N
5/23/01

Appendix B. Sediment Survey Results-Data Tables

Metals
PCBs
PAHs
Oil and Grease
Grain Size
~~Acid Volatile Sulfides~~
~~TOC, Density~~
~~Lat-Long~~
~~Classification A~~: Upstream to Downstream
~~Classification B:~~ Most Contaminated to Least Contaminated

US EPA RECORDS CENTER REGION 5
487641

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S.E. MICHIGAN DISTRICT OFFICE

FROM

"RESULTS OF THE TRENTON CHANNEL PROJECT SEDIMENT SURVEYS 1993-1996."

July 1997

by Art Ostaszewski
MDEQ
SWQD
USEPA-GLNPO Grant #GL995960-01-0

metals

TRENTON CHANNEL PROJECT		HEAVY METALS mg/kg										
SEDIMENT CHEMISTRY RESULTS	Core											
	length	%										
SITE DESCRIPTION	in cm	SOLIDS	TOT. As	TOT Cd	TOT. Cr	TOT. Cu	TOT. Fe	TOT. Pb	TOT. Mn	TOT. Hg	TOT. Ni	TOT. Zn
ERM (Long and Morgan, 1990)			85	9.6	145	390		110		1.3	50	270
SEL (Persuad et. al. OME, 1993)							40000		1100			
Quantification Level (EPA Method 245.1/7470,7471)										0.1		
51 C 1 Firestone upper	000-030	43	9.4	10	150	140	30000	200	410	13	80	490
	030-091	53	13	15	230	300	32000	300	470	16	100	660
	091-152	51	12	13	190	250	26000	260	430	16	84	570
	152-194	48	13	10	140	190	25000	180	410	9.5	70	460
66C1 Firestone Steel -Mid (45P site	000-030	43	12	15	260	300	31000	240	550	16	100	590
	030-091	54	11	15	140	210	25000	190	420	10	67	520
	091-104	57	8.2	10	58	190	18000	160	310	2.9	39	430
45P Firestone Steel	PONAR	45	7.6	11	165	199	44000	180	733	10	76	592
	PONAR	47	13	11	166	221	41000	211	574	6.5	86.8	662
50P Firestone Lower	Ponar	42	9.4	19	250	150	35000	260	500	10	130	790
MONGUAGON CREEK-UPSTREAM	000-030	41	8.5	40	118	140	37500	140	590	2.4	68	563
MONGUAGON CREEK-UPSTREAM	030-104	47	9.9	20	467	246	44100	333	551	1.2	210	864
MONGUAGON CREEK-UPSTREAM	104-142	53	11	14	303	217	41500	333	520	9.9	160	721
MONGUAGON CREEK-UPSTREAM	000-030	41	7.8	33	109	118	38800	149	569	2.5	70	458
MONGUAGON CREEK-UPSTREAM	030-076	43	8.1	21	248	183	45900	277	546	3.4	160	625
MONGUAGON CREEK-UPSTREAM	076-150	47	8.9	22	500	255	42900	352	554	3.1	160	525
MONGUAGON CREEK-UPSTREAM	150-180	60	12	7.6	170	122	24400	212	476	5.7	73	377
48E Monguagon Creek	Eckman	48	7.4	6.2	77	70	22000	150	440	0.29	64	2300
SS - Monguagon Creek	Ponar	58	nm	11.2	178	123	45900	179	655	<0.1	103	850
FI - Fighting Island	Ponar	33	nm	nd	21	14	14200	nd	236	<0.1	17	32
25 C1 MNCK DNS-Nearshore	000-027	70	6.1	29	78	91	27700	115	429	1.1	46	412
25 C1	027-051	61	6.5	10	99	101	28900	142	484	0.95	56	449
25 C1	051-095	58	5.7	15	167	131	35700	213	486	1.5	90	648
25 C1	095-132	71	8	17	405	239	48300	302	542	1.4	251	887
21 C1 MNCK DNS-Offshore	000-027	80	3.5	<0.05	9.2	14	14100	9.1	251	<0.1	15	34
21 C1	027-051	84	3.9	<0.05	13	15	14900	17	285	0.23	17	50
MONGUAGON CREEK-DOWN	000-150	48	8.5	18	437	252	42000	340	556	3.9	200	878
MONGUAGON CREEK-DOWN	150-168	50	10	22	456	281	51700	424	632	11	210	1200
BLACK LAGOON-CENTER	000-030	38	6.5	14	102	99	33200	193	746	1.4	49	3090
BLACK LAGOON-CENTER	030-120	34	9	17	345	218	70100	449	1070	3.1	160	1720
BLACK LAGOON-CENTER	120-210	40	22	11	162	236	112000	439	1640	6.8	90	1030
BLACK LAGOON-CENTER	210-229	75	4.9	3.7	45	99	19800	76	330	1.4	41	225
BLACK LAGOON-LOWER	000-060	42	24	12	191	226	137000	574	2060	5.6	100	1340
BLACK LAGOON-LOWER	060-152	51	10	11	183	247	35800	187	488	7.8	72	554
BLACK LAGOON-LOWER	152-203	54	10	9.8	121	166	29000	118	397	4.8	56	444
BLACK LAGOON-EAST	000-055	81	8.1	<0.050	9.8	5.2	7430	3.9	148	<0.1	8.5	27
BLACK LAGOON-EAST	055-103	80	1.9	<0.050	8.6	3.7	8150	3.4	173	<0.1	7.1	17
BLACK LAGOON-EAST	103-166	78	2.3	<0.050	9.6	5.6	7260	4.1	162	<0.1	7.9	17
BLACK LAGOON-EAST	166-229	80	2.6	0.067	9.7	7	7480	3.9	175	<0.1	8.6	23
BLACK LAGOON-EAST	000-035	80	1.8	<0.050	9	4.7	6840	3.6	128	<0.1	7.6	26
BLACK LAGOON-EAST	035-133	77	1.9	<0.050	9.3	4.2	7190	3.6	161	<0.1	7.9	21
BLACK LAGOON-EAST	133-182	76	3.2	<0.050	11	8.6	8380	4	201	<0.1	9.5	29
24 C1 BLLG-Nearshore	000-030	40	7.1	16	121	110	53300	218	743	1.2	58	3320
24 C1 (WWES Lab)	030-075	32	7.3	11	315	200	57000	337	827	1.2	144	2410
24 C1 BLLG-Nearshore	030-075	32	12	30	418	233	76500	468	1100	1.3	206	3200
(MDNR Lab)												
47E BLLG	Eckman	35	7	9.9	88	96	43000	160	620	11	52	1300
S7 - Black Lagoon	Ponar	55	nm	9.7	156	111	73000	254	873	<0.1	71	2060

pcbs

TRENTON CHANNEL PROJECT									
SEDIMENT CHEMISTRY RESULTS			PCBs SCAN						
	Core Length		mg/kg d.w.						
SITE DESCRIPTION	in cm	TOT. PCB	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
ERM (Long and Morgan, 1990)		0.4							
Quantification Level (EPA Method 608/8081)		0.33							
15 C1 T.C. North Marsh	000-022		<0.33	<0.42	<0.33	<0.33	<0.33	<0.33	<0.33
15 C1	022-062		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
15 C1	062-100		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
51 C 1 Firestone upper	000-030	18.40					3.2	1.8	13.4
	030-091	9.31					4.39	1.95	2.97
	091-152	14.20					4.55	2.6	7.05
	152-194	5.39					2.96	2.43	< 0.33
66C1 Firestone Steel -Mid (45P s:	000-030	4.39					1.96	1.36	1.67
	030-091	3.85					1.31	0.89	1.65
	091-104	0.65					< 0.33	0.18	0.47
45P Firestone Steel	PONAR	1.10	<4.4	<1.2	<4.4	<4.4	<4.4	<0.33	1.10
	PONAR	2.20	<1.1	<1.1	<1.1	<1.1	<1.1	2.20	<1.1
45PC2	PONAR	2.56	<1.1	<1.1	<1.1	<1.1	<1.1	1.70	0.87
50P Firestone Lower	Ponar	3.43					1.26	1.31	0.86
MONGUAGON CREEK-UPSTREAM	000-030	2.4	<2.0	<1.3	<1.3	<2.0	<2.0	<2.6	2.4
MONGUAGON CREEK-UPSTREAM	030-104	2.5	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	2.5
MONGUAGON CREEK-UPSTREAM	104-142	11.2	<1.3	<1.3	<1.3	<1.3	5.7	5.5	<1.3
MONGUAGON CREEK-UPSTREAM	000-030	2.1	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	2.1
MONGUAGON CREEK-UPSTREAM	030-076	9.9	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	9.9
MONGUAGON CREEK-UPSTREAM	076-150	9.7	<2.8	<5.6	<2.8	<2.8	4.9	<4.8	4.8
MONGUAGON CREEK-UPSTREAM	150-180	10	<2.2	<4.4	<2.2	<2.2	5.7	4.3	<3.9
48E Monguagon Creek	Eckman	1.52							1.52
S5 - Monguagon Creek	Ponar	6.18							
FI - Fighting Island	Ponar	0.08							
25 C1 MNCK DNS-Nearshore	000-027		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
25 C1	027-051		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
25 C1	051-095	1.08	<0.33	<0.33	<0.33	<0.33	0.36	<0.33	0.72
25 C1	095-132	1.15	<0.33	<0.33	<0.33	<0.33	0.58	<0.33	0.57
21 C1 MNCK DNS-Offshore	000-027		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
21 C1	027-051		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
MONGUAGON CREEK-DOWN	000-150	5.9	<0.33	<2.8	<0.33	<0.33	2.3	<5.5	3.6
MONGUAGON CREEK-DOWN	150-168	12.3	<0.33	<5.3	<0.33	<0.33	9.6	<7.2	2.7
BLACK LAGOON-CENTER	000-030	0	<8.91	<8.91	<8.91	<8.91	<8.91	<8.91	<8.91
BLACK LAGOON-CENTER	030-120	6.5	<2.0	<2.0	<2.0	<2.0	2.4	<3.9	4.1
BLACK LAGOON-CENTER	120-210	1.8	<1.1	<1.1	<1.1	<1.1	<1.1	1.8	<1.1
BLACK LAGOON-CENTER	210-229	0	<0.44	<1.3	<0.44	<0.44	<0.44	<0.44	<0.44
BLACK LAGOON-LOWER	000-060	2.8	<3.2	<3.2	<3.2	<3.2	<3.2	2.8	<1.3
BLACK LAGOON-LOWER	060-152	0	<4.0	<5.2	<4.0	<4.0	<4.0	<2.7	<1.3
BLACK LAGOON-LOWER	152-203	0	<1.7	<1.7	<2.5	<1.7	<1.7	<1.7	<0.81
BLACK LAGOON-EAST	000-055	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	055-103	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	103-166	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	166-229	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	000-035	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	035-133	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	133-182	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
24 C1 BLLG-Nearshore	000-030	1.64	<0.42	<2.8	<0.42	0.81	<0.42	0.83	<0.42
24 C1 (WWES Lab)	030-075	2.50	<0.51	<0.51	<0.51	<0.51	1.10	<0.51	1.40
24 C1 BLLG-Nearshore (MDNR Lab)	030-075								
48E BLLG	Eckman	3.27					1.2	0.92	1.15
S7 - Black Lagoon	Ponar	4.75							

			acenaphthene			benzo(a)anthracene			chrysene				indeno(1,2,3-cd)pyrene			
TRENTON CHANNEL PROJECT			acenaphthylene			benzo(b&k)fluoranthene			dibenzo(a,h)anthracene				naphtalene			
SEDIMENT CHEMISTRY RESULTS			anthracene			benzo(a)pyrene			fluoranthene				phenanthrene			
						benzo(g,h,i)perylene			fluorene				pyrene			
ERM (Long and Morgan, 1990)		35														
		PAH SCAN														
SITE DESCRIPTION	ore Length	mg/kg d.w.														
	in cm	TOT PAHS	A1	A2	A3	B1	B2	B3	B4	C1	D1	F1	F2	I1	N1	P1	P2
69C1 Wyandotte Yatch Club	000-030	33.44			0.94	2.9	4.7	2.4	1.6	3.4		5.3		1.6	1.2	3.8	5.7
	030-066	32.14			0.87	2.8	4.6	2.4	1.4	3.3		5.1		1.6	1.2	3.4	5.5
68P N of Pt. Hennepin	Ponar	12.29				1	1.8	1.1	0.7	1.2		1.8		0.72	0.68	1.3	2
68E N of Pt. Hennepin	Eckman	4.86				0.68		0.6		0.7		1.1				0.69	1.1
67C1 Portofino	000-030	14.3				1.2	2.5	1.3	1	1.6		2.1		1		1.3	2.3
43P Portofino Slip	PONAR	6.99	<0.33	<0.33	<0.33	0.61	1.3	<0.33	<0.3	0.8	<0.33	1.5	<0.33	0.42	<0.33	0.98	1.4
42P Pt. Hennepin	PONAR	1.14	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	0.44	0.7
15 C1 T.C. North Marsh	000-022	0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
15 C1	022-062	0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
15 C1	062-100	0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
51 C 1 Firestone upper	000-030	34.36			1.8	2.6	3.6	2.1	1.2	3.1		4.1	0.85	1.4	3	5.8	4.8
	030-091	36.69			1.5	2.6	3.5	1.9	1.1	2.9		3.5	0.85	1.2	6.5	4.9	6.2
	091-152	53.5	0.9		2.5	3.9	5.5	2.9	1.1	4.2		4.5	1.7	1.5	8.4	8	8.4
	152-194	38.85			1.4	3.2	4.5	2.4	1.3	3.4		3.1	0.85	1.4	5.9	4.8	6.6
66C1 Firestone Steel -Mid (	000-030	28.5			1.2	2.5	2.7	1.8	0.8	3.1		4.4	0.8	0.91	2.1	3.7	4.5
	030-091	34.68			1.4	2.9	4.3	2.4	1	3.4		5	1.1	1.1	2.7	4.6	4.8
	091-104	85.51	0.73	1	3.6	8.6	11	7.6	3.5	9.3	0.92	11	1.2	2.7	2.4	9.3	13
50P Firestone lower	Ponar	204.2	2.9		4.3	17	28	12	4.6	18	1.9	38	2.7	7.9	2.1	32	35
MONGUAGON CREEK-UPSTREAM	000-030	13.4	<0.41	<0.41	<0.41	1.1	2.1	1.1	1	1.5	<0.41	2	<0.41	0.71	0.52	1.3	2.1
MONGUAGON CREEK-UPSTREAM	030-104	5.6	<0.36	<0.36	<0.36	0.51	0.8	0.4	0.4	0.7	<0.36	0.97	<0.36	<0.36	<0.36	0.81	1.1
MONGUAGON CREEK-UPSTREAM	104-142	7.3	<0.33	<0.33	<0.33	0.59	0.8	0.4	0.3	0.8	<0.33	1.2	<0.33	<0.33	0.54	1.2	1.4
MONGUAGON CREEK-UPSTREAM	000-030	8.8	<0.41	<0.41	<0.41	0.91	1.5	0.9	0.7	1	<0.41	1.3	<0.41	0.51	<0.41	0.81	1.3
MONGUAGON CREEK-UPSTREAM	030-076	9.1	<0.39	<0.39	<0.39	0.87	1.4	0.8	0.6	1	<0.39	1.5	<0.39	0.47	<0.39	0.98	1.5
MONGUAGON CREEK-UPSTREAM	076-150	2.7	<0.36	<0.36	<0.36	<0.36	0.5	<0.36	<0.3	0.4	<0.36	0.61	<0.36	<0.36	<0.36	0.5	0.66
MONGUAGON CREEK-UPSTREAM	150-180	3.4	<0.33	<0.33	<0.33	0.33	0.6	<0.33	<0.3	0.5	<0.33	0.66	<0.33	<0.33	<0.33	0.69	0.67
48E Monguagon Creek	Eckman	100.37		1.1	2.8	11	19	9.3	2.7	9.4	1.3	14	0.97	4.9	3.1	8.3	15
55 - Monguagon Creek	Ponar	218.4															
FI - Fighting Island	Ponar	0															
25 C1 MNCK DNS-Nearshore	000-027	7.82	<0.33	<0.33	<0.33	0.77	0.8	0.3	0.5	0.9	<0.33	1.4	<0.33	0.47	<0.33	0.85	1.3
25 C1	027-051	8.39	<0.33	<0.33	<0.33	0.75	1.3	0.6	0.5	0.9	<0.33	1.5	<0.33	0.41	<0.33	0.85	1.4
25 C1	051-095	8.31	<0.33	<0.33	<0.33	0.62	0.9	0.6	0.4	0.7	<0.33	1.2	<0.33	<0.33	<0.33	0.73	1.2
25 C1	095-132	3.58	<0.33	<0.33	<0.33	0.39	0.4	<0.33	<0.3	0.4	<0.33	0.63	<0.33	<0.33	<0.33	0.53	0.99
21 C1 MNCK DNS-Offshore	000-027	0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
21 C1	027-051	0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
MONGUAGON CREEK-DOWN	000-150	9.1	<0.35	<0.35	<0.35	0.71	1.2	0.6	0.4	1	<0.35	1.5	<0.36	<0.35	0.53	1.4	1.7
MONGUAGON CREEK-DOWN	150-168	4.2	<0.33	<0.33	<0.33	0.36	0.6	<0.33	<0.3	0.5	<0.33	0.78	<0.33	<0.33	0.34	0.84	0.82
BLACK LAGOON-CENTER	000-030	7.5	<0.44	<0.44	<0.44	0.73	1.3	0.7	0.7	1	<0.44	1.2	<0.44	<0.44	<0.44	0.65	1.3
BLACK LAGOON-CENTER	030-120	10.9	<0.49	<0.49	<0.49	0.85	1.5	0.7	0.7	1.5	<0.49	1.8	< 49	<0.49	<0.49	1.8	2
BLACK LAGOON-CENTER	120-210	19.1	<0.42	<0.42	0.58	1.4	1.8	0.9	0.7	2.1	<0.42	3.1	0.63	0.48	0.8	3.2	3.5
BLACK LAGOON-CENTER	210-229	15.1	<0.33	<0.33	0.51	1.7	2.1	1.3	0.8	1.7	<0.33	2.4	<0.33	0.63	<0.33	1.4	2.6

BASF - RIVERVIEW

GROUNDWATER-SURFACE WATER CRITERIA

N
5/8/01

3./ The name, Chemical Abstract Service (CAS) Number, and worst case maximum concentration of contaminants predicted to reach the groundwater/surface water interface (GSI). Generally the highest concentration of the contaminant found in the groundwater would be appropriate to represent the worst case maximum. If source contaminants have not yet reached the groundwater but are expected to do so, source concentrations should be identified and noted as such. Mixing zone-based GSI criteria will not be developed for contaminants that are not identified as having a reasonable potential to exceed water quality criteria. For contaminants that do not have mixing zone-based GSI criteria, the generic GSI criteria will apply. Attach additional sheets, if necessary.

incidental ingestion #5

H Non-Drinking Value

Chemical or General Chemistry Parameter	GSI Criteria	CAS #	Predicted Worst Case Maximum GSI Discharge Concentration (Conc. in well)	Average Surface Water Conc. Upstream If available
mercury	2 .0013	7439976	680	.0018
PCBs	2 .000024		63.6	NLS
4,4 DDT	.02	50293	.106	.002
acetone	1700	67641	6500	450,000
ammonia	50	7664417	48,000	53 un-ionized
arsenic	50	7440382	199 18000	280
barium	190	7440393	288	160,000
Chromium	*	16065831	615	9,400
Cyanide - amenable	20	57125	30 —	48,000
Cyanide – total	20	57125	21,000 23000	NA
2,4-dimethylphenol	12	105679	230	6,700
fluorene	12	86737	26 1100	160
lead	*	7439921	250	190
methylene chloride	940	75092	3400	90,000
naphthalene	13	91203	840 6000	1200
pentachlorophenol	*	87865	69	450
phenanthrene	5	85018	750	2.4
phenol	210	108952	510	2400
selenium	5	7782492	18	2700
vinyl chloride	15	75014	54	15
benzene	200	71432	610	510
toluene	140	108883	420	51,000
xylene	35	1330207	77	33,000
camphene	NA	79925	7000	NA
carbazole	IP 4	87648	160	41
borneol			540	NA
camphor			3900	NA
diphenyl sulfone			3700	NA
ethyl-hexanol			180	NA
eucalyptol			600	NA
linalyl propanoate			9300	NA
methoxy-methylethoxy-methyl-propanol			74	NA
methyl-benzenesulfonamide			100	NA
methyl-methylethyl-oxabicycloheptane			340	NA
o-cresol	82	95487	300	44 000
M & p-cresol	71	108394, 106445	750	89.000 45,000
phenanthrecarboxylic acid			760	
trimethyl-bicycloheptanone			1500	

*GSI is hardness or pH dependent, and has not been calculated

2,3,7,8 dioxin .0031 ppq 319 ppq .0067 ppq

N
5/3/01

From: Christine Flaga
To: Andrew Hogarth; Lynelle Marolf
Date: Thu, May 3, 2001 4:25 PM
Subject: Mercury

Based on a Kd value that is not yet confirmed, the following draft criteria have been developed for mercury. These criteria should be used as screening levels at this time. Only the infinite source VSIC have been calculated.

Criteria for the protection of indoor air are:
Residential SVIIC = 2.7E+5 ppb
Industrial/Commercial SVIIC = 5.0E+5 ppb
Residential GVIIC = 3.8E+2 ppb
Industrial/Commercial GVIIC = 1.0E+3 ppb

Criteria for the protection of ambient air are:
Residential VSIC = 7.8E+4 ppb
Industrial/commercial VSIC = 9.3E+4 ppb
Residential PSIC = 2.0E+7 ppb
Industrial/Commercial PSIC = 8.8E+6 ppb

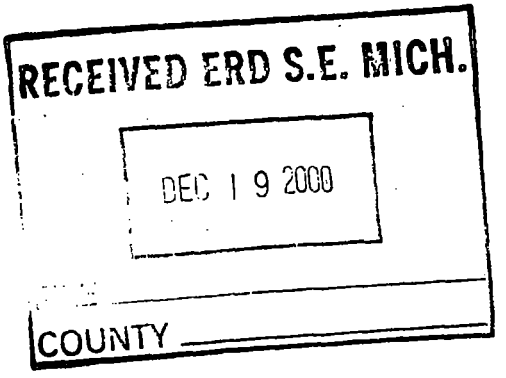
The "not likely to volatilize" notation is currently presented for mercury because an incorrect Henry's Law Constant was in the database. We will work to finalize these criteria. We can then discuss how to inform staff and the public.

Christine Flaga, Supervisor
Toxicology Unit
Environmental Response Division, MDEQ
Phone: 517-373-0160
Fax: 517-373-2637
Email: flagac@state.mi.us

CC: Beth Vens; Jeffrey Crum; Patricia Brandt; Roche...

TriMatrix
Laboratories, Inc.

N
12/19/00



December 15, 2000

MDEQ
Attn: Beth Vens
38980 W. 7 Mile Road
Livonia, Michigan 48152-1006

RE: BASF
Dioxin & Furan Testing

Dear Ms. Beth Vens

Enclosed is a copy of your sub-contract laboratory report and invoice for submittal **35282.3a**. This project was an out-of-scope services project. The samples were completely received at Triangle Laboratory on November 17, 2000. The samples were analyzed for Dioxins & Furans by SW846 Method-8290-High Resolution.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Lisa M. Harvey
Project Chemist

cc: Bill Brunner, Malcolm Pirnie

Enclosure

This report shall not be reproduced except in full, without written authorization of TriMatrix Laboratories, Inc.
Individual sample results relate only to the sample tested.
5560 Corporate Exchange Court SE • Grand Rapids, MI 49512 • (616) 975-4500 • Fax (616) 942-7463

CASE NARRATIVE

Analysis of Samples for the Presence of

Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by

High-Resolution Chromatography / High-Resolution Mass Spectrometry

Method 8290 Rev. 0 (9/94)

Date:	December 13, 2000
Client ID:	TriMatrix, Inc.
P.O. Number:	35282.3a
TLI Project Number:	52366r1

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Overview

The samples and associated QC samples were extracted and analyzed according to procedures described in EPA Method 8290 Rev. 0 (9/94). Any particular difficulties encountered during the sample handling by Triangle Laboratories will be discussed in the QC Remarks section below. This report contains results from only the 8290 dioxin/furan analyses of six water samples.

Quality Control Samples

A laboratory method blank, identified as the TLI Blank, was prepared along with the samples.

Laboratory control spike (LCS) and laboratory control spike duplicate (LCSD) samples were extracted and analyzed along with the samples. A report summarizing the analyte recoveries and relative percent differences for these samples is included in the data package.

Quality Control Remarks

This release of this particular set of TriMatrix, Inc. analytical data by Triangle Laboratories was authorized by the Quality Control Chemist who has reviewed each sample data package following a series of inspections/reviews. When applicable, general deviations from acceptable QC requirements are identified below and comments are made on the effect of these deviations upon the validity and reliability of the results. Specific QC issues associated with this particular project are:

Sample receipt: Eight water samples were received from TriMatrix, Inc. at 4.0 °C in good condition on November 17, 2000 and stored in a refrigerator at 4 °C. The client's chain-of-custody did not indicate whether or not chemical preservatives were utilized for the water samples prior to shipment.

Sample Preparation Laboratory: None

Mass Spectrometry: None

Data Review: The percent recoveries of the internal, alternate, and surrogate standards in samples BASF-SMW-5, BASF-SMW-6, BASF-SMW-13, and BASF-SMW-20 are well

below the QC limits. The corresponding analytes may be underestimated in these samples. These samples have been extracted twice, and both extractions show similar recoveries for these samples. The samples from the first extraction have been included in the data package, under TLI project number 52366. Data review was not performed on samples from 52366. This data was released per client request.

The percent recoveries for 234678-HxCDF and 123789-HxCDF are above the QC limits in the LCSD analysis. However, the relative percent differences are well within the QC limits. The results for these analytes may be slightly overestimated in the samples.

Other Comments: No 2,3,7,8-substituted target analytes were detected in the method blank above the target detection limit (TDL).

The analytical data presented in this report are consistent with the guidelines of EPA Method 8290 Rev. 0 (9/94). Any exceptions have been discussed in the QC Remarks section of this case narrative with emphasis on their effect on the data. Should TriMatrix, Inc. have any questions or comments regarding this data package, please feel free to contact a Project Scientist, at (919) 544-5729.

For Triangle Laboratories, Inc.,

Released by,

Vijay L. Chhabra

Report Preparation Chemist

The total number of pages in the data package is : 745

Method 8290 Sample Calculations:

Analyte Concentration

The concentration or amount of any analyte is calculated using the following expression.

$$C_{(\sigma)} = \frac{A_\sigma * Q_\beta}{A_\beta * RRF_{(\sigma)} * W}$$

Where:

$C_{(\sigma)}$	=	concentration or amount of a given analyte
A_σ	=	integrated current for the characteristic ions of the analyte
A_β	=	integrated current of the characteristic ions of the corresponding internal standard
Q_β	=	amount of internal standard added to the sample before extraction
$RRF_{(\sigma)}$	=	mean analyte relative response factor from the initial calibration
W	=	sample weight or volume

Detection Limits

The detection limit reported for a target analyte that is not detected or presents an analyte response that is less than 2.5 times the background level is calculated by using the following expression. The area of the analyte is replaced by the noise level measured in a region of the chromatogram clear of genuine GC signals. The detection limits represent the maximum possible concentration of a target analyte that could be present without being detected.

$$DL_{(\sigma)} = \frac{2.5 * H * Q_\beta}{H_\beta * RRF_{(\sigma)} * W}$$

Where:

$DL_{(\sigma)}$	=	estimated detection limit for a target analyte
2.5	=	minimum response required for a GC signal
H	=	sum heights of the noise
H_β	=	sum of peak heights of the characteristic ions of the corresponding internal standard
Q_β	=	amount of internal standard added to the sample before extraction
$RRF_{(\sigma)}$	=	mean analyte relative response factor from the initial calibration
W	=	sample weight or volume

Data Flags

In order to assist with data interpretation, data qualifier flags are used on the final reports. Please note that all data qualifier flags are subjective and are applied as consistently as possible. Each flag has been reviewed by two independent Chemists and the impact of the data qualifier flag on the quality of the data discussed above. The most commonly used flags are:

A **'B'** flag is used to indicate that an analyte has been detected in the laboratory method blank as well as in an associated field sample. The 'B' flag is used only when the concentration of analyte found in the sample is less than 20 times that found in the associated blank. This flag denotes possible contribution of background laboratory contamination to the concentration or amount of that analyte detected in the field sample.

An **'E'** flag is used to indicate a concentration based on an analyte to internal standard ratio which exceeds the range of the calibration curve. Values which are outside the calibration curve are estimates only.

An **'I'** flag is used to indicate labeled standards have been interfered with on the GC column by coeluting, interferent peaks. The interference may have caused the standard's area to be overestimated. All quantitations relative to this standard, therefore, may be underestimated.

A **'J'** flag is used to indicate a concentration based on an analyte to internal standard ratio which is below the calibration curve. Values which are outside the calibration curve are estimates only.

A **'PR'** flag is used to indicate that a GC peak is poorly resolved. This resolution problem may be seen as two closely eluting peaks without a reasonable valley between the peak tops, overly broad peaks, or peaks whose shapes vary greatly from a normal distribution. The concentrations or amounts reported for such peaks are most likely overestimated.

A **'Q'** flag is used to indicate the presence of QC ion instabilities caused by quantitative interferences.

An **'RO'** flag is used to indicate that a labeled standard has an ion abundance ratio that is outside of the acceptable QC limits, most likely due to a coeluting interference. This may have caused the percent recovery of the standard to be overestimated. All quantitations versus this standard, therefore, may be underestimated.

An 'S' flag indicates that the response of a specific PCDD/PCDF isomer has exceeded the normal dynamic range of the mass spectrometer detection system. The corresponding signal is saturated and the reported analyte concentration is a 'minimum estimate'. When the 'S' qualifier is used in the reporting of 'totals', there is saturation of one (not

necessarily from a specific isomer) or more saturated signals for a given class of compounds. Results for saturated analytes are reported as greater than the upper calibration limit.

A 'U' flag is used to indicate that a specific isomer cannot be resolved from a large, co-eluting interferent GC peak. The specific isomer is reported as not detected as a valid concentration cannot be determined. The calculated detection limit, therefore, should be considered an underestimated value.

A 'V' flag is used to indicate that, although the percent recovery of a labeled standard may be below a specific QC limit, the signal-to-noise ratio of the peak is greater than ten-to-one. The standard is considered reliably quantifiable. All quantitations derived from the standard are considered valid as well.

An 'X' flag is used to indicate that a polychlorodibenzofuran (PCDF) peak has eluted at the same time as the associated diphenyl ether (DPE) and that the DPE peak intensity is at least ten percent of the total PCDF peak intensity. Total PCDF values are flagged 'X' if the total DPE contribution to the total PCDF value is greater than ten percent. All PCDF peaks that are significantly influenced by the presence of DPE peaks are either reported as "estimated maximum possible concentration (EMPC) values without regard to the isotopic abundance ratio, or are included in the detection limit value depending on the analytical method.

TRIANGLE LABORATORIES, INC.

LIST OF CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

American Association for Laboratory Accreditation. Extended Expiration Date of October 31, 1999. Certificate Number 0226-01. Accreditation for technical competence in Environmental Testing. 8280, 8290, 1613A Dioxin in Wastewater; Solid or Hazardous Waste, and Air Matrices: XAD Trains - M23, 8290X and PUF Trains 8290X. Absorbable Organic Halides (AOX)/ Toxic Organic Halides (TOX) in Pulp/Paper. Method 1613A & B. 2,3,7,8 TCDD for Drinking. *Pending Evaluation of On-Site Audit.*

State of Alabama, Department of Environmental Management. Expires December 31, 2000. Laboratory ID # 40950. 2,3,7,8 TCDD (Dioxin) in drinking water.

State of Alaska, Department of Environmental Conservation. Expires December 21, 2000. Lab ID #NC-06-00. Certificate number NC00140. 2,3,7,8- TCDD (Dioxin) in drinking water.

State of Arizona, Department of Health Services. Expires May 26, 2001. Certificate #AZ0423. Drinking Water for Dioxin. Dioxin in Waste Water and Solid or Hazardous Waste.

State of Arkansas, Department of Pollution Control and Ecology. Expires 8 August 2001. Pulp/paper, soil, water, and Hazardous Waste for Dioxin/Furans.

State of California, Department of Health Services. Expires August 31, 2001. Certificate #1922 Organic Chemistry of Drinking Water -Dioxin in DW; EPA Method 1613, Organic Chemistry of Hazardous Waste by GC/MS - EPA Methods 8240B, 8270B, 8280, 8290, 8260A, and Organic Chemistry of Wastewater by GC/MS - EPA Method 613.

State of Connecticut, Department of Health Services. Expires September 30, 2001. Registration # PH-0117. 2,3,7,8 TCDD (Dioxin) in drinking water (potable water for organic chemicals).

Delaware Health and Social Services. Expired December 31, 1998, **but** current certification will be maintained until DHSS has implemented their NEW Laboratory Certification Program. Certificate #NC 140. Dioxin in drinking water.

Florida Department of Health and Rehabilitative Services. Expires June 30, 2001. Method 1613 for Dioxin in Drinking Water. ID HRS# E87769.

Georgia Department of Environmental Quality. Initial application sent August 12, 1998 for Chemical Certification of Drinking Water for Dioxins, method 1613. *Currently applying*

Hawaii Department of Health. Expires March 1, 2000. Certified for Dioxin under the Safe Drinking Water Act. "Accepted" status for regulatory purposes.

Idaho Department of Health and Welfare. Expires December 31, 2000. Dioxin in drinking water.

Illinois Environmental Protection Agency. Sent initial application and fees December 18, 1998. Drinking Water, Wastewater and Hazardous Waste, Methods 608, 610, 624, 625, 8081A, 8260B, 8260C, 8270B, 8270C, 8310, 8315A.. *Fees paid. Certificate pending.*

Indiana Department of Health. Expires December 31, 2000. Dioxin in drinking water, EPA method 1613. Lab ID # C-NC-01.

State of Kansas, Department of Health and Environment. Expires January 31, 2001. Cert. # E-10215. Method 1613, 2,3,7,8 TCDD for drinking water. Drinking water and/or pollution control; Cert. # E-10215. Solid or Hazardous Waste 8260B, 8270C.

Commonwealth of Kentucky, Department for Environmental Protection. Expires December 31, 2000. Lab ID #90060. 2,3,7,8 TCDD (Dioxin) in drinking water.

State of Louisiana Department of Environmental Quality. As of March 24, 2000, Triangle Laboratories, Inc. has "Pending Accreditation" until the LADEQ completes review of PT studies submitted.

State of Louisiana Department of Health & Hospitals. Expires December 31, 2000. Dioxin (2,3,7,8-TCDD) in Organics parameter. Certificate # LA000008.

Maryland Department of Health and Mental Hygiene. Expires September 30, 2000. Certification #728 - 2,3,7,8 TCDD (Dioxin) by 1613A for Water Quality[SOC II]. *Currently Applying.*

State of Michigan, Department of Environmental Quality. Expires April 1, 2001. 2,3,7,8 TCDD by Method 1613.

Mississippi State Department of Health. No expiration date. Dioxin in drinking water.

Montana Department of Health and Environmental Services. Expires December 31, 2000. Dioxin in drinking water.

Revised: 9/07/00 nch

Y:\CERTIFIC\ADMINIST\CERTLIST.MEM

State of Nebraska Department of Health. Expires December 31, 2000. Reciprocal certification through the North Carolina Department of Health and Human services. 2,3,7,8-TCDD (Dioxin) in drinking water, EPA Method 1613.

State of Nevada, Department of Conservation and Natural Resources. Parameter: Dioxin under Clean Water Act; expires December 31, 2000.

State of Nevada, Department of Human Resources. Lab Certificate No. NC-00140-2000-46, expires June 30, 2001. Parameters: Dioxin under Safe Drinking Water Act, expires March 31 2001.

State of New Jersey, Department of Environmental Protection and Energy. Expires June 30, 2000. ID #67851. 8290 and 1613(2,3,7,8- TCDD). *Currently Applying*

State of New Mexico, Environment Department. Expired October 31, 1999. Dioxin in Drinking Water per A2LA. *Renewal pending A2LA Certificate of renewal.*

New York State Department of Health. Expires March 31, 2001. ID #11026. Environmental Analyses of Solid and Hazardous Waste for purgeable hydrocarbons, chlorinated hydrocarbons, pesticides, priority pollutant phenols; potable water 2,3,7,8 TCDD (Dioxin).

State of North Carolina, Department of Health and Human Services. Expires June 30, 2001. Certificate # 37751. Dioxin in drinking water.

North Dakota State Department of Health and Consolidated Laboratories. Expires March 31, 2000. Certificate # R-076. Effective October 4, 1993. Dioxin in drinking water. Current certification is extended, based on New York certificate renewal.

Oklahoma Department of Environmental Quality. Expires August 31, 2001. Laboratory #9612. 2,3,7,8 TCDD (Dioxin) by 613, 1613A, 8290 and 8280. *Currently applying*

State of South Carolina, Department of Health and Environmental Control. Expires April 1, 2001. Certificate number #99040001 (Other parameters). Dioxin/Furans by method 1613B - Safe Drinking Water Act; 2,3,7,8-TCDD for Drinking Water, and Organic extractables for Solid and Hazardous Waste. Reciprocal certification with New York. Certificate # 99040002 expires August 31, 2001. Solid Hazardous Waste- Dioxins/Furans by 8280A and 8290. Reciprocal certification with California.

State of Tennessee. Department of Environment and Conservation. Expires January 28, 2002. ID #02992. Dioxin in Drinking water.

U.S. Department of Agriculture Soil Permit. Expires June 30, 2002. Permit No. S-4958 (Revised). Under the authority of the Federal Plant Pest Act, permission is granted to receive foreign soil samples for use in laboratory analysis.

Revised: 9/07/00 nch

Y:\CERTIFIC\ADMINIST\CERTLIST.MEM

U.S. Army Corps of Engineers. Expires November 15, 2001. Validated to perform analyses for the McAlester Army Ammunition Plant and various sites. EPA SW-846, Methods 8280 and 8290, water and solids.

U.S. EPA Region V. Expires January 19, 2003. 2,3,7,8 TCDD (Dioxin) in drinking water by method 1613A.

U.S. EPA Region VIII, for the State of Wyoming. Expires October 9, 2000. EPA Method 1613 for Dioxin in drinking water.

State of Utah, Department of Health. ID # TRIA, Account # 9195445729. **Organics** 1613 - RG Dioxin, expires November 31, 2001. **Metal Digestion** 3010A & 3050A; **Metals** 6010B & 7470; **Organic Extraction** 3540A; and, **Organic Instrumentation** 8240, 8280 & 8290; expires May 31, 2001.

Commonwealth of Virginia, Department of General Services, Division of Consolidated Laboratory Services. Expires June 30, 2001. ID # 00341. 2,3,7,8-TCDD (Dioxin) in drinking water.

State of Washington, Department of Ecology. Expires September 11, 2000. Lab Accreditation Number C067. Scope of Accreditation applies to Dioxins (PCDDs/PCDFs) by EPA methods 1613A, 8280, and 8290. *Renewal being processed.*

State of Washington, Department of Health. Expires April 30, 2001. Dioxin by 1613A in drinking water. Lab ID 129.

State of West Virginia, Department of Health. Expires December 31, 2000. Certificate No. 9923(C). 2,3,7,8-TCDD (Dioxin) in drinking water.

State of Wisconsin, Department of Natural Resources. Expires August 31, 2001: Certification for PCDD/PCDF. Laboratory ID Number 999869530. Expires August 31, 2001: Certified for 2,3,7,8-TCDD (Dioxin) in drinking water.

PHARMACEUTICAL

Drug Enforcement Agency (DEA). Expires November 30, 2000. Registration number RT0195835. Controlled substance registration for schedules 1,2,3,3N,4,5.

N.C. Department of Human Resources. Expires October 31, 2000. Registration number NC-PT 0000 0031. North Carolina controlled substances registration for schedules 1, 2, 2N, 3, 3N, 4, 5, 6.

Food & Drug Administration (FDA) Registration. Registered June 17, 1999. ID #'s 001500 1053481(ATL). Annual registration of drug establishment.

OTHER

Clinical Laboratory Improvement Amendments (CLIA) Registration. Expires May 30, 2001. ID # 34D0705123. Department of Health & Human Services, Health Care Financing Administration. Certificate for the Acceptance of Human Specimans for the purposes of performing laboratory examinations or procedures - Chemistry, Toxicology, HCFA.

U.S. EPA Large Quantity Hazardous Waste Generator. No expiration date. EPA ID #NCD982156879. Permit indicates that the laboratory is a large generator of hazardous waste.

North Carolina General License for Radiation Protection. No expiration date. No License. 032-875-OG. The general license applies only to radioactive material contained in devices which have been manufactured and labeled in accordance with specific requirements.

TRIANGLE LABS

DOCUMENT CONTROL

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 27
Fax # 919-544-5491

COPY

MALCOLM PIRNIE
ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS
1400 ABBOTT ROAD, SUITE 140
EAST LANSING, MI 48823
PHONE: 517-337-0111

Chain of Custody Record

No. [illegible]3425

SITE NAME: BASF

PROJECT NO.: 3940-014

SAMPLERS (SIGNATURE): William H Burns

Date	Time	Matrix*	Comp	GRAB	Sample I.D.	No. of Containers	Container Type** & Volume	Field Filtered (Yes or No)	Preservation Method	Analysis Required: Dioxin	Remarks
11/15/00	·	Water		X	BASF-DUP 1	2	1000mlG	N	—	X	
↓	12:24	↓		X	BASF-MS/MSD	1	↓	↓	—	X	
↓	17:00	↓		X	BASF-Field Blank	2	↓	↓	—	X	

Comments/Instructions to Lab:

Tri Matrix Customer

Relinquished by: (signature) William H Burns — Date/Time 11/16/00 17:45 — Received by:

Dispatched by: (signature) — Date/Time — Carrier:

Lab Task Order #: — Airbill Shipping#: — Received at lab by — Date/Time — Logged in by — Date/Time

COPY

MALCOLM PIRNIE — ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

1400 ABBOTT ROAD, SUITE 140
EAST LANSING, MI 48823
PHONE: 517-337-0111

Chain of Custody Record

No. 3424

SITE NAME: BASF

PROJECT NO.: 3940-014

SAMPLERS (SIGNATURE):

Date	Time	"Matrix"	Comp	GRAB	Sample I.D.	No. of Containers	Container Type** & Volume	Field Filtered (Yes or No)	Preservation Method	Analysis Required: Dioxin	Remarks
11/15/00	11:55	Water		X	BASF-SMW-5	2	1000mL G	N	—	X	
↓	15:55	↓		X	BASF-SMW-6	2	↓	↓	—	X	
↓	12:24	↓		X	BASF-SMW-10	2	↓	↓	—	X	

Comments/Instructions to Lab: Tri-Matrix Customer

Relinquished by: (signature) [signature]

Date/Time: 11/16/00 17:45

Received by:

Dispatched by: (signature)

Date/Time

Carrier:

Lab Task Order #:

Airbill Shipping#:

Received at lab by: [illegible]

Date/Time [illegible]

Logged in by: [illegible]

Date/Time 11-17-00

COPY

MALCOLM PIRNIE
ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS
1400 ABBOTT ROAD, SUITE 140
EAST LANSING, MI 48823
PHONE: 517-337-0111

Chain of Custody Record

No. [redacted]3423

SITE NAME: BASF

PROJECT NO.: 3940-014

SAMPLERS (SIGNATURE): [signature]

Date	Time	Matrix*	Comp	GRAB	Sample I.D.	No. of Containers	Container Type** & Volume	Field Filtered (Yes or No)	Preservation Method	Analysis Required: Dioxin	Remarks
11/15/00	16:40	Water		X	BASF-SMW-13	2	1000ml G	N	—	X	
11	18:00	Water		X	BASF-SMW-20	2	1000ml G	N	—	X	

Comments/Instructions to Lab: ~~[redacted]~~ / Customer TriMatrix

Relinquished by: (signature) [signature] Date/Time 11/16/00 17:45 Received by:

Dispatched by: (signature) Date/Time Carrier:

Lab Task Order #: Airbill Shipping#: Received at lab by: Date/Time Logged in by: Date/Time

COPY

CLIENT CHAIN OF CUSTODY SAMPLER'S SIGNATURE Will H Burns Quote 0000001174

From (1): TriMatrix, Inc.
5560 Corporate Exchange Court
Grand Rapids, MI 49512
Project (1): BASF- Malcolm Picnic
(TMI03 /UN)

Contact: Lisa Harvey
Phone: 616/975-4500
Fax: 616/942-7463
P.O.# (1): _____

If the data will be reported to a state agency, which one? ____

Analysis Wanted (2): 1613B:T-O | 8280A:T-O | 8290:T-O | Dioxin

Total Number of Containers: 5

Turn Around Time (In Calendar Days):

Sample ID (3)	Date / Time	Preservation (4)	Matrix	Sample Amt.	1613B:T-O	8280A:T-O	8290:T-O	Dioxin		Remarks
BASE-SMW-20	11/15/00 18:00		Water	2-1000ml						
BASF-DUP 1	11/15/00		Water	2-1000ml				X		
BASF-MS/MSD	11/15/00 12:24			1-1000ml				X		
BASF-Field Blank	11/15/00 17:00			2-1000ml				X		

Relinquished By/Sign.	Date/Time	Received By/Sign.	Relinquished By/Sign.	Date/Time	Received By/Sign.
Will H Burns	11/15/00 17:45				

Received for Laboratory By/Signature	Date/Time
Randy White	09:00 11-17-00

Send Samples to: Triangle Laboratories, Inc.
Attn: Sample Custodian
801 Capitola Drive
Durham, NC 27713 USA
Phone: (919) 544-5729 • Fax: (919) 544-5491

Directions: (1) Provide and/or correct client and project information.
(2) Verify analysis, check approriate boxes for each sample.
(3) Enter the sample ID to be used when reporting the samples.
(4) Please indicate the preservation used for each sample.

COPY

CLIENT CHAIN OF CUSTODY | **SAMPLER'S SIGNATURE** [signature] | **Quote 0000001174**

From (1): TriMatrix, Inc.
5560 Corporate Exchange Court
Grand Rapids, MI 49512

Contact: Lisa Harvey
Phone: 616/975-4500
Fax: 616/942-7463

Project (1): BASF-Malcolm Pirnie

P.O.# (1): _____

(TMI03 /UN)

If the data will be reported to a state agency, which one? ____

Analysis Wanted (2): 1613B:T-O | 8280A:T-O | 8290:T-O | Dioxin

Total Number of Containers: ~~8~~ 6 WHB 11/15/00

Turn Around Time (In Calendar Days):

Sample ID (3)	Date / Time	Preservation (4)	Matrix	Sample Amt.	1613B:T-O	8280A:T-O	8290:T-O	Dioxin		Remarks
BASF-SMW-5	11/15/00 11:55	—	Water	2-1000ml						
BASF-SMW-6	11/15/00 15:55	—	↓	↓						
BASF-SMW-10	11/15/00 12:24	—	↓	↓						
~~BASF-SMW-13~~	~~11/15/00 16:40~~	~~—~~	~~↓~~	~~↓~~						

Relinquished By/Sign.	Date/Time	Received By/Sign.	Relinquished By/Sign.	Date/Time	Received By/Sign.
[signature]	11/15/00 17:45				

Received for Laboratory By/Signature	Date/Time	Send Samples to:
[signature]	09:00 11-1200	Triangle Laboratories, Inc. Attn: Sample Custodian 801 Capitola Drive Durham, NC 27713 USA Phone: (919) 544-5729 • Fax: (919) 544-5491

Directions:
(1) Provide and/or correct client and project information.
(2) Verify analysis, check approriate boxes for each sample.
(3) Enter the sample ID to be used when reporting the samples.
(4) Please indicate the preservation used for each sample.

TRIANGLE LABORATORIES, INC. — LOG ID RECORD/CHAIN OF CUSTODY

Custody Seal : Present/Intact
Chain of Custody : Present
Sample Tags : Absent
Sample Tag Numbers: Not Listed on Chain of Custody
SMO Forms : N/A

Sample Seals: Absent
Container... : Intact

Ice Chest ICE Temp 4.0 C

TLI Project Number 52366
Client: TM103 - TriMatrix, Inc.

Date Received | 11/17/00 | By [signature]

Carrier and Number | UPS

Book 274
Page 99

TLI Number / mR/H:CPM / Client Sample ID / Client COC ID / Matrix / Location	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
274-99-1A									
BASF-SMW-5									
BASF-SMW-5 / C02 / WATER	11/21/00	used							
274-99-1B									
BASF-SMW-5									
BASF-SMW-5 / C02 / WATER		11/21/00	12/1/00	used					
274-99-2A									
BASF-SMW-6									
BASF-SMW-6 / C02 / WATER		used							
274-99-2B									
BASF-SMW-6									
BASF-SMW-6 / C02 / WATER		11/21/00	12/1/00	used					
274-99-3A									
BASF-SMW-10									
BASF-SMW-10 / C02 / WATER		used							
274-99-3B									
BASF-SMW-10									
BASF-SMW-10 / C02 / WATER									
274-99-4A									
BASF-DUP1									
BASF-DUP1 / C02 / WATER		used							
274-99-4B									
BASF-DUP1									
BASF-DUP1 / C02 / WATER		11/21/00	12/1/00	used					
274-99-5									
BASF-MS/MSD									
BASF-MS/MSD / C02 / WATER		used							
274-99-6A									
BASF-FIELD BLANK									
BASF-FIELD BLANK / C02 / WATER		used							
274-99-6B									
BASF-FIELD BLANK									
BASF-FIELD BLANK / C02 / WATER		11/21/00	12/1/00	used					
274-99-7A									
BASF-SMW-13									
BASF-SMW-13 / C02 / WATER		used							
274-99-7B									
BASF-SMW-13									
BASF-SMW-13 / C02 / WATER		11/21/00	12/1/00	used					
274-99-8A									
BASF-SMW-20									
BASF-SMW-20 / C02 / WATER	11/21/00	used							

Receiving Remarks:

Archive Remarks

TRIANGLE LABORATORIES, INC. — LOG IN RECORD/CHAIN OF CUSTODY

Custody Seal : Present/Intact — Sample Seals: Absent
Chain of Custody : Present — Container... : Intact
Sample Tags : Absent
Sample Tag Numbers: Not Listed on Chain of Custody
SMO Forms : N/A

TLI Project Number 52366
Client: TMI03 - TriMatrix, Inc.

Date Received 11/17/00

Carrier and Number UPS

Book 274 Page 99

Ice Chest ICE Temp 4.0 C

TLI Number / mR/H:CPM	Client Sample ID / Client COC ID	Matrix / Location	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
274 99-8B	BASF-SMW-20	WATER	[illegible]	[illegible]	[illegible]	used					
	BASF-SMW-20	CO2	11/21/00	11/21/00	12/1/00						

Receiving Remarks:

TRIANGLE LABORATORIES, INC.
SAMPLE TRACKING AND PROJECT MANAGEMENT FORM

----------ADMINISTRATIVE INFORMATION----------

TLI Proj#: 52366-r1	Samples: 6	TurnAround.: 21 Day(s)
Prod Code: D01002	Matrix.: Water	Hold Time..: 30 Day(s)
DetectLim: 10 ppq	Type...: B	Start Date.: 11/17/00
	Recvd...: 11/17/00	Ship By....: 12/06/00
		DWL Due Dt.: 11/27/00

Analyte List.: Tetra - Octa

Method.....: Method 8290: Tetra-Octa
Client Proj..: BASF-Malcolm Pirnie
Client.....: TriMatrix, Inc. (TMI03)
P.O. No.....: 35282.3a — Collect Dt/Tm: 11/15/00
Contact.....: Lisa Harvey — Phone.....: 616/975-4532
Proj. Mgr....: — Fax.....: 616/942-7463
Sample Origin:

----------SPECIAL INSTRUCTIONS / QA REQUIREMENTS----------

Prespike Standard: n/a
Extraction Exp...: 12/15/00

----------REPORTING REQUIREMENTS----------

Reporting Format: Report Option III

See MILES for Instructions/Communications.

Completed by: _____/_____ DATE: _____

Reviewed by: AG /_____ DATE: 11-28-00 (PMGT0197)

TRIANGLE LABORATORIES, INC.
Wet Lab Extraction and Observations
Project: 52366-r1

Sample #	crd	TLI_Number..	Customer.Sample.Id.....	Init. pH...	NaOH Adj. mL..	NaOH Adj. pH.1.	H2SO4 Adj. mL...	H2SO4 Adj. pH.2.	Appearance.	Color.....	Odor...	Vol.	Entered.By.....	Date....	Time....	S
000		TLI Blank	TLI Blank	7.00	n/a	n/a	n/a	n/a	HPLC H2O	none	none	1000	gatchet	11/28/00	16:57:10	F
001		274-99-1B	BASF-SMW-5	10.00	n/a	n/a	0.5	8.00	CLOUDY	brown	yes	1080	WARENDA	12/01/00	14:28:36	F
				10.00	n/a	n/a	0.5	8.00	opaque	brown	yes	1070	gatchet	11/28/00	16:57:10	F
002		274-99-2B	BASF-SMW-6	13.00	n/a	n/a	10.0	8.00	CLOUDY	brown	yes	1080	WARENDA	12/01/00	14:28:37	F
				13.00	n/a	n/a	12.0	8.00	opaque	brown	yes	1090	gatchet	11/28/00	16:57:11	F
006		274-99-4B	BASF-DUP1	11.00	n/a	n/a	10.0	1.00	CLOUDY	brown	yes	1060	WARENDA	12/01/00	14:28:37	F
				10.00	n/a	n/a	0.5	8.00	opaque	brown	yes	1060	gatchet	11/28/00	16:57:11	F
007		274-99-6B	BASF-FIELD BLANK	7.00	n/a	n/a	n/a	n/a	clear	none	none	1060	gatchet	11/28/00	16:57:12	F
008		274-99-7B	BASF-SMW-13	12.00	n/a	n/a	10.0	8.00	CLOUDY	brown	yes	1050	WARENDA	12/01/00	14:28:37	F
				12.00	n/a	n/a	11.0	7.00	opaque	brown	yes	1050	gatchet	11/28/00	16:57:12	F
009		274-99-8B	BASF-SMW-20	12.00	n/a	n/a	10.0	8.00	CLOUDY	brown	yes	1060	WARENDA	12/01/00	14:28:37	F
				13.00	n/a	n/a	11.0	7.00	opaque	brown	yes	1090	gatchet	11/28/00	16:57:12	F
010		TLI LCS	TLI LCS	n/a	n/a	n/a	n/a	n/a	HPLC H2O	COLORLESS	NO	1000	WARENDA	12/01/00	14:28:37	F
011		TLI LCSD	TLI LCSD	7.00	n/a	n/a	n/a	n/a	HPLC H2O	COLORLESS	NO	1000	WARENDA	12/01/00	14:28:38	F

*** End of Report ***

TRIANGLE LABORATORIES, INC.

Dioxin Sample Preparation Tracking & Management Form

Project: 52366r1

Client: TriMatrix, Inc. (TMI03)

Solvent(s)/Acid(s): MeCl2 / Toluene / ________

Lot Numbers: 496614 / 00445c / ________

IS Spike: 20 µl conc: 0.1000 ng/µl

SS Spike: ____ µl conc: _.____ ng/µl

MS Spike: 40 µl conc: 0.0100 ng/µl

LCS Spike: 40 µl conc: 0.0100 ng/µl

Method: Method 8290: Tetra-Octa Matrix: H2

Extraction Date: 12/01/00

	IS	MS	LCS	
Initials	[initials]	[initials]	[initials]	
Lot	7582C	7554N	7556M	
	USF-AK	USF-MX	USF C	
Date	07/03/01	07/02/01	07/02/01	_/_/_
Date	12/01/00	12/01/00	12/02/00	_/_/_
Time	09:00	09:00	11:30	_:_
Conc.	0.1 ng/µl	0.01 ng/µl	0.01 ng/µl	___ng/µl
Volume	20 µl	40 µl	20 µl	___ µl

S#.crd	TLI SAMPLE ID / CLIENT SAMPLE ID	GROSS WEIGHT Before	GROSS WEIGHT After	SAMPLE SIZE g / (ml)	IS	MS	LCS	
r1 000	TLI Blank / TLI Blank	XXXXXXXXX	XXXXXXXXX	1000	[initials]		[initials]	
r1 001	274-99-1B / BASF-SMW-5 pH=10 → 8 0.5ml	XXXXXXXXX 1518.1g	XXXXXXXXX 503.5g	1080	↓		↓	
r1 002	274-99-2B / BASF-SMW-6 pH=13 → 8 10ml	XXXXXXXXX 1540.4g	XXXXXXXXX 504.5g	1080	↓		↓	
r1 006	274-99-4B / BASF-DUP1 pH=11 → 1 10ml	XXXXXXXXX 1558.0g	XXXXXXXXX 503.7g	1060	↓		↓	
r1 007	274-99-6B / BASF-FIELD BLANK pH=7 -	XXXXXXXXX 1553.2g	XXXXXXXXX 504.5g	1070	↓		↓	
r1 008	274-99-7B / BASF-SMW-13 pH=12 → 8 10ml	XXXXXXXXX 1550.7g	XXXXXXXXX 503.9g	1050	↓		↓	
r1 009	274-99-8B / BASF-SMW-20 pH=12 → 8 10ml	XXXXXXXXX 1573.0g	XXXXXXXXX 503.9g	1060	↓		↓	
r1 010	TLI LCS / TLI LCS	XXXXXXXXX	XXXXXXXXX	1000	↓	* [initials]	↓	
r1 011	TLI LCSD / TLI LCSD	XXXXXXXXX	XXXXXXXXX	1000	[initials]	* [initials]	[initials]	

Gross weight of sample container + sample before/after aliquot removal.

Comments: used HPLC H2O (lot#000976) for blank, LCS, LCSD 12/1/00 used 1:1 H2 to adjust pH's 12/1/00 001, 002, 006, 008, 009 - cloudy, brown, strong odor 007 - clear, colorless, no odor 12/1/00

Initials: ______ Date: ___/

Initials of both SPIKER AND OBSERVER must be entered.

XXXXX = Gross Weight not provided for WATER

REV 05/27/97 (F

TRIANGLE LABORATORIES, INC.
DIOXIN SAMPLE EXTRACTION and CLEANUP TRACKING FORM
TLI Project No.: 52366 r1

Ext S#.crd and TLI Number	1	2	3	4	5	4	7	8	9	
r1 000 TLI Blank	[illegible] 12/1/00	[illegible] 12/2/00	MSC 12/2/00	MSC 12/2/00	NA	NA	MSC 12/2/00	[illegible] 12/04/00	[illegible] 12/4/00	
r1 001 274-99-1B					MSC 12/2/00	MSC 12/2/00				
r1 002 274-99-2B										
r1 006 274-99-4B										
r1 007 274-99-6B					NA	NA				
r1 008 274-99-7B					MSC 12/2/00	MSC 12/2/00				
r1 009 274-99-8B										
r1 010 TLI LCS					NA	NA				
r1 011 TLI LCSD	[illegible] 12/1/00	[illegible] 12/2/00			NA	NA		[illegible] 12/04/00	[illegible] 12/4/00	

Enter the procedure number below into the box at the top of each column to signify the step performed.
Initial and date each sample for each numbered procedure performed.

#.. ....PROCEDURE....	SOP.#.	.v..	DETAILS (circle)
1) EXTRACTION	16'	16	Time On 14 : 30 Time Off 6 : 30
			Soxhlet / Jar / Sep Funnel / Steam Dist / Cont LL / ASE / Waste Dilution
2) SPIKE AFTER EXT'N			
3) ADD TRIDECANE			Lot# TT-1-23-292B
4) ROTOVAP	____	____	40mL / 10mL / Dryness
5) COMBINE	____	____	
6) DIV./LIP. DETERM.	____	____	20%/80% 50%/50% 5mL/20mL Other____
7) SOLVENT EXCHANGE			Iso-Octane Lot#_____ Heptane Lot# V554T12838
8) CLEANUP		17	DSP 260 / Modified DSP 260 / DSP 280 / Other _____
9) TRANSFER	[illegible]	[illegible]	
10) ADDITIONAL CLEANUP		____	DSP260(10g)
11) FINAL TRANSFER	____	____	

Comments: _____

Rev 11/25/97 (PS

TRIANGLE LABORATORIES, INC.
Transfer Chain-of-Custody Form
Project 52366-r1

Transfer From: DWLL5 To: DMS5

	Initials..	Date.....	Time...
Released by:	JJ	12/4/00	21:10
Accepted by:	MVL	12/04/00	21:30

MILES.ID.....	TLI_No.....	Cust.Id.....
52366-r1 -000	TLI Blank	TLI Blank
52366-r1 -001	274-99-1B	BASF-SMW-5
52366-r1 -002	274-99-2B	BASF-SMW-6
52366-r1 -006	274-99-4B	BASF-DUP1
52366-r1 -007	274-99-6B	BASF-FIELD BLANK
52366-r1 -008	274-99-7B	BASF-SMW-13
52366-r1 -009	274-99-8B	BASF-SMW-20
52366-r1 -010	TLI LCS	TLI LCS
52366-r1 -011	TLI LCSD	TLI LCSD

XfrCOC (Rev 11/01/

Additional comments or instructions:

TRIANGLE LABORATORIES, INC.

Method: Method 8290: Tetra-Octa — HR GC/HRMS ANALYSIS

Required Detection Limit: 10 ppq — PROJECT:

SAMPLE INFORMATION — RS Conc 20 µl @ 100.0 P

S#.crd	TLI / SAMPLE ID / CLIENT SAMPLE ID	1ST COLUMN GC/MS FILENAME COLUMN: DB5	CONFIRM	2ND COLUMN CONFIRM FILENAME COLUMN: DB225	USF-RS1 VOLUME 20µl SOLN ID 7560 K	USF-RS2 INIT. MVL DATE 12/04/00	ANALYSIS COMMENTS
r1 000	TLI Blank / TLI Blank	T005998	N				
r1 001	274-39-1B / BASF-SMW-5	T005999	Y	P004407			
r1 002	274-99-3B / BASF-SMW-6	T006000	Y	P004409			
r1 006	274-99-4B / BASF-DUP1	T006001	Y	P004410			
r1 007	274-99-6B / BASF-FIELD BLANK	T006002	N				
r1 008	274-99-7B / BASF-SMW-13	T006003	Y	P004411			
r1 009	274-99-8B / BASF-SMW-20	T006007 / T006004	Y	P004412			
r1 010	TLI LCS / TLI LCS	T006005	—				
r1 011	TLI LCSD / TLI LCSD	T006006	—				

Comments: _____ Type: B

_____

_____ Spike File: SPMIT

_____ Amt of Extract:

Triangle Laboratories, Inc.
Run Log

Instrument ID	Column Type	Column ID	Plot Name	Inj. Vol.	Acquisition	G/C
707	DB-5	0685815	T02	2.0 µl	HDBSW	HDBSW

Signature: [signature] Date: 12/5/00

Filename	Date*	Time*	Project #	Sample#	No.	Client Sample ID	Syr	332	Operator/Date	Comments**
T005990	12/5/00	06:39	52406	TLI LCS	2	TLI LCS	Auto	2.5 E6	Jan 12/5/00	
T005991		07:29	52419	TLI Blk	0	TLI Blk	Auto	2.5E6	Jan 12/5/00	
T005992		08:29		275-53-1	1	20111 2101		2.4E6	TMD 12/5/00	
93		09:16		275-53-2	2	20111 2102		2.4E6		
94		10:03		275-53-3	3	20111 2103		2.8E6		
T005995	12/5/00	10:50	52419	275-53-4	4	20111 2104	Auto		TMD 12/05/00	
T005996		11:39	—	7584A	—	8240/1613 Cond 10	Auto	2.0 E6	LI 12/5/00	Good H113 F/B S/N = 36 TS/1. TSY 12/5/00
T005997		12:34	—	7581A	—	RTC HK	Auto	140%	TSY 12/5/00	
T005998		13:42	52366.1	TLI BLANK	0	TLI BLANK	Auto	7.5E5	LI 12/5/00	
99		14:29		274-99-1B	1	BASF - SMW - 5		1.2E6		
T006000		15:16		274-99-2B	2	BASF - SMW - 6		1.1E6		
1		16:03		274-96.4B	6	BASF - DUP 1		8.5E5		
T006002		16:50	52366.1	274-99-6B	7	BASF - FIELD BLANK	Auto	1.2 E6	LI 12/5/00	

* Transcribed from chromatographic data
** Dated initials required

ConCal Due: 11:51 Jan 12-5-00
ConCal Due:

Triangle Laboratories, Inc.
Run Log

Instrument ID	Column Type	Column ID	Plot Name	Inj. Vol.	Acquisition	G/C
70T	DB5	6685415	TOZ	2.0 l	MDB5US	MDB5US

Signature: [signature] Date: 12/5/00

Filename	Date*	Time*	Project #	Sample#	No.	Client Sample ID	Syr	332	Operator/Date	Comments**
T006003	12/5/00	17:37	52366.1	274-99-7B	8	BASF-SMW-13	Auto	1.1 E6	[illegible] 12/5/00	
↓ 4	↓	18:24	↓	274-99-8B	9	BASF-SMW-20	↓	—	↓	Reshot. Contact mass DFS 12/5/00
↓ 5	↓	19:11	↓	TLI CCS	10	TLI CCS	↓	1.3 E6	↓	
T006006	↓	19:58	52366.1	TLI CCSD	11	TLI CCSD.	Auto	8.2 E5	[illegible] 12/5/00	
T006007	12/5/00	20.55	52366.1	274-99-8B	9	BASF-SMW-20	Auto	4.7 E7	DFS 12/5/00	
↓ 08	↓	21:42	52397	275-31-1A-E	1	W.O.#49SL110ETPSL (COMPOSITE)	↓	—	↓	NO INJECTION SYRINGE BENT.
T006009	12/5/00	—	52408B	275-42-2	1	WA030-SL-110-XNOKL	Auto	—	DFS 12/5/00	DFS 12/5/00
T006010	12/5/00	23.19	—	7584A	—	3290/1613 Conc. 10C	Auto	1.1 E6	DFS 12/5/00	Cond FIB [illegible]
T006011	12/6/00	00:15	—	7581A	—	RTCHK	Auto	14%	[illegible] 12/6/00	
T006012	↓	01:17	52448	TLI Blank	0	TLI Blank	Auto	7.2 E7	[illegible] 12/6/00	
T006013	↓	02:04	↓	275-82-1A-D	1	IO-1F Filter, XAP, [illegible]	↓	5.7 E7	↓	
T006014	↓	02:51	↓	275-82-2A-D	2	S-1F	↓	5.7 E7	↓	
T006015	12/6/00	03:38	52448	275-82-3A-D	3	IO-2F	Auto	1.0 E6	[illegible] 12/6/00	

* Transcribed from chromatographic data

ConCal Due: 23:39 [illegible] 12/5/00

Triangle Laboratories, Inc.
Run Log

Instrument ID	Column Type	Column ID	Plot Name	Inj. Vol.	Acquisition	G/C
70P	DB225	0642915	TT1	2.0	DB225	DB225

Signature: [signature] Date: 12/5/00

Filename	Date*	Time*	Project #	Sample#	No.	Client Sample ID	Syr	332	Operator/Date	Comments**
P004402	12/05/00	14:17	—	7581A	—	Rtable	Auto		[initials] 12/5/00	* [illegible] [initials] 12/5/00
P004403	12/05/00	15:09	—	7568A	—	TETRA CLOCAL 5.0	Auto	11 E6	DFS 12/05/00	GOOD MIT3. DFS 12/05/00
P004404	12/05/00	16:26	52448	TLI BLANK	0	TLI BLANK	Auto	6.4 E5	DFS 12/05/00	
↓ 05	↓	17:12	↓	275-82-1A-D	1	IO-1F FILTER, XAD, ACE/MECL2, TOL	↓	7.3 E5	↓	
↓ 06	↓	17:58	↓	275-82-2A-D	2	S-1F FILTER, XAD, ACE/MECL2, TOL	↓	5.1 E5	↓	
P004407	↓	18:43	52448	275-82-3A-D	3	IO 2F FILTER, XAD, ACE/MECL2, TOL	Auto	7.2 E5	DFS 12/05/00	
P004408	12/05/00	19:38	52366-1	274-99-1B	1	BASF-SMW-5	Auto	9.8 E5	DFS 12/05/00	
↓ 09	↓	20:23	↓	274-99-2B	2	BASF-SMW-6	↓	6.4 E5	↓	
↓ 10	↓	21:08	↓	274-99-4B	6	BASF-DUP1	↓	5.8 E5	↓	
↓ 11	↓	21:53	↓	274-99-7B	8	BASF-SMW-13	↓	8.0 E5	↓	
P004412	↓	22:39	52366-1	274-99-8B	9	BASF-SMW-20	Auto	5.4 [illegible]	DFS 12/05/00	
P004413	12/05/00	23:24	52433	275-67-1	1	Jones-E	Auto	1.9 E4	[initials] 12/05/00	
P004414	12/06/00	00:09	52383B	275-17-3	1	FL180-SL-10300	↓	6.4 E5	↓	

Transcribed from chromatographic data
* Dated initials required

ConCal Due: 03:09 DFS 12/5/00

Triangle Laboratories, Inc.
Run Log

Instrument ID	Column Type	Column ID	Plot Name	Inj. Vol.	Acquisition	G/C
70P	DB-225	0682915	TTI	2.0µl	DB225	DB225

Signature: [signature] Date: 12/6/00

Filename	Date*	Time*	Project #	Sample#	No.	Client Sample ID	Syr	332	Operator/Date	Comments**
P004415	12/06/00	00:54	—	7564A	—	Tetra Concl 5.0	Auto	1.2 E6	[signature] 12/6/00	Good F/A, and Cardy only, [signature]
P004416	↓	05:35	—	7581A	—	RTCHK	Auto	8%	[signature] 12/6/00	
P004417	↓	06:20	—	7564A	—	Tetra Concl 5.0	↓	1.1 E6	↓	Good For All Methods. HZ 12/06/00
P004418	12/06/00	09:50	—	7560K	—	RS-100	Auto	3.1 E6	HZ 12/06/00	Clean. HZ 12/06/00
P004419	↓	10:35	52391Y1	275-25-1	1	2011-066-01/01-X-X	↓	1.4 E6	↓	
P004420	↓	11:20	↓	275-25-2	2	2011-066-02/04-L-X	↓	9.5 E5	↓	
P004421	↓	12:05	↓	275-25-3	3	2011-066-03/05-L-X	↓	8.4 E5	↓	
P004422	↓	12:50	↓	275-25-4	4	2011-066-04/06-L-X	↓	1.2 E6	↓	
P004423	↓	13:35	52391Y1	275-25-5	5	2011-066-05/07-L-X	Auto	1.3 E6	HZ 12/06/00	
P004424	↓	14:38	52448	275-82-4A-D	4	S-2F Filter, XAD, Ace/MeCl2, TOI	↓	1.7 E5	TSY 12/6/00	
↓ 25	↓	15:22	↓	275-82-5A-D	5	FB-1F Filter, XAD, Ace/MeCl2, TOI	↓	1.1 E6	↓	
↓ 26	↓	16:07	↓	275-82-6A-D	6	ID-3F Filter, XAD, Ace/MeCl2, TOI	↓	1.0 E6	↓	
P004427	12/6/00	16:52	↓	275-82-7A-D	7	S-3F Filter, XAD, Ace/MeCl2, TOI	Auto	1.2 E6	TSY 12/6/00	

* Transcribed from chromatographic data

CanCal Due:

TRIANGLE LABS

SAMPLE DATA

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC
Fax # 919-544-5491

TRIANGLE LABORATORIES, INC.
LAB CONTROL SPIKE RECOVERY ANALYSIS AND COMPARISON

Project: 52366 - r1
Matrix: WATER
Method: 8290

Isomer	T005998 ID: TLI Blank Sample (pg/l)	T006005 ID: TLI LCS With Spike (pg/l)	Percent Recovery	T006006 ID: TLI LCSD Spike Dup (pg/l)	Percent Recovery	Relative Percent Difference
2378-TCDD	ND	426	107	447	112	4.57
12378-PeCDD	ND	1930	96.3	2140	107	10.5
123478-HxCDD	ND	2260	113	2300	115	1.75
123678-HxCDD	ND	2070	103	2240	112	8.37
123789-HxCDD	ND	2250	112	2530	126	11.8
1234678-HpCDD	ND	2140	107	2350	118	9.78
OCDD	ND	3920	97.9	4260	106	7.95
2378-TCDF	ND	402	101	435	109	7.62
12378-PeCDF	ND	2110	106	2180	109	2.79
23478-PeCDF	ND	2200	110	2290	114	3.57
123478-HxCDF	ND	2220	111	2370	118	6.11
123678-HxCDF	ND	2150	107	2390	119	10.6
234678-HxCDF	ND	2540	127	2840	142	11.2
123789-HxCDF	ND	2410	120	2920	146	19.5
1234678-HpCDF	ND	2100	105	2250	113	7.34
1234789-HpCDF	ND	2330	116	2590	130	11.4
OCDF	ND	3660	91.4	4160	104	12.9

ND: Not Detected
NA: Not Applicable
[..]: EMPC Value

MILES 4.22.16
GRY_PSUM v1.10

Processed By: JCA Date: 12/13/00

Percent Recovery QC Limits: 70 to 130 percent.
Relative Percent Difference QC Limits: +/- 20 percent.

Nominal Spike Levels:
- TCDD/TCDF..: 0.4 ng
- PeCDD/PeCDF: 2.0 ng
- HxCDD/HxCDF: 2.0 ng
- HpCDD/HpCDF: 2.0 ng
- OCDD/OCDF..: 4.0 ng

Data File	T005998		T005999		T006000		T006001	
Sample ID	TLI Blank		BASF-SMW-5		BASF-SMW-6		BASF-DUP1	
Units	pg/l		pg/l		pg/l		pg/l	
Extraction Date	12/01/2000		12/01/2000		12/01/2000		12/01/2000	
Analysis Date	12/05/2000		12/05/2000		12/05/2000		12/05/2000	
Instrument	T		T		T		T	
Matrix	WATER		WATER		WATER		WATER	
Extraction Type								
Analytes								
2378-TCDD	(1.6)		71.6		37.7		62.7	
12378-PeCDD	(1.4)		115		103		115	
123478-HxCDD	(1.9)		109		120		107	
123678-HxCDD	(1.9)		1270		486		2390	
123789-HxCDD	(1.9)		561		343		888	
1234678-HpCDD	(2.9)		15640		6480		45150	E
OCDD	(4.2)		123200	E	47180	E	229590	E
2378-TCDF	(1.1)		443		807		530	
12378-PeCDF	(1.2)		304		482		{858}	X
23478-PeCDF	(1.2)		187		335		184	
123478-HxCDF	(1.3)		416		947		569	
123678-HxCDF	(1.3)		127		252		151	
234678-HxCDF	(1.4)		115		135		111	
123789-HxCDF	(1.7)		95.4		62.6		12.1	J
1234678-HpCDF	(1.7)		410		808		782	
1234789-HpCDF	(2.1)		{84.1}		167		101	
OCDF	(3.5)		529		759		585	
TOTAL TCDD	(1.6)		1800		280		2820	
TOTAL PeCDD	(1.4)		313		317		717	
TOTAL HxCDD	(1.9)		10540		6090		20210	
TOTAL HpCDD	(2.9)		29530		13740		76610	E
TOTAL TCDF	(1.1)		1220	X	3040	X	2370	X
TOTAL PeCDF	(1.2)		932	X	1950	X	1160	X
TOTAL HxCDF	(1.4)		1530	X	1800	X	2000	X
TOTAL HpCDF	(1.9)		916		1610		1850	
Other Standards Percent Recovery Summary (% Rec)								
37Cl-TCDD	82.1		84.6		90.0		102	
Other Standards Percent Recovery Summary (% Rec)								
13C12-PeCDF 234	70.5		4.4	V	4.2	V	58.3	
13C12-HxCDF 478	60.1		3.0	V	4.1	V	71.2	
13C12-HxCDD 478	61.2		2.8	V	4.2	V	73.8	
13C12-HpCDF 789	72.2		2.7	V	4.1	V	68.5	
Other Standards Percent Recovery Summary (% Rec)								
13C12-HxCDF 789	82.6		3.5	V	4.0	V	81.1	
13C12-HxCDF 234	63.2		3.1	V	3.3	V	77.0	
Internal Standards Percent Recovery Summary (% Rec)								
13C12-2378-TCDF	62.9		7.0	V	4.6	V	87.3	
13C12-2378-TCDD	62.0		6.0	V	5.2	V	70.1	

Data File	T005998	T005999		T006000		T006001
Sample ID	TLI Blank	BASF-SMW-5		BASF-SMW-6		BASF-DUP1
Units	pg/l	pg/l		pg/l		pg/l
Extraction Date	12/01/2000	12/01/2000		12/01/2000		12/01/2000
Analysis Date	12/05/2000	12/05/2000		12/05/2000		12/05/2000
Instrument	T	T		T		T
Matrix	WATER	WATER		WATER		WATER
Extraction Type						
Internal Standards	Percent Recovery	Summary (% Rec)				
13C12-PeCDF 123	63.4	3.8	V	4.6	V	58.1
13C12-PeCDD 123	82.4	5.0	V	5.5	V	64.6
13C12-HxCDF 678	56.6	2.6	V	3.9	V	67.7
13C12-HxCDD 678	62.5	3.0	V	4.3	V	69.0
13C12-HpCDF 678	63.7	2.7	V	3.9	V	61.7
13C12-HpCDD 678	61.9	3.8	V	6.3	V	80.3
13C12-OCDD	63.5	2.2	V	4.0	V	59.6

Data File	T006002		T006003		T006007		T006005
Sample ID	BASF-FIELD BLANK		BASF-SMW-13		BASF-SMW-20		TLI LCS
Units	pg/l		pg/l		pg/l		pg/l
Extraction Date	12/01/2000		12/01/2000		12/01/2000		12/01/2000
Analysis Date	12/05/2000		12/05/2000		12/05/2000		12/05/2000
Instrument	T		T		T		T
Matrix	WATER		WATER		WATER		WATER
Extraction Type							
Analytes							
2378-TCDD	(1.7)		(5.3)		(121)		426
12378-PeCDD	(1.3)		(4.8)		(215)		1930
123478-HxCDD	(1.6)		(7.3)	J	348		2260
123678-HxCDD	(1.6)		70.9		1440		2070
123789-HxCDD	(1.6)		40.2	J	1100		2250
1234678-HpCDD	(2.3)		1370		26770	E	2140
OCDD	7.5	J	5240		172670	E	3920
2378-TCDF	(1.1)		132		2850		402
12378-PeCDF	(1.2)		24.8	J	(390)	X	2110
23478-PeCDF	(1.1)		23.7	J	849		2200
123478-HxCDF	(1.2)		41.5	J	2930		2220
123678-HxCDF	(1.1)		15.6	J	878		2150
234678-HxCDF	(1.2)		15.2	J	759		2540
123789-HxCDF	(1.5)		7.5	J	(133)		2410
1234678-HpCDF	(1.5)		56.9		3890		2100
1234789-HpCDF	(1.9)		10.4	J	742		2330
OCDF	(2.9)		42.5	J	4570		3660
TOTAL TCDD	(1.7)		83.1		330		
TOTAL PeCDD	(1.3)		(26.0)		1510		
TOTAL HxCDD	(1.6)		637		12810		
TOTAL HpCDD	(2.3)		2430		51020	E	
TOTAL TCDF	(1.1)		482	X	9510		
TOTAL PeCDF	(1.1)		137	X	5830	X	
TOTAL HxCDF	(1.3)		166		8280		
TOTAL HpCDF	(1.7)		111		7840		
Other Standards Percent Recovery Summary (% Rec)							
37Cl-TCDD	80.8		82.7		113		46.2
Other Standards Percent Recovery Summary (% Rec)							
13C12-PeCDF 234	85.9		16.3	V	3.8	V	48.4
13C12-HxCDF 478	67.3		20.2	V	4.7	V	40.2
13C12-HxCDD 478	75.8		20.4	V	5.1	V	46.2
13C12-HpCDF 789	85.7		22.3	V	3.1	VRO	44.6
Other Standards Percent Recovery Summary (% Rec)							
13C12-HxCDF 789	86.0		20.6	V	6.1	V	48.6
13C12-HxCDF 234	78.3		16.5	V	5.3	V	47.4
Internal Standards Percent Recovery Summary (% Rec)							
13C12-2378-TCDF	73.2		15.8	V	6.8	V	42.1
13C12-2378-TCDD	67.0		18.4	V	6.2	V	37.9 V

Data File	T006002		T006003		T006007		T006005	
Sample ID	BASF-FIELD BLANK		BASF-SMW-13		BASF-SMW-20		TLI LCS	
Units	pg/l		pg/l		pg/l		pg/l	
Extraction Date	12/01/2000		12/01/2000		12/01/2000		12/01/2000	
Analysis Date	12/05/2000		12/05/2000		12/05/2000		12/05/2000	
Instrument	T		T		T		T	
Matrix	WATER		WATER		WATER		WATER	
Extraction Type								
Internal Standards Percent Recovery Summary (% Rec)								
13C12-PeCDF 123	77.3		18.2	V	4.0	V	44.8	
13C12-PeCDD 123	96.7		23.6	V	4.7	V	54.4	
13C12-HxCDF 678	64.3		19.5	V	4.8	V	39.3	V
13C12-HxCDD 678	76.7		20.7	V	5.5	V	46.0	
13C12-HpCDF 678	74.0		24.6	V	3.7	V	41.0	
13C12-HpCDD 678	91.3		23.9	V	4.9	V	47.8	
13C12-OCDD	84.3		25.5		1.5	V	44.9	

Data File	T006006
Sample ID	TLI LCSD
Units	pg/l
Extraction Date	12/01/2000
Analysis Date	12/05/2000
Instrument	T
Matrix	WATER
Extraction Type	

Analytes	
2378-TCDD	447
12378-PeCDD	2140
123478-HxCDD	2300
123678-HxCDD	2240
123789-HxCDD	2530
1234678-HpCDD	2350
OCDD	4260
2378-TCDF	435
12378-PeCDF	2180
23478-PeCDF	2290
123478-HxCDF	2370
123678-HxCDF	2390
234678-HxCDF	2840
123789-HxCDF	2920
1234678-HpCDF	2250
1234789-HpCDF	2590
OCDF	4160

Other Standards	Percent Recovery Summary (% Rec)
37Cl-TCDD	52.6

Other Standards	Percent Recovery Summary (% Rec)
13C12-PeCDF 234	56.8
13C12-HxCDF 478	42.3
13C12-HxCDD 478	49.1
13C12-HpCDF 789	52.5

Other Standards	Percent Recovery Summary (% Rec)
13C12-HxCDF 789	56.2
13C12-HxCDF 234	50.8

Internal Standards	Percent Recovery Summary (% Rec)
13C12-2378-TCDF	47.6
13C12-2378-TCDD	47.0
13C12-PeCDF 123	53.5
13C12-PeCDD 123	63.3
13C12-HxCDF 678	41.4
13C12-HxCDD 678	50.9
13C12-HpCDF 678	47.3
13C12-HpCDD 678	50.6
13C12-OCDD	51.1

{Estimated Maximum Possible Concentration}, (Detection Limit).

Data File	P004408	P004409	P004410	P004411
Sample ID	BASF-SMW-5	BASF-SMW-6	BASF-DUP1	BASF-SMW-13
Units	pg/l	pg/l	pg/l	pg/l
Extraction Date	12/01/2000	12/01/2000	12/01/2000	12/01/2000
Analysis Date	12/05/2000	12/05/2000	12/05/2000	12/05/2000
Instrument	P	P	P	P
Matrix	WATER	WATER	WATER	WATER
Extraction Type				
Analytes				
2378-TCDF	327	748	327	101
Internal Standards Percent Recovery Summary (% Rec)				
13C12-2378-TCDF	5.8 V	3.8 V	71.0	14.1 V

Data File	P004412
Sample ID	BASF-SMW-20
Units	pg/l
Extraction Date	12/01/2000
Analysis Date	12/05/2000
Instrument	P
Matrix	WATER
Extraction Type	

Analytes	
2378-TCDF	1860

Internal Standards Percent Recovery Summary (% Rec)

13C12-2378-TCDF	5.7	V

TriMatrix, Inc.

TLI Project: **52366r1** Method 8290 PCDD/PCDF Analysis (
Client Sample: **TLI Blank** Analysis File: **T0059**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	/ /	Spike File:	**SPMIT32S**
TLI ID:	**TLI Blank**	Date Extracted:	**12/01/2000**	ICal:	**TF57140**
		Date Analyzed:	**12/05/2000**	ConCal:	**T005996**
Sample Size:	**1.000 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005998**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**BWL**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flag
2,3,7,8-TCDD	ND	1.6				—
1,2,3,7,8-PeCDD	ND	1.4				—
1,2,3,4,7,8-HxCDD	ND	1.9				—
1,2,3,6,7,8-HxCDD	ND	1.9				—
1,2,3,7,8,9-HxCDD	ND	1.9				—
1,2,3,4,6,7,8-HpCDD	ND	2.9				—
1,2,3,4,6,7,8,9-OCDD	ND	4.2				—
2,3,7,8-TCDF	ND	1.1				—
1,2,3,7,8-PeCDF	ND	1.2				—
2,3,4,7,8-PeCDF	ND	1.2				—
1,2,3,4,7,8-HxCDF	ND	1.3				—
1,2,3,6,7,8-HxCDF	ND	1.3				—
2,3,4,6,7,8-HxCDF	ND	1.4				—
1,2,3,7,8,9-HxCDF	ND	1.7				—
1,2,3,4,6,7,8-HpCDF	ND	1.7				—
1,2,3,4,7,8,9-HpCDF	ND	2.1				—
1,2,3,4,6,7,8,9-OCDF	ND	3.5				—

Totals	Conc. (pg/L)	Number	DL	EMPC	Flag
Total TCDD	ND		1.6		—
Total PeCDD	ND		1.4		—
Total HxCDD	ND		1.9		—
Total HpCDD	ND		2.9		—
Total TCDF	ND		1.1		—
Total PeCDF	ND		1.2		—
Total HxCDF	ND		1.4		—
Total HpCDF	ND		1.9		—

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:40 12/13/

TLI Project: **52366r1** Method 8290 PCDD/PCDF Analysis
Client Sample: **TLI Blank** Analysis File: **T005**

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fla
$^{13}C_{12}$-2,3,7,8-TCDF	1260	62.9	40%-130%	0.74	26:08	_
$^{13}C_{12}$-2,3,7,8-TCDD	1240	62.0	40%-130%	0.79	26:48	_
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1270	63.4	40%-130%	1.48	29:56	_
$^{13}C_{12}$-1,2,3,7,8-PeCDD	1650	82.4	40%-130%	1.51	30:56	_
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1130	56.6	40%-130%	0.50	33:27	_
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1250	62.5	40%-130%	1.20	34:09	_
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1270	63.7	25%-130%	0.43	36:28	_
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1240	61.9	25%-130%	1.01	37:35	_
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	2540	63.5	25%-130%	0.83	41:30	_

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fla
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1410	70.5	40%-130%	1.49	30:36	_
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1200	60.1	40%-130%	0.50	33:20	_
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1220	61.2	40%-130%	1.22	34:03	_
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1440	72.2	25%-130%	0.42	38:07	_

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Fla
$^{37}Cl_4$-2,3,7,8-TCDD	164	82.1	40%-130%	26:50	_

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fla
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1650	82.6	40%-130%	0.51	34:45	_
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1260	63.2	40%-130%	0.51	33:56	_

Recovery Standards	Ratio	RT	Fla
$^{13}C_{12}$-1,2,3,4-TCDD	0.80	26:39	_
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.22	34:29	_

Data Reviewer: JCA 12/13/2000

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:40 12/1

TriMatrix, Inc.

TLI Project: **52366r1** Toxicity Equivalents Rep
Client Sample: **TLI Blank** Analysis File: **T005**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/00**	Spike File:	**SPMIT32**
TLI ID:	**TLI Blank**	Date Extracted:	**12/01/00**	ICal:	**TF57140**
		Date Analyzed:	**12/05/00**	ConCal:	**T005996**
Sample Size:	**1.000 L**	Dilution Factor:	**1**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005998**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**BWL**	% Solids:	**n/a**

Analytes	Conc. (pg/L)		TEF		Equivalent
2,3,7,8-TCDD	{1.6}	x	1.	=	1.6
1,2,3,7,8-PeCDD	{1.4}	x	0.5	=	0.70
1,2,3,4,7,8-HxCDD	{1.9}	x	0.1	=	0.19
1,2,3,6,7,8-HxCDD	{1.9}	x	0.1	=	0.19
1,2,3,7,8,9-HxCDD	{1.9}	x	0.1	=	0.19
1,2,3,4,6,7,8-HpCDD	{2.9}	x	0.01	=	0.029
1,2,3,4,6,7,8,9-OCDD	{4.2}	x	0.001	=	0.0042
TOTAL PCDD					2.9
2,3,7,8-TCDF	{1.1}	x	0.1	=	0.11
1,2,3,7,8-PeCDF	{1.2}	x	0.05	=	0.060
2,3,4,7,8-PeCDF	{1.2}	x	0.5	=	0.60
1,2,3,4,7,8-HxCDF	{1.3}	x	0.1	=	0.13
1,2,3,6,7,8-HxCDF	{1.3}	x	0.1	=	0.13
2,3,4,6,7,8-HxCDF	{1.4}	x	0.1	=	0.14
1,2,3,7,8,9-HxCDF	{1.7}	x	0.1	=	0.17
1,2,3,4,6,7,8-HpCDF	{1.7}	x	0.01	=	0.017
1,2,3,4,7,8,9-HpCDF	{2.1}	x	0.01	=	0.021
1,2,3,4,6,7,8,9-OCDF	{3.5}	x	0.001	=	0.0035
TOTAL PCDF					1.38

Total EPA TEFs, 1989a: 4.3 pg/L

{...} indicates that the value is that of a Detection Limit.

GRY_TEF v1.08, MILL

Triangle Laboratories, Inc.®
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:44 12/

Initial ....Date...

Data Review By: JKA 12/13/00

Calculated Noise Height: 0.03

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005998B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
TCDF						0.65-0.89			0.880-1.070				
304-306	DC	NL				Height	0.12	0.07	0.05				
	DC	SN		23:48	RO	1.45	0.19			0.911			
D	D	SN		27:01	RO	2.18	0.19			1.034			
304-306		0	Peaks				0.00						
13C12-TCDF						0.65-0.89			0.962-1.038				
316-318	DC	NL				Height	0.11	0.06	0.05				
				25:26	RO	1.46	0.62	0.51	0.35	0.973			
				25:46		0.66	2.03	0.81	1.22	0.986			
				26:08		0.74	449.66	190.66	259.00	1.000	13C12-2378-TCDF	IS0	
						Height	128.82	54.71	74.11				
				26:32		0.79	2.54	1.12	1.42	1.015			
316-318		4	Peaks				454.85						

---------- Above: TCDF / TCDD Follows ----------

TCDD						0.65-0.89			0.904-1.042				
320-322	DC	NL				Height	0.07	0.04	0.03				
D	D	SN		24:54	RO	2.75	0.14			0.929			
D	D	SN		25:05	RO	0.39	0.21			0.936			
	DC	SN		25:11	RO	0.92	0.21			0.940			
	DC	SN		25:25	RO	0.29	0.11			0.948			
	DC	SN		25:42		0.67	0.05			0.959			
D	D	SN		26:08	RO	4.00	0.12			0.975			
	DC	SN		26:51		0.65	0.38			1.002	2378-TCDD		AN
	DC	SN		27:02	RO	1.15	0.23			1.009			
	DC	SN		27:10	RO	1.33	0.11			1.014			
	DC	WH		27:58	RO	0.44	0.16			1.044			
	DC	WH		28:13	RO	2.11	0.16			1.053			
320-322		0	Peaks				0.00						
37Cl-TCDD									0.925-1.075				
328	DC	NL				Height	0.04	0.04					
	DC	WL		24:25			0.06			0.911			
	DC	WL		24:29			0.02			0.914			
	DC	WL		24:35			0.03			0.917			
	DC	WL		24:36			0.05			0.918			
	DC	WL		24:43			0.07			0.922			
	DC	SN		24:55			0.20			0.930			
				25:02			0.11	0.11		0.934			
				25:32			0.19	0.19		0.953			
	DC	SN		25:39			0.03			0.957			
	DC	SN		25:44			0.08			0.960			

Compound/ M_Z....	QC	Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel RT	Compound Name..	ID..	Flags
					25:53			0.12	0.12		0.966			
					26:50			40.74	40.74		1.001	37Cl-TCDD		CLS
					27:08			0.25	0.25		1.012			
					27:17			0.14	0.14		1.018			
					27:23			0.15	0.15		1.022			
					27:28			0.14	0.14		1.025			
	DC		SN		27:36			0.11			1.030			
	DC		SN		27:44			0.05			1.035			
					27:55			0.15	0.15		1.042			
	DC		SN		28:06			0.03			1.049			
	DC		SN		28:13			0.10			1.053			
328			9	Peaks				41.99						
13C12-TCDD					0.65-0.89						0.925-1.075			
332-334	DC		NL		Height			0.15	0.10	0.05				
					25:41	RO	1.26	0.81	0.58	0.46	0.958			
					26:39		0.80	557.49	246.94	310.55	0.994	13C12-1234-TCDD		RS1
					26:48		0.79	363.39	160.40	202.99	1.000	13C12-2378-TCDD		IS1
					Height			102.46	45.22	57.24				
					27:09	RO	0.34	0.51	0.22	0.64	1.013			
332-334			4	Peaks				922.20						
---------- Above: TCDD / PeCDF Follows ----------														
PeCDF					1.32-1.78						0.930-1.060			
340-342	DC		NL		Height			0.09	0.04	0.05				
D	D		SN		28:29	RO	0.77	0.16			0.952			
	DC		SN		28:41	RO	0.77	0.16			0.958			
	DC		SN		28:55	RO	0.83	0.16			0.966			
	DC		SN		29:04	RO	0.14	0.03			0.971			
	DC		SN		29:21	RO	1.80	0.13			0.981			
	DC		SN		29:45	RO	0.56	0.08			0.994			
	DC		SN		30:23	RO	0.27	0.07			1.015			
	DC		SN		30:36	RO	1.11	0.23			1.022	23478-PeCDF		AN
340-342			0	Peaks				0.00						
13C12-PeCDF					1.32-1.78						0.866-1.134			
352-354	DC		NL		Height			0.09	0.04	0.05				
					29:07	RO	1.13	1.45	0.67	0.57	0.973			
					29:34	RO	0.92	0.74	0.45	0.49	0.988			
					29:56		1.48	423.51	252.43	171.08	1.000	13C12-PeCDF 123		IS2
					Height			133.27	79.94	53.33				
					30:14		1.39	3.40	1.98	1.42	1.010			
					30:36		1.49	466.70	279.52	187.18	1.022	13C12-PeCDF 234		SUR1
					30:55	RO	1.19	0.92	0.43	0.36	1.033			
					31:35		1.32	4.74	2.70	2.04	1.055			
352-354			7	Peaks				901.46						
---------- Above: PeCDF / PeCDD Follows ----------														
PeCDD					1.32-1.78						0.938-1.020			
356-358	DC		NL		Height			0.09	0.05	0.04				

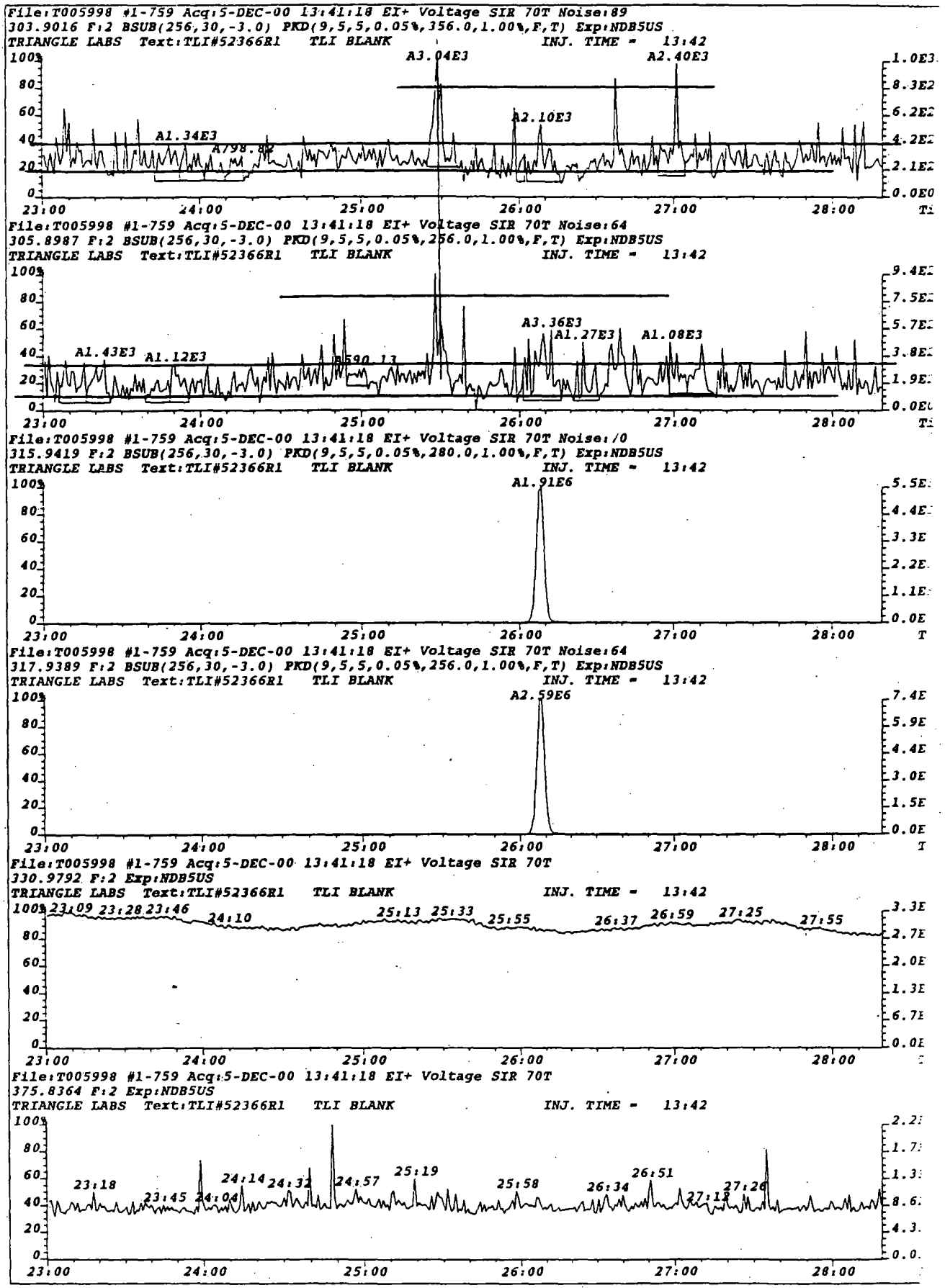
Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		29:41	RO	0.45	0.08			0.960			
	DC	SN		30:59	RO	0.40	0.13			1.002	12378-PeCDD	AN	
	DC	SN		31:09	RO	1.30	0.26			1.007			
356-358		0	Peaks				0.00						
13C12-PeCDD				1.32-1.78						0.871-1.129			
368-370	DC	NL		Height			0.10	0.06	0.04				
				29:54		1.52	1.61	0.97	0.64	0.967			
				30:01	RO	0.95	1.27	0.77	0.81	0.970			
				30:56		1.51	313.27	188.29	124.98	1.000	13C12-PeCDD 123	IS3	
				Height			103.69	62.36	41.33				
368-370		3	Peaks				316.15						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF				1.05-1.43						0.963-1.047			
374-376	DC	NL		Height			0.07	0.04	0.03				
D	D	SN		33:21		1.40	0.24			0.997	123478-HxCDF	AN	
	DC	SN		33:26	RO	1.56	0.20			1.000			
	DC	SN		33:57	RO	1.00	0.22			1.015			
	DC	SN		34:01	RO	0.25	0.02			1.017	234678-HxCDF	AN	
	DC	SN		34:07	RO	1.80	0.11			1.020			
	DC	SN		34:46	RO	2.56	0.20			1.039	123789-HxCDF	AN	
	DC	SN		34:58		1.20	0.11			1.045			
	DC	WH		35:06	RO	1.55	0.25			1.049			
374-376		0	Peaks				0.00						
13C12-HxCDF				0.43-0.59						0.880-1.120			
384-386	DC	NL		Height			0.09	0.04	0.05				
				32:22	RO	0.63	1.33	0.45	0.71	0.968			
				32:30		0.53	1.16	0.40	0.76	0.972			
				33:20		0.50	376.01	125.19	250.82	0.997	13C12-HxCDF 478	SUR2	
				33:27		0.50	359.06	119.69	239.37	1.000	13C12-HxCDF 678	IS4	
				Height			109.74	35.99	73.75				
				33:46	RO	0.28	0.44	0.15	0.53	1.009			
				33:56		0.51	366.01	123.04	242.97	1.014	13C12-HxCDF 234	ALT2	
				34:09	RO	1.03	0.50	0.34	0.33	1.021			
				34:45		0.51	351.20	118.46	232.74	1.039	13C12-HxCDF 789	ALT1	
				35:02		0.44	0.49	0.15	0.34	1.047			
384-386		9	Peaks				1,456.20						
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD				1.05-1.43						0.957-1.013			
390-392	DC	NL		Height			0.07	0.03	0.04				
	DC	SN		33:20	RO	2.14	0.16			0.976			
	DC	SN		33:41	RO	0.57	0.07			0.986			
	DC	SN		33:49	RO	0.80	0.07			0.990			
	DC	SN		34:04		1.20	0.11			0.998	123478-HxCDD	AN	
	DC	SN		34:18		1.25	0.09			1.004			
D	D	SN		34:27		1.09	0.23			1.009	123789-HxCDD	AN	
	DC	WH		34:45	RO	7.00	0.07			1.018			

Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
	DC	WH		34:52	RO	0.56	0.09			1.021			
	DC	WH		34:57	RO	0.60	0.05			1.023			
390-392		0	Peaks				0.00						
13C12-HxCDD				1.05-1.43					0.971-1.029				
402-404	DC	NL		Height			0.11	0.05	0.06				
				33:32		1.36	1.72	0.99	0.73	0.982			
				34:03		1.22	251.44	138.14	113.30	0.997	13C12-HxCDD 478	SUR3	
				34:09		1.20	248.10	135.10	113.00	1.000	13C12-HxCDD 678	IS5	
				Height			76.57	41.75	34.82				
				34:29		1.22	437.09	239.85	197.24	1.010	13C12-HxCDD 789	RS2	
				34:49	RO	0.39	0.34	0.19	0.49	1.020			
				34:51	RO	0.32	0.16	0.09	0.28	1.020			
402-404		6	Peaks				938.85						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF				0.88-1.20					0.995-1.050				
408-410	DC	NL		Height			0.08	0.04	0.04				
D	D	SN		36:30	RO	1.58	0.24			1.001	1234678-HpCDF	AN	
	DC	SN		36:56	RO	1.67	0.24			1.013			
	DC	SN		37:13		1.00	0.18			1.021			
D	D	SN		38:12	RO	1.70	0.20			1.048			
	DC	WH		38:34	RO	2.00	0.12			1.058			
408-410		0	Peaks				0.00						
13C12-HpCDF				0.37-0.51					0.945-1.110				
418-420	DC	NL		Height			0.08	0.04	0.04				
				36:28		0.43	270.27	81.85	188.42	1.000	13C12-HpCDF 678	IS6	
				Height			72.33	22.12	50.21				
				38:07		0.42	238.07	70.77	167.30	1.045	13C12-HpCDF 789	SUR4	
	DC	SN		38:31	RO	0.35	0.29			1.056			
418-420		2	Peaks				508.34						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20					0.974-1.004				
424-426	DC	NL		Height			0.06	0.03	0.03				
D	D	SN		36:46	RO	0.85	0.22			0.978			
424-426		0	Peaks				0.00						
13C12-HpCDD				0.88-1.20					0.973-1.027				
436-438	DC	NL		Height			0.19	0.10	0.09				
				36:46	RO	1.28	0.59	0.37	0.29	0.978			
				37:35		1.01	232.01	116.40	115.61	1.000	13C12-HpCDD 678	IS7	
				Height			61.23	30.75	30.48				
436-438		2	Peaks				232.60						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02					0.904-1.096				
442-444	DC	NL		Height			0.06	0.03	0.03				

Compound/ M_2....	QC.Log	Cmit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
		DC	SN	38:47	RO	0.63	0.11			0.935			
		DC	SN	38:53	RO	1.75	0.08			0.937			
		DC	SN	39:35	RO	0.71	0.11			0.954			
		DC	SN	41:36	RO	0.75	0.19			1.002			
	D	D	SN	41:43	RO	0.56	0.42			1.005	OCDF		AN
		DC	SN	41:53	RO	1.17	0.11			1.009			
				43:26	RO	1.67	0.17	0.15	0.09	1.047			
		DC	SN	43:41	RO	2.50	0.11			1.053			
		DC	SN	44:25	RO	3.00	0.04			1.070			
442-444			1 Peak				0.17						
OCDD					0.76-1.02					0.904-1.096			
458-460		DC	NL		Height		0.06	0.03	0.03				
458-460			0 Peaks				0.00						
13C12-OCDD					0.76-1.02					0.996-1.004			
470-472		DC	NL		Height		0.06	0.03	0.03				
				41:30		0.83	387.52	176.13	211.39	1.000	13C12-OCDD		IS8
					Height		78.53	34.74	43.79				
470-472			1 Peak				387.52						

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_2 -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***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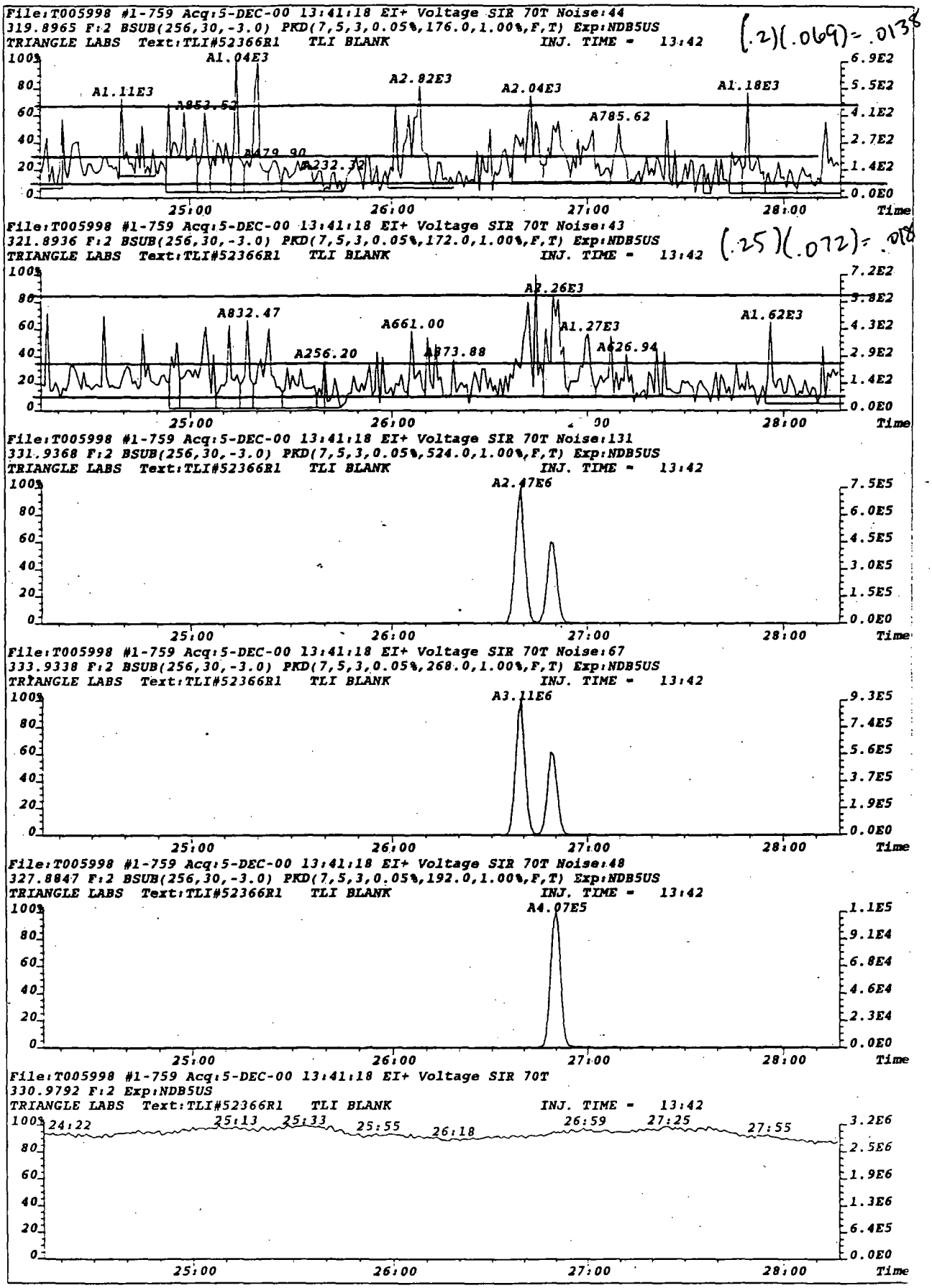
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,356.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A3.04E3
A2.40E3
A2.10E3
A1.34E3
A798.82
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:64
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,256.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A3.36E3
A1.27E3
A1.08E3
A1.43E3
A1.12E3
B590.13
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:70
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,280.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.91E6
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:64
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,256.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A2.59E6
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
23:09 23:28 23:46 24:10 25:13 25:33 25:55 26:37 26:59 27:25 27:55
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
23:18 23:45 24:04 24:14 24:32 24:57 25:19 25:58 26:34 26:51 27:13 27:26
23:00 24:00 25:00 26:00 27:00 28:00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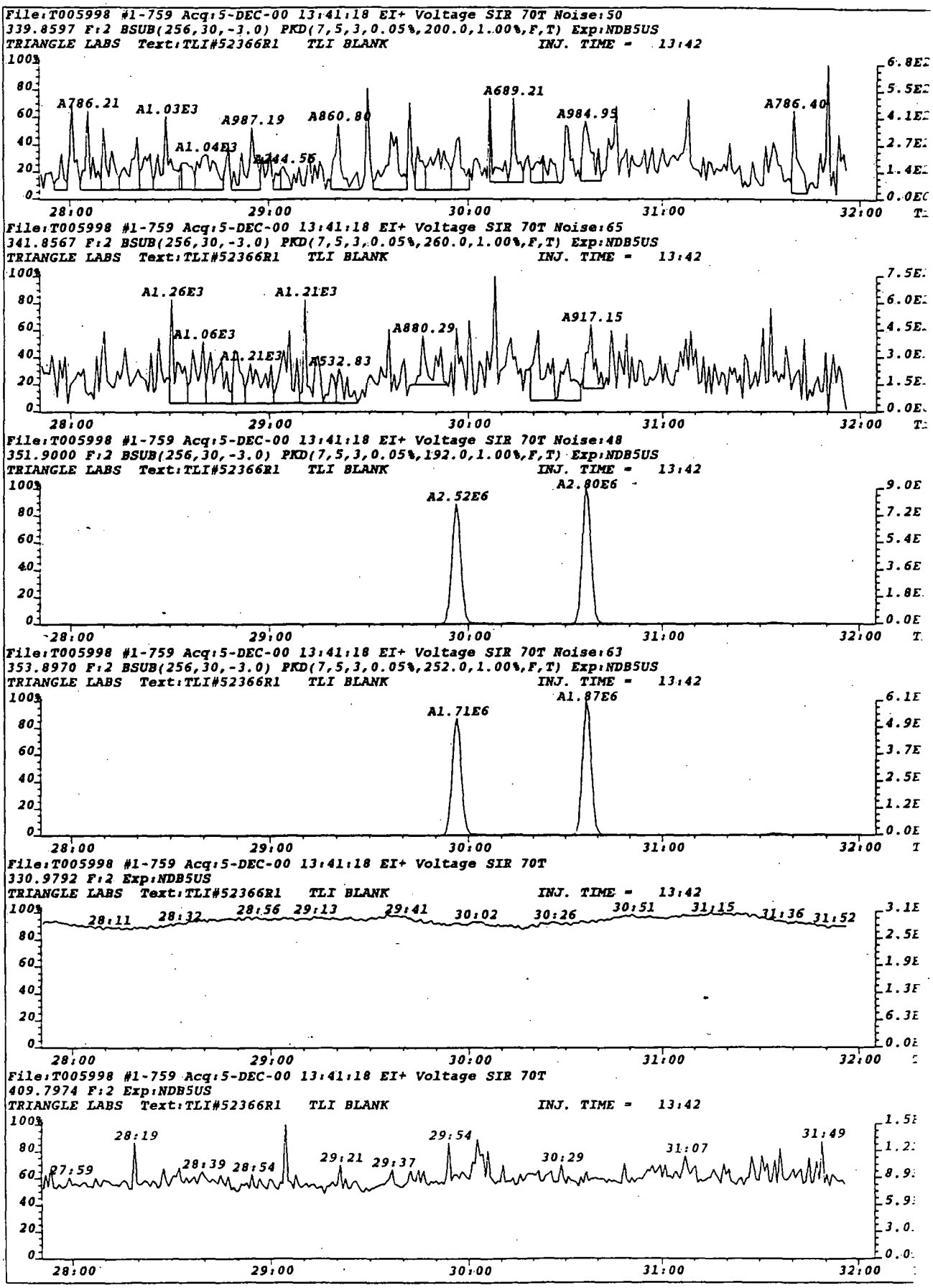
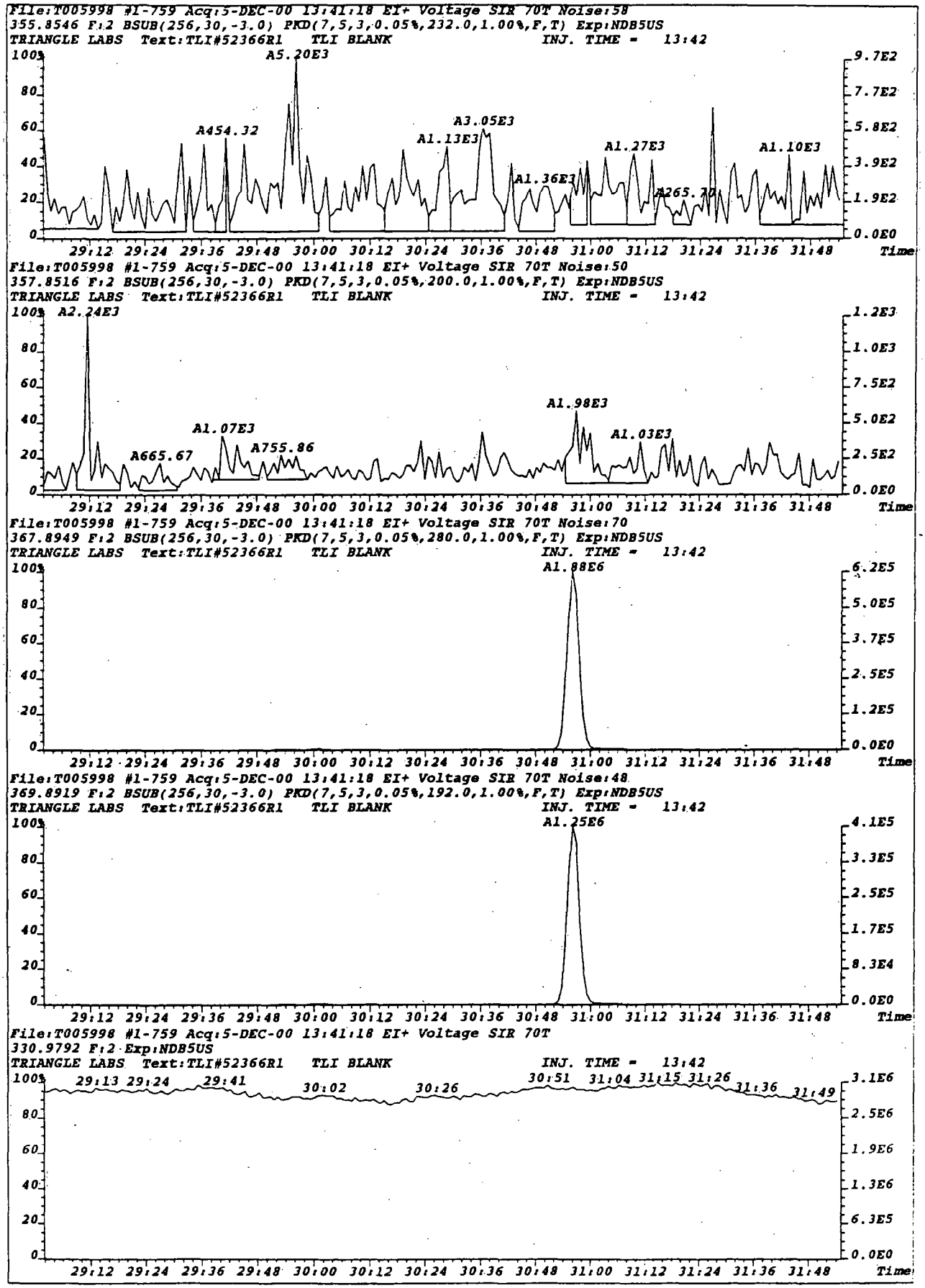
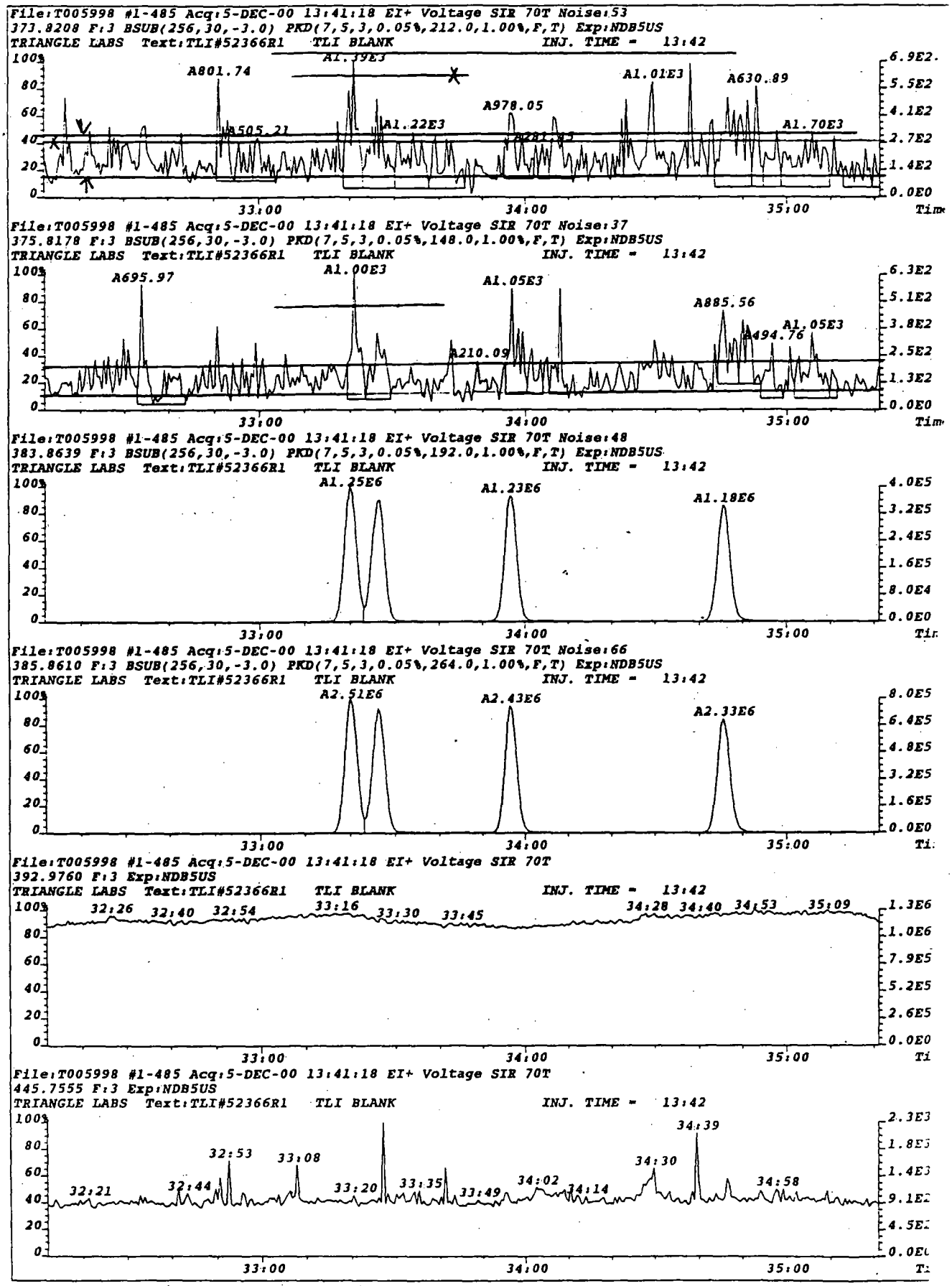
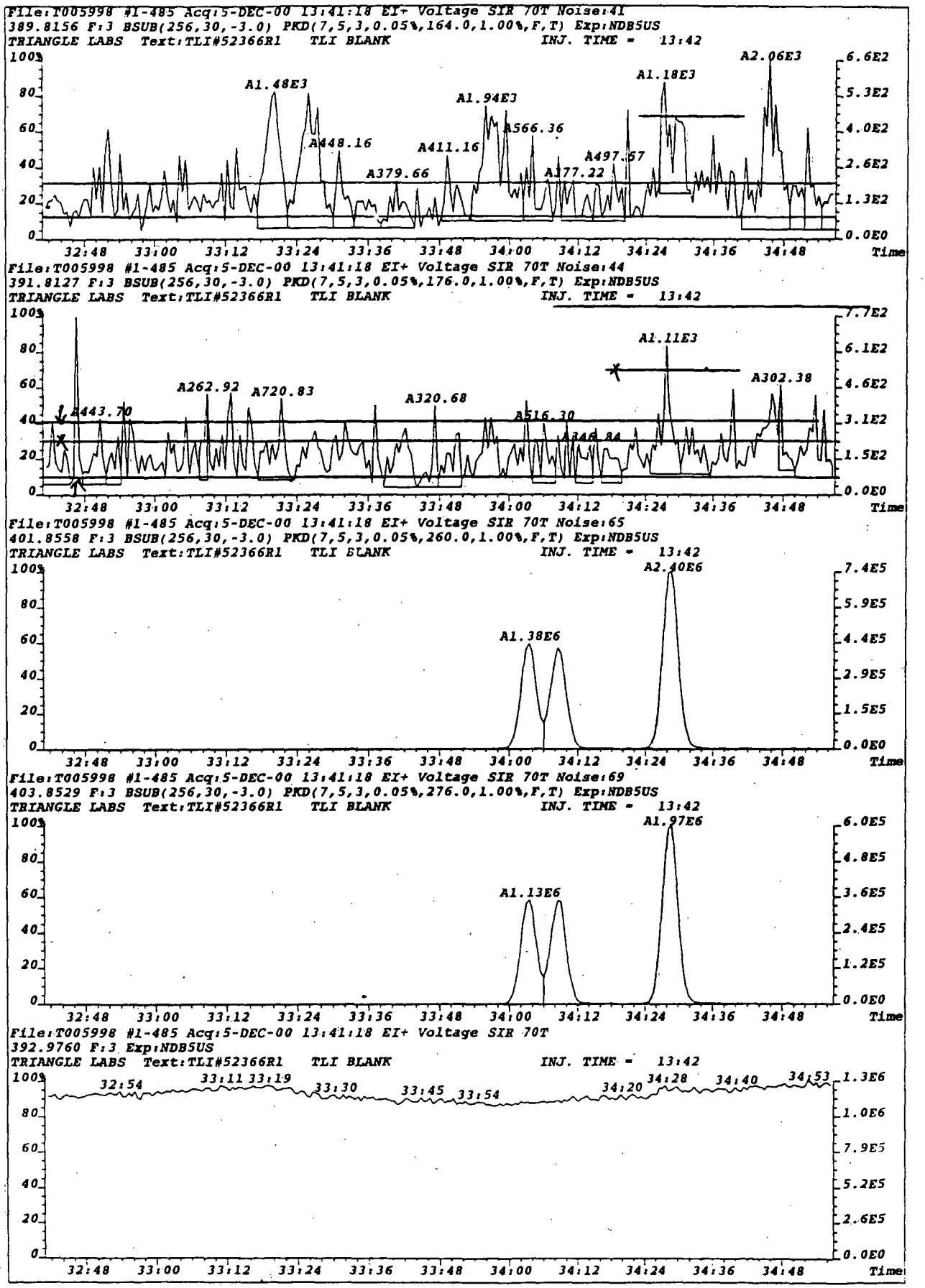
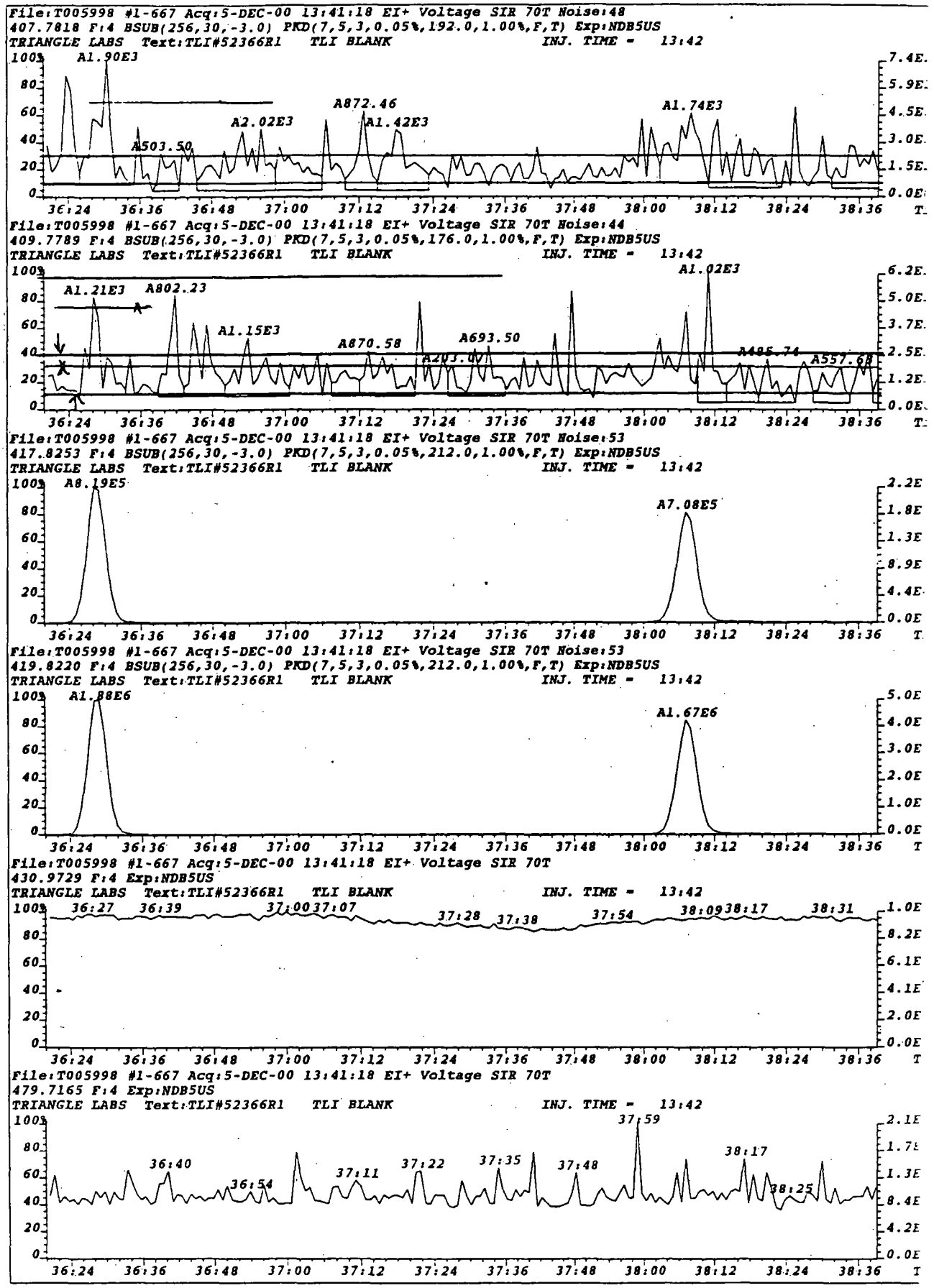
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
(.2)(.069)=.013
A1.04E3
A1.11E3
A2.82E3
A2.04E3
A1.18E3
A785.62
A853.52
A479.90
A232.32
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:43
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
(.25)(.072)=.018
A832.47
A661.00
A1.27E3
A1.62E3
A256.20
A873.88
A626.94
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:131
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,524.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A2.47E6
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:67
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,268.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A3.11E6
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:48
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,192.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A4.07E5
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
24:22
25:13
25:33
25:55
26:18
26:59
27:25
27:55
25:00
26:00
27:00
28:00
Time

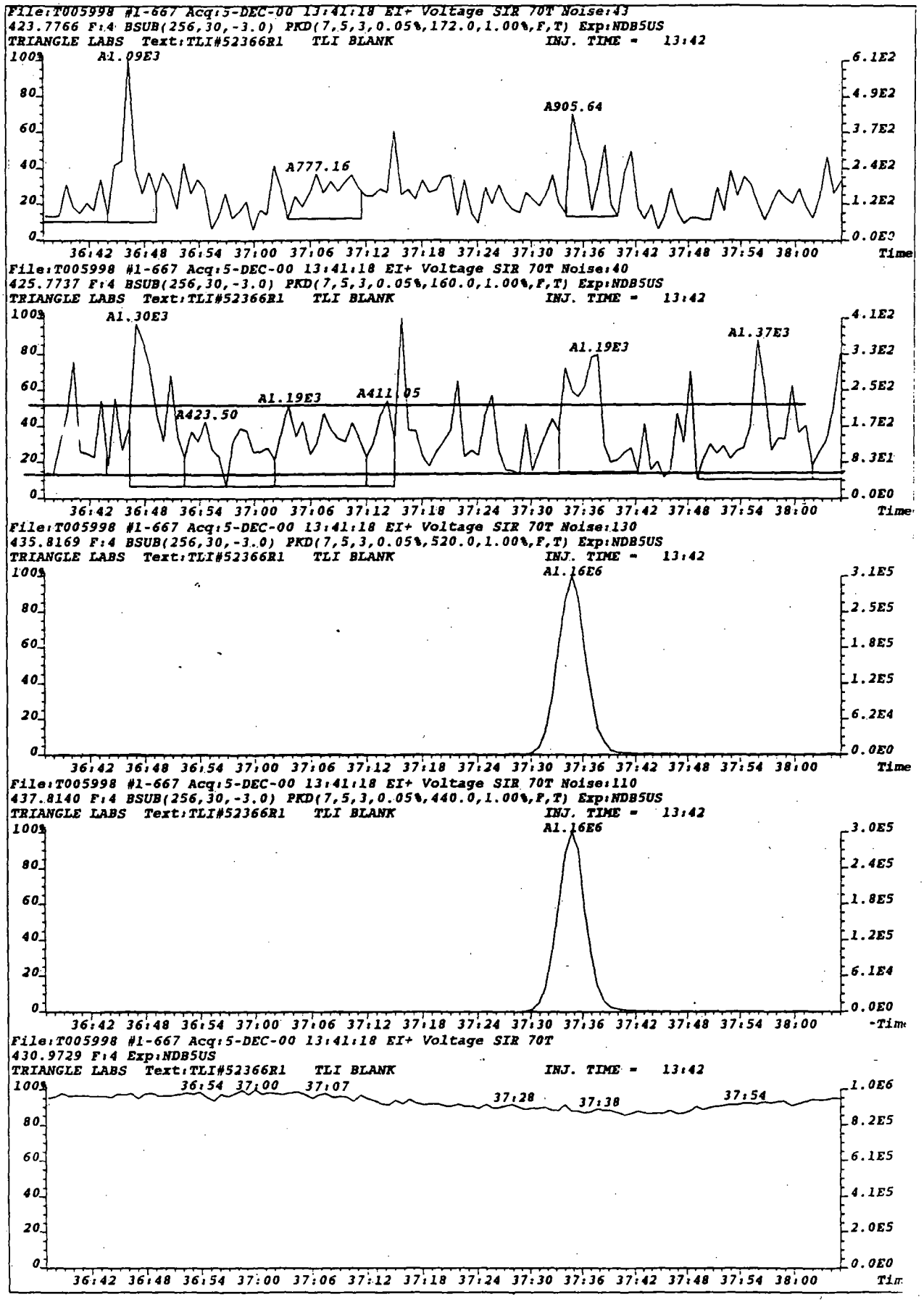

File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:50
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A786.21
A1.03E3
A987.19
A860.80
A1.04E3
A689.21
A984.95
A786.40
28:00
29:00
30:00
31:00
32:00
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:65
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,260.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.26E3
A1.21E3
A1.06E3
A880.29
A917.15
A532.83
28:00
29:00
30:00
31:00
32:00
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:48
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,192.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A2.52E6
A2.80E6
28:00
29:00
30:00
31:00
32:00
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:63
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.71E6
A1.87E6
28:00
29:00
30:00
31:00
32:00
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
28:11
28:32
28:56
29:13
29:41
30:02
30:26
30:51
31:15
31:36
31:52
28:00
29:00
30:00
31:00
32:00
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
28:19
29:54
31:49
27:59
28:39
28:54
29:21
29:37
30:29
31:07
28:00
29:00
30:00
31:00
32:00


File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:58
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A5.20E3
A454.32
A3.05E3
A1.13E3
A1.27E3
A1.10E3
A1.36E3
A265.70
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:50
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A2.24E3
A1.98E3
A1.07E3
A1.03E3
A665.67
A755.86
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:70
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,280.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.88E6
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:48
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,192.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.25E6
File:T005998 #1-759 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
29:13 29:24 29:41 30:02 30:26 30:51 31:04 31:15 31:26 31:36 31:49
29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48
Time

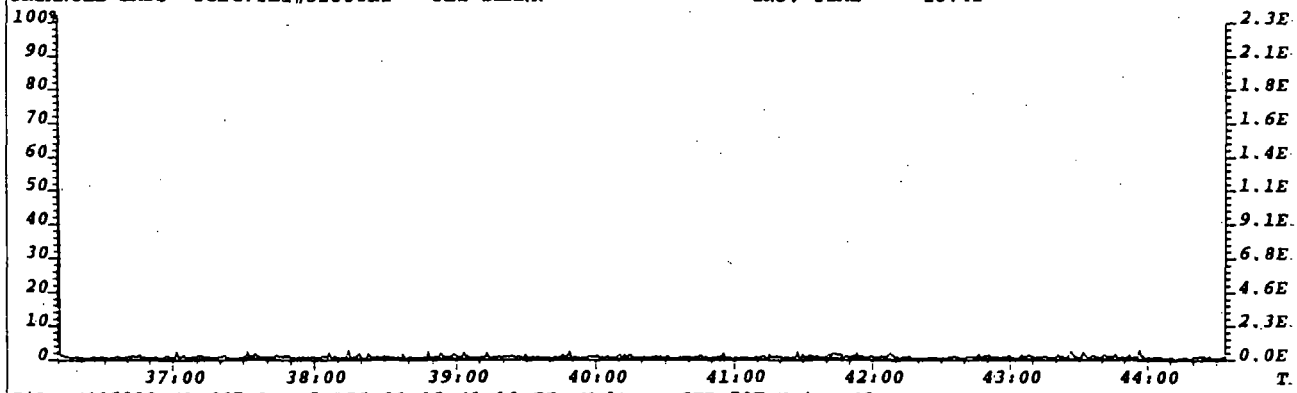

File:T005998 #1-485 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:53
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A801.74
A1.22E3
A978.05
A1.01E3
A630.89
A1.70E3
33:00
34:00
35:00
File:T005998 #1-485 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:37
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A695.97
A1.00E3
A1.05E3
A210.09
A885.56
A494.76
A1.05E3
33:00
34:00
35:00
File:T005998 #1-485 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:48
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,192.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.25E6
A1.23E6
A1.18E6
33:00
34:00
35:00
File:T005998 #1-485 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:66
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,264.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A2.51E6
A2.43E6
A2.33E6
33:00
34:00
35:00
File:T005998 #1-485 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
32:26
32:40
32:54
33:16
33:30
33:45
34:28
34:40
34:53
35:09
33:00
34:00
35:00
File:T005998 #1-485 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
32:21
32:44
32:53
33:08
33:20
33:35
33:49
34:02
34:14
34:30
34:39
34:58
33:00
34:00
35:00


File:T005998 #1-485 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:41
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.48E3
A448.16
A379.66
A411.16
A1.94E3
A566.36
A177.22
A497.57
A1.18E3
A2.06E3
File:T005998 #1-485 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:44
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A443.70
A262.92
A720.83
A320.68
A516.30
A1.11E3
A302.38
File:T005998 #1-485 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:65
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,260.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.38E6
A2.40E6
File:T005998 #1-485 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:69
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,276.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.13E6
A1.97E6
File:T005998 #1-485 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
32:54
33:11 33:19
33:30
33:45 33:54
34:20
34:28
34:40
34:53
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48 Time

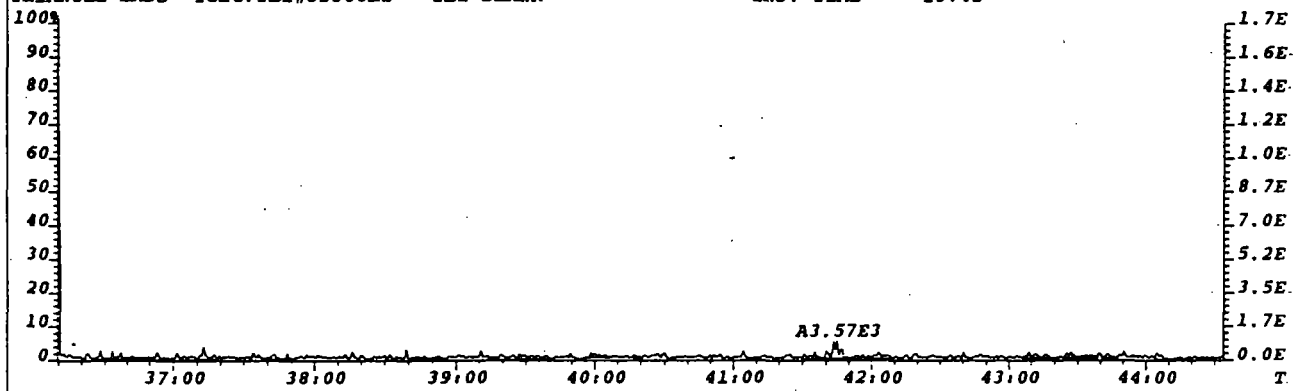

File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:48
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,192.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.90E3
A503.50
A2.02E3
A872.46
A1.42E3
A1.74E3
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:44
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.21E3
A802.23
A1.15E3
A870.58
A693.50
A1.02E3
A485.74
A557.68
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:53
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A8.19E5
A7.08E5
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:53
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.88E6
A1.67E6
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
36:40
36:54
37:11
37:22
37:35
37:48
37:59
38:17
38:25


File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:43
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.09E3
A905.64
A777.16
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:40
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.30E3
A1.37E3
A1.19E3
A1.19E3
A411.05
A423.50
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:130
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,520.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.16E6
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:110
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,440.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.16E6
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
36:54 37:00 37:07
37:28
37:38
37:54
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00

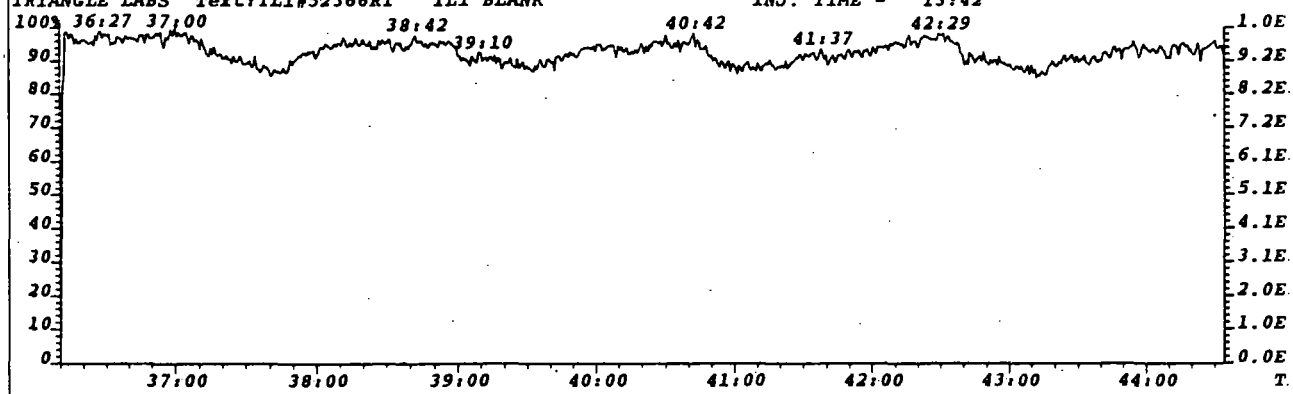
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:42
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42



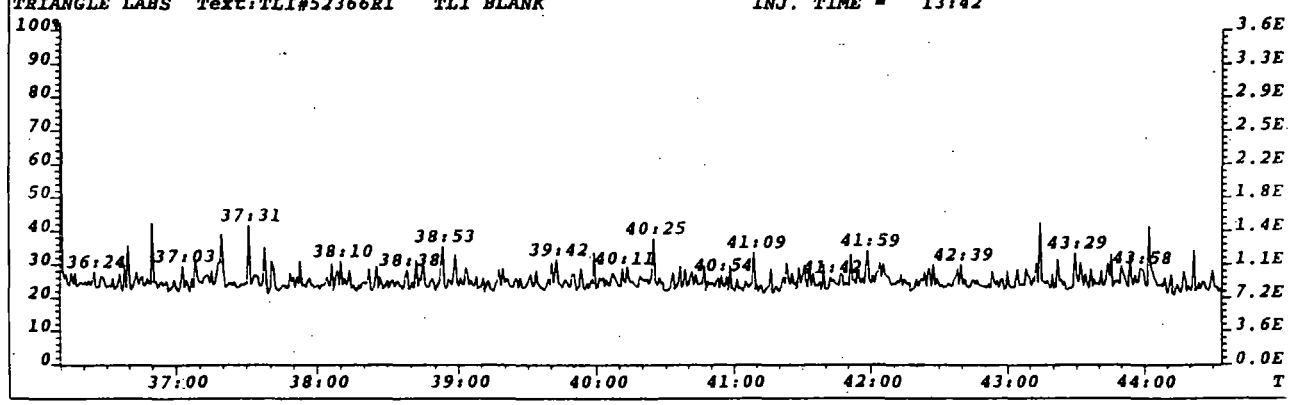
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:43
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42

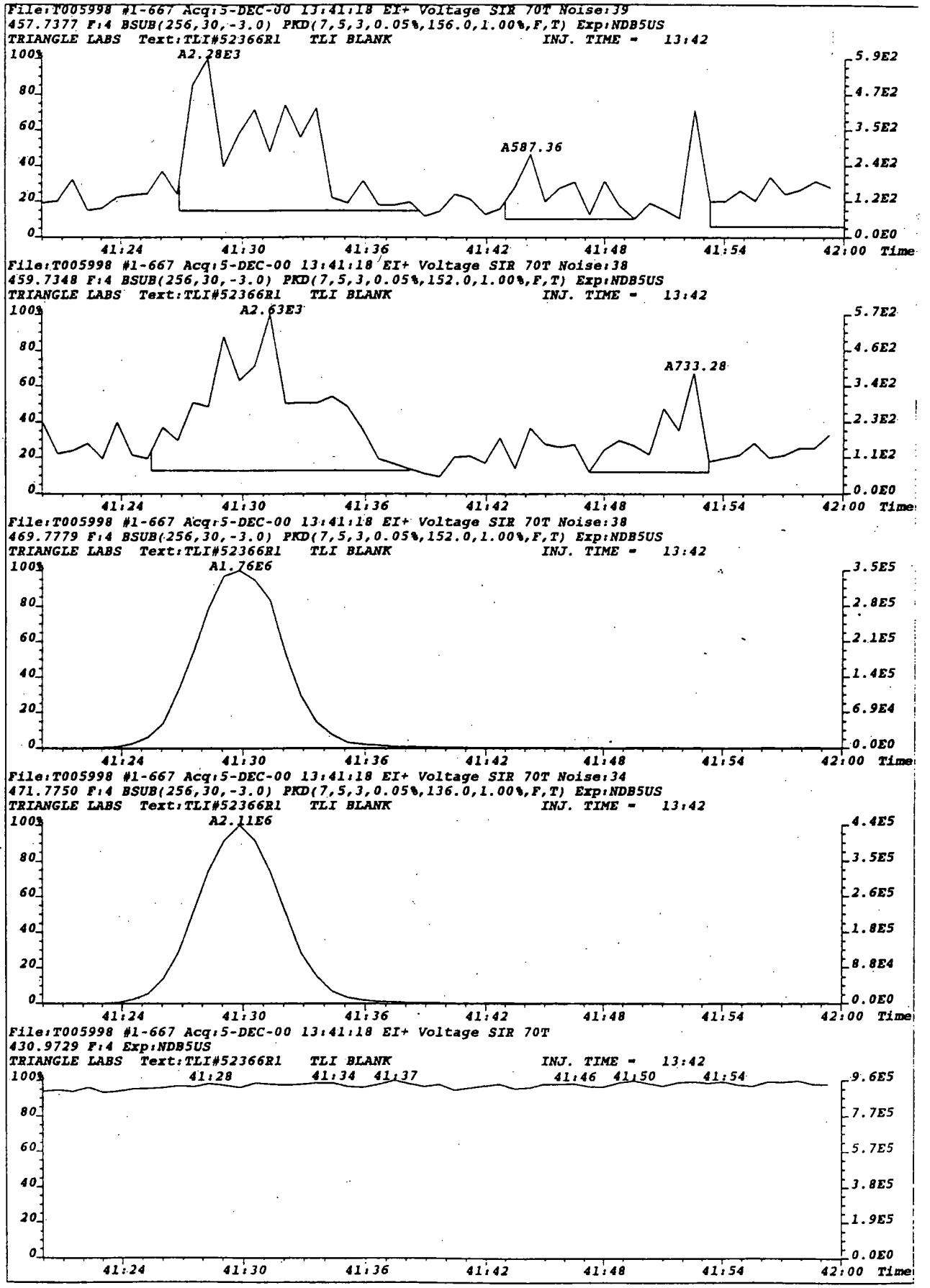


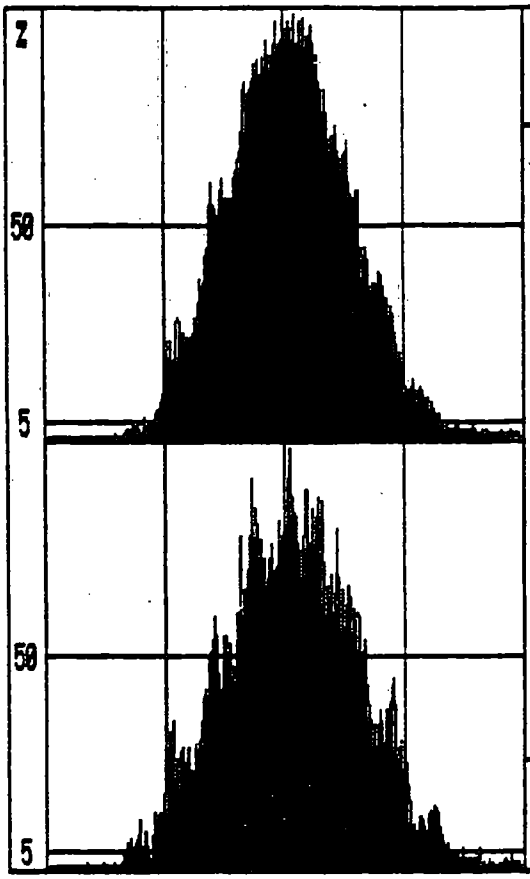
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42



File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42




File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:39
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A2.28E3
A587.36
5.9E2
4.7E2
3.5E2
2.4E2
1.2E2
0.0E0
41:24 41:30 41:36 41:42 41:48 41:54 42:00 Time
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:38
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,152.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A2.63E3
A733.28
5.7E2
4.6E2
3.4E2
2.3E2
1.1E2
0.0E0
41:24 41:30 41:36 41:42 41:48 41:54 42:00 Time
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:38
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,152.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A1.76E6
3.5E5
2.8E5
2.1E5
1.4E5
6.9E4
0.0E0
41:24 41:30 41:36 41:42 41:48 41:54 42:00 Time
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T Noise:34
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,136.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
A2.11E6
4.4E5
3.5E5
2.6E5
1.8E5
8.8E4
0.0E0
41:24 41:30 41:36 41:42 41:48 41:54 42:00 Time
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42
41:28 41:34 41:37 41:46 41:50 41:54
9.6E5
7.7E5
5.7E5
3.8E5
1.9E5
0.0E0
41:24 41:30 41:36 41:42 41:48 41:54 42:00 Time

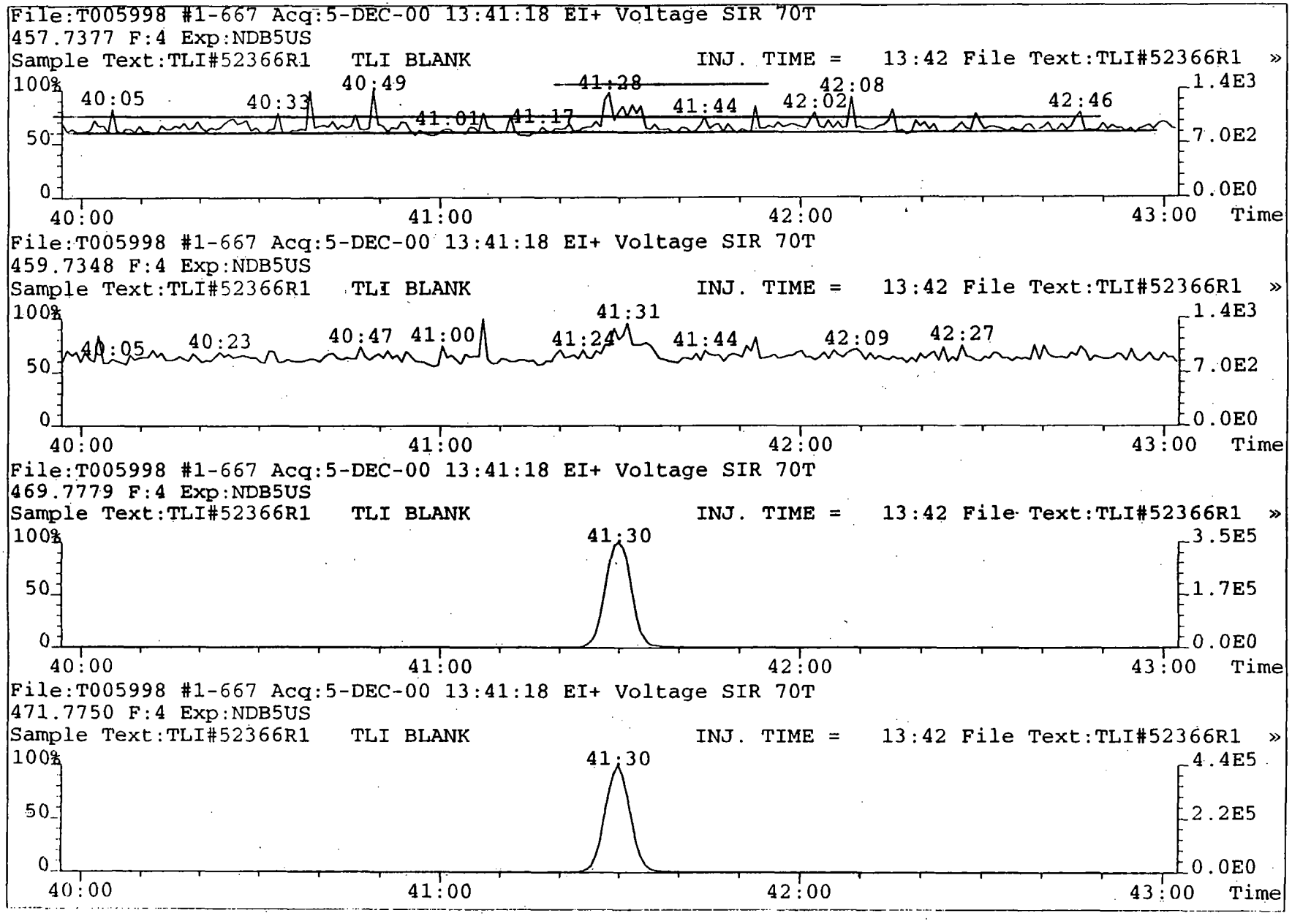


Channel	I	330.9792		Peak top	
Height	.68 volts		Span	200 ppm	

System file name	MOSUS
Data file name	A:TD050803
Resolution	10000
Group number	2
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 416.9760

A	293	J	331	S	368
B	304	K	332	T	370
C	306	L	334	U	376
D	316	M	340	V	410
E	318	N	342		
F	320	O	352		
G	322	P	354		
H	328	Q	356		
I	331	R	358		

Ref. mass	416.9760			Peak top	
Height	.13 volts		Span	200 ppm	


File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
457.7377 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42 File Text:TLI#52366R1
100%
50
0
40:05
40:33
40:49
41:01
41:17
41:28
41:44
42:02
42:08
42:46
1.4E3
7.0E2
0.0E0
40:00
41:00
42:00
43:00
Time
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
459.7348 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42 File Text:TLI#52366R1
100%
50
0
40:05
40:23
40:47
41:00
41:24
41:31
41:44
42:09
42:27
1.4E3
7.0E2
0.0E0
40:00
41:00
42:00
43:00
Time
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
469.7779 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42 File Text:TLI#52366R1
100%
50
0
41:30
3.5E5
1.7E5
0.0E0
40:00
41:00
42:00
43:00
Time
File:T005998 #1-667 Acq:5-DEC-00 13:41:18 EI+ Voltage SIR 70T
471.7750 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 TLI BLANK INJ. TIME = 13:42 File Text:TLI#52366R1
100%
50
0
41:30
4.4E5
2.2E5
0.0E0
40:00
41:00
42:00
43:00
Time

TriMatrix, Inc.

TLI Project: **52366r1** Method 8290 PCDD/PCDF Analysi
Client Sample: **BASF-SMW-5** Analysis File: **T00**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/2000**	Spike File:	**SPMIT3**
TLI ID:	**274-99-1B**	Date Extracted:	**12/01/2000**	ICal:	**TF57140**
		Date Analyzed:	**12/05/2000**	ConCal:	**T005996**
Sample Size:	**1.080 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005998**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**BWL**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Fi
2,3,7,8-TCDD	71.6			0.70	26:50	
1,2,3,7,8-PeCDD	115			1.41	30:57	
1,2,3,4,7,8-HxCDD	109			1.21	34:04	
1,2,3,6,7,8-HxCDD	1270			1.23	34:10	
1,2,3,7,8,9-HxCDD	561			1.25	34:30	
1,2,3,4,6,7,8-HpCDD	15640			1.01	37:35	
1,2,3,4,6,7,8,9-OCDD	123200			0.85	41:31	
2,3,7,8-TCDF	443			0.83	26:08	
1,2,3,7,8-PeCDF	304			1.48	29:56	
2,3,4,7,8-PeCDF	187			1.40	30:37	
1,2,3,4,7,8-HxCDF	416			1.36	33:21	
1,2,3,6,7,8-HxCDF	127			1.33	33:27	
2,3,4,6,7,8-HxCDF	115			1.18	33:57	
1,2,3,7,8,9-HxCDF	95.4			1.41	34:46	
1,2,3,4,6,7,8-HpCDF	410			1.14	36:29	
1,2,3,4,7,8,9-HpCDF	EMPC		84.1			
1,2,3,4,6,7,8,9-OCDF	529			0.88	41:44	

Totals	Conc. (pg/L)	Number	DL	EMPC	F
Total TCDD	1800	3		1910	
Total PeCDD	313	2		594	
Total HxCDD	10540	6			
Total HpCDD	29530	2			
Total TCDF	1220	8		3670	
Total PeCDF	932	5		2020	
Total HxCDF	1530	8		1840	
Total HpCDF	916	3		1000	

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TLI Project: 52366r1 Method 8290 PCDD/PCDF Analys
Client Sample: BASF-SMW-5 Analysis File: T0C

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	F
$^{13}C_{12}$-2,3,7,8-TCDF	129	6.98	40%-130%	0.77	26:08	\
$^{13}C_{12}$-2,3,7,8-TCDD	110	5.96	40%-130%	0.81	26:48	\
$^{13}C_{12}$-1,2,3,7,8-PeCDF	70.2	3.79	40%-130%	1.47	29:56	\
$^{13}C_{12}$-1,2,3,7,8-PeCDD	93.2	5.03	40%-130%	1.54	30:56	\
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	48.8	2.63	40%-130%	0.48	33:26	\
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	55.6	3.00	40%-130%	1.25	34:09	\
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	50.8	2.75	25%-130%	0.46	36:29	\
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	70.6	3.81	25%-130%	1.04	37:35	\
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	82.8	2.24	25%-130%	0.78	41:30	\

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	F
$^{13}C_{12}$-2,3,4,7,8-PeCDF	80.9	4.37	40%-130%	1.54	30:36	\
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	56.4	3.05	40%-130%	0.51	33:20	\
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	52.0	2.81	40%-130%	1.22	34:03	\
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	49.1	2.65	25%-130%	0.43	38:07	\

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	F
$^{37}Cl_4$-2,3,7,8-TCDD	157	84.6	40%-130%	26:49	

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	F
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	65.4	3.53	40%-130%	0.51	34:46	
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	58.1	3.14	40%-130%	0.51	33:57	

Recovery Standards	Ratio	RT	F
$^{13}C_{12}$-1,2,3,4-TCDD	0.81	26:38	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.21	34:29	

Data Reviewer: _____ 12/13/2000

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TriMatrix, Inc.

TLI Project: **52366r1** — Toxicity Equivalents Re
Client Sample: **BASF-SMW-5** — Analysis File: **T005**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/00**	Spike File:	**SPMIT32**
TLI ID:	**274-99-1B**	Date Extracted:	**12/01/00**	ICal:	**TF57140**
		Date Analyzed:	**12/05/00**	ConCal:	**T005996**
Sample Size:	**1.080 L**	Dilution Factor:	**1**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005998**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**BWL**	% Solids:	**n/a**

Analytes	Conc. (pg/L)		TEF		Equivalent
2,3,7,8-TCDD	71.6	x	1.	=	71.6
1,2,3,7,8-PeCDD	115	x	0.5	=	57.5
1,2,3,4,7,8-HxCDD	109	x	0.1	=	10.9
1,2,3,6,7,8-HxCDD	1270	x	0.1	=	127.0
1,2,3,7,8,9-HxCDD	561	x	0.1	=	56.1
1,2,3,4,6,7,8-HpCDD	15640	x	0.01	=	156.40
1,2,3,4,6,7,8,9-OCDD	123200	x	0.001	=	123.200
TOTAL PCDD					602.7
2,3,7,8-TCDF	327	x	0.1	=	32.7
1,2,3,7,8-PeCDF	304	x	0.05	=	15.2
2,3,4,7,8-PeCDF	187	x	0.5	=	93.5
1,2,3,4,7,8-HxCDF	416	x	0.1	=	41.6
1,2,3,6,7,8-HxCDF	127	x	0.1	=	12.7
2,3,4,6,7,8-HxCDF	115	x	0.1	=	11.5
1,2,3,7,8,9-HxCDF	95.4	x	0.1	=	9.54
1,2,3,4,6,7,8-HpCDF	410	x	0.01	=	4.10
1,2,3,4,7,8,9-HpCDF	[84.1]	x	0.01	=	0.841
1,2,3,4,6,7,8,9-OCDF	529	x	0.001	=	0.529
TOTAL PCDF					222.2

Total EPA TEFs, 1989a: 824.9 pg/L

[...] indicates that the value is that of an EMPC.

GRY_TEF v1.08, MI

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Initial ....Date...

Data Review By: JCh 12/13/00

Calculated Noise Height: 0.09

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005999B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel RT	Compound Name	ID	Flags
TCDF							0.65-0.89			0.380-1.070				
304-306		DC	NL				Height	0.12	0.06	0.06				
					23:34		0.32	7.66	3.45	4.21	0.902			
					23:50	RO	0.96	4.05	1.76	1.84	0.912			
					24:13		0.74	6.41	2.73	3.68	0.927			
					24:32		0.84	6.82	3.12	3.70	0.939			
					24:54	RO	0.93	7.24	3.15	3.37	0.953			
					25:09	RO	0.94	3.86	2.04	2.18	0.962			
					25:28		0.82	8.52	3.35	4.67	0.974			
	X		X		25:46	RO	0.80	25.45	11.28	14.17	0.986	1278-TCDF		AN
	A				25:58		0.79	1.52	0.67	0.85	0.994			
					26:08		0.83	21.54	9.80	11.74	1.000	2378-TCDF		AN
					26:33		0.84	3.92	1.79	2.13	1.016			
					26:46		0.79	2.87	1.27	1.60	1.024			
	X		X		26:55	RO	0.81	11.33	5.08	6.25	1.030			
	AX		X		27:10	RO	0.81	31.30	14.00	17.30	1.040			
	X		X		27:29	RO	0.82	31.84	14.39	17.45	1.052			
	M				27:49	RO	1.32	5.03	3.74	2.84	1.064			
		DC	WH		28:05		0.87	15.42			1.075			
304-306			16	Peaks				179.36						
13C12-TCDF							0.65-0.89			0.962-1.038				
316-318		DC	NL				Height	0.18	0.10	0.08				
					26:08		0.77	88.07	38.34	49.73	1.000	13C12-2378-TCDF		ISO
							Height	24.47	10.33	14.14				
					26:38	RO	1.11	1.61	1.01	0.91	1.019			
316-318			2	Peaks				89.68						
---------- Above: TCDF / TCDD Follows ----------														
TCDD							0.65-0.89			0.904-1.042				
320-322		DC	NL				Height	0.08	0.04	0.04				
					24:24		0.71	36.06	15.03	21.03	0.910	1368-TCDD		AN
					24:46		0.73	15.21	6.40	8.81	0.924	1379-TCDD		AN
		DC	SN		25:13	RO	0.10	0.16			0.941			
		DC	SN		25:19	RO	2.00	0.09			0.945			
		DC	SN		25:25	RO	1.22	0.16			0.948			
					25:42	RO	0.47	3.33	1.45	3.07	0.959			
	D	D	SN		25:53		0.82	0.69			0.966			
	D	D	SN		26:01	RO	0.55	0.51			0.971			
	D	D	SN		26:18	RO	0.44	0.32			0.981			
	D	D	SN		26:38		0.81	1.61			0.994			
					26:50		0.70	2.18	0.90	1.28	1.001	2378-TCDD		AN
	D	D	SN		27:08		0.87	0.86			1.012			

Compound M_I....	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel.RT	Compound Name	ID	Flags
	D	D	SN		27:21	RO	1.45	0.19			1.021			
		DC	SN		27:29	RO	0.44	0.18			1.025			
		DC	SN		27:34	RO	2.50	0.07			1.029			
		DC	WH		28:17	RO	1.75	0.14			1.055			
320-322				4	Peaks			56.78						
37Cl-TCDD										0.925-1.075				
328		DC	NL			Height		0.05	0.05					
		DC	WL		24:21			0.37			0.909			
		DC	WL		24:40			1.78			0.920			
		DC	WL		24:47			2.88			0.925			
					25:05			1.93	1.93		0.936			
					25:31			236.87	236.87		0.952			
					25:39			0.58	0.58		0.957			
					26:49			74.07	74.07		1.001	37Cl-TCDD	CLS	
					27:11			5.63	5.63		1.014			
					28:06			1.68	1.68		1.049			
328				6	Peaks			320.76						
13C12-TCDD						0.65-0.89				0.925-1.075				
332-334		DC	NL			Height		0.19	0.13	0.06				
					26:38		0.81	983.57	439.15	544.42	0.994	13C12-1234-TCDD	RS1	
					26:48		0.81	61.67	27.63	34.04	1.000	13C12-2378-TCDD	IS1	
						Height		17.16	7.72	9.44				
332-334				2	Peaks			1,045.24						
---------- Above: TCDD / PeCDF Follows ----------														
PeCDF						1.32-1.78				0.930-1.060				
340-342		DC	NL			Height		0.10	0.04	0.06				
					28:02		1.46	2.81	1.67	1.14	0.937			
					29:07	RO	1.26	7.17	4.36	3.46	0.973			
					29:17	RO	1.03	0.56	0.34	0.33	0.978			J
	D	D	SN		29:35		1.74	1.04			0.988			
					29:41	RO	1.26	0.97	0.59	0.47	0.992			J
	A				29:52	RO	1.28	0.82	0.50	0.39	0.998			J
	AN				29:56		1.48	6.70	4.00	2.70	1.000	12378-PeCDF	AN	
	NXM		X		30:00	RO	1.44	8.58	5.07	3.51	1.002			
	A				30:07	RO	1.10	0.36	0.22	0.20	1.006			J
					30:14		1.53	3.99	2.41	1.58	1.010			
					30:37		1.40	4.18	2.44	1.74	1.023	23478-PeCDF	AN	
					30:50		1.32	2.95	1.68	1.27	1.030			
					31:13	RO	3.78	0.46	0.68	0.18	1.043			J
	X		X		31:20	RO	1.53	5.14	3.11	2.03	1.047			
340-342				13	Peaks			44.69						
13C12-PeCDF						1.32-1.78				0.866-1.134				
352-354		DC	NL			Height		0.12	0.06	0.06				
					27:48	RO	0.65	1.15	0.70	1.07	0.929			
					28:13	RO	0.89	1.04	0.63	0.71	0.943			
					28:35	RO	0.52	0.28	0.17	0.33	0.955			
		DC	SN		28:42	RO	1.30	0.26			0.959			

Compound/ M_Z....	QC	Log	Cmit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht. Peak1	Area/Ht. Peak2	Rel.RT	Compound Name..	ID..	Flag
					28:50	RO	2.00	0.28	0.22	0.11	0.963			
					29:06	RO	0.32	0.59	0.36	0.44	0.972			
					29:56		1.47	44.70	26.58	18.12	1.000	13C12-PeCDF 123	IS2	
							Height	14.85	8.96	5.89				
					30:36		1.54	51.03	30.93	20.10	1.022	13C12-PeCDF 234	SUR1	
					30:58	RO	20.86	0.18	1.46	0.07	1.035			
					31:35	RO	1.83	0.74	0.53	0.29	1.055			
		DC		SN	31:48	RO	0.40	0.07			1.062			
352-354				9 Peaks				99.99						
---------- Above: PeCDF / PeCDD Follows ----------														
PeCDD							1.32-1.78				0.938-1.020			
356-358		DC		NL			Height	0.09	0.05	0.04				
	D	D		WL	29:01	RO	1.05	0.35			0.938			
					29:12	RO	0.44	3.75	2.28	5.17	0.944			
	D	D		SN	29:40	RO	1.03	0.58			0.959			
					29:54	RO	1.20	1.65	1.00	0.83	0.967			
					30:02		1.66	3.81	2.38	1.43	0.971			
	D	D		SN	30:13	RO	1.92	0.97			0.977			
	D	D		SN	30:28	RO	1.92	0.66			0.985			
	D	D		SN	30:39	RO	0.85	0.56			0.991			
	D	D		SN	30:47	RO	0.69	0.18			0.995			
					30:57		1.41	2.22	1.30	0.92	1.001	12378-PeCDD	AN	
		DC		SN	31:13	RO	1.29	0.18			1.009			
		DC		WH	31:47	RO	0.82	0.61			1.027			
356-358				4 Peaks				11.43						
13C12-PeCDD							1.32-1.78				0.871-1.129			
368-370		DC		NL			Height	0.09	0.05	0.04				
					29:54	RO	0.78	0.23	0.14	0.18	0.967			
		DC		SN	30:01	RO	4.33	0.08			0.970			
					30:56		1.54	33.77	20.50	13.27	1.000	13C12-PeCDD 123	IS3	
							Height	11.56	6.98	4.58				
368-370				2 Peaks				34.00						
---------- Above: PeCDD / HxCDF Follows ----------														
HxCDF							1.05-1.43				0.963-1.047			
374-376		DC		NL			Height	0.14	0.07	0.07				
					32:23		1.33	0.63	0.36	0.27	0.969			J
					32:30		1.23	4.19	2.31	1.88	0.972			
					32:57		1.27	6.82	3.82	3.00	0.986			
					33:13	RO	0.96	0.42	0.23	0.24	0.994			J
					33:21		1.36	6.92	3.99	2.93	0.998	123478-HxCDF	AN	
					33:27		1.33	2.21	1.26	0.95	1.000	123678-HxCDF	AN	
	X			X	33:37	RO	1.23	4.51	2.49	2.02	1.005			
	D	D		SN	33:45	RO	1.55	0.25			1.009			
					33:57		1.18	1.81	0.98	0.83	1.015	234678-HxCDF	AN	
					34:46		1.41	1.23	0.72	0.51	1.040	123789-HxCDF	AN	
					34:52		1.29	0.48	0.27	0.21	1.043			J
		DC		WH	35:18		1.20	0.66			1.056			

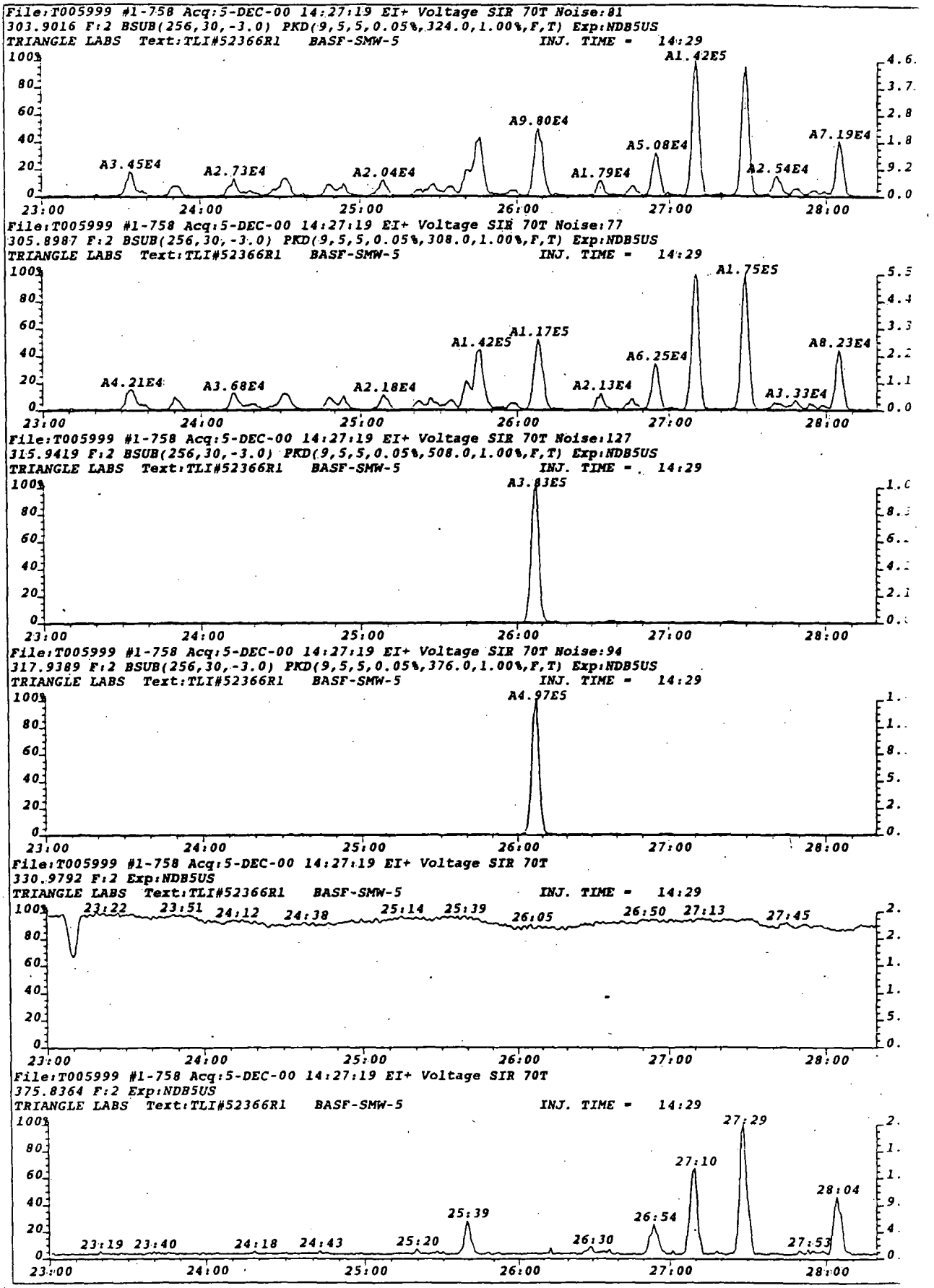
Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
374-376			10 Peaks				29.22						
13C12-HxCDF				0.43-0.59						0.880-1.120			
384-386	DC	NL				Height	0.11	0.05	0.06				
				32:27		0.43	0.20	0.06	0.14	0.971			
	DC	SN		32:45	RO	0.92	0.33			0.980			
				32:57	RO	1.18	0.17	0.13	0.11	0.986			
				33:20		0.51	34.23	11.54	22.69	0.997	13C12-HxCDF 478		SUR2
				33:26		0.48	30.02	9.78	20.24	1.000	13C12-HxCDF 678		IS4
						Height	9.53	3.08	6.45				
	DC	SN		33:37	RO	0.75	0.09			1.005			
	DC	SN		33:38	RO	0.17	0.03			1.006			
				33:57		0.51	32.65	11.03	21.62	1.015	13C12-HxCDF 234		ALT2
				34:03	RO	1.00	0.20	0.13	0.13	1.018			
	DC	SN		34:10		0.50	0.15			1.022			
				34:28	RO	1.24	0.57	0.47	0.38	1.031			
				34:32	RO	1.33	0.14	0.12	0.09	1.033			
				34:46		0.51	26.97	9.05	17.92	1.040	13C12-HxCDF 789		ALT1
	DC	SN		34:56	RO	0.20	0.06			1.045			
384-386			9 Peaks				125.15						
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD				1.05-1.43						0.957-1.013			
390-392	DC	NL				Height	0.10	0.05	0.05				
				32:51		1.23	22.46	12.38	10.08	0.962			
				33:18		1.27	3.75	2.10	1.65	0.975			
				33:31		1.25	75.34	41.84	33.50	0.981			
D	D	SN		33:41	RO	2.20	0.22			0.986			
	DC	SN		33:57	RO	0.53	0.16			0.994			
				34:04		1.21	1.28	0.70	0.58	0.998	123478-HxCDD		AN
				34:10		1.23	14.87	8.19	6.68	1.000	123678-HxCDD		AN
				34:30		1.25	6.66	3.70	2.96	1.010	123789-HxCDD		AN
	DC	WH		34:40	RO	0.17	0.11			1.015			
	DC	WH		34:49	RO	2.50	0.09			1.020			
	DC	WH		34:57	RO	0.89	0.45			1.023			
390-392			6 Peaks				124.36						
13C12-HxCDD				1.05-1.43						0.971-1.029			
402-404	DC	NL				Height	0.12	0.05	0.07				
				34:03		1.22	20.72	11.40	9.32	0.997	13C12-HxCDD 478		SUR3
				34:09		1.25	21.42	11.89	9.53	1.000	13C12-HxCDD 678		IS5
						Height	6.87	3.78	3.09				
				34:29		1.21	785.22	429.31	355.91	1.010	13C12-HxCDD 789		RS2
402-404			3 Peaks				827.36						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF				0.88-1.20						0.995-1.050			
408-410	DC	NL				Height	0.11	0.06	0.05				
M				36:29		1.14	5.81	3.10	2.71	1.000	1234678-HpCDF		AN
				36:46		1.10	0.65	0.34	0.31	1.008			

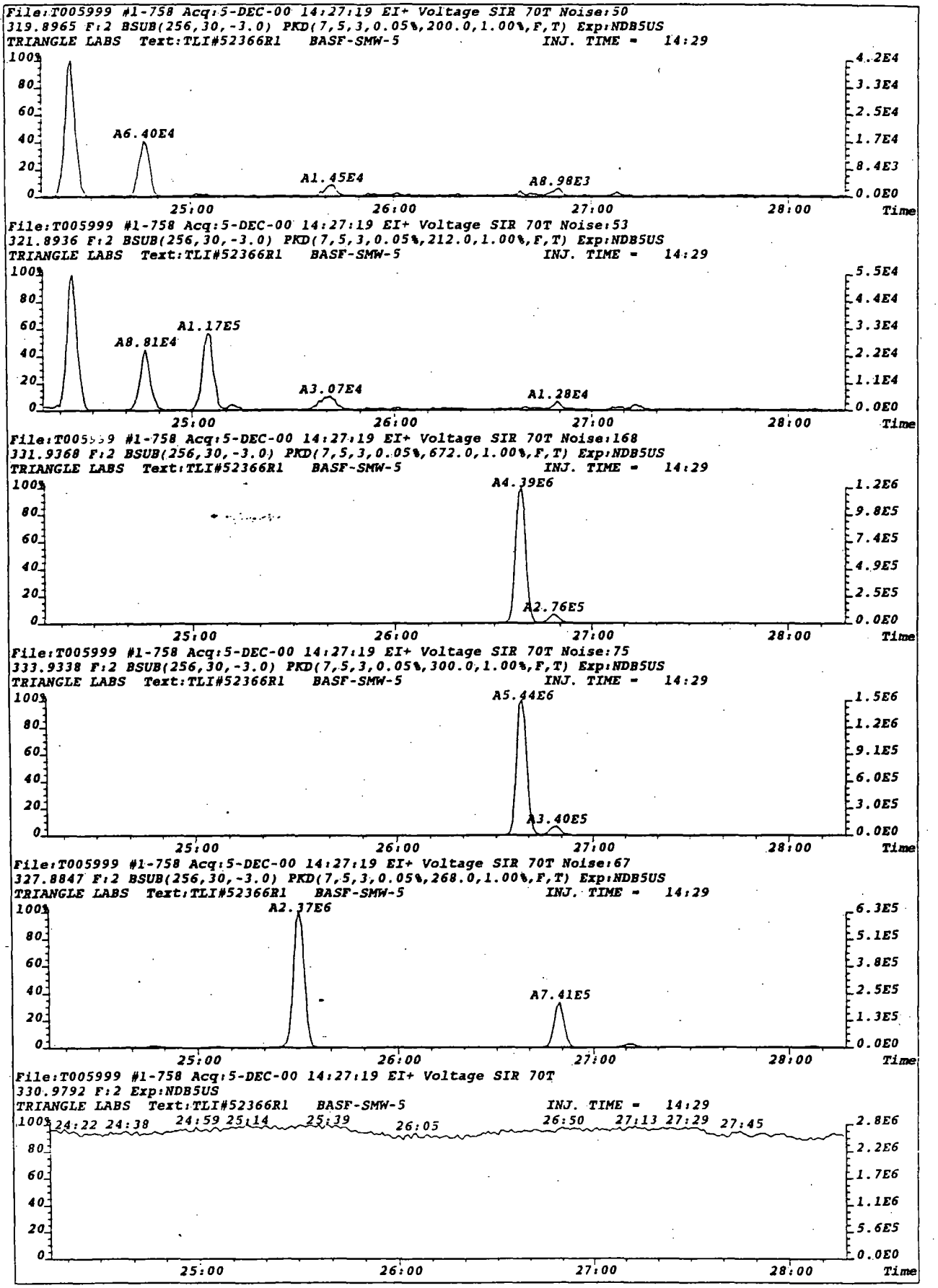
Compound/ M_I....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
				36:56		1.11	5.70	3.00	2.70	1.012			
M				38:08	RO	1.33	0.92	0.60	0.45	1.045	1234789-HpCDF	AN	
	DC	WH		38:25	RO	1.27	0.67			1.053			
408-410		4	Peaks				13.08						
13C12-HpCDF				0.37-0.51					0.945-1.110				
418-420	DC	NL		Height			0.06	0.03	0.03				
				36:29		0.46	20.91	6.58	14.33	1.000	13C12-HpCDF 678	IS6	
				Height			6.04	1.84	4.20				
	DC	SN		36:48	RO	2.50	0.03			1.009			
	DC	SN		36:52		0.38	0.18			1.011			
	DC	SN		37:40	RO	1.67	0.04			1.032			
				38:07		0.43	15.72	4.72	11.00	1.045	13C12-HpCDF 789	SUR4	
418-420		2	Peaks				36.63						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20					0.974-1.004				
424-426	DC	NL		Height			0.28	0.15	0.13				
				36:47		1.03	164.65	83.36	81.29	0.979			
				37:35		1.01	185.49	93.21	92.28	1.000	1234678-HpCDD	AN	
	DC	WH		38:03		1.13	1.62			1.012			
424-426		2	Peaks				350.14						
13C12-HpCDD				0.88-1.20					0.973-1.027				
436-438	DC	NL		Height			0.10	0.05	0.05				
	DC	SN		37:04		1.14	0.15			0.986			
	DC	SN		37:14	RO	12.00	0.02			0.991			
				37:35		1.04	25.68	13.09	12.59	1.000	13C12-HpCDD 678	IS7	
				Height			6.99	3.69	3.30				
436-438		1	Peak				25.68						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02					0.904-1.096				
442-444	DC	NL		Height			0.08	0.04	0.04				
	DC	SN		38:41	RO	0.71	0.11			0.932			
	DC	SN		38:50	RO	0.63	0.21			0.936			
	DC	SN		39:02	RO	2.00	0.11			0.941			
	DC	SN		39:22	RO	0.29	0.13			0.949			
	DC	SN		40:13	RO	0.63	0.11			0.969			
	DC	SN		40:25	RO	3.00	0.11			0.974			
	DC	SN		40:38	RO	2.67	0.11			0.979			
				41:31		0.89	0.89	0.42	0.47	1.000			
				41:44		0.88	3.85	1.80	2.05	1.006	OCDF	AN	
	DC	SN		42:52	RO	0.38	0.06			1.033			
				43:41		0.86	10.14	4.68	5.46	1.053			
	DC	SN		43:54	RO	1.29	0.13			1.058			
	DC	SN		44:06		0.86	0.13			1.063			
	DC	SN		44:16	RO	0.50	0.06			1.067			
	DC	SN		44:23	RO	1.86	0.13			1.069			
442-444		3	Peaks				14.88						

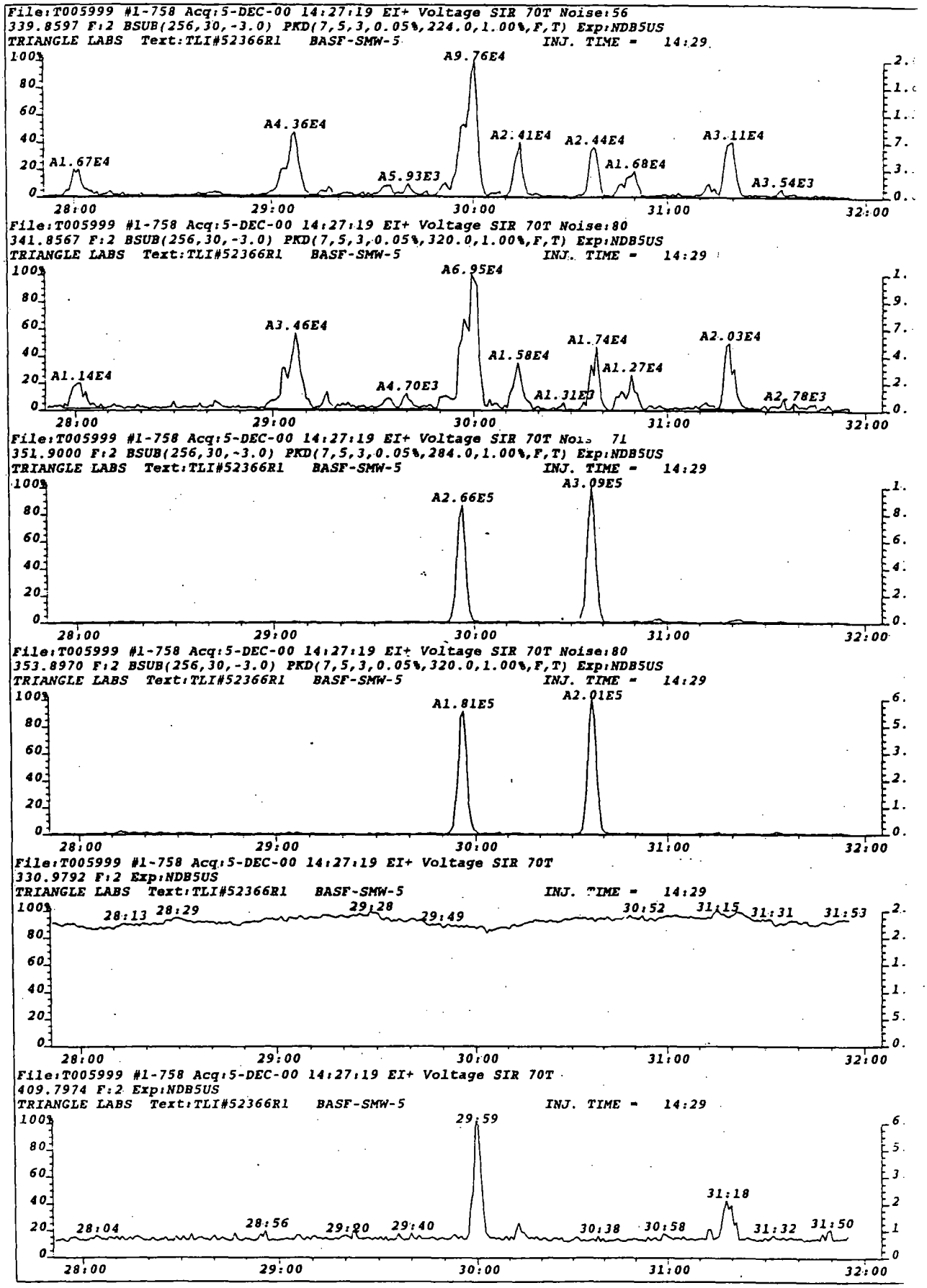
Compound, M_2....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
OCDD						0.76-1.02				0.904-1.096			
458-460	DC	NL				Height	0.06	0.03	0.03				
				41:31		0.85	745.49	342.84	402.65	1.000	OCDD	AN	E
458-460		1	Peak				745.49						
13C12-OCDD						0.76-1.02				0.996-1.004			
470-472	DC	NL				Height	0.07	0.03	0.04				
				41:30		0.78	24.52	10.72	13.80	1.000	13C12-OCDD	IS8	
						Height	4.91	2.19	2.72				
	DC	WH		42:01	RO	1.14	0.13			1.012			
470-472		1	Peak				24.52						

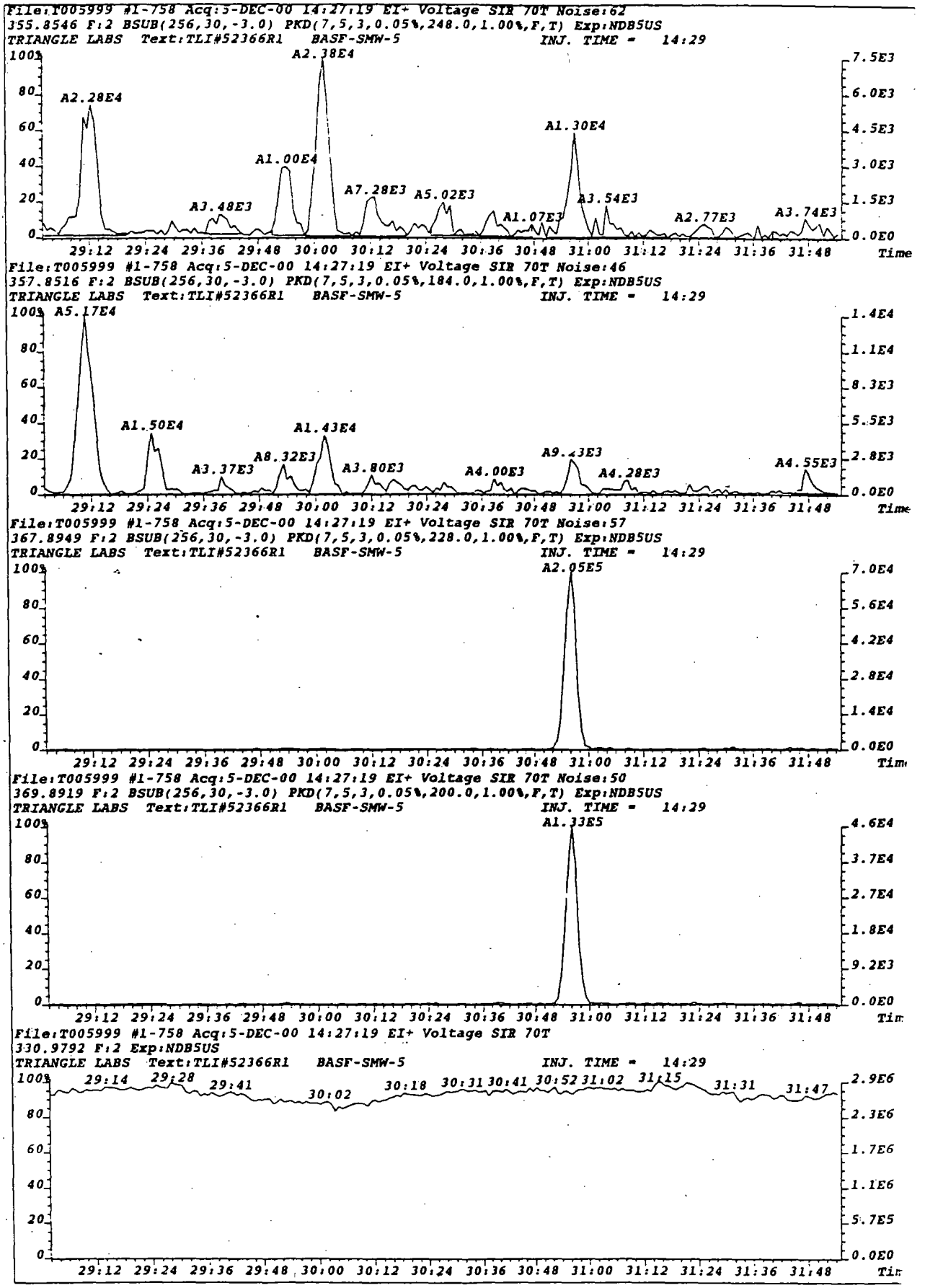
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_2 -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

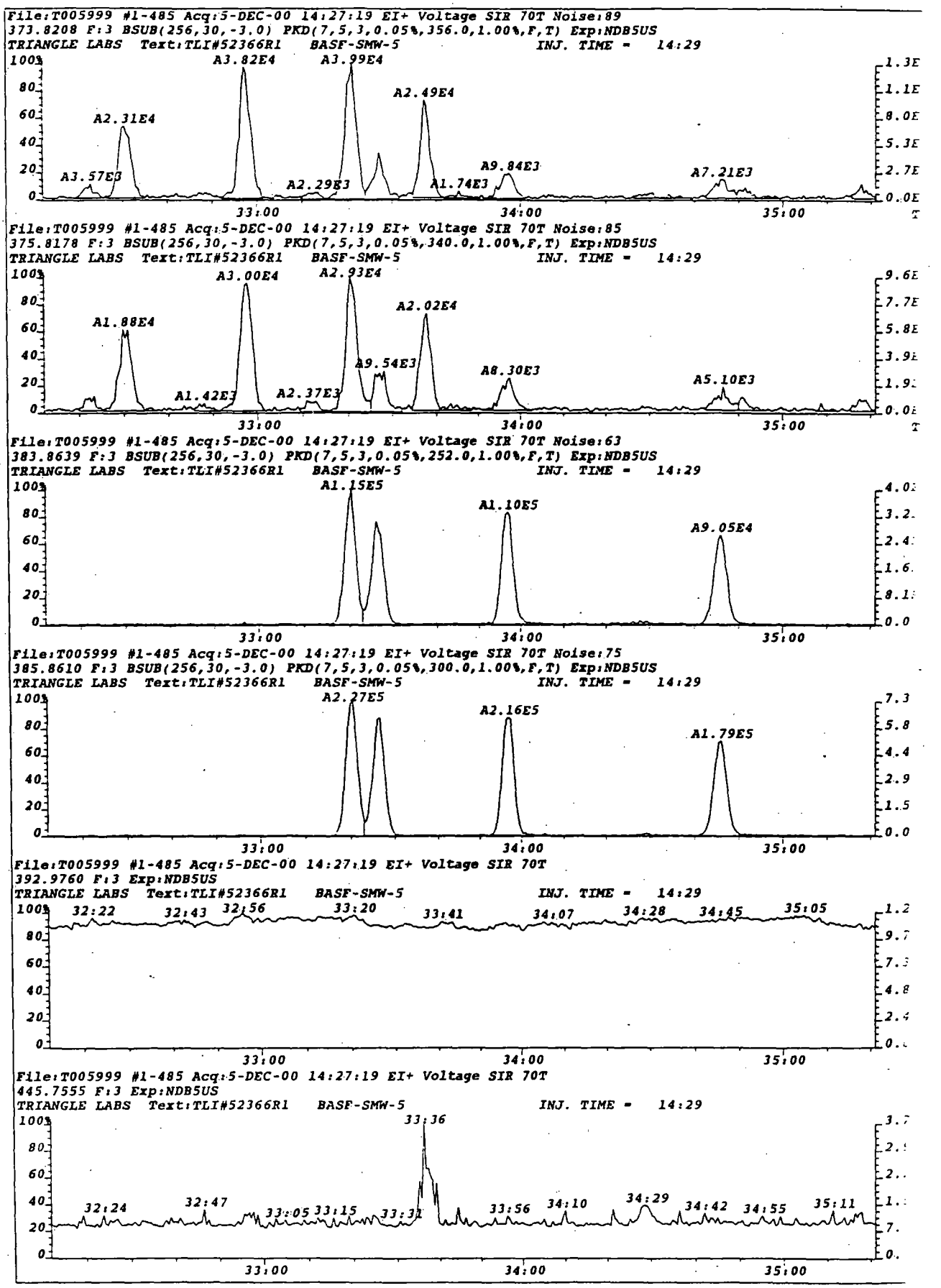
*** End of Report ***

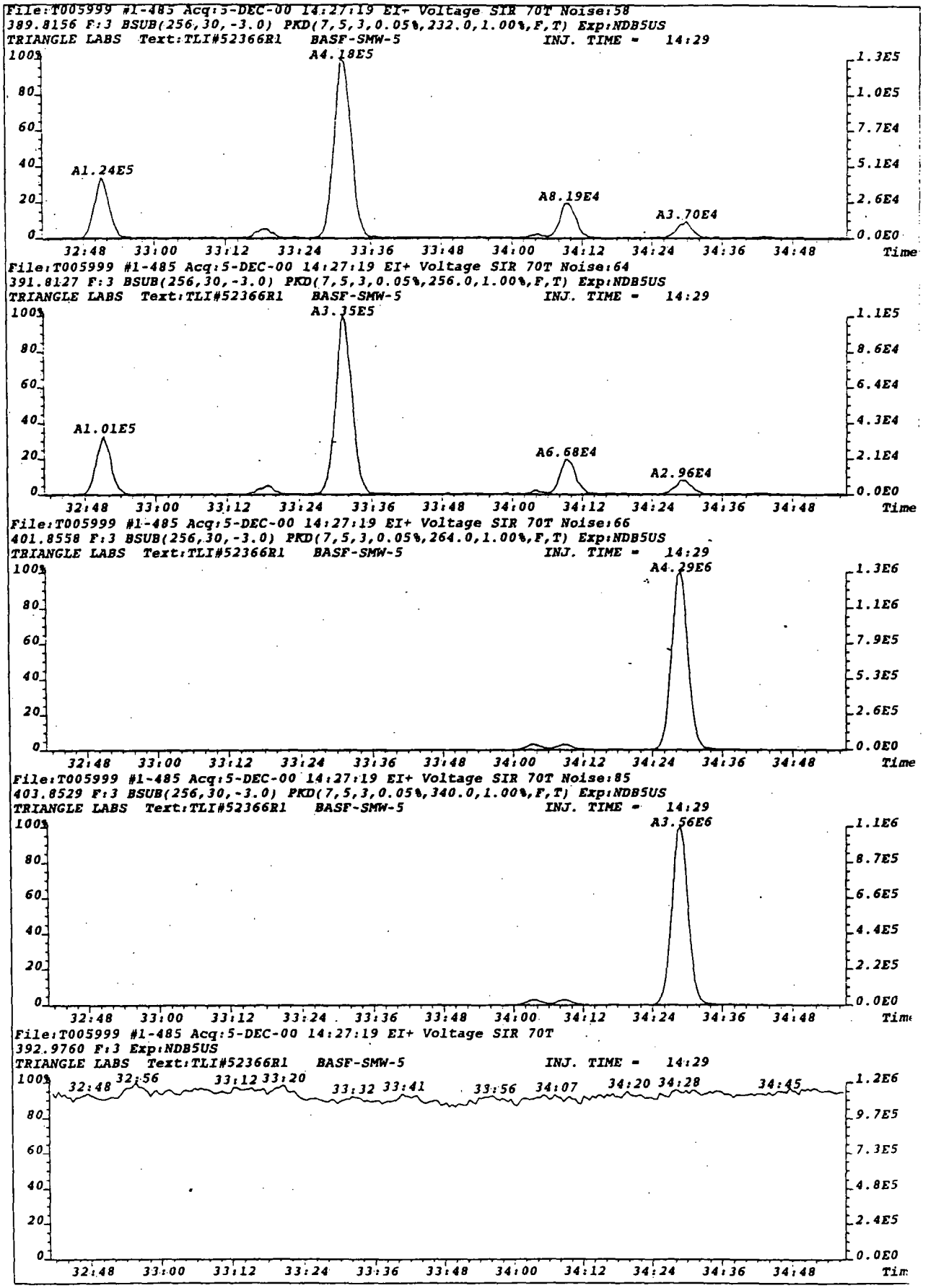

File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:81
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,324.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A3.45E4
A2.73E4
A2.04E4
A9.80E4
A1.79E4
A5.08E4
A1.42E5
A2.54E4
A7.19E4
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:77
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,308.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A4.21E4
A3.68E4
A2.18E4
A1.42E5
A1.17E5
A2.13E4
A6.25E4
A1.75E5
A3.33E4
A8.23E4
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:127
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,508.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A3.83E5
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:94
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,376.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A4.97E5
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
23:22
23:51
24:12
24:38
25:14
25:39
26:05
26:50
27:13
27:45
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
23:19
23:40
24:18
24:43
25:20
25:39
26:30
26:54
27:10
27:29
27:53
28:04

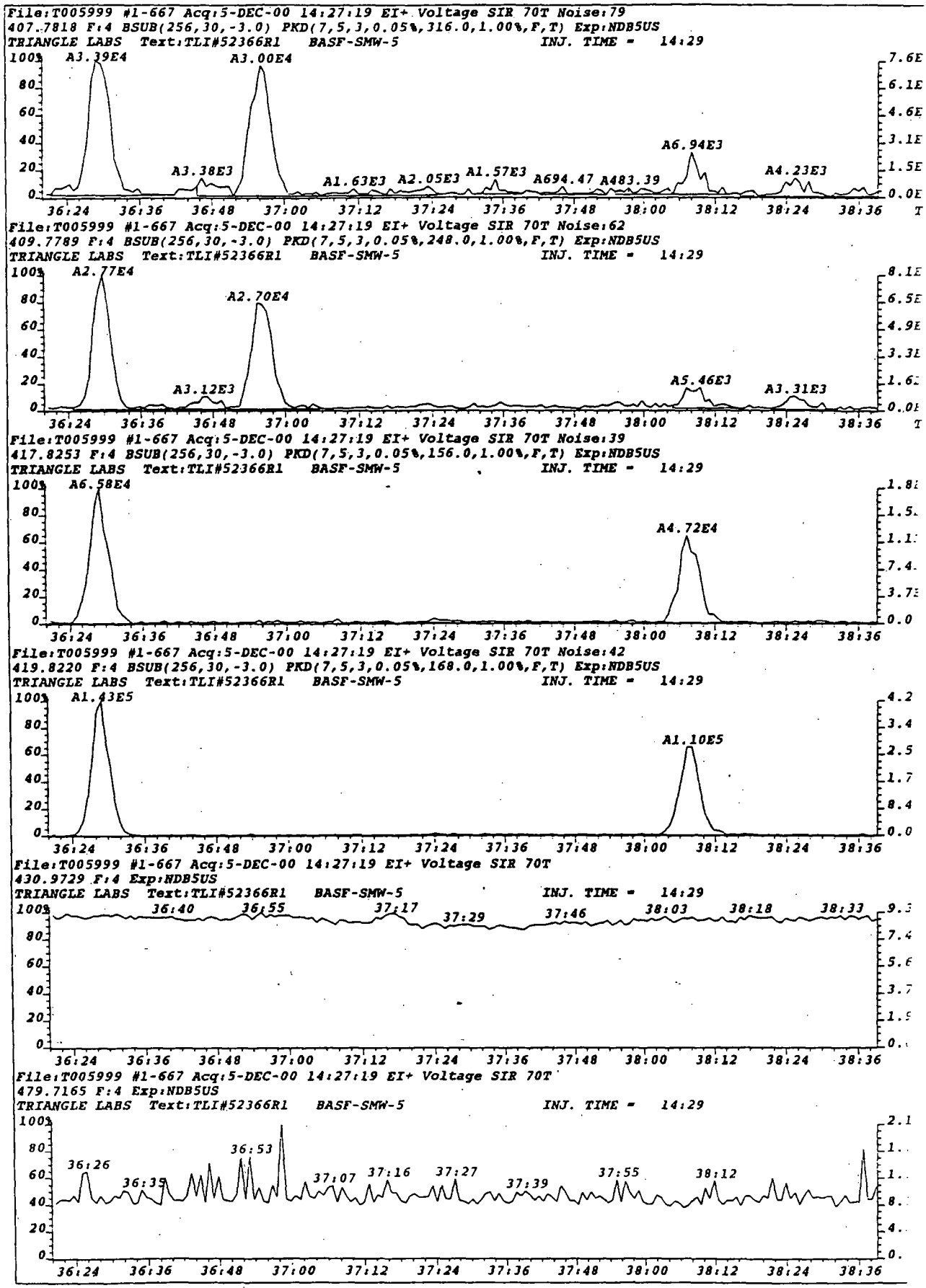

File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:50
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A6.40E4
A1.45E4
A8.98E3
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:53
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A8.81E4
A1.17E5
A3.07E4
A1.28E4
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:168
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,672.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A4.39E6
A2.76E5
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:75
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,300.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A5.44E6
A3.40E5
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:67
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,268.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A2.17E6
A7.41E5
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
24:22 24:38 24:59 25:14 25:39 26:05 26:50 27:13 27:29 27:45
25:00 26:00 27:00 28:00 Time

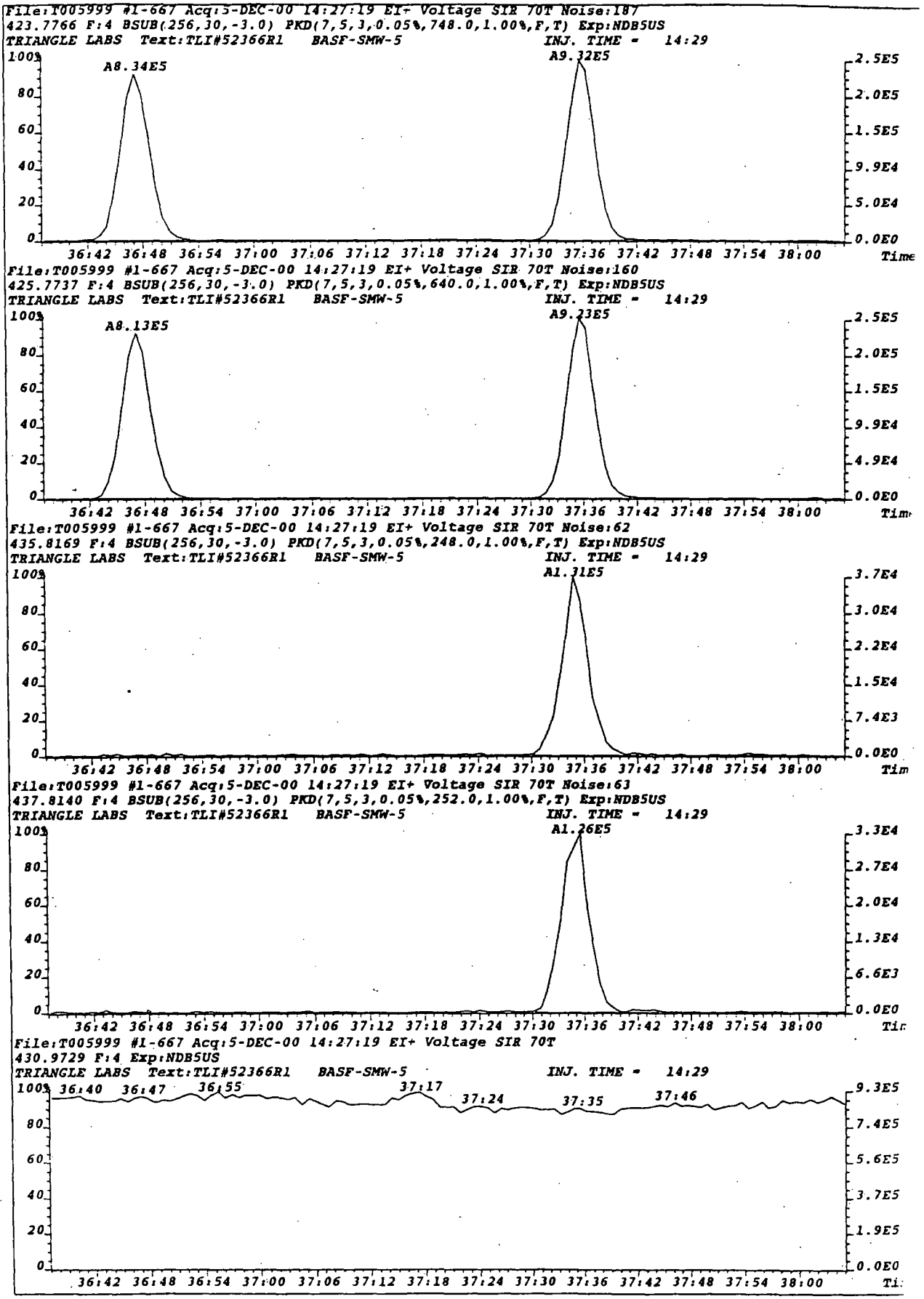

File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:56
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,224.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A1.67E4
A4.36E4
A5.93E3
A9.76E4
A2.41E4
A2.44E4
A1.68E4
A3.11E4
A3.54E3
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:80
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,320.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A1.14E4
A3.46E4
A4.70E3
A6.95E4
A1.58E4
A1.31E3
A1.74E4
A1.27E4
A2.03E4
A2.78E3
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:71
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,284.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A2.66E5
A3.09E5
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:80
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,320.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A1.81E5
A2.01E5
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
28:13 28:29 29:28 29:49 30:52 31:15 31:31 31:53
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
29:59
31:18
28:04 28:56 29:20 29:40 30:38 30:58 31:32 31:50
28:00 29:00 30:00 31:00 32:00


File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:62
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,248.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A2.38E4
A2.28E4
A1.30E4
A1.00E4
A7.28E3
A5.02E3
A3.48E3
A3.54E3
A1.07E3
A2.77E3
A3.74E3
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:46
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A5.17E4
A1.50E4
A1.43E4
A8.32E3
A3.37E3
A3.80E3
A4.00E3
A4.28E3
A4.55E3
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:57
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A2.05E5
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:50
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A1.33E5
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
29:14 29:28 29:41 30:02 30:18 30:31 30:41 30:52 31:02 31:15 31:31 31:47
29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48

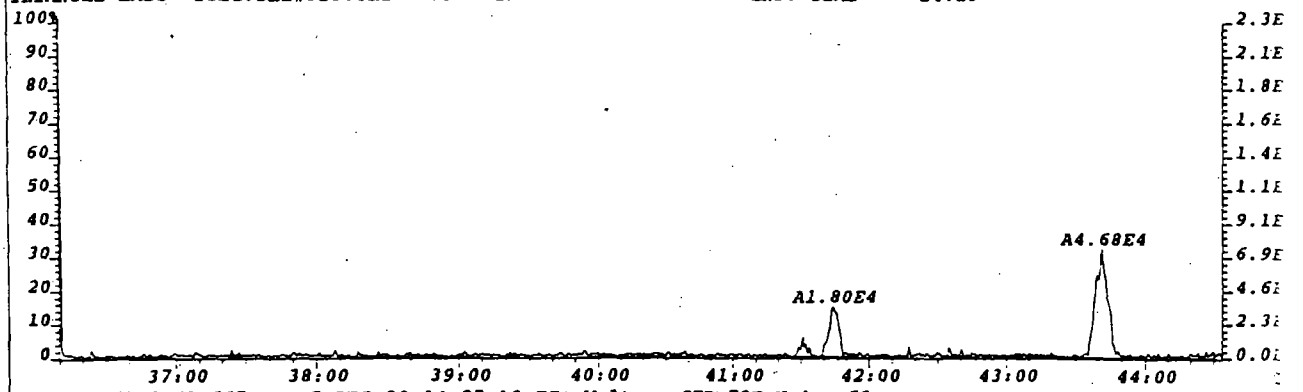

File:T005999 #1-485 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:89
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,356.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A3.82E4
A3.99E4
A2.49E4
A2.31E4
A3.57E3
A2.29E3
A1.74E3
A9.84E3
A7.21E3
33:00
34:00
35:00
File:T005999 #1-485 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:85
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,340.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A3.00E4
A2.93E4
A2.02E4
A1.88E4
A9.54E3
A8.30E3
A5.10E3
A1.42E3
A2.37E3
33:00
34:00
35:00
File:T005999 #1-485 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:63
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A1.15E5
A1.10E5
A9.05E4
33:00
34:00
35:00
File:T005999 #1-485 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:75
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,300.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A2.27E5
A2.16E5
A1.79E5
33:00
34:00
35:00
File:T005999 #1-485 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
32:22
32:43
32:56
33:20
33:41
34:07
34:28
34:45
35:05
33:00
34:00
35:00
File:T005999 #1-485 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
33:36
32:24
32:47
33:05
33:15
33:31
33:56
34:10
34:29
34:42
34:55
35:11
33:00
34:00
35:00


File:T005999 #1-485 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:58
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A4.18E5
A1.24E5
A8.19E4
A3.70E4
File:T005999 #1-485 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:64
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,256.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A3.35E5
A1.01E5
A6.68E4
A2.96E4
File:T005999 #1-485 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:66
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,264.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A4.29E6
File:T005999 #1-485 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:85
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,340.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A3.56E6
File:T005999 #1-485 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
Time

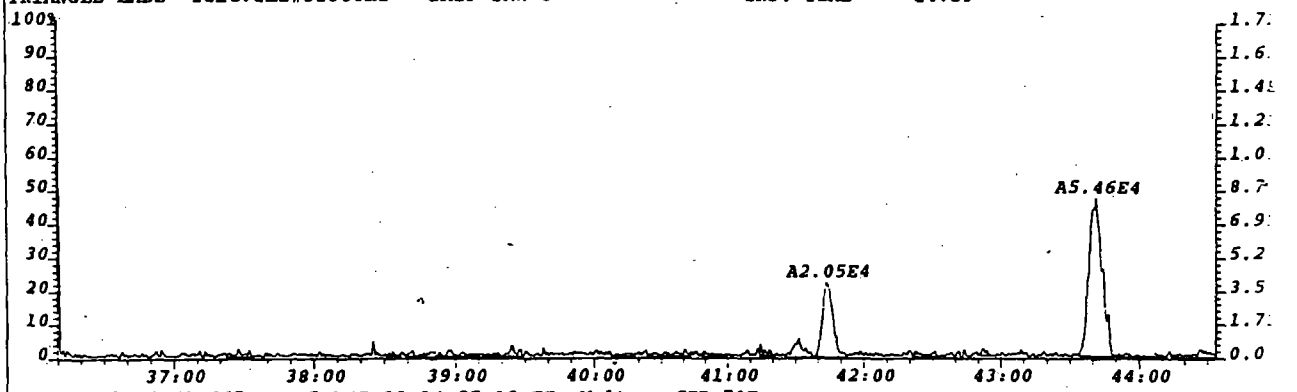

File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:79
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,316.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A3.39E4
A3.00E4
A3.38E3
A1.63E3
A2.05E3
A1.57E3
A694.47
A483.39
A6.94E3
A4.23E3
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:62
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,248.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A2.77E4
A2.70E4
A3.12E3
A5.46E3
A3.31E3
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:39
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A6.58E4
A4.72E4
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:42
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A1.43E5
A1.10E5
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
36:53
36:26
36:35
37:07
37:16
37:27
37:39
37:55
38:12


File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:187
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,748.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5
INJ. TIME = 14:29
A8.34E5
A9.32E5
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:160
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,640.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5
INJ. TIME = 14:29
A8.13E5
A9.23E5
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:62
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,248.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5
INJ. TIME = 14:29
A1.31E5
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:63
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5
INJ. TIME = 14:29
A1.26E5
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5
INJ. TIME = 14:29
36:40 36:47 36:55 37:17 37:24 37:35 37:46

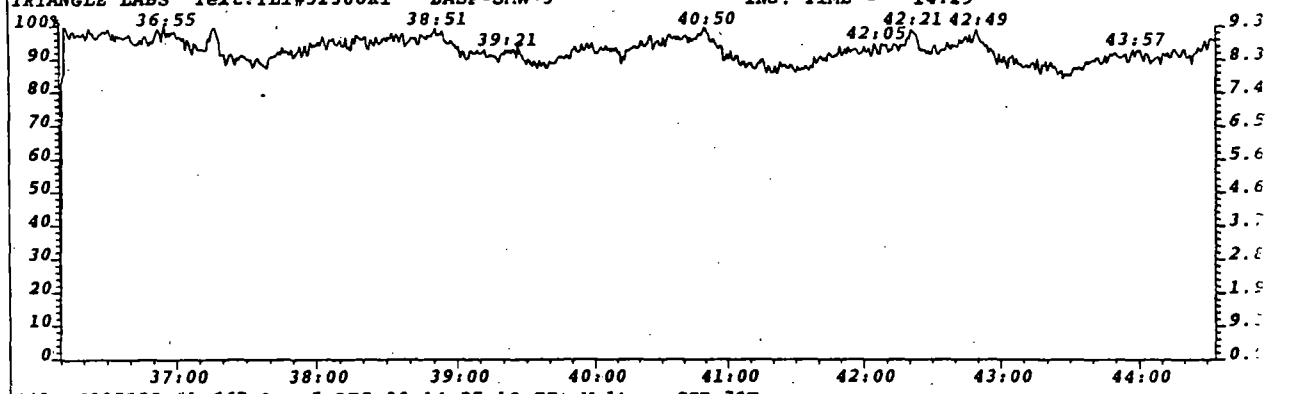
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:49
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29



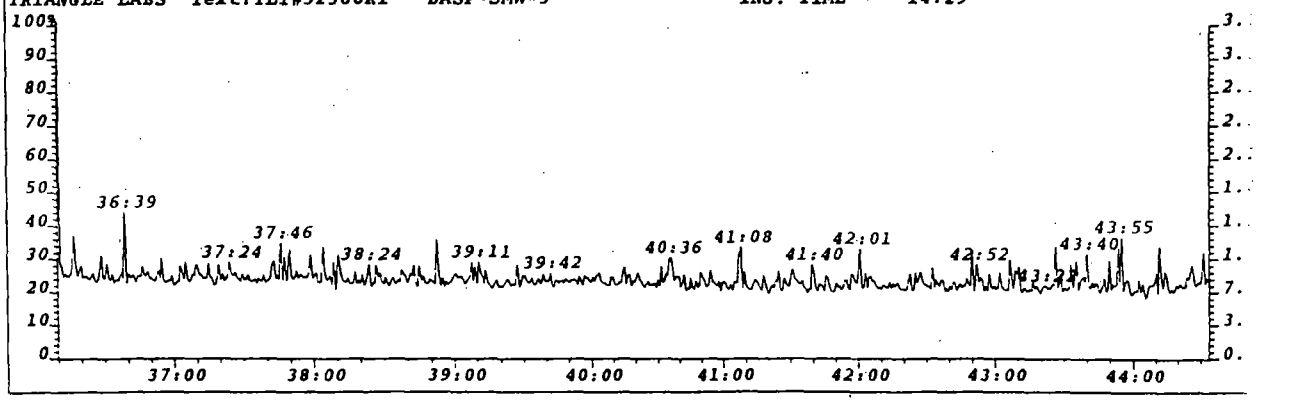
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:53
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29

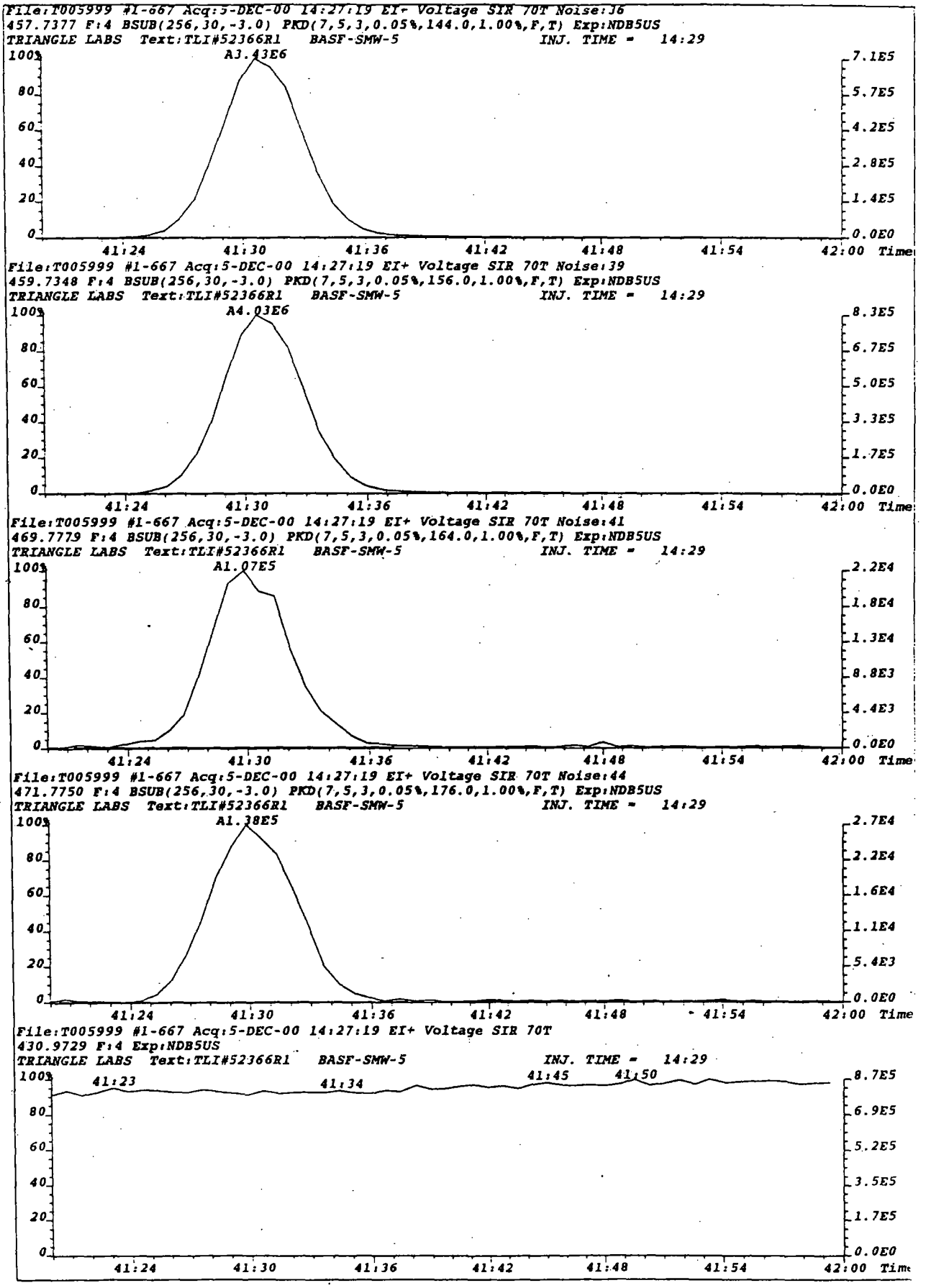


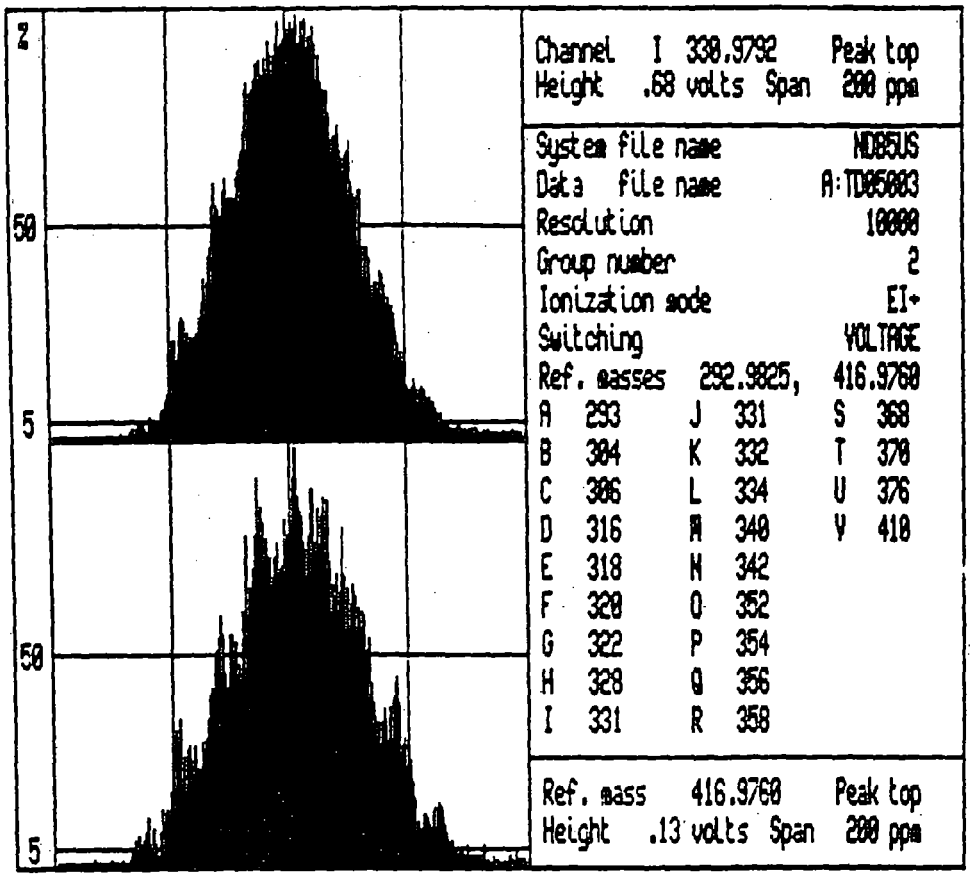
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29



File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29




File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:36
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,144.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A3.43E6
7.1E5
5.7E5
4.2E5
2.8E5
1.4E5
0.0E0
41:24
41:30
41:36
41:42
41:48
41:54
42:00
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:39
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A4.03E6
8.3E5
6.7E5
5.0E5
3.3E5
1.7E5
0.0E0
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:41
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A1.07E5
2.2E4
1.8E4
1.3E4
8.8E3
4.4E3
0.0E0
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T Noise:44
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
A1.38E5
2.7E4
2.2E4
1.6E4
1.1E4
5.4E3
0.0E0
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29
41:23
41:34
41:45
41:50
8.7E5
6.9E5
5.2E5
3.5E5
1.7E5
0.0E0

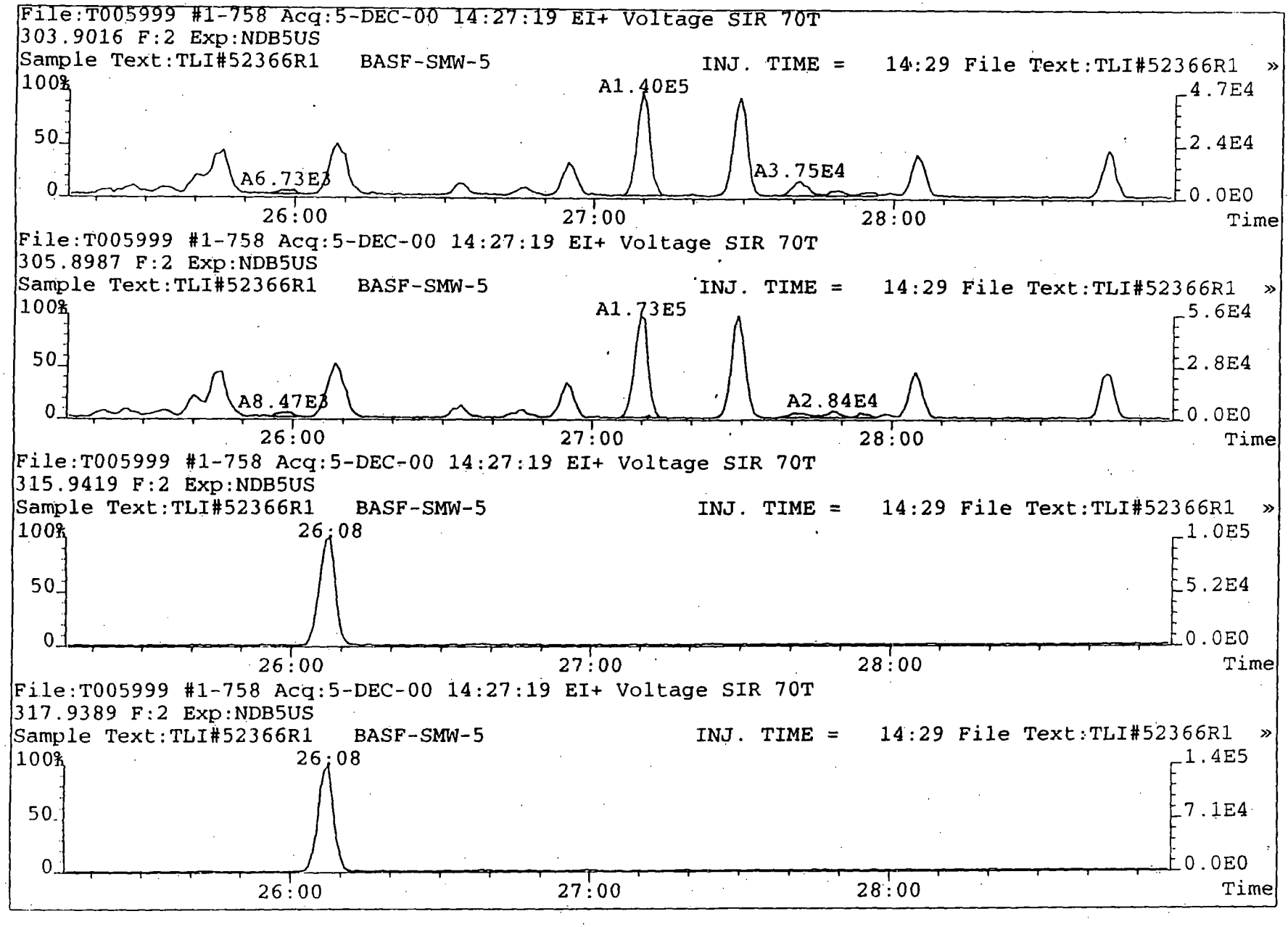


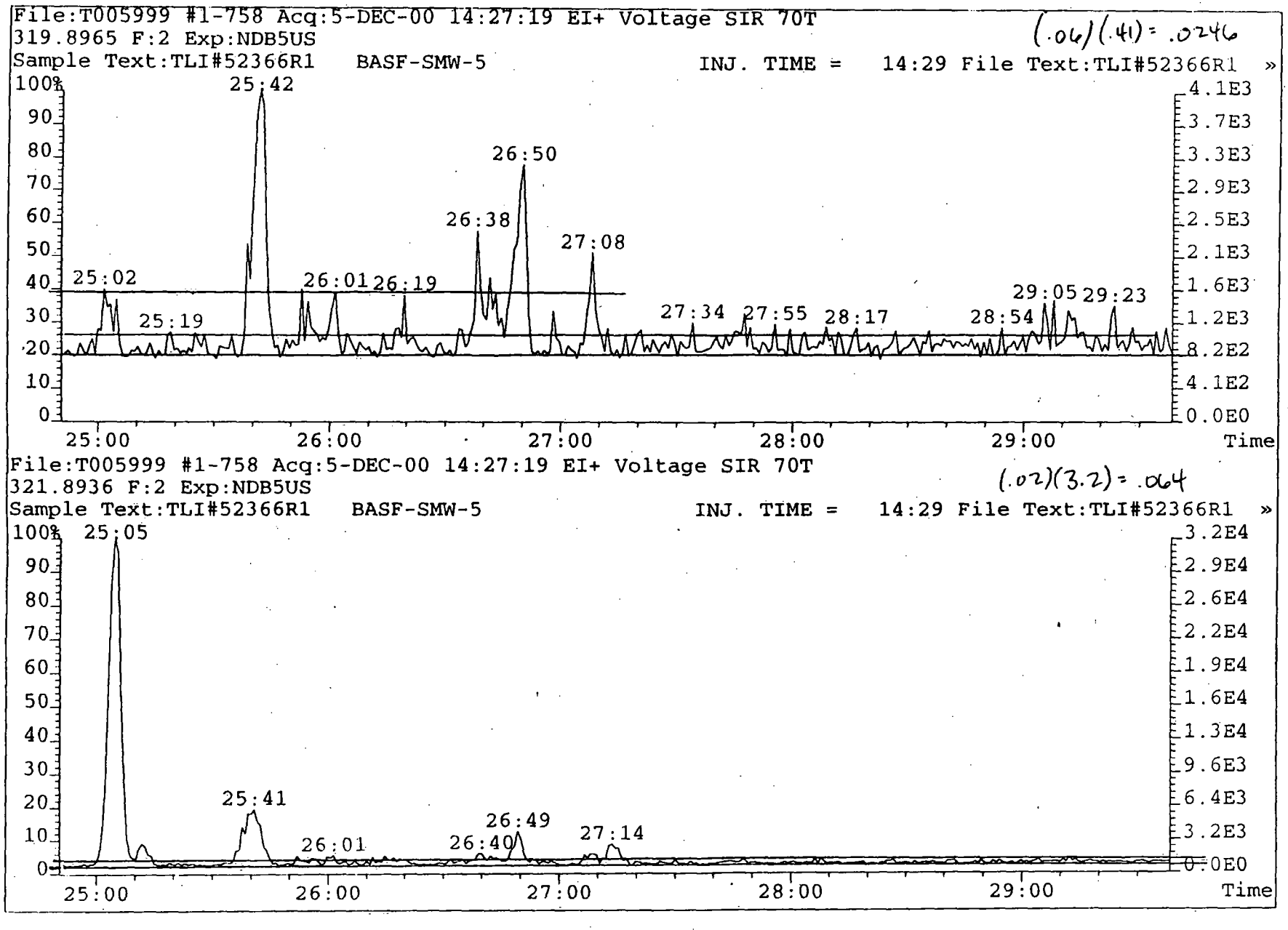
Channel I 330.9792 Peak top
Height .68 volts Span 200 ppm

System file name	MD85US
Data file name	A:TD050003
Resolution	10000
Group number	2
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 416.9760

A	293	J	331	S	368
B	304	K	332	T	370
C	306	L	334	U	376
D	316	M	340	V	410
E	318	N	342		
F	320	O	352		
G	322	P	354		
H	328	Q	356		
I	331	R	358		

Ref. mass 416.9760 Peak top
Height .13 volts Span 200 ppm


File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
303.9016 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
100%
50
0
A1.40E5
A6.73E3
A3.75E4
4.7E4
2.4E4
0.0E0
26:00
27:00
28:00
Time
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
305.8987 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
100%
50
0
A1.73E5
A8.47E3
A2.84E4
5.6E4
2.8E4
0.0E0
26:00
27:00
28:00
Time
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
315.9419 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
100%
50
0
26:08
1.0E5
5.2E4
0.0E0
26:00
27:00
28:00
Time
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
317.9389 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
100%
50
0
26:08
1.4E5
7.1E4
0.0E0
26:00
27:00
28:00
Time

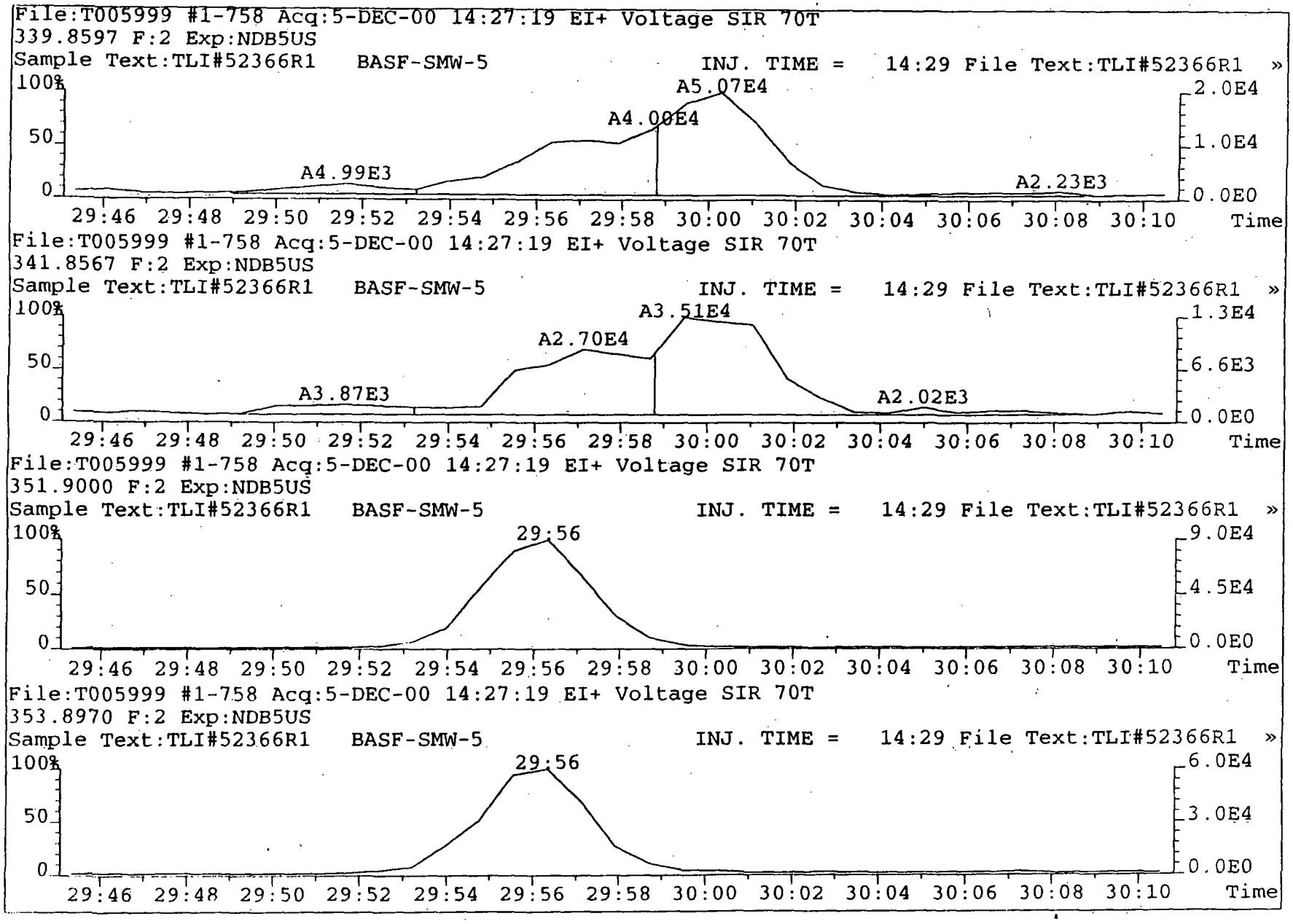


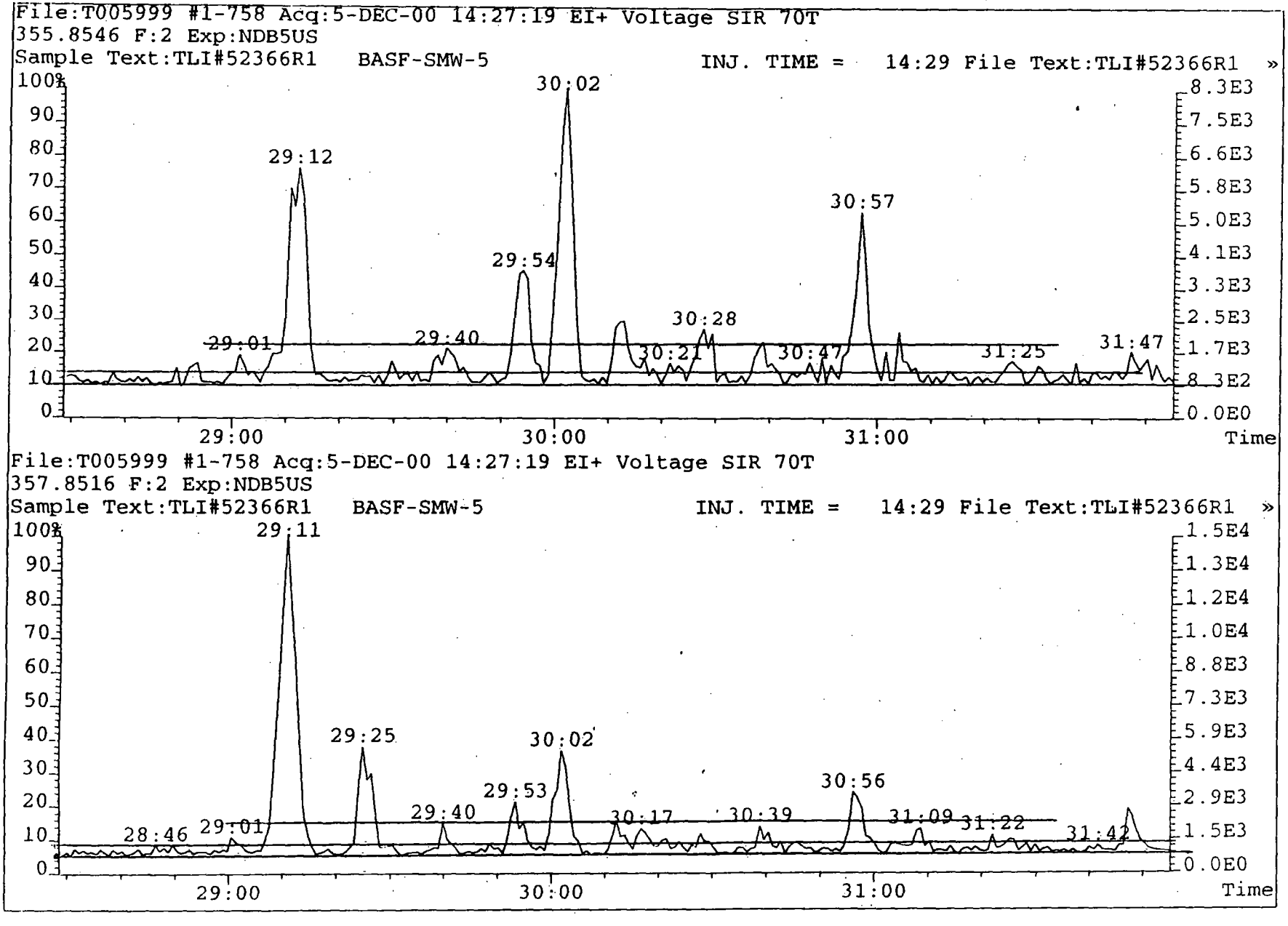
(.06)(.41) = .0246

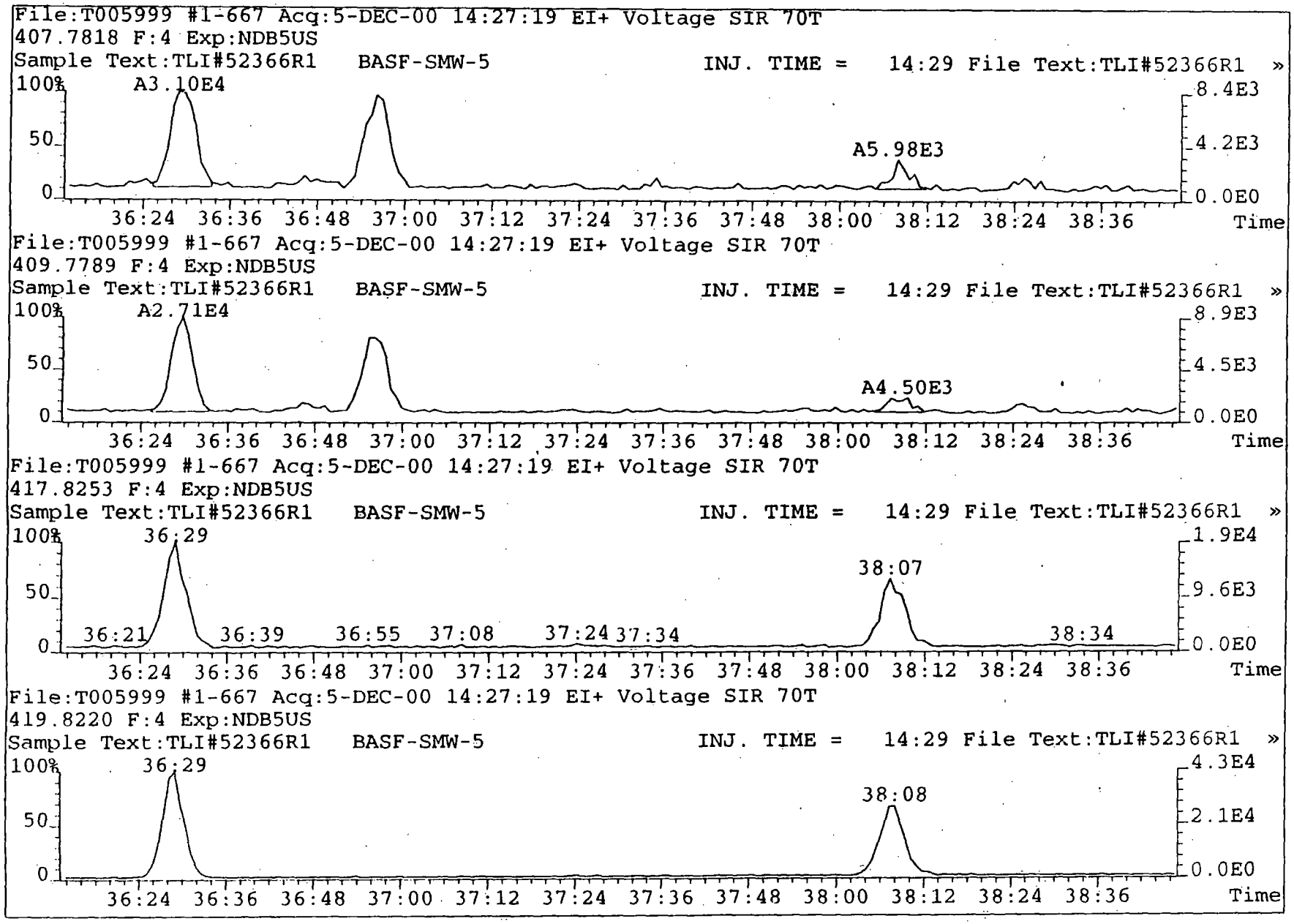
(.02)(3.2) = .064

.0246
.064
.0886

JCA
12/13/00


File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
339.8597 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
A5.07E4
A4.00E4
A4.99E3
A2.23E3
2.0E4
1.0E4
0.0E0
29:46 29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 30:08 30:10 Time
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
341.8567 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
A3.51E4
A2.70E4
A3.87E3
A2.02E3
1.3E4
6.6E3
0.0E0
29:46 29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 30:08 30:10 Time
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
351.9000 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
29:56
9.0E4
4.5E4
0.0E0
29:46 29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 30:08 30:10 Time
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
353.8970 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
29:56
6.0E4
3.0E4
0.0E0
29:46 29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 30:08 30:10 Time


File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
355.8546 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
29:12
30:02
29:54
30:57
29:01
29:40
30:28
30:21
30:47
31:25
31:47
29:00
30:00
31:00
Time
File:T005999 #1-758 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
357.8516 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
29:11
29:25
30:02
29:53
30:56
28:46
29:01
29:40
30:17
30:39
31:09
31:22
31:42
29:00
30:00
31:00
Time


File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
407.7818 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
100%
A3.10E4
A5.98E3
8.4E3
4.2E3
0.0E0
50
0
36:24 36:36 36:48 37:00 37:12 37:24 37:36 37:48 38:00 38:12 38:24 38:36
Time
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
409.7789 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
100%
A2.71E4
A4.50E3
8.9E3
4.5E3
0.0E0
50
0
36:24 36:36 36:48 37:00 37:12 37:24 37:36 37:48 38:00 38:12 38:24 38:36
Time
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
417.8253 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
100%
36:29
38:07
1.9E4
9.6E3
0.0E0
50
0
36:21 36:39 36:55 37:08 37:24 37:34 38:34
36:24 36:36 36:48 37:00 37:12 37:24 37:36 37:48 38:00 38:12 38:24 38:36
Time
File:T005999 #1-667 Acq:5-DEC-00 14:27:19 EI+ Voltage SIR 70T
419.8220 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 14:29 File Text:TLI#52366R1
100%
36:29
38:08
4.3E4
2.1E4
0.0E0
50
0
36:24 36:36 36:48 37:00 37:12 37:24 37:36 37:48 38:00 38:12 38:24 38:36
Time

TriMatrix, Inc.

TLI Project: 52366r1 Method 8290 TCDD/TCDF Analysis (DB-2
Client Sample: BASF-SMW-5 Analysis File: P0044

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/2000	Spike File:	SPC2NF2
TLI ID:	274-99-1B	Date Extracted:	12/01/2000	ICal:	PF2O230
		Date Analyzed:	12/05/2000	ConCal:	P004403
Sample Size:	1.080 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005998	% Lipid:	n/a
GC Column:	DB-225	Analyst:	DFS	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flag
2,3,7,8-TCDF	327			0.69	23:49	

Internal Standard	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,7,8-TCDF	107	5.78	40%-130%	0.81	23:48	V

Recovery Standard	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,4-TCDD	0.82	22:37	

Data Reviewer: _____ 12/13/2000

C2NF_PSR v2.03.LAR

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:39 12/13/

Initial ....Date...

Data Review By: JCA 12/13/00

Calculated Noise Height: 0.12

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of P004408B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

Compound M_I	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel.RT	Compound Name	ID	Flags
TCDF					0.65-0.39					0.791-1.108				
304-306	DC	NL			Height			0.18	0.08	0.10				
	DC	SN			19:01		0.82	0.40			0.984			
					19:10	RO	2.32	0.94	1.23	0.53	0.991			
					19:15		0.70	0.90	0.37	0.53	0.996			
N	DC	SN			19:21	RO	1.18	0.30			1.001			
	DC	SN			19:50	RO	0.56	0.71			1.026			
					20:00	RO	0.60	1.72	0.75	1.24	1.034			
					20:10	RO	1.17	1.54	1.02	0.87	1.043			
					20:17	RO	0.63	2.46	1.07	1.69	1.049			
					20:31	RO	1.12	5.89	3.74	3.33	1.061			
	DC	SN			20:43	RO	3.72	0.51			1.072			
					20:55		0.69	4.32	1.77	2.55	1.082			
					21:04		0.86	2.08	0.96	1.12	1.090			
					21:13		0.66	5.78	2.29	3.49	1.097			
					21:19		0.68	4.21	1.70	2.51	1.103			
					21:24	RO	1.06	2.32	1.39	1.31	1.107			
	DC	WH			21:38	RO	0.40	0.14			1.119			
	DC	WH			21:50	RO	0.63	4.60			1.129			
	DC	WH			22:17		0.78	13.54			1.153			
	DC	WH			22:23	RO	2.12	0.30			1.158			
	DC	WH			22:33		0.76	2.04			1.166			
	DC	WH			22:44	RO	3.03	0.57			1.176			
	DC	WH			22:48	RO	0.59	1.31			1.179			
	DC	WH			23:00	RO	1.25	0.35			1.190			
	DC	WH			23:15		0.73	10.07			1.203			
	DC	WH			23:23		0.77	24.01			1.209			
	DC	WH			23:31	RO	1.11	0.32			1.216			
	DC	WH			23:40		0.70	22.84			1.224			
KN					23:49		0.69	12.28	5.03	7.25	1.232	2378-TCDF		AN
	DC	WH			24:05		0.69	2.42			1.246			
	DC	WH			24:09	RO	1.00	0.27			1.249			
	DC	WH			24:29		0.84	3.46			1.266			
	DC	WH			24:42		0.71	10.30			1.278			
	DC	WH			24:50	RO	3.80	0.09			1.284			
	DC	WH			25:09	RO	1.00	0.04			1.301			
	DC	WH			25:19		0.72	13.34			1.309			
	DC	WH			25:47	RO	3.71	0.25			1.334			
	DC	WH			25:52	RO	0.91	0.39			1.338			
	DC	WH			26:28		0.67	48.26			1.369			
	DC	WH			26:40	RO	1.03	0.53			1.379			
304-306					12 Peaks			44.44						

Compound/ M_Z....	QC	Log	Cmit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel.RT	Compound Name..	ID..	Flags
13C12-TCDF							0.65-0.89				0.958-1.042			
316-318		DC	NL				Height	0.58	0.18	0.40				
	ND	D	SN		19:20		0.76	151.00			1.000			
		DC	SN		19:35		0.33	0.55			1.013			
					19:39	RO	1.09	1.03	0.63	0.58	1.016			
					19:46	RO	0.92	0.69	0.36	0.39	1.022			
					20:09		0.80	2.96	1.32	1.64	1.042			
		DC	WH		20:33	RO	0.28	0.90			1.063			
		DC	WH		21:06	RO	0.30	0.39			1.091			
		DC	WH		22:09		0.89	0.68			1.146			
		DC	WH		22:13	RO	0.46	1.01			1.149			
		DC	WH		22:26	RO	0.34	0.74			1.160			
		DC	WH		22:36	RO	3.10	0.74			1.169			
		DC	WH		22:45	RO	2.51	0.65			1.177			
		DC	WH		22:52	RO	0.92	0.90			1.183			
		DC	WH		23:11	RO	1.41	0.96			1.199			
	KN				23:48		0.81	73.51	32.93	40.58	1.231	13C12-2378-TCDF	IS0	
							Height	18.39	8.03	10.36				
		DC	WH		24:24	RO	0.26	0.34			1.262			
		DC	WH		24:41	RO	0.54	0.46			1.277			
		DC	WH		24:54	RO	1.18	1.47			1.288			
		DC	WH		25:09	RO	0.42	1.01			1.301			
		DC	WH		25:18	RO	2.81	0.48			1.309			
		DC	WH		25:21	RO	2.44	0.48			1.311			
		DC	WH		25:26	RO	0.60	1.20			1.316			
		DC	WH		25:31	RO	1.30	1.22			1.320			
		DC	WH		25:58		0.73	1.02			1.343			
		DC	WH		26:33	RO	2.59	0.60			1.373			
316-318				4	Peaks			78.19						

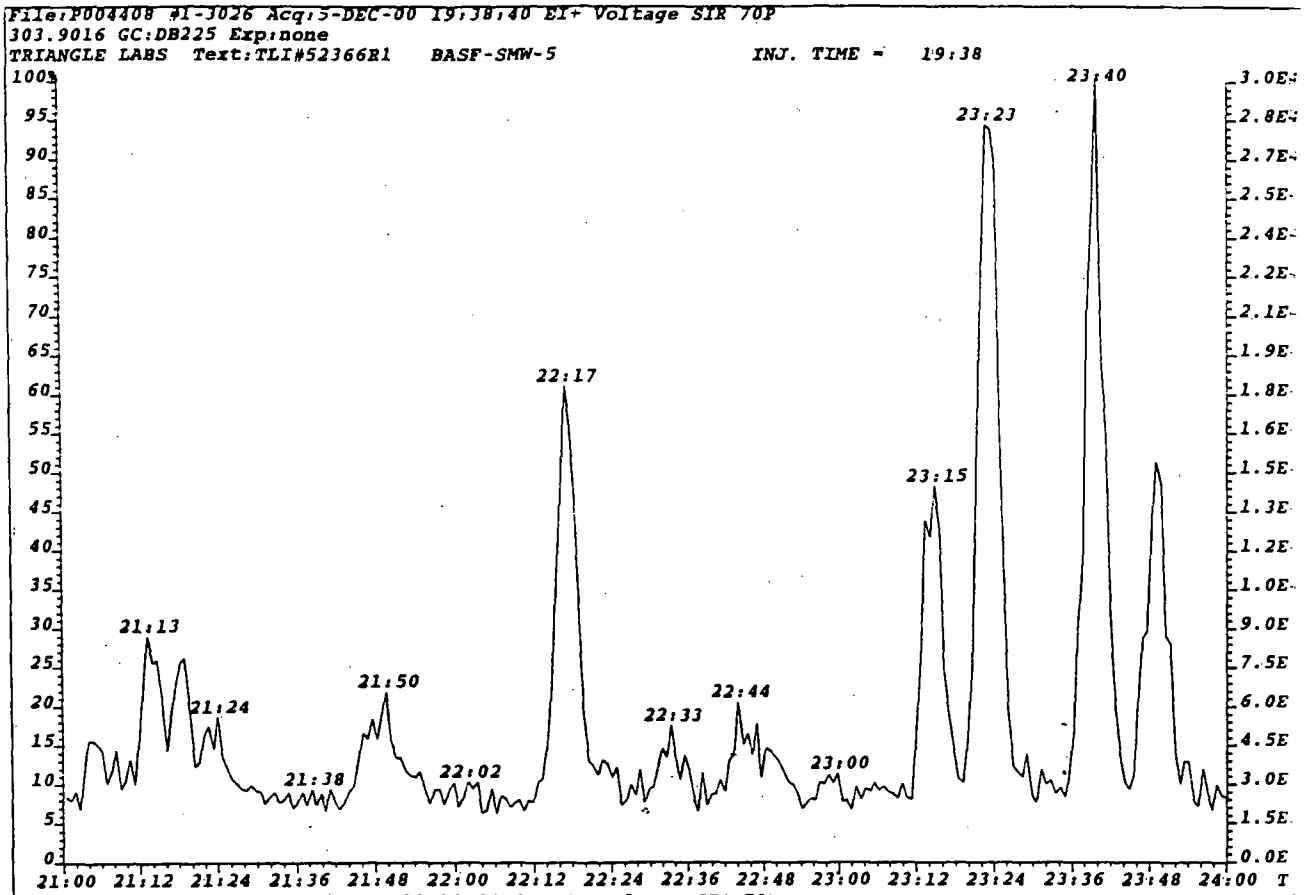
---------- Above: TCDF / TCDD Follows ----------

Compound/ M_Z....	QC	Log	Cmit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel.RT	Compound Name..	ID..	Flags
13C12-TCDD							0.65-0.89				0.910-1.090			
332-334		DC	NL				Height	0.37	0.24	0.13				
		DC	WL		19:56	RO	3.85	0.23			0.881			
		DC	SN		21:37	RO	9.40	0.18			0.956			
	N				22:16		0.79	45.98	20.33	25.65	0.985	13C12-2378-TCDD	IS1	
							Height	12.48	5.59	6.89				
	N				22:37		0.82	813.17	366.77	446.40	1.000	13C12-1234-TCDD	RS1	
		DC	WH		25:13	RO	1.20	1.04			1.115			
		DC	WH		25:36	RO	2.92	0.23			1.132			
		DC	WH		25:44	RO	0.42	0.71			1.138			
332-334				2	Peaks			859.15						

Compound/
M_2.... QC.Log Omit Why ..RT. OK Ratio Total.Area/Ht Area/Ht.Peak1 Area/Ht.Peak2 Rel.RT Compound.Name.. ID.. Flag:

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_2 -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***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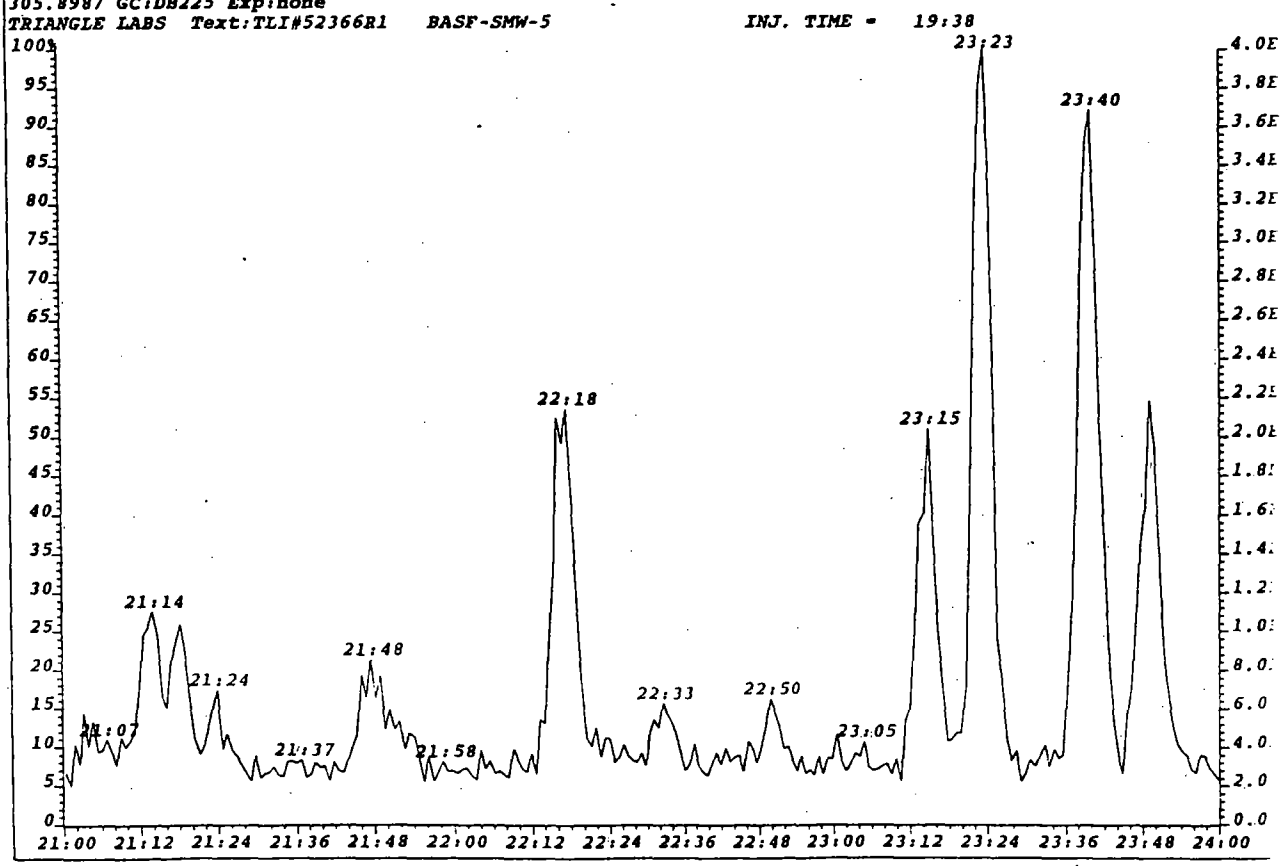
303.9016 GC:DB225 Exp:none
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5
INJ. TIME = 19:38
21:13
21:24
21:38
21:50
22:02
22:17
22:33
22:44
23:00
23:15
23:23
23:40
21:00 21:12 21:24 21:36 21:48 22:00 22:12 22:24 22:36 22:48 23:00 23:12 23:24 23:36 23:48 24:00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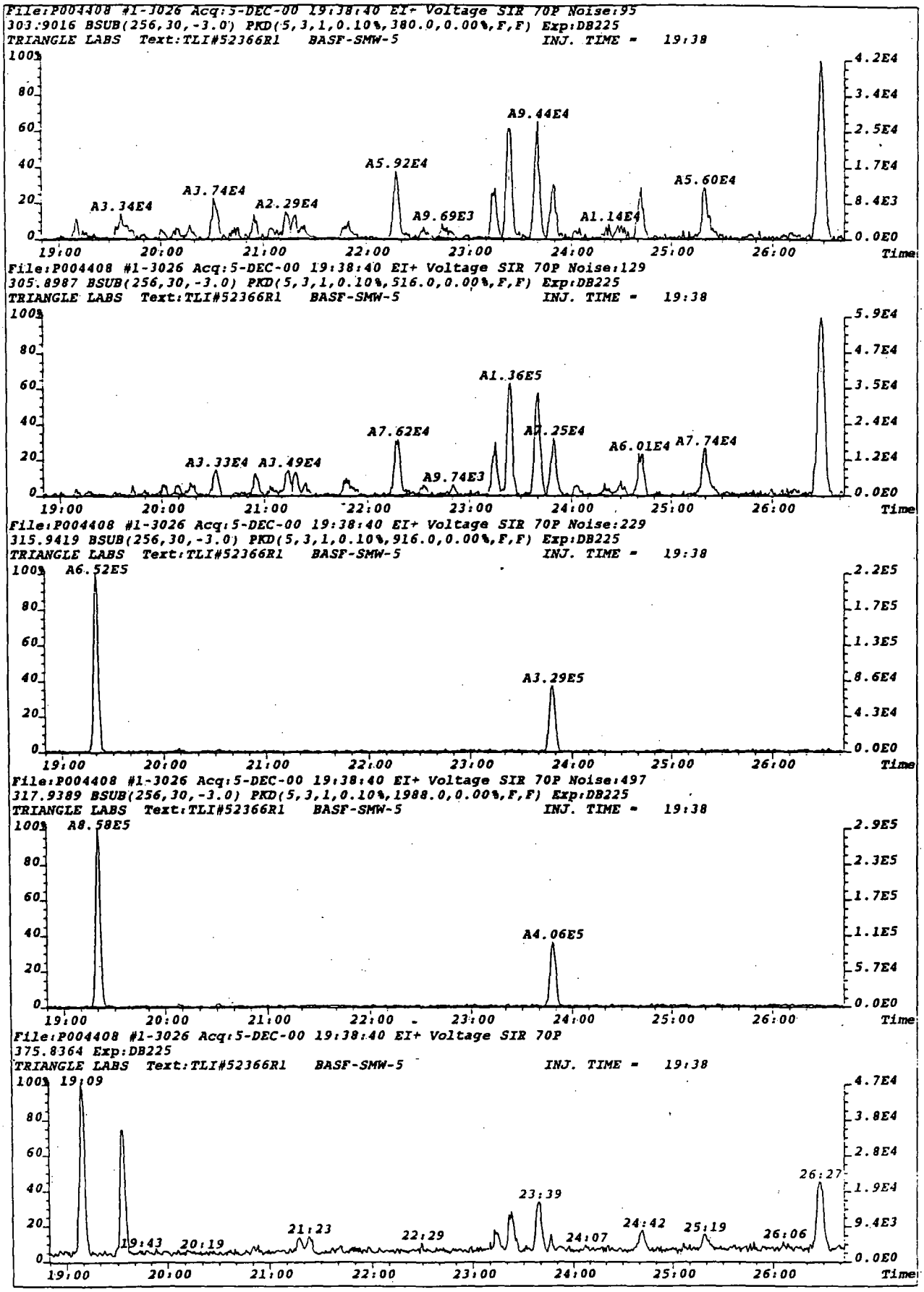
305.8987 GC:DB225 Exp:none
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5
INJ. TIME = 19:38
21:07
21:14
21:24
21:37
21:48
21:58
22:18
22:33
22:50
23:05
23:15
23:23
23:40
21:00 21:12 21:24 21:36 21:48 22:00 22:12 22:24 22:36 22:48 23:00 23:12 23:24 23:36 23:48 24:00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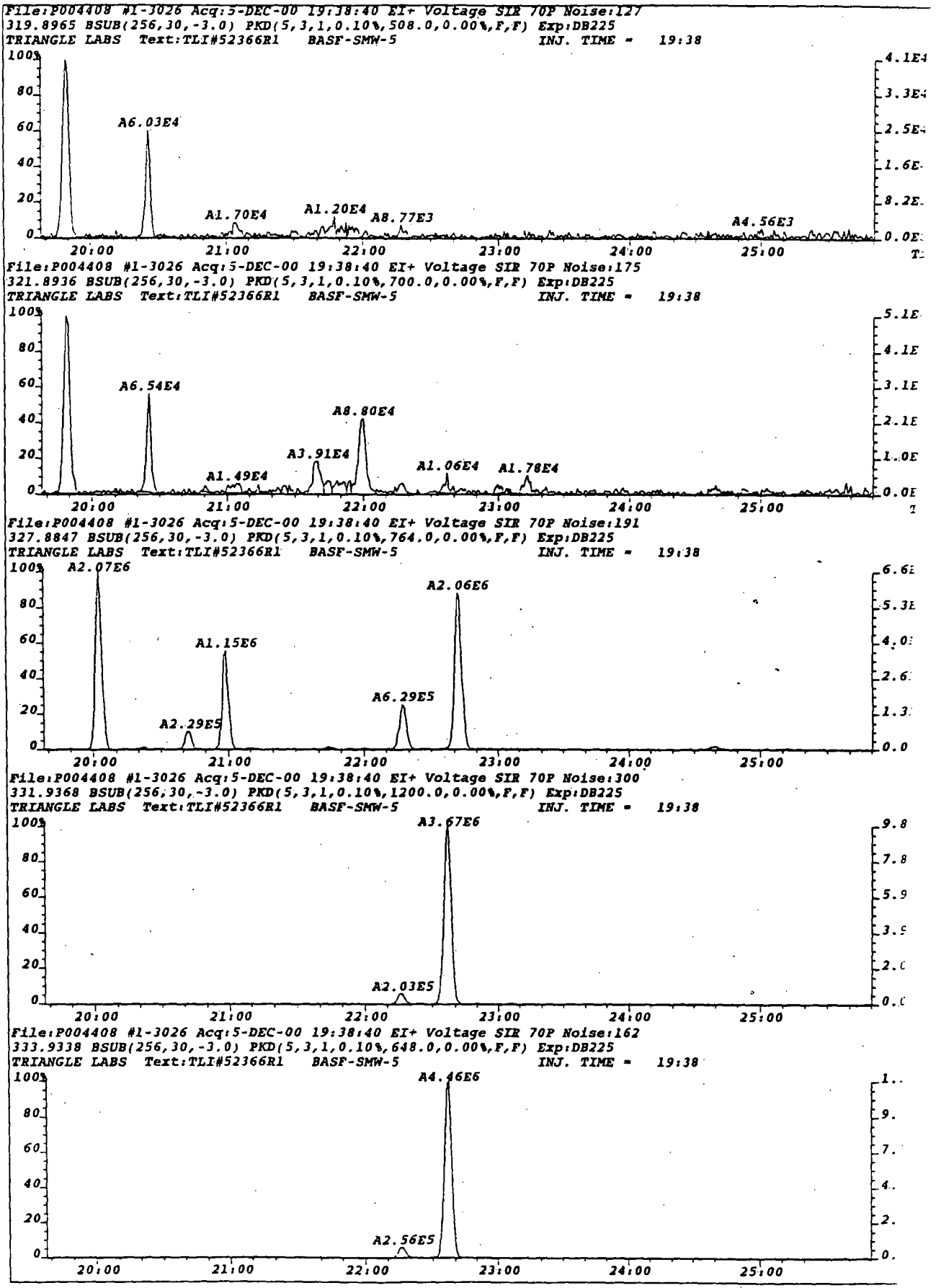
303.9016 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,380.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
A3.34E4
A3.74E4
A2.29E4
A5.92E4
A9.69E3
A9.44E4
A1.14E4
A5.60E4
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P Noise:129
305.8987 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,516.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
A3.33E4
A3.49E4
A7.62E4
A9.74E3
A1.36E5
A7.25E4
A6.01E4
A7.74E4
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P Noise:229
315.9419 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,916.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
A6.52E5
A3.29E5
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P Noise:497
317.9389 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,1988.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
A8.58E5
A4.06E5
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P
375.8364 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
19:09
19:43
20:19
21:23
22:29
23:39
24:07
24:42
25:19
26:06
26:27
Time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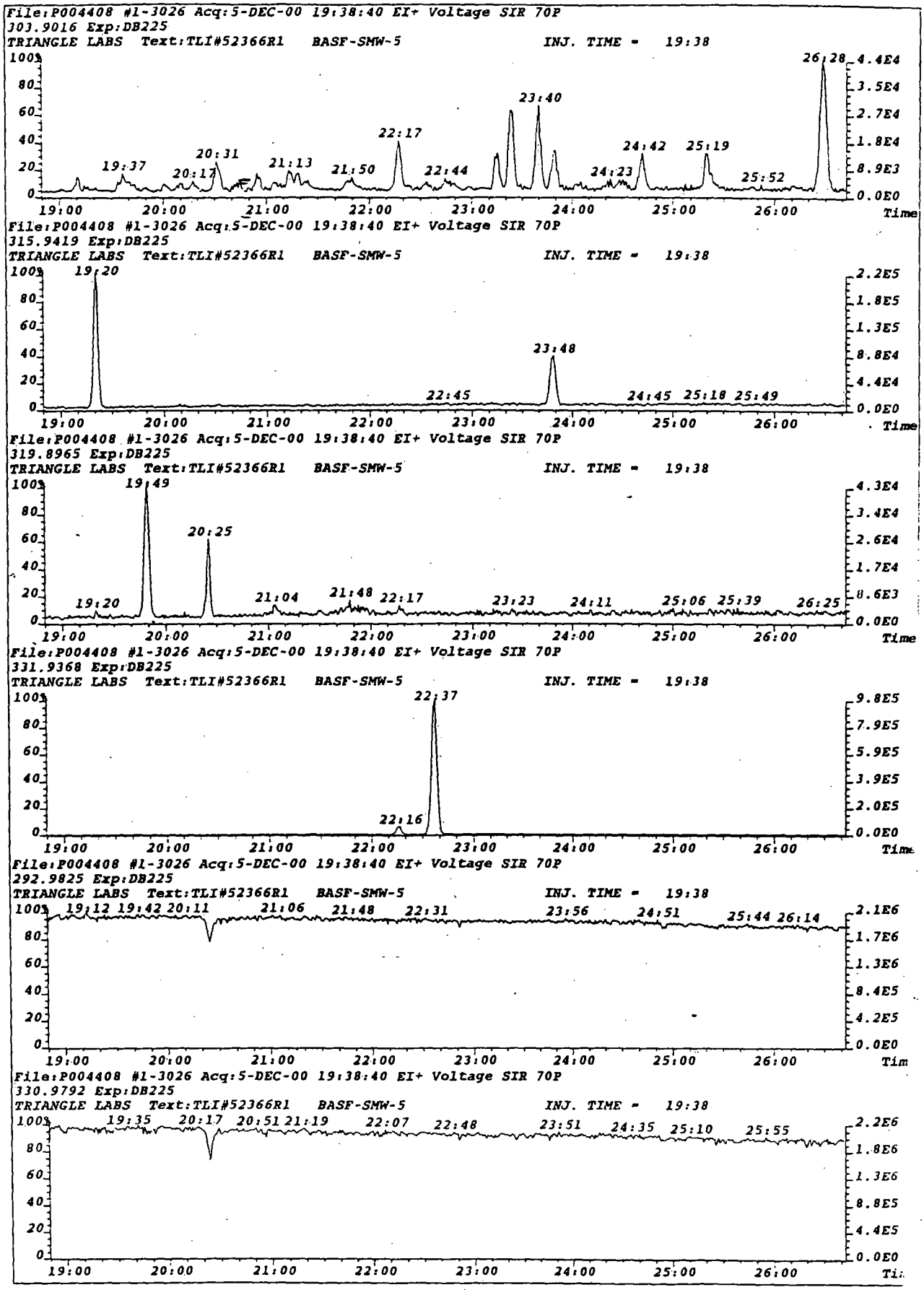
319.8965 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,508.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
A6.03E4
A1.70E4
A1.20E4
A8.77E3
A4.56E3
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P Noise:175
321.8936 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,700.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
A6.54E4
A8.80E4
A3.91E4
A1.49E4
A1.06E4
A1.78E4
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P Noise:191
327.8847 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,764.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
A2.07E6
A2.06E6
A1.15E6
A6.29E5
A2.29E5
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P Noise:300
331.9368 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,1200.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
A3.67E6
A2.03E5
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P Noise:162
333.9338 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,648.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
A4.46E6
A2.56E5
20:00
21:00
22:00
23:00
24:00
25:00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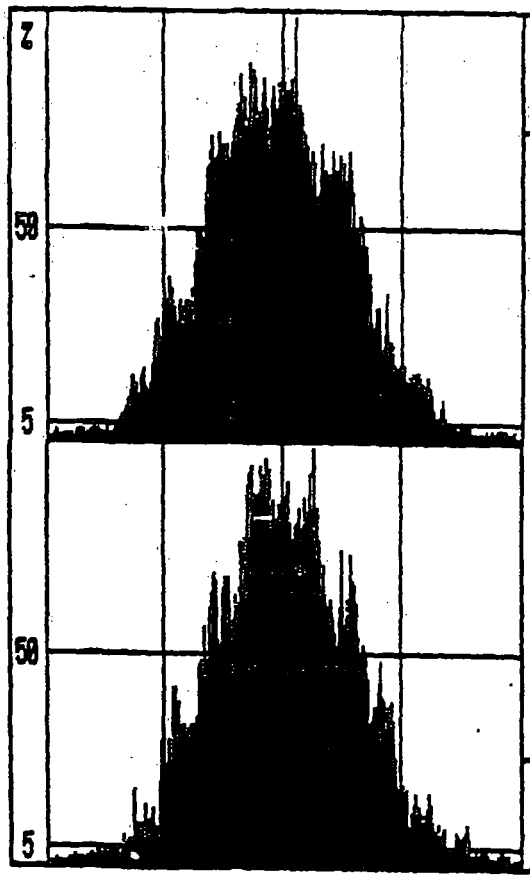
303.9016 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
19:37 20:17 20:31 21:13 21:50 22:17 22:44 23:40 24:23 24:42 25:19 25:52 26:28
Time
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P
315.9419 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
19:20 22:45 23:48 24:45 25:18 25:49
Time
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P
319.8965 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
19:20 19:49 20:25 21:04 21:48 22:17 23:23 24:11 25:06 25:39 26:25
Time
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P
331.9368 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
22:16 22:37
Time
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P
292.9825 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
19:12 19:42 20:11 21:06 21:48 22:31 23:56 24:51 25:44 26:14
Tim
File:P004408 #1-3026 Acq:5-DEC-00 19:38:40 EI+ Voltage SIR 70P
330.9792 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-5 INJ. TIME = 19:38
19:35 20:17 20:51 21:19 22:07 22:48 23:51 24:35 25:10 25:55
Ti

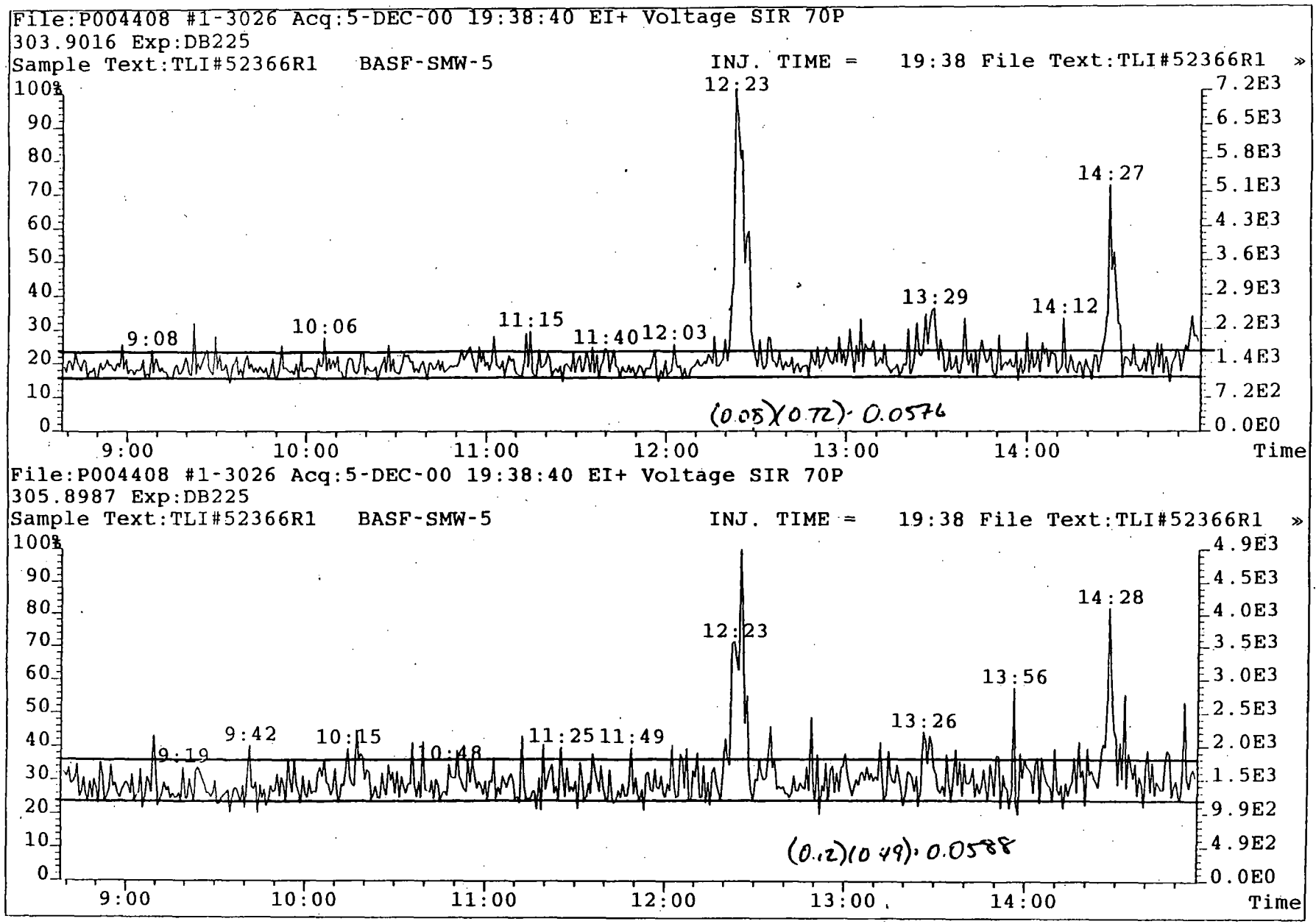


Channel I 330.9792 Peak top
Height .52 volts Span 200 ppm

System file name	08225
Data file name	A:PD05002
Resolution	10000
Group number	1
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 380.9761

A	292.9825	J	330.9792
B	303.9816	K	331.9368
C	305.8987	L	333.9338
D	315.9419	M	375.8364
E	317.9389		
F	319.8965		
G	321.8936		
H	327.8847		
I	330.9792		

Ref. mass 380.9761 Peak top
Height .22 volts Span 200 ppm



0.0576
0.0588
0.1164

DFS
12/5/00

TriMatrix, Inc.

TLI Project: **52366r1** Method 8290 PCDD/PCDF Analysis
Client Sample: **BASF-SMW-6** Analysis File: **T006**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/2000**	Spike File:	**SPMIT32**
TLI ID:	**274-99-2B**	Date Extracted:	**12/01/2000**	ICal:	**TF57140**
		Date Analyzed:	**12/05/2000**	ConCal:	**T005996**
Sample Size:	**1.080 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005998**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**BWL**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Fla
2,3,7,8-TCDD	37.7			0.87	26:51	—
1,2,3,7,8-PeCDD	103			1.60	30:57	—
1,2,3,4,7,8-HxCDD	120			1.18	34:05	—
1,2,3,6,7,8-HxCDD	486			1.16	34:10	—
1,2,3,7,8,9-HxCDD	343			1.08	34:29	—
1,2,3,4,6,7,8-HpCDD	6480			1.00	37:36	—
1,2,3,4,6,7,8,9-OCDD	47180			0.84	41:31	E
2,3,7,8-TCDF	807			0.89	26:09	—
1,2,3,7,8-PeCDF	482			1.55	29:56	—
2,3,4,7,8-PeCDF	335			1.60	30:37	—
1,2,3,4,7,8-HxCDF	947			1.27	33:21	—
1,2,3,6,7,8-HxCDF	252			1.23	33:27	—
2,3,4,6,7,8-HxCDF	135			1.27	33:57	—
1,2,3,7,8,9-HxCDF	62.6			1.21	34:47	—
1,2,3,4,6,7,8-HpCDF	808			1.03	36:30	—
1,2,3,4,7,8,9-HpCDF	167			0.93	38:08	—
1,2,3,4,6,7,8,9-OCDF	759			0.89	41:44	—

Totals	Conc. (pg/L)	Number	DL	EMPC	Fla
Total TCDD	280	3		352	—
Total PeCDD	317	3		674	—
Total HxCDD	6090	7			—
Total HpCDD	13740	2			—
Total TCDF	3040	10		6260	X
Total PeCDF	1950	8		3270	X
Total HxCDF	1800	6		2570	X
Total HpCDF	1610	3		1680	—

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:40 12/1

TriMatrix, Inc.

TLI Project: 52366r1 — Method 8290 PCDD/PCDF Analysis
Client Sample: BASF-SMW-6 — Analysis File: T006

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fla
$^{13}C_{12}$-2,3,7,8-TCDF	84.6	4.57	40%-130%	0.74	26:08	V_
$^{13}C_{12}$-2,3,7,8-TCDD	96.2	5.20	40%-130%	0.80	26:48	V_
$^{13}C_{12}$-1,2,3,7,8-PeCDF	85.6	4.62	40%-130%	1.47	29:56	V_
$^{13}C_{12}$-1,2,3,7,8-PeCDD	103	5.54	40%-130%	1.48	30:56	V_
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	72.4	3.91	40%-130%	0.51	33:26	V_
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	78.7	4.25	40%-130%	1.13	34:09	V_
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	72.1	3.89	25%-130%	0.42	36:29	V_
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	117	6.30	25%-130%	1.20	37:35	V_
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	147	3.96	25%-130%	1.02	41:31	V_

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fla
$^{13}C_{12}$-2,3,4,7,8-PeCDF	77.7	4.20	40%-130%	1.47	30:36	V_
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	76.3	4.12	40%-130%	0.50	33:20	V_
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	78.1	4.22	40%-130%	1.30	34:03	V_
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	76.1	4.11	25%-130%	0.41	38:08	V_

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Fla
$^{37}Cl_4$-2,3,7,8-TCDD	167	90.0	40%-130%	26:50	_

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fla
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	73.9	3.99	40%-130%	0.51	34:45	V_
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	60.8	3.28	40%-130%	0.51	33:57	V_

Recovery Standards	Ratio	RT	Fla
$^{13}C_{12}$-1,2,3,4-TCDD	0.80	26:39	_
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.21	34:29	_

Data Reviewer: _____ 12/13/2000

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:40 12/1

TriMatrix, Inc.

TLI Project: **52366r1** Toxicity Equivalents Re
Client Sample: **BASF-SMW-6** Analysis File: **T006**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/00**	Spike File:	**SPMIT32**
TLI ID:	**274-99-2B**	Date Extracted:	**12/01/00**	ICal:	**TF57140**
		Date Analyzed:	**12/05/00**	ConCal:	**T005996**
Sample Size:	**1.080 L**	Dilution Factor:	**1**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005998**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**BWL**	% Solids:	**n/a**

Analytes	Conc. (pg/L)		TEF		Equivalent
2,3,7,8-TCDD	37.7	x	1.	=	37.7
1,2,3,7,8-PeCDD	103	x	0.5	=	51.5
1,2,3,4,7,8-HxCDD	120	x	0.1	=	12.0
1,2,3,6,7,8-HxCDD	486	x	0.1	=	48.6
1,2,3,7,8,9-HxCDD	343	x	0.1	=	34.3
1,2,3,4,6,7,8-HpCDD	6480	x	0.01	=	64.80
1,2,3,4,6,7,8,9-OCDD	47180	x	0.001	=	47.180
TOTAL PCDD					296.1
2,3,7,8-TCDF	748	x	0.1	=	74.8
1,2,3,7,8-PeCDF	482	x	0.05	=	24.1
2,3,4,7,8-PeCDF	335	x	0.5	=	168
1,2,3,4,7,8-HxCDF	947	x	0.1	=	94.7
1,2,3,6,7,8-HxCDF	252	x	0.1	=	25.2
2,3,4,6,7,8-HxCDF	135	x	0.1	=	13.5
1,2,3,7,8,9-HxCDF	62.6	x	0.1	=	6.26
1,2,3,4,6,7,8-HpCDF	808	x	0.01	=	8.08
1,2,3,4,7,8,9-HpCDF	167	x	0.01	=	1.67
1,2,3,4,6,7,8,9-OCDF	759	x	0.001	=	0.759
TOTAL PCDF					417

Total EPA TEFs, 1989a: 713 pg/L

GRY_TEF v1.08. MI

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Printed: 17:44 12

Initial ....Date...

