

11.01.1.2

PHASE I REMEDIAL INVESTIGATION REPORT

LOCKHEED MARTIN TACTICAL DEFENSE SYSTEMS DIVISION
(Former Unisys Corp. Site)

Great Neck, New York
NYSDEC Site No.130045

APPENDICES ^I~~J~~ & ^J~~K~~

Prepared for:
New York State
Department of Environmental Conservation

On behalf of:
Lockheed Martin Tactical Defense Systems Division of
Lockheed Martin Tactical Systems, Inc.

DECEMBER 1996

JNISYS

APPENDIX ~~J~~ **I**

METEOROLOGICAL DATA

APPENDIX ~~K~~ **J**

SUBSURFACE VOC EMISSION RESULTS

Phase I Remedial Investigation
Great Neck, NY Facility

APPENDIX *I*

METEOROLOGICAL DATA

**METEOROLOGICAL DATA
GREAT NECK, NY**

DATE	TIME	RAINFALL (inch)		TEMP.	WIND		COMMENT
		TOTAL	CHANGE		SPEED	DIRECTION	
1-7-94	08:00	5.93	0.00	27.9	9	67	CLOUDY / SNOW
1-8-94	08:00	6.00	0.07	24.6	7	280	CLEAR + COLD
1-6-94	08:00	6.01	0.01	17.0	5	313	CLEAR
1-7-94	08:05	6.01	0.00	23.1	6	38	CLOUDY AND HAILING
1-9-94	11:00	6.01	0.00	20.0	0	2.90	CLEAR + COLD
1-11-94	8:00	6.02	0.01	22	3	2.56	CLEAR + COLD
1-12-94	07:45	6.02	0.00	34.1	2	39	CLOUDY - POSSIBLY SNOW
1-13-94	07:40	6.16	0.14	32	4	3.09	CLOUDY
1-16-94	07:45	6.93	0.77	23	4	2.18	Partly Cloudy
1-17-94	08:10	8:10	0.17	26.9	8	2.96	CLOUDY
1-18-94	07:50	8:10	0.00	-2	7	301	HELP! CLEAR
1-19-94	08:00	8:10	0.00	1.2	9	304	HELP! COLD - CLEAR
1-20-94	08:15	8:10	0.00	4.0	7	298	CLOUDY - COLD
1-21-94	10:05	8:10	0.00	16.5	2	225	CLEAR
1-22-94	08:30	8:10	0.00	20.8	10	269	CLEAR
1-23-94	07:30	000	000	35.2	5	215	CLOUDY - DRY
1-25-94	08:15	001	001	37.0	6	86	CLOUDY - LOOKS LIKE SNOW
1-26-94	08:10	001	000	19.4	8	52	SNOWING
1-27-94	07:55	001	000	3.2	4	4	CLEAR
1-29-94	07:30	178	1.78	20.1	4	311	CLEAR
2-1-94	09:30	178	0.00	23.5	4	97	CLEAR / SUNNY
2-2-94	09:10	178	0.00	19.3	5	318	CLEAR
2-3-94	08:00	178	0.00	25.3	3	197	CLEAR
2-4-94	08:00	178	0.00	24.2	5	292	CLOUDY - COLD
2-7-94	08:00	178	0.00	35.9	4	247	CLEAR
2-8-94	07:35	178	0.00	20.1	6	79	CLOUDY - SNOW TODAY 4-12"
2-9-94	08:55	178	0.00	17.4	7	28	CLOUDY - GOT AT LEAST 10" SNOW
2-11-94	22:30	178	0.00	24.6	6	32	LOTS OF SNOW 12"
2-11-94	08:50	2.07	0.29	23.3	12	294	CLEAR
2-15-94	11:09	2.09	0.02	28.8	5	115	CLOUDY
2-16-94	08:43	2.12	0.03	34.1	10	301	SUNNY + CLEAR
2-17-94	08:00	2.15	0.03	26.4	0	264	SUNNY + CLEAR
2-18-94	08:09	2.18	0.03	39.1	0	276	SUNNY + CLEAR
2-22-94	14:18	2.42	.24	48.7	7	301	SUNNY + CLEAR
2-23-94	11:30	2.42	0.00	28.7	14	91	SNOW
2-25-94	08:27	2.67	.25	26.5	9	318	SUNNY + CLEAR
2-28-94	08:16	2.67	0.00	16.4	7	326	SUNNY + CLEAR
3-1-94	08:10	2.67	0.00	24.5	4	75	SUNNY + CLEAR
3-2-94	11:13	2.67	0.00	30.2	11	130	CLOUDY
3-4-94	10:30	3.20	0.53	38.4	7	262	SUNNY
3-9-94	11:00	3.40	0.20	52.2	8	32	CLOUDY

**METEOROLOGICAL DATA
GREAT NECK, NY**

DATE	TIME	RAINFALL (inch)		TEMP.	WIND		COMMENT
		TOTAL	CHANGE		SPEED	DIRECTION	
11/1/93	1200	0.00	0.00	42	14	357	cldy, lt. rain
11/3/93	1400	0.00	0.00	48	5	202	cloudy
11/4/93	0820	0.00	0.00	44.6	4	227	Sunny/clear
11/5/93	1418	0.41	0.41	56.7	5	186	rainy
8 Nov 93	0800	0.78	0.37	57.3	1	245	Sunny
11-9-93	0530	0.78	0.00	44.2	2	208	SUNNY
11-10-93	0900	0.78	0.00	42.3	4	2	SUNNY/clear
11-12-93	0830	0.78	0.00	52.8	7	257	cloudy
11-15-93	0800	0.81	0.03	65.8	3	211	SUNNY
11/16/93	0855	0.81	0.00	49.1	6	1207	SUNNY
11-17-93	0755	0.81	0.00	46.3	2	245	cloudy
11-18-93	0800	.87	0.06	47.4	6	206	Partly Cloudy
11-19-93	0802	0.87	0.00	46.6	3	65	Rain
11-22-93	1120	0.94	0.07	54.5	3	213	SUNNY
11-23-93	0800	0.94	0.00	48.1	5	54	SUNNY
11-24-93	0840	0.94	0.00	46.5	1	279	cloudy / foggy
11-29-93	0730	1.78	0.84	38.8	2	274	SUNNY
12-30-93	1000	1.78	0.00	40.6	6	290	SUNNY / COOL
12-1-93	0815	1.78	0.00	34.4	4	67	SUNNY / COOL
12-2-93	0945	1.78	0.00	44.8	3	96	cloudy
12-3-93	1600	1.78	0.00	52.8	4	323	partly cloudy
12-6-93	0900	3.80	2.02	39.1	7	31	SUNNY - COOL - G
12-7-93	0900	3.80	0.00	42.0	5	276	SUNNY - COOL
12/8/93	0803	3.80	0.00	44.6	3	278	overcast
12-8-93	0930	3.80	0.00	41	2	110	OVERCAST COOL
12-10-93	0800	3.80	0.00	48.2	6	163	CLOUDY
12-11-93	0830	4.66	0.86	35°	11	351	CLAP + COOL
12-14-93	1430	4.66	0.00	46°	4	342	clear
12-15-93	0800	4.69	0.03	40	3	318	Rain Light
12-16	1000	4.73	.04	42	6	351	light drizzle
12-17-93	0550	4.73	0.00	28°	4	339	clear - COOL
12-20-93	0800	4.93	0.20	37.4	0	185	cloudy
12/22/93	0800	5.84	0.91	50.5	4	128	RAINTN
12-22-93	1000	5.84	0.00	36.8	17	287	SUNNY - COOL
12-27-93	0930	5.84	0.00	12	7	303	clear
12-28-93	1545	5.84	-	23	4	351	cloudy
12/29	0946	5.84	-	19	6	84	clear
1-3-94	0800	5.93	0.09	20	4	15	clear

METEOROLOGICAL DATA

GREAT NECK, NY

DATE	TIME	RAINFALL (inch)		TEMP.	WIND		COMMENT
		TOTAL	CHANGE		SPEED	DIRECTION	
5-5-94	1025	11.27	0.05	59.1	7	2	1007 MB
5-9-94	0850	11.27	0.02	53.5	6	252	1006 MB
5-9-94	0935	12.55	1.26	60.9	9	296	1007 MB
5-11-94	1010	12.55	0.00	63.2	7	269	1017 MB
5-12-94	0830	12.55	0.00	58.3	3	197	1005 MB
5-13-94	0905	12.62	0.07	51.1	12	254	1005 MB
5-16-94	0945	13.13	0.51	56.7	2	344	1001 MB
5-17-94	0830	14.08	0.95	49.4	3	340	1006 MB
5-18-94	0800	14.16	0.02	55.3	4	315	1005 MB
5-19-94	0915	14.42	0.22	50.1	6	318	1011 MB
5-20-94	0920	14.60	0.18	78.5	7	59	1012 MB
5-21-94	0915	14.60	0.00	68.1	4	301	1003 MB
5-24-94	0900	14.60	0.00	69.4	2	331	1007 MB
5-25-94	0840	14.60	0.00	69.1	5	308	1004 MB
5-26-94	0910	15.35	0.75	64.4	2	151	1001 MB
5-27-94	1000	15.69	0.34	57.3	1	350	1002 MB
5-28-94	0750	15.69	0.00	63	5	197	1019 MB
6-2	7:45	15.69	0	55.6	6	293	1010 MB
6-3	11:05	15.69	0	65.6	3	306	1012 MB
6-6	7:45	15.69	0	66.1	4	219	1012 MB
6-7	0745	15.94	0.25	67.3	3	220	10.01
6-7	1300	15.95	0.01	92.4	3	46	1016 MB
6-7	0800	15.95	0.00	69.7	2	150	10.18 MB
6-20-94	7:50	15.95	0	73	2	68	1016 MB
6-21-94	7:55	15.95	0	70.1	4	185	1011 MB
6-23-94	7:45	16.05	0.1	71.8	4	251	1007 MB
6-24-94	8:45	16.05	0	73.0	3	109	1003 MB
6-28	1400	16.09	0.04	74.0	4	195	1009 MB
6-29	8:35	16.09	0	70.2	5	114	1008 MB
7/5	825	16.42	0.31	71	3	23	1010 MB
7/6	1040	16.42	0	83.7	2	231	1012 MB
7/7-94	300	16.42	0	93.2	7	218	1012 MB
7/8-94	800	16.59	0.12	79.3	3	80	1014 MB
7/12-94	300	17.38	0.84	89.7	6	216	1012 MB
7/13-94	200	17.38	0	92.8	3	180	1012 MB
7/14-94	800	17.38	0	76.7	4	39	1012 MB
7/15-94	800	17.56	0.18	66.8	3	52	1012 MB

METEOROLOGICAL DATA

GREAT NECK, NY

[illegible]

DATE	TIME	RAIN FALL TOTAL	(INCH) CHANGE	TEMP	SPEED	D. REEF	COAST
18-94	10:29	5.10	1.20	31.6	4	281	1000 MB
21-94	13:28	5.33	.23	45.0	5	107	1011 MB
22-94	09:02	6.19	.86	42.4	13	296	1001 MB
23-94	10:18	6.14	0.00	62.1	9	291	1005 MB
24-94	14:16	6.19	0.00	65.3	2	211	1006 MB
25-94	14:00	6.20	0.01	49.2	5	323	1004 MB
28-94	08:20	7.12	0.92	49.6	5	314	1001 MB
29-94	08:00	7.74	0.62	39.1	6	44	1009 MB
30-94	08:00	8.10	0.36	42.4	8	290	1018 MB
31-94	0812	8.10	0.00	42.9	7	258	1021 MB
1-1-94	0750	8.10	0.00	45.1	6	315	1012 MB
2-94	1355	8.11	0.01	49.0	6	297	1012 MB
3-94	0710	8.11	0.00	41.5	1	91	1012 MB
11-94	0915	9.20	1.09	48.0	9	325	1021 MB
12-94	0820	9.20	0.00	49.3	2	152	1026 MB
14-94	0915	10.32	1.12	59.4	9	316	1007 MB
15-94	0915	10.32	0.00	58	1	349	1011.5 MB
18-94	0825	10.76	0.44	50	4	298	1012 MB
19-94	11 10	10.80	0.04	70.8	3	251	1009 MB
20-94	10 05	10.92	0.12	53.9	15	300	1011 MB
21-94	0748	10.92	0.00	48.3	1	243	1015 MB
2-94	0800	10.92	0.00	46.5	7	297	1015 MB
5-94	0945	10.92	0.00	72.8	2	214	1007 MB
6-94							
7-94	0751	10.92	0.00	51.8	2	287	1011 MB
8-94	0803	11.19	0.27	59.8	7	317	1017 MB

METEOROLOGICAL DATA
GREAT NECK, NY

DATE	TIME	RAINFALL (inch)		TEMP.	WIND		COMMENT
		TOTAL	CHANGE		SPEED	DIRECTION	
8-14-94	7:41	27.56		59.5	2	349	1011
8-20-94	7:56	27.56	0	56.2	1	307	1010
8-22-94	8:00	27.56	0	61.9	6	78	1019
9-23-94	2:30	27.56	0	61.4	4	106	1008
9-26-94	8:00	27.56	—	63.4	5	100	1010
9-27	8:45	27.67		63.0	8	98	1009
9-28	6:45	27.70	.09	57.5	0	148	1003
9-30	9:05	27.78	.06	54.8	4	357	1009
10/10	0740	28.05	.27	53.7	6	357	1014
10/11	0745	28.06	.01	44.6	4	357	1022
10/12	0750	28.06	—	47.7	3	357	1028
10/13	0750	28.06	—	47.9	0	045	1028
10/14	0745	28.06	—	50.9	0	089	1022
10/17	0750	28.06	—	47.9	4	322	1021
10/18	0755	28.06	—	53.6	3	071	1018
10/19	0750	28.08	.02	57.1	2	357	1014
10/20	0805	28.15	.07	60.6	3	107	1010
10/24	0810	28.87	.72	50.6	2	269	1012
10/25	0810	28.87	—	54	0	257	1011
11/29	1015	31.99	3.12	52.3	6	357	1013
11/30	0800	31.99	0	47.3	5	357	1015
12/5	0900	32.50	.51	50.9	11	357	1015
12/6	0804	32.96	.46	54.3	4	357	1012
12/7	0801	32.96	0	52.2	2	357	1011
12/9/94	0756	33.06	.10	29.4	0	357	1012
12/12/94	0752	34.02	.96	23.3	4	357	1013
12/12/94	0801	34.23	.21	28.2	3	357	1014
12/16/94	0750	34.23	0	35.4	3	357	1029
12/19/94	0800	34.50	.27	38.4	7	357	1011
12/20/94	0800	34.50	0	42.3	8	357	1012
12/23/94	0800	34.52	.02	45.7	2	357	1010
12/23/94	0744	36.30	1.78	34.3	2	357	1019
12/28/94	0803	36.30	0	38.5	4	357	1011
12/29/94	0730	36.30	0	37.4	9	357	1010
12/30/94	1015	36.30	0	23.4	11	357	1018
1/3/95	0751	37.01	.71	23.7	4	357	1020
1/5/95	0751	37.01	0	15.4	8	357	1020

**METEOROLOGICAL DATA
GREAT NECK, NY**

DATE	TIME	RAINFALL (inch)		TEMP.	WIND		COMMENT
		TOTAL	CHANGE		SPEED	DIRECTION	
7/19/94	8:30	18.29	.73	74.6	2	171	1012mb
7/20/94	8:30	18.29	0	73.2	3	171	1012mb
7/21/94	9:00	18.29	0	79.1	5	199	1013mb
7/22/94	17:00	18.29	0	80.2	7	171	1011
7/23/94	0800	19.04	.85	76.7	3	249	1010
7/24/94	1020	19.05	.01	77.3	2	199	1007
7/25/94	10:00	19.59	.54	76.9	4	48	1009
7/26/94	0850	20.10	.51	72.2	2	331	1012
7/27/94	10:05	20.10	0	74.1	3	245	1016
8/2/94	9:00	20.10	0	78.2	7	186	1012
8/3/94	9:00	20.15	.05	76.8	2	98	1012
8/4/94	9:00	20.15	0	74.8	4	102	1012
8/5/94	9:00	20.15	0	78.5	6	248	1009
8/8/94	9:00	20.91	.86	69.1	4	309	1013
8/9/94	9:00	20.91	0	72.3	3	242	1013
8/10/94	8:00	20.91	0	70.9	4	309	1013
8/11/94	11:00	20.91	0	74.3	5	88	1014
8/12/94	9:00	20.91	0	72.4	3	96	1014
8/15/94	8:00	21.93	1.02	64.7	4	267	1010
8/16/94	1:30	21.93	0	75.2	4	176	1018
8/18/94	11:45	24.08	2.15	76.5	7	147	1007
8/22/94	3:00	26.15	2.07	66.1	4	350	1002
8/23/94	8:00	26.70	.55	58.7	4	348	1012
8/24/94	8:00	26.70	0	60.3	3	266	1012
8/25/94	8:00	26.70	0	62.5	2	239	1019
8/26/94	8:00	26.70	0	68.1	4	217	1018
8/29/94	9:30	26.72	.02	66.2	6	309	1006
8/30/94	8:00	26.76	.04	63.5	7	202	1011
8/31/94	3:00	26.76	0	72.7	1	145	1011
9/2/94	9:00	26.76	0	62.8	5	30	1018
9-6-94	7:45	26.76	0	57.2	6	289	1010
9-7-94	8:00	26.76	0	62.2	2	257	1010
9-9-94	3:20	26.76	0	79.1	11	226	1010
9-10-94	8:05	26.76	0	58.8	6	307	1018
9-14-94	15:45	26.76	0	74.0	5	286	1010
9-15-94	2:15	26.76	0	73.9	6	322	1015
9/16/94	7:40	26.76	0	66.1	2	175	1018

APPENDIX K

SUBSURFACE VOC EMISSION RESULTS



Inchcape Testing Services

Aquatec Laboratories

55 South Park Drive
Colchester, VT 05446
Tel. 802-655-1203
Fax. 802-655-1248

December 17, 1994

Mr. Frank Fendler
Unisys Corporation
70 East Swedesford Road
Paoli, PA 19301

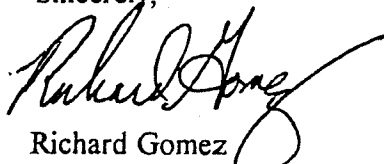
Re: Air Testing Results / Great Neck, NY Facility

Dear Mr. Fendler:

Enclosed are the results EPA Method TO-14 analyses performed on air samples received at our Dallas, Texas facility on December 6, 1994.

