00000000	0.00000000	0.00189529	1.44	0.2325
C103	0.00002190	0.00000581	0.01857505	14.08	0.0002
C104	-0.00000381	0.00000090	0.02378121	18.02	0.0001
C203	-0.00003795	0.00000990	0.01941162	14.71	0.0002
C204	0.00000702	0.00000163	0.02445821	18.53	0.0001
DFT24	-0.00000008	0.00000006	0.00299396	2.27	0.1339

THE ABOVE MODEL IS THE BEST 11 VARIABLE MODEL FOUND.

STEP 12 VARIABLE DFT23 ENTERED R SQUARE = 0.72965352 C(P) = 13.71163949

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	12	0.57782554	0.04815213	36.44	0.0001
ERROR	162	0.21409217	0.00132156		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01638066				
C11	-0.00358904	0.00180519	0.00520085	3.94	0.0490
C12	0.00915430	0.00299561	0.01244953	9.42	0.0025
DFT2	-0.00013331	0.00006392	0.00760370	5.75	0.0176
DFT22	0.00000117	0.00000030	0.01986287	15.03	0.0002
DFT33	-0.00000037	0.00000026	0.00258103	1.95	0.1642
DFT44	0.00000000	0.00000000	0.00289743	2.19	0.1406
C103	0.00002092	0.00000590	0.01660249	12.56	0.0005
C104	-0.00000360	0.00000093	0.01994124	15.09	0.0001
C203	-0.00003648	0.00001005	0.01742972	13.19	0.0004
C204	0.00000668	0.00000165	0.02093878	15.84	0.0001
DFT23	0.00000319	0.00000122	0.00100255	0.76	0.3851
DFT24	-0.00000013	0.00000008	0.00374109	2.83	0.0944

THE ABOVE MODEL IS THE BEST 12 VARIABLE MODEL FOUND.

STEP 13 VARIABLE CL22 ENTERED R SQUARE = 0.73002189 C(P) = 15.48992639

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	0.57811727	0.04447056	33.49	0.0001
ERROR	161	0.21380045	0.00132795		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.02096833				
CL1	-0.00357020	0.00181400	0.00514419	3.87	0.0508
CL2	0.00946758	0.00306238	0.01271479	9.57	0.0023
DET2	-0.00015792	0.00006482	0.00788216	5.94	0.0159
CL22	-0.00000407	0.00000865	0.00029172	0.22	0.6399
DET22	0.00000120	0.00000031	0.02007104	15.11	0.0001
DET33	-0.00000008	0.00000005	0.00276347	2.08	0.1511
DET44	0.00000000	0.00000000	0.00308893	2.33	0.1292
CL33	0.00002093	0.00000592	0.01661349	12.51	0.0005
CL24	-0.00000364	0.00000093	0.02018730	15.20	0.0001
C233	-0.00003648	0.00001007	0.01742764	13.12	0.0004
C234	0.00000674	0.00000165	0.02117424	15.95	0.0001
DET23	0.00000020	0.00000022	0.00108942	0.82	0.3664
DET24	-0.00000014	0.00000008	0.00392185	2.95	0.0876

STEP 13 DET23 REPLACED BY CL11 R SQUARE = 0.73615902 C(P) = 11.79621736

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	0.58297736	0.04484441	34.56	0.0001
ERROR	161	0.20894035	0.00129777		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.02356435				
CL1	-0.01174446	0.00417565	0.01026632	7.91	0.0055
CL2	0.02404879	0.00742120	0.01362809	10.50	0.0014
DET2	-0.00015346	0.00006385	0.00749658	5.78	0.0174
CL11	0.02003569	0.00001667	0.00594951	4.58	0.0338
CL22	-0.00011860	0.00005448	0.00615031	4.74	0.0309
DET22	0.00000107	0.00000031	0.01539257	11.86	0.0007
DET33	-0.00000005	0.00000004	0.00194105	1.50	0.2231
DET44	0.00000000	0.00000000	0.00158969	1.22	0.2700
CL33	0.00002112	0.00000577	0.01736456	13.38	0.0003
CL24	-0.00000379	0.00000091	0.01854522	14.60	0.0002
C233	-0.00003663	0.00000584	0.01799694	13.87	0.0003
C234	0.00000642	0.00000165	0.01955091	15.07	0.0002
DET24	-0.00000007	0.00000006	0.00223774	1.72	0.1910

STEP 13 DET33 REPLACED BY DET1 R SQUARE = 0.73738630 C(P) = 11.05756224

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	0.58394527	0.04491917	34.77	0.0001
ERROR	161	0.20796944	0.00129173		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.02063681				
CL1	-0.01192680	0.00413604	0.01074131	8.32	0.0045
CL2	0.02396965	0.00730540	0.01387864	10.74	0.0013
DET1	-0.00010010	0.00000007	0.00291295	2.26	0.1351
DET2	-0.00013105	0.00006345	0.00613799	4.75	0.0307
CL11	0.00000615	0.00001824	0.00827472	6.41	0.0123
CL22	-0.00013733	0.00005628	0.00769102	5.95	0.0158
DET22	0.00000106	0.00000031	0.01532750	11.87	0.0007
DET44	0.00000000	0.00000000	0.00037617	0.29	0.5902
CL33	0.00001744	0.00000535	0.01351549	10.46	0.0015
CL24	-0.00000393	0.00000097	0.01176748	9.11	0.0030
C233	-0.00003181	0.00000555	0.01432823	11.09	0.0011
C234	0.00000566	0.00000174	0.01365795	10.57	0.0014
DET24	-0.00000008	0.00000005	0.00308555	2.39	0.1242

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 13 DET44 REPLACED BY DET12 R SQUARE = 0.73931666 C(P) = 10.49761299

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	0.58468604	0.04497585	34.94	0.0001
ERROR	161	0.20723168	0.00128715		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01372794				
CL1	-0.01098654	0.00429531	0.00842099	6.54	0.0115
CL2	0.02219383	0.00762365	0.01090859	8.47	0.0041
DET1	-0.00000663	0.00000702	0.00114895	0.89	0.3462
DET2	-0.00316508	0.00005368	0.01218442	9.47	0.0025
CL11	0.00004127	0.00001919	0.00595409	4.63	0.0330
CL22	-0.00012055	0.00005976	0.00523728	4.07	0.0453
DET22	0.00000097	0.00000026	0.01843274	14.32	0.0002
CL03	0.00001879	0.00000542	0.01548286	12.03	0.0007
CL04	-0.00000321	0.00000096	0.01426998	11.09	0.0011
C203	-0.00003416	0.00000955	0.01648479	12.81	0.0005
C204	0.00000616	0.00000172	0.01643128	12.77	0.0005
DET12	0.00000302	0.00000002	0.00111294	0.86	0.3538
DET24	-0.00000005	0.00000001	0.01779046	13.82	0.0003

THE ABOVE MODEL IS THE BEST 13 VARIABLE MODEL FOUND.

STEP 14 VARIABLE DET13 ENTERED R SQUARE = 0.73937249 C(P) = 11.86214468

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	14	0.58552217	0.04182301	32.42	0.0001
ERROR	160	0.20639554	0.00128997		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01103899				
CL1	-0.01085126	0.00430023	0.00836613	6.49	0.0118
CL2	0.02205709	0.00763388	0.01076926	8.35	0.0044
DET1	-0.00001019	0.00000830	0.00194433	1.51	0.2214
DET2	-0.00017501	0.00005311	0.01300842	10.08	0.0018
CL11	0.00004094	0.00001921	0.00585854	4.54	0.0346
CL22	-0.00011801	0.00005991	0.00500521	3.88	0.0506
DET22	0.00000098	0.00000026	0.01881565	14.59	0.0002
CL03	0.00001825	0.00000547	0.01615415	12.52	0.0005
CL04	-0.00000329	0.00000097	0.01485329	11.51	0.0009
C203	-0.00003530	0.00000966	0.01722635	13.35	0.0003
C204	0.00000632	0.00000174	0.01708779	13.25	0.0004
DET12	0.00000003	0.00000002	0.00156875	1.22	0.2718
DET13	0.00000001	0.00000001	0.00083613	0.65	0.4220
DET24	-0.00000005	0.00000001	0.01708467	13.24	0.0004

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 14 DET12 REPLACED BY DET11 R SQUARE = 0.73965744 C(P) = 11.69064630

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	14	0.58574783	0.04183913	32.47	0.0001
ERROR	160	0.20616689	0.00128856		
TOTAL	174	0.79191771			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.00886010				
C11	-0.01102579	0.00425916	0.00863526	6.70	0.0105
C12	0.02203392	0.00759158	0.01085486	8.42	0.0042
DET1	-0.00001052	0.00000807	0.00218851	1.70	0.1944
DET22	-0.00016340	0.00005220	0.01262540	9.80	0.0021
C111	0.00004132	0.00001900	0.00606161	4.70	0.0316
C122	-0.00011723	0.00005563	0.00497995	3.86	0.0510
DET11	0.00000000	0.00000000	0.00179441	1.39	0.2397
DET22	0.00000096	0.00000026	0.01813102	14.07	0.0002
C103	0.00001957	0.00000545	0.01637739	12.71	0.0005
C104	-0.00000330	0.00000097	0.01497500	11.62	0.0008
C203	-0.00003570	0.00000970	0.01745595	13.55	0.0003
C204	0.00000634	0.00000173	0.01721870	13.36	0.0003
DET13	0.00000001	0.00000001	0.00184240	1.43	0.2336
DET24	-0.00000005	0.00000001	0.01576278	12.23	0.0006

STEP 14 DET1 REPLACED BY C201 R SQUARE = 0.74043581 C(P) = 11.22217116

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	14	0.58636423	0.04188316	32.60	0.0001
ERROR	160	0.20555348	0.00128471		
TOTAL	174	0.79191771			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01251238				
C11	-0.01273939	0.00416172	0.01203804	9.37	0.0026
C12	0.02505207	0.00734248	0.01495567	11.64	0.0008
DET22	-0.00016468	0.00005206	0.01285662	10.01	0.0019
C111	0.00005000	0.00001841	0.00947741	7.38	0.0073
C122	-0.00013829	0.00005662	0.00766493	5.97	0.0157
DET11	0.00000000	0.00000000	0.00275347	2.14	0.1452
DET22	0.00000094	0.00000026	0.01699069	13.23	0.0004
C103	0.00001886	0.00000537	0.01588179	12.36	0.0006
C104	-0.00036306	0.00000094	0.01328485	10.34	0.0016
C201	-0.00000052	0.00000035	0.00280492	2.18	0.1415
C203	-0.00003441	0.00000548	0.01693293	13.18	0.0004
C204	0.00000586	0.00000165	0.01536438	11.96	0.0007
DET13	0.00000002	0.00000001	0.00248070	1.93	0.1666
DET24	-0.00000005	0.00000001	0.01570339	12.22	0.0006

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 14 DET11 REPLACED BY C1D1 R SQUARE = 0.74135784 C(P) = 10.66723641

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	14	0.58709440	0.04193531	32.76	0.0001
ERROR	160	0.20482331	0.00128015		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.01855586				
C1D1	-0.01697555	0.00501810	0.01464966	11.44	0.0009
C1D2	0.03276784	0.00882865	0.01763446	13.78	0.0003
DET12	-0.00015324	0.00005109	0.01151834	9.00	0.0031
C1D11	-0.00005925	0.00001957	0.01173348	9.17	0.0029
C1D22	-0.00017235	0.00005935	0.01079664	8.43	0.0042
DET22	0.00000026	0.00000026	0.01721270	13.45	0.0003
C2D1	0.00000245	0.00000148	0.00348364	2.72	0.1010
C2D3	0.00001524	0.00000553	0.00984405	7.69	0.0062
C2D4	-0.00000223	0.00000106	0.00568222	4.44	0.0367
C3D1	-0.00000458	0.00000278	0.00349211	2.73	0.1006
C3D3	-0.00002817	0.00000975	0.01061204	8.29	0.0045
C3D4	-0.00000442	0.00000191	0.00689977	5.39	0.0215
DET13	0.00000001	0.00000001	0.00210163	1.64	0.2019
DET24	-0.00000006	0.00000001	0.01863910	14.56	0.0002

THE ABOVE MODEL IS THE BEST 14 VARIABLE MODEL FOUND.

STEP 15 VARIABLE DET1 ENTERED R SQUARE = 0.74385162 C(P) = 11.16631970

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	15	0.58906928	0.03927129	30.78	0.0001
ERROR	159	0.20284844	0.00127578		
TOTAL	174	0.79191771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.00821252				
C1D1	-0.01545943	0.00511746	0.01202578	9.43	0.0025
C1D2	0.03220237	0.00905161	0.01420382	11.13	0.0011
DET1	-0.00008132	0.00000510	0.00197487	1.55	0.2153
DET12	-0.00016506	0.00005188	0.01291609	10.12	0.0018
C1D11	0.00005221	0.00002034	0.00840604	6.59	0.0112
C1D22	-0.00014743	0.00006254	0.00709004	5.56	0.0196
DET22	0.00000394	0.00000028	0.01710797	13.41	0.0003
C2D1	0.00000252	0.00000148	0.00370424	2.90	0.0903
C2D3	0.00001602	0.00000567	0.01137992	8.92	0.0033
C2D4	-0.00000250	0.00000108	0.00682837	5.35	0.0220
C3D1	-0.00000664	0.00000277	0.00357919	2.81	0.0959
C3D3	-0.00003097	0.00001002	0.01218022	9.55	0.0024
C3D4	0.00000489	0.00000194	0.00810581	6.35	0.0127
DET13	0.00000202	0.00000001	0.00407309	3.19	0.0759
DET24	-0.00000006	0.00000001	0.01576566	12.36	0.0006

THE ABOVE MODEL IS THE BEST 15 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 16 VARIABLE C303 ENTERED R SQUARE = 0.74485061 C(P) = 12.56506242

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	0.58586640	0.03686627	28.83	0.0001
ERROR	159	0.20205132	0.00127084		
TOTAL	175	0.78791771			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-3.00883565				
C101	-1.01656865	0.00523752	0.01279794	10.01	0.0019
C102	0.03163853	0.00924461	0.01497867	11.71	0.0008
DFT1	-3.30001162	0.00000912	0.00207777	1.62	0.2043
DFT2	-0.00013309	0.00006500	0.00519491	4.06	0.0455
C111	3.30035558	0.00002081	0.00912185	7.13	0.0084
C112	-0.03015603	0.00006356	0.00770610	6.03	0.0152
DFT22	0.03300100	0.00000027	0.01782252	13.94	0.0003
C101	0.00000281	0.00000153	0.00433637	3.39	0.0674
C103	0.00001745	0.00000571	0.01193103	9.33	0.0026
C104	-0.00000249	0.00000108	0.00681469	5.33	0.0223
C201	-0.00000518	0.00000286	0.00420138	3.29	0.0718
C202	-0.00000179	0.00000227	0.00079112	0.62	0.4327
C203	-0.00003178	0.00001006	0.01269046	9.92	0.0020
C204	0.00000493	0.00000194	0.00823524	6.44	0.0121
DFT13	3.30000302	0.00000001	0.00427155	3.34	0.0695
DFT24	-3.00000005	0.00000001	0.01568132	12.26	0.0006

THE ABOVE MODEL IS THE BEST 16 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR OEPENDENT VARIABLE GC

WARNING: 111 OBSERVATIONS OELETED OUE TO MISSING VALUES.

STEP 1 VARIABLE D1D2 ENTEREO R SQUARE = 0.19641593 C(P) = 77.47256032

	OF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	439.82363666	439.82363666	15.64	0.0002
ERROR	64	1799.42257546	28.11597774		
TOTAL	65	2239.24621212			

	B VALUE	STO ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.53106186				
D1D2	0.00002763	0.00000699	439.82363666	15.64	0.0002

THE ABOVE MOOEL IS THE BEST 1 VARIABLE MOOEL FOUNO.

STEP 2 VARIABLE D104 ENTEREO R SQUARE = 0.42617650 C(P) = 39.59459848

	OF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	954.31411869	477.15705934	23.39	0.0001
ERROR	63	1284.93209344	20.39574751		
TOTAL	65	2239.24621212			

	B VALUE	STO ERROR	TYPE II SS	F	PROB>F
INTERCEPT	5.43105115				
D1D2	0.00006026	0.00000881	954.29333274	46.79	0.0001
D104	-0.00000443	0.00000088	514.49048202	25.23	0.0001

THE ABOVE MOOEL IS THE BEST 2 VARIABLE MOOEL FOUNO.

STEP 3 VARIABLE DET1 ENTEREO R SQUARE = 0.53375064 C(P) = 22.92369554

	OF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	1195.19909408	398.39969803	23.66	0.0001
ERROR	62	1044.04711804	16.83946965		
TOTAL	65	2239.24621212			

	B VALUE	STO ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.65669701				
DET1	0.00235473	0.00062259	240.88497539	14.30	0.0004
D1D2	0.00006657	0.00000818	1116.11856207	66.28	0.0001
D104	-0.00000660	0.00000099	755.05332319	44.84	0.0001

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUNO.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE GC

STEP 4 VARIABLE F2D2 ENTERED R SQUARE = 0.57368242 C(P) = 17.99301080

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	1284.61618484	321.15404621	20.52	0.0001
ERROR	61	954.63002728	15.64967258		
TOTAL	65	2239.24621212			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	5.06181681				
DET1	0.00211058	0.00060882	188.07580296	12.02	0.0010
D1D2	0.00006847	0.00000792	1168.81247858	74.69	0.0001
D1D4	-0.00000619	0.00000096	644.41680146	41.18	0.0001
F202	-0.00466039	0.00194969	89.41709076	5.71	0.0199

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE DET44 ENTERED R SQUARE = 0.58864444 C(P) = 17.39615638

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	1318.11982501	263.62396500	17.17	0.0001
ERROR	60	921.12638711	15.35210645		
TOTAL	65	2239.24621212			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.25320275				
DET1	0.00245697	0.00064699	221.39924415	14.42	0.0003
DET44	0.00000128	0.00000087	33.50364017	2.18	0.1448
D1D2	0.00007058	0.00000798	1202.13682059	78.30	0.0001
D1D4	-0.00000695	0.00000109	629.91583404	41.03	0.0001
F202	-0.00651385	0.00230285	122.83185871	8.00	0.0063

STEP 5 F202 REPLACED BY D203 R SQUARE = 0.60102648 C(P) = 15.24709026

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	1345.84626872	269.16925374	18.08	0.0001
ERROR	60	893.39994340	14.88999906		
TOTAL	65	2239.24621212			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.35154287				
DET1	0.00253317	0.00063880	234.14701939	15.73	0.0002
DET44	0.00000233	0.00000104	75.15787487	5.05	0.0284
D1D2	0.00007632	0.00000832	1253.19719763	84.16	0.0001
D1D4	-0.00000742	0.00000109	685.27844178	46.02	0.0001
D2D3	-0.00009873	0.00003105	150.55830243	10.11	0.0023

B

MAXIMUM R-SQUARE IMPROVEMENT FOR OEPENOENT VARIABLE GC

STEP 5 OET44 REPLACED BY OET22 R SQUARE = 0.61956486 C(P) = 12.02951134

	OF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	1387.35826314	277.47165263	19.54	0.0001
ERROR	60	851.88794899	14.19813248		
TOTAL	65	2239.24621212			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.54897055				
DET1	0.00182580	0.00059207	135.01830185	9.51	0.0031
OET22	0.00021530	0.00007511	116.66986928	8.22	0.0057
O1D2	0.00005966	0.00000849	700.66071129	49.35	0.0001
D1D4	-0.00000485	0.00000103	314.01115599	22.12	0.0001
O2D3	-0.00011917	0.00003240	192.03861509	13.53	0.0005

STEP 5 OET1 REPLACEO BY C2O1 R SQUARE = 0.63017820 C(P) = 10.18742617

	OF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	1411.12415400	282.22483080	20.45	0.0001
ERROR	60	828.12205812	13.80203430		
TOTAL	65	2239.24621212			

	B VALUE	STO ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.82626421				
DET22	0.00023814	0.00007345	145.07671409	10.51	0.0019
C2D1	0.00017662	0.00005207	158.78419271	11.50	0.0012
D1D2	0.00007900	0.00001091	724.26109524	52.47	0.0001
D1D4	-0.00000901	0.00000196	291.74529721	21.14	0.0001
O2D3	-0.00013596	0.00003106	264.48230767	19.16	0.0001

THE ABOVE MOOEL IS THE 8EST 5 VARIABLE MOOEL FOUND.

STEP 6 VARIABLE FOI3 ENTEREO R SQUARE = 0.66085562 C(P) = 6.86295825

	OF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	1479.81843873	246.63640646	19.16	0.0001
ERROR	59	759.42777339	12.87165718		
TOTAL	65	2239.24621212			

	B VALUE	STO ERROR	TYPE II SS	F	PROB>F
INTERCEPT	3.93219412				
FOI3	0.00937630	0.00405872	68.69428473	5.34	0.0244
DET22	0.00028920	0.00007430	195.02541650	15.15	0.0003
C2D1	0.00014483	0.00005213	99.33782091	7.72	0.0073
D1D2	0.00007669	0.00001058	676.52593318	52.56	0.0001
D1D4	-0.00000828	0.00000192	239.36486277	18.60	0.0001
O2D3	-0.00018202	0.00003602	328.76389366	25.54	0.0001

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE GC

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

STEP 7 VARIABLE DET44 ENTERED R SQUARE = 0.67626799 C(P) = 6.18793888

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	1514.33053370	216.33293339	17.31	0.0001
ERROR	58	724.91567842	12.49854618		
TOTAL	65	2239.24621212			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	3.44396048				
FDI3	0.00760662	0.00413882	42.21725580	3.38	0.0712
DET22	0.00029762	0.00007339	205.56674126	16.45	0.0002
DET44	0.00000158	0.00000095	34.51209497	2.76	0.1020
C201	0.00016487	0.00005277	122.00280486	9.76	0.0028
D1D2	0.00008173	0.00001086	708.39077987	56.68	0.0001
D1D4	-0.00000933	0.00000199	273.43824823	21.88	0.0001
D2D3	-0.00021549	0.00004081	348.51021266	27.88	0.0001

STEP 7 C201 REPLACED BY DET4 R SQUARE = 0.70137733 C(P) = 1.82988308

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	1570.55653237	224.36521891	19.46	0.0001
ERROR	58	668.68967976	11.52913241		
TOTAL	65	2239.24621212			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.32269063				
DET4	-0.00656801	0.00167049	178.22880352	15.46	0.0002
FDI3	0.01399081	0.00383249	153.64532233	13.33	0.0006
DET22	0.00038291	0.00007215	324.70720790	28.16	0.0001
DET44	0.00000548	0.00000147	161.35291079	14.00	0.0004
D1D2	0.00005950	0.00000768	692.43733413	60.06	0.0001
D1D4	-0.00000334	0.00000080	202.41963928	17.56	0.0001
D2D3	-0.00027766	0.00004150	516.09613878	44.76	0.0001

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE GC

STEP 8 VARIABLE FD22 ENTERED R SQUARE = 0.71847220 C(P) = 0.86284354

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	1608.83616188	201.10452023	18.18	0.0001
ERROR	57	630.41005025	11.05982544		
TOTAL	65	2239.24621212			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.21874594				
DET4	-0.00676442	0.00163954	188.26393646	17.02	0.0001
FD13	0.01577877	0.00387476	183.40263530	16.58	0.0001
DET22	0.00036470	0.00007134	289.00921042	26.13	0.0001
DET44	0.00000579	0.00000144	177.66301259	16.06	0.0002
D1D2	0.00006035	0.00000753	709.79269128	64.18	0.0001
D1D4	-0.00000328	0.00000078	194.63398843	17.60	0.0001
D2D3	-0.00025742	0.00004208	413.94457118	37.43	0.0001
FD22	-0.09538379	0.05127018	38.27962951	3.46	0.0680

STEP 8 DET44 REPLACED BY D3D4 R SQUARE = 0.71988119 C(P) = 0.61829608

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	1611.99122127	201.49890266	18.31	0.0001
ERROR	57	627.25499085	11.00447352		
TOTAL	65	2239.24621212			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	3.70331805				
DET4	-0.00613901	0.00150695	182.62841249	16.60	0.0001
FD13	0.01629942	0.00387155	195.04882690	17.72	0.0001
DET22	0.00041462	0.00007477	338.41377125	30.75	0.0001
D1D2	0.00006037	0.00000751	710.22221643	64.54	0.0001
D1D4	-0.00000385	0.00000080	252.56656986	22.95	0.0001
D2D3	-0.00026810	0.00004327	422.39033106	38.38	0.0001
D3D4	0.00002111	0.00000521	180.81807199	16.43	0.0002
FD22	-0.17275293	0.05658125	102.58289840	9.32	0.0034

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR OEPENOENT VARIA8LE GC

STEP 9 VARIA8LE OET2 ENTEREO R SQUARE = 0.73971234 C(P) = -0.82366120

	OF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	1656.39806098	184.04422900	17.68	0.0001
ERROR	56	582.84815114	10.40800270		
TOTAL	65	2239.24621212			

	B VALUE	STO ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.37915550				
OET2	0.02191814	0.01061115	44.40683971	4.27	0.0435
DET4	-0.00856697	0.00187869	216.42778103	20.79	0.0001
FD13	0.01425349	0.00389327	139.50206628	13.40	0.0006
DET22	0.00038800	0.00007385	287.32396710	27.61	0.0001
01D2	0.00005417	0.00000790	489.26241141	47.01	0.0001
D1D4	-0.00000342	0.00000081	185.94931517	17.87	0.0001
02D3	-0.00030651	0.00004601	461.91272882	44.38	0.0001
03D4	0.00002622	0.00000564	225.21843219	21.64	0.0001
FO22	-0.16850540	0.05506488	97.46433401	9.36	0.0034

THE A8OVE MOOEL IS THE 8EST 9 VARIA8LE MOOEL FOUNO.

STEP 10 VARIA8LE DET11 ENTEREO R SQUARE = 0.74862571 C(P) = -0.37069367

	OF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	1676.35729276	167.63572928	16.38	0.0001
ERROR	55	562.88891936	10.23434399		
TOTAL	65	2239.24621212			

	8 VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.11669642				
DET2	0.01848643	0.01080539	29.95610566	2.93	0.0927
DET4	-0.00772062	0.00195905	158.95481882	15.53	0.0002
FD13	0.01247197	0.00406596	96.29503384	9.41	0.0033
DET11	0.00000018	0.00000013	19.95923179	1.95	0.1682
OET22	0.00036647	0.00007483	245.46137781	23.98	0.0001
0102	0.00006059	0.00000908	455.25652454	44.48	0.0001
0104	-0.00000447	0.00000110	168.86693966	16.50	0.0002
02D3	-0.00029575	0.00004627	418.13866100	40.86	0.0001
03D4	0.00002634	0.00000559	227.24279664	22.20	0.0001
FD22	-0.16059826	0.05489634	87.59007191	8.56	0.0050

THE A8OVE MOOEL IS THE 8EST 10 VARIA8LE MOOEL FOUND.

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: GC

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	1676.35729276	167.63572928	16.38	0.0001	0.748626	61.8277
ERROR	55	562.88891936	10.23434399		ROOT MSE		GC MEAN
CORRECTED TOTAL	65	2239.24621212			3.19911613		5.17424242

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
DET2	1	77.71612265	7.59	0.0079	1	29.95610566	2.93	0.0927
DET4	1	305.11578226	29.81	0.0001	1	158.95481882	15.53	0.0002
FDI3	1	0.04724508	0.00	0.9461	1	96.29503384	9.41	0.0033
DET11	1	0.00527527	0.00	0.9820	1	19.95923179	1.95	0.1682
DET22	1	44.05087743	4.30	0.0427	1	245.46137781	23.98	0.0001
D1D2	1	390.93460738	38.20	0.0001	1	455.25652454	44.48	0.0001
D1D4	1	336.24547828	32.85	0.0001	1	168.86693966	16.50	0.0002
D2D3	1	279.03590854	27.26	0.0001	1	418.13866100	40.86	0.0001
D3D4	1	155.61592398	15.21	0.0003	1	227.24279664	22.20	0.0001
FD22	1	87.59007191	8.56	0.0050	1	87.59007191	8.56	0.0050

PARAMETER	ESTIMATE	T FOR H0: PARAMETER=0	PR > |T|	STD ERROR OF ESTIMATE
INTERCEPT	4.11669642	4.96	0.0001	0.83013532
DET2	0.01848643	1.71	0.0927	0.01080539
DET4	-0.00772062	-3.94	0.0002	0.00195905
FDI3	0.01247197	3.07	0.0033	0.00406596
DET11	1.7635756E-07	1.40	0.1682	0.00000013
DET22	0.00036647	4.90	0.0001	0.00007483
D1D2	6.0589365E-05	6.67	0.0001	0.00000908
D1D4	-4.4675964E-06	-4.06	0.0002	0.00000110
D2D3	-0.00029575	-6.39	0.0001	0.00004627
D3D4	2.6341130E-05	4.71	0.0001	0.00000559
FD22	-0.16059826	-2.93	0.0050	0.05489634

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 90% CL INDIVIDUAL	UPPER 90% CL INDIVIDUAL
1 *	.	4.65140446	.	-1.81938176	11.12219067
2 *	.	2.73678767	.	-3.82791465	9.30148999
3 *	.	2.28821004	.	-4.08106223	8.65748230
4 *	.	1.27183068	.	-4.43133198	6.97499333
5 *	.	4.59610299	.	-3.06205560	12.25426159
6 *	.	-1.78927236	.	-8.84463313	5.26608840
7 *	.	-2.62435004	.	-9.56290189	4.31420181
8	1.00000000	2.88466043	-1.88466043	-3.74458344	9.51390430
9	2.00000000	2.71167043	-0.71167043	-2.83902009	8.26236096
10	2.00000000	2.66452008	-0.66452008	-2.85974745	8.18878760
11	2.00000000	2.34898283	-0.34898283	-3.16871838	7.86668405
12 *	.	5.36055327	.	-0.10339756	10.82450410

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: GC

OBSERVATION		OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 90% CL INDIVIDUAL	UPPER 90% CL INDIVIDUAL
13		5.00000000	7.43258782	-2.43258782	1.92720443	12.93797122
14		5.00000000	9.51875864	-4.51875864	3.92199046	15.11552681
15		11.00000000	6.17664143	4.82335857	0.60949894	11.74378392
16	*	.	12.64937876	.	2.39569517	22.90306235
17	*	.	6.31773778	.	-1.74847997	14.38395552
18	*	.	6.35440302	.	0.01481746	12.69398859
19	*	.	4.92971484	.	-2.84070490	12.70013459
20		5.00000000	4.11669642	0.88330358	-1.41279165	9.64618450
21	*	.	7.71492390	.	2.13291465	13.29693316
22	*	.	1.16888700	.	-7.47702885	9.81482285
23	*	.	3.64164327	.	-1.90121638	9.18450293
24	*	.	2.95288806	.	-2.63181618	8.53759230
25	*	.	2.33664914	.	-3.22584784	7.89914612
26	*	.	4.00160462	.	-1.55088883	9.55409807
27	*	.	3.54960430	.	-2.01227186	9.11148046
28		4.00000000	4.97571387	-0.97571387	-0.65455369	10.60598143
29		4.00000000	4.46643606	-0.46643606	-1.09998320	10.03285532
30	*	.	2.63932898	.	-3.22900153	8.50765949
31		3.00000000	3.34815294	-0.34815294	-2.52911980	9.22542568
32		8.00000000	4.61999550	3.38000450	-0.88822374	10.12821474
33		13.00000000	7.96877906	5.03122094	2.39060276	13.54695535
34		5.00000000	8.83294235	-3.83294235	2.88222161	14.78366309
35		7.00000000	3.91860758	3.08139242	-1.67985466	9.51706981
36		7.00000000	4.83566386	2.16433614	-0.67112905	10.34245676
37		2.00000000	4.32613277	-2.32613277	-1.26101407	9.91327960
38		2.00000000	-0.22484652	2.22484652	-5.96871058	5.51901754
39	*	.	3.28034186	.	-2.46695716	9.02764087
40	*	.	4.03414856	.	-1.83013417	9.89843129
41	*	.	5.01564350	.	-0.69101500	10.72230201
42		3.00000000	16.11157573	-13.11157573	10.33262086	21.89053061
43	*	.	4.67711246	.	-1.04947256	10.40369748
44		3.00000000	5.65922767	-2.65922767	-0.06074712	11.37920246
45		3.00000000	2.29114157	0.70885843	-3.55693960	8.13922273
46		3.00000000	2.49474125	0.50525875	-3.39759780	8.38708031
47	*	.	3.83287612	.	-1.66213444	9.32788669
48		2.00000000	3.56440833	-1.56440833	-1.89081191	9.01962857
49	*	.	6.53396712	.	0.67788747	12.39004677
50	*	.	8.70469972	.	2.96210631	14.44729313
51	*	.	3.56315992	.	-2.91578911	10.04210896
52	*	.	0.51153152	.	-5.15194151	6.17500454
53	*	.	0.22946007	.	-5.44235618	5.90127632
54	*	.	1.18158930	.	-4.54712001	6.91029861
55	*	.	-3.38072884	.	-10.04885378	3.28739610
56	*	.	2.83075997	.	-3.22728031	8.88880025
57	*	.	2.52984304	.	-3.11053441	8.17022048
58		7.00000000	4.98534230	2.01465770	-1.06695888	11.03764348
59		3.00000000	4.60132613	-1.60132613	-1.28234093	10.48499319
60		3.00000000	4.41645263	-1.41645263	-1.11626972	9.94917499
61		4.00000000	1.74149469	2.25850531	-3.77921704	7.26220642
62		3.00000000	1.18314193	1.81685807	-4.41993577	6.78621964
63	*	.	3.50187256	.	-2.85720180	9.86094692

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: GC

OBSERVATION		OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 90% CL INDIVIDUAL	UPPER 90% CL INDIVIDUAL
64	*	.	-2.04927105	.	-8.66078958	4.56224748
65	*	.	-2.72505300	.	-9.34157862	3.89147263
66	*	.	-3.57728924	.	-10.35604916	3.20147068
67	*	.	-2.34602556	.	-8.54659841	3.85454729
68	*	.	4.20231932	.	-1.97250332	10.37714196
69	*	.	3.87092443	.	-2.16802019	9.90986904
70	*	.	2.17666269	.	-3.88776953	8.24109491
71	*	.	21.30331061	.	11.07035804	31.53626319
72		3.00000000	4.80781300	-1.80781300	-0.86277518	10.47840117
73		4.00000000	3.22489790	0.77510210	-2.34582028	8.79561607
74		5.00000000	3.91160998	1.08839002	-1.59642563	9.41964559
75	*	.	3.51222682	.	-1.98453089	9.00898454
76		4.00000000	3.92837828	0.07162172	-1.69606970	9.55282625
77	*	.	10.43606349	.	3.64452157	17.22760541
78	*	.	.	.	.	.
79	*	.	19.29711069	.	10.12965983	28.46456156
80	*	.	12.01436593	.	3.20000871	20.82872315
81	*	.	8.13245234	.	1.29903855	14.96586613
82	*	.	8.25733518	.	1.47745864	15.03721173
83	*	.	6.77777009	.	0.51487370	13.04066649
84	*	.	4.57772608	.	-1.26279752	10.41824967
85	*	.	19.55250732	.	8.25400857	47.35902320
86	*	.	6.47525831	.	0.20969746	12.74081916
87	*	.	-4.33577054	.	-10.16647107	1.49492999
88	*	.	20.20339091	.	12.77807316	27.62870866
89	*	.	15.22441324	.	8.33954321	22.10928327
90	*	.	3.60288625	.	-2.68996999	9.89574248
91	*	.	11.67507063	.	5.02438339	18.32575786
92	*	.	10.22792485	.	3.90527588	16.55057381
93		21.00000000	23.61618224	-2.61618224	17.46036767	29.77199681
94		40.00000000	30.73322422	9.26677578	24.25778592	37.20866253
95		16.00000000	13.74918891	2.25081109	7.79018240	19.70819541
96		20.00000000	14.95921105	5.04078895	8.98412598	20.93429612
97		3.00000000	6.83352106	-3.83352106	0.96343815	12.70360397
98		3.00000000	4.52783458	-1.52783458	-1.37548542	10.43115459
99		3.00000000	2.77435589	0.22564411	-4.65593022	10.20464200
100		3.00000000	4.58106908	-1.58106908	-1.25985973	10.42199789
101		2.00000000	2.01034813	-0.01034813	-3.90801923	7.92871550
102		4.00000000	4.38018976	-0.38018976	-1.62365895	10.38403847
103		3.00000000	0.99406484	2.00593516	-4.75309202	6.74122170
104		2.00000000	2.62693223	-0.62693223	-2.84026704	8.09413151
105		2.00000000	2.36996557	-0.36996557	-3.10516551	7.84509665
106		2.00000000	2.64721713	-0.64721713	-2.82225795	8.11669221
107		2.00000000	2.55309958	-0.55309958	-2.90009338	8.00629255
108		2.00000000	1.06058454	0.93941546	-4.46265461	6.58382368
109		3.00000000	3.57287443	-0.57287443	-2.24410816	9.38985701
110		7.50000000	6.89197446	0.60802554	1.07815182	12.70579710
111		3.00000000	1.83504016	1.16495984	-3.67521065	7.34529096
112		4.00000000	5.48248356	-1.48248356	-0.10651536	11.07148247
113	*	.	11.09567943	.	4.52186704	17.66949181
114	*	.	6.69524776	.	-0.91421674	14.30471225

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: GC

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 90% CL INDIVIDUAL	UPPER 90% CL INDIVIDUAL
115 *	.	23.05450317	.	11.84339869	34.26560766
116 *	.	16.60087921	.	7.49449417	25.70726425
117 *	.	.	.	.	.
118 *	.	78.09423152	.	64.84054523	91.34791781
119 *	.	5.67315941	.	-0.45951943	11.80583825
120 *	.	15.03566108	.	5.81241033	24.25891183
121 *	.	1.81573979	.	-4.80021709	8.43169667
122 *	.	4.13543629	.	-2.50646379	10.77733637
123 *	.	13.79327450	.	5.20842240	22.37812661
124 *	.	21.06901586	.	14.61230812	27.52572360
125 *	.	2.52933993	.	-3.18711448	8.24579435
126	2.00000000	4.81040914	-2.81040914	-1.54595280	11.16677107
127 *	.	2.68488076	.	-2.93993436	8.30969587
128 *	.	5.94427525	.	0.35101995	11.53753056
129 *	.	6.38946391	.	0.73607942	12.04284840
130 *	.	6.07338808	.	0.31450531	11.83227085
131 *	.	10.08617232	.	3.43237422	16.73997042
132	4.00000000	4.45974639	-0.45974639	-1.32298880	10.24248157
133	4.00000000	6.60252868	-2.60252868	0.21902461	12.98603276
134 *	.	57.10737402	.	42.55846230	71.65628575
135 *	.	10.01864428	.	1.35861005	18.67867852
136 *	.	7.67849209	.	0.46934705	14.88763712
137 *	.	1.52267463	.	-4.22484631	7.27019556
138 *	.	2.89187266	.	-4.27329464	10.05703996
139 *	.	1.67949230	.	-5.45110758	8.81009217
140 *	.	-0.69401426	.	-7.27117867	5.88315014
141 *	.	-0.79797688	.	-7.40744362	5.81148987
142 *	.	-1.87835208	.	-8.39286553	4.63616137
143 *	.	-1.33044242	.	-7.64513122	4.98424639
144 *	.	4.12645910	.	-1.37626989	9.62918809
145 *	.	1.53664640	.	-4.29628459	7.36957739
146 *	.	2.95058883	.	-2.73993415	8.64111182
147 *	.	10.89364805	.	2.59020801	19.19708810
148 *	.	2.31006939	.	-4.54443299	9.16457178
149 *	.	8.16874215	.	1.39875082	14.93873347
150 *	.	3.85346979	.	-3.54758898	11.25452856
151 *	.	14.72708327	.	7.24499424	22.20917230
152 *	.	15.70111780	.	7.54643663	23.85579898
153 *	.	107.74354222	.	88.34775163	127.13933281
154 *	.	1.22713221	.	-4.26708204	6.72134645
155 *	.	2.06038382	.	-3.43839238	7.55916002
156 *	.	1.65329471	.	-3.99703379	7.30362320
157 *	.	63.74478822	.	52.00191948	75.48765695
158 *	.	7.39938891	.	-0.48861363	15.28739145
159 *	.	11.37302621	.	3.11745387	19.62859855
160 *	.	6.51668821	.	0.98469783	12.04867858
161	3.00000000	1.80061134	1.19938866	-3.80654415	7.40776683
162 *	.	1.17029153	.	-4.76742955	7.10801261
163 *	.	6.47245915	.	0.87856661	12.06635170
164	3.00000000	2.44596611	0.55403389	-3.14813309	8.04006531
165	3.00000000	0.98168105	2.01831895	-4.69918561	6.66254772

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: GC

OBSERVATION	OBSERVED VALUE	PREDICTED VALUE	RESIDUAL	LOWER 90% CL INDIVIDUAL	UPPER 90% CL INDIVIDUAL
166	2.00000000	3.22837774	-1.22837774	-2.58213862	9.03889410
167	7.00000000	2.32036175	4.67963825	-3.26053543	7.90125893
168	8.00000000	10.14574097	-2.14574097	4.06407627	16.22740567
169	10.00000000	9.11361118	0.88638882	3.17877143	15.04845094
170	5.00000000	0.64256782	4.35743218	-5.30575477	6.59089042
171	2.00000000	2.82682476	-0.82682476	-2.66899008	8.32263960
172 *	.	4.01316338	.	-1.51983709	9.54616385
173 *	.	21.57985137	.	5.99139956	37.16830319
174 *	.	-0.49429776	.	-6.07176486	5.08316935
175 *	.	0.24057596	.	-5.34278227	5.82393419
176	2.00000000	1.26245675	0.73754325	-4.29948350	6.82439700
177	3.00000000	4.81610797	-1.81610797	-1.25980331	10.89201925

* OBSERVATION WAS NOT USED IN THIS ANALYSIS

SUM OF RESIDUALS	-0.00000000
SUM OF SQUARED RESIDUALS	562.88891936
SUM OF SQUARED RESIDUALS - ERROR SS	-0.00000000
PRESS STATISTIC	1019.89787403
FIRST ORDER AUTOCORRELATION	-0.09384830
DURBIN-WATSON D	2.17552688

UNIVARIATE

VARIABLE=CL2

MOMENTS

N	177	SUM WGTS	177
MEAN	23.5952	SUM	4176.35
STD DEV	16.8723	VARIANCE	284.673
SKEWNESS	0.841145	KURTOSIS	0.92459
USS	148644	CSS	50102.5
CV	71.5072	STD MEAN	1.2682
T:MEAN=0	18.6053	PROB>|T|	0.0001
SGN RANK	7740.5	PROB>|S|	0.0001
NUM ^= 0	176		

QUANTILES(DEF=4)

100% MAX	81.2	99%	80.4902
75% Q3	33.055	95%	53.037
50% MED	22.98	90%	45.402
25% Q1	-9.96	10%	-2.922
0% MIN	-2.23	5%	0.344
		1%	-2.191
RANGE	83.43		
Q3-Q1	23.095		
MODE	4.84		

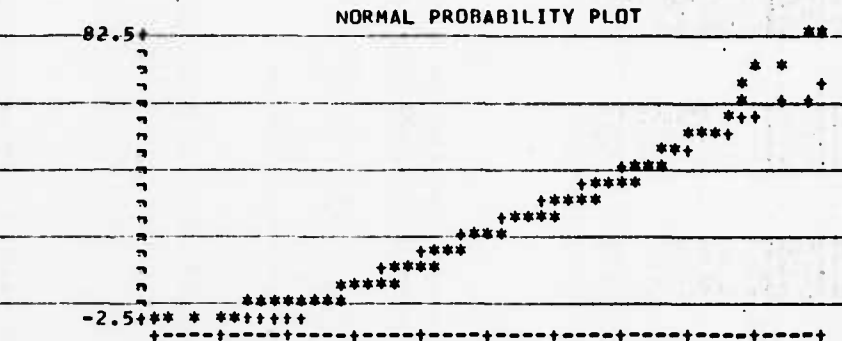
EXTREMES

LOWEST	HIGHEST
-2.23	65.31
-2.18	73.21
-1.43	73.48
-1.02	80.29
-0.24	81.2

STEM	LEAF	#	BOXPLOT
8	01	2	0
7			
7	33	2	0
6	5	1	
6	3	1	
5	8	1	
5	011133	6	
4	5556668	7	
4	11334	5	
3	5677888888899	12	
3	00000011112233333334444	23	+-----+
2	55555555567778888889999	22	| |
2	00111222223333444444	19	*--+--*
1	5555566677799999	15	| |
1	00000011111122233444 4	21	| |
0	55555667777888899999	19	+-----+
0	1112222333 34	12	|
-0	221100000	9	|

MULTIPLY STEM.LEAF BY 10**+01

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-2.23	1	0.6	0.6	2.89	1	0.6	9.6	8.37	1	0.6	19.2	10.81	1	0.6	28.2
-2.18	1	0.6	1.1	2.93	1	0.6	10.2	8.38	1	0.6	19.8	10.86	1	0.6	28.8
-1.43	1	0.6	1.7	2.97	1	0.6	10.7	8.8	1	0.6	20.3	11.39	1	0.6	29.4
-1.02	1	0.6	2.3	3.32	1	0.6	11.3	8.89	1	0.6	20.9	11.61	1	0.6	29.9
-0.24	1	0.6	2.8	4.25	1	0.6	11.9	9.11	1	0.6	21.5	12.11	1	0.6	30.5
-0.11	1	0.6	3.4	4.84	2	1.1	13.0	9.2	1	0.6	22.0	12.24	1	0.6	31.1
0	1	0.6	4.0	4.95	1	0.6	13.6	9.37	1	0.6	22.6	12.53	1	0.6	31.6
0.11	1	0.6	4.5	5.01	1	0.6	14.1	9.66	1	0.6	23.2	12.74	1	0.6	32.2
0.37	1	0.6	5.1	5.27	1	0.6	14.7	9.72	1	0.6	23.7	13.67	1	0.6	32.8
0.99	1	0.6	5.6	5.88	1	0.6	15.3	9.83	1	0.6	24.3	13.83	1	0.6	33.3
1.06	1	0.6	6.2	6.25	1	0.6	15.8	9.93	1	0.6	24.9	13.93	1	0.6	33.9
1.44	1	0.6	6.8	6.51	1	0.6	16.4	9.99	1	0.6	25.4	14.4	1	0.6	34.5
1.58	1	0.6	7.3	6.94	1	0.6	16.9	10.35	1	0.6	26.0	14.66	1	0.6	35.0
1.64	1	0.6	7.9	6.96	1	0.6	17.5	10.72	1	0.6	26.6	15.14	1	0.6	35.6
1.67	1	0.6	8.5	7.03	1	0.6	18.1	10.73	1	0.6	27.1	15.19	1	0.6	36.2
1.97	1	0.6	9.0	7.81	1	0.6	18.6	10.76	1	0.6	27.7	15.22	2	1.1	37.3

UNIVARIATE

VARIABLE=CL2

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
15.53	1	0.6	37.9	24.56	1	0.6	54.2	30.98	1	0.6	70.1	39.07	1	0.6	85.9
16.13	1	0.6	38.4	24.57	1	0.6	54.8	31.03	1	0.6	70.6	40.7	1	0.6	86.4
16.19	1	0.6	39.0	24.63	1	0.6	55.4	31.15	1	0.6	71.2	40.92	1	0.6	87.0
16.78	1	0.6	39.5	24.8	1	0.6	55.9	31.46	1	0.6	71.8	42.76	1	0.6	87.6
17.23	1	0.6	40.1	25	1	0.6	56.5	31.51	1	0.6	72.3	43.46	1	0.6	88.1
17.37	1	0.6	40.7	25.08	1	0.6	57.1	31.71	1	0.6	72.9	43.95	1	0.6	88.7
18.51	1	0.6	41.2	25.2	1	0.6	57.6	32.79	1	0.6	73.4	44.62	1	0.6	89.3
18.85	2	1.1	42.4	25.31	1	0.6	58.2	32.9	1	0.6	74.0	44.97	1	0.6	89.8
18.89	1	0.6	42.9	25.42	1	0.6	58.8	32.98	1	0.6	74.6	45.32	1	0.6	90.4
19.59	1	0.6	43.5	26.02	1	0.6	59.3	33.05	1	0.6	75.1	45.73	1	0.6	91.0
19.74	1	0.6	44.1	26.59	1	0.6	59.9	33.06	1	0.6	75.7	45.98	1	0.6	91.5
20.7	1	0.6	44.6	26.97	1	0.6	60.5	33.22	1	0.6	76.3	46.11	1	0.6	92.1
21.08	1	0.6	45.2	27.21	1	0.6	61.0	33.3	1	0.6	76.8	47.97	1	0.6	92.7
21.24	1	0.6	45.8	27.53	1	0.6	61.6	33.52	1	0.6	77.4	49.67	1	0.6	93.2
21.6	1	0.6	46.3	27.56	1	0.6	62.1	33.89	1	0.6	78.0	50.61	1	0.6	93.8
21.83	1	0.6	46.9	27.66	1	0.6	62.7	34.04	1	0.6	78.5	50.65	1	0.6	94.4
21.91	1	0.6	47.5	28.11	1	0.6	63.3	34.18	1	0.6	79.1	50.73	1	0.6	94.9
21.98	1	0.6	48.0	28.16	1	0.6	63.8	34.9	1	0.6	79.7	53.02	1	0.6	95.5
22.49	1	0.6	48.6	28.59	1	0.6	64.4	36.31	1	0.6	80.2	53.19	1	0.6	96.0
22.71	1	0.6	49.2	28.79	1	0.6	65.0	37.22	1	0.6	80.8	58.08	1	0.6	96.6
22.94	1	0.6	49.7	28.81	1	0.6	65.5	37.43	1	0.6	81.4	63.2	1	0.6	97.2
22.98	1	0.6	50.3	29.16	1	0.6	66.1	37.59	1	0.6	81.9	65.31	1	0.6	97.7
22.99	1	0.6	50.8	29.57	1	0.6	66.7	37.69	1	0.6	82.5	73.21	1	0.6	98.3
23.69	1	0.6	51.4	29.84	1	0.6	67.2	37.72	1	0.6	83.1	73.48	1	0.6	98.9
23.88	1	0.6	52.0	29.89	1	0.6	67.8	37.73	1	0.6	83.6	80.29	1	0.6	99.4
23.9	1	0.6	52.5	30.03	1	0.6	68.4	38.25	1	0.6	84.2	81.2	1	0.6	100.0
24.34	1	0.6	53.1	30.12	1	0.6	68.9	38.27	1	0.6	84.7				
24.49	1	0.6	53.7	30.23	1	0.6	69.5	38.82	1	0.6	85.3				

UNIVARIATE

VARIABLE=DET1

MOMENTS

N	175	SUM WGTS	175
MEAN	705.178	SUM	123406
STD DEV	1070.82	VARIANCE	1146657
SKEWNESS	2.26963	KURTOSIS	8.44725
USS	286541464	CSS	199518233
CV	151.851	STD MEAN	80.9464
T:MEAN=0	8.71166	PROB>|T|	0.0001
SGN RANK	5616.5	PROB>|S|	0.0001
NUM ^= 0	174		

QUANTILES(DEF=4)

100% MAX	6063.97	99%	6059.72
75% Q3	1217.18	95%	2115.89
50% MED	492.01	90%	1722.81
25% Q1	0.8	10%	-322.144
0% MIN	-1257.39	5%	-475.058
		1%	-930.423
RANGE	7321.36		
Q3-Q1	1216.38		
MODE	-1257.39		

EXTREMES

LOWEST	HIGHEST
-1257.39	3837.78
-827.17	3840.53
-664.48	5572.45
-614.08	6058.38
-590.27	6063.97

MISSING VALUE
COUNT 2
% COUNT/NOBS 1.13

STEM	LEAF	#	BOXPLOT
6	11	2	*
5	6	1	*
5			
4			
4			
3	88	2	0
3			
2	59	2	
2	004	3	
1	555556666666677778888899	24	
1	000000111223333333444	20	+-----+
0	555555566666666677777888888899999999	36	+
0	111111222222222233333333334444444444	38	*-----*
-0	444443333332222222111111111000000000	38	
-0	87665555	8	
-1	3	1	

6250+
4750+
3250+
1750+
250+
-1250+

NORMAL PROBABILITY PLOT

-2 -1 +0 +1 +2

MULTIPLY STEM.LEAF BY 10**+03

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-1257.39	1	0.6	0.6	-358.22	1	0.6	8.6	-148.99	1	0.6	16.6	0	1	0.6	24.6
-827.17	1	0.6	1.1	-342.61	1	0.6	9.1	-131.13	1	0.6	17.1	0.8	1	0.6	25.1
-664.48	1	0.6	1.7	-329.95	1	0.6	9.7	-117.79	1	0.6	17.7	1.32	1	0.6	25.7
-614.08	1	0.6	2.3	-316.94	1	0.6	10.3	-107.54	1	0.6	18.3	26.71	1	0.6	26.3
-590.27	1	0.6	2.9	-310.61	1	0.6	10.9	-106.98	1	0.6	18.9	42.43	1	0.6	26.9
-545.86	1	0.6	3.4	-291.05	1	0.6	11.4	-100.31	1	0.6	19.4	60.19	1	0.6	27.4
-517.08	1	0.6	4.0	-252.82	1	0.6	12.0	-88.22	1	0.6	20.0	75.13	1	0.6	28.0
-476.93	1	0.6	4.6	-239.71	1	0.6	12.6	-87.6	1	0.6	20.6	85.15	1	0.6	28.6
-474.59	1	0.6	5.1	-225.01	1	0.6	13.1	-55.07	1	0.6	21.1	105.72	1	0.6	29.1
-432.15	1	0.6	5.7	-220.73	1	0.6	13.7	-53.11	1	0.6	21.7	111.93	1	0.6	29.7
-424.4	1	0.6	6.3	-212.91	1	0.6	14.3	-24.82	1	0.6	22.3	142.46	1	0.6	30.3
-422.25	1	0.6	6.9	-187.94	1	0.6	14.9	-20.32	1	0.6	22.9	143.61	1	0.6	30.9
-367.87	1	0.6	7.4	-187.77	1	0.6	15.4	-15.84	1	0.6	23.4	162.22	1	0.6	31.4
-366.2	1	0.6	8.0	-169.23	1	0.6	16.0	-0.74	1	0.6	24.0	166.56	1	0.6	32.0

UNIVARIATE

VARIABLE=DET1

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
177.17	1	0.6	32.6	471.4	1	0.6	49.7	899.34	1	0.6	66.9	1568.21	1	0.6	84.0
189.44	1	0.6	33.1	492.01	1	0.6	50.3	909.71	1	0.6	67.4	1571.69	1	0.6	84.6
197.7	1	0.6	33.7	500.46	1	0.6	50.9	911.12	1	0.6	68.0	1578.36	1	0.6	85.1
213.98	1	0.6	34.3	509.76	1	0.6	51.4	943.05	1	0.6	68.6	1583	1	0.6	85.7
222.96	1	0.6	34.9	518.32	1	0.6	52.0	944.94	1	0.6	69.1	1612.86	1	0.6	86.3
232.52	1	0.6	35.4	530.04	1	0.6	52.6	966.33	1	0.6	69.7	1626.97	1	0.6	86.9
247.76	1	0.6	36.0	556.17	1	0.6	53.1	973.65	1	0.6	70.3	1630.62	1	0.6	87.4
249.67	1	0.6	36.6	557.25	1	0.6	53.7	981.65	1	0.6	70.9	1637.84	1	0.6	88.0
251.72	1	0.6	37.1	563.45	1	0.6	54.3	1028.63	1	0.6	71.4	1685.88	1	0.6	88.6
262.81	1	0.6	37.7	585.41	1	0.6	54.9	1038.82	1	0.6	72.0	1692.35	1	0.6	89.1
267.08	1	0.6	38.3	587.77	1	0.6	55.4	1041.39	1	0.6	72.6	1694.21	1	0.6	89.7
268.76	1	0.6	38.9	588.03	1	0.6	56.0	1054.42	1	0.6	73.1	1695.49	1	0.6	90.3
270.58	1	0.6	39.4	588.08	1	0.6	56.6	1090.33	1	0.6	73.7	1763.78	1	0.6	90.9
277.15	1	0.6	40.0	593.1	1	0.6	57.1	1125.84	1	0.6	74.3	1810.33	1	0.6	91.4
300.3	1	0.6	40.6	597.33	1	0.6	57.7	1208.18	1	0.6	74.9	1822.51	1	0.6	92.0
300.93	1	0.6	41.1	657.1	1	0.6	58.3	1217.18	1	0.6	75.4	1823.74	1	0.6	92.6
335.21	1	0.6	41.7	658.74	1	0.6	58.9	1302.24	1	0.6	76.0	1843.92	1	0.6	93.1
336.18	1	0.6	42.3	672.33	1	0.6	59.4	1308.94	1	0.6	76.6	1917.64	1	0.6	93.7
336.54	1	0.6	42.9	682.44	1	0.6	60.0	1317.42	1	0.6	77.1	1919.59	1	0.6	94.3
353.14	1	0.6	43.4	731.79	1	0.6	60.6	1322.73	1	0.6	77.7	2018.28	1	0.6	94.9
353.61	1	0.6	44.0	751.25	1	0.6	61.1	1325.42	1	0.6	78.3	2045.37	1	0.6	95.4
376.04	1	0.6	44.6	761.28	1	0.6	61.7	1325.99	1	0.6	78.9	2397.97	1	0.6	96.0
393.38	1	0.6	45.1	765.71	1	0.6	62.3	1427.61	1	0.6	79.4	2537.5	1	0.6	96.6
393.98	1	0.6	45.7	774.9	1	0.6	62.9	1437.6	1	0.6	80.0	2927.93	1	0.6	97.1
396.51	1	0.6	46.3	777.78	1	0.6	63.4	1439.94	1	0.6	80.6	3837.78	1	0.6	97.7
426.6	1	0.6	46.9	789.08	1	0.6	64.0	1452.08	1	0.6	81.1	3840.53	1	0.6	98.3
445.52	1	0.6	47.4	817.38	1	0.6	64.6	1504	1	0.6	81.7	5572.45	1	0.6	98.9
449.05	1	0.6	48.0	860.15	1	0.6	65.1	1512.82	1	0.6	82.3	6058.38	1	0.6	99.4
449.58	1	0.6	48.6	877.09	1	0.6	65.7	1512.93	1	0.6	82.9	6063.97	1	0.6	100.0
465.67	1	0.6	49.1	891.64	1	0.6	66.3	1514.22	1	0.6	83.4				

UNIVARIATE

VARIABLE=DET2

MOMENTS

N	175	SUM WGTS	175
MEAN	78.9683	SUM	13819.5
STD DEV	129.493	VARIANCE	16768.4
SKEWNESS	-0.0762458	KURTOSIS	-0.737041
USS	4008999	CSS	2917700
CV	163.981	STD MEAN	9.78874
T:MEAN=0	8.06727	PROB>|T|	0.0001
SGN RANK	4441.5	PROB>|S|	0.0001
NUM ^= 0	174		

QUANTILES(DEF=4)

100% MAX	366.49	99%	347.908
75% Q3	190.69	95%	292.46
50% MED	67.81	90%	253.254
25% Q1	-25.19	10%	-91.496
0% MIN	-272.4	5%	-122.176
		1%	-182.363
RANGE	638.89		
Q3-Q1	215.88		
MODE	-272.4		