Data Review By: JCA 12/13/00

Calculated Noise Height: 0.08

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T006000B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_2....	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel RT	Compound Name	ID	Flags
TCDF					0.65-0.89					0.880-1.070				
304-306	DC	NL			Height			0.16	0.10	0.06				
					23:36		0.83	3.68	1.67	2.01	0.903			
					23:53		0.84	2.28	1.04	1.24	0.914			
M					24:14		0.72	4.10	1.72	2.38	0.927			Q
					24:35		0.86	7.11	3.28	3.83	0.941			
					24:51		0.86	7.23	3.34	3.89	0.951			
					25:09		0.78	4.52	1.98	2.54	0.962			
M					25:28		0.84	6.52	2.98	3.54	0.974			
AX			X		25:41	RO	0.79	15.27	6.74	8.53	0.983			
M					25:46		0.33	22.90	10.40	12.50	0.986	1278-TCDF		AN
A					25:59	RO	0.93	1.77	0.93	1.00	0.994			
					26:09		0.89	22.05	10.41	11.64	1.001	2378-TCDF		AN
					26:34		0.78	3.26	1.43	1.83	1.017			
MX			X		26:56	RO	0.78	6.50	2.85	3.65	1.031			
X			X		27:10	RO	0.81	29.57	13.25	16.32	1.040			
X			X		27:29	RO	0.81	31.40	14.21	17.19	1.052			
					27:47	RO	1.52	3.58	3.07	2.02	1.063			
	DC	WH			28:05		0.74	12.41			1.075			
304-306			16	Peaks				171.74						
13C12-TCDF					0.65-0.89					0.962-1.038				
316-318	DC	NL			Height			0.26	0.15	0.11				
	DC	WL			24:08	RO	0.58	1.45			0.923			
					25:53	RO	1.74	0.55	0.54	0.31	0.990			
					26:08		0.74	49.49	20.99	28.50	1.000	13C12-2378-TCDF		ISO
							Height	13.83	6.35	7.48				
					26:46	RO	0.62	1.95	0.85	1.37	1.024			
316-318			3	Peaks				51.99						

---------- Above: TCDF / TCDD Follows ----------

Compound/ M_2....	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel RT	Compound Name	ID	Flags
TCDD					0.65-0.89					0.904-1.042				
320-322	DC	NL			Height			0.10	0.05	0.05				
M					24:26	RO	0.55	1.66	0.72	1.31	0.912			
	DC	SN			24:36	RO	4.75	0.07			0.918			
					24:47		0.89	1.91	0.90	1.01	0.925	1379-TCDD		AN
	DC	SN			25:13	RO	0.26	0.44			0.941			
					25:43		0.89	3.33	1.57	1.76	0.960			
D	D	SN			26:20	RO	0.55	0.69			0.982			
M					26:51		0.87	0.86	0.40	0.46	1.002	2378-TCDD		AN
	DC	SN			26:58	RO	1.21	0.42			1.006			
D	D	SN			27:08		0.65	0.76			1.012			
	DC	SN			27:21		0.84	0.46			1.021			

Compound/ M_Z....	QC	Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flag
	DC	WH			28:03	RO	1.41	0.48			1.047			
320-322			4	Peaks				7.76						
37C1-TCDD											0.925-1.075			
328	DC	NL				Height		0.09	0.09					
	DC	WL			24:42			4.61			0.922			
	DC	WL			24:47			4.64			0.925			
					25:06			1.10	1.10		0.937			
					25:15			0.25	0.25		0.942			
					25:31			310.65	310.65		0.952			
					25:57			0.76	0.76		0.968			
					26:50			67.73	67.73		1.001	37C1-TCDD		CLS
					27:12			4.37	4.37		1.015			
					28:06			4.78	4.78		1.049			
328			7	Peaks				389.64						
13C12-TCDD							0.65-0.89				0.925-1.075			
332-334	DC	NL				Height		0.23	0.16	0.07				
					26:39		0.80	845.32	374.63	470.69	0.994	13C12-1234-TCDD		RS1
					26:48		0.80	46.20	20.47	25.73	1.000	13C12-2378-TCDD		IS1
						Height		13.43	5.94	7.49				
332-334			2	Peaks				891.52						

---------- Above: TCDD / PeCDF Follows ----------

PeCDF							1.32-1.78				0.930-1.060			
340-342	DC	NL				Height		0.12	0.06	0.06				
M					28:01		1.36	2.17	1.25	0.92	0.936			
	DC	SN			28:51	RO	0.53	0.13			0.964			
					29:07		1.55	10.26	6.23	4.03	0.973			
					29:22		1.32	1.65	0.94	0.71	0.981			
					29:34	RO	1.20	1.20	0.73	0.61	0.988			
					29:41		1.71	1.41	0.89	0.52	0.992			
A					29:52		1.42	2.20	1.29	0.91	0.998			
AN					29:56		1.55	11.11	6.76	4.35	1.000	12378-PeCDF		AN
NMX			X		29:59	RO	1.57	19.81	12.10	7.71	1.002			
					30:14		1.65	8.74	5.44	3.30	1.010			
					30:37		1.60	7.83	4.82	3.01	1.023	23478-PeCDF		AN
					30:50	RO	1.27	3.21	1.95	1.54	1.030			
MX			X		31:19	RO	1.52	6.35	3.83	2.52	1.046			
D	D		SN		31:35	RO	1.03	0.61			1.055			
	DC		WH		31:50	RO	0.92	0.56			1.063			
340-342			12	Peaks				75.94						
13C12-PeCDF							1.32-1.78				0.866-1.134			
352-354	DC	NL				Height		0.14	0.06	0.08				
					27:49	RO	0.48	0.94	0.57	1.19	0.929			
	DC	SN			27:59	RO	2.05	0.48			0.935			
					28:24	RO	0.83	0.39	0.24	0.29	0.949			
	DC	SN			28:33	RO	1.04	0.69			0.954			
	DC	SN			28:57	RO	2.38	0.43			0.967			
					29:07	RO	0.33	0.31	0.19	0.23	0.973			

Compound M_2	QC	Log	Cmit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel RT	Compound Name	ID	Flags
	DC	SN			29:37		1.67	0.40			0.989			
					29:56		1.47	46.83	27.87	18.96	1.000	13C12-PeCDF 123	IS2	
						Height		14.52	8.55	5.97				
	DC	SN			30:03	RO	3.20	0.26			1.004			
	DC	SN			30:11	RO	1.00	0.54			1.008			
					30:36		1.47	42.12	25.07	17.05	1.022	13C12-PeCDF 234	SUR1	
	DC	SN			31:11	RO	0.42	0.08			1.042			
					31:34	RO	1.02	1.15	0.46	0.45	1.055			
	DC	SN			31:46	RO	3.11	0.23			1.061			
352-354			6	Peaks				91.74						
---------- Above: PeCDF / PeCDD Follows ----------														
PeCDD						1.32-1.78					0.938-1.020			
356-358	DC	NL				Height		0.10	0.05	0.05				
D	D	SN			29:12	RO	0.17	7.21			0.944			
	DC	SN			29:23	RO	0.01	0.13			0.950			
					29:41		1.46	1.50	0.89	0.61	0.960			
					29:55	RO	1.06	1.89	1.15	1.08	0.967			
					30:02	RO	1.27	2.45	1.49	1.17	0.971			
					30:12	RO	1.22	2.16	1.31	1.07	0.976			
					30:28		1.32	2.41	1.37	1.04	0.985			
D	D	SN			30:40		1.38	0.50			0.991			
D	D	SN			30:47	RO	0.50	0.43			0.995			
					30:57		1.60	1.87	1.15	0.72	1.001	12378-PeCDD	AN	
D	D	SN			31:06	RO	0.30	0.87			1.005			
	DC	WH			31:38	RO	0.70	0.12			1.023			
356-358			6	Peaks				12.28						
13C12-PeCDD						1.32-1.78					0.871-1.129			
368-370	DC	NL				Height		0.09	0.05	0.04				
	DC	SN			29:48	RO	0.71	0.08			0.963			
	DC	SN			29:53	RO	2.00	0.23			0.966			
	DC	SN			30:40	RO	0.41	0.18			0.991			
					30:56		1.48	31.96	19.06	12.90	1.000	13C12-PeCDD 123	IS3	
						Height		11.08	6.54	4.54				
	DC	SN			31:17	RO	4.44	0.23			1.011			
					31:46	RO	0.42	0.41	0.25	0.60	1.027			
368-370			2	Peaks				32.37						
---------- Above: PeCDD / HxCDF Follows ----------														
HxCDF						1.05-1.43					0.963-1.047			
374-376	DC	NL				Height		0.12	0.06	0.06				
					32:23	RO	1.52	1.08	0.73	0.48	0.969			
					32:30		1.39	5.54	3.22	2.32	0.972			
X		X			32:58	RO	1.22	8.44	4.63	3.81	0.986			
X		X			33:12	RO	0.96	0.49	0.27	0.28	0.993			J
					33:21		1.27	18.15	10.15	8.00	0.998	123478-HxCDF	AN	
					33:27		1.23	5.05	2.79	2.26	1.000	123678-HxCDF	AN	
X		X			33:37	RO	1.12	3.96	2.09	1.87	1.005			
	DC	SN			33:48	RO	0.85	0.40			1.011			

Compound/ M_2....	QC.Log	Cmit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
				33:57		1.27	2.45	1.37	1.08	1.015	234678-HxCDF	AN	
	DC	SN		34:04	RO	0.38	0.05			1.019			
	DC	SN		34:08	RO	0.67	0.07			1.021			
	DC	SN		34:14	RO	3.00	0.07			1.024			
	DC	SN		34:19	RO	0.63	0.09			1.026			
	DC	SN		34:29		1.10	0.44			1.031			
M				34:47		1.21	0.93	0.51	0.42	1.040	123789-HxCDF	AN	
M				34:52		1.30	1.68	0.95	0.73	1.043			
	DC	WH		35:18		1.13	1.90			1.056			
374-376			10 Peaks				47.77						
13C12-HxCDF					0.43-0.59					0.880-1.120			
384-386	DC	NL			Height		0.14	0.07	0.07				
	DC	SN		32:30	RO	0.40	0.18			0.972			
	DC	SN		32:36	RO	1.00	0.08			0.975			
	DC	SN		32:42		0.56	0.14			0.978			
				33:20		0.50	35.92	12.05	23.87	0.997	13C12-HxCDF 478	SUR2	
				33:26		0.51	34.58	11.71	22.87	1.000	13C12-HxCDF 678	IS4	
					Height		10.92	3.62	7.30				
				33:57		0.51	26.47	8.39	17.58	1.015	13C12-HxCDF 234	ALT2	
	DC	SN		34:19	RO	1.38	0.12			1.026			
				34:28	RO	0.74	0.92	0.31	0.42	1.031			
				34:45		0.51	23.64	8.01	15.63	1.039	13C12-HxCDF 789	ALT1	
	DC	SN		34:53		0.50	0.12			1.043			
384-386			5 Peaks				121.53						

---------- Above: HxCDF / HxCDD Follows ----------

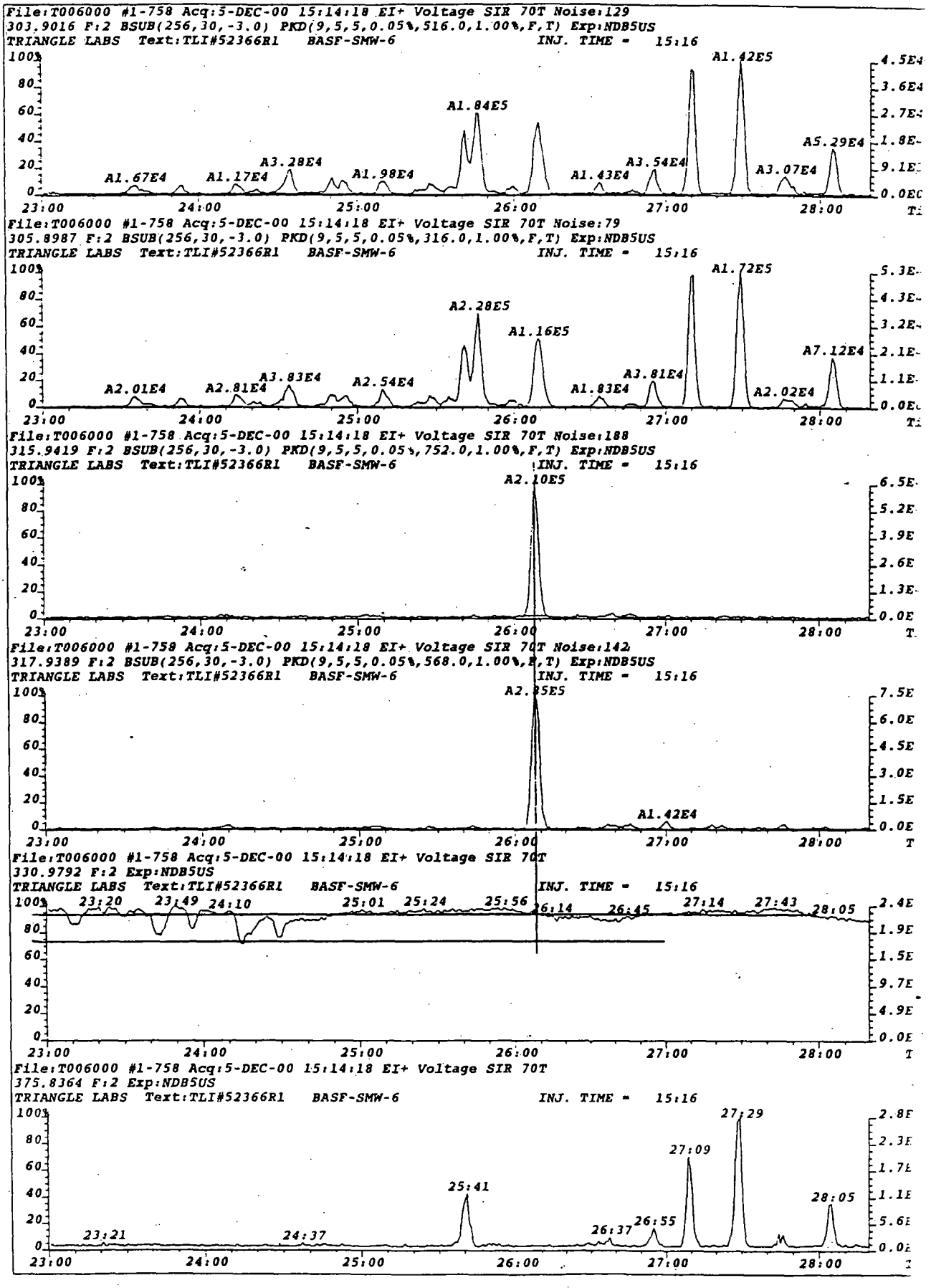
HxCDD					1.05-1.43				0.957-1.013			
390-392	DC	NL			Height		0.13	0.05	0.08			
				32:52		1.19	22.63	12.31	10.32	0.962		
				33:18		1.28	5.73	3.22	2.51	0.975		
				33:32		1.25	37.39	20.80	16.59	0.982		
				33:42		1.42	0.80	0.47	0.33	0.987		
	DC	SN		33:57		1.07	0.29			0.994		
				34:05		1.18	1.55	0.84	0.71	0.998	123478-HxCDD	AN
				34:10		1.16	6.27	3.37	2.90	1.000	123678-HxCDD	AN
M				34:29		1.08	4.47	2.32	2.15	1.010	123789-HxCDD	AN
	DC	WH		34:37	RO	0.86	0.11			1.014		
390-392			7 Peaks				78.84					
13C12-HxCDD					1.05-1.43				0.971-1.029			
402-404	DC	NL			Height		0.19	0.11	0.08			
				33:30	RO	4.81	0.36	0.77	0.16	0.981		
				34:03		1.30	24.16	13.66	10.50	0.997	13C12-HxCDD 478	SUR3
				34:09		1.13	23.52	12.47	11.05	1.000	13C12-HxCDD 678	IS5
					Height		7.65	4.01	3.64			
				34:29		1.21	609.26	333.37	275.89	1.010	13C12-HxCDD 789	RS2
				34:44	RO	3.28	0.40	0.59	0.18	1.017		
402-404			5 Peaks				657.70					

Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF						0.88-1.20				0.995-1.050			
408-410	DC	NL				Height	0.14	0.08	0.06				
				36:30		1.03	12.60	6.39	6.21	1.000	1234678-HpCDF	AN	
				36:46	RO	1.34	0.90	0.59	0.44	1.008			
				36:56		1.02	8.84	4.46	4.38	1.012			
				38:08		0.93	2.01	0.97	1.04	1.045	1234789-HpCDF	AN	
	DC	WH		38:40	RO	1.65	0.63			1.060			
408-410			4	Peaks			24.35						
13C12-HpCDF						0.37-0.51				0.945-1.110			
418-420	DC	NL				Height	0.15	0.08	0.07				
				36:29		0.42	23.01	6.83	16.18	1.000	13C12-HpCDF 678	ISS	
						Height	6.68	1.94	4.74				
				38:08		0.41	18.90	5.54	13.36	1.045	13C12-HpCDF 789	SUR4	
	DC	SN		38:21	RO	0.82	0.46			1.051			
	DC	SN		38:30	RO	1.58	0.17			1.055			
	DC	SN		38:41	RO	0.95	1.24			1.060			
418-420			2	Peaks			41.91						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD						0.88-1.20				0.974-1.004			
424-426	DC	NL				Height	0.23	0.11	0.12				
				36:48		1.01	110.41	55.51	54.90	0.979			
	DC	SN		37:02	RO	2.50	0.08			0.985			
				37:36		1.00	98.52	49.30	49.22	1.000	1234678-HpCDD	AN	
424-426			2	Peaks			208.93						
13C12-HpCDD						0.88-1.20				0.973-1.027			
436-438	DC	NL				Height	0.31	0.20	0.11				
				36:44	RO	2.18	1.00	1.07	0.49	0.977			
				37:35		1.20	32.94	18.00	14.94	1.000	13C12-HpCDD 678	IS7	
						Height	7.95	4.33	3.62				
436-438			2	Peaks			33.94						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF						0.76-1.02				0.904-1.096			
442-444	DC	NL				Height	0.10	0.05	0.05				
	DC	SN		39:11	RO	2.67	0.17			0.944			
	DC	SN		39:18	RO	1.25	0.08			0.947			
	DC	SN		39:31	RO	0.70	0.15			0.952			
	DC	SN		39:41		0.76	0.44			0.956			
	DC	SN		40:22	RO	1.75	0.30			0.972			
	DC	SN		40:30	RO	1.29	0.26			0.976			
	DC	SN		40:38	RO	1.78	0.17			0.979			
	DC	SN		40:56	RO	1.06	0.30			0.986			
				41:44		0.89	7.60	3.58	4.02	1.005	OCDF	AN	
	DC	SN		41:59	RO	0.75	0.06			1.011			
	DC	SN		42:33	RO	1.08	0.23			1.025			

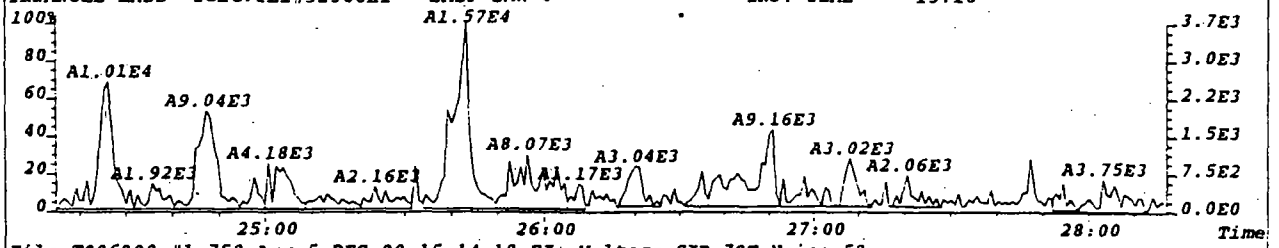
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
	DC	SN		42:39	RO	0.25	0.13			1.027			
	DC	SN		42:53	RO	2.14	0.13			1.033			
				43:05	RO	1.77	0.57	0.53	0.30	1.038			
	DC	SN		43:18	RO	1.29	0.13			1.043			
	DC	SN		43:29		0.93	0.29			1.047			
				43:39		0.31	1.25	0.56	0.69	1.051			
	DC	SN		43:51	RO	0.21	0.08			1.056			
	DC	SN		43:57	RO	1.80	0.19			1.059			
442-444			3 Peaks				9.42						
OCDD						0.76-1.02				0.904-1.096			
458-460	DC	NL				Height	0.10	0.05	0.05				
				41:31		0.84	392.61	179.37	213.24	1.000	OCDD	AN	E
	DC	SN		41:52	RO	1.56	0.17			1.008			
458-460			1 Peak				392.61						
13C12-OCDD						0.76-1.02				0.996-1.004			
470-472	DC	NL				Height	0.18	0.11	0.07				
				41:31		1.02	33.72	17.05	16.67	1.000	13C12-OCDD	IS8	
						Height	6.44	3.07	3.37				
470-472			1 Peak				33.72						

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

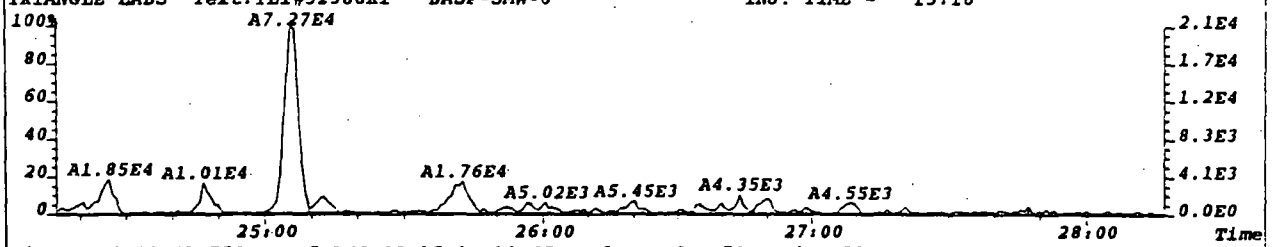
*** End of Report ***


File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:129
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,516.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.67E4
A1.17E4
A3.28E4
A1.98E4
A1.84E5
A1.43E4
A3.54E4
A1.42E5
A3.07E4
A5.29E4
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:79
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,316.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A2.01E4
A2.81E4
A3.83E4
A2.54E4
A2.28E5
A1.16E5
A1.83E4
A3.81E4
A1.72E5
A2.02E4
A7.12E4
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:188
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,752.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A2.10E5
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:142
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,568.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A2.35E5
A1.42E4
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
23:21
24:37
25:41
26:37
26:55
27:09
27:29
28:05

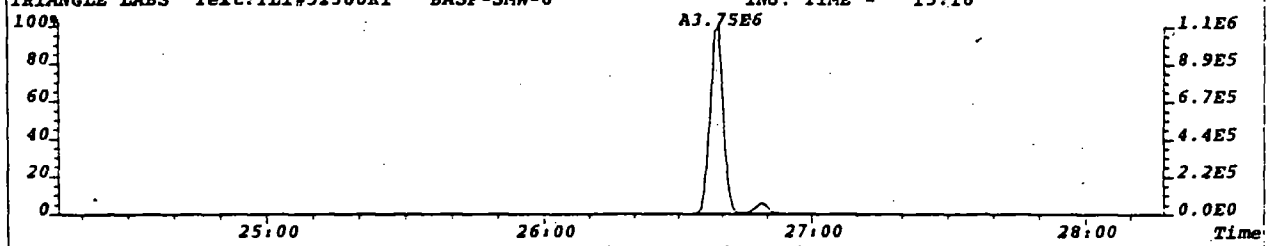
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:67
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,268.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16



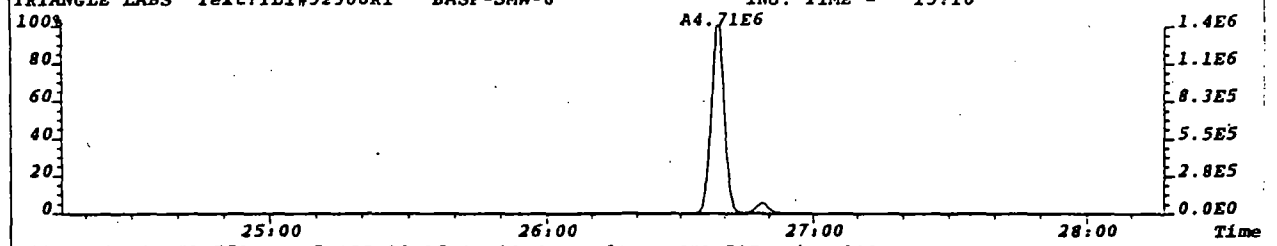
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:58
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16



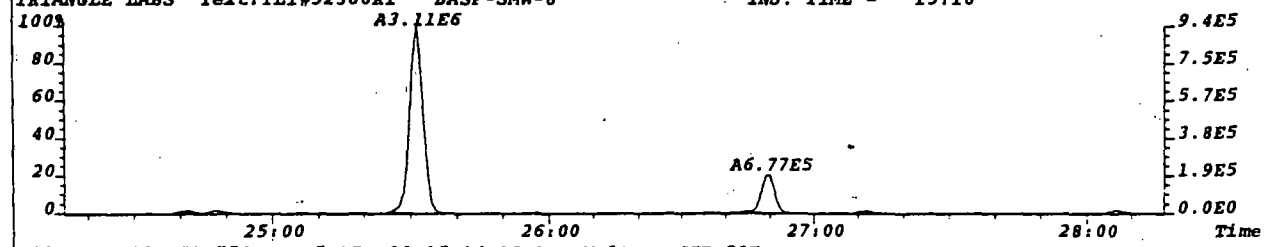
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:202
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,808.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16



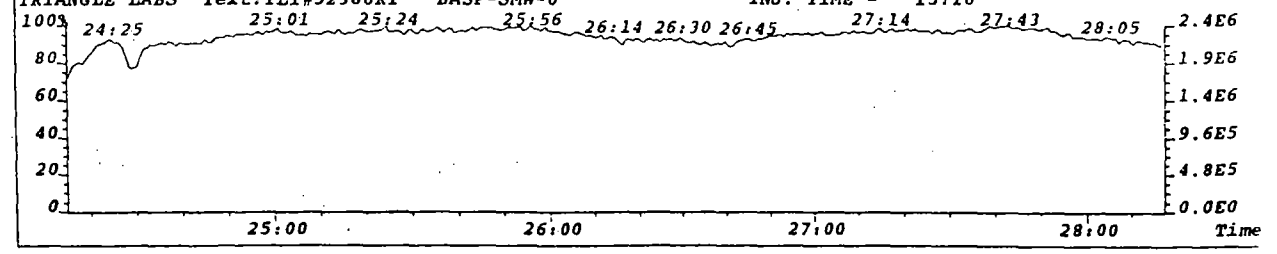
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:82
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,328.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16

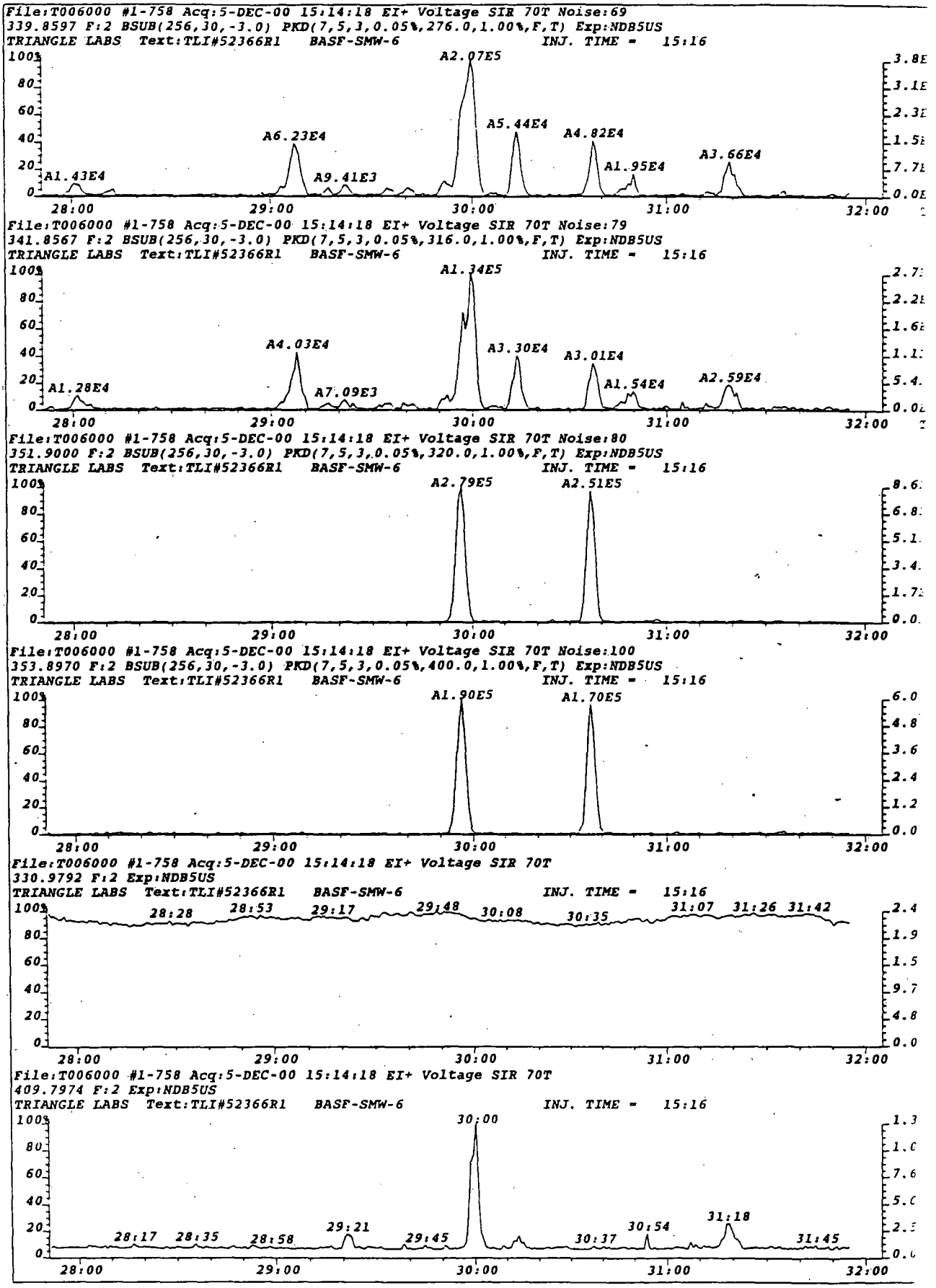


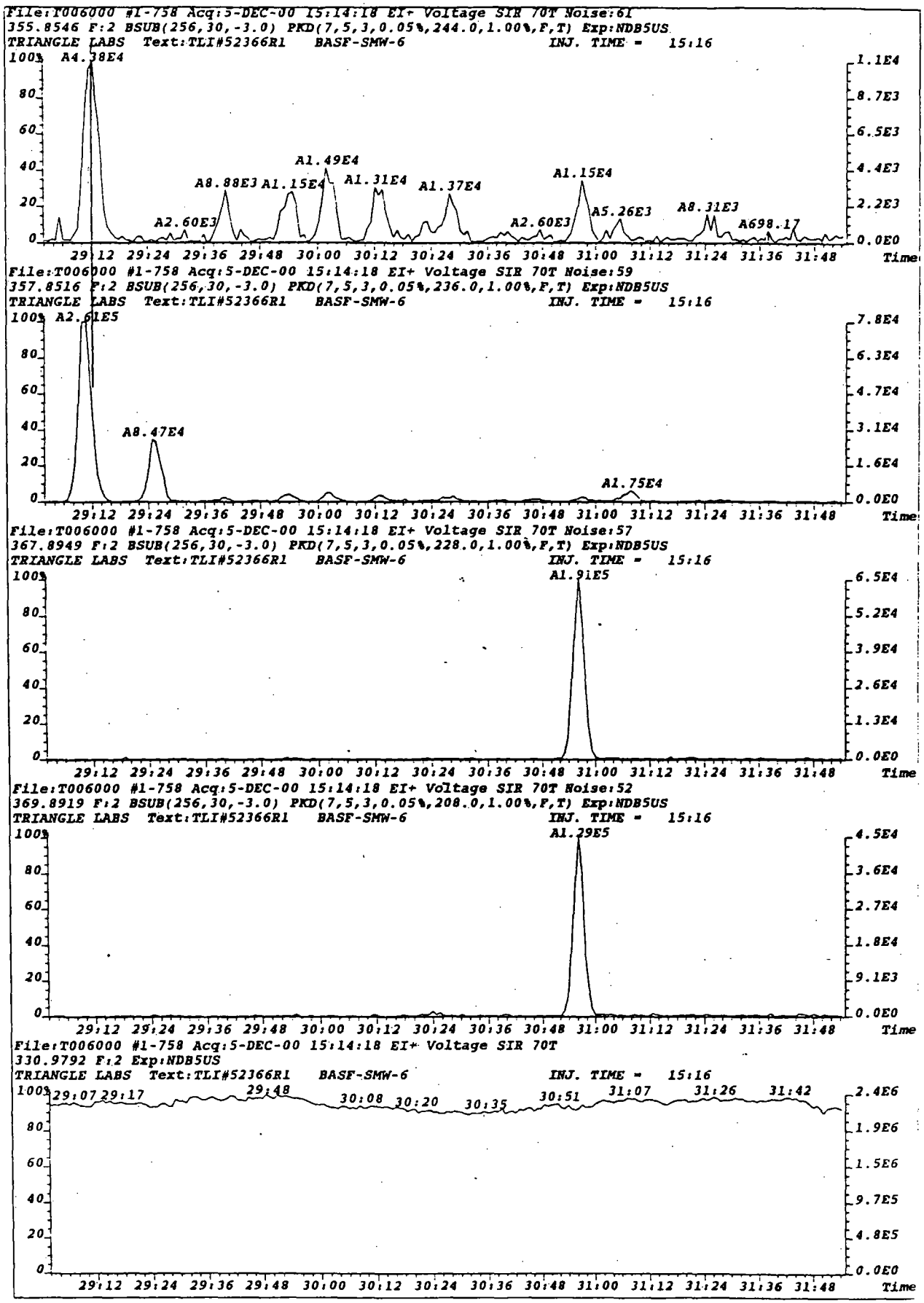
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:109
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,436.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16

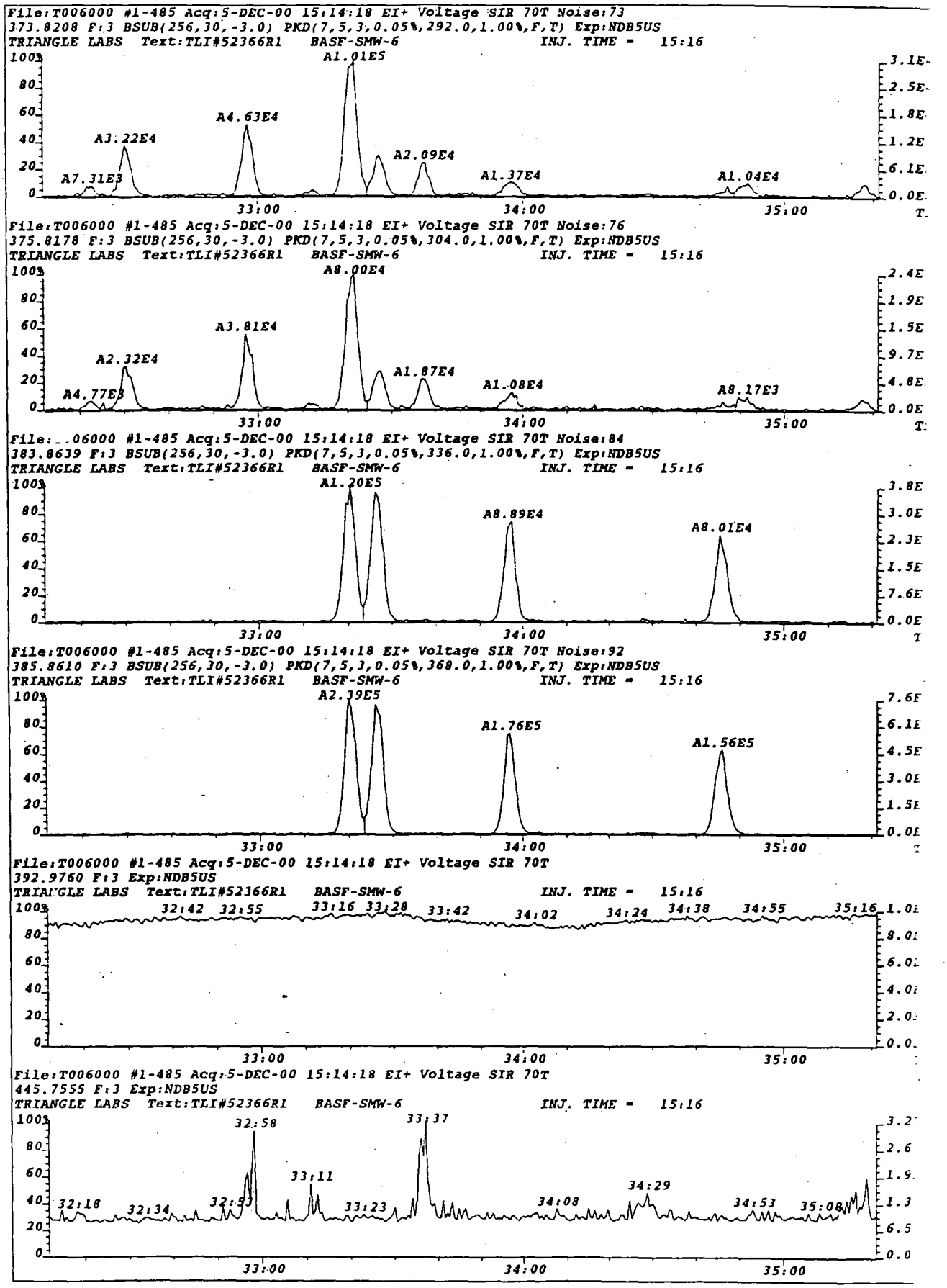


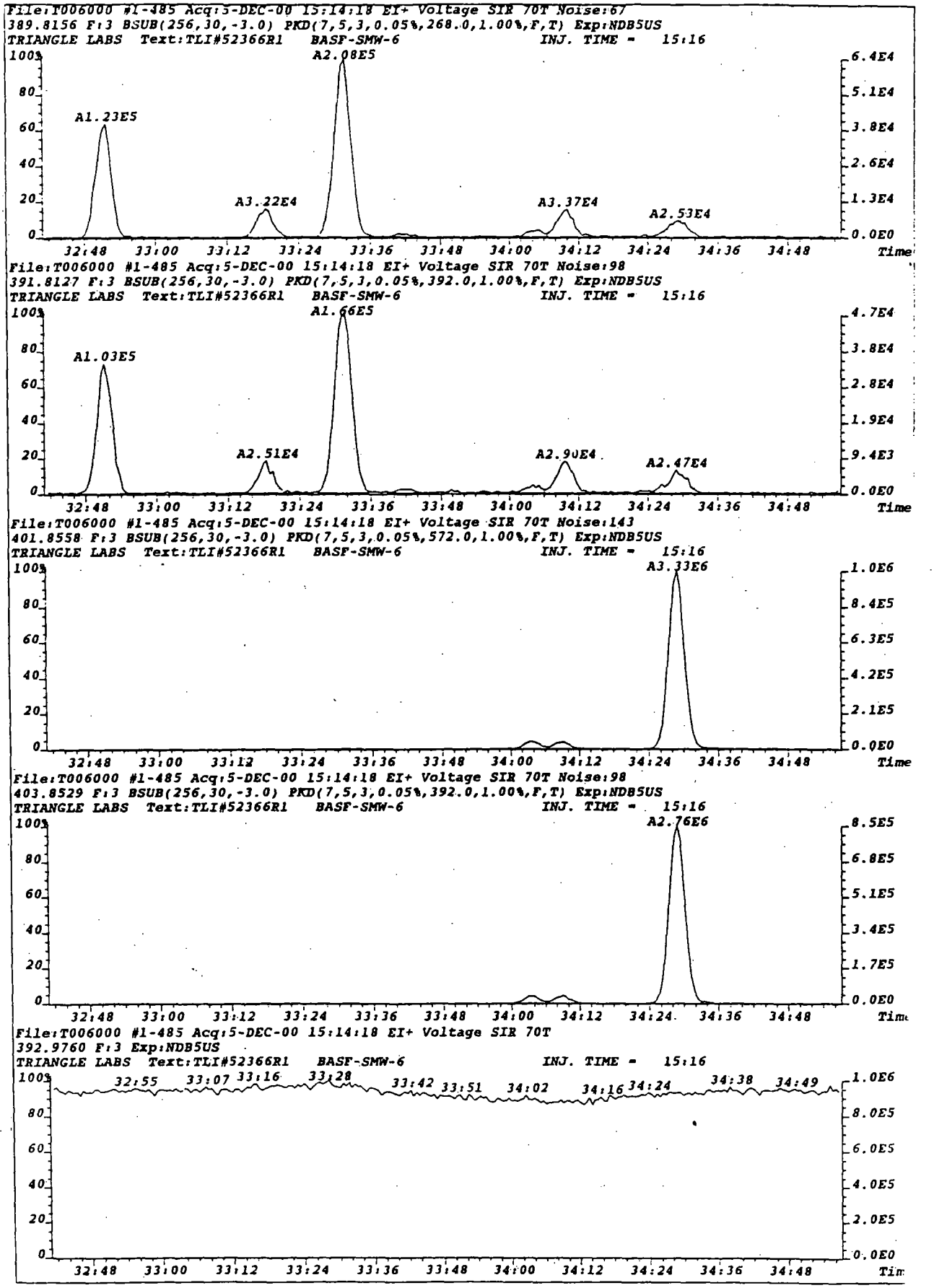
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16

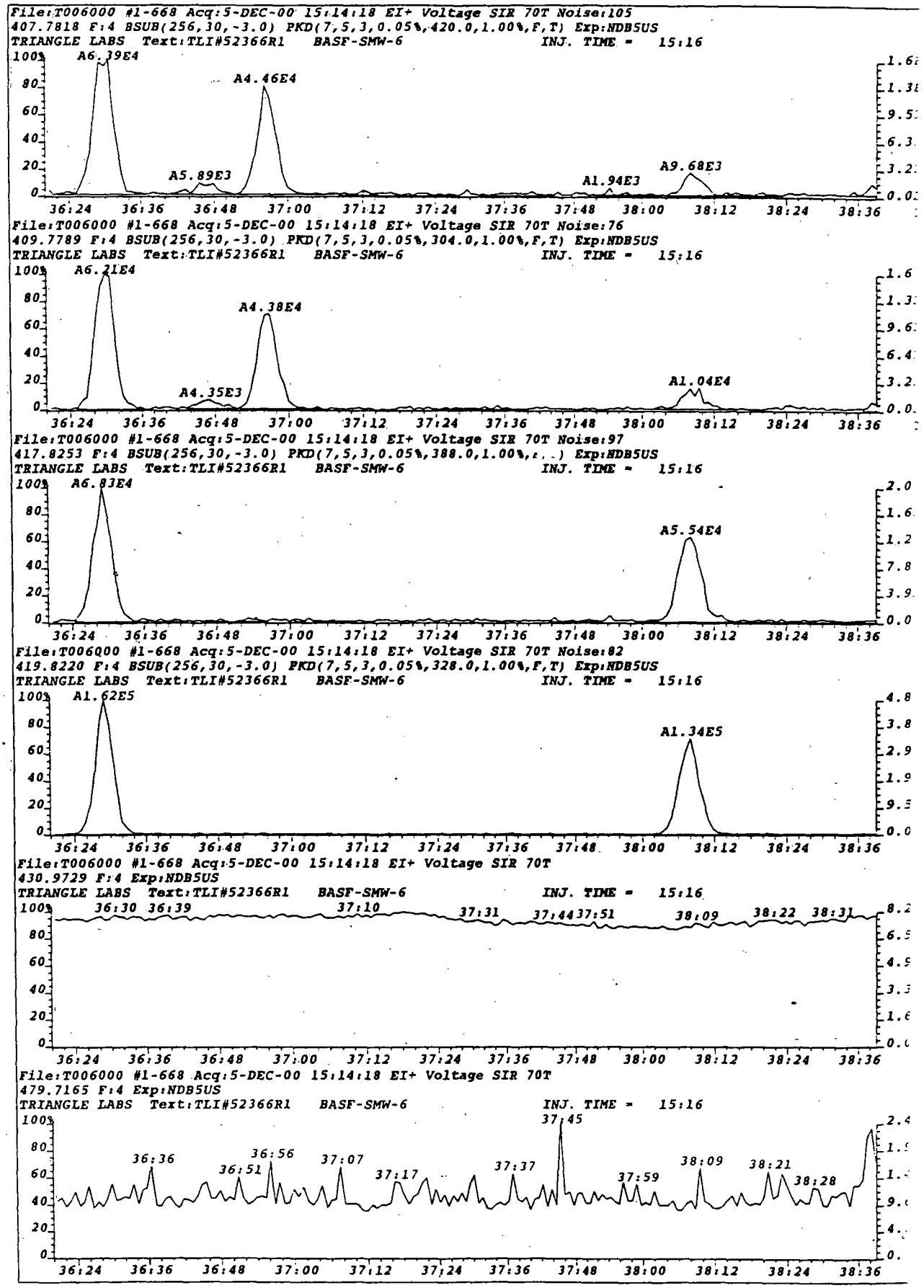


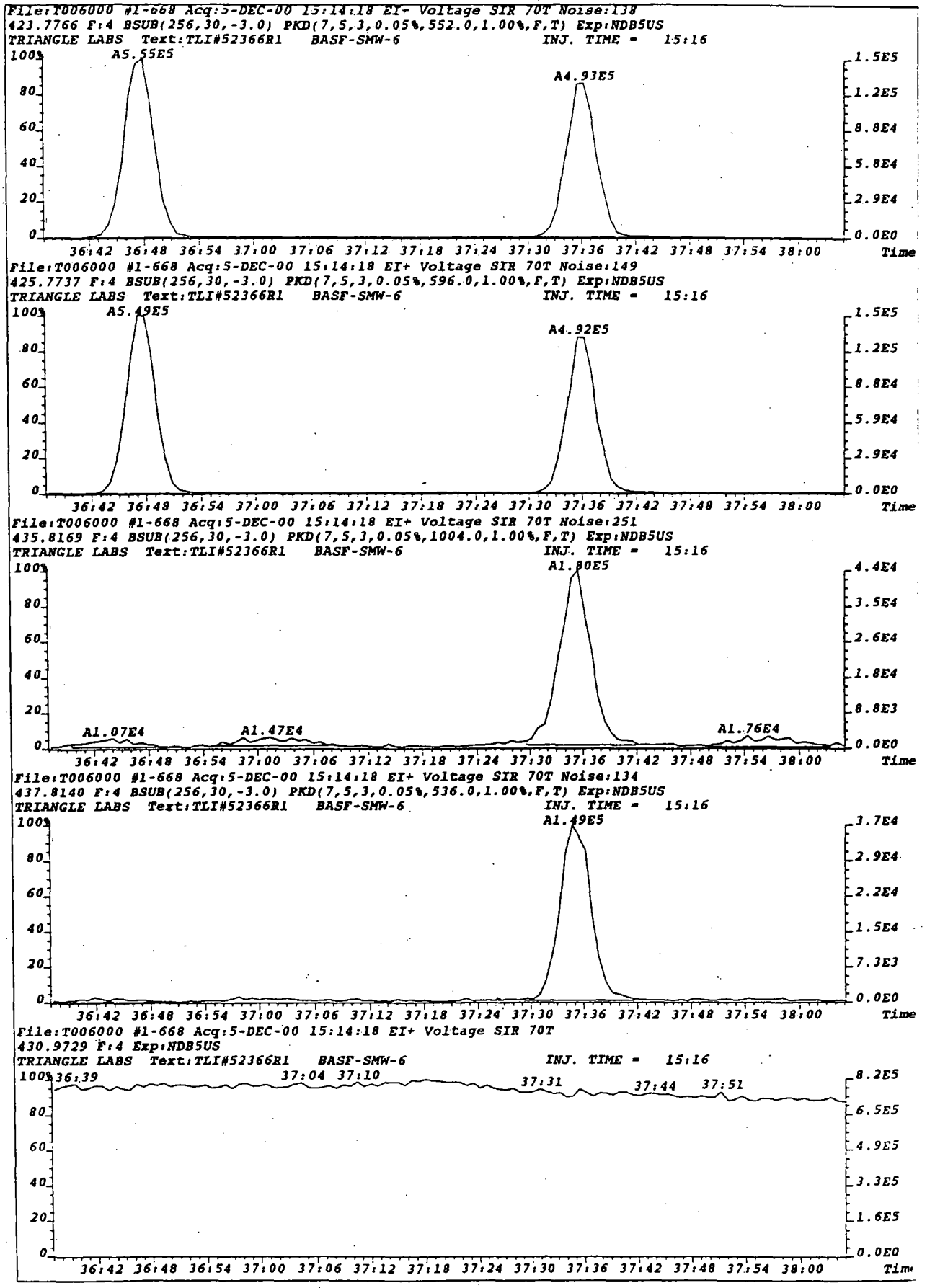

File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:69
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,276.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A2.07E5
A6.23E4
A5.44E4
A4.82E4
A3.66E4
A1.95E4
A1.43E4
A9.41E3
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:79
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,316.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.34E5
A4.03E4
A3.30E4
A3.01E4
A2.59E4
A1.54E4
A1.28E4
A7.09E3
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:80
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,320.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A2.79E5
A2.51E5
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:100
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,400.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.90E5
A1.70E5
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
28:28
28:53
29:17
29:48
30:08
30:35
31:07
31:26
31:42
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
30:00
28:17
28:35
28:58
29:21
29:45
30:37
30:54
31:18
31:45
28:00
29:00
30:00
31:00
32:00

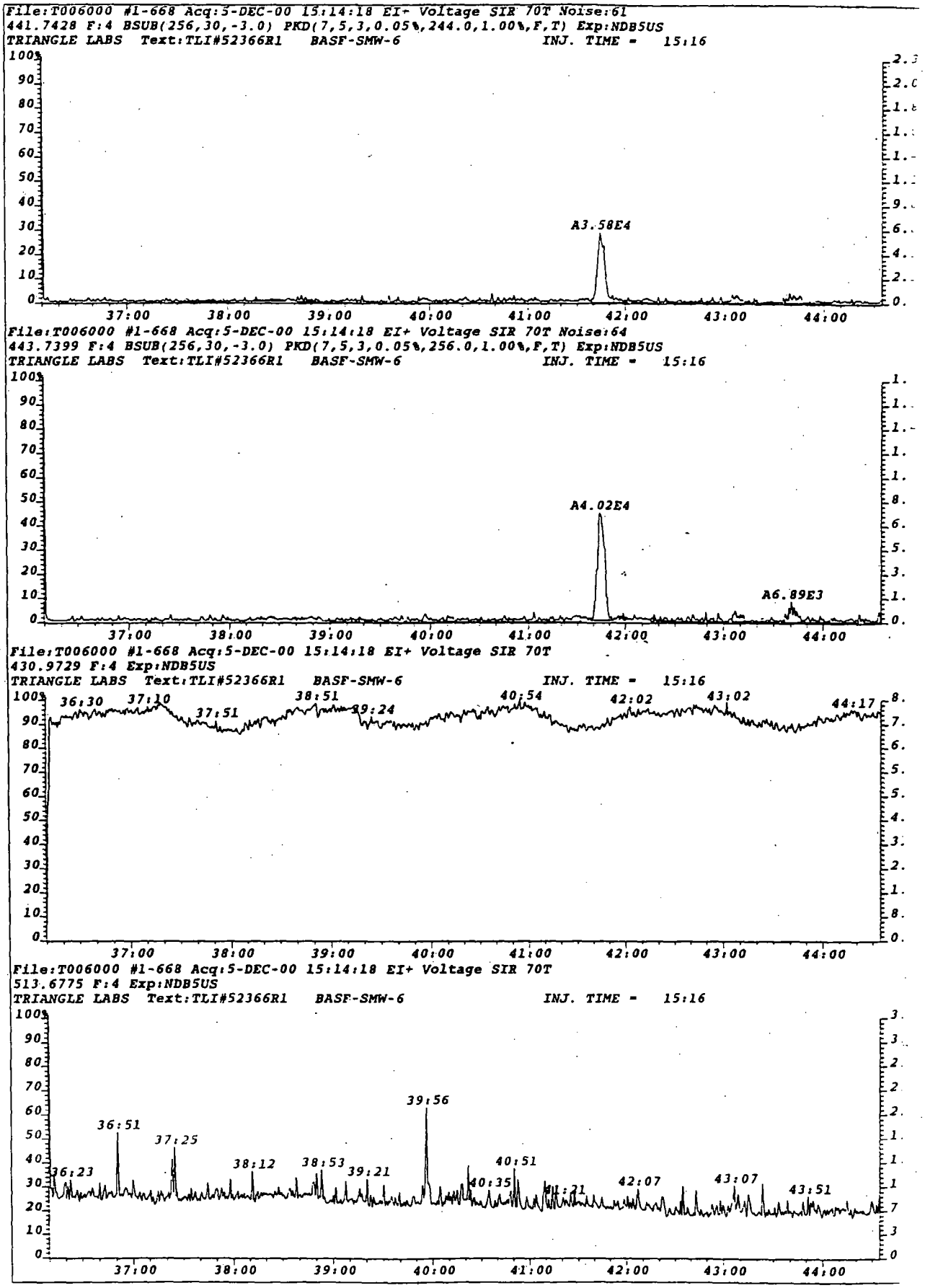

File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:61
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,244.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A4.38E4
A8.88E3
A1.15E4
A1.49E4
A1.31E4
A1.37E4
A2.60E3
A2.60E3
A1.15E4
A5.26E3
A8.31E3
A698.17
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:59
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,236.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A2.61E5
A8.47E4
A1.75E4
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:57
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.91E5
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:52
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.29E5
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
Time

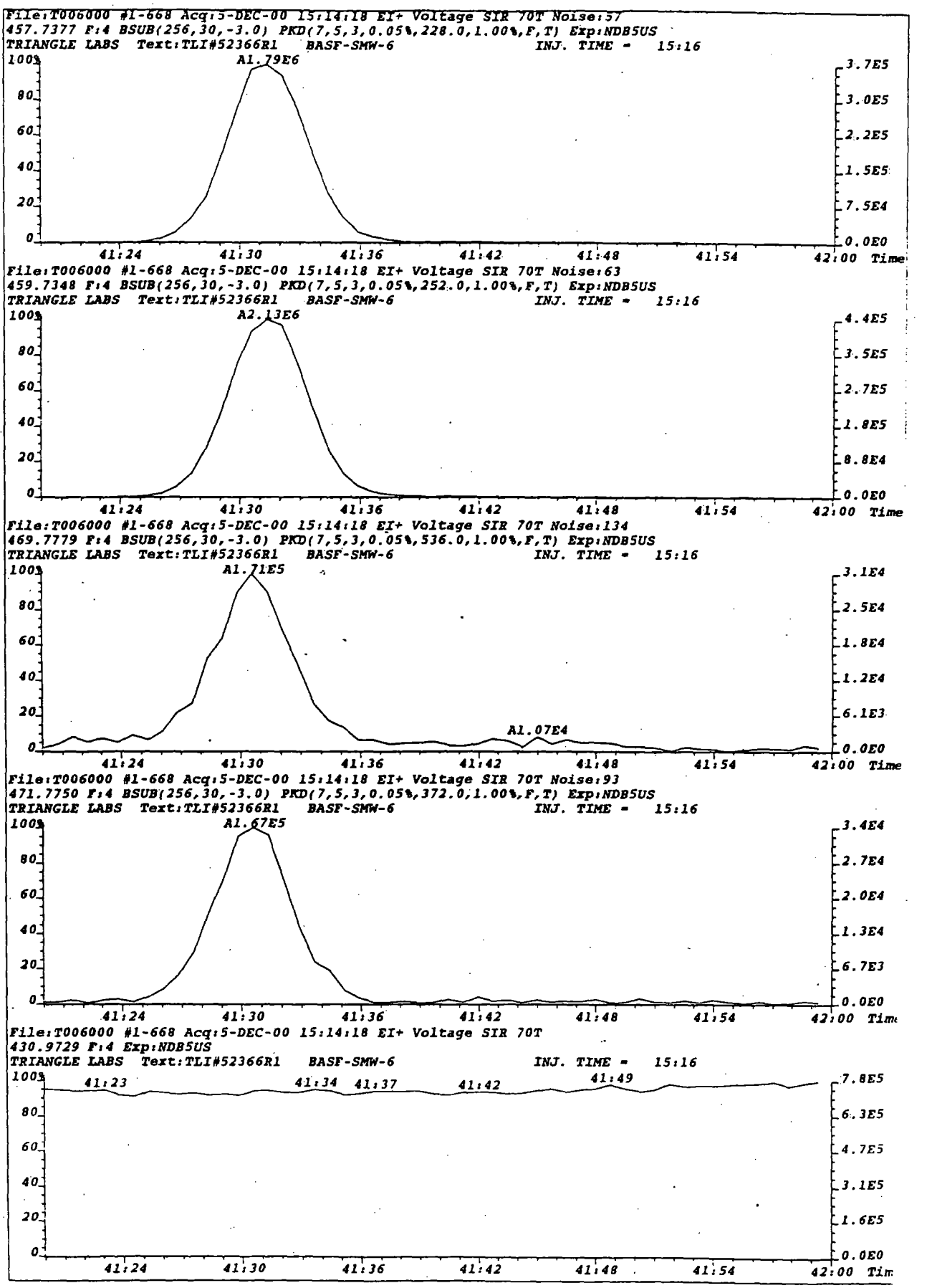

File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:73
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,292.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.01E5
A4.63E4
A3.22E4
A2.09E4
A7.31E3
A1.37E4
A1.04E4
33:00
34:00
35:00
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:76
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,304.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A8.00E4
A3.81E4
A2.32E4
A1.87E4
A4.77E3
A1.08E4
A8.17E3
33:00
34:00
35:00
File:...06000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:84
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,336.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.20E5
A8.89E4
A8.01E4
33:00
34:00
35:00
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:92
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,368.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A2.39E5
A1.76E5
A1.56E5
33:00
34:00
35:00
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
32:42 32:55 33:16 33:28 33:42 34:02 34:24 34:38 34:55 35:16
33:00
34:00
35:00
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
32:58
33:37
33:11
32:18
32:34
32:53
33:23
34:08
34:29
34:53
35:08
33:00
34:00
35:00

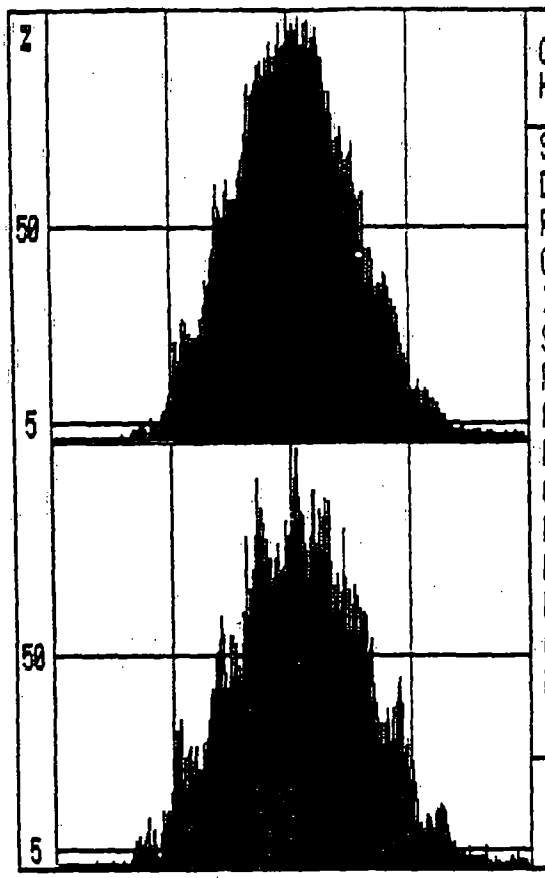

File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:67
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,268.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.23E5
A2.08E5
A3.22E4
A3.37E4
A2.53E4
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:98
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,392.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.03E5
A1.66E5
A2.51E4
A2.90E4
A2.47E4
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:143
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,572.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A3.33E6
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:98
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,392.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A2.76E6
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48 Time


File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:105
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,420.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A6.39E4
A4.46E4
A5.89E3
A1.94E3
A9.68E3
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:76
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,304.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A6.21E4
A4.38E4
A4.35E3
A1.04E4
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:97
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,388.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A6.83E4
A5.54E4
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:82
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,328.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.62E5
A1.34E5
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
36:24 36:36 36:48 37:00 37:12 37:24 37:36 37:48 38:00 38:12 38:24 38:36


File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:138
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,552.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A5.55E5
A4.93E5
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:149
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,596.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A5.49E5
A4.92E5
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:251
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1004.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.80E5
A1.07E4
A1.47E4
A1.76E4
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:134
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,536.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.49E5
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
36:39
37:04 37:10
37:31
37:44
37:51
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
Time


File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:61
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,244.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A3.58E4
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:64
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,256.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A4.02E4
A6.89E3
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
36:30
37:10
37:51
38:51
39:24
40:54
42:02
43:02
44:17
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
36:23
36:51
37:25
38:12
38:53
39:21
39:56
40:35
40:51
41:21
42:07
43:07
43:51
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00


File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:57
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.79E6
3.7E5
3.0E5
2.2E5
1.5E5
7.5E4
0.0E0
41:24
41:30
41:36
41:42
41:48
41:54
42:00 Time
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:63
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A2.13E6
4.4E5
3.5E5
2.7E5
1.8E5
8.8E4
0.0E0
41:24
41:30
41:36
41:42
41:48
41:54
42:00 Time
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:134
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,536.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.71E5
A1.07E4
3.1E4
2.5E4
1.8E4
1.2E4
6.1E3
0.0E0
41:24
41:30
41:36
41:42
41:48
41:54
42:00 Time
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T Noise:93
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,372.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
A1.67E5
3.4E4
2.7E4
2.0E4
1.3E4
6.7E3
0.0E0
41:24
41:30
41:36
41:42
41:48
41:54
42:00 Time
File:T006000 #1-668 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16
41:23
41:34
41:37
41:42
41:49
7.8E5
6.3E5
4.7E5
3.1E5
1.6E5
0.0E0
41:24
41:30
41:36
41:42
41:48
41:54
42:00 Time

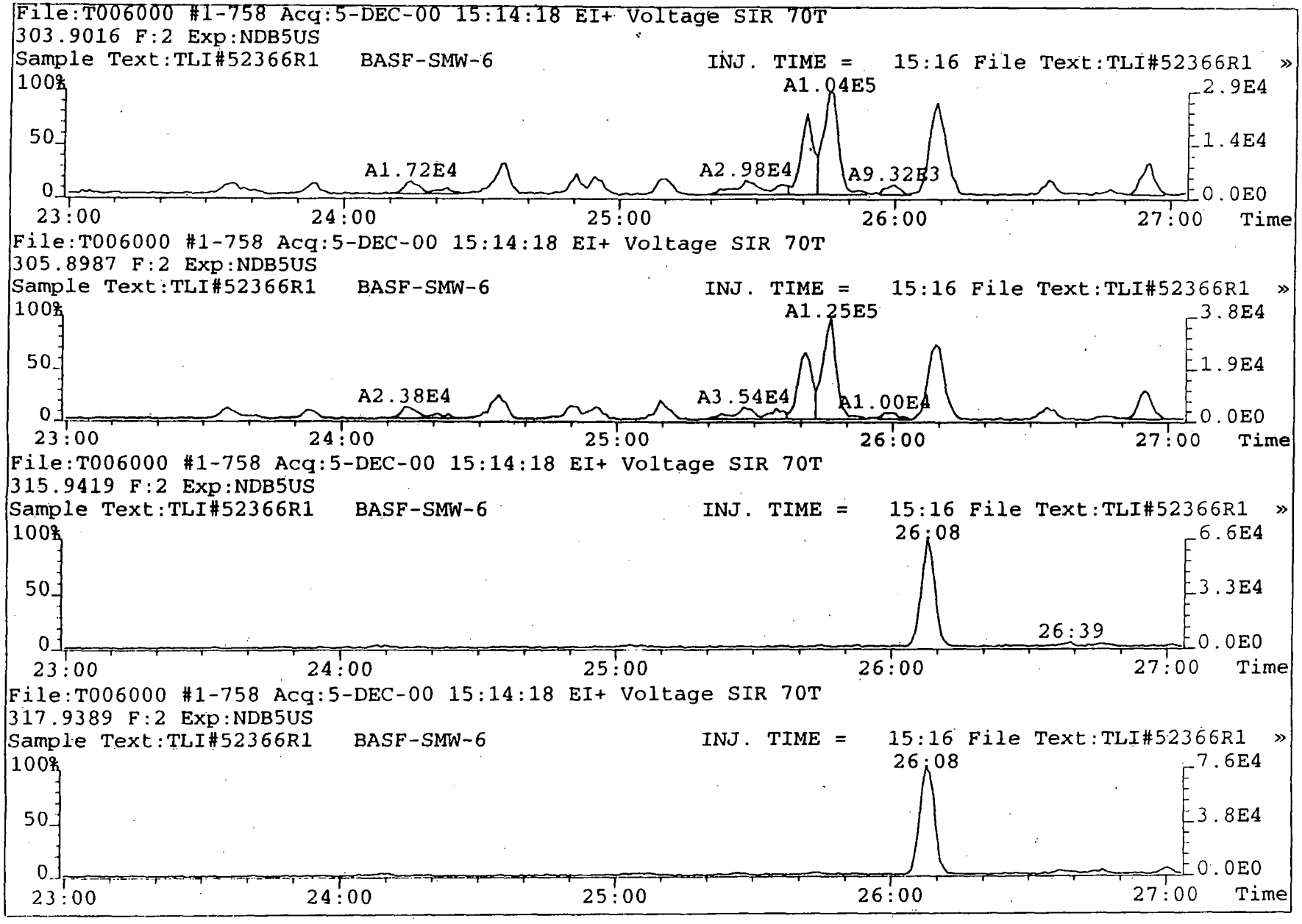


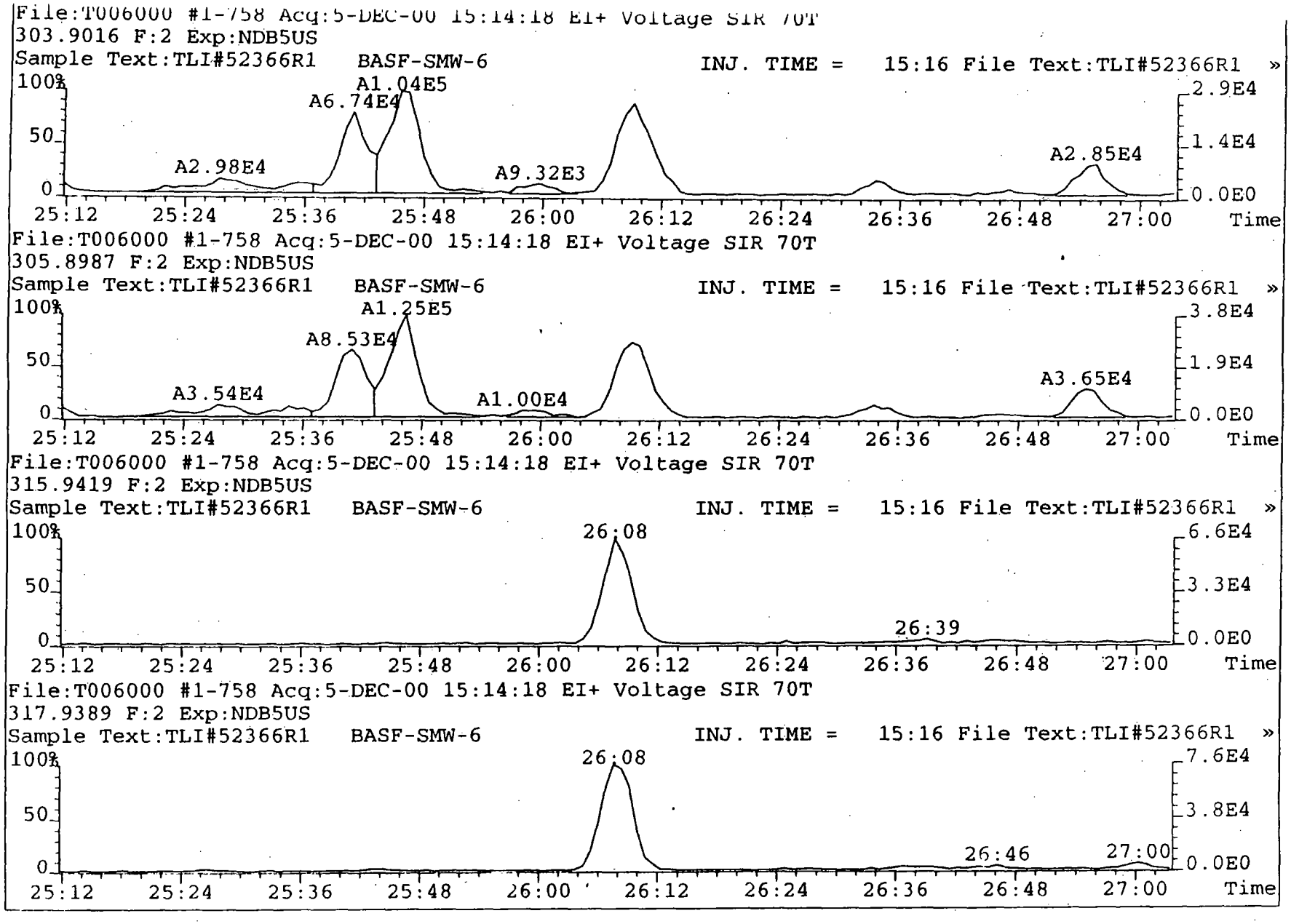
Channel	I	330.9792		Peak top	
Height	.68 volts		Span	200 ppm	

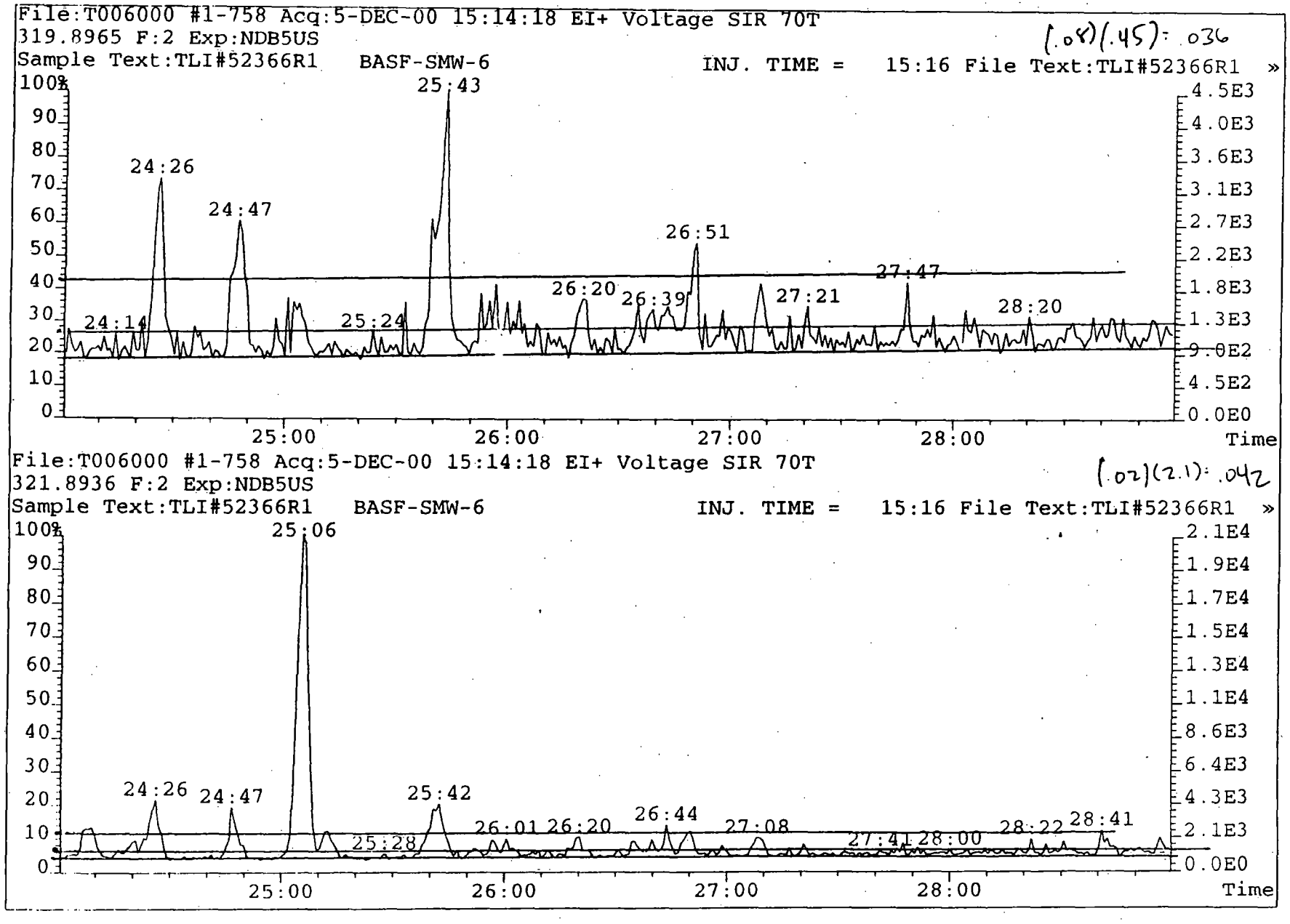
System file name	MOBSUS
Data file name	A:TD05003
Resolution	10000
Group number	2
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 416.9760

A	293	J	331	S	368
B	304	K	332	T	370
C	306	L	334	U	376
D	316	M	340	V	410
E	318	N	342		
F	320	O	352		
G	322	P	354		
H	328	Q	356		
I	331	R	358		

Ref. mass	416.9760			Peak top	
Height	.13 volts		Span	200 ppm	


File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
303.9016 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A1.04E5
A1.72E4
A2.98E4
A9.32E3
2.9E4
1.4E4
0.0E0
23:00
24:00
25:00
26:00
27:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
305.8987 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A1.25E5
A2.38E4
A3.54E4
A1.00E4
3.8E4
1.9E4
0.0E0
23:00
24:00
25:00
26:00
27:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
315.9419 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
26:08
26:39
6.6E4
3.3E4
0.0E0
23:00
24:00
25:00
26:00
27:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
317.9389 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
26:08
7.6E4
3.8E4
0.0E0
23:00
24:00
25:00
26:00
27:00
Time


File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
303.9016 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A2.98E4
A6.74E4
A1.04E5
A9.32E3
A2.85E4
2.9E4
1.4E4
0.0E0
25:12 25:24 25:36 25:48 26:00 26:12 26:24 26:36 26:48 27:00 Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
305.8987 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A3.54E4
A8.53E4
A1.25E5
A1.00E4
A3.65E4
3.8E4
1.9E4
0.0E0
25:12 25:24 25:36 25:48 26:00 26:12 26:24 26:36 26:48 27:00 Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
315.9419 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
26:08
26:39
6.6E4
3.3E4
0.0E0
25:12 25:24 25:36 25:48 26:00 26:12 26:24 26:36 26:48 27:00 Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
317.9389 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
26:08
26:46
27:00
7.6E4
3.8E4
0.0E0
25:12 25:24 25:36 25:48 26:00 26:12 26:24 26:36 26:48 27:00 Time

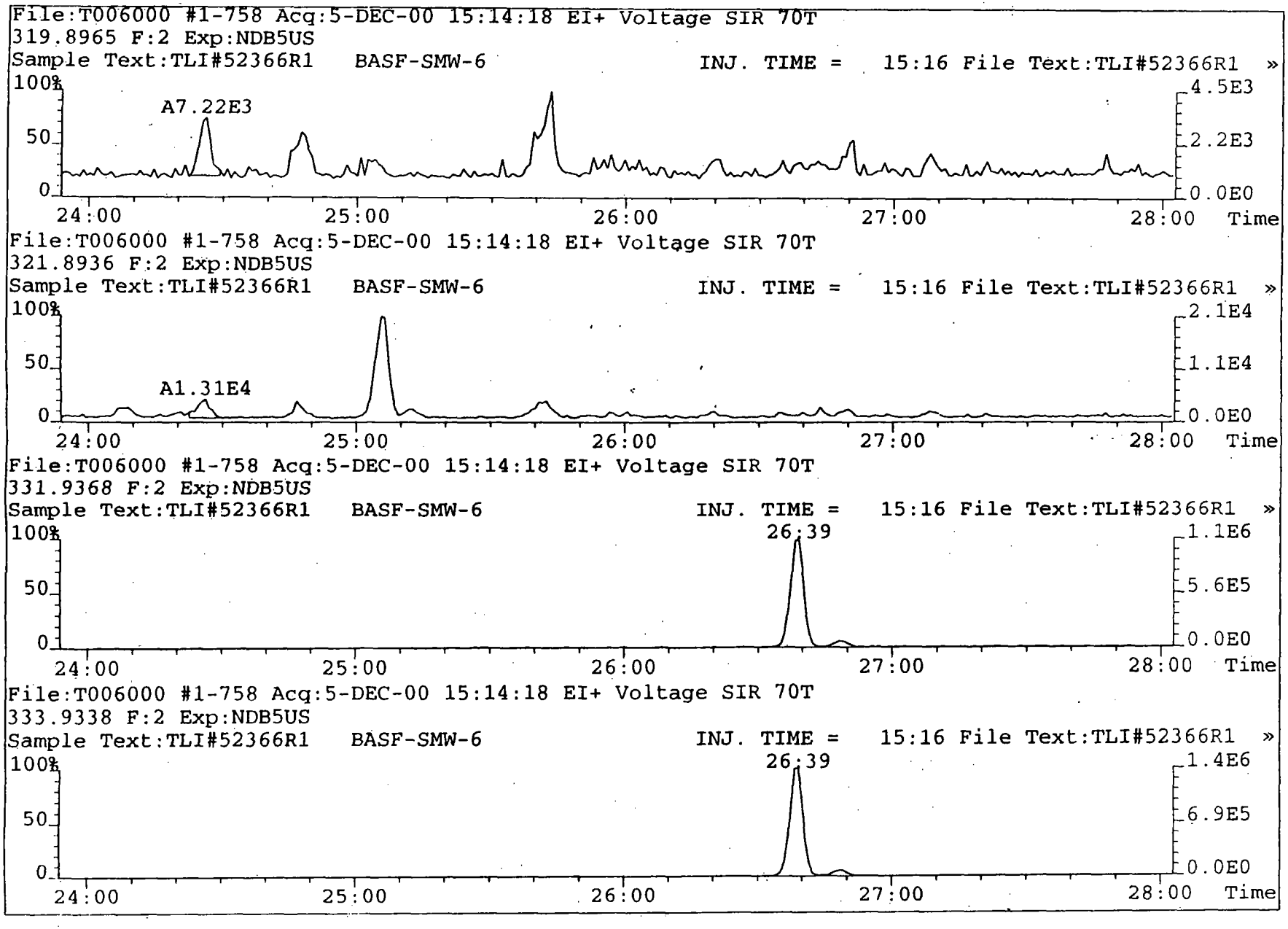


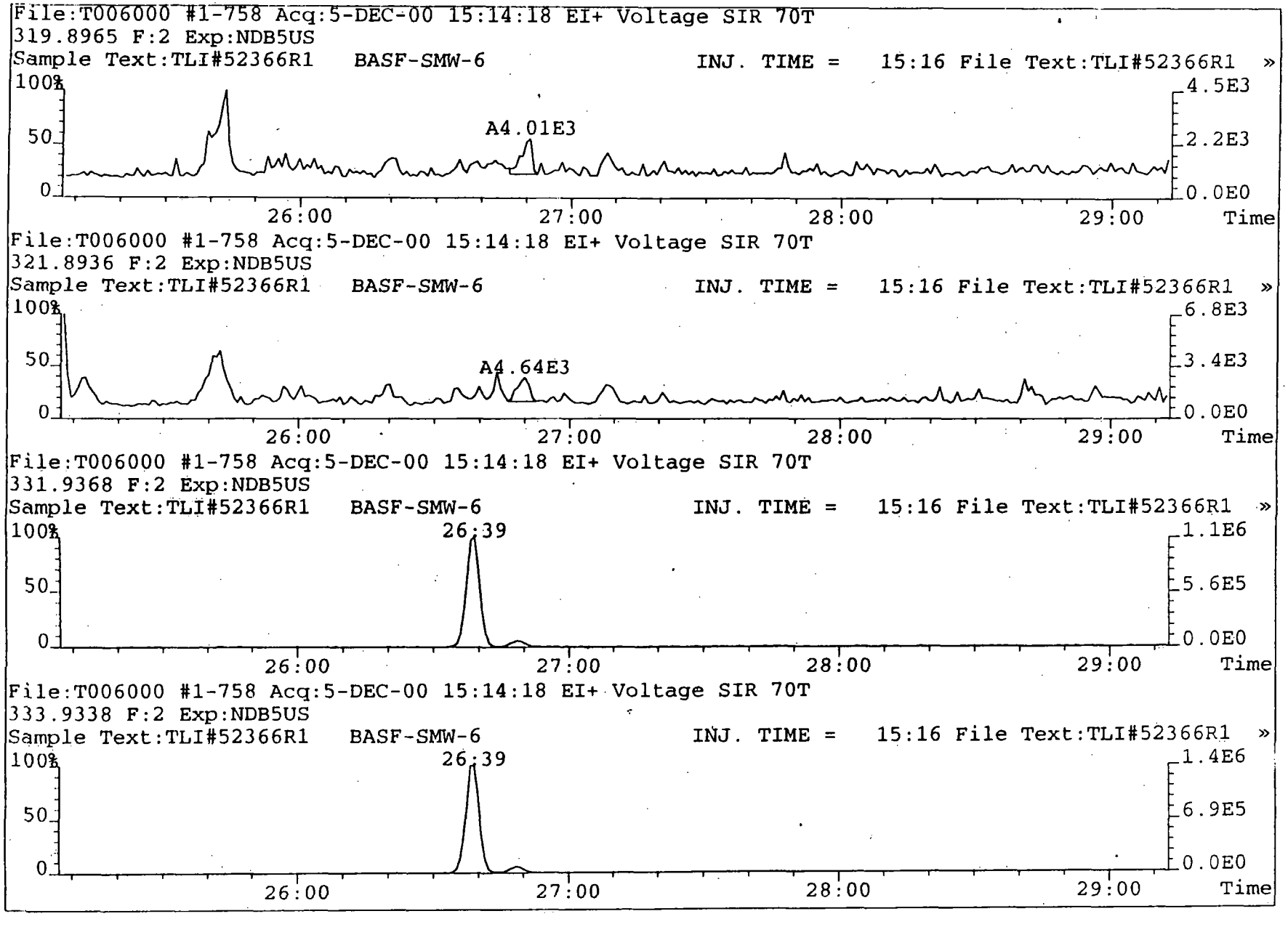
(.08)(.45) = .036

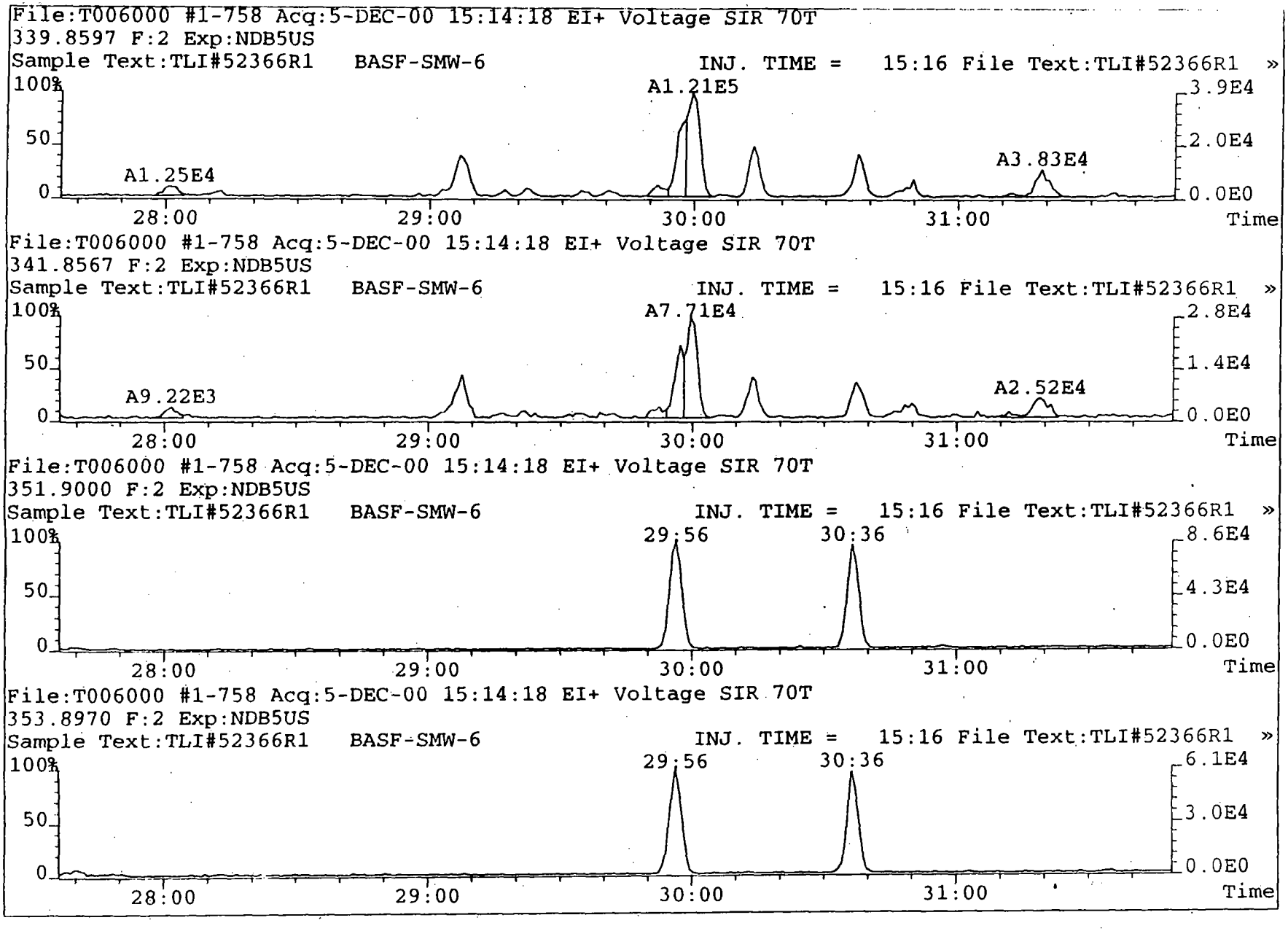
(.02)(2.1) = .042

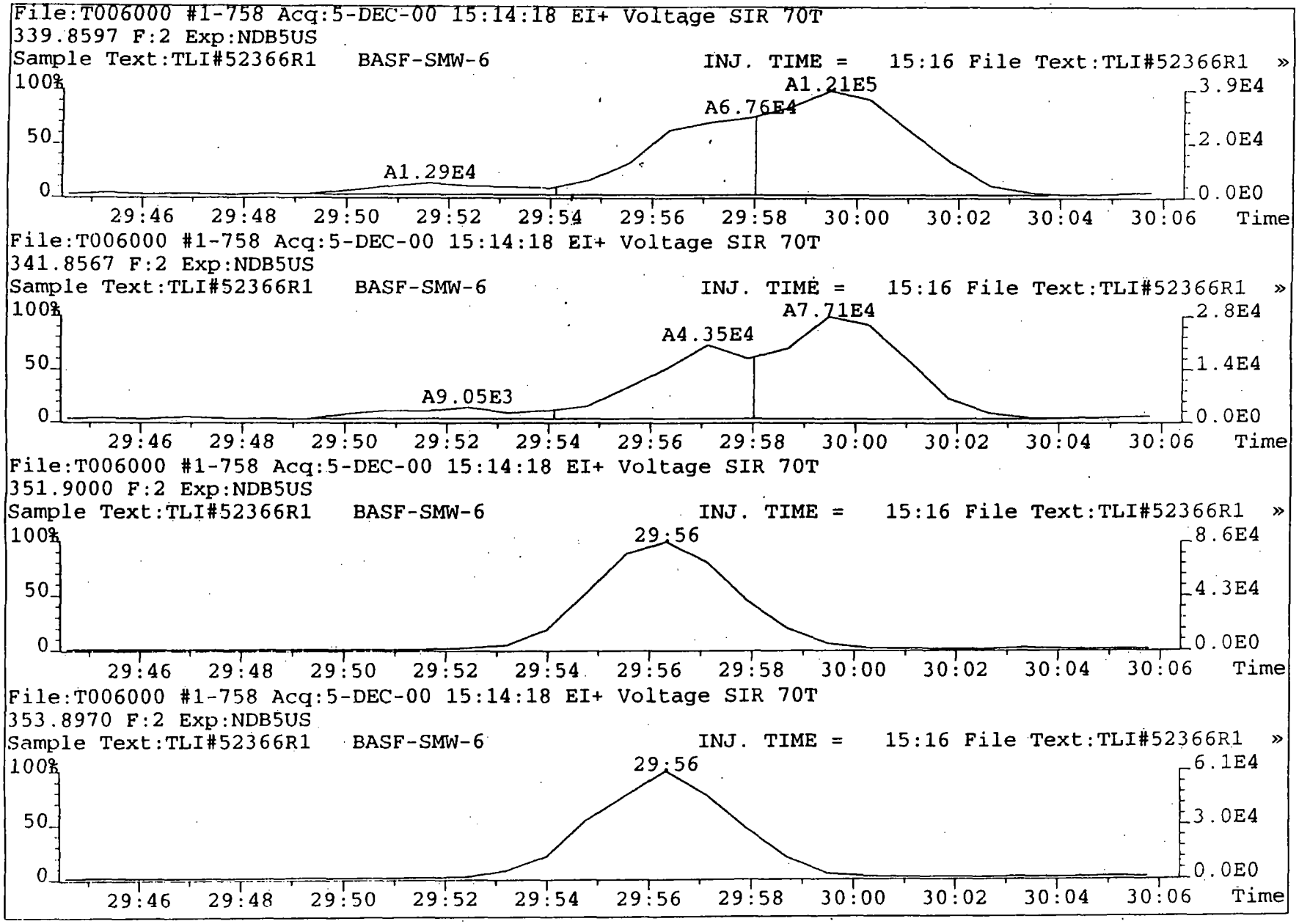
.036
.042
.078

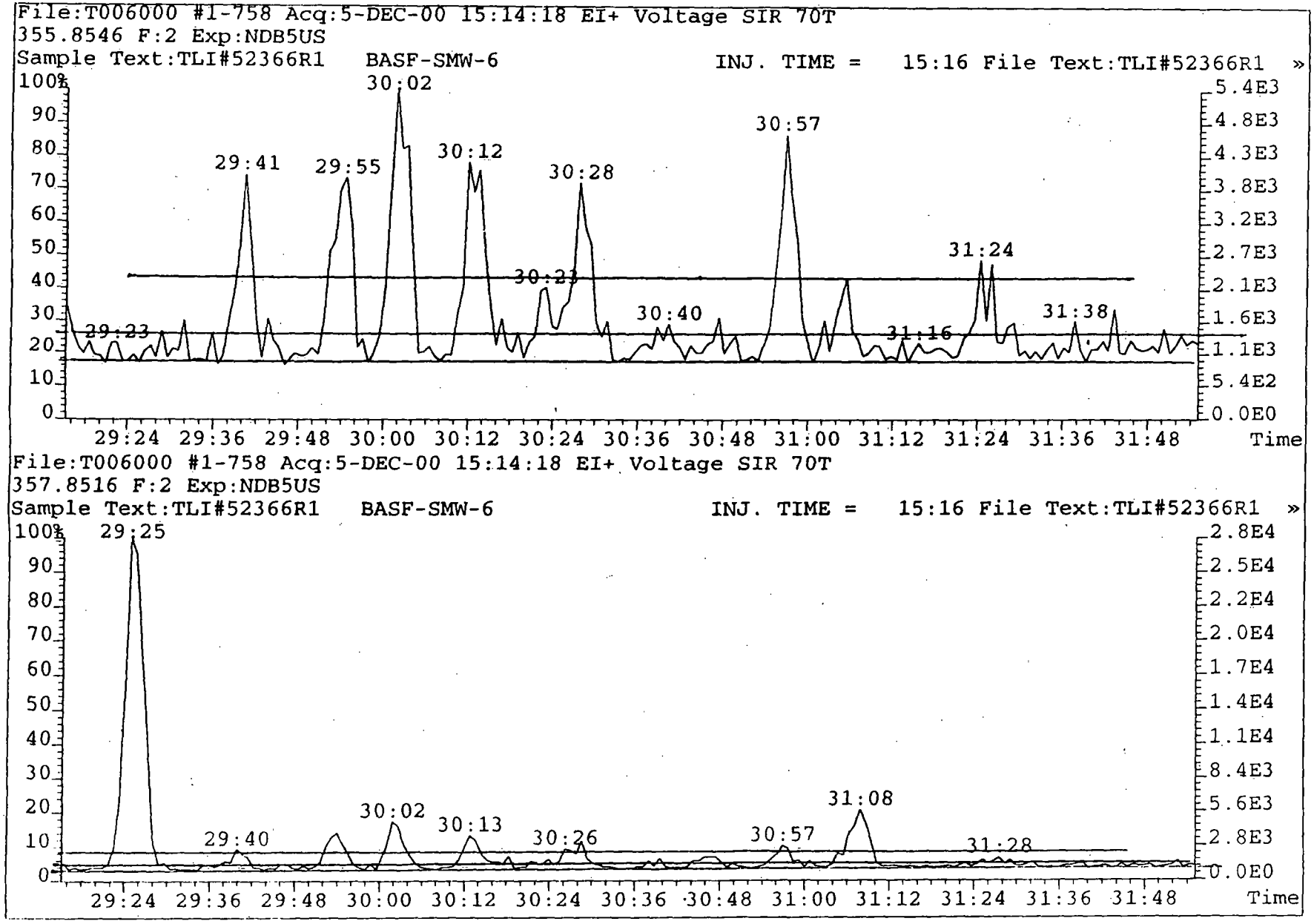
JCA
12/13/00

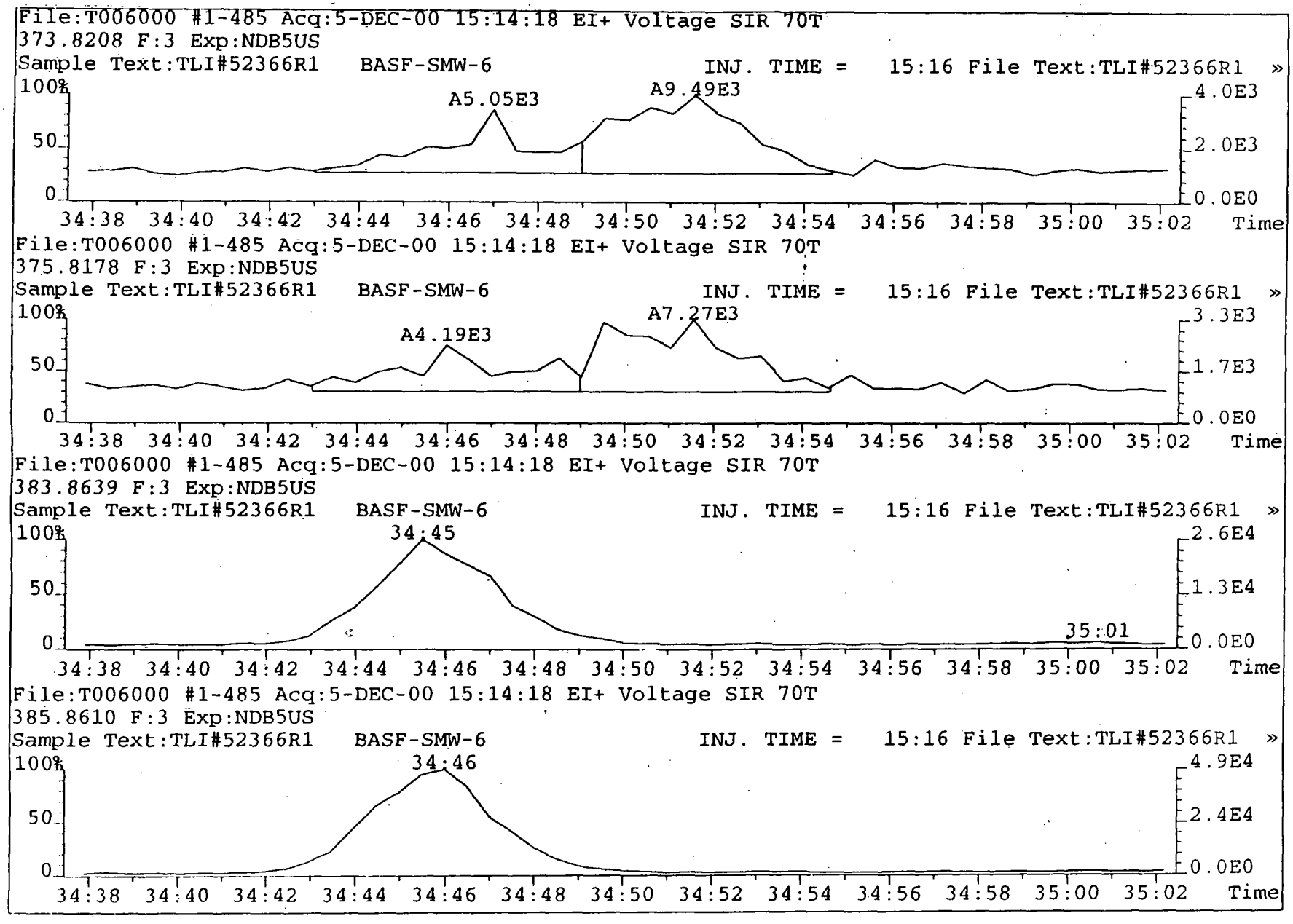

File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A7.22E3
4.5E3
2.2E3
0.0E0
24:00
25:00
26:00
27:00
28:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A1.31E4
2.1E4
1.1E4
0.0E0
24:00
25:00
26:00
27:00
28:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
331.9368 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
26:39
100%
50
0
1.1E6
5.6E5
0.0E0
24:00
25:00
26:00
27:00
28:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
333.9338 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
26:39
100%
50
0
1.4E6
6.9E5
0.0E0
24:00
25:00
26:00
27:00
28:00
Time

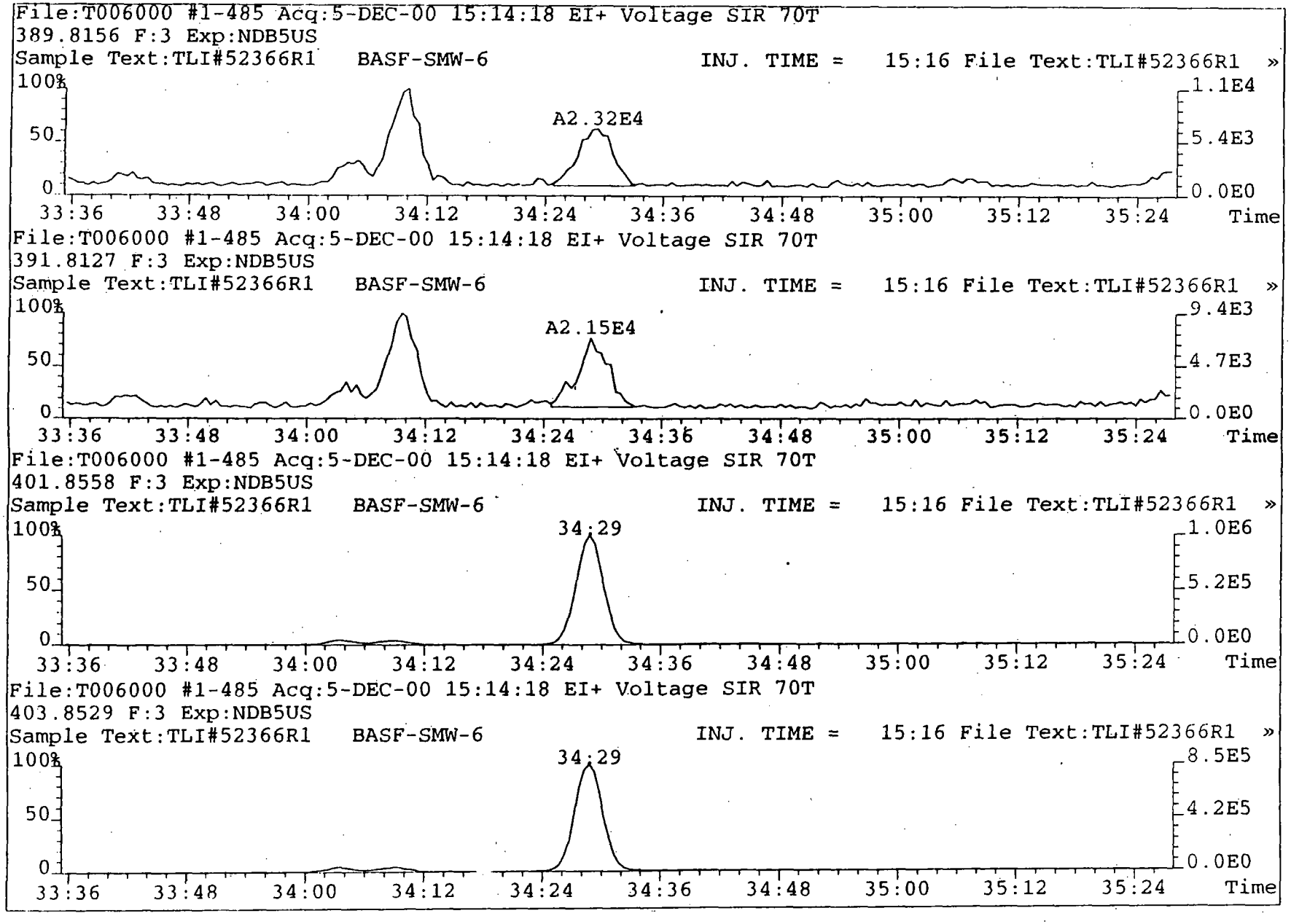

File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A4.01E3
4.5E3
2.2E3
0.0E0
26:00
27:00
28:00
29:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A4.64E3
6.8E3
3.4E3
0.0E0
26:00
27:00
28:00
29:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
331.9368 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
26:39
1.1E6
5.6E5
0.0E0
26:00
27:00
28:00
29:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
333.9338 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
26:39
1.4E6
6.9E5
0.0E0
26:00
27:00
28:00
29:00
Time


File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
339.8597 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A1.21E5
A1.25E4
A3.83E4
3.9E4
2.0E4
0.0E0
28:00
29:00
30:00
31:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
341.8567 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A7.71E4
A9.22E3
A2.52E4
2.8E4
1.4E4
0.0E0
28:00
29:00
30:00
31:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
351.9000 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
29:56
30:36
8.6E4
4.3E4
0.0E0
28:00
29:00
30:00
31:00
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
353.8970 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
29:56
30:36
6.1E4
3.0E4
0.0E0
28:00
29:00
30:00
31:00
Time


File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
339.8597 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A1.21E5
A6.76E4
A1.29E4
3.9E4
2.0E4
0.0E0
29:46 29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
341.8567 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A7.71E4
A4.35E4
A9.05E3
2.8E4
1.4E4
0.0E0
29:46 29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
351.9000 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
29:56
8.6E4
4.3E4
0.0E0
29:46 29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
353.8970 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
29:56
6.1E4
3.0E4
0.0E0
29:46 29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 Time


File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
355.8546 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
29:41
29:55
30:02
30:12
30:28
30:57
31:24
29:23
30:23
30:40
31:16
31:38
Time
File:T006000 #1-758 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
357.8516 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
29:25
29:40
30:02
30:13
30:26
30:57
31:08
31:28
Time


File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
373.8208 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
A5.05E3
A9.49E3
4.0E3
2.0E3
0.0E0
34:38 34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 35:02 Time
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
375.8178 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
A4.19E3
A7.27E3
3.3E3
1.7E3
0.0E0
34:38 34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 35:02 Time
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
383.8639 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
34:45
35:01
2.6E4
1.3E4
0.0E0
34:38 34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 35:02 Time
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
385.8610 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
34:46
4.9E4
2.4E4
0.0E0
34:38 34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 35:02 Time


File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
389.8156 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A2.32E4
1.1E4
5.4E3
0.0E0
33:36 33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 Time
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
391.8127 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
A2.15E4
9.4E3
4.7E3
0.0E0
33:36 33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 Time
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
401.8558 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
34:29
1.0E6
5.2E5
0.0E0
33:36 33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 Time
File:T006000 #1-485 Acq:5-DEC-00 15:14:18 EI+ Voltage SIR 70T
403.8529 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 15:16 File Text:TLI#52366R1
100%
50
0
34:29
8.5E5
4.2E5
0.0E0
33:36 33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 Time

TriMatrix, Inc.

TLI Project: **52366r1** Method 8290 TCDD/TCDF Analysis (DB-2
Client Sample: **BASF-SMW-6** Analysis File: **P004**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/2000**	Spike File:	**SPC2NF2**
TLI ID:	**274-99-2B**	Date Extracted:	**12/01/2000**	ICal:	**PF2O230**
		Date Analyzed:	**12/05/2000**	ConCal:	**P004403**
Sample Size:	**1.080 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005998**	% Lipid:	**n/a**
GC Column:	**DB-225**	Analyst:	**DFS**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flag
2,3,7,8-TCDF	748			0.80	23:49	

Internal Standard	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,7,8-TCDF	69.9	3.78	40%-130%	0.72	23:48	V

Recovery Standard	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,4-TCDD	0.80	22:36	

Data Reviewer: _____ 12/13/2000

C2NF_PSR v2.03, LAI

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:39 12/13

Initial ....Date...

Data Review By: JKA 12.13.00

Calculated Noise Height: 0.10

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of P004409B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

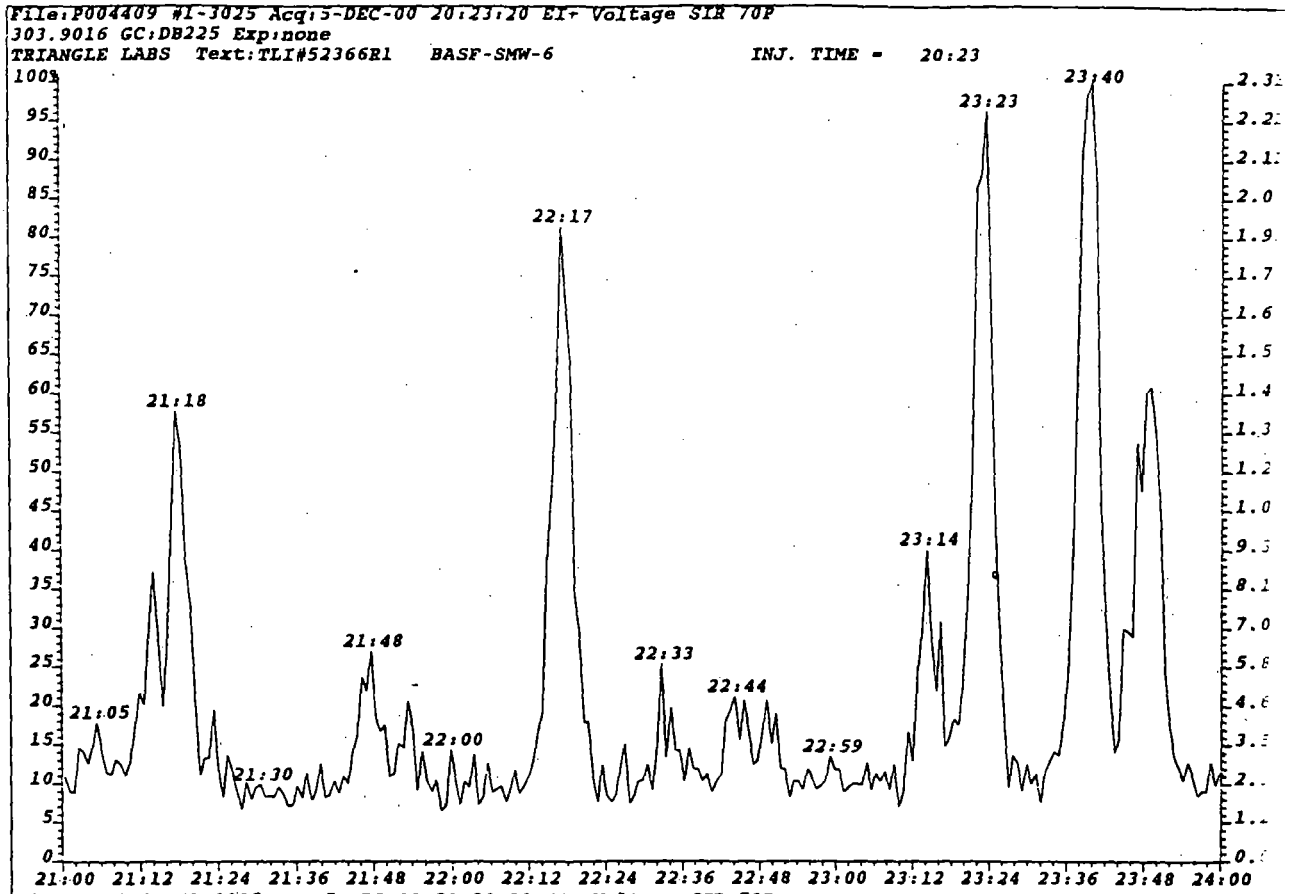
Compound/ M_I....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
TCDF						0.65-0.89				0.791-1.108			
304-306		DC	NL			Height	0.17	0.10	0.07				
		DC	SN	18:52	RO	3.50	0.07			0.976			
				19:03	RO	1.29	0.42	0.31	0.24	0.985			
				19:11	RO	2.59	0.78	1.14	0.44	0.992			
	N	DC	SN	19:23	RO	0.53	0.41			1.003			
		DC	SN	19:27	RO	2.00	0.21			1.006			
		DC	SN	19:50	RO	2.42	0.21			1.026			
		DC	SN	20:01	RO	0.33	0.90			1.035			
				20:10	RO	0.59	1.61	0.70	1.19	1.043			
		DC	SN	20:19	RO	0.16	0.28			1.051			
				20:33	RO	3.05	2.32	3.99	1.31	1.063			
				20:45	RO	1.39	0.81	0.64	0.46	1.073			
				20:56		0.66	4.58	1.82	2.76	1.083			
				21:05		0.66	0.93	0.37	0.56	1.091			
				21:14	RO	0.56	3.59	1.56	2.81	1.098			
				21:18		0.67	8.68	3.49	5.19	1.102			
				21:23		0.77	1.13	0.49	0.64	1.106			
		DC	WH	21:48	RO	1.09	2.57			1.123			
		DC	WH	21:53	RO	1.39	0.90			1.132			
		DC	WH	22:03	RO	1.40	0.18			1.141			
		DC	WH	22:05	RO	1.38	0.14			1.142			
		DC	WH	22:17		0.80	14.56			1.153			
		DC	WH	22:33		0.81	2.04			1.166			
		DC	WH	22:44	RO	7.07	0.27			1.176			
		DC	WH	22:49	RO	1.11	1.27			1.180			
		DC	WH	23:14		0.67	5.64			1.202			
		DC	WH	23:23		0.80	17.92			1.209			
		DC	WH	23:40		0.76	20.75			1.224			
	KNM			23:49		0.80	13.44	5.98	7.46	1.232	2378-TCDF		AN
		DC	WH	24:03		0.85	1.59			1.244			
		DC	WH	24:08	RO	2.21	0.25			1.248			
		DC	WH	24:24	RO	0.49	0.53			1.262			
		DC	WH	24:29		0.80	1.42			1.266			
		DC	WH	24:42		0.79	7.53			1.278			
		DC	WH	25:08		0.70	0.17			1.300			
		DC	WH	25:19		0.82	5.64			1.309			
		DC	WH	25:32	RO	0.40	0.39			1.321			
		DC	WH	25:48	RO	0.41	0.34			1.334			
		DC	WH	25:54	RO	1.20	0.18			1.340			
		DC	WH	26:09	RO	0.46	0.55			1.353			
		DC	WH	26:17	RO	1.22	0.73			1.359			
		DC	WH	26:29		0.75	24.14			1.370			
		DC	WH	26:44	RO	0.44	0.18			1.383			

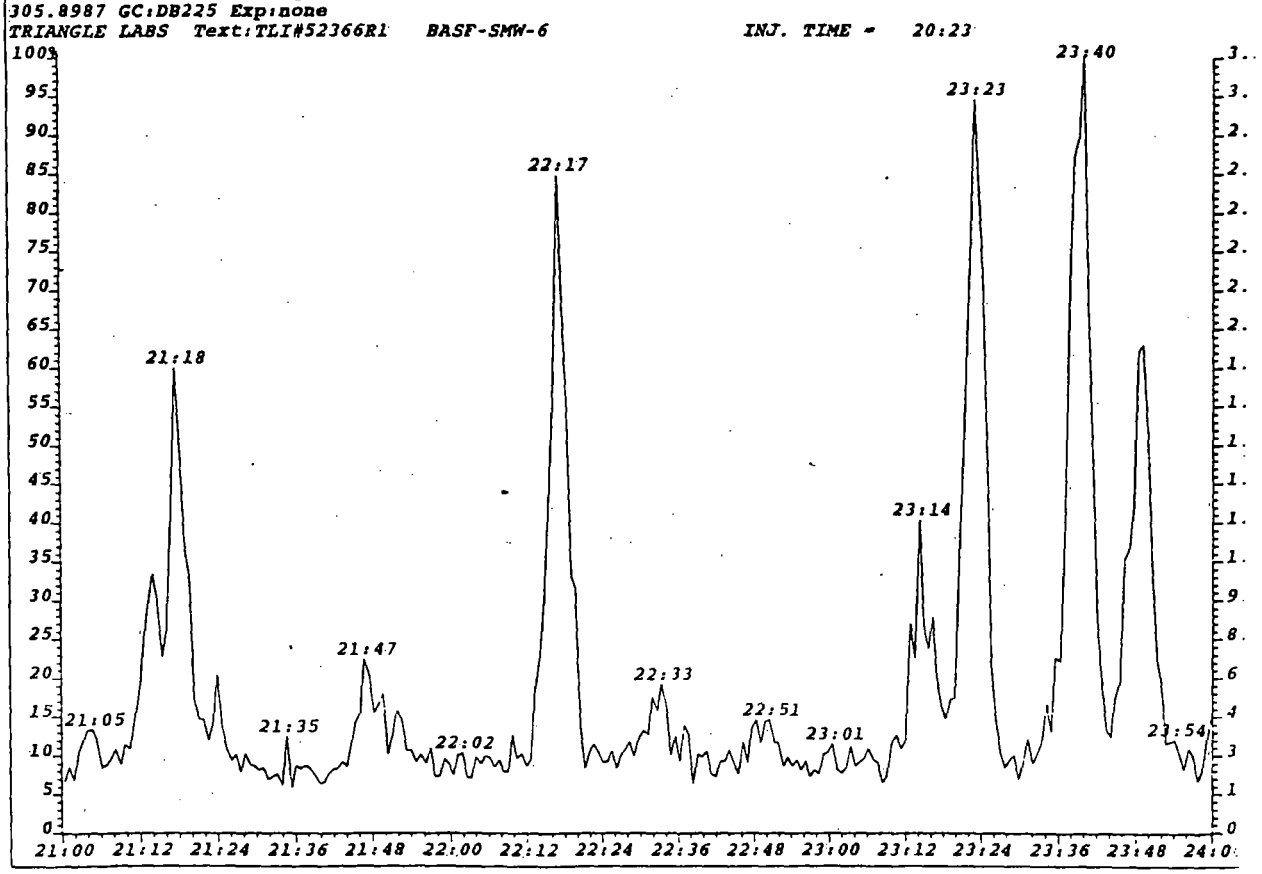
Compound/ M_2....	QC	Log	Cmit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
304-306				11 Peaks				38.29						
13C12-TCDF					0.65-0.89						0.958-1.042			
316-318		DC	NL			Height		0.47	0.18	0.29				
					18:50	RO	1.19	1.70	1.14	0.96	0.974			
					18:57	RO	1.09	0.58	0.36	0.33	0.980			
	DN	D	SN		19:20		0.78	177.85			1.000			
					19:52	RO	0.62	1.79	0.78	1.26	1.028			
					20:08	RO	1.17	1.66	1.10	0.94	1.041			
		DC	WH		20:28		0.71	0.58			1.059			
		DC	WH		20:37	RO	0.57	0.76			1.066			
		DC	WH		20:43	RO	0.32	0.74			1.072			
		DC	WH		21:19	RO	2.72	0.57			1.103			
		DC	WH		21:35		0.68	1.09			1.116			
		DC	WH		21:49	RO	0.21	0.28			1.128			
		DC	WH		22:10	RO	1.45	0.51			1.147			
		DC	WH		22:21	RO	0.53	0.69			1.156			
		DC	WH		22:28	RO	0.37	0.60			1.162			
		DC	WH		23:03		0.69	1.05			1.192			
		DC	WH		23:18	RO	0.42	0.83			1.205			
		DC	WH		23:23	RO	1.21	0.50			1.209			
	KN				23:48		0.72	35.13	14.67	20.46	1.231	13C12-2378-TCDF	ISO	
							Height	8.29	3.64	4.65				
		DC	WH		24:34	RO	1.08	0.35			1.271			
		DC	WH		25:04	RO	0.16	0.53			1.297			
		DC	WH		25:44	RO	1.41	0.81			1.331			
		DC	WH		26:01	RO	1.03	1.42			1.346			
		DC	WH		26:08	RO	1.57	0.53			1.352			
		DC	WH		26:17	RO	1.28	1.19			1.359			
		DC	WH		26:20	RO	1.67	0.27			1.362			
		DC	WH		26:35	RO	1.24	1.19			1.375			
316-318				5 Peaks				40.86						
---------- Above: TCDF / TCDD Follows ----------														
13C12-TCDD					0.65-0.89						0.910-1.090			
332-334		DC	NL			Height		0.35	0.23	0.12				
					20:43	RO	1.27	1.33	0.95	0.75	0.917			
					21:05	RO	0.90	1.59	0.81	0.90	0.933			
					21:15	RO	2.27	0.80	1.02	0.45	0.940			
		DC	SN		21:23	RO	1.67	0.42			0.946			
		DC	SN		21:34	RO	1.88	0.28			0.954			
					21:41	RO	2.44	0.28	0.39	0.16	0.959			
					22:05	RO	0.21	0.30	0.13	0.63	0.977			
	N				22:16		0.86	31.35	14.49	16.86	0.985	13C12-2378-TCDD	IS1	
							Height	7.74	3.32	4.42				
					22:25	RO	0.23	0.28	0.12	0.53	0.992			
	N				22:36		0.80	594.35	264.91	329.44	1.000	13C12-1234-TCDD	RS1	
					23:17		0.68	1.63	0.66	0.97	1.030			
					23:40		0.65	1.63	0.64	0.99	1.047			
					24:11		0.68	1.60	0.65	0.95	1.070			
		DC	WH		25:01	RO	1.18	0.90			1.107			

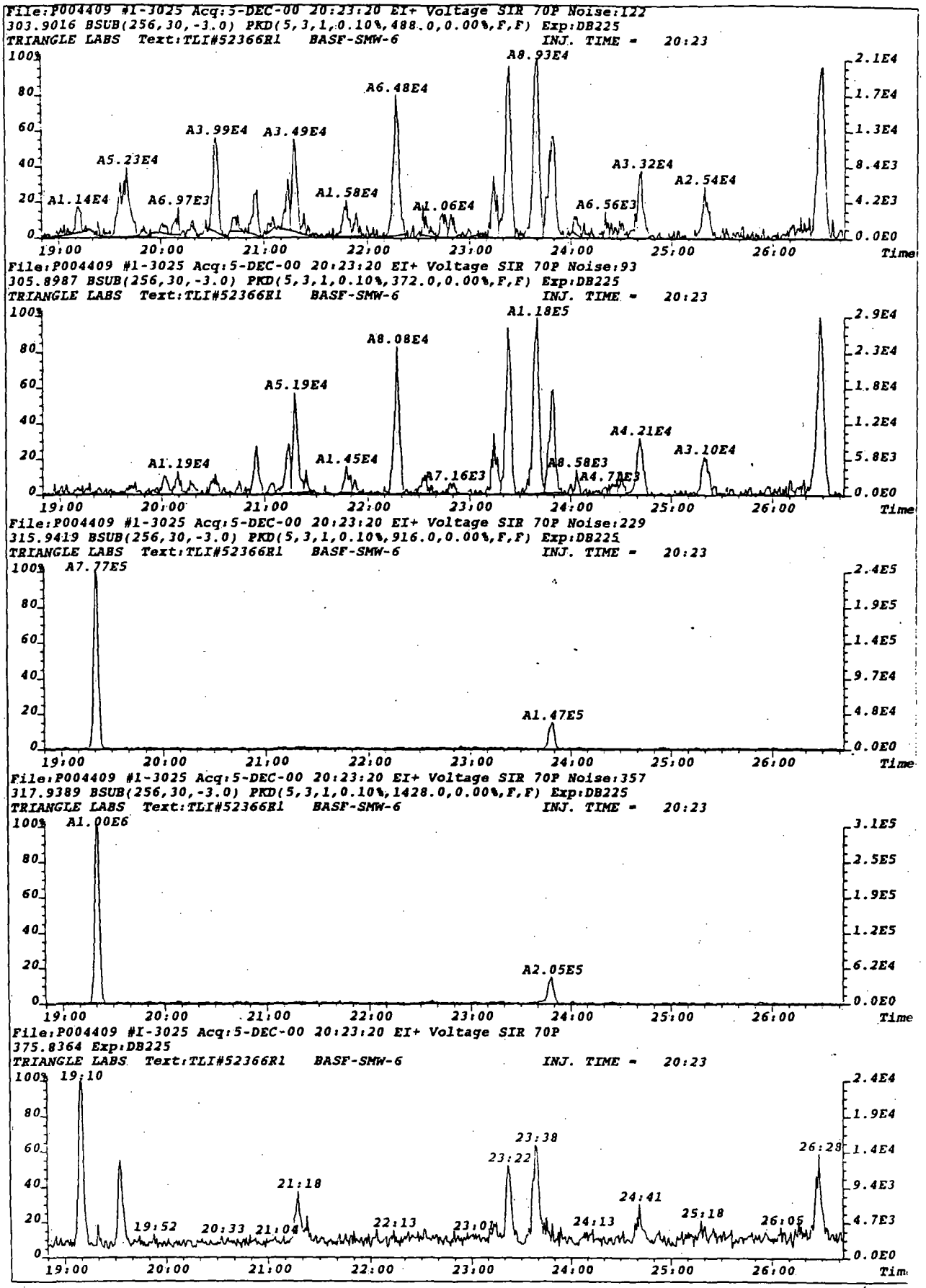
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
	DC		WH	25:11	RO	0.90	0.87			1.114			
	DC		WH	25:17	RO	1.73	0.78			1.119			
	DC		WH	25:35	RO	5.41	0.30			1.132			
	DC		WH	25:41	RO	2.11	1.35			1.136			
	DC		WH	25:50	RO	2.27	0.73			1.143			
332-334			11 Peaks				635.14						

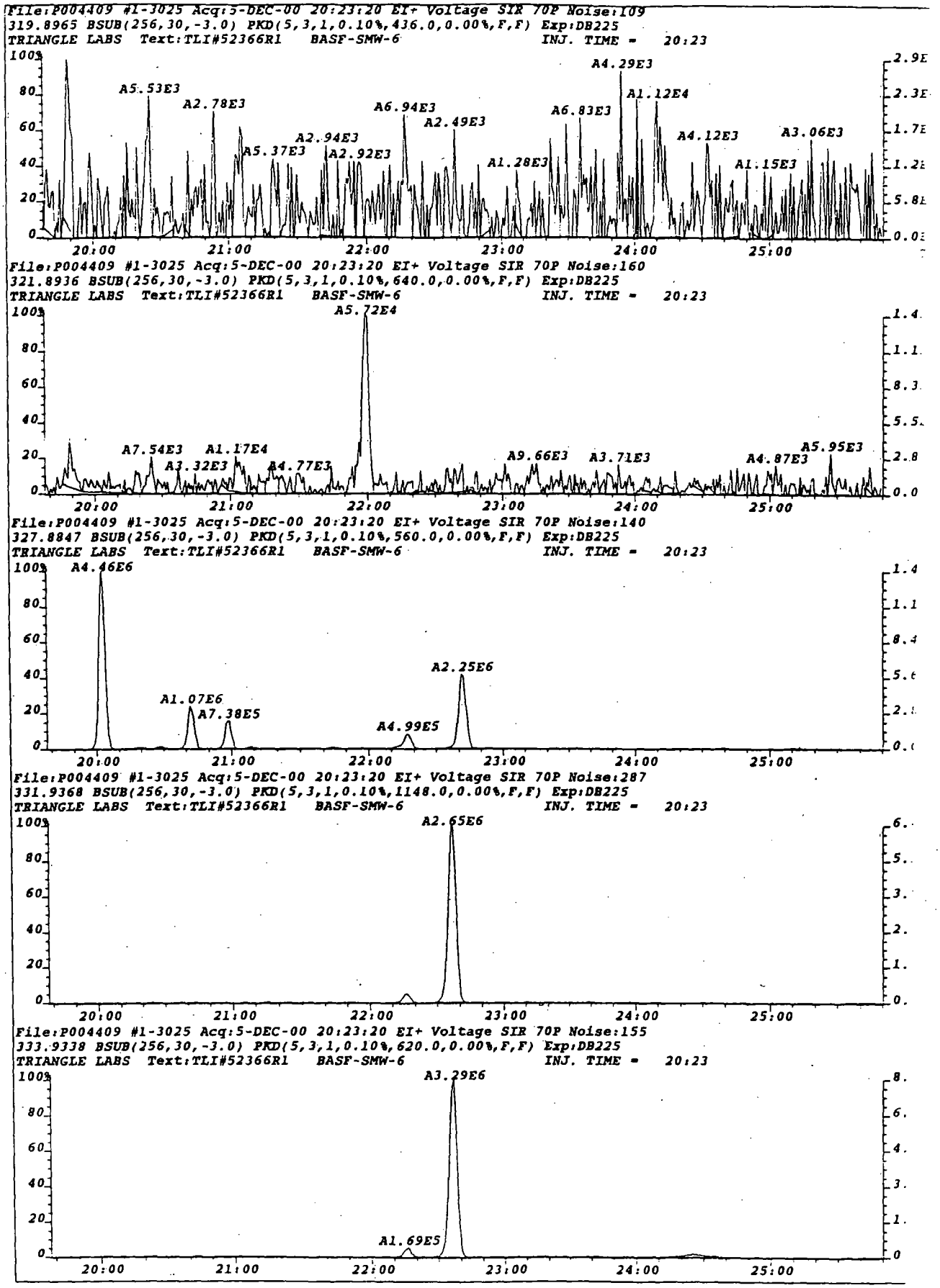
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

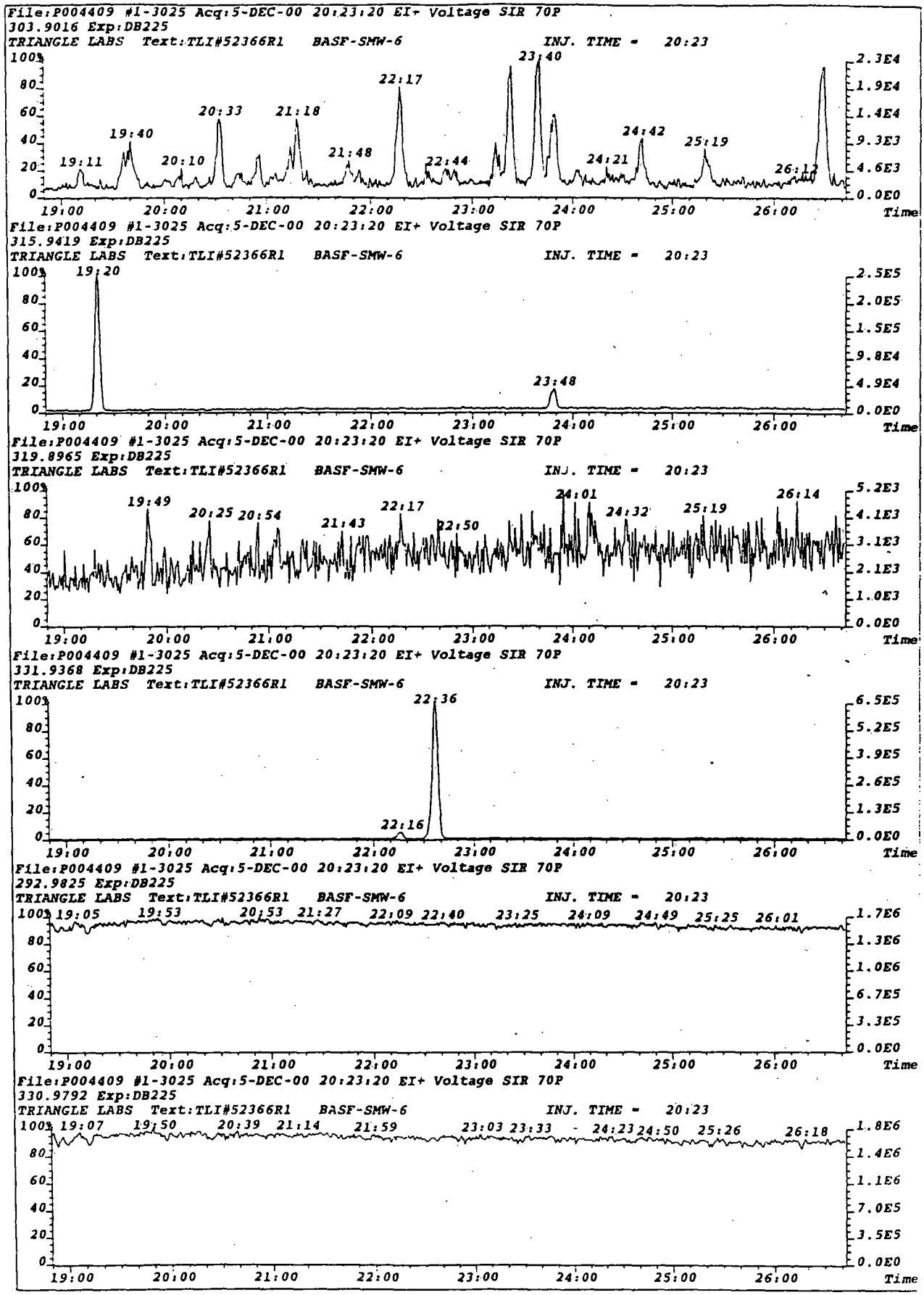
*** End of Report ***

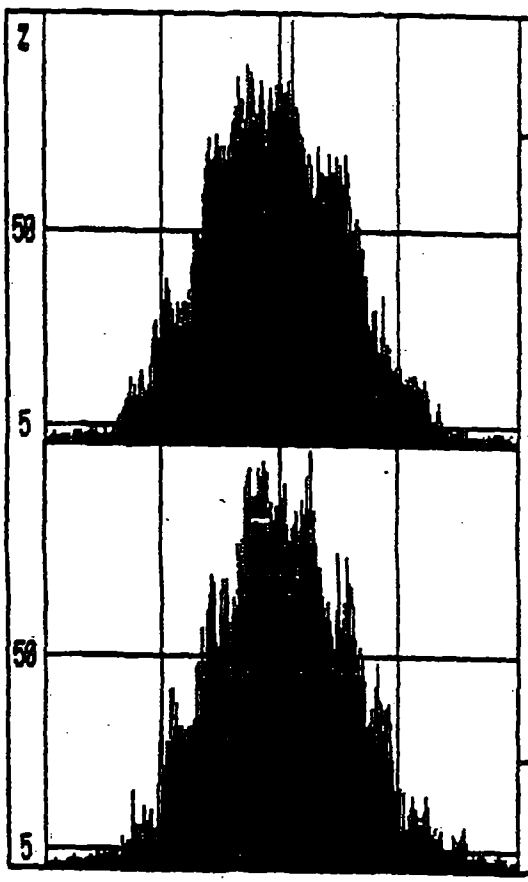

File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
303.9016 GC:DB225 Exp:none
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6
INJ. TIME = 20:23
21:05
21:18
21:30
21:48
22:00
22:17
22:33
22:44
22:59
23:14
23:23
23:40
21:00 21:12 21:24 21:36 21:48 22:00 22:12 22:24 22:36 22:48 23:00 23:12 23:24 23:36 23:48 24:00


File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
305.8987 GC:DB225 Exp:none
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6
INJ. TIME = 20:23
21:05
21:18
21:35
21:47
22:02
22:17
22:33
22:51
23:01
23:14
23:23
23:40
23:54
21:00 21:12 21:24 21:36 21:48 22:00 22:12 22:24 22:36 22:48 23:00 23:12 23:24 23:36 23:48 24:0


File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P Noise:122
303.9016 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,488.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
A1.14E4 A5.23E4 A6.97E3 A3.99E4 A3.49E4 A1.58E4 A6.48E4 A1.06E4 A8.93E4 A6.56E3 A3.32E4 A2.54E4
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P Noise:93
305.8987 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,372.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
A1.19E4 A5.19E4 A1.45E4 A8.08E4 A7.16E3 A1.18E5 A8.58E3 A4.71E3 A4.21E4 A3.10E4
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P Noise:229
315.9419 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,916.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
A7.77E5 A1.47E5
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P Noise:357
317.9389 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,1428.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
A1.00E6 A2.05E5
File:P004409 #I-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
375.8364 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
19:10 19:52 20:33 21:04 21:18 22:13 23:07 23:22 23:38 24:13 24:41 25:18 26:05 26:28
Time


File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P Noise:109
319.8965 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,436.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
A5.53E3
A2.78E3
A5.37E3
A2.94E3
A2.92E3
A6.94E3
A2.49E3
A1.28E3
A6.83E3
A4.29E3
A1.12E4
A4.12E3
A3.06E3
A1.15E3
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P Noise:160
321.8936 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,640.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
A5.72E4
A7.54E3
A1.17E4
A3.32E3
A4.77E3
A9.66E3
A3.71E3
A4.87E3
A5.95E3
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P Noise:140
327.8847 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,560.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
A4.46E6
A2.25E6
A1.07E6
A7.38E5
A4.99E5
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P Noise:287
331.9368 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,1148.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
A2.65E6
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P Noise:155
333.9338 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,620.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
A3.29E6
A1.69E5
20:00
21:00
22:00
23:00
24:00
25:00


File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
303.9016 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
19:11 19:40 20:10 20:33 21:18 21:48 22:17 22:44 23:40 24:21 24:42 25:19 26:12
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
315.9419 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
19:20 23:48
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
319.8965 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
19:49 20:25 20:54 21:43 22:17 22:50 24:01 24:32 25:19 26:14
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
331.9368 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
22:16 22:36
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
292.9825 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
19:05 19:53 20:53 21:27 22:09 22:40 23:25 24:09 24:49 25:25 26:01
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
330.9792 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23
19:07 19:50 20:39 21:14 21:59 23:03 23:33 24:23 24:50 25:26 26:18
19:00 20:00 21:00 22:00 23:00 24:00 25:00 26:00 Time

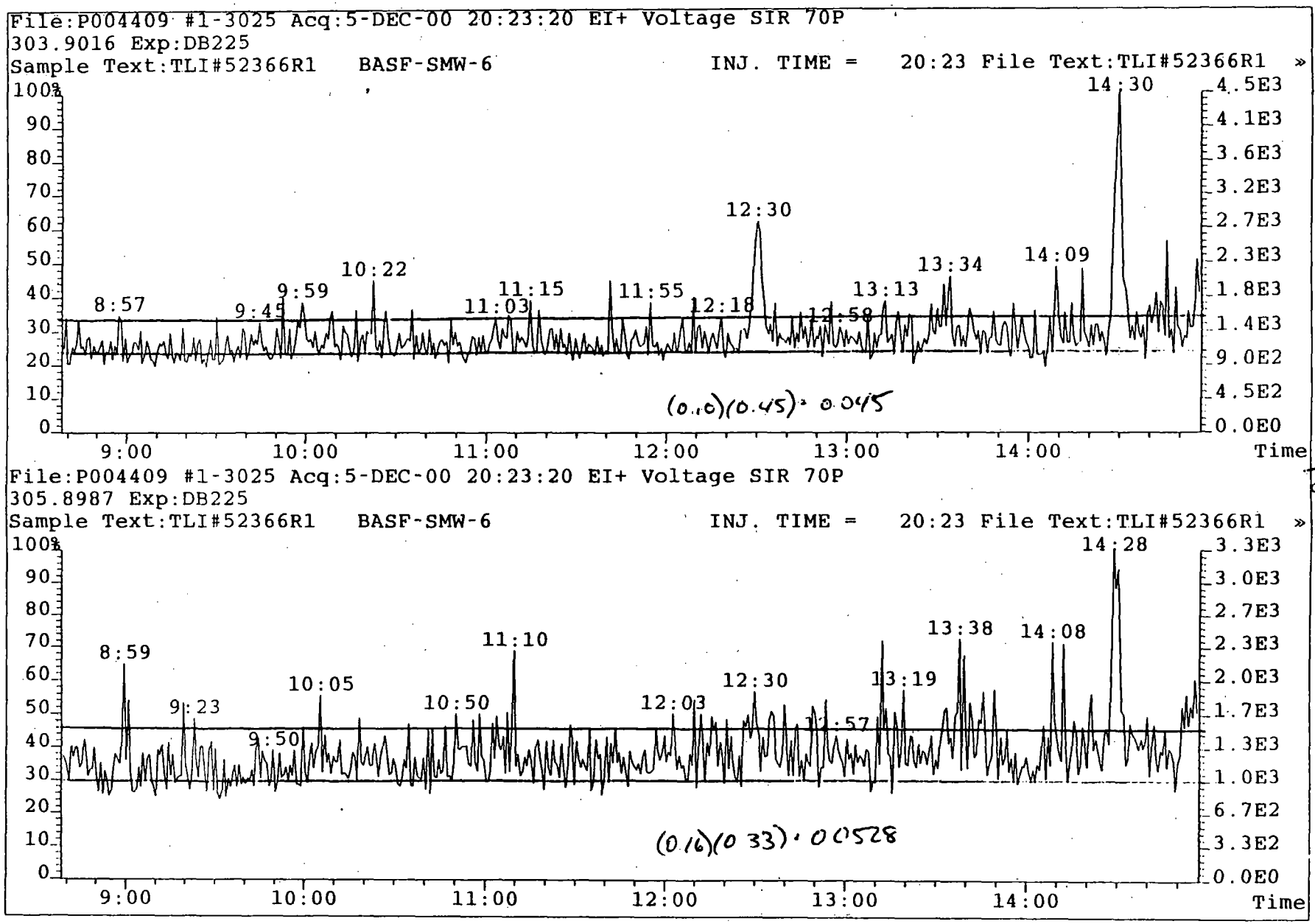


Channel I 330.9792 Peak top
Height .52 volts Span 200 ppm

System file name	UB225
Data file name	A:P005002
Resolution	10000
Group number	1
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 380.9761

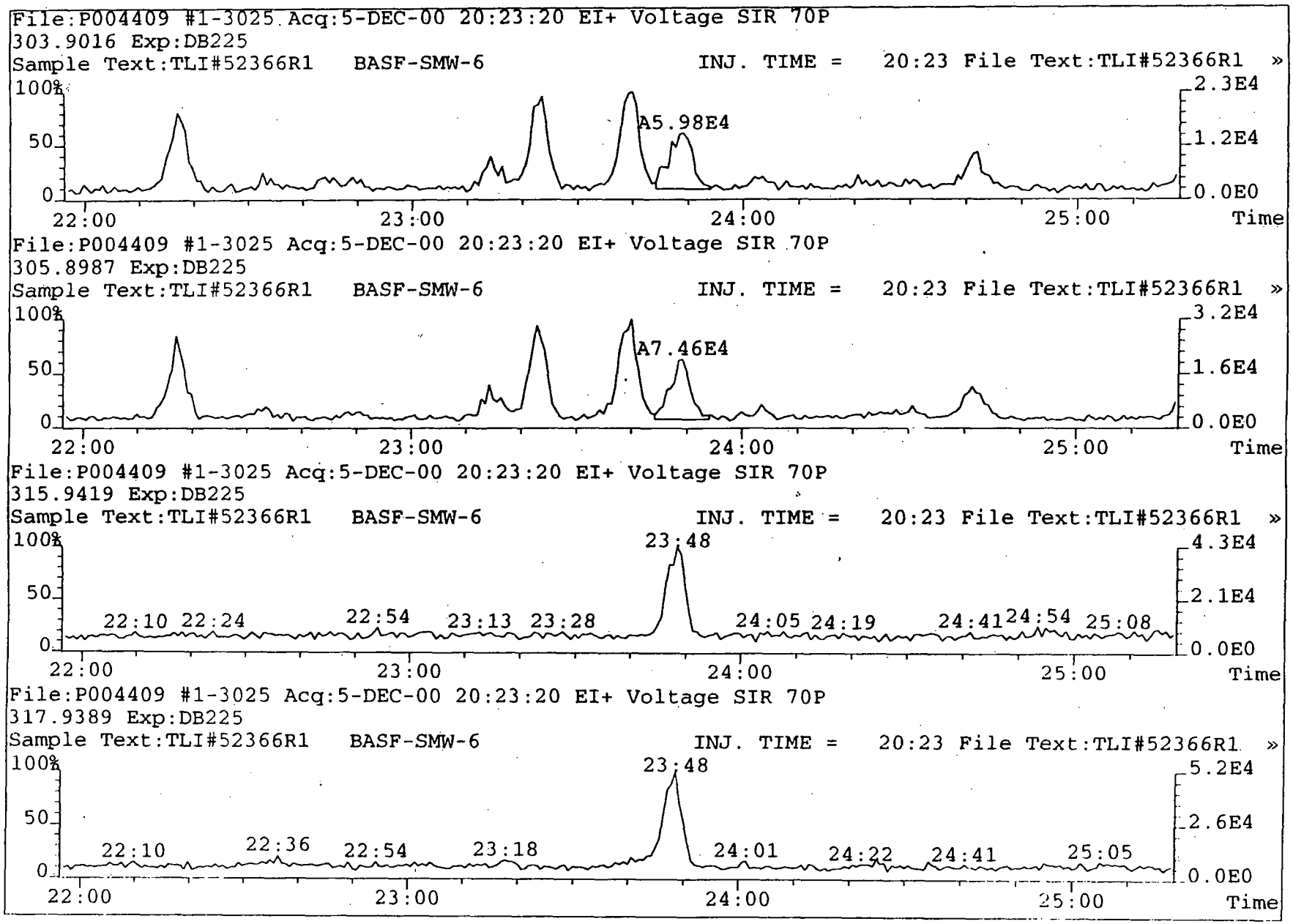
A	292.9825	J	330.9792
B	303.9816	K	331.9368
C	305.8987	L	333.9338
D	315.9419	M	375.8364
E	317.9389		
F	319.8965		
G	321.8936		
H	327.8847		
I	330.9792		

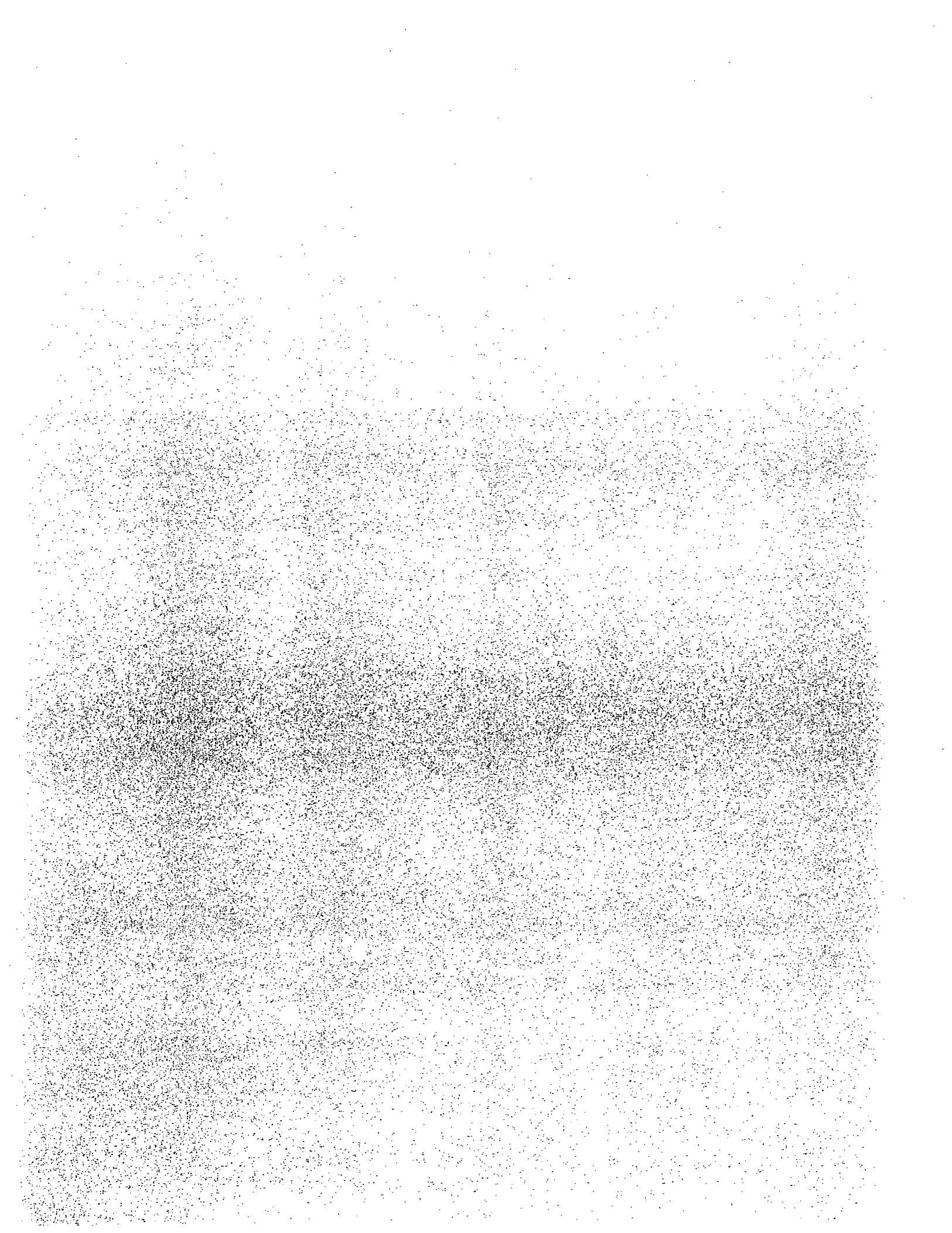
Ref. mass 380.9761 Peak top
Height .22 volts Span 200 ppm



0.0450
0.0528
0.0978

DS
14/100


File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
303.9016 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23 File Text:TLI#52366R1
100%
50
0
A5.98E4
2.3E4
1.2E4
0.0E0
22:00
23:00
24:00
25:00
Time
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
305.8987 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23 File Text:TLI#52366R1
100%
50
0
A7.46E4
3.2E4
1.6E4
0.0E0
22:00
23:00
24:00
25:00
Time
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
315.9419 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23 File Text:TLI#52366R1
100%
50
0
23:48
22:10 22:24 22:54 23:13 23:28 24:05 24:19 24:41 24:54 25:08
4.3E4
2.1E4
0.0E0
22:00
23:00
24:00
25:00
Time
File:P004409 #1-3025 Acq:5-DEC-00 20:23:20 EI+ Voltage SIR 70P
317.9389 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-6 INJ. TIME = 20:23 File Text:TLI#52366R1
100%
50
0
23:48
22:10 22:36 22:54 23:18 24:01 24:22 24:41 25:05
5.2E4
2.6E4
0.0E0
22:00
23:00
24:00
25:00
Time



TriMatrix, Inc.

TLI Project: 52366r1 — Method 8290 PCDD/PCDF Analysis
Client Sample: BASF-DUP1 — Analysis File: T006C

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/2000	Spike File:	SPMIT32S
TLI ID:	274-99-4B	Date Extracted:	12/01/2000	ICal:	TF57140
		Date Analyzed:	12/05/2000	ConCal:	T005996
Sample Size:	1.060 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005998	% Lipid:	n/a
GC Column:	DB-5	Analyst:	BWL	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flag
2,3,7,8-TCDD	62.7			0.73	26:56	
1,2,3,7,8-PeCDD	115			1.48	31:03	
1,2,3,4,7,8-HxCDD	107			1.19	34:08	
1,2,3,6,7,8-HxCDD	2390			1.23	34:14	
1,2,3,7,8,9-HxCDD	888			1.22	34:34	
1,2,3,4,6,7,8-HpCDD	45150			1.03	37:41	E
1,2,3,4,6,7,8,9-OCDD	229590			0.86	41:37	E
2,3,7,8-TCDF	530			0.84	26:16	
1,2,3,7,8-PeCDF	EMPC		858			X
2,3,4,7,8-PeCDF	184			1.61	30:43	
1,2,3,4,7,8-HxCDF	569			1.26	33:26	
1,2,3,6,7,8-HxCDF	151			1.30	33:32	
2,3,4,6,7,8-HxCDF	111			1.27	34:02	
1,2,3,7,8,9-HxCDF	12.1			1.14	34:50	J
1,2,3,4,6,7,8-HpCDF	782			1.05	36:34	
1,2,3,4,7,8,9-HpCDF	101			1.11	38:13	
1,2,3,4,6,7,8,9-OCDF	585			0.89	41:50	

Totals	Conc. (pg/L)	Number	DL	EMPC	Flag
Total TCDD	2820	9		2850	
Total PeCDD	717	7		1220	
Total HxCDD	20210	7			
Total HpCDD	76610	2			E
Total TCDF	2370	13		5270	X
Total PeCDF	1160	8		2770	X
Total HxCDF	2000	12		2490	X
Total HpCDF	1850	3		1950	

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Printed: 17:40 12/13

TLI Project: **52366r1** Method 8290 PCDD/PCDF Analysis
Client Sample: **BASF-DUP1** Analysis File: **T006C**

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,7,8-TCDF	1650	87.3	40%-130%	0.75	26:15	
$^{13}C_{12}$-2,3,7,8-TCDD	1320	70.1	40%-130%	0.80	26:55	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1100	58.1	40%-130%	1.47	30:03	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	1220	64.6	40%-130%	1.49	31:02	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1280	67.7	40%-130%	0.51	33:31	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1300	69.0	40%-130%	1.22	34:13	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1170	61.7	25%-130%	0.44	36:33	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1510	80.3	25%-130%	1.20	37:40	
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	2250	59.6	25%-130%	1.00	41:36	

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1100	58.3	40%-130%	1.52	30:42	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1340	71.2	40%-130%	0.51	33:25	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1390	73.8	40%-130%	1.23	34:08	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1290	68.5	25%-130%	0.42	38:12	

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flag
$^{37}Cl_4$-2,3,7,8-TCDD	193	102	40%-130%	26:56	

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1530	81.1	40%-130%	0.51	34:50	
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1450	77.0	40%-130%	0.51	34:01	

Recovery Standards	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,4-TCDD	0.81	26:45	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.22	34:33	

Data Reviewer: JCA 12/13/2000

MIT3_PSR v1.00. L.A.

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TriMatrix, Inc.

TLI Project: 52366r1 — Toxicity Equivalents Re
Client Sample: BASF-DUP1 — Analysis File: T006

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/00	Spike File:	SPMIT32
TLI ID:	274-99-4B	Date Extracted:	12/01/00	ICal:	TF57140
		Date Analyzed:	12/05/00	ConCal:	T005996
Sample Size:	1.060 L	Dilution Factor:	1	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005998	% Lipid:	n/a
GC Column:	DB-5	Analyst:	BWL	% Solids:	n/a

Analytes	Conc. (pg/L)		TEF		Equivalent
2,3,7,8-TCDD	62.7	x	1.	=	62.7
1,2,3,7,8-PeCDD	115	x	0.5	=	57.5
1,2,3,4,7,8-HxCDD	107	x	0.1	=	10.7
1,2,3,6,7,8-HxCDD	2390	x	0.1	=	239.0
1,2,3,7,8,9-HxCDD	888	x	0.1	=	88.8
1,2,3,4,6,7,8-HpCDD	45150	x	0.01	=	451.50
1,2,3,4,6,7,8,9-OCDD	229590	x	0.001	=	229.590
TOTAL PCDD					1139.8
2,3,7,8-TCDF	327	x	0.1	=	32.7
1,2,3,7,8-PeCDF	[858]	x	0.05	=	42.9
2,3,4,7,8-PeCDF	184	x	0.5	=	92.0
1,2,3,4,7,8-HxCDF	569	x	0.1	=	56.9
1,2,3,6,7,8-HxCDF	151	x	0.1	=	15.1
2,3,4,6,7,8-HxCDF	111	x	0.1	=	11.1
1,2,3,7,8,9-HxCDF	12.1	x	0.1	=	1.21
1,2,3,4,6,7,8-HpCDF	782	x	0.01	=	7.82
1,2,3,4,7,8,9-HpCDF	101	x	0.01	=	1.01
1,2,3,4,6,7,8,9-OCDF	585	x	0.001	=	0.585
TOTAL PCDF					261.3

Total EPA TEFs, 1989a: 1401.1 pg/L

[...] indicates that the value is that of an EMPC.

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Printed: 17:44 1

Initial ....Date...

Data Review By: JCA 12/13/00

Calculated Noise Height: 0.30

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T006001B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_I....	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel RT	Compound Name	ID	Flags
TCDF							0.65-0.89				0.880-1.070			
304-306		DC	NL				Height	0.49	0.28	0.21				
					23:24		0.69	2.20	0.90	1.30	0.891			J
					23:40		0.76	72.97	31.61	41.36	0.902			
					23:59		0.79	27.39	12.10	15.29	0.914			
					24:22		0.83	66.66	30.18	36.48	0.928			
					24:40		0.83	93.57	42.39	51.18	0.940			
					25:00		0.83	77.64	35.25	42.39	0.952			
					25:17		0.81	45.32	20.26	25.06	0.963			
					25:34		0.84	51.98	23.69	28.29	0.974			
	X		X		25:45	RO	0.87	90.52	42.23	48.29	0.981			
					25:52		0.81	222.20	99.58	122.62	0.985	1278-TCDF		AN
					26:04		0.86	25.27	11.70	13.57	0.993			
					26:16		0.84	222.36	101.77	120.59	1.001	2378-TCDF		AN
					26:40		0.83	47.69	21.63	26.06	1.016			
	X		X		26:59	RO	0.81	194.82	87.39	107.43	1.028			
	X		X		27:14	RO	0.79	428.70	189.75	238.95	1.037			
	X		X		27:34	RO	0.82	490.20	220.17	270.03	1.050			
					27:47	RO	2.21	12.76	15.90	7.21	1.058			
					27:58		0.85	43.94	20.17	23.77	1.065			
		DC	WH		28:09		0.82	269.32			1.072			
304-306			18	Peaks				2,216.19						
13C12-TCDF							0.65-0.89				0.962-1.038			
316-318		DC	NL				Height	0.58	0.24	0.34				
		DC	WL		22:54		0.75	48.96			0.872			
		DC	WL		24:14	RO	1.01	5.12			0.923			
		DC	WL		25:07	RO	0.52	6.25			0.957			
					25:53	RO	0.59	3.84	1.67	2.81	0.986			
					26:15		0.75	773.89	331.90	441.99	1.000	13C12-2378-TCDF		ISO
							Height	211.12	90.28	120.84				
					26:40		0.82	5.23	2.36	2.87	1.016			
					26:50		0.66	8.38	3.32	5.06	1.022			
					27:05	RO	0.10	2.00	0.87	8.72	1.032			
		DC	WH		27:52	RO	0.10	0.94			1.062			
316-318			5	Peaks				793.34						

---------- Above: TCDF / TCDD Follows ----------

TCDD							0.65-0.89				0.904-1.042			
320-322		DC	NL				Height	0.17	0.09	0.08				
					24:32		0.78	407.40	178.19	229.21	0.911	1368-TCDD		AN
					24:54		0.76	195.55	84.42	111.13	0.925	1379-TCDD		AN
	M				25:09	RO	0.02	6.55	2.85	187.00	0.934			

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Compound/ M_C....	QC	Log	Cmit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht. Peak1	Area/Ht. Peak2	Rel.RT	Compound Name..	ID..	Flag
A					25:48		0.76	26.70	11.50	15.20	0.959			
					26:03		0.86	7.03	3.26	3.77	0.968			
					26:08		0.74	3.84	1.63	2.21	0.971			
M					26:26		0.82	4.88	2.20	2.68	0.982			
					26:44		0.80	11.94	5.30	6.64	0.993			
					26:56		0.73	15.50	6.52	8.98	1.001	2378-TCDD	AN	
A					27:15		0.77	6.55	2.84	3.71	1.012			
	DC	SN		RO	27:27		1.26	0.41			1.020			
	DC	SN		RO	27:45		0.63	1.10			1.031			
	DC	SN			27:52		0.85	1.63			1.035			
	DC	WH			28:16		0.78	1.05			1.050			
320-322			10	Peaks				685.94						
37Cl-TCDD										0.925-1.075				
328	DC	NL				Height		0.22	0.22					
	DC	WL			24:46			14.96			0.920			
	DC	WL			24:52			22.88			0.924			
					25:10			26.91	26.91		0.935			
					25:36			2,920.36	2,920.36		0.951			
					26:56			62.92	62.92		1.001	37Cl-TCDD	CLS	
					27:18			84.69	84.69		1.014			
					28:11			20.15	20.15		1.047			
328			5	Peaks				3,115.03						
13C12-TCDD						0.65-0.89				0.925-1.075				
332-334	DC	NL				Height		0.27	0.18	0.09				
					26:45		0.81	691.49	308.88	382.61	0.994	13C12-1234-TCDD	RS1	
					26:55		0.80	510.19	227.08	283.11	1.000	13C12-2378-TCDD	IS1	
						Height		150.89	67.36	83.53				
					27:04		0.85	1.87	0.86	1.01	1.006			
	DC	SN		RO	27:24		1.03	1.63			1.018			
	DC	SN		RO	27:50		1.07	1.19			1.034			
332-334			3	Peaks				1,203.55						
---------- Above: TCDD / PeCDF Follows ----------														
PeCDF						1.32-1.78				0.930-1.060				
340-342	DC	NL				Height		0.28	0.18	0.10				
					28:08		1.45	42.33	25.08	17.25	0.936			
	DC	SN		RO	28:18		23.30	0.26			0.942			
	DC	SN		RO	28:28		0.36	0.13			0.947			
					28:47	RC	1.27	5.56	3.38	2.66	0.958			J
					29:13		1.47	109.61	65.25	44.36	0.972			
X		X			29:23	RO	1.44	11.07	6.54	4.53	0.978			
					29:41		1.57	14.95	9.13	5.82	0.988			
					29:46		1.52	12.63	7.61	5.02	0.991			
A					29:57		1.40	12.47	7.28	5.19	0.997			
MX		X			30:03	RO	1.50	200.00	120.00	80.00	1.000	12378-PeCDF	AN	
X		X			30:19	RO	1.53	62.08	37.59	24.49	1.009			
					30:43		1.61	43.38	26.78	16.60	1.022	23478-PeCDF	AN	
					30:55		1.57	32.11	19.60	12.51	1.029			
					31:06	RC	2.08	2.98	2.43	1.17	1.035			J

Compound M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
	X		X	31:16	RO	1.64	13.73	8.52	5.21	1.040			
	X		X	31:22	RO	1.55	79.84	48.51	31.33	1.044			
				31:40		1.69	5.46	3.43	2.03	1.054			J
		DC	WH	31:52	RO	1.85	2.37			1.060			
340-342			15	Peaks			648.20						
13C12-PeCDF						1.32-1.78			0.866-1.134				
352-354		DC	NL			Height	0.20	0.07	0.13				
		DC	SN	27:51	RO	0.56	1.79			0.927			
		DC	SN	28:06	RO	2.61	0.46			0.935			
		DC	SN	28:19	RO	0.86	0.90			0.942			
		DC	SN	28:29	RO	1.87	0.77			0.948			
		DC	SN	28:33	RO	0.36	0.41			0.950			
		DC	SN	29:12		1.65	1.27			0.972			
		DC	SN	29:20	RO	0.41	0.33			0.976			
		DC	SN	29:40	RO	0.86	0.81			0.987			
				30:03		1.47	481.98	286.95	195.03	1.000	13C12-PeCDF 123	IS2	
						Height	146.13	86.85	59.28				
				30:18	RO	0.78	3.06	1.86	2.39	1.008			
				30:42		1.52	478.75	289.09	189.66	1.022	13C12-PeCDF 234	SUR1	
		DC	SN	31:02		1.41	1.54			1.033			
		DC	SN	31:25		1.56	2.69			1.045			
				31:39	RO	1.31	6.68	3.43	2.62	1.053			
352-354			4	Peaks			970.47						
	A	---------- Above: PeCDF / PeCDD Follows ----------											
PeCDD						1.32-1.78			0.938-1.020				
356-358		DC	NL			Height	0.10	0.06	0.04				
		DC	WL	29:06	RO	0.48	3.04			0.938			
	A			29:18	RO	1.18	53.30	32.40	27.40	0.944			
		DC	SN	29:30	RO	0.02	0.36			0.951			
				29:47		1.60	6.30	3.88	2.42	0.960			J
				30:00		1.60	19.64	12.10	7.54	0.967			
				30:08		1.59	49.52	30.38	19.14	0.971			
				30:19	RO	1.08	25.60	10.89	10.04	0.977			
				30:34		1.47	15.68	9.34	6.34	0.985			
				30:45		1.54	7.38	4.47	2.91	0.991			J
				30:53	RO	0.59	2.94	1.79	3.01	0.995			J
				31:03		1.48	19.62	11.72	7.90	1.001	12378-PeCDD	AN	
				31:11	RO	0.70	3.27	1.99	2.83	1.005			J
				31:30		1.34	4.24	2.43	1.81	1.015			J
		DC	WH	31:53	RO	0.98	0.64			1.027			
356-358			11	Peaks			207.49						
13C12-PeCDD						1.32-1.78			0.871-1.129				
368-370		DC	NL			Height	0.13	0.09	0.04				
		DC	SN	29:08	RO	1.80	0.26			0.939			
		DC	SN	30:00	RO	1.29	1.76			0.967			
		DC	SN	30:07	RO	1.87	1.40			0.970			
		DC	SN	30:41	RO	2.62	0.33			0.989			
				31:02		1.49	304.77	182.16	122.61	1.000	13C12-PeCDD 123	IS3	
						Height	98.89	58.92	39.97				

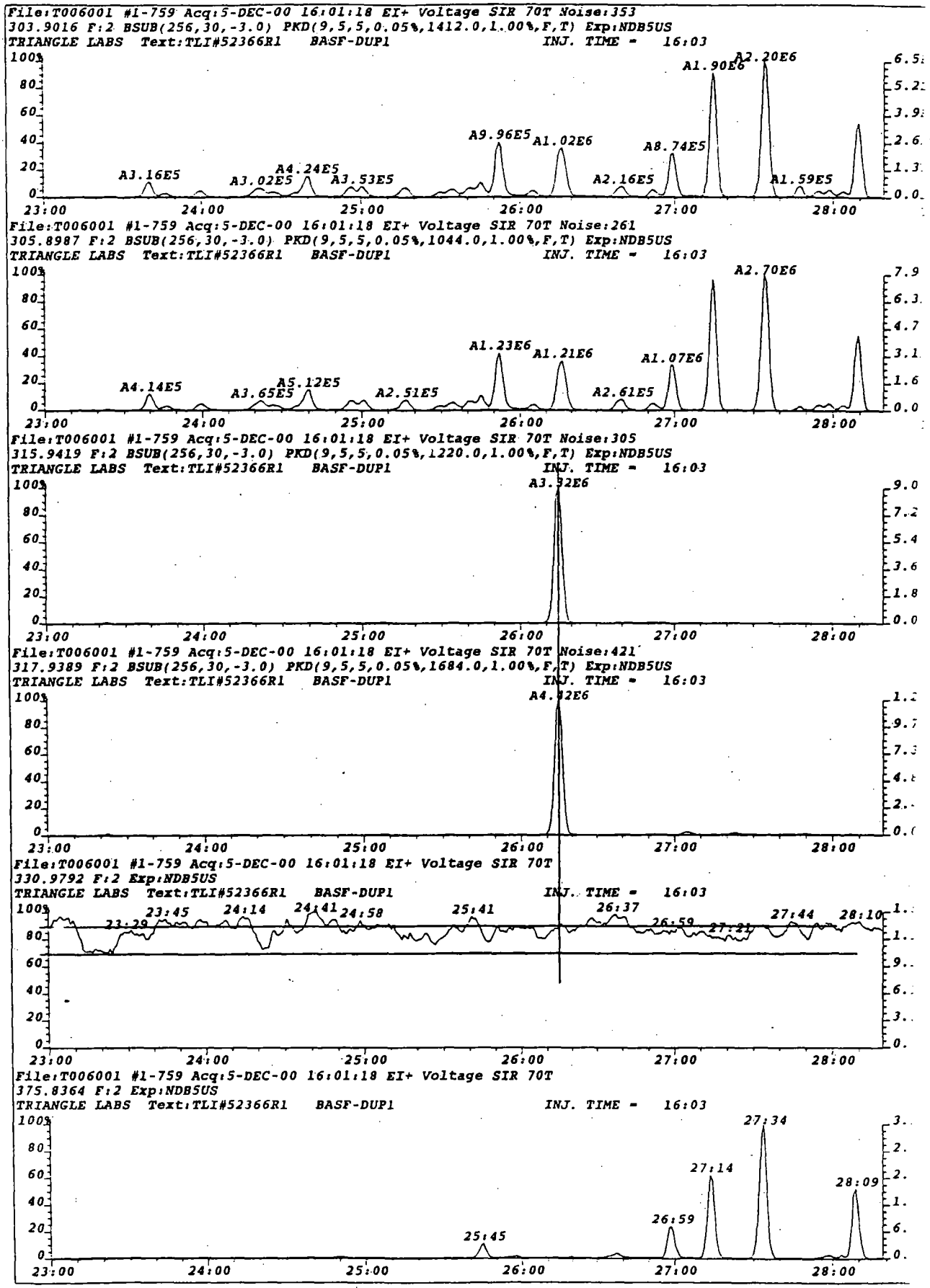
Compound/ M_Z....	QC	Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht. Peak1	Area/Ht. Peak2	Rel.RT	Compound Name..	ID..	Flags
		DC	SN		31:11		1.68	2.09			1.005			
		DC	SN		31:17		1.48	0.67			1.008			
		DC	SN		31:29		1.59	0.44			1.015			
		DC	SN		31:44		1.36	0.33			1.023			
		DC	SN		31:53	RO	2.56	0.46			1.027			
368-370			1	Peak				304.77						
---------- Above: PeCDD / HxCDF Follows ----------														
HxCDF					1.05-1.43						0.963-1.047			
374-376		DC	NL		Height			0.38	0.22	0.16				
					32:28		1.22	13.48	7.41	6.07	0.969			
					32:35		1.27	95.89	53.67	42.22	0.972			
					32:46		1.12	2.16	1.14	1.02	0.978			J
					32:53		1.06	7.61	3.92	3.69	0.981			J
					33:03		1.27	135.91	76.04	59.87	0.986			
	X		X		33:15	RO	1.22	6.49	3.56	2.93	0.992			J
					33:26		1.26	144.00	80.37	63.63	0.998	123478-HxCDF	AN	
					33:32		1.30	39.95	22.61	17.34	1.000	123678-HxCDF	AN	
	X		X		33:41	RO	1.27	109.42	61.24	48.18	1.005			
	A				33:50		1.14	3.28	1.75	1.53	1.009			J
					34:02		1.27	26.52	14.82	11.70	1.015	234678-HxCDF	AN	
		DC	SN		34:12	RO	2.87	0.34			1.020			
		DC	SN		34:26	RO	1.59	1.03			1.027			
		DC	SN		34:32	RO	0.95	0.70			1.030			
	M				34:46		1.14	6.01	3.20	2.81	1.037			J
	AN				34:50		1.14	2.37	1.26	1.11	1.039	123789-HxCDF	AN	J
	M				34:56		1.16	11.83	6.36	5.47	1.042			
		DC	SN		35:00	RO	0.48	0.36			1.044			
		DC	WH		35:21		1.16	15.41			1.055			
374-376			14	Peaks				604.92						
13C12-HxCDF					0.43-0.59						0.880-1.120			
384-386		DC	NL		Height			0.42	0.15	0.27				
					32:29	RO	0.75	1.87	0.63	0.84	0.969			
					33:25		0.51	481.67	163.19	318.48	0.997	13C12-HxCDF 478	SUR2	
					33:31		0.51	465.20	157.47	307.73	1.000	13C12-HxCDF 678	IS4	
					Height			148.73	49.82	98.91				
					34:01		0.51	482.81	162.28	320.53	1.015	13C12-HxCDF 234	ALT2	
					34:50		0.51	373.50	126.05	247.45	1.039	13C12-HxCDF 789	ALT1	
384-386			5	Peaks				1,805.05						
---------- Above: HxCDF / HxCDD Follows ----------														
HxCDD					1.05-1.43						0.957-1.013			
390-392		DC	NL		Height			0.54	0.28	0.26				
					32:56		1.24	572.16	316.90	255.26	0.962			
					33:23		1.24	90.61	50.09	40.52	0.976			
					33:36		1.23	2,027.04	1,118.50	908.54	0.982			
					33:46		1.38	5.28	3.06	2.22	0.987			J
	AN				34:08		1.19	17.13	9.30	7.83	0.998	123478-HxCDD	AN	
	M				34:14		1.23	382.00	211.00	171.00	1.000	123678-HxCDD	AN	

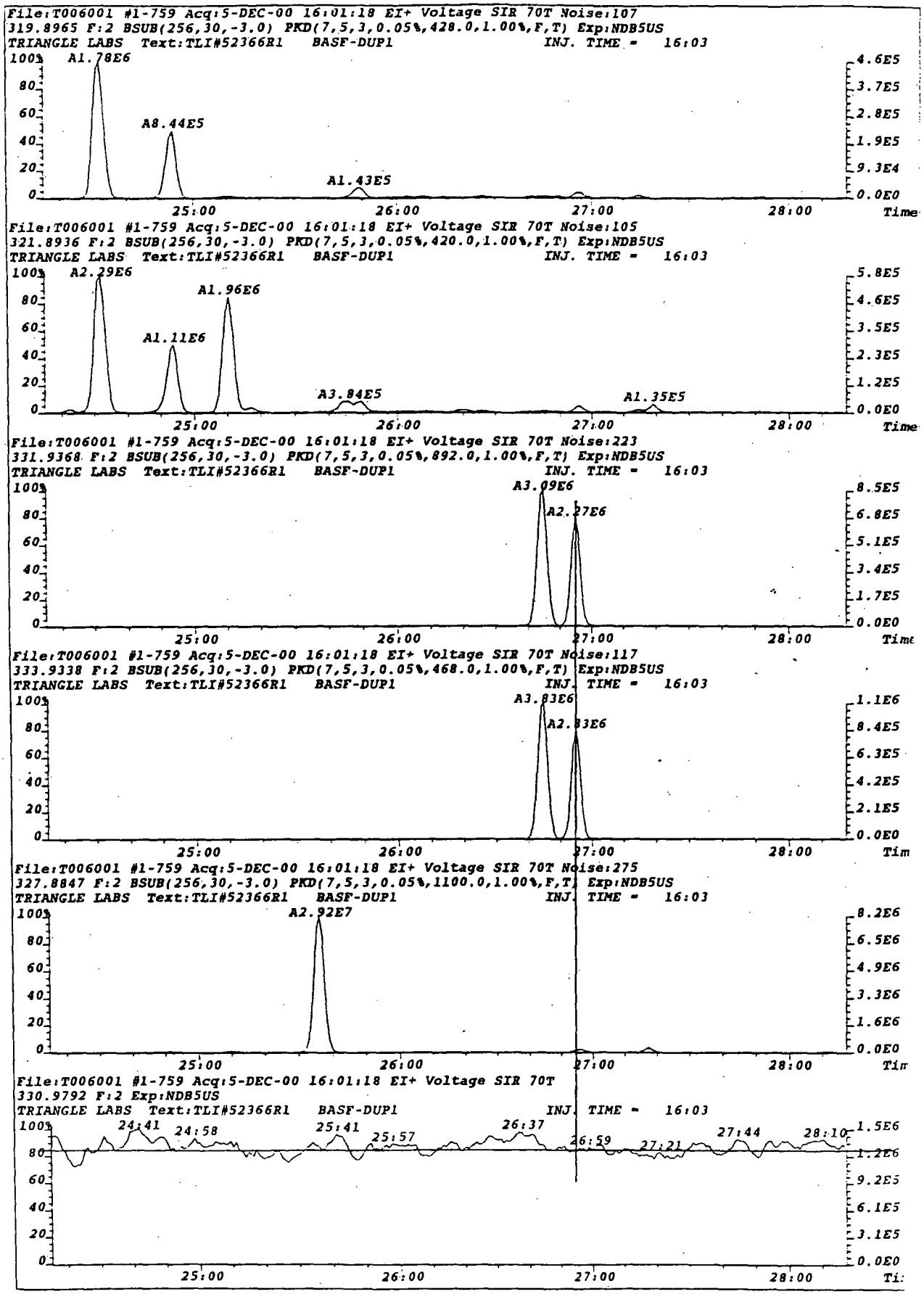
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
				34:34		1.22	143.25	78.71	64.54	1.010	123789-HxCDD	AN	
390-392				7 Peaks			3,237.47						
13C12-HxCDD				1.05-1.43						0.971-1.029			
402-404	DC	NL		Height			0.57	0.37	0.20				
	DC	WL	33:10		RO	3.42	1.19			0.969			
	DC	SN	33:14		RO	4.08	0.58			0.971			
	DC	SN	33:18		RO	3.77	0.49			0.973			
			33:34		RO	7.02	3.02	9.48	1.35	0.981			
			34:08			1.23	328.47	181.05	147.42	0.998	13C12-HxCDD 473	SUR3	
			34:13			1.22	296.39	162.63	133.76	1.000	13C12-HxCDD 678	IS5	
				Height			92.17	49.40	42.77				
			34:33			1.22	473.31	259.71	213.60	1.010	13C12-HxCDD 789	RS2	
			34:57		RO	1.03	2.89	1.33	1.29	1.021			
402-404				5 Peaks			1,104.08						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF				0.88-1.20						0.995-1.050			
408-410	DC	NL		Height			0.48	0.27	0.21				
			36:34			1.05	147.40	75.65	71.75	1.000	1234678-HpCDF	AN	
X		X	36:50		RO	1.05	15.43	7.90	7.53	1.008			
			37:01			1.08	162.37	84.27	78.10	1.013			
D	D	NH	37:41		RO	1.47	4.71			1.031			
			38:13			1.11	14.72	7.76	6.96	1.046	1234789-HpCDF	AN	
408-410				4 Peaks			339.92						
13C12-HpCDF				0.37-0.51						0.945-1.110			
418-420	DC	NL		Height			0.37	0.20	0.17				
			36:33			0.44	283.50	87.27	196.23	1.000	13C12-HpCDF 673	IS6	
				Height			75.76	23.58	52.18				
	DC	SN	37:07		RO	1.60	0.36			1.016			
	DC	SN	37:28		RO	1.40	0.72			1.025			
			38:12			0.42	244.81	72.99	171.82	1.045	13C12-HpCDF 789	SUR4	
418-420				2 Peaks			528.31						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20						0.974-1.004			
424-426	DC	NL		Height			1.09	0.66	0.43				
			36:52			1.03	4,648.14	2,358.68	2,289.46	0.979			E
			37:41			1.03	6,669.20	3,383.82	3,285.38	1.000	1234678-HpCDD	AN	E
424-426				2 Peaks			11,317.34						
13C12-HpCDD				0.88-1.20						0.973-1.027			
436-438	DC	NL		Height			1.70	1.25	0.45				
			36:45		RO	4.35	2.84	6.04	1.39	0.976			
M			37:40			1.20	326.00	178.00	148.00	1.000	13C12-HpCDD 678	IS7	
				Height			79.47	41.69	37.78				
			37:57		RO	4.20	11.38	23.45	5.58	1.008			
436-438				3 Peaks			340.22						

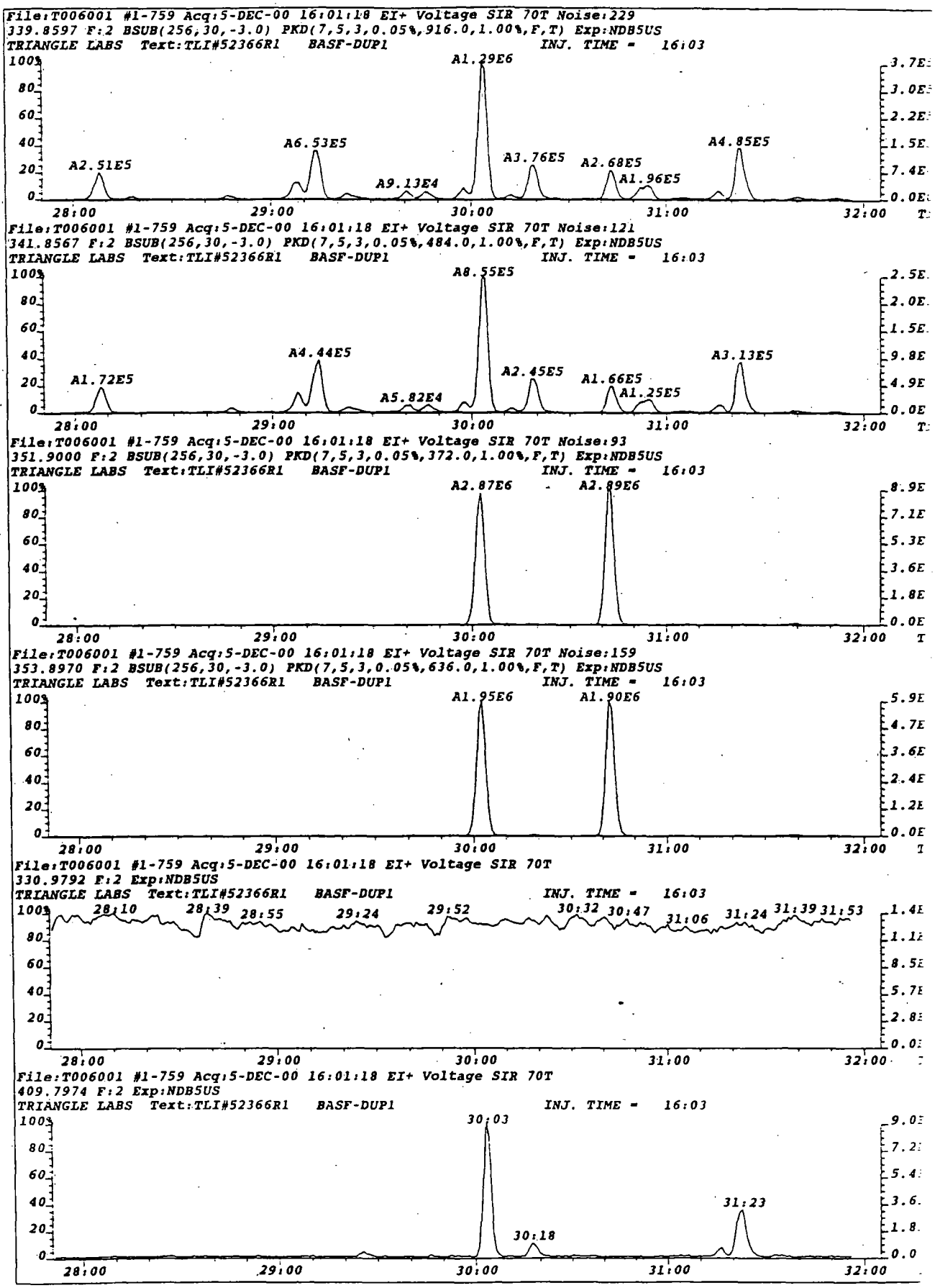
Compound M_Z....	QC.Log	Cmit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF						0.76-1.02				0.904-1.096			
442-444	DC	NL				Height	0.21	0.11	0.10				
	DC	SN		39:21	RO	1.19	0.81			0.946			
	DC	SN		40:04	RO	0.53	0.17			0.963			
	DC	SN		40:11	RO	2.07	0.28			0.966			
	DC	SN		40:31	RO	1.82	0.21			0.974			
	DC	SN		40:38	RO	4.82	0.21			0.977			
	DC	SN		40:53	RO	1.74	0.36			0.983			
	DC	SN		40:58	RO	0.75	0.45			0.985			
	DC	SN		41:18	RO	1.26	0.51			0.993			
				41:37		0.87	9.70	4.52	5.18	1.000			
				41:50		0.89	67.23	31.72	35.51	1.006	OCDF		AN
	DC	SN		43:10		0.86	1.17			1.038			
	DC	SN		43:41	RO	1.67	0.11			1.050			
	DC	SN		43:47		0.90	0.38			1.052			
	DC	SN		43:56		0.85	1.44			1.056			
442-444			2	Peaks			76.93						
OCDD						0.76-1.02				0.904-1.096			
458-460	DC	NL				Height	0.18	0.08	0.10				
				41:37		0.86	21,910.10	10,139.20	11,770.90	1.000	OCDD		AN E
458-460			1	Peak			21,910.10						
13C12-OCDD						0.76-1.02				0.996-1.004			
470-472	DC	NL				Height	1.17	0.87	0.30				
M				41:36		1.00	394.00	197.00	197.00	1.000	13C12-OCDD		IS8
						Height	72.15	34.06	38.09				
				41:45	RO	3.37	7.30	12.99	3.86	1.004			
470-472			2	Peaks			401.30						

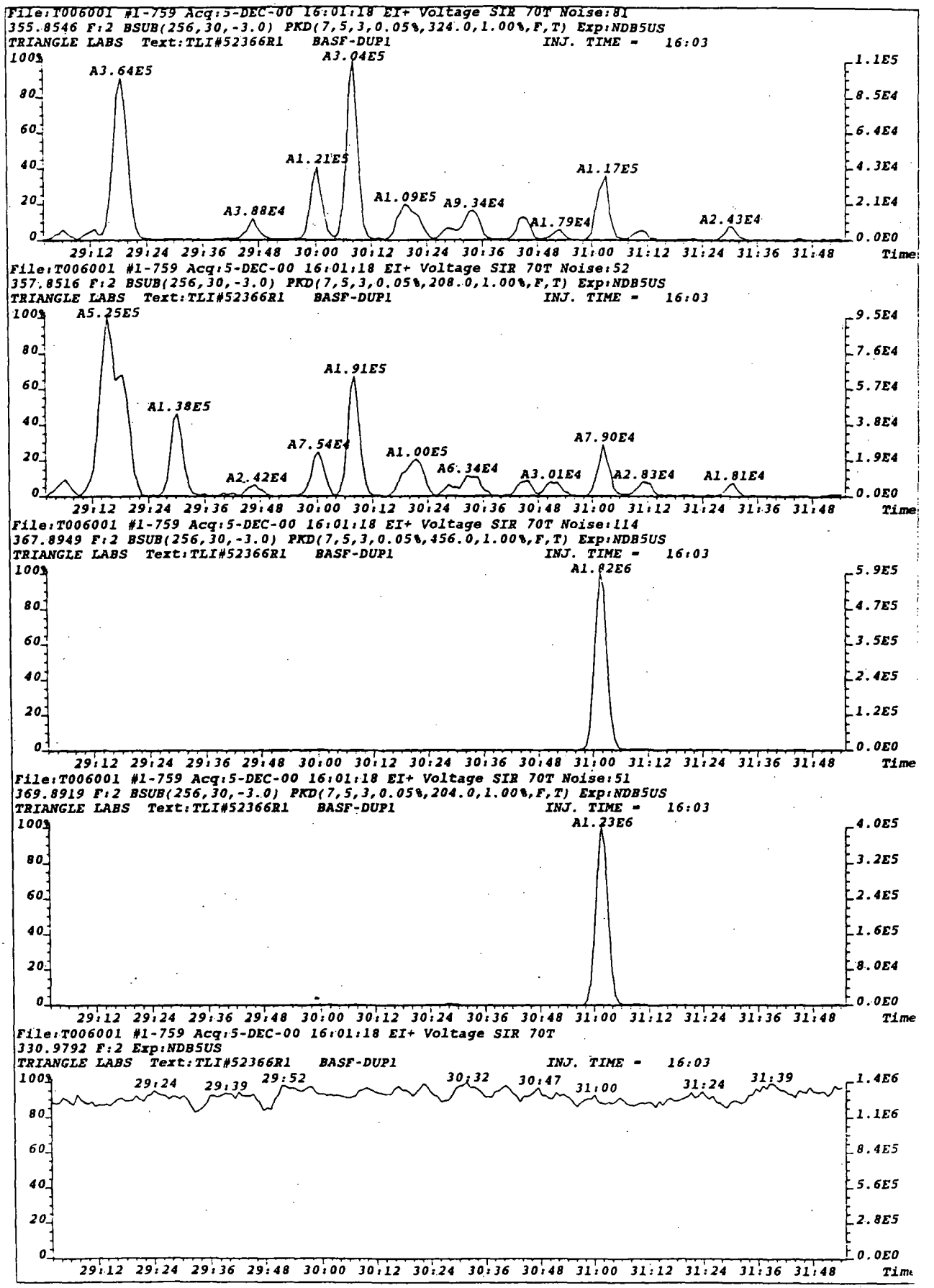
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***

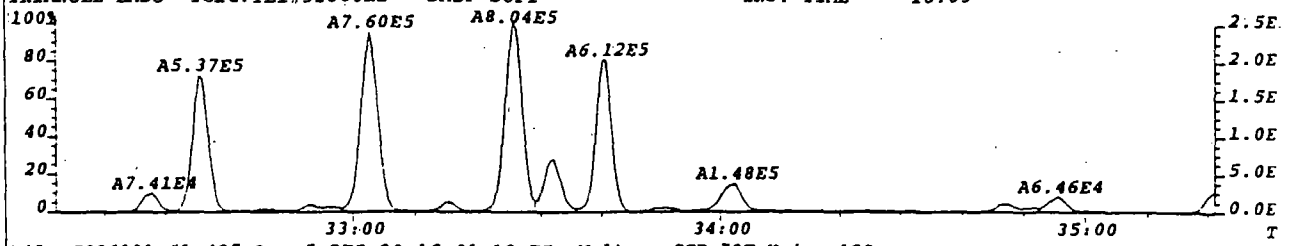

File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:353
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,1412.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A3.16E5
A3.02E5
A4.24E5
A3.53E5
A9.96E5
A1.02E6
A2.16E5
A8.74E5
A1.90E6
A2.20E6
A1.59E5
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:261
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,1044.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A4.14E5
A3.65E5
A5.12E5
A2.51E5
A1.23E6
A1.21E6
A2.61E5
A1.07E6
A2.70E6
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:305
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,1220.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A3.92E6
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:421
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,1684.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A4.92E6
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
23:29
23:45
24:14
24:41
24:58
25:41
26:37
26:59
27:21
27:44
28:10
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
25:45
26:59
27:14
27:34
28:09
23:00
24:00
25:00
26:00
27:00
28:00


File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:107
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,428.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A1.78E6
A8.44E5
A1.43E5
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:105
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,420.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A2.29E6
A1.96E6
A1.11E6
A3.84E5
A1.35E5
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:223
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,892.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A3.09E6
A2.27E6
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:117
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,468.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A3.83E6
A2.83E6
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:275
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1100.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A2.92E7
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
24:41
24:58
25:41
25:57
26:37
26:59
27:21
27:44
28:10
25:00
26:00
27:00
28:00

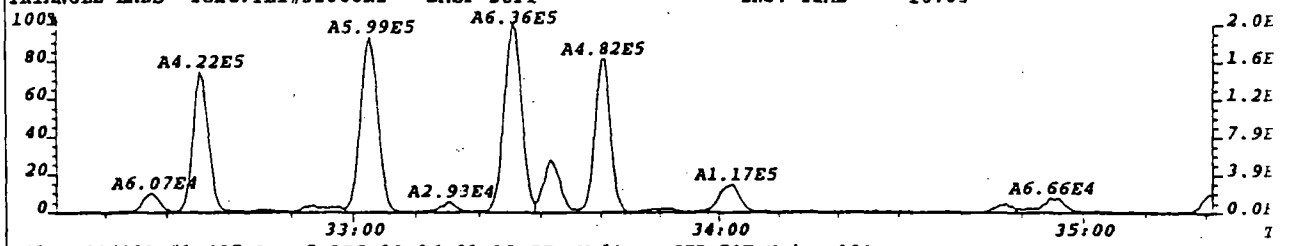

File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:229
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,916.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A1.29E6
A6.53E5
A4.85E5
A3.76E5
A2.68E5
A2.51E5
A1.96E5
A9.13E4
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:121
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,484.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A8.55E5
A4.44E5
A3.13E5
A2.45E5
A1.66E5
A1.72E5
A1.25E5
A5.82E4
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:93
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,372.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A2.87E6
A2.89E6
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:159
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,636.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A1.95E6
A1.90E6
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
28:10
28:39
28:55
29:24
29:52
30:32
30:47
31:06
31:24
31:39
31:53
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
30:03
30:18
31:23
28:00
29:00
30:00
31:00
32:00


File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:81
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,324.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A3.64E5
A3.04E5
A1.21E5
A3.88E4
A1.09E5
A9.34E4
A1.79E4
A1.17E5
A2.43E4
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:52
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A5.25E5
A1.91E5
A1.38E5
A7.54E4
A1.00E5
A6.34E4
A2.42E4
A3.01E4
A7.90E4
A2.83E4
A1.81E4
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:114
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,456.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A1.02E6
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:51
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,204.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A1.23E6
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
29:24
29:39
29:52
30:32
30:47
31:00
31:24
31:39
29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48
Time

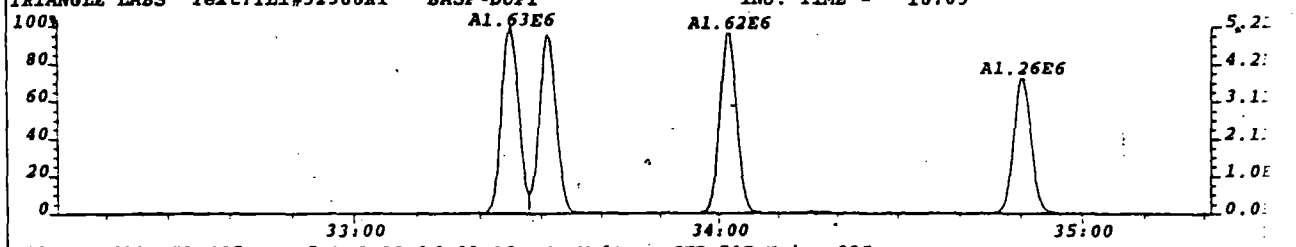
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:280
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1120.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03



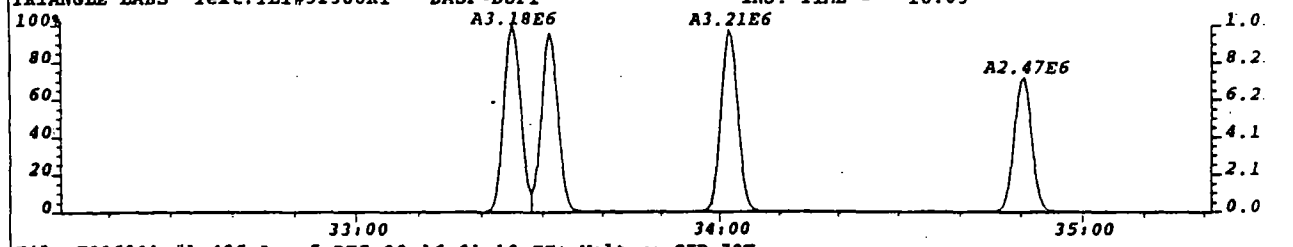
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:198
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,792.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03



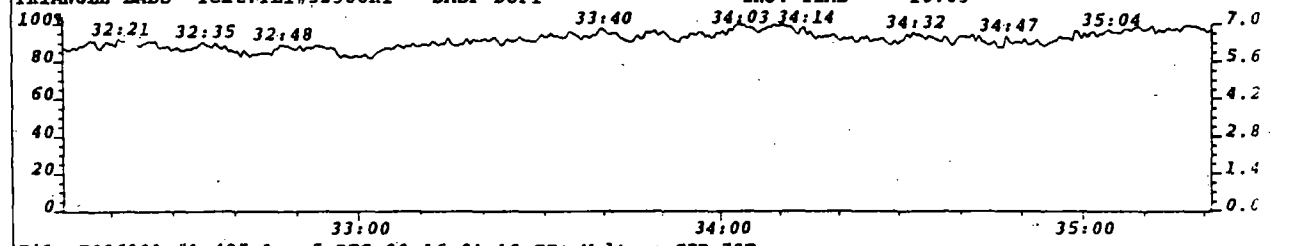
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:189
383.863[illegible] F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,756.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03



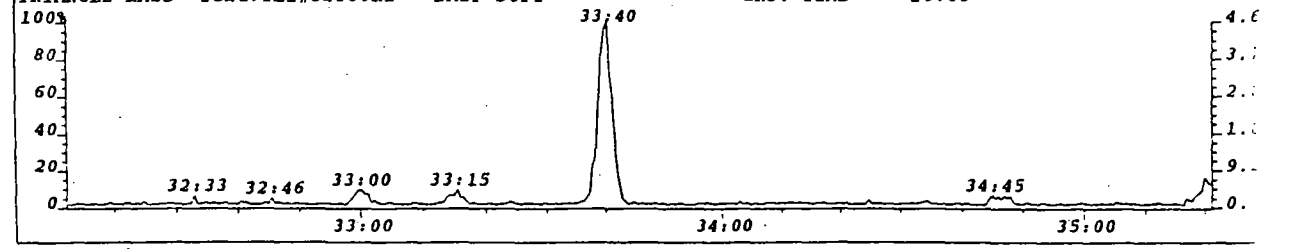
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:335
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1340.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03

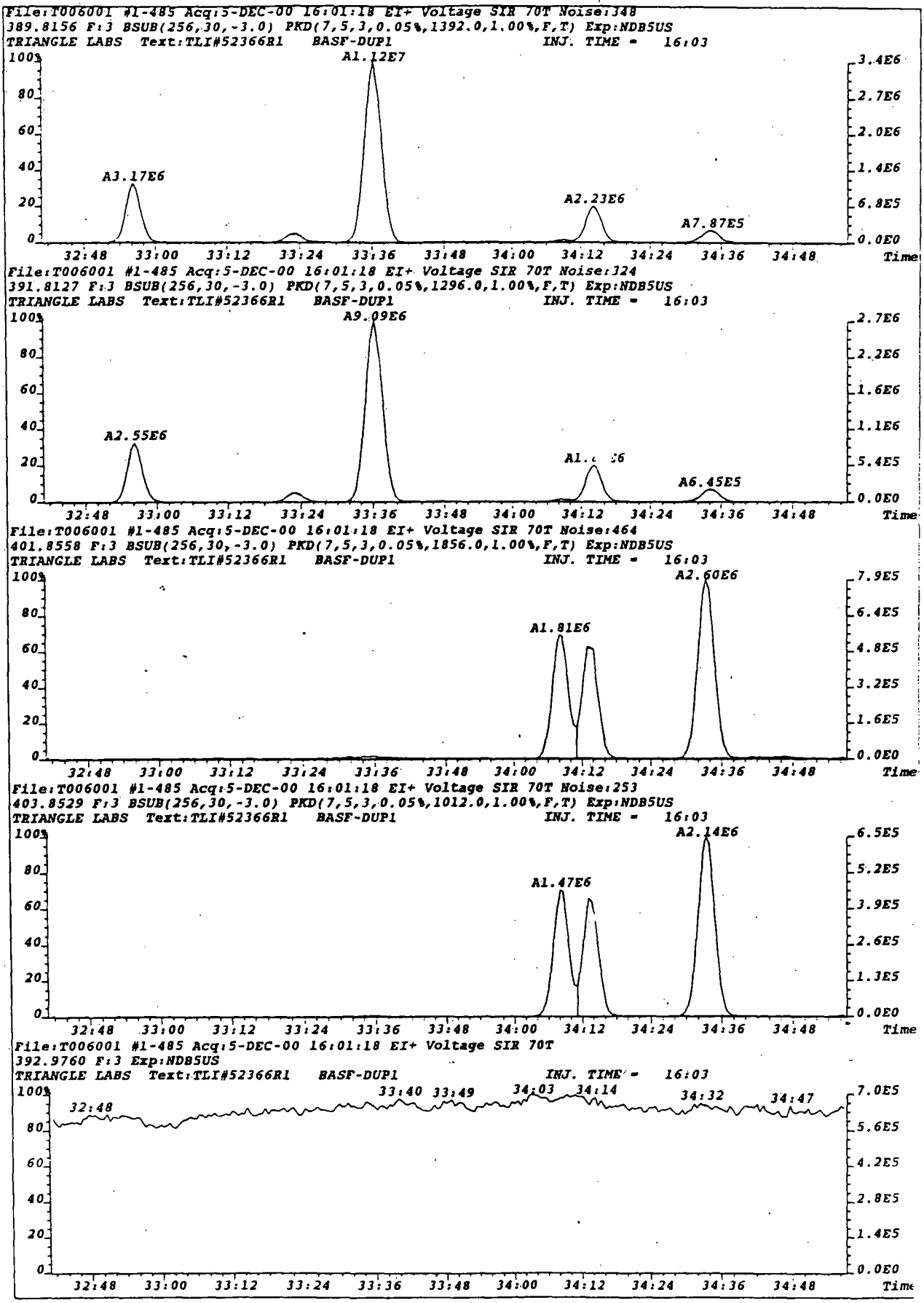


File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03

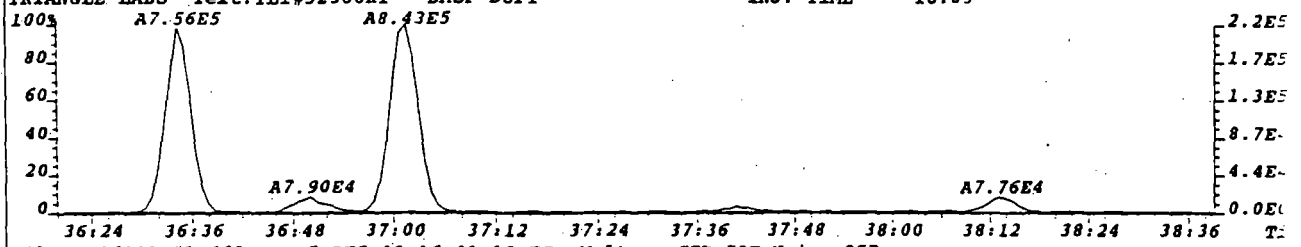


File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03

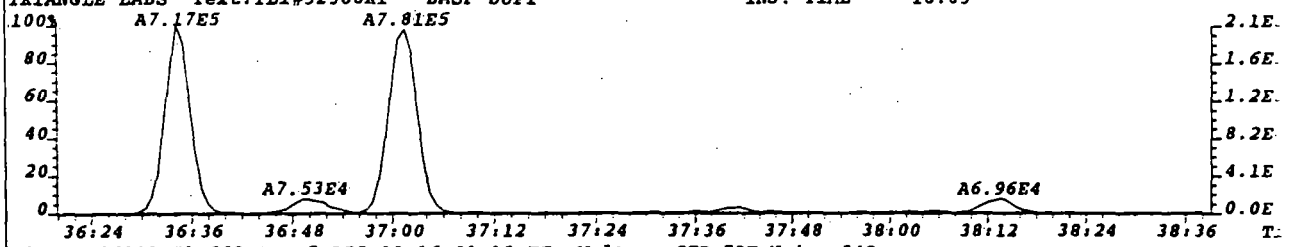



File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:348
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1392.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A1.12E7
A3.17E6
A2.23E6
A7.87E5
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:324
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1296.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A9.09E6
A2.55E6
A6.45E5
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:464
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1856.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A2.60E6
A1.81E6
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:253
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1012.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A2.14E6
A1.47E6
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
32:48
33:40 33:49
34:03 34:14
34:32
34:47
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48
Time

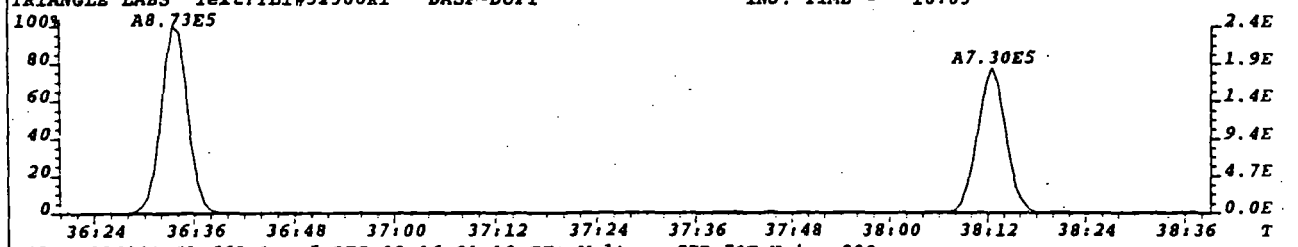
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:335
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1340.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03



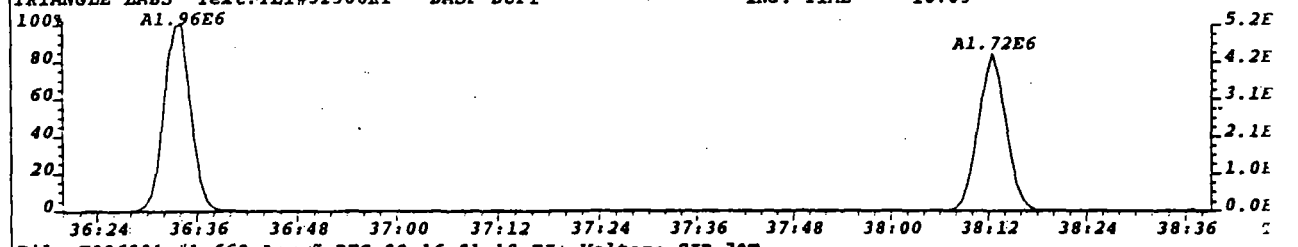
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:257
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1028.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03



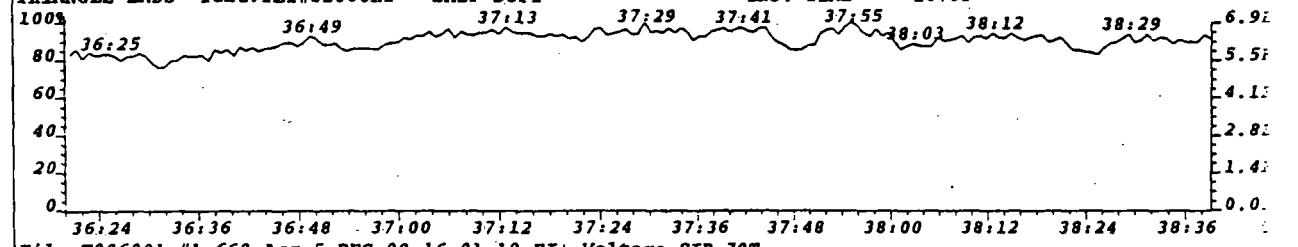
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:249
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,996.0,1.00%,F,T) p:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03



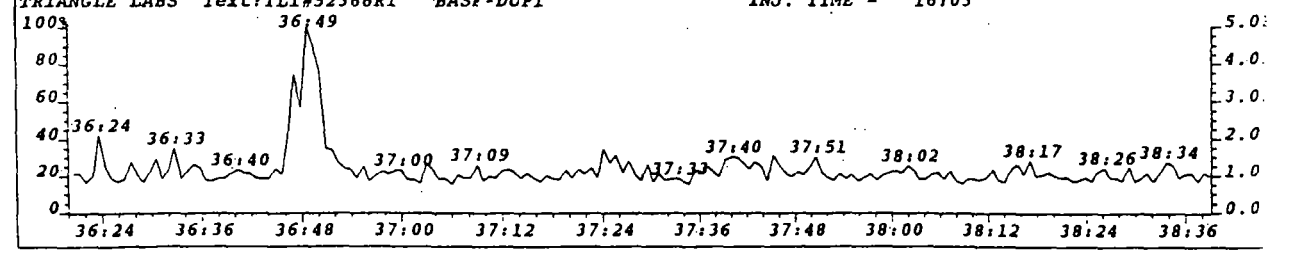
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:209
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,836.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03

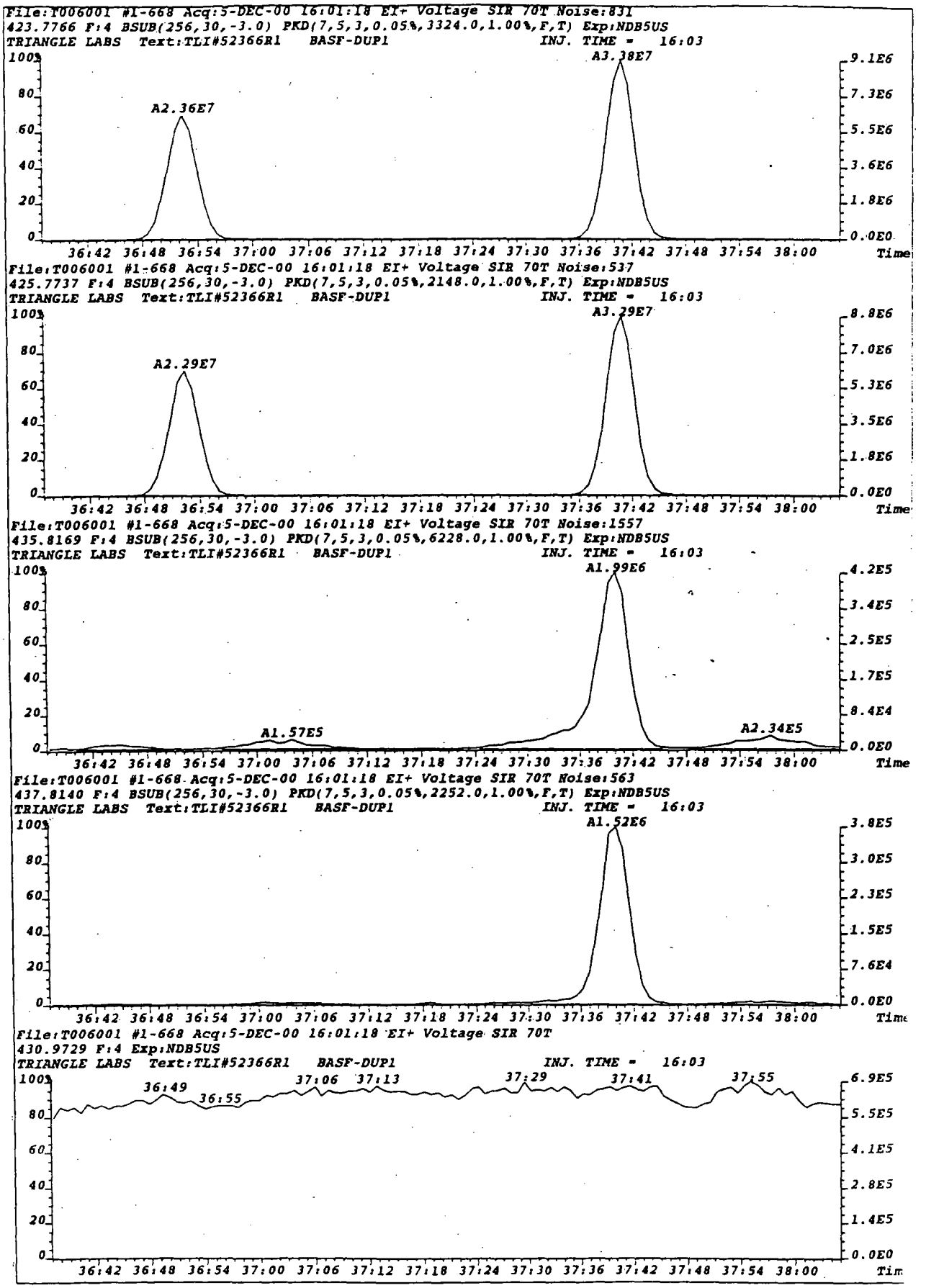


File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03

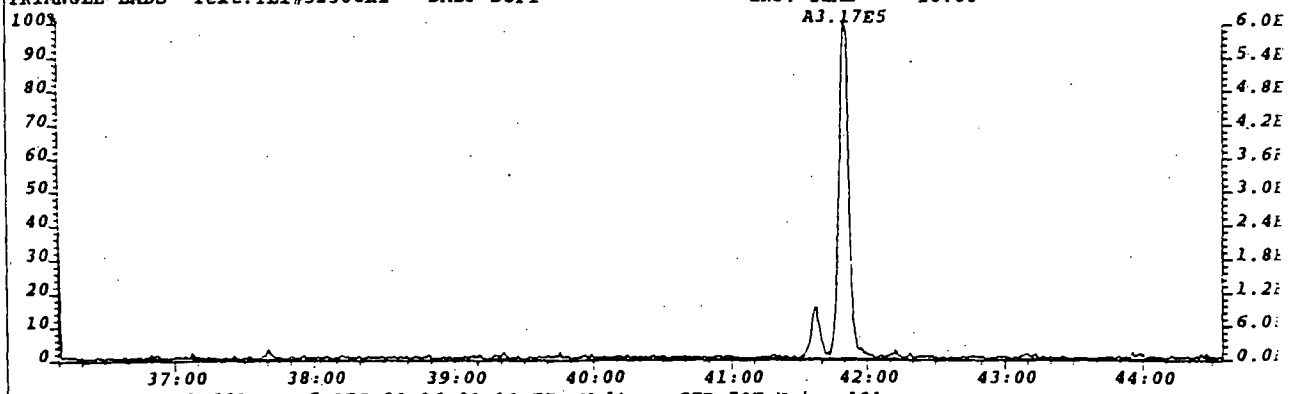


File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03

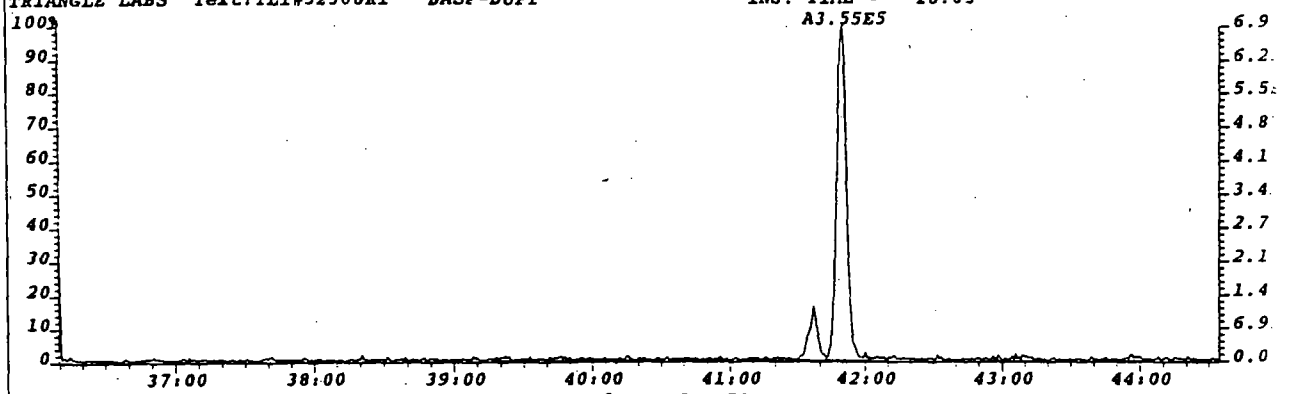



File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:831
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,3324.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A2.36E7
A3.38E7
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:537
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A2.29E7
A3.29E7
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:1557
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,6228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A1.99E6
A1.57E5
A2.34E5
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:563
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A1.52E6
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
36:49
36:55
37:06
37:13
37:29
37:41
37:55
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
Time

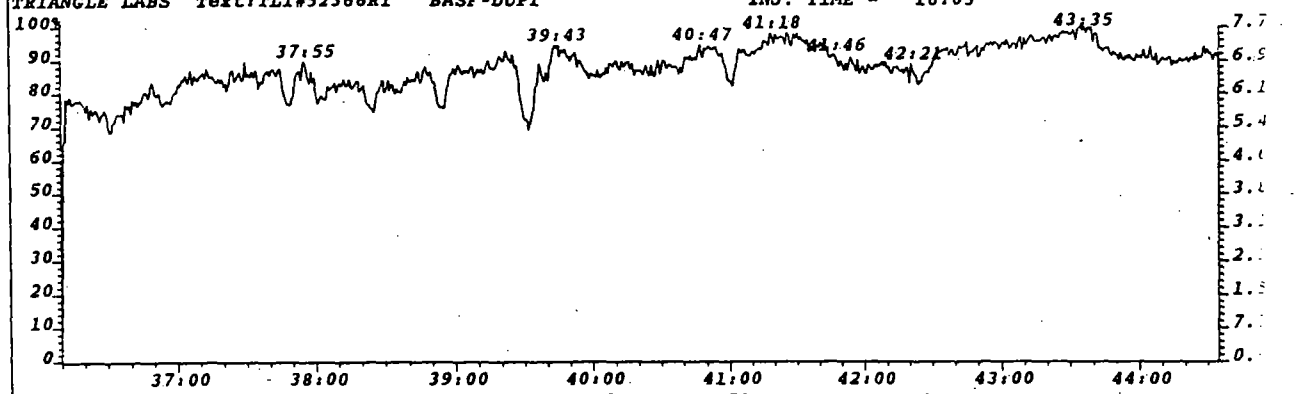
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:135
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,540.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03



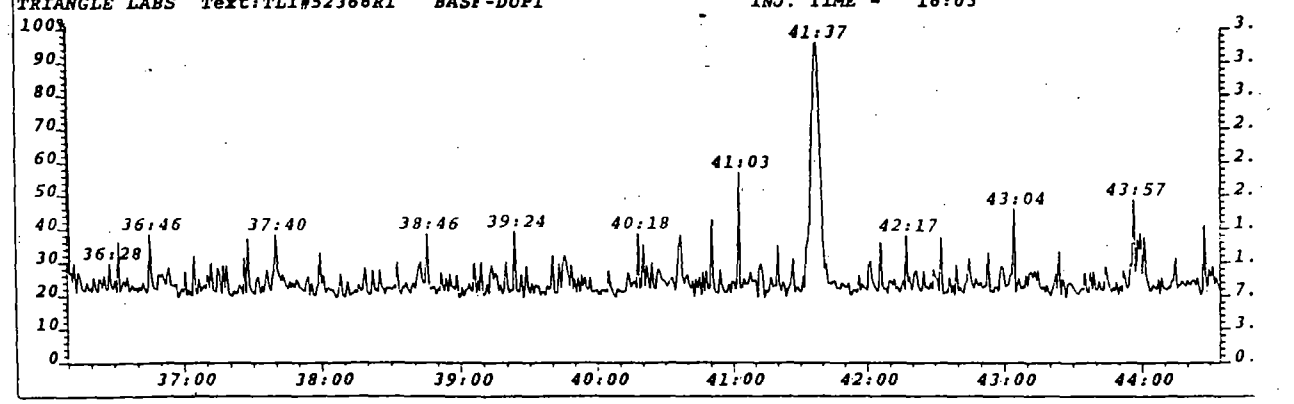
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:131
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,524.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03

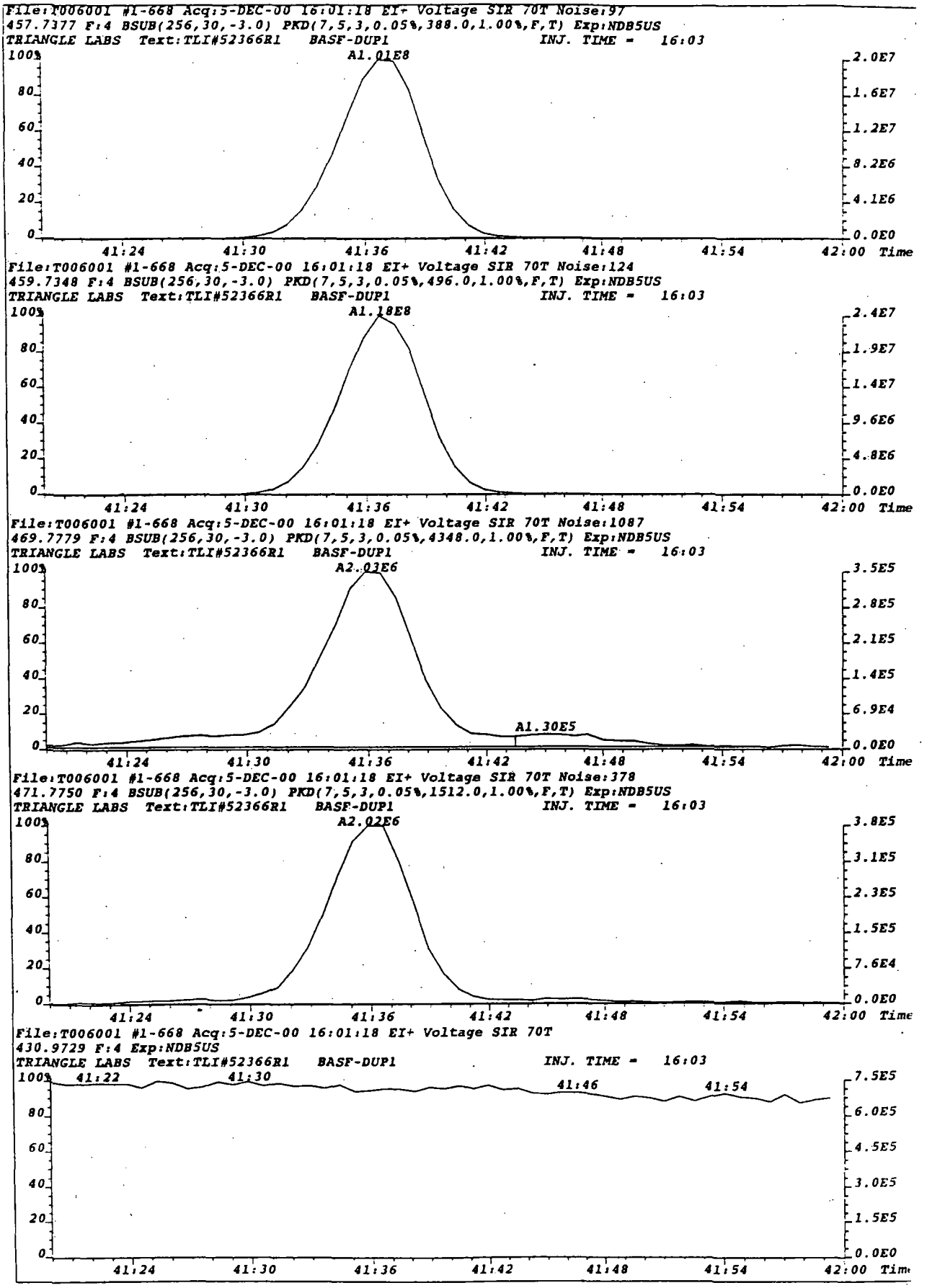


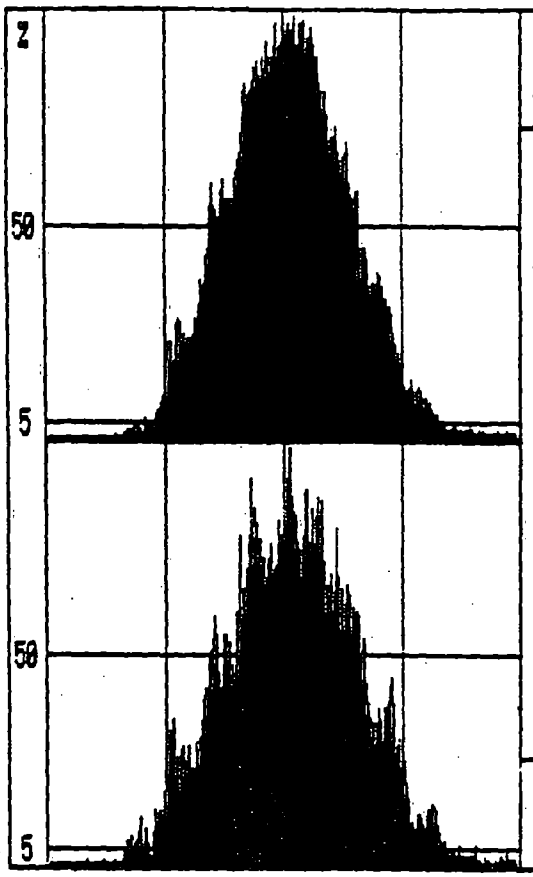
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03



File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03




File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:97
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,388.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A1.01E8
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:124
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,496.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A1.18E8
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:1087
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,4348.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A2.03E6
A1.30E5
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T Noise:378
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1512.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
A2.02E6
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03
41:22
41:30
41:46
41:54
41:24
41:36
41:42
41:48
42:00 Time

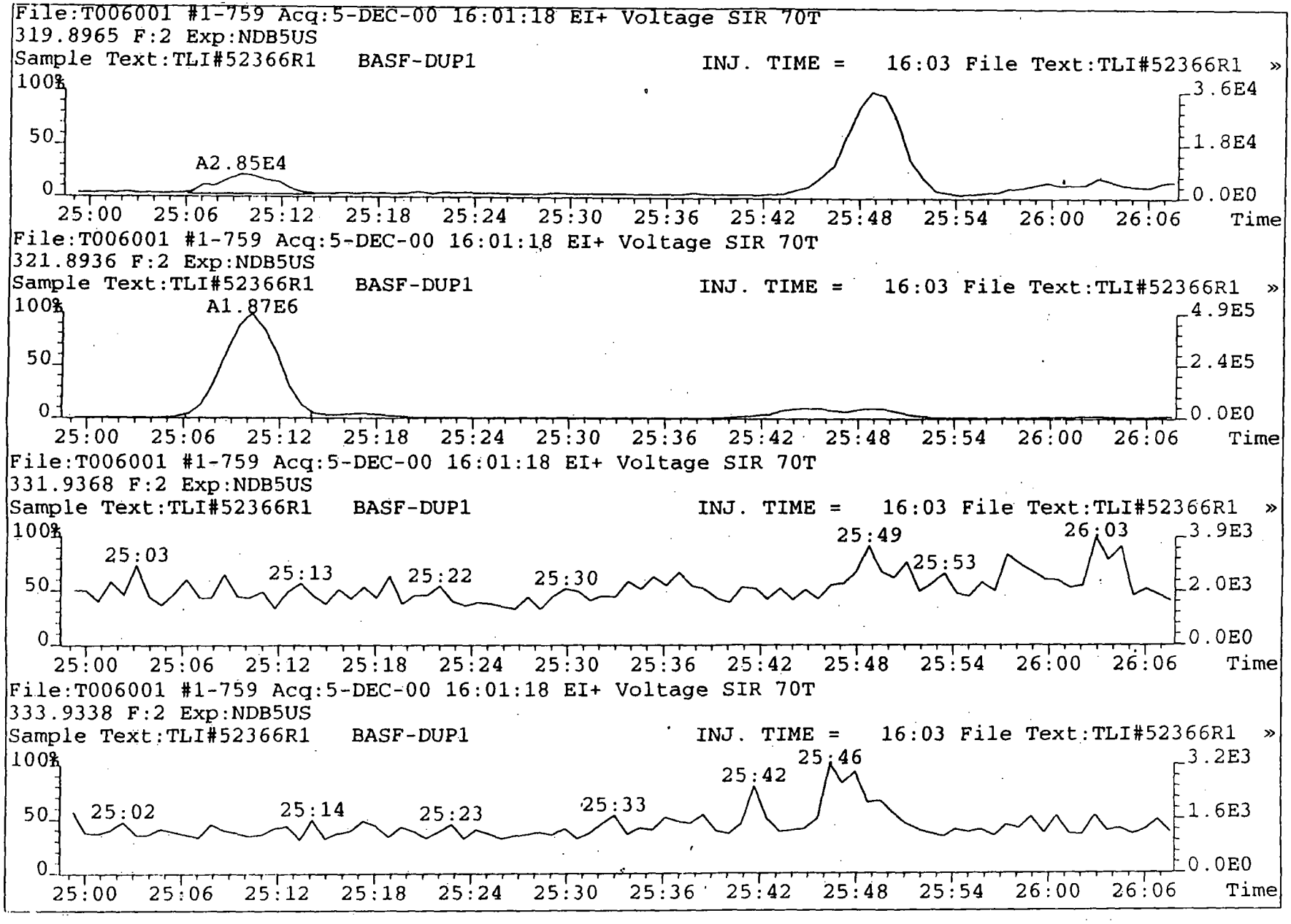


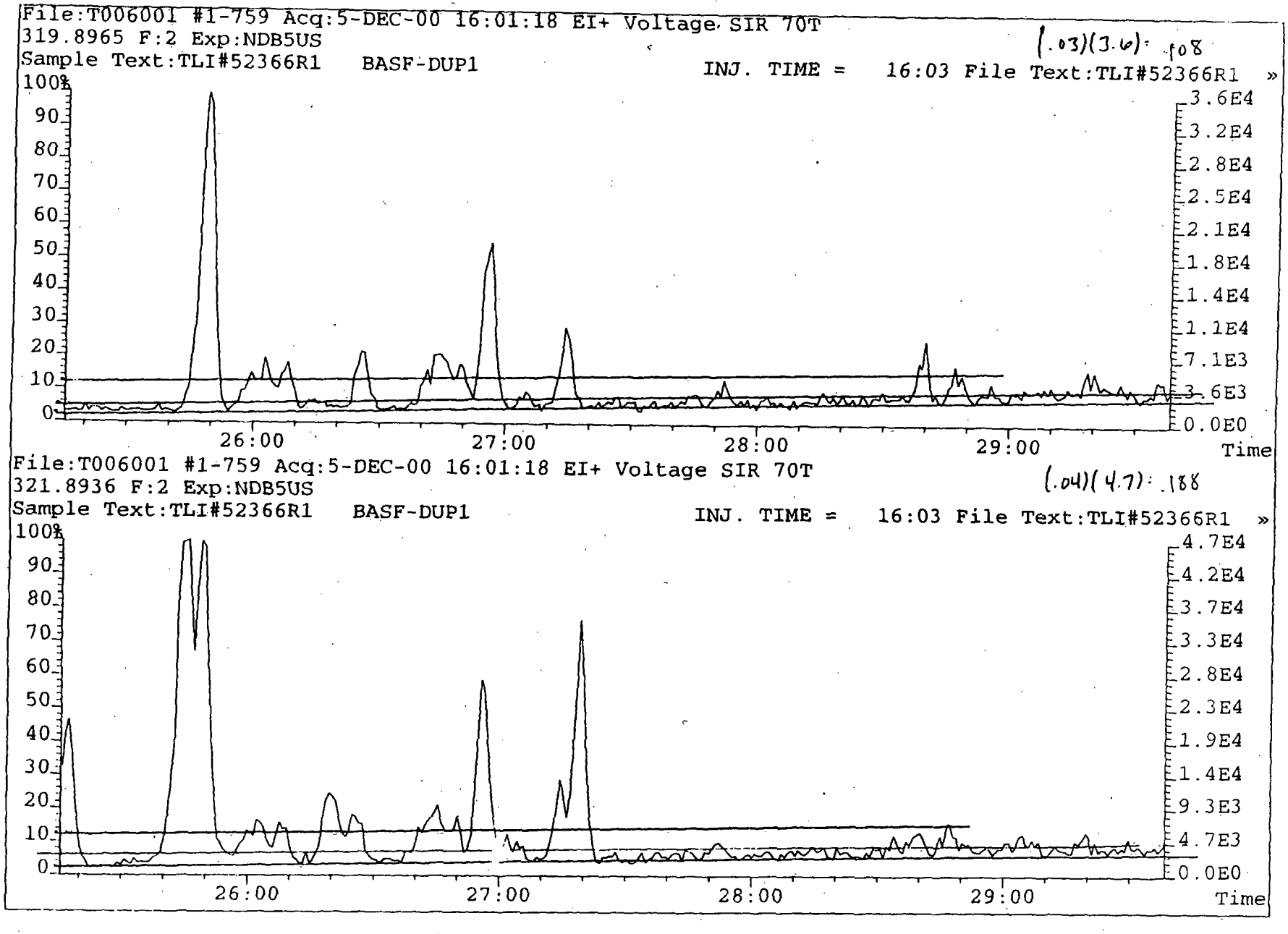
Channel	I	330.9792		Peak top	
Height	.68	volts	Span	200	ppm

System file name	NOBSUS
Data file name	A:TD05003
Resolution	10000
Group number	2
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 416.9760

A	293	J	331	S	368
B	304	K	332	T	370
C	306	L	334	U	376
D	316	M	340	V	418
E	318	N	342		
F	320	O	352		
G	322	P	354		
H	328	Q	356		
I	331	R	358		

Ref. mass	416.9760			Peak top	
Height	.13	volts	Span	200	ppm


File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A2.85E4
3.6E4
1.8E4
0.0E0
25:00 25:06 25:12 25:18 25:24 25:30 25:36 25:42 25:48 25:54 26:00 26:06 Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A1.87E6
4.9E5
2.4E5
0.0E0
25:00 25:06 25:12 25:18 25:24 25:30 25:36 25:42 25:48 25:54 26:00 26:06 Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
331.9368 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
25:03
25:13
25:22
25:30
25:49
25:53
26:03
3.9E3
2.0E3
0.0E0
25:00 25:06 25:12 25:18 25:24 25:30 25:36 25:42 25:48 25:54 26:00 26:06 Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
333.9338 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
25:02
25:14
25:23
25:33
25:42
25:46
3.2E3
1.6E3
0.0E0
25:00 25:06 25:12 25:18 25:24 25:30 25:36 25:42 25:48 25:54 26:00 26:06 Time

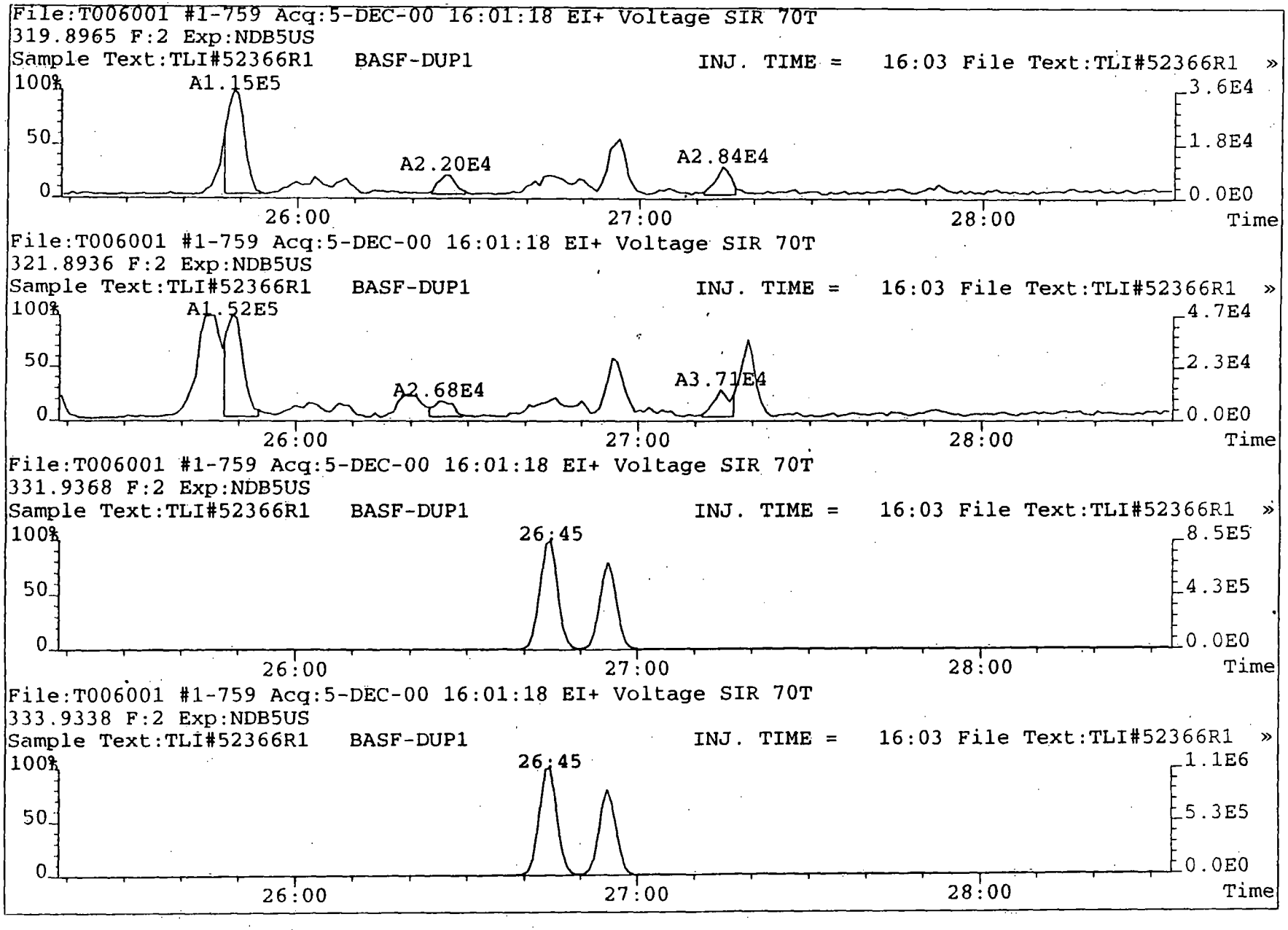


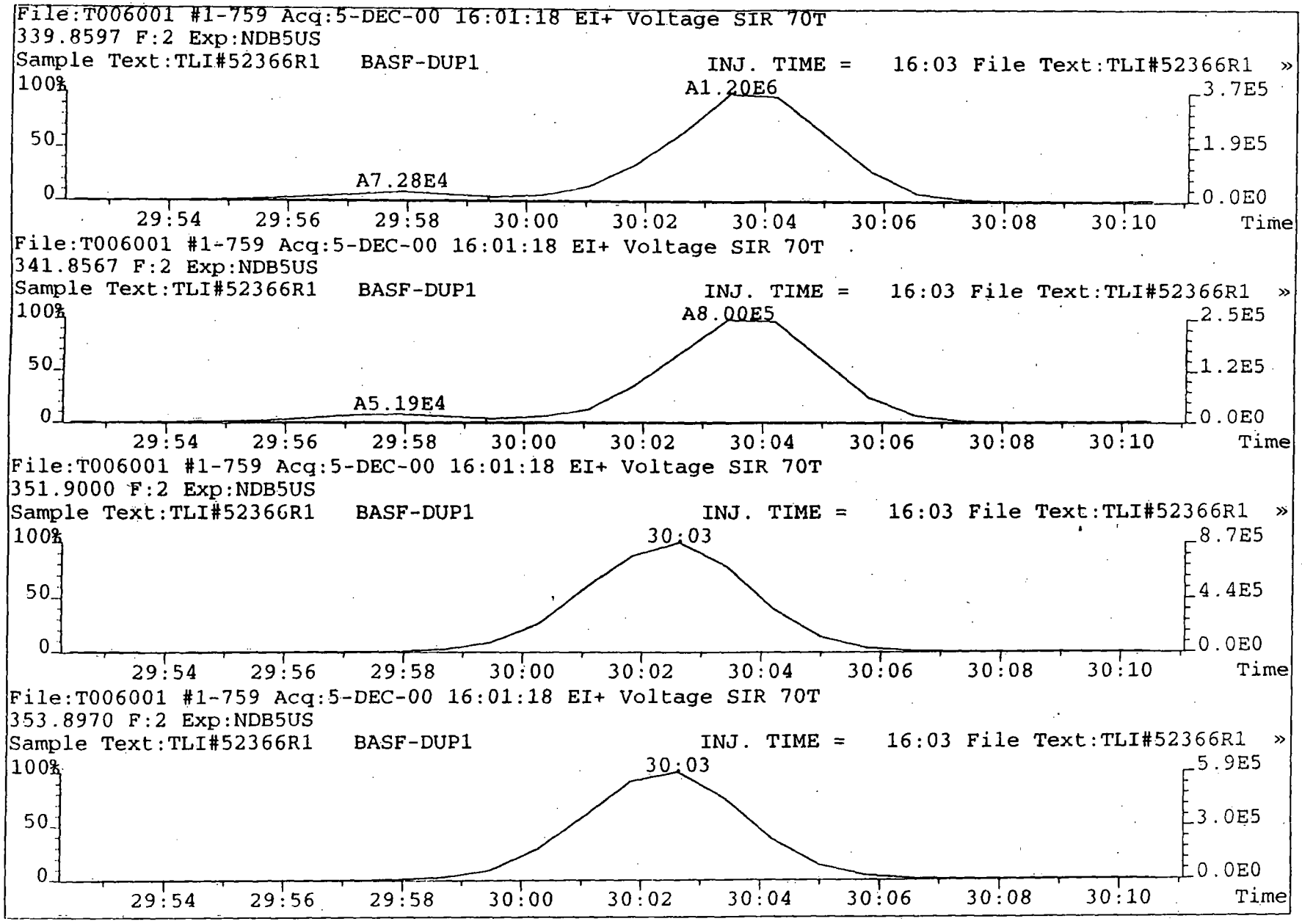
(.03)(3.6) = .108

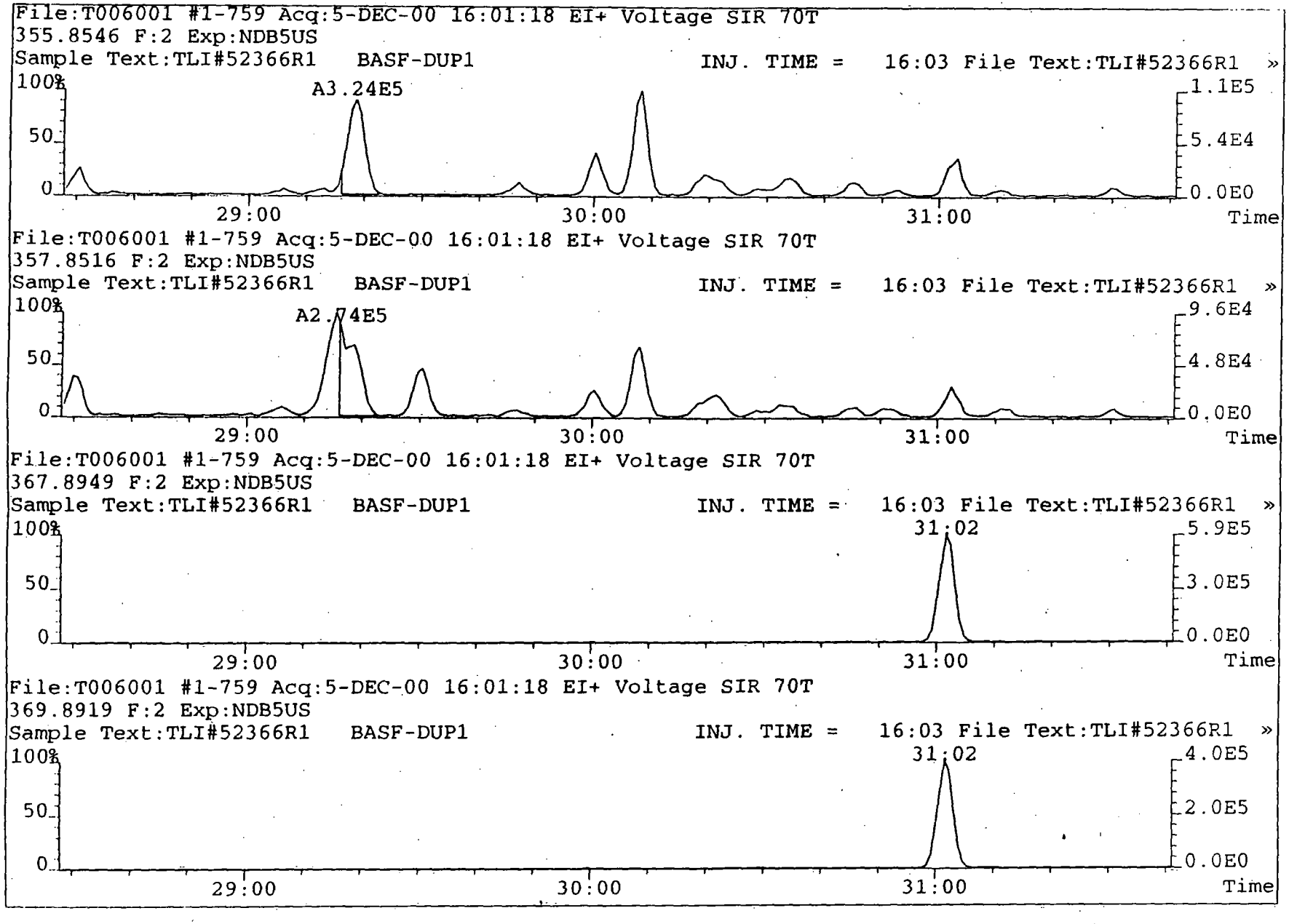
(.04)(4.7) = .188

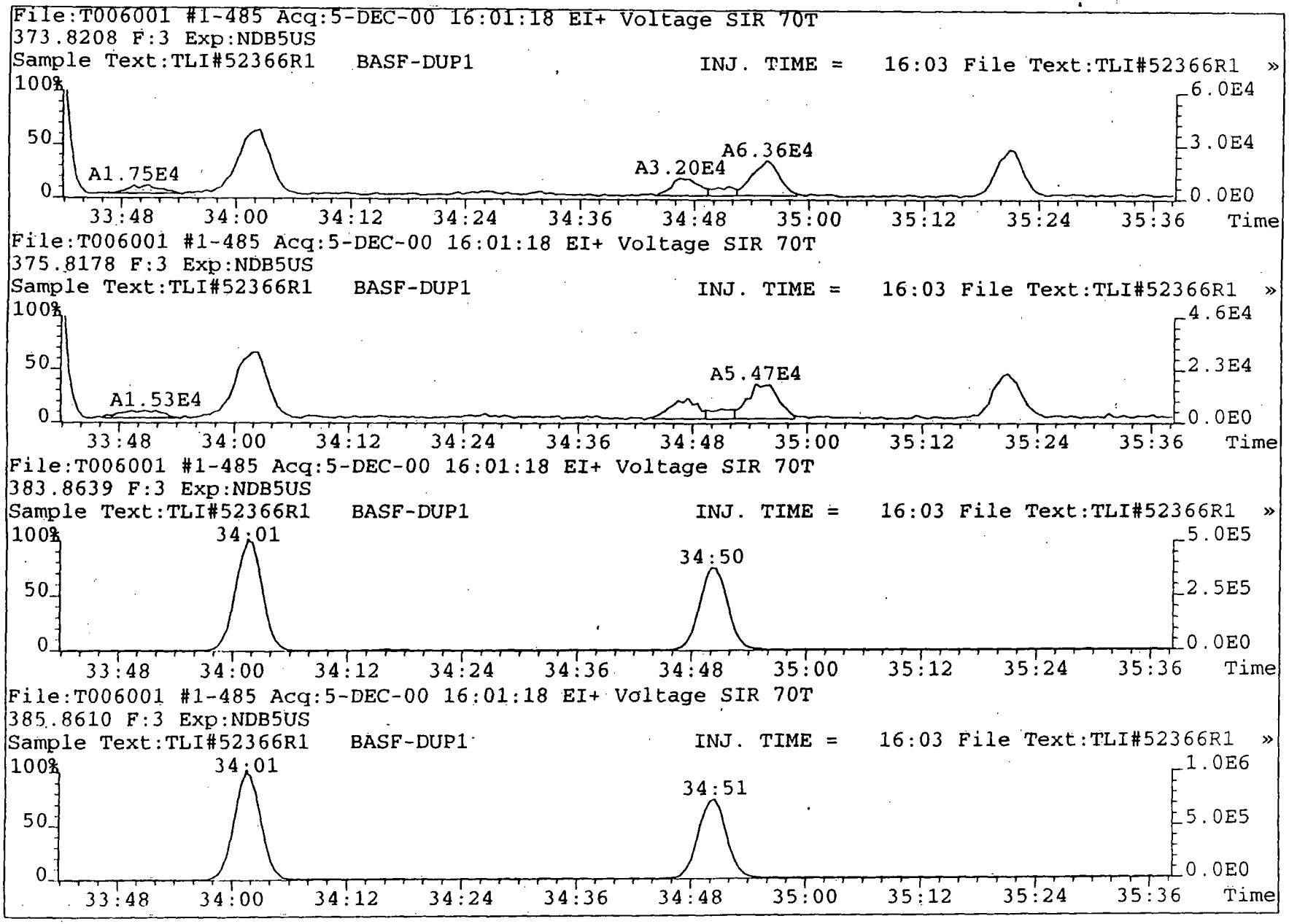
.108
.188
.296

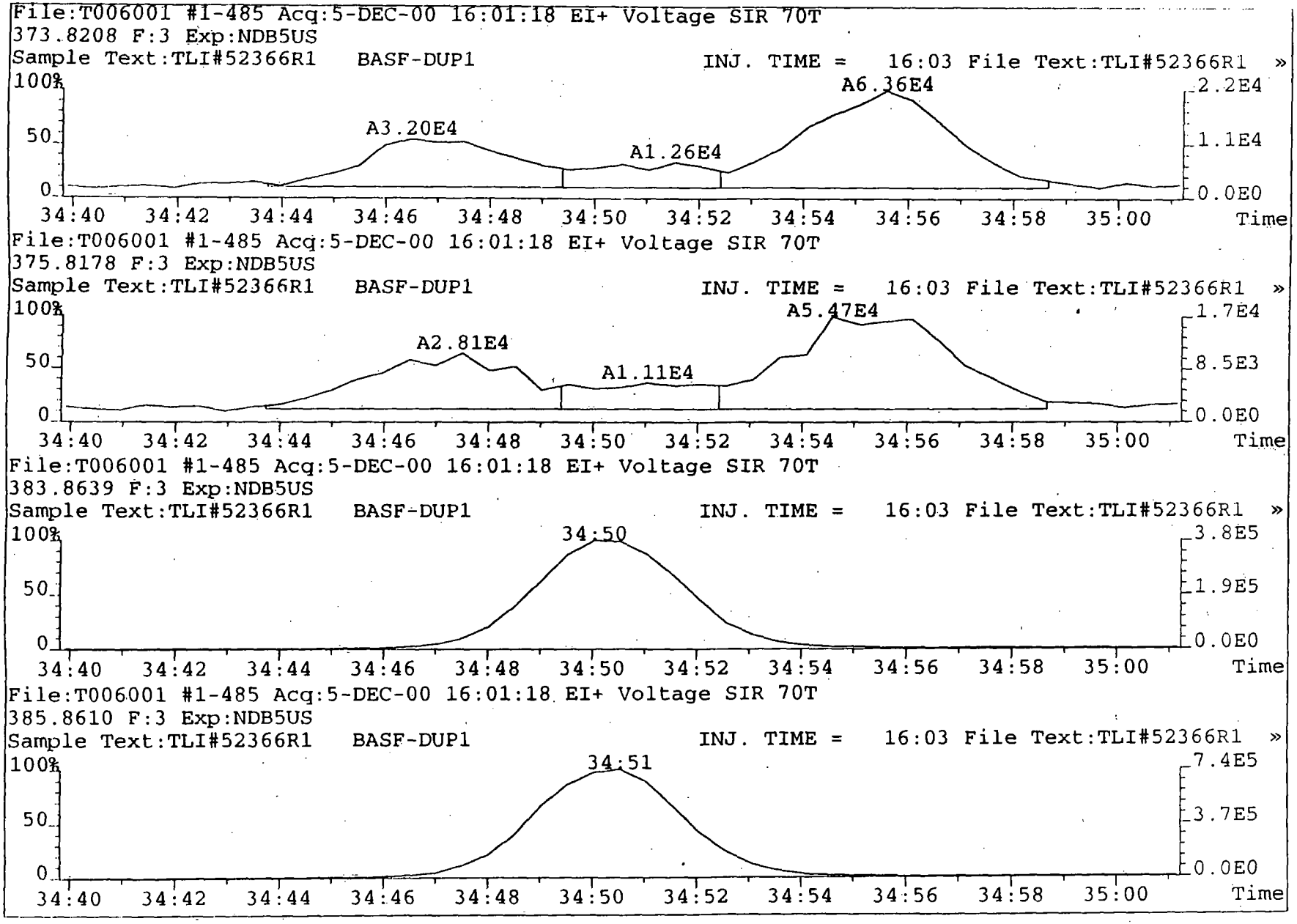
JCA
12/13/00

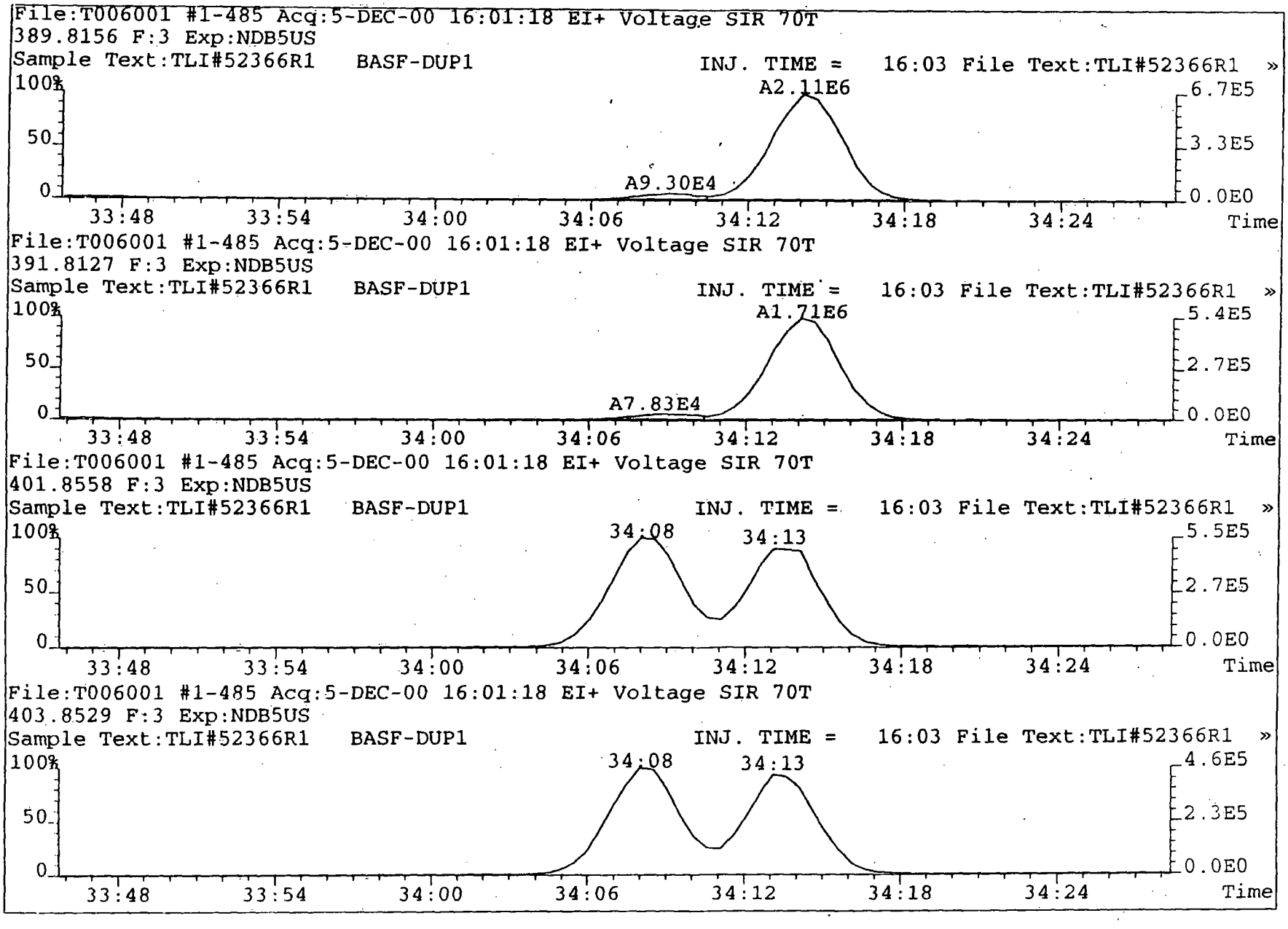

File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A1.15E5
A2.20E4
A2.84E4
3.6E4
1.8E4
0.0E0
26:00
27:00
28:00
Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A1.52E5
A2.68E4
A3.71E4
4.7E4
2.3E4
0.0E0
26:00
27:00
28:00
Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
331.9368 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
26:45
8.5E5
4.3E5
0.0E0
26:00
27:00
28:00
Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
333.9338 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
26:45
1.1E6
5.3E5
0.0E0
26:00
27:00
28:00
Time

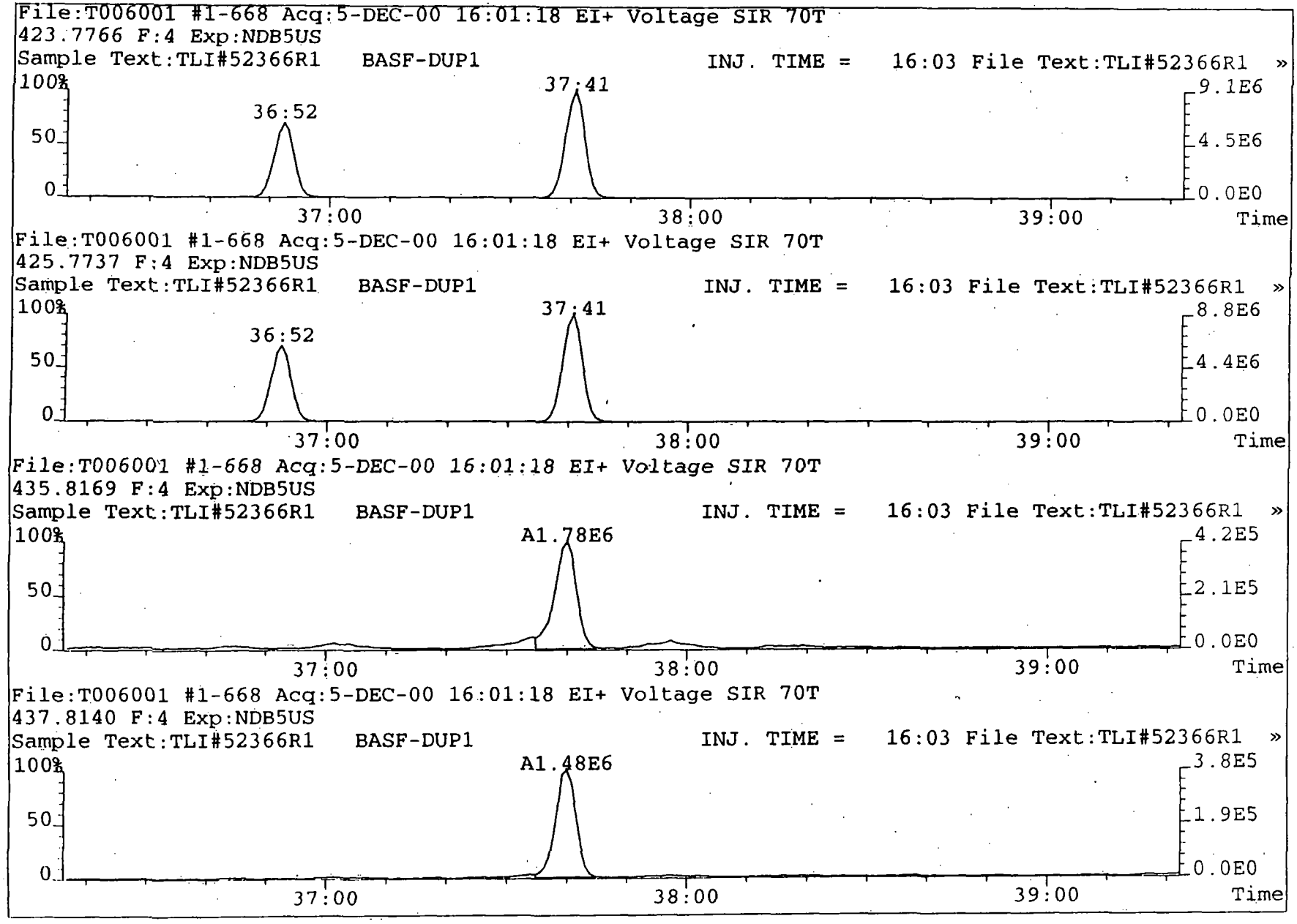

File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
339.8597 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A1.20E6
A7.28E4
3.7E5
1.9E5
0.0E0
29:54 29:56 29:58 30:00 30:02 30:04 30:06 30:08 30:10 Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
341.8567 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A8.00E5
A5.19E4
2.5E5
1.2E5
0.0E0
29:54 29:56 29:58 30:00 30:02 30:04 30:06 30:08 30:10 Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
351.9000 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
30:03
8.7E5
4.4E5
0.0E0
29:54 29:56 29:58 30:00 30:02 30:04 30:06 30:08 30:10 Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
353.8970 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
30:03
5.9E5
3.0E5
0.0E0
29:54 29:56 29:58 30:00 30:02 30:04 30:06 30:08 30:10 Time

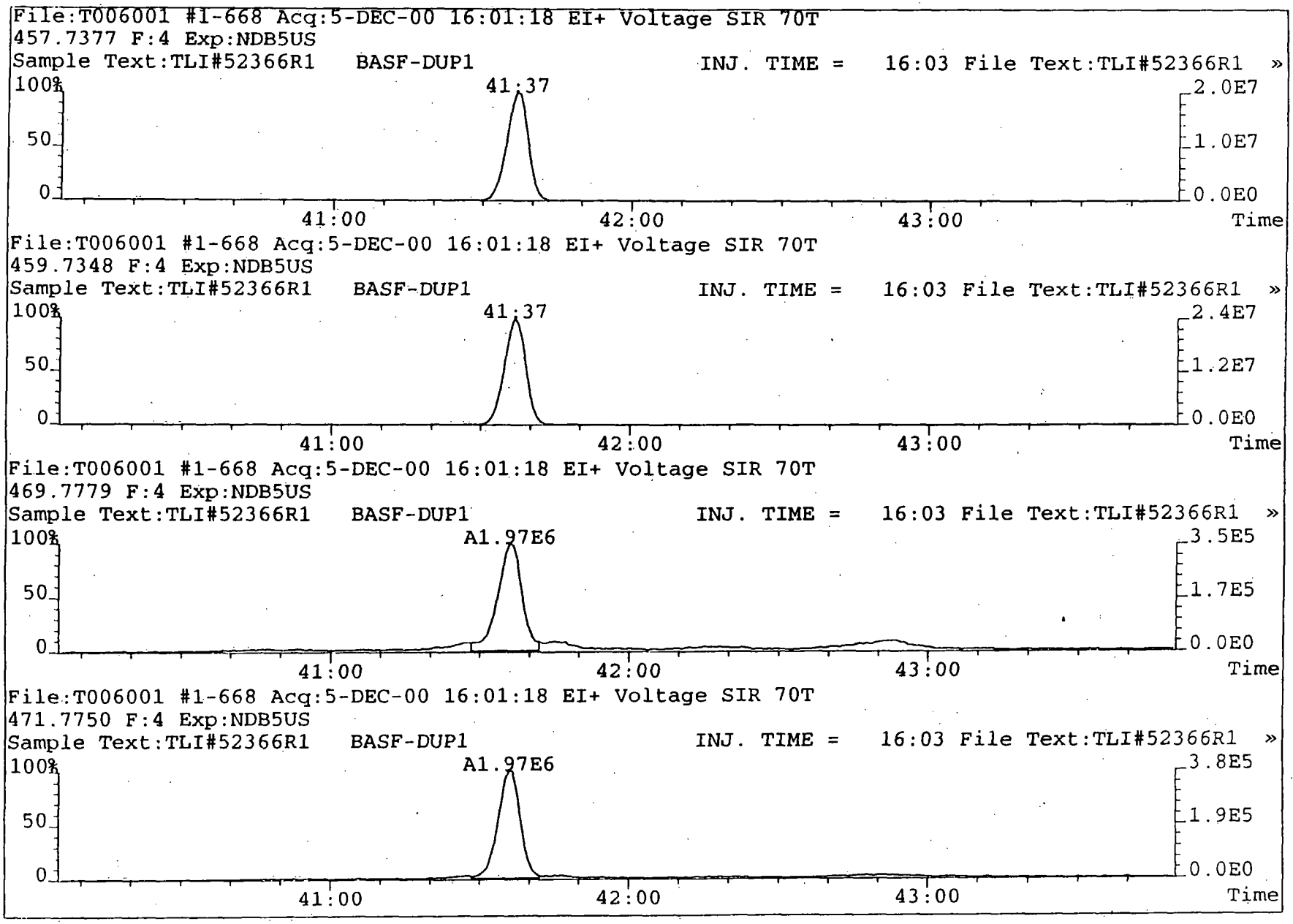

File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
355.8546 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
A3.24E5
1.1E5
5.4E4
0.0E0
29:00
30:00
31:00
Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
357.8516 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
A2.74E5
9.6E4
4.8E4
0.0E0
29:00
30:00
31:00
Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
367.8949 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
31:02
5.9E5
3.0E5
0.0E0
29:00
30:00
31:00
Time
File:T006001 #1-759 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
369.8919 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
31:02
4.0E5
2.0E5
0.0E0
29:00
30:00
31:00
Time

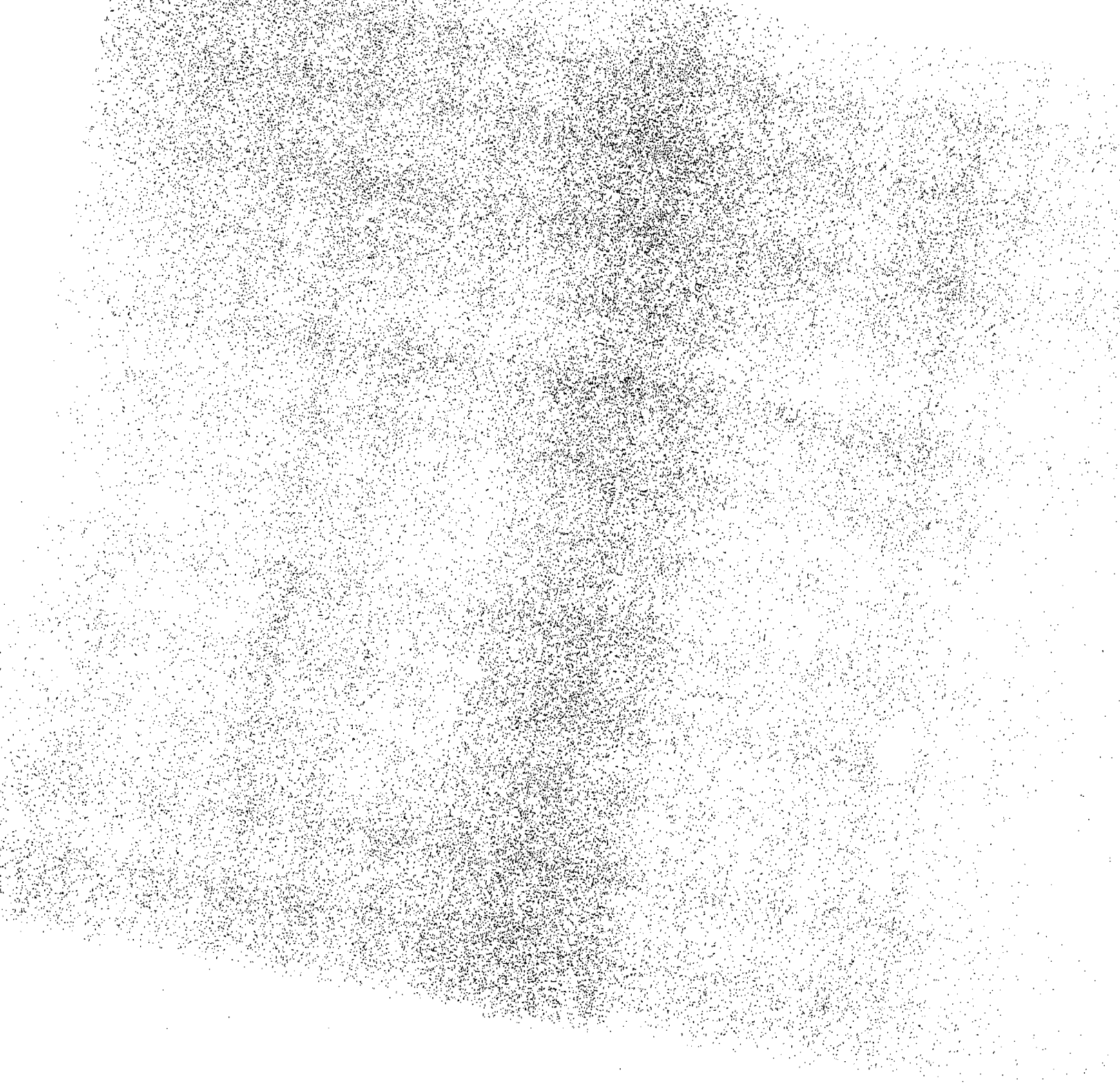

File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
373.8208 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A1.75E4
A3.20E4
A6.36E4
6.0E4
3.0E4
0.0E0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 Time
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
375.8178 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A1.53E4
A5.47E4
4.6E4
2.3E4
0.0E0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 Time
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
383.8639 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
34:01
34:50
5.0E5
2.5E5
0.0E0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 Time
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
385.8610 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
34:01
34:51
1.0E6
5.0E5
0.0E0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 Time


File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
373.8208 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A3.20E4
A1.26E4
A6.36E4
2.2E4
1.1E4
0.0E0
34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 Time
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
375.8178 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A2.81E4
A1.11E4
A5.47E4
1.7E4
8.5E3
0.0E0
34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 Time
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
383.8639 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
34:50
3.8E5
1.9E5
0.0E0
34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 Time
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
385.8610 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
34:51
7.4E5
3.7E5
0.0E0
34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 Time


File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
389.8156 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
A2.11E6
A9.30E4
6.7E5
3.3E5
0.0E0
33:48 33:54 34:00 34:06 34:12 34:18 34:24 Time
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
391.8127 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
A1.71E6
A7.83E4
5.4E5
2.7E5
0.0E0
33:48 33:54 34:00 34:06 34:12 34:18 34:24 Time
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
401.8558 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
34:08
34:13
5.5E5
2.7E5
0.0E0
33:48 33:54 34:00 34:06 34:12 34:18 34:24 Time
File:T006001 #1-485 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
403.8529 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 16:03 File Text:TLI#52366R1
34:08
34:13
4.6E5
2.3E5
0.0E0
33:48 33:54 34:00 34:06 34:12 34:18 34:24 Time


File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
423.7766 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
36:52
37:41
9.1E6
4.5E6
0.0E0
37:00
38:00
39:00
Time
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
425.7737 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
36:52
37:41
8.8E6
4.4E6
0.0E0
37:00
38:00
39:00
Time
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
435.8169 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A1.78E6
4.2E5
2.1E5
0.0E0
37:00
38:00
39:00
Time
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
437.8140 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A1.48E6
3.8E5
1.9E5
0.0E0
37:00
38:00
39:00
Time


File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
457.7377 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
41:37
2.0E7
1.0E7
0.0E0
41:00
42:00
43:00
Time
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
459.7348 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
41:37
2.4E7
1.2E7
0.0E0
41:00
42:00
43:00
Time
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
469.7779 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A1.97E6
3.5E5
1.7E5
0.0E0
41:00
42:00
43:00
Time
File:T006001 #1-668 Acq:5-DEC-00 16:01:18 EI+ Voltage SIR 70T
471.7750 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 16:03 File Text:TLI#52366R1
100%
50
0
A1.97E6
3.8E5
1.9E5
0.0E0
41:00
42:00
43:00
Time



TriMatrix, Inc.

TLI Project: **52366r1** Method 8290 TCDD/TCDF Analysis (DB-2
Client Sample: **BASF-DUP1** Analysis File: **P004**

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/2000	Spike File:	SPC2NF2
TLI ID:	274-99-4B	Date Extracted:	12/01/2000	ICal:	PF2O230
		Date Analyzed:	12/05/2000	ConCal:	P004403
Sample Size:	1.060 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005998	% Lipid:	n/a
GC Column:	DB-225	Analyst:	DFS	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flag
2,3,7,8-TCDF	327			0.76	23:57	

Internal Standard	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,7,8-TCDF	1340	71.0	40%-130%	0.75	23:56	

Recovery Standard	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,4-TCDD	0.83	22:45	

Data Reviewer: Jcm 12/13/2000

C2NF_PSR v2.03.LA

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:39 12/1

Initial ....Date...

Data Review By: JCA 12/13/00

Calculated Noise Height: 0.09

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

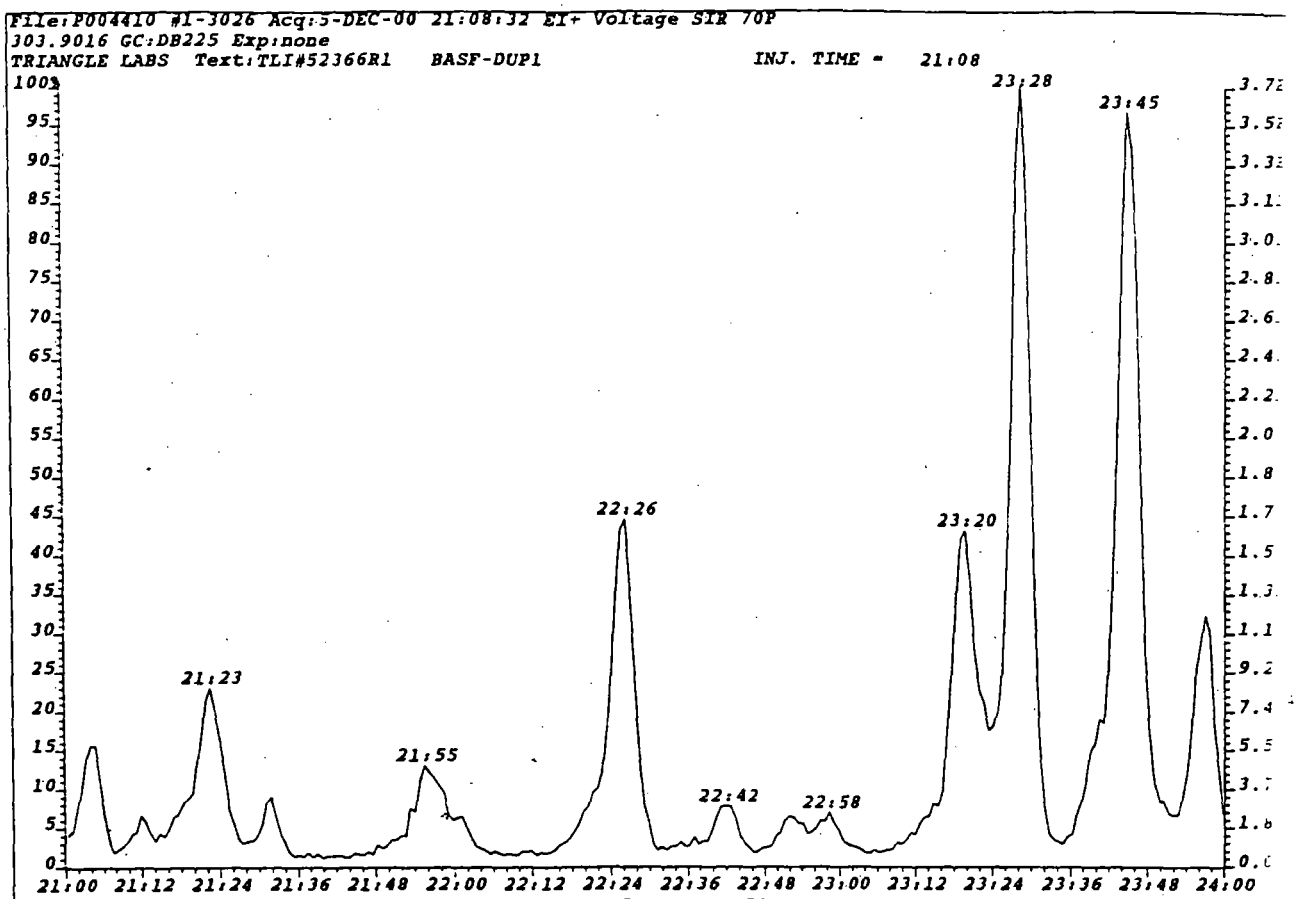
Page No. 1 Listing of P004410B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

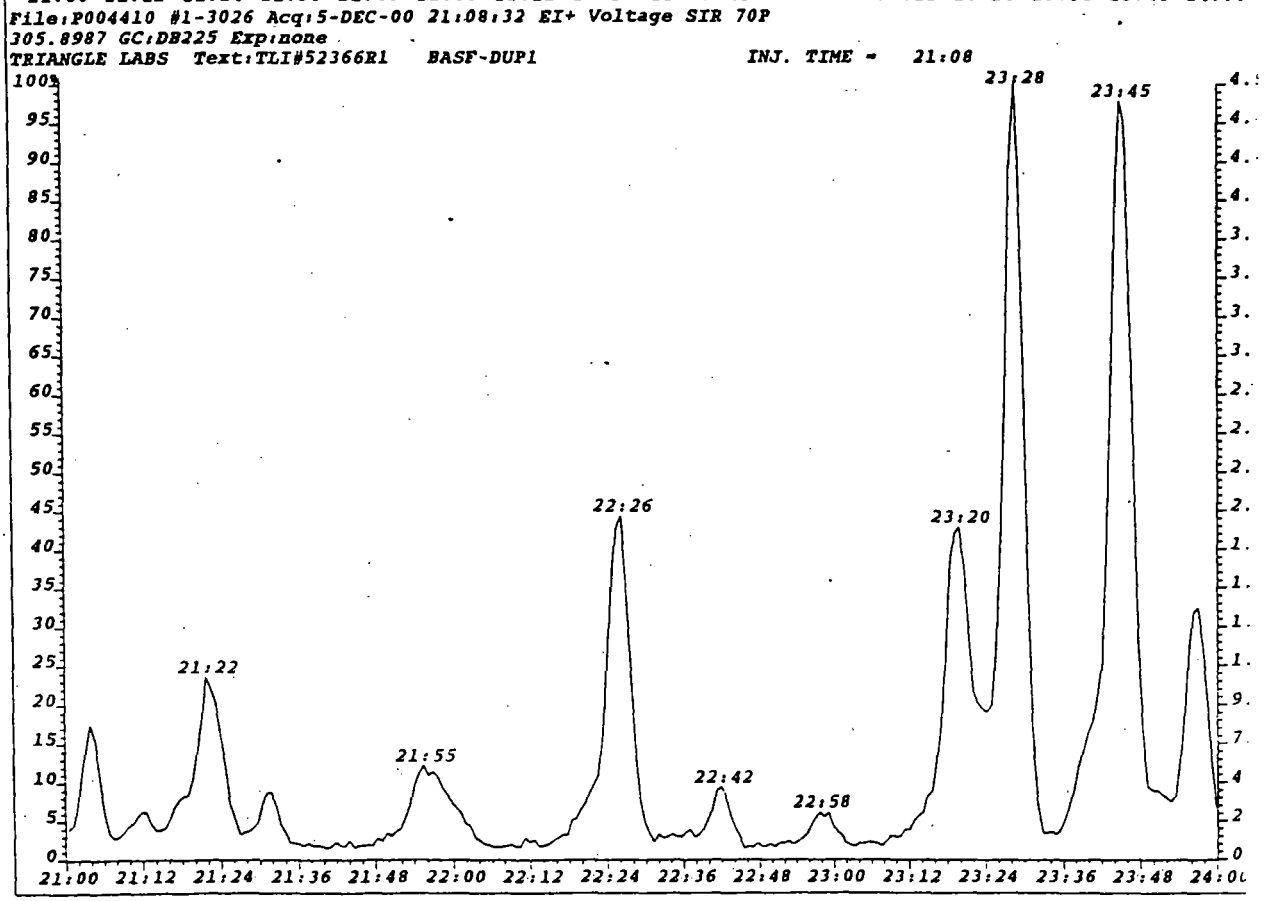
Compound/ M_Z....	QC	Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel.RT	Compound Name..	ID..	Flags
TCDF					0.65-0.89					0.791-1.103				
304-306		DC	NL		Height			0.16	0.08	0.08				
					19:10	RO	1.59	1.20	1.08	0.68	0.987			J
					19:16	RO	3.87	2.11	4.61	1.19	0.992			J
					19:21	RO	1.81	4.11	4.20	2.32	0.997			
	N				19:28	RO	1.38	1.84	1.43	1.04	1.003			J
					19:47	RO	6.41	4.69	16.99	2.65	1.019			
					19:55	RO	1.43	2.09	1.69	1.18	1.026			J
					20:06	RO	0.92	4.07	2.12	2.30	1.035			
					20:12		0.71	23.20	9.67	13.53	1.040			
					20:20		0.67	13.31	5.32	7.99	1.047			
					20:32	RO	0.93	9.43	4.95	5.33	1.058			
					20:38		0.74	47.88	20.34	27.54	1.063			
					20:53	RO	1.68	9.52	9.04	5.38	1.076			
					21:04		0.76	51.33	22.21	29.12	1.085			
					21:12		0.65	15.63	6.17	9.46	1.092			
					21:23		0.75	103.04	44.03	59.01	1.101			
		DC	WH		21:32	RO	0.61	21.06			1.109			
		DC	WH		21:55		0.72	66.57			1.129			
		DC	WH		22:12	RO	0.53	0.80			1.143			
		DC	WH		22:26		0.78	175.85			1.155			
		DC	WH		22:35	RO	0.38	3.65			1.163			
		DC	WH		22:42		0.76	25.20			1.169			
		DC	WH		22:58		0.79	19.36			1.183			
		DC	WH		23:20		0.70	196.43			1.202			
		DC	WH		23:28		0.78	334.95			1.209			
		DC	WH		23:45		0.73	417.02			1.223			
	KN				23:57		0.76	115.75	49.85	65.90	1.233	2378-TCDF		AN
		DC	WH		24:11		0.69	28.87			1.245			
		DC	WH		24:24		0.66	23.40			1.257			
		DC	WH		24:39	RO	1.44	34.25			1.270			
		DC	WH		24:48		0.69	191.25			1.277			
		DC	WH		25:26		0.77	236.88			1.310			
		DC	WH		26:14		0.80	3.86			1.351			
		DC	WH		26:34		0.76	1,164.06			1.368			
304-306			16	Peaks				409.20						
13C12-TCDF					0.65-0.89					0.958-1.042				
316-318		DC	NL		Height			0.38	0.13	0.25				
					18:54	RO	1.01	7.13	4.09	4.03	0.973			
					19:04	RO	1.45	3.50	2.88	1.98	0.982			
					19:10	RO	1.19	3.13	2.10	1.77	0.987			
	DN	D	SN		19:25		0.77	1,434.45			1.000			
					19:37		0.77	1.01	0.44	0.57	1.010			

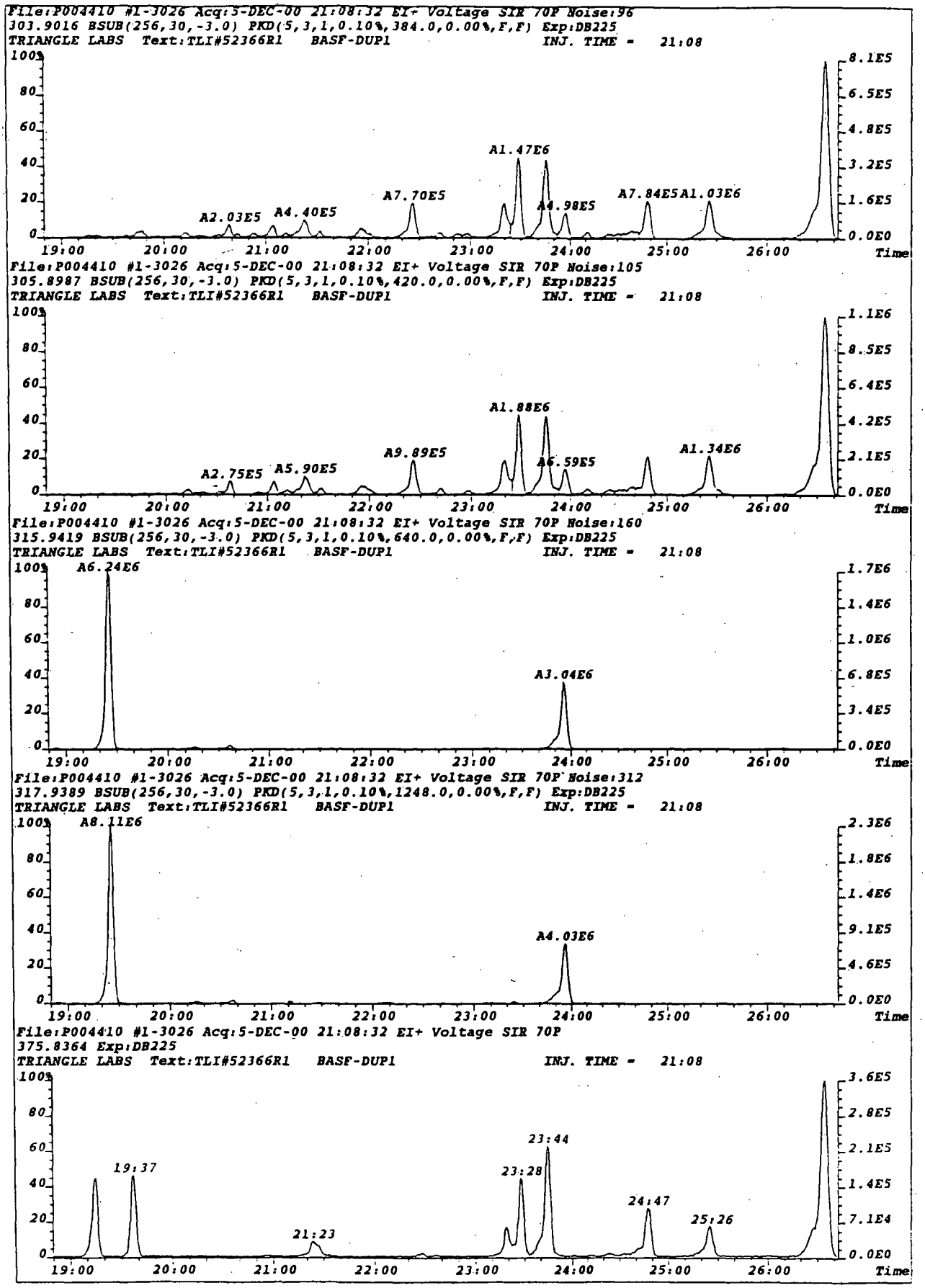
Compound M_Z	QC.Log	Cmit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
		DC	WH	20:16	RO	0.97	17.36			1.044			
		DC	WH	20:32	RO	0.42	1.56			1.058			
		DC	WH	20:37		0.71	24.39			1.062			
		DC	WH	21:30	RO	0.50	2.07			1.107			
		DC	WH	22:16	RO	0.26	0.80			1.147			
		DC	WH	22:26	RO	0.34	1.40			1.155			
		DC	WH	22:43	RO	0.19	1.33			1.170			
	KN			23:56		0.75	706.29	303.53	402.76	1.233	13C12-2378-TCDF	IS0	
						Height	141.17	63.56	77.61				
		DC	WH	24:37	RO	0.56	1.24			1.268			
		DC	WH	25:04	RO	1.57	2.19			1.291			
		DC	WH	26:11	RO	1.31	6.99			1.348			
316-318				5 Peaks			721.06						
	---------- Above: TCDF / TCDD Follows ----------												
13C12-TCDD						0.65-0.89				0.910-1.090			
332-334		DC	NL			Height	0.33	0.20	0.13				
				20:50	RO	1.51	1.84	1.57	1.04	0.916			
	N			22:26		0.30	466.37	206.82	259.55	0.986	13C12-2378-TCDD	IS1	
						Height	101.23	44.85	56.38				
	N			22:45		0.33	635.73	287.84	347.89	1.000	13C12-1234-TCDD	RS1	
				23:11	RO	1.21	6.28	4.28	3.55	1.019			
				23:23		0.84	11.73	5.35	6.38	1.028			
				23:37	RO	0.91	1.40	0.72	0.79	1.038			
				23:46	RO	0.97	17.19	9.46	9.71	1.045			
				24:23	RO	0.51	0.87	0.38	0.74	1.072			
				24:31		0.78	10.35	4.54	5.81	1.078			
				24:46	RO	1.14	3.20	2.07	1.81	1.089			
		DC	WH	25:06	RO	1.59	3.47			1.103			
		DC	WH	25:25		0.87	21.97			1.117			
332-334				10 Peaks			1,154.96						

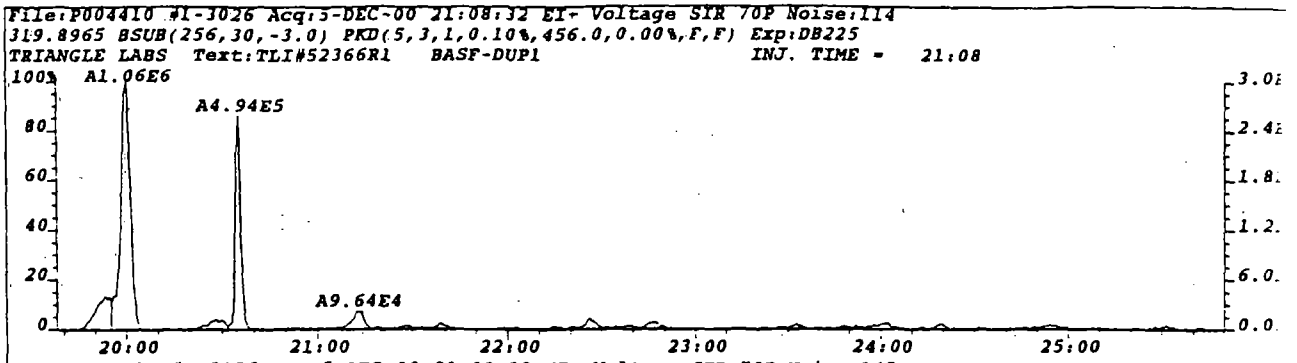
Column Description	"Why" Code Description	QC Log Desc
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

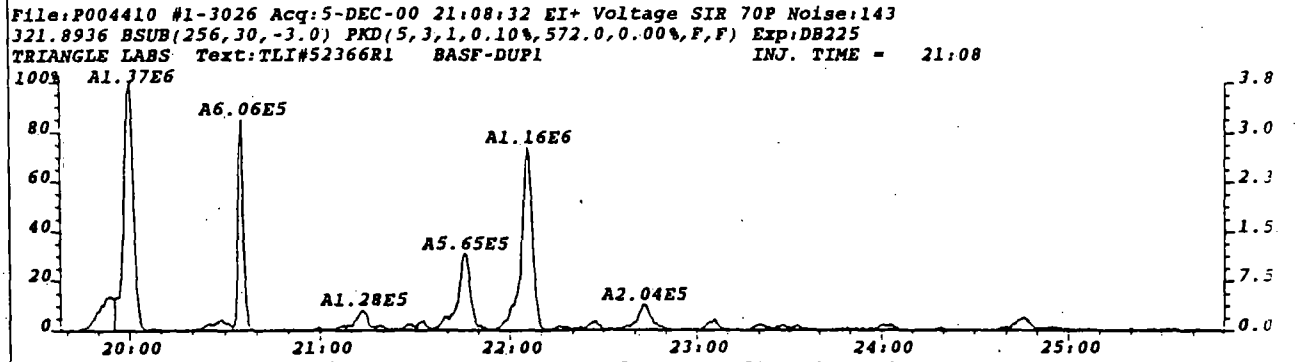
*** End of Report ***


File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P
303.9016 GC:DB225 Exp:none
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 21:08
21:23
21:55
22:26
22:42
22:58
23:20
23:28
23:45
21:00 21:12 21:24 21:36 21:48 22:00 22:12 22:24 22:36 22:48 23:00 23:12 23:24 23:36 23:48 24:00


File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P
305.8987 GC:DB225 Exp:none
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1
INJ. TIME = 21:08
21:22
21:55
22:26
22:42
22:58
23:20
23:28
23:45
21:00 21:12 21:24 21:36 21:48 22:00 22:12 22:24 22:36 22:48 23:00 23:12 23:24 23:36 23:48


File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P Noise:96
303.9016 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,384.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
A2.03E5
A4.40E5
A7.70E5
A1.47E6
A4.98E5
A7.84E5
A1.03E6
Time
File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P Noise:105
305.8987 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,420.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
A2.75E5
A5.90E5
A9.89E5
A1.88E6
A6.59E5
A1.34E6
Time
File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P Noise:160
315.9419 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,640.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
A6.24E6
A3.04E6
Time
File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P Noise:312
317.9389 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,1248.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
A8.11E6
A4.03E6
Time
File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P
375.8364 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
19:37
21:23
23:28
23:44
24:47
25:26
Time


File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P Noise:114
319.8965 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,456.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
A1.06E6
A4.94E5
A9.64E4
20:00
21:00
22:00
23:00
24:00
25:00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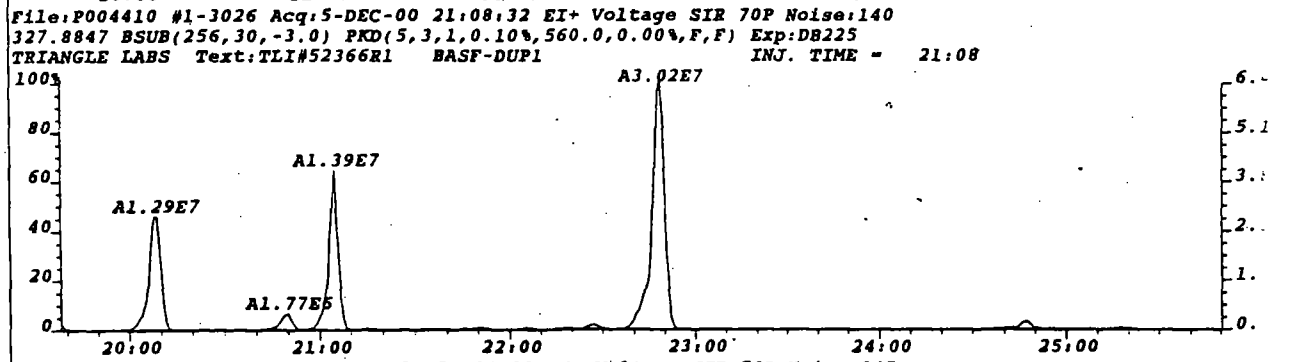
321.8936 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,572.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
A1.37E6
A6.06E5
A1.16E6
A5.65E5
A1.28E5
A2.04E5
20:00
21:00
22:00
23:00
24:00
25:00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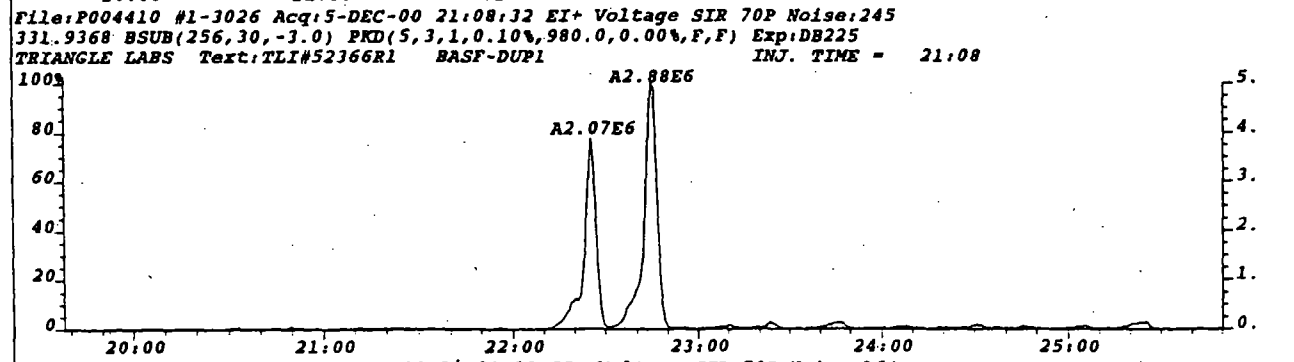
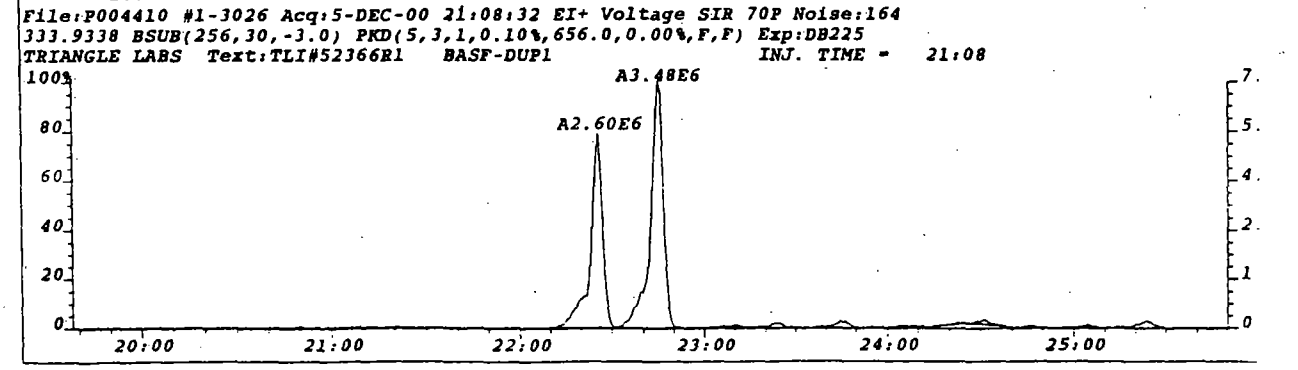
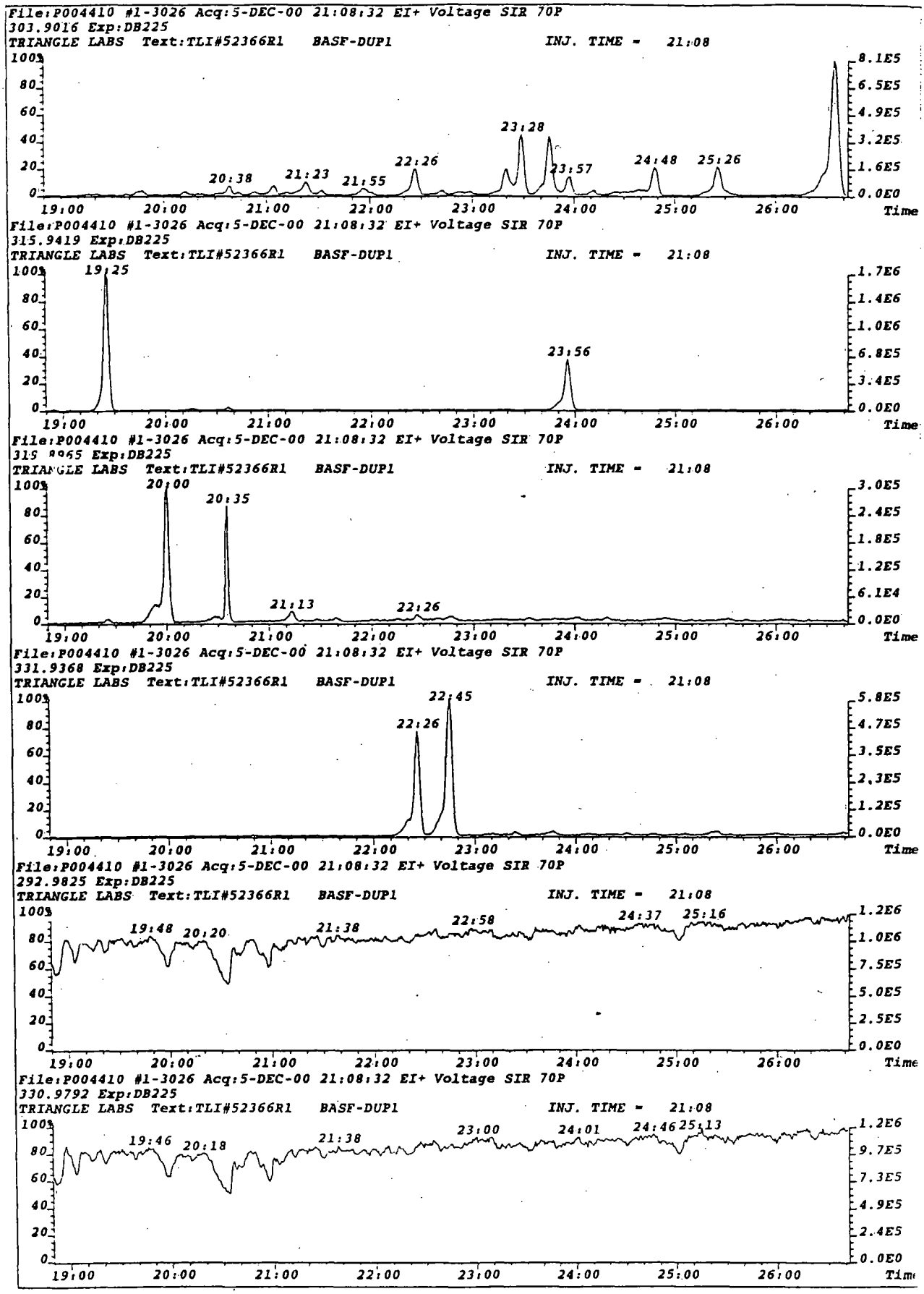
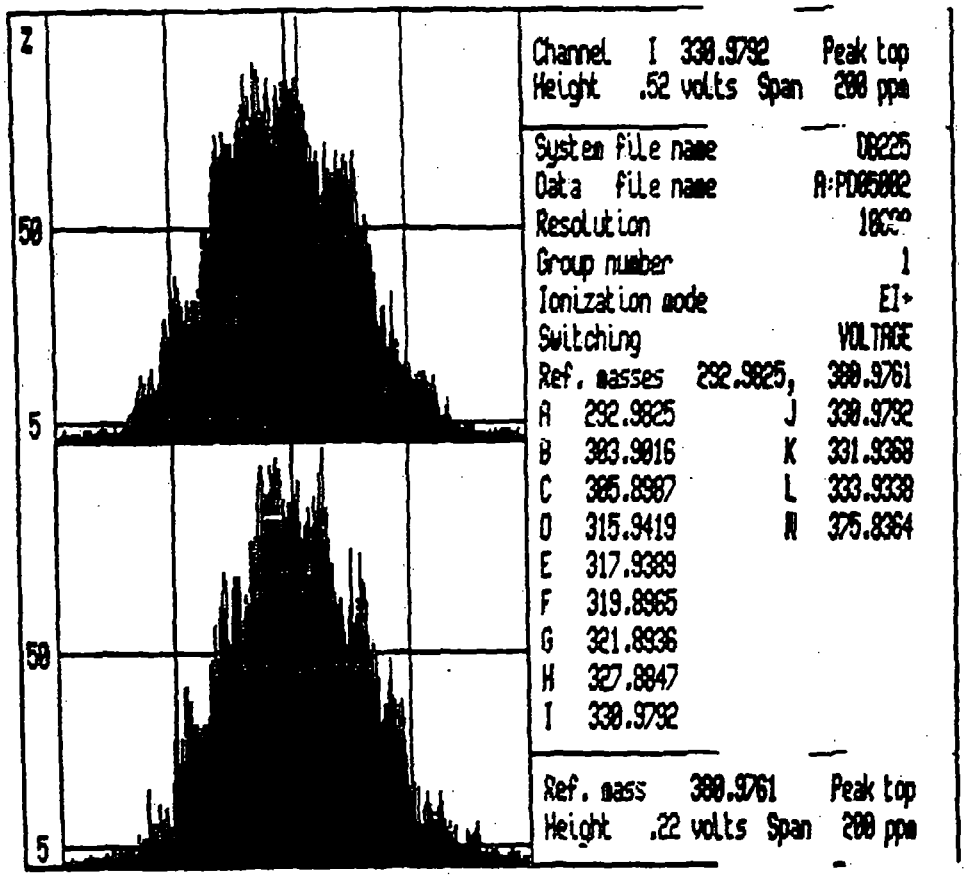
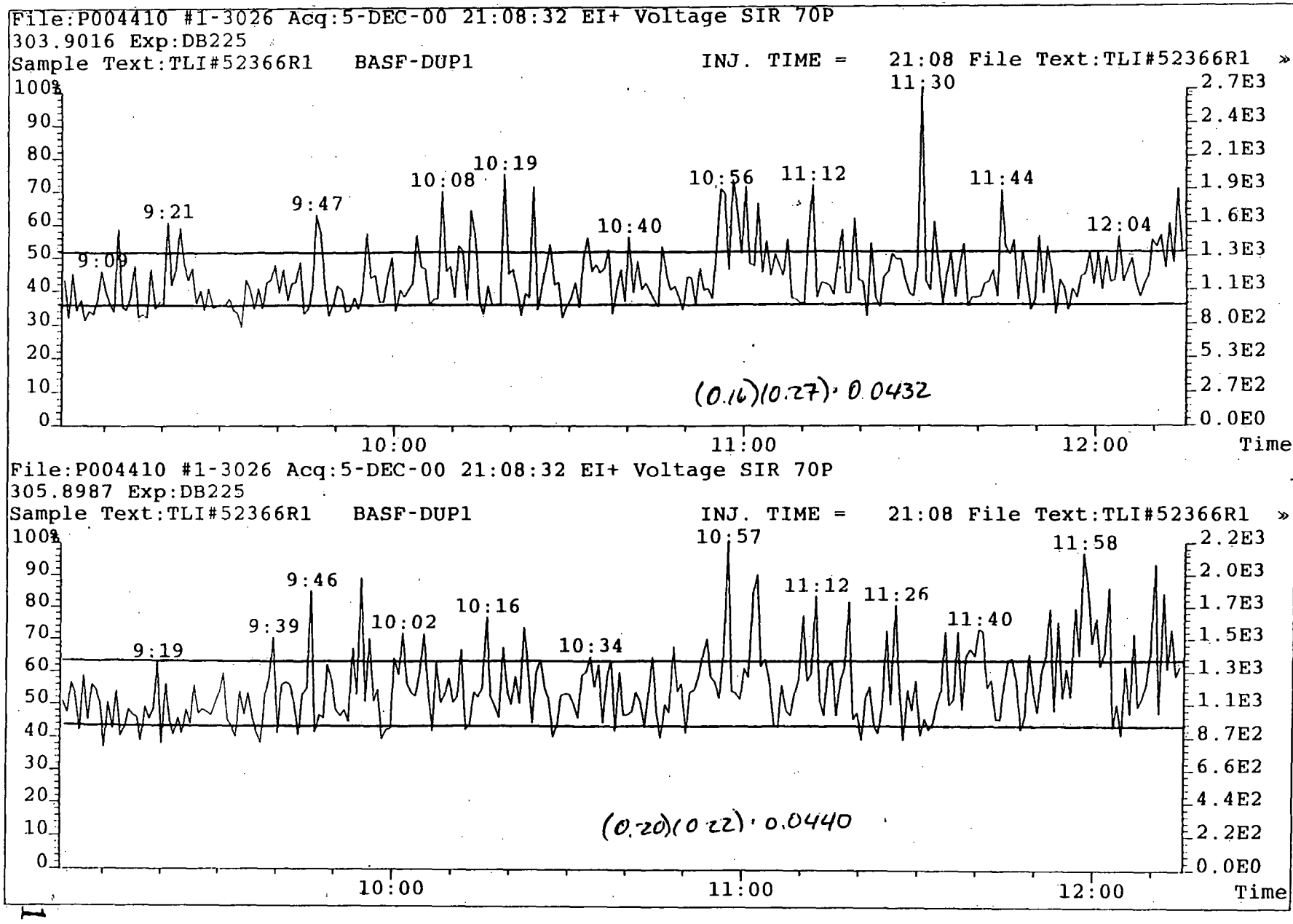
327.8847 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,560.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
A3.02E7
A1.39E7
A1.29E7
A1.77E6
20:00
21:00
22:00
23:00
24:00
25:00


File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P Noise:245
331.9368 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,980.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
A2.88E6
A2.07E6
20:00
21:00
22:00
23:00
24:00
25:00


File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P Noise:164
333.9338 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,656.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
A3.48E6
A2.60E6
20:00
21:00
22:00
23:00
24:00
25:00


File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P
303.9016 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
20:38
21:23
21:55
22:26
23:28
23:57
24:48
25:26
Time
File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P
315.9419 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
19:25
23:56
Time
File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P
315.9965 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
20:00
20:35
21:13
22:26
Time
File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P
331.9368 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
22:26
22:45
Time
File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P
292.9825 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
19:48
20:20
21:38
22:58
24:37
25:16
Time
File:P004410 #1-3026 Acq:5-DEC-00 21:08:32 EI+ Voltage SIR 70P
330.9792 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-DUP1 INJ. TIME = 21:08
19:46
20:18
21:38
23:00
24:01
24:46
25:13
Time

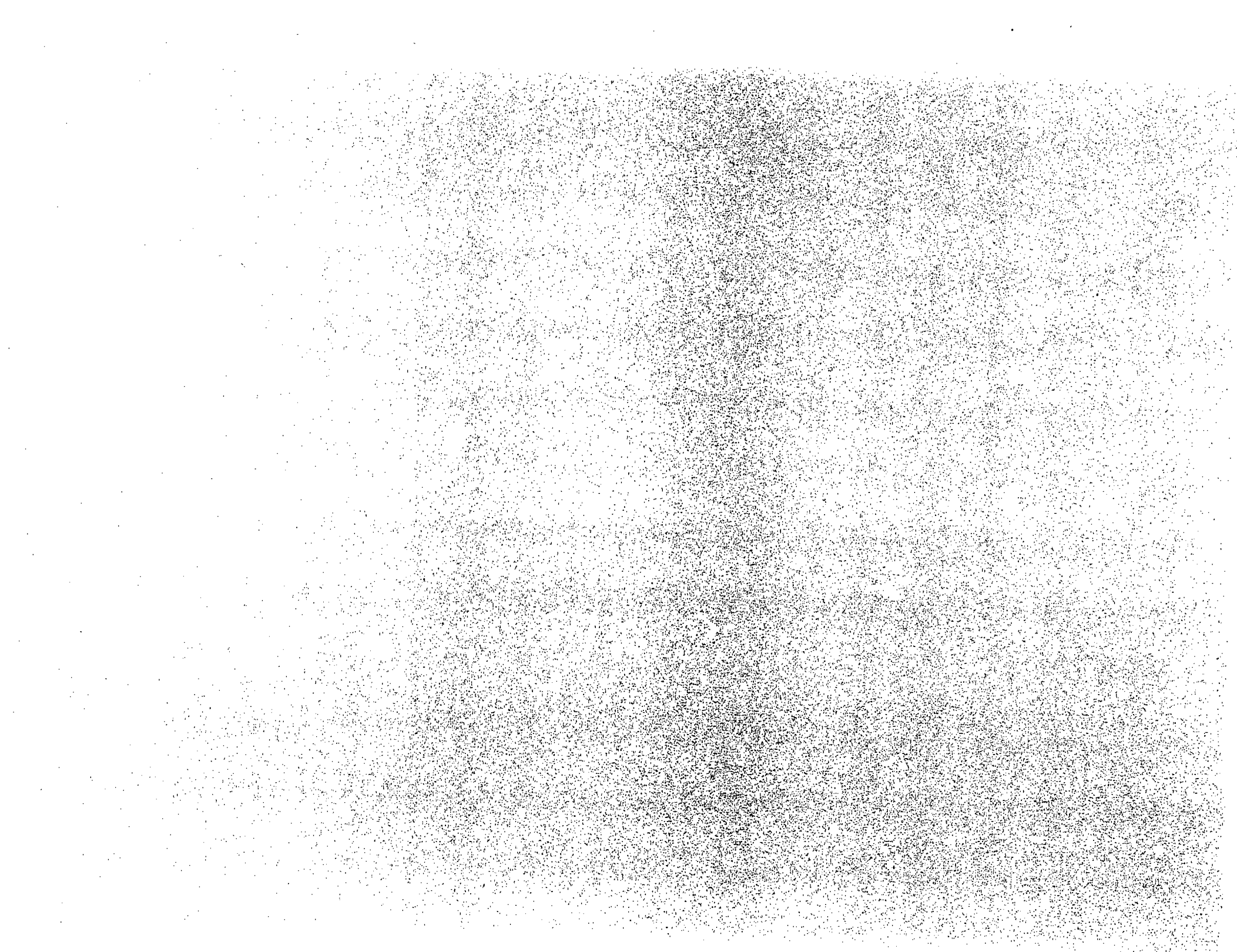

Z
50
5
50
5
Channel I 330.9792 Peak top
Height .52 volts Span 200 ppm
System file name 08225
Data file name A:PD05002
Resolution 1800
Group number 1
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 380.9761
A 292.9825
B 303.9016
C 305.8987
D 315.9419
E 317.9389
F 319.8965
G 321.8936
H 327.8847
I 330.9792
J 330.9792
K 331.9368
L 333.9338
M 375.8364
Ref. mass 380.9761 Peak top
Height .22 volts Span 200 ppm



0.0432
0.0440
0.0872

DS
12/5/00

173



TriMatrix, Inc.

TLI Project: **52366r1** Method 8290 PCDD/PCDF Analysis (
Client Sample: **BASF-FIELD BLANK** Analysis File: **T0060**

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/2000	Spike File:	SPMIT32S
TLI ID:	274-99-6B	Date Extracted:	12/01/2000	ICal:	TF57140
		Date Analyzed:	12/05/2000	ConCal:	T005996
Sample Size:	1.070 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005998	% Lipid:	n/a
GC Column:	DB-5	Analyst:	BWL	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flag
2,3,7,8-TCDD	ND	1.7				
1,2,3,7,8-PeCDD	ND	1.3				
1,2,3,4,7,8-HxCDD	ND	1.6				
1,2,3,6,7,8-HxCDD	ND	1.6				
1,2,3,7,8,9-HxCDD	ND	1.6				
1,2,3,4,6,7,8-HpCDD	ND	2.3				
1,2,3,4,6,7,8,9-OCDD	7.5			1.00	41:33	J
2,3,7,8-TCDF	ND	1.1				
1,2,3,7,8-PeCDF	ND	1.2				
2,3,4,7,8-PeCDF	ND	1.1				
1,2,3,4,7,8-HxCDF	ND	1.2				
1,2,3,6,7,8-HxCDF	ND	1.1				
2,3,4,6,7,8-HxCDF	ND	1.2				
1,2,3,7,8,9-HxCDF	ND	1.5				
1,2,3,4,6,7,8-HpCDF	ND	1.5				
1,2,3,4,7,8,9-HpCDF	ND	1.9				
1,2,3,4,6,7,8,9-OCDF	ND	2.9				

Totals	Conc. (pg/L)	Number	DL	EMPC	Flag
Total TCDD	ND		1.7		
Total PeCDD	ND		1.3		
Total HxCDD	ND		1.6		
Total HpCDD	ND		2.3		
Total TCDF	ND		1.1		
Total PeCDF	ND		1.1		
Total HxCDF	ND		1.3		
Total HpCDF	ND		1.7		

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:40 12/13

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TLI Project: 52366r1 Method 8290 PCDD/PCDF Analysi
Client Sample: BASF-FIELD BLANK Analysis File: T00

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fl
$^{13}C_{12}$-2,3,7,8-TCDF	1370	73.2	40%-130%	0.75	26:08	
$^{13}C_{12}$-2,3,7,8-TCDD	1250	67.0	40%-130%	0.80	26:48	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1450	77.3	40%-130%	1.48	29:56	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	1810	96.7	40%-130%	1.47	30:56	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1200	64.3	40%-130%	0.51	33:27	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1430	76.7	40%-130%	1.21	34:09	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1380	74.0	25%-130%	0.43	36:29	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1710	91.3	25%-130%	1.17	37:35	
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	3150	84.3	25%-130%	0.88	41:31	

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fl
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1610	85.9	40%-130%	1.49	30:36	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1260	67.3	40%-130%	0.50	33:20	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1420	75.8	40%-130%	1.21	34:04	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1600	85.7	25%-130%	0.43	38:08	

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Fl
$^{37}Cl_4$-2,3,7,8-TCDD	151	80.8	40%-130%	26:49	

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fl
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1610	86.0	40%-130%	0.50	34:46	
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1460	78.3	40%-130%	0.50	33:57	

Recovery Standards	Ratio	RT	Fl
$^{13}C_{12}$-1,2,3,4-TCDD	0.80	26:38	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.21	34:29	

Data Reviewer: JCA 12/13/2000

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:40 12/

TriMatrix, Inc.

TLI Project: 52366r1 — Toxicity Equivalents Re
Client Sample: BASF-FIELD BLANK — Analysis File: T006

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/00	Spike File:	SPMIT32
TLI ID:	274-99-6B	Date Extracted:	12/01/00	ICal:	TF57140
		Date Analyzed:	12/05/00	ConCal:	T005996
Sample Size:	1.070 L	Dilution Factor:	1	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005998	% Lipid:	n/a
GC Column:	DB-5	Analyst:	BWL	% Solids:	n/a

Analytes	Conc. (pg/L)		TEF		Equivalent
2,3,7,8-TCDD	{1.7}	x	1.	=	1.7
1,2,3,7,8-PeCDD	{1.3}	x	0.5	=	0.65
1,2,3,4,7,8-HxCDD	{1.6}	x	0.1	=	0.16
1,2,3,6,7,8-HxCDD	{1.6}	x	0.1	=	0.16
1,2,3,7,8,9-HxCDD	{1.6}	x	0.1	=	0.16
1,2,3,4,6,7,8-HpCDD	{2.3}	x	0.01	=	0.023
1,2,3,4,6,7,8,9-OCDD	7.5	x	0.001	=	0.0075
TOTAL PCDD					2.9
2,3,7,8-TCDF	{1.1}	x	0.1	=	0.11
1,2,3,7,8-PeCDF	{1.2}	x	0.05	=	0.060
2,3,4,7,8-PeCDF	{1.1}	x	0.5	=	0.55
1,2,3,4,7,8-HxCDF	{1.2}	x	0.1	=	0.12
1,2,3,6,7,8-HxCDF	{1.1}	x	0.1	=	0.11
2,3,4,6,7,8-HxCDF	{1.2}	x	0.1	=	0.12
1,2,3,7,8,9-HxCDF	{1.5}	x	0.1	=	0.15
1,2,3,4,6,7,8-HpCDF	{1.5}	x	0.01	=	0.015
1,2,3,4,7,8,9-HpCDF	{1.9}	x	0.01	=	0.019
1,2,3,4,6,7,8,9-OCDF	{2.9}	x	0.001	=	0.0029
TOTAL PCDF					1.26

Total EPA TEFs, 1989a: 4.1 pg/L

{...} indicates that the value is that of a Detection Limit.

GRY_TEF v1.08, MIL

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:44 12

1

Initial ....Date...