Please feel free to call Mr. John Todd at our Dallas laboratory or myself, if you have any questions or require a further assistance.

Sincerely,



Richard Gomez
Project Manager

cc. Mr. John Todd

File Project 94200 / Rel#1



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

D94-12381 SAMPLE DATA PACKAGE TABLE OF CONTENTS

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Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

CASE NARRATIVE



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED: 6-DEC-1994

REPORT NUMBER: D94-12381

REPORT DATE: 15-DEC-1994

SAMPLE SUBMITTED BY : Unisys Corporation/CEA
ADDRESS : P.O. Box 517
Paoli, PA 19301
ATTENTION : Mr. Frank Fendler
PROJECT : Great Neck, NY
DATE SAMPLED : 01-DEC-1994

CASE NARRATIVE COMMENTS:

Regarding the EPA TO-14 Volatile Organic analysis, samples with pressure less than -5 psig must be diluted. All samples were received with a pressure less than -5 psig. Please see attached for procedure and dilution factors.

Regarding the EPA TO-14 analysis for Batch # 121394.B, the method blank has a "J" value for methylene chloride at 0.13 ppbv/v.

No further problems were encountered with the analysis for this job.

If you have any questions, please call Mr. John ("J.T.") Todd or Ms. Belinda Feuerbacher at (214) 238-5591.


Elizabeth Castro
Project Manager

PROJECT _____

Continued From Page _____

12/7/94 D94-12381 Diluted with UHP Nitrogen

Barometric Pressure = 30.21 inches of Hg

Dilution Factor = $\frac{\text{Final Pressure} \times 2.03602 \frac{\text{inches of Hg}}{\text{psi}} + \text{Barom. Pressure}}{\text{Initial Pressure} \times 2.03602 \frac{\text{inches of Hg}}{\text{psi}} + \text{Barom. Pressure}}$

SX. #	canister #	(psi) initial pressure	(psi) Final pressure	Dilution Factor
12381-1	0793	-6.6	2.8	2.1
-2	0702	-6.9	1.3	2.0
-3	0709	-6.4	2.4	2.0
-4	0717	-5.1	1.4	1.7
-5	0720	-7.2	1.5	2.1
-6	0718	-5.7	2.9	1.9
-7	0001	-8.3	2.6	2.7
-8	0794	-6.4	2.9	2.1
-9	0707	-7.5	2.9	2.4
-10	0710	-8.1	3.0	2.6

Continued on Page _____

Read and Understood By _____

003



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

JOB ID : D94-12381
CUSTOMER : Unisys Corporation/CEA
PROJECT : Great Neck, NY

SAMPLE ID : D94-12381-1 DATE SAMPLED : 1-DEC-1994 ID MARKS : FG-6					
ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B

SAMPLE ID : D94-12381-2 DATE SAMPLED : 1-DEC-1994 ID MARKS : FG-3					
ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B

SAMPLE ID : D94-12381-3 DATE SAMPLED : 1-DEC-1994 ID MARKS : FG-4					
ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B

SAMPLE ID : D94-12381-4 DATE SAMPLED : 1-DEC-1994 ID MARKS : FG-2					
ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B

SAMPLE ID : D94-12381-5 DATE SAMPLED : 1-DEC-1994 ID MARKS : SB-1					
ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B

SAMPLE ID : D94-12381-6 DATE SAMPLED : 1-DEC-1994 ID MARKS : FG-1					
ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

JOB ID : D94-12381
CUSTOMER : Unisys Corporation/CEA
PROJECT : Great Neck, NY

SAMPLE ID : D94-12381-7 DATE SAMPLED : 1-DEC-1994
ID MARKS : FG-5

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B

SAMPLE ID : D94-12381-8 DATE SAMPLED : 1-DEC-1994
ID MARKS : FG-5 Dup

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B

SAMPLE ID : D94-12381-9 DATE SAMPLED : 1-DEC-1994
ID MARKS : BG-1

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B

SAMPLE ID : D94-12381-10 DATE SAMPLED : 1-DEC-1994
ID MARKS : FB-2

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B

SAMPLE ID : D94-12381-11 DATE SAMPLED : 1-DEC-1994
ID MARKS : Method Blank

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B

SAMPLE ID : D94-12381-12 DATE SAMPLED : 1-DEC-1994
ID MARKS : QC-Sample

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
TO14_SUMMA /1			SLT	13-DEC-1994	121394.B



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

JOB ID : D94-12381
CUSTOMER : Unisys Corporation/CEA
PROJECT : Great Neck, NY

ANALYSIS	DESCRIPTION
TD14_SUMMA	Volatiles, GC/MS, Summa Cannister, ppb v/v



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

CHAIN OF CUSTODY

Inchcape Testing Services

NDRC Laboratories

1089 East Collins Blvd., Richardson, TX 75081 (214) 238-5591

CHAIN OF CUSTODY RECORD

Report to:
 Company: Univis Corp
 Address: Corp. Environ. Affairs
PO Box 517
 Contact: Paula PA 19301
 Phone: (610) 448-2083
 Fax: _____

Invoice to
 Company: Serve
 Address: Serve
 Contact: Frank Fendler
 Phone: _____
 PO/SO #: _____

ANALYSIS
REQUESTED

Lab use only
 Due Date: 12/16/94

Temp. of coolers
 when received (C°):

24 2 3 4 5

Custody Seal N/Y

Intact N/Y

Screened
 For Radioactivity ☒

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Lab Sample ID (Lab Use Only)

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Lab Sample



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 6-DEC-1994

REPORT NUMBER : D94-12381-6

REPORT DATE : 15-DEC-1994

SAMPLE SUBMITTED BY : Unisys Corporation/CEA

ADDRESS : P.O. Box 517

: Paoli, PA 19301

ATTENTION : Mr. Frank Fendler

SAMPLE MATRIX : Air

ID MARKS : FG-1

PROJECT : Great Neck, NY

DATE SAMPLED : 1-DEC-1994

ANALYSIS METHOD : EPA TO-14 /1

ANALYZED BY : SLT

ANALYZED ON : 13-DEC-1994

DILUTION FACTOR : 2

QC BATCH NO : 121394.B

VOLATILE ORGANIC COMPOUNDS			
TEST REQUESTED	DETECTION LIMIT	RESULTS	FLAG
Dichlorodifluoromethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
Chloromethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
Dichlorotetrafluoroethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
Vinyl chloride	0.38 ppb v/v	< 0.38 ppb v/v	DU
Bromomethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
Chloroethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
Trichlorofluoromethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,1-Dichloroethene	0.38 ppb v/v	< 0.38 ppb v/v	DU
Methylene chloride	0.38 ppb v/v	< 0.38 ppb v/v	DU
Trichlorotrifluoroethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,1-Dichloroethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
cis-1,2-Dichloroethene	0.38 ppb v/v	< 0.38 ppb v/v	DU
Chloroform	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,2-Dichloroethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,1,1-Trichloroethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
Benzene	0.38 ppb v/v	0.19 ppb v/v	DJ
Carbon tetrachloride	0.38 ppb v/v	< 0.38 ppb v/v	DU

Report to: _____
Company: University of
Address: GEA
P.O. Box 517
PA 021, PA 19381
Contact: _____
Phone: (610) 643-2083
Fax: _____

Invoice to

Company: Sonic

Address: _____

Contact: Frank Fendler

Phone: _____

PO/SO #: _____

Sampler's Name
Brid Anthony

Sampler's Signature
Bill Anthony

Proj. No.Project Name

No. Type of Containers

Matrix	Date	Time	Identifying Marks of Sample(s)	VOA	
				AG 1 L	P/C 250 ml

A	12/1/84	X		FC-5					1
A	12/1/84	X		FC-5 Dup					1

Lab Sample ID (Lab Use Only)

12381-7
8

ANALYSIS
REQUESTED

Lab use only
Due Date: / /

Temp. of coolers
when received (C°):

Custody Seal	N / Y
Intact	N / Y

☒ Screened For Radioactivity

Turn around time	<input type="checkbox"/> Priority 1 or Standard	<input type="checkbox"/> Priority 2 or 50%	<input type="checkbox"/> Priority 3 or 100%	<input type="checkbox"/> Priority 4 ERS *	* BTEX (602/8020), TPH (418.1 or 8015), VOLATILES (624/8240), IGNITABILITY, TOTAL LEAD (6010)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
<i>Bill Anthony</i>	12/1/94	1500	<i>K.W. Morgan</i>	12/6/94	1000
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Client's delivery of samples constitutes acceptance of Inchtape/NDRC's terms and conditions contained in the Price Schedule

CIF Reporting

1	Matrix	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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1	Matrix	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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OFFICE USE ONLY



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

REPORT NUMBER : D94-12381-6
ANALYSIS METHOD : EPA TO-14 /1

PAGE 2

VOLATILE ORGANIC COMPOUNDS			
TEST REQUESTED	DETECTION LIMIT	RESULTS	FLAG
1,2-Dichloropropane	0.38 ppb v/v	< 0.38 ppb v/v	DU
Trichloroethene	0.38 ppb v/v	< 0.38 ppb v/v	DU
cis-1,3-Dichloropropene	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,1,2-Trichloroethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
Toluene	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,2-Dibromoethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
Tetrachloroethene	0.38 ppb v/v	< 0.38 ppb v/v	DU
Chlorobenzene	0.38 ppb v/v	< 0.38 ppb v/v	DU
Ethylbenzene	0.38 ppb v/v	< 0.38 ppb v/v	DU
m,p-Xylene	0.38 ppb v/v	< 0.38 ppb v/v	DU
Styrene	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,1,2,2-Tetrachloroethane	0.38 ppb v/v	< 0.38 ppb v/v	DU
o-Xylene	0.38 ppb v/v	< 0.38 ppb v/v	DU
4-Ethyltoluene	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,3,5-Trimethylbenzene	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,2,4-Trimethylbenzene	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,3-Dichlorobenzene	0.38 ppb v/v	< 0.38 ppb v/v	DU
Benzyl chloride	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,4-Dichlorobenzene	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,2-Dichlorobenzene	0.38 ppb v/v	< 0.38 ppb v/v	DU
1,2,4-Trichlorobenzene	0.38 ppb v/v	< 0.38 ppb v/v	DU
Hexachlorobutadiene	0.38 ppb v/v	< 0.38 ppb v/v	DU

Martin Jeffus jm
Martin Jeffus
General Manager

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Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 6-DEC-1994

REPORT NUMBER : D94-12381-4

REPORT DATE : 15-DEC-1994

SAMPLE SUBMITTED BY : Unisys Corporation/CEA

ADDRESS : P.O. Box 517

: Paoli, PA 19301

ATTENTION : Mr. Frank Fendler

SAMPLE MATRIX : Air

ID MARKS : FG-2

PROJECT : Great Neck, NY

DATE SAMPLED : 1-DEC-1994

ANALYSIS METHOD : EPA TO-14 /1

ANALYZED BY : SLT

ANALYZED ON : 13-DEC-1994

DILUTION FACTOR : 2

QC BATCH NO : 121394.B

VOLATILE ORGANIC COMPOUNDS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		FLAG
Dichlorodifluoromethane	0.34	ppb v/v	<	0.34 ppb v/v	DU
Chloromethane	0.34	ppb v/v	<	0.34 ppb v/v	DU
Dichlorotetrafluoroethane	0.34	ppb v/v	<	0.34 ppb v/v	DU
Vinyl chloride	0.34	ppb v/v	<	0.34 ppb v/v	DU
Bromomethane	0.34	ppb v/v	<	0.34 ppb v/v	DU
Chloroethane	0.34	ppb v/v	<	0.34 ppb v/v	DU
Trichlorofluoromethane	0.34	ppb v/v	<	0.34 ppb v/v	DU
1,1-Dichloroethene	0.34	ppb v/v	<	0.34 ppb v/v	DU
Methylene chloride	0.34	ppb v/v		1.19 ppb v/v	D
Trichlorotrifluoroethane	0.34	ppb v/v		0.18 ppb v/v	DJ
1,1-Dichloroethane	0.34	ppb v/v	<	0.34 ppb v/v	DU
cis-1,2-Dichloroethene	0.34	ppb v/v	<	0.34 ppb v/v	DU
Chloroform	0.34	ppb v/v	<	0.34 ppb v/v	DU
1,2-Dichloroethane	0.34	ppb v/v	<	0.34 ppb v/v	DU
1,1,1-Trichloroethane	0.34	ppb v/v	<	0.34 ppb v/v	DU
Benzene	0.34	ppb v/v		0.67 ppb v/v	D
Carbon tetrachloride	0.34	ppb v/v	<	0.34 ppb v/v	DU



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

REPORT NUMBER : D94-12381-4
ANALYSIS METHOD : EPA TO-14 /1

PAGE 2

VOLATILE ORGANIC COMPOUNDS			
TEST REQUESTED	DETECTION LIMIT	RESULTS	FLAG
1,2-Dichloropropane	0.34 ppb v/v	< 0.34 ppb v/v	DU
Trichloroethene	0.34 ppb v/v	< 0.34 ppb v/v	DU
cis-1,3-Dichloropropene	0.34 ppb v/v	< 0.34 ppb v/v	DU
1,1,2-Trichloroethane	0.34 ppb v/v	< 0.34 ppb v/v	DU
Toluene	0.34 ppb v/v	0.41 ppb v/v	D
1,2-Dibromoethane	0.34 ppb v/v	< 0.34 ppb v/v	DU
Tetrachloroethene	0.34 ppb v/v	< 0.34 ppb v/v	DU
Chlorobenzene	0.34 ppb v/v	< 0.34 ppb v/v	DU
Ethylbenzene	0.34 ppb v/v	< 0.34 ppb v/v	DU
m,p-Xylene	0.34 ppb v/v	0.28 ppb v/v	DJ
Styrene	0.34 ppb v/v	< 0.34 ppb v/v	DU
1,1,2,2-Tetrachloroethane	0.34 ppb v/v	< 0.34 ppb v/v	DU
o-Xylene	0.34 ppb v/v	< 0.34 ppb v/v	DU
4-Ethyltoluene	0.34 ppb v/v	< 0.34 ppb v/v	DU
1,3,5-Trimethylbenzene	0.34 ppb v/v	< 0.34 ppb v/v	DU
1,2,4-Trimethylbenzene	0.34 ppb v/v	0.22 ppb v/v	DJ
1,3-Dichlorobenzene	0.34 ppb v/v	< 0.34 ppb v/v	DU
Benzyl chloride	0.34 ppb v/v	< 0.34 ppb v/v	DU
1,4-Dichlorobenzene	0.34 ppb v/v	0.17 ppb v/v	DJ
1,2-Dichlorobenzene	0.34 ppb v/v	< 0.34 ppb v/v	DU
1,2,4-Trichlorobenzene	0.34 ppb v/v	0.23 ppb v/v	DJ
Hexachlorobutadiene	0.34 ppb v/v	< 0.34 ppb v/v	DU

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DATE RECEIVED : 6-DEC-1994

REPORT NUMBER : D94-12381-2

REPORT DATE : 15-DEC-1994

SAMPLE SUBMITTED BY : Unisys Corporation/CEA

ADDRESS : P.O. Box 517

: Paoli, PA 19301

ATTENTION : Mr. Frank Fendler

SAMPLE MATRIX : Air

ID MARKS : FG-3

PROJECT : Great Neck, NY

DATE SAMPLED : 1-DEC-1994

ANALYSIS METHOD : EPA TO-14 /1

ANALYZED BY : SLT

ANALYZED ON : 13-DEC-1994

DILUTION FACTOR : 2

QC BATCH NO : 121394.B

VOLATILE ORGANIC COMPOUNDS			
TEST REQUESTED	DETECTION LIMIT	RESULTS	FLAG
Dichlorodifluoromethane	0.40 ppb v/v	< 0.40 ppb v/v	DU
Chloromethane	0.40 ppb v/v	< 0.40 ppb v/v	DU
Dichlorotetrafluoroethane	0.40 ppb v/v	< 0.40 ppb v/v	DU
Vinyl chloride	0.40 ppb v/v	< 0.40 ppb v/v	DU
Bromomethane	0.40 ppb v/v	< 0.40 ppb v/v	DU
Chloroethane	0.40 ppb v/v	< 0.40 ppb v/v	DU
Trichlorofluoromethane	0.40 ppb v/v	< 0.40 ppb v/v	DU
1,1-Dichloroethene	0.40 ppb v/v	< 0.40 ppb v/v	DU
Methylene chloride	0.40 ppb v/v	< 0.40 ppb v/v	DU
Trichlorotrifluoroethane	0.40 ppb v/v	< 0.40 ppb v/v	DU
1,1-Dichloroethane	0.40 ppb v/v	< 0.40 ppb v/v	DU
cis-1,2-Dichloroethene	0.40 ppb v/v	< 0.40 ppb v/v	DU
Chloroform	0.40 ppb v/v	< 0.40 ppb v/v	DU
1,2-Dichloroethane	0.40 ppb v/v	< 0.40 ppb v/v	DU
1,1,1-Trichloroethane	0.40 ppb v/v	< 0.40 ppb v/v	DU
Benzene	0.40 ppb v/v	0.24 ppb v/v	DJ
Carbon tetrachloride	0.40 ppb v/v	< 0.40 ppb v/v	DU



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REPORT NUMBER : D94-12381-2
ANALYSIS METHOD : EPA TO-14 /1

PAGE 2

VOLATILE ORGANIC COMPOUNDS						
TEST REQUESTED	DETECTION LIMIT		RESULTS		FLAG	
1,2-Dichloropropane	0.40	ppb v/v	<	0.40 ppb v/v	DU	
Trichloroethene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
cis-1,3-Dichloropropene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
1,1,2-Trichloroethane	0.40	ppb v/v	<	0.40 ppb v/v	DU	
Toluene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
1,2-Dibromoethane	0.40	ppb v/v	<	0.40 ppb v/v	DU	
Tetrachloroethene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
Chlorobenzene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
Ethylbenzene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
m,p-Xylene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
Styrene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
1,1,2,2-Tetrachloroethane	0.40	ppb v/v	<	0.40 ppb v/v	DU	
o-Xylene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
4-Ethyltoluene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
1,3,5-Trimethylbenzene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
1,2,4-Trimethylbenzene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
1,3-Dichlorobenzene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
Benzyl chloride	0.40	ppb v/v	<	0.40 ppb v/v	DU	
1,4-Dichlorobenzene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
1,2-Dichlorobenzene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
1,2,4-Trichlorobenzene	0.40	ppb v/v	<	0.40 ppb v/v	DU	
Hexachlorobutadiene	0.40	ppb v/v	<	0.40 ppb v/v	DU	