EXTREMES

LOWEST	HIGHEST
-272.4	332.89
-153.93	336.5
-153.03	339.84
-152.97	342.04
-135.45	366.49

MISSING VALUE
COUNT 2
% COUNT/NOBS 1.13

```
STEM LEAF                                  #    BOXPLOT          NORMAL PROBABILITY PLOT
   3 7                                     1       0                375+
   3 1113444                               7       |                    ****  * *
   2 555556677899                         12       |                 *****+
   2 00000011122233333                    18       |              *****
   1 5666666777888899999999999            24   +-------+       ******
   1 0001112223444                        13   |       |      ****+
   0 5666666677777888899999               21   *---+---*    *****
   0 111112223333344444                   18   |       |  ******
  -0 444444443333333332211111110000000000 35   +-------+ ******
  -0 99998888665                          11   |       |  *****
  -1 43322221100                          11   |       | *****+
  -1 555                                   3   |       | * * *++
  -2                                           |       |+++
  -2 7                                     1   |      -275+*
     +----+----+----+----+----+----+----+                +----+----+----+----+----+----+----+----+----+----+----+
     MULTIPLY STEM.LEAF BY 10**+02                      -2   -1   +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-272.4	1	0.6	0.6	-93.26	1	0.6	9.7	-36.34	1	0.6	18.9	-11.93	1	0.6	28.0
-153.93	1	0.6	1.1	-90.32	1	0.6	10.3	-35.04	1	0.6	19.4	-11.45	1	0.6	28.6
-153.03	1	0.6	1.7	-89.82	1	0.6	10.9	-34.41	1	0.6	20.0	-9.41	1	0.6	29.1
-152.97	1	0.6	2.3	-84.27	1	0.6	11.4	-33.94	1	0.6	20.6	-8.66	1	0.6	29.7
-135.45	1	0.6	2.9	-83.64	1	0.6	12.0	-32.25	1	0.6	21.1	-6.37	1	0.6	30.3
-129.36	1	0.6	3.4	-82.37	1	0.6	12.6	-31.99	1	0.6	21.7	-1.14	1	0.6	30.9
-128.5	1	0.6	4.0	-76.41	1	0.6	13.1	-31.14	1	0.6	22.3	0	1	0.6	31.4
-124.36	1	0.6	4.6	-64.28	1	0.6	13.7	-26.86	1	0.6	22.9	0.03	1	0.6	32.0
-121.63	1	0.6	5.1	-61.69	1	0.6	14.3	-26.54	1	0.6	23.4	1.96	1	0.6	32.6
-120.06	1	0.6	5.7	-51.63	1	0.6	14.9	-26.37	1	0.6	24.0	2.01	1	0.6	33.1
-118.18	1	0.6	6.3	-43.17	1	0.6	15.4	-25.64	1	0.6	24.6	3.16	1	0.6	33.7
-114.04	1	0.6	6.9	-43.13	1	0.6	16.0	-25.19	1	0.6	25.1	3.39	1	0.6	34.3
-107.55	1	0.6	7.4	-42.44	1	0.6	16.6	-22.16	1	0.6	25.7	4.15	1	0.6	34.9
-103.83	1	0.6	8.0	-40.66	1	0.6	17.1	-19.55	1	0.6	26.3	5.12	1	0.6	35.4
-96.98	1	0.6	8.6	-39.55	1	0.6	17.7	-13.2	1	0.6	26.9	8.58	1	0.6	36.0
-94.96	1	0.6	9.1	-36.6	1	0.6	18.3	-12.75	1	0.6	27.4	9.77	1	0.6	36.6

UNIVARIATE

VARIABLE=DET2

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
10.49	1	0.6	37.1	80.37	1	0.6	53.1	164.48	1	0.6	69.1	221.47	1	0.6	85.1
13.14	1	0.6	37.7	82.17	1	0.6	53.7	169.28	1	0.6	69.7	223.8	1	0.6	85.7
15.36	1	0.6	38.3	83.32	1	0.6	54.3	171.94	1	0.6	70.3	225.23	1	0.6	86.3
22.17	1	0.6	38.9	87.86	1	0.6	54.9	174.48	1	0.6	70.9	226.59	1	0.6	86.9
23.06	1	0.6	39.4	89.32	1	0.6	55.4	179.4	1	0.6	71.4	227.57	1	0.6	87.4
25.88	1	0.6	40.0	90.04	1	0.6	56.0	179.5	1	0.6	72.0	233.52	1	0.6	88.0
26.08	1	0.6	40.6	90.96	1	0.6	56.6	183.51	1	0.6	72.6	234.34	1	0.6	88.6
28.93	1	0.6	41.1	92.45	1	0.6	57.1	184.45	1	0.6	73.1	248.73	1	0.6	89.1
31.05	1	0.6	41.7	96.52	1	0.6	57.7	186.15	1	0.6	73.7	250.13	1	0.6	89.7
31.21	1	0.6	42.3	99.12	1	0.6	58.3	188.66	1	0.6	74.3	252.51	1	0.6	90.3
39.48	1	0.6	42.9	101.85	1	0.6	58.9	189.18	1	0.6	74.9	254.37	1	0.6	90.9
41.1	1	0.6	43.4	107.36	1	0.6	59.4	190.69	1	0.6	75.4	254.81	1	0.6	91.4
43.35	1	0.6	44.0	109.54	1	0.6	60.0	190.7	1	0.6	76.0	261.05	1	0.6	92.0
43.69	1	0.6	44.6	113.07	1	0.6	60.6	190.97	1	0.6	76.6	261.93	1	0.6	92.6
44.18	1	0.6	45.1	118.46	1	0.6	61.1	191.08	1	0.6	77.1	270.8	1	0.6	93.1
52.94	1	0.6	45.7	121.85	1	0.6	61.7	192.83	1	0.6	77.7	274.35	1	0.6	93.7
57.33	1	0.6	46.3	124.37	1	0.6	62.3	194.06	1	0.6	78.3	283.63	1	0.6	94.3
58.42	1	0.6	46.9	128.47	1	0.6	62.9	195.16	1	0.6	78.9	285.13	1	0.6	94.9
60.6	1	0.6	47.4	137.99	1	0.6	63.4	195.17	1	0.6	79.4	287.87	1	0.6	95.4
60.71	1	0.6	48.0	140.36	1	0.6	64.0	196.22	1	0.6	80.0	310.82	1	0.6	96.0
61.05	1	0.6	48.6	141.34	1	0.6	64.6	197.19	1	0.6	80.6	312.05	1	0.6	96.6
63.54	1	0.6	49.1	153.11	1	0.6	65.1	198.49	1	0.6	81.1	314.09	1	0.6	97.1
64.07	1	0.6	49.7	153.19	1	0.6	65.7	202.28	1	0.6	81.7	332.89	1	0.6	97.7
67.81	1	0.6	50.3	158.04	1	0.6	66.3	204.13	1	0.6	82.3	336.5	1	0.6	98.3
69.3	1	0.6	50.9	158.19	1	0.6	66.9	208.75	1	0.6	82.9	339.84	1	0.6	98.9
72.77	1	0.6	51.4	159.54	1	0.6	67.4	210.18	1	0.6	83.4	342.04	1	0.6	99.4
73.03	1	0.6	52.0	159.78	1	0.6	68.0	213.67	1	0.6	84.0	366.49	1	0.6	100.0
77.5	1	0.6	52.6	163.57	1	0.6	68.6	220.49	1	0.6	84.6				

UNIVARIATE

VARIABLE=DET3

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	175	SUM WGTS	175	100% MAX	908.2	99%	855.03	LOWEST	HIGHEST
MEAN	274.261	SUM	47995.7	75% Q3	461.37	95%	675.332	-887.6	716.98
STD DEV	270.567	VARIANCE	73206.2	50% MED	279.22	90%	595.676	-336.84	757.43
SKEWNESS	-0.574256	KURTOSIS	1.13312	25% Q1	125.46	10%	-100.78	-294.17	774.94
USS	25901242	CSS	12737887	0% MIN	-887.6	5%	-205.944	-292.83	838.24
CV	98.6529	STD MEAN	20.4529			1%	-469.023	-290.61	908.2
T:MEAN=0	13.4094	PROB>|T|	0.0001	RANGE	1795.8				
SGN RANK	6424.5	PROB>|S|	0.0001	Q3-Q1	335.91				
NUM ^= 0	174			MODE	-887.6				

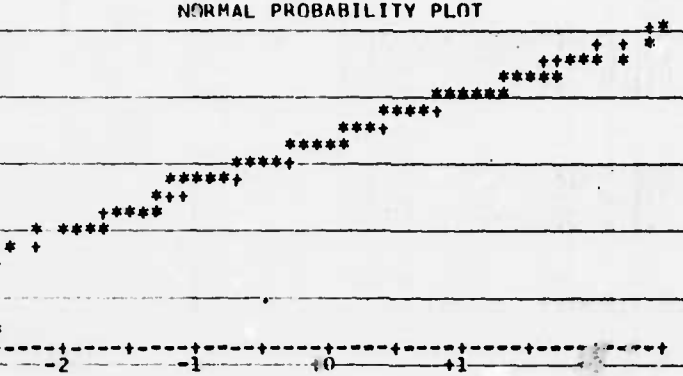
MISSING VALUE

	COUNT	½
% COUNT/NOBS	1.13	

STEM	LEAF	#	BOXPLOT
9	1	1	*
8	4	1	
7	11267	5	
6	0013344678	10	
5	12334455677789999999	19	
4	00123344555666666667 7 4899	25	+-----+
3	000012344467777788899	21	
2	000111111133334456666788888999	29	*--+--*
1	12333344445566677788899	23	+-----+
0	112222445677777899	18	
-0	88500	5	
-1	987764100	9	
-2	9998220	7	
-3	4	1	
-4			
-5			
-6			
-7			
-8	9	1	*

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT

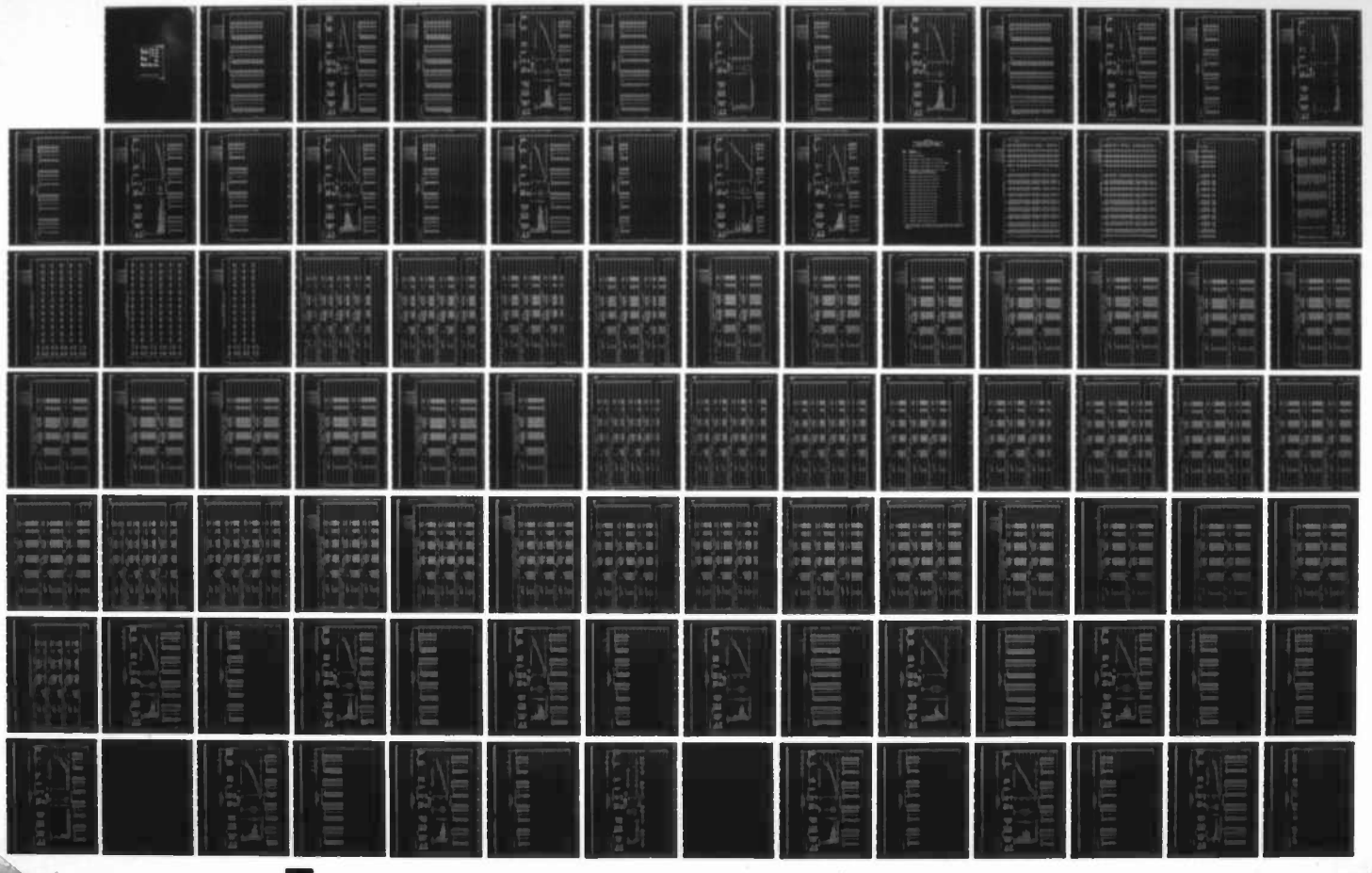


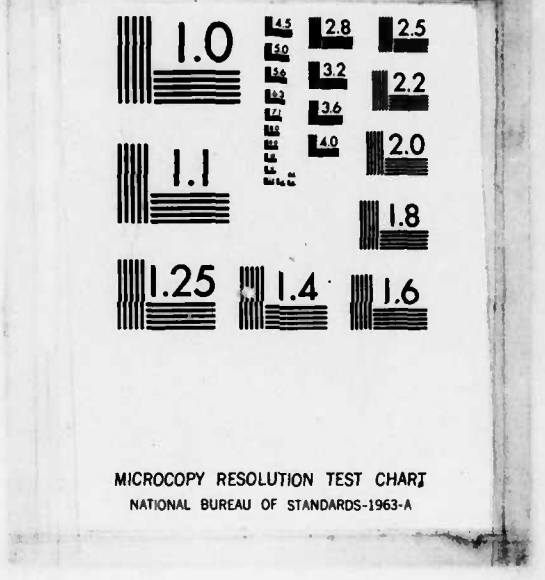
FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-887.6	1	0.6	0.6	-171.1	1	0.6	6.9	1.88	1	0.6	13.1	67.05	1	0.6	19.4
-336.84	1	0.6	1.1	-169.09	1	0.6	7.4	12.05	1	0.6	13.7	67.17	1	0.6	20.0
-294.17	1	0.6	1.7	-164.7	1	0.6	8.0	14.88	1	0.6	14.3	69.03	1	0.6	20.6
-292.83	1	0.6	2.3	-135.85	1	0.6	8.6	16.05	1	0.6	14.9	70.27	1	0.6	21.1
-290.61	1	0.6	2.9	-113.87	1	0.6	9.1	17.38	1	0.6	15.4	72.74	1	0.6	21.7
-278.39	1	0.6	3.4	-103.3	1	0.6	9.7	20.35	1	0.6	16.0	83.18	1	0.6	22.3
-223.82	1	0.6	4.0	-99.1	1	0.6	10.3	24.83	1	0.6	16.6	89.58	1	0.6	22.9
-219.08	1	0.6	4.6	-84.28	1	0.6	10.9	37.86	1	0.6	17.1	94.31	1	0.6	23.4
-202.66	1	0.6	5.1	-81.46	1	0.6	11.4	44.77	1	0.6	17.7	114.02	1	0.6	24.0
-191.2	1	0.6	5.7	-48.4	1	0.6	12.0	47.58	1	0.6	18.3	124.67	1	0.6	24.6
-180.45	1	0.6	6.3	0	1	0.6	12.6	61.21	1	0.6	18.9	125.46	1	0.6	25.1

AD-A152 994 EVALUATION OF USED CRANKCASE OILS USING COMPUTERIZED INFRARED SPECTROMETR..(U) JOINT OIL ANALYSIS PROGRAM PENSACOLA FL TECHNICAL SUPPORT CEN.. B B MCCAA ET AL. 4/5

UNCLASSIFIED JUN 84 JOAP-TSC-84-01-APP F/G 20/6 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

UNIVARIATE

VARIABLE=NET3

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
125.66	1	0.6	25.7	239.56	1	0.6	44.6	380.37	1	0.6	63.4	535.44	1	0.6	82.3
133.1	1	0.6	26.3	239.68	1	0.6	45.1	381.57	1	0.6	64.0	543.64	1	0.6	82.9
134.37	1	0.6	26.9	249.67	1	0.6	45.7	385.52	1	0.6	64.6	550.71	1	0.6	83.4
137.26	1	0.6	27.4	257.14	1	0.6	46.3	392.44	1	0.6	65.1	551.97	1	0.6	84.0
139.59	1	0.6	28.0	258.39	1	0.6	46.9	396.11	1	0.6	65.7	555.65	1	0.6	84.6
140.43	1	0.6	28.6	264.42	1	0.6	47.4	397.35	1	0.6	66.3	567.52	1	0.6	85.1
141.55	1	0.6	29.1	264.54	1	0.6	48.0	411.72	1	0.6	66.9	570.01	1	0.6	85.7
146.63	1	0.6	29.7	270.04	1	0.6	48.6	415.99	1	0.6	67.4	573.39	1	0.6	86.3
148.13	1	0.6	30.3	276.01	1	0.6	49.1	427.35	1	0.6	68.0	576.38	1	0.6	86.9
162.75	1	0.6	30.9	279.14	1	0.6	49.7	433.1	1	0.6	68.6	586.42	1	0.6	87.4
163.58	1	0.6	31.4	279.22	1	0.6	50.3	441.22	1	0.6	69.1	586.92	1	0.6	88.0
163.71	1	0.6	32.0	279.93	1	0.6	50.9	444.82	1	0.6	69.7	587.71	1	0.6	88.6
173	1	0.6	32.6	284.16	1	0.6	51.4	451.53	1	0.6	70.3	588.72	1	0.6	89.1
173.35	1	0.6	33.1	290.3	1	0.6	52.0	453.13	1	0.6	70.9	591.91	1	0.6	89.7
174.69	1	0.6	33.7	292.74	1	0.6	52.6	453.65	1	0.6	71.4	594.96	1	0.6	90.3
179.67	1	0.6	34.3	292.92	1	0.6	53.1	455.2	1	0.6	72.0	596.75	1	0.6	90.9
181.88	1	0.6	34.9	297.16	1	0.6	53.7	455.65	1	0.6	72.6	604.63	1	0.6	91.4
184.17	1	0.6	35.4	301.51	1	0.6	54.3	456.53	1	0.6	73.1	612.42	1	0.6	92.0
187.02	1	0.6	36.0	302.45	1	0.6	54.9	457.6	1	0.6	73.7	626.04	1	0.6	92.6
191.37	1	0.6	36.6	302.49	1	0.6	55.4	458.6	1	0.6	74.3	633.65	1	0.6	93.1
198.51	1	0.6	37.1	307.16	1	0.6	56.0	461.25	1	0.6	74.9	639.32	1	0.6	93.7
199.63	1	0.6	37.7	322.58	1	0.6	56.6	461.37	1	0.6	75.4	643.81	1	0.6	94.3
200.1	1	0.6	38.3	334.67	1	0.6	57.1	462.33	1	0.6	76.0	661.69	1	0.6	94.9
206.06	1	0.6	38.9	338.08	1	0.6	57.7	468.27	1	0.6	76.6	674.7	1	0.6	95.4
207.3	1	0.6	39.4	341.14	1	0.6	58.3	470.32	1	0.6	77.1	677.86	1	0.6	96.0
209.5	1	0.6	40.0	342.61	1	0.6	58.9	475.35	1	0.6	77.7	705.28	1	0.6	96.6
211.44	1	0.6	40.6	363.5	1	0.6	59.4	478.04	1	0.6	78.3	705.9	1	0.6	97.1
213.76	1	0.6	41.1	369.49	1	0.6	60.0	485.16	1	0.6	78.9	716.98	1	0.6	97.7
214.12	1	0.6	41.7	371	1	0.6	60.6	487.59	1	0.6	79.4	757.43	1	0.6	98.3
225.7	1	0.6	42.3	372.3	1	0.6	61.1	506.93	1	0.6	80.0	774.94	1	0.6	98.9
226.62	1	0.6	42.9	372.83	1	0.6	61.7	524.48	1	0.6	80.6	838.24	1	0.6	99.4
226.8	1	0.6	43.4	374	1	0.6	62.3	525.74	1	0.6	81.1	908.2	1	0.6	100.0
233.47	1	0.6	44.0	376.61	1	0.6	62.9	530.35	1	0.6	81.7				

UNIVARIATE

VARIABLE=NET4

MOMENTS

N	175	SUM WGTS	175
MEAN	938.516	SUM	164240
STD DEV	788.828	VARIANCE	622249
SKEWNESS	-0.669381	KURTOSIS	1.75938
USS	262413353	CSS	108271354
CV	84.0506	STD MEAN	59.6298
T:MEAN=0	15.739	PROB>|T|	0.0001
SGN RANK	6906.5	PROB>|S|	0.0001
NUM ^= 0	174		

QUANTILES(DEF=4)

100% MAX	2954.09	99%	2469.98
75% Q3	1550.04	95%	2039.84
50% MED	1005.78	90%	1904.65
25% Q1	432.06	10%	-126.164
0% MIN	-2795.1	5%	-367.484
		1%	-1183.88
RANGE	5749.19		
Q3-Q1	1117.98		
MODE	-2795.1		

EXTREMES

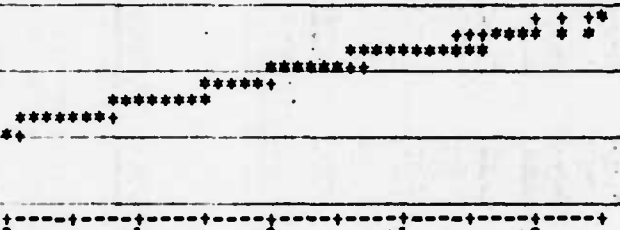
LOWEST	HIGHEST
-2795.1	2107.64
-675.07	2213.68
-664.84	2263.13
-527.83	2317.11
-500.4	2954.09

MISSING VALUE
COUNT 2
% COUNT/NOBS 1.13

STEM	LEAF	#	BOXPLOT
3	0	1	
2			
2	00000011112333	13	
1	555555666666677777788888888888999999	36	
1	000000000001111111112222333333334444444444	43	
0	55555555566666666777777788888999999	37	
0	111112222233333444444	22	
-0	44444333322111000	18	
-0	7755	4	
-1			
-1			
-2			
-2	8	1	

MULTIPLY STEM.LEAF BY 10**+03

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-2795.1	1	0.6	0.6	-122.06	1	0.6	10.3	268.82	1	0.6	20.0	494.92	1	0.6	29.7
-675.07	1	0.6	1.1	-88.03	1	0.6	10.9	268.89	1	0.6	20.6	513.05	1	0.6	30.3
-664.84	1	0.6	1.7	-10.28	1	0.6	11.4	329.63	1	0.6	21.1	529.29	1	0.6	30.9
-527.83	1	0.6	2.3	-7.54	1	0.6	12.0	335.82	1	0.6	21.7	580.92	1	0.6	31.4
-500.4	1	0.6	2.9	0	1	0.6	12.6	374.24	1	0.6	22.3	586.98	1	0.6	32.0
-435.35	1	0.6	3.4	6.19	1	0.6	13.1	405.62	1	0.6	22.9	587.12	1	0.6	32.6
-385.37	1	0.6	4.0	84.23	1	0.6	13.7	408.64	1	0.6	23.4	591.28	1	0.6	33.1
-376.62	1	0.6	4.6	117.4	1	0.6	14.3	420.49	1	0.6	24.0	603.95	1	0.6	33.7
-365.2	1	0.6	5.1	119.43	1	0.6	14.9	430.84	1	0.6	24.6	616.31	1	0.6	34.3
-356.95	1	0.6	5.7	121.19	1	0.6	15.4	432.06	1	0.6	25.1	618.47	1	0.6	34.9
-329.05	1	0.6	6.3	144.8	1	0.6	16.0	443.03	1	0.6	25.7	622.65	1	0.6	35.4
-323.18	1	0.6	6.9	151.57	1	0.6	16.6	458.25	1	0.6	26.3	630.68	1	0.6	36.0
-278.68	1	0.6	7.4	153.83	1	0.6	17.1	462.46	1	0.6	26.9	670.62	1	0.6	36.6
-270.54	1	0.6	8.0	167.5	1	0.6	17.7	470.93	1	0.6	27.4	673.64	1	0.6	37.1
-221.45	1	0.6	8.6	181.5	1	0.6	18.3	478.42	1	0.6	28.0	691.17	1	0.6	37.7
-170.23	1	0.6	9.1	220.07	1	0.6	18.9	483.43	1	0.6	28.6	693.17	1	0.6	38.3
-132.32	1	0.6	9.7	259.53	1	0.6	19.4	484.53	1	0.6	29.1	708.23	1	0.6	38.9

UNIVARIATE

VARIABLE=nET4

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
731.5	1	0.6	39.4	1060.81	1	0.6	54.9	1411.72	1	0.6	70.3	1792.54	1	0.6	85.7
733.01	1	0.6	40.0	1090.53	1	0.6	55.4	1415.94	1	0.6	70.9	1799.46	1	0.6	86.3
745.74	1	0.6	40.6	1098.86	1	0.6	56.0	1428.15	1	0.6	71.4	1802.29	1	0.6	86.9
770.48	1	0.6	41.1	1106.9	1	0.6	56.6	1488.52	1	0.6	72.0	1804.68	1	0.6	87.4
818.99	1	0.6	41.7	1108.52	1	0.6	57.1	1493.24	1	0.6	72.6	1819.5	1	0.6	88.0
824.48	1	0.6	42.3	1119.46	1	0.6	57.7	1511.25	1	0.6	73.1	1824.76	1	0.6	88.6
832.43	1	0.6	42.9	1132.52	1	0.6	58.3	1519.15	1	0.6	73.7	1885.66	1	0.6	89.1
843.68	1	0.6	43.4	1135.33	1	0.6	58.9	1522.87	1	0.6	74.3	1887.1	1	0.6	89.7
859.49	1	0.6	44.0	1162.76	1	0.6	59.4	1538.12	1	0.6	74.9	1895.54	1	0.6	90.3
863.57	1	0.6	44.6	1168.47	1	0.6	60.0	1550.04	1	0.6	75.4	1918.32	1	0.6	90.9
869.61	1	0.6	45.1	1222.42	1	0.6	60.6	1562.9	1	0.6	76.0	1930.62	1	0.6	91.4
881.62	1	0.6	45.7	1228.43	1	0.6	61.1	1568.73	1	0.6	76.6	1945.86	1	0.6	92.0
890.05	1	0.6	46.3	1254.69	1	0.6	61.7	1592.08	1	0.6	77.1	1956.98	1	0.6	92.6
894.94	1	0.6	46.9	1261.09	1	0.6	62.3	1610.97	1	0.6	77.7	1964.7	1	0.6	93.1
973.44	1	0.6	47.4	1273.31	1	0.6	62.9	1618.66	1	0.6	78.3	1968.78	1	0.6	93.7
977.01	1	0.6	48.0	1294.83	1	0.6	63.4	1635.67	1	0.6	78.9	1975.96	1	0.6	94.3
980.46	1	0.6	48.6	1298.76	1	0.6	64.0	1645.09	1	0.6	79.4	1988.06	1	0.6	94.9
980.47	1	0.6	49.1	1308.12	1	0.6	64.6	1680.8	1	0.6	80.0	2030.83	1	0.6	95.4
996.23	1	0.6	49.7	1321.45	1	0.6	65.1	1686.27	1	0.6	80.6	2075.88	1	0.6	96.0
1005.78	1	0.6	50.3	1335.61	1	0.6	65.7	1694.34	1	0.6	81.1	2081.43	1	0.6	96.6
1008.29	1	0.6	50.9	1363.87	1	0.6	66.3	1720.84	1	0.6	81.7	2106.98	1	0.6	97.1
1020.54	1	0.6	51.4	1373.76	1	0.6	66.9	1722.39	1	0.6	82.3	2107.64	1	0.6	97.7
1020.81	1	0.6	52.0	1382.47	1	0.6	67.4	1747.3	1	0.6	82.9	2213.68	1	0.6	98.3
1033.64	1	0.6	52.6	1391.69	1	0.6	68.0	1755.48	1	0.6	83.4	2263.13	1	0.6	98.9
1039.16	1	0.6	53.1	1391.83	1	0.6	68.6	1760.41	1	0.6	84.0	2317.11	1	0.6	99.4
1056.64	1	0.6	53.7	1406.26	1	0.6	69.1	1787.91	1	0.6	84.6	2954.04	1	0.6	100.0
1058.92	1	0.6	54.3	1407	1	0.6	69.7	1789.24	1	0.6	85.1				

B

UNIVARIATE

VARIABLE=FD1

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
								LOWEST	HIGHEST
N	175	SUM WGTS	175	100% MAX	12.28	99%	9.14116	-5.46	7.59
MEAN	0.527943	SUM	92.39	75% Q3	2.13	95%	6.648	-5.2	7.84
STD DEV	2.88991	VARIANCE	8.35159	50% MED	0.18	90%	3.936	-4.34	8.08
SKEWNESS	0.843546	KURTOSIS	1.40238	25% Q1	-1.27	10%	-3.024	-4.14	8.15
USS	1501.95	CSS	1453.18	0% MIN	-5.46	5%	-3.672	-4.07	12.28
CV	547.391	STD MEAN	0.218457			1%	-5.2624		
T:MEAN=0	2.41669	PROB>|T|	0.0166957	RANGE	17.74				
SGN RANK	1114	PROB>|S|	0.091439	Q3-Q1	3.4				
NUM ^= 0	173			MODE	-3.58				

MISSING VALUE
COUNT 2
% COUNT/NOBS 1.13

STEM	LEAF	#	BOXPLOT
12	3	1	0
11			
10			
9			
8	11	2	0
7	368	3	0
6	055689	6	
5	2	1	
4	2567	4	
3	00335778	8	
2	011112222233455556666899	23	+------+
1	000233444566678889999	21	
0	112222223345566788899	21	+------+
-0	9998876655555543221111000000	29	
-1	99997654333333222222220000	25	+------+
-2	9988877111100	13	
-3	8777664432100	13	
-4	311	3	
-5	52	2	

12.5+
3.5+
-5.5+

NORMAL PROBABILITY PLOT

-2 -1 +0 +1 +2

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-5.46	1	0.6	0.6	-3.38	1	0.6	7.4	-2.72	1	0.6	13.7	-1.89	1	0.6	20.0
-5.2	1	0.6	1.1	-3.3	1	0.6	8.0	-2.69	1	0.6	14.3	-1.74	1	0.6	20.6
-4.34	1	0.6	1.7	-3.17	1	0.6	8.6	-2.14	1	0.6	14.9	-1.64	1	0.6	21.1
-4.14	1	0.6	2.3	-3.07	1	0.6	9.1	-2.11	1	0.6	15.4	-1.52	1	0.6	21.7
-4.07	1	0.6	2.9	-3.03	1	0.6	9.7	-2.1	1	0.6	16.0	-1.41	1	0.6	22.3
-3.83	1	0.6	3.4	-3.02	1	0.6	10.3	-2.09	1	0.6	16.6	-1.34	1	0.6	22.9
-3.73	1	0.6	4.0	-2.95	1	0.6	10.9	-2.04	1	0.6	17.1	-1.3	1	0.6	23.4
-3.68	1	0.6	4.6	-2.86	1	0.6	11.4	-2.01	1	0.6	17.7	-1.29	1	0.6	24.0
-3.67	1	0.6	5.1	-2.83	1	0.6	12.0	-1.94	1	0.6	18.3	-1.28	1	0.6	24.6
-3.58	2	1.1	6.3	-2.78	1	0.6	12.6	-1.91	1	0.6	18.9	-1.27	2	1.1	25.7
-3.4	1	0.6	6.9	-2.77	1	0.6	13.1	-1.9	1	0.6	19.4	-1.25	1	0.6	26.3

G-77

UNIVARIATE

VARIABLE=FD1

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-1.24	1	0.6	26.9
-1.23	1	0.6	27.4
-1.22	2	1.1	28.6
-1.2	1	0.6	29.1
-1.16	1	0.6	29.7
-1.05	1	0.6	30.3
-1.02	1	0.6	30.9
-0.99	1	0.6	31.4
-0.97	1	0.6	32.0
-0.91	1	0.6	32.6
-0.89	1	0.6	33.1
-0.88	1	0.6	33.7
-0.82	1	0.6	34.3
-0.79	1	0.6	34.9
-0.74	1	0.6	35.4
-0.6	1	0.6	36.0
-0.57	1	0.6	36.6
-0.55	2	1.1	37.7
-0.49	1	0.6	38.3
-0.48	2	1.1	39.4
-0.47	1	0.6	40.0
-0.36	1	0.6	40.6
-0.29	1	0.6	41.1
-0.24	1	0.6	41.7
-0.23	1	0.6	42.3
-0.14	1	0.6	42.9
-0.11	1	0.6	43.4
-0.07	1	0.6	44.0
-0.06	1	0.6	44.6
-0.04	1	0.6	45.1
-0.02	1	0.6	45.7
0	2	1.1	46.9
0.01	2	1.1	48.0
0.03	1	0.6	48.6
0.09	2	1.1	49.7
0.18	2	1.1	50.9
0.19	2	1.1	52.0
0.25	2	1.1	53.1
0.29	1	0.6	53.7
0.33	1	0.6	54.3
0.41	1	0.6	54.9
0.5	1	0.6	55.4
0.52	1	0.6	56.0
0.56	1	0.6	56.6
0.64	1	0.6	57.1
0.72	1	0.6	57.7
0.79	1	0.6	58.3
0.81	1	0.6	58.9
0.82	1	0.6	59.4
0.91	1	0.6	60.0
0.92	1	0.6	60.6
1	1	0.6	61.1
1.05	2	1.1	62.3
1.17	1	0.6	62.9
1.29	1	0.6	63.4
1.31	1	0.6	64.0
1.4	2	1.1	65.1
1.41	1	0.6	65.7
1.42	1	0.6	66.3
1.47	1	0.6	66.9
1.56	1	0.6	67.4
1.59	1	0.6	68.0
1.62	1	0.6	68.6
1.69	1	0.6	69.1
1.8	1	0.6	69.7
1.82	1	0.6	70.3
1.85	1	0.6	70.9
1.86	1	0.6	71.4
1.87	1	0.6	72.0
1.91	1	0.6	72.6
2.03	1	0.6	73.1
2.06	1	0.6	73.7
2.07	1	0.6	74.3
2.09	1	0.6	74.9
2.13	1	0.6	75.4
2.16	1	0.6	76.0
2.2	2	1.1	77.1
2.24	2	1.1	78.3
2.27	1	0.6	78.9
2.3	1	0.6	79.4
2.4	1	0.6	80.0
2.48	1	0.6	80.6
2.53	1	0.6	81.1
2.55	2	1.1	82.3
2.56	1	0.6	82.9
2.57	1	0.6	83.4
2.61	1	0.6	84.0
2.81	1	0.6	84.6
2.88	1	0.6	85.1
2.89	1	0.6	85.7
2.96	1	0.6	86.3
3.02	1	0.6	86.9
3.31	2	1.1	88.0
3.5	1	0.6	88.6
3.74	2	1.1	89.7
3.78	1	0.6	90.3
4.17	1	0.6	90.9
4.51	1	0.6	91.4
4.57	1	0.6	92.0
4.69	1	0.6	92.6
5.22	1	0.6	93.1
6.04	1	0.6	93.7
6.48	1	0.6	94.3
6.52	1	0.6	94.9
6.61	1	0.6	95.4
6.8	1	0.6	96.0
6.89	1	0.6	96.6
7.31	1	0.6	97.1
7.59	1	0.6	97.7
7.84	1	0.6	98.3
8.08	1	0.6	98.9
8.15	1	0.6	99.4
12.28	1	0.6	100.0

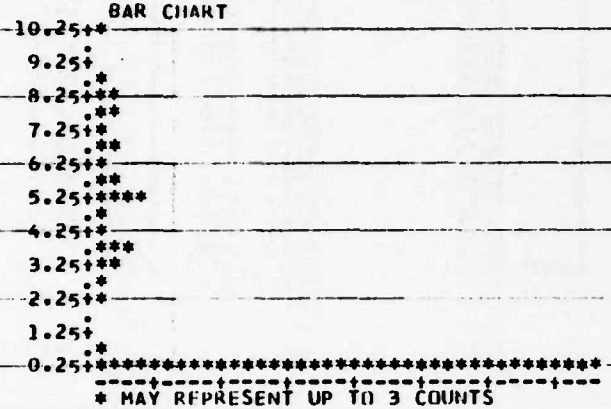
UNIVARIATE

VARIABLE=FD2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
								LOWEST	HIGHEST
N	175	SUM WGTS	175	100% MAX	10.36	99%	8.96158	0	8.22
MEAN	1.90863	SUM	334.01	75% Q3	3.84	95%	7.918	0	8.44
STD DEV	2.87224	VARIANCE	8.24976	50% MED	0	90%	6.934	0	8.52
SKEWNESS	1.12717	KURTOSIS	-0.219579	25% Q1	0	10%	0	0	8.52
USS	2072.96	CSS	1435.46	0% MIN	0	5%	0	0	10.36
CV	150.487	STD MEAN	0.217121			1%	0		
T:MEAN=0	8.79062	PROB>|T|	0.0001	RANGE	10.36				
SGN RANK	1008	PROB>|S|	0.0001	Q3-Q1	3.84				
NUM ^= 0	63			MODE	0				

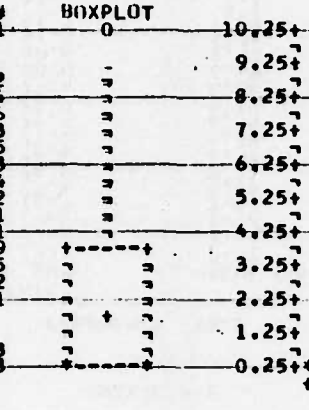
MISSING VALUE
COUNT 2
% COUNT/NOBS 1.13

BAR CHART

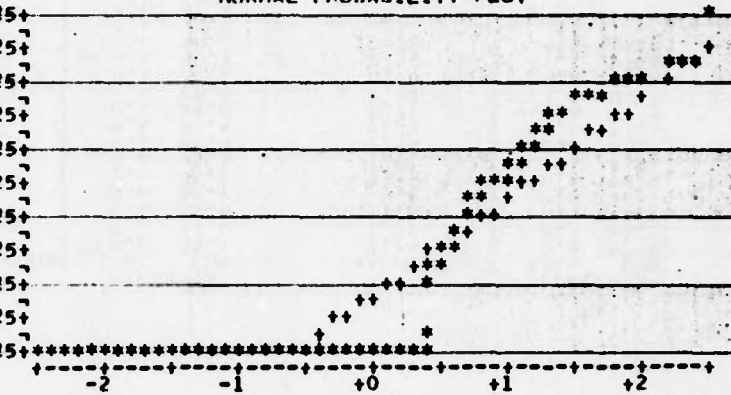


* MAY REPRESENT UP TO 3 COUNTS

BOXPLOT



NORMAL PROBABILITY PLOT



UNIVARIATE

VARIABLE=FD2

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	112	64.0	64.0	3.59	1	0.6	73.1	5.33	1	0.6	83.4	7.14	1	0.6	92.6
0.18	1	0.6	64.6	3.67	1	0.6	73.7	5.45	1	0.6	84.0	7.56	1	0.6	93.1
0.48	1	0.6	65.1	3.74	1	0.6	74.3	5.52	1	0.6	84.6	7.6	1	0.6	93.7
0.53	1	0.6	65.7	3.8	1	0.6	74.9	5.63	1	0.6	85.1	7.8	1	0.6	94.3
0.86	1	0.6	66.3	3.84	1	0.6	75.4	5.68	1	0.6	85.7	7.86	1	0.6	94.9
2.17	1	0.6	66.9	3.85	1	0.6	76.0	5.76	1	0.6	86.3	7.91	1	0.6	95.4
2.76	1	0.6	67.4	4.34	1	0.6	76.6	6.02	1	0.6	86.9	7.95	1	0.6	96.0
2.78	1	0.6	68.0	4.61	1	0.6	77.1	6.28	1	0.6	87.4	8.05	1	0.6	96.6
3.07	1	0.6	68.6	4.98	2	1.1	78.3	6.35	1	0.6	88.0	8.21	1	0.6	97.1
3.27	1	0.6	69.1	5.04	1	0.6	78.9	6.58	1	0.6	88.6	8.22	1	0.6	97.7
3.32	1	0.6	69.7	5.16	1	0.6	79.4	6.66	1	0.6	89.1	8.44	1	0.6	98.3
3.34	1	0.6	70.3	5.18	1	0.6	80.0	6.69	1	0.6	89.7	8.52	2	1.1	99.4
3.45	1	0.6	70.9	5.24	1	0.6	80.6	6.93	1	0.6	90.3	10.36	1	0.6	100.0
3.47	1	0.6	71.4	5.28	1	0.6	81.1	6.94	1	0.6	90.9				
3.48	1	0.6	72.0	5.3	1	0.6	81.7	7.03	1	0.6	91.4				
3.52	1	0.6	72.6	5.32	2	1.1	82.9	7.1	1	0.6	92.0				

UNIVARIATE

VARIABLE=FDI3

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	175	SUM WGTS	175	100% MAX	1486.96	99%	1278.76	LOWEST	HIGHEST
MEAN	227.099	SUM	39742.3	75% Q3	345.75	95%	715.548	-1049.29	894.05
STD DEV	278.06	VARIANCE	77317.3	50% MED	194.76	90%	527.456	-212.85	903.57
SKEWNESS	0.751885	KURTOSIS	5.10011	25% Q1	-45.32	10%	-45.178	-157.05	1136.12
USS	22478629	CSS	13453207	0% MIN	-1049.29	5%	-96.988	-136.63	1213.01
CV	122.44	STD MEAN	21.0193			1%	-413.596	-128.35	1486.96
T:MEAN=0	10.8043	PROB>|T|	0.0001	RANGE	2536.25				
SGN RANK	6491.5	PROB>|S|	0.0001	Q3-Q1	390.43				
NUM ^= 0	174			MODE	29.69				

MISSING VALUE
COUNT 2
% COUNT/NOBS 1.13

STEM	LEAF	#	BOXPLOT	NORMAL PROBABILITY PLOT
14	9	1	*	1450+
13				
12	1	1	0	
11	4	1	0	
10				
9	0	1	0	950+
8	159	3	0	
7	015	3		
6	2589	4		
5	00222468	8		
4	0001245689999	12		450+
3	000011122233455555567789	23	+------+	
2	00022223333444566777788888999	30	+------+	
1	11133333335555666667777788999	29	*------*	
0	22233334444555555666677788	27	+------+	
-0	98876655443332222110000	23		-50+
-1	6431100	7		
-2	1	1		
-3				
-4				
-5				-550+
-6				
-7				
-8				
-9				
-10	5	1	*	-1050+

MULTIPLY STEM.LEAF BY 10**+02

-2 -1 +0 +1 +2

G-81

F

UNIVARIATE

VARIABLE=FD13

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-1049.29	1	0.6	0.6	48.91	1	0.6	26.3	199.02	1	0.6	51.4	352.36	1	0.6	77.1
-212.85	1	0.6	1.1	49.53	1	0.6	26.9	202.37	1	0.6	52.0	352.71	1	0.6	77.7
-157.05	1	0.6	1.7	49.71	1	0.6	27.4	216.67	1	0.6	52.6	356.03	1	0.6	78.3
-136.63	1	0.6	2.3	54.2	1	0.6	28.0	217.89	1	0.6	53.1	367.41	1	0.6	78.9
-128.35	1	0.6	2.9	56.41	1	0.6	28.6	217.99	1	0.6	53.7	374.48	1	0.6	79.4
-113.93	1	0.6	3.4	57.81	1	0.6	29.1	220.83	1	0.6	54.3	382.49	1	0.6	80.0
-111.82	1	0.6	4.0	59.11	1	0.6	29.7	228.61	1	0.6	54.9	387.24	1	0.6	80.6
-102.58	1	0.6	4.6	64.39	1	0.6	30.3	228.82	1	0.6	55.4	395.96	1	0.6	81.1
-95.59	1	0.6	5.1	65.81	1	0.6	30.9	229.05	1	0.6	56.0	398.27	1	0.6	81.7
-86.43	1	0.6	5.7	67.72	1	0.6	31.4	230.57	1	0.6	56.6	398.55	1	0.6	82.3
-81.05	1	0.6	6.3	70.92	1	0.6	32.0	235.04	1	0.6	57.1	414.02	1	0.6	82.9
-78.04	1	0.6	6.9	76.91	1	0.6	32.6	239.12	1	0.6	57.7	421.63	1	0.6	83.4
-67.19	1	0.6	7.4	81.39	1	0.6	33.1	241.97	1	0.6	58.3	442.01	1	0.6	84.0
-60.57	1	0.6	8.0	84.81	1	0.6	33.7	254.42	1	0.6	58.9	448.96	1	0.6	84.6
-56.47	1	0.6	8.6	111.64	1	0.6	34.3	259.93	1	0.6	59.4	458.34	1	0.6	85.1
-50.07	1	0.6	9.1	111.68	1	0.6	34.9	264.5	1	0.6	60.0	480.02	1	0.6	85.7
-46.39	1	0.6	9.7	113.43	1	0.6	35.4	266.63	1	0.6	60.6	488.27	1	0.6	86.3
-44.37	1	0.6	10.3	127.9	1	0.6	36.0	270.21	1	0.6	61.1	490.83	1	0.6	86.9
-35.91	1	0.6	10.9	130.25	1	0.6	36.6	271.54	2	1.1	62.3	494.8	1	0.6	87.4
-33.21	1	0.6	11.4	131.19	1	0.6	37.1	275.99	1	0.6	62.9	496.47	1	0.6	88.0
-32.08	1	0.6	12.0	131.95	1	0.6	37.7	276.17	1	0.6	63.4	503.2	1	0.6	88.6
-27.53	1	0.6	12.6	133.91	1	0.6	38.3	281.83	1	0.6	64.0	517.47	1	0.6	89.1
-20.52	1	0.6	13.1	134.84	1	0.6	38.9	282.25	1	0.6	64.6	518.57	1	0.6	89.7
-19.2	1	0.6	13.7	134.98	1	0.6	39.4	282.46	1	0.6	65.1	519.44	1	0.6	90.3
-16.67	1	0.6	14.3	146.53	1	0.6	40.0	283.56	1	0.6	65.7	539.48	1	0.6	90.9
-16.47	1	0.6	14.9	148.87	1	0.6	40.6	285.19	1	0.6	66.3	564.35	1	0.6	91.4
-14.26	1	0.6	15.4	150.28	1	0.6	41.1	291.34	1	0.6	66.9	579.29	1	0.6	92.0
-13.01	1	0.6	16.0	154.13	1	0.6	41.7	292.2	1	0.6	67.4	624.39	1	0.6	92.6
-4.95	1	0.6	16.6	155.72	1	0.6	42.3	297.12	1	0.6	68.0	646.11	1	0.6	93.1
-4.17	1	0.6	17.1	157.31	1	0.6	42.9	301.29	1	0.6	68.6	676.91	1	0.6	93.7
0	1	0.6	17.7	159.13	1	0.6	43.4	302.06	1	0.6	69.1	688.45	1	0.6	94.3
0.62	1	0.6	18.3	161.25	1	0.6	44.0	303.19	1	0.6	69.7	702.97	1	0.6	94.9
17.13	1	0.6	18.9	164.34	1	0.6	44.6	306.69	1	0.6	70.3	708.09	1	0.6	95.4
20.49	1	0.6	19.4	168.95	1	0.6	45.1	312.02	1	0.6	70.9	745.38	1	0.6	96.0
24.59	1	0.6	20.0	170.19	1	0.6	45.7	314.93	1	0.6	71.4	810.37	1	0.6	96.6
26.87	1	0.6	20.6	172.25	1	0.6	46.3	315.82	1	0.6	72.0	854.89	1	0.6	97.1
29.69	2	1.1	21.7	172.97	1	0.6	46.9	316.31	1	0.6	72.6	894.05	1	0.6	97.7
32.11	1	0.6	22.3	173.18	1	0.6	47.4	320.78	1	0.6	73.1	903.57	1	0.6	98.3
35.24	1	0.6	22.9	177.8	1	0.6	48.0	327.99	1	0.6	73.7	1136.12	1	0.6	98.9
41.08	1	0.6	23.4	180.03	1	0.6	48.6	331.75	1	0.6	74.3	1213.01	1	0.6	99.4
43.5	1	0.6	24.0	186.34	1	0.6	49.1	341.82	1	0.6	74.9	1486.96	1	0.6	100.0
44.31	1	0.6	24.6	194.12	1	0.6	49.7	345.75	1	0.6	75.4				
45.32	1	0.6	25.1	194.76	1	0.6	50.3	347.16	1	0.6	76.0				
48.26	1	0.6	25.7	198.02	1	0.6	50.9	348.15	1	0.6	76.6				

UNIVARIATE

VARIABLE=ZN1

MOMENTS

N	175	SUM WGTS	175
MEAN	-0.571886	SUM	-100.08
STD DEV	0.777656	VARIANCE	0.604749
SKEWNESS	-1.37783	KURTOSIS	5.39103
USS	162.461	CSS	105.226
CV	-135.981	STD MEAN	0.0587853
T:MEAN=0	-9.72839	PROB>|T|	0.0001
SGN RANK	-5776.5	PROB>|S|	0.0001
NUM ^= 0	174		

QUANTILES(DEF=4)

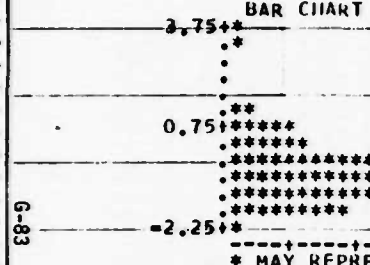
100% MAX	3.47	99%	3.08999
75% Q3	-0.22	95%	0.652
50% MED	-0.61	90%	0.4
25% Q1	-1.04	10%	-1.506
0% MIN	-2.09	5%	-1.722
		1%	-2.0064
RANGE	5.56		
Q3-Q1	0.82		
MODE	-0.88		

EXTREMES

LOWEST	HIGHEST
-2.09	1.04
-1.98	1.08
-1.92	1.09
-1.92	2.97
-1.85	3.47

MISSING VALUE
COUNT 2
% COUNT/NOBS 1.13

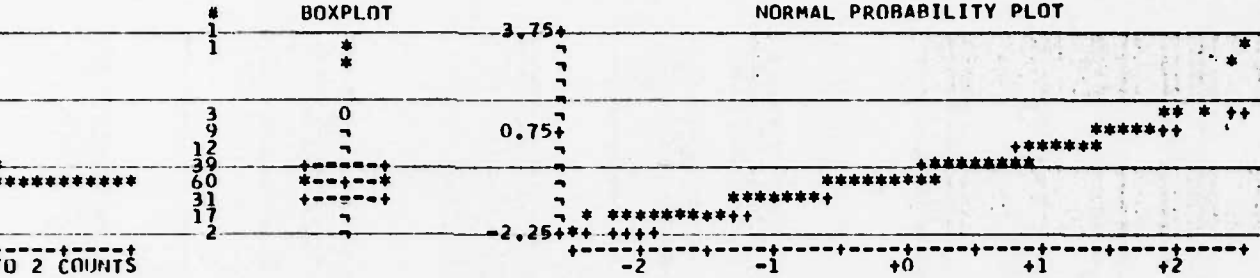
BAR CHART



* MAY REPRESENT UP TO 2 COUNTS

BOXPLOT

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-2.09	1	0.6	0.6	-1.38	1	0.6	14.3	-1	2	1.1	28.0	-0.74	1	0.6	42.9
-1.98	1	0.6	1.1	-1.34	2	1.1	15.4	-0.98	1	0.6	28.6	-0.72	1	0.6	43.4
-1.92	2	1.1	2.3	-1.27	1	0.6	16.0	-0.95	1	0.6	29.1	-0.71	2	1.1	44.6
-1.85	1	0.6	2.9	-1.24	1	0.6	16.6	-0.94	1	0.6	29.7	-0.7	2	1.1	45.7
-1.78	1	0.6	3.4	-1.23	1	0.6	17.1	-0.91	1	0.6	30.3	-0.67	2	1.1	46.9
-1.73	2	1.1	4.6	-1.21	2	1.1	18.3	-0.89	1	0.6	30.9	-0.64	1	0.6	47.4
-1.72	1	0.6	5.1	-1.2	1	0.6	18.9	-0.88	4	2.3	33.1	-0.63	1	0.6	48.0
-1.7	1	0.6	5.7	-1.19	1	0.6	19.4	-0.87	2	1.1	34.3	-0.62	2	1.1	49.1
-1.68	3	1.7	7.4	-1.16	1	0.6	20.0	-0.86	1	0.6	34.9	-0.61	4	2.3	51.4
-1.61	1	0.6	8.0	-1.15	2	1.1	21.1	-0.84	1	0.6	35.4	-0.6	1	0.6	52.0
-1.58	1	0.6	8.6	-1.13	1	0.6	21.7	-0.82	2	1.1	36.6	-0.59	1	0.6	52.6
-1.54	1	0.6	9.1	-1.11	1	0.6	22.3	-0.81	1	0.6	37.1	-0.58	1	0.6	53.1
-1.53	1	0.6	9.7	-1.09	1	0.6	22.9	-0.8	3	1.7	38.9	-0.57	2	1.1	54.3
-1.49	1	0.6	10.3	-1.08	2	1.1	24.0	-0.79	3	1.7	40.6	-0.56	1	0.6	54.9
-1.46	1	0.6	10.9	-1.06	1	0.6	24.6	-0.77	1	0.6	41.1	-0.55	2	1.1	56.0
-1.44	3	1.7	12.6	-1.04	2	1.1	25.7	-0.76	1	0.6	41.7	-0.54	1	0.6	56.6
-1.39	2	1.1	13.7	-1.03	2	1.1	26.9	-0.75	1	0.6	42.3	-0.52	3	1.7	58.3

UNIVARIATE

VARIABLE=ZN1

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-0.5	1	0.6	58.9	-0.27	2	1.1	72.0	-0.02	1	0.6	81.7	0.43	1	0.6	92.0
-0.49	3	1.7	60.6	-0.26	1	0.6	72.6	-0.01	1	0.6	82.3	0.51	2	1.1	93.1
-0.48	1	0.6	61.1	-0.25	3	1.7	74.3	0	1	0.6	82.9	0.57	1	0.6	93.7
-0.47	1	0.6	61.7	-0.24	1	0.6	74.9	0.01	1	0.6	83.4	0.61	1	0.6	94.3
-0.46	2	1.1	62.9	-0.22	1	0.6	75.4	0.02	3	1.7	85.1	0.62	1	0.6	94.9
-0.45	1	0.6	63.4	-0.21	1	0.6	76.0	0.06	1	0.6	85.7	0.63	1	0.6	95.4
-0.44	2	1.1	64.6	-0.2	1	0.6	76.6	0.09	1	0.6	86.3	0.74	1	0.6	96.0
-0.41	1	0.6	65.1	-0.19	1	0.6	77.1	0.11	1	0.6	86.9	0.76	1	0.6	96.6
-0.38	2	1.1	66.3	-0.17	1	0.6	77.7	0.21	1	0.6	87.4	0.89	1	0.6	97.1
-0.36	1	0.6	66.9	-0.11	1	0.6	78.3	0.24	2	1.1	88.6	1.04	1	0.6	97.7
-0.35	1	0.6	67.4	-0.09	1	0.6	78.9	0.29	1	0.6	89.1	1.08	1	0.6	98.3
-0.3	1	0.6	68.0	-0.08	1	0.6	79.4	0.35	1	0.6	89.7	1.09	1	0.6	98.9
-0.29	3	1.7	69.7	-0.05	1	0.6	80.0	0.4	2	1.1	90.9	2.97	1	0.6	99.4
-0.28	2	1.1	70.9	-0.03	2	1.1	81.1	0.42	1	0.6	91.4	3.47	1	0.6	100.0

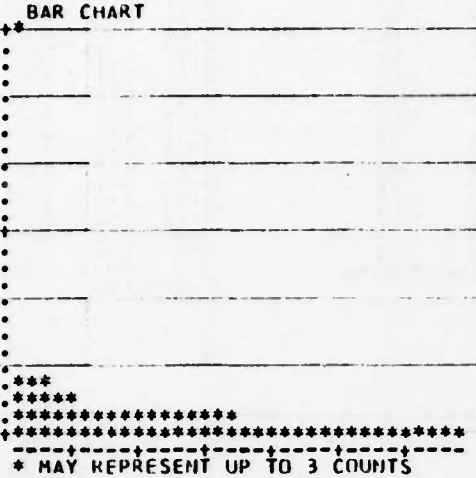
UNIVARIATE

VARIABLE=HRS

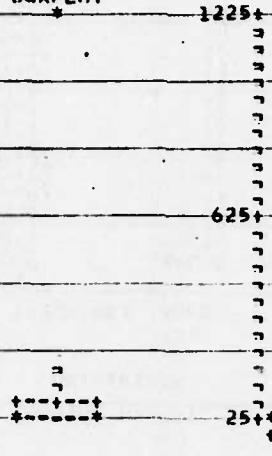
MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	173	SUM WGTS	173	100% MAX	1235	99%	450.578	LOWEST	HIGHEST
MEAN	53.5896	SUM	9271	75% Q3	78	95%	144.9	0	172
STD DEV	100.57	VARIANCE	10114.3	50% MED	32	90%	111	1	175
SKEWNESS	9.58145	KURTOSIS	111.702	25% Q1	10.5	10%	2	1	175
USS	2236487	CSS	1739658	0% MIN	0	5%	1	1	175
CV	187.667	STD MEAN	7.64618			1%	0.739999	1	1235
T:MEAN=0	7.00867	PROB>|T|	0.0001	RANGE	1235				
SGN RANK	7439	PROB>|S|	0.0001	Q3-Q1	67.5				
NUM ^= 0	172			MODE	1				

MISSING VALUE
COUNT 4
% COUNT/NOBS 2.26

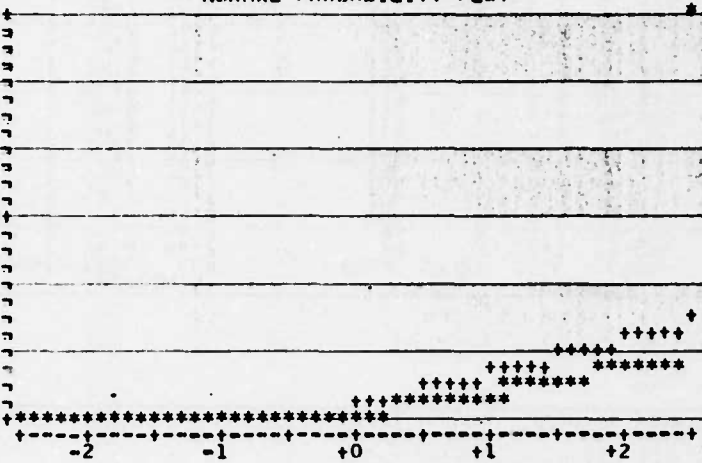
BAR CHART



\# BOXPLOT



NORMAL PROBABILITY PLOT



F

UNIVARIATE

VARIABLE=HRS

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	1	0.6	0.6	25	3	1.7	45.7	60	1	0.6	64.2	90	3	1.7	85.0
1	10	5.8	6.4	27	1	0.6	46.2	61	1	0.6	64.7	94	3	1.7	86.7
2	9	5.2	11.6	29	1	0.6	46.8	62	1	0.6	65.3	100	1	0.6	87.3
3	5	2.9	14.5	30	2	1.2	48.0	63	4	2.3	67.6	101	1	0.6	87.9
4	3	1.7	16.2	31	2	1.2	49.1	64	1	0.6	68.2	104	1	0.6	88.4
5	4	2.3	18.5	32	2	1.2	50.3	66	2	1.2	69.4	106	1	0.6	89.0
6	1	0.6	19.1	35	1	0.6	50.9	68	2	1.2	70.5	107	1	0.6	89.6
8	4	2.3	21.4	36	1	0.6	51.4	72	1	0.6	71.1	108	1	0.6	90.2
9	2	1.2	22.5	38	2	1.2	52.6	73	1	0.6	71.7	113	1	0.6	90.8
10	4	2.3	24.9	39	2	1.2	53.8	75	1	0.6	72.3	117	1	0.6	91.3
11	2	1.2	26.0	40	3	1.7	55.5	76	1	0.6	72.8	120	1	0.6	91.9
12	3	1.7	27.7	42	1	0.6	56.1	77	1	0.6	73.4	124	2	1.2	93.1
13	3	1.7	29.5	43	1	0.6	56.6	78	4	2.3	75.7	126	1	0.6	93.6
14	8	4.6	34.1	45	3	1.7	58.4	79	1	0.6	76.3	134	2	1.2	94.8
15	3	1.7	35.8	46	1	0.6	59.0	80	4	2.3	78.6	144	1	0.6	95.4
16	3	1.7	37.6	47	2	1.2	60.1	82	2	1.2	79.8	147	1	0.6	96.0
17	3	1.7	39.3	53	1	0.6	60.7	83	1	0.6	80.3	160	2	1.2	97.1
18	5	2.9	42.2	55	1	0.6	61.3	84	1	0.6	80.9	172	1	0.6	97.7
19	2	1.2	43.4	57	1	0.6	61.8	85	3	1.7	82.7	175	3	1.7	99.4
20	1	0.6	43.9	58	3	1.7	63.6	88	1	0.6	83.2	1235	1	0.6	100.0

UNIVARIATE

VARIABLE=FE

MOMENTS

N	177	SUM WGTS	177
MEAN	133.661	SUM	23658
STD DEV	104.561	VARIANCE	10933.1
SKEWNESS	4.50661	KURTOSIS	31.5436
USS	5086374	CSS	1924222
CV	78.2288	STD MEAN	7.85931
T:MEAN=0	17.0067	PROB>|T|	0.0001
SGN RANK	7876.5	PROB>|S|	0.0001
NUM ^= 0	177		

QUANTILES(DEF=4)

100% MAX	959	99%	856.038
75% Q3	181	95%	251.1
50% MED	121	90%	208.4
25% Q1	73.5	10%	39.8
0% MIN	4	5%	26.7
		1%	12.58
RANGE	955		
Q3-Q1	107.5		
MODE	90		

EXTREMES

LOWEST	HIGHEST
4	281
15	299
18	325
19	827
22	959

```
  STEM LEAF                            #  BOXPLOT          NORMAL PROBABILITY PLOT
     9 6                               1     *          975+                     *
     9                                                    |                      |
     8                                                    |                      |
     8 3                               1     *           |                      *
     7                                                    |                      |
     7                                                    |                      |
     6                                                    |                      |
     6                                                    |                      |
     5                                                    |                      |
     5                                                    |                      |
     4                                                    |                      |
     4                                                    |                      |
     3                                                    |                    +++
     3 02                              2     |           |                  +++++ *
     2 555788                          6     +-+         |                ++++ ++++
     2 000000000001111222334          21     | |         |              ++++++++++
     1 555555566666666777788888999999999 34   +-+-+       |            +++++++++
     1 000000000000111111112222222222333333344444444444 47  *--+--*    |         *******
     0 555555666666667777777778888888899999999999999 44     +-+-+       |       *********
     0 01222222333333444444           21     | |         25+** * ***********+
  ---+----+----+----+----+----+----+----+----+--          +----+----+----+----+----+----+----+----+----+
  MULTIPLY STEM.LEAF BY 10**+02                          -2   -1   +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
4	1	0.6	0.6	41	1	0.6	10.7	67	1	0.6	20.9	86	3	1.7	31.1
15	1	0.6	1.1	43	1	0.6	11.3	68	1	0.6	21.5	87	1	0.6	31.6
18	1	0.6	1.7	44	1	0.6	11.9	69	1	0.6	22.0	88	1	0.6	32.2
19	1	0.6	2.3	47	1	0.6	12.4	70	2	1.1	23.2	89	1	0.6	32.8
22	1	0.6	2.8	49	1	0.6	13.0	71	1	0.6	23.7	90	4	2.3	35.0
23	1	0.6	3.4	50	2	1.1	14.1	72	1	0.6	24.3	92	1	0.6	35.6
24	2	1.1	4.5	51	1	0.6	14.7	73	1	0.6	24.9	93	1	0.6	36.2
27	1	0.6	5.1	54	1	0.6	15.3	74	1	0.6	25.4	94	1	0.6	36.7
29	3	1.7	6.8	58	1	0.6	15.8	76	1	0.6	26.0	96	1	0.6	37.3
33	1	0.6	7.3	59	3	1.7	17.5	78	1	0.6	26.6	99	1	0.6	37.9
35	1	0.6	7.9	63	1	0.6	18.1	79	1	0.6	27.1	100	2	1.1	39.0
37	2	1.1	9.0	64	2	1.1	19.2	81	1	0.6	27.7	101	2	1.1	40.1
39	1	0.6	9.6	65	1	0.6	19.8	84	2	1.1	28.8	103	2	1.1	41.2
40	1	0.6	10.2	66	1	0.6	20.3	85	1	0.6	29.4	104	1	0.6	41.8

UNIVARIATE

VARIABLE=FE

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
105	3	1.7	43.5	139	2	1.1	60.5	181	3	1.7	76.3	217	2	1.1	92.1
106	2	1.1	44.6	140	1	0.6	61.0	182	1	0.6	76.8	221	1	0.6	92.7
110	3	1.7	46.3	142	2	1.1	62.1	185	1	0.6	77.4	226	1	0.6	93.2
112	1	0.6	46.9	143	2	1.1	63.3	186	1	0.6	78.0	228	1	0.6	93.8
114	1	0.6	47.5	146	1	0.6	63.8	187	3	1.7	79.7	244	1	0.6	94.4
115	1	0.6	48.0	151	2	1.1	65.0	189	1	0.6	80.2	249	1	0.6	94.9
116	1	0.6	48.6	153	2	1.1	66.1	190	1	0.6	80.8	251	1	0.6	95.5
117	2	1.1	49.7	155	2	1.1	67.2	191	2	1.1	81.9	252	1	0.6	96.0
121	1	0.6	50.3	156	1	0.6	67.8	193	1	0.6	82.5	275	1	0.6	96.6
122	1	0.6	50.8	157	1	0.6	68.4	196	2	1.1	83.6	277	1	0.6	97.1
124	2	1.1	52.0	159	1	0.6	68.9	197	1	0.6	84.2	281	1	0.6	97.7
125	3	1.7	53.7	161	3	1.7	70.6	199	3	1.7	85.9	299	1	0.6	98.3
126	1	0.6	54.2	162	1	0.6	71.2	200	3	1.7	87.6	325	1	0.6	98.9
129	1	0.6	54.8	164	1	0.6	71.8	201	1	0.6	88.1	827	1	0.6	99.4
131	1	0.6	55.4	165	1	0.6	72.3	205	1	0.6	88.7	959	1	0.6	100.0
133	2	1.1	56.5	171	2	1.1	73.4	206	1	0.6	89.3				
135	2	1.1	57.6	172	1	0.6	74.0	207	2	1.1	90.4				
137	3	1.7	59.3	175	1	0.6	74.6	214	1	0.6	91.0				

UNIVARIATE

VARIABLE=VIS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	175	SUM WGTS	175	100% MAX	231	99%	227.96	LOWEST	HIGHEST
MEAN	156.64	SUM	27412	75% Q3	179	95%	206.2	53	220
STD DEV	33.8092	VARIANCE	1143.06	50% MED	161	90%	192.2	58	220
SKEWNESS	-0.666112	KURTOSIS	0.561023	25% Q1	140	10%	113	71	220
USS	4492708	CSS	198892	0% MIN	53	5%	86.6	74	227
CV	21.584	STD MEAN	2.55573			1%	56.8	76	231
T:MEAN=0	61.2897	PROB>|T|	0.0001	RANGE	178				
SGN RANK	7700	PROB>|S|	0.0001	Q3-Q1	39				
NUM ^= 0	175			MODE	145				

MISSING VALUE ?
COUNT 2
% COUNT/NOBS 1.13

STEM	LEAF	#	BOXPLOT
23	1	1	
22	0007	4	
21	06	2	
20	15567	5	
19	0000145678	10	
18	0011233444556777788889	21	
17	0112334445555666788899	21	+-----+
16	0001122333334445556667778999 9	28	*-----*
15	001223334555566678999 9	22	+---+
14	013345555578888899	18	+-----+
13	03345568	8	
12	0114456778999	13	
11	055678	6	
10	004	3	
9	12	2	
8	045788	6	0
7	146	3	0
6			
5	38	2	0

MULTIPLY STEM.LEAF BY 10**+01

NORMAL PROBABILITY PLOT

235+
145+
55+**
+----+----+----+----+----+----+----+----+----+----+
-2 -1 +0 +1 +2

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
53	1	0.6	0.6	92	1	0.6	7.4	125	1	0.6	16.0	140	1	0.6	25.1
58	1	0.6	1.1	100	2	1.1	8.6	126	1	0.6	16.6	141	1	0.6	25.7
71	1	0.6	1.7	104	1	0.6	9.1	127	2	1.1	17.7	143	2	1.1	26.9
74	1	0.6	2.3	110	1	0.6	9.7	128	1	0.6	18.3	144	1	0.6	27.4
76	1	0.6	2.9	115	2	1.1	10.9	129	3	1.7	20.0	145	5	2.9	30.3
80	1	0.6	3.4	116	1	0.6	11.4	130	1	0.6	20.6	147	1	0.6	30.9
84	1	0.6	4.0	117	1	0.6	12.0	133	2	1.1	21.7	148	5	2.9	33.7
85	1	0.6	4.6	118	1	0.6	12.6	134	1	0.6	22.3	149	2	1.1	34.9
87	1	0.6	5.1	120	1	0.6	13.1	135	2	1.1	23.4	150	2	1.1	36.0
88	2	1.1	6.3	121	2	1.1	14.3	136	1	0.6	24.0	151	1	0.6	36.6
91	1	0.6	6.9	124	2	1.1	15.4	138	1	0.6	24.6	152	2	1.1	37.7

UNIVARIATE

VARIABLE=VIS

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
153	3	1.7	39.4	167	3	1.7	60.6	181	2	1.1	77.7	197	1	0.6	92.6
154	1	0.6	40.0	168	1	0.6	61.1	182	1	0.6	78.3	198	1	0.6	93.1
155	4	2.3	42.3	169	4	2.3	63.4	183	2	1.1	79.4	201	1	0.6	93.7
156	3	1.7	44.0	170	1	0.6	64.0	184	3	1.7	81.1	205	2	1.1	94.9
157	1	0.6	44.6	171	2	1.1	65.1	185	2	1.1	82.3	206	1	0.6	95.4
158	1	0.6	45.1	172	1	0.6	65.7	186	1	0.6	82.9	207	1	0.6	96.0
159	4	2.3	47.4	173	2	1.1	66.9	187	4	2.3	85.1	210	1	0.6	96.6
160	3	1.7	49.1	174	3	1.7	68.6	188	3	1.7	86.9	216	1	0.6	97.1
161	2	1.1	50.3	175	4	2.3	70.9	189	1	0.6	87.4	220	3	1.7	98.9
162	2	1.1	51.4	176	2	1.1	72.0	190	4	2.3	89.7	227	1	0.6	99.4
163	5	2.9	54.3	177	1	0.6	72.6	191	1	0.6	90.3	231	1	0.6	100.0
164	2	1.1	55.4	178	3	1.7	74.3	194	1	0.6	90.9				
165	3	1.7	57.1	179	2	1.1	75.4	195	1	0.6	91.4				
166	3	1.7	58.9	180	2	1.1	76.6	196	1	0.6	92.0				

UNIVARIATE

VARIABLE=TAN

MOMENTS

N	177	SUM WGTS	177
MEAN	2.45791	SUM	435.05
STD DEV	0.444906	VARIANCE	0.197942
SKEWNESS	0.755842	KURTOSIS	1.91104
USS	1104.15	CSS	34.8377
CV	18.101	STD MEAN	0.0334412
T:MEAN=0	73.4994	PROB>|T|	0.0001
SGN RANK	7876.5	PROB>|S|	0.0001
NUM ^= 0	177		

QUANTILES(DEF=4)

100% MAX	4.29	99%	4.00139
75% Q3	2.7	95%	3.161
50% MED	2.47	90%	2.952
25% Q1	2.16	10%	1.904
0% MIN	1.47	5%	1.749
		1%	1.5402
RANGE	2.82		
Q3-Q1	0.54		
MODE	2.5		

EXTREMES

LOWEST	HIGHEST
1.47	3.61
1.56	3.65
1.58	3.78
1.63	3.92
1.68	4.29

```
STEM LEAF                            #    BOXPLOT          NORMAL PROBABILITY PLOT
  42 9                               1       0      4.3+                        *
  40                                 0       |         |                       |
  38 2                               1       0         |                      *
  36 158                             3       0         |                   ** * +
  34 25                              2       0         |                  **+++ +
  32 6                               1       |         |                 +++*
  30 1265                            4       |         |               +++**
  28 12346677789011566779           20       |      2.9+             +++****
  26 00112222334447889990001555577777 32      +------+          ******
  24 11223357777990000011112346778899 33      *--+--*        ******
  22 11234445689900111122244455677    29      |     |      *****
  20 02345578900123444566778999       27      +-----+    ******
  18 1255788145667 9                  14      |        *****+
  16 3812459                           7      |     *****+
  14 768                               3      |  1.5+** * +
     ----+----+----+----+----+----+---          +----+----+----+----+----+----+----+----+----+----+
     MULTIPLY STEM.LEAF BY 10**-01                -2   -1    +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
1.47	1	0.6	0.6	1.97	1	0.6	13.0	2.19	3	1.7	28.8	2.45	1	0.6	49.2
1.56	1	0.6	1.1	1.99	1	0.6	13.6	2.21	2	1.1	29.9	2.47	4	2.3	51.4
1.58	1	0.6	1.7	2	1	0.6	14.1	2.22	1	0.6	30.5	2.49	2	1.1	52.5
1.63	1	0.6	2.3	2.02	1	0.6	14.7	2.23	1	0.6	31.1	2.5	5	2.8	55.4
1.68	1	0.6	2.8	2.03	1	0.6	15.3	2.24	3	1.7	32.8	2.51	4	2.3	57.6
1.71	1	0.6	3.4	2.04	1	0.6	15.8	2.25	1	0.6	33.3	2.52	1	0.6	58.2
1.72	1	0.6	4.0	2.05	2	1.1	16.9	2.26	1	0.6	33.9	2.53	1	0.6	58.8
1.74	1	0.6	4.5	2.07	1	0.6	17.5	2.28	1	0.6	34.5	2.54	1	0.6	59.3
1.75	1	0.6	5.1	2.08	1	0.6	18.1	2.29	2	1.1	35.6	2.56	1	0.6	59.9
1.79	1	0.6	5.6	2.09	1	0.6	18.6	2.3	2	1.1	36.7	2.57	2	1.1	61.0
1.81	1	0.6	6.2	2.1	2	1.1	19.8	2.31	4	2.3	39.0	2.58	2	1.1	62.1
1.82	1	0.6	6.8	2.11	1	0.6	20.3	2.32	3	1.7	40.7	2.59	3	1.7	63.8
1.85	2	1.1	7.9	2.12	1	0.6	20.9	2.34	3	1.7	42.4	2.6	2	1.1	65.0
1.87	1	0.6	8.5	2.13	1	0.6	21.5	2.35	2	1.1	43.5	2.61	2	1.1	66.1
1.88	2	1.1	9.6	2.14	3	1.7	23.2	2.36	1	0.6	44.1	2.62	4	2.3	68.4
1.91	1	0.6	10.2	2.15	1	0.6	23.7	2.37	2	1.1	45.2	2.63	2	1.1	69.5
1.94	1	0.6	10.7	2.16	3	1.7	25.4	2.41	2	1.1	46.3	2.64	3	1.7	71.2
1.95	1	0.6	11.3	2.17	2	1.1	26.6	2.42	2	1.1	47.5	2.67	1	0.6	71.8
1.96	2	1.1	12.4	2.18	1	0.6	27.1	2.43	2	1.1	48.6	2.68	2	1.1	72.9

UNIVARIATE

VARIABLE=TAN

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
2.69	3	1.7	74.6	2.84	1	0.6	84.2	2.96	2	1.1	91.5	3.42	1	0.6	96.6
2.7	3	1.7	76.3	2.86	2	1.1	85.3	2.97	2	1.1	92.7	3.55	1	0.6	97.2
2.71	1	0.6	76.8	2.87	3	1.7	87.0	2.99	1	0.6	93.2	3.61	1	0.6	97.7
2.75	4	2.3	79.1	2.88	1	0.6	87.6	3.01	1	0.6	93.8	3.65	1	0.6	98.3
2.77	5	2.8	81.9	2.89	1	0.6	88.1	3.02	1	0.6	94.4	3.78	1	0.6	98.9
2.81	1	0.6	82.5	2.9	1	0.6	88.7	3.06	1	0.6	94.9	3.92	1	0.6	99.4
2.82	1	0.6	83.1	2.91	2	1.1	89.8	3.15	1	0.6	95.5	4.29	1	0.6	100.0
2.83	1	0.6	83.6	2.95	1	0.6	90.4	3.26	1	0.6	96.0				

UNIVARIATE

VARIABLE=TS

MOMENTS

N	177	SUM WGTS	177
MEAN	3.86893	SUM	684.8
STD DEV	2.61169	VARIANCE	6.8209
SKEWNESS	0.652296	KURTOSIS	-0.0682193
USS	3849.92	CSS	1200.48
CV	67.5042	STD MEAN	0.196306
T:MEAN=0	19.7086	PROB>|T|	0.0001
SGN RANK	7876.5	PROB>|S|	0.0001
NUM ^= 0	177		

QUANTILES(DEF=4)

100% MAX	12	99%	11.064
75% Q3	5.4	95%	8.4
50% MED	4	90%	8
25% Q1	1.6	10%	0.4
0% MIN	0.4	5%	0.4
		1%	0.4
RANGE	11.6		
Q3-Q1	3.8		
MODE	4		

EXTREMES

LOWEST	HIGHEST
0.4	10
0.4	10.4
0.4	10.8
0.4	10.8
0.4	12

```
   STEM LEAF                            #  BOXPLOT
     12 0                               1     0          12.25+
     11                                                      |
     11                                                      |
     10 88                              2     |            |
     10 04                              2     |            |
      9                                       |            |
      9                                       |            |
      8 88                              2     |            |
      8 0000000004444                   13    |            |
      7 6                               1     |            |
      7 22222                           5     |            |
      6 8888                            4     |            |
      6 0000000000444                   14    |            6.25+
      5                                       |            |
      5                                 .     +------+     |
      4 88888888888                     11    |      |     |
      4 00000000000000000000000000000004444444  39    +------+
      3 66666                           5     |  +   |     |
      3 2222222222                      10    |      |     |
      2 88888888                        8     |      |     |
      2 0000000444                      10    |      |     |
      1 6666666666                      10    +------+     |
      1 2222222222222222                16    |            |
      0 8888                            4     |            |
      0 44444444444444444444            20    |            0.25+
        ----+----+----+----+----+----+----+----+
```

NORMAL PROBABILITY PLOT

```
                                                                    *
                                                                  ***
                                                               ** ++
                                                             ++
                                                           ++
                                                         ++
                                                      ******
                                                    * ++
                                                  +++
                                                ++
                                              ****
                                            ++
                                          ++++
                                        ++
                                      *******
                                    ++
                                  **
                                +++
                              ****
                            +++
                          ****
                        ++
                  ***************
+----+----+----+----+----+----+----+----+----+
-2        -1        +0        +1        +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0.4	20	11.3	11.3
0.8	4	2.3	13.6
1.2	16	9.0	22.6
1.6	10	5.6	28.2
2	7	4.0	32.2
2.4	3	1.7	33.9
2.8	8	4.5	38.4
3.2	10	5.6	44.1
3.6	5	2.8	46.9
4	32	18.1	65.0
4.4	7	4.0	68.9
4.8	11	6.2	75.1
6	11	6.2	81.4
6.4	3	1.7	83.1
6.8	4	2.3	85.3
7.2	5	2.8	88.1
7.6	1	0.6	88.7
8	9	5.1	93.8
8.4	4	2.3	96.0
8.8	2	1.1	97.2
10	1	0.6	97.7
10.4	1	0.6	98.3
10.8	2	1.1	99.4
12	1	0.6	100.0

UNIVARIATE

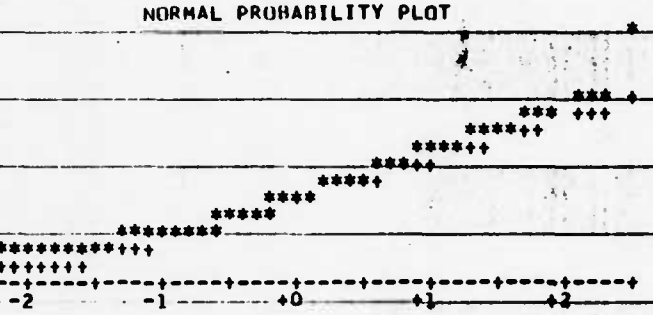
VARIABLE=COB

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
								LOWEST	HIGHEST
N	139	SUM WGTS	139	100% MAX	16.1	99%	14.46	2.5	11
MEAN	6.54964	SUM	910.4	75% Q3	8	95%	11	3	11.5
STD DEV	2.35973	VARIANCE	5.56832	50% MED	6.5	90%	9.99999	3	12
SKEWNESS	0.761143	KURTOSIS	0.853866	25% Q1	4.5	10%	4	3	12
USS	6731.22	CSS	768.427	0% MIN	2.5	5%	3.5	3	16.1
CV	36.0284	STD MEAN	0.200149			1%	2.7		
T:MEAN=0	32.7237	PROB>|T|	0.0001	RANGE	13.6				
SGN RANK	4865	PROB>|S|	0.0001	Q3-Q1	3.5				
NUM ^= 0	139			MODE	4				

MISSING VALUE
COUNT 38
% COUNT/NOBS 21.47

STEM	LEAF	#	BOXPLOT
14	1	1	0
13			
12	00	2	
11	0005	4	
10	0000005	7	
9	00000000025555	12	
8	000000001125579	14	+-----+
7	00000000000000001345555	21	
6	00000000025558999999	20	*--+--*
5	00000000000000555555	20	
4	000000000000000555555555555	26	+-----+
3	00005555559	11	
2	5	1	

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
2.5	1	0.7	0.7	6.2	1	0.7	48.9	8	7	5.0	76.3	10	6	4.3	94.2
3	4	2.9	3.6	6.5	3	2.2	51.1	8.1	2	1.4	77.7	10.5	1	0.7	95.0
3.5	6	4.3	7.9	6.8	1	0.7	51.8	8.2	1	0.7	78.4	11	3	2.2	97.1
3.9	1	0.7	8.6	6.9	6	4.3	56.1	8.5	2	1.4	79.9	11.5	1	0.7	97.8
4	14	10.1	18.7	7	14	10.1	66.2	8.7	1	0.7	80.6	12	2	1.4	99.3
4.5	12	8.6	27.3	7.1	1	0.7	66.9	8.9	1	0.7	81.3	16.1	1	0.7	100.0
5	14	10.1	37.4	7.3	1	0.7	67.6	9	7	5.0	86.3				
5.5	6	4.3	41.7	7.4	1	0.7	68.3	9.2	1	0.7	87.1				
6	9	6.5	48.2	7.5	4	2.9	71.2	9.5	4	2.9	89.9				

F

APPENDIX H
CONTINENTAL DIESEL ENGINE AVDS-1790
6TH BATTALION, 32ND ARMORED
4TH INFANTRY DIVISION, FT. CARSON, CO.

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* These models were all developed early in the study and are based on a slightly different data collection methodology than that outlined in Table 1.

ENGINE AVDS-1790 20117 MONDAY, JUNE 4, 1984 1

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FDI3	ZN1	HRS	FE	VIS	TAN	TS	COR	GC
1	48.58	.	.	.	.	.	.	.	.	.	123	211	2.53	2.8	11.5	.
2	11.43	530.25	236.27	319.46	1379.66	2.40	0.00	34.88	-0.51	.	95	264	2.58	2.0	11.7	.
3	10.77	638.96	251.56	494.62	1511.15	3.66	4.30	121.00	0.16	.	245	256	2.52	28.0	11.5	.
4	23.11	1016.85	331.30	747.78	2032.05	1.56	7.45	-17.90	-0.40	.	238	244	2.89	4.0	8.0	.
5	24.41	1098.82	228.01	771.52	2316.46	-0.36	0.00	103.66	0.30	.	293	229	2.89	4.0	6.3	.
6	25.50	1673.00	208.34	925.03	2738.20	0.20	0.00	356.17	1.08	.	275	213	3.16	3.2	5.0	.
7	8.91	519.70	0.00	258.60	717.85	-0.40	0.00	69.63	0.25	163	149	174	2.32	0.8	6.0	.
8	-0.98	-2022.36	-66.43	-143.87	-330.90	4.61	0.00	127.54	-1.14	47	-9	335	2.78	0.8	8.0	.
9	16.28	-253.22	176.45	426.96	1071.18	2.46	4.94	603.29	-0.99	.	81	96	2.54	2.8	13.0	20
10	11.32	502.67	231.02	481.01	1529.90	1.50	0.00	121.80	0.28	.	73	93	2.82	4.0	13.9	20
11	24.65	594.85	219.87	718.26	1795.99	1.13	7.66	589.79	-1.32	.	129	73	2.98	4.8	15.8	25
12	25.64	2375.86	375.35	1086.57	2595.87	6.34	14.30	959.52	-0.46	.	113	71	2.77	5.6	16.3	24
13	-0.85	2248.68	-44.75	3.43	-11.28	8.01	0.00	295.07	-0.10	.	15	216	2.26	0.8	13.0	.
14	11.32	502.67	231.02	481.01	1529.90	1.50	0.00	121.80	0.28	.	237	146	3.04	4.8	12.0	15
15	52.63	1503.37	0.72	429.66	739.53	12.25	5.87	447.67	-0.73	.	581	152	2.90	4.0	8.0	.
16	53.75	-588.02	-44.77	295.11	387.21	-4.31	0.00	120.42	-0.41	.	541	152	2.82	4.8	6.8	.
17	17.20	1528.91	-75.26	27.82	90.82	0.93	0.00	214.01	0.07	.	181	275	2.53	3.2	8.5	.
18	3.68	1752.90	-120.44	-106.64	-55.13	7.73	0.00	417.40	-0.41	.	76	362	2.38	2.0	12.8	.
19	33.20	808.40	394.09	1098.14	3165.62	0.31	11.54	658.42	-0.53	.	407	296	3.68	4.4	10.0	.
20	31.05	2137.38	386.93	1278.23	3258.74	2.51	14.81	736.82	0.29	.	529	276	3.29	4.4	10.0	.
21	32.88	450.22	437.54	1068.90	3163.46	1.04	12.40	500.43	-1.07	.	489	287	3.49	4.8	10.9	.
22	27.28	1993.31	312.65	1219.61	3552.27	0.77	0.00	366.62	0.99	.	657	291	3.34	4.4	6.1	.
23	-0.95	1201.88	-59.35	-287.09	148.14	7.88	0.00	-92.16	-1.37	.	319	57	1.39	0.8	19.0	1
24	68.85	3170.59	475.08	1002.00	3185.09	9.03	0.00	865.33	2.29	.	337	344	4.33	8.0	5.0	.
25	74.12	4763.05	537.48	943.35	3262.64	8.66	0.00	1176.03	3.05	.	867	372	4.60	0.8	7.5	.
26	11.29	.	.	.	.	.	.	.	.	.	107	408	2.78	12.0	8.0	.
27	-0.01	1808.89	-78.40	33.20	512.13	4.72	0.00	694.45	0.08	.	58	334	2.46	2.0	10.1	.
28	4.68	3031.31	-42.57	223.28	902.45	7.51	2.77	735.68	0.84	.	85	190	2.18	4.0	.	.
29	8.06	2566.72	86.03	195.89	985.08	4.08	1.67	277.70	0.86	.	113	176	2.34	2.0	.	.
30	26.13	3983.45	51.85	649.73	1256.13	2.51	0.00	529.32	1.63	.	75	390	2.82	3.2	7.5	.
31	4.98	943.63	373.29	343.28	1521.28	0.72	0.00	-105.91	-1.42	.	34	394	2.95	1.2	3.0	.
32	7.35	1276.14	258.67	371.39	1918.31	-0.79	0.00	21.08	0.43	.	37	380	2.95	1.2	4.0	.
33	22.15	1911.04	298.19	791.90	3092.02	-0.89	0.00	-145.13	-1.63	.	427	383	2.84	2.0	4.0	.
34	2.14	2631.11	-56.77	19.89	290.09	8.40	0.00	531.10	0.24	.	25	400	2.20	4.0	10.0	.
35	24.40	-369.88	27.69	348.96	919.38	-1.47	2.37	196.96	-0.73	.	289	211	2.67	3.2	10.0	.
36	5.21	896.33	-13.92	184.59	200.39	1.91	0.00	79.08	-0.06	.	96	177	2.16	1.6	10.9	.
37	7.09	.	.	.	.	.	.	.	.	.	97	170	1.79	5.2	10.0	.
38	38.93	1346.38	20.96	272.61	1022.86	-1.81	.	213.79	0.51	.	233	429	2.42	2.0	3.0	.
39	16.06	1132.08	-78.78	20.17	197.99	-0.37	0.00	95.14	-0.06	.	231	320	2.80	4.0	.	.
40	4.29	2521.12	-25.97	-52.43	246.49	3.77	0.00	359.51	-0.26	.	117	150	3.61	2.0	.	.
41	4.72	811.45	-90.76	-129.55	-64.89	0.23	0.00	107.75	-0.24	.	117	140	7.24	2.0	.	1
42	11.08	565.16	52.36	247.70	788.24	0.66	0.00	296.01	0.17	.	181	94	2.09	4.8	.	2
43	19.63	-123.41	164.41	257.59	1147.09	-1.48	0.00	96.97	0.02	30	67	222	2.70	4.8	4.0	.
44	21.14	1152.97	-87.89	423.76	1501.81	-0.90	3.68	299.20	0.94	32	65	232	2.06	3.2	5.0	.
45	-0.29	2249.25	-30.95	-70.38	-225.16	6.46	0.00	445.60	-1.00	.	119	360	2.58	0.8	10.2	.
46	22.44	.	.	.	.	.	.	.	.	.	257	296	2.33	22.0	9.0	.
47	20.94	1695.37	161.94	638.15	1523.89	2.12	7.53	177.38	0.22	.	349	279	2.12	2.4	7.8	.
48	14.80	375.42	240.48	567.47	1426.10	-0.99	5.74	-42.73	-0.86	.	305	274	2.74	2.4	6.0	.
49	13.73	295.20	114.49	236.21	541.20	-0.46	0.00	-88.45	-0.98	.	371	164	2.61	2.0	8.0	.
50	6.73	1424.33	92.32	348.40	970.75	3.88	0.00	208.86	-0.16	.	89	222	2.48	1.6	8.0	.
51	8.21	1366.12	107.32	365.68	1066.30	4.10	3.50	167.29	-0.67	.	213	212	3.13	0.8	9.0	.
52	8.53	1866.72	113.88	393.12	1068.25	4.49	0.00	179.79	-0.56	.	200	213	2.28	2.0	9.0	.
53	12.87	1514.46	90.41	340.97	934.27	3.58	0.00	57.58	-1.02	.	173	299	2.58	2.8	6.0	.
54	21.54	.	.	.	.	.	.	.	.	.	281	331	3.50	22.0	.	.
55	5.34	3264.85	53.17	387.12	1351.53	5.76	3.79	730.29	1.48	.	138	280	3.31	1.6	.	.
56	-2.40	-745.20	12.42	-236.43	-133.96	8.07	0.00	-184.61	-2.03	.	276	66	1.95	0.4	26.0	1

H-1

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FDI3	ZN1	HRS	FE	VIS	TAN	TS	COB	GC
57	7.99	144.3	220.96	441.11	1209.16	4.27	4.63	326.12	-0.50	.	53	191	2.43	2.0	12.0	.
58	9.59	759.7	203.25	473.93	1175.40	4.09	5.01	313.04	-0.16	.	60	188	2.24	2.0	10.8	.
59	13.54	1212.2	151.53	206.24	957.19	1.09	0.00	-370.24	-2.06	.	453	304	2.52	1.6	5.5	.
60	30.66	3114.6	201.91	1208.45	2811.58	2.86	13.80	772.63	1.97	.	81	162	2.34	4.8	6.2	.
61	46.70	1649.4	377.44	1151.60	2909.34	4.35	12.94	468.45	-0.38	.	127	210	2.65	4.8	6.8	.
62	26.98	.	.	.	.	.	.	.	.	.	379	249	2.93	3.6	11.5	.
63	5.30	313.5	-6.88	141.99	198.62	2.27	0.00	141.66	-0.73	.	122	178	2.15	2.0	10.9	.
64	4.83	2855.6	11.45	213.68	248.39	4.23	0.00	251.35	0.68	.	221	175	2.15	1.2	9.1	.
65	14.76	330.2	102.16	140.99	179.18	0.11	0.00	-292.97	-2.09	.	217	194	3.03	3.6	6.0	.
66	4.23	7088.7	-72.96	59.77	-496.37	6.13	0.00	112.12	1.27	.	171	172	2.23	2.8	8.9	.
67	7.19	999.6	19.65	228.44	456.44	3.75	0.00	79.59	-1.20	.	254	180	1.81	0.8	5.5	.
68	24.35	1612.2	101.43	549.10	1298.33	2.82	0.00	269.02	-0.10	.	116	383	2.66	4.0	4.0	.
69	22.95	1615.3	118.70	519.39	1287.84	3.03	0.00	233.08	-0.47	.	210	383	2.86	4.0	5.0	.
70	22.41	2073.8	50.31	617.57	1545.31	2.04	6.21	496.74	1.22	.	195	371	3.18	4.0	5.5	.
71	24.31	829.3	120.47	550.28	1461.15	1.58	6.08	229.04	.7	.	199	366	3.32	4.0	4.8	.
72	17.50	1395.6	52.13	317.98	1142.93	-0.01	0.00	-66.21	.	.	196	187	5.22	4.0	.	.
73	11.59	4096.1	21.21	419.21	1027.44	5.44	0.00	802.86	2.25	.	125	198	2.70	1.6	.	.
74	18.91	7321.8	64.06	692.71	1312.39	5.89	7.00	478.16	2.44	.	40	192	2.41	3.2	.	.
75	34.24	2227.8	110.36	330.56	1377.62	-0.12	0.00	519.38	2.12	.	69	238	2.78	3.2	9.0	.
76	36.98	4575.2	18.14	462.11	1192.72	2.01	0.00	364.46	2.99	.	99	240	2.65	4.0	9.8	.
77	49.89	547.3	227.60	529.15	1905.37	-2.40	0.00	134.30	-0.43	.	133	238	4.17	8.4	4.0	.
78	57.15	661.3	68.26	534.70	2349.76	-5.79	0.00	313.10	0.53	.	175	217	3.99	6.8	4.0	.
79	58.06	802.3	28.38	425.35	2273.68	-5.38	3.10	235.98	0.49	.	205	223	3.95	7.2	4.0	.
80	58.56	765.2	12.66	435.24	2046.05	-5.49	0.00	116.31	-0.37	.	184	297	3.20	7.2	4.0	.
81	60.03	-1019.3	170.60	671.04	2449.38	-1.13	6.12	281.72	-0.25	.	211	296	3.06	8.0	4.0	.
82	24.06	1308.8	2.40	431.01	1564.23	0.39	0.00	620.39	2.29	.	95	360	2.70	6.0	13.0	.
83	25.20	82.8	49.80	354.77	1473.70	0.01	2.93	421.62	0.69	.	101	352	2.74	7.2	13.0	.
84	37.82	446.6	23.90	545.80	2038.51	-3.48	0.00	480.02	0.94	.	140	378	4.52	6.0	.	.
85	40.57	1754.5	216.80	1139.12	3418.96	-0.48	0.00	540.54	-0.61	.	341	256	6.15	7.2	.	.
86	41.49	7163.6	197.56	1795.67	3451.32	7.63	17.97	1139.86	4.48	.	357	258	3.46	8.0	.	.
87	42.88	1096.1	230.63	1097.19	3506.03	-1.92	0.00	473.10	-1.43	.	695	250	3.69	8.0	.	.
88	22.13	8.6	80.16	380.42	828.21	1.13	0.00	422.70	-0.23	.	141	296	3.14	3.2	8.0	.
89	18.79	.	.	.	.	.	.	.	.	.	123	293	2.91	6.0	11.0	.
90	33.40	3482.3	169.18	631.04	1048.87	2.94	0.00	198.42	0.85	.	332	336	3.47	8.4	5.0	.
91	34.62	657.0	188.88	518.77	1180.44	-0.36	6.57	37.15	-1.35	.	463	336	3.27	7.2	4.0	.
92	17.05	1761.8	78.93	286.86	684.16	4.55	0.00	200.12	-0.83	.	224	243	2.91	4.4	5.3	.
93	5.28	3697.5	191.67	522.79	1033.73	12.82	6.64	1095.76	1.03	.	221	230	2.24	2.0	10.0	.
94	5.37	2224.8	205.34	558.37	1123.14	12.11	6.64	989.83	0.22	.	193	243	2.24	1.2	10.0	.
95	5.72	2202.7	205.41	570.25	1116.37	11.74	6.86	968.25	0.21	.	157	239	2.27	1.2	9.0	.
96	13.36	.	.	.	.	.	.	.	.	.	291	164	2.71	2.8	11.5	.
97	12.71	2066.9	273.72	528.03	1670.29	5.80	0.00	242.82	-0.90	.	229	160	3.19	2.8	9.5	.
98	55.71	-926.5	144.48	496.92	1463.79	10.91	4.07	36.18	-0.19	.	247	195	2.37	4.8	12.0	.
99	54.39	-1260.6	125.81	504.57	1457.61	8.50	3.95	48.08	-0.04	.	305	186	2.42	5.2	10.5	.
100	17.75	809.2	352.57	961.76	2150.34	4.89	0.00	1052.86	-0.65	.	229	233	2.18	2.4	14.9	.
101	32.88	1996.4	422.90	1257.24	2276.34	4.97	0.00	1193.87	0.12	.	341	272	2.30	4.0	10.0	.
102	0.81	2023.3	-49.44	74.45	620.37	5.07	0.35	703.04	-0.49	.	65	407	2.65	1.6	7.0	.
103	24.91	1655.0	38.99	272.15	1078.53	3.32	3.82	474.06	-0.75	.	117	434	2.71	3.2	4.0	.
104	34.98	.	.	.	.	.	.	.	.	.	249	431	2.20	32.0	8.0	.
105	28.65	1773.7	57.85	308.98	1180.95	3.16	4.16	475.59	-0.72	.	233	459	2.27	3.2	4.2	.
106	28.74	1363.8	44.52	308.63	1169.95	2.70	3.99	450.71	-0.83	.	331	475	2.51	0.4	3.8	.
107	4.78	1464.3	-93.36	87.38	690.06	2.54	0.00	625.66	0.87	.	175	413	2.53	1.2	11.9	.
108	7.55	1530.2	-82.77	130.06	772.07	2.31	0.00	645.90	1.21	.	341	408	2.76	0.8	10.1	.
109	7.28	2458.6	10.72	138.65	408.17	7.34	0.00	249.47	0.19	.	98	264	2.17	0.4	5.0	.
110	48.42	.	.	.	.	.	.	.	.	.	173	184	3.29	7.2	.	.
111	16.78	2340.2	146.77	857.26	2054.48	8.24	0.00	1525.04	2.58	.	112	222	2.74	3.2	.	.
112	17.06	246.8	172.98	778.19	2161.87	5.70	0.00	1432.77	1.38	.	105	223	2.84	3.2	.	.