Data Review By: JSH 12/17/00

Calculated Noise Height: 0.06

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T006002B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC	Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
TCDF							0.65-0.89			0.880-1.070				
304-306	DC	NL					Height	0.11	0.06	0.05				
	DC	SN			25:28	RO	1.48	0.51			0.974			
D	D	SN			26:07	RO	0.95	0.65			0.999			
	DC	WH			28:03	RO	8.00	0.04			1.073			
304-306			0	Peaks				0.00						
13C12-TCDF							0.65-0.89			0.962-1.038				
316-318	DC	NL					Height	0.15	0.09	0.06				
					25:46		0.69	3.55	1.45	2.10	0.986			
					26:08		0.75	862.09	369.04	493.05	1.000	13C12-2378-TCDF	ISO	
							Height	250.16	107.10	143.06				
					26:34	RO	0.97	4.62	2.01	2.08	1.017			
316-318			3	Peaks				870.26						
---------- Above: TCDF / TCDD Follows ----------														
TCDD							0.65-0.89			0.904-1.042				
320-322	DC	NL					Height	0.08	0.04	0.04				
	DC	SN			24:56	RO	1.18	0.19			0.930			
	DC	SN			25:24	RO	1.00	0.41			0.943			
	DC	SN			25:33	RO	0.63	0.11			0.953			
	DC	SN			25:36	RO	1.00	0.07			0.955			
D	D	SN			25:52		0.76	0.51			0.965			
D	D	SN			26:08	RO	0.98	0.83			0.975			
	DC	SN			26:32	RO	0.25	0.07			0.990			
	DC	SN			26:37	RO	1.00	0.32			0.993			
	DC	SN			26:51	RO	0.22	0.23			1.002	2378-TCDD		AN
	DC	WH			28:18		0.85	0.24			1.056			
320-322			0	Peaks				0.00						
37Cl-TCDD										0.925-1.075				
328	DC	NL					Height	0.05	0.05					
	DC	WL			24:16			0.17			0.905			
	DC	WL			24:43			0.18			0.922			
	DC	SN			24:53			0.05			0.928			
	DC	SN			25:05			0.10			0.936			
					25:32			0.62	0.62		0.953			
					25:42			0.14	0.14		0.959			
	DC	SN			25:51			0.18			0.965			
	DC	SN			25:52			0.08			0.965			
					25:57			0.41	0.41		0.968			
					26:12			0.56	0.56		0.978			
	DC	SN			26:17			0.12			0.981			

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		26:19			0.17			0.982			
	DC	SN		26:39			0.20			0.994			
				26:49			66.04	66.04		1.001	37C1-TCDD		CLS
	DC	SN		27:04			0.07			1.010			
	DC	SN		27:10			0.22			1.014			
	DC	SN		27:14			0.21			1.016			
	DC	SN		27:26			0.19			1.024			
	DC	SN		27:39			0.20			1.032			
	DC	SN		27:47			0.12			1.037			
				27:54			0.20	0.20		1.041			
	DC	SN		28:04			0.10			1.047			
	DC	SN		28:13			0.14			1.053			
	DC	SN		28:17			0.17			1.055			
328			6	Peaks			67.97						
13C12-TCDD					0.65-0.89					0.925-1.075			
332-334	DC	NL			Height		0.38	0.31	0.07				
				25:42	RO	1.53	1.73	1.50	0.98	0.959			
				26:38		0.80	918.85	407.36	511.49	0.994	13C12-1234-TCDD		RS1
				26:48		0.80	647.51	288.53	358.98	1.000	13C12-2378-TCDD		IS1
					Height		184.75	80.95	103.80				
332-334			3	Peaks			1,568.09						
---------- Above: TCDD / PeCDF Follows ----------													
PeCDF					1.32-1.78					0.930-1.060			
340-342	DC	NL			Height		0.09	0.04	0.05				
	DC	SN		27:57	RO	1.29	0.36			0.934			
	DC	SN		28:18	RO	0.44	0.13			0.945			
	DC	SN		28:29	RO	1.00	0.13			0.952			
	DC	SN		29:05	RO	0.75	0.15			0.972			
	DC	SN		29:12	RO	0.55	0.10			0.976			
	DC	SN		29:57	RO	0.86	0.30			1.001	12378-PeCDF		AN
	DC	SN		30:03	RO	0.95	0.30			1.004			
	DC	SN		30:28	RO	1.91	0.28			1.018			
	DC	SN		30:38	RO	1.83	0.61			1.023	23478-PeCDF		AN
	DC	SN		31:11	RO	1.00	0.33			1.042			
	DC	SN		31:18	RO	0.06	0.03			1.046			
	DC	SN		31:38	RO	2.50	0.15			1.057			
340-342			0	Peaks			0.00						
13C12-PeCDF					1.32-1.78					0.866-1.134			
352-354	DC	NL			Height		0.11	0.05	0.06				
				29:07		1.48	2.31	1.38	0.93	0.973			
				29:34	RO	2.02	1.35	1.07	0.53	0.988			
				29:56		1.48	851.91	508.06	343.85	1.000	13C12-PeCDF 123		IS2
					Height		266.88	158.99	107.89				
				30:14	RO	1.21	6.40	3.04	2.51	1.010			
				30:36		1.49	936.80	561.08	375.72	1.022	13C12-PeCDF 234		SUR1
				31:35	RO	1.26	10.61	5.25	4.16	1.055			
352-354			6	Peaks			1,809.38						

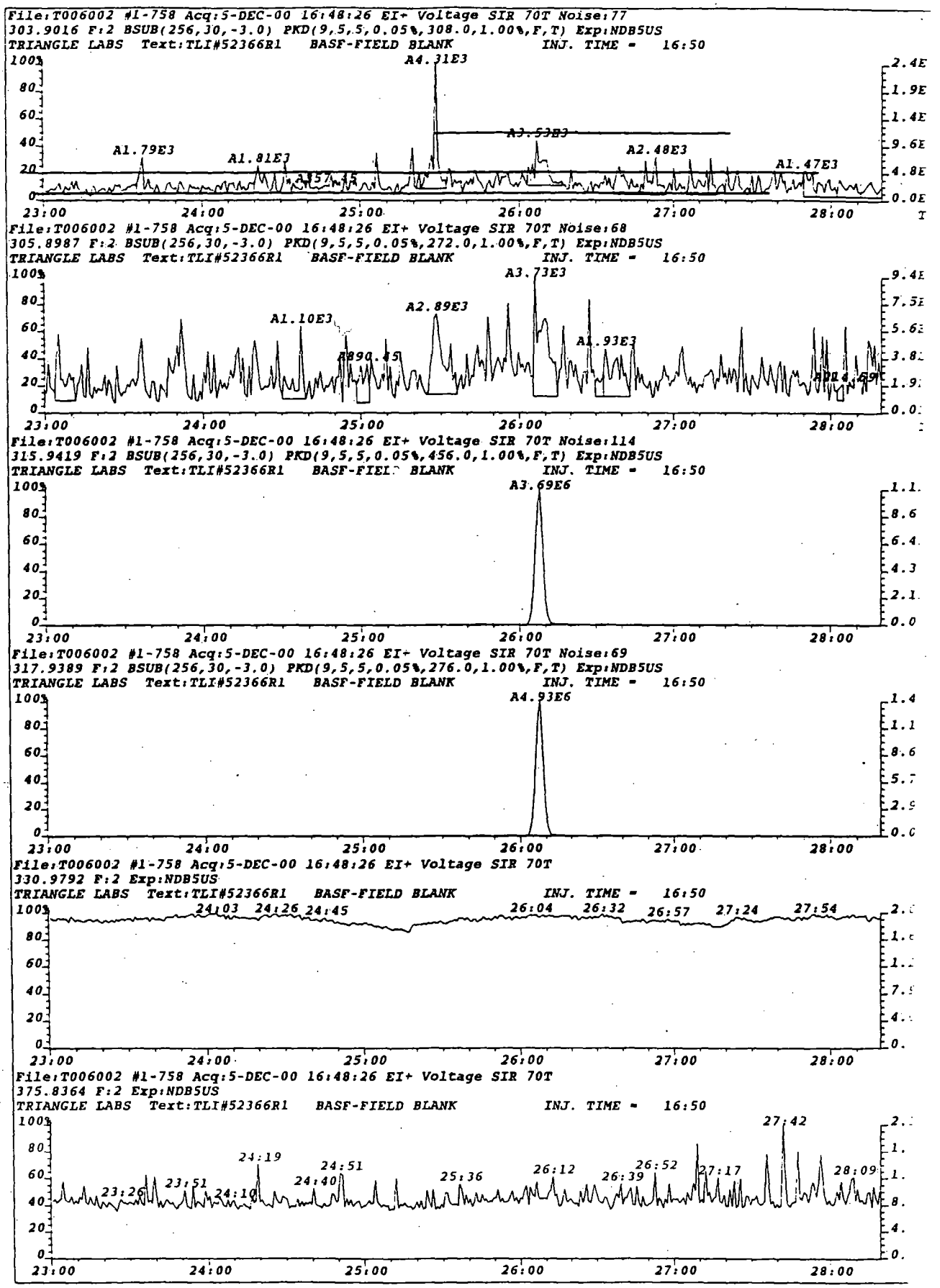
Compound/ M_I....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD						1.32-1.78				0.938-1.020			
356-358	DC	NL				Height	0.10	0.06	0.04				
D	D	SN	29:12	RO		1.15	0.38			0.944			
	DC	SN	29:21	RO		0.73	0.18			0.949			
	DC	SN	29:33			1.55	0.28			0.955			
	DC	SN	29:45	RO		0.33	0.07			0.962			
	DC	SN	29:47	RO		0.10	0.03			0.963			
	DC	SN	29:58	RO		5.86	0.18			0.969			
D	D	SN	30:12	RO		2.21	0.36			0.976			
	DC	SN	30:36	RO		1.35	0.51			0.989			
	DC	SN	31:02	RO		0.60	0.61			1.003			
	DC	SN	31:24	RO		0.29	0.08			1.015			
	DC	WH	31:35	RO		0.67	0.10			1.021			
	DC	WH	31:44	RO		0.73	0.31			1.026			
356-358			0 Peaks				0.00						
13C12-PeCDD						1.32-1.78				0.871-1.129			
368-370	DC	NL				Height	0.26	0.20	0.06				
			29:53	RO		2.47	3.54	3.43	1.39	0.966			
			30:02	RO		2.45	3.32	3.19	1.30	0.971			
			30:42	RO		3.14	0.56	0.69	0.22	0.992			
			30:56			1.47	606.22	360.43	245.79	1.000	13C12-PeCDD 123	IS3	
						Height	200.45	118.82	81.63				
368-370			4 Peaks				613.64						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF						1.05-1.43				0.963-1.047			
374-376	DC	NL				Height	0.12	0.06	0.06				
D	D	SN	33:21			1.07	0.56			0.997	123478-HxCDF	AN	
	DC	SN	33:28	RO		2.56	0.20			1.000	123678-HxCDF	AN	
	DC	SN	33:57	RO		0.50	0.16			1.015	234678-HxCDF	AN	
	DC	SN	34:24	RO		0.32	0.11			1.028			
	DC	SN	34:31	RO		0.87	0.23			1.032			
	DC	SN	34:45	RO		1.00	0.31			1.039	123789-HxCDF	AN	
	DC	SN	34:55	RO		2.50	0.04			1.044			
	DC	SN	35:01	RO		1.83	0.13			1.047			
374-376			0 Peaks				0.00						
13C12-HxCDF						0.43-0.59				0.880-1.120			
384-386	DC	NL				Height	0.29	0.14	0.15				
			32:22	RO		0.70	2.25	0.76	1.08	0.968			
			32:30	RO		0.63	2.22	0.75	1.20	0.972			
			33:20			0.50	743.99	248.35	495.64	0.997	13C12-HxCDF 478	SUR2	
			33:27			0.51	720.85	242.10	478.75	1.000	13C12-HxCDF 678	IS4	
						Height	231.90	78.99	152.91				
			33:57			0.50	800.44	268.37	532.07	1.015	13C12-HxCDF 234	ALT2	
			34:09	RO		0.20	0.56	0.19	0.94	1.021			
			34:46			0.50	646.08	216.78	429.30	1.039	13C12-HxCDF 789	ALT1	
384-386			7 Peaks				2,916.39						

Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD				1.05-1.43					0.957-1.013				
390-392	DC	NL		Height			0.17	0.08	0.09				
390-392			0 Peaks				0.00						
13C12-HxCDD				1.05-1.43					0.971-1.029				
402-404	DC	NL		Height			1.69	1.23	0.46				
			33:36	RO	9.18		3.65	14.97	1.63	0.984			
			34:04		1.21		550.56	301.33	249.23	0.998	13C12-HxCDD 473		SUR3
			34:09		1.21		537.81	294.29	243.52	1.000	13C12-HxCDD 678		IS5
				Height			169.86	92.30	77.56				
			34:29		1.21		772.39	422.44	349.95	1.010	13C12-HxCDD 789		RS2
402-404			4 Peaks				1,364.41						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF				0.88-1.20					0.995-1.050				
408-410	DC	NL		Height			0.09	0.05	0.04				
	DC	SN	38:10		1.18		0.37			1.046	1234789-HpCDF		AN
408-410			0 Peaks				0.00						
13C12-HpCDF				0.37-0.51					0.945-1.110				
418-420	DC	NL		Height			0.16	0.07	0.09				
			36:29		0.43		554.15	166.78	387.37	1.000	13C12-HpCDF 678		IS6
				Height			149.43	43.80	105.63				
			38:08		0.43		499.60	149.97	349.63	1.045	13C12-HpCDF 789		SUR4
418-420			2 Peaks				1,053.75						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20					0.974-1.004				
424-426	DC	NL		Height			0.09	0.05	0.04				
	DC	SN	36:49	RO	0.70		0.27			0.980			
	DC	SN	37:08	RO	0.38		0.12			0.988			
	DC	SN	37:15	RO	0.61		0.22			0.991			
	DC	SN	37:23	RO	0.23		0.06			0.995			
D	D	SN	37:37		0.91		0.67			1.001	1234678-HpCDD		AN
424-426			0 Peaks				0.00						
13C12-HpCDD				0.88-1.20					0.973-1.027				
436-438	DC	NL		Height			1.72	1.16	0.56				
	DC	WL	36:29	RO	3.26		8.14			0.971			
			37:06	RO	5.02		14.28	35.12	7.00	0.987			
M			37:35		1.17		605.00	326.00	279.00	1.000	13C12-HpCDD 678		IS7
				Height			145.44	75.87	69.57				
436-438			2 Peaks				619.28						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02					0.904-1.096				
442-444	DC	NL		Height			0.10	0.05	0.05				

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
	DC		WL	36:22	RO	3.25	0.08			0.876			
	DC		WL	36:27		0.31	0.29			0.878			
	DC		WL	36:55	RO	0.75	0.25			0.889			
	DC		SN	38:24	RO	0.18	0.13			0.925			
	DC		SN	38:31	RO	3.00	0.06			0.928			
	DC		SN	38:37		0.85	0.24			0.930			
	DC		SN	41:04	RO	0.50	0.08			0.989			
	DC		SN	41:11	RO	2.00	0.08			0.992			
	DC		SN	41:34	RO	1.47	0.36			1.001			
D	D		SN	41:46	RO	1.04	1.04			1.006	OCDF	AN	
442-444		0	Peaks				0.00						
OCDD				0.76-1.02					0.904-1.096				
458-460	DC		NL			Height	0.10	0.05	0.05				
M				41:33		1.00	1.66	0.83	0.83	1.001	OCDD	AN	J
	DC		SN	41:42	RO	2.70	0.19			1.004			
458-460		1	Peak				1.66						
13C12-OCDD				0.76-1.02					0.996-1.004				
470-472	DC		NL			Height	1.37	0.91	0.46				
				41:31		0.88	908.67	425.57	483.10	1.000	13C12-OCDD	IS8	
						Height	177.41	81.48	95.93				
	DC		WH	41:46	RO	5.52	9.88			1.006			
470-472		1	Peak				908.67						

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***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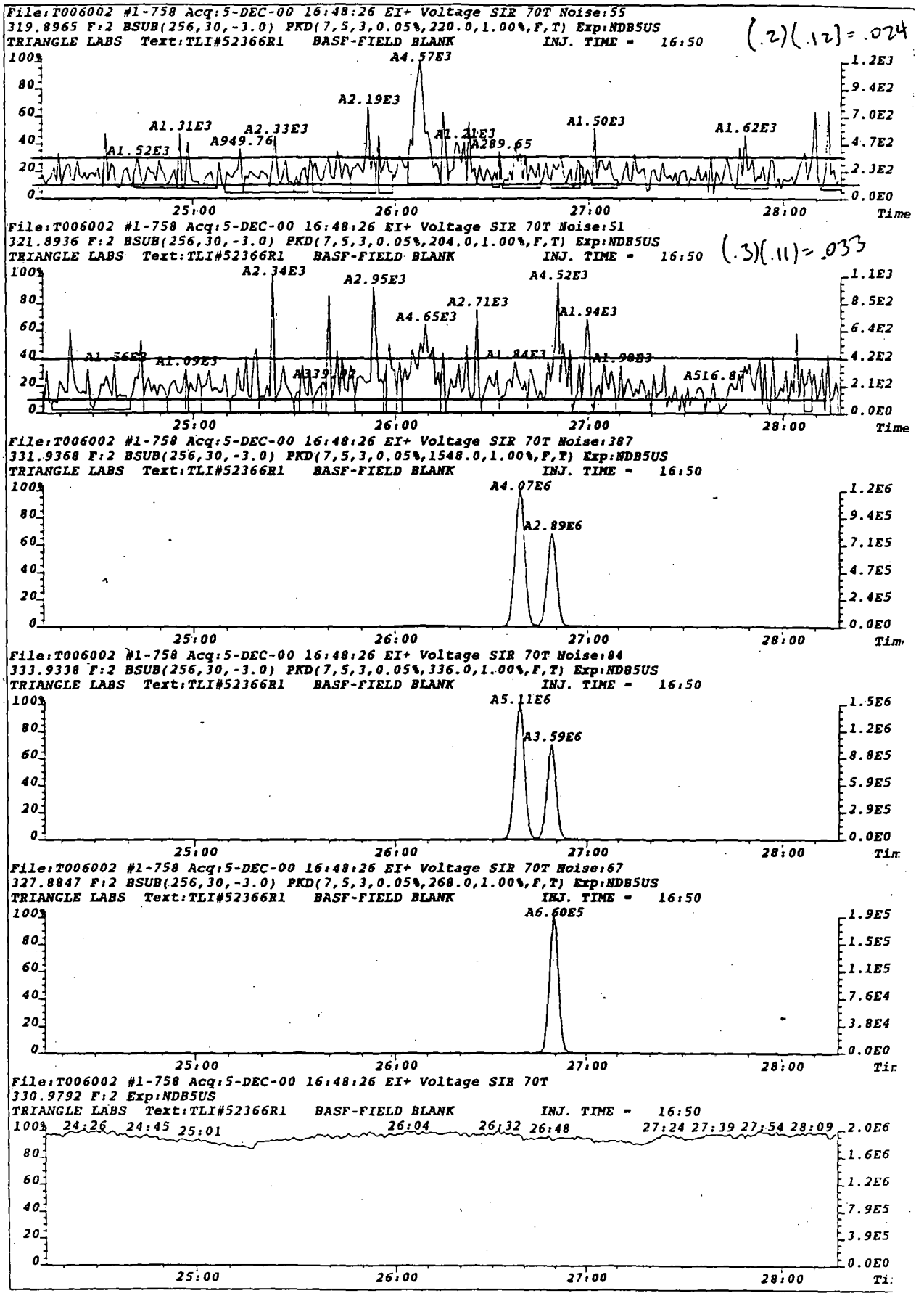
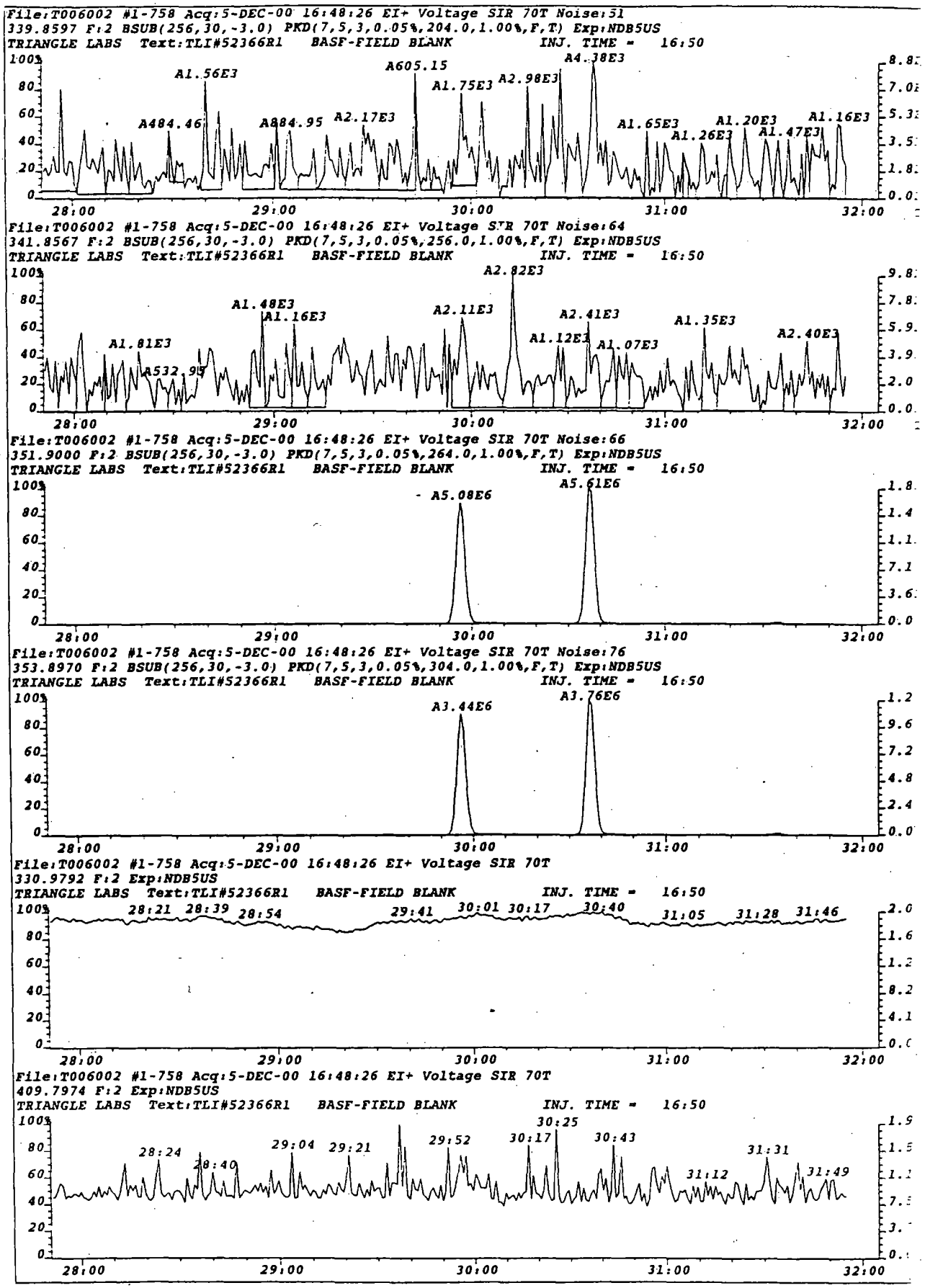
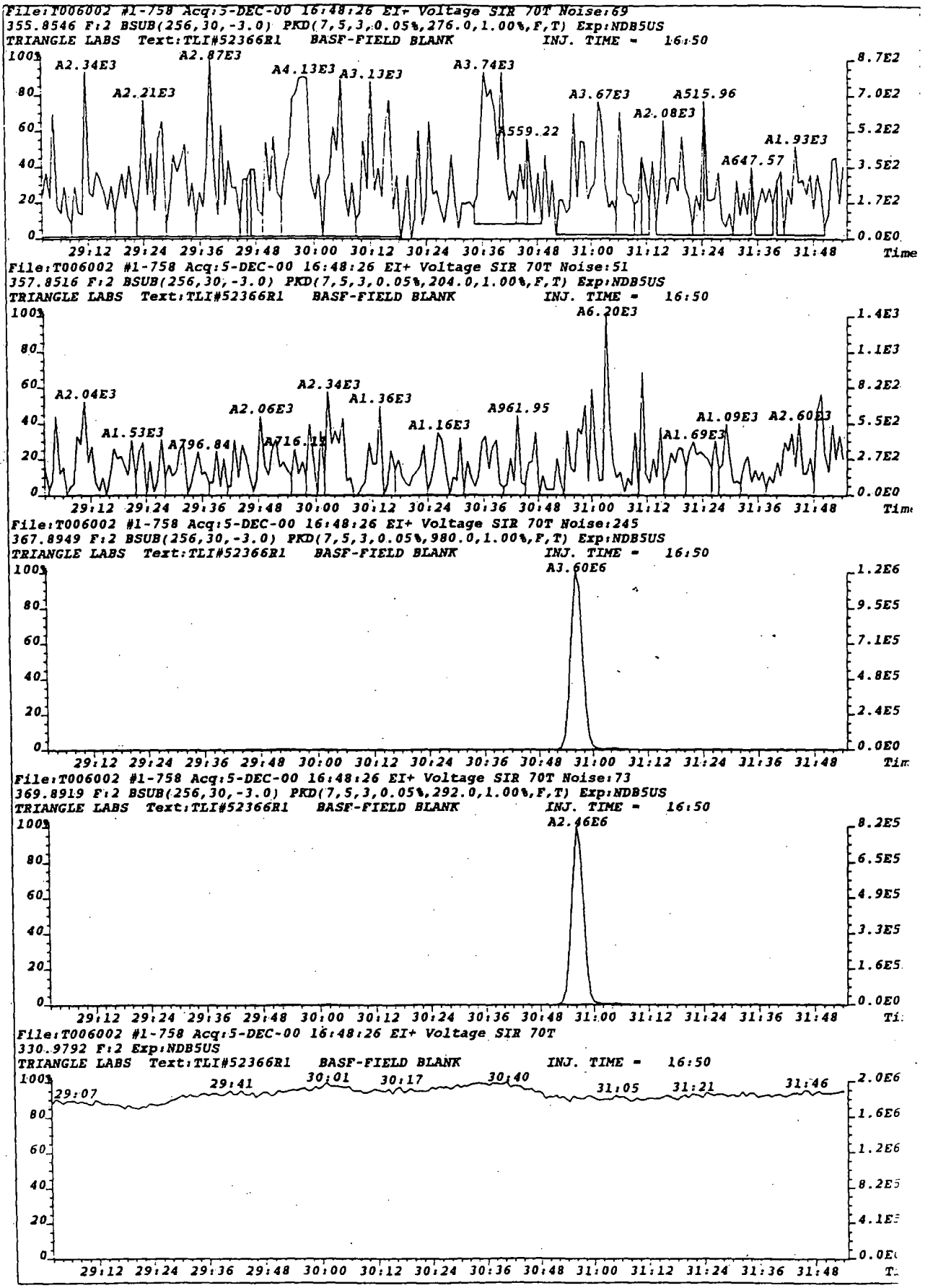
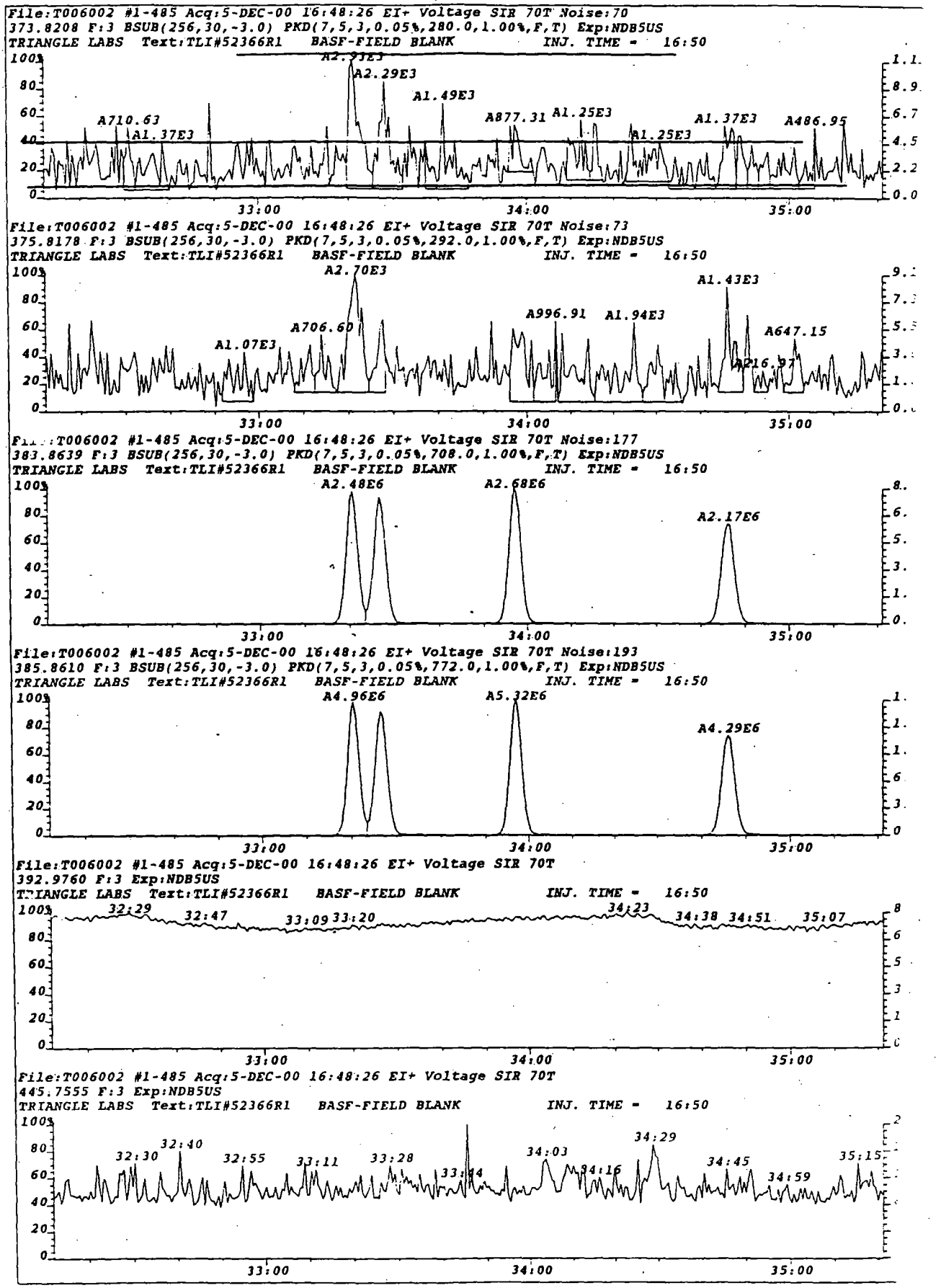
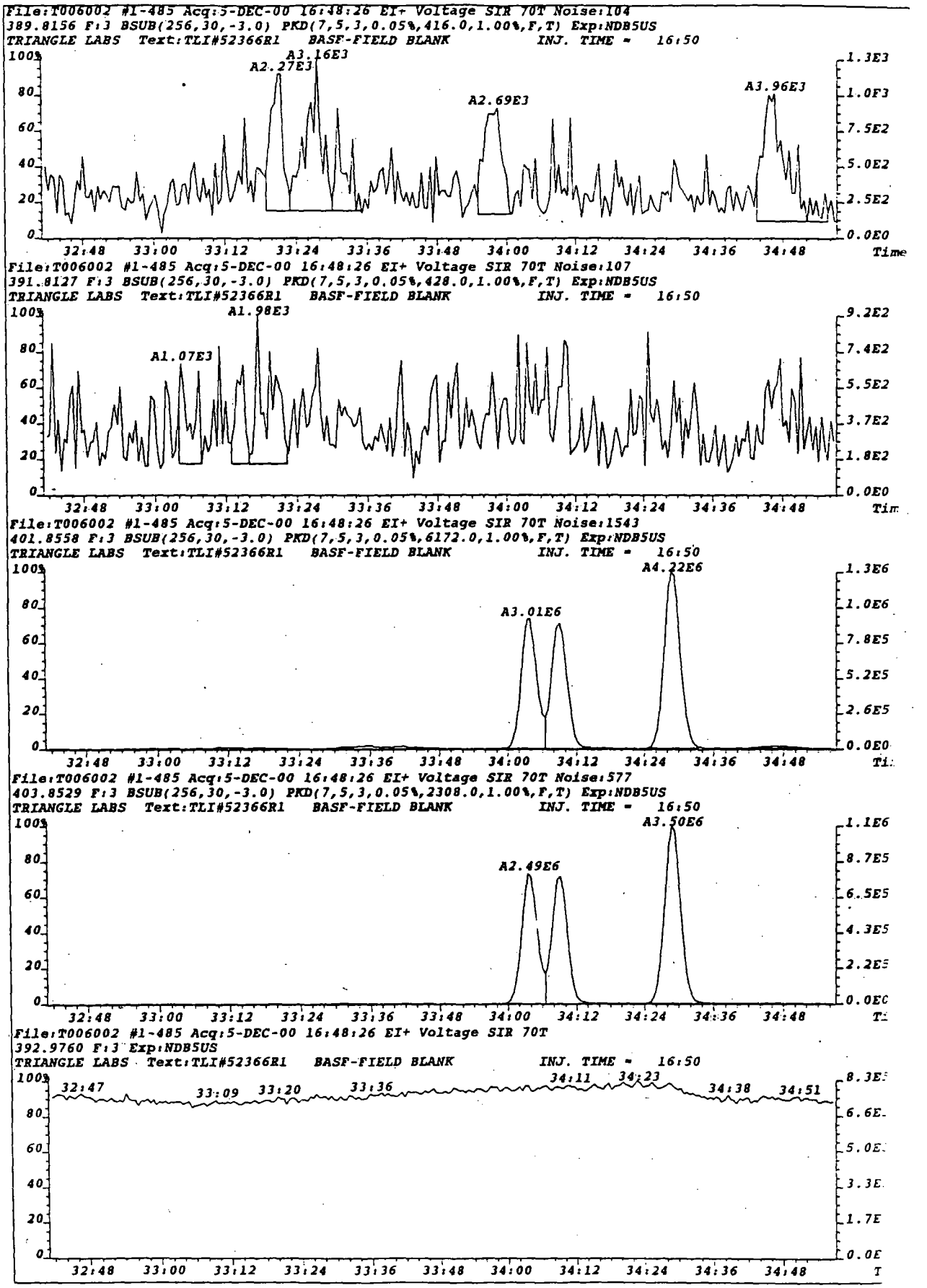
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,308.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A4.31E3
A3.53E3
A1.79E3
A1.81E3
A2.48E3
A1.47E3
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:68
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,272.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A3.73E3
A2.89E3
A1.10E3
A1.93E3
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:114
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,456.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIEL BLANK INJ. TIME = 16:50
A3.69E6
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:69
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,276.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A4.93E6
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
24:03 24:26 24:45 26:04 26:32 26:57 27:24 27:54
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
27:42
24:19
24:51
23:26 23:51 24:10 24:40 25:36 26:12 26:39 26:52 27:17 28:09
23:00 24:00 25:00 26:00 27:00 28:00

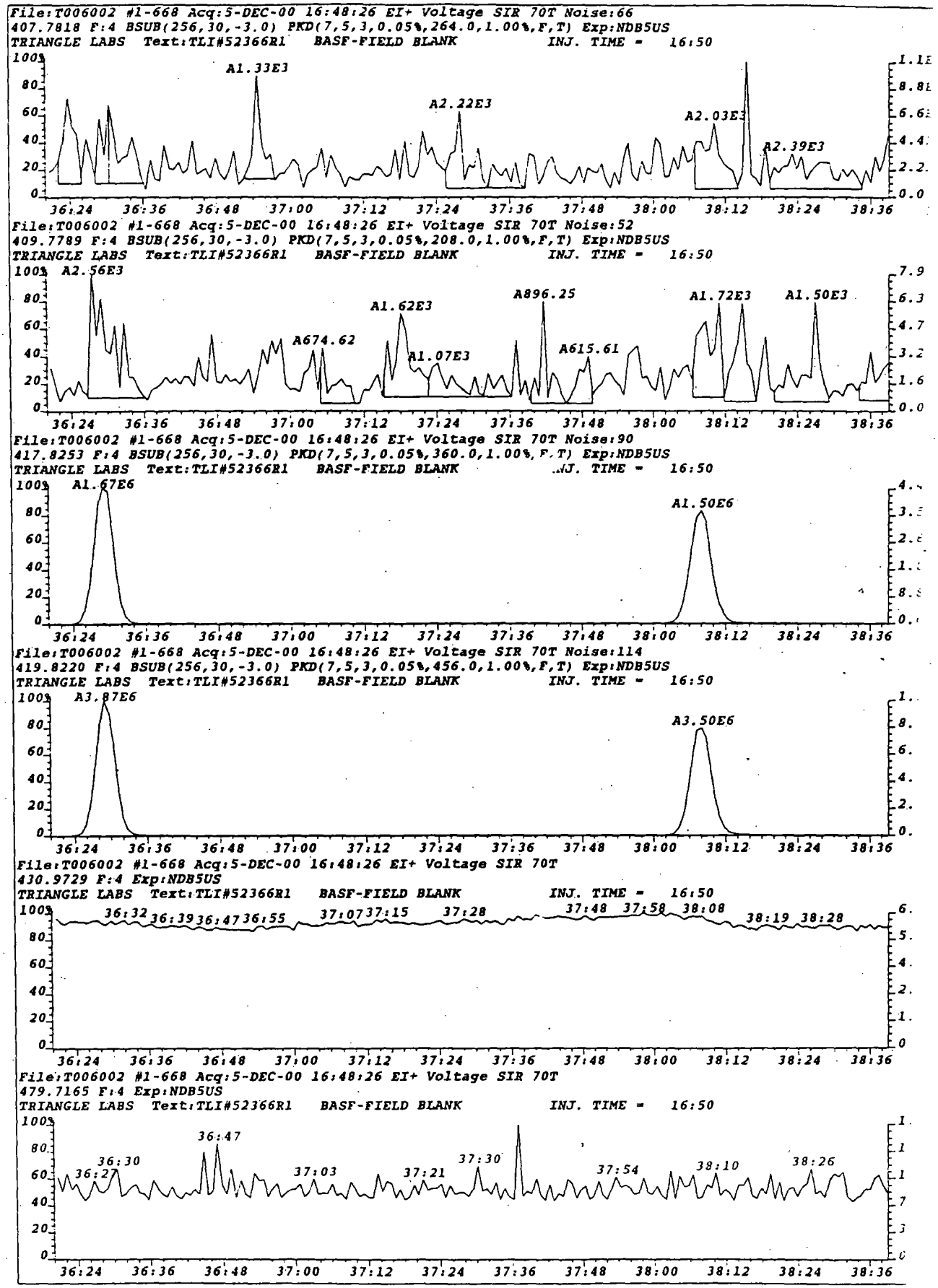

File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:55
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,220.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
(.2)(.12) = .024
A4.57E3
A2.19E3
A1.31E3
A2.33E3
A949.76
A1.52E3
A1.50E3
A1.62E3
A289.65
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:51
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,204.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
(.3)(.11) = .033
A2.34E3
A2.95E3
A4.52E3
A2.71E3
A4.65E3
A1.94E3
A1.09E3
A516.8
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:387
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1548.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A4.07E6
A2.89E6
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:84
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,336.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A5.11E6
A3.59E6
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:67
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,268.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A6.60E5
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
24:26 24:45 25:01 26:04 26:32 26:48 27:24 27:39 27:54 28:09
25:00 26:00 27:00 28:00
Time

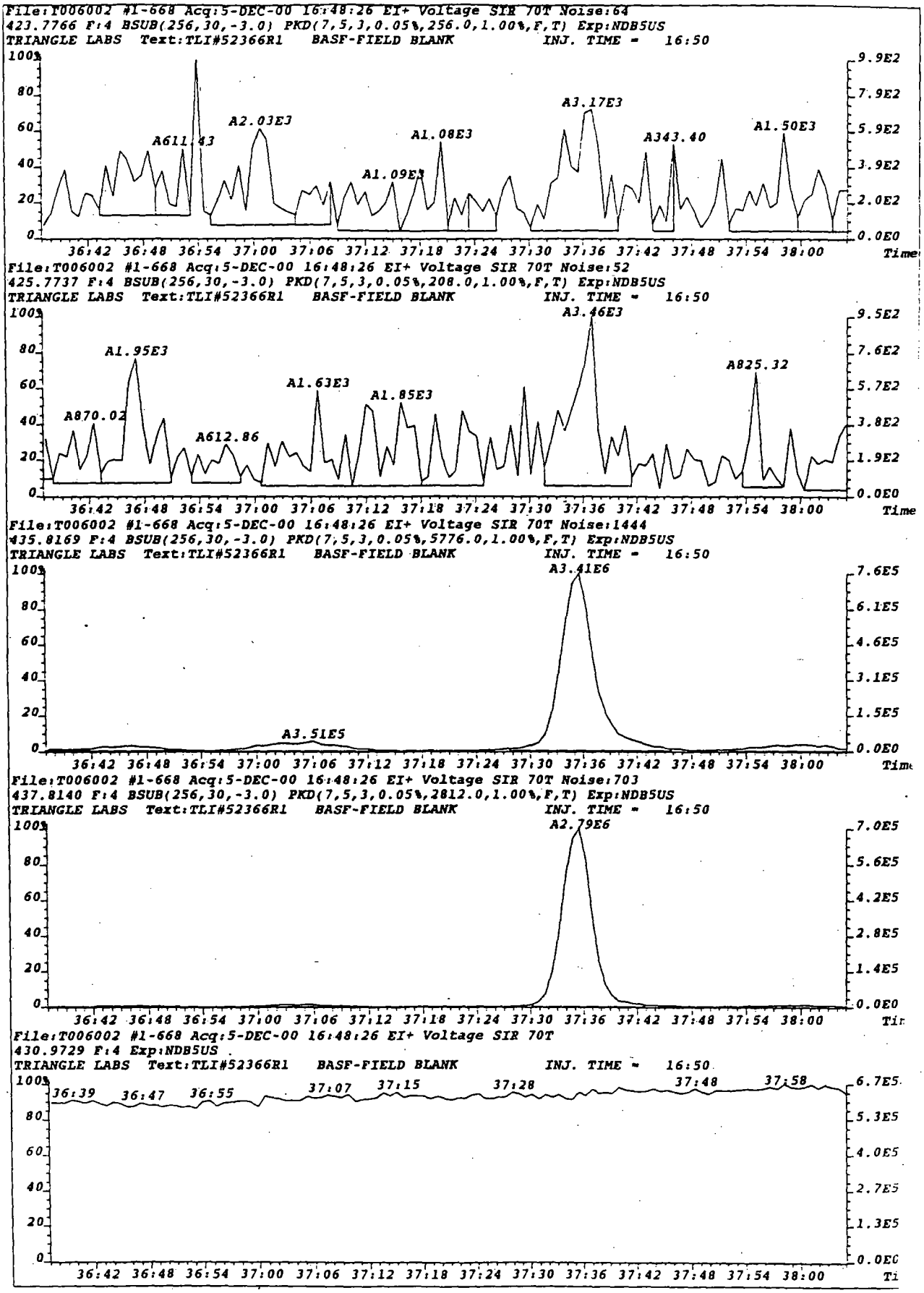

File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:51
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,204.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A484.46
A1.56E3
A884.95
A2.17E3
A605.15
A1.75E3
A2.98E3
A4.38E3
A1.65E3
A1.26E3
A1.20E3
A1.47E3
A1.16E3
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:64
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,256.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A1.81E3
A532.95
A1.48E3
A1.16E3
A2.11E3
A2.82E3
A1.12E3
A2.41E3
A1.07E3
A1.35E3
A2.40E3
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:66
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,264.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A5.08E6
A5.61E6
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:76
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,304.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A3.44E6
A3.76E6
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
28:21 28:39 28:54 29:41 30:01 30:17 30:40 31:05 31:28 31:46
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
28:24 28:40 29:04 29:21 29:52 30:17 30:25 30:43 31:12 31:31 31:49
28:00 29:00 30:00 31:00 32:00


File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:69
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,276.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A2.34E3
A2.21E3
A2.87E3
A4.13E3
A3.13E3
A3.74E3
A559.22
A3.67E3
A2.08E3
A515.96
A1.93E3
A647.57
29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48
Time
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:51
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,204.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A6.20E3
A2.04E3
A1.53E3
A796.84
A2.06E3
A716.15
A2.34E3
A1.36E3
A1.16E3
A961.95
A1.69E3
A1.09E3
A2.60E3
29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48
Time
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:245
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,980.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A3.60E6
29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48
Time
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:73
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,292.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A2.46E6
29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48
Time
File:T006002 #1-758 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
29:07
29:41
30:01
30:17
30:40
31:05
31:21
31:46
29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48
Time

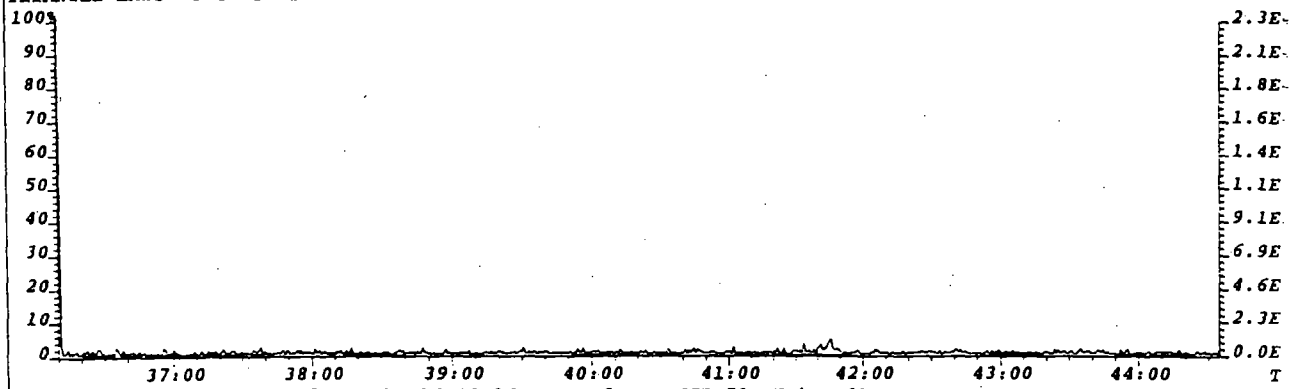

File:T006002 #1-485 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:70
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,280.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A2.29E3
A1.49E3
A710.63
A1.37E3
A877.31
A1.25E3
A1.25E3
A1.37E3
A486.95
File:T006002 #1-485 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:73
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,292.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A2.70E3
A1.43E3
A706.60
A1.07E3
A996.91
A1.94E3
A647.15
File:T006002 #1-485 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:177
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,708.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A2.48E6
A2.68E6
A2.17E6
File:T006002 #1-485 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:193
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,772.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A4.96E6
A5.32E6
A4.29E6
File:T006002 #1-485 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
File:T006002 #1-485 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50


File:T006002 #1-485 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:104
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,416.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A2.27E3
A3.16E3
A2.69E3
A3.96E3
File:T006002 #1-485 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:107
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,428.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A1.07E3
A1.98E3
File:T006002 #1-485 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:1543
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,6172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A3.01E6
A4.22E6
File:T006002 #1-485 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:577
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2308.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A2.49E6
A3.50E6
File:T006002 #1-485 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
32:47
33:09
33:20
33:36
34:11
34:23
34:38
34:51

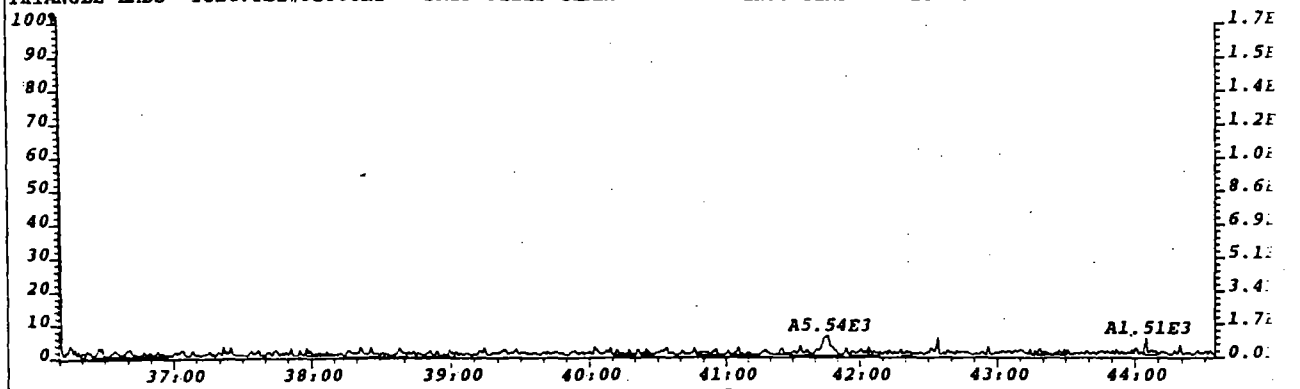

File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:66
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,264.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A1.33E3
A2.22E3
A2.03E3
A2.39E3
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:52
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A2.56E3
A674.62
A1.62E3
A1.07E3
A896.25
A615.61
A1.72E3
A1.50E3
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:90
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,360.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A1.67E6
A1.50E6
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:114
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,456.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A3.87E6
A3.50E6
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50


File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:64
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,256.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A611.43
A2.03E3
A1.09E3
A1.08E3
A3.17E3
A343.40
A1.50E3
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:52
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A870.02
A1.95E3
A612.86
A1.63E3
A1.85E3
A3.46E3
A825.32
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:1444
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,5776.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A3.51E5
A3.41E6
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:703
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2812.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A2.79E6
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
36:39
36:47
36:55
37:07
37:15
37:28
37:48
37:58
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00

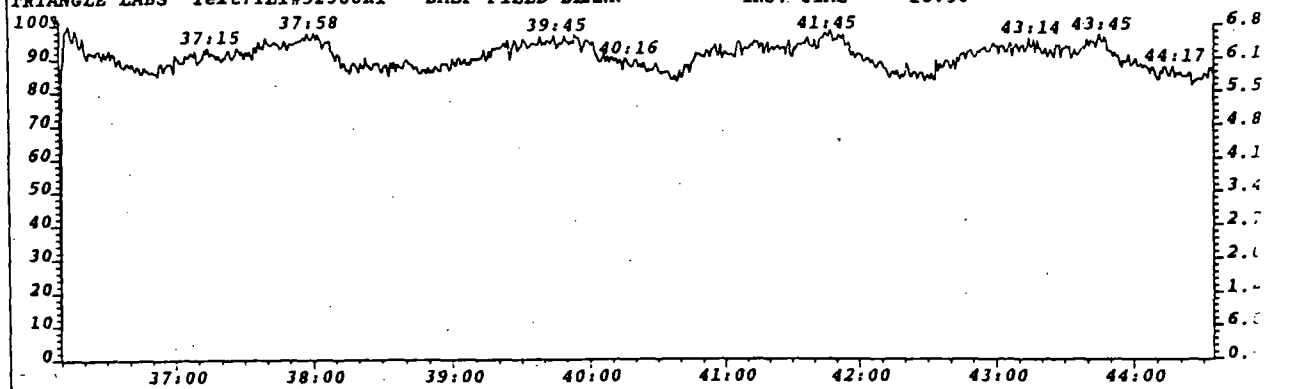
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:60
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,240.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50



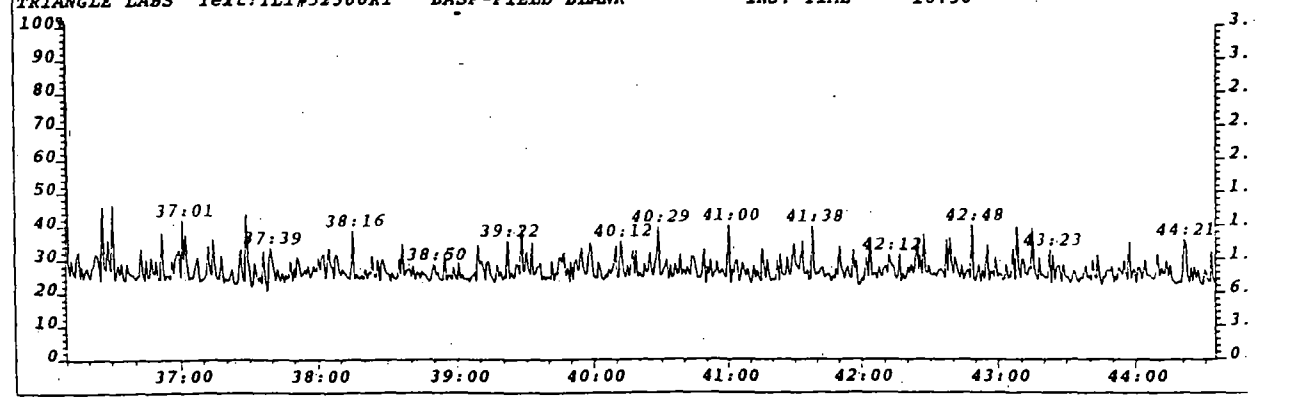
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:63
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50

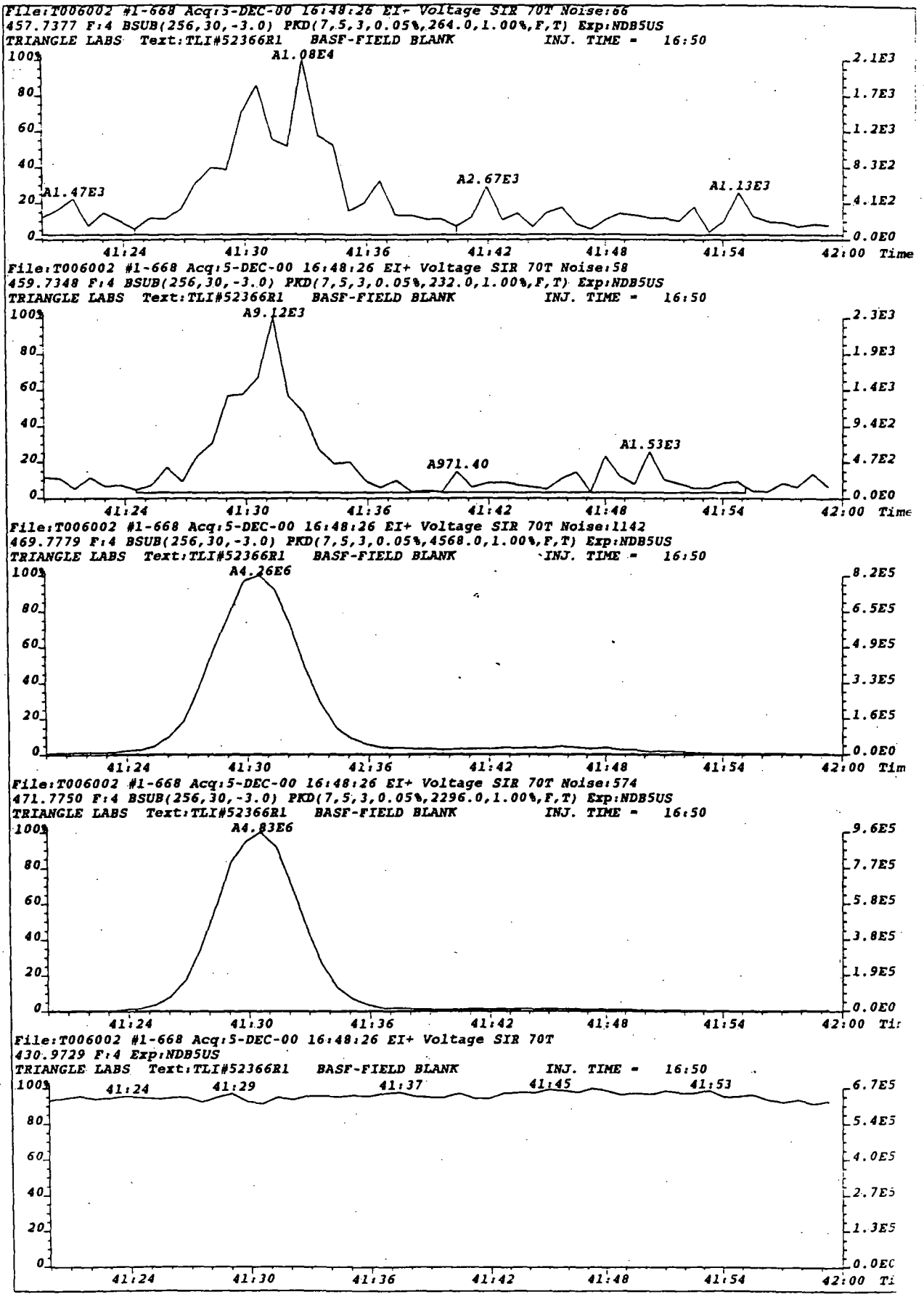


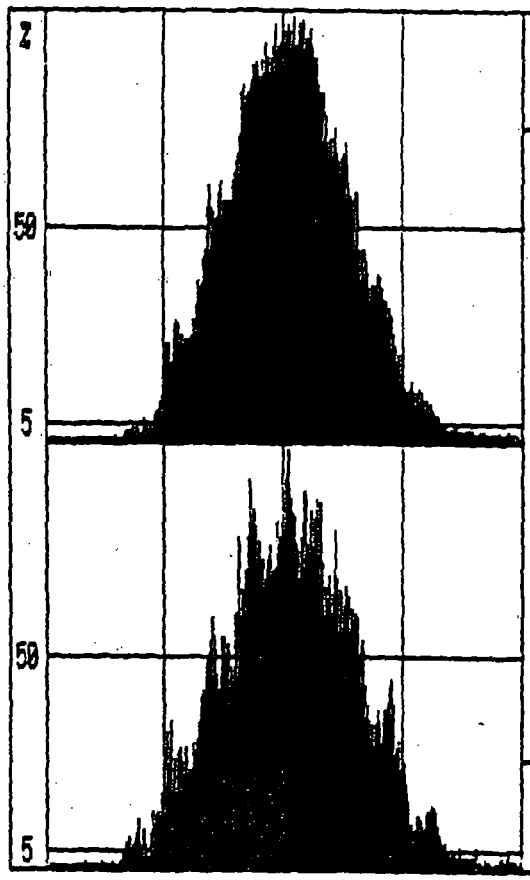
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50



File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50




File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:66
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,264.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A1.08E4
A1.47E3
A2.67E3
A1.13E3
41:24 41:30 41:36 41:42 41:48 41:54 42:00 Time
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:58
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A9.12E3
A971.40
A1.53E3
41:24 41:30 41:36 41:42 41:48 41:54 42:00 Time
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:1142
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,4568.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A4.26E6
41:24 41:30 41:36 41:42 41:48 41:54 42:00 Tim
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T Noise:574
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2296.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
A4.83E6
41:24 41:30 41:36 41:42 41:48 41:54 42:00 Ti
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50
41:24 41:29 41:37 41:45 41:53
41:24 41:30 41:36 41:42 41:48 41:54 42:00 Ti

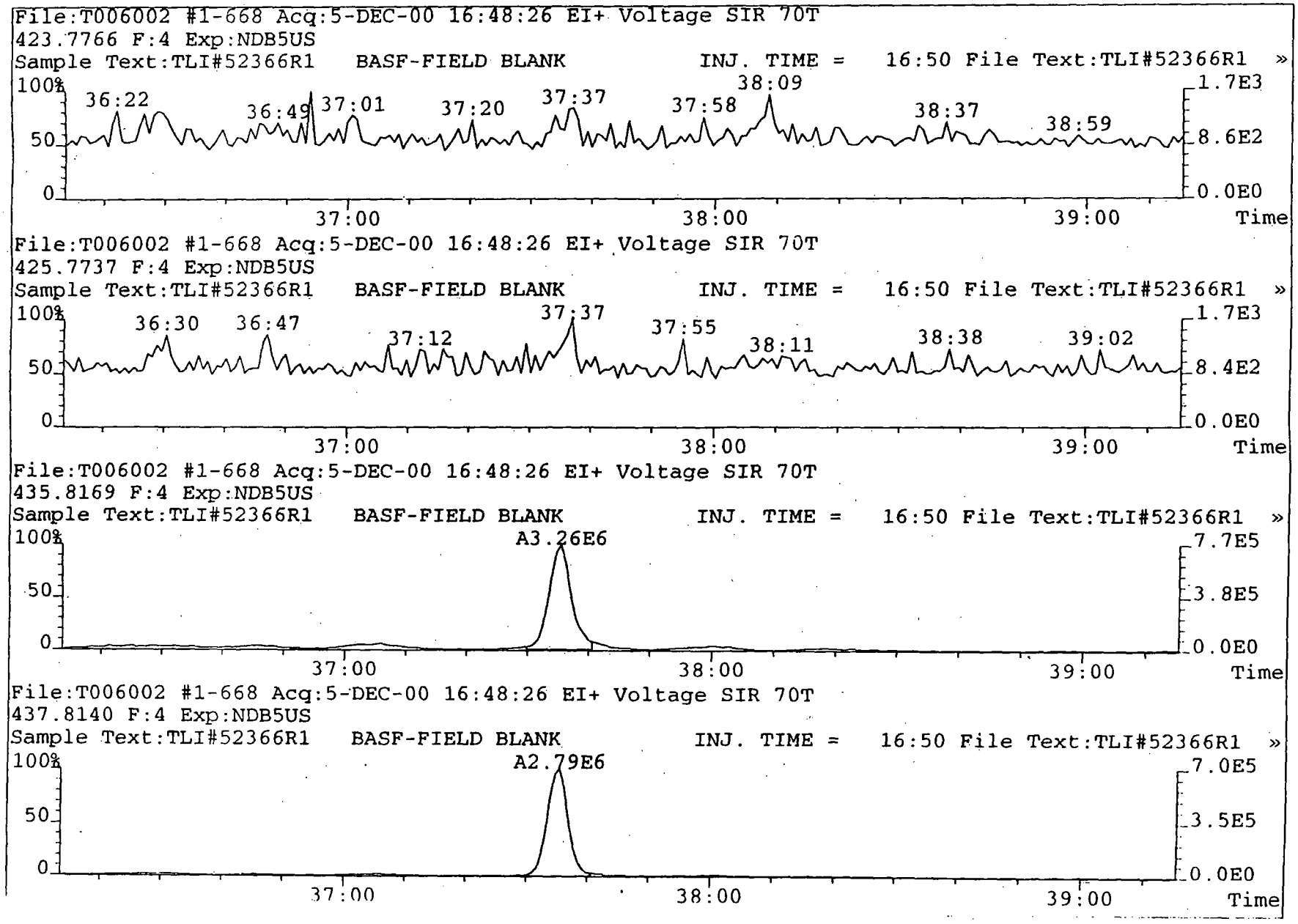


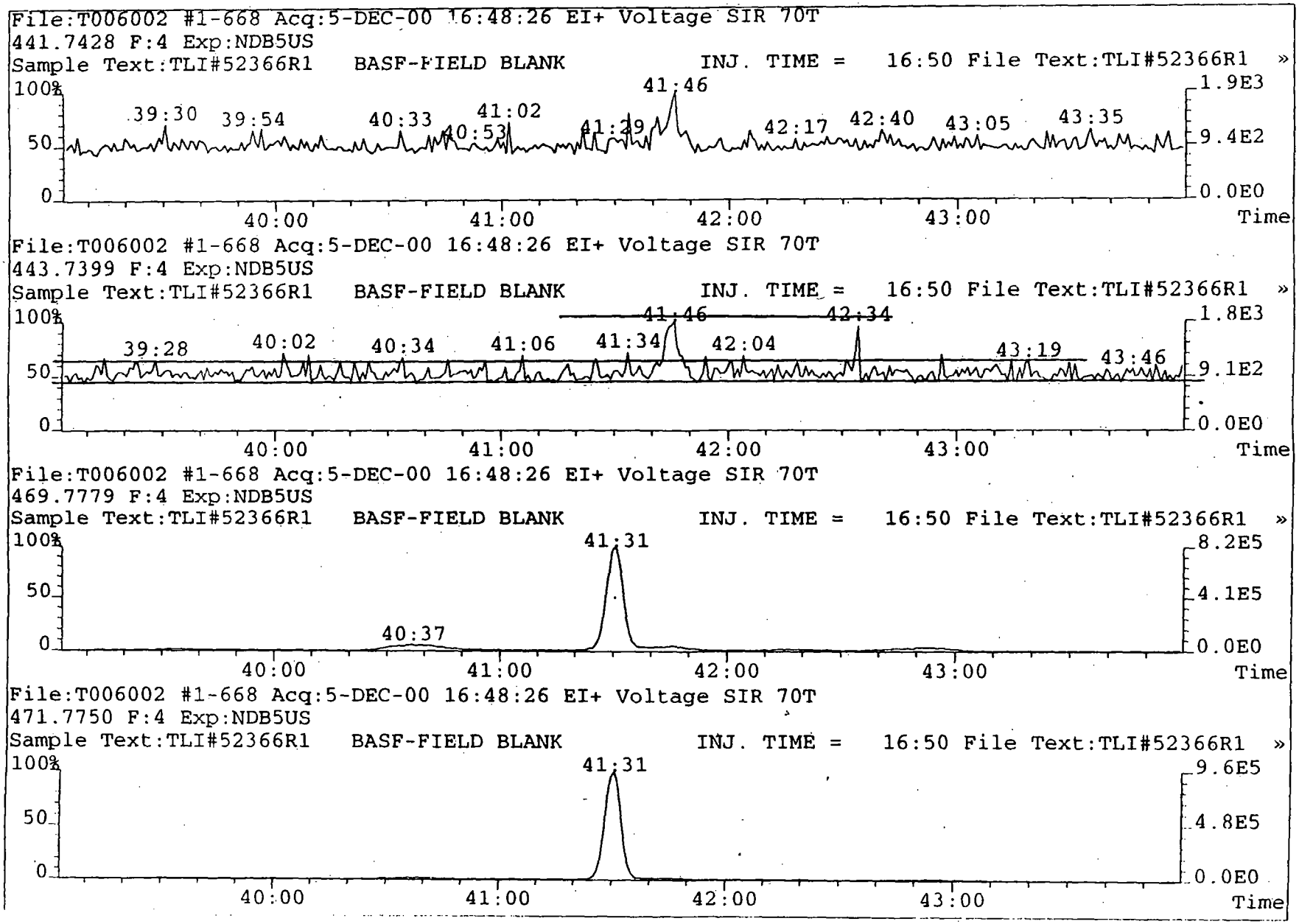
Channel I 330.9792 Peak top
Height .68 volts Span 200 ppm

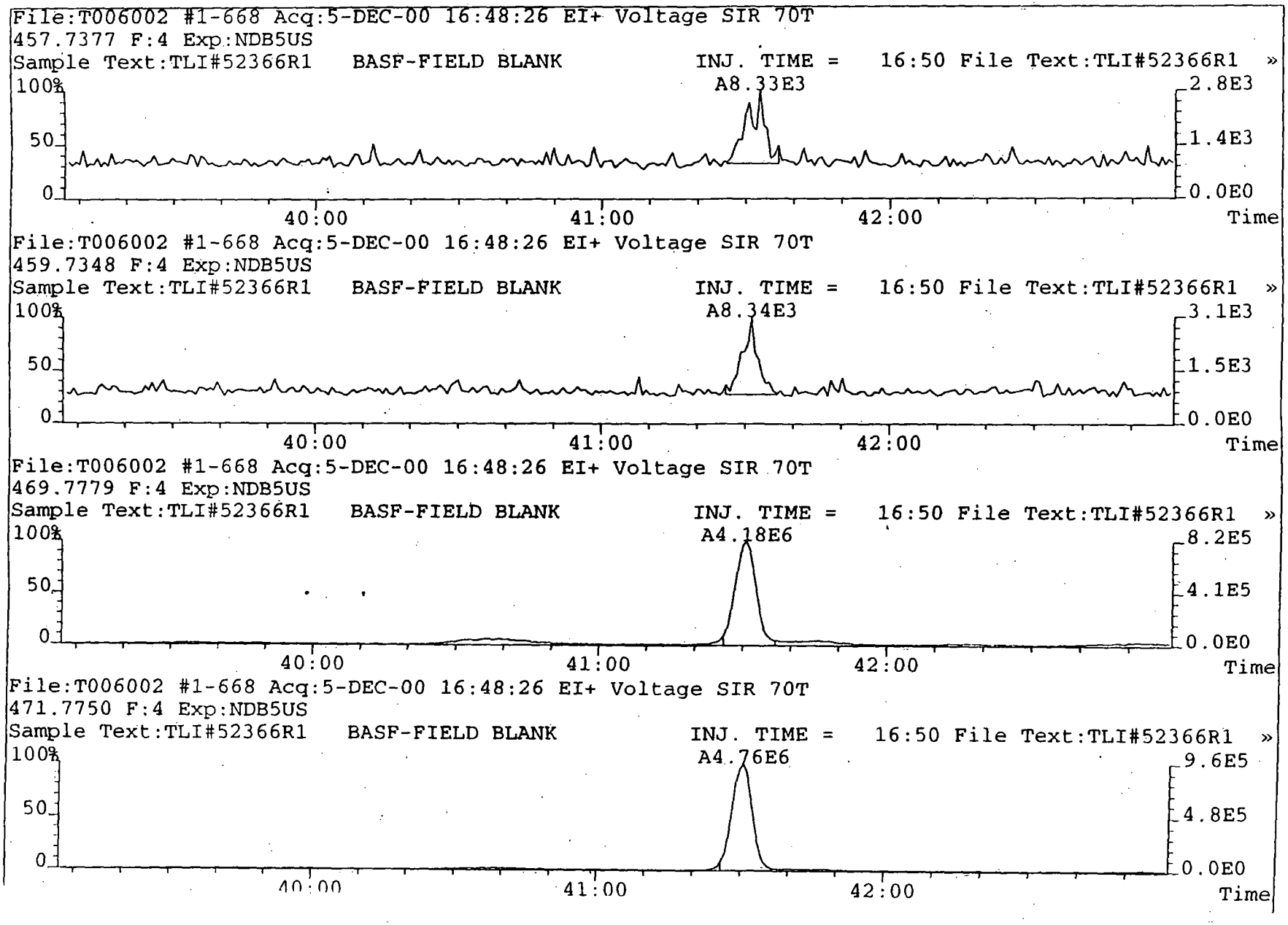
System file name	NDB5US
Data file name	A:TD05003
Resolution	10000
Group number	2
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 416.9768

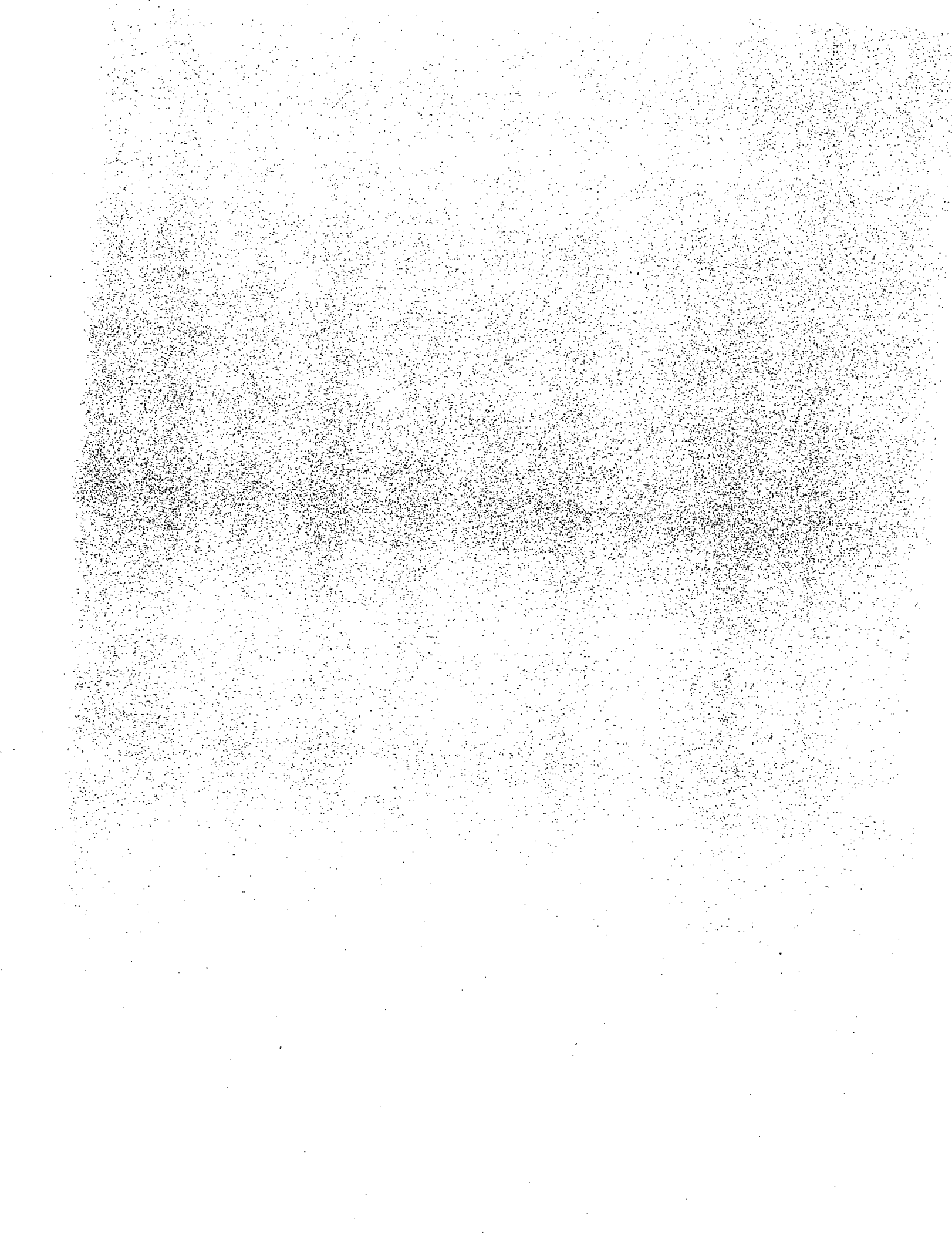
A	293	J	331	S	368
B	304	K	332	T	370
C	306	L	334	U	376
D	316	M	340	V	410
E	318	N	342		
F	320	O	352		
G	322	P	354		
H	328	Q	356		
I	331	R	358		

Ref. mass 416.9768 Peak top
Height .13 volts Span 200 ppm


File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
423.7766 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
100%
50
0
36:22
36:49
37:01
37:20
37:37
37:58
38:09
38:37
38:59
1.7E3
8.6E2
0.0E0
37:00
38:00
39:00
Time
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
425.7737 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
100%
50
0
36:30
36:47
37:12
37:37
37:55
38:11
38:38
39:02
1.7E3
8.4E2
0.0E0
37:00
38:00
39:00
Time
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
435.8169 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
100%
50
0
A3.26E6
7.7E5
3.8E5
0.0E0
37:00
38:00
39:00
Time
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
437.8140 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
100%
50
0
A2.79E6
7.0E5
3.5E5
0.0E0
37:00
38:00
39:00
Time


File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
441.7428 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
100%
50
0
39:30
39:54
40:33
40:53
41:02
41:29
41:46
42:17
42:40
43:05
43:35
1.9E3
9.4E2
0.0E0
40:00
41:00
42:00
43:00
Time
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
443.7399 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
100%
50
0
39:28
40:02
40:34
41:06
41:34
41:46
42:04
42:34
43:19
43:46
1.8E3
9.1E2
0.0E0
40:00
41:00
42:00
43:00
Time
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
469.7779 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
100%
50
0
40:37
41:31
8.2E5
4.1E5
0.0E0
40:00
41:00
42:00
43:00
Time
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
471.7750 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
100%
50
0
41:31
9.6E5
4.8E5
0.0E0
40:00
41:00
42:00
43:00
Time


File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
457.7377 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
A8.33E3
100%
50
0
2.8E3
1.4E3
0.0E0
40:00
41:00
42:00
Time
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
459.7348 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
A8.34E3
100%
50
0
3.1E3
1.5E3
0.0E0
40:00
41:00
42:00
Time
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
469.7779 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
A4.18E6
100%
50
0
8.2E5
4.1E5
0.0E0
40:00
41:00
42:00
Time
File:T006002 #1-668 Acq:5-DEC-00 16:48:26 EI+ Voltage SIR 70T
471.7750 F:4 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-FIELD BLANK INJ. TIME = 16:50 File Text:TLI#52366R1
A4.76E6
100%
50
0
9.6E5
4.8E5
0.0E0
40:00
41:00
42:00
Time



TriMatrix, Inc.

TLI Project: **52366r1** Method 8290 PCDD/PCDF Analysis (
Client Sample: **BASF-SMW-13** Analysis File: **T0060**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/2000**	Spike File:	**SPMIT32S**
TLI ID:	**274-99-7B**	Date Extracted:	**12/01/2000**	ICal:	**TF57140**
		Date Analyzed:	**12/05/2000**	ConCal:	**T005996**
Sample Size:	**1.050 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005998**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**BWL**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flag
2,3,7,8-TCDD	ND	5.3				__
1,2,3,7,8-PeCDD	ND	4.8				__
1,2,3,4,7,8-HxCDD	EMPC		7.3			J__
1,2,3,6,7,8-HxCDD	70.9			1.15	34:09	__
1,2,3,7,8,9-HxCDD	40.2			1.13	34:29	J__
1,2,3,4,6,7,8-HpCDD	1370			0.99	37:35	__
1,2,3,4,6,7,8,9-OCDD	5240			0.84	41:30	__
2,3,7,8-TCDF	132			0.84	26:08	__
1,2,3,7,8-PeCDF	24.8			1.63	29:56	J__
2,3,4,7,8-PeCDF	23.7			1.47	30:36	J__
1,2,3,4,7,8-HxCDF	41.5			1.22	33:20	J__
1,2,3,6,7,8-HxCDF	15.6			1.27	33:27	J__
2,3,4,6,7,8-HxCDF	15.2			1.28	33:56	J__
1,2,3,7,8,9-HxCDF	7.5			1.11	34:46	J__
1,2,3,4,6,7,8-HpCDF	56.9			1.17	36:29	__
1,2,3,4,7,8,9-HpCDF	10.4			1.05	38:06	J__
1,2,3,4,6,7,8,9-OCDF	42.5			0.91	41:43	J__

Totals	Conc. (pg/L)	Number	DL	EMPC	Flag
Total TCDD	83.1	3		95.8	__
Total PeCDD	EMPC			26.0	__
Total HxCDD	637	5		644	__
Total HpCDD	2430	2			__
Total TCDF	482	10		770	X__
Total PeCDF	137	5		224	X__
Total HxCDF	166	7		184	__
Total HpCDF	111	3			__

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TLI Project: **52366r1** Method 8290 PCDD/PCDF Analysis
Client Sample: **BASF-SMW-13** Analysis File: **T006**

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fla
$^{13}C_{12}$-2,3,7,8-TCDF	301	15.8	40%-130%	0.75	26:06	V_
$^{13}C_{12}$-2,3,7,8-TCDD	351	18.4	40%-130%	0.81	26:48	V_
$^{13}C_{12}$-1,2,3,7,8-PeCDF	347	18.2	40%-130%	1.47	29:56	V_
$^{13}C_{12}$-1,2,3,7,8-PeCDD	449	23.6	40%-130%	1.48	30:55	V_
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	372	19.5	40%-130%	0.50	33:26	V_
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	395	20.7	40%-130%	1.21	34:08	V_
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	469	24.6	25%-130%	0.44	36:27	V_
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	455	23.9	25%-130%	1.00	37:34	V_
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	973	25.5	25%-130%	0.84	41:29	_

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fla
$^{13}C_{12}$-2,3,4,7,8-PeCDF	311	16.3	40%-130%	1.52	30:36	V_
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	385	20.2	40%-130%	0.50	33:19	V_
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	388	20.4	40%-130%	1.20	34:02	V_
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	424	22.3	25%-130%	0.43	38:06	V_

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Fla
$^{37}Cl_4$-2,3,7,8-TCDD	158	82.7	40%-130%	26:48	_

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fla
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	392	20.6	40%-130%	0.49	34:44	V_
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	315	16.5	40%-130%	0.49	33:56	V_

Recovery Standards	Ratio	RT	Fla
$^{13}C_{12}$-1,2,3,4-TCDD	0.79	26:37	_
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.19	34:28	_

Data Reviewer: JCA 12/13/2000

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TriMatrix, Inc.

TLI Project: 52366r1 — Toxicity Equivalents Re
Client Sample: BASF-SMW-13 — Analysis File: T00

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/00	Spike File:	SPMIT3
TLI ID:	274-99-7B	Date Extracted:	12/01/00	ICal:	TF57140
		Date Analyzed:	12/05/00	ConCal:	T005996
Sample Size:	1.050 L	Dilution Factor:	1	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005998	% Lipid:	n/a
GC Column:	DB-5	Analyst:	BWL	% Solids:	n/a

Analytes	Conc. (pg/L)		TEF		Equivalent
2,3,7,8-TCDD	{5.3}	x	1.	=	5.3
1,2,3,7,8-PeCDD	{4.8}	x	0.5	=	2.4
1,2,3,4,7,8-HxCDD	[7.3]	x	0.1	=	0.73
1,2,3,6,7,8-HxCDD	70.9	x	0.1	=	7.09
1,2,3,7,8,9-HxCDD	40.2	x	0.1	=	4.02
1,2,3,4,6,7,8-HpCDD	1370	x	0.01	=	13.70
1,2,3,4,6,7,8,9-OCDD	5240	x	0.001	=	5.240
TOTAL PCDD					38.5
2,3,7,8-TCDF	101	x	0.1	=	10.1
1,2,3,7,8-PeCDF	24.8	x	0.05	=	1.24
2,3,4,7,8-PeCDF	23.7	x	0.5	=	11.9
1,2,3,4,7,8-HxCDF	41.5	x	0.1	=	4.15
1,2,3,6,7,8-HxCDF	15.6	x	0.1	=	1.56
2,3,4,6,7,8-HxCDF	15.2	x	0.1	=	1.52
1,2,3,7,8,9-HxCDF	7.5	x	0.1	=	0.75
1,2,3,4,6,7,8-HpCDF	56.9	x	0.01	=	0.569
1,2,3,4,7,8,9-HpCDF	10.4	x	0.01	=	0.104
1,2,3,4,6,7,8,9-OCDF	42.5	x	0.001	=	0.0425
TOTAL PCDF					31.9

Total EPA TEFs, 1989a: 70.4 pg/L

[...] indicates that the value is that of an EMPC.
{...} indicates that the value is that of a Detection Limit.

GRY_TEF v1.0.8. MI

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Initial ....Date...

Data Review By: JCA 12/13/00

Calculated Noise Height: 0.05

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T006003B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

Compound / M_3	QC	Log	Cmit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel. RT	Compound Name	ID	Flag
TCDF							0.65-0.89			0.880-1.070				
304-306		DC	NL				Height	0.10	0.06	0.04				
					23:33		0.84	1.95	0.89	1.06	0.902			
					23:50		0.73	1.66	0.70	0.96	0.913			
	A				24:10	RO	0.92	3.40	1.77	1.92	0.926			
					24:32		0.89	3.92	1.85	2.07	0.940			
					24:52		0.73	3.64	1.54	2.10	0.953			
					25:08		0.86	2.92	1.35	1.57	0.963			
					25:26		0.88	6.43	3.01	3.42	0.974			
					25:44		0.85	10.64	4.90	5.74	0.986	1278-TCDF		AN
					25:58		0.78	1.66	0.73	0.93	0.995			
					26:08		0.84	12.96	5.93	7.03	1.001	2378-TCDF		AN
					26:33	RO	0.96	2.00	1.08	1.13	1.017			
					26:44	RO	1.07	1.27	0.77	0.72	1.024			
	X		X		26:54	RO	0.88	1.88	0.88	1.00	1.031			
	X		X		27:09	RO	0.86	9.68	4.48	5.20	1.040			
	X		X		27:29	RO	0.86	10.07	4.65	5.42	1.053			
					27:47		0.71	1.73	0.72	1.01	1.064			
		DC	WH		28:04		0.73	3.40			1.075			
304-306			16	Peaks				75.81						
13C12-TCDF							0.65-0.89			0.962-1.038				
316-318		DC	NL				Height	0.13	0.08	0.05				
					25:07	RO	0.60	1.54	0.67	1.11	0.962			
					26:06		0.75	182.52	78.16	104.36	1.000	13C12-2378-TCDF		ISO
							Height	50.05	21.36	28.69				
					26:44	RO	1.13	0.55	0.35	0.31	1.024			
		DC	WH		27:55	RO	1.42	0.42			1.070			
316-318			3	Peaks				184.61						

---------- Above: TCDF / TCDD Follows ----------

Compound / M_3	QC	Log	Cmit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel. RT	Compound Name	ID	Flag
TCDD							0.65-0.89			0.904-1.042				
320-322		DC	NL				Height	0.06	0.03	0.03				
	M				24:23		0.67	3.48	1.40	2.08	0.910	1368-TCDD		AN
	M				24:46		0.92	2.02	0.91	1.11	0.924	1379-TCDD		AN
		DC	SN		25:02	RO	0.13	0.34			0.934			
		DC	SN		25:09		0.87	0.28			0.938			
					25:41		0.70	1.26	0.52	0.74	0.958			
		DC	SN		25:56	RO	0.27	0.28			0.968			
		DC	SN		26:07		0.67	0.20			0.975			
		DC	SN		26:19		0.65	0.43			0.982			
					26:41	RO	0.93	1.06	0.56	0.60	0.996			
	D	D	SN		26:48		0.81	0.49			1.000	2378-TCDD		AN

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Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
	DC	SN		27:19	RO	1.30	0.18			1.019			
	DC	SN		27:46	RO	1.29	0.12			1.036			
320-322			4 Peaks				7.82						
37Cl-TCDD										0.925-1.075			
328	DC	NL			Height		0.06	0.06					
	DC	WL		24:15			0.04			0.905			
	DC	WL		24:23			0.17			0.910			
	DC	WL		24:32			0.19			0.915			
	DC	WL		24:39			0.91			0.920			
	DC	WL		24:45			0.86			0.924			
	DC	SN		25:02			0.14			0.934			
	DC	SN		25:06			0.33			0.937			
				25:30			58.76	58.76		0.951			
	DC	SN		25:49			0.32			0.963			
	DC	SN		26:01			0.12			0.971			
	DC	SN		26:06			0.09			0.974			
	DC	SN		26:07			0.14			0.975			
				26:48			66.40	66.40		1.000	37Cl-TCDD	CLS	
	DC	SN		27:00			0.05			1.007			
				27:11			1.65	1.65		1.014			
				28:06			0.68	0.68		1.049			
	DC	SN		28:17			0.13			1.055			
328			4 Peaks				127.49						
13C12-TCDD					0.65-0.89					0.925-1.075			
332-334	DC	NL			Height		0.16	0.12	0.04				
				26:37	0.79		901.85	399.30	502.55	0.993	13C12-1234-TCDD	RS1	
				26:48	0.31		174.64	78.12	96.52	1.000	13C12-2378-TCDD	IS1	
					Height		49.51	21.74	27.77				
332-334			2 Peaks				1,076.49						
---------- Above: TCDD / PeCDF Follows ----------													
PeCDF					1.32-1.78					0.930-1.060			
340-342	DC	NL			Height		0.09	0.04	0.05				
				28:00	1.53		1.90	1.15	0.75	0.935			J
M				29:05	1.44		4.63	2.73	1.90	0.972			
D	D	SN		29:15	1.34		0.68			0.977			
	DC	SN		29:22	RO	0.92	0.38			0.981			
D	D	SN		29:34	RO	2.36	0.92			0.988			
D	D	SN		29:40	RO	1.81	1.35			0.991			
AN				29:56	1.63		2.34	1.45	0.89	1.000	12378-PeCDF	AN	J
MXN		X		29:59	RO	1.49	4.51	2.70	1.81	1.002			J
				30:13	RO	1.25	2.09	1.27	1.02	1.009			J
M				30:36	1.47		2.27	1.35	0.92	1.022	23478-PeCDF	AN	J
				30:45	1.44		1.93	1.14	0.79	1.027			J
	DC	SN		30:58	RO	0.42	0.16			1.035			
	DC	SN		31:07	1.54		0.33			1.040			
D	D	SN		31:11	RO	1.24	0.35			1.042			
X		X		31:17	RO	1.40	1.63	0.95	0.68	1.045			J
	DC	SN		31:43	1.55		0.28			1.060			

Compound/ M_I....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
340-342			8 Peaks				21.30						
13C12-PeCDF				1.32-1.78						0.866-1.134			
352-354	DC	NL			Height		0.09	0.04	0.05				
	DC	SN	28:02	RO	0.79		0.25			0.937			
			28:22	RO	0.93		0.64	0.39	0.42	0.948			
			29:05		1.45		3.26	1.93	1.33	0.972			
	DC	SN	29:17	RO	0.85		0.18			0.978			
			29:33	RO	1.10		2.52	1.09	0.99	0.987			
			29:56		1.47		197.24	117.27	79.97	1.000	13C12-PeCDF 123	IS2	
					Height		58.96	35.10	23.86				
			30:12		1.67		1.44	0.90	0.54	1.009			
			30:36		1.52		174.95	105.56	69.39	1.022	13C12-PeCDF 234	SUR1	
			30:57	RO	3.89		0.89	1.36	0.35	1.034			
	DC	SN	31:20	RO	5.53		0.43			1.047			
			31:33		1.55		1.94	1.18	0.76	1.054			
	DC	SN	31:42	RO	8.00		0.08			1.059			
352-354			8 Peaks				382.88						

---------- Above: PeCDF / PeCDD Follows ----------

Compound/ M_I....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
PeCDD				1.32-1.78						0.939-1.020			
356-358	DC	NL			Height		0.07	0.04	0.03				
	DC	WL	28:54	RO	1.03		0.54			0.935			
D	D	SN	29:12	RO	0.36		3.09			0.944			
D	D	SN	29:38		1.68		0.59			0.958			
			29:52	RO	0.97		1.25	0.76	0.78	0.966			J
			30:02	RO	1.04		0.84	0.51	0.49	0.971			J
D	D	SN	30:12	RO	2.00		0.89			0.977			
	DC	SN	30:21		1.35		0.40			0.982			
D	D	SN	30:28		1.67		0.72			0.985			
	DC	SN	30:39		1.40		0.60			0.991			
	DC	SN	30:46	RO	0.40		0.16			0.995			
D	D	SN	30:55	RO	1.16		0.97			1.000	13C12-PeCDD		AM
	DC	SN	31:24	RO	4.00		0.18			1.016			
	DC	WH	31:48	RO	0.97		0.48			1.029			
356-358			2 Peaks				2.09						
13C12-PeCDD				1.32-1.78						0.871-1.129			
368-370	DC	NL			Height		0.06	0.03	0.03				
			29:51	RO	2.32		0.79	0.72	0.31	0.965			
			29:59	RO	1.24		1.05	0.51	0.41	0.970			
	DC	SN	30:12	RO	2.23		0.33			0.977			
	DC	SN	30:22	RO	0.16		0.12			0.982			
			30:55		1.48		144.89	86.51	58.38	1.000	13C12-PeCDD 123	IS3	
					Height		47.38	28.56	18.82				
	DC	SN	31:35	RO	3.67		0.15			1.022			
368-370			3 Peaks				146.73						

---------- Above: PeCDD / HxCDF Follows ----------

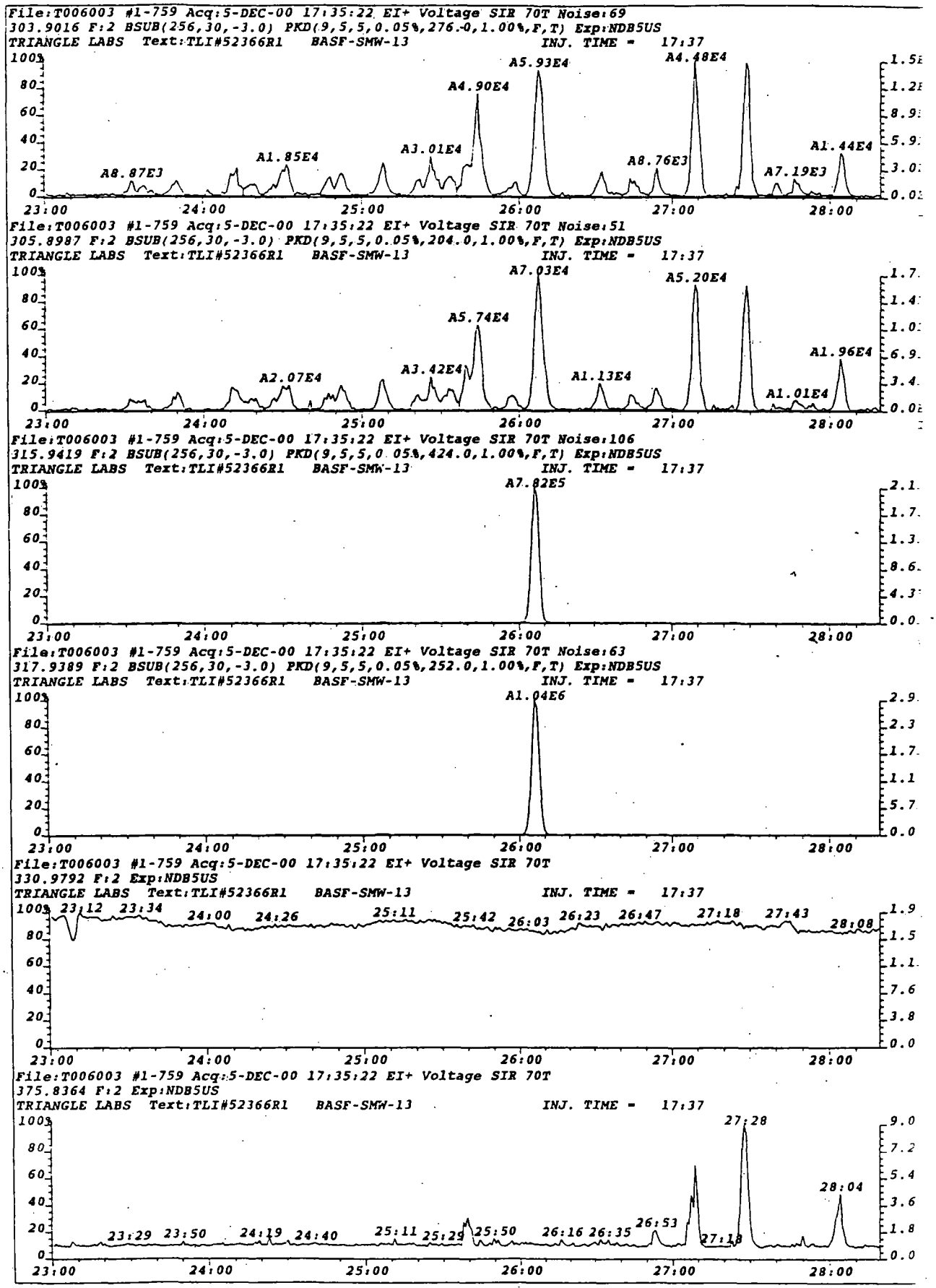
Compound/ M_3	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel RT	Compound Name	ID	Flags
HxCDF					1.05-1.43					0.963-1.047				
374-376	DC	NL			Height			0.10	0.04	0.06				
				32:21	1.43			0.68	0.40	0.28	0.968			J
				32:29	1.28			3.95	2.22	1.73	0.972			J
				32:57	1.14			3.56	1.90	1.66	0.986			J
	DC	SN		33:10	1.33			0.21			0.992			
				33:20	1.22			4.21	2.31	1.90	0.997	123478-HxCDF	AN	J
				33:27	1.27			1.66	0.93	0.73	1.000	123678-HxCDF	AN	J
	XM		X	33:37	1.35	RO		1.53	0.88	0.65	1.005			J
	DC	SN		33:44	0.71	RO		0.22			1.009			
	M			33:56	1.23			1.46	0.82	0.64	1.015	234678-HxCDF	AN	J
	M			34:46	1.11			0.59	0.31	0.28	1.040	123789-HxCDF	AN	J
	A			34:48	1.45	RO		0.25	0.16	0.11	1.041			J
374-376			9	Peaks				17.89						
13C12-HxCDF					0.43-0.59					0.880-1.120				
384-386	DC	NL			Height			0.15	0.07	0.08				
				32:20	0.53			0.89	0.31	0.58	0.967			
				32:29	0.61	RO		1.66	0.56	0.92	0.972			
				33:19	0.50			191.74	64.04	127.70	0.997	13C12-HxCDF 478	SUR2	
				33:26	0.50			188.29	62.82	125.47	1.000	13C12-HxCDF 678	IS4	
					Height			59.15	19.89	39.26				
				33:56	0.49			145.34	48.00	97.34	1.015	13C12-HxCDF 234	ALT2	
	DC	SN		34:09	0.24	RO		0.24			1.021			
				34:44	0.49			132.91	43.96	88.95	1.039	13C12-HxCDF 789	ALT1	
384-386			6	Peaks				660.83						
---------- Above: HxCDF / HxCDD Follows ----------														
HxCDD					1.05-1.43					0.957-1.013				
390-392	DC	NL			Height			0.09	0.05	0.04				
				32:50	1.22			8.71	4.78	3.93	0.962			
	DC	SN		32:58	1.33			0.14			0.966			
				33:17	1.30			3.01	1.70	1.31	0.975			J
				33:30	1.21			23.42	12.80	10.62	0.981			
	DC	SN		33:41	1.07			0.31			0.987			
	DC	SN		33:52	0.18	RO		0.04			0.992			
	DC	SN		33:55	3.00	RO		0.07			0.994			
	M			34:03	0.79	RO		0.49	0.27	0.34	0.998	123478-HxCDD	AN	J
	M			34:09	1.15			4.72	2.52	2.20	1.000	123678-HxCDD	AN	
				34:29	1.13			2.71	1.44	1.27	1.010	123789-HxCDD	AN	J
	DC	SN		34:33	4.00	RO		0.07			1.012			
	DC	WH		34:45	2.40	RO		0.22			1.018			
	DC	WH		34:56	0.75	RO		0.11			1.023			
390-392			6	Peaks				43.06						
13C12-HxCDD					1.05-1.43					0.971-1.029				
402-404	DC	NL			Height			0.15	0.09	0.06				
				33:28	1.42			0.92	0.54	0.38	0.980			
				34:02	1.20			127.15	69.29	57.86	0.997	13C12-HxCDD 478	SUR3	
				34:08	1.21			124.89	68.50	56.39	1.000	13C12-HxCDD 678	IS5	
					Height			38.11	20.72	17.39				

Compound/ M_S....	QC.Log	Cmit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
				34:28		1.19	663.49	361.16	302.33	1.010	13C12-HxCDD 789	RS2	
				34:42	RO	1.65	0.38	0.28	0.17	1.017			
402-404			5	Peaks			916.83						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF						0.88-1.20							
408-410	DC	NL				Height	0.08	0.05	0.03				
				36:29		1.17	5.95	3.21	2.74	1.001	1234678-HpCDF	AN	
	DC	SN		36:46	RO	1.73	0.31			1.009			
				36:55		0.95	4.01	1.95	2.06	1.013			J
	DC	SN		37:34	RO	0.53	0.20			1.031			
				38:06		1.05	0.84	0.43	0.41	1.045	1234789-HpCDF	AN	J
408-410			3	Peaks			10.80						
13C12-HpCDF						0.37-0.51							
418-420	DC	NL				Height	0.10	0.04	0.06				
				36:27		0.44	158.61	48.12	110.49	1.000	13C12-HpCDF 678	IS6	
						Height	42.79	13.28	29.51				
	DC	SN		37:04		0.38	0.18			1.017			
	DC	SN		37:17		0.47	0.25			1.023			
				38:06		0.43	111.46	33.42	78.04	1.045	13C12-HpCDF 789	SUR4	
	DC	SN		38:21	RO	0.24	0.23			1.052			
	DC	SN		38:32	RO	1.36	0.10			1.057			
	DC	SN		38:41	RO	0.75	0.49			1.061			
418-420			2	Peaks			270.07						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD						0.88-1.20							
424-426	DC	NL				Height	0.14	0.07	0.07				
				36:46		1.04	64.84	32.99	31.85	0.979			
				37:35		0.99	83.55	41.52	42.03	1.000	1234678-HpCDD	AN	
424-426			2	Peaks			148.39						
13C12-HpCDD						0.88-1.20							
436-438	DC	NL				Height	0.16	0.10	0.06				
				37:34		1.00	136.08	68.13	67.95	1.000	13C12-HpCDD 678	IS7	
						Height	34.53	17.50	17.03				
436-438			1	Peak			136.08						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF						0.76-1.02							
442-444	DC	NL				Height	0.07	0.03	0.04				
	DC	WL		36:22	RO	0.67	0.08			0.877			
	DC	WL		36:28		1.00	0.18			0.879			
	DC	SN		37:46	RO	0.22	0.04			0.910			
	DC	SN		37:51		0.83	0.11			0.912			
	DC	SN		38:09	RO	0.73	0.17			0.920			
	DC	SN		38:40	RO	0.20	0.02			0.932			
	DC	SN		38:43	RO	1.33	0.06			0.933			

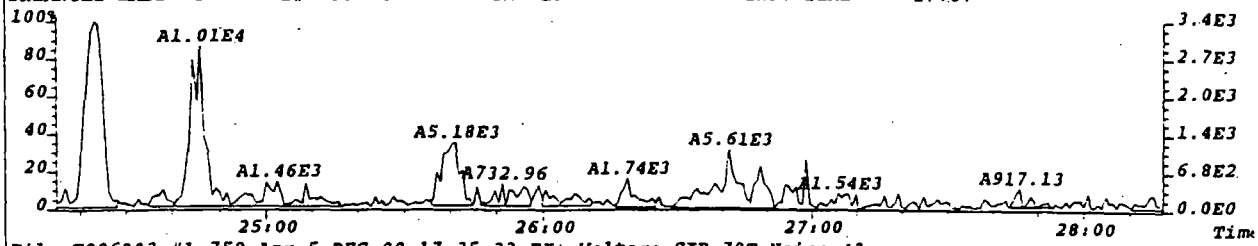
Compound M_Z	QC Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel.RT	Compound Name	ID	Flags
		DC	SN	38:49	RO	0.25	0.04			0.936			
		DC	SN	38:57	RO	1.17	0.11			0.939			
		DC	SN	39:48		1.00	0.12			0.959			
		DC	SN	40:58	RO	0.32	0.13			0.988			
				41:43		0.91	2.90	1.38	1.52	1.006	OCDF	AN	J
		DC	SN	41:56	RO	0.29	0.04			1.011			
		DC	SN	42:05	RO	2.00	0.08			1.014			
		DC	SN	43:06	RO	0.70	0.15			1.039			
		DC	SN	43:14	RO	3.50	0.08			1.042			
		DC	SN	44:28	RO	0.17	0.02			1.072			
442-444			1 Peak				2.90						
OCDD				0.76-1.02						0.904-1.096			
458-460		DC	NL			Height	0.06	0.03	0.03				
				41:30		0.84	297.50	136.08	161.42	1.000	OCDD	AN	
458-460			1 Peak				297.50						
13C12-OCDD				0.76-1.02						0.996-1.004			
470-472		DC	NL			Height	0.09	0.06	0.03				
				41:29		*0.84*	*236.49*	*107.85*	*128.64*	*1.000*	*13C12-OCDD*	*IS8*	
						Height	51.27	23.32	27.95				
		DC	WH	41:51	RO	0.33	0.08			1.009			
		DC	WH	41:57	RO	1.43	0.13			1.011			
470-472			1 Peak				236.49						

Column Description	"Why" Code Description	QC Log Desc
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
RT -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

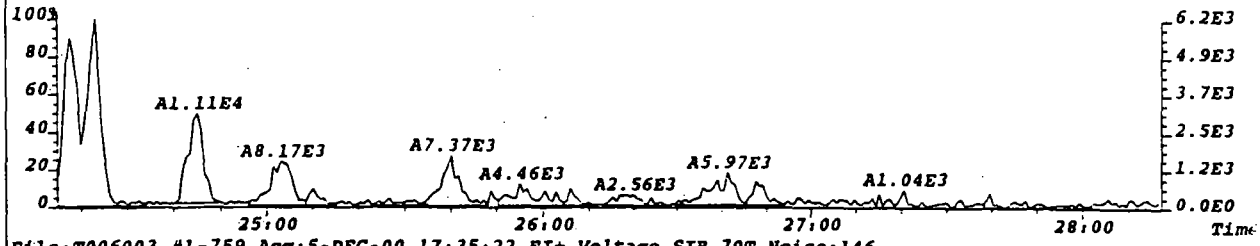
*** End of Report ***


File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:69
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,276.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A8.87E3
A1.85E4
A3.01E4
A4.90E4
A5.93E4
A8.76E3
A4.48E4
A7.19E3
A1.44E4
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:51
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,204.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A2.07E4
A3.42E4
A5.74E4
A7.03E4
A1.13E4
A5.20E4
A1.01E4
A1.96E4
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:106
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,424.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A7.82E5
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:63
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.04E6
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
27:28
28:04
23:00
24:00
25:00
26:00
27:00
28:00

File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:39
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37



File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:43
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37



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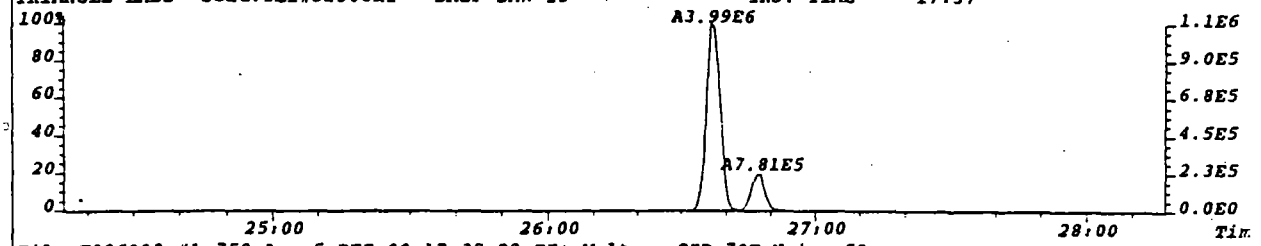
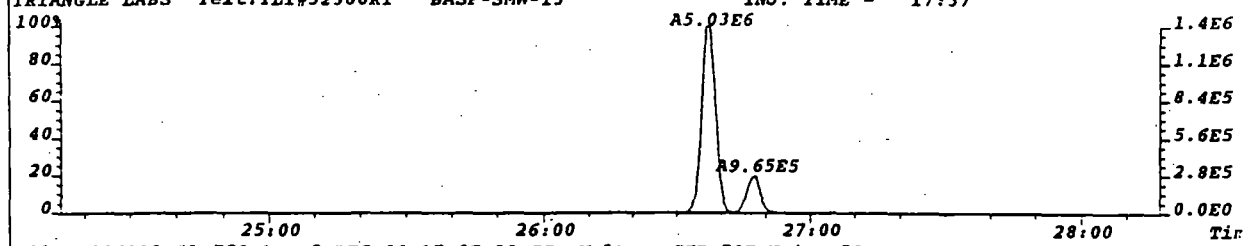
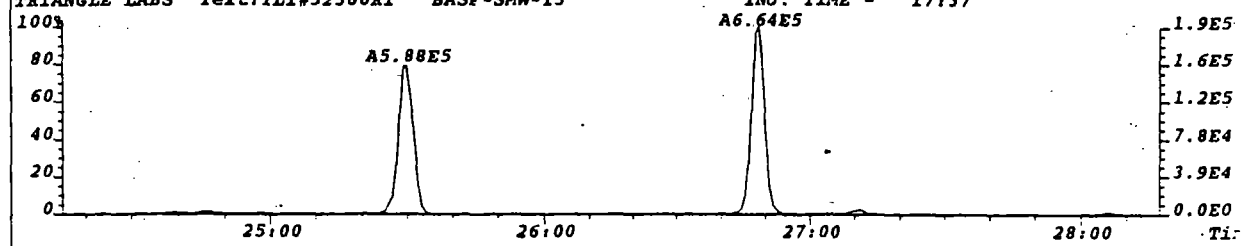
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,584.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37



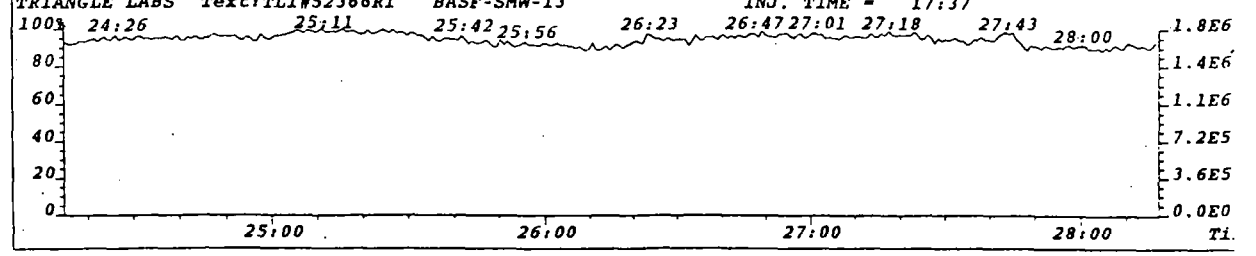
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:50
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37

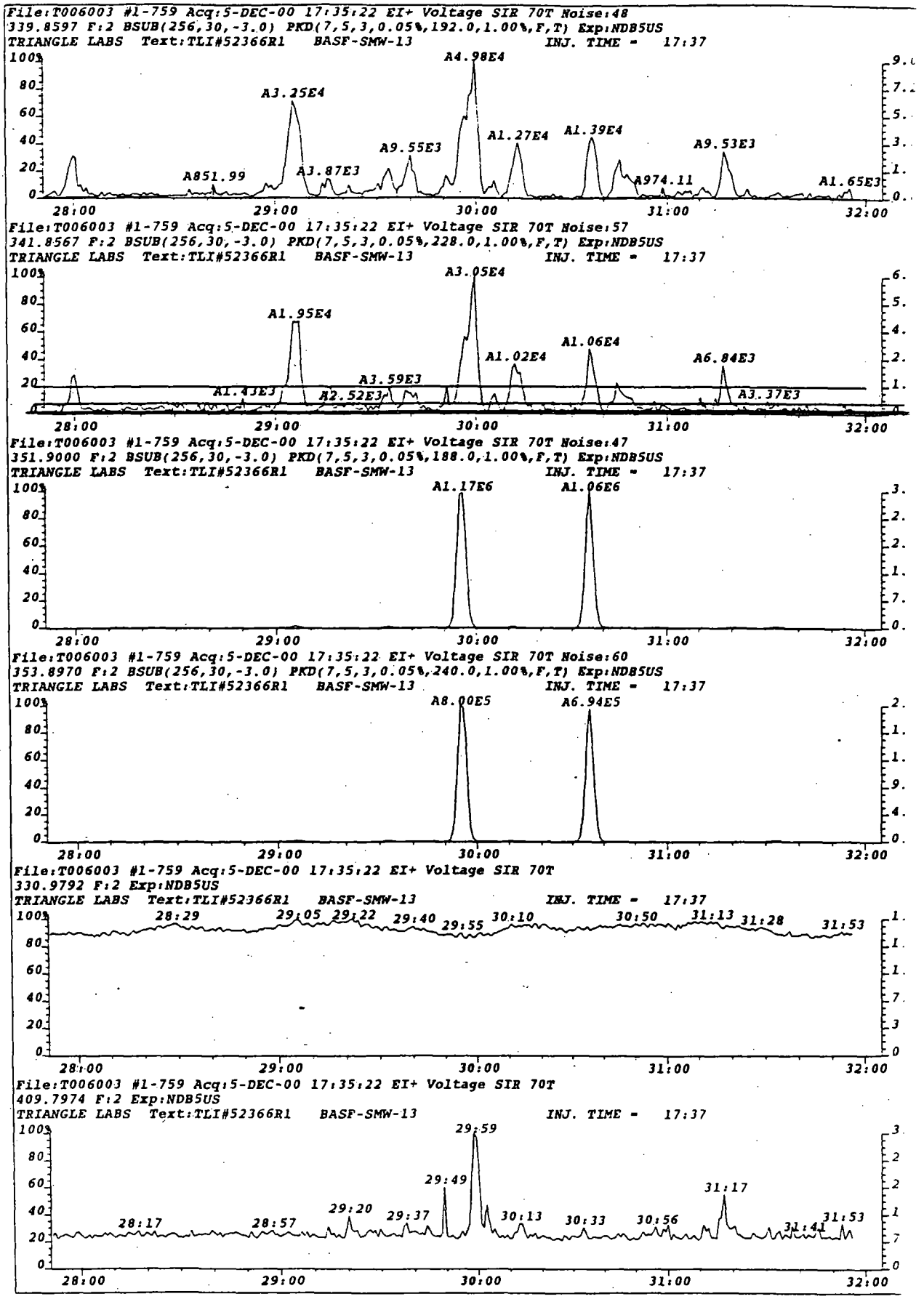


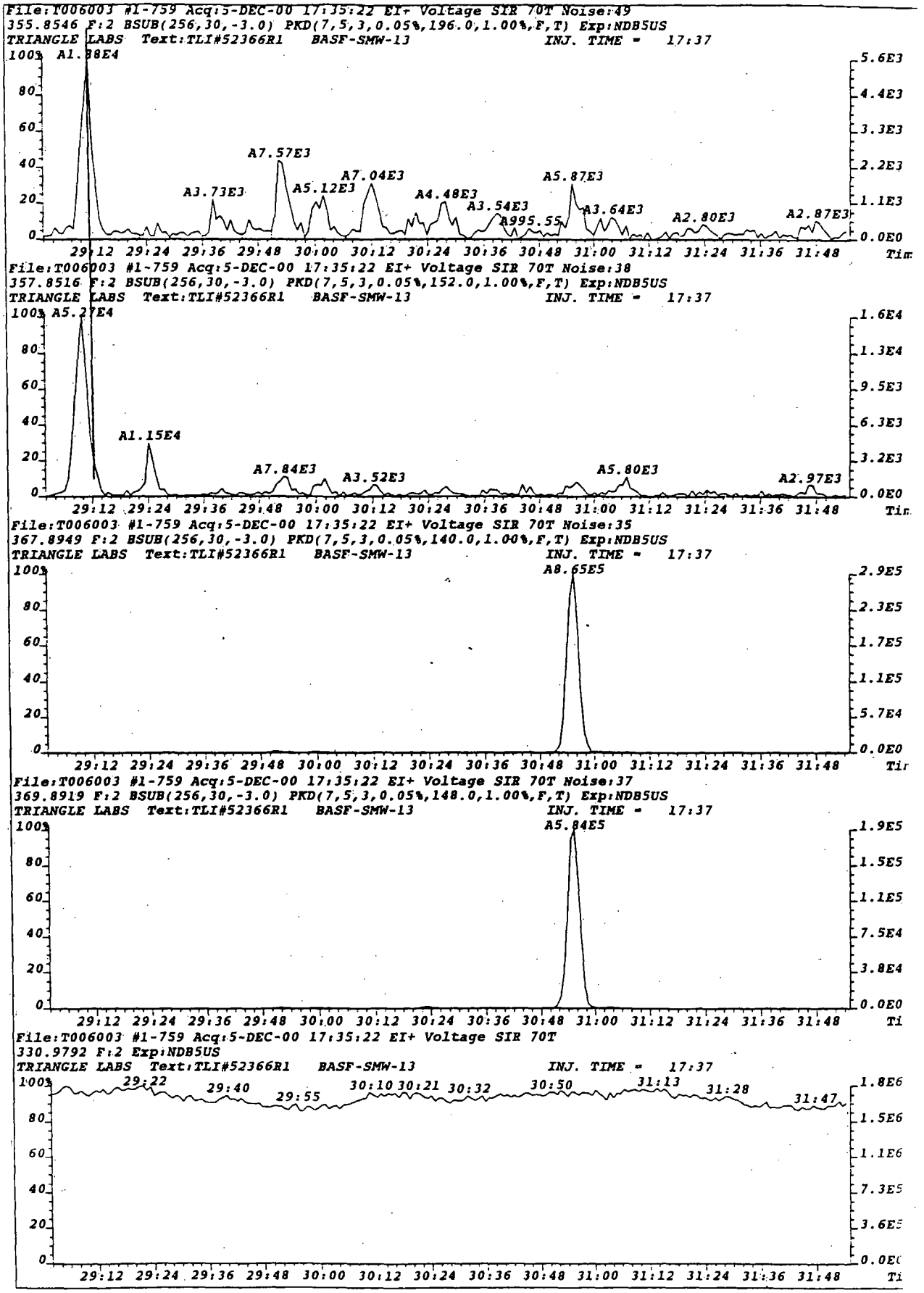
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:78
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,312.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37

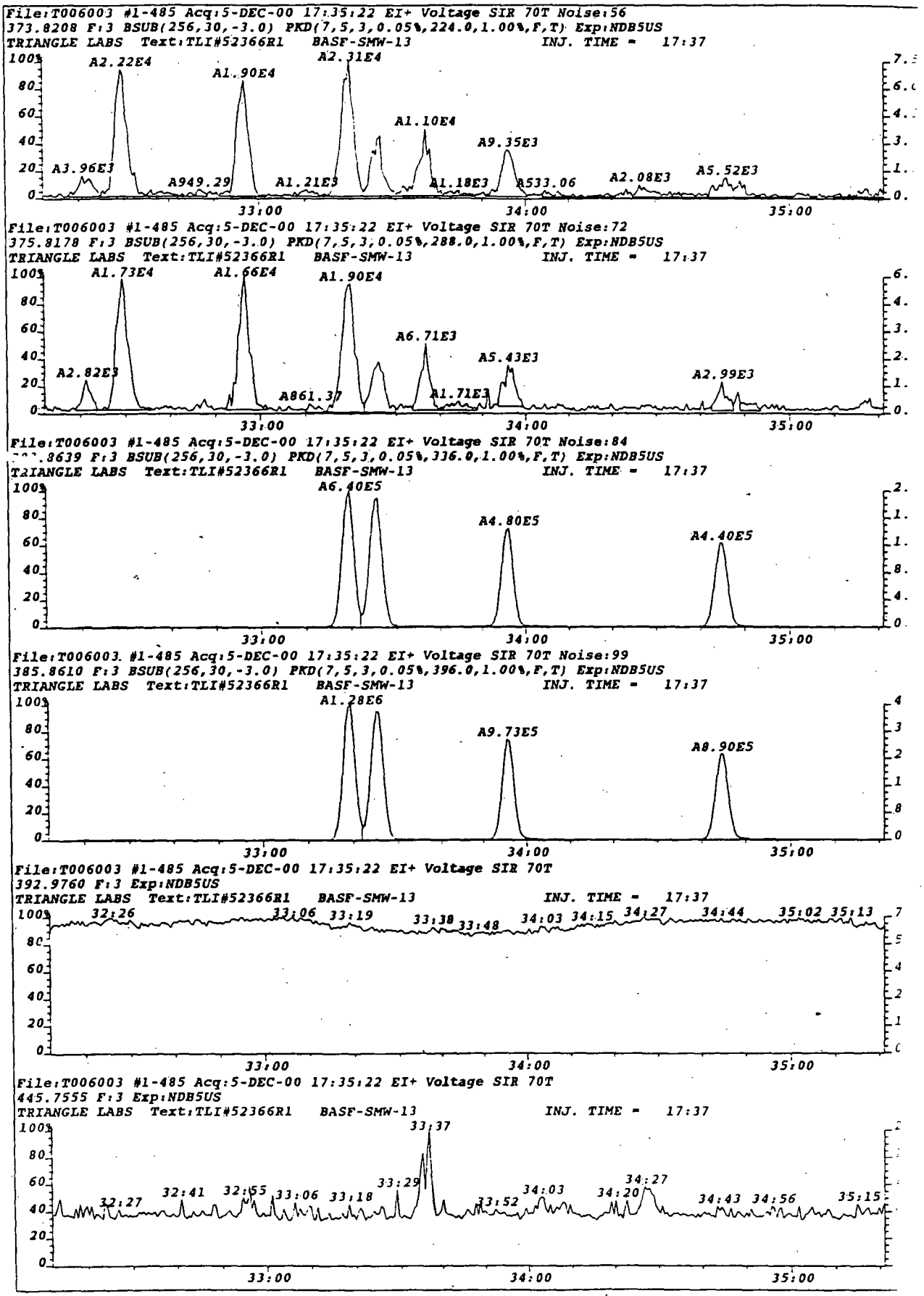


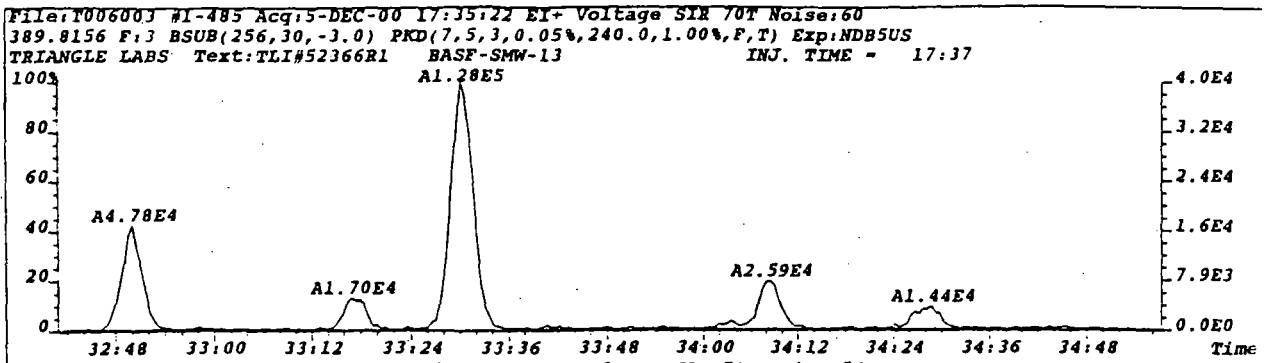
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37

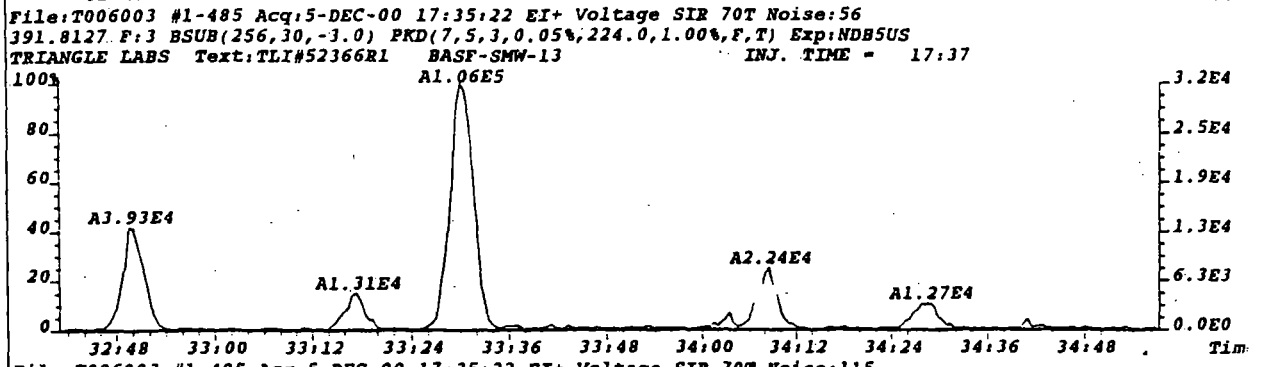


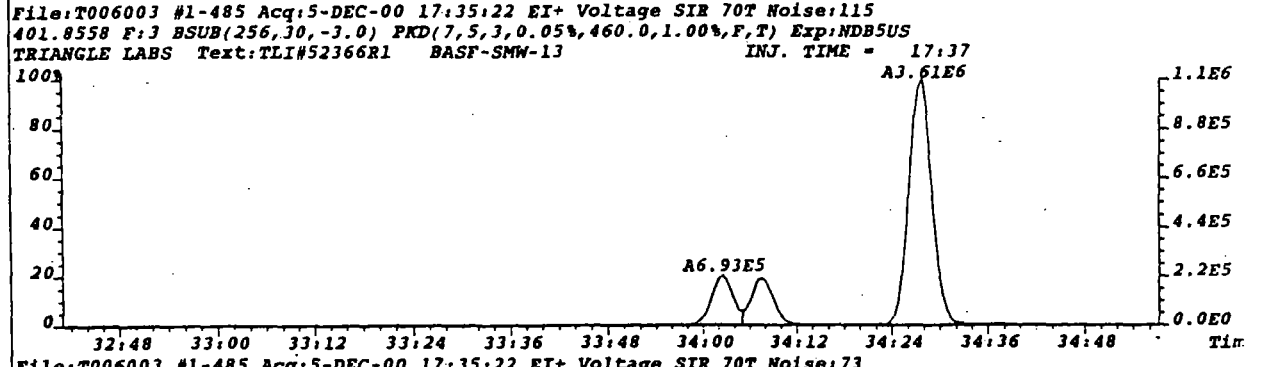

File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:48
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,192.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A4.98E4
A3.25E4
A1.27E4
A1.39E4
A9.55E3
A9.53E3
A851.99
A3.87E3
A974.11
A1.65E3
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:57
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A3.05E4
A1.95E4
A1.06E4
A1.02E4
A6.84E3
A3.59E3
A1.43E3
A2.52E3
A3.37E3
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:47
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,188.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.17E6
A1.06E6
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:60
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,240.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A8.00E5
A6.94E5
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
28:29
29:05
29:22
29:40
29:55
30:10
30:50
31:13
31:28
31:53
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
29:59
29:49
31:17
28:17
28:57
29:20
29:37
30:13
30:33
30:56
31:41
31:53
28:00
29:00
30:00
31:00
32:00

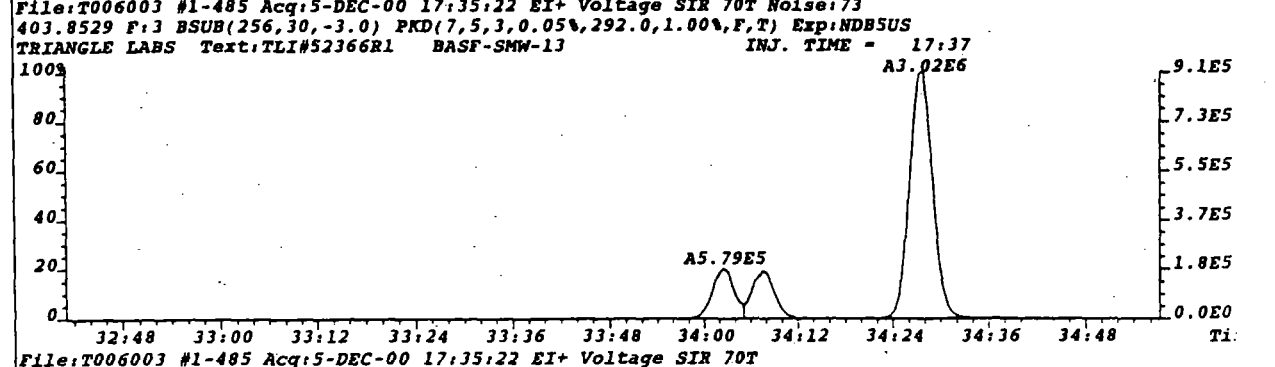

File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:49
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.38E4
A7.57E3
A3.73E3
A5.12E3
A7.04E3
A4.48E3
A3.54E3
A995.55
A5.87E3
A3.64E3
A2.80E3
A2.87E3
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:38
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,152.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A5.27E4
A1.15E4
A7.84E3
A3.52E3
A5.80E3
A2.97E3
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:35
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,140.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A8.65E5
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:37
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A5.84E5
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
29:22
29:40
29:55
30:10
30:21
30:32
30:50
31:13
31:28
31:47

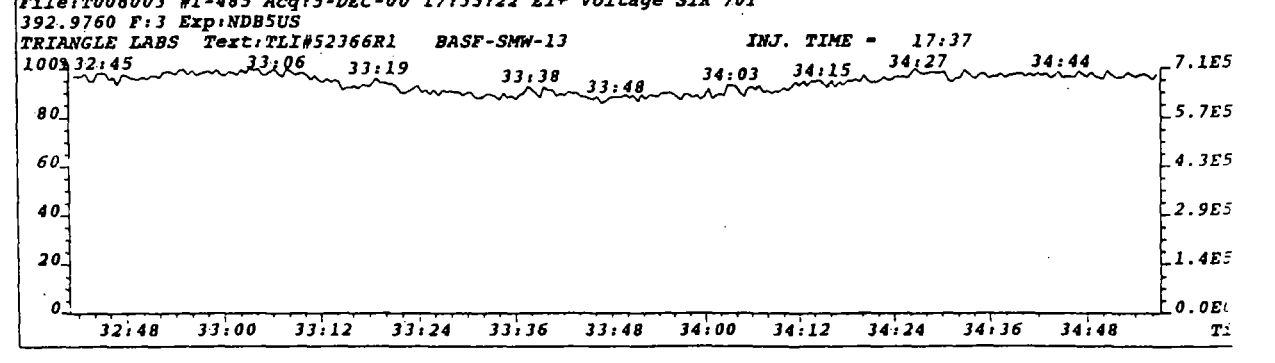

File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:56
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,224.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A2.22E4
A1.90E4
A2.31E4
A1.10E4
A9.35E3
A3.96E3
A949.29
A1.21E3
A1.18E3
A533.06
A2.08E3
A5.52E3
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:72
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,288.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.73E4
A1.66E4
A1.90E4
A6.71E3
A5.43E3
A2.82E3
A861.37
A1.71E3
A2.99E3
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:84
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A6.40E5
A4.80E5
A4.40E5
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:99
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,396.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.28E6
A9.73E5
A8.90E5
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
33:00
34:00
35:00


File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:60
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,240.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.28E5
A4.78E4
A1.70E4
A2.59E4
A1.44E4
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48

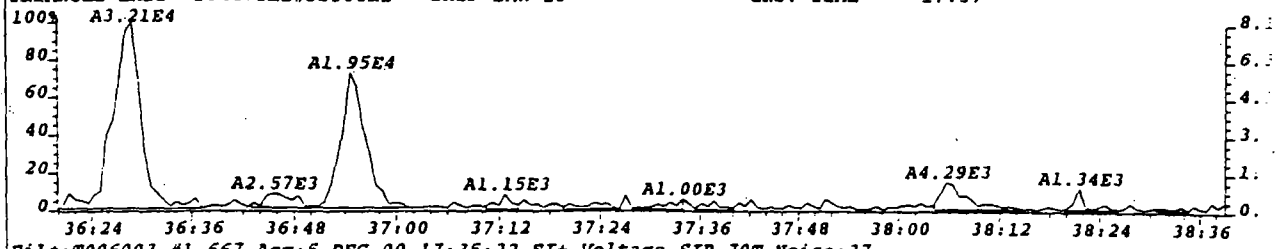

File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:56
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,224.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.06E5
A3.93E4
A1.31E4
A2.24E4
A1.27E4
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48


File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:115
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,460.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A3.61E6
A6.93E5
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48

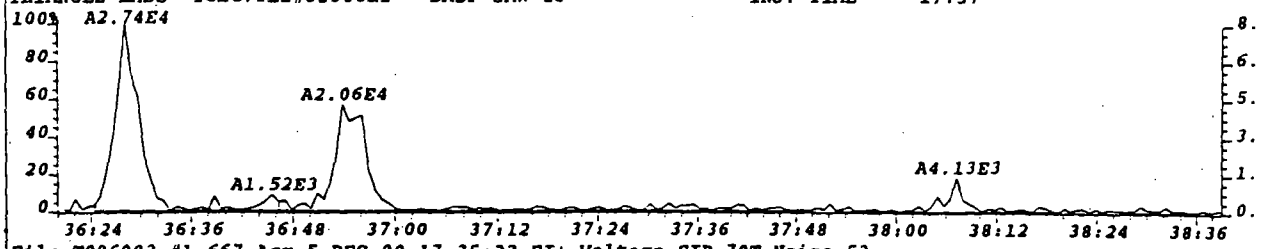

File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:73
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,292.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A3.02E6
A5.79E5
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48


File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
32:45 33:06 33:19 33:38 33:48 34:03 34:15 34:27 34:44
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48

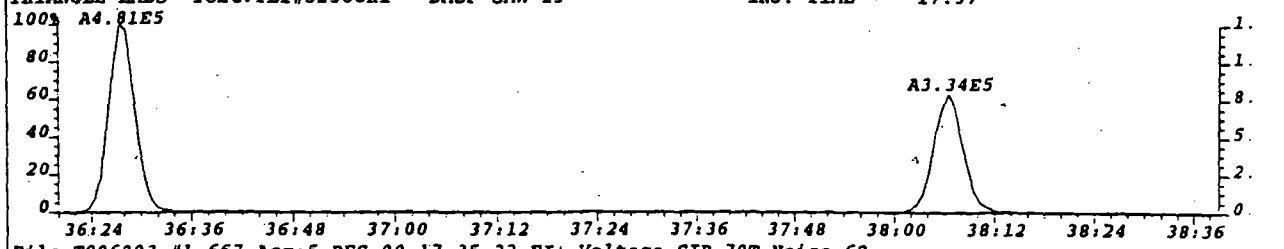
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:60
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,240.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37



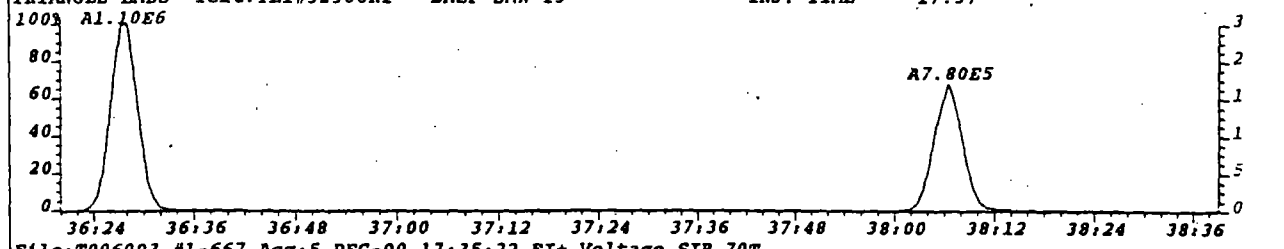
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:37
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37



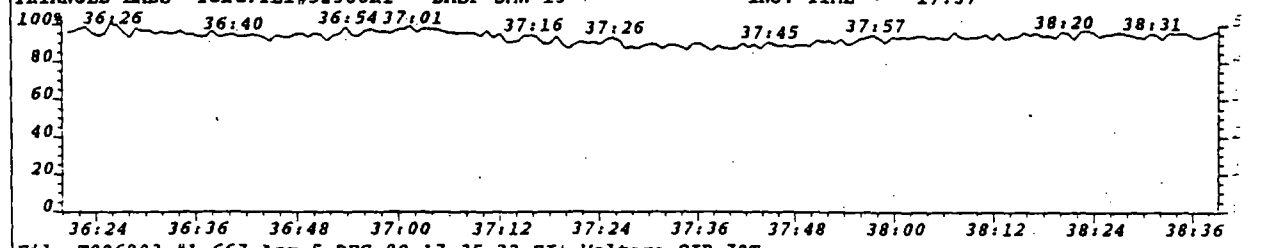
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:53
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37



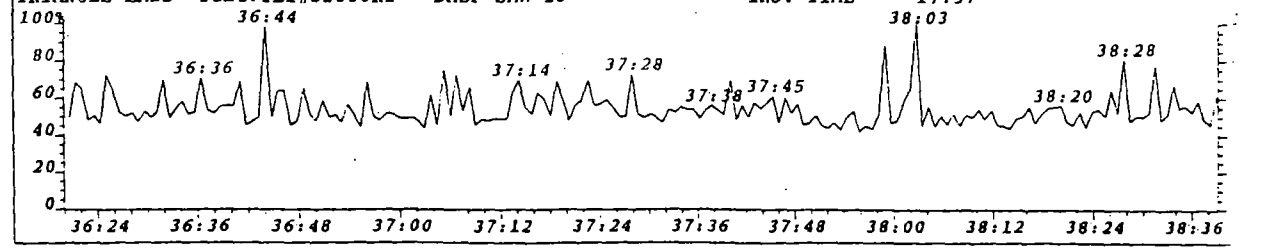
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:69
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,276.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37

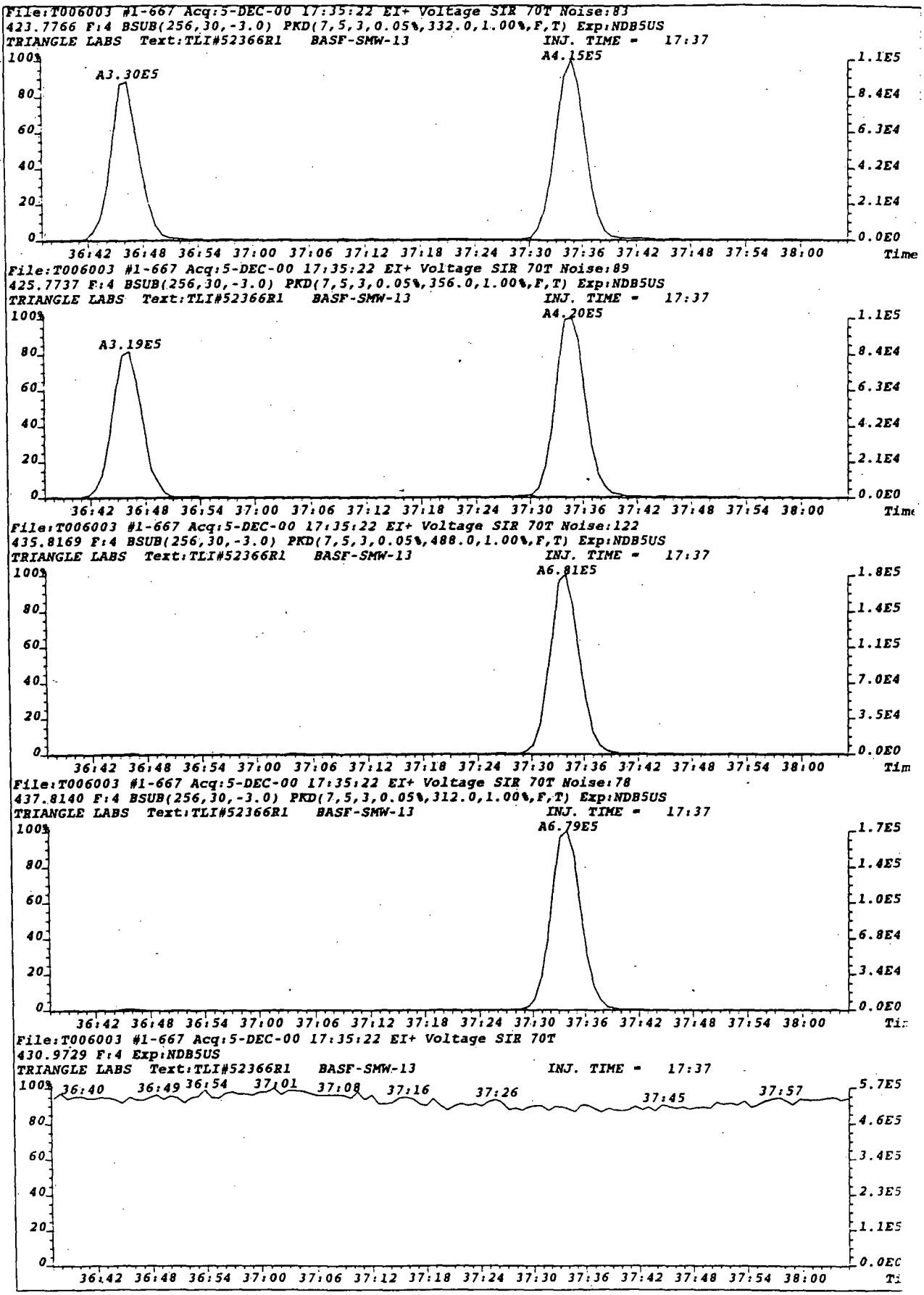


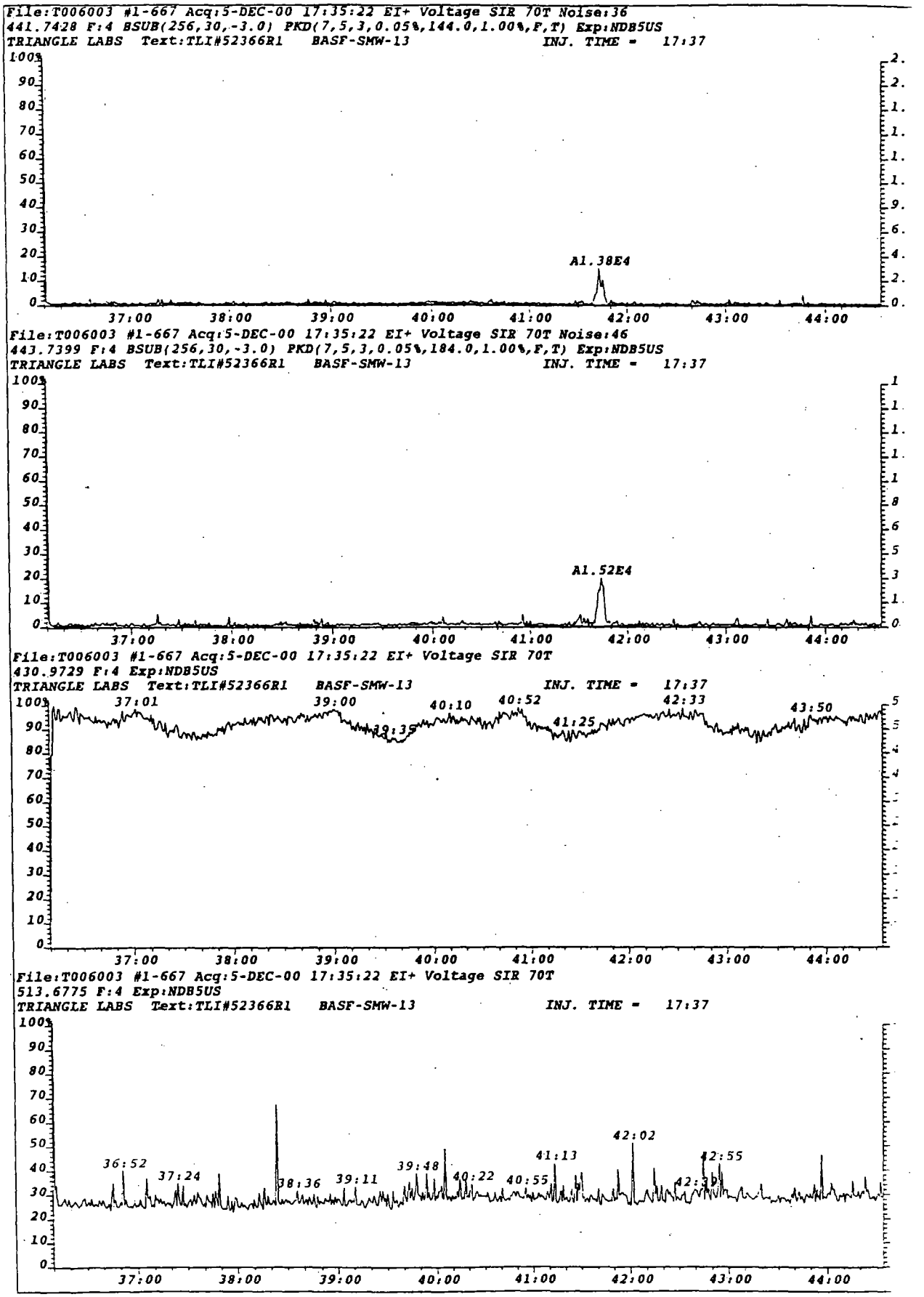
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37



File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37




File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:83
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,332.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13
INJ. TIME = 17:37
A3.30E5
A4.15E5
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:89
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,356.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13
INJ. TIME = 17:37
A3.19E5
A4.20E5
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:122
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,488.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13
INJ. TIME = 17:37
A6.81E5
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:78
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,312.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13
INJ. TIME = 17:37
A6.79E5
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13
INJ. TIME = 17:37
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00


File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:36
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,144.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.38E4
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:46
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.52E4
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
37:01
39:00
40:10
40:52
42:33
43:50
39:35
41:25
File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
36:52
37:24
38:36
39:11
39:48
40:22
40:55
41:13
42:02
42:36
42:55
37:00
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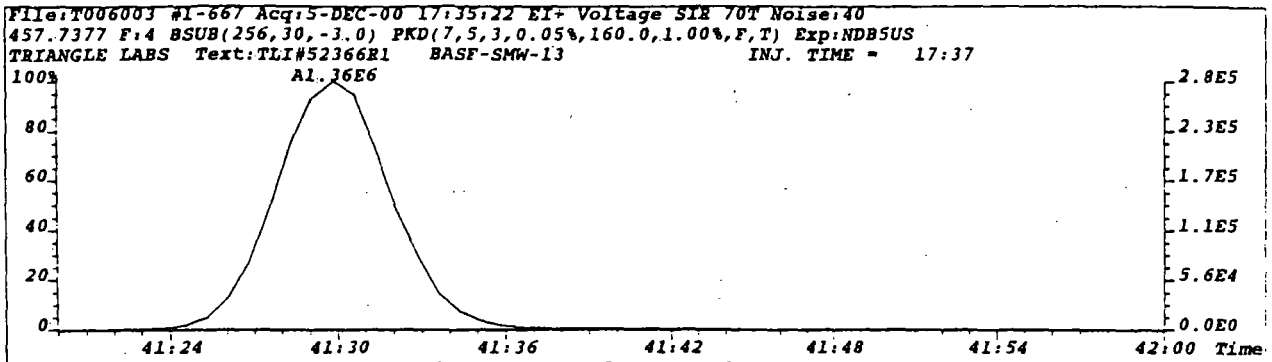
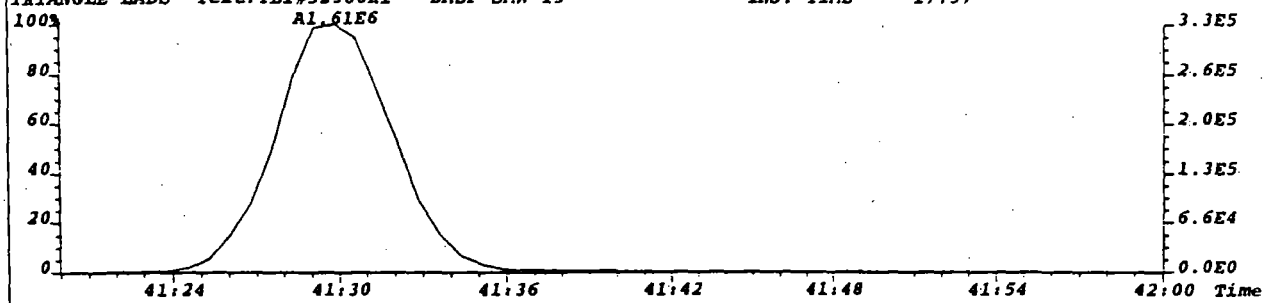
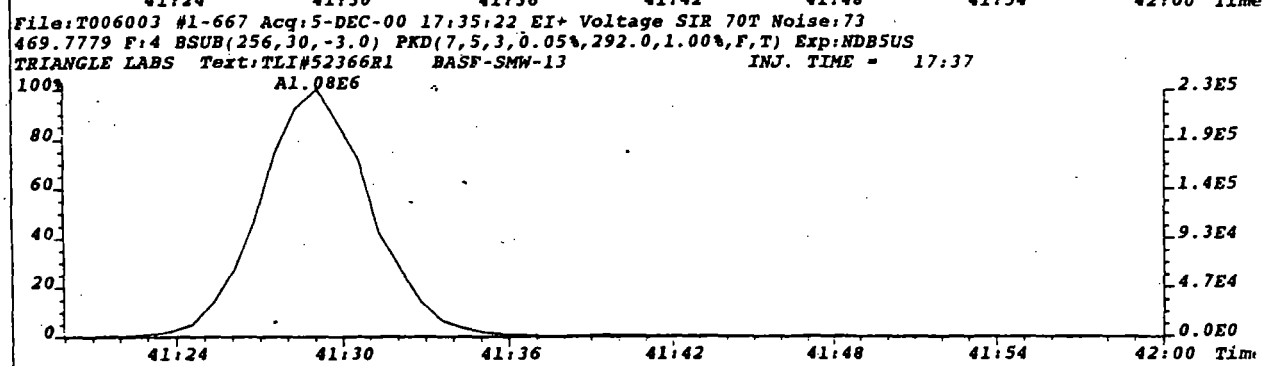
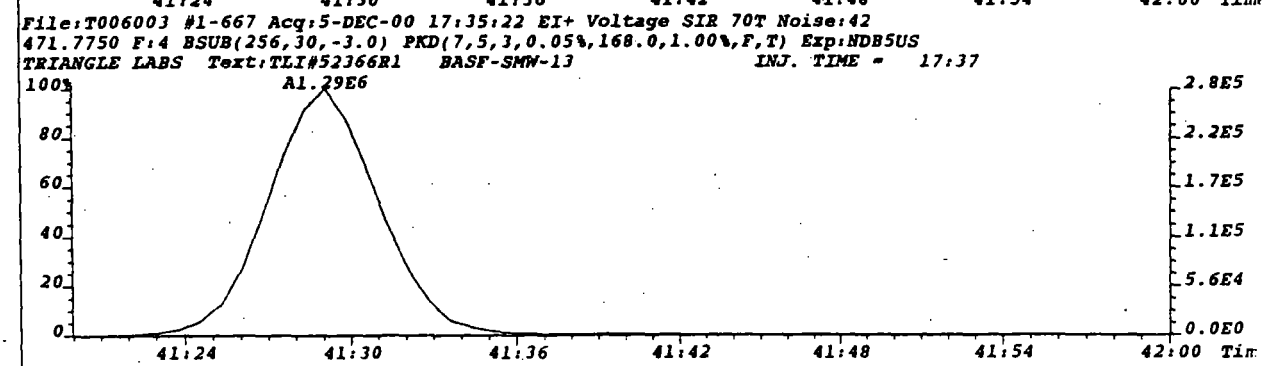
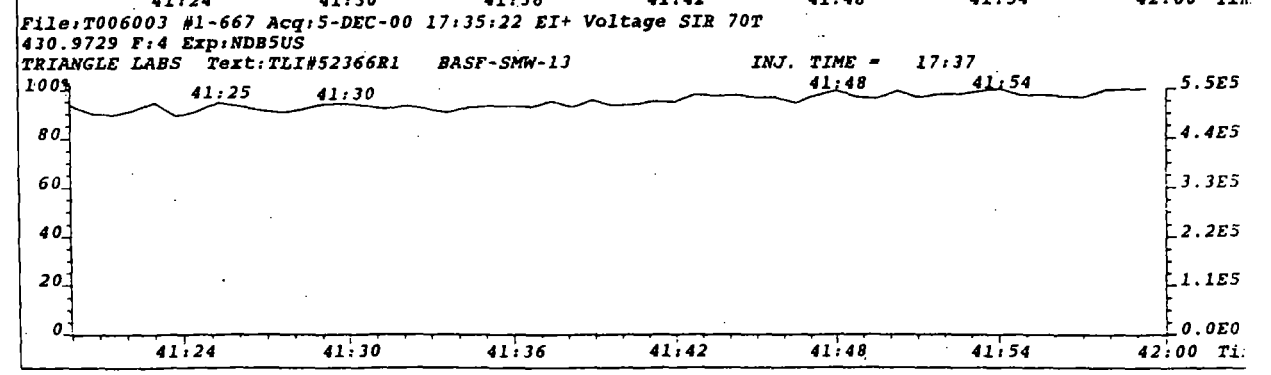
41:00
42:00
43:00
44:00

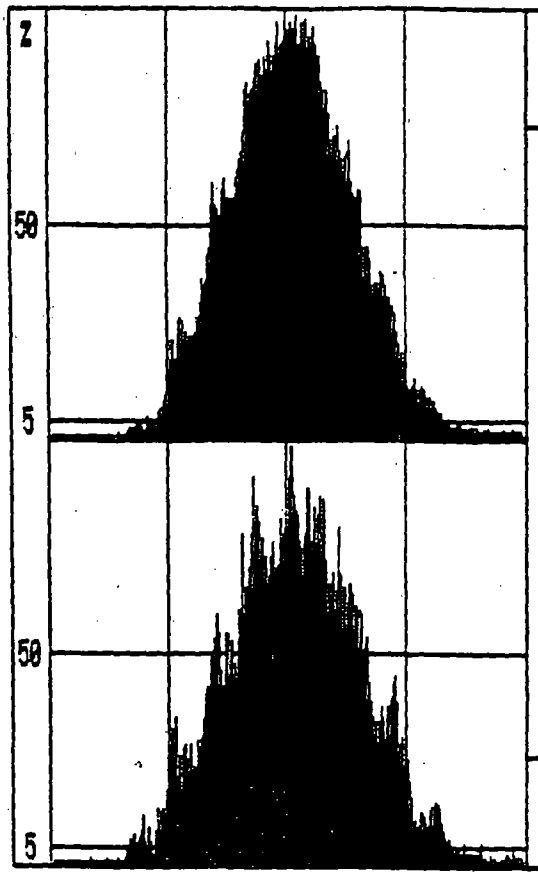

File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:40
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.36E6
100%
80
60
40
20
0
2.8E5
2.3E5
1.7E5
1.1E5
5.6E4
0.0E0
41:24
41:30
41:36
41:42
41:48
41:54
42:00 Time


File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:34
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,136.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.61E6
100%
80
60
40
20
0
3.3E5
2.6E5
2.0E5
1.3E5
6.6E4
0.0E0
41:24
41:30
41:36
41:42
41:48
41:54
42:00 Time


File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:73
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,292.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.08E6
100%
80
60
40
20
0
2.3E5
1.9E5
1.4E5
9.3E4
4.7E4
0.0E0
41:24
41:30
41:36
41:42
41:48
41:54
42:00 Time


File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T Noise:42
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
A1.29E6
100%
80
60
40
20
0
2.8E5
2.2E5
1.7E5
1.1E5
5.6E4
0.0E0
41:24
41:30
41:36
41:42
41:48
41:54
42:00 Time


File:T006003 #1-667 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37
100%
41:25
41:30
41:48
41:54
80
60
40
20
0
5.5E5
4.4E5
3.3E5
2.2E5
1.1E5
0.0E0
41:24
41:30
41:36
41:42
41:48
41:54
42:00 Time

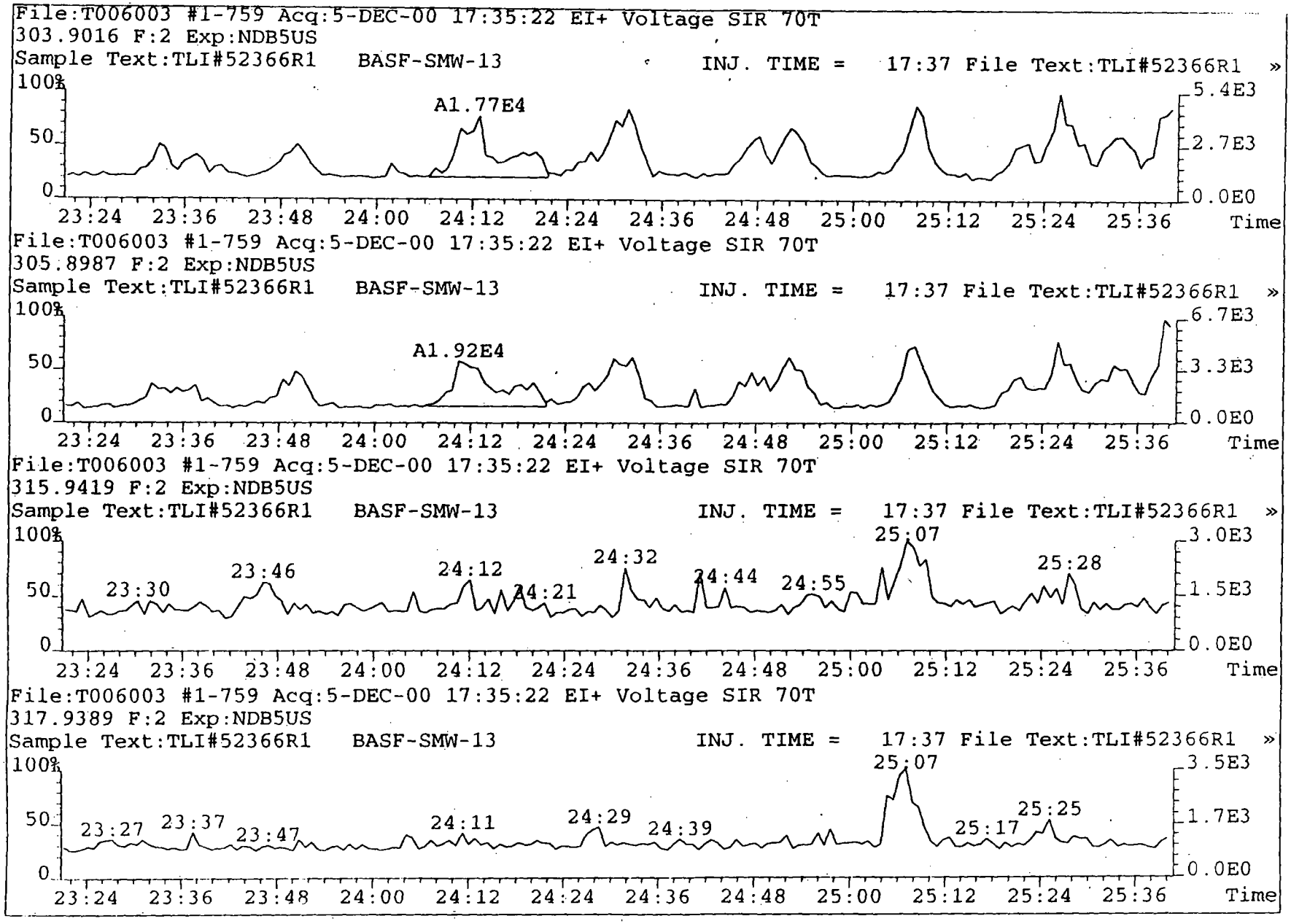


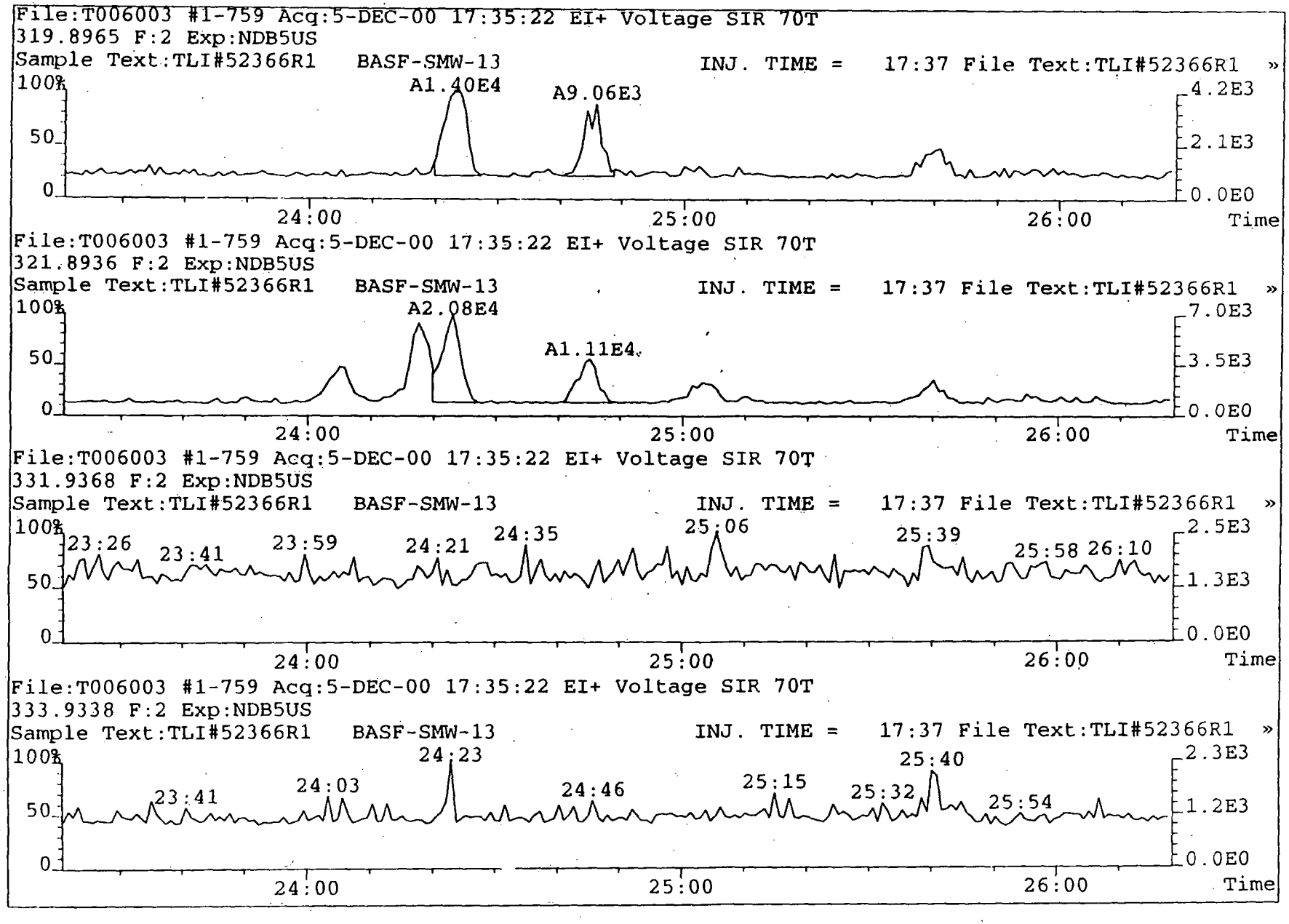
Channel I 330.9792 Peak top
Height .68 volts Span 200 ppm

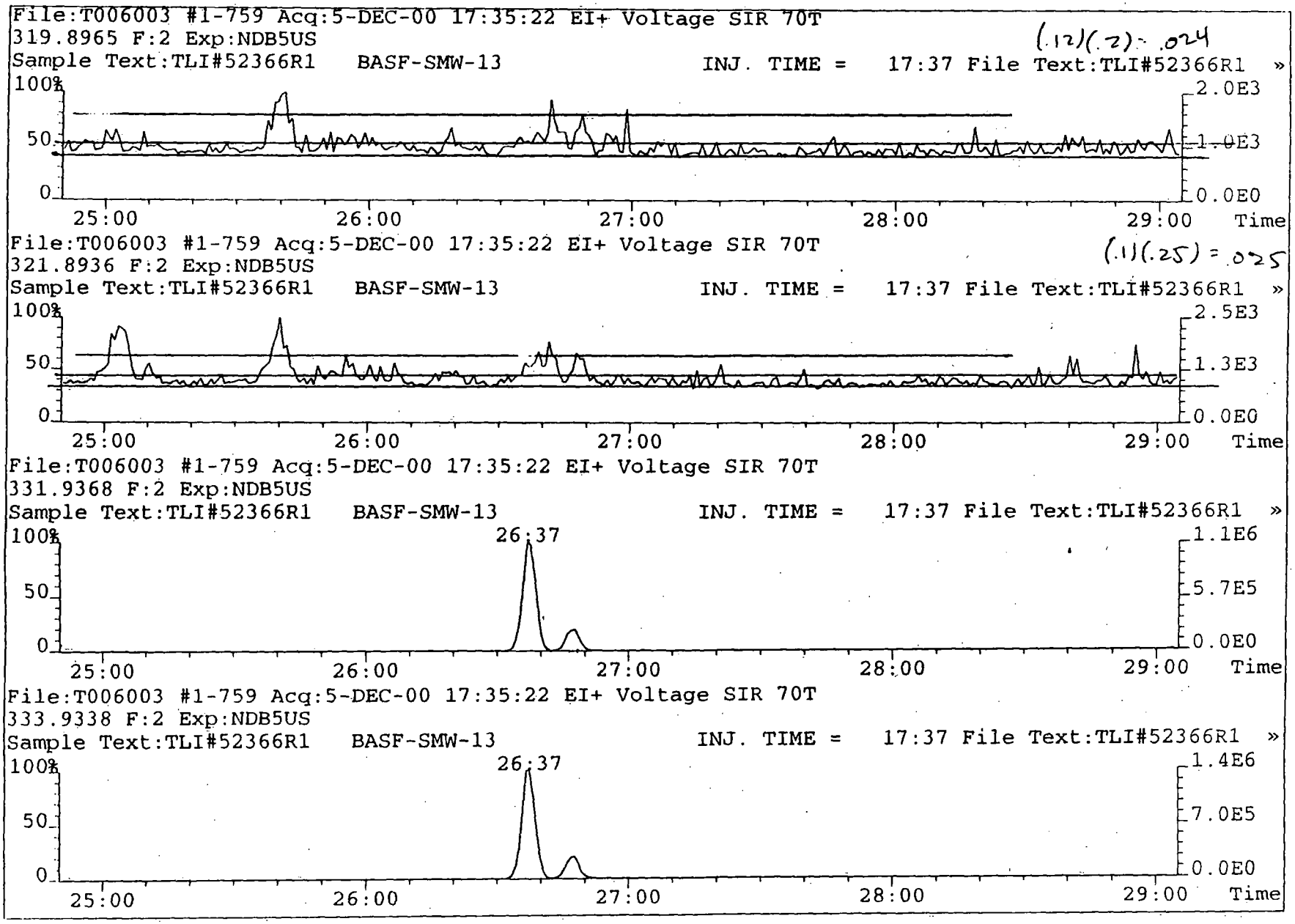
System file name	NOBSUS
Data file name	A:TD050003
Resolution	10000
Group number	2
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 416.9768

A	293	J	331	S	368
B	304	K	332	T	370
C	306	L	334	U	376
D	316	M	340	V	410
E	318	N	342		
F	320	O	352		
G	322	P	354		
H	328	Q	356		
I	331	R	358		

Ref. mass 416.9768 Peak top
Height .13 volts Span 200 ppm


File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
303.9016 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
A1.77E4
5.4E3
2.7E3
0.0E0
23:24 23:36 23:48 24:00 24:12 24:24 24:36 24:48 25:00 25:12 25:24 25:36 Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
305.8987 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
A1.92E4
6.7E3
3.3E3
0.0E0
23:24 23:36 23:48 24:00 24:12 24:24 24:36 24:48 25:00 25:12 25:24 25:36 Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
315.9419 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
23:30
23:46
24:12
24:21
24:32
24:44
24:55
25:07
25:28
3.0E3
1.5E3
0.0E0
23:24 23:36 23:48 24:00 24:12 24:24 24:36 24:48 25:00 25:12 25:24 25:36 Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
317.9389 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
23:27
23:37
23:47
24:11
24:29
24:39
25:07
25:17
25:25
3.5E3
1.7E3
0.0E0
23:24 23:36 23:48 24:00 24:12 24:24 24:36 24:48 25:00 25:12 25:24 25:36 Time


File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
A1.40E4
A9.06E3
4.2E3
2.1E3
0.0E0
24:00
25:00
26:00
Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
A2.08E4
A1.11E4
7.0E3
3.5E3
0.0E0
24:00
25:00
26:00
Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
331.9368 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
23:26
23:41
23:59
24:21
24:35
25:06
25:39
25:58
26:10
2.5E3
1.3E3
0.0E0
24:00
25:00
26:00
Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
333.9338 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
23:41
24:03
24:23
24:46
25:15
25:32
25:40
25:54
2.3E3
1.2E3
0.0E0
24:00
25:00
26:00
Time

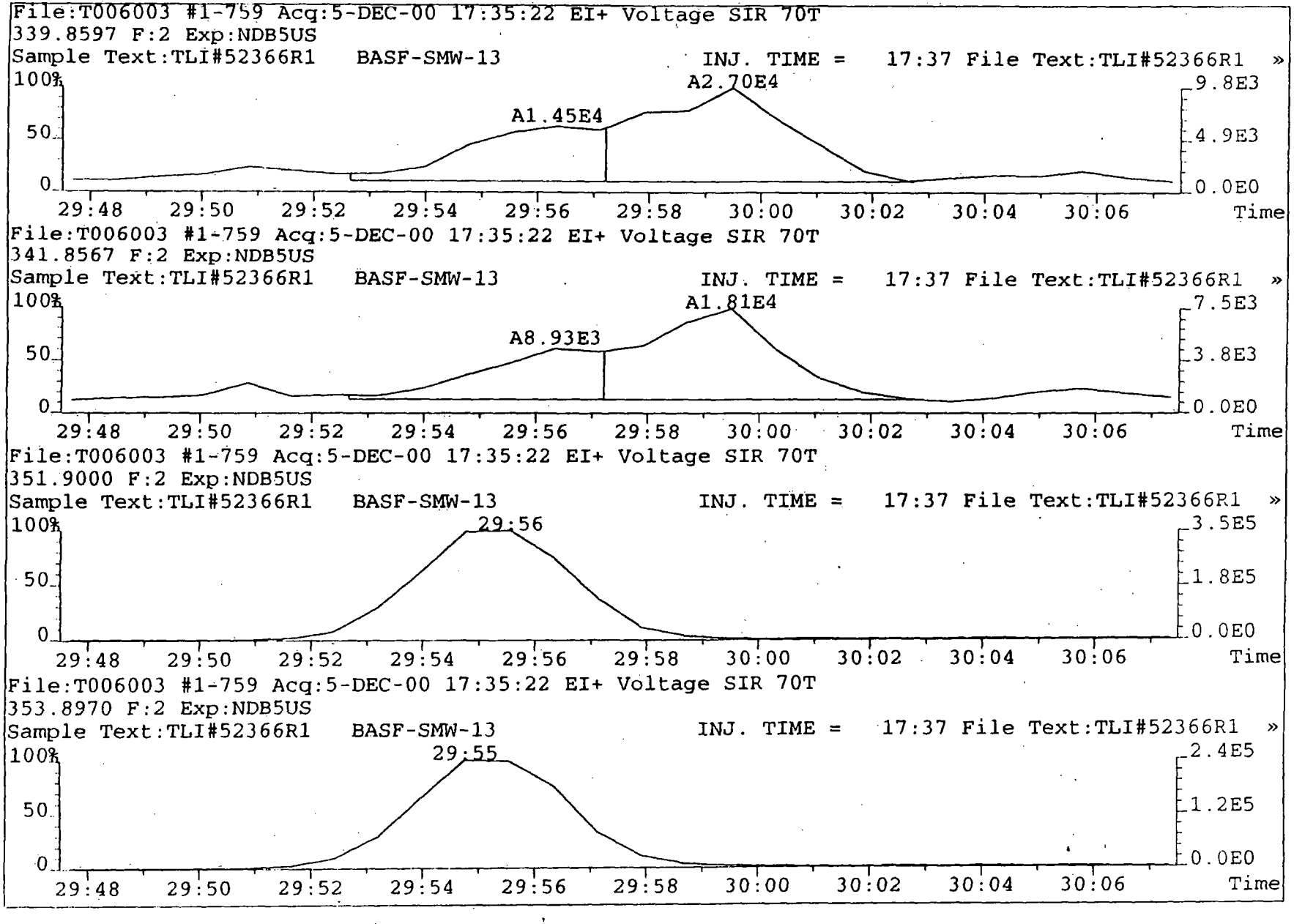


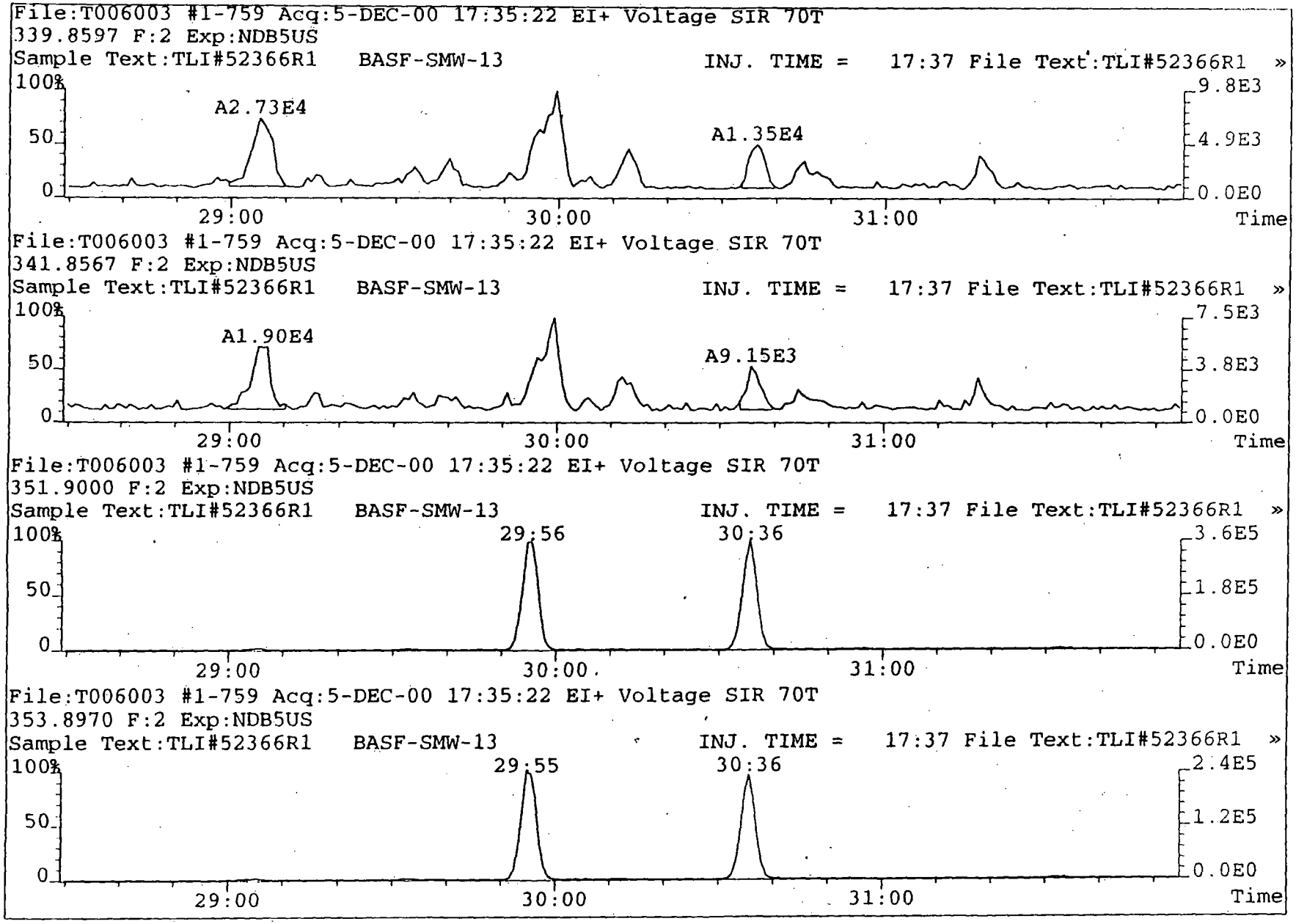
(.12)(.2) = .024

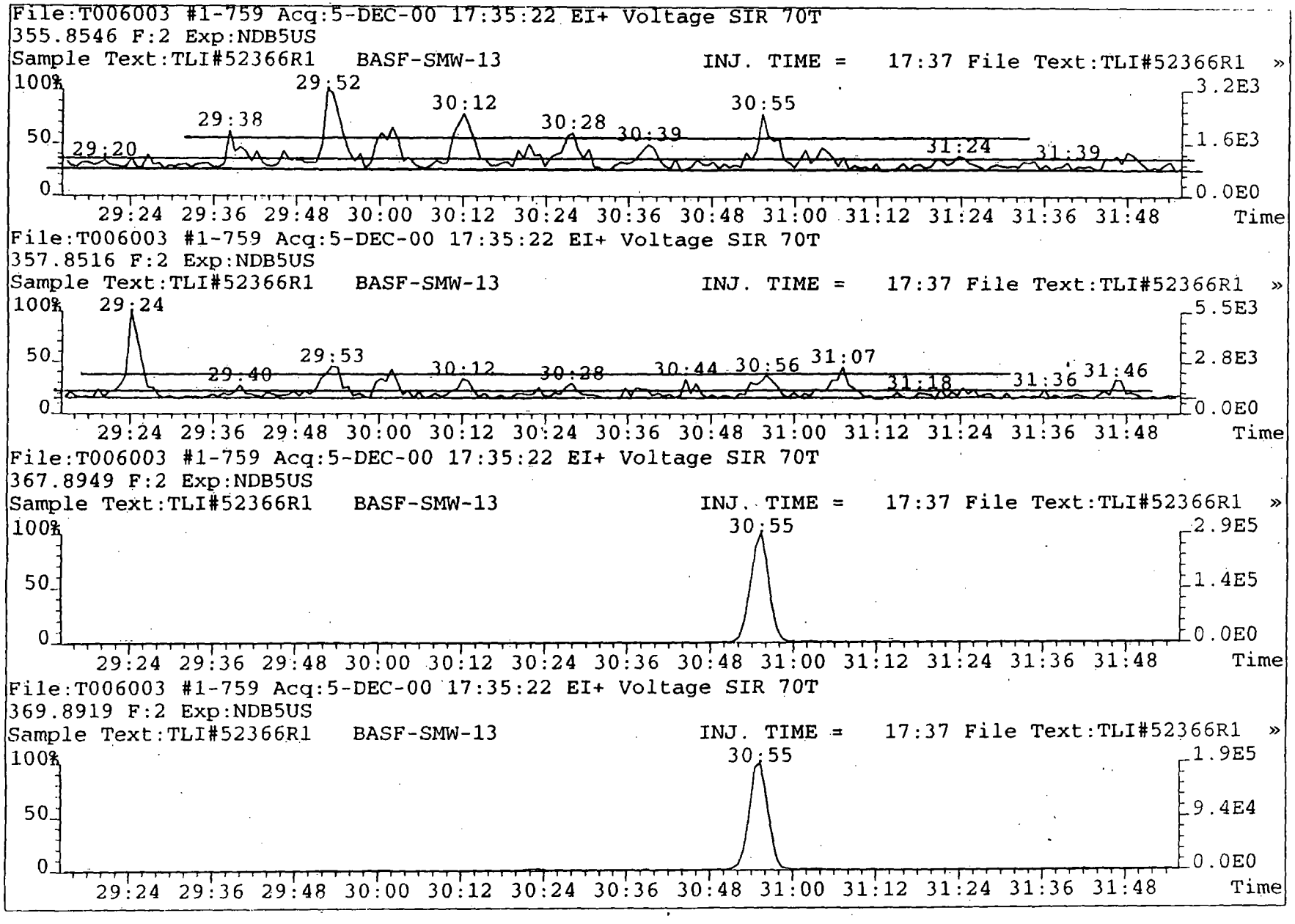
(.1)(.25) = .025

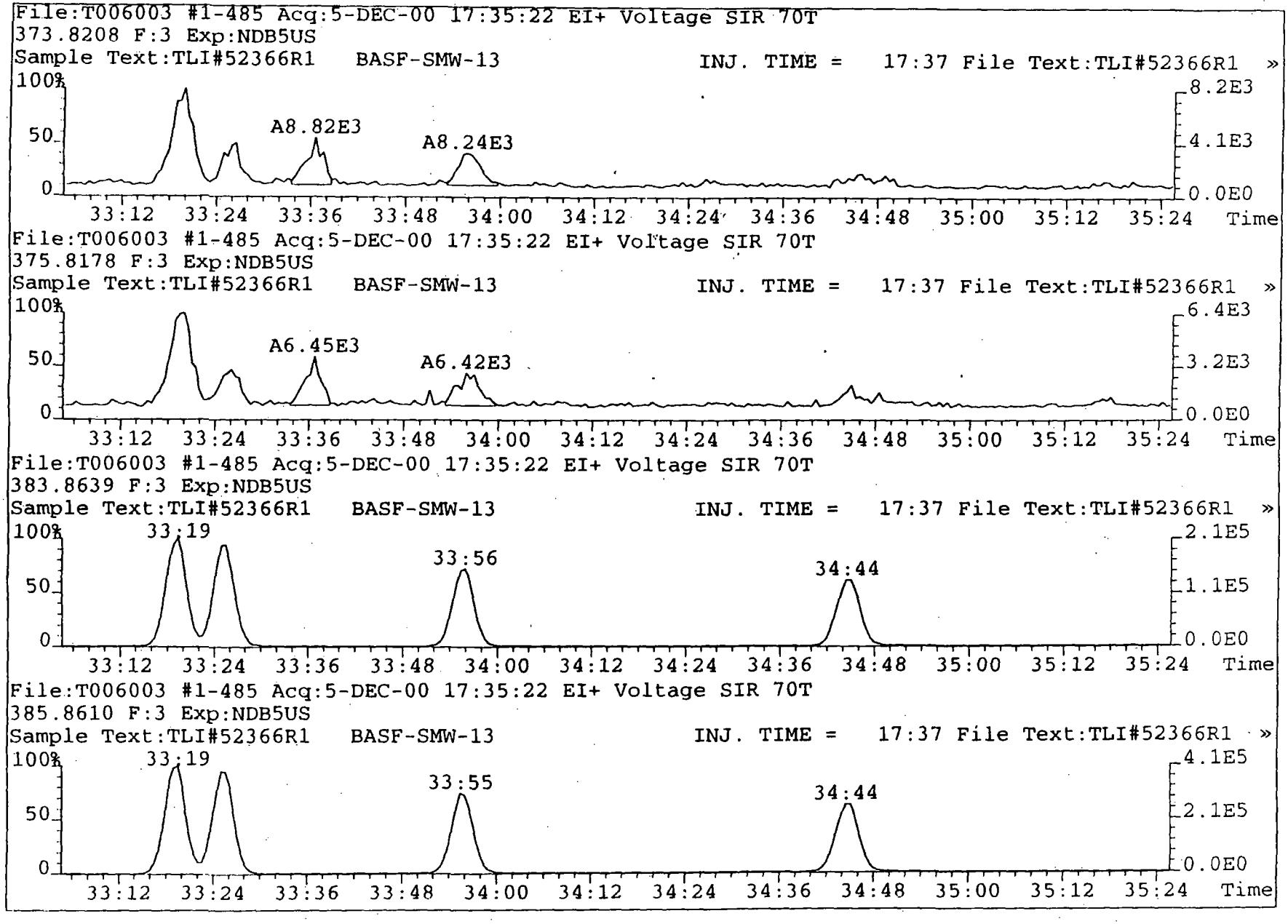
.024
.025
.049

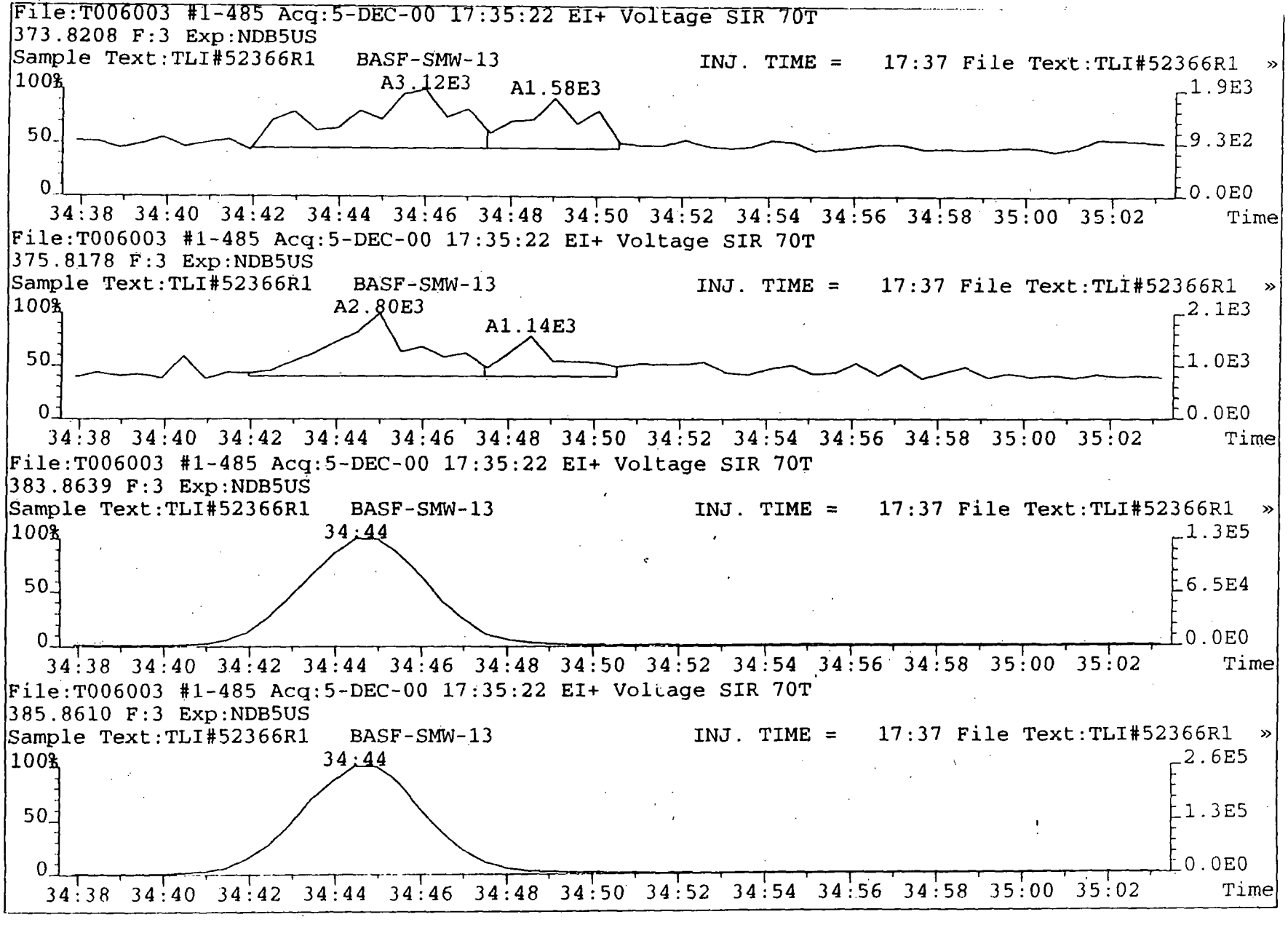
VCH
12/13/00

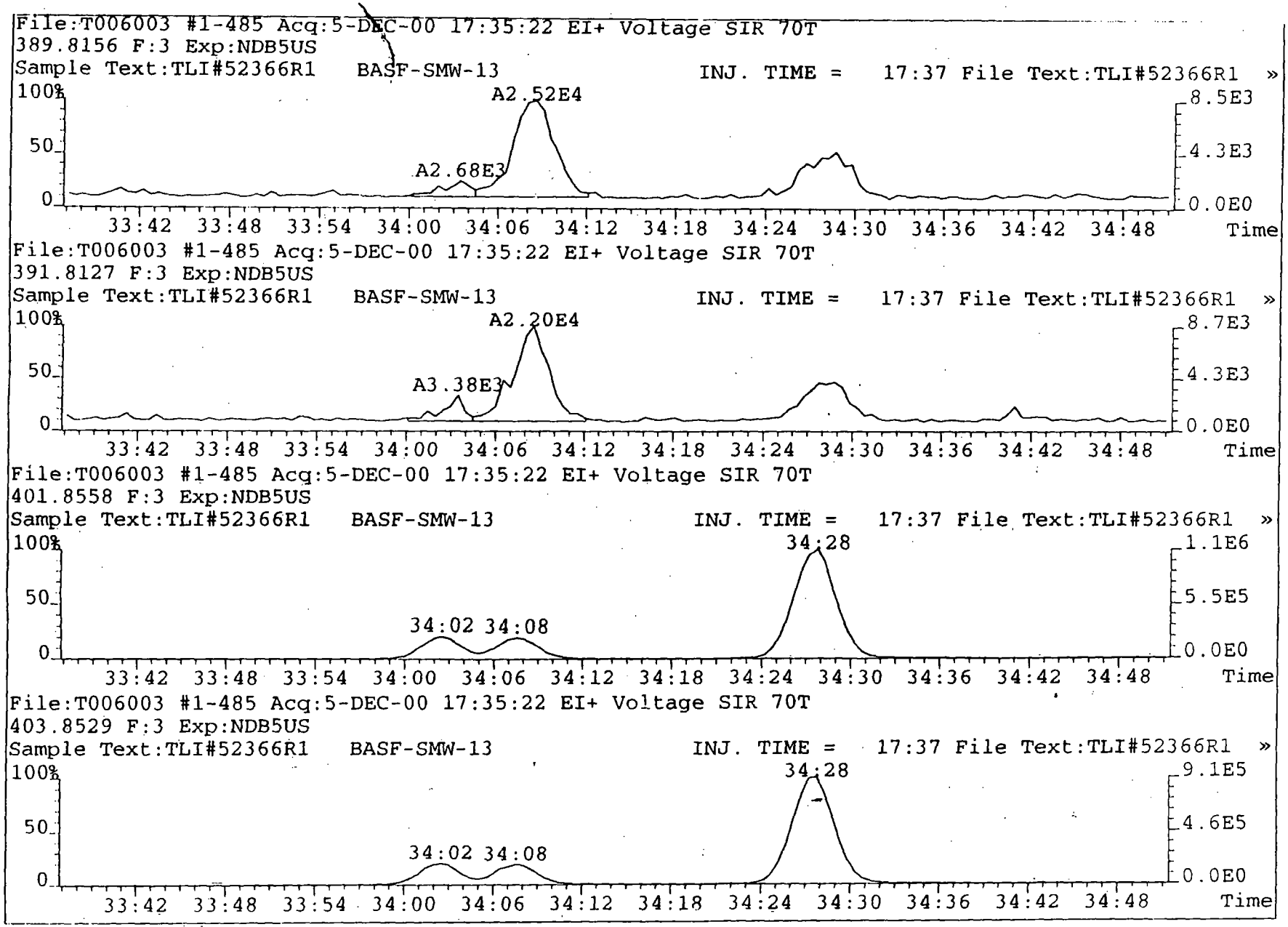

File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
339.8597 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
A1.45E4
A2.70E4
9.8E3
4.9E3
0.0E0
29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
341.8567 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
A8.93E3
A1.81E4
7.5E3
3.8E3
0.0E0
29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
351.9000 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
29:56
3.5E5
1.8E5
0.0E0
29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
353.8970 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
29:55
2.4E5
1.2E5
0.0E0
29:48 29:50 29:52 29:54 29:56 29:58 30:00 30:02 30:04 30:06 Time

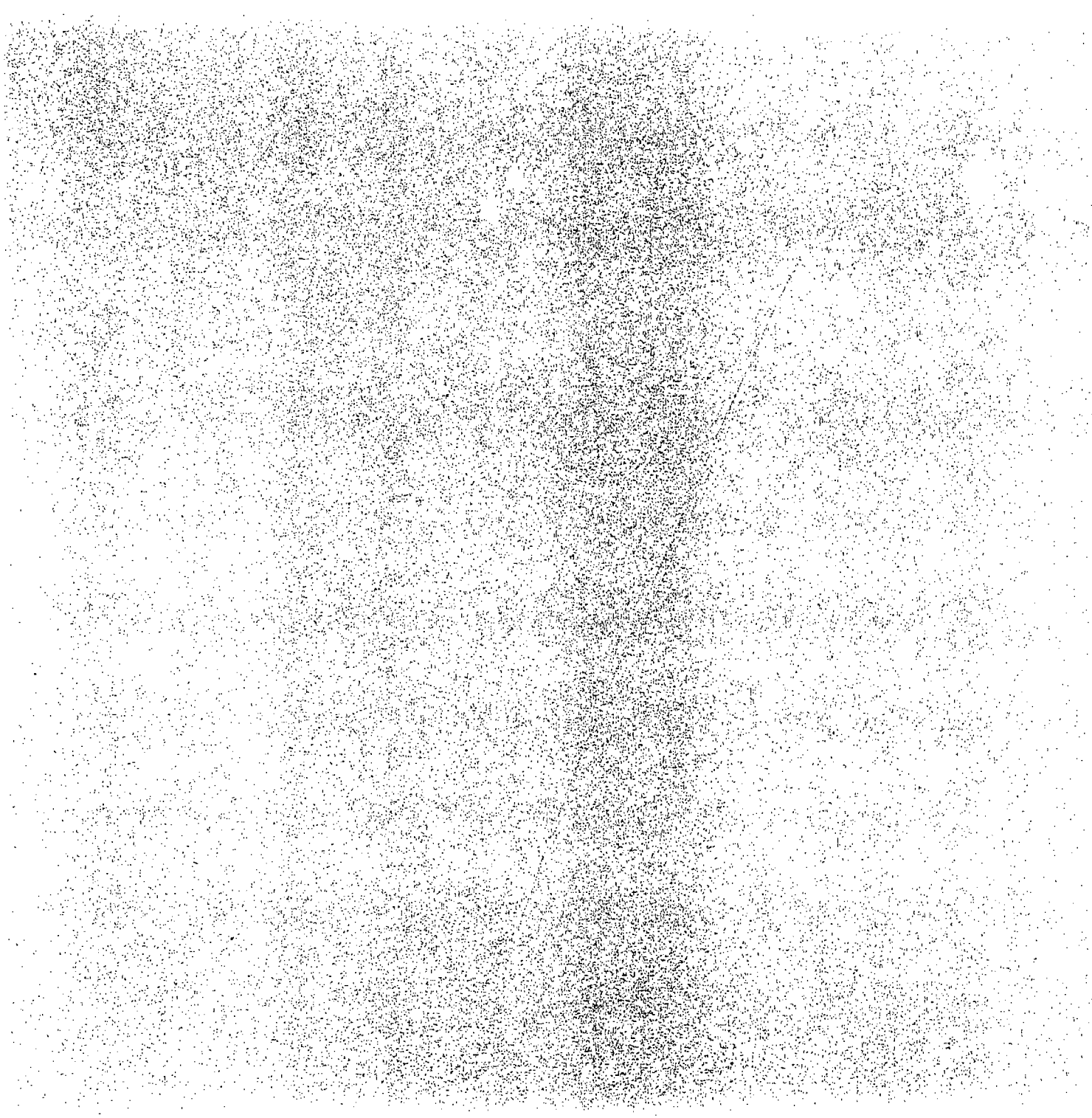

File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
339.8597 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
A2.73E4
A1.35E4
9.8E3
4.9E3
0.0E0
29:00
30:00
31:00
Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
341.8567 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
A1.90E4
A9.15E3
7.5E3
3.8E3
0.0E0
29:00
30:00
31:00
Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
351.9000 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
29:56
30:36
3.6E5
1.8E5
0.0E0
29:00
30:00
31:00
Time
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
353.8970 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
29:55
30:36
2.4E5
1.2E5
0.0E0
29:00
30:00
31:00
Time


File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
355.8546 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
29:20 29:38 29:52 30:12 30:28 30:39 30:55 31:24 31:39
3.2E3 1.6E3 0.0E0
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
357.8516 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
29:24 29:40 29:53 30:12 30:28 30:44 30:56 31:07 31:18 31:36 31:46
5.5E3 2.8E3 0.0E0
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
367.8949 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
30:55
2.9E5 1.4E5 0.0E0
File:T006003 #1-759 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
369.8919 F:2 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
30:55
1.9E5 9.4E4 0.0E0
100%
50
0
29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48
Time


File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
373.8208 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
A8.82E3
A8.24E3
8.2E3
4.1E3
0.0E0
33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 Time
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
375.8178 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
A6.45E3
A6.42E3
6.4E3
3.2E3
0.0E0
33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 Time
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
383.8639 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
33:19
33:56
34:44
2.1E5
1.1E5
0.0E0
33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 Time
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
385.8610 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
33:19
33:55
34:44
4.1E5
2.1E5
0.0E0
33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 Time


File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
373.8208 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
A3.12E3
A1.58E3
1.9E3
9.3E2
0.0E0
34:38 34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 35:02 Time
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
375.8178 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
A2.80E3
A1.14E3
2.1E3
1.0E3
0.0E0
34:38 34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 35:02 Time
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
383.8639 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
34:44
1.3E5
6.5E4
0.0E0
34:38 34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 35:02 Time
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
385.8610 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
34:44
2.6E5
1.3E5
0.0E0
34:38 34:40 34:42 34:44 34:46 34:48 34:50 34:52 34:54 34:56 34:58 35:00 35:02 Time


File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
389.8156 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
A2.52E4
A2.68E3
8.5E3
4.3E3
0.0E0
33:42 33:48 33:54 34:00 34:06 34:12 34:18 34:24 34:30 34:36 34:42 34:48 Time
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
391.8127 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
A2.20E4
A3.38E3
8.7E3
4.3E3
0.0E0
33:42 33:48 33:54 34:00 34:06 34:12 34:18 34:24 34:30 34:36 34:42 34:48 Time
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
401.8558 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
34:28
34:02 34:08
1.1E6
5.5E5
0.0E0
33:42 33:48 33:54 34:00 34:06 34:12 34:18 34:24 34:30 34:36 34:42 34:48 Time
File:T006003 #1-485 Acq:5-DEC-00 17:35:22 EI+ Voltage SIR 70T
403.8529 F:3 Exp:NDB5US
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 17:37 File Text:TLI#52366R1
100%
50
0
34:28
34:02 34:08
9.1E5
4.6E5
0.0E0
33:42 33:48 33:54 34:00 34:06 34:12 34:18 34:24 34:30 34:36 34:42 34:48 Time



TriMatrix, Inc.

TLI Project: **52366r1** Method 8290 TCDD/TCDF Analysis (DB-
Client Sample: **BASF-SMW-13** Analysis File: **P00**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/2000**	Spike File:	**SPC2NF**
TLI ID:	**274-99-7B**	Date Extracted:	**12/01/2000**	ICal:	**PF2O230**
		Date Analyzed:	**12/05/2000**	ConCal:	**P004403**
Sample Size:	**1.050 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005998**	% Lipid:	**n/a**
GC Column:	**DB-225**	Analyst:	**DFS**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Fla
2,3,7,8-TCDF	101			0.68	23:48	_

Internal Standard	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fla
$^{13}C_{12}$-2,3,7,8-TCDF	269	14.1	40%-130%	0.77	23:48	V_

Recovery Standard	Ratio	RT	Fla
$^{13}C_{12}$-1,2,3,4-TCDD	0.81	22:36	_

Data Reviewer: _____ 12/13/2000

C2NF_PSR v2.03. L

Triangle Laboratories, Inc.®
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:39 12/1

Initial ....Date...

Data Review By: JGA 12/13/00

Channel specific noise levels computed from 'NL' heights.

The Total Area for each peak with an ion abundance ratio outside
ratio limits has been recalculated according to method requirements.

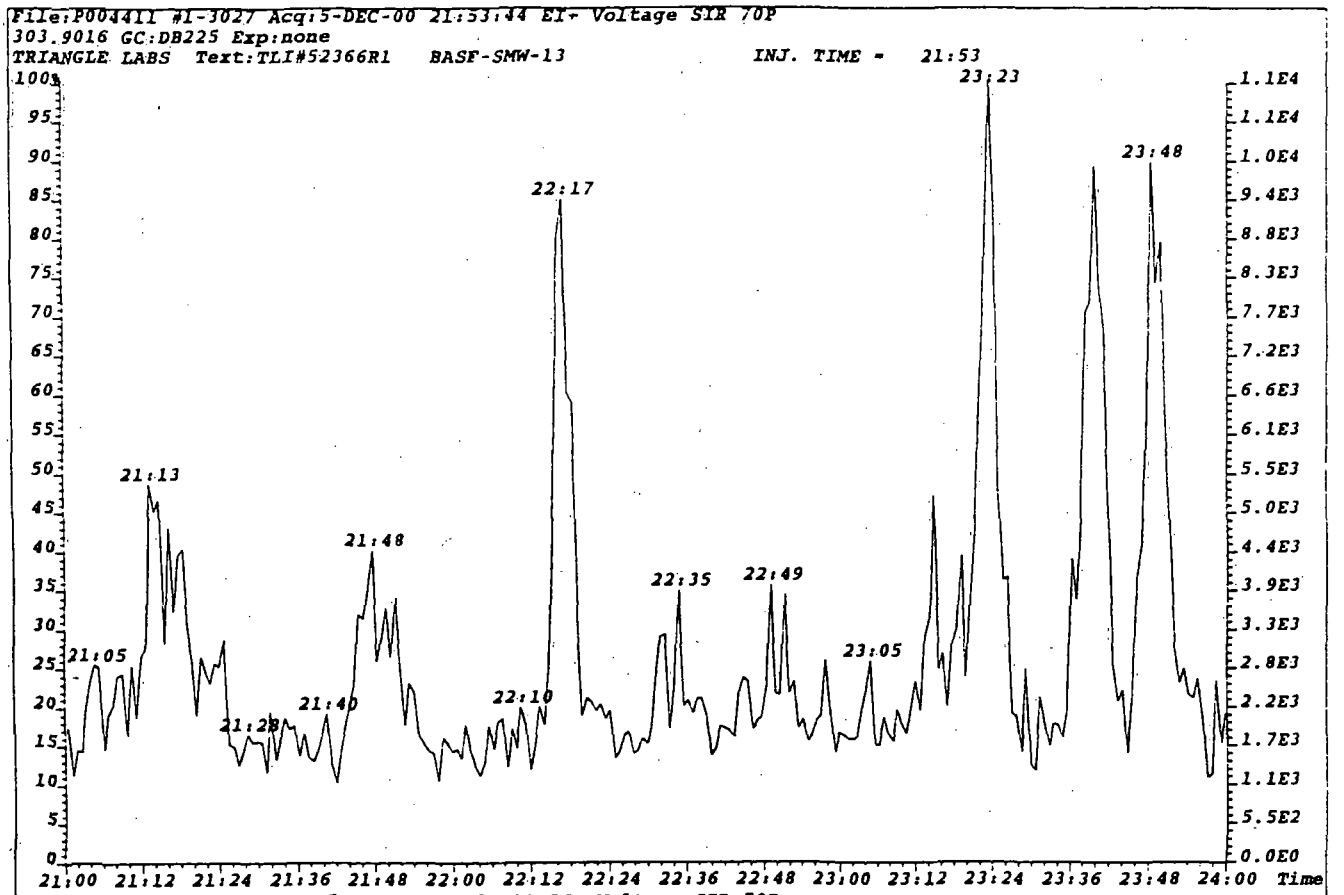
Page No. 1 Listing of P004411B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

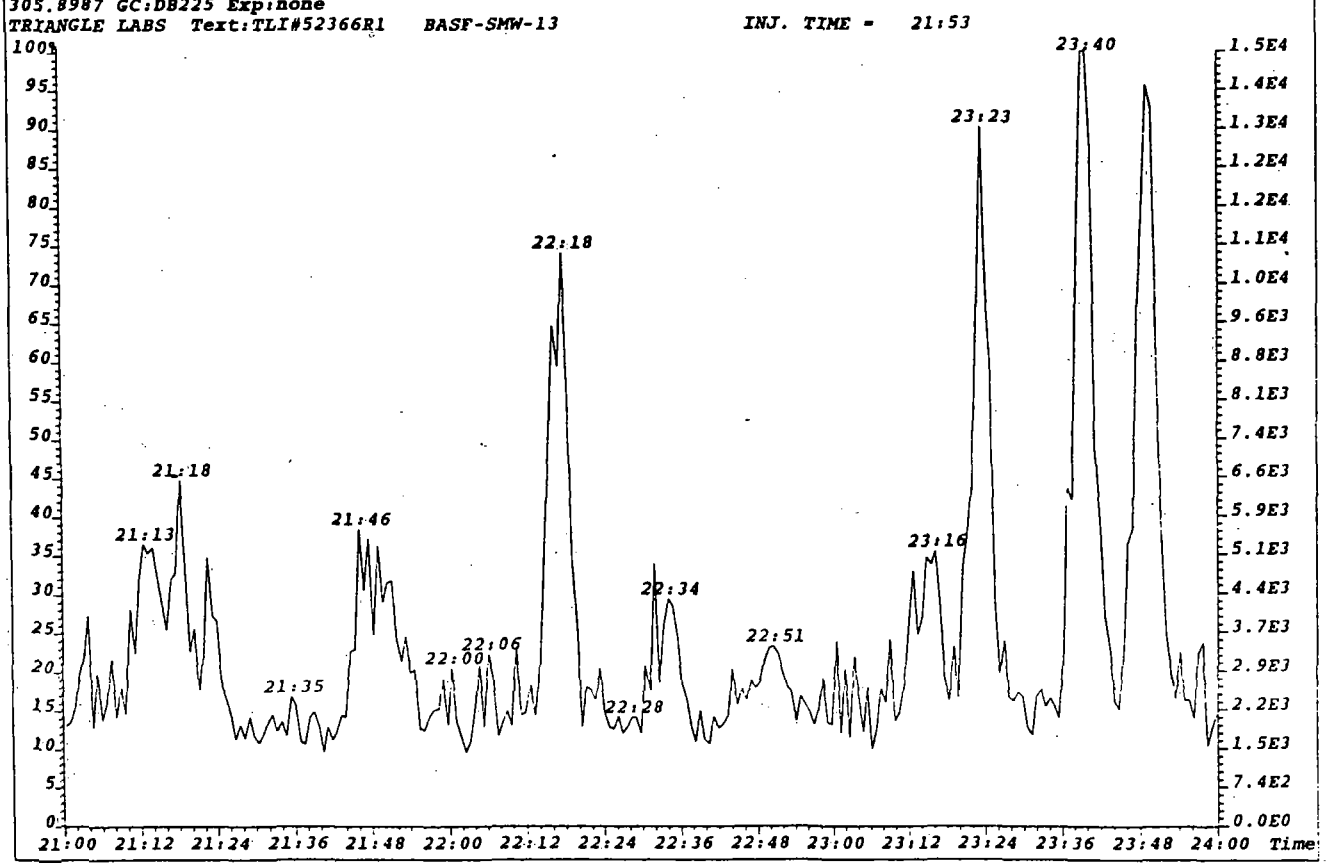
Compound/ M_3....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
TCDF				0.65-0.89						0.791-1.108			
304-306	DC	NL		Height			0.17	0.07	0.10				
				18:52	RO	0.45	0.48	0.21	0.47	0.793			J
	DC	SN		19:02	RO	5.14	0.12			0.800			
	DC	SN		19:15	RO	2.00	0.14			0.809			
	DC	SN		19:33	RO	2.38	0.14			0.821			
				19:42	RO	1.53	0.67	0.58	0.38	0.828			J
				20:00	RO	1.44	0.69	0.56	0.39	0.840			J
				20:08	RO	0.58	1.45	0.63	1.09	0.846			
	DC	SN		20:17	RO	0.40	0.51			0.852			
	DC	SN		20:27	RO	0.39	0.25			0.859			
				20:32	RO	1.73	0.53	0.52	0.30	0.863			J
	DC	SN		20:36	RO	2.17	0.11			0.866			
				20:57	RO	0.91	2.18	1.12	1.23	0.880			
				21:05		0.77	0.76	0.33	0.43	0.886			
				21:10	RO	1.43	0.50	0.40	0.28	0.889			J
				21:13	RO	0.53	2.46	1.07	1.85	0.891			
				21:16		0.79	2.49	1.10	1.39	0.894			
				21:25		0.70	1.46	0.60	0.86	0.900			
				21:48		0.75	3.88	1.66	2.22	0.916			
	DC	SN		22:08	RO	0.12	0.09			0.930			
				22:17		0.70	5.63	2.32	3.31	0.936			
	DC	SN		22:21		0.85	0.61			0.939			
				22:33	RO	0.28	0.69	0.30	1.07	0.947			J
	DC	SN		22:45	RO	1.89	0.16			0.956			
				22:49	RO	0.96	1.19	0.64	0.67	0.959			
				23:05	RO	1.17	0.42	0.28	0.24	0.970			J
	DC	SN		23:09	RO	0.54	0.32			0.973			
				23:15	RO	0.50	2.02	0.88	1.75	0.977			
				23:23	RO	0.94	7.04	3.73	3.98	0.982			
				23:40		0.78	8.43	3.69	4.74	0.994			
M				23:48		0.68	7.70	3.13	4.57	1.000	2378-TCDF		AN
	DC	SN		23:58	RO	0.38	0.18			1.007			
				24:30		0.84	2.12	0.97	1.15	1.029			
				24:42		0.80	3.32	1.48	1.84	1.038			
	DC	SN		24:53	RO	1.00	0.12			1.046			
	DC	SN		25:01	RO	1.83	0.11			1.051			
				25:20		0.67	3.81	1.53	2.28	1.064			
	DC	SN		25:44	RO	1.23	0.51			1.081			
	DC	SN		26:01	RO	3.67	0.21			1.093			
				26:10		0.77	0.94	0.41	0.53	1.099			
	DC	SN		26:15	RO	0.21	0.25			1.103			
	DC	SN		26:19	RO	0.93	0.27			1.106			
	DC	WH		26:28		0.75	13.14			1.112			

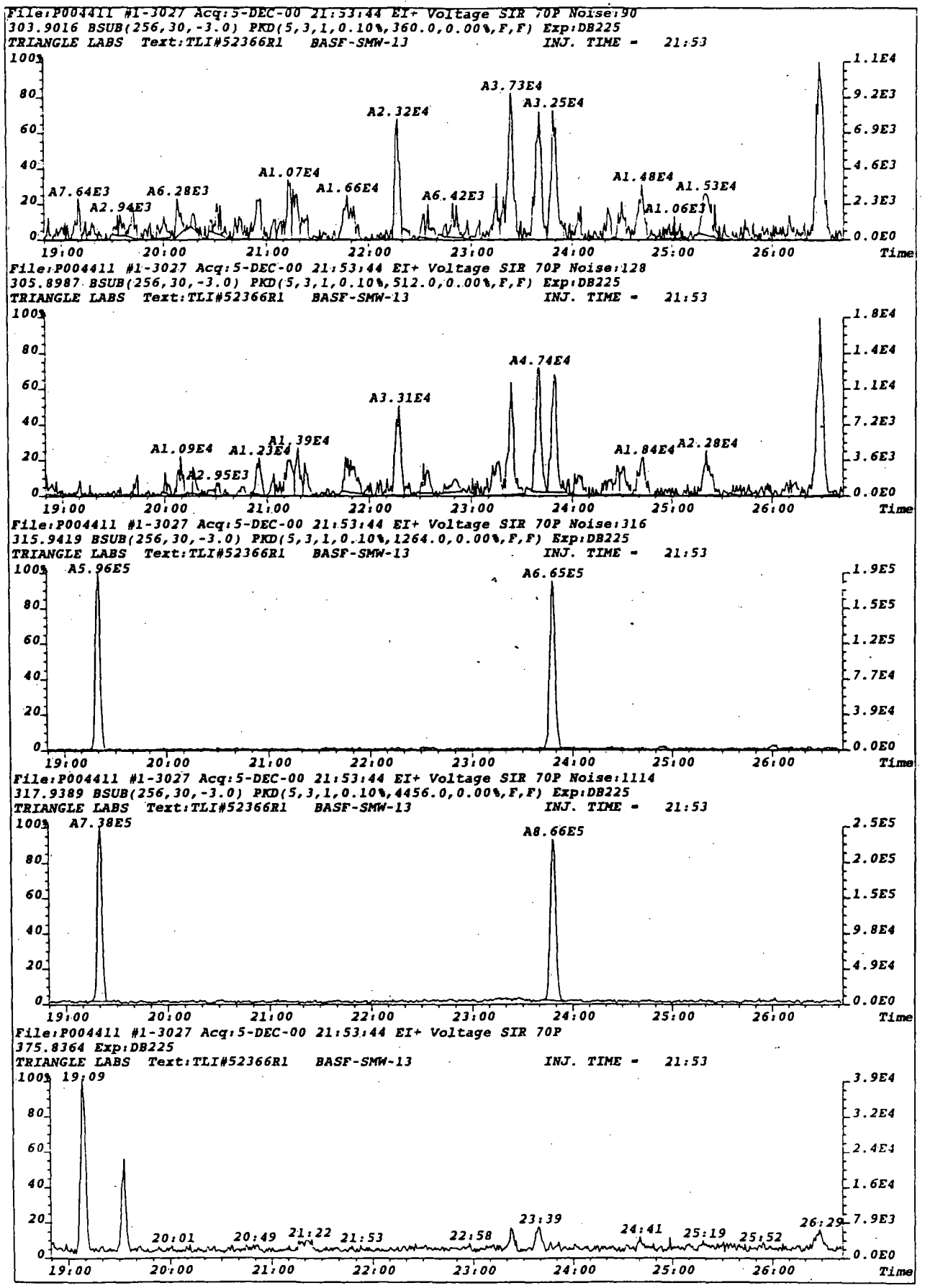
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	WH		26:38	RO	1.13	0.14			1.119			
304-306		24	Peaks				60.86						
13C12-TCDF				0.65-0.89					0.958-1.042				
316-318	DC	NL				Height	1.14	0.25	0.89				
	DC	WL		19:20		0.31	133.41			0.312			
				23:48		0.77	153.03	66.47	86.56	1.000	13C12-2378-TCDF	IS0	
						Height	40.76	18.27	22.49				
316-318		1	Peak				153.03						
---------- Above: TCDF / TCDD Follows ----------													
13C12-TCDD				0.65-0.89					0.910-1.090				
332-334	DC	NL				Height	0.54	0.33	0.21				
	DC	WL		19:38	RO	0.52	1.77			0.882			
	DC	WL		19:43	RO	0.10	0.23			0.886			
				20:28	RO	0.31	1.88	0.82	2.61	0.920			
				20:40	RO	2.15	0.85	1.03	0.48	0.929			
				20:45	RO	1.52	0.48	0.41	0.27	0.933			
				21:20	RO	3.28	0.32	0.59	0.18	0.959			
				21:28	RO	1.44	2.07	1.68	1.17	0.965			
				21:31	RO	1.48	2.34	1.96	1.32	0.967			
				21:35	RO	0.31	1.01	0.44	1.44	0.970			
				21:43	RO	2.95	0.37	0.62	0.21	0.976			
				21:50		0.74	0.47	0.20	0.27	0.981			
				22:15		0.82	127.27	57.22	70.05	1.000	13C12-2378-TCDD	IS1	
						Height	34.23	15.21	19.02				
				22:36		0.81	692.79	310.41	382.38	1.016	13C12-1234-TCDD	RS1	
				23:02	RO	0.25	0.67	0.29	1.18	1.035			
				23:17	RO	0.50	3.08	1.34	2.69	1.046			
				23:27	RO	0.37	0.85	0.37	0.99	1.054			
				23:29	RO	0.54	0.80	0.35	0.65	1.055			
	DC	WH		25:06	RO	4.14	0.25			1.123			
	DC	WH		25:26	RO	3.53	0.27			1.143			
332-334		15	Peaks				835.25						

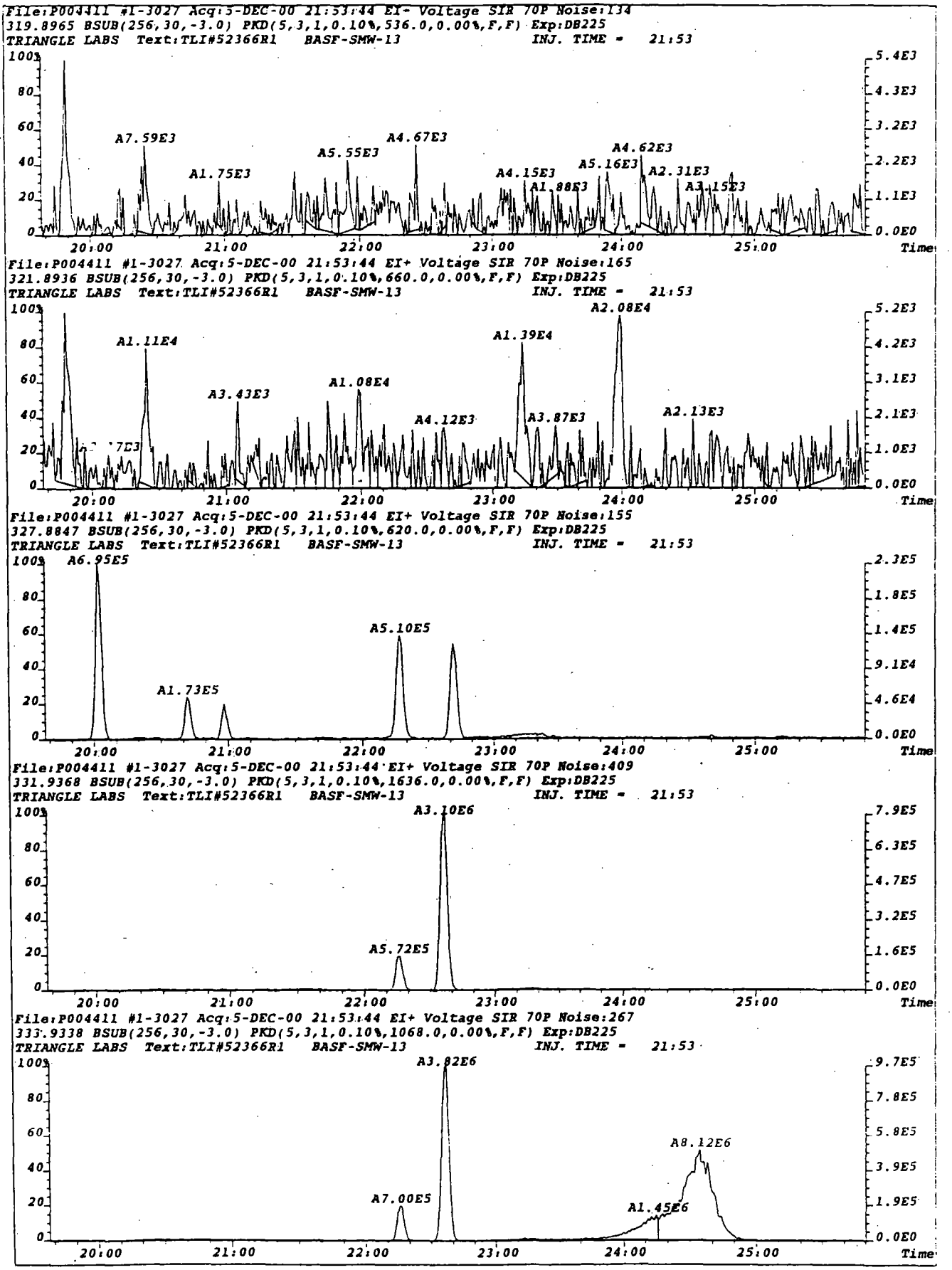
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

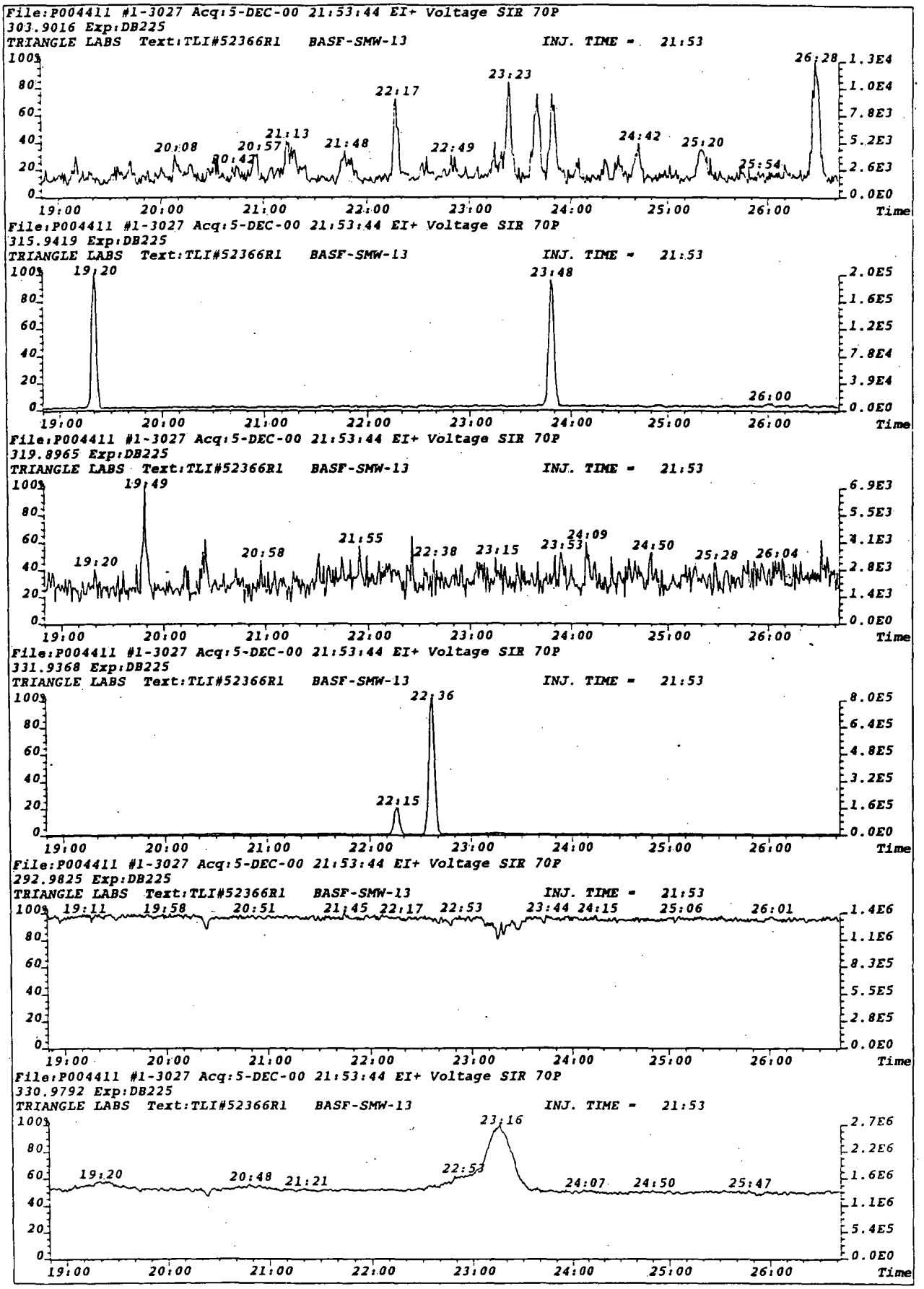
*** End of Report ***

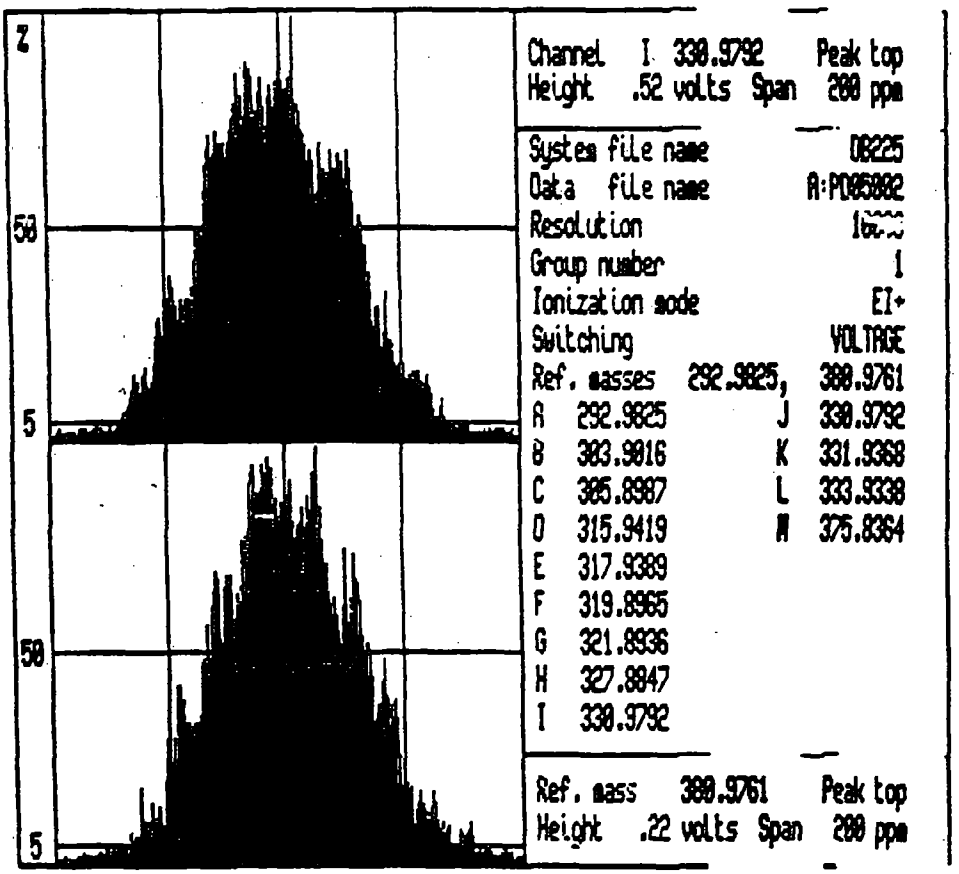

File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
303.9016 GC:DB225 Exp:none
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13
INJ. TIME - 21:53
21:05
21:13
21:28
21:40
21:48
22:10
22:17
22:35
22:49
23:05
23:23
23:48
21:00 21:12 21:24 21:36 21:48 22:00 22:12 22:24 22:36 22:48 23:00 23:12 23:24 23:36 23:48 24:00 Time

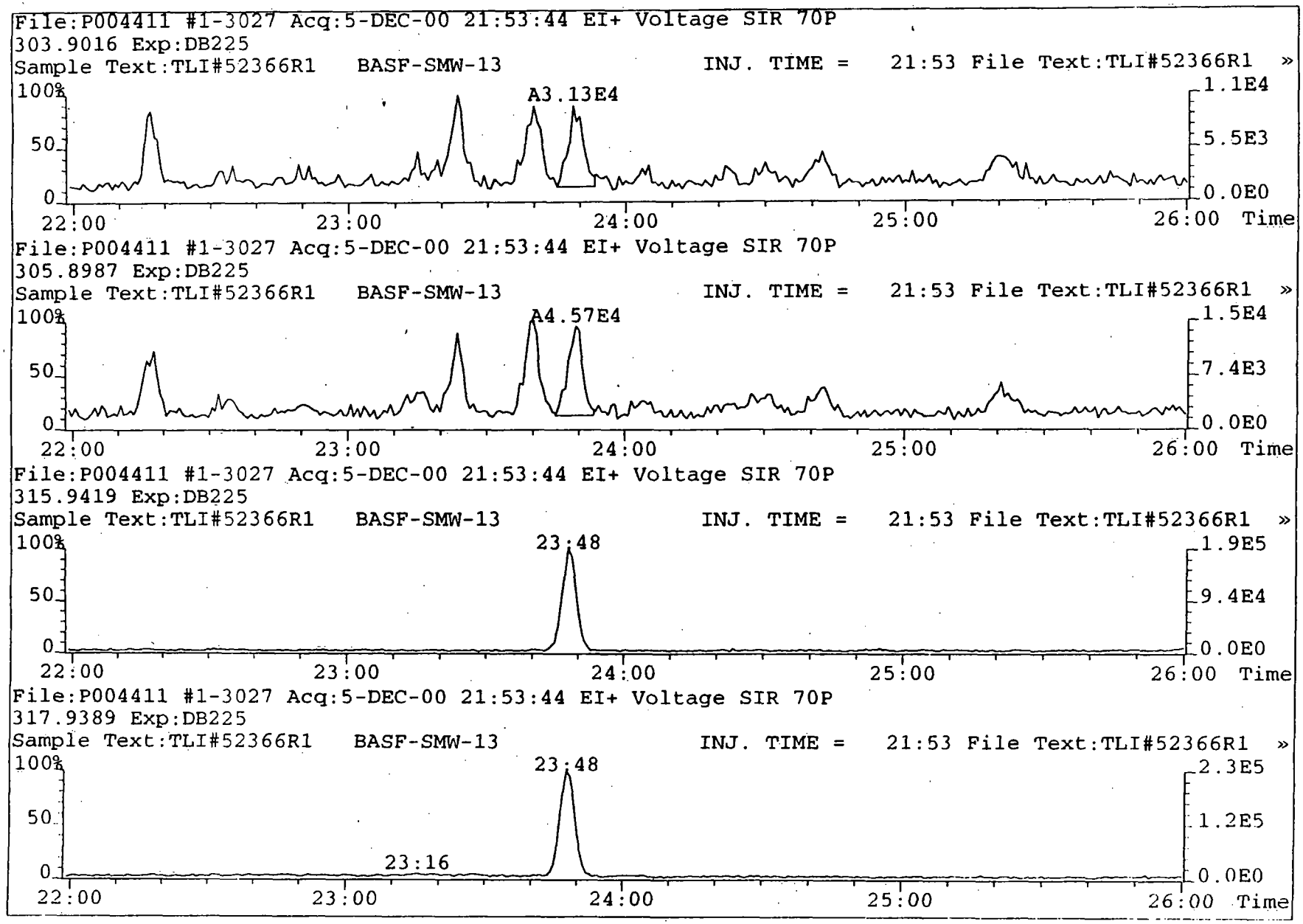

File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
305.8987 GC:DB225 Exp:none
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13
INJ. TIME - 21:53
21:13
21:18
21:35
21:46
22:00
22:06
22:18
22:28
22:34
22:51
23:16
23:23
23:40
21:00 21:12 21:24 21:36 21:48 22:00 22:12 22:24 22:36 22:48 23:00 23:12 23:24 23:36 23:48 24:00 Time


File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P Noise:90
303.9016 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,360.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME - 21:53
A7.64E3
A2.94E3
A6.28E3
A1.07E4
A1.66E4
A2.32E4
A6.42E3
A3.73E4
A3.25E4
A1.48E4
A1.53E4
A1.06E3
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P Noise:128
305.8987 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,512.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME - 21:53
A1.09E4
A1.23E4
A1.39E4
A2.95E3
A3.31E4
A4.74E4
A1.84E4
A2.28E4
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P Noise:316
315.9419 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,1264.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME - 21:53
A5.96E5
A6.65E5
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P Noise:1114
317.9389 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,4456.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME - 21:53
A7.38E5
A8.66E5
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
375.8364 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME - 21:53
19:09
20:01
20:49
21:22
21:53
22:58
23:39
24:41
25:19
25:52
26:29
Time

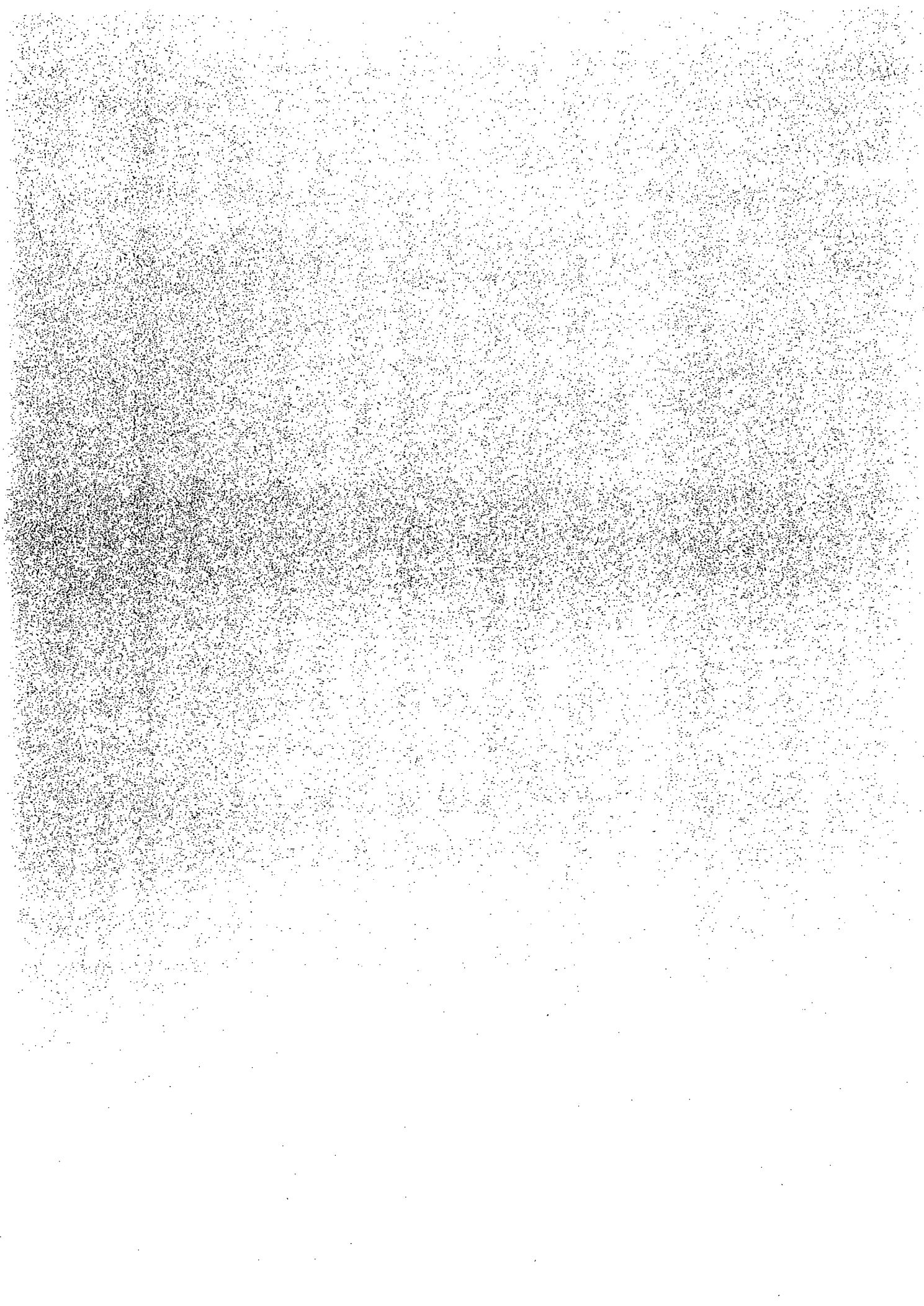

File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P Noise:134
319.8965 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,536.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53
A7.59E3
A1.75E3
A5.55E3
A4.67E3
A4.15E3
A1.88E3
A5.16E3
A4.62E3
A2.31E3
A3.15E3
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P Noise:165
321.8936 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,660.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53
A1.11E4
A3.43E3
A1.08E4
A4.12E3
A1.39E4
A3.87E3
A2.08E4
A2.13E3
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P Noise:155
327.8847 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,620.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53
A6.95E5
A1.73E5
A5.10E5
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P Noise:409
331.9368 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,1636.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53
A3.10E6
A5.72E5
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P Noise:267
333.9338 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,1068.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53
A3.82E6
A8.12E6
A7.00E5
A1.45E6
20:00
21:00
22:00
23:00
24:00
25:00
Time


File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
303.9016 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53
20:08 20:42 20:57 21:13 21:48 22:17 22:49 23:23 24:42 25:20 25:54 26:28
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
315.9419 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53
19:20 23:48 26:00
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
319.8965 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53
19:20 19:49 20:58 21:55 22:38 23:15 23:53 24:09 24:50 25:28 26:04
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
331.9368 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53
22:15 22:36
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
292.9825 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53
19:11 19:58 20:51 21:45 22:17 22:53 23:44 24:15 25:06 26:01
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
330.9792 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53
19:20 20:48 21:21 22:53 23:16 24:07 24:50 25:47
19:00 20:00 21:00 22:00 23:00 24:00 25:00 26:00 Time


Z
50
5
50
5
Channel I 330.9792 Peak top
Height .52 volts Span 200 ppm
System file name DB225
Data file name A:PD05002
Resolution low
Group number 1
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 380.9761
A 292.9825 J 330.9792
B 303.9816 K 331.9368
C 305.8987 L 333.9338
D 315.9419 M 375.8364
E 317.9389
F 319.8965
G 321.8936
H 327.8847
I 330.9792
Ref. mass 380.9761 Peak top
Height .22 volts Span 200 ppm


File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
303.9016 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53 File Text:TLI#52366R1
A3.13E4
1.1E4
5.5E3
0.0E0
22:00 23:00 24:00 25:00 26:00 Time
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
305.8987 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53 File Text:TLI#52366R1
A4.57E4
1.5E4
7.4E3
0.0E0
22:00 23:00 24:00 25:00 26:00 Time
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
315.9419 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53 File Text:TLI#52366R1
23:48
1.9E5
9.4E4
0.0E0
22:00 23:00 24:00 25:00 26:00 Time
File:P004411 #1-3027 Acq:5-DEC-00 21:53:44 EI+ Voltage SIR 70P
317.9389 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-13 INJ. TIME = 21:53 File Text:TLI#52366R1
23:48
23:16
2.3E5
1.2E5
0.0E0
22:00 23:00 24:00 25:00 26:00 Time

3



TriMatrix, Inc.

TLI Project: **52366r1** Method 8290 PCDD/PCDF Analysis
Client Sample: **BASF-SMW-20** Analysis File: **T006**

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/2000	Spike File:	SPMIT32
TLI ID:	274-99-8B	Date Extracted:	12/01/2000	ICal:	TF57140
		Date Analyzed:	12/05/2000	ConCal:	T005996
Sample Size:	1.060 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005998	% Lipid:	n/a
GC Column:	DB-5	Analyst:	DFS	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Fla
2,3,7,8-TCDD	ND	121				
1,2,3,7,8-PeCDD	EMPC		215			
1,2,3,4,7,8-HxCDD	348			1.20	34:09	
1,2,3,6,7,8-HxCDD	1440			1.27	34:14	
1,2,3,7,8,9-HxCDD	1100			1.09	34:34	
1,2,3,4,6,7,8-HpCDD	26770			1.02	37:39	E
1,2,3,4,6,7,8,9-OCDD	172670			0.84	41:34	E
2,3,7,8-TCDF	2850			0.84	26:23	
1,2,3,7,8-PeCDF	EMPC		1690			X
2,3,4,7,8-PeCDF	849			1.63	30:45	
1,2,3,4,7,8-HxCDF	2930			1.29	33:26	
1,2,3,6,7,8-HxCDF	878			1.19	33:32	
2,3,4,6,7,8-HxCDF	759			1.24	34:02	
1,2,3,7,8,9-HxCDF	EMPC		133			
1,2,3,4,6,7,8-HpCDF	3890			1.07	36:33	
1,2,3,4,7,8,9-HpCDF	742			1.11	38:12	
1,2,3,4,6,7,8,9-OCDF	4570			0.87	41:48	

Totals	Conc. (pg/L)	Number	DL	EMPC	Fla
Total TCDD	330	1		695	
Total PeCDD	1510	4		2140	
Total HxCDD	12810	7		12950	
Total HpCDD	51020	2			E
Total TCDF	9510	8		12240	
Total PeCDF	5830	9		7800	X
Total HxCDF	8280	8		8610	
Total HpCDF	7840	3		8060	

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:41 12/1

TriMatrix, Inc.

TLI Project: 52366r1 Method 8290 PCDD/PCDF Analysis
Client Sample: **BASF-SMW-20** Analysis File: **T0060**

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	128	6.76	40%-130%	0.70	26:22	V__
$^{13}C_{12}$-2,3,7,8-TCDD	116	6.15	40%-130%	0.77	27:00	V__
$^{13}C_{12}$-1,2,3,7,8-PeCDF	74.7	3.96	40%-130%	1.35	30:06	V__
$^{13}C_{12}$-1,2,3,7,8-PeCDD	88.7	4.70	40%-130%	1.38	31:03	V__
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	89.7	4.76	40%-130%	0.52	33:31	V__
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	105	5.54	40%-130%	1.22	34:13	V__
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	69.9	3.70	25%-130%	0.46	36:33	V__
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	91.6	4.85	25%-130%	0.99	37:38	V__
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	58.1	1.54	25%-130%	0.85	41:32	V__

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,4,7,8-PeCDF	71.0	3.76	40%-130%	1.53	30:44	V__
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	87.8	4.66	40%-130%	0.51	33:25	V__
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	96.9	5.14	40%-130%	1.26	34:08	V__
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	58.4	3.09	25%-130%	0.52	38:10	VRO_

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flag
$^{37}Cl_4$-2,3,7,8-TCDD	213	113	40%-130%	27:01	__

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	115	6.08	40%-130%	0.50	34:50	V__
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	101	5.33	40%-130%	0.51	34:02	V__

Recovery Standards	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,4-TCDD	0.79	26:50	__
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.21	34:33	__

Data Reviewer: JCB 12/13/2000

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

TriMatrix, Inc.

TLI Project: **52366r1** — Toxicity Equivalents Re
Client Sample: **BASF-SMW-20** — Analysis File: **T006**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/00**	Spike File:	**SPMIT32**
TLI ID:	**274-99-8B**	Date Extracted:	**12/01/00**	ICal:	**TF57140**
		Date Analyzed:	**12/05/00**	ConCal:	**T005996**
Sample Size:	**1.060 L**	Dilution Factor:	**1**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005998**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**DFS**	% Solids:	**n/a**

Analytes	Conc. (pg/L)		TEF		Equivalent
2,3,7,8-TCDD	{121}	x	1.	=	121
1,2,3,7,8-PeCDD	[215]	x	0.5	=	108
1,2,3,4,7,8-HxCDD	348	x	0.1	=	34.8
1,2,3,6,7,8-HxCDD	1440	x	0.1	=	144.0
1,2,3,7,8,9-HxCDD	1100	x	0.1	=	110.0
1,2,3,4,6,7,8-HpCDD	26770	x	0.01	=	267.70
1,2,3,4,6,7,8,9-OCDD	172670	x	0.001	=	172.670
TOTAL PCDD					958
2,3,7,8-TCDF	1860	x	0.1	=	186.0
1,2,3,7,8-PeCDF	[1690]	x	0.05	=	84.50
2,3,4,7,8-PeCDF	849	x	0.5	=	425
1,2,3,4,7,8-HxCDF	2930	x	0.1	=	293.0
1,2,3,6,7,8-HxCDF	878	x	0.1	=	87.8
2,3,4,6,7,8-HxCDF	759	x	0.1	=	75.9
1,2,3,7,8,9-HxCDF	[133]	x	0.1	=	13.3
1,2,3,4,6,7,8-HpCDF	3890	x	0.01	=	38.90
1,2,3,4,7,8,9-HpCDF	742	x	0.01	=	7.42
1,2,3,4,6,7,8,9-OCDF	4570	x	0.001	=	4.570
TOTAL PCDF					1216

Total EPA TEFs, 1989a: 2175 pg/L

[...] indicates that the value is that of an EMPC.
{...} indicates that the value is that of a Detection Limit.

GRY_TEF v1.08, MI.

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:44 12

2

Initial ....Date...

Data Review By: JCH 12/13/00

Calculated Noise Height: 0.21

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T006007B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_I....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
TCDF						0.65-0.89			0.880-1.070				
304-306	DC	NL				Height	0.26	0.14	0.12				
				23:59	RO	0.93	2.89	1.52	1.63	0.910			
				24:14		0.83	8.42	3.82	4.60	0.919			
				24:39		0.76	18.00	7.77	10.23	0.935			
				24:50		0.78	19.69	8.64	11.05	0.942			
M				25:06	RO	0.90	17.66	9.02	9.98	0.952			
				25:24		0.79	16.69	7.37	9.32	0.963			
				25:43		0.89	35.76	16.79	18.97	0.979			
				25:58		0.82	40.17	18.12	22.05	0.985	1278-TCDF		AN
				26:12		0.81	9.32	4.18	5.14	0.994			
				26:23		0.84	62.71	28.56	34.15	1.001	2378-TCDF		AN
X		X		26:46	RO	0.90	10.74	5.46	6.07	1.015			
				26:58	RO	0.96	8.83	4.80	4.99	1.023			
X		X		27:19	RO	0.85	7.78	3.57	4.21	1.036			
X		X		27:40	RO	0.73	8.37	3.52	4.85	1.049			
				27:54	RO	2.18	3.77	4.64	2.13	1.058			
D	D		WH	28:13		0.79	4.02			1.079			
304-306			15	Peaks			270.80						
13C12-TCDF						0.65-0.89			0.962-1.038				
316-318	DC	NL				Height	0.27	0.12	0.15				
	DC	WL		23:11		0.77	5.49			0.879			
				26:09	RO	2.52	0.37	0.53	0.21	0.992			
				26:22		0.70	40.65	16.80	23.85	1.000	13C12-2378-TCDF		ISO
						Height	10.34	4.34	6.00				
				26:59		0.75	3.32	1.42	1.90	1.023			
316-318			3	Peaks			44.34						

---------- Above: TCDF / TCDD Follows ----------

TCDD						0.65-0.89			0.904-1.042				
320-322	DC	NL				Height	0.18	0.09	0.09				
M				24:43	RO	0.35	5.36	2.33	6.60	0.915			
				25:04		0.72	4.86	2.04	2.82	0.928			
D	D	SN		25:16	RO	0.02	1.26			0.936			
	DC	SN		25:25	RO	0.06	0.39			0.941			
D	D	SN		26:10	RO	0.96	2.50			0.969			
D	D	SN		26:47	RO	0.93	1.50			0.992			
D	D	SN		26:56		0.67	2.51			0.998			
D	D	SN		27:21	RO	1.62	0.69			1.013			
D	D	SN		27:34	RO	1.12	0.44			1.021			
	DC	SN		27:45	RO	0.90	0.55			1.028			
	DC	SN		28:06		0.95	0.37			1.041			

Compound/ M/Z....	QC.Log	Cmit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
320-322			2 Peaks				10.22						
37Cl-TCDD										0.925-1.075			
328	DC	NL		Height			0.11	0.11					
	DC	WL	24:18				42.58			0.900			
	DC	WL	24:37				1.16			0.912			
	DC	WL	24:54				1.66			0.922			
			25:02				1.75	1.75		0.927			
			25:16				4.37	4.37		0.936			
			25:24				0.55	0.55		0.941			
			25:42				254.83	254.83		0.952			
			26:25				2.17	2.17		0.978			
			27:01				47.06	47.06		1.001	37Cl-TCDD		CLS
			27:22				13.39	13.39		1.014			
			28:15				3.50	3.50		1.046			
328			8 Peaks				327.62						
13C12-TCDD				0.65-0.89						0.925-1.075			
332-334	DC	NL		Height			0.23	0.15	0.08				
	DC	WL	24:23	RO	0.97		0.87			0.903			
	DC	WL	24:50	RO	1.08		0.67			0.929			
			26:50		0.79		469.06	206.97	262.09	0.994	13C12-1234-TCDD		RS1
			27:00		0.77		30.37	13.25	17.12	1.000	13C12-2378-TCDD		IS1
				Height			8.97	4.14	4.83				
	DC	SN	27:58	RO	2.28		0.51			1.036			
	DC	SN	28:11	RO	0.35		0.39			1.044			
332-334			2 Peaks				499.43						
---------- Above: TCDD / PeCDF Follows ----------													
PeCDF				1.32-1.78						0.930-1.060			
340-342	DC	NL		Height			0.18	0.08	0.10				
	DC	WL	27:49		1.50		0.30			0.924			
	DC	SN	28:00	RO	1.90		0.26			0.930			
			28:13		1.40		3.31	1.93	1.38	0.937			
			29:17		1.57		19.59	11.96	7.63	0.973			
			29:26		1.48		2.80	1.67	1.13	0.978			
M			29:45		1.49		3.24	1.94	1.30	0.988			
			29:51		1.53		3.64	2.20	1.44	0.992			
A			30:03		1.60		3.93	2.42	1.51	0.998			
MX		X	30:07	RO	1.50		18.17	10.90	7.27	1.001	12378-PeCDF		AN
M			30:21		1.54		9.82	5.96	3.86	1.008			
N			30:45		1.63		9.27	5.75	3.52	1.022	23478-PeCDF		AN
			30:53		1.37		7.67	4.44	3.23	1.026			
D	D	SN	31:17	RO	0.74		0.51			1.039			
			31:24	RO	1.17		1.35	0.82	0.70	1.043			
			31:42	RO	1.19		1.71	0.80	0.67	1.053			
	DC	SN	31:51	RO	1.14		0.92			1.058			
340-342			12 Peaks				84.50						
13C12-PeCDF				1.32-1.78						0.866-1.134			
352-354	DC	NL		Height			0.14	0.07	0.07				

Compound/ M_2....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
				27:48	RO	0.74	4.36	2.65	3.57	0.924			
		DC	SN	28:06		1.36	0.59			0.934			
				28:25	RO	0.30	0.36	0.22	0.74	0.944			
		DC	SN	28:40	RO	2.04	0.66			0.952			
		DC	SN	28:57		1.54	0.66			0.962			
		DC	SN	29:16	RO	3.50	0.10			0.972			
		DC	SN	29:39	RO	0.19	0.08			0.985			
				30:06		1.35	22.27	12.78	9.49	1.000	13C12-PeCDF 123	IS2	
						Height	7.30	4.21	3.09				
		DC	SN	30:16	RO	0.53	0.30			1.006			
		DC	SN	30:21	RO	0.39	0.18			1.008			
	N			30:44		1.53	20.95	12.68	8.27	1.021	13C12-PeCDF 234	SUR1	
				31:03	RO	3.84	0.48	0.73	0.19	1.032			
		DC	SN	31:12	RO	0.94	0.53			1.037			
				31:28		1.69	1.56	0.98	0.58	1.045			
		DC	SN	31:33	RO	1.00	0.82			1.048			
		DC	SN	31:50	RO	0.87	0.54			1.058			
352-354			6	Peaks			49.98						

---------- Above: PeCDF / PeCDD Follows ----------

PeCDD						1.32-1.78				0.938-1.020			
356-358		DC	NL			Height	0.12	0.06	0.06				
				29:45	RO	1.31	1.55	0.94	0.72	0.958			
	D	D	SN	29:51	RO	0.98	0.99			0.961			
				30:03		1.47	3.44	2.05	1.39	0.968			
				30:11		1.34	2.72	1.56	1.16	0.972			
				30:21		1.47	2.45	1.46	0.99	0.977			
				30:36		1.34	4.09	2.34	1.75	0.986			
	D	D	SN	30:46		1.53	1.24			0.991			
				30:54	RO	0.45	1.14	0.69	1.54	0.995			
				31:04	RO	1.80	1.81	1.28	0.71	1.001	12378-PeCDD	AN	
	D	D	SN	31:12	RO	0.73	0.79			1.005			
				31:31	RO	0.82	0.82	0.50	0.61	1.015			
		DC	WH	31:53	RO	0.95	0.35			1.027			
356-358			8	Peaks			18.02						
13C12-PeCDD						1.32-1.78				0.871-1.129			
368-370		DC	NL			Height	0.11	0.06	0.05				
				29:12	RO	2.98	1.20	1.40	0.47	0.940			
		DC	SN	29:32	RO	1.08	0.31			0.951			
		DC	SN	30:10		1.40	0.24			0.972			
				30:21	RO	2.27	1.25	1.11	0.49	0.977			
		DC	SN	30:32	RO	0.12	0.36			0.983			
				31:03		1.38	15.04	8.72	6.32	1.000	13C12-PeCDD 123	IS3	
						Height	4.99	2.96	2.03				
		DC	SN	31:20	RO	0.57	0.13			1.009			
		DC	SN	31:24		1.71	0.19			1.011			
		DC	SN	31:38	RO	3.08	0.33			1.019			
		DC	SN	31:48	RO	0.74	0.28			1.024			
		DC	SN	31:56	RO	1.00	0.36			1.028			
368-370			3	Peaks			17.49						

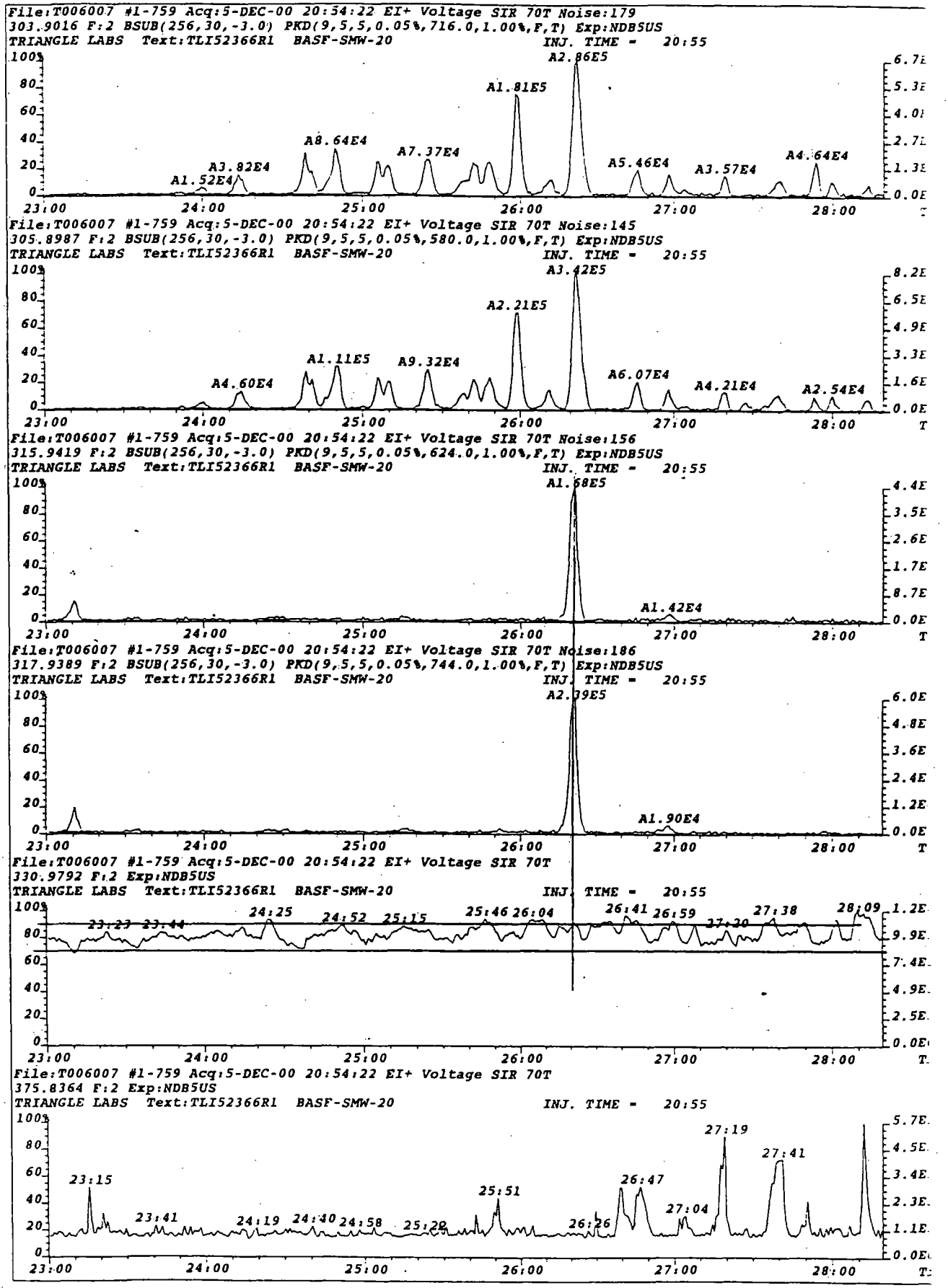
Compound/ M_2....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flag
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF						1.05-1.43				0.963-1.047			
374-376	DC	NL				Height	0.20	0.13	0.07				
				32:23		1.23	1.94	1.09	0.35	0.969			
				32:36		1.26	15.14	8.45	6.69	0.973			
	DC	SN		32:46	RO	0.90	0.51			0.978			
				32:54		1.12	1.06	0.56	0.50	0.982			
				33:03		1.34	13.70	7.84	5.86	0.986			
				33:26		1.29	28.73	16.19	12.54	0.998	123478-HxCDF		AN
				33:32		1.19	9.01	4.90	4.11	1.000	123678-HxCDF		AN
	X		X	33:41	RO	1.05	1.76	0.90	0.86	1.005			
	DC	SN		33:51	RO	2.03	0.72			1.010			
				34:02		1.24	7.04	3.90	3.14	1.015	234678-HxCDF		AN
	DC	SN		34:11	RO	1.00	0.40			1.020			
	DC	SN		34:15	RO	2.50	0.04			1.022			
	AN			34:50	RO	1.00	1.01	0.56	0.56	1.039	123789-HxCDF		AN
	M			34:56		1.10	2.44	1.28	1.16	1.042			
	DC	WH		35:08	RO	0.26	0.13			1.048			
	DC	WH		35:11	RO	0.25	0.07			1.050			
	DC	WH		35:22	RO	0.97	1.37			1.055			
374-376		10	Peaks				81.83						
13C12-HxCDF						0.43-0.59				0.830-1.120			
384-386	DC	NL				Height	0.15	0.06	0.09				
	DC	SN		33:11	RO	1.00	0.11			0.990			
	DC	SN		33:19	RO	0.12	0.06			0.994			
				33:25		0.51	17.37	5.86	11.51	0.997	13C12-HxCDF 478		SUR2
				33:31		0.52	18.01	6.18	11.83	1.000	13C12-HxCDF 678		IS4
						Height	5.72	1.88	3.84				
	DC	SN		33:39	RO	0.38	0.15			1.004			
	DC	SN		33:43		0.50	0.15			1.006			
	DC	SN		33:47		0.47	0.25			1.008			
				34:02		0.51	18.41	6.20	12.21	1.015	13C12-HxCDF 234		ALT2
	DC	SN		34:08	RO	1.00	0.12			1.018			
	DC	SN		34:17	RO	2.67	0.23			1.023			
				34:50		0.50	15.44	5.12	10.32	1.039	13C12-HxCDF 789		ALT1
	DC	SN		35:20		0.57	0.22			1.054			
384-386		4	Peaks				69.23						
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD						1.05-1.43				0.957-1.013			
390-392	DC	NL				Height	0.25	0.10	0.15				
				32:57		1.24	17.44	9.65	7.79	0.963			
				33:23		1.16	7.86	4.22	3.64	0.976			
				33:36		1.24	43.88	24.29	19.59	0.982			
				33:47		1.38	1.12	0.65	0.47	0.987			
				34:00	RO	0.62	1.01	0.56	0.90	0.994			
				34:09		1.20	2.46	1.34	1.12	0.998	123478-HxCDD		AN
				34:14		1.27	10.20	5.70	4.50	1.000	123678-HxCDD		AN
				34:34		1.09	7.87	4.10	3.77	1.010	123789-HxCDD		AN

Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel.RT	Compound Name..	ID..	Flags
390-392			8 Peaks				91.84						
13C12-HxCDD				1.05-1.43					0.971-1.029				
402-404	DC	NL		Height			0.15	0.08	0.07				
	DC	WL	32:54	RO	2.07		4.17			0.962			
	DC	SN	33:35	RO	2.90		0.22			0.981			
			34:08		1.26		12.59	7.02	5.57	0.998	13C12-HxCDD 478	SUR3	
			34:13		1.22		13.12	7.21	5.91	1.000	13C12-HxCDD 678	IS5	
				Height			4.25	2.43	1.82				
			34:33		1.21		260.85	143.05	117.80	1.010	13C12-HxCDD 789	RS2	
	DC	SN	34:43	RO	2.27		0.25			1.015			
402-404			3 Peaks				286.56						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF				0.88-1.20					0.995-1.050				
408-410	DC	NL		Height			0.28	0.18	0.10				
			36:33		1.07		24.27	12.55	11.72	1.000	1234678-HpCDF	AN	
			36:50	RO	1.68		1.20	0.99	0.59	1.008			
			36:59		1.12		17.71	9.34	8.37	1.012			
	DC	SN	37:38	RO	0.87		0.65			1.030			
			38:12		1.11		3.57	1.88	1.69	1.045	1234789-HpCDF	AN	
408-410			4 Peaks				46.75						
13C12-HpCDF				0.37-0.51					0.945-1.110				
418-420	DC	NL		Height			0.20	0.09	0.11				
			36:33		0.46		9.37	2.96	6.41	1.000	13C12-HpCDF 678	IS6	
				Height			2.41	0.76	1.65				
	DC	SN	37:14	RO	2.67		0.09			1.019			
	DC	SN	37:20	RO	4.60		0.07			1.021			
	DC	SN	37:30	RO	0.61		0.33			1.026			
	DC	SN	37:48	RO	1.89		0.13			1.034			
M			38:10	RO	0.52		6.09	2.18	4.23	1.044	13C12-HpCDF 789	SUR4	
	DC	SN	38:34	RO	0.54		0.43			1.055			
418-420			2 Peaks				15.46						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20					0.974-1.004				
424-426	DC	NL		Height			0.21	0.12	0.09				
			36:51		1.01		119.37	60.08	59.29	0.979			E
	DC	SN	37:03	RO	1.42		0.24			0.984			
	DC	SN	37:21	RO	0.45		0.37			0.992			
			37:39		1.02		131.72	66.65	65.07	1.000	1234678-HpCDD	AN	E
424-426			2 Peaks				251.09						
13C12-HpCDD				0.88-1.20					0.973-1.027				
436-438	DC	NL		Height			0.16	0.09	0.07				
			37:38		0.99		10.86	5.40	5.46	1.000	13C12-HpCDD 678	IS7	
				Height			2.70	1.29	1.41				
	DC	SN	37:51	RO	3.07		0.29			1.006			
	DC	SN	38:03	RO	0.30		0.18			1.011			

Compound/ M_Z....	QC.Log	Cmit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
436-438			1 Peak				10.86						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF						0.76-1.02				0.904-1.096			
442-444	DC	NL				Height	0.08	0.04	0.04				
	DC	WL		36:33	RO	1.50	0.15			0.880			
	DC	WL		36:38	RO	1.25	0.15			0.882			
	DC	WL		37:09		1.00	0.22			0.894			
	DC	SN		37:42	RO	2.33	0.06			0.908			
	DC	SN		38:48	RO	2.50	0.15			0.934			
	DC	SN		39:04		0.83	0.22			0.941			
	DC	SN		39:16	RO	0.60	0.38			0.945			
	DC	SN		40:28	RO	0.75	0.13			0.974			
	DC	SN		41:37	RO	1.50	0.23			1.002			
				41:48		0.87	7.48	3.49	3.99	1.006	OCDF		AN
	DC	SN		43:39		0.93	0.27			1.051			
	DC	SN		44:04	RO	0.50	0.15			1.061			
	DC	SN		44:10	RO	0.48	0.28			1.063			
	DC	SN		44:28	RO	4.50	0.04			1.071			
442-444			1 Peak				7.48						
OCDD						0.76-1.02				0.904-1.096			
458-460	DC	NL				Height	0.09	0.04	0.05				
				41:34		0.84	234.62	106.93	127.69	1.001	OCDD		AN E
458-460			1 Peak				234.62						
13C12-OCDD						0.76-1.02				0.996-1.004			
470-472	DC	NL				Height	0.09	0.04	0.05				
				41:32		0.35	5.61	2.58	3.03	1.000	13C12-OCDD		IS8
						Height	1.12	0.50	0.62				
470-472			1 Peak				5.61						

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***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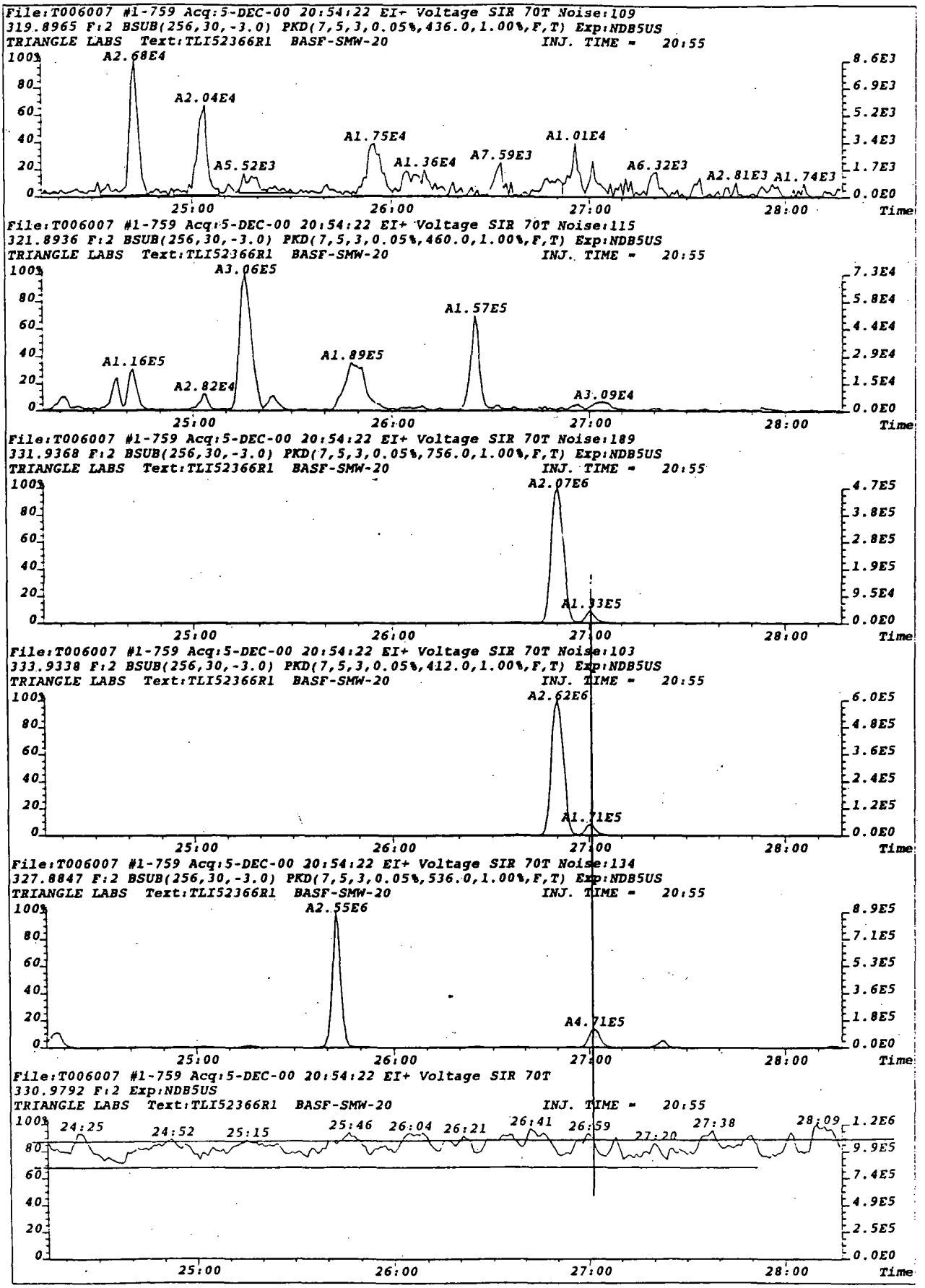
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,716.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55
A2.86E5
A1.81E5
A8.64E4
A7.37E4
A3.82E4
A1.52E4
A5.46E4
A3.57E4
A4.64E4
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:145
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,580.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55
A3.42E5
A2.21E5
A1.11E5
A9.32E4
A4.60E4
A6.07E4
A4.21E4
A2.54E4
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:156
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,624.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55
A1.68E5
A1.42E4
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:186
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,744.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55
A2.39E5
A1.90E4
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55
23:23 23:44
24:25
24:52
25:15
25:46 26:04
26:41
26:59
27:30
27:38
28:09
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55
23:15
23:41
24:19
24:40
24:58
25:28
25:51
26:26
26:47
27:04
27:19
27:41
23:00
24:00
25:00
26:00
27:00
28:00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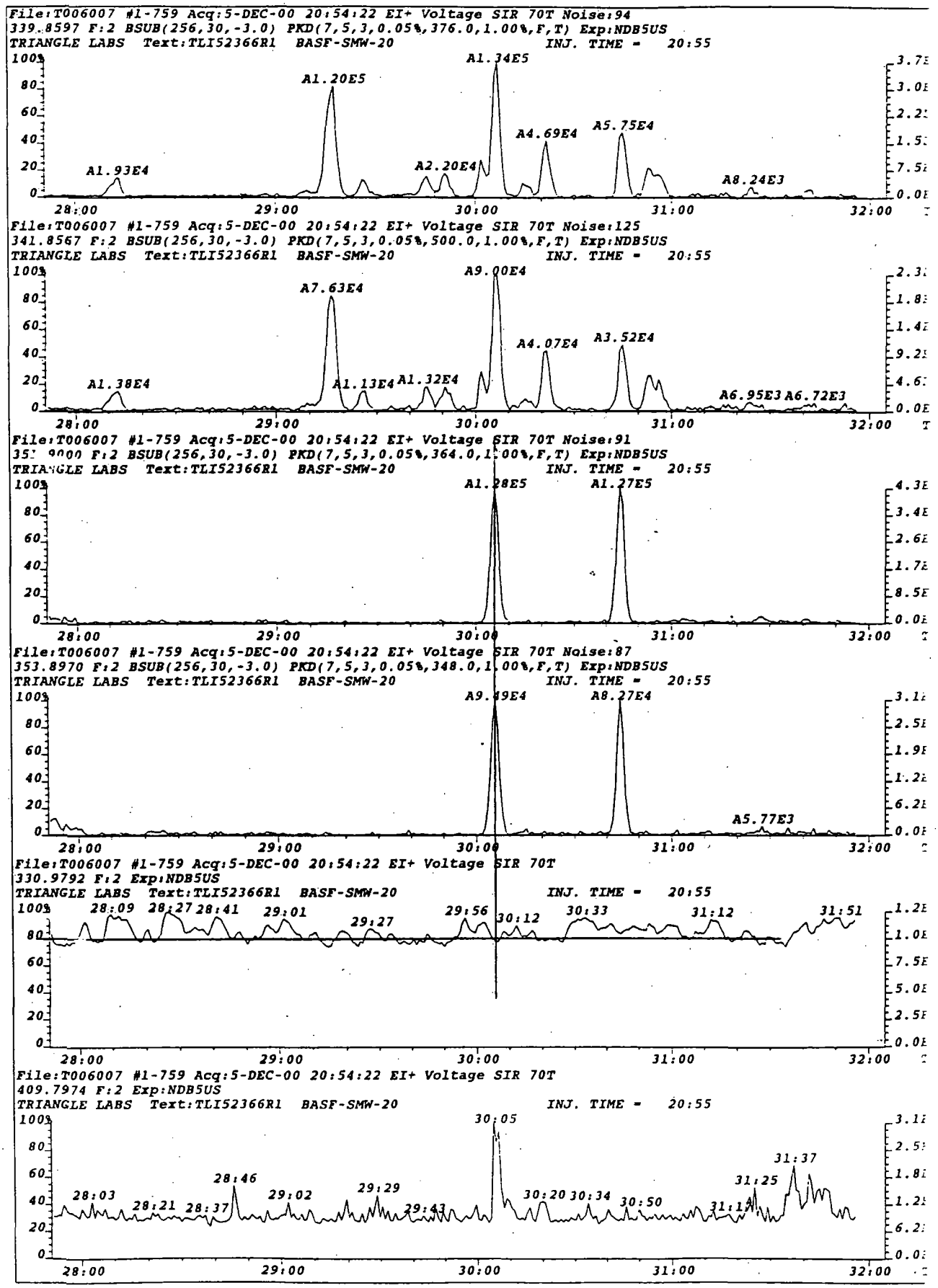
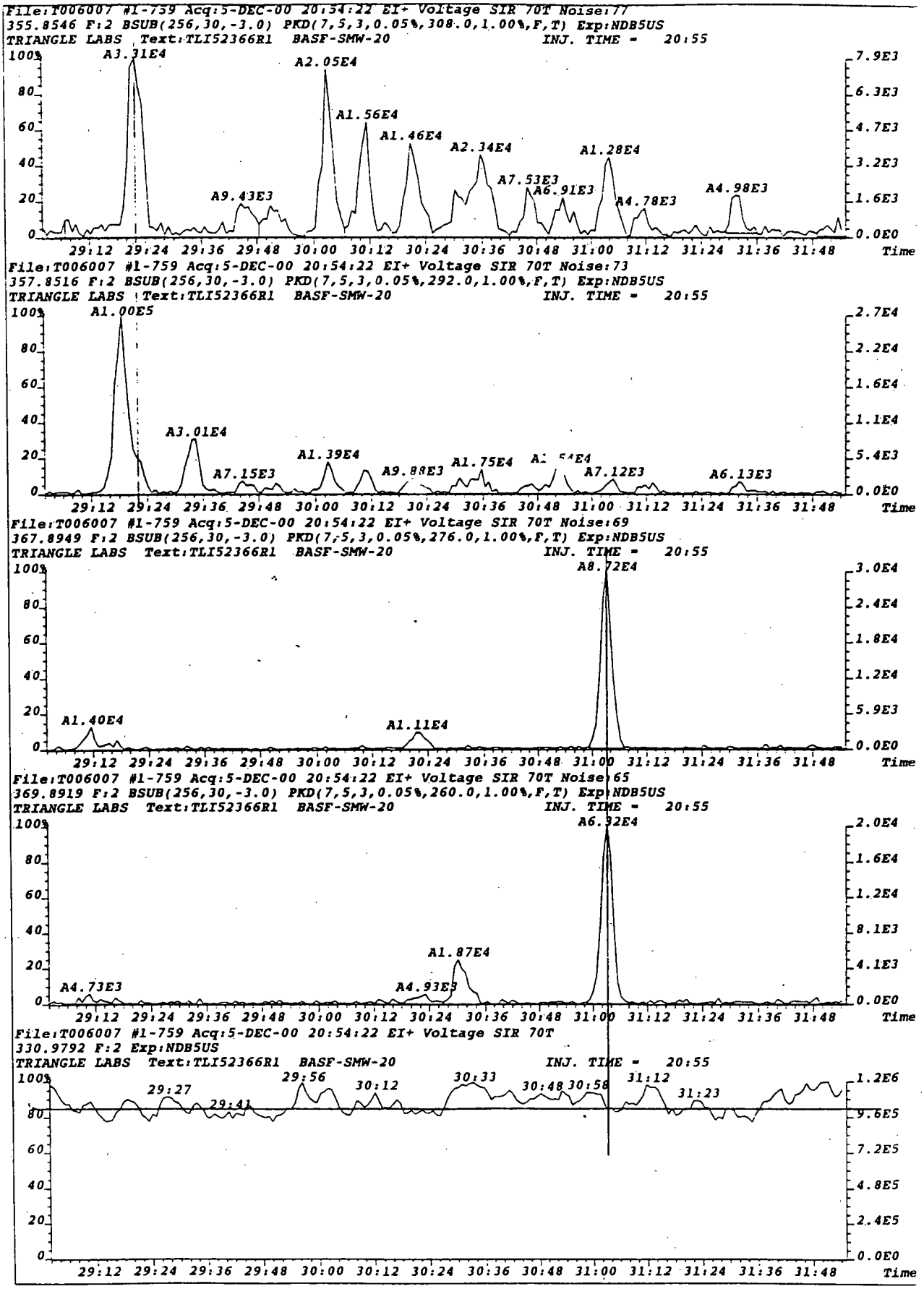
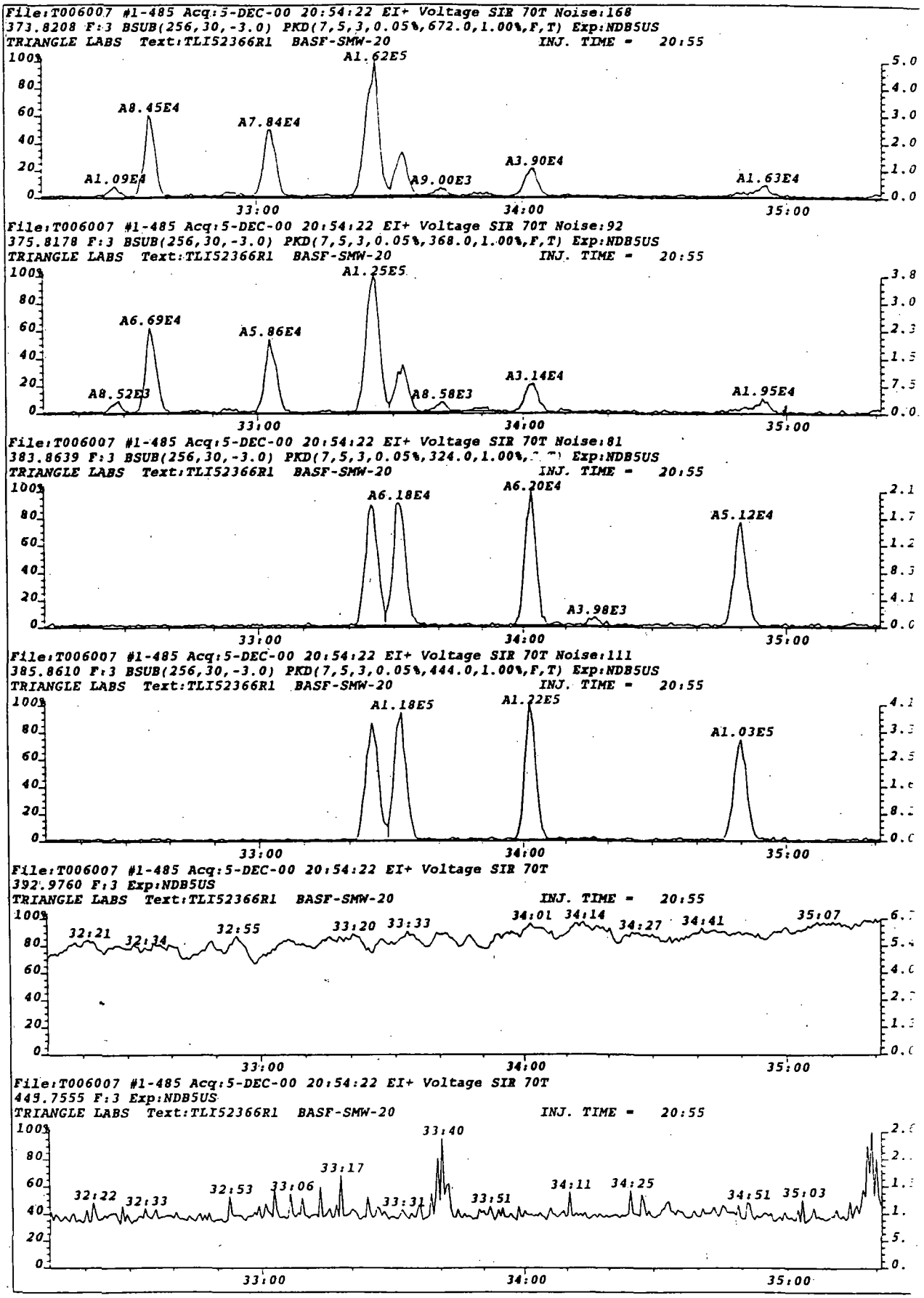
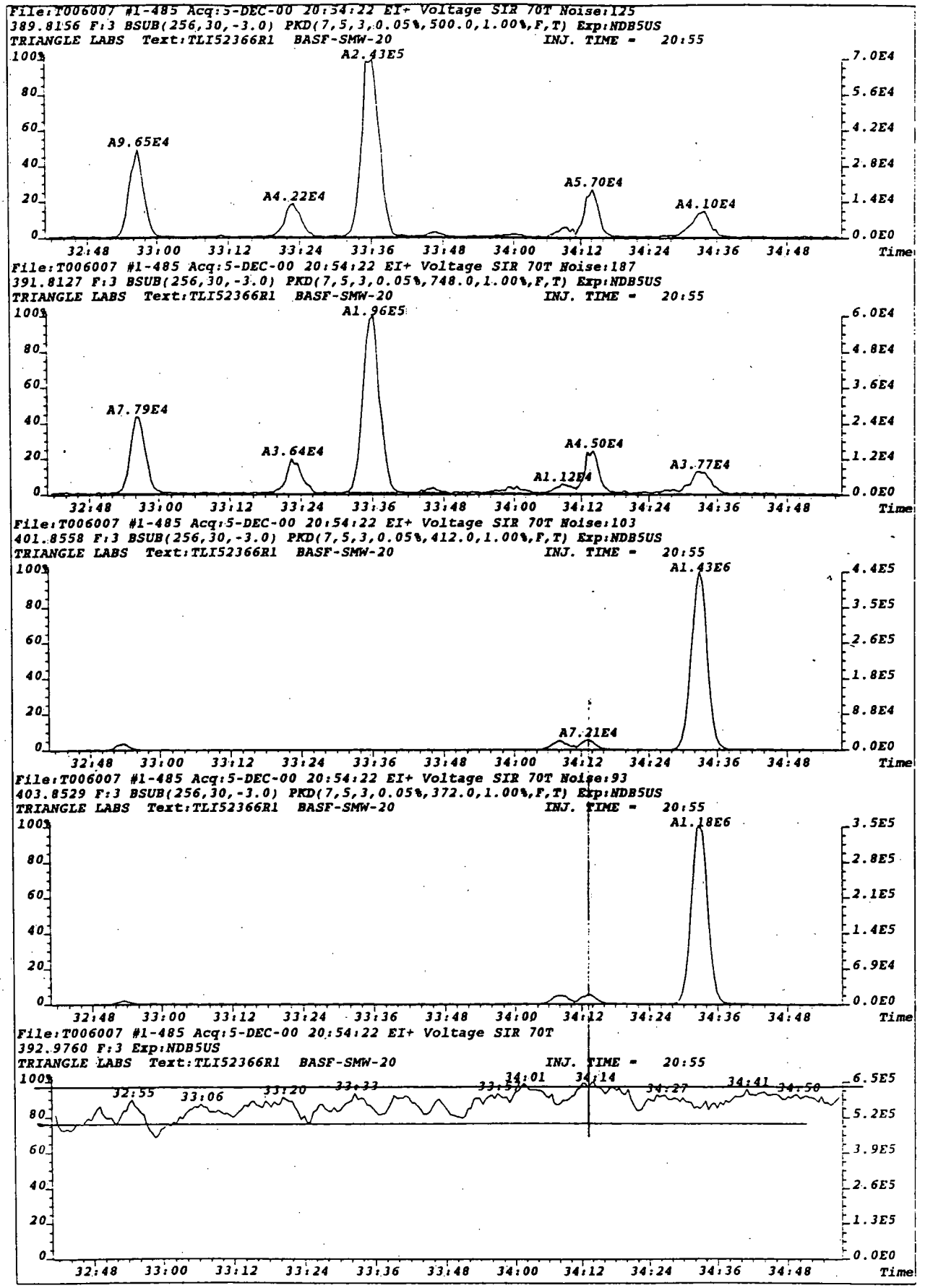
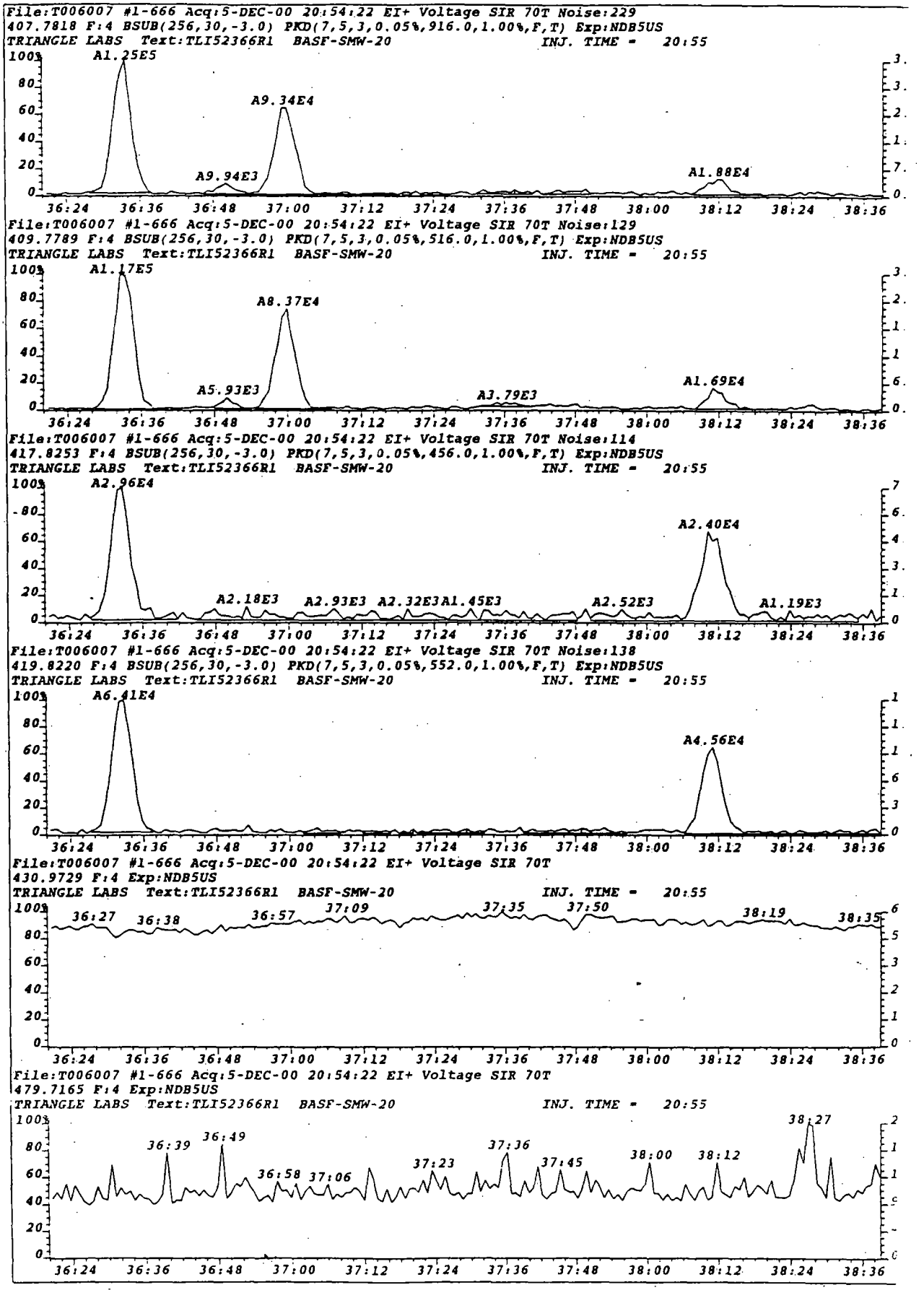
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,436.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A2.68E4
A2.04E4
A5.52E3
A1.75E4
A1.36E4
A7.59E3
A1.01E4
A6.32E3
A2.81E3
A1.74E3
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:115
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,460.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A3.06E5
A1.57E5
A1.16E5
A1.89E5
A2.82E4
A3.09E4
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:189
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,756.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A2.07E6
A1.33E5
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:103
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,412.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A2.62E6
A1.71E5
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:134
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,536.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A2.55E6
A4.71E5
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
24:25
24:52
25:15
25:46
26:04
26:21
26:41
26:59
27:20
27:38
28:09
25:00
26:00
27:00
28:00
Time

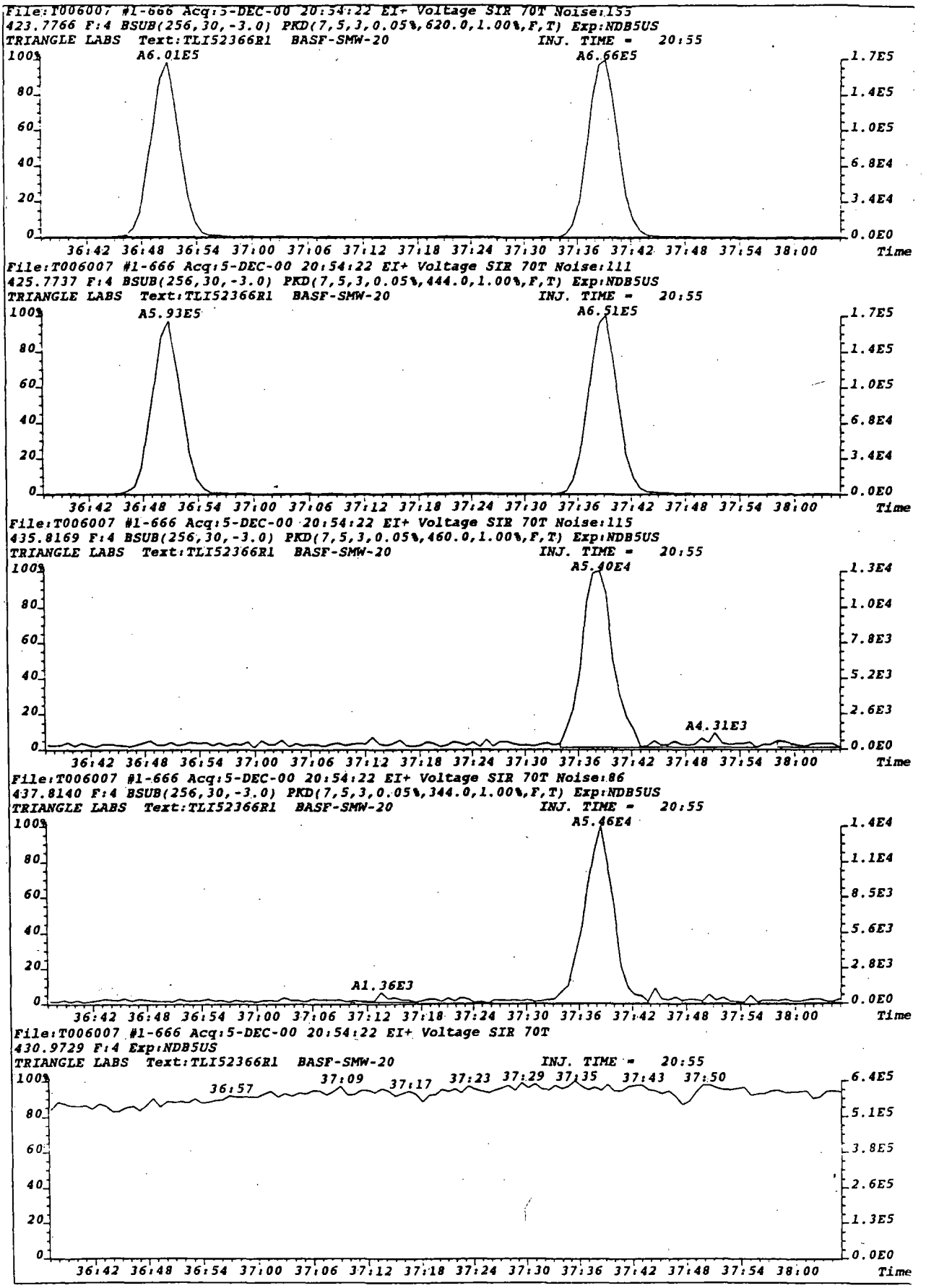

File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:94
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,376.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.34E5
A1.20E5
A4.69E4
A5.75E4
A1.93E4
A2.20E4
A8.24E3
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:125
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,500.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A9.00E4
A7.63E4
A4.07E4
A3.52E4
A1.38E4
A1.13E4
A1.32E4
A6.95E3
A6.72E3
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:91
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.28E5
A1.27E5
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:87
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,348.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A9.49E4
A8.27E4
A5.77E3
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
28:09 28:27 28:41 29:01 29:27 29:56 30:12 30:33 31:12 31:51
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
30:05
28:03 28:21 28:37 28:46 29:02 29:29 29:43 30:20 30:34 30:50 31:25 31:37
28:00 29:00 30:00 31:00 32:00


File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:77
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,308.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A3.31E4
A2.05E4
A1.56E4
A1.46E4
A2.34E4
A1.28E4
A7.53E3
A6.91E3
A4.78E3
A4.98E3
A9.43E3
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:73
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,292.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.00E5
A3.01E4
A1.39E4
A7.15E3
A9.88E3
A1.75E4
A7.12E3
A6.13E3
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:69
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,276.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A8.72E4
A1.40E4
A1.11E4
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:65
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,260.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A6.92E4
A1.87E4
A4.73E3
A4.93E3
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
29:27
29:41
29:56
30:12
30:33
30:48
30:58
31:12
31:23
29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48
Time

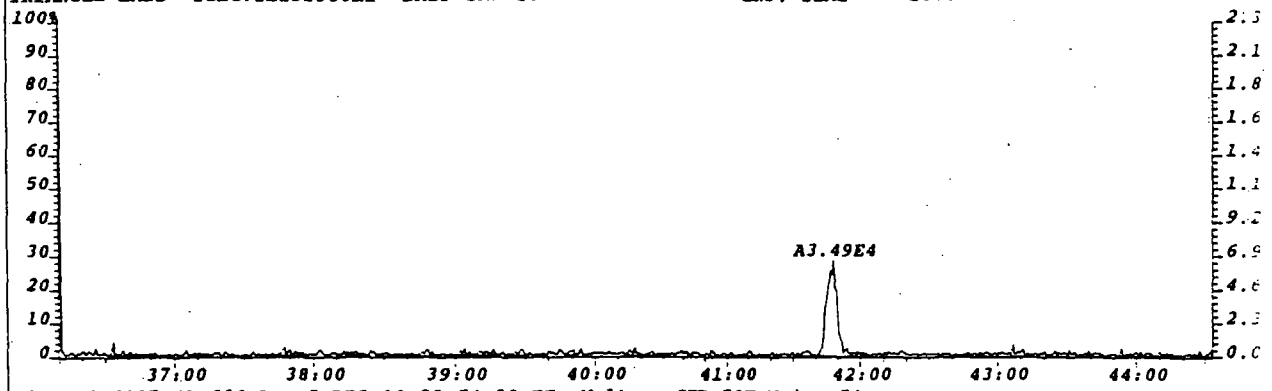

File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:168
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,672.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.62E5
A8.45E4
A7.84E4
A3.90E4
A1.09E4
A9.00E3
A1.63E4
33:00
34:00
35:00
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:92
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,368.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.25E5
A6.69E4
A5.86E4
A3.14E4
A8.52E3
A8.58E3
A1.95E4
33:00
34:00
35:00
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:81
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,324.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A6.18E4
A6.20E4
A5.12E4
A3.98E3
33:00
34:00
35:00
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:111
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,444.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.18E5
A1.22E5
A1.03E5
33:00
34:00
35:00
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
32:21
32:34
32:55
33:20
33:33
34:01
34:14
34:27
34:41
35:07
33:00
34:00
35:00
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
449.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
33:40
33:17
32:22
32:33
32:53
33:06
33:31
33:51
34:11
34:25
34:51
35:03
33:00
34:00
35:00


File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:125
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,500.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A2.43E5
A9.65E4
A4.22E4
A5.70E4
A4.10E4
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:187
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,748.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.96E5
A7.79E4
A3.64E4
A4.50E4
A1.12E4
A3.77E4
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:103
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,412.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.43E6
A7.21E4
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:93
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,372.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.18E6
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48 Time

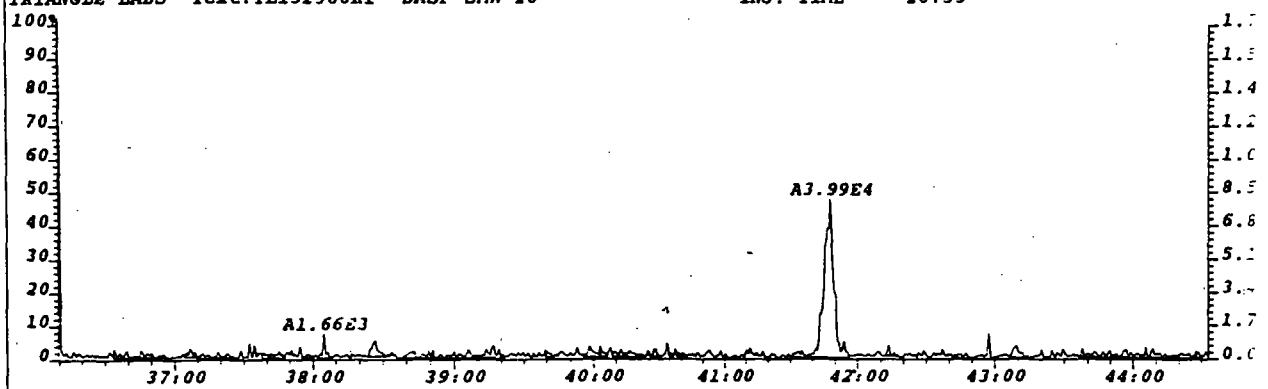

File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:229
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,916.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.25E5
A9.34E4
A9.94E3
A1.88E4
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:129
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,516.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.17E5
A8.37E4
A5.93E3
A3.79E3
A1.69E4
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:114
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,456.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A2.96E4
A2.40E4
A2.18E3
A2.93E3
A2.32E3
A1.45E3
A2.52E3
A1.19E3
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:138
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,552.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A6.41E4
A4.56E4
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55


File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:155
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,620.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A6.01E5
A6.66E5
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:111
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,444.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A5.93E5
A6.51E5
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:115
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,460.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A5.40E4
A4.31E3
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:86
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,344.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A5.46E4
A1.36E3
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
36:57
37:09
37:17
37:23
37:29
37:35
37:43
37:50
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
Time

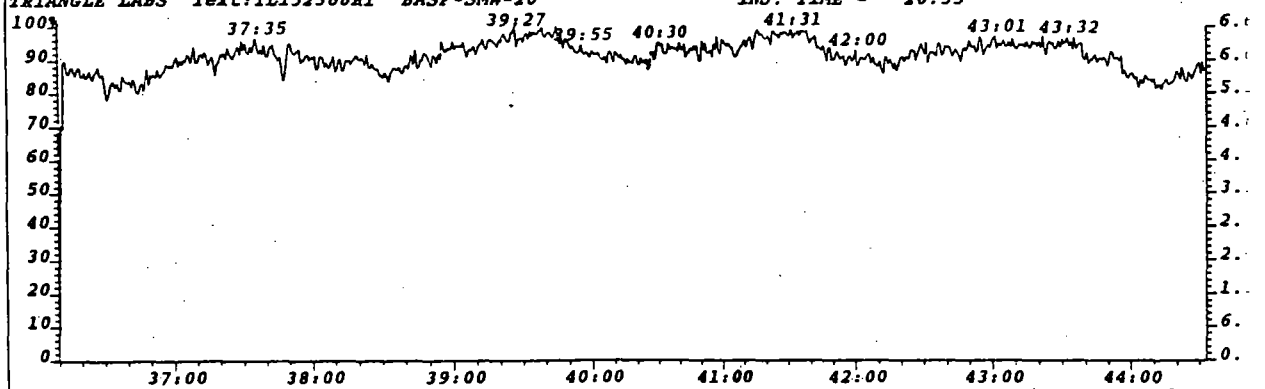
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:50
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55



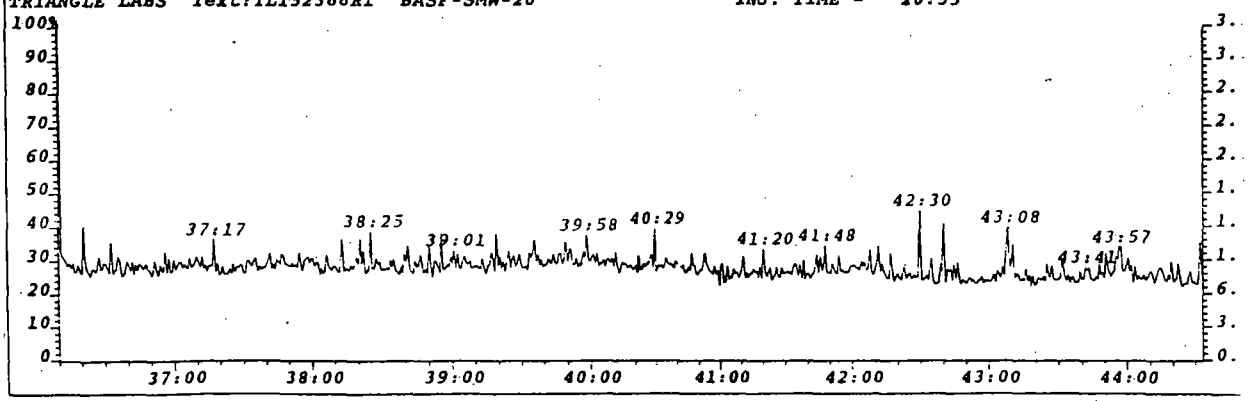
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:54
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,216.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55

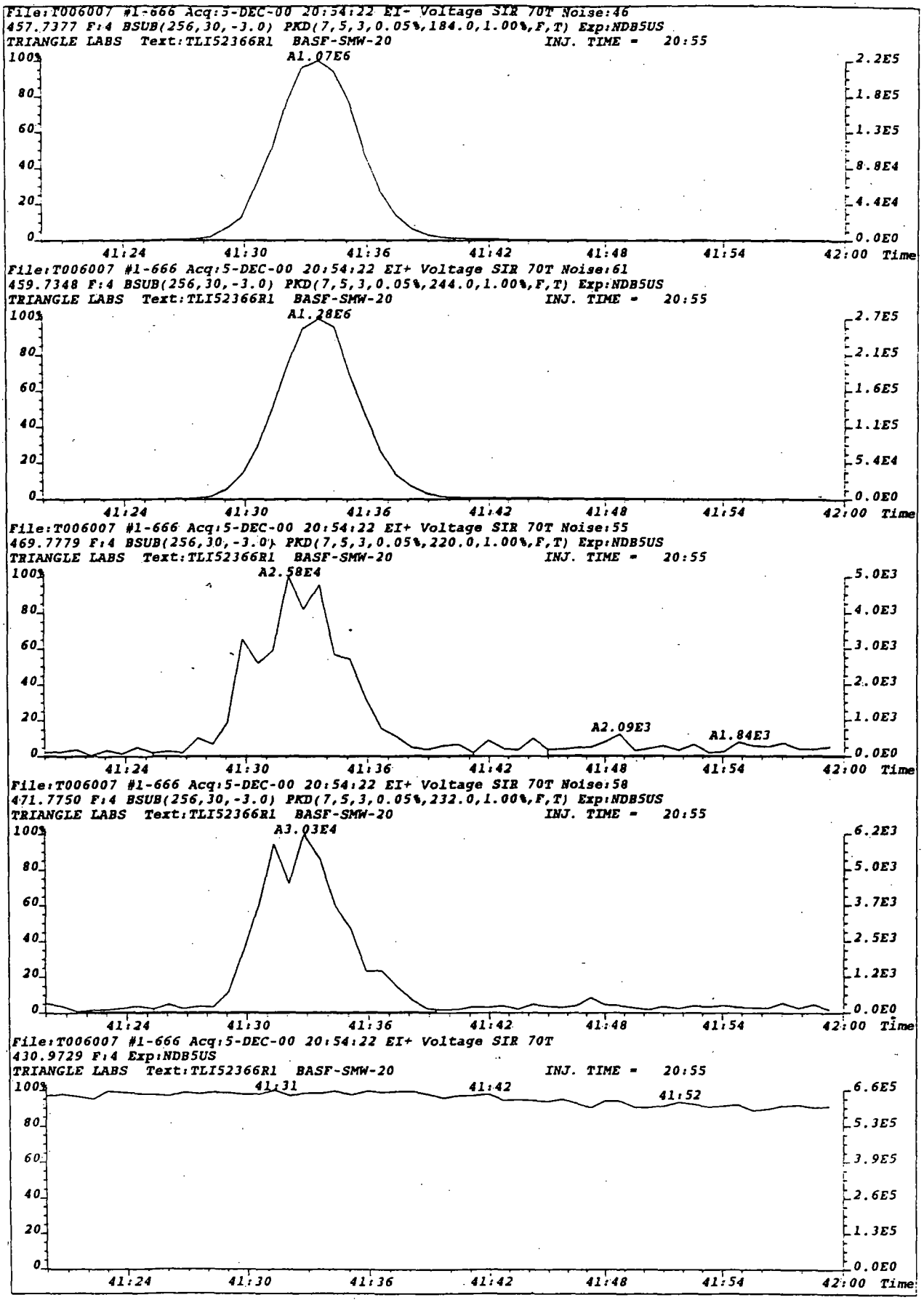


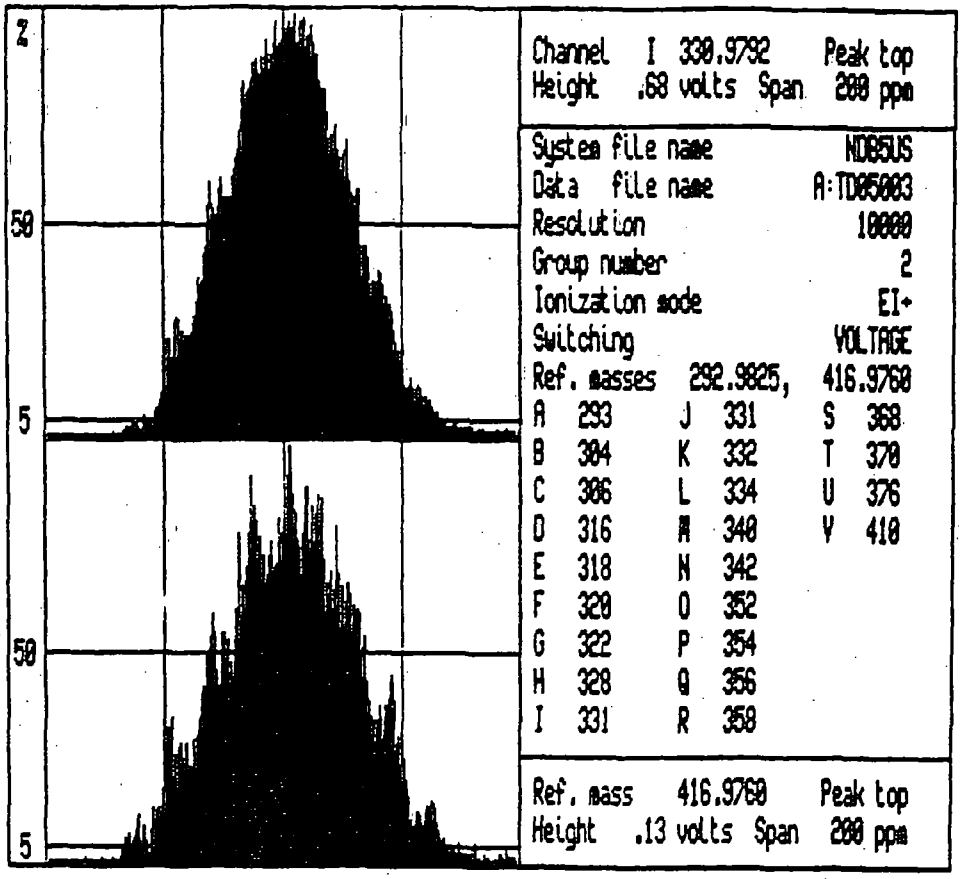
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55



File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55




File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI- Voltage SIR 70T Noise:46
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.07E6
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:61
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,244.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A1.28E6
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:55
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,220.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A2.58E4
A2.09E3
A1.84E3
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T Noise:58
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
A3.03E4
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55
41:31
41:42
41:52
41:24
41:30
41:36
41:42
41:48
41:54
42:00
Time

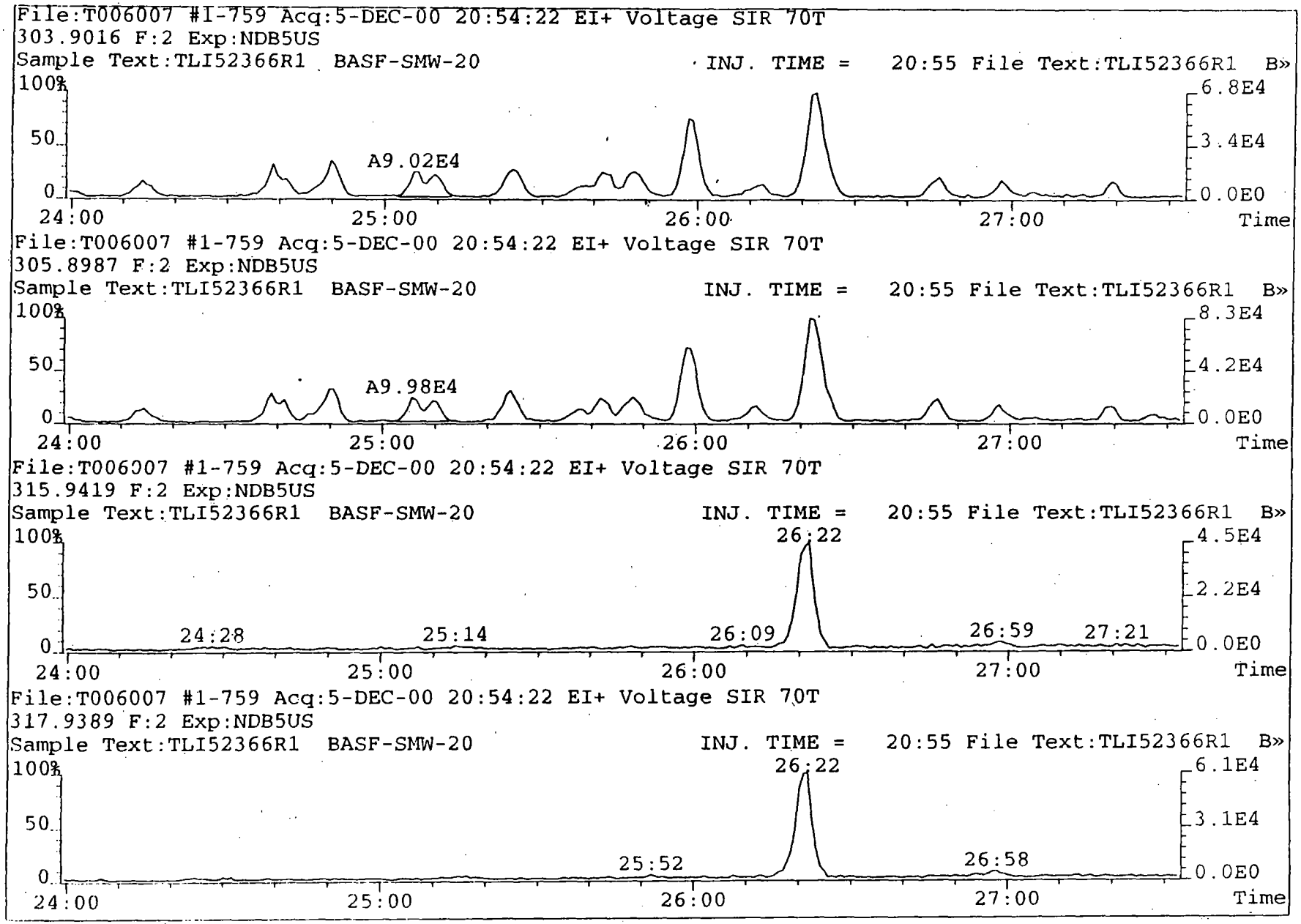


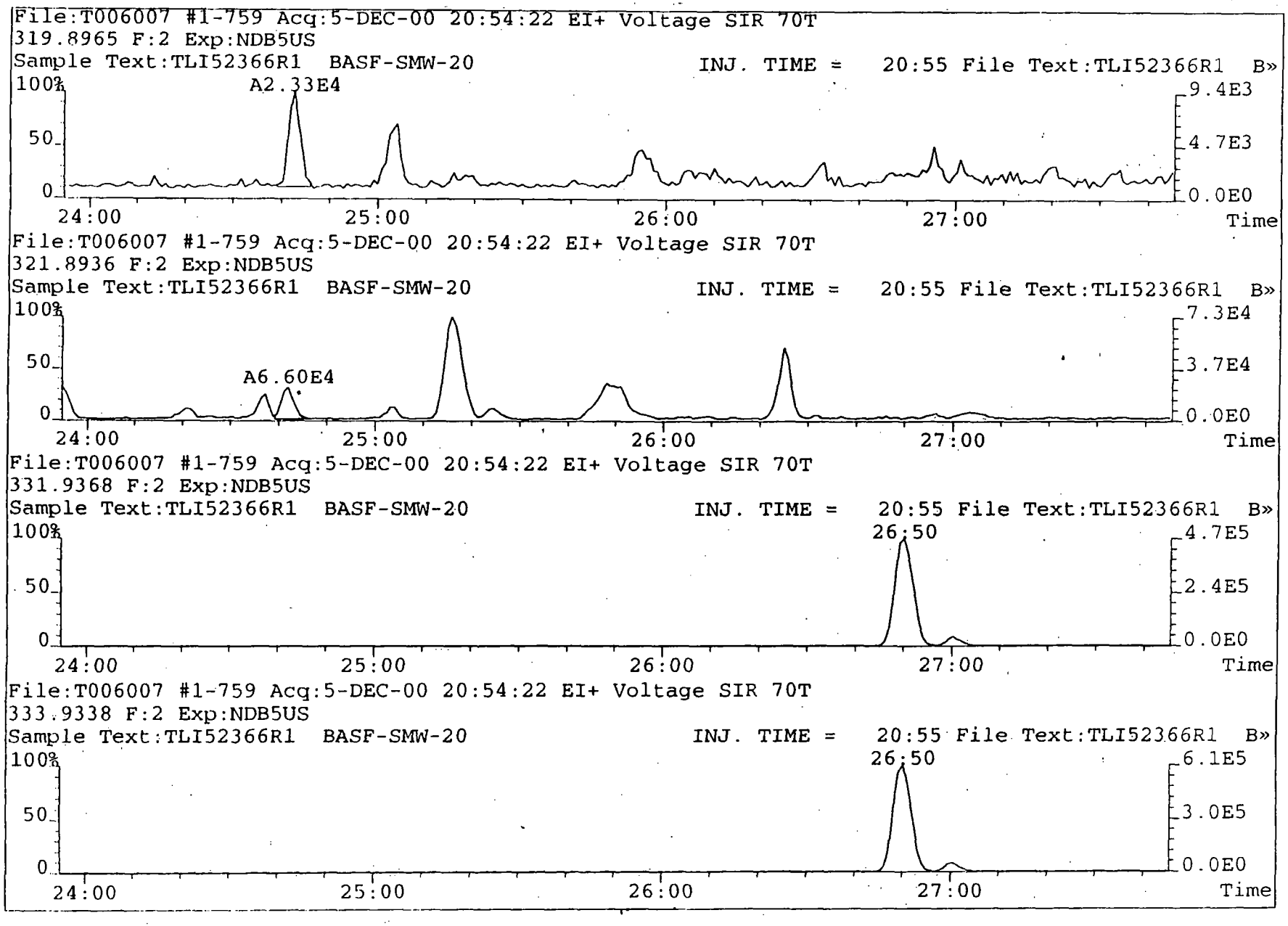
Channel	I	330.9792		Peak top	
Height	.68 volts		Span	200 ppm	

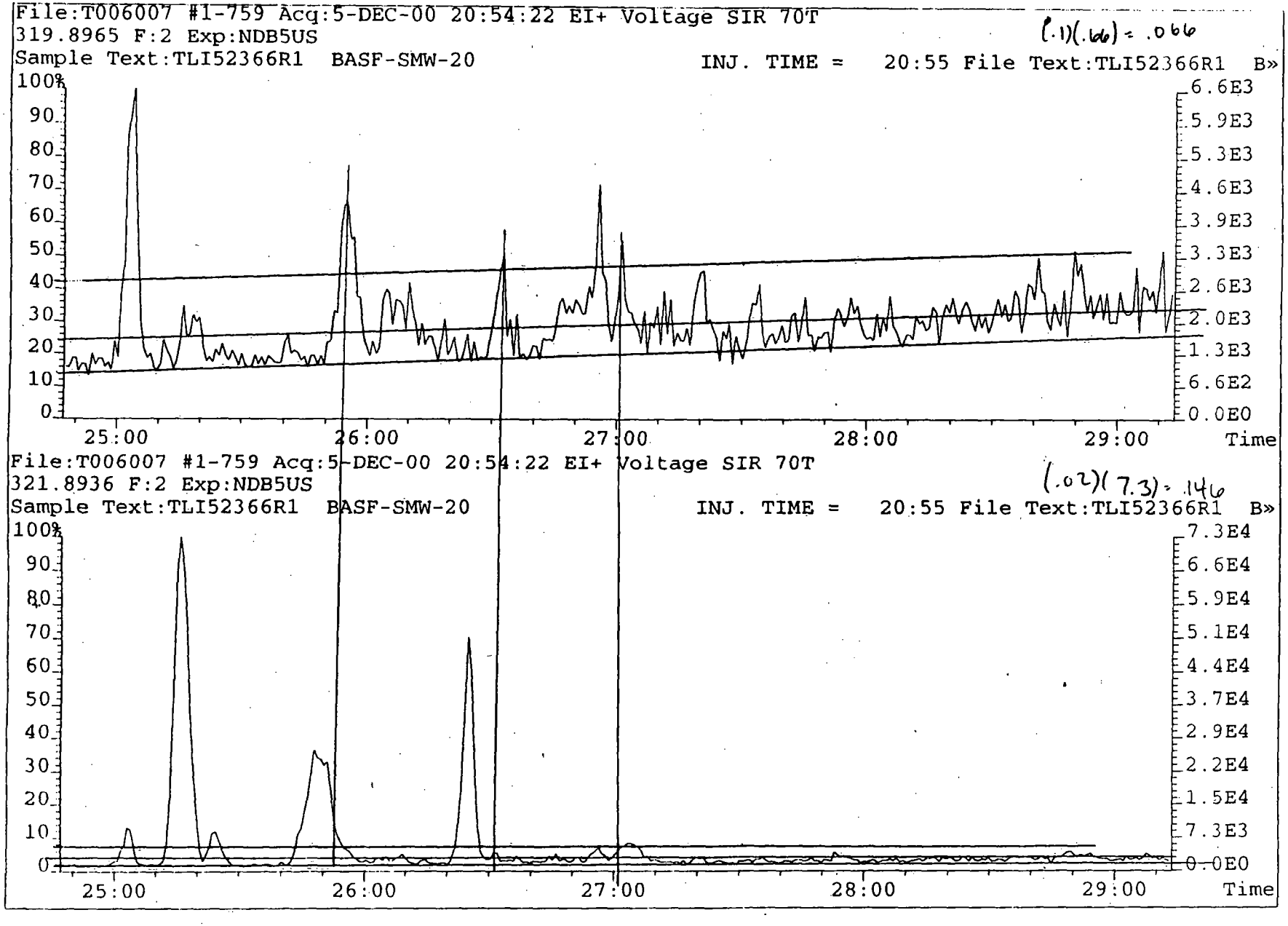
System file name	MD85US
Data file name	A:TD050003
Resolution	10000
Group number	2
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 416.9760

A	293	J	331	S	368
B	304	K	332	T	370
C	306	L	334	U	376
D	316	M	340	V	410
E	318	N	342		
F	320	O	352		
G	322	P	354		
H	328	Q	356		
I	331	R	358		

Ref. mass	416.9760			Peak top	
Height	.13 volts		Span	200 ppm	


File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
303.9016 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1
100%
50
0
A9.02E4
6.8E4
3.4E4
0.0E0
24:00
25:00
26:00
27:00
Time
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
305.8987 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1
100%
50
0
A9.98E4
8.3E4
4.2E4
0.0E0
24:00
25:00
26:00
27:00
Time
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
315.9419 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1
100%
50
0
26:22
24:28
25:14
26:09
26:59
27:21
4.5E4
2.2E4
0.0E0
24:00
25:00
26:00
27:00
Time
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
317.9389 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1
100%
50
0
26:22
25:52
26:58
6.1E4
3.1E4
0.0E0
24:00
25:00
26:00
27:00
Time


File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1 B»
100%
50
0
A2.33E4
9.4E3
4.7E3
0.0E0
24:00
25:00
26:00
27:00
Time
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1 B»
100%
50
0
A6.60E4
7.3E4
3.7E4
0.0E0
24:00
25:00
26:00
27:00
Time
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
331.9368 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1 B»
100%
50
0
26:50
4.7E5
2.4E5
0.0E0
24:00
25:00
26:00
27:00
Time
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
333.9338 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1 B»
100%
50
0
26:50
6.1E5
3.0E5
0.0E0
24:00
25:00
26:00
27:00
Time

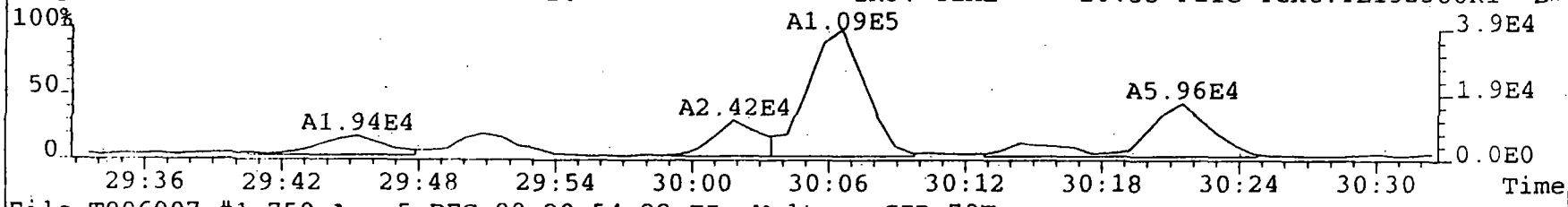


(.1)(.66) = .066

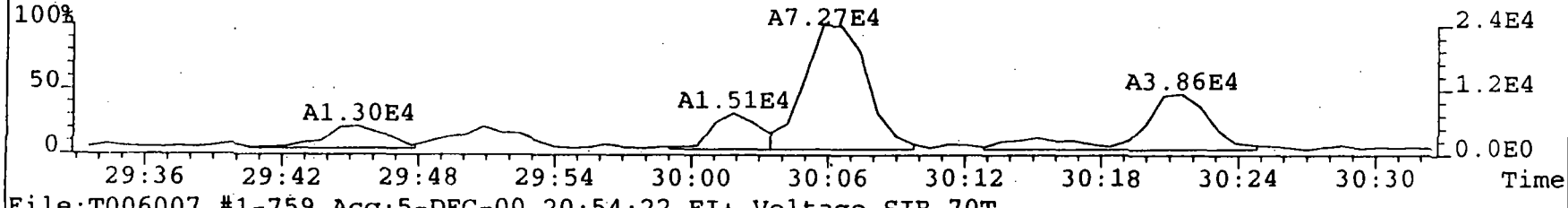
(.02)(7.3) = .146

.066
.146
.212
JKA
12/13/00

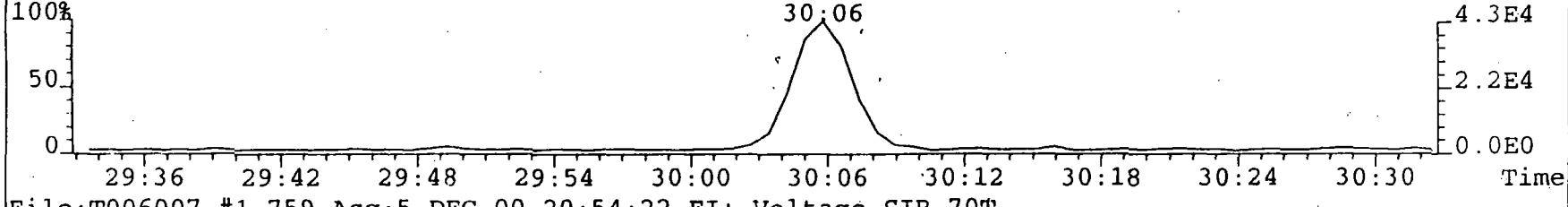
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
339.8597 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»



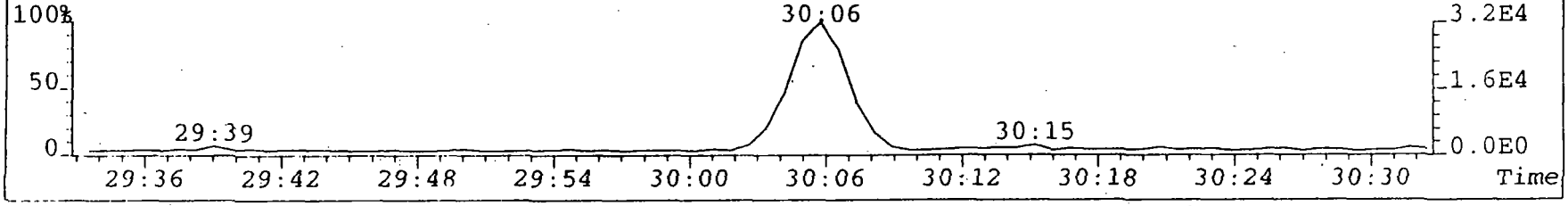
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
341.8567 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»

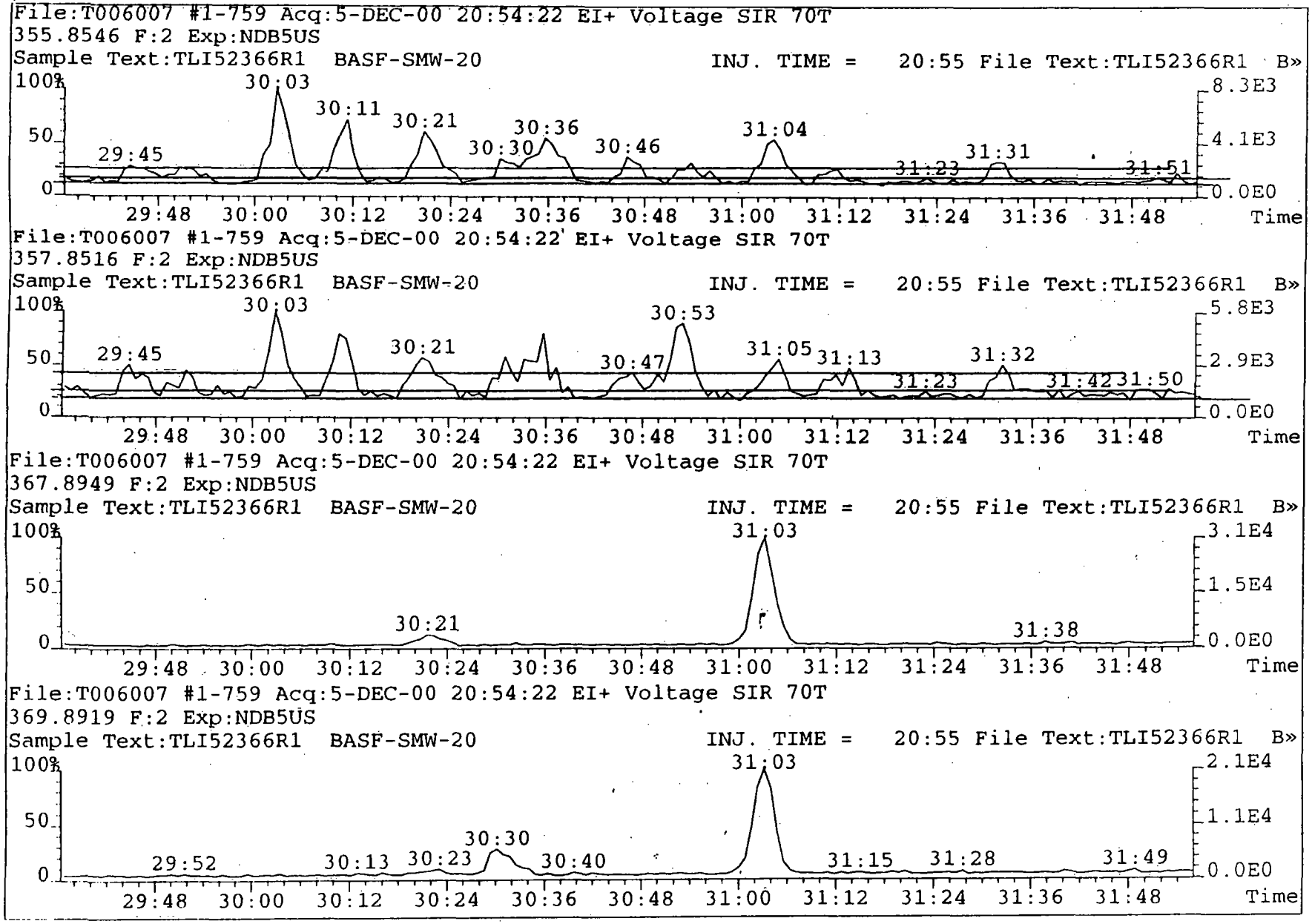


File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
351.9000 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»

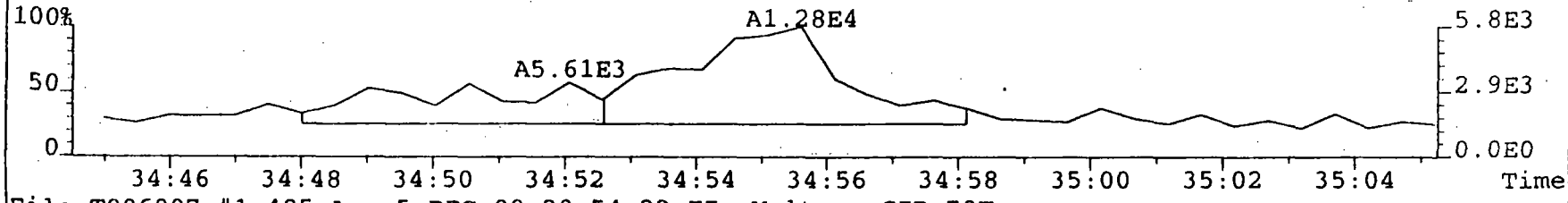


File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
353.8970 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»

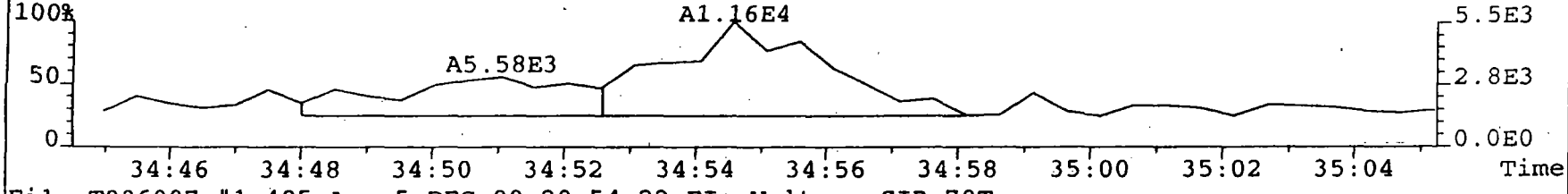



File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
355.8546 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1 B»
100%
50
0
30:03
30:11
30:21
30:36
30:30
30:46
31:04
29:45
31:31
31:23
31:51
8.3E3
4.1E3
0.0E0
29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48 Time
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
357.8516 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1 B»
100%
50
0
30:03
30:53
30:21
29:45
30:47
31:05
31:13
31:32
31:23
31:42
31:50
5.8E3
2.9E3
0.0E0
29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48 Time
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
367.8949 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1 B»
100%
50
0
31:03
30:21
31:38
3.1E4
1.5E4
0.0E0
29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48 Time
File:T006007 #1-759 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
369.8919 F:2 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20
INJ. TIME = 20:55 File Text:TLI52366R1 B»
100%
50
0
31:03
30:30
29:52
30:13
30:23
30:40
31:15
31:28
31:49
2.1E4
1.1E4
0.0E0
29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48 Time

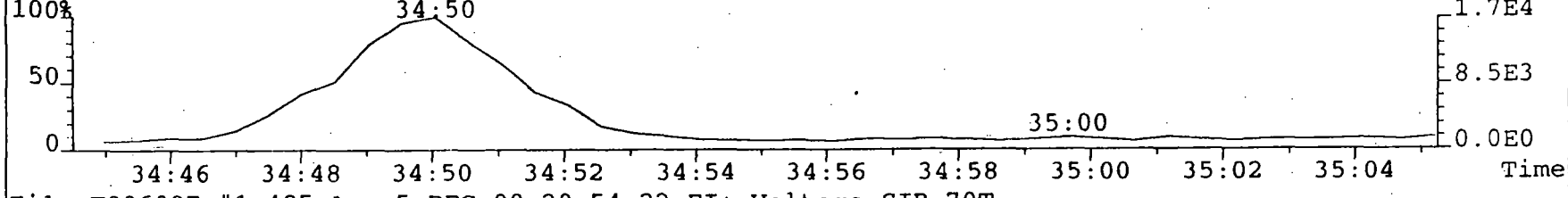
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
373.8208 F:3 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»



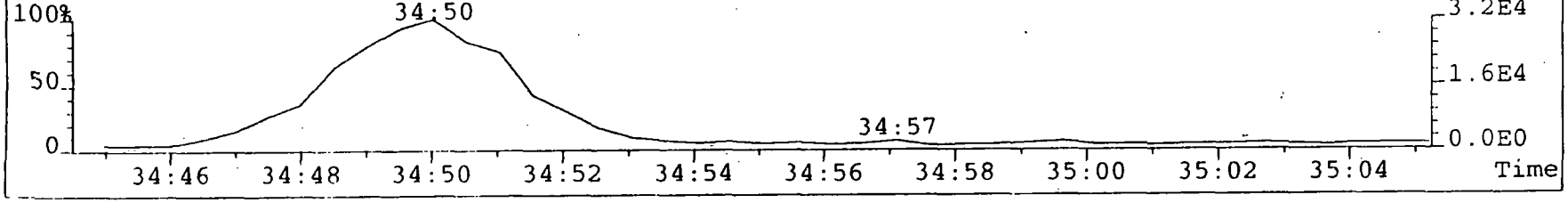
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
375.8178 F:3 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»

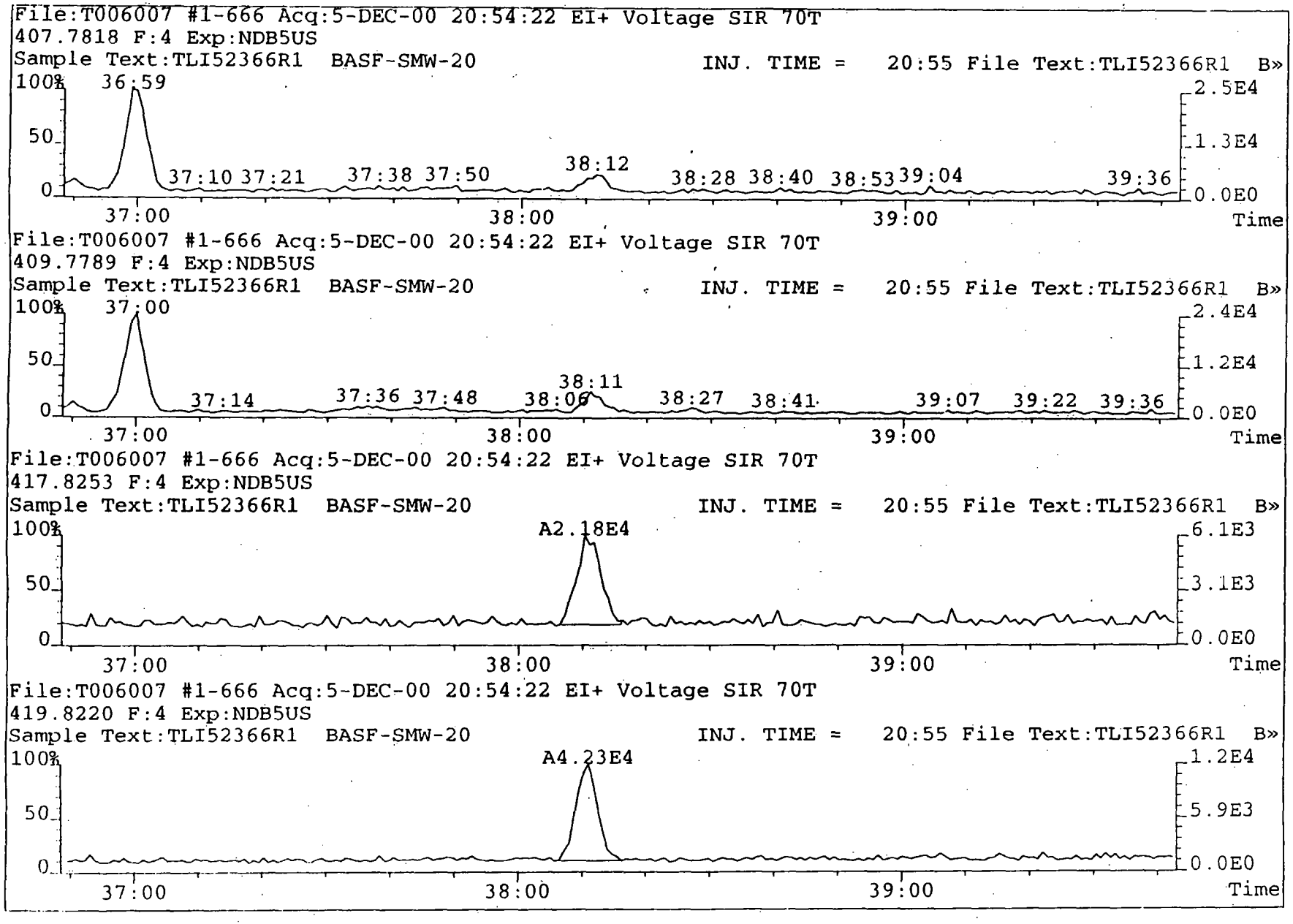


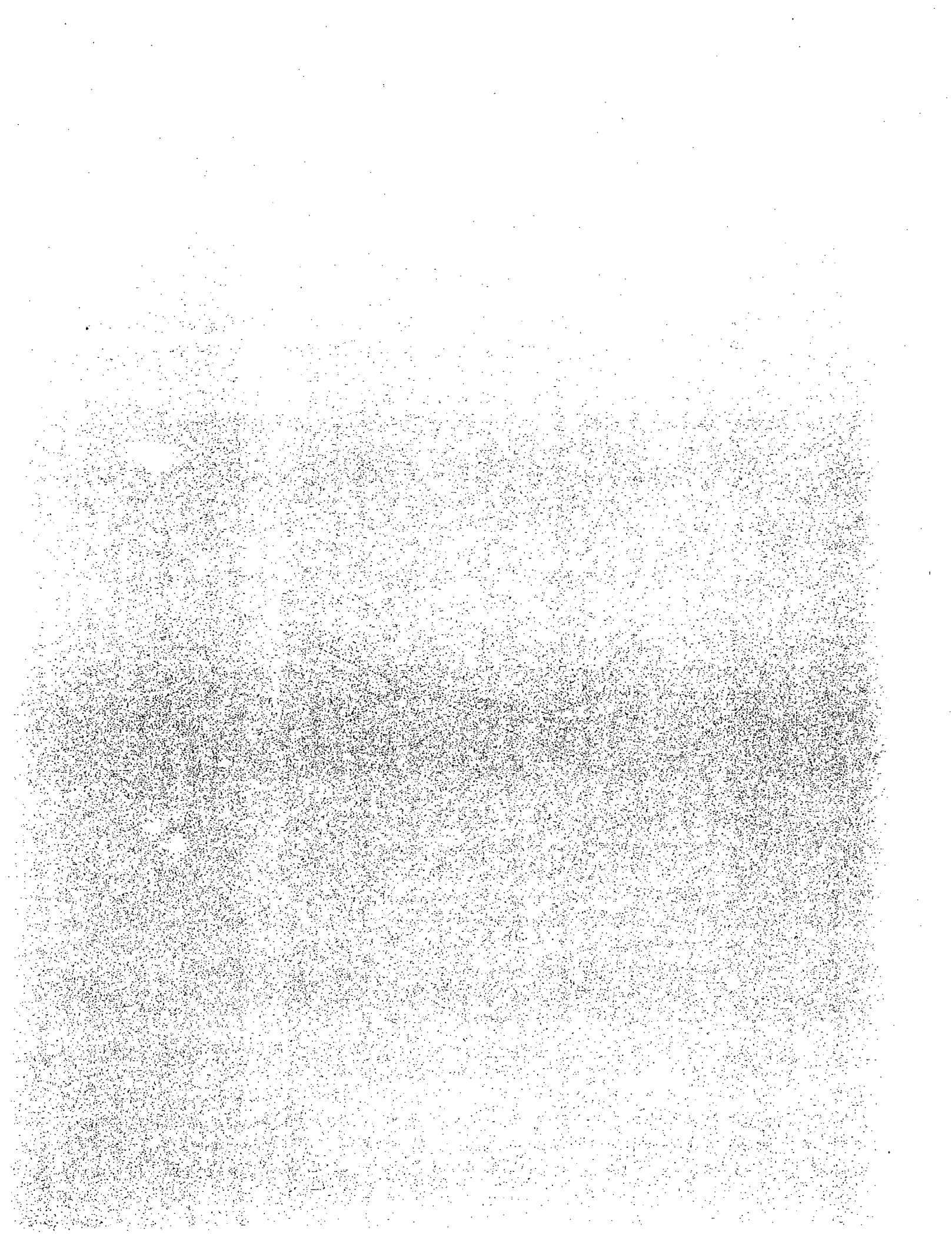
File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
383.8639 F:3 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»



File:T006007 #1-485 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
385.8610 F:3 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»




File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
407.7818 F:4 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»
100% 36:59
37:10 37:21 37:38 37:50 38:12 38:28 38:40 38:53 39:04 39:36
2.5E4
1.3E4
0.0E0
37:00 38:00 39:00 Time
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
409.7789 F:4 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»
100% 37:00
37:14 37:36 37:48 38:06 38:11 38:27 38:41 39:07 39:22 39:36
2.4E4
1.2E4
0.0E0
37:00 38:00 39:00 Time
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
417.8253 F:4 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»
100% A2.18E4
6.1E3
3.1E3
0.0E0
37:00 38:00 39:00 Time
File:T006007 #1-666 Acq:5-DEC-00 20:54:22 EI+ Voltage SIR 70T
419.8220 F:4 Exp:NDB5US
Sample Text:TLI52366R1 BASF-SMW-20 INJ. TIME = 20:55 File Text:TLI52366R1 B»
100% A4.23E4
1.2E4
5.9E3
0.0E0
37:00 38:00 39:00 Time



TriMatrix, Inc.

TLI Project: **52366r1** Method 8290 TCDD/TCDF Analysis (DB-2
Client Sample: **BASF-SMW-20** Analysis File: **P004**

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/2000	Spike File:	SPC2NF2
TLI ID:	274-99-8B	Date Extracted:	12/01/2000	ICal:	PF2O230
		Date Analyzed:	12/05/2000	ConCal:	P004403
Sample Size:	1.060 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005998	% Lipid:	n/a
GC Column:	DB-225	Analyst:	DFS	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flag
2,3,7,8-TCDF	1860			0.78	23:58	

Internal Standard	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,7,8-TCDF	107	5.66	40%-130%	0.76	23:57	V

Recovery Standard	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,4-TCDD	0.82	22:48	

Data Reviewer: JCA 12/13/2000

C2NF_PSR v2.03.L

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:39 12/1

Initial ....Date...

Data Review By: JGH 12/13/00

Channel specific noise levels computed from 'NL' heights.