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REPORT NUMBER : D94-12381-9
ANALYSIS METHOD : EPA TO-14 /1

PAGE 2

VOLATILE ORGANIC COMPOUNDS			
TEST REQUESTED	DETECTION LIMIT	RESULTS	FLAG
1,2-Dichloropropane	0.48 ppb v/v	< 0.48 ppb v/v	DU
Trichloroethene	0.48 ppb v/v	< 0.48 ppb v/v	DU
cis-1,3-Dichloropropene	0.48 ppb v/v	< 0.48 ppb v/v	DU
1,1,2-Trichloroethane	0.48 ppb v/v	< 0.48 ppb v/v	DU
Toluene	0.48 ppb v/v	< 0.48 ppb v/v	DU
1,2-Dibromoethane	0.48 ppb v/v	< 0.48 ppb v/v	DU
Tetrachloroethene	0.48 ppb v/v	< 0.48 ppb v/v	DU
Chlorobenzene	0.48 ppb v/v	< 0.48 ppb v/v	DU
Ethylbenzene	0.48 ppb v/v	< 0.48 ppb v/v	DU
m,p-Xylene	0.48 ppb v/v	< 0.48 ppb v/v	DU
Styrene	0.48 ppb v/v	< 0.48 ppb v/v	DU
1,1,2,2-Tetrachloroethane	0.48 ppb v/v	< 0.48 ppb v/v	DU
o-Xylene	0.48 ppb v/v	< 0.48 ppb v/v	DU
4-Ethyltoluene	0.48 ppb v/v	< 0.48 ppb v/v	DU
1,3,5-Trimethylbenzene	0.48 ppb v/v	< 0.48 ppb v/v	DU
1,2,4-Trimethylbenzene	0.48 ppb v/v	< 0.48 ppb v/v	DU
1,3-Dichlorobenzene	0.48 ppb v/v	< 0.48 ppb v/v	DU
Benzyl chloride	0.48 ppb v/v	< 0.48 ppb v/v	DU
1,4-Dichlorobenzene	0.48 ppb v/v	< 0.48 ppb v/v	DU
1,2-Dichlorobenzene	0.48 ppb v/v	< 0.48 ppb v/v	DU
1,2,4-Trichlorobenzene	0.48 ppb v/v	< 0.48 ppb v/v	DU
Hexachlorobutadiene	0.48 ppb v/v	< 0.48 ppb v/v	DU

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REPORT NUMBER : D94-12381-5
ANALYSIS METHOD : EPA TO-14 /1

PAGE 2

VOLATILE ORGANIC COMPOUNDS			
TEST REQUESTED	DETECTION LIMIT	RESULTS	FLAG
1,2-Dichloropropane	0.42 ppb v/v	< 0.42 ppb v/v	DU
Trichloroethene	0.42 ppb v/v	< 0.42 ppb v/v	DU
cis-1,3-Dichloropropene	0.42 ppb v/v	< 0.42 ppb v/v	DU
1,1,2-Trichloroethane	0.42 ppb v/v	< 0.42 ppb v/v	DU
Toluene	0.42 ppb v/v	0.43 ppb v/v	D
1,2-Dibromoethane	0.42 ppb v/v	< 0.42 ppb v/v	DU
Tetrachloroethene	0.42 ppb v/v	< 0.42 ppb v/v	DU
Chlorobenzene	0.42 ppb v/v	< 0.42 ppb v/v	DU
Ethylbenzene	0.42 ppb v/v	< 0.42 ppb v/v	DU
m,p-Xylene	0.42 ppb v/v	0.27 ppb v/v	DJ
Styrene	0.42 ppb v/v	< 0.42 ppb v/v	DU
1,1,2,2-Tetrachloroethane	0.42 ppb v/v	< 0.42 ppb v/v	DU
o-Xylene	0.42 ppb v/v	< 0.42 ppb v/v	DU
4-Ethyltoluene	0.42 ppb v/v	< 0.42 ppb v/v	DU
1,3,5-Trimethylbenzene	0.42 ppb v/v	< 0.42 ppb v/v	DU
1,2,4-Trimethylbenzene	0.42 ppb v/v	< 0.42 ppb v/v	DU
1,3-Dichlorobenzene	0.42 ppb v/v	< 0.42 ppb v/v	DU
Benzyl chloride	0.42 ppb v/v	< 0.42 ppb v/v	DU
1,4-Dichlorobenzene	0.42 ppb v/v	0.21 ppb v/v	DJ
1,2-Dichlorobenzene	0.42 ppb v/v	< 0.42 ppb v/v	DU
1,2,4-Trichlorobenzene	0.42 ppb v/v	0.24 ppb v/v	DJ
Hexachlorobutadiene	0.42 ppb v/v	< 0.42 ppb v/v	DU

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DATE RECEIVED : 6-DEC-1994

REPORT NUMBER : D94-12381-10

REPORT DATE : 15-DEC-1994

SAMPLE SUBMITTED BY : Unisys Corporation/CEA

ADDRESS : P.O. Box 517

: Paoli, PA 19301

ATTENTION : Mr. Frank Fendler

SAMPLE MATRIX : Air

ID MARKS : FB-2

PROJECT : Great Neck, NY

DATE SAMPLED : 1-DEC-1994

ANALYSIS METHOD : EPA TO-14 /1

ANALYZED BY : SLT

ANALYZED ON : 13-DEC-1994

DILUTION FACTOR : 3

QC BATCH NO : 121394.B

VOLATILE ORGANIC COMPOUNDS			
TEST REQUESTED	DETECTION LIMIT	RESULTS	FLAG
Dichlorodifluoromethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
Chloromethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
Dichlorotetrafluoroethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
Vinyl chloride	0.52 ppb v/v	< 0.52 ppb v/v	DU
Bromomethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
Chloroethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
Trichlorofluoromethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,1-Dichloroethene	0.52 ppb v/v	< 0.52 ppb v/v	DU
Methylene chloride	0.52 ppb v/v	< 0.52 ppb v/v	DU
Trichlorotrifluoroethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,1-Dichloroethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
cis-1,2-Dichloroethene	0.52 ppb v/v	< 0.52 ppb v/v	DU
Chloroform	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,2-Dichloroethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,1,1-Trichloroethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
Benzene	0.52 ppb v/v	< 0.52 ppb v/v	DU
Carbon tetrachloride	0.52 ppb v/v	< 0.52 ppb v/v	DU



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REPORT NUMBER : D94-12381-10
ANALYSIS METHOD : EPA TO-14 /1

PAGE 2

VOLATILE ORGANIC COMPOUNDS						
TEST REQUESTED	DETECTION LIMIT		RESULTS		FLAG	
1,2-Dichloropropane	0.52	ppb v/v	<	0.52 ppb v/v	DU	
Trichloroethene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
cis-1,3-Dichloropropene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
1,1,2-Trichloroethane	0.52	ppb v/v	<	0.52 ppb v/v	DU	
Toluene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
1,2-Dibromoethane	0.52	ppb v/v	<	0.52 ppb v/v	DU	
Tetrachloroethene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
Chlorobenzene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
Ethylbenzene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
m,p-Xylene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
Styrene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
1,1,2,2-Tetrachloroethane	0.52	ppb v/v	<	0.52 ppb v/v	DU	
o-Xylene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
4-Ethyltoluene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
1,3,5-Trimethylbenzene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
1,2,4-Trimethylbenzene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
1,3-Dichlorobenzene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
Benzyl chloride	0.52	ppb v/v	<	0.52 ppb v/v	DU	
1,4-Dichlorobenzene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
1,2-Dichlorobenzene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
1,2,4-Trichlorobenzene	0.52	ppb v/v	<	0.52 ppb v/v	DU	
Hexachlorobutadiene	0.52	ppb v/v	<	0.52 ppb v/v	DU	

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DATE RECEIVED : 6-DEC-1994

REPORT NUMBER : D94-12381-11

REPORT DATE : 15-DEC-1994

SAMPLE SUBMITTED BY : Unisys Corporation/CEA

ADDRESS : P.O. Box 517

: Paoli, PA 19301

ATTENTION : Mr. Frank Fendler

SAMPLE MATRIX : Air

ID MARKS : Method Blank

PROJECT : Great Neck, NY

DATE SAMPLED : 1-DEC-1994

ANALYSIS METHOD : EPA TO-14 /1

ANALYZED BY : SLT

ANALYZED ON : 13-DEC-1994

DILUTION FACTOR : 1

QC BATCH NO : 121394.B

VOLATILE ORGANIC COMPOUNDS						
TEST REQUESTED	DETECTION LIMIT		RESULTS		FLAG	
Dichlorodifluoromethane	0.20	ppb v/v	<	0.20	ppb v/v	U
Chloromethane	0.20	ppb v/v	<	0.20	ppb v/v	U
Dichlorotetrafluoroethane	0.20	ppb v/v	<	0.20	ppb v/v	U
Vinyl chloride	0.20	ppb v/v	<	0.20	ppb v/v	U
Bromomethane	0.20	ppb v/v	<	0.20	ppb v/v	U
Chloroethane	0.20	ppb v/v	<	0.20	ppb v/v	U
Trichlorofluoromethane	0.20	ppb v/v	<	0.20	ppb v/v	U
1,1-Dichloroethene	0.20	ppb v/v	<	0.20	ppb v/v	U
Methylene chloride	0.20	ppb v/v		0.13	ppb v/v	J
Trichlorotrifluoroethane	0.20	ppb v/v	<	0.20	ppb v/v	U
1,1-Dichloroethane	0.20	ppb v/v	<	0.20	ppb v/v	U
cis-1,2-Dichloroethene	0.20	ppb v/v	<	0.20	ppb v/v	U
Chloroform	0.20	ppb v/v	<	0.20	ppb v/v	U
1,2-Dichloroethane	0.20	ppb v/v	<	0.20	ppb v/v	U
1,1,1-Trichloroethane	0.20	ppb v/v	<	0.20	ppb v/v	U
Benzene	0.20	ppb v/v	<	0.20	ppb v/v	U
Carbon tetrachloride	0.20	ppb v/v	<	0.20	ppb v/v	U



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REPORT NUMBER : D94-12381-11
ANALYSIS METHOD : EPA TO-14 /1

PAGE 2

VOLATILE ORGANIC COMPOUNDS			
TEST REQUESTED	DETECTION LIMIT	RESULTS	FLAG
1,2-Dichloropropane	0.20 ppb v/v	< 0.20 ppb v/v	U
Trichloroethene	0.20 ppb v/v	< 0.20 ppb v/v	U
cis-1,3-Dichloropropene	0.20 ppb v/v	< 0.20 ppb v/v	U
1,1,2-Trichloroethane	0.20 ppb v/v	< 0.20 ppb v/v	U
Toluene	0.20 ppb v/v	< 0.20 ppb v/v	U
1,2-Dibromoethane	0.20 ppb v/v	< 0.20 ppb v/v	U
Tetrachloroethene	0.20 ppb v/v	< 0.20 ppb v/v	U
Chlorobenzene	0.20 ppb v/v	< 0.20 ppb v/v	U
Ethylbenzene	0.20 ppb v/v	< 0.20 ppb v/v	U
m,p-Xylene	0.20 ppb v/v	< 0.20 ppb v/v	U
Styrene	0.20 ppb v/v	< 0.20 ppb v/v	U
1,1,2,2-Tetrachloroethane	0.20 ppb v/v	< 0.20 ppb v/v	U
o-Xylene	0.20 ppb v/v	< 0.20 ppb v/v	U
4-Ethyltoluene	0.20 ppb v/v	< 0.20 ppb v/v	U
1,3,5-Trimethylbenzene	0.20 ppb v/v	< 0.20 ppb v/v	U
1,2,4-Trimethylbenzene	0.20 ppb v/v	< 0.20 ppb v/v	U
1,3-Dichlorobenzene	0.20 ppb v/v	< 0.20 ppb v/v	U
Benzyl chloride	0.20 ppb v/v	< 0.20 ppb v/v	U
1,4-Dichlorobenzene	0.20 ppb v/v	< 0.20 ppb v/v	U
1,2-Dichlorobenzene	0.20 ppb v/v	< 0.20 ppb v/v	U
1,2,4-Trichlorobenzene	0.20 ppb v/v	< 0.20 ppb v/v	U
Hexachlorobutadiene	0.20 ppb v/v	< 0.20 ppb v/v	U

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DATE RECEIVED : 6-DEC-1994

REPORT NUMBER : D94-12381-12

REPORT DATE : 15-DEC-1994

SAMPLE SUBMITTED BY : Unisys Corporation/CEA

ADDRESS : P.O. Box 517

: Paoli, PA 19301

ATTENTION : Mr. Frank Fendler

SAMPLE MATRIX : Air

ID MARKS : QC-Sample

PROJECT : Great Neck, NY

DATE SAMPLED : 1-DEC-1994

ANALYSIS METHOD : EPA TO-14 /1

ANALYZED BY : SLT

ANALYZED ON : 13-DEC-1994

DILUTION FACTOR : 3

QC BATCH NO : 121394.B

VOLATILE ORGANIC COMPOUNDS					
TEST REQUESTED	DETECTION LIMIT		RESULTS		FLAG
Dichlorodifluoromethane	0.52	ppb v/v	<	0.52 ppb v/v	DU
Chloromethane	0.52	ppb v/v	<	0.52 ppb v/v	DU
Dichlorotetrafluoroethane	0.52	ppb v/v	<	0.52 ppb v/v	DU
Vinyl chloride	0.52	ppb v/v	<	0.52 ppb v/v	DU
Bromomethane	0.52	ppb v/v	<	0.52 ppb v/v	DU
Chloroethane	0.52	ppb v/v	<	0.52 ppb v/v	DU
Trichlorofluoromethane	0.52	ppb v/v	<	0.52 ppb v/v	DU
1,1-Dichloroethene	0.52	ppb v/v	<	0.52 ppb v/v	DU
Methylene chloride	0.52	ppb v/v	<	0.52 ppb v/v	DU
Trichlorotrifluoroethane	0.52	ppb v/v	<	0.52 ppb v/v	DU
1,1-Dichloroethane	0.52	ppb v/v	<	0.52 ppb v/v	DU
cis-1,2-Dichloroethene	0.52	ppb v/v	<	0.52 ppb v/v	DU
Chloroform	0.52	ppb v/v	<	0.52 ppb v/v	DU
1,2-Dichloroethane	0.52	ppb v/v	<	0.52 ppb v/v	DU
1,1,1-Trichloroethane	0.52	ppb v/v	<	0.52 ppb v/v	DU
Benzene	0.52	ppb v/v	<	0.52 ppb v/v	DU
Carbon tetrachloride	0.52	ppb v/v	<	0.52 ppb v/v	DU



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REPORT NUMBER : D94-12381-12
ANALYSIS METHOD : EPA TO-14 /1

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VOLATILE ORGANIC COMPOUNDS			
TEST REQUESTED	DETECTION LIMIT	RESULTS	FLAG
1,2-Dichloropropane	0.52 ppb v/v	< 0.52 ppb v/v	DU
Trichloroethene	0.52 ppb v/v	< 0.52 ppb v/v	DU
cis-1,3-Dichloropropene	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,1,2-Trichloroethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
Toluene	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,2-Dibromoethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
Tetrachloroethene	0.52 ppb v/v	< 0.52 ppb v/v	DU
Chlorobenzene	0.52 ppb v/v	< 0.52 ppb v/v	DU
Ethylbenzene	0.52 ppb v/v	< 0.52 ppb v/v	DU
m,p-Xylene	0.52 ppb v/v	< 0.52 ppb v/v	DU
Styrene	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,1,2,2-Tetrachloroethane	0.52 ppb v/v	< 0.52 ppb v/v	DU
o-Xylene	0.52 ppb v/v	< 0.52 ppb v/v	DU
4-Ethyltoluene	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,3,5-Trimethylbenzene	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,2,4-Trimethylbenzene	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,3-Dichlorobenzene	0.52 ppb v/v	< 0.52 ppb v/v	DU
Benzyl chloride	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,4-Dichlorobenzene	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,2-Dichlorobenzene	0.52 ppb v/v	< 0.52 ppb v/v	DU
1,2,4-Trichlorobenzene	0.52 ppb v/v	< 0.52 ppb v/v	DU
Hexachlorobutadiene	0.52 ppb v/v	< 0.52 ppb v/v	DU

Martin Jeffus jm
Martin Jeffus
General Manager

036



Inchcape Testing Services

NDRC Laboratories

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Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DESCRIPTION OF REPORTING FLAGS

- U - Indicates compound was analyzed for but not detected.
- J - Indicates an estimated value. This flag is used if the compound is detected but is below the Method Detection Limit.
- D - Indicates all compounds in an analysis at a secondary dilution.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds where the identification is based on a mass spectral library search.
- E - Indicates the compounds whose concentration exceed the limit of the instrument or the Laboratory Information Management System. The concentration will be greater than the concentration listed.
- Q - Indicates the surrogate recovery is outside the defined QC limits.
- M - Indicates the matrix has interfered with the recovery of the surrogates.
- O - Indicates the surrogate was lost because of dilution.



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QC SUMMARY

FORM 3

AIR VOLATILE DUPLICATE SAMPLE RECOVERY

LAB NAME: Inchcape Testing Services - NDRC Dallas

METHOD: TO-14

BATCH: 121394

DATE: 12-13-94

SAMPLE NO: 12381-10

ANALYST: S.T.