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OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FDI3	ZN1	HRS	FE	VIS	TAN	TS	COB	GC
113	22.29	337.13	100.30	273.40	644.41	2.73	0.00	362.79	-0.73	:	229	239	2.47	3.2	8.5	:
114	22.83	51.18	87.09	260.21	594.76	2.19	2.63	328.53	-1.36	:	303	234	2.58	3.6	8.1	:
115	23.75	1879.23	76.31	339.21	646.18	3.07	3.64	433.75	0.04	:	403	232	2.58	3.6	8.2	:
116	16.28	772.32	220.01	378.64	917.56	0.44	0.00	-138.94	-0.39	:	157	217	2.22	3.2	:	:
117	16.96	1593.17	265.68	650.09	1840.37	3.72	0.00	205.20	-0.29	:	204	195	2.13	2.0	5.0	:
118	17.63	1087.05	121.71	601.51	1349.51	3.16	0.00	214.49	-0.12	:	168	306	2.18	2.0	3.0	:
119	19.95	937.44	124.70	617.39	1302.43	1.98	7.25	227.30	-0.81	:	277	311	2.39	2.8	3.5	:
120	5.76	1527.15	1.28	48.05	53.64	3.81	0.00	55.32	-1.24	:	153	202	2.69	2.0	6.1	:
121	22.33	373.08	8.88	505.24	1224.50	-1.08	0.00	342.97	-0.40	:	169	248	2.69	3.2	:	:
122	16.07	1505.00	62.91	515.19	1551.49	-0.16	0.00	150.60	0.79	:	285	243	2.82	4.0	:	:
123	37.25	:	:	:	:	:	:	:	:	:	263	321	3.28	18.0	:	:
124	8.66	:	:	:	:	:	:	:	:	:	142	207	2.02	8.0	:	:
125	11.14	822.35	233.45	920.44	2554.91	6.49	0.00	1520.28	1.41	:	147	280	2.43	2.4	:	:
126	12.54	1002.95	246.51	1016.29	2603.76	7.02	0.00	1444.52	1.20	:	225	275	2.42	2.4	:	:
127	22.35	1864.41	370.48	1553.45	3917.90	5.77	0.00	1503.18	1.00	:	117	326	2.70	4.0	:	:
128	31.77	1770.97	428.14	1595.63	4026.30	4.32	17.21	1409.88	0.31	:	153	263	3.24	4.8	:	:

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VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
CL2	128	21.47609375	16.27118439	2748.9400000	-2.40000000	74.12000000
DET1	116	1544.60181034	1413.15291373	179173.8100000	-1260.63000000	7321.80000000
DET2	116	127.79431034	141.88752054	14824.1400000	-120.44000000	537.48000000
DET3	116	490.02922414	387.35870161	56843.3900000	-287.09000000	1795.67000000
DET4	116	1395.72025862	995.41270670	161903.5500000	-496.37000000	4026.30000000
FD1	116	2.98991379	3.70181283	346.8300000	-5.79000000	12.82000000
FD2	115	2.41643478	4.09494022	277.8900000	0	17.97000000
FDI3	116	395.94629310	399.82516904	45929.7700000	-370.24000000	1525.04000000
ZN1	115	0.07991304	1.14578135	9.1900000	-2.09000000	4.48000000
HRS	4	68.00000000	63.78610089	272.0000000	30.00000000	163.00000000
FE	128	212.48437500	142.96979387	27198.0000000	9.00000000	867.00000000
VIS	128	258.60937500	89.39157726	33102.0000000	57.00000000	475.00000000
TAN	128	2.81656250	0.76565698	360.5200000	1.39000000	7.24000000
TS	128	4.35312500	4.67625830	557.2000000	0.40000000	32.00000000
COB	101	8.41089109	3.78478271	849.5000000	3.00000000	26.00000000
GC	9	12.11111111	10.68228024	109.0000000	1.00000000	25.00000000

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

CL2

CL2	GC	DET4	DET3	FE	TAN	DET2	HRS	COB	TS	FD1	FD2	ZN1	VIS
1.00000	0.87826	0.57369	0.50327	0.45927	0.39448	0.36566	-0.32398	-0.31347	0.29968	-0.26781	0.24791	0.21262	0.12064
128	9	116	116	128	128	116	4	101	128	116	115	115	128

FDI3	DET1
0.11356	-0.06220
116	116

DET1

DET1	ZN1	FD1	FDI3	DET3	HRS	FD2	VIS	TS	COB	CL2	GC	DET4	DET2
1.00000	0.60517	0.39363	0.31658	0.17366	-0.17073	0.14897	-0.09362	-0.09177	-0.06987	-0.06220	0.04895	0.04084	-0.02531
116	115	116	116	116	4	115	116	116	93	116	9	116	116

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

DET1

TAN	FE
0.01009	0.00310
116	116

DET2

DET2	GC	DET4	DET3	HRS	FD2	CL2	FE	FD13	TS	TAN	FD1	COR	ZN1
1.00000	0.91276	0.78966	0.78413	-0.41527	0.40644	0.36566	0.34240	0.32498	0.22833	0.16907	0.07613	-0.05746	0.05331
116	9	116	116	4	115	116	116	116	116	116	116	93	115

DET1	VIS
-0.02531	-0.01908
116	116

DET3

DET3	DET4	GC	DET2	FD13	FD2	CL2	ZN1	FE	TS	TAN	COR	DET1	HRS
1.00000	0.92292	0.90221	0.78413	0.56787	0.54243	0.50327	0.35670	0.33757	0.30694	0.22752	-0.17737	0.17366	0.05505
116	116	9	116	116	115	116	115	116	116	116	93	116	4

VIS	FD1
0.05138	0.02179
116	116

DET4

DET4	DET3	GC	DET2	CL2	FD13	FD2	FE	TAN	TS	ZN1	COR	HRS	VIS
1.00000	0.92292	0.89949	0.78966	0.57369	0.47787	0.42830	0.35428	0.34201	0.33491	0.30589	-0.20684	-0.14813	0.13118
116	116	9	116	116	116	115	116	116	116	115	93	4	116

FD1	DET1
-0.12969	0.04084
116	116

FD1

FD1	FD13	COR	DET1	TAN	CL2	GC	TS	ZN1	FD2	DET4	VIS	HRS	DET2
1.00000	0.44114	0.40054	0.39363	-0.32389	-0.26781	-0.22374	-0.22272	0.18385	0.16214	-0.12969	-0.10077	-0.08607	0.07613
116	116	93	116	116	116	9	116	115	115	116	116	4	116

FE	DET3
-0.05581	0.02179
116	116

FD2

FD2	GC	DET3	DET4	DET2	HRS	FD13	CL2	TS	FD1	DET1	FE	ZN1	COR
1.00000	0.70758	0.54243	0.42830	0.40644	-0.37626	0.29123	0.24791	0.19435	0.16214	0.14897	0.13104	0.09017	0.07826
115	9	115	115	115	4	115	115	115	115	115	115	114	92

VIS	TAN
-0.07467	0.00975
115	115

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

FDI3

FDI3	GC	DET3	ZN1	HRS	DET4	FD1	DET2	DET1	FD2	COB	VIS	CL2	TAN
1.00000	0.75748	0.56787	0.55098	-0.53206	0.47787	0.44114	0.32498	0.31658	0.29123	0.16719	0.13644	0.11356	0.03431
116	9	116	115	4	116	116	116	116	115	93	116	116	116

FE	TS
-0.01307	0.00135
116	116

ZN1

ZN1	DET1	FDI3	DET3	DET4	CL2	FD1	GC	TS	VIS	TAN	FD2	FE	HRS
1.00000	0.60517	0.55098	0.35670	0.30589	0.21262	0.18385	0.16029	0.11801	0.10724	0.10319	0.09017	-0.08761	0.07908
115	115	115	115	115	115	115	9	115	115	115	114	115	4

COB	DET2
-0.07688	0.05331
93	115

HRS

HRS	FE	TS	VIS	FDI3	DET2	FD2	CL2	TAN	COB	DET1	DET4	FD1	ZN1
1.00000	0.82306	-0.63576	-0.56261	-0.53206	-0.41527	-0.37626	-0.32398	-0.22898	0.21419	-0.17073	-0.14813	-0.08607	0.07908
4	4	4	4	4	4	4	4	4	4	4	4	4	4

DET3	GC
0.05505	0.00000
4	0

FE

FE	HRS	GC	CL2	DET4	DET2	DET3	TAN	FD2	TS	ZN1	COB	FD1	VIS
1.00000	0.82306	-0.63705	0.45927	0.35428	0.34240	0.33757	0.24268	0.13104	0.11244	-0.08761	-0.08538	-0.05581	0.05459
128	4	9	128	116	116	116	128	115	128	115	101	116	128

FDI3	DET1
-0.01307	0.00310
116	116

VIS

VIS	HRS	COB	TS	FDI3	DET4	CL2	ZN1	FD1	DET1	FD2	TAN	GC	FE
1.00000	-0.56261	-0.48698	-0.17425	0.13644	0.13118	-0.12064	0.10724	-0.10077	0.09362	-0.07467	-0.07419	-0.06497	0.05459
128	4	101	128	116	116	128	115	116	116	115	128	9	128

DET3	DET2
0.05138	-0.01908
116	116

TAN

TAN	CL2	DET4	FD1	COB	FE	HRS	DET3	DET2	TS	GC	ZN1	VIS	FDI3
1.00000	0.39448	0.34201	-0.32389	-0.32275	0.24268	-0.22898	0.22752	0.16907	0.12556	-0.11285	0.10319	0.07419	0.03431
128	128	116	116	101	128	4	116	116	128	9	115	128	116

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ENGINE AVDS=1790 20:17 MONDAY, JUNE 4, 1984

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

TAN

DET1	FD2
0.01009	-0.00975
116	115

TS

TS	GC	HRS	DET4	DET3	CL2	DET2	FD1	FD2	VIS	TAN	ZN1	FE	DET1
1.00000	0.67665	-0.63576	0.33491	0.30694	0.29068	0.22833	-0.22272	0.19435	0.17425	0.12556	0.11801	0.11244	-0.09177
128	9	4	116	116	128	116	116	115	128	128	115	128	116

COB	FDI3
-0.03391	0.00135
101	116

COB

COB	GC	VIS	FD1	TAN	CL2	HRS	DET4	DET3	FDI3	FE	FD2	ZN1	DET1
1.00000	-0.71184	-0.48698	0.40054	-0.32275	-0.31347	0.21419	-0.20684	-0.17737	0.16719	-0.08538	0.07826	-0.07680	-0.06987
101	7	101	93	101	101	4	93	93	93	101	92	93	93

DET2	TS
-0.05746	-0.03391
93	101

GC

GC	DET2	DET3	DET4	CL2	FDI3	COB	FD2	TS	FE	FD1	ZN1	TAN	VIS
1.00000	0.91226	0.90221	0.89949	0.87826	0.75748	-0.71184	0.70758	0.67665	-0.63705	-0.22374	0.16029	-0.11285	-0.06497
9	9	9	9	9	9	7	9	9	9	9	9	9	9

DET1	HRS
0.04895	0.00000
9	0

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F

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 1 VARIABLE CL1 ENTERED R SQUARE = 0.06291527 C(P) = 22.10919062

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	42923.89070723	42923.89070723	5.37	0.0230
ERROR	80	639325.32880497	7991.56661006		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	205.51577113				
CL1	0.85736028	0.36993871	42923.89070723	5.37	0.0230

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE CL2 ENTERED R SQUARE = 0.09419808 C(P) = 21.83553753

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	57444.07615088	28722.03807544	3.63	0.0310
ERROR	79	624805.14336132	7908.92586533		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	215.68312948				
CL1	4.31414795	2.57761264	22155.02629278	2.80	0.0981
CL2	-6.40950073	4.73038917	14520.18544365	1.84	0.1793

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE CL22 ENTERED R SQUARE = 0.10545961 C(P) = 21.56415873

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	71949.73732930	23983.24577643	3.07	0.0324
ERROR	78	610299.48218290	7824.35233568		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	168.90455811				
CL1	6.71992872	3.11367427	36444.44795138	4.66	0.0340
CL2	-7.31288502	4.75157525	18533.17965079	2.37	0.1278
CL22	-0.04500247	0.03305155	14505.66117842	1.85	0.1772

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE CL02 ENTERED R SQUARE = 0.11314942 C(P) = 22.74265240

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	77196.10683212	19299.02670803	2.46	0.0526
ERROR	77	605053.11268008	7857.83263221		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	158.55199604				
CL1	7.75485414	3.36760880	41668.82470994	5.30	0.0240
CL2	-8.22890754	4.89192041	22234.55151482	2.83	0.0966
CL22	-0.04665058	0.03318354	15529.99389110	1.98	0.1638
CL02	-0.00135639	0.00165562	5246.36950282	0.67	0.4164

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE V15

STEP 4 CL22 REPLACED BY DET24 R SQUARE = 0.14723554 C(P) = 19.10078938

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	100454.06399390	25113.51599848	3.32	0.0145
ERROR	77	581795.15551829	7555.78124050		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	173.40896816				
CL1	12.77695741	4.35084055	65161.43699180	8.62	0.0044
CL2	-18.57514031	6.90659567	54653.12693084	7.23	0.0088
C1D2	-0.00783164	0.00334197	41493.43210375	5.49	0.0217
DET24	0.00011236	0.00004959	38787.95105289	5.13	0.0263

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE C2D2 ENTERED R SQUARE = 0.16558139 C(P) = 19.14132175

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	112967.77311567	22593.55462393	3.02	0.0155
ERROR	76	569281.44639253	7490.54534727		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	165.29320036				
CL1	21.24905187	7.85686899	54789.01940309	7.31	0.0084
CL2	-32.74585789	12.94183521	47955.06146819	6.40	0.0135
C1D2	-0.04542913	0.02927828	18033.96051890	2.41	0.1249
C2D2	0.06690985	0.05176709	12513.70912577	1.67	0.2001
DET24	0.00007963	0.00005549	15425.77407784	2.06	0.1554

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE DET22 ENTERED R SQUARE = 0.17135989 C(P) = 20.52400212

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	116910.14911561	19485.02485260	2.58	0.0249
ERROR	75	565339.07039658	7537.85427195		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	151.69174684				
CL1	23.27295559	8.36374372	58364.58273665	7.74	0.0068
CL2	-35.46193693	13.51495423	51897.14714517	6.88	0.0105
DET22	0.00054543	0.00075420	3942.37599594	0.52	0.4718
C1D2	-0.05234117	0.03088658	21646.87067300	2.87	0.0943
C2D2	0.07513015	0.05315573	15056.03563729	2.00	0.1617
DET24	0.00005274	0.00006695	4677.59502521	0.62	0.4333

STEP 6 DET24 REPLACED BY DET44 R SQUARE = 0.17890165 C(P) = 19.71831185

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	122055.51285780	20342.58547630	2.72	0.0190
ERROR	75	560193.70665439	7469.24942206		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	151.32173472				
CL1	22.88572497	8.29960294	56792.59060202	7.60	0.0073
CL2	-34.94874411	13.39350770	50857.08293255	6.81	0.0109
DET22	0.00077729	0.00063010	11366.55011322	1.52	0.2212
DET44	0.00000321	0.00000368	9822.95876740	1.32	0.2551
C1D2	-0.04942161	0.02994206	20349.19910218	2.72	0.1030
C2D2	0.06978065	0.05135535	13790.35715876	1.85	0.1783

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

STEP 7 VARIABLE DET24 ENTERED R SQUARE = 0.19274530 C(P) = 20.23938911

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	131500.32770153	18785.76110022	2.52	0.0220
ERROR	74	550748.89181066	7442.55259204		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	147.91455971				
C1	23.70134378	8.31633298	60451.07215961	8.12	0.0057
C2	-36.67645077	13.45723445	55282.26486246	7.43	0.0080
DET22	0.00213950	0.00136302	18337.50066269	2.46	0.1208
DET44	0.00001622	0.00001159	14590.17858592	1.96	0.1657
C1D2	-0.05886921	0.03104284	26765.50809060	3.60	0.0618
C2D2	-0.08702362	0.05350240	19694.70424271	2.65	0.1090
DET24	-0.00027116	0.00024071	9444.81484373	1.27	0.2636

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

STEP 8 VARIABLE DET23 ENTERED R SQUARE = 0.19555892 C(P) = 21.93880888

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	133419.91719890	16677.48964986	2.22	0.0355
ERROR	73	548829.30231330	7518.20962073		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	147.24163160				
C1	23.55887001	8.36325119	59658.60030525	7.94	0.0062
C2	-36.56461277	13.52727315	54930.79293724	7.31	0.0085
DET22	0.00225467	0.00138877	19816.39224211	2.64	0.1088
DET44	0.00001837	0.00001236	16509.20219372	2.20	0.1427
C1D2	-0.05948944	0.03122436	27290.23511696	3.63	0.0607
C2D2	-0.08893065	0.05390455	20462.87132477	2.72	0.1033
DET23	-0.00012822	0.00012298	1919.58949736	0.26	0.6149
DET24	-0.00028259	0.00024298	10168.47235761	1.35	0.2486

STEP 8 DET24 REPLACED BY DET33 R SQUARE = 0.25177570 C(P) = 15.93314361

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	171773.77762714	21471.72220339	3.07	0.0049
ERROR	73	510475.44188505	6992.81427240		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	141.27364505				
C1	25.24626080	8.09338510	68043.35369997	9.73	0.0026
C2	-39.16816861	13.06951089	62805.81492829	8.98	0.0037
DET22	0.00278723	0.00096951	57795.29413745	8.26	0.0053
DET33	0.00010499	0.00003986	48522.33278585	6.94	0.0103
DET44	0.00000598	0.00000432	13387.35580464	1.91	0.1707
C1D2	-0.06691004	0.02971061	35465.93491084	5.07	0.0273
C2D2	0.10541334	0.05145627	29347.19066512	4.20	0.0441
DET23	-0.00122254	0.00046150	49071.08728452	7.02	0.0099

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MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 8 DET44 REPLACED BY C1D3 R SQUARE = 0.26144546 C(P) = 14.90011924

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	178370.96055673	22296.37006959	3.23	0.0034
ERROR	73	503878.25895546	6902.44190350		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	167.70335182				
CL1	29.07082242	7.99766116	85032.90831102	12.32	0.0008
CL2	-46.20294340	13.19056052	84686.76546314	12.27	0.0008
DET22	0.00345959	0.00106625	72665.90343342	10.53	0.0018
DET33	0.00007463	0.00004211	21677.06482231	3.14	0.0805
C1D2	-0.07884948	0.02853298	52711.59731005	7.64	0.0072
C1D3	0.00318870	0.00187399	19984.53873423	2.90	0.0931
C2D2	0.11693544	0.04963025	38317.87930776	5.55	0.0212
DET23	-0.00133689	0.00047261	55230.72637542	8.00	0.0060

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

STEP 9 VARIABLE C2D3 ENTERED R SQUARE = 0.28597344 C(P) = 14.27978351

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	195105.15838606	21678.35093178	3.20	0.0026
ERROR	72	487144.06112613	6765.88973786		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	146.53422483				
CL1	19.11130462	9.75462640	25970.72817859	3.84	0.0540
CL2	-29.40136447	16.87258590	20544.54803855	3.04	0.0857
DET22	0.00336295	0.00105744	68431.21496018	10.11	0.0022
DET33	0.00013588	0.00005705	38375.60387285	5.67	0.0199
C1D2	-0.11794535	0.03762998	66468.91865512	9.82	0.0025
C1D3	0.02674628	0.01509374	21245.05964664	3.14	0.0806
C2D2	0.19016112	0.06769324	53392.20005336	7.89	0.0064
C2D3	-0.04303724	0.02736557	16734.19782933	2.47	0.1202
DET23	-0.00150668	0.00048021	66604.74614476	9.84	0.0025

THE ABOVE MODEL IS THE BEST 9 VARIABLE MODEL FOUND.

STEP 10 VARIABLE DET24 ENTERED R SQUARE = 0.29681023 C(P) = 15.12208465

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	202498.54759117	20249.85475912	3.00	0.0033
ERROR	71	479750.67192103	6757.05171720		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	143.92432382				
CL1	17.83205248	9.82466880	22259.94428002	3.29	0.0737
CL2	-27.13206236	17.00055251	17210.63062447	2.55	0.1149
DET22	0.00303785	0.00110151	51394.43816391	7.61	0.0074
DET33	0.00014920	0.00005842	44069.18018135	6.52	0.0128
C1D2	-0.10803082	0.03878148	52432.88716415	7.76	0.0068
C1D3	0.02626468	0.01509090	20467.80214762	3.03	0.0861
C2D2	0.17420064	0.06934651	42643.46147151	6.31	0.0143
C2D3	-0.04277968	0.02734880	16533.15937986	2.45	0.1222
DET23	-0.00167658	0.00050664	73996.45820687	10.95	0.0015
DET24	0.00005133	0.00008731	7393.38920511	1.09	0.2991

THE ABOVE MODEL IS THE BEST 10 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 11 VARIABLE DFT4 ENTERED R SQUARE = 0.30975975 C(P) = 15.73868118

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	211333.34957790	19212.12268890	2.86	0.0039
ERROR	70	470915.86993429	6727.36957049		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	164.52171095				
CL1	18.46414493	9.81857141	23790.69236300	3.54	0.0642
CL2	-27.84507218	16.97457830	18102.72669634	2.69	0.1054
DFT4	-0.03319487	0.02893154	8834.80198673	1.31	0.2557
CL22	0.00286744	0.00110910	44967.00997726	6.68	0.0118
DFT23	0.00016219	0.00005639	50181.06891684	7.46	0.0080
C1D2	-0.11613595	0.03933725	58636.84194145	8.72	0.0043
C1D3	0.03033773	0.01547150	25867.02601630	3.85	0.0539
C2D2	0.18514035	0.06984936	47264.49714350	7.03	0.0099
C2D3	-0.04873204	0.02777859	20703.98626875	3.08	0.0838
DFT23	-0.00194745	0.00055805	81927.00057919	12.18	0.0008
DFT24	0.00024831	0.00016234	15739.09331627	2.34	0.1306

THE ABOVE MODEL IS THE BEST 11 VARIABLE MODEL FOUND.

STEP 12 VARIABLE CL22 ENTERED R SQUARE = 0.31268767 C(P) = 17.42642492

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	12	213327.5C55C597	17777.29212550	2.62	0.0062
ERROR	69	468921.71400622	6795.96686966		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	174.34808239				
CL1	17.35804528	10.07754C54	20162.47208001	2.97	0.0895
CL2	-27.37602267	17.08286272	17452.99726218	2.57	0.1136
DFT4	-0.02416784	0.03347862	3541.53801879	0.52	0.4728
CL22	0.03708754	0.06846587	1994.15592807	0.29	0.5898
DFT22	0.00287687	0.00111487	45252.13474483	6.66	0.0120
DFT23	0.00017369	0.00006335	51088.21767517	7.52	0.0078
C1D2	-0.14188742	0.06183151	35786.51401489	5.27	0.0248
C1D3	0.03947175	0.02161675	21525.48219487	3.17	0.0795
C2D2	0.22899982	0.10716454	31032.68262266	4.57	0.0362
C2D3	-0.06407152	0.03976690	17641.59570787	2.60	0.1117
DFT23	-0.00184796	0.00059020	66625.69021289	9.80	0.0026
DFT24	0.00022140	0.00017056	11451.06761054	1.68	0.1986

THE ABOVE MODEL IS THE BEST 12 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 13 VARIABLE DET34 ENTERED R SQUARE = 0.31348391 C(P) = 19.34082767

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	213874.15351263	16451.85796251	2.39	0.0105
ERROR	68	468375.06599956	6887.86861764		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	175.56262673				
CL1	16.44927575	10.64594727	16444.08810186	2.39	0.1270
CL2	-26.14951184	17.74048316	14965.15222637	2.17	0.1451
DET4	-0.01982060	0.03706884	1969.24863149	0.29	0.5946
CL22	-0.04650568	0.07660691	2538.40529043	0.37	0.5458
DET22	0.00266712	0.00134688	27009.05885758	3.92	0.0517
DET33	0.00019756	0.00010606	23899.69859519	3.47	0.0668
C1D2	-0.14916150	0.06739094	33743.89945629	4.90	0.0302
C1D3	-0.04182379	0.02480287	19585.18602609	2.84	0.0963
C2D2	0.24113318	0.11616592	29678.45966306	4.31	0.0417
C2D3	-0.07003125	0.04528057	16475.73471589	2.39	0.1266
DET23	-0.00183465	0.00059605	65256.15524828	9.47	0.0030
DET24	0.00026485	0.00023081	9069.51388191	1.32	0.2552
DET34	-0.00001697	0.00006025	546.64800666	0.08	0.7790

STEP 13 CL22 REPLACED BY CL11 R SQUARE = 0.31361445 C(P) = 19.32688212

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	213963.21373034	16458.70874849	2.39	0.0105
ERROR	68	468286.00578186	6886.55890856		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	173.14520805				
CL1	13.81232391	12.59023791	8288.34656213	1.20	0.2765
CL2	-21.49881767	20.26910830	7747.50978244	1.13	0.2926
DET4	-0.01764611	0.03899706	1410.05580643	0.20	0.6524
CL11	0.01531498	0.02479415	2627.46550813	0.38	0.5388
DET22	0.00263087	0.00136001	25770.25789151	3.74	0.0572
DET33	0.00015686	0.00010496	24227.13616555	3.52	0.0650
C1D2	-0.15501871	0.07445276	29854.43763827	4.34	0.0411
C1D3	0.04280969	0.02577997	18989.85026448	2.76	0.1014
C2D2	0.24974469	0.12618852	26974.60818218	3.92	0.0519
C2D3	-0.07155902	0.04673765	16143.45709438	2.34	0.1304
DET23	-0.00178813	0.00062240	56841.08418268	8.25	0.0054
DET24	0.00027436	0.00023264	9557.17743044	1.39	0.2429
DET34	-0.00002137	0.00006343	781.33612359	0.11	0.7373

THE ABOVE MODEL IS THE BEST 13 VARIABLE MODEL FOUND.

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MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 14 VARIABLE DET44 ENTERED R SQUARE = 0.31450938 C(P) = 21.23127601

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	14	214573.78109735	15326.69864981	2.20	0.0168
ERROR	67	467675.43841484	6980.23042410		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	170.59391155				
CL1	13.94741307	12.68380235	8440.30526852	1.21	0.2754
CL2	-21.34864998	20.41280643	7634.92948786	1.09	0.2994
DET4	-0.02333118	0.04371443	1988.35334392	0.28	0.5953
CL11	0.01765414	0.02648848	1603.10921673	0.23	0.6333
DET22	0.00281146	0.00149521	24547.61184791	3.52	0.0651
DET33	0.00320750	0.00011162	24122.14866987	3.46	0.0674
DET44	0.00000673	0.00002275	610.56736702	0.09	0.7683
C1D2	-0.15095922	0.07617551	27424.76172122	3.93	0.0516
C1D3	0.04205123	0.02608110	18145.77598869	2.60	0.1116
C2D2	0.24331814	0.12888870	24876.48562092	3.56	0.0634
C2D3	-0.07318169	0.04728438	15377.36797276	2.20	0.1424
DET23	-0.00175016	0.00063423	53702.52944444	7.69	0.0072
DET24	0.00022188	0.00029323	3996.39365356	0.57	0.4519
DET34	-0.00003581	0.00008040	1384.91501780	0.20	0.6574

THE ABOVE MODEL IS THE BEST 14 VARIABLE MODEL FOUND.

STEP 15 VARIABLE DET3 ENTERED R SQUARE = 0.31570784 C(P) = 23.10324414

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	15	215391.42847080	14359.42856472	2.03	0.0258
ERROR	66	466857.79104140	7073.60289457		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	174.34505541				
CL1	13.44103520	12.85492858	7733.33426077	1.09	0.2996
CL2	-20.86527074	20.59801018	7258.35469425	1.03	0.3148
DET3	-0.04921240	0.14474175	817.64737344	0.12	0.7349
DET4	-0.03702811	0.05966173	2724.65778018	0.39	0.5370
CL11	0.01862601	0.03186586	2416.73499688	0.34	0.5609
DET22	0.00274019	0.00152370	22877.25467456	3.23	0.0767
DET33	0.00322716	0.00013375	21313.32986192	3.01	0.0873
DET44	0.00001448	0.00003233	1420.25585317	0.20	0.6556
C1D2	-0.16496786	0.08691672	25463.41947807	3.60	0.0622
C1D3	0.04475751	0.02743508	18826.09296613	2.66	0.1076
C2D2	0.26575467	0.14561548	23566.45298136	3.33	0.0725
C2D3	-0.07584668	0.05043166	15999.51767772	2.26	0.1374
DET23	-0.00167639	0.00068230	42576.50936085	6.02	0.0168
DET24	0.00023201	0.00029669	4325.74394377	0.61	0.4370
DET34	-0.00006626	0.00012071	2137.37876930	0.30	0.5849

THE ABOVE MODEL IS THE BEST 15 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 16 VARIABLE DET14 ENTERED R SQUARE = 0.31659203 C(P) = 25.00878580

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	215994.66590626	13499.66661914	1.88	0.0386
ERROR	65	466254.55360593	7173.14697855		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	172.28375574				
CL1	10.92525132	15.58317546	3525.82441524	0.49	0.4857
CL2	-16.42588937	25.77982696	2912.10829107	0.41	0.5263
DET3	0.05629865	0.14779672	1040.82114477	0.15	0.7045
DET4	-0.04037024	0.06117545	3123.76237767	0.44	0.5116
CL11	0.01816361	0.03212888	2292.57223679	0.32	0.5738
DET22	0.00284981	0.00158026	23328.34291217	3.25	0.0760
DET33	0.00025470	0.00015550	19243.54282087	2.68	0.1063
DET44	0.00002131	0.00004018	2018.71174373	0.28	0.5976
C1D2	-0.17685447	0.09679527	23956.86343595	3.34	0.0722
C1D3	0.05033074	0.03365447	16043.19871553	2.24	0.1396
C2D2	0.28662038	0.16328114	22103.02964858	3.08	0.0839
C2D3	-0.08554691	0.06081143	14195.40768863	1.98	0.1643
DET14	0.00000006	0.00000020	603.23743546	0.08	0.7727
DET23	-0.00160927	0.00072598	35246.93628710	4.91	0.0301
DET24	0.00018627	0.00033785	2180.60130221	0.30	0.5833
DET34	-0.00008935	0.00014530	2712.11779903	0.38	0.5408

STEP 16 C12 REPLACED BY DET13 R SQUARE = 0.35685522 C(P) = 20.70745108

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	243464.19407986	15216.51212999	2.25	0.0113
ERROR	65	439785.02543233	6750.53885281		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	171.39556049				
CL1	0.75252846	2.29729894	726.27774397	0.11	0.7440
DET3	0.08817152	0.14192997	2605.27120174	0.39	0.5366
DET4	-0.04478283	0.05936561	3841.41804196	0.57	0.4534
CL11	0.03298120	0.02987375	8227.93067351	1.22	0.2737
DET22	0.00148858	0.00161631	5725.74803137	0.85	0.3605
DET33	0.00059349	0.00017404	78499.49043890	11.63	0.0011
DET44	-0.00005283	0.00003727	13560.91577131	2.01	0.1612
C1D2	-0.24811550	0.08305524	60243.77653024	8.92	0.0040
C1D3	0.07572249	0.02003847	96396.05502929	14.28	0.0003
C2D2	0.40372767	0.13749389	58204.28780992	8.62	0.0046
C2D3	-0.17961194	0.03597560	87602.37610154	12.98	0.0006
DET13	-0.00304054	0.00001911	30381.63646467	4.50	0.0377
DET14	0.00002270	0.00001064	30739.16232130	4.55	0.0366
DET23	-0.00103853	0.00068765	15397.18540367	2.28	0.1358
DET24	0.00038501	0.00034173	8568.76050969	1.27	0.2640
DET34	-0.00037172	0.00016400	34679.08050587	5.14	0.0268

B

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 16 C11 REPLACED BY DET1 R SQUARE = 0.36330795 C(P) = 20.01810312

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	247866.56321914	15491.66020120	2.32	0.0091
ERROR	65	434382.65629305	6682.81009682		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	158.64966557				
DET1	-0.00772873	0.00883381	5128.64688325	0.77	0.3842
DET3	0.13774523	0.14382053	6130.14121747	0.92	0.3417
DET4	-0.06477325	0.06387870	6871.29149966	1.03	0.3143
C111	0.03653479	0.01968230	23025.24131390	3.45	0.0680
DET22	0.00148448	0.00154900	6145.67290643	0.92	0.3411
DET33	0.00047172	0.00022477	29434.89982734	4.40	0.0397
DET44	0.00005005	0.00003677	12381.27301558	1.85	0.1782
C102	-0.25455213	0.07464042	77750.09964476	11.63	0.0011
C103	0.07880675	0.01858696	120134.94464129	17.98	0.0001
C202	0.41224370	0.12483324	72879.71767394	10.91	0.0016
C203	-0.13329513	0.03340896	106380.41964458	15.92	0.0002
DET13	-0.00004027	0.00001898	30076.25597411	4.50	0.0377
DET14	0.00002985	0.00001253	35441.87658449	5.30	0.0245
DET23	-0.00105433	0.00067340	16382.27518323	2.45	0.1223
DET24	0.00044424	0.00032518	12471.90550724	1.87	0.1766
DET34	-0.00034776	0.00016573	29423.28154707	4.40	0.0398

STEP 16 C111 REPLACED BY C122 R SQUARE = 0.36379937 C(P) = 19.96560374

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	249201.83898401	15512.61493650	2.32	0.0089
ERROR	65	434047.38052819	6677.65200813		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	157.22240667				
DET1	-0.00741788	0.00886758	4672.75961256	0.70	0.4059
DET3	0.14487891	0.14487626	6542.58930796	0.98	0.3259
DET4	-0.06944218	0.06412762	7831.30899131	1.17	0.2828
C122	0.11470379	0.06132654	23360.51707876	3.50	0.0659
DET22	0.00153498	0.00153698	6627.45353270	0.99	0.3228
DET33	0.00052677	0.00023908	32416.49610187	4.85	0.0311
DET44	0.00005775	0.00003786	15538.12823075	2.33	0.1370
C102	-0.26657246	0.07508255	75874.01382004	11.36	0.0013
C103	0.08953977	0.02222636	108370.04762956	16.23	0.0001
C202	0.43722719	0.13414185	70975.44936006	10.63	0.0018
C203	-0.15302708	0.04094064	93293.43774013	13.97	0.0004
DET13	-0.00004104	0.00001903	31063.48041898	4.65	0.0347
DET14	0.00002912	0.00001252	36128.32746898	5.41	0.0231
DET23	-0.00105554	0.00067232	16459.00187051	2.46	0.1213
DET24	0.00032494	0.00031874	9739.97633409	1.46	0.2315
DET34	-0.00037474	0.00017135	31924.09965575	4.78	0.0324

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE V1S

STEP 16 DET22 REPLACED BY DET2 R SQUARE = 0.36691953 C(P) = 19.63227656

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	250330.55971627	15645.65998227	2.35	0.0080
ERROR	65	431918.65979593	6644.90245840		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	197.44201044				
DET1	-0.01100338	0.00964884	8641.53060003	1.30	0.2583
DET2	-0.41720308	0.36344158	8756.17426496	1.32	0.2552
DET3	0.23352283	0.16578238	13185.83874420	1.98	0.1637
DET4	-0.05281265	0.06404392	4518.64982634	0.68	0.4126
C122	0.13511038	0.05954478	34212.01185688	5.15	0.0266
DET33	0.00056429	0.00023179	39382.55503327	5.93	0.0177
DET44	0.00004024	0.00003813	7399.36066184	1.11	0.2952
C102	-0.26661833	0.07888748	75901.87351311	11.42	0.0012
C103	0.08906263	0.02218214	107120.57391434	16.12	0.0002
C202	0.44777742	0.13396680	74236.69392652	11.17	0.0014
C203	-0.15583326	0.04078700	96998.55816164	14.60	0.0003
DET13	-0.00004747	0.00001778	47277.11640775	7.11	0.0096
DET14	0.00003550	0.00001253	53298.59285459	8.02	0.0061
DET23	-0.00113619	0.00068458	18303.90260010	2.75	0.1018
DET24	0.00078525	0.00028122	51810.41747818	7.80	0.0069
DET34	-0.00040755	0.00016737	39401.05810717	5.93	0.0176

STEP 16 DET44 REPLACED BY C104 R SQUARE = 0.36723156 C(P) = 19.59894169

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	250543.44550692	15658.96534431	2.36	0.0079
ERROR	65	431705.77400328	6641.62729236		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	205.49502345				
DET1	-0.01347477	0.00952116	13302.63953332	2.00	0.1618
DET2	-0.55002184	0.35545867	15902.16123912	2.39	0.1266
DET3	0.23014334	0.16372244	13122.05456692	1.98	0.1646
DET4	-0.04713070	0.06044116	4038.46871783	0.61	0.4384
C122	0.09127287	0.05912731	15826.38002154	2.38	0.1275
DET33	0.00051325	0.00020464	41776.51881501	6.29	0.0146
C102	-0.19560548	0.07502824	45142.64762945	6.80	0.0113
C103	0.07275624	0.02132807	77372.94430311	11.65	0.0011
C104	0.00139745	0.00130532	7612.24645449	1.15	0.2883
C202	0.32466744	0.12792259	45457.65435685	6.84	0.0110
C203	-0.13117550	0.03790285	79557.67687912	11.98	0.0010
DET13	-0.00004811	0.00001795	47481.32579461	7.15	0.0095
DET14	0.00003770	0.00001309	55059.39882949	8.29	0.0054
DET23	-0.00155086	0.00054984	55598.87148819	8.37	0.0052
DET24	0.00085599	0.00025878	79617.88989707	11.99	0.0010
DET34	-0.00051162	0.00009849	66490.82891937	10.01	0.0024

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 16 DET4 REPLACED BY C2D4 R SQUARE = 0.37416644 C(P) = 18.85808500

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	255274.76380969	15954.67273811	2.43	0.0062
ERROR	65	426974.45570250	6568.83778004		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	187.06891649				
DET1	-0.00886134	0.00818306	7598.97345664	1.16	0.2861
DET2	-0.49776602	0.35279735	13075.88064119	1.99	0.1630
DET3	0.11535133	0.12743645	5382.03235802	0.82	0.3687
C122	0.10992712	0.05670616	24685.26675809	3.76	0.0569
DET33	0.00046984	0.00020955	33023.11703938	5.03	0.0284
C1D3	-0.19460278	0.07270532	47060.24678002	7.16	0.0094
C2D3	0.04745186	0.03234267	14163.64708077	2.16	0.1468
C1D4	0.00932261	0.00744472	10300.69158871	1.57	0.2150
C2D2	0.33869473	0.12304301	49772.74127456	7.58	0.0077
C2D3	-0.08509590	0.05745960	14407.23396390	2.19	0.1434
C2D4	-0.01546552	0.01338487	8769.78701860	1.34	0.2521
DET13	-0.00004701	0.00001784	45635.84331235	6.95	0.0105
DET14	0.00003376	0.00001218	49026.65162700	7.46	0.0081
DET23	-0.00144354	0.00050988	52652.65335558	8.02	0.0062
DET24	0.00072566	0.00025919	51888.87834717	7.90	0.0065
DET34	-0.00025918	0.00010677	38704.94485634	5.89	0.0180

H-19

STEP 16 DET3 REPLACED BY DET22 R SQUARE = 0.39745767 C(P) = 16.36987225

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	271165.18729589	16947.82420599	2.68	0.0027
ERROR	65	411084.03221631	6324.36972640		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	191.06667309				
DET1	-0.00834438	0.00758680	7650.47681363	1.21	0.2755
DET2	-0.33633745	0.21249145	15843.82614611	2.51	0.1183
C122	0.06573966	0.05343667	9571.79522812	1.51	0.2230
DET22	0.00306892	0.00167335	21272.45584422	3.36	0.0712
DET33	0.00023885	0.00022746	6973.50643365	1.10	0.2976
C1D2	-0.14781285	0.07069626	27647.04428752	4.37	0.0405
C1D3	-0.01177797	0.03435823	743.18473654	0.12	0.7329
C1D4	0.01816959	0.00824758	30694.03285146	4.85	0.0311
C2D2	0.26103947	0.11734889	31294.75927449	4.95	0.0296
C2D3	-0.01906262	0.06002545	573.86729812	0.09	0.7642
C2D4	-0.03128027	0.01467290	28669.14192312	4.53	0.0370
DET13	-0.00001928	0.00001928	17880.99145137	2.83	0.0975
DET14	0.00002475	0.00001227	25723.63620852	4.07	0.0479
DET23	-0.00189912	0.00056346	71844.34444547	11.36	0.0013
DET24	0.00015745	0.00034565	1312.26199064	0.21	0.6503
DET34	-0.00007686	0.00012393	2432.59483317	0.38	0.5373

F.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE V1S

STEP 16 C103 REPLACED BY CL2 R SQUARE = 0.41543363 C(P) = 14.44949234

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	283429.27128357	17714.32945522	2.89	0.0013
ERROR	65	398819.94822863	6135.69151121		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	261.28335954				
CL2	-6.76644990	4.64728784	13007.26872422	2.12	0.1502
DET1	-0.00868519	0.00747541	8282.32041040	1.35	0.2496
DET2	-0.14749971	0.24668206	2193.66695149	0.36	0.5520
CL22	0.16390241	0.08706016	21746.79416988	3.54	0.0642
DET22	0.00348047	0.00147647	34094.89848068	5.56	0.0214
DET33	0.00018014	0.00020479	4747.26419215	0.77	0.3823
C102	-0.17997284	0.05652163	62208.25785160	10.14	0.0022
C104	0.02652182	0.00623114	111156.65892946	18.12	0.0001
C202	0.31433859	0.09781694	63362.43437468	10.33	0.0020
C203	0.00342792	0.00538086	2490.13376591	0.41	0.5263
C204	-0.04560663	0.01110051	103569.85568279	16.88	0.0001
DET13	-0.00003387	0.00001884	19945.69233850	3.25	0.0760
DET14	0.00002583	0.00001202	28321.19734876	4.62	0.0354
DET23	-0.00178123	0.00055827	62462.64229846	10.18	0.0022
DET24	-0.00002140	0.00028716	34.08081701	0.01	0.9408
DET34	-0.00004410	0.00010735	1035.55404481	0.17	0.6826

STEP 16 DET2 REPLACED BY CL11 R SQUARE = 0.42511143 C(P) = 13.41560929

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	290031.93799034	18126.99612440	3.00	0.0009
ERROR	65	392217.28152185	6034.11202341		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	249.57966686				
CL2	-6.48416003	4.05636394	15418.67278115	2.56	0.1148
DET1	-0.00665573	0.00737060	4701.09144219	0.78	0.3807
CL11	0.06680009	0.05532646	8796.33365827	1.46	0.2317
CL22	-0.02023796	0.19098298	67.75749589	0.01	0.9159
DET22	0.00316545	0.00147690	27719.36859096	4.59	0.0358
DET33	0.00020509	0.00020448	6070.20760952	1.01	0.3196
C102	-0.20622919	0.05412883	87760.35745945	14.54	0.0003
C104	0.02425629	0.00645752	85842.95933909	14.23	0.0004
C202	0.34537457	0.09348998	82350.07052267	13.65	0.0005
C203	0.00275257	0.00533146	2989.99164172	0.50	0.4840
C204	-0.04161306	0.01158724	77823.83861095	12.90	0.0006
DET13	-0.00002595	0.00001878	22113.11776334	3.66	0.0600
DET14	0.00002179	0.00001179	27218.25780544	4.51	0.0375
DET23	-0.00152118	0.00052233	51178.91734228	8.48	0.0049
DET24	0.00006276	0.00029161	279.47963456	0.05	0.8303
DET34	-0.00007319	0.00011000	2671.45502164	0.44	0.5082

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE V1S

STEP 16 DET34 REPLACED BY C1D3 R SQUARE = 0.43156518 C(P) = 12.72615189

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	294435.00603309	18402.18787707	3.08	0.0007
ERROR	65	387814.21347911	5966.37251506		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	253.46293750				
CL2	-7.02990531	4.01225867	18316.03507366	3.07	0.0845
DET1	-0.00599169	0.00718345	4150.84994006	0.70	0.4073
CL11	0.10836281	0.07111221	13854.23177577	2.32	0.1324
CL22	-0.14977617	0.23814275	2360.04875186	0.40	0.5316
DET22	0.00406899	0.00126376	62461.81332991	10.47	0.0019
DET33	0.00007217	0.00011029	2555.12915354	0.43	0.5152
C1D2	-0.16331944	0.07027538	32224.02035815	5.40	0.0233
C1D3	-0.04280980	0.03931423	7074.52306438	1.19	0.2802
C1D4	0.03226827	0.00879269	80355.91079809	13.47	0.0005
C2D2	0.27315949	0.12077570	30528.88672778	5.12	0.0270
C2D3	0.07900753	0.06860497	7912.90836188	1.33	0.2537
C2D4	-0.05551693	0.01495226	82208.17358481	13.78	0.0004
DET13	-0.00003166	0.00001223	40012.35466170	6.71	0.0118
DET14	0.00000994	0.00000994	29377.49493632	4.92	0.0300
DET33	-0.00146244	0.00051668	49779.70105415	8.34	0.0053
DET34	-0.00015940	0.00024236	2580.91539395	0.43	0.5130

STEP 16 DET33 REPLACED BY CL1 R SQUARE = 0.43472063 C(P) = 12.38905309

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	296587.81340598	18536.73833787	3.12	0.0006
ERROR	65	385661.40610621	5933.25240163		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	267.91777788				
CL1	-14.95070088	16.78389156	4707.93652643	0.79	0.3763
CL2	17.76753565	28.23452795	2349.55789413	0.40	0.5314
DET1	-0.00967488	0.00485360	23575.20466155	3.97	0.0504
CL11	0.17784121	0.09433537	21084.90925055	3.55	0.0639
CL22	-0.35920249	0.29476205	8811.06409351	1.49	0.2274
DET22	0.00412015	0.00125474	63974.85383546	10.78	0.0017
C1D2	-0.15922321	0.06950595	31132.33059238	5.25	0.0252
C1D3	-0.05324810	0.03945309	10807.84010093	1.82	0.1818
C1D4	0.03674534	0.01024155	76282.27016139	12.86	0.0006
C2D2	0.26308894	0.11848554	29250.81765700	4.93	0.0299
C2D3	0.09864745	0.06795624	12502.75820021	2.11	0.1514
C2D4	-0.06293556	0.01715027	79899.30250103	13.47	0.0005
DET13	-0.00003405	0.00001192	48463.61599107	8.17	0.0057
DET14	0.00002628	0.00000807	62932.85087119	10.61	0.0018
DET33	-0.00128228	0.00047026	42748.58807475	7.20	0.0092
DET34	-0.00020022	0.00025070	3784.52824741	0.64	0.4274

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 16 DET1 REPLACED BY C2D1 R SQUARE = 0.43641698 C(P) = 12.20783133

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	297745.14632135	18609.07164508	3.15	0.0006
ERROR	65	384504.07319085	5915.44727986		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	255.33104443				
CL1	-12.88205298	16.73749347	3504.10336745	0.59	0.4443
CL2	14.49342842	28.20333505	1562.17223067	0.26	0.6091
CL11	0.15184329	0.09979667	13694.51431443	2.32	0.1330
CL22	-0.26082259	0.31781413	3983.50138775	0.67	0.4149
DET22	0.00374818	0.00124727	53420.48707918	9.03	0.0038
C1D2	-0.17903660	0.07394507	34677.89536286	5.86	0.0183
C1D3	-0.04130438	0.04259147	5563.32836309	0.94	0.3358
C1D4	0.03558807	0.01031628	69922.40461383	11.82	0.0010
C2D1	-0.00011907	0.00005823	24732.53757692	4.18	0.0449
C2D2	0.30052952	0.12766358	32781.42391133	5.54	0.0216
C2D3	0.07515733	0.07435615	6043.60494516	1.02	0.3159
C2D4	-0.06060413	0.01728114	72752.39265441	12.30	0.0008
DET13	-0.00002964	0.00001186	36950.24318756	6.25	0.0150
DET14	0.00002417	0.00000743	62534.90630865	10.57	0.0018
DET23	-0.00110565	0.00044418	36653.15051128	6.20	0.0154
DET24	-0.00018681	0.00025048	3290.18124970	0.56	0.4585

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STEP 16 CL2 REPLACED BY DET11 R SQUARE = 0.43845231 C(P) = 11.99039632

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	299133.74715637	18695.85919727	3.17	0.0005
ERROR	65	383115.47235582	5894.08419009		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	261.12372372				
CL1	-4.59620416	2.37526388	22069.43565502	3.74	0.0573
CL11	0.12408490	0.07258555	17224.78836596	2.92	0.0921
CL22	-0.18310752	0.24293426	3348.50668078	0.57	0.4537
DET11	0.00000003	0.00000004	2950.77306573	0.50	0.4818
DET22	0.00404342	0.00134922	52935.97769250	8.98	0.0039
C1D2	-0.17772802	0.07386041	34127.51528923	5.79	0.0190
C1D3	-0.03934523	0.04180298	5221.38857381	0.89	0.3501
C1D4	0.03368592	0.00920595	78917.33913919	13.39	0.0005
C2D1	-0.00046903	0.00053865	5059.00878141	0.86	0.3576
C2D2	0.29576071	0.12773342	31600.08287980	5.36	0.0238
C2D3	0.07491872	0.07359571	6107.90111994	1.04	0.3125
C2D4	-0.05800070	0.01566655	80786.00980458	13.71	0.0004
DET13	-0.00002614	0.00001275	24632.37166838	4.18	0.0450
DET14	0.00002453	0.00000743	64259.56576200	10.90	0.0016
DET23	-0.00134127	0.00050136	42184.09410589	7.16	0.0094
DET24	-0.00016156	0.00023822	2710.80122756	0.46	0.5001

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE V1S

STEP 16 DET24 REPLACED BY DET4 R SQUARE = 0.44151635 C(P) = 11.66306330

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	301224.18752879	18826.51172055	3.21	0.0004
ERROR	65	381025.03198340	5861.92356898		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	260.69010322				
CL1	-3.23926874	2.50588090	9795.19888287	1.67	0.2007
DET4	-0.03478915	0.03843923	4801.24159998	0.82	0.3688
CL11	0.12424922	0.07214790	17384.93578832	2.97	0.0898
CL22	-0.23026763	0.25274566	4865.62380975	0.83	0.3656
DET11	0.00000003	0.00000004	3801.50067947	0.65	0.4236
DET22	0.00386734	0.00116057	65090.71542695	11.10	0.0014
C1D2	-0.15187414	0.08376765	19268.82103510	3.29	0.0744
C1D3	-0.03889904	0.03998215	5553.89552796	0.95	0.3340
C1D4	0.03118797	0.00817870	85303.09396945	14.55	0.0003
C2D1	-0.00056523	0.00054601	6281.92922225	1.07	0.3044
C2D2	0.24915524	0.14550628	17193.18569461	2.93	0.0916
C2D3	0.07571000	0.07114552	6638.21779073	1.13	0.2912
C2D4	-0.05353736	0.01441362	80873.85572824	13.80	0.0004
DET13	-0.00002561	0.00001226	25556.97208691	4.36	0.0407
DET14	0.00002519	0.00000744	67170.90119175	11.46	0.0012
DET23	-0.00166698	0.00054115	55623.57627294	9.49	0.0030

STEP 16 DET11 REPLACED BY DET3 R SQUARE = 0.44266968 C(P) = 11.53985338

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	302011.04055425	18875.69003464	3.23	0.0004
ERROR	65	380238.17895795	5849.81813781		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	275.47400313				
CL1	-4.35216064	2.83077661	13827.39560603	2.36	0.1290
DET3	0.11028722	0.12452927	4588.35370493	0.78	0.3791
DET4	-0.06008055	0.05146378	7972.72580789	1.36	0.2473
CL11	0.13383978	0.07393622	18882.03806134	3.23	0.0770
CL22	-0.19823633	0.24723353	3760.92008114	0.64	0.4256
DET22	0.00347770	0.00102501	67340.02281915	11.51	0.0012
C1D2	-0.16885767	0.08367778	23821.13034086	4.07	0.0477
C1D3	-0.04086329	0.04015256	6058.77159520	1.04	0.3126
C1D4	0.03324973	0.00872715	86153.58277264	14.73	0.0003
C2D1	-0.00013510	0.00005907	30597.50275041	5.23	0.0255
C2D2	0.28155358	0.14496096	22067.96708309	3.77	0.0564
C2D3	0.07210984	0.07047619	6124.16027020	1.05	0.3100
C2D4	-0.05647513	0.01498732	83063.27687651	14.20	0.0004
DET13	-0.00002634	0.00001166	30839.25111730	5.27	0.0249
DET14	0.00002367	0.00000750	58314.98000210	9.97	0.0024
DET23	-0.00141221	0.00044184	59760.62813155	10.22	0.0022

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MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE V1S

STEP 16 C2D1 REPLACED BY DET1 R SQUARE = 0.45138729 C(P) = 10.60854619

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	16	307958.62907537	19247.41431746	3.34	0.0003
ERROR	65	374290.59043283	5758.31677589		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	310.51716378				
C1	-5.36011205	2.89741321	19843.82599278	3.45	0.0679
DET1	-0.01311647	0.00520616	36545.09127553	6.35	0.0142
DET3	0.18878833	0.13091248	11975.22626460	2.08	0.1541
DET4	-0.08768486	0.05400881	15171.10510383	2.63	0.1094
C11	0.15366698	0.06678023	30502.14932727	5.30	0.0246
C13	-0.25726714	0.22379158	7611.22696771	1.32	0.2545
DET22	0.00400531	0.00104323	84880.73574560	14.74	0.0003
C1D2	-0.15615895	0.08019218	21846.79398511	3.79	0.0558
C1D3	-0.05182387	0.03654789	11577.92362828	2.01	0.1610
C1D4	0.03590739	0.00860766	100205.73744547	17.40	0.0001
C2D2	0.25756214	0.13788094	20096.41440913	3.49	0.0662
C2D3	0.09178360	0.06369573	11956.52866297	2.08	0.1544
C2D4	-0.06007356	0.01473527	95655.52586123	16.61	0.0001
DET13	-0.00013117	0.00001165	41231.16265967	7.16	0.0094
DET14	0.00002740	0.00000809	66004.39045909	11.46	0.0012
DET23	-0.00172336	0.00047814	73079.59186857	12.69	0.0007

THE ABOVE MODEL IS THE BEST 16 VARIABLE MODEL FOUND.

STEP 17 VARIABLE DET12 ENTERED R SQUARE = 0.45500559 C(P) = 12.22270167

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	17	310427.21069265	18260.42415839	3.14	0.0005
ERROR	64	371822.00881955	5809.71888781		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	334.42404357				
C1	-6.03340694	3.07871142	22312.19979615	3.84	0.0544
DET1	-0.02014168	0.01198044	16421.06108181	2.83	0.0976
DET3	0.24448069	0.15681409	14121.28031339	2.43	0.1239
DET4	-0.10716346	0.06194573	17384.80510607	2.99	0.0885
C11	0.18102567	0.07985252	30162.25163393	5.19	0.0260
C13	-0.34483324	0.26185054	10075.44898977	1.73	0.1926
DET22	0.00445828	0.00125138	73042.59010810	12.57	0.0007
C1D2	-0.14139033	0.08371670	16557.76573810	2.85	0.0962
C1D3	-0.06512106	0.04195762	13968.46442870	2.40	0.1259
C1D4	0.03794723	0.00921065	98769.09969482	17.00	0.0001
C2D2	0.22813708	0.14565645	14257.38015828	2.45	0.1222
C2D3	0.11617512	0.07411847	14273.43592366	2.46	0.1219
C2D4	-0.06332780	0.01559200	95651.29858051	16.46	0.0001
DET12	0.00002773	0.00004254	2468.58161323	0.42	0.5168
DET13	-0.00003618	0.00001400	38784.69584501	6.68	0.0121
DET14	0.00002875	0.00000839	69230.29456030	11.74	0.0011
DET23	-0.00172972	0.00050178	60361.09542913	10.39	0.0020

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 17 DET1 REPLACED BY C2D1 R SQUARE = 0.45799148 C(P) = 11.90331749

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	17	312464.33295228	18380.25487955	3.18	0.0004
ERROR	64	369784.88655592	5777.88885250		
TOTAL	81	682249.21951220			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	306.66013136				
C1I	-5.38581279	2.91639113	19705.16852754	3.41	0.0694
DET3	0.18715595	0.13633050	10893.71459309	1.89	0.1745
DET4	-0.09141968	0.05620335	15287.06409097	2.65	0.1087
C1I1	-0.16237288	0.07669144	25898.80706509	4.48	0.0381
C1I2	-0.28401255	0.25384558	7232.54835282	1.25	0.2674
DET22	0.00425335	0.00117058	76283.04237591	13.20	0.0006
C1D2	-0.16748844	0.08316797	23432.93565962	4.06	0.0482
C1D3	-0.04983068	0.04045802	8769.03543120	1.52	0.2226
C1D4	0.03593155	0.00886097	95007.60407120	16.44	0.0001
C2D1	-0.00051289	0.00028701	18458.18334144	3.19	0.0786
C2D2	0.27397218	0.14417721	20863.58349709	3.61	0.0619
C2D3	-0.08967732	0.07124888	9153.31288161	1.58	0.2127
C2D4	-0.05993585	0.01511548	90844.54798896	15.72	0.0002
DET12	0.00012175	0.00009052	10453.29239803	1.81	0.1834
DET13	-0.00003812	0.00001433	40894.39790507	7.08	0.0099
DET14	0.00002476	0.00000749	63100.11338881	10.92	0.0016
DET23	-0.00188853	0.00056411	64756.39681427	11.21	0.0014

THE ABOVE MODEL IS THE BEST 17 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 1 VARIABLE CLI1 ENTERED R SQUARE = 0.14709560 C(P) = -3.61242946

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	7.17231996	7.17231996	13.80	0.0004
ERROR	80	41.58726053	0.51984076		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.58523878				
CLI1	0.00006918	0.00001863	7.17231996	13.80	0.0004

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE DET22 ENTERED R SQUARE = 0.15248301 C(P) = -2.08230196

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	7.43500780	3.71750390	7.11	0.0015
ERROR	79	41.32457269	0.52309586		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.55229083				
CLI1	0.00006325	0.00002048	4.98987052	9.54	0.0028
DET22	0.00000126	0.00000178	0.26268784	0.50	0.4806

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE C2D3 ENTERED R SQUARE = 0.15908607 C(P) = -0.65819957

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	7.75697024	2.58565675	4.92	0.0036
ERROR	78	41.00261025	0.52567449		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.56781163				
CLI1	0.00007021	0.00002237	5.17637952	9.85	0.0024
DET22	0.00000240	0.00000230	0.57120442	1.09	0.3004
C2D3	-0.00000384	0.00000491	0.32198244	0.61	0.4362

STEP 3 CLI1 REPLACED BY CLI R SQUARE = 0.16541363 C(P) = -1.21006843

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	8.06549512	2.68849971	5.15	0.0028
ERROR	78	40.69408136	0.52171899		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.21490419				
CLI	0.01317077	0.00406205	5.48490840	10.51	0.0017
DET22	0.00000233	0.00000230	0.53680426	1.03	0.3135
C2D3	-0.00000668	0.00000527	0.83791029	1.61	0.2088

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 3 DET22 REPLACED BY DET23 R SQUARE = 0.17175598 C(P) = -1.76322757

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	8.37474535	2.79158312	5.39	0.0021
ERROR	78	40.38483113	0.51775425		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.12603186				
CL1	0.01792355	0.00538770	5.73013498	11.07	0.0013
C2D3	-0.00001963	0.00001325	1.13604759	2.19	0.1426
DET23	0.00000160	0.00000125	0.84605449	1.63	0.2049

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE DET2 ENTERED R SQUARE = 0.17809931 C(P) = -0.31647245

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	8.68404752	2.17101188	4.17	0.0041
ERROR	77	40.07553297	0.52046147		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.10973975				
CL1	0.02127748	0.00693597	4.89794975	9.41	0.0030
DET2	-0.00089067	0.00115537	0.30929817	0.59	0.4431
C2D3	-0.00002643	0.00001595	1.42942726	2.75	0.1015
DET23	0.00002254	0.00000175	1.09646739	2.11	0.1507

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE DET4 ENTERED R SQUARE = 0.18431198 C(P) = 1.14167814

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	8.98697491	1.79739498	3.43	0.0076
ERROR	76	39.77260558	0.52332376		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.97754035				
CL1	0.02339298	0.00749024	5.10446551	9.75	0.0025
DET2	-0.00136219	0.00133295	0.57087760	1.09	0.2996
DET4	0.00013046	0.00013546	0.30292739	0.58	0.4491
C2D3	-0.00003222	0.00001771	1.73206455	3.31	0.0728
DET23	0.00000286	0.00000180	1.31237944	2.51	0.1174

STEP 5 DET2 REPLACED BY DET24 R SQUARE = 0.18924424 C(P) = 0.71150266

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	9.22746965	1.84549393	3.55	0.0063
ERROR	76	39.53211083	0.52015935		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.85170053				
CL1	0.02296815	0.00671382	6.08764391	11.70	0.0010
DET4	0.00021863	0.00018533	0.69361064	1.33	0.2518
C2D3	-0.00003671	0.00001884	1.97506853	3.80	0.0550
DET23	0.00000429	0.00000255	1.47009746	2.83	0.0968
DET24	-0.00000102	0.00000082	0.81137234	1.56	0.2155

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 5 DET4 REPLACED BY DET44 R SQUARE = 0.19057891 C(P) = 0.59509711

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	9.29254757	1.85850951	3.58	0.0059
ERROR	76	39.46703292	0.51930306		
TOTAL	81	48.75958049			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.94251955				
CL1	0.02595627	0.00810557	5.32523194	10.25	0.0020
DET44	0.00000107	0.00000006	0.75868856	1.46	0.2305
C2D3	-0.00004204	0.00002147	1.99184141	3.84	0.0538
DET23	0.00000422	0.00000247	1.5124315	2.91	0.0920
DET24	-0.00000110	0.00000085	0.87802361	1.69	0.1974

STEP 5 DET23 REPLACED BY DET22 R SQUARE = 0.22412890 C(P) = -2.33102504

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	10.92843113	2.18568623	4.39	0.0015
ERROR	76	37.83114936	0.49777828		
TOTAL	81	48.75958049			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.13951328				
CL1	0.01040734	0.00501306	2.14540460	4.31	0.0413
DET22	0.00002450	0.00000974	3.14830671	6.32	0.0140
DET44	0.00000023	0.00000010	2.74810019	5.52	0.0214
C2D3	-0.00001142	0.00000869	0.86036262	1.73	0.1926
DET24	-0.00000433	0.00000182	2.80082669	5.63	0.0202

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE DET23 ENTERED R SQUARE = 0.23610759 C(P) = -1.37576781

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	11.51250707	1.91875118	3.86	0.0021
ERROR	75	37.24707342	0.49662765		
TOTAL	81	48.75958049			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.99527585				
CL1	0.01817507	0.00873936	2.14794641	4.33	0.0410
DET22	0.00002143	0.00001013	2.21995950	4.47	0.0378
DET44	0.00000024	0.00000010	2.96107593	5.96	0.0170
C2D3	-0.00003270	0.00002145	1.15379349	2.32	0.1317
DET23	0.00000273	0.00000252	0.58407594	1.18	0.2816
DET24	-0.00000457	0.00000184	3.07201625	6.19	0.0151

STEP 6 CL1 REPLACED BY CL2 R SQUARE = 0.23620805 C(P) = -1.38452967

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	11.51740545	1.91956758	3.87	0.0020
ERROR	75	37.24217500	0.49656233		
TOTAL	81	48.75958049			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.91763554				
CL2	0.03647045	0.01751546	2.15284483	4.34	0.0407
DET22	0.00002386	0.00000870	3.00555873	6.05	0.0162
DET44	0.00000026	0.00000010	3.41862230	6.88	0.0105
C2D3	-0.00003809	0.00002378	1.27411863	2.57	0.1134
DET23	0.00000329	0.00000274	0.71650485	1.44	0.2334
DET24	-0.00000509	0.00000183	3.83294032	7.72	0.0069

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

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F

STEP 7 VARIABLE C202 ENTERED R SQUARE = 0.24230494 C(P) = 0.08371943

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	11.81468715	1.68781246	3.38	0.0036
ERROR	74	36.94489330	0.49925531		
TOTAL	81	48.75958045			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.99283896				
C12	0.03268607	0.01823477	1.60415825	3.21	0.0771
DET22	0.00001967	0.00001114	1.55657094	3.12	0.0816
DET44	0.00000027	0.00000010	3.55332949	7.12	0.0094
C202	0.00004115	0.00005333	0.29728170	0.60	0.4428
C203	-0.00004456	0.00002527	1.55175214	3.11	0.0820
DET23	0.00000286	0.00000285	0.91858354	1.84	0.1791
DET24	-0.00000507	0.00000184	3.80149772	7.61	0.0073

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

STEP 8 VARIABLE C123 ENTERED R SQUARE = 0.25203924 C(P) = 1.23472519

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	12.28932757	1.53616595	3.07	0.0048
ERROR	73	36.47025292	0.49959251		
TOTAL	81	48.75958045			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.75135540				
C12	0.04966149	0.02521595	1.93716728	3.88	0.0527
C123	-0.00031934	0.00032763	0.47464038	0.95	0.3329
DET22	0.00002228	0.00001146	1.88790952	3.78	0.0556
DET44	0.00000030	0.00000011	4.02156017	8.05	0.0059
C202	0.00007185	0.00006195	0.67195306	1.35	0.2499
C203	-0.00004328	0.00002532	1.46033131	2.92	0.0916
DET23	0.00000377	0.00000285	0.87777212	1.76	0.1891
DET24	-0.00000596	0.00000205	4.21398334	8.43	0.0049

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STEP 8 C202 REPLACED BY C102 R SQUARE = 0.25291864 C(P) = 1.15802692

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	12.33220665	1.54152583	3.09	0.0047
ERROR	73	36.42737384	0.49900512		
TOTAL	81	48.75958045			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.74422340				
C12	0.03507899	0.02527793	1.97483882	3.96	0.0504
C123	-0.00034850	0.00033765	0.53159426	1.07	0.3054
DET22	0.00002204	0.00001148	1.83803287	3.68	0.0589
DET44	0.00000029	0.00000010	3.87828244	7.77	0.0068
C102	0.00004605	0.00003612	0.71483215	1.43	0.2352
C203	-0.00003892	0.00002465	1.30425014	2.61	0.1103
DET23	0.00000347	0.00000280	0.76582760	1.53	0.2193
DET24	-0.00000573	0.00000202	4.02774305	8.07	0.0058

STEP 8 C203 REPLACED BY DET3 R SQUARE = 0.25865122 C(P) = 0.65804940

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	12.61172506	1.57646563	3.18	0.0038
ERROR	73	36.14785543	0.49517610		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.77935568				
CL2	0.05943451	0.02735236	2.33801514	4.72	0.0330
DET3	-0.00090378	0.00050536	1.58376856	3.20	0.0779
CL22	-0.00086906	0.00040377	1.98821585	4.02	0.0488
DET22	0.00002737	0.00001110	3.01288359	6.08	0.0160
DET44	0.00000033	0.00000011	4.39026401	8.87	0.0039
CL02	0.00004667	0.00003129	1.10187434	2.23	0.1401
DET23	0.00000132	0.00000154	0.36242271	0.73	0.3951
DET24	-0.00000648	0.00000211	4.68953078	9.47	0.0029

STEP 8 DET23 REPLACED BY DET13 R SQUARE = 0.27218270 C(P) = -0.52212246

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	13.27151425	1.65893928	3.41	0.0022
ERROR	73	35.48806624	0.48613789		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.62740835				
CL2	0.06513406	0.02634228	2.97213819	6.11	0.0157
DET3	-0.00067555	0.00033526	1.92750784	3.96	0.0502
CL22	-0.00090586	0.00039695	2.53167668	5.21	0.0254
DET22	0.00003201	0.00001132	3.88430830	7.99	0.0061
DET44	0.00000035	0.00000011	4.79722995	9.87	0.0024
CL02	0.00003360	0.00003084	0.57696085	1.19	0.2796
DET13	0.00000000	0.00000000	1.02221190	2.10	0.1513
DET24	-0.00000658	0.00000206	4.98165445	10.25	0.0020

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

STEP 9 VARIABLE DET23 ENTERED R SQUARE = 0.28081538 C(P) = 0.72496287

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	13.69244019	1.52138224	3.12	0.0032
ERROR	72	35.06714029	0.48704362		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.54775992				
CL2	0.07833571	0.02994176	3.33241311	6.84	0.0108
DET3	-0.00102671	0.00050794	1.98995629	4.09	0.0470
CL22	-0.00108298	0.00044064	2.94199465	6.04	0.0164
DET22	0.00003150	0.00001135	3.75227026	7.70	0.0070
DET44	0.00000036	0.00000011	5.09746746	10.47	0.0018
CL02	0.00003914	0.00003144	0.75477257	1.55	0.2172
DET13	0.00000000	0.00000000	1.08071513	2.22	0.1407
DET23	0.00000142	0.00000153	0.42092595	0.86	0.3557
DET24	-0.00000708	0.00000213	5.39908641	11.09	0.0014

STEP 9 DET13 REPLACED BY DET11 R SQUARE = 0.28114839 C(P) = 0.69591884

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	13.70867761	1.52318640	3.13	0.0032
ERROR	72	35.05090288	0.48681810		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.55207405				
CL2	0.07795823	0.02980704	3.33348525	6.85	0.0108
DET3	-0.00102182	0.00050721	1.97580359	4.06	0.0477
CL22	-0.00107903	0.00043888	2.94260679	6.04	0.0164
DET11	0.00000000	0.00000000	1.09695254	2.25	0.1377
DET22	0.00003145	0.00001133	3.74922647	7.70	0.0070
DET44	0.00000036	0.00000011	5.12606123	10.53	0.0018
CL23	0.00003907	0.00003155	0.70911541	1.46	0.2314
DET23	0.00000165	0.00000155	0.55424128	1.14	0.2895
DET24	-0.00000715	0.00000213	5.45550439	11.21	0.0013

THE ABOVE MODEL IS THE BEST 9 VARIABLE MODEL FOUND.

STEP 10 VARIABLE DET4 ENTERED R SQUARE = 0.28794994 C(P) = 2.10270964

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	14.04031830	1.40403183	2.87	0.0046
ERROR	71	34.71926219	0.48900369		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.48727317				
CL2	0.07060983	0.03119197	2.50586029	5.12	0.0266
DET3	-0.00134890	0.00064510	2.13802027	4.37	0.0401
DET4	0.00031804	0.00038619	0.33164069	0.68	0.4130
CL22	-0.00097230	0.00045856	2.19847355	4.50	0.0375
DET11	0.00000000	0.00000000	0.96264393	1.97	0.1650
DET22	0.00002923	0.00001167	3.06684502	6.27	0.0146
DET44	0.00000029	0.00000014	2.20305102	4.51	0.0373
CL23	0.00002542	0.00003178	0.60736630	1.24	0.2688
DET23	0.00000313	0.00000237	0.85090054	1.74	0.1914
DET24	-0.00000715	0.00000214	5.46056613	11.17	0.0013

STEP 10 DET11 REPLACED BY DET1 R SQUARE = 0.28796964 C(P) = 2.10099155

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	14.04127681	1.40412788	2.87	0.0046
ERROR	71	34.71830167	0.48899016		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.48295522				
CL2	0.07088333	0.03127206	2.51232236	5.14	0.0265
DET1	0.00000147	0.00000105	0.96360445	1.97	0.1647
DET3	-0.00135989	0.00064559	2.16968820	4.44	0.0387
DET4	0.00031988	0.00038605	0.33571941	0.69	0.4101
CL22	-0.00097537	0.00045644	2.20387371	4.51	0.0372
DET22	0.00002921	0.00001167	3.06475931	6.27	0.0146
DET44	0.00000029	0.00000014	2.19703425	4.49	0.0375
CL23	0.00003564	0.00003175	0.61594904	1.26	0.2655
DET23	0.00000311	0.00000237	0.84121796	1.72	0.1939
DET24	-0.00000714	0.00000214	5.45122035	11.15	0.0013

THE ABOVE MODEL IS THE BEST 10 VARIABLE MODEL FOUND.

STEP 11 VARIABLE CL1 ENTERED R SQUARE = 0.29803699 C(P) = 3.22294946

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	14.53215874	1.32110534	2.70	0.0059
ERROR	70	34.22742174	0.48896317		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.46335407				
CL1	-0.04796512	0.04787138	0.49087993	1.00	0.3198
CL2	0.15392527	0.08858287	1.47637451	3.02	0.0867
DET1	0.00000220	0.00000127	1.45420505	2.97	0.0890
DET3	-0.00157798	0.00068128	2.62320403	5.36	0.0235
DET4	0.00041697	0.00039802	0.53664412	1.10	0.2984
CL22	-0.00114272	0.00048884	2.67187615	5.46	0.0223
DET22	0.00003098	0.00001180	3.36967558	6.89	0.0106
DET44	0.00000032	0.00000014	2.56273172	5.24	0.0251
C1D2	0.00007048	0.00004109	1.09534842	2.24	0.1390
DET22	0.00000363	0.00000243	1.09358327	2.24	0.1393
DET24	-0.00000834	0.00000245	5.65772017	11.57	0.0011

STEP 11 DET4 REPLACED BY C2D2 R SQUARE = 0.31543042 C(P) = 1.70595093

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	15.38025490	1.39820499	2.93	0.0031
ERROR	70	33.37932558	0.47684751		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.47306638				
CL1	-0.14796656	0.08023960	1.62154520	3.40	0.0694
CL2	0.35010298	0.14984717	2.60299926	5.46	0.0223
DET1	0.00000209	0.00000126	1.32693790	2.78	0.0998
DET3	-0.00142581	0.00054601	3.25157297	6.82	0.0110
CL22	-0.00160634	0.00052390	4.48280674	9.40	0.0031
DET22	0.00002941	0.00001167	3.02749362	6.35	0.0140
DET44	0.00000042	0.00000012	5.63278572	11.81	0.0010
C1D2	0.00056711	0.00029830	1.72354431	3.61	0.0614
C2D2	-0.00083888	0.00049227	1.38474028	2.90	0.0928
DET23	0.00000254	0.00000161	1.18438997	2.48	0.1195
DET24	-0.00000801	0.00000240	5.29511535	11.10	0.0014

STEP 11 DET1 REPLACED BY DET11 R SQUARE = 0.31545411 C(P) = 1.70388456

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	15.38141013	1.39831001	2.93	0.0031
ERROR	70	33.37817035	0.47683101		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.47854794				
CL1	-0.14787403	0.08021705	1.62037268	3.40	0.0695
CL2	0.34949597	0.14970116	2.59895337	5.45	0.0224
DET3	-0.00141269	0.00054415	3.21383036	6.74	0.0115
CL22	-0.00160111	0.00052232	4.48049284	9.40	0.0031
DET11	0.00000000	0.00000000	1.32809312	2.79	0.0996
DET22	0.00002944	0.00001168	3.03022650	6.35	0.0140
DET44	0.00000042	0.00000012	5.63572389	11.82	0.0010
C1D2	0.00056615	0.00029827	1.71796141	3.60	0.0618
C2D2	-0.00083778	0.00049227	1.38107166	2.90	0.0932
DET23	0.00000258	0.00000161	1.21503129	2.55	0.1149
DET24	-0.00000803	0.00000241	5.29995023	11.11	0.0014

THE ABOVE MODEL IS THE BEST 11 VARIABLE MODEL FOUND.

STEP 12 VARIABLE DET4 ENTERED R SQUARE = 0.32821299 C(P) = 2.95289794

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	12	16.00643392	1.33386949	2.81	0.0035
ERROR	69	32.75314657	0.47468328		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.38468558				
CL1	-0.16491422	0.08140215	1.94826482	4.10	0.0466
CL2	0.36956668	0.15038733	2.86706462	6.04	0.0165
DET3	-0.00191785	0.00069898	3.57361422	7.53	0.0077
DET4	0.00045052	0.00039261	0.62502379	1.32	0.2551
CL22	-0.00151716	0.00052626	3.94521462	8.31	0.0052
DET11	0.00000000	0.00000000	1.42248196	3.00	0.0879
DET22	0.00002683	0.00001187	2.42414615	5.11	0.0270
DET44	0.00000034	0.00000014	2.74221430	5.78	0.0189
C1D2	0.00058986	0.00029831	1.85591536	3.91	0.0520
C2D2	-0.00086749	0.00049184	1.47667157	3.11	0.0822
DET23	0.00000472	0.00000247	1.73813100	3.66	0.0598
DET24	-0.00000836	0.00000242	5.66631055	11.94	0.0009

STEP 12 DET11 REPLACED BY DET1 R SQUARE = 0.32841404 C(P) = 2.57356147

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	12	16.01333077	1.33444423	2.81	0.0035
ERROR	69	32.74624572	0.47458333		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.37776395				
CL1	-0.16524990	0.08143558	1.95418884	4.12	0.0463
CL2	0.37063449	0.15054423	2.87657636	6.06	0.0163
DET1	0.00000218	0.00000125	1.42937881	3.01	0.0871
DET3	-0.00193546	0.00070102	3.61756497	7.62	0.0074
DET4	0.00046352	0.00039267	0.63307586	1.33	0.2521
CL22	-0.00152328	0.00052758	3.95631824	8.34	0.0052
DET22	0.00002680	0.00001186	2.42253111	5.10	0.0270
DET44	0.00000034	0.00000014	2.73669848	5.77	0.0190
C1D2	0.00059107	0.00029831	1.86320062	3.93	0.0515
C2D2	-0.00086880	0.00049178	1.48117202	3.12	0.0817
DET23	0.00000470	0.00000247	1.72351759	3.63	0.0609
DET24	-0.00000835	0.00000242	5.66860354	11.94	0.0009

THE ABOVE MODEL IS THE BEST 12 VARIABLE MODEL FOUND.