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of P004412B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_I....	QC	Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
TCDF					0.65-0.89					0.791-1.108				
304-306	DC	NL			Height			0.14	0.07	0.07				
					19:20	RO	0.52	1.01	0.44	0.35	0.990			
					19:39	RO	0.44	0.76	0.33	0.75	1.006			
					19:42	RO	2.84	0.78	1.25	0.44	1.009			
					19:52	RO	1.73	2.05	2.01	1.16	1.017			
					20:20		0.74	9.39	3.99	5.40	1.041			
					20:40	RO	1.56	2.00	1.76	1.13	1.058			
					20:44	RO	0.50	0.94	0.41	0.82	1.061			
					21:10	RO	0.52	16.00	6.96	13.28	1.084			
					21:18		0.71	4.35	1.81	2.54	1.090			
					21:26		0.66	22.74	9.03	13.71	1.097			
					21:36		0.68	7.08	2.86	4.22	1.106			
	DC	WH			21:59	RO	1.12	11.98			1.125			
	DC	WH			22:13	RO	0.04	0.34			1.137			
	DC	WH			22:30		0.76	36.97			1.152			
	DC	WH			22:43	RO	1.23	8.89			1.163			
	DC	WH			23:01	RO	1.75	6.44			1.178			
	DC	WH			23:16	RO	0.97	0.58			1.191			
	DC	WH			23:31	RO	0.48	3.08			1.204			
	DC	WH			23:51	RO	0.22	3.54			1.221			
	KMN				23:58		0.78	41.90	18.40	23.50	1.227	2378-TCDF		AN
	DC	WH			24:14		0.69	9.86			1.241			
	DC	WH			24:24	RO	0.97	0.51			1.249			
	DC	WH			24:34	RO	0.18	1.49			1.258			
	DC	WH			24:41	RO	0.91	8.39			1.264			
	DC	WH			24:52		0.68	4.15			1.273			
	DC	WH			25:28	RO	0.30	1.79			1.304			
	DC	WH			26:20	RO	1.85	3.12			1.348			
	DC	WH			26:35		0.67	35.58			1.361			
304-306			12	Peaks				109.00						
13C12-TCDF					0.65-0.89					0.958-1.042				
316-318	DC	NL			Height			0.26	0.14	0.12				
					18:52	RO	0.39	0.30	0.13	0.33	0.966			
	DC	SN			18:57	RO	0.62	0.37			0.970			
					19:02	RO	0.61	1.24	0.54	0.89	0.974			
					19:14	RO	0.47	0.64	0.28	0.59	0.985			
					19:18	RO	3.33	0.32	0.60	0.18	0.988			
	N				19:32		0.74	155.82	66.05	89.77	1.000			
	DC	SN			19:44	RO	4.00	0.12			1.010			
	DC	SN			19:48	RO	0.34	0.30			1.014			
	DC	SN			19:53	RO	0.58	0.32			1.018			
	DC	SN			19:57		0.70	0.63			1.021			

Compound M_2....	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel RT	Compound Name	ID	Flags
	DC		SN		20:01	RO	1.67	0.11			1.025			
					20:17	RO	2.39	0.41	0.55	0.23	1.038			
					20:20	RO	0.34	1.20	0.52	1.52	1.041			
	DC		WH		20:38		0.78	1.16			1.056			
	DC		WH		20:42	RO	0.48	2.99			1.060			
	DC		WH		20:54	RO	1.50	0.25			1.070			
	DC		WH		21:00	RO	2.91	0.19			1.075			
	DC		WH		21:05	RO	0.41	0.16			1.079			
	DC		WH		21:23	RO	7.33	0.21			1.095			
	DC		WH		21:33	RO	0.93	1.68			1.103			
	DC		WH		21:46	RO	0.62	0.92			1.114			
	DC		WH		22:11		0.79	0.93			1.136			
	DC		WH		22:18	RO	4.60	0.18			1.142			
	DC		WH		22:23	RO	1.90	0.53			1.146			
	DC		WH		22:38	RO	1.21	0.69			1.159			
	DC		WH		22:46	RO	1.92	1.15			1.166			
	DC		WH		22:53	RO	2.19	0.92			1.172			
	DC		WH		23:11		0.89	2.32			1.187			
	DC		WH		23:19	RO	6.14	0.12			1.194			
	DC		WH		23:28	RO	0.92	0.65			1.201			
	DC		WH		23:32	RO	1.44	0.28			1.205			
KN					23:57		0.76	44.78	19.39	25.39	1.226	13C12-2378-TCDF	IS0	
							Height	9.00	3.66	5.34				
	DC		WH		24:13		0.66	0.48			1.240			
	DC		WH		24:41	RO	0.27	0.55			1.264			
	DC		WH		24:45		0.73	0.52			1.267			
	DC		WH		24:51	RO	0.38	0.11			1.272			
	DC		WH		24:55	RO	2.90	0.18			1.276			
	DC		WH		25:05	RO	6.33	0.85			1.284			
	DC		WH		25:17	RO	5.52	0.58			1.294			
	DC		WH		25:34	RO	0.18	1.68			1.309			
	DC		WH		25:40	RO	0.33	1.66			1.314			
	DC		WH		25:48	RO	1.69	0.23			1.321			
	DC		WH		25:51	RO	1.10	0.37			1.323			
	DC		WH		26:04	RO	1.84	2.16			1.334			
	DC		WH		26:14		0.72	0.93			1.343			
	DC		WH		26:29	RO	1.84	1.35			1.356			
	DC		WH		26:37	RO	0.64	1.08			1.363			
	DC		WH		26:43	RO	1.58	4.14			1.368			
316-318				8	Peaks			204.71						

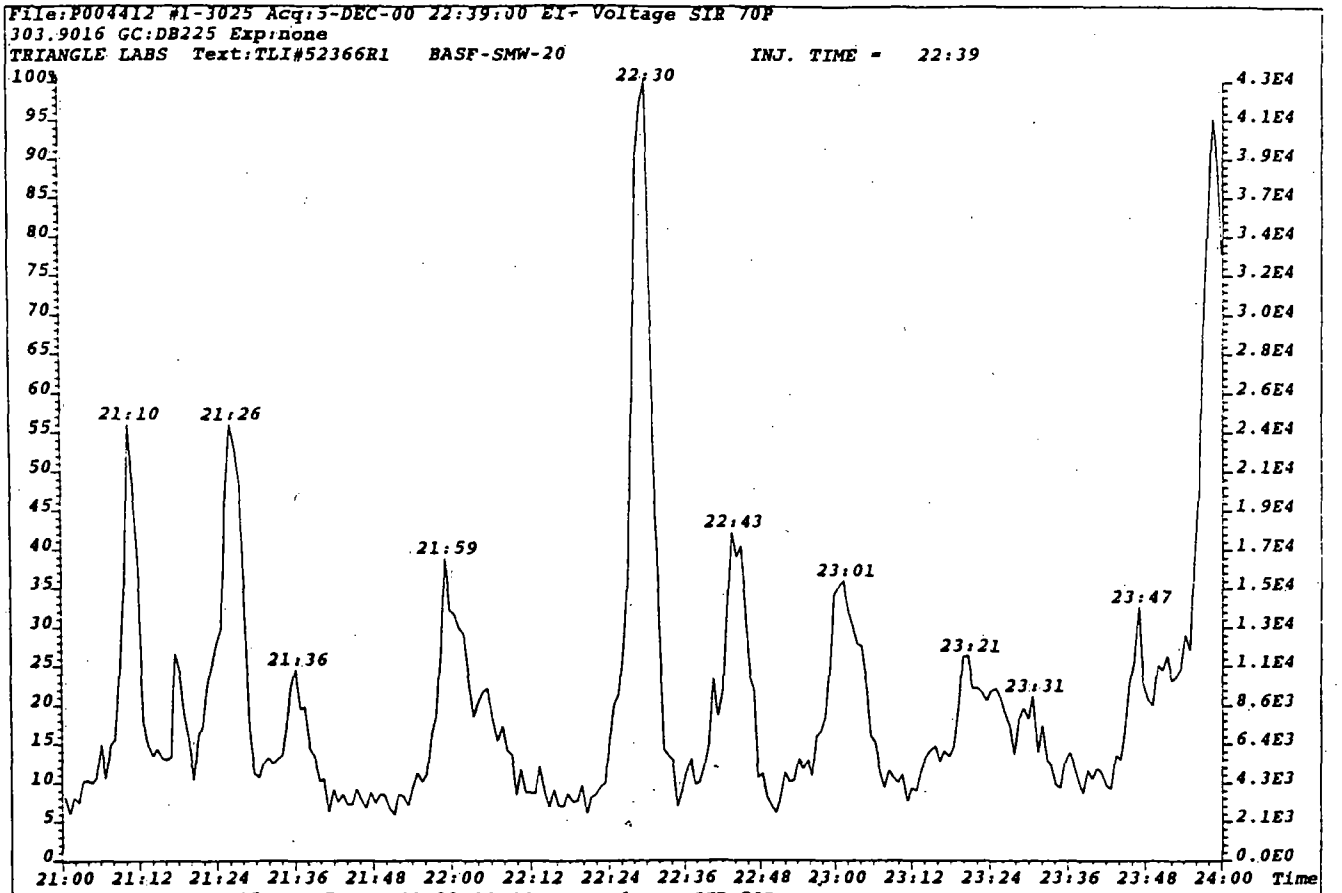
---------- Above: TCDF / TCDD Follows ----------

13C12-TCDD					0.65-0.89						0.910-1.090			
332-334	DC		NL				Height	0.30	0.20	0.10				
	DC		WL		19:50	RO	0.35	0.21			0.870			
	DC		WL		19:57	RO	1.06	1.27			0.875			
	DC		WL		20:11	RO	4.13	0.41			0.885			
	DC		WL		20:38	RO	0.62	0.78			0.905			
	DC		WL		20:43	RO	6.63	0.14			0.909			
MN					22:29		0.84	29.00	13.20	15.80	0.986	13C12-2378-TCDD	IS1	
							Height	6.73	2.92	3.81				

Compound/ M_2....	QC Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel.RT	Compound Name..	ID..	Flags
N				22:48		0.82	505.45	227.96	277.49	1.000	13C12-1234-TCDD	RS1	
				23:07	RO	1.36	0.50	0.38	0.28	1.014			
		DC	SN	23:27	RO	2.20	0.18			1.029			
				23:41		0.84	1.03	0.47	0.56	1.039			
		DC	SN	23:53	RO	0.92	0.23			1.048			
				24:04	RO	1.39	1.84	1.45	1.04	1.056			
				24:21	RO	1.12	1.52	0.96	0.86	1.068			
				24:33	RO	1.82	0.99	1.02	0.56	1.077			
				24:47		0.69	4.61	1.88	2.73	1.087			
		DC	WH	25:07		0.77	4.86			1.102			
		DC	WH	25:12	RO	1.96	2.16			1.105			
		DC	WH	25:26		0.84	22.88			1.115			
		DC	WH	25:48	RO	1.46	0.46			1.132			
332-334			8 Peaks				544.94						

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_2 -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***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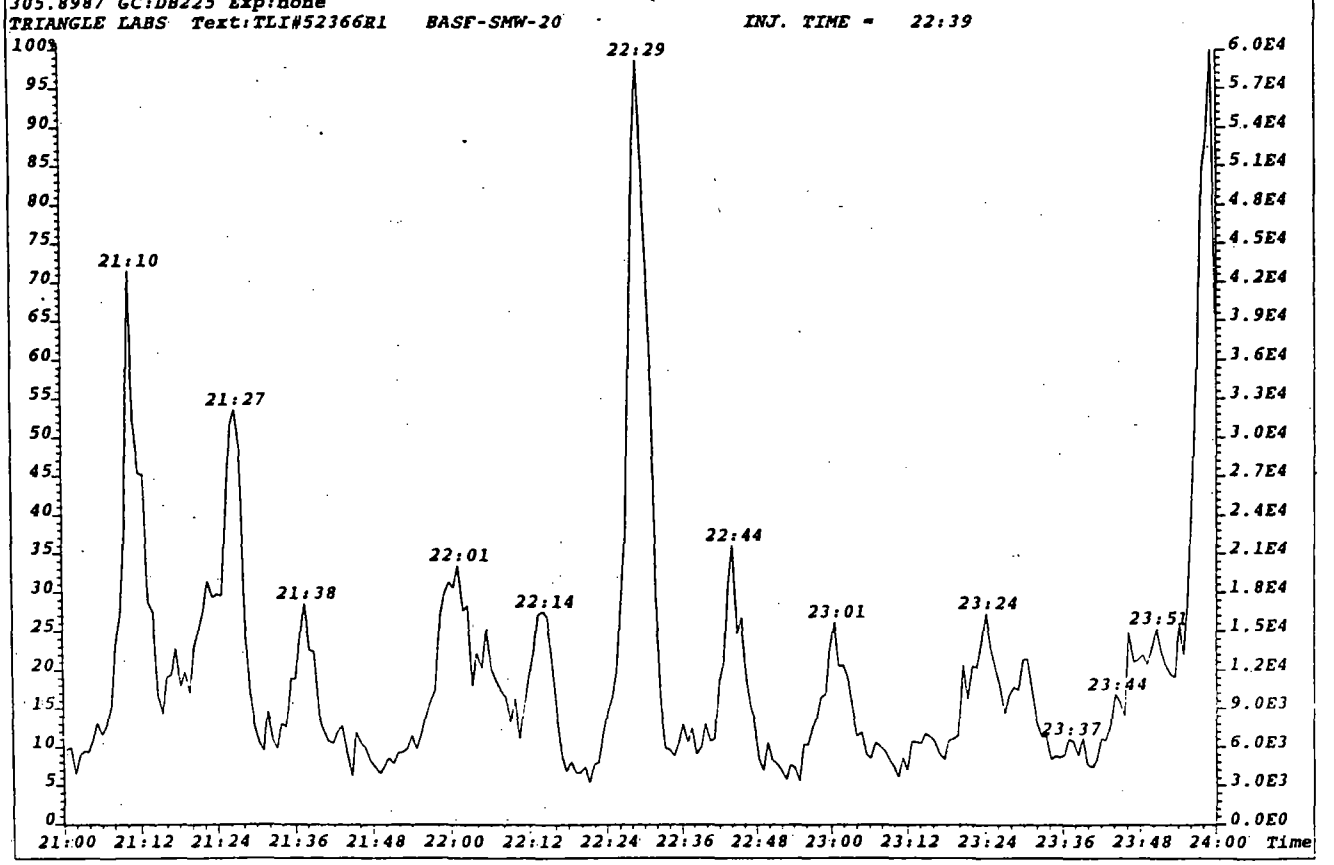
303.9016 GC:DB225 Exp:none
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20
INJ. TIME = 22:39
21:10
21:26
21:36
21:59
22:30
22:43
23:01
23:21
23:31
23:47
Time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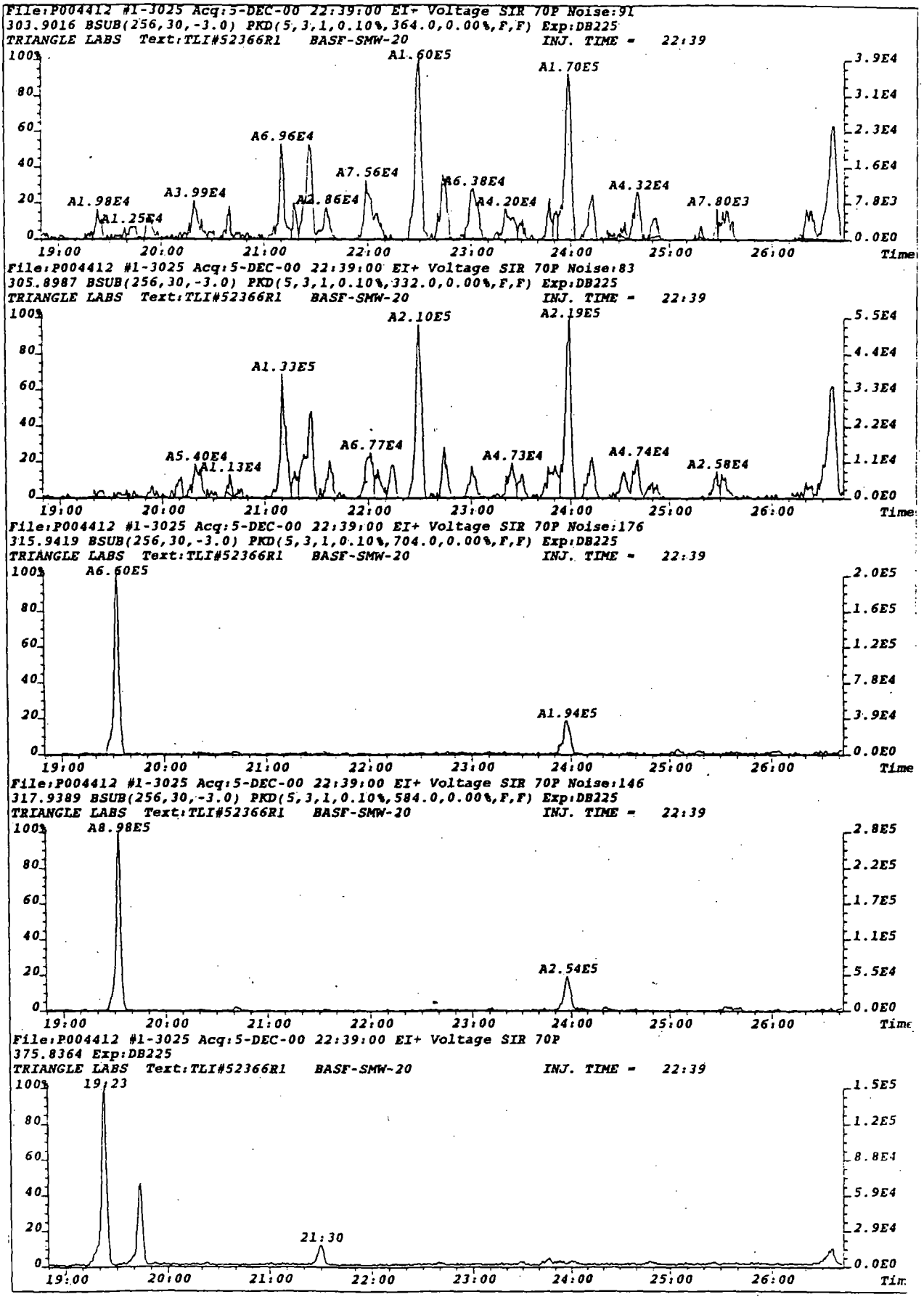
305.8987 GC:DB225 Exp:none
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20
INJ. TIME = 22:39
21:10
21:27
21:38
22:01
22:14
22:29
22:44
23:01
23:24
23:37
23:44
23:51
Time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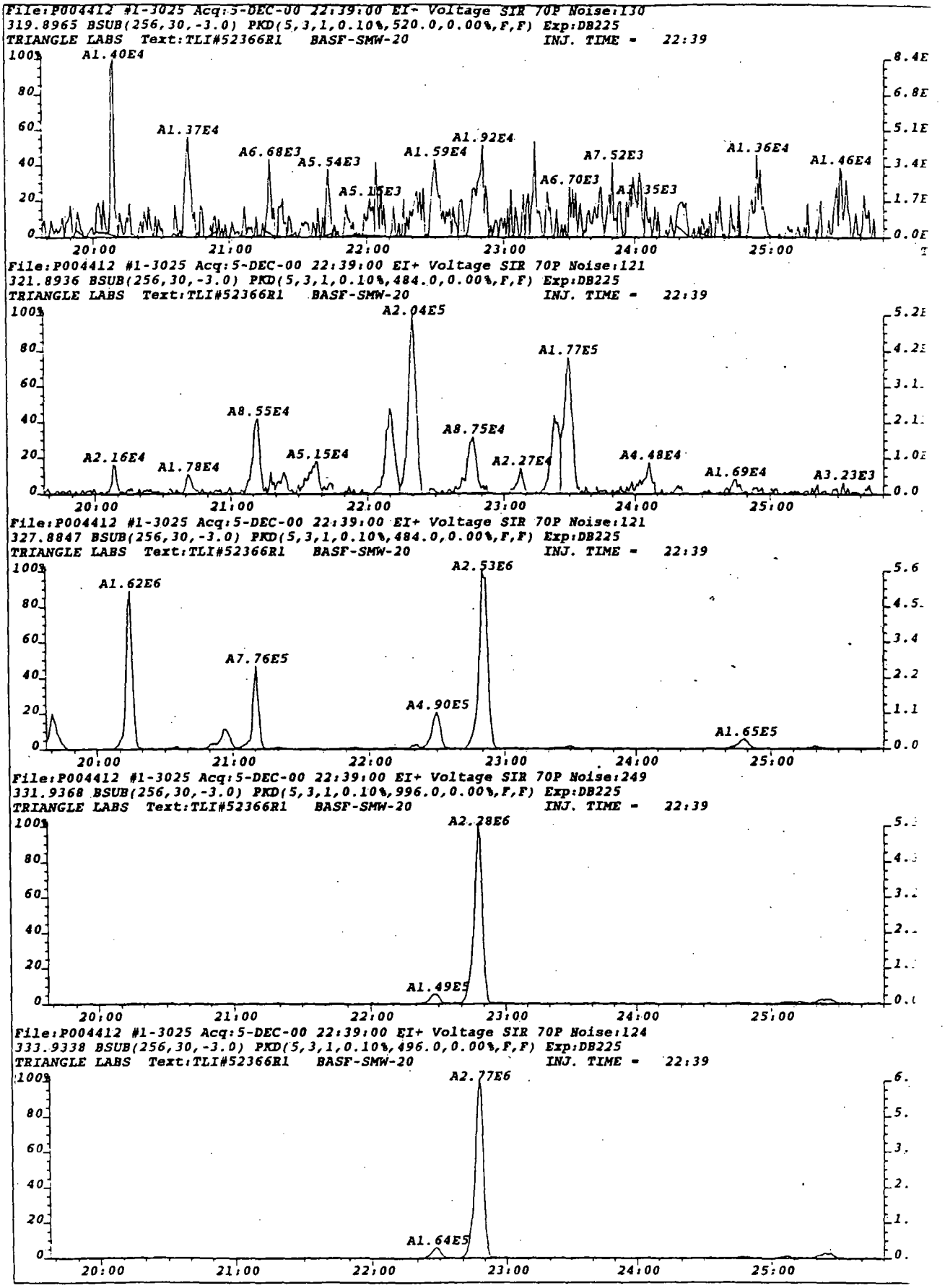
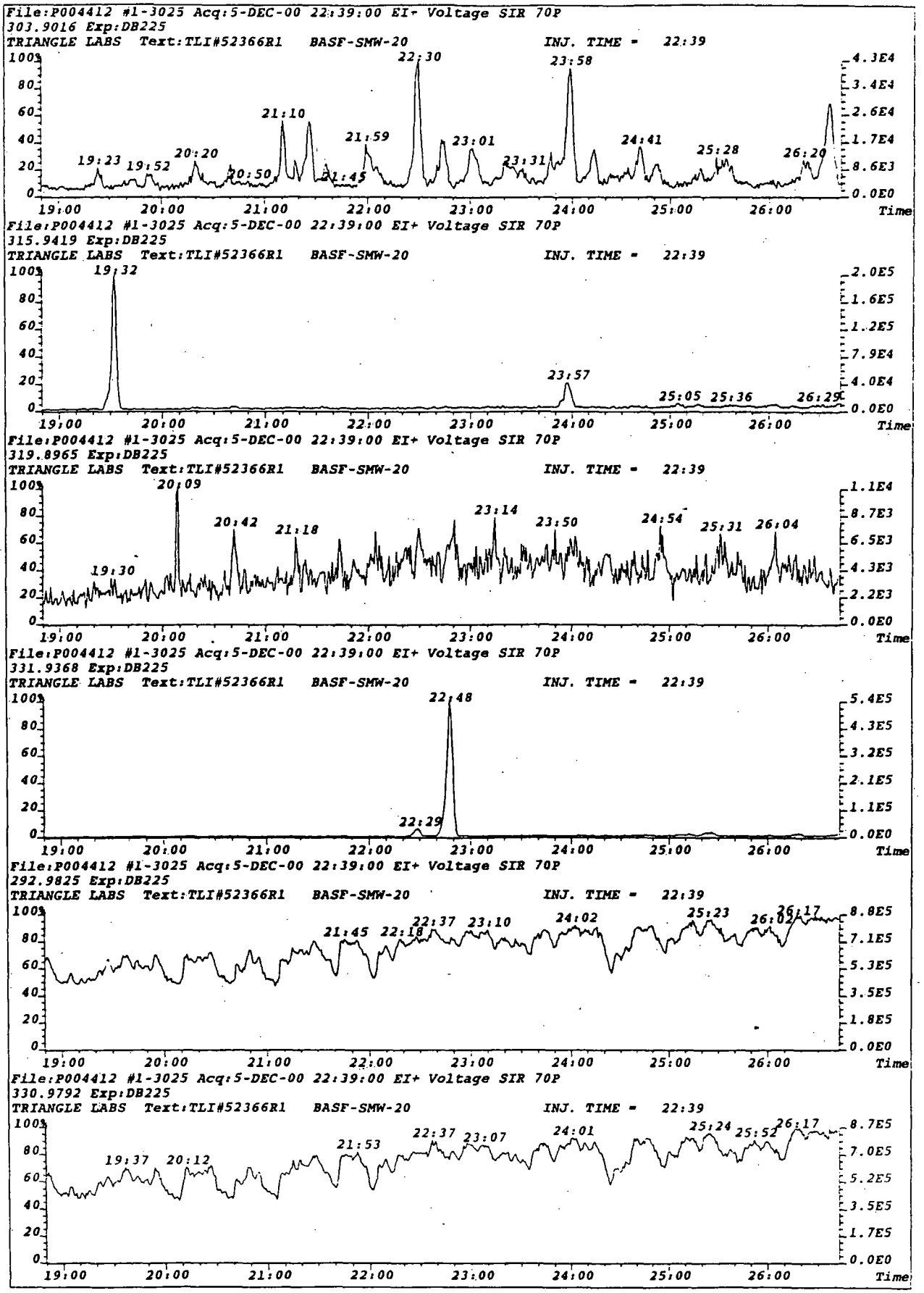
303.9016 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,364.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39
A1.60E5
A1.70E5
A6.96E4
A7.56E4
A6.38E4
A4.32E4
A3.99E4
A2.86E4
A4.20E4
A1.98E4
A1.25E4
A7.80E3
19:00 20:00 21:00 22:00 23:00 24:00 25:00 26:00 Time
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P Noise:83
305.8987 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,332.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39
A2.10E5
A2.19E5
A1.33E5
A6.77E4
A5.40E4
A1.13E4
A4.73E4
A4.74E4
A2.58E4
19:00 20:00 21:00 22:00 23:00 24:00 25:00 26:00 Time
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P Noise:176
315.9419 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,704.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39
A6.60E5
A1.94E5
19:00 20:00 21:00 22:00 23:00 24:00 25:00 26:00 Time
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P Noise:146
317.9389 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,584.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39
A8.98E5
A2.54E5
19:00 20:00 21:00 22:00 23:00 24:00 25:00 26:00 Time
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P
375.8364 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39
19:23
21:30
19:00 20:00 21:00 22:00 23:00 24:00 25:00 26:00 Tim


File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P Noise:130
319.8965 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,520.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME - 22:39
A1.40E4
A1.37E4
A6.68E3
A5.54E3
A1.59E4
A1.92E4
A6.70E3
A7.52E3
A1.36E4
A1.46E4
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P Noise:121
321.8936 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,484.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME - 22:39
A2.04E5
A1.77E5
A8.55E4
A8.75E4
A2.16E4
A1.78E4
A5.15E4
A2.27E4
A4.48E4
A1.69E4
A3.23E3
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P Noise:121
327.8847 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,484.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME - 22:39
A2.53E6
A1.62E6
A7.76E5
A4.90E5
A1.65E5
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P Noise:249
331.9368 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,996.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME - 22:39
A2.28E6
A1.49E5
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P Noise:124
333.9338 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,496.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME - 22:39
A2.77E6
A1.64E5
20:00
21:00
22:00
23:00
24:00
25:00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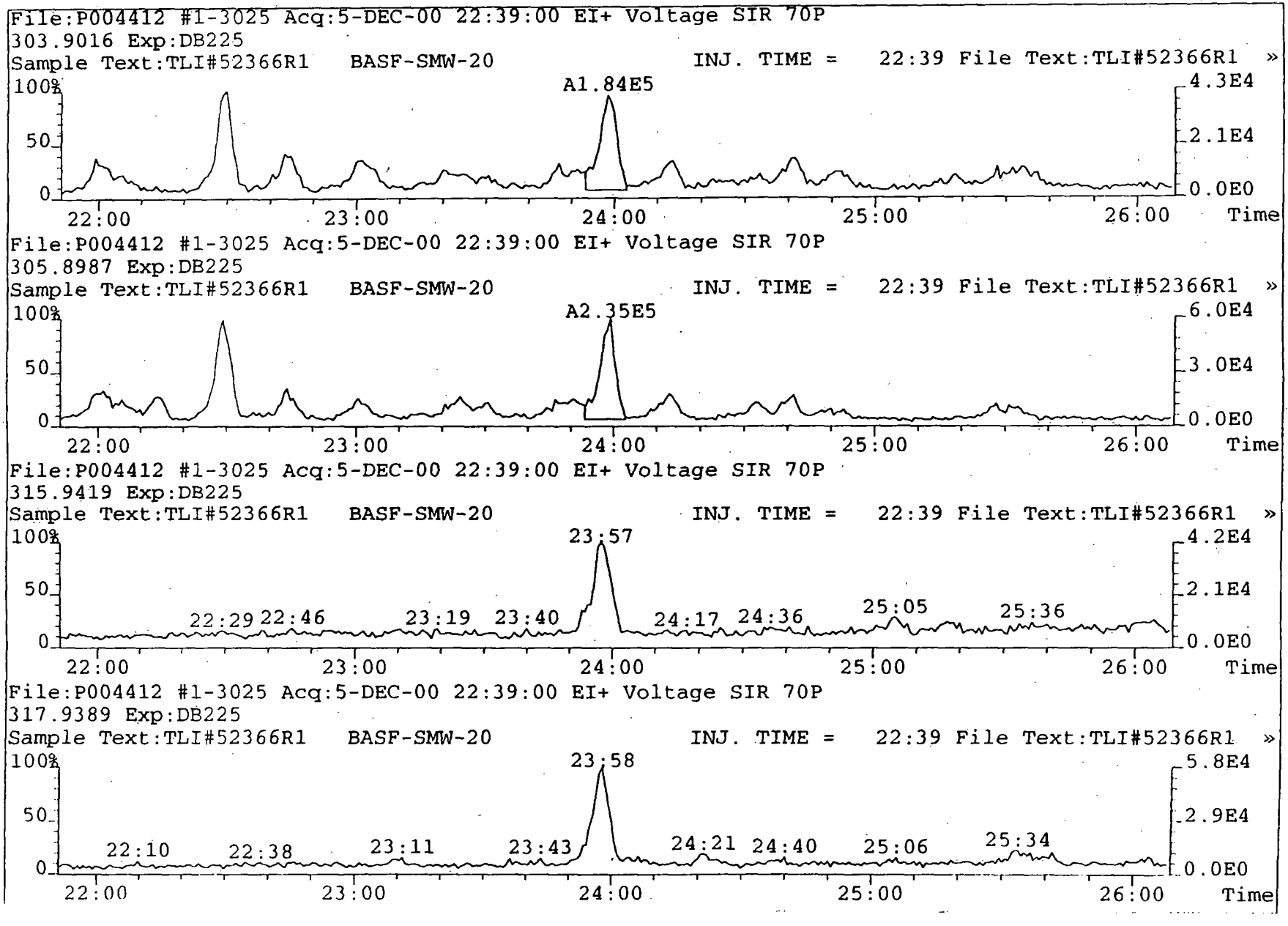
303.9016 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39
19:23 19:52 20:20 20:50 21:10 21:45 21:59 22:30 23:01 23:31 23:58 24:41 25:28 26:20
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P
315.9419 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39
19:32 23:57 25:05 25:36 26:29
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P
319.8965 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39
19:30 20:09 20:42 21:18 23:14 23:50 24:54 25:31 26:04
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P
331.9368 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39
22:29 22:48
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P
292.9825 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39
21:45 22:18 22:37 23:10 24:02 25:23 26:02 26:17
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P
330.9792 Exp:DB225
TRIANGLE LABS Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39
19:37 20:12 21:53 22:37 23:07 24:01 25:24 25:52 26:17
19:00 20:00 21:00 22:00 23:00 24:00 25:00 26:00 Time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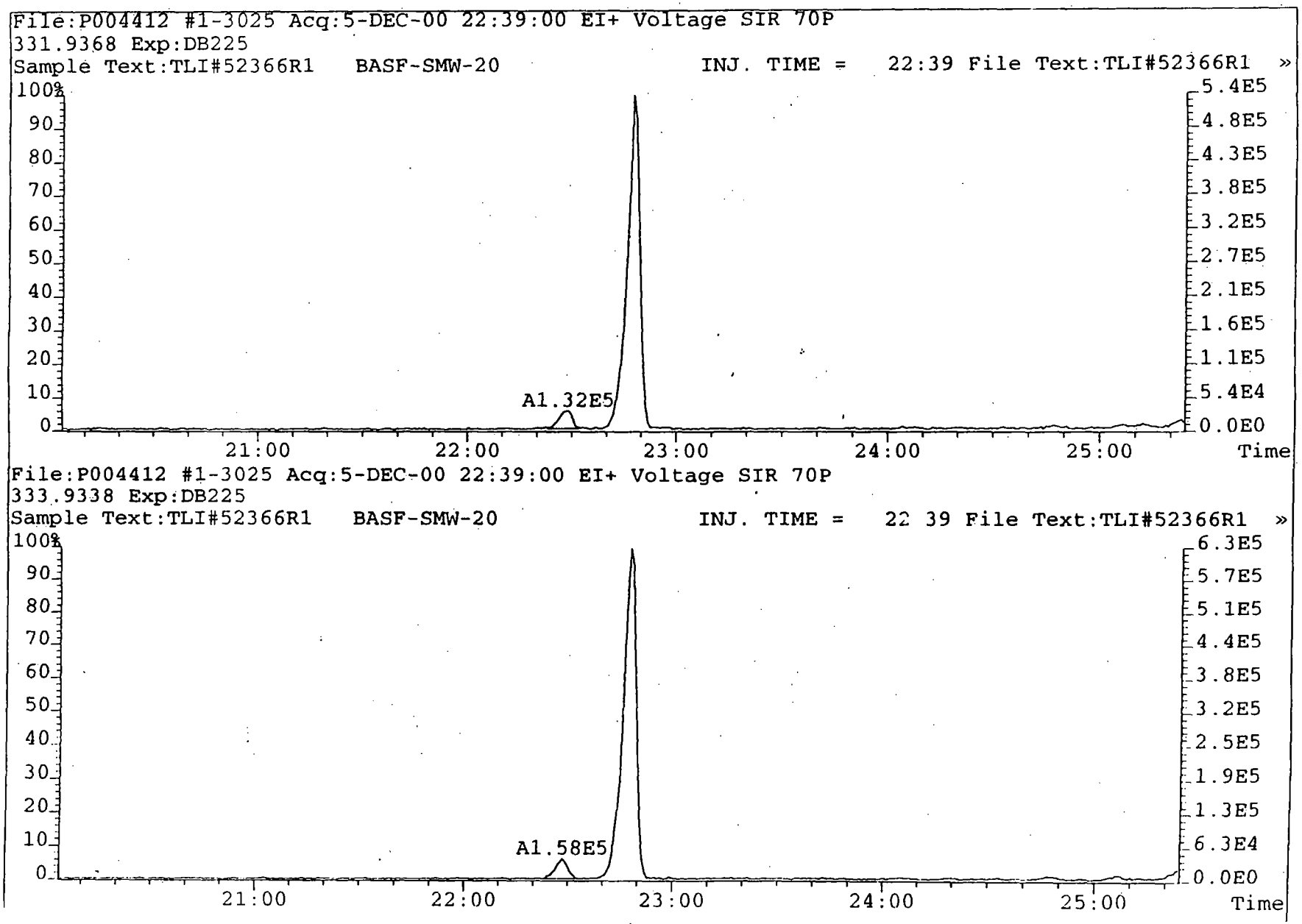
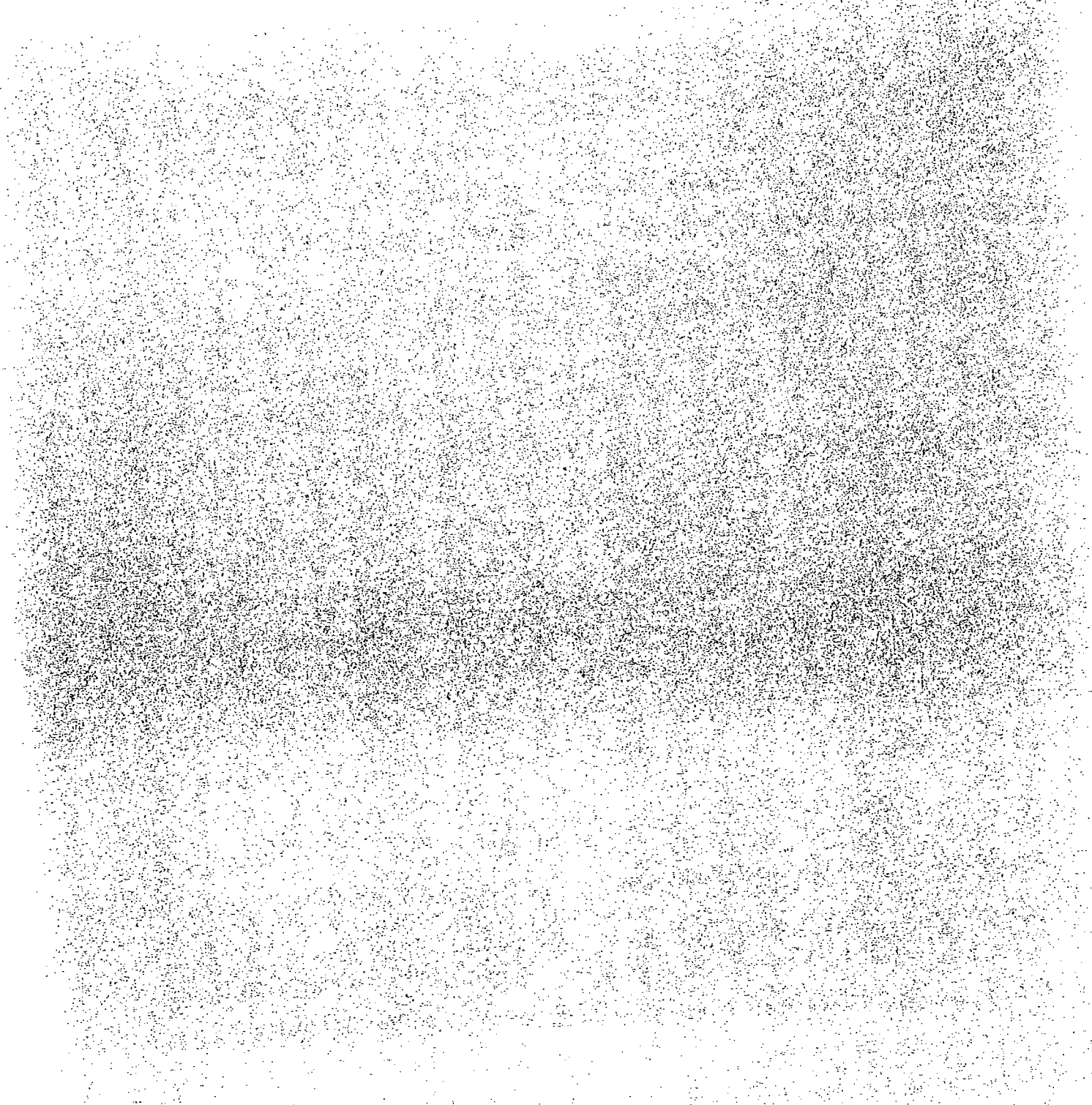
303.9016 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39 File Text:TLI#52366R1
A1.84E5
4.3E4
2.1E4
0.0E0
22:00 23:00 24:00 25:00 26:00 Time
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P
305.8987 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39 File Text:TLI#52366R1
A2.35E5
6.0E4
3.0E4
0.0E0
22:00 23:00 24:00 25:00 26:00 Time
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P
315.9419 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39 File Text:TLI#52366R1
23:57
22:29 22:46 23:19 23:40 24:17 24:36 25:05 25:36
4.2E4
2.1E4
0.0E0
22:00 23:00 24:00 25:00 26:00 Time
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P
317.9389 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39 File Text:TLI#52366R1
23:58
22:10 22:38 23:11 23:43 24:21 24:40 25:06 25:34
5.8E4
2.9E4
0.0E0
22:00 23:00 24:00 25:00 26:00 Time


File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P
331.9368 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22:39 File Text:TLI#52366R1
100%
90
80
70
60
50
40
30
20
10
0
5.4E5
4.8E5
4.3E5
3.8E5
3.2E5
2.7E5
2.1E5
1.6E5
1.1E5
5.4E4
0.0E0
A1.32E5
21:00
22:00
23:00
24:00
25:00
Time
File:P004412 #1-3025 Acq:5-DEC-00 22:39:00 EI+ Voltage SIR 70P
333.9338 Exp:DB225
Sample Text:TLI#52366R1 BASF-SMW-20 INJ. TIME = 22 39 File Text:TLI#52366R1
100%
90
80
70
60
50
40
30
20
10
0
6.3E5
5.7E5
5.1E5
4.4E5
3.8E5
3.2E5
2.5E5
1.9E5
1.3E5
6.3E4
0.0E0
A1.58E5
21:00
22:00
23:00
24:00
25:00
Time



TriMatrix, Inc.

TLI Project: 52366r1 — Method 8290 PCDD/PCDF Analysis (
Client Sample: TLI LCS — Analysis File: T0060

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	/ /	Spike File:	SPMIT32S
TLI ID:	TLI LCS	Date Extracted:	12/01/2000	ICal:	TF57140
		Date Analyzed:	12/05/2000	ConCal:	T005996
Sample Size:	1.000 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005998	% Lipid:	n/a
GC Column:	DB-5	Analyst:	BWL	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	426			0.79	26:49	
1,2,3,7,8-PeCDD	1930			1.55	30:57	
1,2,3,4,7,8-HxCDD	2260			1.24	34:04	
1,2,3,6,7,8-HxCDD	2070			1.22	34:10	
1,2,3,7,8,9-HxCDD	2250			1.22	34:29	
1,2,3,4,6,7,8-HpCDD	2140			1.03	37:35	
1,2,3,4,6,7,8,9-OCDD	3920			0.85	41:31	
2,3,7,8-TCDF	402			0.81	26:08	
1,2,3,7,8-PeCDF	2110			1.49	29:57	
2,3,4,7,8-PeCDF	2200			1.49	30:37	
1,2,3,4,7,8-HxCDF	2220			1.26	33:21	
1,2,3,6,7,8-HxCDF	2150			1.27	33:27	
2,3,4,6,7,8-HxCDF	2540			1.27	33:57	
1,2,3,7,8,9-HxCDF	2410			1.28	34:46	
1,2,3,4,6,7,8-HpCDF	2100			1.07	36:29	
1,2,3,4,7,8,9-HpCDF	2330			1.06	38:08	
1,2,3,4,6,7,8,9-OCDF	3660			0.90	41:44	

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	843	42.1	40%-130%	0.75	26:07	
$^{13}C_{12}$-2,3,7,8-TCDD	758	37.9	40%-130%	0.81	26:48	V
$^{13}C_{12}$-1,2,3,7,8-PeCDF	895	44.8	40%-130%	1.50	29:56	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	1090	54.4	40%-130%	1.47	30:56	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	785	39.3	40%-130%	0.51	33:26	V
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	921	46.0	40%-130%	1.20	34:09	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	821	41.0	25%-130%	0.43	36:29	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	955	47.8	25%-130%	1.06	37:35	
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	1800	44.9	25%-130%	0.86	41:30	

MIT3_PSR v1.00.LARS

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:40 12/13/2

2

TLI Project: 52366r1 Method 8290 PCDD/PCDF Analysis
Client Sample: TLI LCS Analysis File: T006(

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,4,7,8-PeCDF	967	48.4	40%-130%	1.47	30:36	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	804	40.2	40%-130%	0.50	33:20	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	925	46.2	40%-130%	1.20	34:03	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	891	44.6	25%-130%	0.43	38:07	

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flag
$^{37}Cl_4$-2,3,7,8-TCDD	92.4	46.2	40%-130%	26:49	

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	972	48.6	40%-130%	0.50	34:45	
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	947	47.4	40%-130%	0.51	33:56	

Recovery Standards	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,4-TCDD	0.82	26:38	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.19	34:28	

Data Reviewer: _____ 12/13/2000

MIT3_PSR v1.00. LAR

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Printed: 17:40 12/13/

2

Initial ....Date...

Data Review By: JCA 12/13/00

Calculated Noise Height: 0.03

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T006005B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC.Log	Cmit	Why	..RT.	OK	Ratio	Total Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Fla
TCDF						0.65-0.89			0.880-1.070				
304-306	DC	NL				Height	0.10	0.05	0.05				
	DC	SN		25:09		0.69	0.44			0.963			
	DC	SN		25:30	RO	0.60	0.67			0.976			
				25:45	RO	0.64	2.78	1.21	1.39	0.986	1278-TCDF	AN	J
				26:08		0.81	112.06	50.03	62.03	1.001	2378-TCDF	AN	
304-306			2 Peaks				114.84						
13C12-TCDF						0.65-0.89			0.962-1.038				
316-318	DC	NL				Height	0.11	0.07	0.04				
				25:43		0.78	2.44	1.07	1.37	0.985			
				26:07		0.75	544.55	233.65	310.90	1.000	13C12-2378-TCDF	ISO	
						Height	152.82	65.69	87.13				
				26:32		0.89	3.58	1.69	1.89	1.016			
				26:49	RO	1.15	0.81	0.53	0.46	1.027			
316-318			4 Peaks				551.38						

---------- Above: TCDF / TCDD Follows ----------

TCDD						0.65-0.89			0.904-1.042				
320-322	DC	NL				Height	0.09	0.05	0.04				
				26:49		0.79	78.28	34.51	43.77	1.001	2378-TCDD	AN	
320-322			1 Peak				78.28						
37Cl-TCDD									0.925-1.075				
328	DC	NL				Height	0.06	0.06					
	DC	WL		24:45			0.17			0.924			
	DC	SN		24:52			0.06			0.928			
	DC	SN		25:05			0.08			0.936			
				25:31			0.45	0.45		0.952			
	DC	SN		26:27			0.07			0.987			
	DC	SN		26:38			0.07			0.994			
				26:49			41.47	41.47		1.001	37Cl-TCDD	CLS	
	DC	SN		27:04			0.11			1.010			
	DC	SN		27:10			0.12			1.014			
	DC	SN		27:14			0.07			1.016			
	DC	SN		27:22			0.21			1.021			
	DC	SN		28:02			0.09			1.046			
	DC	SN		28:07			0.06			1.049			
	DC	SN		28:15			0.16			1.054			
328			2 Peaks				41.92						
13C12-TCDD						0.65-0.89			0.925-1.075				
332-334	DC	NL				Height	0.18	0.13	0.05				

Compound M_Z...	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel.RT	Compound Name	ID	Flags
					26:38		0.82	1,008.10	453.73	554.37	0.994	13C12-1234-TCDD	RS1	
					26:48		0.81	401.87	180.03	221.84	1.000	13C12-2378-TCDD	IS1	
							Height	109.97	49.27	60.70				
332-334					2 Peaks			1,409.97						
---------- Above: TCDD / PeCDF Follows ----------														
PeCDF							1.32-1.78				0.930-1.082			
340-342	DC	NL					Height	0.09	0.04	0.05				
					29:07	RO	1.10	2.58	1.11	1.01	0.973			J
					29:34	RO	1.18	1.58	0.78	0.66	0.988			J
					29:39	RO	1.12	0.87	0.38	0.34	0.991			J
					29:57		1.49	521.00	311.64	209.36	1.001	12378-PeCDF	AN	
					30:14	RO	1.28	8.06	4.05	3.16	1.010			J
					30:37		1.49	551.43	329.57	221.86	1.023	23478-PeCDF	AN	
					30:46		1.57	4.11	2.51	1.60	1.028			J
					31:35	RO	1.24	3.49	1.70	1.37	1.055			J
340-342					8 Peaks			1,093.22						
13C12-PeCDF							1.32-1.78				0.866-1.134			
352-354	DC	NL					Height	0.08	0.04	0.04				
					29:07		1.36	1.51	0.87	0.64	0.973			
					29:56		1.50	541.19	324.77	216.42	1.000	13C12-PeCDF 123	IS2	
							Height	170.60	102.36	68.24				
					30:13		1.44	4.32	2.55	1.77	1.009			
					30:36		1.47	578.82	344.30	234.52	1.022	13C12-PeCDF 234	SUR1	
					31:34		1.64	6.15	3.82	2.33	1.055			
352-354					5 Peaks			1,131.99						
---------- Above: PeCDF / PeCDD Follows ----------														
PeCDD							1.32-1.78				0.938-1.020			
356-358	DC	NL					Height	0.09	0.05	0.04				
					30:03		1.38	0.76	0.44	0.32	0.971			J
					30:13		1.33	0.98	0.56	0.42	0.977			J
					30:36	RO	2.04	0.61	0.49	0.24	0.989			J
					30:57		1.55	380.01	230.89	149.12	1.001	12378-PeCDD	AN	
					31:21	RO	3.29	0.36	0.46	0.14	1.013			J
356-358					5 Peaks			382.72						
13C12-PeCDD							1.32-1.78				0.871-1.129			
368-370	DC	NL					Height	0.10	0.06	0.04				
					29:52	RO	2.27	2.09	1.86	0.82	0.966			
					30:02	RO	0.95	1.84	1.12	1.18	0.971			
					30:38	RO	0.92	0.36	0.22	0.24	0.990			
					30:56		1.47	373.78	222.30	151.48	1.000	13C12-PeCDD 123	IS3	
							Height	120.41	72.13	48.28				
368-370					4 Peaks			378.07						
---------- Above: PeCDD / HxCDF Follows ----------														

Compound/ M_Z....	QC	Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel RT	Compound Name	ID	Flag
HxCDF					1.05-1.43					0.963-1.047				
374-376	DC	NL			Height			0.23	0.13	0.10				
			32:30	RO			1.50	0.90	0.60	0.40	0.972			J
			33:21				1.26	512.06	285.82	226.24	0.998	123478-HxCDF	AN	
			33:27				1.27	519.58	290.86	228.72	1.000	123678-HxCDF	AN	
			33:57				1.27	555.13	310.10	245.03	1.015	234678-HxCDF	AN	
			34:46				1.23	430.94	241.88	189.06	1.040	123789-HxCDF	AN	
374-376			5 Peaks					2,018.61						
13C12-HxCDF					0.43-0.59					0.880-1.120				
384-386	DC	NL			Height			0.19	0.10	0.09				
			32:22				0.51	1.33	0.45	0.88	0.968			
			32:29	RO			0.62	1.30	0.44	0.71	0.972			
			33:20				0.50	454.35	151.48	302.87	0.997	13C12-HxCDF 473	SUR2	
			33:26				0.51	450.51	151.30	299.21	1.000	13C12-HxCDF 678	IS4	
					Height			140.49	47.24	93.25				
			33:56				0.51	495.51	167.01	328.50	1.015	13C12-HxCDF 234	ALT2	
	DC	SN	34:09				0.54	0.80			1.021			
			34:30	RO			1.11	0.56	0.41	0.37	1.032			
			34:45				0.50	373.76	124.79	248.97	1.039	13C12-HxCDF 789	ALT1	
	DC	SN	34:57	RO			2.44	0.14			1.045			
384-386			7 Peaks					1,777.32						
---------- Above: HxCDF / HxCDD Follows ----------														
HxCDD					1.05-1.43					0.957-1.013				
390-392	DC	NL			Height			0.13	0.06	0.07				
			34:04				1.24	379.12	210.03	169.09	0.998	123478-HxCDD	AN	
			34:10				1.22	347.14	191.04	156.10	1.000	123678-HxCDD	AN	
			34:29				1.22	381.59	210.00	171.59	1.010	123789-HxCDD	AN	
390-392			3 Peaks					1,107.85						
13C12-HxCDD					1.05-1.43					0.971-1.029				
402-404	DC	NL			Height			0.39	0.26	0.13				
			33:30				1.33	1.96	1.12	0.84	0.981			
			34:03				1.20	343.40	187.24	156.16	0.997	13C12-HxCDD 473	SUR3	
			34:09				1.20	330.31	180.49	149.82	1.000	13C12-HxCDD 678	IS5	
					Height			104.89	57.40	47.49				
			34:28				1.19	790.23	430.21	360.02	1.009	13C12-HxCDD 789	RS2	
402-404			4 Peaks					1,465.90						
---------- Above: HxCDD / HpCDF Follows ----------														
HpCDF					0.88-1.20					0.995-1.050				
408-410	DC	NL			Height			0.21	0.13	0.08				
			36:29				1.07	415.45	214.90	200.55	1.000	1234678-HpCDF	AN	
	DC	SN	36:45	RO			1.76	0.67			1.007			
	DC	SN	36:55	RO			1.28	0.96			1.012			
			38:08				1.06	354.42	182.54	171.88	1.045	1234789-HpCDF	AN	
408-410			2 Peaks					769.87						

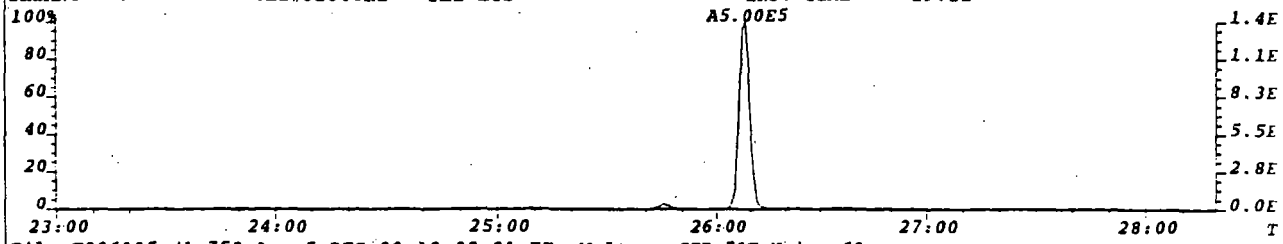
Compound M_Z....	QC.Log	Cmit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
13C12-HpCDF				0.37-0.51					0.945-1.110				
413-420	DC	NL		Height			0.16	0.07	0.09				
				36:29		0.43	314.63	94.75	219.88	1.000	13C12-HpCDF 678	IS6	
				Height			86.71	26.57	60.14				
				38:07		0.43	265.77	80.27	185.50	1.045	13C12-HpCDF 789	SUR4	
	DC	SN		38:25		0.41	0.48			1.053			
413-420			2	Peaks			580.40						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20					0.974-1.004				
424-426	DC	NL		Height			0.13	0.06	0.07				
				36:46		1.11	0.97	0.51	0.46	0.978			J
				37:35		1.03	295.76	150.39	145.37	1.000	1234678-HpCDD	AN	
	DC	WH		38:06	RO	2.29	0.29			1.014			
424-426			2	Peaks			296.73						
13C12-HpCDD				0.88-1.20					0.973-1.027				
436-438	DC	NL		Height			0.49	0.38	0.11				
	DC	SN		37:04	RO	5.14	1.00			0.986			
				37:35		1.06	323.89	166.42	157.47	1.000	13C12-HpCDD 678	IS7	
				Height			81.78	41.42	40.36				
				38:01	RO	3.55	1.77	3.09	0.87	1.012			
436-438			2	Peaks			325.66						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02					0.904-1.096				
442-444	DC	NL		Height			0.10	0.05	0.05				
				41:44		0.90	497.81	235.88	261.93	1.006	OCDF	AN	
	DC	SN		42:05	RO	0.71	0.21			1.014			
442-444			1	Peak			497.81						
OCDD				0.76-1.02					0.904-1.096				
458-460	DC	NL		Height			0.08	0.04	0.04				
				41:31		0.85	443.21	203.73	239.48	1.000	OCDD	AN	
				41:57	RO	0.40	0.36	0.17	0.42	1.011			
458-460			2	Peaks			443.57						
13C12-OCDD				0.76-1.02					0.996-1.004				
470-472	DC	NL		Height			0.14	0.07	0.07				
				41:30		0.86	495.07	228.44	266.63	1.000	13C12-OCDD	IS8	
				Height			100.87	46.80	54.07				
470-472			1	Peak			495.07						

Compound/
M_2.... QC.Log Omit Why ..RT. OK Ratio Total.Area/Ht Area/Ht.Peak1 Area/Ht.Peak2 Rel.RT Compound.Name.. ID.. Flags

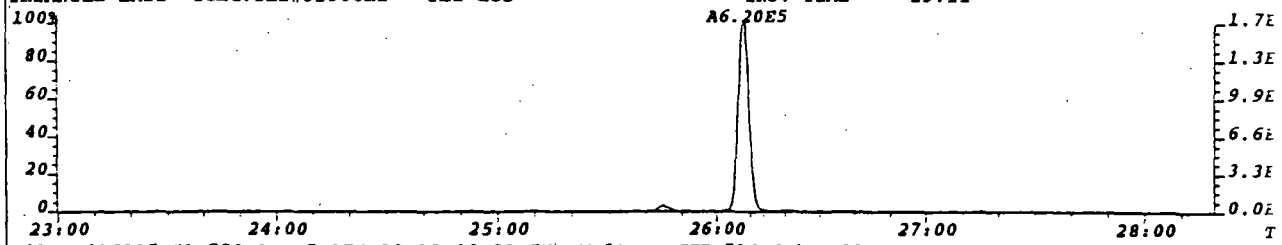
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_2 -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***

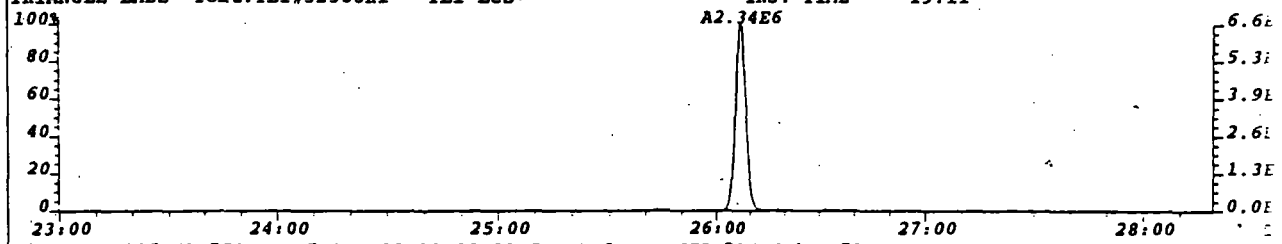
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:63
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



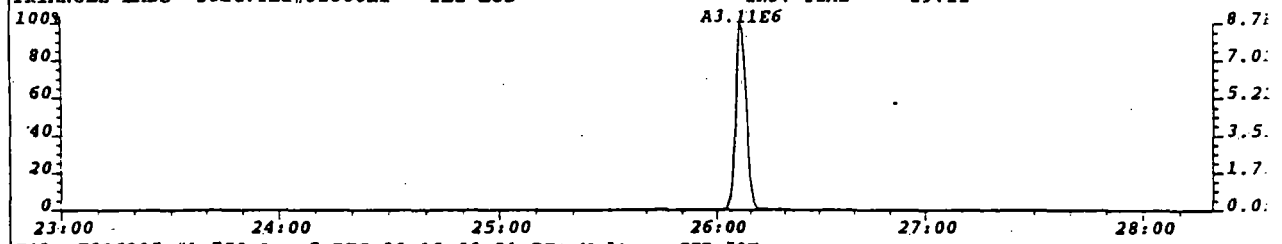
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:60
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,240.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



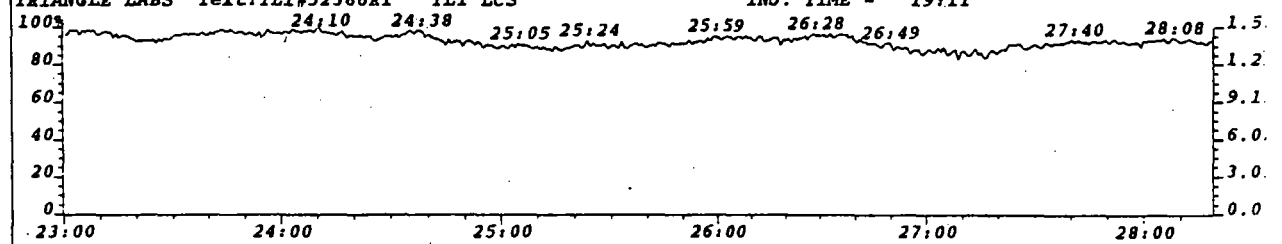
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:88
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,352.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



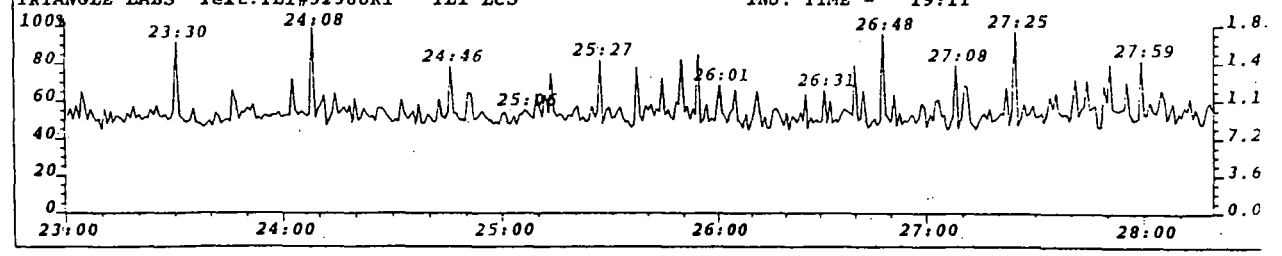
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:50
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



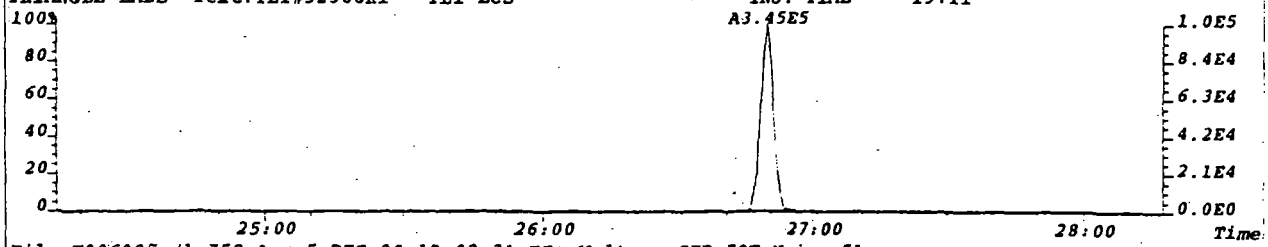
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



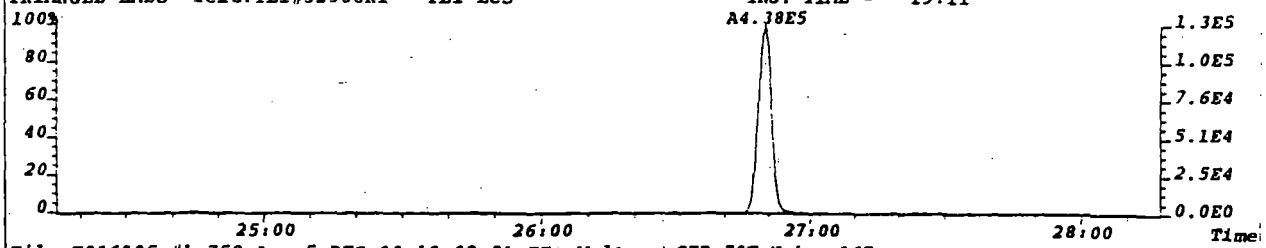
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



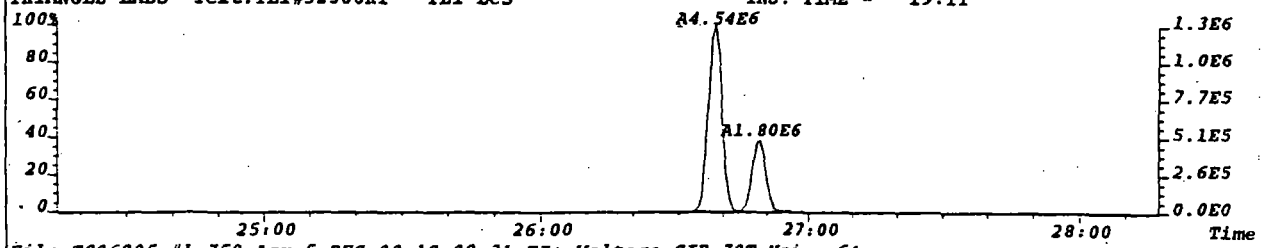
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:60
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,240.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



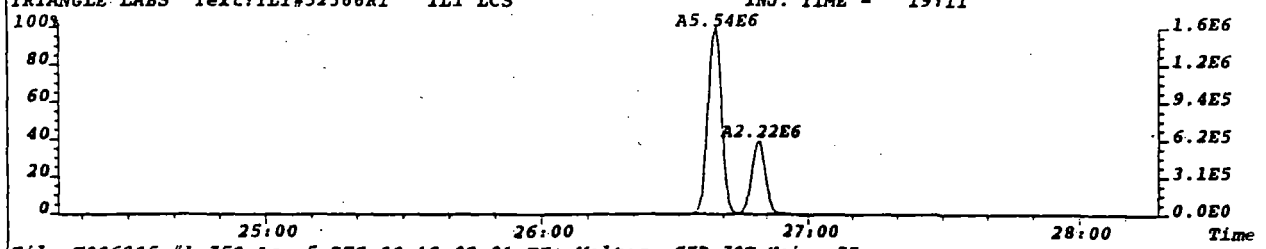
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:51
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,204.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



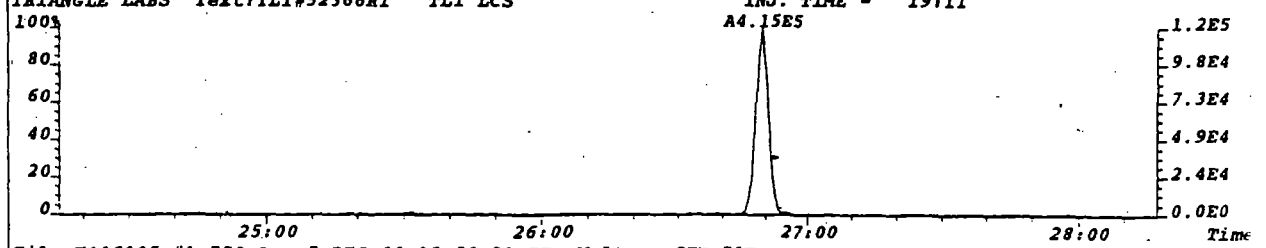
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:167
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,668.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



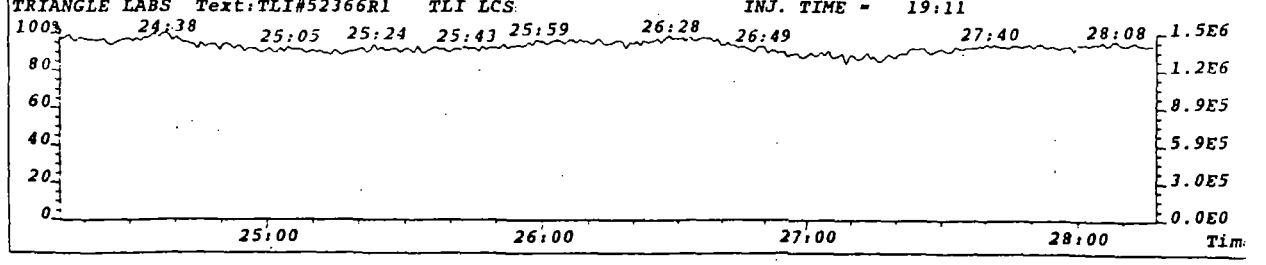
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:64
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,256.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



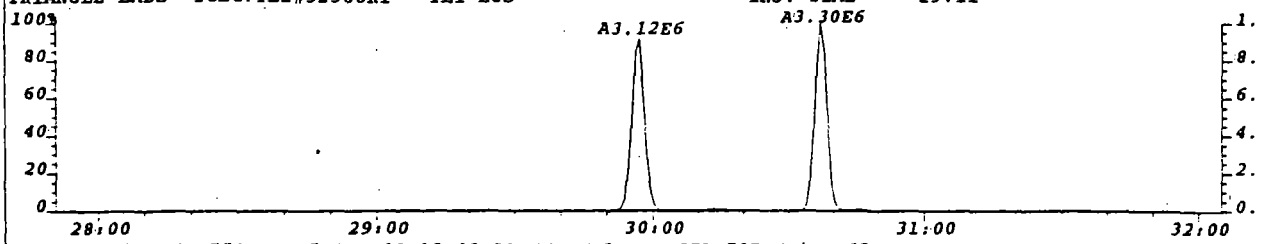
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:77
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,308.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



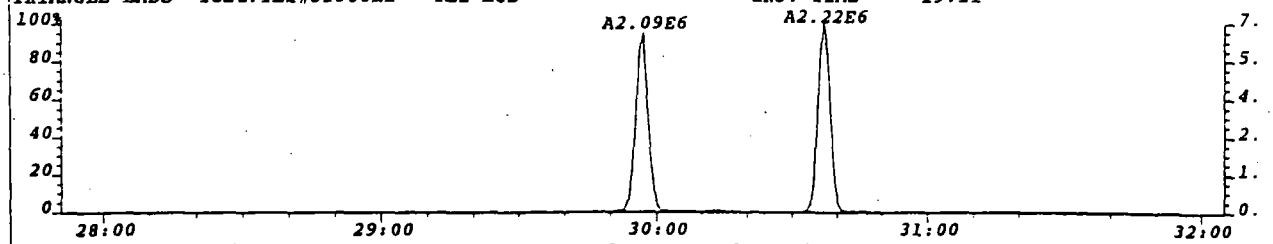
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



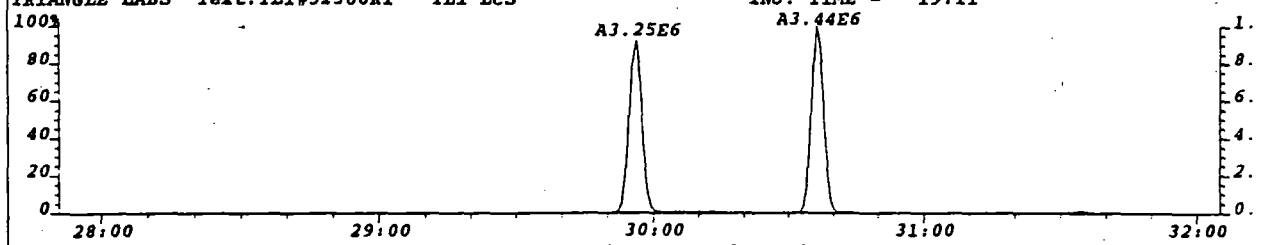
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:49
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



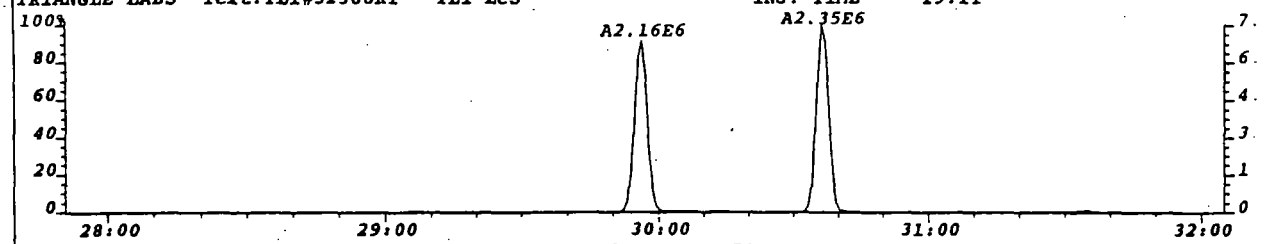
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:65
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,260.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



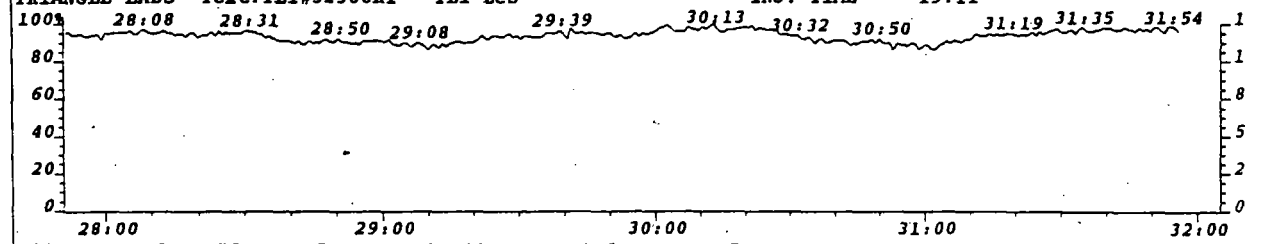
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:47
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,188.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



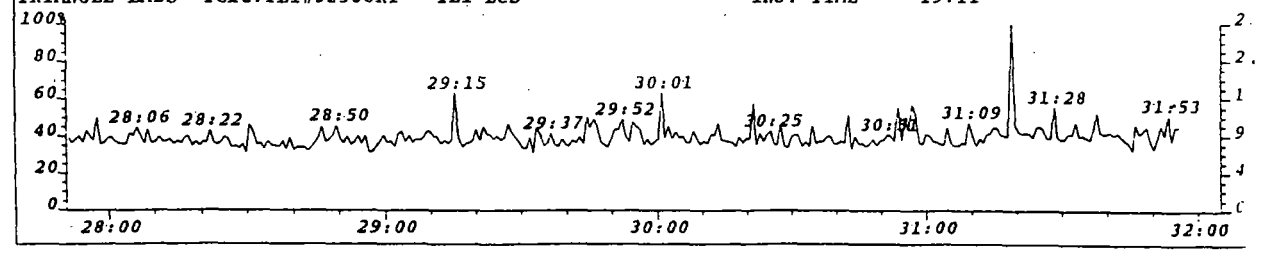
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:56
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,224.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11

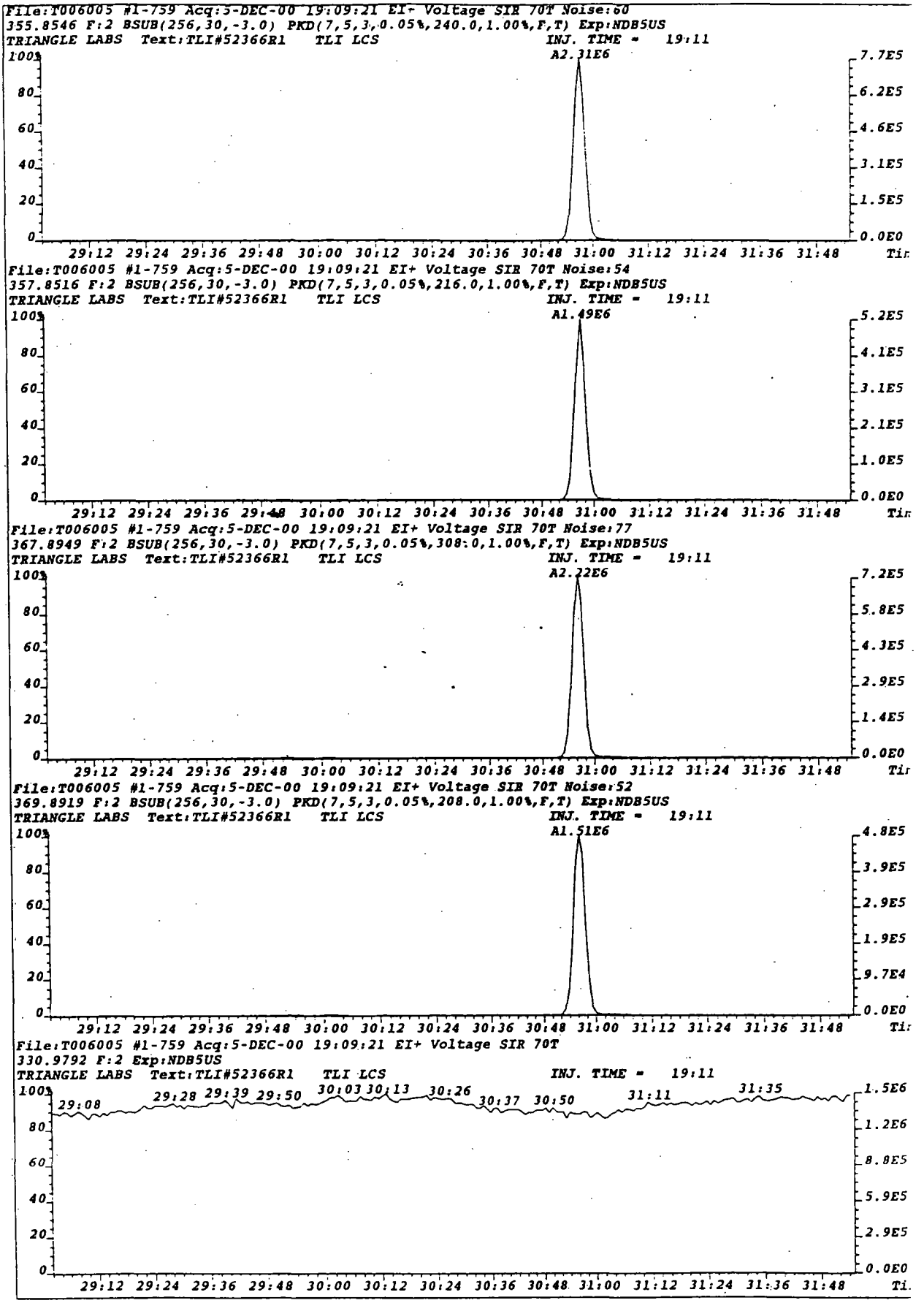


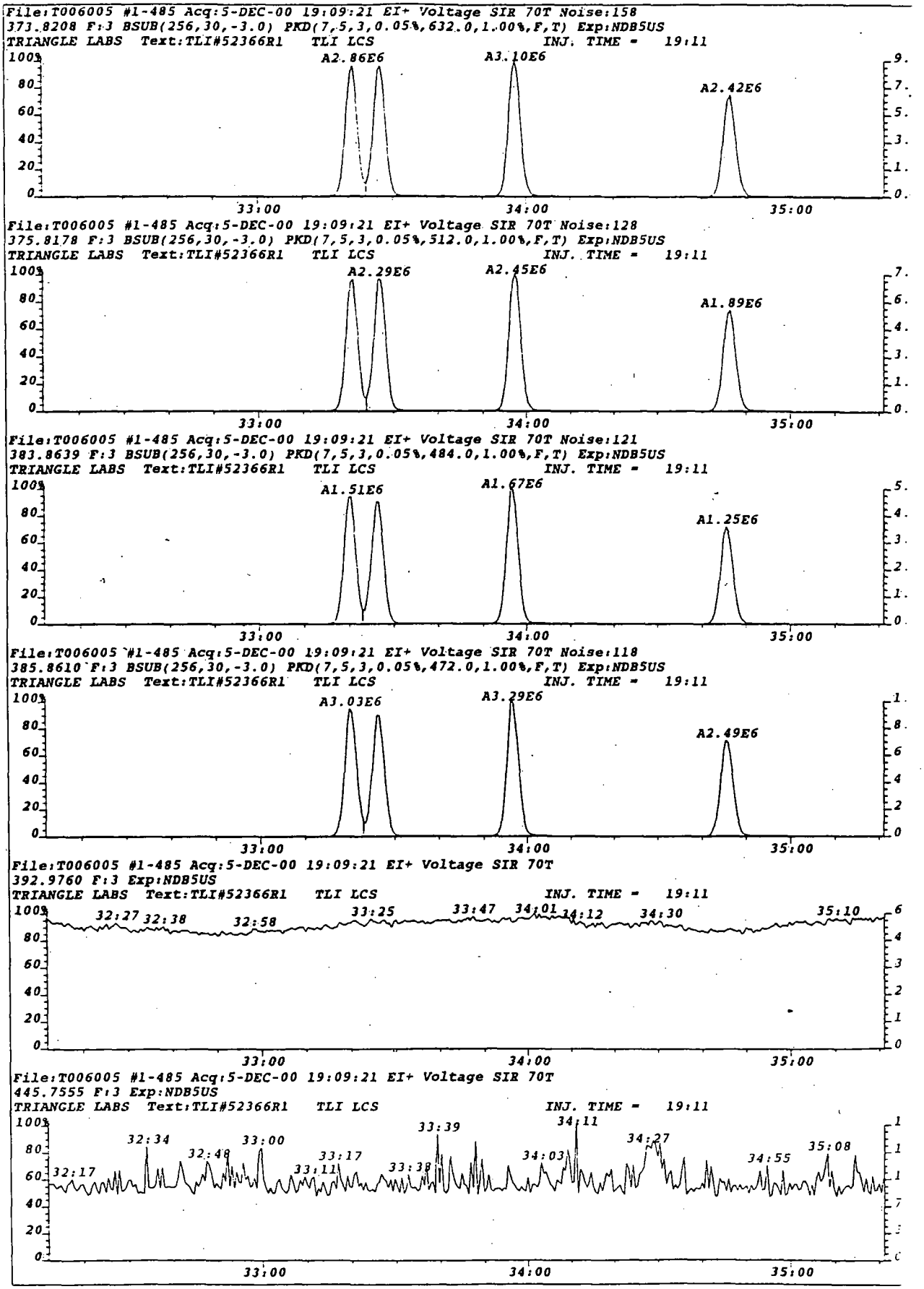
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11

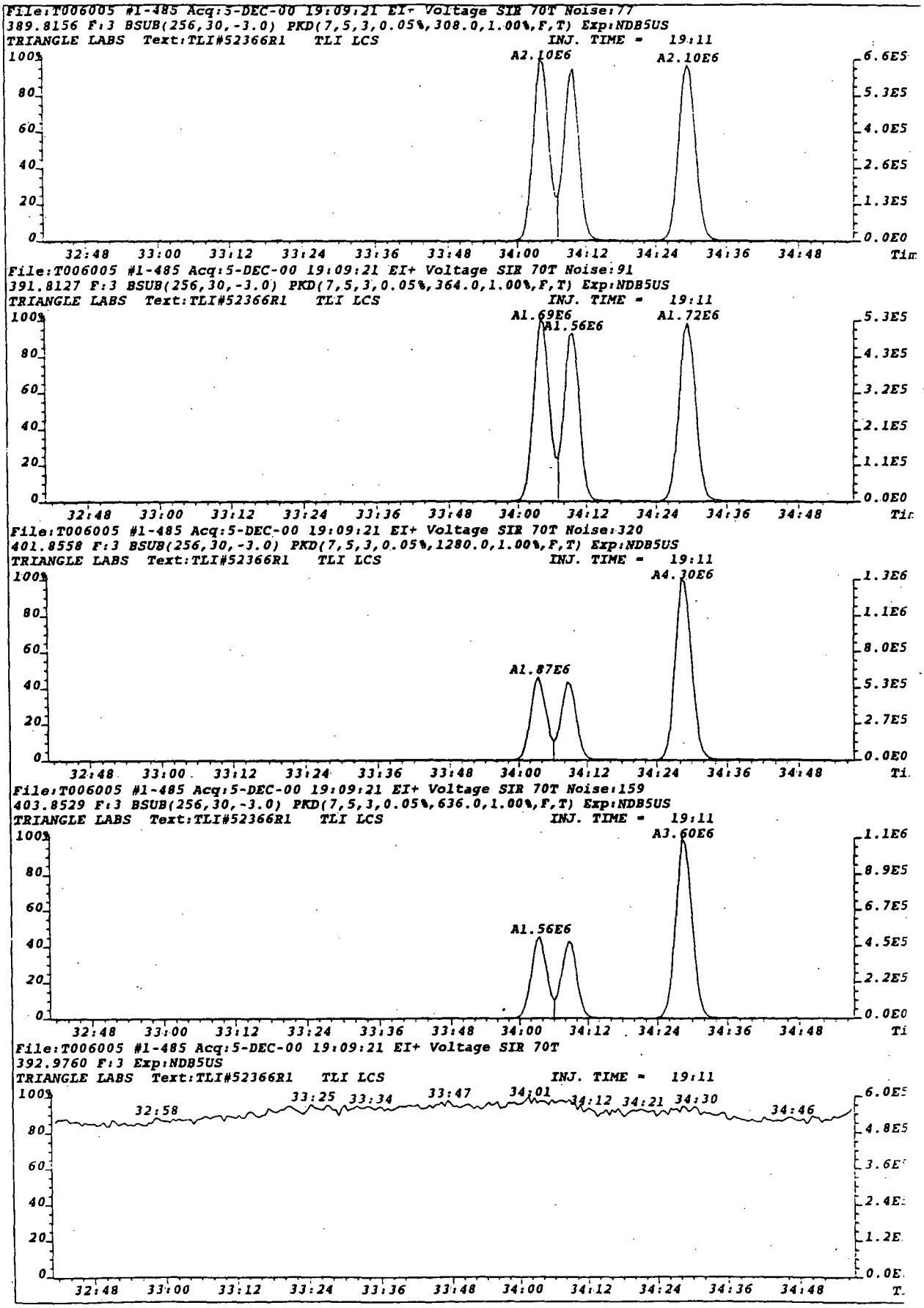


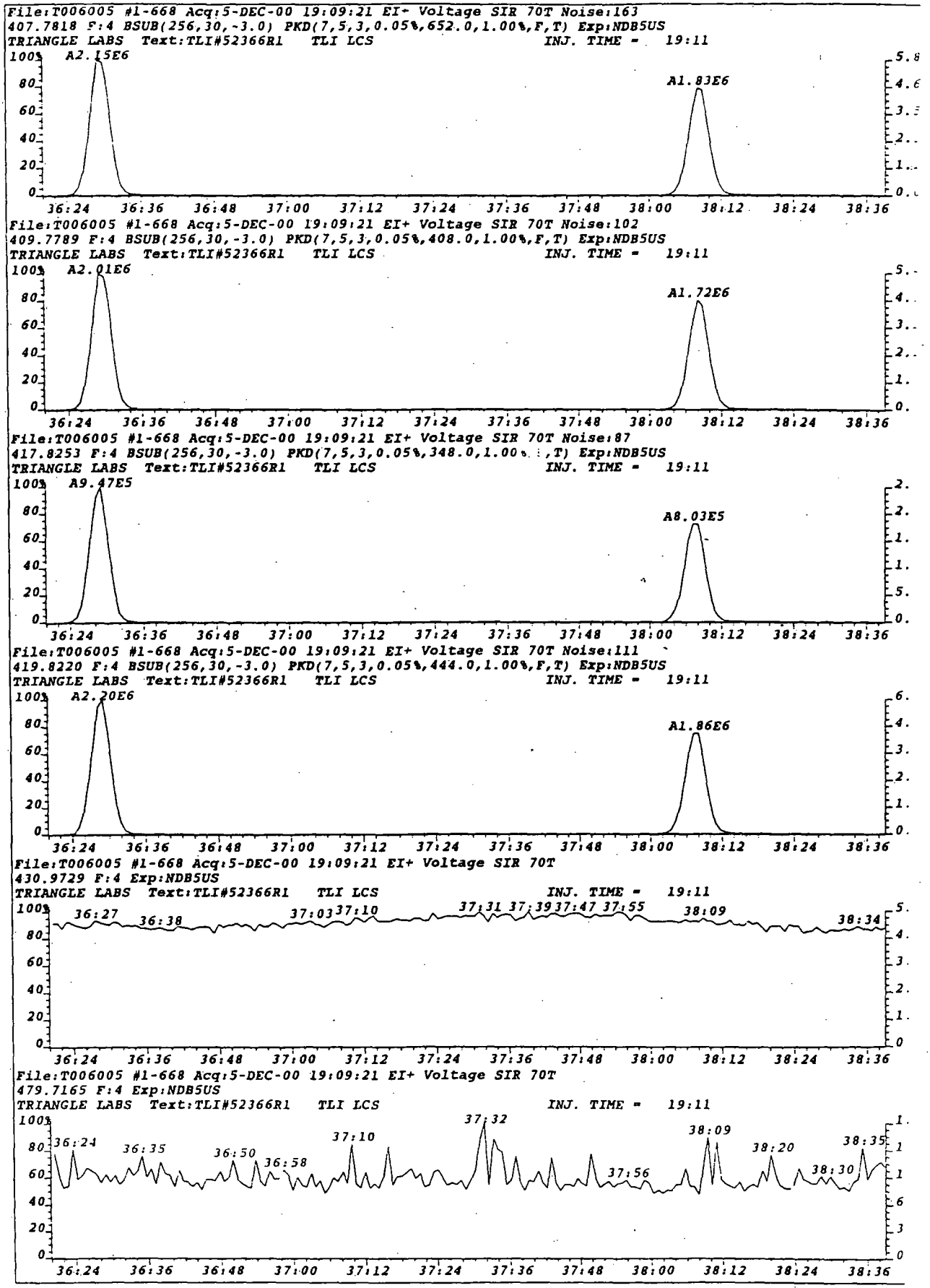
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11

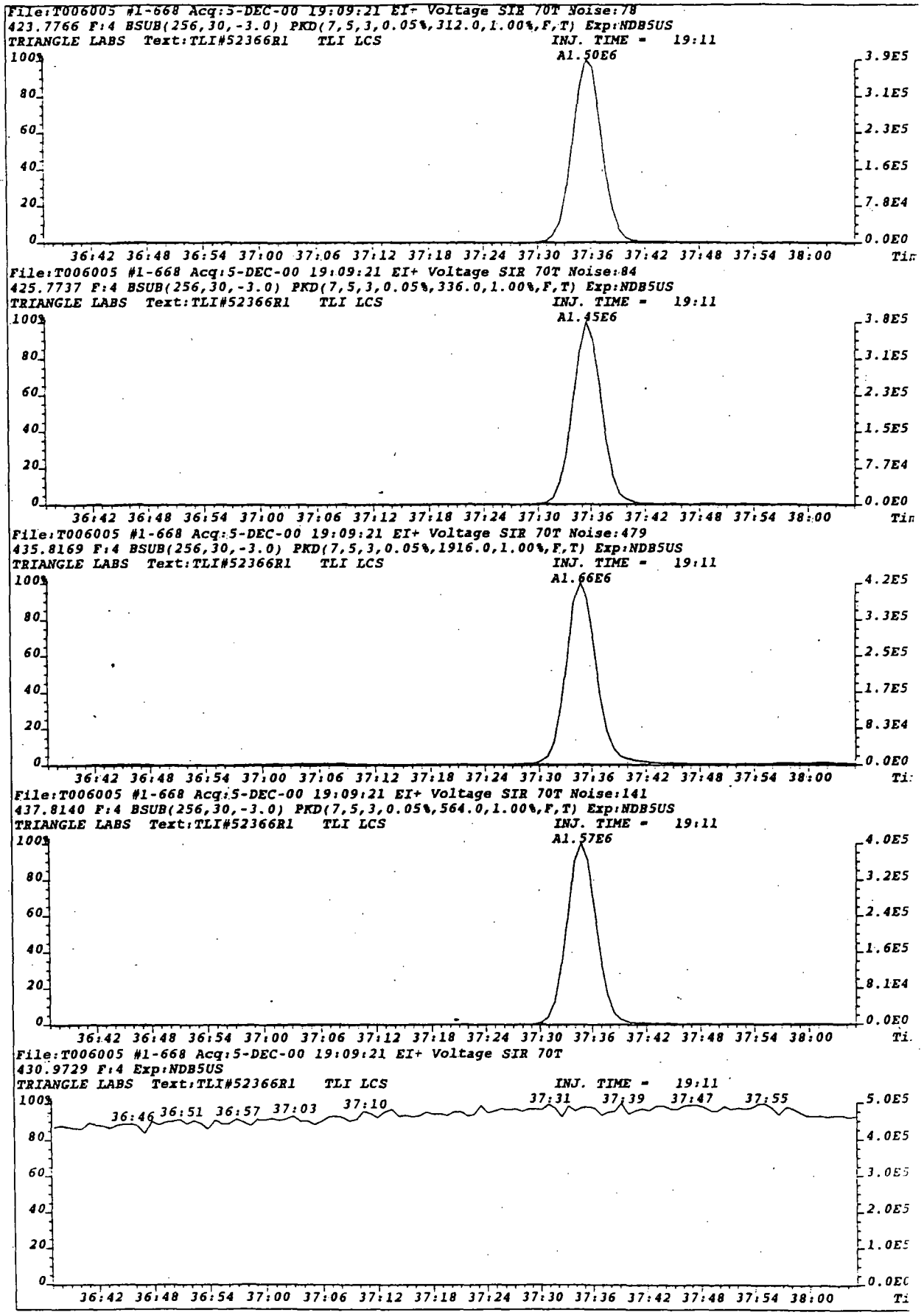


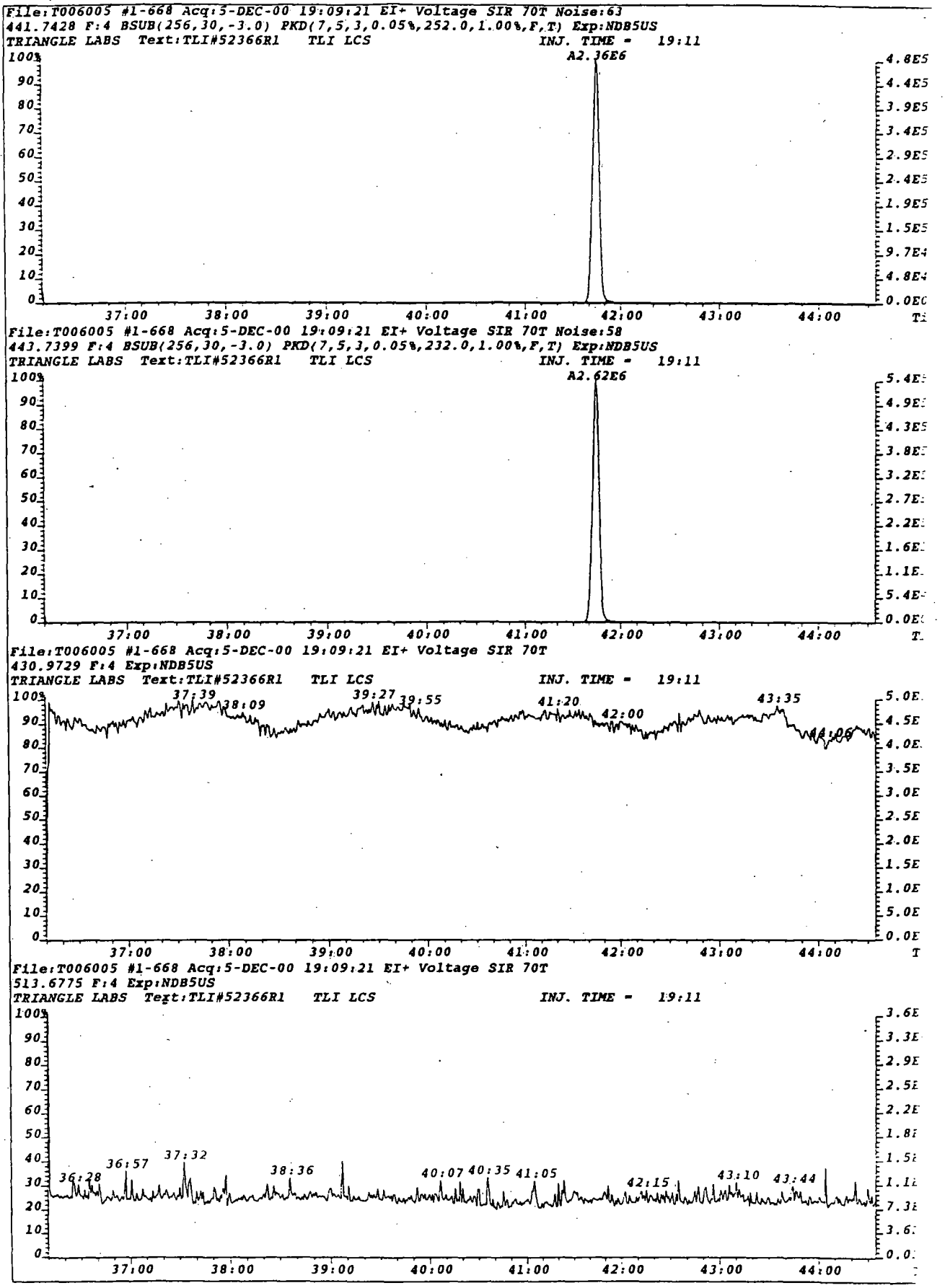

File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:60
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,240.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A2.31E6
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:54
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,216.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A1.49E6
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:77
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,308.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A2.22E6
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:52
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A1.51E6
File:T006005 #1-759 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11


File:T006005 #1-485 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:158
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,632.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
A2.86E6
A3.10E6
A2.42E6
File:T006005 #1-485 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:128
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,512.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
A2.29E6
A2.45E6
A1.89E6
File:T006005 #1-485 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:121
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,484.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
A1.51E6
A1.67E6
A1.25E6
File:T006005 #1-485 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:118
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,472.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
A3.03E6
A3.29E6
A2.49E6
File:T006005 #1-485 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
32:27 32:38 32:58 33:25 33:47 34:01 34:12 34:30 35:10
File:T006005 #1-485 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
32:17 32:34 32:48 33:00 33:11 33:17 33:38 33:39 34:03 34:11 34:27 34:55 35:08
33:00
34:00
35:00

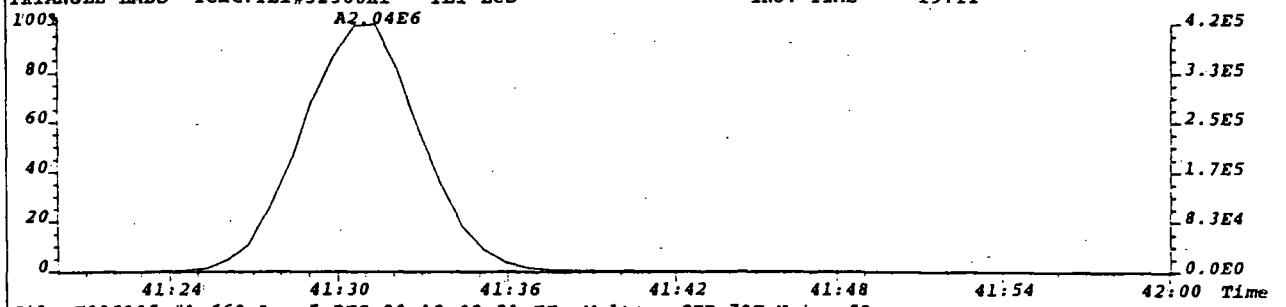

File:T006005 #1-485 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:77
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,308.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A2.10E6
A2.10E6
6.6E5
5.3E5
4.0E5
2.6E5
1.3E5
0.0E0
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48
File:T006005 #1-485 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:91
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,364.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A1.69E6
A1.56E6
A1.72E6
5.3E5
4.3E5
3.2E5
2.1E5
1.1E5
0.0E0
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48
File:T006005 #1-485 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:320
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1280.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A4.30E6
A1.87E6
1.3E6
1.1E6
8.0E5
5.3E5
2.7E5
0.0E0
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48
File:T006005 #1-485 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:159
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,636.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A3.60E6
A1.56E6
1.1E6
8.9E5
6.7E5
4.5E5
2.2E5
0.0E0
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48
File:T006005 #1-485 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
32:58
33:25
33:34
33:47
34:01
34:12
34:21
34:30
34:46
6.0E5
4.8E5
0.0E
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48


File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:163
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,652.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
A2.15E6
A1.83E6
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:102
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,408.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
A2.01E6
A1.72E6
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:87
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,348.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
A9.47E5
A8.03E5
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:111
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,444.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
A2.20E6
A1.86E6
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
36:24
36:36
36:48
37:00
37:12
37:24
37:36
37:48
38:00
38:12
38:24
38:36


File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:78
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,312.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A1.50E6
100%
80
60
40
20
0
3.9E5
3.1E5
2.3E5
1.6E5
7.8E4
0.0E0
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:84
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,336.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A1.45E6
3.8E5
3.1E5
2.3E5
1.5E5
7.7E4
0.0E0
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:479
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1916.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A1.66E6
4.2E5
3.3E5
2.5E5
1.7E5
8.3E4
0.0E0
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:141
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,564.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
A1.57E6
4.0E5
3.2E5
2.4E5
1.6E5
8.1E4
0.0E0
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS
INJ. TIME = 19:11
36:46 36:51 36:57 37:03 37:10 37:31 37:39 37:47 37:55
5.0E5
4.0E5
3.0E5
2.0E5
1.0E5
0.0E0
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00


File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:63
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
A2.36E6
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:58
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
A2.62E6
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
37:39
38:09
39:27
39:55
41:20
42:00
43:35
File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11
36:28
36:57
37:32
38:36
40:07
40:35
41:05
42:15
43:10
43:44
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00

File:T006005 #1-668 Acq:5-DEC-00 19:09:21 EI+ Voltage SIR 70T Noise:55
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,220.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



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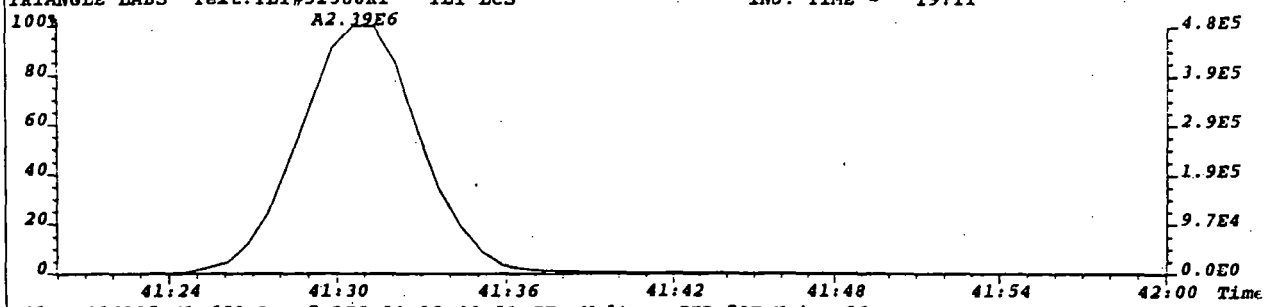
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



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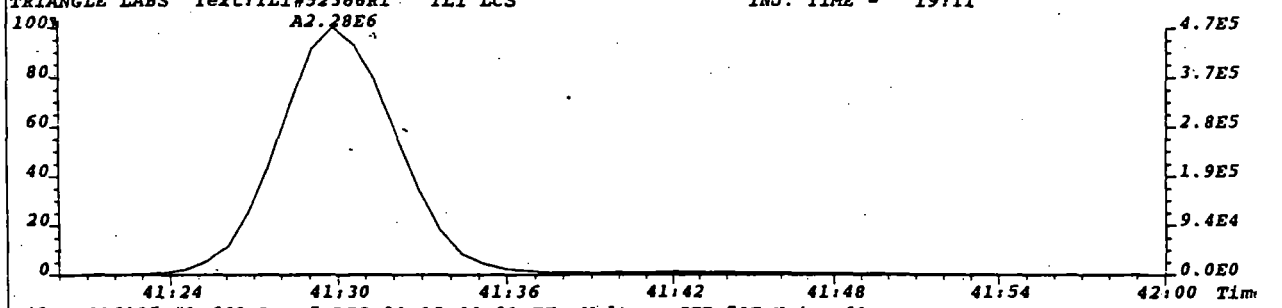
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,344.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



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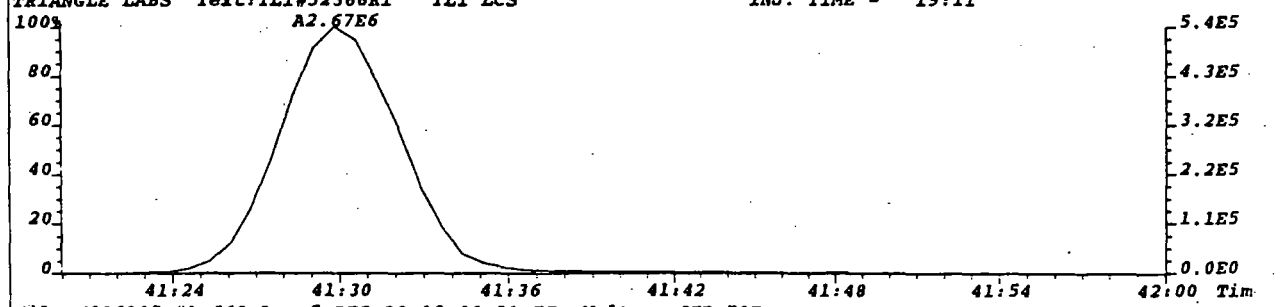
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



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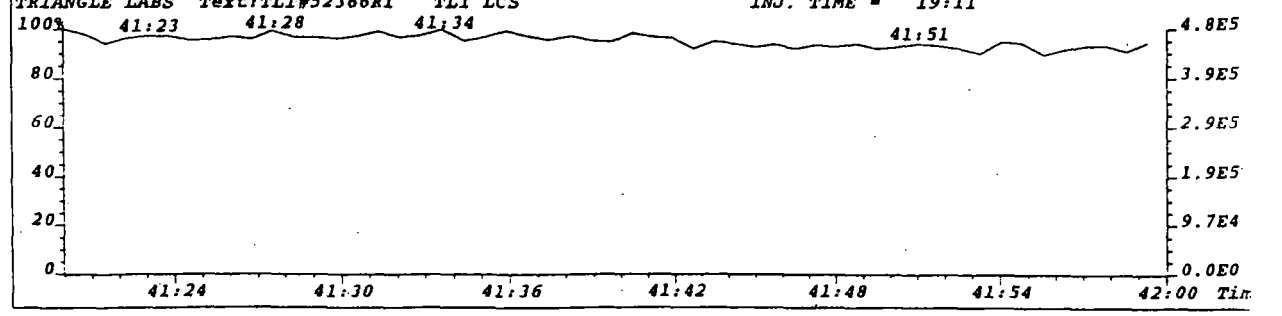
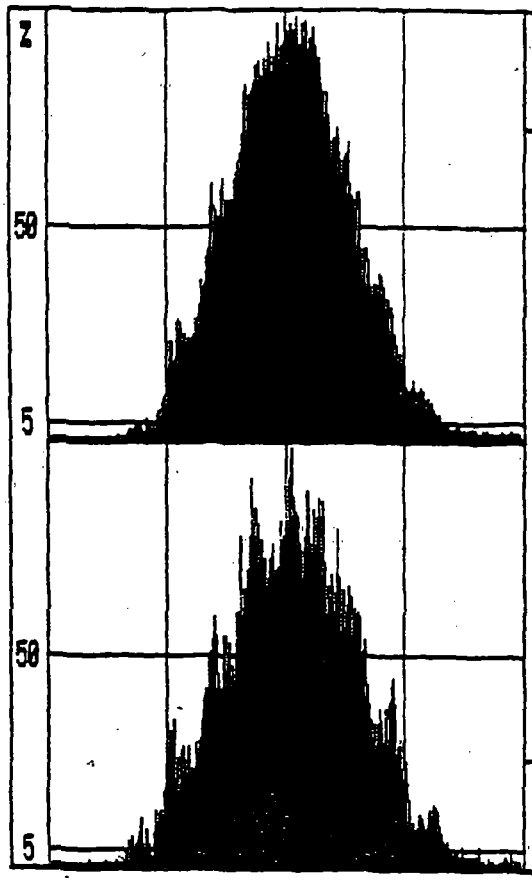
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCS INJ. TIME = 19:11



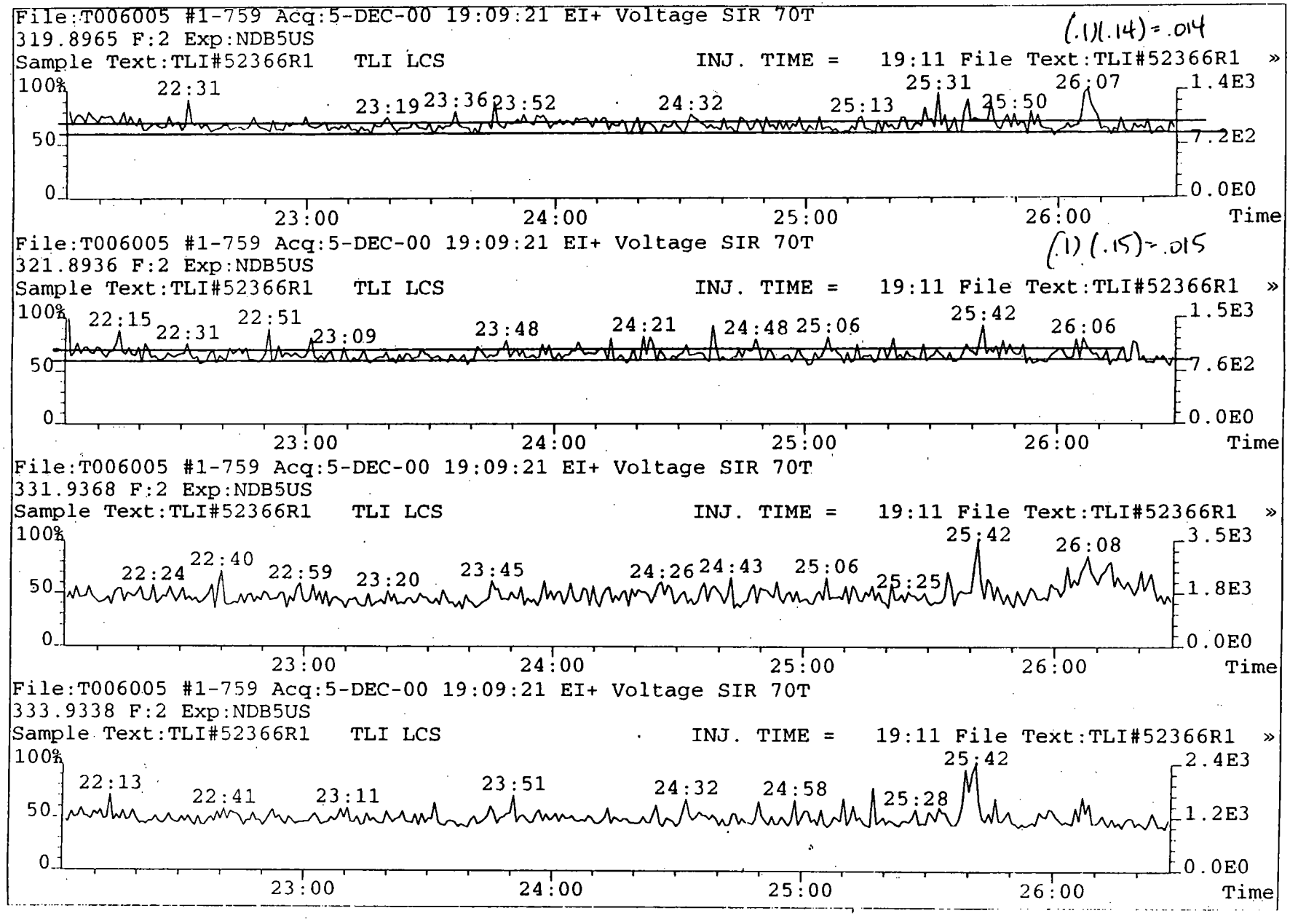


Channel	I	330.9792		Peak top	
Height	.68	volts	Span	200	ppm

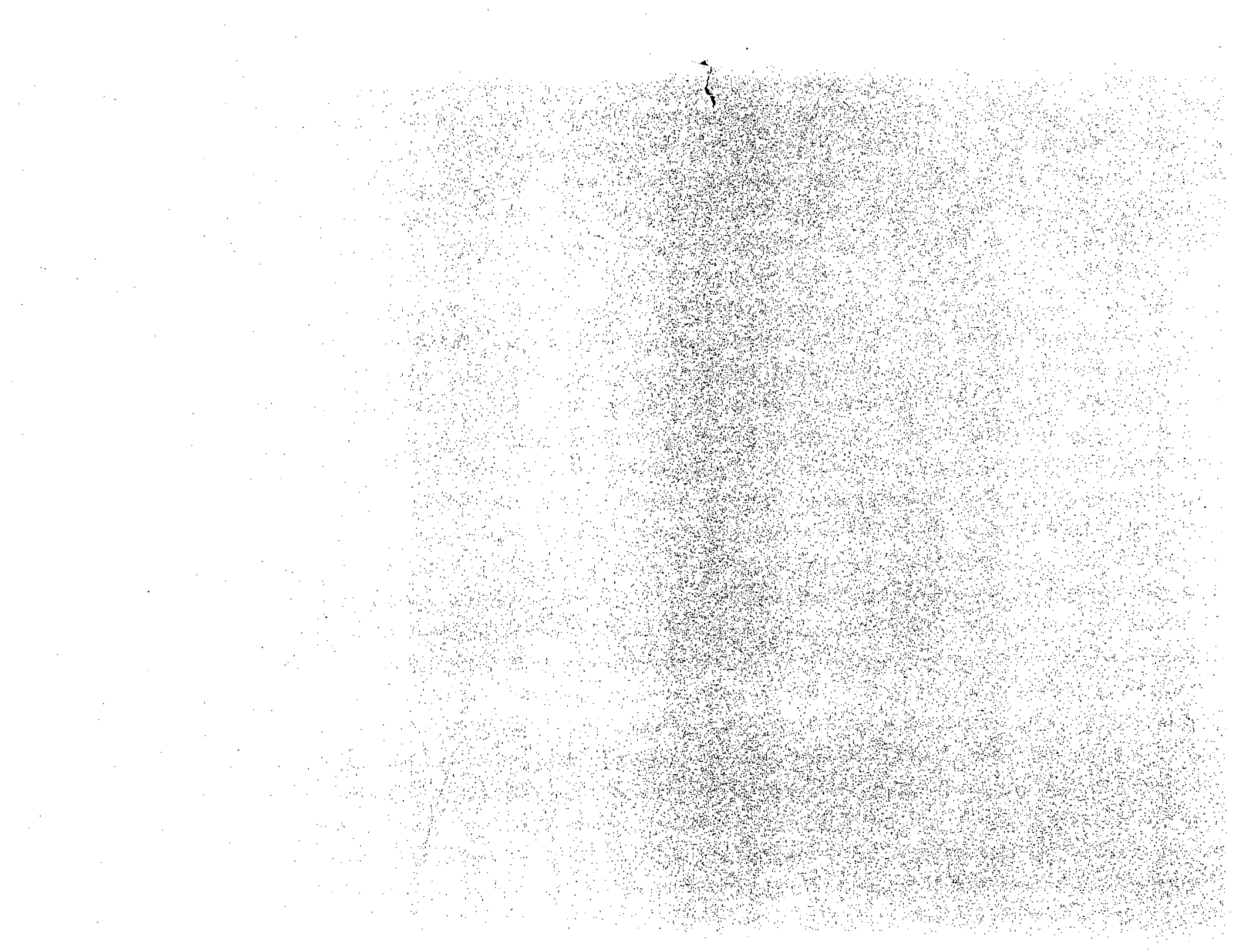
System file name	MD85US
Data file name	A:TD050003
Resolution	10000
Group number	2
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 416.9760

A	293	J	331	S	368
B	304	K	332	T	370
C	306	L	334	U	376
D	316	M	340	V	410
E	318	N	342		
F	320	O	352		
G	322	P	354		
H	328	Q	356		
I	331	R	358		

Ref. mass	416.9760			Peak top	
Height	.13	volts	Span	200	ppm



.014
.015
.029
JCA
12/13/00



TriMatrix, Inc.

TLI Project: **52366r1** Method 8290 PCDD/PCDF Analysis
Client Sample: **TLI LCSD** Analysis File: **T006**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	/ /	Spike File:	SPMIT32
TLI ID:	**TLI LCSD**	Date Extracted:	**12/01/2000**	ICal:	TF57140
		Date Analyzed:	**12/05/2000**	ConCal:	T005996
Sample Size:	**1.000 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005998**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**BWL**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Fla
2,3,7,8-TCDD	447			0.78	26:49	
1,2,3,7,8-PeCDD	2140			1.54	30:57	
1,2,3,4,7,8-HxCDD	2300			1.25	34:04	
1,2,3,6,7,8-HxCDD	2240			1.25	34:10	
1,2,3,7,8,9-HxCDD	2530			1.25	34:30	
1,2,3,4,6,7,8-HpCDD	2350			1.04	37:36	
1,2,3,4,6,7,8,9-OCDD	4260			0.86	41:31	
2,3,7,8-TCDF	435			0.84	26:08	
1,2,3,7,8-PeCDF	2180			1.49	29:57	
2,3,4,7,8-PeCDF	2290			1.49	30:37	
1,2,3,4,7,8-HxCDF	2370			1.26	33:21	
1,2,3,6,7,8-HxCDF	2390			1.27	33:27	
2,3,4,6,7,8-HxCDF	2840			1.26	33:58	
1,2,3,7,8,9-HxCDF	2920			1.28	34:46	
1,2,3,4,6,7,8-HpCDF	2250			1.08	36:30	
1,2,3,4,7,8,9-HpCDF	2590			1.06	38:09	
1,2,3,4,6,7,8,9-OCDF	4160			0.90	41:45	

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Fla
$^{13}C_{12}$-2,3,7,8-TCDF	953	47.6	40%-130%	0.74	26:08	
$^{13}C_{12}$-2,3,7,8-TCDD	941	47.0	40%-130%	0.79	26:48	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1070	53.5	40%-130%	1.47	29:56	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	1270	63.3	40%-130%	1.55	30:56	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	827	41.4	40%-130%	0.51	33:27	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1020	50.9	40%-130%	1.22	34:09	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	946	47.3	25%-130%	0.43	36:29	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1010	50.6	25%-130%	1.01	37:35	
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	2040	51.1	25%-130%	0.83	41:30	

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 17:41 12/13

TLI Project: 52366r1 Method 8290 PCDD/PCDF Analysis
Client Sample: TLI LCSD Analysis File: T006

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1140	56.8	40%-130%	1.48	30:36	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	846	42.3	40%-130%	0.50	33:20	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	983	49.1	40%-130%	1.21	34:03	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1050	52.5	25%-130%	0.43	38:08	

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flag
$^{37}Cl_4$-2,3,7,8-TCDD	105	52.6	40%-130%	26:50	

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1120	56.2	40%-130%	0.50	34:46	
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1020	50.8	40%-130%	0.51	33:57	

Recovery Standards	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,4-TCDD	0.80	26:38	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.20	34:29	

Data Reviewer: _____ 12/13/2000

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Initial ....Date...

Data Review By: JCH 12/13/00

Calculated Noise Height: 0.04

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T006006B.dbf
12/13/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_I....	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel.RT	Compound Name	ID	Flags
TCDF					0.65-0.89					0.980-1.070				
304-306	DC	NL			Height			0.10	0.06	0.04				
					25:46		0.70	2.25	0.93	1.32	0.986	1278-TCDF		AN
	DC	SN			25:56	RO	1.13	0.14			0.992			
					26:08		0.84	86.72	39.64	47.08	1.000	2378-TCDF		AN
304-306			2	Peaks				88.97						
13C12-TCDF					0.65-0.89					0.962-1.038				
316-318	DC	NL			Height			0.11	0.06	0.05				
					25:45		0.82	1.97	0.89	1.08	0.985			
					26:08		0.74	389.80	166.20	223.60	1.000	13C12-2378-TCDF		ISO
					Height			108.33	46.27	62.06				
					26:33	RO	1.01	2.48	1.42	1.40	1.016			
					26:49	RO	1.29	0.55	0.40	0.31	1.026			
316-318			4	Peaks				394.80						

---------- Above: TCDF / TCDD Follows ----------

TCDD					0.65-0.89					0.904-1.042				
320-322	DC	NL			Height			0.08	0.04	0.04				
	DC	SN			24:35	RO	0.36	0.11			0.917			
					26:49		0.78	64.53	28.29	36.24	1.001	2378-TCDD		AN
	DC	SN			27:06	RO	2.40	0.09			1.011			
320-322			1	Peak				64.53						
37C1-TCDD										0.925-1.075				
328	DC	NL			Height			0.05	0.05					
	DC	WL			24:13			0.10			0.904			
	DC	WL			24:19			0.15			0.907			
					25:30			0.21	0.21		0.951			
	DC	SN			26:30			0.02			0.989			
	DC	SN			26:34			0.10			0.991			
	DC	SN			26:41			0.11			0.996			
					26:50			29.88	29.38		1.001	37C1-TCDD		CLS
	DC	SN			27:07			0.14			1.012			
	DC	SN			27:24			0.26			1.022			
	DC	SN			27:42			0.17			1.034			
	DC	SN			27:51			0.05			1.039			
	DC	SN			27:57			0.15			1.043			
	DC	SN			28:02			0.04			1.046			
					28:17			0.32	0.32		1.055			
328			3	Peaks				30.41						

Compound M_3....	QC.Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
13C12-TCDD				0.65-0.89					0.925-1.075				
332-334	DC	NL				Height	0.13	0.08	0.05				
				25:41	RO	3.06	0.32	0.55	0.13	0.958			
				26:38		0.80	638.34	283.61	354.73	0.994	13C12-1234-TCDD	RS1	
				26:48		0.79	315.80	139.82	175.98	1.000	13C12-2378-TCDD	IS1	
						Height	88.69	38.84	49.85				
332-334			3 Peaks				954.46						
---------- Above: TCDD / PeCDF Follows ----------													
PeCDF				1.32-1.78					0.930-1.060				
340-342	DC	NL				Height	0.09	0.04	0.05				
				29:07	RO	1.01	1.73	0.69	0.68	0.973			J
				29:35	RO	1.05	1.45	0.60	0.57	0.988			J
				29:57		1.49	407.03	243.76	163.27	1.001	12378-PeCDF	AN	
				30:14		1.37	5.82	3.36	2.46	1.010			J
				30:37		1.49	433.18	259.40	173.78	1.023	23478-PeCDF	AN	
				30:55	RO	0.67	0.61	0.37	0.55	1.033			J
				31:35	RO	1.12	2.58	1.13	1.01	1.055			J
340-342			7 Peaks				852.40						
13C12-PeCDF				1.32-1.78					0.366-1.134				
352-354	DC	NL				Height	0.08	0.04	0.04				
				29:08		1.65	0.69	0.43	0.26	0.973			
				29:56		1.47	409.50	243.66	165.84	1.000	13C12-PeCDF 123	IS2	
						Height	128.09	76.33	51.76				
				30:14	RO	1.80	3.11	2.20	1.22	1.010			
				30:36		1.48	430.69	257.20	173.49	1.022	13C12-PeCDF 234	SUR1	
				31:35		1.49	4.33	2.59	1.74	1.055			
352-354			5 Peaks				848.32						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD				1.32-1.78					0.938-1.020				
356-358	DC	NL				Height	0.08	0.04	0.04				
	DC	SN		30:01	RO	0.71	0.16			0.970			
				30:13		1.47	0.42	0.25	0.17	0.977			J
				30:57		1.54	311.44	189.02	122.42	1.001	12378-PeCDD	AN	
	DC	SN		31:27	RO	0.92	0.20			1.017			
356-358			2 Peaks				311.86						
13C12-PeCDD				1.32-1.78					0.871-1.129				
368-370	DC	NL				Height	0.08	0.04	0.04				
				29:53		1.40	1.32	0.77	0.55	0.966			
				30:01	RO	1.25	1.45	0.71	0.57	0.970			
				30:13	RO	0.59	0.21	0.13	0.22	0.977			
				30:56		1.55	275.45	167.28	108.17	1.000	13C12-PeCDD 123	IS3	
						Height	86.47	52.52	33.95				
				31:24		1.71	0.46	0.29	0.17	1.015			
368-370			5 Peaks				278.89						

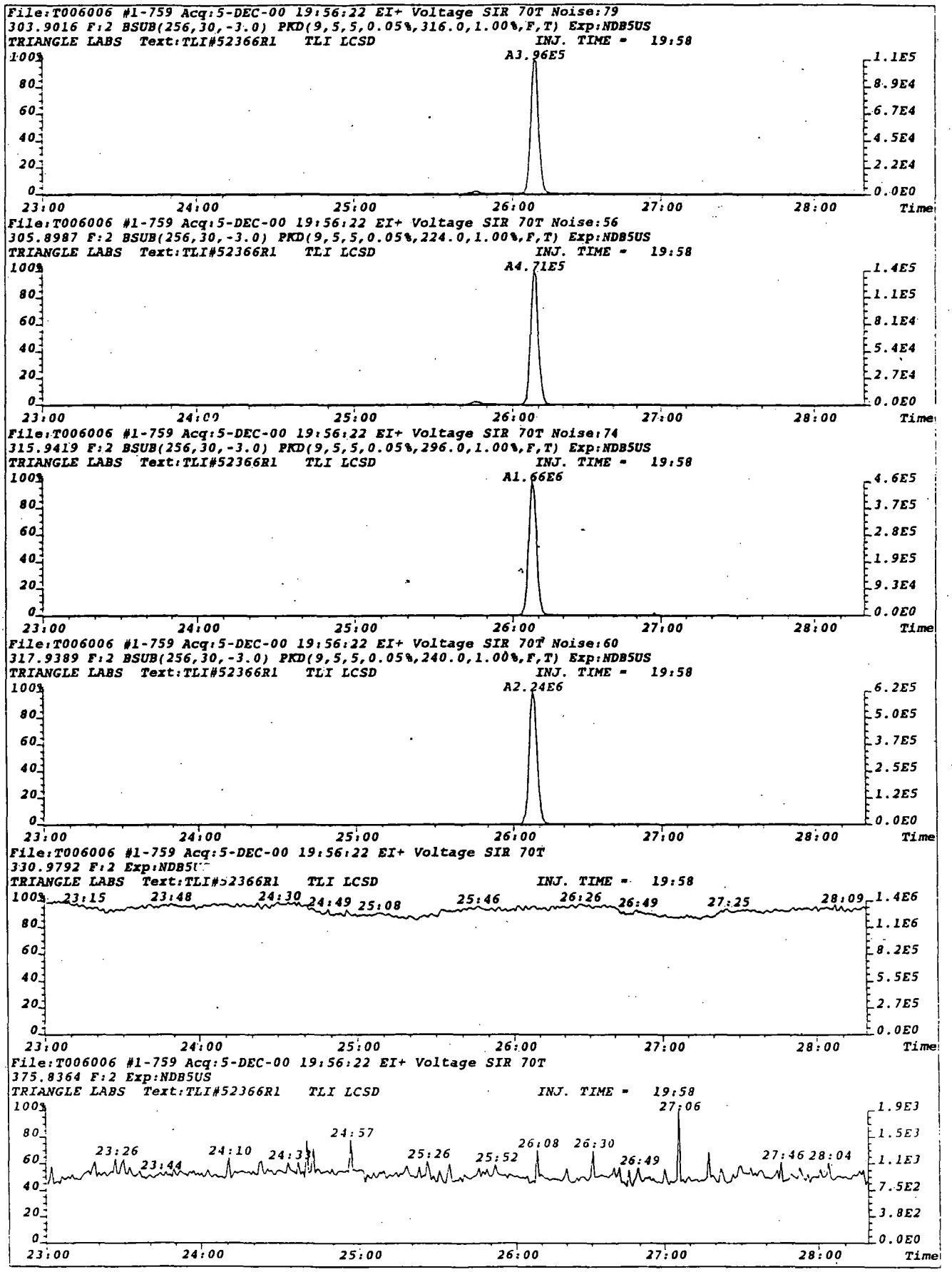
Compound/ M_Z....	QC	Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
---------- Above: PeCDD / HxCDF Follows ----------														
HxCDF					1.05-1.43					0.963-1.047				
374-376	DC	NL			Height			0.13	0.07	0.06				
					32:31	RO	1.61	0.63	0.45	0.28	0.972			J
					33:21		1.26	377.98	210.59	167.39	0.997	123478-HxCDF	AN	
					33:27		1.27	399.21	222.99	176.22	1.000	123678-HxCDF	AN	
					33:46		1.42	0.46	0.27	0.19	1.009			J
					33:58		1.26	430.47	239.97	190.50	1.015	234678-HxCDF	AN	
					34:46		1.28	361.63	202.82	158.81	1.039	123789-HxCDF	AN	
374-376				6	Peaks			1,570.38						
13C12-HxCDF					0.43-0.59					0.880-1.120				
384-386	DC	NL			Height			0.14	0.06	0.08				
					32:22		0.56	0.81	0.29	0.52	0.968			
					32:30	RO	0.62	0.98	0.33	0.53	0.972			
					33:20		0.50	313.90	104.72	209.18	0.997	13C12-HxCDF 478	SUR2	
					33:27		0.51	311.41	105.22	206.19	1.000	13C12-HxCDF 678	IS4	
					Height			97.69	33.07	64.62				
					33:57		0.51	349.18	117.49	231.69	1.015	13C12-HxCDF 234	ALT2	
					34:07	RO	0.78	0.74	0.25	0.32	1.020			
	DC	SN			34:12		0.44	0.23			1.022			
					34:46		0.50	283.55	95.11	188.44	1.039	13C12-HxCDF 789	ALT1	
384-386				7	Peaks			1,260.57						
---------- Above: HxCDF / HxCDD Follows ----------														
HxCDD					1.05-1.43					0.957-1.013				
390-392	DC	NL			Height			0.09	0.04	0.05				
					34:04		1.25	280.83	155.80	125.03	0.998	123478-HxCDD	AN	
					34:10		1.25	273.12	151.75	121.37	1.000	123678-HxCDD	AN	
					34:30		1.25	311.16	172.82	138.34	1.010	123789-HxCDD	AN	
	DC	WH			34:49	RO	0.31	0.18			1.020			
390-392				3	Peaks			865.11						
13C12-HxCDD					1.05-1.43					0.971-1.029				
402-404	DC	NL			Height			0.09	0.04	0.05				
					33:31		1.21	1.35	0.74	0.61	0.981			
					34:03		1.21	239.44	131.07	108.37	0.997	13C12-HxCDD 478	SUR3	
					34:09		1.22	239.85	131.69	108.16	1.000	13C12-HxCDD 678	IS5	
					Height			73.66	40.26	33.40				
					34:29		1.20	518.61	283.22	235.39	1.010	13C12-HxCDD 789	RS2	
					34:53	RO	2.25	0.27	0.27	0.12	1.021			
402-404				5	Peaks			999.52						
---------- Above: HxCDD / HpCDF Follows ----------														
HpCDF					0.88-1.20					0.995-1.050				
408-410	DC	NL			Height			0.14	0.08	0.06				
					36:30		1.08	336.00	174.49	161.51	1.000	1234678-HpCDF	AN	
					36:56	RO	1.30	0.94	0.60	0.46	1.012			J
					38:09		1.06	299.03	153.76	145.27	1.046	1234789-HpCDF	AN	

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
408-410			3 Peaks				635.97						
13C12-HpCDF				0.37-0.51					0.945-1.110				
418-420	DC	NL		Height			0.09	0.04	0.05				
				36:29		0.43	237.92	71.07	166.85	1.000	13C12-HpCDF 678	IS6	
				Height			67.82	19.77	48.05				
				38:08		0.43	205.44	62.05	143.39	1.045	13C12-HpCDF 789	SUR4	
				38:24	RO	1.25	0.23	0.20	0.16	1.053			
	DC	SN		38:42	RO	0.34	0.39			1.061			
418-420			3 Peaks				443.59						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20					0.974-1.004				
424-426	DC	NL		Height			0.12	0.06	0.06				
				36:48	RO	1.47	0.61	0.44	0.30	0.979			J
				37:36		1.04	226.45	115.33	111.12	1.000	1234678-HpCDD	AN	
	DC	WH		37:53	RO	0.33	0.18			1.008			
424-426			2 Peaks				227.06						
13C12-HpCDD				0.88-1.20					0.973-1.027				
436-438	DC	NL		Height			0.11	0.06	0.05				
				36:47	RO	1.95	0.41	0.39	0.20	0.979			
				37:35		1.01	225.15	113.16	111.99	1.000	13C12-HpCDD 678	IS7	
				Height			58.63	28.92	29.71				
	DC	SN		37:51	RO	2.33	0.24			1.007			
436-438			2 Peaks				225.56						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02					0.904-1.096				
442-444	DC	NL		Height			0.05	0.02	0.03				
				41:45		0.90	422.77	199.73	223.04	1.006	OCDF		AN
442-444			1 Peak				422.77						
OCDD				0.76-1.02					0.904-1.096				
458-460	DC	NL		Height			0.06	0.03	0.03				
				41:31		0.86	359.75	166.73	193.02	1.000	OCDD		AN
458-460			1 Peak				359.75						
13C12-OCDD				0.76-1.02					0.996-1.004				
470-472	DC	NL		Height			0.07	0.04	0.03				
				41:30		0.83	369.89	167.49	202.40	1.000	13C12-OCDD		IS8
				Height			77.34	35.59	41.75				
470-472			1 Peak				369.89						

Compound/
M_Z.... QC.Log Omit Why ..RT. OK Ratio Total.Area/Ht Area/Ht.Peak1 Area/Ht.Peak2 Rel.RT Compound.Name.. ID.. Flag.

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***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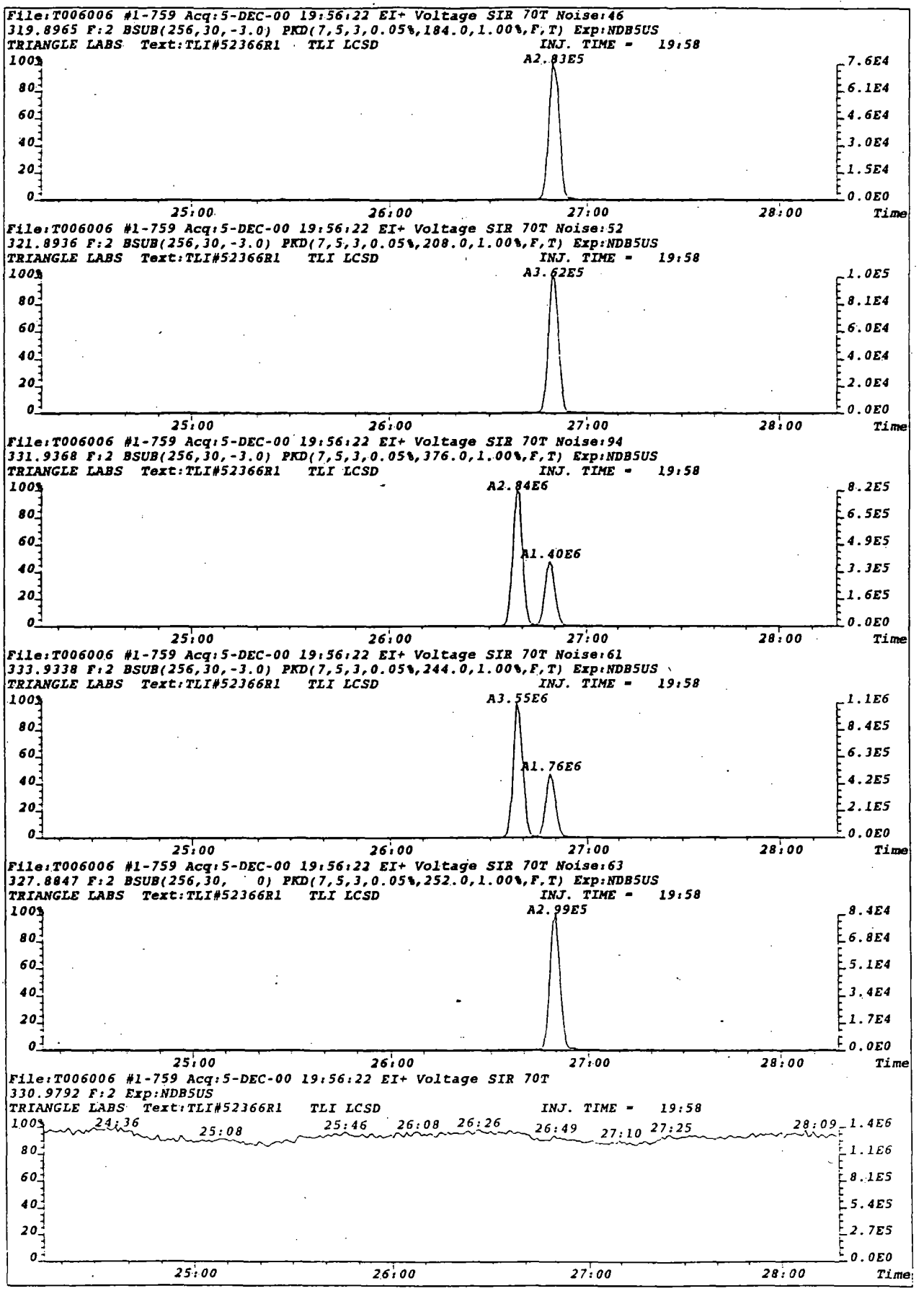
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,316.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A3.96E5
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:56
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,224.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A4.71E5
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:74
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,296.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.66E6
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:60
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,240.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A2.24E6
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
Time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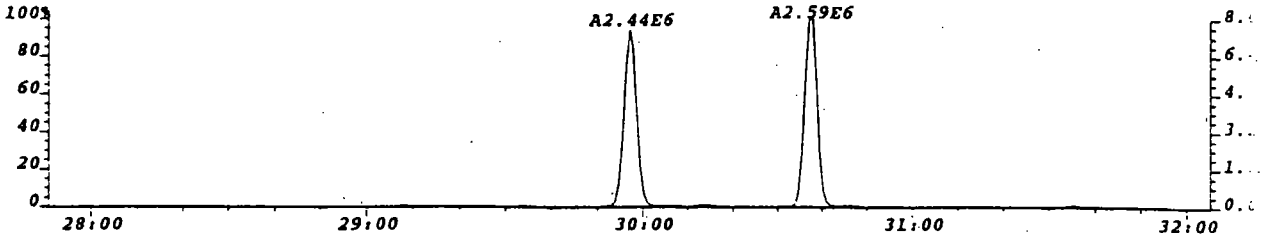
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A2.83E5
25:00 26:00 27:00 28:00 Time
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:52
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A3.62E5
25:00 26:00 27:00 28:00 Time
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:94
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,376.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A2.84E6
A1.40E6
25:00 26:00 27:00 28:00 Time
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:61
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,244.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A3.55E6
A1.76E6
25:00 26:00 27:00 28:00 Time
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:63
327.8847 F:2 BSUB(256,30, 0) PKD(7,5,3,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A2.99E5
25:00 26:00 27:00 28:00 Time
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
24:36 25:08 25:46 26:08 26:26 26:49 27:10 27:25 28:09
25:00 26:00 27:00 28:00 Time

File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:53
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58



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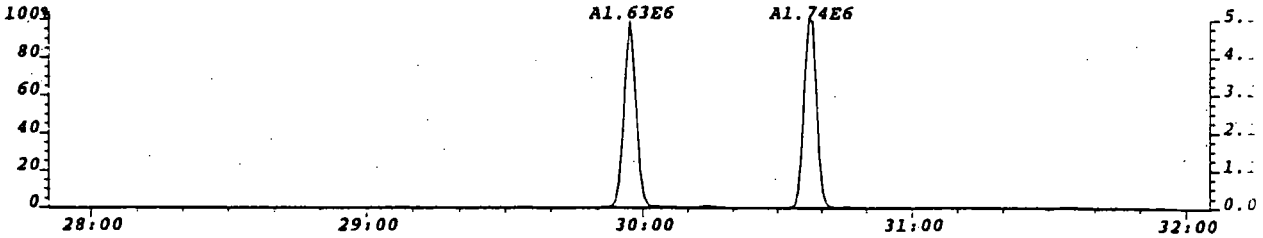
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,260.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58



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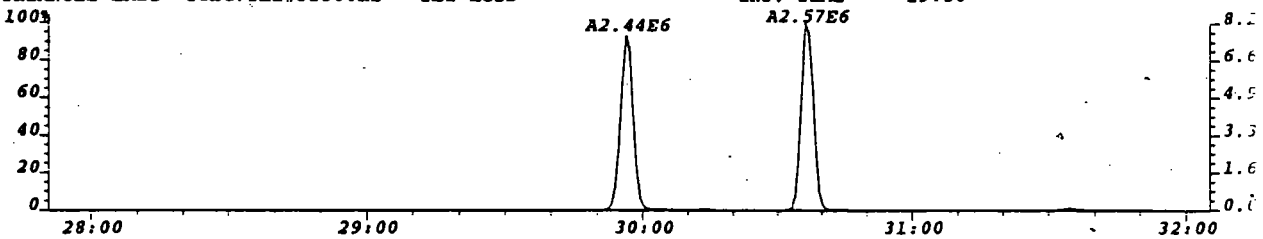
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58



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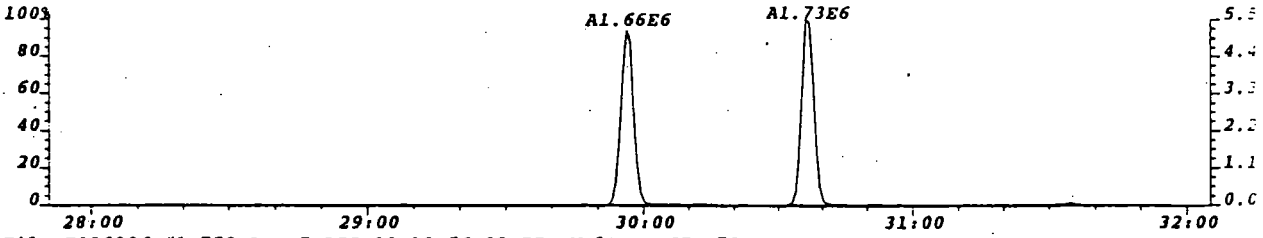
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,192.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58



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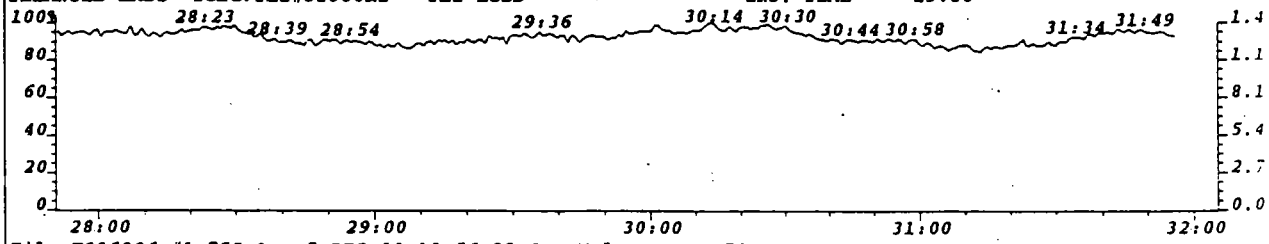
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58



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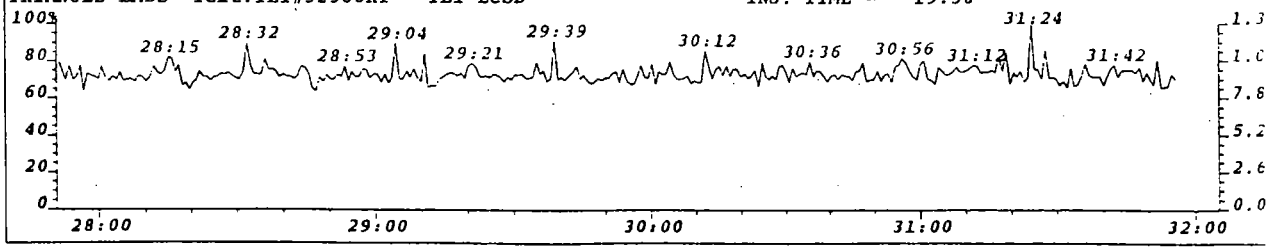
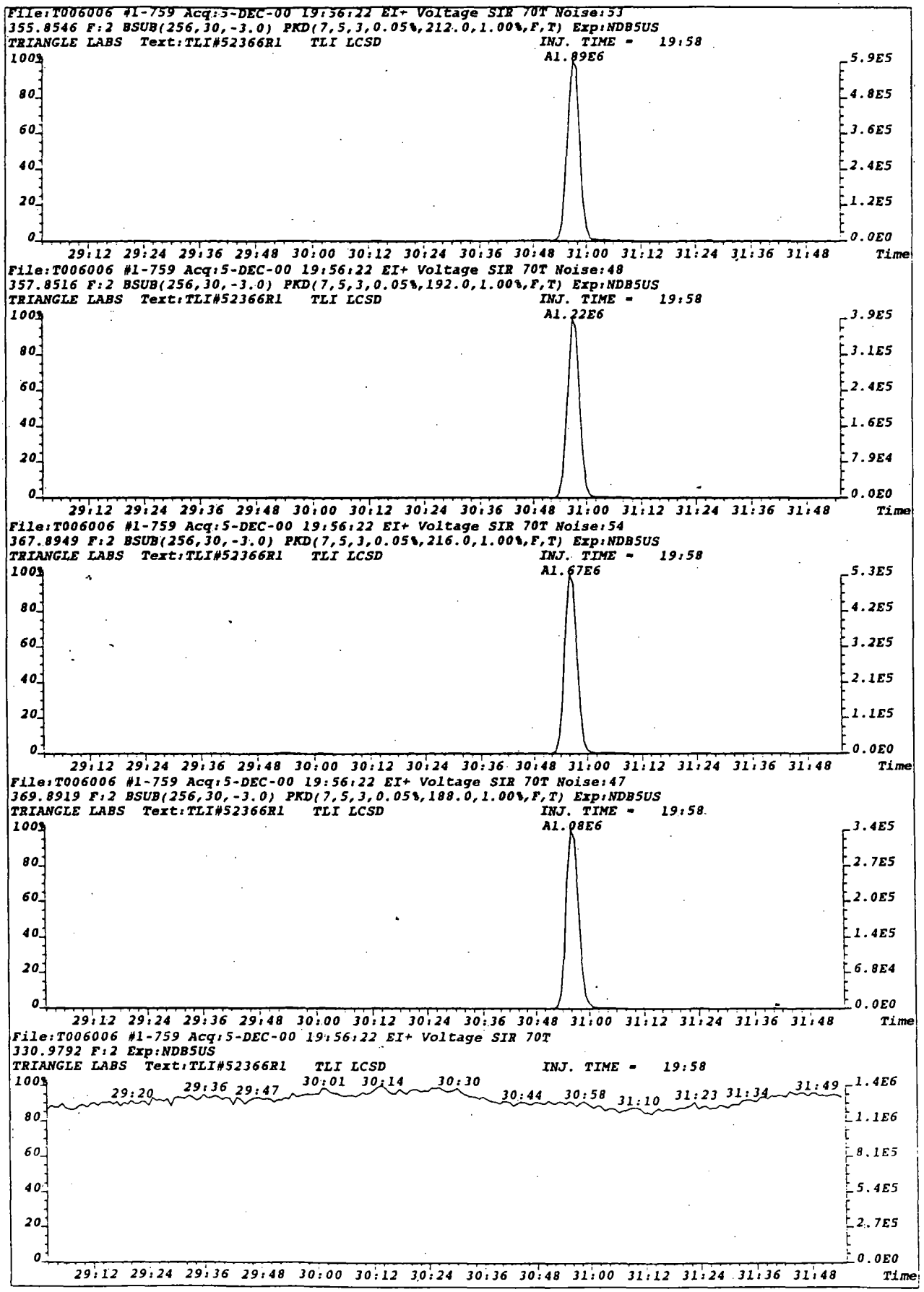
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58

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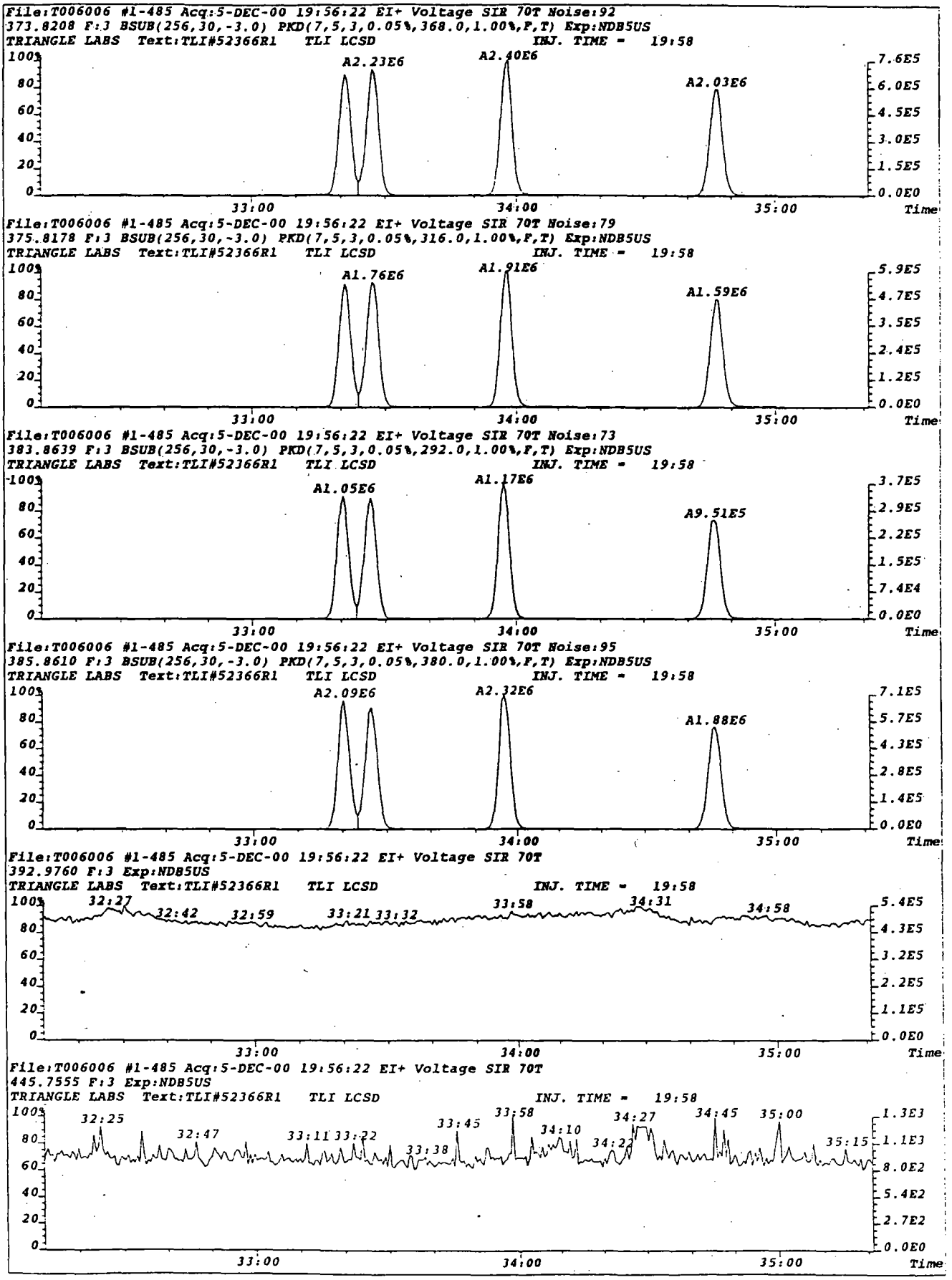
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD
INJ. TIME = 19:58
A1.89E6
5.9E5
4.8E5
3.6E5
2.4E5
1.2E5
0.0E0
29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 30:48 31:00 31:12 31:24 31:36 31:48
Time
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:48
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,192.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD
INJ. TIME = 19:58
A1.22E6
3.9E5
3.1E5
2.4E5
1.6E5
7.9E4
0.0E0
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:54
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,216.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD
INJ. TIME = 19:58
A1.67E6
5.3E5
4.2E5
3.2E5
2.1E5
1.1E5
0.0E0
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:47
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,188.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD
INJ. TIME = 19:58
A1.08E6
3.4E5
2.7E5
2.0E5
1.4E5
6.8E4
0.0E0
File:T006006 #1-759 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD
INJ. TIME = 19:58
29:20 29:36 29:47 30:01 30:14 30:30 30:44 30:58 31:10 31:23 31:34 31:49
1.4E6
1.1E6
8.1E5
5.4E5
2.7E5
0.0E0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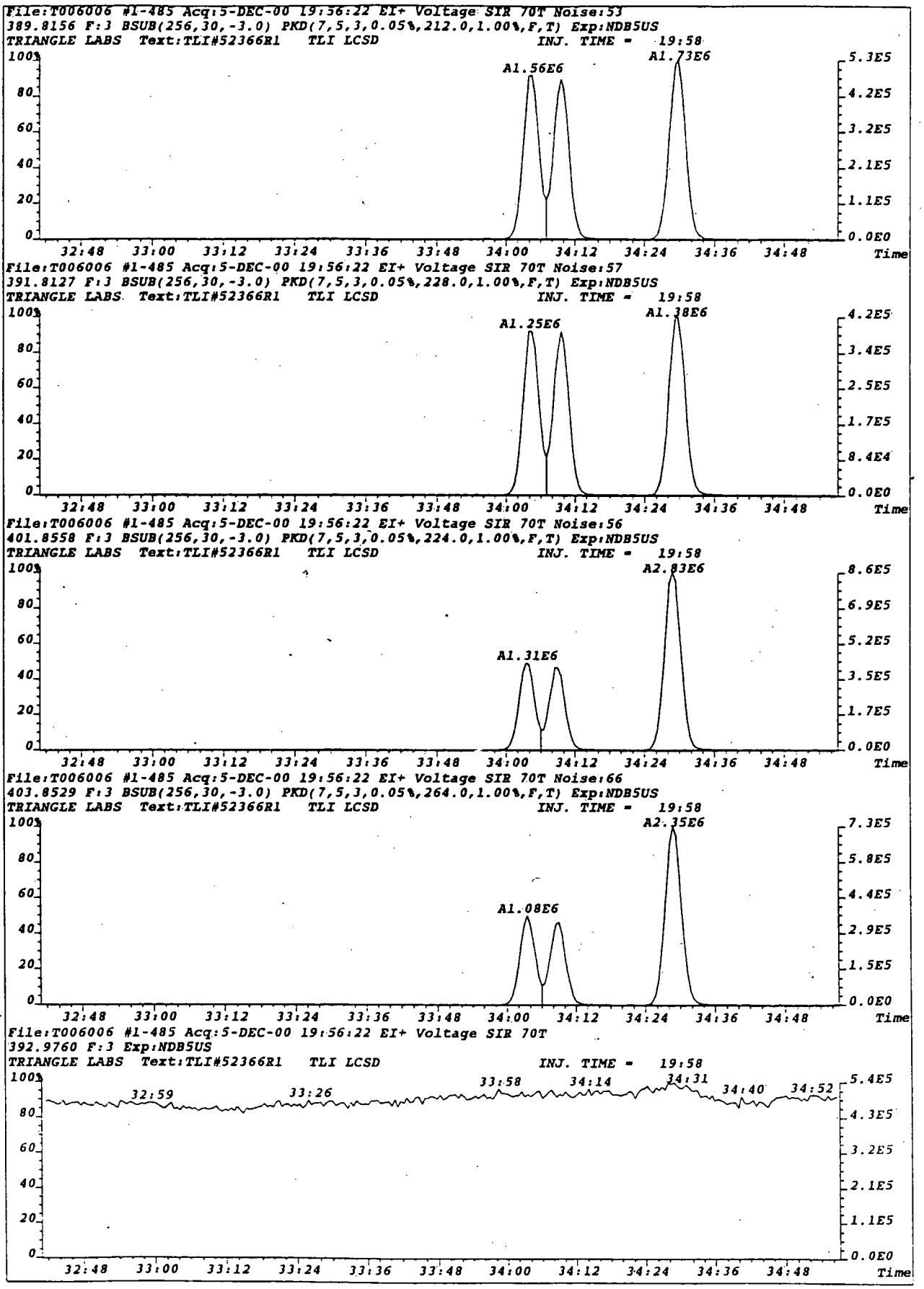
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,368.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A2.23E6
A2.40E6
A2.03E6
33:00
34:00
35:00
Time
File:T006006 #1-485 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:79
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,316.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.76E6
A1.91E6
A1.59E6
File:T006006 #1-485 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:73
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,292.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.05E6
A1.17E6
A9.51E5
File:T006006 #1-485 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:95
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,380.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A2.09E6
A2.32E6
A1.88E6
File:T006006 #1-485 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
32:27
32:42
32:59
33:21
33:32
33:58
34:31
34:58
File:T006006 #1-485 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
32:25
32:47
33:11
33:22
33:38
33:45
33:58
34:10
34:22
34:27
34:45
35:00
35:15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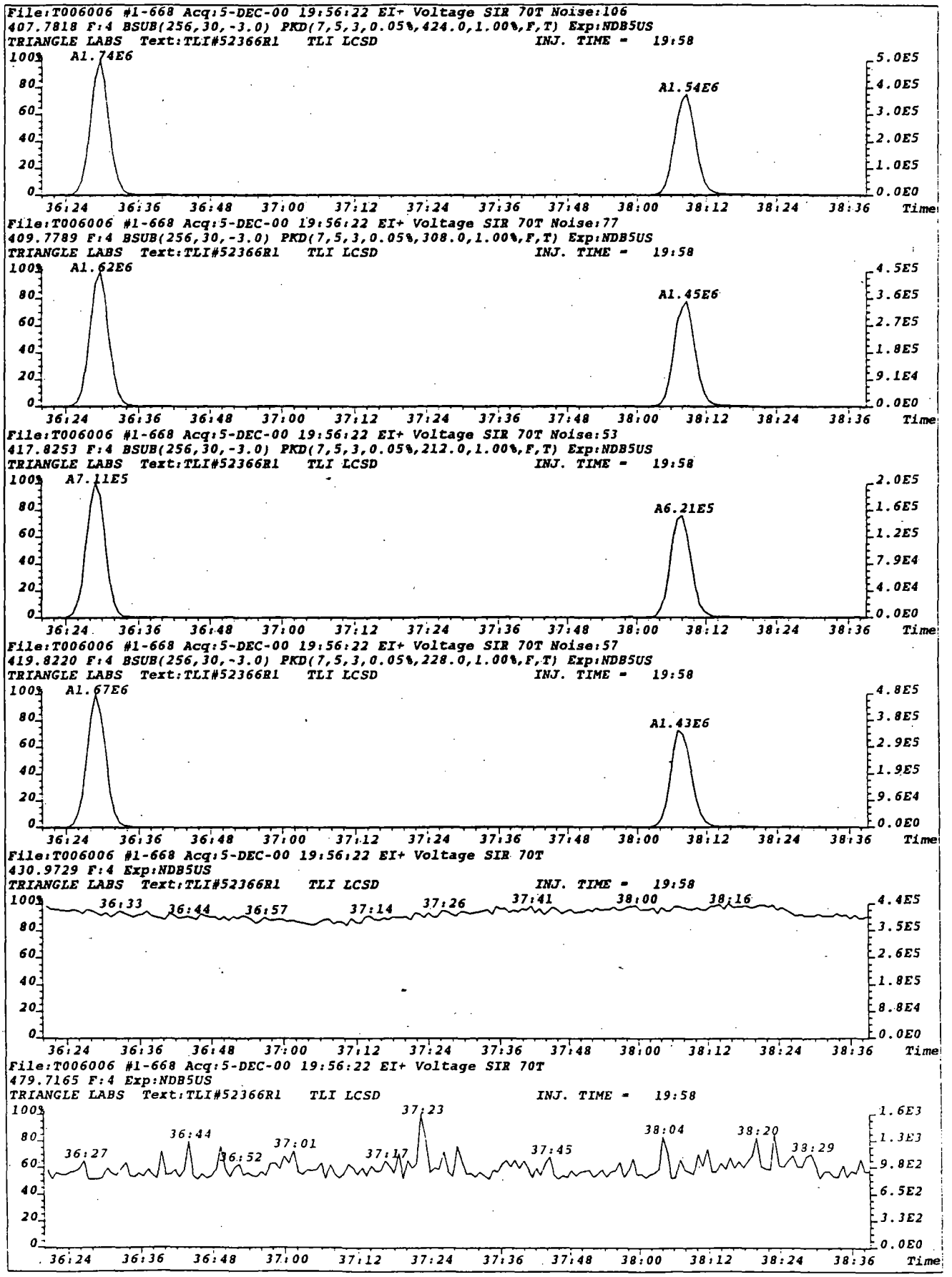
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.56E6
A1.73E6
File:T006006 #1-485 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:57
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.25E6
A1.38E6
File:T006006 #1-485 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:56
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,224.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.31E6
A2.83E6
File:T006006 #1-485 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:66
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,264.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.08E6
A2.35E6
File:T006006 #1-485 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
32:59
33:26
33:58
34:14
34:31
34:40
34:52
32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 34:24 34:36 34:48
Time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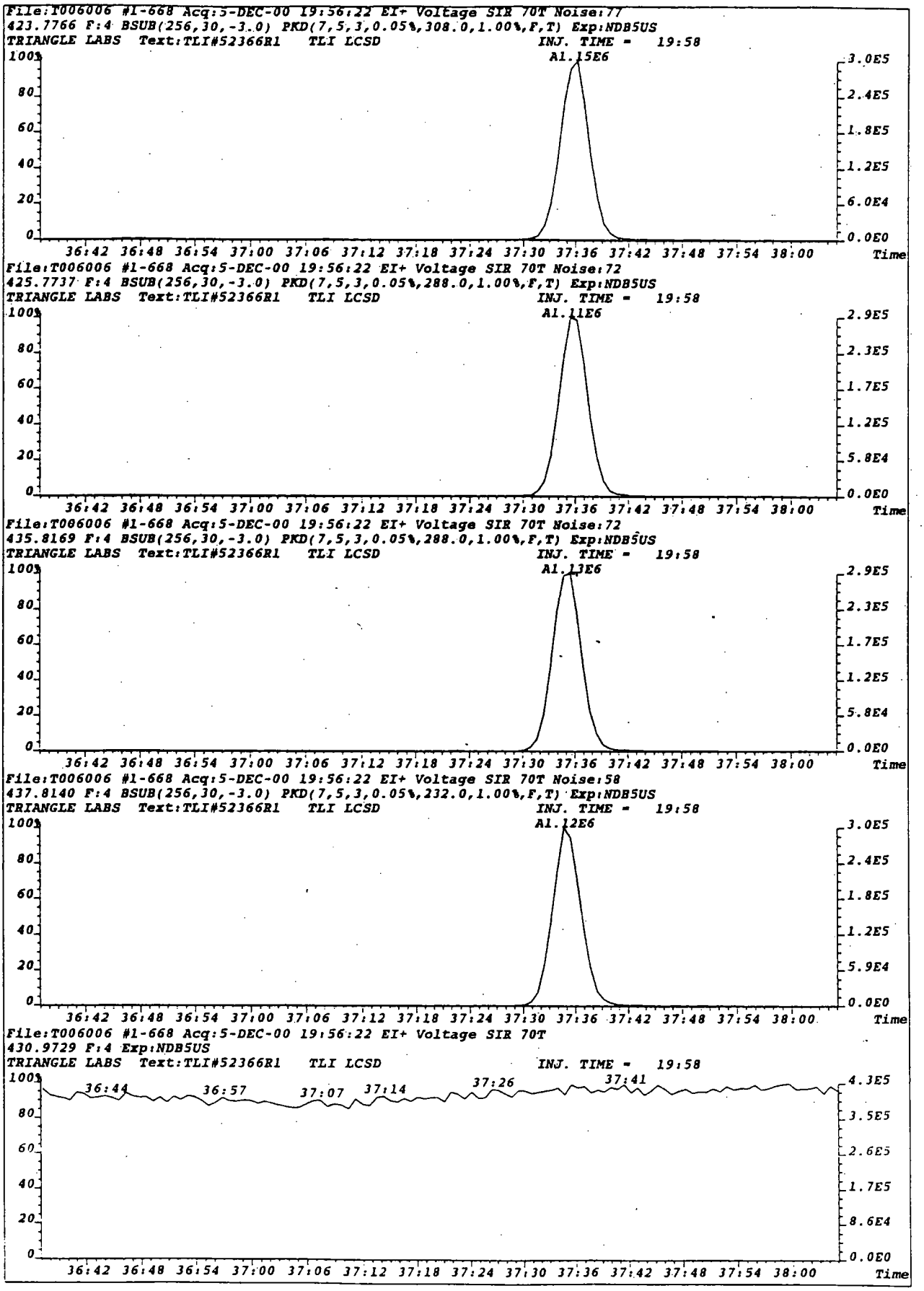
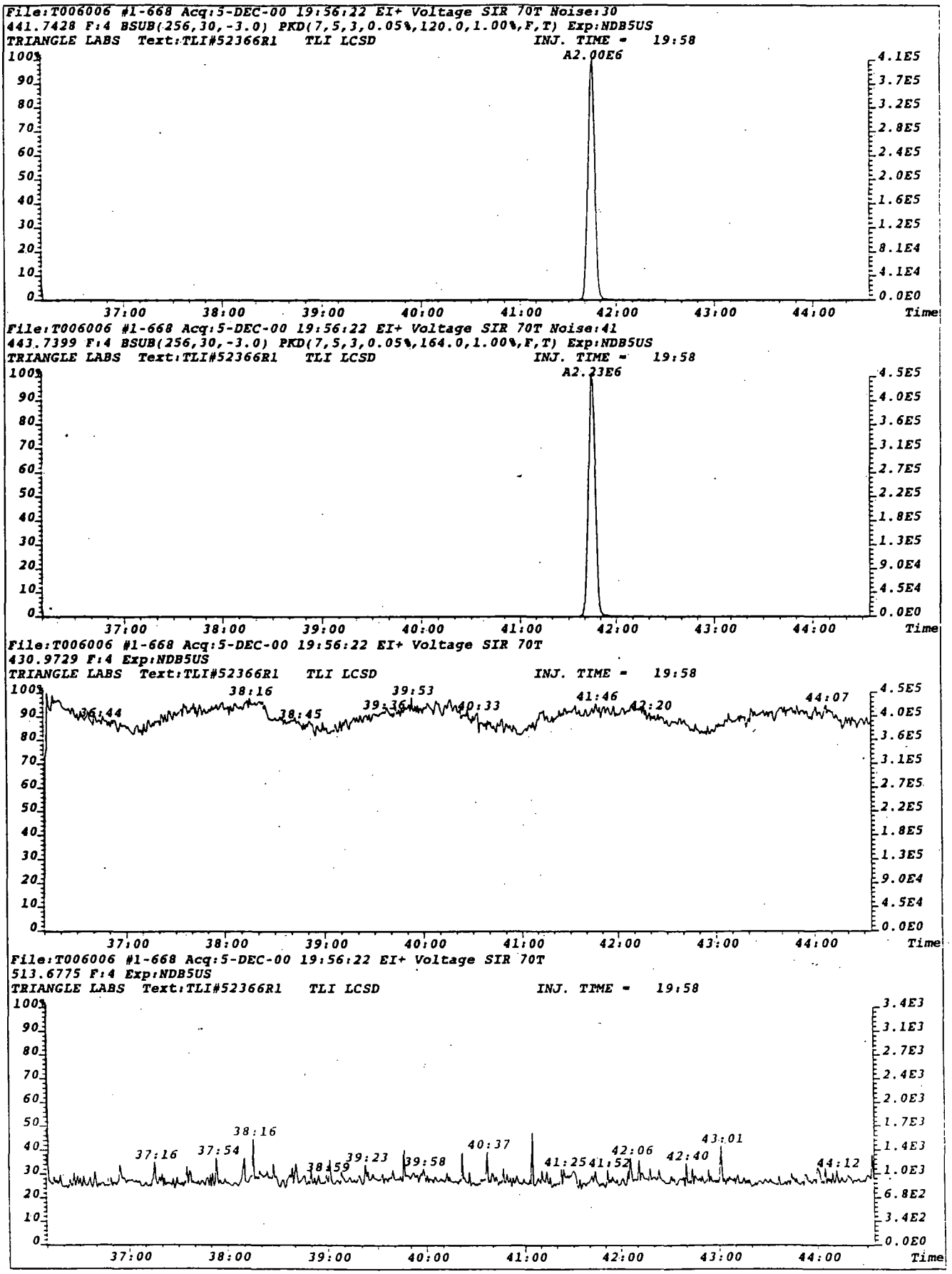
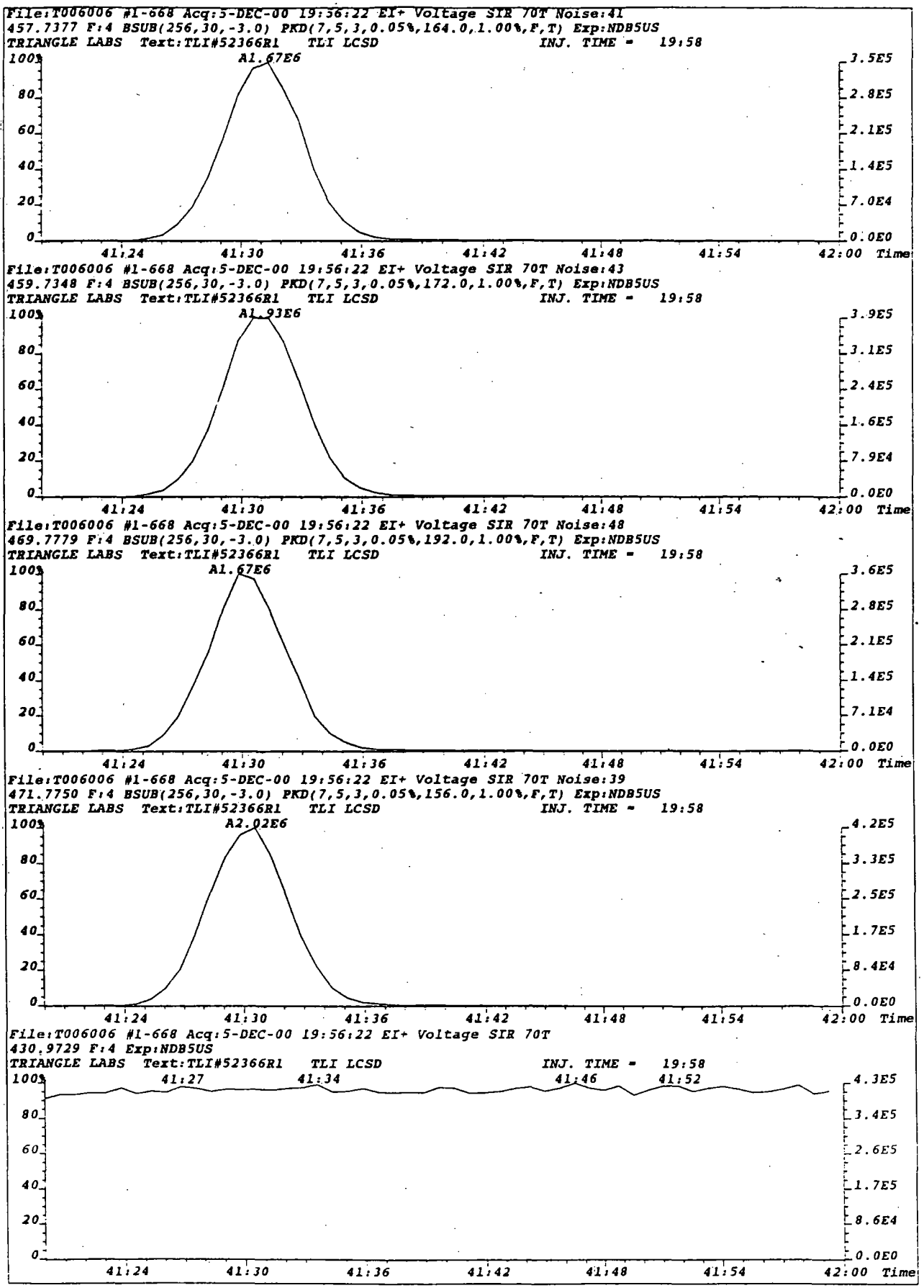
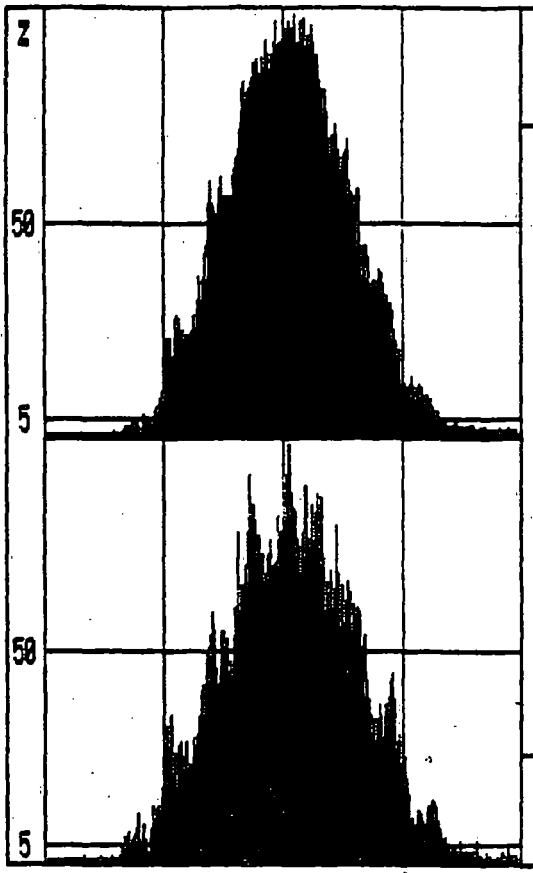
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,424.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.74E6
A1.54E6
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:77
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,308.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.62E6
A1.45E6
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:53
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A7.11E5
A6.21E5
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:57
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.67E6
A1.43E6
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
36:33
36:44
36:57
37:14
37:26
37:41
38:00
38:16
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
36:27
36:44
36:52
37:01
37:17
37:23
37:45
38:04
38:20
38:29
36:24 36:36 36:48 37:00 37:12 37:24 37:36 37:48 38:00 38:12 38:24 38:36 Time


File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:77
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,308.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD
INJ. TIME = 19:58
A1.15E6
3.0E5
2.4E5
1.8E5
1.2E5
6.0E4
0.0E0
100
80
60
40
20
0
36:42 36:48 36:54 37:00 37:06 37:12 37:18 37:24 37:30 37:36 37:42 37:48 37:54 38:00
Time
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:72
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,288.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD
INJ. TIME = 19:58
A1.11E6
2.9E5
2.3E5
1.7E5
1.2E5
5.8E4
0.0E0
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:72
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,288.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD
INJ. TIME = 19:58
A1.13E6
2.9E5
2.3E5
1.7E5
1.2E5
5.8E4
0.0E0
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:58
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD
INJ. TIME = 19:58
A1.12E6
3.0E5
2.4E5
1.8E5
1.2E5
5.9E4
0.0E0
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD
INJ. TIME = 19:58
36:44
36:57
37:07
37:14
37:26
37:41
4.3E5
3.5E5
2.6E5
1.7E5
8.6E4
0.0E0


File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:30
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,120.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A2.00E6
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:41
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A2.23E6
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
36:44
38:16
38:45
39:36
39:53
40:33
41:46
42:20
44:07
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
37:16
37:54
38:16
38:59
39:23
39:58
40:37
41:25
41:52
42:06
42:40
43:01
44:12
Time


File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:41
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.67E6
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:43
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.93E6
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:48
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,192.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A1.67E6
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T Noise:39
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
A2.02E6
File:T006006 #1-668 Acq:5-DEC-00 19:56:22 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI#52366R1 TLI LCSD INJ. TIME = 19:58
41:27
41:34
41:46
41:52
41:24
41:30
41:36
41:42
41:48
41:54
42:00
Time

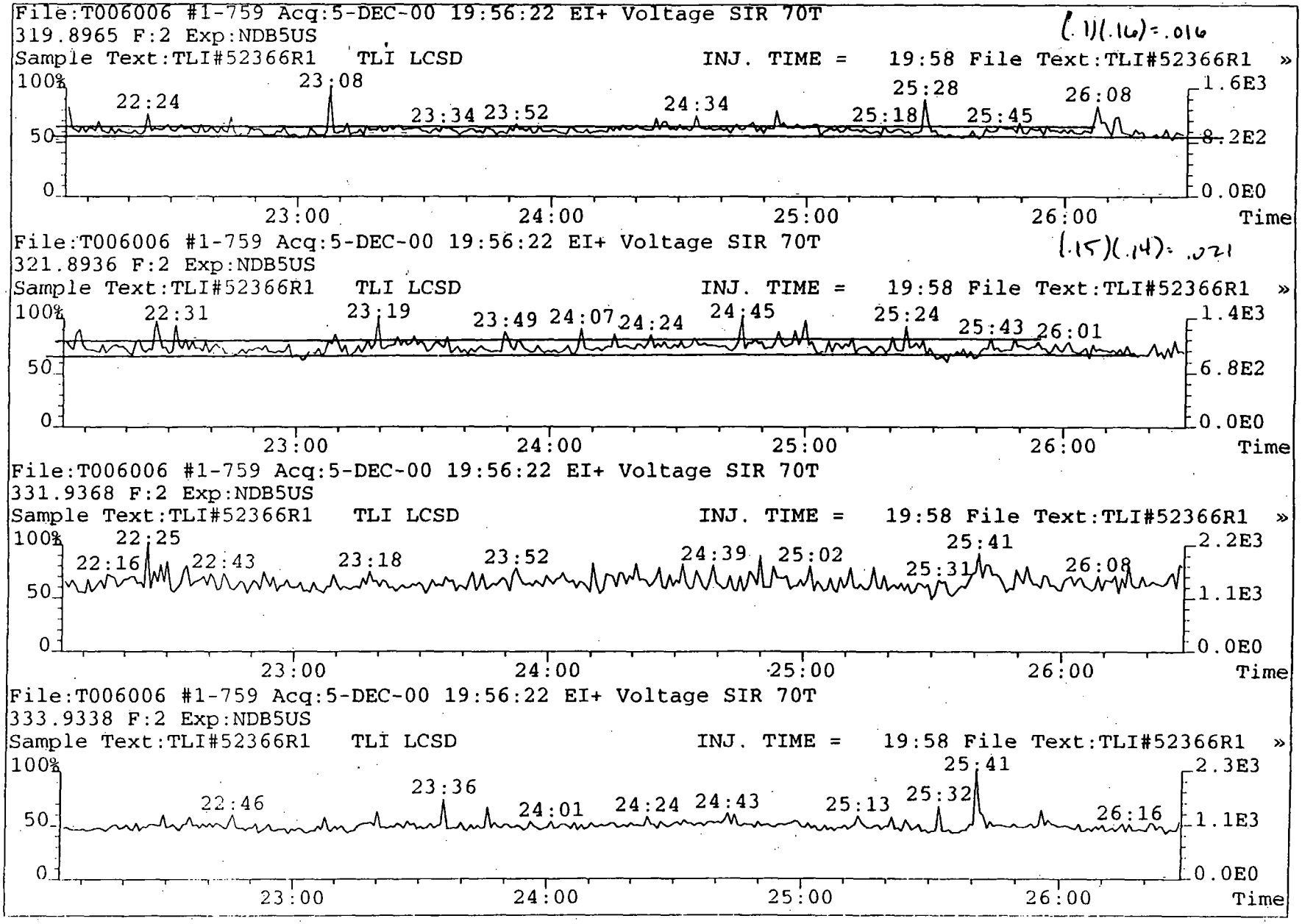


Channel I 338.9792 Peak top
Height .68 volts Span 200 ppm

System file name	NOBSUS
Data file name	A:TD05003
Resolution	10000
Group number	2
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 416.9760

A	293	J	331	S	368
B	304	K	332	T	370
C	306	L	334	U	376
D	316	M	340	V	410
E	318	N	342		
F	320	O	352		
G	322	P	354		
H	328	Q	356		
I	331	R	358		

Ref. mass 416.9760 Peak top
Height .13 volts Span 200 ppm

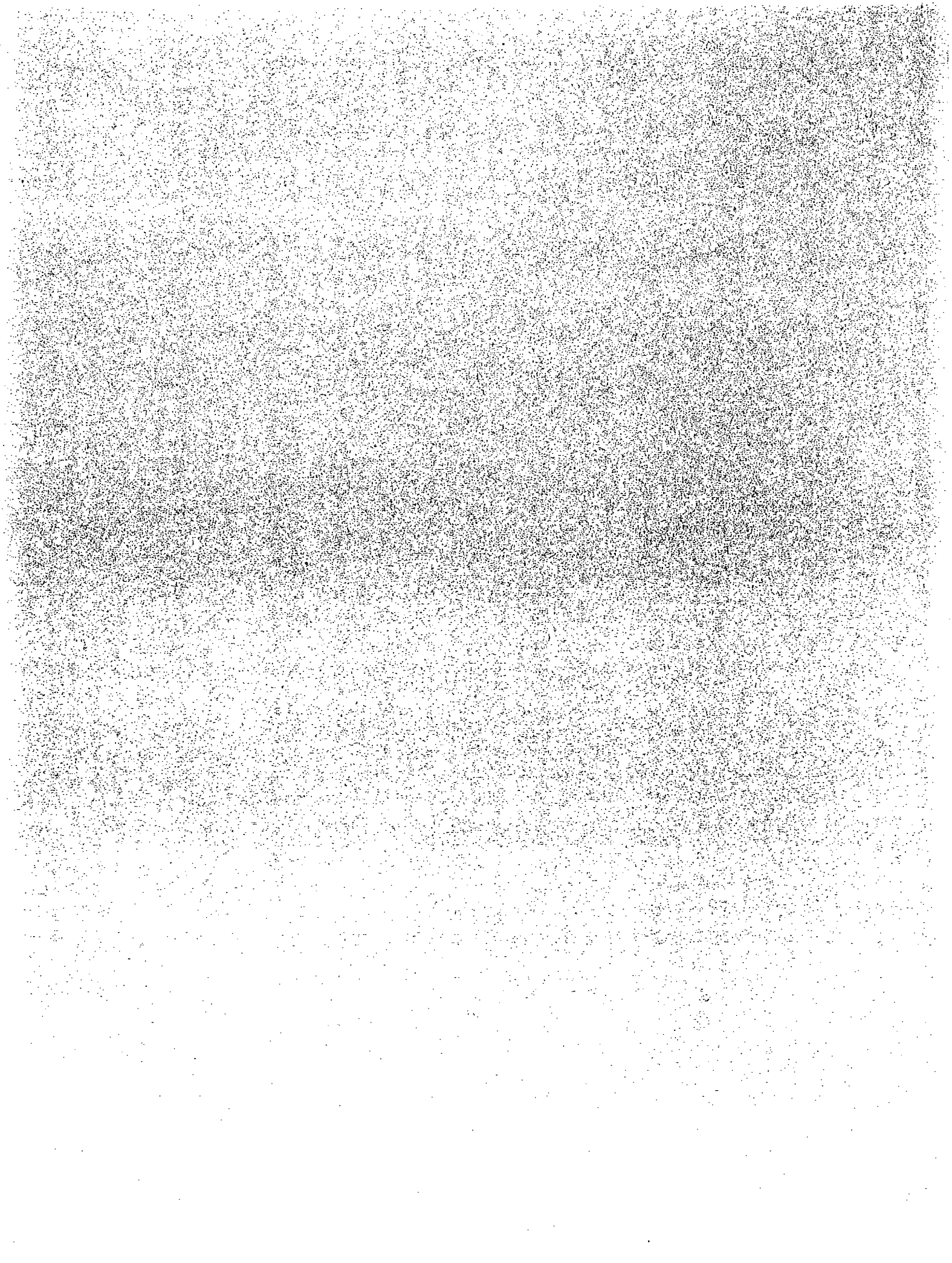


(.1)(.16) = .016

(.15)(.14) = .021

.016
.021
.037

JCA
12/13/00



TLI Project: **52366** Method 8290 PCDD/PCDF Analysis (
Client Sample: **BASF-SMW-5** Analysis File: **T0058**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/2000**	Spike File:	**SPMIT32S**
TLI ID:	**274-99-1A**	Date Extracted:	**11/21/2000**	ICal:	**TF57140**
		Date Analyzed:	**11/25/2000**	ConCal:	**T005815**
Sample Size:	**1.070 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005817**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**JMM**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	EMPC		44.8			
1,2,3,7,8-PeCDD	EMPC		131			
1,2,3,4,7,8-HxCDD	ND	36.2				
1,2,3,6,7,8-HxCDD	985			1.20	32:53	
1,2,3,7,8,9-HxCDD	397			1.22	33:12	
1,2,3,4,6,7,8-HpCDD	12380			1.03	36:06	
1,2,3,4,6,7,8,9-OCDD	81410			0.82	39:40	E
2,3,7,8-TCDF	405			0.85	24:39	
1,2,3,7,8-PeCDF	ND	27.6				
2,3,4,7,8-PeCDF	ND	27.2				
1,2,3,4,7,8-HxCDF	262			1.23	32:07	
1,2,3,6,7,8-HxCDF	EMPC		74.3			
2,3,4,6,7,8-HxCDF	66.6			1.29	32:41	
1,2,3,7,8,9-HxCDF	ND	34.5				
1,2,3,4,6,7,8-HpCDF	270			1.19	35:04	
1,2,3,4,7,8,9-HpCDF	76.8			1.05	36:35	
1,2,3,4,6,7,8,9-OCDF	403			0.84	39:52	

Totals	Conc. (pg/L)	Number	DL	EMPC	Flag
Total TCDD	1710	2		1920	
Total PeCDD	189	2		738	
Total HxCDD	7990	5			
Total HpCDD	22250	2			
Total TCDF	5380	11		6250	
Total PeCDF	2950	4		3990	
Total HxCDF	1690	6		1830	
Total HpCDF	643	3		734	

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Printed: 09:26 11/25/2

30

TLI Project: 52366 Method 8290 PCDD/PCDF Analysis (
Client Sample: BASF-SMW-5 Analysis File: T0058

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	124	6.65	40%-130%	0.77	24:37	V___
$^{13}C_{12}$-2,3,7,8-TCDD	102	5.47	40%-130%	0.83	25:21	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDF	66.3	3.55	40%-130%	1.45	28:37	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDD	75.1	4.02	40%-130%	1.50	29:40	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	82.6	4.42	40%-130%	0.52	32:12	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	92.0	4.92	40%-130%	1.26	32:52	V___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	89.2	4.77	25%-130%	0.45	35:04	V___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	107	5.73	25%-130%	1.06	36:05	V___
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	143	3.82	25%-130%	0.81	39:40	V___

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,4,7,8-PeCDF	73.4	3.92	40%-130%	1.50	29:20	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	83.7	4.48	40%-130%	0.49	32:06	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	82.1	4.39	40%-130%	1.17	32:48	V___
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	79.2	4.24	25%-130%	0.46	36:35	V___

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	149	79.7	40%-130%	25:23	___

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	88.8	4.75	40%-130%	0.48	33:26	V___
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	84.9	4.54	40%-130%	0.52	32:41	V___

Recovery Standards	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.81	25:09	___
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.19	33:11	___

Data Reviewer: _____ 11/25/2000

MIT3_PSR v1.00, LARS 6.

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Printed: 09:26 11/25/2C

Chromatographic Calculations For File:T005818

QC Front End.....: 1.8611
Tetra/Hexa RS Ratio: 1.4226

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Initial ....Date...

Data Review By: _____ __/__/__

Calculated Noise Height: 0.05

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005818B.dbf
11/25/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
TCDF				0.65-0.89					0.860-1.077				
304-306	DC	NL		Height			0.13	0.07	0.06				
				21:22	RO	0.95	1.38	0.60	0.63	0.868	1368-TCDF		AN
				21:50		0.82	7.19	3.23	3.96	0.887			
				22:10		0.89	1.93	0.91	1.02	0.900			
				22:33		0.83	4.19	1.90	2.29	0.916			
				22:56	RO	0.92	5.08	2.21	2.41	0.932			
				23:18		0.75	4.36	1.87	2.49	0.947			
				23:34		0.84	3.16	1.44	1.72	0.957			
				24:00		0.80	2.41	1.07	1.34	0.975			
				24:09		0.82	30.85	13.88	16.97	0.981			
				24:28	RO	0.93	1.72	0.75	0.81	0.994			
				24:39		0.85	13.80	6.34	7.46	1.001	2378-TCDF		AN
				25:04	RO	0.99	4.00	1.74	1.76	1.018			
				25:18		0.88	2.54	1.19	1.35	1.028			
				25:28	RO	0.90	16.00	6.96	7.75	1.035			
				25:45		0.83	51.30	23.27	28.03	1.046			
				26:04		0.81	61.54	27.62	33.92	1.059			
				26:31	RO	2.68	1.49	2.25	0.84	1.077			
	DC	WH		26:41		0.80	24.65			1.084			
304-306			17	Peaks			212.94						
13C12-TCDF				0.65-0.89					0.959-1.041				
316-318	DC	NL		Height			0.12	0.06	0.06				
	DC	WL		23:21	RO	0.45	0.41			0.867			
	DC	WL		23:30	RO	0.63	0.46			0.955			
	DC	SN		23:37	RO	1.18	0.30			0.959			
				24:12		0.71	0.84	0.35	0.49	0.983			
				24:37		0.77	62.21	27.16	35.05	1.000	13C12-2378-TCDF		ISO
				Height			16.56	7.52	9.04				
				25:10		0.74	1.32	0.56	0.76	1.022			
	DC	WH		25:52	RO	0.41	0.46			1.051			
	DC	WH		[illegible]	RO	0.47	0.18			1.070			
	DC	WH		26:38	RO	1.11	0.34			1.082			
316-318			3	Peaks			64.37						

---------- Above: TCDF / TCDD Follows ----------

TCDD				0.65-0.89					0.890-1.045				
320-322	DC	NL		Height			0.09	0.04	0.05				
	DC	SN		22:34	RO	0.05	0.07			0.890			
				22:46		0.76	24.42	10.57	13.85	0.898	1368-TCDD		AN
				23:10		0.72	9.78	4.08	5.70	0.914	1379-TCDD		AN
	DC	SN		23:55	RO	0.23	0.11			0.943			

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				24:11	RO	0.62	2.83	1.23	1.97	0.954			
				24:30	RO	0.39	0.55	0.24	0.62	0.966			
	DC	SN		24:35		0.86	0.13			0.970			
	DC	SN		24:44	RO	0.20	0.09			0.976			
	DC	SN		24:51		0.74	0.47			0.980			
	DC	SN		25:10	RO	2.06	0.28			0.993			
				25:23	RO	0.61	0.92	0.40	0.66	1.001	2378-TCDD		AN
	DC	SN		26:07	RO	1.63	0.14			1.030			
	DC	SN		26:23	RO	1.19	0.28			1.041			
320-322			5	Peaks			38.50						
37Cl-TCDD										0.921-1.079			
328	DC	NL				Height	0.07	0.07					
	DC	WL		23:02			5.41			0.909			
	DC	WL		23:10			6.28			0.914			
				23:30			1.00	1.00		0.927			
				23:57			520.23	520.23		0.945			
				25:23			51.74	51.74		1.001	37Cl-TCDD		CLS
				25:45			4.32	4.32		1.016			
				26:42			3.96	3.96		1.053			
328			5	Peaks			581.25						
13C12-TCDD						0.65-0.89				0.921-1.079			
332-334	DC	NL				Height	0.24	0.19	0.05				
				23:36	RO	2.40	0.35	0.48	0.20	0.931			
				25:09		0.81	729.40	326.79	402.61	0.992	13C12-1234-TCDD		RS1
				25:21		0.83	41.95	19.07	22.88	1.000	13C12-2378-TCDD		IS1
						Height	11.43	5.11	6.32				
332-334			3	Peaks			771.70						
---------- Above: TCDD / PeCDF Follows ----------													
PeCDF						1.32-1.78				0.923-1.064			
340-342	DC	NL				Height	0.10	0.04	0.06				
				26:37		1.60	3.28	2.02	1.26	0.930			
	DC	SN		26:54	RO	0.73	0.13			0.940			
	DC	SN		27:22	RO	0.78	0.30			0.956			
				27:46		1.47	5.66	3.37	2.29	0.970			
				27:57	RO	1.17	0.59	0.27	0.23	0.977			J
				28:03	RO	1.13	1.40	0.62	0.55	0.980			
				28:15	RO	1.15	1.02	0.46	0.40	0.987			
				28:__	RO	2.71	0.43	0.46	0.17	0.991			J
				28:42		1.53	28.29	17.12	11.17	1.003			
				28:56	RO	1.18	6.15	2.85	2.41	1.011			
				29:21	RO	1.10	2.55	1.10	1.00	1.026			
				29:31	RO	1.13	2.19	0.97	0.86	1.031			
	DC	SN		29:42	RO	0.58	0.18			1.038			
				29:56	RO	1.08	1.53	0.65	0.60	1.046			
				30:03		1.49	7.69	4.60	3.09	1.050			
	DC	WH		30:31	RO	1.86	0.36			1.066			
340-342			12	Peaks			60.78						

Compound/ M_Z....	QC	Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht. Peak1	Area/Ht. Peak2	Rel.RT	Compound Name..	ID..	Flags.
13C12-PeCDF					1.32-1.78						0.860-1.140			
352-354	DC	NL			Height			0.08	0.03	0.05				
					26:22	RO	0.88	0.58	0.35	0.40	0.921			
	DC	SN			26:53	RO	0.31	0.18			0.939			
	DC	SN			27:02	RO	3.40	0.13			0.945			
	DC	SN			27:19	RO	0.50	0.12			0.955			
	DC	SN			27:29	RO	1.17	0.15			0.960			
	DC	SN			28:15	RO	1.13	0.20			0.987			
	DC	SN			28:20	RO	1.13	0.20			0.990			
					28:37		1.45	31.01	18.35	12.66	1.000	13C12-PeCDF 123	IS2	
					Height			9.27	5.49	3.78				
	DC	SN			28:54		1.50	0.35			1.010			
	DC	SN			29:02	RO	1.21	0.36			1.015			
					29:20		1.50	33.98	20.38	13.60	1.025	13C12-PeCDF 234	SUR1	
	DC	SN			29:37	RO	1.26	0.69			1.035			
	DC	SN			30:04	RO	1.05	0.54			1.051			
	DC	SN			30:09	RO	2.29	0.18			1.054			
					30:18	RO	1.20	0.64	0.30	0.25	1.059			
	DC	SN			30:33		1.73	0.30			1.068			
	DC	SN			30:41	RO	0.54	0.12			1.072			
352-354			4	Peaks				66.21						

---------- Above: PeCDF / PeCDD Follows ----------

PeCDD					1.32-1.78						0.933-1.021			
356-358	DC	NL			Height			0.09	0.05	0.04				
	DC	SN			28:06	RO	0.01	0.05			0.947			
					28:37		1.53	1.19	0.72	0.47	0.965			
					28:45	RO	1.25	3.21	1.58	1.26	0.969			
					28:56		1.47	0.94	0.56	0.38	0.975			
	DC	SN			29:05		1.50	0.20			0.980			
					29:09	RO	1.86	0.92	0.67	0.36	0.983			
	DC	SN			29:23	RO	3.50	0.20			0.990			
	DC	SN			29:30	RO	1.04	0.61			0.994			
					29:40	RO	1.29	1.48	0.75	0.58	1.000	12378-PeCDD	AN	
					29:50	RO	0.35	0.59	0.36	1.02	1.006			
	DC	SN			30:09		1.42	0.58			1.016			
356-358			6	Peaks				8.33						
13C12-PeCDD					1.32-1.78						0.865-1.135			
368-370	DC	NL			Height			0.09	0.05	0.04				
	DC	SN			27:47	RO	6.50	0.15			0.937			
	DC	SN			27:56		1.71	0.19			0.942			
	DC	SN			28:33	RO	3.25	0.20			0.962			
	DC	SN			28:43	RO	3.27	0.28			0.968			
	DC	SN			29:02	RO	0.41	0.20			0.979			
					29:40		1.50	19.98	11.98	8.00	1.000	13C12-PeCDD 123	IS3	
					Height			6.29	3.76	2.53				
368-370			1	Peak				19.98						

---------- Above: PeCDD / HxCDF Follows ----------

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
HxCDF				1.05-1.43						0.961-1.046			
374-376	DC	NL		Height			0.08	0.04	0.04				
				31:08		1.23	0.69	0.38	0.31	0.967			
				31:16		1.34	2.71	1.55	1.16	0.971			
	DC	SN		31:29	RO	0.25	0.07			0.978			
	DC	SN		31:33	RO	2.11	0.20			0.980			
				31:44		1.31	5.33	3.02	2.31	0.986			
				31:58	RO	1.76	0.65	0.51	0.29	0.993			J
				32:07		1.23	3.91	2.16	1.75	0.997	123478-HxCDF	AN	
				32:14	RO	1.44	1.16	0.75	0.52	1.001	123678-HxCDF	AN	
				32:23		1.32	10.33	5.88	4.45	1.006			
	DC	SN		32:30	RO	2.00	0.11			1.009			
	DC	SN		32:32	RO	2.75	0.09			1.010			
				32:41		1.29	0.94	0.53	0.41	1.015	234678-HxCDF	AN	
	DC	SN		33:24	RO	1.69	0.36			1.037			
				33:32	RO	0.86	0.34	0.19	0.22	1.041			J
	DC	SN		33:35	RO	0.25	0.04			1.043			
	DC	WH		33:42	RO	1.67	0.07			1.047			
	DC	WH		33:46	RO	3.00	0.04			1.049			
	DC	WH		33:56	RO	1.50	0.76			1.054			
374-376			9	Peaks			26.06						
13C12-HxCDF				0.43-0.59						0.876-1.124			
384-386	DC	NL		Height			0.09	0.04	0.05				
	DC	SN		31:07	RO	0.39	0.21			0.966			
	DC	SN		31:16	RO	0.88	0.21			0.971			
				32:06		0.49	27.09	8.86	18.23	0.997	13C12-HxCDF 478	SUR2	
				32:12		0.52	27.15	9.23	17.92	1.000	13C12-HxCDF 678	IS4	
				Height			8.53	2.94	5.59				
	DC	SN		32:30	RO	2.50	0.03			1.009			
				32:41		0.52	25.46	8.68	16.78	1.015	13C12-HxCDF 234	ALT2	
				33:26		0.48	19.55	6.36	13.19	1.038	13C12-HxCDF 789	ALT1	
	DC	SN		33:41		0.45	0.16			1.046			
	DC	SN		33:46	RO	1.18	0.17			1.049			
384-386			4	Peaks			99.25						

---------- Above: HxCDF / HxCDD Follows ----------

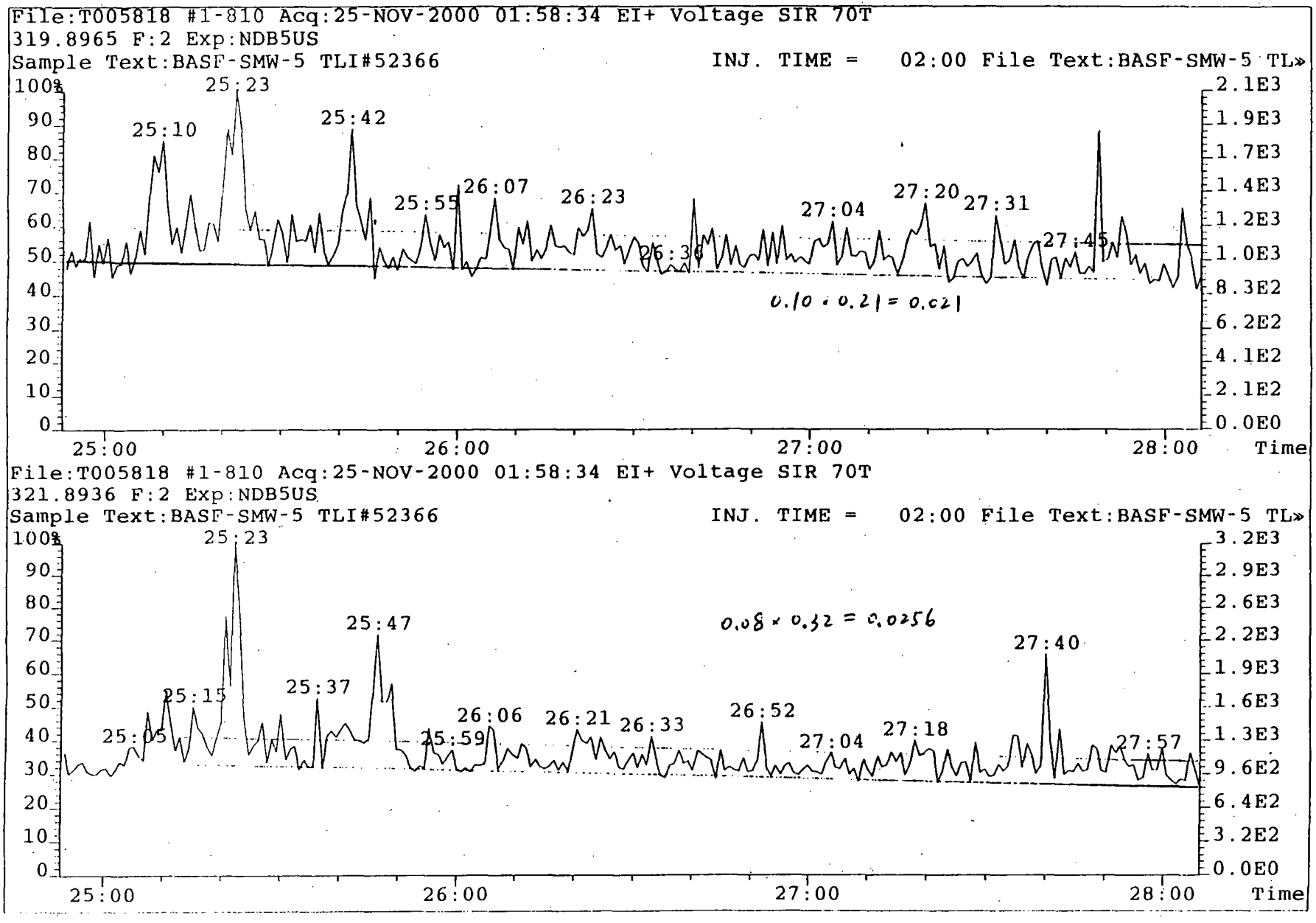
HxCDD				1.05-1.43						0.956-1.013			
390-392	DC	NL		Height			0.11	0.05	0.06				
				31:38		1.18	14.77	8.00	6.77	0.962			
	DC	SN		31:44	RO	0.46	0.11			0.966			
	DC	SN		31:49	RO	0.80	0.07			0.968			
				32:04		1.11	2.43	1.28	1.15	0.976			
				32:18		1.23	50.98	28.13	22.85	0.983			
	DC	SN		32:31	RO	1.50	0.09			0.989			
				32:53		1.20	10.12	5.52	4.60	1.001	123678-HxCDD	AN	
	DC	SN		33:01	RO	2.00	0.16			1.005			
				33:12		1.22	4.12	2.26	1.86	1.010	123789-HxCDD	AN	
390-392			5	Peaks			82.42						

Compound/ M_Z....	QC.Log	Cmit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
13C12-HxCDD				1.05-1.43					0.970-1.030				
402-404	DC	NL		Height			0.08	0.05	0.03				
				32:48		1.17	17.46	9.40	8.06	0.998	13C12-HxCDD	478	SUR3
				32:52		1.26	18.91	10.56	8.35	1.000	13C12-HxCDD	678	ISS
					Height		6.35	3.67	2.68				
				33:11		1.19	423.06	229.71	193.35	1.010	13C12-HxCDD	789	RS2
				33:27	RO	2.91	0.76	0.99	0.34	1.018			
				33:38	RO	1.73	0.25	0.19	0.11	1.023			
402-404			5 Peaks				460.44						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF				0.88-1.20					0.995-1.048				
408-410	DC	NL		Height			0.07	0.04	0.03				
	DC	SN	34:55	RO	1.44		0.18			0.996			
			35:04		1.19		3.55	1.93	1.62	1.000	1234678-HpCDF		AN
			35:19	RO	0.82		1.06	0.54	0.66	1.007			
			35:28		1.02		3.45	1.74	1.71	1.011			
	DC	SN	36:05	RO	0.78		0.27			1.029			
			36:35		1.05		0.78	0.40	0.38	1.043	1234789-HpCDF		AN
	DC	WH	36:53	RO	0.45		0.10			1.052			
	DC	WH	36:59	RO	1.33		0.12			1.055			
408-410			4 Peaks				8.84						
13C12-HpCDF				0.37-0.51					0.943-1.114				
418-420	DC	NL		Height			0.08	0.04	0.04				
			35:04		0.45		19.58	6.03	13.55	1.000	13C12-HpCDF	678	IS6
				Height			6.02	1.73	4.29				
			36:35		0.46		13.53	4.26	9.27	1.043	13C12-HpCDF	789	SUR4
418-420			2 Peaks				33.11						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20					0.974-1.005				
424-426	DC	NL		Height			0.17	0.09	0.08				
			35:20		1.04		93.88	47.97	45.91	0.979			
			36:06		1.03		117.81	59.87	57.94	1.000	1234678-HpCDD		AN
	DC	WH	36:19	RO	0.45		0.37			1.006			
	DC	WH	36:24	RO	0.55		0.24			1.009			
424-426			2 Peaks				211.69						
13C12-HpCDD				0.88-1.20					0.972-1.028				
436-438	DC	NL		Height			0.08	0.04	0.04				
			36:05		1.06		20.80	10.69	10.11	1.000	13C12-HpCDD	678	IS7
				Height			5.65	2.92	2.73				
	DC	SN	36:18		0.90		0.19			1.006			
436-438			1 Peak				20.80						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02					0.899-1.101				
442-444	DC	NL		Height			0.08	0.04	0.04				

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		36:11	RO	1.38	0.15			0.912			
	DC	SN		36:16	RO	0.40	0.04			0.914			
	DC	SN		36:31	RO	1.50	0.08			0.921			
	DC	SN		36:39	RO	0.50	0.08			0.924			
	DC	SN		36:55	RO	0.67	0.04			0.931			
	DC	SN		37:08	RO	0.13	0.04			0.936			
	DC	SN		37:18		1.00	0.06			0.940			
	DC	SN		37:54	RO	12.00	0.02			0.955			
	DC	SN		39:06	RO	1.60	0.09			0.986			
	DC	SN		39:40	RO	0.42	0.21			1.000			
				39:52		0.84	2.67	1.22	1.45	1.005	OCDF		AN
	DC	SN		40:13	RO	0.40	0.04			1.014			
	DC	SN		40:20		0.78	0.16			1.017			
	DC	SN		40:56	RO	1.17	0.11			1.032			
	DC	SN		41:10	RO	0.33	0.11			1.038			
	DC	SN		42:11		0.90	0.19			1.063			
	DC	SN		42:41	RO	1.10	0.19			1.076			
	DC	SN		42:48	RO	2.67	0.11			1.079			
	DC	SN		43:14	RO	2.25	0.15			1.090			
	DC	SN		43:29	RO	1.33	0.11			1.096			
	DC	SN		43:33	RO	3.25	0.08			1.098			
	DC	WH		43:43	RO	0.33	0.08			1.102			
	DC	WH		43:51	RO	2.14	0.13			1.105			
	DC	WH		44:16	RO	3.00	0.06			1.116			
	DC	WH		44:20	RO	1.63	0.15			1.118			
	DC	WH		44:34	RO	11.00	0.02			1.124			
442-444		1	Peak				2.67						
OCDD				0.76-1.02						0.899-1.101			
458-460	DC	NL		Height			0.07	0.04	0.03				
				39:40		0.82	448.66	202.06	246.60	1.000	OCDD		AN E
458-460		1	Peak				448.66						
13C12-OCDD				0.76-1.02						0.996-1.004			
470-472	DC	NL		Height			0.06	0.03	0.03				
				39:40		0.91	22.54	10.12	12.42	1.000	13C12-OCDD		IS8
				Height			4.92	2.22	2.70				
470-472		1	Peak				22.54						

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***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319.8965 F:2 Exp:NDB5US
Sample Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00 File Text:BASF-SMW-5 TL»
25:23
25:10
25:42
25:55
26:07
26:23
26:36
27:04
27:20
27:31
27:45
0.10 × 0.21 = 0.021
25:00
26:00
27:00
28:00
Time
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00 File Text:BASF-SMW-5 TL»
25:23
25:47
0.08 × 0.32 = 0.0256
25:05
25:15
25:37
25:59
26:06
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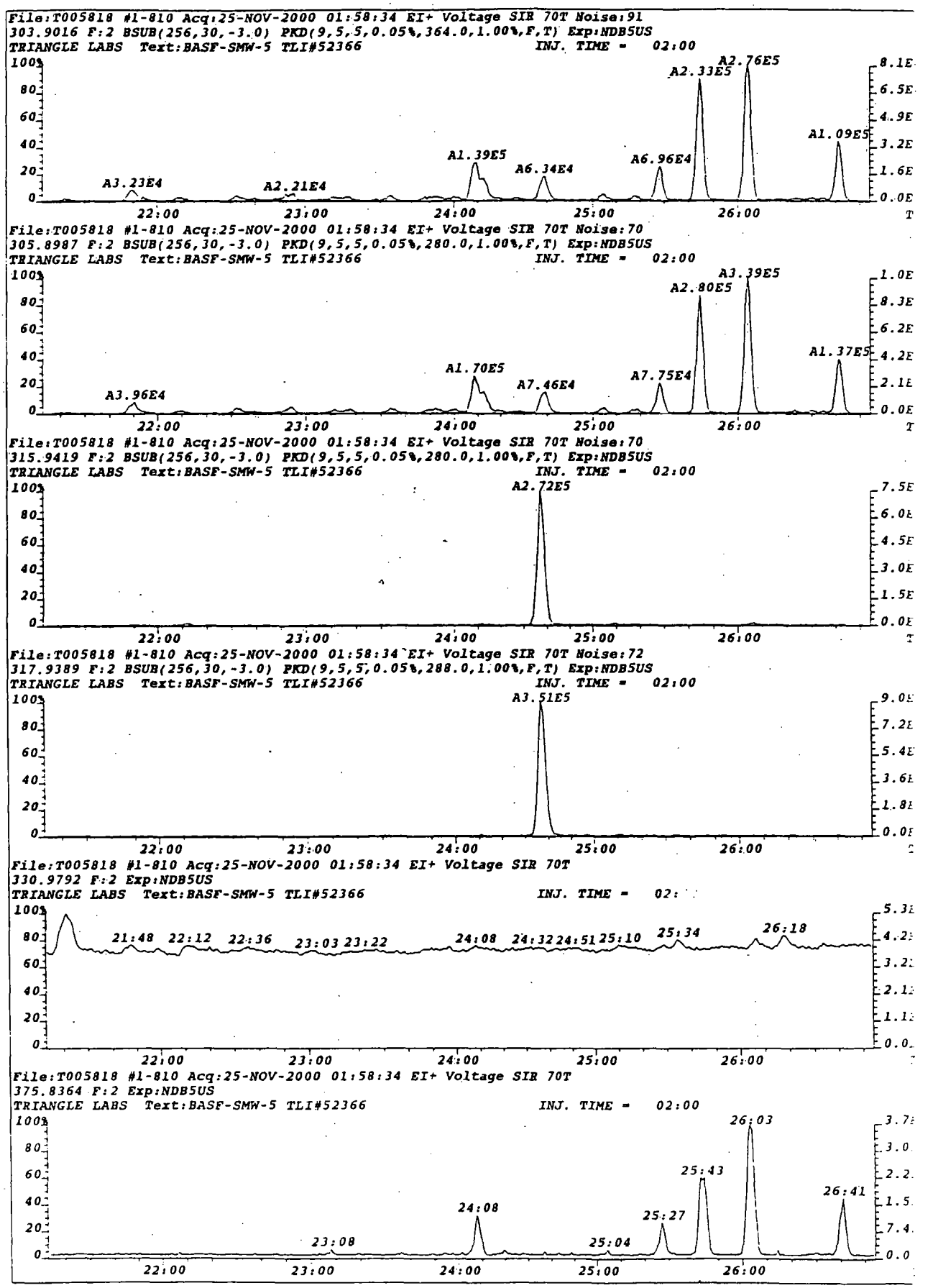
26:00
27:00
28:00
Time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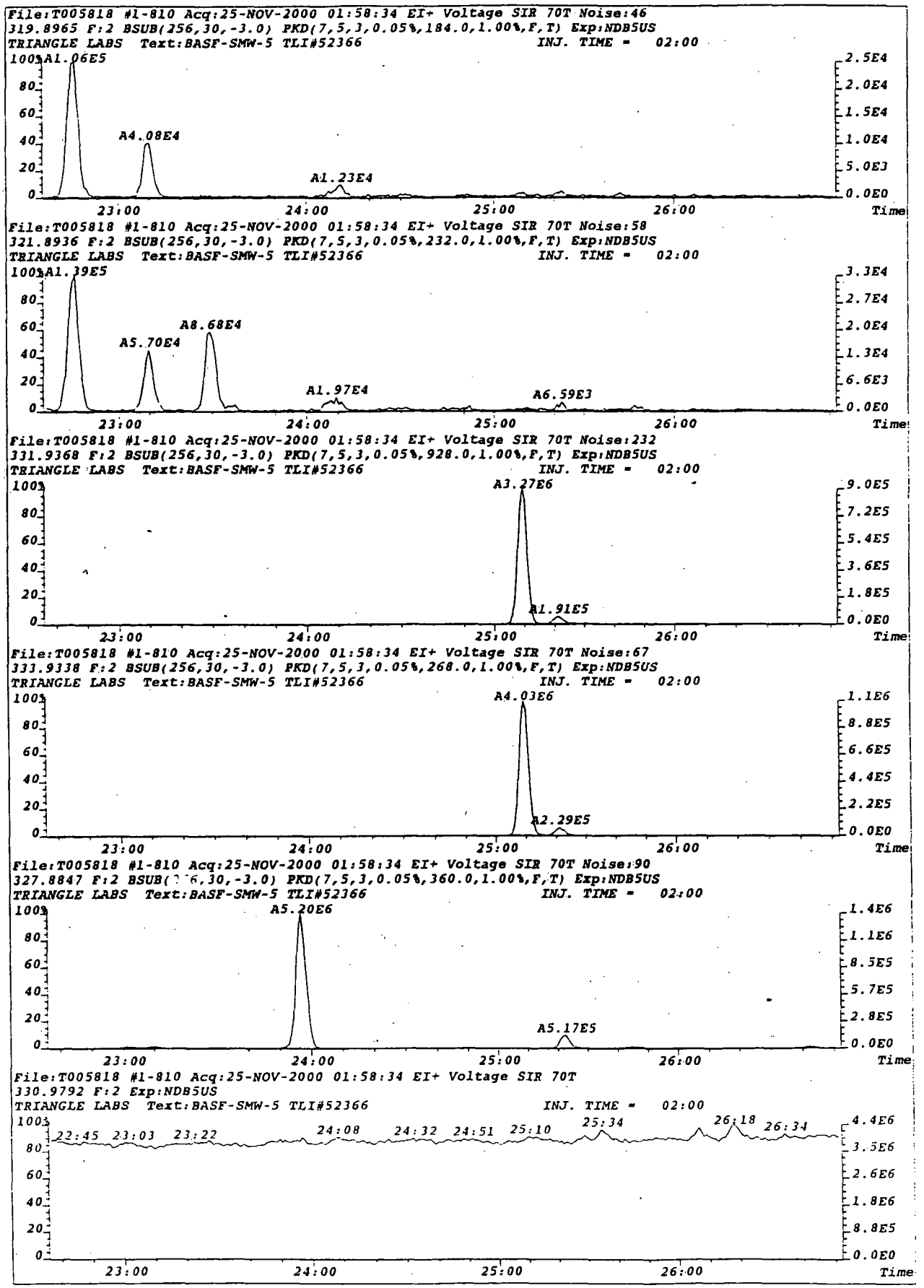
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,364.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A3.23E4
A2.21E4
A1.39E5
A6.34E4
A6.96E4
A2.33E5
A2.76E5
A1.09E5
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:70
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,280.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A3.96E4
A1.70E5
A7.46E4
A7.75E4
A2.80E5
A3.39E5
A1.37E5
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:70
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,280.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A2.72E5
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:72
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,288.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A3.51E5
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:
21:48 22:12 22:36 23:03 23:22 24:08 24:32 24:51 25:10 25:34 26:18
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
23:08
24:08
25:04
25:27
25:43
26:03
26:41
22:00
23:00
24:00
25:00
26:00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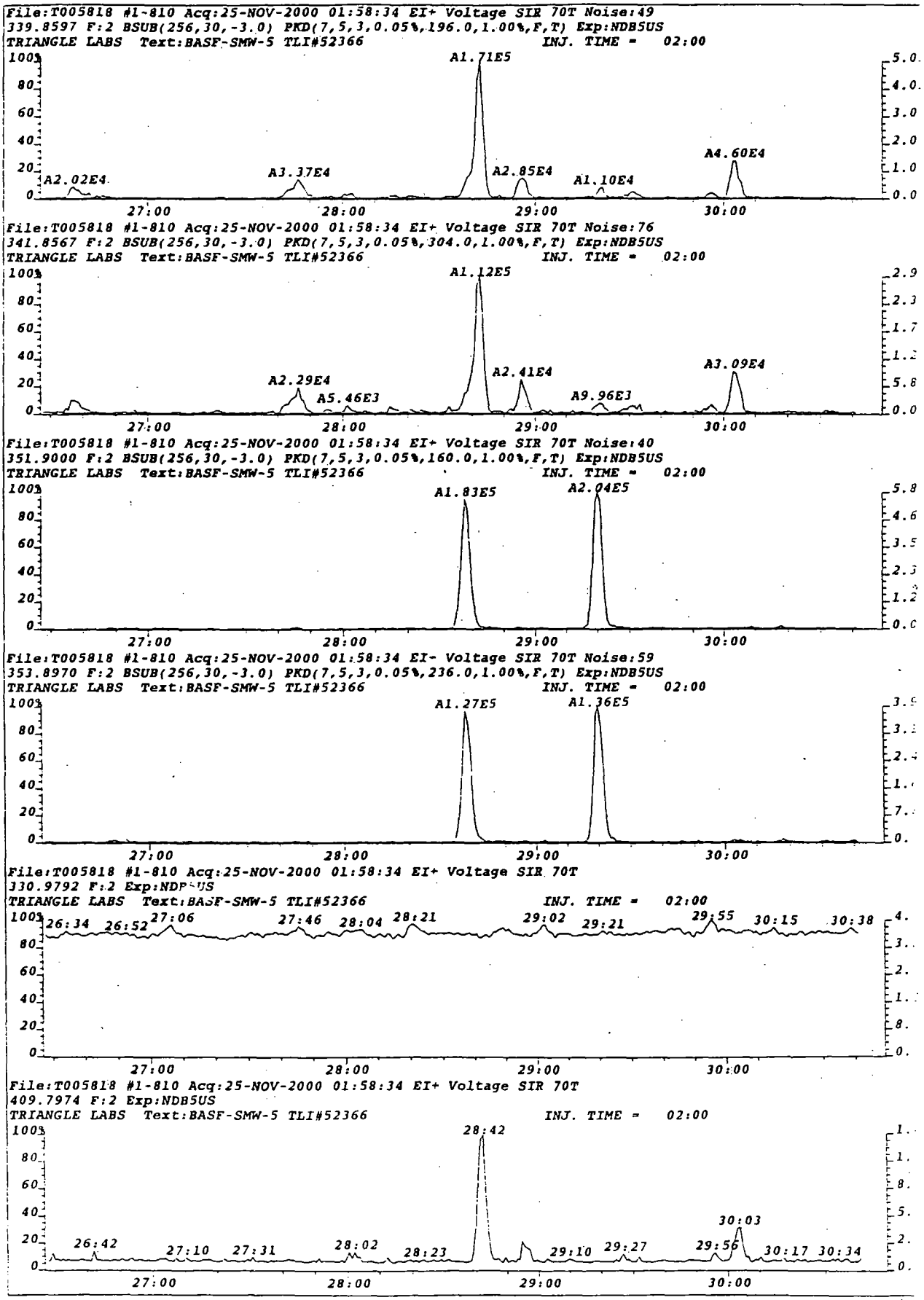
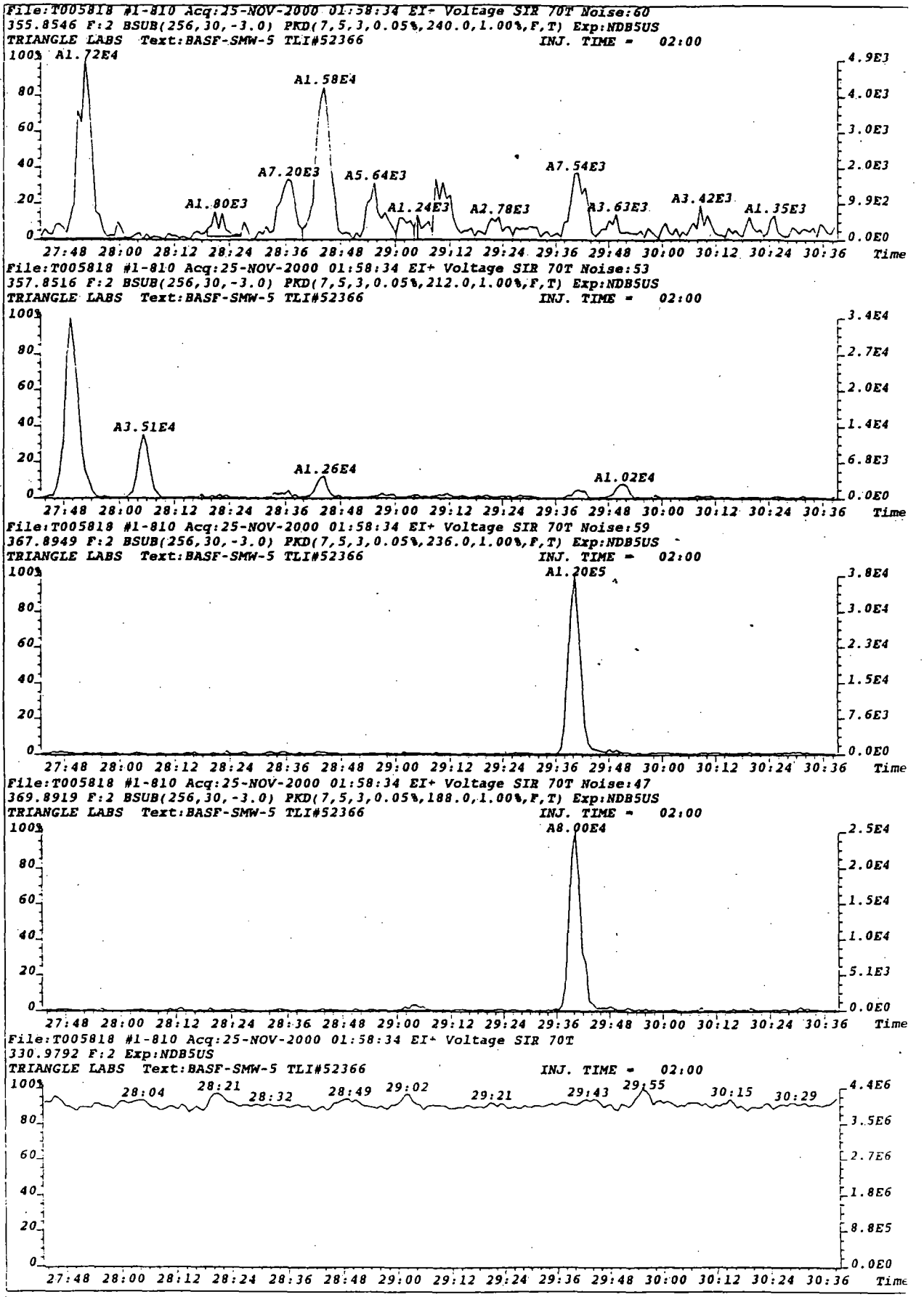
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.06E5
A4.08E4
A1.23E4
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:58
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.39E5
A8.68E4
A5.70E4
A1.97E4
A6.59E3
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:232
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,928.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A3.27E6
A1.91E5
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:67
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,268.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A4.03E6
A2.29E5
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:90
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,360.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A5.20E6
A5.17E5
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
22:45 23:03 23:22 24:08 24:32 24:51 25:10 25:34 26:18 26:34
23:00 24:00 25:00 26:00 Time


File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:49
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.71E5
A2.02E4
A3.37E4
A2.85E4
A1.10E4
A4.60E4
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:76
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,304.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.12E5
A2.29E4
A5.46E3
A2.41E4
A9.96E3
A3.09E4
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:40
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.83E5
A2.04E5
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI- Voltage SIR 70T Noise:59
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,236.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.27E5
A1.36E5
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
26:34 26:52 27:06 27:46 28:04 28:21 29:02 29:21 29:55 30:15 30:38
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
28:42
26:42 27:10 27:31 28:02 28:23 29:10 29:27 29:56 30:03 30:17 30:34
27:00 28:00 29:00 30:00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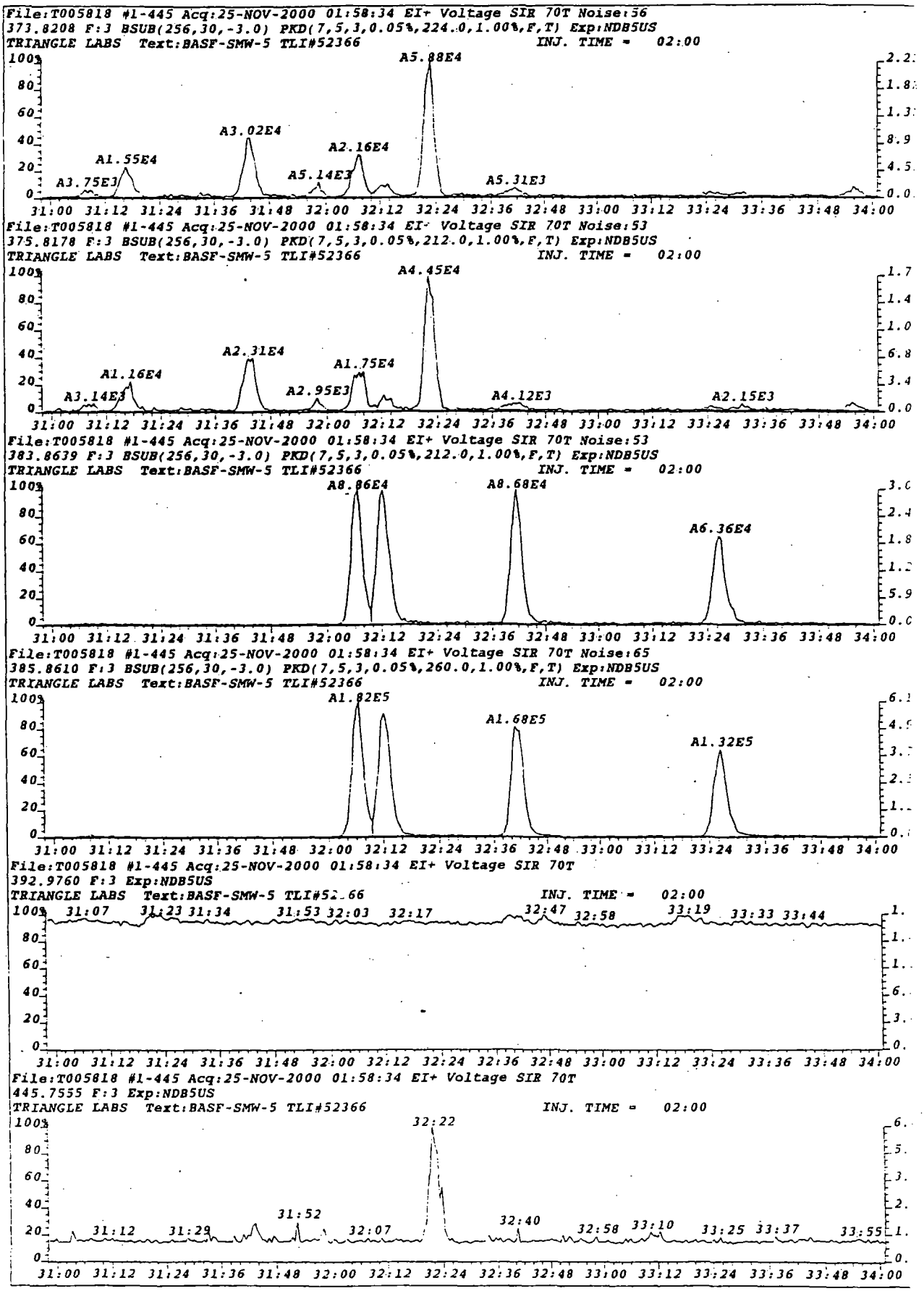
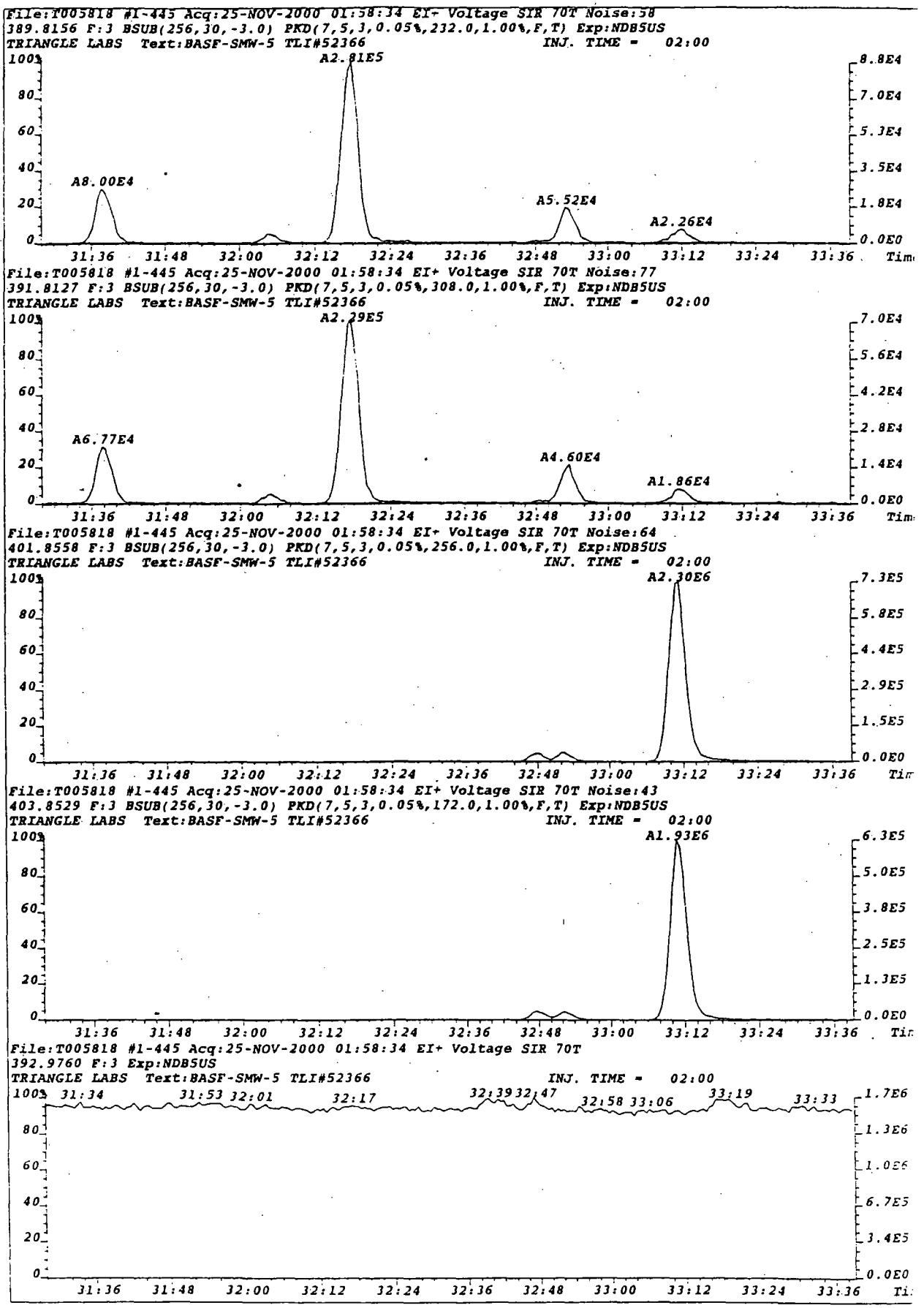
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,240.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A1.72E4
A1.58E4
A7.20E3
A5.64E3
A1.80E3
A1.24E3
A2.78E3
A7.54E3
A3.63E3
A3.42E3
A1.35E3
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:53
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A3.51E4
A1.26E4
A1.02E4
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:59
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,236.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A1.20E5
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:47
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,188.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A8.00E4
File:T005818 #1-810 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
28:04
28:21
28:32
28:49
29:02
29:21
29:43
29:55
30:15
30:29
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36
Time


File:T005818 #1-445 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:56
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,224.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A5.88E4
A3.02E4
A2.16E4
A1.55E4
A3.75E3
A5.14E3
A5.31E3
File:T005818 #1-445 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:53
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A4.45E4
A2.31E4
A1.75E4
A1.16E4
A3.14E3
A2.95E3
A4.12E3
A2.15E3
File:T005818 #1-445 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:53
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A8.86E4
A8.68E4
A6.36E4
File:T005818 #1-445 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:65
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,260.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.82E5
A1.68E5
A1.32E5
File:T005818 #1-445 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
File:T005818 #1-445 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
32:22
31:52
32:40
31:12 31:29 32:07 32:58 33:10 33:25 33:37 33:55
31:00 31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 33:48 34:00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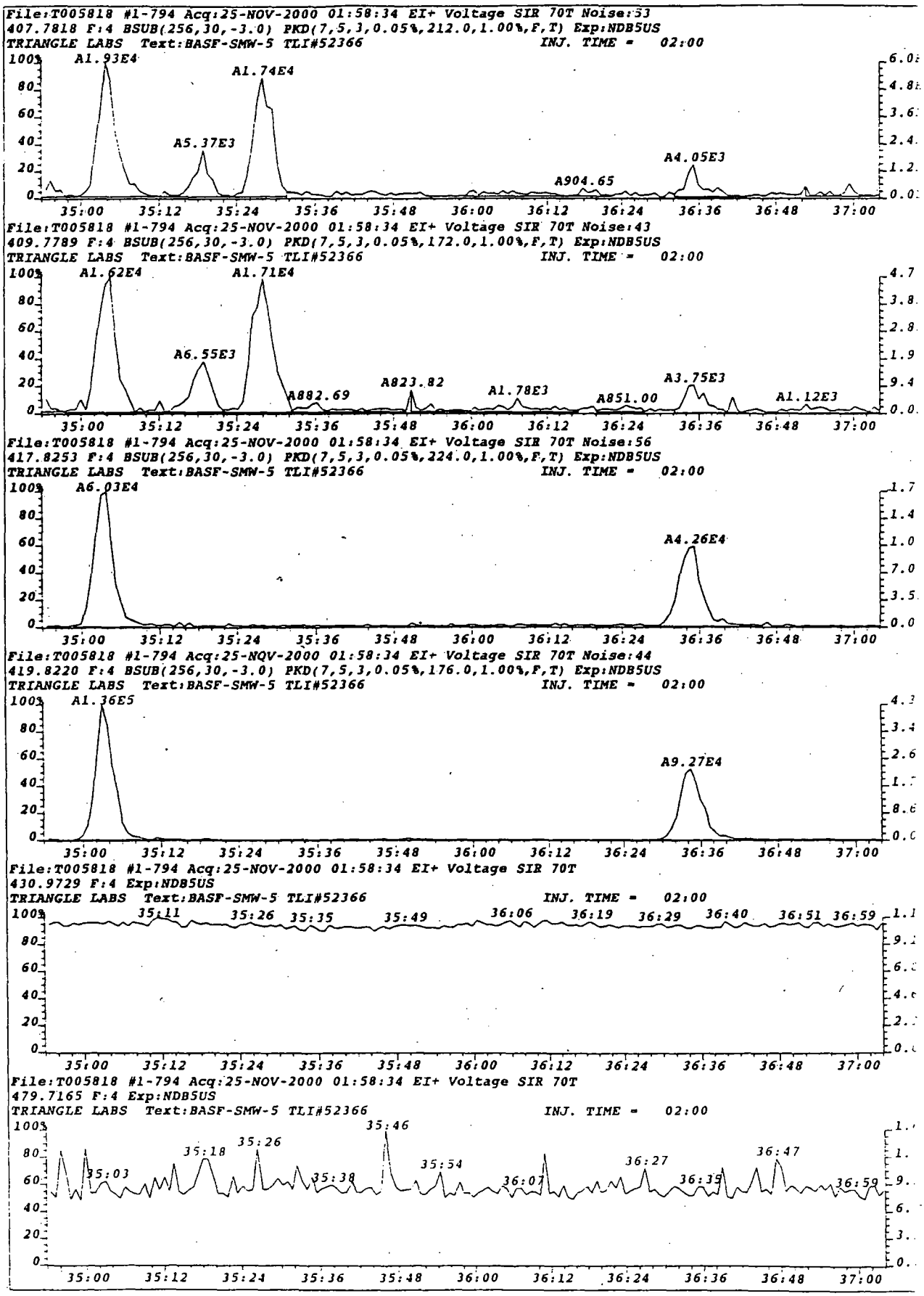
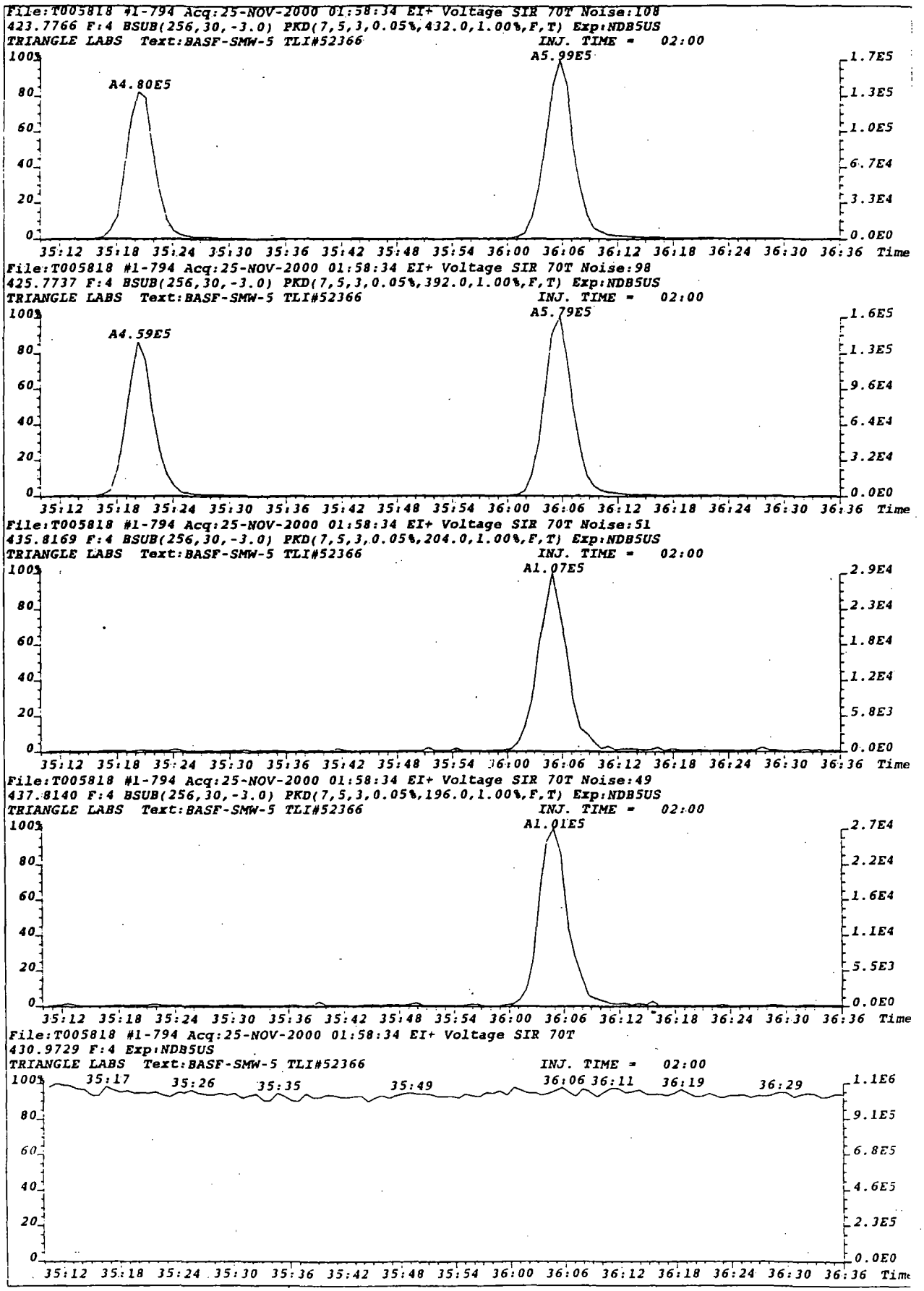
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A2.81E5
A8.00E4
A5.52E4
A2.26E4
File:T005818 #1-445 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:77
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,308.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A2.29E5
A6.77E4
A4.60E4
A1.86E4
File:T005818 #1-445 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:64
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,256.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A2.30E6
File:T005818 #1-445 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:43
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A1.93E6
File:T005818 #1-445 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00


File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:53
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.93E4
A1.74E4
A5.37E3
A4.05E3
A904.65
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:43
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.62E4
A1.71E4
A6.55E3
A882.69
A823.82
A1.78E3
A851.00
A3.75E3
A1.12E3
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:56
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,224.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A6.03E4
A4.26E4
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:44
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.36E5
A9.27E4
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
35:03
35:18
35:26
35:38
35:46
35:54
36:07
36:27
36:35
36:47
36:59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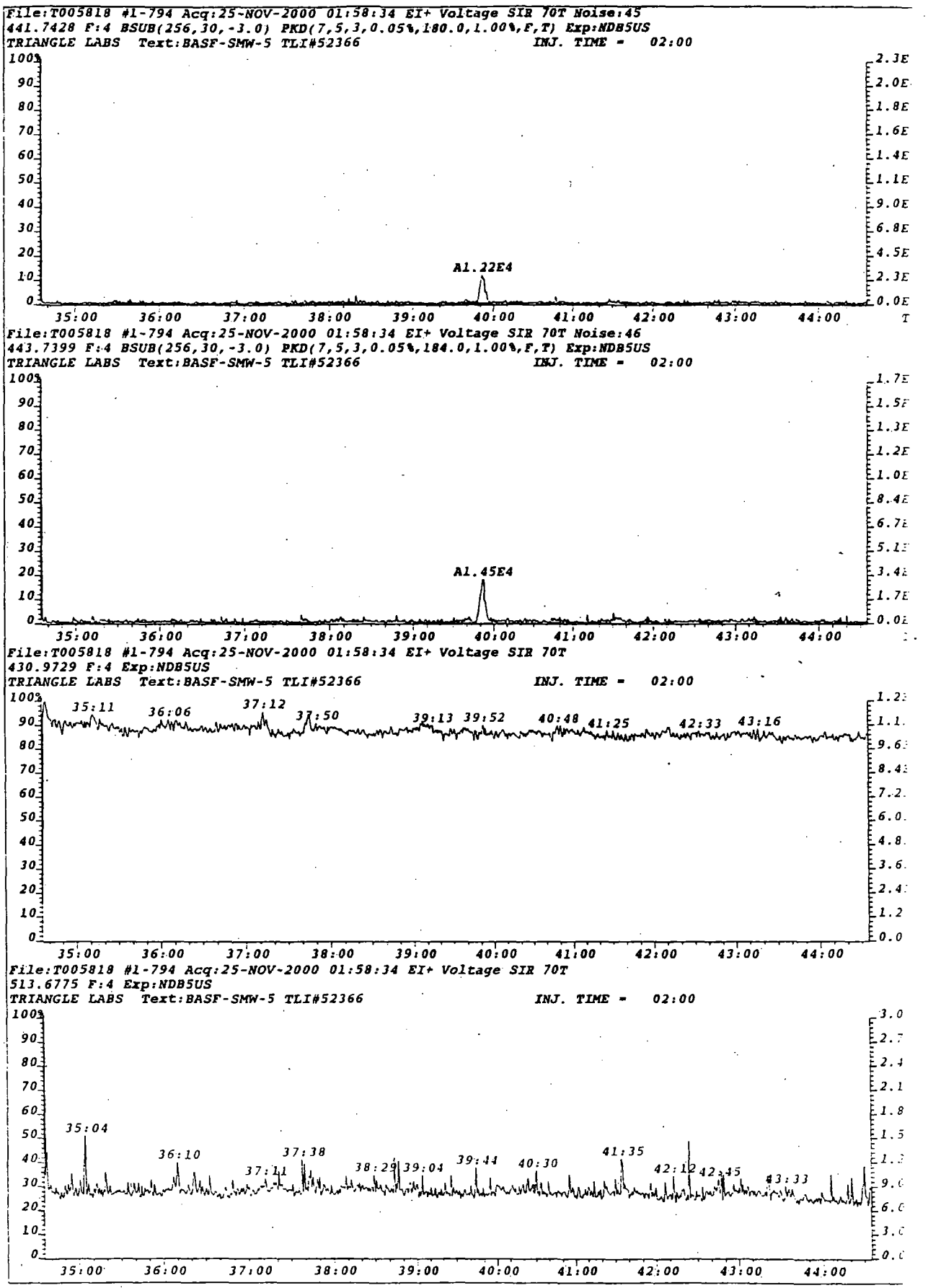
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,432.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A4.80E5
A5.99E5
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:98
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,392.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A4.59E5
A5.79E5
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:51
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,204.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A1.07E5
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:49
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
A1.01E5
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366
INJ. TIME = 02:00
35:17
35:26
35:35
35:49
36:06
36:11
36:19
36:29
Time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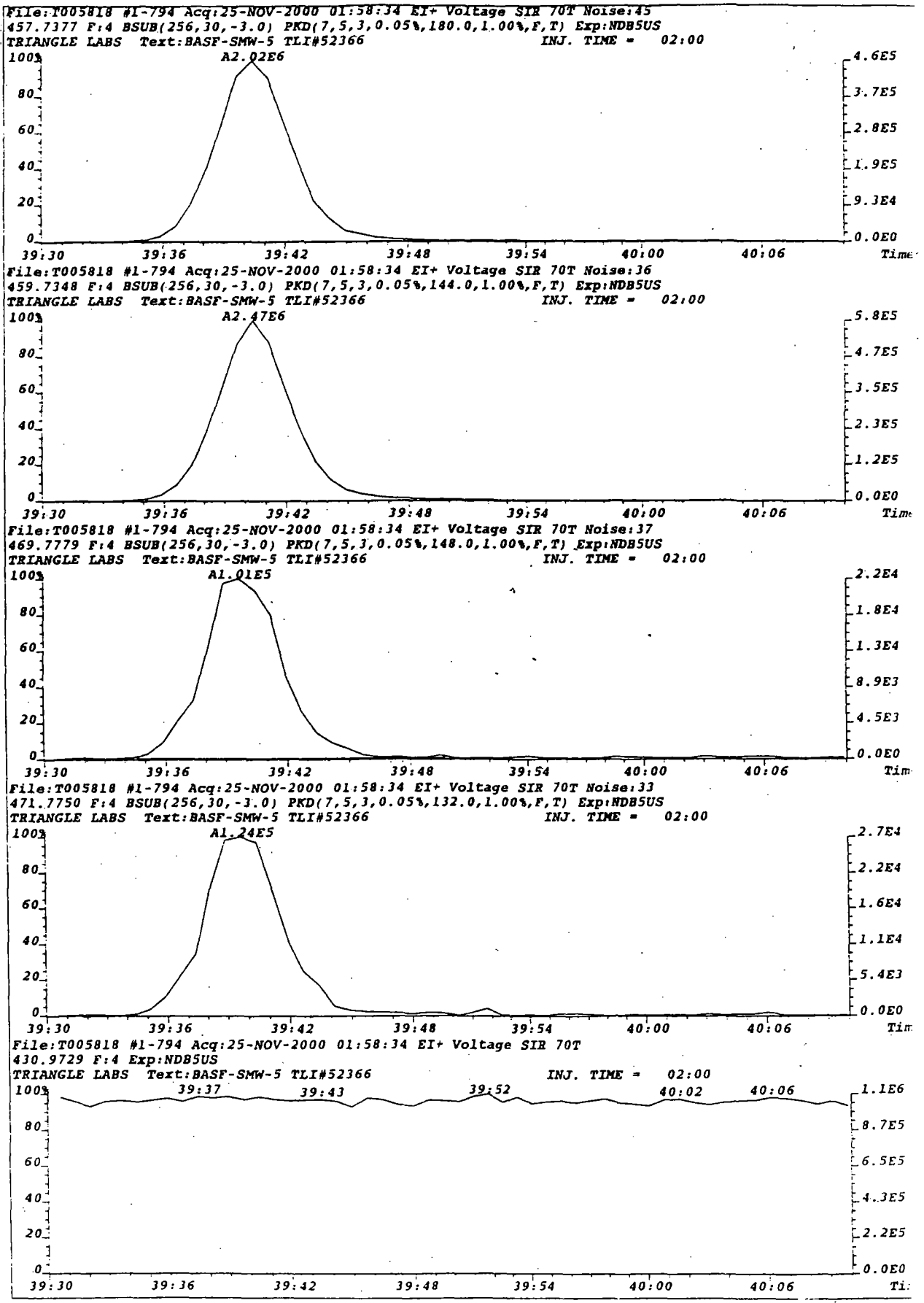
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,180.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.22E4
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:46
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.45E4
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
35:11 36:06 37:12 37:50 39:13 39:52 40:48 41:25 42:33 43:16
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
35:04 36:10 37:11 37:38 38:29 39:04 39:44 40:30 41:35 42:12 42:45 43:33
35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00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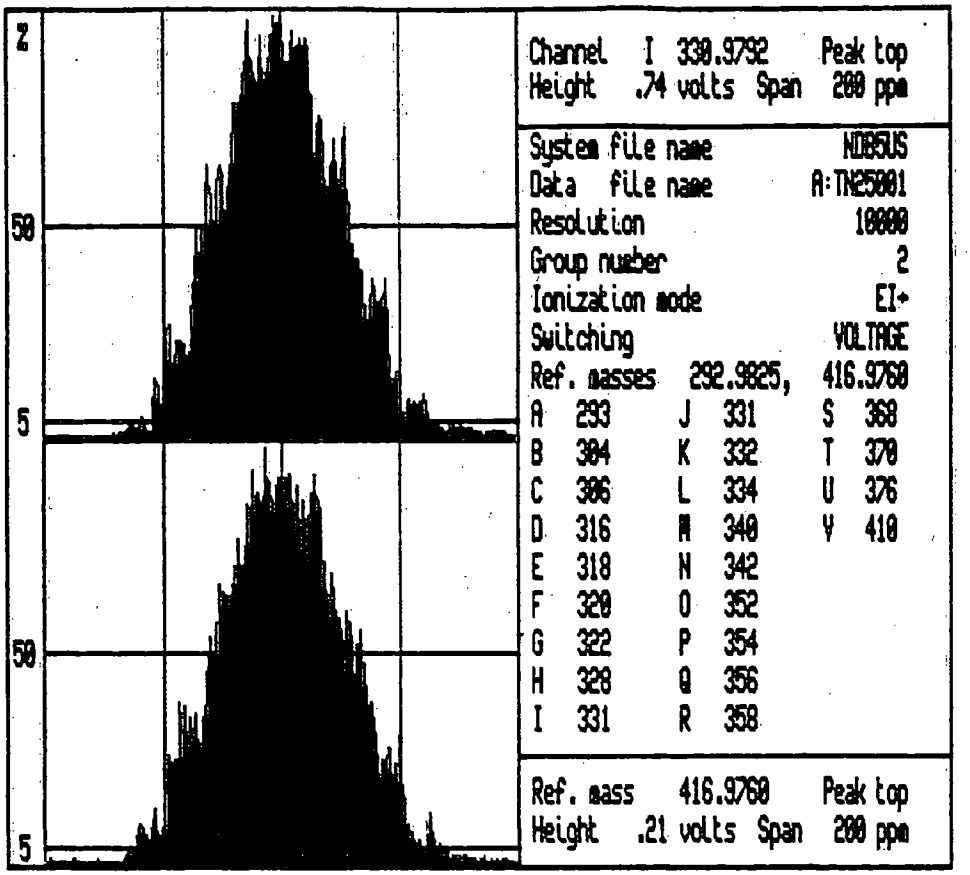
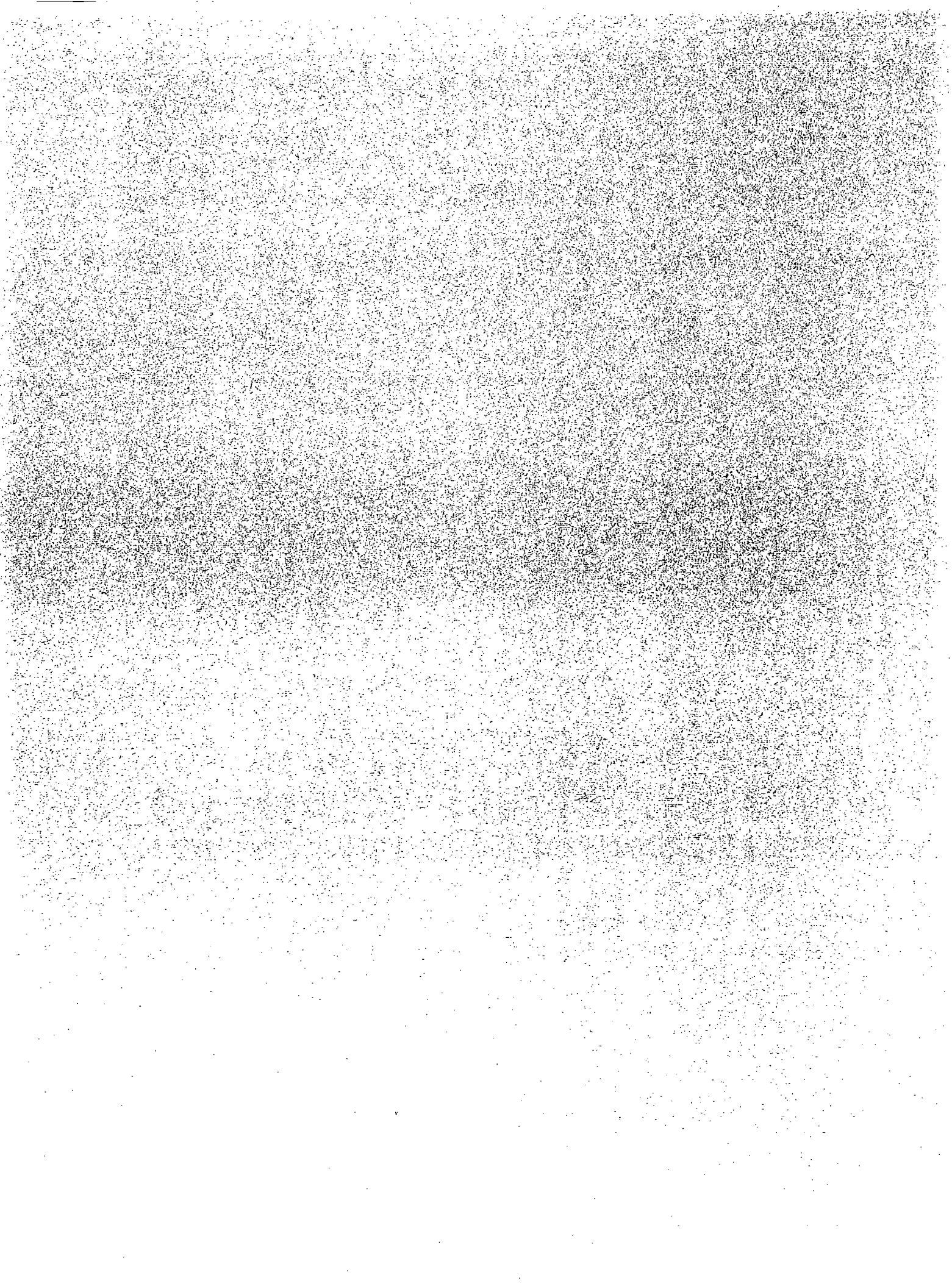
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,180.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A2.02E6
39:30 39:36 39:42 39:48 39:54 40:00 40:06
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:36
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,144.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A2.47E6
39:30 39:36 39:42 39:48 39:54 40:00 40:06
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:37
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.01E5
39:30 39:36 39:42 39:48 39:54 40:00 40:06
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T Noise:33
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,132.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
A1.24E5
39:30 39:36 39:42 39:48 39:54 40:00 40:06
File:T005818 #1-794 Acq:25-NOV-2000 01:58:34 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-5 TLI#52366 INJ. TIME = 02:00
39:37 39:43 39:52 40:02 40:06
39:30 39:36 39:42 39:48 39:54 40:00 40:06


Z
50
5
50
5
Channel I 330.9792 Peak top
Height .74 volts Span 200 ppm
System file name NIBSUS
Data file name A:TN25001
Resolution 10000
Group number 2
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 416.9760
A 293 J 331 S 368
B 304 K 332 T 370
C 306 L 334 U 376
D 316 M 340 V 410
E 318 N 342
F 320 O 352
G 322 P 354
H 328 Q 356
I 331 R 358
Ref. mass 416.9760 Peak top
Height .21 volts Span 200 ppm



TLI Project: 52366 Method 8290 PCDD/PCDF Analysis
Client Sample: BASF-SMW-6 Analysis File: T005

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/2000	Spike File:	SPMIT32
TLI ID:	274-99-2A	Date Extracted:	11/21/2000	ICal:	TF57140
		Date Analyzed:	11/25/2000	ConCal:	T005815
Sample Size:	1.090 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005817	% Lipid:	n/a
GC Column:	DB-5	Analyst:	JMM	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flag
2,3,7,8-TCDD	49.0			0.82	25:23	
1,2,3,7,8-PeCDD	97.3			1.68	29:42	
1,2,3,4,7,8-HxCDD	99.7			1.36	32:49	
1,2,3,6,7,8-HxCDD	425			1.15	32:54	
1,2,3,7,8,9-HxCDD	337			1.20	33:12	
1,2,3,4,6,7,8-HpCDD	7780			1.03	36:06	
1,2,3,4,6,7,8,9-OCDD	52510			0.81	39:41	E
2,3,7,8-TCDF	621			0.87	24:39	
1,2,3,7,8-PeCDF	2290			1.51	28:42	
2,3,4,7,8-PeCDF	382			1.59	29:21	
1,2,3,4,7,8-HxCDF	910			1.31	32:07	
1,2,3,6,7,8-HxCDF	239			1.22	32:14	
2,3,4,6,7,8-HxCDF	139			1.30	32:43	
1,2,3,7,8,9-HxCDF	ND	12.1				
1,2,3,4,6,7,8-HpCDF	644			1.03	35:04	
1,2,3,4,7,8,9-HpCDF	126			1.07	36:36	
1,2,3,4,6,7,8,9-OCDF	830			0.86	39:52	

Totals	Conc. (pg/L)	Number	DL	EMPC	Flag
Total TCDD	286	6		385	
Total PeCDD	319	3		746	
Total HxCDD	5200	7			
Total HpCDD	16570	2			
Total TCDF	6070	14		6360	
Total PeCDF	4990	9		5140	
Total HxCDF	2610	8		2760	
Total HpCDF	1300	4			

Triangle Laboratories, Inc.®
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 09:28 11/25

TLI Project: 52366 Method 8290 PCDD/PCDF Analysis
Client Sample: BASF-SMW-6 Analysis File: T005E

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag:
$^{13}C_{12}$-2,3,7,8-TCDF	208	11.3	40%-130%	0.77	24:38	V___
$^{13}C_{12}$-2,3,7,8-TCDD	181	9.87	40%-130%	0.83	25:22	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDF	135	7.33	40%-130%	1.45	28:38	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDD	154	8.38	40%-130%	1.50	29:40	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	135	7.38	40%-130%	0.51	32:13	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	152	8.30	40%-130%	1.23	32:53	V___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	147	7.99	25%-130%	0.42	35:04	V___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	146	7.96	25%-130%	1.03	36:05	V___
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	206	5.60	25%-130%	0.84	39:40	V___

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,4,7,8-PeCDF	143	7.78	40%-130%	1.52	29:20	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	140	7.62	40%-130%	0.50	32:07	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	135	7.37	40%-130%	1.27	32:48	V___
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	130	7.07	25%-130%	0.44	36:34	V___

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flag
$^{37}Cl_4$-2,3,7,8-TCDD	183	99.5	40%-130%	25:23	___

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	165	8.99	40%-130%	0.52	33:27	V___
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	150	8.17	40%-130%	0.51	32:41	V___

Recovery Standards	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,4-TCDD	0.81	25:10	___
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.20	33:11	___

Data Reviewer: _____ 11/25/2000

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Chromatographic Calculations For File:T005819

QC Front End.....: 1.8907
Tetra/Hexa RS Ratio: 1.1719

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Initial ....Date...

Data Review By: _____ ___/___/___

Calculated Noise Height: 0.05

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005819B.dbf
11/25/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC	Log	Omit	Why	RT	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
TCDF					0.65-0.89						0.860-1.077			
304-306	DC	NL			Height			0.15	0.08	0.07				
					21:21	RO	1.02	0.99	0.57	0.56	0.867			
					21:50		0.75	9.24	3.95	5.29	0.886			
					22:10		0.73	3.21	1.35	1.86	0.900			
					22:34		0.87	7.95	3.70	4.25	0.916			
					22:54	RO	0.94	14.21	6.18	6.57	0.930			
					23:13		0.71	12.14	5.03	7.11	0.942			
					23:34		0.82	5.71	2.57	3.14	0.957			
					23:53		0.85	13.63	6.28	7.35	0.970			
					24:09		0.84	95.00	43.44	51.56	0.980			
					24:27		0.80	3.57	1.59	1.98	0.993			
					24:39		0.87	45.07	20.96	24.11	1.001	2378-TCDF		AN
					25:04		0.89	6.36	3.00	3.36	1.018			
					25:18		0.89	3.73	1.76	1.97	1.027			
					25:29		0.84	23.06	10.50	12.56	1.035			
					25:45		0.83	97.75	44.42	53.33	1.045			
					26:04		0.84	114.41	52.25	62.16	1.058			
					26:24	RO	1.13	5.36	3.43	3.03	1.072			
	DC	WH			26:42		0.84	46.71			1.084			
304-306			17	Peaks				461.39						
13C12-TCDF					0.65-0.89						0.959-1.041			
316-318	DC	NL			Height			0.18	0.08	0.10				
	DC	WL			21:22	RO	0.90	1.59			0.867			
	DC	WL			22:24		0.67	2.64			0.909			
	DC	WL			23:28	RO	0.52	3.52			0.953			
					23:54	RO	0.25	0.64	0.28	1.13	0.970			
	DC	SN			24:13	RO	0.17	0.62			0.983			
					24:38		0.77	130.17	56.68	73.49	1.000	13C12-2378-TCDF		ISO
					Height			34.18	15.11	19.07				
					25:16		0.73	4.25	1.79	2.46	1.026			
	DC	SN			25:??	RO	0.07	0.55			1.038			
316-318			3	Peaks				135.06						

---------- Above: TCDF / TCDD Follows ----------

TCDD					0.65-0.89						0.890-1.045			
320-322	DC	NL			Height			0.09	0.05	0.04				
					22:46		0.69	4.53	1.85	2.68	0.898	1368-TCDD		AN
					23:10		0.73	2.65	1.12	1.53	0.913			
					23:29	RO	0.03	1.24	0.54	15.54	0.926			
	DC	SN			23:57		0.70	0.73			0.944			
					24:25		0.74	1.41	0.60	0.81	0.963			

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				24:31	RO	1.69	0.57	0.54	0.32	0.966			
				24:50		0.65	1.24	0.49	0.75	0.979			
				25:12		0.87	1.29	0.60	0.69	0.993			
				25:17	RO	0.54	1.15	0.50	0.93	0.997			
				25:23		0.82	2.27	1.02	1.25	1.001	2378-TCDD	AN	
				25:31	RO	1.18	0.39	0.26	0.22	1.006			J
				25:42	RO	0.59	1.20	0.52	0.88	1.013			
	DC	SN		25:56	RO	1.86	0.37			1.022			
320-322			11 Peaks				17.94						
37Cl-TCDD										0.921-1.079			
328	DC	NL			Height		0.14	0.14					
	DC	WL		22:54			1.82			0.903			
	DC	WL		23:03			16.90			0.909			
	DC	WL		23:10			11.85			0.913			
				23:29			2.09	2.09		0.926			
				23:40			1.59	1.59		0.933			
				23:58			1,032.56	1,032.56		0.945			
				24:25			3.17	3.17		0.963			
				24:57			1.24	1.24		0.984			
				25:23			79.39	79.39		1.001	37Cl-TCDD	CLS	
				25:46			10.80	10.80		1.016			
				26:43			23.89	23.89		1.053			
328			8 Peaks				1,154.73						
13C12-TCDD					0.65-0.89					0.921-1.079			
332-334	DC	NL			Height		0.25	0.20	0.05				
				25:18		0.81	896.22	401.45	494.77	0.992	13C12-1234-TCDD	RS1	
				25:22		0.83	93.04	42.15	50.89	1.000	13C12-2378-TCDD	IS1	
					Height		24.96	11.44	13.52				
				25:35		0.74	2.39	1.02	1.37	1.009			
332-334			3 Peaks				991.65						

---------- Above: TCDD / PeCDF Follows ----------

PeCDF					1.32-1.78					0.923-1.064			
340-342	DC	NL			Height		0.10	0.05	0.05				
				26:38		1.49	8.02	4.80	3.22	0.930			
	DC	SN		27:00	RO	0.29	0.10			0.943			
				27:22	RO	0.87	0.76	0.46	0.53	0.956			J
				27:47		1.43	23.80	14.00	9.80	0.970			
				28:02		1.44	9.79	5.78	4.01	0.979			
				28:16	RO	1.29	2.30	1.16	0.90	0.987			
				28:22		1.47	2.47	1.47	1.00	0.991			
				28:42		1.51	89.84	54.03	35.81	1.002	12378-PeCDF	AN	
				28:56		1.48	18.78	11.21	7.57	1.010			
				29:21		1.59	15.18	9.33	5.85	1.025	23478-PeCDF	AN	
				29:32		1.65	6.94	4.32	2.62	1.031			
	DC	SN		29:45	RO	0.71	0.25			1.039			
				29:57	RO	1.83	1.81	1.30	0.71	1.046			
				30:04		1.59	21.16	12.99	8.17	1.050			
				30:19	RO	0.76	1.17	0.71	0.94	1.059			J

Compound/ M_Z....	QC.Log	Cmit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	WH		30:34		1.38	0.88			1.068			
340-342		13	Peaks				202.02						
13C12-PeCDF				1.32-1.78					0.860-1.140				
352-354	DC	NL					Height	0.08	0.04	0.04			
				27:46	RO	3.00	0.31	0.36	0.12	0.970			
	DC	SN		28:03		1.57	0.18			0.980			
				28:38		1.45	78.77	46.63	32.14	1.000	13C12-PeCDF 123	IS2	
							Height	23.86	13.87	9.99			
				28:55	RO	0.79	0.79	0.48	0.61	1.010			
	DC	SN		29:03	RO	1.24	0.54			1.015			
				29:20		1.52	82.76	49.91	32.85	1.024	13C12-PeCDF 234	SUR1	
	DC	SN		29:39	RO	2.85	0.66			1.036			
	DC	SN		29:52	RO	0.67	0.10			1.043			
				30:08	RO	5.54	0.33	0.72	0.13	1.052			
				30:19	RO	1.13	1.71	0.76	0.67	1.059			
352-354		6	Peaks				164.67						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD				1.32-1.78					0.933-1.021				
356-358	DC	NL					Height	0.07	0.04	0.03			
				28:22	RO	0.89	1.55	0.94	1.06	0.956			
				28:36	RO	0.45	3.49	2.12	4.71	0.964			
				28:45	RO	1.25	6.17	3.03	2.42	0.969			
				28:56		1.49	2.81	1.68	1.13	0.975			
				29:10		1.46	3.74	2.22	1.52	0.983			
				29:30	RO	0.60	0.49	0.30	0.50	0.994			J
				29:42		1.68	2.87	1.80	1.07	1.001	12378-PeCDD	AN	
				29:50	RO	0.07	0.89	0.54	8.19	1.006			J
	DC	WH		30:26	RO	0.55	0.74			1.026			
356-358		8	Peaks				22.01						
13C12-PeCDD				1.32-1.78					0.865-1.135				
368-370	DC	NL					Height	0.08	0.05	0.03			
	DC	SN		28:11	RC	3.75	0.10			0.950			
	DC	SN		28:20	RO	4.14	0.18			0.955			
	DC	SN		28:35	RO	0.75	0.39			0.963			
	DC	SN		28:52	RO	0.62	0.13			0.973			
	DC	SN		29:21	RO	0.83	0.08			0.989			
				29:40		1.50	51.24	30.75	20.49	1.000	13C12-PeCDD 123	IS3	
							Height	15.80	9.48	6.32			
				30:04	RC	1.17	0.46	0.21	0.18	1.013			
368-370		2	Peaks				51.70						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF				1.05-1.43					0.961-1.046				
374-376	DC	NL					Height	0.12	0.06	0.06			
				31:08		1.36	2.78	1.60	1.18	0.966			
				31:17		1.35	11.19	6.43	4.76	0.971			
				31:30	RO	2.84	0.56	0.71	0.25	0.978			J

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				31:35	RO	1.54	0.54	0.37	0.24	0.980			J
				31:44		1.26	18.45	10.28	8.17	0.985			
				31:59		1.39	1.91	1.11	0.80	0.993			
				32:07		1.31	34.30	19.45	14.85	0.997	123478-HxCDF	AN	
				32:14		1.22	9.45	5.19	4.26	1.001	123678-HxCDF	AN	
				32:23		1.34	12.55	7.19	5.36	1.005			
				32:30	RO	0.83	0.45	0.25	0.30	1.009			J
				32:43		1.30	4.97	2.81	2.16	1.016	234678-HxCDF	AN	
	DC	SN		33:18	RO	0.22	0.04			1.034			
				33:31	RO	1.90	3.85	3.27	1.72	1.040			
	DC	SN		33:40	RO	2.75	0.09			1.045			
	DC	WH		33:56		1.27	4.49			1.053			
374-376			12	Peaks			101.00						
13C12-HxCDF				0.43-0.59					0.876-1.124				
384-386	DC	NL		Height			0.15	0.07	0.08				
				32:07		0.50	68.57	22.94	45.63	0.997	13C12-HxCDF 478	SUR2	
				32:13		0.51	67.40	22.71	44.69	1.000	13C12-HxCDF 678	IS4	
				Height			23.94	8.02	15.92				
				32:41		0.51	68.07	22.96	45.11	1.014	13C12-HxCDF 234	ALT2	
				32:51		0.43	0.33	0.10	0.23	1.020			
				33:27		0.52	55.02	18.72	36.30	1.038	13C12-HxCDF 789	ALT1	
				33:35	RO	1.42	0.29	0.27	0.19	1.042			
384-386			6	Peaks			259.68						

---------- Above: HxCDF / HxCDD Follows ----------

HxCDD				1.05-1.43					0.956-1.013				
390-392	DC	NL		Height			0.12	0.05	0.07				
				31:38		1.18	38.78	20.97	17.81	0.962			
				32:05		1.27	9.13	5.10	4.03	0.976			
				32:18		1.16	64.93	34.90	30.03	0.982			
				32:27		1.15	1.40	0.75	0.65	0.987			
				32:49		1.36	2.62	1.51	1.11	0.998	123478-HxCDD	AN	
				32:54		1.15	11.16	5.98	5.18	1.001	123678-HxCDD	AN	
				33:12		1.20	8.95	4.89	4.06	1.010	123789-HxCDD	AN	
	DC	WH		33:20	RO	1.80	0.11			1.014			
	DC	WH		33:39	RO	0.68	0.23			1.023			
390-392			7	Peaks			136.97						
13C12-HxCDD				1.05-1.43					0.970-1.030				
402-404	DC	NL		Height			0.13	0.08	0.05				
				32:48		1.27	43.58	24.36	19.22	0.997	13C12-HxCDD 478	SUR3	
				32:53		1.23	47.40	26.17	21.23	1.000	13C12-HxCDD 678	IS5	
				Height			15.95	8.67	7.28				
				33:11		1.20	628.98	342.55	286.43	1.009	13C12-HxCDD 789	RS2	
				33:26	RO	0.51	0.43	0.24	0.47	1.017			
402-404			4	Peaks			720.39						

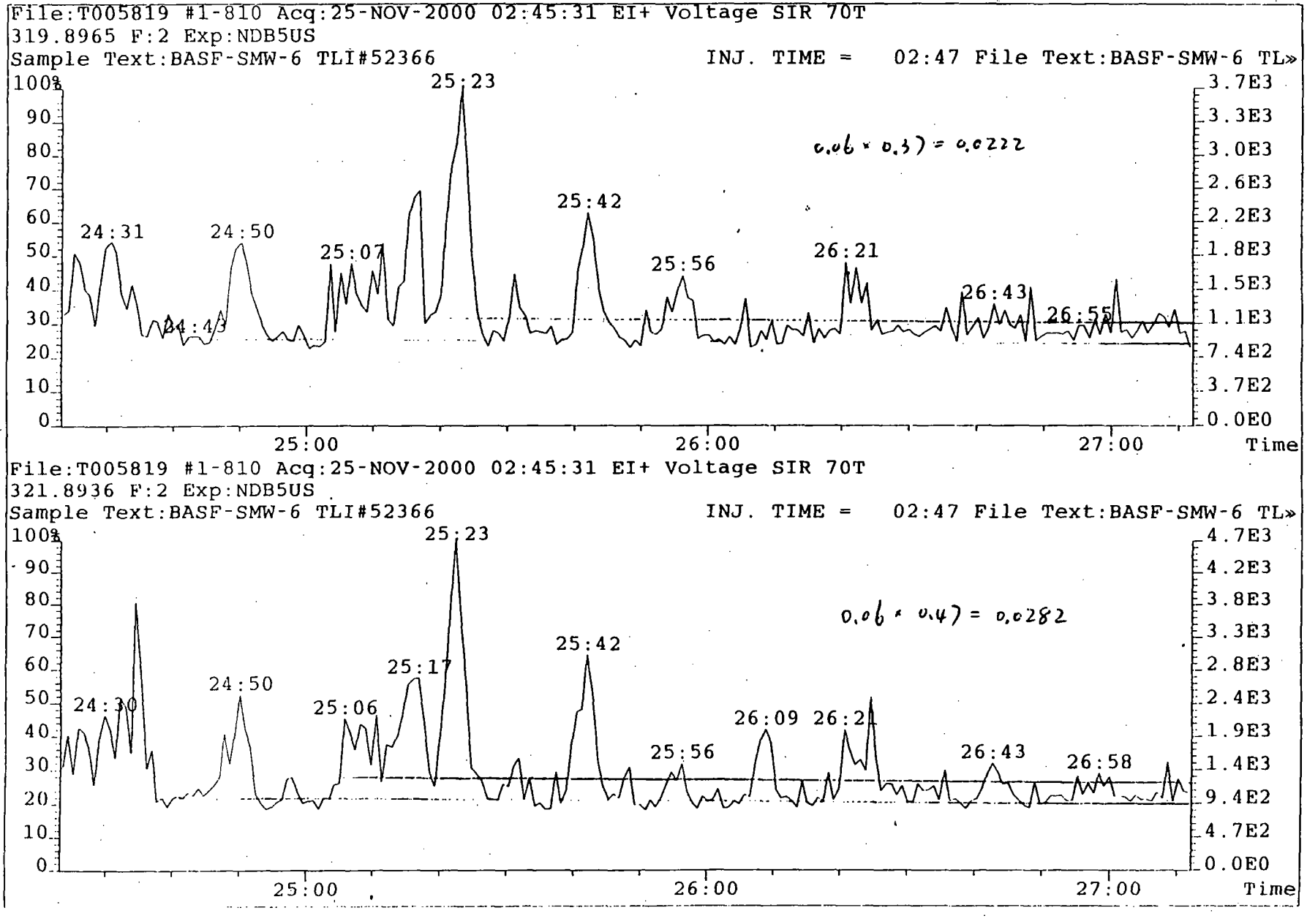
---------- Above: HxCDD / HpCDF Follows ----------

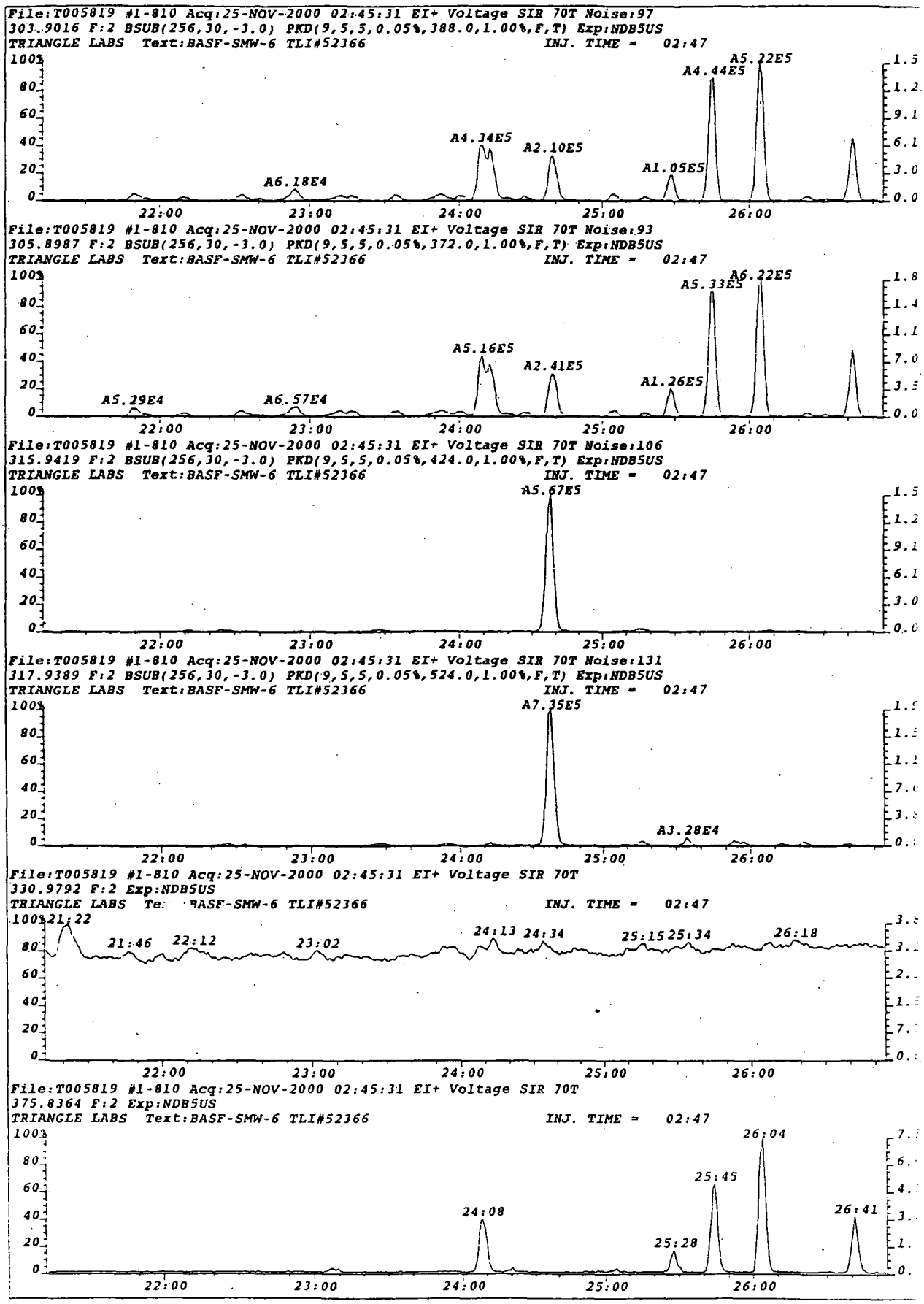
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
HpCDF				0.88-1.20					0.995-1.048				
408-410	DC	NL		Height			0.10	0.06	0.04				
				35:04		1.03	21.47	10.87	10.60	1.000	1234678-HpCDF	AN	
				35:19		1.02	1.90	0.96	0.94	1.007			
				35:29		1.06	13.75	7.06	6.69	1.012			
	DC	SN		36:06	RO	0.43	0.06			1.029			
				36:36		1.07	3.23	1.67	1.56	1.044	1234789-HpCDF	AN	
	DC	WH		36:47	RO	0.50	0.18			1.049			
408-410			4	Peaks			40.35						
13C12-HpCDF				0.37-0.51					0.943-1.114				
418-420	DC	NL		Height			0.09	0.05	0.04				
				35:04		0.42	48.73	14.40	34.33	1.000	13C12-HpCDF 678	IS6	
				Height			14.98	4.31	10.67				
	DC	SN		35:23	RO	0.85	0.56			1.009			
	DC	SN		35:33	RO	0.57	0.13			1.014			
				36:34		0.44	33.57	10.24	23.33	1.043	13C12-HpCDF 789	SUR4	
	DC	SN		36:47	RO	0.88	0.46			1.049			
	DC	SN		36:54	RO	0.33	0.23			1.052			
418-420			2	Peaks			82.30						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20					0.974-1.005				
424-426	DC	NL		Height			0.16	0.06	0.10				
				35:21		1.02	176.02	88.89	87.13	0.980			
				36:06		1.03	155.70	78.92	76.78	1.000	1234678-HpCDD	AN	
424-426			2	Peaks			331.72						
13C12-HpCDD				0.88-1.20					0.972-1.028				
436-438	DC	NL		Height			0.23	0.16	0.07				
				36:05		1.03	42.97	21.84	21.13	1.000	13C12-HpCDD 678	IS7	
				Height			11.15	5.64	5.51				
436-438			1	Peak			42.97						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02					0.899-1.101				
442-444	DC	NL		Height			0.07	0.04	0.03				
	DC	SN		36:37	RO	1.25	0.15			0.923			
	DC	SN		36:48	RO	3.67	0.06			0.928			
	DC	SN		37:00	RO	1.40	0.09			0.933			
	DC	SN		37:34	RO	0.75	0.19			0.947			
	DC	SN		37:47	RO	0.36	0.08			0.953			
				37:58		0.96	0.98	0.48	0.50	0.957			
	DC	SN		38:05	RO	1.67	0.11			0.960			
	DC	SN		38:29	RO	0.50	0.11			0.970			
	DC	SN		39:03		0.90	0.19			0.984			
	DC	SN		39:09	RO	1.09	0.21			0.987			
	DC	SN		39:16	RO	2.20	0.09			0.990			
	DC	SN		39:33	RO	0.62	0.17			0.997			
	DC	SN		39:40	RO	0.58	0.40			1.000			

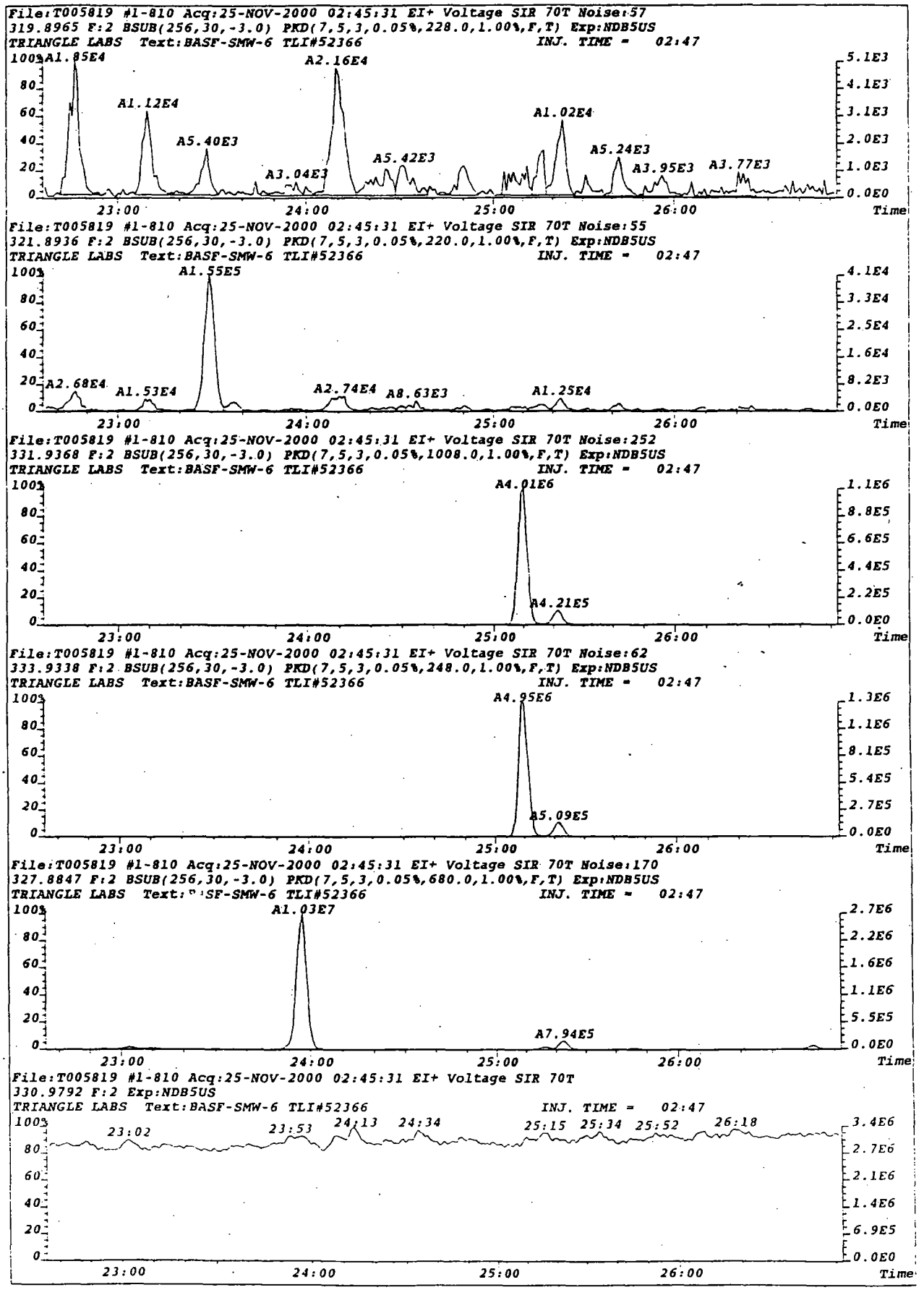
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
				39:52		0.86	12.25	5.65	6.60	1.005	OCDF	AN	
	DC	SN		40:05		0.92	0.46			1.011			
	DC	SN		40:27	RO	1.50	0.15			1.020			
	DC	SN		41:06	RO	2.10	0.19			1.036			
	DC	SN		41:20	RO	2.33	0.11			1.042			
	DC	SN		41:26	RO	2.50	0.08			1.045			
	DC	SN		41:33	RO	1.10	0.40			1.047			
	DC	SN		42:21	RO	0.42	0.11			1.068			
	DC	SN		42:45	RO	0.58	0.23			1.078			
	DC	SN		43:01		0.83	0.11			1.084			
	DC	SN		43:09		0.82	0.20			1.088			
	DC	SN		43:37		1.00	0.20			1.100			
	DC	WH		43:56	RO	0.17	0.11			1.108			
	DC	WH		44:24		0.91	0.21			1.119			
442-444		2	Peaks				13.23						
OCDD				0.76-1.02					0.899-1.101				
458-460	DC	NL		Height			0.07	0.03	0.04				
				39:41		0.81	643.56	288.97	354.59	1.000	OCDD	AN	E
458-460		1	Peak				643.56						
13C12-OCDD				0.76-1.02					0.996-1.004				
470-472	DC	NL		Height			0.15	0.09	0.06				
				39:40		0.84	49.21	22.41	26.80	1.000	13C12-OCDD	IS8	
				Height			11.24	4.98	6.26				
	DC	WH		40:00	RO	2.27	0.77			1.008			
	DC	WH		40:12	RO	1.94	0.68			1.013			
470-472		1	Peak				49.21						

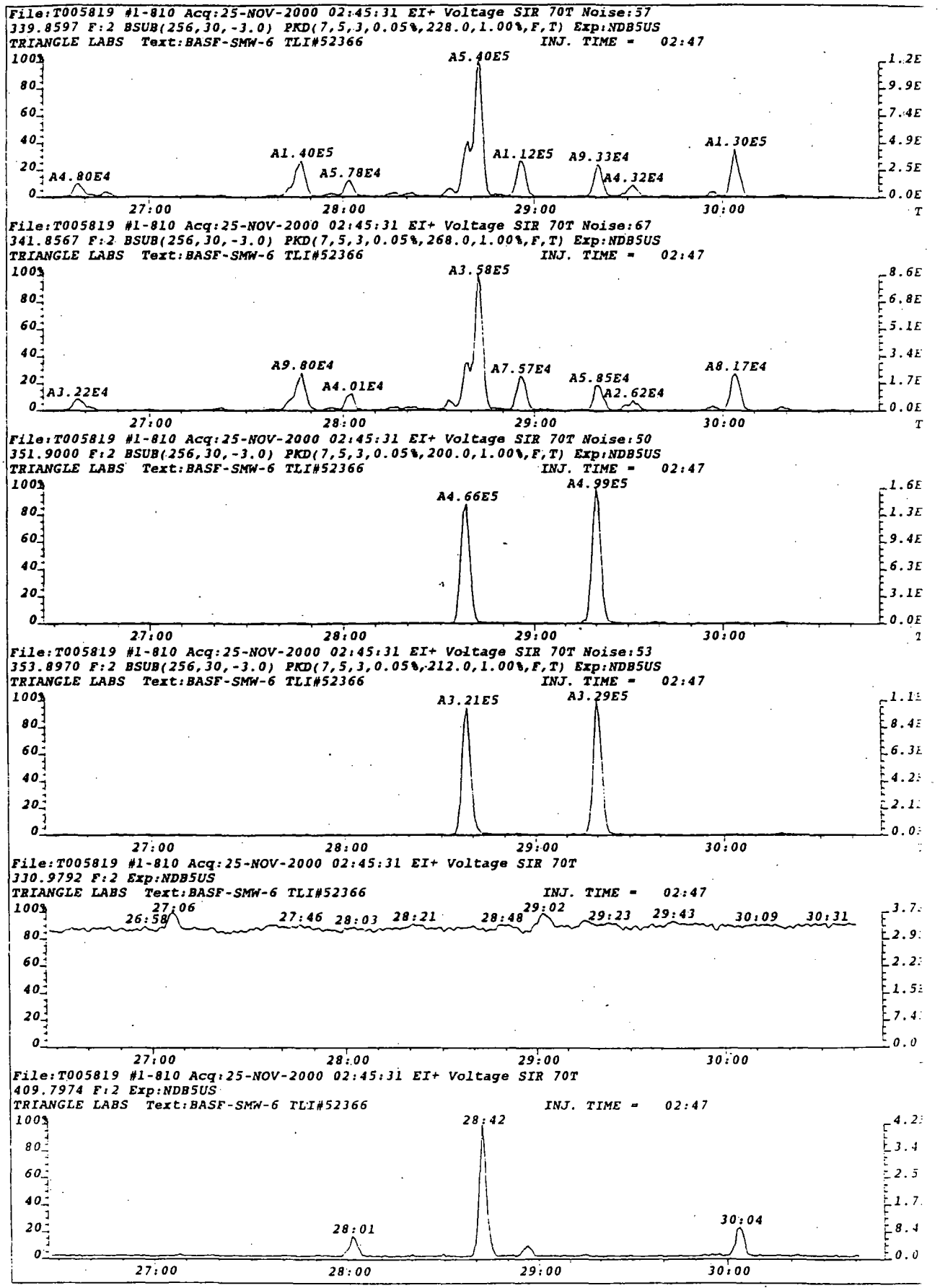
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

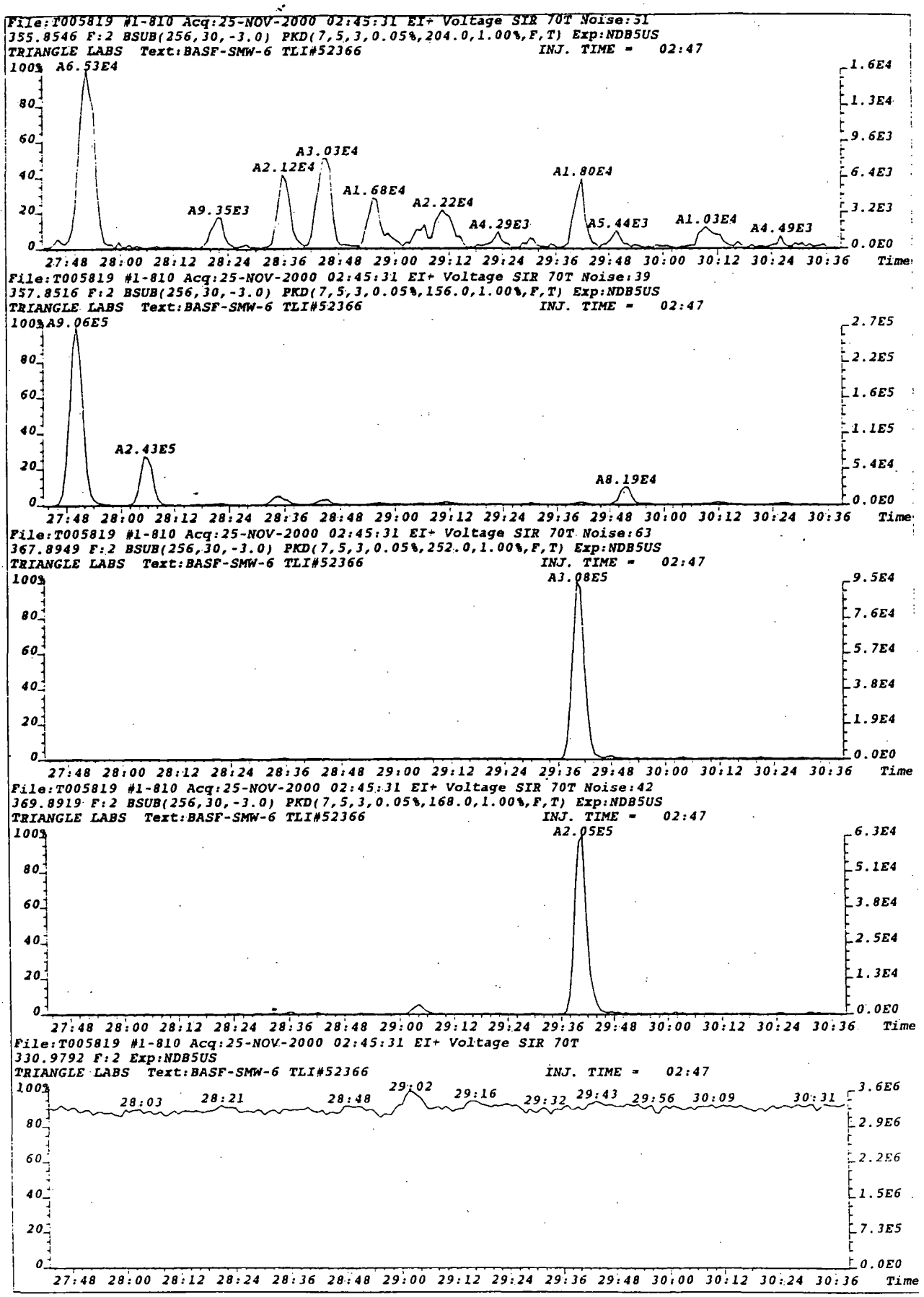
*** End of Report ***

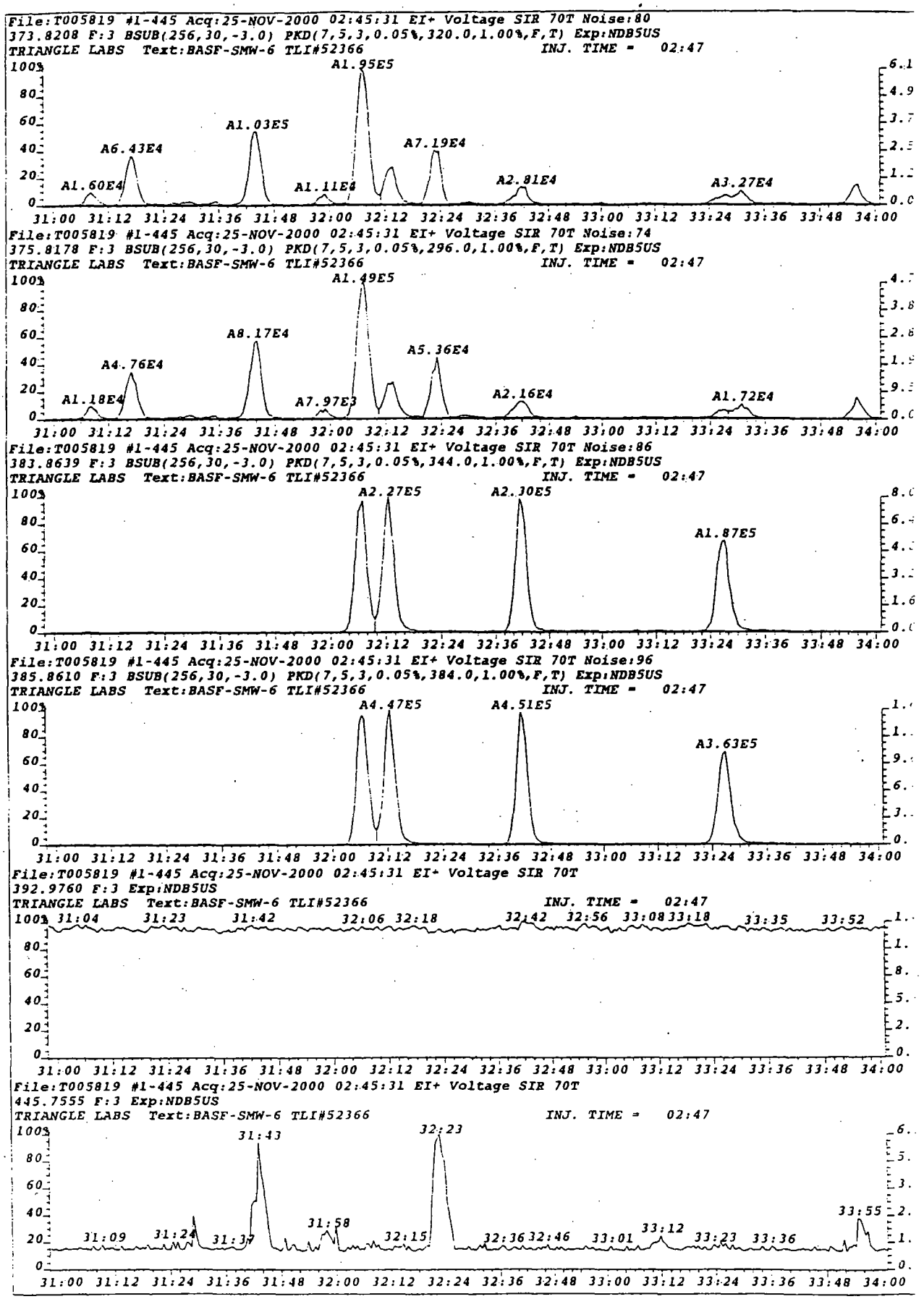

File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47 File Text:BASF-SMW-6 TL»
100%
90
80
70
60
50
40
30
20
10
0
3.7E3
3.3E3
3.0E3
2.6E3
2.2E3
1.8E3
1.5E3
1.1E3
7.4E2
3.7E2
0.0E0
24:31
24:43
24:50
25:07
25:23
25:42
25:56
26:21
26:43
26:55
0.06 × 0.3) = 0.0222
25:00
26:00
27:00
Time
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47 File Text:BASF-SMW-6 TL»
100%
90
80
70
60
50
40
30
20
10
0
4.7E3
4.2E3
3.8E3
3.3E3
2.8E3
2.4E3
1.9E3
1.4E3
9.4E2
4.7E2
0.0E0
24:30
24:50
25:06
25:17
25:23
25:42
25:56
26:09
26:21
26:43
26:58
0.06 × 0.4) = 0.0282
25:00
26:00
27:00
Time


File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:97
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,388.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47
A5.22E5
A4.44E5
A4.34E5
A2.10E5
A1.05E5
A6.18E4
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:93
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,372.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47
A6.22E5
A5.33E5
A5.16E5
A2.41E5
A1.26E5
A5.29E4
A6.57E4
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:106
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,424.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47
A5.67E5
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:131
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,524.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47
A7.35E5
A3.28E4
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47
21:22
21:46
22:12
23:02
24:13
24:34
25:15
25:34
26:18
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47
26:04
25:45
24:08
25:28
26:41
22:00
23:00
24:00
25:00
26:00

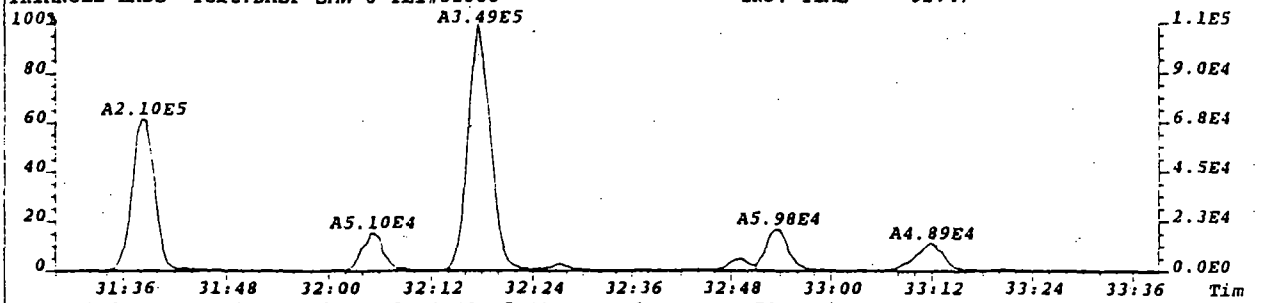

File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:57
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A1.85E4
A1.12E4
A5.40E3
A2.16E4
A3.04E3
A5.42E3
A1.02E4
A5.24E3
A3.95E3
A3.77E3
Time
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:55
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,220.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A1.55E5
A2.68E4
A1.53E4
A2.74E4
A8.63E3
A1.25E4
Time
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:252
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1008.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A4.01E6
A4.21E5
Time
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:62
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,248.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A4.95E6
A5.09E5
Time
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:170
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,680.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A1.03E7
A7.94E5
Time
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
23:02
23:53
24:13
24:34
25:15
25:34
25:52
26:18
Time


File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:57
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A5.40E5
A1.40E5
A1.12E5
A9.33E4
A1.30E5
A4.80E4
A5.78E4
A4.32E4
27:00
28:00
29:00
30:00
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:67
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,268.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A3.58E5
A9.80E4
A7.57E4
A5.85E4
A8.17E4
A3.22E4
A4.01E4
A2.62E4
27:00
28:00
29:00
30:00
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:50
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A4.66E5
A4.99E5
27:00
28:00
29:00
30:00
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:53
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A3.21E5
A3.29E5
27:00
28:00
29:00
30:00
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
27:06
26:58
27:46
28:03
28:21
28:48
29:02
29:23
29:43
30:09
30:31
27:00
28:00
29:00
30:00
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
28:42
28:01
30:04
27:00
28:00
29:00
30:00

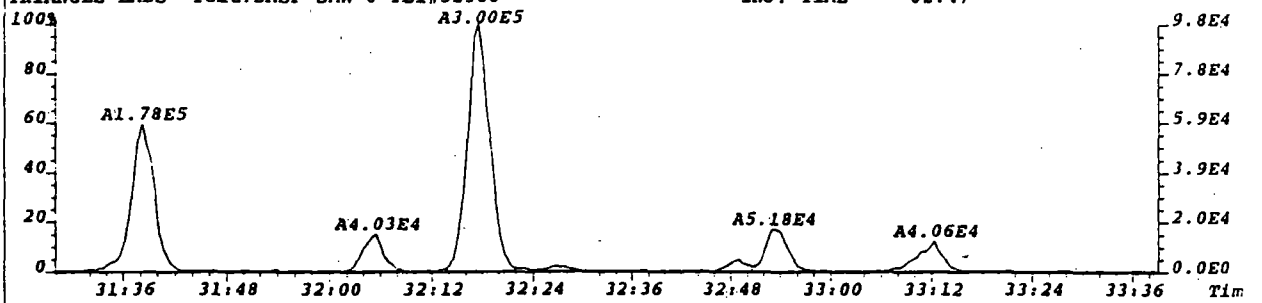

File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:51
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,204.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47
A6.53E4
A9.35E3
A2.12E4
A3.03E4
A1.68E4
A2.22E4
A4.29E3
A1.80E4
A5.44E3
A1.03E4
A4.49E3
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:39
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47
A9.06E5
A2.43E5
A8.19E4
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:63
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47
A3.08E5
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:42
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47
A2.05E5
File:T005819 #1-810 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366
INJ. TIME = 02:47
28:03
28:21
28:48
29:02
29:16
29:32
29:43
29:56
30:09
30:31
Time


File:T005819 #1-445 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:80
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,320.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A1.95E5
A1.03E5
A6.43E4
A7.19E4
A1.60E4
A1.11E4
A2.81E4
A3.27E4
File:T005819 #1-445 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:74
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,296.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A1.49E5
A8.17E4
A5.36E4
A4.76E4
A1.18E4
A7.97E3
A2.16E4
A1.72E4
File:T005819 #1-445 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:86
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,344.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A2.27E5
A2.30E5
A1.87E5
File:T005819 #1-445 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:96
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,384.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A4.47E5
A4.51E5
A3.63E5
File:T005819 #1-445 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
File:T005819 #1-445 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
31:43
32:23
31:58
33:55
31:09
31:24
31:37
32:15
32:36
32:46
33:01
33:12
33:23
33:36
31:00 31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 33:48 34:00

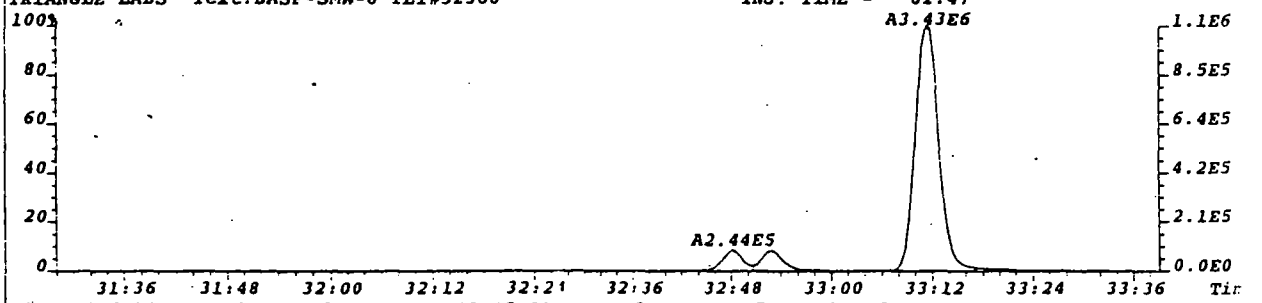
File:T005819 #1-445 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:68
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,272.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47



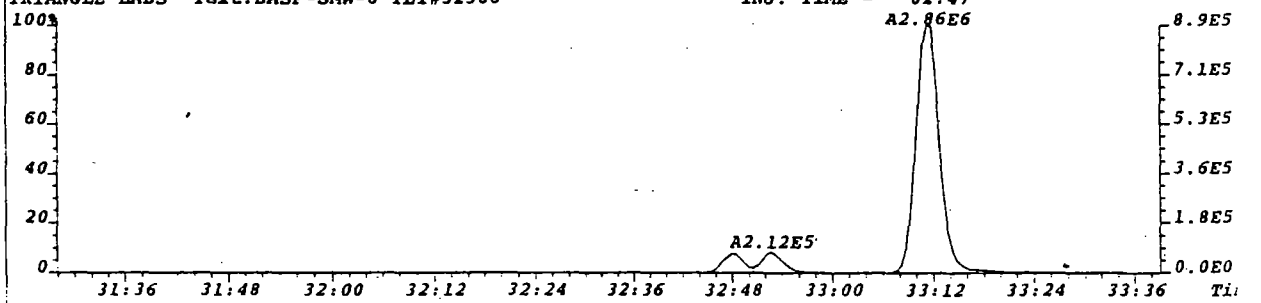
File:T005819 #1-445 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:93
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,372.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47



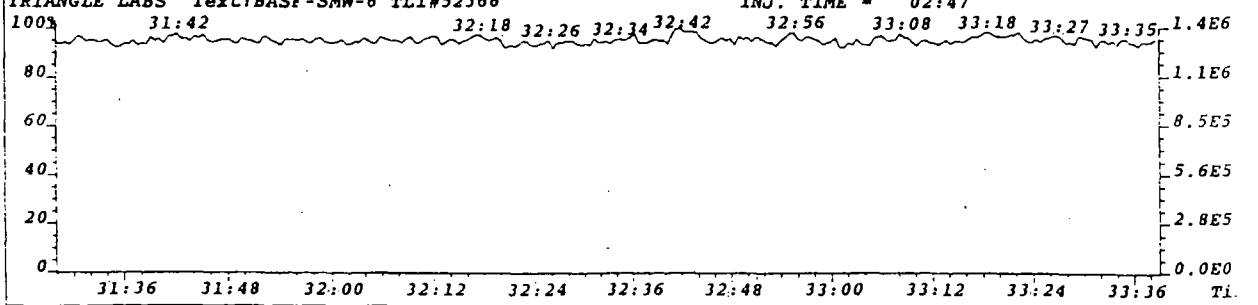
File:T005819 #1-445 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:100
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,400.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47

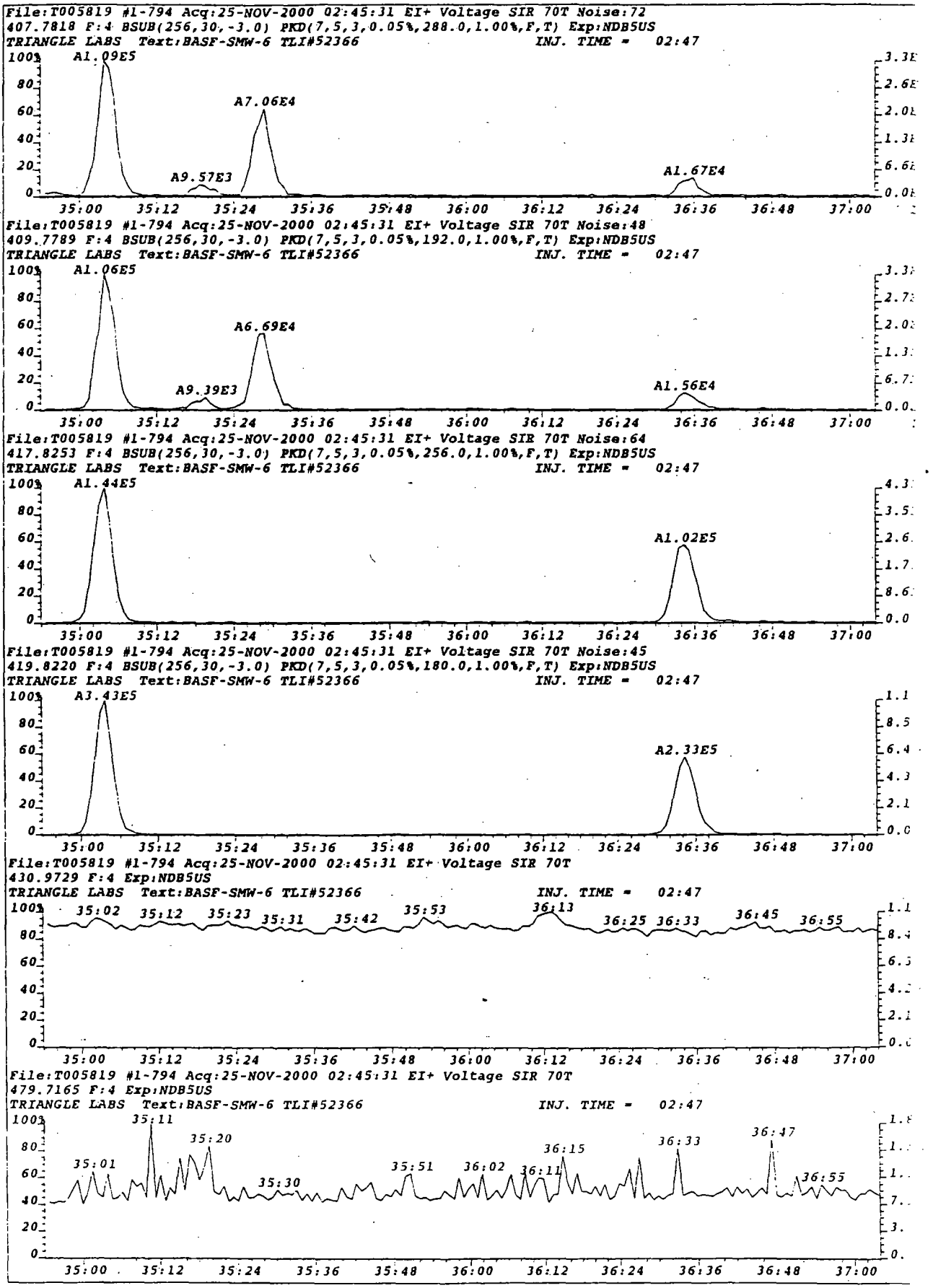


File:T005819 #1-445 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:68
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,272.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47



File:T005819 #1-445 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47




File:T005819 #1-794 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:72
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,288.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-6 TLI#52366 INJ. TIME = 02:47
A1.09E5
A7.06E4
A9.57E3
A1.67E4
File:T005819 #1-794 Acq:25-NOV-2000 02:45:31 EI+ Voltage SIR 70T Noise:48
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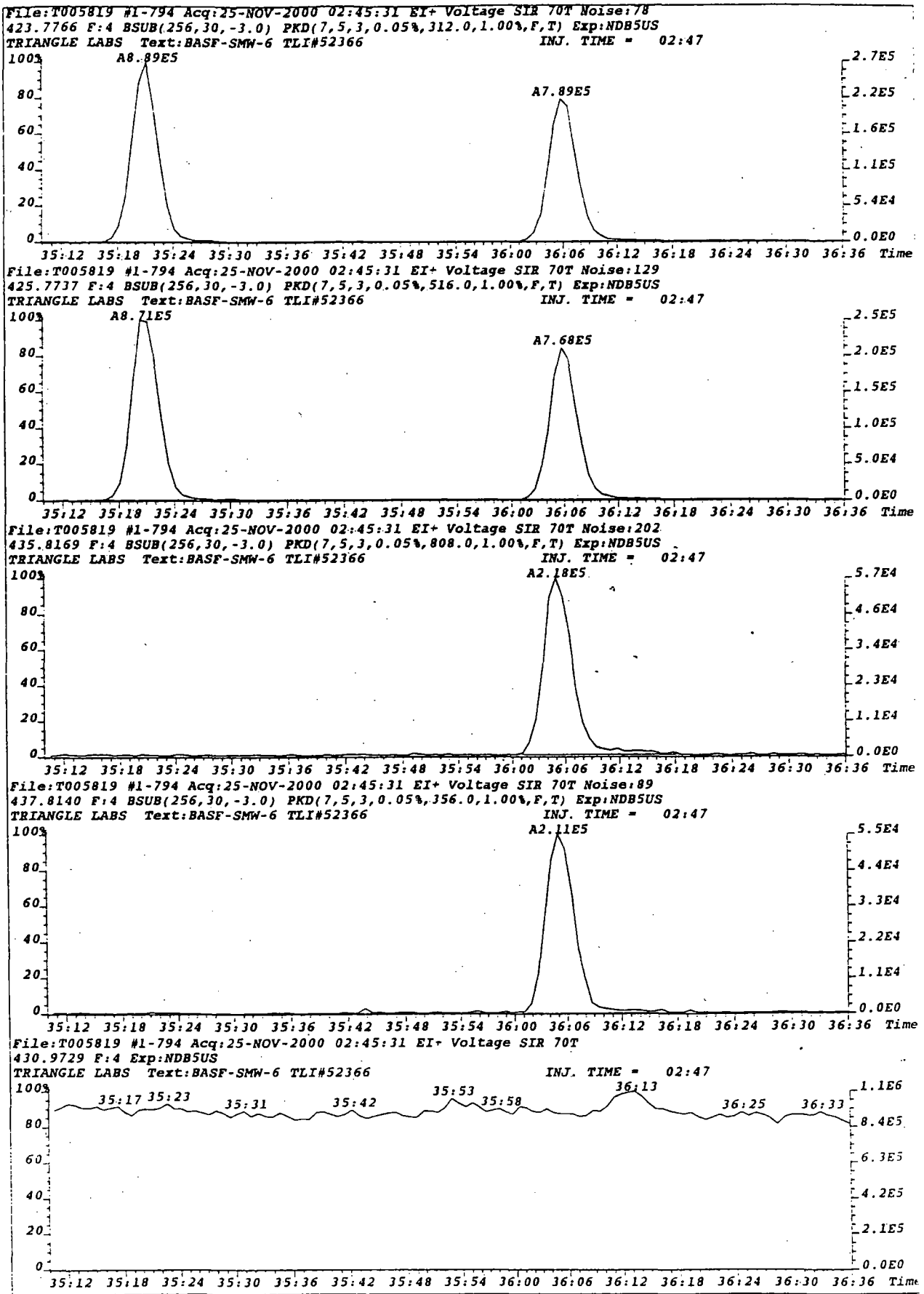
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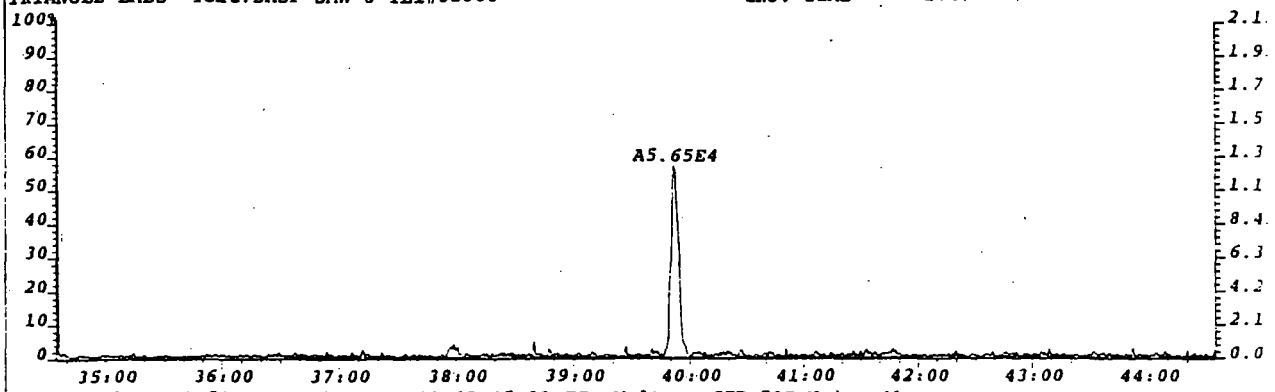

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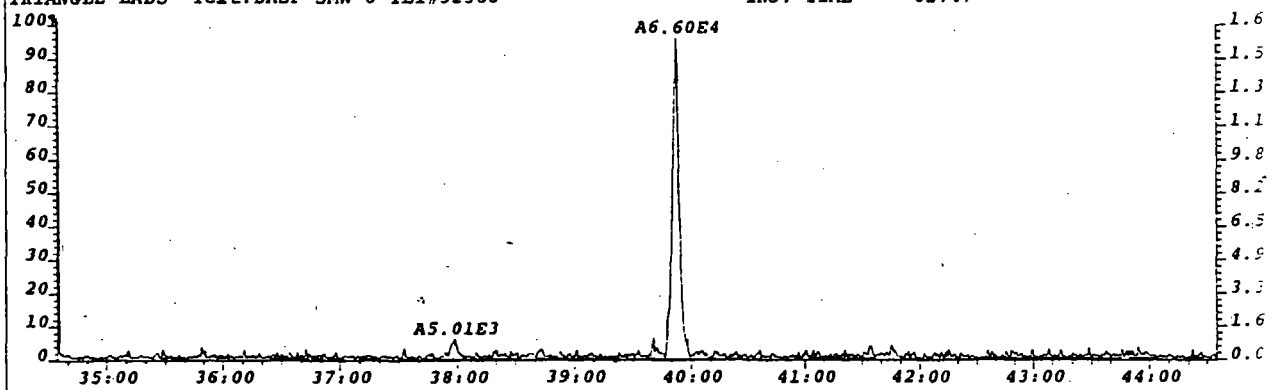

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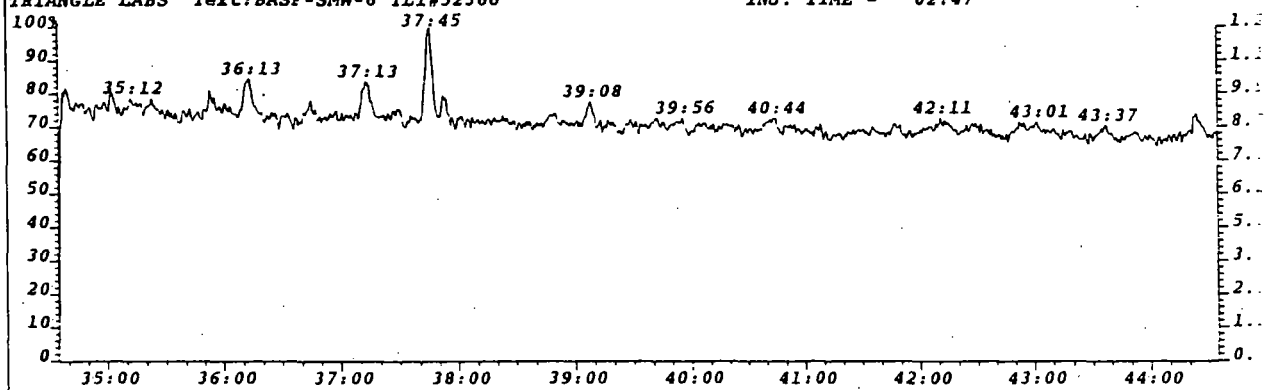

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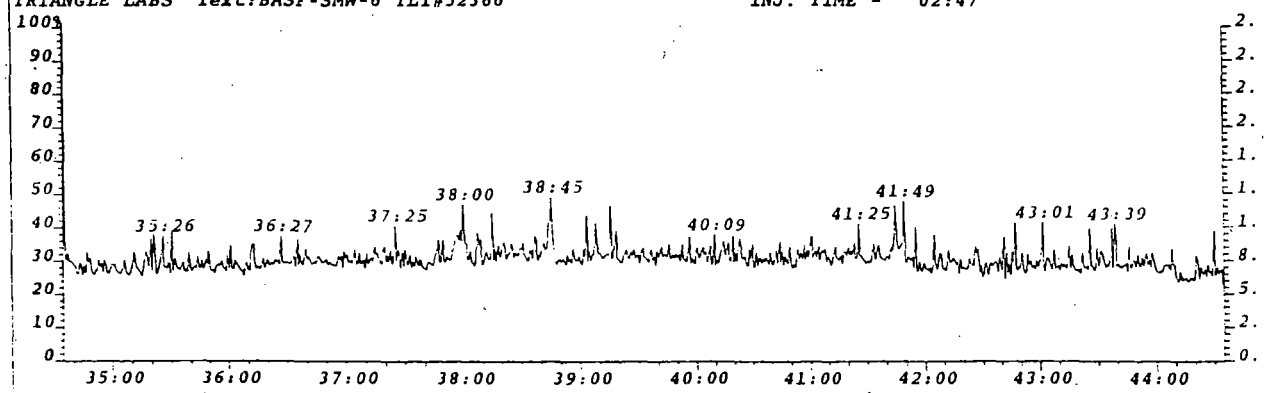

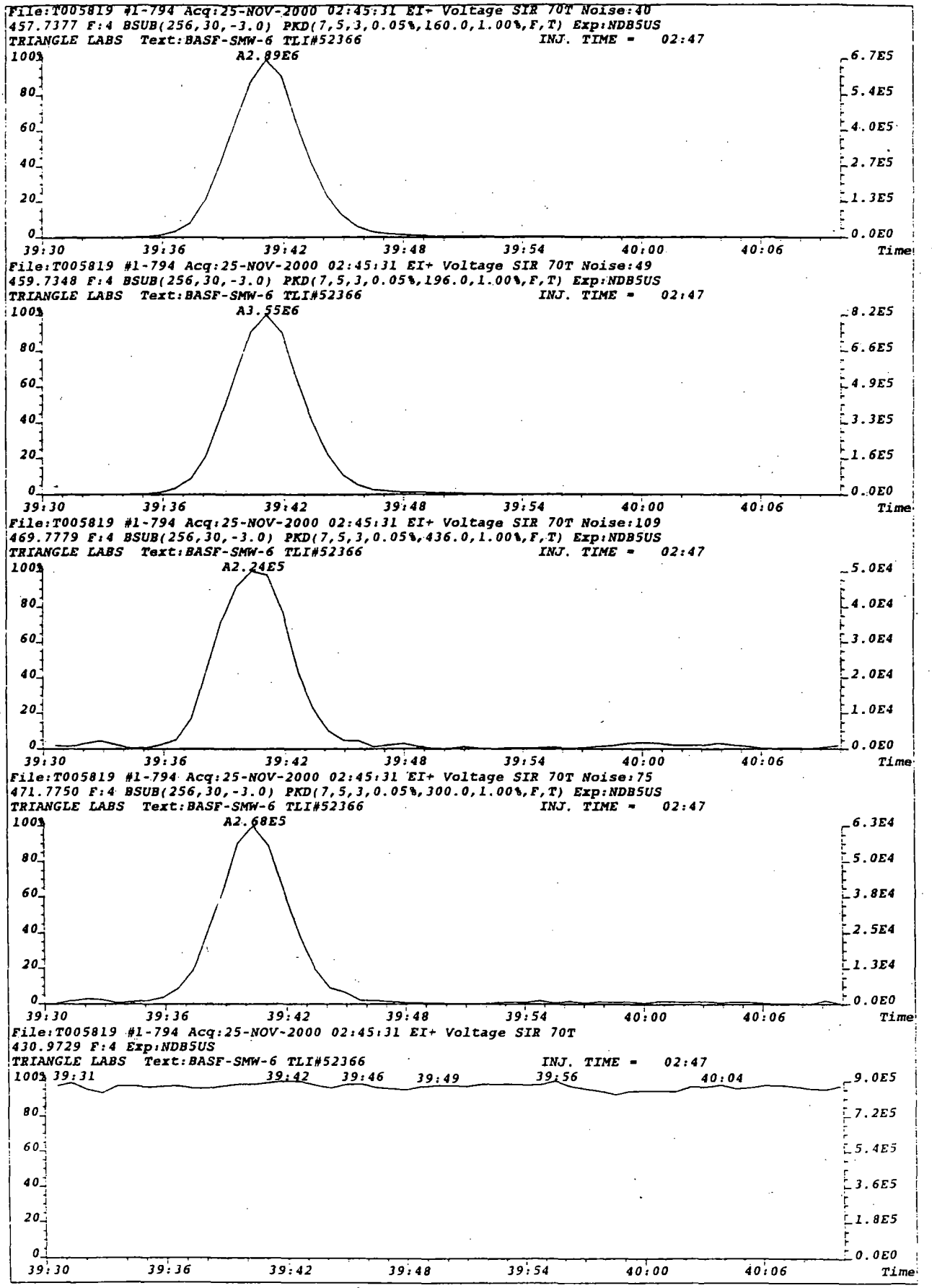
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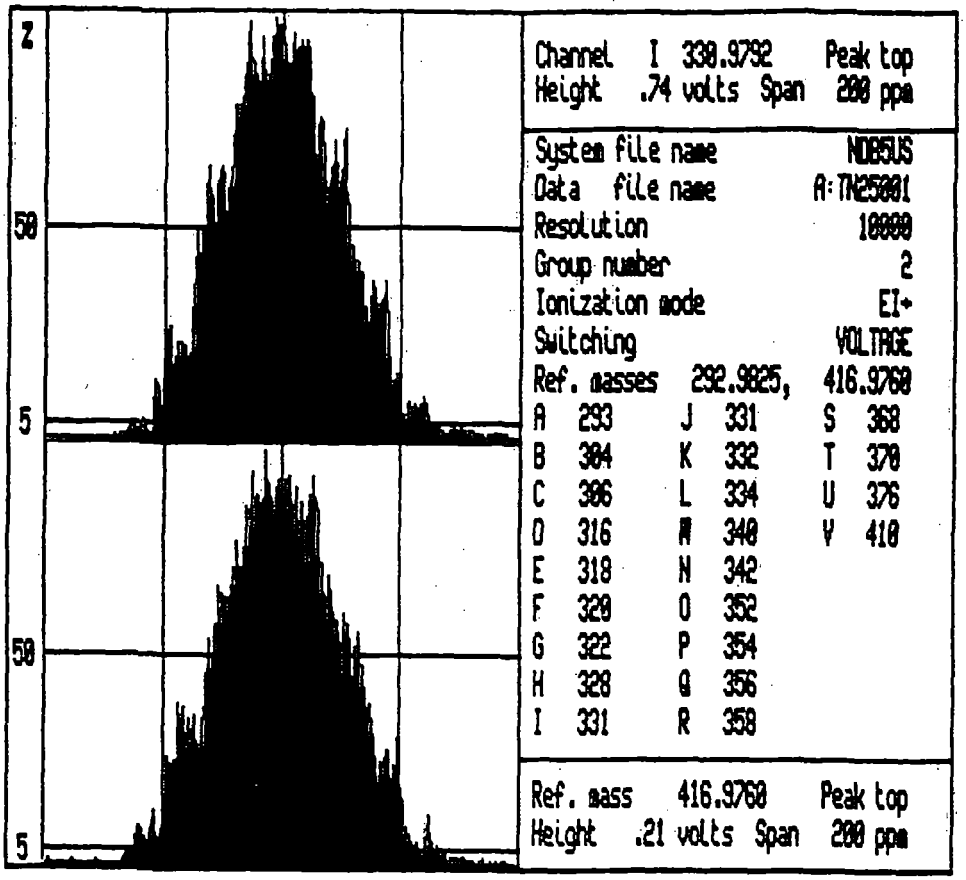
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50
5
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Ionization mode EI+
Switching VOLTAGE
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A 293 J 331 S 368
B 304 K 332 T 370
C 306 L 334 U 376
D 316 M 340 V 410
E 318 N 342
F 320 O 352
G 322 P 354
H 328 Q 356
I 331 R 358
Ref. mass 416.9760 Peak top
Height .21 volts Span 200 ppm

N
1/1/00

Firestone-Riverview-Monguagon Creek Data 2000

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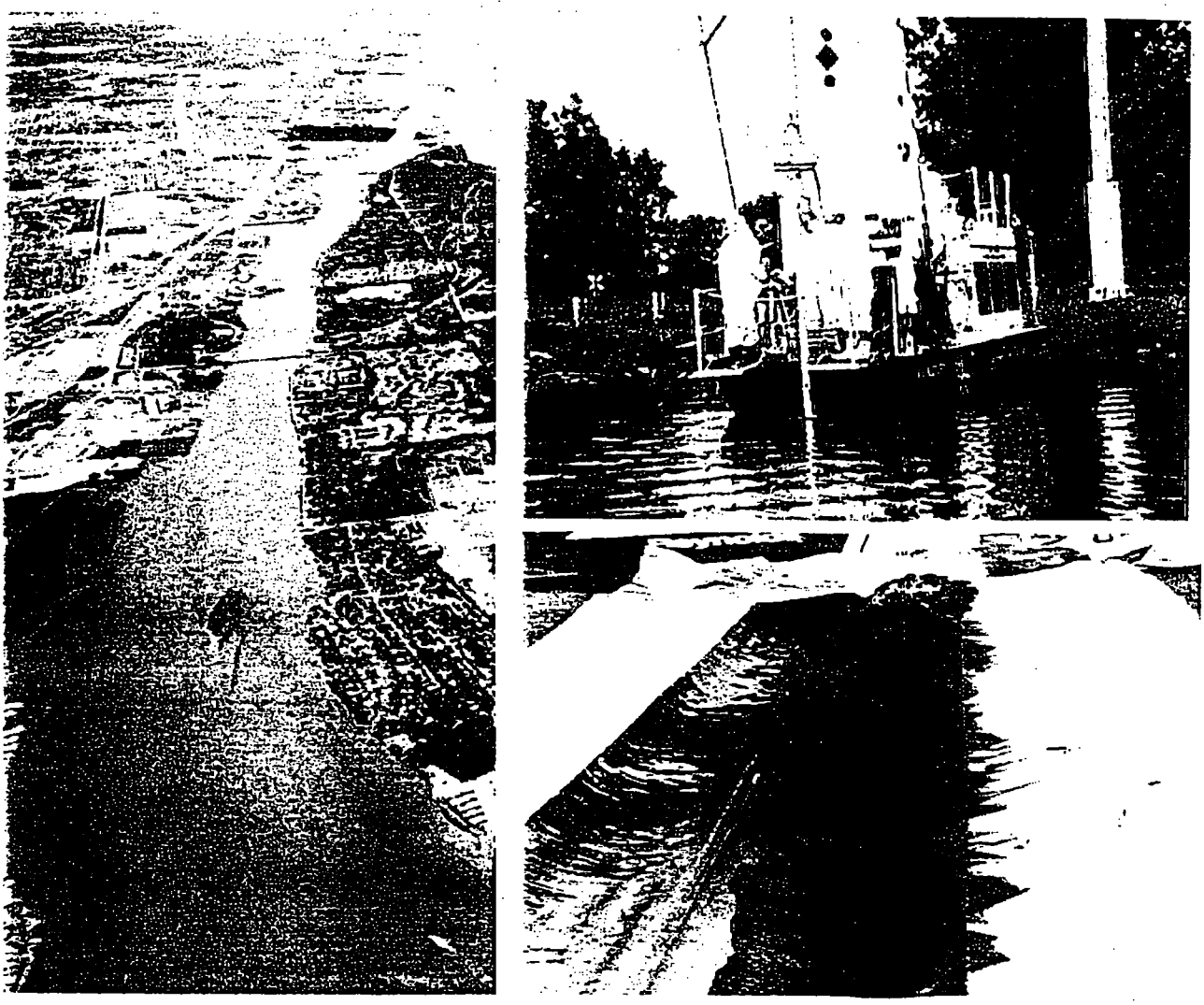
MI/DEQ/SWQ-97/084

Results of the Trenton Channel Project Sediment Surveys 1993-1996



July 1997

Arthur Ostaszewski
Michigan Department of Environmental Quality
Surface Water Quality Division
U.S. EPA-GLNPO Grant # GL-995960-02-0

Table of Contents

Abstract
Introduction
Methods
Results
Discussion
Acknowledgments
Literature Cited

Table A. Parameters and Guideline Levels Used to Evaluate Trenton Channel Project Sediment Results.
Table B. Classification of Contaminated Sediment Sites as applied to the Trenton Channel Project Sediment Survey Results (1993-1996).
Graph B. Classification and Distribution of Trenton Channel Project Sediment Results.
Graph B(a). Classification and Distribution of Trenton Channel Project Sediment Results (annotated).
Table C. Known Contaminated Sites identified in the Trenton Channel with Comparisons to 1993-1996 Sampling Results.