COMPOUND	SAMPLE CONCENTRATION (ppbv/v)	DUP. CONCENTRATION (ppbv/v)	% RPD	LIMITS
Dichlorodifluoromethane	< 0.52	< 0.52	0.0	30
Chloromethane	< 0.52	< 0.52	0.0	30
Dichlorotetrafluoroethane	< 0.52	< 0.52	0.0	30
Vinyl Chloride	< 0.52	< 0.52	0.0	30
Bromomethane	< 0.52	< 0.52	0.0	30
Chloroethane	< 0.52	< 0.52	0.0	30
Trichlorofluoromethane	< 0.52	< 0.52	0.0	30
1,1-Dichloroethene	< 0.52	< 0.52	0.0	30
Dichloromethane	< 0.52	< 0.52	0.0	30
Trichlorotrifluoroethane	< 0.52	< 0.52	0.0	30
1,1-Dichloroethane	< 0.52	< 0.52	0.0	30
cis-1,2-Dichloroethene	< 0.52	< 0.52	0.0	30
Chloroform	< 0.52	< 0.52	0.0	30
1,2-Dichloroethane	< 0.52	< 0.52	0.0	30
1,1,1-Trichloroethane	< 0.52	< 0.52	0.0	30
Benzene	< 0.52	< 0.52	0.0	30
Carbon Tetrachloride	< 0.52	< 0.52	0.0	30
1,2-Dichloropropane	< 0.52	< 0.52	0.0	30
Trichloroethene	< 0.52	< 0.52	0.0	30
cis-1,3-Dichloropropene	< 0.52	< 0.52	0.0	30
trans-1,3-Dichloropropene	< 0.52	< 0.52	0.0	30
1,1,2-Trichloroethane	< 0.52	< 0.52	0.0	30
Toluene	< 0.52	< 0.52	0.0	30
Ethylenedibromide	< 0.52	< 0.52	0.0	30
Tetrachloroethene	< 0.52	< 0.52	0.0	30
Chlorobenzene	< 0.52	< 0.52	0.0	30
Ethylbenzene	< 0.52	< 0.52	0.0	30
m,p-Xylene	< 0.52	< 0.52	0.0	30
Styrene	< 0.52	< 0.52	0.0	30
1,1,2,2-Tetrachloroethane	< 0.52	< 0.52	0.0	30
o-Xylene	< 0.52	< 0.52	0.0	30
4-Ethyltoluene	< 0.52	< 0.52	0.0	30
1,3,5-Trimethylbenzene	< 0.52	< 0.52	0.0	30
1,2,4-Trimethylbenzene	< 0.52	< 0.52	0.0	30
Benzylchloride	< 0.52	< 0.52	0.0	30
1,3-Dichlorobenzene	< 0.52	< 0.52	0.0	30
1,4-Dichlorobenzene	< 0.52	< 0.52	0.0	30
1,2-Dichlorobenzene	< 0.52	< 0.52	0.0	30
1,2,4-Trichlorobenzene	< 0.52	< 0.52	0.0	30
Hexachlorobutadiene	< 0.52	< 0.52	0.0	30

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Blank

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 12381

Lab File ID: ST2BA639.D

Lab Sample ID: 12381-11

Date Analyzed: 12/13/94

Time Analyzed: 1332

GC Column: DB-1

ID: 0.32 (mm)

Heated Purge: (Y/N) N

Instrument ID: SATURN2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-1	12381-5	ST2BA640.D	1412
02	FG-2	12381-4	ST2BA641.D	1452
03	FG-6	12381-1	ST2BA642.D	1532
04	FG-3	12381-2	ST2BA643.D	1614
05	FG-4	12381-3	ST2BA644.D	1659
06	FG-1	12381-6	ST2BA645.D	1739
07	FG-5	12381-7	ST2BA646.D	1820
08	FG-5Dup	12381-8	ST2BA647.D	1859
09	BG-1	12381-9	ST2BA648.D	1940
10	FB-2	12381-10	ST2BA649.D	2020
11	QC-Sample	12381-12	ST2BA650.D	2100
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:



Inchcape Testing Services

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VOLATILE ORGANICS (TO-14)



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SAMPLE DATA

Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba642.d
Lab. Id. : D94-12381-1
Inj Date : 13-DEC-1994 15:32
Operator : SLTATUM
Smp Info : TO14_SUMMA;;121394.b;1
Misc Info : ST 12381-1 60 ML
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 14-Dec-1994 17:00 sltatum
Cal Date : 13-DEC-1994 09:37
Als bottle: 0
Dil Factor: 2.100
Integrator: HP RTE
Sample Matrix: AIR

Quant Type: ESTD
Autotune Date:
Inst ID: saturn2.i
Cal File: st2ba635.d
Target Version: Target 2.40
Compound Sublist: all.sub

Compounds	QUANT SIG		RT	RESPONSE	CONCENTRATIONS	
	MASS				ON-COLUMN (ppbv/v)	FINAL (ppb v/v)
=====	====		==	=====	=====	=====
19 Benzene	78.00		22.027	4070	0.19	0.41

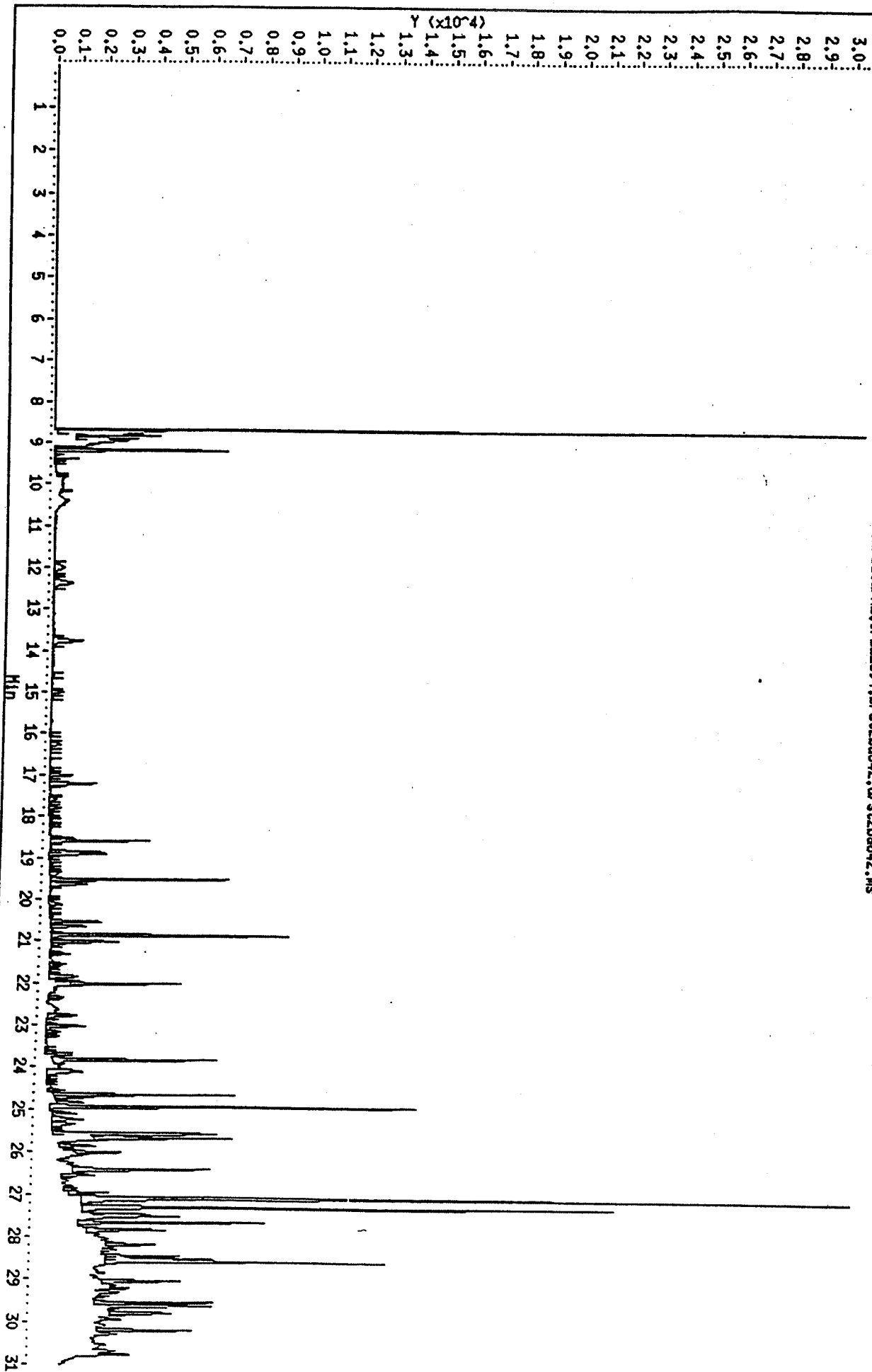
043

[Signature] 12/15/94
ANALYST Date
Michelle Delgado 12/15/94
REVIEW Date
M.D. 12/15/94
DATA ENTRY

Data File: /chem/saturn2.1/121394.b/st2ba642.d
Date : 13-DEC-1994 15:32
Instrument : saturn2.1
Sample ID : UNISYS SP8
Column phase : DB-1
Volume Injected (uL) : 0.0

Column diameter : 0.32

/chem/saturn2.1/121394.b/st2ba642.d/st2ba642.ms



Date : 13-DEC-1994 15:32

Instrument : saturn2.i

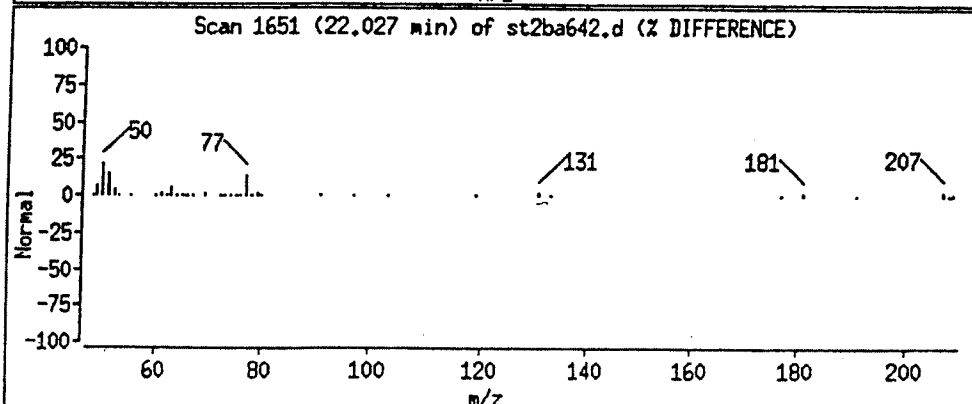
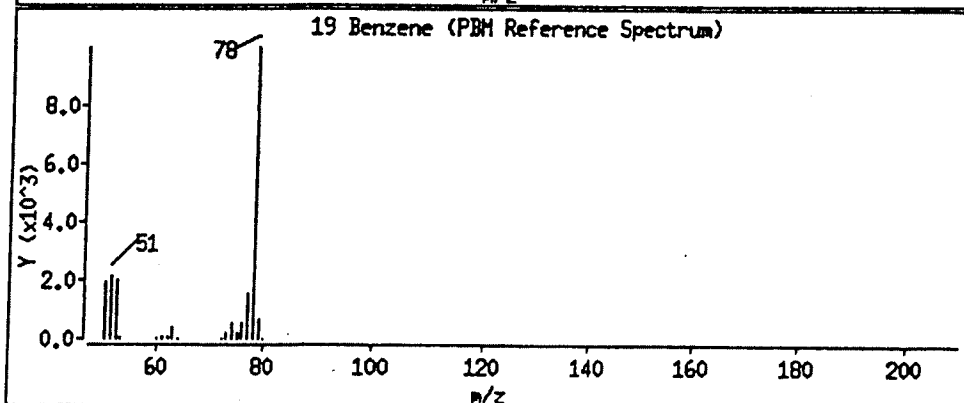
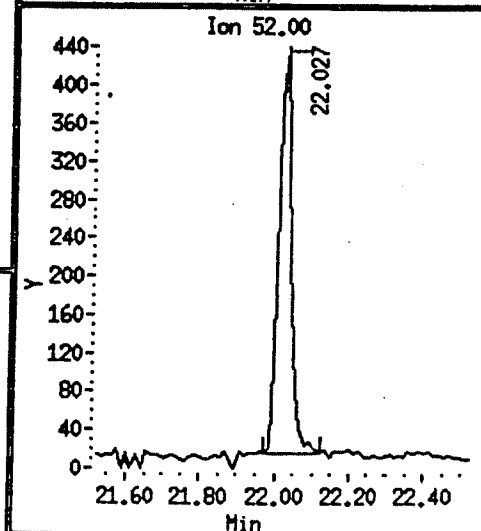
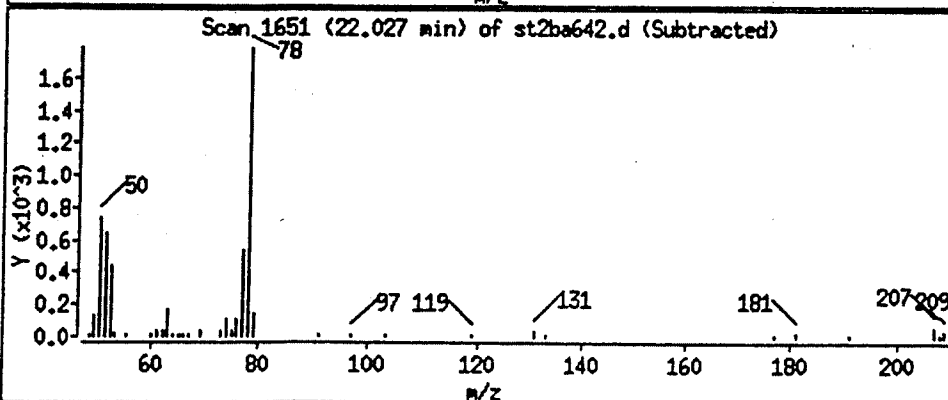
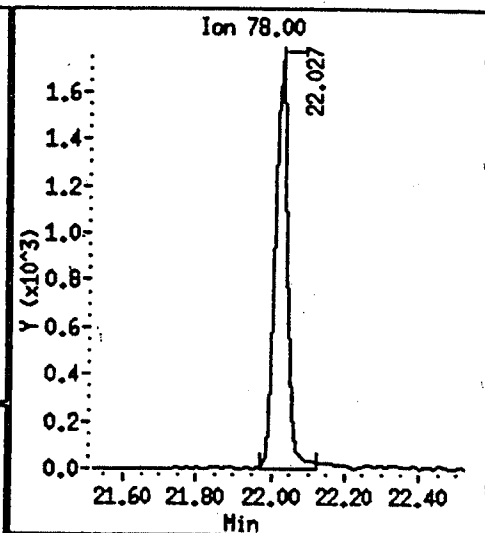
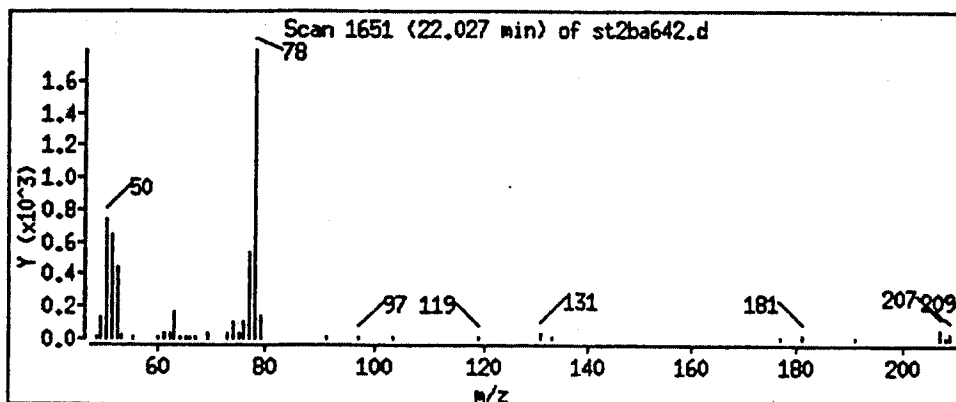
Sample ID : UNISYS SP8

Column phase : DB-1

Column diameter : 0.32

Volume Injected (ul) : 0.0

19 Benzene



Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba643.d
Lab. Id. : D94-12381-2 Quant Type: ESTD
Inj Date : 13-DEC-1994 16:14 Autotune Date:
Operator : SLTATUM Inst ID: saturn2.i
Smp Info : TO14_SUMMA;;121394.b;2
Misc Info : ST 12381-2 60 ML
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 14-Dec-1994 17:00 sltatum
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0
Dil Factor: 2.000 Target Version: Target 2.40
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: AIR

Compounds	QUANT	SIG	RT	RESPONSE	CONCENTRATIONS	
	MASS	ON-COLUMN			FINAL	
				(ppbv/v)	(ppb v/v)	
19 Benzene	78.00	22.067	2523	0.12	0.24	