STEP 13 VARIABLE DET2 ENTERED R SQUARE = 0.33907435 C(P) = 3.64380357

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	16.53312204	1.27177870	2.68	0.0043
ERROR	68	32.22645745	0.47391849		
TOTAL	81	48.75958049			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.35051140				
CL1	-0.18686922	0.08395599	2.34787953	4.95	0.0293
CL2	0.40956429	0.15473693	3.30397314	6.97	0.0103
DET1	0.00000226	0.00000126	1.53293076	3.23	0.0765
DET2	-0.00232154	0.00221673	0.51979227	1.10	0.2987
DET3	-0.00180926	0.00071082	3.07035379	6.48	0.0132
DET4	0.00061681	0.00042224	1.01135203	2.13	0.1487
CL22	-0.00164393	0.00053565	4.39785227	9.28	0.0033
DET22	0.00002702	0.00001186	2.46213173	5.20	0.0258
DET44	0.00000028	0.00000015	1.67602906	3.54	0.0643
C1D2	0.00266514	0.00030636	2.23369504	4.71	0.0334
C2D2	-0.00095497	0.00049828	1.74075619	3.67	0.0595
DET23	0.00000448	0.00000247	1.55811999	3.29	0.0742
DET24	-0.00000794	0.00000245	4.99165335	10.53	0.0018

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 13 DET23 REPLACED BY DET33 R SQUARE = 0.34434304 C(P) = 3.18428544

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	16.79002214	1.29154016	2.75	0.0035
ERROR	68	31.96955834	0.47014056		
TOTAL	81	48.75958049			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.26220860				
CL1	-0.19726438	0.08470344	2.54989891	5.42	0.0228
CL2	0.43432823	0.15731913	3.58344521	7.62	0.0074
DET1	0.00000190	0.00000124	1.10083253	2.34	0.1306
DET2	-0.00337410	0.00223034	1.07596805	2.29	0.1350
DET3	-0.00193203	0.00072355	3.35525374	7.14	0.0094
DET4	0.00070370	0.00043666	1.22101089	2.60	0.1117
CL22	-0.00179613	0.00055585	4.90891083	10.44	0.0019
DET22	0.00002813	0.00001169	2.72345181	5.79	0.0188
DET33	0.00000044	0.00000022	1.81501910	3.86	0.0535
DET44	0.00000021	0.00000016	0.81096486	1.72	0.1935
C1D2	0.00073218	0.00031335	2.56692218	5.46	0.0224
C2D2	-0.00102722	0.00050354	1.95653881	4.16	0.0452
DET24	-0.00000664	0.00000235	3.74325433	7.96	0.0063

STEP 13 DET1 REPLACED BY DET11 R SQUARE = 0.34463039 C(P) = 3.15922353

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	16.80403330	1.29261795	2.75	0.0035
ERROR	68	31.95554719	0.46993452		
TOTAL	81	48.75958049			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.26491781				
CL1	-0.19762755	0.08470909	2.55783349	5.44	0.0226
CL2	0.43475624	0.15727989	3.59143534	7.64	0.0073
DET2	-0.00338999	0.00223049	1.08550772	2.31	0.1332
DET3	-0.00192373	0.00072295	3.32744242	7.08	0.0097
DET4	0.00070432	0.00043655	1.22322920	2.60	0.1113
CL22	-0.00179648	0.00055519	4.92038365	10.47	0.0019
DET11	0.00000000	0.00000000	1.11484368	2.37	0.1281
DET22	0.00002819	0.00001169	2.73306676	5.82	0.0186
DET33	0.00000044	0.00000022	1.84741090	3.93	0.0514
DET44	0.00000021	0.00000016	0.81300674	1.73	0.1928
C1D2	0.00073255	0.00031328	2.56942872	5.47	0.0223
C2D2	-0.00102758	0.00050341	1.95802817	4.17	0.0451
DET24	-0.00000666	0.00000236	3.75573330	7.99	0.0062

H-SS

STEP 13 DET44 REPLACED BY DET13 R SQUARE = 0.34523372 C(P) = 3.10660354

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	16.83345114	1.29488086	2.76	0.0034
ERROR	68	31.92612935	0.46950190		
TOTAL	81	48.75958049			

	R VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.27695664				
CL1	-0.19225016	0.08483580	2.41085704	5.13	0.0266
CL2	0.41235224	0.15734559	3.22451886	6.87	0.0108
DET2	-0.00355086	0.00216651	1.28978062	2.75	0.1020
DET3	-0.00256967	0.00081028	4.72200289	10.06	0.0023
DET4	0.00120074	0.00033676	5.96875193	12.71	0.0007
CL22	-0.00158794	0.00053251	4.17497023	8.89	0.0040
DET11	0.00000000	0.00000000	0.88919873	1.89	0.1733
DET22	0.00002033	0.00000890	2.44792392	5.21	0.0255
DET33	0.00000143	0.00000068	2.10893165	4.49	0.0377
C1D2	0.00072703	0.00031348	2.52537927	5.38	0.0234
C2D2	-0.00102491	0.00050325	1.94702726	4.15	0.0456
DET13	-0.00000008	0.00000006	0.84242458	1.79	0.1849
DET24	-0.00000528	0.00000164	4.87289587	10.38	0.0020

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 1 VARIABLE DFT33 ENTERED R SQUARE = 0.79261627 C(P) = 112.02685440

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	0.78923799	0.78923799	305.76	0.0001
ERROR	80	0.20649982	0.00258125		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.05200217				
DFT33	0.00000006	0.00000000	0.78923799	305.76	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE DFT24 ENTERED R SQUARE = 0.81052172 C(P) = 97.61998953

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	0.80706712	0.40353356	168.97	0.0001
ERROR	79	0.18867068	0.00238824		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.06232351				
DFT33	0.00000007	0.00000001	0.50145484	209.97	0.0001
DFT24	-0.00000005	0.00000002	0.01782914	7.47	0.0078

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE DFT3 ENTERED R SQUARE = 0.84908311 C(P) = 64.28597355

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	0.84546416	0.28182139	146.28	0.0001
ERROR	78	0.15027365	0.00192659		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.03184397				
DFT3	0.00010176	0.00002279	0.03839704	19.93	0.0001
DFT33	0.00000005	0.00000001	0.10206730	52.98	0.0001
DFT24	-0.00000009	0.00000002	0.04824830	25.04	0.0001

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE DFT34 ENTERED R SQUARE = 0.85461513 C(P) = 61.21695530

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	0.85097260	0.21274315	113.16	0.0001
ERROR	77	0.14476521	0.00188007		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.02961360				
DFT3	0.00011772	0.00002437	0.04386426	23.33	0.0001
DFT33	0.00000008	0.00000002	0.03481217	18.52	0.0001
DFT24	-0.00000006	0.00000003	0.00853419	4.54	0.0363
DFT34	-0.00000003	0.00000001	0.00550844	2.93	0.0910

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 4 DET24 REPLACED BY DET23 R SQUARE = 0.85951766 C(P) = 56.72473858

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	0.85585423	0.21396356	117.78	0.0001
ERROR	77	0.13988357	0.00181667		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.02815703				
DET3	0.00012662	0.00002432	0.04925277	27.11	0.0001
DET33	0.00000010	0.00000001	0.11252203	61.94	0.0001
DET23	-0.00000018	0.00000007	0.01341583	7.38	0.0081
DET34	-0.00000003	0.00000001	0.01858210	10.23	0.0020

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE DET13 ENTERED R SQUARE = 0.86577590 C(P) = 52.99027945

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	0.86208580	0.17241716	98.04	0.0001
ERROR	76	0.13365201	0.00175858		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.02834486				
DET3	0.00013099	0.00002404	0.05221885	29.69	0.0001
DET33	0.00000011	0.00000001	0.11848981	67.38	0.0001
DET13	-0.00000000	0.00000000	0.00623157	3.54	0.0636
DET23	-0.00000016	0.00000007	0.00993269	5.65	0.0200
DET34	-0.00000004	0.00000001	0.02276588	12.95	0.0006

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE C2D2 ENTERED R SQUARE = 0.87797299 C(P) = 43.81402107

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	0.87423090	0.14570515	89.94	0.0001
ERROR	75	0.12150691	0.00162009		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.02566665				
DET3	0.00012087	0.00002556	0.02522661	15.57	0.0002
DET33	0.00000013	0.00000001	0.12382682	76.43	0.0001
C2D2	0.00000594	0.00000217	0.01214510	7.50	0.0077
DET13	-0.00000000	0.00000000	0.01722981	10.64	0.0017
DET23	-0.00000042	0.00000012	0.02151287	13.28	0.0005
DET34	-0.00000003	0.00000001	0.01346176	8.31	0.0051

STEP 6 DET34 REPLACED BY DET44 R SQUARE = 0.87842783 C(P) = 43.39724585

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	0.87468380	0.14578063	90.32	0.0001
ERROR	75	0.12105401	0.00161405		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.03327483				
DET3	0.00009111	0.00002381	0.02363494	14.64	0.0003
DET33	0.00000010	0.00000001	0.09950692	61.65	0.0001
DET44	-0.00000001	0.00000000	0.01391466	8.62	0.0044
C2D2	0.00000654	0.00000212	0.01535929	9.52	0.0029
DET13	-0.00000000	0.00000000	0.01895638	11.74	0.0010
DET23	-0.00000046	0.00000011	0.02710272	16.79	0.0001

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 6 DET13 REPLACED BY DET14 R SQUARE = 0.87843330 C(P) = 43.39223324

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	0.87468525	0.14578154	90.32	0.0001
ERROR	75	0.12104855	0.00161399		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.03320831				
DET3	0.00005156	0.00002378	0.02392217	14.82	0.0002
DET33	0.00000010	0.00000001	0.09967039	61.75	0.0001
DET44	-0.00000001	0.00000000	0.01363595	8.45	0.0048
C2D2	0.00000652	0.00000212	0.01533423	9.50	0.0029
DET14	-0.00000000	0.00000000	0.01896184	11.75	0.0010
DET23	-0.00000046	0.00000011	0.02712285	16.80	0.0001

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

STEP 7 VARIABLE DET1 ENTERED R SQUARE = 0.88600107 C(P) = 38.45784752

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	0.88222476	0.12603211	82.16	0.0001
ERROR	74	0.11351304	0.00153396		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.03542434				
DET1	0.00000647	0.00000292	0.00753551	4.91	0.0297
DET3	0.00006198	0.00002675	0.00823224	5.37	0.0233
DET33	0.00000017	0.00000003	0.03695934	24.09	0.0001
DET44	-0.00000001	0.00000000	0.01517925	9.90	0.0024
C2D2	0.00000612	0.00000207	0.01337123	8.72	0.0042
DET14	-0.00000001	0.00000000	0.00797502	5.20	0.0255
DET23	-0.00000055	0.00000012	0.03412082	22.24	0.0001

STEP 7 DET44 REPLACED BY DET24 R SQUARE = 0.88893706 C(P) = 35.76757980

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	0.88514824	0.12644975	84.61	0.0001
ERROR	74	0.11058956	0.00149445		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.03172443				
DET1	0.00000797	0.00000294	0.01097611	7.34	0.0084
DET3	0.00007047	0.00002702	0.01016760	6.80	0.0110
DET33	0.00000022	0.00000004	0.05247227	35.11	0.0001
C2D2	0.00000516	0.00000210	0.00901007	6.03	0.0164
DET14	-0.00000001	0.00000000	0.01146761	7.67	0.0071
DET23	-0.00000052	0.00000012	0.02896786	19.38	0.0001
DET24	-0.00000004	0.00000001	0.01810273	12.11	0.0008

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 7 DET3 REPLACED BY DET2 R SQUARE = 0.88977981 C(P) = 34.99536442

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	0.88598740	0.12656963	85.34	0.0001
ERROR	74	0.10975041	0.00148311		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.03408121				
DET1	0.00001284	0.00000273	0.03279730	22.11	0.0001
DET2	0.00020436	0.00007502	0.01100675	7.42	0.0080
DET33	0.00000030	0.00000004	0.09923091	66.91	0.0001
C2D2	0.00000474	0.00000214	0.00727795	4.91	0.0298
DET14	-0.00000001	0.00000000	0.03388502	22.85	0.0001
DET23	-0.00000076	0.00000012	0.06019113	40.58	0.0001
DET34	-0.00000003	0.00000001	0.01487164	10.03	0.0022

STEP 7 C2D2 REPLACED BY CL1 R SQUARE = 0.89468241 C(P) = 30.50308881

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	0.89086910	0.12726701	89.81	0.0001
ERROR	74	0.10486871	0.00141714		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.01360105				
CL1	0.00066695	0.00023452	0.01215965	8.58	0.0045
DET1	0.00001262	0.00000262	0.03294390	23.25	0.0001
DET2	0.00023202	0.00006885	0.01609149	11.35	0.0012
DET33	0.00000029	0.00000004	0.09316445	65.74	0.0001
DET14	-0.00000001	0.00000000	0.03397185	23.97	0.0001
DET23	-0.00000063	0.00000010	0.05214967	36.80	0.0001
DET34	-0.00000004	0.00000001	0.01996204	14.09	0.0003

STEP 7 DET14 REPLACED BY DET12 R SQUARE = 0.89870016 C(P) = 26.82159822

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	0.89486973	0.12783853	93.79	0.0001
ERROR	74	0.10086808	0.00136308		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.00103240				
CL1	0.00009593	0.00021668	0.02827208	20.74	0.0001
DET1	0.00001506	0.00000289	0.03700717	27.15	0.0001
DET2	0.00018463	0.00006682	0.01040827	7.64	0.0072
DET33	0.00000014	0.00000001	0.14499171	106.37	0.0001
DET12	-0.00000005	0.00000001	0.03797248	27.86	0.0001
DET23	-0.00000022	0.00000010	0.00718474	5.27	0.0245
DET34	-0.00000003	0.00000001	0.01719972	12.62	0.0007

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 7 DET23 REPLACED BY C1D3 R SQUARE = 0.90641894 C(P) = 19.74884515

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	0.90255560	0.12893651	102.39	0.0001
ERROR	74	0.09318220	0.00125922		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.04252573				
C11	0.00267102	0.00054883	0.02982443	23.68	0.0001
DET1	0.00001951	0.00000265	0.06630990	52.66	0.0001
DET2	0.00015057	0.00005141	0.01080202	8.58	0.0045
DET33	0.00000016	0.00000001	0.14747665	117.12	0.0001
C1D3	-0.00000219	0.00000064	0.01487061	11.81	0.0010
DET12	-0.00000006	0.00000001	0.06771022	53.77	0.0001
DET34	-0.00000003	0.00000001	0.01727378	13.72	0.0004

STEP 7 DET1 REPLACED BY C201 R SQUARE = 0.90897217 C(P) = 17.40929881

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	0.90509796	0.12929971	105.56	0.0001
ERROR	74	0.09063985	0.00122486		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.02548372				
C11	0.00256330	0.00053794	0.02781080	22.71	0.0001
DET2	0.00016627	0.00005141	0.01281343	10.46	0.0018
DET33	0.00000030	0.00000003	0.14501708	118.39	0.0001
C1D3	-0.00000286	0.00000065	0.02334451	19.06	0.0001
C201	0.00000063	0.00000008	0.06885226	56.21	0.0001
DET12	-0.00000017	0.00000002	0.06938944	56.65	0.0001
DET34	-0.00000006	0.00000001	0.04758160	38.85	0.0001

STEP 7 DET2 REPLACED BY DET4 R SQUARE = 0.90911527 C(P) = 17.27817568

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	0.90524045	0.12932006	105.75	0.0001
ERROR	74	0.09049736	0.00122294		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.02986288				
C11	0.00185940	0.00052795	0.01515278	12.39	0.0007
DET4	0.00003571	0.00001097	0.01295592	10.59	0.0017
DET33	0.00000031	0.00000003	0.13815979	112.97	0.0001
C1D3	-0.00000182	0.00000059	0.01171161	9.58	0.0028
C201	0.00000056	0.00000008	0.06466513	52.88	0.0001
DET12	-0.00000015	0.00000002	0.06519497	53.31	0.0001
DET34	-0.00000009	0.00000002	0.03898108	31.87	0.0001

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE IS

STEP 7 C2D1 REPLACED BY C1D1 R SQUARE = 0.90955671 C(P) = 16.87368659

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	0.90568000	0.12938286	106.31	0.0001
ERROR	74	0.09005780	0.00121700		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.03096664				
C1	0.00184580	0.00052656	0.01495408	12.29	0.0008
DET4	0.00003923	0.00001105	0.01534917	12.61	0.0007
DET33	0.00000034	0.00000003	0.13521513	111.11	0.0001
C1D1	0.00000028	0.00000004	0.06510468	53.50	0.0001
C1D3	-0.00000184	0.00000059	0.01195820	9.83	0.0025
DET12	-0.00000015	0.00000002	0.06563872	53.93	0.0001
DET34	-0.00000010	0.00000002	0.04528176	37.21	0.0001

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

STEP 8 VARIABLE C2D2 ENTERED R SQUARE = 0.91366645 C(P) = 15.10790701

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	0.90977223	0.11372153	96.57	0.0001
ERROR	73	0.08596558	0.00117761		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.04211485				
C1	0.00220412	0.00055249	0.01874257	15.92	0.0002
DET4	0.00004303	0.00001106	0.01784132	15.15	0.0002
DET33	0.00000038	0.00000004	0.11522633	97.85	0.0001
C1D1	0.00000031	0.00000004	0.06730196	57.15	0.0001
C1D3	-0.00000298	0.00000084	0.01480568	12.57	0.0007
C2D2	-0.00000371	0.00000199	0.00409223	3.48	0.0663
DET12	-0.00000017	0.00000002	0.06774396	57.53	0.0001
DET34	-0.00000011	0.00000002	0.04936658	41.92	0.0001

STEP 8 C1D1 REPLACED BY C2D1 R SQUARE = 0.91677493 C(P) = 12.25959301

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	0.91286745	0.11410843	100.52	0.0001
ERROR	73	0.08287035	0.00113521		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.04627438				
C1	0.00237613	0.00054648	0.02146229	18.91	0.0001
DET4	0.00004101	0.00001077	0.01647449	14.51	0.0003
DET33	0.00000037	0.00000004	0.11946653	105.24	0.0001
C1D3	-0.00000346	0.00000085	0.01885220	16.61	0.0001
C1D1	0.00000267	0.00000068	0.07039719	62.01	0.0001
C2D2	0.00000527	0.00000203	0.00762701	6.72	0.0115
DET12	-0.00000018	0.00000002	0.07082963	62.39	0.0001

DET34	-0.00000010	0.00000002	0.04588169	40.42	0.0001

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE Y3

STEP 8 C13 REPLACED BY C12 R SQUARE = 0.91748184 C(P) = 11.61184764

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	0.91357135	0.11419642	101.46	0.0001
ERROR	73	0.08216645	0.00112557		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.04595191				
C12	0.00393903	0.00088763	0.02216619	19.69	0.0001
DET4	0.00004408	0.00001065	0.01914609	17.01	0.0001
DET33	0.00000038	0.00000004	0.12113339	107.62	0.0001
C103	-0.00000346	0.00000084	0.01929236	17.14	0.0001
C201	0.00000067	0.00000008	0.07124214	63.29	0.0001
C203	0.00000629	0.00000212	0.01016861	9.03	0.0036
DET12	-0.00000018	0.00000002	0.07160776	63.62	0.0001
DET34	-0.00000011	0.00000002	0.05458267	48.49	0.0001

STEP 8 C202 REPLACED BY C102 R SQUARE = 0.91770711 C(P) = 11.40542718

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	0.91379566	0.11422446	101.76	0.0001
ERROR	73	0.08194214	0.00112250		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.04622341				
C12	0.00400830	0.00089501	0.02251377	20.06	0.0001
DET4	0.00004316	0.00001061	0.01856700	16.54	0.0001
DET33	0.00000037	0.00000004	0.12479848	111.18	0.0001
C102	0.00000352	0.00000116	0.01039292	9.26	0.0033
C103	-0.00000352	0.00000084	0.01949464	17.37	0.0001
C201	0.00000067	0.00000008	0.07175611	63.93	0.0001
DET12	-0.00000018	0.00000002	0.07212017	64.25	0.0001
DET34	-0.00000010	0.00000002	0.05339094	47.56	0.0001

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

STEP 9 VARIABLE DET22 ENTERED R SQUARE = 0.92000623 C(P) = 11.29872783

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	0.91608499	0.10178722	92.01	0.0001
ERROR	72	0.07965282	0.00110629		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.04285809				
C12	0.00393686	0.00088991	0.02165081	19.57	0.0001
DET4	0.00004297	0.00001054	0.01839547	16.63	0.0001
DET22	-0.00000034	0.00000024	0.00228932	2.07	0.1546
DET33	0.00000037	0.00000004	0.12356622	111.69	0.0001
C102	0.00000572	0.00000191	0.00988529	8.94	0.0038
C103	-0.00000396	0.00000089	0.02177356	19.68	0.0001
C201	0.00000067	0.00000008	0.07082603	64.02	0.0001
DET12	-0.00000018	0.00000002	0.07129102	64.44	0.0001
DET34	-0.00000010	0.00000002	0.04342587	39.25	0.0001

STEP 9 C1D2 REPLACED BY C2D2 R SQUARE = 0.92051710 C(P) = 10.83062073

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	0.91659368	0.10184374	92.65	0.0001
ERROR	72	0.07914412	0.00109922		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.04252367				
CL2	0.00384265	0.00087910	0.02100255	19.11	0.0001
DET4	0.00004479	0.00001057	0.01973555	17.95	0.0001
DET22	-0.00000042	0.00000025	0.00302232	2.75	0.1016
DET33	0.00000638	0.00000004	0.12281744	111.73	0.0001
C1D3	-0.00000490	0.00000090	0.02230577	20.29	0.0001
C2D1	0.00000868	0.00000008	0.07163829	65.17	0.0001
C2D2	0.00001155	0.00000376	0.01039398	9.46	0.0030
DET12	-0.00000018	0.00000002	0.07207346	65.57	0.0001
DET34	-0.00000010	0.00000002	0.04843972	44.07	0.0001

THE ABOVE MODEL IS THE BEST 9 VARIABLE MODEL FOUND.

STEP 10 VARIABLE DET11 ENTERED R SQUARE = 0.92234928 C(P) = 11.15178213

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	0.91841805	0.09184180	84.34	0.0001
ERROR	71	0.07731976	0.00108901		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.04777274				
CL2	0.00432617	0.00095141	0.02251644	20.68	0.0001
DET4	0.00003962	0.00001126	0.01348804	12.39	0.0008
DET11	-0.00000200	0.00000000	0.00182437	1.68	0.1997
DET22	-0.00000040	0.00000025	0.00273862	2.51	0.1172
DET33	0.00000035	0.00000004	0.06910410	63.46	0.0001
C1D3	-0.00000479	0.00000107	0.02198728	20.19	0.0001
C2D1	0.00000890	0.00000019	0.02365459	21.72	0.0001
C2D2	0.00001348	0.00000402	0.01221425	11.22	0.0013
DET12	-0.00000019	0.00000002	0.07383555	67.80	0.0001
DET34	-0.00000009	0.00000002	0.01866977	17.14	0.0001

THE ABOVE MODEL IS THE BEST 10 VARIABLE MODEL FOUND.

STEP 11 VARIABLE DET14 ENTERED R SQUARE = 0.92628018 C(P) = 9.54987352

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	0.92233220	0.08384838	79.96	0.0001
ERROR	70	0.07340561	0.00104865		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.06664818				
CL2	0.00560530	0.00114455	0.02515124	23.98	0.0001
DET4	0.00004417	0.00001125	0.01603473	15.29	0.0002
DET11	-0.00000000	0.00000000	0.00573510	5.47	0.0222
DET22	-0.00000075	0.00000031	0.00625379	5.96	0.0171
DET33	0.00000042	0.00000006	0.05487736	52.33	0.0001
C1D3	-0.00000716	0.00000161	0.02069766	19.74	0.0001
C2D1	0.00000141	0.00000032	0.01981781	18.90	0.0001
C2D2	0.00001774	0.00000452	0.01612788	15.38	0.0002
DET12	-0.00000018	0.00000002	0.06390694	60.94	0.0001
DET14	-0.00000001	0.00000000	0.00391415	3.73	0.0574
DET34	-0.00000008	0.00000002	0.01467949	14.00	0.0004

STEP 11 C2D1 REPLACED BY C1D1 R SQUARE = 0.92675181 C(P) = 9.71792820

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	0.92280184	0.08389109	80.51	0.0001
ERROR	70	0.07293597	0.00104194		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.07196699				
CL2	0.00600942	0.00119870	0.02618710	25.13	0.0001
DFT4	0.00004465	0.00001126	0.01637155	15.71	0.0002
DFT11	-0.00000000	0.00000000	0.00845647	8.12	0.0058
DFT22	-0.0000C07E	0.00000031	0.00643466	6.18	0.0153
DFT33	0.0000C044	0.00000006	0.05602083	53.77	0.0001
C1D1	0.0000C085	0.00000015	0.02028745	19.47	0.0001
C1D3	-0.00000760	0.00000168	0.02133899	20.48	0.0001
C2D2	0.00001701	0.00000439	0.01565443	15.02	0.0002
DFT12	-0.0000C017	0.00000002	0.05669692	54.41	0.0001
DFT14	-0.00000001	0.00000000	0.00480571	4.61	0.0352
DFT34	-0.00000008	0.00000002	0.01355937	13.01	0.0006

STEP 11 DFT22 REPLACED BY DFT23 R SQUARE = 0.92690704 C(P) = 8.97547899

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	0.92295638	0.08390513	80.70	0.0001
ERROR	70	0.07278142	0.00103973		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.06503891				
CL2	0.00561800	0.00115901	0.02442937	23.50	0.0001
DFT4	0.00003980	0.00001108	0.01340730	12.89	0.0006
DFT11	-0.00000000	0.00000000	0.00891420	8.57	0.0046
DFT33	0.0000C048	0.00000007	0.05107675	49.12	0.0001
C1D1	0.00000084	0.00000015	0.02030198	19.53	0.0001
C1D3	-0.0000C717	0.00000157	0.02153834	20.72	0.0001
C2D2	0.00001607	0.00000405	0.01635955	15.73	0.0002
DFT12	-0.00000013	0.00000003	0.02320986	22.32	0.0001
DFT14	-0.00000C01	0.00000001	0.00624214	6.00	0.0168
DFT23	-0.00000049	0.00000020	0.00658921	6.34	0.0141
DFT34	-0.00000006	0.00000002	0.00750747	7.22	0.0090

THE ABOVE MODEL IS THE BEST 11 VARIABLE MODEL FOUND.

STEP 12 VARIABLE DFT3 ENTERED R SQUARE = 0.92911025 C(P) = 8.95667103

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	12	0.92515020	0.07709585	75.36	0.0001
ERROR	69	0.07058761	0.00102301		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.06174393				
CL2	0.00566945	0.00115019	0.02485572	24.30	0.0001
DFT3	0.00004722	0.00003224	0.00219381	2.14	0.1476
DFT4	0.00002459	0.00001512	0.00270663	2.65	0.1084
DFT11	-0.00000000	0.00000000	0.00944304	9.23	0.0034
DFT33	0.0000C045	0.00000007	0.04123357	40.31	0.0001
C1D1	0.00000081	0.00000019	0.01901720	18.59	0.0001
C1D3	-0.0000C748	0.00000158	0.02304664	22.53	0.0001
C2D2	0.00001707	0.00000408	0.01794745	17.54	0.0001
DFT12	-0.0000C011	0.00000003	0.01100359	10.76	0.0016
DFT14	-0.00000C01	0.00000001	0.00701828	6.86	0.0108
DFT23	-0.00000026	0.00000020	0.00812615	7.94	0.0063
DFT34	-0.00000004	0.00000003	0.00306415	3.00	0.0880

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MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 12 DET4 REPLACED BY DET44 R SQUARE = 0.92985105 C(P) = 8.27786789

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	12	0.92588785	0.07715732	76.22	0.0001
ERROR	69	0.06984596	0.00101232		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.05496776				
CL2	0.00567202	0.00114373	0.02489678	24.59	0.0001
DET3	0.00005544	0.00002424	0.01569201	15.50	0.0002
DET11	-0.00000000	0.00000000	0.00669392	6.61	0.0123
DET33	0.00000048	0.00000008	0.03932730	38.85	0.0001
DET44	0.00000001	0.00000001	0.00344428	3.40	0.0694
CL01	0.00030075	0.00000019	0.01568431	15.49	0.0002
CL03	-0.00000720	0.00000159	0.02086525	20.61	0.0001
CL22	0.00001504	0.00000433	0.01221704	12.07	0.0009
DET12	-0.00000011	0.00000003	0.01169815	11.56	0.0011
DET14	-0.00000001	0.00000001	0.00540690	5.34	0.0238
DET23	-0.00000048	0.00000021	0.00531323	5.25	0.0250
DET34	-0.00000010	0.00000005	0.00400295	3.95	0.0507

THE ABOVE MODEL IS THE BEST 12 VARIABLE MODEL FOUND.

STEP 13 VARIABLE CL11 ENTERED R SQUARE = 0.93070749 C(P) = 9.49310443

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	0.92674064	0.07128774	70.26	0.0001
ERROR	68	0.06899717	0.00101466		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.05766534				
CL2	0.00607757	0.00122754	0.02487220	24.51	0.0001
DET3	0.00008221	0.00002824	0.00860049	8.48	0.0049
CL11	-0.00000476	0.00000519	0.00085279	0.84	0.3625
DET11	-0.00000000	0.00000000	0.00582939	5.75	0.0193
DET33	0.00000048	0.00000008	0.03901598	38.45	0.0001
DET44	0.00000001	0.00000001	0.00354046	3.49	0.0661
CL01	0.00000072	0.00000019	0.01447994	14.27	0.0003
CL03	-0.00000667	0.00000169	0.01585931	15.63	0.0002
CL22	0.00001532	0.00000455	0.01303144	12.84	0.0006
DET12	-0.00000012	0.00000003	0.01245772	12.28	0.0008
DET14	-0.00000001	0.00000001	0.00428618	4.22	0.0437
DET23	-0.00000051	0.00000021	0.00587047	5.79	0.0189
DET34	-0.00000010	0.00000005	0.00441757	4.35	0.0407

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 13 C202 REPLACED BY C102 R SQUARE = 0.92134868 C(P) = 8.90558248

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	13	0.92737905	0.07133685	70.96	0.0001
ERROR	68	0.06835871	0.00100529		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.06266822				
C102	0.00683934	0.00132450	0.02680461	26.66	0.0001
C104	0.00006071	0.00002562	0.00422207	4.20	0.0443
C111	-0.00001118	0.00000592	0.00358861	3.57	0.0631
C111	-0.00000000	0.00000000	0.00529309	5.27	0.0248
C133	0.00330047	0.00000008	0.03787601	37.68	0.0001
C144	0.00330001	0.00000001	0.00301670	3.00	0.0878
C201	0.00000069	0.00000018	0.01391799	13.84	0.0004
C202	0.00000263	0.00000070	0.01366989	13.60	0.0005
C203	-0.00000611	0.00000159	0.01491455	14.84	0.0003
C213	-0.00330012	0.00000003	0.01344151	13.37	0.0005
C214	-0.00330001	0.00000001	0.00373039	3.71	0.0582
C233	-0.00000054	0.00000022	0.00637796	6.34	0.0141
C234	-0.00000330	0.00000005	0.00400172	3.98	0.0500

THE ABOVE MODEL IS THE BEST 13 VARIABLE MODEL FOUND.

STEP 14 VARIABLE C132 ENTERED R SQUARE = 0.93251322 C(P) = 8.83851081

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	14	0.92853866	0.06632419	66.13	0.0001
ERROR	67	0.06719914	0.00100297		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.06956320				
C102	0.00748789	0.00145355	0.02660011	26.52	0.0001
C104	-0.00013164	0.00012243	0.00115957	1.16	0.2861
C111	0.00005023	0.00004036	0.00501172	5.00	0.0287
C111	-0.00001308	0.00000646	0.00469908	4.69	0.0340
C111	-0.00000000	0.00000000	0.00560956	5.59	0.0209
C133	0.00330048	0.00000008	0.03892112	38.81	0.0001
C144	0.00330001	0.00000001	0.00348136	3.47	0.0668
C201	0.00000068	0.00000018	0.01357380	13.53	0.0005
C202	0.00001237	0.00000362	0.01173033	11.70	0.0011
C203	-0.00001684	0.00000172	0.01579130	15.74	0.0002
C213	-0.00330011	0.00000004	0.00874248	8.72	0.0043
C214	-0.00330001	0.00000001	0.00432865	4.32	0.0416
C233	-0.00000358	0.00000022	0.00709297	7.07	0.0098
C234	-0.00330010	0.00000005	0.00423825	4.23	0.0437

THE ABOVE MODEL IS THE BEST 14 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 15 VARIABLE C122 ENTERED R SQUARE = 0.93389192 C(P) = 10.57519440

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	15	0.92991149	0.06199410	62.16	0.0001
ERROR	66	0.06582631	0.00099737		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.06491603				
C12	0.02700637	0.00150685	0.02156133	21.62	0.0001
DET2	-0.00020933	0.00013889	0.00226561	2.27	0.1365
DET3	0.00112357	0.00004927	0.00627288	6.29	0.0146
DT11	-0.00002595	0.00001207	0.00461210	4.62	0.0352
C122	0.00004828	0.00004115	0.00137283	1.38	0.2449
DET11	-0.00020000	0.00003000	0.00698239	7.00	0.0102
DET33	0.00010050	0.00000108	0.04024881	40.36	0.0001
DET44	-0.00003001	0.00000101	0.00315568	3.16	0.0799
C101	0.00060077	0.00000120	0.01485635	14.90	0.0003
C102	0.00001579	0.00000464	0.01156472	11.60	0.0011
C103	-0.00000828	0.00000211	0.01533658	15.38	0.0002
DET12	-0.00000009	0.00000004	0.00505324	5.07	0.0277
DET14	-0.00000001	0.00000001	0.00567191	5.69	0.0200
DET23	-0.00000370	0.00000024	0.00846347	8.49	0.0049
DET24	-0.00000009	0.00000005	0.00327592	3.28	0.0745

STEP 15 DET12 REPLACED BY C201 R SQUARE = 0.93508189 C(P) = 9.48481935

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	15	0.93109639	0.06207309	63.38	0.0001
ERROR	66	0.06464141	0.00097942		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.07423969				
C12	0.02808831	0.00153691	0.02712589	27.70	0.0001
DET2	-0.00340151	0.00011965	0.01102198	11.25	0.0013
DET3	0.00016914	0.00004216	0.01576173	16.09	0.0002
DT11	-0.00006705	0.00001647	0.01623901	16.58	0.0001
C125	0.00115953	0.00034741	0.01085252	11.18	0.0014
DET11	-0.00020000	0.00000000	0.02146141	21.91	0.0001
DET33	0.00010061	0.00000006	0.04731226	48.31	0.0001
DET44	0.00000300	0.00000001	0.00454521	4.64	0.0349
C101	0.00060451	0.00000145	0.00951855	9.72	0.0027
C102	0.00002222	0.00000374	0.03454419	35.27	0.0001
C103	-0.00001064	0.00000178	0.03506015	35.80	0.0001
C201	-0.00000250	0.00000060	0.00623813	6.37	0.0140
DET14	-0.00000002	0.00000000	0.02365290	24.15	0.0001
DET23	-0.00000189	0.00000017	0.03358280	34.29	0.0001
DET24	-0.00000010	0.00000005	0.00409117	4.18	0.0450

H-8

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 15 DET44 REPLACED BY DET4 R SQUARE = 0.93551673 C(P) = 9.08637593

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	15	0.93152937	0.06210196	63.83	0.0001
ERROR	66	0.06420943	0.00097285		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.08377919				
CL2	0.00782376	0.00152112	0.02573678	26.45	0.0001
DET2	-0.00043947	0.00012523	0.01158155	12.32	0.0008
DET3	0.00011643	0.00004014	0.00804502	8.27	0.0054
DET4	0.00003691	0.00001632	0.00497819	5.12	0.0270
CL11	-0.00006899	0.00001653	0.01664563	17.11	0.0001
CL22	0.00016885	0.00004576	0.01166609	11.99	0.0009
DET11	-0.00000000	0.00000000	0.02202660	22.64	0.0001
DET33	0.00000059	0.00000008	0.05420871	55.72	0.0001
CL01	0.00000428	0.00000138	0.00931948	9.58	0.0029
CL02	0.00002453	0.00000392	0.03813003	39.19	0.0001
CL03	-0.00001143	0.00000183	0.03793839	39.00	0.0001
CL01	-0.00000571	0.00000235	0.00576100	5.92	0.0177
DET14	-0.00000002	0.00000000	0.02714219	27.90	0.0001
DET23	-0.00000111	0.00000017	0.04076591	41.90	0.0001
DET34	-0.00000004	0.00000002	0.00295044	3.03	0.0863

STEP 15 DET34 REPLACED BY DET13 R SQUARE = 0.93716987 C(P) = 7.57159711

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	15	0.93317547	0.06221170	65.63	0.0001
ERROR	66	0.06256234	0.00094791		
TOTAL	81	0.99573780			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-0.08140410				
CL2	0.00837858	0.00150342	0.02944090	31.06	0.0001
DET2	-0.00044104	0.00012140	0.01251167	13.20	0.0005
DET3	0.00014083	0.00003933	0.01215100	12.82	0.0007
DET4	0.00002030	0.00001044	0.00358633	3.78	0.0560
CL11	-0.00008014	0.00001835	0.01800207	18.99	0.0001
CL22	0.00020256	0.00005366	0.01350774	14.25	0.0003
DET11	-0.00000000	0.00000000	0.02327432	24.55	0.0001
DET33	0.00000052	0.00000007	0.05343216	56.37	0.0001
CL01	0.00000655	0.00000194	0.01067133	11.26	0.0013
CL02	0.00002522	0.00000390	0.03974329	41.93	0.0001
CL03	-0.00001216	0.00000178	0.04402506	46.45	0.0001
CL01	-0.00000957	0.00000335	0.00772383	8.15	0.0058
DET13	0.00000302	0.00000001	0.00459653	4.85	0.0312
DET14	-0.00000003	0.00000001	0.03419426	36.07	0.0001
DET23	-0.00000115	0.00000017	0.04448897	46.93	0.0001

THE ABOVE MODEL IS THE BEST 15 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE GC

WARNING: 119 OBSERVATIONS DELETED DUE TO MISSING VALUES.

STEP 1 VARIABLE DET2 ENTERED R SQUARE = 0.83221982 C(P) = 7.25317273

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	759.72422981	759.72422981	34.72	0.0006
ERROR	7	153.16465908	21.88066558		
TOTAL	8	912.88888889			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.15139894				
DET2	0.06238128	0.01058660	759.72422981	34.72	0.0006

THE ABOVE MODEL IS THE BEST 1-VARIABLE MODEL FOUND.

STEP 2 VARIABLE CL2 ENTERED R SQUARE = 0.87760782 C(P) = 5.93843678

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	801.15842918	400.57921459	21.51	0.0018
ERROR	6	111.73045971	18.62174328		
TOTAL	8	912.88888889			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.27238686				
CL2	0.41490107	0.27814755	41.43419937	2.23	0.1864
DET2	0.04037834	0.01769083	97.01100930	5.21	0.0626

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE DET3 ENTERED R SQUARE = 0.93844467 C(P) = 3.49545438

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	856.69570915	285.56523638	25.41	0.0019
ERROR	5	56.19317974	11.23863595		
TOTAL	8	912.88888889			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	-6.06953409				
CL2	1.70714506	0.62017365	85.15846568	7.58	0.0402
DET2	0.11922981	0.03804049	110.40563379	9.82	0.0258
DET3	-0.05266159	0.02368964	55.53727997	4.94	0.0768

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

UNIVARIATE

VARIABLE=CL2

MOMENTS

N	128	SUM WGTS	128
MEAN	21.4761	SUM	2748.94
STD DEV	16.2712	VARIANCE	264.751
SKEWNESS	1.00792	KURTOSIS	0.665448
USS	92654.9	CSS	33823.4
CV	75.7642	STD MEAN	1.43818
T:MEAN=0	14.9328	PROB>|T|	0.0001
SGN RANK	4107	PROB>|S|	0.0001
NUM ^= 0	128		

QUANTILES(DEF=4)

100% MAX	74.12	99%	72.5916
75% Q3	28.7175	95%	56.808
50% MED	18.27	90%	48.436
25% Q1	8.29	10%	4.716
0% MIN	-2.4	5%	0.358999
		1%	-1.9882
RANGE	76.52		
Q3-Q1	20.4275		
MODE	11.32		

EXTREMES

LOWEST	HIGHEST
-2.4	58.06
-0.98	58.56
-0.95	60.03
-0.85	68.85
-0.29	74.12

```
STEM LEAF                            #
   7 4                               1
   6 9                               1
   6 0                               1
   5 66789                           5
   5 034                             3
   4 789                             3
   4 113                             3
   3 557789                          6
   3 11233334                        8
   2 5556677799                     10
   2 00112222222233344444           21
   1 5566667777778899               16
   1 011111112333344                15
   0 555555555667777778888999       24
   0 12444                           5
  -0 211100                          6
     ----+----+----+----+----
     MULTIPLY STEM.LEAF BY 10**+01
```

```
BOXPLOT
      0
      0
      0
      |
      |
      |
```

UNIVARIATE

VARIABLE=CL2

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
22.33	1	0.8	58.6
22.35	1	0.8	59.4
22.41	1	0.8	60.2
22.44	1	0.8	60.9
22.83	1	0.8	61.7
22.95	1	0.8	62.5
23.11	1	0.8	63.3
23.75	1	0.8	64.1
24.06	1	0.8	64.8
24.31	1	0.8	65.6
24.35	1	0.8	66.4
24.4	1	0.8	67.2
24.41	1	0.8	68.0
24.65	1	0.8	68.8
25.2	1	0.8	69.5
25.5	1	0.8	70.3
25.64	1	0.8	71.1
26.13	1	0.8	71.9
26.91	1	0.8	72.7
26.98	1	0.8	73.4
27.28	1	0.8	74.2
28.65	1	0.8	75.0
28.74	1	0.8	75.8
30.66	1	0.8	76.6
31.05	1	0.8	77.3
31.77	1	0.8	78.1
32.88	2	1.6	79.7
33.2	1	0.8	80.5
33.4	1	0.8	81.3
34.24	1	0.8	82.0
34.62	1	0.8	82.8
34.98	1	0.8	83.6
36.98	1	0.8	84.4
37.25	1	0.8	85.2
37.82	1	0.8	85.9
38.93	1	0.8	86.7
40.57	1	0.8	87.5
41.49	1	0.8	88.3
42.88	1	0.8	89.1
46.7	1	0.8	89.8
48.42	1	0.8	90.6
48.58	1	0.8	91.4
49.89	1	0.8	92.2
52.63	1	0.8	93.0
53.75	1	0.8	93.8
55.71	1	0.8	94.5
56.39	1	0.8	95.3
57.15	1	0.8	96.1
58.06	1	0.8	96.9
58.56	1	0.8	97.7
60.03	1	0.8	98.4
68.85	1	0.8	99.2
74.12	1	0.8	100.0

UNIVARIATE

VARIABLE=DET1

MOMENTS

N	116	SUM WGTS	116
MEAN	1544.6	SUM	179174
STD DEV	1413.15	VARIANCE	1997001
SKEWNESS	1.75887	KURTOSIS	5.2418
USS	506407324	CSS	229655133
CV	91.4898	STD MEAN	131.208
T:MEAN=0	11.7722	PROB>|T|	0.0001
SGN RANK	3233	PROB>|S|	0.0001
NUM ^= 0	116		

QUANTILES(DEF=4)

100% MAX	7321.8	99%	7294.89
75% Q3	2023.06	95%	4167.97
50% MED	1380.88	90%	3131.38
25% Q1	658.072	10%	-280.695
0% MIN	-1260.63	5%	-142.882
		1%	-1219.61
RANGE	8582.43		
Q3-Q1	1364.98		
MODE	502.67		

EXTREMES

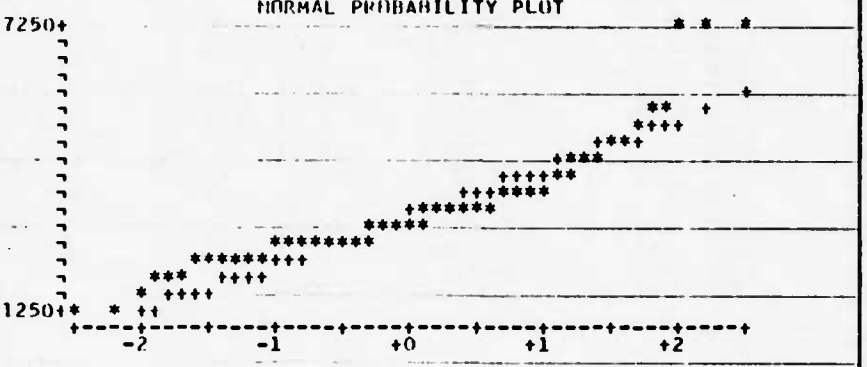
LOWEST	HIGHEST
-1260.63	4575.18
-1019.34	4763.05
-926.46	7088.73
-369.88	7163.56
-253.22	7321.8

MISSING VALUE
COUNT 12
% COUNT/NOBS 9.38

STEM	LEAF	#	BOXPLOT
7	123	3	*
6			
6			
5			
5			
4	68	2	0
4	01	2	0
3	57	2	
3	0123	4	
2	55669	5	
2	000011122222234	14	+------+
1	555555566677788888899999	24	+ +
1	000111122233344444	17	*------*
0	555555666777888888888999	25	+------+
0	111233344444	11	
-0	4310	4	
-0	9	1	
-1	30	2	

MULTIPLY STEM.LEAF BY 10**+03

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-1260.63	1	0.9	0.9	313.49	1	0.9	11.2	588.02	1	0.9	22.4	811.45	1	0.9	32.8
-1019.34	1	0.9	1.7	330.21	1	0.9	12.1	594.85	1	0.9	23.3	822.35	1	0.9	33.6
-926.46	1	0.9	2.6	337.13	1	0.9	12.9	638.96	1	0.9	24.1	829.34	1	0.9	34.5
-369.88	1	0.9	3.4	373.08	1	0.9	13.8	656.98	1	0.9	25.0	896.33	1	0.9	35.3
-253.22	1	0.9	4.3	375.42	1	0.9	14.7	661.35	1	0.9	25.9	937.44	1	0.9	36.2
-123.41	1	0.9	5.2	446.59	1	0.9	15.5	745.2	1	0.9	26.7	943.63	1	0.9	37.1
8.63	1	0.9	6.0	460.22	1	0.9	16.4	759.7	1	0.9	27.6	999.6	1	0.9	37.9
51.18	1	0.9	6.9	502.67	2	1.7	18.1	765.19	1	0.9	28.4	1002.95	1	0.9	38.8
82.77	1	0.9	7.8	519.7	1	0.9	19.0	772.32	1	0.9	29.3	1015.85	1	0.9	39.7
144.3	1	0.9	8.6	530.25	1	0.9	19.8	802.3	1	0.9	30.2	1087.05	1	0.9	40.5
246.85	1	0.9	9.5	547.27	1	0.9	20.7	808.4	1	0.9	31.0	1096.12	1	0.9	41.4
295.2	1	0.9	10.3	565.16	1	0.9	21.6	809.19	1	0.9	31.9	1098.82	1	0.9	42.2

UNIVARIATE

VARIABLE=DET1

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
1132.04	1	0.9	43.1
1152.97	1	0.9	44.0
1201.88	1	0.9	44.8
1212.21	1	0.9	45.7
1276.14	1	0.9	46.6
1308.82	1	0.9	47.4
1346.38	1	0.9	48.3
1363.8	1	0.9	49.1
1366.12	1	0.9	50.0
1395.64	1	0.9	50.9
1424.33	1	0.9	51.7
1464.33	1	0.9	52.6
1503.37	1	0.9	53.4
1505	1	0.9	54.3
1514.46	1	0.9	55.2
1527.15	1	0.9	56.0
1528.91	1	0.9	56.9
1530.22	1	0.9	57.8
1593.17	1	0.9	58.6
1612.24	1	0.9	59.5
1615.28	1	0.9	60.3
1649.41	1	0.9	61.2
1655.01	1	0.9	62.1
1673	1	0.9	62.9
1695.37	1	0.9	63.8
1752.9	1	0.9	64.7
1754.51	1	0.9	65.5
1761.81	1	0.9	66.4
1770.97	1	0.9	67.2
1773.73	1	0.9	68.1
1808.89	1	0.9	69.0
1864.41	1	0.9	69.8
1866.72	1	0.9	70.7
1879.23	1	0.9	71.6
1911.04	1	0.9	72.4
1993.31	1	0.9	73.3
1996.38	1	0.9	74.1
2022.36	1	0.9	75.0
2023.29	1	0.9	75.9
2066.92	1	0.9	76.7
2073.83	1	0.9	77.6
2137.38	1	0.9	78.4
2202.73	1	0.9	79.3
2224.8	1	0.9	80.2
2227.84	1	0.9	81.0
2248.68	1	0.9	81.9
2249.25	1	0.9	82.8
2340.21	1	0.9	83.6
2375.86	1	0.9	84.5
2458.61	1	0.9	85.3
2521.12	1	0.9	86.2
2566.72	1	0.9	87.1
2631.11	1	0.9	87.9
2855.65	1	0.9	88.8
3031.31	1	0.9	89.7
3114.68	1	0.9	90.5
3170.59	1	0.9	91.4
3264.85	1	0.9	92.2
3482.29	1	0.9	93.1
3697.51	1	0.9	94.0
3983.45	1	0.9	94.8
4096.12	1	0.9	95.7
4575.18	1	0.9	96.6
4763.05	1	0.9	97.4
7088.73	1	0.9	98.3
7163.56	1	0.9	99.1
7321.8	1	0.9	100.0

UNIVARIATE

VARIABLE=DET2

MOMENTS

N	116	SUM WGTS	116
MEAN	127.794	SUM	14824.1
STD DEV	141.888	VARIANCE	20132.1
SKEWNESS	0.58319	KURTOSIS	-0.132248
USS	4209629	CSS	2315188
CV	111.028	STD MEAN	13.1739
T:MEAN=0	9.700955	PROB>|T|	0.0001
SGN RANK	2735	PROB>|S|	0.0001
NUM ^= 0	115		

QUANTILES(DEF=4)

100% MAX	537.48	99%	526.871
75% Q3	220.722	95%	398.411
50% MED	104.74	90%	357.943
25% Q1	19.9775	10%	-51.639
0% MIN	-120.44	5%	-78.457
		1%	-115.836
RANGE	657.92		
Q3-Q1	200.745		
MODE	231.02		

EXTREMES

LOWEST	HIGHEST
-120.44	422.9
-93.36	428.14
-90.76	437.54
-82.77	475.08
-78.78	537.48

MISSING VALUE
COUNT 12
% COUNT/NOBS 9.38

STEM	LEAF	#	BOXPLOT
5	4	1	0
4	8	1	
4	234	3	
3	577888999	7	
3	013	3	
2	55677	5	
2	000111222233333344	18	+-----+
1	5566777899	10	
1	0001111222234	13	*--+--*
0	555555666788899999	18	
0	111112222233444	15	+-----+
-0	4433110000	10	
-0	998888877665	11	
-1	2	1	

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT

525+
-125+
-2 -1 +0 +1 +2

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-120.44	1	0.9	0.9
-93.36	1	0.9	1.7
-90.76	1	0.9	2.6
-82.77	1	0.9	3.4
-78.78	1	0.9	4.3
-78.4	1	0.9	5.2
-75.26	1	0.9	6.0
-72.96	1	0.9	6.9
-66.43	1	0.9	7.8
-59.35	1	0.9	8.6
-56.77	1	0.9	9.5
-49.44	1	0.9	10.3
-44.77	1	0.9	11.2
-44.75	1	0.9	12.1
-30.95	1	0.9	12.9
-25.97	1	0.9	13.8
-13.92	1	0.9	14.7
-6.88	1	0.9	15.5
0	1	0.9	16.4
0.72	1	0.9	17.2
1.28	1	0.9	18.1
2.4	1	0.9	19.0
8.88	1	0.9	19.8
10.72	1	0.9	20.7
11.45	1	0.9	21.6
12.42	1	0.9	22.4
12.66	1	0.9	23.3
18.14	1	0.9	24.1
19.65	1	0.9	25.0
20.96	1	0.9	25.9
21.21	1	0.9	26.7
23.9	1	0.9	27.6
27.69	1	0.9	28.4
28.38	1	0.9	29.3
38.99	1	0.9	30.2
42.57	1	0.9	31.0
44.52	1	0.9	31.9
49.8	1	0.9	32.8
50.31	1	0.9	33.6
51.85	1	0.9	34.5
52.13	1	0.9	35.3
52.36	1	0.9	36.2
53.17	1	0.9	37.1
57.85	1	0.9	37.9
62.91	1	0.9	38.8
64.06	1	0.9	39.7
68.26	1	0.9	40.5
76.31	1	0.9	41.4
78.93	1	0.9	42.2
80.16	1	0.9	43.1
86.03	1	0.9	44.0
87.09	1	0.9	44.8
87.89	1	0.9	45.7
90.41	1	0.9	46.6
92.32	1	0.9	47.4
100.3	1	0.9	48.3
101.43	1	0.9	49.1
102.16	1	0.9	50.0
107.32	1	0.9	50.9
110.36	1	0.9	51.7
113.88	1	0.9	52.6
114.49	1	0.9	53.4
118.7	1	0.9	54.3
120.47	1	0.9	55.2

UNIVARIATE

VARIABLE=DET2

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
121.71	1	0.9	56.0
124.7	1	0.9	56.9
125.81	1	0.9	57.8
144.48	1	0.9	58.6
146.77	1	0.9	59.5
151.53	1	0.9	60.3
161.94	1	0.9	61.2
164.41	1	0.9	62.1
169.18	1	0.9	62.9
170.6	1	0.9	63.8
172.98	1	0.9	64.7
176.45	1	0.9	65.5
188.88	1	0.9	66.4
191.67	1	0.9	67.2
197.56	1	0.9	68.1
201.91	1	0.9	69.0
203.25	1	0.9	69.8
205.34	1	0.9	70.7
205.41	1	0.9	71.6
208.34	1	0.9	72.4
216.8	1	0.9	73.3
219.87	1	0.9	74.1
220.01	1	0.9	75.0
220.96	1	0.9	75.9
227.6	1	0.9	76.7
228.01	1	0.9	77.6
230.63	1	0.9	78.4
231.02	2	1.7	80.2
233.45	1	0.9	81.0
236.27	1	0.9	81.9
240.48	1	0.9	82.8
246.51	1	0.9	83.6
251.56	1	0.9	84.5
258.67	1	0.9	85.3
265.68	1	0.9	86.2
273.72	1	0.9	87.1
298.19	1	0.9	87.9
312.65	1	0.9	88.8
331.3	1	0.9	89.7
352.57	1	0.9	90.5
370.48	1	0.9	91.4
373.29	1	0.9	92.2
375.35	1	0.9	93.1
377.44	1	0.9	94.0
386.93	1	0.9	94.8
394.09	1	0.9	95.7
422.9	1	0.9	96.6
428.14	1	0.9	97.4
437.54	1	0.9	98.3
475.08	1	0.9	99.1
537.41	1	0.9	100.0

UNIVARIATE

VARIABLE=DFT3

MOMENTS

N	116	SUM WGTS	116
MEAN	490.029	SUM	56843.4
STD DEV	387.359	VARIANCE	150047
SKEWNESS	0.842696	KURTOSIS	0.977544
USS	45110300	CSS	17255378
CV	79.0481	STD MEAN	35.9654
T:MEAN=0	13.625	PROB>|T|	0.0001
SGN RANK	3273	PROB>|S|	0.0001
NUM ^= 0	116		

QUANTILES(DEF=4)

100% MAX	1795.67	99%	1761.66
75% Q3	646.835	95%	1225.25
50% MED	430.335	90%	1009.76
25% Q1	257.842	10%	31.586
0% MIN	-287.09	5%	-75.819
		1%	-278.478
RANGE	2082.76		
Q3-Q1	388.993		
MODE	481.01		

EXTREMES

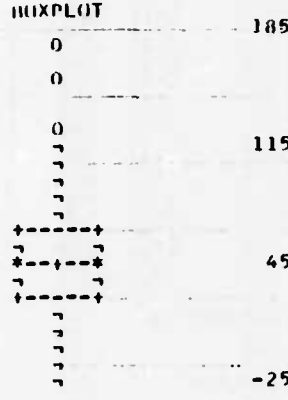
LOWEST	HIGHEST
-287.09	1257.24
-236.43	1278.23
-143.87	1553.45
-129.55	1595.63
-106.64	1795.67

MISSING VALUE .
COUNT 12
% COUNT/NOBS 9.38

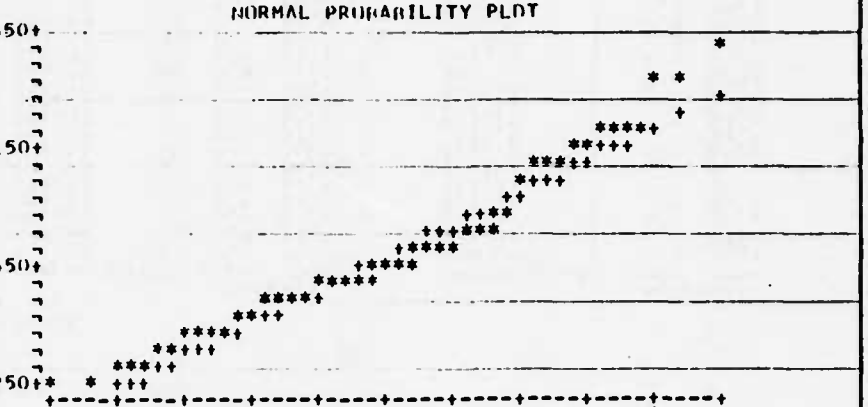
STEM	LEAF	#
18	0	1
17		
16	0	1
15	5	1
14		
13		
12	1268	4
11	0045	4
10	0279	4
9	2346	4
8	6	1
7	25789	5
6	0223455,79	9
5	00122223335556677	16
4	2233334467889	13
3	011223444555778899	18
2	011234566677779	14
1	34448	5
0	22335679	8
-0	750	3
-1	431	3
-2	94	2

MULTIPLY STEM.LEAF BY 10**+02

BOXPLOT



NORMAL PROBABILITY PLOT



H-59

UNIVARIATE

VARIABLE=DET3

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-287.09	1	0.9	0.9	258.6	1	0.9	25.9	431.01	1	0.9	50.9	650.09	1	0.9	76.7
-236.43	1	0.9	1.7	260.21	1	0.9	26.7	435.24	1	0.9	51.7	671.04	1	0.9	77.6
-143.87	1	0.9	2.6	272.15	1	0.9	27.6	441.11	1	0.9	52.6	692.71	1	0.9	78.4
-120.55	1	0.9	3.4	272.61	1	0.9	28.4	462.11	1	0.9	53.4	718.26	1	0.9	79.3
-106.64	1	0.9	4.3	273.4	1	0.9	29.3	473.93	1	0.9	54.3	747.78	1	0.9	80.2
-70.38	1	0.9	5.2	286.86	1	0.9	30.2	481.01	2	1.7	56.0	771.52	1	0.9	81.0
-52.43	1	0.9	6.0	295.11	1	0.9	31.0	494.62	1	0.9	56.9	778.19	1	0.9	81.9
3.43	1	0.9	6.9	308.63	1	0.9	31.9	496.92	1	0.9	57.8	791.9	1	0.9	82.8
19.89	1	0.9	7.8	308.98	1	0.9	32.8	504.57	1	0.9	58.6	857.26	1	0.9	83.6
20.17	1	0.9	8.6	317.98	1	0.9	33.6	505.24	1	0.9	59.5	920.44	1	0.9	84.5
27.82	1	0.9	9.5	319.46	1	0.9	34.5	515.19	1	0.9	60.3	925.03	1	0.9	85.3
33.2	1	0.9	10.3	330.56	1	0.9	35.3	518.77	1	0.9	61.2	943.35	1	0.9	86.2
48.05	1	0.9	11.2	339.21	1	0.9	36.2	519.39	1	0.9	62.1	961.76	1	0.9	87.1
59.77	1	0.9	12.1	340.97	1	0.9	37.1	522.79	1	0.9	62.9	1002	1	0.9	87.9
74.45	1	0.9	12.9	343.28	1	0.9	37.9	528.03	1	0.9	63.8	1016.29	1	0.9	88.8
87.38	1	0.9	13.8	348.4	1	0.9	38.8	529.15	1	0.9	64.7	1068.9	1	0.9	89.7
130.05	1	0.9	14.7	348.96	1	0.9	39.7	534.7	1	0.9	65.5	1086.57	1	0.9	90.5
138.65	1	0.9	15.5	354.77	1	0.9	40.5	545.8	1	0.9	66.4	1097.19	1	0.9	91.4
140.90	1	0.9	16.4	365.68	1	0.9	41.4	549.1	1	0.9	67.2	1098.14	1	0.9	92.2
141.99	1	0.9	17.2	371.39	1	0.9	42.2	550.28	1	0.9	68.1	1139.12	1	0.9	93.1
184.59	1	0.9	18.1	378.64	1	0.9	43.1	558.37	1	0.9	69.0	1151.6	1	0.9	94.0
195.89	1	0.9	19.0	380.42	1	0.9	44.0	567.47	1	0.9	69.8	1208.45	1	0.9	94.8
206.24	1	0.9	19.8	387.12	1	0.9	44.8	570.25	1	0.9	70.7	1219.61	1	0.9	95.7
213.68	1	0.9	20.7	393.12	1	0.9	45.7	601.51	1	0.9	71.6	1257.24	1	0.9	96.6
223.28	1	0.9	21.6	419.21	1	0.9	46.6	617.39	1	0.9	72.4	1278.23	1	0.9	97.4
228.44	1	0.9	22.4	423.76	1	0.9	47.4	617.57	1	0.9	73.3	1553.45	1	0.9	98.3
236.21	1	0.9	23.3	425.35	1	0.9	48.3	631.04	1	0.9	74.1	1595.63	1	0.9	99.1
247.7	1	0.9	24.1	426.96	1	0.9	49.1	638.15	1	0.9	75.0	1795.67	1	0.9	100.0
257.59	1	0.9	25.0	429.66	1	0.9	50.0	649.73	1	0.9	75.9				

UNIVARIATE

VARIABLE=DET4

MOMENTS

N	116	SUM WGTS	116
MEAN	1395.72	SUM	161904
STD DEV	995.413	VARIANCE	990846
SKEWNESS	0.628157	KURTOSIS	-0.0309027
USS	339919407	CSS	114947343
CV	71.3189	STD MEAN	92.4217
T:MEAN=0	15.1016	PROB>|T|	0.0001
SGN RANK	3331	PROB>|S|	0.0001
NUM ^= 0	116		

QUANTILES(DEF=4)

100% MAX	4026.3	99%	4007.87
75% Q3	2003.61	95%	3423.81
50% MED	1216.83	90%	3113.45
25% Q1	723.27	10%	-192.347
0% MIN	-496.37	5%	-56.594
		1%	-468.24
RANGE	4522.67		
Q3-Q1	1280.34		
MODE	1529.9		

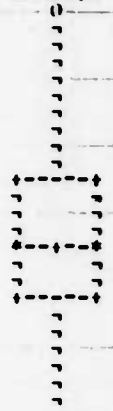
MISSING VALUE .
COUNT 12
% COUNT/NOBS 9.38

EXTREMES

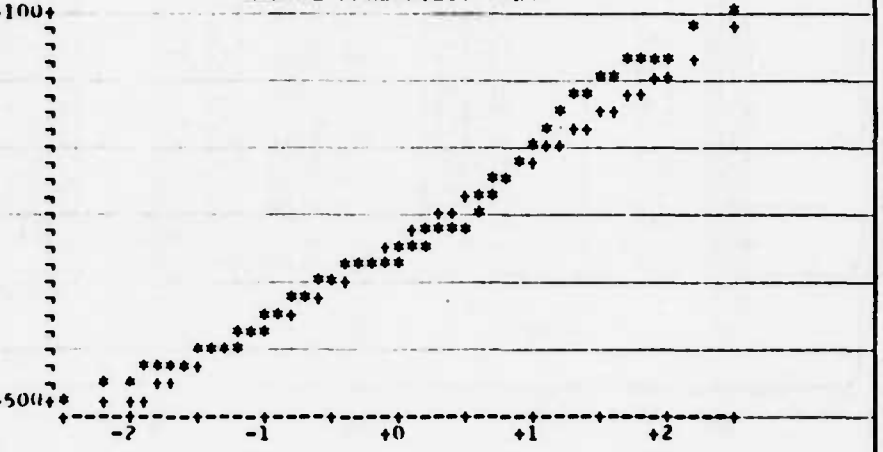
LOWEST	HIGHEST
-496.37	3451.32
-330.9	3506.03
-225.16	3552.27
-133.96	3917.9
-64.89	4026.3

```
STEM LEAF                          #
  40 3                             1
  38 2                             1
  36                               0
  34 2515                          4
  32 66                            2
  30 9679                          4
  28 11                            2
  26 004                           3
  24 55                            2
  22 7825                          4
  20 345556                        6
  18 0412                          4
  16 7                             1
  14 36867012233556                14
  12 12809001558H                  11
  10 2345777822457H889             17
   8 3022367H                      8
   6 2458H2479                     9
   4 16149                         5
   2 0005599                       7
   0 5958                          4
  -0 3661                          4
  -2 33                            2
  -4 0                             1
     ----+----+----+----+
     MULTIPLY STEM.LEAF BY 10**+02
```

BOXPLOT



NORMAL PROBABILITY PLOT



UNIVARIATE

VARIABLE=DET4

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-496.37	1	0.9	0.9	739.53	1	0.9	25.9	1224.5	1	0.9	50.9	2038.51	1	0.9	76.7
-330.9	1	0.9	1.7	772.07	1	0.9	26.7	1256.13	1	0.9	51.7	2046.05	1	0.9	77.6
-225.16	1	0.9	2.6	788.24	1	0.9	27.6	1287.84	1	0.9	52.6	2054.48	1	0.9	78.4
-133.96	1	0.9	3.4	828.21	1	0.9	28.4	1298.33	1	0.9	53.4	2150.34	1	0.9	79.3
-64.89	1	0.9	4.3	902.45	1	0.9	29.3	1302.43	1	0.9	54.3	2161.87	1	0.9	80.2
-55.13	1	0.9	5.2	917.56	1	0.9	30.2	1312.39	1	0.9	55.2	2273.68	1	0.9	81.0
-11.28	1	0.9	6.0	919.38	1	0.9	31.0	1346.51	1	0.9	56.0	2276.34	1	0.9	81.9
53.64	1	0.9	6.9	934.27	1	0.9	31.9	1351.53	1	0.9	56.9	2316.46	1	0.9	82.8
90.82	1	0.9	7.8	957.19	1	0.9	32.8	1377.62	1	0.9	57.8	2349.76	1	0.9	83.6
148.14	1	0.9	8.6	970.75	1	0.9	33.6	1379.66	1	0.9	58.6	2449.38	1	0.9	84.5
179.14	1	0.9	9.5	985.08	1	0.9	34.5	1426.1	1	0.9	59.5	2554.91	1	0.9	85.3
197.90	1	0.9	10.3	1022.86	1	0.9	35.3	1457.61	1	0.9	60.3	2595.87	1	0.9	86.2
198.62	1	0.9	11.2	1027.44	1	0.9	36.2	1461.15	1	0.9	61.2	2603.76	1	0.9	87.1
200.39	1	0.9	12.1	1033.73	1	0.9	37.1	1463.79	1	0.9	62.1	2738.2	1	0.9	87.9
246.49	1	0.9	12.9	1048.87	1	0.9	37.9	1473.7	1	0.9	62.9	2811.58	1	0.9	88.8
248.39	1	0.9	13.8	1066.3	1	0.9	38.8	1501.81	1	0.9	63.8	2909.34	1	0.9	89.7
290.09	1	0.9	14.7	1068.25	1	0.9	39.7	1511.15	1	0.9	64.7	3092.02	1	0.9	90.5
387.21	1	0.9	15.5	1071.18	1	0.9	40.5	1521.28	1	0.9	65.5	3163.46	1	0.9	91.4
408.17	1	0.9	16.4	1078.53	1	0.9	41.4	1523.89	1	0.9	66.4	3165.62	1	0.9	92.2
456.44	1	0.9	17.2	1116.37	1	0.9	42.2	1529.9	2	1.7	68.1	3185.09	1	0.9	93.1
512.13	1	0.9	18.1	1123.14	1	0.9	43.1	1545.31	1	0.9	69.0	3258.74	1	0.9	94.0
541.2	1	0.9	19.0	1142.93	1	0.9	44.0	1551.49	1	0.9	69.8	3262.64	1	0.9	94.8
594.76	1	0.9	19.8	1147.09	1	0.9	44.8	1564.23	1	0.9	70.7	3418.96	1	0.9	95.7
620.37	1	0.9	20.7	1169.95	1	0.9	45.7	1670.29	1	0.9	71.6	3451.32	1	0.9	96.6
644.41	1	0.9	21.6	1175.4	1	0.9	46.6	1795.99	1	0.9	72.4	3506.03	1	0.9	97.4
646.18	1	0.9	22.4	1180.44	1	0.9	47.4	1840.37	1	0.9	73.3	3552.27	1	0.9	98.3
684.16	1	0.9	23.3	1180.95	1	0.9	48.3	1905.37	1	0.9	74.1	3917.9	1	0.9	99.1
690.06	1	0.9	24.1	1192.72	1	0.9	49.1	1918.31	1	0.9	75.0	4026.3	1	0.9	100.0
717.85	1	0.9	25.0	1209.16	1	0.9	50.0	2032.05	1	0.9	75.9				

UNIVARIATE

VARIABLE=FD1

MOMENTS

N	116	SUM WGTS	116
MEAN	2.98991	SUM	346.83
STD DEV	3.70181	VARIANCE	13.7034
SKEWNESS	0.300685	KURTOSIS	0.305633
USS	2612.88	CSS	1575.89
CV	123.81	STD MEAN	0.343705
T:MEAN=0	8.69908	PROB>|T|	0.0001
SGN RANK	2599	PROB>|S|	0.0001
NUM ^= 0	116		

QUANTILES(DEF=4)

100% MAX	12.82	99%	12.7231
75% Q3	5.045	95%	6.31199
50% MED	2.715	90%	4.028
25% Q1	0.33	10%	-1.095
0% MIN	-5.79	5%	-2.562
		1%	-5.739
RANGE	18.61		
Q3-Q1	4.715		
MODE	-0.36		

EXTREMES

LOWEST	HIGHEST
-5.79	10.91
-5.49	11.74
-5.38	12.11
-4.31	12.25
-3.48	12.82

MISSING VALUE
COUNT 12
% COUNT/NOBS 9.38

```
STEM LEAF                            #  BOXPLOT
  12 128                             3     0
  11 7                               1     |
  10 9                               1     |
   9 0                               1     |
   8 012457                          6     |
   7 035679                          6     |
   6 1355                            4     |
   5 01477889                        8     +-----+
   4 111233455679                    12    |     |
   3 012236777889                    12    |     |
   2 00012334555577899               17    *--+--*
   1 0011155669                      10    |     |
   0 1223447789                      10    +-----+
  -0 998554442100                    13    |
  -1 985511                          6     |
  -2 4                               1     |
  -3 5                               1     |
  -4 3                               1     |
  -5 854                             3     |
     ----+----+----+----+
```

NORMAL PROBABILITY PLOT

```
 12.5+                                                    * * *
                                                        *  +
                                                      *++
                                                    *+
                                                  ****
                                                ***+
                                              **+
                                            ****
                                          ****+
                                        ***
                                      *****
 3.5+                               ***+
                                  *****
                                ****
                              *****
                            ******+
                          *****
                        *++++
                      *+
                    **
                  **
 -5.5+*  *
     +----+----+----+----+----+----+----+----+----+----+
     -2        -1        +0        +1        +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-5.79	1	0.9	0.9	-1.08	1	0.9	10.3	-0.01	1	0.9	20.7	0.93	1	0.9	30.2
-5.49	1	0.9	1.7	-0.9	1	0.9	11.2	0.01	1	0.9	21.6	0.99	1	0.9	31.0
-5.38	1	0.9	2.6	-0.89	1	0.9	12.1	0.11	1	0.9	22.4	1.04	1	0.9	31.9
-4.31	1	0.9	3.4	-0.79	1	0.9	12.9	0.2	1	0.9	23.3	1.09	1	0.9	32.8
-3.48	1	0.9	4.3	-0.46	1	0.9	13.8	0.23	1	0.9	24.1	1.13	2	1.7	34.5
-2.4	1	0.9	5.2	-0.46	1	0.9	14.7	0.31	1	0.9	25.0	1.5	2	1.7	36.2
-1.92	1	0.9	6.0	-0.4	1	0.9	15.5	0.39	1	0.9	25.9	1.56	1	0.9	37.1
-1.81	1	0.9	6.9	-0.37	1	0.9	16.4	0.44	1	0.9	26.7	1.58	1	0.9	37.9
-1.48	1	0.9	7.8	-0.36	2	1.7	18.1	0.66	1	0.9	27.6	1.91	1	0.9	38.8
-1.47	1	0.9	8.6	-0.16	1	0.9	19.0	0.72	1	0.9	28.4	1.98	1	0.9	39.7
-1.13	1	0.9	9.5	-0.12	1	0.9	19.8	0.77	1	0.9	29.3	2.01	1	0.9	40.5

UNIVARIATE

VARIABLE=FD1

FREQUENCY TABLE (CUNT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
2.04	1	0.9	41.4
2.12	1	0.9	42.2
2.19	1	0.9	43.1
2.27	1	0.9	44.0
2.31	1	0.9	44.8
2.4	1	0.9	45.7
2.46	1	0.9	46.6
2.51	2	1.7	48.3
2.54	1	0.9	49.1
2.7	1	0.9	50.0
2.73	1	0.9	50.9
2.82	1	0.9	51.7
2.86	1	0.9	52.6
2.94	1	0.9	53.4
3.03	1	0.9	54.3
3.07	1	0.9	55.2
3.16	2	1.7	56.9
3.32	1	0.9	57.8
3.58	1	0.9	58.6
3.66	1	0.9	59.5
3.72	1	0.9	60.3
3.75	1	0.9	61.2
3.77	1	0.9	62.1
3.81	1	0.9	62.9
3.88	1	0.9	63.8
4.08	1	0.9	64.7
4.09	1	0.9	65.5
4.1	1	0.9	66.4
4.23	1	0.9	67.2
4.27	1	0.9	68.1
4.32	1	0.9	69.0
4.35	1	0.9	69.8
4.49	1	0.9	70.7
4.55	1	0.9	71.6
4.61	1	0.9	72.4
4.72	1	0.9	73.3
4.89	1	0.9	74.1
4.97	1	0.9	75.0
5.07	1	0.9	75.9
5.44	1	0.9	76.7
5.7	1	0.9	77.6
5.76	1	0.9	78.4
5.77	1	0.9	79.3
5.8	1	0.9	80.2
5.89	1	0.9	81.0
6.13	1	0.9	81.9
6.34	1	0.9	82.8
6.46	1	0.9	83.6
6.49	1	0.9	84.5
7.02	1	0.9	85.3
7.34	1	0.9	86.2
7.51	1	0.9	87.1
7.63	1	0.9	87.9
7.73	1	0.9	88.8
7.88	1	0.9	89.7
8.01	1	0.9	90.5
8.07	1	0.9	91.4
8.24	1	0.9	92.2
8.4	1	0.9	93.1
8.5	1	0.9	94.0
8.66	1	0.9	94.8
9.03	1	0.9	95.7
10.91	1	0.9	96.6
11.74	1	0.9	97.4
12.11	1	0.9	98.3
12.25	1	0.9	99.1
12.82	1	0.9	100.0

UNIVARIATE

VARIABLE=FD1

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
2.04	1	0.9	41.4	3.32	1	0.9	57.8	4.61	1	0.9	72.4	7.51	1	0.9	87.1
2.12	1	0.9	42.2	3.58	1	0.9	58.6	4.72	1	0.9	73.3	7.63	1	0.9	87.9
2.19	1	0.9	43.1	3.66	1	0.9	59.5	4.89	1	0.9	74.1	7.73	1	0.9	88.8
2.27	1	0.9	44.0	3.72	1	0.9	60.3	4.97	1	0.9	75.0	7.88	1	0.9	89.7
2.31	1	0.9	44.8	3.75	1	0.9	61.2	5.07	1	0.9	75.9	8.01	1	0.9	90.5
2.4	1	0.9	45.7	3.77	1	0.9	62.1	5.44	1	0.9	76.7	8.07	1	0.9	91.4
2.46	1	0.9	46.6	3.81	1	0.9	62.9	5.7	1	0.9	77.6	8.24	1	0.9	92.2
2.51	2	1.7	48.3	3.88	1	0.9	63.8	5.76	1	0.9	78.4	8.4	1	0.9	93.1
2.54	1	0.9	49.1	4.08	1	0.9	64.7	5.77	1	0.9	79.3	8.5	1	0.9	94.0
2.7	1	0.9	50.0	4.09	1	0.9	65.5	5.8	1	0.9	80.2	8.66	1	0.9	94.8
2.73	1	0.9	50.9	4.1	1	0.9	66.4	5.89	1	0.9	81.0	9.03	1	0.9	95.7
2.82	1	0.9	51.7	4.23	1	0.9	67.2	6.13	1	0.9	81.9	10.91	1	0.9	96.6
2.86	1	0.9	52.6	4.27	1	0.9	68.1	6.34	1	0.9	82.8	11.74	1	0.9	97.4
2.94	1	0.9	53.4	4.32	1	0.9	69.0	6.46	1	0.9	83.6	12.11	1	0.9	98.3
3.03	1	0.9	54.3	4.35	1	0.9	69.8	6.49	1	0.9	84.5	12.25	1	0.9	99.1
3.07	1	0.9	55.2	4.49	1	0.9	70.7	7.02	1	0.9	85.3	12.82	1	0.9	100.0
3.16	2	1.7	56.9	4.55	1	0.9	71.6	7.34	1	0.9	86.2				

UNIVARIATE

VARIABLE=FD2

MOMENTS

N	115	SUM WGTS	115
MEAN	2.41643	SUM	277.89
STD DEV	4.09494	VARIANCE	16.7685
SKEWNESS	1.9728	KURTOSIS	3.62012
USS	2583.12	CSS	1911.61
CV	169.462	STD MEAN	0.381855
T:MEAN=0	6.32815	PROB>|T|	0.0001
SGN RANK	451.5	PROB>|S|	0.0001
NUM ^= 0	42		

QUANTILES(DEF=4)

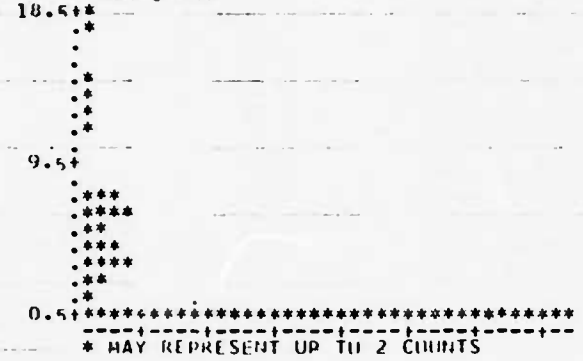
100% MAX	17.97	99%	17.8484
75% Q3	3.99	95%	13.112
50% MED	0	90%	7.33
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	17.97		
Q3-Q1	3.99		
MODE	0		

EXTREMES

LOWEST	HIGHEST
0	13.8
0	14.3
0	14.81
0	17.21
0	17.97

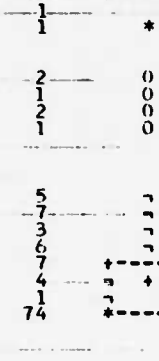
MISSING VALUE .
COUNT 13
% COUNT/NOBS 10.16

BAR CHART

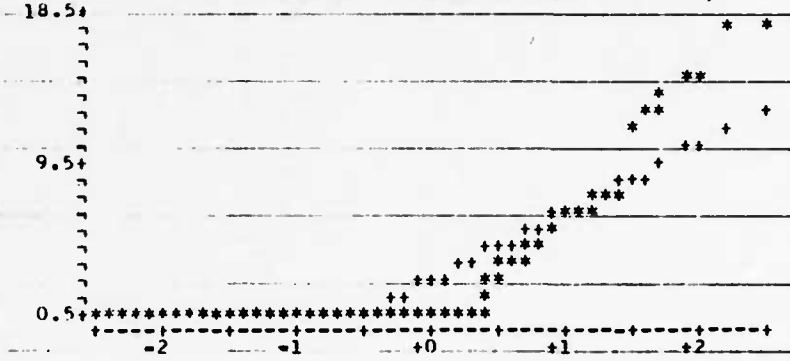


* MAY REPRESENT UP TO 2 COUNTS

BOXPLOT



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	73	63.5	63.5
0.35	1	0.9	64.3
1.67	1	0.9	65.2
2.37	1	0.9	66.1
2.63	1	0.9	67.0
2.77	1	0.9	67.8
2.93	1	0.9	68.7
3.1	1	0.9	69.6
3.5	1	0.9	70.4
3.64	1	0.9	71.3
3.69	1	0.9	72.2
3.79	1	0.9	73.0
3.82	1	0.9	73.9
3.95	1	0.9	74.8
3.99	1	0.9	75.7
4.07	1	0.9	76.5
4.16	1	0.9	77.4
4.3	1	0.9	78.3
4.63	1	0.9	79.1
4.94	1	0.9	80.0
5.01	1	0.9	80.9
5.74	1	0.9	81.7
5.87	1	0.9	82.6
6.08	1	0.9	83.5
6.12	1	0.9	84.3
6.21	1	0.9	85.2
6.57	1	0.9	86.1
6.64	2	1.7	87.8
6.86	1	0.9	88.7
7	1	0.9	89.6
7.25	1	0.9	90.4
7.45	1	0.9	91.3
7.53	1	0.9	92.2
7.66	1	0.9	93.0
11.54	1	0.9	93.9
12.4	1	0.9	94.8
12.94	1	0.9	95.7
13.8	1	0.9	96.5
14.3	1	0.9	97.4
14.81	1	0.9	98.3
17.21	1	0.9	99.1
17.97	1	0.9	100.0

UNIVARIATE

VARIABLE=FD13

MOMENTS

N	116	SUM WGTS	116
MEAN	395.946	SUM	45929.8
STD DEV	399.825	VARIANCE	159860
SKEWNESS	1.09646	KURTOSIS	1.05196
USS	36569641	CSS	18383919
CV	100.98	STD MEAN	37.1228
T:MEAN=0	10.6658	PROB>¬T¬	0.0001
SGN RANK	3114	PROB>¬S¬	0.0001
NUM ^= 0	116		

QUANTILES(DEF=4)

100% MAX	1525.04	99%	1524.23
75% Q3	538.18	95%	1413.31
50% MED	297.605	90%	1008.74
25% Q1	121.2	10%	30.7399
0% MIN	-370.24	5%	-110.865
		1%	-357.104
RANGE	1895.28		
Q3-Q1	416.98		
MODE	121.8		

EXTREMES

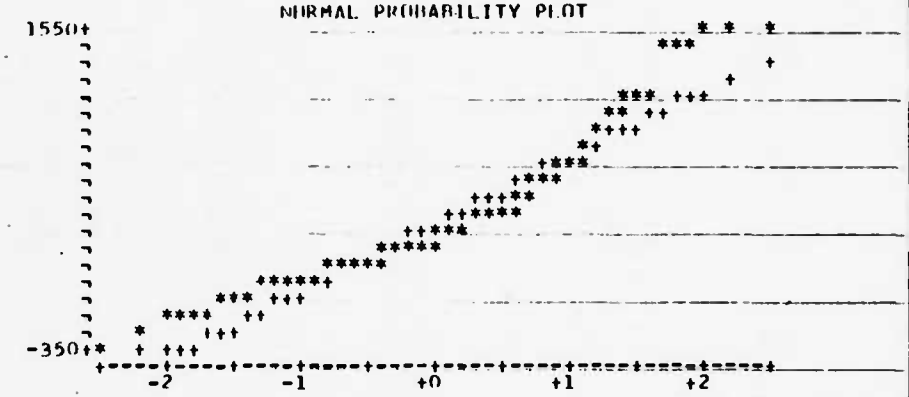
LOWEST	HIGHEST
-370.24	1432.77
-292.97	1444.52
-184.61	1503.18
-145.13	1520.28
-138.94	1525.04

MISSING VALUE

COUNT	12
% COUNT/NOBS	9.38