Figure 1. Trenton Channel Project: Sediment Survey Chronology.
Figure 2. Map of Sample Areas.

Appendix A. Mass Spectrometry-Library Search Interpretations.
Appendix B. Sediment Survey Results-Data Tables
Metals, PCBs, PAHs, Oil and Grease, Grain Size,
Acid Volitile Sulfides, TOC, Density, Lat-Long,
Classification A. Upstream to Downstream
Classification B. Most Contaminated to Least Contaminated

ABSTRACT

The Trenton Channel of the Detroit River has been identified in several studies as containing contaminated sediments that impair beneficial uses. From 1993 to 1996, the MDEQ and USEPA surveyed depositional areas of the Trenton Channel to determine horizontal and vertical distribution of contaminated sediments. Using the Rossfelder coring unit of the USEPA-GLNPO R/V Mudpuppy along with ponar and eckman dredges, 84 stations were sampled. Results show that 6 major areas harbor the bulk of contamination, an estimated 483,000 cubic yards. They are: Allied Fuel Oil Slip, Nicholson South Slip, Firestone Steel Area, Black Lagoon, Elizabeth Park North Canal, and Elizabeth Park South Canal-Inlet. Mercury, PCBs, PAHs, Heavy Metals, and Oil and Grease are the primary parameters of concern. Contamination is concentrated on the Michigan mainland side in depositional pockets primarily of fine sand and silt.

INTRODUCTION

The Trenton Channel is a 9 mile stretch of the lower Detroit River that is bound by the Michigan mainland on its western shore, and a series of islands of which Grosse Ile is the largest on the east. The Trenton Channel is defined as beginning at a line running west northwest from the head of Fighting Island to the Michigan mainland, and continuing downstream to Celeron Island. The top half of the Trenton Channel has a defined navigational channel that is dredged periodically for commercial shipping by the U. S. Army Corp of Engineers. All dredge material is sent to the Pt. Mouillee Confined Disposal Facility. The Michigan mainland (nearshore) area of the Trenton Channel has been industrially developed with several steel mills, chemical facilities, coal-generated power plants and landfill/disposal sites. Approximately half of the facilities that once operated with discharges to the river have been either abandoned or demolished.

Several municipalities are located along the Trenton Channel including the cities of Ecorse, Wyandotte, Riverview, Trenton, and the townships of Gibralter and Grosse Ile. The industrial nature of land use along the nearshore Trenton Channel has tended toward recreation. Today, these municipalities provide a multitude of public access points on the river, including walkways, fishing piers, parks, and boat launching facilities. There are also numerous private marinas, restaurants, apartment complexes and homes that line the Channel. In 1996, a public golf course was opened on the site of a former chemical alkali/resin facility.

The Trenton Channel has been identified as harboring the majority of contaminated sediments in the Detroit River Area of Concern (Michigan Department of Environmental Quality, 1987). The Michigan Department of Environmental Quality-Surface Water Quality Division (MDEQ-SWQD) with assistance from United States Environmental Protection Agency-Great Lakes National Program Office (USEPA-GLNPO), USEPA Region 5 Office of Water (R5), USEPA Large Lakes and Rivers Research Station (LLRS) and United States Army Corps of Engineers (USACE) conducted sediment surveys of the Trenton Channel, between 1993 and 1996 to further identify sediment depositional areas and delineate contaminated sediment zones in the Trenton Channel (Figure 1. Chronology).

Contaminated sediment sites have been identified in previous surveys (Fallon and Horvath 1985, MDEQ 1987, U.S. EPA and Env. Can 1988, Geisy et.al. 1988, Farara and Burt 1993), using primarily surficial (ponar, eckman) and shallow core techniques, (Table C. Known contaminated sites identified in the Trenton Channel). The Trenton Channel Project Surveys conducted for this report concentrated on determining the vertical and horizontal extent of contamination in known contaminated areas and characterization of unsurveyed depositional zones throughout the Channel.

Sediment assessment was a major part of the overall Trenton Channel Project. The Trenton Channel Project is a cooperative project between MDEQ and USEPA with the goal of applying innovative methods and procedures for addressing sediment contamination in large river systems. Other studies of the Trenton Channel Project include measurements of resuspension potential (Lick et.al., 1995), hydroacoustic profiling (Caulfield, 1985), response of dredging activities (Besser et.al., 1996), fish contaminant monitoring (USEPA Region 5, 1996 unpublished), low-level contaminant loading estimates (Froese et.al. 1996), data archive and retrieval (USEPA-FIELDS, unpublished) (MDEQ-SWQD DARTS, unpublished), bench-scale remedial technology evaluation (MDEQ ongoing), and full-scale remedial feasibility studies (MDEQ ongoing).

METHODS

Using the USEPA-GLNPO Research Vessel (R/V) Mudpuppy, 4 inch diameter sediment cores were taken using a Rossfelder Vibracoring Unit in depositional areas encompassing the entire portion of the Trenton Channel over a 3 year period, 1993-1996, (Figure 2, Map of Sample Areas). Cores were taken to refusal. MDEQ-SWQD also collected surfical petite ponar and eckman sediment samples in certain locations inaccessible to the 32' R/V Mudpuppy. Data from Michigan State University (Besser et. al., 1996) was also used. Depositional zones were determined by reviewing historical outfall and sampling records, and presurvey reconnaissance of soft sediments (fine sand and silt) using a petite ponar dredge and/or 12 ft. PVC poles.

To address trends in surficial depositing sediments, Michigan State University (Besser et.al., 1996), collected ponar sediment samples in a dredged portion of the Channel that included clean and contaminated reference sites. In 1994 and 1996, ponar and eckman dredge samples were taken at the same reference depositional sites by MDEQ to better characterize the trend contaminant levels in undisturbed surficial sediments.

The primary suite of parameters measured for all surveys included heavy metals, PCBs and PAHs. Depending on specific survey objectives (Figure 1. Chronology), analysis for TOC, Oil and Grease, Grain-size, Acid Volatile Sulfides-Simultaneously Extractable Metals, Density, Pesticides, Base Neutral Scans, and Mass Spec-Library Searches (Appendix A. Mass Spec-Library Search Interpretations) were also conducted. All lab analyses used standard USEPA methodology or ASTM protocol as identified in the Trenton Channel Sediment Assessment Quality Assurance Project Plan, (Ostaszewski and Benzie, 1993).

For comparing the results to established levels of high contamination to aquatic life, the Effects Range Median Guidelines (ERM - Long and Morgan, 1990), as outlined in the USEPA Sediment Classification Methods Compendium (USEPA, 1992) were used. For those parameters without established ERMs, results were compared to the Ontario Ministry of the Environments Severe Effect Levels (SEL - Persaud, 1993). For the bioaccumulative parameters PCBs and Mercury, we compared results to the quantification limit (QL) as outlined by the MDEQ-Environmental Response Division Target Method Detection Limit using respective EPA Analytical methods, (Table A. Parameters and Guidelines Used to Evaluate Trenton Channel Project Sediment Results). The magnitude of exceedances for bioaccumulatives (QL) and toxics (ERM/SEL) were summed and used in identifying those sites which were the most contaminated (Table B. Classification of Contaminated Sediment Sites as applied to the Trenton Channel Project Sediment Survey Results (1993-1996)), (Graph B (a). Classification and Distribution of Trenton Channel Project Sediment Results (annotated)). Dredging volumes for "extremely" contaminated areas where estimated taking the surface area of the depositional site, and depth of QL and/or ERM/SEL exceedances. Where QL and ERM/SELs were still exceeded at bottom intervals, professional judgment was used to determine depth of contamination (rate of decline). The volumes are based on in place measurements, and do not take into account percent solids.

RESULTS

From the period 1993 to 1996, a total of 84 sediment stations were surveyed in the Trenton Channel and vicinity under the auspices of Trenton Channel Project (Figure 2. Map of Sample Areas). The sediment surveys main objectives were to delineate known contaminated areas, characterize unsampled depositional zones, and depict the range of contamination present in the system, (Appendix B. Data Results) (DARTS-Date Archive and Retrieval Transfer System Compact-Disk, SWQD).

Upper Trenton Channel - Confluence of Rouge River to Ecorse Creek
Figure 3. Upper Trenton Channel Rouge River to Ecorse Creek

The Trenton Channel starts at a line cutting across the top of Fighting Island, west northwest to the Michigan shoreline. At the upstream end, it splits briefly between Mud and Grassy Islands, former Confined Disposal Facilities (CDFs) then joins together and continues downstream between Grosse Ile and the Michigan mainland.

Areas where sediments deposit in this upper area of the Trenton Channel begin with the Allied Fuel Oil Slip and include Nicholson South Slip, the area above Mud Island CDF, and the area below Mud Island CDF. Minor depositional zones include the marinas such as the Stenson Club slips and at the mouth of the Ecorse Creek. The area immediately between the Stenson Club and Ecorse Creek has fast current velocity (>2 feet per second) and a boardwalk/park along the mainland shore.

Sediment sampling for the Trenton Channel Project began upstream of the Channel in the Allied (a.k.a. Dana) Fuel Oil Slip and Nicholson Terminal-South Boat Slip. Sediments in the upstream portion of the Upper Trenton Channel showed varied levels of contamination, with the worst contamination beginning in both the Allied and Nicholson Boat Slips and continuing downstream primarily along the Michigan mainland side.

Heavy metals were present above QL and ERM/SEL levels at both the Allied and Nicholson Boat Slips, as well as the first depositional zone accessible downstream of them, (Stenson Club slip). Metals and Organics that exceeded QL or ERM/SEL values at Allied and/or Nicholson-South are presented below:

Allied/Nicholson South Slips Maximum
Metals (ppm-dw)
Cd=35 Cr=300 Cu=630 Fe=120,000 Hg=3.0 Mn=2090 Ni=240 Pb=580 Zn=1200

Organics (ppm-dw)
PCBs=12.7 PAHs=93 Oil and Grease=71,000

Figure 4. Upper Trenton Channel PCB levels
Figure 5. Upper Trenton Channel Oil and Grease levels

Downstream at the Stenson Club, PCBs on the surface decrease to 7.2 ppm. At the mouth of Ecorse Creek levels of PCBs decreased to 3.5 ppm on the surface.

PAHs were also above ERM levels at the Allied, Nicholson, and Stetson sites. Oil and Grease levels were extremely high (42,000 - 71,000 ppm) in the Allied and Nicholson Slips. Oil and Grease levels gradually diminish downstream from those 2 sites, though continued to exceed SEL levels down past Ecorse Creek (8000 ppm) along the mainland shoreline.

The pattern of contamination in the upstream portion of the upper Trenton Channel appears to be highest at the most upstream stations and decreases downstream. The contamination is also much greater for those stations along the Michigan shoreline. Allied and Nicholson Slips have the highest levels of most contaminants. Core samples at these two freighter slips show the vertical distribution of all contaminants to be variable with no discernible pattern. Contamination was present down to the bottom of the core, 218 cm.

Downstream at the Stenson Site, levels of Cd, Cr, Fe, Mn, Ni, Zn, PCBs and Oil and Grease are highest on the surface, and decrease down through the sediments. This is very clear with PCBs at the Stenson site. PCB levels on the surface (0-30cm) were at 7.2 ppm and decrease to 7.0 ppm (30-91cm), 5.6 ppm (91-152cm), 1.3 ppm (152-213cm) and 1.5 ppm (213-224cm). PCBs were also lower with depth at the Nicholson Slip Site.

Levels of Cu, Hg and PAHs showed an increase with depth to 213cm at the Stenson site, then decreased at the 213-224 cm interval. Just offshore at the three Mud Island CDF sample sites, contaminants were much lower. ERM/SEL guidelines were exceeded only for organic contaminants. The highest level around the CDF for PCBs was 1.6 ppm. Oil and Grease (2760 ppm) and PAHs (48 ppm) were highest for the west side of the island (nearest the mainland) than on the east side (Oil and Grease=1200ppm, PAHs=18.6 ppm).

Upper Trenton-Grassy Island to Pt. Hennepin

Figure 6. Upper Trenton Channel Grassy Island to Pt. Hennepin

There are few depositional zones in the area downstream from Ecorse Creek to the Grosse Ile Toll Bridge. Areas sampled in this stretch included five samples around Grassy Island (another former CDF), off the southern tip of BASF Northworks, in a boat slip of the Wyandotte Yacht Club, in the shallow region between Grassy Island and Pt. Hennepin, and off the west side of Fighting Island (also a former CDF).

Heavy Metals exceeded QL and ERM/SEL levels only at the BASF-Lower and/or Wyandotte Yacht Club sites. The highest values are presented below:

BASF-Lower/Wyandotte Yacht Club Maximum Values
Metals (ppm-dw)
Hg=1.5 Ni=67 Pb=150 Zn=330

Organics (ppm-dw)
PCBs=3.3 PAHs=88.7 Oil and Grease=11,000

Figure 7. PCBs in the Upper Trenton Channel
Figure 8. Hg in the Upper Trenton Channel

Levels of Cd, Cr, Cu, Fe and Mn did not exceed ERM/SEL levels as did sites upstream. Heavy metals were relatively low for the sites around Grassy Island and the one site off Fighting Island. PCBs continued to be elevated above QL levels, are greater at nearshore stations, and increase with depth,. At the BASF-Lower site, PCB concentrations ranged from 1.93 ppm near the surface (0-30 cm), 1.3 (30-91cm), 0.42 ppm (91-152cm), and non-detected at lower depths (152-213cm) and (213-218cm) in the core.

PCBs exceeded QL levels at the upper easternmost Grassy Island station (0.67 ppm), and both downstream island stations (0.43-0.41 ppm), Other sites around Grassy Island and at Fighting Island were low or below detection for PCBs. PAHs only exceeded ERM levels in buried sediments (30-213cm) at the BASF-Lower site (37.2 to 88.7 ppm). Sites at the southern end of Grassy Island showed greater levels of PAHs than others around the island. Oil and Grease exceeded SEL levels at BASF-Lower (11,000 ppm), Wyandotte Yacht Club (9000 ppm), and the two stations at the south end of Grassy Island (eastside=220 ppm, westside=1900 ppm).

Portofino/Point Hennepin to Grosse Ile Toll Bridge

Figure 9. Upper Trenton Channel: Point Hennepin to Grosse Ile Toll Bridge

There are few depositional zones in the area between Point Hennepin downstream to the Grosse Ile Toll Bridge. The Grosse Ile side is primarily rock/rip rap, with the upper portion of the Island used formally for the landfilling of caustic soda and flyash. The mainland side is primarily concrete breakwall where the old BASF-Southworks and Pennwalt Chemical plants used to operate. The Trenton Channel Project sampled at the Portofino Restaurant Boat slip immediately above the old BASF plant, across from the Portofino Slip along the Grosse Ile shore, in the marshy area along the Grosse Ile side of the Channel above the Toll Bridge, and in the only other depositional zone in the upper Trenton, sediments off Firestone Steel/MPC (Materials Processing Corp) and Federal Marine Terminal.

Only Ni (50 ppm), Pb (288 ppm), and Zn (350 ppm) exceeded ERMs for heavy metals above the Firestone Steel site in the Trenton Channel. PCBs were non-detect along the Grosse Ile side, though a level of 1.9 ppm was recorded at the Portofino slip (0-30 cm). No sites exceeded PAH ERMs above Firestone, though Oil and Grease levels of 7000 ppm were found at the Portofino site. Levels of Oil and Grease along the Grosse Ile side ranged from non-detect to 367 ppm.

Firestone Steel Site-

The Firestone Steel site is the first large sheltered depositional area along the mainland side of the Trenton Channel downstream of Allied and Nicholson Slips. Compared with samples taken upstream, levels of contamination increase for all heavy metal parameters at the Firestone Steel site, with levels of Cd (19 ppm), Cr (260 ppm), Fe (44000 ppm), Hg (16 ppm), Ni (130 ppm) , Pb (300 ppm), and Zn (790 ppm), exceeding QL and or ERM/SEL levels. Highest concentrations generally appear on the surface, though QL, ERM/SEL levels are exceeded as far down as 152-194cm.

Firestone Steel Site Maximums
Metals (ppm-dw)
Cd=19 Cr=260 Fe=44,000 Hg=16 Ni=130 Pb=300 Zn=790

Organics (ppm-dw)
PCBs=18.4 PAHs=204 Oil and Grease=21,000

Figure 10. Cd at Firestone Steel Site
Figure 11. Hg at Firestone Steel Site
Figure 12. PCBs at Firestone Steel Site
Figure 13. Oil and Grease at Firestone Steel Site

Besides having the highest Hg (16 ppm) of any Trenton Channel Project Site, Firestone Steel also had the highest levels of PCBs (18.4 ppm), and very high levels of PAHs (204 ppm) and Oil and Grease (21000 ppm). These high levels were on the surface. All samples at all depths at the Firestone Steel site were above the QL for PCBs. PAHs appeared concentrated at the downstream end of the site. Oil and Grease levels were above SELs at the surface and at depth.

Immediately downstream of Firestone Steel is the Federal Marine Terminal (BASF Landfill) Site. Sediments off this site had levels similar to the Firestone Steel site, with elevated levels of Cd (40 ppm), Cr (500 ppm), Fe (45,000 ppm), Hg (9.9 ppm), Ni (210 ppm), Pb (352 ppm), Zn (846 ppm), PCBs (11.2 ppm), and Oil and Grease (41,200 ppm).

Federal Marine Terminal (a.k.a. Monguagon Creek-Upstream) Site Maximums
Metals (ppm-dw)
Cd=40 Cr=500 Fe=45,000 Hg=9.9 Ni=210 Pb=352 Zn=846

Organics (ppm-dw)
PCBs=11.2 Oil and Grease=41,200

Figure 14. Federal Marine Terminal / Monguagon Creek Area Cd levels
Figure 15. Federal Marine Terminal / Monguagon Creek Area Hg levels

With the exception of cadmium, the highest levels of contaminants were found below the surface at the Federal Marine Terminal site, though surfical sediments still exceeded QL and ERM/SEL levels. Cadmium at this site was the highest of the survey (40 ppm) and located in the surface core interval (0-30cm).

Middle Trenton Channel - Monguagon Creek/Gross Ile Toll Bridge to Elizabeth Park-North
Figure 16. Middle Trenton Channel: Monguagon Creek to Elizabeth Park North Canal

There are 2 sediment depositional areas in the Middle Trenton Channel. Immediately downstream of the Grosse Ile Toll Bridge at the mouth of Monguagon Creek, sediments showed similar patterns of contamination as the Federal Marine Terminal Site, with QL and ERM/SEL levels exceeded for Cd (30 ppm), Cr (456 ppm), Fe (57,000), Hg, (3.9 ppm), Ni (251 ppm), Pb (424 ppm), Zn (1200 ppm), and PCBs (12.3 ppm). The mouth of Monguagon Creek showed high levels of PAHs (218 ppm) and Oil and Grease (9000 ppm).

Monguagon Creek Area Maximums
Metals (ppm-dw)
Cd=30 Cr=456 Fe=57,000 Hg=3.9 Ni=251 Pb=424 Zn=1200

Organics (ppm-dw)
PCBs=12.3 PAHs=218 Oil and Grease=9000

Figure 17. Pb in the Federal Marine Terminal / Monguagon Creek Area.
Figure 18. Zn in the Federal Marine Terminal / Monguagon Creek Area

One small depositional pocket along the Grosse Ile shoreline, downstream and across from Monguagon Creek, did not exceed any ERM/SEL levels for heavy metals. Only PCBs (0.6 ppm) exceeded QL levels.

Black Lagoon-
Downstream from the Monguagon Creek area, running the length of McLouth Steel-Trenton, the Trenton Channel constricts and no depositional zones exist for approximately 1 mile. Black Lagoon is a depositional zone below the former McLouth Steel-Trenton Plant (closed 1995). Sediments have historically been found to exceed QL and ERM/SEL levels (Pranckevicius, P.E. 1987, USEPA 1988, Farara and Burt 1993, MDEQ 1995). The Trenton Channel Project Sediment Surveys defined the horizontal and vertical extent of contamination in the Black Lagoon area. Metal levels of Cd (30 ppm), Cr (418), Fe (137,000 ppm), Hg (11.0 ppm), Mn (2060 ppm), Ni (206 ppm), Pb (547 ppm), and Zn (3320 ppm) all exceeded QL and ERM/SEL levels. Organic contaminants such as PCBs (6.5 ppm), PAHs (70.5 ppm), and Oil and Grease (19700 ppm) also exceeded QL and ERM/SEL levels.

Black Lagoon Maximums
Metals (ppm-dw)
Cd=30 Cr=418 Fe=137,000 Hg=11 Mn=2060 Ni=206 Pb=547 Zn=3320

Organics (ppm-dw)
PCBs=6.5 PAHs=70.5 Oil and Grease=19700

Figure 19. Black Lagoon Hg levels
Figure 20. Black Lagoon Zn levels
Figure 21. Black Lagoon Oil and Grease levels

Downstream of Black Lagoon there are only small pockets where sediments can deposit, due to the current velocity of the Trenton Channel and straight shoreline contour.

Approximately 300 feet downstream from Black Lagoon, a small depositional zone located at the foot of Riverside Hospital did not exceed heavy metal ERM/SEL levels except for Pb (130 ppm) and Zn (738 ppm). No exceedances were found for any organic parameter. Approximately 800 feet downstream from Black Lagoon, at a site along the mainland shore at the foot of the Trenton Towers Apartments, heavy metals exceeded QL and ERM/SEL levels for Cd (10 ppm), Cr (220 ppm), Fe (52, 000 ppm), Hg (6.4 ppm), Ni (88 ppm), Pb (261 ppm), and Zn (945 ppm). No Organic parameters exceeded QL or ERM/SEL levels. The area itself is very small (approximately 30 cu yards).

Trenton Towers Maximums
Metals (ppm-dw)
Cd=10 Cr=220 Fe=52,000 Hg=6.4 Ni=88 Pb=261 Zn=945

Organics (ppm-dw)
None

Figure 22. Trenton Towers Hg levels

Lower Trenton Channel: Elizabeth Park North to Celeron Island

Figure 23. Lower Trenton Channel: Elizabeth Park North Canal to Celeron Island

Downstream of the Trenton Towers, homes, marinas, and boat launches dot the mainland shoreline until the beginning of Elizabeth Park. Elizabeth Park is a 500 acre municipal park administered by the Wayne County Parks Department. It is actually an island, with a canal running the length of it. At the north end of the park a depositional zone known as Elizabeth Park-North Canal is located. Elizabeth Park-North Canal is bound by a Mobil Oil Terminal to the north, and the park itself on the South. The Trenton Channel flows to the east, and the canal constricts to pass around the island on the west.

Just upstream of the Mobil Oil Terminal, sediments were sampled in a small cove. Only Zn (683 ppm) exceeded ERM levels. No other metals or organics exceeded QL or ERM/ SEL levels. In Elizabeth Park-North Canal, Cd (15 ppm), Cr (270 ppm), Fe (48700 ppm), Hg (7.4 ppm), Ni (100 ppm), Pb (279 ppm), and Zn (842 ppm) exceeded ERM/SEL levels. Organics also exceed QL and ERM/SEL levels for PCBs (10.3 ppm), PAHs (57 ppm), and Oil and Grease (26,200 ppm).

Elizabeth Park-North Canal (EPNC) Maximums
Metals (ppm-dw)
Cd=15 Cr=270 Fe=48,700 Hg=7.4 Ni=100 Pb=279 Zn=842

Organics (ppm-dw)
PCBs=10.3 PAHs=57 Oil and Grease=26,200

Figure 24. EPNC Hg levels
Figure 25. EPNC PCB levels
Figure 26. EPNC PAH levels

With the exception of PAHs, levels of contamination were highest on the surface. Other contaminants decreased with depth down to 330 cm. At the eastern end of the Elizabeth Park-North Canal depositional zone, contaminants exceeded ERM levels for only Pb (129 ppm) and Zn (795 ppm), with no exceedances for organics.

Continuing along the canal, there are 5 small public bridges which cross its upper half. These bridges attach the park to the mainland. Surficial sediments were collected behind each bridge. Exceedances of QL and ERM/SEL levels are outlined as follows:

Bridge (Upstream to Downstream)
All values above ERM/SEL (ppm d.w.)

EPC-1					Pb=129	Zn=795	
EPC-2 no exceedances							
EPC-3			Hg=1.7		Pb=137	Zn=750	
EPC-4	Cr=146	Fe=43,000		Ni=75	Pb=189	Zn=870	PCBs=5.5
EPC-5	Cd=9.9	Fe=43,000			Pb=187	Zn=1020	PCBs=0.8

Downstream of EPC-2, there is an increase in contamination in the sediments. PCBs are found in the canal only below the area where dredge spoils from the Elizabeth Park Marina excavation were land deposited (EPC-4, Bridge 4).

Along the Trenton Channel length of Elizabeth Park, downstream of the Mobil Oil/North Canal area, there is rock riprap and no further area of deposition until the Elizabeth Park Marina. In 1993, a portion of the nearshore Trenton Channel along with a portion of upland area was dredged/excavated to build a 50 slip boat marina for the park. Being secluded from strong current and wave action and once having upland soils, the Trenton Channel Project used this marina as a study site to determine the quality of sediments depositing on the surface in the Lower Trenton Channel. In 1993, initial sediment chemistry, benthic community and toxicity were measured in relation to reference sites in the Trenton Channel, (Besser, 1996). Subsequent sediment chemistry sampling in 1994 and 1996 has tentatively shown levels of surficial contaminants decreasing, with Cd, Cr, PCBs, and PAHs falling below QL and ERM/SEL levels. Other heavy metal contaminant levels also fell in 1996 but continued to exceeded QL and ERM/SEL levels in the Marina for Fe (45,000 ppm), Hg (3.8 ppm), Ni (68 ppm), Pb (153 ppm), and Zn (782 ppm). (1997 MDEQ-SWQD, ongoing).

Elizabeth Park Marina 1996 Surface ERM/SEL Exceedances
Metals (ppm-dw)
Fe=45,000 Hg=3.8 Ni=68 Pb=153 Zn=782

Figure 27. Elizabeth Park Marina Zn levels

A station across the Marina on the Grosse Ile side of the channel had no QL and or ERM/SEL exceedances of any parameter.

Downstream of Elizabeth Park Marina and the Grosse Ile "Free" Bridge, the Detroit Edison-Trenton Coal Fired Power Plant dominates the mainland shoreline. The next zones of deposition occur in the south end of Elizabeth Park Canal and in sheltered areas along Monsanto Chemical Property.

QL and ERM/SEL sediment level exceedance in this region are concentrated primarily around the Monsanto Chemical Property. At the south end of Elizabeth Park Canal before it re-enters the Trenton Channel, at the foot of Monsanto's northern most outfall, heavy metals Cd (13 ppm), Cr (205 ppm), Fe (58,900 ppm), Hg (1.6 ppm), Pb (272 ppm), and Zn (1010 ppm) exceeded ERM/SEL levels. PCBs (0.8 ppm) were also above the ERM.

Monsanto Outfall (a.k.a. EPSC dock) Surface ERM/SEL Exceedances
Metals (ppm-dw)
Cd=13 Cr=205 Fe=58,000 Hg=1.6 Pb=272 Zn=1010

Organics (ppm-dw)
PCBs=0.8

Figure 28. EPSC Area Hg levels
Figure 29. EPSC Area Zn levels

Horizontally, contaminant distribution in Black Lagoon is bound on the north, west and south by the shoreline. To the east of Black Lagoon, a shoal runs the length of the depositional zone with the effect of creating a quasi-breakwall. Levels of contamination along the shoal did not exceed any QL or ERM/SEL for either metals or organics. The shoreline and the shoal effectively bound the contaminated area of Black Lagoon.

Vertically, contamination varied within Black Lagoon. Sample sites located deeper in the lagoon generally had the greatest level of contaminants buried at depths from 30 to 210 cm. Samples in the south region had higher contamination on the surface. Below 210cm, contaminant levels did not exceed QL or ERM/SEL levels except for Hg (1.4 ppm) and Oil and Grease (2970 ppm). The estimated volume of contaminated sediments in Black Lagoon is 20,000 cu. yards.

Downstream of Black Lagoon, the next major depositional area is Elizabeth Park North Canal. Elizabeth Park North Canal is a contaminated depositional zone bound by the shoreline to the north, east and south. Deposition is bound to the east by the flow velocity and scour of the Trenton Channel. Contamination was primarily greatest on the surface at this site, though extended below 330 cm. Surficial samples from 1996 were generally less contaminated than surficial core samples collected in 1993 and 1994 at Elizabeth Park North Canal. Highest PAHs levels (57 ppm) were found buried in cores.

At Elizabeth Park Marina, 3 years of surficial sediment sampling show depositional rates in the lower Trenton to be on the order 1-3 cm/yr. (Kreis, 1996). Surficial contaminant levels have declined but still exceeded QL and ERM/SEL levels for Fe, Hg, Ni. Pb, and Zn in the Marina.

Below Elizabeth Park Marina and the Grosse Ile "Free" Bridge, the Trenton Channel begins to widen and velocities decrease. Several islands dot this area as it opens up to Lake Erie. Wind and waves play a predominant role in moving the sediments. Sand predominates in this region in contrast to silt in upstream sheltered areas. The Lower Trenton is a dynamic area with waves reaching much higher peak heights than upstream. It is also more prevalent to partial reverse flow seiche effects from Lake Erie that happen with sustained east winds (Quinn, 1976).

At Celeron Island, Pb was found highest on the surface. Also, Hg and PAHs were found only on the surface interval of sediment cores and not detected below the surface. Resuspension of upstream contaminants are one of the mechanisms of how contaminants relocate to the Western Basin of Lake Erie (Schloesser, 1995).

Conclusions-

In two separate prioritization rankings of contaminated sediment sites in the Trenton Channel and Detroit River, the Firestone/Monguagon/McLouth area, along with Black Lagoon and Elizabeth Park North Canal ranked "Severely Contaminated" (Kreis, 1989) and "Severely Contaminated and Impacted" (Farara and Burt, 1993). These areas had exhibited degraded bethos, high toxicity, and exceed highly polluted sediment guidelines. These and other previous sediment sites studied compare well to Trenton Channel Project sediment results. (Table C. Known contaminated sites identified in the Trenton Channel with Comparisons to 1993-1996 Sampling Results).

The results of the Trenton Channel Project sediments sampling 1993-1996 has led to the conclusion that six major depositional areas are extremely contaminated in the Trenton Channel. Several minor areas are also extremely contaminated. Due to current velocity and navigational channel morphology, these depositional zones are horizontally defined in the Trenton Channel. Core sampling and/or hydroacoustic profiling (Caulfield, 1995) has determined the depth of contamination in these zones.

The six major depositional zones are, (with estimated volumes* CY=cubic yards):

Site	Surface Area (yards)	Depth of Contamination* (yards)	Volume
Allied Fuel Oil Slip	730x120	2.75	241,000 CY
Nicholson Terminal South Slip	365x85	2.75	85,000 CY
Firestone Steel Area-primary	42x530	2.75	61,200 CY
Area in front of Monguagon Creek-secondary	42x660	2.10	58,000 CY
Black Lagoon	50x150	2.75	20,600 CY
Elizabeth Park North Canal	65x65	3.80	16,000 CY
Elizabeth Park South Canal	75x12	1.25	1100 CY
Total			483,000 CY

* Where QL or ERM/SELs were still exceeded at bottom intervals, professional judgment was used to determine depth of contamination. Note-these volumes are based on in place measurements, and do not take into account % solids.

Smaller depositional zones (<1000 CY) that are extremely contaminated include:

Site	Surface Area (yards)	Depth of Contamination* (yards)	Volume
Stenson Club	15x20	2.75	825 CY
Trenton Towers	10x10	0.30	30 CY
Total			855 CY

Sediment QL and ERM/SEL exceedances in these zones (and throughout the study area) were predominantly found only on the grain size of sediments consisting of fine sands or silt. Native clay lines the sides and bottom of the Channel. This was observed at the base of several cores in contaminated areas (Black Lagoon, Elizabeth Park North Canal), on our anchors during sampling near the navigational channel, and during hydroacoustic profiling (strong signal reflectivity). The clays are non contaminated and appear to make a suitable physical cleanup standard for future remediation.

The east shore of the Trenton Channel along Grosse Ile is relatively free of contamination. The depositional areas along the Michigan mainland shore that exceed QL and ERM/SEL sediment guidelines contain the largest mass of contaminants in the Detroit River AOC (Detroit River RAP Biennial Report, 1995). These sediments present the most likely route of bioaccumulative and toxic contaminant exposure to biota and the ecosystem.

DISCUSSION

As identified in the 1985 Upper Great Lakes Connecting Channel Studies (U.S. EPA, 1988), sediment contamination in the Trenton continues to show a distinct gradient across the channel. Contamination is primarily present only along the Michigan mainland shore where depositional areas exist. The Allied Fuel Oil Slip and Nicholson South Slip mark the beginning of sediment contamination in the Trenton Channel. Levels in these two areas are much higher than those in immediate depositional zones downstream. Organic contaminants PCBs and Oil and Grease show a distinct decreasing trend of contamination from upstream (Allied/Nicholson) down to Wyandotte Yacht Club (3.5 miles).

Downstream of the Ecorse Creek mouth and out from shore lies the closed CDF (now a National Wildlife Refuge), Grassy Island. The contaminants Hg, PAHs and O&G are elevated at the south end of Grassy Island compared to north and west island sites. The closed CDF is currently the subject of study, (Manny, 1997).

There is no major depositional area along the Michigan Mainland shore from the Wyandotte Yacht Club to the site of the former Firestone Steel, now operating as the warehouse of Materials Processing Corp (MPC), a distance of 2.5 miles. A substantial increase in contamination begins at Firestone Steel and continues downstream to Monguagon Creek. The Firestone Steel Area is a large depositional area of heavy metals, PCBs, Hg, and Oil and Grease. Highest concentrations are found primarily on the surface, suggesting recent or continuing sources. The depositional area continuing downstream of Firestone Steel shows extreme contamination though less elevated, with the highest contamination found primarily below the surface, though surficial concentrations also exceeding QL and ERM/SEL levels.

Cadmium levels were generally low upstream of Firestone Steel (non-detect to 13 ppm). Just downstream of Firestone Steel at the Federal Marine Terminal station, levels increase to 40 ppm and were found highest on the surface. Cadmium levels continue to be predominantly higher on the surface and decrease downstream from the Federal Marine Terminal Area to Lake Erie.

The distribution of contaminants (2-4 DTP) from Monguagon Creek to the Lower Trenton Channel and Lake Erie has been well documented (Carter and Hites, 1992). In Trenton Channel Project sediments surveys, the mouth of Monguagon Creek had increased levels of PAHs and Oil and Grease compared to surrounding sites. Monguagon Creek is now in the process of remediation (Conestoga, 1996). This action will prevent Monguagon Creek from further being a primary source of PAHs and Oil and Grease to the sediments of the Lower Trenton Channel. The size of the large contaminated zone in the middle Trenton extends from Firestone Steel to the Upper McLouth Property, encompassing the Federal Marine Terminal site and mouth of Monguagon Creek.

The swift laminar current in the Trenton Channel has kept sediment contamination in a tight lens along the Michigan mainland and has also kept it from crossing over to the Grosse Ile side. Transect sediment core sampling (3 stations-nearshore, midshore, offshore) across from the upper property area of McLouth Steel shows the contamination to be in a band extending from the mainland to the west bank of the navigation channel, basically hugging the shore. The highest contaminant levels in this area downstream of Monguagon creek are found now in a lens hugging the mainland shore with the greatest concentrations below surficial layered sediments.

Downstream of Monguagon Creek, the next area of contamination is below the former McLouth Steel-Trenton facility, the depositional area known as Black Lagoon. Our sediment surveys have determined that contamination in Black Lagoon is bound by the shoreline and a shoal area. Depth of contamination extends to approximately 230cm, where clean native clays are found. The surficial sediments of Black Lagoon have been surveyed for over 10 years. Contamination on the surface has decreased, though still above ERM/SEL levels. The cause of this decrease is most likely due to resuspension of sediments and subsequent redeposition of new material (thus dilution).

Just downstream of where Elizabeth Park South Canal rejoins the Trenton Channel, Monsanto has an abandoned water intake inlet/slip. Contaminants in this inlet exceeded QL and ERM/SEL levels for Cd (13 ppm), Cr (225 ppm), Fe (82,700 ppm), Hg (5.1 ppm), Ni (102 ppm), Pb (347 ppm), Zn (1200 ppm), PCBs (2.4 ppm), PAHs (35 ppm), and Oil and Grease (10,000 ppm). The intake appears to have a solid base at approximately 88cm below the surface.

Elizabeth Park South Canal-Inlet: QL and ERM/SEL Exceedances
Metals (ppm-dw)
Cd=13 Cr=225 Fe=82,700 Hg=5.1 Ni=102 Pb=347 Zn=1200

Organics (ppm-dw)
PCBs=2.4 PAHs=35 Oil and Grease=10,000

Monsanto also has several lagoons along the nearshore bank, including one which is accessible from the Trenton Channel by boat. In the southern most lagoon, Cd (16 ppm), Cr (193 ppm), Fe (80200 ppm), Hg (3.9 ppm), Ni (89 ppm), Pb (246 ppm), Zn (996 ppm), and PCBs (0.9 ppm) exceeded QL and ERM/SEL levels.

Monsanto Lagoon ERM/SEL Exceedances
Metals (ppm-dw)
Cd=16 Cr=193 Fe=80,200 Hg=3.9 Ni=89 Pb=246 Zn=996

Organics (ppm-dw)
PCBs=0.9

Figure 30. Lower Trenton PCB levels
Figure 31. Lower Trenton Pb levels

In the Trenton Channel on the downstream side of the Monsanto Lagoons, along the Michigan mainland and in the vicinity of a Chrysler outfall, levels of Cr (150 ppm), Fe (66300 ppm), Hg (3.9 ppm), Ni (71 ppm), Pb (222 ppm), Zn (701 ppm), PCBs (2.4 ppm), and Oil and Grease (3010) exceed QL and ERM/SEL levels.

Sites sampled at the upper-inner end of Chrysler Bay, downstream of the Chrysler outfall, had exceedances for Fe (55,200 ppm), Ni (56 ppm), Zn (765 ppm), PCBs (1.4 ppm), and Oil and Grease (2000 ppm). This site also had high TOC (30.7%). Furthermore downstream in the bay, Ni (54 ppm), and Zn (661 ppm) exceeded ERMs at the site above Humbug Marina.

For the most downstream station along the Grosse Ile side of the Trenton Channel, at the north end of Swan Island, no QL or ERM/SEL exceedances occurred. The most downstream sediment site of the surveys was the middle bay of Celeron Island. Celeron Island is located at the fringe of Lake Erie, in the middle of the channel. Sediments here showed high % TOC and no QL or ERM/SEL exceedances.

With assessment complete, the focus of the Trenton Channel Project now shifts towards remediation. The next steps include examining remedial options for the six zones of the Trenton Channel determined to be extremely contaminated. With the Sediment Treatability Study nearing completion (Snell Environmental and MDEQ-SWQD, 1996), the feasibility of applying treatment technologies will be investigated alongside more conventional disposal techniques.

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TABLE A. Parameters and Guideline Levels Used to Evaluate Trenton Channel Project Sediment Results.

Bioaccumulative Parameters	Symbol	QL (ppm d.w.)	Note
Mercury	Hg	0.1	EPA Method 245.1/7470.7471
Polychlorinated Biphenols	PCBs	0.33	EPA Method 608/8081

Toxic Parameters		Aquatic Life Guidelines (ppm d.w.)		
Parameter	Symbol	ERM	SEL	Note
Arsenic	As	85		
Cadmium	Cd	9.6		
Chromium	Cr	145		
Copper	Cu	390		
Iron	Fe		40000	
Nickel	Ni	50		
Manganese	Mn		1100	
Lead	Pb	110		
Zinc	Zn	270		
Oil and Grease	O&G		1500	
Polyaromatic Hydrocarbons	PAHs	35		Sum of 12 PAH's

TABLE B. Classifications of Contaminated Sediment Sites as applied to the Trenton Channel Project Sediment Survey Results (1993-1996).

Not Impacted

Summed Toxic ERM/SEL and Bioaccumulative QL exeedances less than one, (<1)

Impacted

Summed Toxic ERM/SEL and Bioaccumulative QL exeedances between 1 and 15

Moderately Impacted

Summed Toxic ERM/SEL and Bioaccumulative QL exeedances between 15 and 30

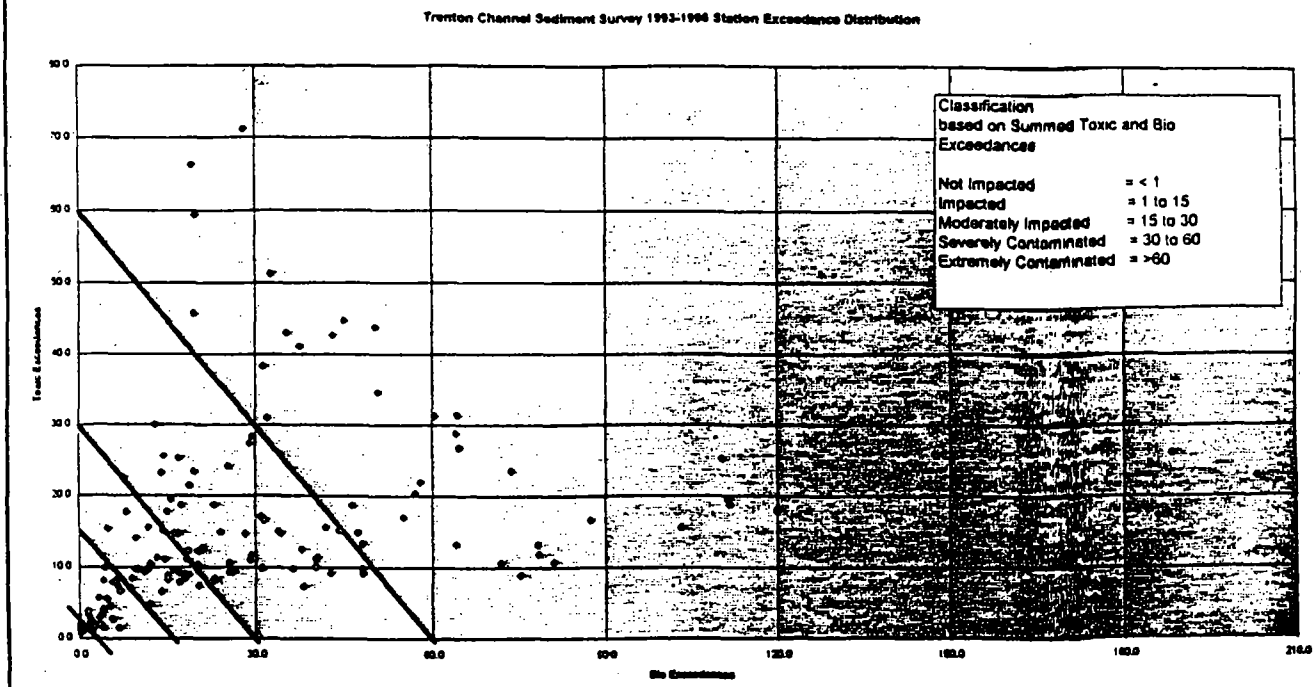
Severely Contaminated

Summed Toxic ERM/SEL and Bioaccumulative QL exeedances between 30 and 60

Extremely Contaminated

Summed Toxic ERM/SEL and Bioaccumulative QL exceedances greater than sixty, (> 60)

Graph B Classification and Distribution of Trenton Channel Project Sediment Results



Graph B (a). Classification and Distribution of Trenton Channel Project Sediment Results (annotated).

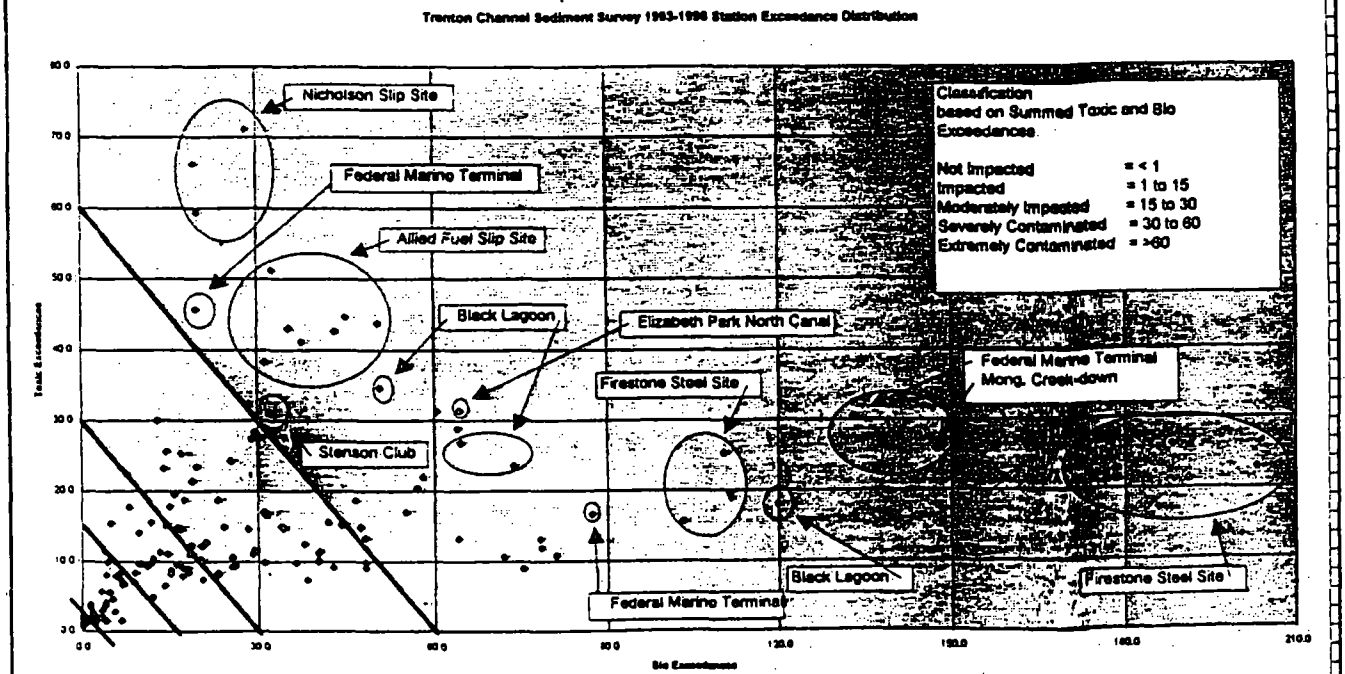


TABLE C.

Known Contaminated Sites Identified the Trenton Channel with Comparisons to 1993-1996 Sampling Results

	Fallon and Horvath, 1983			1993-1996 Trenton Channel Project Classification
	Criteria:	Sediment Chemistry		Criteria: Sediment Guideline Exceedances
Location	Results			(see Table 8. Classification of Sites)
Mud Island	First Priority Station			Impacted
Upper Grassy Island	First Priority Station			Impacted
Pt. Hennepin	First Priority Station			Impacted
Elizabeth Park North Canal	First Priority Station			Extremely Contaminated
Stag Island	First Priority Station			Impacted
Swan Island	First Priority Station			Impacted
East Celeron Island	First Priority Station			Impacted
Gibraltar Bay	First Priority Station			Not Specifically Sampled

	Rosau, Geary and Kreis, 1989		
	Criteria:	C. tentans Bioassay	
Location	Results		1993-1996 Trenton Channel Project Classification
Wyandotte	> 25 % reduction in weight: Bioassay		Not specifically Sampled, areas nearby were Severely Contaminated
Pt. Hennepin	> 25 % reduction in weight: Bioassay		Impacted
Monguagon Creek Mouth	> 25 % reduction in weight: Bioassay		Extremely Contaminated
North Marsh Area	> 25 % reduction in weight: Bioassay		Impacted
Black Lagoon	> 25 % reduction in weight: Bioassay		Extremely Contaminated
Chrysler Bay Outer	> 25 % reduction in weight: Bioassay		Extremely Contaminated
Gibraltar Bay	> 25 % reduction in weight: Bioassay		Not Specifically Sampled
Lake Erie State Park	> 25 % reduction in weight: Bioassay		Not Specifically Sampled

	Kreis, 1988			
	Criteria:	Sediment Chemistry, Toxicity,		
		Resuspension Potential, Mutagenicity		
Location	Results			1993-1996 Trenton Channel Project Classification
Firestone Steel	Severe Degradation			Extremely Contaminated
Above Monguagon Creek	Severe Degradation			Extremely Contaminated
Monguagon Creek	Severe Degradation			Extremely Contaminated
Below Monguagon Cr	Severe Degradation			Extremely Contaminated
Black Lagoon	Severe Degradation			Extremely Contaminated
Trenton Towers	Severe Degradation			Extremely Contaminated
Deadhead cove	Severe Degradation			Impacted
Elizabeth Park North Canal	Severe Degradation			Extremely Contaminated

	Farara and Burt, 1993		
	Criteria:	Sediment Chemistry, Benthic Communities	
Location	Results		1993-1996 Trenton Channel Project Classification
Off Great Lakes Steel	Severely Impacted		Site is not significantly depositional, nearby sites=Extremely Contaminated
Off E.C. Levy	Severely Impacted		Site is not significantly depositional, nearby sites=Extremely Contaminated
Ecorse River Mouth	Severely Impacted		Moderately Contaminated
Downstream of Ecorse River mouth	Severely Impacted		Site is not significantly depositional, nearby sites=Extremely Contaminated
Wyandotte	Severely Impacted		Site is not significantly depositional, nearby sites=Extremely Contaminated
Firestone Steel	Severely Impacted		Extremely Contaminated
Downstream of Monguagon Creek	Severely Impacted		Extremely Contaminated
Black Lagoon	Severely Impacted		Extremely Contaminated
Across Channel from McLouth Steel	Severely Impacted		Impacted
Monsanto Bay	Severely Impacted		Severely Contaminated
East of Horse Island	Severely Impacted		Not Sampled, Lake Erie

Newly Identified Extremely Contaminated Sediment Sites in the Trenton Channel

	1993-1996 Trenton Channel Project	
	Criteria:	Sediment Guideline Exceedances
Location		(see figure 8. Classification of Sites)
Allied Fuel Oil Slip	Extremely Contaminated	
Nicholson South Slip	Extremely Contaminated	
Stenson Club	Extremely Contaminated	
Trenton Towers	Extremely Contaminated	
Elizabeth Park Marina	Extremely Contaminated	
Elizabeth Park South Canal	Extremely Contaminated	

Classification of Contaminated Sediment Sites as applied to the Trenton Channel Sediment Survey Results 1993-1996 (Table 8:)

Not-impacted <1 < Impacted < 15 < Moderately Impacted < 30 < Severely Contaminated < 60 < Extremely Contaminated

Figure 1. Trenton Channel Project: Sediment Survey Chronology

October 1993 (GLNPO/SWQD/UCSB)
Primary Objectives — Vertical and horizontal hotspot delineation
Contaminant distribution in Lower TC
Secondary Objectives — Resuspension measurements

November 1993 (GLNPO/SWQD/MSU)
Primary Objective — Elizabeth Park Marina study

April 1994 (GLNPO/LLRS/SWQD)
Primary Objective — Vertical and horizontal hotspot delineation
Secondary Objective — Baseline data for hydroacoustic profiling

May 1994 (SWQD)
Primary Objective — Surficial contaminant distribution in mid and lower Trenton Channel

June 1994 (GLNPO/LLRS/SWQD)
Primary Objective — Hydroacoustic profiling-Trenton Channel (Caulfield Eng.)

November 1994 (SWQD)
Primary Objective — Elizabeth Park Marina surfical contaminant trends

April 1996 (LLRS)
Primary objective — Elizabeth Park Marina depositional rates

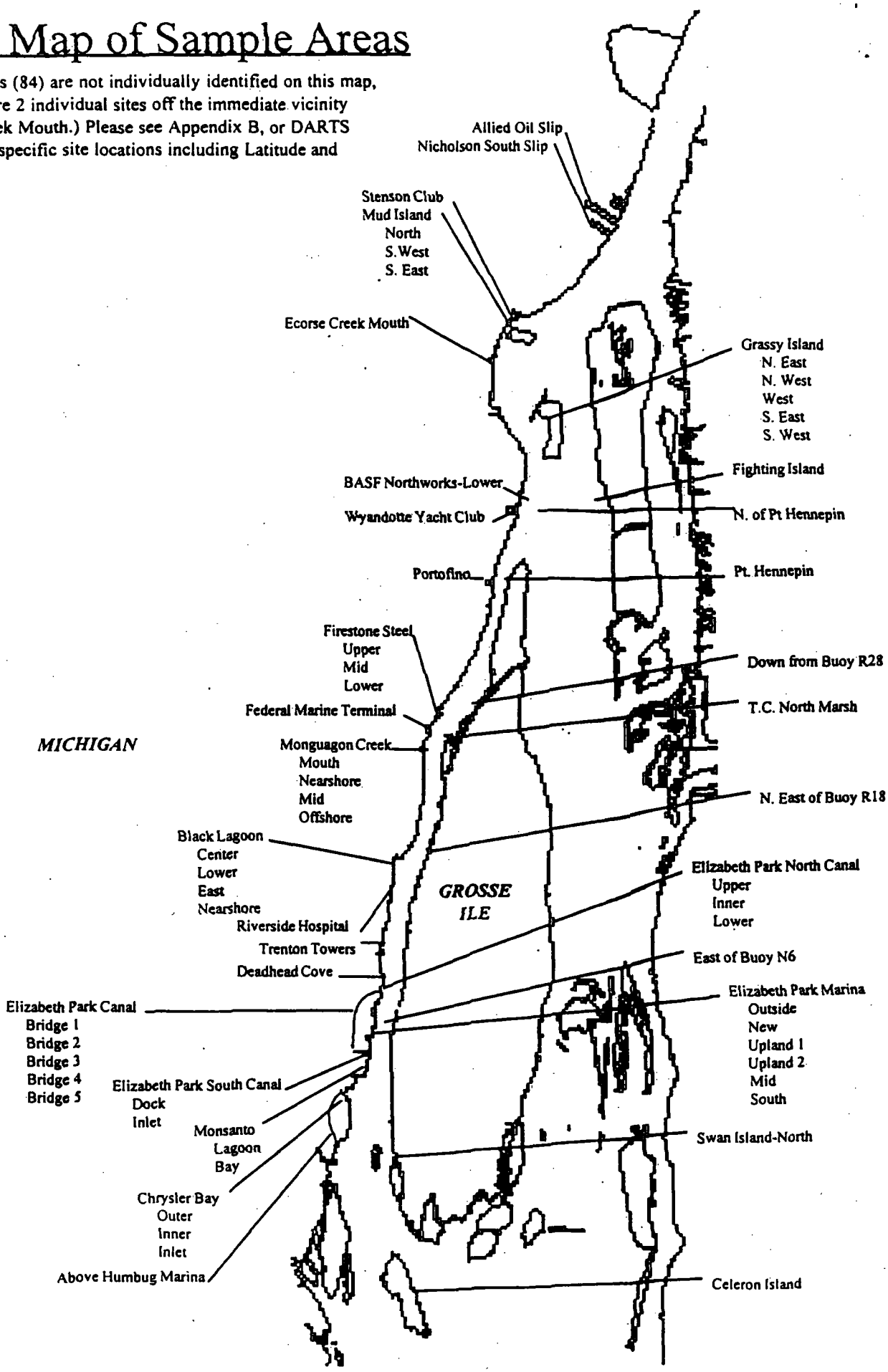
May 1996 (GLNPO/SWQD)
Primary Objective — Hotspot delineation and characterization of Upper TC Sediments
Secondary Objective — Support of Grassy Island NWR study

June 1996 (SWQD)
Primary Objectives — Ponar sediment sampling at tributaries to the Detroit River
Confirmation of RAP hotspots

December 1996 (SWQD)
Primary Objective — Elizabeth Park Marina surfical contaminant trends

Figure 2. Map of Sample Areas

Note- All Sample Sites (84) are not individually identified on this map, (i.e... there were 2 individual sites off the immediate vicinity of Ecorse Creek Mouth.) Please see Appendix B, or DARTS for individual specific site locations including Latitude and Longitude.



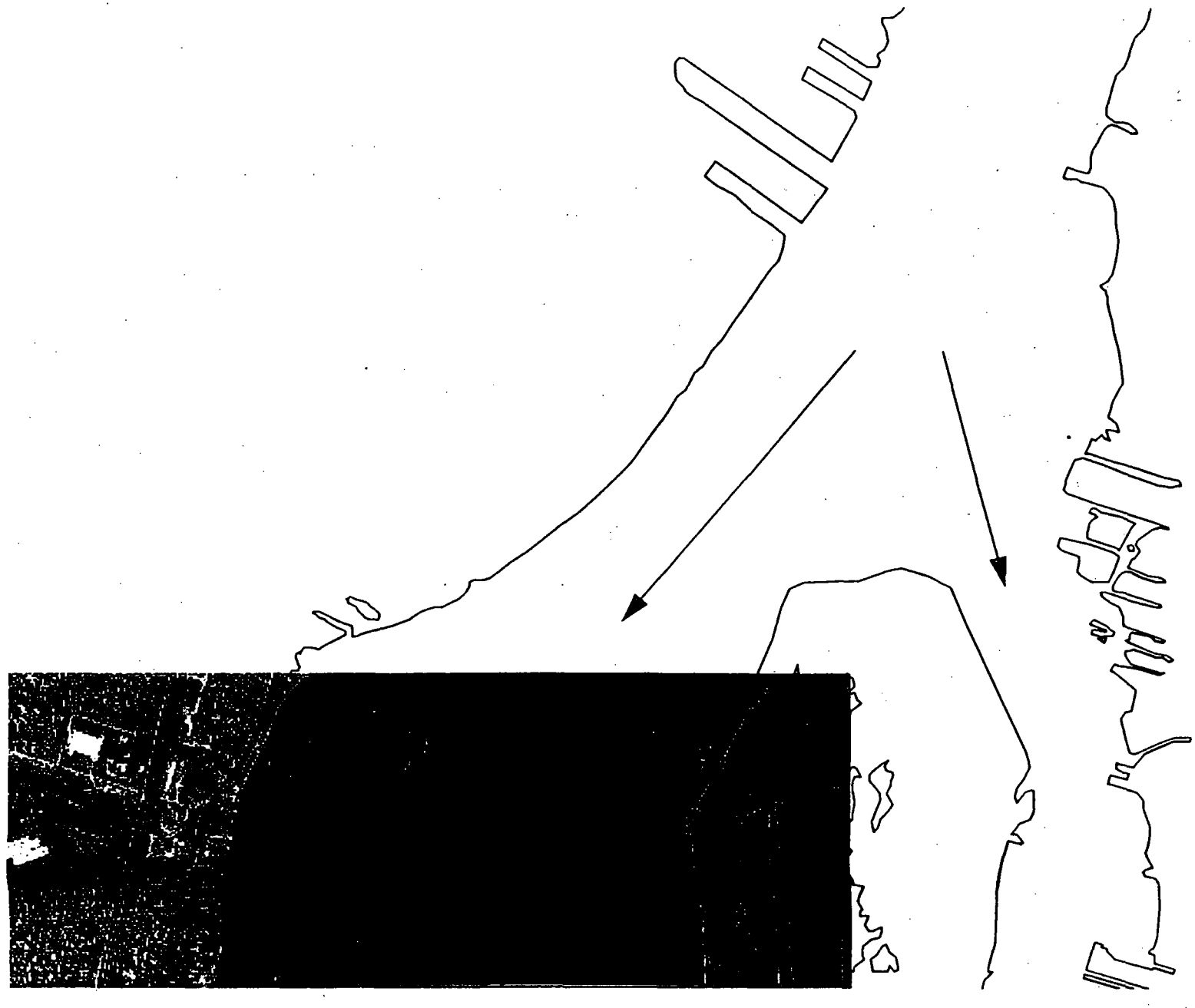


Figure 3. Upper Trenton Channel
Rouge River to EcorseCreek

TOTAL PCBS

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

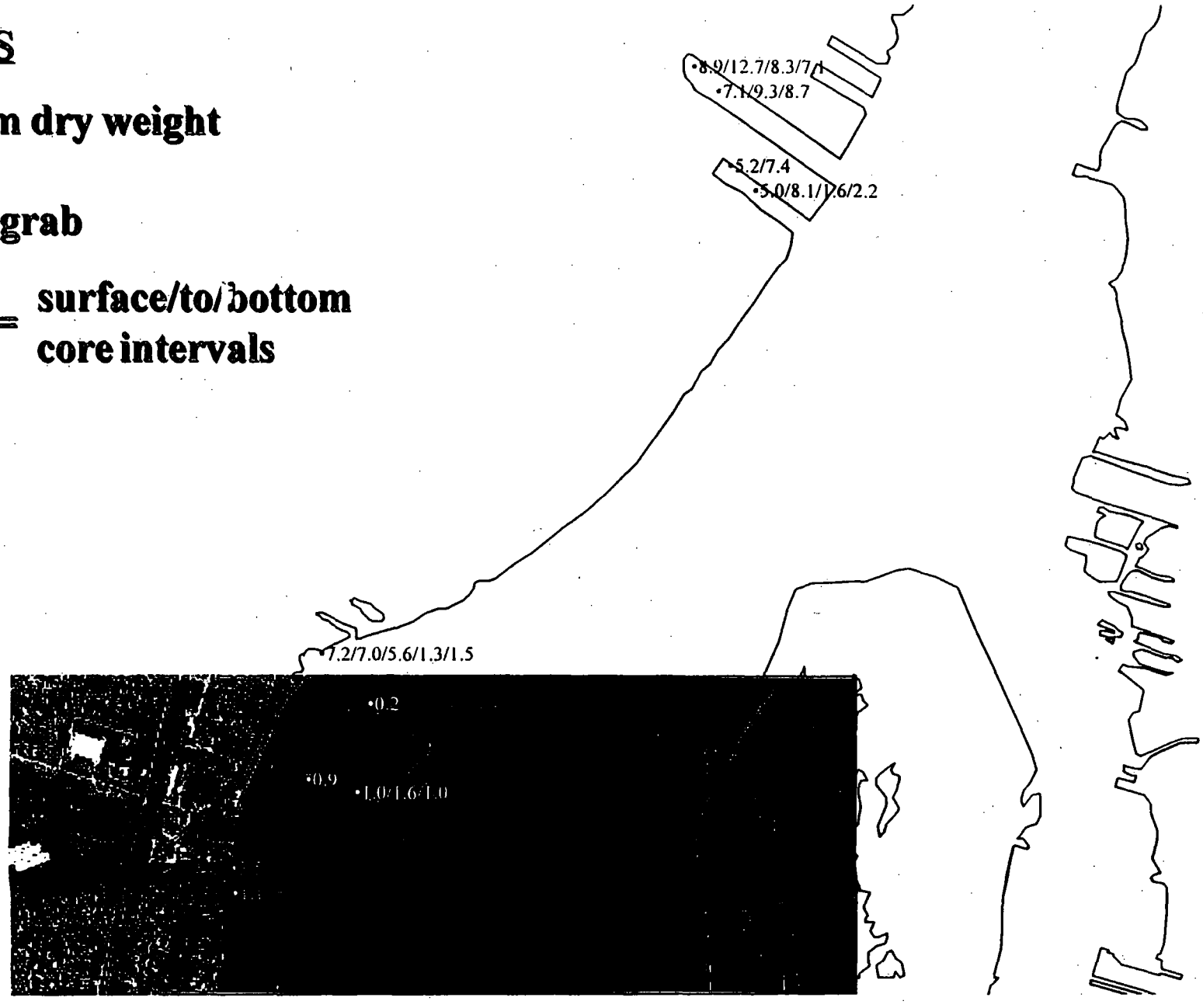


Figure 4. Upper Trenton Channel
Rouge River to EcorseCreek

OIL and GREASE

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

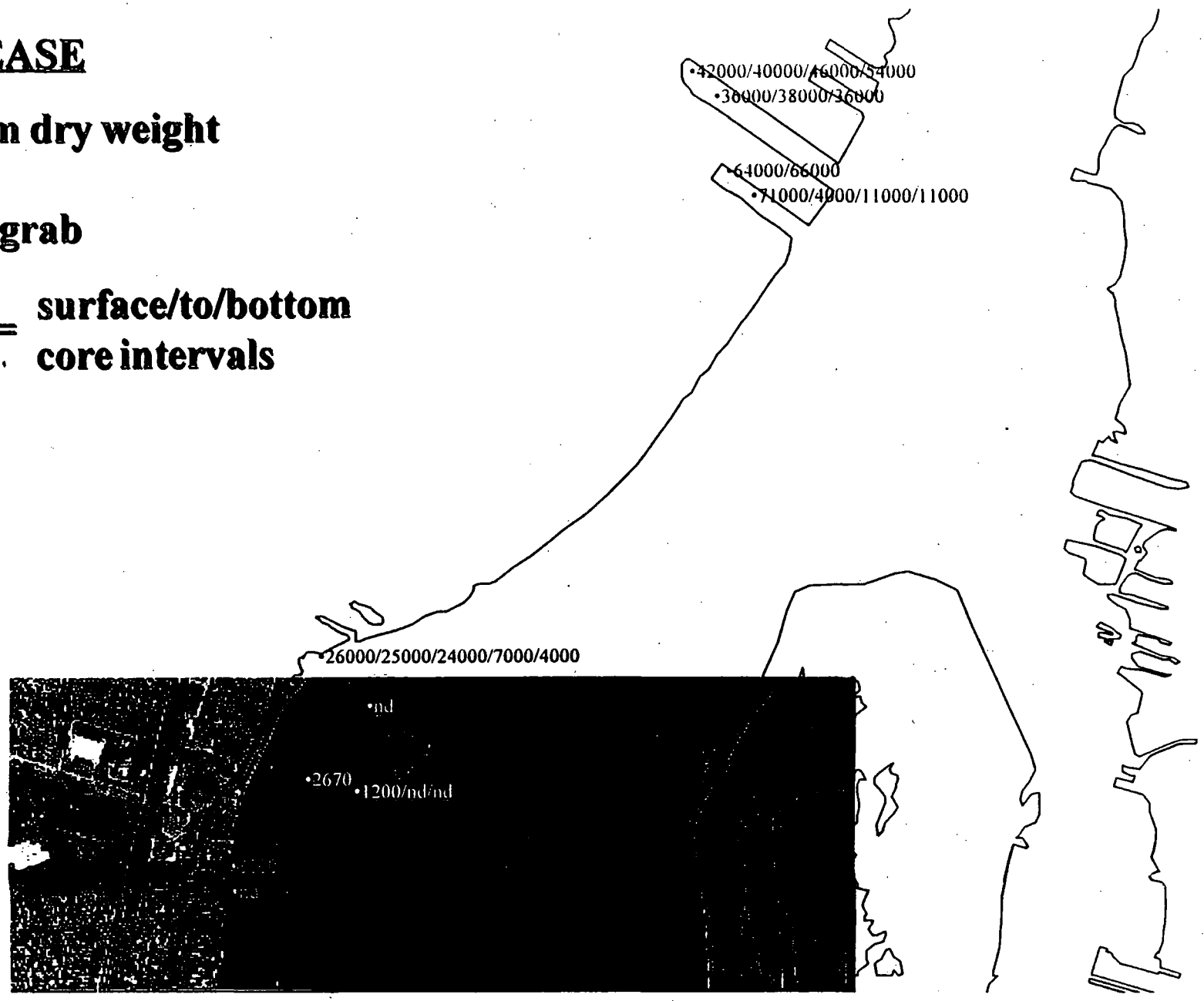


Figure 5. Upper Trenton Channel Rouge River to EcorseCreek

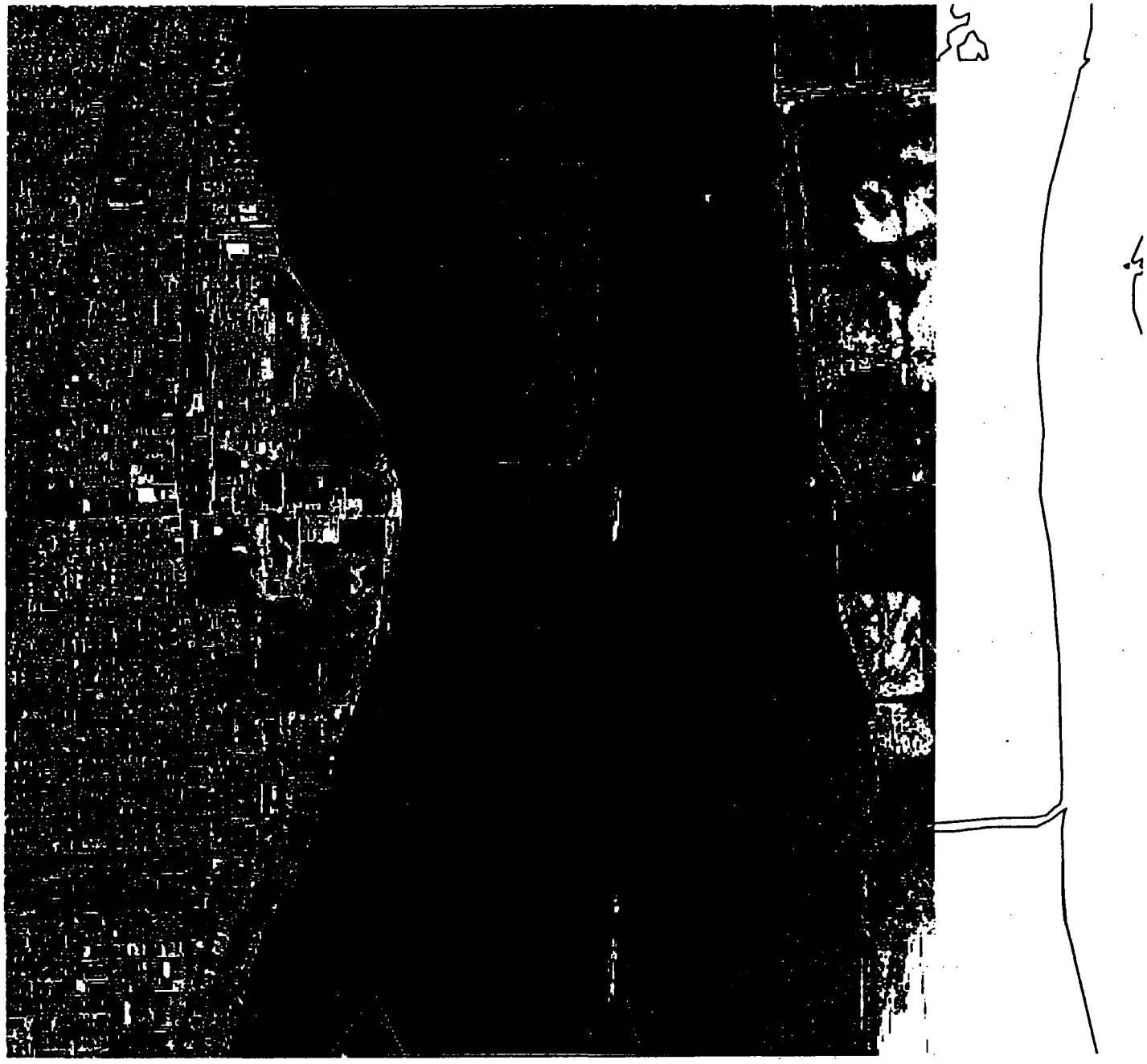


Figure 6. Upper Trenton Channel
Grassy Island toPt. Hennepin

TOTAL PCBS

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

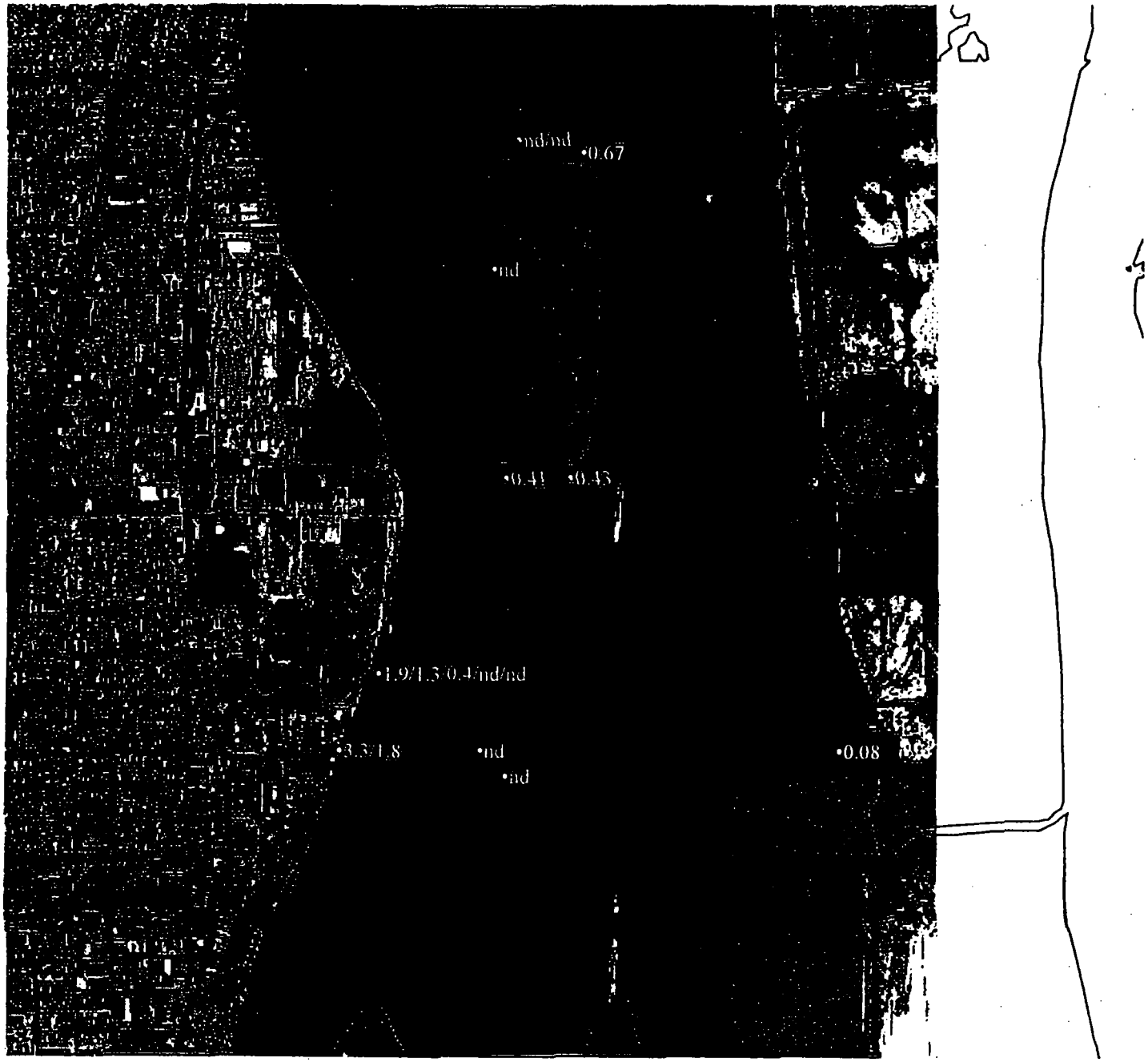


Figure 7. Upper Trenton Channel Grassy Island toPt. Hennepin

MERCURY

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

Figure 8. Upper Trenton Channel
Grassy Island toFt. Hennepin

Figure 9. Upper Trenton Channel
Pt. Hennepin to Grosse Ile Toll Bridge

CADMIUM

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

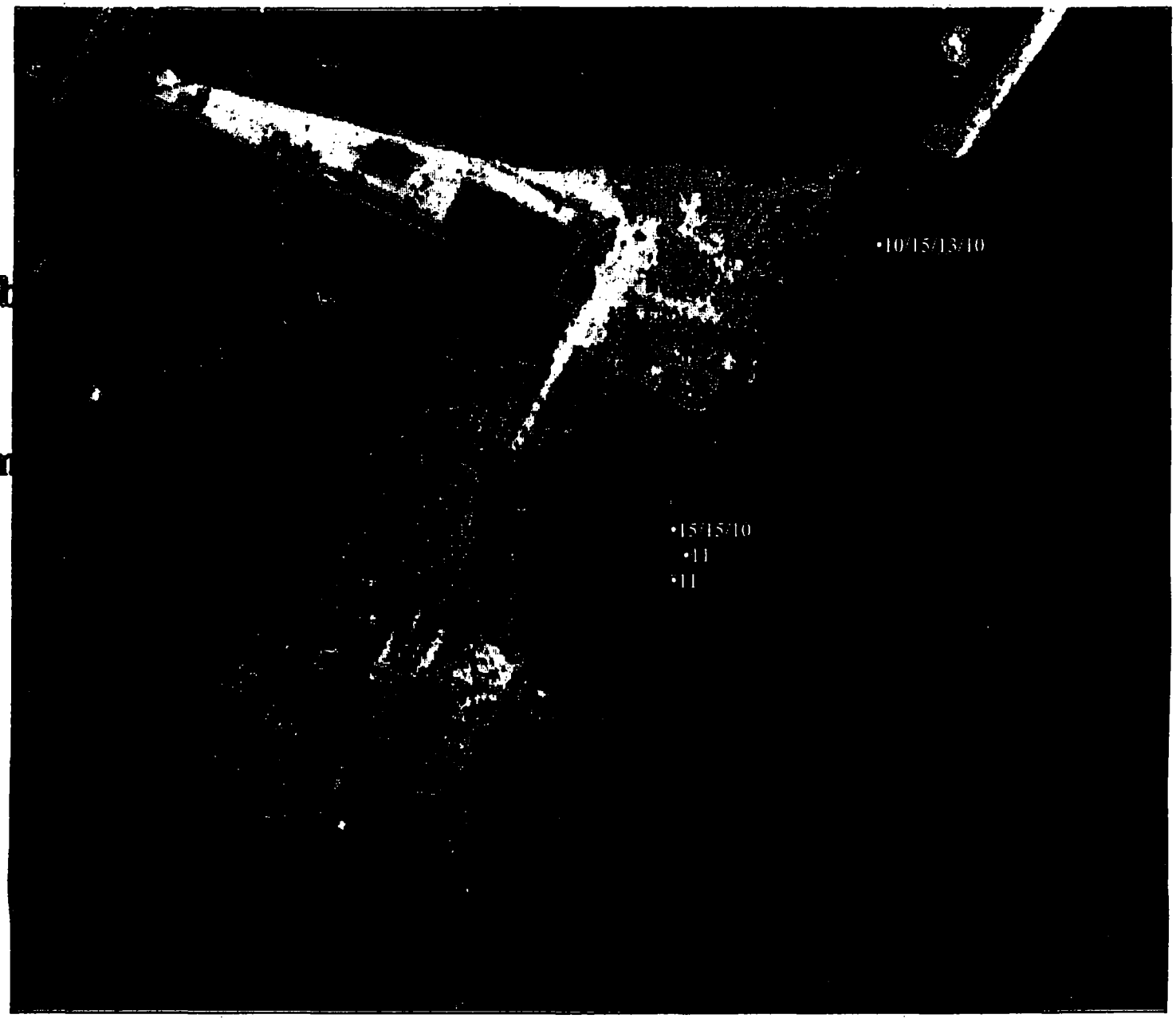


Figure 10. Firestone Steel Site

MERCURY

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

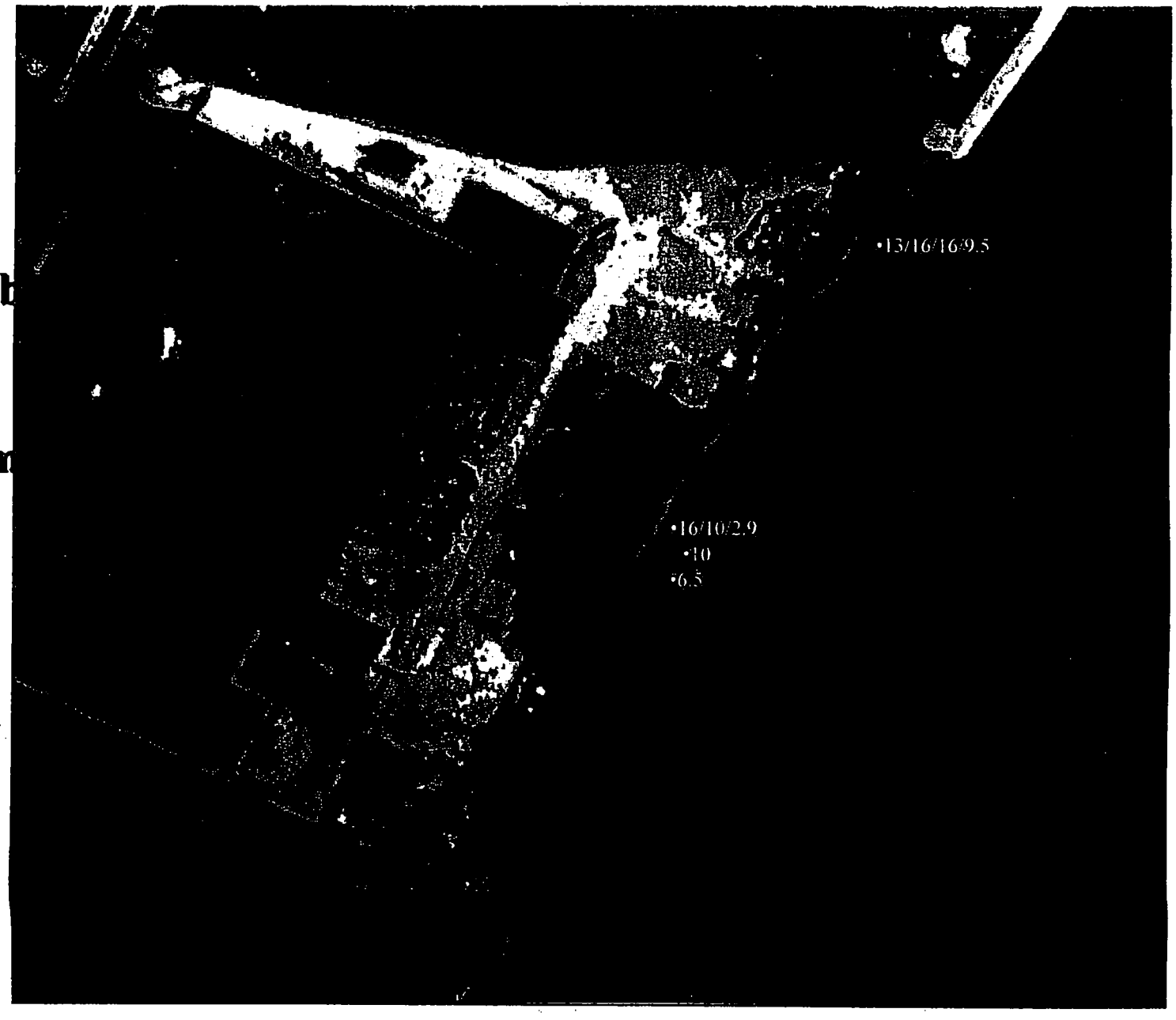


Figure 11. Firestone Steel Site

TOTAL PCBS

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

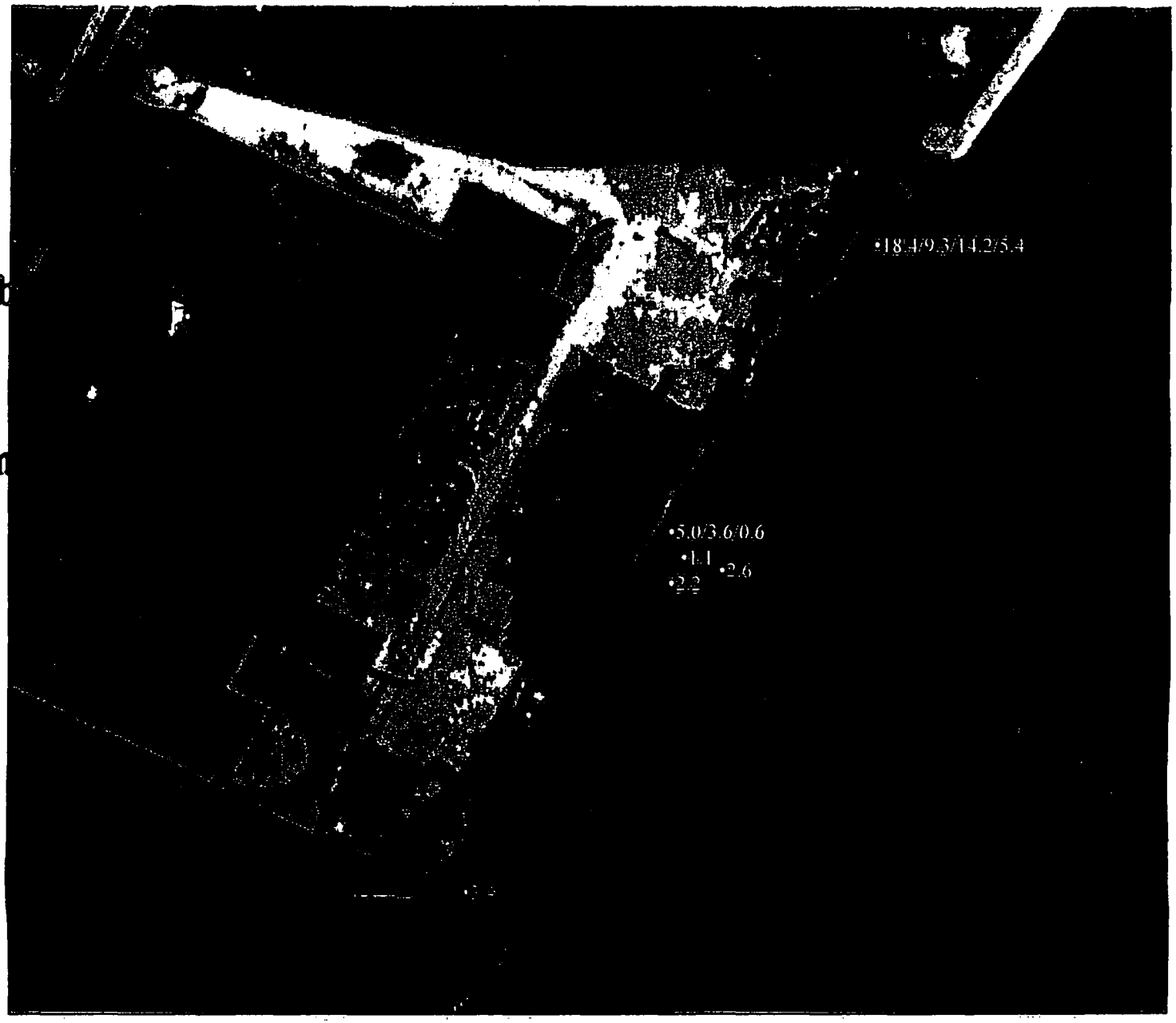


Figure 12. Firestone Steel Site

OIL and GREAS

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

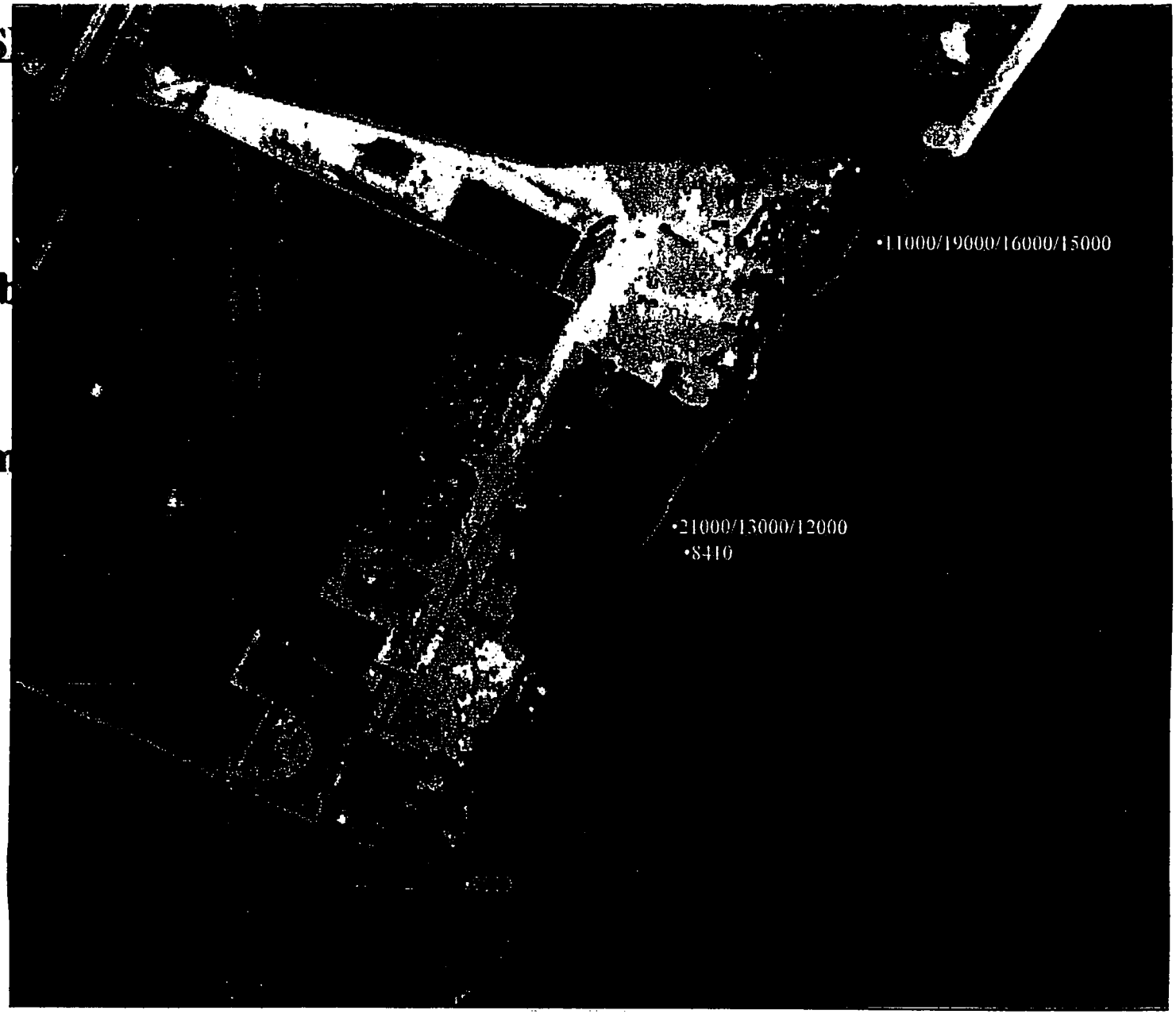


Figure 13. Firestone Steel Site

CADMIUM

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

Figure 14. Federal Marine Terminal /Monguagon Creek Area

MERCURY

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

Figure 15. Federal Marine Terminal /Monguagon Creek Area

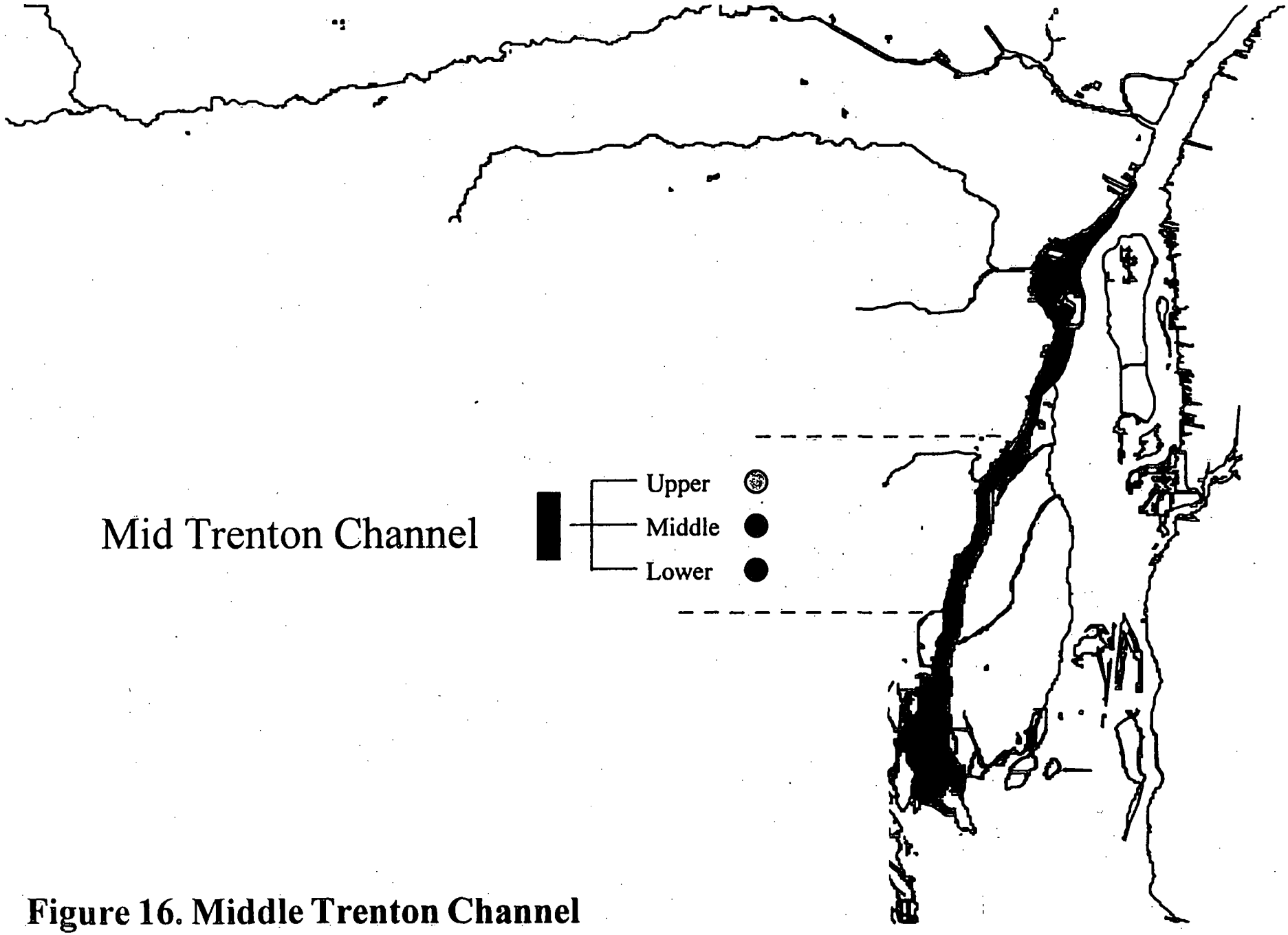


Figure 16. Middle Trenton Channel
Monguagon Creek to Elizabeth Park North Canal

LEAD

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

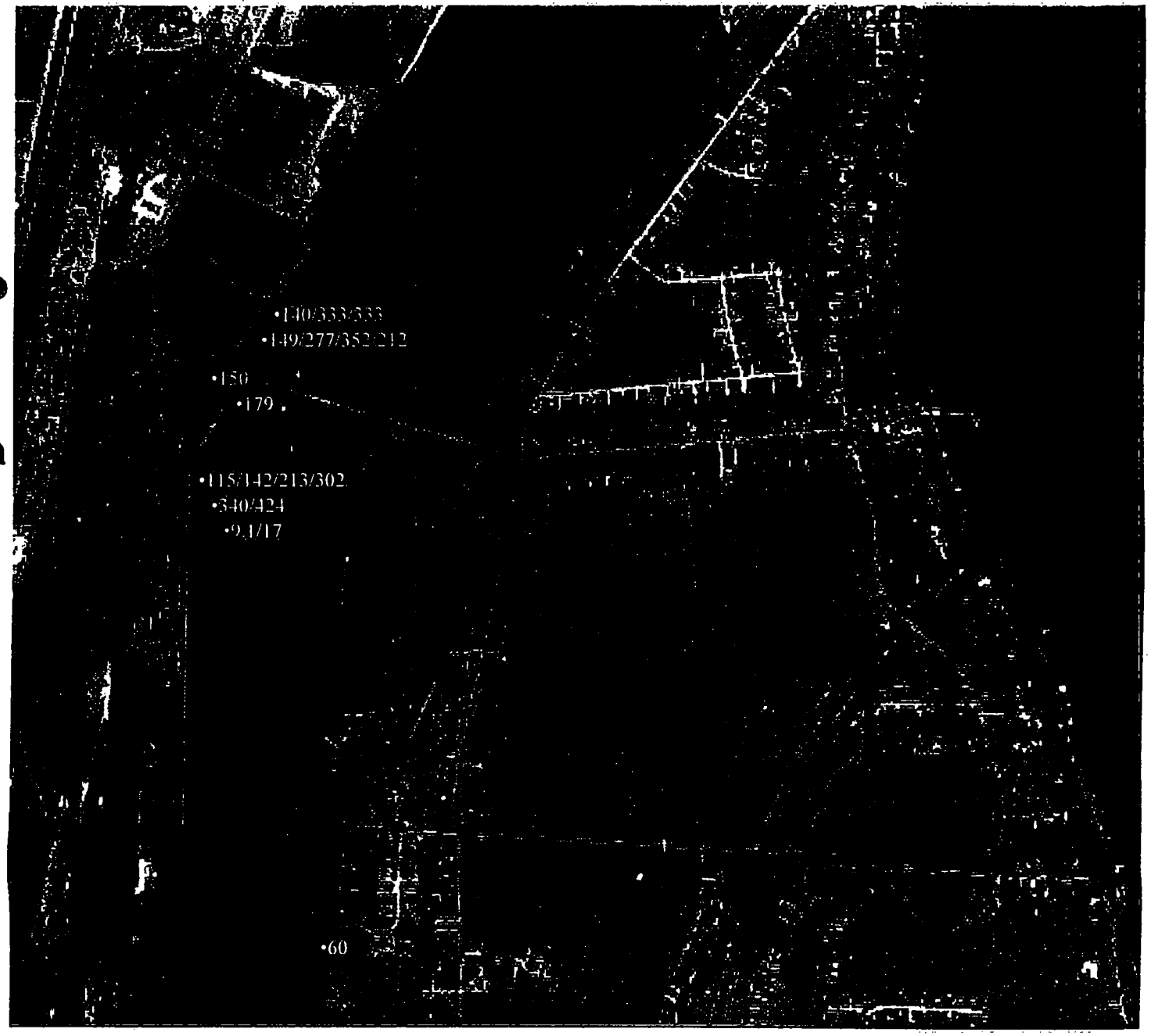


Figure 17. Federal Marine Terminal /Monguagon Creek Area

ZINC

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

Figure 18. Federal Marine Terminal /Monguagon Creek Area

MERCURY

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

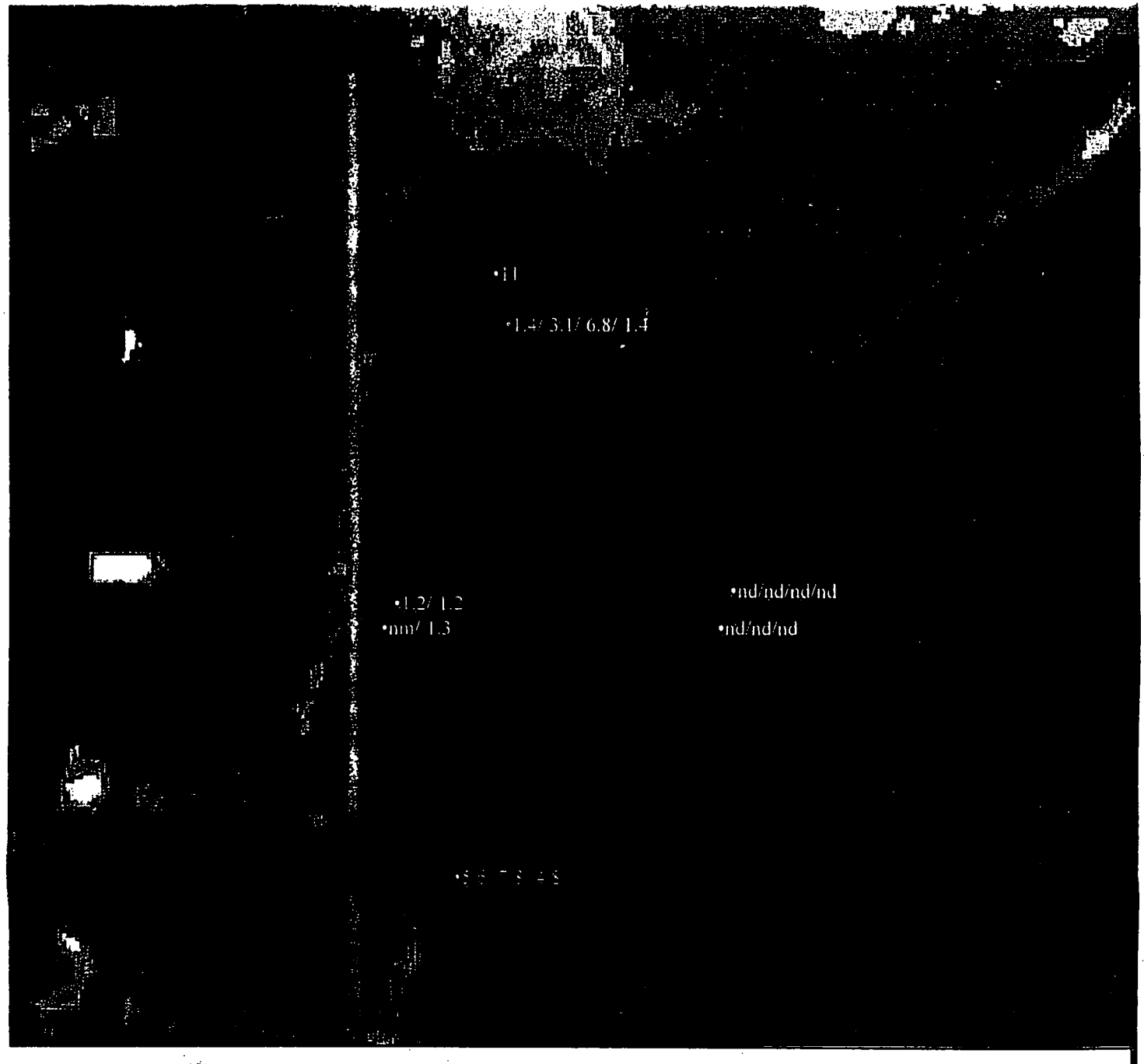


Figure 19. Black Lagoon

ZINC

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

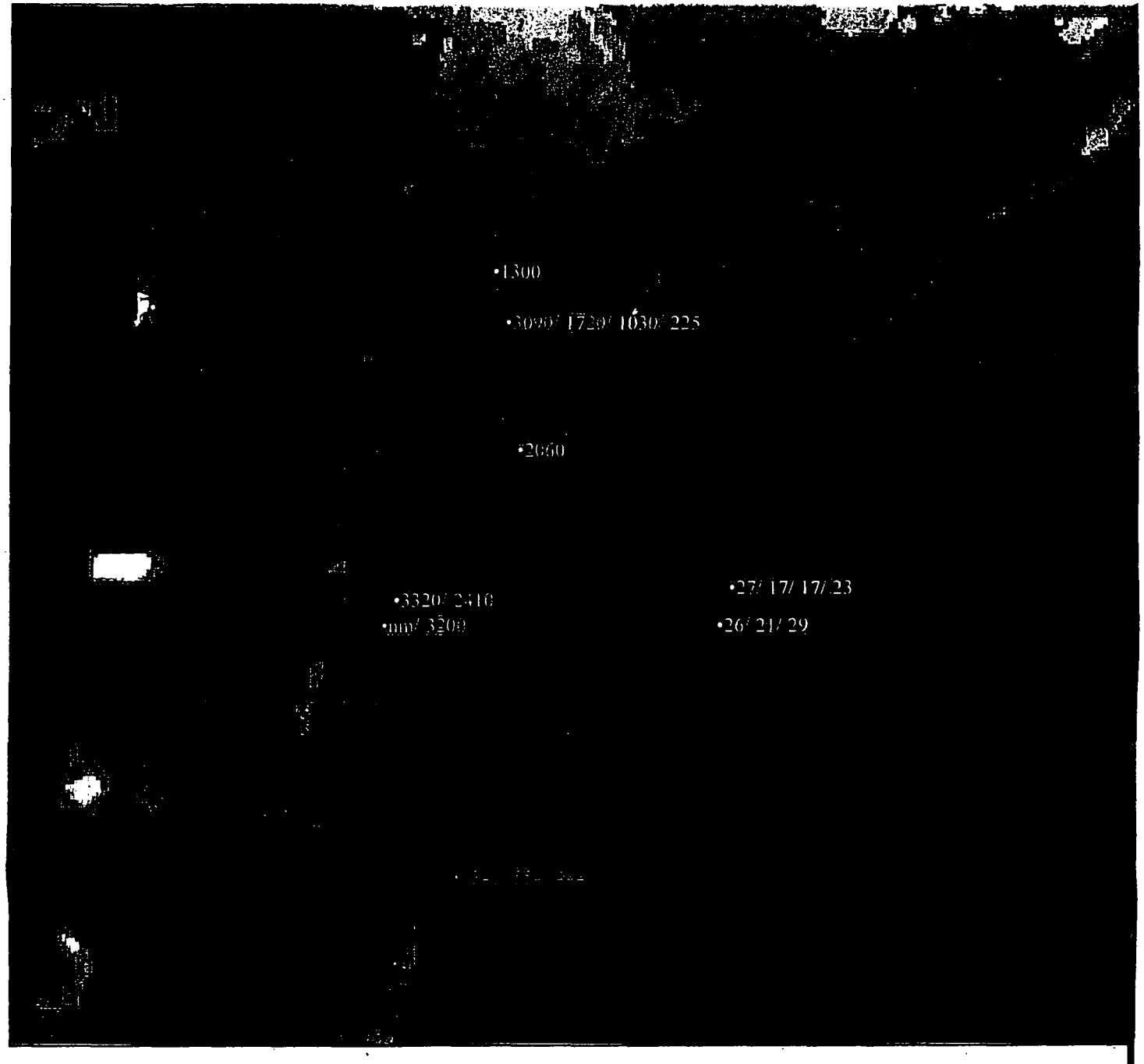


Figure 20. Black Lagoon

OIL and GREASE

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

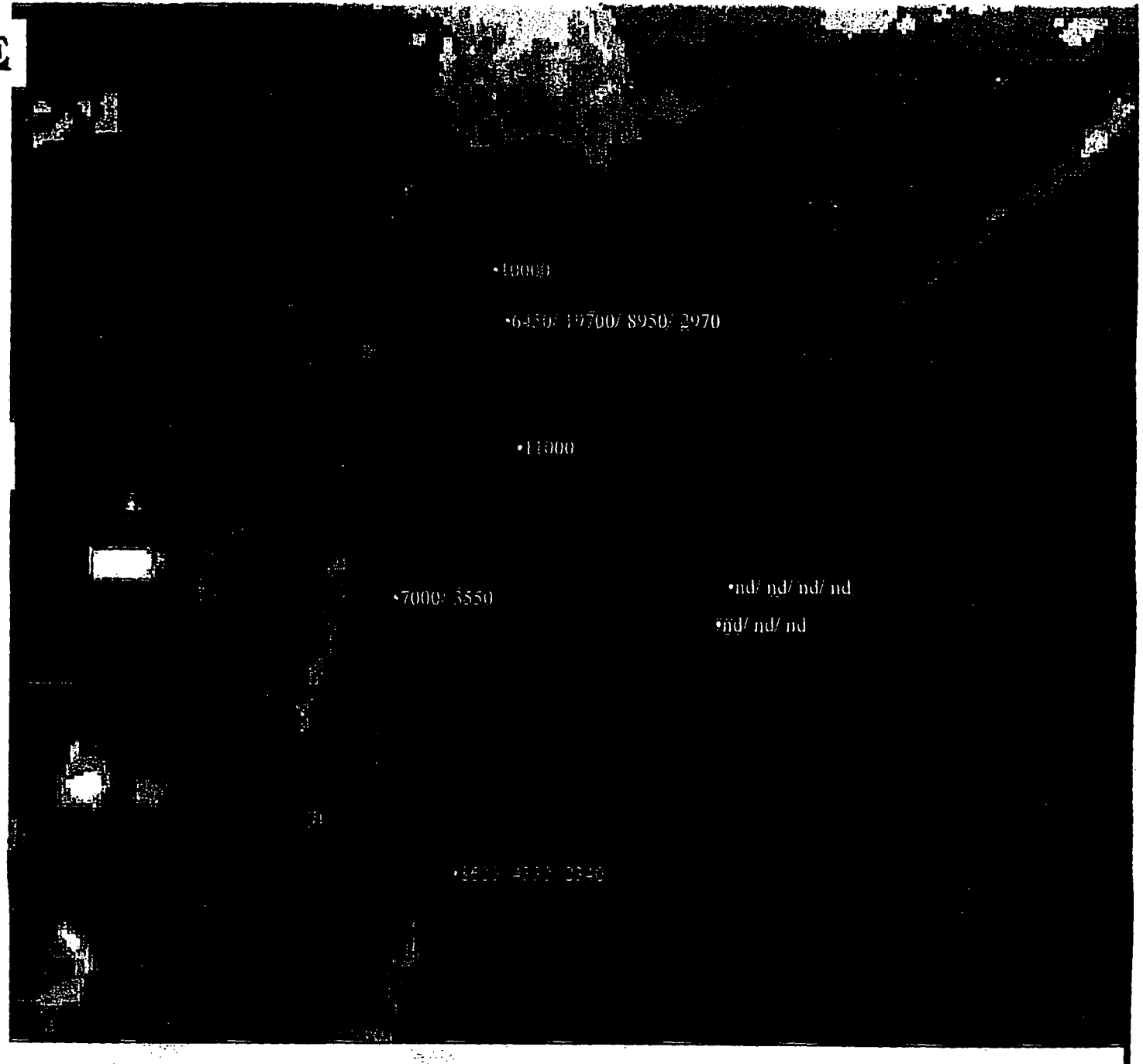


Figure 21. Black Lagoon

MERCURY

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

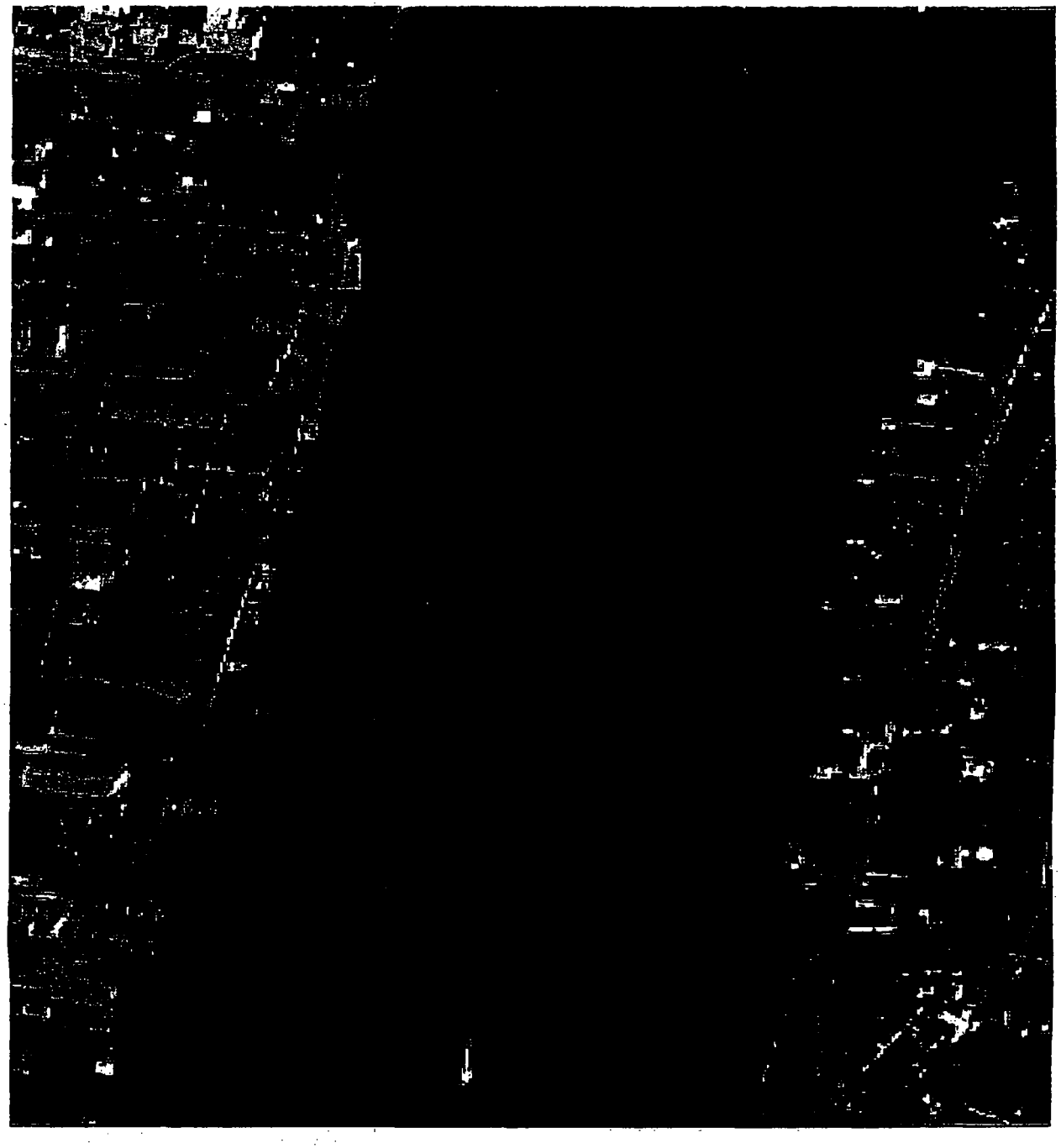


Figure 22. Trenton Towers

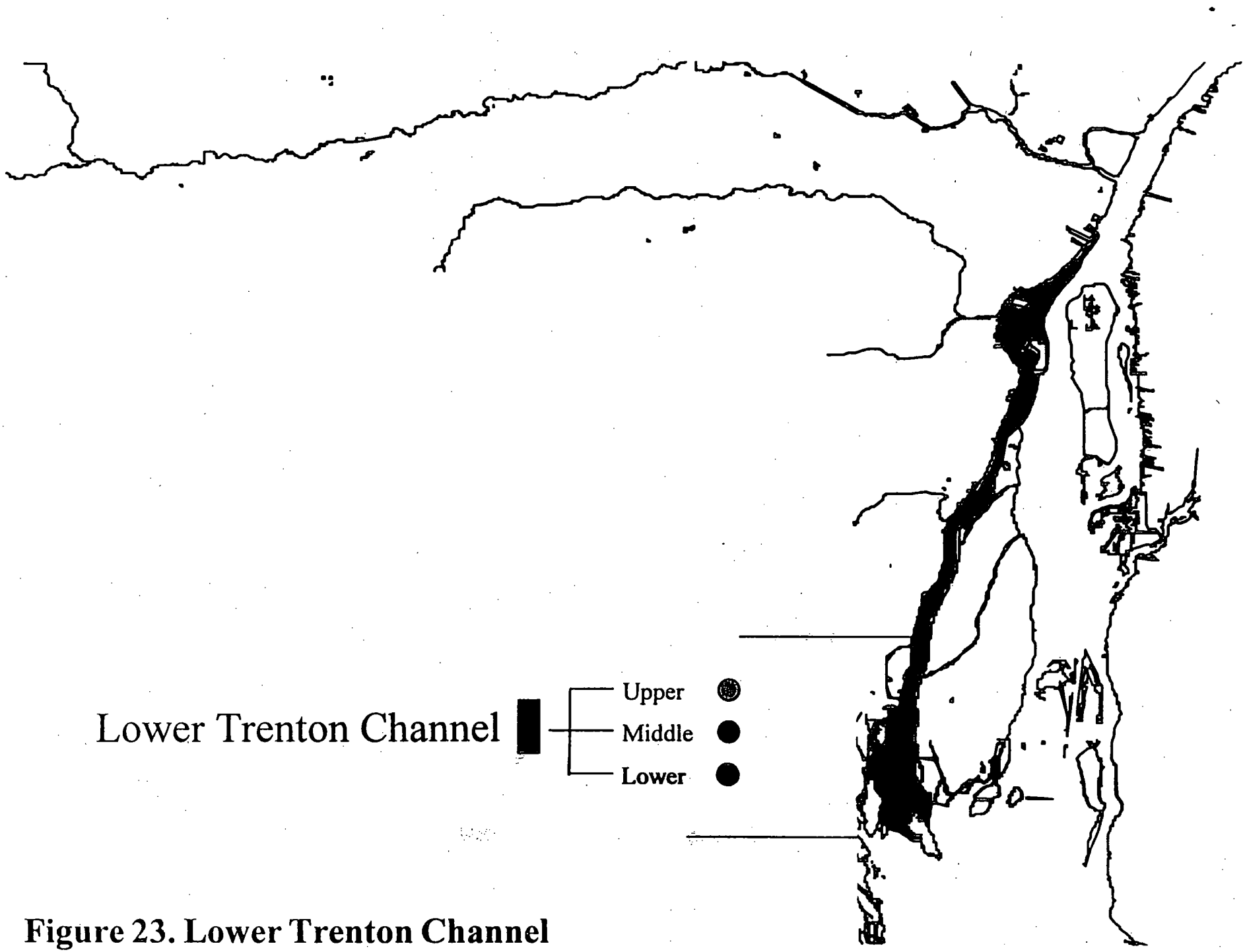


Figure 23. Lower Trenton Channel
Elizabeth Park North Canal to Celeron Island

MERCURY

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

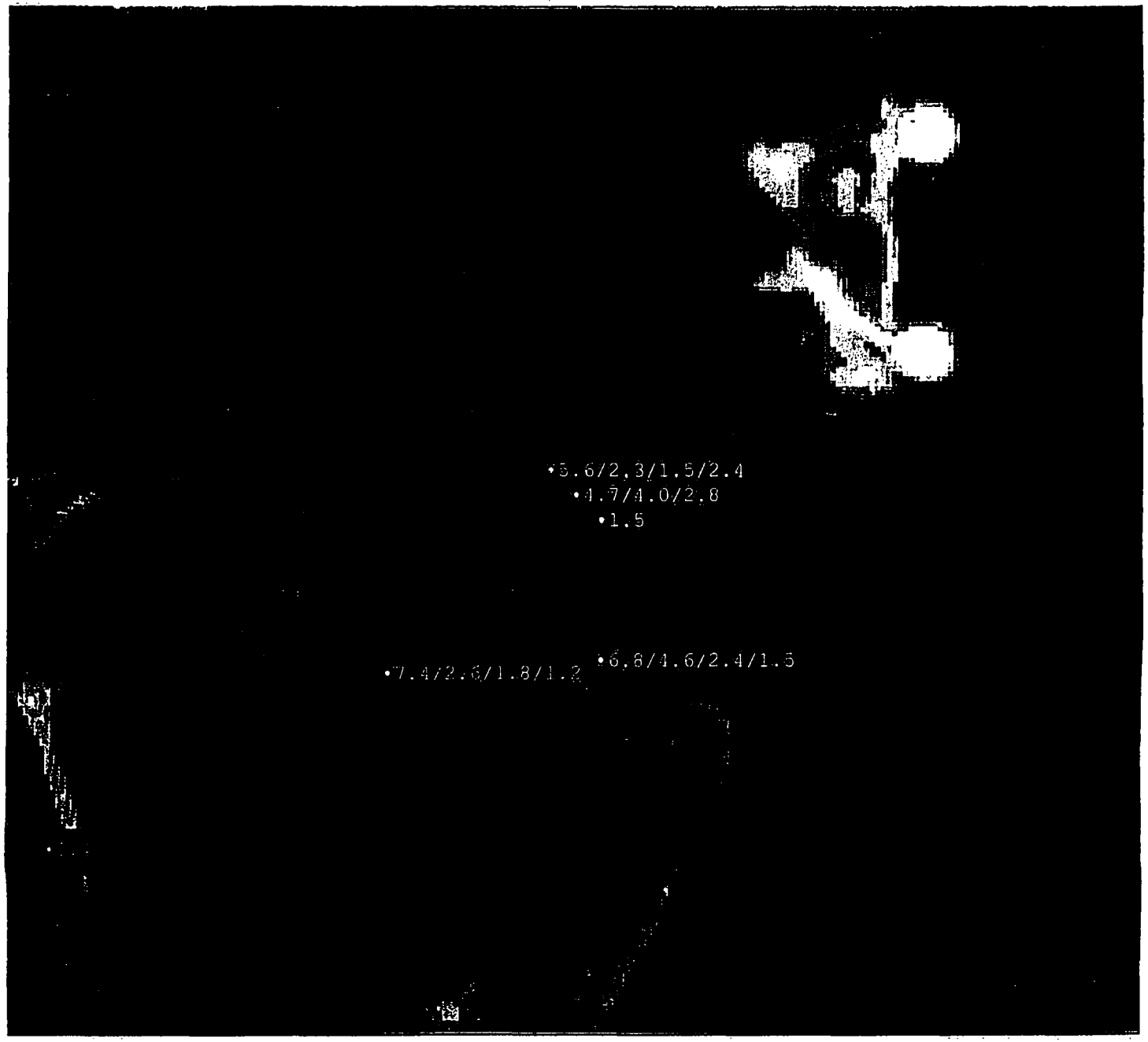


Figure 24. Elizabeth Park North Canal

TOTAL PCBS

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

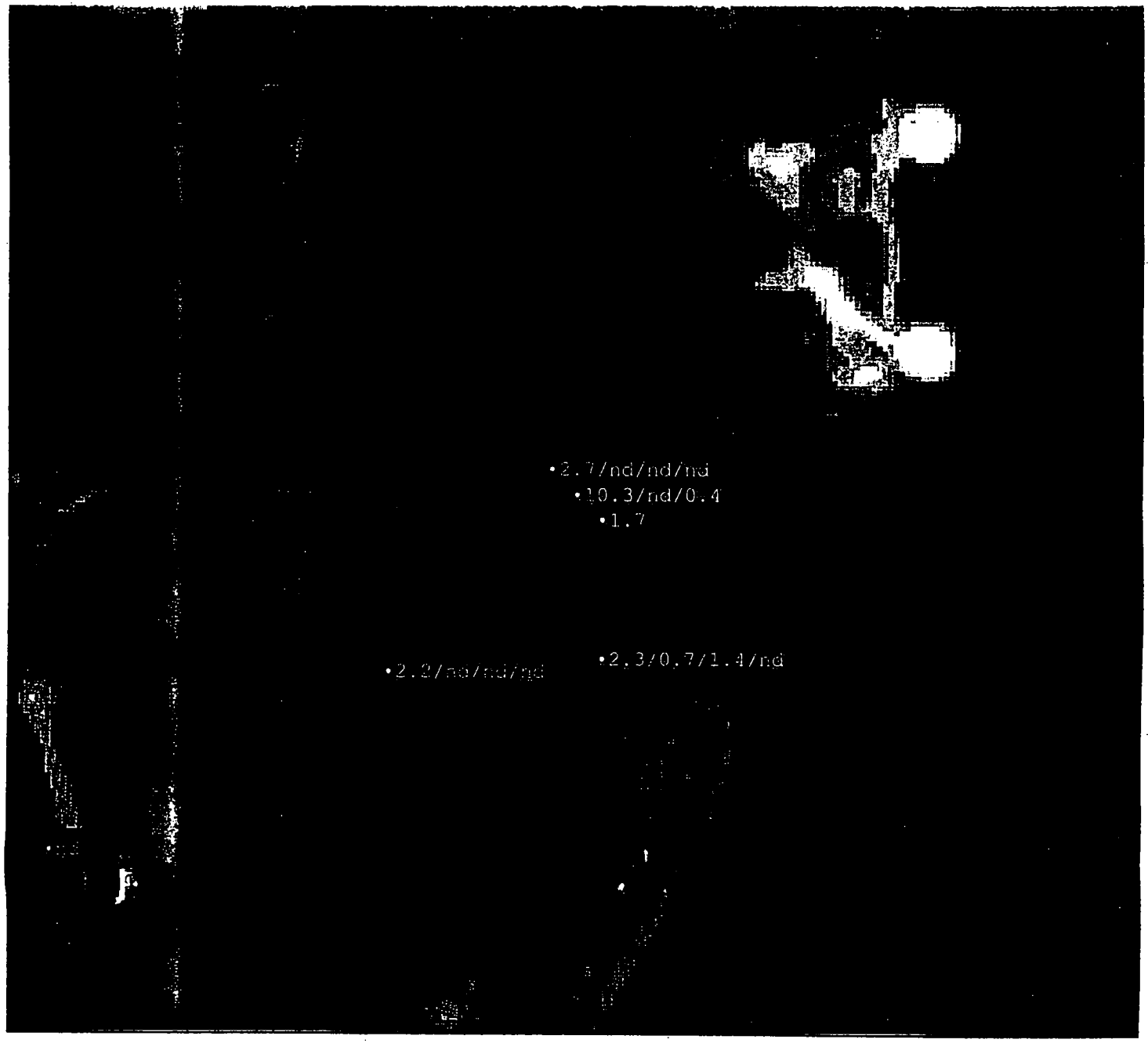


Figure 25. Elizabeth Park North Canal

TOTAL PAHS

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

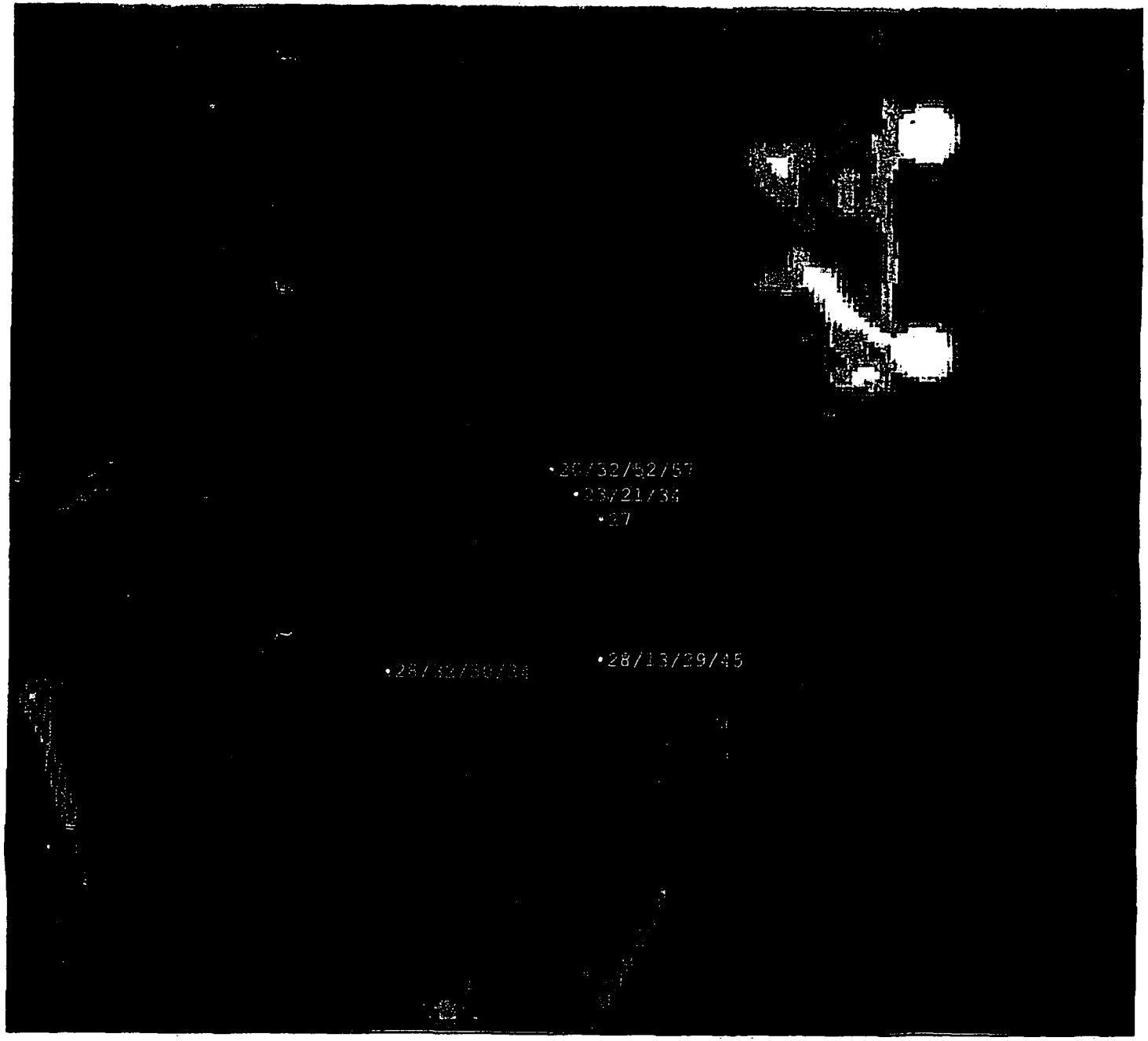


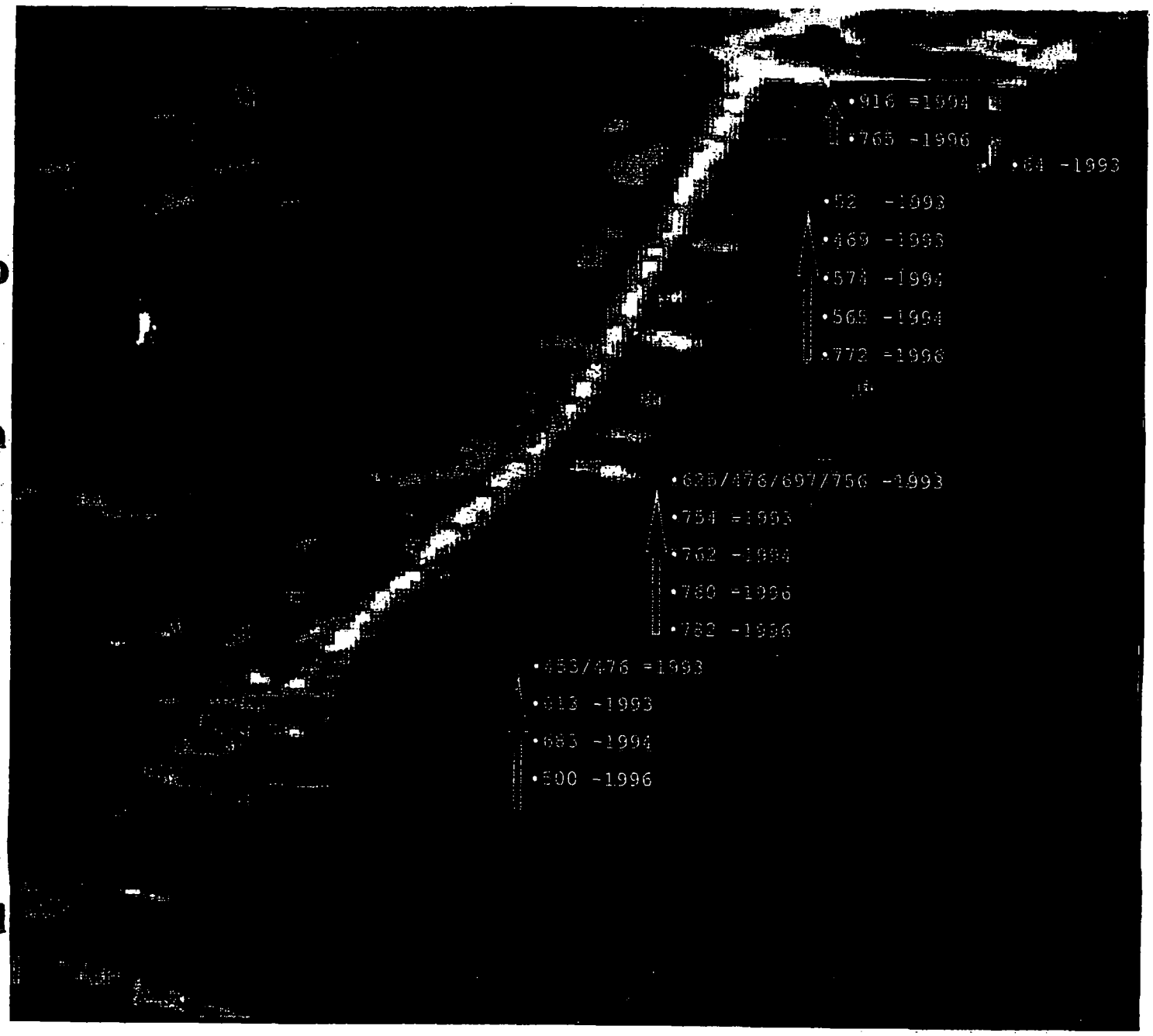
Figure 26. Elizabeth Park North Canal

ZINC

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals



↑ -Site location

-1993 Year sampled

Figure 27. Elizabeth Park Marina

MERCURY

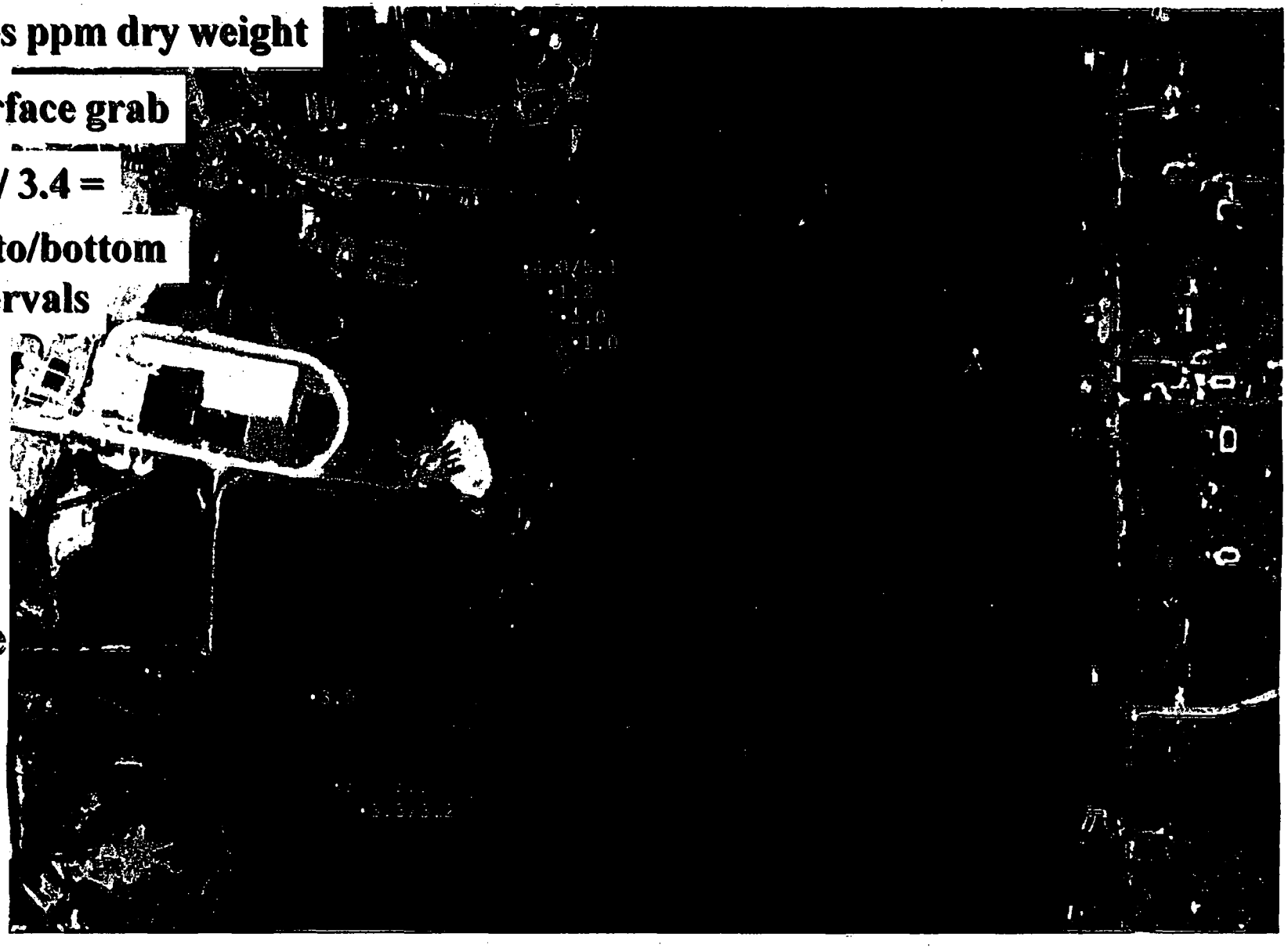


Figure 28. Elizabeth Park South Canal Area

ZINC

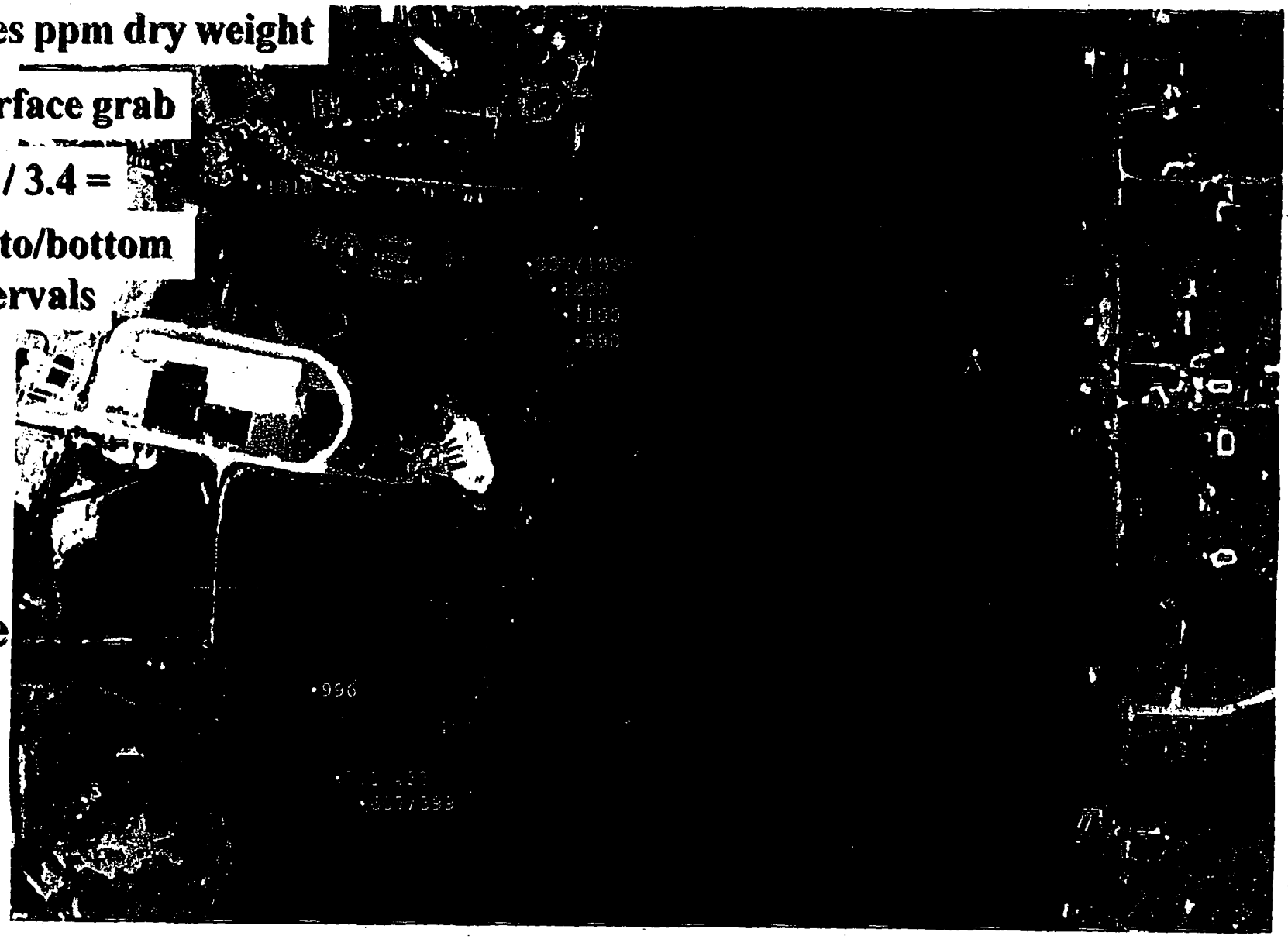


Figure 29. Elizabeth Park South Canal Area

TOTAL PCBS

all values ppm dry weight

3.4 = surface grab

1.2 / 2.3 / 3.4 = surface/to/bottom core intervals

Figure 30. Lower Trenton Channel

Appendix A. Mass Spec-Library Search Interpretations

The following is a brief overview and analysis of a number of identified constituents of the several sediment samples collected from the Trenton Channel. On generalization, it appears the numerous chemicals identified may occur as constituents of heavy oils and lubricants, components of naturally occurring substances such as fats and oils or as possible components of plasticizers, rubber, nylon or other similar synthetic compounds.

1. Polycyclic Aromatic Hydrocarbons (PAHs) and Cresol:

   1,4,6-Trimethyl-naphthalene
   1,6,7-Trimethyl-naphthalene
   1,2,3-Trimethyl-naphthalene
   methyl phenanthrene
   methyl anthracene
   4-methyl phenol (p-cresol)

   common constituents of coal tar and heavy oils (bunker C or #6 Fuel Oil)

2. Hexadecanoic acid (palmitic acid):

   A saturated fatty acid which occurs in natural fats and oils and in "tall oil" (see below). It has been used commercially in soaps, lubricating oils, waterproofing and in food grade additives.

   Note: tall oil is a mixture of rosin acids, fatty acids and other materials obtained from pulping pine wood. Tall oil fatty acids consist of the following: palmitic 0.1%, stearic 2.1%, oleic 48.5%, linoleic 35.3% and eicosenoic 1.1%. Some of the use of tall oil is in vehicle paints, alkyl resins, soaps, cutting oils and emulsifiers, lubricants and greases, asphalt derivatives, rubber reclaiming, synthesis of cortisone and sex hormones, chemical intermediates, etc.

3. Hexane dioic acid (adipic acid) mono (ethyl hexyl) ester:

90% of adipic acid esters are commercially used as plasticizers. 10% are used commercially as high performance lubricants. 2-ethyl hexyl adipates are reported to be excellent low temperature lubricants. They also offer low temperature flexibility in PVC formulations.

4. Isopentane/Isoprene, Terpene and Steroid Type Compounds

Many chemical components/compounds of plants and animals have the common characteristic of their carbon skeletons being evenly divisible into iso-C_5 units, i.e. isoprene or isopentane units. These units may be joined in regular sequences head-to-tail, or, in head-to-tail groupings that are joined tail-to-tail. Many of these compounds or fragments of compounds were detected in the sediment analysis.

a. isopentane sequencing:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Dodecane
Pentadecane
Hexadecane
eicosane

chemicals identified in this grouping include:

2-methyl eicosane
2,6,10 and 2,6,11-trimethyl dodecanes
1,6,10,14 and 2,6,10,14-tetramethylpentadecanes (pristane)
2,6,10,14 tetramethylhexadecane (phytane)

Both pristane and phytane are found in rock specimens 2.5-3 billion years old, are derivatives of chlorophyll and are commonly used as biomakers in identifying particular crude oils. Because of these compounds ability to withstand heat and pressure, commercial uses of these compounds have been as precision lubricants, chromatographic oil and as anticorrosive agents.

Eicosane and eicosanoic acid are used in refining, rubber manufacturing, paper processing, cosmetics, lubricants, plasticizers and in organic synthesis.

b. isoprene sequencing

The isoprene unit is a common natural building block of more complex biological compounds. It occurs in a wide variety of compounds isolated from plant and animals, including natural rubber. Exudates from conifers and oils from citus fruits and eucalyptus trees have abundant $C_{10}H_{16}$ alicyclic hydrocarbon composition. The term terpene (turpentine tree) has commonly been applied to these compounds. Triterpenes (C_{30}) are widely distributed in nature, especially in plants. Trans-squalene has been identified as the precursor in the biosynthesis of all triterpenes through a series of cyclization and rearrangement. Squalene is an intermediate in the biosynthesis of cholesterol and other steroids (see attached) via the intermediate, lanosterol (note: wool fat or lanolin contains cholesterol esters of higher fatty acids). Cholestane is a steroid of the same ring structure as cholesterol (and cortisone and the sex hormones) and has also been identified with wool fat. There was no identified occurrence or use for 4,5 epoxy (alpha, alpha) cholestane noted in the literature reviewed, however, there was note of 5 alpha cholestanol identified as a member of the cholestane group related to the common saturated sterols. Sterols are solid alcohols having from 27-29 carbons (steroid means sterol-like). Sterols are widely distributed in plants and animals both in the free form and esterified to fatty acids. Coprostanol, 5 beta-cholestan-3 beta ol, is a cholestanol produced in the intestines of mammals by microbial reduction of cholesterol and excreted along with cholesterol. This sterol has been identified as a sediment contaminant at concentrations up to 500 ppb.

Squalene is a common naturally occurring substance that is also used as a commercial chemical intermediate in steroid production. Lanolin (containing sterols including lanosterol which may be derived from squalene) is used in ointments, soaps, face and hand creams, suntan preparations, hair-sets and leather finishing.

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Appendix B. Sediment Survey Results-Data Tables

- Metals
- PCBs
- PAHs
- Oil and Grease
- Grain Size
- Acid Volatile Sulfides
- TOC, Density
- Lat-Long
- Classification A: Upstream to Downstream
- Classification B: Most Contaminated to Least Contaminated

TRENTON CHANNEL PROJECT		HEAVY METALS mg/kg										
SEDIMENT CHEMISTRY RESULTS	Core											
	length											
SITE DESCRIPTION	in cm	SOLIDS	TOT. As	TOT Cd	TOT. Cr	TOT. Cu	TOT. Fe	TOT. Pb	TOT Mn	TOT. Hg	TOT Ni	TOT. Zn
EPM Long and Morgan, 1990)			85	9.6	145	390		110		1.3	50	270
SEL Persaud et. al. OME, 1993)							40000		1100			
Quantification Level EPA Method 245.1/7470.7471)										0.1		
55C1 Allied Oil Slip NW	000-030	43	10	15	260	230	48000	340	420	1.8	120	330
	030-091	48	14	17	280	280	53000	350	490	1.2	96	1100
	091-152	52	16	15	220	270	50000	360	470	1	79	98
	152-213	54	15	16	210	270	50000	340	490	1.1	72	710
55C2 Allied Oil Slip NW - dup	000-030	43	9.2	12	180	160	43000	350	490	0.99	94	670
	030-091	48	12	16	260	250	48000	390	430	1.5	110	1200
	091-147	50	15	16	290	280	52000	350	530	1.1	100	960
56C1 Nickelson South Slip	000-030	36	19	21	170	360	99000	250	1400	0.41	140	720
	030-043	42	41	35	300	630	120000	580	1000	0.56	240	710
56C2 Nickelson South Slip -dup	000-030	37	26	25	210	450	100000	310	1300	0.42	160	740
	030-091	45	29	27	300	410	94000	520	1400	0.07	170	960
	091-152	56	9	10	90	120	26000	200	480	0.7	35	440
	152-201	57	11	18	110	190	39000	330	490	0.91	42	730
59C1 Stenson Club	000-030	44	6.3	10	170	130	32000	160	740	0.73	91	600
	030-091	52	7.8	12	180	190	34000	210	490	0.83	97	600
	091-152	54	10	13	190	250	33000	230	540	1.5	110	650
	152-213	53	14	3.6	47	300	18000	250	410	3	19	390
	213-224	57	13	2.5	28	160	14000	130	290	2.1	16	210
64P Mud Island Northside	Ponar	66	3.4	3.3	28	23	23000	22	230	0.08	24	97
65P Mud Island SW	Ponar	64	4.1	7.1	54	71	38000	71	900	0.33	35	250
60C1 Mud Island -South side	000-030	59	2.5	2	17	18	13000	12	190	0.23	13	48
	030-091	61	2.9	1.9	15	15	13000	10	230	0.17	15	50
	091-137	65	2.4	2.1	16	14	14000	9	120	0.08	14	35
53C1 Grassy Island NW	000-030	38	4.5	3.3	29	35	17000	31	190	0.33	44	100
	030-071	77	4	1.4	13	14	9400	9.1	230	0.031	18	38
54C1 Grassy Island NE	000-034	55	4.6	2.2	18	20	13000	20	240	0.16	21	61
63P Grassy Island W	Ponar	66	2.6	2.3	22	27	15000	20	180	0.14	26	73
61P Grassy Island SW	Ponar	60	5.3	3.3	24	44	14000	39	350	0.39	18	120
62P Grassy Island SE	Ponar	57	4.5	3.4	93	32	16000	33	240	0.33	49	110
57P Mouth of Ecorse Creek	Ponar	34	7.1	5.6	57	66	30000	81	590	0.4	37	270
58C1 Mouth of Ecorse Creek	000-030	72	3.1	1.9	16	25	13000	11	140	<0.1	39	45
52C1 BASF Northworks Lower	000-030	54	9.9	9.4	120	120	30000	120	420	0.84	67	290
	030-091	51	15	10	110	160	30000	110	440	1.3	59	320
	091-152	56	15	13	77	130	27000	140	420	1.5	44	360
	152-213	59	7.4	4	23	74	13000	90	200	0.89	17	180
69C1 Wyandotte Yatch Club	000-030	43	8.2	5.9	35	120	19000	150	240	1.1	44	330
	030-066	53	8.5	5.5	68	110	19000	150	230	1.5	35	310
68P N of Pt. Hennepin	Ponar	76	5.2	1.2	12	10	8800	9	120	0.07	8.5	37
68E N of Pt. Hennepin	Eckman	76	2.1	1.3	12	10	8800	14	130	0.08	10	49
67C1 Portofino	000-030	45	7.5	5.7	68	83	22000	220	310	0.75	39	350
43P Portofino Slip	PONAR	56	5.8	2.9	40	49	25900	143	455	0.32	27	245
42P Pt. Hennepin	PONAR	58	4.8	1.5	20	24	14300	27	161	0.22	17	106
15 C1 T.C. North Marsh	000-022	63	2.4	0.43	30	21	21600	19	161	<0.1	27	78
15 C1	022-062	73	2.6	0.12	17	24	21600	13	130	<0.1	25	62
15 C1	062-100	70	3.2	<0.05	22	20	26000	12	161	<0.1	31	93

TRENTON CHANNEL PROJECT		HEAVY METALS mg/kg										
SEDIMENT CHEMISTRY RESULTS	Core Length											
SITE DESCRIPTION	in cm	SOLIDS:TOT.	As	TOT. Cd	TOT. Cr	TOT. Cu	TOT. Fe	TOT. Pb	TOT. Mn	TOT. Hg	TOT. Ni	TOT. Zn
ERM Long and Morgan, 1990:			35	9.6	145	390		110		1.3	50	270
SEC (Persuad et. al. OME, 1993)							40000		1100			
Quantification Level EPA Method 245.1/7470,7471:										0.1		
51 C1 Firestone Upper	000-030	43	9.4	10	150	140	30000	200	410	13	90	490
	030-091	53	13	15	230	300	32000	300	470	16	100	660
	091-152	51	12	13	190	250	26000	250	410	16	94	570
	152-194	49	13	10	140	190	25000	190	410	9.5	70	460
66C1 Firestone Steel -Mid 45P Inter	000-030	43	12	15	260	300	31000	240	530	16	100	590
	030-091	54	11	15	140	210	25000	190	420	10	67	520
	091-104	57	9.2	10	58	190	18000	160	310	2.9	39	430
45P Firestone Steel	PONAR	45	7.6	11	165	199	44000	190	731	10	76	592
	PONAR	47	13	11	166	221	41000	211	574	6.5	86.8	662
50P Firestone Lower	Ponar	42	9.4	19	250	150	35000	260	900	10	130	790
MONGUAGON CREEK-UPSTREAM	000-030	41	8.5	40	119	140	37500	140	590	2.4	68	563
MONGUAGON CREEK-UPSTREAM	030-104	47	8.9	20	467	246	44100	333	551	1.2	210	964
MONGUAGON CREEK-UPSTREAM	104-142	53	11	14	303	217	41500	333	520	9.9	160	721
MONGUAGON CREEK-UPSTREAM	000-030	41	7.8	33	109	118	38800	149	569	2.5	70	458
MONGUAGON CREEK-UPSTREAM	030-076	43	8.1	21	248	183	45900	277	544	3.4	160	625
MONGUAGON CREEK-UPSTREAM	076-150	47	8.9	22	500	255	42900	352	554	3.1	160	625
MONGUAGON CREEK-UPSTREAM	150-190	50	12	7.6	170	122	24400	212	416	5.7	73	377
49E Monguagon Creek	Eckman	48	7.4	6.2	77	70	22000	150	440	0.29	64	2300
55 - Monguagon Creek	Ponar	58	nm	11.2	178	123	45900	179	455	<0.1	103	850
FI - Fighting Island	Ponar	33	nm	nd	21	14	14200	nd	234	<0.1	17	32
25 C1 MNCK DNS-Nearshore	000-027	70	5.1	29	78	91	27700	115	427	1.1	46	412
25 C1	027-051	61	6.5	30	99	101	28900	142	484	0.95	56	449
25 C1	051-095	58	6.7	15	167	131	35700	213	484	1.5	90	648
25 C1	095-132	71	9	17	405	239	48300	302	542	1.4	251	987
21 C1 MNCK DNS-Offshore	000-027	80	3.5	<0.05	9.2	14	14100	9.1	251	<0.1	15	34
21 C1	027-051	84	3.9	<0.05	13	15	14900	17	288	0.23	17	50
MONGUAGON CREEK-DOWN	000-150	43	8.5	19	437	252	42000	340	596	3.9	200	878
MONGUAGON CREEK-DOWN	150-169	30	10	22	456	281	51700	424	632	11	210	1200
BLACK LAGOON-CENTER	000-030	38	6.5	14	102	99	53200	193	744	1.4	49	3090
BLACK LAGOON-CENTER	030-120	34	9	17	345	218	70100	449	1070	3.1	160	1720
BLACK LAGOON-CENTER	120-210	40	22	11	162	236	112000	439	1440	6.8	90	1030
BLACK LAGOON-CENTER	210-229	75	4.9	3.7	45	99	19800	76	330	1.4	41	225
BLACK LAGOON-LOWER	000-060	42	24	12	191	226	137000	574	2060	5.6	100	1340
BLACK LAGOON-LOWER	060-152	51	10	11	183	247	35800	187	488	7.8	72	554
BLACK LAGOON-LOWER	152-203	54	10	9.8	121	166	29000	118	397	4.8	56	444
BLACK LAGOON-EAST	000-055	91	9.1	<0.050	9.8	5.2	7430	3.9	148	<0.1	8.5	27
BLACK LAGOON-EAST	055-103	80	1.9	<0.050	8.6	3.7	8150	3.4	173	<0.1	7.1	17
BLACK LAGOON-EAST	103-166	79	2.3	<0.050	9.6	5.6	7260	4.1	163	<0.1	7.9	17
BLACK LAGOON-EAST	166-229	80	2.6	0.067	9.7	7	7480	3.9	175	<0.1	8.6	23
BLACK LAGOON-EAST	000-035	80	1.8	<0.050	9	4.7	6840	3.6	128	<0.1	7.6	26
BLACK LAGOON-EAST	035-133	77	1.9	<0.050	9.3	4.2	7130	3.6	161	<0.1	7.9	21
BLACK LAGOON-EAST	133-182	76	3.2	<0.050	11	8.6	8380	4	201	<0.1	9.5	29
24 C1 BLLG-Nearshore	000-030	40	7.1	16	121	110	53300	218	743	1.2	58	3320
24 C1 (WWES Lab)	030-075	32	7.3	11	315	200	57000	337	937	1.2	144	2410
24 C1 BLLG-Nearshore (MDNR Lab)	030-075	32	12	10	418	233	76300	468	1100	1.3	206	3200
47E BLLG	Eckman	35	7	9.9	98	96	43000	160	620	11	52	1300
37 - Black Lagoon	Ponar	55	nm	3.7	156	111	33000	254	873	<0.1	71	2060

TRENTON CHANNEL PROJECT		HEAVY METALS mg/kg										
SEDIMENT CHEMISTRY RESULTS	Core											
	Length	%										
SITE DESCRIPTION	in cm	SOLIDS	TOT. As	TOT Cd	TOT. Cr	TOT. Cu	TOT. Fe	TOT. Pb	TOT. Mn	TOT. Hg	TOT. Ni	TOT. Zn
ERM (Long and Morgan, 1990)			85	9.6	145	390		110		1.3	50	270
SEL (Persuad et. al. OME, 1993)							40000		1100			
Quantification Level (EPA Method 245.1/7470,7471)										0.1		
40P East of Bouy N "6"	PONAR	48.1	4.7	<2	31	35	15500	36	270	0.19	25	130
41P NE of Bouy R "19"	PONAR	36	4.7	2.7	40	39	23400	60	401	0.23	30	221
44P ONS from Bouy R "23"	PONAR	29.9	13	3.5	62	92.5	37000	288	900	0.65	50	290
26P Riverside Hospital	PONAR	59.5	5.5	4.5	77	67.9	33000	130	545	0.56	44	738
27P Trenton Towers	PONAR	37.1	13	10	220	290	52000	261	740	6.4	98	945
29P Deadhead Cove	PONAR	36.9	6	3.5	60	57.9	39000	97.5	949	0.7	35	683
29PC2	PONAR	38.3	5.9	3.5	58	59.5	37000	98.5	530	0.67	36	680
ELIZABETH PARK CANAL	000-079	47	9.9	14	270	224	45700	279	610	5.6	100	842
ELIZABETH PARK CANAL	079-180	53	9.4	15	147	197	36500	218	510	2.3	48	711
ELIZABETH PARK CANAL	180-260	51	6.3	6.9	82	214	22000	183	400	1.5	36	537
ELIZABETH PARK CANAL	260-330	53	7.1	4.5	59	326	24700	279	369	2.4	33	742
16 C1 EPNC-Upper	000-080	54	11	8.9	167	164	40700	195	544	4.7	81	693
16 C1	080-120	49	11	14	172	196	26600	169	174	4	46	571
16 C1	120-157	56	12	15	124	201	35700	200	493	2.8	46	682
17 C1 EPNC-Inner	000-040	50	10	10	148	186	31000	164	328	7.4	62	552
17 C1	040-080	50	9.6	11	98	173	31300	154	379	2.6	38	554
17 C1	080-140	58	8.1	5.1	39	190	20300	162	274	1.8	31	534
17 C1	140-175	60	8.7	0.98	19	110	19100	100	239	1.2	24	305
18 C1 EPNC-Lower	000-055	44	9	5.8	129	159	23000	139	334	6.8	51	437
18 C1	055-125	47	9.8	12	163	194	25800	171	389	4.6	67	572
18 C1	125-170	52	7.5	8.3	102	167	24400	156	340	2.4	40	496
18 C1	170-217	59	5.3	2.1	24	170	16200	139	238	1.5	22	415
46E EPNC	Eckman	50	5.6	9.5	110	81	44000	120	690	1.5	70	460
29P EPC Bridge 1	PONAR	18.4	9	7	72	107	39000	129	980	0.4	43	795
30P EPC Bridge 2	PONAR	41.2	5.3	<0.05	27	27	13600	31	100	0.18	19	160
31P EPC Bridge 3	PONAR	36.8	7.9	4.5	73	68.5	38000	137	595	1.7	43	750
32P EPC Bridge 4	PONAR	25.7	8.2	9	146	114	43000	199	948	0.88	74.5	870
33P EPC Bridge 5	PONAR	54.4	9.9	9.9	100	106	43000	177	639	0.91	8.4	1020
EP MARINA - OUTSIDE	000-020	85	4	<0.050	20	17	15600	8.9	351	<0.1	21	54
EP MARINA - UPLAND	000-006	96	4.5	0.091	19	14	16000	6.4	331	<0.1	20	52
EP MARINA - RIVER BED UP.	000-010	59	6.2	7.4	220	113	37900	191	620	3	87	625
EP MARINA - RIVER BED UP.	010-020	60	7.3	9	276	148	51300	240	679	4.2	74	476
EP MARINA - RIVER BED UP.	020-029	57	7.5	9.3	278	125	39000	243	964	5.2	103	697
EP MARINA - RIVER BED UP.	029-038	58	6.5	10	304	144	47900	247	640	4.3	113	756
EP MARINA - RIVER BED DN.	000-013	68	5.9	4.1	125	70	36000	132	564	4	64	453
EP MARINA - RIVER BED DN.	013-018	71	5.3	4.2	134	72	47200	146	638	4	62	476
EP1 - Upland (S11)	Ponar	49	nm	6.5	131	108	38500	172	957	<0.1	66	469
EP2 - Mid Marina (S12)	Ponar	43	nm	7.7	188	102	56000	179	672	<0.1	99	754
EP3 - South Marina (S13)	Ponar	31	nm	5.1	149	77	79200	177	804	<0.1	87	613

TRENTON CHANNEL PROJECT		HEAVY METALS mg/kg											
SEDIMENT CHEMISTRY RESULTS	Core												
	length												
SITE DESCRIPTION	in cm	SOLIDS	TOT. As	TOT Cd	TOT. Cr	TOT. Cu	TOT. Fe	TOT. Pb	TOT Mn	TOT. Hg	TOT. Ni	TOT. Zn
ERM (Long and Morgan, 1990)			85	9.6	145	390		110		1.3	50	270
SEL (Persaud et. al. OME, 1993)							40000		1100			
Quantification Level (EPA Method 245.1/7470,7471)										0.1		
EPN (new site)	Ponar		12	13	340	167	47000	258	721	4.4	148	916
EPM-N	Eckman	24	13	5.5	110	147	43000	141	575	1.5	60.5	765
S11-EPM Upland	Ponar		12	6.9	114	116	36000	149	387	2.3	62.4	574
S11D- EPM Upland Dup.	Ponar		12	7	113	117	36000	139	402	2.3	62	565
EPM-1 (S11-EPM Upland)	Eckman	32	10	5.9	112	137	43000	153	569	1.9	60.9	772
S12-EPM Mid	Ponar		10	8.4	187	125	40000	175	447	2.9	30.6	762
EPM-2 (S12-EPM Mid)	Eckman	16	10	6	121	139	45000	147	670	1.6	68.5	760
EPM2-dup (S12- EPM Upland)	Eckman	16	11	5.9	117	136	43000	149	653	1.7	67.9	782
S13-EPM South	Ponar		13	7.4	129	129	45000	177	718	3.1	64.4	683
EPM-3 (S13-EPM South)	Eckman	54	9.1	2.5	64	65	41000	100	695	1.8	49	500
34P EPSC DOCK	PONAR	42.4	12	13	205	165	58900	272	777	1.6	3.4	1010
35P EPSC-Inlet	PONAR	44.9	11	11	100	126	49000	149	658	1.2	3.4	1200
35PC2	PONAR	44.9	9.4	9.5	93	118	47000	139	660	1	3.5	1100
20 C1 EPSC-Inlet	000-083	53	13	13	225	160	58700	273	658	4	102	839
20 C1	083-093	55	22	11	186	153	82700	347	943	5.1	86	1050
49E EPSC	Eckman	20	7.6	7.2	71	100	34000	100	530	0.96	48	590
36P Monsanto Lagoon	PONAR	42	23	16	193	194	80200	246	1080	3.9	89	996
19 C1 Monsanto Bay	000-053	52	8.8	8.2	150	165	59100	222	716	3.6	71	701
19 C1	053-095	63	8.8	1.6	86	125	66300	148	729	3.9	55	433
19 C2 Monsanto Bay	000-051	51	9.3	7.6	135	145	44300	201	632	3.3	63	607
19 C2	051-085	65	9.9	3.4	77	113	59800	139	709	3.2	49	399
CHRYSLER BAY-INNER	000-030	15	3.6	0.55	7.1	17	7930	10	80	0.2	11	88
CHRYSLER BAY-INNER	030-058	69	3.6	0.15	15	29	13700	13	75	<0.10	21	72
CHRYSLER BAY-INNER	058-079	78	7.7	<0.05	12	17	19800	13	122	<0.10	23	88
CHRYSLER BAY-OUTER	000-013	65	5.9	4.4	78	82	27100	105	908	1.5	53	523
CHRYSLER BAY-OUTER	013-061	70	7.1	0.29	14	19	16100	11	330	<0.10	27	67
37P Chry Bay Marsh Inlet	PONAR	52.8	4.9	<0.05	29.5	33	17300	31	310	0.18	25	250
39P Swan Island-North	PONAR	41	4.3	3.2	37	46	17700	44	386	0.38	29	178
38P Above Humbug Marina	PONAR	25	4.6	7.4	73	94	25200	87	349	0.87	54	661
S9 - Chrysler Bay	Ponar	73	nm	4.2	77	61	55200	95	620	<0.1	56	765
CELERON ISLAND	000-043	51	4.1	0.3	9.7	14	10600	22	143	0.16	16	68
CELERON ISLAND	043-074	72	4.3	0.22	15	23	14500	12	100	<0.10	22	76
CELERON ISLAND	074-107	80	7.1	0.12	5.1	18	17500	7.1	139	<0.10	19	61

TRENTON CHANNEL PROJECT									
SEDIMENT CHEMISTRY RESULTS			PCBs SCAN						
	Core Length		mg/kg d.w.						
SITE DESCRIPTION	in cm	TOT. PCB	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
ERM (Long and Morgan, 13901		0.4							
Quantification Level (EPA Method 608/8081)		0.33							
55C1 Allied Oil Slip NW	000-030	8.87					4.24	2.71	1.92
	030-091	12.65					4.39	4.05	1.71
	091-152	8.32					1.07	3.9	1.35
	152-218	7.10					1.96	3.24	<0.33
55C2 Allied Oil Slip NW - dup	000-030	7.06					1.11	3.95	<0.33
	030-091	9.25					3.21	4.04	<0.33
	091-147	9.70					1.75	4.95	<0.33
56C1 Nickelson South Slip	000-030	5.17					1.77	1.79	1.61
	030-043	7.39					2.39	2.27	2.73
56C2 Nickelson South Slip -dup	000-030	4.38					1.53	1.61	1.34
	030-091	8.11					4.44	2.33	1.34
	091-152	1.57					0.61	0.66	0.3
	152-201	2.19					0.58	0.63	0.97
59C1 Stenson Club	000-030	7.15					2.71	2.08	2.36
	030-091	6.98					3.29	1.99	1.7
	091-152	5.61					2.97	1.67	0.97
	152-213	1.25					0.68	0.57	< 0.33
	213-224	1.45					0.77	0.68	< 0.33
64P Mud Island Northside	Ponar	0.17					0.17	< 0.33	< 0.33
65P Mud Island SW	Ponar	0.91					0.37	0.28	0.26
60C1 Mud Island -South side	000-030	1.04					0.54	0.5	< 0.33
	030-091	1.61					0.65	0.53	0.43
	091-137	1.03					0.54	0.49	< 0.33
53C1 Grassy Island NW	000-030	< 0.33							
	030-071	< 0.33							
54C1 Grassy Island NE	000-034	0.61					0.37	0.24	< 0.33
63P Grassy Island W	Ponar	0.00					< 0.33	< 0.33	< 0.33
61P Grassy Isalnd SW	Ponar	0.41					0.19	0.22	< 0.33
62P Grassy Island SE	Ponar	0.43					0.25	0.18	< 0.33
57P Mouth of Ecorse Creek	Ponar	3.49					1.3	1.1	1.09
58C1 Mouth of Ecorse Creek	000-030	1.11					0.58	0.53	< 0.33
52C1 BASF Northworks Lower	000-030	1.33					0.74	0.75	0.44
	030-091	1.30					0.36	0.66	0.28
	091-152	0.42					0.18	0.24	< 0.33
	152-213	0.00					< 0.33	< 0.33	< 0.33
	213-219	0.00					< 0.33	< 0.33	< 0.33
69C1 Wyandotte Yacht Club	000-030	3.29					1.62	1.05	0.62
	030-066	1.77					0.65	0.59	0.53
68P N of Pt. Hennepin	Ponar	< 0.33							
68E N of Pt. Hennepin	Eckman	< 0.33							
67C1 Portofino	000-030	1.88					0.66	0.62	0.6
43P Portofino Slip	PONAR		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
42P Pt. Hennepin	PONAR		<0.33	<0.46	<0.33	<0.33	<0.33	<0.33	<0.33

TRENTON CHANNEL PROJECT									
SEDIMENT CHEMISTRY RESULTS			PCBs SCAN						
	Core Length		mg/kg d.w.						
SITE DESCRIPTION	in cm	TOT. PCB	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
ERM (Long and Morgan, 1990)		1.4							
Quantification Level (EPA Method 608/8081)		0.33							
15 C1 T.C. North Marsh	000-022		<0.33	<0.42	<0.33	<0.33	<0.33	<0.33	<0.33
15 C1	022-062		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
15 C1	062-100		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
51 C 1 Firestone Upper	000-030	18.40					3.2	3.9	13.4
	030-091	9.31					4.39	1.35	2.97
	091-152	14.20					4.55	2.5	7.35
	152-194	5.39					2.96	2.43	< 0.33
66C1 Firestone Steel -Mid (45P si	000-030	4.39					1.96	1.36	1.67
	030-091	3.85					1.31	0.99	1.65
	091-104	0.65					< 0.33	0.18	0.47
45P Firestone Steel	PONAR	1.10	<4.4	<1.2	<4.4	<4.4	<4.4	<0.33	1.10
	PONAR	2.20	<1.1	<1.1	<1.1	<1.1	<1.1	2.20	<1.1
45PC2	PONAR	2.56	<1.1	<1.1	<1.1	<1.1	<1.1	1.70	0.97
50P Firestone lower	Ponar	3.43					1.26	1.31	0.86
MONGUAGON CREEK-UPSTREAM	000-030	2.4	<2.0	<1.3	<1.3	<2.0	<2.0	<2.6	2.4
MONGUAGON CREEK-UPSTREAM	030-104	2.5	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	2.5
MONGUAGON CREEK-UPSTREAM	104-142	11.2	<1.3	<1.3	<1.3	<1.3	5.7	5.5	<1.3
MONGUAGON CREEK-UPSTREAM	000-030	2.1	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	2.1
MONGUAGON CREEK-UPSTREAM	030-076	9.9	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	9.9
MONGUAGON CREEK-UPSTREAM	076-150	9.7	<2.9	<5.6	<2.8	<2.8	4.9	<4.9	4.8
MONGUAGON CREEK-UPSTREAM	150-180	10	<2.2	<4.4	<2.2	<2.2	4.7	4.3	<3.9
48E Monguagon Creek	Eckman	1.52							1.52
S5 - Monguagon Creek	Ponar	6.18							
FI - Fighting Island	Ponar	0.98							
25 C1 MNCK DNS-Nearshore	000-027		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
25 C1	027-051		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
25 C1	051-095	1.08	<0.33	<0.33	<0.33	<0.33	0.36	<0.33	0.72
25 C1	095-132	1.15	<0.33	<0.33	<0.33	<0.33	0.58	<0.33	0.57
21 C1 MNCK DNS-Offshore	000-027		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
21 C1	027-051		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
MONGUAGON CREEK-DOWN	000-150	5.9	<0.33	<2.9	<0.33	<0.33	2.3	<5.5	3.6
MONGUAGON CREEK-DOWN	150-168	12.3	<0.33	<5.3	<0.33	<0.33	9.6	<7.2	2.7
BLACK LAGOON-CENTER	000-030	0	<8.91	<8.91	<8.91	<8.91	<8.91	<8.91	<8.91
BLACK LAGOON-CENTER	030-120	6.5	<2.0	<2.0	<2.0	<2.0	2.4	<3.9	4.1
BLACK LAGOON-CENTER	120-210	1.8	<1.1	<1.1	<1.1	<1.1	<1.1	1.8	<1.1
BLACK LAGOON-CENTER	210-229	0	<0.44	<1.3	<0.44	<0.44	<0.44	<0.44	<0.44
BLACK LAGOON-LOWER	000-060	2.8	<3.2	<3.2	<3.2	<3.2	<3.2	2.8	<1.3
BLACK LAGOON-LOWER	060-152	0	<4.0	<5.2	<4.0	<4.0	<4.0	<2.7	<1.3
BLACK LAGOON-LOWER	152-203	0	<1.7	<1.7	<2.5	<1.7	<1.7	<1.7	<0.81
BLACK LAGOON-EAST	000-055	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	055-103	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	103-166	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	166-229	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	000-035	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	035-133	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	133-192	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
24 C1 BLLG-Nearshore	000-030	1.54	<0.42	<2.8	<0.42	0.81	<0.42	0.93	<0.42
24 C1 (WWES Lab)	030-075	2.50	<0.51	<0.51	<0.51	<0.51	1.10	<0.51	1.40
24 C1 BLLG-Nearshore (MDNR Lab)	030-075								
47E BLLG	Eckman	3.27					1.2	0.92	1.15
S7 - Black Lagoon	Ponar	4.75							

TRENTON CHANNEL PROJECT									
SEDIMENT CHEMISTRY RESULTS			PCBs SCAN						
	Core Length		(mg/kg d.w.						
SITE DESCRIPTION	in cm	TOT. PCB	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
EPM (Long and Morgan, 1990)		0.3							
Quantification Level (EPA Method 608/8081)		0.33							
40P East of Bouy N "6"	PONAR		<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9
41P NE of Bouy R "28"	PONAR	0.66	<1.1	<1.1	<1.1	<1.1	<1.1	<0.37	0.66
44P ONS from Bouy R "28"	PONAR		<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
26P Riverside Hospital	PONAR		<0.9	<0.8	<0.8	<0.8	<0.8	<0.9	<0.8
27P Trenton Towers	PONAR		<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
28P Deadhead Cove	PONAR		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
28PC2	PONAR		<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9
ELIZABETH PARK CANAL	000-079	2.72	<0.71	<1.4	<0.71	<0.71	1.8	<0.71	0.92
ELIZABETH PARK CANAL	079-180	0	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33
ELIZABETH PARK CANAL	180-260	0	<0.52	<0.52	<0.65	<0.33	<0.33	<0.33	<0.33
ELIZABETH PARK CANAL	260-330								
16 C1 EPNC-Upper	000-080	10.30	<2.4	<2.4	<2.4	6.90	<2.4	3.40	<0.61
16 C1	080-120		<0.68	<2.7	<0.68	<0.68	<0.68	<0.68	<0.68
16 C1	120-157	0.41	<0.34	<3.57	<0.34	<0.34	<0.34	0.41	<0.34
17 C1 EPNC-Inner	000-040	2.24	<0.66	<2.64	<0.66	<0.66	<0.66	2.24	<0.66
17 C1	040-080		<2.8	<2.1	<2.8	<2.8	<2.8	<0.65	<0.65
17 C1	080-140		<0.33	<0.46	<0.33	<0.33	<0.33	<0.33	<0.33
17 C1	140-175		<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
18 C1 EPNC-Lower	000-055	2.30	<.4	<1.5	<0.4	<0.4	<0.4	2.30	<0.4
18 C1	055-125	0.66	<.71	<1.4	<0.71	<0.71	<0.71	0.66	<0.35
18 C1	125-170	1.40	<1.4	<2.1	<1.4	<1.4	<1.4	1.40	<1.4
18 C1	170-217		<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
46E EPNC	Eckman	1.71					0.58	0.47	0.66
29P EPC Bridge 1	PONAR	0.00	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2
30P EPC Bridge 2	PONAR	0.00	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75
31P EPC Bridge 3	PONAR	0.00	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
32P EPC Bridge 4	PONAR	5.50	<1.7	<1.7	<1.7	2.30	<1.7	1.50	1.70
33P EPC Bridge 5	PONAR	0.84	<0.95	<0.95	<0.95	<0.95	<0.95	0.84	<0.95
EP MARINA - OUTSIDE	000-020	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
EP MARINA-UPLAnd	000-006	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
EP MARINA-RIVER BED UP.	000-010	1.37	<0.33	<0.45	<0.33	<0.33	0.92	<0.33	0.55
EP MARINA-RIVER BED UP.	010-020	1.43	<0.55	<1.7	<0.55	<0.55	0.96	<0.55	0.47
EP MARINA-RIVER BED UP.	020-029	1.94	<0.58	<0.58	<0.58	<0.58	1.4	<0.66	0.54
EP MARINA-RIVER BED UP.	029-038	1.68	<0.23	<0.45	<0.45	<0.45	1.3	<0.49	0.38
EP MARINA-RIVER BED DN.	000-013	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
EP MARINA-RIVER BED DN.	013-018	0	<1.8	<1.8	<1.8	<1.8	<1.8	<0.33	<0.33
EP1 - North Marina	Ponar	1.27							
EP2 - Mid Marina	Ponar	2.63							
EP3 - South Marina	Ponar	1.59							
EPN (new site)	Ponar	0							
EPM-N	Eckman	< 0.33							

TRENTON CHANNEL PROJECT									
SEDIMENT CHEMISTRY RESULTS			PCBs SCAN						
	Core Length		mg/kg d.w.						
SITE DESCRIPTION	in cm	TOT. PCB	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
EPM Long and Morgan, 1990)		3.4							
Quantification Level (EPA Method 608/8081)		0.33							
S11-EPM Upland	Ponar	0							
S11D- EPM Upland Dup.	Ponar	0							
EPM-1 (S11-EPM Upland)	Eckman	< 0.33							
S12-EPM Mid	Ponar	0							
EPM-2 (S12-EPM Mid)	Eckman	< 0.33							
EPM2-dup (S12- EPM Upland)	Eckman	0							
S13-EPM South	Ponar	0							
EPM-3 (S13-EPM South)	Eckman	< 0.33							
34P EPSC DOCK	PONAR	0.93	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	0.83
35P EPSC-Inlet	PONAR	0.00	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
35PC2	PONAR	0.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
20 C1 EPSC-Inlet	000-083	2.40	<0.33	<0.33	<0.33	<0.33	1.30	1.10	<0.33
20 C1	083-099	1.33	<0.33	<0.33	<0.33	<0.33	0.54	0.79	<0.33
49E EPSC	Eckman	0							
36P Monsanto Lagoon	PONAR	0.90	<0.33	<0.33	<0.33	<0.33	0.57	<0.33	0.33
19 C1 Monsanto Bay	000-053	0.54	<0.33	<0.33	<0.33	<0.33	<0.33	0.54	<0.33
19 C1	053-085	1.15	<0.3	<1.0	<0.33	<0.33	0.36	0.79	<0.33
19 C2 Monsanto Bay	000-051	2.40	<0.33	<0.33	<0.33	<0.33	1.10	1.30	<0.33
19 C2	051-085	1.37	<0.33	<0.33	<0.33	<0.33	0.42	0.95	<0.33
CHRYSLER BAY-INNER	000-030	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CHRYSLER BAY-INNER	030-058	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CHRYSLER BAY-INNER	058-079	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CHRYSLER BAY-OUTER	000-013	1.79	<0.41	<0.41	<0.41	<0.41	0.98	0.81	<0.41
CHRYSLER BAY-OUTER	013-061	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
37P Chry Bay Marsh Inlet	PONAR	0.00	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
33P Swan Island-North	PONAR	0.00	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
38P Above Humbug Marina	PONAR	0.00	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
S9 - Chrysler Bay	Ponar	1.39							
CELERON ISLAnd	000-043	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CELERON ISLAnd	043-074	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CELERON ISLAnd	074-107	0	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33

			acenaphthene		benzo(a)anthracene			chrysene			indeno(1,2,3-cd)pyrene					
TRENTON CHANNEL PROJECT			acenaphthylene		benzo(b&k)fluoranthene			dibenzo(a,h)anthracene			naphthalene					
SEDIMENT CHEMISTRY RESULTS			anthracene		benzo(a)pyrene			fluoranthene			phenanthrene					
								benzo(g,h,i)perylene			fluorene					pyrene
ERM (Long and Morgan, 1990)		35														
			PAH SCAN													
SITE DESCRIPTION	Core Length		mg/kg d.w.													
	cm =	TOT PAHS	A1	A2	A3	B1	B2	B3	B4	C1	D1	F1	F2	I1	N1	P1	P2
55C1 Allied Oil Slip NW	000-030	68.3			3.3	6.3	9.9	5.3	3.3	8.7		6		2.4	2.6	8.7	14
	030-091	53.2			2.7	4.5	6.3	3.7	2	4.3		4.6	1.6	2.3	2.1	7.6	11
	091-152	48.12	1.3	0.7	4.1	3.3	4	2.4	1.7	3.7		3.5	3	1.6	1.4	8.4	8.1
	152-213	93.2	3.8	1.1	9.3	7.8	6.5	4.6	2	5.6		4	8.6	1.7	2.2	16	11
55C2 Allied Oil Slip NW - 3	000-030	77.63	0.93	1.2	3.2	7.3	9.8	6.5	3.7	9.3	1.1	6.6	1.6	3.4	2.8	8	12
	030-091	39.22	0.73		1.9	3.9	4.4	2.6	2.2	4.4		3.3	0.73	1.9	1.3	5.2	7.2
	091-147	73.19	1.4	0.9	4.3	6.3	7.1	4.4	7.9	5	0.72	5.7	4.4	3.2	1.9	10	11
56C1 Nickelson South Slip	000-030	24.45				2.1	4.1	2	1	2.9		3.4		1		2.1	6
	030-043	82.2			1.9	4.1	6.9	3.9	2.3	5.3		12				11	15
56C2 Nickelson South Slip -1	000-030	26.7				2.1	3	2	2	2.7		4.1		1.1		3.5	6.2
	030-091	92.97	1.5	0.9	3.1	6.2	9.5	5.2	3.9	7.2		18	2.5	2.3	1.8	16	15
	091-152	32.67			1.2	2.9	4.3	2.3	1.7	3.3		4.4	1.2	0.87	1.2	4.5	4.8
	152-201	31.2			1.1	2.9	4.5	2.5	1.6	3.5		4.3		1.1	1.7	3	5
59C1 Stenson Club	000-030	22.49				2.2	3.6	2.1	1.7	2.3		2.7		0.9	1	2.9	3.1
	030-091	44.49	0.79		2.2	3.9	5.7	3.4	1.8	4.5		5.2	1	1.1	1.3	8.7	8.9
	091-152	123.3	2.5	1.4	6.9	9.5	12	8.3	3.9	9.8		18	6	2.3	2.9	23	17
	152-213	131.96	2.2	1	7.1	11	13	9.1	5.3	11	0.86	20	3.8	2.8	4.5	22	19
	213-224	94.79	2.6	0.8	5.4	8.1	8.5	6.6	3.9	7.7		14	3.3	1.9	3.1	17	12
64P Mud Island Northside	Ponar	47.82	0.53	0.6	1.6	4.4	7.3	4.5	2.5	4.8	0.87	7.4	0.99	2.6	2.9	4.4	2.5
65P Mud Island SW	Ponar	47.89		0.6	1.6	4.4	7.3	4.5	2.5	4.8	0.73	5.8	0.78	2.6	2.1	4	5.7
60C1 Mud Island -South side	000-030	18.6			1.1	2.1	0.7	2.1	1	2		2.6		0.95	0.7	2.4	3
	030-091	0.56															0.56
	091-137																
53C1 Grassy Island NW	000-030	1.99										0.89					1.1
	030-071	5.33				0.65	0.7	0.6		0.8		0.89				0.71	1
54C1 Grassy Island NE	000-034	8.62				0.85	0.9	0.9		0.8		1.1				0.78	1.3
63P Grassy Island W	Ponar	18.07			0.7	1.6	2.7	1.8	0.7	1.8		2.5		0.72		1.4	2.2
61P Grassy Island SW	Ponar	23.1			0.86	2.2	3.5	2.3	0.9	2.4		3.5		0.99	1.1	2	3.4
62P Grassy Island SE	Ponar	32.1			1.1	2.9	5.3	3.5	1.5	3.3		4.3		1.5	2	2.8	3.9
57P Mouth of Ecorse Creek	Ponar	25.9				2	4.4	2.3	1.9	2.6		3.7		1.2	1.4	2.9	3.5
58C1 Mouth of Ecorse Creek	000-030	<0.33															
52C1 BASF Northworks lower	000-030	32.1			1.5	2.8	3.6	2.4	1.7	3.2		3.2	0.66	1.5	2.6	4.6	4.3
	030-091	37.24			1.9	3.2	3.9	2.5	1.5	3.7	0.67	3.5	0.67	1.9	3.1	5.3	5.4
	091-152	88.1	2	1.3	5.2	7.6	9.2	6	3.2	7.5	1.1	8.2	3	3.8	4.2	13	14
	152-213	87.7	2.3	1.8	5.2	7.6	8.7	5.6	3.2	7.5	1.1	8.1	3.8	3.4	5.8	14	12
	213-218	6.38										0.96			3.4	1.3	0.73

			acenaphthene			benzo(a)anthracene			chrysene			indeno(1,2,3-cd)pyrene					
TRENTON CHANNEL PROJECT				acenaphthylene			benzo(b&k)fluoranthene			dibenzo(a,h)anthracene			naphthalene				
SEDIMENT CHEMISTRY RESULTS					anthracene			benzo(a)pyrene			fluoranthene			phenanthrene		
									benzo(g,h,i)perylene			fluorene			pyrene		
ERM - Long and Morgan, 1990		35															
			PAH SCAN														
SITE DESCRIPTION	Core Length in cm	TOT PAHS	A1	A2	A3	B1	B2	B3	B4	C1	D1	F1	F2	I1	N1	P1	P2
69C1 Wyandotte Yatch Club	000-030	33.44			3.34	2.8	4.7	2.4	1.5	3.4		5.3		18	1.2	3.8	5.7
	030-066	32.14			3.87	2.8	4.5	2.4	1.4	3.3		5.1		18	1.2	3.4	5.5
69P N of Ft. Hennepin	Ponar	12.29				1	1.3	1.1	0.7	1.2		1.8		0.72	0.68	1.3	2
68E N of Ft. Hennepin	Eckman	4.88				0.68		0.6		0.7		1.1				0.69	1.1
67C1 Portofino	000-030	14.3				1.2	2.5	1.3	1	1.6		2.1		1		1.3	2.3
43P Portofino Slip	PONAR	8.99	<0.33	<0.33	<0.33	0.61	1.3	<0.33	<0.3	0.8	<0.33	1.5	<0.33	0.42	<0.33	0.96	1.4
42P Ft. Hennepin	PONAR	1.14	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	0.44	0.7
15 C1 T.C. North Marsh	000-022	0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
15 C1	022-062	0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
15 C1	062-100	0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
51 C 1 Firestone Upper	000-030	34.38			1.9	2.6	3.6	2.1	1.2	3.1		4.1	0.84	1.4	3	5.8	4.8
	030-091	38.69			1.6	2.6	3.5	1.9	1.1	2.9		3.5	0.86	1.2	6.5	4.9	6.2
	091-152	53.5	0.9		2.3	3.9	5.5	2.9	1.1	4.2		4.5	1.7	1.5	8.4	8	8.4
	152-194	38.85			1.4	3.2	4.5	2.4	1.3	3.4		3.1	0.86	1.4	5.9	4.8	6.8
66C1 Firestone Steel -Mid (	000-030	28.5			1.2	2.5	3.7	1.9	0.8	3.1		4.4	0.8	0.91	2.1	3.7	4.5
	030-091	34.68			1.4	2.9	4.3	2.4	1	3.4		5	1.1	1.1	2.7	4.6	4.8
	091-104	85.51	0.73	1	3.6	9.6	11	7.6	3.5	9.3	0.92	11	1.2	2.7	2.4	9.3	13
50P Firestone Lower	Ponar	204.2	2.9		6.3	17	28	12	4.6	18	1.9	36	2.7	7.9	2.1	32	35
MONGUAGON CREEK-UPSTREAM	000-030	13.4	<0.41	<0.41	<0.41	1.1	2.1	1.1	1	1.5	<0.41	2	<0.41	0.71	0.52	1.3	2.1
MONGUAGON CREEK-UPSTREAM	030-104	5.6	<0.36	<0.36	<0.36	0.51	0.8	0.4	0.4	0.7	<0.36	0.97	<0.36	<0.36	<0.36	0.81	1.1
MONGUAGON CREEK-UPSTREAM	104-142	7.3	<0.33	<0.33	<0.33	0.59	0.9	0.4	0.3	0.8	<0.33	1.2	<0.33	<0.33	0.54	1.2	1.4
MONGUAGON CREEK-UPSTREAM	000-030	8.8	<0.41	<0.41	<0.41	0.31	1.5	0.9	0.7	1	<0.41	1.3	<0.41	0.91	<0.41	0.81	1.3
MONGUAGON CREEK-UPSTREAM	030-076	9.1	<0.39	<0.39	<0.39	0.37	1.4	0.8	0.6	1	<0.39	1.5	<0.39	0.47	<0.39	0.98	1.5
MONGUAGON CREEK-UPSTREAM	076-150	2.7	<0.36	<0.36	<0.36	<0.36	0.5	<0.36	<0.3	0.4	<0.36	0.61	<0.36	<0.36	<0.36	0.5	0.65
MONGUAGON CREEK-UPSTREAM	150-180	3.4	<0.33	<0.33	<0.33	0.33	0.6	<0.33	<0.3	0.5	<0.33	0.68	<0.33	<0.33	<0.33	0.69	0.67
48E Monguagon Creek	Eckman	100.37		1.1	2.9	11	19	9.3	2.7	9.4	1.3	14	0.97	4.9	3.1	8.3	15
55 - Monguagon Creek	Ponar	218.4															
FI - Fighting Island	Ponar	0															
25 C1 MNCK DNS-Nearshore	000-027	7.82	<0.33	<0.33	<0.33	0.77	0.9	0.9	0.5	0.9	<0.33	1.4	<0.33	0.47	<0.33	0.85	1.3
25 C1	027-051	8.39	<0.33	<0.33	<0.33	0.75	1.3	0.8	0.5	0.9	<0.33	1.5	<0.33	0.41	<0.33	0.85	1.4
25 C1	051-095	9.31	<0.33	<0.33	<0.33	0.62	0.9	0.6	0.4	0.7	<0.33	1.2	<0.33	<0.33	<0.33	0.73	1.2
25 C1	095-132	3.58	<0.33	<0.33	<0.33	0.39	0.4	<0.33	<0.3	0.4	<0.33	0.83	<0.33	<0.33	<0.33	0.53	0.99
21 C1 MNCK DNS-Offshore	000-027	0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
21 C1	027-051	0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
MONGUAGON CREEK-DOWN	000-150	9.1	<0.35	<0.35	<0.35	0.71	1.2	0.6	0.4	1	<0.35	1.5	<0.35	<0.35	0.53	1.4	1.7
MONGUAGON CREEK-DOWN	150-164	4.2	<0.33	<0.33	<0.33	0.36	0.6	<0.33	<0.3	0.5	<0.33	0.78	<0.33	<0.33	0.34	0.84	0.82
BLACK LAGOON-CENTER	000-030	7.5	<0.44	<0.44	<0.44	0.73	1.3	0.7	0.7	1	<0.44	1.2	<0.44	<0.44	<0.44	0.85	1.3
BLACK LAGOON-CENTER	030-120	10.9	<0.49	<0.49	<0.49	0.85	1.5	0.7	0.7	1.5	<0.49	1.8	<0.49	<0.49	<0.49	1.8	2
BLACK LAGOON-CENTER	120-210	19.1	<0.42	<0.42	0.58	1.4	1.8	0.9	0.7	2.1	<0.42	3.1	0.63	0.48	0.8	3.2	3.5
BLACK LAGOON-CENTER	210-229	15.1	<0.33	<0.33	0.51	1.7	2.1	1.3	0.9	1.7	<0.33	2.4	<0.33	0.63	<0.33	1.4	2.8

TRENTON CHANNEL PROJECT			acenaphthene	acenaphthylene	anthracene	benzo(a)anthracene	benzo(b&k)fluoranthene	benzo(a)pyrene	chrysene	benzo(g,h,i)perylene	dibenzo(a,h)anthracene	fluoranthene	fluorene	indeno(1,2,3-cd)pyrene	naphthalene	phenanthrene	pyrene
SEDIMENT CHEMISTRY RESULTS																	
ERM (Long and Morgan, 1990)		35															
SITE DESCRIPTION	core Length in cm	TOT PAHS	PAH SCAN mg/kg d.w. A1	A2	A3	B1	B2	B3	B4	C1	D1	F1	F2	I1	N1	P1	P2
BLACK LAGOON-LOWER	000-060	5.0	<0.40	<0.4	<0.4	0.16	0.7	<0.4	<0.4	0.7	<0.4	1.1	<0.4	<0.4	<0.4	1	1.1
BLACK LAGOON-LOWER	060-152	20.0	<0.33	<0.33	0.74	1.6	2.2	1.1	0.9	2.2	<0.33	3.3	0.51	0.85	0.8	2.6	3.5
BLACK LAGOON-LOWER	152-203	8.1	<0.33	<0.33	<0.33	0.69	1	0.5	0.4	1	<0.33	1.4	<0.33	<0.33	0.49	1	1.6
BLACK LAGOON-EAST	000-055	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	055-103	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	103-166	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	166-229	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	000-035	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	035-133	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
BLACK LAGOON-EAST	133-182	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
24 C1 BLLG-Nearshore	000-030	9.09	<0.82	<0.82	<0.82	0.95	1.7	<0.82	0.8	1.2	<0.82	1.8	<0.82	<0.82	<0.82	0.92	1.7
24 C1 (WWBS Lab)	030-075	3.24	<0.51	<0.51	<0.51	<0.51	0.7	<0.51	<0.5	<0.5	<0.51	0.94	<0.51	<0.51	<0.51	0.6	0.96
24 C1 BLLG-Nearshore (MDNR Lab)	030-075	3.02	<0.79	<0.78	<0.78	<0.78	<1.6	<1.6	<3.9	0.8	<3.9	1.1	<0.78	<3.9	<0.78	1.1	<0.78
47E BLLG	Eckman	14.97				1.4	2.3	1.5	1	1.7		1.9		1		1.4	2.8
ST - Black Lagoon	Ponar	70.5															
40P East of Bouy N "6"	PONAR	7.38	<0.45	<0.45	<0.45	0.82	1.1	1.8	<2.3	1	<2.3	1.1	<0.45	<2.3	<0.45	0.5	1.1
41P NE of Bouy R "18"	PONAR	10.36	<0.46	<0.46	<0.46	0.91	1.8	1	0.6	1	<0.46	1.9	<0.46	0.5	<0.46	1.1	1.6
26P Riverside Hospital	PONAR	19.02	<0.4	<0.4	0.42	1.8	2.4	3.9	<2.0	2.6	<2.0	4.2	<0.4	1.7	<0.4	2	<0.4
27P Trenton Towers	PONAR	9	<0.65	<0.65	<0.65	1	<1.3	<1.3	<3.3	1.2	<3.3	1.2	<0.65	<3.3	<0.65	1.4	1.2
28P Deadhead Cove	PONAR	7.24	<0.5	<0.5	<0.5	1.1	<1	<1.0	<0.2	1.3	<2.5	1.7	<0.5	<2.5	0.44	1.2	1.5
28PC2	PONAR	8.54	<0.45	<0.45	<0.45	0.82	<.9	1.7	<2.3	1.6	<2.3	1.2	<0.45	<2.3	0.46	0.8	<0.45
ELIZABETH PARK CANAL	000-079	20.0	<0.363	0.36	0.42	2	1.9	1.2	0.8	2.0	<0.36	3.5	0.48	0.58	0.49	2.5	3.3
ELIZABETH PARK CANAL	079-190	31.9	<0.33	<0.33	1.1	3	3.9	2.2	1.4	3.8	<0.33	5.7	0.66	1	0.63	4	4.4
ELIZABETH PARK CANAL	190-260	51.5	0.42	<0.33	2.7	4.5	5.2	3.6	1.9	4.9	<0.33	8.8	1.3	1.4	1	8	7.8
ELIZABETH PARK CANAL	260-330	56.8	<1.65	<1.65	3	5.4	6	4	2.6	6.2	<1.65	8	1.7	1.9	<1.65	8	10
16 C1 EPNC-Upper	000-080	23.24	0.36	<0.33	0.58	1.1	2.5	<0.33	<0.3	5.2	<0.33	3.4	<0.33	<0.33	<0.33	2.8	5.3
16 C1	080-120	20.62	0.35	<0.34	0.83	2.1	2	<0.34	<0.3	2.4	<0.34	3.9	0.37	0.5	0.77	3.2	4.2
16 C1	120-157	34.99	0.39	<0.33	1	3.8	3.4	2.3	<0.3	4.6	<0.33	5.1	<0.33	0.99	0.61	5.6	7
17 C1 EPNC-Inner	000-040	27.87	<0.33	<0.33	0.7	3.5	2.7	2.2	1.1	5.7	<0.33	3.3	<0.33	0.77	<0.33	2.1	5.8
17 C1	040-080	31.9	<0.33	<0.33	1.3	3.8	4	1.9	1.6	4	<0.33	5.3	<0.33	1.2	<0.33	3.1	5.6
17 C1	080-140	49.82	0.51	<0.33	2.5	6.1	6.2	2.7	<0.3	5.9	<0.33	7.7	0.61	1.8	<0.33	5.8	10
17 C1	140-175	33.63	0.33	<0.33	2.1	2.8	3.6	1.6	1.4	3.2	<0.33	5.2	<0.33	1	<0.33	5.9	9
18 C1 EPNC-Lower	000-055	28.29	<0.38	<0.38	0.82	2.9	2.7	1.9	0.9	3.8	0.38	4.5	0.41	0.82	0.47	3.3	5.4
18 C1	055-125	12.86	<0.35	<0.35	<0.35	1.4	1.3	0.8	0.5	1.7	<0.36	2.3	<0.36	0.36	0.36	1.6	2.6
18 C1	125-170	29.39	<0.33	<0.33	0.82	3.1	3.3	2.3	1.3	3.6	0.44	4.6	0.36	1	0.36	3.1	5.1
18 C1	170-217	45.23	<0.33	<0.33	2	5.5	4.3	3.8	1.9	5.3	0.58	6.3	0.44	1.4	<0.33	4.3	9.5
46E EPNC	Eckman	27.17			0.67	2.3	4.6	2.4	1	3.1		3.1		1.6	1.1	2.8	4.5
39P EPC Bridge 1	PONAR	0	<1.1	<1.1	<1.1	<1.1	<2.2	<2.2	<5.5	<1.1	<5.5	<1.1	<1.1	<5.5	<1.1	<1.1	<1.1
3CP EPC Bridge 2	PONAR	0.84	<0.38	<0.38	<0.38	<0.38	0.7	<0.75	<1.9	<0.3	<1.9	0.34	<0.38	<1.9	<0.38	<0.38	0.3

TRENTON CHANNEL PROJECT			acenaphthene			benzo(a)anthracene			chrysene			indeno(1,2,3-cd)pyrene				
SEDIMENT CHEMISTRY RESULTS			acenaphthylene			benzo(b&k)fluoranthene			dibenzo(a,h)anthracene			naphthalene				
			anthracene			benzo(a)pyrene			fluoranthene			phenanthrene				
EPM Long and Morgan, 1990		35							benzo(g,h,i)perylene			fluorene				pyrene
		PAH SCAN														
SITE DESCRIPTION	core Length	mg/kg 1.%														
	in cm	TOT PAHS	A1	A2	A3	B1	B2	B3	B4	C1	D1	F1	F2	I1	N1	P1	P2
DEP EPC Bridge 1	PONAR	10.3	<0.5	<0.5	<0.5	2	<1	<1.0	<2.5	3.4	<2.5	1.7	<0.5	<2.5	<0.5	1	2.2
DEP EPC Bridge 4	PONAR	9.1	<0.83	<0.83	<0.83	1.3	<1.7	<1.7	<4.1	1.9	<4.1	1.9	<0.83	<4.1	<0.83	1.1	1.9
DEP EPC Bridge 5	PONAR	14.8	<0.48	<0.48	0.42	2.4	<.35	<0.35	<2.4	3.1	<2.4	3.4	<0.48	<2.4	<0.48	2	3.2
EP MARINA-OUTSIDE	000-020	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
EP MARINA-UPLand	000-006	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
EP MARINA-RIVER BED UP	000-010	8.3	<1.65	<1.65	<1.65	<1.65	2	<1.65	<1.6	2	<1.65	2	<1.65	<1.65	<1.65	<1.65	2.3
EP MARINA-RIVER BED UP	010-020	19.7	<0.33	<0.33	0.44	2.2	2.6	1.6	1.3	3.6	<0.33	2.8	0.46	0.49	0.59	<0.33	3.6
EP MARINA-RIVER BED UP	020-029	18.2	<0.33	<0.33	0.76	1.9	2.2	1.3	1.1	2.7	<0.33	2.7	<0.33	0.58	<0.33	2	3
EP MARINA-RIVER BED UP	029-038	8.2	<0.66	<0.66	<0.66	0.66	1.1	<0.66	<0.6	1.1	<0.66	1.1	<0.66	<0.66	<0.66	0.98	1.3
EP MARINA-RIVER BED DN	000-013	38.5	<0.66	<0.66	0.74	3.6	7.1	4.3	3.2	5.2	<0.66	4.5	<0.66	2.5	<0.66	2.2	5.2
EP MARINA-RIVER BED DN	013-019	35.3	<0.66	<0.66	0.67	3.5	6.5	4	3	4.9	<0.66	3.8	<0.66	2.3	<0.66	2	4.6
EP1 - North Marina	Ponar	45.4															
EP2 - Mid Marina	Ponar	35.8															
EP3 - South Marina	Ponar	66.1															
EPM (new site)	Ponar	12.62				1.4	1.5	2.3		2		1.8				1.9	1.7
EPM-N	Eckman	3.02								1		0.92					1.1
S11-EPM Upland	Ponar	9.16				1.1	1.1	1.6		1.6		1.2				0.95	1.8
S11D- EPM Upland Dup.	Ponar	9.36				0.98	1	1.4		1.4		1.2				0.94	1.4
EPM-1 (S11-EPM Upland)	Eckman	2.19								0.7		0.69					0.81
S12-EPM Mid	Ponar	20.73			0.53	2.6	2.7	4.1		3.9		2.4				2	2.6
EPM-2 (S12-EPM Mid)	Eckman	14.54				1.2	2.6	1.6	1.2	1.8		1.8		0.94		1.2	2.2
S13-EPM South	Ponar	18.19			0.42	2.2	2.1	2.9	1.5	3.7		1.8				1.5	2.3
EPM-3 (S13-EPM South)	Eckman	33.11			0.56	2.9	6.4	4.4	3.3	3.7	0.67	3.7		2.8	0.48	1.6	3.7
34P EPSC DOCK	PONAR	13	<0.6	<0.6	<0.6	2	<1.2	1.2	<3.0	2.8	<3.0	3	<0.6	<3.0	<0.6	2	<0.6
35P EPSC-Inlet	PONAR	13.3	<0.55	<0.55	<0.55	1.9	<1.1	1.5	<2.9	2.6	<2.8	2.8	<0.55	<2.8	0.6	1.9	<0.55
35PC2	PONAR	13.84	<0.5	<0.5	<0.5	2	<1.0	1.8	<2.5	2.6	<2.5	3.2	<0.5	<2.5	0.54	1.7	<0.5
20 C1 EPSC-Inlet	000-083	22.21	<0.33	<0.33	<0.33	2.6	2.6	2	1.4	4.3	0.45	2.4	<0.33	0.66	<0.33	1.8	4
20 C1	083-098	34.75	<0.33	<0.33	0.48	4.5	3.7	3	2	6.7	<0.33	3.8	0.46	0.91	<0.33	2.9	6.3
49S EPSC	Eckman	15.5					3.1	1.9		2.5		2.6				1.9	3.6
26P Monsanto Lagoon	PONAR	8.35	<0.39	<0.39	<0.39	1	1.2	0.9	0.6	1.9	<0.39	1.1	<0.39	<0.39	<0.39	<0.39	1.7
19 C1 Monsanto Bay	000-053	15.57	<0.33	<0.33	<0.33	2	1.8	1.4	0.8	2.7	<0.33	2.3	<0.33	0.5	<0.33	1.1	3
19 C1	053-095	17.22	<0.33	<0.33	0.49	1.9	2.5	1.7	1.2	2.3	<0.33	2.5	<0.33	0	<0.33	1.2	2.6
19 C2 Monsanto Bay	000-051	13.64	<0.33	<0.33	<0.33	1.5	1.7	1.1	0.9	2.2	<0.33	2	<0.33	0.49	<0.33	1.2	2.52
19 C2	051-095	22.4	<0.33	<0.33	0.75	2.2	2.7	1.9	1.3	2.9	0.41	3.5	<0.33	0.94	<0.33	2.1	3.8
CHRYSLER BAY-INNER	000-030	0.0	<0.66	<0.66	<0.66	<0.66	0.6	<0.66	<0.6	<0.6	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66
CHRYSLER BAY-INNER	030-058	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CHRYSLER BAY-INNER	058-079	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CHRYSLER BAY-OUTER	000-013	29.9	<0.33	<0.33	0.64	4	5.7	3.1	1.1	3	0.89	3.6	<0.33	2	<0.33	1.9	4
CHRYSLER BAY-OUTER	013-061	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
32P Chry Bay Marsh Inlet	PONAR	0	<0.4	<0.4	<0.4	<0.4	<0.4	<0.8	<2.0	<0.4	<2.0	<0.4	<0.4	<2.0	<0.4	<0.4	<0.4
33P Swan Island-North	PONAR	9.9	<0.40	<0.40	<0.40	0.98	1.9	1.4	0.8	1.1	<0.40	1.4	<0.40	0.64	<0.40	0.42	1.3
31P Above Humbug Marina	PONAR	0	<0.66	<0.66	<0.66	<0.66	0.6	<0.66	<0.6	<0.6	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66
33 - Chrysler Bay	Ponar	24.3															
CELERON ISLAND	000-043	3.0	<0.33	<0.33	<0.33	0.46	0.7	0.5	<0.3	0.4	<0.33	0.44	<0.33	<0.33	<0.33	<0.33	0.56
CELERON ISLAND	043-074	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
CELERON ISLAND	074-107	0.0	<0.33	<0.33	<0.33	<0.33	0.3	<0.33	<0.3	<0.3	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33

TRENTON CHANNEL PROJECT			
SEDIMENT CHEMISTRY RESULTS			
SEL (Persaud et. al. OME, 1993)		1500	
SITE DESCRIPTION	CORE LENGTH	OIL & GREASE	
	cm	mg/kg d.w.	
55C1 Allied Oil Slip NW	000-030	42000	
	030-091	40000	
	091-152	46000	
	152-218	54000	
55C2 Allied Oil Slip NW	000-030	36000	
	030-091	38000	
	091-147	36000	
56C1 Nickelson South Sli	000-030	64000	
	030-043	66000	
56C2 Nickelson South Slip	000-030	71000	
	030-091	<50	
	091-152	11000	
	152-201	11000	
59C1 Stenson Club	000-030	26000	
	030-091	25000	
	091-152	24000	
	152-213	7000	
	213-224	4000	
64P Mud Island Northside	Ponar	<50	
65P Mud Island SW	Ponar	2760	
60C1 Mud Island -South s	000-030	1200	
	030-091	<50	
	091-137	<50	
53C1 Grassy Island NW	000-030	<50	
	030-071	<50	
54C1 Grassy Island NE	000-034	<50	
63P Grassy Island W	Ponar	1400	
61P Grassy Isalnd SW	Ponar	2200	
62P Grassy Island SE	Ponar	1900	
57P Mouth of Ecorse Cree	Ponar	8000	
58C1 Mouth of Ecorse Cre	000-030	<50	
52C1 BASF Northworks lowe	000-030	11000	
	030-091	10000	
	091-152	8000	
	152-213	4000	
	213-218	0	

TRENTON CHANNEL PROJECT		
SEDIMENT CHEMISTRY RESULTS		
SEL (Persaud et. al. OME, 1993)		1500
SITE DESCRIPTION	CORE LENGTH	OIL & GREASE
	cm	mg/kg d.w.
69C1 Wyandotte Yatch Cl	000-030	9000
	030-066	9000
68P N of Pt. Hennepin	Ponar	<50
68E N of Pt. Hennepin	Eckman	<50
67C1 Portofino	000-030	7000
43P Portofino Slip	PONAR	1390
42P Pt. Hennepin	PONAR	367
15 C1 T.C. North Marsh	000-022	<50
15 C1	022-062	<50
15 C1	062-100	<50
51 C 1 Firestone upper	000-030	11000
	030-091	19000
	091-152	16000
	152-194	15000
66C1 Firestone Steel -M	000-030	21000
	030-091	13000
	091-104	12000
45P Firestone Steel	PONAR	8410
	PONAR	
50P Firestone lower	Ponar	9000
MONGUAGON CREEK-UPSTREAM	000-030	7290
MONGUAGON CREEK-UPSTREAM	030-104	41200
MONGUAGON CREEK-UPSTREAM	104-142	23500
MONGUAGON CREEK-UPSTREAM	000-030	8630
MONGUAGON CREEK-UPSTREAM	030-076	21600
MONGUAGON CREEK-UPSTREAM	076-150	21600
MONGUAGON CREEK-UPSTREAM	150-180	12400
48E Monguagon Creek	Eckman	9000
S5 - Monguagon Creek	Ponar	5800
FI - Fighting Island	Ponar	200
25 C1 MNCK DNS-Nearshor	000-027	1110
25 C1	027-051	120
25 C1	051-095	444
25 C1	095-132	887
21 C1 MNCK DNS-Offshore	000-027	<50
21 C1	027-051	<50
MONGUAGON CREEK-DOWN	000-150	3930
MONGUAGON CREEK-DOWN	150-168	7640
BLACK LAGOON-CENTER	000-030	6450
BLACK LAGOON-CENTER	030-120	19700
BLACK LAGOON-CENTER	120-210	8950
BLACK LAGOON-CENTER	210-229	2970

TRENTON CHANNEL PROJECT			
SEDIMENT CHEMISTRY RESULTS			
SEL (Persaud et. al. OME, 1993)		1500	
SITE DESCRIPTION	CORE LENGTH	OIL & GREASE	
	cm	mg/kg d.w.	
BLACK LAGOON-LOWER	000-060	8600	
BLACK LAGOON-LOWER	060-152	4330	
BLACK LAGOON-LOWER	152-203	2340	
BLACK LAGOON-EAST	000-055	<50	
BLACK LAGOON-EAST	055-103	<50	
BLACK LAGOON-EAST	103-166	<50	
BLACK LAGOON-EAST	166-229	<50	
BLACK LAGOON-EAST	000-035	<50	
BLACK LAGOON-EAST	035-133	<50	
BLACK LAGOON-EAST	133-182	<50	
24 C1 BLLG-Nearshore	000-030	7000	
24 C1 (WWES Lab)	030-075	3550	
47E BLLG	Eckman	10000	
S7 - Black Lagoon	Ponar	11000	
40P East of Bouy N "6"	PONAR	nm	
41P NE of Bouy R "18"	PONAR	367	
44P DNS from Bouy R "28"	PONAR	nm	
26P Riverside Hospital	PONAR	nm	
27P Trenton Towers	PONAR	nm	
28P Deadhead Cove	PONAR	nm	
28PC2	PONAR	nm	
ELIZABETH PARK CANAL	000-079	26200	
ELIZABETH PARK CANAL	079-180	11500	
ELIZABETH PARK CANAL	180-260	13700	
ELIZABETH PARK CANAL	260-330	6890	
16 C1 EPNC-Upper	000-080	1360	
16 C1	080-120	1240	
16 C1	120-157	1490	
17 C1 EPNC-Inner	000-040	2180	
17 C1	040-080	1120	
17 C1	080-140	1380	
17 C1	140-175	116	
18 C1 EPNC-Lower	000-055	2040	
18 C1	055-125	813	
18 C1	125-170	10100	
18 C1	170-217	3290	
46E EPNC	Eckman	2400	
29P EPC Bridge 1	PONAR	nm	
30P EPC Bridge 2	PONAR	nm	

TRENTON CHANNEL PROJECT		
SEDIMENT CHEMISTRY RESULTS		
SEL Persaud et. al. OME. (1993)		1500
SITE DESCRIPTION	CORE LENGTH cm	OIL & GREASE mg/kg d.w.
31P EPC Bridge 3	PONAR	nm
32P EPC Bridge 4	PONAR	nm
33P EPC Bridge 5	PONAR	nm
EP MARINA - OUTSIDE	000-020	<50
EP MARINA-UPLand	000-006	<50
EP MARINA-RIVER BED UP.	000-010	6850
EP MARINA-RIVER BED UP.	010-020	11500
EP MARINA-RIVER BED UP.	020-028	14700
EP MARINA-RIVER BED UP.	028-038	772
EP MARINA-RIVER BED DN.	000-013	4480
EP MARINA-RIVER BED DN.	013-018	1390
EP1 - North Marina	Ponar	3300
EP2 - Mid Marina	Ponar	9900
EP3 - South Marina	Ponar	5100
EPN (new site)	Ponar	nm
EPM-N	Eckman	nm
S11-EPM Upland	Ponar	nm
S11D- EPM Upland Dup.	Ponar	nm
EPM-1 (S11-EPM Upland)	Eckman	nm
S12-EPM Mid	Ponar	nm
EPM-2 (S12-EPM Mid)	Eckman	nm
EPM2-dup (S12- EPM Upla	Eckman	nm
S13-EPM South	Ponar	nm
EPM-3 (S13-EPM South)	Eckman	nm
34P EPSC DOCK	PONAR	nm
35P EPSC-Inlet	PONAR	nm
35PC2	PONAR	nm
20 C1 EPSC-Inlet	000-083	1620
20 C1	083-088	1890
49E EPSC	Eckman	10000
36P Monsanto Lagoon	PONAR	1320
19 C1 Monsanto Bay	000-053	2150
19 C1	053-085	1380
19 C2 Monsanto Bay	000-051	2780
19 C2	051-085	3010
CHRYSLER BAY-INNER	000-030	<50
CHRYSLER BAY-INNER	030-058	<50
CHRYSLER BAY-INNER	058-079	<50
CHRYSLER BAY-OUTER	000-013	148
CHRYSLER BAY-OUTER	013-061	<50
37P Chry Bay Marsh Inlet	PONAR	nm
39P Swan Island-North	PONAR	454
38P Above Humbug Marina	PONAR	238
S9 - Chrysler Bay	Ponar	2000
CELERON Island	000-043	<50
CELERON Island	043-074	<50
CELERON Island	074-107	<50

grain size

TRENTON CHANNEL PROJECT		SIEVE					HYDROMETER			ATTERBERG LIMITS		
SEDIMENT CHEMISTRY RESULTS		% PASSING					%PASSING FINE					
SITE DESCRIPTION	Core length	GRAVEL	GRAVEL	MED SAND	FINE SAND	FINE SAND	VF SAND	SILT	SILT	CLAY			
	cm	4 75mm	2	0 5	0 25	0 125	0 075	0 05	0 009	0 002	LIQUID LIM	PLASTIC LIM	PLASTICITY INDEX
43P Portofino Slip	PONAR	97.5	50 2	50 3	44 3	41 9	19 5	12 8					
42P Pt Hennepin	PONAR	90 3	54 9	42 5	33 5	30	13 8	10					
15 C1 T C North Marsh	000-022	38 1	35 7	98 6	79 4	77 1	41	28 8					
15 C1	022-082	99 2	98 8	98	96 7	94 5	91	58 5					
15 C1	082-100	99	97 6	95	93	90	69	53 5					
45P Firestone Steel	PONAR	34 3	30 5	79 7	59 7	84 5	20 5	12 5					
MONGUAGON CREEK-UPSTREAM	000-030	100	100	99 9	98 7	94 6	94 7	73 5	29 5	16 1	61 1	33 1	30 1
MONGUAGON CREEK-UPSTREAM	030-104	100	99 5	95 5	94 8	92 7	89 3	88	43 5	27 2	67 4	40 7	26 7
MONGUAGON CREEK-UPSTREAM	104-142	97	94 3	90 7	59 1	58 3	54 3	60	45	28	65 8	38 3	27 5
MONGUAGON CREEK-UPSTREAM	000-030	100	99 8	98 5	97 4	91 6	78 3	67 2	24 5	14 5	58 7	33	25 6
MONGUAGON CREEK-UPSTREAM	030-078	100	99 9	99	97 8	92 4	84 4	72 2	25 5	14 2	63 1	33	63 5
MONGUAGON CREEK-UPSTREAM	078-150	100	99 8	98 5	98	98 9	94 9	90 9	45 9	22	70 1	37	33 4
MONGUAGON CREEK-UPSTREAM	150-180	59	56 2	42 1	39 1	36 8	35 1	30 5	10 9	6	68 8	38 2	28 3
25 C1 MNCK ONS-Nearshore	000-027	99 5	98 6	95 4	97 7	84 7	60 7	50 6					
25 C1	027-051	100	99 3	97 1	91 9	73 8	68 8	57 7					
25 C1	051-095	99 8	99 2	98 8	90 9	73	62 8	51 7					
25 C1	095-132	99 5	99 4	98 4	95 9	67 6	60 4	49 1					
21 C1 MNCK ONS-Offshore	000-027	94 8	77 9	68 8	53 5	58 9	33 6	22 5					
21 C1	027-051	90 3	71	60 4	54	50	27	19					
MONGUAGON CREEK-DOWN	000-150	100	100	99 7	98 4	98	95 6	90 1	45 5	28	71 4	37 4	34
MONGUAGON CREEK-DOWN	150-168	100	100	99 6	99 3	98 1	95 5	88 5	46 9	29 9	68 4	38 5	29 9
BLACK LAGOON-CENTER	000-030	100	99 9	98 9	98 2	98 5	93	58 1	14 2	5 5	62 1	37 8	24 9
BLACK LAGOON-CENTER	030-120	100	99 9	83 9	82 3	82 1	81 9	68	13	3 5	73 7	50 6	23 1
BLACK LAGOON-CENTER	120-210	100	100	93 9	93 5	93 3	92 7	84 5	16 5	4	67 7	45	22 7
BLACK LAGOON-CENTER	210-229	99 9	99 6	89 7	76 5	45 6	39	29	13 5	7			NONPLASTIC
BLACK LAGOON-LOWER	000-080	100	100	98 3	95 7	94 5	90 7	76 1	14 5	4	58 7	43 5	15 2
BLACK LAGOON-LOWER	080-152	100	100	99 9	99 7	98	93 9	81	34 5	18	58	38 5	19 5
BLACK LAGOON-LOWER	152-203	100	100	98 5	96 9	93 4	87 5	64 2	47 8	23	54 8	42 6	12
BLACK LAGOON-EAST	000-055	99 7	99 2	92 8	97 7	53 8	34 9	25 5	7 5	4 1			NONPLASTIC
BLACK LAGOON-EAST	055-103	100	99 8	97 6	59 9	50	26 7	23 5	7 2	6			NONPLASTIC
BLACK LAGOON-EAST	103-166	99 8	99 3	97 7	94 2	62 1	34 7	25	9 8	6 5			NONPLASTIC
BLACK LAGOON-EAST	166-229	99 9	99 7	98 6	34	55 8	35 9	25 5	10 5	7 5			NONPLASTIC
BLACK LAGOON-EAST	000-035	99 3	98 6	97 3	93 4	56	36	27	8 9	6 9			NONPLASTIC
BLACK LAGOON-EAST	035-133	99 9	99 8	97 6	91 8	55 6	32 3	23	9	7 5			NONPLASTIC
BLACK LAGOON-EAST	133-182	100	99 9	99 6	96 4	49	32 9	25	7 9	5 9			NONPLASTIC
24 C1 BLLG-Nearshore	000-030	98 5	97 8	96 5	93 5	86 5	17 9	10					
24 C1 (WWES Lab)	030-075	99 7	99 6	99 5	99 3	92	19	6 5					
41P NE of Bouy R "18"	PONAR	97 5	35 2	39 4	79 2	70	22 5	12 2					

grain size

TRENTON CHANNEL PROJECT		SIEVE					HYDROMETER				ATTERBERG LIMITS		
SEDIMENT CHEMISTRY RESULTS		% PASSING					%PASSING FINE						
SITE DESCRIPTION	Core length	GRAVEL	GRAVEL	MED SAND	FINE SAND	FINE SAND	VF SAND	SILT	SILT	CLAY			
	cm	4 75mm	2	0 5	0 25	0 125	0 075	0 05	0 005	0 002	LIQUID LIM	PLASTIC LIM	PLASTICITY INDE
ELIZABETH PARK CANAL	000-079	99 8	99.7	99 1	98.5	98 0	93.3	88.5	42	23	63.1	39 9	23.5
ELIZABETH PARK CANAL	079-180	100	100	99 7	99 4	98 4	95 5	89	40 8	21 5	55.4	35 5	20
ELIZABETH PARK CANAL	180-260	100	100	99 9	99.7	99.4	98	94	45.5	27	59 4	38.8	20.7
ELIZABETH PARK CANAL	260-330	100	100	99 9	99 9	99.8	98.9	95	39 5	25	58.5	38.4	20.1
16 C1 EPNC-Upper	000-080	98 1	98.3	89 7	79 9	71 8	27	14 8					
16 C1	380-120	34 9	93.1	30 5	90 9	82	30	15					
16 C1	120-157	99 1	98.5	97 4	95.7	90	33 5	19					
17 C1 EPNC-Inner	000-040	94 9	94.1	92.1	88.1	82	33.9	17					
17 C1	040-080	99 2	98.3	96.5	92	82	27	14 8					
17 C1	080-140	98.8	98.2	98 8	93 9	86	26	11 8					
17 C1	140-175	98.1	97 4	96.5	95	87 5	41.5	27 5					
18 C1 EPNC-Lower	000-055	98.7	97 2	92.2	85.6	79.1	31 9	18.7					
18 C1	055-125	98	97	94.7	91.5	84.8	38.2	20.2					
18 C1	125-170	99	98.6	91	81.8	73.2	28.5	17					
18 C1	170-217	39.2	97 8	92.7	84.4	77.5	29.2	19					
20 C1 EPSC-Inlet	000-083	99.3	97 8	95.1	90.8	83.5	23	11					
20 C1	083-088												
36P Monsanto Lagoon	PONAR	96	92.3	88.7	82.4	77 5	8.2	5.9					
19 C1 Monsanto Bay	000-053	97 3	94.9	90.1	52	70.8	14.2	5.8					
19 C1	053-085	98 5	94.5	78.2	54.2	39	8.5	3.8					
19 C2 Monsanto Bay	000-051	95 6	93	88.1	80	68.9	15	5.5					
19 C2	051-085	98.1	93.4	75.5	51.8	34	7	2.9					
CHRYSLER BAY-INNER	000-030												
CHRYSLER BAY-INNER	030-058	99.3	98.3	94.4	88.1	77.4	70.8	53.9	43.5	33.1	48.3	19.7	25.6
CHRYSLER BAY-INNER	058-079	98.7	98.8	92.2	84.9	73.3	90	59.5	38	28.9	34.7	16.1	18.6
CHRYSLER BAY-OUTER	000-013												
CHRYSLER BAY-OUTER	013-081	98.7	95.1	90	84.7	77.1	72.6	68.5	45.5	38	43.9	19.1	24.9
39P Swan Island-North	PONAR	98.6	98.6	88.5	70.7	64.2	21	12.5					
38P Above Humbug Marina	PONAR	95 2	91	84.3	78.8	65.9	13.5	7.9					
CELERON ISLAND	000-043	98 2	98.1	84 7	81 1	48.8	48.8	41.5	17.9	12.9			NONPLASTIC
CELERON ISLAND	043-074	97.3	94 6	86	74 4	62.2	58	53.1	37.1	31.1	31	22.7	28.3
CELERON ISLAND	074-107	88.4	84.5	78.7	68.2	57.2	52.1	51.5	24.5	19	30.3	15.3	15

TRENTON CHANNEL PROJECT				SEM:AVS>1	
SEDIMENT CHEMISTRY RESULTS				Metals	Sulfide
		AVS/SEM ANALYSIS		Presumed	bufferring
SITE DESCRIPTION				Available	capacity
	Core length in cm	umol/g TOTAL METALS	umol/g SULFIDE	SEM:AVS	umol/g AVS-SEM
43P Portofino Slip	PONAR	100.6	5.5	18.3	
42P Pt. Hennepin	PONAR	49.8	6	8.3	
15 C1 T.C. North Marsh	000-022	88.3	3.8	23.2	
15 C1	022-062	93.7	<0.05		
15 C1	062-100	118.9	<0.05		
45P Firestone Steel	PONAR	302.4	73	4.1	
MONGUAGON CREEK-UPSTREAM	000-030	12.3	356.8	0.03	344.5
MONGUAGON CREEK-UPSTREAM	030-104	34.8	448.9	0.08	414.1
MONGUAGON CREEK-UPSTREAM	104-142	21.8	349.0	0.06	327.2
MONGUAGON CREEK-UPSTREAM	000-030	10.9	299.1	0.04	288.2
MONGUAGON CREEK-UPSTREAM	030-076	16.3	316.9	0.05	300.6
MONGUAGON CREEK-UPSTREAM	076-150	30.0	236.1	0.13	206.1
MONGUAGON CREEK-UPSTREAM	150-180	10.9	215.5	0.05	204.6
S5 - Monguagon Creek	Ponar	11.59	10.8	1.07	
FI - Fighting Island	Ponar	1.02	0.39	2.61	
25 C1 MNCK DNS-Nearshore	000-027	145.05	7	20.7	
25 C1	027-051	175.83	4.3	40.9	
25 C1	051-095	225.12	9.7	23.2	
25 C1	095-132	386.88	6	64.5	
21 C1 MNCK DNS-Offshore	000-027	94	<0.05		
21 C1	027-051	64.7	0.97	66.7	
MONGUAGON CREEK-DOWN	000-150	29.3	211.9	0.14	182.6
MONGUAGON CREEK-DOWN	150-168	33.0	142.5	0.23	109.5
BLACK LAGOON-CENTER	000-030	43.5	1189.0	0.04	1145.5
BLACK LAGOON-CENTER	030-120	31.3	719.1	0.04	687.8
BLACK LAGOON-CENTER	120-210	23.3	234.5	0.10	211.2
BLACK LAGOON-CENTER	210-229	5.4	88.6	0.06	83.2
BLACK LAGOON-LOWER	000-060	32.1	136.4	0.24	104.3
BLACK LAGOON-LOWER	060-152	16.1	128.4	0.13	112.3
BLACK LAGOON-LOWER	152-203	12.8	138.1	0.09	125.3
BLACK LAGOON-EAST	000-055	0.8	8.5	0.09	7.7
BLACK LAGOON-EAST	055-103	0.4	8.8	0.05	8.4
BLACK LAGOON-EAST	103-166	0.5	8.8	0.06	8.3
BLACK LAGOON-EAST	166-229	0.5	0.4	1.25	-0.1
BLACK LAGOON-EAST	000-035	0.5	7.3	0.07	6.8
BLACK LAGOON-EAST	035-133	0.5	4.7	0.11	4.2
BLACK LAGOON-EAST	133-192	0.5	1.3	0.38	0.8
24 C1 BLLG-Nearshore	000-030	252.8	55	4.6	
24 C1 (WWES Lab)	030-075	646.7	409	1.6	
S7 - Black Lagoon	Ponar	20.16	18.1	1.11	

TRENTON CHANNEL PROJECT				SEM:AVS>1	
SEDIMENT CHEMISTRY RESULTS				Metals	Sulfide
		AVS/SEM ANALYSIS		Presumed	bufferring
SITE DESCRIPTION				Available	capacity
	Core				
	length	umol/g	umol/g		umol/g
	in cm	TOTAL METALS	SULFIDE	SEM:AVS	AVS-SEM
41P NE of Bouy R "18"	PONAR	82.6	25	3.3	
ELIZABETH PARK CANAL	000-079	19.2	470.2	0.04	451.0
ELIZABETH PARK CANAL	079-180	17.0	135.5	0.13	118.5
ELIZABETH PARK CANAL	180-260	10.8	131.7	0.08	120.9
ELIZABETH PARK CANAL	260-330	14.1	167.5	0.08	153.4
16 C1 EPNC-Upper	000-080	200.4	11	18.2	
16 C1	080-120	171.3	30	5.7	
16 C1	120-157	296.4	5.9	50.2	
17 C1 EPNC-Inner	000-040	169.3	9.7	17.5	
17 C1	040-080	182.5	14	13.0	
17 C1	080-140	180	6.6	27.3	
17 C1	140-175	111.3	6.9	16.1	
18 C1 EPNC-Lower	000-055	198.5	8.6	23.1	
18 C1	055-125	169.6	7.5	22.6	
18 C1	125-170	170.5	12	14.2	
18 C1	170-217	109.1	5.2	21.0	
EP1 - North Marina	Ponar	7.31	4.4	1.66	
EP2 - Mid Marina	Ponar	11.25	6.04	1.84	
EP3 - South Marina	Ponar	8.79	4.19	2.1	
20 C1 EPSC-Inlet	000-083	253.68	16	15.9	
20 C1	083-088				
36P Monsanto Lagoon	PONAR	318.2	4.8	66.3	
19 C1 Monsanto Bay	000-053	277.8	12	221.9	
19 C1	053-085	201.1	7.9	25.5	
19 C2 Monsanto Bay	000-051	274.6	11	25.0	
19 C2	051-085	217.5	8.2	26.5	
CHRYSLER BAY-INNER	000-030	7.7	30.0	0.26	22.3
CHRYSLER BAY-INNER	030-058	1.5	1.1	1.36	-0.4
CHRYSLER BAY-INNER	058-079	1.5	2.3	0.65	0.8
CHRYSLER BAY-OUTER	000-013				
CHRYSLER BAY-OUTER	013-061	1.6	7.7	0.21	6.1
39P Swan Island-North	PONAR	59.4	12	5.0	
38P Above Humbug Marina	PONAR	70.3	11	6.4	
S9 - Chrysler Bay	Ponar	11.87	2.37	5.01	
CELERON ISLAND	000-043	3.7	49.5	0.07	45.8
CELERON ISLAND	043-074	1.1	1.9	0.58	0.8
CELERON ISLAND	074-107	1.1	1.4	0.79	0.3

TRENTON CHANNEL PROJECT		%TOTAL ORG.	DENSITY	DENSITY
SEDIMENT CHEMISTRY RESUL	Core length	CARBON	LB/FT3	LB/FT3
	cm	DRY BASIS	WET	DRY
SEL (Persaud et. al. OME, 1993)		10		
55C1 Allied Oil Slip NW	000-030	2.9		
	030-091	3.2		
	091-152	3.4		
	152-218	2		
55C2 Allied Oil Slip NW	000-030	3		
	030-091	2.1		
	091-147	2.1		
56C1 Nickelson South Sl	000-030	2		
	030-043	1.7		
56C2 Nickelson South Sli	000-030	3		
	030-091	1.9		
	091-152	1.9		
	152-201	1.7		
59C1 Stenson Club	000-030	3.4		
	030-091	2.6		
	091-152	2.2		
	152-213	2.7		
	213-224	2		
64P Mud Island Northsid	Ponar	2.2		
65P Mud Island SW	Ponar	1.7		
60C1 Mud Island -South	000-030	2.2		
	030-091	2.3		
	091-137	2		
53C1 Grassy Island NW	000-030	3		
	030-071	0.74		
54C1 Grassy Island NE	000-034	1.8		
63P Grassy Island W	Ponar	2		
61P Grassy Isalnd SW	Ponar	1.6		
62P Grassy Island SE	Ponar	2.5		
57P Mouth of Ecorse Cre	Ponar	3		
58C1 Mouth of Ecorse Cr	000-030	1.1		
52C1 BASF Northworks low	000-030	1.3		
	030-091	1.6		
	091-152	3.2		
	152-213	1		
	213-218	0.9		

TRENTON CHANNEL PROJECT		%TOTAL ORG.	DENSITY	DENSITY
SEDIMENT CHEMISTRY RESUL	Core length	CARBON	LB/FT3	LB/FT3
	cm	DRY BASIS	WET	DRY
SEL (Persaud et. al. OME, 1993)		10		
69C1 Wyandotte Yacht Cl	000-030	2.2		
	030-066	2.5		
68P N of Pt. Hennepin	Ponar	1.2		
68E N of Pt. Hennepin	Eckman	1		
67C1 Portofino	000-030	2.1		
43P Portofino Slip	PONAR	3.66	86.3	78.6
42P Pt. Hennepin	PONAR	1.69	94.2	88.7
15 C1 T.C. North Marsh	000-022	3.11	99.9	99.6
15 C1	022-062	2.33	100	100
15 C1	062-100	1.06	100	100
51 C 1 Firestone upper	000-030	2.5		
	030-091	2.6		
	091-152	2.6		
	152-194	2.1		
66C1 Firestone Steel -M	000-030	3		
	030-091	2.1		
	091-104	1.8		
45P Firestone Steel	PONAR	5.6	98.5	97.6
	PONAR			
50P Firestone lower	Ponar	4		
MONGUAGON CREEK-UPSTR	000-030	5.95	104.6	43.6
MONGUAGON CREEK-UPSTR	030-104	6.55	96.1	44.9
MONGUAGON CREEK-UPSTR	104-142	5.78	107.7	60.1
MONGUAGON CREEK-UPSTR	000-030	5.67	89.9	36.4
MONGUAGON CREEK-UPSTR	030-076	6.09	102.6	44
MONGUAGON CREEK-UPSTR	076-150	6.71	98.7	45
MONGUAGON CREEK-UPSTR	150-180	3.88	133	86.2
48E Monguagon Creek	Eckman	1.3		
S5 - Monguagon Creek	Ponar	5.1		
FI - Fighting Island	Ponar	1	NA	
25 C1 MNCK DNS-Nearshore	000-027	5.82	100	100
25 C1	027-051	3.77	100	100
25 C1	051-095	4.96	100	100
25 C1	095-132	5.88	100	100

TRENTON CHANNEL PROJECT		%TOTAL ORG.	DENSITY	DENSITY
SEDIMENT CHEMISTRY RESUL	Core length	CARBON	LB/FT3	LB/FT3
	cm	DRY BASIS	WET	DRY
SEL (Persaud et. al. OME, 1993)		10		
21 C1 MNCK DNS-Offshore	000-027	1.18	95.9	92
21 C1	027-051	0.85	94.2	90.9
MONGUAGON CREEK-DOWN	000-150	6.58	100.8	48.8
MONGUAGON CREEK-DOWN	150-168	7.11	107.3	53.9
BLACK LAGOON-CENTER	000-030	5.22	141.7	55.4
BLACK LAGOON-CENTER	030-120	6.88	104.3	35.3
BLACK LAGOON-CENTER	120-210	6.94	113.6	45.8
BLACK LAGOON-CENTER	210-229	3.88	115.6	81.3
BLACK LAGOON-LOWER	000-060	6.96	92.9	39.7
BLACK LAGOON-LOWER	060-152	5.34	107.6	54.6
BLACK LAGOON-LOWER	152-203	4.84	102.2	52.2
BLACK LAGOON-EAST	000-055	0.82	128.2	102.5
BLACK LAGOON-EAST	055-103	0.57	119.5	94.3
BLACK LAGOON-EAST	103-166	0.6	118.9	92.5
BLACK LAGOON-EAST	166-229	1.18	116.1	90.8
BLACK LAGOON-EAST	000-035	0.7	171.3	137.2
BLACK LAGOON-EAST	035-133	0.66	116.4	91.5
BLACK LAGOON-EAST	133-182	0.94	115.4	89.9
24 C1 BLLG-Nearshore	000-030	4.64	100	100
24 C1 (WWES Lab)	030-075	4.87	100	99.9
47E BLLG	Eckman	4		
S7 - Black Lagoon	Ponar	5.1		
40P East of Bouy N "6"	PONAR			
41P NE of Bouy R "18"	PONAR	4.11	100	99.7
ELIZABETH PARK CANAL	000-079	5.93	94.6	46.4
ELIZABETH PARK CANAL	079-180	4.81	86.8	46.5
ELIZABETH PARK CANAL	180-260	5.79	72.9	37.6
ELIZABETH PARK CANAL	260-330	3.91	124.7	66.8
16 C1 EPNC-Upper	000-080	4.19	100	99.7
16 C1	080-120	4.77	100	100
16 C1	120-157	4.29	100	99.9
17 C1 EPNC-Inner	000-040	4.6	97.3	97.2
17 C1	040-080	3.83	100	100
17 C1	080-140	2.91	99.9	99.9
17 C1	140-175	4.63	100	99.4
18 C1 EPNC-Lower	000-055	3.95	100	99.8
18 C1	055-125	4.44	100	100
18 C1	125-170	3.81	100	100
18 C1	170-217	2.38	100	99.9
45E EPNC	Eckman	4.4		
EP1 - North Marina	Ponar	2.8		
EP2 - Mid Marina	Ponar	6		
EP3 - South Marina	Ponar	5.3		

toc, density

TRENTON CHANNEL PROJECT		%TOTAL ORG.	DENSITY	DENSITY
SEDIMENT CHEMISTRY RESUL	Core length	CARBON	LB/FT3	LB/FT3
	cm	DRY BASIS	WET	DRY
SEL (Persaud et. al. OME, 1993)		10		
20 C1 EPSC-Inlet	000-083	4.86	99.9	99.8
20 C1	083-088			
49E EPSC	Eckman	5		
36P Monsanto Lagoon	PONAR	5.02	100	99.3
19 C1 Monsanto Bay	000-053	4.72	100	99.6
19 C1	053-085	4.94	100	100
19 C2 Monsanto Bay	000-051	4.51	99.8	99.3
19 C2	051-085	4.11	100	99.9
CHRYSLER BAY-INNER	000-030	30.71		
CHRYSLER BAY-INNER	030-058	1.11	75.3	54.8
CHRYSLER BAY-INNER	058-079	0.436	161.6	125
CHRYSLER BAY-OUTER	000-013			
CHRYSLER BAY-OUTER	013-061	0.956	114.5	78.2
37P Chry Bay Marsh Inlet	PONAR			
39P Swan Island-North	PONAR	3.2	100	100
38P Above Humbug Marina	PONAR	8.62	100	96.5
S9 - Chrysler Bay	Ponar	18.7		
CELERON ISLAND	000-043	11.79	109.6	55.9
CELERON ISLAND	043-074	2.08	135.8	92.4
CELERON ISLAND	074-107	0.538	156	124.5

TRENTON CHANNEL PROJECT				
SEDIMENT CHEMISTRY RESULTS			Collection Method/	
SITE DESCRIPTION	Latitude	Longitude	Agency	Estimated Accuracy
55C1 Allied Oil Slip NW	N 42 15 37	W 83 07 29	Mapping Software	+/- 150ft.
55C2 Allied Oil Slip NW - d	N 42 15 37	W 83 07 29	Mapping Software	+/- 150ft.
56C1 Nickelson South Slip	N 42 15 32	W 83 07 43	Loran	+/- 150ft.
56C2 Nickelson South Slip -d	N 42 15 32	W 83 07 44	Loran	+/- 150ft.
59C1 Stenson Club	N 42 14 36	W 83 08 55	Loran	+/- 150ft.
64P Mud Island Northside	N 42 14 4160	W 83.08 3987	Ashtech diff corr	+/- 5ft
65P Mud Island SW	N 42 14 1282	W 83 08 6581	Ashtech diff corr	+/- 5ft
60C1 Mud Island -South side	N 42 14 2701	W 83 08 5673	Ashtech diff corr	+/- 5ft
53C1 Grassy Island NW	N 42 13 6828	W 83 08 1324	Ashtech diff corr	+/- 5ft
54C1 Grassy Island NE	N 42 13 7018	W 83 08 0533	Ashtech diff corr	+/- 5ft
63P Grassy Island W	N 42 13 3979	W 83 08 1478	Ashtech diff corr	+/- 5ft
61P Grassy Isalnd SW	N 42 13 1423	W 83 08 2095	Ashtech diff corr	+/- 5ft
62P Grassy Island SE	N 42 13 1010	W 83 08 1263	Ashtech diff corr	+/- 5ft
57P Mouth of Ecorse Creek	N 42 13 94	W83 08 82	Loran	+/- 150ft.
58C1 Mouth of Ecorse Creek	N 42 13 94	W83 08 82	Loran	+/- 150ft.
52C1 BASF Northworks lower	N 42 12 7136	W 83 08 5514	Ashtech diff corr	+/- 5ft
69C1 Wyandotte Yatch Club	N 42 12 44	W 83 08 73	Loran	+/- 150ft.
68P N of Pt. Hennepin	N 42 12 35	W 83 08 27	Loran	+/- 150ft.
68E N of Pt. Hennepin	N 42 12 35	W 83 08 27	Loran	+/- 150ft.
67C1 Portofino	N 43 11 73	W83 09 00	Loran	+/- 150ft.
43P Portofino Slip	N 42 11 50	W 83 08 57	Mapping Software	+/- 150ft.
42P Pt. Hennepin	N 42 11 48	W 83 08 47	Mapping Software	+/- 150ft.
15 C1 T.C. North Marsh	N 42:10:26	W 83:09:29	Mapping Software	+/- 150ft.
51 C 1 Firestone upper	N 42 10 7916	W 83 09 5462	Ashtech diff corr	+/- 5ft
66C1 Firestone Steel -Mid (	N 42 10 56	W 83 09 60	Ashtech diff corr	+/- 5ft
45P Firestone Steel	N 42 10 23	W 83 09 55	Mapping Software	+/- 150ft.
50P Firestone lower	N 42 10 6264	W 83 09 6997	Ashtech diff corr	+/- 5ft

TRENTON CHANNEL PROJECT				
SEDIMENT CHEMISTRY RESULTS			Collection Method/	
SITE DESCRIPTION	Latitude	Longitude	Agency	Estimated Accuracy
MONGUAGON CREEK-UPSTREAM (aka Federal Marine Terminal)	N 42:10:31.36	W 83:09:45.44	Trimble-USEPA LLRS	+/- 1 meter
MONGUAGON CREEK-UPSTREAM (aka Federal Marine Terminal)	N 42:10:31.30	W 83:09:45.44	Trimble-USEPA LLRS	+/- 1 meter
48E Monguagon Creek	N 42 10 25	W 83 09 86	Loran	+/- 150ft.
S5 - Monguagon Creek	N 42 10 13	W 83 09 59	Mapping Software	+/- 150ft.
FI - Fighting Island	(260611.4)	(13460207.77)	ArcView-photo	+/- 2 ft.
25 C1 MNCK DNS-Nearshore	N 42:10.280	W 83:09.906	Hand Held GPS-MDNR	+/- 100 ft.
21 C1 MNCK DNS-Offshore	N 42:08.313	W 83:09.945	Hand Held GPS-MDNR	+/- 100 ft.
MONGUAGON CREEK-DOWN	N 42:10:17.73	W 83:09:53.72	Trimble-USEPA LLRS	+/- 1 meter
BLACK LAGOON-CENTER	N 42:09:08.37	W 83:10:20.13	Trimble-USEPA LLRS	+/- 1 meter
BLACK LAGOON-LOWER	N 42:09:02.45	W 83:10:19.23	Trimble-USEPA LLRS	+/- 1 meter
BLACK LAGOON-EAST	N 42:09:01.36	W 83:10:15.40	Trimble-USEPA LLRS	+/- 1 meter
24 C1 BLLG-Nearshore	N 42:09.164	W 83:10.325	Hand Held GPS-MDNR	+/- 100 ft.
47E BLLG	N 42 09 00	W 83 10 30	Loran	+/- 150ft.
S7 - Black Lagoon	N 42 09 09	W 83 10 19	Mapping Software	+/- 150ft.
40P East of Bouy N "6"	N 42 07 44	W 83 10 22	Mapping Software	+/- 150ft.
41P NE of Bouy R "18"	N 42 09 25	W 83 09 47	Mapping Software	+/- 150ft.
44P DNS from Bouy R "28"	N 42 11 11	W 83 09 14	Mapping Software	+/- 150ft.
26P Riverside Hospital	N 42:09:05	W 83:10:20	Mapping Software	+/- 150ft.
27P Trenton Towers	N 42:08:48	W 83:10:24	Mapping Software	+/- 150ft.
28P Deadhead Cove	N 42:01:18	W 83:10:33	Mapping Software	+/- 150ft.
28PC2	N 42:01:18	W 83:10:33	Mapping Software	+/- 150ft.
ELIZABETH PARK CANAL	N 42:08:12.93	W 83:10:34.28	Trimble-USEPA LLRS	+/- 1 meter
16 C1 EPNC-Upper	N 42:08:13	W 83:10:33	Mapping Software	+/- 150ft.
17 C1 EPNC-Inner	N 42:08.225	W 83:10.602	Hand Held GPS-MDNR	+/- 100 ft.
18 C1 EPNC-Lower	N 42:08.200	W 83:10.583	Hand Held GPS-MDNR	+/- 100 ft.
46E EPNC	N 42 98 12	W 83 10 33	Mapping Software	+/- 150ft.
29P EPC Bridge 1	N 42:08:10	W 83:10:44	Mapping Software	+/- 150ft.
30P EPC Bridge 2	N 42:08:04	W 83:10:51	Mapping Software	+/- 150ft.
31P EPC Bridge 3	N 42:07:56	W 83:11:01	Mapping Software	+/- 150ft.
32P EPC Bridge 4	N 42:07:40	W 83:11:01	Mapping Software	+/- 150ft.
33P EPC Bridge 5	N 42:07:17	W 83:10:57	Mapping Software	+/- 150ft.

TRENTON CHANNEL PROJECT SEDIMENT CHEMISTRY RESULTS SITE DESCRIPTION	Latitude	Longitude	Collection Method/ Agency	Estimated Accuracy
EP MARINA - OUTSIDE	N 42:07:47.15	W 83:10:35.47	Trimble-USEPA LLRS	+/- 1 meter
EP MARINA - UPLAND	N 42:07:46.28	W 83:10:36.91	Trimble-USEPA LLRS	+/- 1 meter
EP MARINA - RIVER BED UP.	N 42:07:44.29	W 83:10:37.60	Trimble-USEPA LLRS	+/- 1 meter
EP MARINA - RIVER BED DN.	N 42:07:42.83	W 83:10:39.41	Trimble-USEPA LLRS	+/- 1 meter
EP1 - North Marina	(231691.73)	(13446002.56)	ArcView-photo	+/- 2 ft.
EP2 - Mid Marina	(231498.13)	(13445947.77)	ArcView-photo	+/- 2 ft.
EP3 - South Marina	(231304.52)	(13445858.27)	ArcView-photo	+/- 2 ft.
EPN (new site)	(231830.54)	(13446000.74)	ArcView-photo	+/- 2 ft.
EPM-N	(231830.54)	(13446000.74)	ArcView-photo	+/- 2 ft.
S11-EPM Upland	(231691.73)	(13446002.56)	ArcView-photo	+/- 2 ft.
S11D- EPM Upland Dup.	(231691.73)	(13446002.56)	ArcView-photo	+/- 2 ft.
EPM-1 (S11-EPM Upland)	(231691.73)	(13446002.56)	ArcView-photo	+/- 2 ft.
S12-EPM Mid	(231498.13)	(13445947.77)	ArcView-photo	+/- 2 ft.
EPM-2 (S12-EPM Mid)	(231691.73)	(13446002.56)	ArcView-photo	+/- 2 ft.
EPM2-dup (S12- EPM Upland)	(231691.73)	(13446002.56)	ArcView-photo	+/- 2 ft.
S13-EPM South	(231304.52)	(13445858.27)	ArcView-photo	+/- 2 ft.
EPM-3 (S13-EPM South)	(231304.52)	(13445858.27)	ArcView-photo	+/- 2 ft.
34P EPSC DOCK	N 42:07:16	W 83:10:55	Mapping Software	+/- 150ft.
35P EPSC-Inlet	N 42:07:13	W 83:10:47	Mapping Software	+/- 150ft.
35PC2	N 42:07:13	W 83:10:47	Mapping Software	+/- 150ft.
20 C1 EPSC-Inlet	N 42:07.213	W 83:10.818	Hand Held GPS-MDNR	+/- 100 ft.
49E EPSC	N 42 07 19	W 83 11 05	Loran	+/- 150ft.
36P Monsanto Lagoon	N 42 07 03	W 83 10 57	Mapping Software	+/- 150ft.
19 C1 Monsanto Bay	N 42:07.000	W 83:10.881	Hand Held GPS-MDNR	+/- 100 ft.
19 C2 Monsanto Bay	N 42:07.000	W 83:10.881	Hand Held GPS-MDNR	+/- 100 ft.
CHRYSLER BAY-INNER	N 42:06:49.26	W 83:11:06.68	Trimble-USEPA LLRS	+/- 1 meter
CHRYSLER BAY-OUTER	N 42:06:47.91	W 83:11:02.65	Trimble-USEPA LLRS	+/- 1 meter
37P Chry Bay Marsh Inlet	N 42 06 49	W 83 11 06	Mapping Software	+/- 150ft.
39P Swan Island-North	N 42 06 10	W 83 10 28	Mapping Software	+/- 150ft.
38P Above Humbug Marina	N 42 06 03	W 83 11 22	Mapping Software	+/- 150ft.
S9 - Chrysler Bay	N 42 06 50	W 83 11 02	Mapping Software	+/- 150ft.
CELERON ISLAND	N 42:04:45.36	W 83:10:29.20	Trimble-USEPA LLRS	+/- 1 meter

DATA RESULTS Classification - Upstream to Downstream

Classification of Contaminated Sediment Sites as applied to the Trenton Channel Sediment Survey Results 1993-1996

Summed Exceedances

Not-impacted <1 < Impacted < 15 < Moderately Impacted < 30 < Severely Contaminated < 60 < Extremely Contaminated

	Trenton Channel Project	Core		BIO + TOX	EXCEEDANCES (-x over guidelines)					
Location Index	Sediment Results SITE DESCRIPTION	length in cm	CLASSIFICATION	EXCEEDANCE TOTAL	BIO Exceedance	Tox Exceedance	Toxics Metals	Organics	Bioaccum PCBs	Hg
1.1	55C1 Allied Oil Slip NW	000-030	Extremely Contaminated	89.6	44.9	44.7	14.8	30.0	26.9	18.0
1.2	55C1 Allied Oil Slip NW	030-091	Extremely Contaminated	94.1	50.3	43.8	15.6	28.2	38.3	12.0
1.3	55C1 Allied Oil Slip NW	091-152	Extremely Contaminated	78.3	35.2	43.1	11.0	32.0	25.2	10.0
1.4	55C1 Allied Oil Slip NW	152-218	Extremely Contaminated	83.7	32.5	51.2	12.9	38.4	21.5	11.0
1.45										
1.5	55C2 Allied Oil Slip NW - dup	000-030	Extremely Contaminated	69.6	31.3	38.3	12.1	26.2	21.4	9.9
1.6	55C2 Allied Oil Slip NW - dup	030-091	Extremely Contaminated	85.7	43.0	42.6	16.2	26.5	28.0	15.0
1.7	55C2 Allied Oil Slip NW - dup	091-147	Extremely Contaminated	78.5	37.4	41.1	15.0	26.1	26.4	11.0
1.75										
2.1	56C1 Nickelson South Slip	000-030	Extremely Contaminated	79.1	19.8	59.4	16.0	43.4	15.7	4.1
2.2	56C1 Nickelson South Slip	030-043	Extremely Contaminated	99.1	28.0	71.1	25.3	45.8	22.4	5.6
2.25										
2.3	56C2 Nickelson South Slip -dup	000-030	Extremely Contaminated	85.5	19.3	66.2	18.1	48.1	15.1	4.2
2.4	56C2 Nickelson South Slip -dup	030-091	Severely Contaminated	49.5	25.3	24.2	21.6	2.7	24.6	0.7
2.5	56C2 Nickelson South Slip -dup	091-152	Moderately Contaminated	27.3	11.6	15.6	7.3	8.3	4.6	7.0
2.6	56C2 Nickelson South Slip -dup	152-201	Severely Contaminated	35.1	15.7	19.4	11.2	8.2	6.6	9.1
2.65										
3.1	59C1 Stenson Club	000-030	Severely Contaminated	56.3	29.0	27.4	9.4	18.0	21.7	7.3
3.2	59C1 Stenson Club	030-091	Severely Contaminated	57.6	29.5	28.4	10.4	17.9	21.2	8.3
3.3	59C1 Stenson Club	091-152	Extremely Contaminated	63.0	32.0	31.0	11.4	19.5	17.0	15.0
3.4	59C1 Stenson Club	152-213	Severely Contaminated	48.8	33.8	15.0	6.6	8.4	3.8	30.0
3.5	59C1 Stenson Club	213-224	Severely Contaminated	34.7	25.4	9.3	3.9	5.4	4.4	21.0
3.55										
4.1	64P Mud Island Northside	Ponar	Impacted	5.2	1.3	3.9	2.5	1.4	0.5	0.8
4.15										
5.1	65P Mud Island SW	Ponar	Impacted	14.3	6.1	8.2	5.0	3.2	2.8	3.3
5.15										
6.1	60C1 Mud Island -South side	000-030	Impacted	8.2	5.5	2.8	1.4	1.3	3.2	2.3
6.2	60C1 Mud Island -South side	030-091	Impacted	6.1	6.6	1.5	1.5	0.0	4.9	1.7
6.3	60C1 Mud Island -South side	091-137	Impacted	5.4	3.9	1.5	1.5	0.0	3.1	0.8
6.35										
7	53C1 Grassy Island NW	000-030	Impacted	6.3	3.3	3.0	3.0	0.1	0.0	3.3
7.1	53C1 Grassy Island NW	030-071	Impacted	1.8	0.3	1.5	1.3	0.2	0.0	0.3
7.15										
8	54C1 Grassy Island NE	000-034	Impacted	5.5	3.4	2.0	1.8	0.2	1.8	1.6
8.5										
9	63P Grassy Island W	Ponar	Impacted	4.8	1.4	3.4	2.0	1.4	0.0	1.4
9.5										
10	61P Grassy Island SW	Ponar	Impacted	9.8	5.1	4.8	2.5	2.1	1.2	3.9
10.5										
11	62P Grassy Island SE	Ponar	Impacted	10.2	4.6	5.6	3.4	2.2	1.3	3.3
11.5										
12	57P Mouth of Ecorse Creek	Ponar	Moderately Contaminated	25.6	14.6	11.1	5.0	6.1	10.6	4.0
12.5										
13	58C1 Mouth of Ecorse Creek	000-030	Impacted	5.3	3.4	1.9	1.9	0.0	3.4	0.0
13.5										
14	52C1 BASF Northworks lower	000-030	Moderately Contaminated	29.4	14.2	15.1	6.9	8.3	5.8	8.4
14.1	52C1 BASF Northworks lower	030-091	Severely Contaminated	31.6	16.9	14.7	6.9	7.7	3.9	13.0
14.2	52C1 BASF Northworks lower	091-152	Severely Contaminated	31.1	16.3	14.8	6.9	7.9	1.3	15.0
14.3	52C1 BASF Northworks lower	152-213	Moderately Contaminated	17.3	8.9	8.4	3.3	5.2	0.0	8.9

DATA RESULTS Classificaton - Upstream to Downstream

Classificaton of Contaminated Sediment Sites as applied to the Trenton Channel Sediment Survey Results 1993-1998
Summed Exceedances
Not-impacted <1 < Impacted < 15 < Moderately Impacted < 30 < Severely Contaminated < 60 < Extremely Contaminated

Location Index	Trenton Channel Project Sediment Results SITE DESCRIPTION	Core length in cm	CLASSIFICATION	BIO + TOX EXCEEDANCE TOTAL	EXCEEDANCES (x over guidelines) BIO Exceedance	Tox Exceedance	Toxics Metals	Organics	Bioaccum PCBs	Hg
15	69C1 Wyandotte Yacht Club	000-030	Severely Contaminated	33.7	21.0	12.7	5.8	7.0	10.0	11.0
15.1	69C1 Wyandotte Yacht Club	030-066	Severely Contaminated	32.6	20.4	12.3	5.3	6.9	5.4	15.0
15.15										
16	68P N of Pt. Hennepin	Ponar	Impacted	2.1	0.7	1.4	1.0	0.4	0.0	0.7
16.5										
17	68E N of Pt. Hennepin	Eckman	Impacted	2.1	0.8	1.3	1.1	0.1	0.0	0.8
17.5										
18	67C1 Portofino	000-030	Moderately Contaminated	24.5	13.2	11.3	6.3	5.1	5.7	7.5
18.5										
19	43P Portofino Slip	PONAR	Impacted	8.9	3.2	5.7	4.6	1.1	0.0	3.2
19.5										
20	42P Pt. Hennepin	PONAR	Impacted	4.4	2.2	2.2	1.9	0.3	0.0	2.2
20.5										
21	15 C1 T.C. North Marsh	000-022	Impacted	2.0	0.0	2.0	2.0	0.0	0.0	0.0
21.1	15 C1 T.C. North Marsh	022-062	Impacted	1.8	0.0	1.8	1.8	0.0	0.0	0.0
21.2	15 C1 T.C. North Marsh	062-100	Impacted	2.1	0.0	2.1	2.1	0.0	0.0	0.0
21.5										
22	51 C 1 Firestone upper	000-030	Extremely Contaminated	203.0	185.8	17.2	8.9	8.3	55.8	130.0
22.1	51 C 1 Firestone upper	030-091	Extremely Contaminated	214.4	188.2	26.2	12.5	13.7	26.2	160.0
22.2	51 C 1 Firestone upper	091-152	Extremely Contaminated	225.9	203.0	22.8	10.6	12.2	43.0	160.0
22.3	51 C 1 Firestone upper	152-194	Extremely Contaminated	130.8	111.3	19.5	8.4	11.1	16.3	95.0
22.5										
23	66C1 Firestone Steel -Mid (45P site	000-030	Extremely Contaminated	201.8	175.1	26.7	11.9	14.8	15.1	160.0
23.1	66C1 Firestone Steel -Mid (45P site	030-091	Extremely Contaminated	130.5	111.7	18.9	9.2	9.7	11.7	100.0
23.2	66C1 Firestone Steel -Mid (45P site	091-104	Severely Contaminated	48.0	31.0	17.0	6.6	10.4	2.0	29.0
23.5										
24	45P Firestone Steel	PONAR	Extremely Contaminated	118.9	103.3	15.6	10.0	5.6	3.3	100.0
24.1	45P Firestone Steel	PONAR	Extremely Contaminated	82.3	71.7	10.7	10.7	0.0	6.7	65.0
24.5										
25	50P Firestone lower	Ponar	Extremely Contaminated	135.6	110.4	25.3	13.4	11.8	10.4	100.0
25.5										
27	MONGUAGON CREEK-UPSTREA	000-030	Severely Contaminated	48.1	31.3	16.9	11.6	5.2	7.3	24.0
27.1	MONGUAGON CREEK-UPSTREA	030-104	Extremely Contaminated	65.3	19.6	45.7	18.1	27.6	7.6	12.0
27.2	MONGUAGON CREEK-UPSTREA	104-142	Extremely Contaminated	183.5	132.9	30.5	14.6	15.9	33.9	99.0
27.5										
28	MONGUAGON CREEK-UPSTREA	000-030	Severely Contaminated	47.9	31.4	16.5	10.5	6.0	8.4	25.0
28.1	MONGUAGON CREEK-UPSTREA	030-076	Extremely Contaminated	92.8	64.0	28.8	14.1	14.7	30.0	34.0
28.2	MONGUAGON CREEK-UPSTREA	076-150	Extremely Contaminated	91.7	60.4	31.3	16.8	14.5	29.4	31.0
28.3	MONGUAGON CREEK-UPSTREA	150-180	Extremely Contaminated	103.9	87.3	16.6	8.2	8.4	30.3	57.0
28.5										
29	48E Monguagon Creek	Eckman	Moderately Contaminated	29.9	7.5	22.4	13.6	8.9	4.6	2.9
29.5										
30	SS - Monguagon Creek	Ponar	Severely Contaminated	40.1	18.7	21.4	11.3	10.1	18.7	0.0
30.5										
31	FI - Fighting Island	Ponar	Impacted	1.6	0.2	1.3	1.2	0.1	0.2	0.0
31.5										
32	25 C1 MNCK DNS-Nearshore	000-027	Moderately Contaminated	20.3	11.0	9.3	8.3	1.0	0.0	11.0
32.1	25 C1 MNCK DNS-Nearshore	027-051	Moderately Contaminated	19.2	9.5	9.7	9.4	0.3	0.0	9.5
32.2	25 C1 MNCK DNS-Nearshore	051-095	Moderately Contaminated	29.3	18.3	11.1	10.6	0.5	3.3	15.0
32.3	25 C1 MNCK DNS-Nearshore	095-132	Severely Contaminated	38.2	17.5	18.7	18.0	0.7	3.5	14.0
32.5										
33	21 C1 MNCK DNS-Offshore	000-027	Impacted	1.2	0.0	1.2	1.2	0.0	0.0	0.0
33.1	21 C1 MNCK DNS-Offshore	027-051	Impacted	3.8	2.3	1.5	1.5	0.0	0.0	2.3
33.5										
34	MONGUAGON CREEK-DOWN	000-150	Extremely Contaminated	77.3	56.9	20.4	17.5	2.9	17.9	39.0
34.1	MONGUAGON CREEK-DOWN	150-168	Extremely Contaminated	173.1	147.3	25.9	20.6	5.2	37.3	110.0
34.5										

DATA RESULTS: Classification - Upstream to Downstream

Classification of Contaminated Sediment Sites as applied to the Trenton Channel Sediment Survey Results 1993-1996

Summed Exceedances

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Location Index	Trenton Channel Project Sediment Results SITE DESCRIPTION	Core length in cm	CLASSIFICATION	BIO + TOX EXCEEDANCE TOTAL	BIO Exceedance	Tox Exceedance	EXCEEDANCES (x over guidelines) Toxics Metals	Organics	Bioaccumi PCBs	Hg
Not-impacted <1 < Impacted < 15 < Moderately Impacted < 30 < Severely Contaminated < 60 < Extremely Contaminated										
35	BLACK LAGOON-CENTER	000-030	Severely Contaminated	37.2	14.0	23.2	18.7	4.5	0.0	14.0
35.1	BLACK LAGOON-CENTER	030-120	Extremely Contaminated	85.3	50.7	34.6	21.2	13.4	19.7	31.0
35.2	BLACK LAGOON-CENTER	120-210	Extremely Contaminated	97.0	73.5	23.5	17.0	6.5	5.5	68.0
35.3	BLACK LAGOON-CENTER	210-229	Moderately Contaminated	20.6	14.0	6.6	4.1	2.4	0.0	14.0
35.5										
36	BLACK LAGOON-LOWER	000-060	Extremely Contaminated	91.3	64.5	26.8	20.9	5.9	8.5	56.0
36.1	BLACK LAGOON-LOWER	060-152	Extremely Contaminated	91.1	78.0	13.1	9.7	3.5	0.0	78.0
36.2	BLACK LAGOON-LOWER	152-203	Severely Contaminated	57.1	48.0	9.1	7.3	1.8	0.0	48.0
36.5										
37	BLACK LAGOON-EAST	000-055	Non-Impacted	0.8	0.0	0.8	0.8	0.0	0.0	0.0
37.1	BLACK LAGOON-EAST	055-103	Non-Impacted	0.7	0.0	0.7	0.7	0.0	0.0	0.0
37.2	BLACK LAGOON-EAST	103-166	Non-Impacted	0.7	0.0	0.7	0.7	0.0	0.0	0.0
37.3	BLACK LAGOON-EAST	166-229	Non-Impacted	0.8	0.0	0.8	0.8	0.0	0.0	0.0
37.5										
38	BLACK LAGOON-EAST	000-035	Non-Impacted	0.7	0.0	0.7	0.7	0.0	0.0	0.0
38.1	BLACK LAGOON-EAST	035-133	Non-Impacted	0.7	0.0	0.7	0.7	0.0	0.0	0.0
38.2	BLACK LAGOON-EAST	133-182	Non-Impacted	0.9	0.0	0.9	0.9	0.0	0.0	0.0
38.5										
39	24 C1 BLLG-Nearshore	000-030	Severely Contaminated	42.2	17.0	25.2	20.3	4.9	5.0	12.0
39.1	24 C1 BLLG-Nearshore	030-075	Severely Contaminated	43.0	19.6	23.4	21.0	2.5	7.6	12.0
39.5										
40	24 C1 BLLG-Nearshore	030-075	Severely Contaminated	43.0	13.0	30.0	29.9	0.1	0.0	13.0
40.5										
41	47E BLLG	Eckman	Extremely Contaminated	137.9	119.9	18.0	10.9	7.1	9.9	110.0
41.5										
42	S7 - Black Lagoon	Ponar	Severely Contaminated	40.0	14.4	25.6	16.2	9.3	14.4	0.0
42.5										
43	40P East of Bouy N "8"	PONAR	Impacted	4.3	1.8	2.5	2.3	0.2	0.0	1.8
43.5										
44	41P NE of Bouy R "18"	PONAR	Impacted	8.2	4.0	4.2	3.6	0.5	1.7	2.3
44.5										
45	44P ONS from Bouy R "26"	PONAR	Impacted	13.8	6.5	7.3	7.3	0.0	0.0	6.5
45.5										
46	26P Riverside Hospital	PONAR	Impacted	13.5	5.6	7.9	7.4	0.5	0.0	5.6
46.5										
47	27P Trenton Towers	PONAR	Extremely Contaminated	77.3	64.0	13.3	13.1	0.2	0.0	64.0
47.5										
48	28P Deadhead Cove	PONAR	Impacted	13.8	7.0	6.8	6.6	0.2	0.0	7.0
48.1	28PC2	PONAR	Impacted	13.4	6.7	6.7	6.5	0.2	0.0	6.7
48.5										
49	ELIZABETH PARK CANAL	000-079	Extremely Contaminated	95.6	64.2	31.4	13.4	18.0	8.2	56.0
49.1	ELIZABETH PARK CANAL	079-180	Severely Contaminated	41.7	23.0	18.7	10.1	8.6	0.0	23.0
49.2	ELIZABETH PARK CANAL	180-260	Severely Contaminated	32.8	15.0	17.8	7.2	10.6	0.0	15.0
49.3	ELIZABETH PARK CANAL	260-330	Severely Contaminated	38.9	24.0	14.9	8.7	6.2	0.0	24.0
49.5										
50	16 C1 EPNC-Upper	000-080	Extremely Contaminated	90.1	78.2	11.9	10.3	1.6	31.2	47.0
50.1	16 C1 EPNC-Upper	080-120	Severely Contaminated	50.2	40.0	10.2	8.8	1.4	0.0	40.0
50.2	16 C1 EPNC-Upper	120-157	Severely Contaminated	40.9	29.2	11.6	9.6	2.0	1.2	28.0
50.5										
51	17 C1 EPNC-Inner	000-040	Extremely Contaminated	91.5	80.8	10.8	8.5	2.2	6.8	74.0
51.1	17 C1 EPNC-Inner	040-080	Severely Contaminated	35.4	26.0	9.4	7.7	1.7	0.0	26.0
51.2	17 C1 EPNC-Inner	080-140	Moderately Contaminated	26.5	18.0	8.5	6.2	2.3	0.0	18.0
51.3	17 C1 EPNC-Inner	140-175	Moderately Contaminated	16.9	12.0	4.9	3.8	1.0	0.0	12.0
51.5										
52	18 C1 EPNC-Lower	000-055	Extremely Contaminated	83.9	75.0	9.0	6.8	2.2	7.0	68.0
52.1	18 C1 EPNC-Lower	055-125	Severely Contaminated	57.9	48.0	9.9	9.0	0.9	2.0	46.0
52.2	18 C1 EPNC-Lower	125-170	Severely Contaminated	42.9	28.2	14.7	7.1	7.6	4.2	24.0
52.3	18 C1 EPNC-Lower	170-217	Moderately Contaminated	23.2	15.0	8.2	4.7	3.5	0.0	15.0
52.5										
53	46E EPNC	Eckman	Severely Contaminated	30.5	20.2	10.3	7.9	2.4	5.2	15.0
53.5										
55	29P EPC Bridge 1	PONAR	Impacted	12.1	4.0	8.1	8.1	0.0	0.0	4.0
55.5										
56	30P EPC Bridge 2	PONAR	Impacted	3.9	1.8	2.1	2.1	0.0	0.0	1.8
56.5										
57	31P EPC Bridge 3	PONAR	Moderately Contaminated	24.9	17.0	7.9	7.6	0.3	0.0	17.0
57.5										
58	32P EPC Bridge 4	PONAR	Severely Contaminated	36.0	25.5	10.6	10.3	0.2	16.7	8.8
58.5										

DATA RESULTS. Classification - Upstream to Downstream

Classification of Contaminated Sediment Sites as applied to the Trenton Channel Sediment Survey Results 1993-1998

Summed Exceedances

Not-impacted <1 < Impacted < 15 < Moderately Impacted < 30 < Severely Contaminated < 60 < Extremely Contaminated

Location Index	Trenton Channel Project Sediment Results SITE DESCRIPTION	Core length in cm	CLASSIFICATION	BIO + TOX EXCEEDANCE TOTAL	EXCEEDANCES (x over guidelines) BIO Exceedance	Tox Exceedance	Toxics Metals	Organics	Bioaccum PCBs	Hg
59	33P EPC Bridge 5	PCNAR	Moderately Contaminated	21.4	11.6	9.7	9.3	0.4	2.5	9.1
59.5										
60	EP MARINA - OUTSIDE	000-020	Impacted	1.7	0.0	1.7	1.7	0.0	0.0	0.0
60.5										
61	EP MARINA - UPLAND	000-006	Impacted	1.6	0.0	1.6	1.6	0.0	0.0	0.0
61.5										
62	EP MARINA - RIVER BED UP	000-010	Severely Contaminated	46.9	34.2	14.8	10.0	4.8	4.2	30.0
62.1	EP MARINA - RIVER BED UP	010-020	Extremely Contaminated	65.0	46.3	18.7	10.4	8.2	4.3	42.0
62.2	EP MARINA - RIVER BED UP	020-028	Extremely Contaminated	79.9	57.9	22.0	11.7	10.3	5.9	52.0
62.3	EP MARINA - RIVER BED UP	028-038	Extremely Contaminated	61.5	48.1	13.4	12.7	0.7	5.1	43.0
62.5										
63	EP MARINA - RIVER BED DN	000-013	Severely Contaminated	51.2	40.0	11.2	7.1	4.1	0.0	40.0
63.1	EP MARINA - RIVER BED DN.	013-018	Severely Contaminated	50.0	40.0	10.0	7.7	2.3	0.0	40.0
63.5										
65	EP1 - Upland (S11)	Ponar	Moderately Contaminated	15.3	3.8	11.4	7.9	3.5	3.8	0.0
65.5										
66	EP2 - Mid Manna (S12)	Ponar	Moderately Contaminated	25.7	8.0	17.7	10.6	7.0	8.0	0.0
66.5										
67	EP3 - South Manna (S13)	Ponar	Moderately Contaminated	20.2	4.8	15.4	10.1	5.3	4.8	0.0
67.5										
68	EPN (new site)	Ponar	Severely Contaminated	59.2	44.0	15.2	14.8	0.4	0.0	44.0
68.05										
68.1	EPM-N	Eckman	Moderately Contaminated	23.8	15.0	8.8	8.7	0.1	0.0	15.0
68.5										
69	S11-EPM Upland	Ponar	Severely Contaminated	31.4	23.0	8.4	8.1	0.3	0.0	23.0
69.1	S11D- EPM Upland Dup.	Ponar	Severely Contaminated	31.2	23.0	8.2	8.0	0.2	0.0	23.0
69.15										
69.2	EPM-1 (S11-EPM Upland)	Eckman	Moderately Contaminated	27.0	18.0	9.0	8.9	0.1	0.0	18.0
69.5										
69.5										
70	S12-EPM Mid	Ponar	Severely Contaminated	40.0	29.0	11.0	10.4	0.6	0.0	29.0
70.05										
70.1	EPM-2 (S12-EPM Mid)	Eckman	Moderately Contaminated	25.6	16.0	9.6	9.2	0.4	0.0	16.0
70.15										
70.2	EPM2-dup (S12- EPM Upland)	Eckman	Moderately Contaminated	26.2	17.0	9.2	9.2	0.0	0.0	17.0
70.25										
71	S13-EPM South	Ponar	Severely Contaminated	40.9	31.0	9.9	9.3	0.5	0.0	31.0
71.05										
71.1	EPM-3 (S13-EPM South)	Eckman	Severely Contaminated	45.3	38.0	7.3	6.4	0.9	0.0	38.0
71.15										
72	34P EPSC DOCK	PONAR	Severely Contaminated	30.8	18.5	12.3	11.9	0.4	2.5	16.0
72.5										
73	35P EPSC-Inlet	PONAR	Moderately Contaminated	22.5	12.0	10.5	10.1	0.4	0.0	12.0
73.1	35P EPSC-Inlet	PONAR	Moderately Contaminated	19.7	10.0	9.7	9.3	0.4	0.0	10.0
73.15										
74	20 C1 EPSC-Inlet	000-083	Extremely Contaminated	62.2	47.3	14.9	13.2	1.7	7.3	40.0
74.1	20 C1 EPSC-Inlet	083-088	Extremely Contaminated	72.1	55.0	17.0	14.8	2.3	4.0	51.0
74.15										
74.2	49E EPSC	Eckman	Moderately Contaminated	23.7	9.6	14.1	7.0	7.1	0.0	9.6
74.25										
75	36P Monsanto Lagoon	PONAR	Severely Contaminated	57.3	41.7	15.6	14.5	1.1	2.7	39.0
75.5										
77	19 C1 Monsanto Bay	000-053	Severely Contaminated	50.1	37.6	12.5	10.6	1.9	1.6	36.0
77.1	19 C1 Monsanto Bay	053-085	Severely Contaminated	51.7	42.5	9.2	7.8	1.4	3.5	39.0
77.15										
77.2	19 C2 Monsanto Bay	000-051	Severely Contaminated	51.7	40.3	11.5	9.3	2.2	7.3	33.0
77.3	19 C2 Monsanto Bay	051-085	Severely Contaminated	45.9	38.2	9.8	7.1	2.8	4.2	32.0
77.35										
78	CHRYSLER BAY-INNER	000-030	Impacted	3.1	2.0	1.1	1.1	0.0	0.0	2.0
78.1	CHRYSLER BAY-INNER	030-058	Impacted	1.5	0.0	1.5	1.5	0.0	0.0	0.0
78.2	CHRYSLER BAY-INNER	058-079	Impacted	1.7	0.0	1.7	1.7	0.0	0.0	0.0
78.25										
79	CHRYSLER BAY-OUTER	000-013	Moderately Contaminated	27.9	20.4	7.5	6.4	1.1	5.4	15.0
79.1	CHRYSLER BAY-OUTER	013-081	Impacted	1.9	0.0	1.9	1.9	0.0	0.0	0.0
79.15										
80	37P Chry Bay Marsh Inlet	PONAR	Impacted	4.6	1.8	2.8	2.8	0.0	0.0	1.8
80.5										
81	39P Swan Island-North	PONAR	Impacted	7.5	3.8	3.7	3.1	0.6	0.0	3.8
81.5										
82	38P Above Humbug Manna	PONAR	Moderately Contaminated	15.7	8.7	7.0	6.8	0.2	0.0	8.7
82.5										
83	S9 - Chrysler Bay	Ponar	Impacted	14.1	4.2	9.9	7.9	2.0	4.2	0.0
83.5										
84	CELERON ISLAND	000-043	Impacted	3.1	1.6	1.5	1.4	0.1	0.0	1.6
84.1	CELERON ISLAND	043-074	Impacted	1.5	0.0	1.5	1.5	0.0	0.0	0.0
84.2	CELERON ISLAND	074-107	Impacted	1.6	0.0	1.6	1.6	0.0	0.0	0.0

DATA RESULTS: Classification - Most Contaminated to Least Contaminated

Classification of Contaminated Sediment Sites as applied to the Trenton Channel Sediment Survey Results 1993-1998
Summed Exceedances
Not-Impacted <1 < Impacted < 15 < Moderately Impacted < 30 < Severely Contaminated < 50 < Extremely Contaminated

Location Index	Trenton Channel Project Sediment Results SITE DESCRIPTION	Core length in cm	CLASSIFICATION	BIO + TOX EXCEEDANCE TOTAL	EXCEEDANCES (x over guidelines) BIO Exceedance	Tox Exceedance	Tissue Metals	Organics	Bioaccum PCBs	Hg
22.2	51 C 1 Firestone upper	091-152	Extremely Contaminated	225.9	203.0	22.8	10.6	12.2	43.0	160.0
22.1	51 C 1 Firestone upper	030-091	Extremely Contaminated	214.4	188.2	26.2	12.5	13.7	28.2	160.0
22	51 C 1 Firestone upper	000-030	Extremely Contaminated	203.0	185.8	17.2	8.9	8.3	55.6	130.0
23	66C1 Firestone Steel -Mid (45P site)	000-030	Extremely Contaminated	201.8	175.1	26.7	11.9	14.6	15.1	160.0
34.1	MONGUAGON CREEK-DOWN	150-188	Extremely Contaminated	173.1	147.3	25.9	10.6	5.2	37.3	110.0
27.2	MONGUAGON CREEK-UPSTREAM	104-142	Extremely Contaminated	163.5	132.9	30.5	14.6	15.9	33.9	90.0
41	47E BLLG	Eckman	Extremely Contaminated	137.9	119.9	18.0	10.9	7.1	9.9	110.0
25	50P Firestone lower	Ponar	Extremely Contaminated	135.6	110.4	25.3	13.4	11.8	10.4	100.0
22.3	51 C 1 Firestone upper	152-194	Extremely Contaminated	130.8	111.3	19.5	8.4	11.1	18.3	95.0
23.1	66C1 Firestone Steel -Mid (45P site)	030-091	Extremely Contaminated	130.5	111.7	18.9	9.2	9.7	11.7	100.0
24	45P Firestone Steel	PONAR	Extremely Contaminated	118.9	103.3	15.6	10.0	5.6	3.3	100.0
28.3	MONGUAGON CREEK-UPSTREAM	150-180	Extremely Contaminated	103.9	87.3	16.6	8.2	8.4	30.3	57.0
2.2	56C1 Nicketson South Slip	030-043	Extremely Contaminated	99.1	28.0	71.1	28.3	45.8	22.4	5.6
35.2	BLACK LAGOON-CENTER	120-210	Extremely Contaminated	97.0	73.5	23.5	17.0	6.5	5.5	68.0
49	ELIZABETH PARK CANAL	000-079	Extremely Contaminated	95.5	64.2	31.4	13.4	18.0	8.2	56.0
1.2	55C1 Allied Oil Slip NW	030-091	Extremely Contaminated	94.1	50.3	43.8	15.6	28.2	38.3	12.0
28.1	MONGUAGON CREEK-UPSTREAM	030-076	Extremely Contaminated	92.8	64.0	28.8	14.1	14.7	30.0	34.0
28.2	MONGUAGON CREEK-UPSTREAM	076-150	Extremely Contaminated	91.7	60.4	31.3	16.8	14.5	29.4	31.0
51	17 C1 EPNC-Inner	000-040	Extremely Contaminated	91.5	80.8	10.8	6.5	2.2	9.6	74.0
36	BLACK LAGOON-LOWER	000-060	Extremely Contaminated	91.3	64.5	26.8	20.9	5.9	8.5	56.0
36.1	BLACK LAGOON-LOWER	060-152	Extremely Contaminated	91.1	78.0	13.1	8.7	3.5	0.0	78.0
50	18 C1 EPNC-Upper	000-080	Extremely Contaminated	90.1	78.2	11.9	10.3	1.6	31.2	47.0
1.1	55C1 Allied Oil Slip NW	000-030	Extremely Contaminated	89.6	44.9	44.7	14.8	30.0	26.9	18.0
1.8	55C2 Allied Oil Slip NW - dup	030-091	Extremely Contaminated	85.7	43.0	42.6	16.2	26.5	28.0	15.0
2.3	56C2 Nicketson South Slip -dup	000-030	Extremely Contaminated	85.5	19.3	66.2	18.1	48.1	15.1	4.2
35.1	BLACK LAGOON-CENTER	030-120	Extremely Contaminated	85.3	50.7	34.6	21.3	13.4	19.7	31.0
52	18 C1 EPNC-Lower	000-055	Extremely Contaminated	83.9	75.0	9.0	6.8	2.2	7.0	68.0
1.4	55C1 Allied Oil Slip NW	152-218	Extremely Contaminated	83.7	32.5	51.2	12.9	38.4	21.5	11.0
24.1	45P Firestone Steel	PONAR	Extremely Contaminated	82.3	71.7	10.7	10.7	0.0	6.7	65.0
62.2	EP MARINA - RIVER BED UP	020-028	Extremely Contaminated	79.9	57.9	22.0	11.7	10.3	5.9	52.0
2.1	56C1 Nicketson South Slip	000-030	Extremely Contaminated	79.1	19.6	59.4	19.0	43.4	15.7	4.1
1.7	55C2 Allied Oil Slip NW - dup	091-147	Extremely Contaminated	78.5	37.4	41.1	18.0	28.1	28.4	11.0
1.3	55C1 Allied Oil Slip NW	091-152	Extremely Contaminated	78.3	35.2	43.1	11.0	32.0	25.2	10.0
34	MONGUAGON CREEK-DOWN	000-150	Extremely Contaminated	77.3	56.9	20.4	17.5	2.9	17.9	39.0
47	27P Trenton Towers	PONAR	Extremely Contaminated	77.3	64.0	13.3	13.1	0.2	0.0	64.0
74.1	20 C1 EPSC-Inlet	083-088	Extremely Contaminated	72.1	55.0	17.0	14.8	2.3	4.0	51.0
1.5	55C2 Allied Oil Slip NW - dup	000-030	Extremely Contaminated	69.6	31.3	38.3	13.1	26.2	21.4	9.9
27.1	MONGUAGON CREEK-UPSTREAM	030-104	Extremely Contaminated	65.3	19.6	45.7	18.1	27.6	7.6	12.0
62.1	EP MARINA - RIVER BED UP	010-020	Extremely Contaminated	65.0	46.3	18.7	10.4	8.2	4.3	42.0
3.3	59C1 Stanson Club	091-152	Extremely Contaminated	63.0	32.0	31.0	11.4	19.5	17.9	15.0
74	20 C1 EPSC-Inlet	000-083	Extremely Contaminated	62.2	47.3	14.9	13.2	1.7	7.3	40.0
62.3	EP MARINA - RIVER BED UP	028-038	Extremely Contaminated	61.5	48.1	13.4	12.7	0.7	5.1	43.0

DATA RESULTS Classification - Most Contaminated to Least Contaminated

Classification of Contaminated Sediment Sites as applied to the Trenton Channel Sediment Survey Results 1993-1998

Summed Exceedances

Not-impacted <1 < Impacted < 15 < Moderately Impacted < 30 < Severely Contaminated < 90 < Extremely Contaminated

Location Index	Trenton Channel Project Sediment Results SITE DESCRIPTION	Core length in cm	CLASSIFICATION	BIO + TOX EXCEEDANCE TOTAL	BIO Exceedance	Tox Exceedance	EXCEEDANCES (x over guidelines) Metals	Organics	Bioaccum PCBs	Hg
68	EPN (new site)	Ponar	Severely Contaminated	59.2	44.0	15.2	14.8	0.4	0.0	44.0
52.1	18 C1 EPNC-Lower	055-125	Severely Contaminated	57.9	48.0	9.9	9.0	0.9	2.0	46.0
3.2	59C1 Stenson Club	030-091	Severely Contaminated	57.8	29.5	28.4	10.4	17.9	21.2	9.3
75	36P Monsanto Lagoon	PONAR	Severely Contaminated	57.3	41.7	15.6	14.5	1.1	2.7	39.0
36.2	BLACK LAGOON-LOWER	152-203	Severely Contaminated	57.1	48.0	9.1	7.3	1.8	0.0	48.0
3.1	59C1 Stenson Club	000-030	Severely Contaminated	56.3	29.0	27.4	9.4	18.0	21.7	7.3
77.2	19 C2 Monsanto Bay	000-051	Severely Contaminated	51.7	40.3	11.5	9.2	2.2	7.3	33.0
77.1	19 C1 Monsanto Bay	053-085	Severely Contaminated	51.7	42.5	9.2	7.8	1.4	3.5	39.0
93	EP MARINA - RIVER BED DN.	000-013	Severely Contaminated	51.2	40.0	11.2	7.1	4.1	0.0	40.0
50.1	18 C1 EPNC-Upper	080-120	Severely Contaminated	50.2	40.0	10.2	8.9	1.4	0.0	40.0
77	19 C1 Monsanto Bay	000-053	Severely Contaminated	50.1	37.5	12.5	10.6	1.9	1.6	36.0
93.1	EP MARINA - RIVER BED DN	013-018	Severely Contaminated	50.0	40.0	10.0	7.7	2.3	0.0	40.0
2.4	59C2 Nickelson South Slip -dup	030-091	Severely Contaminated	49.5	25.3	24.2	11.6	2.7	24.8	0.7
92	EP MARINA - RIVER BED UP	000-010	Severely Contaminated	48.9	34.2	14.8	10.0	4.8	4.2	30.0
3.4	59C1 Stenson Club	152-213	Severely Contaminated	48.8	33.8	15.0	7.8	8.4	3.8	30.0
27	MONGUAGON CREEK-UPSTREAM	000-030	Severely Contaminated	48.1	31.3	16.9	11.0	5.2	7.3	24.0
23.2	66C1 Firestone Steel -Mid (45P site)	091-104	Severely Contaminated	48.0	31.0	17.0	6.6	10.4	2.0	29.0
28	MONGUAGON CREEK-UPSTREAM	000-030	Severely Contaminated	47.9	31.4	16.5	10.8	6.0	6.4	25.0
77.3	19 C2 Monsanto Bay	051-085	Severely Contaminated	45.9	36.2	9.8	7.1	2.6	4.2	32.0
71.1	EPM-3 (S13-EPM South)	Eckman	Severely Contaminated	45.3	38.0	7.3	6.4	0.9	0.0	38.0
39.1	24 C1 BLLG-Nearshore	030-075	Severely Contaminated	43.0	19.6	23.4	11.0	2.5	7.6	12.0
40	24 C1 BLLG-Nearshore	030-075	Severely Contaminated	43.0	13.0	30.0	12.9	0.1	0.0	13.0
52.2	18 C1 EPNC-Lower	125-176	Severely Contaminated	42.9	28.2	14.7	7.1	7.8	4.2	24.0
39	24 C1 BLLG-Nearshore	000-030	Severely Contaminated	42.2	17.0	25.2	20.3	4.9	5.0	12.0
49.1	ELIZABETH PARK CANAL	078-180	Severely Contaminated	41.7	23.0	18.7	10.1	8.6	0.0	23.0
50.2	18 C1 EPNC-Upper	120-157	Severely Contaminated	40.9	28.2	11.8	7.8	2.0	1.2	28.0
71	S13-EPM South	Ponar	Severely Contaminated	40.9	31.0	9.9	8.3	0.5	0.0	31.0
30	S5 - Monguagon Creek	Ponar	Severely Contaminated	40.1	18.7	21.4	11.3	10.1	18.7	0.0
70	S12-EPM Mid	Ponar	Severely Contaminated	40.0	29.0	11.0	10.4	0.6	0.0	29.0
42	S7 - Black Lagoon	Ponar	Severely Contaminated	40.0	14.4	25.6	10.2	9.3	14.4	0.0
49.3	ELIZABETH PARK CANAL	260-330	Severely Contaminated	38.9	24.0	14.9	9.7	9.2	0.0	24.0
35	BLACK LAGOON-CENTER	000-030	Severely Contaminated	37.2	14.0	23.2	9.5	4.5	0.0	14.0
32.3	25 C1 MNCK DNS-Nearshore	095-132	Severely Contaminated	36.2	17.5	18.7	11.0	0.7	3.5	14.0
58	32P EPC Bridge 4	PONAR	Severely Contaminated	36.0	25.5	10.6	10.3	0.2	16.7	8.8
51.1	17 C1 EPNC-Inner	040-080	Severely Contaminated	35.4	28.0	9.4	7.7	1.7	0.0	28.0
2.6	59C2 Nickelson South Slip -dup	152-201	Severely Contaminated	35.1	15.7	19.4	11.2	8.2	8.6	9.1
3.5	59C1 Stenson Club	213-224	Severely Contaminated	34.7	25.4	9.3	5.9	3.4	4.4	21.0
15	89C1 Wyandotte Yacht Club	000-030	Severely Contaminated	33.7	21.0	12.7	14.0	7.0	10.0	11.0
49.2	ELIZABETH PARK CANAL	180-260	Severely Contaminated	32.8	15.0	17.8	7.2	10.6	0.0	15.0
15.1	89C1 Wyandotte Yacht Club	030-066	Severely Contaminated	32.6	20.4	12.3	8.0	6.9	9.4	15.0
14.1	52C1 BASF Northworks lower	030-091	Severely Contaminated	31.6	16.9	14.7	8.3	7.7	3.9	13.0
69	S11-EPM Upland	Ponar	Severely Contaminated	31.4	23.0	8.4	8.1	0.3	0.0	23.0
69.1	S11D- EPM Upland Dup.	Ponar	Severely Contaminated	31.2	23.0	8.2	8.0	0.2	0.0	23.0
14.2	52C1 BASF Northworks lower	091-152	Severely Contaminated	31.1	16.3	14.8	8.4	7.9	1.3	15.0
72	34P EPSC DOCK	PONAR	Severely Contaminated	30.8	18.5	12.3	11.9	0.4	2.3	16.0
53	46E EPNC	Eckman	Severely Contaminated	30.5	20.2	10.3	7.8	2.4	5.2	15.0

DATA RESULTS: Classification - Most Contaminated to Least Contaminated

Classification of Contaminated Sediment Sites as applied to the Trenton Channel Sediment Survey Results 1993-1998
Summed Exceedances
Not-impacted <1 < Impacted < 15 < Moderately Impacted < 30 < Severely Contaminated < 60 < Extremely Contaminated

Location Index	Trenton Channel Project Sediment Results SITE DESCRIPTION	Core length in cm	CLASSIFICATION	SIO + TOX EXCEEDANCE TOTAL	EXCEEDANCES (x over guidelines) SIO Exceedance	Tox Exceedance	Tissue Metals	Organics	Bioaccum PCBs	Hg
29	48E Monguagon Creek	Eckman	Moderately Contaminated	29.9	7.5	22.4	13.6	8.9	4.6	2.9
14	52C1 BASF Northworks lower	000-030	Moderately Contaminated	29.4	14.2	15.1	8.9	8.3	5.6	8.4
32.2	25 C1 MNCK DNS-Nearshore	051-095	Moderately Contaminated	29.3	18.3	11.1	10.9	0.5	3.3	15.0
79	CHRYSLER BAY-OUTER	000-013	Moderately Contaminated	27.9	20.4	7.5	8.4	1.1	5.4	15.0
2.5	56C2 Nicholson South Slip -dup	091-152	Moderately Contaminated	27.3	11.8	15.9	7.5	8.3	4.8	7.0
59.2	EPM-1 (S11-EPM Upland)	Eckman	Moderately Contaminated	27.0	18.0	9.0	8.9	0.1	0.0	18.0
51.2	17 C1 EPNC-Inner	080-140	Moderately Contaminated	26.5	18.0	8.5	8.3	2.3	0.0	18.0
70.2	EPM2-dup (S12- EPM Upland)	Eckman	Moderately Contaminated	26.2	17.0	9.2	8.2	0.0	0.0	17.0
98	EP2 - Mid Marina (S12)	Ponar	Moderately Contaminated	25.7	8.0	17.7	10.8	7.0	8.0	0.0
12	57P Mouth of Ecorse Creek	Ponar	Moderately Contaminated	25.6	14.8	11.1	3.0	8.1	10.8	4.0
70.1	EPM-2 (S12-EPM Mid)	Eckman	Moderately Contaminated	25.6	18.0	9.6	9.2	0.4	0.0	18.0
57	31P EPC Bridge 3	PONAR	Moderately Contaminated	24.9	17.0	7.9	7.6	0.3	0.0	17.0
18	87C1 Pontaline	000-030	Moderately Contaminated	24.5	13.2	11.3	8.3	5.1	5.7	7.5
58.1	EPM-N	Eckman	Moderately Contaminated	23.8	15.0	8.8	8.7	0.1	0.0	15.0
74.2	49E EPSC	Eckman	Moderately Contaminated	23.7	9.6	14.1	7.0	7.1	0.0	9.6
52.3	18 C1 EPNC-Lower	170-217	Moderately Contaminated	23.2	15.0	8.2	4.7	3.5	0.0	15.0
73	35P EPSC-Inlet	PONAR	Moderately Contaminated	22.5	12.0	10.5	10.1	0.4	0.0	12.0
59	33P EPC Bridge 5	PONAR	Moderately Contaminated	21.4	11.8	9.7	9.3	0.4	2.5	9.1
35.3	BLACK LAGOON-CENTER	210-229	Moderately Contaminated	20.8	14.0	6.8	4.1	2.4	0.0	14.0
32	25 C1 MNCK DNS-Nearshore	000-027	Moderately Contaminated	20.3	11.0	9.3	9.3	1.0	0.0	11.0
87	EP3 - South Marina (S13)	Ponar	Moderately Contaminated	20.2	4.8	15.4	10.1	5.3	4.8	0.0
73.1	35P EPSC-Inlet	PONAR	Moderately Contaminated	19.7	10.0	9.7	9.3	0.4	0.0	10.0
32.1	25 C1 MNCK DNS-Nearshore	027-051	Moderately Contaminated	19.2	9.5	9.7	9.4	0.3	0.0	9.5
14.3	52C1 BASF Northworks lower	152-213	Moderately Contaminated	17.3	8.9	8.4	3.3	5.2	0.0	8.9
51.3	17 C1 EPNC-Inner	140-175	Moderately Contaminated	16.9	12.0	4.9	3.8	1.0	0.0	12.0
82	38P Above Humbug Marina	PONAR	Moderately Contaminated	15.7	8.7	7.0	8.8	0.2	0.0	8.7
85	EP1 - Upland (S11)	Ponar	Moderately Contaminated	15.3	3.8	11.4	7.9	3.5	3.8	0.0

DATA RESULTS: Classification - Most Contaminated to Least Contaminated

Classification of Contaminated Sediment Sites as applied to the Trenton Channel Sediment Survey Results 1993-1998

Summed Exceedances

Not-Impacted <1 < Impacted < 15 < Moderately Impacted < 30 < Severely Contaminated < 60 < Extremely Contaminated

Location Index	Trenton Channel Project Sediment Results SITE DESCRIPTION	Core length in cm	CLASSIFICATION	BIO + TOX EXCEEDANCE TOTAL	BIO Exceedance	Tox Exceedance	EXCEEDANCES (x over guidelines) Toxics Metals	Organics	Bioaccum PCBs	Hg
5.1	65P Mud Island SW	Ponar	Impacted	14.3	6.1	8.2	4.0	3.2	2.9	3.3
83	S9 - Chrysler Bay	Ponar	Impacted	14.1	4.2	9.9	7.9	2.0	4.2	0.0
45	44P ONS from Bouy R "26"	PONAR	Impacted	13.8	6.5	7.3	7.3	0.0	0.0	6.5
48	28P Deadhead Cove	PONAR	Impacted	13.9	7.0	6.8	6.6	0.2	3.0	7.0
46	26P Riverside Hospital	PONAR	Impacted	13.5	5.9	7.9	7.4	0.5	0.0	5.8
48.1	26PC2	PONAR	Impacted	13.4	6.7	6.7	6.5	0.2	0.0	6.7
55	29P EPC Bridge 1	PONAR	Impacted	12.1	4.0	8.1	8.1	0.0	0.0	4.0
11	82P Grassy Island SE	Ponar	Impacted	10.2	4.6	5.6	5.4	2.2	1.3	3.3
10	81P Grassy Island SW	Ponar	Impacted	9.8	5.1	4.6	3.9	2.1	1.2	3.9
19	43P Portofino Slip	PONAR	Impacted	8.9	3.2	5.7	4.8	1.1	0.0	3.2
6.1	60C1 Mud Island -South side	000-030	Impacted	8.2	5.5	2.8	1.6	1.3	3.2	2.3
44	41P NE of Bouy R "18"	PONAR	Impacted	8.2	4.0	4.2	1.8	0.5	1.7	2.3
6.2	60C1 Mud Island -South side	030-091	Impacted	8.1	6.6	1.5	1.5	0.0	4.9	1.7
91	39P Swan Island-North	PONAR	Impacted	7.5	3.8	3.7	3.1	0.6	0.0	3.8
7	53C1 Grassy Island NW	000-030	Impacted	6.3	3.3	3.0	3.0	0.1	0.0	3.3
8	54C1 Grassy Island NE	000-034	Impacted	5.5	3.4	2.0	1.8	0.2	1.8	1.6
6.3	60C1 Mud Island -South side	091-137	Impacted	5.4	3.9	1.5	1.5	0.0	3.1	0.8
13	58C1 Mouth of Ecorse Creek	000-030	Impacted	5.3	3.4	1.9	1.9	0.0	3.4	0.0
4.1	64P Mud Island Northside	Ponar	Impacted	5.2	1.3	3.8	3.8	1.4	0.5	0.8
9	83P Grassy Island W	Ponar	Impacted	4.8	1.4	3.4	3.0	1.4	0.0	1.4
80	37P Chry Bay Marsh Inlet	PONAR	Impacted	4.6	1.8	2.8	2.8	0.0	0.0	1.8
20	42P Pt. Hennepin	PONAR	Impacted	4.4	2.2	2.2	1.9	0.3	0.0	2.2
43	40P East of Bouy N "9"	PONAR	Impacted	4.3	1.8	2.5	2.3	0.2	0.0	1.8
56	30P EPC Bridge 2	PONAR	Impacted	3.9	1.8	2.1	2.1	0.0	0.0	1.8
33.1	21 C1 MNCK ONS-Offshore	027-051	Impacted	3.8	2.3	1.5	1.5	0.0	0.0	2.3
84	CELERON ISLAND	000-043	Impacted	3.1	1.8	1.5	1.4	0.1	0.0	1.8
78	CHRYSLER BAY-INNER	000-030	Impacted	3.1	2.0	1.1	1.1	0.0	0.0	2.0
21.2	15 C1 T.C. North Marsh	082-100	Impacted	2.1	0.0	2.1	2.1	0.0	0.0	0.0
17	68E N of Pt. Hennepin	Eckman	Impacted	2.1	0.8	1.3	1.1	0.1	0.0	0.8
16	68P N of Pt. Hennepin	Ponar	Impacted	2.1	0.7	1.4	1.0	0.4	0.0	0.7
21	15 C1 T.C. North Marsh	000-022	Impacted	2.0	0.0	2.0	2.0	0.0	0.0	0.0
79.1	CHRYSLER BAY-OUTER	013-061	Impacted	1.9	0.0	1.9	1.9	0.0	0.0	0.0
7.1	53C1 Grassy Island NW	030-071	Impacted	1.8	0.3	1.5	1.3	0.2	0.0	0.3
21.1	15 C1 T.C. North Marsh	022-082	Impacted	1.8	0.0	1.8	1.8	0.0	0.0	0.0
78.2	CHRYSLER BAY-INNER	058-079	Impacted	1.7	0.0	1.7	1.7	0.0	0.0	0.0
60	EP MARINA - OUTSIDE	000-020	Impacted	1.7	0.0	1.7	1.7	0.0	0.0	0.0
84.2	CELERON ISLAND	074-107	Impacted	1.6	0.0	1.6	1.6	0.0	0.0	0.0
31	FI - Fighting Island	Ponar	Impacted	1.5	0.2	1.3	1.2	0.1	0.2	0.0
81	EP MARINA - UPLAND	000-008	Impacted	1.5	0.0	1.5	1.5	0.0	0.0	0.0
84.1	CELERON ISLAND	043-074	Impacted	1.5	0.0	1.5	1.5	0.0	0.0	0.0
78.1	CHRYSLER BAY-INNER	030-058	Impacted	1.5	0.0	1.5	1.5	0.0	0.0	0.0
33	21 C1 MNCK ONS-Offshore	000-027	Impacted	1.2	0.0	1.2	1.2	0.0	0.0	0.0
38.2	BLACK LAGOON-EAST	133-182	Non-Impacted	0.9	0.0	0.9	0.9	0.0	0.0	0.0
37	BLACK LAGOON-EAST	000-055	Non-Impacted	0.8	0.0	0.8	0.8	0.0	0.0	0.0
37.3	BLACK LAGOON-EAST	166-229	Non-Impacted	0.8	0.0	0.8	0.8	0.0	0.0	0.0
37.2	BLACK LAGOON-EAST	103-166	Non-Impacted	0.7	0.0	0.7	0.7	0.0	0.0	0.0
38.1	BLACK LAGOON-EAST	035-133	Non-Impacted	0.7	0.0	0.7	0.7	0.0	0.0	0.0
37.1	BLACK LAGOON-EAST	055-103	Non-Impacted	0.7	0.0	0.7	0.7	0.0	0.0	0.0
38	BLACK LAGOON-EAST	000-035	Non-Impacted	0.7	0.0	0.7	0.7	0.0	0.0	0.0

N
ND

TLI Project: **52366** Method 8290 PCDD/PCDF Analysis (
Client Sample: **BASF-DUP1** Analysis File: **T0058**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/2000**	Spike File:	**SPMIT32S**
TLI ID:	**274-99-4A**	Date Extracted:	**11/21/2000**	ICal:	**TF57140**
		Date Analyzed:	**11/25/2000**	ConCal:	**T005815**
Sample Size:	**1.060 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005817**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**JMM**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	EMPC		37.8			
1,2,3,7,8-PeCDD	95.5			1.42	29:42	
1,2,3,4,7,8-HxCDD	68.8			1.21	32:49	
1,2,3,6,7,8-HxCDD	749			1.16	32:54	
1,2,3,7,8,9-HxCDD	304			1.21	33:12	
1,2,3,4,6,7,8-HpCDD	9340			1.07	36:06	
1,2,3,4,6,7,8,9-OCDD	61700			0.81	39:41	E
2,3,7,8-TCDF	358			0.84	24:39	
1,2,3,7,8-PeCDF	ND	19.9				
2,3,4,7,8-PeCDF	163			1.49	29:21	
1,2,3,4,7,8-HxCDF	255			1.32	32:07	
1,2,3,6,7,8-HxCDF	EMPC		75.5			
2,3,4,6,7,8-HxCDF	94.3			1.43	32:42	
1,2,3,7,8,9-HxCDF	EMPC		63.1			
1,2,3,4,6,7,8-HpCDF	EMPC		179			
1,2,3,4,7,8,9-HpCDF	64.9			1.05	36:36	
1,2,3,4,6,7,8,9-OCDF	460			0.88	39:52	

Totals	Conc. (pg/L)	Number	DL	EMPC	Flags
Total TCDD	1290	2		1470	
Total PeCDD	232	2		454	
Total HxCDD	6390	6			
Total HpCDD	17200	2			
Total TCDF	5900	10		6410	
Total PeCDF	2690	6		3190	
Total HxCDF	1410	6		1600	
Total HpCDF	344	3		523	

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Printed: 09:36 11/25/20

TLI Project: 52366 Method 8290 PCDD/PCDF Analysis (
Client Sample: **BASF-DUP1** Analysis File: T0058

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	121	6.40	40%-130%	0.79	24:38	V___
$^{13}C_{12}$-2,3,7,8-TCDD	105	5.59	40%-130%	0.80	25:22	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDF	85.6	4.54	40%-130%	1.59	28:38	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDD	118	6.27	40%-130%	1.58	29:40	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	66.6	3.53	40%-130%	0.51	32:13	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	83.6	4.43	40%-130%	1.31	32:53	V___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	87.1	4.62	25%-130%	0.42	35:04	V___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	90.6	4.80	25%-130%	1.21	36:06	VRO__
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	93.4	2.48	25%-130%	0.80	39:41	V___

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,4,7,8-PeCDF	99.1	5.25	40%-130%	1.48	29:21	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	65.8	3.49	40%-130%	0.49	32:07	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	106	5.59	40%-130%	2.88	32:48	VRO__
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	61.5	3.26	25%-130%	0.42	36:34	V___

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	169	89.5	40%-130%	25:23	___

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	76.5	4.05	40%-130%	0.49	33:27	V___
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	76.0	4.03	40%-130%	0.50	32:42	V___

Recovery Standards	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.81	25:10	___
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.21	33:12	___

Data Reviewer: _____ 11/25/2000

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Printed: 09:36 11/25/20

Chromatographic Calculations For File:T005823

QC Front End.....: 1.5159
Tetra/Hexa RS Ratio: 0.7280

Initial ....Date...