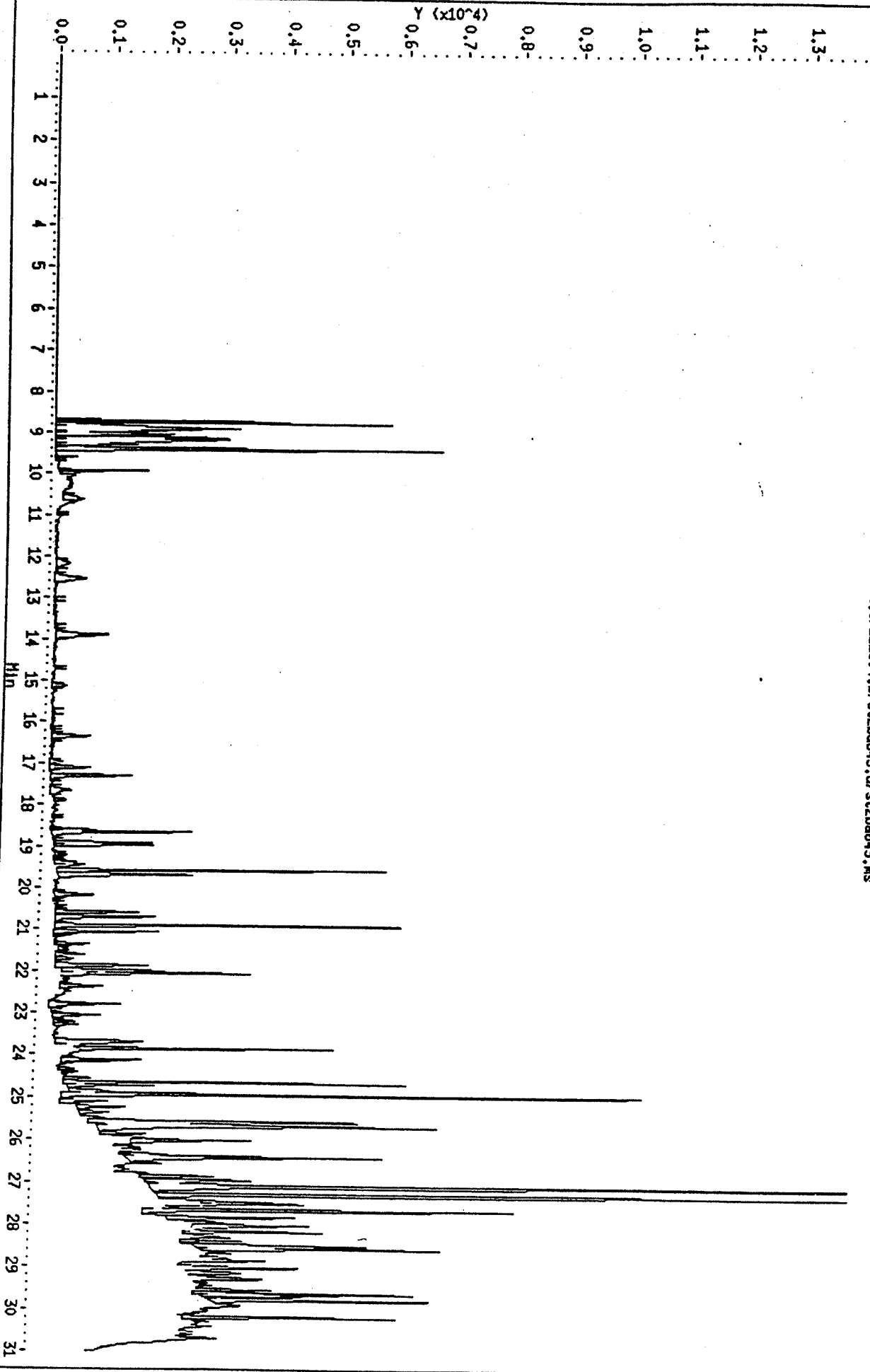
046

ANALYST Shydat 12/15/94
REVIEW Michelle Delgado 12/15/94
DATA ENTRY M D 12/15/94

Date : 15-06-1994 16:14
 Instrument : saturn2.1
 Sample ID : UNISYS SP9
 Column phase : DB-1
 Volume Injected (uL) : 0.0

Column diameter : 0.32

/chem/saturn2.1/121394.b/st2ba643.d/st2ba643.ms



Date : 13-DEC-1994 16:14

Instrument : saturn2.i

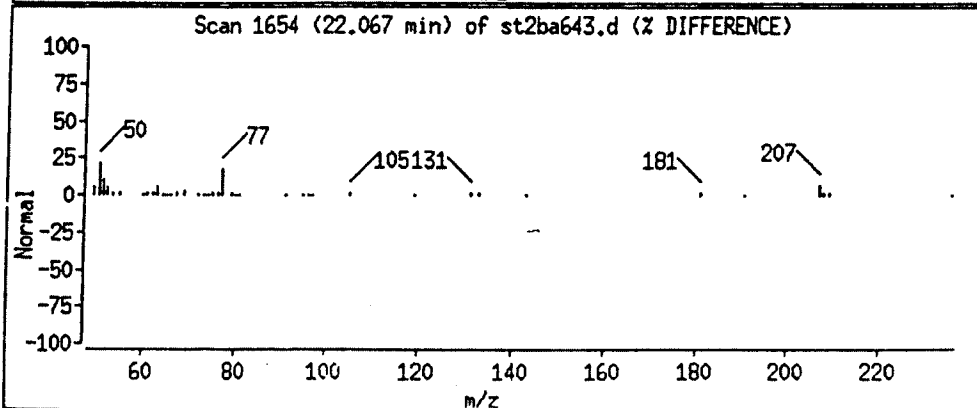
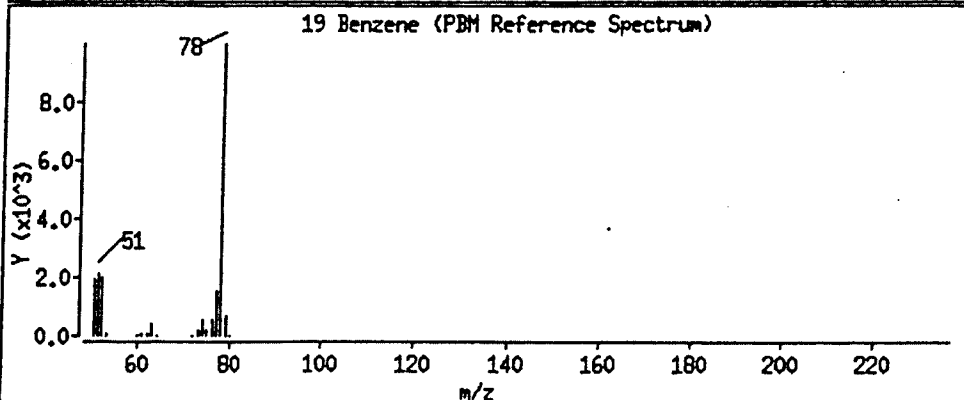
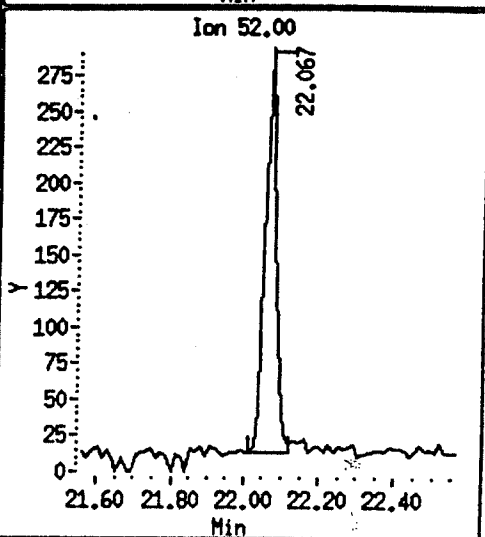
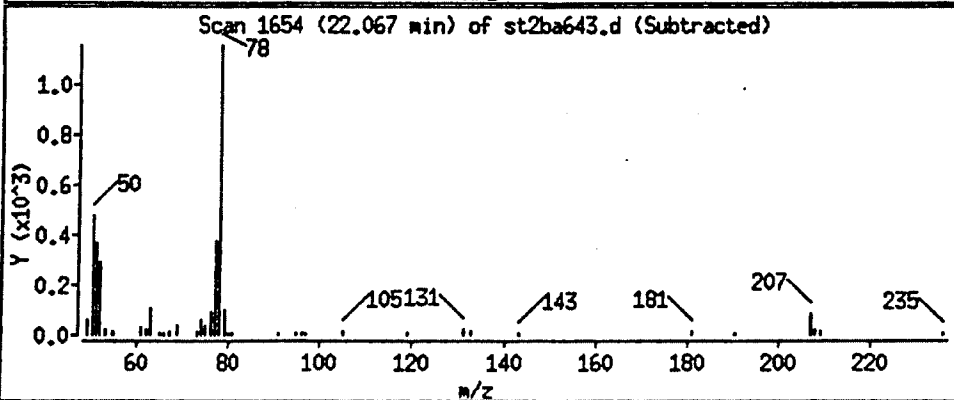
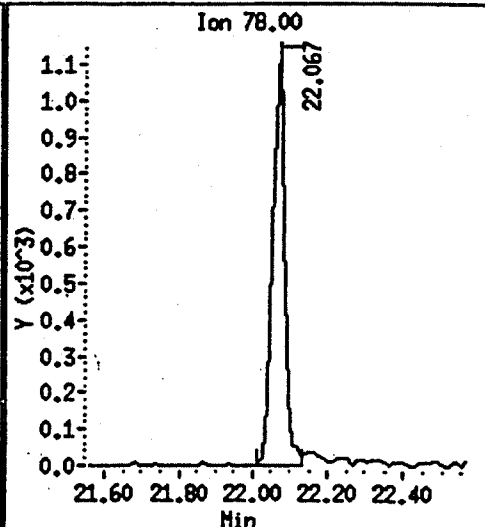
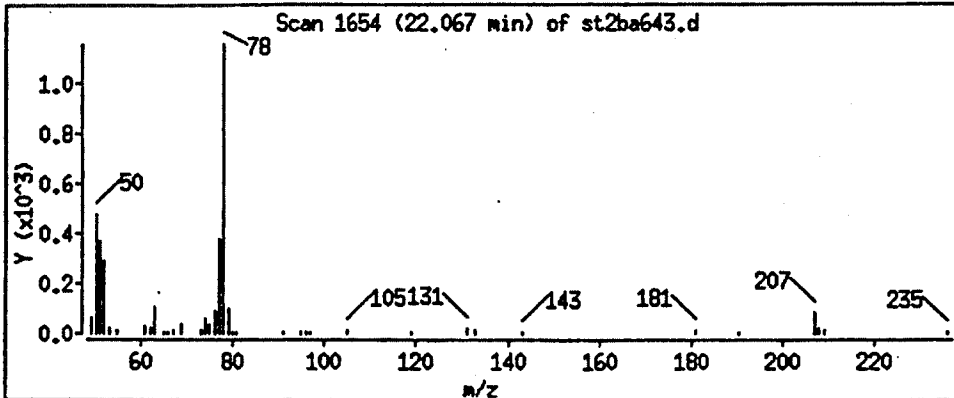
Sample ID : UNISYS SP9

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

19 Benzene



Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba644.d
Lab. Id. : D94-12381-3 Quant Type: ESTD
Inj Date : 13-DEC-1994 16:59 Autotune Date:
Operator : SLTATUM Inst ID: saturn2.i
Smp Info : TO14_SUMMA;;121394.b;2
Misc Info : ST 12381-3 60 ML
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 14-Dec-1994 17:00 sltatum
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0
Dil Factor: 2.000 Target Version: Target 2.40
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: AIR

Compounds	QUANT SIG		RT	RESPONSE	CONCENTRATIONS	
	MASS				ON-COLUMN (ppbv/v)	FINAL (ppb v/v)
=====	====		==	=====	=====	=====
19 Benzene	78.00		22.079	2581	0.12	0.25

049

[Signature] 12/15/94
ANALYST Date
Michelle Delgado 12/15/94
REVIEW Date
M.S. 12/15/94
DATA ENTRY Date

Data File: /chem/saturn2.1/121394.b/st2ba644.d

Date : 13-DEC-1994 16:59

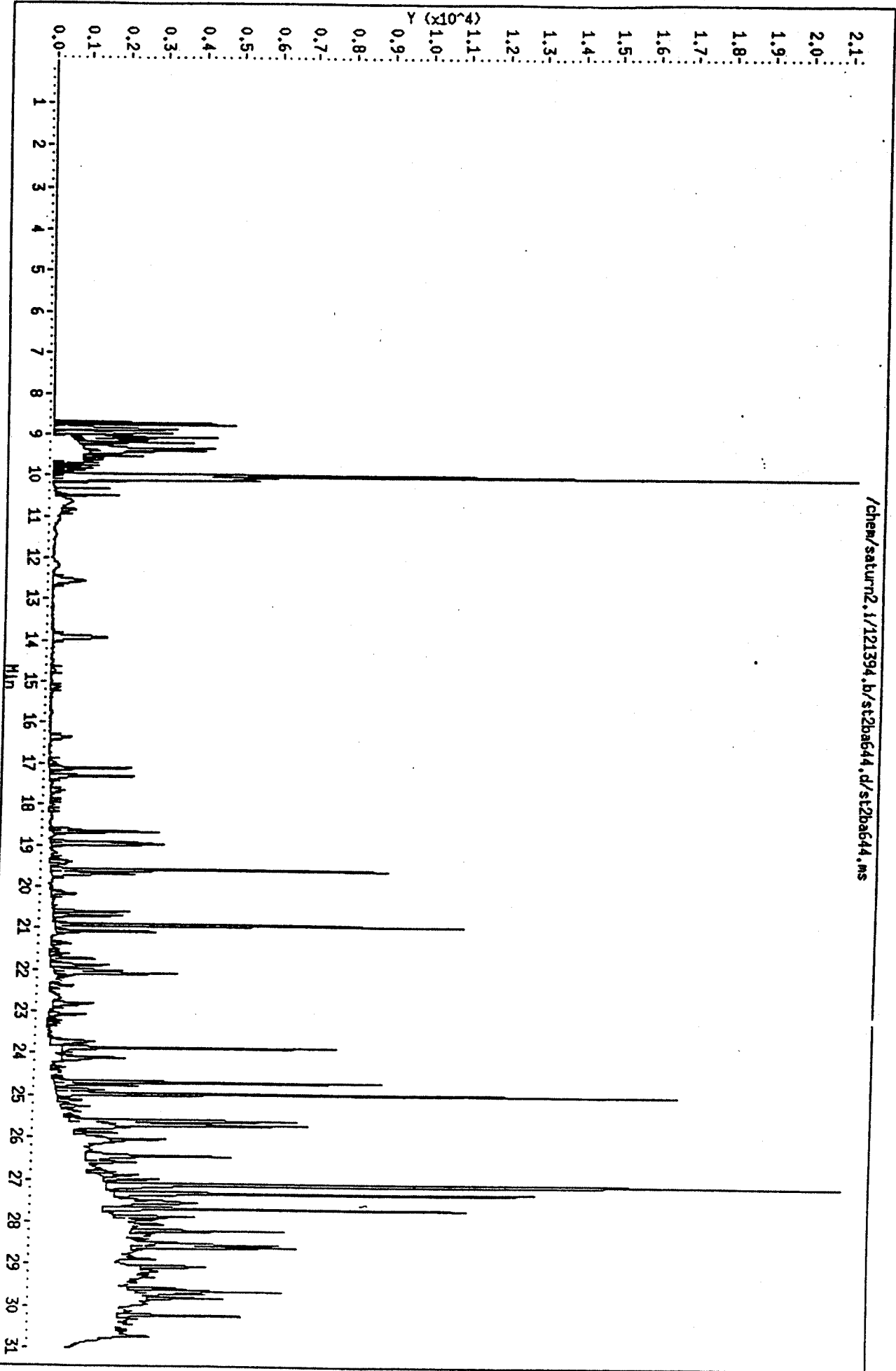
Instrument : saturn2.1

Sample ID : UMISYS SP10

Column phase : DB-1

Volume Injected (ul) : 0.0

Column diameter : 0.32



Date : 13-DEC-1994 16:59

Instrument : saturn2.i

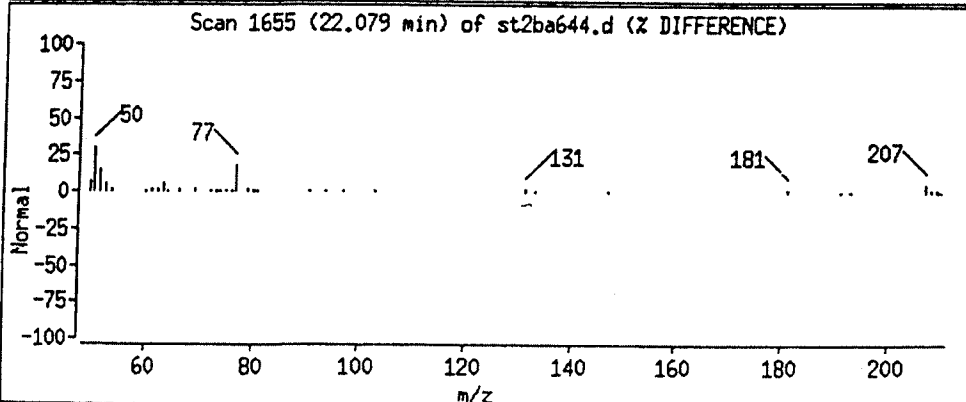
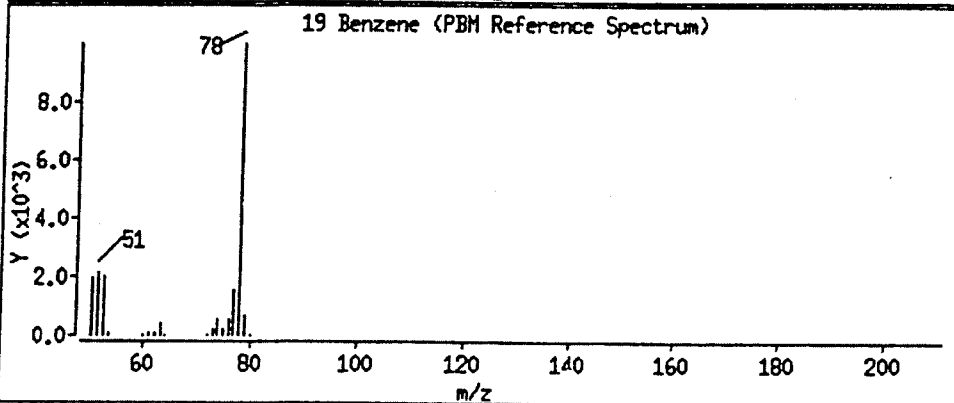
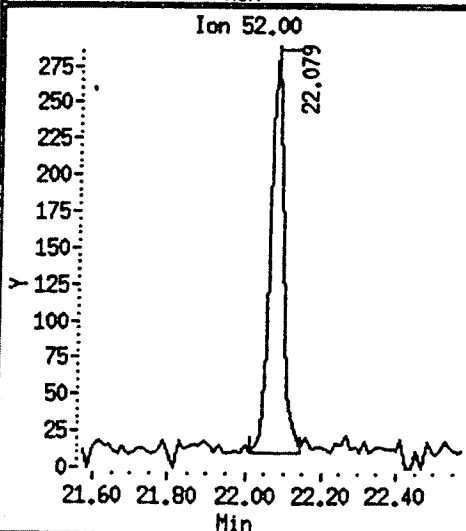
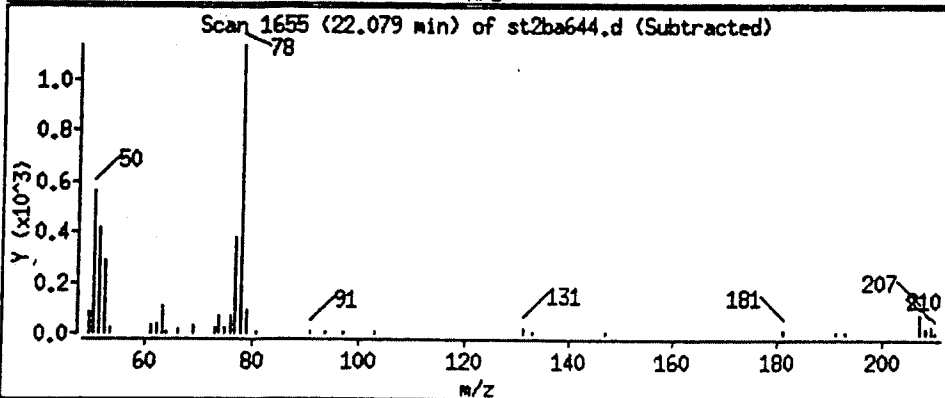
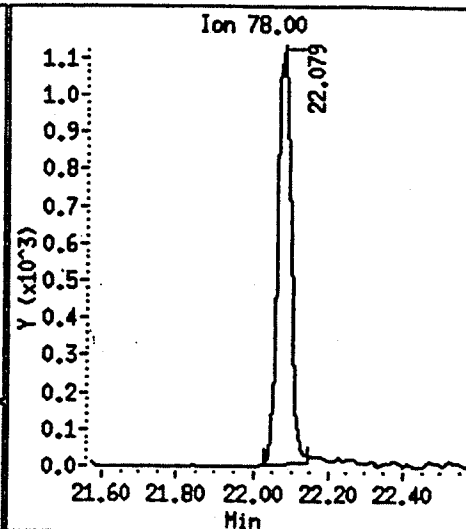
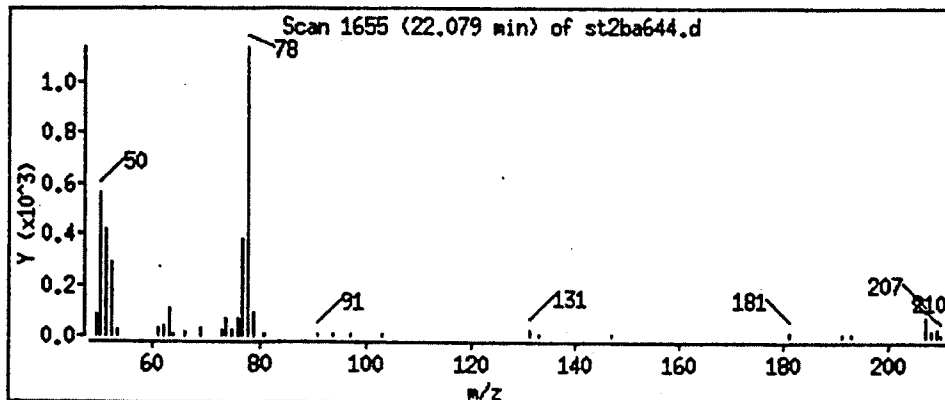
Sample ID : UNISYS SP10