```
STEM LEAF                            #  BOXPLOT
  15 023                             3     0
  14 134                             3     0
  13                                 0
  12                                 0
  11 0489                            4     0
  10 5                               1     |
   9 679                             3     |
   8 07                              2     |
   7 03447                           5     |
   6 023569                          6     |
   5 0023349                         7  +-----+
   4 2223556777888                  13  |     |
   3 000113346666 7                 13  |  +  |
   2 0001111133344557 8             18  *-----*
   1 0001122222334578 8             17  +-----+
   0 2444566788                     11     |
  -0 9972                            4     |
  -1 8541                            4     |
  -2 9                               1     |
  -3 7                               1     |
     ----+----+----+----+
     MULTIPLY STEM.LEAF BY 10**+02
```

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-370.24	1	0.9	0.9	21.08	1	0.9	9.5	79.59	1	0.9	18.1	127.54	1	0.9	27.6
-292.97	1	0.9	1.7	34.08	1	0.9	10.3	95.14	1	0.9	19.0	134.3	1	0.9	28.4
-184.61	1	0.9	2.6	36.18	1	0.9	11.2	96.97	1	0.9	19.8	141.66	1	0.9	29.3
-145.13	1	0.9	3.4	37.15	1	0.9	12.1	103.66	1	0.9	20.7	150.6	1	0.9	30.2
-138.94	1	0.9	4.3	42.73	1	0.9	12.9	107.75	1	0.9	21.6	167.29	1	0.9	31.0
-105.91	1	0.9	5.2	48.08	1	0.9	13.8	112.12	1	0.9	22.4	177.38	1	0.9	31.9
-92.16	1	0.9	6.0	55.32	1	0.9	14.7	116.31	1	0.9	23.3	179.79	1	0.9	32.8
-88.45	1	0.9	6.9	57.58	1	0.9	15.5	120.42	1	0.9	24.1	196.96	1	0.9	33.6
-66.21	1	0.9	7.8	69.63	1	0.9	16.4	121	1	0.9	25.0	198.42	1	0.9	34.5
-17.9	1	0.9	8.6	79.08	1	0.9	17.2	121.8	2	1.7	26.7	200.12	1	0.9	35.3

UNIVARIATE

VARIABLE=FUI3

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
205.2	1	0.9	36.2
208.86	1	0.9	37.1
213.79	1	0.9	37.9
214.01	1	0.9	38.8
214.49	1	0.9	39.7
227.3	1	0.9	40.5
229.04	1	0.9	41.4
233.08	1	0.9	42.2
235.98	1	0.9	43.1
242.82	1	0.9	44.0
249.47	1	0.9	44.8
251.35	1	0.9	45.7
269.02	1	0.9	46.6
277.7	1	0.9	47.4
281.72	1	0.9	48.3
295.07	1	0.9	49.1
296.01	1	0.9	50.0
299.2	1	0.9	50.9
31[illegible].04	1	0.9	51.7
313.1	1	0.9	52.6
326.12	1	0.9	53.4
328.53	1	0.9	54.3
342.97	1	0.9	55.2
356.17	1	0.9	56.0
359.51	1	0.9	56.9
362.79	1	0.9	57.8
364.46	1	0.9	58.6
366.62	1	0.9	59.5
417.4	1	0.9	60.3
421.62	1	0.9	61.2
422.7	1	0.9	62.1
433.75	1	0.9	62.9
445.6	1	0.9	63.8
447.67	1	0.9	64.7
450.71	1	0.9	65.5
468.45	1	0.9	66.4
473.1	1	0.9	67.2
474.06	1	0.9	68.1
475.59	1	0.9	69.0
478.16	1	0.9	69.8
480.02	1	0.9	70.7
496.74	1	0.9	71.6
500.43	1	0.9	72.4
519.38	1	0.9	73.3
529.32	1	0.9	74.1
531.1	1	0.9	75.0
540.54	1	0.9	75.9
589.79	1	0.9	76.7
603.29	1	0.9	77.6
620.39	1	0.9	78.4
625.66	1	0.9	79.3
645.9	1	0.9	80.2
658.42	1	0.9	81.0
694.45	1	0.9	81.9
703.04	1	0.9	82.8
730.29	1	0.9	83.6
735.68	1	0.9	84.5
736.82	1	0.9	85.3
772.63	1	0.9	86.2
802.86	1	0.9	87.1
865.33	1	0.9	87.9
959.52	1	0.9	88.8
968.25	1	0.9	89.7
989.83	1	0.9	90.5
1052.86	1	0.9	91.4
1095.76	1	0.9	92.2
1139.86	1	0.9	93.1
1176.03	1	0.9	94.0
1193.87	1	0.9	94.8
1409.88	1	0.9	95.7
1432.77	1	0.9	96.6
1444.52	1	0.9	97.4
1503.18	1	0.9	98.3
1520.28	1	0.9	99.1
1525.04	1	0.9	100.0

UNIVARIATE

VARIABLE=ZN1

MOMENTS

N	115	SUM WGTS	115
MEAN	0.079913	SUM	9.19
STD DEV	1.14578	VARIANCE	1.31281
SKEWNESS	0.942665	KURTOSIS	1.46105
USS	150.395	CSS	149.661
CV	1433.79	STD MEAN	0.106845
T:MEAN=0	0.747937	PROB>|T|	0.456038
SGN RANK	-53	PROB>|S|	0.883513
NUM ^= 0	115		

QUANTILES(DEF=4)

100% MAX	4.48	99%	4.25117
75% Q3	0.79	95%	2.32
50% MED	-0.1	90%	1.54
25% Q1	-0.73	10%	-1.216
0% MIN	-2.09	5%	-1.422
		1%	-2.0852
RANGE	6.57		
Q3-Q1	1.52		
MODE	-0.73		

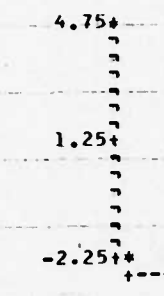
EXTREMES

LOWEST	HIGHEST
-2.09	2.44
-2.06	2.58
-2.03	2.99
-1.63	3.05
-1.43	4.48

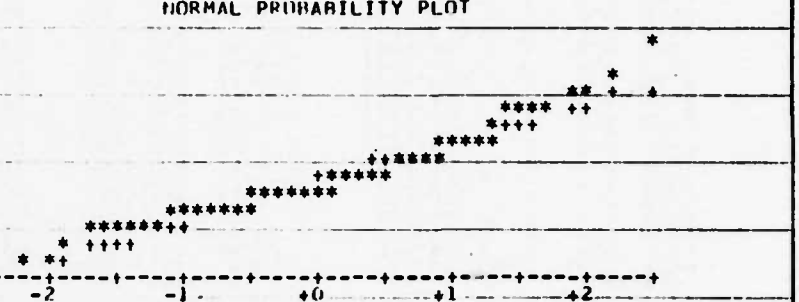
MISSING VALUE .
COUNT 13
% COUNT/NOBS 10.16

STEM	LEAF	#
4	5	1
4		
3		
3	00	2
2	6	1
2	012434	6
1	56	2
1	0001222344	10
0	555678889999	12
0	111122222222333334	18
-0	44444444332222221111000	23
-0	998887777777666555555	21
-1	444433221100000	15
-1	6	1
-2	110	3

BOXPLOT



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-2.09	1	0.9	0.9
-2.06	1	0.9	1.7
-2.03	1	0.9	2.6
-1.63	1	0.9	3.5
-1.43	1	0.9	4.3
-1.42	1	0.9	5.2
-1.37	1	0.9	6.1
-1.36	1	0.9	7.0
-1.35	1	0.9	7.8
-1.32	1	0.9	8.7
-1.24	1	0.9	9.6
-1.2	1	0.9	10.4
-1.14	1	0.9	11.3
-1.07	1	0.9	12.2
-1.02	1	0.9	13.0
-1	1	0.9	13.9
-0.99	1	0.9	14.8
-0.98	1	0.9	15.7
-0.97	1	0.9	16.5
-0.9	1	0.9	17.4
-0.86	1	0.9	18.3
-0.84	2	1.7	20.0
-0.81	1	0.9	20.9
-0.75	1	0.9	21.7
-0.73	4	3.5	25.2
-0.72	1	0.9	26.1
-0.67	1	0.9	27.0
-0.66	1	0.9	27.8
-0.61	1	0.9	28.7
-0.58	1	0.9	29.6
-0.53	1	0.9	30.4
-0.51	1	0.9	31.3
-0.5	1	0.9	32.2
-0.49	1	0.9	33.0
-0.47	1	0.9	33.9
-0.46	1	0.9	34.8
-0.43	1	0.9	35.7
-0.41	2	1.7	37.4
-0.4	2	1.7	39.1
-0.39	1	0.9	40.0
-0.38	1	0.9	40.9
-0.37	1	0.9	41.7
-0.29	1	0.9	42.6
-0.26	1	0.9	43.5
-0.25	1	0.9	44.3
-0.24	1	0.9	45.2
-0.23	1	0.9	46.1
-0.19	1	0.9	47.0
-0.16	2	1.7	48.7
-0.12	1	0.9	49.6
-0.1	1	0.9	50.4
-0.06	2	1.7	52.2
-0.04	1	0.9	53.0
0.02	1	0.9	53.9
0.04	1	0.9	54.8
0.07	1	0.9	55.7
0.08	1	0.9	56.5
0.1	1	0.9	57.4
0.12	1	0.9	58.3
0.16	1	0.9	59.1

H-69

UNIVARIATE

VARIABLE=7N1

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0.17	1	0.9	60.0
0.19	1	0.9	60.9
0.21	1	0.9	61.7
0.22	2	1.7	63.5
0.24	1	0.9	64.3
0.25	1	0.9	65.2
0.28	2	1.7	67.0
0.29	1	0.9	67.8
0.3	1	0.9	68.7
0.31	1	0.9	69.6
0.43	1	0.9	70.4
0.49	1	0.9	71.3
0.51	1	0.9	72.2
0.53	1	0.9	73.0
0.63	1	0.9	73.9
0.69	1	0.9	74.8
0.79	1	0.9	75.7
0.84	1	0.9	76.5
0.85	1	0.9	77.4
0.86	1	0.9	78.3
0.87	1	0.9	79.1
0.94	2	1.7	80.9
0.99	1	0.9	81.7
1	1	0.9	82.6
1.03	1	0.9	83.5
1.08	1	0.9	84.3
1.2	1	0.9	85.2
1.21	1	0.9	86.1
1.22	1	0.9	87.0
1.27	1	0.9	87.8
1.38	1	0.9	88.7
1.41	1	0.9	89.6
1.48	1	0.9	90.4
1.63	1	0.9	91.3
1.97	1	0.9	92.2
2.12	1	0.9	93.0
2.25	1	0.9	93.9
2.29	2	1.7	95.7
2.44	1	0.9	96.5
2.58	1	0.9	97.4
2.99	1	0.9	98.3
3.05	1	0.9	99.1
4.48	1	0.9	100.0

UNIVARIATE

VARIABLE=HRS

MOMENTS

N	4	SUM WGTS	4
MEAN	68	SUM	272
STD DEV	63.7861	VARIANCE	4068.67
SKEWNESS	1.91784	KURTOSIS	3.69818
USS	30702	CSS	12206
CV	93.8031	STD MEAN	31.8931
T:MEAN=0	2.13213	PROB>|T|	0.122764
SGN RANK	5	PROB>|S|	0.100348
NUM ^= 0	4		

QUANTILES(DEF=4)

100% MAX	163	99%	163
75% Q3	134	95%	163
50% MED	39.5	90%	163
25% Q1	30.5	10%	30
0% MIN	30	5%	30
		1%	30
RANGE	133		
Q3-Q1	103.5		
MODE	30		

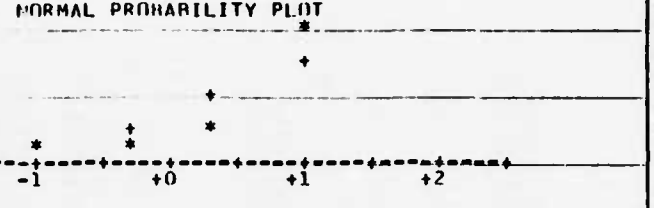
EXTREMES

LOWEST	HIGHEST
30	
32	30
47	32
163	47
	163

MISSING VALUE
COUNT 124
% COUNT/NOBS 96.88

STEM	LEAF	#	BOXPLOT
16	3	1	
14			
12			
10			
8			
6			
4	7	1	
2	02	2	

MULTIPLY STEM.LEAF BY 10**+01



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
30	1	25.0	25.0
32	1	25.0	50.0
47	1	25.0	75.0
163	1	25.0	100.0

UNIVARIATE

VARIABLE=FE

MOMENTS

N	128	SUM WGTS	128
MEAN	212.484	SUM	27198
STD DEV	142.97	VARIANCE	20440.4
SKEWNESS	1.63462	KURTOSIS	3.94328
USS	8375076	CSS	2595926
CV	67.2949	STD MEAN	12.6369
T:MEAN=0	16.8146	PROB>|T|	0.0001
SGN RANK	4128	PROB>|S|	0.0001
NUM ^= 0	128		

QUANTILES(DEF=4)

100% MAX	867	99%	817.119
75% Q3	276.75	95%	511
50% MED	182.5	90%	381.4
25% Q1	113.75	10%	68.8
0% MIN	9	5%	45.85
		1%	10.74
RANGE	858		
Q3-Q1	163		
MODE	117		

EXTREMES

LOWEST	HIGHEST
9	541
15	581
25	657
34	695
37	867

STEM	LEAF	#	BOXPLOT
8	7	1	*
8			
7			
7			
6	69	2	0
6			
5	9	1	0
5	34	2	0
4	569	3	+
4	013	3	+
3	5678	4	+
3	0002334444	10	+
2	55566788888999	13	+-----+
2	000001112222233333444	22	+ +
1	555566777777788899	18	*-----*
1	000000111122222222223334444	27	+-----+
0	566667777888899	16	+
0	112344	6	+

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT

875+

.25+

-2 -1 +0 +1 +2

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
9	1	0.8	0.8
15	1	0.8	1.6
25	1	0.8	2.3
34	1	0.8	3.1
37	1	0.8	3.9
40	1	0.8	4.7
53	1	0.8	5.5
58	1	0.8	6.3
60	1	0.8	7.0
65	2	1.6	8.6
67	1	0.8	9.4
69	1	0.8	10.2
73	1	0.8	10.9
75	1	0.8	11.7
76	1	0.8	12.5
81	2	1.6	14.1
85	1	0.8	14.8
89	1	0.8	15.6
95	2	1.6	17.2
96	1	0.8	18.0
97	1	0.8	18.8
98	1	0.8	19.5
99	1	0.8	20.3
101	1	0.8	21.1
105	1	0.8	21.9
107	1	0.8	22.7
112	1	0.8	23.4
113	2	1.6	25.0
116	1	0.8	25.8
117	4	3.1	28.9
119	1	0.8	29.7
122	1	0.8	30.5
123	2	1.6	32.0
125	1	0.8	32.8
127	1	0.8	33.6
129	1	0.8	34.4
133	1	0.8	35.2
138	1	0.8	35.9
140	1	0.8	36.7
141	1	0.8	37.5
142	1	0.8	38.3
147	1	0.8	39.1
149	1	0.8	39.8
153	2	1.6	41.4
157	2	1.6	43.0
168	1	0.8	43.8
169	1	0.8	44.5
171	1	0.8	45.3
173	2	1.6	46.9
175	2	1.6	48.4
181	2	1.6	50.0
184	1	0.8	50.8
193	1	0.8	51.6
195	1	0.8	52.3
196	1	0.8	53.1
199	1	0.8	53.9
200	1	0.8	54.7
204	1	0.8	55.5
205	1	0.8	56.3
210	1	0.8	57.0
211	1	0.8	57.8
213	1	0.8	58.6
217	1	0.8	59.4
221	2	1.6	60.9

UNIVARIATE

VARIABLE=EE

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
224	1	0.8	61.7	257	1	0.8	72.7	305	2	1.6	82.0	407	1	0.8	92.2
225	1	0.8	62.5	263	1	0.8	73.4	319	1	0.8	82.8	427	1	0.8	93.0
229	3	2.3	64.8	275	1	0.8	74.2	331	1	0.8	83.6	453	1	0.8	93.8
231	1	0.8	65.6	276	1	0.8	75.0	332	1	0.8	84.4	463	1	0.8	94.5
233	2	1.6	67.2	277	1	0.8	75.8	337	1	0.8	85.2	489	1	0.8	95.3
237	1	0.8	68.0	281	1	0.8	76.6	341	3	2.3	87.5	529	1	0.8	96.1
238	1	0.8	68.8	285	1	0.8	77.3	349	1	0.8	88.3	541	1	0.8	96.9
245	1	0.8	69.5	289	1	0.8	78.1	357	1	0.8	89.1	581	1	0.8	97.7
247	1	0.8	70.3	291	1	0.8	78.9	371	1	0.8	89.8	657	1	0.8	98.4
249	1	0.8	71.1	293	1	0.8	79.7	379	1	0.8	90.6	695	1	0.8	99.2
254	1	0.8	71.9	303	1	0.8	80.5	403	1	0.8	91.4	867	1	0.8	100.0

UNIVARIATE

VARIABLE=V1S

MOMENTS

N	128	SUM WGTS	128
MEAN	258.609	SUM	33102
STD DEV	89.3916	VARIANCE	7990.85
SKEWNESS	0.16962	KURTOSIS	-0.320374
USS	9575326	CSS	1014038
CV	34.5663	STD MEAN	7.90117
T:MEAN=0	32.7305	PROB>¬T¬	0.0001
SGN RANK	4128	PROB>¬S¬	0.0001
NUM ^= 0	128		

QUANTILES(DEF=4)

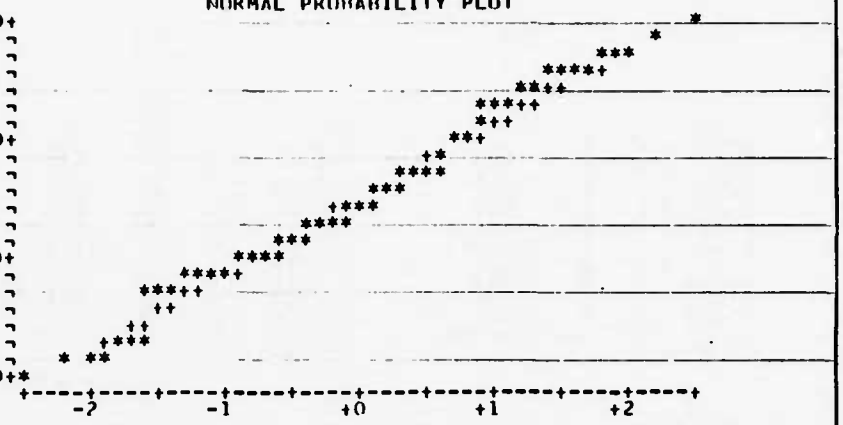
100% MAX	475	99%	470.36
75% Q3	320.75	95%	410.75
50% MED	243.5	90%	383.7
25% Q1	194.25	10%	159.2
0% MIN	57	5%	94.9
		1%	59.61
RANGE	418		
Q3-Q1	126.5		
MODE	206		

EXTREMES

LOWEST	HIGHEST
57	429
66	431
71	434
73	459
93	475

```
STEM LEAF                            #  BOXPLOT
  46 5                               1     |
  44 9                               1     |
  42 914                             3     |
  40 07883                           5     |
  38 033304                          6     |
  36 0026123                         7     |
  34 42                              2     |
  32 01614566                        8     +-----+
  30 461                             3     |     |
  28 0071366667779                   12    |     |
  26 344245569                       9     |     |
  24 0333489066U                     11    *--+--*
  22 222339022348899                 15    |     |
  20 2011233677                      10    |     |
  18 0467801124558                   12    +-----+
  16 024402456?8                     11    |
  14 06022                           5     |
  12                                       |
  10                                       |
   8 346                             3     |
   6 613                             3     |
   4 7                               1     |
     ----+----+----+----+
     MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
57	1	0.8	0.8	162	1	0.8	10.9	187	1	0.8	21.1	213	2	1.6	32.8
66	1	0.8	1.6	164	2	1.6	12.5	188	1	0.8	21.9	216	1	0.8	33.6
71	1	0.8	2.3	179	1	0.8	13.3	190	1	0.8	22.7	217	2	1.6	35.2
73	1	0.8	3.1	172	1	0.8	14.1	191	1	0.8	23.4	222	3	2.3	37.5
93	1	0.8	3.9	174	1	0.8	14.8	192	1	0.8	24.2	223	2	1.6	39.1
94	1	0.8	4.7	175	1	0.8	15.6	194	1	0.8	25.0	229	1	0.8	39.8
96	1	0.8	5.5	176	1	0.8	16.4	195	2	1.6	26.6	230	1	0.8	40.6
140	1	0.8	6.3	177	1	0.8	17.2	198	1	0.8	27.3	232	2	1.6	42.2
146	1	0.8	7.0	178	1	0.8	18.0	202	1	0.8	28.1	233	1	0.8	43.0
150	1	0.8	7.8	180	1	0.8	18.8	210	1	0.8	28.9	234	1	0.8	43.8
152	2	1.6	9.4	184	1	0.8	19.5	211	2	1.6	30.5	238	2	1.6	45.3
160	1	0.8	10.2	186	1	0.8	20.3	212	1	0.8	31.3	239	2	1.6	46.9

UNIVARIATE

VARIABLE=VIS

FREQUENCY TABLE (CONT.)

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
240	1	0.8	47.7	279	1	0.8	62.5	331	1	0.8	77.3	390	1	0.8	91.4
242	3	2.3	50.0	280	2	1.6	64.1	334	1	0.8	78.1	394	1	0.8	92.2
244	1	0.8	50.8	287	1	0.8	64.8	335	1	0.8	78.9	400	1	0.8	93.0
248	1	0.8	51.6	291	1	0.8	65.6	336	2	1.6	80.5	407	1	0.8	93.8
249	1	0.8	52.3	293	1	0.8	66.4	344	1	0.8	81.3	408	2	1.6	95.3
250	1	0.8	53.1	296	4	3.1	69.5	352	1	0.8	82.0	413	1	0.8	96.1
256	2	1.6	54.7	297	2	1.6	71.1	360	2	1.6	83.6	429	1	0.8	96.9
258	1	0.8	55.5	299	1	0.8	71.9	362	1	0.8	84.4	431	1	0.8	97.7
263	1	0.8	56.3	304	1	0.8	72.7	366	1	0.8	85.2	434	1	0.8	98.4
264	2	1.6	57.8	306	1	0.8	73.4	371	1	0.8	85.9	459	1	0.8	99.2
272	1	0.8	58.6	311	1	0.8	74.2	372	1	0.8	86.7	475	1	0.8	100.0
274	1	0.8	59.4	320	1	0.8	75.0	378	1	0.8	87.5				
275	2	1.6	60.9	321	1	0.8	75.8	380	1	0.8	88.3				
276	1	0.8	61.7	326	1	0.8	76.6	383	3	2.3	90.6				

UNIVARIATE

VARIABLE=TAN

MOMENTS

N	128	SUM WGTS	128
MEAN	2.81656	SUM	360.52
STD DEV	0.765657	VARIANCE	0.586231
SKEWNESS	2.63719	KURTOSIS	10.9716
USS	1089.88	CSS	74.4513
CV	27.1841	STD MEAN	0.0676752
T:MEAN=0	41.6189	PROB>|T|	0.0001
SGN RANK	4128	PROB>|S|	0.0001
NUM ^= 0	128		

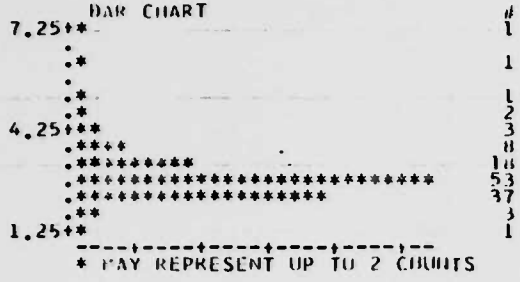
QUANTILES(DEF=4)

100% MAX	7.24	99%	6.92389
75% Q3	3.0375	95%	4.258
50% MED	2.695	90%	3.511
25% Q1	2.3475	10%	2.169
0% MIN	1.39	5%	2.0735
		1%	1.506
RANGE	5.85		
Q3-Q1	0.690001		
MODE	2.58		

EXTREMES

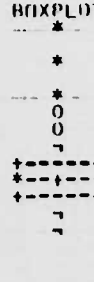
LOWEST	HIGHEST
1.39	4.52
1.79	4.6
1.81	5.22
1.95	6.15
2.02	7.24

BAR CHART

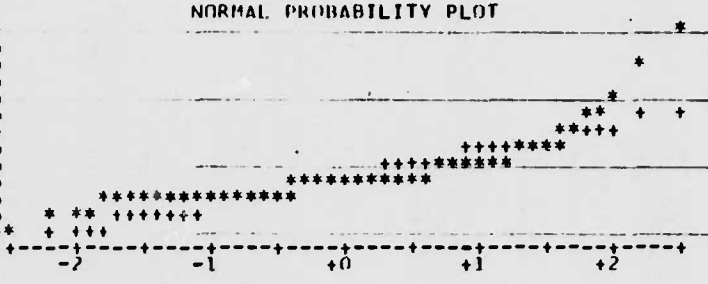


* MAY REPRESENT UP TO 2 COUNTS

BOXPLOT



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
1.39	1	0.8	0.8	2.32	1	0.8	22.7	2.69	2	1.6	50.0	3.14	1	0.8	78.1
1.79	1	0.8	1.6	2.33	1	0.8	23.4	2.7	4	3.1	53.1	3.16	1	0.8	78.9
1.81	1	0.8	2.3	2.34	2	1.6	25.0	2.71	2	1.6	54.7	3.18	1	0.8	79.7
1.95	1	0.8	3.1	2.37	1	0.8	25.8	2.74	3	2.3	57.0	3.19	1	0.8	80.5
2.02	1	0.8	3.9	2.38	1	0.8	26.6	2.76	1	0.8	57.8	3.2	1	0.8	81.3
2.06	1	0.8	4.7	2.39	1	0.8	27.3	2.77	1	0.8	58.6	3.24	1	0.8	82.0
2.09	1	0.8	5.5	2.41	1	0.8	28.1	2.78	3	2.3	60.9	3.27	1	0.8	82.8
2.12	1	0.8	6.3	2.42	3	2.3	30.5	2.8	1	0.8	61.7	3.28	1	0.8	83.6
2.13	1	0.8	7.0	2.43	2	1.6	32.0	2.82	4	3.1	64.8	3.29	2	1.6	85.2
2.15	2	1.6	8.6	2.46	1	0.8	32.8	2.84	2	1.6	66.4	3.31	1	0.8	85.9
2.16	1	0.8	9.4	2.47	1	0.8	33.6	2.86	1	0.8	67.2	3.32	1	0.8	86.7
2.17	1	0.8	10.2	2.49	1	0.8	34.4	2.89	2	1.6	68.8	3.34	1	0.8	87.5
2.18	3	2.3	12.5	2.51	1	0.8	35.2	2.9	1	0.8	69.5	3.46	1	0.8	88.3
2.2	2	1.6	14.1	2.52	2	1.6	36.7	2.91	2	1.6	71.1	3.47	1	0.8	89.1
2.22	1	0.8	14.8	2.53	3	2.3	39.1	2.93	1	0.8	71.9	3.49	1	0.8	89.8
2.23	1	0.8	15.6	2.54	1	0.8	39.8	2.95	2	1.6	73.4	3.5	1	0.8	90.6
2.24	3	2.3	18.0	2.58	5	3.9	43.8	2.98	1	0.8	74.2	3.61	1	0.8	91.4
2.26	1	0.8	18.8	2.61	1	0.8	44.5	3.03	1	0.8	75.0	3.68	1	0.8	92.2
2.27	2	1.6	20.3	2.65	3	2.3	46.9	3.04	1	0.8	75.8	3.69	1	0.8	93.0
2.28	1	0.8	21.1	2.66	1	0.8	47.7	3.06	1	0.8	76.6	3.95	1	0.8	93.8
2.3	1	0.8	21.9	2.67	1	0.8	48.4	3.13	1	0.8	77.3	3.99	1	0.8	94.5

UNIVARIATE

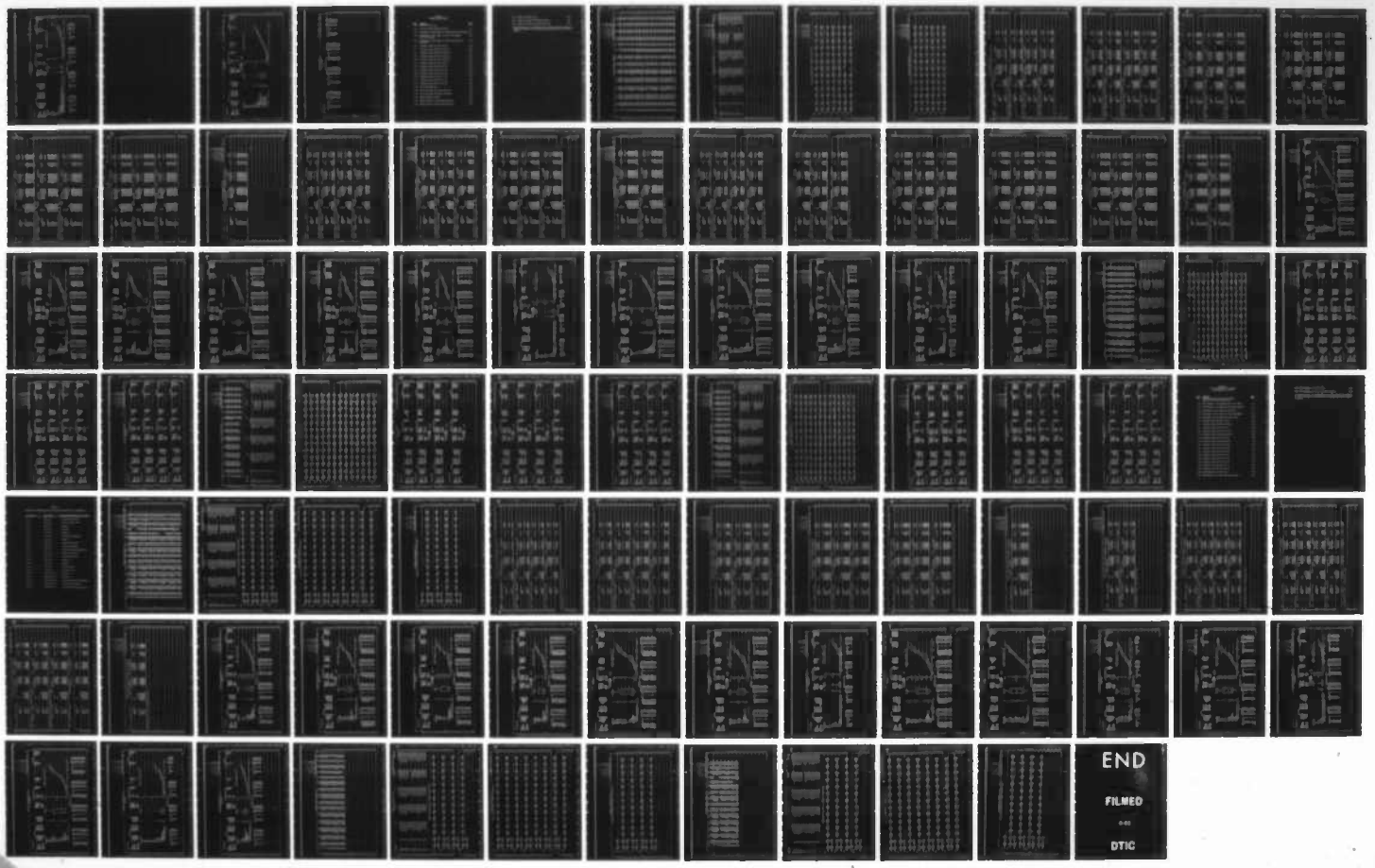
VARIABLE=TAN

FREQUENCY TABLE (CUNT.)

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
4.17	1	0.8	95.3	4.52	1	0.8	96.9	5.22	1	0.8	98.4	7.24	1	0.8	100.0
4.33	1	0.8	96.1	4.6	1	0.8	97.7	6.15	1	0.8	99.2				

AD-A152 994 EVALUATION OF USED CRANKCASE OILS USING COMPUTERIZED INFRARED SPECTROMETR..(U) JOINT OIL ANALYSIS PROGRAM PENSACOLA FL TECHNICAL SUPPORT CEN.. B B MCCAA ET AL. 5/5

UNCLASSIFIED JUN 84 JOAP-TSC-84-01-APP F/G 20/6 NL



UNIVARIATE

VARIABLE=TS

MOMENTS

N	128	SUM WGTS	128
MEAN	4.35312	SUM	557.2
STD DEV	4.676626	VARIANCE	21.8674
SKEWNESS	3.72861	KURTOSIS	16.5148
USS	5202.72	CSS	2777.16
CV	107.423	STD MEAN	0.413327
T:MEAN=0	10.5319	PROB>|T|	0.0001
SGN RANK	4128	PROB>|S|	0.0001
NUM ^= 0	128		

QUANTILES(DEF=4)

100% MAX	32	99%	30.84
75% Q3	4.8	95%	10.38
50% MED	3.2	90%	8
25% Q1	2	10%	1.16
0% MIN	0.4	5%	0.8
		1%	0.4
RANGE	31.6		
Q3-Q1	2.8		
MODE	2		

EXTREMES

LOWEST	HIGHEST
0.4	18
0.4	22
0.4	22
0.8	28
0.8	32

```
STEM LEAF                                                    #  BOXPLOT
  32 0                                                       1     *
  30
  28 0                                                       1     *
  26
  24
  22 00                                                      2     *
  20
  18 0                                                       1     *
  16
  14
  12 0                                                       1     0
  10
   8 0000044                                                 7     +-+
   6 000H222222                                             10     +-+
   4 000000000000000044448888888888222                      33     +---+--+
   2 00000000000000000444448888888222222222222222226666    48     *---+--*
   0 444888888888222222666666                               24     +-+
     ----+----+----+----+----+----+----+----+----+----+---
```

NORMAL PROBABILITY PLOT

```
33+                                                                  *
                                                                     *
                                                                     *
                                                                     **
                                                                    *
                                                                    *
17+                                                                 +
                                                                   +
                                                                  ++++
                                                                 ++++
                                                               ++++++
                                                            ++++ ****
                                                          +++++++++
                                                       ++++++++++
                                                    ++++++++++
                                                 ++++++++++
                                              ++++++++++
                                           ++++++++++
                                        ++++++++++
                                     ++++++++++
                                  ++++++++++
                               ++++++++++
                            ++++++++++
                         ++++++++++
                      ++++++++++
                   ++++++++++
                ++++++++++
             ++++++++++
          ++++++++++
       ++++++++++
    ++++++++++
 1++++++++++
    +----+----+----+----+----+----+----+----+----+----+
      -2        -1        +0        +1        +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0.4	3	2.3	2.3
0.8	9	7.0	9.4
1.2	6	4.7	14.1
1.6	6	4.7	18.8
2	17	13.3	32.0
2.4	5	3.9	35.9
2.8	7	5.5	41.4
3.2	15	11.7	53.1
3.6	4	3.1	56.3
4	16	12.5	68.8
4.4	4	3.1	71.9
4.8	10	7.8	79.7
5.2	3	2.3	82.0
6	3	2.3	84.4
6.8	1	0.8	85.2
7.2	6	4.7	89.8
8	5	3.9	93.8
8.4	2	1.6	95.3
12	1	0.8	96.1
18	1	0.8	96.9
22	2	1.6	98.4
28	1	0.8	99.2
32	1	0.8	100.0

UNIVARIATE

VARIABLE=COB

MOMENTS

N	101	SUM WGTS	101
MEAN	8.41089	SUM	849.5
STD DEV	3.78478	VARIANCE	14.3246
SKEWNESS	1.252	KURTOSIS	3.69493
USS	8577.51	CSS	1432.46
CV	44.9986	STD MEAN	0.3766
T:MEAN=0	22.3338	PROB>|T|	0.0001
SGN RANK	2575.5	PROB>|S|	0.0001
NUM ^= 0	101		

QUANTILES(DEF=4)

100% MAX	26	99%	25.8599
75% Q3	10.65	95%	14.8
50% MED	8	90%	12.96
25% Q1	5.15	10%	4
0% MIN	3	5%	3.82
		1%	3
RANGE	23		
Q3-Q1	5.5		
MODE	4		

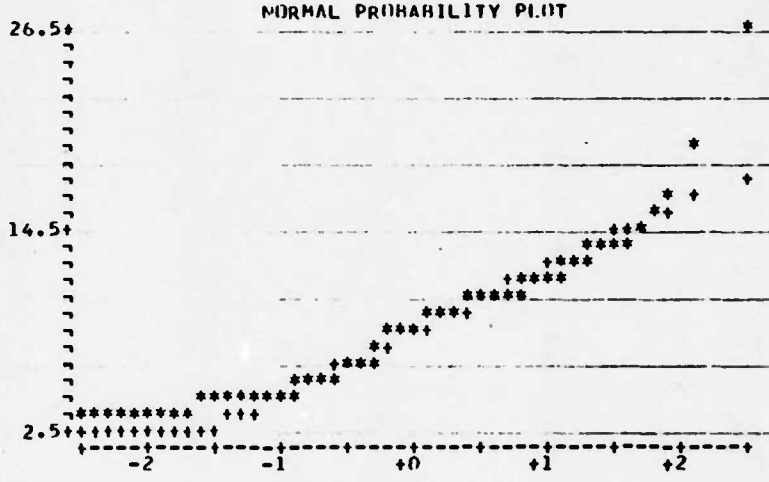
EXTREMES

LOWEST	HIGHEST
3	14.9
3	15.8
3	16.3
3.5	19
3.8	26

MISSING VALUE
COUNT 27
% COUNT/NOBS 21.09

STEM	LEAF	#	BOXPLOT
26	0	1	0
25			
24			
23			
22			
21			
20			
19	0	1	0
18			
17			
16	3	1	
15	8	1	
14	9	1	
13	00009	5	
12	0008	4	
11	0555579	7	
10	0000000011258999	16	+-----+
9	00000158	8	
8	0000003012559	13	*--+--*
7	0558	4	
6	0000112388	10	
5	00000003555	11	+-----+
4	0000000000028	13	
3	00058	5	
2			

NORMAL PROBABILITY PLOT



UNIVARIATE

VARIABLE=COB

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
3	4	3.0	3.0	6.3	1	1.0	36.6	9.5	1	1.0	62.4	12	3	3.0	89.1
3.5	1	1.0	4.0	6.9	2	2.0	38.6	9.8	1	1.0	63.4	12.8	1	1.0	90.1
3.8	1	1.0	5.0	7	1	1.0	39.6	10	8	7.9	71.3	13	4	4.0	94.1
4	11	10.9	15.8	7.5	2	2.0	41.6	10.1	2	2.0	73.3	13.9	1	1.0	95.0
4.2	1	1.0	16.8	7.8	1	1.0	42.6	10.2	1	1.0	74.3	14.9	1	1.0	96.0
4.8	1	1.0	17.8	8	8	7.9	50.5	10.5	1	1.0	75.2	15.8	1	1.0	97.0
5	7	6.9	24.8	8.1	1	1.0	51.5	10.8	1	1.0	76.2	16.3	1	1.0	98.0
5.3	1	1.0	25.7	8.2	1	1.0	52.5	10.9	3	3.0	79.2	19	1	1.0	99.0
5.5	3	3.0	28.7	8.5	2	2.0	54.5	11	1	1.0	80.2	26	1	1.0	100.0
6	4	4.0	32.7	8.9	1	1.0	55.4	11.5	4	4.0	84.2				
6.1	2	2.0	34.7	9	5	5.0	60.4	11.7	1	1.0	85.1				
6.2	1	1.0	35.6	9.1	1	1.0	61.4	11.9	1	1.0	86.1				

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PROPANE FUELED ENGINES

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* These models were all developed early in the study and are based on a slightly different data collection methodology than that outlined in Table 1.

FORD 6 CYLINDER (PROPANE) 14:38 WEDNESDAY, JUNE 6, 1984 1

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	MIL	FE	VIS	TAN	TS	COB
1	0.00	0.00	0.0	0.00	0.0	0.00	0.00	0	50	119.0	3.09	0.40	11.0
2	1.32	1963.00	-383.0	237.03	-902.6	0.99	2.70	20	21	103.0	2.73	3.60	14.2
3	1.53	414.12	-499.0	490.35	1130.2	-0.90	0.00	41	65	89.0	4.98	2.00	19.0
4	1.44	2016.45	-865.2	803.93	-323.4	6.71	0.00	119	325	137.0	3.90	4.00	16.0
5	0.69	1301.10	-1275.0	237.99	-3452.1	0.11	0.00	119	68	126.4	3.22	0.40	33.3
6	-0.02	-109.18	-100.6	26.76	-249.7	-1.15	0.00	229	19	88.0	2.40	.	16.0
7	1.29	.	.	.	.	.	.	245	19	112.0	2.36	14.40	8.2
8	0.24	2317.67	-48.2	203.30	262.3	-0.29	0.00	291	28	85.0	2.35	0.40	26.0
9	-0.19	7082.59	-1541.8	-310.62	-3286.7	-6.53	0.00	310	28	86.0	2.46	0.40	15.5
10	1.14	2073.03	-277.9	443.46	-284.0	1.49	0.00	374	36	112.0	2.96	3.60	6.4
11	0.90	5713.84	-87.3	372.09	490.9	2.10	0.00	380	43	89.0	2.20	0.40	17.0
12	0.96	378.05	-17.9	117.13	227.0	-0.57	1.23	633	69	113.0	3.66	4.40	5.0
13	1.84	652.14	-405.1	255.72	824.4	-2.71	0.00	639	89	93.0	3.56	0.80	12.0
14	1.83	2865.70	-337.5	507.52	221.4	1.78	0.00	697	54	117.0	2.62	0.80	7.0
15	0.51	-109.58	-1505.5	221.61	-4850.8	-0.96	0.00	788	95	145.0	3.59	0.40	19.2
16	1.03	-183.34	-1221.3	210.08	-3825.3	-0.05	0.00	853	134	121.0	2.14	0.40	20.0
17	1.44	-380.87	-3144.3	230.73	-5323.5	-1.79	1.99	880	97	132.0	2.37	0.40	16.0
18	0.20	689.60	241.4	110.74	324.8	2.07	.	894	81	119.0	3.41	0.40	10.0
19	0.71	400.38	-155.9	347.55	1570.6	-0.89	0.00	943	84	85.0	2.51	0.80	15.0
20	0.34	2354.38	72.9	335.83	1059.0	2.01	0.00	961	81	119.0	3.24	2.00	6.0
21	1.85	3204.95	-44.7	469.38	457.8	1.73	0.00	1010	48	118.0	2.89	2.40	19.8
22	1.51	1649.36	-379.8	342.54	-295.8	0.33	3.68	1026	59	102.0	2.31	0.80	8.0
23	1.05	1174.41	-372.6	282.62	975.6	-0.59	0.00	1172	75	98.0	5.19	0.40	16.0
24	2.04	2721.89	517.7	879.74	2561.2	7.30	0.00	1294	102	115.0	3.00	0.40	9.0
25	1.92	183.93	-501.7	358.45	1416.7	-2.70	0.00	1390	102	102.0	2.55	0.40	13.0
26	1.00	467.42	-1344.4	334.49	-3398.7	-0.08	0.00	1462	209	123.0	3.27	2.00	24.3
27	1.55	-186.33	-3163.4	366.92	-5016.1	-1.71	3.34	1481	153	135.0	2.29	0.80	16.0
28	1.71	2952.17	-524.1	474.38	1154.0	-0.04	7.66	1495	97	95.0	2.26	0.40	13.0
29	3.27	.	.	.	.	.	.	1574	65	127.0	3.76	4.00	7.3
30	1.65	61.76	-1268.1	395.69	-2282.1	-0.75	0.00	1611	185	138.0	3.07	0.40	28.0
31	2.35	7396.46	-518.0	725.59	1495.4	2.04	9.65	1667	96	98.0	2.19	1.20	14.0
32	2.85	3260.25	22.3	716.33	1375.9	2.80	0.00	1698	72	113.0	4.16	0.40	10.0
33	2.39	2320.75	66.5	743.88	1586.0	2.48	0.00	1790	105	116.0	4.28	0.40	5.0
34	0.93	231.65	875.3	572.05	6496.5	-1.37	.	1955	144	134.0	4.26	1.20	8.0
35	2.80	4252.19	9.0	862.19	1674.2	3.87	0.00	2056	85	117.0	3.41	0.40	6.0
36	2.89	1499.27	-368.7	544.48	788.7	-0.02	0.00	2125	101	96.0	3.13	2.80	6.8
37	0.77	330.52	-3180.1	296.34	-6455.4	-1.30	0.00	2207	303	123.0	3.62	0.40	26.0
38	0.02	737.93	-840.6	614.82	-4261.4	4.75	0.00	2369	291	134.4	4.03	4.00	38.0
39	1.20	2250.70	666.9	705.56	5699.6	-0.06	.	2454	155	150.0	3.51	0.80	8.0
40	1.96	3426.98	-365.6	596.75	1000.5	1.75	0.00	2536	139	106.0	3.89	1.20	8.0
41	2.01	11.25	-1187.0	479.25	-1900.3	-0.68	0.00	2724	265	145.0	4.56	1.20	30.5
42	2.12	3945.98	-375.5	657.10	905.1	2.21	0.00	2848	51	121.0	3.39	2.80	6.8
43	2.65	2350.60	-433.1	571.47	1097.2	-0.10	0.00	2868	165	102.0	3.96	1.20	8.0
44	3.02	.	.	.	.	.	.	3223	217	105.0	5.60	8.40	8.0
45	1.30	2244.44	165.4	356.35	1251.1	0.39	5.14	3228	57	112.0	1.96	4.80	15.0
46	1.93	1296.35	-438.2	568.57	2085.9	-3.15	0.00	3428	119	86.0	3.62	3.20	18.5
47	2.64	2897.88	-425.7	642.67	1381.0	0.76	0.00	3559	192	103.0	5.10	2.80	6.0
48	0.99	1109.74	-3513.6	381.01	-8118.0	-0.22	0.00	3594	188	136.0	4.30	1.20	30.5
49	2.03	2250.39	-409.9	522.84	608.1	0.75	0.00	3702	52	124.0	3.46	1.20	11.5
50	0.99	10.71	-3186.6	466.92	-5257.2	-0.82	0.00	3948	434	144.0	4.94	1.20	31.0
51	1.48	2843.36	-3145.4	559.12	-5488.7	0.42	0.00	4211	345	145.0	4.28	1.20	31.0
52	3.10	6422.95	265.2	1536.41	4082.5	4.44	0.00	4370	79	148.0	3.40	5.20	14.2
53	1.22	1272.48	-406.8	709.42	3017.3	-2.54	0.00	4388	180	98.0	3.98	6.00	20.0
54	2.68	914.33	12.6	707.01	1803.9	0.53	0.00	4493	55	116.0	3.76	0.40	11.0
55	1.46	377.10	-1968.0	526.70	-3150.5	-0.71	0.00	5199	400	122.0	4.77	1.20	32.0
56	0.50	2120.43	-571.6	556.34	1916.8	-6.00	0.00	5358	222	97.0	3.95	8.00	20.9
57	2.85	5816.57	-35.7	1055.01	2516.4	4.53	0.00	5472	71	121.0	4.59	3.20	8.0
58	1.44	1638.15	-565.9	718.94	2770.8	-4.61	0.00	6138	185	105.0	6.07	2.80	21.0
59	3.19	.	.	.	.	.	.	6952	64	122.0	4.07	3.12	10.0
60	2.22	1395.97	-425.8	1231.16	4244.3	-3.32	0.00	8609	239	96.0	7.59	4.00	27.0
61	2.75	881.33	-103.4	1975.19	6847.5	-2.70	18.85	11017	335	120.0	14.48	10.00	19.0

I-1

F

VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
CL2	61	1.56524590	0.89725992	95.4800000	-0.19000000	3.27000000
DET1	57	1880.26929825	1858.59225790	107175.3500000	-380.87000000	7396.46000000
DET2	57	-684.46298246	1028.83237275	-39014.3900000	-3513.60000000	875.29000000
DET3	57	514.82245614	356.59163752	29344.8800000	-310.62000000	1975.19000000
DET4	57	-14.06526316	3145.35882485	-801.7200000	-8118.01000000	6847.48000000
FD1	57	0.15842105	2.64071608	9.0300000	-6.53000000	7.30000000
FD2	54	1.00444444	3.12180443	54.2400000	0	18.85000000
MIL	61	2346.18032787	2192.99963907	143117.0000000	0	11017.00000000
FE	61	130.93442623	99.19120741	7987.0000000	19.00000000	434.00000000
VIS	61	114.73442623	17.78717595	6998.8000000	85.00000000	150.00000000
TAN	61	3.74836066	1.76024258	228.6500000	1.96000000	14.48000000
TS	60	2.29866667	2.67081621	137.9200000	0.40000000	14.40000000
CUB	61	15.68688525	8.47701747	956.9000000	5.00000000	38.00000000

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

CL2

CL2	DET3	MIL	DET4	COB	DET1	TAN	FD1	FD2	DET2	TS	VIS	FE
1.00000	0.69414	0.44206	0.40732	-0.37694	0.32325	0.30047	-0.28440	-0.21315	0.19579	0.17560	0.06024	0.00846
61	57	61	57	61	57	61	57	54	57	60	61	61

DET1

DET1	FD1	CL2	COB	FE	DET2	DET4	DET3	VIS	TAN	FD2	TS	MIL
1.00000	0.33053	0.32325	-0.31004	-0.29930	0.28305	0.28268	0.26849	-0.18782	-0.13913	0.09001	0.05947	0.04520
57	57	57	57	57	57	57	57	57	57	54	56	57

DET2

DET2	DET4	COB	FE	VIS	DET1	FD1	DET3	TS	CL2	FD2	MIL	TAN
1.00000	0.86015	-0.59939	-0.52085	-0.36362	0.28305	0.27297	0.25255	0.19933	0.19579	0.06947	-0.04275	0.02517
57	57	57	57	57	57	57	57	56	57	54	57	57

DET3

DET3	MIL	CL2	TAN	TS	DET4	FD2	FE	FD1	DET1	DET2	VIS	COB
1.00000	0.74453	0.69414	0.67259	0.56570	0.55314	0.42406	0.33419	0.27485	0.26849	0.25255	0.20022	-0.04938
57	57	57	57	56	57	54	57	57	57	57	57	57

DET4

DET4	DET2	DET3	COB	CL2	TS	TAN	VIS	MIL	FD2	DET1	FE	FD1
1.00000	0.86015	0.55314	-0.54149	0.40732	0.38314	0.32905	-0.32716	0.32566	0.28551	0.28268	-0.25776	0.05551
57	57	57	57	57	56	57	57	57	54	57	57	57

FD1

FD1	DET1	VIS	CL2	DET3	DET2	COB	MIL	TAN	TS	FE	FD2	DET4
1.00000	0.33053	0.32103	0.28440	0.27485	0.27297	-0.25150	-0.24037	-0.19491	-0.13086	-0.11054	-0.09879	0.05551
57	57	57	57	57	57	57	57	57	56	57	54	57

FD2

FD2	TAN	DET3	TS	MIL	DET4	CL2	FE	FD1	DET1	DET2	COB	VIS
1.00000	0.49720	0.42406	0.41804	0.37362	0.28551	0.21315	0.12170	-0.09879	0.09001	0.06947	-0.05093	-0.04727
54	54	54	53	54	54	54	54	54	54	54	54	54

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

MIL

MIL	TAN	DET3	FE	CL2	FD2	TS	DET4	FD1	COB	VIS	DET1	DET2
1.00000	0.74834	0.74453	0.49855	0.44206	0.37362	0.36845	0.32566	-0.24037	0.19866	0.12110	0.04520	-0.04275
61	61	57	61	61	54	60	57	57	61	61	57	57

FE

FE	COB	DET2	TAN	MIL	VIS	DET3	DET1	DET4	FD2	TS	FD1	CL2
1.00000	0.58729	-0.52085	0.51433	0.49855	0.40046	0.33419	-0.29930	-0.25776	0.12170	0.11832	-0.11054	0.00846
61	61	57	61	61	61	57	57	57	54	60	57	61

VIS

VIS	FE	DET2	DET4	FD1	COB	DET3	DET1	MIL	TAN	TS	CL2	FD2
1.00000	0.40046	-0.36362	-0.32716	0.32103	0.23700	0.20022	-0.18782	0.12110	0.09147	-0.06408	0.06024	-0.04727
61	61	57	57	57	61	57	57	61	61	60	61	54

TAN

TAN	MIL	DET3	FE	FD2	TS	DET4	CL2	FD1	COB	DET1	VIS	DET2
1.00000	0.74834	0.67259	0.51433	0.49728	0.38326	0.32905	0.30047	-0.19491	0.16661	-0.13913	0.09147	0.02517
61	61	57	61	54	60	57	61	57	61	57	61	57

TS

TS	DET3	FD2	TAN	DET4	MIL	DET2	CL2	FD1	FE	COB	VIS	DET1
1.00000	0.56570	0.41804	0.38326	0.38314	0.36845	0.19933	0.17560	-0.13086	0.11832	-0.08102	-0.06408	0.05947
60	56	53	60	56	60	56	60	56	60	60	60	56

COB

COB	DET2	FE	DET4	CL2	DET1	FD1	VIS	MIL	TAN	TS	FD2	DET3
1.00000	-0.59939	0.58729	-0.54149	-0.37694	-0.31004	-0.25330	0.23700	0.19866	0.16661	-0.08102	-0.05093	-0.04938
61	57	61	57	61	57	57	61	61	61	60	54	57

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

WARNING: 7 OBSERVATIONS DELETED DUE TO MISSING VALUES.

STEP 1 VARIABLE D2D4 ENTERED R SQUARE = 0.28863800 C(P) = 54.16519288

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	4896.51503797	4896.51503797	21.10	0.0001
ERROR	52	12067.69311018	232.07102135		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	109.42783312				
D2D4	0.00000150	0.00000033	4896.51503797	21.10	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE FD1 ENTERED R-SQUARE = 0.46159101 C(P) = 30.83957309

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	7830.52590077	3915.26295039	21.86	0.0001
ERROR	51	9133.68224737	179.09180877		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	108.62627603				
FD1	2.78125073	0.68714303	2934.01086280	16.38	0.0002
D2D4	0.00000164	0.00000029	5743.42347699	32.07	0.0001

STEP 2 D2D4 REPLACED BY DET2 R SQUARE = 0.50924112 C(P) = 23.86213640

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	8638.87235811	4319.43617905	26.46	0.0001
ERROR	51	8325.33579004	163.24187824		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	104.23690252				
DET2	-0.01153919	0.00182143	6551.76993633	40.14	0.0001
FD1	3.60330779	0.68190164	4558.17335042	27.92	0.0001

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE DET33 ENTERED R-SQUARE = 0.57538693 C(P) = 16.17636253

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	9760.98372161	3253.66124054	22.58	0.0001
ERROR	50	7203.22442653	144.06448853		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	100.42866887				
DET2	-0.01262884	0.00175508	7459.20367217	51.78	0.0001
FD1	3.52362006	0.64123231	4350.15068346	30.20	0.0001
DET33	0.00000757	0.00000271	1122.11136351	7.79	0.0074

STEP 3 DET2 REPLACED BY C2D4 R SQUARE = 0.64769933 C(P) = 5.58761159

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	10987.70632633	3662.56877544	30.64	0.0001
ERROR	50	5976.50182182	119.53003644		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	105.48957970				
FD1	2.43968294	0.56166331	2255.23453989	18.87	0.0001
DET33	0.00002859	0.00000383	6668.51949462	55.79	0.0001
C2D4	-0.00425586	0.00049925	8685.92627689	72.67	0.0001

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE FD2 ENTERED R SQUARE = 0.67784594 C(P) = 3.17322444

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	11499.11966898	2874.77991725	25.78	0.0001
ERROR	49	5465.08847917	111.53241794		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	105.13948489				
FD1	2.20059125	0.55391797	1760.30925289	15.78	0.0002
FD2	-1.25876953	0.58784219	511.41334265	4.59	0.0372
DET33	0.00003298	0.00000423	6784.51142398	60.83	0.0001
C2D4	-0.00436035	0.00048472	9025.26674591	80.92	0.0001

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE DET4 ENTERED R SQUARE = 0.68990865 C(P) = 3.40687510

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	11703.75387722	2340.75077544	21.36	0.0001
ERROR	48	5260.45427093	109.59279731		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	104.87247855				
DET4	-0.00176610	0.00129246	204.63420824	1.87	0.1782
FD1	2.20028447	0.54908040	1759.81819308	16.06	0.0002
FD2	-1.18115779	0.58546983	446.05541384	4.07	0.0493
DET33	0.00002948	0.00000491	3941.63749233	35.97	0.0001
C2D4	-0.00303820	0.00108030	866.80753618	7.91	0.0071

STEP 5 FD2 REPLACED BY D1D4 R SQUARE = 0.68996323 C(P) = 3.39888180

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	11704.67991216	2340.93598243	21.36	0.0001
ERROR	48	5259.52823599	109.57350492		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	104.68782626				
DET4	-0.00291349	0.00136035	502.60831130	4.59	0.0373
FD1	1.92862408	0.59084389	1167.49553662	10.65	0.0020
DET33	0.00002294	0.00000446	2896.13013231	26.43	0.0001
C2D4	-0.00254810	0.00107557	614.98163017	5.61	0.0219
D1D4	0.00000065	0.00000032	446.98144879	4.08	0.0490

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE FD2 ENTERED R SQUARE = 0.71151885 C(P) = 2.24247943

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	12070.35383903	2011.72563984	19.32	0.0001
ERROR	47	4893.85430912	104.12455977		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	104.46894986				
DET4	-0.00260292	0.00133641	394.99484423	3.79	0.0574
FD1	1.77045236	0.58208616	963.70329865	9.26	0.0038
FD2	-1.07472031	0.57348894	365.67392686	3.51	0.0672
DET33	0.00002729	0.00000493	3190.00989740	30.64	0.0001
C2D4	-0.00282708	0.00105900	742.05677745	7.13	0.0104
D1D4	0.00000059	0.00000032	366.59996181	3.52	0.0668

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

STEP 7 VARIABLE D2D4 ENTERED R SQUARE = 0.72581233 C(P) = 2.14947509

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	12312.83151654	1758.97593093	17.40	0.0001
ERROR	46	4651.37663161	101.11688330		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	104.82117892				
DET4	-0.00411626	0.00163996	637.03495124	6.30	0.0157
FD1	1.56002297	0.58955335	708.01007991	7.00	0.0111
FD2	-1.13614513	0.56653585	406.66472502	4.02	0.0508
DET33	0.00003167	0.00000562	3208.29344816	31.73	0.0001
C2D4	-0.00318288	0.00106859	897.10623783	8.87	0.0046
D1D4	0.00000068	0.00000032	470.46224414	4.65	0.0363
D2D4	-0.00000080	0.00000052	242.47767751	2.40	0.1283

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

STEP 8 VARIABLE DET11 ENTERED R-SQUARE = 0.73564412 C(P) = 2.70980052

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	12479.61995993	1559.95249499	15.65	0.0001
ERROR	45	4484.58818821	99.65751529		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	105.83511209				
DET4	-0.00448169	0.00165240	733.09681407	7.36	0.0094
FD1	1.69860958	0.59500647	812.18285016	8.15	0.0065
FD2	-1.06144341	0.56538914	351.24391974	3.52	0.0670
DET11	-0.00000016	0.00000012	166.78844340	1.67	0.2024
DET33	0.00003026	0.00000569	2818.98491234	28.30	0.0001
C2D4	-0.00272589	0.00111812	592.31235349	5.94	0.0188
D1D4	0.00000070	0.00000032	496.60231384	4.98	0.0306
D2D4	-0.00000077	0.00000052	224.16151419	2.25	0.1407

STEP 8 D2D4 REPLACED BY DET44 R SQUARE = 0.74122442 C(P) = 1.89267326

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	12574.28537850	1571.78567231	16.11	0.0001
ERROR	45	4389.92276965	97.55383933		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	106.07235957				
DET4	-0.00525789	0.00180904	824.08304427	8.45	0.0057
FD1	1.45699709	0.62430011	531.34293785	5.45	0.0241
FD2	-0.93596282	0.55892066	273.56543792	2.80	0.1010
DET11	-0.00000022	0.00000012	299.51117875	3.07	0.0866
DET33	0.00003296	0.00000621	2744.93396544	28.14	0.0001
DET44	-0.00000043	0.00000024	318.82693276	3.27	0.0773
C2D4	-0.00208623	0.00109021	357.23025828	3.66	0.0620
D1D4	0.00000069	0.00000031	488.35645683	5.01	0.0303

STEP 8 D1D4 REPLACED BY D1D3 R SQUARE = 0.74319065 C(P) = 1.60475794

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	12607.64079843	1575.95509980	16.28	0.0001
ERROR	45	4356.56734972	96.81260777		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	105.55321963				
DET4	-0.00582359	0.00188932	919.81798926	9.50	0.0035
FD1	0.93490046	0.73520367	156.54792748	1.62	0.2100
FD2	-0.56907683	0.59469785	88.65045923	0.92	0.3437
DET11	-0.00000047	0.00000017	730.56431468	7.55	0.0086
DET33	0.00002974	0.00000648	2041.06062374	21.08	0.0001
DET44	-0.00000051	0.00000024	431.84857452	4.46	0.0403
C2D4	-0.00158814	0.00113361	190.01188492	1.96	0.1681
D1D3	0.00000386	0.00000166	521.71187676	5.39	0.0249

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

STEP 9 VARIABLE D1D4 ENTERED R-SQUARE = 0.74596597 C(P) = 3.19836574

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	12654.72194068	1406.08021563	14.36	0.0001
ERROR	44	4309.48620747	97.94286835		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	105.71358850				
DET4	-0.00577832	0.00190144	904.50515220	9.24	0.0040
FD1	1.06256589	0.76206338	190.41553166	1.94	0.1702
FD2	-0.68917296	0.62273494	119.95623096	1.22	0.2744
DET11	-0.00000038	0.00000022	296.50203969	3.03	0.0889
DET33	0.00003076	0.00000668	2077.32257188	21.21	0.0001
DET44	-0.00000049	0.00000025	386.02096430	3.94	0.0534
C2D4	-0.00173403	0.00115946	219.06368412	2.24	0.1419
D1D3	0.00000242	0.00000267	80.43656218	0.82	0.3697
D1D4	0.00000034	0.00000049	47.08114225	0.48	0.4917

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 9 D1D3 REPLACED BY D1D2 R SQUARE = 0.74834523 C(P) = 2.84996928

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	12695.08419175	1410.56491019	14.54	0.0001
ERROR	44	4269.12395640	97.02554446		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	105.62823873				
DET4	-0.00604620	0.00193753	944.82742008	9.74	0.0032
FD1	1.49983533	0.62378997	560.91424598	5.78	0.0205
FD2	-0.83370750	0.56488844	211.34312584	2.18	0.1471
DET11	-0.00000044	0.00000023	344.85961100	3.55	0.0660
DET33	0.00003168	0.00000630	2453.73476533	25.29	0.0001
DET44	-0.00000050	0.00000025	407.12021481	4.20	0.0465
C2D4	-0.00171318	0.00113750	220.08301501	2.27	0.1392
D1D2	-0.00000203	0.00000182	120.79881324	1.25	0.2706
D1D4	-0.00000130	0.00000063	417.17985482	4.30	0.0440

THE ABOVE MODEL IS THE BEST 9 VARIABLE MODEL FOUND.

STEP 10 VARIABLE D2D3 ENTERED R SQUARE = 0.75231903 C(P) = 4.26808266

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	12762.49662493	1276.24966249	13.06	0.0001
ERROR	43	4201.71152322	97.71422147		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	106.40565971				
DET4	-0.00600762	0.00194495	932.27671313	9.54	0.0035
FD1	1.48158764	0.62638524	546.67528555	5.59	0.0226
FD2	-0.80862432	0.56769345	198.25475089	2.03	0.1615
DET11	-0.00000057	0.00000029	395.09077604	4.04	0.0506
DET33	0.00003367	0.00000676	2423.40018510	24.80	0.0001
DET44	-0.00000047	0.00000025	346.66430970	3.55	0.0664
C2D4	-0.00233318	0.00136393	285.93951630	2.93	0.0944
D1D2	-0.00000319	0.00000230	188.18421790	1.93	0.1724
D1D4	0.00000166	0.00000076	461.94048641	4.73	0.0352
D2D3	0.00000616	0.00000742	67.41243318	0.69	0.4108

THE ABOVE MODEL IS THE BEST 10 VARIABLE MODEL FOUND.

STEP 11 VARIABLE D3D4 ENTERED R SQUARE = 0.75565223 C(P) = 5.78000075

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	12819.04164332	1165.36742212	11.81	0.0001
ERROR	42	4145.16650483	98.69444059		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	105.77571844				
DET4	-0.00461995	0.00267989	293.31372776	2.97	0.0921
FD1	0.87613721	1.01789540	73.11906643	0.74	0.3943
FD2	-0.59804997	0.63474649	87.61269057	0.89	0.3515
DET11	-0.00000055	0.00000029	352.69289200	3.57	0.0656
DET33	0.00004449	0.00001582	780.42883026	7.91	0.0075
DET44	-0.00000039	0.00000027	208.04801236	2.11	0.1540
C2D4	-0.00258084	0.00140926	331.00468369	3.35	0.0741
D1D2	-0.00000288	0.00000235	148.17390666	1.50	0.2273
D1D4	0.00000154	0.00000078	382.43868384	3.87	0.0556
D2D3	0.00001193	0.00001066	123.57765023	1.25	0.2695
D3D4	-0.00000400	0.00000528	56.54501839	0.57	0.4533

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VIS

STEP 11 FD1 REPLACED BY C2D3 R SQUARE = 0.75657845 C(P) = 5.64437366

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	12834.75424346	1166.79584031	11.87	0.0001
ERROR	42	4129.45390469	98.32033106		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	104.03082462				
DET4	-0.00359004	0.00243968	212.90048126	2.17	0.1486
FD2	-0.33689006	0.62048801	28.98364077	0.29	0.5900
DET11	-0.00000051	0.00000029	318.33149367	3.24	0.0791
DET33	0.00004873	0.00001191	1644.98377008	16.73	0.0002
DET44	-0.00000034	0.00000027	153.99314283	1.57	0.2177
C2D3	0.00403194	0.00424182	88.83166657	0.90	0.3473
C2D4	-0.00297954	0.00139660	447.50418567	4.55	0.0388
D1D2	-0.00000222	0.00000234	88.32014055	0.90	0.3487
D1D4	0.00000129	0.00000081	247.86090451	2.52	0.1198
D2D3	0.00001770	0.00000871	406.42925650	4.13	0.0484
D3D4	-0.00000723	0.00000328	477.10096812	4.85	0.0331

STEP 11 FD2 REPLACED BY C2D2 R SQUARE = 0.76167733 C(P) = 4.89774032

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	12921.25283131	1174.65934830	12.20	0.0001
ERROR	42	4042.95531684	96.26084088		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	104.32268857				
DET4	-0.00391323	0.00243790	248.02040530	2.58	0.1160
DET11	-0.00000050	0.00000028	308.50195578	3.20	0.0806
DET33	0.00003871	0.00001483	655.76650733	6.81	0.0125
DET44	-0.00000035	0.00000027	163.55687639	1.70	0.1995
C2D2	0.00492394	0.00449552	115.48222862	1.20	0.2796
C2D3	0.00868377	0.00563972	228.21845471	2.37	0.1311
C2D4	-0.00415729	0.00177144	530.17492893	5.51	0.0237
D1D2	-0.00000207	0.00000232	76.38069901	0.79	0.3781
D1D4	0.00000126	0.00000080	239.21206668	2.49	0.1224
D2D3	0.00000693	0.00001373	24.56990678	0.26	0.6160
D3D4	-0.00000479	0.00000413	129.65438647	1.35	0.2524

STEP 11 D2D3 REPLACED BY C2D1 R SQUARE = 0.76329394 C(P) = 4.66101976

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	12948.67726138	1177.15247831	12.31	0.0001
ERROR	42	4015.53088677	95.60787826		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	103.94446056				
DET4	-0.00403571	0.00232267	288.64041703	3.02	0.0896
DET11	-0.00000037	0.00000028	160.20008638	1.68	0.2026
DET33	0.00003143	0.00001072	822.41566359	8.60	0.0054
DET44	-0.00000037	0.00000026	197.99193654	2.07	0.1575
C2D1	-0.00097693	0.00132339	51.99433684	0.54	0.4650
C2D2	0.00763990	0.00299359	622.70683095	6.51	0.0144
C2D3	0.01409116	0.00707998	378.72477182	3.96	0.0531
C2D4	-0.00461851	0.00175533	661.87840949	6.92	0.0118
D1D2	-0.00000255	0.00000248	100.76710619	1.05	0.3105
D1D4	0.00000166	0.00000102	252.03653408	2.64	0.1119
D3D4	-0.00000421	0.00000305	182.47374623	1.91	0.1744

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE VTS

STEP 11 D3D4 REPLACED BY FD1 R SQUARE = 0.76429956 C(P) = 4.51376561

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	12965.73687405	1178.70335219	12.38	0.0001
ERROR	42	3998.47127410	95.20169700		
TOTAL	53	16964.20814815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	105.17912760				
DET4	-0.00561233	0.00195600	783.77745675	8.23	0.0064
FD1	1.39647149	0.96459867	199.53335891	2.10	0.1551
DET11	-0.00000049	0.00000025	375.11278301	3.94	0.0537
DET33	0.00001720	0.00001073	244.73014275	2.57	0.1164
DET44	-0.00000040	0.00000025	243.08153027	2.55	0.1176
C2D1	-0.00158762	0.00153480	101.86726475	1.07	0.3069
C2D2	0.00600063	0.00318563	337.79023079	3.55	0.0665
C2D3	0.01431506	0.00708171	389.00470379	4.09	0.0496
C2D4	-0.00411090	0.00182893	480.97602371	5.05	0.0299
D1D2	-0.00000464	0.00000270	281.08157169	2.95	0.0931
D1D4	0.00000239	0.00000112	434.55139783	4.56	0.0385

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MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

WARNING: 7 OBSERVATIONS DELETED DUE TO MISSING VALUES.

STEP 1 VARIABLE DET33 ENTERED R SQUARE = 0.59760012 C(P) = 119.38429030

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	107.57073953	107.57073953	77.22	0.0001
ERROR	52	72.43380862	1.39295786		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.83585955				
DET33	0.00000227	0.00000026	107.57073953	77.22	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE D1D3 ENTERED R SQUARE = 0.76932058 C(P) = 49.10109811

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	138.48120295	69.24060148	85.04	0.0001
ERROR	51	41.52334519	0.81418324		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	3.11464494				
DET33	0.00000308	0.00000024	137.17524287	168.48	0.0001
D1D3	-0.00000051	0.00000008	30.91046342	37.96	0.0001

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE DET3 ENTERED R SQUARE = 0.80872461 C(P) = 34.51455129

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	145.57410841	48.52470280	70.47	0.0001
ERROR	50	34.43043973	0.68860879		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.32937531				
DET3	0.00278194	0.00086681	7.09290546	10.30	0.0023
DET33	0.00000187	0.00000044	12.68048208	18.41	0.0001
D1D3	-0.00000066	0.00000009	37.62621922	54.64	0.0001

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE D2D3 ENTERED R SQUARE = 0.82400071 C(P) = 30.08430313

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	148.32387561	37.08096890	57.35	0.0001
ERROR	49	31.68067254	0.64654434		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.31923048				
DET3	0.00207418	0.00090732	3.37884043	5.23	0.0266
DET33	0.00000218	0.00000045	15.30365859	23.67	0.0001
D1D3	-0.00000059	0.00000009	26.11075229	40.39	0.0001
D2D3	-0.00000058	0.00000028	2.74976719	4.25	0.0445

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 4 DET3 REPLACED BY DET4 R SQUARE = 0.83993051 C(P) = 23.37888862

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	151.19131219	37.79782805	64.28	0.0001
ERROR	49	28.81323595	0.58802522		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.83519751				
DET4	0.00019186	0.00005887	6.24627702	10.62	0.0020
DET33	0.00000272	0.00000023	80.48196502	136.87	0.0001
D1D3	-0.00000050	0.00000007	28.06360273	47.73	0.0001
D2D3	-0.00000157	0.00000034	12.69673778	21.59	0.0001

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE DET22 ENTERED R SQUARE = 0.84674827 C(P) = 22.50905198

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	152.41854051	30.48370810	53.04	0.0001
ERROR	48	27.58600764	0.57470849		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.82550688				
DET4	0.00011658	0.00007772	1.29295829	2.25	0.1402
DET22	-0.00000011	0.00000007	1.22722832	2.14	0.1504
DET33	0.00000284	0.00000024	77.74570023	135.28	0.0001
D1D3	-0.00000049	0.00000007	26.94474690	46.88	0.0001
D2D3	-0.00000191	0.00000041	12.57356631	21.88	0.0001

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE D2D4 ENTERED R SQUARE = 0.86093539 C(P) = 18.53719509

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	154.97228584	25.82871431	48.50	0.0001
ERROR	47	25.03226231	0.53260133		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.84212282				
DET4	0.00027713	0.00010476	3.72732000	7.00	0.0111
DET22	-0.00000052	0.00000020	3.55464301	6.67	0.0130
DET33	0.00000260	0.00000026	53.58085887	100.60	0.0001
D1D3	-0.00000052	0.00000007	29.12233684	54.68	0.0001
D2D3	-0.00000239	0.00000045	15.03247925	28.22	0.0001
D2D4	0.00000024	0.00000011	2.55374532	4.79	0.0335

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 7 VARIABLE C2D1 ENTERED R SQUARE = 0.86836721 C(P) = 17.40888029

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	156.31004710	22.33000674	43.35	0.0001
ERROR	46	23.69450097	0.51509785		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.72596012				
DET4	0.00028010	0.00010304	3.80637482	7.39	0.0092
DET22	-0.00000055	0.00000020	3.93435762	7.64	0.0082
DET33	0.00000271	0.00000026	54.13664584	105.10	0.0001
C2D1	0.00011366	0.00007053	1.33776134	2.60	0.1139
D1D3	-0.00000081	0.00000019	9.12551790	17.72	0.0001
D2D3	-0.00000247	0.00000044	15.85671234	30.78	0.0001
D2D4	0.00000026	0.00000011	2.89243751	5.62	0.0221

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

STEP 8 VARIABLE FD2 ENTERED R SQUARE = 0.87844073 C(P) = 15.16858262

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	158.12332579	19.76541572	40.65	0.0001
ERROR	45	21.88122236	0.48624939		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.68432247				
DET4	0.00027474	0.00010015	3.65926817	7.53	0.0087
FD2	-0.08097751	0.04193356	1.81327861	3.73	0.0598
DET22	-0.00000052	0.00000019	3.47584448	7.15	0.0104
DET33	0.00000306	0.00000031	46.11169459	94.83	0.0001
C2D1	0.00015774	0.00007223	2.31937801	4.77	0.0342
D1D3	-0.00000096	0.00000020	10.93095239	22.48	0.0001
D2D3	-0.00000248	0.00000043	16.03020829	32.97	0.0001
D2D4	0.00000024	0.00000011	2.52178673	5.19	0.0276

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

STEP 9 VARIABLE C2D3 ENTERED R SQUARE = 0.88425860 C(P) = 14.71963200

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	159.17057061	17.68561896	37.35	0.0001
ERROR	44	20.83397754	0.47349949		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.76761348				
DET4	0.00030924	0.00010151	4.39379936	9.28	0.0039
FD2	-0.11796624	0.04827956	2.82688659	5.97	0.0186
DET22	-0.00000048	0.00000019	2.94186636	6.21	0.0165
DET33	0.00000409	0.00000076	13.81556676	29.18	0.0001
C2D1	0.00026930	0.00010347	3.20730617	6.77	0.0126
C2D3	-0.00064893	0.00043635	1.04724482	2.21	0.1441
D1D3	-0.00000115	0.00000024	11.13391967	23.51	0.0001
D2D3	-0.00000251	0.00000043	16.35059517	34.53	0.0001
D2D4	0.00000024	0.00000011	2.36117166	4.99	0.0307

THE ABOVE MODEL IS THE BEST 9 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 10 VARIABLE D1D4 ENTERED R SQUARE = 0.89679718 C(P) = 11.44170381

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	161.42757118	16.14275712	37.37	0.0001
ERROR	43	18.57697697	0.43202272		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.82434233				
DET4	0.00027968	0.00009783	3.53114282	8.17	0.0065
FD2	-0.16887245	0.05121305	4.69745851	10.87	0.0020
DET22	-0.00000050	0.00000018	3.14553370	7.28	0.0099
DET33	0.00000514	0.00000086	15.56095284	36.02	0.0001
C2D1	0.00044784	0.00012598	5.45965904	12.64	0.0009
C2D3	-0.00116901	0.00047486	2.61822669	6.06	0.0179
D1D3	-0.00000172	0.00000034	11.29038124	26.13	0.0001
D1D4	0.00000008	0.00000003	2.25700057	5.22	0.0273
D2D3	-0.00000260	0.00000041	17.41590124	40.31	0.0001
D2D4	0.00000025	0.00000010	2.66821384	6.18	0.0169

THE ABOVE MODEL IS THE BEST 10 VARIABLE MODEL FOUND.

STEP 11 VARIABLE DET3 ENTERED R SQUARE = 0.90022218 C(P) = 12.00000000

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	162.04408702	14.73128064	34.45	0.0001
ERROR	42	17.96046113	0.42763003		
TOTAL	53	180.00454815			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	3.13111199				
DET3	-0.00140896	0.00117344	0.61651584	1.44	0.2366
DET4	0.00032800	0.00010532	4.14760303	9.70	0.0033
FD2	-0.18165283	0.05205193	5.20809377	12.18	0.0012
DET22	-0.00000059	0.00000020	3.76199424	8.80	0.0050
DET33	0.00000549	0.00000090	15.86841374	37.11	0.0001
C2D1	0.00044903	0.00012534	5.48836315	12.83	0.0009
C2D3	-0.00100770	0.00049117	1.79998366	4.21	0.0465
D1D3	-0.00000172	0.00000034	11.18339525	26.15	0.0001
D1D4	0.00000009	0.00000003	2.75855365	6.45	0.0149
D2D3	-0.00000314	0.00000061	11.49545623	26.88	0.0001
D2D4	0.00000029	0.00000011	3.23277554	7.56	0.0088

THE ABOVE MODEL IS THE BEST 11 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

WARNING: 8 OBSERVATIONS DELETED DUE TO MISSING VALUES.

STEP 1 VARIABLE DET33 ENTERED R SQUARE = 0.38504572 C(P) = 15.01894081

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	85.32496850	85.32496850	31.93	0.0001
ERROR	51	136.27201263	2.67200025		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.17362074				
DET33	0.00000203	0.00000036	85.32496850	31.93	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE C2D3 ENTERED R SQUARE = 0.47834576 C(P) = 7.30607240

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	105.99997670	52.99998835	22.92	0.0001
ERROR	50	115.59700443	2.31194009		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.72667177				
DET33	0.00000432	0.00000084	61.69759061	26.69	0.0001
C2D3	-0.00145322	0.00048595	20.67500820	8.94	0.0043

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 3 VARIABLE DET4 ENTERED R SQUARE = 0.54137707 C(P) = 2.74428740

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	119.96752501	39.98917500	19.28	0.0001
ERROR	49	101.62945613	2.07407053		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.17007223				
DET4	0.00021734	0.00008375	13.96754831	6.73	0.0124
DET33	0.00000441	0.00000079	63.98873897	30.85	0.0001
C2D3	-0.00186907	0.00048737	30.50336385	14.71	0.0004

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE DET3 ENTERED R SQUARE = 0.57833351 C(P) = 0.89699027

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	128.15695951	32.03923988	16.46	0.0001
ERROR	48	93.44002162	1.94666712		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.34724579				
DET3	-0.00318336	0.00155205	8.18943450	4.21	0.0457
DET4	0.00019897	0.00008163	11.56477026	5.94	0.0185
DET33	0.00000372	0.00000084	38.19151233	19.62	0.0001
C2D3	-0.00243942	0.00054797	38.57930520	19.82	0.0001

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 5 VARIABLE FD1 ENTERED R SQUARE = 0.59709837 C(P) = 0.94350087

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	132.31519658	26.46303932	13.93	0.0001
ERROR	47	89.28178455	1.89961244		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.99258122				
DET3	0.00402663	0.00163569	11.51190739	6.06	0.0176
DET4	0.00018057	0.00008159	9.30381896	4.90	0.0318
FD1	-0.12143613	0.08207782	4.15823707	2.19	0.1457
DET33	0.00000314	0.00000092	22.21450607	11.69	0.0013
C2D3	-0.00228037	0.00055188	32.43318911	17.07	0.0001

STEP 5 DET3 REPLACED BY D3D4 R SQUARE = 0.60610413 C(P) = 0.00596963

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	134.31084455	26.86216891	14.46	0.0001
ERROR	47	87.28613658	1.85715184		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.78517105				
DET4	0.00058271	0.00015900	24.94217890	13.43	0.0006
FD1	-0.18597303	0.09105018	7.74793169	4.17	0.0467
DET33	0.00000731	0.00000138	51.68506684	27.83	0.0001
C2D3	-0.00202517	0.00051158	29.10336832	15.67	0.0003
D3D4	-0.00000100	0.00000037	13.50755535	7.27	0.0097

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE C2D1 ENTERED R SQUARE = 0.61782681 C(P) = 0.78559653

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	136.90855541	22.81809257	12.39	0.0001
ERROR	46	84.68842573	1.84105273		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.76998784				
DET4	0.00056391	0.00015910	23.12732247	12.56	0.0009
FD1	-0.22960085	0.09781227	10.14440395	5.51	0.0233
DET33	0.00000789	0.00000146	53.51097329	29.07	0.0001
C2D1	0.00009315	0.00007842	2.59771086	1.41	0.2410
C2D3	-0.00256384	0.00068198	26.02009971	14.13	0.0005
D3D4	-0.00000099	0.00000037	13.04909123	7.09	0.0107

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 7 VARIABLE DET11 ENTERED R SQUARE = 0.63663145 C(P) = 0.82796587

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	141.07560765	20.15365824	11.26	0.0001
ERROR	45	80.52137348	1.78936386		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.93228324				
DET4	0.00044788	0.00017431	11.81365725	6.60	0.0136
FD1	-0.25526505	0.09788495	12.16885065	6.80	0.0123
DET11	-0.00000004	0.00000003	4.16705224	2.33	0.1340
DET33	0.00000778	0.00000144	52.01476133	29.07	0.0001
C2D1	0.00025141	0.00012935	6.75955114	3.78	0.0582
C2D3	-0.00306971	0.00074962	30.00664989	16.77	0.0002
D3D4	-0.00000073	0.00000040	5.79208261	3.24	0.0787

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

STEP 8 VARIABLE CL22 ENTERED R SQUARE = 0.65077780 C(P) = 1.35528027

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	144.21039601	18.02629950	10.25	0.0001
ERROR	44	77.38658513	1.75878603		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.80615218				
DET4	0.00043712	0.00017300	11.22835510	6.38	0.0152
FD1	-0.24997704	0.09712578	11.65049061	6.62	0.0135
CL22	-0.43131275	0.32306856	3.13478836	1.78	0.1887
DET11	-0.00000004	0.00000003	3.82075189	2.17	0.1476
DET33	0.00001022	0.00000232	34.15112734	19.42	0.0001
C2D1	0.00028076	0.00013011	8.18931911	4.66	0.0364
C2D3	-0.00534223	0.00185736	14.55007490	8.27	0.0062
D3D4	-0.00000072	0.00000040	5.63226858	3.20	0.0804

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

STEP 9 VARIABLE DET1 ENTERED R SQUARE = 0.65907454 C(P) = 2.49156032

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	146.04892776	16.22765864	9.24	0.0001
ERROR	43	75.54805337	1.75693147		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.44343324				
DET1	0.00034940	0.00034155	1.83853176	1.05	0.3120
DET4	0.00038627	0.00017991	8.09860695	4.61	0.0375
FD1	-0.26745874	0.09856732	12.93607573	7.36	0.0095
CL22	-0.42658795	0.32293121	3.06585729	1.75	0.1935
DET11	-0.00000008	0.00000005	4.85607993	2.76	0.1037
DET33	0.00001009	0.00000232	33.22821010	18.91	0.0001
C2D1	0.00025968	0.00013167	6.83411526	3.89	0.0550
C2D3	-0.00523724	0.00185922	13.94117865	7.93	0.0073
D3D4	-0.00000068	0.00000040	5.08242939	2.89	0.0962

STEP 9 C2D1 REPLACED BY D1D3 R SQUARE = 0.66705032 C(P) = 1.66125307

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	9	147.81633658	16.42403740	9.57	0.0001
ERROR	43	73.74064456	1.71582894		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.26830417				
DET1	0.00051020	0.00033429	3.99678754	2.33	0.1343
DET4	0.00031162	0.00018860	4.68404872	2.73	0.1058
FD1	-0.26539899	0.09618905	13.06234899	7.61	0.0085
CL22	0.65660935	0.34883382	6.07926328	3.54	0.0666
DET11	-0.00000009	0.00000005	5.72192765	3.33	0.0748
DET33	0.00000990	0.00000226	32.80037228	19.12	0.0001
C2D3	-0.00585246	0.00192676	15.83044889	9.23	0.0040
D1D3	0.00000060	0.00000027	8.60152407	5.01	0.0304
D3D4	-0.00000052	0.00000042	2.64526504	1.54	0.2211

THE ABOVE MODEL IS THE BEST 9 VARIABLE MODEL FOUND.

STEP 10 VARIABLE DET44 ENTERED R SQUARE = 0.67040147 C(P) = 3.31238622

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	148.55894161	14.85589416	8.54	0.0001
ERROR	42	73.03803952	1.73900094		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	1.26900849				
DET1	0.00056148	0.00034557	4.59096647	2.64	0.1117
DET4	0.00019040	0.00026545	0.89462232	0.51	0.4772
FD1	-0.24397464	0.10625200	13.31206212	7.66	0.0084
CL22	0.63454873	0.35280027	5.62564015	3.23	0.0793
DET11	-0.00000010	0.00000005	6.46453267	3.72	0.0606
DET33	0.00001008	0.00000230	33.51467761	19.27	0.0001
DET44	-0.00000002	0.00000003	0.74260503	0.43	0.5170
C2D3	-0.00577519	0.00194333	15.35813260	8.83	0.0049
D1D3	0.00000065	0.00000028	9.32226809	5.36	0.0256
D3D4	-0.00000047	0.00000043	2.07744036	1.19	0.2806

STEP 10 DET4 REPLACED BY DET3 R SQUARE = 0.67524579 C(P) = 2.80807524

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	149.63242817	14.96324282	8.73	0.0001
ERROR	42	71.96455296	1.71344174		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.75295979				
DET1	0.00053936	0.00033405	4.46686503	2.61	0.1139
DET3	0.00227938	0.00212680	1.96810888	1.15	0.2900
FD1	-0.29230284	0.10465276	13.36700373	7.80	0.0078
CL22	0.67381086	0.35008886	6.34729616	3.70	0.0611
DET11	-0.00000010	0.00000005	5.53724571	3.23	0.0794
DET33	0.00000883	0.00000244	22.37755595	13.06	0.0008
DET44	-0.00000003	0.00000002	3.05518544	1.78	0.1890
C2D3	-0.00619496	0.00195162	17.26447240	10.08	0.0028
D1D3	0.00000063	0.00000027	9.50258780	5.55	0.0233
D3D4	-0.00000012	0.00000030	0.28279505	0.17	0.6866

B

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 10 D304 REPLACED BY C2D4 R SQUARE = 0.67574390 C(P) = 2.76622020

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	149.74280785	14.97428078	8.75	0.0001
ERROR	42	71.85417328	1.71081365		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.69131235				
DET1	0.00054336	0.00033232	4.57353553	2.67	0.1095
DET3	0.00252304	0.00198897	2.75292381	1.61	0.2116
FD1	-0.28203145	0.09179015	16.15122956	9.44	0.0037
CL22	0.71352839	0.34765618	7.20651543	4.21	0.0464
DET11	-0.00000009	0.00000005	5.63274626	3.29	0.0767
DET33	-0.00000876	0.00000230	24.82351877	14.51	0.0004
DET44	-0.00000003	0.00000002	3.52857173	2.06	0.1584
C2D3	-0.00639619	0.00192339	18.91956938	11.06	0.0018
C2D4	-0.00004800	0.00010013	0.39317473	0.23	0.6341
D1D3	0.00000064	0.00000027	9.78314434	5.72	0.0213

STEP 10 DET44 REPLACED BY DET2 R SQUARE = 0.67763093 C(P) = 2.55977300

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	10	150.16096934	15.01609693	8.83	0.0001
ERROR	42	71.43601179	1.70085742		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.68977541				
DET1	0.00046711	0.00033656	3.27623417	1.93	0.1725
DET2	0.00081862	0.00053740	3.94673322	2.32	0.1352
DET3	0.00341148	0.00206280	4.65200955	2.74	0.1056
FD1	-0.33799443	0.10528801	17.52787186	10.31	0.0025
CL22	0.71291446	0.34664226	7.19415406	4.23	0.0460
DET11	-0.00000007	0.00000005	2.95497101	1.74	0.1946
DET33	0.00000827	0.00000222	23.50550459	13.82	0.0006
C2D3	-0.00612399	0.00192588	17.19810505	10.11	0.0028
C2D4	-0.00018751	0.00017317	1.99423389	1.17	0.2851
D1D3	0.00000056	0.00000027	7.16273720	4.21	0.0464

THE ABOVE MODEL IS THE BEST 10 VARIABLE MODEL FOUND.

STEP 11 VARIABLE C2D2 ENTERED R-SQUARE = 0.68348531 C(P) = 3.95031185

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	151.45828067	13.76893461	8.05	0.0001
ERROR	41	70.13870046	1.71070001		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.47911780				
DET1	0.00043381	0.00033969	2.78996871	1.63	0.2088
DET2	0.00063518	0.00057866	2.06121471	1.20	0.2788
DET3	0.00420015	0.00225831	5.91747908	3.46	0.0701
FD1	-0.39044468	0.12156217	17.64802182	10.32	0.0026
CL22	0.79384218	0.35985058	8.32525959	4.87	0.0330
DET11	-0.00000007	0.00000005	2.61746183	1.53	0.2231
DET33	0.00000842	0.00000224	24.24234668	14.17	0.0005
C2D2	0.00042017	0.00048250	1.29731133	0.76	0.3889
C2D3	-0.00624031	0.00193605	17.77262441	10.39	0.0025
C2D4	-0.00029693	0.00021436	3.28250682	1.92	0.1735
D1D3	0.00000055	0.00000027	7.13808781	4.17	0.0475

STEP 11 DET2 REPLACED BY DET4 R SQUARE = 0.69093455 C(P) = 3.17481858

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	153.10901135	13.91900103	8.33	0.0001
ERROR	41	68.48796978	1.67043829		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.51858049				
DET1	0.00035896	0.00034284	1.83121831	1.10	0.3012
DET3	0.00377711	0.00222690	4.80559815	2.88	0.0974
DET4	0.00027902	0.00018718	3.71194539	2.22	0.1437
FD1	-0.35091056	0.11642980	15.17382198	9.08	0.0044
CL22	0.94046287	0.35970999	11.41849158	6.84	0.0124
DET11	-0.00000006	0.00000005	1.85683371	1.11	0.2979
DET33	0.00000942	0.00000234	26.96492658	16.14	0.0002
C2D2	0.00077040	0.00045645	4.75851145	2.85	0.0990
C2D3	-0.00679741	0.00191378	21.07341782	12.62	0.0010
C2D4	-0.00044866	0.00025688	5.09570605	3.05	0.0882
D1D3	0.00000056	0.00000027	7.44325661	4.46	0.0409

STEP 11 DET1 REPLACED BY D1D2 R SQUARE = 0.69293804 C(P) = 2.96624812

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	11	153.55297865	13.95936170	8.41	0.0001
ERROR	41	68.04400248	1.65960982		
TOTAL	52	221.59698113			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.81918954				
DET3	0.00397505	0.00216113	5.61474598	3.38	0.0731
DET4	0.00034807	0.00018230	6.05057922	3.65	0.0632
FD1	-0.32557237	0.11630804	13.00413768	7.84	0.0078
CL22	0.97894702	0.35868311	12.36239215	7.45	0.0093
DET11	-0.00000003	0.00000003	1.55814782	0.94	0.3383
DET33	0.00000944	0.00000234	27.09209632	16.32	0.0002
C2D2	0.00089298	0.00044455	6.69661640	4.04	0.0512
C2D3	-0.00692007	0.00190950	21.79652327	13.13	0.0008
C2D4	-0.00048990	0.00025231	6.25665371	3.77	0.0591
D1D2	-0.00000015	0.00000013	2.27518561	1.37	0.2484
D1D3	0.00000067	0.00000029	8.88207627	5.35	0.0258

THE ABOVE MODEL IS THE BEST 11 VARIABLE MODEL FOUND.

UNIVARIATE

VARIABLE=CL2

MOMENTS

N	61	SUM WGTS	61
MEAN	1.56525	SUM	95.48
STD DEV	0.89726	VARIANCE	0.805075
SKEWNESS	0.0548772	KURTOSIS	-0.732431
USS	197.754	CSS	48.3045
CV	57.3239	STD MEAN	0.114862
T:MEAN=0	13.6248	PROB>|T|	0.0001
SGN RANK	910.5	PROB>|S|	0.0001
NUM ^= 0	60		

QUANTILES(DEF=4)

100% MAX	3.27	99%	3.27
75% Q3	2.17	95%	3.092
50% MED	1.48	90%	2.85
25% Q1	0.975	10%	0.26
0% MIN	-0.19	5%	0.00199999
		1%	-0.19
RANGE	3.46		
Q3-Q1	1.195		
MODE	1.44		

EXTREMES

LOWEST	HIGHEST
-0.19	2.89
-0.02	3.02
0	3.1
0.02	3.19
0.2	3.27