Data Review By: _____ __/__/__

Calculated Noise Height: 0.05

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005823B.dbf
11/25/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
TCDF						0.65-0.89				0.860-1.077			
304-306	DC	NL				Height	0.10	0.05	0.05				
				21:22	RO	1.38	1.15	0.90	0.65	0.867			
	DC	SN		21:35	RO	0.64	0.21			0.876			
				21:50		0.86	6.29	2.90	3.39	0.886			
				22:11	RO	1.16	1.65	1.08	0.93	0.901			
				22:34		0.87	3.65	1.70	1.95	0.916			
				22:55	RO	1.03	3.13	1.83	1.77	0.930			
				23:12		0.88	3.35	1.57	1.78	0.942			
				23:36		0.76	2.70	1.17	1.53	0.958			
				23:53	RO	1.53	4.19	3.62	2.37	0.970			
				24:09		0.79	24.96	11.04	13.92	0.980			
				24:39		0.84	10.94	4.99	5.95	1.001	2378-TCDF		AN
				25:04	RO	0.99	3.54	1.54	1.56	1.018			
				25:19		0.84	2.01	0.92	1.09	1.028			
				25:29		0.88	13.58	6.34	7.24	1.035			
				25:45		0.81	45.60	20.46	25.14	1.045			
				26:05		0.85	67.13	30.88	36.25	1.059			
				26:24	RO	1.36	1.82	1.40	1.03	1.072			
	DC	WH		26:43		0.85	26.87			1.085			
304-306		16	Peaks				195.69						
13C12-TCDF						0.65-0.89				0.959-1.041			
316-318	DC	NL				Height	0.14	0.08	0.06				
	DC	WL		21:13	RO	1.24	0.58			0.861			
	DC	WL		21:48	RO	1.31	0.23			0.885			
				24:38		0.79	56.33	24.88	31.45	1.000	13C12-2378-TCDF		ISO
						Height	14.34	6.46	7.88				
	DC	WH		25:58	RO	4.39	1.04			1.054			
	DC	WH		26:07	RO	5.09	1.22			1.060			
	DC	WH		26:18	RO	3.74	0.69			1.068			
316-318		1	Peak				56.33						
---------- Above: TCDF / TCDD Follows ----------													
TCDD						0.65-0.89				0.890-1.045			
320-322	DC	NL				Height	0.07	0.04	0.03				
				22:45		0.73	17.99	7.57	10.42	0.897	1368-TCDD		AN
				23:10		0.81	7.68	3.44	4.24	0.913			
	DC	SN		23:30	RO	0.05	0.67			0.926			
	DC	SN		23:37	RO	0.24	0.21			0.931			
	DC	SN		23:47	RO	1.40	0.09			0.938			
	DC	SN		23:49	RO	1.40	0.09			0.939			
				24:10	RO	0.58	2.34	1.02	1.76	0.953			

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		24:25	RO	2.63	0.14			0.963			
	DC	SN		24:50	RO	1.20	0.18			0.979			
				25:23	RO	0.58	0.74	0.32	0.55	1.001	2378-TCDD	AN	
	DC	SN		25:43	RO	1.25	0.42			1.014			
	DC	SN		25:52	RO	0.13	0.07			1.020			
	DC	SN		26:05	RO	1.70	0.35			1.028			
	DC	SN		26:12	RO	1.00	0.19			1.033			
				26:18	RO	0.94	0.39	0.17	0.18	1.037			
	DC	SN		26:23	RO	1.20	0.27			1.040			
	DC	WH		26:36	RO	1.43	0.25			1.049			
	DC	WH		26:52		0.78	0.16			1.059			
320-322			5	Peaks			29.14						
37C1-TCDD									0.921-1.079				
328	DC	NL			Height		0.13	0.13					
	DC	WL		23:03			4.09			0.909			
	DC	WL		23:10			4.72			0.913			
				23:29			1.12	1.12		0.926			
				23:58			401.21	401.21		0.945			
				24:43			0.19	0.19		0.974			
				25:23			54.70	54.70		1.001	37C1-TCDD	CLS	
				25:47			4.81	4.81		1.016			
				25:56			0.60	0.60		1.022			
				25:59			0.73	0.73		1.024			
				26:07			0.72	0.72		1.030			
				26:10			0.64	0.64		1.032			
				26:20			0.64	0.64		1.038			
				26:36			0.37	0.37		1.049			
				26:43			4.89	4.89		1.053			
328			12	Peaks			470.62						
13C12-TCDD					0.65-0.89				0.921-1.079				
332-334	DC	NL			Height		0.48	0.45	0.03				
				25:10	0.81		687.06	307.21	379.85	0.992	13C12-1234-TCDD	RS1	
				25:22	0.80		40.40	18.01	22.39	1.000	13C12-2378-TCDD	IS1	
					Height		11.18	5.15	6.03				
				26:07	RO	99.99	0.46	67.27	0.26	1.030			
				26:17	RO	39.39	0.81	18.12	0.46	1.036			
332-334			4	Peaks			728.73						
---------- Above: TCDD / PeCDF Follows ----------													
PeCDF					1.32-1.78				0.923-1.064				
340-342	DC	NL			Height		0.08	0.04	0.04				
				26:37	RO	1.31	3.83	1.97	1.50	0.930			
	DC	SN		26:57	RO	5.33	0.08			0.941			
	DC	SN		27:05	RO	1.07	0.38			0.946			
	DC	SN		27:16	RO	2.39	0.46			0.952			
				27:23		1.52	0.58	0.35	0.23	0.956			J
	DC	SN		27:30	RO	3.75	0.10			0.960			
				27:47		1.43	6.68	3.93	2.75	0.970			
				28:02	RO	0.93	1.14	0.69	0.74	0.979			

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				28:16	RO	2.03	0.74	0.59	0.29	0.987			J
				28:22	RO	2.03	0.89	0.71	0.35	0.991			
				28:43		1.55	25.36	15.43	9.93	1.003			
				28:56		1.51	4.39	2.64	1.75	1.010			
				29:21		1.49	2.99	1.79	1.20	1.025	23478-PeCDF	AN	
				29:32	RO	2.07	2.07	1.68	0.81	1.031			
				29:58	RO	3.36	0.56	0.74	0.22	1.047			J
				30:04		1.46	8.88	5.27	3.61	1.050			
340-342			12	Peaks			58.11						
13C12-PeCDF					1.32-1.78				0.860-1.140				
352-354	DC	NL			Height		0.08	0.04	0.04				
	DC	SN		26:40	RO	0.95	0.35			0.931			
				26:49		1.43	1.19	0.70	0.49	0.937			
	DC	SN		27:05	RO	6.75	0.20			0.946			
				27:10	RO	1.00	0.69	0.27	0.27	0.949			
	DC	SN		27:47	RO	2.15	0.87			0.970			
	DC	SN		28:12	RO	2.00	0.31			0.985			
	DC	SN		28:26	RO	2.50	0.46			0.993			
				28:38		1.59	37.39	22.95	14.44	1.000	13C12-PeCDF 123	IS2	
					Height		12.98	7.81	5.17				
	DC	SN		28:56	RO	1.07	0.38			1.010			
	DC	SN		29:03	RO	5.00	0.15			1.015			
				29:21		1.48	42.83	25.58	17.25	1.025	13C12-PeCDF 234	SUR1	
				29:34		1.61	1.07	0.66	0.41	1.033			
				30:04	RO	0.94	0.56	0.34	0.36	1.050			
	DC	SN		30:10	RO	3.33	0.15			1.054			
				30:19	RO	0.87	0.44	0.27	0.31	1.059			
352-354			7	Peaks			84.17						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD					1.32-1.78				0.933-1.021				
356-358	DC	NL			Height		0.08	0.03	0.05				
	DC	SN		28:07	RO	0.03	0.20			0.948			
				28:21	RO	0.98	0.72	0.44	0.45	0.956			J
				28:37	RO	1.20	1.53	0.72	0.60	0.965			
				28:45		1.34	2.25	1.29	0.96	0.969			
				29:00	RO	3.13	0.38	0.47	0.15	0.978			J
				29:11	RO	0.73	0.74	0.45	0.62	0.984			J
	DC	SN		29:23		1.75	0.55			0.990			
	DC	SN		29:32		1.53	0.48			0.996			
				29:42		1.42	1.57	0.92	0.65	1.001	12378-PeCDD	AN	
	DC	SN		29:51	RO	0.34	0.39			1.006			
				30:09	RO	0.47	0.28	0.17	0.36	1.016			J
	DC	WH		30:29		1.33	0.21			1.028			
	DC	WH		30:33	RO	0.43	0.15			1.030			
356-358			7	Peaks			7.47						
13C12-PeCDD					1.32-1.78				0.865-1.135				
368-370	DC	NL			Height		0.16	0.13	0.03				
	DC	SN		28:01	RO	3.67	0.31			0.944			

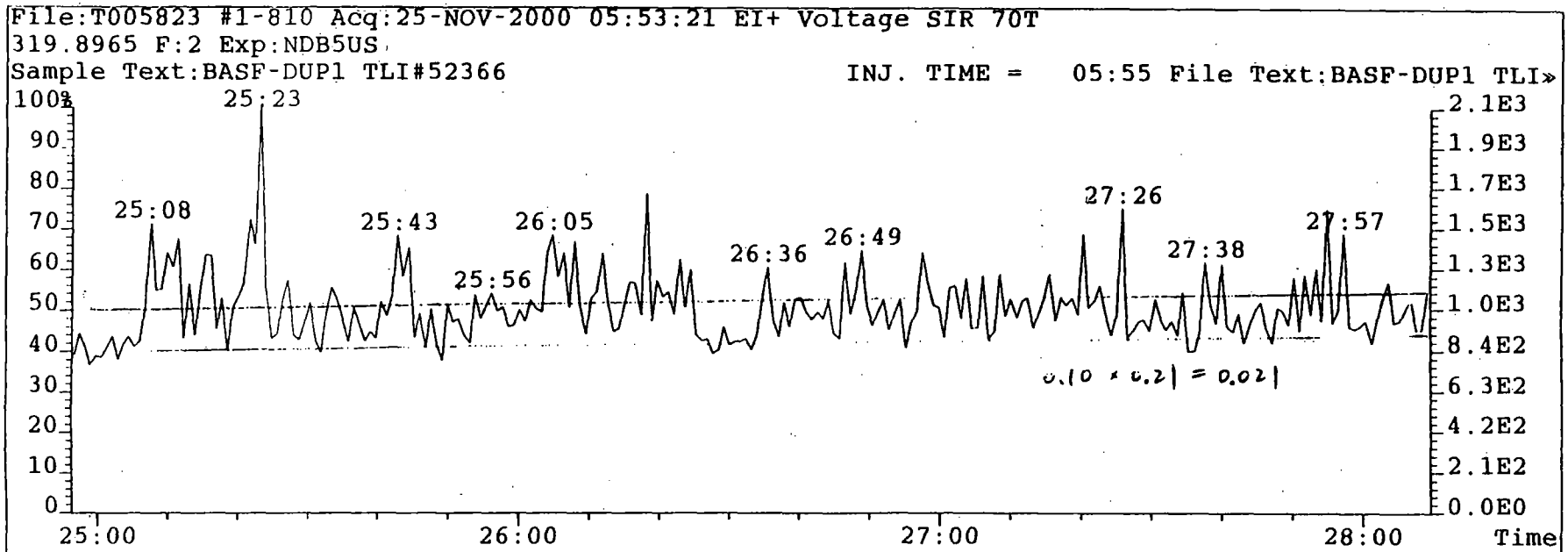
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				28:23	RO	10.37	2.40	9.75	0.94	0.957			
				29:07	RO	3.72	1.84	2.68	0.72	0.981			
				29:40		1.58	29.38	17.98	11.40	1.000	13C12-PeCDD 123	IS3	
						Height	8.76	5.04	3.72				
	DC	SN		29:53	RO	2.83	0.15			1.007			
				30:03	RO	6.46	0.89	2.26	0.35	1.013			
				30:16	RO	0.73	0.67	0.41	0.56	1.020			
				30:34	RO	4.57	0.36	0.64	0.14	1.030			
368-370			6	Peaks			35.54						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF						1.05-1.43				0.961-1.046			
374-376	DC	NL				Height	0.15	0.07	0.08				
				31:09		1.13	0.68	0.36	0.32	0.967			J
				31:17		1.36	3.23	1.86	1.37	0.971			
	DC	SN		31:34		1.08	0.25			0.980			
				31:44		1.26	6.62	3.69	2.93	0.985			
				31:59	RO	1.51	0.92	0.62	0.41	0.993			J
				32:07		1.32	5.47	3.11	2.36	0.997	123478-HxCDF	AN	
				32:14	RO	1.58	1.70	1.20	0.76	1.001	123678-HxCDF	AN	
				32:23		1.29	10.99	6.19	4.80	1.005			
				32:42		1.43	1.92	1.13	0.79	1.015	234678-HxCDF	AN	
				33:26	RO	0.85	1.05	0.58	0.68	1.038	123789-HxCDF	AN	
	DC	WH		33:56	RO	1.03	0.74			1.053			
374-376			9	Peaks			32.58						
13C12-HxCDF						0.43-0.59				0.876-1.124			
384-386	DC	NL				Height	0.37	0.18	0.19				
				32:07		0.49	38.45	12.68	25.77	0.997	13C12-HxCDF 478	SUR2	
				32:13		0.51	39.51	13.43	26.08	1.000	13C12-HxCDF 678	IS4	
						Height	13.47	4.60	8.87				
	DC	SN		32:28		0.53	0.23			1.008			
				32:42		0.50	41.10	13.75	27.35	1.015	13C12-HxCDF 234	ALT2	
				32:50	RO	1.17	0.36	0.28	0.24	1.019			
				33:10	RO	1.81	0.47	0.56	0.31	1.029			
				33:27		0.49	30.41	9.97	20.44	1.038	13C12-HxCDF 789	ALT1	
				33:39	RO	1.25	1.33	1.10	0.88	1.044			
384-386			7	Peaks			151.63						
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD						1.05-1.43				0.956-1.013			
390-392	DC	NL				Height	0.22	0.10	0.12				
				31:39		1.17	18.50	9.99	8.51	0.962			
				32:05		1.29	3.14	1.77	1.37	0.976			
				32:18		1.22	66.68	36.60	30.08	0.982			
	DC	SN		32:34	RO	0.83	0.09			0.990			
				32:49		1.21	1.15	0.63	0.52	0.998	123478-HxCDD	AN	
				32:54		1.16	12.52	6.73	5.79	1.001	123678-HxCDD	AN	
				33:12		1.21	5.14	2.81	2.33	1.010	123789-HxCDD	AN	
390-392			6	Peaks			107.13						

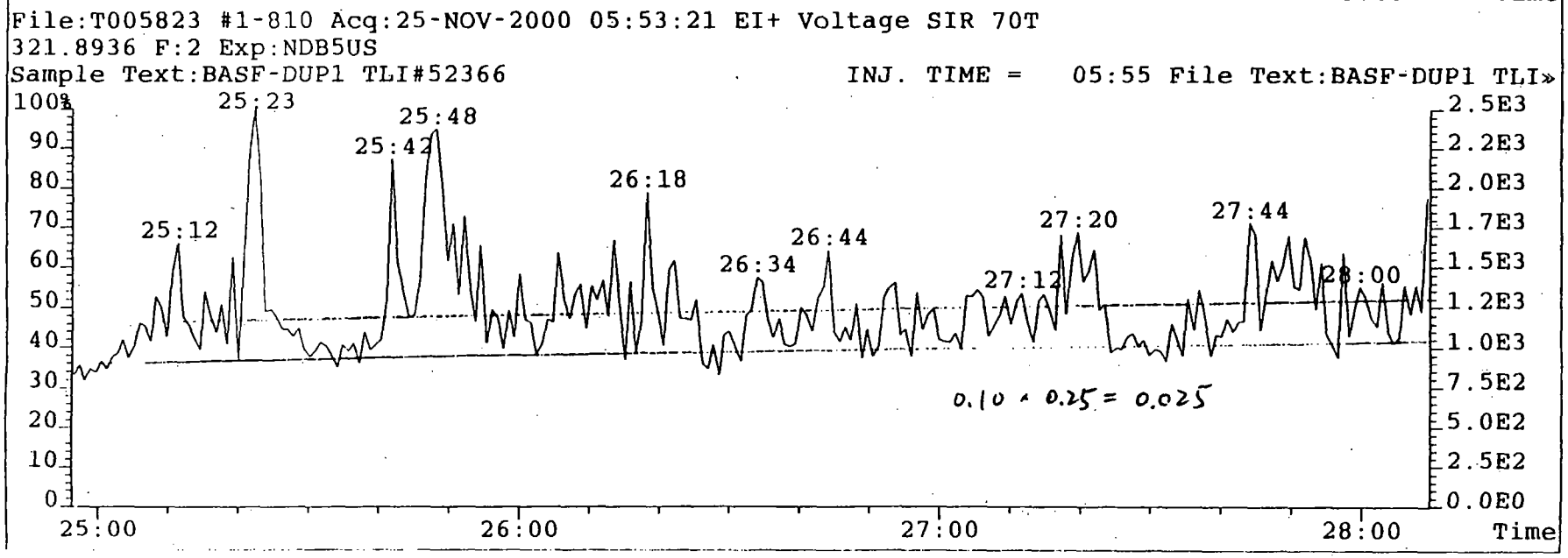
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
13C12-HxCDD				1.05-1.43						0.970-1.030			
402-404	DC	NL		Height			1.52	1.10	0.42				
	DC	WL	31:29	RO		10.07	12.59			0.957			
	DC	WL	31:47	RO		8.77	9.74			0.967			
			32:48	RO		2.88	40.52	52.18	18.09	0.997	13C12-HxCDD	478	SUR3
			32:53			1.31	31.03	17.58	13.45	1.000	13C12-HxCDD	678	IS5
				Height			9.74	5.39	4.35				
			33:00	RO		8.47	6.70	25.34	2.99	1.004			
			33:12			1.21	771.03	421.99	349.04	1.010	13C12-HxCDD	789	RS2
402-404		4	Peaks				849.28						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF				0.88-1.20						0.995-1.048			
408-410	DC	NL		Height			0.14	0.09	0.05				
			35:04	RO		1.21	4.12	2.44	2.02	1.000	1234678-HpCDF		AN
			35:19			1.05	1.29	0.66	0.63	1.007			
			35:29			1.06	4.39	2.26	2.13	1.012			
			36:36			1.05	1.15	0.59	0.56	1.044	1234789-HpCDF		AN
408-410		4	Peaks				10.95						
13C12-HpCDF				0.37-0.51						0.943-1.114			
418-420	DC	NL		Height			0.19	0.07	0.12				
			35:04			0.42	34.52	10.22	24.30	1.000	13C12-HpCDF	678	IS6
				Height			10.32	2.96	7.36				
			36:34			0.42	18.97	5.60	13.37	1.043	13C12-HpCDF	789	SUR4
418-420		2	Peaks				53.49						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20						0.974-1.005			
424-426	DC	NL		Height			0.18	0.10	0.08				
			35:21			1.00	113.11	56.60	56.51	0.979			
			36:06			1.07	134.57	69.48	65.09	1.000	1234678-HpCDD		AN
	DC	WH	36:22	RO		0.87	0.39			1.007			
424-426		2	Peaks				247.68						
13C12-HpCDD				0.88-1.20						0.972-1.028			
436-438	DC	NL		Height			1.40	1.14	0.26				
			35:15	RO		3.79	8.20	15.23	4.02	0.976			
			35:35	RO		3.00	7.22	10.61	3.54	0.986			
			36:06	RO		1.21	31.78	18.92	15.58	1.000	13C12-HpCDD	678	IS7
				Height			8.98	4.83	4.15				
			36:15	RO		3.51	33.60	57.79	16.47	1.004			
436-438		4	Peaks				80.80						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02						0.899-1.101			
442-444	DC	NL		Height			0.07	0.03	0.04				
	DC	SN	36:06	RO		1.50	0.11			0.910			
	DC	SN	36:12	RO		0.54	0.15			0.912			

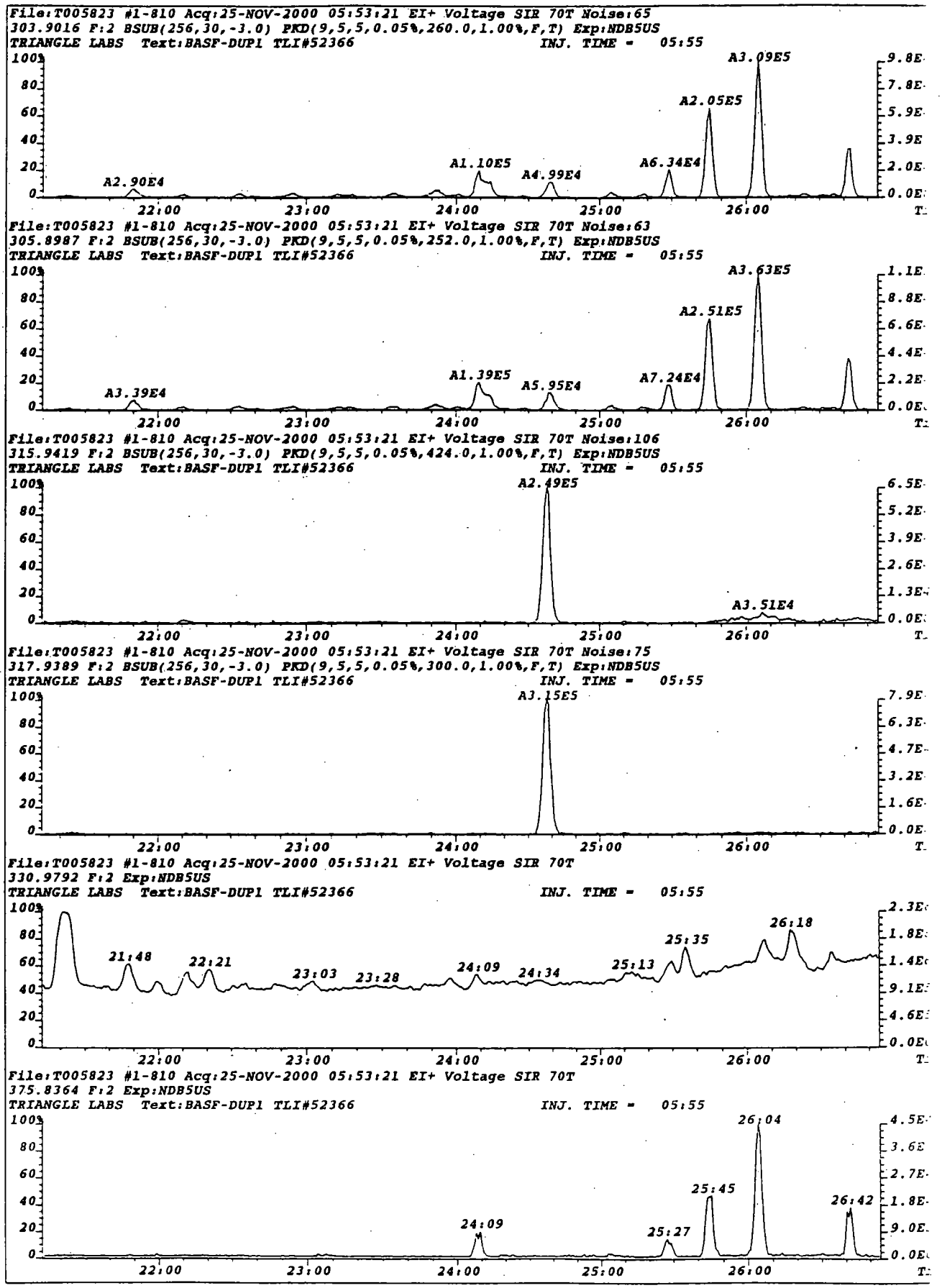
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		36:31	RO	0.44	0.08			0.920			
	DC	SN		36:57	RO	1.38	0.15			0.931			
	DC	SN		37:02		0.83	0.11			0.933			
	DC	SN		37:09		0.83	0.22			0.936			
	DC	SN		37:20	RO	1.21	0.26			0.941			
	DC	SN		37:48		0.89	0.17			0.953			
	DC	SN		37:54		0.78	0.16			0.955			
	DC	SN		38:00		1.00	0.24			0.958			
	DC	SN		38:10		1.00	0.14			0.962			
	DC	SN		39:31	RO	2.50	0.04			0.996			
	DC	SN		39:43	RO	1.67	0.23			1.001			
				39:52		0.88	3.57	1.67	1.90	1.005	OCDF		AN
	DC	SN		40:08	RO	0.75	0.06			1.011			
	DC	SN		41:16	RO	1.20	0.09			1.040			
	DC	SN		42:04		1.00	0.16			1.060			
	DC	SN		42:57	RO	0.50	0.11			1.082			
	DC	SN		43:03	RO	0.47	0.15			1.085			
442-444			1 Peak				3.57						
OCDD				0.76-1.02						0.899-1.101			
458-460	DC	NL				Height	0.08	0.04	0.04				
				39:41		0.81	398.29	178.11	220.18	1.000	OCDD		AN E
				39:58	RO	1.50	0.26	0.21	0.14	1.007			
458-460			2 Peaks				398.55						
13C12-OCDD				0.76-1.02						0.996-1.004			
470-472	DC	NL				Height	4.92	3.73	1.19				
				39:41		0.80	26.65	11.84	14.81	1.000	13C12-OCDD		IS8
						Height	6.42	2.99	3.43				
				39:48	RO	3.54	9.81	18.39	5.19	1.003			
470-472			2 Peaks				36.46						

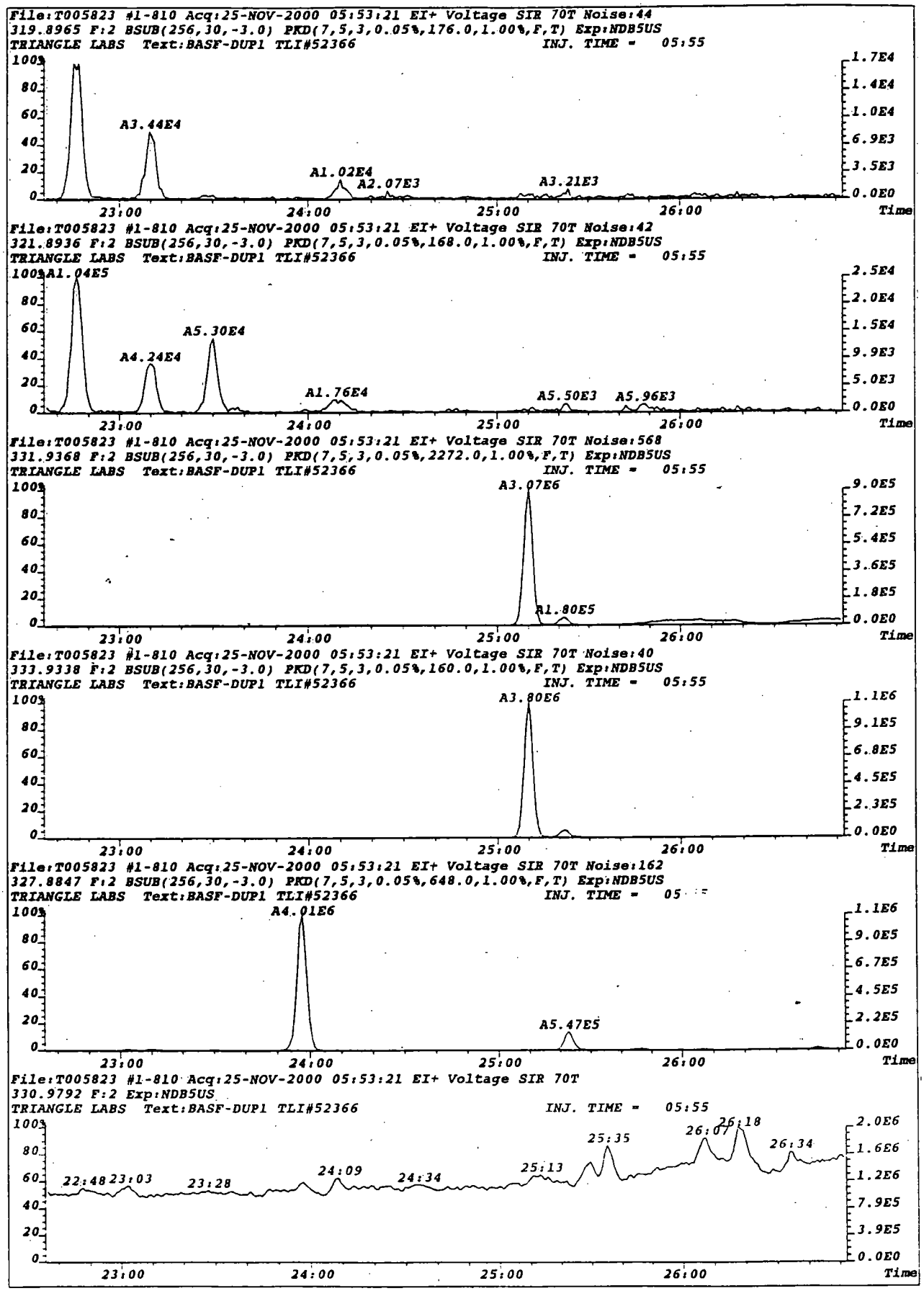
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

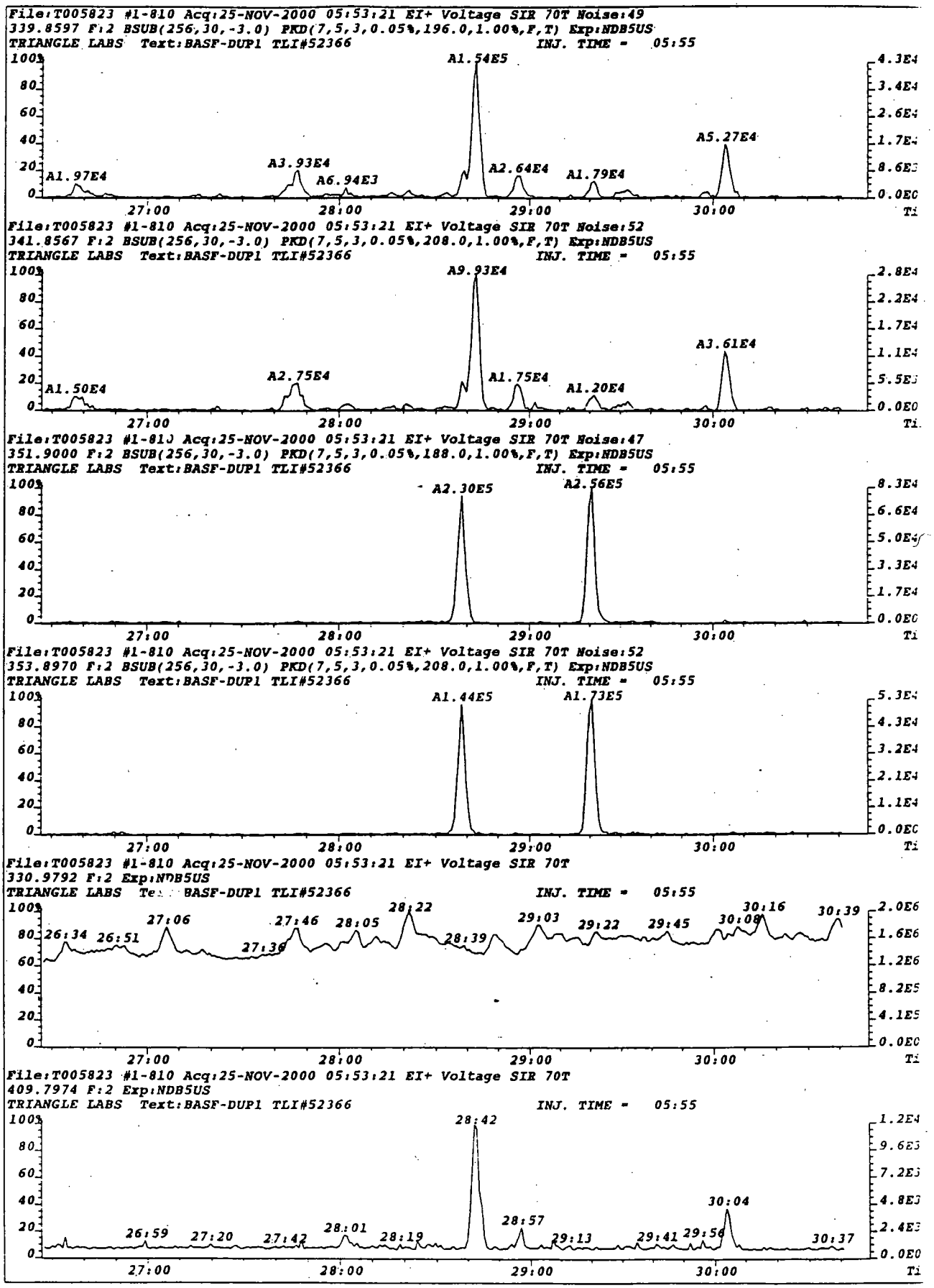
*** End of Report ***

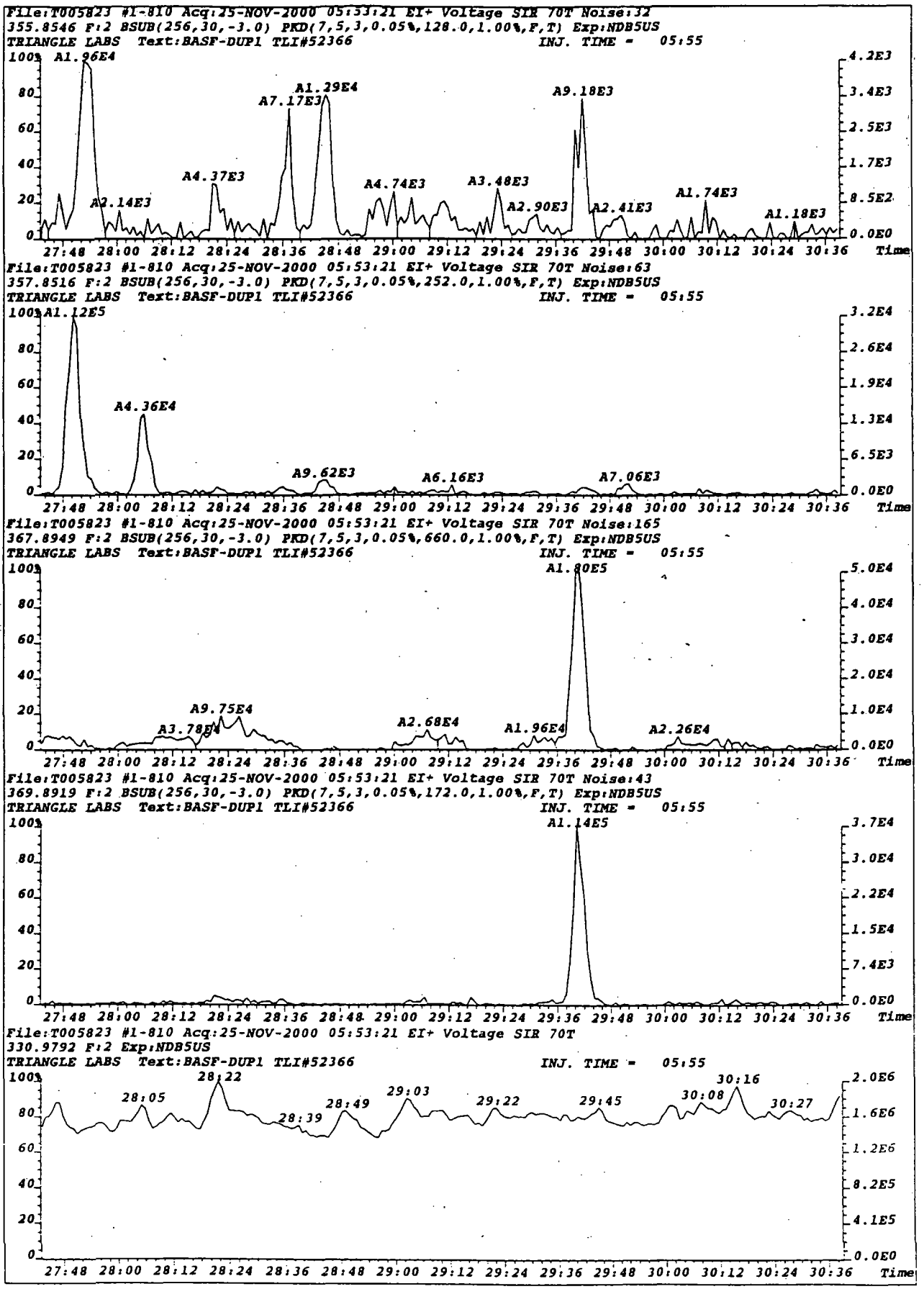

File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55 File Text:BASF-DUP1 TLI»
25:23
25:08
25:43
26:05
25:56
26:36
26:49
27:26
27:38
27:57
0.10 × 0.21 = 0.021
Time


File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55 File Text:BASF-DUP1 TLI»
25:23
25:48
25:42
25:12
26:18
26:44
26:34
27:20
27:12
27:44
28:00
0.10 × 0.25 = 0.025
Time


File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:65
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,260.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A2.90E4
A1.10E5
A4.99E4
A6.34E4
A2.05E5
A3.09E5
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:63
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A3.39E4
A1.39E5
A5.95E4
A7.24E4
A2.51E5
A3.63E5
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:106
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,424.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A2.49E5
A3.51E4
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:75
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,300.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A3.15E5
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
21:48
22:21
23:03
23:28
24:09
24:34
25:13
25:35
26:18
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
24:09
25:27
25:45
26:04
26:42
22:00
23:00
24:00
25:00
26:00


File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:44
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A3.44E4
A1.02E4
A2.07E3
A3.21E3
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:42
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A1.04E5
A5.30E4
A4.24E4
A1.76E4
A5.50E3
A5.96E3
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:568
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2272.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A3.07E6
A1.80E5
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:40
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A3.80E6
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:162
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,648.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05
A4.01E6
A5.47E5
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
22:48
23:03
23:28
24:09
24:34
25:13
25:35
26:07
26:18
26:34
23:00
24:00
25:00
26:00
Time


File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:49
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A1.54E5
A5.27E4
A3.93E4
A2.64E4
A1.79E4
A1.97E4
A6.94E3
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:52
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A9.93E4
A3.61E4
A2.75E4
A1.75E4
A1.20E4
A1.50E4
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:47
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,188.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A2.30E5
A2.56E5
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:52
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A1.44E5
A1.73E5
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
26:34 26:51 27:06 27:36 27:46 28:05 28:22 28:39 29:03 29:22 29:45 30:08 30:16 30:39
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
28:42
30:04
26:59 27:20 27:42 28:01 28:19 28:57 29:13 29:41 29:56 30:37
27:00 28:00 29:00 30:00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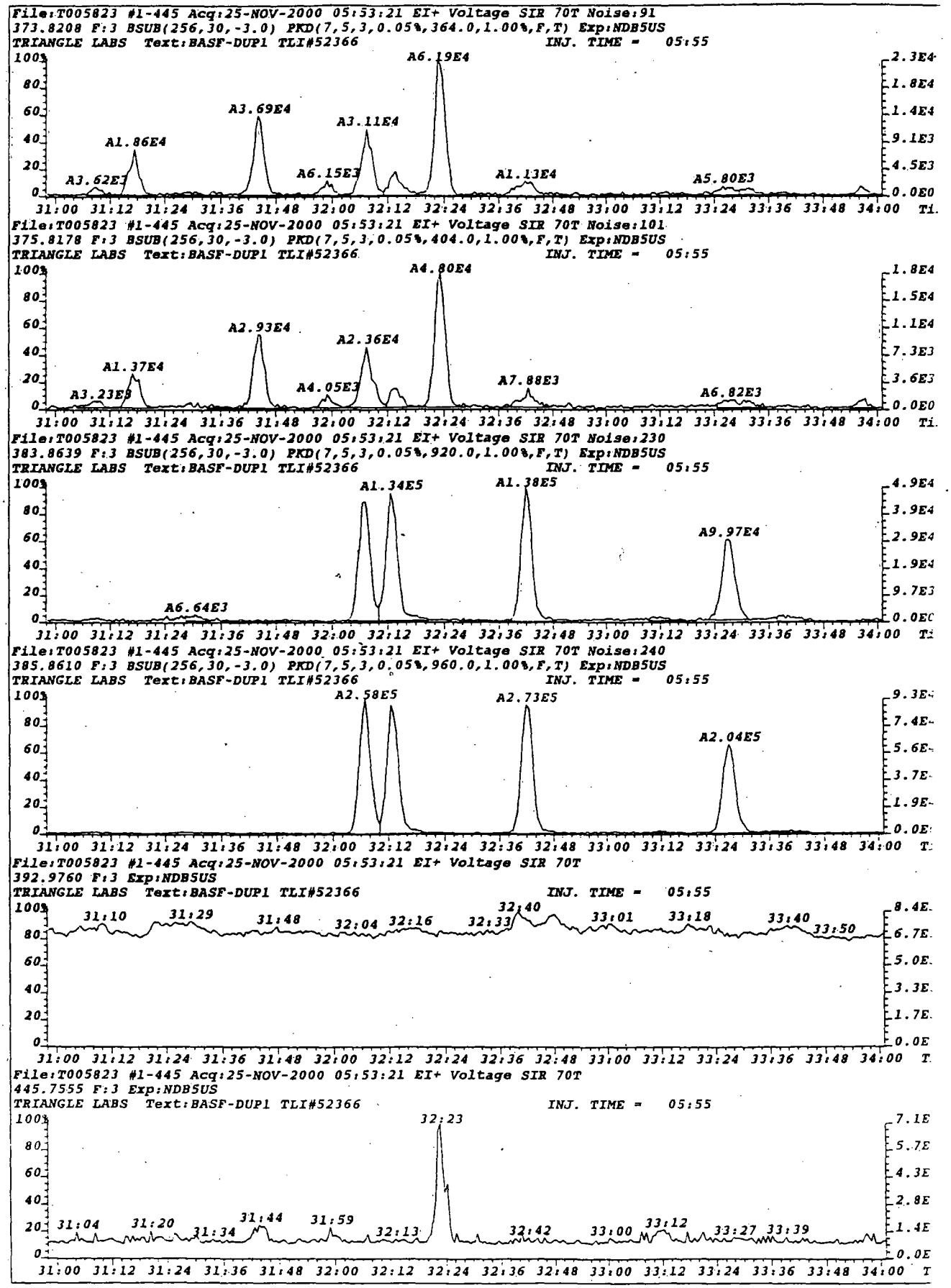
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,128.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A1.96E4
A2.14E3
A4.37E3
A7.17E3
A1.29E4
A4.74E3
A3.48E3
A2.90E3
A9.18E3
A2.41E3
A1.74E3
A1.18E3
Time
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:63
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A1.12E5
A4.36E4
A9.62E3
A6.16E3
A7.06E3
Time
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:165
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,660.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A1.80E5
A9.75E4
A3.78E4
A2.68E4
A1.96E4
A2.26E4
Time
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:43
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A1.14E5
Time
File:T005823 #1-810 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
28:05
28:22
28:39
28:49
29:03
29:22
29:45
30:08
30:16
30:27
Time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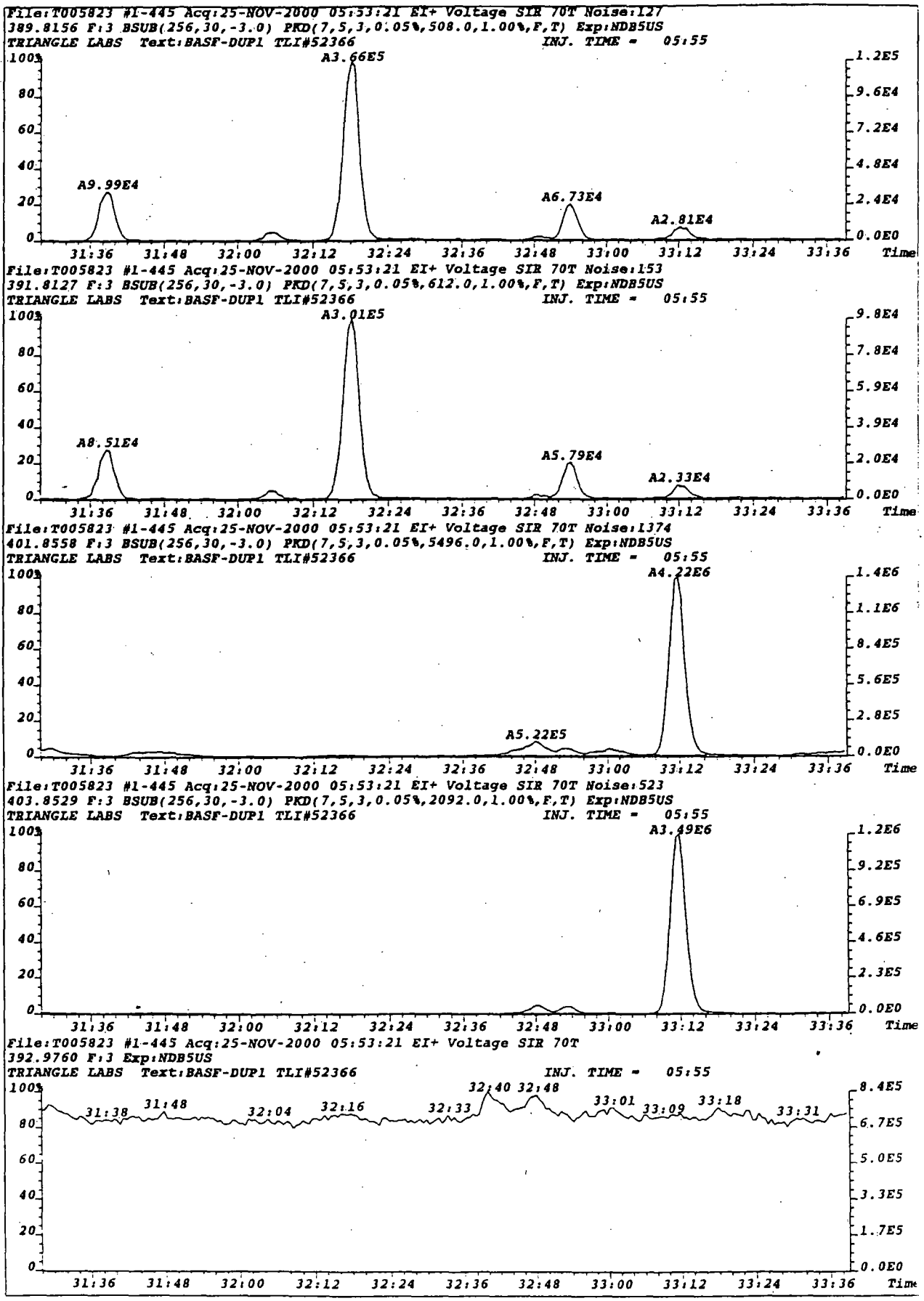
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,364.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A6.19E4
A3.69E4
A3.11E4
A1.86E4
A3.62E3
A6.15E3
A1.13E4
A5.80E3
File:T005823 #1-445 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:101
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,404.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A4.80E4
A2.93E4
A2.36E4
A1.37E4
A3.23E3
A4.05E3
A7.88E3
A6.82E3
File:T005823 #1-445 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:230
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,920.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A1.34E5
A1.38E5
A9.97E4
A6.64E3
File:T005823 #1-445 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:240
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,960.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A2.58E5
A2.73E5
A2.04E5
File:T005823 #1-445 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
File:T005823 #1-445 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
32:23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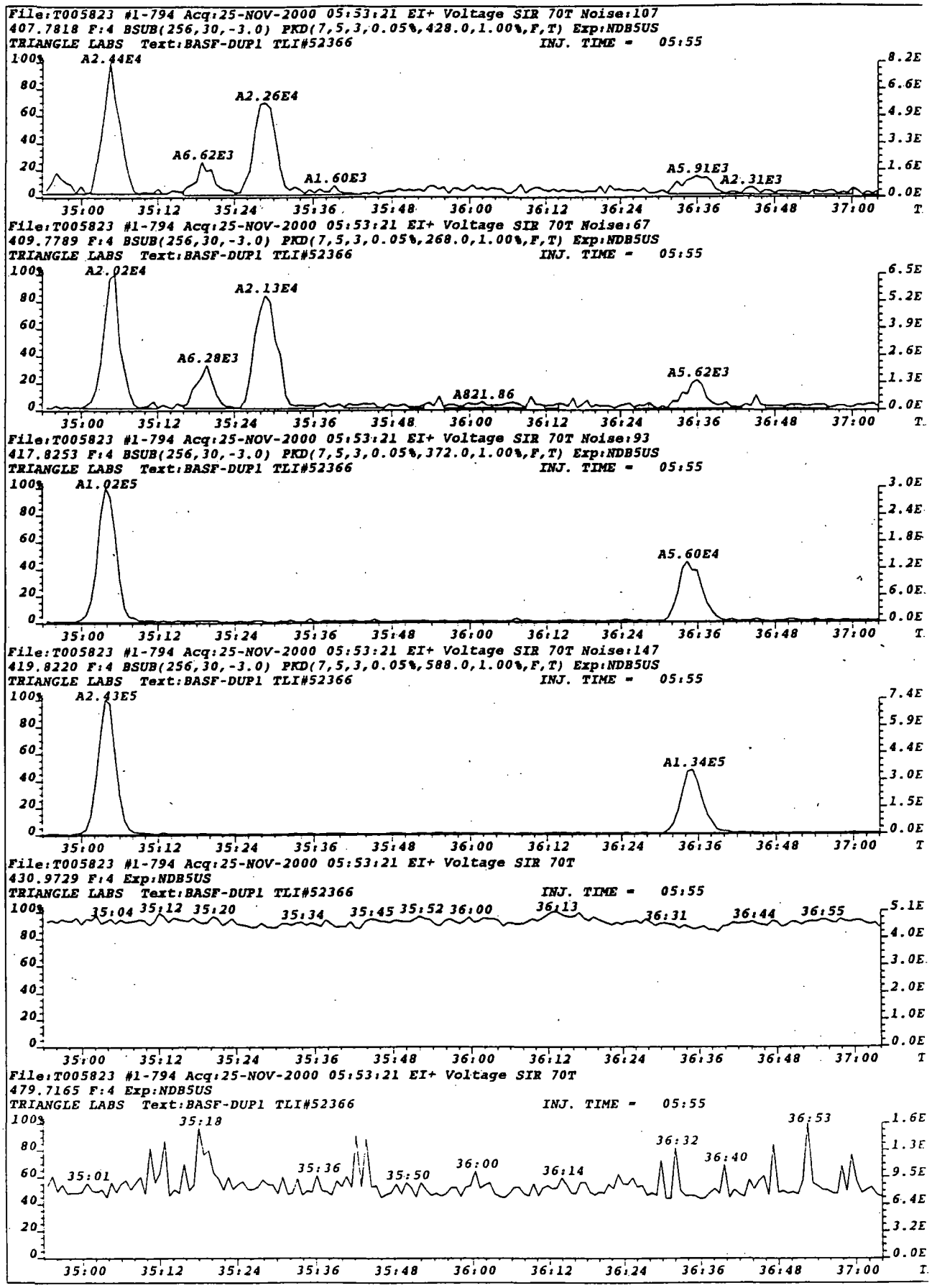
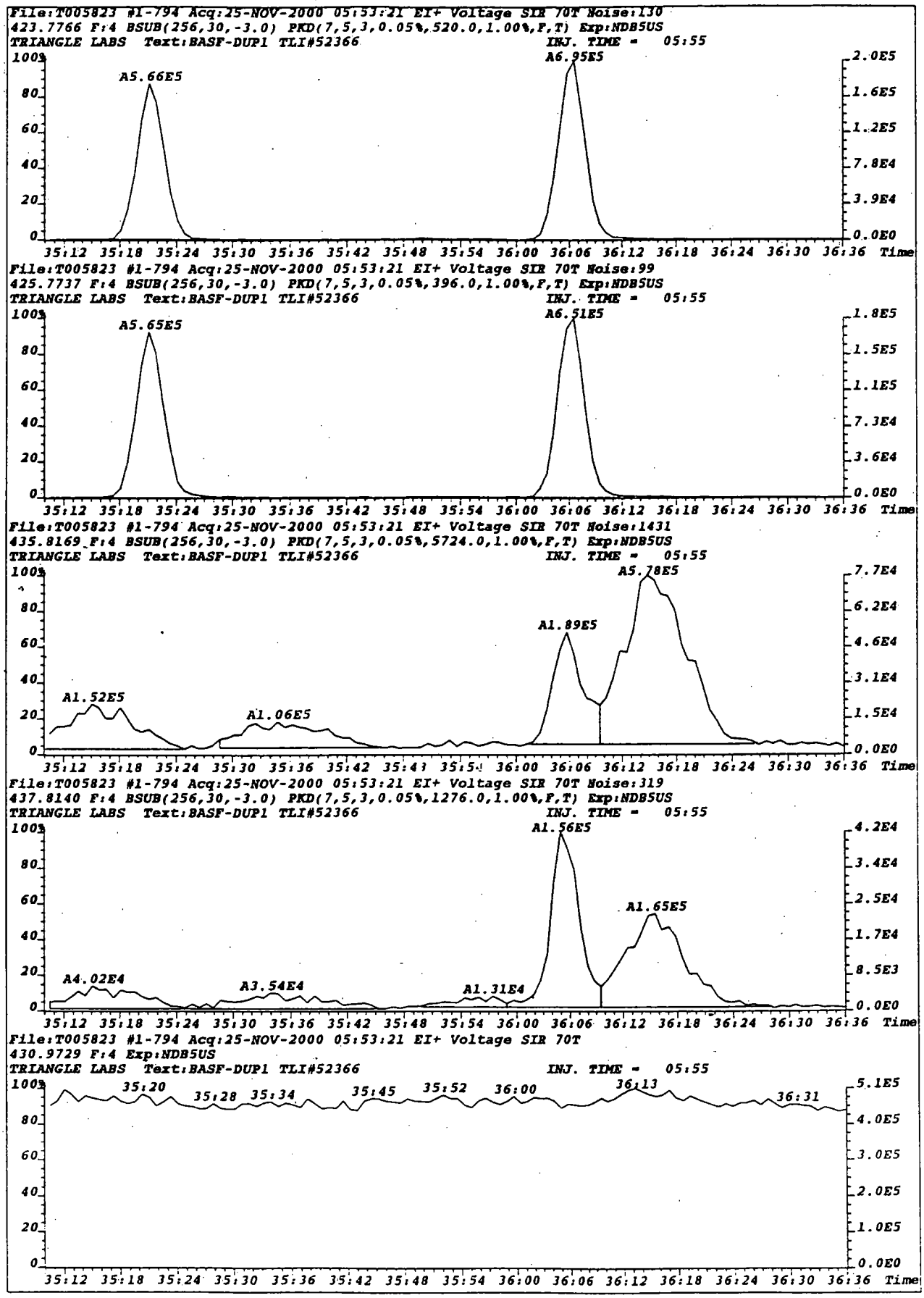
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,508.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A3.66E5
A9.99E4
A6.73E4
A2.81E4
File:T005823 #1-445 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:153
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,612.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A3.01E5
A8.51E4
A5.79E4
A2.33E4
File:T005823 #1-445 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:1374
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,5496.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A4.22E6
A5.22E5
File:T005823 #1-445 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:523
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2092.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A3.49E6
File:T005823 #1-445 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
31:38 31:48 32:04 32:16 32:33 32:40 32:48 33:01 33:09 33:18 33:31
31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 Time


File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:107
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,428.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A2.44E4
A2.26E4
A6.62E3
A1.60E3
A5.91E3
A2.31E3
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:67
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,268.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A2.02E4
A2.13E4
A6.28E3
A821.86
A5.62E3
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:93
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,372.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A1.02E5
A5.60E4
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:147
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,588.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A2.43E5
A1.34E5
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
35:18
35:01
35:36
35:50
36:00
36:14
36:32
36:40
36:53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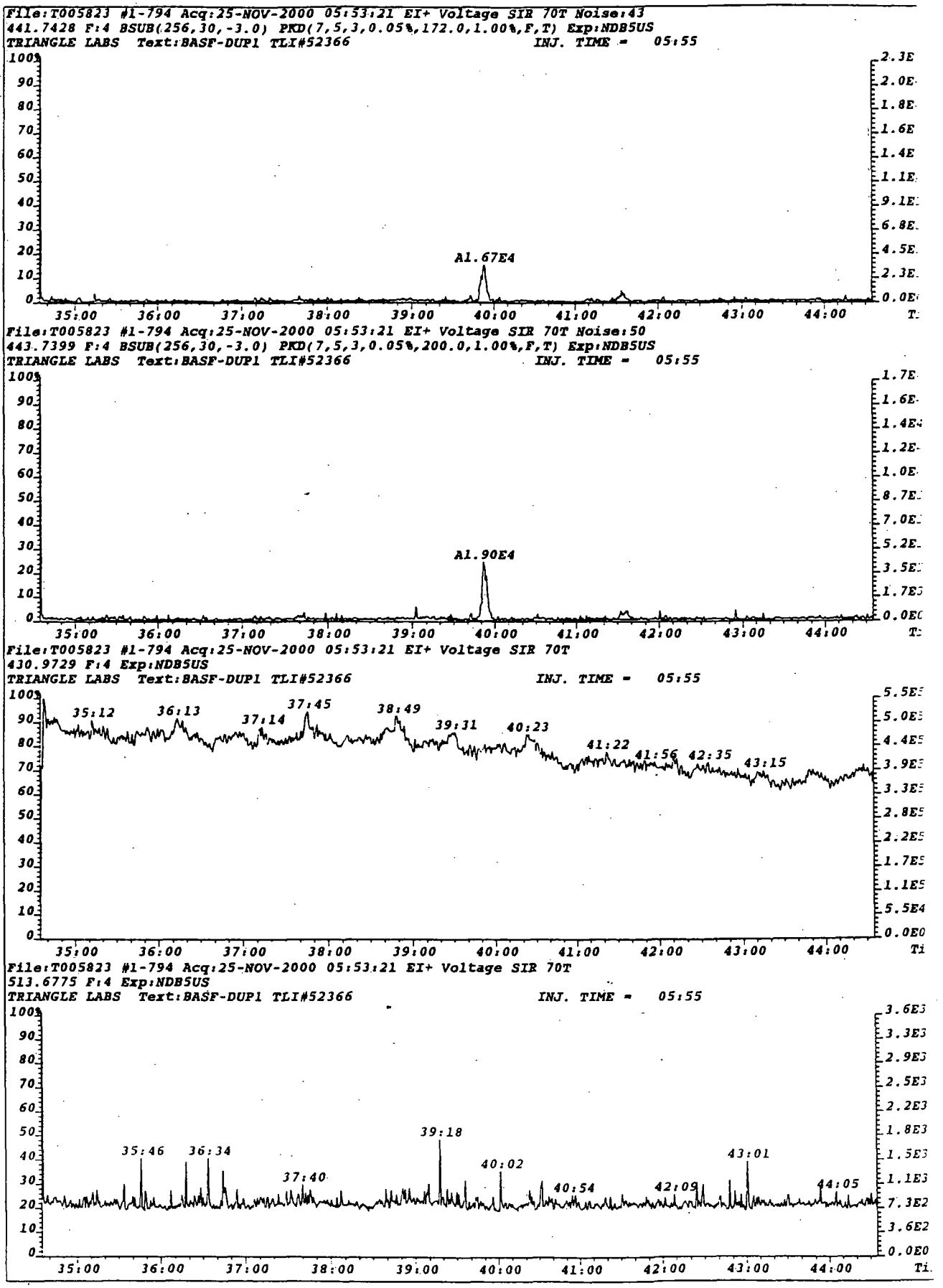
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,520.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A5.66E5
A6.95E5
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:99
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,396.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A5.65E5
A6.51E5
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:1431
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,5724.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A5.78E5
A1.89E5
A1.52E5
A1.06E5
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:319
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1276.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
A1.56E5
A1.65E5
A4.02E4
A3.54E4
A1.31E4
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366
INJ. TIME = 05:55
35:20
35:28
35:34
35:45
35:52
36:00
36:13
36:31
35:12 35:18 35:24 35:30 35:36 35:42 35:48 35:54 36:00 36:06 36:12 36:18 36:24 36:30 36:36 Time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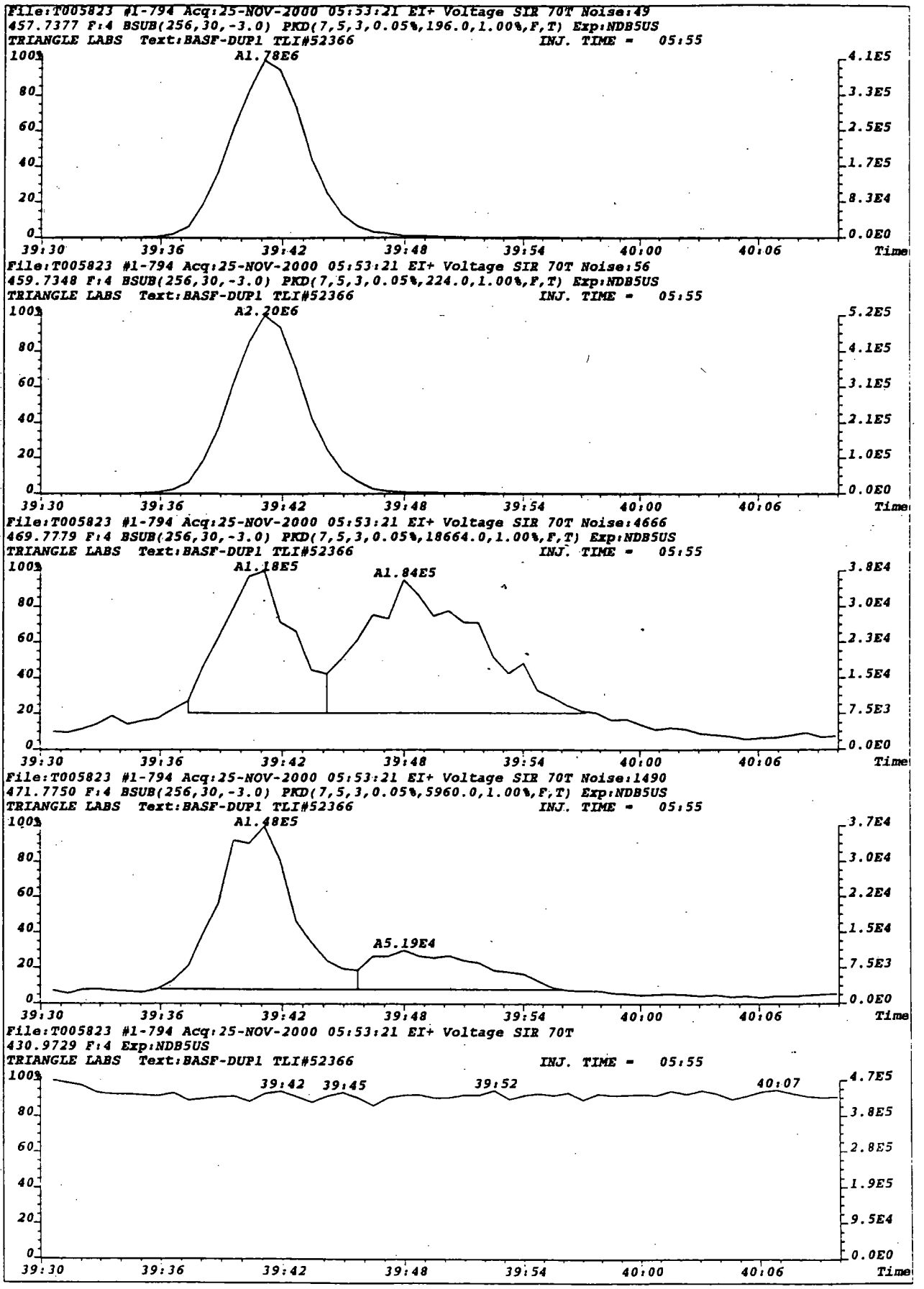
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A1.67E4
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:50
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A1.90E4
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
35:12
36:13
37:14
37:45
38:49
39:31
40:23
41:22
41:56
42:35
43:15
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
35:46
36:34
37:40
39:18
40:02
40:54
42:09
43:01
44:05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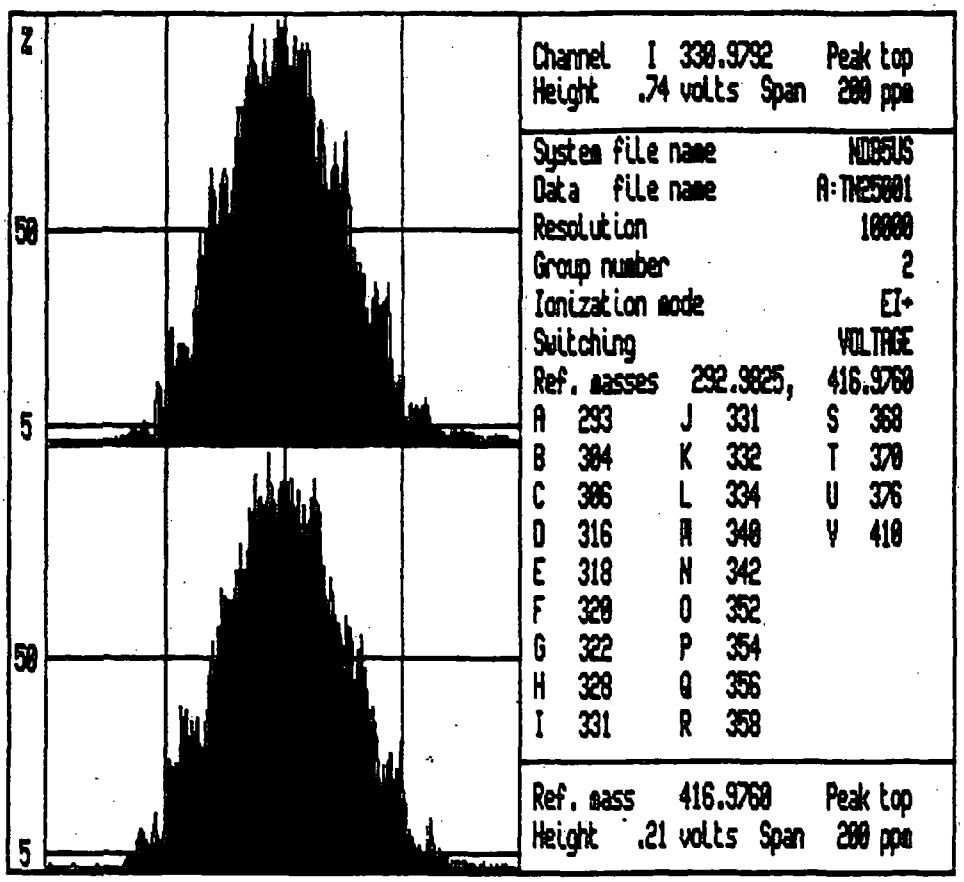
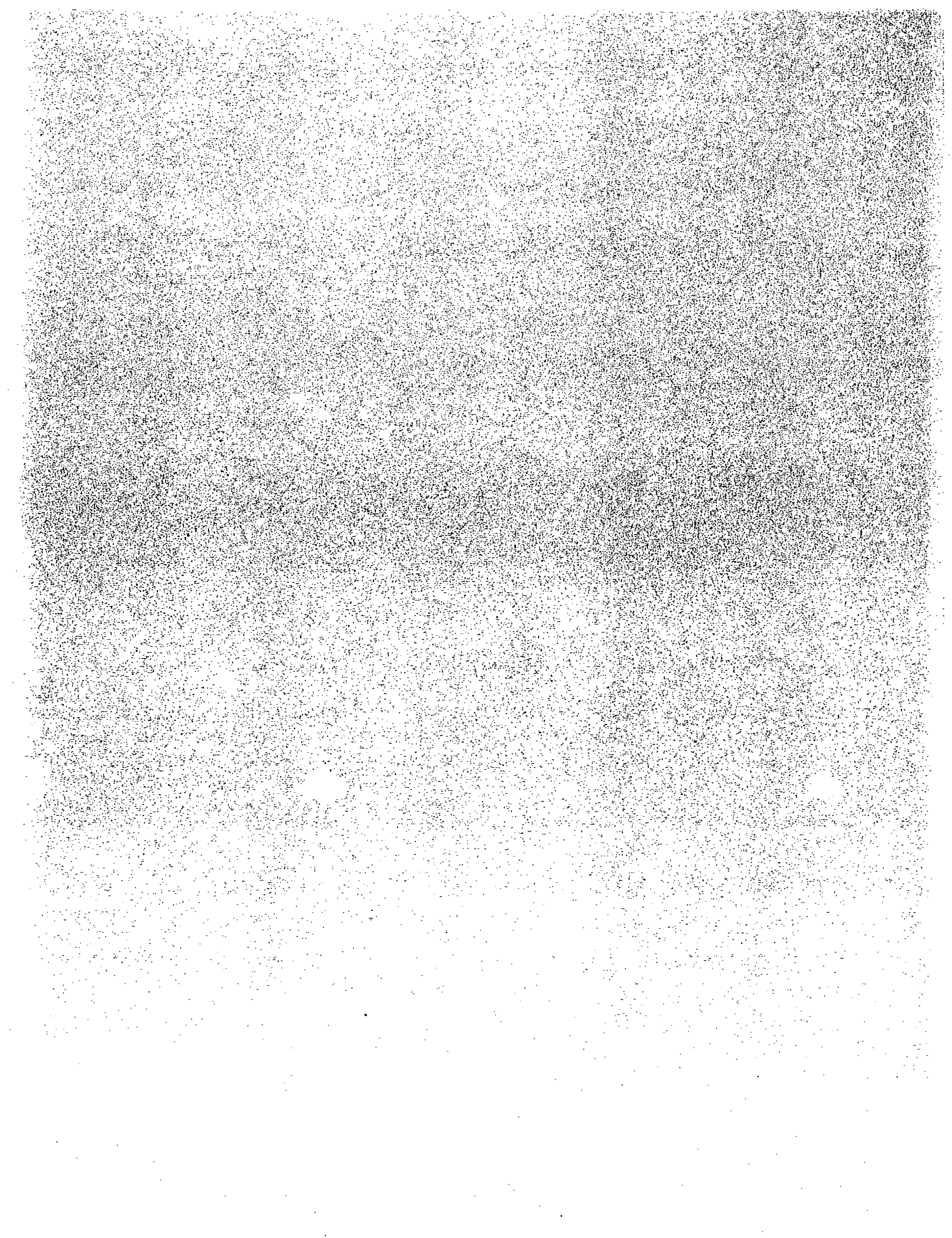
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A1.78E6
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:56
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,224.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A2.20E6
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:4666
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,18664.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A1.18E5
A1.84E5
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T Noise:1490
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,5960.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
A1.48E5
A5.19E4
File:T005823 #1-794 Acq:25-NOV-2000 05:53:21 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-DUP1 TLI#52366 INJ. TIME = 05:55
39:42 39:45 39:52 40:07
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time


Z
50
5
50
5
Channel I 330.9792 Peak top
Height .74 volts Span 200 ppm
System file name NIOSUS
Data file name A:TNE5001
Resolution 10000
Group number 2
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 416.9760
A 293 J 331 S 368
B 304 K 332 T 370
C 306 L 334 U 376
D 316 M 340 V 410
E 318 N 342
F 320 O 352
G 322 P 354
H 328 Q 356
I 331 R 358
Ref. mass 416.9760 Peak top
Height .21 volts Span 200 ppm



TLI Project: 52366 Method 8290 PCDD/PCDF Analysis (
Client Sample: BASF-FIELD BLANK Analysis File: T0058

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/2000	Spike File:	SPMIT32S
TLI ID:	274-99-6A	Date Extracted:	11/21/2000	ICal:	TF57140
		Date Analyzed:	11/25/2000	ConCal:	T005815
Sample Size:	1.060 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005817	% Lipid:	n/a
GC Column:	DB-5	Analyst:	JMM	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	ND	1.2				
1,2,3,7,8-PeCDD	ND	0.8				
1,2,3,4,7,8-HxCDD	ND	0.6				
1,2,3,6,7,8-HxCDD	ND	0.6				
1,2,3,7,8,9-HxCDD	ND	0.6				
1,2,3,4,6,7,8-HpCDD	EMPC		0.68			J
1,2,3,4,6,7,8,9-OCDD	EMPC		9.2			J
2,3,7,8-TCDF	ND	0.8				
1,2,3,7,8-PeCDF	EMPC		1.2			J
2,3,4,7,8-PeCDF	ND	0.7				
1,2,3,4,7,8-HxCDF	1.1			1.43	32:06	JB
1,2,3,6,7,8-HxCDF	EMPC		0.24			J
2,3,4,6,7,8-HxCDF	EMPC		0.92			JB
1,2,3,7,8,9-HxCDF	ND	0.6				
1,2,3,4,6,7,8-HpCDF	1.2			1.11	35:05	J
1,2,3,4,7,8,9-HpCDF	EMPC		0.32			J
1,2,3,4,6,7,8,9-OCDF	EMPC		2.8			JB

Totals	Conc. (pg/L)	Number	DL	EMPC	Flags
Total TCDD	ND		1.2		
Total PeCDD	ND		0.8		
Total HxCDD	EMPC			1.9	
Total HpCDD	EMPC			0.68	
Total TCDF	ND		0.8		
Total PeCDF	0.47	1		5.0	
Total HxCDF	1.1	1		2.5	
Total HpCDF	1.2	1		1.5	

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TLI Project: 52366 Method 8290 PCDD/PCDF Analysis
Client Sample: **BASF-FIELD BLANK** Analysis File: **T0058**

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	1530	80.9	40%-130%	0.75	24:38	
$^{13}C_{12}$-2,3,7,8-TCDD	1490	78.9	40%-130%	0.80	25:22	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1800	95.5	40%-130%	1.51	28:37	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	2450	130	40%-130%	1.51	29:40	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1330	70.6	40%-130%	0.51	32:13	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1580	83.9	40%-130%	1.26	32:53	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1660	88.0	25%-130%	0.43	35:04	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1490	78.9	25%-130%	1.05	36:05	
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	2220	58.9	25%-130%	0.83	39:40	

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,4,7,8-PeCDF	2140	113	40%-130%	1.48	29:20	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1370	72.9	40%-130%	0.50	32:07	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1470	77.8	40%-130%	1.16	32:48	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1670	88.3	25%-130%	0.41	36:34	

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	158	83.8	40%-130%	25:23	

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1930	102	40%-130%	0.51	33:26	
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1600	84.9	40%-130%	0.51	32:41	

Recovery Standards	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.82	25:10	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.20	33:12	

Data Reviewer: _____ 11/25/2000

MIT3_PSR v1.00, LARS 6.

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Printed: 09:38 11/25/20

Chromatographic Calculations For File:T005824

QC Front End.....: 0.6764
Tetra/Hexa RS Ratio: 0.5518

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Initial ....Date...

Data Review By: _____ ___/___/___

Calculated Noise Height: 0.01

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005824B.dbf
11/25/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
TCDF						0.65-0.89				0.860-1.077			
304-306		DC	NL			Height	0.07	0.04	0.03				
		DC	SN	24:28		0.86	0.13			0.993			
304-306			0	Peaks			0.00						
13C12-TCDF						0.65-0.89				0.959-1.041			
316-318		DC	NL			Height	0.06	0.03	0.03				
				24:14		0.88	0.92	0.43	0.49	0.984			
				24:38		0.75	200.16	85.83	114.33	1.000	13C12-2378-TCDF	IS0	
						Height	55.77	24.31	31.46				
				25:04	RO	0.58	1.06	0.46	0.80	1.018			
316-318			3	Peaks			202.14						

---------- Above: TCDF / TCDD Follows ----------

TCDD						0.65-0.89				0.890-1.045			
320-322		DC	NL			Height	0.06	0.03	0.03				
320-322			0	Peaks			0.00						
37Cl-TCDD										0.921-1.079			
328		DC	NL			Height	0.04	0.04					
				23:46			0.05	0.05		0.937			
				23:51			0.06	0.06		0.940			
				23:58			0.11	0.11		0.945			
				24:44			0.04	0.04		0.975			
				24:55			0.08	0.08		0.982			
				25:00			0.09	0.09		0.986			
				25:23			14.38	14.38		1.001	37Cl-TCDD		CLS
				25:48			0.03	0.03		1.017			
				25:56			0.06	0.06		1.022			
				26:07			0.19	0.19		1.030			
		DC	SN	26:41			0.03			1.052			
				26:52			0.09	0.09		1.059			
328			11	Peaks			15.18						
13C12-TCDD						0.65-0.89				0.921-1.079			
332-334		DC	NL			Height	0.08	0.05	0.03				
				24:09	RO	1.23	0.23	0.16	0.13	0.952			
				25:10		0.82	192.89	86.69	106.20	0.992	13C12-1234-TCDD	RS1	
				25:22		0.80	160.03	71.07	88.96	1.000	13C12-2378-TCDD	IS1	
						Height	42.87	19.62	23.25				
				25:46	RO	1.08	0.64	0.39	0.36	1.016			
				26:19		0.71	0.29	0.12	0.17	1.037			
332-334			5	Peaks			354.08						

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
---------- Above: TCDD / PeCDF Follows ----------													
PeCDF						1.32-1.78			0.923-1.064				
340-342	DC	NL				Height	0.06	0.03	0.03				
				28:40	RO	0.89	0.13	0.08	0.09	1.002	12378-PeCDF	AN	J
				29:05	RO	0.33	0.10	0.06	0.18	1.016			J
				29:10		1.50	0.05	0.03	0.02	1.019			J
				29:21	RO	1.00	0.26	0.10	0.10	1.026			J
340-342			4	Peaks			0.54						
13C12-PeCDF						1.32-1.78			0.860-1.140				
352-354	DC	NL				Height	0.06	0.03	0.03				
				28:37		1.51	220.94	133.04	87.90	1.000	13C12-PeCDF 123	IS2	
						Height	70.20	42.05	28.15				
				28:56		1.45	2.03	1.20	0.83	1.011			
				29:20		1.48	259.29	154.90	104.39	1.025	13C12-PeCDF 234	SUR1	
				30:20		1.58	2.63	1.61	1.02	1.060			
352-354			4	Peaks			484.89						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD						1.32-1.78			0.933-1.021				
356-358	DC	NL				Height	0.06	0.03	0.03				
	DC	SN		27:46	RO	2.00	0.15		0.936				
	DC	SN		28:51		1.50	0.10		0.972				
	DC	WH		30:26	RO	1.00	0.20		1.026				
356-358			0	Peaks			0.00						
13C12-PeCDD						1.32-1.78			0.865-1.135				
368-370	DC	NL				Height	0.06	0.03	0.03				
				28:35	RO	0.85	0.67	0.41	0.48	0.963			
				28:45	RO	0.77	0.44	0.27	0.35	0.969			
				29:40		1.51	171.13	102.90	68.23	1.000	13C12-PeCDD 123	IS3	
						Height	56.98	34.26	22.72				
				30:10	RO	1.23	0.33	0.16	0.13	1.017			
368-370			4	Peaks			172.57						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF						1.05-1.43			0.961-1.046				
374-376	DC	NL				Height	0.06	0.03	0.03				
				32:06		1.43	0.17	0.10	0.07	0.996	123478-HxCDF	AN	J
				32:15	RO	6.50	0.04	0.13	0.02	1.001	123678-HxCDF	AN	J
	DC	SN		32:28		1.33	0.07			1.008			
	DC	SN		32:29	RO	0.20	0.02			1.008			
				32:36	RO	0.67	0.04	0.02	0.03	1.012			J
				32:42	RO	0.73	0.14	0.08	0.11	1.015	234678-HxCDF	AN	J
	DC	SN		32:54	RO	2.50	0.04			1.021			
	DC	SN		32:57	RO	2.50	0.04			1.023			
	DC	WH		33:44	RO	1.00	0.07			1.047			
374-376			4	Peaks			0.39						

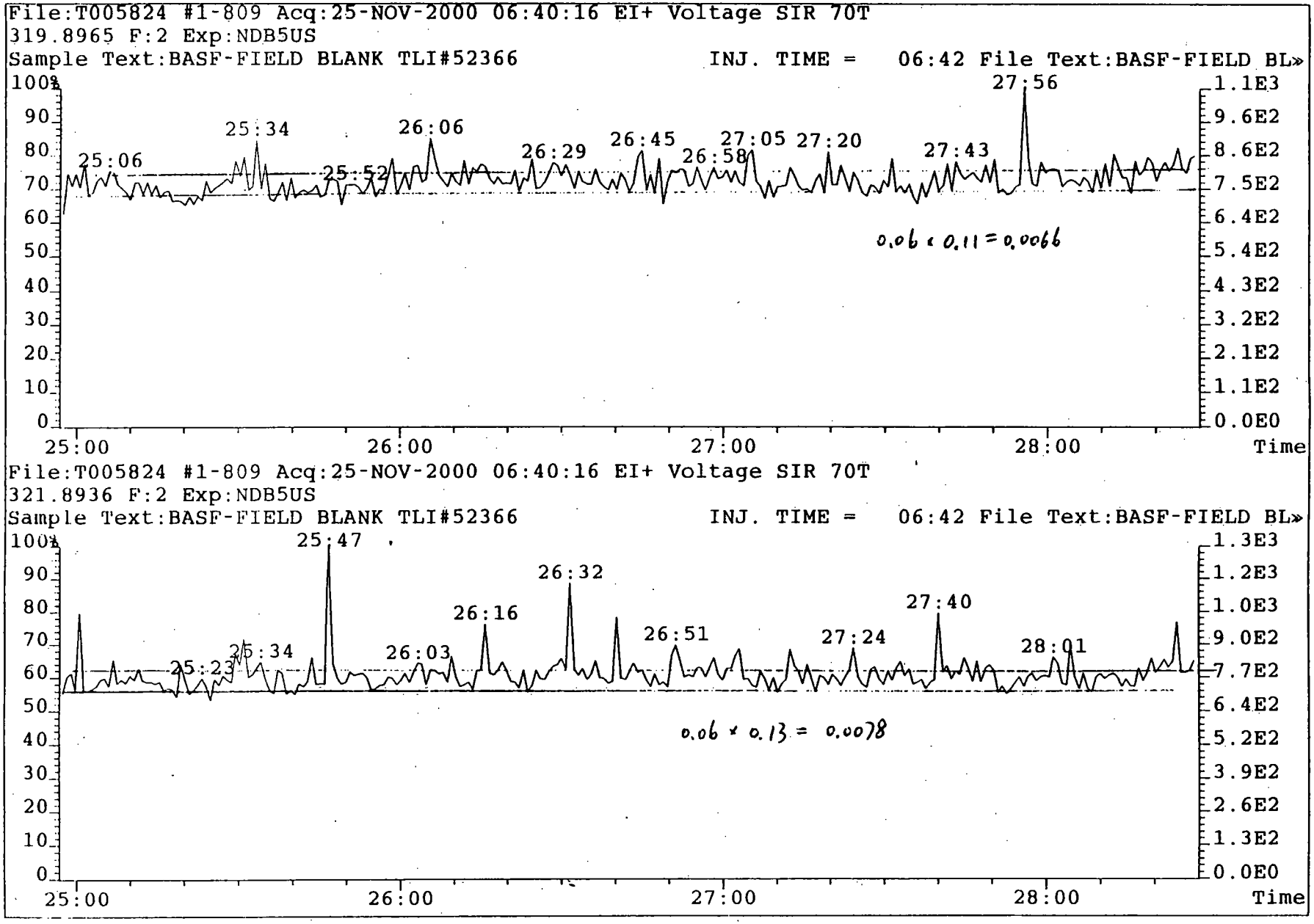
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
13C12-HxCDF						0.43-0.59			0.876-1.124				
384-386	DC	NL				Height	0.06	0.03	0.03				
				31:09		0.49	0.76	0.25	0.51	0.967			
				31:17		0.53	0.58	0.20	0.38	0.971			
				32:07		0.50	299.87	100.61	199.26	0.997	13C12-HxCDF 478	SUR2	
				32:13		0.51	294.85	99.65	195.20	1.000	13C12-HxCDF 678	IS4	
						Height	100.12	34.15	65.97				
				32:26		0.54	0.37	0.13	0.24	1.007			
				32:31	RO	0.69	0.80	0.27	0.39	1.009			
				32:41		0.51	323.64	108.90	214.74	1.014	13C12-HxCDF 234	ALT2	
				33:04	RO	0.78	0.41	0.14	0.18	1.026			
				33:11	RO	0.41	0.21	0.07	0.17	1.030			
				33:26		0.51	286.81	96.26	190.55	1.038	13C12-HxCDF 789	ALT1	
				33:43	RO	0.21	0.21	0.07	0.33	1.047			
384-386			11 Peaks				1,208.51						
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD						1.05-1.43			0.956-1.013				
390-392	DC	NL				Height	0.05	0.02	0.03				
	DC	SN		31:34	RO	9.00	0.02			0.960			
	DC	SN		31:39	RO	1.00	0.07			0.962			
	DC	SN		31:41	RO	0.75	0.05			0.964			
				31:47	RO	0.75	0.05	0.03	0.04	0.967			J
	DC	SN		32:32	RO	2.00	0.04			0.989			
				32:41	RO	1.88	0.18	0.15	0.08	0.994			J
	DC	WH		33:26	RO	4.00	0.07			1.017			
	DC	WH		33:39	RO	1.00	0.07			1.023			
390-392			2 Peaks				0.23						
13C12-HxCDD						1.05-1.43			0.970-1.030				
402-404	DC	NL				Height	0.09	0.06	0.03				
				32:17		1.22	0.91	0.50	0.41	0.982			
				32:48		1.16	210.39	113.14	97.25	0.997	13C12-HxCDD 478	SUR3	
				32:53		1.26	219.19	122.06	97.13	1.000	13C12-HxCDD 678	IS5	
						Height	74.55	40.86	33.69				
				33:12		1.20	287.71	157.10	130.61	1.010	13C12-HxCDD 789	RS2	
402-404			4 Peaks				718.20						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF						0.88-1.20			0.995-1.048				
408-410	DC	NL				Height	0.07	0.04	0.03				
				35:05		1.11	0.19	0.10	0.09	1.000	1234678-HpCDF	AN	J
	DC	SN		36:31	RO	0.63	0.10			1.041			
				36:35	RO	0.33	0.04	0.02	0.06	1.043	1234789-HpCDF	AN	J
	DC	WH		37:01	RO	1.75	0.08			1.056			
408-410			2 Peaks				0.23						
13C12-HpCDF						0.37-0.51			0.943-1.114				
418-420	DC	NL				Height	0.09	0.05	0.04				
				35:04		0.43	245.50	73.36	172.14	1.000	13C12-HpCDF 678	IS6	
						Height	73.47	22.28	51.19				

Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				35:22	RO	0.79	0.62	0.19	0.24	1.009			
				36:34		0.41	191.78	56.19	135.59	1.043	13C12-HpCDF 789	SUR4	
418-420			3	Peaks			437.90						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD						0.88-1.20				0.974-1.005			
424-426	DC	NL					Height	0.06	0.03	0.03			
				36:07	RO	0.20	0.06	0.03	0.15	1.001	1234678-HpCDD	AN	J
	DC	WH		36:20	RO	2.50	0.04			1.007			
424-426			1	Peak			0.06						
13C12-HpCDD						0.88-1.20				0.972-1.028			
436-438	DC	NL					Height	0.12	0.07	0.05			
				35:11	RO	3.75	0.24	0.45	0.12	0.975			
				35:20	RO	1.79	0.29	0.25	0.14	0.979			
				36:05		1.05	194.80	99.76	95.04	1.000	13C12-HpCDD 678	IS7	
							Height	54.75	28.37	26.38			
				36:32	RO	1.63	0.82	0.65	0.40	1.012			
436-438			4	Peaks			196.15						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF						0.76-1.02				0.899-1.101			
442-444	DC	NL					Height	0.06	0.03	0.03			
	DC	SN		39:26	RO	0.36	0.08			0.994			
				39:50	RO	1.60	0.19	0.16	0.10	1.004	OCDF	AN	J
	DC	WH		44:14	RO	1.80	0.09			1.115			
442-444			1	Peak			0.19						
OCDD						0.76-1.02				0.899-1.101			
458-460	DC	NL					Height	0.06	0.03	0.03			
				39:40	RO	0.68	0.53	0.25	0.37	1.000	OCDD	AN	J
	DC	SN		39:49	RO	0.38	0.06			1.004			
458-460			1	Peak			0.53						
13C12-OCDD						0.76-1.02				0.996-1.004			
470-472	DC	NL					Height	0.13	0.09	0.04			
				39:40		0.83	236.60	107.10	129.50	1.000	13C12-OCDD	IS8	
							Height	56.82	25.72	31.10			
	DC	WP		39:58	RO	0.62	0.62			1.008			
470-472			1	Peak			236.60						

Compound/
M_Z.... QC.Log Omit Why ..RT. OK Ratio Total.Area/Ht Area/Ht.Peak1 Area/Ht.Peak2 Rel.RT Compound.Name.. ID.. Flags.

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***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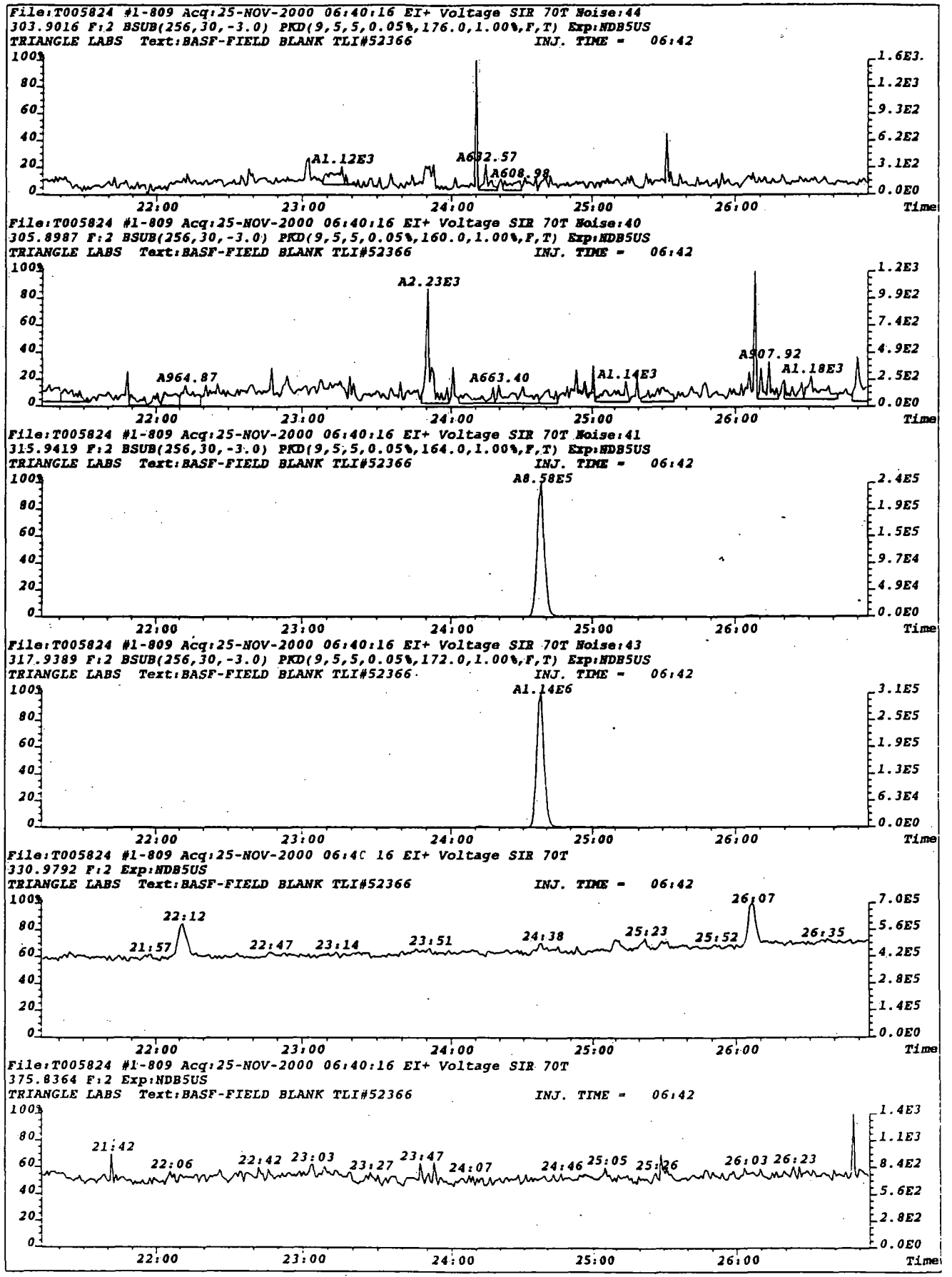
319.8965 F:2 Exp:NDB5US
Sample Text:BASF-FIELD BLANK TLI#52366
INJ. TIME = 06:42 File Text:BASF-FIELD BL»
25:06
25:34
25:52
26:06
26:29
26:45
26:58
27:05
27:20
27:43
27:56
0.06 x 0.11 = 0.0066
25:00
26:00
27:00
28:00
Time
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:BASF-FIELD BLANK TLI#52366
INJ. TIME = 06:42 File Text:BASF-FIELD BL»
25:23
25:34
25:47
26:03
26:16
26:32
26:51
27:24
27:40
28:01
0.06 x 0.13 = 0.0078
25:00
26:00
27:00
28:00
Time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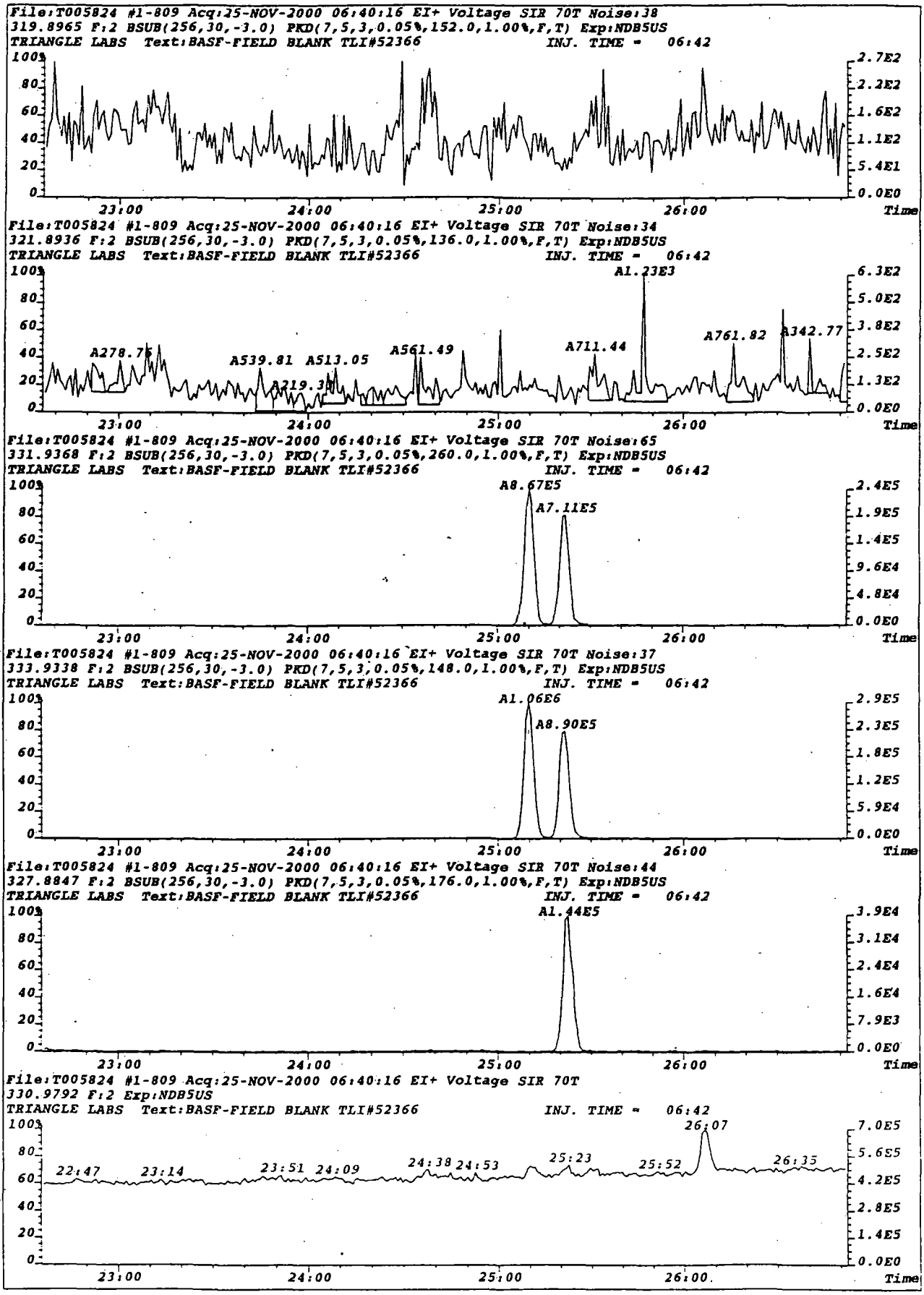
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.12E3
A632.57
A608.98
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:40
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A2.23E3
A964.87
A663.40
A1.14E3
A907.92
A1.18E3
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:41
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A8.58E5
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:43
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.14E6
File:T005824 #1-809 Acq:25-NOV-2000 06:40 16 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
21:57
22:12
22:47
23:14
23:51
24:38
25:23
25:52
26:07
26:35
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
21:42
22:06
22:42
23:03
23:27
23:47
24:07
24:46
25:05
25:26
26:03
26:23
22:00
23:00
24:00
25:00
26:00
Time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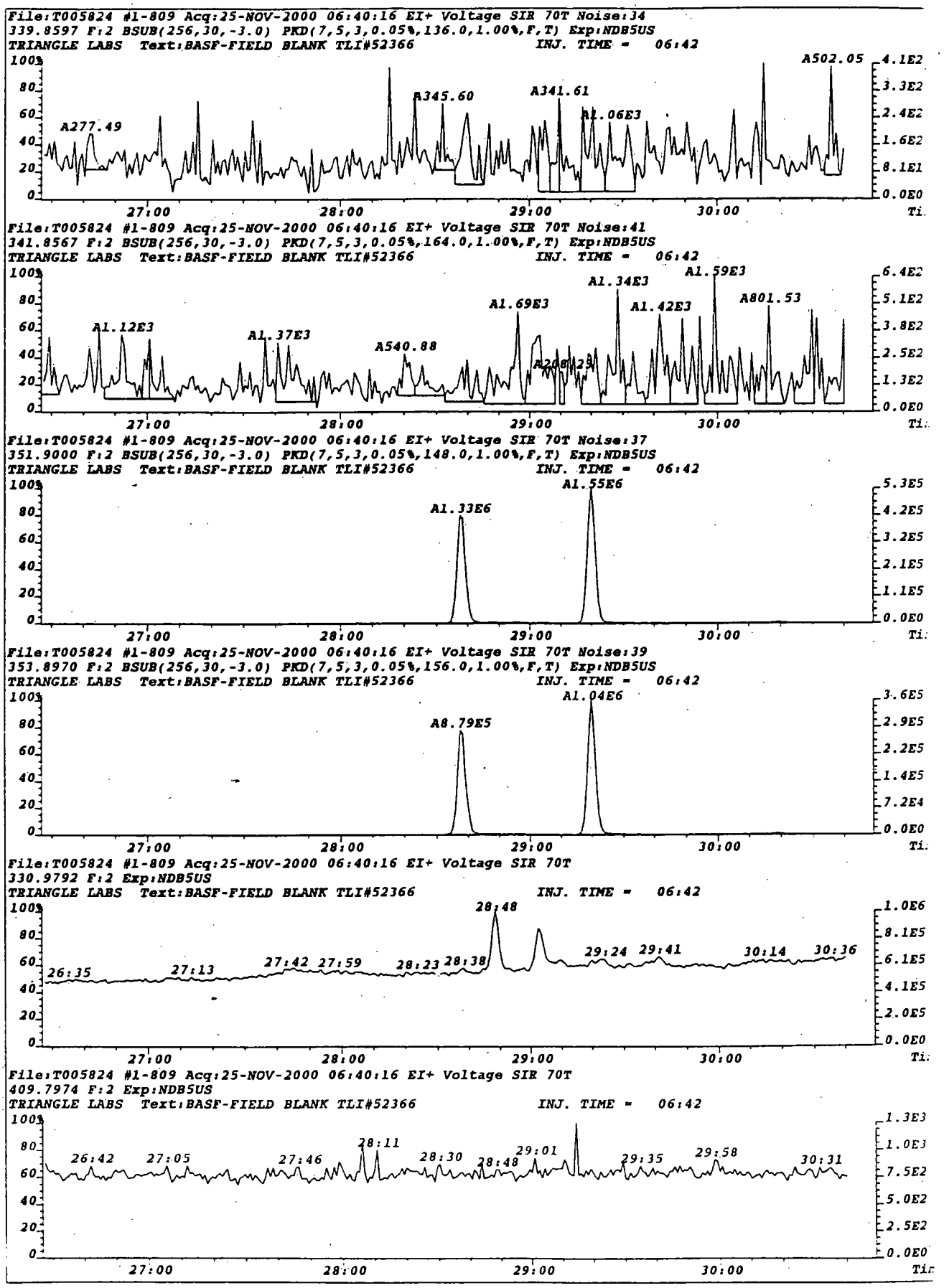
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,152.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
100% 80 60 40 20 0
2.7E2 2.2E2 1.6E2 1.1E2 5.4E1 0.0E0
23:00 24:00 25:00 26:00 Time
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:34
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,136.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.23E3
A278.75 A539.81 A513.05 A561.49 A711.44 A761.82 A342.77
6.3E2 5.0E2 3.8E2 2.5E2 1.3E2 0.0E0
23:00 24:00 25:00 26:00 Time
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:65
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,260.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A8.67E5
A7.11E5
2.4E5 1.9E5 1.4E5 9.6E4 4.8E4 0.0E0
23:00 24:00 25:00 26:00 Time
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:37
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.06E6
A8.90E5
2.9E5 2.3E5 1.8E5 1.2E5 5.9E4 0.0E0
23:00 24:00 25:00 26:00 Time
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:44
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.44E5
3.9E4 3.1E4 2.4E4 1.6E4 7.9E3 0.0E0
23:00 24:00 25:00 26:00 Time
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
26:07
22:47 23:14 23:51 24:09 24:38 24:53 25:23 25:52 26:35
7.0E5 5.6E5 4.2E5 2.8E5 1.4E5 0.0E0
23:00 24:00 25:00 26:00 Time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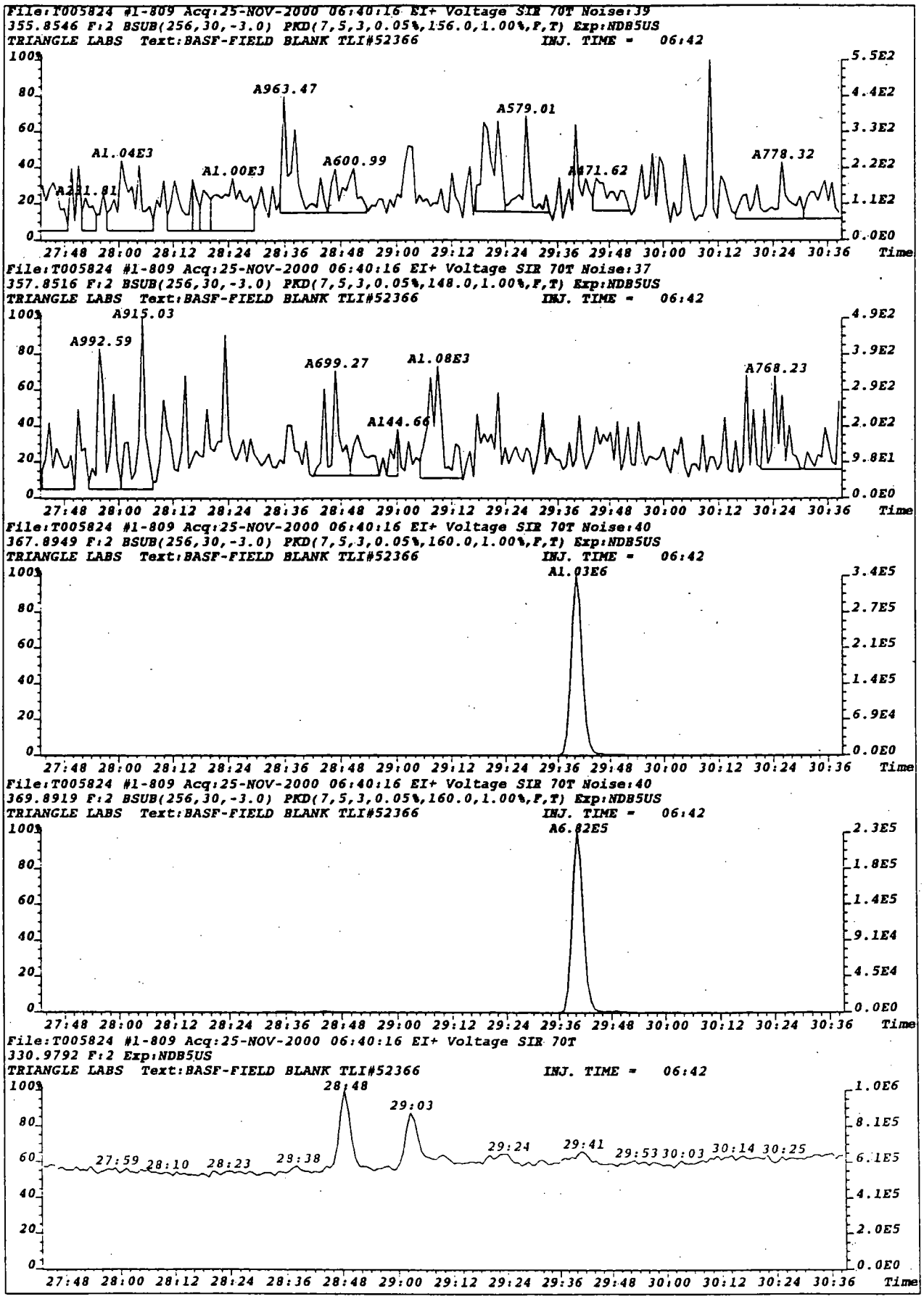
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,136.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A277.49
A345.60
A341.61
A1.06E3
A502.05
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:41
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.12E3
A1.37E3
A540.88
A1.69E3
A1.34E3
A1.42E3
A1.59E3
A801.53
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:37
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.33E6
A1.55E6
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:39
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A8.79E5
A1.04E6
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
26:35
27:13
27:42
27:59
28:23
28:38
28:48
29:24
29:41
30:14
30:36
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
26:42
27:05
27:46
28:11
28:30
28:48
29:01
29:35
29:58
30:31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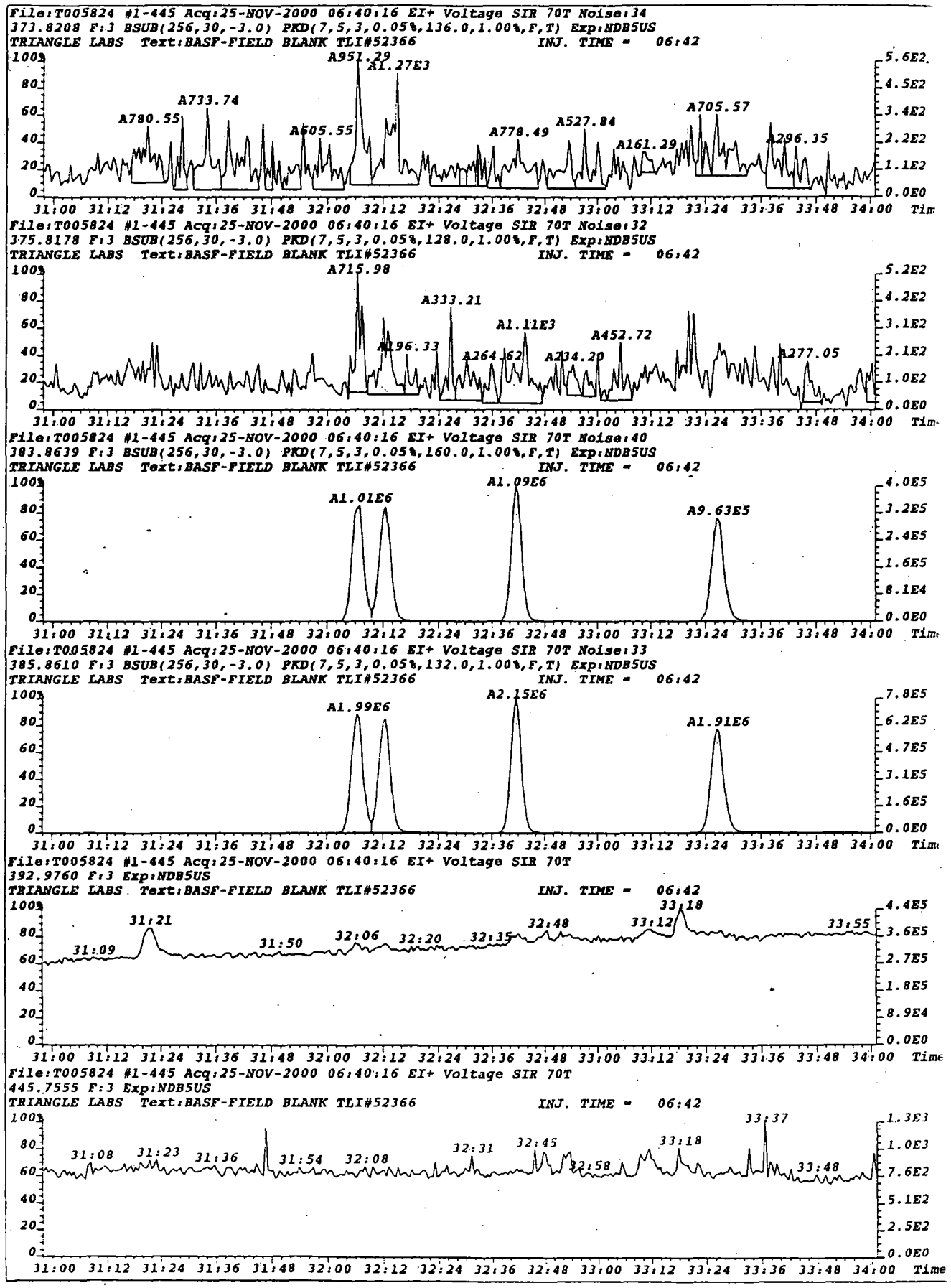
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A963.47
A579.01
A1.04E3
A1.00E3
A600.99
A778.32
A211.81
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:37
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A915.03
A992.59
A699.27
A1.08E3
A768.23
A144.66
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:40
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.03E6
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:40
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A6.82E5
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005824 #1-809 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
28:48
29:03
27:59
28:10
28:23
29:38
29:24
29:41
29:53
30:03
30:14
30:25
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time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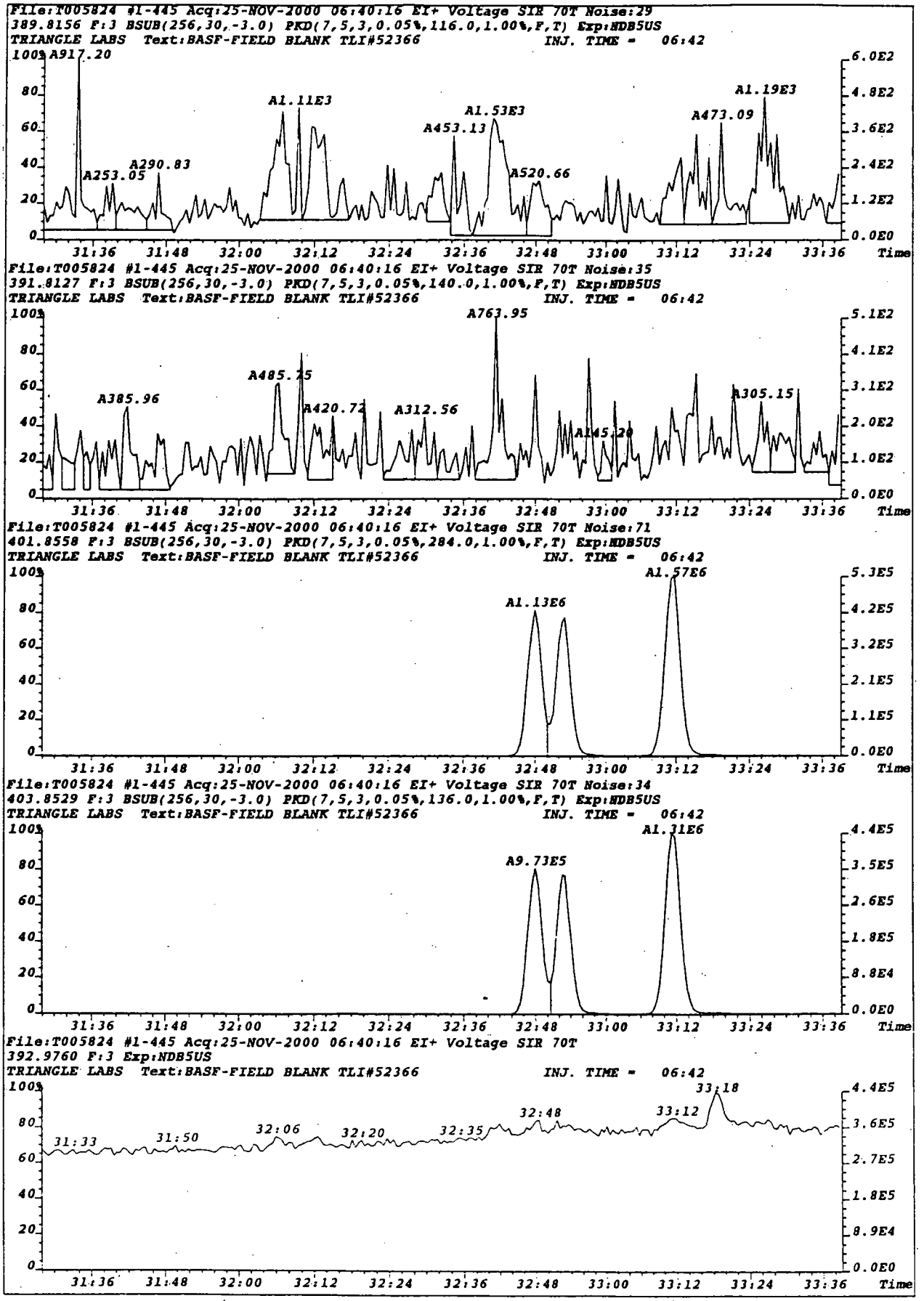
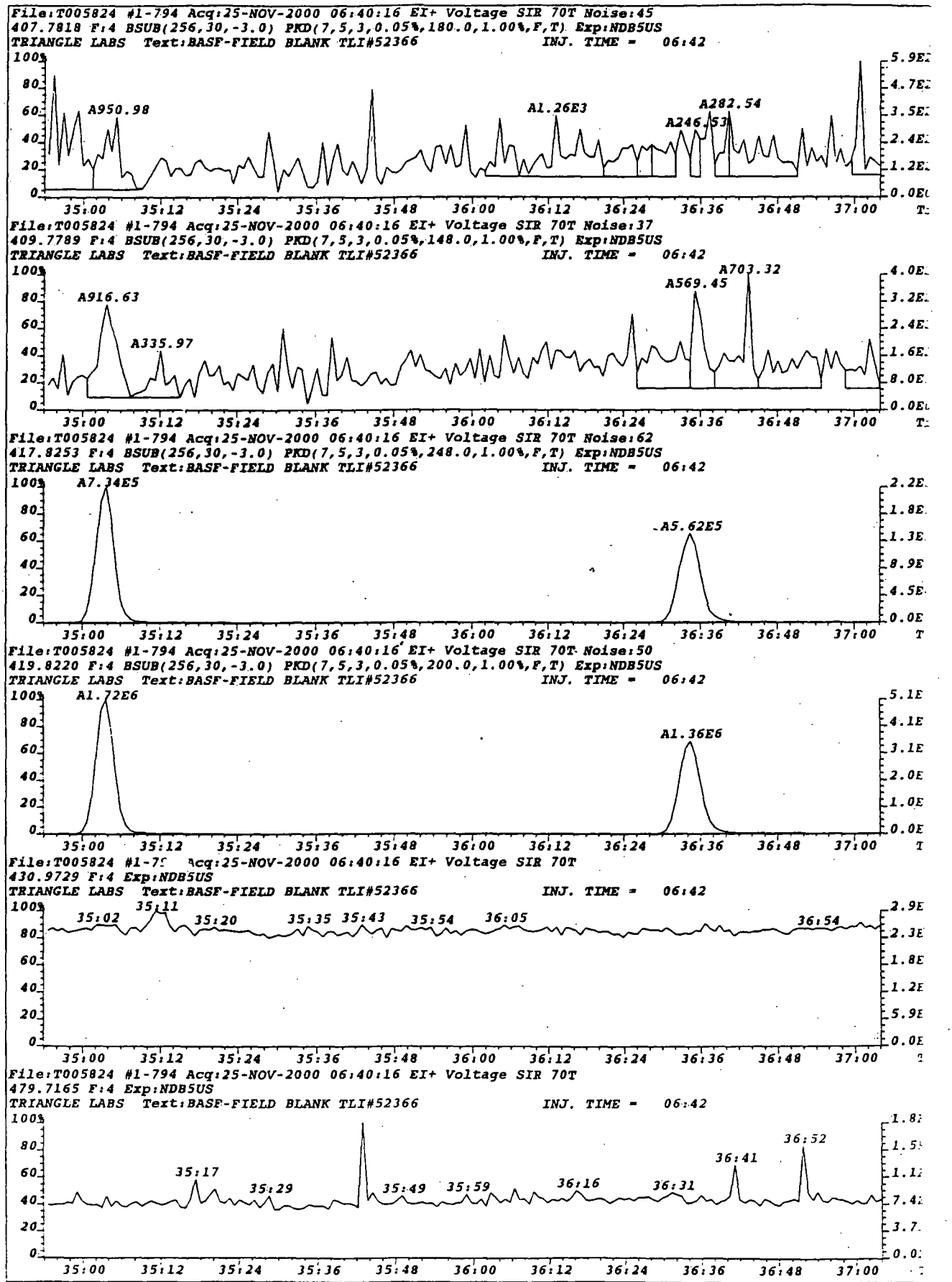
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,136.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A951.29
A1.27E3
A733.74
A780.55
A605.55
A778.49
A527.84
A705.57
A161.29
A296.35
File:T005824 #1-445 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:32
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,128.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A715.98
A333.21
A1.11E3
A452.72
A296.33
A264.62
A234.20
A277.05
File:T005824 #1-445 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:40
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.09E6
A1.01E6
A9.63E5
File:T005824 #1-445 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:33
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,132.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A2.15E6
A1.99E6
A1.91E6
File:T005824 #1-445 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
31:09
31:21
31:50
32:06
32:20
32:35
32:48
33:12
33:18
33:55
File:T005824 #1-445 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
31:08
31:23
31:36
31:54
32:08
32:31
32:45
32:58
33:18
33:37
33:48


File:T005824 #1-445 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:29
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,116.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A917.20
A1.11E3
A1.53E3
A1.19E3
A453.13
A473.09
A290.83
A253.05
A520.66
File:T005824 #1-445 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:35
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,140.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A763.95
A485.25
A385.96
A420.72
A312.56
A305.15
A145.20
File:T005824 #1-445 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:71
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,284.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.57E6
A1.13E6
File:T005824 #1-445 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:34
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,136.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.31E6
A9.73E5
File:T005824 #1-445 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
33:18
33:12
32:48
32:35
32:20
32:06
31:50
31:33
31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 Time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407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,180.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A950.98
A1.26E3
A282.54
A246.53
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:37
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A916.63
A335.97
A703.32
A569.45
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:62
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,248.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A7.34E5
A5.62E5
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:50
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.72E6
A1.36E6
File:T005824 #1-79 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
35:02
35:11
35:20
35:35
35:43
35:54
36:05
36:54
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
35:17
35:29
35:49
35:59
36:16
36:31
36:41
36:52
35:00
35:12
35:24
35:36
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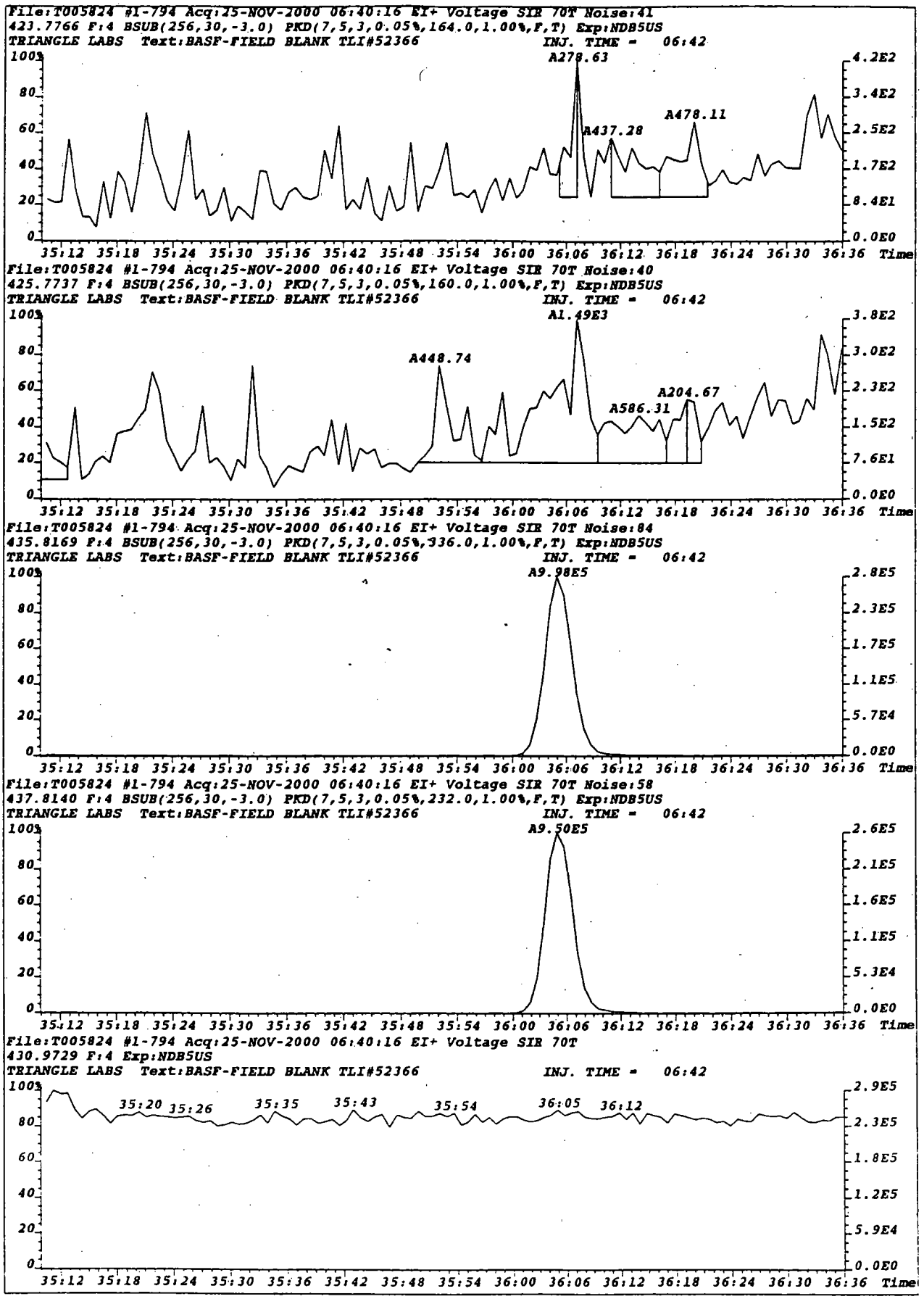
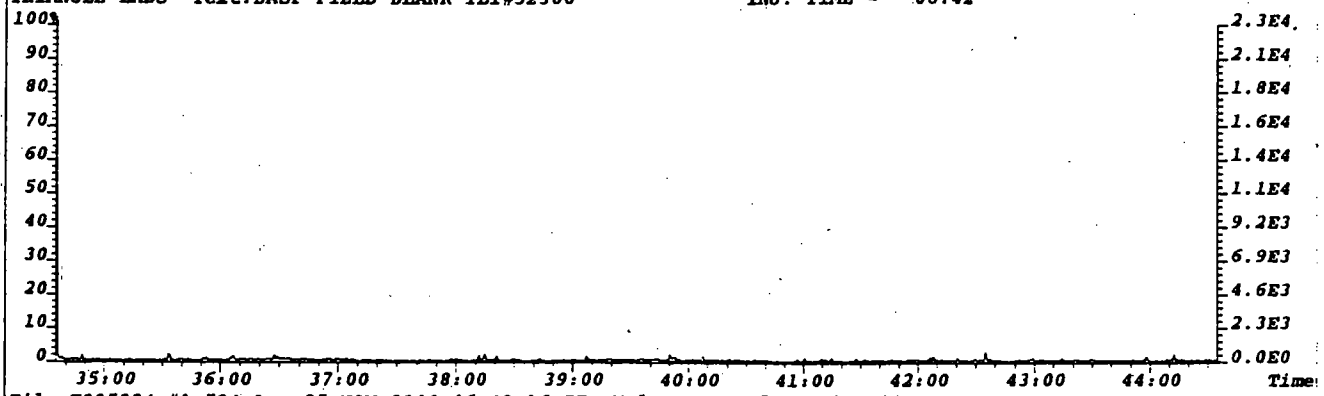
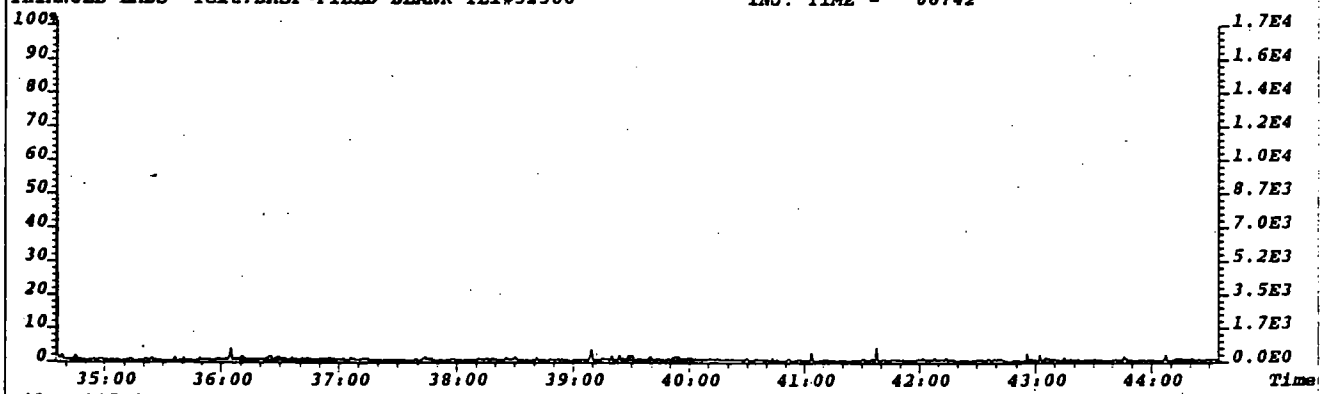
36:24
36:36
36:48
37:00


File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:41
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366
INJ. TIME = 06:42
A278.63
A437.28
A478.11
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:40
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366
INJ. TIME = 06:42
A1.49E3
A448.74
A204.67
A586.31
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:84
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,336.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366
INJ. TIME = 06:42
A9.98E5
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:58
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366
INJ. TIME = 06:42
A9.50E5
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366
INJ. TIME = 06:42
35:20 35:26 35:35 35:43 35:54 36:05 36:12
35:12 35:18 35:24 35:30 35:36 35:42 35:48 35:54 36:00 36:06 36:12 36:18 36:24 36:30 36:36 Time

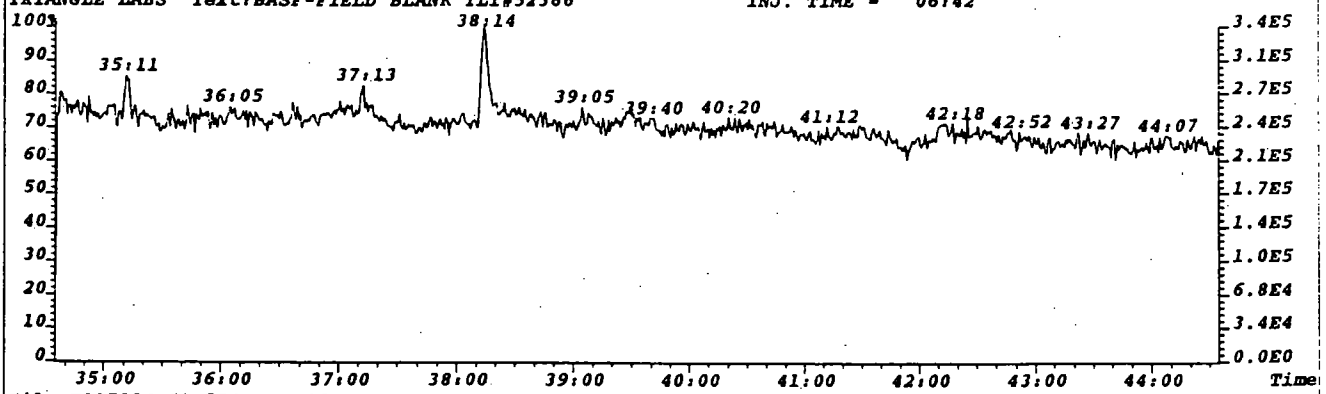
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:38
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,152.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42



File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:38
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,152.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42



File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42



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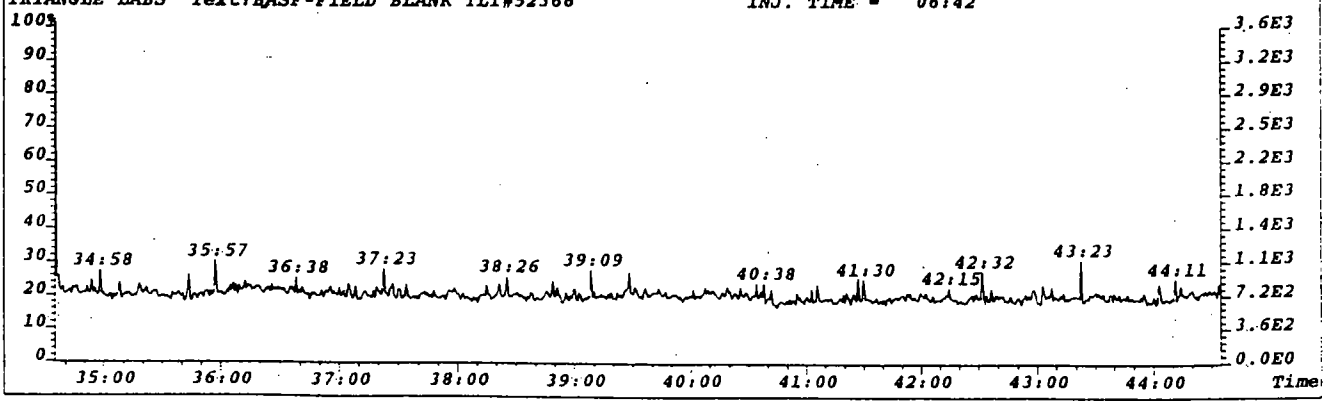
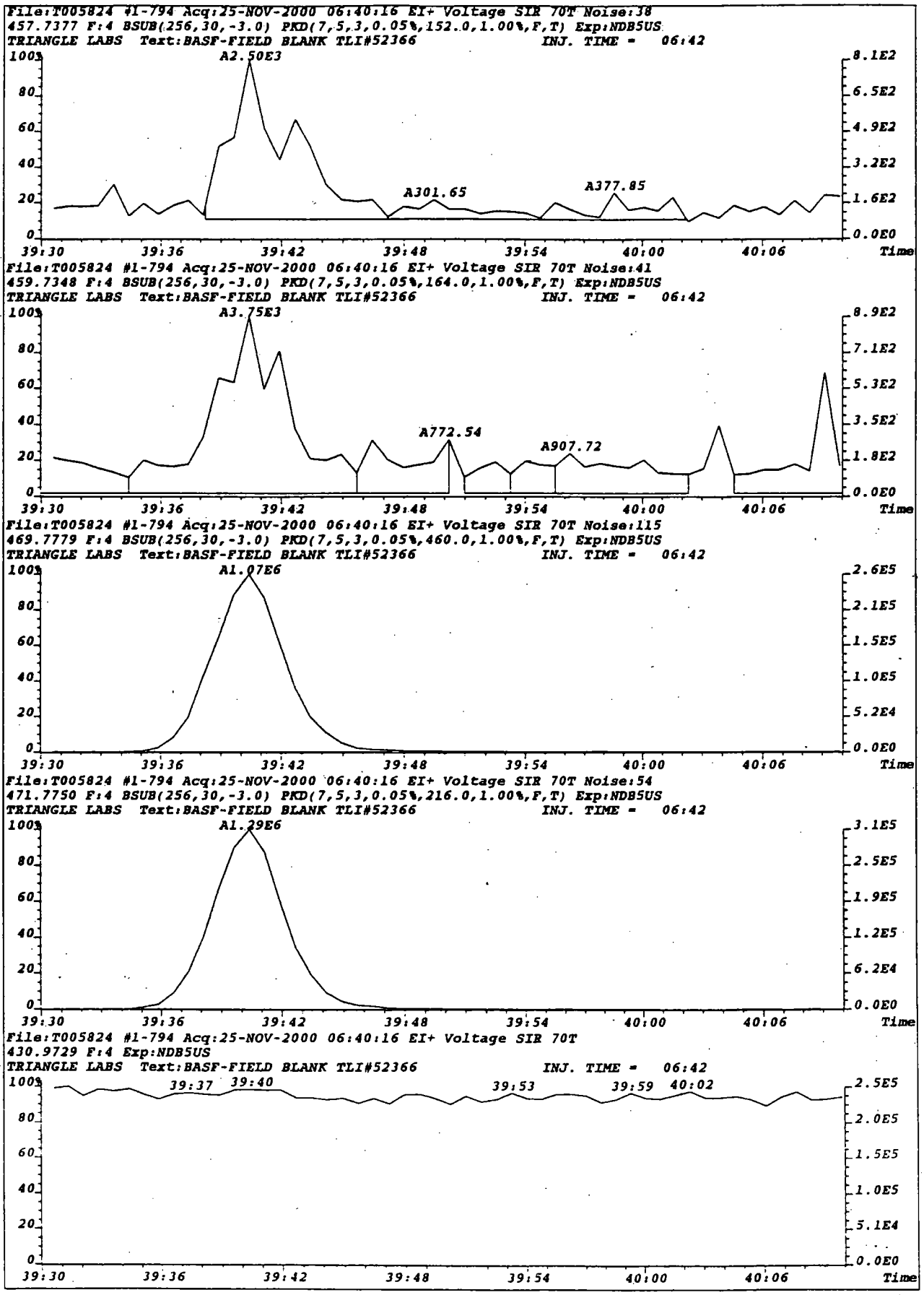
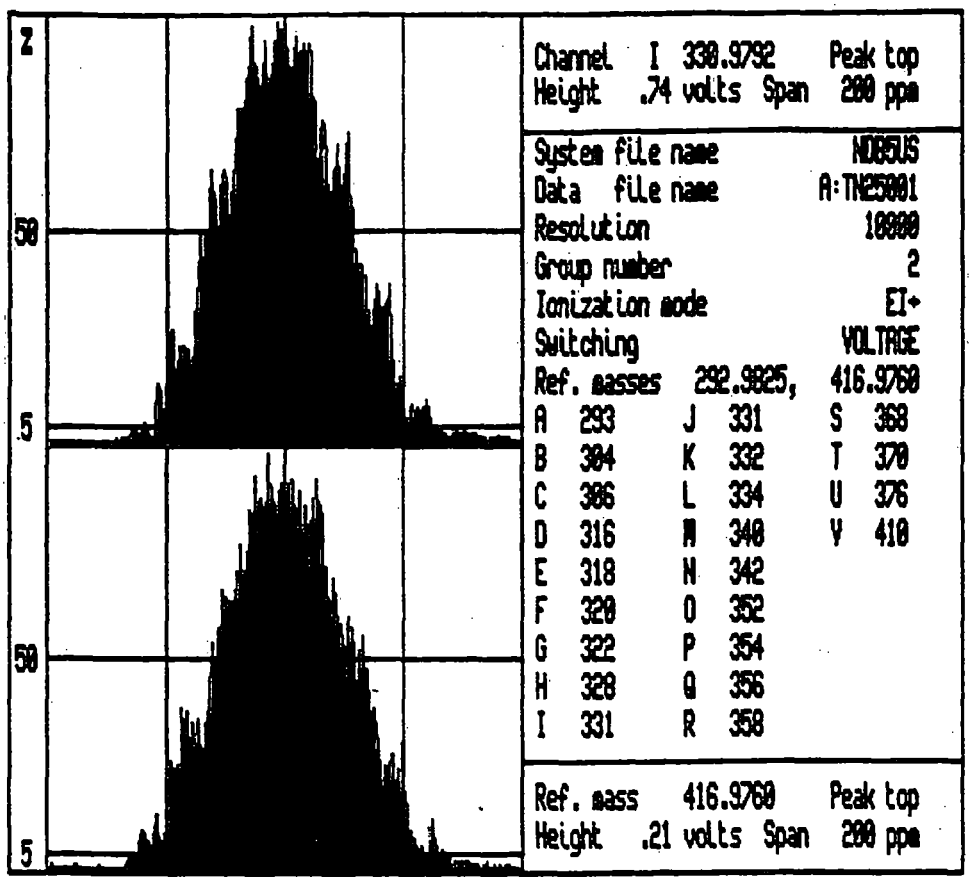
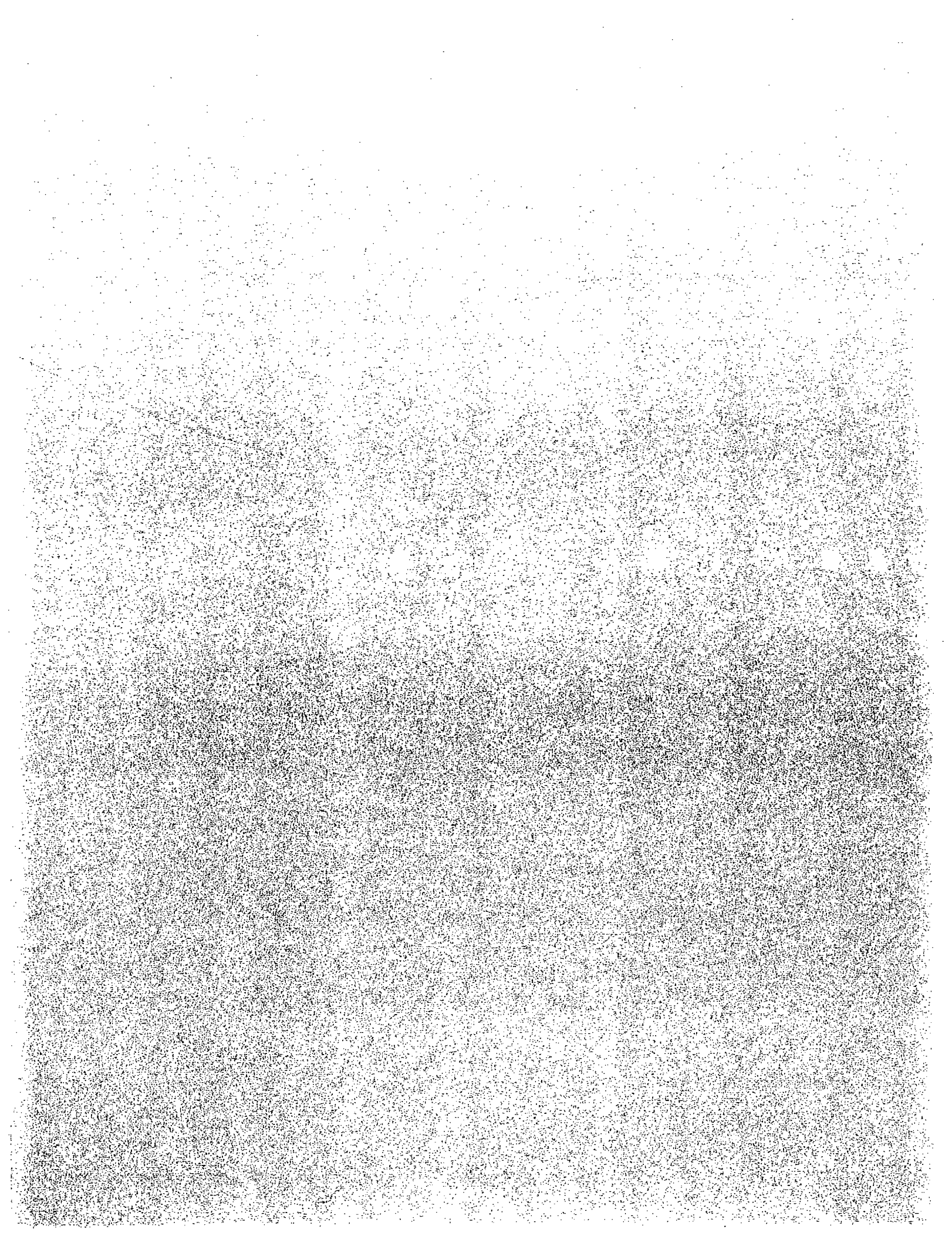
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42




File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:38
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,152.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A2.50E3
A301.65
A377.85
8.1E2
6.5E2
4.9E2
3.2E2
1.6E2
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:41
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A3.75E3
A772.54
A907.72
8.9E2
7.1E2
5.3E2
3.5E2
1.8E2
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:115
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,460.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.07E6
2.6E5
2.1E5
1.5E5
1.0E5
5.2E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T Noise:54
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,216.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
A1.29E6
3.1E5
2.5E5
1.9E5
1.2E5
6.2E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005824 #1-794 Acq:25-NOV-2000 06:40:16 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-FIELD BLANK TLI#52366 INJ. TIME = 06:42
39:37 39:40 39:53 39:59 40:02
2.5E5
2.0E5
1.5E5
1.0E5
5.1E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time


%
50
5
50
5
Channel I 330.9792 Peak top
Height .74 volts Span 200 ppm
System file name NOBSUS
Data file name A:TN25001
Resolution 10000
Group number 2
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 416.9760
A 293 J 331 S 368
B 304 K 332 T 370
C 306 L 334 U 376
D 316 M 340 V 410
E 318 N 342
F 320 O 352
G 322 P 354
H 328 Q 356
I 331 R 358
Ref. mass 416.9760 Peak top
Height .21 volts Span 200 ppm



TLI Project: 52366 Method 8290 PCDD/PCDF Analysis (t
Client Sample: BASF-SMW-13 Analysis File: T00582

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/2000	Spike File:	SPMIT32S
TLI ID:	274-99-7A	Date Extracted:	11/21/2000	ICal:	TF57140
		Date Analyzed:	11/25/2000	ConCal:	T005815
Sample Size:	1.050 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005817	% Lipid:	n/a
GC Column:	DB-5	Analyst:	JMM	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	EMPC		2.5			J__
1,2,3,7,8-PeCDD	EMPC		5.7			J__
1,2,3,4,7,8-HxCDD	ND	4.7				___
1,2,3,6,7,8-HxCDD	73.0			1.40	32:54	___
1,2,3,7,8,9-HxCDD	35.6			1.42	33:13	J__
1,2,3,4,6,7,8-HpCDD	1450			1.01	36:06	___
1,2,3,4,6,7,8,9-OCDD	6760			0.81	39:42	___
2,3,7,8-TCDF	114			0.80	24:40	___
1,2,3,7,8-PeCDF	ND	3.8				___
2,3,4,7,8-PeCDF	ND	3.7				___
1,2,3,4,7,8-HxCDF	43.2			1.10	32:07	JB_
1,2,3,6,7,8-HxCDF	17.1			1.22	32:14	J__
2,3,4,6,7,8-HxCDF	EMPC		13.7			J__
1,2,3,7,8,9-HxCDF	EMPC		3.2			JB_
1,2,3,4,6,7,8-HpCDF	52.9			1.17	35:04	___
1,2,3,4,7,8,9-HpCDF	ND	5.2				___
1,2,3,4,6,7,8,9-OCDF	80.1			0.94	39:53	JB_

Totals	Conc. (pg/L)	Number	DL	EMPC	Flags
Total TCDD	80.5	3		97.9	___
Total PeCDD	16.7	1		119	___
Total HxCDD	543	4		580	___
Total HpCDD	2530	2			___
Total TCDF	508	10		652	___
Total PeCDF	208	6		378	___
Total HxCDF	179	5		212	___
Total HpCDF	116	3			___

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Printed: 09:40 11/25/200

TLI Project: 52366 Method 8290 PCDD/PCDF Analysis
Client Sample: **BASF-SMW-13** Analysis File: T005

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,7,8-TCDF	323	17.0	40%-130%	0.74	24:38	V__
$^{13}C_{12}$-2,3,7,8-TCDD	299	15.7	40%-130%	0.81	25:22	V__
$^{13}C_{12}$-1,2,3,7,8-PeCDF	297	15.6	40%-130%	1.50	28:38	V__
$^{13}C_{12}$-1,2,3,7,8-PeCDD	384	20.2	40%-130%	1.49	29:41	V__
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	285	14.9	40%-130%	0.51	32:13	V__
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	312	16.4	40%-130%	1.24	32:54	V__
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	320	16.8	25%-130%	0.42	35:04	V__
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	291	15.3	25%-130%	1.03	36:06	V__
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	318	8.35	25%-130%	0.85	39:41	V__

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,4,7,8-PeCDF	294	15.4	40%-130%	1.50	29:21	V__
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	296	15.6	40%-130%	0.50	32:07	V__
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	319	16.8	40%-130%	1.23	32:48	V__
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	280	14.7	25%-130%	0.43	36:35	V__

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flag
$^{37}Cl_4$-2,3,7,8-TCDD	133	69.6	40%-130%	25:23	__

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	375	19.7	40%-130%	0.52	33:27	V__
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	313	16.4	40%-130%	0.51	32:42	V__

Recovery Standards	Ratio	RT	Flag
$^{13}C_{12}$-1,2,3,4-TCDD	0.80	25:11	__
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.21	33:12	__

Data Reviewer: _____ 11/25/2000

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Printed: 09:40 11/25/

Chromatographic Calculations For File:T005825

QC Front End.....: 1.7178
Tetra/Hexa RS Ratio: 0.9865

Initial ....Date...

Data Review By: _____ ___/___/___

Calculated Noise Height: 0.02

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005825B.dbf
11/25/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
TCDF						0.65-0.89				0.860-1.077			
304-306	DC	NL				Height	0.07	0.03	0.04				
				21:21		0.79	0.50	0.22	0.28	0.867			J
				22:12		0.83	0.75	0.34	0.41	0.901			
				22:34	RO	0.90	1.63	0.71	0.79	0.916			
				23:17		0.82	1.58	0.71	0.87	0.945			
				23:34		0.84	1.25	0.57	0.68	0.957			
				23:53	RO	0.93	2.62	1.14	1.23	0.970			
				24:01	RO	0.96	1.06	0.46	0.48	0.975			
				24:14		0.76	5.64	2.43	3.21	0.984	1278-TCDF	AN	
				24:28		0.66	0.63	0.25	0.38	0.993			
				24:40		0.80	6.17	2.74	3.43	1.001	2378-TCDF	AN	
				25:06		0.82	1.13	0.51	0.62	1.019			
				25:18	RO	1.11	1.01	0.63	0.57	1.027			
				25:30	RO	1.40	0.94	0.74	0.53	1.035			
				25:46		0.82	4.02	1.81	2.21	1.046			
				26:06		0.74	6.02	2.57	3.45	1.060			
				26:23	RO	0.46	0.53	0.23	0.50	1.071			
	DC	WH		26:43		0.76	2.06			1.085			
304-306			16	Peaks			35.48						
13C12-TCDF						0.65-0.89				0.959-1.041			
316-318	DC	NL				Height	0.06	0.03	0.03				
	DC	WL		23:34	RO	1.88	0.14			0.957			
				24:13	RO	0.48	0.37	0.16	0.33	0.983			
				24:38		0.74	100.94	42.90	58.04	1.000	13C12-2378-TCDF	ISO	
						Height	27.70	12.21	15.49				
				25:11		0.74	0.94	0.40	0.54	1.022			
	DC	WH		26:08	RO	3.05	0.34			1.061			
316-318			3	Peaks			102.25						
---------- Above: TCDF / TCDD Follows ----------													
TCDD						0.65-0.89				0.890-1.045			
320-322	DC	NL				Height	0.06	0.03	0.03				
				22:47		0.72	1.72	0.72	1.00	0.898	1368-TCDD	AN	
				23:11		0.82	0.89	0.40	0.49	0.914	1379-TCDD	AN	
	DC	SN		23:28	RO	0.19	0.14			0.925			
	DC	SN		23:36	RO	0.50	0.05			0.930			
				24:09	RO	0.62	0.37	0.16	0.26	0.952			
				24:31		0.86	0.26	0.12	0.14	0.966			J
				24:50	RO	1.30	0.18	0.13	0.10	0.979			J
				25:24	RO	2.20	0.09	0.11	0.05	1.001	2378-TCDD	AN	J
320-322			6	Peaks			3.51						

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
37Cl-TCDD										0.921-1.079			
328	DC	NL				Height	0.05	0.05					
	DC	WL		22:36			0.11			0.891			
	DC	WL		22:47			0.04			0.898			
	DC	WL		22:53			0.13			0.902			
	DC	WL		23:03			0.92			0.909			
	DC	WL		23:11			0.36			0.914			
	DC	WL		23:16			0.10			0.917			
				23:31			0.06	0.06		0.927			
				23:40			0.13	0.13		0.933			
				23:58			37.51	37.51		0.945			
				24:10			0.12	0.12		0.953			
				24:27			0.07	0.07		0.964			
				24:50			0.13	0.13		0.979			
				25:04			0.12	0.12		0.988			
				25:23			28.75	28.75		1.001	37Cl-TCDD		CLS
				25:36			0.17	0.17		1.009			
				25:47			0.74	0.74		1.016			
				26:10			0.40	0.40		1.032			
				26:43			0.78	0.78		1.053			
328			12	Peaks			68.98						
13C12-TCDD					0.65-0.89					0.921-1.079			
332-334	DC	NL				Height	0.09	0.06	0.03				
				25:11		0.80	463.80	206.22	257.58	0.993	13C12-1234-TCDD		RS1
				25:22		0.81	76.51	34.17	42.34	1.000	13C12-2378-TCDD		IS1
						Height	20.40	9.14	11.26				
332-334			2	Peaks			540.31						
---------- Above: TCDD / PeCDF Follows ----------													
PeCDF					1.32-1.78					0.923-1.064			
340-342	DC	NL				Height	0.04	0.02	0.02				
				26:39	RO	1.09	1.43	0.61	0.56	0.931			J
				26:52	RO	2.60	0.13	0.13	0.05	0.938			J
	DC	SN		26:59	RO	0.67	0.07			0.942			
				27:47	RO	1.93	1.81	1.37	0.71	0.970			J
				27:57	RO	1.00	0.48	0.19	0.19	0.976			J
				28:03	RO	1.08	0.61	0.26	0.24	0.980			J
				28:22	RO	0.74	0.82	0.50	0.68	0.991			J
				28:43		1.49	4.41	2.64	1.77	1.003			
				28:56		1.71	1.30	0.82	0.48	1.010			J
	DC	SN		29:04	RO	0.33	0.08			1.015			
				29:22	RO	1.02	1.68	0.67	0.66	1.026			J
				29:30		1.67	1.36	0.85	0.51	1.030			J
				29:38		1.67	0.24	0.15	0.09	1.035			J
	DC	SN		29:58	RO	0.28	0.08			1.047			
				30:04		1.34	1.03	0.59	0.44	1.050			J
				30:13	RO	0.90	0.15	0.09	0.10	1.055			J
				30:24		1.62	0.34	0.21	0.13	1.062			J
	DC	WH		30:31	RO	1.13	0.20			1.066			
340-342			14	Peaks			15.79						

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
13C12-PeCDF				1.32-1.78						0.860-1.140			
352-354	DC	NL			Height		0.06	0.03	0.03				
				26:49	RO	0.51	0.35	0.21	0.41	0.937			
				27:46		1.63	0.42	0.26	0.16	0.970			
				28:15	RO	3.00	0.10	0.12	0.04	0.987			
				28:21	RO	2.63	0.20	0.21	0.08	0.990			
				28:38		1.50	86.57	51.99	34.58	1.000	13C12-PeCDF 123	IS2	
					Height		27.69	16.32	11.37				
				28:56	RO	1.87	0.77	0.56	0.30	1.010			
				29:02	RO	0.57	0.13	0.08	0.14	1.014			
				29:21		1.50	84.99	50.94	34.05	1.025	13C12-PeCDF 234	SUR1	
	DC	SN		29:40	RO	23.00	0.10			1.036			
				29:48	RO	3.00	0.08	0.09	0.03	1.041			
				30:18	RO	2.00	0.99	0.78	0.39	1.058			
352-354			10	Peaks			174.60						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD				1.32-1.78						0.933-1.021			
356-358	DC	NL			Height		0.05	0.02	0.03				
				27:53	RO	0.15	0.97	0.59	4.05	0.939			J
				28:37	RO	1.07	1.12	0.47	0.44	0.964			J
				28:45	RO	0.81	0.77	0.47	0.58	0.969			J
				28:55		1.68	0.59	0.37	0.22	0.974			J
				29:23	RO	1.06	0.41	0.17	0.16	0.990			J
	DC	SN		29:32	RO	0.16	0.05			0.995			
				29:41	RO	0.52	0.20	0.12	0.23	1.000	12378-PeCDD	AN	J
				29:51	RO	0.14	0.15	0.09	0.64	1.006			J
	DC	WH		30:20	RO	0.88	0.12			1.022			
	DC	WH		30:24	RO	0.81	0.21			1.024			
	DC	WH		30:33	RO	0.45	0.08			1.029			
356-358			7	Peaks			4.21						
13C12-PeCDD				1.32-1.78						0.865-1.135			
368-370	DC	NL			Height		0.04	0.02	0.02				
	DC	SN		28:20	RO	1.00	0.15			0.955			
				28:37	RO	1.15	0.33	0.15	0.13	0.964			
				28:45		1.45	0.27	0.16	0.11	0.969			
				29:41		1.49	63.77	38.19	25.58	1.000	13C12-PeCDD 123	IS3	
					Height		21.38	12.63	8.75				
	DC	SN		30:02	RO	5.00	0.13			1.012			
				30:10		1.75	0.33	0.21	0.12	1.016			
				30:26	RO	1.17	0.15	0.07	0.06	1.025			
				30:32		1.50	0.20	0.12	0.08	1.029			
368-370			6	Peaks			65.05						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF				1.05-1.43						0.961-1.046			
374-376	DC	NL			Height		0.06	0.03	0.03				
				31:10	RO	1.47	0.43	0.28	0.19	0.967			J
				31:17		1.20	1.98	1.08	0.90	0.971			J

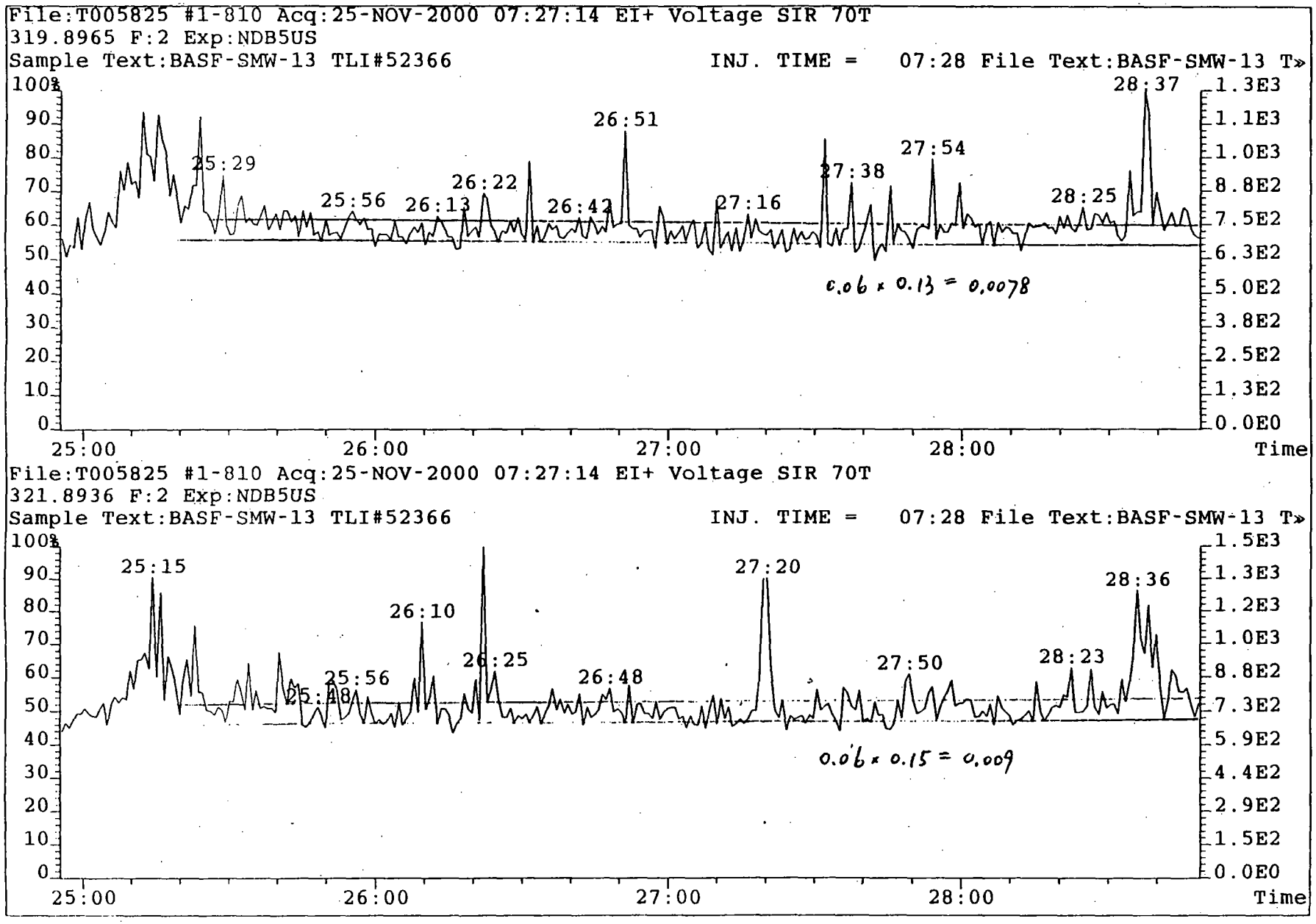
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				31:31	RO	0.82	0.25	0.14	0.17	0.978			J
	DC	SN		31:35		1.40	0.12			0.980			
				31:45		1.13	2.02	1.07	0.95	0.986			
				32:07		1.10	1.93	1.01	0.92	0.997	123478-HxCDF	AN	J
				32:14		1.22	0.80	0.44	0.36	1.001	123678-HxCDF	AN	J
				32:24		1.38	1.00	0.58	0.42	1.006			J
	DC	SN		32:30	RO	1.00	0.16			1.009			
				32:43	RO	1.50	0.58	0.39	0.26	1.016	234678-HxCDF	AN	J
				33:27	RO	0.43	0.11	0.06	0.14	1.038	123789-HxCDF	AN	J
374-376		9	Peaks				9.10						
13C12-HxCDF				0.43-0.59					0.876-1.124				
384-386	DC	NL		Height			0.07	0.03	0.04				
				31:08	RO	0.71	0.50	0.17	0.24	0.966			
				32:07		0.50	85.10	28.31	56.79	0.997	13C12-HxCDF 478	SUR2	
				32:13		0.51	82.96	27.99	54.97	1.000	13C12-HxCDF 678	IS4	
				Height			28.04	9.70	18.34				
				32:28	RO	0.37	0.21	0.07	0.19	1.008			
				32:42		0.51	83.08	28.12	54.96	1.015	13C12-HxCDF 234	ALT2	
				32:58	RO	0.63	0.15	0.05	0.08	1.023			
				33:06	RO	2.29	0.11	0.16	0.07	1.027			
				33:12	RO	1.00	0.26	0.17	0.17	1.031			
				33:27		0.52	73.19	24.94	48.25	1.038	13C12-HxCDF 789	ALT1	
				33:44	RO	1.33	0.09	0.08	0.06	1.047			
	DC	SN		33:47	RO	0.21	0.09			1.049			
384-386		10	Peaks				325.65						
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD				1.05-1.43					0.956-1.013				
390-392	DC	NL		Height			0.06	0.03	0.03				
				31:39		1.11	3.50	1.84	1.66	0.962			
				32:06	RO	1.47	1.10	0.72	0.49	0.976			J
				32:18		1.17	9.72	5.24	4.48	0.982			
	DC	SN		32:43	RO	2.00	0.04			0.994			
				32:54		1.40	2.21	1.29	0.92	1.000	123678-HxCDD	AN	
	DC	SN		33:03	RO	0.33	0.04			1.005			
				33:13		1.42	1.09	0.64	0.45	1.010	123789-HxCDD	AN	J
390-392		5	Peaks				17.62						
13C12-HxCDD				1.05-1.43					0.970-1.030				
402-404	DC	NL		Height			0.05	0.03	0.02				
				32:48		1.23	60.20	33.15	27.05	0.997	13C12-HxCDD 478	SUR3	
				32:54		1.24	56.77	31.37	25.40	1.000	13C12-HxCDD 678	IS5	
				Height			19.92	10.90	9.02				
				33:12		1.21	382.27	209.05	173.22	1.009	13C12-HxCDD 789	RS2	
				33:26	RO	0.66	0.42	0.23	0.35	1.016			
402-404		4	Peaks				499.66						
---------- Above: HxCDD / HpCDF Follows ----------													

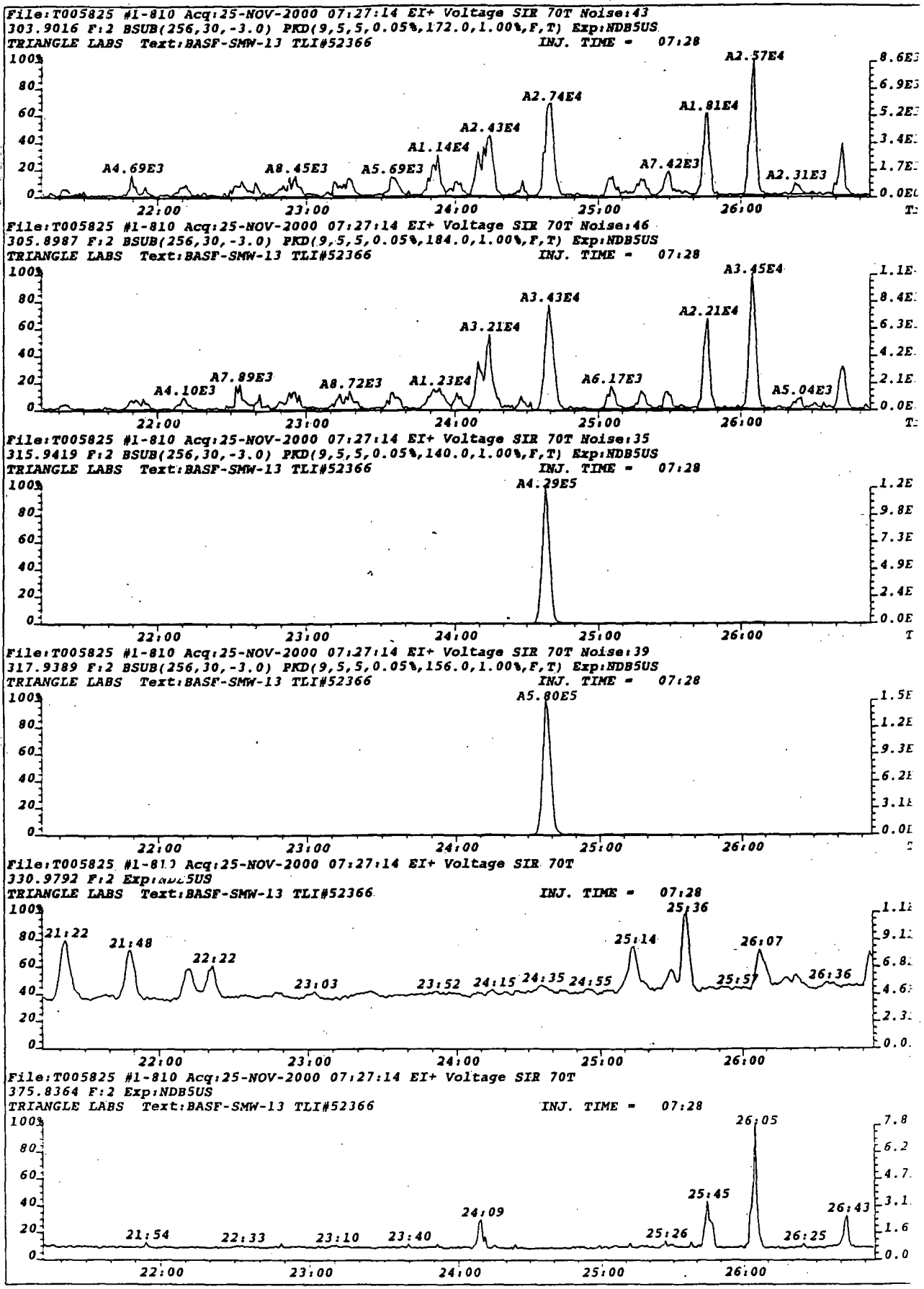
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
HpCDF				0.88-1.20						0.995-1.048			
408-410	DC	NL			Height		0.05	0.03	0.02				
	DC	SN		34:55	RO	25.00	0.02			0.996			
				35:04		1.17	2.17	1.17	1.00	1.000	1234678-HpCDF	AN	
				35:19		1.11	0.40	0.21	0.19	1.007			J
				35:29		1.01	1.91	0.96	0.95	1.012			
408-410			3	Peaks			4.48						
13C12-HpCDF				0.37-0.51						0.943-1.114			
418-420	DC	NL			Height		0.06	0.03	0.03				
				35:04		0.42	62.30	18.40	43.90	1.000	13C12-HpCDF 678	IS6	
					Height		18.84	5.73	13.11				
				36:35		0.43	42.34	12.67	29.67	1.043	13C12-HpCDF 789	SUR4	
418-420			2	Peaks			104.64						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20						0.974-1.005			
424-426	DC	NL			Height		0.06	0.03	0.03				
				35:22		1.06	24.19	12.44	11.75	0.980			
	DC	SN		35:35		0.88	0.15			0.986			
	DC	SN		35:46	RO	0.20	0.02			0.991			
				36:06		1.01	32.74	16.42	16.32	1.000	1234678-HpCDD	AN	
	DC	WH		36:34	RO	1.75	0.08			1.013			
424-426			2	Peaks			56.93						
13C12-HpCDD				0.88-1.20						0.972-1.028			
436-438	DC	NL			Height		0.08	0.04	0.04				
	DC	SN		35:20	RO	1.71	0.14			0.979			
	DC	SN		35:38	RO	5.33	0.06			0.987			
				36:06		1.03	50.19	25.42	24.77	1.000	13C12-HpCDD 678	IS7	
					Height		14.23	7.22	7.01				
	DC	SN		36:38		1.00	0.08			1.015			
436-438			1	Peak			50.19						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02						0.899-1.101			
442-444	DC	NL			Height		0.04	0.02	0.02				
	DC	WL		35:25	RO	1.50	0.04			0.892			
	DC	WL		35:28		1.00	0.04			0.894			
	DC	SN		36:04	RO	1.88	0.15			0.909			
	DC	SN		36:29	RO	3.00	0.04			0.919			
	DC	SN		36:39	RO	1.33	0.06			0.924			
	DC	SN		36:49	RO	0.50	0.08			0.928			
	DC	SN		37:12	RO	0.62	0.17			0.937			
	DC	SN		38:44	RO	0.60	0.06			0.976			
				38:57	RO	0.55	0.13	0.06	0.11	0.982			
	DC	SN		39:18	RO	0.57	0.08			0.990			
	DC	SN		39:29	RO	0.64	0.15			0.995			
	DC	SN		39:34	RO	1.67	0.06			0.997			
	DC	SN		39:36		1.00	0.06			0.998			

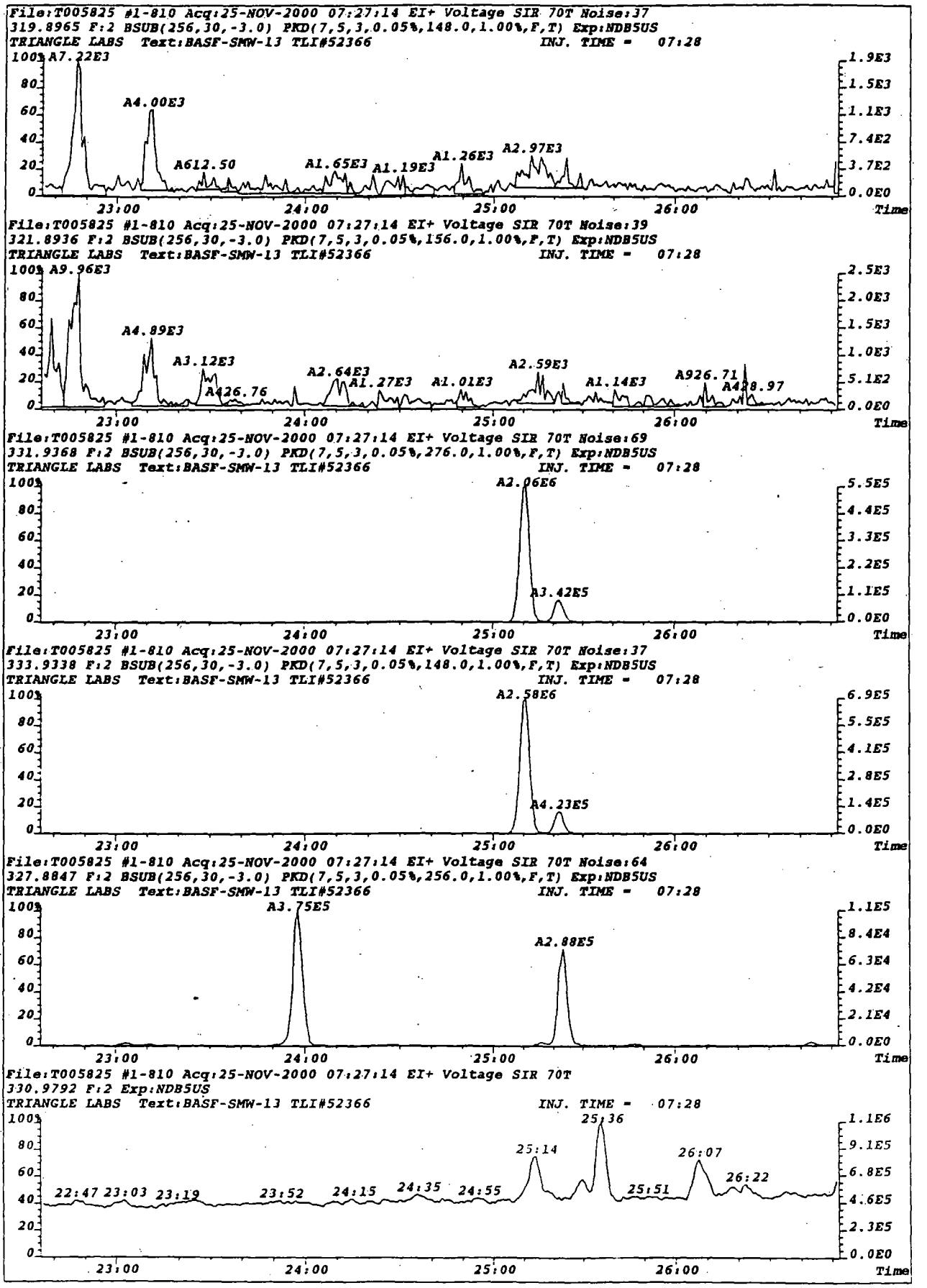
Compound/ M_Z.....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		39:41	RO	1.67	0.11			1.000			
				39:53		0.94	1.03	0.50	0.53	1.005	OCDF	AN	J
	DC	SN		42:04	RO	0.50	0.04			1.060			
	DC	SN		42:34	RO	0.20	0.04			1.073			
	DC	SN		42:41	RO	0.25	0.04			1.076			
	DC	SN		42:47	RO	0.50	0.08			1.078			
	DC	SN		43:14		1.00	0.06			1.089			
				43:24	RO	0.67	0.21	0.10	0.15	1.094			
	DC	SN		43:32	RO	2.00	0.09			1.097			
442-444			3 Peaks				1.37						
OCDD						0.76-1.02				0.899-1.101			
458-460	DC	NL				Height	0.05	0.03	0.02				
				39:42		0.81	72.24	32.39	39.85	1.000	OCDD	AN	
458-460			1 Peak				72.24						
13C12-OCDD						0.76-1.02				0.996-1.004			
470-472	DC	NL				Height	0.06	0.03	0.03				
				39:33	RO	0.60	0.13	0.06	0.10	0.997			
				39:41		0.85	44.54	20.47	24.07	1.000	13C12-OCDD	IS8	
						Height	10.04	4.56	5.48				
	DC	WH		40:13	RO	1.25	0.15			1.013			
470-472			2 Peaks				44.67						

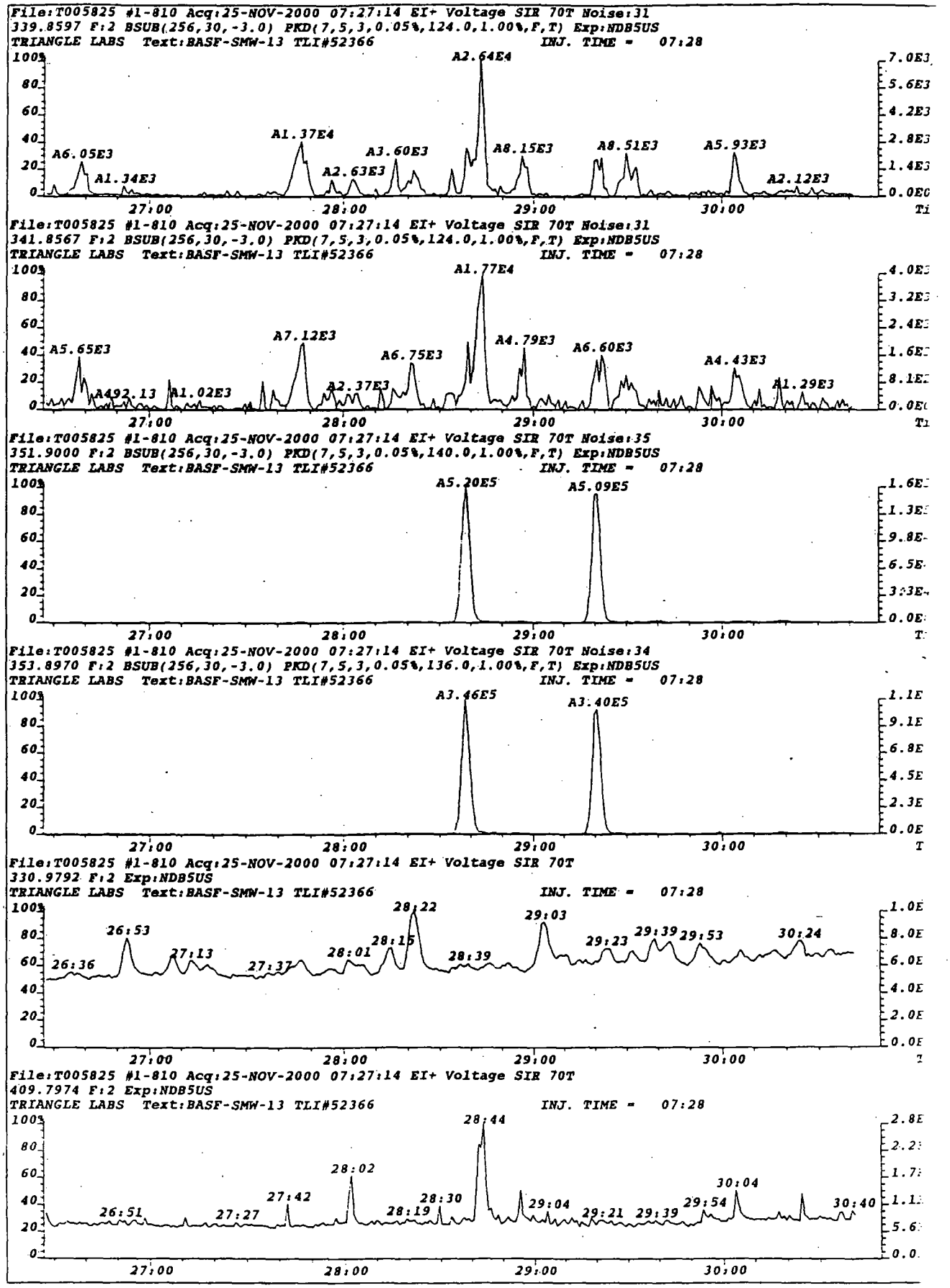
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

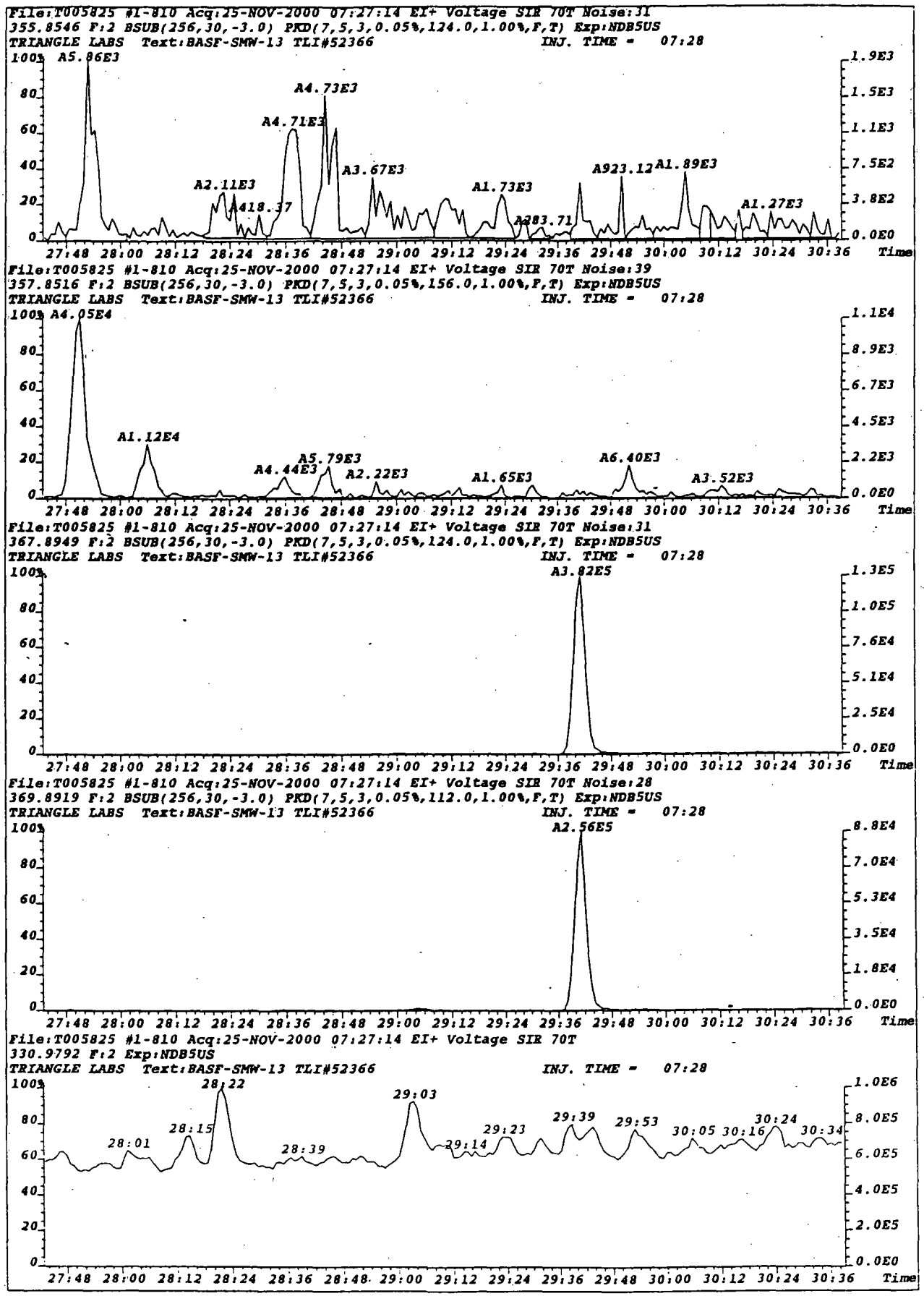
*** End of Report ***


File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28 File Text:BASF-SMW-13 T»
25:29
25:56
26:13
26:22
26:42
26:51
27:16
27:38
27:54
28:25
28:37
0.06 × 0.13 = 0.0078
25:00
26:00
27:00
28:00
Time
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28 File Text:BASF-SMW-13 T»
25:15
25:48
25:56
26:10
26:25
26:48
27:20
27:50
28:23
28:36
0.06 × 0.15 = 0.009
25:00
26:00
27:00
28:00
Time


File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:43
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A4.69E3
A8.45E3
A5.69E3
A1.14E4
A2.43E4
A2.74E4
A7.42E3
A1.81E4
A2.57E4
A2.31E3
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:46
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A4.10E3
A7.89E3
A8.72E3
A1.23E4
A3.21E4
A3.43E4
A6.17E3
A2.21E4
A3.45E4
A5.04E3
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:35
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,140.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A4.29E5
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:39
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A5.80E5
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
21:22
21:48
22:22
23:03
23:52
24:15
24:35
24:55
25:14
25:36
25:57
26:07
26:36
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
21:54
22:33
23:10
23:40
24:09
25:26
25:45
26:05
26:25
26:43
22:00
23:00
24:00
25:00
26:00


File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:37
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A7.22E3
A4.00E3
A612.50
A1.65E3
A1.19E3
A1.26E3
A2.97E3
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:39
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A9.96E3
A4.89E3
A3.12E3
A426.76
A2.64E3
A1.27E3
A1.01E3
A2.59E3
A1.14E3
A926.71
A428.97
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:69
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,276.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A2.06E6
A3.42E5
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:37
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A2.58E6
A4.23E5
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:64
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,256.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A3.75E5
A2.88E5
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
25:36
25:14
26:07
26:22
22:47 23:03 23:19
23:52
24:15
24:35
24:55
25:51
23:00
24:00
25:00
26:00
Time


File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:31
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,124.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A2.64E4
A1.37E4
A6.05E3
A1.34E3
A2.63E3
A3.60E3
A8.15E3
A8.51E3
A5.93E3
A2.12E3
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:31
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,124.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A1.77E4
A7.12E3
A5.65E3
A492.13
A1.02E3
A2.37E3
A6.75E3
A4.79E3
A6.60E3
A4.43E3
A1.29E3
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:35
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,140.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A5.20E5
A5.09E5
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:34
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,136.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A3.46E5
A3.40E5
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
26:36
26:53
27:13
27:37
28:01
28:15
28:22
28:39
29:03
29:23
29:39
29:53
30:24
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
26:51
27:27
27:42
28:02
28:19
28:30
28:44
29:04
29:21
29:39
29:54
30:04
30:40
27:00
28:00
29:00
30:00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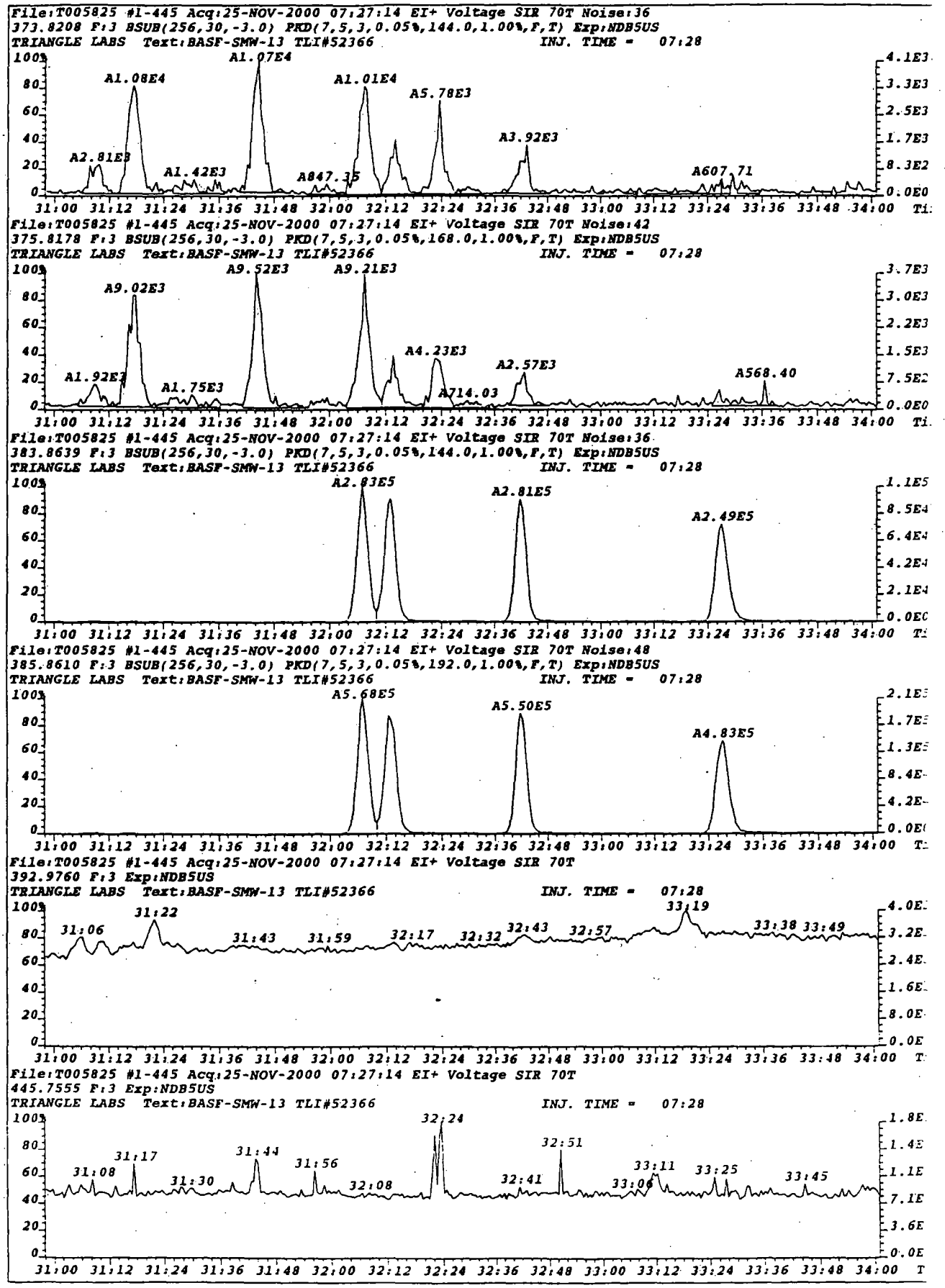
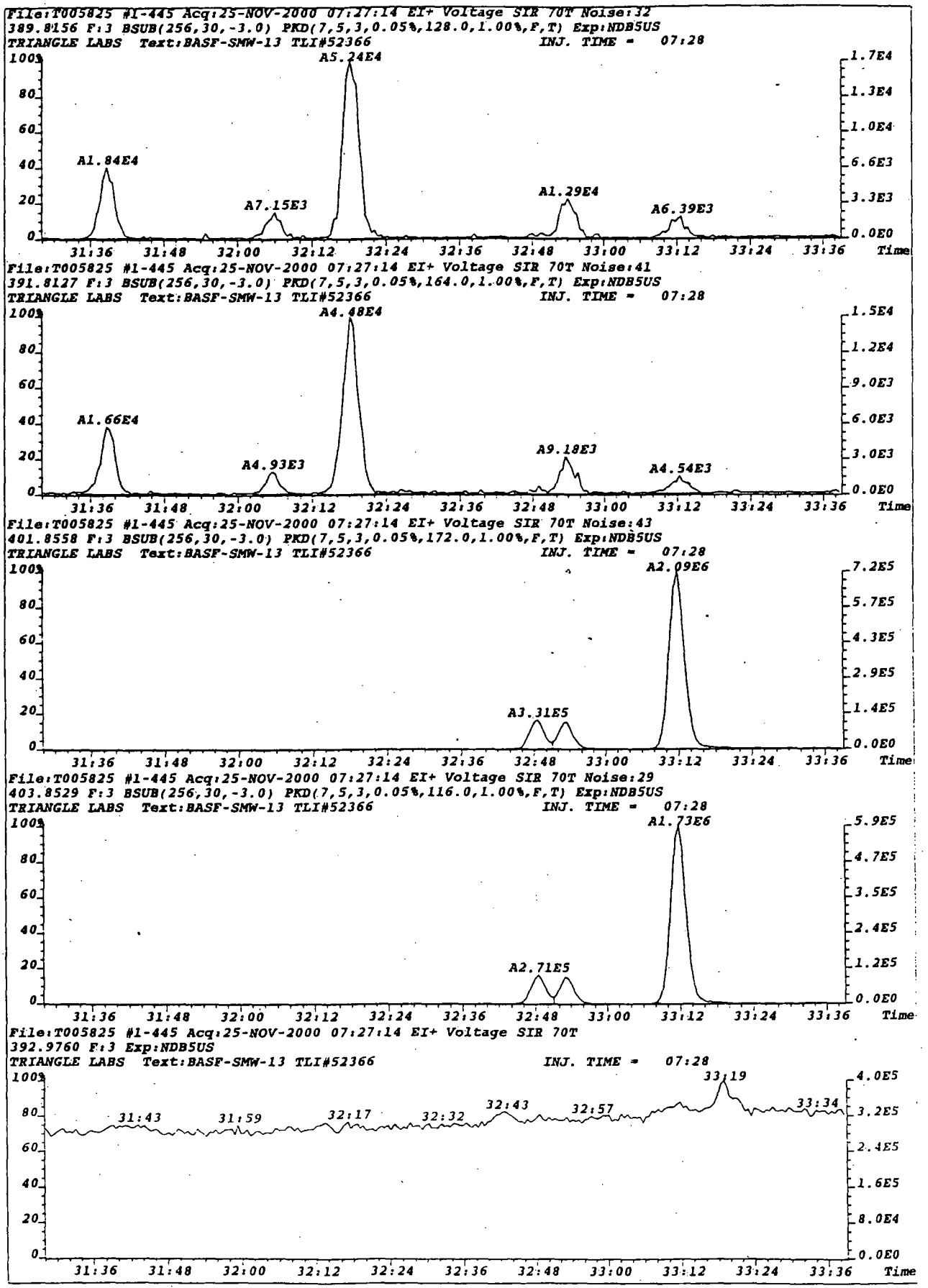
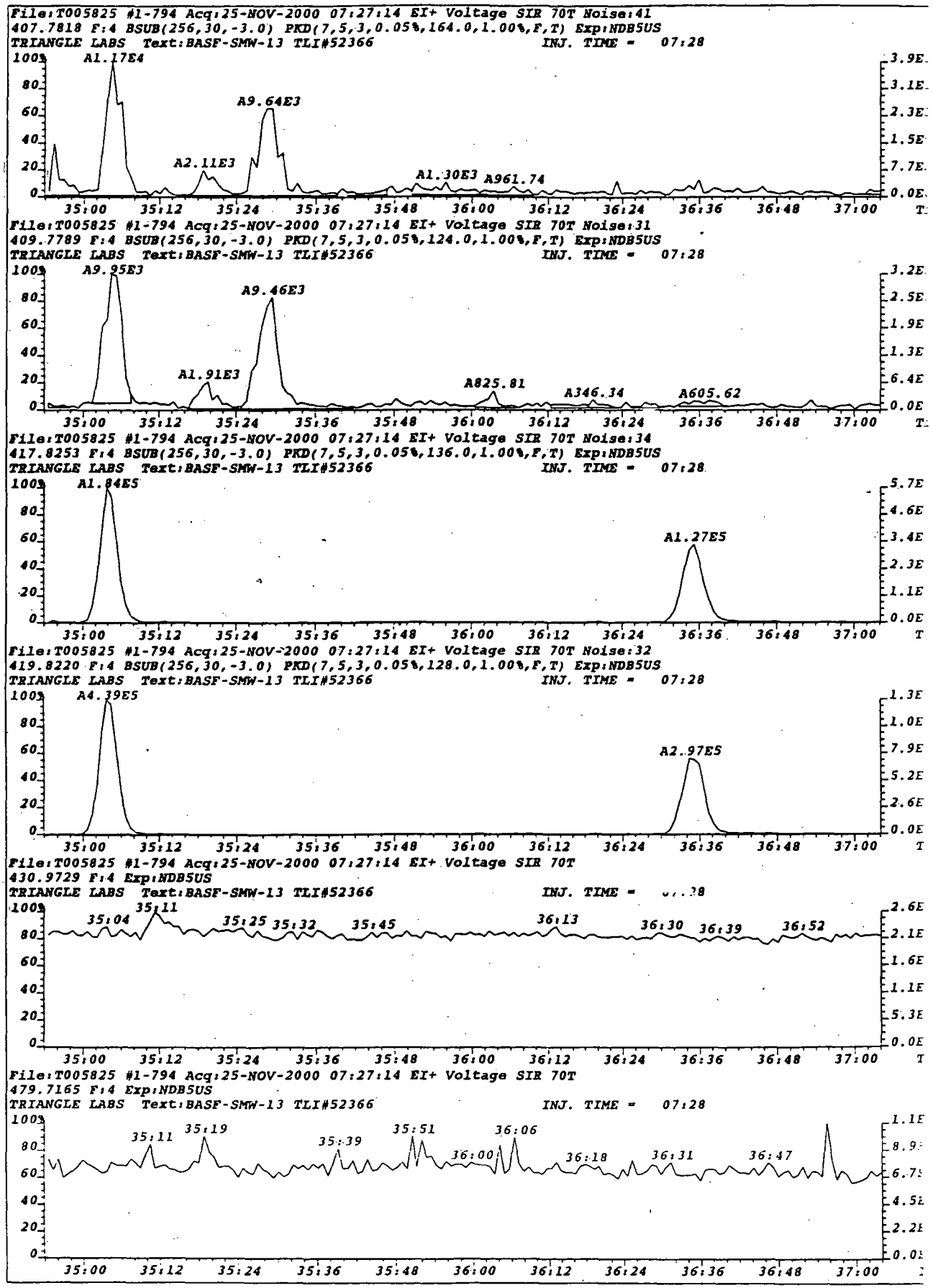
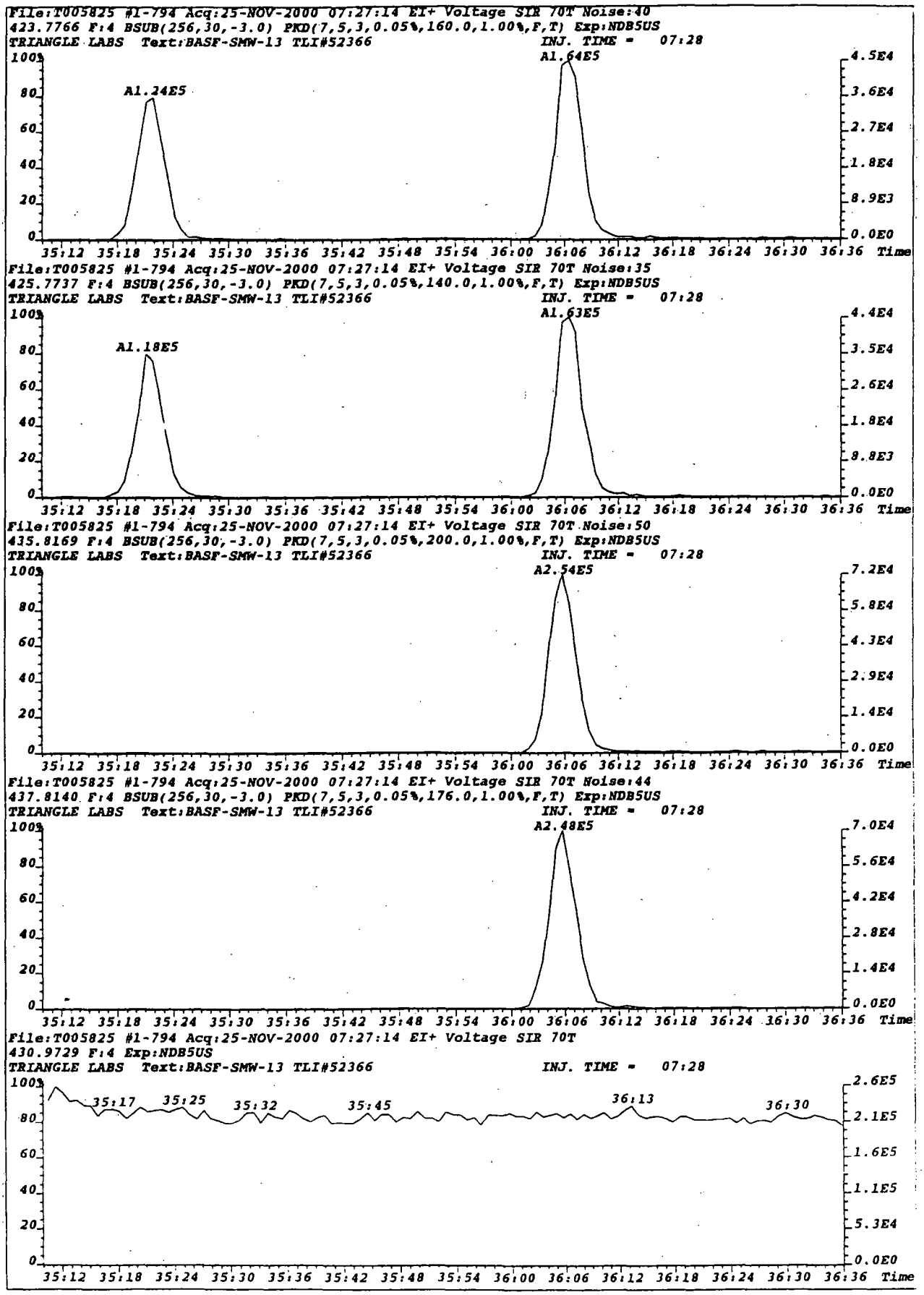
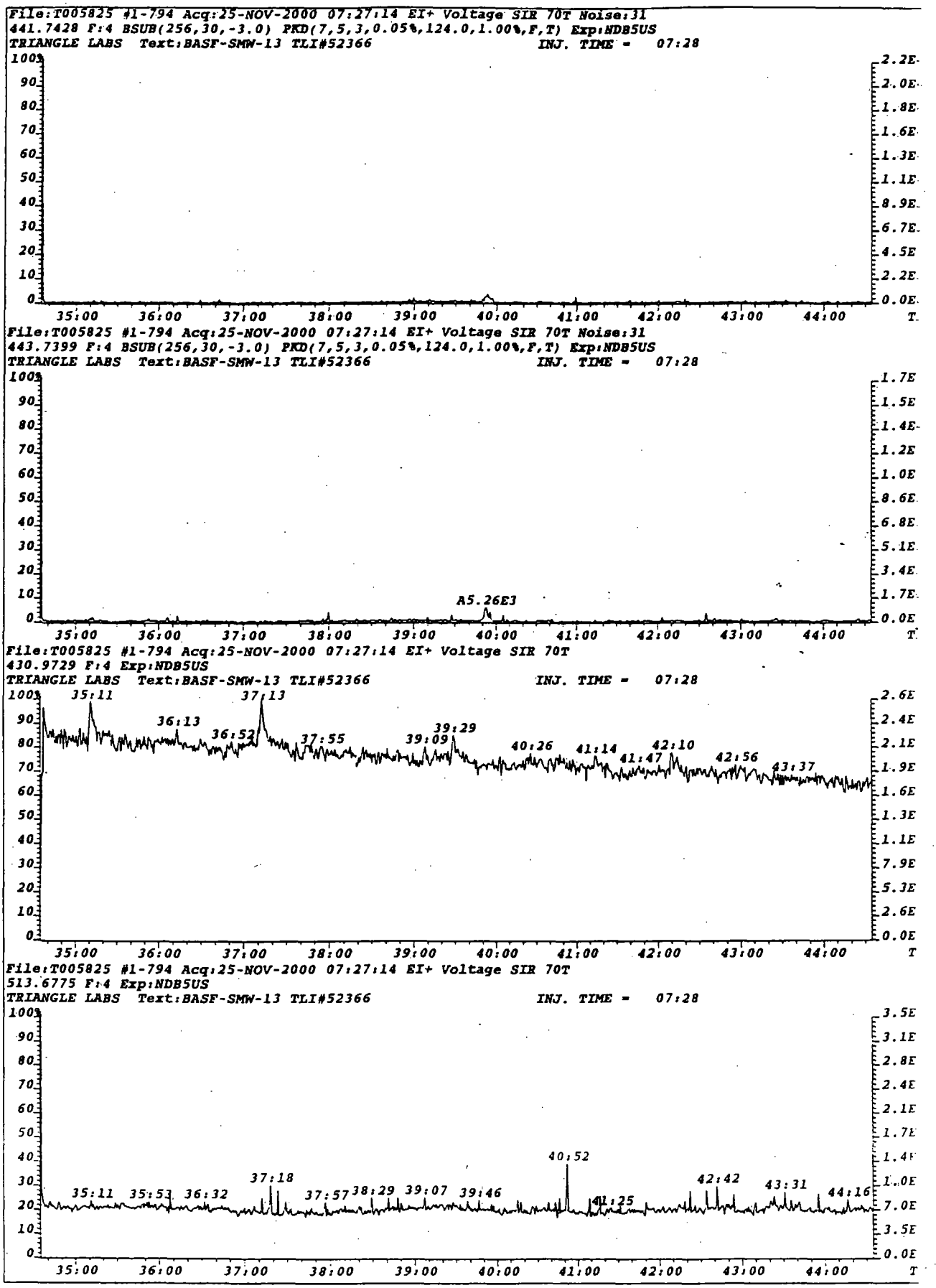
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,124.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A5.86E3
A4.73E3
A4.71E3
A3.67E3
A2.11E3
A418.37
A1.73E3
A283.71
A923.12
A1.89E3
A1.27E3
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:39
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A4.05E4
A1.12E4
A4.44E3
A5.79E3
A2.22E3
A1.65E3
A6.40E3
A3.52E3
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:31
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,124.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A3.82E5
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:28
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,112.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A2.56E5
File:T005825 #1-810 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
28:22
29:03
28:15
28:01
28:39
29:14
29:23
29:39
29:53
30:05
30:16
30:24
30:34
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36
Time

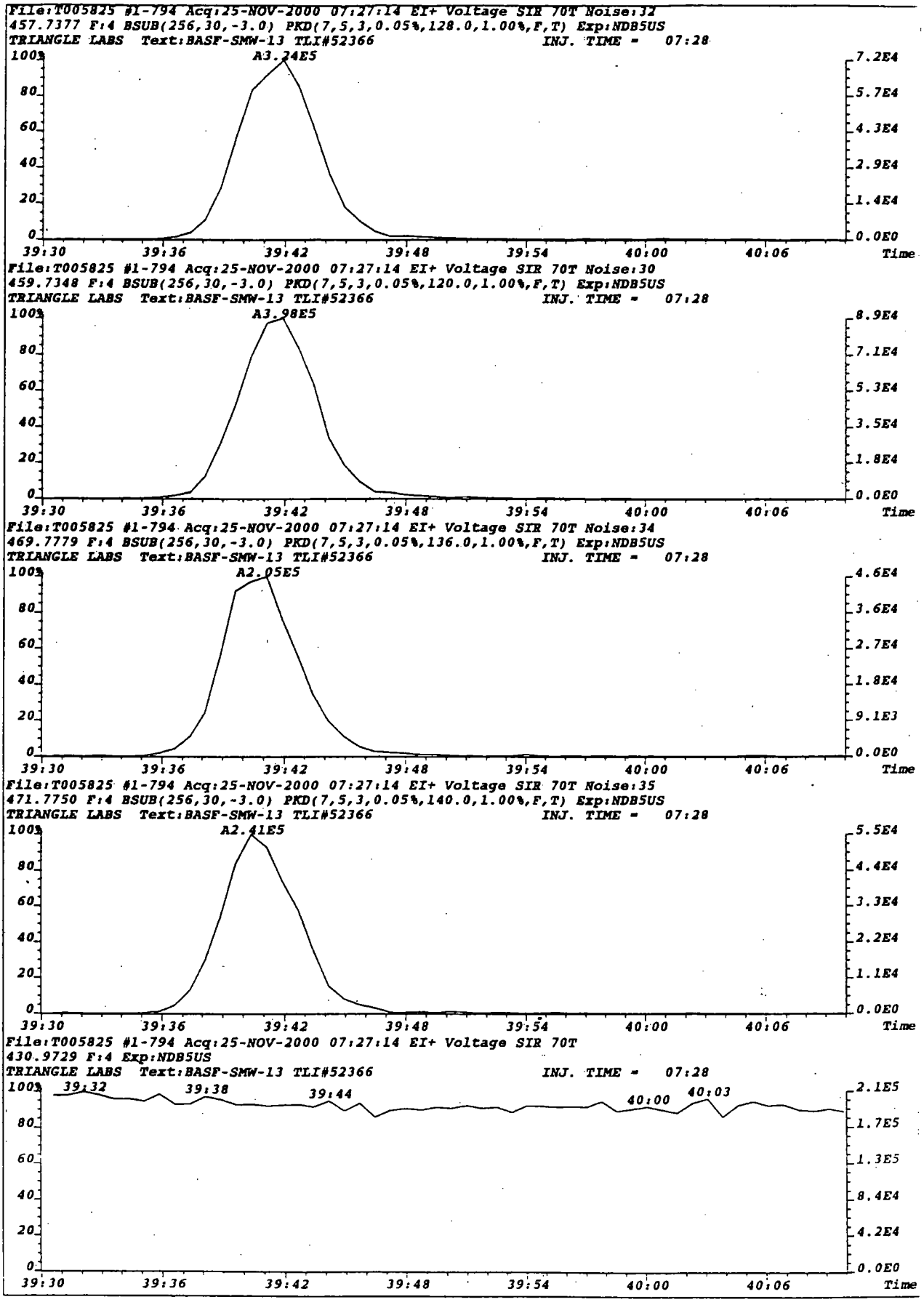

File:T005825 #1-445 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:36
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,144.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A1.07E4
A1.08E4
A1.01E4
A5.78E3
A3.92E3
A2.81E3
A1.42E3
A847.35
A607.71
File:T005825 #1-445 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:42
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A9.52E3
A9.21E3
A9.02E3
A4.23E3
A2.57E3
A1.92E3
A1.75E3
A714.03
A568.40
File:T005825 #1-445 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:36
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,144.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A2.83E5
A2.81E5
A2.49E5
File:T005825 #1-445 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:48
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,192.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A5.68E5
A5.50E5
A4.83E5
File:T005825 #1-445 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
31:06
31:22
31:43
31:59
32:17
32:32
32:43
32:57
33:19
33:38
33:49
File:T005825 #1-445 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
31:08
31:17
31:30
31:44
31:56
32:08
32:24
32:41
32:51
33:06
33:11
33:25
33:45

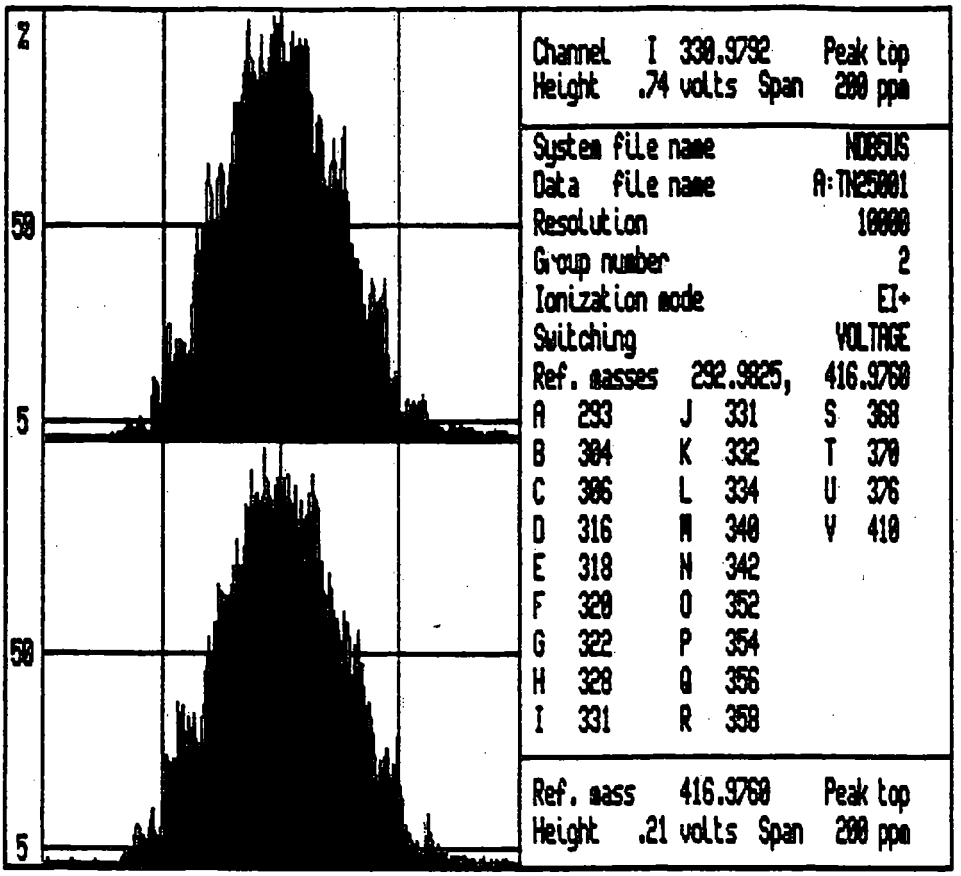

File:T005825 #1-445 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:32
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,128.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A5.24E4
A1.84E4
A7.15E3
A1.29E4
A6.39E3
File:T005825 #1-445 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:41
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A4.48E4
A1.66E4
A4.93E3
A9.18E3
A4.54E3
File:T005825 #1-445 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:43
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A2.09E6
A3.31E5
File:T005825 #1-445 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:29
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,116.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A1.73E6
A2.71E5
File:T005825 #1-445 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
33:19
31:43
31:59
32:17
32:32
32:43
32:57
33:34
31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 Time

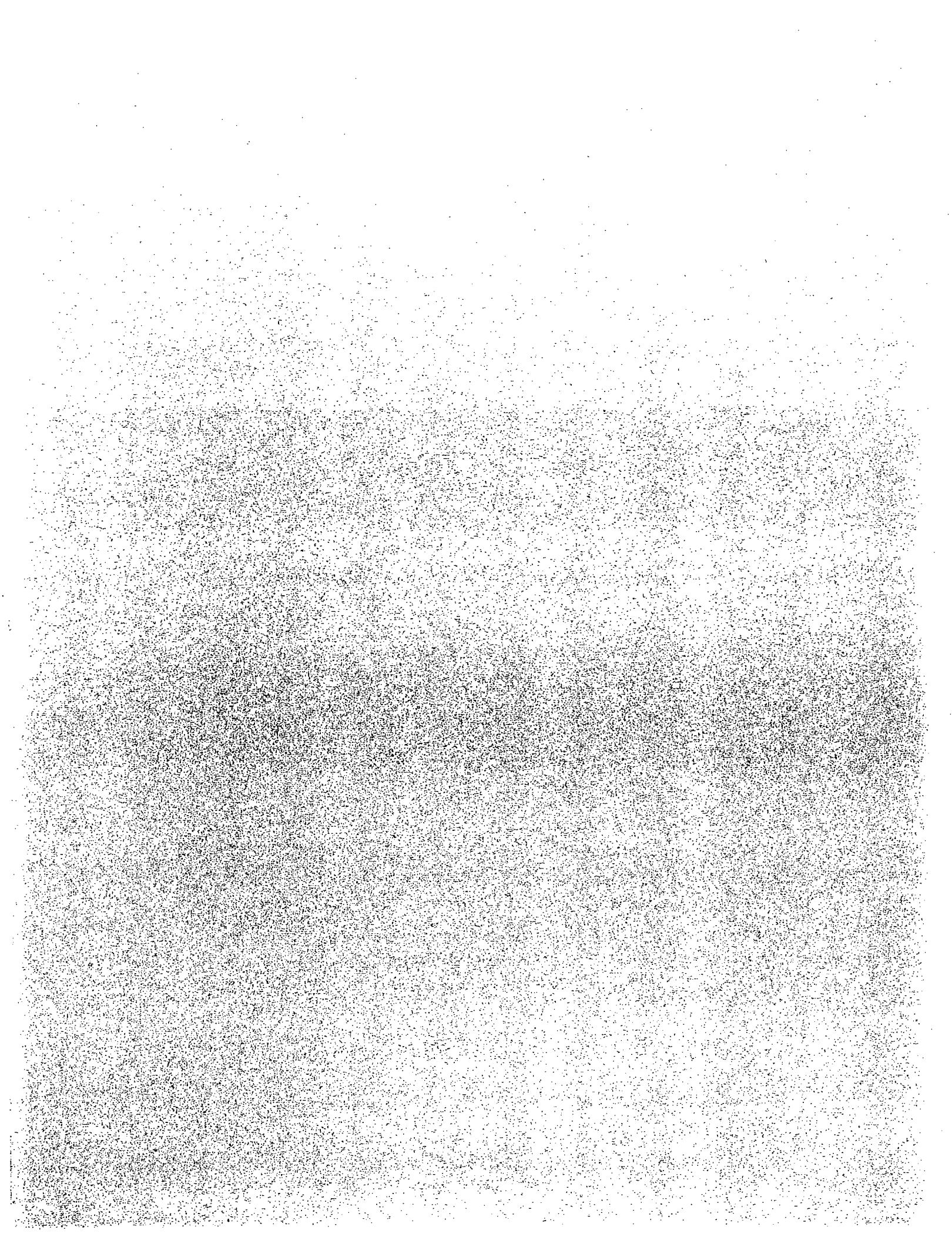

File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:41
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A1.17E4
A9.64E3
A2.11E3
A1.30E3
A961.74
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:31
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,124.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A9.95E3
A9.46E3
A1.91E3
A825.81
A346.34
A605.62
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:34
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,136.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A1.84E5
A1.27E5
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:32
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,128.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A4.39E5
A2.97E5
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME =
35:04
35:11
35:25
35:32
35:45
36:13
36:30
36:39
36:52
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
35:11
35:19
35:39
35:51
36:00
36:06
36:18
36:31
36:47
35:00
35:12
35:24
35:36
35:48
36:00
36:12
36:24
36:36
36:48
37:00


File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:40
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A1.24E5
A1.64E5
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:35
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,140.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A1.18E5
A1.63E5
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:50
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A2.54E5
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:44
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
A2.48E5
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366
INJ. TIME = 07:28
35:17
35:25
35:32
35:45
36:13
36:30
Time


File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:31
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,124.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:31
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,124.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A5.26EJ
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
35:11
36:13
36:52
37:13
37:55
39:09
39:29
40:26
41:14
41:47
42:10
42:56
43:37
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
35:11
35:53
36:32
37:18
37:57
38:29
39:07
39:46
40:52
41:25
42:42
43:31
44:16


File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:32
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,128.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A3.24E5
7.2E4
5.7E4
4.3E4
2.9E4
1.4E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:30
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,120.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A3.98E5
8.9E4
7.1E4
5.3E4
3.5E4
1.8E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:34
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,136.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A2.05E5
4.6E4
3.6E4
2.7E4
1.8E4
9.1E3
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T Noise:35
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,140.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
A2.41E5
5.5E4
4.4E4
3.3E4
2.2E4
1.1E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005825 #1-794 Acq:25-NOV-2000 07:27:14 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-13 TLI#52366 INJ. TIME = 07:28
39:32 39:38 39:44 40:00 40:03
2.1E5
1.7E5
1.3E5
8.4E4
4.2E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time


Z
50
5
50
5
Channel I 330.9792 Peak top
Height .74 volts Span 200 ppm
System file name MOBIUS
Data file name A:TN25001
Resolution 10000
Group number 2
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 416.9760
A 293 J 331 S 368
B 304 K 332 T 370
C 306 L 334 U 376
D 316 M 340 V 410
E 318 N 342
F 320 O 352
G 322 P 354
H 328 Q 356
I 331 R 358
Ref. mass 416.9760 Peak top
Height .21 volts Span 200 ppm



TriMatrix, Inc.

TLI Project: 52366 Method 8290 PCDD/PCDF Analysis (
Client Sample: **BASF-SMW-20** Analysis File: **T0058**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/2000**	Spike File:	**SPMIT32S**
TLI ID:	**274-99-8A**	Date Extracted:	**11/21/2000**	ICal:	**TF57140**
		Date Analyzed:	**11/25/2000**	ConCal:	**T005815**
Sample Size:	**1.090 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005817**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**JMM**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	ND	20.0				
1,2,3,7,8-PeCDD	181			1.46	29:58	
1,2,3,4,7,8-HxCDD	ND	3.1				
1,2,3,6,7,8-HxCDD	586			1.18	33:21	
1,2,3,7,8,9-HxCDD	ND	3.1				
1,2,3,4,6,7,8-HpCDD	72990			1.05	36:13	E
1,2,3,4,6,7,8,9-OCDD	205370			0.80	39:48	E
2,3,7,8-TCDF	2920			0.82	25:22	
1,2,3,7,8-PeCDF	967			1.55	29:40	
2,3,4,7,8-PeCDF	ND	9.4				
1,2,3,4,7,8-HxCDF	ND	8.5				
1,2,3,6,7,8-HxCDF	651			1.26	32:52	
2,3,4,6,7,8-HxCDF	ND	9.0				
1,2,3,7,8,9-HxCDF	ND	11.0				
1,2,3,4,6,7,8-HpCDF	4030			1.05	35:12	
1,2,3,4,7,8,9-HpCDF	906			1.01	36:42	
1,2,3,4,6,7,8,9-OCDF	5160			0.90	39:59	

Totals	Conc. (pg/L)	Number	DL	EMPC	Flags
Total TCDD	1720	4	2340		
Total PeCDD	1040	4	1580		
Total HxCDD	10730	5			
Total HpCDD	127110	2			E
Total TCDF	27100	15	28890		E
Total PeCDF	11600	11	11940		
Total HxCDF	9130	11	9260		
Total HpCDF	8190	4			

MIT3_PSR v1.00, LARS 6.

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Printed: 09:42 11/25/2(

TLI Project: **52366** Method 8290 PCDD/PCDF Analysis (b)
Client Sample: **BASF-SMW-20** Analysis File: **T005826**

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	530	28.9	40%-130%	0.64	25:21	VRO___
$^{13}C_{12}$-2,3,7,8-TCDD	587	32.0	40%-130%	0.77	26:00	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDF	916	49.9	40%-130%	1.46	29:39	___
$^{13}C_{12}$-1,2,3,7,8-PeCDD	1080	59.1	40%-130%	1.50	29:57	___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	393070	21420	40%-130%	0.50	32:52	___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1694720	92360	40%-130%	1.22	33:20	___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	330460	18010	25%-130%	0.45	35:11	___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	282500	15400	25%-130%	1.13	36:13	___
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	284960	7770	25%-130%	0.99	39:47	___

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,4,7,8-PeCDF	Interference					___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	Interference					___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	Interference					___
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	287390	15660	25%-130%	0.43	36:42	___

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	214	116	40%-130%	26:02	___

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	Interference					___
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	Interference					___

Recovery Standards	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.80	25:48	___
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	0.44	33:39	RO___

Data Reviewer: _____ 11/25/2000

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Printed: 09:42 11/25/2000

ERROR REPORT - TLI_AMT v3.11 For File:T005826

** Can't find peak For 13C12-2378-TCDF
** Can't find peak For 13C12-HxCDD 789
*** End of Error Report ***
Chromatographic Calculations For File:T005826

QC Front End.....: 1.6185
Tetra/Hexa RS Ratio:421.636

Initial ....Date...

Data Review By: _____ ___/___/___

Calculated Noise Height: 0.04

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005826B.dbf
11/25/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
TCDF						0.65-0.89				0.860-1.077			
304-306	DC	NL				Height	0.31	0.14	0.17				
				22:51		0.73	7.64	3.23	4.41	0.901			
				23:03		0.74	7.67	3.26	4.41	0.909			
				23:17		0.82	13.21	5.95	7.26	0.918			
				23:35	RO	0.92	38.57	16.78	18.25	0.930			
				23:51		0.89	35.72	16.84	18.88	0.941			
				24:05		0.79	28.43	12.55	15.88	0.950			
				24:25		0.85	18.46	8.50	9.96	0.963			
				24:39		0.83	20.75	9.40	11.35	0.972			
				24:47		0.87	24.46	11.35	13.11	0.978			
				24:59		0.76	50.91	22.04	28.87	0.986			
				25:12		0.85	10.86	5.00	5.86	0.994			
				25:22		0.82	62.80	28.21	34.59	1.001	2378-TCDF	AN	
				25:45		0.85	10.42	4.79	5.63	1.016			
				25:58		0.81	23.13	10.38	12.75	1.024			
				26:33		0.80	261.41	116.01	145.40	1.047			E
				26:58		0.77	7.29	3.17	4.12	1.064			
304-306			16 Peaks				621.73						
13C12-TCDF						0.65-0.89				0.959-1.041			
316-318	DC	NL				Height	0.40	0.19	0.21				
	DC	WL		22:04		0.68	20.52			0.870			
				25:21	RO	0.64	38.60	16.79	26.10	1.000	13C12-2378-TCDF	IS0	
						Height	11.90	4.74	7.16				
316-318			1 Peak				38.60						

---------- Above: TCDF / TCDD Follows ----------

TCDD						0.65-0.89				0.890-1.045			
320-322	DC	NL				Height	0.15	0.07	0.08				
	DC	SN	23:09	RC	0.42		0.51			0.890			
			23:43		0.79		17.05	7.51	9.54	0.912			
			24:03		0.84		8.06	3.69	4.37	0.925			
			24:57	RO	0.90		6.23	2.71	3.00	0.960			
			25:10	RO	0.50		2.44	1.06	2.13	0.968			
			25:30		0.88		1.60	0.75	0.85	0.981			
			26:08	RO	1.22		0.73	0.50	0.41	1.005			
			26:26		0.82		3.42	1.54	1.88	1.017			
			26:56	RO	0.97		1.43	0.62	0.64	1.036			
320-322			8 Peaks				40.96						
37Cl-TCDD										0.921-1.079			
328	DC	NL				Height	0.32	0.32					

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	WL		22:45			11.31			0.875			
	DC	WL		22:56			23.63			0.882			
	DC	WL		23:04			5.51			0.887			
	DC	WL		23:14			476.90			0.894			
	DC	WL		23:32			3.25			0.905			
	DC	WL		23:53			37.88			0.919			
				24:13			12.29	12.29		0.931			
				24:39			1,997.79	1,997.79		0.948			
				25:21			5.28	5.28		0.975			
				25:48			4.12	4.12		0.992			
				26:02			10.81	10.81		1.001	37Cl-TCDD		CLS
				26:21			17.82	17.82		1.013			
328			6	Peaks			2,048.11						
13C12-TCDD				0.65-0.89						0.921-1.079			
332-334	DC	NL			Height		0.22	0.14	0.08				
	DC	WL		22:48	RO	1.06	0.96			0.877			
	DC	WL		22:57	RO	0.64	0.48			0.883			
	DC	WL		23:07	RO	1.49	0.62			0.889			
	DC	WL		23:36	RO	0.30	0.21			0.908			
				25:48		0.80	104.27	46.38	57.89	0.992	13C12-1234-TCDD		RS1
				26:00		0.77	35.09	15.22	19.87	1.000	13C12-2378-TCDD		IS1
					Height		10.03	4.31	5.72				
				26:20		0.76	0.51	0.22	0.29	1.013			
				26:30	RO	2.19	0.57	0.70	0.32	1.019			
				26:34	RO	0.41	0.62	0.27	0.66	1.022			
332-334			5	Peaks			141.06						
---------- Above: TCDD / PeCDF Follows ----------													
PeCDF				1.32-1.78						0.923-1.064			
340-342	DC	NL			Height		0.16	0.09	0.07				
	DC	WL		26:33	RO	8.04	1.15			0.895			
	DC	WL		27:09		1.39	13.98			0.916			
				28:04		1.39	7.45	4.33	3.12	0.947			
				28:12		1.52	55.10	33.21	21.89	0.951			
				28:20		1.54	13.22	8.02	5.20	0.956			
				28:37		1.69	6.34	3.98	2.36	0.965			
				28:45		1.56	9.27	5.65	3.62	0.970			
				29:00		1.58	163.22	99.88	63.34	0.978			
				29:09		1.55	5.16	3.14	2.02	0.983			
				29:15		1.64	10.26	6.37	3.89	0.987			
				29:40		1.55	30.01	18.25	11.76	1.001	12378-PeCDF		AN
				29:47		1.50	35.24	21.13	14.11	1.004			
				30:09	RO	2.21	6.45	5.58	2.53	1.017			
				30:17		1.45	26.92	15.95	10.97	1.021			
				30:34	RO	1.93	4.18	3.16	1.64	1.031			
340-342			13	Peaks			372.82						
13C12-PeCDF				1.32-1.78						0.860-1.140			
352-354	DC	NL			Height		0.14	0.06	0.08				
				26:29	RO	0.61	2.32	1.41	2.32	0.893			

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				26:34	RO	0.79	2.50	1.52	1.92	0.896			
	DC	SN		27:10	RO	0.83	0.25			0.916			
				27:19		1.56	0.41	0.25	0.16	0.921			
				27:52	RO	0.90	0.59	0.36	0.40	0.940			
				28:59		1.47	83.42	49.71	33.71	0.978			
				29:39		1.46	62.43	37.07	25.36	1.000	13C12-PeCDF 123	IS2	
					Height		21.15	12.90	8.25				
				29:54	RO	2.91	1.10	1.25	0.43	1.008			
				30:05	RO	0.85	2.01	1.22	1.43	1.015			
352-354		8	Peaks				154.78						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD						1.32-1.78				0.933-1.021			
356-358	DC	NL				Height	0.06	0.03	0.03				
				28:04	RO	0.48	0.67	0.41	0.85	0.937			J
				28:37	RO	0.64	2.48	1.51	2.36	0.955			
				28:45		1.49	1.94	1.16	0.78	0.960			
				28:57		1.53	13.23	8.00	5.23	0.967			
				29:05		1.41	5.67	3.32	2.35	0.971			
				29:17	RO	1.98	2.37	1.84	0.93	0.978			
				29:47	RO	0.33	3.96	2.41	7.29	0.994			
				29:58		1.46	4.38	2.60	1.78	1.001	12378-PeCDD	AN	
				30:05	RO	0.25	3.50	2.13	8.64	1.004			
356-358		9	Peaks				38.20						
13C12-PeCDD						1.32-1.78				0.865-1.135			
368-370	DC	NL				Height	0.08	0.04	0.04				
				27:50		1.74	0.52	0.33	0.19	0.929			
	DC	SN		28:21	RO	0.83	0.08			0.947			
				28:58	RO	2.61	0.46	0.47	0.18	0.967			
				29:04		1.77	0.72	0.46	0.26	0.971			
	DC	SN		29:40	RO	3.38	0.20			0.991			
				29:57		1.50	42.03	25.24	16.79	1.000	13C12-PeCDD 123	IS3	
					Height		14.17	8.58	5.59				
				30:09	RO	0.93	0.44	0.27	0.29	1.007			
	DC	SN		30:20	RO	5.00	0.18			1.013			
368-370		5	Peaks				44.17						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF						1.05-1.43				0.961-1.046			
374-376	DC	NL				Height	0.47	0.22	0.25				
	DC	WL		30:59		1.09	4.36			0.943			
	DC	WL		31:22		1.22	15.73			0.954			
	DC	WL		31:30		1.32	72.17			0.958			
				31:39		1.10	2.27	1.19	1.08	0.963			
				31:47		1.32	4.73	2.69	2.04	0.967			
				31:56		1.31	51.62	29.23	22.39	0.972			
				32:07	RO	0.99	4.26	2.36	2.39	0.977			
				32:18		1.32	120.48	68.45	52.03	0.983			
				32:23		1.29	36.99	20.81	16.18	0.985			

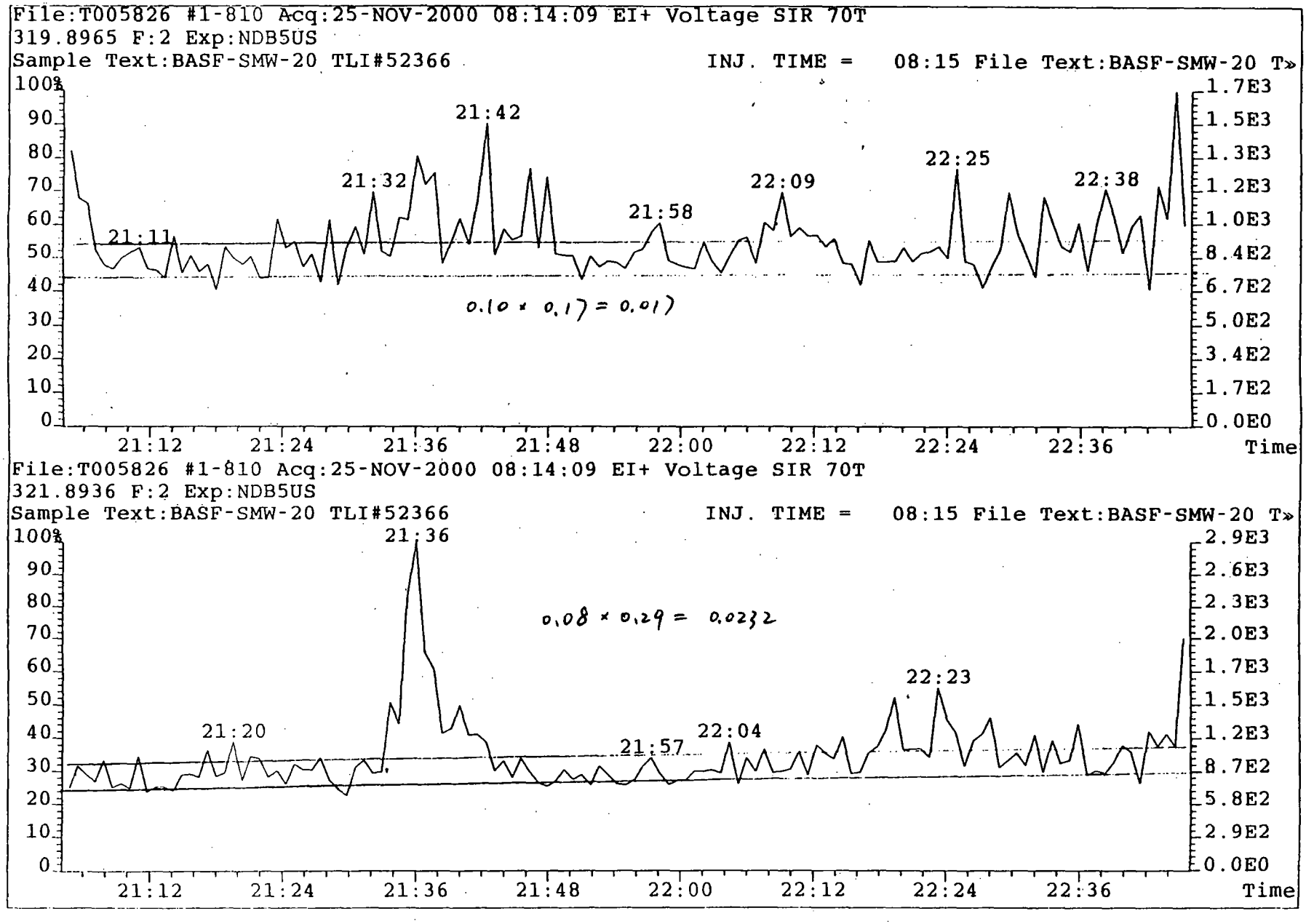
Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				32:31		1.24	36.30	20.13	16.17	0.989			
				32:39		1.32	4.58	2.61	1.97	0.993			
				32:52		1.26	23.74	13.24	10.50	1.000	123678-HxCDF		AN
				33:33		1.38	4.29	2.49	1.80	1.021			
				33:40		1.28	10.35	5.81	4.54	1.024			
				34:02		1.09	6.33	3.30	3.03	1.035			
374-376			12 Peaks				305.94						
13C12-HxCDF						0.43-0.59				0.876-1.124			
384-386	DC	NL				Height	0.40	0.15	0.25				
				31:21	RO	0.80	1.27	0.43	0.54	0.954			
				32:17		0.51	74.90	25.31	49.59	0.982			
				32:23		0.52	70.36	24.16	46.20	0.985			
				32:52		0.50	62.21	20.85	41.36	1.000	13C12-HxCDF 678		IS4
						Height	20.92	6.66	14.26				
				33:03	RO	2.38	0.92	1.45	0.61	1.006			
				33:36		0.52	52.65	18.10	34.55	1.022			
384-386			6 Peaks				262.31						
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD						1.05-1.43				0.956-1.013			
390-392	DC	NL				Height	0.38	0.17	0.21				
	DC	WL		31:28	RO	0.66	3.05			0.944			
	DC	WL		31:50		1.21	90.25			0.955			
				32:16		1.21	49.13	26.88	22.25	0.968			
				32:28		1.22	728.06	399.93	328.13	0.974			
				32:37		1.27	4.81	2.69	2.12	0.979			
				33:03		1.21	163.99	89.69	74.30	0.992			
				33:21		1.18	54.40	29.47	24.93	1.001	123678-HxCDD		AN
390-392			5 Peaks				1,000.39						
13C12-HxCDD						1.05-1.43				0.970-1.030			
402-404	DC	NL				Height	0.25	0.15	0.10				
	DC	WL		31:27	RO	0.37	0.49			0.944			
				32:58		1.22	42.34	23.27	19.07	0.989			
				33:02		1.21	42.12	23.05	19.07	0.991			
	DC	SN		33:10	RO	0.73	0.14			0.995			
				33:20		1.22	167.73	92.02	75.71	1.000	13C12-HxCDD 678		IS5
						Height	58.04	32.04	26.00				
				33:39	RO	0.44	0.20	0.11	0.25	1.010	13C12-HxCDD 789		RS2
402-404			4 Peaks				252.39						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF						0.88-1.20				0.995-1.048			
408-410	DC	NL				Height	0.92	0.63	0.29				
	DC	WL		34:48	RO	1.67	1.84			0.989			
				35:12		1.05	96.37	49.42	46.95	1.000	1234678-HpCDF		AN
				35:25		1.06	9.82	5.05	4.77	1.007			
				35:36		1.09	59.05	30.86	28.19	1.012			
				36:42		1.01	16.71	8.38	8.33	1.043	1234789-HpCDF		AN

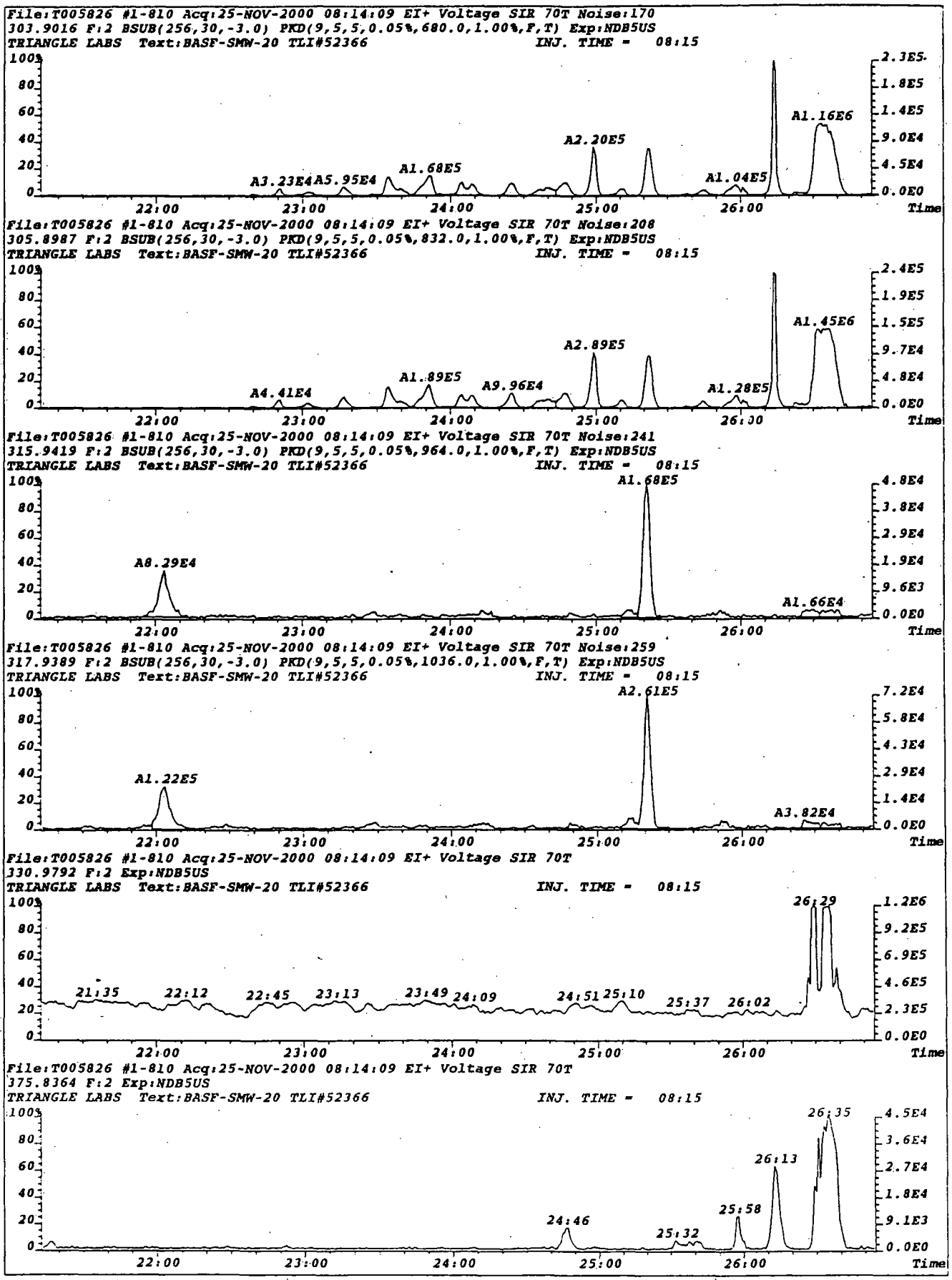
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
408-410			4 Peaks				181.95						
13C12-HpCDF				0.37-0.51						0.943-1.114			
418-420	DC	NL		Height			0.41	0.18	0.23				
				35:11		0.45	34.94	10.83	24.11	1.000	13C12-HpCDF 678	IS6	
				Height			10.76	3.20	7.56				
				36:42		0.43	23.64	7.15	16.49	1.043	13C12-HpCDF 789	SUR4	
418-420			2 Peaks				58.58						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20						0.974-1.005			
424-426	DC	NL		Height			0.41	0.21	0.20				
	DC	WL		35:09		1.11	1.92			0.971			
				35:29		1.04	666.30	339.36	326.94	0.980			E
				36:13		1.05	898.57	460.99	437.58	1.000	1234678-HpCDD	AN	E
424-426			2 Peaks				1,564.87						
13C12-HpCDD				0.88-1.20						0.972-1.028			
436-438	DC	NL		Height			0.45	0.29	0.16				
				36:13		1.13	26.42	14.04	12.38	1.000	13C12-HpCDD 678	IS7	
				Height			6.87	3.77	3.10				
436-438			1 Peak				26.42						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02						0.899-1.101			
442-444	DC	NL		Height			0.14	0.07	0.07				
	DC	WL		34:52		0.84	0.70			0.876			
	DC	SN		36:13	RO	4.43	0.13			0.910			
	DC	SN		36:23	RO	1.31	0.30			0.915			
	DC	SN		38:40	RO	2.64	0.21			0.972			
				38:52	RO	1.43	0.26	0.20	0.14	0.977			
	DC	SN		39:33	RO	0.25	0.13			0.994			
	DC	SN		39:37	RO	0.44	0.08			0.996			
				39:49	RO	1.40	1.46	1.08	0.77	1.001			
				39:59		0.90	33.51	15.85	17.66	1.005	OCDF	AN	
				41:10	RO	1.24	0.55	0.36	0.29	1.035			
	DC	SN		41:26	RO	1.33	0.23			1.041			
				41:52		0.99	3.40	1.69	1.71	1.052			
	DC	SN		42:22		0.83	0.33			1.065			
	DC	SN		42:28	RO	1.17	0.23			1.067			
	DC	SN		42:35		0.93	0.27			1.070			
	DC	SN		42:49	RO	0.43	0.13			1.076			
	DC	SN		43:09	RO	3.17	0.23			1.085			
	DC	SN		43:15	RO	1.54	0.25			1.087			
	DC	SN		43:29	RO	0.23	0.15			1.093			
				43:44	RO	0.54	0.57	0.27	0.50	1.099			
	DC	WH		43:51	RO	4.00	0.04			1.102			
	DC	WH		44:16	RO	1.57	0.26			1.113			
442-444			6 Peaks				39.75						

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
OCDD						0.76-1.02				0.899-1.101			
458-460	DC	NL				Height	0.13	0.06	0.07				
				39:48		0.80	1,108.95	493.59	615.36	1.000	OCDD	AN	E
458-460			1 Peak				1,108.95						
13C12-OCDD						0.76-1.02				0.996-1.004			
470-472	DC	NL				Height	0.22	0.12	0.10				
				39:47		0.99	21.68	10.77	10.91	1.000	13C12-OCDD	IS8	
						Height	5.00	2.55	2.45				
470-472			1 Peak				21.68						

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***


File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15 File Text:BASF-SMW-20 T»
21:11
21:32
21:42
21:58
22:09
22:25
22:38
0.10 × 0.17 = 0.017
Time
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15 File Text:BASF-SMW-20 T»
21:20
21:36
21:57
22:04
22:23
0.08 × 0.29 = 0.0232
Time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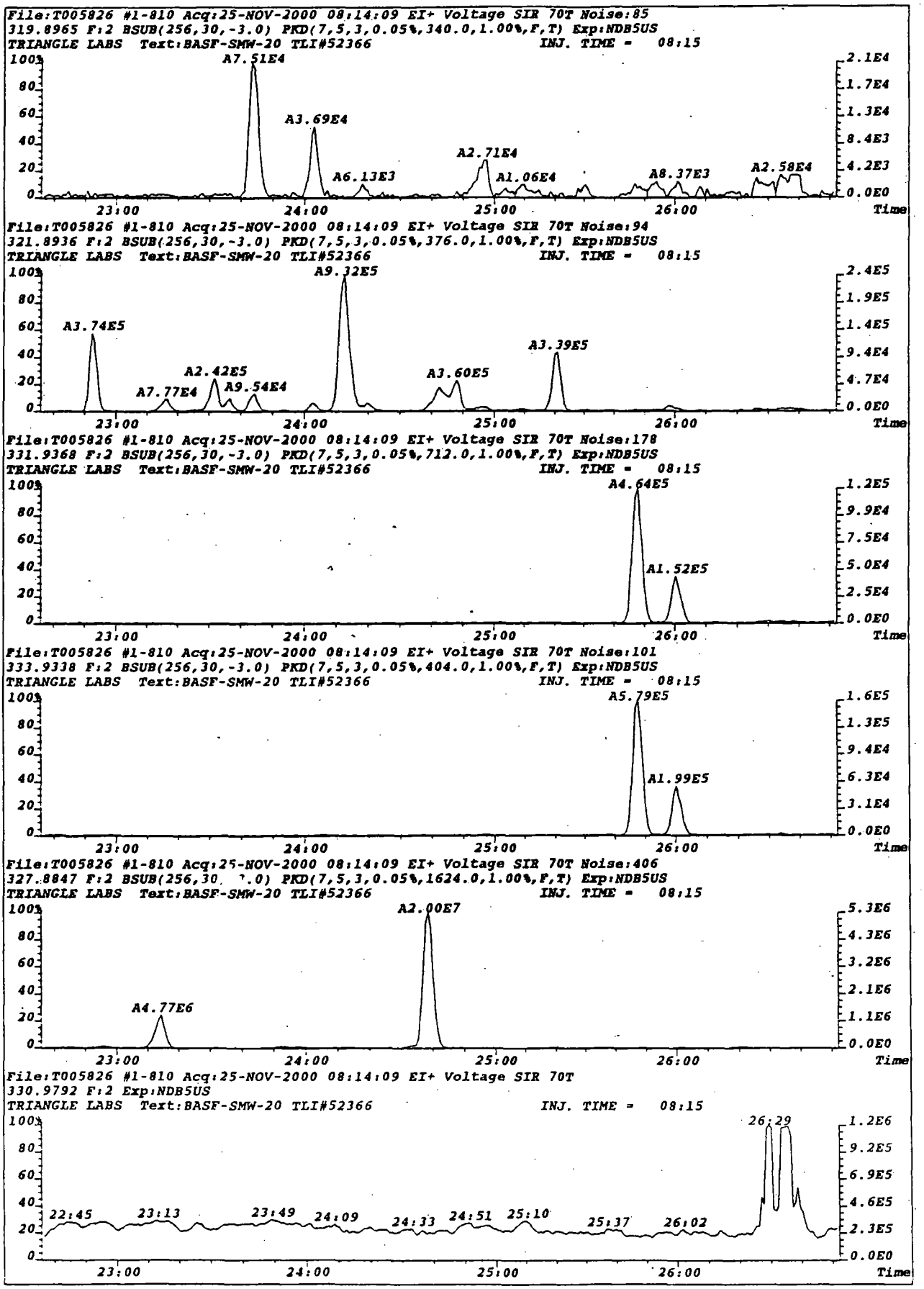
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,680.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A3.23E4 A5.95E4 A1.68E5 A2.20E5 A1.04E5 A1.16E6
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:208
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,832.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A4.41E4 A1.89E5 A9.96E4 A2.89E5 A1.28E5 A1.45E6
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:241
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,964.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A8.29E4 A1.68E5 A1.66E4
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:259
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,1036.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A1.22E5 A2.61E5 A3.82E4
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
21:35 22:12 22:45 23:13 23:49 24:09 24:51 25:10 25:37 26:02 26:29
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
24:46 25:32 25:58 26:13 26:35
Time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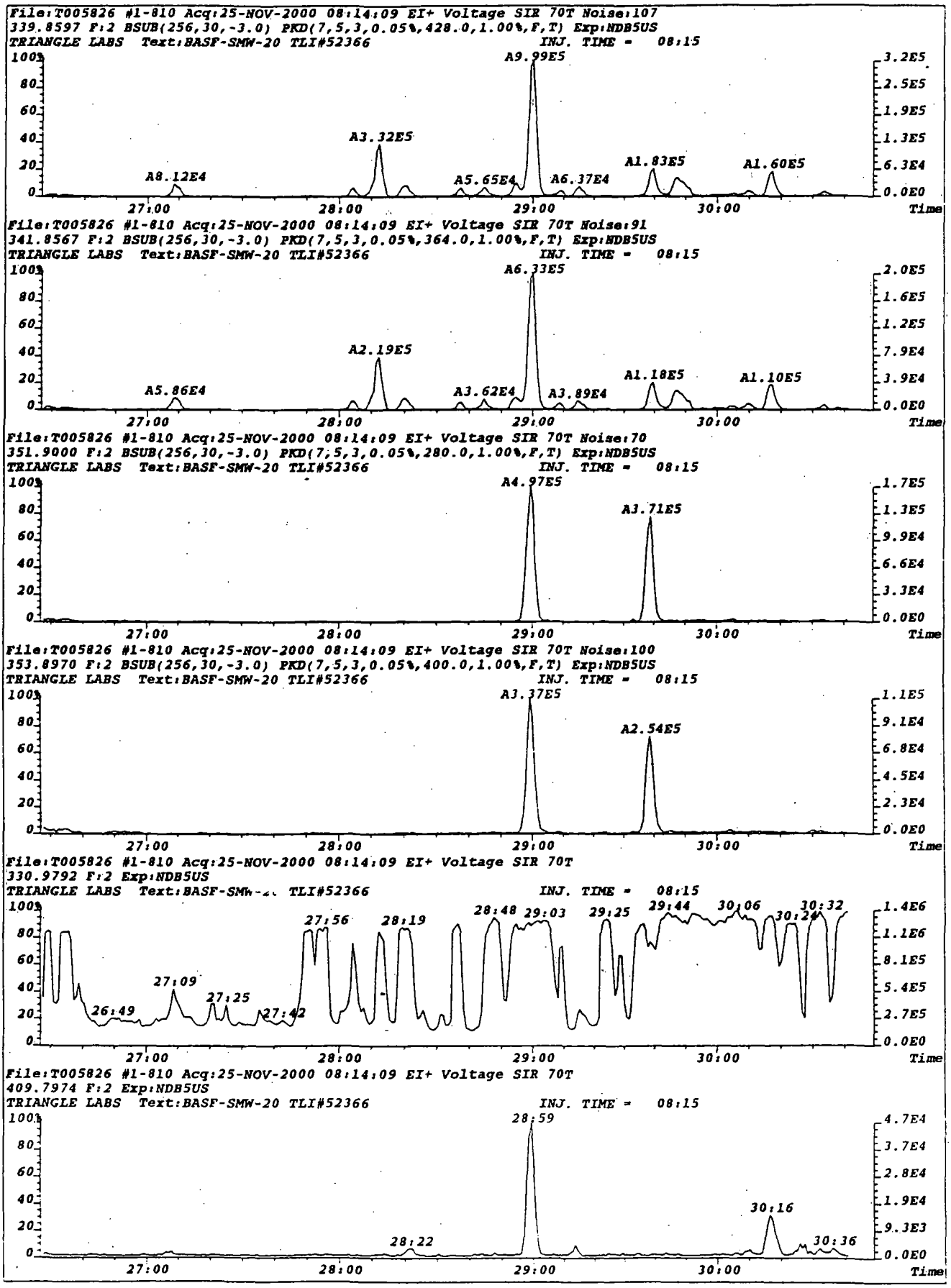
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,340.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A7.51E4
A3.69E4
A6.13E3
A2.71E4
A1.06E4
A8.37E3
A2.58E4
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:94
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,376.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A9.32E5
A3.74E5
A2.42E5
A7.77E4
A9.54E4
A3.60E5
A3.39E5
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:178
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,712.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A4.64E5
A1.52E5
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:101
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,404.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A5.79E5
A1.99E5
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:406
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1624.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A2.00E7
A4.77E6
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
26:29
22:45
23:13
23:49
24:09
24:33
24:51
25:10
25:37
26:02
23:00
24:00
25:00
26:00
Time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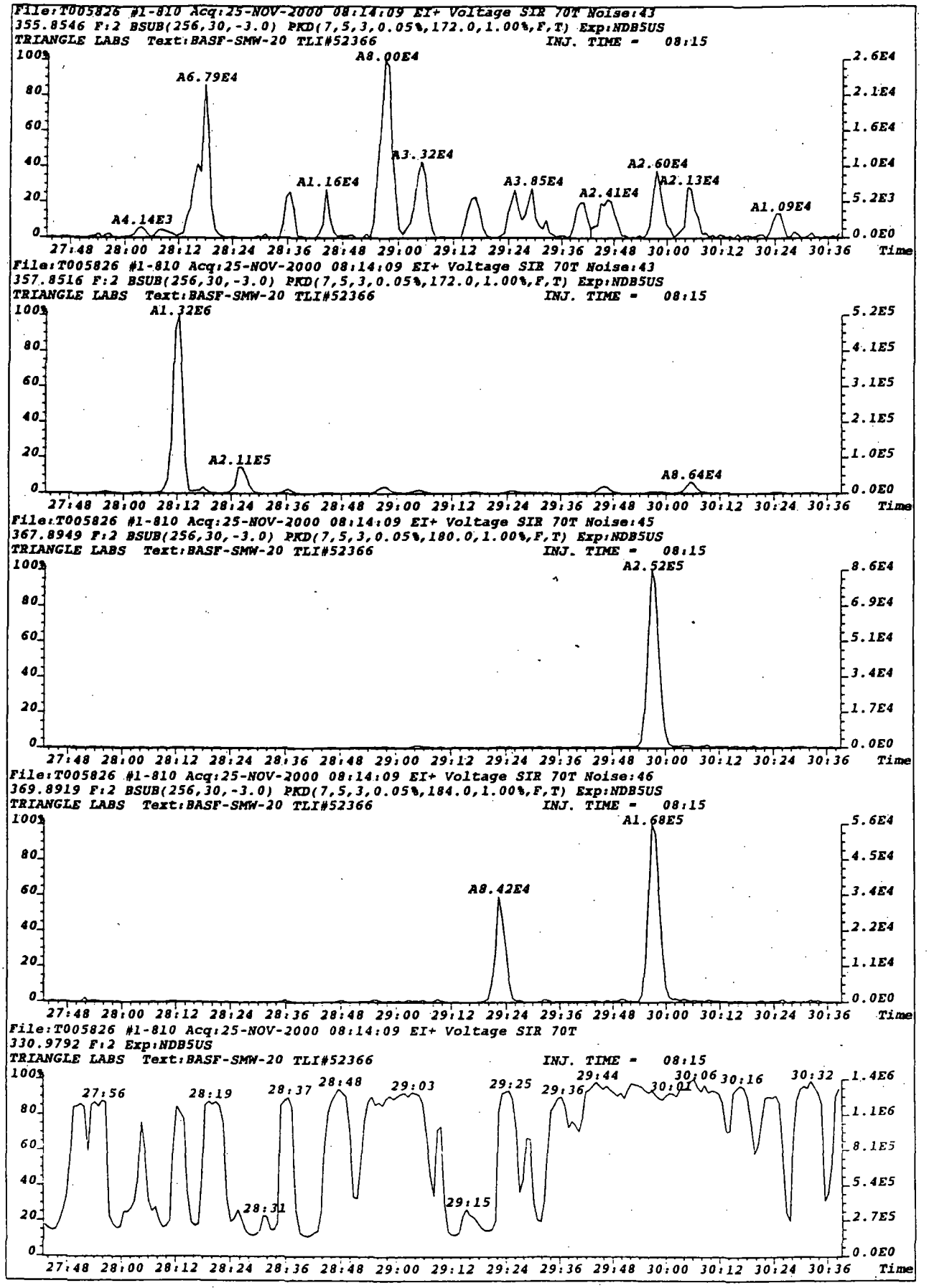
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,428.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A9.99E5
A3.32E5
A8.12E4
A5.65E4
A6.37E4
A1.83E5
A1.60E5
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:91
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,364.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A6.33E5
A2.19E5
A5.86E4
A3.62E4
A3.89E4
A1.18E5
A1.10E5
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:70
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,280.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A4.97E5
A3.71E5
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:100
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,400.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A3.37E5
A2.54E5
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
27:56
28:19
28:48
29:03
29:25
29:44
30:06
30:24
30:32
27:09
27:25
26:49
27:42
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
28:59
30:16
28:22
30:36
27:00
28:00
29:00
30:00
Time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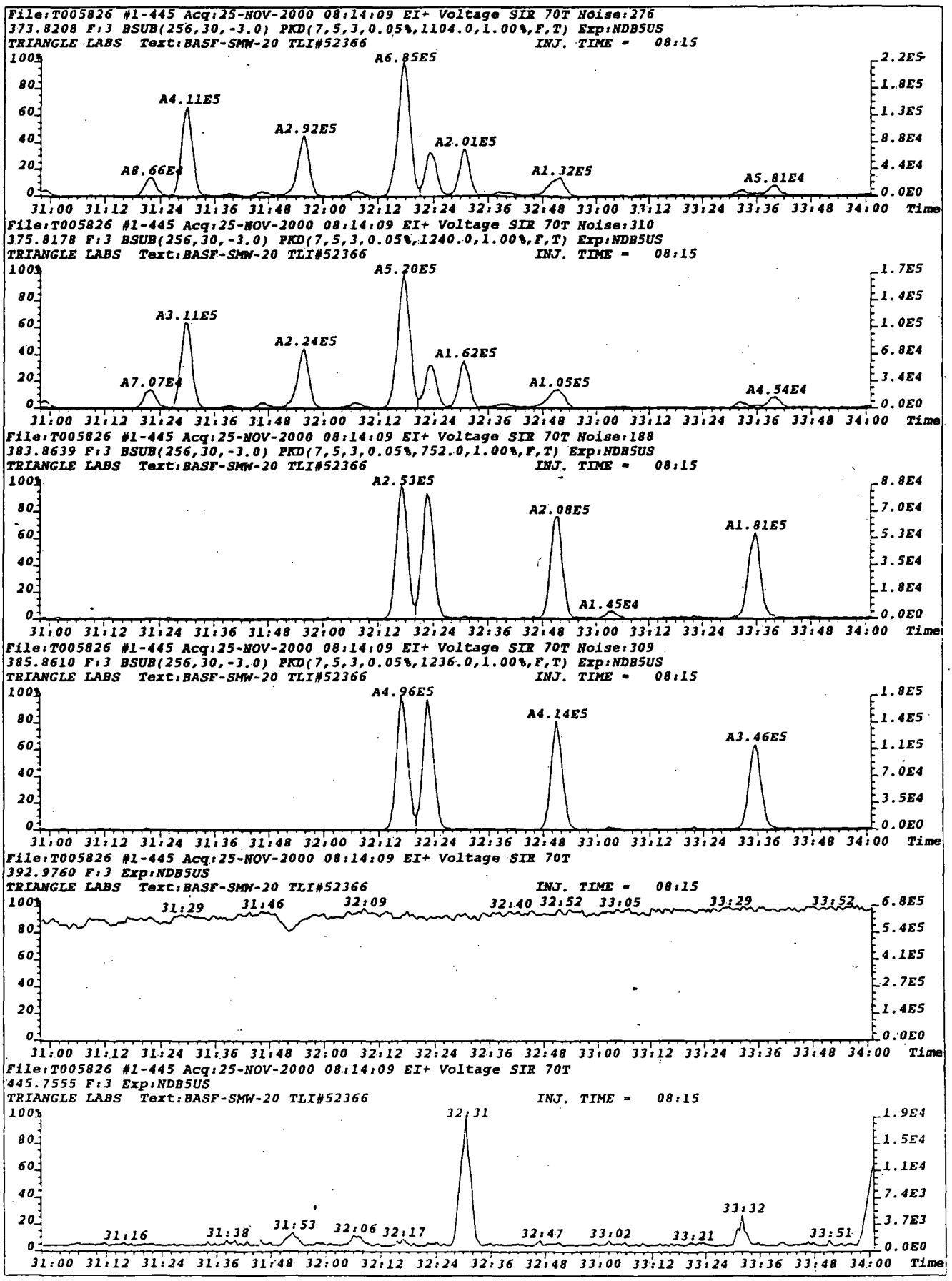
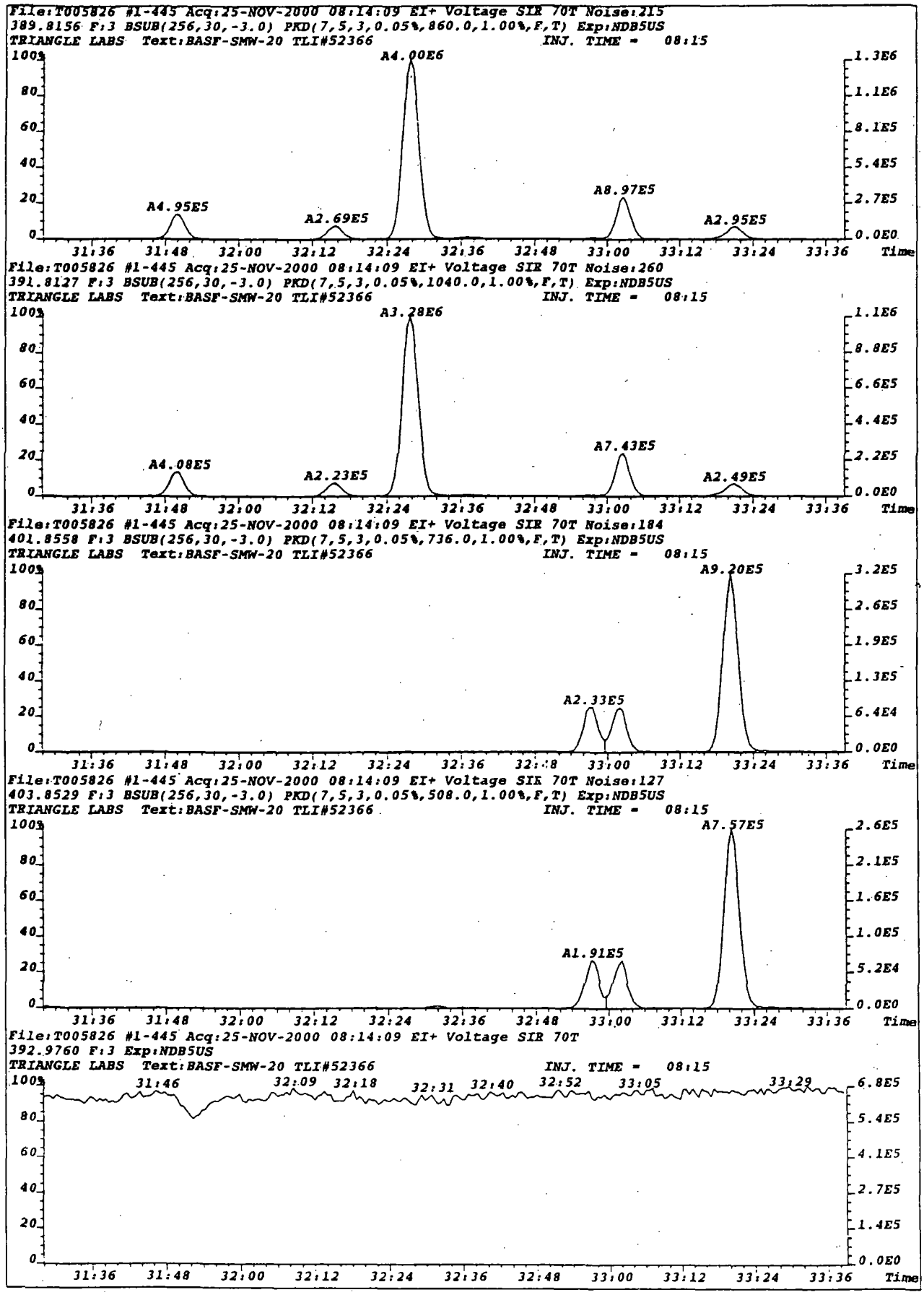
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A6.79E4
A8.00E4
A3.32E4
A1.16E4
A3.85E4
A2.60E4
A2.13E4
A2.41E4
A1.09E4
A4.14E3
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:43
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A1.32E6
A2.11E5
A8.64E4
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:45
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,180.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A2.52E5
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:46
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A1.68E5
A8.42E4
File:T005826 #1-810 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
27:56
28:19
28:37
28:48
29:03
29:25
29:36
29:44
30:01
30:06
30:16
30:32
28:31
29:15
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time


File:T005826 #1-445 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:276
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1104.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A6.85E5
A4.11E5
A2.92E5
A2.01E5
A8.66E4
A1.32E5
A5.81E4
File:T005826 #1-445 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:310
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1240.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A5.20E5
A3.11E5
A2.24E5
A1.62E5
A7.07E4
A1.05E5
A4.54E4
File:T005826 #1-445 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:188
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,752.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A2.53E5
A2.08E5
A1.81E5
A1.45E4
File:T005826 #1-445 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:309
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1236.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A4.96E5
A4.14E5
A3.46E5
File:T005826 #1-445 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
31:29
31:46
32:09
32:40
32:52
33:05
33:29
33:52
File:T005826 #1-445 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
32:31
31:16
31:38
31:53
32:06
32:17
32:47
33:02
33:21
33:32
33:51
31:00 31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 33:48 34:00 Time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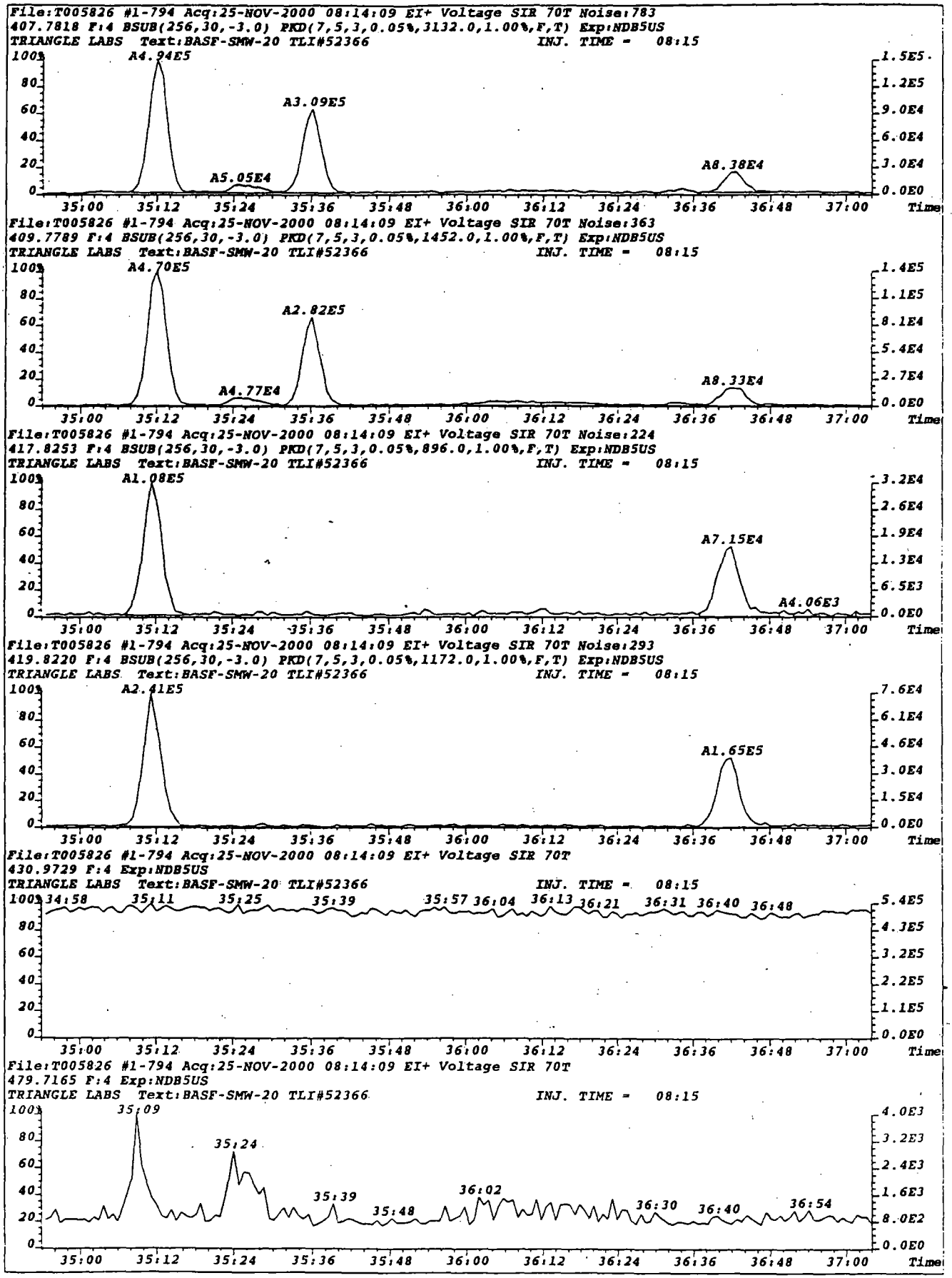
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,860.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A4.00E6
A4.95E5
A2.69E5
A8.97E5
A2.95E5
File:T005826 #1-445 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:260
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1040.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A3.28E6
A4.08E5
A2.23E5
A7.43E5
A2.49E5
File:T005826 #1-445 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:184
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,736.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A9.20E5
A2.33E5
File:T005826 #1-445 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:127
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,508.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A7.57E5
A1.91E5
File:T005826 #1-445 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
31:46
32:09
32:18
32:31
32:40
32:52
33:05
33:29
Time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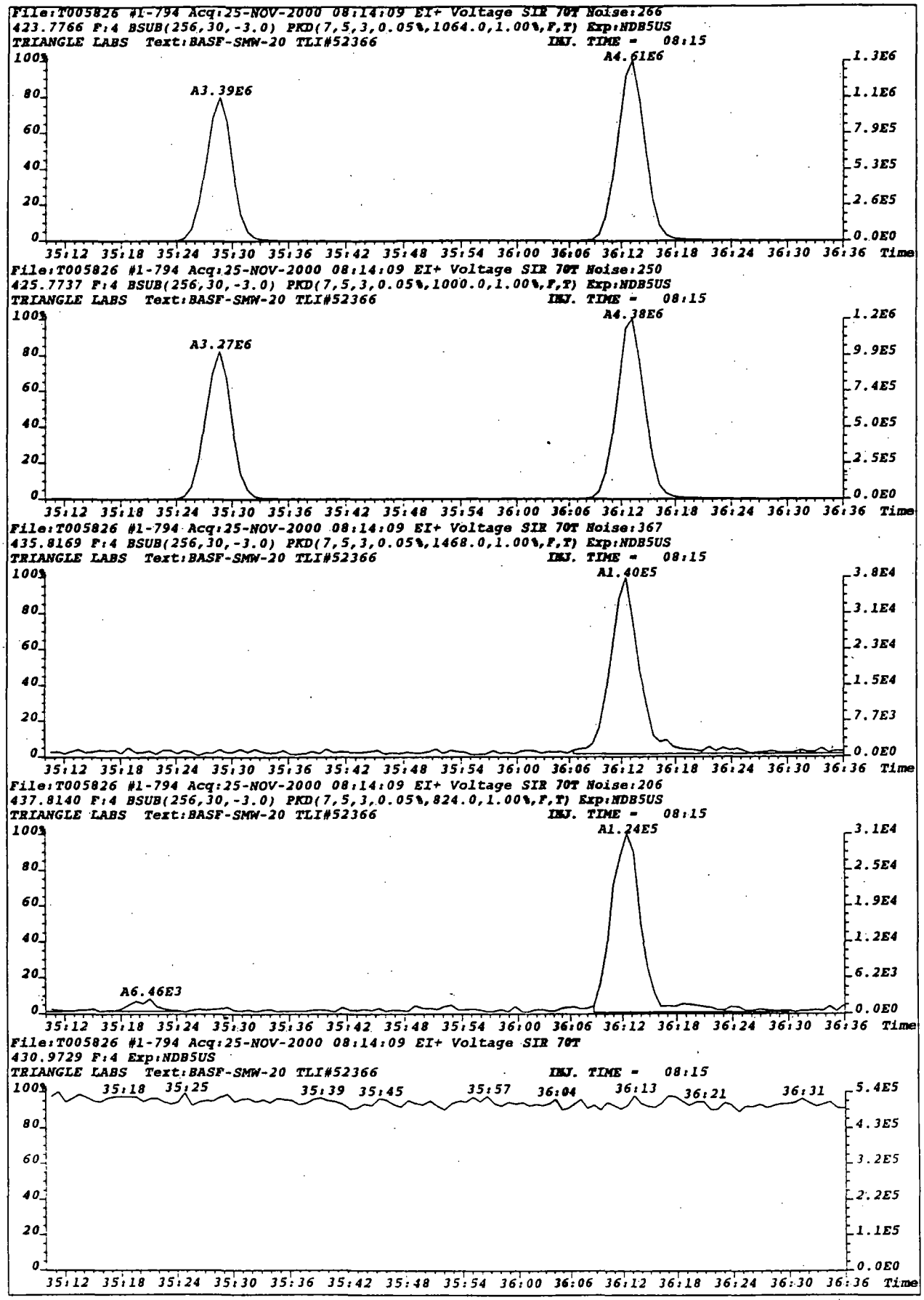
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,3132.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A4.94E5
A3.09E5
A5.05E4
A8.38E4
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:363
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1452.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A4.70E5
A2.82E5
A4.77E4
A8.33E4
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:224
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,896.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A1.08E5
A7.15E4
A4.06E3
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:293
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A2.41E5
A1.65E5
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
35:09
35:24
35:39
35:48
36:02
36:30
36:40
36:54
35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36 36:48 37:00
Time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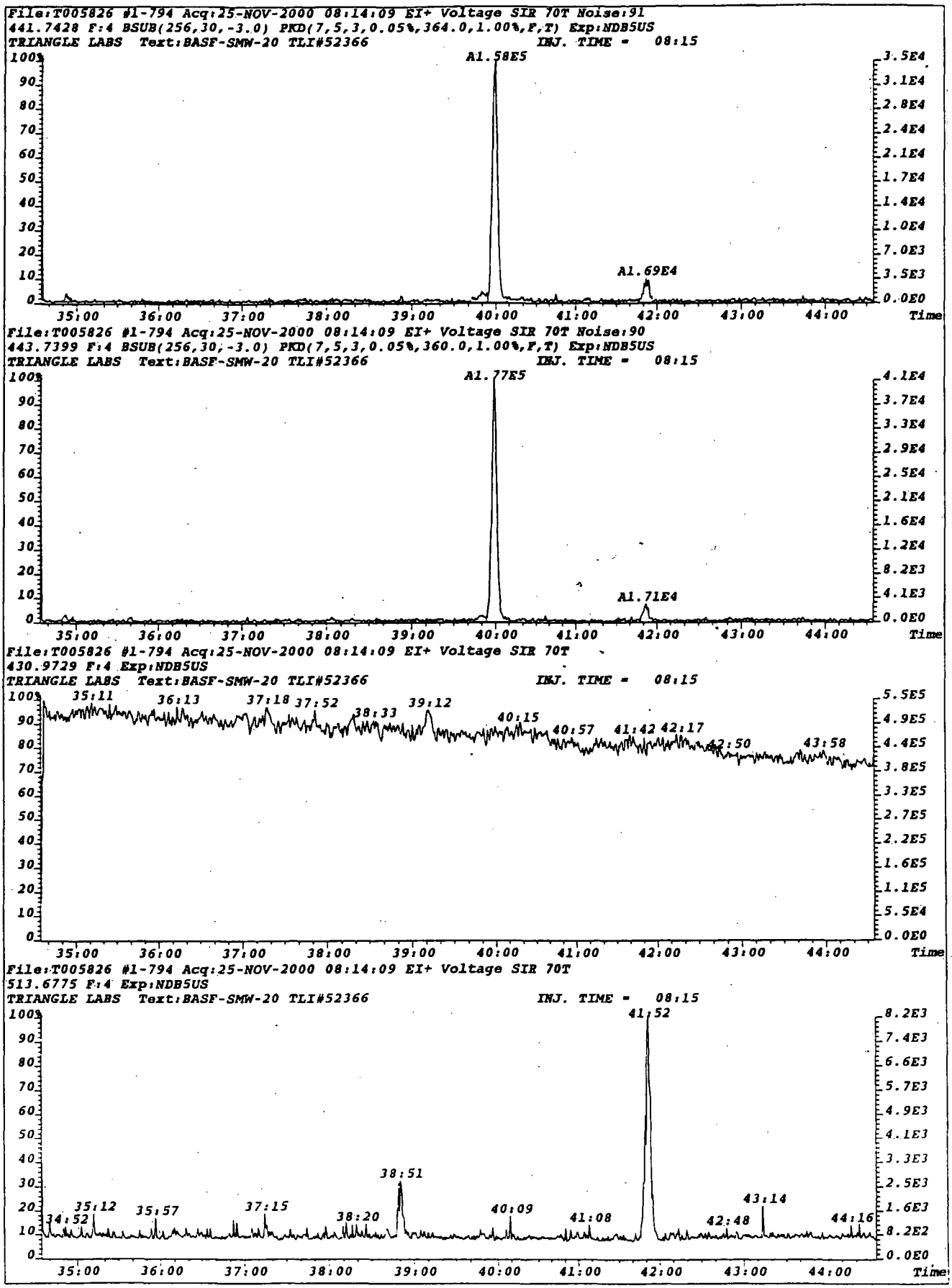
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1064.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A3.39E6
A4.61E6
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:250
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1000.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A3.27E6
A4.38E6
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:367
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1468.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A1.40E5
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:206
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,824.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A1.24E5
A6.46E3
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
Time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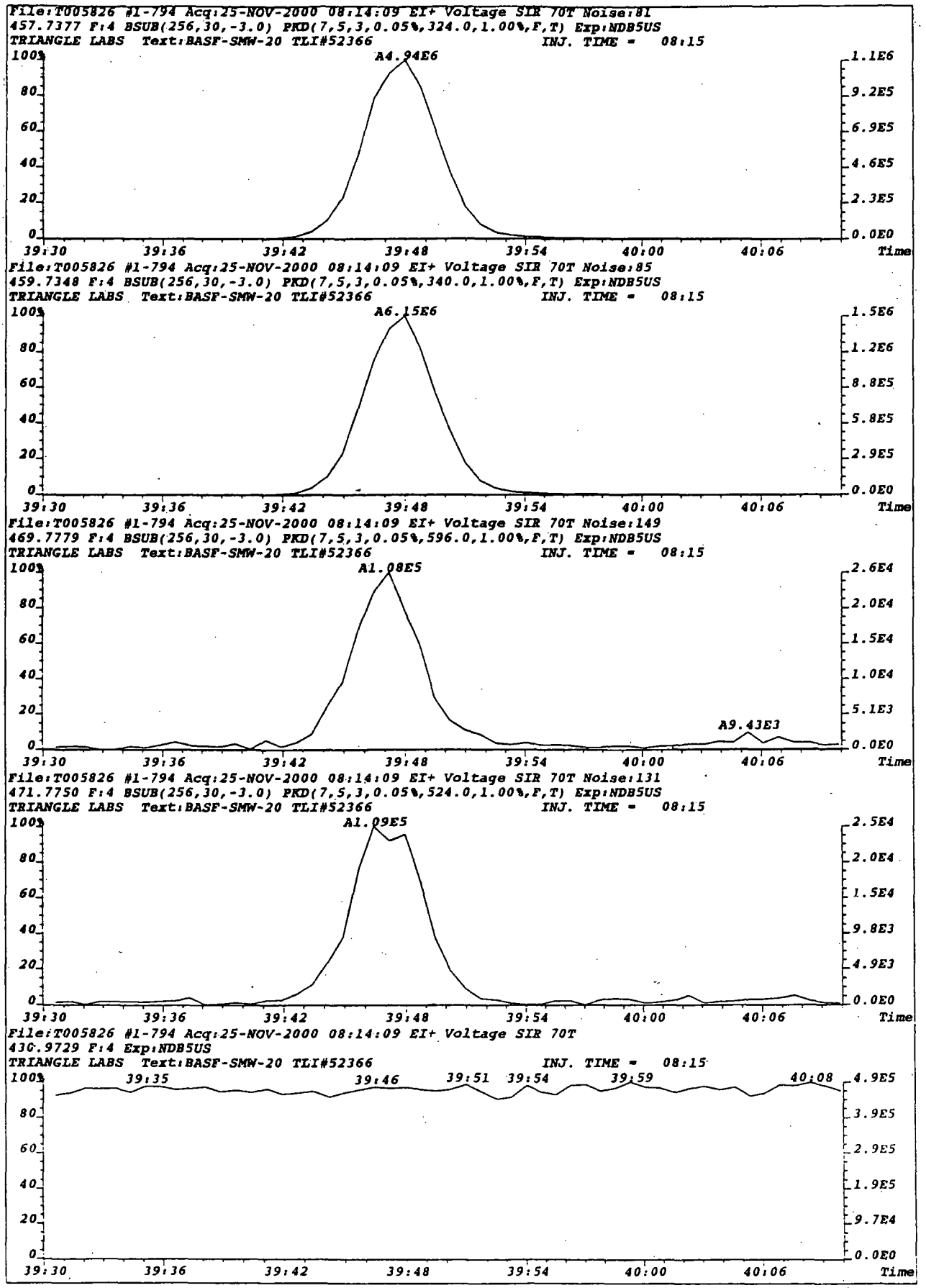
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,364.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A1.58E5
A1.69E4
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:90
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,360.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
A1.77E5
A1.71E4
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
35:11
36:13
37:18
37:52
38:33
39:12
40:15
40:57
41:42
42:17
42:50
43:58
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366
INJ. TIME = 08:15
41:52
38:51
34:52
35:12
35:57
37:15
38:20
40:09
41:08
42:48
43:14
44:16
Time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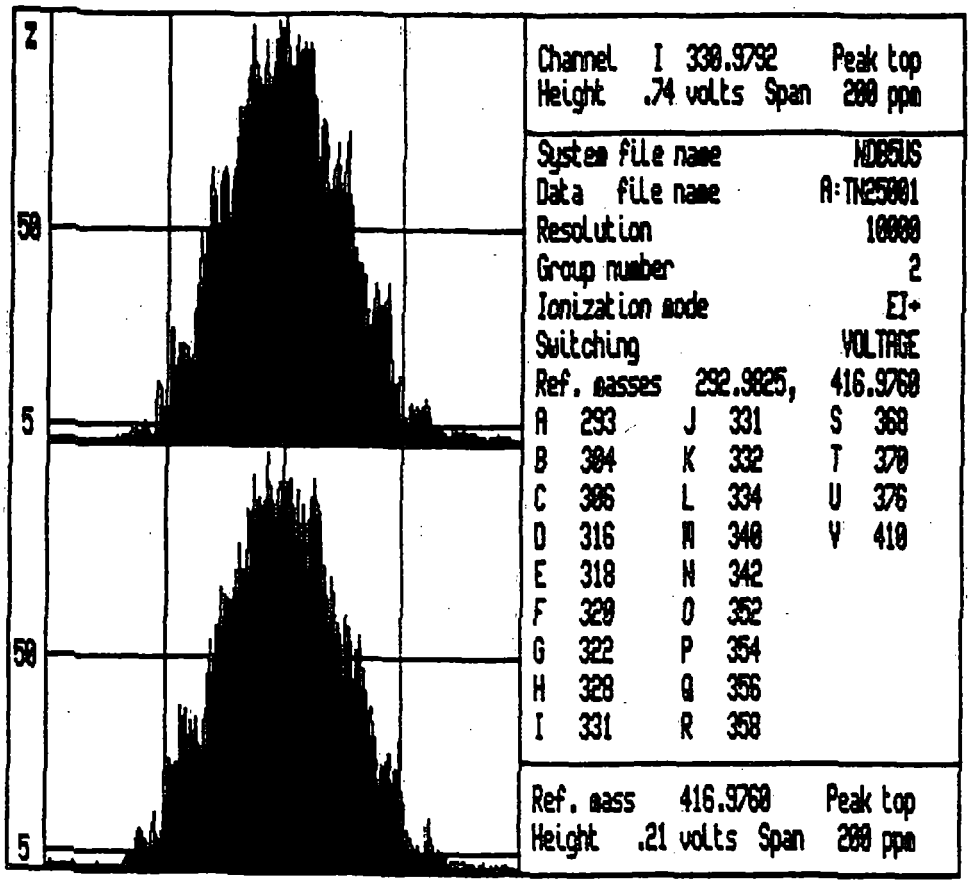
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,324.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A4.94E6
1.1E6
9.2E5
6.9E5
4.6E5
2.3E5
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:85
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,340.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A6.15E6
1.5E6
1.2E6
8.8E5
5.8E5
2.9E5
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:149
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,596.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A1.08E5
A9.43E3
2.6E4
2.0E4
1.5E4
1.0E4
5.1E3
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T Noise:131
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,524.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
A1.09E5
2.5E4
2.0E4
1.5E4
9.8E3
4.9E3
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005826 #1-794 Acq:25-NOV-2000 08:14:09 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-20 TLI#52366 INJ. TIME = 08:15
39:35 39:46 39:51 39:54 39:59 40:08
4.9E5
3.9E5
2.9E5
1.9E5
9.7E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time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50
5
Channel I 330.9792 Peak top
Height .74 volts Span 200 ppm
System file name MOBSUS
Data file name A:TN25001
Resolution 10000
Group number 2
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 416.9760
A 293 J 331 S 368
B 304 K 332 T 370
C 306 L 334 U 376
D 316 M 340 V 410
E 318 N 342
F 329 O 352
G 322 P 354
H 328 Q 356
I 331 R 358
Ref. mass 416.9760 Peak top
Height .21 volts Span 200 ppm

TRIANGLE LABS

CALIBRATION DATA

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

TRIANGLE LABORATORIES, INC. Date: 07/15/2000
Initial Calibration Summary for TF57140

Analysis Date....: 07/14/2000 Method.....: MIT3
Instrument.....: T

Analytes	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
Total MCDF	1.885	0.000	0%	10:39	6:25	20:25	3.255		1
Total MCDD	1.869	0.000	0%	11:19	7:05	21:05	3.153		1
Total DCDF	0.542	0.000	0%	14:32	13:25	21:25	6.472		1
Total DCDD	0.944	0.000	0%	15:21	14:05	22:05	1.551		1
Total TriCDF	0.785	0.000	0%	20:23	17:25	24:25	0.984		1
Total TriCDD	0.524	0.000	0%	20:29	19:05	25:05	0.949		1
1368-TCDF	1.203	0.050	4%	23:30	25:25	32:25	0.792		6
1278-TCDF	1.051	0.047	4%	26:04			0.799		6
2378-TCDF	1.023	0.028	3%	26:26			0.772		6
TOTAL TCDF	1.023	0.028	3%				0.788		6
1368-TCDD	0.938	0.036	4%	24:43	26:05	33:05	0.788		6
1379-TCDD	0.798	0.024	3%	25:05			0.783		6
2378-TCDD	0.914	0.025	3%	27:06			0.780		6
TOTAL TCDD	0.914	0.025	3%				0.783		6
12378-PeCDF	0.912	0.023	3%	30:12	26:11	34:11	1.508		6
23478-PeCDF	0.925	0.021	2%	30:52			1.499		6
TOTAL PeCDF	0.918	0.019	2%				1.504		6
12378-PeCDD	1.056	0.009	1%	31:12	27:11	35:11	1.602		6
TOTAL PeCDD	1.056	0.009	1%				1.602		6
123478-HxCDF	1.026	0.009	1%	33:36	29:41	37:41	1.262		6
123678-HxCDF	1.075	0.014	1%	33:42			1.266		6
234678-HxCDF	0.972	0.024	2%	34:13			1.262		6
123789-HxCDF	0.795	0.055	7%	35:02			1.262		6
TOTAL HxCDF	0.967	0.020	2%				1.263		6
123478-HxCDD	1.017	0.022	2%	34:19	30:24	38:24	1.244		6
123678-HxCDD	1.016	0.026	3%	34:24			1.233		6
123789-HxCDD	1.027	0.052	5%	34:45			1.230		6
TOTAL HxCDD	1.020	0.032	3%				1.235		6
1234678-HpCDF	1.255	0.016	1%	36:47	32:47	40:47	1.041		6
1234789-HpCDF	0.969	0.076	8%	38:28			1.041		6
TOTAL HpCDF	1.112	0.041	4%				1.041		6
1234678-HpCDD	0.855	0.012	1%	37:54	33:53	41:53	1.031		6
TOTAL HpCDD	0.855	0.012	1%				1.031		6
OCDF	1.100	0.095	9%	42:08	37:53	45:53	0.897		6
OCDD	0.914	0.015	2%	41:54	37:53	45:53	0.852		6

Other Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
37Cl-TCDD	0.846	0.021	2%	27:06	25:05	29:05			6
13C12-PeCDF 234	0.990	0.020	2%	30:51	28:11	32:11	1.471		6
13C12-HxCDF 478	0.985	0.015	2%	33:35			0.506		6
13C12-HxCDF 234	0.912	0.018	2%	34:12			0.505		6
13C12-HxCDF 789	0.670	0.041	6%	35:02			0.503		6
13C12-HxCDD 478	1.035	0.028	3%	34:18			1.195		6
13C12-HpCDF 789	0.778	0.043	6%	38:27	34:47	40:47	0.414		6

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... Calibration Summary for TF57140

Internal Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
13C12-2378-TCDF	1.282	0.051	4%	26:25	25:25	27:25	0.728		6
13C12-2378-TCDD	1.052	0.040	4%	27:05	25:05	29:05	0.796		6
13C12-PeCDF 123	1.199	0.133	11%	30:11	26:11	34:11	1.472		6
13C12-PeCDD 123	0.682	0.075	11%	31:11	27:11	35:11	1.397		6
13C12-HxCDF 678	1.452	0.062	4%	33:41	29:41	37:41	0.504		6
13C12-HxCDD 678	0.908	0.038	4%	34:24	33:24	35:24	1.214		6
13C12-HpCDF 678	0.970	0.014	1%	36:47	34:47	40:47	0.416		6
13C12-HpCDD 678	0.858	0.032	4%	37:53	36:53	38:53	1.021		6
13C12-OCDD	0.698	0.054	8%	41:53	39:53	43:53	0.851		6

Recovery Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
13C12-1234-TCDD	1.000	0.000	0%	26:55			0.810		6
13C12-HxCDD 789	1.000	0.000	0%	34:44			1.204		6

*** End of Report ***

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TRIANGLE LABORATORIES, INC. Date: 10/24/2000

Initial Calibration Summary for PF20230

Analysis Date....: 10/23/2000 Method.....: C2NF

Instrument.....: P GC Column...: DB-225

Analytes	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
2378-TCDF	0.947	0.099	10%	23:51	16:49	27:49	0.767		10
TOTAL TCDF	0.947	0.099	10%				0.767		10
2378-TCDD	0.965	0.125	13%	22:20	18:19	26:19	0.778		10
TOTAL TCDD	0.965	0.125	13%				0.778		10

Other Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
37Cl-TCDD	0.992	0.030	3%	22:20	20:19	24:19			10

Internal Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
13C12-2378-TCDF	1.565	0.032	2%	23:49	22:49	24:49	0.793		10
13C12-2378-TCDD	1.104	0.026	2%	22:19	20:19	24:19	0.799		10

Recovery Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
13C12-1234-TCDD	1.000	0.000	0%	22:38			0.812		10

*** End of Report ***

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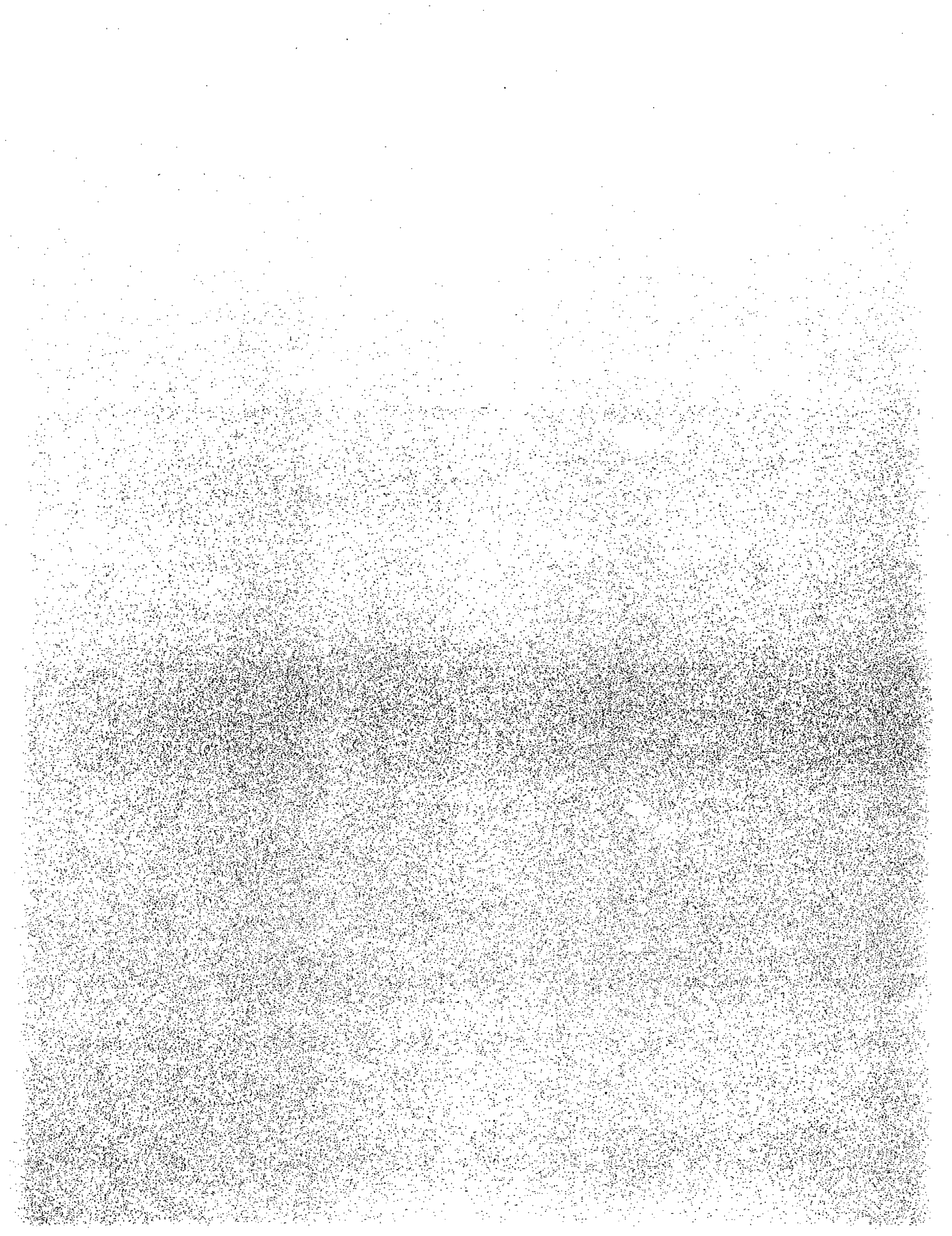
Printed: 05:09 10/24/2000



Date: 12/05/2000 TRIANGLE LABORATORIES, INC.

Continuing Calibration for T005996

Analysis Date....: 12/05/2000 Method.....: MIT3
Operator.....: BWL Instrument..: T
Init Calibration.: TF57140 Std.Conc....: 10.00
ICal Date.....: 07/14/2000

Analyte Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
Total MCDF	0.000		6:09 20:09			1.885	-1.885	100.0%
Total MCDD	0.000		6:50 20:50			1.869	-1.869	100.0%
Total DCDF	0.000		13:09 21:09			0.542	-0.542	100.0%
Total DCDD	0.000		13:50 21:50			0.944	-0.944	100.0%
Total TriCDF	0.000		17:09 24:09			0.785	-0.785	100.0%
Total TriCDD	0.000		18:50 24:50			0.524	-0.524	100.0%
1368-TCDF	1.064	0.93	23:00 27:59	23:11	0.8864	1.203	-0.139	-11.5%
1278-TCDF	0.911	0.79		25:46	0.9855	1.051	-0.140	-13.4%
2378-TCDF	1.078	0.83		26:10	1.0008	1.023	0.055	5.3%
TOTAL TCDF	1.078	0.82				1.023	0.055	5.3%
1368-TCDD	0.880	0.79	24:15 27:57	24:25	0.9102	0.938	-0.058	-6.2%
1379-TCDD	0.757	0.78		24:47	0.9236	0.798	-0.041	-5.2%
2378-TCDD	0.989	0.79		26:51	1.0007	0.914	0.075	8.2%
TOTAL TCDD	0.989	0.78				0.914	0.075	8.2%
12378-PeCDF	0.925	1.53	27:51 31:45	29:58	1.0007	0.912	0.013	1.4%
23478-PeCDF	0.958	1.52		30:38	1.0227	0.925	0.033	3.5%
TOTAL PeCDF	0.941	1.52				0.918	0.023	2.5%
12378-PeCDD	1.000	1.56	29:02 31:35	30:58	1.0006	1.056	-0.056	-5.3%
TOTAL PeCDD	1.000	1.56				1.056	-0.056	-5.3%
123478-HxCDF	1.086	1.33	32:12 35:01	33:22	0.9976	1.026	0.060	5.9%
123678-HxCDF	1.109	1.28		33:28	1.0006	1.075	0.034	3.2%
234678-HxCDF	1.088	1.29		33:58	1.0155	0.972	0.116	11.9%

Final

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Printed: 13:50 12/05/2000

123789-HxCDF	0.938	1.31		34:47	1.0398	0.795	0.143	18.0%
TOTAL HxCDF	1.055	1.30				0.967	0.088	9.1%
123478-HxCDD	1.121	1.24	32:41 34:37	34:05	0.9974	1.017	0.104	10.2%
123678-HxCDD	1.110	1.24		34:10	1.0000	1.016	0.094	9.2%
123789-HxCDD	1.184	1.23		34:30	1.0097	1.027	0.157	15.3%
TOTAL HxCDD	1.138	1.24				1.020	0.118	11.6%
1234678-HpCDF	1.305	1.07	36:20 38:19	36:30	1.0000	1.255	0.050	4.0%
1234789-HpCDF	1.071	1.08		38:09	1.0452	0.969	0.102	10.5%
TOTAL HpCDF	1.188	1.08				1.112	0.076	6.8%
1234678-HpCDD	0.898	1.02	36:37 37:45	37:36	1.0005	0.855	0.043	5.0%
TOTAL HpCDD	0.898	1.02				0.855	0.043	5.0%
OCDF	1.220	0.89	37:31 45:31	41:45	1.0055	1.100	0.120	10.9%
OCDD	0.994	0.86	37:31 45:31	41:31	1.0000	0.914	0.080	8.7%

Other Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
37Cl-TCDD	0.902		24:50 28:50	26:51	1.0007	0.846	0.056	6.6%
13C12-PeCDF 234	1.012	1.48	25:57 33:57	30:38	1.0227	0.990	0.022	2.2%
13C12-HxCDF 478	0.996	0.50	29:27 37:27	33:21	0.9970	0.985	0.011	1.1%
13C12-HxCDF 234	0.967	0.51		33:57	1.0149	0.912	0.055	6.0%
13C12-HxCDF 789	0.761	0.51		34:46	1.0395	0.670	0.091	13.5%
13C12-HxCDD 478	1.077	1.21	33:10 35:10	34:04	0.9971	1.035	0.042	4.1%
13C12-HpCDF 789	0.823	0.43	34:30 40:30	38:08	1.0447	0.778	0.045	5.8%

Internal Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-2378-TCDF	1.439	0.74	25:09 27:09	26:09	1.0000	1.282	0.157	12.2%
13C12-2378-TCDD	1.108	0.80	24:50 28:50	26:50	1.0000	1.052	0.056	5.3%

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Continuing Calibration for T005996

13C12-PeCDF 123	1.216	1.47	25:57 33:57	29:57	1.0000	1.199	0.017	1.4%
13C12-PeCDD 123	0.748	1.46	26:57 34:57	30:57	1.0000	0.682	0.066	9.7%
13C12-HxCDF 678	1.283	0.51	29:27 37:27	33:27	1.0000	1.452	-0.169	-11.6%
13C12-HxCDD 678	0.822	1.22	33:10 35:10	34:10	1.0000	0.908	-0.086	-9.4%
13C12-HpCDF 678	0.907	0.44	34:30 40:30	36:30	1.0000	0.970	-0.063	-6.5%
13C12-HpCDD 678	0.832	1.01	36:35 38:35	37:35	1.0000	0.858	-0.026	-3.1%
13C12-OCDD	0.614	0.85	41:20 41:40	41:31	1.0000	0.698	-0.084	-12.0%

Recovery Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-1234-TCDD	1.000	0.79	24:50 28:50	26:40	0.9940	1.000	0.000	0.0%
13C12-HxCDD 789	1.000	1.21	33:10 35:10	34:29	1.0091	1.000	0.000	0.0%

QC Front End Check: 1.1694 TetraRS/HexaRS: 1.048

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Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
TCDF		0.65-0.89							
304-306	23:11		0.83	200.49	90.66	109.83	0.886	1368-TCDF	AN
	25:46		0.79	171.52	75.74	95.78	0.986	1278-TCDF	AN
	26:10		0.83	202.97	92.06	110.91	1.001	2378-TCDF	AN
304-306		3 Peaks							
13C12-TCDF		0.65-0.89							
316-318	26:09		0.74	1,883.68	802.48	1,081.20	1.000	13C12-2378-TCDF	IS0
316-318		1 Peak							
---------- Above: TCDF / TCDD Follows ----------									
TCDD		0.65-0.89							
320-322	24:25		0.79	127.71	56.18	71.53	0.910	1368-TCDD	AN
	24:47		0.78	109.78	48.18	61.60	0.924	1379-TCDD	AN
	26:51		0.79	143.46	63.10	80.36	1.001	2378-TCDD	AN
320		3 Peaks							
37Cl-TCDD									
328	26:51			130.90	130.90		1.001	37Cl-TCDD	CLS
328-330		1 Peak							
13C12-TCDD		0.65-0.89							
332-334	26:40		0.79	1,309.40	579.39	730.01	0.994	13C12-1234-TCDD	RS1
	26:50		0.80	1,450.93	644.22	806.71	1.000	13C12-2378-TCDD	IS1
332-334		2 Peaks							
---------- Above: TCDD / PeCDF Follows ----------									
PeCDF		1.32-1.78							
340-342	29:58		1.53	736.57	444.93	291.64	1.001	12378-PeCDF	AN
	30:38		1.52	762.44	459.76	302.68	1.023	23478-PeCDF	AN
340-342		2 Peaks							
13C12-PeCDF		1.32-1.78							
352-354	29:57		1.47	1,592.41	948.44	643.97	1.000	13C12-PeCDF 123	IS2
	30:38		1.48	1,610.73	961.52	649.21	1.023	13C12-PeCDF 234	SUR1
352-354		2 Peaks							
---------- Above: PeCDF / PeCDD Follows ----------									
PeCDD		1.32-1.78							
356-358	30:58		1.56	489.91	298.46	191.45	1.001	12378-PeCDD	AN
356-358		1 Peak							
13C12-PeCDD		1.32-1.78							
368-370	30:57		1.46	980.04	581.44	398.60	1.000	13C12-PeCDD 123	IS3
368-370		1 Peak							
---------- Above: PeCDD / HxCDF Follows ----------									

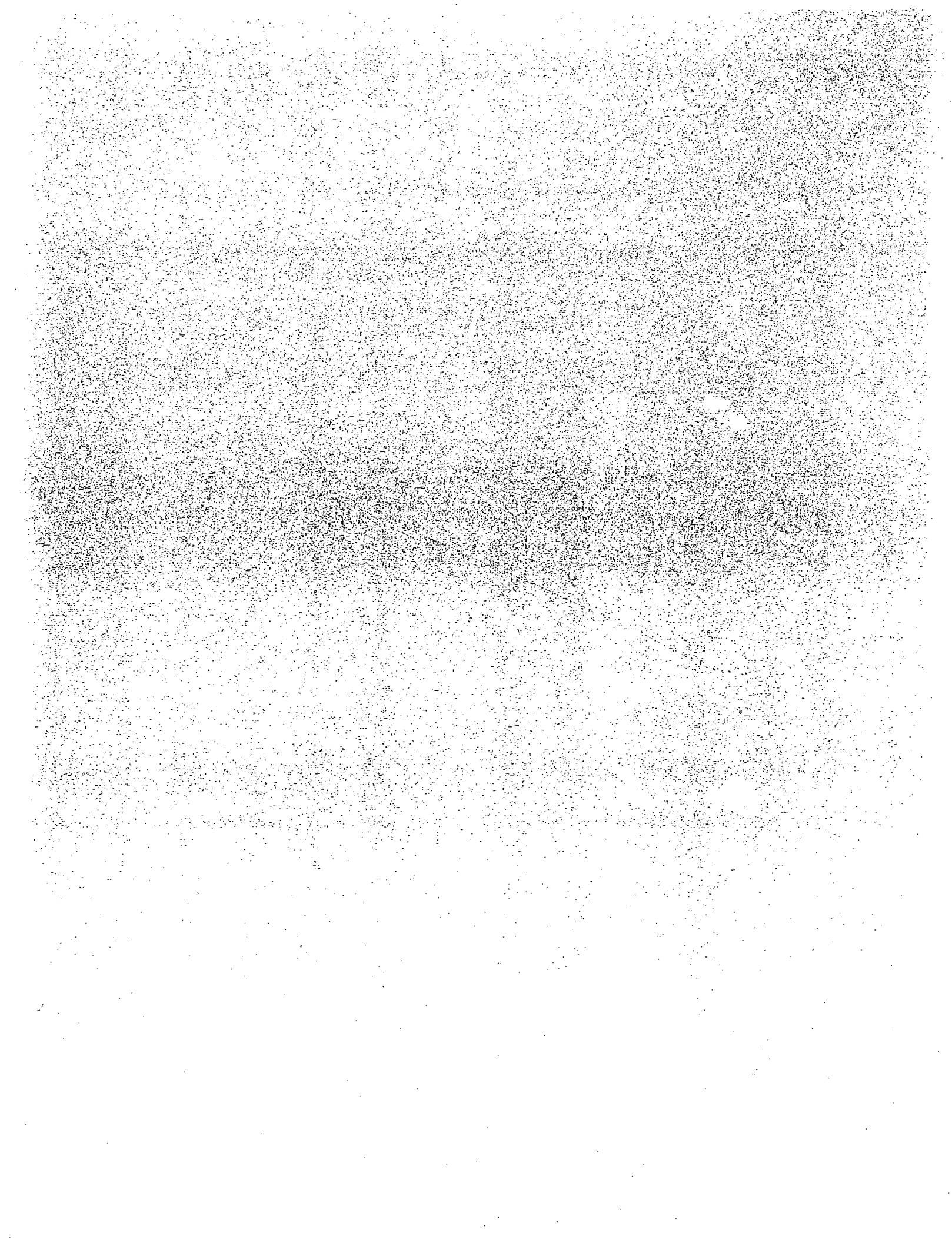
Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
HxCDF			1.05-1.43						
374-376	33:22		1.33	703.78	401.50	302.28	0.998	123478-HxCDF	AN
	33:28		1.28	718.79	404.12	314.67	1.001	123678-HxCDF	AN
	33:58		1.29	704.75	397.28	307.47	1.016	234678-HxCDF	AN
	34:47		1.31	608.00	345.00	263.00	1.040	123789-HxCDF	AN
374-376			4 Peaks						
13C12-HxCDF			0.43-0.59						
384-386	33:21		0.50	1,290.41	432.87	857.54	0.997	13C12-HxCDF 478	SUR2
	33:27		0.51	1,295.99	435.68	860.31	1.000	13C12-HxCDF 678	IS4
	33:57		0.51	1,252.58	423.64	828.94	1.015	13C12-HxCDF 234	ALT2
	34:46		0.51	985.80	331.18	654.62	1.040	13C12-HxCDF 789	ALT1
384-386			4 Peaks						
---------- Above: HxCDF / HxCDD Follows ----------									
HxCDD			1.05-1.43						
390-392	34:05		1.24	465.32	257.17	208.15	0.997	123478-HxCDD	AN
	34:10		1.24	460.72	255.40	205.32	1.000	123678-HxCDD	AN
	34:30		1.23	491.57	271.31	220.26	1.010	123789-HxCDD	AN
390-392			3 Peaks						
13C12-HxCDD			1.05-1.43						
402-404	34:04		1.21	894.53	489.77	404.76	0.997	13C12-HxCDD 478	SUR3
	34:10		1.22	830.48	455.84	374.64	1.000	13C12-HxCDD 678	IS5
	34:29		1.21	1,010.05	552.70	457.35	1.009	13C12-HxCDD 789	RS2
402-404			3 Peaks						
---------- Above: HxCDD / HpCDF Follows ----------									
HpCDF			0.88-1.20						
408-410	36:30		1.07	597.65	309.29	288.36	1.000	1234678-HpCDF	AN
	38:09		1.08	490.53	254.87	235.66	1.045	1234789-HpCDF	AN
408-410			2 Peaks						
13C12-HpCDF			0.37-0.51						
418-420	36:30		0.44	915.96	278.30	637.66	1.000	13C12-HpCDF 678	IS6
	38:08		0.43	753.62	228.25	525.37	1.045	13C12-HpCDF 789	SUR4
418-420			2 Peaks						
---------- Above: HpCDF / HpCDD Follows ----------									
HpCDD			0.88-1.20						
424-426	37:36		1.02	377.06	190.05	187.01	1.001	1234678-HpCDD	AN
424-426			1 Peak						
13C12-HpCDD			0.88-1.20						
436-438	37:35		1.01	840.04	421.87	418.17	1.000	13C12-HpCDD 678	IS7
436-438			1 Peak						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----									

Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
OCDF	0.76-1.02								
442-444	41:45		0.89	757.01	357.09	399.92	1.006	OCDF	AN
442-444	1 Peak								
OCDD	0.76-1.02								
458-460	41:31		0.86	616.60	285.75	330.85	1.000	OCDD	AN
458-460	1 Peak								
13C12-OCDD	0.76-1.02								
470-472	41:31		0.85	1,240.76	570.65	670.11	1.000	13C12-OCDD	IS8
470	1 Peak								

Column Description.....

M_Z - Nominal Ion Mass(es)
..RT. - Retention Time (mm:ss)
Rat.1 - Ratio of M/M+2 Ions
OK - RO=Ratio Outside Limits
Rel.RT - Relative Retention Time

*** End of Report ***



Date: 12/05/2000 TRIANGLE LABORATORIES, INC.

Continuing Calibration for P004403

Analysis Date....: 12/05/2000 Method.....: C2NF
Operator.....: DFS Instrument..: P
Init Calibration.: PF20230 Std.Conc....: 5.00
ICal Date.....: 10/23/2000
Analysis Time....: 15:09 GC Column...: DB-225

Analyte Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
2378-TCDF	0.845	0.73	18:50 26:22	23:49	1.0008	0.947	-0.102	-10.8%
TOTAL TCDF	0.845	0.73				0.947	-0.102	-10.8%
2378-TCDD	0.834	0.79	19:38 25:30	22:17	1.0013	0.965	-0.131	-13.6%
TOTAL TCDD	0.834	0.79				0.965	-0.131	-13.6%

Other Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
37Cl-TCDD	1.003		20:15 24:15	22:17	1.0013	0.992	0.011	1.1%

Internal Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-2378-TCDF	1.473	0.78	22:48 24:48	23:48	1.0000	1.565	-0.092	-5.9%
13C12-2378-TCDD	1.071	0.81	20:15 24:15	22:15	1.0000	1.104	-0.033	-3.0%

Recovery Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-1234-TCDD	1.000	0.81		22:37	1.0166	1.000	0.000	0.0%

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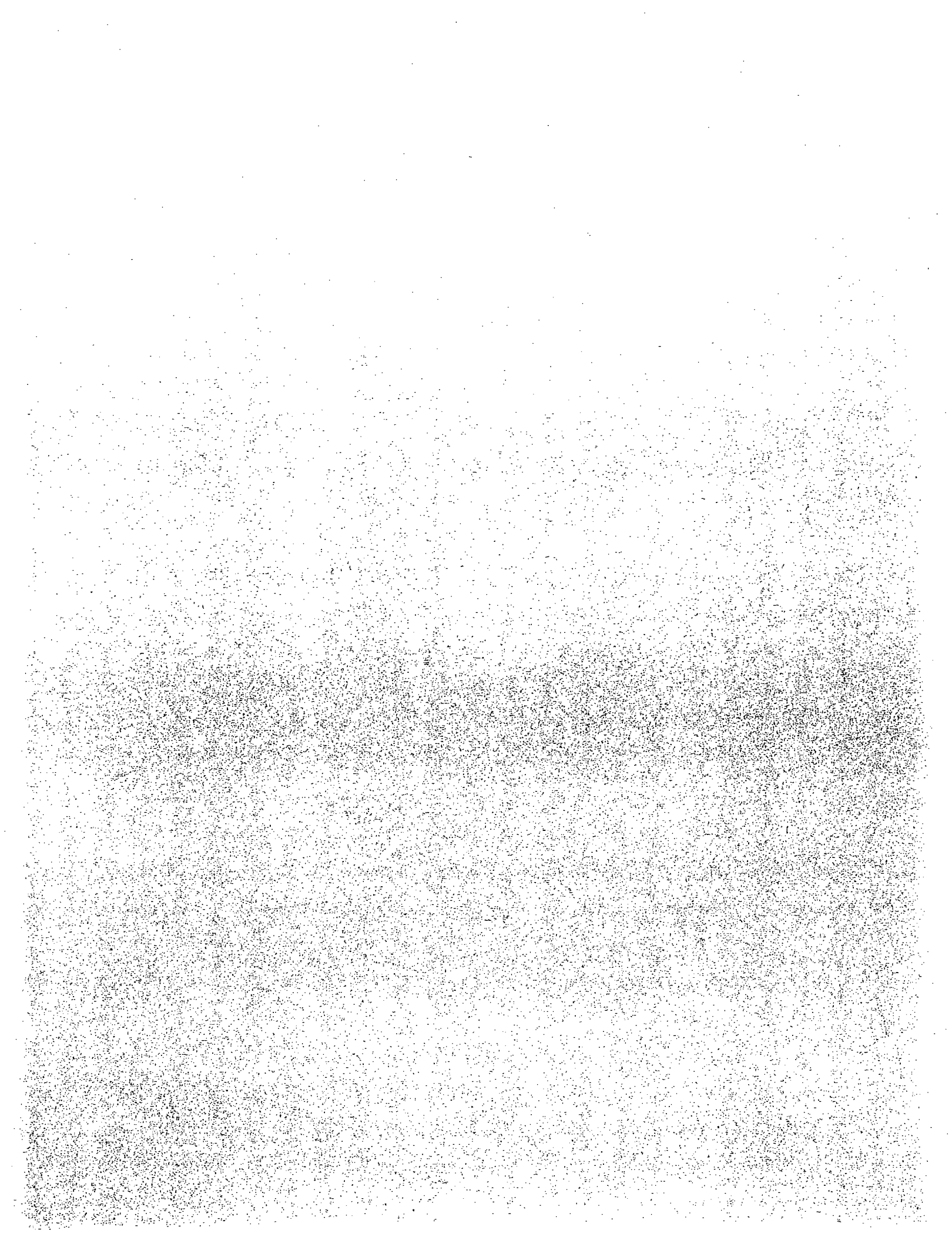
Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
TCDF			0.65-0.89						
304-306	23:49		0.73	55.37	23.41	31.96	1.001	2378-TCDF	AN
304-306			1 Peak						
13C12-TCDF			0.65-0.89						
316-318	23:48		0.78	1,310.34	575.61	734.73	1.000	13C12-2378-TCDF	ISO
316-318			1 Peak						
---------- Above: TCDF / TCDD Follows ----------									
TCDD			0.65-0.89						
320-322	22:17		0.79	39.71	17.56	22.15	1.001	2378-TCDD	AN
320			1 Peak						
37Cl-TCDD									
328	22:17			47.77	47.77		1.001	37Cl-TCDD	SUR1
328-330			1 Peak						
13C12-TCDD			0.65-0.89						
332-334	22:15		0.81	952.61	427.33	525.28	1.000	13C12-2378-TCDD	IS1
	22:37		0.81	889.75	398.40	491.35	1.017	13C12-1234-TCDD	RS1
332			2 Peaks						

Column Description.....