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

19 Benzene



Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba641.d
Lab. Id. : D94-12381-4 Quant Type: ESTD
Inj Date : 13-DEC-1994 14:52 Autotune Date:
Operator : SLTATUM Inst ID: saturn2.i
Smp Info : TO14_SUMMA;;121394.b;2
Misc Info : ST 12381-4 60 ML
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 14-Dec-1994 17:00 sltatum
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0
Dil Factor: 1.700 Target Version: Target 2.40
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: AIR

Compounds	QUANT SIG		RT	RESPONSE	CONCENTRATIONS	
	MASS				ON-COLUMN	FINAL
=====	=====	==	=====	=====	(ppbv/v)	(ppb v/v)
9 Methylene chloride	49.00		18.599	15154	0.70	1.19
11 Trichlorotrifluoroethane	101.00		18.970	2624	0.10	0.18
19 Benzene	78.00		22.064	8145	0.39	0.67
26 Toluene	92.00		24.090	4419	0.24	0.41
33 m,p-Xylene	106.00		25.691	2538	0.16	0.28(Q)
39 1,2,4-Trimethylbenzene	105.00		27.319	5866	0.13	0.22(H)
42 1,4-Dichlorobenzene	146.00		27.531	3411	0.10	0.17(M)
44 1,2,4-Trichlorobenzene	180.00		29.638	2148	0.14	0.23

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

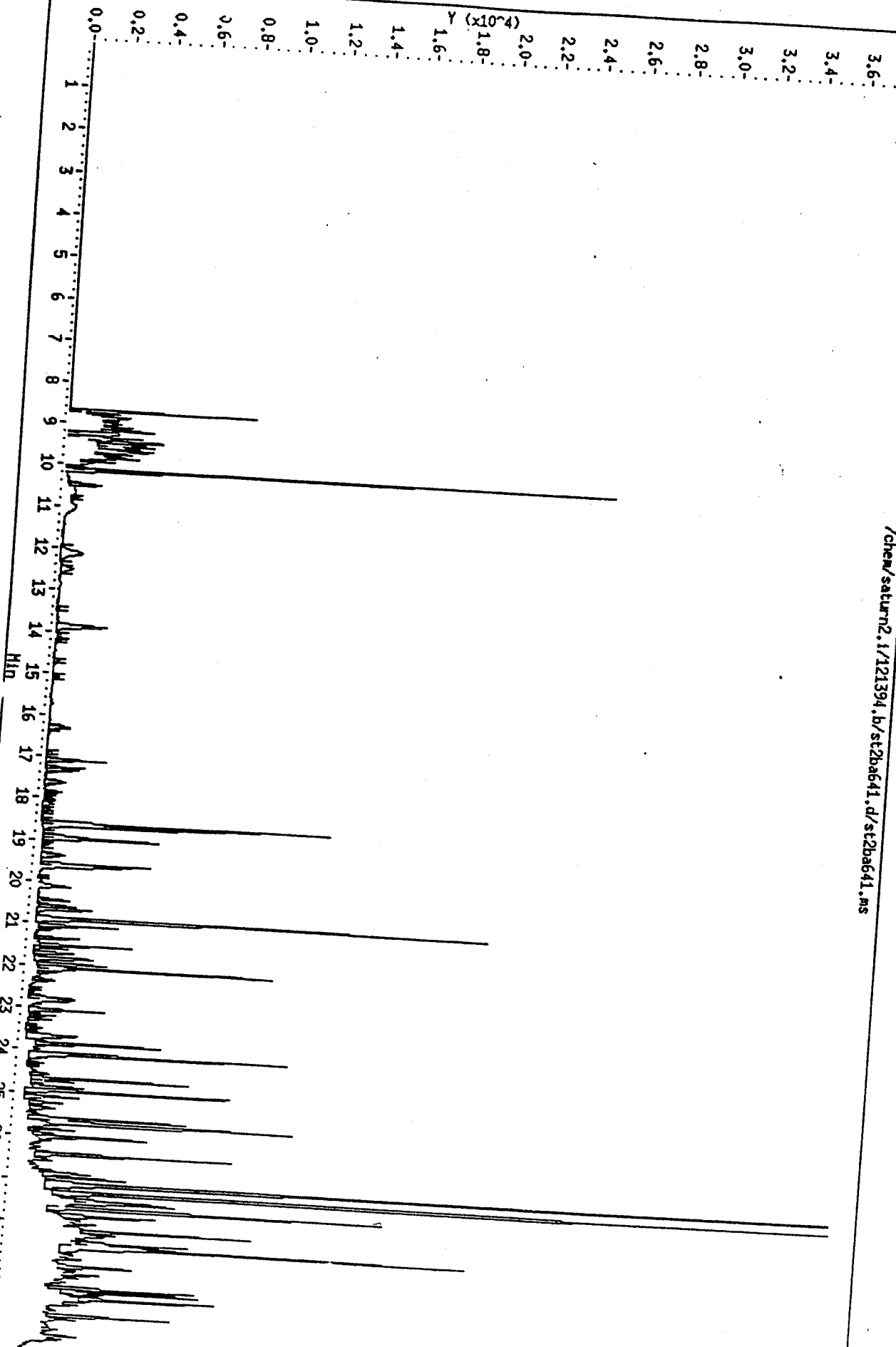
052

ANALYST SLT 12/15/94
REVIEW Michelle Delgado 12/15/94
DATA ENTRY M.A. 12/15/94

13-DEC-1994 14:52
Instrument : saturn2.1
Sample ID : 12381-4 60 ML
Column phase : DB-1
Volume Injected (ul) : 0.0

Column diameter : 0.32

/chem/saturn2.1/121394.b/st2ba641.d/st2ba641.ms



Date : 13-DEC-1994 14:52

Instrument : saturn2.i

Sample ID : 12381-4 60 ML

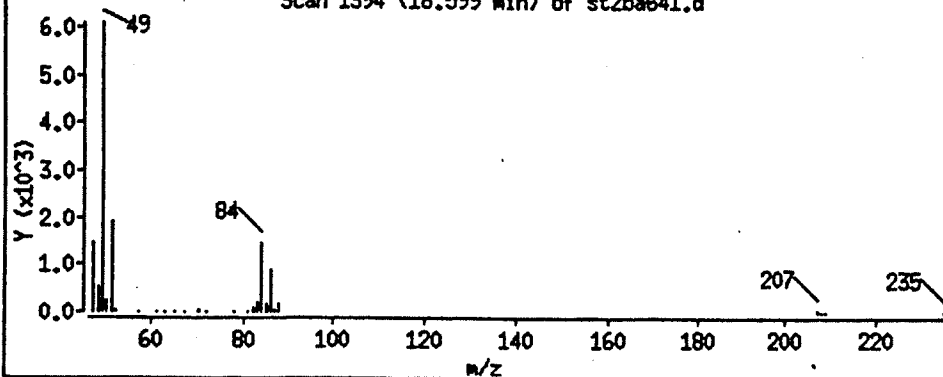
Column phase : DB-1

Column diameter : 0.32

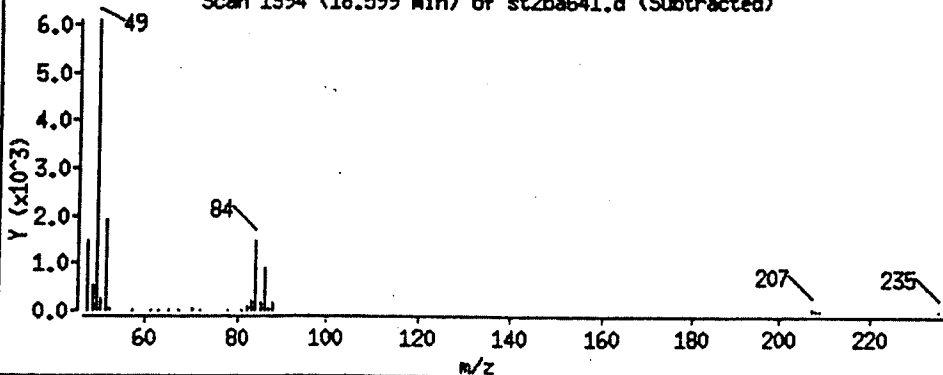
Volume Injected (uL) : 0.0

9 Methylene chloride

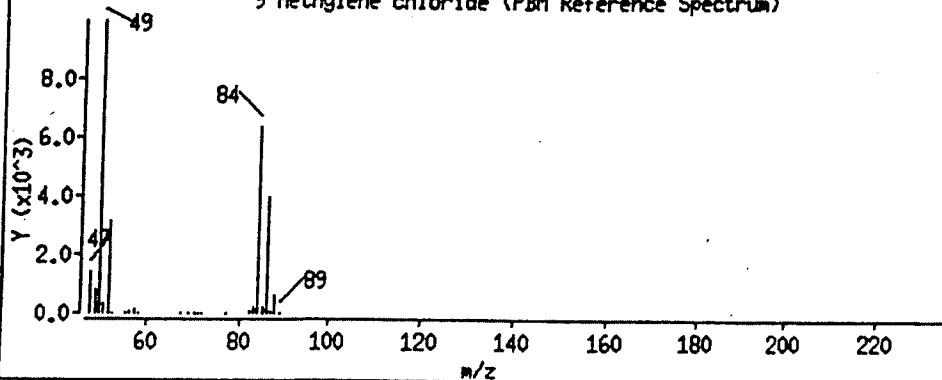
Scan 1394 (18.599 min) of st2ba641.d



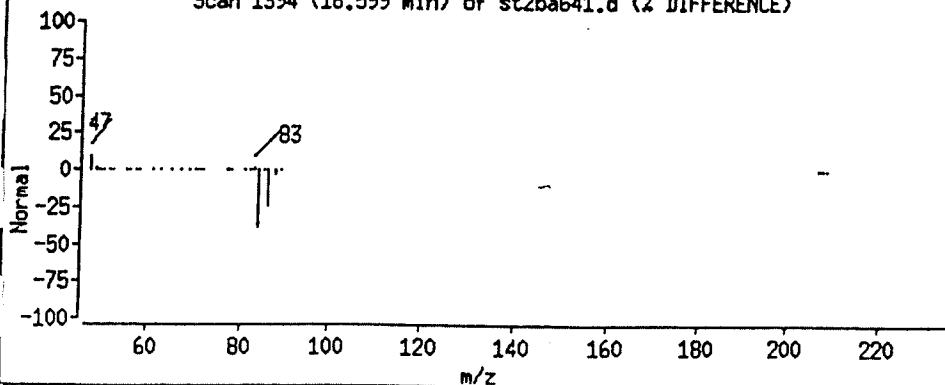
Scan 1394 (18.599 min) of st2ba641.d (Subtracted)



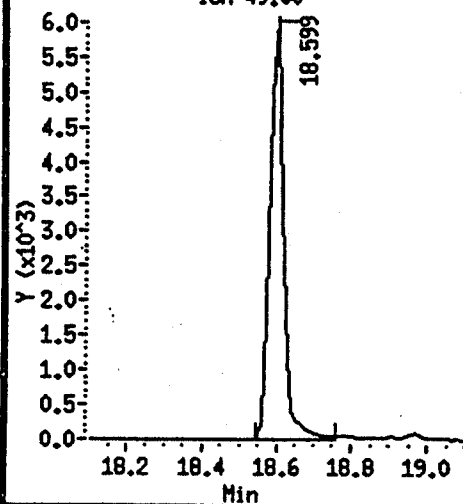
9 Methylene chloride (PBM Reference Spectrum)



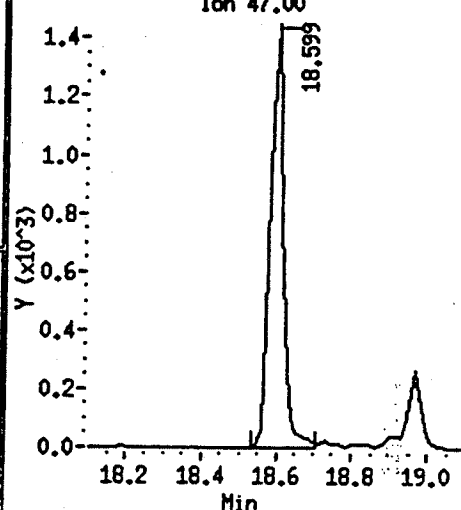
Scan 1394 (18.599 min) of st2ba641.d (% DIFFERENCE)