```
STEM LEAF                            #  BOXPLOT
  32 7                               1      0
  30 209                             3      |
  28 0559                            4      |
  26 4585                            4      |
  24                                 0      |
  22 259                             3      |
  20 1342                            4      +-----+
  18 345236                          6      |   |
  16 51                              2      |   |
  14 4446H135                        8      *---*
  12 02902                           5      |   |
  10 0354                            4      |   |
   8 03699                           5      +-----+
   6 917                             3      |
   4 01                              2      |
   2 044                             3      |
   0 2                               1      |
  -0 920                             3      |
     ----+----+----+----+                    |
     MULTIPLY STEM.LEAF BY 10**-01
```

NORMAL PROBABILITY PLOT

```
 3.3+                                                    +  *
                                                      ** *
                                                   ***
                                                 *****
                                               ++
                                             ***+
                                           ***+
                                         ****
                                       ++
                                     ****
                                   ***+
                                 ***
                               ***
                             **
                           **
                         ***
                       **
                     **
-0.1+  *   *
       +----+----+----+----+----+----+----+----+----+
       -2   -1   +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-0.19	1	1.6	1.6	0.99	2	3.3	27.9	1.55	1	1.6	55.7	2.39	1	1.6	80.3
-0.02	1	1.6	3.3	1	1	1.6	29.5	1.65	1	1.6	57.4	2.64	1	1.6	82.0
0	1	1.6	4.9	1.03	1	1.6	31.1	1.71	1	1.6	59.0	2.65	1	1.6	83.6
0.02	1	1.6	6.6	1.05	1	1.6	32.8	1.83	1	1.6	60.7	2.68	1	1.6	85.2
0.2	1	1.6	8.2	1.14	1	1.6	34.4	1.84	1	1.6	62.3	2.75	1	1.6	86.9
0.24	1	1.6	9.8	1.2	1	1.6	36.1	1.85	1	1.6	63.9	2.8	1	1.6	88.5
0.34	1	1.6	11.5	1.22	1	1.6	37.7	1.92	1	1.6	65.6	2.85	2	3.3	91.8
0.4	1	1.6	13.1	1.29	1	1.6	39.3	1.93	1	1.6	67.2	2.89	1	1.6	93.4
0.51	1	1.6	14.8	1.3	1	1.6	41.0	1.96	1	1.6	68.9	3.02	1	1.6	95.1
0.69	1	1.6	16.4	1.32	1	1.6	42.6	2.01	1	1.6	70.5	3.1	1	1.6	96.7
0.71	1	1.6	18.0	1.44	3	4.9	47.5	2.03	1	1.6	72.1	3.19	1	1.6	98.4
0.77	1	1.6	19.7	1.46	1	1.6	49.2	2.04	1	1.6	73.8	3.27	1	1.6	100.0
0.9	1	1.6	21.3	1.48	1	1.6	50.8	2.12	1	1.6	75.4				
0.93	1	1.6	23.0	1.51	1	1.6	52.5	2.22	1	1.6	77.0				
0.96	1	1.6	24.6	1.53	1	1.6	54.1	2.35	1	1.6	78.7				

UNIVARIATE

VARIABLE=DET1

MOMENTS

N	57	SUM WGTS	57
MEAN	1880.27	SUM	107175
STD DEV	1858.59	VARIANCE	3454365
SKEWNESS	1.29	KURTOSIS	1.50175
USS	394962070	CSS	193444450
CV	98.8471	STD MEAN	246.177
T:MEAN=0	7.637A9	PROB>|T|	0.0001
SGN RANK	762	PROB>|S|	0.0001
NUM ^= 0	56		

QUANTILES(DEF=4)

100% MAX	7396.46	99%	7396.46
75% Q3	2782.62	95%	6488.91
50% MED	1499.27	90%	4544.51
25% Q1	389.215	10%	-21.8363
0% MIN	-380.87	5%	-183.639
		1%	-380.87
RANGE	7777.33		
Q3-Q1	2393.41		
MODE	-380.87		

EXTREMES

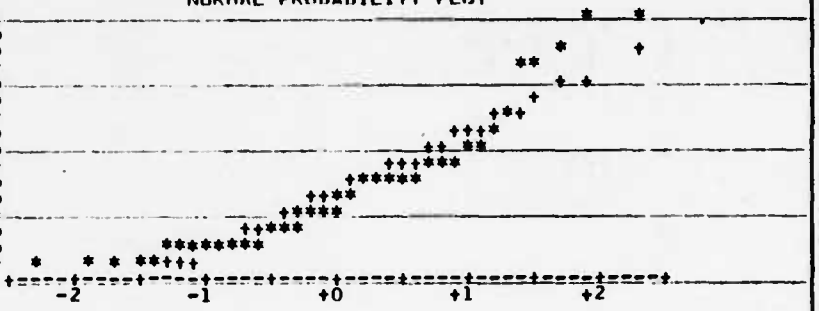
LOWEST	HIGHEST
-380.87	5713.84
-186.33	5816.57
-183.34	6422.95
-109.58	7082.59
-109.18	7396.46

MISSING VALUE .
COUNT 4
% COUNT/NOBS 6.56

STEM	LEAF	#	BOXPLOT
7	14	2	0
6		0	
6	4	1	0
5	78	2	
5		0	
4		0	
4	3	1	
3	9	1	
3	0234	4	
2	7899	4	+-----+
2	00112333344	11	
1	566	3	+-+-+
1	123334	6	*-----*
0	577799	6	
0	12234444	8	+-----+
-0	42211000	8	

MULTIPLY STEM.LEAF BY 10**+03

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-380.87	1	1.8	1.8
-186.33	1	1.8	3.5
-183.34	1	1.8	5.3
-109.58	1	1.8	7.0
-109.18	1	1.8	8.8
0	1	1.8	10.5
10.71	1	1.8	12.3
11.25	1	1.8	14.0
61.76	1	1.8	15.8
183.93	1	1.8	17.5
231.65	1	1.8	19.3
330.52	1	1.8	21.1
377.1	1	1.8	22.8
378.05	1	1.8	24.6
400.38	1	1.8	26.3
414.12	1	1.8	28.1
467.42	1	1.8	29.8
652.14	1	1.8	31.6
689.6	1	1.8	33.3
737.93	1	1.8	35.1
881.33	1	1.8	36.8
914.33	1	1.8	38.6
1109.74	1	1.8	40.4
1174.41	1	1.8	42.1
1272.48	1	1.8	43.9
1296.35	1	1.8	45.6
1301.1	1	1.8	47.4
1395.97	1	1.8	49.1
1499.27	1	1.8	50.9
1638.15	1	1.8	52.6
1649.36	1	1.8	54.4
1963	1	1.8	56.1
2016.45	1	1.8	57.9
2073.03	1	1.8	59.6
2120.43	1	1.8	61.4
2244.44	1	1.8	63.2
2250.39	1	1.8	64.9
2250.7	1	1.8	66.7
2317.67	1	1.8	68.4
2320.75	1	1.8	70.2
2350.6	1	1.8	71.9
2354.38	1	1.8	73.7
2721.89	1	1.8	75.4
2843.36	1	1.8	77.2
2865.7	1	1.8	78.9
2897.88	1	1.8	80.7
2952.17	1	1.8	82.5
3204.95	1	1.8	84.2
3260.25	1	1.8	86.0
3426.98	1	1.8	87.7
3945.98	1	1.8	89.5
4252.19	1	1.8	91.2
5713.84	1	1.8	93.0
5816.57	1	1.8	94.7
6422.95	1	1.8	96.5
7082.59	1	1.8	98.2
7396.46	1	1.8	100.0

UNIVARIATE

VARIABLE=DET2

MOMENTS

N	57	SUM WGTS	57
MEAN	-684.464	SUM	-39014.4
STD DEV	1028.83	VARIANCE	1058496
SKEWNESS	-1.50229	KURTOSIS	1.68736
USS	85079685	CSS	59275779
CV	-150.312	STD MEAN	136.272
T:MEAN=0	-5.02276	PROB>|T|	0.0001
SGN RANK	-814	PROB>|S|	0.0001
NUM ^= 0	56		

QUANTILES(DEF=4)

100% MAX	875.29	99%	875.29
75% Q3	-40.18	95%	532.592
50% MED	-405.07	90%	180.606
25% Q1	-1026.12	10%	-3144.54
0% MIN	-3513.6	5%	-3180.72
		1%	-3513.6
RANGE	4388.89		
Q3-Q1	985.945		
MODE	-3513.6		

EXTREMES

LOWEST	HIGHEST
-3513.6	241.39
-3186.65	265.18
-3180.06	517.67
-3163.39	666.9
-3145.37	875.29

MISSING VALUE .
COUNT 4
% COUNT/NOBS 6.56

STEM	LEAF	#
8	8	1
6	7	1
4	2	1
2	47	2
0	112777	6
-0	600954420	9
-2	88877748	8
-4	7722004433111	13
-6		
-8	74	2
-10	9	1
-12	4872	4
-14	41	2
-16		
-18	7	1
-20		
-22		
-24		
-26		
-28		
-30	98654	5
-32		
-34	1	1

MULTIPLY STEM.LEAF BY 10**+02

BOXPLOT

NORMAL PROBABILITY PLOT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM
-3513.6	1	1.8	1.8
-3186.65	1	1.8	3.5
-3180.06	1	1.8	5.3
-3163.39	1	1.8	7.0
-3145.37	1	1.8	8.8
-3144.33	1	1.8	10.5
-1968.02	1	1.8	12.3
-1541.77	1	1.8	14.0
-1505.52	1	1.8	15.8
-1344.38	1	1.8	17.5
-1275.03	1	1.8	19.3
-1208.13	1	1.8	21.1
-1221.33	1	1.8	22.8
-1187.01	1	1.8	24.6
-865.24	1	1.8	26.3
-840.58	1	1.8	28.1
-571.64	1	1.8	29.8
-565.9	1	1.8	31.6
-524.07	1	1.8	33.3
-517.97	1	1.8	35.1
-501.69	1	1.8	36.8
-498.97	1	1.8	38.6
-438.21	1	1.8	40.4
-433.12	1	1.8	42.1
-425.82	1	1.8	43.9
-425.69	1	1.8	45.6
-409.88	1	1.8	47.4
-406.79	1	1.8	49.1
-405.07	1	1.8	50.9
-383.05	1	1.8	52.6
-379.82	1	1.8	54.4
-375.47	1	1.8	56.1
-372.6	1	1.8	57.9
-368.66	1	1.8	59.6
-365.57	1	1.8	61.4
-337.5	1	1.8	63.2
-277.93	1	1.8	64.9
-155.89	1	1.8	66.7
-103.4	1	1.8	68.4
-100.56	1	1.8	70.2
-87.32	1	1.8	71.9
-48.16	1	1.8	73.7
-44.67	1	1.8	75.4
-35.69	1	1.8	77.2
-17.94	1	1.8	78.9
0	1	1.8	80.7
8.97	1	1.8	82.5
12.64	1	1.8	84.2
22.3	1	1.8	86.0
66.46	1	1.8	87.7
72.86	1	1.8	89.5
165.41	1	1.8	91.2
241.39	1	1.8	93.0
265.18	1	1.8	94.7
517.67	1	1.8	96.5
666.9	1	1.8	98.2
875.29	1	1.8	100.0

UNIVARIATE

VARIABLE=DET3

MOMENTS

N	57	SUM WGTS	57
MEAN	514.822	SUM	29344.9
STD DEV	356.592	VARIANCE	127158
SKEWNESS	1.51561	KURTOSIS	5.11949
USS	22228229	CSS	7120825
CV	69.265	STD MEAN	47.2317
T:MEAN=0	10.89929	PROB>|T|	0.0001
SGN RANK	785	PROB>|S|	0.0001
NUM ^= 0	56		

QUANTILES(DEF=4)

100% MAX	1975.19	99%	1975.19
75% Q3	681.33	95%	1261.68
50% MED	479.25	90%	865.7
25% Q1	315.415	10%	186.066
0% MIN	-310.62	5%	24.084
		1%	-310.62
RANGE	2285.81		
Q3-Q1	365.915		
MODE	-310.62		

EXTREMES

LOWEST	HIGHEST
-310.62	879.74
0	1055.01
26.76	1231.16
110.74	1536.41
117.13	1975.19

MISSING VALUE
COUNT 4
% COUNT/NOBS 6.56

STEM LEAF # BOXPLOT

```
 19 8          1        *
 18                     |
 17                     |
 16                     |
 15 4          1        0
 14                     |
 13                     |
 12 3          1        0
 11                     |
 10 6          1        |
  9                     |
  8 068        3        |
  7 1112234    7        |
  6 0146       4     +-----+
  5 123466777  9     |  +  |
  4 0477789    7     *-----*
  3 0344566778 10    +-----+
  2 01234468   8     |
  1 12         2     |
  0 3          1     |
 -0 0          1     |
 -1                   |
 -2                   |
 -3 1          1        0
```

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT

```
1950+                                                                  *
    |                                                                  |
    |                                                                  |
    |                                                                  |
```

UNIVARIATE

VARIABLE=DET4

MOMENTS

N	57	SUM WGTS	57
MEAN	-14.0653	SUM	-801.72
STD DEV	3145.36	VARIANCE	9893282
SKEWNESS	-0.427357	KURTOSIS	0.229799
USS	554035076	CSS	554023800
CV	-22362.6	STD MEAN	416.613
T:MEAN=0	-0.033761	PROB>|T|	0.973188
SGN RANK	93	PROB>|S|	0.450531
NUM ^= 0	56		

QUANTILES(DEF=4)

100% MAX	6847.48	99%	6847.48
75% Q3	1578.27	95%	5779.31
50% MED	788.66	90%	3230.36
25% Q1	-2091.18	10%	-5064.31
0% MIN	-8118.01	5%	-5585.36
		1%	-8118.01
RANGE	14965.5		
Q3-Q1	3669.46		
MODE	-8118.01		

EXTREMES

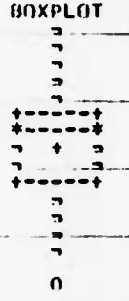
LOWEST	HIGHEST
-8118.01	4082.49
-6455.45	4244.25
-5488.68	5699.64
-5323.53	6496.47
-5257.21	6847.48

MISSING VALUE
COUNT 4
% COUNT/NOBS 6.56

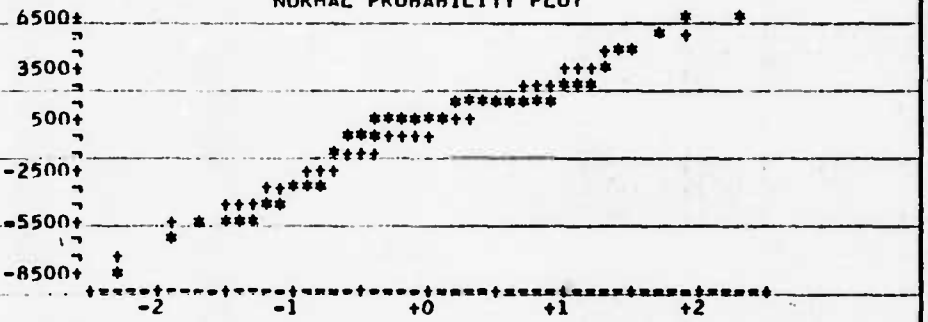
STEM	LEAF	#
6	58	2
5	7	1
4	12	2
3	0	1
2	1568	4
1	0011123444566789	16
0	2233556889	10
-0	933320	6
-1	9	1
-2	3	1
-3	85432	5
-4	93	2
-5	5330	4
-6	5	1
-7		
-8	1	1

MULTIPLY STEM.LEAF BY 10**+03

BOXPLOT



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM
-8118.01	1	1.8	1.8
-6455.45	1	1.8	3.5
-5488.68	1	1.8	5.3
-5323.53	1	1.8	7.0
-5257.21	1	1.8	8.8
-5016.09	1	1.8	10.5
-4850.77	1	1.8	12.3
-4261.39	1	1.8	14.0
-3825.29	1	1.8	15.8
-3452.06	1	1.8	17.5
-3398.74	1	1.8	19.3
-3286.67	1	1.8	21.1
-3150.51	1	1.8	22.8
-2282.08	1	1.8	24.6
-1900.29	1	1.8	26.3
-902.56	1	1.8	28.1
-323.36	1	1.8	29.8
-295.84	1	1.8	31.6
-283.97	1	1.8	33.3
-249.7	1	1.8	35.1
0	1	1.8	36.8
221.36	1	1.8	38.6
227.05	1	1.8	40.4
262.26	1	1.8	42.1
324.81	1	1.8	43.9
457.84	1	1.8	45.6
490.95	1	1.8	47.4
608.08	1	1.8	49.1
788.66	1	1.8	50.9
824.45	1	1.8	52.6
905.06	1	1.8	54.4
975.56	1	1.8	56.1
1000.47	1	1.8	57.9
1059	1	1.8	59.6
1097.21	1	1.8	61.4
1130.16	1	1.8	63.2
1154.02	1	1.8	64.9
1251.07	1	1.8	66.7
1375.93	1	1.8	68.4
1381.01	1	1.8	70.2
1416.71	1	1.8	71.9
1495.36	1	1.8	73.7
1570.57	1	1.8	75.4
1585.98	1	1.8	77.2
1674.22	1	1.8	78.9
1803.95	1	1.8	80.7
1916.76	1	1.8	82.5
2085.91	1	1.8	84.2
2516.37	1	1.8	86.0
2561.23	1	1.8	87.7
2770.81	1	1.8	89.5
3017.33	1	1.8	91.2
4082.49	1	1.8	93.0
4244.25	1	1.8	94.7
5699.64	1	1.8	96.5
6496.47	1	1.8	98.2
6847.48	1	1.8	100.0

UNIVARIATE

VARIABLE=FD1

MOMENTS

N	57	SUM WGTS	57
MEAN	0.158421	SUM	9.03
STD DEV	2.64072	VARIANCE	6.97338
SKEWNESS	0.19895	KURTOSIS	1.11359
USS	391.94	CSS	390.509
CV	1666.9	STD MEAN	0.349771
T:MEAN=0	0.452927	PROB>|T|	0.652351
SGN RANK	23.5	PROB>|S|	0.851179
NUM ^= 0	56		

QUANTILES(DEF=4)

100% MAX	7.3	99%	7.3
75% Q3	1.765	95%	4.94598
50% MED	-0.05	90%	3.984
25% Q1	-1.055	10%	-2.798
0% MIN	-6.53	5%	-4.749
		1%	-6.53
RANGE	13.83		
Q3-Q1	2.82		
MODE	-2.7		

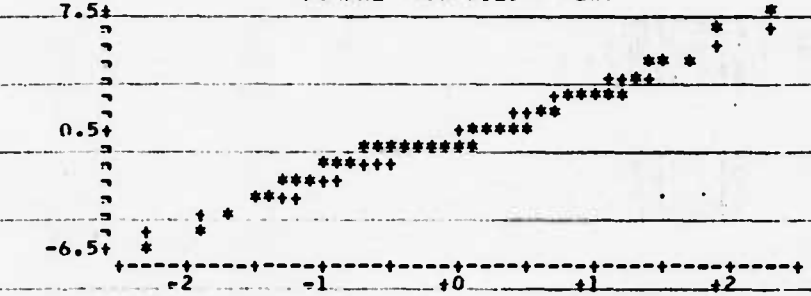
EXTREMES

LOWEST	HIGHEST
-6.53	4.44
-6	4.53
-4.61	4.75
-3.32	6.71
-3.15	7.3

MISSING VALUE .
COUNT 4
% COUNT/NOBS 6.56

STEM	LEAF	#	BOXPLOT
7	3	1	0
6	7	1	0
5			
4	457	3	
3	9	1	
2	0011258	7	
1	05778	5	+-----+
0	1344578	7	+ +
-0	9887776321110000	17	*-----*
-1	874310	6	+-----+
-2	7775	4	
-3	31	2	
-4	6	1	
-5		0	
-6	50	2	0

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-6.53	1	1.8	1.8
-6	1	1.8	3.5
-4.61	1	1.8	5.3
-3.32	1	1.8	7.0
-3.15	1	1.8	8.8
-2.71	1	1.8	10.5
-2.7	2	3.5	14.0
-2.54	1	1.8	15.8
-1.79	1	1.8	17.5
-1.71	1	1.8	19.3
-1.37	1	1.8	21.1
-1.3	1	1.8	22.8
-1.15	1	1.8	24.6
-0.96	1	1.8	26.3
-0.9	1	1.8	28.1
-0.89	1	1.8	29.8
-0.82	1	1.8	31.6
-0.75	1	1.8	33.3
-0.71	1	1.8	35.1
-0.68	1	1.8	36.8
-0.59	1	1.8	38.6
-0.57	1	1.8	40.4
-0.29	1	1.8	42.1
-0.22	1	1.8	43.9
-0.1	1	1.8	45.6
-0.08	1	1.8	47.4
-0.06	1	1.8	49.1
-0.05	1	1.8	50.9
-0.04	1	1.8	52.6
-0.02	1	1.8	54.4
0	1	1.8	56.1
0.11	1	1.8	57.9
0.33	1	1.8	59.6
0.39	1	1.8	61.4
0.42	1	1.8	63.2
0.53	1	1.8	64.9
0.75	1	1.8	66.7
0.76	1	1.8	68.4
0.99	1	1.8	70.2
1.49	1	1.8	71.9
1.73	1	1.8	73.7
1.75	1	1.8	75.4
1.78	1	1.8	77.2
2.01	1	1.8	78.9
2.04	1	1.8	80.7
2.07	1	1.8	82.5
2.1	1	1.8	84.2
2.21	1	1.8	86.0
2.48	1	1.8	87.7
2.8	1	1.8	89.5
3.87	1	1.8	91.2
4.44	1	1.8	93.0
4.53	1	1.8	94.7
4.75	1	1.8	96.5
6.71	1	1.8	98.2
7.3	1	1.8	100.0

UNIVARIATE

VARIABLE=FD2

MOMENTS

N	54	SUM WGTS	54
MEAN	1.00444	SUM	54.24
STD DEV	3.1218	VARIANCE	9.74566
SKEWNESS	4.30658	KURTOSIS	21.1606
USS	571.001	CSS	516.52
CV	310.799	STD MEAN	0.424824
T:MEAN=0	2.36438	PROB>|T|	0.0217557
SGN RANK	22.5	PROB>|S|	0.00915169
NUM ^= 0	9		

QUANTILES(DEF=4)

100% MAX	18.85	99%	18.85
75% Q3	0	95%	8.15747
50% MED	0	90%	3.50999
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	18.85		
Q3-Q1	0		
MODE	0		

EXTREMES

LOWEST	HIGHEST
0	3.68
0	5.14
0	7.66
0	9.65
0	18.85

MISSING VALUE .
COUNT 7
% COUNT/NOBS 11.48

STEM	LEAF	#	BOXPLOT
18	8	1	*
17			
16			
15			
14			
13			
12			
11			
10			
9	6	1	*
8			
7	7	1	*
6			
5	1	1	*
4			
3	37	2	*
2	07	2	*
1	2	1	*
0	000000000000000000000000000000000000000000000000	45	*-----*

18.5+
9.5+
0.5+

NORMAL PROBABILITY PLOT

+----+----+----+----+----+----+----+----+----+----+
-2 -1 +0 +1 +2

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	45	83.3	83.3
1.23	1	1.9	85.2
1.99	1	1.9	87.0
2.7	1	1.9	88.9
3.34	1	1.9	90.7
3.68	1	1.9	92.6
5.14	1	1.9	94.4
7.66	1	1.9	96.3
9.65	1	1.9	98.1
18.85	1	1.9	100.0

UNIVARIATE

VARIABLE=MIL

MOMENTS

N	61	SUM WGTS	61		
MEAN	2346.18	SUM	143117		
STD DEV	2193	VARIANCE	4809247		
SKEWNESS	1.66825	KURTOSIS	3.60004		
USS	624333135	CSS	288554845		
CV	93.4711	STD MEAN	280.785		
T:MEAN=0	8.35579	PROB>|T|	0.0001		
SGN RANK	915	PROB>|S|	0.0001		
NUM ^= 0	60				

QUANTILES(DEF=4)

100% MAX	11017	99%	11017
75% Q3	3493.5	95%	6870.6
50% MED	1667	90%	5326.2
25% Q1	820.5	10%	232.2
0% MIN	0	5%	48.8
		1%	0
RANGE	11017		
Q3-Q1	2673		
MODE	119		

EXTREMES

LOWEST	HIGHEST
0	5472
20	6138
41	6952
119	8609
119	11017

STEM	LEAF	#	BOXPLOT
11	0	1	0
10			
10			
9			
9			
8	6	1	0
8			
7			
7	0	1	
6			
6	1	1	
5	5	1	
5	24	2	
4	5	1	
4	244	3	
3	6679	4	
3	224	3	
2	55789	5	
2	01124	5	
1	55566778	8	
1	000234	6	
0	66789999	8	
0	00011223344	11	

MULTIPLY STEM.LEAF BY 10**+03

NORMAL PROBABILITY PLOT

11250+
5750+
250+
-2 -1 +0 +1 +2

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	1	1.6	1.6	880	1	1.6	27.9	1698	1	1.6	52.5	3559	1	1.6	77.0
20	1	1.6	3.3	894	1	1.6	29.5	1790	1	1.6	54.1	3594	1	1.6	78.7
41	1	1.6	4.9	943	1	1.6	31.1	1955	1	1.6	55.7	3702	1	1.6	80.3
119	2	3.3	8.2	961	1	1.6	32.8	2056	1	1.6	57.4	3948	1	1.6	82.0
229	1	1.6	9.8	1010	1	1.6	34.4	2125	1	1.6	59.0	4211	1	1.6	83.6
245	1	1.6	11.5	1026	1	1.6	36.1	2207	1	1.6	60.7	4370	1	1.6	85.2
291	1	1.6	13.1	1172	1	1.6	37.7	2369	1	1.6	62.3	4388	1	1.6	86.9
310	1	1.6	14.8	1294	1	1.6	39.3	2454	1	1.6	63.9	4493	1	1.6	88.5
374	1	1.6	16.4	1390	1	1.6	41.0	2536	1	1.6	65.6	5199	1	1.6	90.2
380	1	1.6	18.0	1462	1	1.6	42.6	2724	1	1.6	67.2	5358	1	1.6	91.8
933	1	1.6	19.7	1481	1	1.6	44.3	2848	1	1.6	68.9	5472	1	1.6	93.4
639	1	1.6	21.3	1495	1	1.6	45.9	2868	1	1.6	70.5	6138	1	1.6	95.1
657	1	1.6	23.0	1574	1	1.6	47.5	3223	1	1.6	72.1	6952	1	1.6	96.7
786	1	1.6	24.6	1611	1	1.6	49.2	3228	1	1.6	73.8	8609	1	1.6	98.4
859	1	1.6	26.2	1667	1	1.6	50.8	3428	1	1.6	75.4	11017	1	1.6	100.0

UNIVARIATE

VARIABLE=FE

MOMENTS

N	61	SUM WGTS	61
MEAN	130.9344	SUM	7987
STD DEV	99.1912	VARIANCE	9838.9
SKEWNESS	1.30798	KURTOSIS	1.10937
USS	1636107	CSS	590334
CV	75.7564	STD MEAN	12.7001
T:MEAN=0	10.3097	PROB>|T|	0.0001
SGN RANK	945.5	PROB>|S|	0.0001
NUM ^= 0	61		

QUANTILES(DEF=4)

100% MAX	434	99%	434
75% Q3	185	95%	344
50% MED	96	90%	300.6
25% Q1	61.5	10%	37.4
0% MIN	19	5%	21.7
		1%	19
RANGE	415		
Q3-Q1	123.5		
MODE	19		

EXTREMES

LOWEST	HIGHEST
19	325
19	335
21	345
28	400
28	434

```
STEM LEAF                            #  BOXPLOT
  42 4                               1      0
  40 0                               1      0
  38                                 0
  36                                 0
  34 5                               1      |
  32 55                              2      |
  30 3                               1      |
  28 1                               1      |
  26 5                               1      |
  24                                 0      |
  22 29                              2      |
  20 97                              2      |
  18 05582                           5      +-----+
  16 5                               1      |     |
  14 435                             3      |     |
  12 49                              2      |  +  |
  10 12259                           5      |     |
   8 1145595677                      9      *-----*
   6 4558891259                      9      +-----+
   4 3801245579                      9      |     |
   2 1886                            4      |     |
   0 99                              2      |     |
  ----+----+----+----+
  MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT

```
 430+                                                          *
                                                             *
                                                          *
                                                       *  *
                                                    *  *
 290+                                            *  **
                                                 ++++
                                              +++
                                           +++
                                        +++
                                     ++ **
 150+                             ++ **
                               ++ ***
                            ++ ****
                         ++ ****
                      *****
                   ******
                *****  ++
  10+  ***** ++++++
       +----+----+----+----+----+----+----+----+----+
            -2   -1   +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
19	2	3.3	3.3
21	1	1.6	4.9
28	2	3.3	8.2
36	1	1.6	9.8
43	1	1.6	11.5
48	1	1.6	13.1
50	1	1.6	14.8
51	1	1.6	16.4
57	1	1.6	18.0
54	1	1.6	19.7
55	1	1.6	21.3
57	1	1.6	23.0
59	1	1.6	24.6
64	1	1.6	26.2
65	2	3.3	29.5
68	1	1.6	31.1
69	1	1.6	32.8
71	1	1.6	34.4
72	1	1.6	36.1
75	1	1.6	37.7
79	1	1.6	39.3
81	2	3.3	42.6
84	1	1.6	44.3
85	1	1.6	45.9
89	1	1.6	47.5
95	1	1.6	49.2
96	1	1.6	50.8
97	2	3.3	54.1
101	1	1.6	55.7
102	2	3.3	59.0
105	1	1.6	60.7
119	1	1.6	62.3
134	1	1.6	63.9
139	1	1.6	65.6
144	1	1.6	67.2
153	1	1.6	68.9
155	1	1.6	70.5
165	1	1.6	72.1
180	1	1.6	73.8
185	2	3.3	77.0
188	1	1.6	78.7
192	1	1.6	80.3
209	1	1.6	82.0
217	1	1.6	83.6
222	1	1.6	85.2
239	1	1.6	86.9
265	1	1.6	88.5
291	1	1.6	90.2
303	1	1.6	91.8
325	1	1.6	93.4
335	1	1.6	95.1
345	1	1.6	96.7
400	1	1.6	98.4
434	1	1.6	100.0

UNIVARIATE

VARIABLE=VIS

MOMENTS

N	61	SUM WGTS	61
MEAN	114.734	SUM	6998.8
STD DEV	17.7872	VARIANCE	316.384
SKEWNESS	0.12772	KURTOSIS	-0.80224
USS	821986	CSS	18983
CV	15.5029	STD MEAN	2.27741
T:MEAN=0	50.3702	PROB>|T|	0.0001
SGN RANK	945.5	PROB>|S|	0.0001
NUM ^= 0	61		

QUANTILES(DEF=4)

100% MAX	150	99%	150
75% Q3	125.2	95%	145
50% MED	116	90%	142.8
25% Q1	100	10%	89
0% MIN	85	5%	86
		1%	85
RANGE	65		
Q3-Q1	25.2		
MODE	98		

EXTREMES

LOWEST	HIGHEST
85	145
85	145
86	145
86	148
88	150

```
STEM LEAF                      #  BOXPLOT
  15 0                         1      *
  14 5558                      4      +-+
  14 4                         1      | |
  13 5678                      4      +-+
  13 244                       3      | |
  12 67                        2      +---+
  12 0111223334                9      |   |
  11 566778999                 9      *---*
  11 22233                     5      |   |
  10 556                       3      +-+
  10 22233                     5      +---+
   9 5667888                   7      |   |
   9 3                         1      |   |
   8 5566899                   7      |   |
   8                                  +-+-+
  ----+----+----+----+
  MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT

```
152.5+                                                    *
                                                     ****
                                                   * +++
                                                 *****
                                               ****
                                             +++
                                           *****
                                         ****
                                       ****
                                     +++
                                   +***
                                 *****
                               +**
                             ***
                          ** ***
                  ***** **
82.5+             +++++ +
  +----+----+----+----+----+----+----+----+----+----+----+
      -2   -1    0    +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
85	2	3.3	3.3
86	2	3.3	6.6
88	1	1.6	8.2
89	2	3.3	11.5
93	1	1.6	13.1
95	1	1.6	14.8
96	2	3.3	18.0
97	1	1.6	19.7
98	3	4.9	24.6
102	3	4.9	29.5
103	2	3.3	32.8
105	2	3.3	36.1
106	1	1.6	37.7
112	3	4.9	42.6
113	2	3.3	45.9
115	1	1.6	47.5
116	2	3.3	50.8
117	2	3.3	54.1
118	1	1.6	55.7
119	3	4.9	60.7
120	1	1.6	62.3
121	3	4.9	67.2
122	2	3.3	70.5
123	2	3.3	73.8
124	1	1.6	75.4
126.4	1	1.6	77.0
127	1	1.6	78.7
132	1	1.6	80.3
134	1	1.6	82.0
134.4	1	1.6	83.6
135	1	1.6	85.2
136	1	1.6	86.9
137	1	1.6	88.5
138	1	1.6	90.2
144	1	1.6	91.8
145	3	4.9	96.7
148	1	1.6	98.4
150	1	1.6	100.0

UNIVARIATE

VARIABLE=TS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	60	SUM WGTS	60	100% MAX	14.4	99%	14.4	LOWEST	HIGHEST
MEAN	2.29867	SUM	137.92	75% Q3	3.2	95%	8.38	0.4	6
STD DEV	2.67082	VARIANCE	7.13326	50% MED	1.2	90%	5.16	0.4	8
SKEWNESS	2.39695	KURTOSIS	7.18717	25% Q1	0.4	10%	0.4	0.4	8.4
USS	737.804	CSS	420.862	0% MIN	0.4	5%	0.4	0.4	10
CV	116.19	STD MEAN	0.344801			1%	0.4	0.4	14.4
T:MEAN=0	6.666665	PROB>|T|	0.0001	RANGE	14				
SGN RANK	915	PROB>=S	0.0001	Q3-Q1	2.8				
NUM ^= 0	60			MODE	0.4				

MISSING VALUE .
COUNT 1
% COUNT/NOBS 1.64

STEM	LEAF	#	BOXPLOT	
14	4	1	*	14.5+
13				
12				
11				
10	0	1	0	
9				
8	04	2	0	
7				7.5+
6	0	1		
5	2	1		
4	000048	6		
3	12266	5	+-----+	
2	00048888	8	+	
1	2222222222	10	*-----*	
0	444444444444444444888888	25	+-----+	0.5+