M_Z - Nominal Ion Mass(es)
..RT. - Retention Time (mm:ss)
Rat.1 - Ratio of M/M+2 Ions
OK - RO=Ratio Outside Limits
Rel.RT - Relative Retention Time

*** End of Report ***



Date: 11/25/2000

TRIANGLE LABORATORIES, INC.
Continuing Calibration for T005815

Analysis Date....: 11/24/2000 Method.....: MIT3
Operator.....: MVL Instrument..: T
Init Calibration.: TF57140 Std.Conc....: 10.00
ICal Date.....: 07/14/2000

Analyte Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
Total MCDF	0.000		4:40 18:40			1.885	-1.885	100.0%
Total MCDD	0.000		5:23 19:23			1.869	-1.869	100.0%
Total DCDF	0.000		11:40 19:40			0.542	-0.542	100.0%
Total DCDD	0.000		12:23 20:23			0.944	-0.944	100.0%
Total TriCDF	0.000		15:40 22:40			0.785	-0.785	100.0%
Total TriCDD	0.000		17:23 23:23			0.524	-0.524	100.0%
1368-TCDF	1.036	0.77	21:13 26:34	21:26	0.8687	1.203	-0.167	-13.9%
1278-TCDF	0.953	0.79		24:16	0.9838	1.051	-0.098	-9.3%
2378-TCDF	1.051	0.78		24:41	1.0004	1.023	0.028	2.8%
TOTAL TCDF	1.051	0.78				1.023	0.028	2.8%
1368-TCDD	0.773	0.81	22:36 26:32	22:48	0.8983	0.938	-0.165	-17.6%
1379-TCDD	0.679	0.76		23:14	0.9153	0.798	-0.119	-15.0%
2378-TCDD	0.989	0.78		25:25	1.0016	0.914	0.075	8.2%
TOTAL TCDD	0.989	0.78				0.914	0.075	8.2%
12378-PeCDF	0.946	1.54	26:27 30:29	28:40	1.0007	0.912	0.034	3.8%
23478-PeCDF	0.907	1.54		29:21	1.0244	0.925	-0.018	-1.9%
TOTAL PeCDF	0.927	1.54				0.918	0.009	1.0%
12378-PeCDD	1.096	1.57	27:43 30:19	29:43	1.0007	1.056	0.040	3.8%
TOTAL PeCDD	1.096	1.57				1.056	0.040	3.8%
123478-HxCDF	1.018	1.29	30:58 33:41	32:08	0.9972	1.026	-0.008	-0.7%
123678-HxCDF	1.067	1.29		32:14	1.0003	1.075	-0.008	-0.7%
234678-HxCDF	0.976	1.28		32:43	1.0155	0.972	0.004	0.4%

Final

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Printed: 01:32 11/25/2000

123789-HxCDF	0.806	1.30		33:28	1.0388	0.795	0.011	1.4%
TOTAL HxCDF	0.967	1.29				0.967	0.000	0.0%
123478-HxCDD	1.059	1.26	31:28 33:19	32:50	0.9979	1.017	0.042	4.1%
123678-HxCDD	1.104	1.23		32:54	1.0000	1.016	0.088	8.7%
123789-HxCDD	1.056	1.25		33:13	1.0097	1.027	0.029	2.9%
TOTAL HxCDD	1.073	1.25				1.020	0.053	5.2%
1234678-HpCDF	1.301	1.05	34:54 36:44	35:04	1.0000	1.255	0.046	3.7%
1234789-HpCDF	0.957	1.05		36:36	1.0436	0.969	-0.012	-1.3%
TOTAL HpCDF	1.129	1.05				1.112	0.017	1.5%
1234678-HpCDD	0.913	1.06	35:10 36:16	36:06	1.0000	0.855	0.058	6.8%
TOTAL HpCDD	0.913	1.06				0.855	0.058	6.8%
OCDF	1.252	0.90	35:40 43:40	39:52	1.0050	1.100	0.152	13.8%
OCDD	0.985	0.84	35:40 43:40	39:41	1.0003	0.914	0.071	7.8%

Other Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
37Cl-TCDD	0.901		23:23 27:23	25:24	1.0008	0.846	0.055	6.5%
13C12-PeCDF 234	0.932	1.52	24:39 32:39	29:21	1.0244	0.990	-0.058	-5.9%
13C12-HxCDF 478	0.940	0.52	28:13 36:13	32:07	0.9969	0.985	-0.045	-4.6%
13C12-HxCDF 234	0.882	0.50		32:42	1.0149	0.912	-0.030	-3.3%
13C12-HxCDF 789	0.657	0.51		33:27	1.0382	0.670	-0.013	-2.0%
13C12-HxCDD 478	1.004	1.23	31:54 33:54	32:48	0.9970	1.035	-0.031	-3.0%
13C12-HpCDF 789	0.733	0.42	33:04 39:04	36:35	1.0431	0.778	-0.045	-5.7%

Internal Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-2378-TCDF	1.409	0.75	23:40 25:40	24:40	1.0000	1.282	0.127	9.9%
13C12-2378-TCDD	1.153	0.79	23:23 27:23	25:23	1.0000	1.052	0.101	9.6%

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13C12-PeCDF 123	1.293	1.49	24:39 32:39	28:39	1.0000	1.199	0.094	7.8%
13C12-PeCDD 123	0.670	1.43	25:42 33:42	29:42	1.0000	0.682	-0.012	-1.8%
13C12-HxCDF 678	1.648	0.50	28:13 36:13	32:13	1.0000	1.452	0.196	13.5%
13C12-HxCDD 678	0.964	1.23	31:54 33:54	32:54	1.0000	0.908	0.056	6.2%
13C12-HpCDF 678	0.965	0.43	33:04 39:04	35:04	1.0000	0.970	-0.005	-0.5%
13C12-HpCDD 678	0.743	1.04	35:06 37:06	36:06	1.0000	0.858	-0.115	-13.4%
13C12-OCDD	0.490	0.88	39:30 39:50	39:40	1.0000	0.698	-0.208	-29.9%

Recovery Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-1234-TCDD	1.000	0.80	23:23 27:23	25:12	0.9929	1.000	0.000	0.0%
13C12-HxCDD 789	1.000	1.21	31:54 33:54	33:12	1.0091	1.000	0.000	0.0%

QC Front End Check: 1.7509 TetraRS/HexaRS: 1.209

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Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
TCDF			0.65-0.89						
304-306	21:26		0.77	47.25	20.57	26.68	0.869	1368-TCDF	AN
	24:16		0.79	43.46	19.22	24.24	0.984	1278-TCDF	AN
	24:41		0.78	47.93	20.95	26.98	1.000	2378-TCDF	AN
304-306			3 Peaks						
13C12-TCDF			0.65-0.89						
316-318	24:40		0.75	455.97	195.17	260.80	1.000	13C12-2378-TCDF	ISO
316-318			1 Peak						
---------- Above: TCDF / TCDD Follows ----------									
TCDD			0.65-0.89						
320-322	22:48		0.81	28.83	12.89	15.94	0.898	1368-TCDD	AN
	23:14		0.76	25.31	10.94	14.37	0.915	1379-TCDD	AN
	25:25		0.78	36.87	16.16	20.71	1.002	2378-TCDD	AN
320			3 Peaks						
37Cl-TCDD									
328	25:24			33.59	33.59		1.001	37Cl-TCDD	CLS
328-330			1 Peak						
13C12-TCDD			0.65-0.89						
332-334	25:12		0.80	323.51	144.01	179.50	0.993	13C12-1234-TCDD	RS1
	25:23		0.79	372.95	164.92	208.03	1.000	13C12-2378-TCDD	IS1
332-334			2 Peaks						
---------- Above: TCDD / PeCDF Follows ----------									
PeCDF			1.32-1.78						
340-342	28:40		1.54	197.89	120.06	77.83	1.001	12378-PeCDF	AN
	29:21		1.54	189.74	115.18	74.56	1.024	23478-PeCDF	AN
340-342			2 Peaks						
13C12-PeCDF			1.32-1.78						
352-354	28:39		1.49	418.28	250.20	168.08	1.000	13C12-PeCDF 123	IS2
	29:21		1.52	389.70	234.99	154.71	1.024	13C12-PeCDF 234	SUR1
352-354			2 Peaks						
---------- Above: PeCDF / PeCDD Follows ----------									
PeCDD			1.32-1.78						
356-358	29:43		1.57	118.80	72.57	46.23	1.001	12378-PeCDD	AN
356-358			1 Peak						
13C12-PeCDD			1.32-1.78						
368-370	29:42		1.43	216.74	127.41	89.33	1.000	13C12-PeCDD 123	IS3
368-370			1 Peak						
---------- Above: PeCDD / HxCDF Follows ----------									

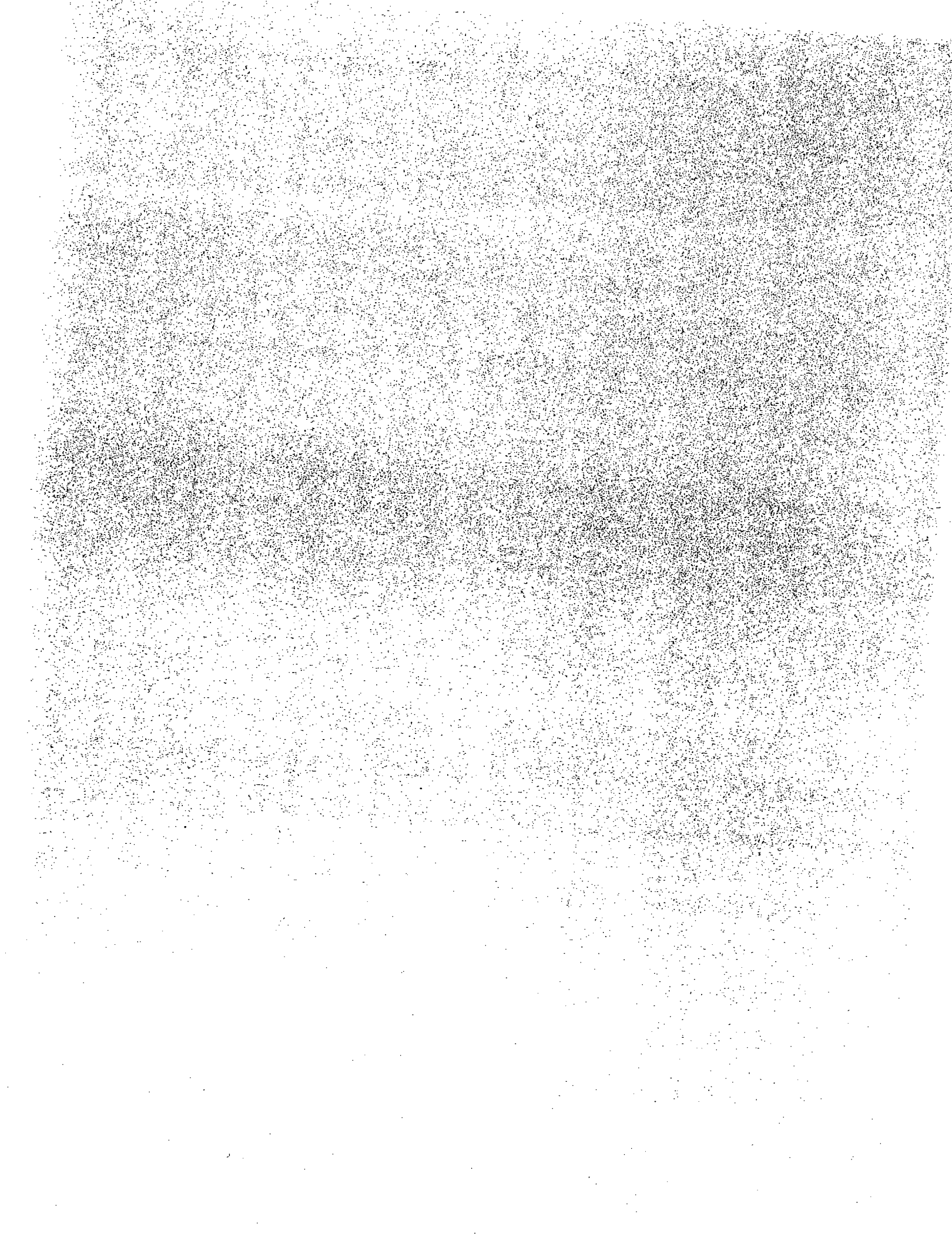
Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
HxCDF			1.05-1.43						
374-376	32:08		1.29	182.57	102.87	79.70	0.997	123478-HxCDF	AN
	32:14		1.29	191.35	107.82	83.53	1.000	123678-HxCDF	AN
	32:43		1.28	174.92	98.27	76.65	1.016	234678-HxCDF	AN
	33:28		1.30	144.54	81.79	62.75	1.039	123789-HxCDF	AN
374-376			4 Peaks						
13C12-HxCDF			0.43-0.59						
384-386	32:07		0.52	336.93	114.78	222.15	0.997	13C12-HxCDF 478	SUR2
	32:13		0.50	358.52	118.96	239.56	1.000	13C12-HxCDF 678	IS4
	32:42		0.50	316.25	105.23	211.02	1.015	13C12-HxCDF 234	ALT2
	33:27		0.51	235.38	79.22	156.16	1.038	13C12-HxCDF 789	ALT1
384-386			4 Peaks						
---------- Above: HxCDF / HxCDD Follows ----------									
HxCDD			1.05-1.43						
390-392	32:50		1.26	111.00	61.96	49.04	0.998	123478-HxCDD	AN
	32:54		1.23	115.78	63.86	51.92	1.000	123678-HxCDD	AN
	33:13		1.25	110.76	61.62	49.14	1.010	123789-HxCDD	AN
390-392			3 Peaks						
13C12-HxCDD			1.05-1.43						
402-404	32:48		1.23	210.45	116.21	94.24	0.997	13C12-HxCDD 478	SUR3
	32:54		1.23	209.68	115.49	94.19	1.000	13C12-HxCDD 678	IS5
	33:12		1.21	217.53	119.08	98.45	1.009	13C12-HxCDD 789	RS2
402-404			3 Peaks						
---------- Above: HxCDD / HpCDF Follows ----------									
HpCDF			0.88-1.20						
408-410	35:04		1.05	136.51	69.94	66.57	1.000	1234678-HpCDF	AN
	36:36		1.05	100.37	51.36	49.01	1.044	1234789-HpCDF	AN
408-410			2 Peaks						
13C12-HpCDF			0.37-0.51						
418-420	35:04		0.43	209.85	62.80	147.05	1.000	13C12-HpCDF 678	IS6
	36:35		0.42	153.90	45.85	108.05	1.043	13C12-HpCDF 789	SUR4
418-420			2 Peaks						
---------- Above: HpCDF / HpCDD Follows ----------									
HpCDD			0.88-1.20						
424-426	36:06		1.06	73.85	37.97	35.88	1.000	1234678-HpCDD	AN
424-426			1 Peak						
13C12-HpCDD			0.88-1.20						
436-438	36:06		1.04	161.70	82.44	79.26	1.000	13C12-HpCDD 678	IS7
436-438			1 Peak						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----									

Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
OCDF			0.76-1.02						
442-444	39:52		0.90	133.36	63.33	70.03	1.005	OCDF	AN
442-444			1 Peak						
OCDD			0.76-1.02						
458-460	39:41		0.84	104.93	47.76	57.17	1.000	OCDD	AN
458-460			1 Peak						
13C12-OCDD			0.76-1.02						
470-472	39:40		0.88	213.00	100.00	113.00	1.000	13C12-OCDD	IS8
470			1 Peak						

Column Description.....

M_Z - Nominal Ion Mass(es)
..RT. - Retention Time (mm:ss)
Rat.1 - Ratio of M/M+2 Ions
OK - RO=Ratio Outside Limits
Rel.RT - Relative Retention Time

*** End of Report ***



CASE NARRATIVE

Analysis of Samples for the Presence of

Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by

High-Resolution Chromatography / High-Resolution Mass Spectrometry

Method 8290 Rev. 0 (9/94)

Date:	November 30, 2000
Client ID:	TriMatrix, Inc.
P.O. Number:	
TLI Project Number:	52366

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Overview

The sample and associated QC samples were extracted and analyzed according to procedures described in EPA Method 8290 Rev. 0 (9/94). Any particular difficulties encountered during the sample handling by Triangle Laboratories will be discussed in the QC Remarks section below. This report contains results from only the 8290 dioxin/furan analysis of one water sample.

Quality Control Samples

A laboratory method blank, identified as the TLI Blank, was prepared along with the sample.

Laboratory control spike (LCS) and laboratory control spike duplicate (LCSD) samples were extracted and analyzed along with the samples. A report summarizing the analyte recoveries and relative percent differences for these samples is included in the data package.

Matrix spike (MS) and matrix spike duplicate (MSD) samples were created using sample BASF-SMW-10. The matrix spike samples were extracted and analyzed along with the samples. A report summarizing the analyte recoveries and relative percent differences for these samples is included in the data package.

Quality Control Remarks

This release of this particular set of TriMatrix, Inc. analytical data by Triangle Laboratories was authorized by the Quality Control Chemist who has reviewed each sample data package following a series of inspections/reviews. When applicable, general deviations from acceptable QC requirements are identified below and comments are made on the effect of these deviations upon the validity and reliability of the results. Specific QC issues associated with this particular project are:

Sample receipt: Eight water samples were received from TriMatrix, Inc. at 4 °C in good condition on November 17, 2000 and stored in a refrigerator at 4 °C. The client's chain-of-custody did not indicate whether or not chemical preservatives were utilized for the water sample prior to shipment.

Sample Preparation Laboratory: None

Mass Spectrometry: None

Data Review: Samples BASF-SMW-5, BASF-SMW-6, BASF-DUP1, BASF-FIELD BLANK, BASF-SMW-13, and BASF-SMW-20 are being reextracted. The results from these samples will be forwarded as soon as they are made available.

The percent recoveries of 23478-PeCDF, 234678-HxCDF, 123789-HxCDF, and OCDF in the LCSD are above the QC criteria (70-130%). As a result the associated relative percent differences of 234678-HxCDF and 123789-HxCDF the LCS and LCSD are also above the QC criteria (< 20%). The results for the associated analytes should be consider overestimated

The recoveries and/or relative percent differences (RPDs) for 12378-PeCDF, 123678-HxCDD, 123789-HxCDD, 1234678-HpCDD and OCDD in the matrix spike (MS) and matrix spike duplicate (MSD) analyses are outside method requirements. This variance is due to a high level of these analytes in the native sample. When the amount in the native sample approaches more than one-forth the spiked analyte level, statistical analysis becomes unreliable and the RPDs and recoveries can not be assessed using the QC samples.

Other Comments: No 2,3,7,8-substituted target analytes were detected in the method blank above the target detection limit (TDL).

The analytical data presented in this report are consistent with the guidelines of EPA Method 8290 Rev. 0 (9/94). Any exceptions have been discussed in the QC Remarks section of this case narrative with emphasis on their effect on the data. Should TriMatrix, Inc. have any questions or comments regarding this data package, please feel free to contact our Project Scientist, at (919) 544-5729.

For Triangle Laboratories, Inc.,

Released by,

Kenneth Varley

Kenneth Varley

Report Preparation Chemist

The total number of pages in the data package is : _____ .

Method 8290 Sample Calculations:

Analyte Concentration

The concentration or amount of any analyte is calculated using the following expression.

$$C_{(\sigma)} = \frac{A_\sigma * Q_\beta}{A_\beta * RRF_{(\sigma)} * W}$$

Where:

$C_{(\sigma)}$	=	concentration or amount of a given analyte
A_σ	=	integrated current for the characteristic ions of the analyte
A_β	=	integrated current of the characteristic ions of the corresponding internal standard
Q_β	=	amount of internal standard added to the sample before extraction
$RRF_{(\sigma)}$	=	mean analyte relative response factor from the initial calibration
W	=	sample weight or volume

Detection Limits

The detection limit reported for a target analyte that is not detected or presents an analyte response that is less than 2.5 times the background level is calculated by using the following expression. The area of the analyte is replaced by the noise level measured in a region of the chromatogram clear of genuine GC signals. The detection limits represent the maximum possible concentration of a target analyte that could be present without being detected.

$$DL_{(\sigma)} = \frac{2.5 * H * Q_\beta}{H_\beta * RRF_{(\sigma)} * W}$$

Where:

$DL_{(\sigma)}$	=	estimated detection limit for a target analyte
2.5	=	minimum response required for a GC signal
H	=	sum heights of the noise
H_β	=	sum of peak heights of the characteristic ions of the corresponding internal standard
Q_β	=	amount of internal standard added to the sample before extraction
$RRF_{(\sigma)}$	=	mean analyte relative response factor from the initial calibration
W	=	sample weight or volume

Data Flags

In order to assist with data interpretation, data qualifier flags are used on the final reports. Please note that all data qualifier flags are subjective and are applied as consistently as possible. Each flag has been reviewed by two independent Chemists and the impact of the data qualifier flag on the quality of the data discussed above. The most commonly used flags are:

A **'B'** flag is used to indicate that an analyte has been detected in the laboratory method blank as well as in an associated field sample. The 'B' flag is used only when the concentration of analyte found in the sample is less than 20 times that found in the associated blank. This flag denotes possible contribution of background laboratory contamination to the concentration or amount of that analyte detected in the field sample.

An **'E'** flag is used to indicate a concentration based on an analyte to internal standard ratio which exceeds the range of the calibration curve. Values which are outside the calibration curve are estimates only.

An **'I'** flag is used to indicate labeled standards have been interfered with on the GC column by coeluting, interferent peaks. The interference may have caused the standard's area to be overestimated. All quantitations relative to this standard, therefore, may be underestimated.

A **'J'** flag is used to indicate a concentration based on an analyte to internal standard ratio which is below the calibration curve. Values which are outside the calibration curve are estimates only.

A **'PR'** flag is used to indicate that a GC peak is poorly resolved. This resolution problem may be seen as two closely eluting peaks without a reasonable valley between the peak tops, overly broad peaks, or peaks whose shapes vary greatly from a normal distribution. The concentrations or amounts reported for such peaks are most likely overestimated.

A **'Q'** flag is used to indicate the presence of QC ion instabilities caused by quantitative interferences.

An **'RO'** flag is used to indicate that a labeled standard has an ion abundance ratio that is outside of the acceptable QC limits, most likely due to a coeluting interference. This may have caused the percent recovery of the standard to be overestimated. All quantitations versus this standard, therefore, may be underestimated.

An 'S' flag indicates that the response of a specific PCDD/PCDF isomer has exceeded the normal dynamic range of the mass spectrometer detection system. The corresponding signal is saturated and the reported analyte concentration is a 'minimum estimate'. When the 'S' qualifier is used in the reporting of 'totals', there is saturation of one (not

necessarily from a specific isomer) or more saturated signals for a given class of compounds. Results for saturated analytes are reported as greater than the upper calibration limit.

A '**U**' flag is used to indicate that a specific isomer cannot be resolved from a large, co-eluting interferent GC peak. The specific isomer is reported as not detected as a valid concentration cannot be determined. The calculated detection limit, therefore, should be considered an underestimated value.

A '**V**' flag is used to indicate that, although the percent recovery of a labeled standard may be below a specific QC limit, the signal-to-noise ratio of the peak is greater than ten-to-one. The standard is considered reliably quantifiable. All quantitations derived from the standard are considered valid as well.

An '**X**' flag is used to indicate that a polychlorodibenzofuran (PCDF) peak has eluted at the same time as the associated diphenyl ether (DPE) and that the DPE peak intensity is at least ten percent of the total PCDF peak intensity. Total PCDF values are flagged 'X' if the total DPE contribution to the total PCDF value is greater than ten percent. All PCDF peaks that are significantly influenced by the presence of DPE peaks are either reported as "estimated maximum possible concentration (EMPC) values without regard to the isotopic abundance ratio, or are included in the detection limit value depending on the analytical method.

TRIANGLE LABORATORIES, INC.

LIST OF CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

American Association for Laboratory Accreditation. Extended Expiration Date of October 31, 1999. Certificate Number 0226-01. Accreditation for technical competence in Environmental Testing. 8280, 8290, 1613A Dioxin in Wastewater; Solid or Hazardous Waste, and Air Matrices: XAD Trains - M23, 8290X and PUF Trains 8290X. Absorbable Organic Halides (AOX)/ Toxic Organic Halides (TOX) in Pulp/Paper. Method 1613A & B, 2,3,7,8 TCDD for Drinking. *Pending Evaluation of On-Site Audit.*

State of Alabama, Department of Environmental Management. Expires December 31, 2000. Laboratory ID # 40950. 2,3,7,8 TCDD (Dioxin) in drinking water.

State of Alaska, Department of Environmental Conservation. Expires December 21, 2000. Lab ID #NC-06-00. Certificate number NC00140. 2,3,7,8- TCDD (Dioxin) in drinking water.

State of Arizona, Department of Health Services. Expires May 26, 2001. Certificate #AZ0423. Drinking Water for Dioxin, Dioxin in Waste Water and Solid or Hazardous Waste.

State of Arkansas, Department of Pollution Control and Ecology. Expires 8 August 2001. Pulp/paper, soil, water, and Hazardous Waste for Dioxin/Furans.

State of California, Department of Health Services. Expires August 31, 2001. Certificate #1922. Organic Chemistry of Drinking Water -Dioxin in DW; EPA Method 1613, Organic Chemistry of Hazardous Waste by GC/MS - EPA Methods 8240B, 8270B, 8280, 8290, 8260A, and Organic Chemistry of Wastewater by GC/MS - EPA Method 613.

State of Connecticut, Department of Health Services. Expires September 30, 2001. Registration # PH-0117. 2,3,7,8 TCDD.(Dioxin) in drinking water (potable water for organic chemicals).

Delaware Health and Social Services. Expired December 31, 1998, **but** current certification will be maintained until DHSS has implemented their NEW Laboratory Certification Program. Certificate #NC 140. Dioxin in drinking water.

Florida Department of Health and Rehabilitative Services. Expires June 30, 2001. Method 1613 for Dioxin in Drinking Water. ID HRS# E87769.

Revised: 9/07/00 nch

Y:\CERTIFIC\ADMINIST\CERTLIST.MEM

Georgia Department of Environmental Quality. Initial application sent August 12, 1998 for Chemical Certification of Drinking Water for Dioxins, method 1613. *Currently applying*

Hawaii Department of Health. Expires March 1, 2000. Certified for Dioxin under the Safe Drinking Water Act. "Accepted" status for regulatory purposes.

Idaho Department of Health and Welfare. Expires December 31, 2000. Dioxin in drinking water.

Illinois Environmental Protection Agency. Sent initial application and fees December 18, 1998. Drinking Water, Wastewater and Hazardous Waste, Methods 608, 610, 624, 625, 8081A, 8260B, 8260C, 8270B, 8270C, 8310, 8315A. *Fees paid, Certificate pending.*

Indiana Department of Health. Expires December 31, 2000. Dioxin in drinking water, EPA method 1613. Lab ID # C-NC-01.

State of Kansas, Department of Health and Environment. Expires January 31, 2001. Cert. # E-10215. Method 1613, 2,3,7,8 TCDD for drinking water. Drinking water and/or pollution control; Cert. # E-10215. Solid or Hazardous Waste 8260B, 8270C.

Commonwealth of Kentucky, Department for Environmental Protection. Expires December 31, 2000. Lab ID #90060. 2,3,7,8 TCDD (Dioxin) in drinking water.

State of Louisiana Department of Environmental Quality. As of March 24, 2000, Triangle Laboratories, Inc. has "Pending Accreditation" until the LADEQ completes review of PT studies submitted.

State of Louisiana Department of Health & Hospitals. Expires December 31, 2000. Dioxin (2,3,7,8-TCDD) in Organics parameter. Certificate # LA000008.

Maryland Department of Health and Mental Hygiene. Expires September 30, 2000. Certification #728 - 2,3,7,8 TCDD (Dioxin) by 1613A for Water Quality[SOC II]. *Currently Applying.*

State of Michigan, Department of Environmental Quality. Expires April 1, 2001. 2,3,7,8 TCDD by Method 1613.

Mississippi State Department of Health. No expiration date. Dioxin in drinking water.

Montana Department of Health and Environmental Services. Expires December 31, 2000. Dioxin in drinking water.

Revised: 9/07/00 nch

Y:\CERTIFIC\ADMINIST\CERTLIST.MEM

State of Nebraska Department of Health. Expires December 31, 2000. Reciprocal certification through the North Carolina Department of Health and Human services. 2,3,7,8-TCDD (Dioxin) in drinking water, EPA Method 1613.

State of Nevada, Department of Conservation and Natural Resources. Parameter: Dioxin under Clean Water Act; expires December 31, 2000.

State of Nevada, Department of Human Resources. Lab Certificate No. NC-00140-2000-46, expires June 30, 2001. Parameters: Dioxin under Safe Drinking Water Act, expires March 31 2001.

State of New Jersey, Department of Environmental Protection and Energy. Expires June 30, 2000. ID #67851. 8290 and 1613(2,3,7,8- TCDD). *Currently Applying*

State of New Mexico, Environment Department. Expired October 31, 1999. Dioxin in Drinking Water per A2LA. *Renewal pending A2LA Certificate of renewal.*

New York State Department of Health. Expires March 31, 2001. ID #11026. Environmental Analyses of Solid and Hazardous Waste for purgeable hydrocarbons, chlorinated hydrocarbons, pesticides, priority pollutant phenols; potable water 2,3,7,8 TCDD (Dioxin).

State of North Carolina, Department of Health and Human Services. Expires June 30, 2001. Certificate # 37751. Dioxin in drinking water.

North Dakota State Department of Health and Consolidated Laboratories. Expires March 31, 2000. Certificate # R-076. Effective October 4, 1993. Dioxin in drinking water. Current certification is extended, based on New York certificate renewal.

Oklahoma Department of Environmental Quality. Expires August 31, 2001. Laboratory #9612. 2,3,7,8 TCDD (Dioxin) by 613, 1613A, 8290 and 8280. *Currently applying*

State of South Carolina, Department of Health and Environmental Control. Expires April 1, 2001. Certificate number #99040001 (Other parameters). Dioxin/Furans by method 1613B - Safe Drinking Water Act; 2,3,7,8-TCDD for Drinking Water, and Organic extractables for Solid and Hazardous Waste. Reciprocal certification with New York. Certificate # 99040002 expires August 31, 2001. Solid Hazardous Waste- Dioxins/Furans by 8280A and 8290. Reciprocal certification with California.

State of Tennessee. Department of Environment and Conservation. Expires January 28, 2002. ID #02992. Dioxin in Drinking water.

U.S. Department of Agriculture Soil Permit. Expires June 30, 2002. Permit No. S-4958 (Revised). Under the authority of the Federal Plant Pest Act, permission is granted to receive foreign soil samples for use in laboratory analysis.

Revised: 9/07/00 nch

Y:\CERTIFIC\ADMINIST\CERTLIST.MEM

U.S. Army Corps of Engineers. Expires November 15, 2001. Validated to perform analyses for the McAlester Army Ammunition Plant and various sites. EPA SW-846, Methods 8280 and 8290, water and solids.

U.S. EPA Region V. Expires January 19, 2003. 2,3,7,8 TCDD (Dioxin) in drinking water by method 1613A.

U.S. EPA Region VIII, for the State of Wyoming. Expires October 9, 2000. EPA Method 1613 for Dioxin in drinking water.

State of Utah, Department of Health. ID # TRIA, Account # 9195445729. **Organics** 1613 - RG Dioxin, expires November 31, 2001. **Metal Digestion** 3010A & 3050A; **Metals** 6010B & 7470; **Organic Extraction** 3540A; and, **Organic Instrumentation** 8240, 8280 & 8290; expires May 31, 2001.

Commonwealth of Virginia, Department of General Services, Division of Consolidated Laboratory Services. Expires June 30, 2001. ID # 00341. 2,3,7,8-TCDD (Dioxin) in drinking water.

State of Washington, Department of Ecology. Expires September 11, 2000. Lab Accreditation Number C067. Scope of Accreditation applies to Dioxins (PCDDs/PCDFs) by EPA methods 1613A, 8280, and 8290. *Renewal being processed.*

State of Washington, Department of Health. Expires April 30, 2001. Dioxin by 1613A in drinking water. Lab ID 129.

State of West Virginia, Department of Health. Expires December 31, 2000. Certificate No. 9923(C). 2,3,7,8-TCDD (Dioxin) in drinking water.

State of Wisconsin, Department of Natural Resources. Expires August 31, 2001: Certification for PCDD/PCDF. Laboratory ID Number 999869530. Expires August 31, 2001: Certified for 2,3,7,8-TCDD (Dioxin) in drinking water.

PHARMACEUTICAL

Drug Enforcement Agency (DEA). Expires November 30, 2000. Registration number RT0195835. Controlled substance registration for schedules 1,2,3,3N,4,5.

N.C. Department of Human Resources. Expires October 31, 2000. Registration number NC-PT 0000 0031. North Carolina controlled substances registration for schedules 1, 2, 2N, 3, 3N, 4, 5, 6.

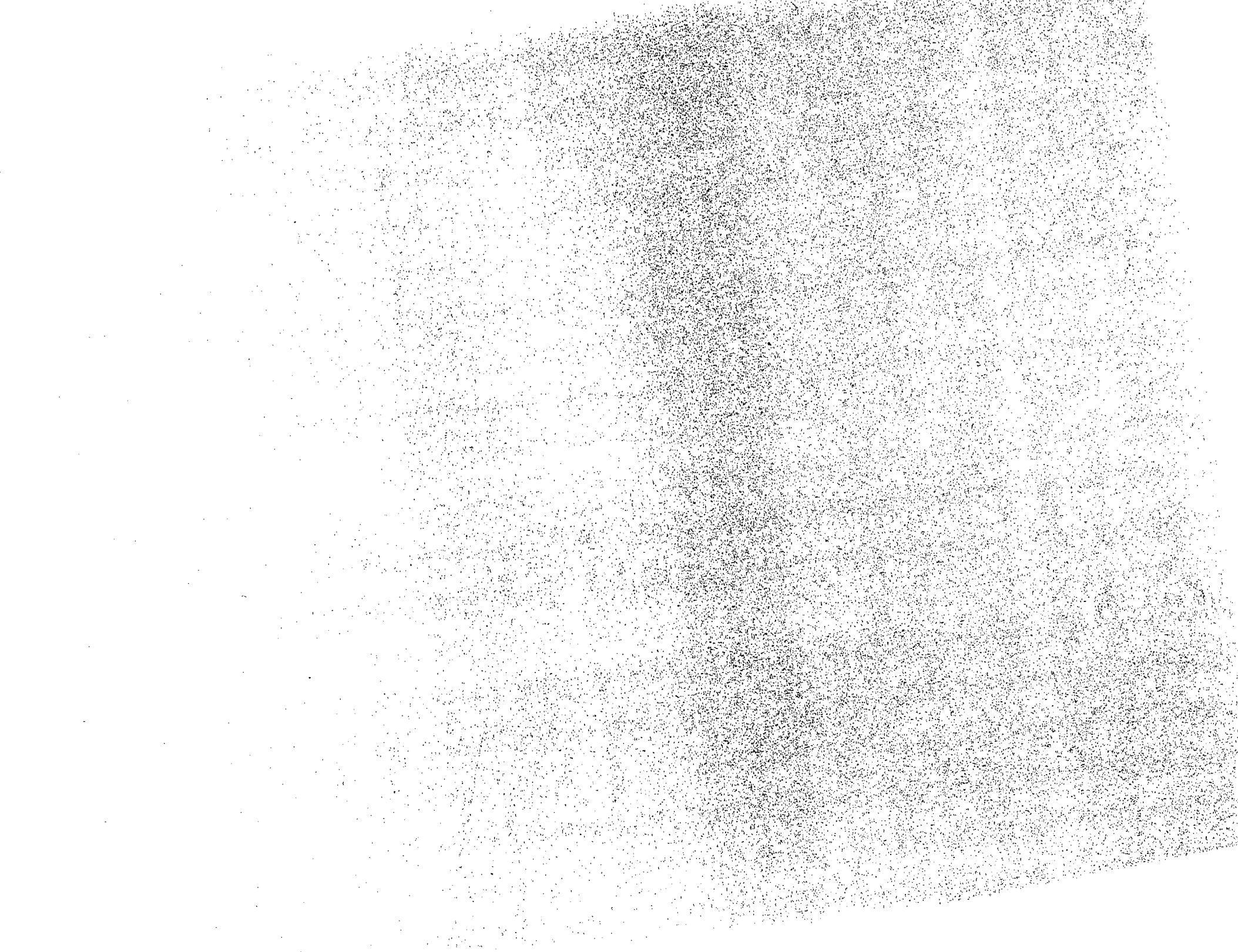
Food & Drug Administration (FDA) Registration. Registered June 17, 1999. ID #'s 001500 1053481(ATL). Annual registration of drug establishment.

OTHER

Clinical Laboratory Improvement Amendments (CLIA) Registration. Expires May 30, 2001. ID # 34D0705123. Department of Health & Human Services, Health Care Financing Administration. Certificate for the Acceptance of Human Specimans for the purposes of performing laboratory examinations or procedures - Chemistry, Toxicology, HCFA.

U.S. EPA Large Quantity Hazardous Waste Generator. No expiration date. EPA ID #NCD982156879. Permit indicates that the laboratory is a large generator of hazardous waste.

North Carolina General License for Radiation Protection. No expiration date. No License. 032-875-OG. The general license applies only to radioactive material contained in devices which have been manufactured and labeled in accordance with specific requirements.



TRIANGLE LABS

DOCUMENT CONTROL

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729

P.O. Box 13485
Research Triangle Park, NC 27709-348
Fax # 919-544-5491

COPY

MALCOLM PIRNIE

ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

1400 ABBOTT ROAD, SUITE 140
EAST LANSING, MI 48823
PHONE: 517-337-0111

Chain of Custody Record

No. 3425-9

SITE NAME: BASF

PROJECT NO.: 3940-014

SAMPLERS (SIGNATURE): William H Burns

Date	Time	Matrix*	Comp	GRAB	Sample I.D.	No. of Containers	Container Type** & Volume	Field Filtered (Yes or No)	Preservation Method	Analysis Required: Dioxin	Remarks
11/15/00		Water		X	BASF-DUP 1	2	1000mlG	N	—	+	
↓	12:24	↓		X	BASF-MS/MSD	1	↓	↓	—	+	
↓	17:00	↓		X	BASF-Field Blank	2	↓	↓	—	+	

Comments/Instructions to Lab:

Tri Matrix Customer

Relinquished by: (signature) William H Burns — Date/Time 11/16/00 17:45 — Received by:

Dispatched by: (signature) — Date/Time — Carrier:

Lab Task Order #: — Airbill Shipping#: — Received at lab by: — Date/Time 11-17-00 0910 — Logged in by: — Date/Time 11/17/00

*MATRIX: WATER (WTR), WASTEWATER (WW), SOIL (SOL), SLUDGE (SLU), AIR, OIL, HAZARDOUS WASTE (HW)

**CONTAINER TYPE: P - POLYETHYLENE; G - GLASS

COPY

MALCOLM PIRNIE
ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS
1400 ABBOTT ROAD, SUITE 140
EAST LANSING, MI 48823
PHONE: 517-337-0111

Chain of Custody Record

No. 3424

SITE NAME: BASF

PROJECT NO.: 3940-014

SAMPLERS (SIGNATURE):

Date	Time	Matrix*	Comp	GRAB	Sample I.D.	No. of Containers	Container Type** & Volume	Field Filtered (Yes or No)	Preservation Method	Analysis Required: Dioxin	Remarks
11/15/00	11:55	Water		X	BASF-SMW-5	2	1000mL G	N	—	X	
↓	15:55	↓		X	BASF-SMW-6	2	↓	↓	—	X	
↓	12:24	↓		X	BASF-SMW-10	2	↓	↓	—	X	

Comments/Instructions to Lab:

Tr: Matrix Customer

Relinquished by: (signature) — Date/Time: 11/16/00 17:45 — Received by:

Dispatched by: (signature) — Date/Time — Carrier:

Lab Task Order #: — Airbill Shipping#: — Received at lab by: — Date/Time — Logged in by: — Date/Time

COPY

MALCOLM PIRNIE
ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS
1400 ABBOTT ROAD, SUITE 140
EAST LANSING, MI 48823
PHONE: 517-337-0111

Chain of Custody Record

No. 3423

SITE NAME: BASF

PROJECT NO.: 3940-014

SAMPLERS (SIGNATURE): [signature]

Date	Time	Matrix*	Comp	GRAB	Sample I.D.	No. of Containers	Container Type** & Volume	Field Filtered (Yes or No)	Preservation Method	Analysis Required: Dioxin	Remarks
11/15/00	16:40	Water		X	BASF-SMW-13	2	1000ml G	N	—	X	
11	18:00	Water		X	BASF-SMW-20	2	1000ml G	N	—	X	

Comments/Instructions to Lab: ~~Test America~~ / Customer
TriMatrix

Relinquished by: (signature) [signature] Date/Time 11/16/00 17:45 Received by:

Dispatched by: (signature) Date/Time Carrier:

Task Order #: Airbill Shipping#: Received at lab by: Date/Time Logged in by: Date/Time

COPY

CLIENT CHAIN OF CUSTODY **SAMPLER'S SIGNATURE** [signature] **Quote 0000001174**

From (1): TriMatrix, Inc.
5560 Corporate Exchange Court
Grand Rapids, MI 49512
Project (1): BASF - Malcolm Pirnie

Contact: Lisa Harvey
Phone: 616/975-4500
Fax: 616/942-7463
P.O.# (1): _____

(TMI03 /UN) If the data will be reported to a state agency, which one? ____

Analysis Wanted (2): 1613B:T-O | 8280A:T-O | 8290:T-O | Dioxin

Total Number of Containers: ~~8~~ 6 WHB 11/15/00

Turn Around Time (In Calendar Days):

Sample ID (3)	Date / Time	Preservation (4)	Matrix	Sample Amt.						Remarks
BASF-SMW-5	11/15/00 11:55	—	Water	2-1000ml						
BASF-SMW-6	11/15/00 15:55	—	↓	↓						
BASF-SMW-10	11/15/00 12:24	—	↓	↓						
~~BASF-SMW-13~~	~~11/15/00 16:40~~	~~—~~	~~↓~~	~~↓~~						

Relinquished By/Sign.	Date/Time	Received By/Sign.	Relinquished By/Sign.	Date/Time	Received By/Sign.
[signature]	11/15/00 17:45				

Received for Laboratory By/Signature	Date/Time	Send Samples to:
[signature]	09:00 11-17-00	**Triangle Laboratories, Inc.** **Attn: Sample Custodian** **801 Capitola Drive** **Durham, NC 27713 USA** **Phone: (919) 544-5729 • Fax: (919) 544-5491**

Directions:
(1) Provide and/or correct client and project information.
(2) Verify analysis, check approriate boxes for each sample.
(3) Enter the sample ID to be used when reporting the samples.
(4) Please indicate the preservation used for each sample.

COPY

CLIENT CHAIN OF CUSTODY | **SAMPLER'S SIGNATURE** _____ | **Quote 0000001174**

From (1): TriMatrix, Inc.
5560 Corporate Exchange Court
Grand Rapids, MI 49512
Project (1): BASF- Malcolm Pirnie
(TMI03 /UN)

Contact: Lisa Harvey
Phone: 616/975-4500
Fax: 616/942-7463
P.O.# (1): _____

If the data will be reported to a state agency, which one? ___

Analysis Wanted (2): 1613B:T-O | 8280A:T-O | 8290:T-O | Dioxin

Total Number of Containers: 5

Turn Around Time (In Calendar Days):

Sample ID (3)	Date / Time	Preservation (4)	Matrix	Sample Amt.	1613B:T-O	8280A:T-O	8290:T-O	Dioxin		Remarks
~~BASF-SMW-20~~	~~11/15/00 18:00~~		~~Water~~	~~2-1000ml~~						
BASF- DUP 1	11/15/00		Water	2-1000ml				X		
BASF- MS/MSD	11/15/00 12:24			1-1000ml				X		
BASF- Field Blank	11/15/00 17:00			2-1000ml				X		

Relinquished By/Sign.	Date/Time	Received By/Sign.	Relinquished By/Sign.	Date/Time	Received By/Sign.
[signature]	11/15/00 17:45				

Received for Laboratory By/Signature	Date/Time	Send Samples to:
[signature]	09:00 11-17-00	Triangle Laboratories, Inc. Attn: Sample Custodian 801 Capitola Drive Durham, NC 27713 USA Phone: (919) 544-5729 • Fax: (919) 544-5491

Directions:
(1) Provide and/or correct client and project information.
(2) Verify analysis, check approriate boxes for each sample.
(3) Enter the sample ID to be used when reporting the samples.
(4) Please indicate the preservation used for each sample.

TRIANGLE LABORATORIES, INC. LOG IN RECORD/CHAIN OF CUSTODY

Custody Seal : Present/Intact Sample Seals: Absent
Chain of Custody : Present Container... : Intact
Sample Tags : Absent
Sample Tag Numbers: Not Listed on Chain of Custody
SMO Forms : N/A

TLI Project Number 52366
Client: TMI03 - TriMatrix, Inc.

Book 274

Date Received 11/17/00 By

Page 99

Ice Chest ICE Temp 4.0 C

Carrier and Number UPS

TLI Number / mR/H:CPM	Client Sample ID / Client COC ID	Location	Matrix	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
274-99-1A	BASF-SMW-5		WATER									
	BASF-SMW-5	C02		11/21/00								
274-99-1B	BASF-SMW-5		WATER									
	BASF-SMW-5	C02										
274-99-2A	BASF-SMW-6		WATER									
	BASF-SMW-6	C02										
274-99-2B	BASF-SMW-6		WATER									
	BASF-SMW-6	C02										
274-99-3A	BASF-SMW-10		WATER									
	BASF-SMW-10	C02										
274-99-3B	BASF-SMW-10		WATER									
	BASF-SMW-10	C02										
274-99-4A	BASF-DUP1		WATER									
	BASF-DUP1	C02										
274-99-4B	BASF-DUP1		WATER									
	BASF-DUP1	C02										
274-99-5	BASF-MS/MSD		WATER									
	BASF-MS/MSD	C02										
274-99-6A	BASF-FIELD BLANK		WATER									
	BASF-FIELD BLANK	C02										
274-99-6B	BASF-FIELD BLANK		WATER									
	BASF-FIELD BLANK	C02										
274-99-7A	BASF-SMW-13		WATER									
	BASF-SMW-13	C02										
274-99-7B	BASF-SMW-13		WATER									
	BASF-SMW-13	C02										
274-99-8A	BASF-SMW-20		WATER									
	BASF-SMW-20	C02		11/21/00								

Receiving Remarks:

Archive Remarks:

TRIANGLE LABORATORIES, INC. LOG IN RECORD/CHAIN OF CUSTODY

Custody Seal : Present/Intact Sample Seals: Absent
Chain of Custody : Present Container...: Intact
Sample Tags : Absent
Sample Tag Numbers: Not Listed on Chain of Custody
SMO Forms : N/A

TLI Project Number 52366
Client: TM103 - TriMatrix, Inc.

Date Received 11/17/00 By

Book 274 Page 99

Ice Chest ICE Temp 4.0 C

Carrier and Number UPS

TLI Number / mR/H:CPM	Client Sample ID / Client COC ID	Matrix / Location	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
274-99-88	BASF-SMW-20	WATER	[illegible]	[illegible]							
	BASF-SMW-20	CO2	11/21/00	11/21/00							

Receiving Remarks:

Archive Remarks:

TRIANGLE LABORATORIES, INC.
SAMPLE TRACKING AND PROJECT MANAGEMENT FORM

----------ADMINISTRATIVE INFORMATION----------

TLI Proj#: 52366-	Samples: 7+MS/MSD	TurnAround.: 21 Day(s)
Prod Code: D01002	Matrix.: Water	Hold Time..: 30 Day(s)
DetectLim: 10 ppq	Type...: B	Start Date.: 11/17/00
	Recvd...: 11/17/00	Ship By....: 12/06/00
		DWL Due Dt.: 11/27/00

Analyte List.: Tetra - Octa

Method.....: Method 8290: Tetra-Octa
Client Proj..: BASF-Malcolm Pirnie
Client.....: TriMatrix, Inc. (TMI03)
P.O. No.....:
Contact.....: Lisa Harvey
Proj. Mgr....:

Collect Dt/Tm: 11/15/00
Phone.....: 616/975-4532
Fax.....: 616/942-7463
Sample Origin:

----------SPECIAL INSTRUCTIONS / QA REQUIREMENTS----------

Prespike Standard: n/a
Extraction Exp...: 12/15/00

----------REPORTING REQUIREMENTS----------

Reporting Format: Report Option III

See MILES for Instructions/Communications.

Completed by: AC / [signature] DATE: 11-17-00

Reviewed by: [signature] DATE: 11/17/00 (PMGT0197)

Date: 11/21/00
Time: 21:52

TRIANGLE LABORATORIES, INC.
Wet Lab Extraction and Observations
Project: 52366

PRDPERC v4.03
Page: 1

Sample #	crd	TLI_Number..	Customer.Sample.Id.....	Init. pH...	NaOH Adj. mL..	NaOH Adj. pH.1.	H2SO4 Adj. mL...	H2SO4 Adj. pH.2.	Appearance.	Color.....	Odor...	Vol.	Entered.By.....	Date....	Time....	S
000		TLI Blank	TLI Blank	7.00	n/a	n/a	n/a	n/a	HPLC H2O	none	none	1000	miller	11/21/00	21:49:13	F
001		274-99-1A	BASF-SMW-5	10.00	n/a	n/a	0.5	8.00	opaque	brown	yes	1070	miller	11/21/00	21:52:49	F
002		274-99-2A	BASF-SMW-6	13.00	n/a	n/a	12.0	8.00	opaque	brown	yes	1090	miller	11/21/00	21:52:49	F
003		274-99-3A	BASF-SMW-10	13.00	n/a	n/a	11.0	7.00	opaque	brown	yes	1080	miller	11/21/00	21:52:49	F
004		274-99-3BMS	BASF-SMW-10 (MS)	13.00	n/a	n/a	12.0	7.00	opaque	brown	yes	1090	miller	11/21/00	21:52:49	F
005		274-99-5MSD	BASF-MS/MSD (MSD)	13.00	n/a	n/a	12.0	7.00	opaque	brown	yes	1080	miller	11/21/00	21:52:49	F
006		274-99-4A	BASF-DUP1	10.00	n/a	n/a	0.5	8.00	opaque	brown	yes	1060	miller	11/21/00	21:52:49	F
007		274-99-6A	BASF-FIELD BLANK	7.00	n/a	n/a	n/a	n/a	clear	none	none	1060	miller	11/21/00	21:52:49	F
008		274-99-7A	BASF-SMW-13	12.00	n/a	n/a	11.0	7.00	opaque	brown	yes	1050	miller	11/21/00	21:52:49	F
009		274-99-8A	BASF-SMW-20	13.00	n/a	n/a	11.0	7.00	opaque	brown	yes	1090	miller	11/21/00	21:52:49	F
010		TLI LCS	TLI LCS	7.00	n/a	n/a	n/a	n/a	HPLC H2O	none	none	1000	miller	11/21/00	21:49:13	F
011		TLI LCSD	TLI LCSD	7.00	n/a	n/a	n/a	n/a	HPLC H2O	none	none	1000	miller	11/21/00	21:49:13	F

*** End of Report ***

TRIANGLE LABORATORIES, INC.

Dioxin Sample Preparation Tracking & Management Form

Project: 52366 Client: TriMatrix, Inc. (TMI03)

Solvent(s)/Acid(s): MeCl2 / Toluene / _____ Method: Method 8290: Tetra-Octa Matrix: H2O

Lot Numbers: 996614 / 004450 / _____ Extraction Date: 11/21/00

IS Spike: 20 µl conc: 0.1000 ng/µl

SS Spike: ___ µl conc: ___ ng/µl

MS Spike: 40 µl conc: 0.0100 ng/µl

LCS Spike: 40 µl conc: 0.0100 ng/µl

						JSM	JSM	[illegible]		Chemis
						7582 E	7554 M	7556 K		Spike
						USF-A13	USF-ML	USF-C		" ID
						7/3/01	7/2/01	07/02/01	/ /	" Exp
						11/21/00	11/21/00	11/22/00	/ /	" Dat
						14:30	14:30	17:00	:	" Tim
						0.1 ng/µl	0.01 ng/µl	0.01 ng/µl	ng/µl	" Con
						20 µl	40 µl	20 µl	µl	" Vol
S#.crd	TLI SAMPLE ID	CLIENT SAMPLE ID	GROSS WEIGHT Before	GROSS WEIGHT After	SAMPLE SIZE g / ml					
000	TLI Blank	TLI Blank	XXXXXXXXX	XXXXXXXXX	1000	JSM		[illegible]		Any Le yes/n
001	274-99-1A	pH=10 BASF-SMW-5	XXXXXXXXX 1564g	XXXXXXXXX 504g	1070					Any Le yes/n
002	274-99-2A	pH=13 BASF-SMW-6	XXXXXXXXX 1590g	XXXXXXXXX 505g	1090					Any Le yes/n
003	274-99-3A	pH=13 BASF-SMW-10	XXXXXXXXX 1583g	XXXXXXXXX 504g	1080					Any Le yes/n
004	274-99-3BMS	pH=13 BASF-SMW-10 (MS)	XXXXXXXXX 1591g	XXXXXXXXX 505g	1090		* JSM			Any Le yes/n
005	274-99-5MSD	pH=13 BASF-MS/MSD (MSD)	XXXXXXXXX 1586g	XXXXXXXXX 504g	1080		* JSM			Any Le yes/n
006	274-99-4A	pH=10 BASF-DUP1	XXXXXXXXX 1559g	XXXXXXXXX 504g	1060					Any Le yes/n
007	274-99-6A	pH=7 BASF-FIELD BLANK	XXXXXXXXX 1562g	XXXXXXXXX 504g	1060					Any Le yes/n
008	274-99-7A	pH=12 BASF-SMW-13	XXXXXXXXX 1561g	XXXXXXXXX 506g	1050					Any Le yes/n
009	274-99-8A	pH=13 BASF-SMW-20	XXXXXXXXX 1588g	XXXXXXXXX 505g	1090	JSM		[illegible]		Any Le yes/n

Gross weight of sample container + sample before/after aliquot removal.

Comments: HPLC H2O lot # 000976 used for Blank LCS, + LCSD.

001- Added 0.5mL 1:1 H2SO4 → pH=8 002- added 12mL 1:1 H2SO4 → pH=8 003- added 11mL → pH=7

004- added 12mL 1:1 H2SO4 → pH=7 005- added 12mL → pH=7 006- added 0.5mL → pH=8

008- added 11mL → pH=7 009- added 11mL → pH=7 Initials: JSM Date: 11/21/00

Initials of both SPIKER AND OBSERVER must be entered. XXXXX = Gross Weight not provided for WATER Samples

REV 05/27/97 (PSTMF 7

TRIANGLE LABORATORIES, INC.

Dioxin Sample Preparation Tracking & Management Form

Project: 52366

Client: TriMatrix, Inc. (TMI03)

Solvent(s)/Acid(s): $MeCl_2$ / _____ / _____

Method: Method 8290: Tetra-Octa Matrix: H_2O

Lot Numbers: 996614 / _____ / _____

Extraction Date: 11/21/00

IS Spike: 20 µl conc: 0.1000 ng/µl

SS Spike: ____ µl conc: ____ ng/µl

MS Spike: 40 µl conc: 0.0100 ng/µl

LCS Spike: 40 µl conc: 0.0100 ng/µl

S#.crd	TLI SAMPLE ID	CLIENT SAMPLE ID	GROSS WEIGHT Before	GROSS WEIGHT After	SAMPLE SIZE g / ml					
						JSM	JSM	EM		Chemist
						7582C	7554M	7556K		Spike #
						USF-AN	USF-ML	USF-C		" ID
						7/2/01	7/2/01	07/02/01	__/__/__	" Exp.
						11/21/00	11/21/00	11/22/00	__/__/__	" Date
						14:30	14:30	17:00	__:__	" Time
						0.1 ng/µl	0.01 ng/µl	0.01 ng/µl	____ ng/µl	" Conc
						20 µl	40 µl	20 µl	____ µl	" Vol.
	TLI LCS		XXXXXXXXX	XXXXXXXXX						Any Le
010		TLI LCS	XXXXXXXXX	XXXXXXXXX	1000	JSM	JSM	EM		yes/no
	TLI LCSD		XXXXXXXXX	XXXXXXXXX						Any Le
011		TLI LCSD	XXXXXXXXX	XXXXXXXXX	1000	JSM	JSM	EM		yes/no
										Any Le
										yes/no
										Any Le
										yes/no
										Any Le
										yes/no
										Any Le
										yes/no
										Any Le
										yes/no
										Any Le
										yes/no
										Any Le
										yes/no

Gross weight of sample container + sample before/after aliquot removal.

Comments: 001-006, 008, 009 - opaque, brown, w/ odor. 007. clear, colorless, no odor.

Initials: JSM Date: 11/21/00

Initials of both SPIKER AND OBSERVER must be entered.

XXXXX = Gross Weight not provided for WATER Samples

REV 05/27/97 (PSTMF 7

TRIANGLE LABORATORIES, INC.
DIOXIN SAMPLE EXTRACTION and CLEANUP TRACKING FORM
TLI Project No.: 52366

Ext S#.crd and TLI Number	1	2	3	4	7	8
010 TLI LCS	JS 11/21/00	EM 11/22/00	MC 11/24/00	MC 11/24/00	MC 11/24/00	JS 11/24/00
011 TLI LCSD	JS 11/21/00	EM 11/22/00	MC 11/24/00	MC 11/24/00	MC 11/24/00	JS 11/24/00

Enter the procedure number below into the box at the top of each column to signify the step performed.
Initial and date each sample for each numbered procedure performed.

#..	....PROCEDURE....	SOP.#.	v..	DETAILS (circle)
1)	EXTRACTION	161	16	Time On 23:00 Time Off 15:00
				Soxhlet / Jar / Sep Funnel / Steam Dist / Cont LL / ASE / Waste Dilution
2)	SPIKE AFTER EXT'N			12 - 11/21/00
3)	ADD TRIDECANE			Lot# 11-1-23-262J
4)	ROTOVAP	____	___	40mL / 10mL / Dryness
5)	COMBINE	____	___	
6)	DIV./LIP. DETERM.	____	___	20%/80% 50%/50% 5mL/20mL Other____
7)	SOLVENT EXCHANGE			Iso-Octane Lot#_____ Heptane Lot# V5547126J8
8)	CLEANUP	12		DSP 260 / Modified DSP 260 / DSP 280 / Other _____
9)	TRANSFER	____	___	
10)	ADDITIONAL CLEANUP		___	DSP260(10g)
11)	FINAL TRANSFER	____	___	

Comments: _____

Rev 11/25/97 (PSTMF

TRIANGLE LABORATORIES, INC.

DIOXIN SAMPLE EXTRACTION and CLEANUP TRACKING FORM

TLI Project No.: 52366

Ext S#.crd and TLI Number	1	2	3	4	5	6	7	8	9
000 TLI Blank	JS 11/21/00	ES 11/22/00	MC 11/24/00	KG 11/24/00	N/A	N/A	MC 11/24/00	JS 11/24/00	JJ 11/24/00
001 274-99-1A					MC 11/24/00	MC 11/24/00			
002 274-99-2A									
003 274-99-3A									
004 274-99-3BMS									
005 274-99-5MSD									
006 274-99-4A									
007 274-99-6A					N/A	N/A			
008 274-99-7A					MC 11/24/00	MC 11/24/00			
009 274-99-8A	JS 11/21/00	ES 11/22/00						JS 11/24/00	JJ 11/24/00

Enter the procedure number below into the box at the top of each column to signify the step performed.
Initial and date each sample for each numbered procedure performed.

#	....PROCEDURE....	SOP.#.	.v..	DETAILS (circle)
(1)	EXTRACTION	161	16	Time On 23 : 00 Time Off 15 : 00
				Soxhlet / Jar / Sep Funnel / Steam Dist / Cont LL / ASE / Waste Dilution
(2)	SPIKE AFTER EXT'N			
(3)	ADD TRIDECANE			Lot# TT-1-23-252J
(4)	ROTOVAP	____	____	40mL / 10mL / Dryness
(5)	COMBINE	____	____	
6)	DIV./LIP. DETERM.	____	____	20%/80% 50%/50% 5mL/20mL Other____
(7)	SOLVENT EXCHANGE			Iso-Octane Lot#____ Heptane Lot#____
(8)	CLEANUP		12	DSP 260 / Modified DSP 260 / DSP 280 / Other ____
(9)	TRANSFER	172	8	
10)	ADDITIONAL CLEANUP		____	DSP260(10g)
11)	FINAL TRANSFER	____	____	

Comments: _____

Rev 11/25/97 (PSTMF 4)

TRIANGLE LABORATORIES, INC.
Transfer Chain-of-Custody Form
Project 52366

Transfer From: DWLL5 To: DMS5

	Initials..	Date.....	Time...
Released by:	JJ	11/24/00	20:57
Accepted by:	DFS	11/24/00	21:00

MILES.ID.....		TLI_No.....	Cust.Id.....
52366-	-000	TLI Blank	TLI Blank
52366-	-001	274-99-1A	BASF-SMW-5
52366-	-002	274-99-2A	BASF-SMW-6
52366-	-003	274-99-3A	BASF-SMW-10
52366-	-004	274-99-3BMS	BASF-SMW-10 (MS)
52366-	-005	274-99-5MSD	BASF-MS/MSD (MSD)
52366-	-006	274-99-4A	BASF-DUP1
52366-	-007	274-99-6A	BASF-FIELD BLANK
52366-	-008	274-99-7A	BASF-SMW-13
52366-	-009	274-99-8A	BASF-SMW-20
52366-	-010	TLI LCS	TLI LCS
52366-	-011	TLI LCSD	TLI LCSD

XfrCOC (Rev 11/01/94)

Additional comments or instructions:

TRIANGLE LABORATORIES, INC.

Method: Method 8290: Tetra-Octa — HR GC/HRMS ANALYSIS

Required Detection Limit: 10 ppq — PROJECT: 52366

SAMPLE INFORMATION — RS Conc 20 µl @ 100.0 PG/µl

S#.crd	TLI / SAMPLE ID / CLIENT / SAMPLE ID	1ST COLUMN GC/MS FILENAME COLUMN: DB5	CONFIRM	2ND COLUMN CONFIRM FILENAME COLUMN: DB225	USF-RS 100 VOLUME 20µl SOLN ID 75607	USF-RS 99 INIT. MVL DATE 11/24/99	ANALYSIS COMMENTS
000	TLI Blank / TLI Blank	T005817					BATCHED NATIVE
001	274-99-1A / BASF-SMW-5	T005818	Y	P004298			
002	274-99-2A / BASF-SMW-6	T005819	Y	P004299			
003	274-99-3A / BASF-SMW-10	T005820	Y	P004302			
004	274-99-3BMS / BASF-SMW-10 (MS)	T005821	-				
005	274-99-5MSD / BASF-MS/MSD (MSD)	T005822	-				
006	274-99-4A / BASF-DUP1	T005823	Y				
007	274-99-6A / BASF-FIELD BLANK	T005824	N				
008	274-99-7A / BASF-SMW-13	T005825	Y				
009	274-99-8A / BASF-SMW-20	T005826	Y				
010	TLI LCS / TLI LCS	T005827	-				
011	TLI LCSD / TLI LCSD	T005828	-				

Comments: _____ Type: B

Spike File: SPMIT22S

Amt of Extract: 100%

REV 03/07/95 (PSTMF 6

Triangle Laboratories, Inc.
Run Log

Instrument ID	Column Type	Column ID	Plot Name	Inj. Vol.	Acquisition	G/C
70T	DB-5	06303Z1	T02	2.0µl	NDB5113	NDB5113

Signature: MNL Date: 11/24/00

Filename	Date*	Time*	Project #	Sample#	No.	Client Sample ID	Syr	332	Operator/Date	Comments**
T00 5814	11/24/00	2135	—	7584A	—	R193/1613 concal 10	Auto	7.5 E5	MNL 11/24/00	NG OCDD std % D out MNL 11/24/00
T00 5815	11/24/00	23:24	—	7584A	—	8290/1613 concal 10	Auto	4.7 E5	MNL 11/24/00	Conf. Rev T-2 Jan 11/25/00
T00 5816	11/25/00	00:18	—	7581A	—	PTCHH	Auto	11.0	Jan 11/25/00	
T00 5817	11/25/00	01:13	52366	TLE Blk	0	TLE Blk	Auto	11.6 E5	Jan 11/25/00	
T00 5818		02:00		274-99-1A	1	BASF-sinw-5		9.0E5		
T00 5819		02:47		274-99-2A	2	BASF-sinw-6		1.1E6		
T00 5820		03:34		274-99-3A	3	BASF-sinw-10		1.4E6		
T00 5821		04:21		274-99-3Ms	4	BASF-sinw-10(MS)		1.7E6		
T00 5822		05:08		274-99-3Msd	5	BASF-ms/msd (MS12)		1.8E6		
T00 5823		05:55		274-99-4A	6	BASF-Dup1		9.0E5		
T00 5824		06:42		274-99-6A	7	BASF-Field Blk		2.4E5		
T00 5825		07:28		274-99-1A	8	BASF-sinw-13		5.5E5		
T00 5826	11/25/00	08:15	52366	274-99-8A	9	BASF-sinw-20	Auto	1.2E5	Jan 11/25/00	

* Transcribed from chromatographic data
** Dated initials required

ConCal Due: _____
ConCal Due: _____

srvr1/qa/forms/hrrunlog.doc (02/05/97)

Triangle Labor[illegible]es, Inc.
Run Log

Instrument ID	Column Type	Column ID	Plot Name	Inj. Vol.	Acquisition	G/C
707	DB-5	0630321	T12	2.0 µl	NDB540	NDB540

Signature: [signature] Date: 11/25/00

Filename	Date*	Time*	Project #	Sample#	No.	Client Sample ID	Syr	332	Operator/Date	Comments**
T005827	11/25/00	09:02	52366	TCILCS	10	TCILCS	Auto	3.0E5	[signature] 11/25/00	
T005828	11/25/00	09:49	↓	TCILCSD	11	TCI LCSD	↓	1.8E5		
T005827	11/25/00	1036	—	7584A	—	8290/1613 Concal 10	Auto	1.0 E5	[signature] 11/25/00	N/C HxCDF > 25%
T005830	11/27/00	0806	—	7584A	—	8290/1613 Concal 10	Auto	5.7 E5	[illegible] 11/27/00	Good 8290 [illegible] F10 [illegible]
T005831	11/27/00		—	7581A	-	RTCHK	Auto		HZ 11/27/00	

* Transcribed from chromatographic data
** Dated initials required

ConCal Due: 11:24 [signature] 11-25-00
ConCal Due: _____

srvr1/qa/forms/hrrunlog.doc (02/05/97)

Triangle Laboratories, Inc.
Run Log

Instrument ID	Column Type	Column ID	Plot Name	Inj. Vol.	Acquisition	G/C
70P	DB225	0682957	TT1	2.0 ul	DB225	DB225

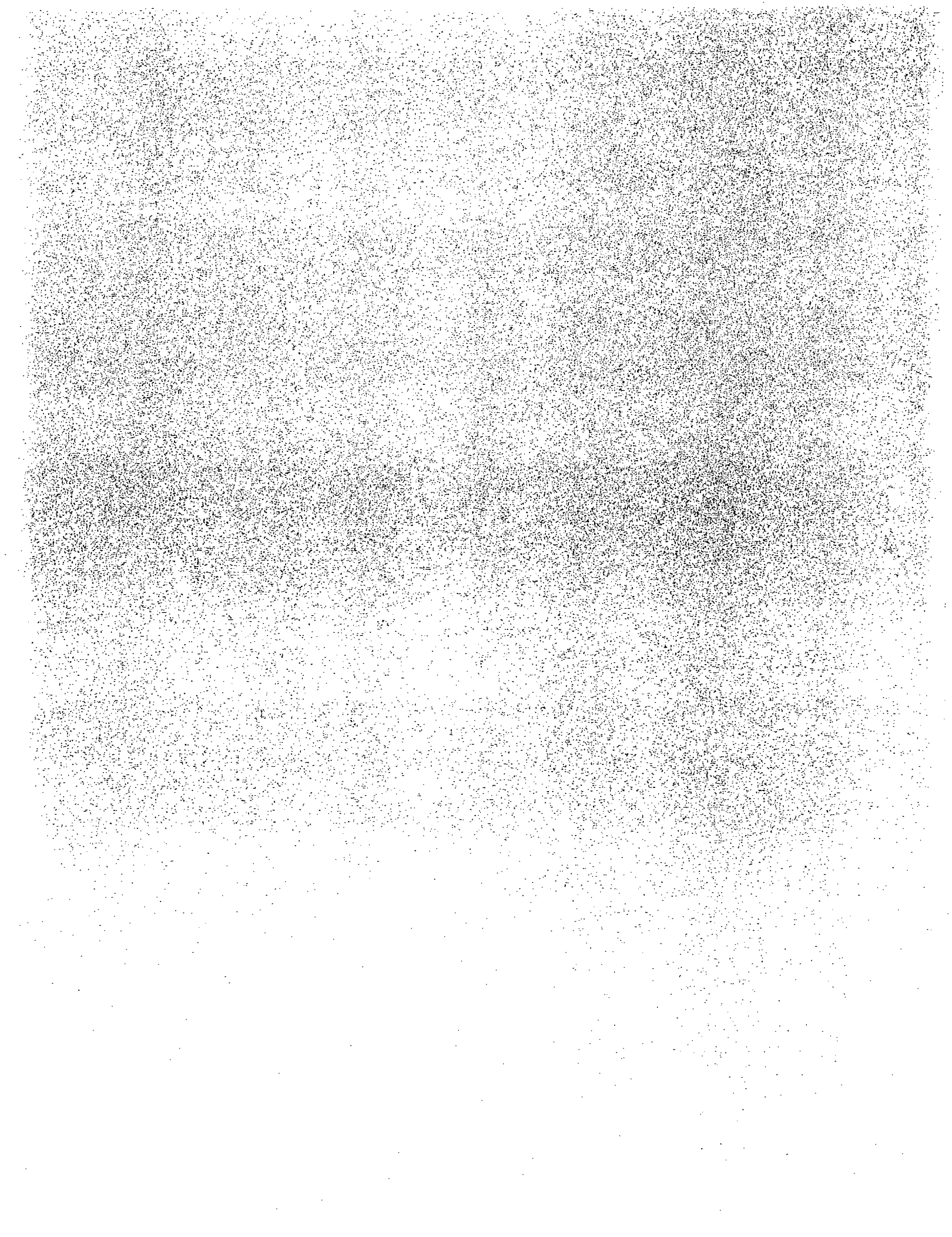
Hong Zhou — Signature
11/29/00 — Date

Filename	Date*	Time*	Project #	Sample#	No.	Client Sample ID	Syr	332	Operator/Date	Comments**
P004338	11/29/00	1651	–	7568 A	–	Tetra Concal 5.0	Auto	5.5 E5	HZ 11/29/00	
P004339	11/29/00	1833	—	7581A	—	RT LHK	Auto	16%	MVL 11/29/00	
P004340	11/29/00	1934	—	7568A	—	Tetra Concal 5.0	Auto	3.7 E6	MVL 11/29/00	Good 16136 and 8290 MVL 11/29/00
P004341	11/29/00	2031	—	7560 I	—	R3100	Auto	3.1 E6	MVL 11/29/00	
P004342	11/29/00	2122	52366	274-99-3A	3	BASF-SMW-10	Auto	1.8 E6	MVL 11/29/00	
P004343	11/29/00	23:41	5216814	272-95-1	1	HB-01B1 (2-10)	Auto	0.1 [illegible]	MVL 11/29/00	
P004344	11/30/00	01:22	52352	274-95-1	1	AFR SLUDGE	Auto	[illegible]	[illegible] 11/30/00	
P004345	11/30/00	02:55	52391	275-25-1	1	2011-066-01/01-X-X	Auto	2.6 [illegible]	[illegible] 11/30/00	
P004346	↓	04:01	52391	275-25-2	2	2011-066-02/04-L-X	Auto	2.5 [illegible]	[illegible] 11/30/00	
P004347	↓	04:47	52391	275-25-3	3	2011-066-03/05-L-X	Auto	1.9 [illegible]	[illegible] 11/30/00	
P004348	↓	05:36	52391	275-25-4	4	2011-066-04/06-L-X	Auto	2.5 [illegible]	[illegible] 11/30/00	
P004349	↓	06:20	52391	275-25-5	5	2011-066-0 -L-X	↓	2.7 E5	↓	
P004350	11/30/00	07:05 06:20	—	7568A	—	Tetra Concal 5.0	Auto	2.9 E5	[illegible] 11/30/00	Good [illegible] 11/30/00

* Transcribed from chromatographic data
** Dated initials required

* [illegible] 11/30/00 ConCal Due: _____
ConCal Due: _____

srvr1/qa/forms/hrrunlog.doc (02/05/97)



TRIANGLE LABS

SAMPLE DATA

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 277
Fax # 919-544-5491

TRIANGLE LABORATORIES, INC.
LAB CONTROL SPIKE RECOVERY ANALYSIS AND COMPARISON

Project: 52366
Matrix: WATER
Method: 8290

Isomer	TQ05817 ID: TLI Blank Sample (pg/l)	TQ05827 ID: TLI LCS With Spike (pg/l)	Percent Recovery	TQ05828 ID: TLI LCSD Spike Dup (pg/l)	Percent Recovery	Relative Percent Difference
2378-TCDD	ND	435	109	410	103	5.66
12378-PeCDD	ND	1860	93.0	1950	97.6	4.83
123478-HxCDD	ND	2050	102	2050	103	0.98
123678-HxCDD	ND	2050	103	2180	109	5.86
123789-HxCDD	ND	2100	105	2290	114	8.22
1234678-HpCDD	ND	2240	112	2320	116	3.51
OCDD	ND	4430	111	4770	119	6.96
2378-TCDF	ND	402	100	406	101	1.00
12378-PeCDF	ND	2180	109	2190	109	0.0
23478-PeCDF	ND	2550	127	2960	148	15.3
123478-HxCDF	ND	2050	103	2060	103	0.0
123678-HxCDF	ND	2060	103	2150	107	3.81
234678-HxCDF	ND	2170	108	2660	133	20.7
123789-HxCDF	2.5	2200	110	2960	148	29.5
1234678-HpCDF	ND	2040	102	2200	110	7.55
1234789-HpCDF	ND	1780	88.9	2160	108	19.4
OCDF	ND	5020	126	5360	134	6.15

ND: Not Detected
NA: Not Applicable
[..]: EMPC Value

MILES 4.22.16
GRY_PSUM v1.10

Processed By: _____ Date: 11/30/00

Percent Recovery QC Limits: 70 to 130 percent.
Relative Percent Difference QC Limits: +/- 20 percent.

Nominal Spike Levels:
TCDD/TCDF..: 0.4 ng
PeCDD/PeCDF: 2.0 ng
HxCDD/HxCDF: 2.0 ng
HpCDD/HpCDF: 2.0 ng
OCDD/OCDF..: 4.0 ng

TRIANGLE LABORATORIES, INC.
MATRIX SPIKE RECOVERY ANALYSIS AND COMPARISON

Project: 52366
Matrix: WATER
Method: 8290

Isomer	T005820 ID: BASF-SMW-10 Sample (pg/l)	T005821 ID: BASF-SMW-10 (MS) With Spike (pg/l)	Percent Recovery	T005822 ID: BASF-MS/MSD (MSD) Spike Dup (pg/l)	Percent Recovery	Relative Percent Difference
2378-TCDD	319	694	102	704	104	1.94
12378-PeCDD	579	2290	93.1	2250	90.0	3.39
123478-HxCDD	264	1960	92.5	2080	98.0	5.77
123678-HxCDD	4880	14630	532	6870	107	133
123789-HxCDD	2090	5310	176	4040	105	50.5
1234678-HpCDD	81960	177190	5190	93660	632	157
OCDD	326530	367280	1110	347840	575	63.5
2378-TCDF	1880	2180	82.6	2210	90.5	9.13
12378-PeCDF	ND	4350	237	4220	228	3.87
23478-PeCDF	678	2380	92.8	2390	92.6	0.22
123478-HxCDF	1620	3590	108	3570	106	1.87
123678-HxCDF	476	2410	105	2330	100	4.88
234678-HxCDF	480	2330	101	2370	102	0.99
123789-HxCDF	68.5	2240	118	2250	118	0.0
1234678-HpCDF	1830	3950	115	3850	109	5.36
1234789-HpCDF	162	1930	96.2	1880	92.8	3.60
OCDF	1380	4880	95.2	4760	91.1	4.40

ND: Not Detected
NA: Not Applicable
[..]: EMPC Value

MILES 4.22.16
GRY_PSUM v1.10

Processed By: _____ Date: 11/30/00

Percent Recovery QC Limits: 70 to 130 percent.
Relative Percent Difference QC Limits: +/- 20 percent.

Nominal Spike Levels:
- TCDD/TCDF..: 0.4 ng
- PeCDD/PeCDF: 2.0 ng
- HxCDD/HxCDF: 2.0 ng
- HpCDD/HpCDF: 2.0 ng
- OCDD/OCDF..: 4.0 ng

Data File	T005817		T005820		T005821		T005822	
Sample ID	TLI Blank		BASF-SMW-10		BASF-SMW-10 (MS)		BASF-MS/MSD (MSD)	
Units	pg/l		pg/l		pg/l		pg/l	
Extraction Date	11/21/2000		11/21/2000		11/21/2000		11/21/2000	
Analysis Date	11/25/2000		11/25/2000		11/25/2000		11/25/2000	
Instrument	T		T		T		T	
Matrix	WATER		WATER		WATER		WATER	
Extraction Type								
Analytes								
2378-TCDD	(2.1)		319		694		704	
12378-PeCDD	(2.0)		579		2290		2250	
123478-HxCDD	(2.6)		264		1960		2080	
123678-HxCDD	(2.6)		4880		14630		6870	
123789-HxCDD	(2.5)		2090		5310		4040	
1234678-HpCDD	(5.0)		81960	E	177190	E	93660	E
OCDD	(8.4)		326530	E	367280	E	347840	E
2378-TCDF	(1.5)		1880		2180		2210	
12378-PeCDF	(1.9)		(12.0)		4350		4220	
23478-PeCDF	(1.8)		678		2380		2390	
123478-HxCDF	(1.6)		1620		3590		3570	
123678-HxCDF	(1.5)		476		2410		2330	
234678-HxCDF	(1.7)		480		2330		2370	
123789-HxCDF	2.5	J	{68.5}	X	2240		2250	
1234678-HpCDF	(2.4)		1830		3950		3850	
1234789-HpCDF	(3.1)		162		1930		1880	
OCDF	(7.0)		1380		4880		4760	
TOTAL TCDD	(2.1)		5060					
TOTAL PeCDD	(2.0)		2950					
TOTAL HxCDD	(2.6)		50730	E				
TOTAL HpCDD	(5.0)		152270	E				
TOTAL TCDF	(1.5)		8100	X				
TOTAL PeCDF	(1.8)		4600	X				
TOTAL HxCDF	2.5		5970	X				
TOTAL HpCDF	(2.7)		2960					
Other Standards Percent Recovery Summary (% Rec)								
37Cl-TCDD	84.4		120		124		84.3	
Other Standards Percent Recovery Summary (% Rec)								
13C12-PeCDF 234	68.3		33.0	V	26.0	V	22.0	V
13C12-HxCDF 478	78.4		39.3	V	31.3	V	26.1	V
13C12-HxCDD 478	76.7		37.3	V	33.2	V	27.4	V
13C12-HpCDF 789	71.3		25.8		23.4	V	18.8	V
Other Standards Percent Recovery Summary (% Rec)								
13C12-HxCDF 789	89.2		42.3		37.0	V	29.9	V
13C12-HxCDF 234	84.8		36.9	V	30.4	V	25.6	V
Internal Standards Percent Recovery Summary (% Rec)								
13C12-2378-TCDF	73.9		47.3		38.6	V	32.3	V
13C12-2378-TCDD	67.1		40.6		33.7	V	27.8	V

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Data File	T005817	T005820		T005821		T005822	
Sample ID	TLI Blank	BASF-SMW-10		BASF-SMW-10 (MS)		BASF-MS/MSD (MSD)	
Units	pg/l	pg/l		pg/l		pg/l	
Extraction Date	11/21/2000	11/21/2000		11/21/2000		11/21/2000	
Analysis Date	11/25/2000	11/25/2000		11/25/2000		11/25/2000	
Instrument	T	T		T		T	
Matrix	WATER	WATER		WATER		WATER	
Extraction Type							
Internal Standards Percent Recovery Summary (% Rec)							
13C12-PeCDF 123	61.7	34.2	V	28.7	V	23.8	V
13C12-PeCDD 123	75.1	38.8	V	31.6	V	26.7	V
13C12-HxCDF 678	79.6	37.2	V	30.8	V	25.2	V
13C12-HxCDD 678	79.9	40.0		34.4	V	27.4	V
13C12-HpCDF 678	74.1	29.5		26.0		21.1	V
13C12-HpCDD 678	62.5	31.0		30.0		22.3	V
13C12-OCDD	53.1	17.3	VRO	15.4	VRO	12.6	V

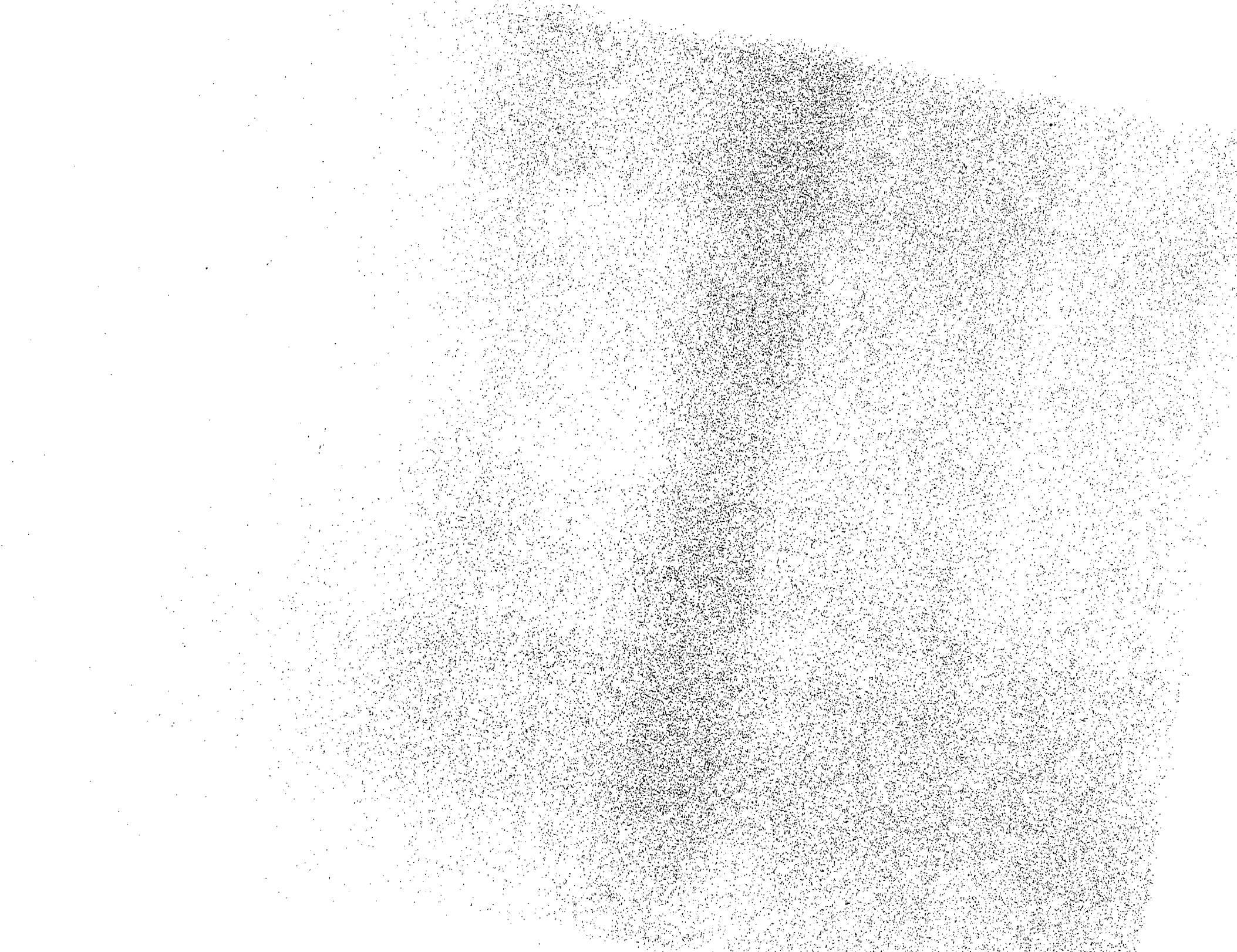
Data File	T005827	T005828
Sample ID	TLI LCS	TLI LCSD
Units	pg/l	pg/l
Extraction Date	11/21/2000	11/21/2000
Analysis Date	11/25/2000	11/25/2000
Instrument	T	T
Matrix	WATER	WATER
Extraction Type		
Analytes		
2378-TCDD	435	410
12378-PeCDD	1860	1950
123478-HxCDD	2050	2050
123678-HxCDD	2050	2180
123789-HxCDD	2100	2290
1234678-HpCDD	2240	2320
OCDD	4430	4770
2378-TCDF	402	406
12378-PeCDF	2180	2190
23478-PeCDF	2550	2960
123478-HxCDF	2050	2060
123678-HxCDF	2060	2150
234678-HxCDF	2170	2660
123789-HxCDF	2200	2960
1234678-HpCDF	2040	2200
1234789-HpCDF	1780	2160
OCDF	5020	5360
Other Standards Percent Recovery Summary (% Rec)		
37Cl-TCDD	69.0	88.8
Other Standards Percent Recovery Summary (% Rec)		
13C12-PeCDF 234	123	135
13C12-HxCDF 478	67.1	63.4
13C12-HxCDD 478	67.4	73.2
13C12-HpCDF 789	49.5	71.9
Other Standards Percent Recovery Summary (% Rec)		
13C12-HxCDF 789	77.4	98.5
13C12-HxCDF 234	71.9	81.3
Internal Standards Percent Recovery Summary (% Rec)		
13C12-2378-TCDF	57.2	70.7
13C12-2378-TCDD	56.8	76.9
13C12-PeCDF 123	98.6	103
13C12-PeCDD 123	137	159
13C12-HxCDF 678	65.1	64.7
13C12-HxCDD 678	69.0	77.7
13C12-HpCDF 678	58.0	73.0
13C12-HpCDD 678	46.8	59.9
13C12-OCDD	24.2 V	38.1

{Estimated Maximum Possible Concentration}, (Detection Limit).

Data File	P004342
Sample ID	BASF-SMW-10
Units	pg/l
Extraction Date	11/21/2000
Analysis Date	11/29/2000
Instrument	P
Matrix	WATER
Extraction Type	

Analytes		
2378-TCDF	1490	

Internal Standards	Percent Recovery	Summary (% Rec)
13C12-2378-TCDF	30.9	V



TriMatrix, Inc.

TLI Project: **52366** Method 8290 PCDD/PCDF Analysis (b
Client Sample: **TLI Blank** Analysis File: **T00581**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	/ /	Spike File:	**SPMIT32S**
TLI ID:	**TLI Blank**	Date Extracted:	**11/21/2000**	ICal:	**TF57140**
		Date Analyzed:	**11/25/2000**	ConCal:	**T005815**
Sample Size:	**1.000 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005817**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**JMM**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	ND	2.1				
1,2,3,7,8-PeCDD	ND	2.0				
1,2,3,4,7,8-HxCDD	ND	2.6				
1,2,3,6,7,8-HxCDD	ND	2.6				
1,2,3,7,8,9-HxCDD	ND	2.5				
1,2,3,4,6,7,8-HpCDD	ND	5.0				
1,2,3,4,6,7,8,9-OCDD	ND	8.4				
2,3,7,8-TCDF	ND	1.5				
1,2,3,7,8-PeCDF	ND	1.9				
2,3,4,7,8-PeCDF	ND	1.8				
1,2,3,4,7,8-HxCDF	ND	1.6				
1,2,3,6,7,8-HxCDF	ND	1.5				
2,3,4,6,7,8-HxCDF	ND	1.7				
1,2,3,7,8,9-HxCDF	2.5			1.11	33:26	J
1,2,3,4,6,7,8-HpCDF	ND	2.4				
1,2,3,4,7,8,9-HpCDF	ND	3.1				
1,2,3,4,6,7,8,9-OCDF	ND	7.0				

Totals	Conc. (pg/L)	Number	DL	EMPC	Flags
Total TCDD	ND		2.1		
Total PeCDD	ND		2.0		
Total HxCDD	ND		2.6		
Total HpCDD	ND		5.0		
Total TCDF	ND		1.5		
Total PeCDF	ND		1.8		
Total HxCDF	2.5	1			
Total HpCDF	ND		2.7		

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Printed: 18:36 11/29/2000

TLI Project: 52366 Method 8290 PCDD/PCDF Analysis (b)
Client Sample: TLI Blank Analysis File: T005817

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	1480	73.9	40%-130%	0.75	24:38	___
$^{13}C_{12}$-2,3,7,8-TCDD	1340	67.1	40%-130%	0.79	25:21	___
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1230	61.7	40%-130%	1.48	28:37	___
$^{13}C_{12}$-1,2,3,7,8-PeCDD	1500	75.1	40%-130%	1.45	29:40	___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1590	79.6	40%-130%	0.51	32:12	___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1600	79.9	40%-130%	1.20	32:53	___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1480	74.1	25%-130%	0.42	35:04	___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1250	62.5	25%-130%	1.04	36:05	___
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	2130	53.1	25%-130%	0.83	39:40	___

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1370	68.3	40%-130%	1.48	29:20	___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1570	78.4	40%-130%	0.51	32:06	___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1530	76.7	40%-130%	1.20	32:47	___
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1430	71.3	25%-130%	0.43	36:34	___

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	169	84.4	40%-130%	25:23	___

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1780	89.2	40%-130%	0.50	33:26	___
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1700	84.8	40%-130%	0.51	32:41	___

Recovery Standards	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.81	25:10	___
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.21	33:11	___

Data Reviewer: JCM 11/29/2000

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Printed: 18:36 11/29/2000

TriMatrix, Inc.

TLI Project: **52366** — Toxicity Equivalents Report
Client Sample: **TLI Blank** — Analysis File: **T005817**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/00**	Spike File:	**SPMIT32S**
TLI ID:	**TLI Blank**	Date Extracted:	**11/21/00**	ICal:	**TF57140**
		Date Analyzed:	**11/25/00**	ConCal:	**T005815**
Sample Size:	**1.000 L**	Dilution Factor:	**1**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005817**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**JMM**	% Solids:	**n/a**

Analytes	Conc. (pg/L)		TEF		Equivalent
2,3,7,8-TCDD	{2.1}	x	1.	=	2.1
1,2,3,7,8-PeCDD	{2.0}	x	0.5	=	1.0
1,2,3,4,7,8-HxCDD	{2.6}	x	0.1	=	0.26
1,2,3,6,7,8-HxCDD	{2.6}	x	0.1	=	0.26
1,2,3,7,8,9-HxCDD	{2.5}	x	0.1	=	0.25
1,2,3,4,6,7,8-HpCDD	{5.0}	x	0.01	=	0.050
1,2,3,4,6,7,8,9-OCDD	{8.4}	x	0.001	=	0.0084
TOTAL PCDD					3.9
2,3,7,8-TCDF	{1.5}	x	0.1	=	0.15
1,2,3,7,8-PeCDF	{1.9}	x	0.05	=	0.095
2,3,4,7,8-PeCDF	{1.8}	x	0.5	=	0.90
1,2,3,4,7,8-HxCDF	{1.6}	x	0.1	=	0.16
1,2,3,6,7,8-HxCDF	{1.5}	x	0.1	=	0.15
2,3,4,6,7,8-HxCDF	{1.7}	x	0.1	=	0.17
1,2,3,7,8,9-HxCDF	2.5	x	0.1	=	0.25
1,2,3,4,6,7,8-HpCDF	{2.4}	x	0.01	=	0.024
1,2,3,4,7,8,9-HpCDF	{3.1}	x	0.01	=	0.031
1,2,3,4,6,7,8,9-OCDF	{7.0}	x	0.001	=	0.0070
TOTAL PCDF					1.94

Total EPA TEFs, 1989a: 5.9 pg/L

{...} indicates that the value is that of a Detection Limit.

GRY_TEF v1.08, MILES 4.22.16

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Printed: 10:21 11/30/00

Initial ....Date...

Data Review By: JCA 11/29/00

Calculated Noise Height: 0.04

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005817B.dbf
11/29/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_I....	QC	Log	Omit	Why	RT	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
TCDF							0.65-0.89				0.860-1.077			
304-306	DC	NL					Height	0.11	0.06	0.05				
	DC	SN			21:50	RO	5.67	0.05			0.886			
	DC	SN			23:19	RO	2.00	0.27			0.947			
D	d	SN			23:51	RO	0.94	0.89			0.968			
D	d	SN			24:39	RO	1.68	0.55			1.001	2378-TCDF		AN
	DC	SN			25:21	RO	1.08	0.23			1.029			
304-306			0	Peaks				0.00						
13C12-TCDF							0.65-0.89				0.959-1.041			
316-318	DC	NL					Height	0.11	0.05	0.06				
					24:13	RO	0.57	2.28	0.99	1.74	0.983			
					24:38		0.75	523.92	224.51	299.41	1.000	13C12-2378-TCDF		ISO
							Height	132.79	57.04	75.75				
					25:03		0.67	4.08	1.63	2.45	1.017			
316-318			3	Peaks				530.28						

---------- Above: TCDF / TCDD Follows ----------

TCDD							0.65-0.89				0.890-1.045			
320-322	DC	NL					Height	0.10	0.05	0.05				
	DC	SN			24:37	RO	1.45	0.39			0.971			
	DC	SN			25:22		0.80	0.54			1.001	2378-TCDD		AN
320-322			0	Peaks				0.00						
37Cl-TCDD											0.921-1.079			
328	DC	NL					Height	0.06	0.06					
	DC	WL			22:37			0.07			0.892			
	DC	WL			22:43			0.08			0.896			
	DC	WL			22:48			0.06			0.899			
	DC	WL			22:51			0.08			0.901			
	DC	WL			22:56			0.06			0.905			
	DC	WL			23:00			0.09			0.907			
	DC	WL			23:03			0.15			0.909			
	DC	WL			23:11			0.07			0.915			
	DC	WL			23:19			0.04			0.920			
	DC	SN			23:21			0.13			0.921			
	DC	SN			23:30			0.11			0.927			
	DC	SN			23:35			0.10			0.930			
	DC	SN			23:43			0.06			0.936			
	DC	SN			23:48			0.05			0.939			
					23:58			0.40	0.40		0.945			
	DC	SN			24:14			0.09			0.956			
	DC	SN			24:26			0.07			0.964			

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		24:28			0.09			0.965			
	DC	SN		24:31			0.08			0.967			
				24:58			0.19	0.19		0.985			
	DC	SN		25:04			0.08			0.989			
				25:23			41.51	41.51		1.001	37Cl-TCDD	CLS	
				25:37			0.35	0.35		1.011			
	DC	SN		25:48			0.16			1.018			
	DC	SN		25:55			0.07			1.022			
	DC	SN		26:00			0.07			1.026			
	DC	SN		26:02			0.03			1.027			
	DC	SN		26:07			0.18			1.030			
				26:21			0.18	0.18		1.039			
	DC	SN		26:29			0.12			1.045			
	DC	SN		26:38			0.04			1.051			
	DC	SN		26:41			0.09			1.053			
	DC	SN		26:53			0.10			1.060			
328		5	Peaks				42.63						
13C12-TCDD				0.65-0.89						0.921-1.079			
332-334	DC	NL			Height		0.20	0.14	0.06				
				25:10		0.81	-552.94	246.93	306.01	0.993	13C12-1234-TCDD	RS1	
				25:21		0.79	390.09	172.42	217.67	1.000	13C12-2378-TCDD	IS1	
					Height		102.91	44.94	57.97				
				25:40	RO	0.27	0.71	0.31	1.16	1.012			
332-334		3	Peaks				943.74						
---------- Above: TCDD / PeCDF Follows ----------													
PeCDF				1.32-1.78						0.923-1.064			
340-342	DC	NL			Height		0.10	0.04	0.06				
	DC	SN		29:20	RO	0.96	0.36			1.025	23478-PeCDF	AN	
	DC	SN		30:05	RO	0.46	0.10			1.051			
340-342		0	Peaks				0.00						
13C12-PeCDF				1.32-1.78						0.860-1.140			
352-354	DC	NL			Height		0.09	0.04	0.05				
				27:47	RO	1.25	1.30	0.64	0.51	0.971			
				28:17	RO	1.21	0.71	0.34	0.28	0.988			
				28:37		1.48	409.02	243.94	165.08	1.000	13C12-PeCDF 123	IS2	
					Height		118.19	70.19	48.00				
				28:54	RO	1.10	5.89	2.54	2.31	1.010			
				29:20		1.48	448.39	267.94	180.45	1.025	13C[illegible]-PeCDF 234	SUR1	
				29:40	RO	1.13	1.84	0.81	0.72	1.037			
				30:19		1.36	4.42	2.55	1.87	1.059			
352-354		7	Peaks				871.57						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD				1.32-1.78						0.933-1.021			
356-358	DC	NL			Height		0.09	0.05	0.04				
	DC	SN		29:05	RO	1.25	0.10			0.980			
	DC	SN		29:14	RO	0.25	0.05			0.985			

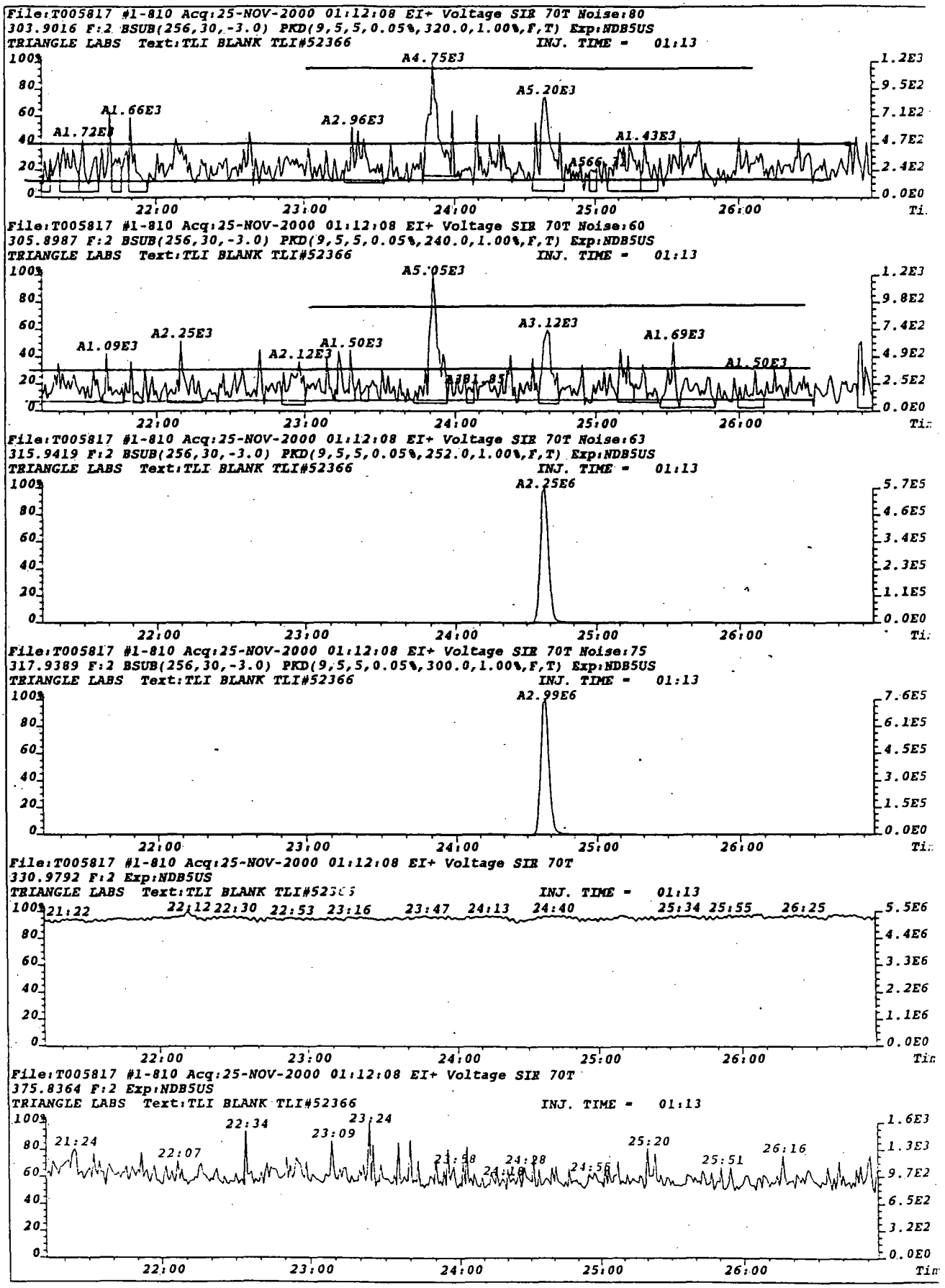
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		29:20	RO	7.00	0.10			0.989			
	DC	SN		29:31	RO	0.70	0.12			0.995			
	DC	SN		29:42	RO	0.58	0.36			1.001	12378-PeCDD	AN	
	DC	SN		29:57	RO	2.38	0.20			1.010			
	DC	SN		30:10	RO	0.56	0.16			1.017			
356-358			0	Peaks			0.00						
13C12-PeCDD				1.32-1.78						0.865-1.135			
368-370	DC	NL		Height			0.10	0.06	0.04				
				28:34		1.66	1.86	1.16	0.70	0.963			
				28:45	RO	1.26	1.86	0.92	0.73	0.969			
				29:40		1.45	283.09	167.77	115.32	1.000	13C12-PeCDD 123	IS3	
				Height			94.92	56.59	38.33				
				30:07	RO	1.04	0.69	0.28	0.27	1.015			
368-370			4	Peaks			287.50						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF				1.05-1.43						0.961-1.046			
374-376	DC	NL		Height			0.07	0.04	0.03				
	DC	SN		31:06	RO	0.67	0.04			0.966			
	DC	SN		31:33	RO	4.00	0.02			0.980			
	DC	SN		31:39	RO	0.29	0.07			0.983			
D	d	SN		32:07		1.32	0.44			0.997	123478-HxCDF	AN	
	DC	SN		32:14	RO	0.77	0.36			1.001	123678-HxCDF	AN	
D	d	SN		32:43	RO	0.37	0.13			1.016	234678-HxCDF	AN	
M				33:26		1.11	0.38	0.20	0.18	1.038	123789-HxCDF	AN	J
374-376			1	Peak			0.38						
13C12-HxCDF				0.43-0.59						0.876-1.124			
384-386	DC	NL		Height			0.07	0.04	0.03				
				31:09		0.58	1.12	0.41	0.71	0.967			
				31:17	RO	0.63	1.15	0.39	0.62	0.972			
				32:06		0.51	366.88	124.21	242.67	0.997	13C12-HxCDF 478	SUR2	
				32:12		0.51	378.08	127.92	250.16	1.000	13C12-HxCDF 678	IS4	
				Height			123.71	41.72	81.99				
				32:30	RO	0.69	0.98	0.33	0.48	1.009			
				32:41		0.51	367.54	123.59	243.95	1.015	13C12-HxCDF 234	ALT2	
				32:58	RO	0.25	0.36	0.12	0.48	1.024			
				33:04		0.43	0.63	0.19	0.44	1.027			
				33:26		0.50	283.96	94.99	188.97	1.038	13C12-HxCDF 789	ALT1	
				33:49		0.38	0.86	0.29	0.33	1.050			
384-386			10	Peaks			1,401.56						
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD				1.05-1.43						0.956-1.013			
390-392	DC	NL		Height			0.07	0.03	0.04				
	DC	SN		31:39	RO	0.71	0.09			0.962			
	DC	SN		31:58	RO	4.00	0.04			0.972			
	DC	SN		32:25	RO	1.00	0.16			0.986			
	DC	SN		32:32	RO	0.67	0.04			0.989			

Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		32:41	RO	3.14	0.16			0.994			
390-392		0	Peaks				0.00						
13C12-HxCDD				1.05-1.43						0.970-1.030			
402-404	DC	NL		Height			0.09	0.04	0.05				
				32:17	RO	1.00	1.59	0.71	0.71	0.982			
				32:28	RO	1.75	0.27	0.21	0.12	0.987			
				32:47		1.20	235.90	128.77	107.13	0.997	13C12-HxCDD 478	SUR3	
				32:53		1.20	237.37	129.33	108.04	1.000	13C12-HxCDD 678	IS5	
					Height		76.41	41.23	35.18				
				33:11		1.21	327.32	179.05	148.27	1.009	13C12-HxCDD 789	RS2	
402-404		5	Peaks				802.45						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF				0.88-1.20						0.995-1.048			
408-410	DC	NL		Height			0.08	0.04	0.04				
	DC	SN		35:04	RO	0.86	0.37			1.000	1234678-HpCDF	AN	
	DC	SN		35:10	RO	0.73	0.16			1.003			
	DC	SN		35:28	RO	1.67	0.06			1.011			
	DC	SN		36:34	RO	0.60	0.24			1.043			
	DC	WH		36:48	RO	0.60	0.18			1.049			
408-410		0	Peaks				0.00						
13C12-HpCDF				0.37-0.51						0.943-1.114			
418-420	DC	NL		Height			0.09	0.05	0.04				
				35:04		0.42	235.41	69.43	165.98	1.000	13C12-HpCDF 678	IS6	
					Height		67.28	20.14	47.14				
	DC	SN		35:28	RO	0.54	0.49			1.011			
	DC	SN		35:36	RO	0.82	0.46			1.015			
				36:34		0.43	176.17	53.04	123.13	1.043	13C12-HpCDF 789	SUR4	
413-420		2	Peaks				411.58						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20						0.974-1.005			
424-426	DC	NL		Height			0.08	0.04	0.04				
424-426		0	Peaks				0.00						
13C12-HpCDD				0.88-1.20						0.972-1.028			
436-438	DC	NL		Height			0.12	0.06	0.06				
				35:20		0.97	0.73	0.36	0.37	0.979			
				36:05		1.04	175.45	89.46	85.99	1.000	13C12-HpCDD 678	IS7	
					Height		47.10	24.22	22.88				
436-438		2	Peaks				176.18						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02						0.899-1.101			
442-444	DC	NL		Height			0.08	0.04	0.04				
	DC	WL		35:01		0.94	0.35			0.883			
	DC	WL		35:14	RO	2.33	0.06			0.888			

Compound M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
		DC	WL	35:23	RO	4.00	0.04			0.892			
		DC	WL	35:32	RO	1.25	0.23			0.896			
		DC	SN	35:43	RO	3.14	0.13			0.900			
		DC	SN	36:45	RO	0.18	0.06			0.926			
		DC	SN	37:02	RO	1.67	0.11			0.934			
		DC	SN	38:41	RO	2.00	0.21			0.975			
		DC	SN	39:00	RO	1.25	0.15			0.983			
	D	d	SN	39:51	RO	0.66	0.62			1.005	OCDF		AN
		DC	SN	40:00	RO	0.75	0.19			1.008			
		DC	SN	40:22	RO	1.11	0.17			1.018			
		DC	SN	40:36		1.00	0.14			1.024			
		DC	SN	40:43	RO	0.60	0.13			1.026			
		DC	SN	40:52	RO	2.56	0.17			1.030			
		DC	SN	41:05	RO	1.89	0.17			1.036			
		DC	SN	41:12	RO	1.33	0.17			1.039			
		DC	SN	42:09	RO	2.80	0.09			1.063			
		DC	SN	43:02	RO	0.71	0.11			1.085			
		DC	SN	43:30	RO	1.50	0.08			1.097			
		DC	SN	43:39	RO	1.22	0.17			1.100			
		DC	WH	44:06	RO	0.29	0.17			1.112			
		DC	WH	44:17	RO	0.57	0.17			1.116			
442-444		0	Peaks				0.00						
OCDD						0.76-1.02				0.899-1.101			
458-460		DC	NL			Height	0.06	0.03	0.03				
		DC	SN	39:40	RO	0.35	0.23			1.000	OCDD		AN
458-460		0	Peaks				0.00						
13C12-OCDD						0.76-1.02				0.996-1.004			
470-472		DC	NL			Height	0.08	0.04	0.04				
				39:40		0.83	242.80	109.89	132.91	1.000	13C12-OCDD		IS8
						Height	51.97	23.17	28.80				
470-472		1	Peak				242.80						

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***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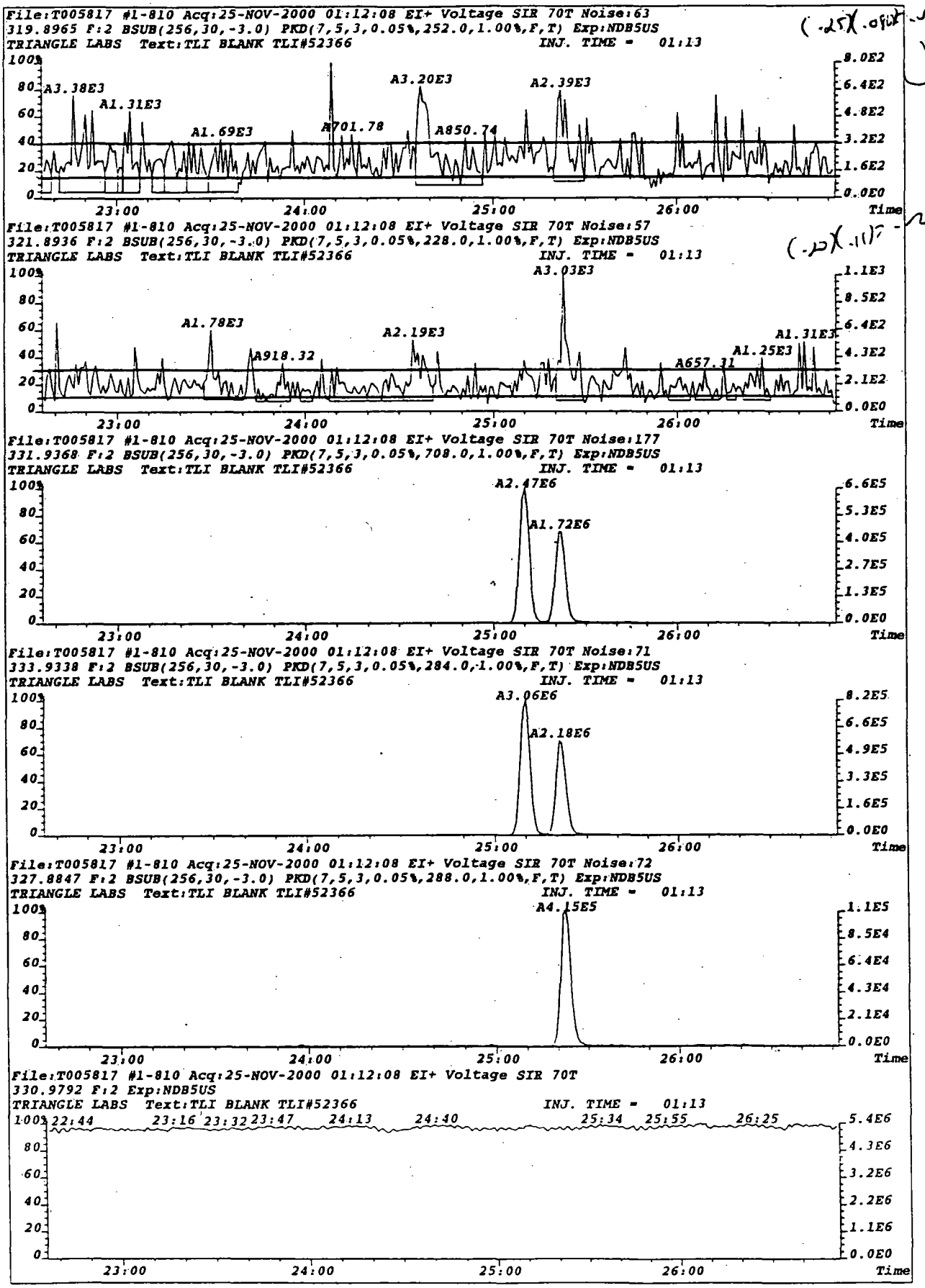
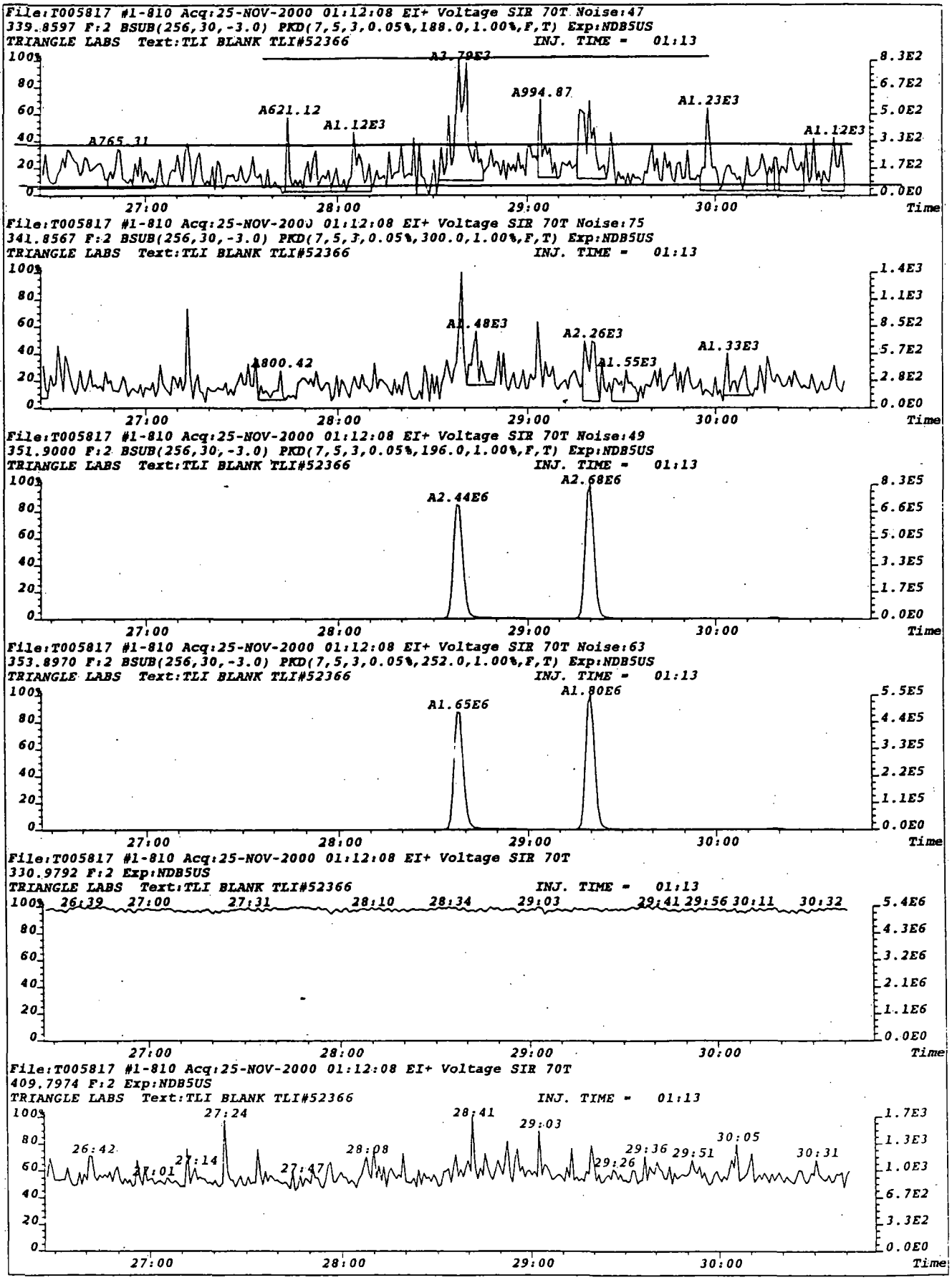
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,320.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A4.75E3
A5.20E3
A1.66E3
A1.72E3
A2.96E3
A1.43E3
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:60
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,240.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A5.05E3
A3.12E3
A2.25E3
A1.09E3
A1.50E3
A2.12E3
A1.69E3
A1.50E3
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:63
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A2.25E6
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:75
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,300.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A2.99E6
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
22:00
23:00
24:00
25:00
26:00


File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:63
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A3.38E3
A1.31E3
A1.69E3
A701.78
A3.20E3
A850.74
A2.39E3
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:57
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A1.78E3
A918.32
A2.19E3
A3.03E3
A657.11
A1.25E3
A1.31E3
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:177
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,708.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A2.47E6
A1.72E6
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:71
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,284.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A3.06E6
A2.18E6
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:72
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,288.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A4.15E5
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
22:44 23:16 23:32 23:47 24:13 24:40 25:34 25:55 26:25
23:00 24:00 25:00 26:00 Time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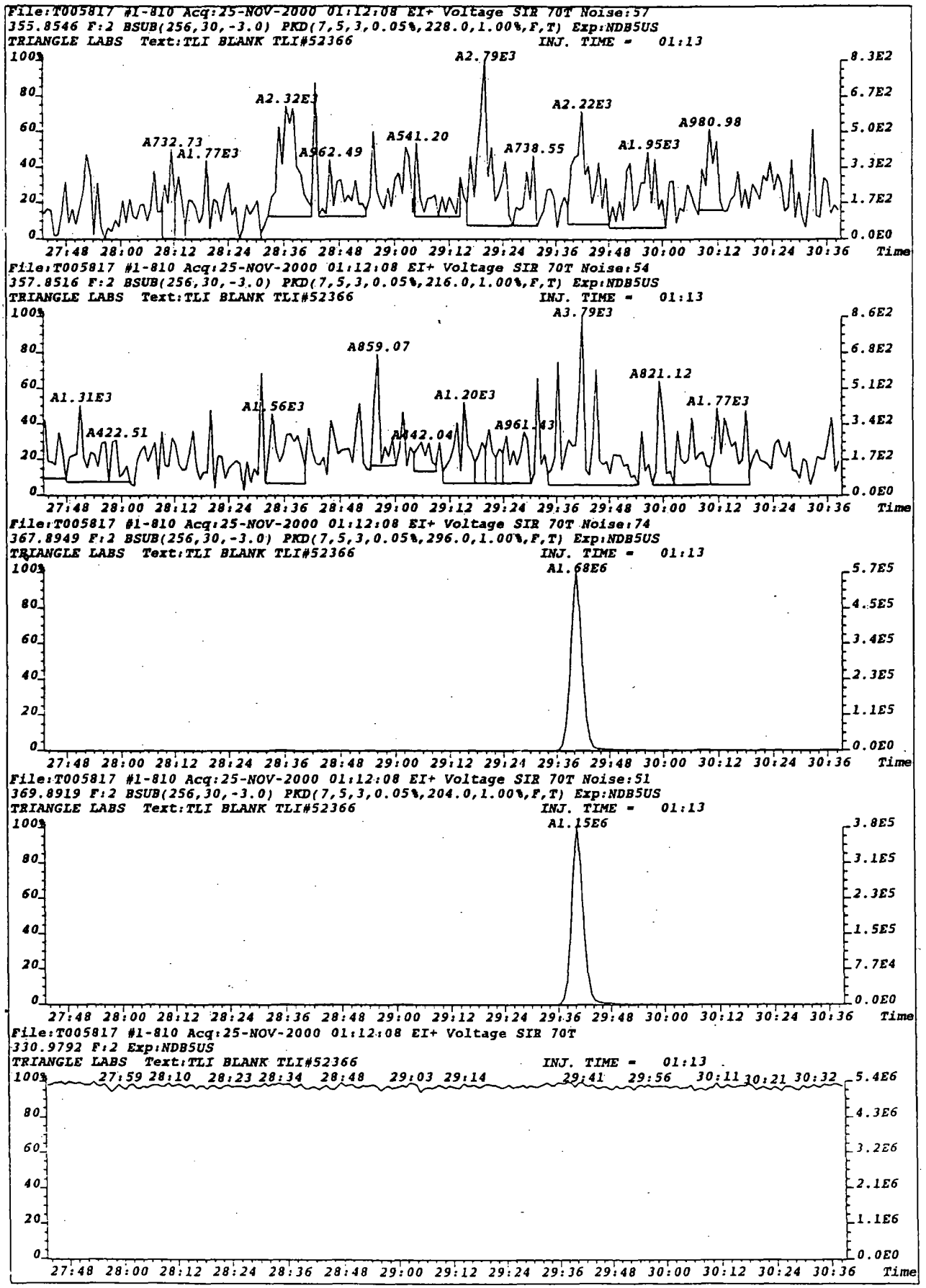
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,188.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A765.31
A621.12
A1.12E3
A2.79E3
A994.87
A1.23E3
A1.12E3
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:75
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,300.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A800.42
A1.48E3
A2.26E3
A1.55E3
A1.33E3
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:49
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A2.44E6
A2.68E6
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:63
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A1.65E6
A1.80E6
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
26:39 27:00 27:31 28:10 28:34 29:03 29:41 29:56 30:11 30:32
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
26:42
27:01
27:14
27:24
27:47
28:08
28:41
29:03
29:26
29:36
29:51
30:05
30:31
27:00
28:00
29:00
30:00
Time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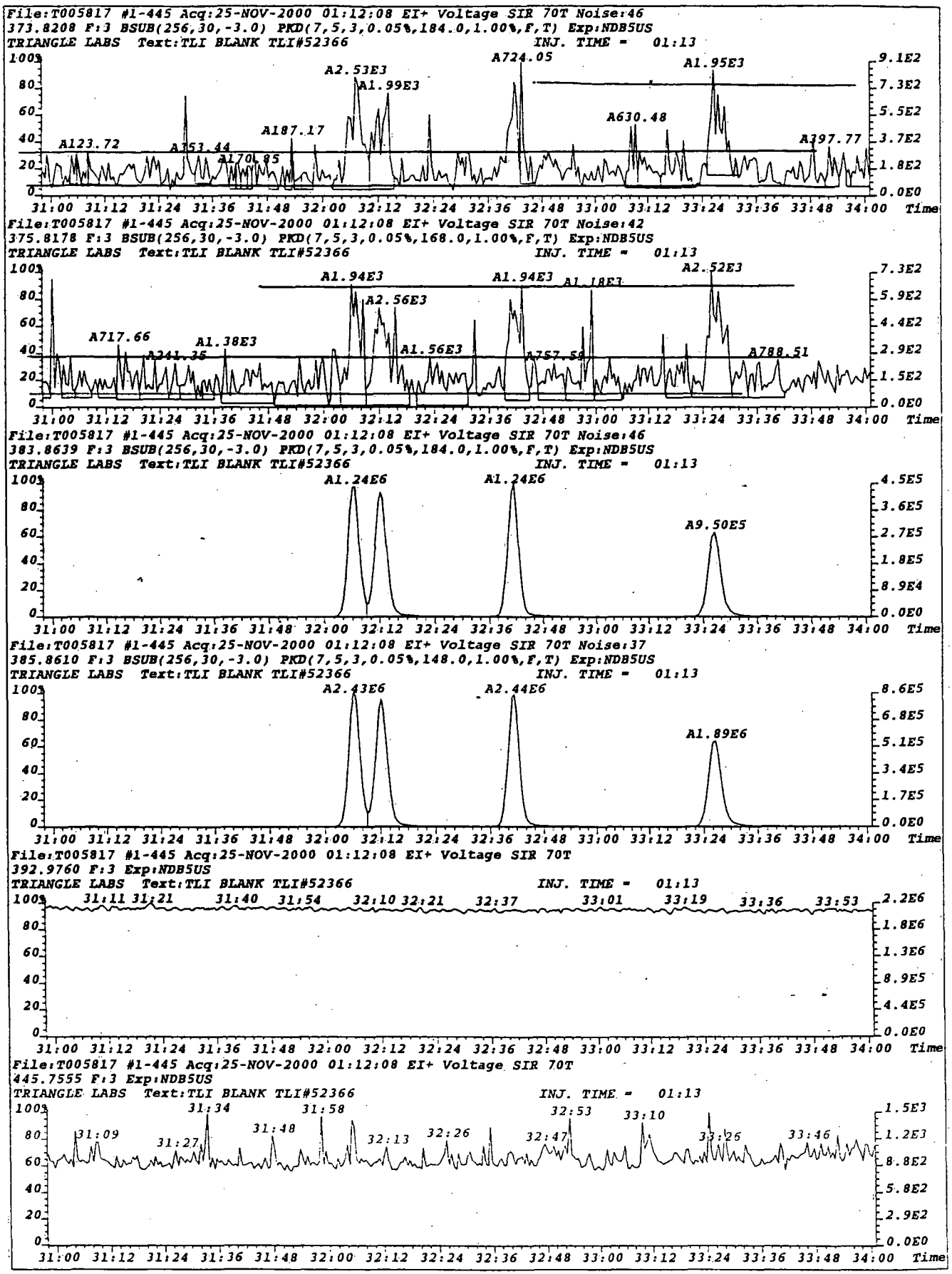
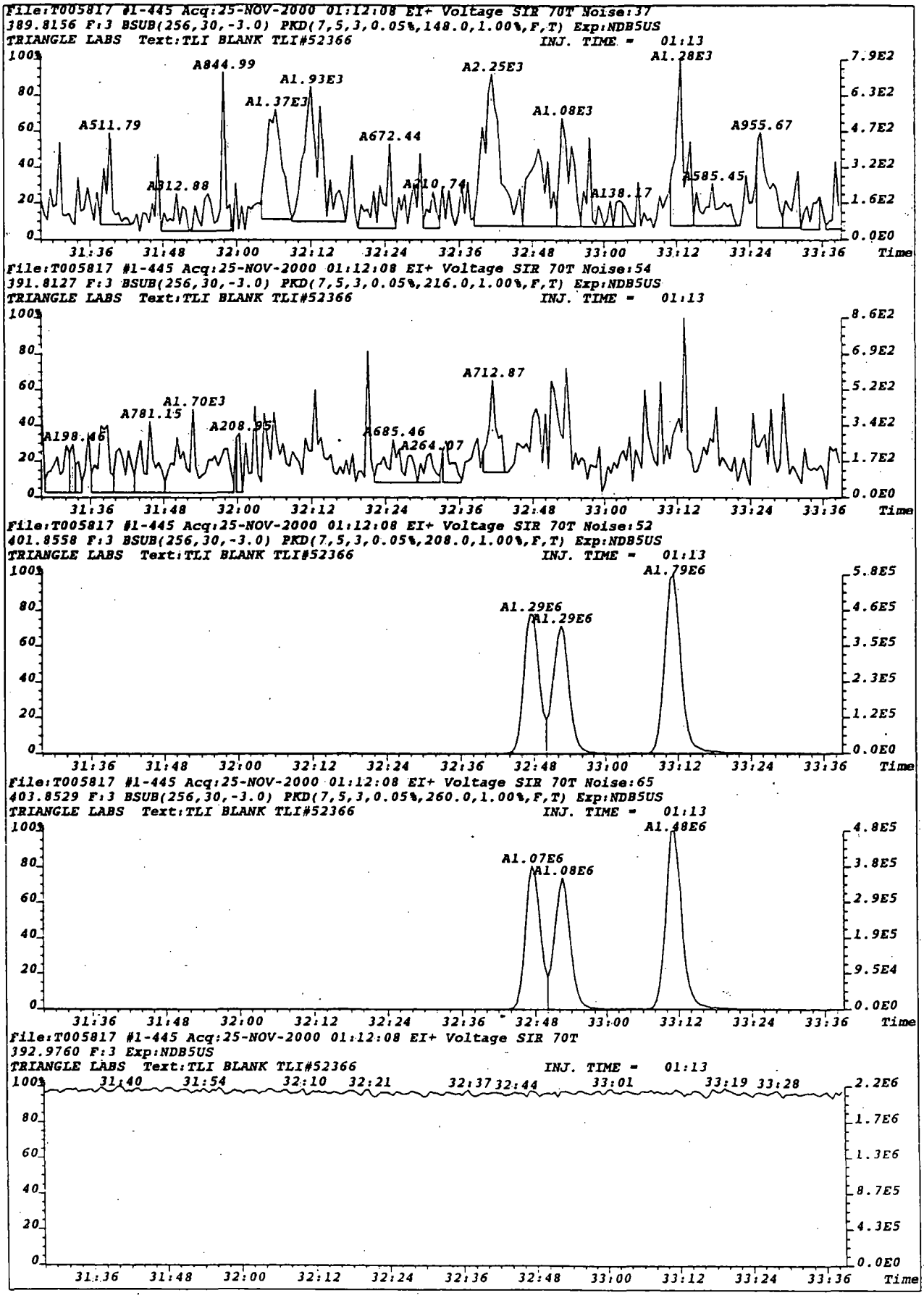
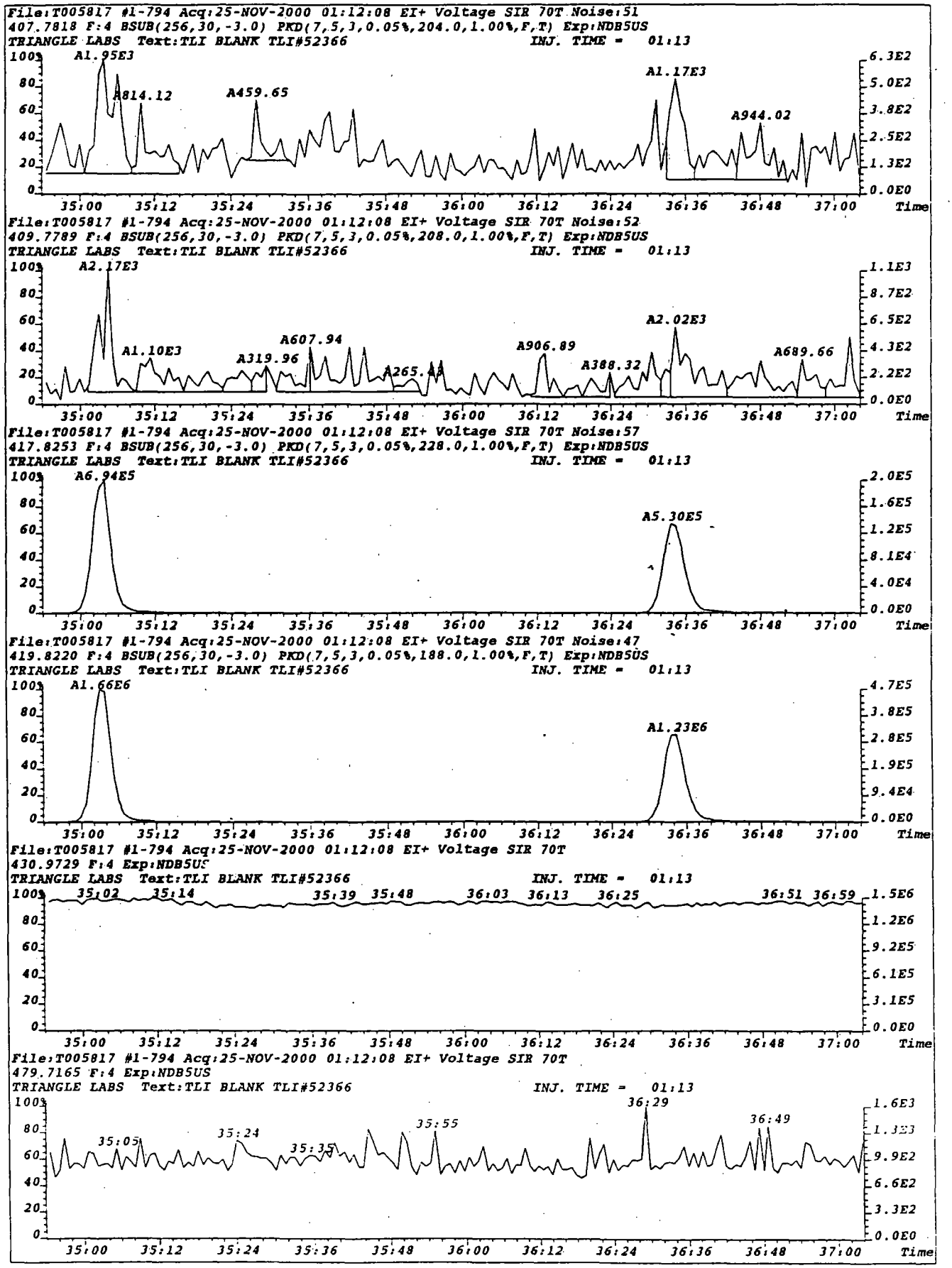
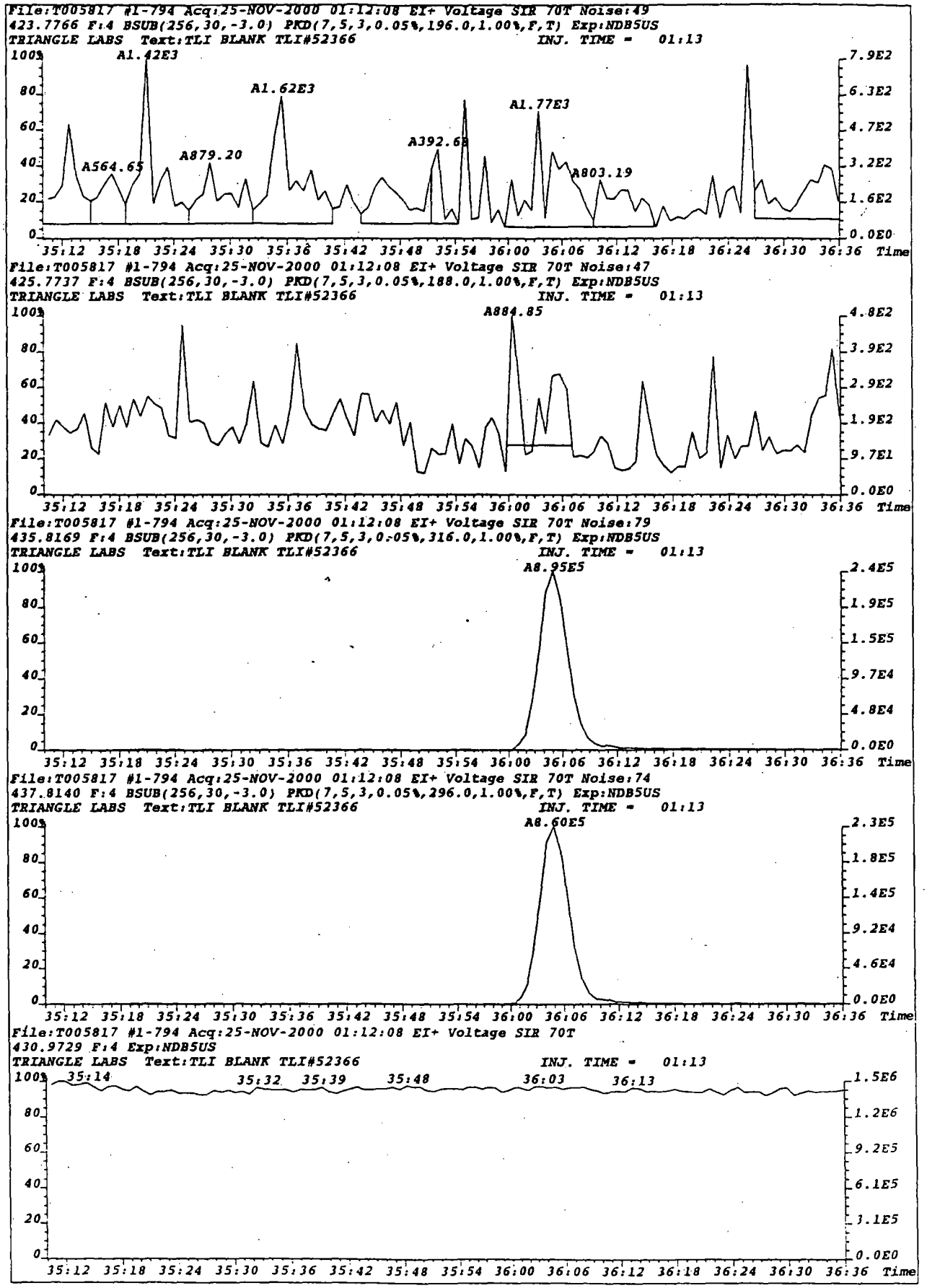
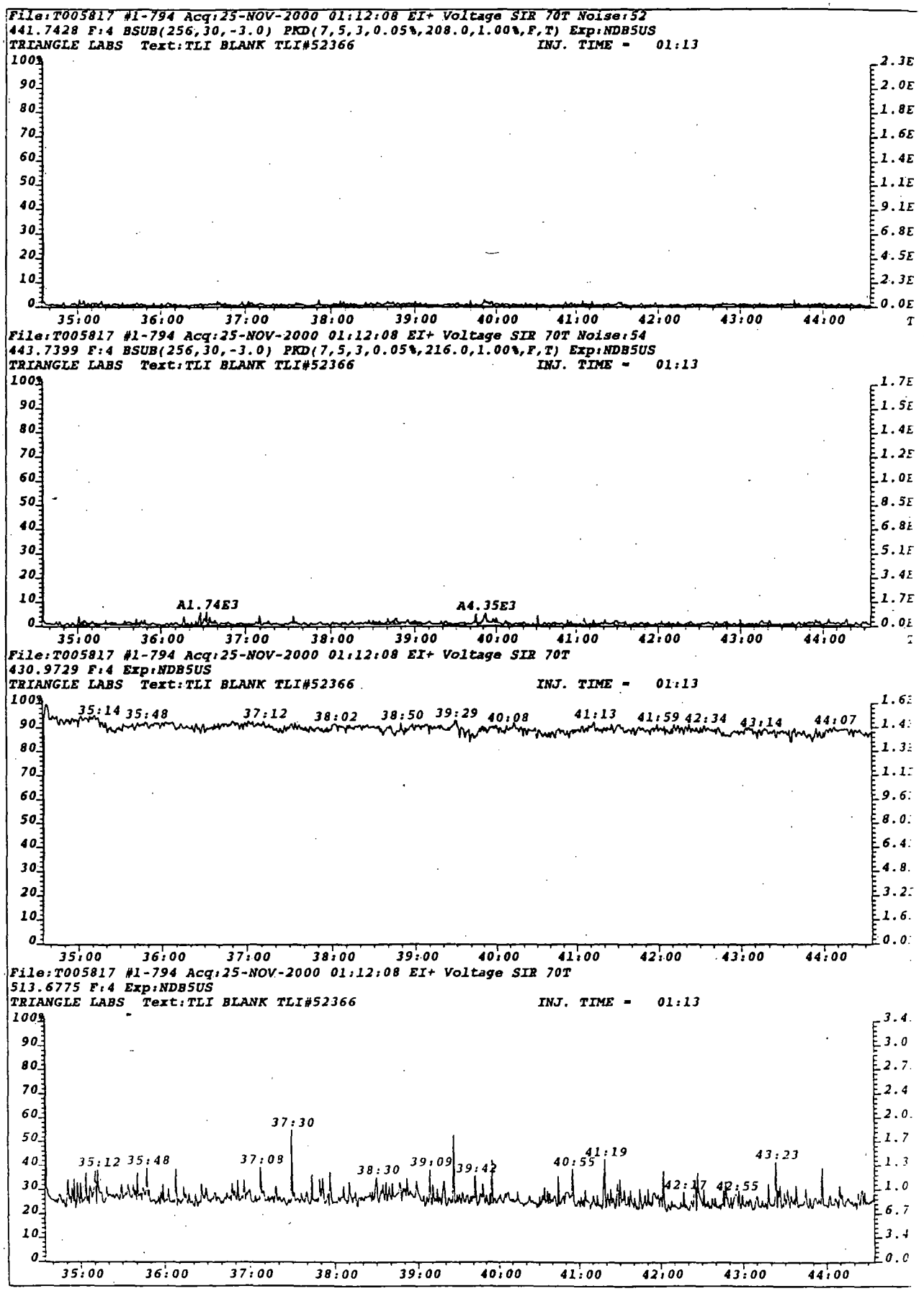
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A2.79E3
A2.32E3
A2.22E3
A980.98
A732.73
A1.77E3
A962.49
A541.20
A738.55
A1.95E3
8.3E2
6.7E2
5.0E2
3.3E2
1.7E2
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:54
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,216.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A3.79E3
A859.07
A821.12
A1.31E3
A1.56E3
A1.20E3
A1.77E3
A422.51
A442.04
A961.43
8.6E2
6.8E2
5.1E2
3.4E2
1.7E2
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:74
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,296.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A1.68E6
5.7E5
4.5E5
3.4E5
2.3E5
1.1E5
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:51
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,204.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A1.15E6
3.8E5
3.1E5
2.3E5
1.5E5
7.7E4
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005817 #1-810 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
27:59 28:10 28:23 28:34 28:48 29:03 29:14 29:41 29:56 30:11 30:21 30:32
5.4E6
4.3E6
3.2E6
2.1E6
1.1E6
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time

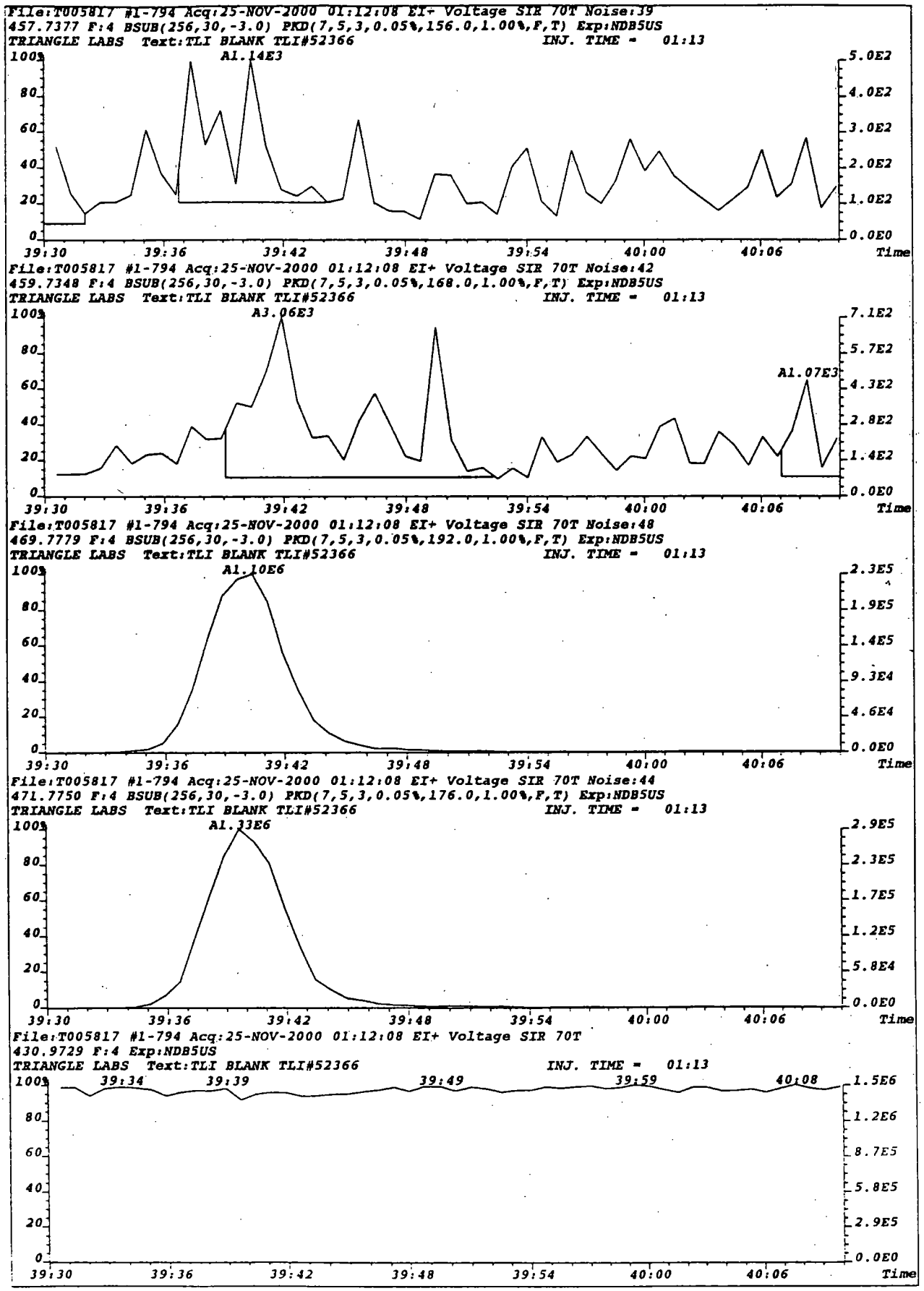

File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:46
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A724.05
A2.53E3
A1.99E3
A1.95E3
A187.17
A630.48
A123.72
A353.44
A170.85
A397.77
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:42
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A1.94E3
A1.94E3
A2.52E3
A2.56E3
A717.66
A1.38E3
A1.56E3
A788.51
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:46
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A1.24E6
A1.24E6
A9.50E5
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:37
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A2.43E6
A2.44E6
A1.89E6
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
Time

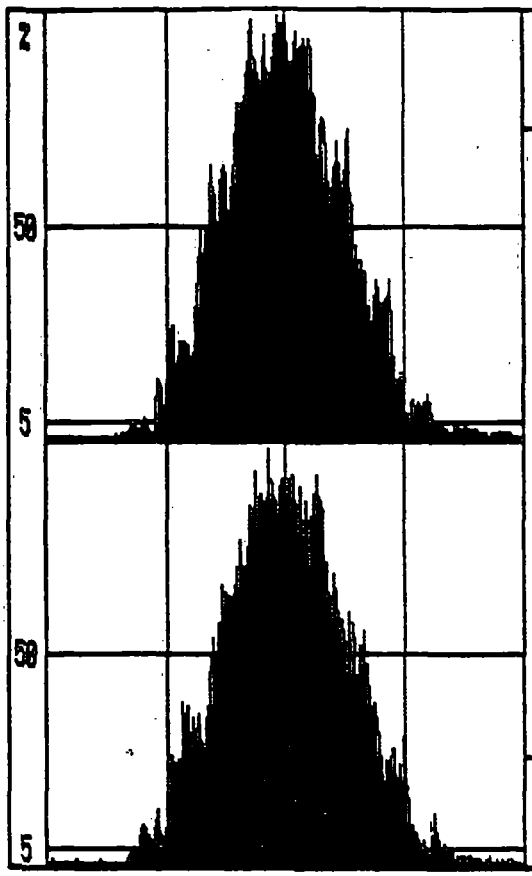

File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:37
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A511.79
A844.99
A1.93E3
A1.37E3
A672.44
A2.25E3
A1.08E3
A1.28E3
A955.67
A585.45
A312.88
A810.74
A138.17
Time
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:54
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,216.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A198.46
A781.15
A1.70E3
A208.95
A685.46
A264.07
A712.87
Time
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:52
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A1.29E6
A1.29E6
A1.79E6
Time
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:65
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,260.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
A1.07E6
A1.08E6
A1.48E6
Time
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366
INJ. TIME = 01:13
Time


File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:51
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,204.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A1.95E3
A814.12
A459.65
A1.17E3
A944.02
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:52
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A2.17E3
A1.10E3
A319.96
A607.94
A265.48
A906.89
A388.32
A2.02E3
A689.66
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:57
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,228.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A6.94E5
A5.30E5
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:47
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,188.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A1.66E6
A1.23E6
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
35:05
35:24
35:35
35:55
36:29
36:49
Time


File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:49
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A1.42E3
A1.62E3
A1.77E3
A564.65
A879.20
A803.19
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:47
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,188.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A884.85
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:79
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,316.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A8.95E5
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:74
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,296.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A8.60E5
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
35:14 35:32 35:39 35:48 36:03 36:13
35:12 35:18 35:24 35:30 35:36 35:42 35:48 35:54 36:00 36:06 36:12 36:18 36:24 36:30 36:36 Time


File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:52
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,208.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:54
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,216.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A1.74E3
A4.35E3
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
35:14 35:48 37:12 38:02 38:50 39:29 40:08 41:13 41:59 42:34 43:14 44:07
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
35:12 35:48 37:09 37:30 38:30 39:09 39:42 40:55 41:19 42:17 42:55 43:23
35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00


File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:39
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A1.14E3
5.0E2
4.0E2
3.0E2
2.0E2
1.0E2
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:42
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A3.06E3
A1.07E3
7.1E2
5.7E2
4.3E2
2.8E2
1.4E2
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:48
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,192.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A1.10E6
2.3E5
1.9E5
1.4E5
9.3E4
4.6E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T Noise:44
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
A1.33E6
2.9E5
2.3E5
1.7E5
1.2E5
5.8E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI BLANK TLI#52366 INJ. TIME = 01:13
39:34 39:39 39:49 39:59 40:08
1.5E6
1.2E6
8.7E5
5.8E5
2.9E5
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time

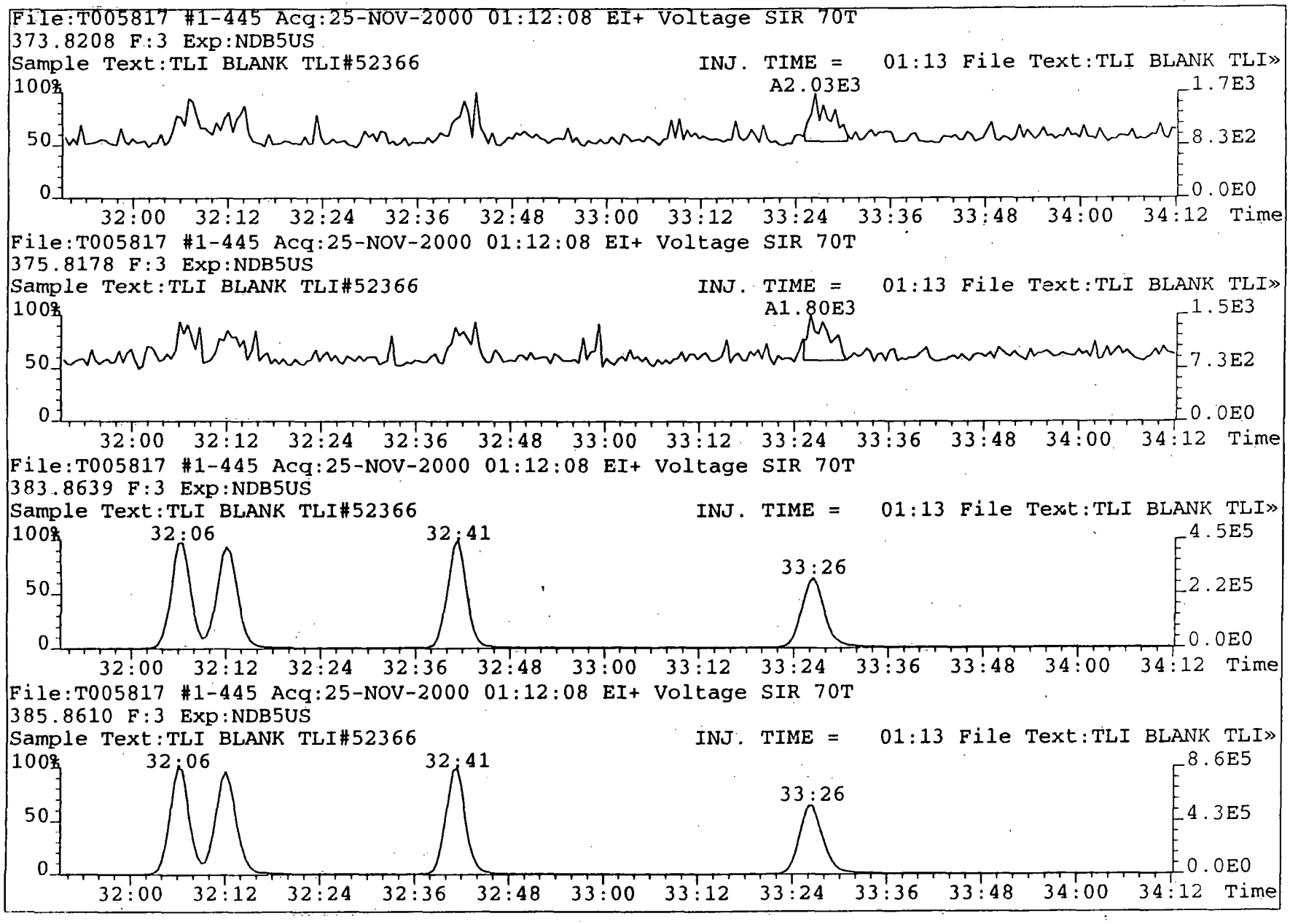


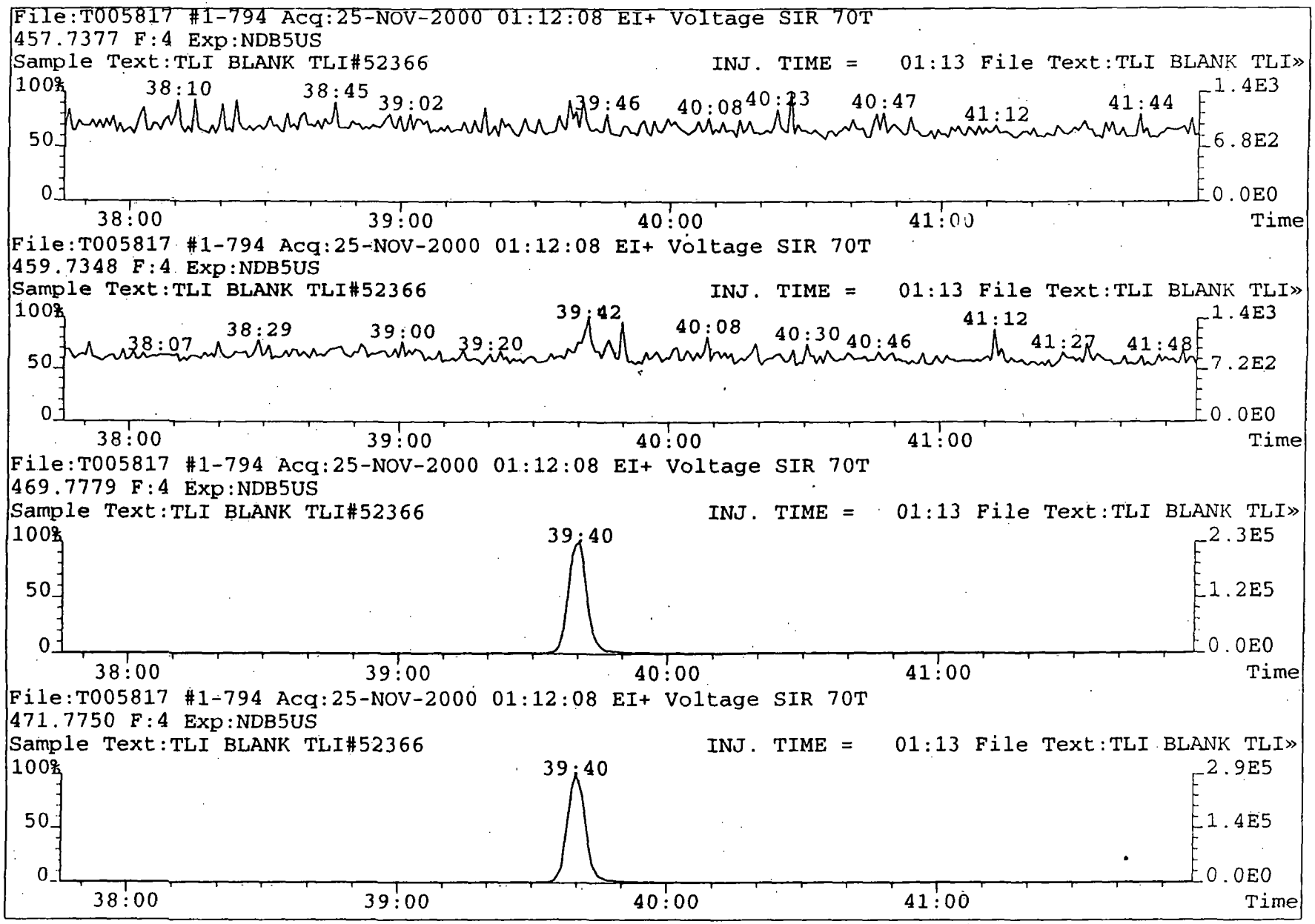
Channel I 330.9792 Peak top
Height .74 volts Span 200 ppm

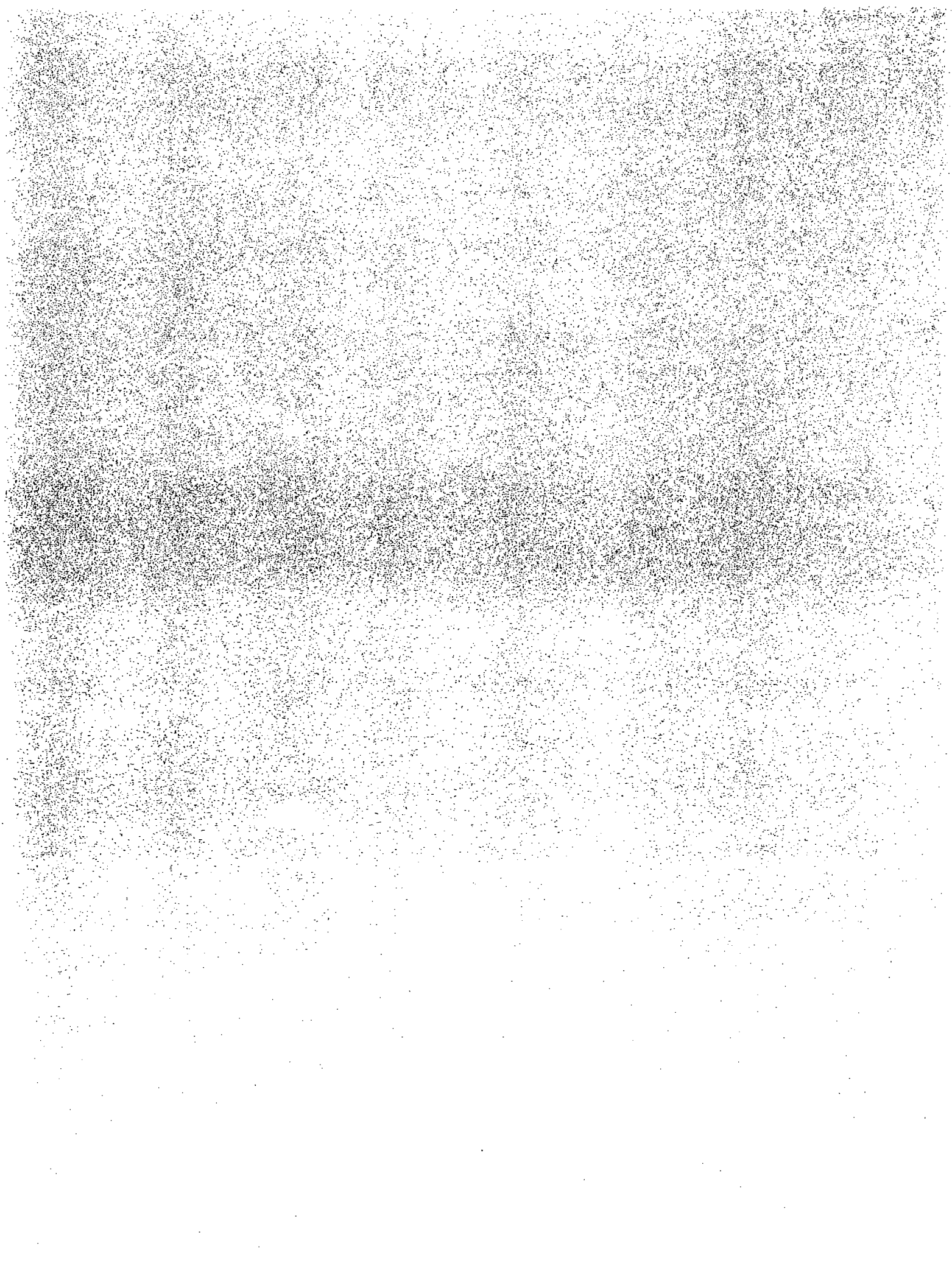
System file name	NOBSUS
Data file name	A:TN25001
Resolution	10000
Group number	2
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 416.9760

A	293	J	331	S	368
B	304	K	332	T	370
C	306	L	334	U	376
D	316	M	340	V	410
E	318	N	342		
F	320	O	352		
G	322	P	354		
H	328	Q	356		
I	331	R	358		

Ref. mass 416.9760 Peak top
Height .21 volts Span 200 ppm


File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
373.8208 F:3 Exp:NDB5US
Sample Text:TLI BLANK TLI#52366
INJ. TIME = 01:13 File Text:TLI BLANK TLI»
A2.03E3
100%
50
0
1.7E3
8.3E2
0.0E0
32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 Time
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
375.8178 F:3 Exp:NDB5US
Sample Text:TLI BLANK TLI#52366
INJ. TIME = 01:13 File Text:TLI BLANK TLI»
A1.80E3
100%
50
0
1.5E3
7.3E2
0.0E0
32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 Time
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
383.8639 F:3 Exp:NDB5US
Sample Text:TLI BLANK TLI#52366
INJ. TIME = 01:13 File Text:TLI BLANK TLI»
32:06
32:41
33:26
100%
50
0
4.5E5
2.2E5
0.0E0
32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 Time
File:T005817 #1-445 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
385.8610 F:3 Exp:NDB5US
Sample Text:TLI BLANK TLI#52366
INJ. TIME = 01:13 File Text:TLI BLANK TLI»
32:06
32:41
33:26
100%
50
0
8.6E5
4.3E5
0.0E0
32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 33:48 34:00 34:12 Time


File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
457.7377 F:4 Exp:NDB5US
Sample Text:TLI BLANK TLI#52366
INJ. TIME = 01:13 File Text:TLI BLANK TLI»
100%
50
0
38:10
38:45
39:02
39:46
40:08
40:23
40:47
41:12
41:44
1.4E3
6.8E2
0.0E0
38:00
39:00
40:00
41:00
Time
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
459.7348 F:4 Exp:NDB5US
Sample Text:TLI BLANK TLI#52366
INJ. TIME = 01:13 File Text:TLI BLANK TLI»
100%
50
0
38:07
38:29
39:00
39:20
39:42
40:08
40:30
40:46
41:12
41:27
41:48
1.4E3
7.2E2
0.0E0
38:00
39:00
40:00
41:00
Time
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
469.7779 F:4 Exp:NDB5US
Sample Text:TLI BLANK TLI#52366
INJ. TIME = 01:13 File Text:TLI BLANK TLI»
100%
50
0
39:40
2.3E5
1.2E5
0.0E0
38:00
39:00
40:00
41:00
Time
File:T005817 #1-794 Acq:25-NOV-2000 01:12:08 EI+ Voltage SIR 70T
471.7750 F:4 Exp:NDB5US
Sample Text:TLI BLANK TLI#52366
INJ. TIME = 01:13 File Text:TLI BLANK TLI»
100%
50
0
39:40
2.9E5
1.4E5
0.0E0
38:00
39:00
40:00
41:00
Time



TriMatrix, Inc.

TLI Project: 52366 Method 8290 PCDD/PCDF Analysis (
Client Sample: BASF-SMW-10 Analysis File: T0058

Client Project:	BASF-Malcolm Pirnie				
Sample Matrix:	WATER	Date Received:	11/17/2000	Spike File:	SPMIT32S
TLI ID:	274-99-3A	Date Extracted:	11/21/2000	ICal:	TF57140
		Date Analyzed:	11/25/2000	ConCal:	T005815
Sample Size:	1.080 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005817	% Lipid:	n/a
GC Column:	DB-5	Analyst:	JMM	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	319			0.75	25:30	___
1,2,3,7,8-PeCDD	579			1.65	29:45	___
1,2,3,4,7,8-HxCDD	264			1.22	32:51	___
1,2,3,6,7,8-HxCDD	4880			1.21	32:57	___
1,2,3,7,8,9-HxCDD	2090			1.20	33:15	___
1,2,3,4,6,7,8-HpCDD	81960			1.02	36:09	E__
1,2,3,4,6,7,8,9-OCDD	326530			0.81	39:44	E__
2,3,7,8-TCDF	1880			0.86	24:46	___
1,2,3,7,8-PeCDF	ND	12.0				___
2,3,4,7,8-PeCDF	678			1.53	29:25	___
1,2,3,4,7,8-HxCDF	1620			1.29	32:10	___
1,2,3,6,7,8-HxCDF	476			1.28	32:16	___
2,3,4,6,7,8-HxCDF	480			1.32	32:45	___
1,2,3,7,8,9-HxCDF	EMPC		68.5			X__
1,2,3,4,6,7,8-HpCDF	1830			1.08	35:08	___
1,2,3,4,7,8,9-HpCDF	162			1.06	36:38	___
1,2,3,4,6,7,8,9-OCDF	1380			0.94	39:56	___

Totals	Conc. (pg/L)	Number	DL	EMPC	Flags
Total TCDD	5060	8		5400	___
Total PeCDD	2950	4		3950	___
Total HxCDD	50730	7			E__
Total HpCDD	152270	2			E__
Total TCDF	8100	14		11740	X__
Total PeCDF	4600	12		8080	X__
Total HxCDF	5970	8		7100	X__
Total HpCDF	2960	3		3110	___

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 18:17 11/30/200

TriMatrix, Inc.

TLI Project: 52366 Method 8290 PCDD/PCDF Analysis
Client Sample: BASF-SMW-10 Analysis File: T005

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flag
$^{13}C_{12}$-2,3,7,8-TCDF	875	47.3	40%-130%	0.75	24:45	___
$^{13}C_{12}$-2,3,7,8-TCDD	751	40.6	40%-130%	0.79	25:29	___
$^{13}C_{12}$-1,2,3,7,8-PeCDF	633	34.2	40%-130%	1.51	28:43	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDD	719	38.8	40%-130%	1.49	29:44	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	689	37.2	40%-130%	0.51	32:16	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	741	40.0	40%-130%	1.31	32:56	___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	547	29.5	25%-130%	0.42	35:07	___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	574	31.0	25%-130%	1.19	36:08	___
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	642	17.3	25%-130%	1.07	39:43	VRO__

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,4,7,8-PeCDF	612	33.0	40%-130%	1.51	29:25	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	728	39.3	40%-130%	0.51	32:10	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	690	37.3	40%-130%	1.22	32:51	V___
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	477	25.8	25%-130%	0.42	36:37	___

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	222	120	40%-130%	25:30	___

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	784	42.3	40%-130%	0.51	33:29	___
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	684	36.9	40%-130%	0.51	32:45	V___

Recovery Standards	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.82	25:17	___
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.20	33:15	___

Data Reviewer: _____ 11/30/2000

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

TriMatrix, Inc.

TLI Project: **52366** — Toxicity Equivalents Repc
Client Sample: **BASF-SMW-10** — Analysis File: **T0058**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/00**	Spike File:	**SPMIT32S**
TLI ID:	**274-99-3A**	Date Extracted:	**11/21/00**	ICal:	**TF57140**
		Date Analyzed:	**11/25/00**	ConCal:	**T005315**
Sample Size:	**1.080 L**	Dilution Factor:	**1**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005817**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**JMM**	% Solids:	**n/a**

Analytes	Conc. (pg/L)		TEF		Equivalent
2,3,7,8-TCDD	319	x	1.	=	319
1,2,3,7,8-PeCDD	579	x	0.5	=	290
1,2,3,4,7,8-HxCDD	264	x	0.1	=	26.4
1,2,3,6,7,8-HxCDD	4880	x	0.1	=	488.0
1,2,3,7,8,9-HxCDD	2090	x	0.1	=	209.0
1,2,3,4,6,7,8-HpCDD	81960	x	0.01	=	819.60
1,2,3,4,6,7,8,9-OCDD	326530	x	0.001	=	326.530
TOTAL PCDD					2479
2,3,7,8-TCDF	1490	x	0.1	=	149.0
1,2,3,7,8-PeCDF	{12.0}	x	0.05	=	0.600
2,3,4,7,8-PeCDF	678	x	0.5	=	339
1,2,3,4,7,8-HxCDF	1620	x	0.1	=	162.0
1,2,3,6,7,8-HxCDF	476	x	0.1	=	47.6
2,3,4,6,7,8-HxCDF	480	x	0.1	=	48.0
1,2,3,7,8,9-HxCDF	68.5	x	0.1	=	6.85
1,2,3,4,6,7,8-HpCDF	1830	x	0.01	=	18.30
1,2,3,4,7,8,9-HpCDF	162	x	0.01	=	1.62
1,2,3,4,6,7,8,9-OCDF	1380	x	0.001	=	1.380
TOTAL PCDF					774

Total EPA TEFs, 1989a: 3253 pg/L

{...} indicates that the value is that of a Detection Limit.

GRY_TEF v1.08, MILES 4.2

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 10:21 11/30/0

6

Initial ....Date...

Data Review By: KW 11/30/00

Calculated Noise Height: 0.39

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005820B.dbf
11/30/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID.	Flags.
TCDF						0.65-0.89				0.860-1.077			
304-306	DC	NL				Height	1.09	0.71	0.38				
				21:58		0.83	56.32	25.49	30.83	0.888			
				22:05		0.89	57.49	27.09	30.40	0.892			
				22:23		0.88	71.05	33.18	37.87	0.904			
				22:51		0.86	158.40	73.09	85.31	0.923			q
				23:03		0.86	288.45	133.45	155.00	0.931			
				23:25		0.85	293.29	134.52	158.77	0.946			
				23:42		0.86	193.10	89.12	103.98	0.958			
				24:08		0.87	398.20	185.44	212.76	0.975			
				24:20		0.87	697.96	324.08	373.88	0.983	1278-TCDF	AN	
				24:34		0.87	121.60	56.69	64.91	0.993			
				24:46		0.86	811.27	374.47	436.80	1.001	2378-TCDF	AN	
				25:12		0.89	178.59	84.02	94.57	1.018			
				25:25		0.87	135.93	63.13	72.80	1.027			
	X		X	25:34	RO	0.89	135.96	63.85	72.11	1.033			
	AX		X	25:50	RO	0.86	653.00	302.00	351.00	1.044			
	X		X	26:12	RO	0.89	782.85	367.83	415.02	1.059			
				26:30		0.89	53.51	25.25	28.26	1.071			
	DC	WH		26:47		0.88	340.82			1.082			
304-306			17	Peaks			5,086.97						
13C12-TCDF						0.65-0.89				0.959-1.041			
316-318	DC	NL				Height	2.04	0.75	1.29				
	DC	WL		21:13		0.70	54.37			0.857			
	DC	WL		21:38		0.74	9.05			0.874			
	DC	WL		22:53	RO	0.62	11.95			0.925			
	DC	WL		23:03	RO	0.57	7.52			0.931			
	DC	WL		23:13		0.70	17.72			0.938			
	DC	WL		23:35		0.66	89.14			0.953			
				24:19	RO	0.64	9.98	4.34	6.77	0.982			
				24:45		0.75	781.70	334.34	447.36	1.000	13C12-2378-TCDF	ISO	
						Height	183.56	77.90	105.66				
				25:12		0.73	11.71	4.94	6.77	1.018			
				25:23	RO	0.63	65.31	28.41	45.13	1.026			
316-313			4	Peaks			868.70						

---------- Above: TCDF / TCDD Follows ----------

TCDD						0.65-0.89				0.890-1.045			
320-322	DC	NL				Height	0.47	0.21	0.26				
				22:55		0.75	609.32	261.67	347.65	0.899	1368-TCDD	AN	
				23:19		0.79	297.67	131.43	166.24	0.915	1379-TCDD	AN	
	M			23:34	RO	0.16	41.15	17.90	112.00	0.925			

Compound/ M_2....	QC	Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name...	ID..	Flags.
	A				24:00	RO	0.48	17.88	7.78	16.20	0.942			
					24:17		0.76	194.58	83.89	110.69	0.953			
					24:33		0.75	30.48	13.08	17.40	0.963			
					24:38	RO	0.59	24.23	10.54	17.83	0.967			
					24:57		0.66	24.98	9.92	15.06	0.979			
					25:23		0.73	65.53	27.75	37.78	0.996			
					25:30		0.75	86.62	37.16	49.46	1.001	2378-TCDD	AN	
					25:40	RO	0.96	4.37	2.36	2.47	1.007			
					25:49		0.76	36.79	15.84	20.95	1.013			
					26:02	RO	0.93	4.44	2.33	2.51	1.022			
	A				26:20	RO	0.54	1.70	0.74	1.38	1.033			J
		DC		WH	26:48	RO	0.58	10.67			1.052			
320-322				14	Peaks			1,439.74						
37Cl-TCDD											0.921-1.079			
328		DC		NL			Height	5.08	5.08					
		DC		WL	23:02			65.49			0.904			
		DC		WL	23:10			1,089.46			0.909			
		DC		WL	23:18			782.61			0.914			
					24:05			35,508.00	35,508.00		0.945			
					24:30			53.02	53.02		0.961			
					25:04			48.23	48.23		0.984			
					25:22			423.43	423.43		0.995			
					25:30			137.52	137.52		1.001	37Cl-TCDD	CLS	
					25:52			635.59	635.59		1.015			
					26:47			1,015.24	1,015.24		1.051			
328				7	Peaks			37,821.03						
13C12-TCDD							0.65-0.89				0.921-1.079			
332-334		DC		NL			Height	1.45	1.15	0.30				
					24:04	RO	1.65	16.23	15.10	9.17	0.944			
					25:17		0.82	1,290.19	580.17	710.02	0.992	13C12-1234-TCDD	RS1	
					25:29		0.79	550.39	242.85	307.54	1.000	13C12-2378-TCDD	IS1	
							Height	142.81	62.87	79.94				
		DC		SN	25:49	RO	12.35	1.22			1.013			
332-334				3	Peaks			1,856.81						

---------- Above: TCDD / PeCDF Follows ----------

PeCDF							1.32-1.78				0.923-1.064			
340-342		DC		NL			Height	0.55	0.22	0.33				
					26:44		1.50	140.47	84.38	56.09	0.931			
					27:27		1.39	6.49	3.77	2.72	0.956			J
					27:52		1.53	441.08	266.51	174.57	0.970			
					28:01		1.49	81.22	48.63	32.59	0.976			
					28:15		1.43	15.99	9.41	6.58	0.984			
					28:22		1.43	68.14	40.11	28.03	0.988			
					28:30	RO	1.98	11.63	9.01	4.56	0.992			J
	A				28:38		1.50	54.90	32.90	22.00	0.997			
	MXN			X	28:45	RO	1.52	575.00	347.00	228.00	1.001			
	A				28:53		1.44	41.30	24.40	16.90	1.006			
	X			X	29:00	RO	1.51	193.68	116.39	77.29	1.010			

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
				29:25		1.53	179.24	108.34	70.90	1.024	23478-PeCDF	AN	
				29:34		1.51	146.19	87.93	58.26	1.030			
		DC	SN	29:47		1.72	5.09			1.037			
				29:52	RO	1.85	6.50	4.72	2.55	1.040			J
				30:00		1.66	14.46	9.03	5.43	1.045			
	X		X	30:07	RO	1.50	127.83	76.66	51.17	1.049			
				30:23		1.59	17.27	10.61	6.66	1.058			
		DC	WH	30:37		1.53	4.45			1.066			
340-342			17	Peaks			2,121.39						
13C12-PeCDF						1.32-1.78				0.860-1.140			
352-354		DC	NL			Height	0.56	0.26	0.30				
		DC	SN	26:30	RO	0.77	2.71			0.923			
		DC	SN	26:55	RO	1.07	3.37			0.937			
		DC	SN	27:04	RO	0.59	1.71			0.943			
		DC	SN	28:01	RO	0.89	1.07			0.976			
				28:43		1.51	529.10	318.31	210.79	1.000	13C12-PeCDF 123	IS2	
						Height	164.45	99.67	64.78				
				28:59		1.53	3.77	2.28	1.49	1.009			
		DC	SN	29:05		1.54	1.98			1.013			
				29:25		1.51	506.15	304.17	201.98	1.024	13C12-PeCDF 234	SUR1	
				30:21		1.35	6.58	3.78	2.80	1.057			
		DC	SN	30:31	RO	4.00	0.59			1.063			
352-354			4	Peaks			1,045.60						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD						1.32-1.78				0.933-1.021			
356-358		DC	NL			Height	0.41	0.14	0.27				
		DC	SN	28:09	RO	0.00	0.76			0.947			
				28:30	RO	1.88	15.78	11.61	6.19	0.959			
				28:41	RO	0.95	110.26	67.02	70.45	0.965			
				28:49		1.54	313.20	189.96	123.24	0.969			
				29:01		1.48	67.05	40.04	27.01	0.976			
	A			29:15		1.40	81.30	47.40	33.90	0.984			
	A			29:24	RO	1.31	21.39	13.00	9.89	0.989			
				29:35	RO	0.30	7.30	4.44	14.90	0.995			J
				29:45		1.65	112.86	70.27	42.59	1.001	12378-PeCDD	AN	
				29:53	RO	0.06	16.93	10.29	158.73	1.005			
				30:13	RO	0.97	22.77	13.84	14.23	1.016			
356-358			10	Peaks			768.84						
13C12-PeCDD						1.32-1.78				0.865-1.135			
368-370		DC	NL			Height	0.37	0.26	0.11				
		DC	SN	27:55	RO	5.53	1.73			0.939			
		DC	SN	28:22	RO	3.22	0.82			0.954			
		DC	SN	28:34	RO	2.87	0.59			0.961			
		DC	SN	28:41		1.37	1.92			0.965			
		DC	SN	28:48	RO	1.03	1.76			0.969			
		DC	SN	29:09	RO	0.08	0.94			0.980			
		DC	SN	29:28	RO	1.97	0.97			0.991			
				29:44		1.49	341.70	204.35	137.35	1.000	13C12-PeCDD 123	IS3	
						Height	111.33	65.90	45.43				

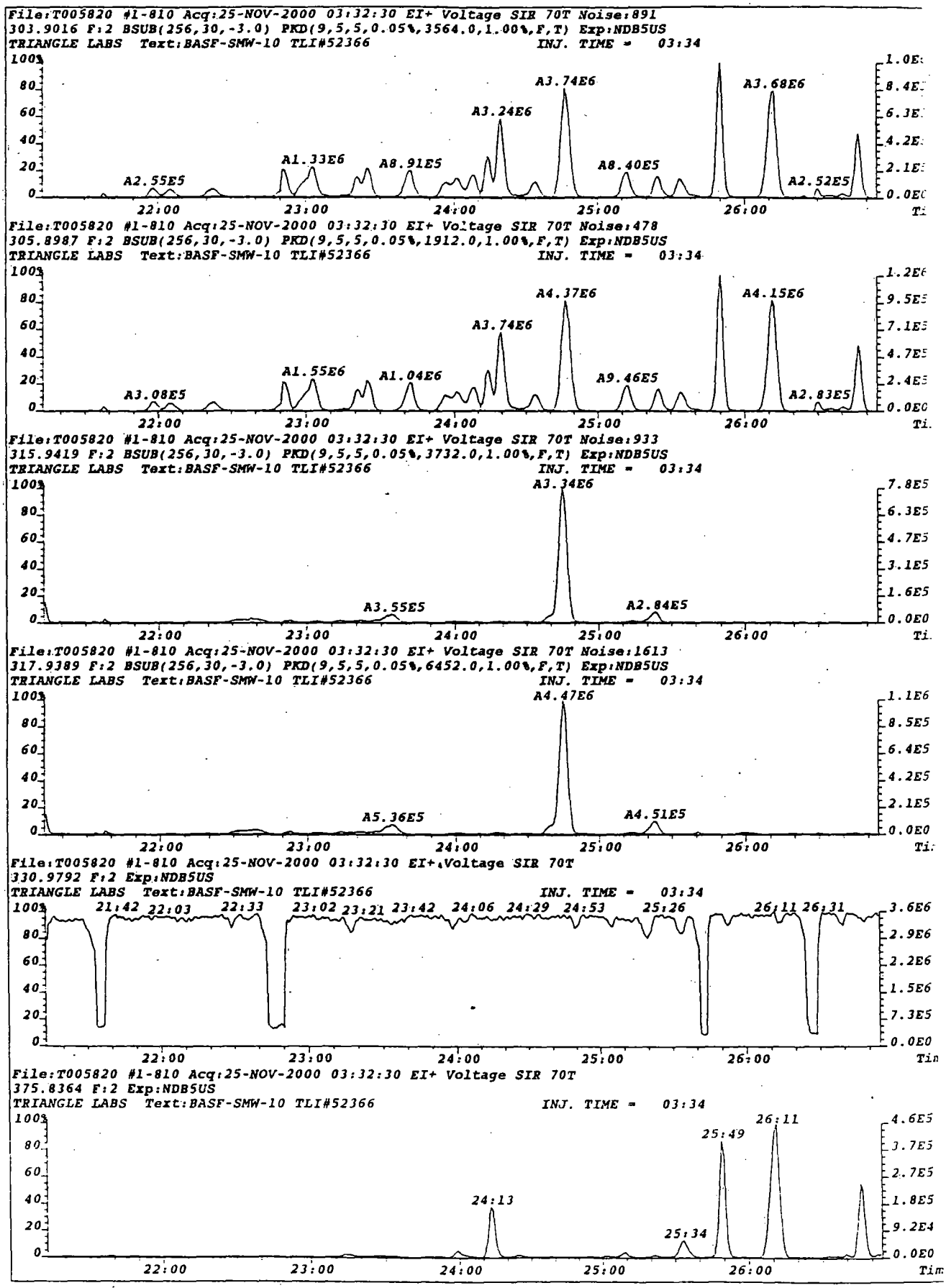
Compound/ M_Z....	QC	Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN			30:05	RO	6.56	0.92			1.012			
	DC	SN			30:16	RO	4.08	0.66			1.018			
	DC	SN			30:20	RO	0.42	0.72			1.020			
	DC	SN			30:28		1.60	0.65			1.025			
	DC	SN			30:37	RO	2.67	0.69			1.030			
368-370			1	Peak				341.70						
---------- Above: PeCDD / HxCDF Follows ----------														
HxCDF							1.05-1.43				0.961-1.046			
374-376	DC	NL					Height	0.46	0.21	0.25				
					31:13		1.29	43.83	24.67	19.16	0.967			
					31:21		1.30	348.26	197.12	151.14	0.972			
X		X			31:31	RO	1.33	14.12	8.07	6.05	0.977			
					31:38		1.30	22.26	12.59	9.67	0.980			
					31:48		1.30	324.66	183.57	141.09	0.986			
X		X			32:01	RO	1.29	8.28	4.67	3.61	0.992			J
					32:10		1.29	384.83	217.06	167.77	0.997	123478-HxCDF	AN	
					32:16		1.28	118.92	66.87	52.05	1.000	123678-HxCDF	AN	
X		X			32:25	RO	1.31	204.75	116.20	88.55	1.005			
					32:34	RO	1.44	11.09	7.11	4.95	1.009			
					32:45		1.32	108.38	61.67	46.71	1.015	234678-HxCDF	AN	
NX		X			33:28	RO	1.18	12.65	6.84	5.81	1.037	123789-HxCDF	AN	
N					33:34		1.32	23.51	13.36	10.15	1.040			
	DC	WH			33:58		1.35	18.98			1.053			
374-376			13	Peaks				1,625.54						
13C12-HxCDF							0.43-0.59				0.876-1.124			
384-386	DC	NL					Height	0.65	0.30	0.35				
	DC	SN			31:13		0.55	1.69			0.967			
					32:10		0.51	447.78	150.42	297.36	0.997	13C12-HxCDF 478	SUR2	
					32:16		0.51	429.96	145.41	284.55	1.000	13C12-HxCDF 678	IS4	
							Height	152.02	52.45	99.57				
					32:45		0.51	389.49	131.62	257.87	1.015	13C12-HxCDF 234	ALT2	
	DC	SN			32:58	RO	1.91	0.80			1.022			
					33:29		0.51	327.85	110.91	216.94	1.038	13C12-HxCDF 789	ALT1	
384-386			4	Peaks				1,595.08						
---------- Above: HxCDF / HxCDD Follows ----------														
HxCDD							1.05-1.43				0.956-1.013			
390-392	DC	NL					Height	0.95	0.43	0.52				
					31:42		1.21	2,018.33	1,105.35	912.98	0.963			
					32:09		1.22	213.95	117.77	96.18	0.976			
					32:21		1.21	4,663.55	2,557.69	2,105.86	0.982			E
					32:30		1.21	33.01	18.08	14.93	0.987			
AN					32:51		1.22	42.00	23.10	18.90	0.997	123478-HxCDD	AN	
M					32:57		1.21	774.00	423.00	351.00	1.001	123678-HxCDD	AN	
					33:15		1.20	335.12	182.56	152.56	1.010	123789-HxCDD	AN	
390-392			7	Peaks				8,079.96						

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
13C12-HxCDD				1.05-1.43					0.970-1.030				
402-404	DC	NL				Height	1.47	1.11	0.36				
				32:51		1.22	278.77	153.18	125.59	0.997	13C12-HxCDD	478	SUR3
				32:56		1.31	289.19	163.93	125.26	1.000	13C12-HxCDD	678	IS5
						Height	96.84	53.79	43.05				
				33:15		1.20	796.16	435.05	361.11	1.010	13C12-HxCDD	789	RS2
				33:35	RO	2.53	9.07	10.25	4.05	1.020			
	DC	SN		33:40	RO	10.56	4.48			1.022			
402-404			4	Peaks			1,373.19						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF				0.88-1.20					0.995-1.048				
408-410	DC	NL				Height	0.36	0.23	0.13				
				35:08		1.08	283.01	147.15	135.86	1.000	1234678-HpCDF		AN
X		X		35:22	RO	1.04	20.42	10.42	10.00	1.007			
				35:32		1.08	132.71	68.90	63.81	1.012			
	DC	SN		35:4[illegible]		1.10	1.53			1.018			
	DC	SN		36:09		0.88	4.35			1.029			
	DC	SN		36:22	RO	1.75	1.82			1.036			
				36:38		1.06	19.33	9.94	9.39	1.043	1234789-HpCDF		AN
408-410			4	Peaks			455.47						
13C12-HpCDF				0.37-0.51					0.943-1.114				
418-420	DC	NL				Height	0.38	0.17	0.21				
				35:07		0.42	228.06	67.35	160.71	1.000	13C12-HpCDF	678	IS6
						Height	68.55	20.12	48.43				
	DC	SN		36:20		0.48	0.46			1.035			
	DC	SN		36:29	RO	0.79	0.62			1.039			
				36:37		0.42	154.90	45.54	109.36	1.043	13C12-HpCDF	789	SUR4
418-420			2	Peaks			382.96						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20					0.974-1.005				
424-426	DC	NL				Height	2.01	0.70	1.31				
				35:24		1.04	6,872.53	3,501.32	3,371.21	0.980			E
				36:09		1.02	8,010.60	4,053.65	3,956.95	1.000	1234678-HpCDD		AN E
424-426			2	Peaks			14,883.13						
13C12-HpCDD				0.88-1.20					0.972-1.028				
436-438	DC	NL				Height	2.47	1.69	0.78				
M				36:08		1.19	211.70	115.00	96.70	1.000	13C12-HpCDD	678	IS7
						Height	55.26	28.33	26.93				
436-438			1	Peak			211.70						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02					0.899-1.101				
442-444	DC	NL				Height	0.17	0.08	0.09				
	DC	SN		37:15	RO	1.33	0.23			0.938			
	DC	SN		37:40	RO	0.52	0.53			0.948			

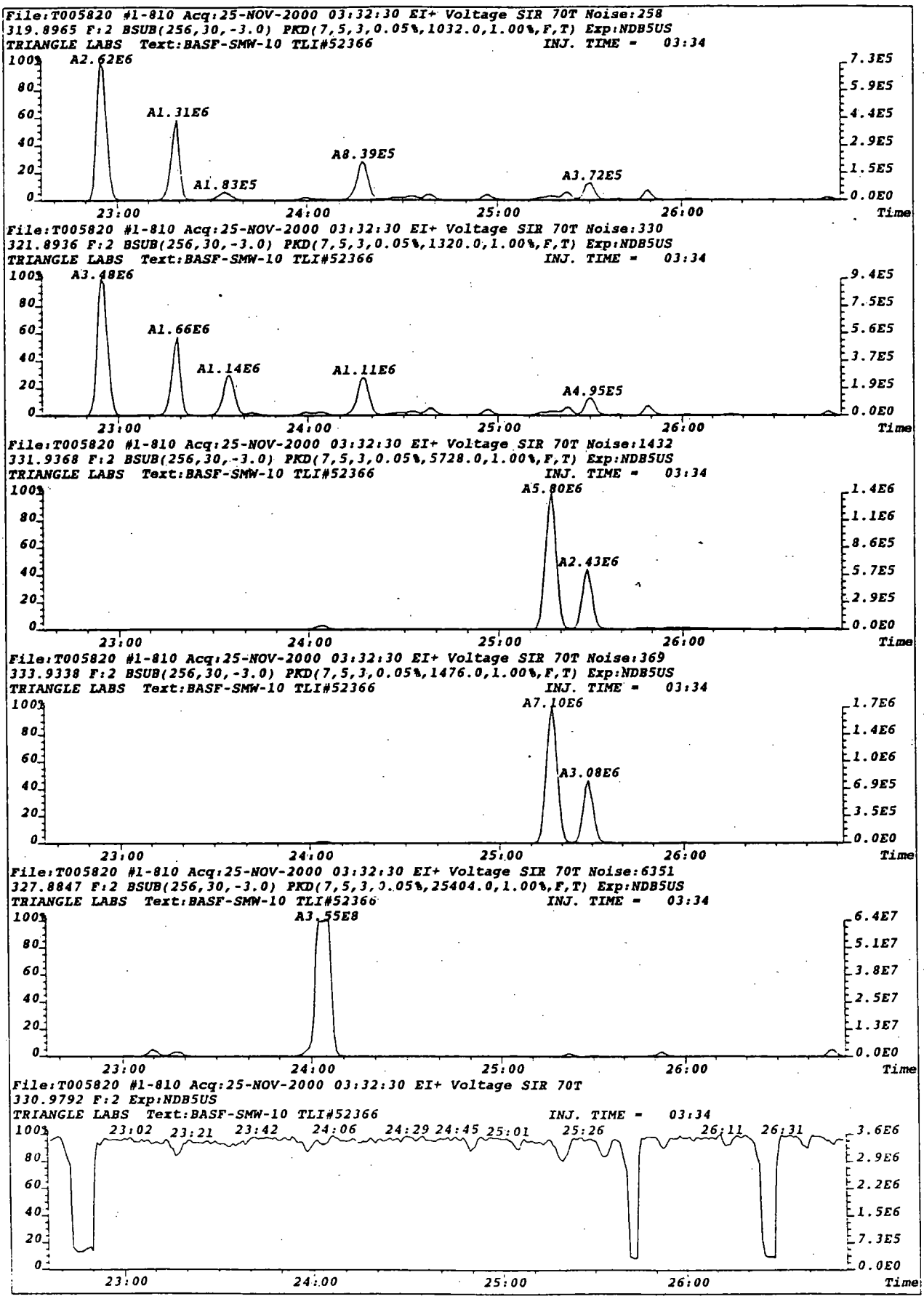
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		37:49	RO	1.11	0.36			0.952			
	DC	SN		38:01		0.90	2.13			0.957			
	DC	SN		38:32	RO	0.22	0.08			0.970			
	DC	SN		38:35	RO	3.00	0.06			0.971			
	DC	SN		39:05	RO	1.87	1.04			0.984			
	DC	SN		39:23	RO	1.18	0.42			0.992			
				39:44	RO	1.11	5.16	3.02	2.73	1.000			
				39:56		0.94	79.24	38.31	40.93	1.005	OCDF		AN
	DC	SN		40:04	RO	1.96	1.44			1.009			
	DC	SN		40:17	RO	2.45	0.83			1.014			
	DC	SN		40:44	RO	4.63	0.36			1.026			
	DC	SN		41:07	RO	2.02	0.83			1.035			
	DC	SN		41:49	RO	1.28	2.25			1.053			
	DC	SN		42:17	RO	2.05	0.72			1.065			
	DC	SN		42:54	RO	3.67	0.34			1.080			
	DC	SN		43:02	RO	2.79	0.53			1.084			
	DC	SN		43:20	RO	4.00	0.13			1.091			
	DC	SN		43:25	RO	0.67	0.13			1.093			
	DC	SN		43:37	RO	1.87	0.57			1.098			
442-444			2	Peaks			84.40						
OCDD						0.76-1.02				0.899-1.101			
458-460	DC	NL				Height	0.17	0.08	0.09				
				39:44		0.81	15,534.45	6,943.45	8,591.00	1.000	OCDD		AN E
458-460			1	Peak			15,534.45						
13C12-OCDD						0.76-1.02				0.996-1.004			
470-472	DC	NL				Height	7.89	6.07	1.82				
M				39:43	RO	1.07	192.78	109.00	102.00	1.000	13C12-OCDD		IS8
						Height	44.84	22.40	22.44				
470-472			1	Peak			192.78						

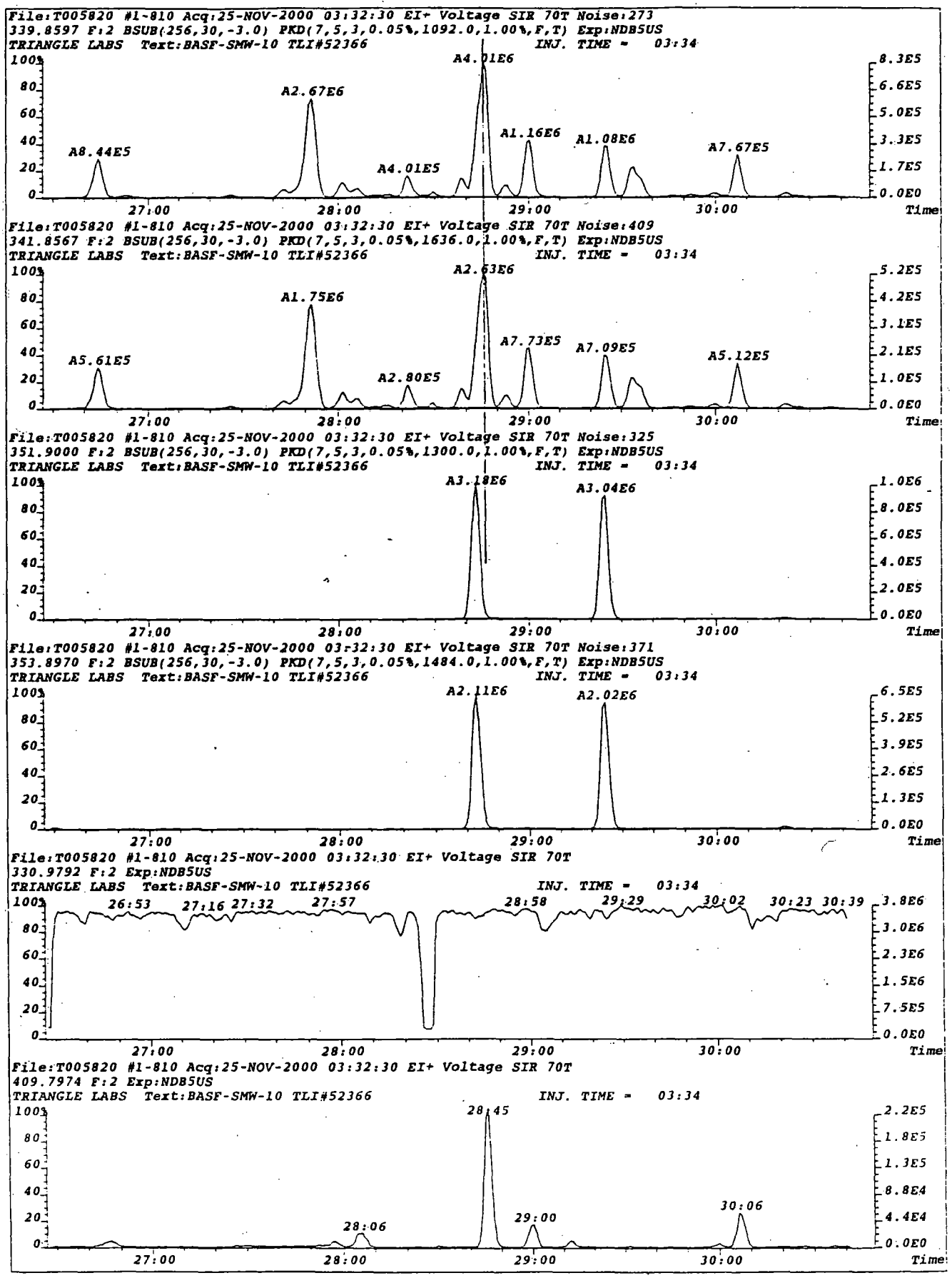
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***


File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:891
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,3564.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A2.55E5
A1.33E6
A8.91E5
A3.24E6
A3.74E6
A8.40E5
A3.68E6
A2.52E5
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:478
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,1912.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A3.08E5
A1.55E6
A1.04E6
A3.74E6
A4.37E6
A9.46E5
A4.15E6
A2.83E5
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:933
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,3732.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A3.55E5
A3.34E6
A2.84E5
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:1613
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,6452.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A5.36E5
A4.47E6
A4.51E5
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
21:42 22:03 22:33 23:02 23:21 23:42 24:06 24:29 24:53 25:26 26:11 26:31
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
24:13
25:34
25:49
26:11
22:00
23:00
24:00
25:00
26:00

6


File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:258
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1032.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A2.62E6
A1.31E6
A1.83E5
A8.39E5
A3.72E5
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:330
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1320.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A3.48E6
A1.66E6
A1.14E6
A1.11E6
A4.95E5
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:1432
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,5728.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A5.80E6
A2.43E6
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:369
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1476.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A7.10E6
A3.08E6
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:6351
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,25404.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A3.55E8
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
23:02 23:21 23:42 24:06 24:29 24:45 25:01 25:26 26:11 26:31
23:00 24:00 25:00 26:00 Time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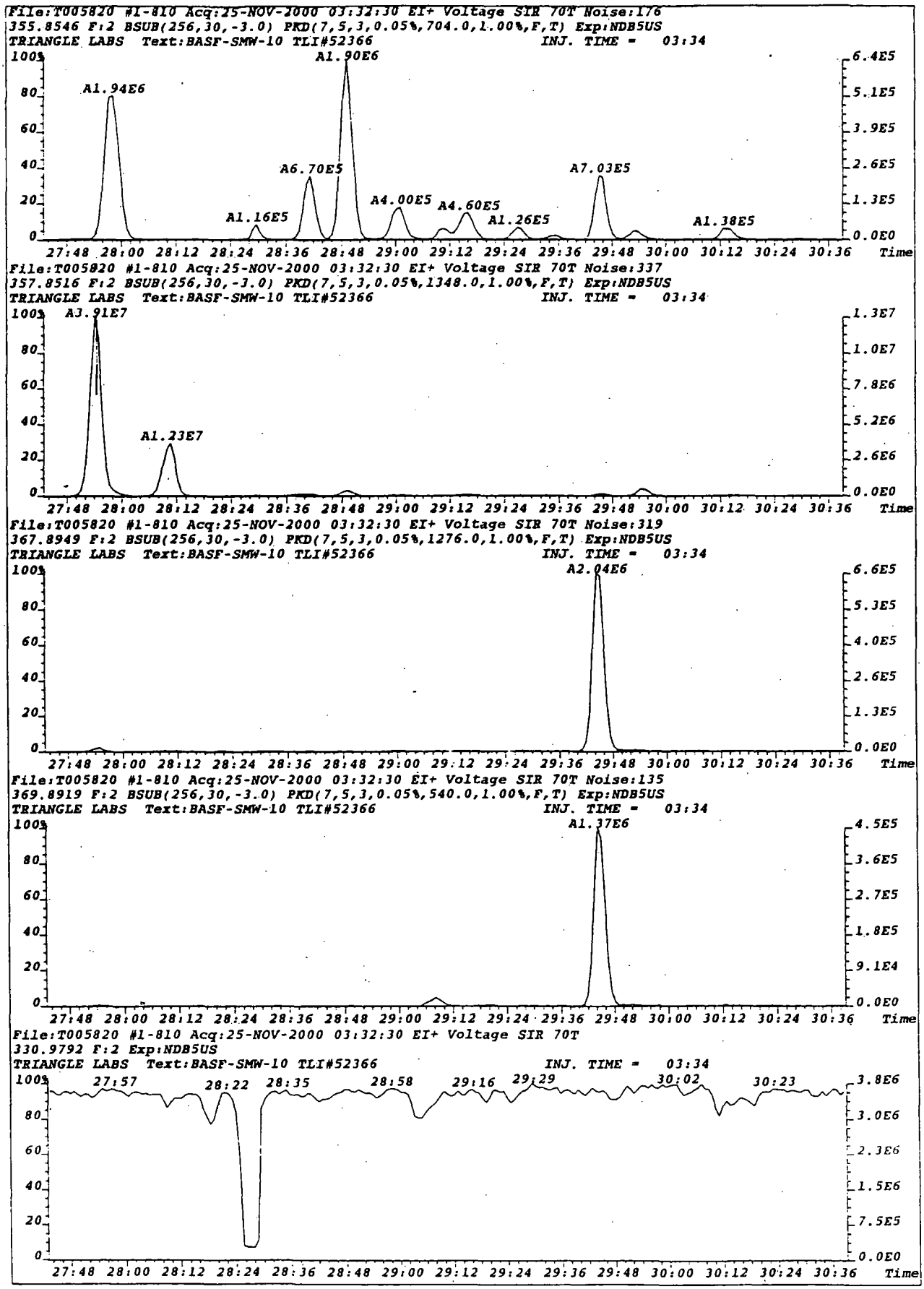
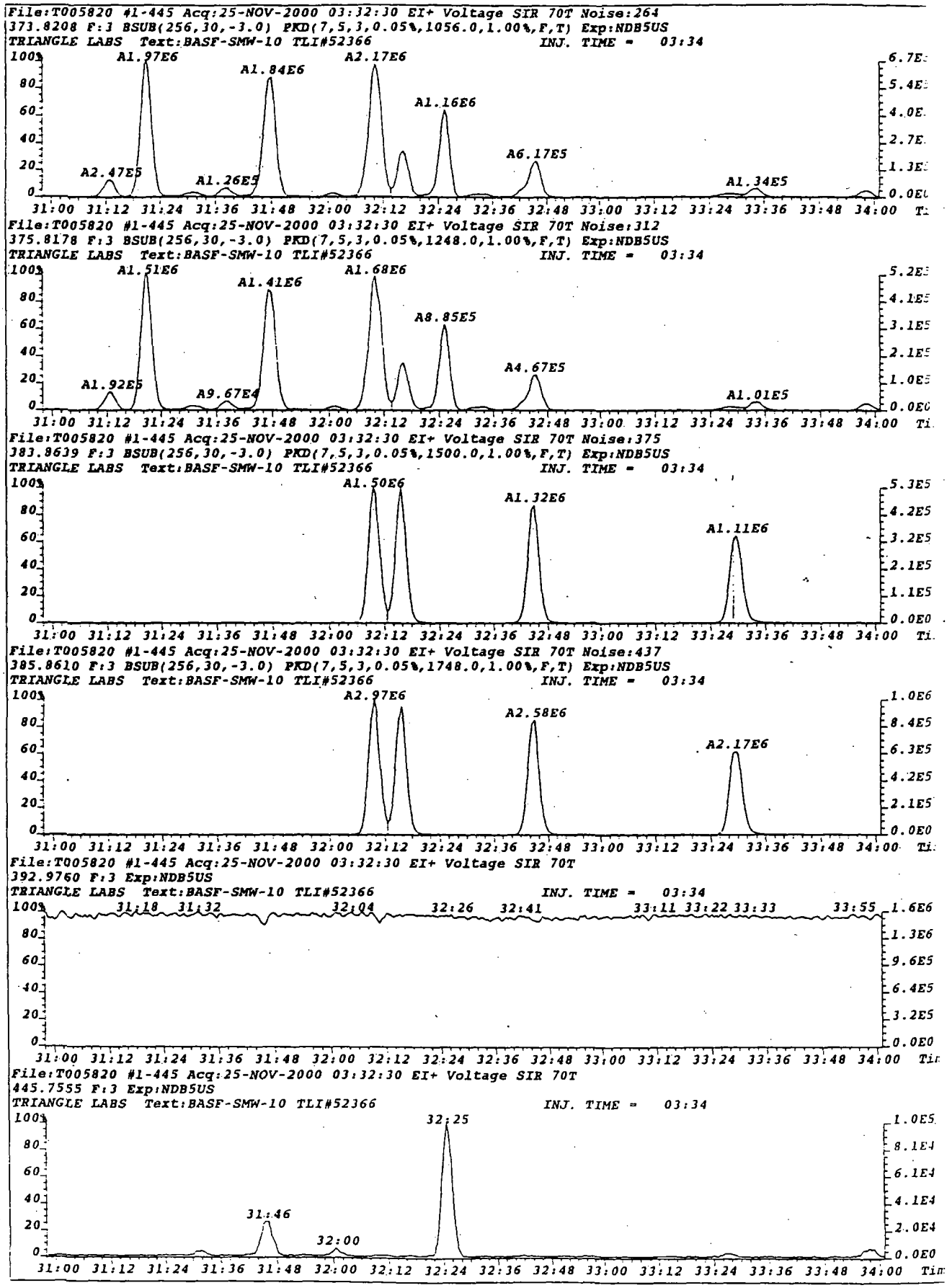
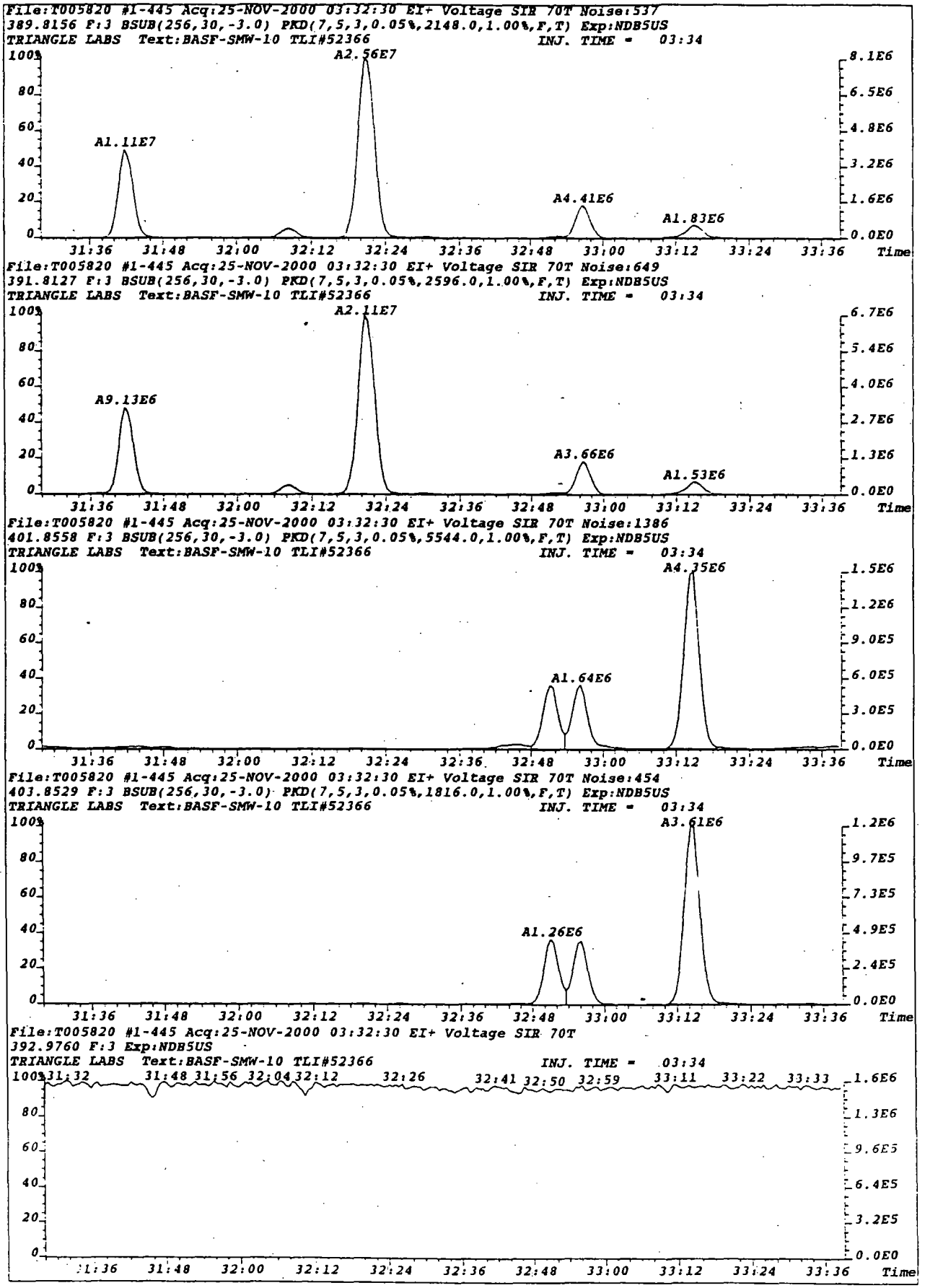
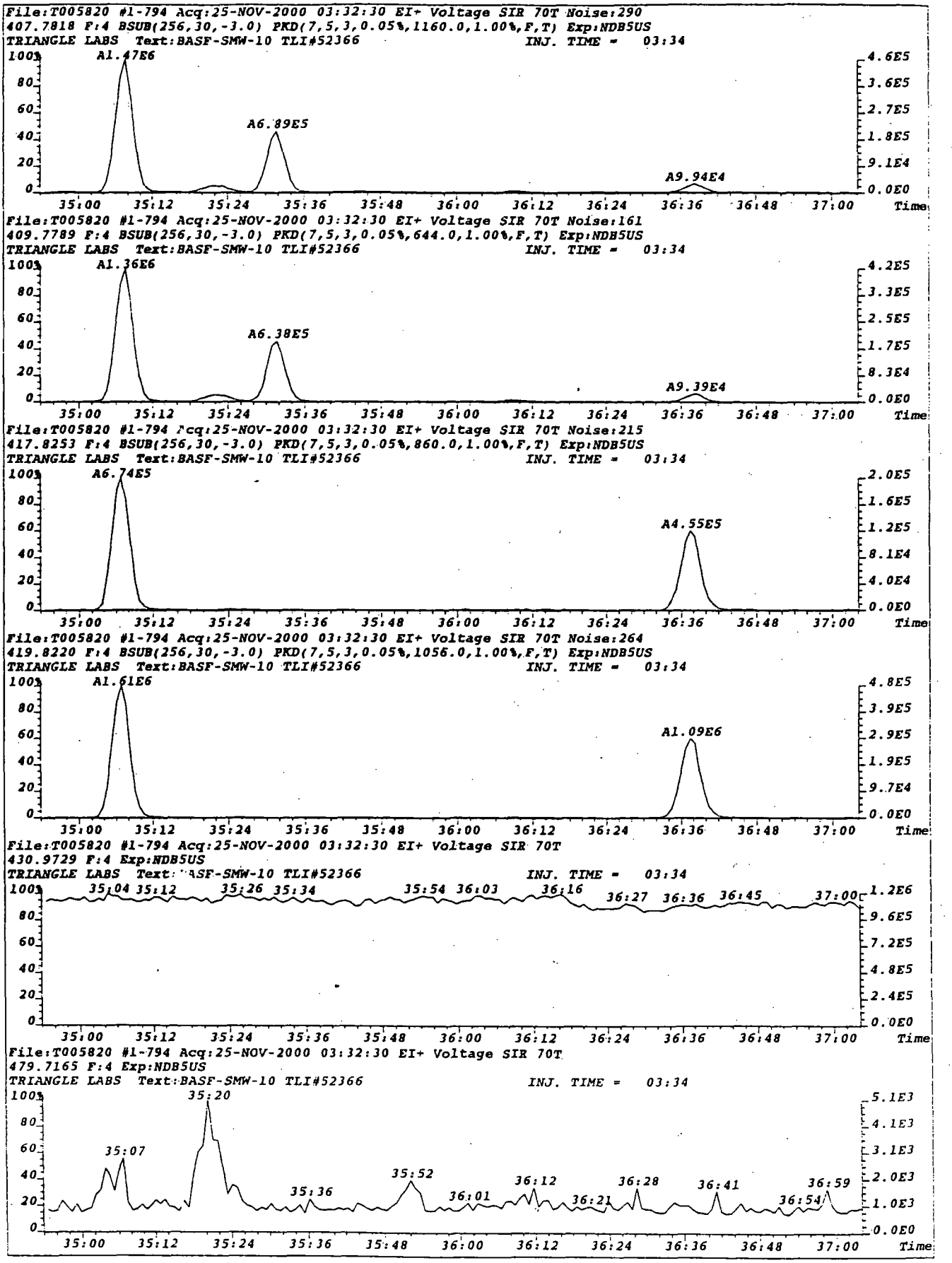
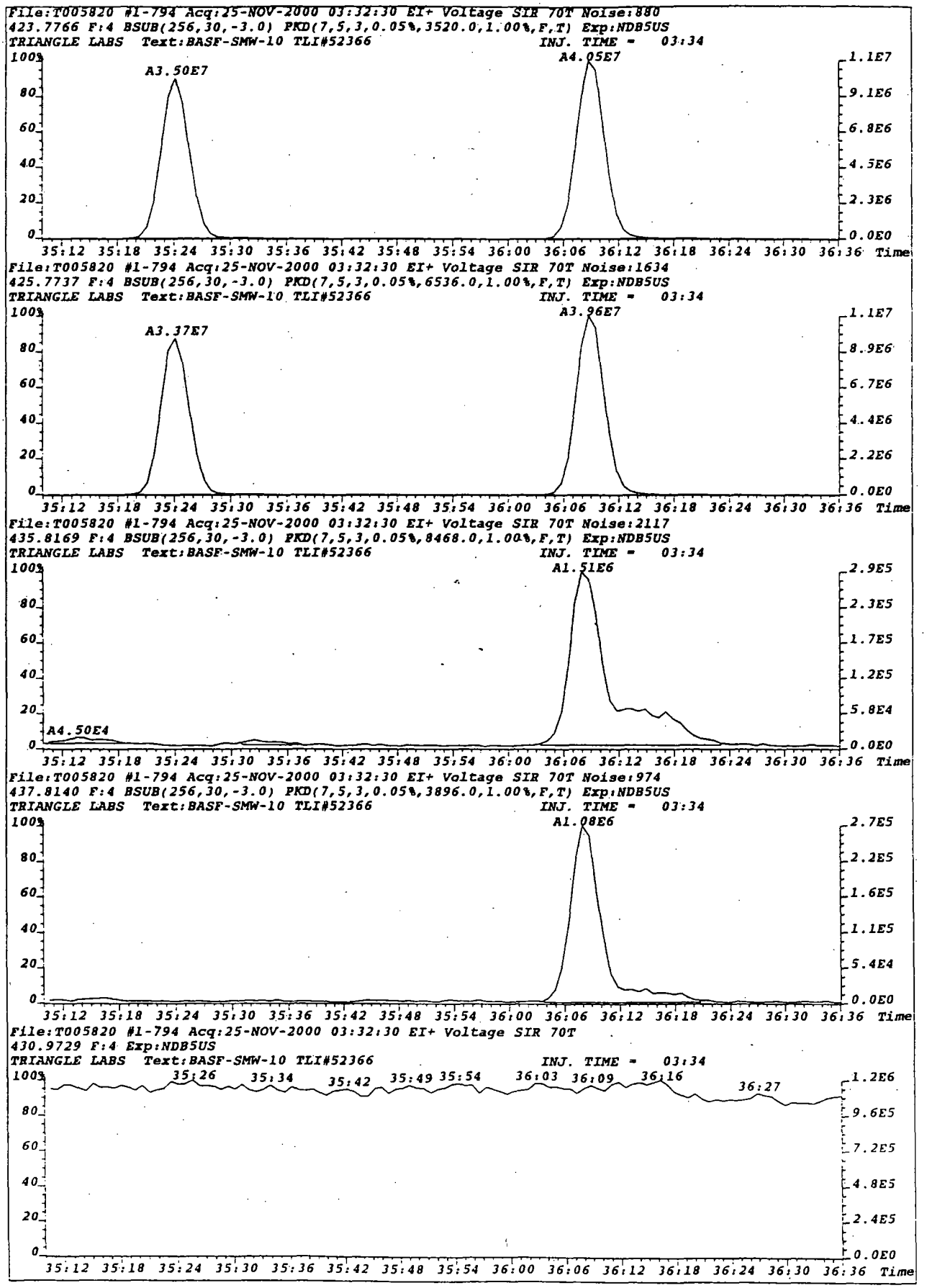
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1092.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A8.44E5
A2.67E6
A4.01E5
A4.91E6
A1.16E6
A1.08E6
A7.67E5
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:409
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1636.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A5.61E5
A1.75E6
A2.80E5
A2.63E6
A7.73E5
A7.09E5
A5.12E5
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:325
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1300.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A3.18E6
A3.04E6
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:371
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1484.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A2.11E6
A2.02E6
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
26:53
27:16
27:32
27:57
28:58
29:29
30:02
30:23
30:39
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
28:06
28:45
29:00
30:06
27:00
28:00
29:00
30:00
Time

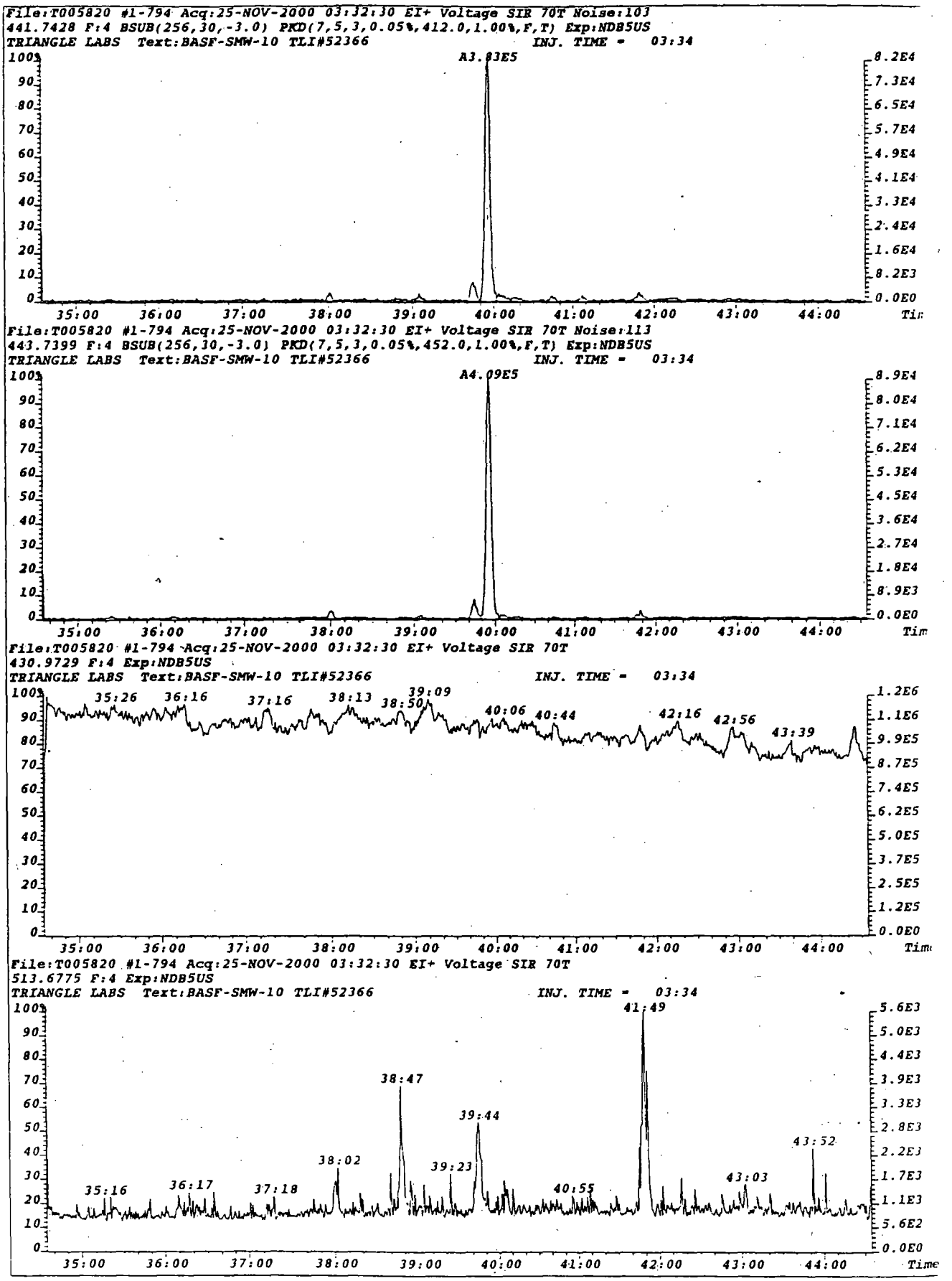

File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:176
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,704.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A1.94E6
A1.90E6
A6.70E5
A1.16E5
A4.00E5
A4.60E5
A1.26E5
A7.03E5
A1.38E5
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:337
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1348.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A3.91E7
A1.23E7
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:319
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1276.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A2.04E6
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:135
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,540.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A1.37E6
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
27:57
28:22
28:35
28:58
29:16
29:29
30:02
30:23
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36
Time

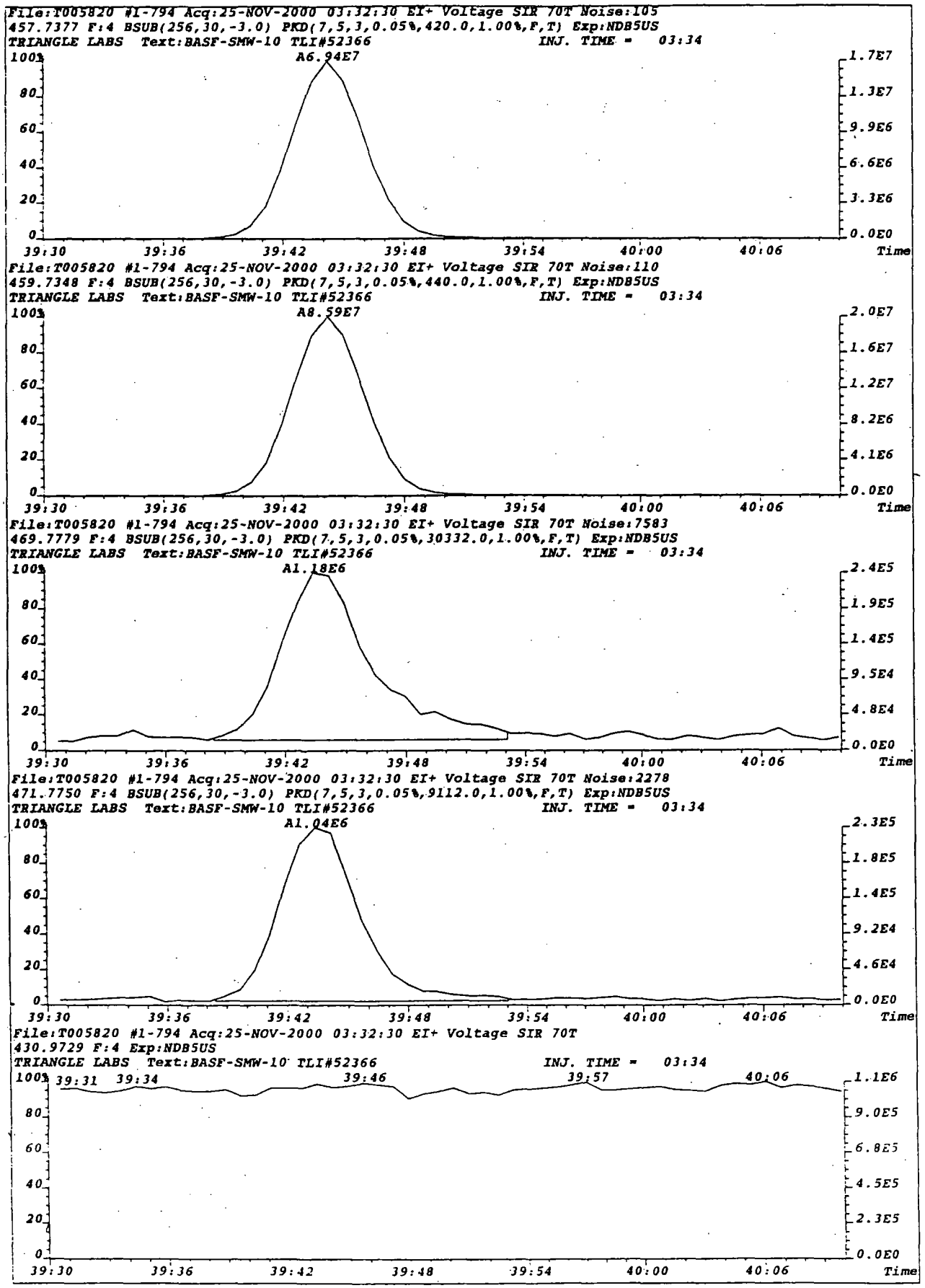

File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:264
371.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1056.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A1.97E6
A1.84E6
A2.17E6
A1.16E6
A6.17E5
A2.47E5
A1.26E5
A1.34E5
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:312
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1248.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A1.51E6
A1.41E6
A1.68E6
A8.85E5
A4.67E5
A1.92E5
A9.67E4
A1.01E5
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:375
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1500.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A1.50E6
A1.32E6
A1.11E6
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:437
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1748.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A2.97E6
A2.58E6
A2.17E6
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
32:25
31:46
32:00

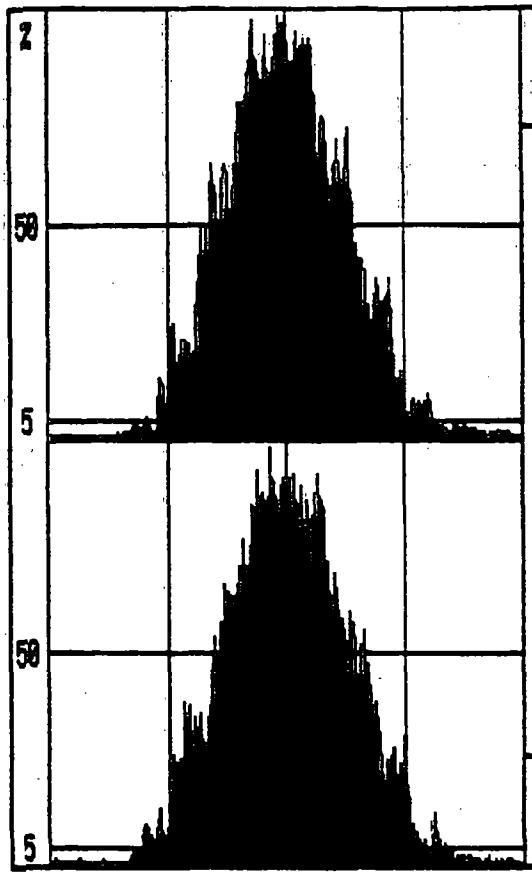

File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:537
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A2.56E7
A1.11E7
A4.41E6
A1.83E6
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:649
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2596.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A2.11E7
A9.13E6
A3.66E6
A1.53E6
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:1386
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,5544.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A4.35E6
A1.64E6
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:454
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1816.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A3.61E6
A1.26E6
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
Time


File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:290
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A1.47E6
A6.89E5
A9.94E4
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:161
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,644.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A1.36E6
A6.38E5
A9.39E4
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:215
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,860.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A6.74E5
A4.55E5
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:264
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1056.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A1.61E6
A1.09E6
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
35:20
35:07
35:36
35:52
36:01
36:12
36:21
36:28
36:41
36:54
36:59
Time


File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:880
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,3520.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A3.50E7
A4.05E7
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:1634
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,6536.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A3.37E7
A3.96E7
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:2117
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,8468.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A1.51E6
A4.50E4
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:974
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,3896.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A1.08E6
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
35:26
35:34
35:42
35:49
35:54
36:03
36:09
36:16
36:27
Time


File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:103
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,412.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A3.83E5
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:113
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,452.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
A4.09E5
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
35:26
36:16
37:16
38:13
38:50
39:09
40:06
40:44
42:16
42:56
43:39
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34
35:16
36:17
37:18
38:02
38:47
39:23
39:44
40:55
41:49
43:03
43:52
35:00
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00


File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:105
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,420.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A6.94E7
1.7E7
1.3E7
9.9E6
6.6E6
3.3E6
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:110
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,440.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A8.59E7
2.0E7
1.6E7
1.2E7
8.2E6
4.1E6
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:7583
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,30332.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A1.18E6
2.4E5
1.9E5
1.4E5
9.5E4
4.8E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T Noise:2278
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,9112.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
A1.04E6
2.3E5
1.8E5
1.4E5
9.2E4
4.6E4
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34
39:31 39:34 39:46 39:57 40:06
1.1E6
9.0E5
6.8E5
4.5E5
2.3E5
0.0E0
39:30 39:36 39:42 39:48 39:54 40:00 40:06 Time

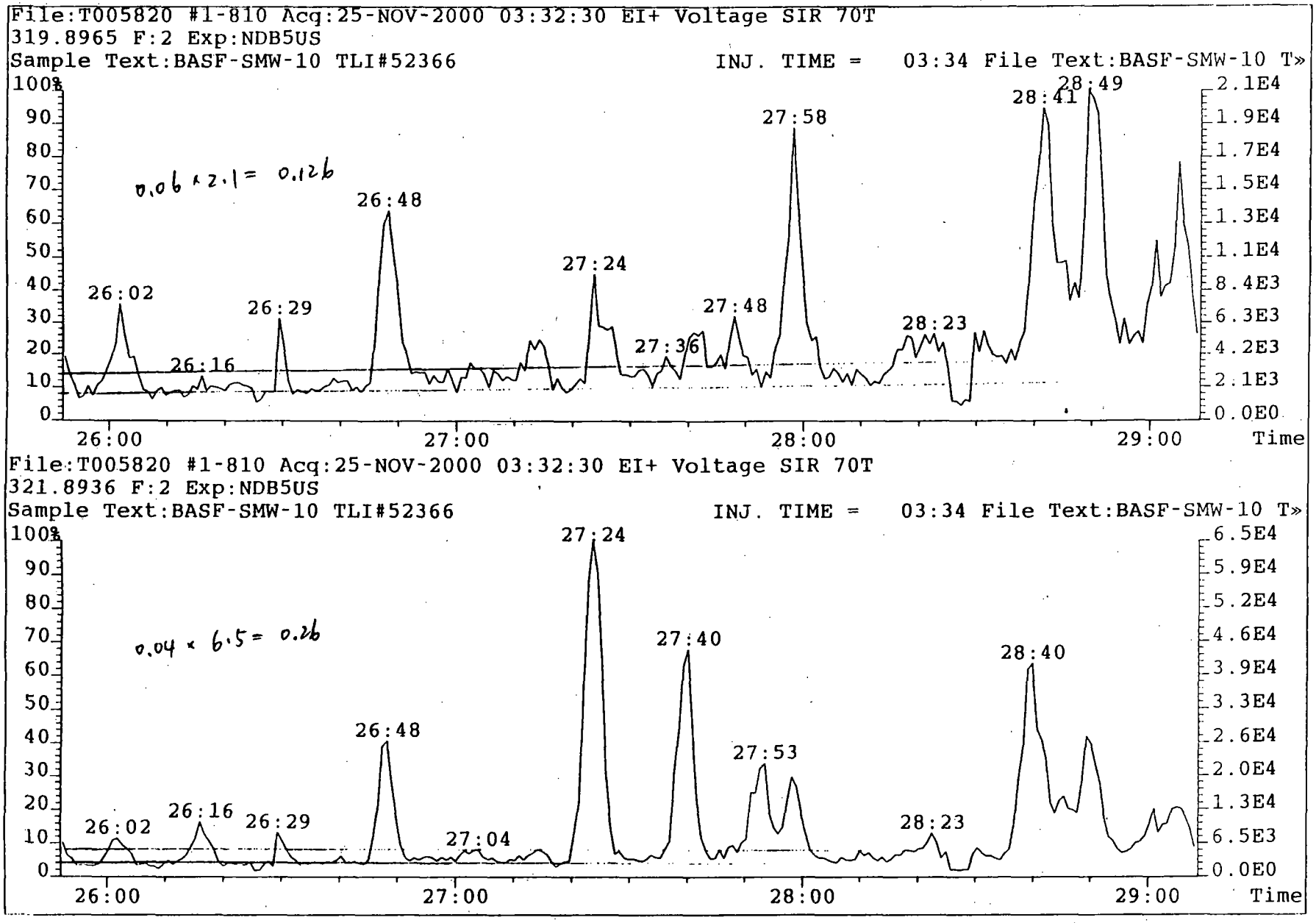


Channel I 330.9792 Peak top
Height .74 volts Span 200 ppm

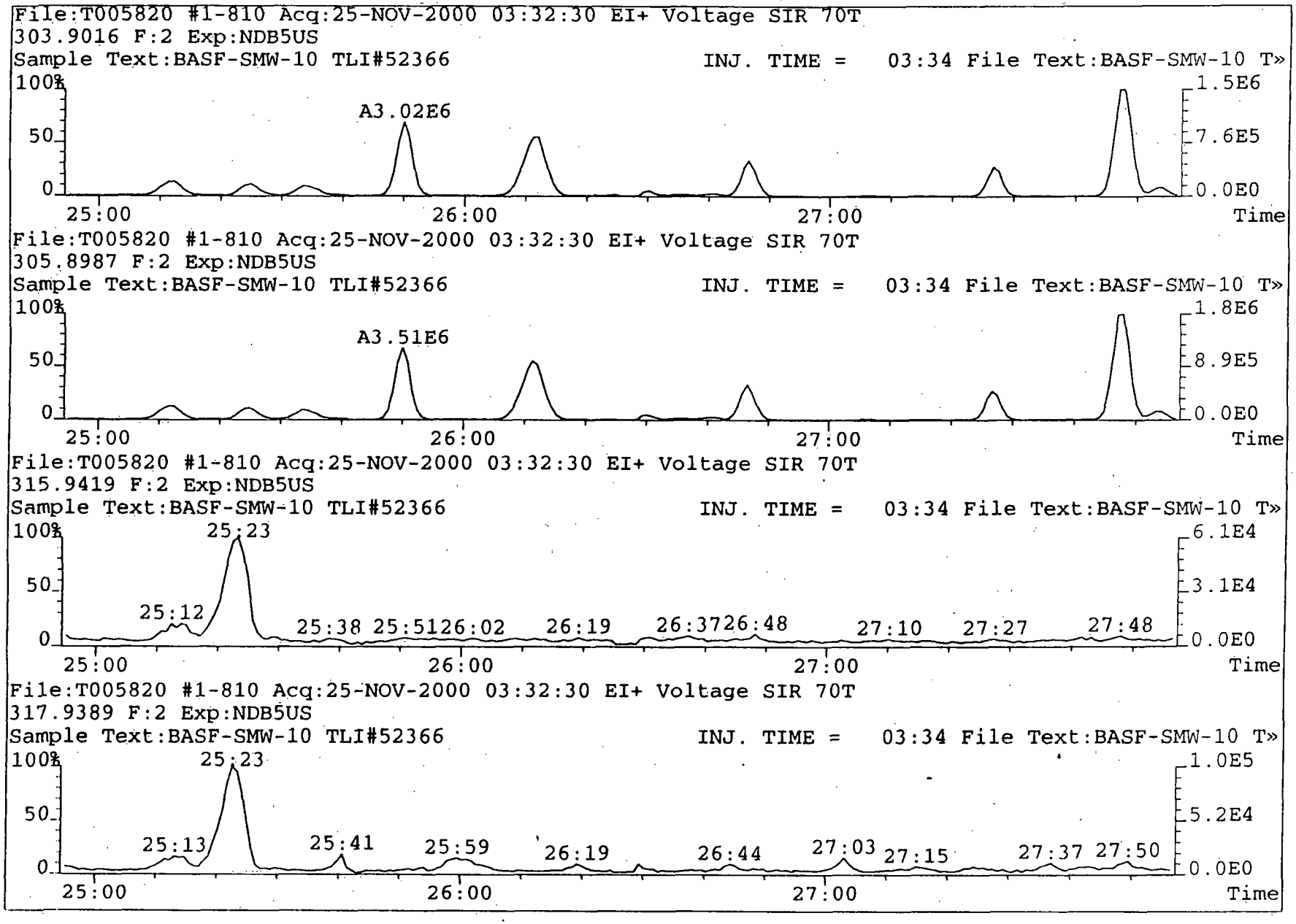
System file name	NOBSUS
Data file name	A:TN25001
Resolution	10000
Group number	2
Ionization mode	EI+
Switching	VOLTAGE
Ref. masses	292.9825, 416.9768

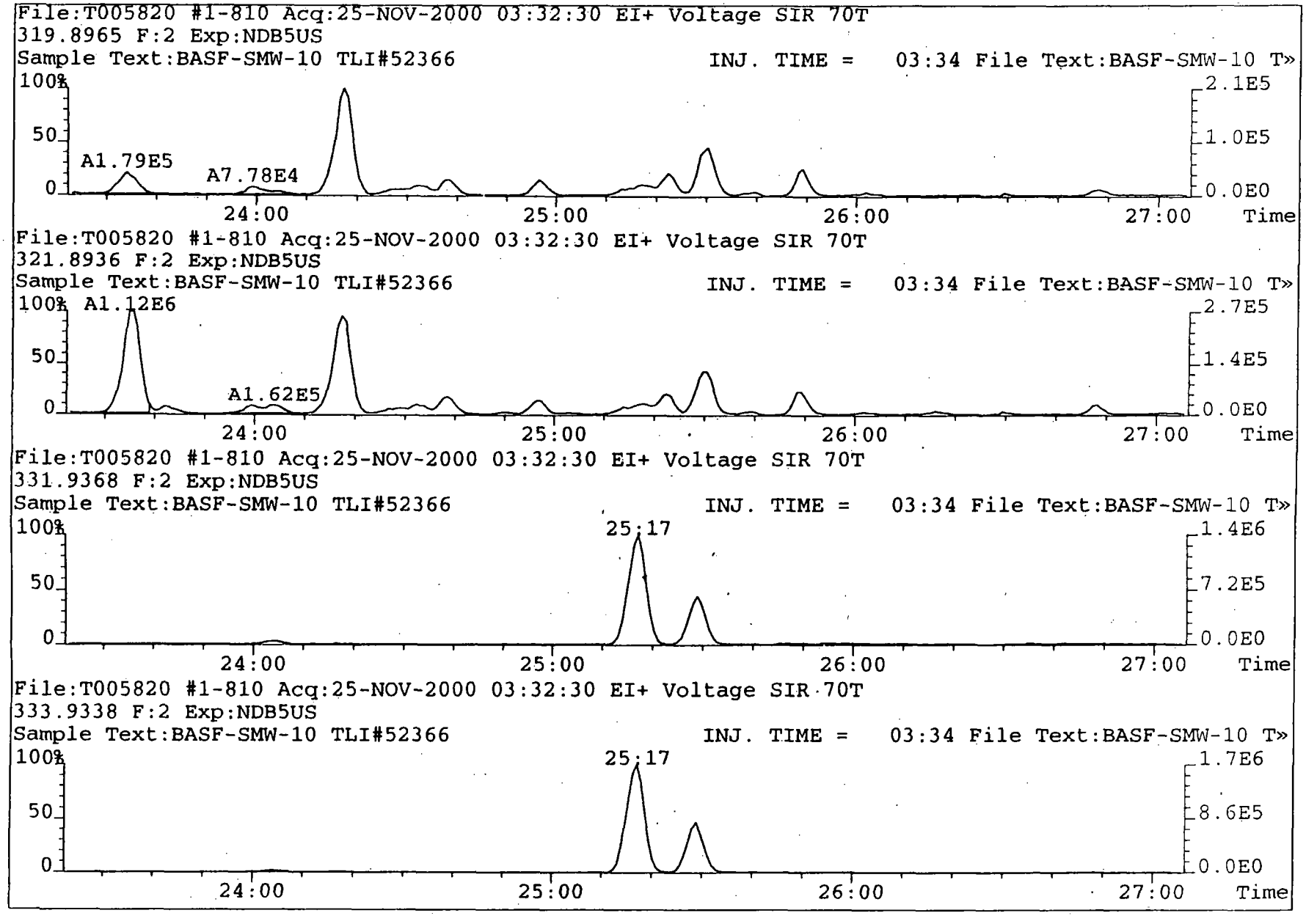
A	293	J	331	S	368
B	304	K	332	T	370
C	306	L	334	U	376
D	316	M	340	V	410
E	318	N	342		
F	320	O	352		
G	322	P	354		
H	328	Q	356		
I	331	R	358		

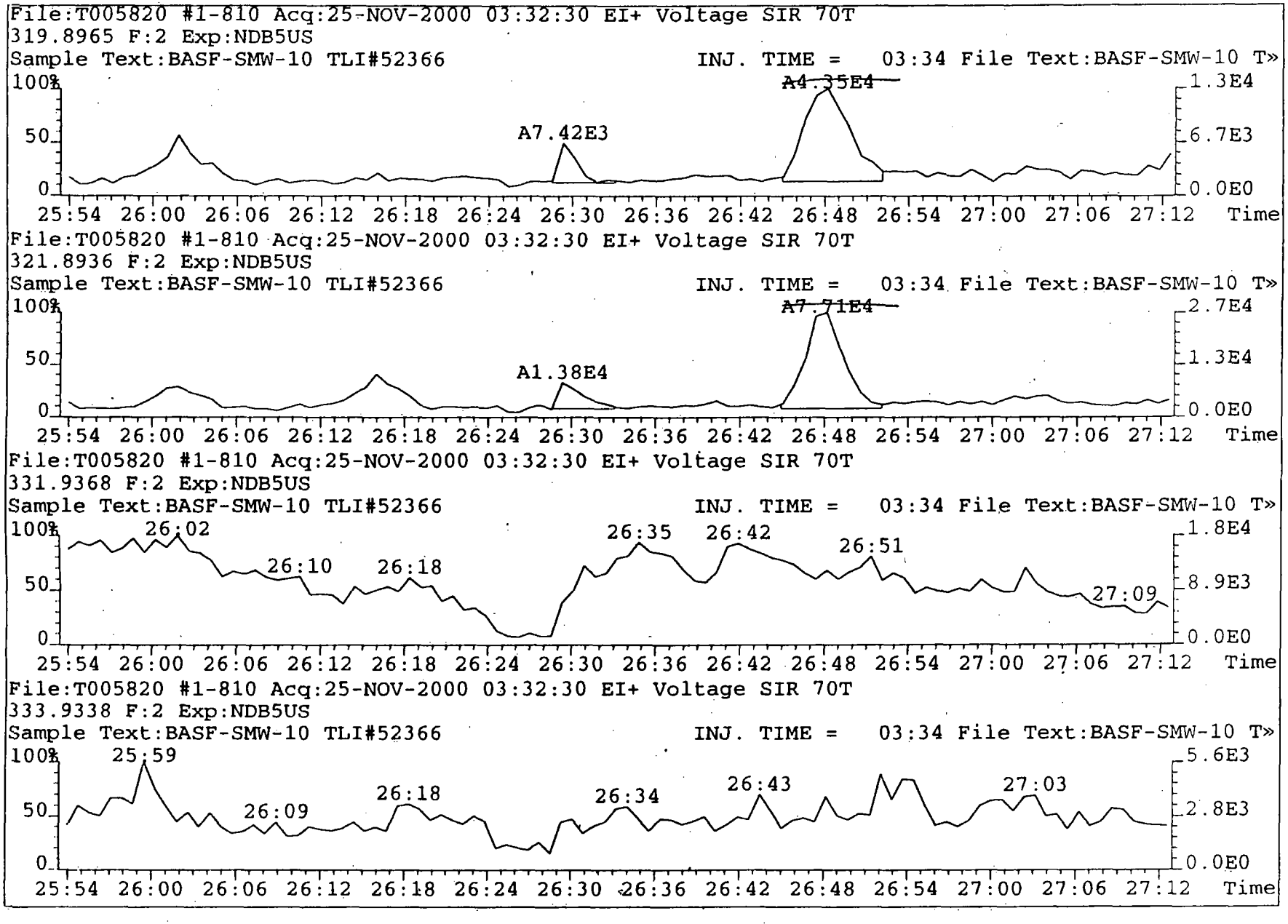
Ref. mass 416.9768 Peak top
Height .21 volts Span 200 ppm



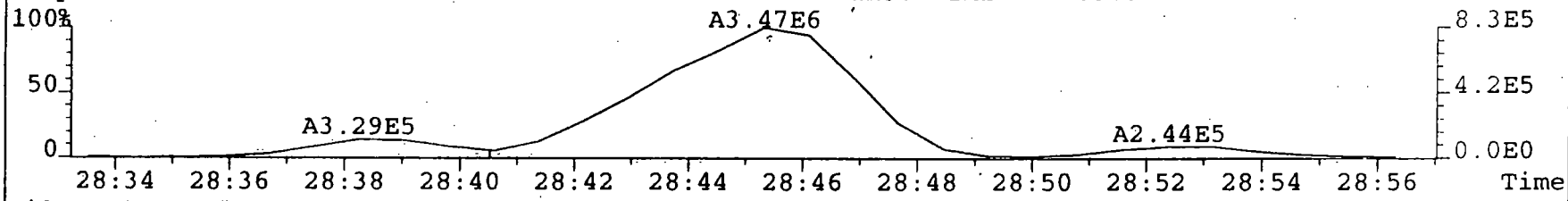
N = 0.386 H2 11/27/00


File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
303.9016 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
A3.02E6
1.5E6
7.6E5
0.0E0
25:00
26:00
27:00
Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
305.8987 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
A3.51E6
1.8E6
8.9E5
0.0E0
25:00
26:00
27:00
Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
315.9419 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
25:23
25:12
25:38
25:51
26:02
26:19
26:37
26:48
27:10
27:27
27:48
6.1E4
3.1E4
0.0E0
25:00
26:00
27:00
Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
317.9389 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
25:23
25:13
25:41
25:59
26:19
26:44
27:03
27:15
27:37
27:50
1.0E5
5.2E4
0.0E0
25:00
26:00
27:00
Time

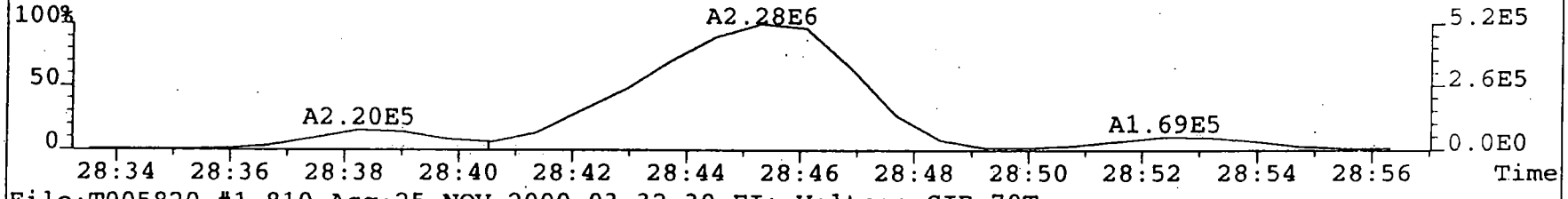

File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
A1.79E5
A7.78E4
2.1E5
1.0E5
0.0E0
24:00
25:00
26:00
27:00
Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
A1.12E6
A1.62E5
2.7E5
1.4E5
0.0E0
24:00
25:00
26:00
27:00
Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
331.9368 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
25:17
1.4E6
7.2E5
0.0E0
24:00
25:00
26:00
27:00
Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
333.9338 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
25:17
1.7E6
8.6E5
0.0E0
24:00
25:00
26:00
27:00
Time


File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
319.8965 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
A7.42E3
A4.35E4
1.3E4
6.7E3
0.0E0
25:54 26:00 26:06 26:12 26:18 26:24 26:30 26:36 26:42 26:48 26:54 27:00 27:06 27:12 Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
321.8936 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
A1.38E4
A7.71E4
2.7E4
1.3E4
0.0E0
25:54 26:00 26:06 26:12 26:18 26:24 26:30 26:36 26:42 26:48 26:54 27:00 27:06 27:12 Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
331.9368 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
26:02
26:10
26:18
26:35
26:42
26:51
27:09
1.8E4
8.9E3
0.0E0
25:54 26:00 26:06 26:12 26:18 26:24 26:30 26:36 26:42 26:48 26:54 27:00 27:06 27:12 Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
333.9338 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
25:59
26:09
26:18
26:34
26:43
27:03
5.6E3
2.8E3
0.0E0
25:54 26:00 26:06 26:12 26:18 26:24 26:30 26:36 26:42 26:48 26:54 27:00 27:06 27:12 Time

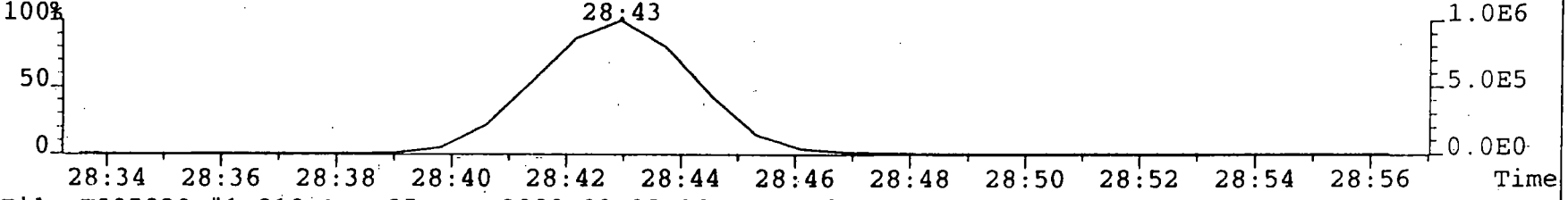
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
339.8597 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34 File Text:BASF-SMW-10 T»



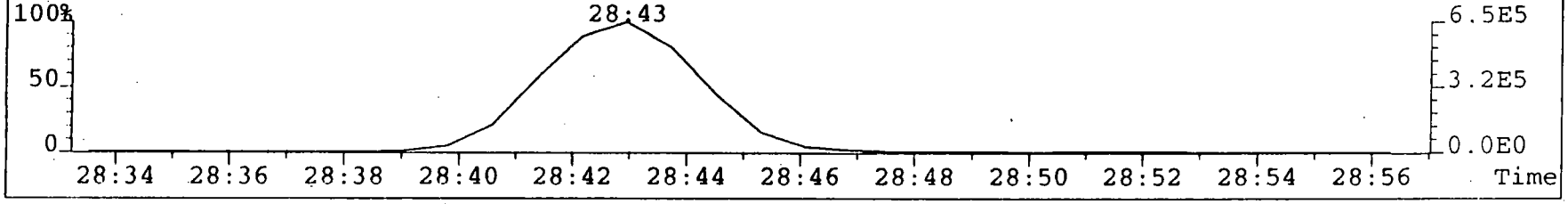
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
341.8567 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34 File Text:BASF-SMW-10 T»

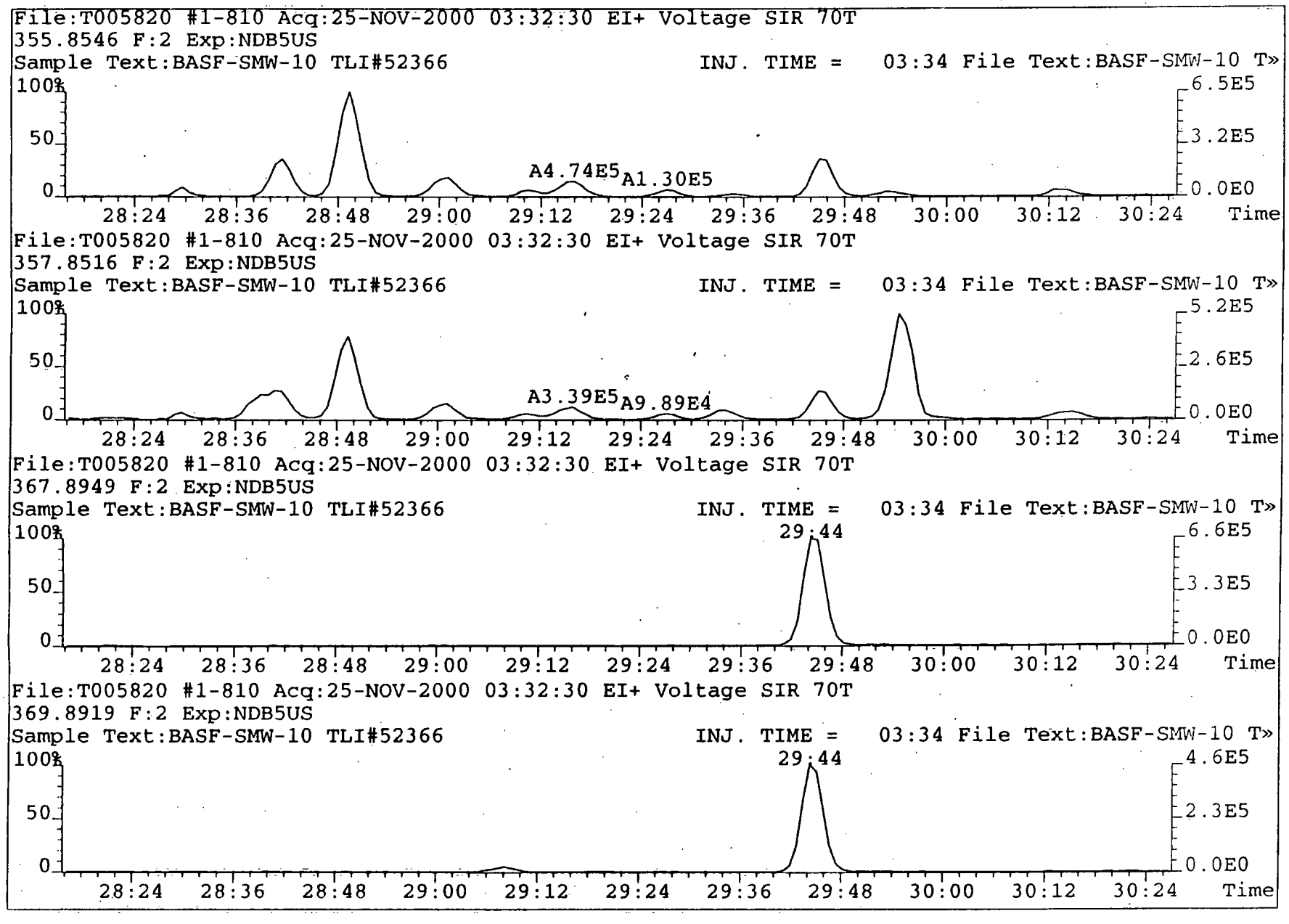


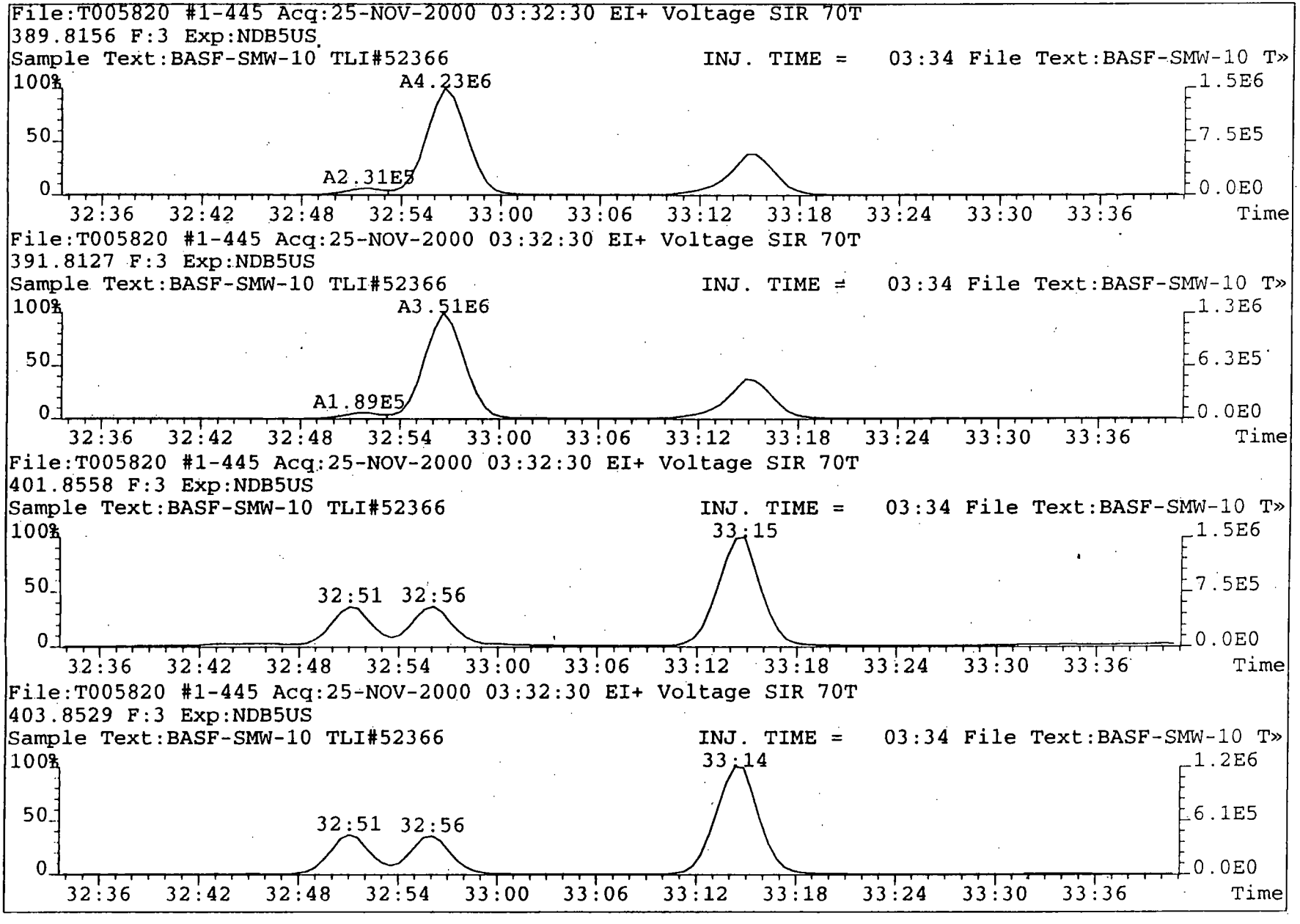
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
351.9000 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34 File Text:BASF-SMW-10 T»

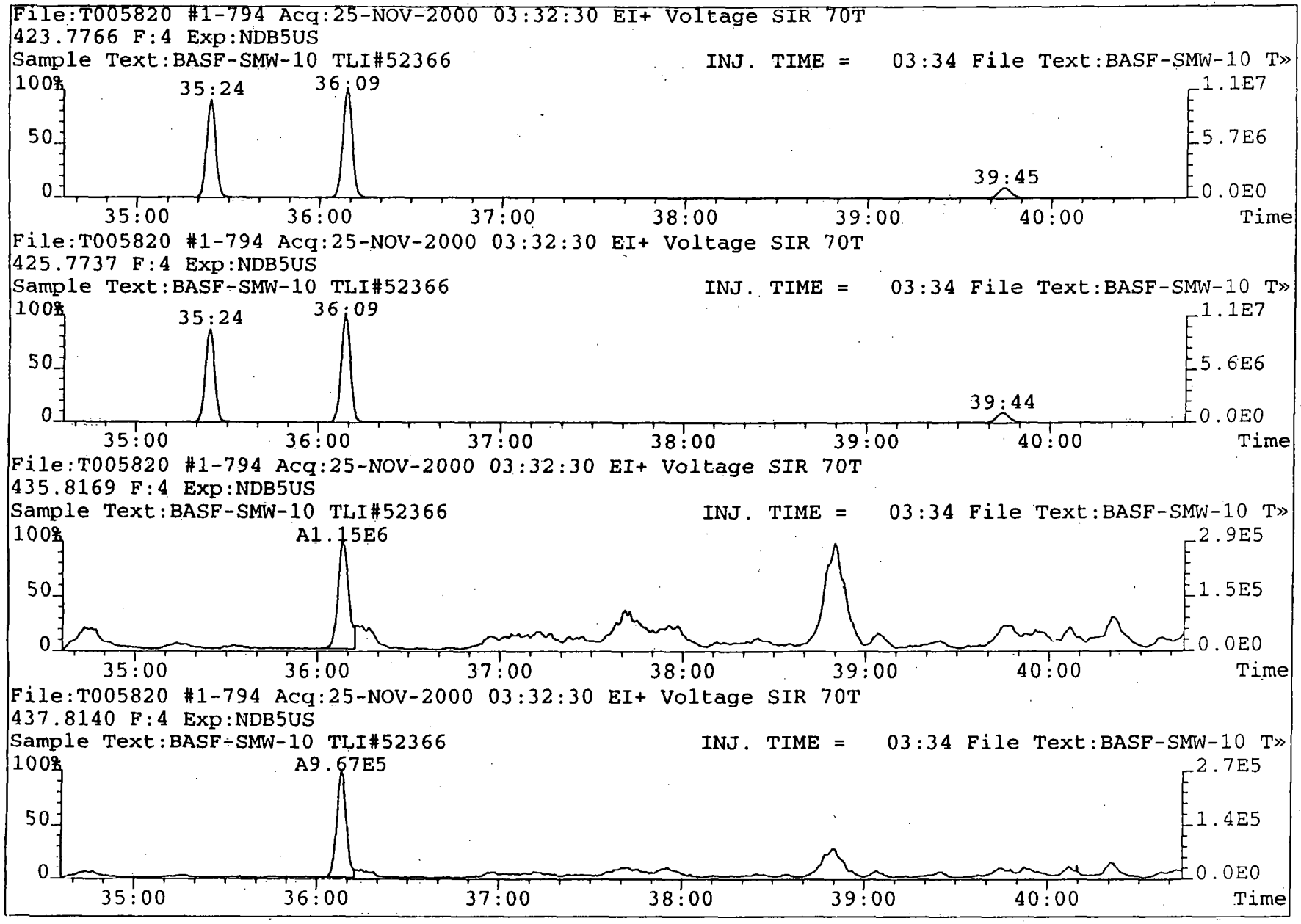


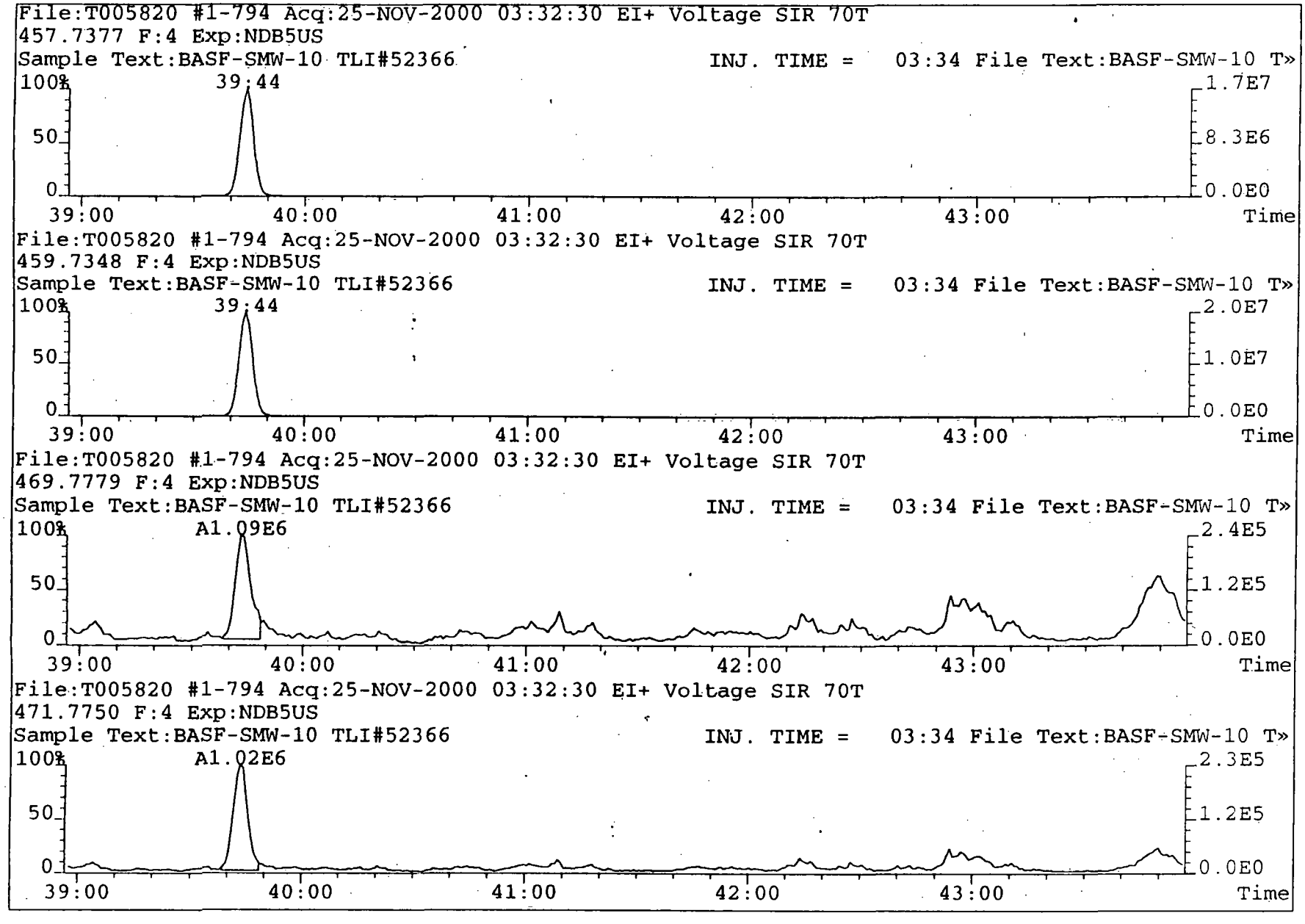
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
353.8970 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366 INJ. TIME = 03:34 File Text:BASF-SMW-10 T»

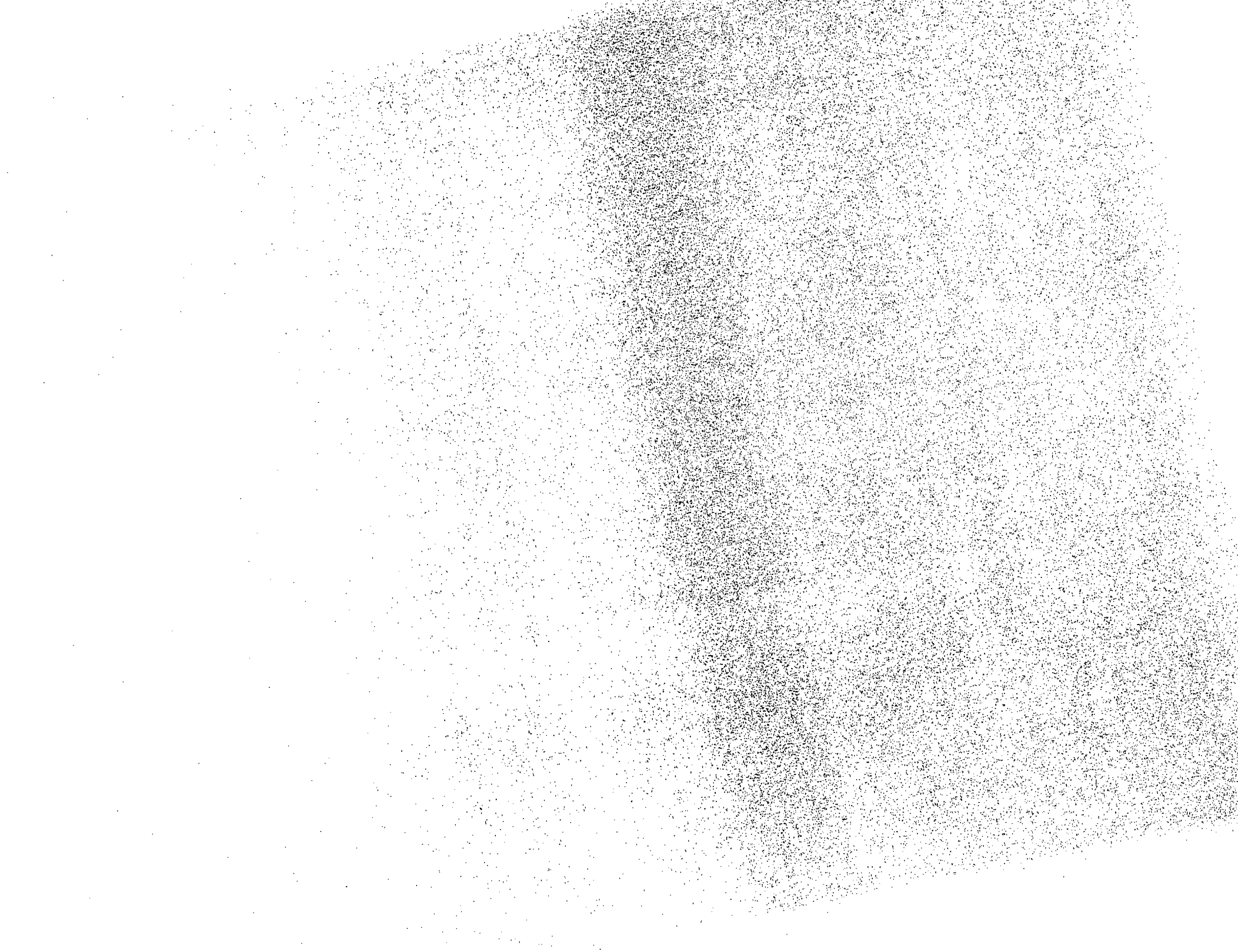


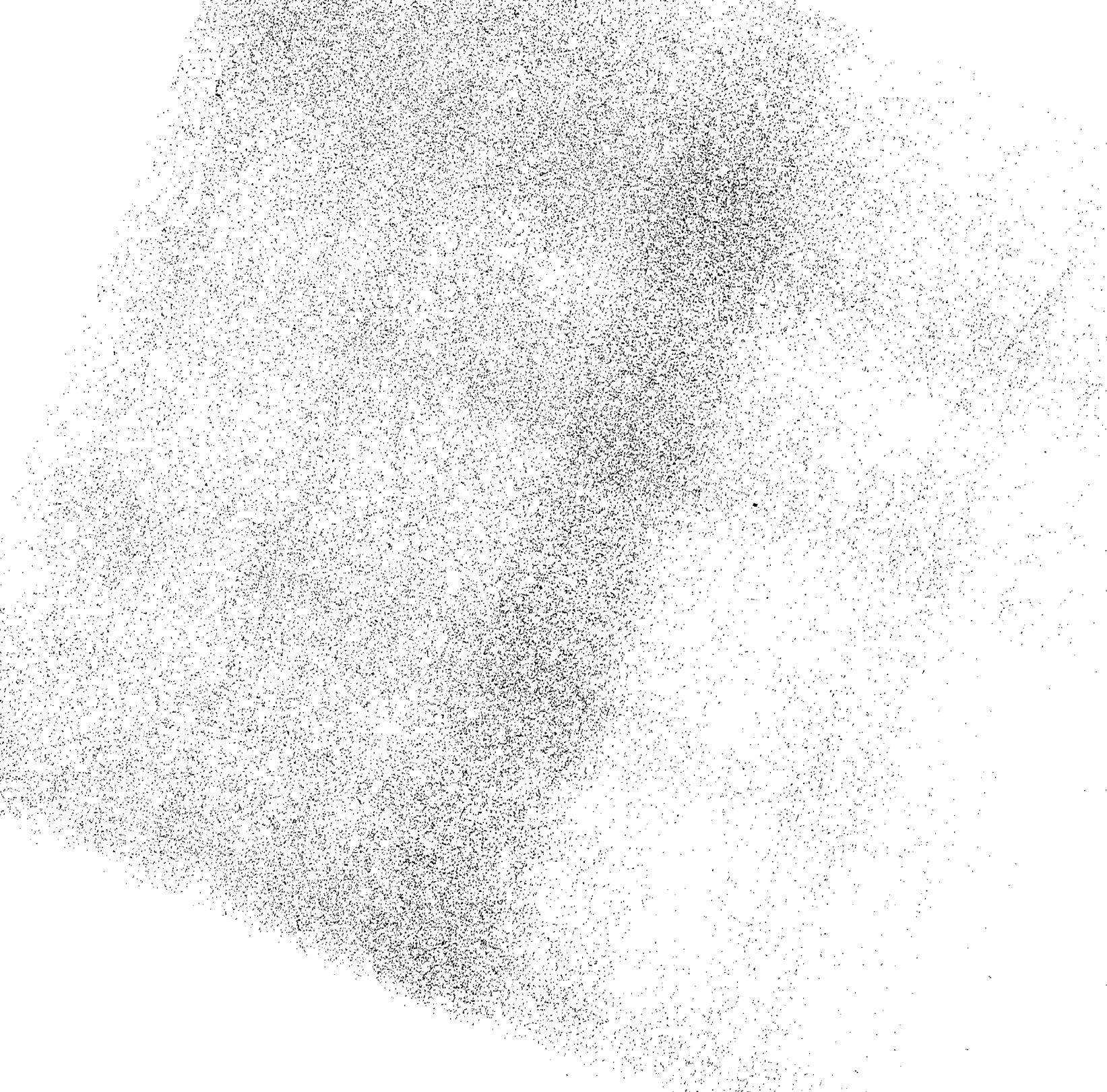

File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
355.8546 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
A4.74E5
A1.30E5
6.5E5
3.2E5
0.0E0
28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
357.8516 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
A3.39E5
A9.89E4
5.2E5
2.6E5
0.0E0
28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
367.8949 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
29:44
6.6E5
3.3E5
0.0E0
28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 Time
File:T005820 #1-810 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
369.8919 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
50
0
29:44
4.6E5
2.3E5
0.0E0
28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 Time


File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
389.8156 F:3 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
A4.23E6
A2.31E5
1.5E6
7.5E5
0.0E0
Time
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
391.8127 F:3 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
A3.51E6
A1.89E5
1.3E6
6.3E5
0.0E0
Time
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
401.8558 F:3 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
33:15
32:51 32:56
1.5E6
7.5E5
0.0E0
Time
File:T005820 #1-445 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
403.8529 F:3 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
33:14
32:51 32:56
1.2E6
6.1E5
0.0E0
Time
100%
50
0
32:36 32:42 32:48 32:54 33:00 33:06 33:12 33:18 33:24 33:30 33:36


File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
423.7766 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
35:24
36:09
39:45
1.1E7
5.7E6
0.0E0
Time
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
425.7737 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
35:24
36:09
39:44
1.1E7
5.6E6
0.0E0
Time
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
435.8169 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
A1.15E6
2.9E5
1.5E5
0.0E0
Time
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
437.8140 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
A9.67E5
2.7E5
1.4E5
0.0E0
Time
100%
50
0
35:00
36:00
37:00
38:00
39:00
40:00


File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
457.7377 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
39:44
1.7E7
8.3E6
0.0E0
50
0
39:00
40:00
41:00
42:00
43:00
Time
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
459.7348 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
39:44
2.0E7
1.0E7
0.0E0
50
0
39:00
40:00
41:00
42:00
43:00
Time
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
469.7779 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
A1.09E6
2.4E5
1.2E5
0.0E0
50
0
39:00
40:00
41:00
42:00
43:00
Time
File:T005820 #1-794 Acq:25-NOV-2000 03:32:30 EI+ Voltage SIR 70T
471.7750 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 TLI#52366
INJ. TIME = 03:34 File Text:BASF-SMW-10 T»
100%
A1.02E6
2.3E5
1.2E5
0.0E0
50
0
39:00
40:00
41:00
42:00
43:00
Time





TriMatrix, Inc.

TLI Project: **52366** Method 8290 TCDD/TCDF Analysis (DB-225)
Client Sample: **BASF-SMW-10** Analysis File: **P004342**

Client Project:	BASF-Malcolm Pirnie			ICal:	PF2O230
Sample Matrix:	WATER	Date Received:	11/17/2000	Spike File:	SPC2NF2S
TLI ID:	274-99-3A	Date Extracted:	11/21/2000	1st CCal:	P004340
		Date Analyzed:	11/29/2000	End CCal:	P004350
Sample Size:	1.080 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	T005817	% Lipid:	n/a
GC Column:	DB-225	Analyst:	MVL	% Solids:	n/a

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDF	1490			0.74	23:43	___

Internal Standard	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	573	30.9	40%-130%	0.78	23:42	V___

Recovery Standard	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.79	22:31	___

Data Reviewer: _____ 11/30/2000

C2NF_PSR v2.03, LARS 6.25.00

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 10:15 11/30/2000

Initial ....Date...

Data Review By: CMCS 1/30/01

Calculated Noise Height: 0.11

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

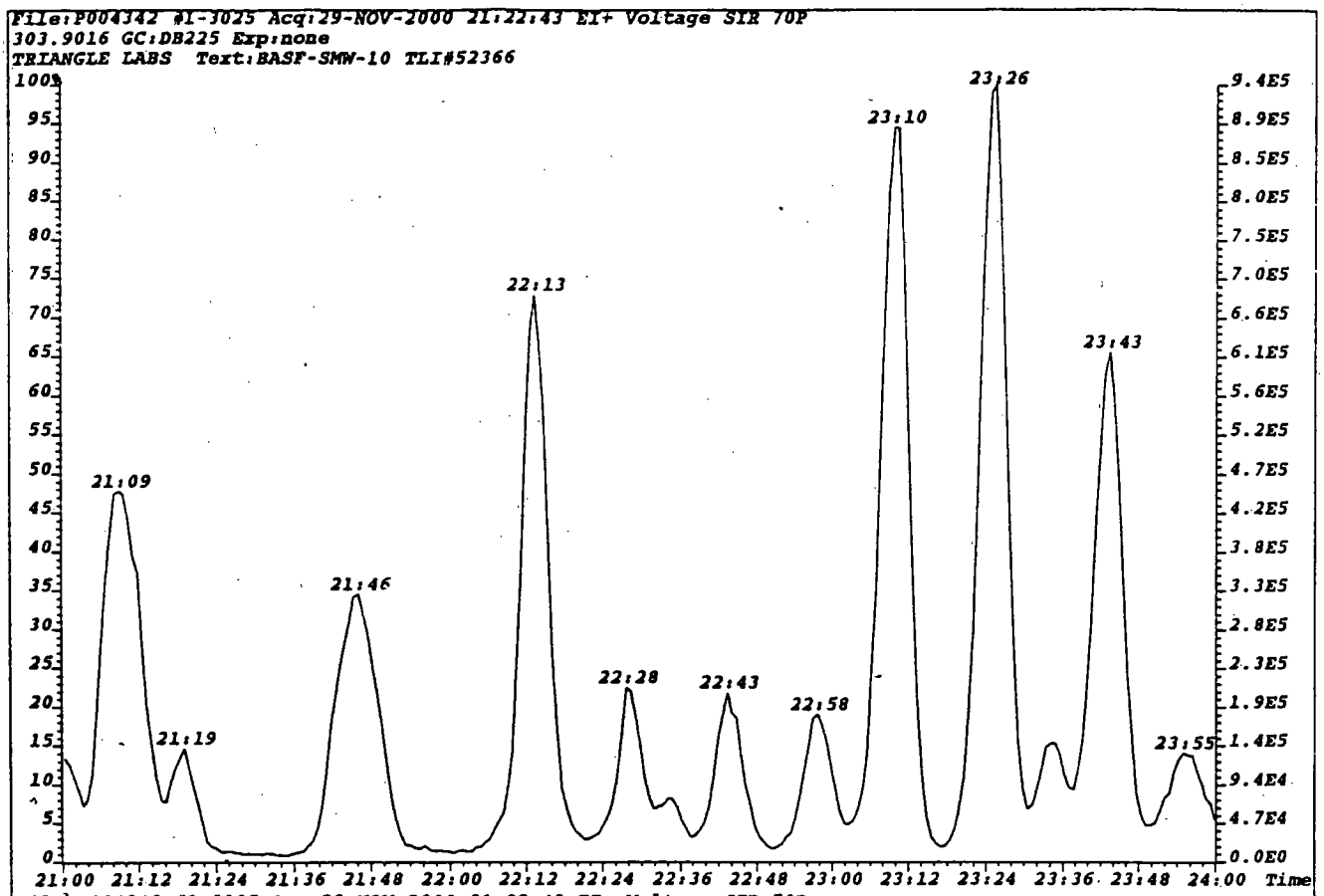
Page No. 1 Listing of P004342B.dbf
11/30/2000 Matched GC Peaks / Ratio / Ret. Time

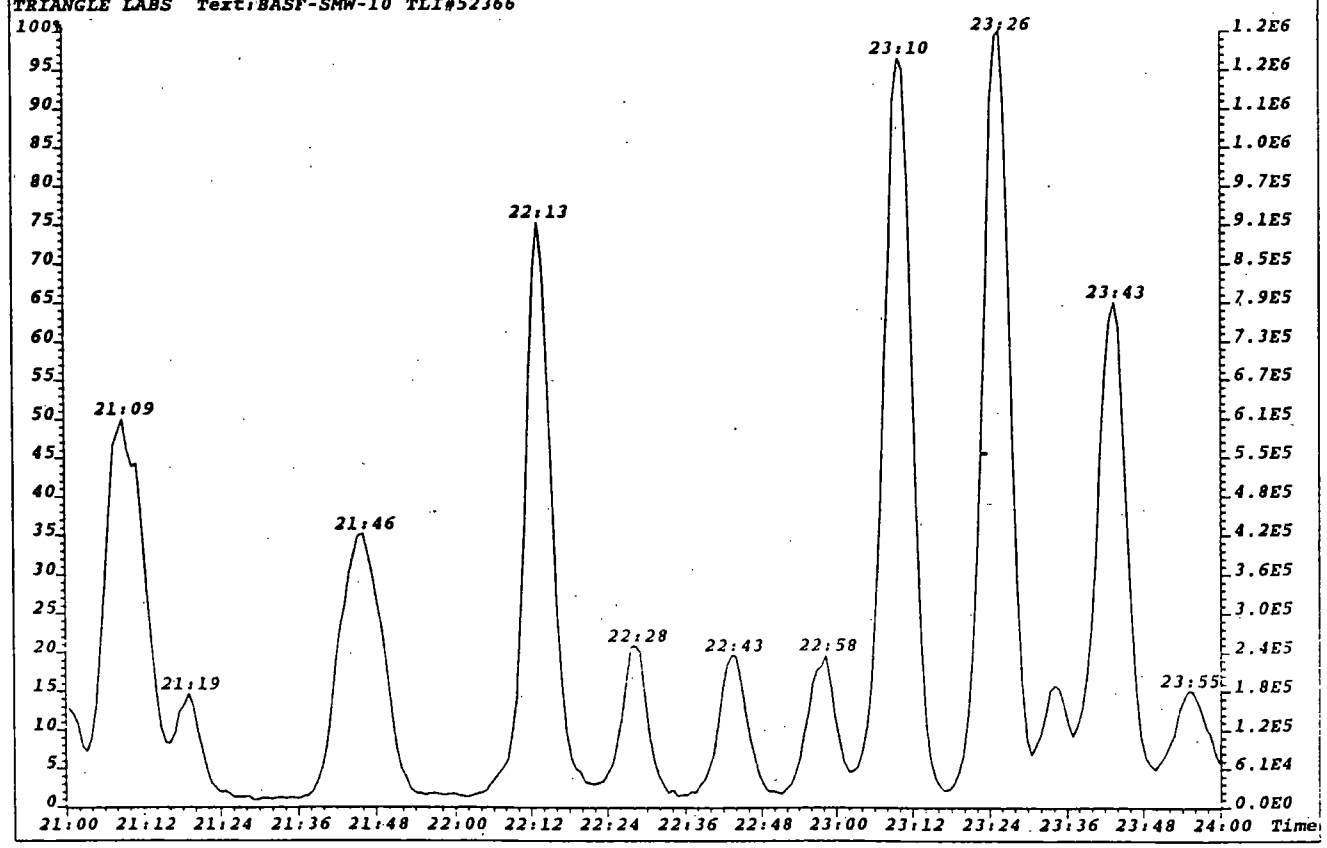
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
TCDF						0.65-0.89				0.703-1.170			
304-306		DC	NL			Height	0.29	0.14	0.15				
				18:57	RO	3.87	13.20	28.90	7.46	0.990			
				19:07		0.74	51.84	22.06	29.78	0.998			
				19:17	RO	1.90	21.15	22.73	11.95	1.007			
				19:25	RO	1.65	18.34	17.09	10.36	1.014			
				19:50		0.65	59.74	23.49	36.25	1.036			
				20:07		0.76	156.02	67.39	88.63	1.050			
				20:15		0.69	53.36	21.87	31.49	1.057			
				20:21		0.76	251.71	108.47	143.24	1.063			
				20:48		0.80	68.27	30.44	37.83	1.086			
				20:54		0.78	351.72	153.84	197.88	1.091			
				21:00		0.73	93.51	39.52	53.99	1.097			
		DC	WH	21:09		0.76	743.45			1.104			
		DC	WH	21:19		0.70	133.74			1.113			
		DC	WH	21:46		0.76	552.82			1.137			
		DC	WH	22:13		0.77	790.94			1.160			
		DC	WH	22:28		0.83	206.64			1.173			
		DC	WH	22:43		0.85	218.41			1.186			
		DC	WH	22:58		0.77	207.84			1.199			
		DC	WH	23:10		0.75	1,089.83			1.210			
		DC	WH	23:26		0.76	1,111.09			1.224			
		DC	WH	23:35		0.84	154.93			1.232			
	KN			23:43		0.74	784.75	334.94	449.81	1.238	2378-TCDF		AN
		DC	WH	23:55		0.77	222.02			1.249			
		DC	WH	24:12		0.80	201.38			1.264			
		DC	WH	24:25		0.76	699.79			1.275			
		DC	WH	24:37	RO	0.51	5.42			1.285			
		DC	WH	24:45	RO	0.24	0.92			1.292			
		DC	WH	25:02		0.78	369.07			1.307			
		DC	WH	25:11		0.69	182.23			1.315			
		DC	WH	25:41		0.70	3.29			1.341			
		DC	WH	25:49	RO	1.53	0.27			1.348			
		DC	WH	26:08		0.76	1,708.43			1.365			
		DC	WH	26:24	RO	0.07	0.23			1.379			
304-306			12	Peaks			1,923.61						
13C12-TCDF						0.65-0.89				0.953-1.042			
316-318		DC	NL			Height	0.21	0.08	0.13				
				18:39		0.72	131.18	54.97	76.21	0.974			
	N			19:09		0.74	29,247.70	12,421.00	16,826.70	1.000			
				19:52	RO	0.30	28.25	12.29	40.97	1.037			
		DC	WH	20:19	RO	0.63	106.29			1.061			
		DC	WH	21:18	RO	0.43	41.65			1.112			

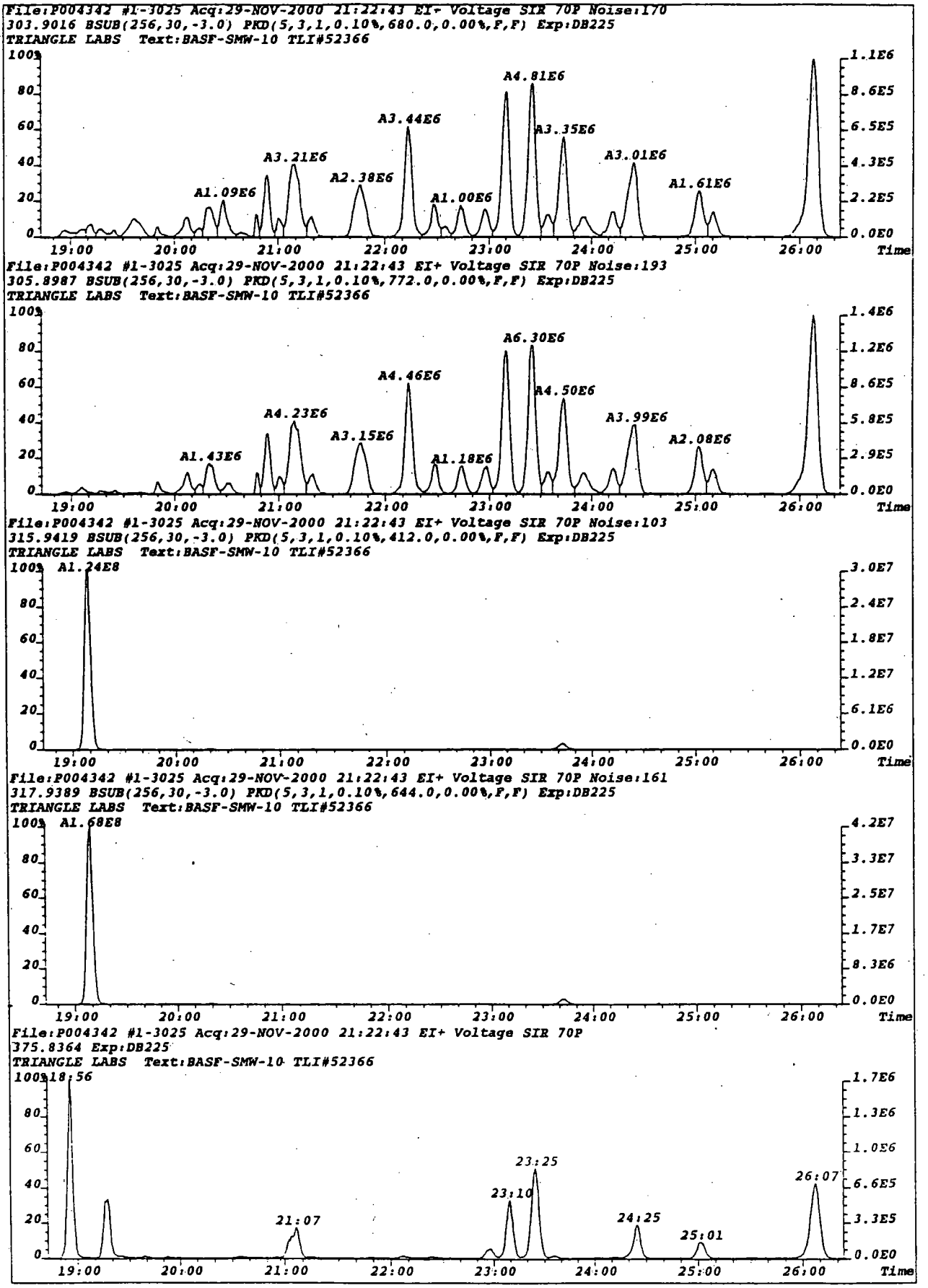
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
		DC	WH	22:52	RO	0.41	32.73			1.194			
	KN			23:42		0.78	1,201.22	526.71	674.51	1.238	13C12-2378-TCDF	IS0	
						Height	218.27	95.41	122.86				
316-318			4 Peaks				30,608.35						
---------- Above: TCDF / TCDD Follows ----------													
13C12-TCDD						0.65-0.89				0.910-1.090			
332-334		DC	NL			Height	0.44	0.35	0.09				
		DC	WL	19:52	RO	3.59	7.86			0.882			
	N			22:18		0.78	938.44	412.67	525.77	0.990	13C12-2378-TCDD	IS1	
						Height	168.89	74.24	94.65				
	N			22:31		0.79	2,129.91	937.64	1,192.27	1.000	13C12-1234-TCDD	RS1	
				24:01	RO	0.90	6.62	3.38	3.74	1.067			
		DC	WH	24:44		0.71	24.87			1.098			
		DC	WH	24:49	RO	0.58	5.38			1.102			
		DC	WH	25:01	RO	0.93	25.31			1.111			
		DC	WH	25:19		0.87	101.08			1.124			
332-334			3 Peaks				3,074.97						

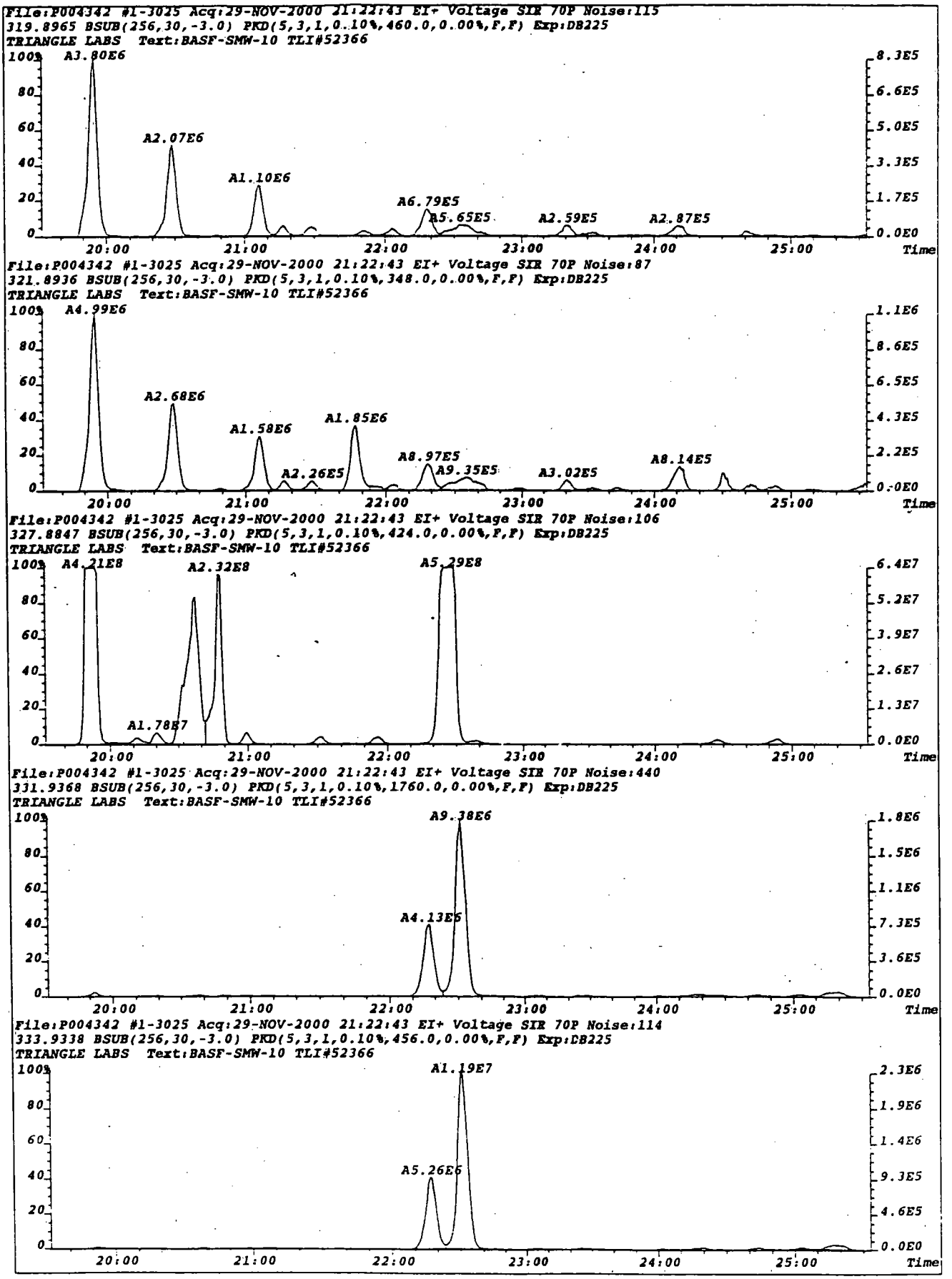
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

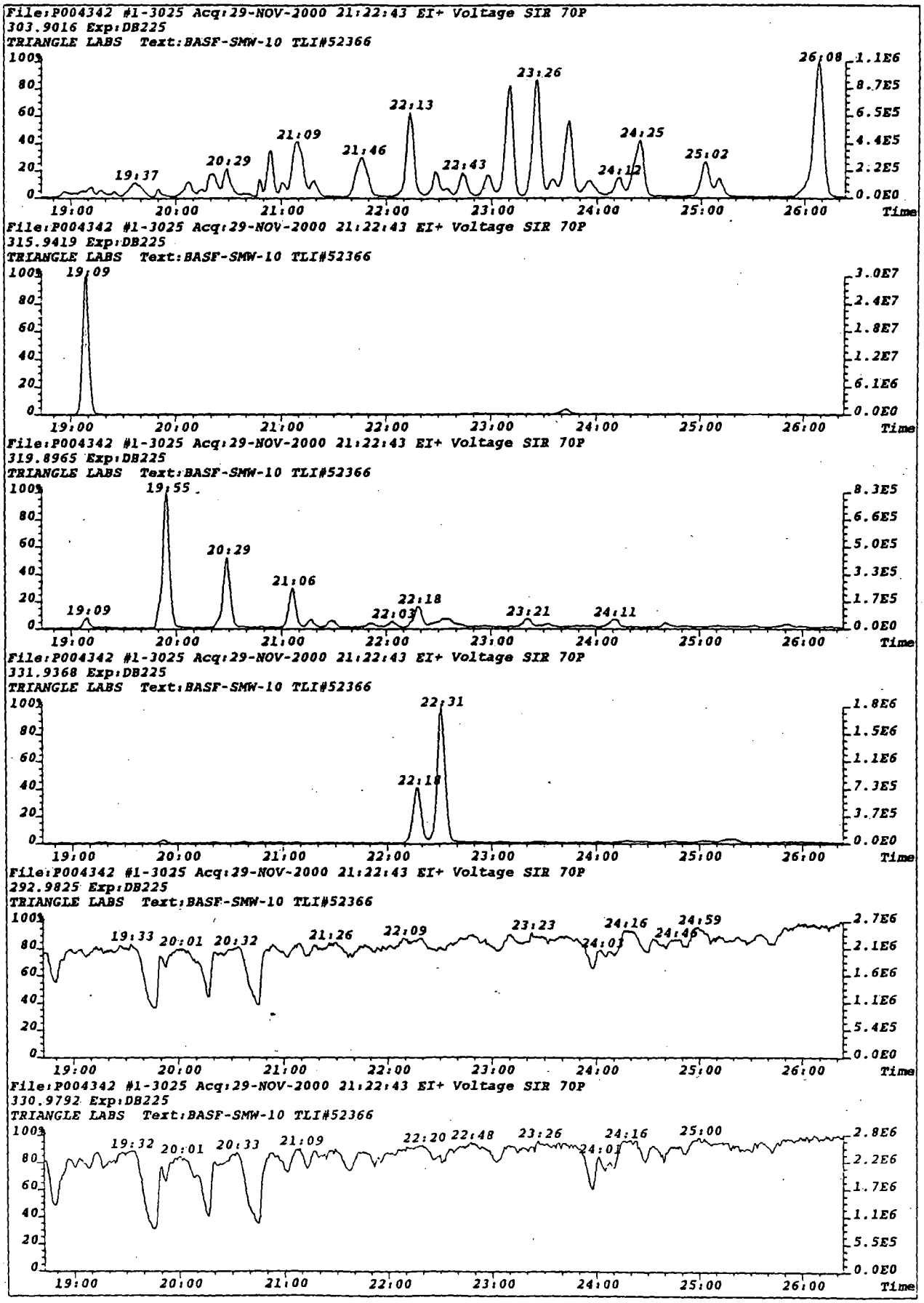
*** End of Report ***

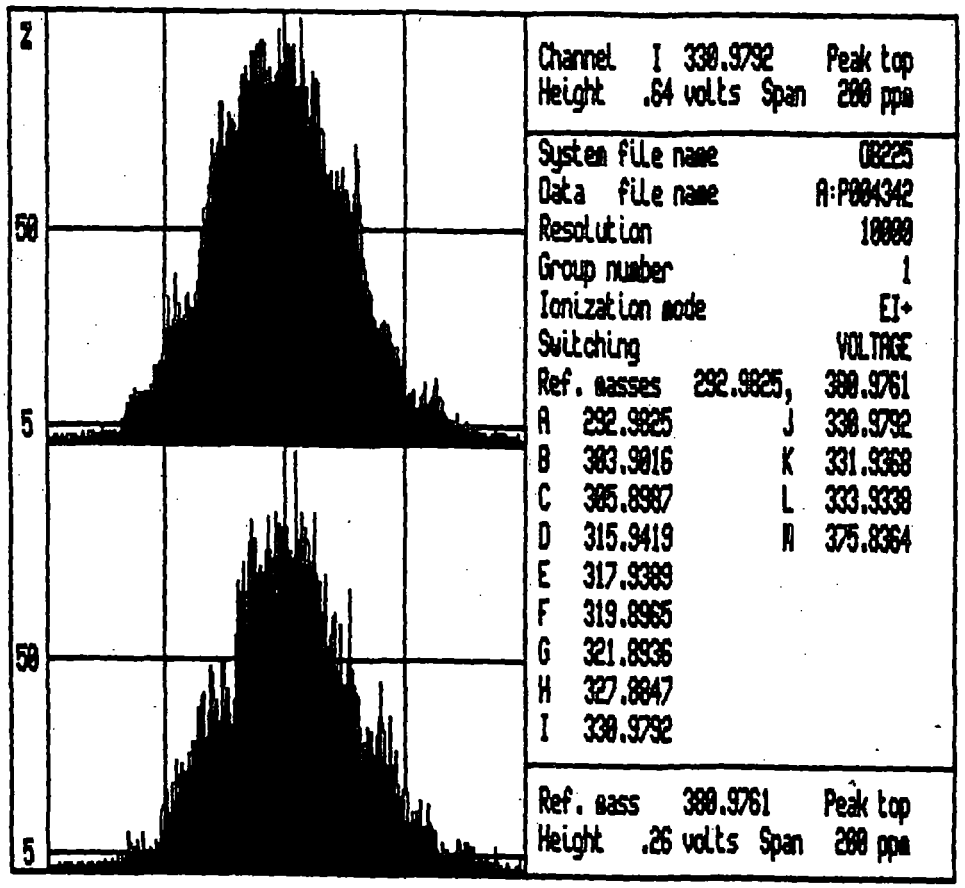

File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P
303.9016 GC:DB225 Exp:none
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
21:09
21:19
21:46
22:13
22:28
22:43
22:58
23:10
23:26
23:43
23:55
Time

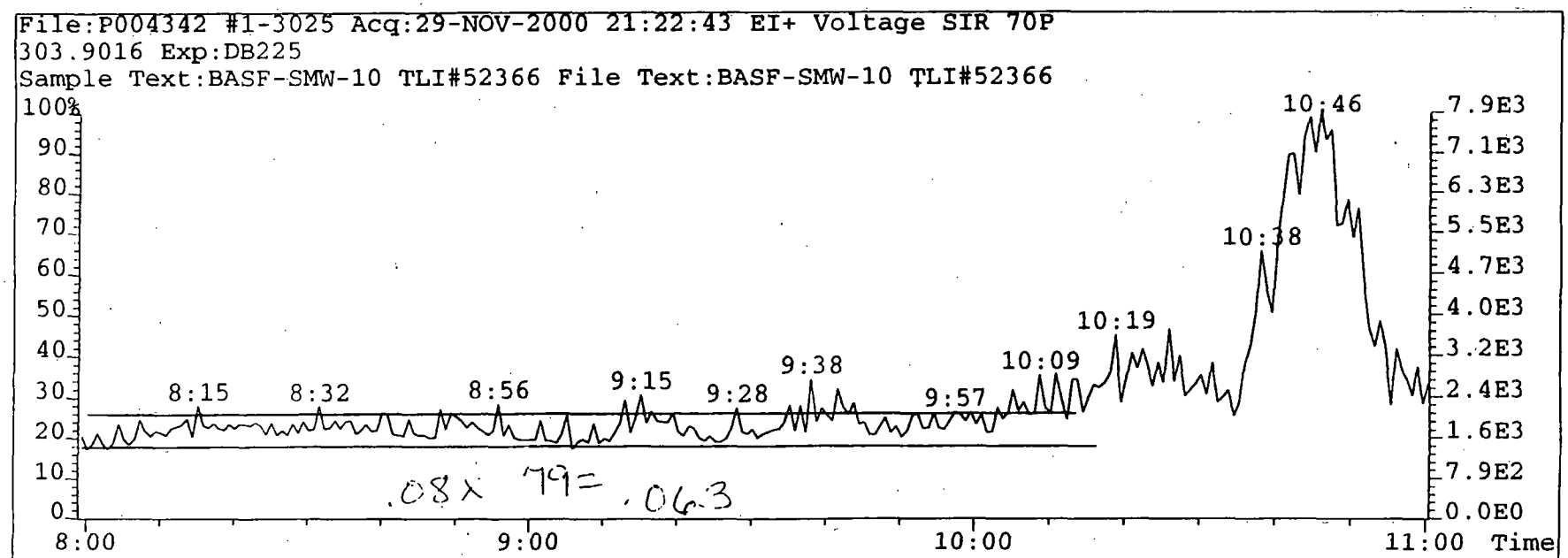

File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P
305.8987 GC:DB225 Exp:none
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
21:09
21:19
21:46
22:13
22:28
22:43
22:58
23:10
23:26
23:43
23:55
Time

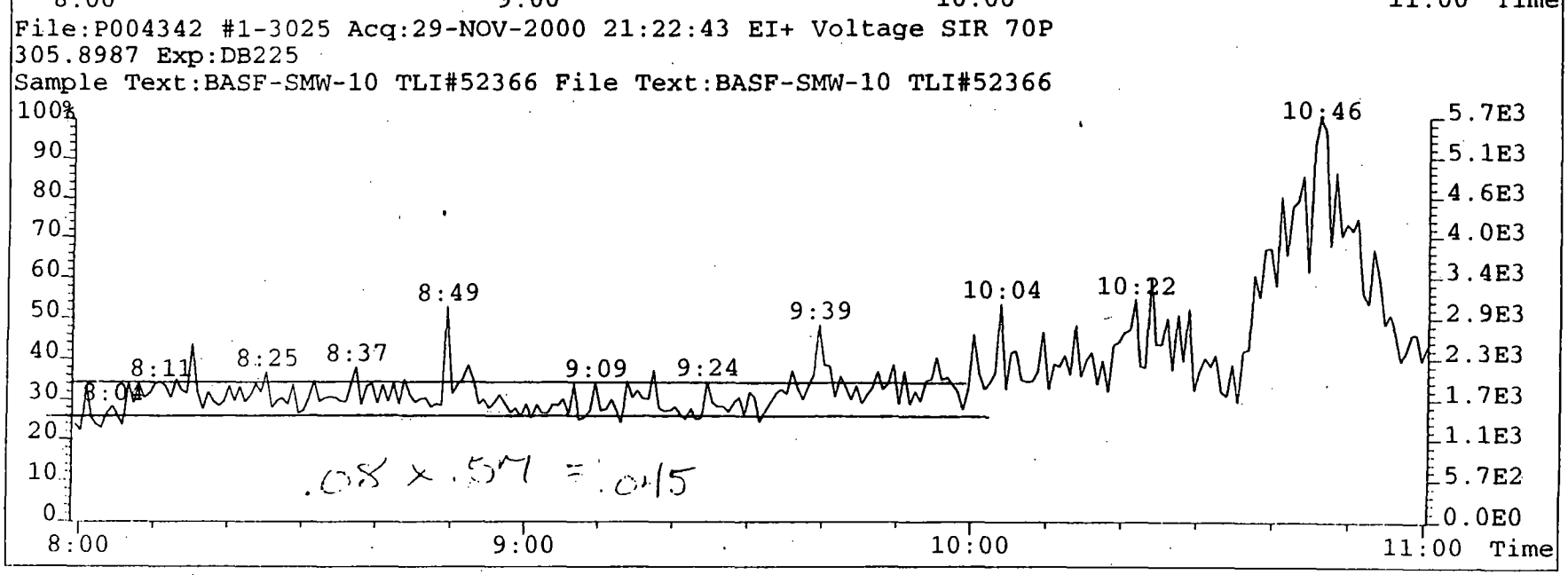

File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P Noise:170
303.9016 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,680.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
A1.09E6
A3.21E6
A2.38E6
A3.44E6
A1.00E6
A4.81E6
A3.35E6
A3.01E6
A1.61E6
Time
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P Noise:193
305.8987 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,772.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
A1.43E6
A4.23E6
A3.15E6
A4.46E6
A1.18E6
A6.30E6
A4.50E6
A3.99E6
A2.08E6
Time
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P Noise:103
315.9419 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,412.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
A1.24E8
Time
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P Noise:161
317.9389 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,644.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
A1.68E8
Time
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P
375.8364 Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
18:56
21:07
23:10
23:25
24:25
25:01
26:07
Time


File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P Noise:115
319.8965 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,460.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
A3.80E6
A2.07E6
A1.10E6
A6.79E5
A5.65E5
A2.59E5
A2.87E5
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P Noise:87
321.8936 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,348.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
A4.99E6
A2.68E6
A1.58E6
A1.85E6
A2.26E5
A8.97E5
A9.35E5
A3.02E5
A8.14E5
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P Noise:106
327.8847 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,424.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
A4.21E8
A2.32E8
A5.29E8
A1.78E7
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P Noise:440
331.9368 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,1760.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
A9.38E6
A4.13E5
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P Noise:114
333.9338 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,456.0,0.00%,F,F) Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
A1.19E7
A5.26E6
Time

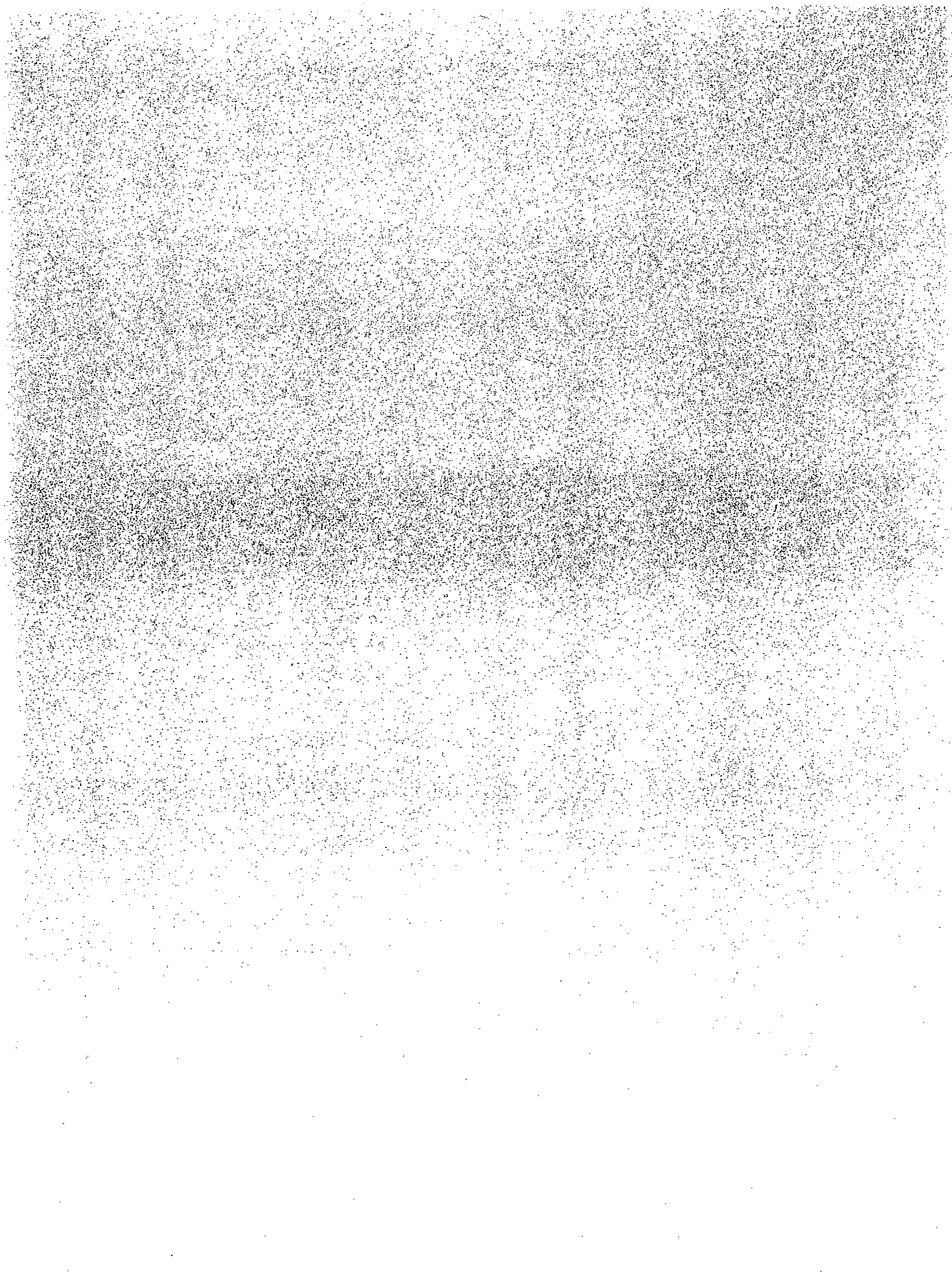

File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P
303.9016 Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
19:37
20:29
21:09
21:46
22:13
22:43
23:26
24:12
24:25
25:02
26:08
Time
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P
315.9419 Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
19:09
Time
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P
319.8965 Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
19:09
19:55
20:29
21:06
22:03
22:18
23:21
24:11
Time
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P
331.9368 Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
22:18
22:31
Time
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P
292.9825 Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
19:33
20:01
20:32
21:26
22:09
23:23
24:01
24:16
24:46
24:59
Time
File:P004342 #1-3025 Acq:29-NOV-2000 21:22:43 EI+ Voltage SIR 70P
330.9792 Exp:DB225
TRIANGLE LABS Text:BASF-SMW-10 TLI#52366
19:32
20:01
20:33
21:09
22:20
22:48
23:26
24:01
24:16
25:00
Time


2
50
5
50
5
Channel I 330.9792 Peak top
Height .64 volts Span 200 ppm
System file name 08225
Data file name A:P004342
Resolution 10000
Group number 1
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 380.9761
A 292.9825 J 330.9792
B 303.9816 K 331.9368
C 305.8987 L 333.9338
D 315.9419 M 375.8364
E 317.9389
F 319.8965
G 321.8936
H 327.8847
I 330.9792
Ref. mass 380.9761 Peak top
Height .26 volts Span 200 ppm





NH = .063 + .045 = .108 [illegible] 11/30/00



TriMatrix, Inc.