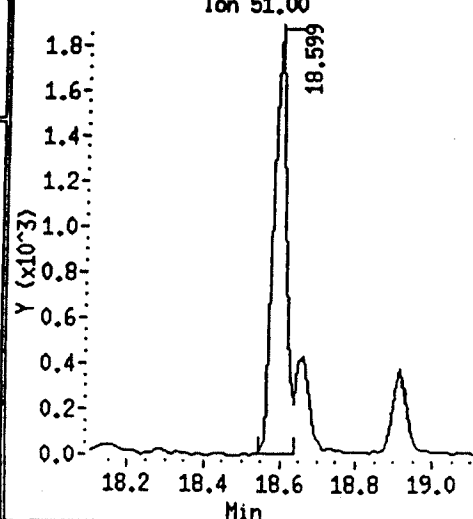
Ion 49.00



Ion 47.00



Ion 51.00



Date : 13-DEC-1994 14:52

Instrument : saturn2.i

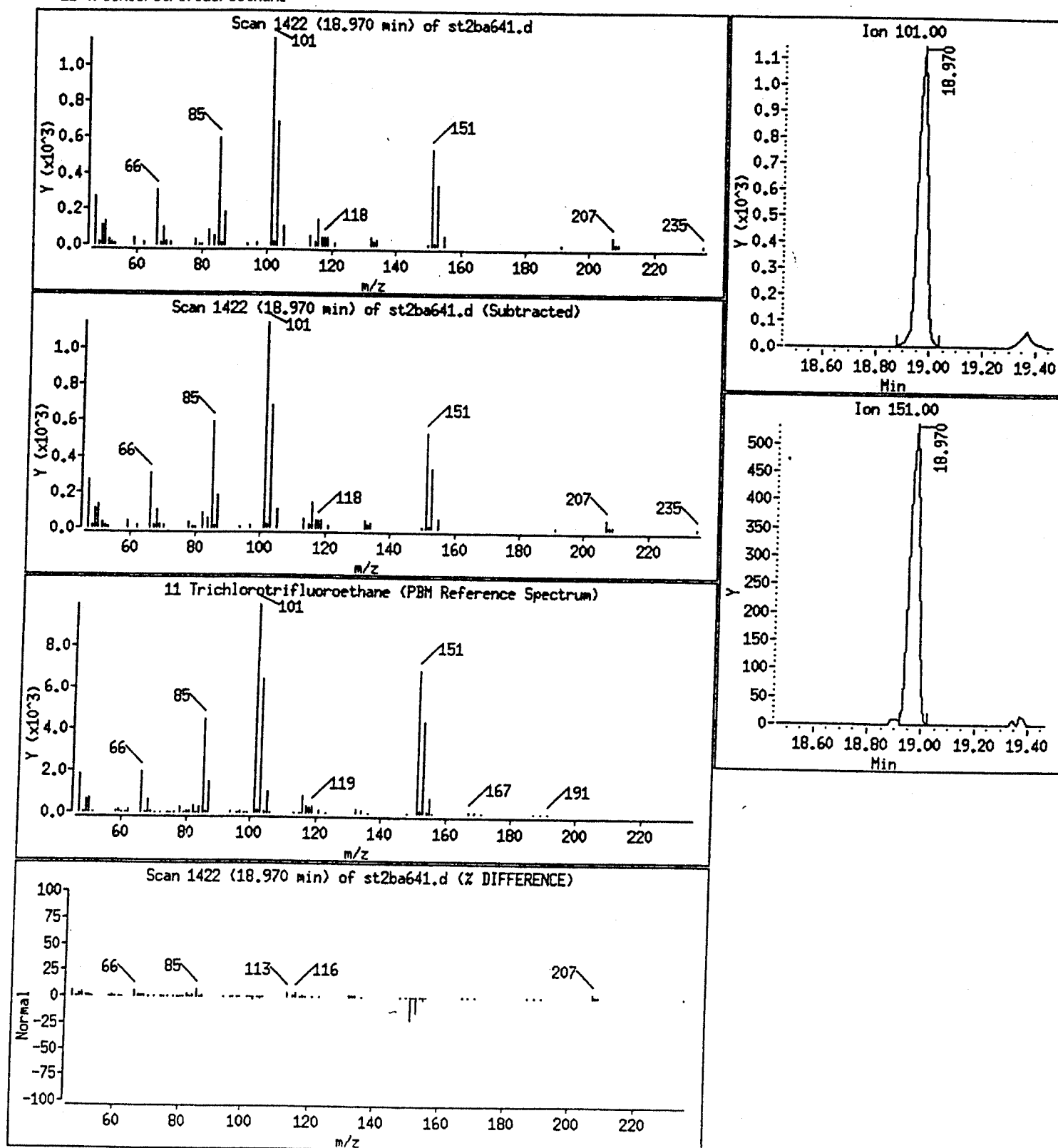
Sample ID : 12381-4 60 ML

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

11 Trichlorotrifluoroethane



Data File: /chem/saturn2.i/121394.b/st2ba641.d

Date : 13-DEC-1994 14:52

Instrument : saturn2.i

Sample ID : 12381-4 60 ML

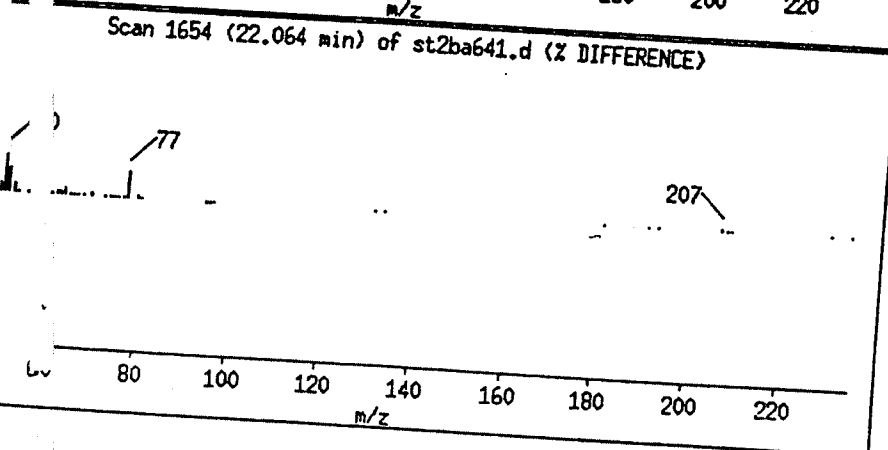
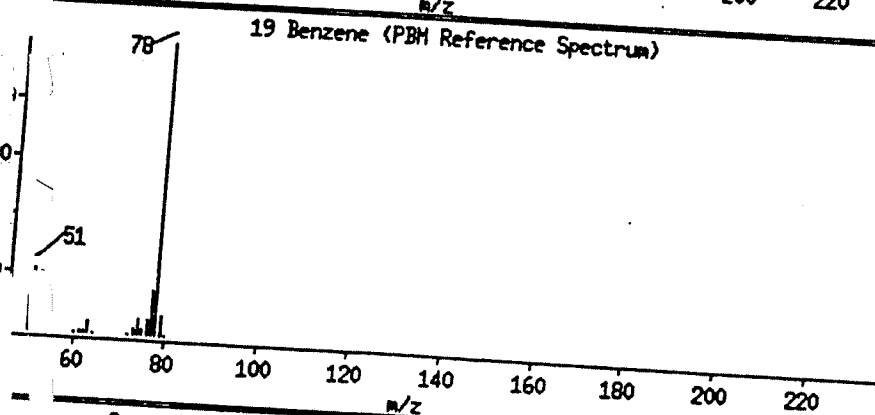
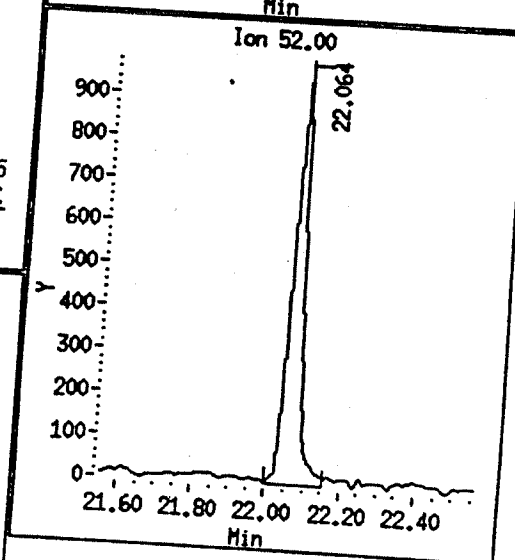
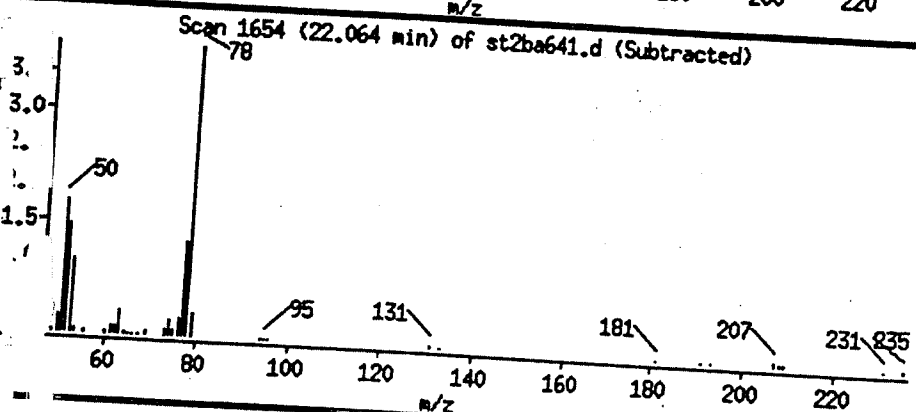
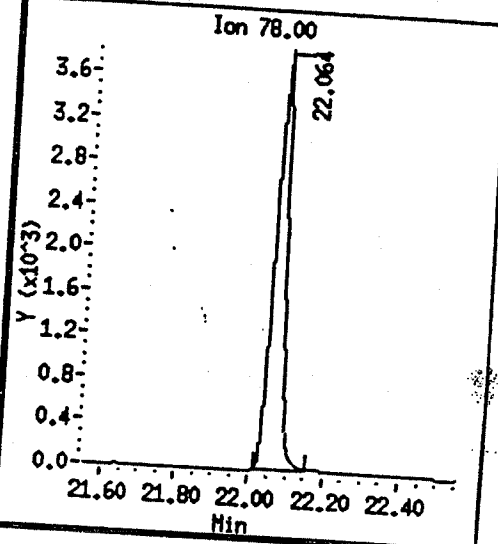
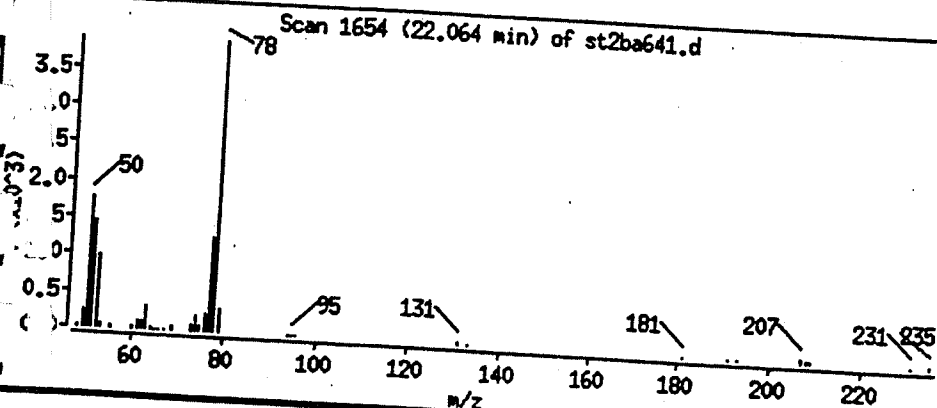
Column phase : DB-1

Volume Injected (uL) : 0.0

Column diameter : 0.32

Page 8

19 Benzene



056

Data File: /chem/saturn2.i/121394.b/st2ba641.d

Page 9

Date : 13-DEC-1994 14:52

Instrument : saturn2.i

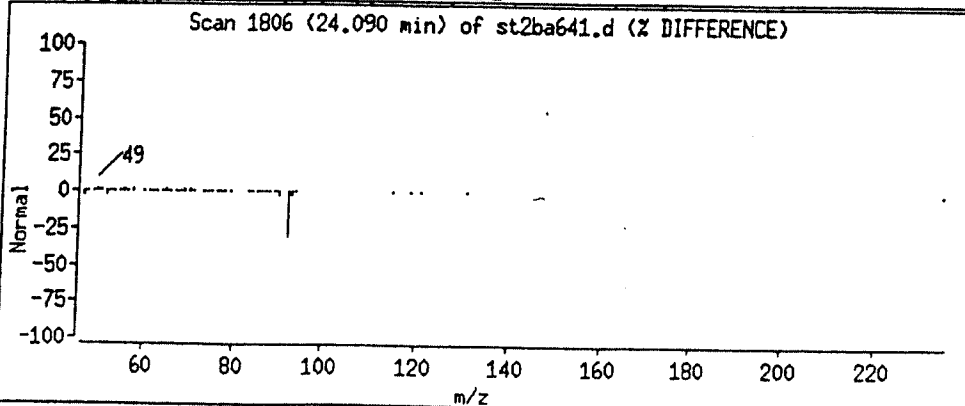
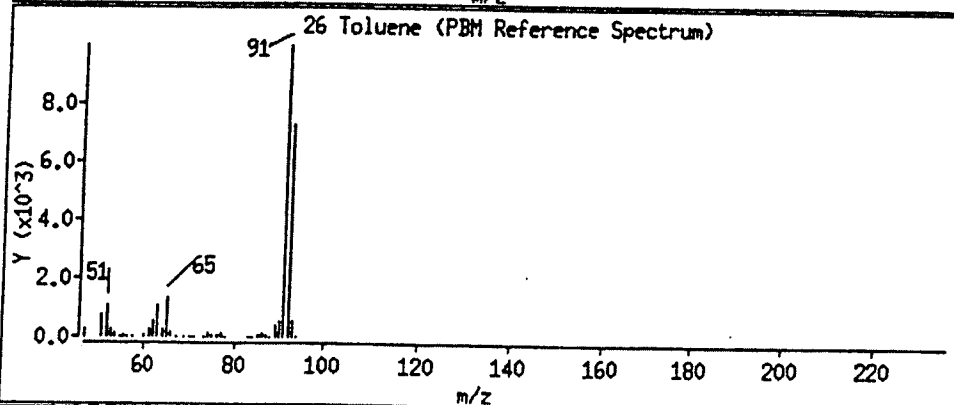
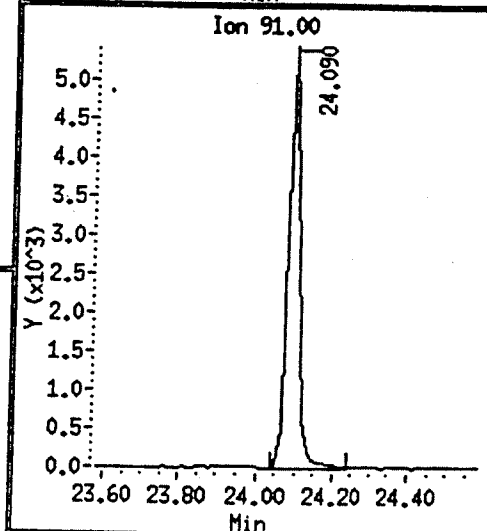
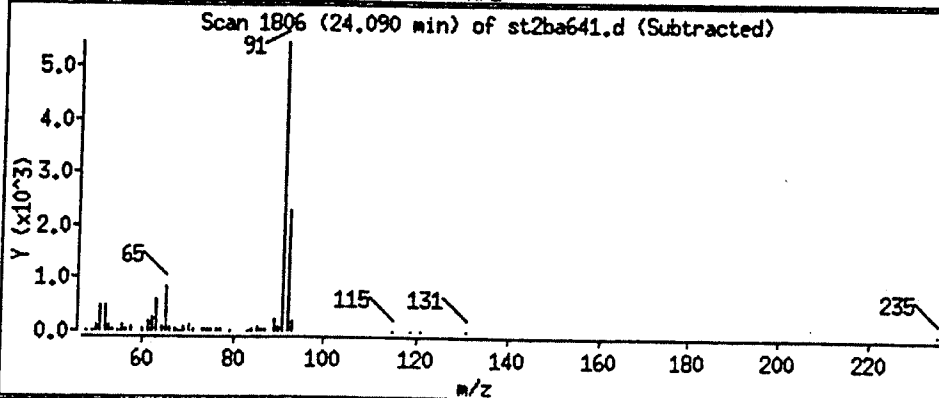
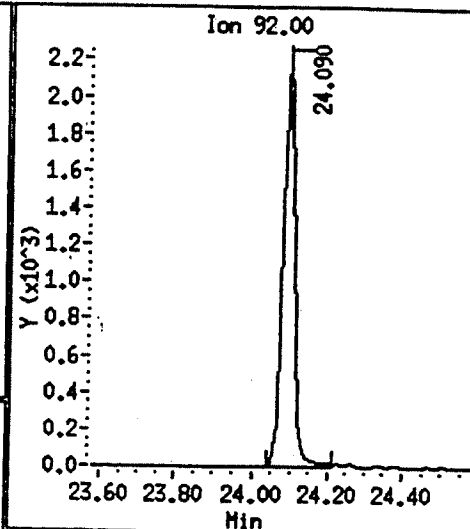
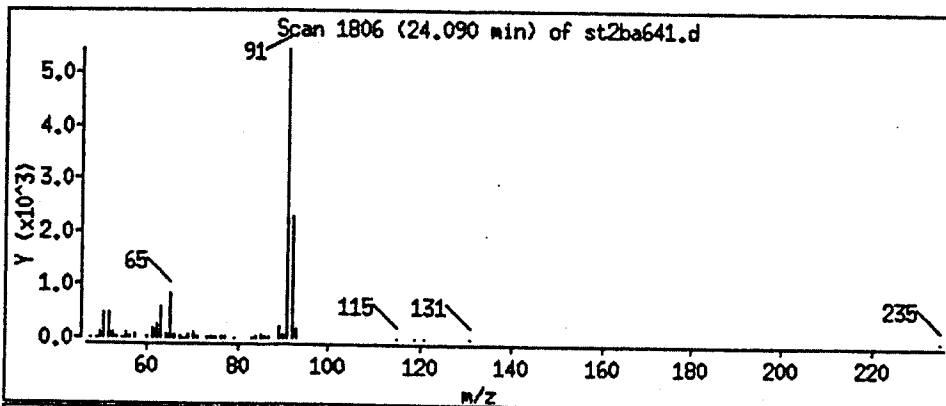
Sample ID : 12381-4 60 ML