NORMAL PROBABILITY PLOT

```
                                                                    *
                                                                 *
                                                              **   +
                                                            *  ++
                                                          +++
                                                       +++++
                                                    +++++
                                                 ++++++
                                              +++++
                                           ++++++
                                        ++++++
                                     ++++++
                                  ++++++
                                +++++
                             ++++++
                          ++++++
                       ++++++
                    ++++++
                 ++++++
              ++++++
           ++++++
        ++++++
     ++++++
  ++++++
*********************
+----+----+----+----+----+----+----+----+----+----+
-2   -1   +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0.4	19	31.7	31.7	2.8	4	6.7	71.7	4.4	1	1.7	88.3	8.4	1	1.7	96.7
0.8	6	10.0	41.7	3.12	1	1.7	73.3	4.8	1	1.7	90.0	10	1	1.7	98.3
1.2	10	16.7	58.3	3.2	2	3.3	76.7	5.2	1	1.7	91.7	14.4	1	1.7	100.0
2	3	5.0	63.3	3.6	2	3.3	80.0	6	1	1.7	93.3				
2.4	1	1.7	65.0	4	4	6.7	86.7	8	1	1.7	95.0				

UNIVARIATE

VARIABLE=COB

MOMENTS

N	61	SUM WGTS	61
MEAN	15.6869	SUM	956.9
STD DEV	8.47702	VARIANCE	71.8598
SKEWNESS	0.790881	KURTOSIS	-0.270137
USS	19322.4	CSS	4311.59
CV	54.0389	STD MEAN	1.08537
T:MEAN=0	14.453	PROB>|T|	0.0001
SGN RANK	945.5	PROB>|S|	0.0001
NUM ^= 0	61		

QUANTILES(DEF=4)

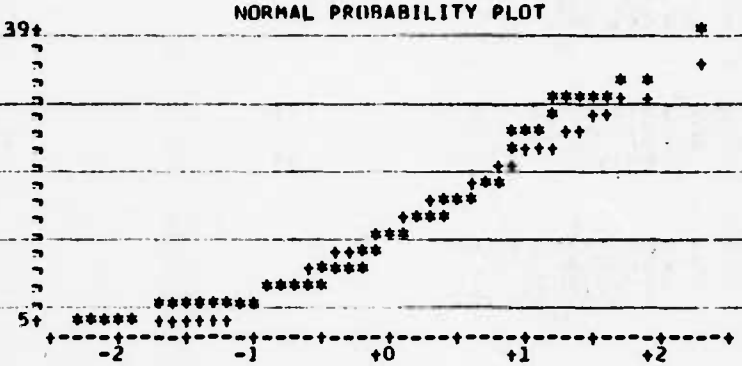
100% MAX	38	99%	38
75% Q3	20	95%	31.9
50% MED	14.2	90%	30.5
25% Q1	8	10%	6.48
0% MIN	5	5%	6
		1%	5
RANGE	33		
Q3-Q1	12		
MODE	8		

EXTREMES

LOWEST	HIGHEST
5	31
5	31
6	32
6	33.3
6	38

STEM	LEAF	#	BOXPLOT
38	0	1	
36			
34			
32	03	2	
30	5500	4	
28	0	1	
26	000	3	
24	3	1	
22			
20	0090	4	
18	50028	5	
16	000000	6	
14	022005	6	
12	000	3	
10	000005	6	
8	000000020	9	
6	00048803	8	
4	00	2	

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM
5	2	3.3	3.3
6	3	4.9	8.2
6.4	1	1.6	9.8
6.8	2	3.3	13.1
7	1	1.6	14.8
7.3	1	1.6	16.4
8	7	11.5	27.9
8.2	1	1.6	29.5
9	1	1.6	31.1
10	3	4.9	36.1
11	2	3.3	39.3
11.5	1	1.6	41.0
12	1	1.6	42.6
13	2	3.3	45.9
14	1	1.6	47.5
14.2	2	3.3	50.8
15	2	3.3	54.1
15.5	1	1.6	55.7
16	5	8.2	63.9
17	1	1.6	65.6
18.5	1	1.6	67.2
19	2	3.3	70.5
19.2	1	1.6	72.1
19.8	1	1.6	73.8
20	2	3.3	77.0
20.9	1	1.6	78.7
21	1	1.6	80.3
24.3	1	1.6	82.0
26	2	3.3	85.2
27	1	1.6	86.9
28	1	1.6	88.5
30.5	2	3.3	91.8
31	2	3.3	95.1
32	1	1.6	96.7
33.3	1	1.6	98.4
38	1	1.6	100.0

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	MIL	FE	VIS	TAN	TS	COB
1	1.02	888.94	32.75	321.45	660.63	-0.24	5.34	4087	91	137	2.80	6.00	17.9
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1021	48	106	2.68	2.40	8.8
3	1.33	690.07	0.00	-98.16	-110.42	1.78	0.00	1662	26	100	2.27	0.80	9.0
4	1.35	516.47	60.14	111.48	672.04	1.69	0.00	3179	51	107	3.36	0.80	5.5
5	1.19	1073.76	-51.44	120.71	1231.08	0.20	0.00	4124	101	111	3.35	1.60	6.5
6	1.31	430.43	-35.53	151.44	1641.80	-0.45	0.00	5310	113	123	4.05	1.20	9.0
7	2.34	518.11	-57.75	454.13	1658.73	-0.75	0.00	5858	111	118	4.24	0.40	8.0
8	3.04	3155.97	28.92	224.85	3969.46	3.99	0.00	7443	369	118	1.38	4.00	13.0
9	0.87	2071.95	309.26	757.13	3006.45	1.02	0.00	1989	98	144	3.14	9.20	23.0
10	-1.20	1886.66	109.85	189.11	731.33	10.25	0.00	1185	28	106	3.09	1.60	7.1
11	1.67	163.32	441.67	730.28	2928.78	4.06	0.00	2339	73	112	3.02	2.40	12.0
12	0.92	715.83	787.48	985.04	5008.34	7.18	0.00	2639	82	133	4.57	3.20	18.2
13	1.35	1892.39	1518.74	1995.06	8509.32	9.91	0.00	4289	149	140	6.85	2.40	27.5
14	0.34	2047.59	966.08	1522.12	5824.57	5.14	0.00	6624	115	123	6.48	2.00	23.5
15	0.21	2032.47	929.14	1504.18	5636.04	4.76	0.00	7021	112	125	6.25	1.20	23.5
16	0.39	4216.76	71.02	345.23	586.80	4.22	0.00	1	28	107	2.44	0.08	11.0
17	0.31	635.99	537.25	944.57	4613.14	2.96	0.00	1150	89	132	4.14	4.00	12.0
18	0.07	182.60	103.72	418.75	2417.68	-0.49	0.00	2393	30	118	3.02	4.00	5.0
19	1.66	3543.24	398.85	597.12	2720.92	1.60	0.00	667	130	109	2.53	0.40	40.5
20	1.83	4988.40	1513.92	1227.81	5376.25	25.66	26.52	450	74	84	2.94	0.40	15.0
21	2.14	2135.71	1570.94	1321.84	6379.18	24.06	28.12	729	152	84	3.52	2.80	20.0
22	3.53	538.21	1526.39	1336.14	7404.43	20.91	0.00	846	283	85	4.72	2.00	19.0
23	4.18	1868.55	993.89	1181.21	6118.41	10.39	0.00	1982	445	97	4.03	3.20	16.5
24	3.21	3435.54	864.25	1310.40	6146.21	7.66	0.00	2733	447	109	4.92	0.20	16.5
25	3.12	2697.16	881.13	1326.95	6343.27	7.17	0.00	2847	555	109	4.94	2.00	17.5
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19	41	101	3.62	0.40	18.0
27	0.59	7119.25	80.05	772.14	1795.18	6.60	0.00	341	94	97	3.55	2.80	17.5
28	0.35	2247.78	106.64	783.14	2814.64	1.32	0.00	778	140	97	4.51	2.00	20.0

VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
CL2	28	1.32250000	1.25616885	37.03000000	-1.20000000	4.18000000
DET1	28	1846.18392857	1686.27330198	51693.15000000	0	7119.25000000
DET2	28	488.83428571	558.77233253	13687.36000000	-57.75000000	1570.94000000
DET3	28	733.36142857	567.61714663	20534.12000000	-98.16000000	1995.06000000
DET4	28	3360.15214286	2543.73695994	94084.26000000	-110.42000000	8509.32000000
FD1	28	5.73571429	7.17591673	160.60000000	-0.75000000	25.66000000
FD2	28	2.14214286	7.18556854	59.98000000	0	28.12000000
MIL	28	2632.35714286	2194.63182121	73706.00000000	1.00000000	7443.00000000
FE	28	145.53571429	140.60938332	4075.00000000	26.00000000	555.00000000
VIS	28	111.85714286	16.30658646	3132.00000000	84.00000000	144.00000000
TAN	28	3.79964286	1.28822439	106.39000000	1.38000000	6.85000000
TS	28	2.26714286	1.96382253	63.48000000	0.08000000	9.20000000
COB	28	15.75000000	7.77519798	441.00000000	5.00000000	40.50000000

CL2

CL2	FE	DET4	DET2	FD1	DET3	VIS	MIL	FD2	COB	DET1	TS	TAN
1.00000	0.79854	0.52635	0.43112	0.37689	0.34014	-0.26943	0.14693	0.14292	0.13543	0.10296	-0.05331	0.04011

DET1

DET1	FD1	COB	DET3	VIS	FD2	FE	DET4	MIL	DET2	TS	CL2	TAN
1.00000	0.35121	0.34248	0.29663	-0.27267	0.26398	0.21674	0.19355	-0.19111	0.18948	-0.10537	0.10296	-0.05760

DET2

DET2	DET4	DET3	FD1	TAN	FD2	COB	CL2	FE	VIS	DET1	MIL	TS
1.00000	0.90542	0.88851	0.83179	0.55356	0.50899	0.46948	0.43112	0.38107	-0.19410	0.18948	-0.05240	-0.04006

DET3

DET3	DET4	DET2	TAN	FD1	COB	FE	CL2	DET1	FD2	MIL	VIS	TS
1.00000	0.93788	0.88851	0.76044	0.58540	0.56532	0.43847	0.34014	0.29663	0.24937	0.11987	0.05846	0.05516

DET4

DET4	DET3	DET2	TAN	FD1	FE	CL2	COB	FD2	DET1	MIL	TS	VIS
1.00000	0.93788	0.90542	0.65053	0.63307	0.59393	0.52635	0.48391	0.25115	0.19355	0.18334	0.07816	0.01725

FD1

FD1	DET2	FD2	DET4	DET3	VIS	CL2	DET1	MIL	FE	COB	TAN	TS
1.00000	0.83179	0.72673	0.63307	0.58540	-0.54639	0.37689	0.35121	-0.29110	0.25142	0.19143	0.15690	-0.12746

FD2

FD2	FD1	DET2	VIS	DET1	DET4	DET3	MIL	TAN	CL2	COB	FE	TS
1.00000	0.72673	0.50899	-0.43869	0.26398	0.25115	0.24937	-0.24339	-0.14404	0.14292	0.07365	-0.07356	-0.03832

MIL

MIL	VIS	TAN	FD1	FD2	DET1	FE	DET4	CL2	DET3	TS	DET2	COB
1.00000	0.53511	0.34069	-0.29110	-0.24339	-0.19111	0.19023	0.18334	0.14693	0.11987	0.07306	-0.05240	-0.04237

FE

FE	CL2	DET4	DET3	DET2	FD1	TAN	DET1	COB	MIL	VIS	FD2	TS
1.00000	0.79854	0.59393	0.43847	0.38107	0.25142	0.23572	0.21674	0.20082	0.19023	-0.13850	-0.07356	0.01908

VIS

VIS	FD1	MIL	TS	FD2	DET1	CL2	TAN	DET2	FE	COB	DET3	DET4
1.00000	-0.54639	0.53511	0.52470	-0.43869	-0.27267	-0.26943	0.25459	-0.19410	-0.13850	0.12877	0.05846	0.01725

TAN

TAN	DET3	DET4	DET2	COB	MIL	VIS	FE	FD1	FD2	TS	DET1	CL2
1.00000	0.76044	0.65053	0.55356	0.36210	0.34069	0.25459	0.23572	0.15690	-0.14404	-0.13109	-0.05760	0.04011

TS

TS	VIS	TAN	FD1	DET1	COB	DET4	MIL	DET3	CL2	DET2	FD2	FE
1.00000	0.52470	-0.13109	-0.12746	-0.10537	0.09773	0.07816	0.07306	0.05516	-0.05331	-0.04006	-0.03832	0.01908

COB

COB	DET3	DET4	DET2	TAN	DET1	FE	FD1	CL2	VIS	TS	FD2	MIL
1.00000	0.56532	0.48391	0.46948	0.36210	0.34248	0.20082	0.19143	0.13543	0.12877	0.09773	0.07365	-0.04237

UNIVARIATE

VARIABLE=CL2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	4.18	99%	4.18	LOWEST	HIGHEST
MEAN	1.3225	SUM	37.03	75% Q3	2.0625	95%	3.88749	-1.2	3.04
STD DEV	1.25617	VARIANCE	1.57796	50% MED	1.25	90%	3.242	0	3.12
SKEWNESS	0.503443	KURTOSIS	-0.0453373	25% Q1	0.3425	10%	0	0	3.21
USS	91.5771	CSS	42.6049	0% MIN	-1.2	5%	-0.66	0.07	3.53
CV	94.9844	STD MEAN	0.237394			1%	-1.2	0.21	4.18
T:MEAN=0	5.57092	PROB>|T|	0.0001	RANGE	5.38				
SGN RANK	163.5	PROB>|S|	0.0001	Q3-Q1	1.72				
NUM ^= 0	26			MODE	0				

VARIABLE=DET1

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	7119.25	99%	7119.25	LOWEST	HIGHEST
MEAN	1846.18	SUM	51693.1	75% Q3	2584.81	95%	6160.34	0	3435.54
STD DEV	1686.27	VARIANCE	2843518	50% MED	1877.6	90%	4293.91	0	3543.24
SKEWNESS	1.37271	KURTOSIS	2.2388	25% Q1	523.135	10%	146.988	163.32	4216.76
USS	172210039	CSS	76774977	0% MIN	0	5%	0	182.6	4988.4
CV	91.3383	STD MEAN	318.676			1%	0	430.43	7119.25
T:MEAN=0	5.7933	PROB>|T|	0.0001	RANGE	7119.25				
SGN RANK	175.5	PROB>|S|	0.0001	Q3-Q1	2061.68				
NUM ^= 0	26			MODE	0				

VARIABLE=DET2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	1570.94	99%	1570.94	LOWEST	HIGHEST
MEAN	488.834	SUM	13687.4	75% Q3	917.137	95%	1550.89	-57.75	993.89
STD DEV	558.772	VARIANCE	312227	50% MED	209.555	90%	1519.5	-51.44	1513.92
SKEWNESS	0.82641	KURTOSIS	-0.691614	25% Q1	29.8775	10%	-37.121	-35.53	1518.74
USS	15120967	CSS	8430116	0% MIN	-57.75	5%	-54.9105	0	1526.39
CV	114.307	STD MEAN	105.598			1%	-57.75	0	1570.94
T:MEAN=0	4.6292	PROB>|T|	0.0001	RANGE	1628.69				
SGN RANK	150.5	PROB>|S|	0.0001	Q3-Q1	887.26				
NUM ^= 0	25			MODE	0				

VARIABLE=DET3

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	1995.06	99%	1995.06	LOWEST	HIGHEST
MEAN	733.361	SUM	20534.1	75% Q3	1289.75	95%	1782.23	-98.16	1326.95
STD DEV	567.617	VARIANCE	322189	50% MED	743.705	90%	1505.97	0	1336.14
SKEWNESS	0.329277	KURTOSIS	-0.890387	25% Q1	198.045	10%	0	0	1504.18
USS	23758041	CSS	8699109	0% MIN	-98.16	5%	-53.988	111.48	1522.12
CV	77.3994	STD MEAN	107.27			1%	-98.16	120.71	1995.06
T:MEAN=0	6.83662	PROB>|T|	0.0001	RANGE	2093.22				
SGN RANK	174.5	PROB>|S|	0.0001	Q3-Q1	1091.71				
NUM ^= 0	26			MODE	0				

UNIVARIATE

VARIABLE=DET4

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	8509.32	99%	8509.32	LOWEST	HIGHEST
MEAN	3360.15	SUM	94084.3	75% Q3	5777.43	95%	8012.1	-110.42	6146.21
STD DEV	2543.74	VARIANCE	6470598	50% MED	2871.71	90%	6481.7	0	6343.27
SKEWNESS	0.290373	KURTOSIS	-1.15653	25% Q1	856.267	10%	0	0	6379.18
USS	490843566	CSS	174706138	0% MIN	-110.42	5%	-60.731	586.8	7404.43
CV	75.703	STD MEAN	480.721			1%	-110.42	660.63	8509.32
T:MEAN=0	6.989382	PROB>|T|	0.0001	RANGE	8619.74				
SGN RANK	174.5	PROB>|S|	0.0001	Q3-Q1	4921.17				
NUM ^= 0	26			MODE	0				

VARIABLE=FD1

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	25.66	99%	25.66	LOWEST	HIGHEST
MEAN	5.73571	SUM	160.6	75% Q3	7.54	95%	24.94	-0.75	10.25
STD DEV	7.17592	VARIANCE	51.4938	50% MED	4.025	90%	21.225	-0.49	10.39
SKEWNESS	1.71612	KURTOSIS	2.48856	25% Q1	0.405	10%	-0.454	-0.45	20.91
USS	2311.49	CSS	1390.33	0% MIN	-0.75	5%	-0.633	-0.24	24.06
CV	125.109	STD MEAN	1.35612			1%	-0.75	0	25.66
T:MEAN=0	4.2295	PROB>|T|	0.00023967	RANGE	26.41				
SGN RANK	161.5	PROB>|S|	0.0001	Q3-Q1	7.135				
NUM ^= 0	26			MODE	0				

VARIABLE=FD2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	28.12	99%	28.12	LOWEST	HIGHEST
MEAN	2.14214	SUM	59.98	75% Q3	0	95%	27.4	0	0
STD DEV	7.18557	VARIANCE	51.6324	50% MED	0	90%	7.4578	0	0
SKEWNESS	3.4103	KURTOSIS	10.6797	25% Q1	0	10%	0	0	5.34
USS	1522.56	CSS	1394.07	0% MIN	0	5%	0	0	26.52
CV	335.438	STD MEAN	1.35794			1%	0	0	28.12
T:MEAN=0	1.57749	PROB>|T|	0.126329	RANGE	28.12				
SGN RANK	3	PROB>|S|	0.181449	Q3-Q1	0				
NUM ^= 0	3			MODE	0				

VARIABLE=MIL

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	7443	99%	7443	LOWEST	HIGHEST
MEAN	2632.36	SUM	73706	75% Q3	4114.75	95%	7253.09	1	5310
STD DEV	2194.63	VARIANCE	4816409	50% MED	2164	90%	6663.7	19	5858
SKEWNESS	0.853864	KURTOSIS	-0.274756	25% Q1	795	10%	308.8	341	6624
USS	324063554	CSS	130043638	0% MIN	1	5%	9.1	450	7021
CV	83.3714	STD MEAN	414.746			1%	1	667	7443
T:MEAN=0	6.346971	PROB>|T|	0.0001	RANGE	7442				
SGN RANK	203	PROB>|S|	0.0001	Q3-Q1	3319.75				
NUM ^= 0	28			MODE	1				

UNIVARIATE

VARIABLE=FE

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	555	99%	555	LOWEST	HIGHEST
MEAN	145.536	SUM	4075	75% Q3	146.75	95%	506.399	26	283
STD DEV	140.609	VARIANCE	19771	50% MED	99.5	90%	445.2	28	369
SKEWNESS	1.79951	KURTOSIS	2.36736	25% Q1	56.5	10%	28	28	445
USS	1126875	CSS	533817	0% MIN	26	5%	26.9	30	447
CV	96.615	STD MEAN	26.5727			1%	26	41	555
T:MEAN=0	5.476689	PROB>|T|	0.0001	RANGE	529				
SGN RANK	203	PROB>|S|	0.0001	Q3-Q1	90.25				
NUM ^= 0	28			MODE	28				

VARIABLE=VIS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	144	99%	144	LOWEST	HIGHEST
MEAN	111.857	SUM	3132	75% Q3	123	95%	142.2	84	132
STD DEV	16.3066	VARIANCE	265.905	50% MED	109	90%	137.3	84	133
SKEWNESS	0.171604	KURTOSIS	-0.464464	25% Q1	100.25	10%	84.9	85	137
USS	357516	CSS	7179.43	0% MIN	84	5%	84	97	140
CV	14.578	STD MEAN	3.08166			1%	84	97	144
T:MEAN=0	36.2977	PROB>|T|	0.0001	RANGE	60				
SGN RANK	203	PROB>|S|	0.0001	Q3-Q1	22.75				
NUM ^= 0	28			MODE	97				

VARIABLE=TS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	9.2	99%	9.2	LOWEST	HIGHEST
MEAN	2.26714	SUM	63.48	75% Q3	3.1	95%	7.75996	0.08	4
STD DEV	1.96382	VARIANCE	3.8566	50% MED	2	90%	4.19998	0.2	4
SKEWNESS	1.83288	KURTOSIS	4.83268	25% Q1	0.8	10%	0.38	0.4	4
USS	248.046	CSS	104.128	0% MIN	0.08	5%	0.134	0.4	6
CV	86.621	STD MEAN	0.371128			1%	0.08	0.4	9.2
T:MEAN=0	6.10888	PROB>|T|	0.0001	RANGE	9.12				
SGN RANK	203	PROB>|S|	0.0001	Q3-Q1	2.3				
NUM ^= 0	28			MODE	0.4				

VARIABLE=COB

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	28	SUM WGTS	28	100% MAX	40.5	99%	40.5	LOWEST	HIGHEST
MEAN	15.75	SUM	441	75% Q3	19.75	95%	34.6498	5	23
STD DEV	7.7752	VARIANCE	60.4537	50% MED	16.5	90%	23.9	5.5	23.5
SKEWNESS	1.09658	KURTOSIS	2.37675	25% Q1	9	10%	6.4	6.5	23.5
USS	8578	CSS	1632.25	0% MIN	5	5%	5.225	7.1	27.5
CV	49.3663	STD MEAN	1.46937			1%	5	8	40.5
T:MEAN=0	10.71188	PROB>|T|	0.0001	RANGE	35.5				
SGN RANK	203	PROB>|S|	0.0001	Q3-Q1	10.75				
NUM ^= 0	28			MODE	9				

F

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	MIL	FE	VIS	TAN	TS	COB
1	0.00	0.00	0.00	0.00	0.0	0.00	0.00	4742	81	102	3.37	0.8	15.1
2	2.24	3592.38	960.18	842.30	2726.6	14.29	16.40	580	41	104	2.68	0.4	19.2
3	4.02	1380.27	805.86	835.37	3122.3	8.68	0.00	1908	87	107	2.75	0.4	16.0
4	3.04	541.30	756.33	867.88	3647.9	7.54	0.00	2693	113	110	4.36	2.0	16.6
5	2.18	1334.32	330.10	663.00	2294.2	2.49	0.00	3628	96	113	3.59	2.8	13.5
6	2.21	361.90	72.63	592.97	1790.4	-0.47	9.15	4448	99	118	4.51	2.0	12.5
7	2.30	385.47	100.50	598.65	2370.0	0.43	0.00	5966	139	125	4.20	4.0	12.0
8	2.78	1293.68	717.23	941.47	4142.7	9.20	0.00	7844	112	118	4.48	2.4	14.0
9	3.01	1045.84	512.42	892.66	3920.3	5.31	0.00	8574	108	115	4.54	2.0	12.0
10	1.64	2721.57	506.08	692.16	3534.5	1.34	0.00	5683	191	106	3.36	3.6	16.0
11	0.74	1220.00	-165.57	-216.69	-1049.3	0.03	0.00	156	52	106	2.99	3.2	10.6
12	0.93	394.61	-112.19	117.32	80.6	-0.57	2.58	239	19	115	2.43	5.2	35.0
13	2.34	357.76	-118.77	393.34	864.6	-1.57	0.00	458	50	120	4.45	3.2	16.3
14	2.07	2117.69	-150.36	509.17	1193.6	-0.33	0.00	552	65	121	3.60	2.0	12.5
15	2.04	2008.49	-182.49	541.61	1297.1	-0.32	0.00	644	83	115	4.68	1.2	10.5
16	2.30	1355.44	-199.49	569.15	1563.5	-0.47	0.00	852	95	115	3.72	1.2	12.0
17	4.45	.	.	.	.	.	.	1088	177	135	4.03	18.0	11.0
18	3.14	.	.	.	.	.	.	1149	224	125	3.90	2.0	11.0

VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
CL2	18	2.30166667	1.07792966	41.43000000	0	4.45000000
DET1	16	1256.92000000	972.55847573	20110.72000000	0	3592.38000000
DET2	16	239.52875000	410.90724695	3832.46000000	-199.49000000	960.18000000
DET3	16	553.77250000	335.12622063	8860.36000000	-216.69000000	941.47000000
DET4	16	1968.67812500	1527.40344097	31498.85000000	-1049.34000000	4142.69000000
FD1	16	2.84875000	4.69760631	45.58000000	-1.57000000	14.29000000
FD2	16	1.75812500	4.54520145	28.13000000	0	16.40000000
MIL	18	2844.66666667	2745.86769743	51204.00000000	156.00000000	8574.00000000
FE	18	101.77777778	53.33529408	1832.00000000	19.00000000	224.00000000
VIS	18	115.00000000	8.48528137	2070.00000000	102.00000000	135.00000000
TAN	18	3.75777778	0.71019099	67.64000000	2.43000000	4.68000000
TS	18	3.13333333	3.91978391	56.40000000	0.40000000	18.00000000
COB	18	14.76666667	5.62180628	265.80000000	10.50000000	35.00000000

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

CL2

CL2	DET3	DET4	DET2	VIS	FD1	FE	TS	TAN	COR	DET1	MIL	FD2
1.00000	0.84721	0.75716	0.57593	0.54479	0.53057	0.46291	0.38299	0.33284	-0.30223	0.15788	0.03918	-0.00211
18	16	16	16	18	16	18	18	18	18	16	18	16

DET1

DET1	FD1	FD2	DET2	DET3	TS	VIS	TAN	DET4	MIL	CL2	COR	FE
1.00000	0.46401	0.42058	0.37642	0.36084	-0.32181	-0.31216	-0.29861	0.29180	-0.19211	0.15788	-0.10184	0.07840
16	16	16	16	16	16	16	16	16	16	16	16	16

DET2

DET2	FD1	DET4	DET3	CL2	MIL	DET1	VIS	FD2	TS	FE	TAN	COR
1.00000	0.92485	0.80479	0.73333	0.57593	0.39570	0.37642	-0.37571	0.33497	-0.32736	0.30327	-0.10239	0.07094
16	16	16	16	16	16	16	16	16	16	16	16	16

DET3

DET3	DET4	CL2	DET2	FD1	FE	MIL	TAN	DET1	TS	VIS	COR	FD2
1.00000	0.95052	0.84721	0.73333	0.64787	0.47019	0.43700	0.36590	0.36084	-0.32470	0.18759	-0.17751	0.17351
16	16	16	16	16	16	16	16	16	16	16	16	16

DET4

DET4	DET3	DET2	CL2	FD1	FE	MIL	TAN	DET1	TS	COR	VIS	FD2
1.00000	0.95052	0.80479	0.75716	0.65425	0.62863	0.62365	0.33898	0.29180	-0.20730	-0.15509	0.07771	0.05692
16	16	16	16	16	16	16	16	16	16	16	16	16

FD1

FD1	DET2	DET4	DET3	CL2	DET1	FD2	TS	VIS	MIL	TAN	COR	FE
1.00000	0.92485	0.65425	0.64787	0.53057	0.46401	0.46351	-0.46079	-0.37333	0.19368	-0.17606	0.07921	0.01664
16	16	16	16	16	16	16	16	16	16	16	16	16

FD2

FD2	FD1	DET1	DET2	FE	TS	TAN	COR	VIS	MIL	DET3	DET4	CL2
1.00000	0.46351	0.42058	0.33497	-0.31720	-0.28061	-0.26332	0.22976	-0.22029	-0.18175	0.17351	0.05692	-0.00211
16	16	16	16	16	16	16	16	16	16	16	16	16

MIL

MIL	DET4	DET3	TAN	DET2	FE	COR	FD1	DET1	FD2	TS	VIS	CL2
1.00000	0.62365	0.43700	0.40830	0.39570	0.33355	-0.19953	0.19368	-0.19211	-0.18175	-0.12529	-0.05346	0.03918
18	16	16	18	16	18	18	16	16	16	18	18	18

FE

FE	DET4	DET3	COR	CL2	VIS	TAN	TS	MIL	FD2	DET2	DET1	FD1
1.00000	0.62863	0.47019	-0.46824	0.46291	0.42880	0.35128	0.33757	0.33355	-0.31720	0.30327	0.07840	0.01664
18	16	16	18	18	18	18	18	18	16	16	16	16

VIS

VIS	TS	CL2	TAN	FE	DET2	FD1	DET1	COR	FD2	DET3	DET4	MIL
1.00000	0.64800	0.54479	0.49783	0.42880	-0.37571	-0.37333	-0.31216	-0.24527	-0.22029	0.18759	0.07771	-0.05346
18	18	18	18	18	16	16	16	18	16	16	16	18

TAN

TAN	COR	VIS	MIL	DET3	FE	DET4	CL2	DET1	FD2	FD1	DET2	TS
1.00000	-0.56884	0.49783	0.40830	0.36590	0.35128	0.33898	0.33284	-0.29861	-0.26332	-0.17606	-0.10239	0.07424
18	18	18	18	16	18	16	18	16	16	16	16	18

TS

TS	VIS	FD1	CL2	FE	DET2	DET3	DET1	FD2	DET4	MIL	TAN	COR
1.00000	0.64800	-0.46079	0.38299	0.33757	-0.32736	-0.32470	-0.32181	-0.28061	-0.20730	-0.12529	0.07424	-0.01975
18	18	16	18	18	16	16	16	16	16	18	18	18

COR

COR	TAN	FE	CL2	VIS	FD2	MIL	DET3	DET4	DET1	FD1	DET2	TS
1.00000	-0.56884	-0.46824	-0.30223	-0.24527	0.22976	-0.19953	-0.17751	-0.15509	-0.10184	0.07921	0.07094	-0.01975
18	18	18	18	18	16	18	16	16	16	16	16	18

VARIABLE=CL2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	16	SUM WGTS	16	100% MAX	4.45	99%	4.45	LOWEST	HIGHEST
MEAN	2.301875	SUM	41.43	75% Q3	3.0175	95%	4.45	0	3.01
STD DEV	1.077793	VARIANCE	1.16193	50% MED	2.27	90%	4.063	0.74	3.04
SKEWNESS	-0.129985	KURTOSIS	0.663299	25% Q1	1.94	10%	0.665999	0.93	3.16
USS	115.111	CSS	19.7529	0% MIN	0	5%	0	1.64	4.02
CV	46.83226	STD MEAN	0.25407			1%	0	2.04	4.45
T:MEAN=0	9.059917	PROB>|T|	0.0001	RANGE	4.45				
SGN RANK	76.5	PROB>|S|	.000320427	Q3-Q1	1.0775				
NUM ^= 0	17			MODE	2.3				

VARIABLE=DET1

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	16	SUM WGTS	16	100% MAX	3592.38	99%	3592.38	LOWEST	HIGHEST
MEAN	1256.92	SUM	20110.7	75% Q3	1851.43	95%	3592.38	0	1380.27
STD DEV	972.5558	VARIANCE	945870	50% MED	1256.84	90%	2982.81	357.76	2008.49
SKEWNESS	0.980421	KURTOSIS	0.790925	25% Q1	387.755	10%	250.431	361.9	2117.69
USS	39465616	CSS	14188050	0% MIN	0	5%	0	385.47	2721.57
CV	77.37683	STD MEAN	243.14			1%	0	394.61	3592.38
T:MEAN=0	5.169954	PROB>|T|	.000114225	RANGE	3592.38				
SGN RANK	60	PROB>|S|	.000726514	Q3-Q1	1463.68				
NUM ^= 0	15			MODE	0				

MISSING VALUE ;
COUNT 2
% COUNT/NOBS 11.11

VARIABLE=DET2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	16	SUM WGTS	16	100% MAX	960.18	99%	960.18	LOWEST	HIGHEST
MEAN	239.529	SUM	3832.46	75% Q3	666.027	95%	960.18	-199.49	512.42
STD DEV	410.9007	VARIANCE	168845	50% MED	86.565	90%	852.156	-182.49	717.23
SKEWNESS	0.69007	KURTOSIS	-1.39595	25% Q1	-142.462	10%	-187.59	-165.57	756.33
USS	3450656	CSS	2532671	0% MIN	-199.49	5%	-199.49	-150.36	805.86
CV	171.5548	STD MEAN	102.727			1%	-199.49	-118.77	960.18
T:MEAN=0	2.331171	PROB>|T|	0.0340672	RANGE	1159.67				
SGN RANK	27	PROB>|S|	0.132299	Q3-Q1	808.49				
NUM ^= 0	15			MODE	-199.49				

MISSING VALUE ;
COUNT 2
% COUNT/NOBS 11.11

VARIABLE=DET3

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	16	SUM WGTS	16	100% MAX	941.47	99%	941.47	LOWEST	HIGHEST
MEAN	553.772	SUM	8860.36	75% Q3	840.567	95%	941.47	-216.69	835.37
STD DEV	335.126	VARIANCE	112310	50% MED	595.81	90%	907.303	0	842.3
SKEWNESS	-1.08339	KURTOSIS	0.578465	25% Q1	422.297	10%	-65.0072	117.32	867.88
USS	6591267	CSS	1684644	0% MIN	-216.69	5%	-216.69	393.34	892.66
CV	60.51169	STD MEAN	83.78816			1%	-216.69	509.17	941.47
T:MEAN=0	6.60972	PROB>|T|	0.0001	RANGE	1158.16				
SGN RANK	58	PROB>|S|	0.00199163	Q3-Q1	418.27				
NUM ^= 0	15			MODE	-216.69				

MISSING VALUE ;
COUNT 2
% COUNT/NOBS 11.11

VARIABLE=DFT4

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	16	SUM WGTS	16	100% MAX	4142.69	99%	4142.69	LOWEST	HIGHEST
MEAN	1968.68	SUM	31498.8	75% Q3	3431.43	95%	4142.69	-1049.34	3122.34
STD DEV	1527.4	VARIANCE	2332961	50% MED	2042.31	90%	3986.98	0	3534.46
SKEWNESS	-0.335365	KURTOSIS	-0.675243	25% Q1	946.815	10%	-314.803	80.64	3647.9
USS	97005516	CSS	34994419	0% MIN	-1049.34	5%	-1049.34	864.56	3920.25
CV	77.5852	STD MEAN	381.851			1%	-1049.34	1193.58	4142.69
T:MEAN=0	5.15562	PROB>|T|	.000117316	RANGE	5192.03				
SGN RANK	57	PROB>|S|	0.00133205	Q3-Q1	2484.62				
NUM ^= 0	15			MODE	-1049.34				

MISSING VALUE .
COUNT 2
% COUNT/NOBS 11.11

VARIABLE=FD1

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	16	SUM WGTS	16	100% MAX	14.29	99%	14.29	LOWEST	HIGHEST
MEAN	2.84875	SUM	45.58	75% Q3	6.9825	95%	14.29	-1.57	5.31
STD DEV	4.69761	VARIANCE	22.0675	50% MED	0.23	90%	10.727	-0.57	7.54
SKEWNESS	1.28172	KURTOSIS	0.704708	25% Q1	-0.435	10%	-0.870001	-0.47	8.68
USS	460.859	CSS	331.013	0% MIN	-1.57	5%	-1.57	-0.47	9.2
CV	164.901	STD MEAN	1.1744			1%	-1.57	-0.33	14.29
T:MEAN=0	2.4257	PROB>|T|	0.0283617	RANGE	15.86				
SGN RANK	28	PROB>|S|	0.118239	Q3-Q1	7.4175				
NUM ^= 0	15			MODE	-0.47				

MISSING VALUE .
COUNT 2
% COUNT/NOBS 11.11

VARIABLE=FD2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	16	SUM WGTS	16	100% MAX	16.4	99%	16.4	LOWEST	HIGHEST
MEAN	1.75812	SUM	28.13	75% Q3	0	95%	16.4	0	0
STD DEV	4.5452	VARIANCE	20.6589	50% MED	0	90%	11.325	0	0
SKEWNESS	2.81786	KURTOSIS	7.74678	25% Q1	0	10%	0	0	2.58
USS	359.339	CSS	309.883	0% MIN	0	5%	0	0	9.15
CV	258.526	STD MEAN	1.1363			1%	0	0	16.4
T:MEAN=0	1.54724	PROB>|T|	0.142642	RANGE	16.4				
SGN RANK	3	PROB>|S|	0.181449	Q3-Q1	0				
NUM ^= 0	3			MODE	0				

MISSING VALUE .
COUNT 2
% COUNT/NOBS 11.11

VARIABLE=MTL

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	18	SUM WGTS	18	100% MAX	8574	99%	8574	LOWEST	HIGHEST
MEAN	2844.67	SUM	51204	75% Q3	4977.25	95%	8574	156	4742
STD DEV	2745.87	VARIANCE	7539789	50% MED	1528.5	90%	7916.99	239	5683
SKEWNESS	0.874689	KURTOSIS	-0.479986	25% Q1	573	10%	230.7	458	5966
USS	273834732	CSS	128176420	0% MIN	156	5%	156	552	7844
CV	96.5269	STD MEAN	647.207			1%	156	580	8574
T:MEAN=0	4.39529	PROB>|T|	.000395154	RANGE	8418				
SGN RANK	85.5	PROB>|S|	.000214092	Q3-Q1	4404.25				
NUM ^= 0	18			MODE	156				

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VARIABLE=FE

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	18	SUM WGTS	18	100% MAX	224	99%	224	LOWEST	HIGHEST
MEAN	101.778	SUM	1832	75% Q3	119.5	95%	224	19	113
STD DEV	53.3353	VARIANCE	2844.65	50% MED	95.5	90%	194.3	41	139
SKEWNESS	0.825886	KURTOSIS	0.495819	25% Q1	61.75	10%	38.8	50	177
USS	234816	CSS	48359.1	0% MIN	19	5%	19	52	191
CV	52.4037	STD MEAN	12.5712			1%	19	65	224
T:MEAN=0	8.09604	PROB>|T|	0.0001	RANGE	205				
SGN RANK	85.5	PROB>|S|	.000214092	Q3-Q1	57.75				
NUM ^= 0	18			MODE	19				

VARIABLE=VIS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	18	SUM WGTS	18	100% MAX	135	99%	135	LOWEST	HIGHEST
MEAN	115	SUM	2070	75% Q3	120.25	95%	135	102	120
STD DEV	8.48528	VARIANCE	72	50% MED	115	90%	126	104	121
SKEWNESS	0.516032	KURTOSIS	0.319056	25% Q1	106.75	10%	103.8	106	125
USS	239274	CSS	1224	0% MIN	102	5%	102	106	125
CV	7.37851	STD MEAN	2			1%	102	107	135
T:MEAN=0	57.5	PROB>|T|	0.0001	RANGE	33				
SGN RANK	85.5	PROB>|S|	.000209317	Q3-Q1	13.5				
NUM ^= 0	18			MODE	115				

VARIABLE=TS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	18	SUM WGTS	18	100% MAX	18	99%	18	LOWEST	HIGHEST
MEAN	3.13333	SUM	56.4	75% Q3	3.3	95%	18	0.4	3.2
STD DEV	3.91978	VARIANCE	15.3647	50% MED	2	90%	6.47988	0.4	3.6
SKEWNESS	3.53776	KURTOSIS	13.8022	25% Q1	1.2	10%	0.4	0.8	4
USS	437.92	CSS	261.2	0% MIN	0.4	5%	0.4	1.2	5.2
CV	125.099	STD MEAN	0.923902			1%	0.4	1.2	18
T:MEAN=0	3.39141	PROB>|T|	0.00347169	RANGE	17.6				
SGN RANK	85.5	PROB>|S|	.000205698	Q3-Q1	2.1				
NUM ^= 0	18			MODE	2				

VARIABLE=COB

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	18	SUM WGTS	18	100% MAX	35	99%	35	LOWEST	HIGHEST
MEAN	14.7667	SUM	265.8	75% Q3	16.075	95%	35	10.5	16
STD DEV	5.62181	VARIANCE	31.6047	50% MED	13	90%	20.7799	10.6	16.3
SKEWNESS	2.99372	KURTOSIS	10.5928	25% Q1	11.75	10%	10.59	11	16.6
USS	4462.26	CSS	537.26	0% MIN	10.5	5%	10.5	11	19.2
CV	38.0709	STD MEAN	1.32507			1%	10.5	12	35
T:MEAN=0	11.144	PROB>|T|	0.0001	RANGE	24.5				
SGN RANK	85.5	PROB>|S|	.000211511	Q3-Q1	4.325				
NUM ^= 0	18			MODE	12				

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	MIL	FE	VIS	TAN	TS	COB
1	0.91	671.20	5.91	294.24	-92.57	3.02	4.50	0	17	93	2.18	1.6	24.8
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1912	47	108	3.40	0.4	8.9
3	0.76	2229.94	47.23	128.31	392.30	3.96	0.00	2382	63	114	2.51	0.8	9.0
4	1.43	974.57	-124.69	158.75	837.45	-0.10	0.00	3759	53	118	3.58	2.0	7.8
5	1.21	2514.53	-137.37	251.32	1682.73	1.11	2.37	4909	67	124	3.54	4.0	10.0
6	1.24	769.51	-170.77	133.31	1398.32	-0.11	1.49	5556	65	129	3.64	1.2	9.0
7	1.64	2468.47	191.34	384.71	2305.37	3.14	0.00	6467	63	123	4.04	1.2	10.0
8	1.93	3306.64	-117.47	263.34	537.80	2.99	2.95	7732	44	121	2.70	1.2	4.0
9	1.60	1390.61	44.75	531.83	881.94	1.29	7.20	0	85	118	2.52	3.6	17.0
10	0.07	700.64	-153.30	-4.43	-698.39	0.61	0.00	1549	37	106	2.78	0.8	9.9
11	0.89	2100.67	1186.18	190.59	3451.39	2.46	0.00	2730	64	112	2.83	2.4	10.0
12	2.40	-981.90	657.10	66.52	2655.79	-2.18	0.00	3520	64	112	3.61	1.2	8.8
13	1.28	561.35	537.70	125.96	2624.78	-0.30	1.65	4227	63	115	3.24	2.0	6.5
14	1.61	1405.04	432.73	197.04	2542.45	0.46	1.99	5058	65	118	3.73	1.2	10.0
15	1.90	401.01	418.49	195.95	2833.14	-0.64	1.93	5586	67	123	4.04	2.8	10.0
16	2.18	4342.94	310.79	407.98	2708.27	2.60	0.00	6523	78	126	3.36	3.6	8.0
17	2.28	3279.40	320.87	405.28	2982.73	1.60	0.00	6555	77	129	3.79	2.0	8.0

VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
CL2	17	1.39588235	0.70510690	23.73000000	0	2.40000000
DET1	17	1537.33058824	1369.41784781	26134.62000000	-981.90000000	4342.94000000
DET2	17	202.91117647	365.00697666	3449.49000000	-170.77000000	1186.18000000
DET3	17	219.45294118	148.99895628	3730.70000000	-4.43000000	531.83000000
DET4	17	1590.79411765	1276.62832779	27043.50000000	-698.39000000	3451.39000000
FD1	17	1.17117647	1.66600526	19.91000000	-2.18000000	3.96000000
FD2	17	1.41647059	2.01445384	24.08000000	0	7.20000000
MIL	17	4027.35294118	2328.02093905	68465.00000000	0	7732.00000000
FE	17	59.94117647	16.38776445	1019.00000000	17.00000000	85.00000000
VIS	17	117.00000000	9.18558654	1989.00000000	93.00000000	129.00000000
TAN	17	3.26411765	0.57016509	55.49000000	2.18000000	4.04000000
TS	17	1.88235294	1.07484609	32.00000000	0.40000000	4.00000000
COB	17	10.10000000	4.56631690	171.70000000	4.00000000	24.80000000

CL2

CL2	DET3	MIL	VIS	DET3	FE	TAN	TS	DET1	DET2	COB	FD1	FD2
1.00000	0.62932	0.60148	0.58314	0.53590	0.51485	0.43882	0.38922	0.29188	0.24039	-0.22513	-0.13671	0.06133

DET1

DET1	FD1	DET3	MIL	VIS	TS	FE	CL2	COB	DET4	FD2	DET2	TAN
1.00000	0.73379	0.62993	0.52502	0.50813	0.38551	0.32600	0.29188	-0.24018	0.21218	-0.05957	-0.05341	-0.04810

DET2

DET2	DET4	FE	FD2	CL2	TAN	TS	FD1	COB	DET1	MIL	VIS	DET3
1.00000	0.78004	0.32782	-0.24717	0.24039	0.14906	0.13378	-0.11980	-0.10350	-0.05341	0.05157	-0.03188	0.00286

DET3

DET3	DET1	TS	CL2	FD2	FD1	FE	VIS	COB	DET4	MIL	TAN	DET2
1.00000	0.62993	0.61503	0.53590	0.50351	0.48217	0.45053	0.38285	0.30928	0.28461	0.19191	-0.04158	0.00286

DET4

DET4	DET2	FE	CL2	TAN	VIS	MIL	TS	COB	DET3	FD2	DET1	FD1
1.00000	0.78004	0.65837	0.62032	0.58336	0.52718	0.52474	0.40041	-0.30498	0.28461	-0.23954	0.21218	-0.18003

FD1

FD1	DET1	TAN	DET3	COB	DET4	CL2	FE	DET2	FD2	VIS	TS	MIL
1.00000	0.73379	-0.49604	0.48217	0.20843	-0.18003	-0.13671	-0.13060	-0.11980	0.09588	-0.05804	0.03931	0.03309

FD2

FD2	COB	DET3	TAN	TS	MIL	DET2	DET4	VIS	FD1	CL2	DET1	FE
1.00000	0.60897	0.50351	-0.45174	0.39525	-0.35231	-0.24717	-0.23954	-0.14950	0.09588	0.06133	-0.05957	-0.01294

MIL

MIL	VIS	COB	TAN	CL2	DET1	DET4	FD2	FE	DET3	TS	DET2	FD1
1.00000	0.78729	-0.68717	0.64476	0.60148	0.52502	0.52474	-0.35231	0.34916	0.19191	0.08561	0.05157	0.03309

FE

FE	VIS	DET4	TS	CL2	DET3	TAN	COB	MIL	DET2	DET1	FD1	FD2
1.00000	0.76438	0.65837	0.53608	0.51485	0.45053	0.44197	-0.35630	0.34916	0.32782	0.32600	-0.13060	-0.01294

VIS

VIS	MIL	FE	TAN	COB	CL2	DET4	DET1	DET3	TS	FD2	FD1	DET2
1.00000	0.78729	0.76438	0.63940	-0.59811	0.58314	0.52718	0.50813	0.38285	0.37476	-0.14950	-0.05804	-0.03188

TAN

TAN	MIL	VIS	DET4	FD1	COB	FD2	FE	CL2	DET2	TS	DET1	DET3
1.00000	0.64476	0.63940	0.58336	-0.49604	-0.47678	-0.45174	0.44197	0.43882	0.14906	0.05550	-0.04810	-0.04158

TS

TS	DET3	FE	DET4	FD2	CL2	DET1	VIS	COB	DET2	MIL	TAN	FD1
1.00000	0.61503	0.53608	0.40041	0.39525	0.38922	0.38551	0.37476	0.15179	0.13378	0.08561	0.05550	0.03931

COB

COB	MIL	FD2	VIS	TAN	FE	DET3	DET4	DET1	CL2	FD1	TS	DET2
1.00000	-0.68717	0.60897	-0.59811	-0.47678	-0.35630	0.30928	-0.30498	-0.24018	-0.22513	0.20843	0.15179	-0.10350

F

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VARIABLE=CL2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	2.4	99%	2.4	LOWEST	HIGHEST
MEAN	1.395588	SUM	23.73	75% Q3	1.915	95%	2.4	0	1.9
STD DEV	0.705107	VARIANCE	0.497176	50% MED	1.6	90%	2.304	0.07	1.93
SKEWNESS	-0.602736	KURTOSIS	-0.205558	25% Q1	0.9	10%	0.0559999	0.76	2.18
USS	41.0791	CSS	7.95481	0% MIN	0	5%	0	0.89	2.28
CV	50.5133	STD MEAN	0.171014			1%	0	0.91	2.4
T:MEAN=0	8.16241	PROB>|T|	0.0001	RANGE	2.4				
SGN RANK	68	PROB>|S|	.000482403	Q3-Q1	1.015				
NUM ^= 0	16			MODE	0				

VARIABLE=DET1

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	4342.94	99%	4342.94	LOWEST	HIGHEST
MEAN	1537.33	SUM	26134.6	75% Q3	2491.5	95%	4342.94	-981.9	2468.47
STD DEV	1369.42	VARIANCE	1875305	50% MED	1390.61	90%	3513.9	0	2514.53
SKEWNESS	0.310874	KURTOSIS	-0.215426	25% Q1	616.275	10%	-196.381	401.01	3279.4
USS	70182435	CSS	30004884	0% MIN	-981.9	5%	-981.9	561.35	3306.64
CV	89.0776	STD MEAN	332.133			1%	-981.9	671.2	4342.94
T:MEAN=0	4.628666	PROB>|T|	.000270426	RANGE	5324.84				
SGN RANK	61	PROB>|S|	0.00175772	Q3-Q1	1875.22				
NUM ^= 0	16			MODE	-981.9				

VARIABLE=DET2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	1186.18	99%	1186.18	LOWEST	HIGHEST
MEAN	202.911	SUM	3449.49	75% Q3	425.61	95%	1186.18	-170.77	418.49
STD DEV	365.007	VARIANCE	133230	50% MED	47.23	90%	762.914	-153.3	432.73
SKEWNESS	1.2794	KURTOSIS	1.83583	25% Q1	-121.08	10%	-156.794	-137.37	531.7
USS	2831622	CSS	2131681	0% MIN	-170.77	5%	-170.77	-124.69	657.1
CV	179.895	STD MEAN	88.5272			1%	-170.77	-117.47	1186.18
T:MEAN=0	2.292018	PROB>|T|	0.0357985	RANGE	1356.95				
SGN RANK	38	PROB>|S|	0.0524917	Q3-Q1	546.69				
NUM ^= 0	16			MODE	-170.77				

VARIABLE=DET3

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	531.83	99%	531.83	LOWEST	HIGHEST
MEAN	219.453	SUM	3730.7	75% Q3	339.475	95%	531.83	-4.43	294.24
STD DEV	148.999	VARIANCE	22200.7	50% MED	195.95	90%	432.75	0	384.71
SKEWNESS	0.445283	KURTOSIS	-0.265861	25% Q1	127.135	10%	-0.886003	66.52	405.28
USS	1173924	CSS	355211	0% MIN	-4.43	5%	-4.43	125.96	407.98
CV	67.8956	STD MEAN	36.1376			1%	-4.43	128.31	531.83
T:MEAN=0	6.07271	PROB>|T|	0.0001	RANGE	536.26				
SGN RANK	67	PROB>|S|	.000584659	Q3-Q1	212.34				
NUM ^= 0	16			MODE	-4.43				

UNIVARIATE

VARIABLE=DET4

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	3451.39	99%	3451.39	LOWEST	HIGHEST
MEAN	1590.79	SUM	27043.5	75% Q3	2682.03	95%	3451.39	-698.39	2655.79
STD DEV	1276.64	VARIANCE	1629780	50% MED	1682.73	90%	3076.46	-92.57	2708.27
SKEWNESS	-0.288703	KURTOSIS	-1.29294	25% Q1	465.05	10%	-213.734	0	2833.14
USS	69097119	CSS	2607678	0% MIN	-698.39	5%	-698.39	392.3	2982.73
CV	80.251	STD MEAN	309.628			1%	-698.39	537.8	3451.39
T:MEAN=0	5.13776	PROB>|T|	0.0001	RANGE	4149.78				
SGN RANK	63	PROB>|S|	0.00123014	Q3-Q1	2216.98				
NUM ^= 0	16			MODE	-698.39				

VARIABLE=ED1

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	3.96	99%	3.96	LOWEST	HIGHEST
MEAN	1.17118	SUM	19.91	75% Q3	2.795	95%	3.96	-2.18	2.6
STD DEV	1.666601	VARIANCE	2.77557	50% MED	1.11	90%	3.304	-0.64	2.99
SKEWNESS	-0.0929527	KURTOSIS	-0.651945	25% Q1	-0.105	10%	-0.948001	-0.3	3.02
USS	67.7273	CSS	44.4092	0% MIN	-2.18	5%	-2.18	-0.11	3.14
CV	142.251	STD MEAN	0.404066			1%	-2.18	-0.1	3.96
T:MEAN=0	2.898448	PROB>|T|	0.010474	RANGE	6.14				
SGN RANK	46	PROB>|S|	0.0186352	Q3-Q1	2.9				
NUM ^= 0	16			MODE	-2.18				

VARIABLE=ED2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	7.2	99%	7.2	LOWEST	HIGHEST
MEAN	1.41647	SUM	24.08	75% Q3	2.18	95%	7.2	0	1.99
STD DEV	2.01445	VARIANCE	4.05802	50% MED	0	90%	5.03999	0	2.37
SKEWNESS	1.75037	KURTOSIS	3.26699	25% Q1	0	10%	0	0	2.95
USS	99.037	CSS	64.9284	0% MIN	0	5%	0	0	4.5
CV	142.216	STD MEAN	0.488577			1%	0	0	7.2
T:MEAN=0	2.899118	PROB>|T|	0.0104589	RANGE	7.2				
SGN RANK	18	PROB>|S|	0.0142662	Q3-Q1	2.18				
NUM ^= 0	8			MODE	0				

VARIABLE=MIL

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	7732	99%	7732	LOWEST	HIGHEST
MEAN	4027.35	SUM	68465	75% Q3	6026.5	95%	7732	0	5586
STD DEV	2328.02	VARIANCE	5419681	50% MED	4227	90%	6790.4	0	6467
SKEWNESS	-0.313916	KURTOSIS	-0.833736	25% Q1	2147	10%	0	1549	6523
USS	362447423	CSS	86714904	0% MIN	0	5%	0	1912	6555
CV	57.8052	STD MEAN	564.626			1%	0	2382	7732
T:MEAN=0	7.13275	PROB>|T|	0.0001	RANGE	7732				
SGN RANK	60	PROB>|S|	.000726514	Q3-Q1	3879.5				
NUM ^= 0	15			MODE	0				

UNIVARIATE

VARIABLE=FE

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	85	99%	85	LOWEST	HIGHEST
MEAN	59.9412	SUM	1019	75% Q3	67	95%	85	17	67
STD DEV	16.3876	VARIANCE	268.559	50% MED	64	90%	79.4	37	67
SKEWNESS	-1.12721	KURTOSIS	1.85395	25% Q1	50	10%	33	44	77
USS	65377	CSS	4296.94	0% MIN	17	5%	17	47	78
CV	27.3397	STD MEAN	3.97462			1%	17	53	85
T:MEAN=0	15.081	PROB>|T|	0.0001	RANGE	68				
SGN RANK	76.5	PROB>|S|	.000316717	Q3-Q1	17				
NUM ^= 0	17			MODE	63				

VARIABLE=VIS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	129	99%	129	LOWEST	HIGHEST
MEAN	117	SUM	1989	75% Q3	123.5	95%	129	93	123
STD DEV	9.18559	VARIANCE	84.375	50% MED	118	90%	129	106	124
SKEWNESS	-1.01831	KURTOSIS	1.5572	25% Q1	112	10%	103.4	108	126
USS	234063	CSS	1350	0% MIN	93	5%	93	112	129
CV	7.85093	STD MEAN	2.22783			1%	93	112	129
T:MEAN=0	52.5174	PROB>|T|	0.0001	RANGE	36				
SGN RANK	76.5	PROB>|S|	.000316717	Q3-Q1	11.5				
NUM ^= 0	17			MODE	118				

VARIABLE=TS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	4	99%	4	LOWEST	HIGHEST
MEAN	1.88235	SUM	32	75% Q3	2.6	95%	4	0.4	2.4
STD DEV	1.07485	VARIANCE	1.15529	50% MED	1.6	90%	3.68	0.8	2.8
SKEWNESS	0.749749	KURTOSIS	-0.452648	25% Q1	1.2	10%	0.72	0.8	3.6
USS	78.72	CSS	18.4847	0% MIN	0.4	5%	0.4	1.2	3.6
CV	57.1012	STD MEAN	0.260686			1%	0.4	1.2	4
T:MEAN=0	7.2207	PROB>|T|	0.0001	RANGE	3.6				
SGN RANK	76.5	PROB>|S|	.000305173	Q3-Q1	1.4				
NUM ^= 0	17			MODE	1.2				

VARIABLE=COB

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
N	17	SUM WGTS	17	100% MAX	24.8	99%	24.8	LOWEST	HIGHEST
MEAN	10.1	SUM	171.7	75% Q3	10	95%	24.8	4	10
STD DEV	4.56632	VARIANCE	20.8513	50% MED	9	90%	18.56	6.5	10
SKEWNESS	2.37823	KURTOSIS	6.93958	25% Q1	8	10%	6	7.8	10
USS	2067.79	CSS	333.62	0% MIN	4	5%	4	8	17
CV	45.2111	STD MEAN	1.10749			1%	4	8	24.8
T:MEAN=0	9.11968	PROB>|T|	0.0001	RANGE	20.8				
SGN RANK	76.5	PROB>|S|	.000307578	Q3-Q1	2				
NUM ^= 0	17			MODE	10				

APPENDIX J
1977 GM OLDS 350 CID V8 ENGINE
ASTM SEQUENCE III-D TEST

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* These models were all developed early in the study and are based on a slightly different data collection methodology than that outlined in Table 1.

TABLE J-1

PRELIMINARY INFRARED PEAKS AND REGIONS USED FOR ASTM III-D CALCULATIONS

IR VARIABLE	PEAK/REGION	CONTAMINATION/DETERIORATION PRODUCT
CL1	3800 cm^{-1}	carbon loading (soot)
CL2	1980 cm^{-1}	carbon loading (soot)
Det 1	3400 cm^{-1}	hydroxyl
Det 2	1764 cm^{-1}	oxidation
Det 3	1710 cm^{-1}	oxidation
Det 4	1618 cm^{-1}	nitration/carboxylates
Det 5	1590 cm^{-1}	aromatic
Det 6	1396 cm^{-1}	oxidation/nitration
Det 7	1456 cm^{-1}	oxidation/nitration
Det 8	1226 cm^{-1}	oxidation/nitration/sulfation
Det 9	1130 cm^{-1}	oxidation/sulfation
Det 10	1100 cm^{-1}	oxidation/sulfation
Det 11	1070 cm^{-1}	oxidation
Det 12	490 cm^{-1}	aromatic
Det 13	660 cm^{-1}	ZDDP depletion
Det 14	2640 cm^{-1}	carboxylic acid
Det I1	3600-3060 cm^{-1}	hydroxyl
Det I2	1880-1650 cm^{-1}	oxidation
Det I3	1880-1520 cm^{-1}	oxidation/nitration/carboxylates
Det I4	1650-1520 cm^{-1}	nitration/carboxylates
Det I5	1300-1000 cm^{-1}	oxidation/nitration/sulfation

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FD13	ZN1	HRS	FE	VIS	TAN	TS	COB	GC
1	0.60	20.1	2.07	-19.76	-7.6	-0.52	0.38	0.67	-0.31	0.167	43	198	1.42	0.4	57.0	.
2	1.59	45.5	57.32	69.47	252.6	-0.48	1.54	22.92	-2.22	4.000	202	213	1.79	0.8	41.0	.
3	1.01	-504.1	168.37	260.71	1101.4	-1.13	3.78	-125.51	-3.02	8.000	633	249	2.50	1.2	8.5	.
4	1.18	-216.6	822.49	866.80	3796.2	-0.86	9.34	65.13	-2.47	16.000	818	318	4.00	2.0	8.5	.
5	3.08	4237.3	5481.97	3152.79	15278.2	10.43	0.00	1365.18	0.50	24.000	924	.	14.17	3.2	16.0	.
6	3.65	5074.4	6529.91	4168.73	17433.4	13.52	0.00	1833.82	1.50	32.000	941	.	18.38	7.2	9.0	.
7	4.52	5576.7	6713.71	4723.57	18336.5	14.46	0.00	1990.02	2.05	40.000	978	.	17.09	12.0	3.5	.
8	5.61	5226.7	7375.45	4847.91	19173.7	14.24	0.00	1977.25	1.79	48.000	938	.	16.10	14.0	3.0	.
9	5.52	5218.8	7070.87	5069.30	18797.0	14.11	0.00	2020.67	2.00	56.000	910	.	19.46	32.0	3.0	.
10	7.72	.	.	.	.	.	0.00	.	.	64.000	790	.	16.18	48.0	2.0	.
11	0.33	16.0	-47.02	-18.92	-113.9	-0.42	0.00	-4.61	-0.91	0.167	23	80	3.10	0.4	10.0	.
12	0.67	193.0	12.11	86.72	128.7	-0.52	1.29	-22.18	-5.58	4.000	91	85	3.24	0.8	10.5	.
13	0.24	-728.1	179.25	390.66	1234.2	-1.48	0.00	-182.00	-9.38	8.000	212	100	3.99	1.2	8.0	.
14	0.46	-662.7	287.07	560.66	2007.5	-1.45	5.77	-242.38	-9.65	16.000	248	112	4.53	2.0	9.0	.
15	0.45	-697.4	451.21	778.58	2837.8	-1.45	0.00	-235.77	-9.96	24.000	270	125	4.92	4.8	11.0	.
16	0.70	-36.9	793.99	1146.77	4424.4	-0.46	0.00	-131.44	-9.65	32.000	295	145	7.09	6.0	16.0	.
17	1.44	1919.8	2788.21	2397.42	10498.1	4.04	0.00	584.10	-7.21	40.000	352	295	11.81	8.0	23.0	.
18	2.14	2256.5	4042.76	3158.63	13032.1	6.06	0.00	930.67	-7.01	48.000	444	660	15.44	12.0	21.0	.
19	2.93	2916.0	5015.26	3960.03	15162.2	7.59	0.00	1318.15	-6.44	56.000	478	1100	16.07	16.0	16.0	.
20	3.39	3436.6	5490.10	4363.28	16220.1	8.56	0.00	1446.40	-5.85	64.000	386	1700	16.80	22.0	13.0	.
21	0.55	-19.7	-32.68	5.39	-109.6	0.30	0.00	39.57	-0.28	0.167	19	92	3.23	0.4	25.0	.
22	0.49	241.8	21.68	79.50	179.9	0.11	1.30	36.21	-3.95	4.000	82	94	3.12	0.4	18.0	.
23	0.24	-1264.9	181.33	310.12	1307.8	-0.67	4.24	-116.27	-8.66	8.000	170	102	3.72	1.2	14.5	.
24	0.21	-1415.1	265.50	405.00	2021.0	-0.53	5.23	-174.65	-9.15	16.000	195	110	4.40	2.0	14.0	.
25	0.25	-1021.2	380.12	514.81	2830.6	-0.13	5.96	-174.59	-9.46	24.000	200	120	4.89	3.2	15.0	.
26	0.25	-1486.0	473.37	611.56	3479.1	-0.14	7.22	-227.36	-9.91	32.000	224	130	5.23	4.0	15.0	.
27	0.25	-788.8	539.83	736.83	3911.1	0.76	8.24	-183.29	-9.59	40.000	240	140	6.60	4.0	16.0	.
28	0.40	498.3	630.04	927.79	4545.3	1.50	0.00	-79.44	-8.72	48.000	226	160	6.96	4.8	18.0	.
29	0.37	-751.3	786.85	1056.98	5331.0	0.93	0.00	-135.43	-9.71	56.000	243	163	7.58	4.8	18.0	.
30	1.60	3252.7	2462.26	2437.79	11128.7	5.33	0.00	563.80	-7.27	64.000	307	294	13.96	6.0	35.0	.
31	0.44	-10.6	-33.09	-5.32	-85.5	-0.67	0.00	-3.95	-0.30	0.167	20	150	3.07	0.4	33.0	.
32	0.70	385.8	34.14	194.04	114.6	-0.75	0.00	-181.79	-3.32	4.000	155	167	4.16	0.4	36.0	.
33	1.36	-2016.5	181.82	382.59	1233.0	-2.57	0.00	-220.50	-4.84	8.000	740	205	4.35	0.4	21.0	.
34	1.71	-2031.7	276.13	561.22	2070.0	-2.76	0.00	-374.90	-4.94	16.000	998	240	4.88	2.0	19.0	.
35	1.60	-2002.2	422.05	778.76	2975.9	-2.43	8.57	-373.39	-4.92	24.000	.	280	5.99	2.4	21.0	.
36	1.72	-2001.3	632.77	1061.82	4312.6	-3.12	0.00	-299.88	-4.36	32.000	.	330	6.96	2.4	24.0	.
37	2.00	-1001.9	1707.10	1724.03	8013.0	-0.78	16.44	39.37	-3.45	40.000	.	465	9.51	3.2	28.0	.
38	2.96	576.9	3809.36	2807.71	12749.2	4.23	0.00	730.90	-1.94	48.000	.	905	14.77	4.0	27.0	.
39	3.40	1130.2	4743.86	3426.22	15115.6	6.18	0.00	1042.44	-1.08	56.000	.	1600	17.11	4.0	19.0	.
40	3.63	1095.1	5102.02	3766.61	16074.8	6.44	0.00	1136.53	-0.87	66.000	.	2890	17.24	4.0	14.0	.
41	0.41	4190.5	12.65	-50.29	699.8	4.59	0.00	275.56	1.01	0.167	43	180	1.72	0.4	5.0	.
42	0.79	626.3	55.97	78.34	305.1	0.05	1.32	18.36	-3.65	4.000	134	200	2.19	0.8	7.0	.
43	0.56	-619.8	141.51	281.15	1030.3	-1.46	0.00	-162.07	-7.54	8.000	225	230	2.90	1.2	4.0	.
44	0.58	-116.8	252.61	471.94	1715.4	-0.96	5.05	-147.03	-7.41	16.000	280	245	3.12	1.6	5.0	.
45	0.46	-205.4	497.47	729.67	2799.2	-0.78	0.00	-107.81	-7.25	24.000	259	280	4.01	2.4	3.0	.
46	0.81	1129.8	1157.29	1278.56	5268.7	1.19	0.00	134.46	-6.32	32.000	253	340	6.51	3.2	9.0	.
47	1.56	1912.8	3455.18	2198.01	11349.3	5.19	0.00	702.45	-5.55	40.000	297	570	11.20	4.0	15.0	.
48	2.45	3384.4	5293.61	3131.72	15254.4	9.15	0.00	1261.56	-4.00	48.000	365	1160	15.80	6.8	14.0	.
49	2.93	3895.9	6235.36	3855.38	17031.3	10.81	0.00	1635.06	-3.35	56.000	434	1860	19.28	8.8	10.0	.
50	3.47	4959.9	6891.53	4516.18	19219.9	13.25	0.00	1984.95	-2.20	64.000	473	4900	20.15	16.0	7.0	.
51	0.52	-34.1	-22.31	8.81	-109.4	0.47	0.34	-1.86	-0.25	0.167	51	110	2.07	0.4	32.0	.
52	1.33	-366.0	34.29	137.39	175.6	-0.20	1.91	-178.99	-3.73	4.000	209	112	3.66	0.4	24.0	.
53	1.13	-671.5	234.56	439.28	1402.2	0.21	4.99	-411.27	-5.01	8.000	676	133	3.78	1.2	16.0	.
54	1.10	-446.3	448.17	771.45	2579.0	0.61	0.00	-453.06	-5.37	16.000	998	155	4.04	2.0	18.0	.
55	2.33	2847.6	3175.94	2503.08	11027.2	5.68	0.00	363.39	-3.65	24.000	998	365	9.91	3.2	33.0	.
56	3.80	5516.6	5876.83	4603.52	20388.2	12.54	0.00	1469.75	-0.87	32.000	998	.	16.65	8.8	16.0	.
57	3.86	4955.1	6464.25	5361.98	22948.1	12.77	0.00	1713.00	-0.96	40.000	734	.	23.00	16.8	4.0	.

J-3

VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
CL2	57	1.74473684	1.62374029	99.4500000	0.21000000	7.72000000
DET1	56	993.22250000	2266.52084282	55620.4600000	-2031.69000000	5576.72000000
DET2	56	2071.86553571	2529.86993675	116024.4700000	-47.02000000	7375.45000000
DET3	56	1643.98160714	1699.85080421	92062.9700000	-50.29000000	5361.98000000
DET4	56	6962.06178571	7131.14704623	389875.4600000	-113.86000000	22948.13000000
FD1	56	3.01035714	5.27954611	168.5800000	-3.12000000	14.46000000
FD2	57	1.63000000	3.24518600	92.9100000	0	16.44000000
FDI3	56	388.40928571	766.45660938	21750.9200000	-453.06000000	2020.67000000
ZN1	56	-4.36857143	3.59043093	-244.6400000	-9.96000000	2.05000000
HRS	57	27.84214035	21.11644371	1587.0020000	0.16700000	66.00000000
FE	51	416.11764706	323.13338714	21222.0000000	19.00000000	998.00000000
VIS	49	507.28571429	848.60819876	24857.0000000	80.00000000	4900.00000000
TAN	57	8.69964912	6.24951311	495.8800000	1.42000000	23.00000000
TS	57	5.82456140	8.30525395	332.0000000	0.40000000	48.00000000
COB	57	16.51754386	10.81168552	941.5000000	2.00000000	57.00000000

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

CL2

CL2	DET2	DET3	DET4	FDI3	FD1	TAN	TS	DET1	VIS	FE	HRS	ZN1	COB
1.00000	0.92839	0.92306	0.89945	0.89750	0.87096	0.82767	0.80322	0.76943	0.76640	0.69247	0.64550	0.60680	-0.27132
57	56	56	56	56	56	57	57	56	49	51	57	56	57

FD2	GC
-0.25092	0.00000
57	0

DET1

DET1	FD1	FDI3	DET2	DET3	DET4	TAN	CL2	TS	VIS	ZN1	HRS	FE	FD2
1.00000	0.95290	0.91807	0.86370	0.83282	0.83252	0.78583	0.76943	0.66805	0.59635	0.55666	0.50105	0.46926	-0.42460
56	56	56	56	56	56	56	56	56	49	56	56	50	56

COB	GC
-0.26940	0.00000
56	0

DET2

DET2	DET3	DET4	FDI3	TAN	FD1	CL2	DET1	VIS	TS	HRS	FE	ZN1	FD2
1.00000	0.98455	0.98306	0.97390	0.96464	0.95846	0.92839	0.86370	0.81747	0.76680	0.74213	0.60627	0.46575	-0.29882
56	56	56	56	56	56	56	56	49	56	56	50	56	56

COB	GC
-0.28701	0.00000
56	0

DET3

DET3	DET4	DET2	TAN	FDI3	FD1	CL2	DET1	TS	HRS	VIS	FE	ZN1	COB
1.00000	0.99260	0.98455	0.97804	0.94241	0.92971	0.92306	0.83282	0.80605	0.79115	0.77721	0.62324	0.39231	-0.28335
56	56	56	56	56	56	56	56	56	56	49	50	56	56

FD2	GC
-0.27227	0.00000
56	0

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

DET4

DET4	DET3	TAN	DET2	FDI3	FD1	CL2	DET1	HPS	VIS	TS	FE	ZN1	COR
1.00000	0.99260	0.98354	0.98306	0.93615	0.92982	0.89945	0.83252	0.80122	0.76776	0.75688	0.60915	0.38172	-0.26406
56	56	56	56	56	56	56	56	56	49	56	50	56	56

FD2	GC
-0.25826	0.00000
56	0

FD1

FD1	FDI3	DET2	DET1	DET4	DET3	TAN	CL2	VIS	TS	HRS	FE	ZN1	FD2
1.00000	0.97437	0.95846	0.95290	0.92982	0.92971	0.89687	0.87096	0.77209	0.74198	0.63260	0.55835	0.53235	-0.35900
56	56	56	56	56	56	56	56	49	56	56	50	56	56

COR	GC
-0.29991	0.00000
56	0

FD2

FD2	DET1	FD1	FDI3	DET2	TAN	DET3	DET4	ZN1	CL2	TS	VIS	HRS	FE
1.00000	-0.42460	-0.35900	-0.35261	-0.29882	-0.27370	-0.27227	-0.25826	-0.25577	-0.25092	-0.19371	-0.18364	-0.12507	-0.10817
57	56	56	56	56	57	56	56	56	57	57	49	57	51

COR	GC
0.01330	0.00000
57	0

FDI3

FDI3	FD1	DET2	DET3	DET4	DET1	TAN	CL2	VIS	TS	HRS	ZN1	FE	FD2
1.00000	0.97437	0.97390	0.94241	0.93615	0.91807	0.91604	0.89750	0.82199	0.76362	0.65289	0.55489	0.50265	-0.35261
56	56	56	56	56	56	56	56	49	56	56	56	50	56

COR	GC
-0.29330	0.00000
56	0

ZN1

ZN1	CL2	DET1	FDI3	FD1	DET2	DET3	DET4	FE	TAN	VIS	FD2	TS	COR
1.00000	0.60680	0.55666	0.55489	0.53235	0.46575	0.39231	0.38172	0.35957	0.33793	0.27447	-0.25577	0.18891	0.07539
56	56	56	56	56	56	56	56	50	56	49	56	56	56

HRS	GC
-0.04161	0.00000
56	0

HRS

HRS	TAN	DET4	DET3	DET2	FDI3	CL2	TS	FD1	VIS	DET1	FE	COR	FD2
1.00000	0.84034	0.80122	0.79115	0.74213	0.65289	0.64550	0.63846	0.63260	0.63055	0.50105	0.35931	-0.22153	-0.12507
57	57	56	56	56	56	57	57	56	49	56	51	57	57

ZN1	GC
-0.04161	0.00000
56	0

FE

FE	CL2	DET3	DET4	DET2	FD1	TAN	FDI3	DET1	TS	ZN1	HRS	COR	VIS
1.00000	0.69247	0.62324	0.60915	0.60627	0.55835	0.55783	0.50265	0.46926	0.40885	0.35957	0.35931	-0.26923	0.17754
51	51	50	50	50	50	51	50	50	51	50	51	51	43

FD2	GC
-0.10817	0.00000
51	0

VIS

VIS	FDI3	DET2	DET3	FD1	DET4	CL2	TAN	HRS	TS	DET1	ZN1	FD2	FE
1.00000	0.82199	0.81747	0.77721	0.77209	0.76776	0.76640	0.76581	0.63055	0.61354	0.59635	0.27447	-0.18364	0.17754
49	49	49	49	49	49	49	49	49	49	49	49	49	43

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

VIS

COB	GC
-0.17551	0.00000
49	0

TAN

TAN	DET4	DET3	DET2	FDI3	FD1	HRS	CL2	DET1	VIS	TS	FE	ZN1	FD2
1.00000	0.98354	0.97804	0.96464	0.91604	0.89687	0.84034	0.82767	0.78583	0.76581	0.65938	0.55783	0.33793	-0.27370
57	56	56	56	56	56	57	57	56	49	57	51	56	57

COB	GC
-0.25775	0.00000
57	0

TS

TS	DET3	CL2	DET2	FDI3	DET4	FD1	DET1	TAN	HRS	VIS	FE	COB	FD2
1.00000	0.80605	0.80322	0.76680	0.76362	0.75688	0.74198	0.66805	0.65938	0.63846	0.61354	0.40885	-0.36262	-0.19371
57	56	57	56	56	56	56	56	57	57	49	51	57	57

ZN1	GC
0.18891	0.00000
56	0

COB

COB	TS	FD1	FDI3	DET2	DET3	CL2	DET1	FE	DET4	TAN	HRS	VIS	ZN1
1.00000	-0.36262	-0.29991	-0.29330	-0.28701	-0.28335	-0.27132	-0.26940	-0.26923	-0.26406	-0.25775	-0.22153	-0.17551	0.07539
57	57	56	56	56	56	57	56	51	56	57	57	49	56

FD2	GC
0.01330	0.00000
57	0

GC

CL2	DET1	DET2	DET3	DET4	FD1	FD2	FDI3	ZN1	HRS	FE	VIS	TAN	TS
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0	0	0	0	0	0	0	0	0	0	0	0	0	0

COB	GC
0.00000	0.00000
0	0

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE LVI

WARNING: 4 OBSERVATIONS DELETED DUE TO MISSING VALUES.

STEP 1 VARIABLE DET88 ENTERED R SQUARE = 0.87531597 C(P) = 69.80727000

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	43.32328829	43.32328829	336.97	0.0001
ERROR	48	6.17116835	0.12856601		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	5.04442058				
DET88	0.00075681	0.00004123	43.32328829	336.97	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE DET15 ENTERED R SQUARE = 0.88553775 C(P) = 62.31322248

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	43.82920560	21.91460480	181.81	0.0001
ERROR	47	5.66524704	0.12053717		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.94331058				
DET15	0.00476580	0.00232624	0.50592131	4.20	0.0461
DET88	0.00053429	0.00011572	2.56955406	21.32	0.0001

STEP 2 DET88 REPLACED BY DET1414 R SQUARE = 0.89489372 C(P) = 53.62333589

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	44.29227857	22.14613928	200.08	0.0001
ERROR	47	5.20217807	0.11068464		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.92498102				
DET15	0.00740552	0.00161630	2.32356739	20.99	0.0001
DET1414	0.01293856	0.00247184	3.03262303	27.40	0.0001

STEP 2 DET15 REPLACED BY DET8 R SQUARE = 0.90254746 C(P) = 46.51449923

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	44.67109613	22.33554807	217.64	0.0001
ERROR	47	4.82336051	0.10262469		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.95556592				
DET8	0.02485660	0.00484385	2.70238494	26.33	0.0001
DET1414	0.01096380	0.00258706	1.84315270	17.96	0.0001

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE LV1

STEP 3 VARIABLE DET38 ENTERED R SQUARE = 0.91144002 C(P) = 40.25503835

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	45.11122846	15.03707615	157.81	0.0001
ERROR	46	4.38322818	0.09528757		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.91307469				
DET8	0.03765103	0.00757643	2.35634636	24.73	0.0001
DET38	-0.00026178	0.00012180	0.44013233	4.62	0.0369
DET1414	0.01924666	0.00458592	1.67547105	17.58	0.0001

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

STEP 4 VARIABLE DET15 ENTERED R SQUARE = 0.91647525 C(P) = 37.57828482

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	45.36044454	11.34011113	123.44	0.0001
ERROR	45	4.13401211	0.09186694		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.86545315				
DET15	0.00364239	0.00239360	0.24921609	2.71	0.1065
DET8	0.02970475	0.00888237	1.02743184	11.18	0.0017
DET38	-0.00029453	0.00012124	0.54215519	5.90	0.0192
DET1414	0.01956578	0.00451148	1.73142034	18.85	0.0001

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE DET22 ENTERED R SQUARE = 0.91842694 C(P) = 37.76553942

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	45.45704259	9.09140852	99.08	0.0001
ERROR	44	4.03741405	0.09175941		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.85835819				
DET15	0.00387939	0.00239298	0.24115558	2.63	0.1121
DET22	0.00026577	0.00025803	0.09659805	1.05	0.3105
DET8	0.03504163	0.01028882	1.06435870	11.60	0.0014
DET38	-0.00047196	0.00021115	0.45841542	5.00	0.0305
DET1414	0.01646729	0.00543760	0.84154995	9.17	0.0041

STEP 6 DET1414 REPLACED BY DET1414 R SQUARE = 0.92098835 C(P) = 35.38648925

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	45.58381805	9.11676361	102.58	0.0001
ERROR	44	3.91063860	0.08887815		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.81326742				
DET15	0.00423254	0.00236232	0.28531276	3.21	0.0801
DET22	0.00053495	0.00021752	0.53755341	6.05	0.0179
DET8	0.04230631	0.01018726	1.53281909	17.25	0.0001
DET38	-0.00059787	0.00020911	0.72656833	8.17	0.0065
DET1414	0.13465274	0.04079454	0.96832541	10.89	0.0019

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE LVI

STEP 5 DET22 REPLACED BY DET142 R SQUARE = 0.92276428 C(P) = 33.73629321

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	45.67171683	9.13434337	105.14	0.0001
ERROR	44	3.82273982	0.08688045		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.82065348				
DET15	0.00403684	0.00233792	0.25902649	2.98	0.0912
DET142	0.00069888	0.00026048	0.62545219	7.20	0.0102
DET8	0.03688585	0.00911166	1.42379269	16.39	0.0002
DET38	-0.00051629	0.00016528	0.80819602	9.30	0.0039
DET1414	0.16942042	0.03937698	1.58937645	18.29	0.0001

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE DET4 ENTERED R SQUARE = 0.92677741 C(P) = 32.00958210

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	45.87034409	7.64505735	90.71	0.0001
ERROR	43	3.62411255	0.08428169		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.84363108				
DET4	-0.03380920	0.02202328	0.19862727	2.36	0.1321
DET15	0.00398795	0.00230291	0.25274195	3.00	0.0905
DET142	0.00089152	0.00028279	0.81895133	9.72	0.0033
DET8	0.05793743	0.01638655	1.05334417	12.50	0.0010
DET38	-0.00049059	0.00016756	0.72245034	8.57	0.0054
DET1414	0.11379204	0.05263507	0.39391864	4.67	0.0362

STEP 6 DET142 REPLACED BY DET24 R SQUARE = 0.92775748 C(P) = 31.09928664

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	45.91885216	7.65314203	92.04	0.0001
ERROR	43	3.57560449	0.08315359		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.93793084				
DET4	-0.05324728	0.02485245	0.38171345	4.59	0.0379
DET15	0.00444796	0.00228491	0.31511299	3.79	0.0581
DET24	0.00105119	0.00032546	0.86745940	10.43	0.0024
DET8	0.07176629	0.01862185	1.23422903	14.84	0.0004
DET38	-0.00062074	0.00019414	0.85011042	10.22	0.0026
DET1414	0.13564498	0.05118777	0.58392370	7.02	0.0112

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE LVI

STEP 7 VARIABLE DET214 ENTERED R SQUARE = 0.93255394 C(P) = 28.64430170

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	46.15625057	6.59375008	82.96	0.0001
ERROR	42	3.33820607	0.07948110		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.80955403				
DET4	-0.07147507	0.02648781	0.57873655	7.28	0.0100
DET15	0.00499270	0.00225601	0.38927253	4.90	0.0324
DET24	0.00142876	0.00038597	1.08910740	13.70	0.0006
DET8	0.07955996	0.01876747	1.42980845	17.99	0.0001
DET38	-0.00057317	0.00019175	0.70988441	8.93	0.0047
DET1414	0.31944832	0.11753831	0.58709207	7.39	0.0095
DET214	-0.01398344	0.00809105	0.23739841	2.99	0.0913

STEP 7 DET4 REPLACED BY DET44 R SQUARE = 0.93374247 C(P) = 27.54038477

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	46.21507635	6.60215377	84.56	0.0001
ERROR	42	3.27938029	0.07808049		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.75807156				
DET15	0.00467432	0.00223095	0.34275499	4.39	0.0422
DET44	-0.00203635	0.00071263	0.63756236	8.17	0.0066
DET24	0.00285000	0.00079638	0.99997531	12.81	0.0009
DET8	0.04766903	0.00998816	1.77846013	22.78	0.0001
DET38	-0.00066347	0.00019569	0.89750149	11.49	0.0015
DET1414	0.40391455	0.12373045	0.83208559	10.66	0.0022
DET214	-0.02191464	0.00937887	0.42629456	5.46	0.0243

STEP 7 DET38 REPLACED BY DET1414 R SQUARE = 0.94113271 C(P) = 20.67628771

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	46.58085220	6.65440746	95.92	0.0001
ERROR	42	2.91360444	0.06937153		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.82509797				
DET15	0.00448990	0.00209773	0.31778674	4.58	0.0382
DET44	-0.00266719	0.00071245	0.97225898	14.02	0.0005
DET24	0.00241184	0.00068558	0.84165025	12.13	0.0012
DET8	0.03416745	0.00733295	0.75349014	10.86	0.0020
DET1414	0.31923795	0.11578558	0.52732559	7.60	0.0086
DET214	-0.05754211	0.01219254	1.54512697	22.27	0.0001
DET1414	0.06022362	0.01413138	1.26327730	18.21	0.0001

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE LVI

STEP 7 DET44 REPLACED BY DET154 R SQUARE = 0.94239037 C(P) = 19.50817032

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	46.64309515	6.66329988	98.15	0.0001
ERROR	42	2.85135749	0.06788946		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.71972434				
DET15	0.00897624	0.00238759	0.95956324	14.13	0.0005
DET24	0.00313990	0.00084478	0.93788579	13.81	0.0006
DET154	-0.00137294	0.00035171	1.03450593	15.24	0.0003
DET8	0.04380272	0.00994265	1.31765124	19.41	0.0001
DET1414	0.35030602	0.11672101	0.61150424	9.01	0.0045
DET214	-0.04665826	0.01014271	1.43911674	21.20	0.0001
DET1414	0.05163466	0.01317216	1.04329852	15.37	0.0003

STEP 7 DET24 REPLACED BY DET22 R SQUARE = 0.94609808 C(P) = 16.06442669

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	7	46.82661027	6.68951575	105.31	0.0001
ERROR	42	2.66784638	0.06352015		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.75678890				
DET15	0.00701696	0.00210209	0.70779706	11.14	0.0018
DET22	0.00144487	0.00034388	1.12139691	17.65	0.0001
DET154	-0.00065119	0.00015476	1.12466772	17.71	0.0001
DET8	0.03158861	0.00782067	1.03629713	16.31	0.0002
DET1414	0.37466481	0.11341693	0.69308180	10.91	0.0020
DET214	-0.07010975	0.01345702	1.72413217	27.14	0.0001
DET1414	0.07281842	0.01431777	1.66302198	25.87	0.0001

THE ABOVE MODEL IS THE BEST 7 VARIABLE MODEL FOUND.

STEP 8 VARIABLE DET142 ENTERED R SQUARE = 0.95214036 C(P) = 12.45232205

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	47.12566958	5.89070871	101.96	0.0001
ERROR	41	2.36878706	0.05777529		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.74956614				
DET15	0.00791545	0.00204330	0.86701837	15.01	0.0004
DET22	0.00329544	0.00087102	0.81574271	14.12	0.0005
DET142	-0.00311316	0.00136634	0.29905931	5.18	0.0282
DET154	-0.00045151	0.00017172	0.39944652	6.91	0.0120
DET8	0.02370298	0.00822462	0.47986142	8.31	0.0063
DET1414	0.41571190	0.10966408	0.83022929	14.37	0.0005
DET214	-0.11322474	0.02288144	1.41393867	24.47	0.0001
DET1414	0.13257852	0.02960392	1.15875091	20.06	0.0001

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE LVI

STEP 8 DET8 REPLACED BY DET4 R SQUARE = 0.95360988 C(P) = 11.08742354

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	8	47.19840265	5.89980033	105.35	0.0001
ERROR	41	2.29605395	0.05600132		
TOTAL	49	49.49445664			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	4.70131145				
DET4	0.04594073	0.01462493	0.55259456	9.87	0.0031
DET15	0.00911946	0.00185716	1.35031795	24.11	0.0001
DET22	0.00394806	0.00083185	1.26145374	22.53	0.0001
DET42	-0.00373062	0.00126614	0.48618145	8.68	0.0053
DET154	-0.00070568	0.00022309	0.56034734	10.01	0.0029
DET414	0.45971090	0.10805662	1.01359648	18.10	0.0001
DET215	-0.12796431	0.02173357	1.94169729	34.67	0.0001
DET1414	0.15284321	0.02761441	1.71561138	30.64	0.0001

THE ABOVE MODEL IS THE BEST 8 VARIABLE MODEL FOUND.

B

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TAN

STEP 1 VARIABLE DETIS ENTERED R SQUARE = 0.96890130 C(P) = 14.93827212

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	2015.35863325	2015.35863325	1620.10	0.0001
ERROR	52	64.68670008	1.24397500		
TOTAL	53	2080.04533333			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.59033794				
DETIS	0.08572313	0.00212975	2015.35863325	1620.10	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE DETII ENTERED R SQUARE = 0.97397287 C(P) = 6.34816549

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	2025.90771362	1012.95385681	954.25	0.0001
ERROR	51	54.13761971	1.06152196		
TOTAL	53	2080.04533333			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	2.53409340				
DETIS	0.09184919	0.00276531	1171.09476364	1103.22	0.0001
DETII	-0.01386969	0.00439571	10.54908037	9.94	0.0027

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

STEP 1 VARIABLE DET44 ENTERED R SQUARE = 0.71162217 C(P) = 250.56943514

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	1	0.54338942	0.54338942	128.32	0.0001
ERROR	52	0.22020317	0.00423468		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.04601273				
DET44	0.00010303	0.00000909	0.54338942	128.32	0.0001

THE ABOVE MODEL IS THE BEST 1 VARIABLE MODEL FOUND.

STEP 2 VARIABLE DET313 ENTERED R SQUARE = 0.82479130 C(P) = 134.61591347

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	0.62980453	0.31490226	120.04	0.0001
ERROR	51	0.13378807	0.00262332		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.03994769				
DET313	-0.00016790	0.00002925	0.08641511	32.94	0.0001
DET44	0.00014709	0.00001050	0.51511067	196.36	0.0001

STEP 2 DET44 REPLACED BY DETI4D4 R SQUARE = 0.84854721 C(P) = 109.85568361

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	0.64794437	0.32397218	142.87	0.0001
ERROR	51	0.11564823	0.00226761		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.03822725				
DET313	-0.00020911	0.00002896	0.11824281	52.14	0.0001
DETI4D4	0.00016846	0.00001099	0.53325051	235.16	0.0001

STEP 2 DET313 REPLACED BY DETI213 R SQUARE = 0.84856C62 C(P) = 109.84170362

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	2	0.64795461	0.32397730	142.88	0.0001
ERROR	51	0.11563799	0.00226741		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.03824331				
DETI4D4	0.00016974	0.00001112	0.52816913	232.94	0.0001
DETI213	-0.00019492	0.00002699	0.11825305	52.15	0.0001

THE ABOVE MODEL IS THE BEST 2 VARIABLE MODEL FOUND.

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	0.66835179	0.22278393	116.96	0.0001
ERROR	50	0.09524081	0.00190482		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.05533144				
DET9	-0.00247103	0.00075513	0.02039718	10.71	0.0019
DET1404	0.00024528	0.00002523	0.17997495	94.48	0.0001
DET1213	-0.00018618	0.00002488	0.10663488	55.98	0.0001

STEP 3 DET1213 REPLACED BY DET1413 R SQUARE = 0.87687272 C(P) = 82.33767605

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	0.66957351	0.22319117	118.69	0.0001
ERROR	50	0.09401908	0.00188038		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.05366459				
DET9	-0.00267498	0.00074782	0.02405986	12.80	0.0008
DET1404	0.00025248	0.00002528	0.18750854	99.72	0.0001
DET1413	-0.00046725	0.00006169	0.10785660	57.36	0.0001

STEP 3 DET9 REPLACED BY DET3 R SQUARE = 0.88272540 C(P) = 76.23256408

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	0.67404257	0.22468086	125.45	0.0001
ERROR	50	0.08955002	0.00179100		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.04784058				
DET3	-0.00150428	0.00037691	0.02852892	15.93	0.0002
DET1404	0.00024536	0.00002140	0.23532390	131.39	0.0001
DET1413	-0.00053835	0.00006164	0.13661019	76.28	0.0001

STEP 3 DET1413 REPLACED BY DET913 R SQUARE = 0.88426476 C(P) = 74.62811889

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	3	0.67521802	0.22507267	127.34	0.0001
ERROR	50	0.08837457	0.00176749		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.05025552				
DET3	-0.00178439	0.00038271	0.03842333	21.74	0.0001
DET1404	0.00025935	0.00002215	0.24237870	137.13	0.0001
DET913	-0.00030855	0.00003495	0.13778564	77.96	0.0001

THE ABOVE MODEL IS THE BEST 3 VARIABLE MODEL FOUND.

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 4 VARIABLE DET14 ENTERED R SQUARE = 0.91666764 C(P) = 42.85536035

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	4	0.69996062	0.17499016	134.75	0.0001
ERROR	49	0.06363197	0.00129861		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.02898791				
DET14	0.00563157	0.00129017	0.02474260	19.05	0.0001
DET3	-0.00293984	0.00042152	0.06316546	48.64	0.0001
DET1404	0.00022937	0.00002217	0.11581823	89.19	0.0001
DET913	-0.00030545	0.00002996	0.13495652	103.92	0.0001

THE ABOVE MODEL IS THE BEST 4 VARIABLE MODEL FOUND.

STEP 5 VARIABLE CL1 ENTERED R SQUARE = 0.92512250 C(P) = 36.04305425

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	5	0.70641669	0.14128334	118.61	0.0001
ERROR	48	0.05717590	0.00119116		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.04331166				
CL1	-0.01089146	0.00472125	0.00645607	5.42	0.0242
DET14	0.00539088	0.00123596	0.02251515	18.90	0.0001
DET3	-0.00282420	0.00040675	0.05742464	48.21	0.0001
DET1404	0.00021121	0.00002125	0.11769881	98.81	0.0001
DET913	-0.00029814	0.00002887	0.12705426	106.66	0.0001

THE ABOVE MODEL IS THE BEST 5 VARIABLE MODEL FOUND.

STEP 6 VARIABLE DET12 ENTERED R SQUARE = 0.92958879 C(P) = 33.38795509

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	0.70982711	0.11830452	103.42	0.0001
ERROR	47	0.05376548	0.00114395		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.04025910				
CL1	-0.01370865	0.00488704	0.00900127	7.87	0.0073
DET14	0.00850326	0.00217389	0.01750252	15.30	0.0003
DET3	-0.00177085	0.00072874	0.00675498	5.90	0.0190
DET1404	0.00020071	0.00002169	0.09793786	85.61	0.0001
DET913	-0.00028323	0.00002958	0.10487691	91.68	0.0001
DET12	-0.00198522	0.00114976	0.00341042	2.98	0.0908

STEP 6 DET3 REPLACED BY DET4 R SQUARE = 0.94058667 C(P) = 21.92512234

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	0.71822501	0.11970417	124.01	0.0001
ERROR	47	0.04536758	0.00096527		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.03669098				
CL1	-0.01210649	0.00445936	0.00711442	7.37	0.0092
DET14	0.01237929	0.00175568	0.04798999	49.72	0.0001
DET4	-0.00524608	0.00132407	0.01515288	15.70	0.0003
DET1404	0.00023451	0.00002289	0.10131273	104.96	0.0001
DET913	-0.00031207	0.00002887	0.11282481	116.88	0.0001
DET12	-0.00350859	0.00061328	0.03159360	32.73	0.0001

MAXIMUM R-SQUARE IMPROVEMENT FOR DEPENDENT VARIABLE TS

STEP 6 CL1 REPLACED BY D4C1 R SQUARE = 0.94111155 C(P) = 21.37804987

	DF	SUM OF SQUARES	MEAN SQUARE	F	PROB>F
REGRESSION	6	0.71862581	0.11977097	125.19	0.0001
ERROR	47	0.04496679	0.00095674		
TOTAL	53	0.76359259			

	B VALUE	STD ERROR	TYPE II SS	F	PROB>F
INTERCEPT	0.02000258				
DET14	0.01412107	0.00186005	0.05514171	57.63	0.0001
DET4	-0.00558563	0.00128277	0.01814018	18.96	0.0001
D4C1	-0.00075577	0.00026966	0.00751522	7.86	0.0073
DET1404	0.00025100	0.00002282	0.11576412	121.00	0.0001
DET913	-0.00031269	0.00002865	0.11392500	119.08	0.0001
DET12	-0.00377188	0.00063335	0.03393250	35.47	0.0001

THE ABOVE MODEL IS THE BEST 6 VARIABLE MODEL FOUND.

UNIVARIATE

VARIABLE=CL2

MOMENTS

N	57	SUM WGTS	57
MEAN	1.74474	SUM	99.45
STD DEV	1.62374	VARIANCE	2.63653
SKEWNESS	1.48817	KURTOSIS	2.35641
USS	321.16	CSS	147.646
CV	93.0651	STD MEAN	0.21507
T:MEAN=0	8.11243	PROB>|T|	0.0001
SGN RANK	826.5	PROB>|S|	0.0001
NUM ^= 0	57		

QUANTILES(DEF=4)

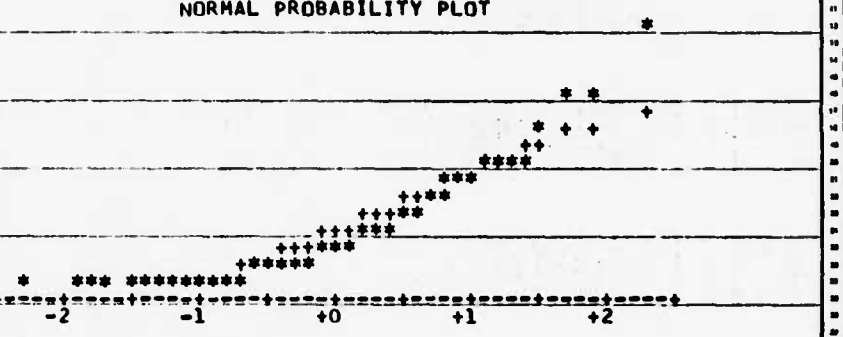
100% MAX	7.72	99%	7.72
75% Q3	2.93	95%	5.529
50% MED	1.18	90%	3.812
25% Q1	0.475	10%	0.25
0% MIN	0.21	5%	0.24
		1%	0.21
RANGE	7.51		
Q3-Q1	2.455		
MODE	0.25		

EXTREMES

LOWEST	HIGHEST
0.21	3.86
0.24	4.52
0.24	5.52
0.25	5.61
0.25	7.72

STEM	LEAF	#	BOXPLOT
7	7	1	0
7			
6			
6			
5	56	2	
5			
4	5	1	
4			
3	56689	5	
3	0144	4	
2	99	2	+-----+
2	0134	4	
1	666677	6	+
1	0112344	7	*-----*
0	5555566677788	13	
0	222222344444	12	+-----+

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0.21	1	1.8	1.8
0.24	2	3.5	5.3
0.25	3	5.3	10.5
0.33	1	1.8	12.3
0.37	1	1.8	14.0
0.4	1	1.8	15.8
0.41	1	1.8	17.5
0.44	1	1.8	19.3
0.45	1	1.8	21.1
0.46	2	3.5	24.6
0.49	1	1.8	26.3
0.52	1	1.8	28.1
0.55	1	1.8	29.8
0.56	1	1.8	31.6
0.58	1	1.8	33.3
0.6	1	1.8	35.1
0.67	1	1.8	36.8
0.7	2	3.5	40.4
0.79	1	1.8	42.1
0.81	1	1.8	43.9
1.01	1	1.8	45.6
1.1	1	1.8	47.4
1.13	1	1.8	49.1
1.18	1	1.8	50.9
1.33	1	1.8	52.6
1.36	1	1.8	54.4
1.44	1	1.8	56.1
1.56	1	1.8	57.9
1.59	1	1.8	59.6
1.6	2	3.5	63.2
1.71	1	1.8	64.9
1.72	1	1.8	66.7
2	1	1.8	68.4
2.14	1	1.8	70.2
2.33	1	1.8	71.9
2.45	1	1.8	73.7
2.93	2	3.5	77.2
2.96	1	1.8	78.9
3.08	1	1.8	80.7
3.39	1	1.8	82.5
3.4	1	1.8	84.2
3.47	1	1.8	86.0
3.63	1	1.8	87.7
3.65	1	1.8	89.5
3.8	1	1.8	91.2
3.86	1	1.8	93.0
4.52	1	1.8	94.7
5.52	1	1.8	96.5
5.61	1	1.8	98.2
7.72	1	1.8	100.0

UNIVARIATE

VARIABLE=DET1

MOMENTS

N	56	SUM WGTS	56
MEAN	993.222	SUM	55620.5
STD DEV	2266.52	VARIANCE	5137117
SKEWNESS	0.743457	KURTOSIS	-0.694595
USS	337784913	CSS	282541420
CV	228.199	STD MEAN	302.877
T:MEAN=0	3.2793	PROB>|T|	0.00180888
SGN RANK	241	PROB>|S|	0.0497882
NUM ^= 0	56		

QUANTILES(DEF=4)

100% MAX	5576.72	99%	5576.72
75% Q3	2898.92	95%	5270.18
50% MED	32.815	90%	4994.22
25% Q1	-669.292	10%	-1436.33
0% MIN	-2031.69	5%	-2004.33
		1%	-2031.69
RANGE	7608.41		
Q3-Q1	3568.22		
MODE	-2031.69		

EXTREMES

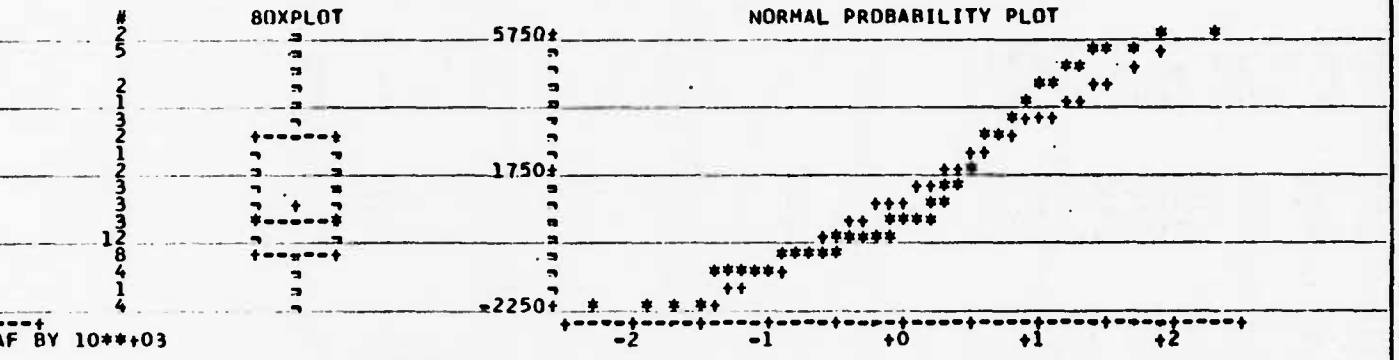
LOWEST	HIGHEST
-2031.69	5074.39
-2016.47	5218.8
-2002.19	5226.69
-2001.34	5516.62
-1485.96	5576.72

MISSING VALUE
COUNT 1
% COUNT/NOBS 1.75

STEM LEAF

STEM	LEAF	#
5	56	2
5	00122	5
4		
4	22	2
3	9	1
3	344	3
2	89	2
2	3	1
1	99	2
1	111	3
0	566	3
0	224	3
-0	442210000000	12
-0	88777765	8
-1	4300	4
-1	5	1
-2	0000	4

MULTIPLY STEM.LEAF BY 10**+03



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-2031.69	1	1.8	1.8	-662.7	1	1.8	26.8	45.52	1	1.8	51.8	2916.02	1	1.8	76.8
-2016.47	1	1.8	3.6	-619.84	1	1.8	28.6	192.96	1	1.8	53.6	3252.69	1	1.8	78.6
-2002.19	1	1.8	5.4	-504.06	1	1.8	30.4	241.83	1	1.8	55.4	3384.37	1	1.8	80.4
-2001.34	1	1.8	7.1	-446.25	1	1.8	32.1	385.75	1	1.8	57.1	3436.56	1	1.8	82.1
-1485.96	1	1.8	8.9	-366.03	1	1.8	33.9	498.31	1	1.8	58.9	3895.9	1	1.8	83.9
-1415.06	1	1.8	10.7	-216.56	1	1.8	35.7	576.94	1	1.8	60.7	4190.5	1	1.8	85.7
-1264.91	1	1.8	12.5	-205.39	1	1.8	37.5	626.35	1	1.8	62.5	4237.34	1	1.8	87.5
-1021.23	1	1.8	14.3	-116.78	1	1.8	39.3	1095.08	1	1.8	64.3	4955.15	1	1.8	89.3
-1001.93	1	1.8	16.1	-36.95	1	1.8	41.1	1129.79	1	1.8	66.1	4959.86	1	1.8	91.1
-788.78	1	1.8	17.9	-34.1	1	1.8	42.9	1130.21	1	1.8	67.9	5074.39	1	1.8	92.9
-751.27	1	1.8	19.6	-19.66	1	1.8	44.6	1912.77	1	1.8	69.6	5218.8	1	1.8	94.6
-728.09	1	1.8	21.4	-10.6	1	1.8	46.4	1919.8	1	1.8	71.4	5226.69	1	1.8	96.4
-697.37	1	1.8	23.2	16.03	1	1.8	48.2	2256.46	1	1.8	73.2	5516.62	1	1.8	98.2
-671.49	1	1.8	25.0	20.11	1	1.8	50.0	2847.64	1	1.8	75.0	5576.72	1	1.8	100.0

F

UNIVARIATE

VARIABLE=DET2

MOMENTS

N	56	SUM WGTS	56
MEAN	2071.87	SUM	116024
STD DEV	2529.87	VARIANCE	6400242
SKEWNESS	0.905361	KURTOSIS	-0.835218
USS	592400405	CSS	352013304
CV	122.106	STD MEAN	338.068
T:MEAN=0	6.12855	PROB>|T|	0.0001
SGN RANK	770	PROB>|S|	0.0001
NUM ^= 0	56		

QUANTILES(DEF=4)

100% MAX	7375.45	99%	7375.45
75% Q3	4568.58	95%	6918.43
50% MED	518.65	90%	6483.95
25% Q1	171.09	10%	9.09798
0% MIN	-47.02	5%	-32.7415
		1%	-47.02
RANGE	7422.47		
Q3-Q1	4397.69		
MODE	-47.02		

EXTREMES

LOWEST	HIGHEST
-47.02	6529.91
-33.09	6713.71
-32.68	6891.53
-22.31	7070.87
2.07	7375.45

MISSING VALUE
COUNT 1
% COUNT/NOBS 1.75

STEM LEAF # BOXPLOT