TLI Project: **52366** Method 8290 PCDD/PCDF Analysis (b)
Client Sample: **BASF-SMW-10 (MS)** Analysis File: **T005821**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/2000**	Spike File:	**SPMIT32S**
TLI ID:	**274-99-3BMS**	Date Extracted:	**11/21/2000**	ICal:	**TF57140**
		Date Analyzed:	**11/25/2000**	ConCal:	**T005815**
Sample Size:	**1.090 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005817**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**JMM**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	694			0.77	25:30	___
1,2,3,7,8-PeCDD	2290			1.59	29:46	___
1,2,3,4,7,8-HxCDD	1960			1.20	32:53	___
1,2,3,6,7,8-HxCDD	14630			1.22	32:58	___
1,2,3,7,8,9-HxCDD	5310			1.23	33:16	___
1,2,3,4,6,7,8-HpCDD	177190			1.03	36:10	E__
1,2,3,4,6,7,8,9-OCDD	367280			0.82	39:46	E__
2,3,7,8-TCDF	2180			0.83	24:46	___
1,2,3,7,8-PeCDF	4350			1.52	28:45	___
2,3,4,7,8-PeCDF	2380			1.51	29:26	___
1,2,3,4,7,8-HxCDF	3590			1.28	32:11	___
1,2,3,6,7,8-HxCDF	2410			1.28	32:17	___
2,3,4,6,7,8-HxCDF	2330			1.28	32:46	___
1,2,3,7,8,9-HxCDF	2240			1.31	33:31	___
1,2,3,4,6,7,8-HpCDF	3950			1.07	35:08	___
1,2,3,4,7,8,9-HpCDF	1930			1.06	36:40	___
1,2,3,4,6,7,8,9-OCDF	4880			0.92	39:56	___

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	709	38.6	40%-130%	0.76	24:45	V___
$^{13}C_{12}$-2,3,7,8-TCDD	618	33.7	40%-130%	0.81	25:29	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDF	526	28.7	40%-130%	1.52	28:44	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDD	580	31.6	40%-130%	1.51	29:46	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	565	30.8	40%-130%	0.51	32:17	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	631	34.4	40%-130%	1.36	32:57	V___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	478	26.0	25%-130%	0.43	35:08	___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	550	30.0	25%-130%	1.19	36:09	___
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	566	15.4	25%-130%	1.10	39:45	VRO___

MIT3_PSR v1.00, LARS 6 25/01

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 18:37 11/29/2000

TLI Project: **52366** Method 8290 PCDD/PCDF Analysis (b)
Client Sample: **BASF-SMW-10 (MS)** Analysis File: **T005821**

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,4,7,8-PeCDF	477	26.0	40%-130%	1.52	29:25	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	575	31.3	40%-130%	0.51	32:11	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	610	33.2	40%-130%	1.34	32:52	V___
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	430	23.4	25%-130%	0.43	36:39	V___

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	228	124	40%-130%	25:30	___

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	678	37.0	40%-130%	0.50	33:31	V___
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	558	30.4	40%-130%	0.51	32:45	V___

Recovery Standards	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.82	25:17	___
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.21	33:15	___

Data Reviewer: _____ 11/29/2000

MIT3_PSR v1.00, LARS 0.25.001

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

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Initial ....Date...

Data Review By: JCA 11-29-00

Channel specific noise levels computed from 'NL' heights.

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005821B.dbf
11/29/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
TCDF				0.65-0.89					0.860-1.077				
304-306	DC	NL		Height			0.70	0.40	0.30				
				21:59		0.84	86.08	39.25	46.83	0.888			
				22:21		0.88	64.16	30.04	34.12	0.903			
				22:46		0.87	251.76	117.27	134.49	0.920			
				23:03		0.88	255.69	119.58	136.11	0.931			
				23:25		0.85	272.28	125.00	147.28	0.946			
				23:43		0.85	178.23	81.78	96.45	0.958			
				24:09		0.85	357.53	164.51	193.02	0.976			
				24:20		0.84	738.18	337.91	400.27	0.983	1278-TCDF	AN	
				24:34		0.86	110.29	50.95	59.34	0.993			
				24:46		0.83	863.12	391.78	471.34	1.001	2378-TCDF	AN	
				25:12		0.84	162.28	74.31	87.97	1.018			
				25:24		0.86	116.01	53.64	62.37	1.026			
				25:34		0.84	110.04	50.26	59.78	1.033			
				25:50		0.83	570.97	258.46	312.51	1.044			
				26:12		0.85	668.60	307.84	360.76	1.059			
				26:31		0.87	48.02	22.31	25.71	1.071			
	DC	WH		26:47		0.87	272.55			1.082			
304-306			16	Peaks			4,353.24						
13C12-TCDF				0.65-0.89					0.959-1.041				
316-318	DC	NL		Height			1.86	0.76	1.10				
	DC	WL		21:09		0.71	82.59			0.855			
	DC	WL		22:36	RO	0.61	43.33			0.913			
	DC	WL		22:47		0.68	11.50			0.921			
	DC	WL		23:14	RO	0.26	8.94			0.939			
	DC	WL		23:35		0.66	69.05			0.953			
	DC	SN		24:19	RO	0.56	7.26			0.982			
				24:45		0.76	709.53	305.63	403.90	1.000	13C12-2378-TCDF	ISO	
				Height			172.41	74.78	97.63				
				25:14		0.69	11.45	4.69	6.76	1.020			
				25:23	RO	0.64	58.78	25.57	40.15	1.026			
316-318			3	Peaks			779.76						

---------- Above: TCDF / TCDD Follows ----------

TCDD				0.65-0.89					0.890-1.045				
320-322	DC	NL		Height			0.63	0.25	0.38				
				22:55		0.78	1,395.85	610.84	785.01	0.899	1368-TCDD	AN	E
				23:18		0.78	504.08	221.05	283.03	0.914	1379-TCDD	AN	
				23:35	RO	0.17	38.14	16.59	95.25	0.925			
				24:18		0.79	172.14	75.71	96.43	0.954			
				24:33		0.72	27.59	11.58	16.01	0.963			

Compound/ M_Z....	QC	Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht. Peak1	Area/Ht. Peak2	Rel.RT	Compound Name..	ID..	Flags.
					24:39	RO	0.42	22.23	9.67	23.27	0.967			
					24:57		0.74	21.14	9.02	12.12	0.979			
					25:23		0.69	66.40	27.09	39.31	0.996			
					25:30		0.77	175.63	76.27	99.36	1.001	2378-TCDD	AN	
					25:38		0.74	6.12	2.61	3.51	1.006			
					25:50		0.71	34.49	14.33	20.16	1.014			
					26:02		0.66	4.95	1.97	2.98	1.022			
					26:30	RO	0.29	1.79	0.78	2.69	1.040			J
	DC		WH		26:49		0.66	10.41			1.052			
320-322			13	Peaks				2,470.55						
37Cl-TCDD										0.921-1.079				
328	DC		NL			Height		4.50	4.50					
	DC		WL		23:02			88.93			0.904			
	DC		WL		23:10			1,258.01			0.909			
	DC		WL		23:17			889.09			0.914			
					23:47			92.89	92.89		0.933			
					24:04			35,275.10	35,275.10		0.944			
					24:31			112.10	112.10		0.962			
					24:56			27.06	27.06		0.978			
					25:04			72.26	72.26		0.984			
					25:22			726.73	726.73		0.995			
					25:30			158.66	158.66		1.001	37Cl-TCDD	CLS	
					25:52			544.78	544.78		1.015			
					26:48			805.35	805.35		1.052			
328			9	Peaks				37,814.93						
13C12-TCDD						0.65-0.89				0.921-1.079				
332-334	DC		NL			Height		2.30	2.02	0.28				
					24:05	RO	1.29	14.30	10.45	8.08	0.945			
					25:17		0.82	1,432.79	644.84	787.95	0.992	13C12-1234-TCDD	RS1	
					25:29		0.81	507.77	226.76	281.01	1.000	13C12-2378-TCDD	IS1	
						Height		131.33	58.99	72.34				
	DC		SN		25:37	RO	1.78	2.60			1.005			
	DC		SN		26:51	RO	16.02	1.54			1.054			
332-334			3	Peaks				1,954.86						

---------- Above: TCDD / PeCDF Follows ----------

PeCDF						1.32-1.78				0.923-1.064				
340-342	DC		NL			Height		0.49	0.30	0.19				
					26:45		1.45	107.28	63.56	43.72	0.931			
	DC		SN		26:54	RO	9.71	1.22			0.936			
					27:27	RO	1.15	4.79	2.91	2.53	0.955			J
					27:53		1.50	362.84	217.51	145.33	0.970			
					28:07		1.54	90.24	54.77	35.47	0.979			
					28:16		1.68	13.06	8.19	4.87	0.984			
					28:23		1.54	65.33	39.59	25.74	0.988			
					28:30		1.45	10.25	6.07	4.18	0.992			J
	M				28:45		1.52	1,066.00	643.00	423.00	1.001	12378-PeCDF	AN	
					28:54		1.59	37.66	23.12	14.54	1.006			
					29:01		1.47	181.27	107.93	73.34	1.010			

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				29:26		1.51	591.48	355.77	235.71	1.024	23478-PeCDF	AN	
				29:34		1.44	133.64	78.78	54.86	1.029			
				29:47		1.39	7.18	4.17	3.01	1.037			J
				29:53		1.52	7.09	4.28	2.81	1.040			J
				30:01		1.59	13.34	8.18	5.16	1.045			
				30:08		1.48	98.34	58.64	39.70	1.049			
				30:24		1.46	16.81	9.98	6.83	1.058			
		DC	WH	30:37		1.40	3.19			1.066			
340-342			17 Peaks				2,806.60						
13C12-PeCDF						1.32-1.78				0.860-1.140			
352-354		DC	NL			Height	0.49	0.26	0.23				
				26:55	RO	0.91	2.20	1.34	1.47	0.937			
				28:44		1.52	492.67	297.20	195.47	1.000	13C12-PeCDF 123	IS2	
						Height	154.44	93.99	60.45				
				29:00	RO	0.76	2.65	1.61	2.13	1.009			
				29:25		1.52	441.79	266.77	175.02	1.024	13C12-PeCDF 234	SUR1	
				30:22	RO	1.80	5.87	4.15	2.30	1.057			
352-354			5 Peaks				945.18						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD						1.32-1.78				0.933-1.021			
356-358		DC	NL			Height	0.54	0.12	0.42				
				28:42	RO	1.02	494.47	196.92	193.91	0.964			
				28:50		1.54	281.99	171.13	110.86	0.969			
				29:02		1.57	92.44	56.45	35.99	0.975			
				29:36	RO	0.32	6.35	3.86	12.01	0.994			J
				29:46		1.59	406.89	249.55	157.34	1.000	12378-PeCDD	AN	
				29:54	RO	0.05	16.45	10.00	186.12	1.004			
				30:15	RO	0.79	23.53	14.30	18.15	1.016			
356-358			7 Peaks				1,322.12						
13C12-PeCDD						1.32-1.78				0.865-1.135			
368-370		DC	NL			Height	0.56	0.44	0.12				
				27:55	RO	5.34	2.30	4.81	0.90	0.938			
		DC	SN	28:07	RO	2.45	0.51			0.945			
				28:32	RO	5.01	1.96	3.86	0.77	0.959			
		DC	SN	28:43	RO	1.12	1.96			0.965			
		DC	SN	28:50	RO	2.15	0.69			0.969			
				29:36	RO	4.27	2.42	4.06	0.95	0.994			
				29:46		1.51	308.98	186.02	122.96	1.000	13C12-[illegible]D 123	IS3	
						Height	104.50	62.35	42.15				
		DC	SN	30:02	RO	2.43	0.94			1.009			
		DC	SN	30:24		1.68	3.22			1.021			
368-370			4 Peaks				315.66						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF						1.05-1.43				0.961-1.046			
374-376		DC	NL			Height	0.73	0.52	0.21				
				31:13		1.29	39.15	22.05	17.10	0.967			

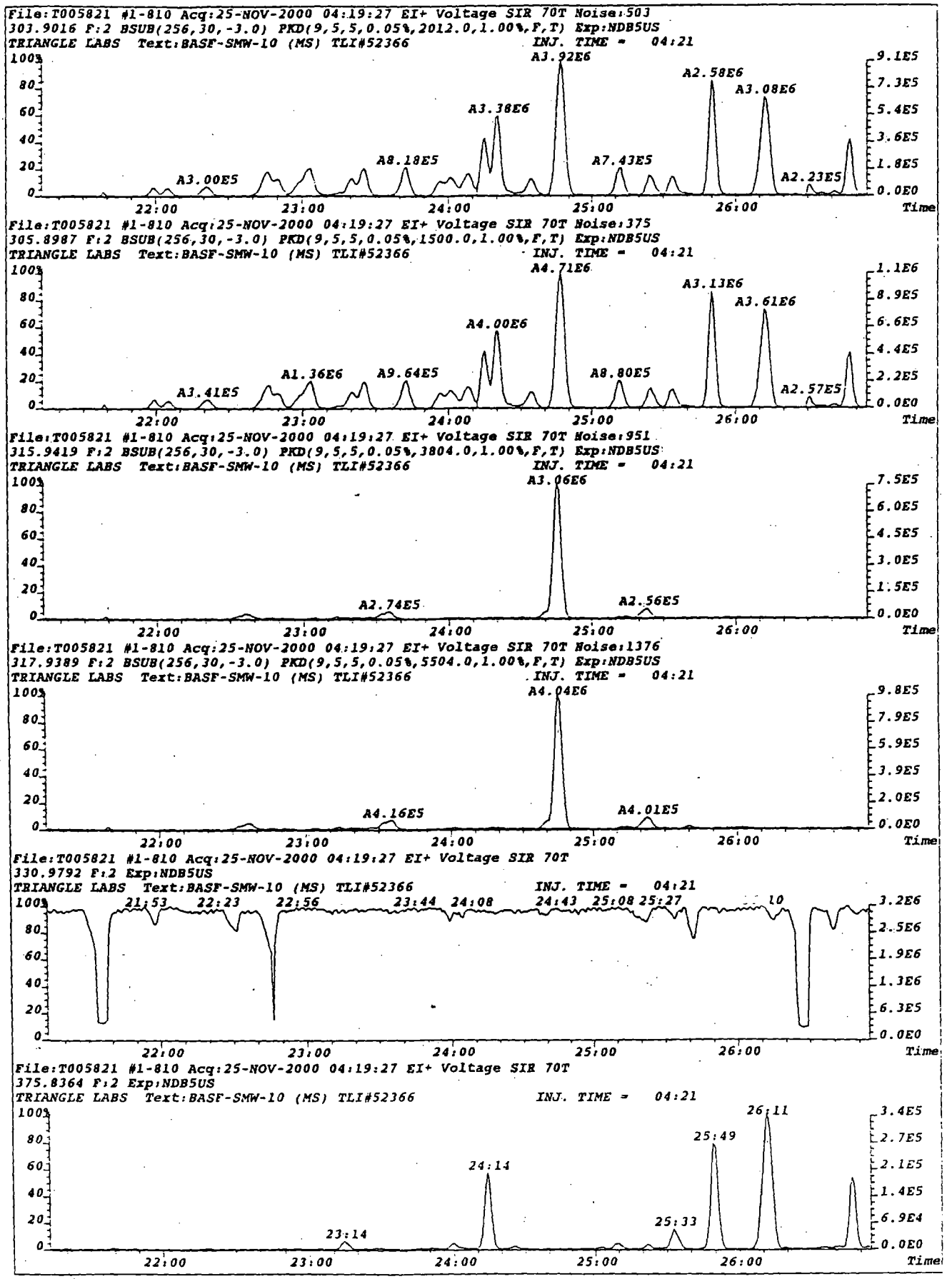
Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				31:21		1.29	342.92	193.02	149.90	0.971			
				31:32		1.21	20.07	10.99	9.08	0.977			
				31:39		1.26	23.41	13.06	10.35	0.980			
				31:49		1.30	334.93	189.42	145.51	0.986			
				32:02		1.22	8.80	4.84	3.96	0.992			J
				32:11		1.28	828.75	465.81	362.94	0.997	123478-HxCDF	AN	
				32:17		1.28	581.37	326.23	255.14	1.000	123678-HxCDF	AN	
				32:26		1.26	217.14	121.13	96.01	1.005			
				32:34		1.18	13.20	7.14	6.06	1.009			
				32:46		1.28	507.97	284.95	223.02	1.015	234678-HxCDF	AN	
				33:31		1.31	400.61	226.81	173.80	1.038	123789-HxCDF	AN	
	DC		WH	33:59		1.32	17.36			1.053			
374-376			12	Peaks			3,318.32						
13C12-HxCDF						0.43-0.59				0.876-1.124			
384-386	DC		NL			Height	0.72	0.29	0.43				
	DC		SN	31:12	RO	0.40	1.60			0.966			
				32:11		0.51	412.95	139.13	273.82	0.997	13C12-HxCDF 478	SUR2	
				32:17		0.51	412.30	139.11	273.19	1.000	13C12-HxCDF 678	IS4	
						Height	139.72	47.94	91.78				
				32:45		0.51	371.46	124.71	246.75	1.014	13C12-HxCDF 234	ALT2	
				33:31		0.50	331.54	110.90	220.64	1.038	13C12-HxCDF 789	ALT1	
	DC		SN	33:49		0.43	1.20			1.047			
384-386			4	Peaks			1,528.25						
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD						1.05-1.43				0.956-1.013			
390-392	DC		NL			Height	1.30	0.65	0.65				
				31:43		1.21	2,802.66	1,537.34	1,265.32	0.963			
				32:10		1.22	398.30	218.94	179.36	0.976			
				32:22		1.22	10,660.16	5,849.07	4,811.09	0.982			E
				32:31		1.22	38.15	20.97	17.18	0.987			
				32:53		1.20	313.08	170.91	142.17	0.998	123478-HxCDD	AN	
				32:58		1.22	2,333.33	1,282.20	1,051.13	1.001	123678-HxCDD	AN	
				33:16		1.23	856.39	471.56	384.83	1.010	123789-HxCDD	AN	
390-392			7	Peaks			17,402.07						
13C12-HxCDD						1.05-1.43				0.970-1.030			
402-404	DC		NL			Height	2.77	2.10	0.67				
	DC		WL	31:29	RO	7.06	13.62			0.955			
	DC		WL	31:45	RO	14.14	1.61			0.964			
	M			32:52		1.34	288.00	165.00	123.00	0.997	13C12-HxCDD 478	SUR3	
	M			32:57		1.36	288.00	166.00	122.00	1.000	13C12-HxCDD 678	IS5	
						Height	89.16	49.49	39.67				
				33:15		1.21	922.00	504.42	417.58	1.009	13C12-HxCDD 789	RS2	
402-404			3	Peaks			1,498.00						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF						0.88-1.20				0.995-1.048			
408-410	DC		NL			Height	0.84	0.54	0.30				

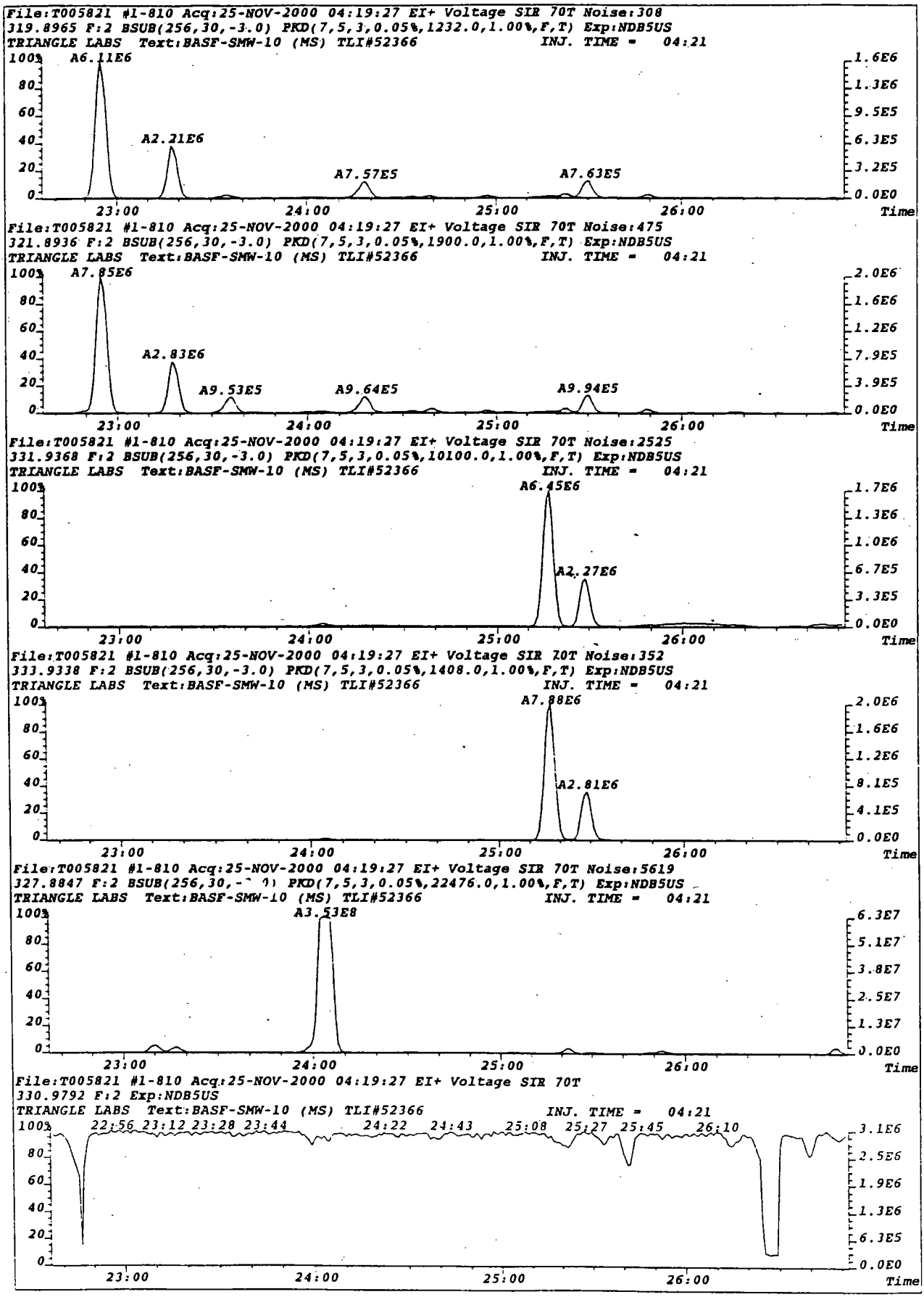
Compound/ M_Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				35:08		1.07	628.56	325.08	303.48	1.000	1234678-HpCDF	AN	
				35:23		1.02	25.82	13.01	12.81	1.007			
				35:32		1.07	153.31	79.29	74.02	1.011			
				36:10		1.00	9.21	4.61	4.60	1.029			
				36:24	RO	2.08	9.57	9.74	4.69	1.036			
				36:40		1.06	237.01	122.08	114.93	1.044	1234789-HpCDF	AN	
408-410			6 Peaks				1,063.48						
13C12-HpCDF				0.37-0.51						0.943-1.114			
418-420	DC	NL		Height			0.54	0.24	0.30				
				35:08		0.43	232.80	70.20	162.60	1.000	13C12-HpCDF 678	IS6	
				Height			70.87	21.28	49.59				
				36:39		0.43	162.93	48.74	114.19	1.043	13C12-HpCDF 789	SUR4	
418-420			2 Peaks				395.73						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD				0.88-1.20						0.974-1.005			
424-426	DC	NL		Height			2.73	1.51	1.22				
				35:25		1.02	13,306.37	6,728.50	6,577.87	0.980			E
				36:10		1.03	19,577.21	9,912.87	9,664.34	1.000	1234678-HpCDD	AN	E
424-426			2 Peaks				32,883.58						
13C12-HpCDD				0.88-1.20						0.972-1.028			
436-438	DC	NL		Height			3.20	2.16	1.04				
	DC	SN	35:17	RO		2.65	9.30			0.976			
	DC	SN	35:33	RO		3.71	5.26			0.983			
			36:09			1.19	237.11	128.87	108.24	1.000	13C12-HpCDD 678	IS7	
				Height			59.78	30.80	28.98				
			36:18	RO		3.52	40.72	70.35	19.96	1.004			
436-438			2 Peaks				277.83						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF				0.76-1.02						0.899-1.101			
442-444	DC	NL		Height			0.23	0.12	0.11				
	DC	WL	34:49			0.94	4.47			0.876			
	DC	WL	35:26	RO		1.12	0.93			0.891			
	DC	SN	35:49	RO		2.09	0.21			0.901			
			36:10	RO		1.06	1.85	1.04	0.98	0.910			
			37:40			0.98	26.98	13.32	13.66	0.948			
			38:01			0.94	4.78	2.31	2.47	0.956			
			38:49	RO		1.63	0.93	0.80	0.49	0.977			
	DC	SN	39:06	RO		1.11	1.06			0.984			
	DC	SN	39:15	RO		2.09	0.21			0.987			
			39:46			0.95	6.27	3.06	3.21	1.000			
			39:56			0.92	290.09	138.93	151.16	1.005	OCDF	AN	
			41:08	RO		1.63	2.25	1.94	1.19	1.035			
	DC	SN	41:22	RO		0.74	0.30			1.041			
	DC	SN	41:26	RO		2.43	0.13			1.042			
			41:50	RO		1.87	1.64	1.63	0.87	1.052			
	DC	SN	42:06	RO		3.80	0.19			1.059			

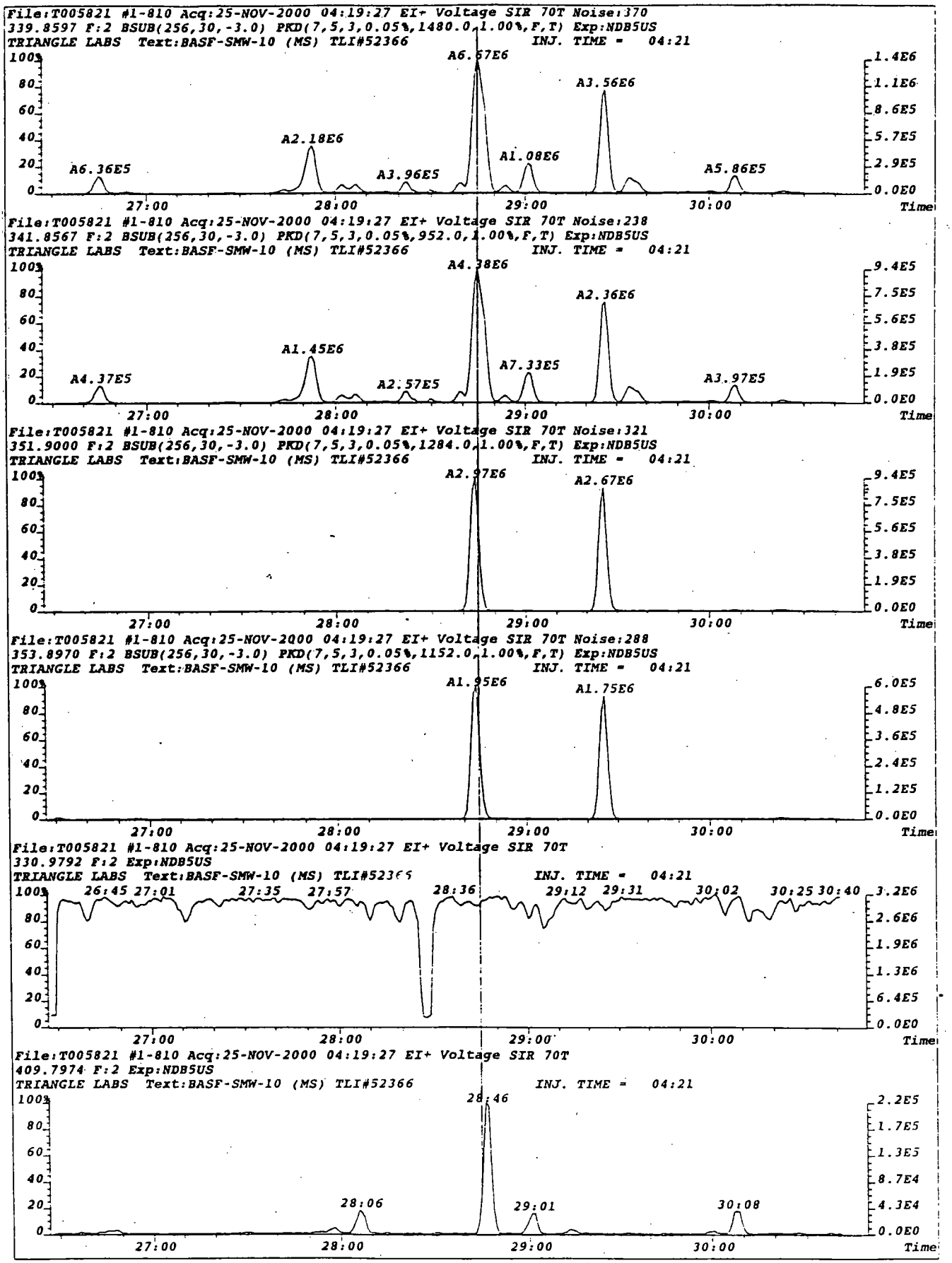
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		42:13	RO	3.85	0.25			1.062			
	DC	SN		43:04	RO	1.48	0.55			1.083			
	DC	SN		43:11	RO	0.75	0.64			1.086			
	DC	SN		43:23	RO	0.68	0.28			1.091			
	DC	SN		43:26		0.86	0.39			1.093			
	DC	WH		43:57		0.88	0.96			1.106			
	DC	WH		44:08	RO	2.29	0.13			1.110			
442-444			8 Peaks				334.79						
OCDD						0.76-1.02				0.899-1.101			
458-460	DC	NL				Height	0.24	0.11	0.13				
				39:46		0.82	18,153.51	8,205.75	9,947.76	1.000	OCDD	AN	E
458-460			1 Peak				18,153.51						
13C12-OCDD						0.76-1.02				0.996-1.004			
470-472	DC	NL				Height	8.33	5.84	2.49				
M				39:45	RO	1.10	198.45	116.00	105.00	1.000	13C12-OCDD	IS8	
						Height	47.33	23.20	24.13				
470-472			1 Peak				198.45						

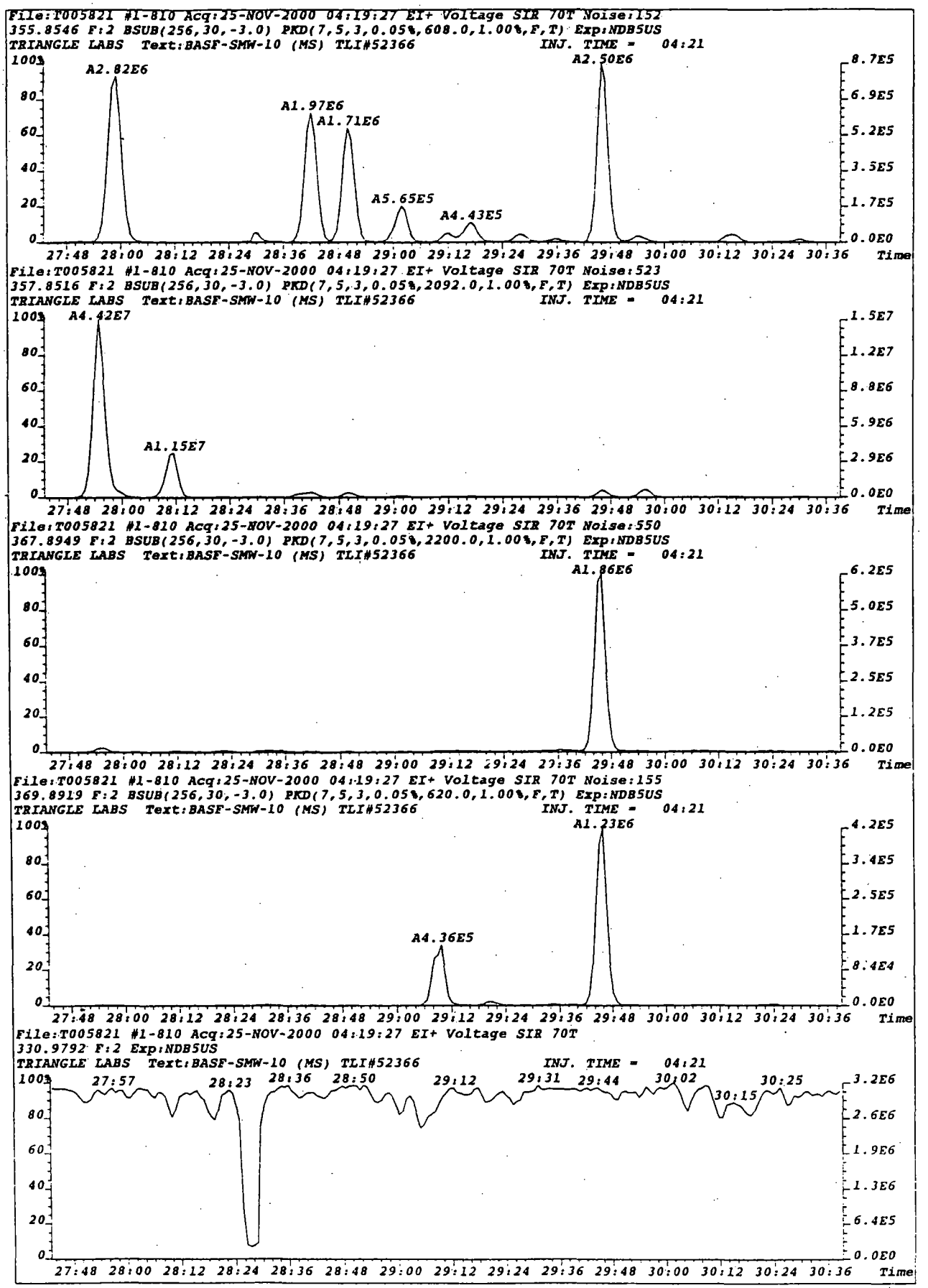
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

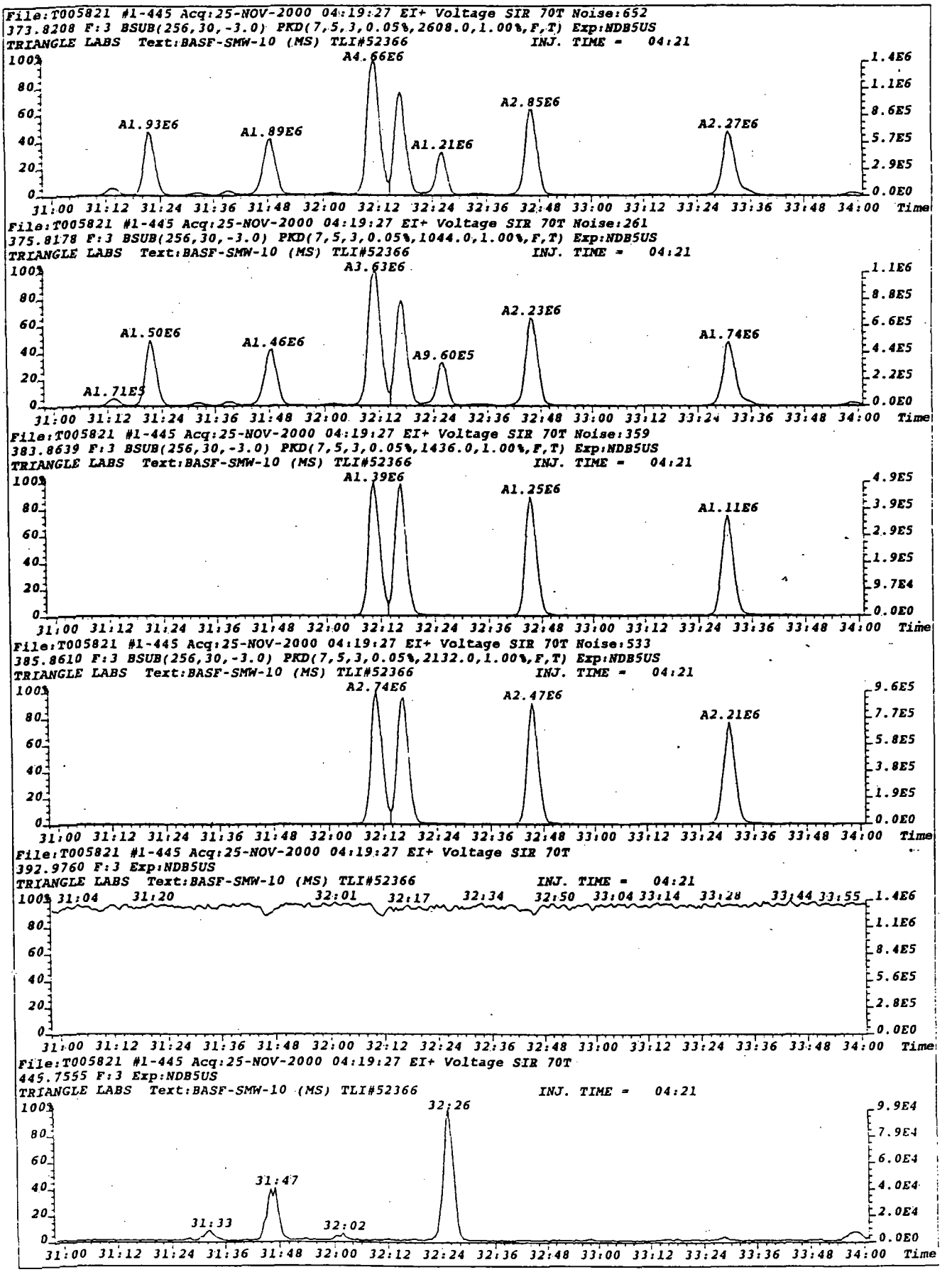
*** End of Report ***

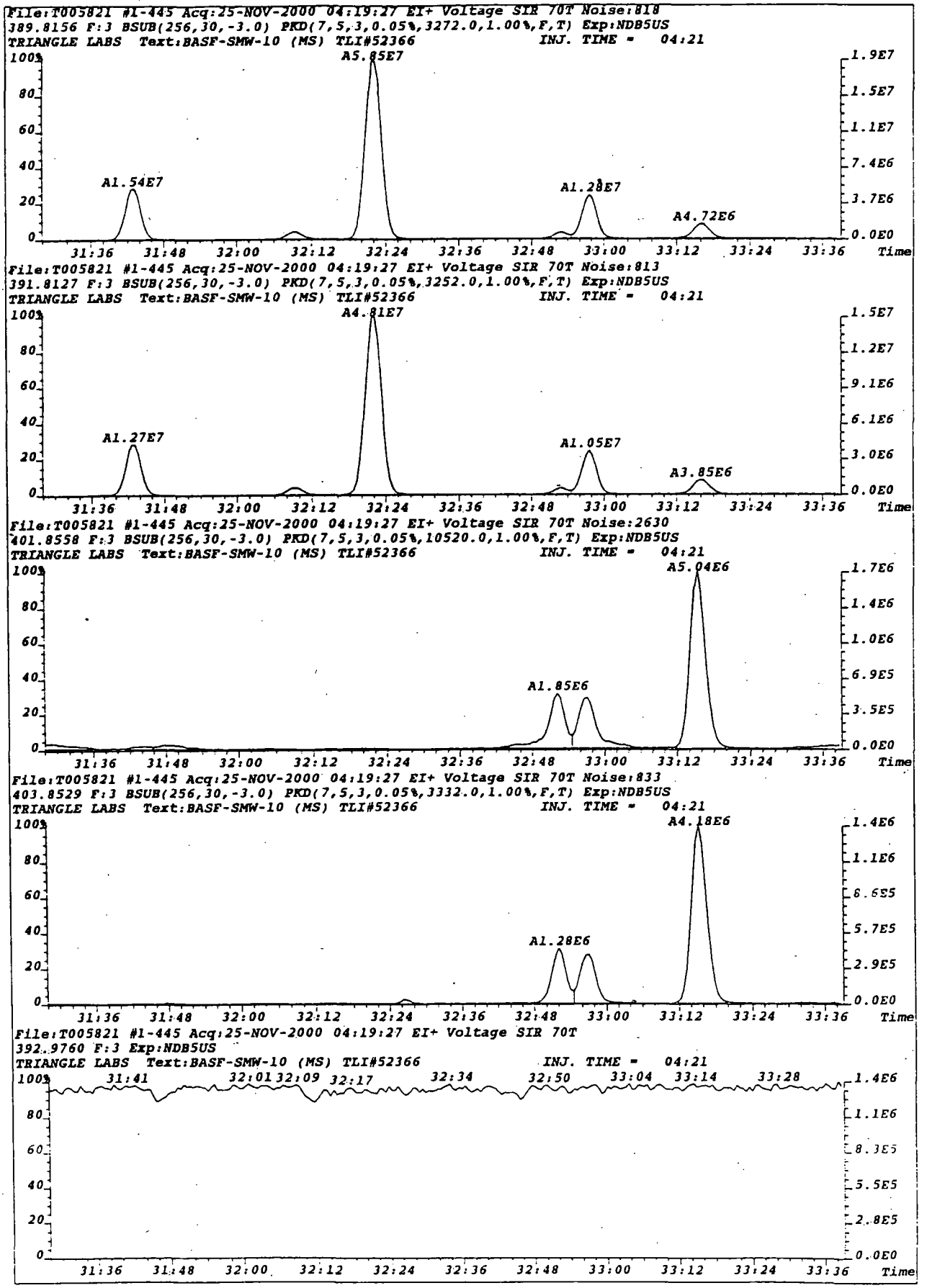

File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:503
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,2012.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A3.92E6
A2.58E6
A3.08E6
A3.38E6
A8.18E5
A7.43E5
A3.00E5
A2.23E5
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:375
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,1500.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A4.71E6
A3.13E6
A3.61E6
A4.00E6
A1.36E6
A9.64E5
A8.80E5
A3.41E5
A2.57E5
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:951
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,3804.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A3.06E6
A2.74E5
A2.56E5
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:1376
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,5504.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A4.04E6
A4.16E5
A4.01E5
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
21:53
22:23
22:56
23:44
24:08
24:43
25:08
25:27
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
26:11
25:49
24:14
25:33
23:14
22:00
23:00
24:00
25:00
26:00
Time

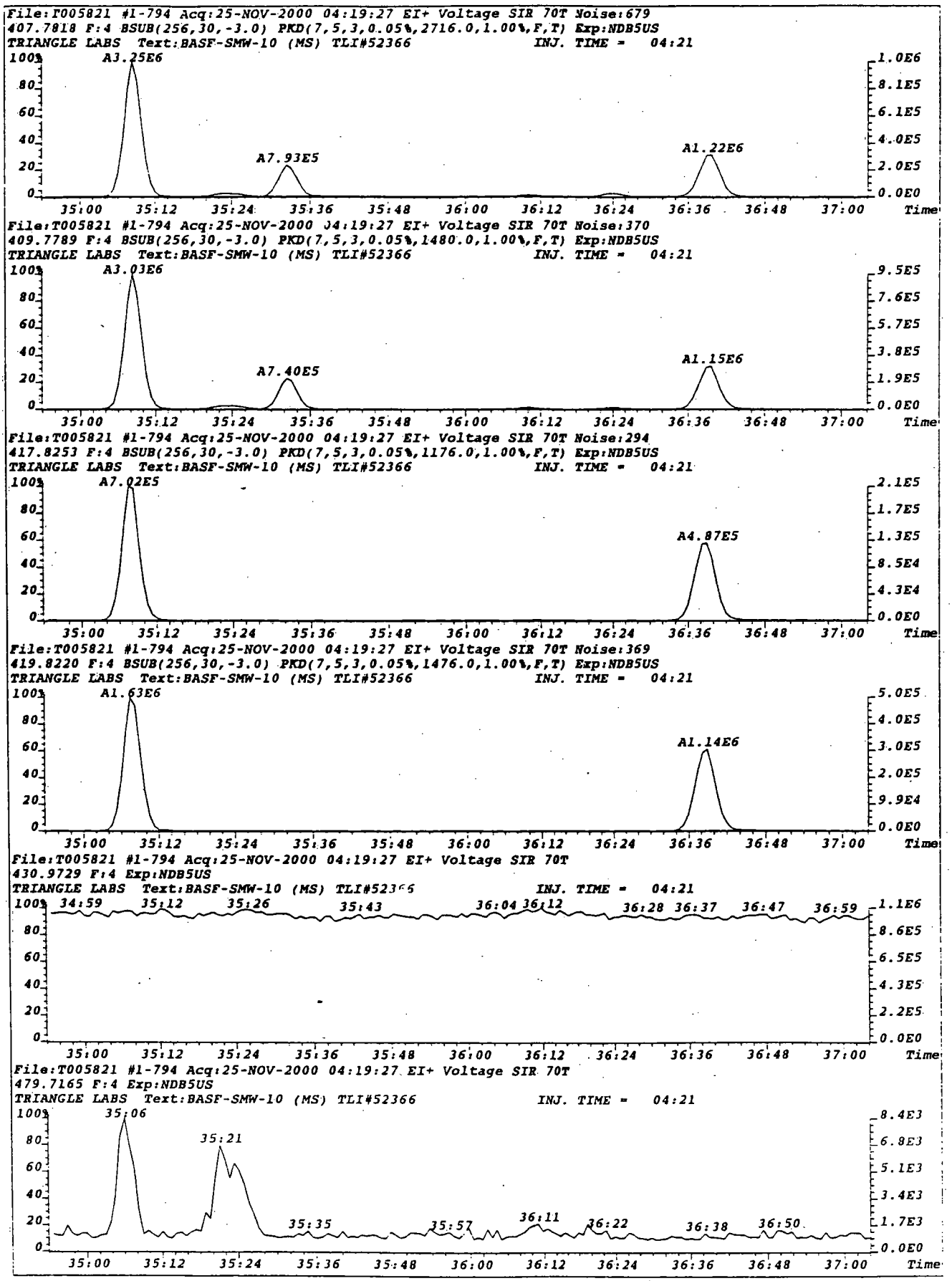

File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:308
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A6.11E6
A2.21E6
A7.57E5
A7.63E5
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:475
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1900.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A7.85E6
A2.83E6
A9.53E5
A9.64E5
A9.94E5
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:2525
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,10100.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A6.45E6
A2.27E6
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:352
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1408.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A7.88E6
A2.81E6
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:5619
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,22476.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A3.53E8
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
22:56 23:12 23:28 23:44 24:22 24:43 25:08 25:27 25:45 26:10
23:00 24:00 25:00 26:00 Time

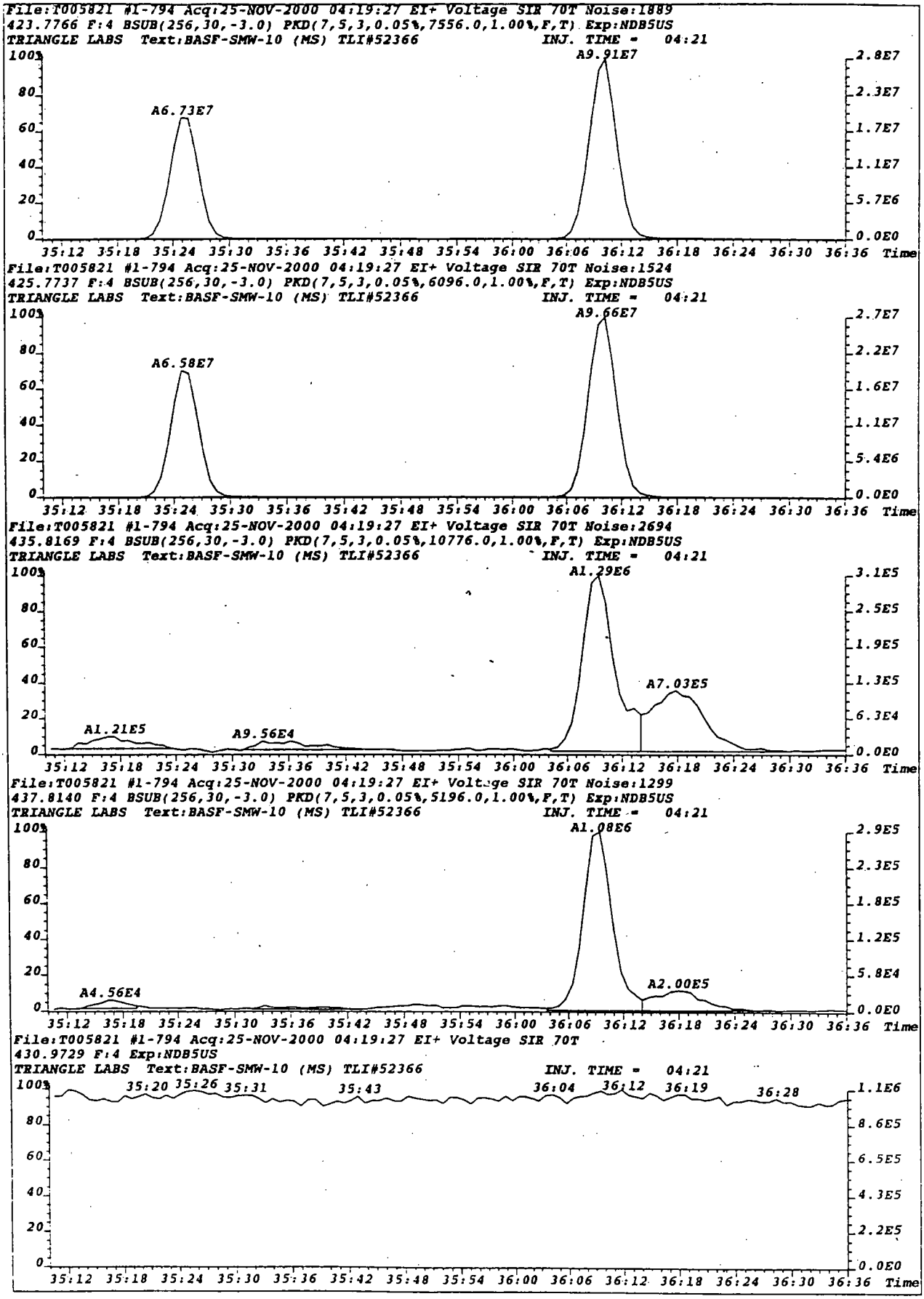

File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:370
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1480.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A6.36E5
A2.18E6
A3.96E5
A6.67E6
A1.08E6
A3.56E6
A5.86E5
Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:238
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,952.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A4.37E5
A1.45E6
A2.57E5
A4.38E6
A7.33E5
A2.36E6
A3.97E5
Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:321
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1284.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A2.97E6
A2.67E6
Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:288
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1152.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A1.95E6
A1.75E6
Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
26:45 27:01 27:35 27:57 28:36 29:12 29:31 30:02 30:25 30:40
Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
28:46
28:06
29:01
30:08
Time


File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:152
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,608.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A2.82E6
A1.97E6
A1.71E6
A5.65E5
A4.43E5
A2.50E6
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:523
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2092.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A4.42E7
A1.15E7
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:550
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A1.86E6
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:155
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,620.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
A1.23E6
A4.36E5
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21
27:57
28:23
28:36
28:50
29:12
29:31
29:44
30:02
30:15
30:25
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time


File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:652
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2608.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A1.93E6
A1.89E6
A4.66E6
A1.21E6
A2.85E6
A2.27E6
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:261
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1044.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A1.71E5
A1.50E6
A1.46E6
A3.63E6
A9.60E5
A2.23E6
A1.74E6
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:359
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1436.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A1.39E6
A1.25E6
A1.11E6
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:533
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2132.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A2.74E6
A2.47E6
A2.21E6
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
31:33
31:47
32:02
32:26
Time


File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:818
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,3272.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A5.85E7
A1.54E7
A1.28E7
A4.72E6
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:813
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,3252.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A4.81E7
A1.27E7
A1.05E7
A3.85E6
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:2630
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,10520.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A5.04E6
A1.85E6
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:833
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,3332.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A4.18E6
A1.28E6
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
Time


File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:679
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2716.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A3.25E6
A7.93E5
A1.22E6
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:370
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1480.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A3.03E6
A7.40E5
A1.15E6
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:294
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A7.02E5
A4.87E5
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:369
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1476.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A1.63E6
A1.14E6
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
35:06
35:21
Time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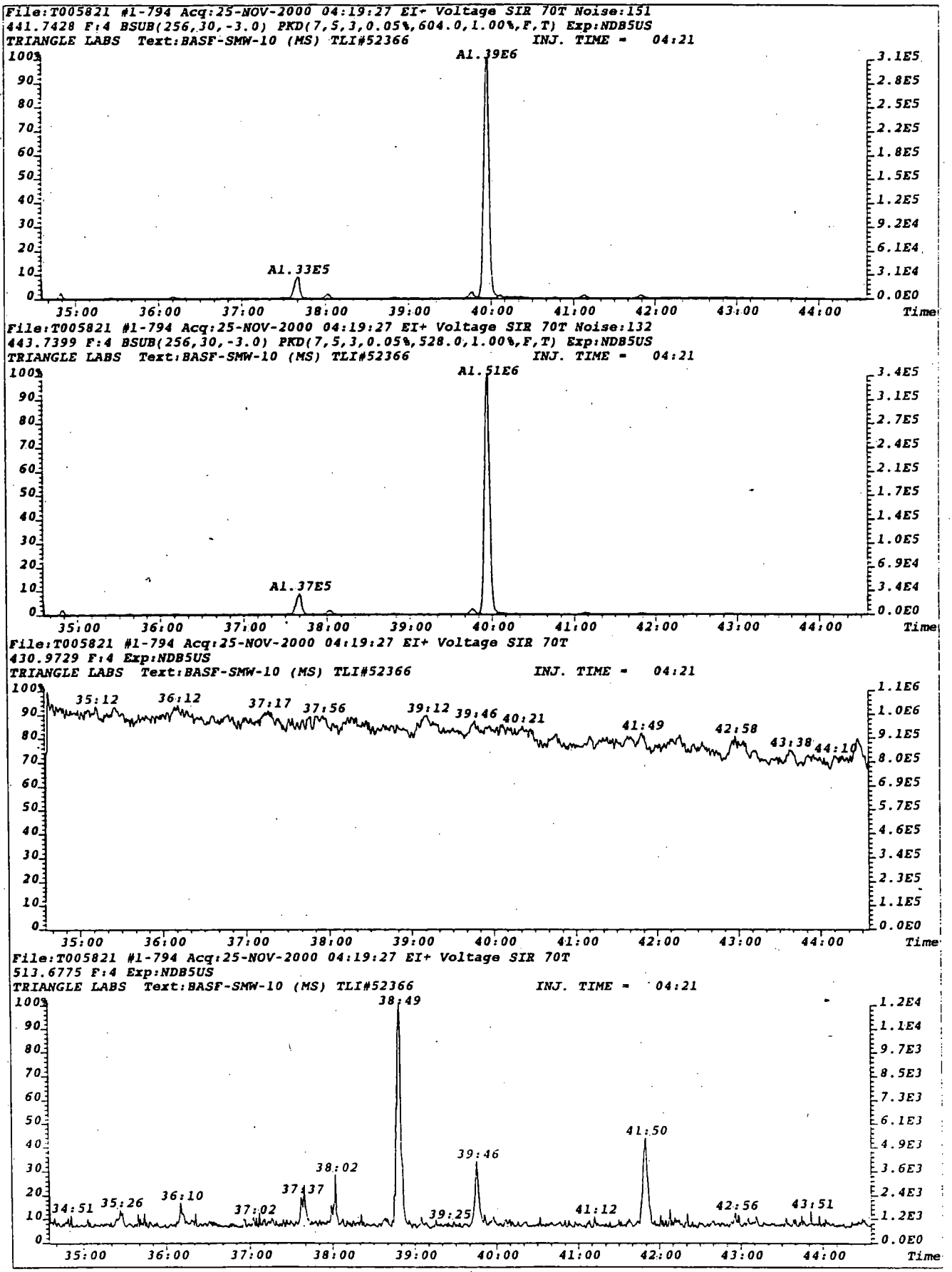
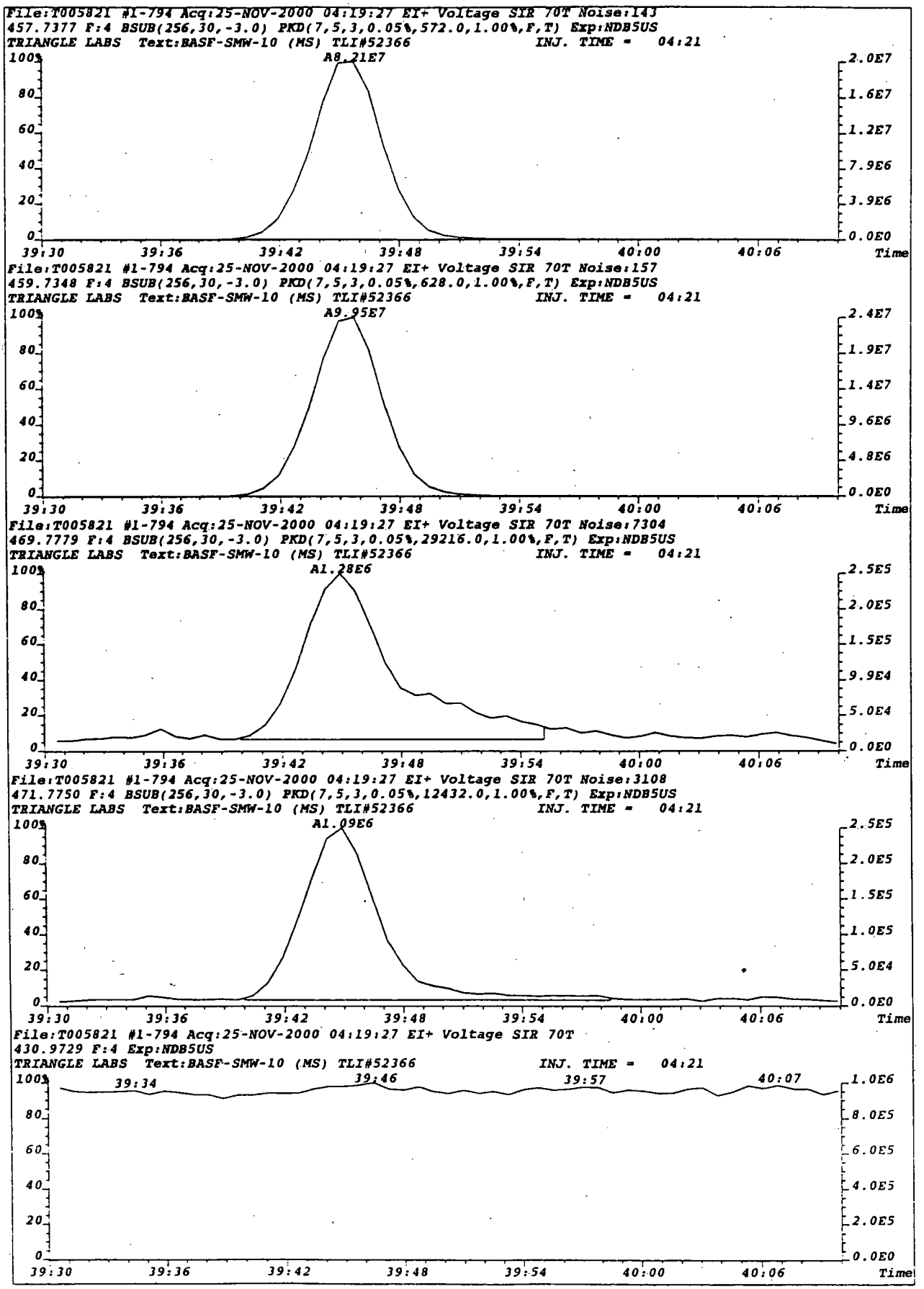
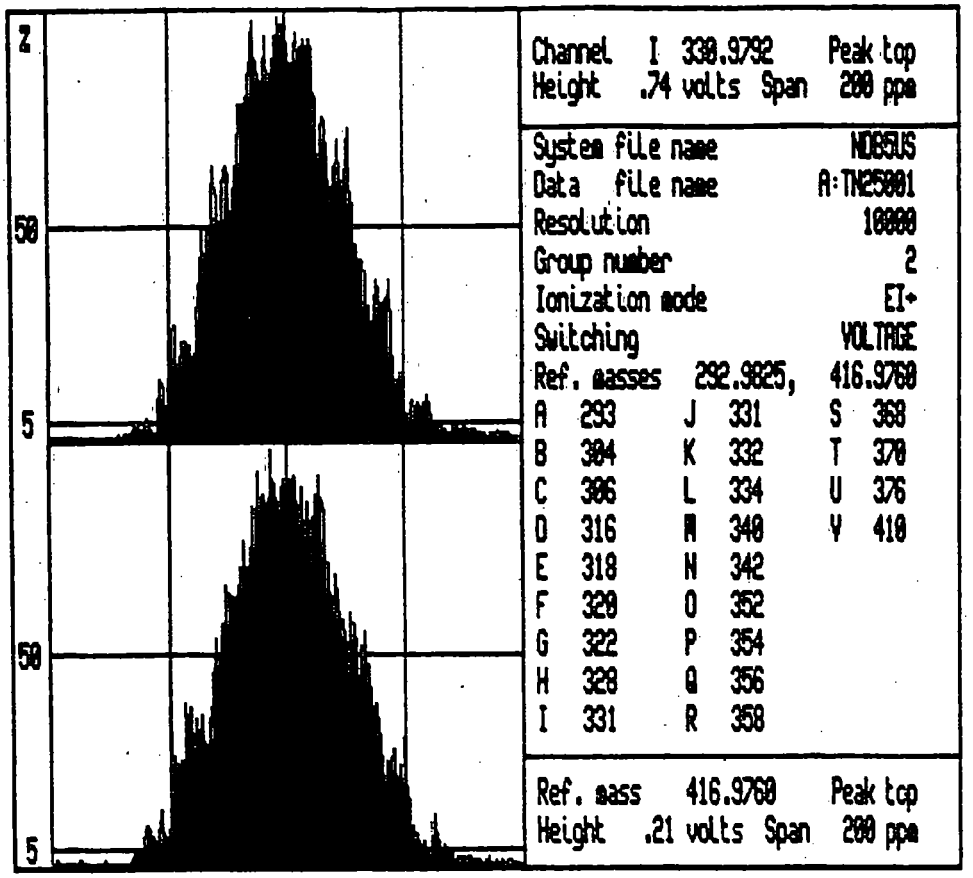
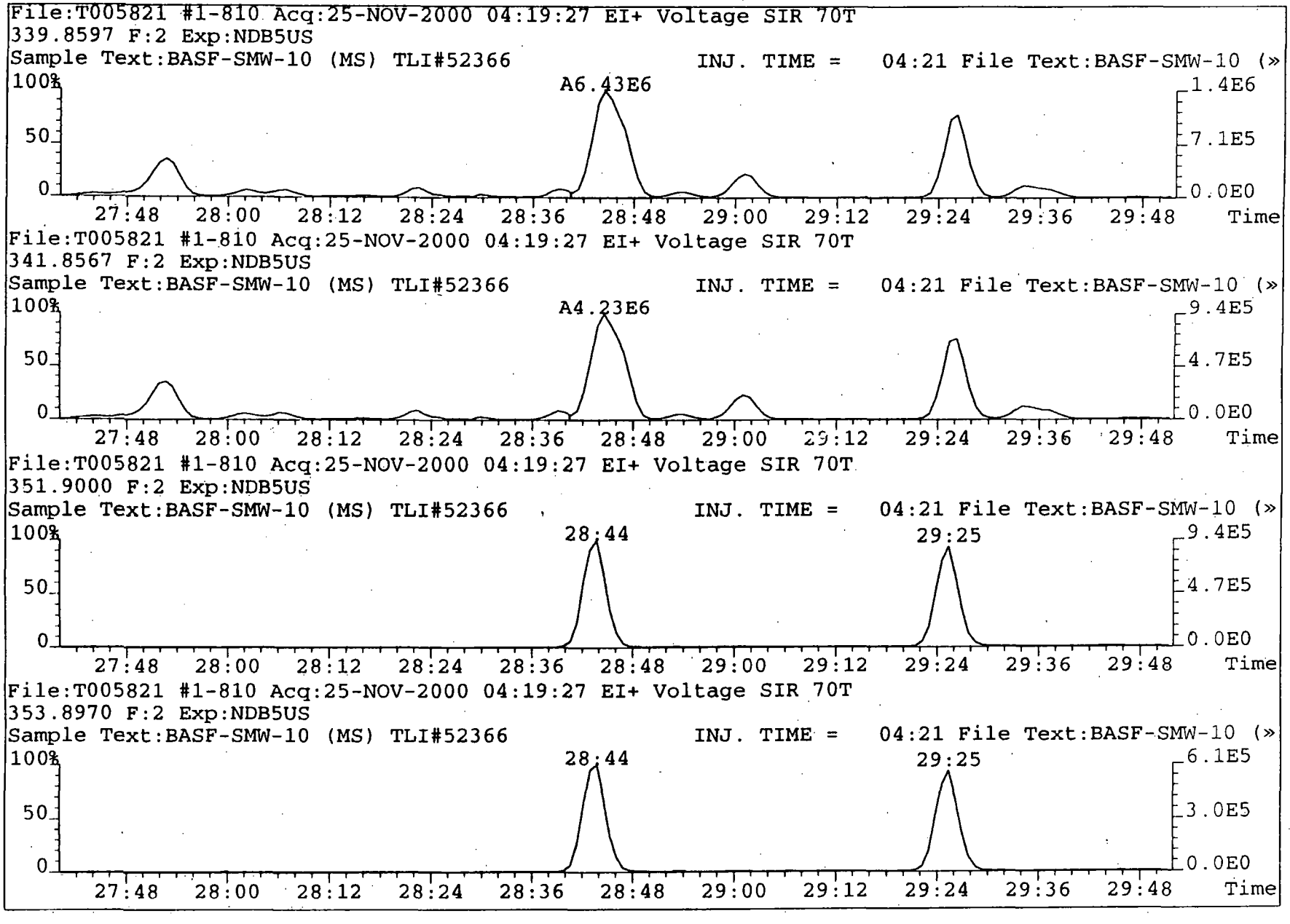
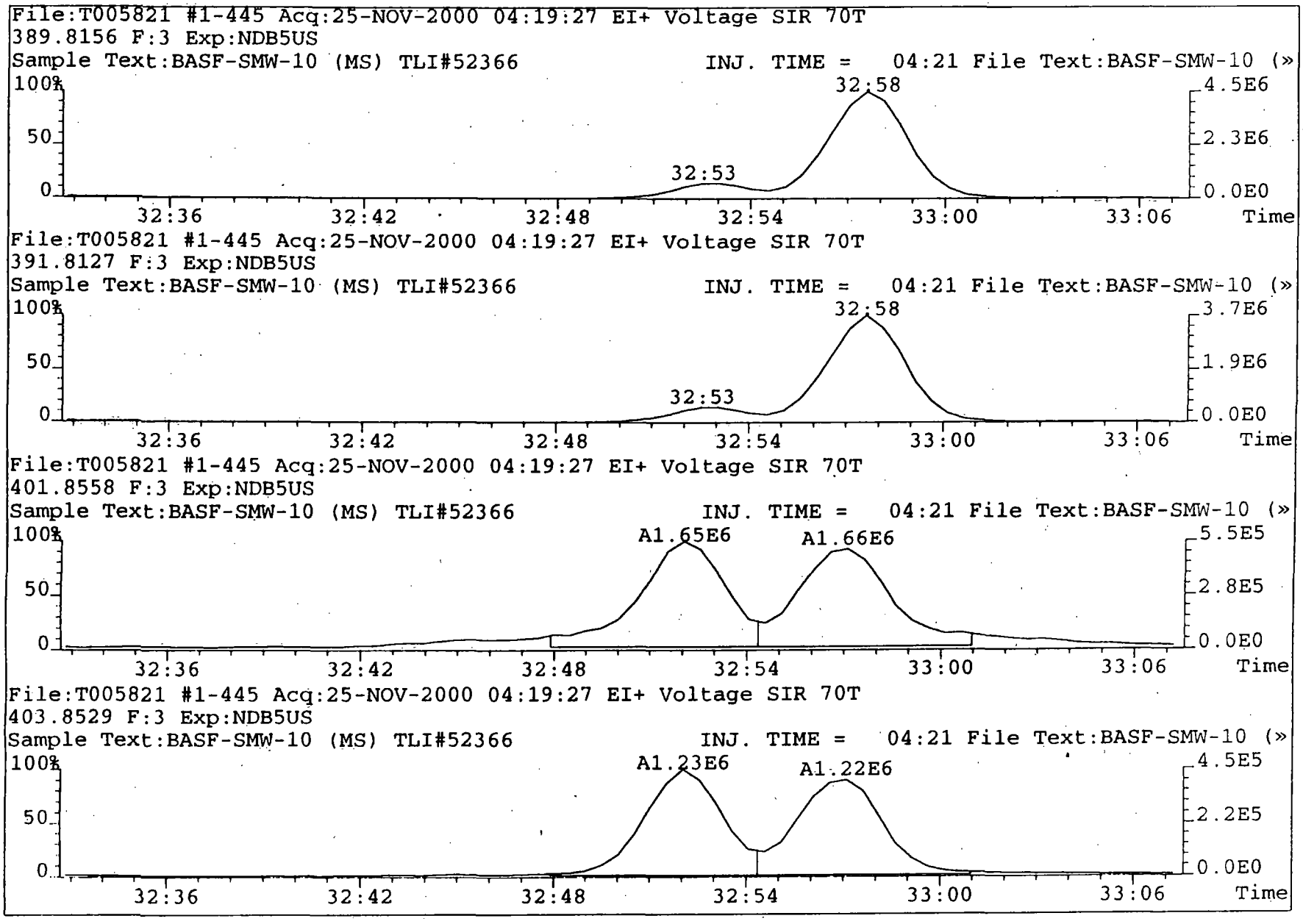
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,7556.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A6.73E7
A9.91E7
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:1524
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,6096.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A6.58E7
A9.66E7
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:2694
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,10776.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A1.29E6
A7.03E5
A1.21E5
A9.56E4
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:1299
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,5196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A1.08E6
A2.00E5
A4.56E4
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
35:20 35:26 35:31 35:43 36:04 36:12 36:19 36:28
35:12 35:18 35:24 35:30 35:36 35:42 35:48 35:54 36:00 36:06 36:12 36:18 36:24 36:30 36:36 Time

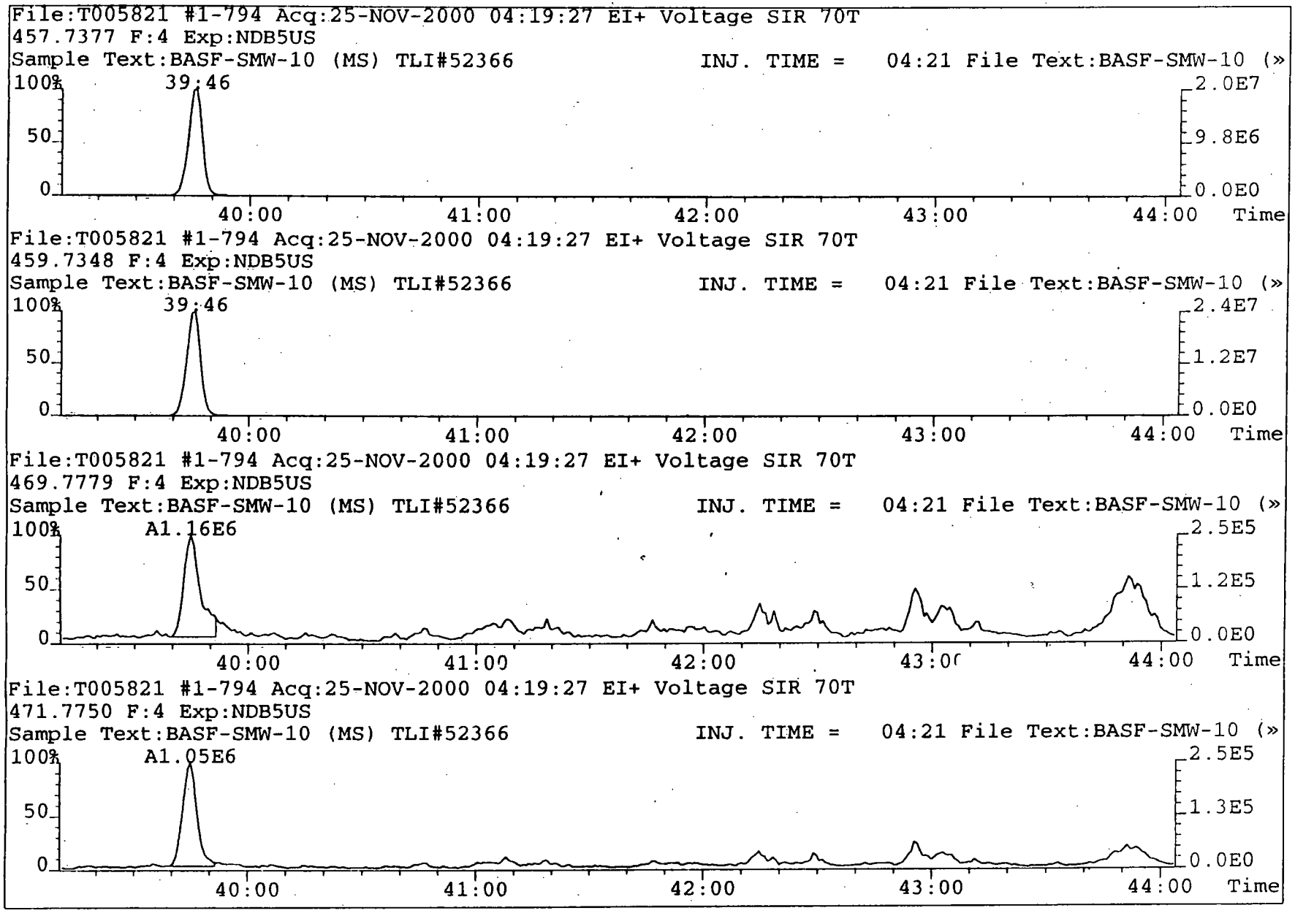

File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:151
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,604.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A1.39E6
A1.33E5
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:132
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,528.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A1.51E6
A1.37E5
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
35:12
36:12
37:17
37:56
39:12
39:46
40:21
41:49
42:58
43:38
44:10
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
38:49
41:50
39:46
38:02
37:37
34:51
35:26
36:10
37:02
39:25
41:12
42:56
43:51
Time

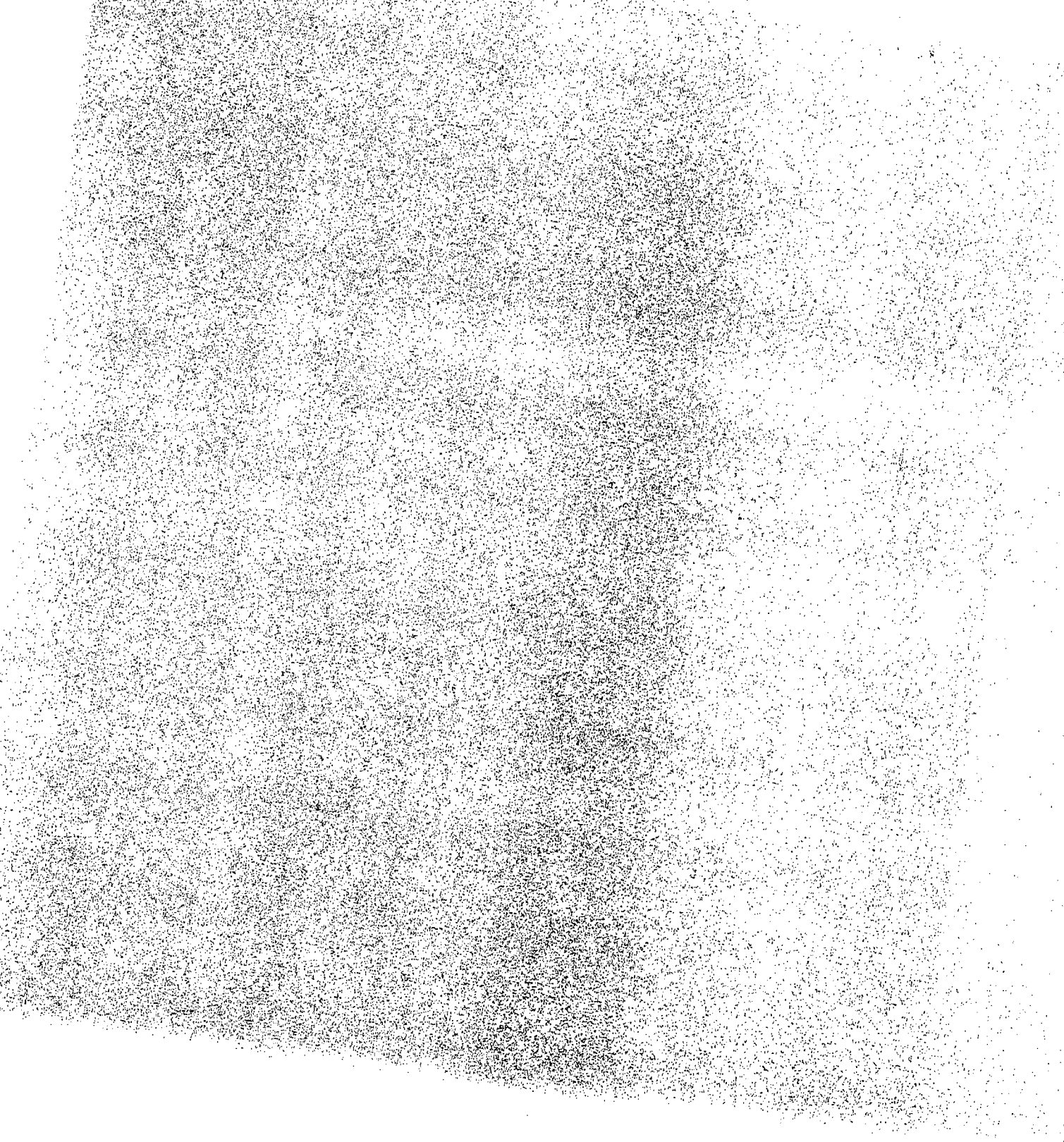

File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:143
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,572.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A8.21E7
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:157
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,628.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A9.95E7
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:7304
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,29216.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A1.28E6
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T Noise:3108
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,12432.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
A1.09E6
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21
39:34
39:46
39:57
40:07
39:30
39:36
39:42
39:48
39:54
40:00
40:06
Time


Z
50
5
50
5
Channel I 330.9792 Peak top
Height .74 volts Span 200 ppm
System file name MOSUS
Data file name A:TN25001
Resolution 10000
Group number 2
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 416.9760
A 293 J 331 S 368
B 304 K 332 T 370
C 306 L 334 U 376
D 316 M 340 V 410
E 318 N 342
F 320 O 352
G 322 P 354
H 328 Q 356
I 331 R 358
Ref. mass 416.9760 Peak top
Height .21 volts Span 200 ppm


File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
339.8597 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100%
50
0
A6.43E6
1.4E6
7.1E5
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
341.8567 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100%
50
0
A4.23E6
9.4E5
4.7E5
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
351.9000 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100%
50
0
28:44
29:25
9.4E5
4.7E5
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 Time
File:T005821 #1-810 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
353.8970 F:2 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100%
50
0
28:44
29:25
6.1E5
3.0E5
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 Time


File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
389.8156 F:3 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100%
50
0
32:58
32:53
4.5E6
2.3E6
0.0E0
32:36
32:42
32:48
32:54
33:00
33:06
Time
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
391.8127 F:3 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100%
50
0
32:58
32:53
3.7E6
1.9E6
0.0E0
32:36
32:42
32:48
32:54
33:00
33:06
Time
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
401.8558 F:3 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100%
50
0
A1.65E6
A1.66E6
5.5E5
2.8E5
0.0E0
32:36
32:42
32:48
32:54
33:00
33:06
Time
File:T005821 #1-445 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
403.8529 F:3 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366
INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100%
50
0
A1.23E6
A1.22E6
4.5E5
2.2E5
0.0E0
32:36
32:42
32:48
32:54
33:00
33:06
Time


File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
457.7377 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100% 39:46
50
0
2.0E7
9.8E6
0.0E0
40:00 41:00 42:00 43:00 44:00 Time
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
459.7348 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100% 39:46
50
0
2.4E7
1.2E7
0.0E0
40:00 41:00 42:00 43:00 44:00 Time
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
469.7779 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100% A1.16E6
50
0
2.5E5
1.2E5
0.0E0
40:00 41:00 42:00 43:0(44:00 Time
File:T005821 #1-794 Acq:25-NOV-2000 04:19:27 EI+ Voltage SIR 70T
471.7750 F:4 Exp:NDB5US
Sample Text:BASF-SMW-10 (MS) TLI#52366 INJ. TIME = 04:21 File Text:BASF-SMW-10 (»
100% A1.05E6
50
0
2.5E5
1.3E5
0.0E0
40:00 41:00 42:00 43:00 44:00 Time



TriMatrix, Inc.

TLI Project: **52366** Method 8290 PCDD/PCDF Analysis (b)
Client Sample: **BASF-MS/MSD (MSD)** Analysis File: **T005822**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	**11/17/2000**	Spike File:	**SPMIT32S**
TLI ID:	**274-99-5MSD**	Date Extracted:	**11/21/2000**	ICal:	**TF57140**
		Date Analyzed:	**11/25/2000**	ConCal:	**T005815**
Sample Size:	**1.080 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005817**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**JMM**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	704			0.78	25:29	___
1,2,3,7,8-PeCDD	2250			1.56	29:45	___
1,2,3,4,7,8-HxCDD	2080			1.22	32:52	___
1,2,3,6,7,8-HxCDD	6870			1.22	32:56	___
1,2,3,7,8,9-HxCDD	4040			1.22	33:15	___
1,2,3,4,6,7,8-HpCDD	93660			1.04	36:09	E__
1,2,3,4,6,7,8,9-OCDD	347840			0.83	39:43	E__
2,3,7,8-TCDF	2210			0.86	24:45	___
1,2,3,7,8-PeCDF	4220			1.51	28:44	___
2,3,4,7,8-PeCDF	2390			1.49	29:25	___
1,2,3,4,7,8-HxCDF	3570			1.29	32:10	___
1,2,3,6,7,8-HxCDF	2330			1.30	32:16	___
2,3,4,6,7,8-HxCDF	2370			1.30	32:45	___
1,2,3,7,8,9-HxCDF	2250			1.28	33:30	___
1,2,3,4,6,7,8-HpCDF	3850			1.09	35:07	___
1,2,3,4,7,8,9-HpCDF	1880			1.08	36:37	___
1,2,3,4,6,7,8,9-OCDF	4760			0.91	39:55	___

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	597	32.3	40%-130%	0.76	24:44	V___
$^{13}C_{12}$-2,3,7,8-TCDD	516	27.8	40%-130%	0.82	25:27	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDF	441	23.8	40%-130%	1.53	28:42	V___
$^{13}C_{12}$-1,2,3,7,8-PeCDD	494	26.7	40%-130%	1.49	29:44	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	467	25.2	40%-130%	0.51	32:15	V___
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	508	27.4	40%-130%	1.33	32:56	V___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	391	21.1	25%-130%	0.43	35:06	V___
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	413	22.3	25%-130%	1.15	36:08	V___
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	465	12.6	25%-130%	1.01	39:43	V___

MIT3_PSR v1.00, LARS 6.25.001

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 18:37 11/29/2000

TLI Project: 52366 Method 8290 PCDD/PCDF Analysis (b)
Client Sample: BASF-MS/MSD (MSD) Analysis File: T005822

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,4,7,8-PeCDF	407	22.0	40%-130%	1.51	29:24	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	483	26.1	40%-130%	0.51	32:09	V___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	507	27.4	40%-130%	1.37	32:51	V___
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	349	18.8	25%-130%	0.42	36:37	V___

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	156	84.3	40%-130%	25:29	___

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	554	29.9	40%-130%	0.51	33:29	V___
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	474	25.6	40%-130%	0.51	32:44	V___

Recovery Standards	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.81	25:15	___
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.21	33:14	___

Data Reviewer: _____ 11/29/2000

MIT3_PSR v1.00, LARS 6.25.01

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 18:37 11/29/2000

Initial ....Date...

Data Review By: JCA 11/29/00

Channel specific noise levels computed from 'NL' heights.

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005822B.dbf
11/29/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_I....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
TCDF						0.65-0.89				0.860-1.077			
304-306	DC	NL				Height	0.97	0.65	0.32				
				21:37		0.85	16.79	7.70	9.09	0.874			
				21:57		0.85	118.03	54.30	63.73	0.887			
				22:20		0.83	59.85	27.13	32.72	0.903			
				22:49		0.86	155.67	71.87	83.80	0.923			
				23:01		0.89	245.87	115.56	130.31	0.931			
				23:24		0.87	252.77	117.66	135.11	0.946			
				23:41		0.85	171.65	79.04	92.61	0.958			
				24:00	RO	0.90	227.94	99.16	110.63	0.970			
				24:07		0.87	132.66	61.65	71.01	0.975			
				24:19		0.84	531.57	242.85	288.72	0.983	1278-TCDF		AN
				24:33		0.88	107.42	50.31	57.11	0.993			
				24:45		0.86	838.17	386.94	451.23	1.001	2378-TCDF		AN
				25:10		0.85	165.31	75.91	89.40	1.018			
				25:23		0.83	114.38	51.98	62.40	1.026			
				25:33		0.88	172.68	79.59	93.09	1.033			
				25:49		0.83	876.35	397.29	479.06	1.044			
				26:10		0.84	1,037.49	472.48	565.01	1.058			
				26:29		0.87	56.76	26.41	30.35	1.071			
	DC	WH		26:46		0.86	427.10			1.082			
304-306			18 Peaks				5,281.36						
13C12-TCDF						0.65-0.89				0.959-1.041			
316-318	DC	NL				Height	2.02	0.95	1.07				
	DC	WL		21:10		0.82	67.54			0.856			
	DC	WL		21:37		0.71	9.94			0.874			
	DC	WL		22:35	RO	0.61	56.02			0.913			
	DC	WL		22:51	RO	0.53	8.05			0.924			
	DC	WL		23:03	RO	0.63	11.45			0.932			
	DC	WL		23:12	RO	0.63	23.75			0.938			
	DC	WL		23:33	RO	0.59	85.56			0.952			
				24:44		0.76	685.30	295.54	389.76	1.000	13C12-2378-TCDF		ISO
				...ight			164.90	71.02	93.88				
	DC	SN		25:12		0.66	10.90			1.019			
				25:22	RO	0.62	54.41	23.67	38.17	1.026			
316-318			2 Peaks				739.71						

---------- Above: TCDF / TCDD Follows ----------

TCDD						0.65-0.89				0.890-1.045			
320-322	DC	NL				Height	0.51	0.23	0.28				
				22:53		0.78	551.95	241.50	310.45	0.899	1368-TCDD		AN
	DC	SN		23:06		0.66	1.76			0.908			

Compound/ M_Z....	QC	Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel.RT	Compound Name..	ID..	Flags
					23:17		0.78	261.90	114.95	146.95	0.915	1379-TCDD	AN	
					23:32	RO	0.16	39.26	17.08	106.81	0.925			
					24:17		0.74	167.76	71.43	96.33	0.954			
					24:31		0.81	24.96	11.15	13.81	0.963			
					24:37		0.65	22.67	8.97	13.70	0.967			
					24:55		0.79	19.73	8.69	11.04	0.979			
					25:15		0.83	24.44	11.12	13.32	0.992			
					25:21		0.67	25.51	10.20	15.31	0.996			
					25:29		0.78	168.62	74.09	94.53	1.001	2378-TCDD	AN	
					25:37		0.83	4.91	2.22	2.69	1.007			
					25:48		0.77	31.55	13.71	17.84	1.014			
					26:01		0.70	4.21	1.74	2.47	1.022			
					26:28	RO	1.37	2.30	1.78	1.30	1.040			
	DC		WH		26:47	RO	0.62	14.71			1.052			
320-322			14	Peaks				1,349.77						
37Cl-TCDD										0.921-1.079				
328	DC		NL			Height		3.51	3.51					
	DC		WL		22:59			23.99			0.903			
	DC		WL		23:09			435.35			0.910			
	DC		WL		23:16			480.12			0.914			
					24:04			39,693.00	39,693.00		0.946			
					25:20			113.43	113.43		0.995			
					25:29			124.36	124.36		1.001	37Cl-TCDD	CLS	
					25:51			494.13	494.13		1.016			
					26:47			1,295.47	1,295.47		1.052			
328			5	Peaks				41,720.39						
13C12-TCDD							0.65-0.89			0.921-1.079				
332-334	DC		NL			Height		2.03	1.76	0.27				
					24:03	RO	1.48	20.18	16.86	11.40	0.945			
					25:15		0.81	1,657.16	742.92	914.24	0.992	13C12-1234-TCDD	RS1	
					25:27		0.82	485.32	219.19	266.13	1.000	13C12-2378-TCDD	IS1	
						Height		120.68	54.19	66.49				
	DC		SN		26:03	RO	91.86	1.27			1.024			
					26:51	RO	13.76	2.25	17.48	1.27	1.055			
332-334			4	Peaks				2,164.91						
---------- Above: TCDD / PeCDF Follows ----------														
PeCDF							1.32-1.78			0.923-1.064				
340-342	DC		NL			Height		0.58	0.32	0.26				
					26:44		1.45	154.17	91.19	62.98	0.931			
					27:25		1.51	8.02	4.83	3.19	0.955			J
					27:51		1.49	384.80	230.52	154.28	0.970			
					28:01		1.51	52.93	31.84	21.09	0.976			
					28:15		1.52	13.73	8.29	5.44	0.984			
					28:21		1.62	60.40	37.32	23.08	0.988			
					28:29	RO	0.97	7.53	4.58	4.74	0.992			J
M					28:44		1.51	983.00	592.00	391.00	1.001	12378-PeCDF	AN	
					28:59		1.50	143.64	86.15	57.49	1.010			
					29:25		1.49	565.89	338.57	227.32	1.025	23478-PeCDF	AN	

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				29:33		1.53	132.32	80.11	52.21	1.030			
				29:46		1.76	5.11	3.26	1.85	1.037			J
				29:51	RO	1.16	9.77	4.46	3.83	1.040			J
				29:59	RO	1.97	13.54	10.44	5.31	1.045			
				30:06		1.57	157.08	95.87	61.21	1.049			
				30:22		1.41	17.22	10.08	7.14	1.058			
	DC	WH		30:36		1.41	4.62			1.066			
340-342			16 Peaks				2,709.15						
13C12-PeCDF						1.32-1.78				0.860-1.140			
352-354	DC	NL				Height	0.58	0.30	0.28				
				26:29	RO	0.62	2.98	1.81	2.93	0.923			
	DC	SN		26:53	RO	1.02	4.13			0.937			
	DC	SN		27:14	RO	0.85	0.90			0.949			
	DC	SN		27:51	RO	0.85	1.55			0.970			
				28:42		1.53	473.53	286.14	187.39	1.000	13C12-PeCDF 123	IS2	
						Height	152.71	92.65	60.06				
				29:24		1.51	432.14	259.84	172.30	1.024	13C12-PeCDF 234	SUR1	
				30:21	RO	1.90	5.38	4.01	2.11	1.057			
352-354			4 Peaks				914.03						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD						1.32-1.78				0.933-1.021			
356-358	DC	NL				Height	0.37	0.13	0.24				
				28:41		1.34	105.51	60.40	45.11	0.965			
				28:48		1.53	267.84	162.02	105.82	0.969			
				29:00		1.49	55.30	33.05	22.25	0.975			
				29:45		1.56	386.42	235.21	151.21	1.001	12378-PeCDD	AN	
				29:53	RO	0.14	15.46	9.40	66.29	1.005			
356-358			5 Peaks				830.53						
13C12-PeCDD						1.32-1.78				0.865-1.135			
368-370	DC	NL				Height	0.48	0.38	0.10				
				27:53	RO	4.08	1.63	2.61	0.64	0.938			
				28:21	RO	4.84	0.79	1.50	0.31	0.953			
				28:30	RO	3.92	2.96	4.55	1.16	0.959			
				28:39		1.71	1.87	1.18	0.69	0.964			
				29:44		1.49	301.70	180.47	121.23	1.000	13C12-PeCDD 123	IS3	
						Height	100.74	60.34	40.40				
				30:20	RO	1.31	2.32	1.19	0.91	1.020			
368-370			6 Peaks				311.27						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF						1.05-1.43				0.961-1.046			
374-376	DC	NL				Height	0.55	0.30	0.25				
				31:12		1.29	43.97	24.75	19.22	0.967			
				31:20		1.27	337.28	188.90	148.38	0.972			
				31:31		1.32	8.96	5.10	3.86	0.977			J
				31:38		1.30	22.23	12.56	9.67	0.981			
				31:47		1.28	276.43	155.01	121.42	0.986			

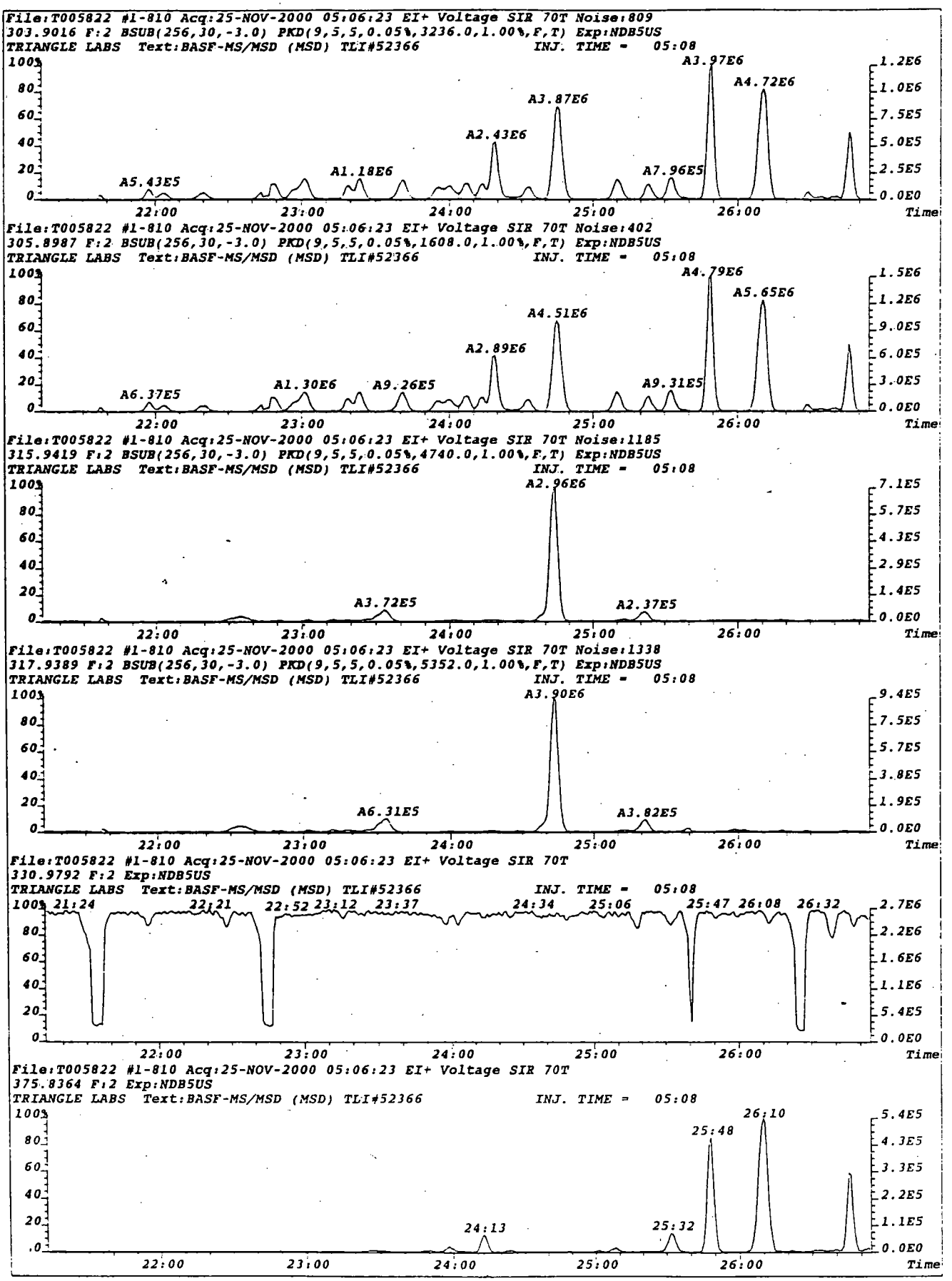
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
				32:00		1.29	8.49	4.78	3.71	0.992			J
				32:10		1.29	781.15	440.51	340.64	0.997	123478-HxCDF	AN	
				32:16		1.30	534.06	302.24	231.82	1.001	123678-HxCDF	AN	
				32:25		1.30	235.58	133.22	102.36	1.005			
				32:33		1.22	12.00	6.60	5.40	1.009			
				32:45		1.30	490.64	277.03	213.61	1.016	234678-HxCDF	AN	
		DC	SN	33:12	RO	1.33	0.94			1.029			
				33:30		1.28	381.36	214.26	167.10	1.039	123789-HxCDF	AN	
		DC	WH	33:58		1.30	20.34			1.053			
374-376			12	Peaks			3,132.15						
13C12-HxCDF						0.43-0.59				0.876-1.124			
384-386		DC	NL			Height	0.81	0.36	0.45				
		DC	SN	31:11	RO	0.40	1.33			0.967			
				32:09		0.51	401.65	135.18	266.47	0.997	13C12-HxCDF 478	SUR2	
				32:15		0.51	394.39	133.96	260.43	1.000	13C12-HxCDF 678	IS4	
						Height	129.28	44.28	85.00				
				32:44		0.51	364.64	123.14	241.50	1.015	13C12 HxCDF 234	ALT2	
		DC	SN	32:58	RO	1.25	1.27			1.022			
				33:29		0.51	313.06	105.99	207.07	1.038	13C12-HxCDF 789	ALT1	
384-386			4	Peaks			1,473.74						
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD						1.05-1.43				0.956-1.013			
390-392		DC	NL			Height	0.96	0.43	0.53				
				31:42		1.22	1,871.68	1,028.74	842.94	0.963			
				32:08		1.22	197.83	108.58	89.25	0.976			
				32:21		1.21	4,363.90	2,389.41	1,974.49	0.982			E
				32:30		1.15	28.95	15.51	13.44	0.987			
				32:52		1.22	306.01	168.24	137.77	0.998	123478-HxCDD	AN	
				32:56		1.22	1,009.75	554.58	455.17	1.000	123678-HxCDD	AN	
				33:15		1.22	600.08	330.26	269.82	1.010	123789-HxCDD	AN	
390-392			7	Peaks			8,378.20						
13C12-HxCDD						1.05-1.43				0.970-1.030			
402-404		DC	NL			Height	2.25	1.69	0.56				
		DC	WL	31:30	RO	9.40	10.71			0.956			
		DC	WL	31:48	RO	10.67	7.10			0.966			
	M			32:51		1.37	277.00	160.00	117.00	0.997	13C12-HxCDD 478	SUR3	
	M			32:56		1.33	268.00	153.00	115.00	1.000	13C12-HxCDD 678	IS5	
						Height	86.97	47.45	39.52				
				33:14		1.21	1,076.48	590.08	486.40	1.009	13C12-HxCDD 789	RS2	
				33:34	RO	5.28	4.12	9.72	1.84	1.019			
402-404			4	Peaks			1,625.60						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF						0.88-1.20				0.995-1.048			
403-410		DC	NL			Height	0.56	0.36	0.20				
				35:07		1.09	576.50	300.68	275.82	1.000	1234678-HpCDF	AN	
				35:22		1.03	23.82	12.10	11.72	1.008			

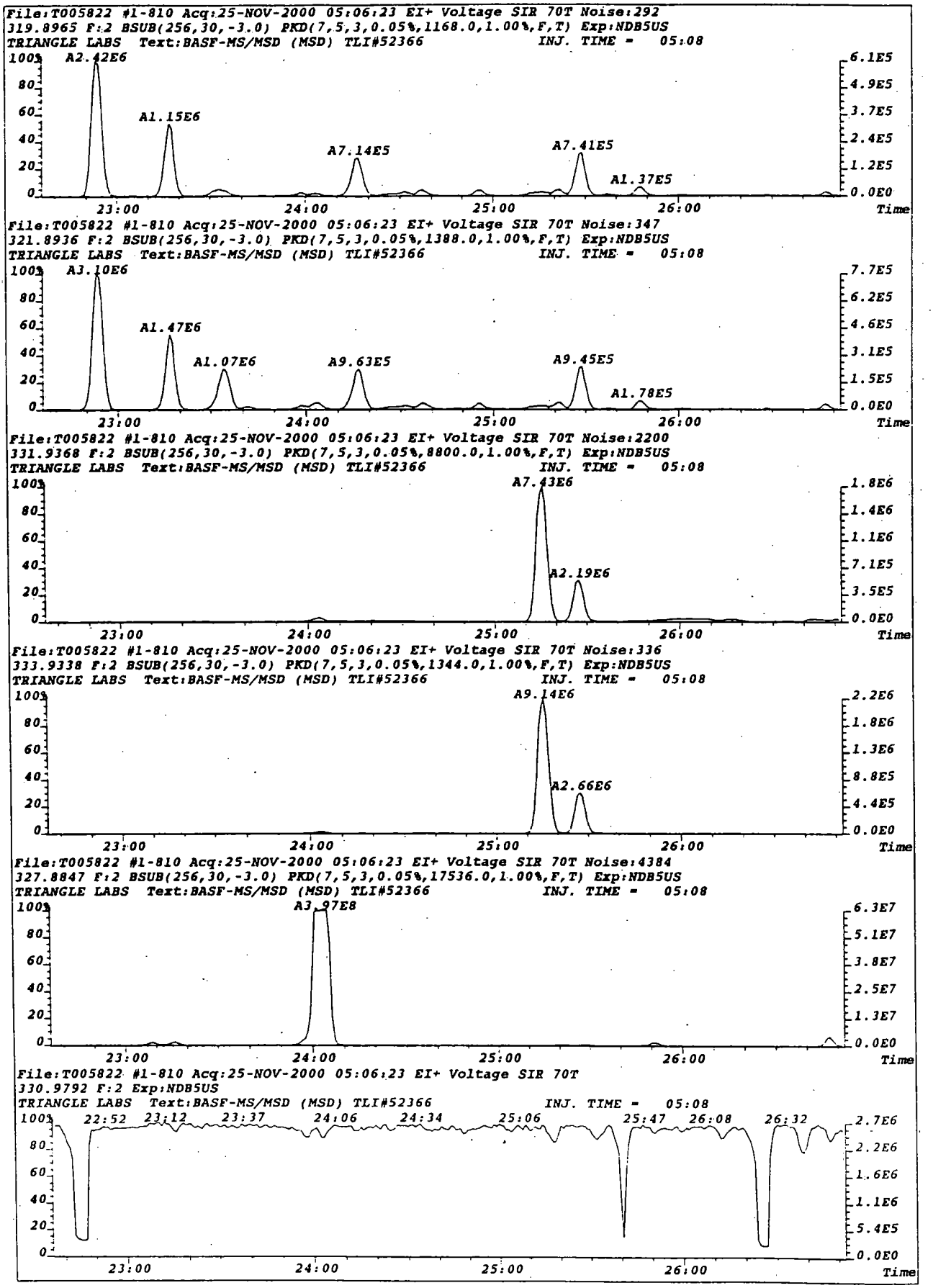
Compound/ M_Z....	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht Peak1	Area/Ht Peak2	Rel RT	Compound Name	ID	Flags
					35:31		1.08	132.19	68.53	63.66	1.012			
					36:08		1.12	3.96	2.09	1.87	1.029			J
					36:22	RO	2.18	1.69	1.31	0.83	1.036			J
					36:37		1.08	217.24	112.80	104.44	1.043	1234789-HpCDF	AN	
408-410				6 Peaks				955.40						
13C12-HpCDF							0.37-0.51				0.943-1.114			
418-420	DC	NL					Height	0.51	0.22	0.29				
					35:06		0.43	220.71	65.89	154.82	1.000	13C12-HpCDF 678	IS6	
							Height	69.01	20.76	48.25				
					36:37		0.42	152.92	45.36	107.56	1.043	13C12-HpCDF 789	SUR4	
418-420				2 Peaks				373.63						
---------- Above: HpCDF / HpCDD Follows ----------														
HpCDD							0.88-1.20				0.974-1.005			
424-426	DC	NL					Height	2.29	1.12	1.17				
					35:23		1.04	7,467.30	3,804.33	3,662.97	0.979			E
					36:09		1.04	8,906.58	4,532.86	4,373.72	1.000	1234678-HpCDD	AN	E
424-426				2 Peaks				16,373.88						
13C12-HpCDD							0.88-1.20				0.972-1.028			
436-438	DC	NL					Height	3.68	2.47	1.21				
					36:08		1.15	205.96	110.23	95.73	1.000	13C12-HpCDD 678	IS7	
							Height	53.77	28.23	25.54				
					36:17	RO	3.42	38.33	64.28	18.79	1.004			
436-438				2 Peaks				244.29						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------														
OCDF							0.76-1.02				0.899-1.101			
442-444	DC	NL					Height	0.20	0.10	0.10				
	DC	WL			35:37	RO	0.38	0.19			0.897			
					36:09	RO	1.34	0.83	0.59	0.44	0.910			
	DC	SN			37:07	RO	0.55	0.23			0.935			
	DC	SN			37:11		0.88	0.30			0.936			
	DC	SN			37:18	RO	1.44	0.17			0.939			
	DC	SN			37:27	RO	0.55	0.34			0.943			
					37:39	RO	0.71	1.85	0.87	1.23	0.948			
	DC	SN			38:02		0.92	0.98			0.958			
	DC	SN			38:49		0.85	0.96			0.977			
	DC	SN			38:55		0.76	0.37			0.980			
	DC	SN			39:04		2.23	0.81			0.984			
					39:43		0.93	6.17	2.98	3.19	1.000			
					39:55		0.91	266.71	127.29	139.42	1.005	OCDF	AN	
	DC	SN			40:15	RO	2.43	0.83			1.013			
	DC	SN			40:37	RO	1.33	0.28			1.023			
	DC	SN			40:44	RO	1.06	0.91			1.026			
					41:07	RO	2.21	0.79	0.93	0.42	1.035			
	DC	SN			41:18	RO	1.92	0.25			1.040			
					41:48	RO	1.58	2.38	1.99	1.26	1.052			
	DC	SN			43:01	RO	1.41	0.42			1.083			

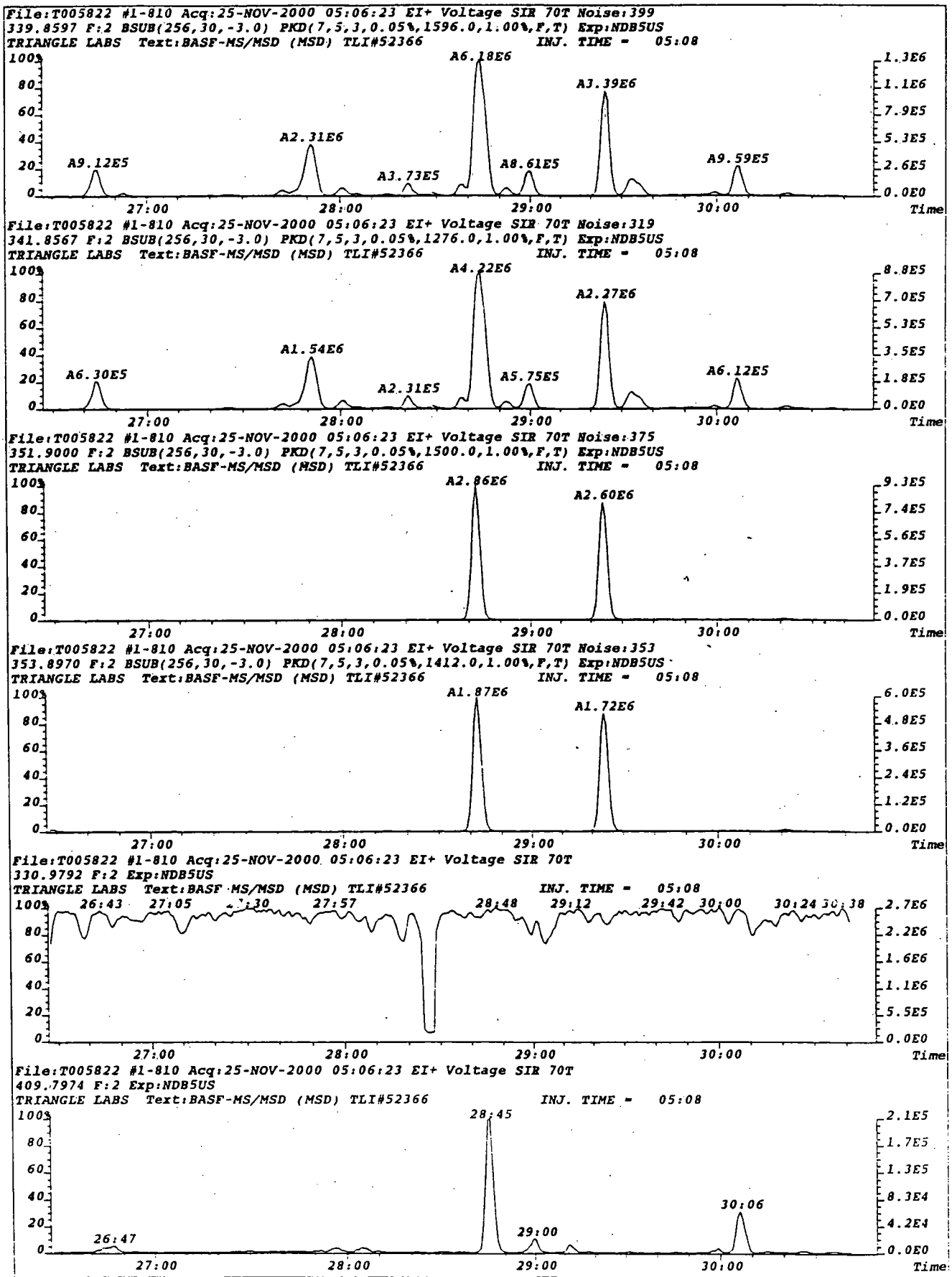
Compound / M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound Name..	ID..	Flags.
442-444			6 Peaks				278.73						
OCDD				0.76-1.02						0.899-1.101			
458-460	DC	NL		Height			0.24	0.10	0.14				
			39:43	0.83			16,198.08	7,325.28	8,872.80	1.000	OCDD	AN	E
458-460			1 Peak				16,198.08						
13C12-OCDD				0.76-1.02						0.996-1.004			
470-472	DC	NL		Height			7.67	5.43	2.24				
M			39:43	1.01			188.70	94.80	93.90	1.000	13C12-OCDD	IS8	
				Height			42.68	20.39	22.29				
470-472			1 Peak				188.70						

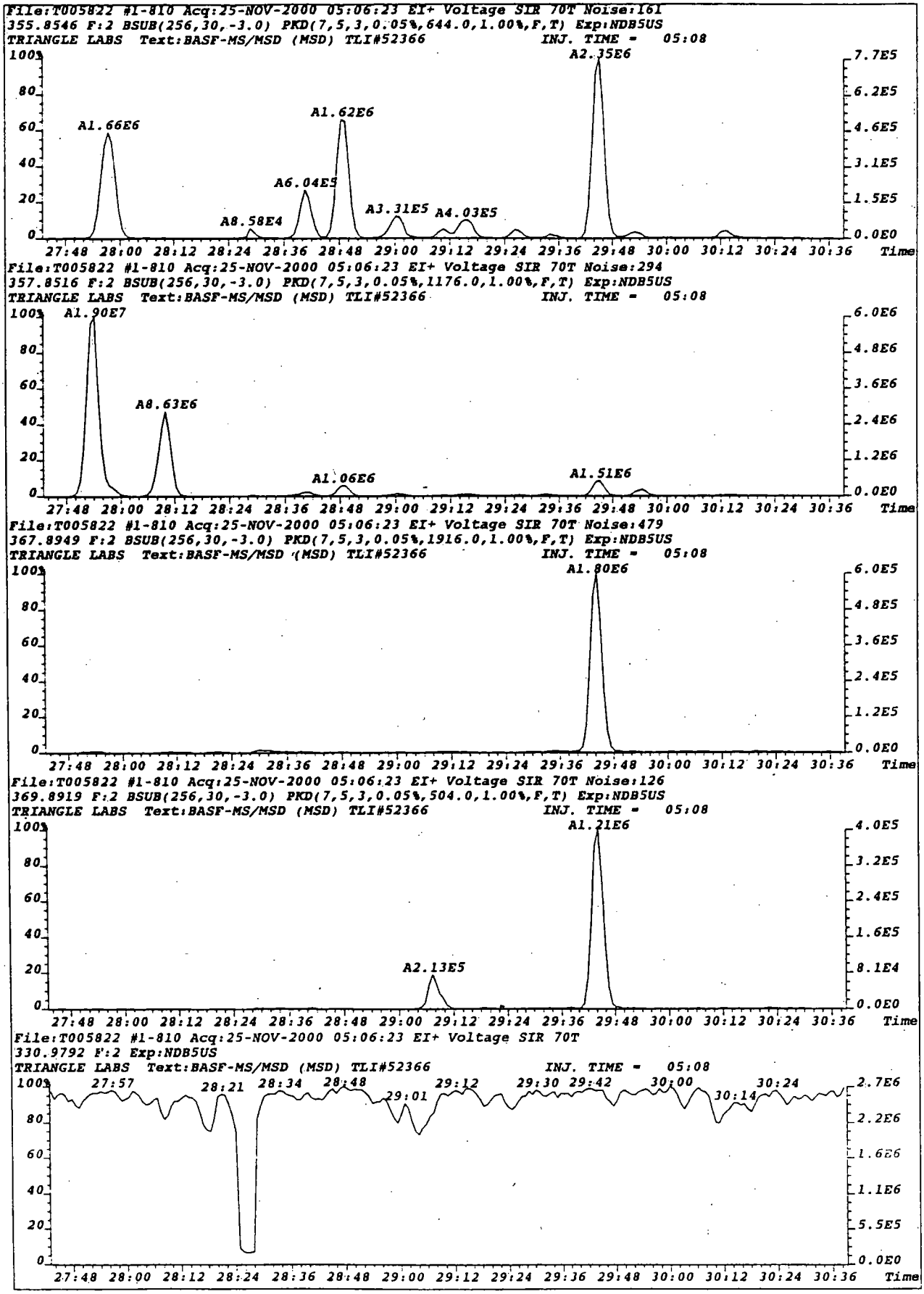
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

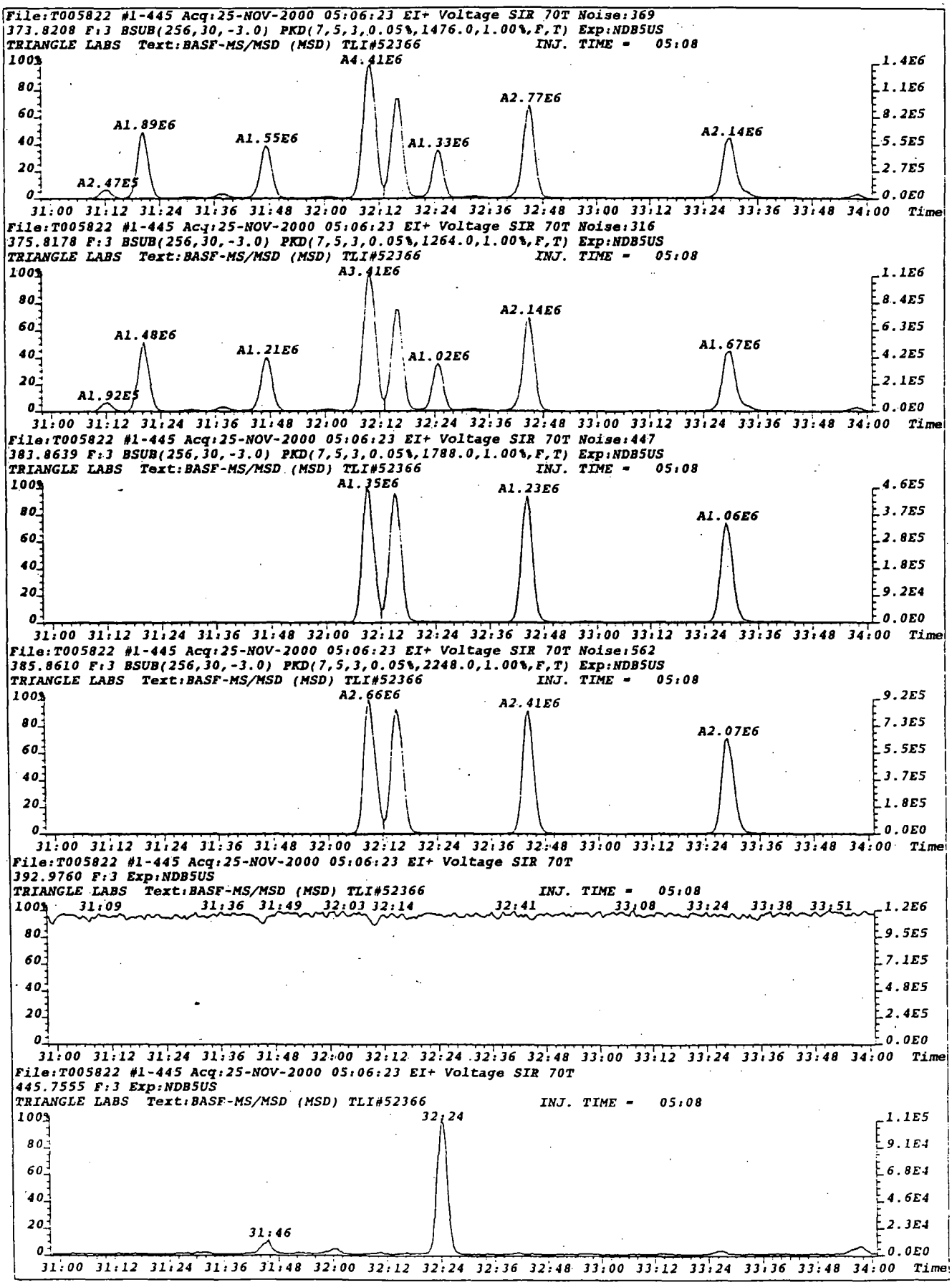
*** End of Report ***

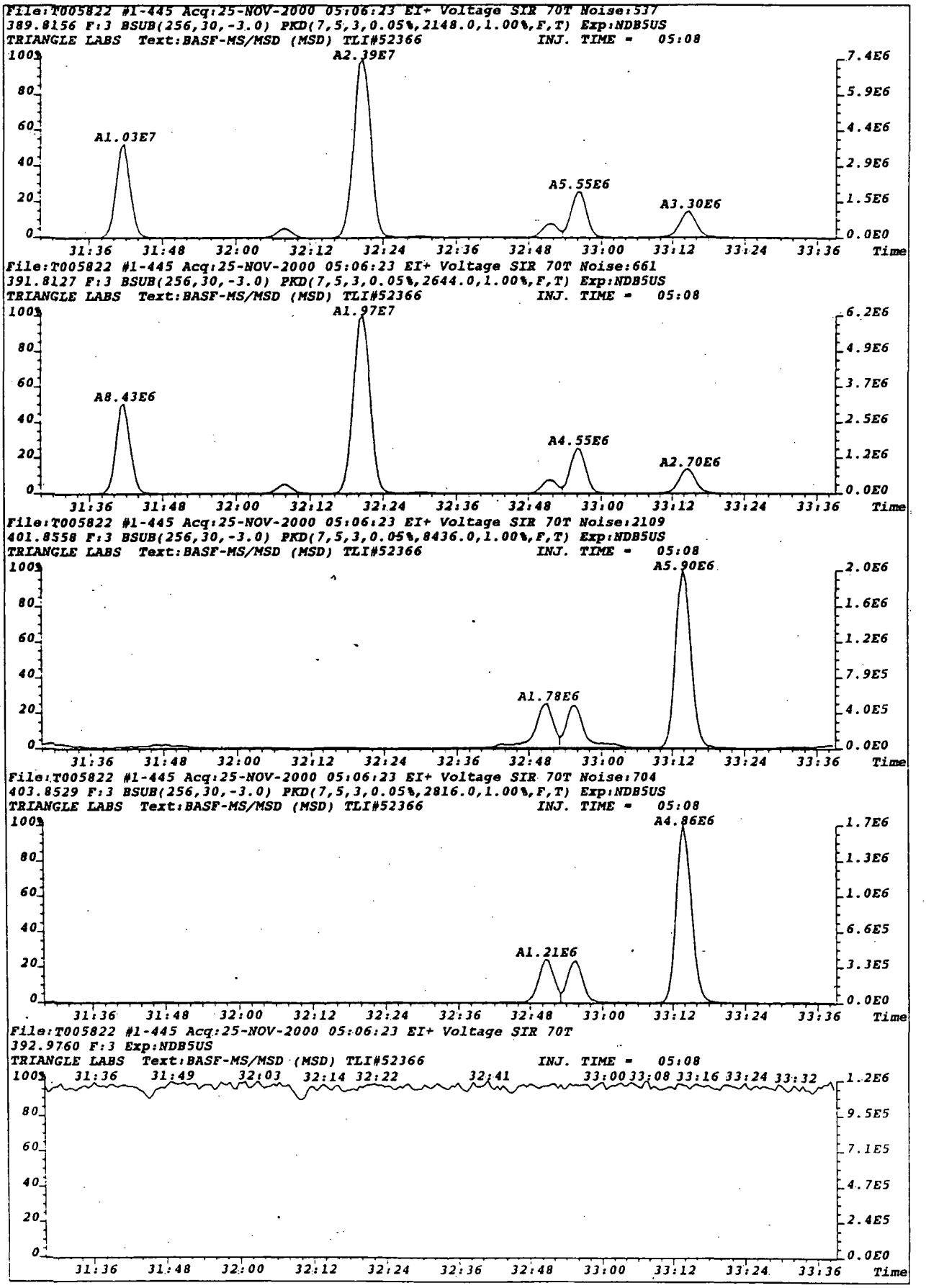

File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:809
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,3236.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A5.43E5
A1.18E6
A2.43E6
A3.87E6
A7.96E5
A3.97E6
A4.72E6
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:402
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,1608.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A6.37E5
A1.30E6
A9.26E5
A2.89E6
A4.51E6
A9.31E5
A4.79E6
A5.65E6
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:1185
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,4740.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A3.72E5
A2.96E6
A2.37E5
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:1338
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,5352.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A6.31E5
A3.90E6
A3.82E5
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
21:24 22:21 22:52 23:12 23:37 24:34 25:06 25:47 26:08 26:32
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
24:13
25:32
25:48
26:10
22:00
23:00
24:00
25:00
26:00
Time


File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:292
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A2.42E6
A1.15E6
A7.14E5
A7.41E5
A1.37E5
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:347
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1388.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A3.10E6
A1.47E6
A1.07E6
A9.63E5
A9.45E5
A1.78E5
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:2200
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,8800.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A7.43E6
A2.19E6
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:336
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1344.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A9.14E6
A2.66E6
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:4384
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,17536.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A3.97E8
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
22:52 23:12 23:37 24:06 24:34 25:06 25:47 26:08 26:32
23:00 24:00 25:00 26:00
Time


File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:399
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1596.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A6.18E6
A3.39E6
A2.31E6
A9.12E5
A3.73E5
A8.61E5
A9.59E5
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:319
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1276.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A4.22E6
A2.27E6
A1.54E6
A6.30E5
A2.31E5
A5.75E5
A6.12E5
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:375
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1500.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A2.86E6
A2.60E6
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:353
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1412.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A1.87E6
A1.72E6
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
26:43
27:05
27:57
28:48
29:12
29:42
30:00
30:24
30:38
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
28:45
30:06
29:00
26:47
27:00
28:00
29:00
30:00
Time


File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:161
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,644.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A1.66E6
A8.58E4
A6.04E5
A1.62E6
A3.31E5
A4.03E5
A2.35E6
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:294
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1176.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A1.90E7
A8.63E6
A1.06E6
A1.51E6
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:479
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1916.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A1.80E6
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:126
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,504.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A2.13E5
A1.21E6
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
27:57
28:21
28:34
28:48
29:01
29:12
29:30
29:42
30:00
30:14
30:24
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time


File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:369
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1476.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A4.41E6
A2.77E6
A1.89E6
A1.55E6
A1.33E6
A2.14E6
A2.47E5
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:316
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1264.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A3.41E6
A2.14E6
A1.48E6
A1.21E6
A1.02E6
A1.67E6
A1.92E5
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:447
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1788.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A1.35E6
A1.23E6
A1.06E6
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:562
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2248.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A2.66E6
A2.41E6
A2.07E6
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
32:24
31:46
Time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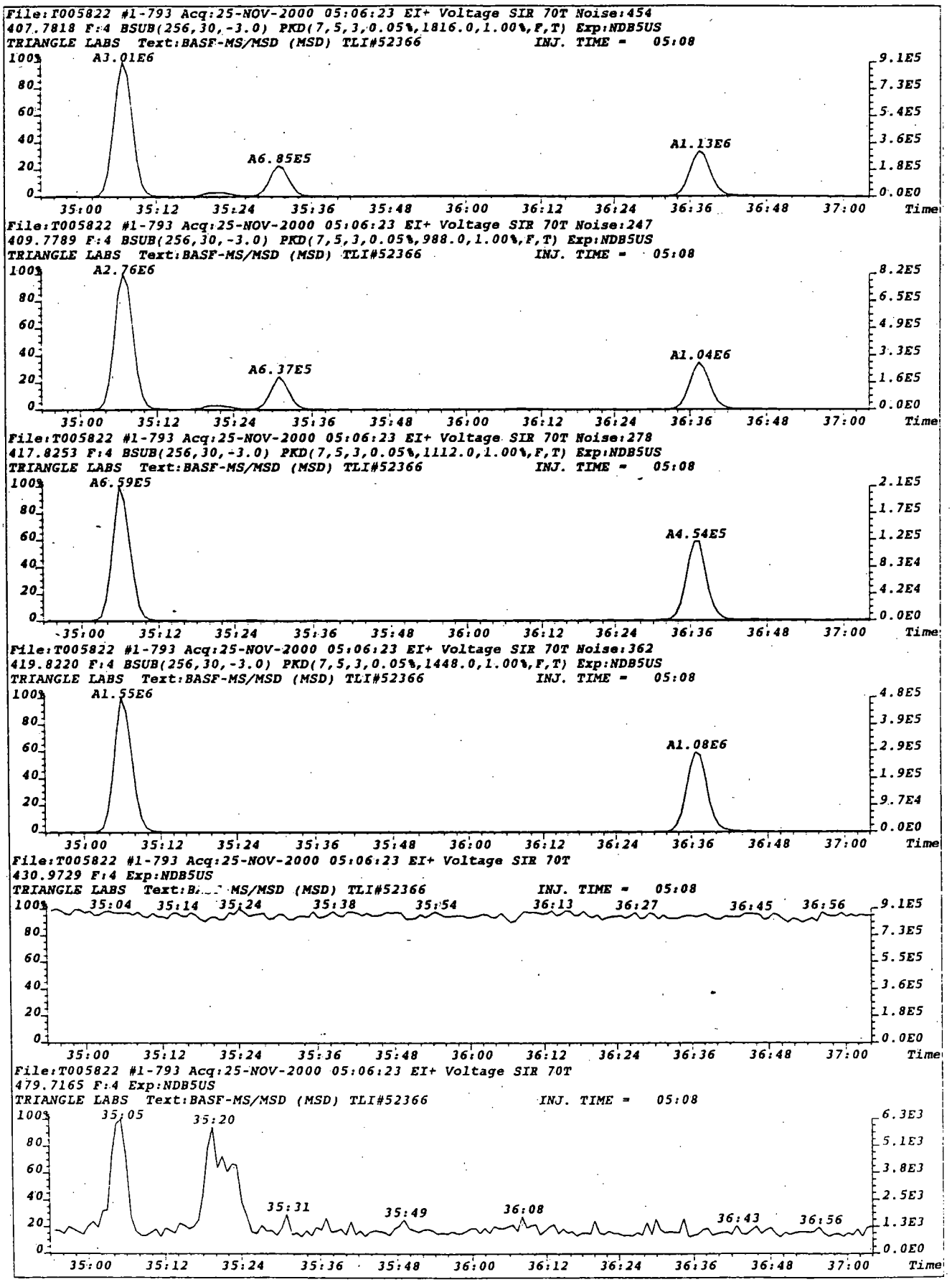
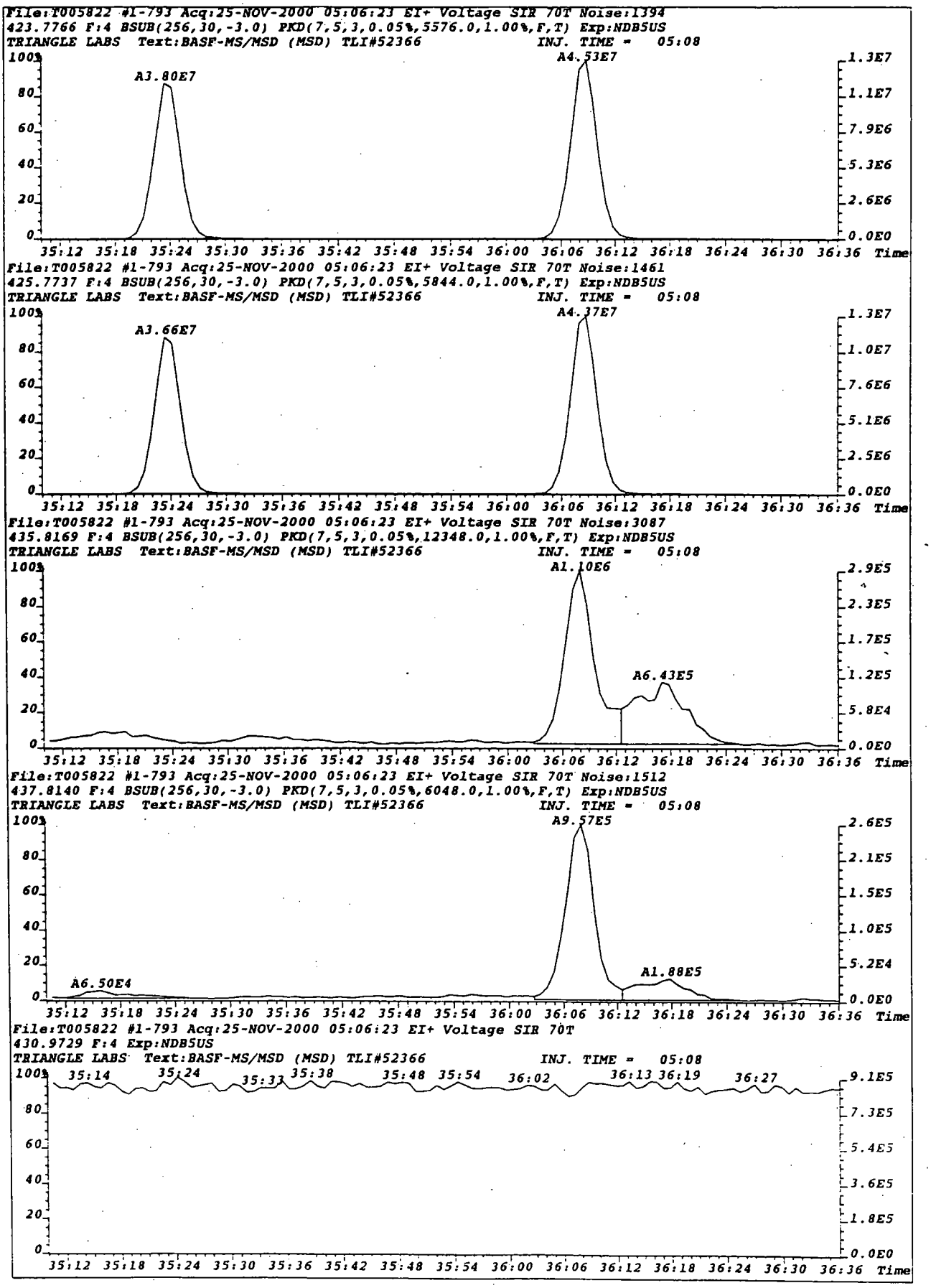
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A2.39E7
A1.03E7
A5.55E6
A3.30E6
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:661
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2644.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A1.97E7
A8.43E6
A4.55E6
A2.70E6
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:2109
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,8436.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A5.90E6
A1.78E6
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:704
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,2816.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A4.86E6
A1.21E6
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
Time


File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:454
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1816.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A3.01E6
A6.85E5
A1.13E6
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:247
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,988.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A2.76E6
A6.37E5
A1.04E6
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:278
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1112.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A6.59E5
A4.54E5
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:362
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1448.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A1.55E6
A1.08E6
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
35:05
35:20
35:31
35:49
36:08
36:43
36:56
Time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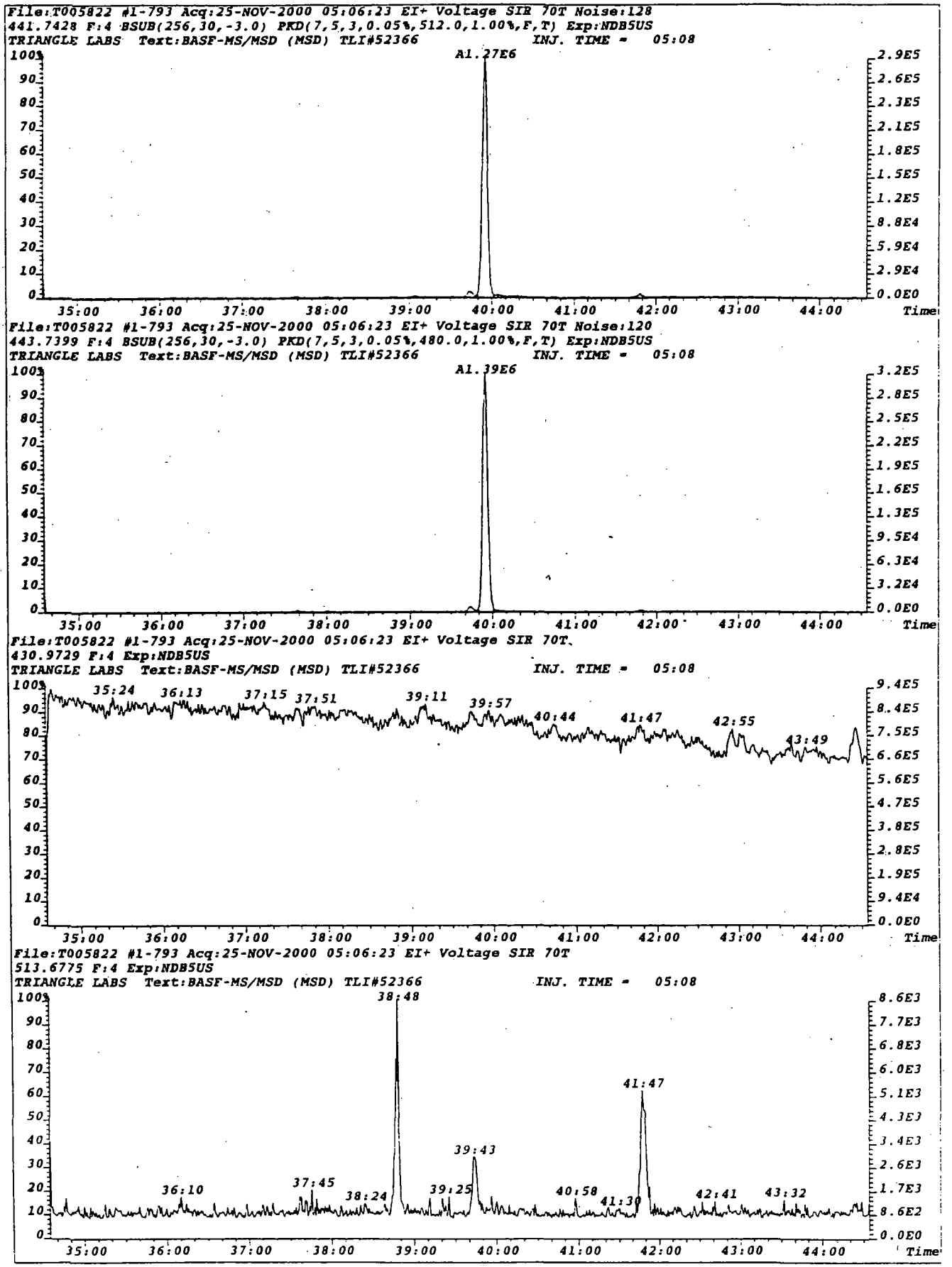
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,5576.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08
A3.80E7
A4.53E7
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:1461
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,5844.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08
A3.66E7
A4.37E7
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:3087
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,12348.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08
A1.10E6
A6.43E5
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:1512
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,6048.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08
A9.57E5
A6.50E4
A1.88E5
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08
Time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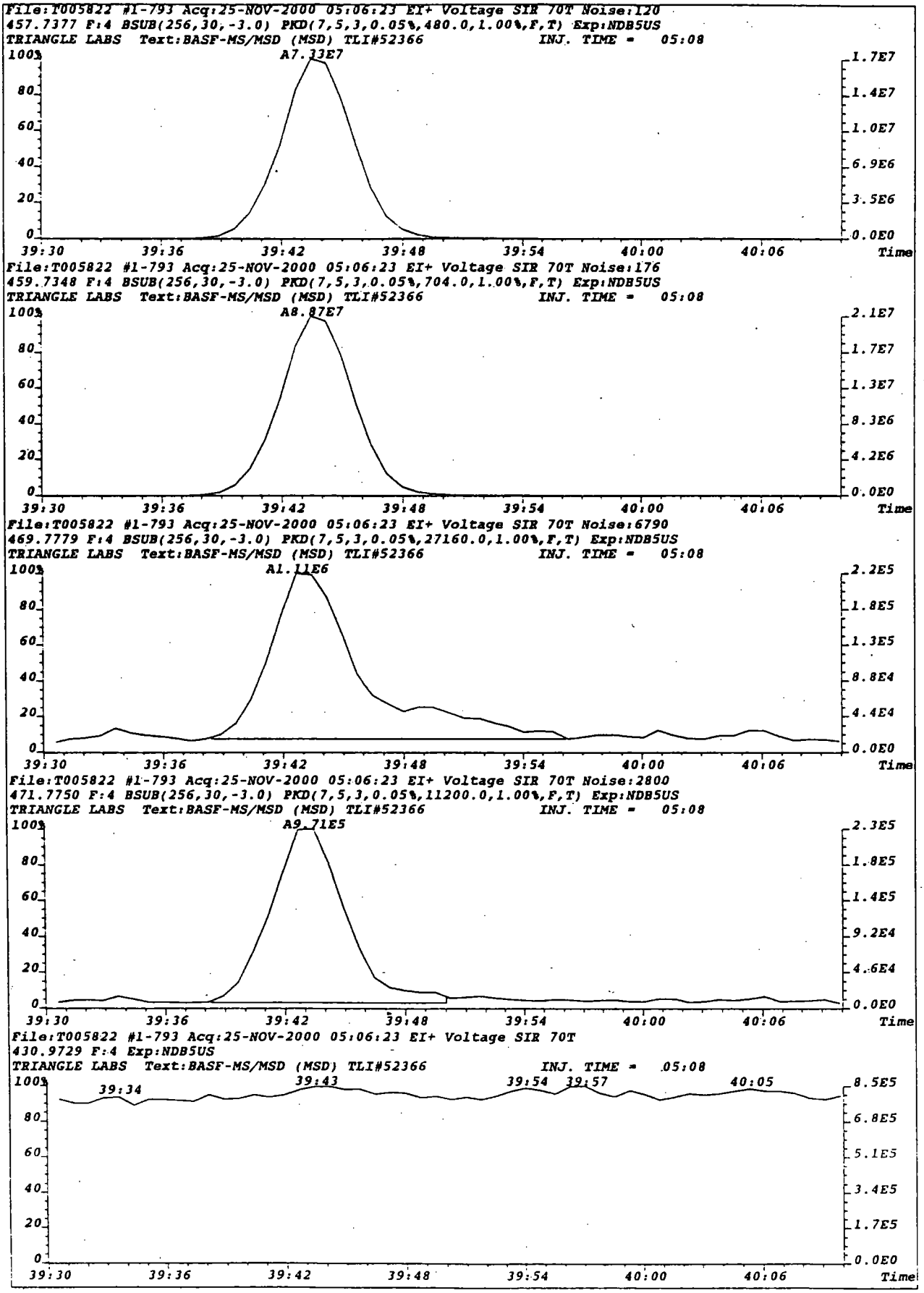
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,512.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08
A1.27E6
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:120
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,480.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08
A1.39E6
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08
35:24
36:13
37:15
37:51
39:11
39:57
40:44
41:47
42:55
43:49
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08
38:48
41:47
39:43
36:10
37:45
38:24
39:25
40:58
41:30
42:41
43:32
Time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457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,480.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A7.13E7
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:176
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,704.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A8.87E7
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:6790
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,27160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A1.11E6
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T Noise:2800
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,11200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
A9.71E5
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08
39:34
39:43
39:54
39:57
40:05
100%
80
60
40
20
0
39:30
39:36
39:42
39:48
39:54
40:00
40:06
Time
1.7E7
1.4E7
1.0E7
6.9E6
3.5E6
0.0E0
2.1E7
1.7E7
1.3E7
8.3E6
4.2E6
0.0E0
2.2E5
1.8E5
1.3E5
8.8E4
4.4E4
0.0E0
2.3E5
1.8E5
1.4E5
9.2E4
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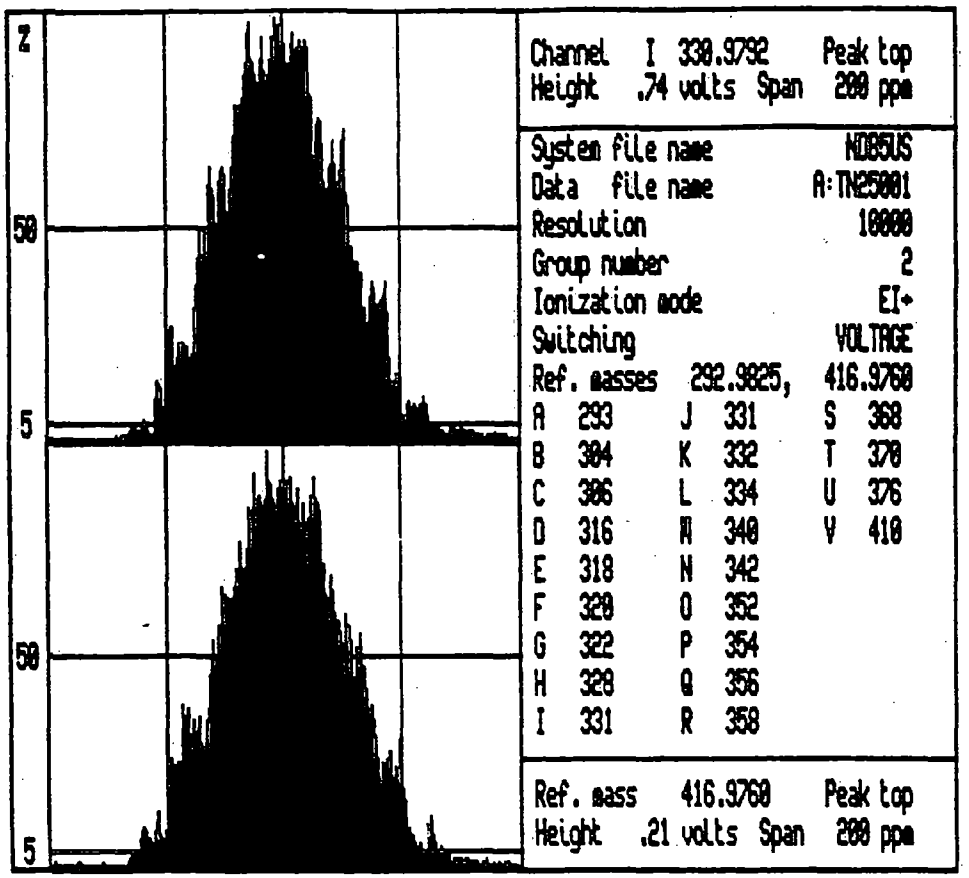
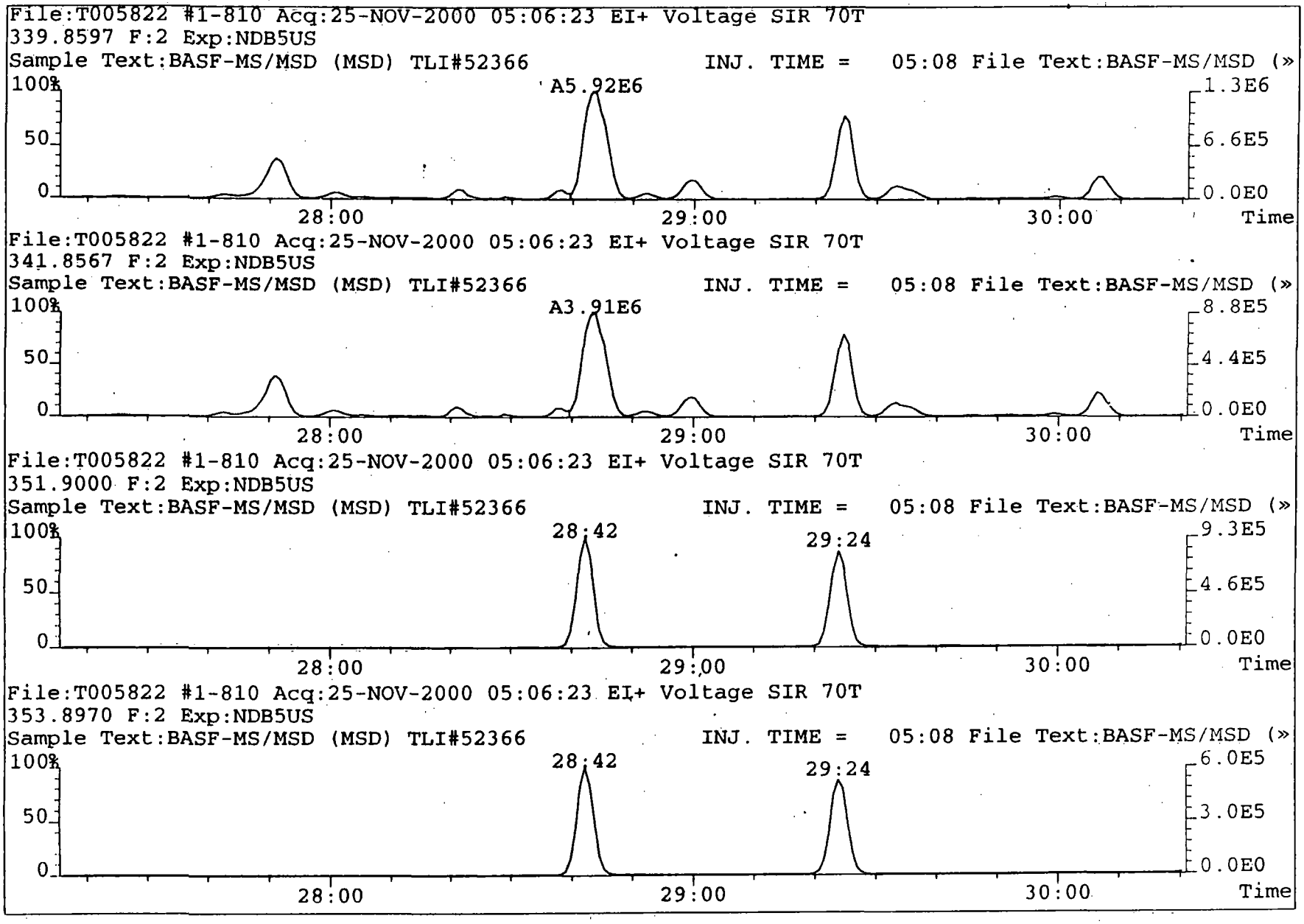
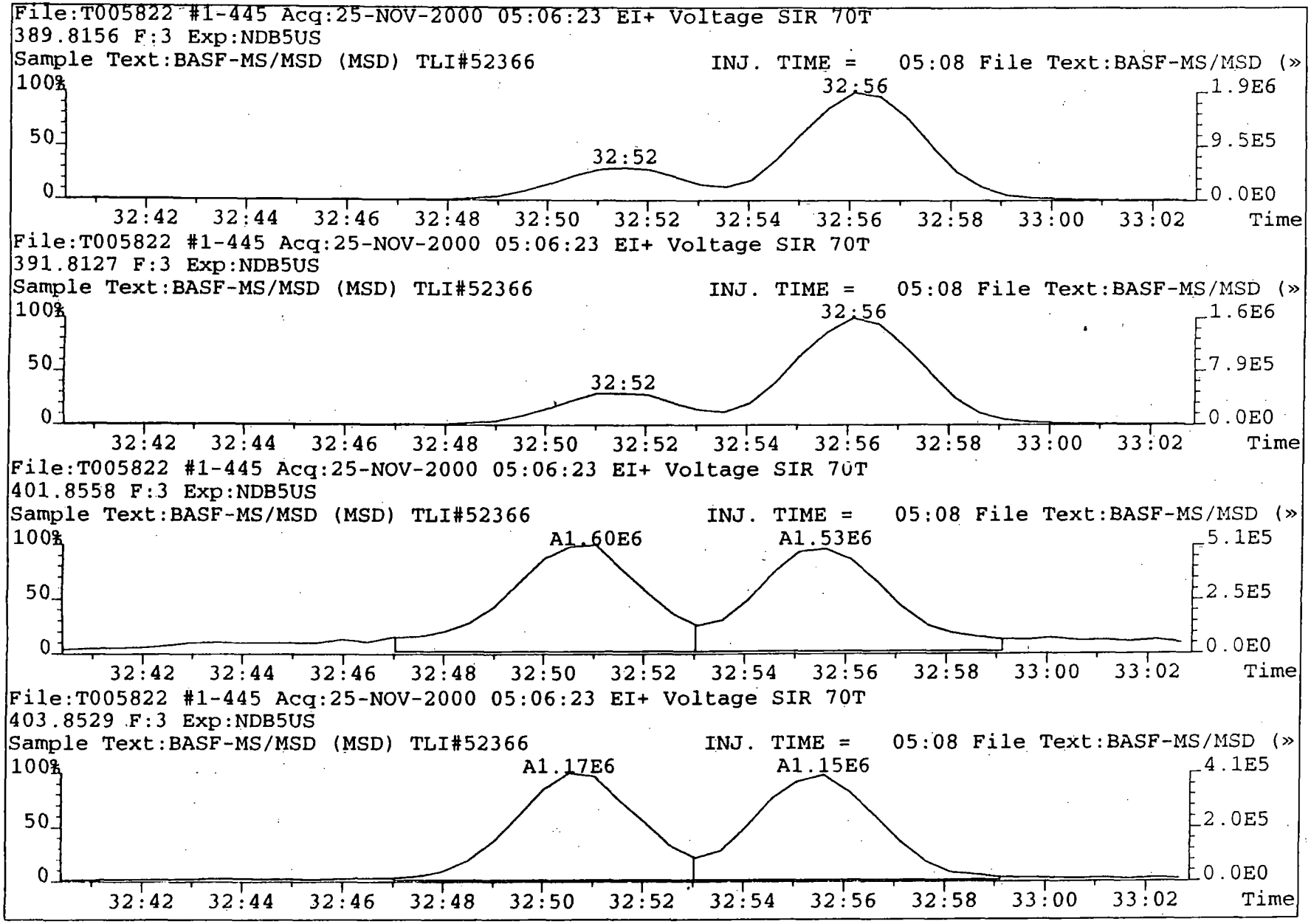
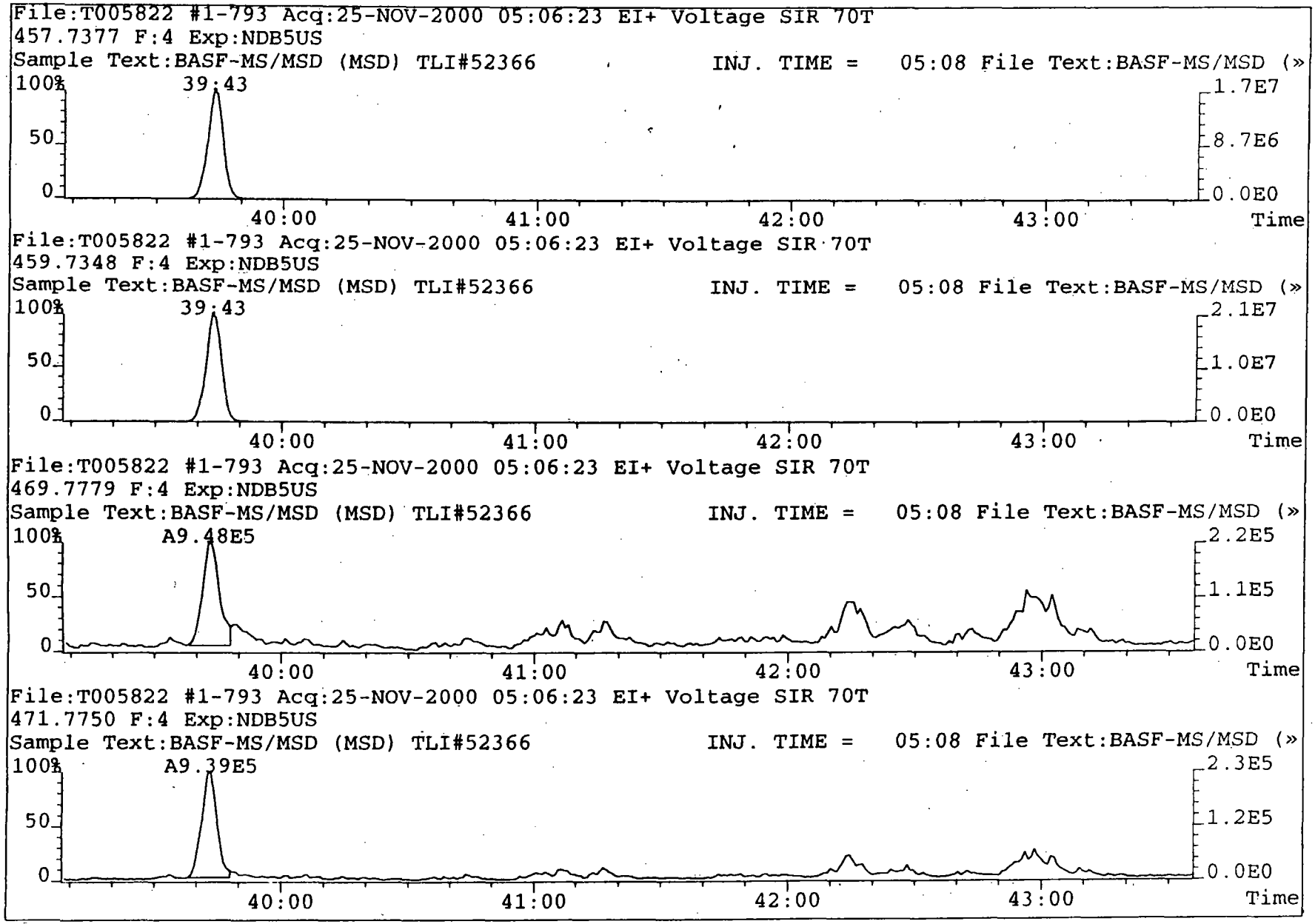
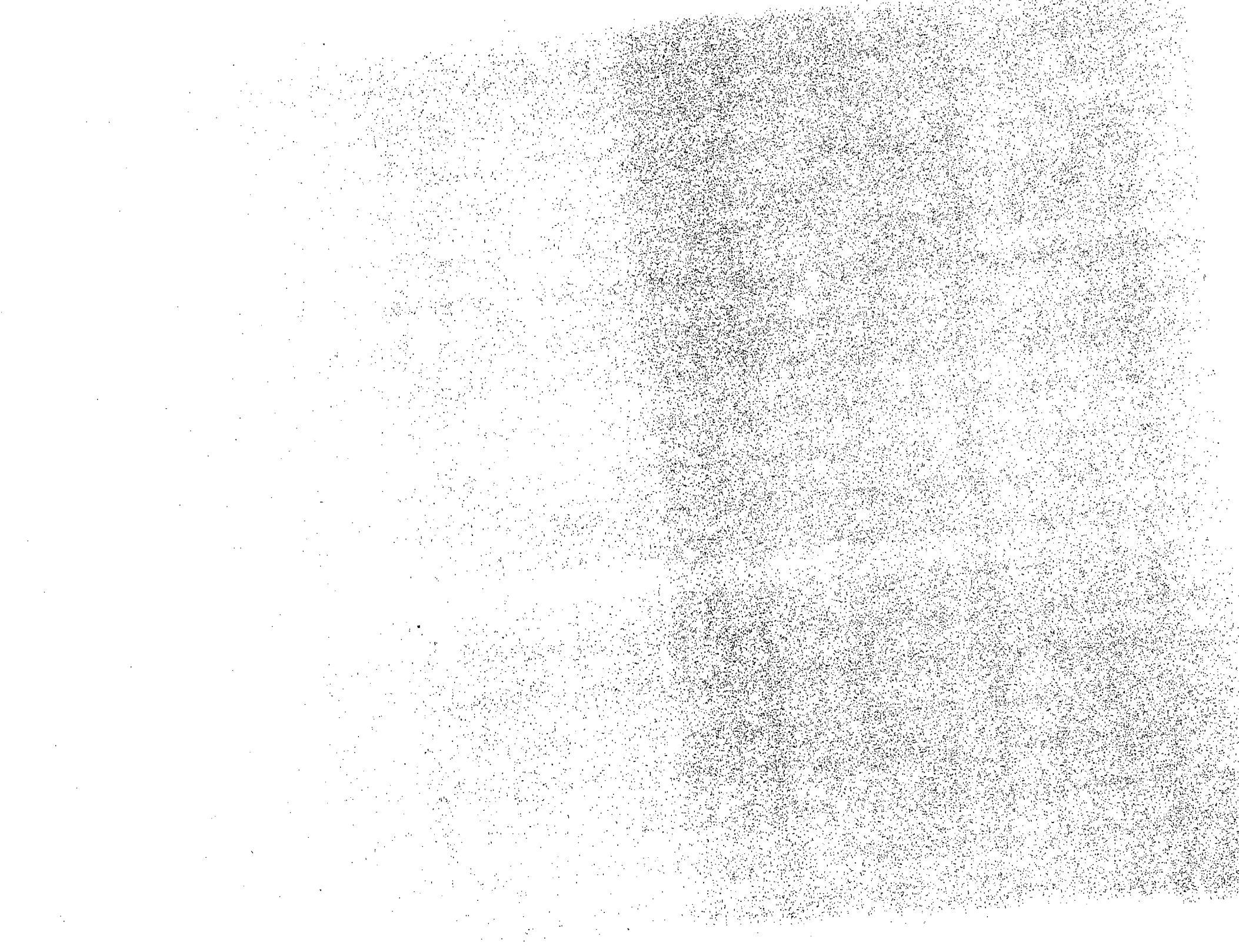
6.8E5
5.1E5
3.4E5
1.7E5
0.0E0


Z
50
5
50
5
Channel I 330.9792 Peak top
Height .74 volts Span 200 ppm
System file name NOBSUS
Data file name A:TN25001
Resolution 10000
Group number 2
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 416.9760
A 293 J 331 S 368
B 304 K 332 T 370
C 306 L 334 U 376
D 316 M 340 V 410
E 318 N 342
F 320 O 352
G 322 P 354
H 328 Q 356
I 331 R 358
Ref. mass 416.9760 Peak top
Height .21 volts Span 200 ppm


File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
339.8597 F:2 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
50
0
A5.92E6
1.3E6
6.6E5
0.0E0
28:00
29:00
30:00
Time
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
341.8567 F:2 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
50
0
A3.91E6
8.8E5
4.4E5
0.0E0
28:00
29:00
30:00
Time
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
351.9000 F:2 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
50
0
28:42
29:24
9.3E5
4.6E5
0.0E0
28:00
29:00
30:00
Time
File:T005822 #1-810 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
353.8970 F:2 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
50
0
28:42
29:24
6.0E5
3.0E5
0.0E0
28:00
29:00
30:00
Time


File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
389.8156 F:3 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
50
0
32:52
32:56
1.9E6
9.5E5
0.0E0
32:42 32:44 32:46 32:48 32:50 32:52 32:54 32:56 32:58 33:00 33:02 Time
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
391.8127 F:3 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
50
0
32:52
32:56
1.6E6
7.9E5
0.0E0
32:42 32:44 32:46 32:48 32:50 32:52 32:54 32:56 32:58 33:00 33:02 Time
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
401.8558 F:3 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
50
0
A1.60E6
A1.53E6
5.1E5
2.5E5
0.0E0
32:42 32:44 32:46 32:48 32:50 32:52 32:54 32:56 32:58 33:00 33:02 Time
File:T005822 #1-445 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
403.8529 F:3 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366
INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
50
0
A1.17E6
A1.15E6
4.1E5
2.0E5
0.0E0
32:42 32:44 32:46 32:48 32:50 32:52 32:54 32:56 32:58 33:00 33:02 Time


File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
457.7377 F:4 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
39.43
50
0
1.7E7
8.7E6
0.0E0
40:00
41:00
42:00
43:00
Time
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
459.7348 F:4 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
39.43
50
0
2.1E7
1.0E7
0.0E0
40:00
41:00
42:00
43:00
Time
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
469.7779 F:4 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
A9.48E5
50
0
2.2E5
1.1E5
0.0E0
40:00
41:00
42:00
43:00
Time
File:T005822 #1-793 Acq:25-NOV-2000 05:06:23 EI+ Voltage SIR 70T
471.7750 F:4 Exp:NDB5US
Sample Text:BASF-MS/MSD (MSD) TLI#52366 INJ. TIME = 05:08 File Text:BASF-MS/MSD (»
100%
A9.39E5
50
0
2.3E5
1.2E5
0.0E0
40:00
41:00
42:00
43:00
Time



TriMatrix, Inc.

TLI Project: **52366** — Method 8290 PCDD/PCDF Analysis (b)
Client Sample: **TLI LCS** — Analysis File: **T005827**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	/ /	Spike File:	**SPMIT32S**
TLI ID:	**TLI LCS**	Date Extracted:	**11/21/2000**	ICal:	**TF57140**
		Date Analyzed:	**11/25/2000**	ConCal:	**T005815**
Sample Size:	**1.000 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005817**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**JMM**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	435			0.80	25:23	
1,2,3,7,8-PeCDD	1860			1.63	29:41	
1,2,3,4,7,8-HxCDD	2050			1.23	32:48	
1,2,3,6,7,8-HxCDD	2050			1.21	32:53	
1,2,3,7,8,9-HxCDD	2100			1.21	33:12	
1,2,3,4,6,7,8-HpCDD	2240			1.07	36:06	
1,2,3,4,6,7,8,9-OCDD	4430			0.81	39:41	
2,3,7,8-TCDF	402			0.85	24:39	
1,2,3,7,8-PeCDF	2180			1.57	28:38	
2,3,4,7,8-PeCDF	2550			1.49	29:21	
1,2,3,4,7,8-HxCDF	2050			1.29	32:07	
1,2,3,6,7,8-HxCDF	2060			1.30	32:13	
2,3,4,6,7,8-HxCDF	2170			1.31	32:42	
1,2,3,7,8,9-HxCDF	2200			1.30	33:27	
1,2,3,4,6,7,8-HpCDF	2040			1.08	35:04	
1,2,3,4,7,8,9-HpCDF	1780			1.10	36:35	
1,2,3,4,6,7,8,9-OCDF	5020			0.89	39:52	

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	1100	55.2	40%-130%	0.76	24:38	
$^{13}C_{12}$-2,3,7,8-TCDD	1140	56.8	40%-130%	0.79	25:21	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1970	98.6	40%-130%	1.50	28:37	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	2740	137	40%-130%	1.52	29:40	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1300	65.1	40%-130%	0.51	32:12	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1380	69.0	40%-130%	1.21	32:53	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1160	58.0	25%-130%	0.42	35:03	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	935	46.8	25%-130%	1.05	36:05	
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	967	24.2	25%-130%	0.85	39:40	V

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

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TLI Project: **52366** Method 8290 PCDD/PCDF Analysis (b)
Client Sample: **TLI LCS** Analysis File: **T005827**

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,4,7,8-PeCDF	2460	123	40%-130%	1.52	29:20	___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1340	67.1	40%-130%	0.51	32:06	___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1350	67.4	40%-130%	1.20	32:47	___
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	989	49.5	25%-130%	0.41	36:34	___

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	138	69.0	40%-130%	25:23	___

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1550	77.4	40%-130%	0.51	33:26	___
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1440	71.9	40%-130%	0.51	32:41	___

Recovery Standards	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.81	25:10	___
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.20	33:11	___

Data Reviewer: JCA 11/29/2000

MIT3_PSR v1.00, LARS 6.25 (0)

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
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Printed: 18:37 11/29/2000

Initial ....Date...

Data Review By: JCM 11-29-00

Channel specific noise levels computed from 'NL' heights.

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005827B.dbf
11/29/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht. Peak1	Area/Ht. Peak2	Rel.RT	Compound Name..	ID..	Flags
TCDF							0.65-0.89			0.860-1.077				
304-306	DC	NL					Height	0.05	0.03	0.02				
	DC	SN			22:22	RO	0.53	0.18			0.908			
	DC	SN			22:44		0.85	0.24			0.923			
	DC	SN			22:56	RO	1.10	0.18			0.931			
					24:13		0.86	0.82	0.38	0.44	0.983	1278-TCDF	AN	J
					24:39		0.85	34.38	15.77	18.61	1.001	2378-TCDF	AN	
	DC	SN			25:01	RO	1.38	0.14			1.016			
	DC	SN			25:19	RO	1.00	0.12			1.028			
					26:20	RO	1.08	0.23	0.14	0.13	1.069			J
	DC	WH			26:42	RO	0.53	0.21			1.084			
304-306			3	Peaks				35.43						
13C12-TCDF							0.65-0.89			0.959-1.041				
316-318	DC	NL					Height	0.04	0.02	0.02				
					24:11		0.72	0.67	0.28	0.39	0.982			
					24:38		0.76	167.35	72.53	94.82	1.000	13C12-2378-TCDF	ISO	
							Height	46.91	19.86	27.05				
					25:04	RO	0.92	1.54	0.67	0.73	1.018			
	DC	WH			26:07	RO	6.72	0.32			1.060			
316-318			3	Peaks				169.56						

---------- Above: TCDF / TCDD Follows ----------

Compound/ M_Z....	QC	Log	Omit	Why	RT	OK	Ratio	Total Area/Ht	Area/Ht. Peak1	Area/Ht. Peak2	Rel.RT	Compound Name..	ID..	Flags
TCDD							0.65-0.89			0.890-1.045				
320-322	DC	NL					Height	0.04	0.02	0.02				
	DC	SN			24:46		0.89	0.17			0.977			
	DC	SN			25:02	RO	0.50	0.07			0.988			
					25:23		0.80	28.08	12.47	15.61	1.001	2378-TCDD	AN	
	DC	SN			25:37		0.83	0.11			1.011			
	DC	SN			25:42	RO	1.50	0.14			1.014			
	DC	SN			25:52	RO	0.50	0.05			1.020			
					26:08	RO	0.33	0.09	0.04	0.12	1.031			J
					26:14	RO	1.75	0.14	0.14	0.08	1.035			J
	DC	SN			26:30	RO	2.33	0.05			1.045			
	DC	WH			26:34	RO	1.75	0.07			1.048			
320-322			3	Peaks				28.31						
37Cl-TCDD										0.921-1.079				
328	DC	NL					Height	0.03	0.03					
	DC	WL			22:45			0.07			0.897			
	DC	WL			22:59			0.02			0.907			
	DC	WL			23:06			0.07			0.911			
	DC	WL			23:14			0.03			0.917			

Compound/ M_Z....	QC.Log	Omit	Why	RT	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
				23:21			0.07	0.07		0.921			
	DC	SN		23:26			0.05			0.924			
	DC	SN		23:44			0.03			0.936			
	DC	SN		23:47			0.02			0.938			
	DC	SN		23:55			0.07			0.943			
				23:57			0.17	0.17		0.945			
	DC	SN		24:03			0.04			0.949			
	DC	SN		24:16			0.07			0.957			
	DC	SN		24:29			0.09			0.966			
	DC	SN		24:42			0.15			0.974			
	DC	SN		25:03			0.03			0.988			
	DC	SN		25:04			0.04			0.989			
	DC	SN		25:09			0.02			0.992			
				25:23			14.52	14.52		1.001	37Cl-TCDD	CLS	
				26:06			0.32	0.32		1.030			
				26:12			0.11	0.11		1.034			
				26:19			0.10	0.10		1.038			
	DC	SN		26:22			0.12			1.040			
				26:35			0.11	0.11		1.049			
	DC	SN		26:43			0.10			1.054			
	DC	SN		26:57			0.11			1.063			
328			7	Peaks			15.40						
13C12-TCDD				0.65-0.89						0.921-1.079			
332-334	DC	NL		Height			0.06	0.04	0.02				
				25:10		0.81	236.38	105.80	130.58	0.993	13C12-1234-TCDD	RS1	
				25:21		0.79	141.25	62.41	78.84	1.000	13C12-2378-TCDD	IS1	
				Height			39.18	17.08	22.10				
				25:52	RO	1.13	0.41	0.26	0.23	1.020			
332-334			3	Peaks			378.04						

---------- Above: TCDD / PeCDF Follows ----------

PeCDF				1.32-1.78						0.923-1.064			
340-342	DC	NL		Height			0.04	0.02	0.02				
				27:48	RO	2.23	0.79	0.69	0.31	0.971			J
				28:16	RO	2.24	0.43	0.38	0.17	0.988			J
				28:38		1.57	277.82	169.54	108.28	1.001	12378-PeCDF	AN	
				28:49		1.32	2.04	1.16	0.88	1.007			J
				28:56	RO	1.20	3.67	2.23	1.86	1.011			J
	N			29:21		1.49	329.22	196.91	132.31	1.026	23478-PeCDF	AN	
				30:20		1.64	1.56	0.97	0.59	1.060			J
340-342			7	Peaks			615.53						
13C12-PeCDF				1.32-1.78						0.860-1.140			
352-354	DC	NL		Height			0.04	0.02	0.02				
				27:47		1.38	0.50	0.29	0.21	0.971			
				28:37		1.50	279.45	167.65	111.80	1.000	13C12-PeCDF 123	IS2	
				Height			86.53	51.72	34.81				
				28:46	RO	2.00	1.63	1.28	0.64	1.005			
				28:55		1.59	1.89	1.16	0.73	1.010			
				29:20		1.52	345.00	207.84	137.16	1.025	13C12-PeCDF 234	SUR1	

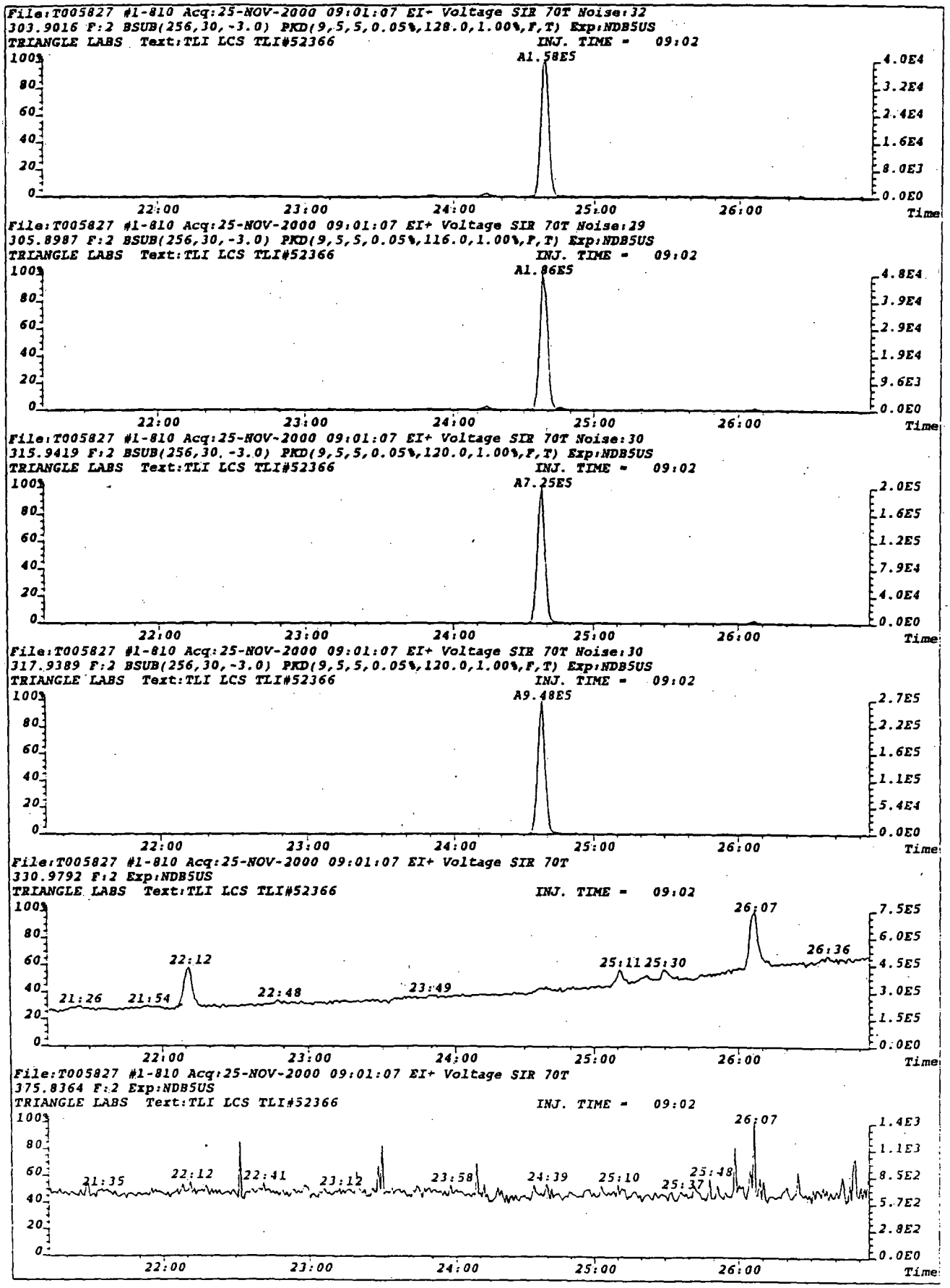
Compound/ M_I....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				30:19		1.53	3.42	2.07	1.35	1.059			
352-354			6	Peaks			631.89						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD						1.32-1.78			0.933-1.021				
356-358	DC	NL				Height	0.04	0.02	0.02				
				29:41		1.63	216.91	134.53	82.38	1.001	12378-PeCDD	AN	
356-358			1	Peak			216.91						
13C12-PeCDD						1.32-1.78			0.865-1.135				
368-370	DC	NL				Height	0.04	0.02	0.02				
				28:35		1.69	1.13	0.71	0.42	0.963			
				28:44		1.33	0.70	0.40	0.30	0.969			
				29:26	RO	0.89	0.26	0.16	0.18	0.992			
				29:40		1.52	220.76	133.21	87.55	1.000	13C12-PeCDD 123	IS3	
						Height	73.83	44.61	29.22				
				30:04		1.58	0.31	0.19	0.12	1.013			
				30:12	RO	1.15	0.33	0.15	0.13	1.018			
				30:28	RO	3.29	0.18	0.23	0.07	1.027			
368-370			7	Peaks			223.67						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF						1.05-1.43			0.961-1.046				
374-376	DC	NL				Height	0.19	0.09	0.10				
				31:18	RO	0.88	0.54	0.30	0.34	0.972			J
				32:07		1.29	404.46	228.00	176.46	0.997	123478-HxCDF	AN	
				32:13		1.30	424.21	239.58	184.63	1.001	123678-HxCDF	AN	
				32:42		1.31	404.81	229.40	175.41	1.016	234678-HxCDF	AN	
				32:52	RO	1.94	0.78	0.68	0.35	1.021			J
				33:27		1.30	335.71	189.98	145.73	1.039	123789-HxCDF	AN	
	DC	WH		33:44	RO	0.55	0.40			1.048			
374-376			6	Peaks			1,570.51						
13C12-HxCDF						0.43-0.59			0.876-1.124				
384-386	DC	NL				Height	0.17	0.08	0.09				
				31:07		0.58	1.41	0.52	0.89	0.966			
				31:16		0.50	0.87	0.29	0.58	0.971			
				32:06		0.51	389.85	131.85	258.00	0.997	13C12-HxCDF 478	SUR2	
				32:12		0.51	383.97	130.46	253.51	1.000	13C12-HxCDF 678	IS4	
						Height	128.52	43.37	85.15				
				32:20	RO	2.50	0.33	0.55	0.22	1.004			
	DC	SN		32:25	RO	0.36	0.59			1.007			
				32:41		0.51	386.44	131.34	255.10	1.015	13C12-HxCDF 234	ALT2	
	DC	SN		32:58	RO	0.92	0.36			1.024			
	DC	SN		33:02	RO	0.14	0.12			1.026			
				33:10	RO	0.60	0.74	0.25	0.42	1.030			
				33:26		0.51	305.79	102.73	203.06	1.038	13C12-HxCDF 789	ALT1	
				33:42	RO	1.37	0.45	0.41	0.30	1.047			
	DC	SN		33:49	RO	0.32	0.18			1.050			
384-386			9	Peaks			1,469.85						

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD						1.05-1.43				0.956-1.013			
390-392	DC	NL				Height	0.12	0.06	0.06				
	DC	SN		32:41	RO	3.00	0.18			0.994			
				32:48		1.23	264.91	146.34	118.57	0.997	123478-HxCDD		AN
				32:53		1.21	265.07	145.03	120.04	1.000	123678-HxCDD		AN
				33:12		1.21	274.13	150.36	123.77	1.010	123789-HxCDD		AN
	DC	WH		33:24		1.29	1.26			1.016			
	DC	WH		33:30	RO	0.69	0.20			1.019			
	DC	WH		33:32	RO	3.13	0.18			1.020			
	DC	WH		33:37	RO	0.53	0.18			1.022			
390-392			3 Peaks				804.11						
13C12-HxCDD						1.05-1.43				0.970-1.030			
402-404	DC	NL				Height	0.29	0.20	0.09				
	DC	WL		31:32	RO	3.49	1.05			0.959			
				32:17		1.30	1.84	1.04	0.80	0.982			
				32:47		1.20	257.16	140.18	116.98	0.997	13C12-HxCDD 478		SUR3
				32:53		1.21	254.23	139.38	114.85	1.000	13C12-HxCDD 678		IS5
						Height	85.41	46.61	38.80				
				33:11		1.20	405.99	221.66	184.33	1.009	13C12-HxCDD 789		RS2
				33:24	RO	2.55	0.90	1.02	0.40	1.016			
				33:41	RO	2.27	1.77	1.79	0.79	1.024			
402-404			6 Peaks				921.89						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF						0.88-1.20				0.995-1.048			
408-410	DC	NL				Height	0.15	0.07	0.08				
				35:04		1.08	292.50	151.92	140.58	1.000	1234678-HpCDF		AN
	DC	SN		35:18	RO	0.75	0.65			1.007			
				36:35		1.10	196.76	103.14	93.62	1.044	1234789-HpCDF		AN
	DC	WH		36:51	RO	0.42	0.22			1.051			
408-410			2 Peaks				489.26						
13C12-HpCDF						0.37-0.51				0.943-1.114			
418-420	DC	NL				Height	0.15	0.08	0.07				
				35:03		0.42	228.37	67.74	160.63	1.000	13C12-HpCDF 678		IS6
						Height	71.70	21.09	50.61				
				36:34		0.41	151.55	43.91	107.64	1.043	13C12-HpCDF 789		SUR4
418-420			2 Peaks				379.92						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD						0.88-1.20				0.974-1.005			
424-426	DC	NL				Height	0.11	0.05	0.06				
				36:06		1.07	156.15	80.82	75.33	1.000	1234678-HpCDD		AN
424-426			1 Peak				156.15						
13C12-HpCDD						0.88-1.20				0.972-1.028			
436-438	DC	NL				Height	0.51	0.36	0.15				

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				36:05		1.05	162.36	83.23	79.63	1.000	13C12-HpCDD	678	IS7
						Height	46.46	23.74	22.72				
436-438			1	Peak			162.86						
				---------- Above: HpCDD / Octa-CDD and CDF Follows ----------									
OCDF						0.76-1.02				0.899-1.101			
442-444	DC	NL				Height	0.11	0.06	0.05				
	DC	WL		35:01	RO	0.67	0.17			0.883			
	DC	SN		37:13	RO	1.80	0.09			0.938			
	DC	SN		38:53		0.85	0.24			0.980			
	DC	SN		39:12	RO	1.38	0.15			0.988			
	DC	SN		39:18	RO	1.43	0.13			0.991			
	DC	SN		39:28	RO	2.40	0.09			0.995			
				39:52		0.89	189.32	89.35	99.97	1.005	OCDF		AN
	DC	SN		40:55	RO	0.50	0.06			1.032			
	DC	SN		40:59	RO	0.75	0.13			1.033			
	DC	SN		43:20	RO	1.83	0.11			1.092			
	DC	SN		43:33	RO	3.00	0.09			1.098			
442-444			1	Peak			189.32						
OCDD						0.76-1.02				0.899-1.101			
458-460	DC	NL				Height	0.12	0.06	0.06				
				39:41		0.81	138.76	62.29	76.47	1.000	OCDD		AN
	DC	SN		40:02	RO	0.53	0.21			1.009			
	DC	SN		40:08		0.89	0.17			1.012			
458-460			1	Peak			138.76						
13C12-OCDD						0.76-1.02				0.996-1.004			
470-472	DC	NL				Height	0.53	0.37	0.16				
				39:40		0.85	137.06	62.95	74.11	1.000	13C12-OCDD		IS8
						Height	30.13	13.55	16.58				
470-472			1	Peak			137.06						

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***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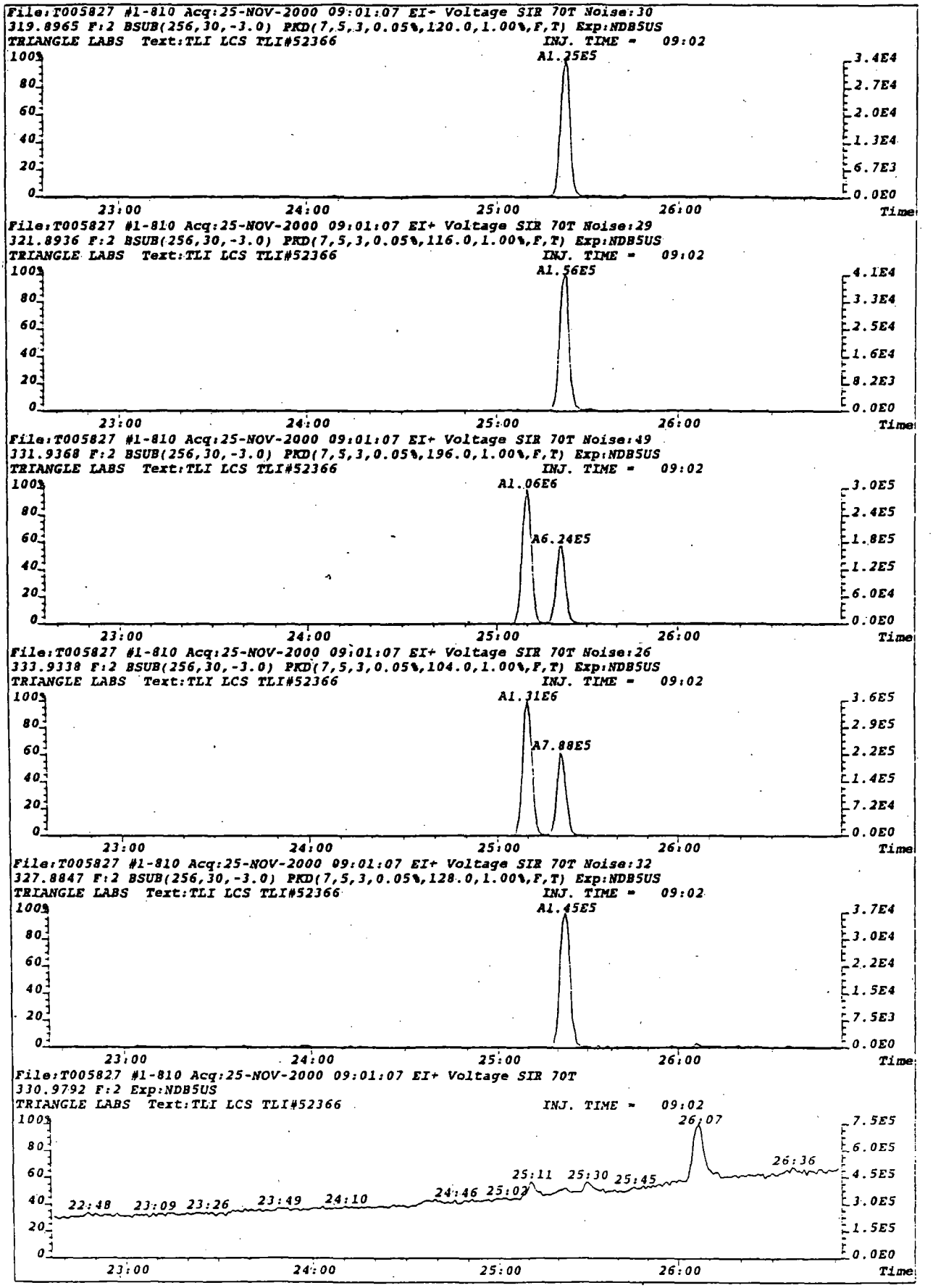
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,128.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.58E5
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:29
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,116.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.86E5
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:30
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,120.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A7.25E5
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:30
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,120.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A9.48E5
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
21:26
21:54
22:12
22:48
23:49
25:11
25:30
26:07
26:36
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
21:35
22:12
22:41
23:12
23:58
24:39
25:10
25:37
25:48
26:07
22:00
23:00
24:00
25:00
26:00
Time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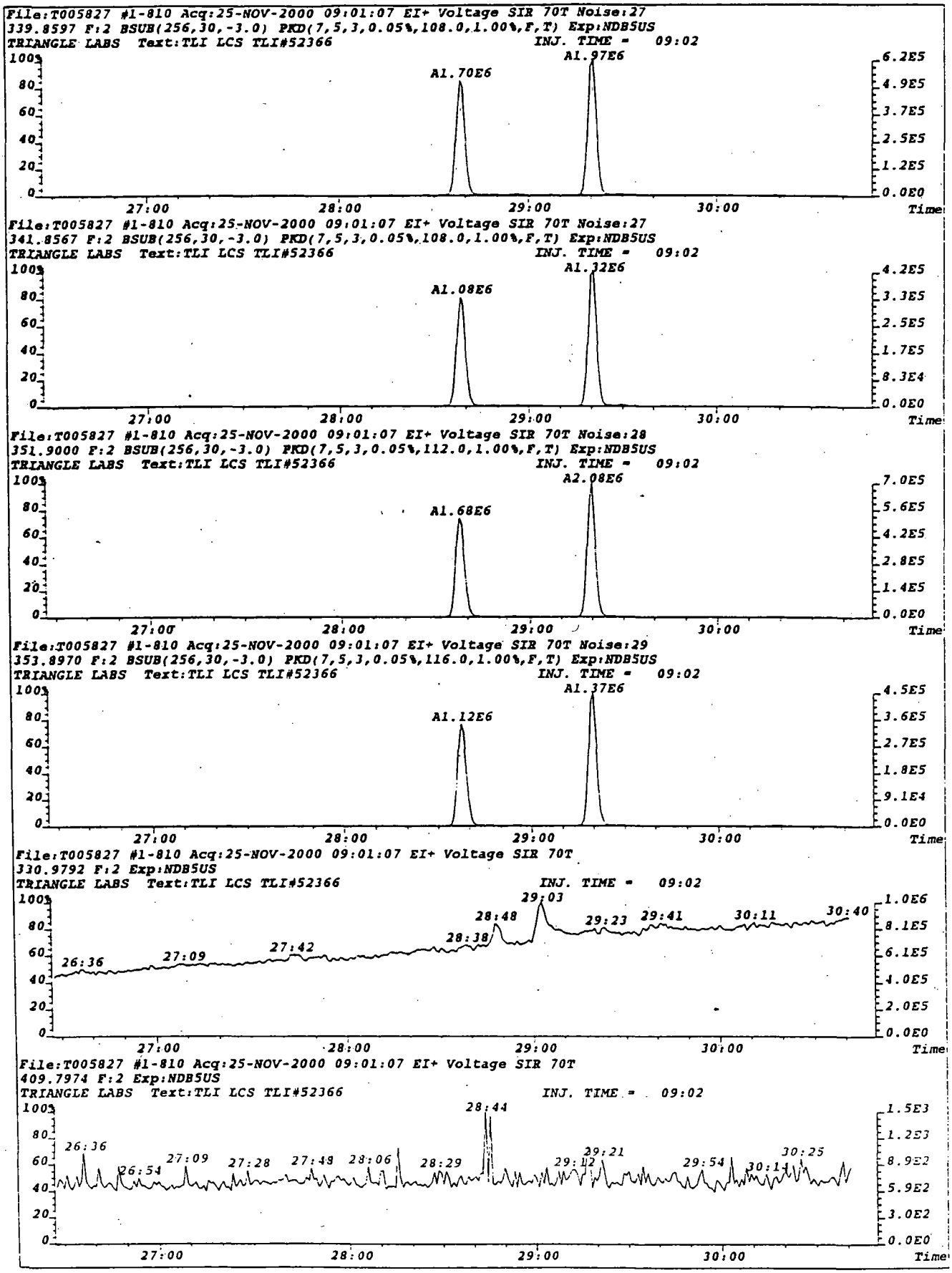
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,120.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.25E5
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:29
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,116.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.56E5
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:49
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.06E6
A6.24E5
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:26
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,104.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.31E6
A7.88E5
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:32
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,128.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.45E5
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
22:48
23:09
23:26
23:49
24:10
24:46
25:02
25:11
25:30
25:45
26:07
26:36
23:00
24:00
25:00
26:00
Time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339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,108.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.70E6
A1.97E6
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:27
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,108.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.08E6
A1.32E6
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:28
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,112.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.68E6
A2.08E6
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:29
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,116.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.12E6
A1.37E6
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
26:36
27:09
27:42
28:38
28:48
29:03
29:23
29:41
30:11
30:40
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
26:36
26:54
27:09
27:28
27:48
28:06
28:29
28:44
29:12
29:21
29:54
30:11
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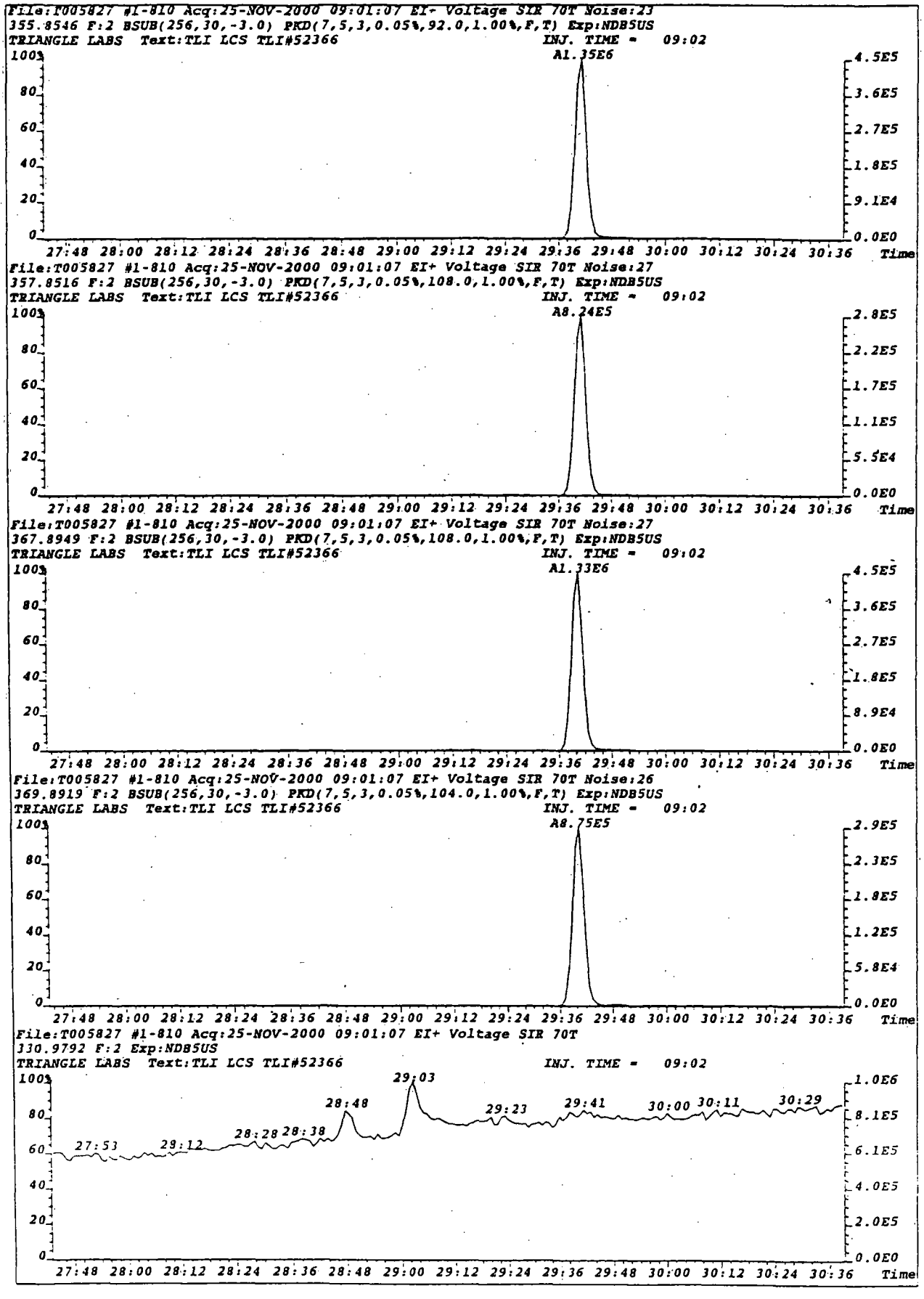
28:00
29:00
30:00
Time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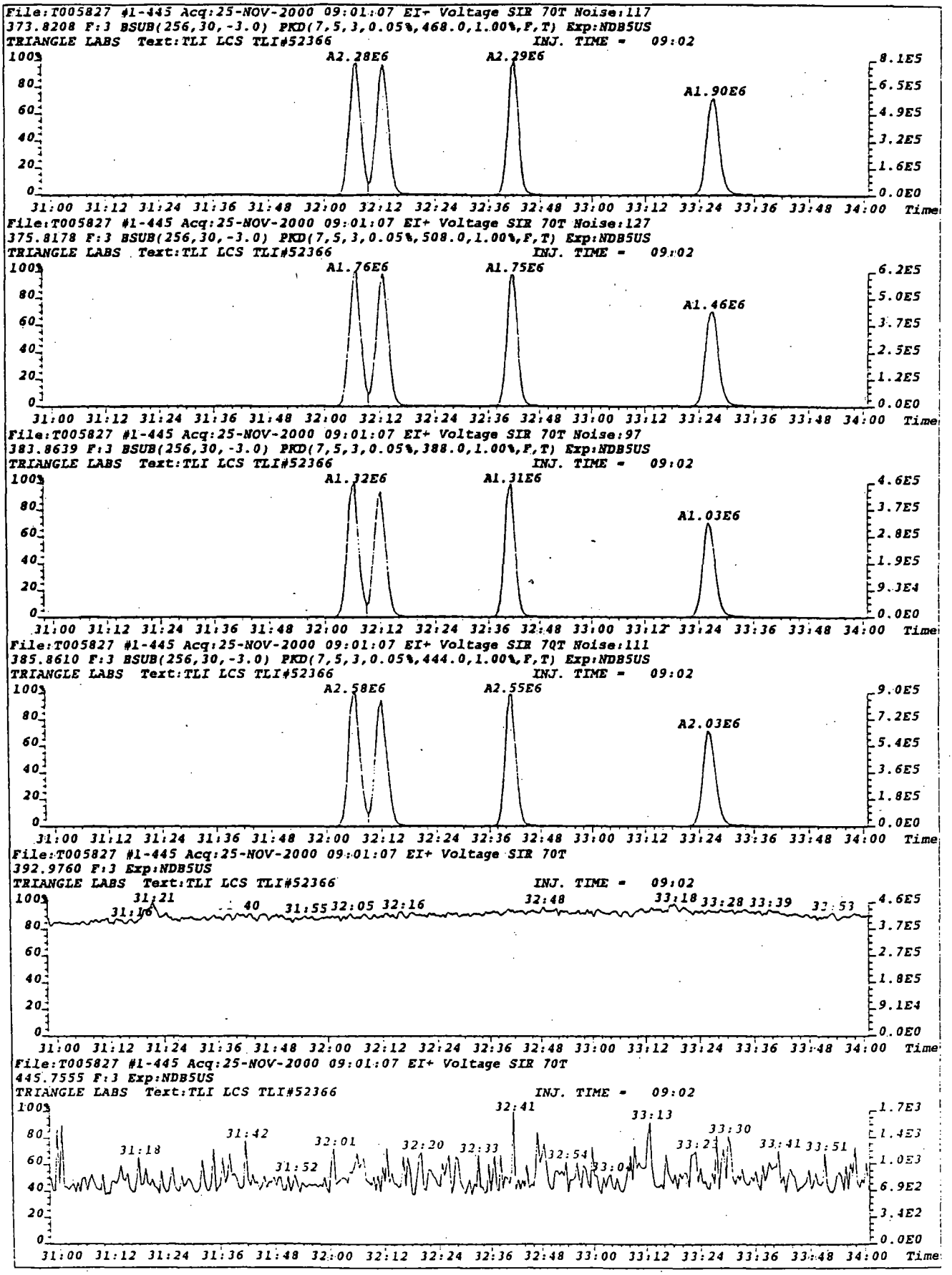
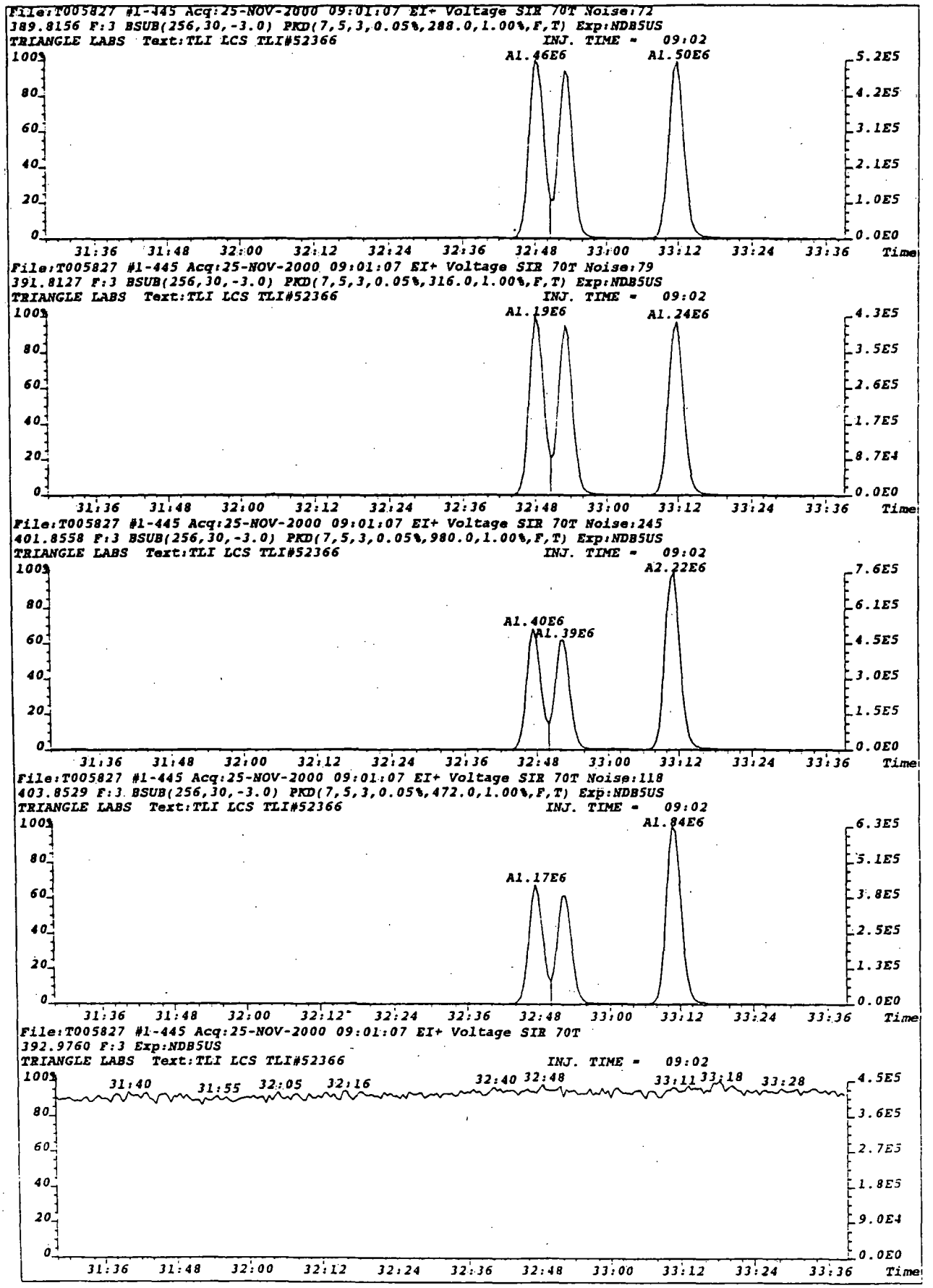
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,92.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.35E6
4.5E5
3.6E5
2.7E5
1.8E5
9.1E4
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:27
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,108.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A8.24E5
2.8E5
2.2E5
1.7E5
1.1E5
5.5E4
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:27
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,108.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.33E6
4.5E5
3.6E5
2.7E5
1.8E5
8.9E4
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:26
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,104.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A8.75E5
2.9E5
2.3E5
1.8E5
1.2E5
5.8E4
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005827 #1-810 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
27:53
29:12
28:28
28:38
28:48
29:03
29:23
29:41
30:00
30:11
30:29
1.0E6
8.1E5
6.1E5
4.0E5
2.0E5
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time


File:T005827 #1-445 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:117
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,468.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A2.28E6
A2.29E6
A1.90E6
File:T005827 #1-445 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:127
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,508.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.76E6
A1.75E6
A1.46E6
File:T005827 #1-445 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:97
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,388.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.32E6
A1.31E6
A1.03E6
File:T005827 #1-445 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:111
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,444.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A2.58E6
A2.55E6
A2.03E6
File:T005827 #1-445 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
File:T005827 #1-445 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
Time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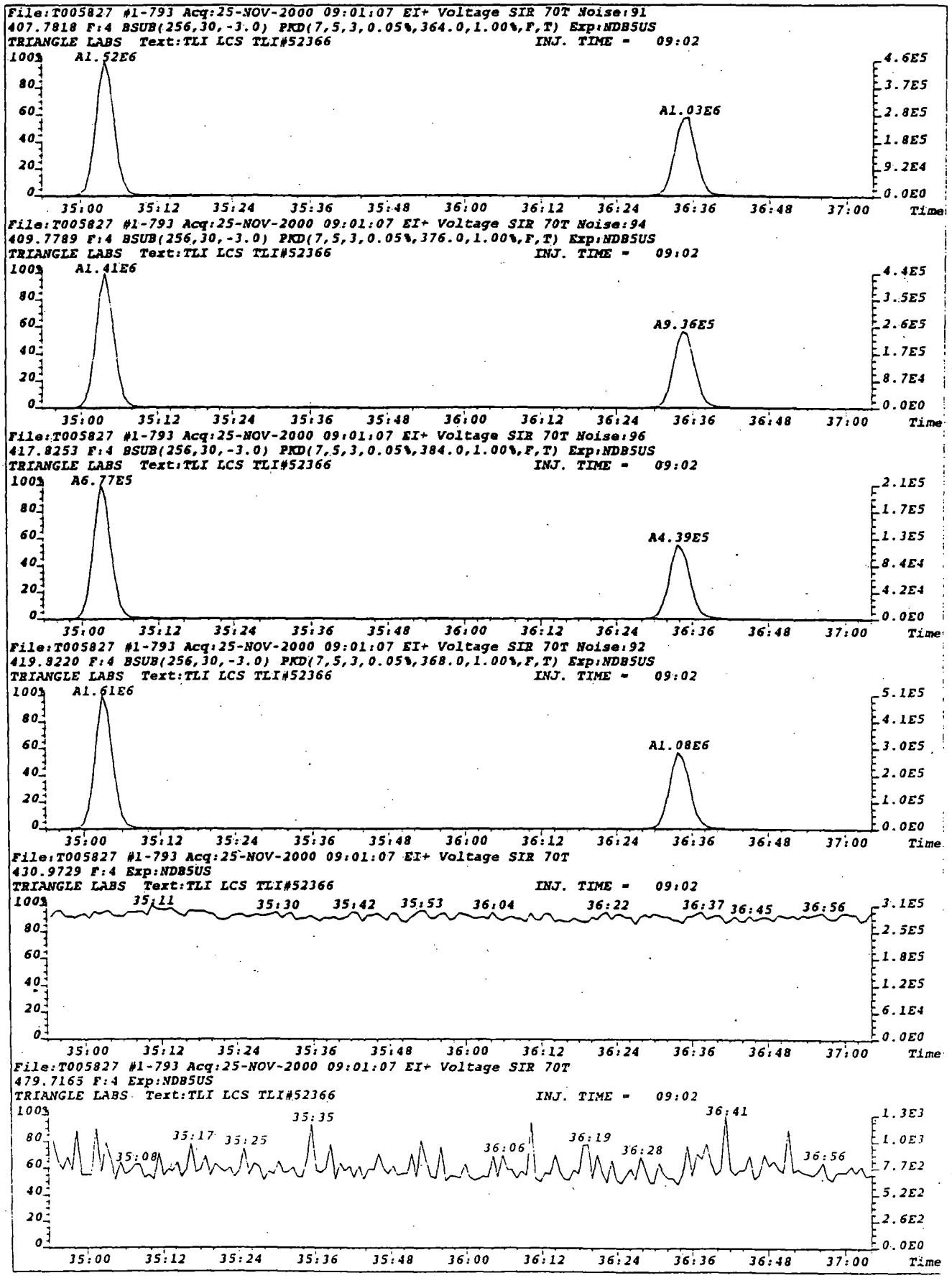
389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,288.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.46E6
A1.50E6
File:T005827 #1-445 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:79
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,316.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.19E6
A1.24E6
File:T005827 #1-445 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:245
401.8558 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,980.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A2.22E6
A1.40E6
A1.39E6
File:T005827 #1-445 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:118
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,472.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A1.84E6
A1.17E6
File:T005827 #1-445 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
Time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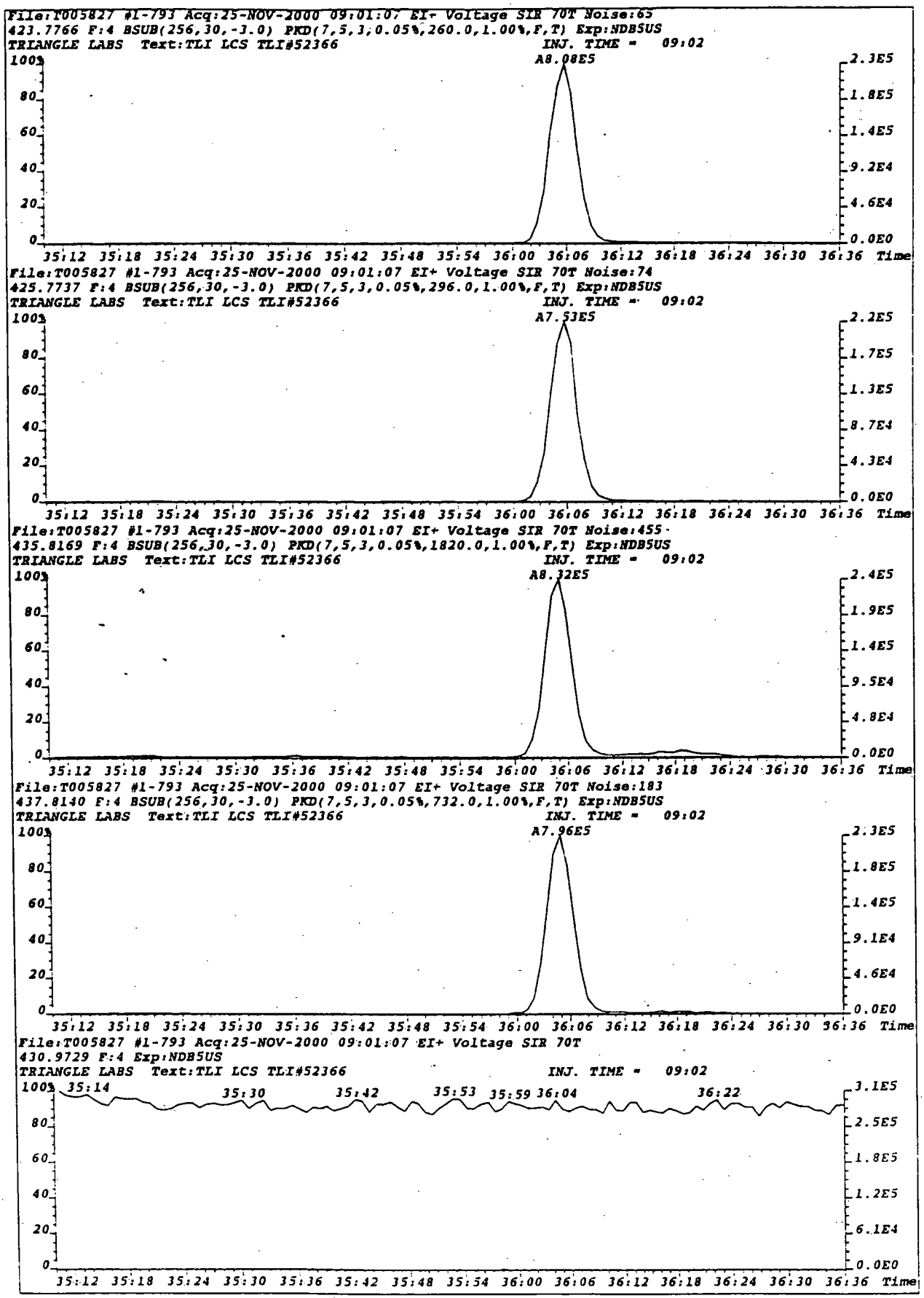
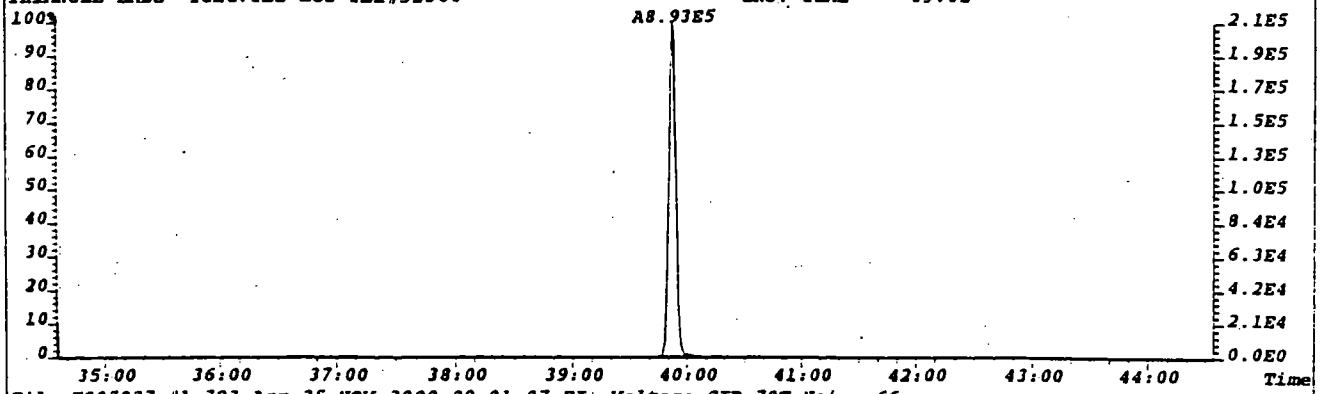
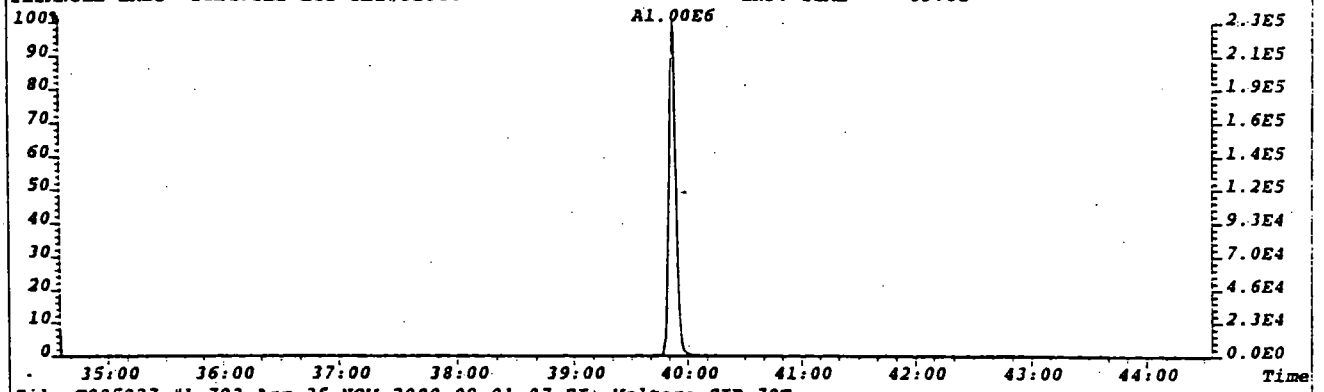
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,364.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02
A1.52E6
A1.03E6
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:94
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,376.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02
A1.41E6
A9.36E5
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:96
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,384.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02
A6.77E5
A4.39E5
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:92
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,368.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02
A1.61E6
A1.08E6
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02
Time


File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:65
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,260.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A8.08E5
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:74
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,296.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A7.53E5
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:455
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1820.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A8.32E5
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:183
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,732.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
A7.96E5
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366
INJ. TIME = 09:02
35:14
35:30
35:42
35:53
35:59
36:04
36:22
Time

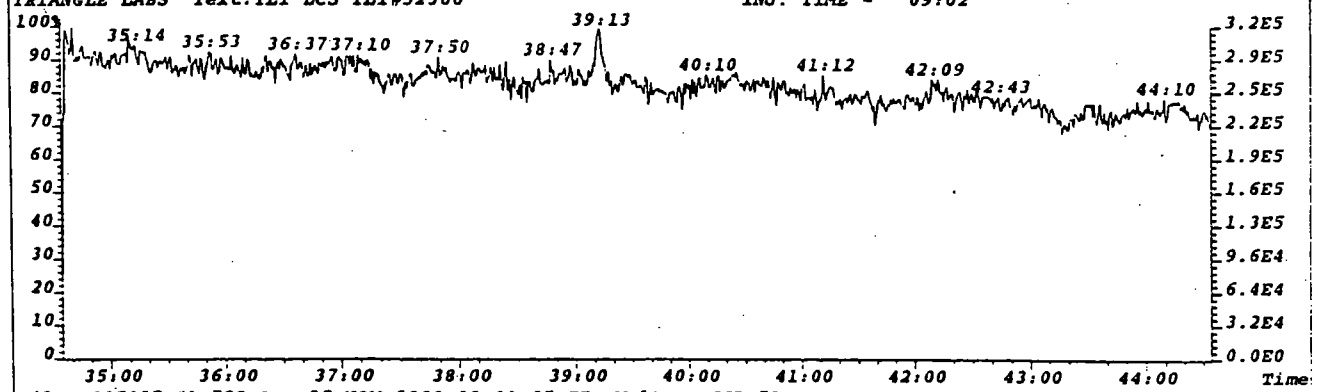
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:71
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,284.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02



File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:66
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,264.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02



File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02



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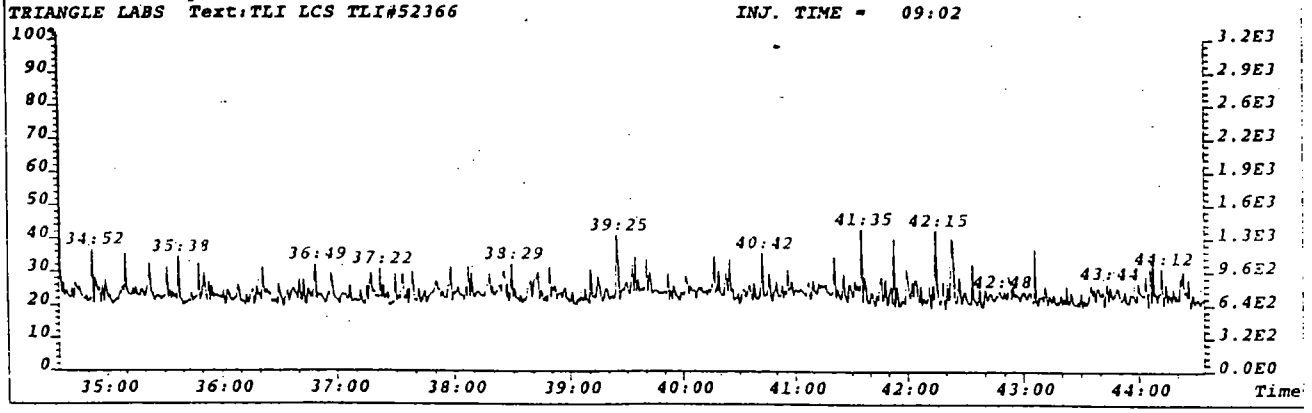
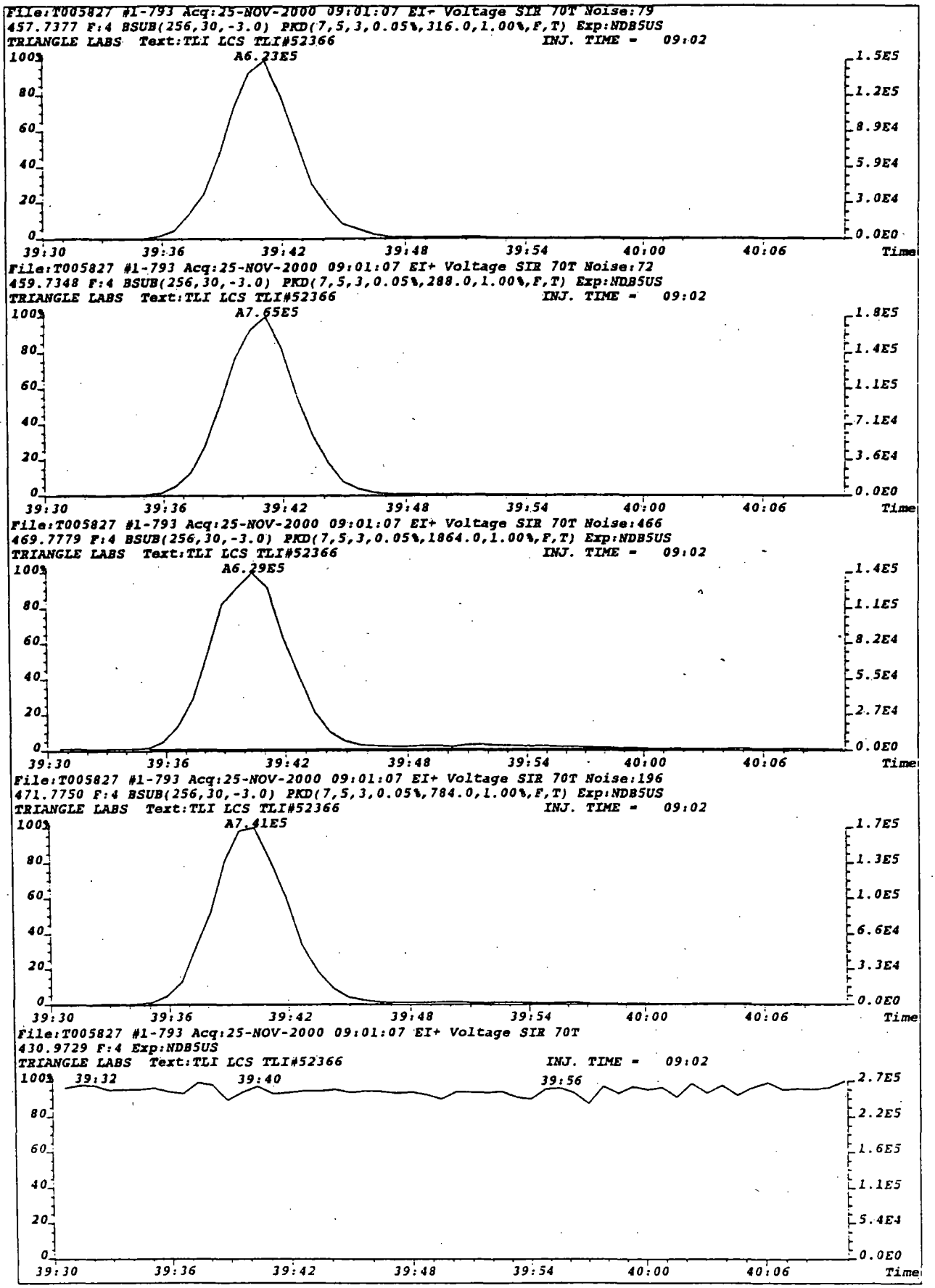
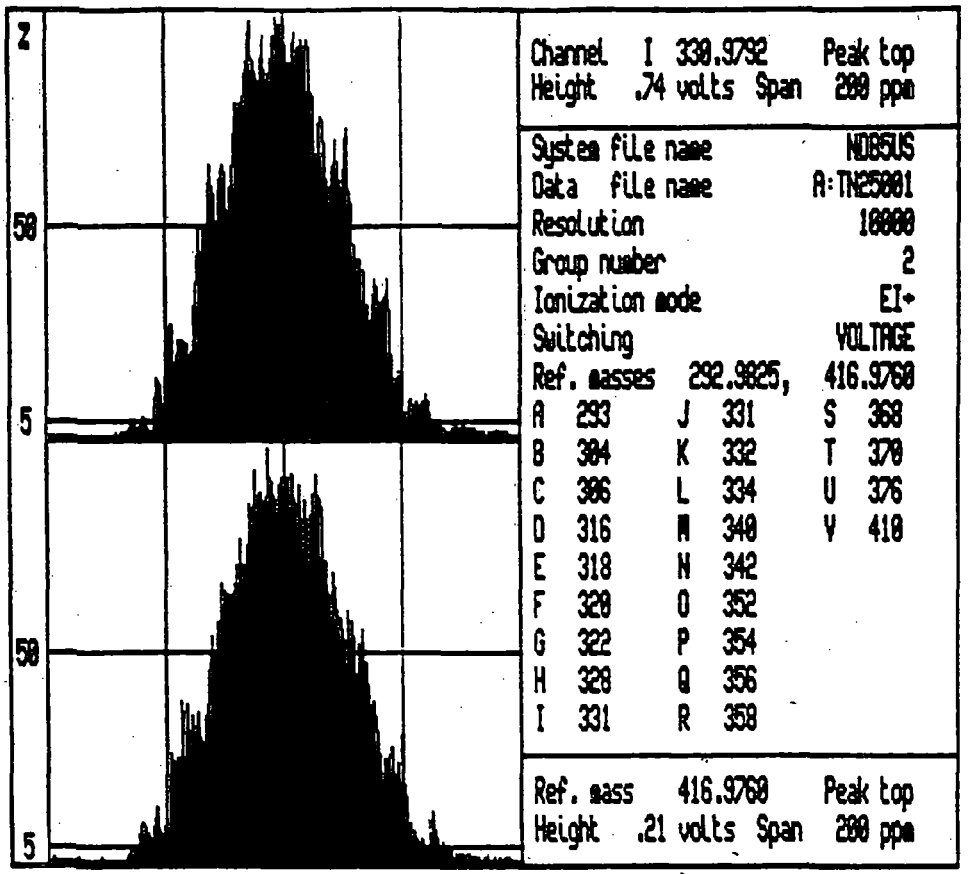
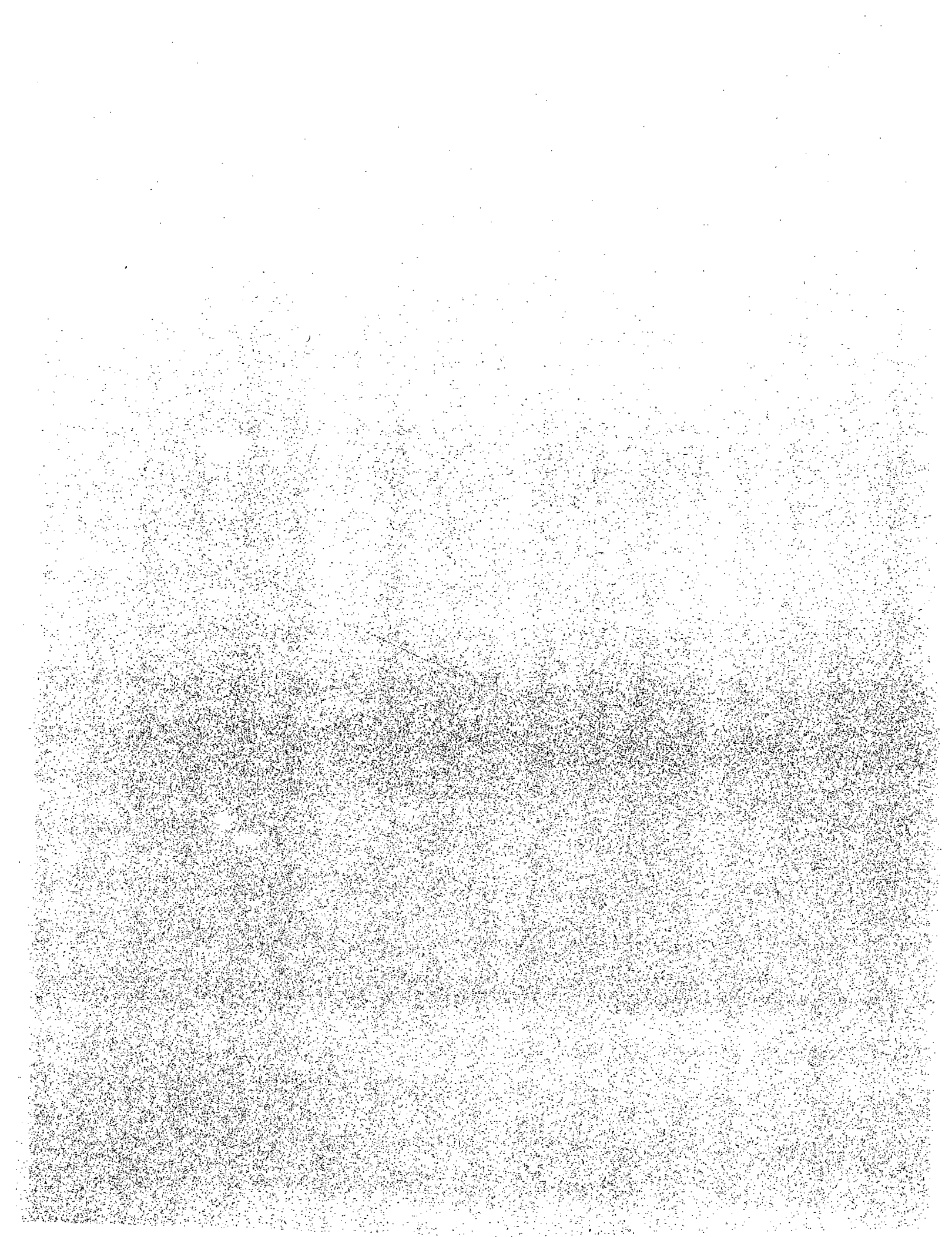
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02




File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:79
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,316.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02
A6.23E5
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:72
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,288.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02
A7.65E5
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:466
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,1864.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02
A6.29E5
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T Noise:196
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,784.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02
A7.41E5
File:T005827 #1-793 Acq:25-NOV-2000 09:01:07 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCS TLI#52366 INJ. TIME = 09:02
39:32
39:40
39:56
Time


Z
50
5
50
5
Channel I 330.9792 Peak top
Height .74 volts Span 200 ppm
System file name MOBSUS
Data file name A:TN25001
Resolution 16000
Group number 2
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 416.9768
A 293 J 331 S 368
B 304 K 332 T 370
C 306 L 334 U 376
D 316 M 340 V 410
E 318 N 342
F 320 O 352
G 322 P 354
H 328 Q 356
I 331 R 358
Ref. mass 416.9768 Peak top
Height .21 volts Span 200 ppm



TriMatrix, Inc.

TLI Project: **52366** Method 8290 PCDD/PCDF Analysis (b)
Client Sample: **TLI LCSD** Analysis File: **T005828**

Client Project:	**BASF-Malcolm Pirnie**				
Sample Matrix:	**WATER**	Date Received:	/ /	Spike File:	**SPMIT32S**
TLI ID:	**TLI LCSD**	Date Extracted:	**11/21/2000**	ICal:	**TF57140**
		Date Analyzed:	**11/25/2000**	ConCal:	**T005815**
Sample Size:	**1.000 L**	Dilution Factor:	**n/a**	% Moisture:	**n/a**
Dry Weight:	**n/a**	Blank File:	**T005817**	% Lipid:	**n/a**
GC Column:	**DB-5**	Analyst:	**JMM**	% Solids:	**n/a**

Analytes	Conc. (pg/L)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	410			0.78	25:22	
1,2,3,7,8-PeCDD	1950			1.59	29:40	
1,2,3,4,7,8-HxCDD	2050			1.21	32:48	
1,2,3,6,7,8-HxCDD	2180			1.23	32:53	
1,2,3,7,8,9-HxCDD	2290			1.23	33:11	
1,2,3,4,6,7,8-HpCDD	2320			1.05	36:05	
1,2,3,4,6,7,8,9-OCDD	4770			0.82	39:40	
2,3,7,8-TCDF	406			0.88	24:38	
1,2,3,7,8-PeCDF	2190			1.55	28:38	
2,3,4,7,8-PeCDF	2960			1.50	29:20	
1,2,3,4,7,8-HxCDF	2060			1.31	32:06	
1,2,3,6,7,8-HxCDF	2150			1.31	32:12	
2,3,4,6,7,8-HxCDF	2660			1.31	32:41	
1,2,3,7,8,9-HxCDF	2960			1.31	33:26	
1,2,3,4,6,7,8-HpCDF	2200			1.10	35:03	
1,2,3,4,7,8,9-HpCDF	2160			1.08	36:34	
1,2,3,4,6,7,8,9-OCDF	5360			0.92	39:52	

Internal Standards	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDF	1410	70.7	40%-130%	0.76	24:37	
$^{13}C_{12}$-2,3,7,8-TCDD	1540	76.9	40%-130%	0.79	25:21	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	2060	103	40%-130%	1.47	28:37	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	3180	159	40%-130%	1.42	29:40	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1290	64.7	40%-130%	0.52	32:12	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1550	77.7	40%-130%	1.20	32:52	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1460	73.0	25%-130%	0.42	35:02	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1200	59.9	25%-130%	1.03	36:04	
$^{13}C_{12}$-1,2,3,4,6,7,8,9-OCDD	1530	38.1	25%-130%	0.85	39:40	

MIT3_PSR v1.00, LARS 6.25.01

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 18:37 11/29/2000

TLI Project: 52366 Method 8290 PCDD/PCDF Analysis (b)
Client Sample: TLI LCSD Analysis File: T005828

Surrogate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,4,7,8-PeCDF	2710	135	40%-130%	1.52	29:19	___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1270	63.4	40%-130%	0.51	32:06	___
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1460	73.2	40%-130%	1.19	32:47	___
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1440	71.9	25%-130%	0.41	36:34	___

Other Standard	Conc. (pg/L)	% Recovery	QC Limits	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	178	88.8	40%-130%	25:23	___

Alternate Standards (Type B)	Conc. (pg/L)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1970	98.5	40%-130%	0.51	33:26	___
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1630	81.3	40%-130%	0.51	32:41	___

Recovery Standards	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.84	25:10	___
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.19	33:11	___

Data Reviewer: _____ 11/29/2000

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 18:37 11/29/2000

Initial ....Date...

Data Review By: JLM 11/29/00

Channel specific noise levels computed from 'NL' heights.

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of T005828B.dbf
11/29/2000 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC	Log	Omit	Why	RT.	OK	Ratio	Total Area/Ht	Area/Ht. Peak1	Area/Ht. Peak2	Rel.RT	Compound Name..	ID..	Flags.
TCDF					0.65-0.89					0.860-1.077				
304-306	DC	NL			Height			0.06	0.03	0.03				
	DC	SN			23:51	RO	1.00	0.19			0.969			
					24:15	RO	0.90	0.60	0.26	0.29	0.985	1278-TCDF	AN	J
					24:38		0.88	26.07	12.22	13.85	1.001	2378-TCDF	AN	
304-306			2	Peaks				26.67						
13C12-TCDF					0.65-0.89					0.959-1.041				
316-318	DC	NL			Height			0.06	0.03	0.03				
					24:37		0.76	125.60	54.29	71.31	1.000	13C12-2378-TCDF	IS0	
					Height			33.92	14.70	19.22				
	DC	SN			25:12	RO	1.27	0.19			1.024			
	DC	SN			25:23	RO	0.57	0.28			1.031			
316-318			1	Peak				125.60						

---------- Above: TCDF / TCDD Follows ----------

TCDD					0.65-0.89					0.890-1.045				
320-322	DC	NL			Height			0.06	0.03	0.03				
					25:22		0.78	21.02	9.22	11.80	1.001	2378-TCDD	AN	
	DC	SN			25:30		0.69	0.22			1.006			
	DC	SN			25:45	RO	1.25	0.07			1.016			
320-322			1	Peak				21.02						
37Cl-TCDD										0.921-1.079				
328	DC	NL			Height			0.03	0.03					
					25:23			10.95	10.95		1.001	37Cl-TCDD	CLS	
	DC	SN			25:45			0.16			1.016			
	DC	SN			25:50			0.05			1.019			
	DC	SN			25:55			0.11			1.022			
	DC	SN			26:03			0.16			1.028			
	DC	SN			26:20			0.06			1.039			
328			1	Peak				10.95						
13C12-TCDD					0.65-0.89					0.921-1.079				
332-334	DC	NL			Height			0.06	0.03	0.03				
					25:10		0.84	138.50	63.08	75.42	0.993	13C12-1234-TCDD	RS1	
					25:21		0.79	112.07	49.54	62.53	1.000	13C12-2378-TCDD	IS1	
					Height			40.68	18.01	22.67				
					25:34	RO	1.28	0.32	0.23	0.18	1.009			
	DC	SN			26:01		0.83	0.11			1.026			
					26:06	RO	1.00	0.19	0.11	0.11	1.030			
332-334			4	Peaks				251.08						

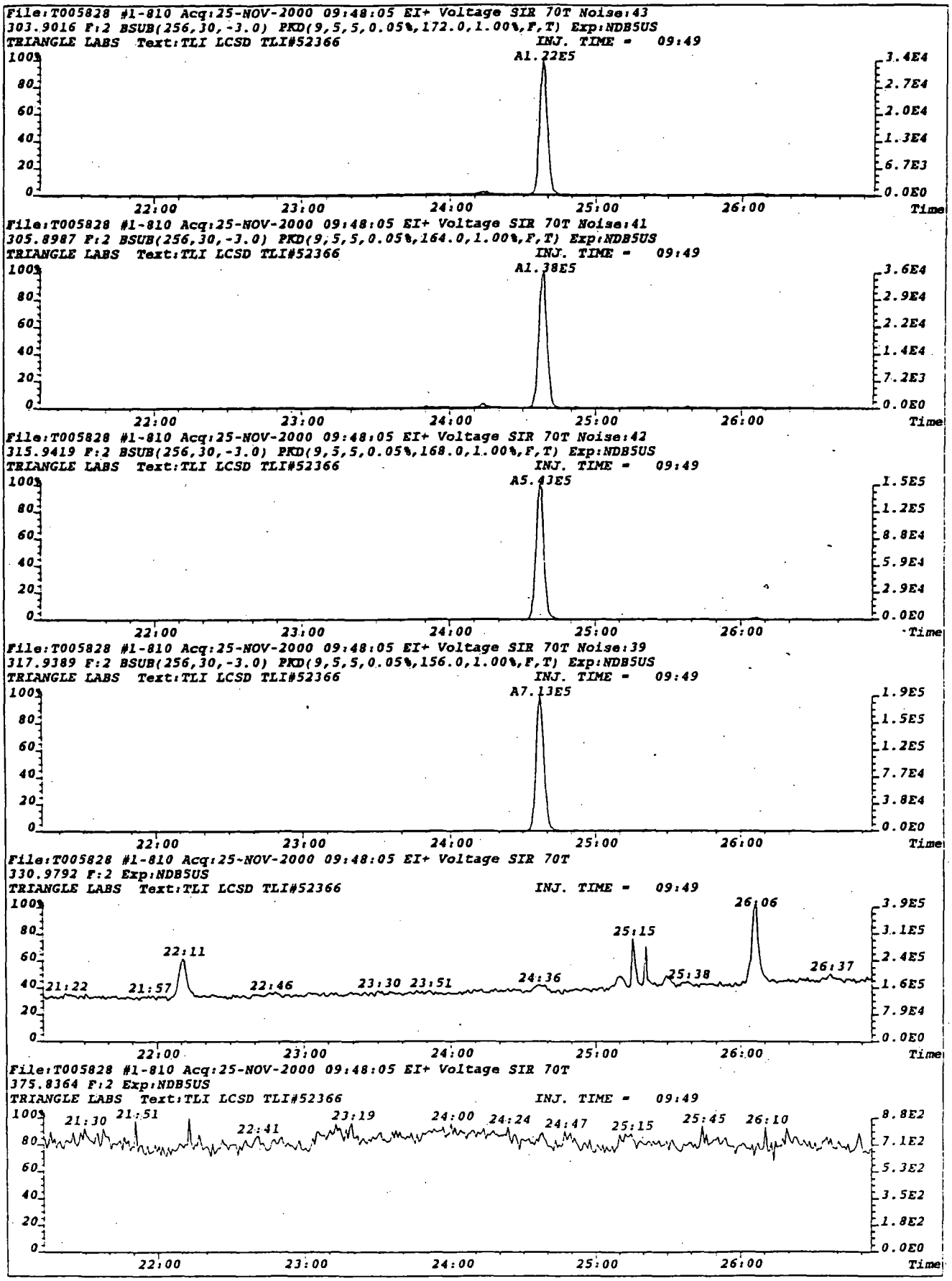
Compound/ M_2....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags
---------- Above: TCDD / PeCDF Follows ----------													
PeCDF				1.32-1.78					0.923-1.064				
340-342	DC	NL		Height			0.06	0.03	0.03				
			27:48	RO	2.24		0.54	0.47	0.21	0.971			J
			28:15		1.42		0.46	0.27	0.19	0.987			J
			28:38		1.55		170.70	103.67	67.03	1.001	12378-PeCDF	AN	
			28:48	RO	1.91		1.48	1.11	0.58	1.006			J
			28:56	RO	1.30		2.24	1.14	0.88	1.011			J
			29:01	RO	0.86		0.51	0.31	0.36	1.014			J
			29:20		1.50		234.36	140.56	93.80	1.025	23478-PeCDF	AN	
			29:29		1.53		1.90	1.15	0.75	1.030			J
			29:40	RO	3.00		0.20	0.24	0.08	1.037			J
			30:19	RO	1.12		1.50	0.66	0.59	1.059			J
340-342			10 Peaks				413.89						
13C12-PeCDF				1.32-1.78					0.860-1.140				
352-354	DC	NL		Height			0.06	0.03	0.03				
			28:37		1.47		171.09	101.95	69.14	1.000	13C12-PeCDF 123	IS2	
				Height			55.95	33.14	22.81				
			28:55	RO	2.11		0.92	0.76	0.36	1.010			
			29:19		1.52		222.63	134.15	88.48	1.024	13C12-PeCDF 234	SUR1	
			29:40	RO	0.57		0.41	0.25	0.44	1.037			
			30:18	RO	1.21		2.88	1.37	1.13	1.059			
352-354			5 Peaks				397.93						
---------- Above: PeCDF / PeCDD Follows ----------													
PeCDD				1.32-1.78					0.933-1.021				
356-358	DC	NL		Height			0.06	0.03	0.03				
	DC	SN	28:56	RO	0.90		0.15			0.975			
			29:40		1.59		154.78	95.11	59.67	1.000	12378-PeCDD	AN	
356-358			1 Peak				154.78						
13C12-PeCDD				1.32-1.78					0.865-1.135				
368-370	DC	NL		Height			0.06	0.03	0.03				
			28:35		1.38		0.62	0.36	0.26	0.963			
			28:45		1.36		0.52	0.30	0.22	0.969			
			29:40		1.42		150.17	88.12	62.05	1.000	13C12-PeCDD 123	IS3	
				Height			48.61	27.81	20.80				
368-370			3 Peaks				151.31						
---------- Above: PeCDD / HxCDF Follows ----------													
HxCDF				1.05-1.43					0.961-1.046				
374-376	DC	NL		Height			0.11	0.03	0.08				
			31:17		1.12		0.70	0.37	0.33	0.972			J
			32:06		1.31		326.69	185.33	141.36	0.997	123478-HxCDF	AN	
			32:12		1.31		356.68	202.37	154.31	1.000	123678-HxCDF	AN	
	DC	SN	32:28	RO	1.88		0.36			1.008			
			32:41		1.31		399.08	226.09	172.99	1.015	234678-HxCDF	AN	
			32:53	RO	5.27		0.25	0.58	0.11	1.021			J

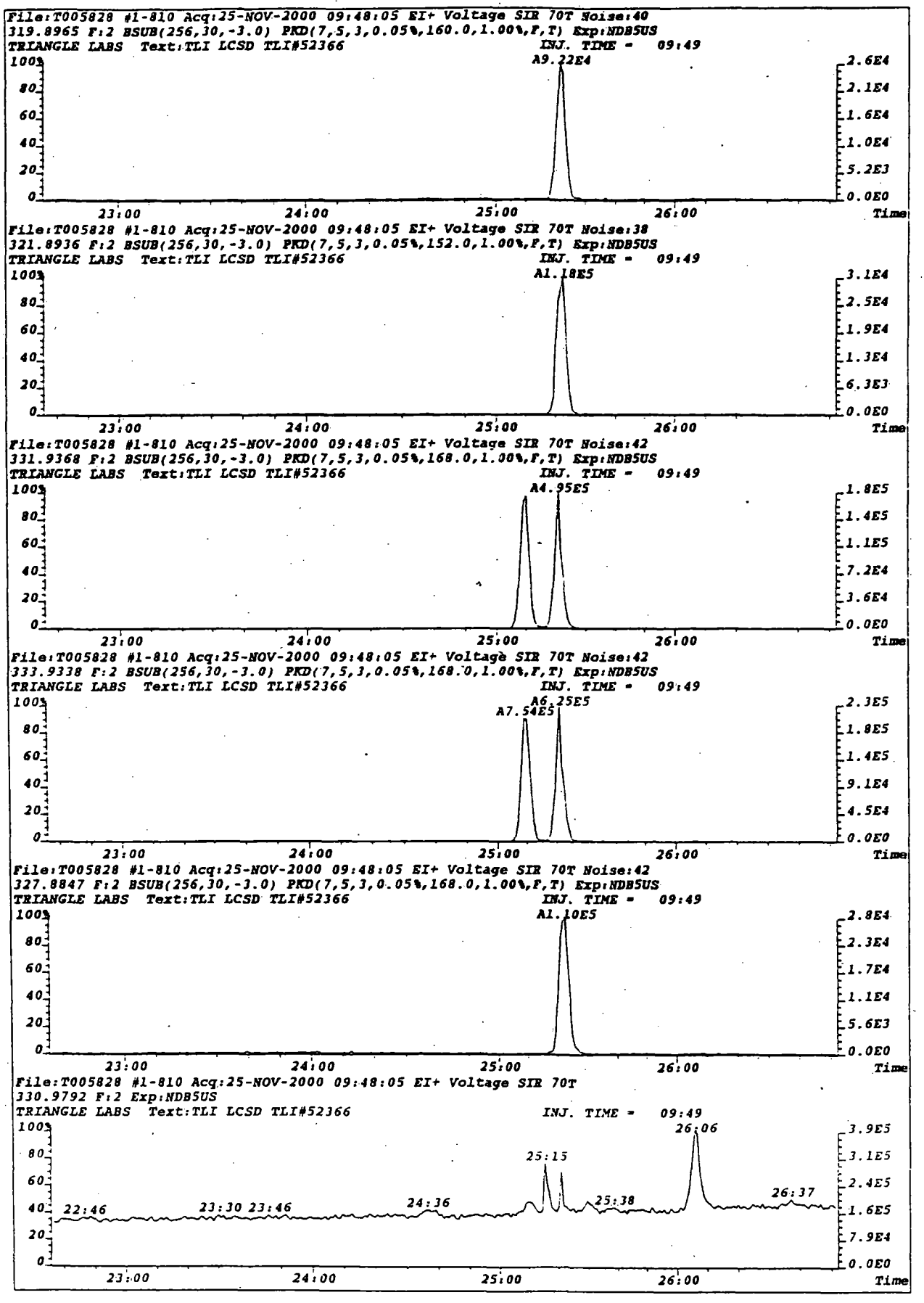
Compound/ M/Z....	QC.Log	Omit	Why	RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
	DC	SN		33:11		1.18	0.37			1.031			
				33:26		1.31	363.25	205.99	157.26	1.038	123789-HxCDF	AN	
				33:38	RO	0.67	0.74	0.41	0.61	1.045			J
374-376			7 Peaks				1,447.39						
13C12-HxCDF						0.43-0.59				0.876-1.124			
384-386	DC	NL				Height	0.10	0.04	0.06				
				31:08	RO	0.72	0.83	0.28	0.39	0.967			
				31:16	RO	1.04	0.36	0.25	0.24	0.971			
				32:06		0.51	297.75	100.58	197.17	0.997	13C12-HxCDF 478	SUR2	
				32:12		0.52	308.66	105.60	203.06	1.000	13C12-HxCDF 678	IS4	
						Height	110.37	37.48	72.89				
				32:41		0.51	353.65	119.84	233.81	1.015	13C12-HxCDF 234	ALT2	
				32:51	RO	0.30	0.47	0.16	0.54	1.020			
				33:26		0.51	314.78	106.78	208.00	1.038	13C12-HxCDF 789	ALT1	
				33:41	RO	0.77	0.68	0.23	0.30	1.046			
	DC	SN		33:46	RO	0.18	0.21			1.049			
384-386			8 Peaks				1,277.18						
---------- Above: HxCDF / HxCDD Follows ----------													
HxCDD						1.05-1.43				0.956-1.013			
390-392	DC	NL				Height	0.05	0.02	0.03				
				32:48		1.21	241.86	132.55	109.31	0.998	123478-HxCDD	AN	
				32:53		1.23	256.56	141.60	114.96	1.001	123678-HxCDD	AN	
				33:11		1.23	272.39	150.35	122.04	1.010	123789-HxCDD	AN	
	DC	WH		33:31		1.25	0.27			1.020			
390-392			3 Peaks				770.81						
13C12-HxCDD						1.05-1.43				0.970-1.030			
402-404	DC	NL				Height	0.06	0.03	0.03				
				32:16	RO	0.76	0.85	0.47	0.62	0.982			
				32:47		1.19	226.05	122.95	103.10	0.997	13C12-HxCDD 478	SUR3	
				32:52		1.20	231.81	126.37	105.44	1.000	13C12-HxCDD 678	IS5	
						Height	83.63	45.90	37.73				
				33:11		1.19	328.50	178.84	149.66	1.010	13C12-HxCDD 789	RS2	
				33:22	RO	0.36	0.29	0.16	0.44	1.015			
				33:38		1.18	0.37	0.20	0.17	1.023			
402-404			6 Peaks				787.87						
---------- Above: HxCDD / HpCDF Follows ----------													
HpCDF						0.88-1.20				0.995-1.048			
408-410	DC	NL				Height	0.11	0.06	0.05				
				35:03		1.10	320.93	167.95	152.98	1.000	1234678-HpCDF	AN	
				35:29	RO	1.66	0.59	0.48	0.29	1.013			J
				36:34		1.08	243.18	126.38	116.80	1.044	1234789-HpCDF	AN	
	DC	WH		36:51	RO	0.59	0.26			1.052			
408-410			3 Peaks				564.70						
13C12-HpCDF						0.37-0.51				0.943-1.114			
418-420	DC	NL				Height	0.08	0.04	0.04				

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area/Ht	Area/Ht.Peak1	Area/Ht.Peak2	Rel.RT	Compound.Name..	ID..	Flags.
				35:02		0.42	232.51	68.32	164.19	1.000	13C12-HpCDF 678	IS6	
						Height	72.87	21.40	51.47				
				36:34		0.41	178.21	52.11	126.10	1.044	13C12-HpCDF 789	SUR4	
418-420			2 Peaks				410.72						
---------- Above: HpCDF / HpCDD Follows ----------													
HpCDD						0.88-1.20							
424-426	DC	NL				Height	0.08	0.04	0.04				
				36:05		1.05	167.29	85.83	81.46	1.000	1234678-HpCDD	AN	
424-426			1 Peak				167.29						
13C12-HpCDD						0.88-1.20							
436-438	DC	NL				Height	0.08	0.05	0.03				
				35:20	RO	0.76	0.31	0.16	0.21	0.980			
				36:04		1.03	168.86	85.80	83.06	1.000	13C12-HpCDD 678	IS7	
						Height	49.35	25.39	23.96				
	DC	SN		36:37		1.00	0.10			1.015			
436-438			2 Peaks				169.17						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----------													
OCDF						0.76-1.02							
442-444	DC	NL				Height	0.06	0.03	0.03				
				39:52		0.92	257.64	123.20	134.44	1.005	OCDF	AN	
	DC	SN		41:13	RO	1.13	0.15			1.039			
442-444			1 Peak				257.64						
OCDD						0.76-1.02							
458-460	DC	NL				Height	0.07	0.03	0.04				
				39:40		0.82	190.68	85.82	104.86	1.000	OCDD	AN	
				39:56	RO	1.37	0.36	0.26	0.19	1.007			
458-460			2 Peaks				191.04						
13C12-OCDD						0.76-1.02							
470-472	DC	NL				Height	0.07	0.04	0.03				
				39:40		0.85	174.93	80.38	94.55	1.000	13C12-OCDD	IS8	
						Height	40.95	18.98	21.97				
470-472			1 Peak				174.93						

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		X-Ether Interference

*** End of Report ***


File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:43
303.9016 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A1.22E5
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:41
305.8987 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A1.38E5
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:42
315.9419 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A5.43E5
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:39
317.9389 F:2 BSUB(256,30,-3.0) PKD(9,5,5,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A7.13E5
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
21:22
21:57
22:11
22:46
23:30
23:51
24:36
25:15
25:38
26:06
26:37
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
375.8364 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
21:30
21:51
22:41
23:19
24:00
24:24
24:47
25:15
25:45
26:10
22:00
23:00
24:00
25:00
26:00
Time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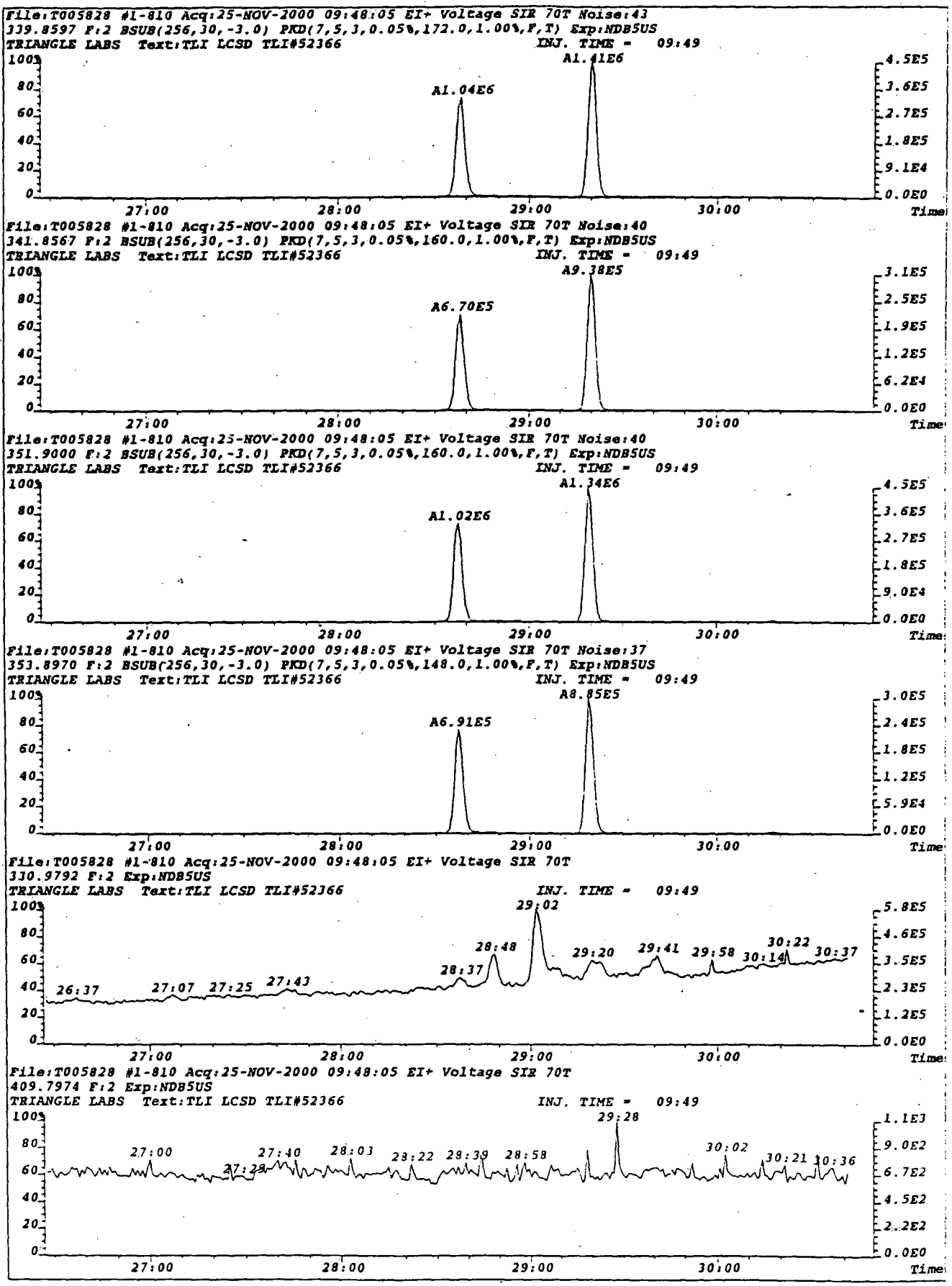
319.8965 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A9.22E4
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:38
321.8936 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,152.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A1.18E5
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:42
331.9368 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A4.95E5
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:42
333.9338 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A6.25E5
A7.54E5
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:42
327.8847 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,168.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A1.10E5
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
22:46
23:30 23:46
24:36
25:15
25:38
26:06
26:37
23:00
24:00
25:00
26:00
Time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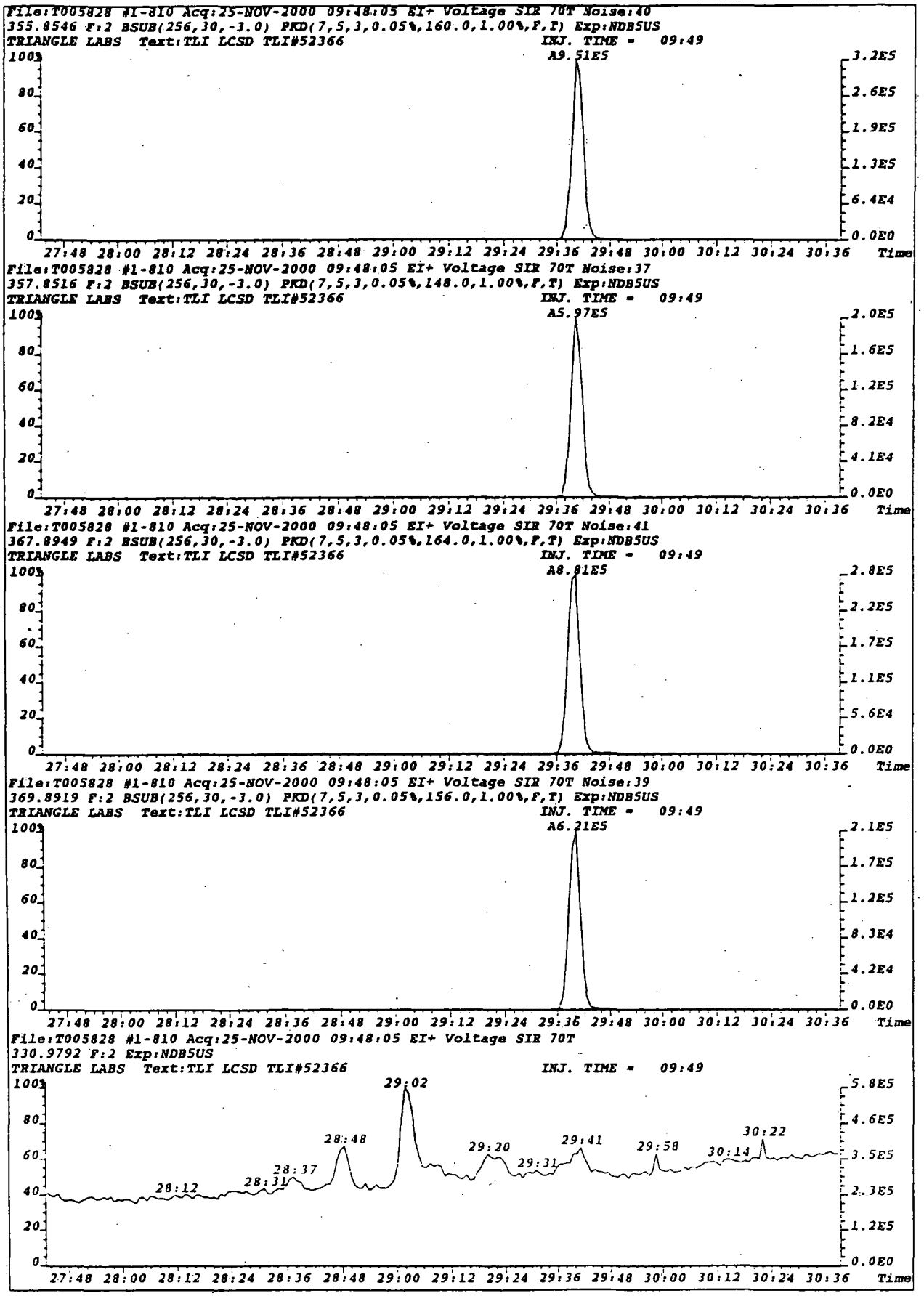
339.8597 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A1.04E6
A1.41E6
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:40
341.8567 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A6.70E5
A9.38E5
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:40
351.9000 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A1.02E6
A1.34E6
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:37
353.8970 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A6.91E5
A8.85E5
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
26:37
27:07
27:25
27:43
28:37
28:48
29:02
29:20
29:41
29:58
30:14
30:22
30:37
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
409.7974 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
27:00
27:40
28:03
28:22
28:39
28:58
29:28
30:02
30:21
30:36
27:00
28:00
29:00
30:00
Time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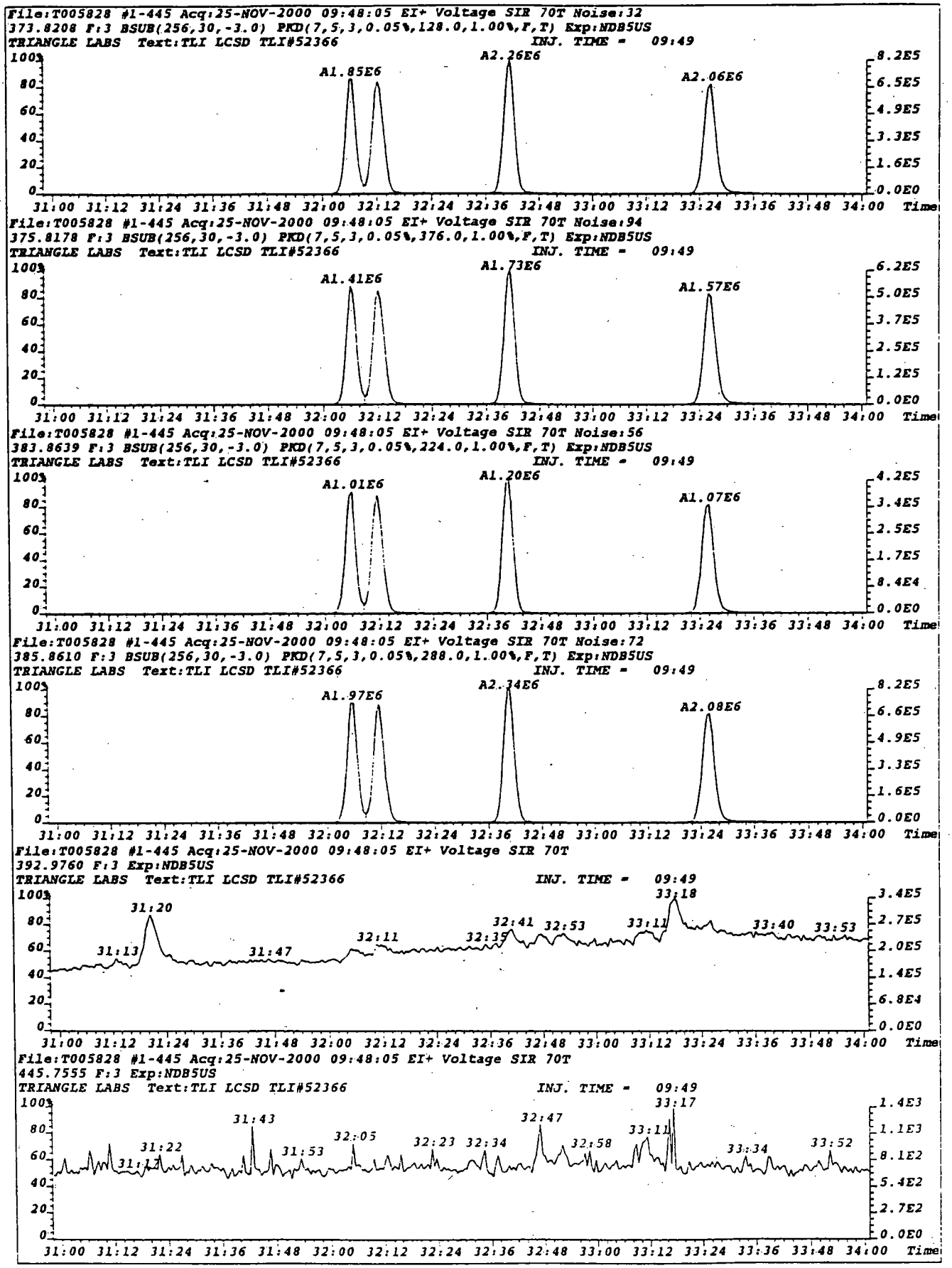
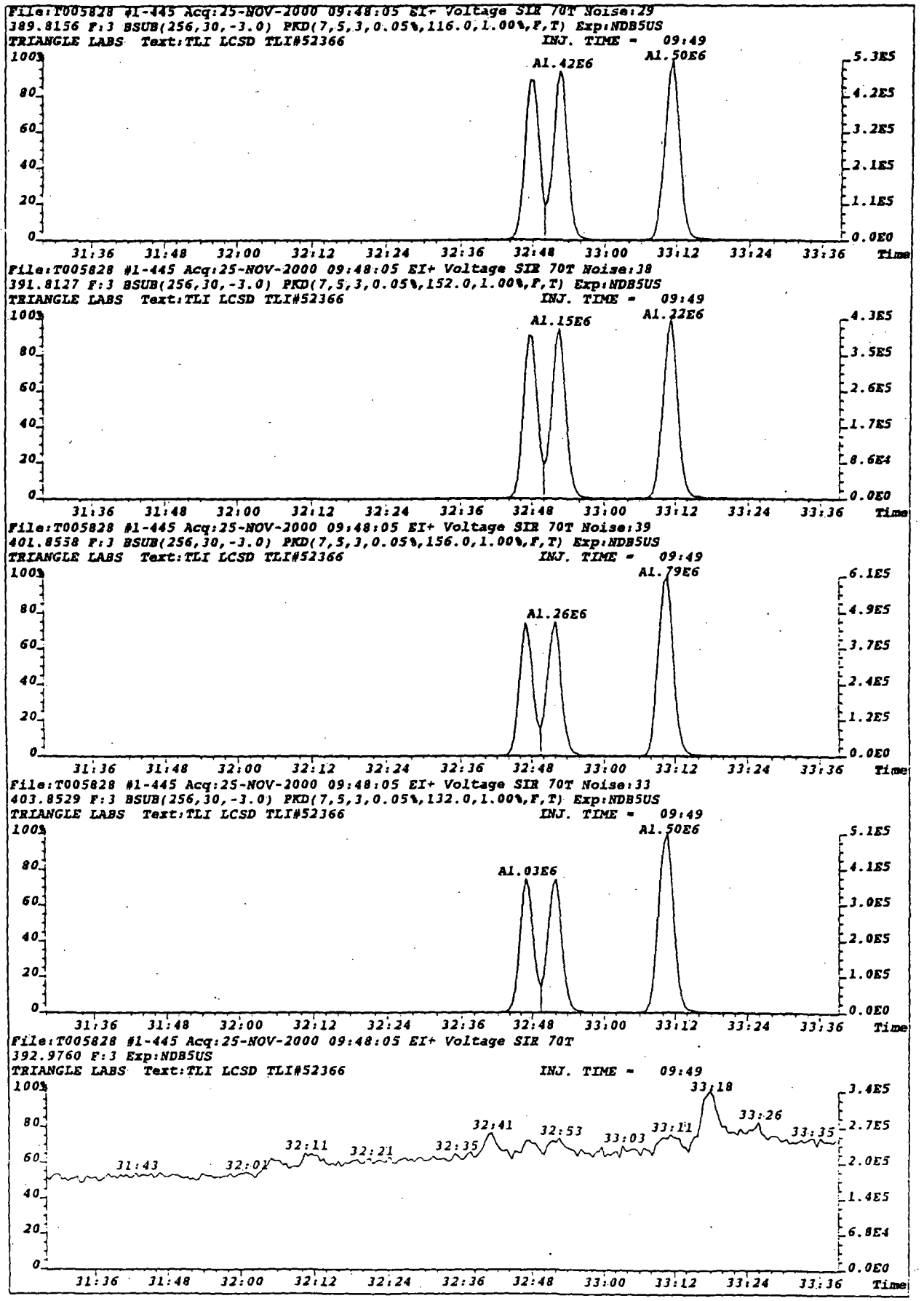
355.8546 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A9.51E5
3.2E5
2.6E5
1.9E5
1.3E5
6.4E4
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:37
357.8516 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A5.97E5
2.0E5
1.6E5
1.2E5
8.2E4
4.1E4
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:41
367.8949 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,164.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A8.81E5
2.8E5
2.2E5
1.7E5
1.1E5
5.6E4
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:39
369.8919 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A6.21E5
2.1E5
1.7E5
1.2E5
8.3E4
4.2E4
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time
File:T005828 #1-810 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
330.9792 F:2 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
28:12
28:31
28:37
28:48
29:02
29:20
29:31
29:41
29:58
30:14
30:22
5.8E5
4.6E5
3.5E5
2.3E5
1.2E5
0.0E0
27:48 28:00 28:12 28:24 28:36 28:48 29:00 29:12 29:24 29:36 29:48 30:00 30:12 30:24 30:36 Time


File:T005828 #1-445 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:32
373.8208 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,128.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A1.85E6
A2.26E6
A2.06E6
File:T005828 #1-445 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:94
375.8178 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,376.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A1.41E6
A1.73E6
A1.57E6
File:T005828 #1-445 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:56
383.8639 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,224.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A1.01E6
A1.20E6
A1.07E6
File:T005828 #1-445 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:72
385.8610 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,288.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A1.97E6
A2.14E6
A2.08E6
File:T005828 #1-445 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
31:13
31:20
31:47
32:11
32:35
32:41
32:53
33:11
33:18
33:40
33:53
File:T005828 #1-445 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
445.7555 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
31:17
31:22
31:43
31:53
32:05
32:23
32:34
32:47
32:58
33:11
33:17
33:34
33:52
31:00 31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 33:48 34:00 Time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389.8156 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,116.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A1.42E6
A1.50E6
File:T005828 #1-445 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:18
391.8127 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,152.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A1.15E6
A1.22E6
File:T005828 #1-445 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:39
401.8538 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A1.26E6
A1.79E6
File:T005828 #1-445 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:33
403.8529 F:3 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,132.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A1.03E6
A1.50E6
File:T005828 #1-445 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
392.9760 F:3 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
31:43
32:01
32:11
32:21
32:35
32:41
32:53
33:03
33:11
33:18
33:26
33:35
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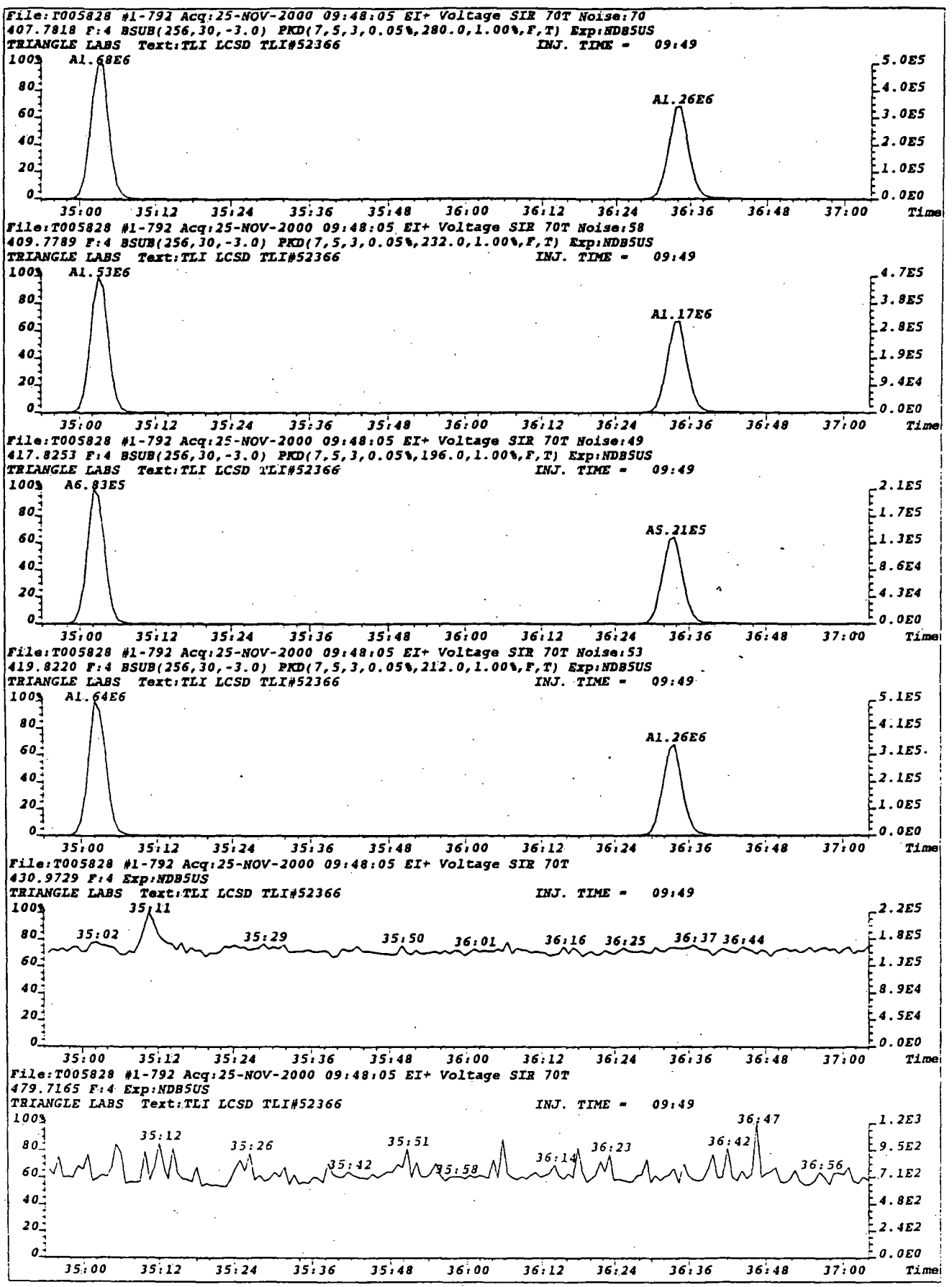
33:12
33:24
33:36
Time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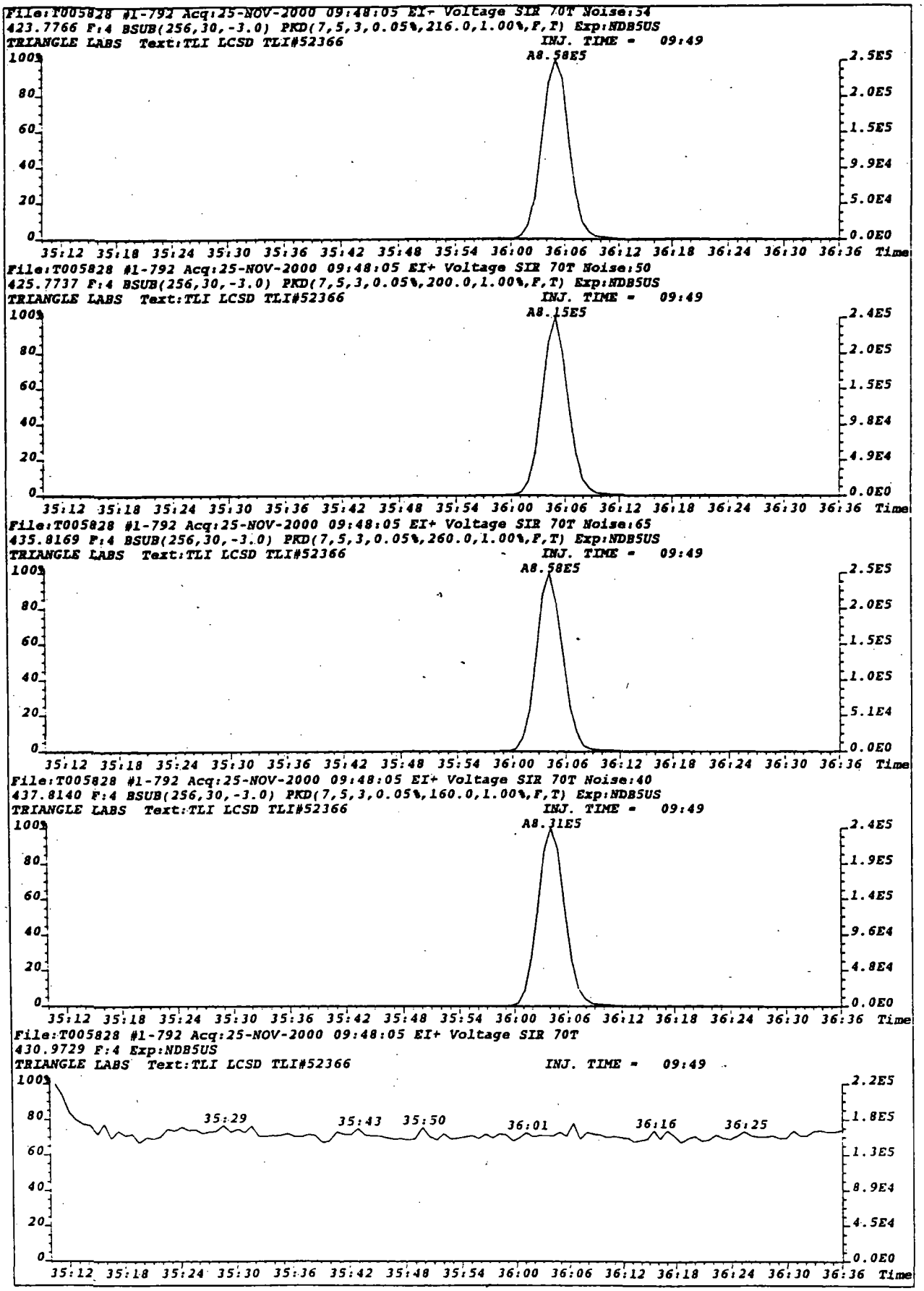
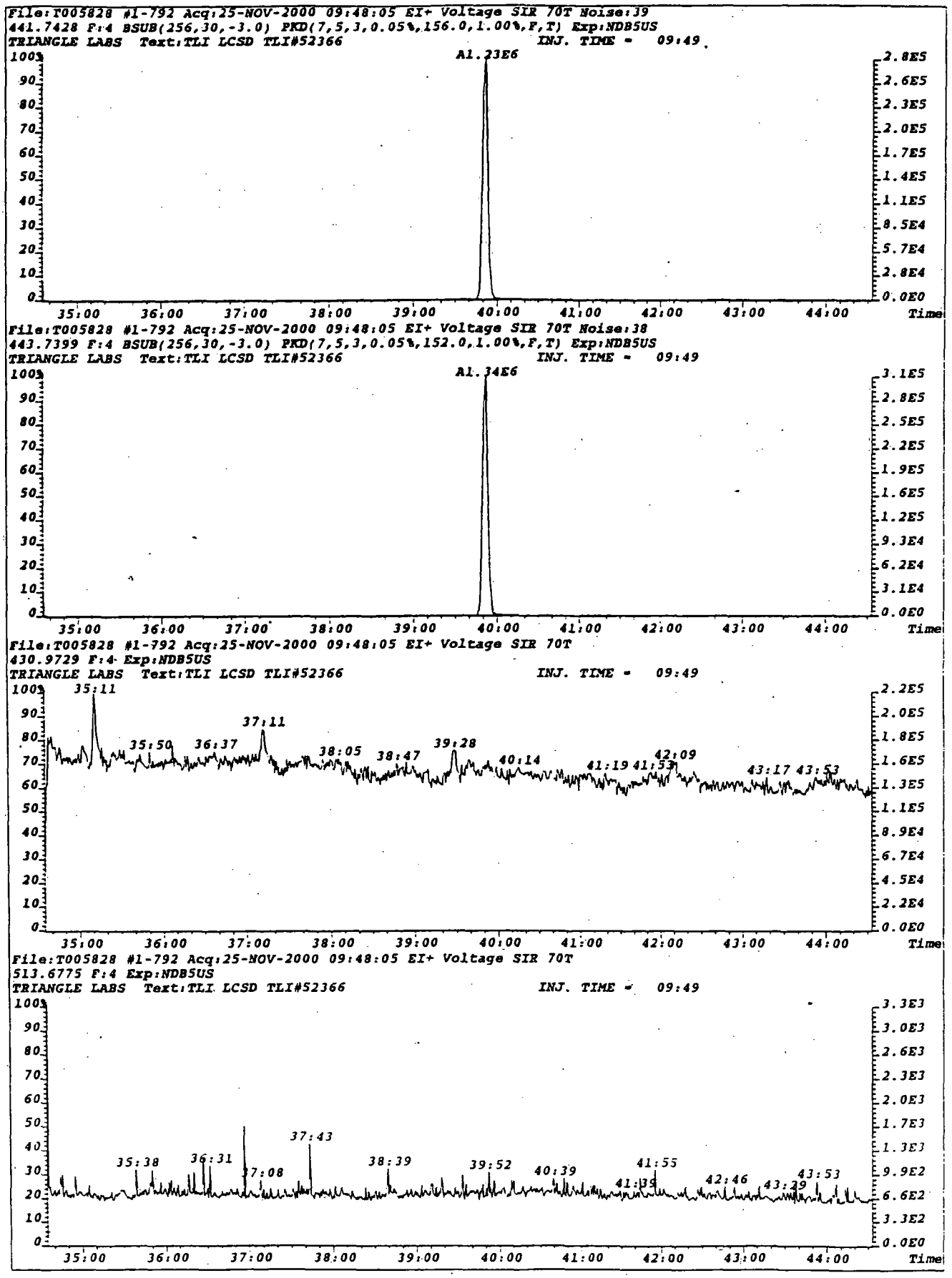
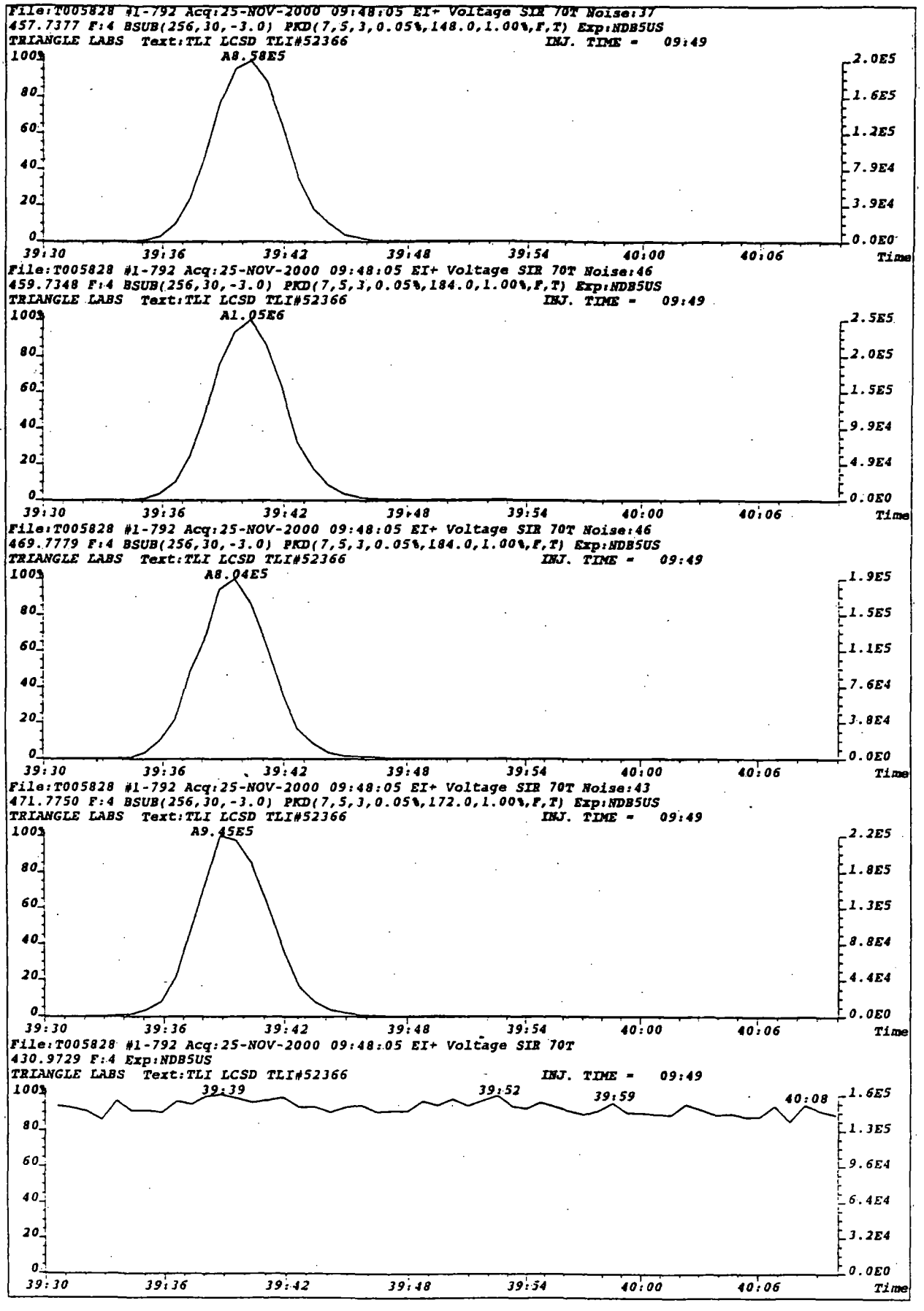
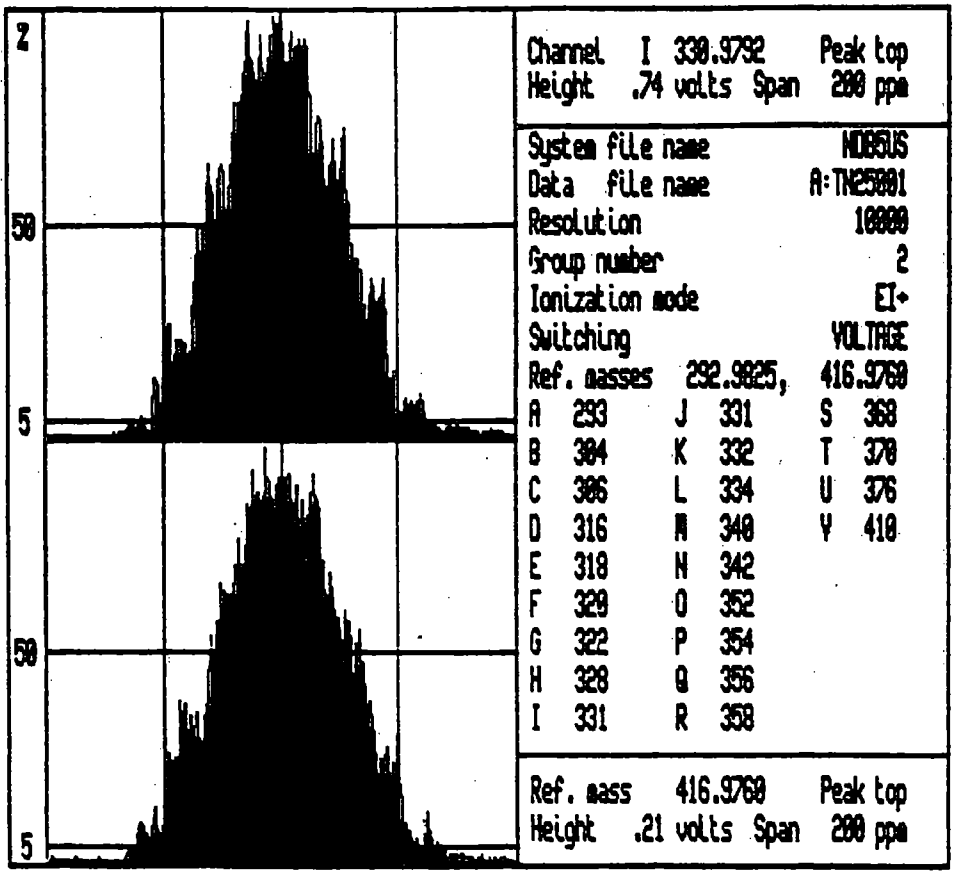
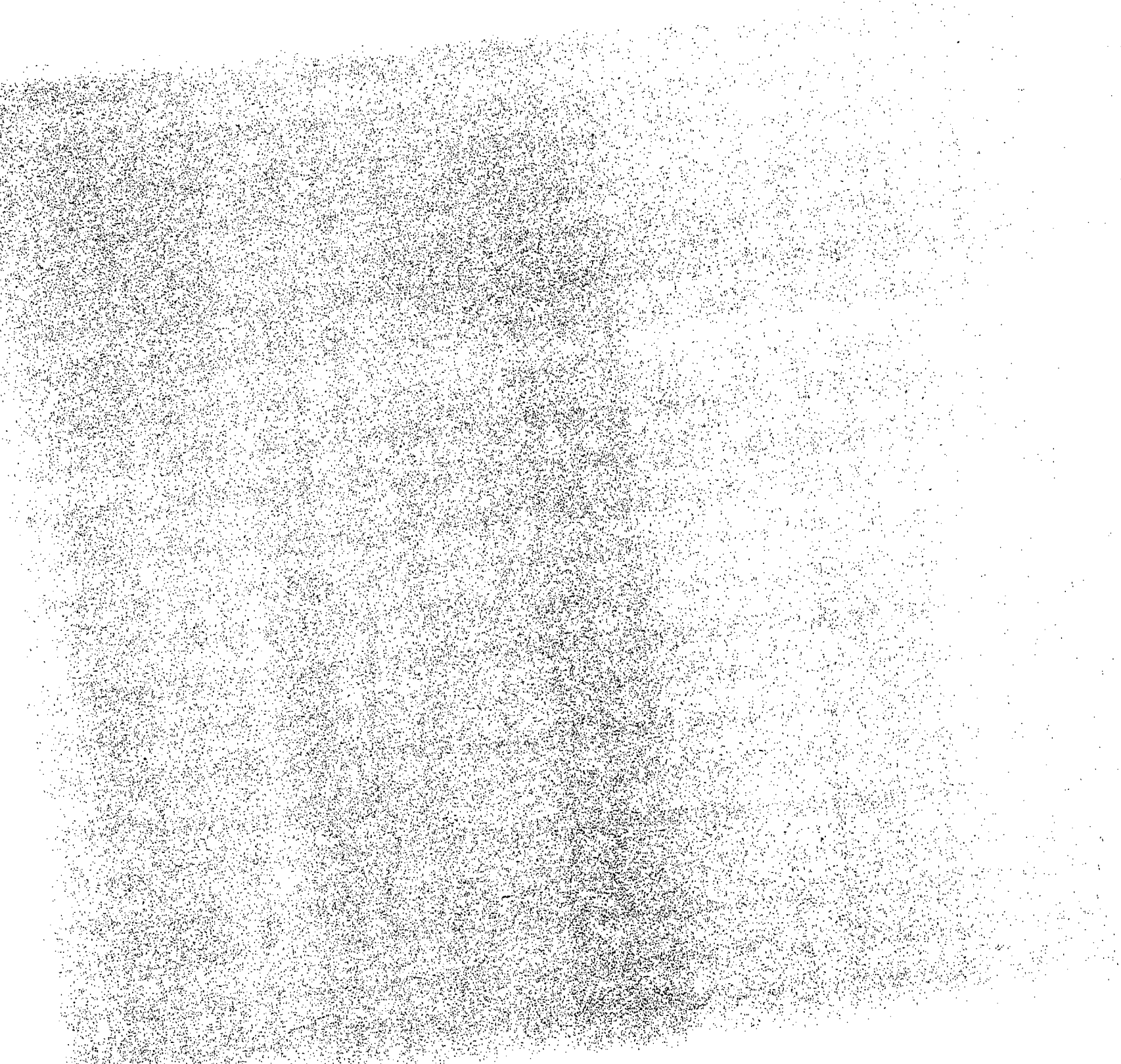
407.7818 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,280.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A1.68E6
A1.26E6
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:58
409.7789 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,232.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A1.53E6
A1.17E6
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:49
417.8253 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,196.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A6.83E5
A5.21E5
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:53
419.8220 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,212.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A1.64E6
A1.26E6
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
35:11
35:02
35:29
35:50
36:01
36:16
36:25
36:37
36:44
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
479.7165 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
36:47
35:12
35:26
35:51
35:42
35:58
36:14
36:23
36:42
36:56
35:00
35:12
35:24
35:36
35:48
36:00
36:12
36:24
36:36
36:48
37:00
Time


File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:54
423.7766 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,216.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A8.58E5
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:50
425.7737 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,200.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A8.15E5
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:65
435.8169 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,260.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A8.58E5
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:40
437.8140 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,160.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
A8.31E5
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366
INJ. TIME = 09:49
35:29
35:43
35:50
36:01
36:16
36:25
Time


File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:39
441.7428 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,156.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A1.23E6
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:38
443.7399 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,152.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A1.34E6
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
35:11
37:11
35:50
36:37
38:05
38:47
39:28
40:14
41:19
41:53
42:09
43:17
43:53
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
513.6775 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
37:43
35:38
36:31
37:08
38:39
39:52
40:39
41:55
41:39
42:46
43:29
43:53
35:00
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
Time


File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:37
457.7377 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,148.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A8.58E5
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:46
459.7348 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A1.05E6
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:46
469.7779 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,184.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A8.04E5
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T Noise:43
471.7750 F:4 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,172.0,1.00%,F,T) Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
A9.45E5
File:T005828 #1-792 Acq:25-NOV-2000 09:48:05 EI+ Voltage SIR 70T
430.9729 F:4 Exp:NDB5US
TRIANGLE LABS Text:TLI LCSD TLI#52366 INJ. TIME = 09:49
39:39
39:52
39:59
40:08
Time


2
50
5
50
5
Channel I 330.9792 Peak top
Height .74 volts Span 200 ppm
System file name MOBIUS
Data file name A:TN25001
Resolution 10000
Group number 2
Ionization mode EI+
Switching VOLTAGE
Ref. masses 292.9825, 416.9769
A 293 J 331 S 368
B 304 K 332 T 370
C 306 L 334 U 376
D 316 M 340 V 410
E 318 N 342
F 329 O 352
G 322 P 354
H 328 Q 356
I 331 R 358
Ref. mass 416.9769 Peak top
Height .21 volts Span 200 ppm



TRIANGLE LABS

CALIBRATION DATA

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

TRIANGLE LABORATORIES, INC. Date: 07/15/2000

Initial Calibration Summary for TF57140

Analysis Date....: 07/14/2000 Method.....: MIT3
Instrument.....: T

Analytes	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
Total MCDF	1.885	0.000	0%	10:39	6:25	20:25	3.255		1
Total MCDD	1.869	0.000	0%	11:19	7:05	21:05	3.153		1
Total DCDF	0.542	0.000	0%	14:32	13:25	21:25	6.472		1
Total DCDD	0.944	0.000	0%	15:21	14:05	22:05	1.551		1
Total TriCDF	0.785	0.000	0%	20:23	17:25	24:25	0.984		1
Total TriCDD	0.524	0.000	0%	20:29	19:05	25:05	0.949		1
1368-TCDF	1.203	0.050	4%	23:30	25:25	32:25	0.792		6
1278-TCDF	1.051	0.047	4%	26:04			0.799		6
2378-TCDF	1.023	0.028	3%	26:26			0.772		6
TOTAL TCDF	1.023	0.028	3%				0.788		6
1368-TCDD	0.938	0.036	4%	24:43	26:05	33:05	0.788		6
1379-TCDD	0.798	0.024	3%	25:05			0.783		6
2378-TCDD	0.914	0.025	3%	27:06			0.780		6
TOTAL TCDD	0.914	0.025	3%				0.783		6
12378-PeCDF	0.912	0.023	3%	30:12	26:11	34:11	1.508		6
23478-PeCDF	0.925	0.021	2%	30:52			1.499		6
TOTAL PeCDF	0.918	0.019	2%				1.504		6
12378-PeCDD	1.056	0.009	1%	31:12	27:11	35:11	1.602		6
TOTAL PeCDD	1.056	0.009	1%				1.602		6
123478-HxCDF	1.026	0.009	1%	33:36	29:41	37:41	1.262		6
123678-HxCDF	1.075	0.014	1%	33:42			1.266		6
234678-HxCDF	0.972	0.024	2%	34:13			1.262		6
123789-HxCDF	0.795	0.055	7%	35:02			1.262		6
TOTAL HxCDF	0.967	0.020	2%				1.263		6
123478-HxCDD	1.017	0.022	2%	34:19	30:24	38:24	1.244		6
123678-HxCDD	1.016	0.026	3%	34:24			1.233		6
123789-HxCDD	1.027	0.052	5%	34:45			1.230		6
TOTAL HxCDD	1.020	0.032	3%				1.235		6
1234678-HpCDF	1.255	0.016	1%	36:47	32:47	40:47	1.041		6
1234789-HpCDF	0.969	0.076	8%	38:28			1.041		6
TOTAL HpCDF	1.112	0.041	4%				1.041		6
1234678-HpCDD	0.855	0.012	1%	37:54	33:53	41:53	1.031		6
TOTAL HpCDD	0.855	0.012	1%				1.031		6
OCDF	1.100	0.095	9%	42:08	37:53	45:53	0.897		6
OCDD	0.914	0.015	2%	41:54	37:53	45:53	0.852		6

Other Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
37Cl-TCDD	0.846	0.021	2%	27:06	25:05	29:05			6
13C12-PeCDF 234	0.990	0.020	2%	30:51	28:11	32:11	1.471		6
13C12-HxCDF 478	0.985	0.015	2%	33:35			0.506		6
13C12-HxCDF 234	0.912	0.018	2%	34:12			0.505		6
13C12-HxCDF 789	0.670	0.041	6%	35:02			0.503		6
13C12-HxCDD 478	1.035	0.028	3%	34:18			1.195		6
13C12-HpCDF 789	0.778	0.043	6%	38:27	34:47	40:47	0.414		6

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Printed: 01:24 07/15/2000

TRIANGLE LABORATORIES, INC. Date: 07/15/2000

Initial Calibration Summary for TF57140

Internal Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
13C12-2378-TCDF	1.282	0.051	4%	26:25	25:25	27:25	0.728		6
13C12-2378-TCDD	1.052	0.040	4%	27:05	25:05	29:05	0.796		6
13C12-PeCDF 123	1.199	0.133	11%	30:11	26:11	34:11	1.472		6
13C12-PeCDD 123	0.682	0.075	11%	31:11	27:11	35:11	1.397		6
13C12-HxCDF 678	1.452	0.062	4%	33:41	29:41	37:41	0.504		6
13C12-HxCDD 678	0.908	0.038	4%	34:24	33:24	35:24	1.214		6
13C12-HpCDF 678	0.970	0.014	1%	36:47	34:47	40:47	0.416		6
13C12-HpCDD 678	0.858	0.032	4%	37:53	36:53	38:53	1.021		6
13C12-OCDD	0.698	0.054	8%	41:53	39:53	43:53	0.851		6

Recovery Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
13C12-1234-TCDD	1.000	0.000	0%	26:55			0.810		6
13C12-HxCDD 789	1.000	0.000	0%	34:44			1.204		6

*** End of Report ***

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TRIANGLE LABORATORIES, INC. Date: 10/24/2000

Initial Calibration Summary for PF20230

Analysis Date....: 10/23/2000 Method.....: C2NF

Instrument.....: P GC Column...: DB-225

Analytes	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
2378-TCDF	0.947	0.099	10%	23:51	16:49	27:49	0.767		10
TOTAL TCDF	0.947	0.099	10%				0.767		10
2378-TCDD	0.965	0.125	13%	22:20	18:19	26:19	0.778		10
TOTAL TCDD	0.965	0.125	13%				0.778		10
Other Standards	**RF**	**SD**	**%RSD**	**RT**	**RT/LO**	**RT/HI**	**Ratio1**	**Ratio2**	**N**
37Cl-TCDD	0.992	0.030	3%	22:20	20:19	24:19			10
Internal Standards	**RF**	**SD**	**%RSD**	**RT**	**RT/LO**	**RT/HI**	**Ratio1**	**Ratio2**	**N**
13C12-2378-TCDF	1.565	0.032	2%	23:49	22:49	24:49	0.793		10
13C12-2378-TCDD	1.104	0.026	2%	22:19	20:19	24:19	0.799		10
Recovery Standards	**RF**	**SD**	**%RSD**	**RT**	**RT/LO**	**RT/HI**	**Ratio1**	**Ratio2**	**N**
13C12-1234-TCDD	1.000	0.000	0%	22:38			0.812		10

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Printed: 05:09 10/24/2000

Date: 11/25/2000 TRIANGLE LABORATORIES, INC.

Continuing Calibration for T005815

Analysis Date....: 11/24/2000 Method.....: MIT3
Operator.....: MVL Instrument..: T
Init Calibration.: TF57140 Std.Conc....: 10.00
ICal Date.....: 07/14/2000

Analyte Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
Total MCDF	0.000		4:40 18:40			1.885	-1.885	100.0%
Total MCDD	0.000		5:23 19:23			1.869	-1.869	100.0%
Total DCDF	0.000		11:40 19:40			0.542	-0.542	100.0%
Total DCDD	0.000		12:23 20:23			0.944	-0.944	100.0%
Total TriCDF	0.000		15:40 22:40			0.785	-0.785	100.0%
Total TriCDD	0.000		17:23 23:23			0.524	-0.524	100.0%
1368-TCDF	1.036	0.77	21:13 26:34	21:26	0.8687	1.203	-0.167	-13.9%
1278-TCDF	0.953	0.79		24:16	0.9838	1.051	-0.098	-9.3%
2378-TCDF	1.051	0.78		24:41	1.0004	1.023	0.028	2.8%
TOTAL TCDF	1.051	0.78				1.023	0.028	2.8%
1368-TCDD	0.773	0.81	22:36 26:32	22:48	0.8983	0.938	-0.165	-17.6%
1379-TCDD	0.679	0.76		23:14	0.9153	0.798	-0.119	-15.0%
2378-TCDD	0.989	0.78		25:25	1.0016	0.914	0.075	8.2%
TOTAL TCDD	0.989	0.78				0.914	0.075	8.2%
12378-PeCDF	0.946	1.54	26:27 30:29	28:40	1.0007	0.912	0.034	3.8%
23478-PeCDF	0.907	1.54		29:21	1.0244	0.925	-0.018	-1.9%
TOTAL PeCDF	0.927	1.54				0.918	0.009	1.0%
12378-PeCDD	1.096	1.57	27:43 30:19	29:43	1.0007	1.056	0.040	3.8%
TOTAL PeCDD	1.096	1.57				1.056	0.040	3.8%
123478-HxCDF	1.018	1.29	30:58 33:41	32:08	0.9972	1.026	-0.008	-0.7%
123678-HxCDF	1.067	1.29		32:14	1.0003	1.075	-0.008	-0.7%
234678-HxCDF	0.976	1.28		32:43	1.0155	0.972	0.004	0.4%

Final

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123789-HxCDF	0.806	1.30		33:28	1.0388	0.795	0.011	1.4%
TOTAL HxCDF	0.967	1.29				0.967	0.000	0.0%
123478-HxCDD	1.059	1.26	31:28 33:19	32:50	0.9979	1.017	0.042	4.1%
123678-HxCDD	1.104	1.23		32:54	1.0000	1.016	0.088	8.7%
123789-HxCDD	1.056	1.25		33:13	1.0097	1.027	0.029	2.9%
TOTAL HxCDD	1.073	1.25				1.020	0.053	5.2%
1234678-HpCDF	1.301	1.05	34:54 36:44	35:04	1.0000	1.255	0.046	3.7%
1234789-HpCDF	0.957	1.05		36:36	1.0436	0.969	-0.012	-1.3%
TOTAL HpCDF	1.129	1.05				1.112	0.017	1.5%
1234678-HpCDD	0.913	1.06	35:10 36:16	36:06	1.0000	0.855	0.058	6.8%
TOTAL HpCDD	0.913	1.06				0.855	0.058	6.8%
OCDF	1.252	0.90	35:40 43:40	39:52	1.0050	1.100	0.152	13.8%
OCDD	0.985	0.84	35:40 43:40	39:41	1.0003	0.914	0.071	7.8%

Other Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
37Cl-TCDD	0.901		23:23 27:23	25:24	1.0008	0.846	0.055	6.5%
13C12-PeCDF 234	0.932	1.52	24:39 32:39	29:21	1.0244	0.990	-0.058	-5.9%
13C12-HxCDF 478	0.940	0.52	28:13 36:13	32:07	0.9969	0.985	-0.045	-4.6%
13C12-HxCDF 234	0.882	0.50		32:42	1.0149	0.912	-0.030	-3.3%
13C12-HxCDF 789	0.657	0.51		33:27	1.0382	0.670	-0.013	-2.0%
13C12-HxCDD 478	1.004	1.23	31:54 33:54	32:48	0.9970	1.035	-0.031	-3.0%
13C12-HpCDF 789	0.733	0.42	33:04 39:04	36:35	1.0431	0.778	-0.045	-5.7%

Internal Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-2378-TCDF	1.409	0.75	23:40 25:40	24:40	1.0000	1.282	0.127	9.9%
13C12-2378-TCDD	1.153	0.79	23:23 27:23	25:23	1.0000	1.052	0.101	9.6%

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Date: 11/25/2000 TRIANGLE LABORATORIES, INC.

Continuing Calibration for T005815

13C12-PeCDF 123	1.293	1.49	24:39 32:39	28:39	1.0000	1.199	0.094	7.8%
13C12-PeCDD 123	0.670	1.43	25:42 33:42	29:42	1.0000	0.682	-0.012	-1.8%
13C12-HxCDF 678	1.648	0.50	28:13 36:13	32:13	1.0000	1.452	0.196	13.5%
13C12-HxCDD 678	0.964	1.23	31:54 33:54	32:54	1.0000	0.908	0.056	6.2%
13C12-HpCDF 678	0.965	0.43	33:04 39:04	35:04	1.0000	0.970	-0.005	-0.5%
13C12-HpCDD 678	0.743	1.04	35:06 37:06	36:06	1.0000	0.858	-0.115	-13.4%
13C12-OCDD	0.490	0.88	39:30 39:50	39:40	1.0000	0.698	-0.208	-29.9%

Recovery Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-1234-TCDD	1.000	0.80	23:23 27:23	25:12	0.9929	1.000	0.000	0.0%
13C12-HxCDD 789	1.000	1.21	31:54 33:54	33:12	1.0091	1.000	0.000	0.0%

QC Front End Check: 1.7509 TetraRS/HexaRS: 1.209

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Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
TCDF			0.65-0.89						
304-306	21:26		0.77	47.25	20.57	26.68	0.869	1368-TCDF	AN
	24:16		0.79	43.46	19.22	24.24	0.984	1278-TCDF	AN
	24:41		0.78	47.93	20.95	26.98	1.000	2378-TCDF	AN
304-306			3 Peaks						
13C12-TCDF			0.65-0.89						
316-318	24:40		0.75	455.97	195.17	260.80	1.000	13C12-2378-TCDF	IS0
316-318			1 Peak						
---------- Above: TCDF / TCDD Follows ----------									
TCDD			0.65-0.89						
320-322	22:48		0.81	28.83	12.89	15.94	0.898	1368-TCDD	AN
	23:14		0.76	25.31	10.94	14.37	0.915	1379-TCDD	AN
	25:25		0.78	36.87	16.16	20.71	1.002	2378-TCDD	AN
320			3 Peaks						
37Cl-TCDD									
328	25:24			33.59	33.59		1.001	37Cl-TCDD	CLS
328-330			1 Peak						
13C12-TCDD			0.65-0.89						
332-334	25:12		0.80	323.51	144.01	179.50	0.993	13C12-1234-TCDD	RS1
	25:23		0.79	372.95	164.92	208.03	1.000	13C12-2378-TCDD	IS1
332-334			2 Peaks						
---------- Above: TCDD / PeCDF Follows ----------									
PeCDF			1.32-1.78						
340-342	28:40		1.54	197.89	120.06	77.83	1.001	12378-PeCDF	AN
	29:21		1.54	189.74	115.18	74.56	1.024	23478-PeCDF	AN
340-342			2 Peaks						
13C12-PeCDF			1.32-1.78						
352-354	28:39		1.49	418.28	250.20	168.08	1.000	13C12-PeCDF 123	IS2
	29:21		1.52	389.70	234.99	154.71	1.024	13C12-PeCDF 234	SUR1
352-354			2 Peaks						
---------- Above: PeCDF / PeCDD Follows ----------									
PeCDD			1.32-1.78						
356-358	29:43		1.57	118.80	72.57	46.23	1.001	12378-PeCDD	AN
356-358			1 Peak						
13C12-PeCDD			1.32-1.78						
368-370	29:42		1.43	216.74	127.41	89.33	1.000	13C12-PeCDD 123	IS3
368-370			1 Peak						
---------- Above: PeCDD / HxCDF Follows ----------									

Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
HxCDF			1.05-1.43						
374-376	32:08		1.29	182.57	102.87	79.70	0.997	123478-HxCDF	AN
	32:14		1.29	191.35	107.82	83.53	1.000	123678-HxCDF	AN
	32:43		1.28	174.92	98.27	76.65	1.016	234678-HxCDF	AN
	33:28		1.30	144.54	81.79	62.75	1.039	123789-HxCDF	AN
374-376			4 Peaks						
13C12-HxCDF			0.43-0.59						
384-386	32:07		0.52	336.93	114.78	222.15	0.997	13C12-HxCDF 478	SUR2
	32:13		0.50	358.52	118.96	239.56	1.000	13C12-HxCDF 678	IS4
	32:42		0.50	316.25	105.23	211.02	1.015	13C12-HxCDF 234	ALT2
	33:27		0.51	235.38	79.22	156.16	1.038	13C12-HxCDF 789	ALT1
384-386			4 Peaks						
---------- Above: HxCDF / HxCDD Follows ----------									
HxCDD			1.05-1.43						
390-392	32:50		1.26	111.00	61.96	49.04	0.998	123478-HxCDD	AN
	32:54		1.23	115.78	63.86	51.92	1.000	123678-HxCDD	AN
	33:13		1.25	110.76	61.62	49.14	1.010	123789-HxCDD	AN
390-392			3 Peaks						
13C12-HxCDD			1.05-1.43						
402-404	32:48		1.23	210.45	116.21	94.24	0.997	13C12-HxCDD 478	SUR3
	32:54		1.23	209.68	115.49	94.19	1.000	13C12-HxCDD 678	IS5
	33:12		1.21	217.53	119.08	98.45	1.009	13C12-HxCDD 789	RS2
402-404			3 Peaks						
---------- Above: HxCDD / HpCDF Follows ----------									
HpCDF			0.88-1.20						
408-410	35:04		1.05	136.51	69.94	66.57	1.000	1234678-HpCDF	AN
	36:36		1.05	100.37	51.36	49.01	1.044	1234789-HpCDF	AN
408-410			2 Peaks						
13C12-HpCDF			0.37-0.51						
418-420	35:04		0.43	209.85	62.80	147.05	1.000	13C12-HpCDF 678	IS6
	36:35		0.42	153.90	45.85	108.05	1.043	13C12-HpCDF 789	SUR4
418-420			2 Peaks						
---------- Above: HpCDF / HpCDD Follows ----------									
HpCDD			0.88-1.20						
424-426	36:06		1.06	73.85	37.97	35.88	1.000	1234678-HpCDD	AN
424-426			1 Peak						
13C12-HpCDD			0.88-1.20						
436-438	36:06		1.04	161.70	82.44	79.26	1.000	13C12-HpCDD 678	IS7
436-438			1 Peak						
---------- Above: HpCDD / Octa-CDD and CDF Follows ----									

Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
OCDF			0.76-1.02						
442-444	39:52		0.90	133.36	63.33	70.03	1.005	OCDF	AN
442-444			1 Peak						
OCDD			0.76-1.02						
458-460	39:41		0.84	104.93	47.76	57.17	1.000	OCDD	AN
458-460			1 Peak						
13C12-OCDD			0.76-1.02						
470-472	39:40		0.88	213.00	100.00	113.00	1.000	13C12-OCDD	IS8
470			1 Peak						

Column Description.....

M_Z - Nominal Ion Mass(es)
..RT. - Retention Time (mm:ss)
Rat.1 - Ratio of M/M+2 Ions
OK - RO=Ratio Outside Limits
Rel.RT - Relative Retention Time

*** End of Report ***

Date: 11/29/2000 TRIANGLE LABORATORIES, INC.

Continuing Calibration for P004340

Analysis Date....: 11/29/2000 Method.....: C2NF
Operator.....: MVL Instrument..: P
Init Calibration.: PF20230 Std.Conc....: 5.00
ICal Date.....: 10/23/2000
Analysis Time....: 19:34 GC Column...: DB-225

Analyte Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
2378-TCDF	0.830	0.77	18:43 26:03	23:37	1.0008	0.947	-0.117	-12.3%
TOTAL TCDF	0.830	0.77				0.947	-0.117	-12.3%
2378-TCDD	0.852	0.77	19:32 25:13	22:10	1.0000	0.965	-0.113	-11.7%
TOTAL TCDD	0.852	0.77				0.965	-0.113	-11.7%

Other Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
37Cl-TCDD	0.993		20:10 24:10	22:10	1.0000	0.992	0.001	0.1%

Internal Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-2378-TCDF	1.489	0.77	22:36 24:36	23:36	1.0000	1.565	-0.076	-4.9%
13C12-2378-TCDD	1.014	0.77	20:10 24:10	22:10	1.0000	1.104	-0.090	-8.1%

Recovery Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-1234-TCDD	1.000	0.78		22:23	1.0095	1.000	0.000	0.0%

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Printed: 21:23 11/29/2000

Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
TCDF		0.65-0.89							
304-306	23:37		0.77	240.14	104.67	135.47	1.001	2378-TCDF	AN
304-306		1 Peak							
13C12-TCDF		0.65-0.89							
316-318	23:36		0.77	5,783.25	2,522.92	3,260.33	1.000	13C12-2378-TCDF	IS0
316-318		1 Peak							
---------- Above: TCDF / TCDD Follows ----------									
TCDD		0.65-0.89							
320-322	22:10		0.77	167.85	73.00	94.85	1.000	2378-TCDD	AN
320		1 Peak							
37Cl-TCDD									
328	22:10			195.75	195.75		1.000	37Cl-TCDD	SUR1
328-330		1 Peak							
13C12-TCDD		0.65-0.89							
332-334	22:10		0.77	3,940.79	1,709.21	2,231.58	1.000	13C12-2378-TCDD	IS1
	22:23		0.78	3,884.49	1,700.58	2,183.91	1.010	13C12-1234-TCDD	RS1
332		2 Peaks							

Column Description.....

M_Z - Nominal Ion Mass(es)
..RT. - Retention Time (mm:ss)
Rat.1 - Ratio of M/M+2 Ions
OK - RO=Ratio Outside Limits
Rel.RT - Relative Retention Time

*** End of Report ***

Date: 11/30/2000 TRIANGLE LABORATORIES, INC.

Continuing Calibration for P004350

Analysis Date....: 11/30/2000 Method.....: C2NF
Operator.....: JMM Instrument..: P
Init Calibration..: PF20230 Std.Conc....: 5.00
ICal Date.....: 10/23/2000 Related CCal: P004340
Analysis Time....: 07:05 GC Column...: DB-225

Analyte Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
2378-TCDF	0.794	0.76	16:34 27:34	23:35	1.0004	0.947	-0.153	-16.1%
TOTAL TCDF	0.794	0.76				0.947	-0.153	-16.1%
2378-TCDD	0.850	0.80	18:08 26:08	22:09	1.0009	0.965	-0.115	-11.9%
TOTAL TCDD	0.850	0.80				0.965	-0.115	-11.9%

Other Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
37Cl-TCDD	0.909		20:08 24:08	22:08	1.0000	0.992	-0.083	-8.4%

Internal Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-2378-TCDF	2.156	0.74	22:34 24:34	23:34	1.0000	1.565	0.591	37.8%
13C12-2378-TCDD	1.011	0.76	20:08 24:08	22:08	1.0000	1.104	-0.093	-8.4%

Recovery Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-1234-TCDD	1.000	0.80		22:21	1.0099	1.000	0.000	0.0%

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Compound/ M_Z....	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..
TCDF			0.65-0.89						
304-306	23:35		0.76	16.05	6.91	9.14	1.000	2378-TCDF	AN
304-306			1 Peak						
13C12-TCDF			0.65-0.89						
316-318	23:34		0.74	404.03	172.00	232.03	1.000	13C12-2378-TCDF	IS0
316-318			1 Peak						
---------- Above: TCDF / TCDD Follows ----------									
TCDD			0.65-0.89						
320-322	22:09		0.80	8.05	3.58	4.47	1.001	2378-TCDD	AN
320			1 Peak						
37Cl-TCDD									
328	22:08			8.61	8.61		1.000	37Cl-TCDD	SUR1
328-330			1 Peak						
13C12-TCDD			0.65-0.89						
332-334	22:08		0.76	189.45	81.79	107.66	1.000	13C12-2378-TCDD	IS1
	22:21		0.80	187.37	83.02	104.35	1.010	13C12-1234-TCDD	RS1
332			2 Peaks						

Column Description.....

M_Z - Nominal Ion Mass(es)
..RT. - Retention Time (mm:ss)
Rat.1 - Ratio of M/M+2 Ions
OK - RO=Ratio Outside Limits
Rel.RT - Relative Retention Time

*** End of Report ***