```
 7 14          2
 6 5579        4
 6 2           1
 5 559         3
 5 013         3
 4 7           1
 4 0           1
 3 58          2
 3 2           1
 2 58          2
 2             
 1 7           1
 1 2           1
 0 555566888   9
 0 111222233334444   15
-0 0000000000  10
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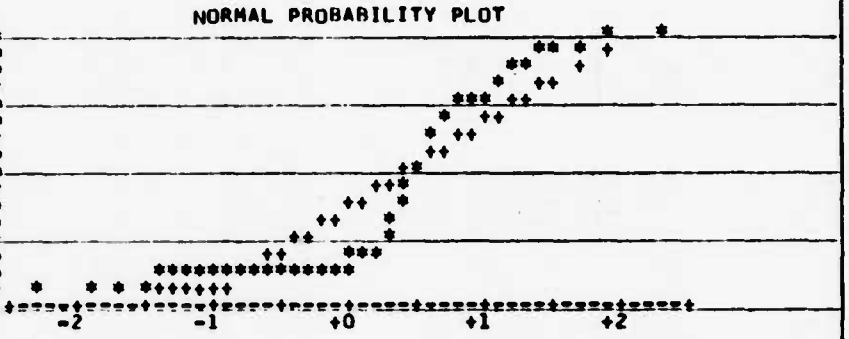
MULTIPLY STEM.LEAF BY 10**+03

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-47.02	1	1.8	1.8	179.25	1	1.8	26.8	539.83	1	1.8	51.8	4743.86	1	1.8	76.8
-33.09	1	1.8	3.6	181.33	1	1.8	28.6	630.04	1	1.8	53.6	5015.26	1	1.8	78.6
-32.68	1	1.8	5.4	181.82	1	1.8	30.4	632.77	1	1.8	55.4	5102.02	1	1.8	80.4
-22.31	1	1.8	7.1	234.56	1	1.8	32.1	786.85	1	1.8	57.1	5293.61	1	1.8	82.1
2.07	1	1.8	8.9	252.61	1	1.8	33.9	793.99	1	1.8	58.9	5481.97	1	1.8	83.9
12.11	1	1.8	10.7	265.5	1	1.8	35.7	822.49	1	1.8	60.7	5490.1	1	1.8	85.7
12.65	1	1.8	12.5	276.13	1	1.8	37.5	1157.29	1	1.8	62.5	5876.83	1	1.8	87.5
21.68	1	1.8	14.3	287.07	1	1.8	39.3	1707.1	1	1.8	64.3	6235.36	1	1.8	89.3
34.14	1	1.8	16.1	380.12	1	1.8	41.1	2462.26	1	1.8	66.1	6464.25	1	1.8	91.1
34.29	1	1.8	17.9	422.05	1	1.8	42.9	2788.21	1	1.8	67.9	6529.91	1	1.8	92.9
55.97	1	1.8	19.6	448.17	1	1.8	44.6	3175.94	1	1.8	69.6	6713.71	1	1.8	94.6
57.32	1	1.8	21.4	451.21	1	1.8	46.4	3455.18	1	1.8	71.4	6891.53	1	1.8	96.4
141.51	1	1.8	23.2	473.37	1	1.8	48.2	3809.36	1	1.8	73.2	7070.87	1	1.8	98.2
168.37	1	1.8	25.0	497.47	1	1.8	50.0	4042.76	1	1.8	75.0	7375.45	1	1.8	100.0

UNIVARIATE

VARIABLE=DET3

MOMENTS

N	56	SUM WGTS	56
MEAN	1643.98	SUM	92063
STD DEV	1699.85	VARIANCE	2889493
SKEWNESS	0.827589	KURTOSIS	-0.800806
USS	310271931	CSS	158922102
CV	103.398	STD MEAN	227.152
T:MEAN=0	7.23736	PROB>|T|	0.0001
SGN RANK	782	PROB>|S|	0.0001
NUM ^= 0	56		

QUANTILES(DEF=4)

100% MAX	5361.98	99%	5361.98
75% Q3	3147.52	95%	4881.11
50% MED	778.67	90%	4542.38
25% Q1	288.392	10%	7.78399
0% MIN	-50.29	5%	-19.046
		1%	-50.29
RANGE	5412.27		
Q3-Q1	2859.13		
MODE	-50.29		

EXTREMES

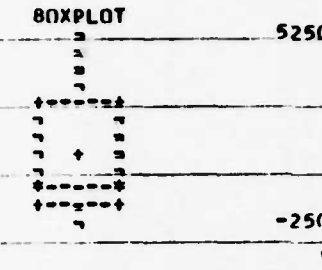
LOWEST	HIGHEST
-50.29	4603.52
-19.76	4723.57
-18.92	4847.91
-5.32	5069.63
5.39	5361.98

MISSING VALUE
COUNT 1
% COUNT/NOBS 1.75

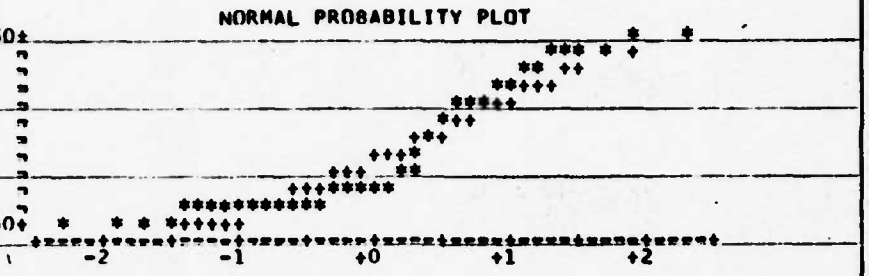
STEM	LEAF	#
5	14	2
4	5678	4
4	024	3
3	89	2
3	1224	4
2	58	2
2	244	3
1	7	1
1	1113	4
0	5566677888899	12
0	1111123334444	13
-0	100000	6

MULTIPLY STEM.LEAF BY 10**+03

BOXPLOT



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-50.29	1	1.8	1.8	310.12	1	1.8	26.8	778.76	1	1.8	51.8	3152.79	1	1.8	76.8
-19.76	1	1.8	3.6	382.59	1	1.8	28.6	866.8	1	1.8	53.6	3158.63	1	1.8	78.6
-18.92	1	1.8	5.4	390.66	1	1.8	30.4	927.79	1	1.8	55.4	3426.22	1	1.8	80.4
-5.32	1	1.8	7.1	405	1	1.8	32.1	1056.98	1	1.8	57.1	3766.61	1	1.8	82.1
5.39	1	1.8	8.9	439.28	1	1.8	33.9	1061.82	1	1.8	58.9	3855.38	1	1.8	83.9
8.81	1	1.8	10.7	471.94	1	1.8	35.7	1146.77	1	1.8	60.7	3960.03	1	1.8	85.7
69.47	1	1.8	12.5	514.81	1	1.8	37.5	1278.56	1	1.8	62.5	4168.73	1	1.8	87.5
78.34	1	1.8	14.3	560.66	1	1.8	39.3	1724.03	1	1.8	64.3	4363.28	1	1.8	89.3
79.5	1	1.8	16.1	561.22	1	1.8	41.1	2198.01	1	1.8	66.1	4516.18	1	1.8	91.1
86.72	1	1.8	17.9	611.56	1	1.8	42.9	2397.42	1	1.8	67.9	4603.52	1	1.8	92.9
137.39	1	1.8	19.6	729.67	1	1.8	44.6	2437.79	1	1.8	69.6	4723.57	1	1.8	94.6
194.04	1	1.8	21.4	736.83	1	1.8	46.4	2503.08	1	1.8	71.4	4847.91	1	1.8	96.4
260.71	1	1.8	23.2	771.45	1	1.8	48.2	2807.71	1	1.8	73.2	5069.63	1	1.8	98.2
281.15	1	1.8	25.0	778.58	1	1.8	50.0	3131.72	1	1.8	75.0	5361.98	1	1.8	100.0

VARIABLE=nET4

MOMENTS

N	56	SUM WGTS	56
MEAN	6962.06	SUM	389875
STD DEV	7131.15	VARIANCE	50853258
SKEWNESS	0.723851	KURTOSIS	-1.0138
USS	5511266242	CSS	2796929201
CV	102.429	STD MEAN	952.94
T:MEAN=0	7.30588	PROB>¬T¬	0.0001
SGN RANK	783	PROB>¬S¬	0.0001
NUM ^= 0	56		

QUANTILES(DEF=4)

100% MAX	22948.1	99%	22948.1
75% Q3	14594.7	95%	19395.1
50% MED	3637.67	90%	18474.7
25% Q1	1134.3	10%	77.9137
0% MIN	-113.86	5%	-109.407
		1%	-113.86
RANGE	23062		
Q3-Q1	13460.4		
MODE	-113.86		

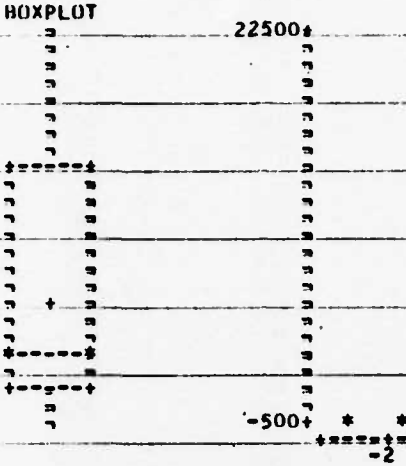
EXTREMES

LOWEST	HIGHEST
-113.86	18797
-109.56	19173.7
-109.38	19219.9
-85.51	20388.2
-7.64	22948.1

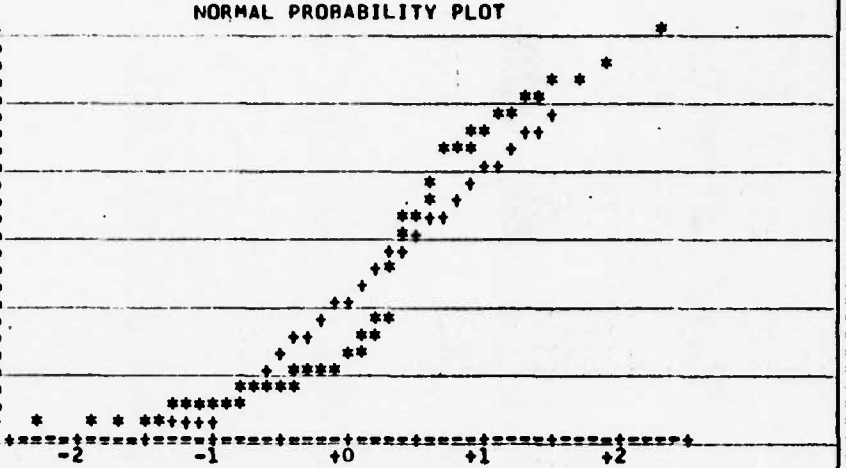
MISSING VALUE
COUNT 1
% COUNT/NOBS 1.75

STEM	LEAF	#
22	9	1
21		
20	4	1
19	22	2
18	38	2
17	04	2
16	12	2
15	1233	4
14		
13	0	1
12	7	1
11	013	3
10	5	1
9		
8	0	1
7		
6		
5	33	2
4	345	3
3	0589	4
2	0016888	7
1	0122347	7
0	1122337	7
-0	11110	5

MULTIPLY STEM.LEAF BY 10**+03



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-113.86	1	1.8	1.8	1232.99	1	1.8	26.8	3796.24	1	1.8	51.8	15115.6	1	1.8	76.8
-109.56	1	1.8	3.6	1234.23	1	1.8	28.6	3911.15	1	1.8	53.6	15162.2	1	1.8	78.6
-109.38	1	1.8	5.4	1307.81	1	1.8	30.4	4312.65	1	1.8	55.4	15254.4	1	1.8	80.4
-85.51	1	1.8	7.1	1402.2	1	1.8	32.1	4424.41	1	1.8	57.1	15278.2	1	1.8	82.1
-7.64	1	1.8	8.9	1715.42	1	1.8	33.9	4545.34	1	1.8	58.9	16074.8	1	1.8	83.9
114.58	1	1.8	10.7	2007.47	1	1.8	35.7	5268.68	1	1.8	60.7	16220.1	1	1.8	85.7
128.71	1	1.8	12.5	2021.03	1	1.8	37.5	5331	1	1.8	62.5	17031.3	1	1.8	87.5
175.57	1	1.8	14.3	2070.04	1	1.8	39.3	8013.02	1	1.8	64.3	17433.4	1	1.8	89.3
179.93	1	1.8	16.1	2579.02	1	1.8	41.1	10498.1	1	1.8	66.1	18336.5	1	1.8	91.1
252.65	1	1.8	17.9	2799.16	1	1.8	42.9	11027.2	1	1.8	67.9	18797	1	1.8	92.9
305.09	1	1.8	19.6	2830.62	1	1.8	44.6	11128.7	1	1.8	69.6	19173.7	1	1.8	94.6
699.76	1	1.8	21.4	2837.81	1	1.8	46.4	11349.3	1	1.8	71.4	19219.9	1	1.8	96.4
1030.31	1	1.8	23.2	2975.88	1	1.8	48.2	12749.2	1	1.8	73.2	20388.2	1	1.8	98.2
1101.41	1	1.8	25.0	3479.1	1	1.8	50.0	13032.1	1	1.8	75.0	22948.1	1	1.8	100.0

UNIVARIATE

VARIABLE=FD1

MOMENTS

N	56	SUM WGTS	56
MEAN	3.01036	SUM	168.58
STD DEV	5.27955	VARIANCE	27.8736
SKEWNESS	0.995805	KURTOSIS	-0.350222
USS	2040.53	CSS	1533.05
CV	175.379	STD MEAN	0.705509
T:MEAN=0	4.26693	PROB>|T|	0.0001
SGN RANK	308	PROB>|S|	0.0121298
NUM ^= 0	56		

QUANTILES(DEF=4)

100% MAX	14.46	99%	14.46
75% Q3	6.15	95%	14.1295
50% MED	0.255	90%	12.914
25% Q1	-0.73	10%	-1.466
0% MIN	-3.12	5%	-2.5985
		1%	-3.12
RANGE	17.58		
Q3-Q1	6.88		
MODE	-1.45		

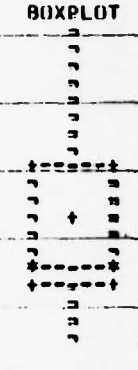
EXTREMES

LOWEST	HIGHEST
-3.12	13.25
-2.76	13.52
-2.57	14.11
-2.43	14.24
-1.48	14.46

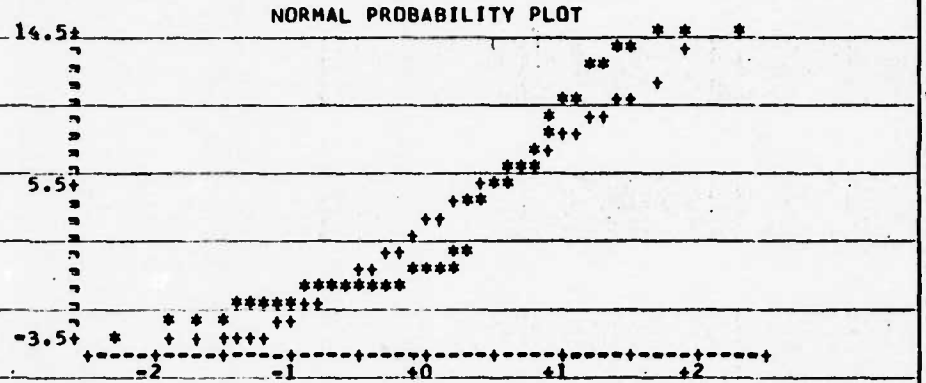
MISSING VALUE
COUNT 1
% COUNT/NOBS 1.75

STEM	LEAF	#
14	125	3
13	25	2
12	58	2
11		
10	48	2
9	1	1
8	6	1
7	6	1
6	124	3
5	237	3
4	026	3
3		
2		
1	25	2
0	1235689	7
-0	9887775555542110	16
-1	554410	6
-2	864	3
-3	1	1

BOXPLOT



NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
-3.12	1	1.8	1.8
-2.76	1	1.8	3.6
-2.57	1	1.8	5.4
-2.43	1	1.8	7.1
-1.48	1	1.8	8.9
-1.46	1	1.8	10.7
-1.45	2	3.6	14.3
-1.13	1	1.8	16.1
-0.96	1	1.8	17.9
-0.86	1	1.8	19.6
-0.78	2	3.6	23.2
-0.75	1	1.8	25.0
-0.67	2	3.6	28.6
-0.53	1	1.8	30.4
-0.52	2	3.6	33.9
-0.48	1	1.8	35.7
-0.46	1	1.8	37.5
-0.42	1	1.8	39.3
-0.2	1	1.8	41.1
-0.14	1	1.8	42.9
-0.13	1	1.8	44.6
0.05	1	1.8	46.4
0.11	1	1.8	48.2
0.21	1	1.8	50.0
0.3	1	1.8	51.8
0.47	1	1.8	53.6
0.61	1	1.8	55.4
0.76	1	1.8	57.1
0.93	1	1.8	58.9
1.19	1	1.8	60.7
1.5	1	1.8	62.5
4.04	1	1.8	64.3
4.23	1	1.8	66.1
4.59	1	1.8	67.9
5.19	1	1.8	69.6
5.33	1	1.8	71.4
5.68	1	1.8	73.2
6.06	1	1.8	75.0
6.18	1	1.8	76.8
6.44	1	1.8	78.6
7.59	1	1.8	80.4
8.56	1	1.8	82.1
9.15	1	1.8	83.9
10.43	1	1.8	85.7
10.81	1	1.8	87.5
12.54	1	1.8	89.3
12.77	1	1.8	91.1
13.25	1	1.8	92.9
13.52	1	1.8	94.6
14.11	1	1.8	96.4
14.24	1	1.8	98.2
14.46	1	1.8	100.0

F

UNIVARIATE

VARIABLE=FD2

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
								LOWEST	HIGHEST
N	57	SUM WGTS	57	100% MAX	16.44	99%	16.44	0	7.22
MEAN	1.63	SUM	92.91	75% Q3	1.43	95%	8.64699	0	8.24
STD DEV	3.24512	VARIANCE	10.5312	50% MED	0	90%	6.212	0	8.57
SKEWNESS	2.51266	KURTOSIS	7.27503	25% Q1	0	10%	0	0	9.34
USS	741.192	CSS	589.749	0% MIN	0	5%	0	0	16.44
CV	199.091	STD MEAN	0.429835			1%	0		
T:MEAN=0	3.79215	PROB>|T|	.000368364	RANGE	16.44				
SGN RANK	95	PROB>|S|	0.00014302	Q3-Q1	1.43				
NUM ^= 0	19			MODE	0				

```
  STEM LEAF                                                  #    BOXPLOT          NORMAL PROBABILITY PLOT
    16 4                                                     1          *    16.5+                      *
    15                                                                        |                          |
    14                                                                        |                          |
    13                                                                        |                          |
    12                                                                        |                          |
    11                                                                        |                          |
    10                                                                        |                          |
     9 3                                                     1          *    |                          |
     8 24                                                    2          *    |                          |
     7 2                                                     1          *    |                          |
     6 0                                                     1               |                          |
     5 0028                                                  4          *    |                          |
     4 2                                                     1          0    |                          |
     3 8                                                     1          0    |                          |
     2                                                                   |    |                          |
     1 33359                                                 5          +--+--+                          |
     0 0000000000000000000000000000000000000000034          40         *****+*****    0.5+**************************
       +---+---+---+---+---+---+---+---+---+---+                                  +---+---+---+---+---+---+---+---+---+---+
                                                                                   -2  -1  +0  +1  +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	38	66.7	66.7	1.32	1	1.8	75.4	4.99	1	1.8	84.2	7.22	1	1.8	93.0
0.34	1	1.8	68.4	1.54	1	1.8	77.2	5.05	1	1.8	86.0	8.24	1	1.8	94.7
0.38	1	1.8	70.2	1.91	1	1.8	78.9	5.23	1	1.8	87.7	8.57	1	1.8	96.5
1.29	1	1.8	71.9	3.78	1	1.8	80.7	5.77	1	1.8	89.5	9.34	1	1.8	98.2
1.3	1	1.8	73.7	4.24	1	1.8	82.5	5.96	1	1.8	91.2	16.44	1	1.8	100.0

J-31

F

MOMENTS

N	56	SUM WGTS	56
MEAN	388.409	SUM	21750.9
STD DEV	766.457	VARIANCE	587456
SKEWNESS	0.986544	KURTOSIS	-0.48649
USS	40758325	CSS	32310065
CV	197.332	STD MEAN	102.422
T:MEAN=0	3.792224	PROB>|T|	.000373531
SGN RANK	227	PROB>|S|	0.0646632
NUM ^= 0	56		

QUANTILES(DEF=4)

100% MAX	2020.67	99%	2020.67
75% Q3	1014.5	95%	1985.71
50% MED	9.51499	90%	1749.24
25% Q1	-174.635	10%	-259.63
0% MIN	-453.06	5%	-380.355
		1%	-453.06
RANGE	2473.73		
Q3-Q1	1189.13		
MODE	-453.06		

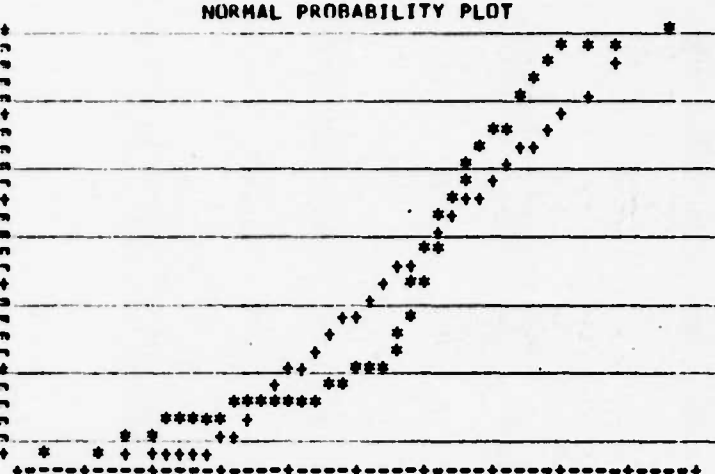
EXTREMES

LOWEST	HIGHEST
-453.06	1833.82
-411.27	1977.25
-374.9	1984.95
-373.39	1990.02
-299.88	2020.67

MISSING VALUE
COUNT 1
% COUNT/NOBS 1.75

```
STEM LEAF                            #  BOXPLOT
  20 2                               1     0
  19 889                             3     |
  18 3                               1     |
  17 1                               1     |
  16 4                               1     |
  15                                 0     |
  14 57                              2     |
  13 27                              2     |
  12 6                               1     |
  11 4                               1     |
  10 4                               1     +-----+
   9 3                               1     |     |
   8                                 0     |     |
   7 03                              2     |     |
   6                                 0     |     |
   5 68                              2     |     |
   4                                 0     |     |
   3 6                               1     |     |
   2 8                               1     |     |
   1 3                               1     |     |
   0 224447                          6     +-----+
  -0 820000                          6     |     |
  -1 8888776543321                  13     +-----+
  -2 4432                            4     |     |
  -3 770                             3     |     |
  -4 51                              2     0     |
  ----+----+----+----+                           |
MULTIPLY STEM.LEAF BY 10**+02
```

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
-453.06	1	1.8	1.8	-174.59	1	1.8	26.8	18.36	1	1.8	51.8	1042.44	1	1.8	76.8
-411.27	1	1.8	3.6	-162.07	1	1.8	28.6	22.92	1	1.8	53.6	1136.53	1	1.8	78.6
-374.9	1	1.8	5.4	-147.03	1	1.8	30.4	36.21	1	1.8	55.4	1261.56	1	1.8	80.4
-373.39	1	1.8	7.1	-135.43	1	1.8	32.1	39.37	1	1.8	57.1	1318.15	1	1.8	82.1
-299.88	1	1.8	8.9	-131.44	1	1.8	33.9	39.57	1	1.8	58.9	1365.18	1	1.8	83.9
-242.38	1	1.8	10.7	-125.51	1	1.8	35.7	65.13	1	1.8	60.7	1446.4	1	1.8	85.7
-235.77	1	1.8	12.5	-116.27	1	1.8	37.5	134.46	1	1.8	62.5	1469.75	1	1.8	87.5
-227.36	1	1.8	14.3	-107.81	1	1.8	39.3	275.56	1	1.8	64.3	1635.06	1	1.8	89.3
-220.5	1	1.8	16.1	-79.44	1	1.8	41.1	363.39	1	1.8	66.1	1713	1	1.8	91.1
-183.29	1	1.8	17.9	-22.18	1	1.8	42.9	563.8	1	1.8	67.9	1833.82	1	1.8	92.9
-182	1	1.8	19.6	-4.61	1	1.8	44.6	584.1	1	1.8	69.6	1977.25	1	1.8	94.6
-181.79	1	1.8	21.4	-3.95	1	1.8	46.4	702.45	1	1.8	71.4	1984.95	1	1.8	96.4
-178.99	1	1.8	23.2	-1.86	1	1.8	48.2	730.9	1	1.8	73.2	1990.02	1	1.8	98.2
-174.65	1	1.8	25.0	0.67	1	1.8	50.0	930.67	1	1.8	75.0	2020.67	1	1.8	100.0

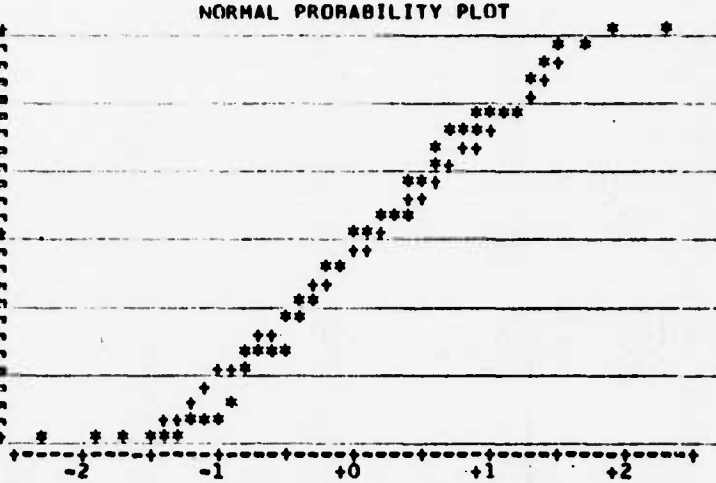
F

N	56	SUM WGTS	56	100% MAX	2.05	99%	2.05	LOWEST	HIGHEST
MEAN	-4.36857	SUM	-244.64	75% Q3	-0.99	95%	1.8215	-9.96	1.01
STD DEV	3.59043	VARIANCE	12.8912	50% MED	-4.18	90%	0.652994	-9.91	1.5
SKEWNESS	0.0466238	KURTOSIS	-1.05843	25% Q1	-7.265	10%	-9.608	-9.71	1.79
USS	1777.74	CSS	709.016	0% MIN	-9.96	5%	-9.74	-9.65	2
CV	-82.1878	STD MEAN	0.479792			1%	-9.96	-9.65	2.05
T:MEAN=0	-9.10515	PROB>|T|	0.0001	RANGE	12.01				
SGN RANK	-727	PROB>|S|	0.0001	Q3-Q1	6.275				
NUM ^= 0	56			MODE	-9.65				

MISSING VALUE .
COUNT 1
% COUNT/NOBS 1.75

STEM	LEAF	#	BOXPLOT
-2	00	2	
-1	58	2	
-1	0	1	
-0	5	1	
-0		0	
-0	3332	4	
-0	999	3	
-1	10	2	
-1	9	1	
-2	22	2	
-2	5	1	
-3	4330	4	
-3	9766	4	
-4	40	2	
-4	998	3	
-5	40	2	
-5	865	3	
-6	43	2	
-6		0	
-7	43220	5	
-7	5	1	
-8		0	
-8	77	2	
-9	41	2	
-9	0976665	7	

2.25
-3.75
-9.75



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM
-9.96	1	1.8	1.8
-9.91	1	1.8	3.6
-9.71	1	1.8	5.4
-9.65	2	3.6	8.9
-9.59	1	1.8	10.7
-9.46	1	1.8	12.5
-9.38	1	1.8	14.3
-9.15	1	1.8	16.1
-8.72	1	1.8	17.9
-8.66	1	1.8	19.6
-7.54	1	1.8	21.4
-7.41	1	1.8	23.2
-7.27	1	1.8	25.0
-7.25	1	1.8	26.8
-7.21	1	1.8	28.6
-7.01	1	1.8	30.4
-6.44	1	1.8	32.1
-6.32	1	1.8	33.9
-5.85	1	1.8	35.7
-5.58	1	1.8	37.5
-5.55	1	1.8	39.3
-5.37	1	1.8	41.1
-5.01	1	1.8	42.9
-4.94	1	1.8	44.6
-4.92	1	1.8	46.4
-4.84	1	1.8	48.2
-4.36	1	1.8	50.0
-4	1	1.8	51.8
-3.95	1	1.8	53.6
-3.73	1	1.8	55.4
-3.65	2	3.6	58.9
-3.45	1	1.8	60.7
-3.35	1	1.8	62.5
-3.32	1	1.8	64.3
-3.02	1	1.8	66.1
-2.47	1	1.8	67.9
-2.22	1	1.8	69.6
-2.2	1	1.8	71.4
-1.94	1	1.8	73.2
-1.08	1	1.8	75.0
-0.96	1	1.8	76.8
-0.91	1	1.8	78.6
-0.87	2	3.6	82.1
-0.31	1	1.8	83.9
-0.3	1	1.8	85.7
-0.28	1	1.8	87.5
-0.25	1	1.8	89.3
0.5	1	1.8	91.1
1.01	1	1.8	92.9
1.5	1	1.8	94.6
1.79	1	1.8	96.4
2	1	1.8	98.2
2.05	1	1.8	100.0

UNIVARIATE

VARIABLE=HRS

MOMENTS

N	57	SUM WGTS	57
MEAN	27.8421	SUM	1587
STD DEV	21.1164	VARIANCE	445.904
SKEWNESS	0.280604	KURTOSIS	-1.21158
USS	69156.2	CSS	24970.6
CV	75.8435	STD MEAN	2.79694
T:MEAN=0	9.9545	PROB>|T|	0.0001
SGN RANK	826.5	PROB>|S|	0.0001
NUM ^= 0	57		

QUANTILES(DEF=4)

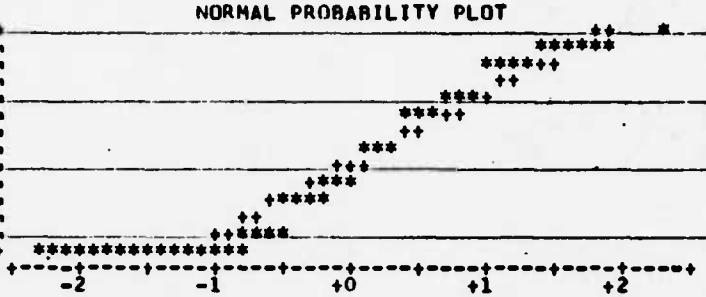
100% MAX	66	99%	66
75% Q3	48	95%	64
50% MED	24	90%	57.6
25% Q1	8	10%	0.167
0% MIN	0.167	5%	0.167
		1%	0.167
RANGE	65.833		
Q3-Q1	40		
MODE	0.167		

EXTREMES

LOWEST	HIGHEST
0.167	64
0.167	64
0.167	64
0.167	64
0.167	66

```
STEM LEAF                          #  BOXPLOT
   6 6                             1      0
   6 4444                          4      |
   5 66666                         5      |
   5                               |      |
   4 88888                         5    +---+
   4 000000                        6    |   |
   3                               |    |   |
   3 222222                        6    |   |
   2                               |    |   |
   2 444444                        6    *---*
   1 666666                        6    |   |
   1                               |    |   |
   0 888888                        6    +---+
   0 000000444444                  12   |
   ----+----+----+----+                 0
   MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0.167	6	10.5	10.5	16	6	10.5	42.1	40	6	10.5	73.7	64	4	7.0	98.2
4	6	10.5	21.1	24	6	10.5	52.6	48	5	8.8	82.5	66	1	1.8	100.0
8	6	10.5	31.6	32	6	10.5	63.2	56	5	8.8	91.2				

UNIVARIATE

VARIABLE=FE

MOMENTS

N	51	SUM WGTS	51
MEAN	416.118	SUM	21222
STD DEV	323.133	VARIANCE	104415
SKEWNESS	0.707483	KURTOSIS	-0.922199
USS	14051608	CSS	5220759
CV	77.6543	STD MEAN	45.2477
T:MEAN=0	9.19643	PROB>|T|	0.0001
SGN RANK	663	PROB>|S|	0.0001
NUM ^= 0	51		

QUANTILES(DEF=4)

100% MAX	998	99%	998
75% Q3	734	95%	998
50% MED	280	90%	970.6
25% Q1	200	10%	44.6
0% MIN	19	5%	21.8
		1%	19
RANGE	979		
Q3-Q1	534		
MODE	998		

EXTREMES

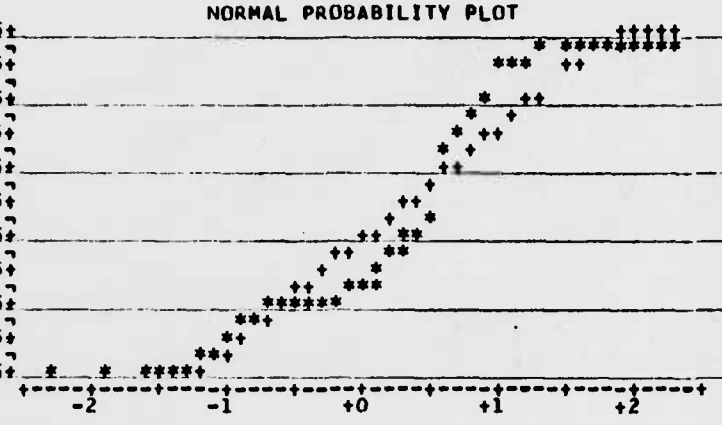
LOWEST	HIGHEST
19	978
20	998
23	998
43	998
43	998

MISSING VALUE
COUNT 6
% COUNT/NOBS 10.53

STEM	LEAF	#	BOXPLOT
10	0000	4	
9	8	1	
9	1244	4	
8			
8	2	1	
7	9	1	
7	34	2	+-----+
6	8	1	
6	3	1	
5			
5			
4	78	2	
4	34	2	+
3	569	3	
3	01	2	
2	556789	6	*-----*
2	001122344	9	+-----+
1	579	3	
1	3	1	
0	589	3	
0	22244	5	

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
19	1	2.0	2.0
20	1	2.0	3.9
23	1	2.0	5.9
43	2	3.9	9.8
51	1	2.0	11.8
82	1	2.0	13.7
91	1	2.0	15.7
34	1	2.0	17.6
5	1	2.0	19.6
10	1	2.0	21.6
195	1	2.0	23.5
200	1	2.0	25.5
202	1	2.0	27.5
209	1	2.0	29.4
212	1	2.0	31.4
224	1	2.0	33.3
225	1	2.0	35.3
226	1	2.0	37.3
240	1	2.0	39.2
243	1	2.0	41.2
248	1	2.0	43.1
253	1	2.0	45.1
259	1	2.0	47.1
270	1	2.0	49.0
280	1	2.0	51.0
295	1	2.0	52.9
297	1	2.0	54.9
307	1	2.0	56.9
352	1	2.0	58.8
365	1	2.0	60.8
386	1	2.0	62.7
434	1	2.0	64.7
444	1	2.0	66.7
473	1	2.0	68.6
478	1	2.0	70.6
633	1	2.0	72.5
676	1	2.0	74.5
734	1	2.0	76.5
740	1	2.0	78.4
790	1	2.0	80.4
818	1	2.0	82.4
910	1	2.0	84.3
924	1	2.0	86.3
938	1	2.0	88.2
941	1	2.0	90.2
978	1	2.0	92.2
998	4	7.8	100.0

UNIVARIATE

VARIABLE=VIS

MOMENTS

N	49	SUM WGTS	49
MEAN	507.286	SUM	24857
STD DEV	848.608	VARIANCE	720136
SKEWNESS	3.6546	KURTOSIS	15.5699
USS	47176123	CSS	34566522
CV	167.284	STD MEAN	121.23
T:MEAN=0	4.1845	PROB>|T|	.000120877
SGN RANK	612.5	PROB>|S|	0.0001
NUM ^= 0	49		

QUANTILES(DEF=4)

100% MAX	4900	99%	4900
75% Q3	352.5	95%	2374.98
50% MED	205	90%	1599.99
25% Q1	127.5	10%	100
0% MIN	80	5%	88.5
		1%	80
RANGE	4820		
Q3-Q1	225		
MODE	110		

EXTREMES

LOWEST	HIGHEST
80	1600
85	1700
92	1860
94	2890
100	4900

MISSING VALUE
COUNT 8
% COUNT/NOBS 14.04

```
STEM LEAF                                  #    BOXPLOT        NORMAL PROBABILITY PLOT
   4 9                                     1       *      4750+                      *
   4                                                      |                        +
   3                                                      |                       +
   3                                              3250+   |                      +
   2 9                                     1       *      |                     *
   2                                                      |                    +
   1 679                                   3       *      1750+                +**
   1 12                                    2       *      |                 +++++**
   0 5679                                  4       0      |              ++++++ **
   0 1111111111111111122222222222223333333 38      *------*  250+  * * * **********************
     ----+----+----+----+----+----+----+----+               +----+----+----+----+----+----+----+
     MULTIPLY STEM.LEAF BY 10**+03                          -2   -1   +0   +1   +2
```

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
80	1	2.0	2.0	140	1	2.0	30.6	230	1	2.0	55.1	570	1	2.0	81.6
85	1	2.0	4.1	145	1	2.0	32.7	240	1	2.0	57.1	660	1	2.0	83.7
92	1	2.0	6.1	150	1	2.0	34.7	245	1	2.0	59.2	905	1	2.0	85.7
94	1	2.0	8.2	155	1	2.0	36.7	249	1	2.0	61.2	1100	1	2.0	87.8
100	1	2.0	10.2	160	1	2.0	38.8	280	2	4.1	65.3	1160	1	2.0	89.8
102	1	2.0	12.2	163	1	2.0	40.8	294	1	2.0	67.3	1600	1	2.0	91.8
110	2	4.1	16.3	167	1	2.0	42.9	295	1	2.0	69.4	1700	1	2.0	93.9
112	2	4.1	20.4	180	1	2.0	44.9	318	1	2.0	71.4	1860	1	2.0	95.9
120	1	2.0	22.4	198	1	2.0	46.9	330	1	2.0	73.5	2890	1	2.0	98.0
125	1	2.0	24.5	200	1	2.0	49.0	340	1	2.0	75.5	4900	1	2.0	100.0
130	1	2.0	26.5	205	1	2.0	51.0	365	1	2.0	77.6				
133	1	2.0	28.6	213	1	2.0	53.1	465	1	2.0	79.6				

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F

UNIVARIATE

VARIABLE=TAN

MOMENTS

N	57	SUM WGTS	57
MEAN	8.69965	SUM	495.88
STD DEV	6.24951	VARIANCE	39.0564
SKEWNESS	0.654582	KURTOSIS	-1.08362
USS	6501.14	CSS	2187.16
CV	71.8364	STD MEAN	0.827768
T:MEAN=0	10.5098	PROB>|T|	0.0001
SGN RANK	826.5	PROB>|S|	0.0001
NUM ^= 0	57		

QUANTILES(DEF=4)

100% MAX	23	99%	23
75% Q3	15.62	95%	19.529
50% MED	5.99	90%	17.468
25% Q1	3.69	10%	2.438
0% MIN	1.42	5%	1.783
		1%	1.42
RANGE	21.58		
Q3-Q1	11.93		
MODE	3.12		

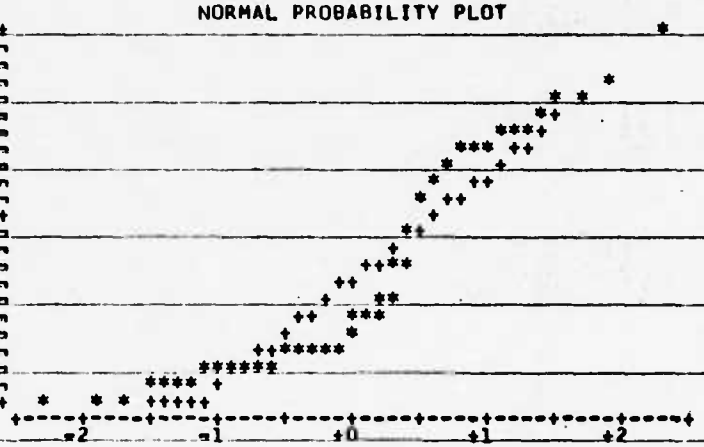
EXTREMES

LOWEST	HIGHEST
1.42	18.38
1.72	19.28
1.79	19.46
2.07	20.15
2.19	23

STEM	LEAF	#	BOXPLOT
23	0	1	
22			
21			
20	1	1	
19	35	2	
18	4	1	
17	112	3	
16	11269	5	
15	48	2	
14	028	3	
13			
12			
11	28	2	
10			
9	59	2	
8			
7	0016	4	
6	056	3	
5	2	1	
4	00002345999	11	
3	111122778	9	
2	1259	4	
1	478	3	

----+----+----+----+

NORMAL PROBABILITY PLOT



FREQUENCY TABLE

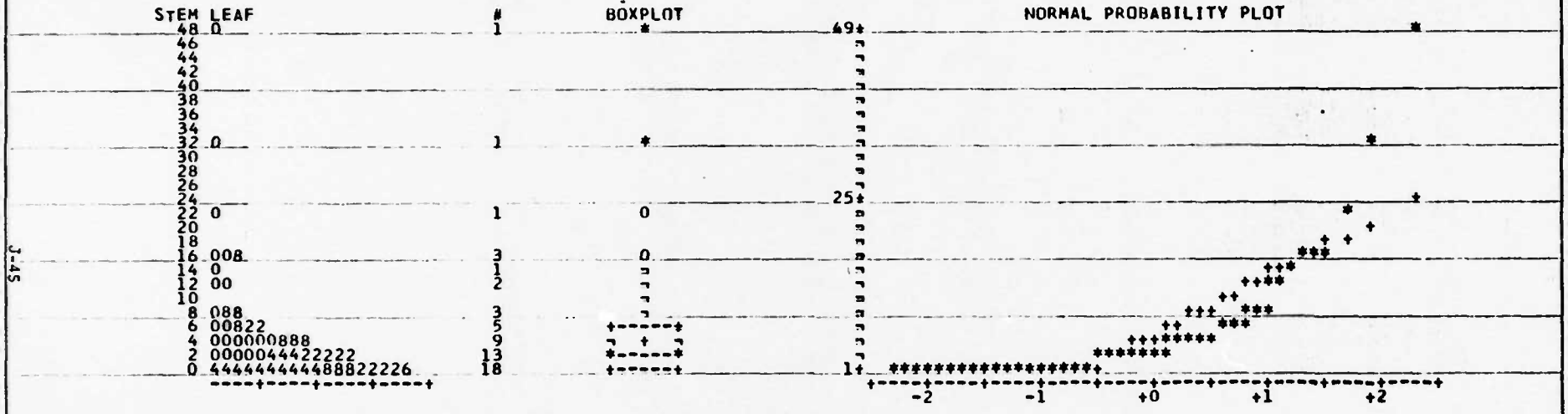
VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
1.42	1	1.8	1.8	3.78	1	1.8	28.1	6.51	1	1.8	52.6	16.07	1	1.8	78.9
1.72	1	1.8	3.5	3.99	1	1.8	29.8	6.6	1	1.8	54.4	16.1	1	1.8	80.7
1.79	1	1.8	5.3	4	1	1.8	31.6	6.96	2	3.5	57.9	16.18	1	1.8	82.5
2.07	1	1.8	7.0	4.01	1	1.8	33.3	7.09	1	1.8	59.6	16.65	1	1.8	84.2
2.19	1	1.8	8.8	4.04	1	1.8	35.1	7.58	1	1.8	61.4	16.88	1	1.8	86.0
2.5	1	1.8	10.5	4.16	1	1.8	36.8	9.51	1	1.8	63.2	17.09	1	1.8	87.7
2.9	1	1.8	12.3	4.35	1	1.8	38.6	9.91	1	1.8	64.9	17.11	1	1.8	89.5
3.07	1	1.8	14.0	4.4	1	1.8	40.4	11.2	1	1.8	66.7	17.24	1	1.8	91.2
3.1	1	1.8	15.8	4.53	1	1.8	42.1	11.81	1	1.8	68.4	18.38	1	1.8	93.0
3.12	2	3.5	19.3	4.88	1	1.8	43.9	13.96	1	1.8	70.2	19.28	1	1.8	94.7
3.23	1	1.8	21.1	4.89	1	1.8	45.6	14.17	1	1.8	71.9	19.46	1	1.8	96.5
3.24	1	1.8	22.8	4.92	1	1.8	47.4	14.77	1	1.8	73.7	20.15	1	1.8	98.2
3.66	1	1.8	24.6	5.23	1	1.8	49.1	15.44	1	1.8	75.4	23	1	1.8	100.0
3.72	1	1.8	26.3	5.99	1	1.8	50.9	15.8	1	1.8	77.2				

F-3

UNIVARIATE

VARIABLE=TS

MOMENTS				QUANTILES(DEF=4)				EXTREMES	
								LOWEST	HIGHEST
N	57	SUM WGTS	57	100% MAX	48	99%	48	0.4	16
MEAN	5.82456	SUM	332	75% Q3	7	95%	22.9999	0.4	16.8
STD DEV	8.30525	VARIANCE	68.9772	50% MED	3.2	90%	16	0.4	22
SKEWNESS	3.18926	KURTOSIS	12.5405	25% Q1	1.2	10%	0.4	0.4	32
USS	5796.48	CSS	3862.73	0% MIN	0.4	5%	0.4	0.4	48
CV	142.59	STD MEAN	1.10006			1%	0.4		
T:MEAN=0	5.29478	PROB>|T|	0.0001	RANGE	47.6				
SGN RANK	826.5	PROB>|S|	0.0001	Q3-Q1	5.8				
NUM ^= 0	57			MODE	0.4				



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0.4	10	17.5	17.5	3.2	5	8.8	54.4	8	1	1.8	80.7	22	1	1.8	96.5
0.8	3	5.3	22.8	4	6	10.5	64.9	8.8	2	3.5	84.2	32	1	1.8	98.2
1.2	4	7.0	29.8	4.8	3	5.3	70.2	12	2	3.5	87.7	48	1	1.8	100.0
1.6	1	1.8	31.6	6	2	3.5	73.7	14	1	1.8	89.5				
2	5	8.8	40.4	6.8	1	1.8	75.4	16	2	3.5	93.0				
2.4	3	5.3	45.6	7.2	2	3.5	78.9	16.8	1	1.8	94.7				

UNIVARIATE

VARIABLE=C08

MOMENTS

N	57	SUM WGTS	57
MEAN	16.5175	SUM	941.5
STD DEV	10.8117	VARIANCE	116.893
SKEWNESS	1.2702	KURTOSIS	2.44486
USS	22097.3	CSS	6545.98
CV	65.4558	STD MEAN	1.43204
T:MEAN=0	11.5343	PROB>|T|	0.0001
SGN RANK	826.5	PROB>|S|	0.0001
NUM ^= 0	57		

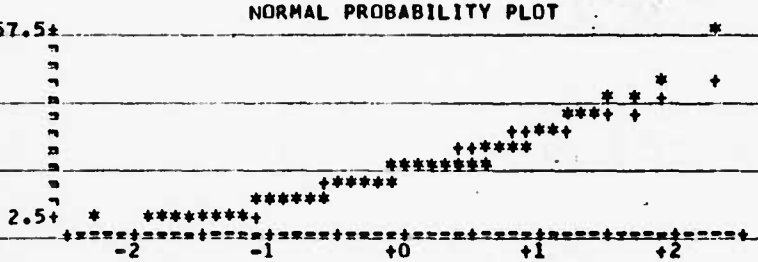
QUANTILES(DEF=4)

100% MAX	57	99%	57
75% Q3	21	95%	36.5
50% MED	15	90%	33
25% Q1	8.75	10%	3.9
0% MIN	2	5%	3
		1%	2
RANGE	55		
Q3-Q1	12.25		
MODE	16		

EXTREMES

LOWEST	HIGHEST
2	33
3	35
3	36
3	41
3.5	57

```
      STEM LEAF                            #          BOXPLOT
         5 7                               1                0
         5                                 0                |
         4                                 0                |
         4 1                               1                0
         3 56                              2                |
         3 233                             3                |
         2 578                             3                +
         2 111344                          6                |
         1 555666666888899                15                *
         1 000134444                       9                +
         0 5577888999                     10                |
         0 2333344                         7                0
        ----+----+----+----+
        MULTIPLY STEM.LEAF BY 10**+01
```



FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
2	1	1.8	1.8
3	3	5.3	7.0
3.5	1	1.8	8.8
4	2	3.5	12.3
5	2	3.5	15.8
7	2	3.5	19.3
8	1	1.8	21.1
8.5	2	3.5	24.6
9	3	5.3	29.8
10	2	3.5	33.3
10.5	1	1.8	35.1
11	1	1.8	36.8
13	1	1.8	38.6
14	3	5.3	43.9
14.5	1	1.8	45.6
15	3	5.3	50.9
16	6	10.5	61.4
18	4	7.0	68.4
19	2	3.5	71.9
21	3	5.3	77.2
23	1	1.8	78.9
24	2	3.5	82.5
25	1	1.8	84.2
27	1	1.8	86.0
28	1	1.8	87.7
32	1	1.8	89.5
33	2	3.5	93.0
35	1	1.8	94.7
36	1	1.8	96.5
41	1	1.8	98.2
57	1	1.8	100.0

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FD2	FDI3	ZN1	HRS	FE	VIS	TAN	TS	COB	GC
1	0.55	-19.7	-32.68	5.39	-109.6	0.30	0.00	39.57	-0.28	0.167	19	92	3.23	0.4	25.0	•
2	0.49	241.8	21.68	79.50	179.9	0.11	1.30	36.21	-3.95	4.000	82	94	3.12	0.4	18.0	•
3	0.24	-1264.9	181.33	310.12	1307.8	-0.67	4.24	-116.27	-8.66	8.000	170	102	3.72	7.2	14.5	•
4	0.21	-1415.1	265.50	405.00	2021.0	-0.53	5.23	-174.65	-9.15	16.000	195	110	4.40	6.0	14.0	•
5	0.25	-1021.2	380.12	514.81	2830.6	-0.13	5.96	-174.59	-9.46	24.000	200	120	4.89	3.2	15.0	•
6	0.25	-1486.0	473.37	611.56	3479.1	-0.14	7.22	-227.36	-9.91	32.000	224	130	5.23	4.0	15.0	•
7	0.25	-788.8	539.83	736.83	3911.1	0.76	8.24	-183.29	-9.59	40.000	240	140	6.60	4.0	16.0	•
8	0.40	498.3	630.04	927.79	4545.3	1.50	0.00	-79.44	-8.72	48.000	226	160	6.96	4.8	18.0	•
9	0.37	-751.3	786.85	1056.98	5331.0	0.93	0.00	-135.43	-9.71	56.000	243	163	7.58	4.8	18.0	•
10	1.60	3252.7	2462.26	2437.79	11128.7	5.33	0.00	563.80	-7.27	64.000	307	294	13.96	6.0	35.0	•
11	0.41	4190.5	12.65	-50.29	699.8	4.59	0.00	275.56	1.01	0.167	43	180	1.72	0.4	5.0	•
12	0.79	626.3	55.97	78.34	305.1	0.05	1.32	18.36	-3.65	4.000	134	200	2.19	0.8	7.0	•
13	0.56	-619.8	141.51	281.15	1030.3	-1.46	0.00	-162.07	-7.54	8.000	225	230	2.90	1.2	4.0	•
14	0.58	-116.8	252.61	471.94	1715.4	-0.96	5.05	-147.03	-7.41	16.000	280	245	3.12	1.6	5.0	•
15	0.46	-205.4	497.47	729.67	2799.2	-0.78	0.00	-107.81	-7.25	24.000	259	280	4.01	2.4	3.0	•
16	0.81	1129.8	1157.29	1278.56	5268.7	1.19	0.00	134.46	-6.32	32.000	253	340	6.51	3.2	9.0	•
17	1.56	1912.8	3455.18	2198.01	11349.3	5.19	0.00	702.45	-5.55	40.000	297	570	11.20	4.0	15.0	•
18	2.45	3384.4	5293.61	3131.72	15254.4	9.15	0.00	1261.56	-4.00	48.000	365	1160	15.80	6.8	14.0	•
19	2.93	3895.9	6235.36	3855.38	17031.3	10.81	0.00	1635.06	-3.35	56.000	434	1860	19.28	8.8	10.0	•
20	3.47	4959.9	6891.53	4516.18	19219.9	13.25	0.00	1984.95	-2.20	64.000	473	4900	20.15	16.0	7.0	•
21	0.52	-34.1	-22.31	8.81	-109.4	0.47	0.34	-1.86	-0.25	0.167	51	110	2.07	0.4	32.0	•
22	1.33	-366.0	34.29	137.39	175.6	-0.20	1.91	-178.99	-3.73	4.000	209	112	3.66	0.4	24.0	•
23	1.13	-671.5	234.56	439.28	1402.2	0.21	4.09	-411.27	-5.01	8.000	676	133	3.78	1.2	16.0	•
24	1.10	-446.3	448.17	771.45	2579.0	0.61	0.00	-453.06	-5.37	16.000	998	155	4.04	2.0	18.0	•
25	2.33	2847.6	3175.94	2503.08	11027.2	5.68	0.00	363.39	-3.65	24.000	998	365	9.91	3.2	33.0	•
26	3.80	5516.6	5876.83	4603.52	20388.2	12.54	0.00	1469.75	-0.87	32.000	998	•	16.65	8.8	16.0	•
27	3.86	4955.1	6464.25	5361.98	22948.1	12.77	0.00	1713.00	-0.96	40.000	734	•	23.00	16.8	4.0	•

CL2	27	1.21111111	1.15611862	32.7000000	0.21000000	3.86000000
DET1	27	1044.63074074	2217.96930733	28205.0300000	-1485.96000000	5516.62000000
DET2	27	1700.48925926	2357.01886930	45913.2100000	-32.68000000	6891.53000000
DET3	27	1385.25703704	1604.68115033	37401.9400000	-50.29000000	5361.98000000
DET4	27	6211.45740741	7087.82566519	167709.3500000	-109.56000000	22948.13000000
FD1	27	2.98407407	4.70283242	80.5700000	-1.46000000	13.25000000
FD2	27	1.69629630	2.63691566	45.8000000	0	8.24000000
FDI3	27	283.14814815	702.35403471	7645.0000000	-453.06000000	1984.95000000
ZN1	27	-5.28888889	3.31879535	-142.8000000	-9.91000000	1.01000000
HRS	27	26.24077778	20.65137951	708.5010000	0.16700000	64.00000000
FE	27	345.66666667	287.12889092	9333.0000000	19.00000000	998.00000000
VIS	25	489.80000000	998.97272235	12245.0000000	92.00000000	4900.00000000
TAN	27	7.76592593	6.23424800	209.6800000	1.72000000	23.00000000
TS	27	4.25185185	4.31690509	114.8000000	0.40000000	16.80000000
COB	27	15.20370370	8.79057544	410.5000000	3.00000000	35.00000000

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CL2

CL2	DET3	DET2	FD1	DET4	FDI3	TAN	DET1	VIS	TS	FE	ZN1	HRS	FD2
1.00000	0.94329	0.94251	0.93620	0.92689	0.90505	0.90002	0.85706	0.77983	0.77034	0.67087	0.53506	0.48272	-0.44195
27	27	27	27	27	27	27	27	25	27	27	27	27	27

COB	GC
-0.05511	0.00000
27	0

DET1

DET1	FD1	FDI3	CL2	DET2	DET4	DET3	TAN	TS	ZN1	VIS	FD2	HRS	FE
1.00000	0.93425	0.89954	0.85706	0.84572	0.83614	0.83312	0.79864	0.65029	0.64937	0.64633	-0.57498	0.45827	0.43200
27	27	27	27	27	27	27	27	27	27	25	27	27	27

COB	GC
-0.09679	0.00000
27	0

DET2

DET2	DET4	DET3	TAN	FD1	FDI3	CL2	TS	DET1	VIS	HRS	FE	FD2	ZN1
1.00000	0.98138	0.97952	0.97090	0.96492	0.96362	0.94251	0.85275	0.84572	0.81521	0.66980	0.53773	-0.38978	0.37952
27	27	27	27	27	27	27	27	27	25	27	27	27	27

COB	GC
-0.13303	0.00000
27	0

DET3

DET3	DET4	TAN	DET2	FD1	CL2	FDI3	TS	DET1	VIS	HRS	FE	FD2	ZN1
1.00000	0.99605	0.98019	0.97952	0.94874	0.94329	0.92598	0.88406	0.83312	0.78979	0.69515	0.60829	-0.37639	0.32489
27	27	27	27	27	27	27	27	27	25	27	27	27	27

COB	GC
-0.11049	0.00000
27	0

	DET4	DET3	TAN	DET2	FD1	FDI3	CL2	TS	DET1	VIS	HRS	FE	FD2	ZN1
	1.00000	0.92605	0.88270	0.88138	0.85233	0.82795	0.82689	0.77351	0.73614	0.65547	0.61953	0.48005	-0.36539	0.30426
	27	27	27	27	27	27	27	27	27	25	27	27	27	27
	COB	GC												
	-0.10079	0.00000												
	27	0												

FD1

	FD1	FDI3	DET2	DET4	DET3	CL2	DET1	TAN	TS	VIS	HRS	ZN1	FE	FD2
	1.00000	0.96813	0.96492	0.95233	0.94874	0.93620	0.93425	0.93419	0.81974	0.80575	0.59918	0.52506	0.51580	-0.43923
	27	27	27	27	27	27	27	27	27	25	27	27	27	27
	COB	GC												
	-0.09550	0.00000												
	27	0												

FD2

	FD2	DET1	ZN1	FDI3	CL2	FD1	DET2	DET3	DET4	TAN	VIS	FE	TS	HRS
	1.00000	-0.57498	-0.56641	-0.44925	-0.44199	-0.43923	-0.38978	-0.37639	-0.36539	-0.34240	-0.24867	-0.19389	-0.19013	-0.17067
	27	27	27	27	27	27	27	27	27	27	25	27	27	27
	COB	GC												
	-0.06245	0.00000												
	27	0												

FDI3

	FDI3	FD1	DET2	DET4	TAN	DET3	CL2	DET1	VIS	TS	HRS	ZN1	FD2	FE
	1.00000	0.96813	0.96362	0.92795	0.92657	0.92598	0.90505	0.89954	0.84397	0.82828	0.58380	0.51206	-0.44925	0.35839
	27	27	27	27	27	27	27	27	25	27	27	27	27	27
	COB	GC												
	-0.18125	0.00000												
	27	0												

ZN1

	ZN1	DET1	FD2	CL2	FD1	FDI3	DET2	DET3	DET4	VIS	TAN	HRS	FE	TS
	1.00000	0.64937	-0.56641	0.53506	0.52506	0.51206	0.37952	0.32489	0.30426	0.28079	0.26551	-0.25054	0.19170	0.14908
	27	27	27	27	27	27	27	27	27	25	27	27	27	27
	COB	GC												
	0.05550	0.00000												
	27	0												

HRS

	HRS	TAN	DET4	DET3	TS	DET2	FD1	FDI3	VIS	CL2	DET1	ZN1	FE	FD2
	1.00000	0.76915	0.71953	0.69515	0.69121	0.66980	0.59918	0.58380	0.53488	0.48272	0.45827	-0.25054	0.24750	-0.17067
	27	27	27	27	27	27	27	27	25	27	27	27	27	27
	COB	GC												
	-0.00031	0.00000												
	27	0												

FE

	FE	CL2	DET3	DET4	DET2	FD1	TAN	DET1	TS	FDI3	HRS	VIS	FD2	ZN1
	1.00000	0.67087	0.60829	0.58005	0.53773	0.51580	0.49806	0.43200	0.40681	0.35839	0.24750	0.20641	-0.19389	0.19170
	27	27	27	27	27	27	27	27	27	27	27	25	27	27
	COB	GC												
	0.08573	0.00000												
	27	0												

VIS

	VIS	TS	FDI3	DET2	FD1	DET3	CL2	TAN	DET4	DET1	HRS	ZN1	COB	FD2
	1.00000	0.85034	0.84397	0.81521	0.80575	0.78979	0.77983	0.76238	0.75547	0.64633	0.53488	0.28079	-0.24965	-0.24867
	25	25	25	25	25	25	25	25	25	25	25	25	25	25

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VIS

FE	GC
0.20641	0.00000
25	0

TAN

TAN	DET4	DET3	DET2	FD1	FDI3	CL2	TS	DET1	HRS	VIS	FE	FD2	ZN1
1.00000	0.98270	0.98019	0.97090	0.93419	0.92657	0.90002	0.89796	0.79864	0.76915	0.76238	0.49806	-0.34240	0.26551
27	27	27	27	27	27	27	27	27	27	25	27	27	27

COB	GC
-0.07736	0.00000
27	0

TS

TS	TAN	DET3	DET4	OET2	VIS	FOI3	FD1	CL2	HRS	DET1	FE	COB	FD2
1.00000	0.89796	0.88406	0.87351	0.85275	0.85034	0.82828	0.81974	0.77034	0.69121	0.65029	0.40681	-0.24141	-0.19019
27	27	27	27	27	25	27	27	27	27	27	27	27	27

ZN1	GC
0.14908	0.00000
27	0

COB

COB	VIS	TS	FOI3	OET2	DET3	DET4	DET1	FD1	FE	TAN	FD2	ZN1	CL2
1.00000	-0.24965	-0.24141	-0.18125	-0.13303	-0.11049	-0.10079	-0.09679	-0.09550	0.08573	-0.07736	-0.06245	0.05550	-0.05511
27	25	27	27	27	27	27	27	27	27	27	27	27	27

HRS	GC
-0.00031	0.00000
27	0

GC

CL2	OET1	DET2	OET3	DET4	FD1	FD2	FDI3	ZN1	HRS	FE	VIS	TAN	TS
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0	0	0	0	0	0	0	0	0	0	0	0	0	0

COB	GC
0.00000	0.00000
0	0

OBS	CL2	DET1	DET2	DET3	DET4	FD1	FO2	FDI3	ZN1	HRS	FE	VIS	TAN	TS	COB	GC
1	0.60	20.1	2.07	-19.76	-7.6	-0.52	0.38	0.67	-0.31	0.167	43	198	1.42	0.4	57.0	.
2	1.59	45.5	57.32	69.47	252.6	-0.48	1.54	22.92	-2.22	4.000	202	213	1.79	0.8	41.0	.
3	1.01	-504.1	168.37	260.71	1101.4	-1.13	3.78	-125.51	-3.02	8.000	633	249	2.50	1.2	8.5	.
4	1.18	-216.6	822.49	866.80	3796.2	-0.86	9.34	65.13	-2.47	16.000	818	318	4.00	2.0	8.5	.
5	3.08	4237.3	5481.97	3152.79	15278.2	10.43	0.00	1365.18	0.50	24.000	924	.	14.17	3.2	16.0	.
6	3.65	5074.4	6529.91	4168.73	17433.4	13.52	0.00	1833.82	1.50	32.000	941	.	18.38	7.2	9.0	.
7	4.52	5576.7	6713.71	4723.57	18336.5	14.46	0.00	1990.02	2.05	40.000	978	.	17.09	12.0	3.5	.
8	5.61	5226.7	7375.45	4847.91	19173.7	14.24	0.00	1977.25	1.79	48.000	938	.	16.10	14.0	3.0	.
9	5.52	5218.8	7070.87	5069.30	18797.0	14.11	0.00	2020.67	2.00	56.000	910	.	19.46	32.0	3.0	.
10	7.72	.	.	.	.	.	0.00	.	.	64.000	790	.	16.18	48.0	2.0	.
11	0.33	16.0	-47.02	-18.92	-113.9	-0.42	0.00	-4.61	-0.91	0.167	23	80	3.10	0.4	10.0	.
12	0.67	193.0	12.11	86.72	128.7	-0.52	1.29	-22.18	-5.58	4.000	91	85	3.24	0.8	10.5	.
13	0.24	-728.1	179.25	390.66	1234.2	-1.48	0.00	-182.00	-9.38	8.000	212	100	3.99	1.2	8.0	.
14	0.46	-662.7	287.07	560.66	2007.5	-1.45	5.77	-242.38	-9.65	16.000	248	112	4.53	2.0	9.0	.
15	0.45	-697.4	451.21	778.58	2837.8	-1.45	0.00	-235.77	-9.96	24.000	270	125	4.92	4.8	11.0	.
16	0.70	-36.9	793.99	1146.77	4424.4	-0.46	0.00	-131.44	-9.65	32.000	295	145	7.09	6.0	16.0	.
17	1.44	1919.8	2788.21	2397.42	10498.1	4.04	0.00	584.10	-7.21	40.000	352	295	11.81	8.0	23.0	.
18	2.14	2256.5	4042.76	3158.63	13032.1	6.06	0.00	930.67	-7.01	48.000	444	660	15.44	12.0	21.0	.
19	2.93	2916.0	5015.26	3960.03	15162.2	7.59	0.00	1318.15	-6.44	56.000	478	1100	16.07	16.0	16.0	.
20	3.39	3436.6	5490.10	4363.28	16220.1	8.56	0.00	1446.40	-5.85	64.000	386	1700	16.88	22.0	13.0	.
21	0.44	-10.6	-33.09	-5.32	-85.5	-0.67	0.00	-3.95	-0.30	0.167	20	150	3.07	0.4	33.0	.
22	0.70	385.8	34.14	194.04	114.6	-0.75	0.00	-181.79	-3.32	4.000	155	167	4.16	0.4	36.0	.
23	1.36	-2016.5	181.82	382.59	1233.0	-2.57	0.00	-220.50	-4.84	8.000	740	205	4.35	0.4	21.0	.
24	1.71	-2031.7	276.13	561.22	2070.0	-2.76	0.00	-374.90	-4.94	16.000	998	240	4.88	2.0	19.0	.
25	1.60	-2002.2	422.05	778.76	2975.9	-2.43	8.57	-373.39	-4.92	24.000	.	280	5.99	2.4	21.0	.
26	1.72	-2001.3	632.77	1061.82	4312.6	-3.12	0.00	-299.88	-4.36	32.000	.	330	6.96	2.4	24.0	.
27	2.00	-1001.9	1707.10	1724.03	8013.0	-0.78	16.44	39.37	-3.45	40.000	.	465	9.51	3.2	28.0	.
28	2.96	576.9	3809.36	2807.71	12749.2	4.23	0.00	730.90	-1.94	48.000	.	905	14.77	4.0	27.0	.
29	3.40	1130.2	4743.86	3426.22	15115.6	6.18	0.00	1042.44	-1.08	56.000	.	1600	17.11	4.0	19.0	.
30	3.63	1095.1	5102.02	3766.61	16074.8	6.44	0.00	1136.53	-0.87	66.000	.	2890	17.24	4.0	14.0	.

CL2	30	2.22500000	1.84097004	66.7500000	0.24000000	7.72000000
DET1	29	945.35965517	2349.00849635	27415.4300000	-2031.69000000	5576.72000000
DET2	29	2417.62965517	2675.13975946	70111.2600000	-47.02000000	7375.45000000
DET3	29	1884.86310345	1777.65927871	54661.0300000	-19.76000000	5069.30000000
DET4	29	7660.90034483	7224.42592814	222166.1100000	-113.86000000	19173.68000000
FD1	29	3.03482759	5.84923659	88.0100000	-3.12000000	14.46000000
FD2	30	1.57033333	3.75424861	47.1100000	0	16.44000000
FDI3	29	486.41103448	821.72621007	14105.9200000	-374.90000000	2020.67000000
ZN1	29	-3.51172414	3.67657262	-101.8400000	-9.96000000	2.05000000
HRS	30	29.28336667	21.77519687	878.5010000	0.16700000	66.00000000
FE	24	495.37500000	348.44184999	11889.0000000	20.00000000	998.00000000
VIS	24	525.50000000	678.88015207	12612.0000000	80.00000000	2890.00000000
TAN	30	9.54000000	6.24754241	286.2000000	1.42000000	19.46000000
TS	30	7.24000000	10.58839964	217.2000000	0.40000000	48.00000000
COB	30	17.70000000	12.38505774	531.0000000	2.00000000	57.00000000

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CL2

CL2	DET2	DET3	DET4	FDI3	FD1	VIS	TAN	TS	DET1	HRS	FE	ZN1	COB
1.00000	0.93799	0.92837	0.91899	0.90919	0.89507	0.86595	0.82783	0.82006	0.79044	0.77068	0.68760	0.60639	-0.43578
30	29	29	29	29	29	24	30	30	29	30	24	29	30

FD2	GC
-0.18557	0.00000
30	0

DET1

DET1	FD1	FDI3	DET2	DET3	DET4	TAN	CL2	TS	VIS	HRS	ZN1	FE	COB
1.00000	0.97174	0.95410	0.90042	0.85592	0.84249	0.79251	0.79044	0.71721	0.54166	0.54085	0.52657	0.50362	-0.38146
29	29	29	29	29	29	29	29	29	24	29	29	23	29

FD2	GC
-0.34167	0.00000
29	0

DET2

DET2	DET4	DET3	FDI3	FD1	TAN	CL2	DET1	VIS	HRS	TS	FE	ZN1	COB
1.00000	0.98798	0.98783	0.98048	0.97116	0.96216	0.93799	0.90042	0.85294	0.80527	0.74033	0.64669	0.49991	-0.42248
29	29	29	29	29	29	29	29	24	29	29	23	29	29

FD2	GC
-0.25284	0.00000
29	0

DET3

DET3	DET4	DET2	TAN	FDI3	FD1	CL2	HRS	DET1	VIS	TS	FE	COB	ZN1
1.00000	0.99305	0.98783	0.97834	0.95295	0.93560	0.92837	0.87620	0.85592	0.82473	0.78761	0.62380	-0.43492	0.40596
29	29	29	29	29	29	29	29	29	24	29	23	29	29

FD2	GC
-0.21759	0.00000
29	0

1.00000	0.99305	0.98798	0.98498	0.94568	0.92883	0.91899	0.87475							
29	29	29	29	29	29	29	29	29	24	29	23			

FD2	GC
-0.19717	0.00000
29	0

FD1

FD1	FDI3	DET1	DET2	DET3	DET4	CL2	TAN	VIS	TS	HRS	FE	ZN1	COB
1.00000	0.99248	0.97174	0.97116	0.93560	0.92885	0.89507	0.88964	0.78196	0.72810	0.66281	0.60023	0.56578	-0.41605
29	29	29	29	29	29	29	29	24	29	29	23	29	29

FD2	GC
-0.31885	0.00000
29	0

FD2

FD2	DET1	FD1	FDI3	DET2	TAN	DET3	TS	DET4	CL2	VIS	HRS	ZN1	FE
1.00000	-0.34167	-0.31885	-0.30497	-0.25284	-0.23718	-0.21759	-0.20015	-0.19717	-0.18557	-0.14991	-0.09823	-0.08760	0.05279
30	29	29	29	29	30	29	30	29	30	24	30	29	24

COB	GC
0.05061	0.00000
30	0

FDI3

FDI3	FD1	DET2	DET1	DET3	DET4	TAN	CL2	VIS	TS	HRS	FE	ZN1	COB
1.00000	0.99248	0.98048	0.95410	0.95295	0.94568	0.91022	0.90919	0.81119	0.74512	0.70996	0.58862	0.56627	-0.39846
29	29	29	29	29	29	29	29	24	29	29	23	29	29

FD2	GC
-0.30497	0.00000
29	0

ZN1

ZN1	CL2	FDI3	FD1	DET1	DET2	FE	DET4	DET3	TAN	VIS	TS	HRS	FD2
1.00000	0.60639	0.56627	0.56578	0.52657	0.49991	0.43769	0.42414	0.40596	0.36507	0.27639	0.17464	0.10583	-0.08760
29	29	29	29	29	29	23	29	29	29	24	29	29	29

COB	GC
0.03347	0.00000
29	0

HRS

HRS	TAN	DET3	DET4	VIS	DET2	CL2	FDI3	TS	FD1	DET1	FE	COB	ZN1
1.00000	0.90208	0.87620	0.87475	0.80612	0.80527	0.77068	0.70996	0.67885	0.66281	0.54085	0.48737	-0.37576	0.10583
30	30	29	29	24	29	30	29	30	29	29	24	30	29

FD2	GC
-0.09823	0.00000
30	0

FE

FE	CL2	DET2	DET4	DET3	TAN	FD1	FDI3	COB	DET1	HRS	ZN1	TS	VIS
1.00000	0.68760	0.64669	0.64236	0.62380	0.60671	0.60023	0.58862	-0.52572	0.50362	0.48737	0.43769	0.39628	0.20546
24	24	23	23	23	24	23	23	24	23	24	23	24	18

FD2	GC
0.05279	0.00000
24	0

VIS

VIS	CL2	DET2	DET4	DET3	TAN	FDI3	HRS	FD1	DET1	TS	ZN1	FE	FD2
1.00000	0.86595	0.85294	0.82914	0.82473	0.81615	0.81119	0.80612	0.78196	0.54166	0.48196	0.27639	0.20546	-0.14991
24	24	24	24	24	24	24	24	24	24	24	24	18	24

CORRELATION COEFFICIENTS / NUMBER OF OBSERVATIONS

VIS

COB	GC
-0.13602	0.00000
24	0

TAN

TAN	DET4	DET3	DET2	FDI3	HRS	FD1	CL2	VIS	DET1	TS	FE	COB	ZN1
1.00000	0.98448	0.97834	0.96216	0.91022	0.90208	0.88964	0.82783	0.81615	0.79251	0.63224	0.60671	-0.41355	0.36507
30	29	29	29	29	30	29	30	24	29	30	24	30	29

FD2	GC
-0.23718	0.00000
30	0

TS

TS	CL2	DET3	FDI3	DET2	FD1	DET4	DET1	HRS	TAN	VIS	COB	FE	FD2
1.00000	0.82006	0.78761	0.74512	0.74033	0.72810	0.72588	0.71721	0.67885	0.63224	0.48196	-0.44471	0.39628	-0.20015
30	30	29	29	29	29	29	29	30	30	24	30	24	30

ZN1	GC
0.17464	0.00000
29	0

COB

COB	FE	TS	CL2	DET3	DET2	FD1	TAN	DET4	FDI3	DET1	HRS	VIS	FD2
1.00000	-0.52572	-0.44471	-0.43578	-0.43492	-0.42248	-0.41605	-0.41355	-0.40780	-0.39846	-0.38146	-0.37576	-0.13682	0.05061
30	24	30	30	29	29	29	30	29	29	29	30	24	30

ZN1	GC
0.03347	0.00000
29	0

GC

CL2	DET1	DET2	DET3	DET4	FD1	FD2	FDI3	ZN1	HRS	FE	VIS	TAN	TS
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0	0	0	0	0	0	0	0	0	0	0	0	0	0

COB	GC
0.00000	0.00000
0	0

END

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DTIC