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

26 Toluene



057

Date : 13-DEC-1994 14:52

Instrument : saturn2.i

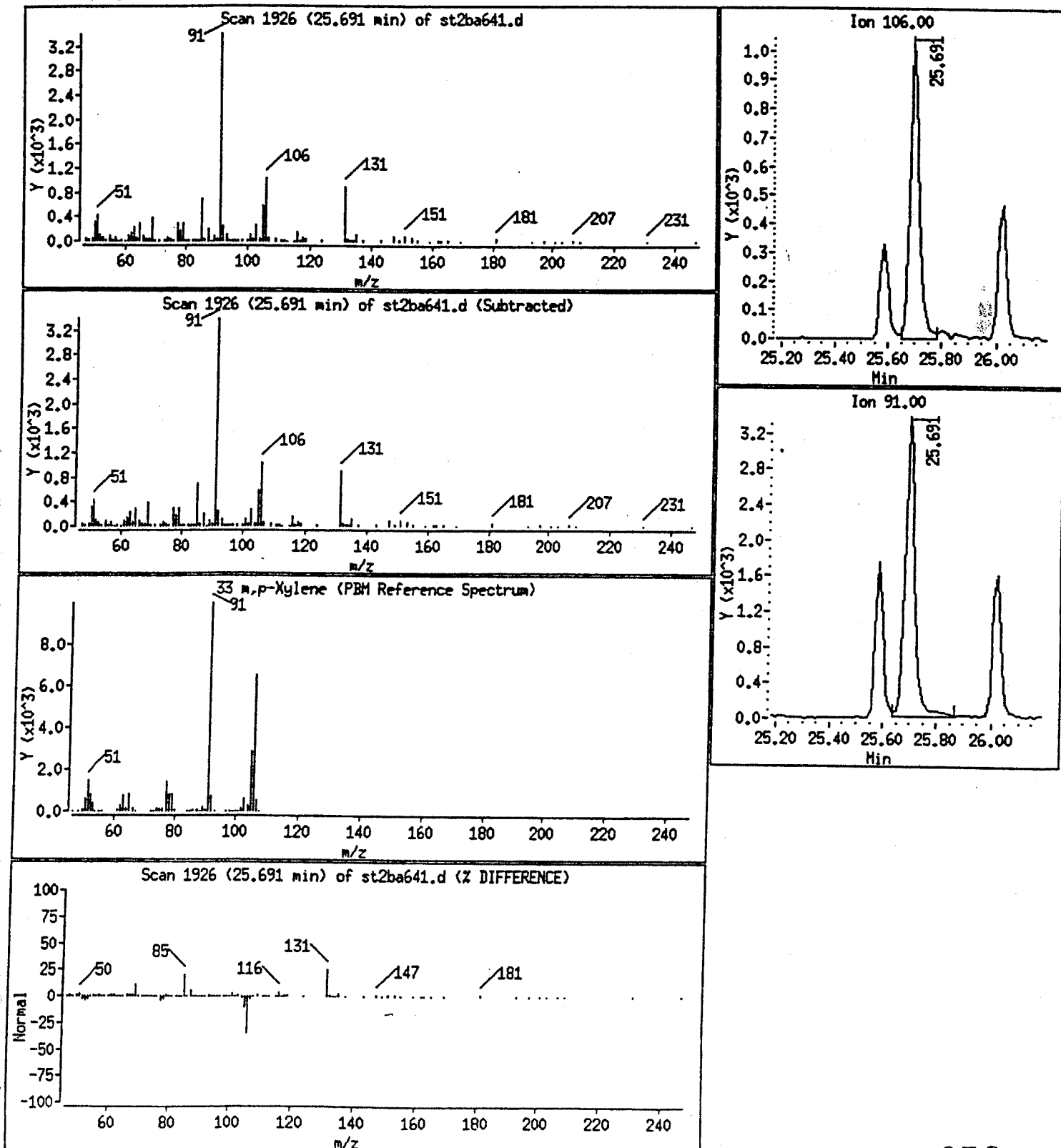
Sample ID : 12381-4 60 ML

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

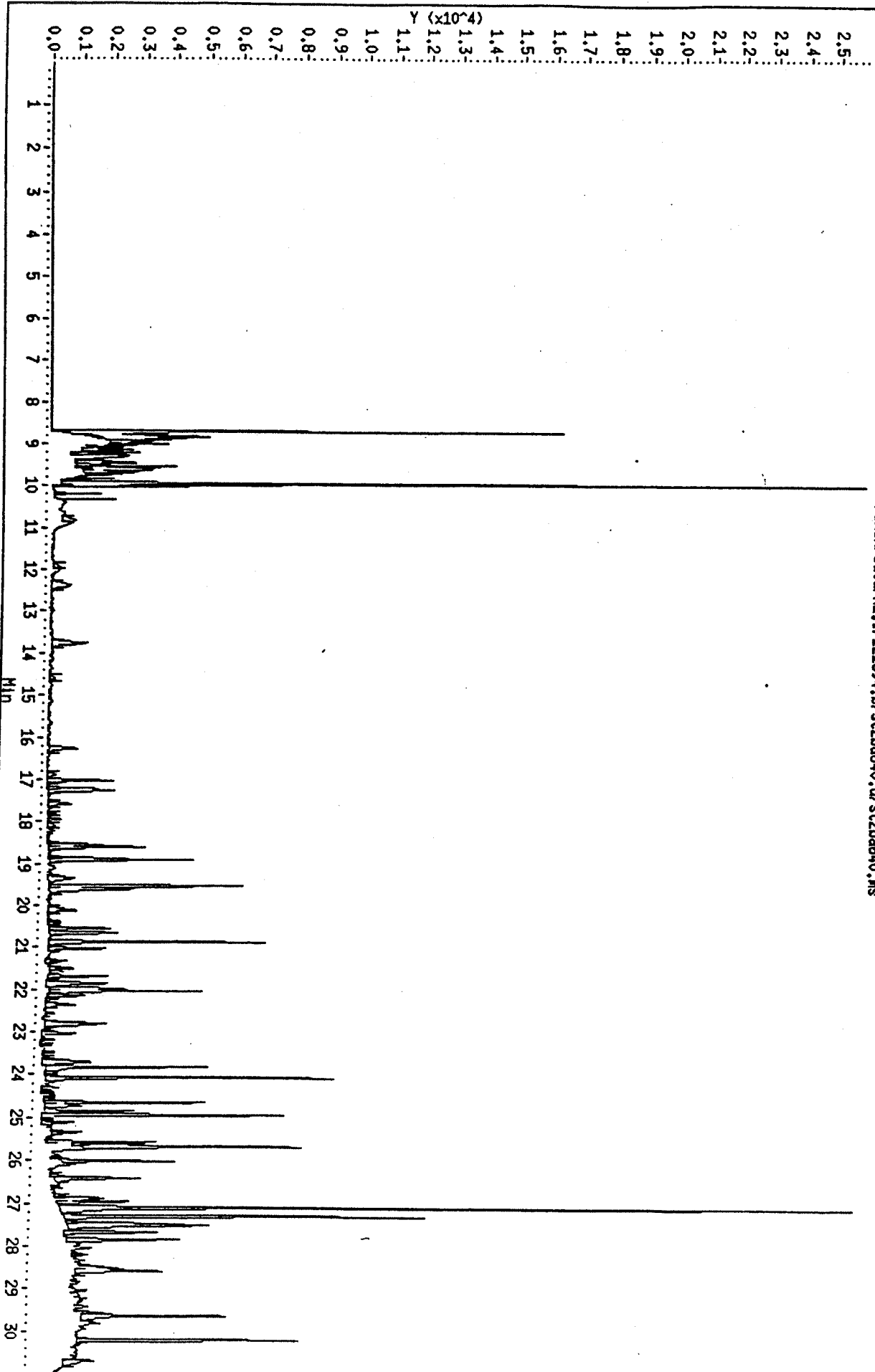
33 m,p-Xylene



Date : -DEC-1994 14:12
Instrument : saturn2.1
Sample ID : UNISYS SP6
Column phase : DB-1
Volume Injected (uL) : 0.0

Column diameter : 0.32

/chem/saturn2.1/121394.b/st2ba640.d/st2ba640.ms



Date : 13-DEC-1994 14:12

Instrument : saturn2.i

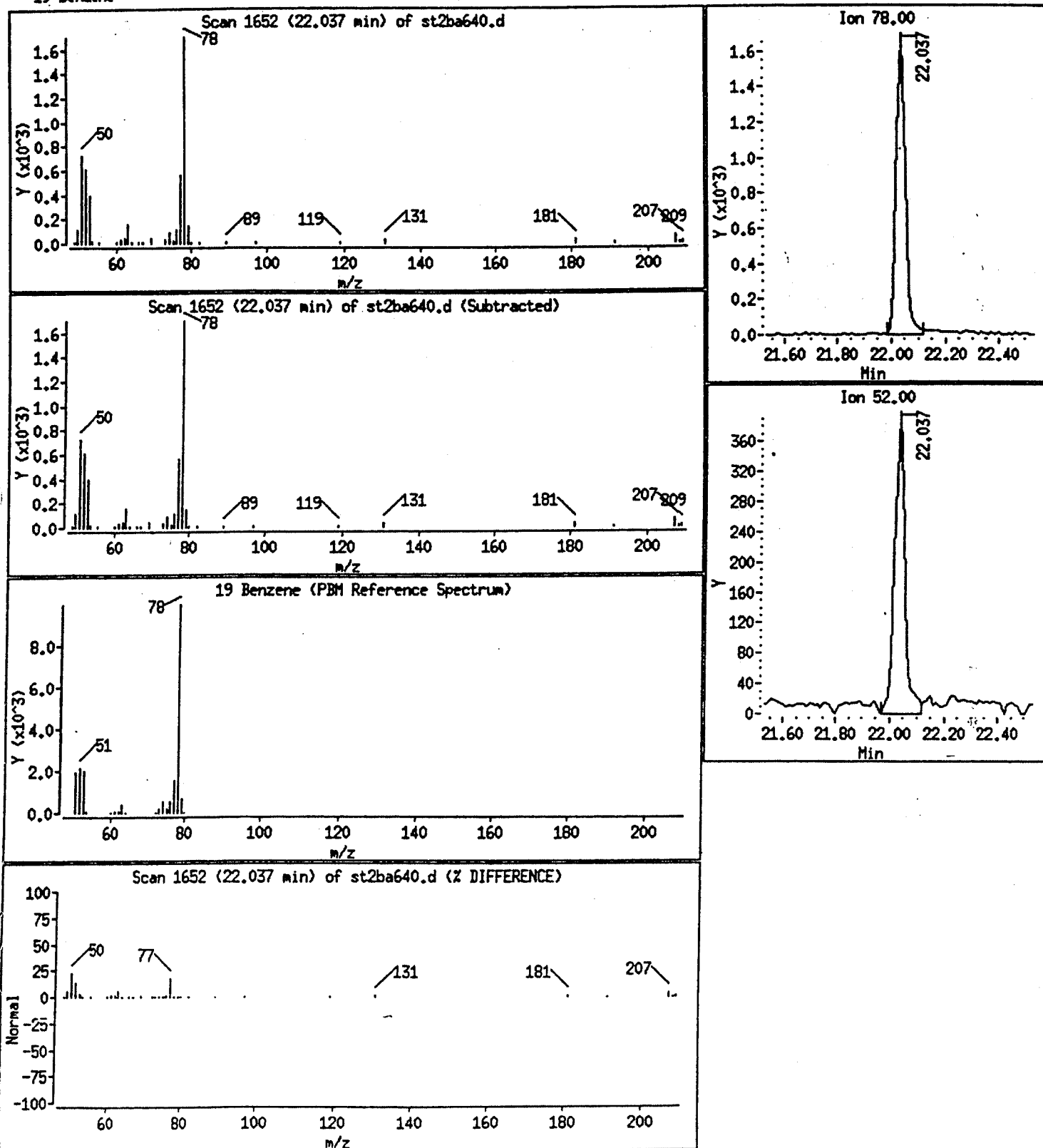
Sample ID : UNISYS SP6

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

19 Benzene



Date : 13-DEC-1994 14:12

Instrument : saturn2.i

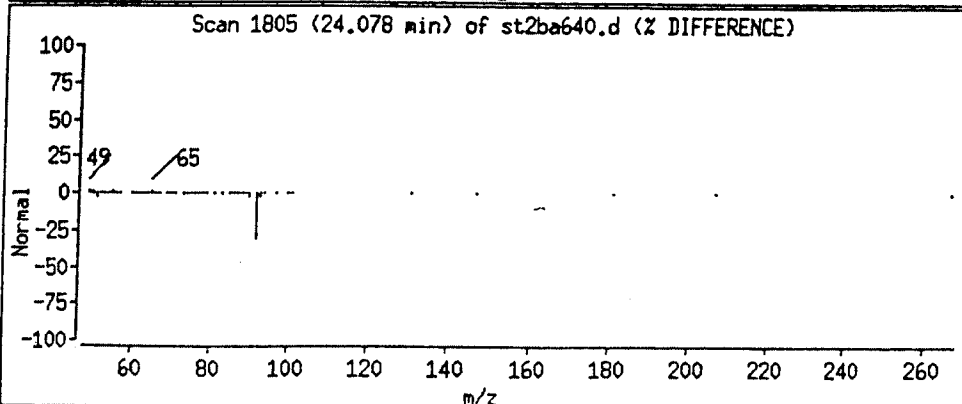
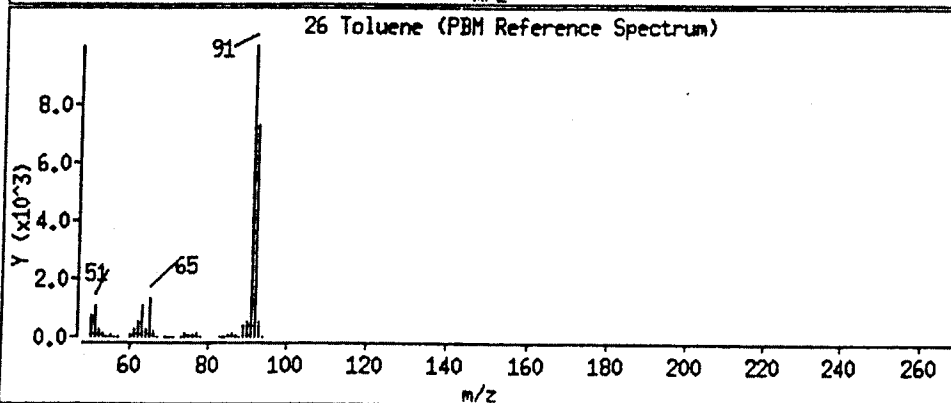
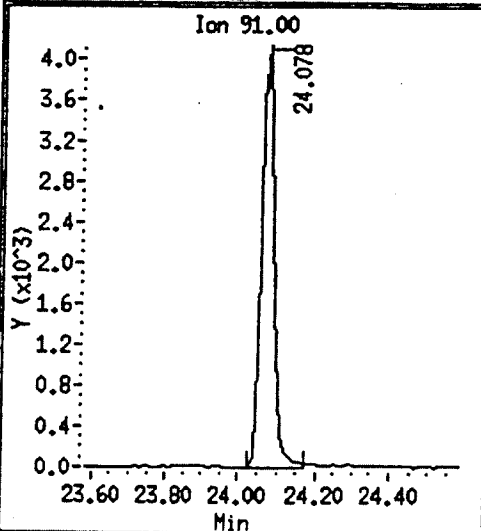
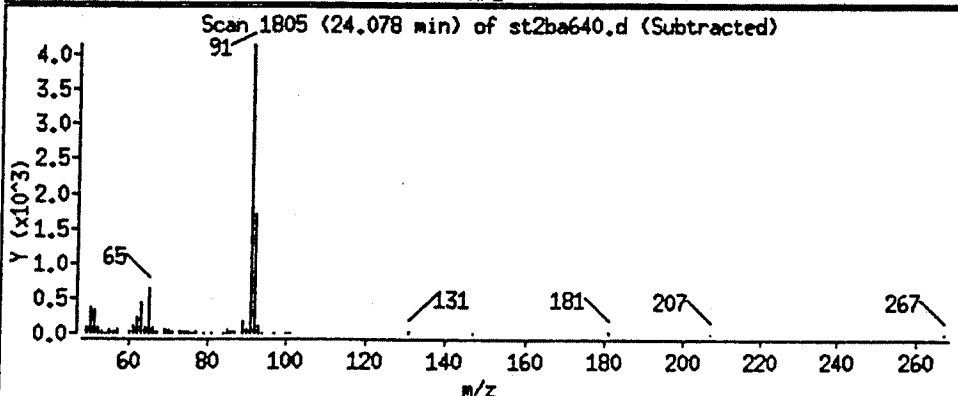
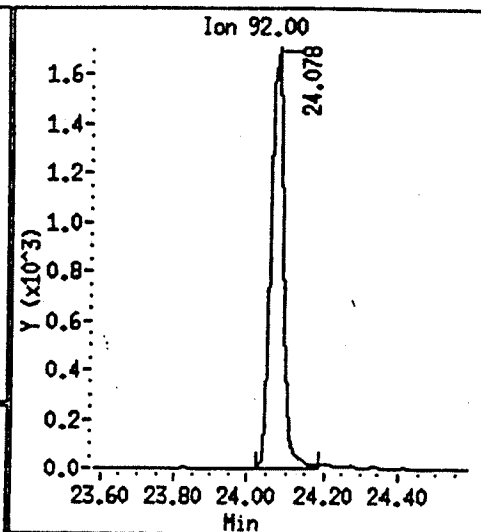
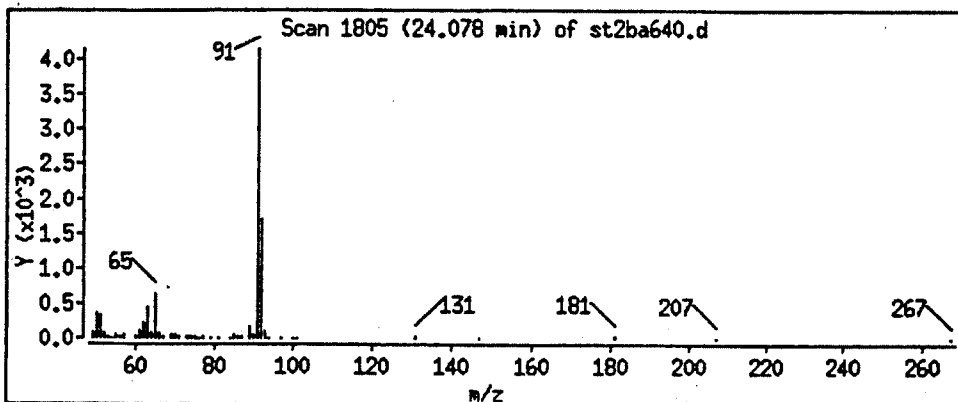
Sample ID : UNISYS SP6

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

26 Toluene



Date : 13-DEC-1994 14:12

Instrument : saturn2.i

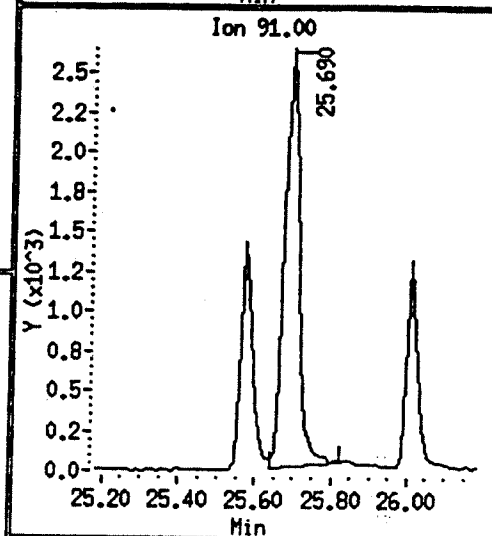
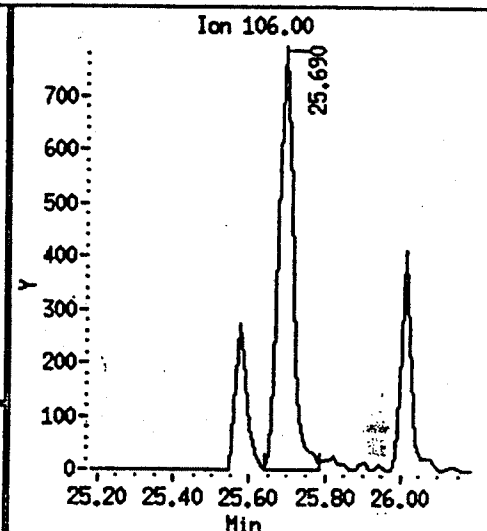
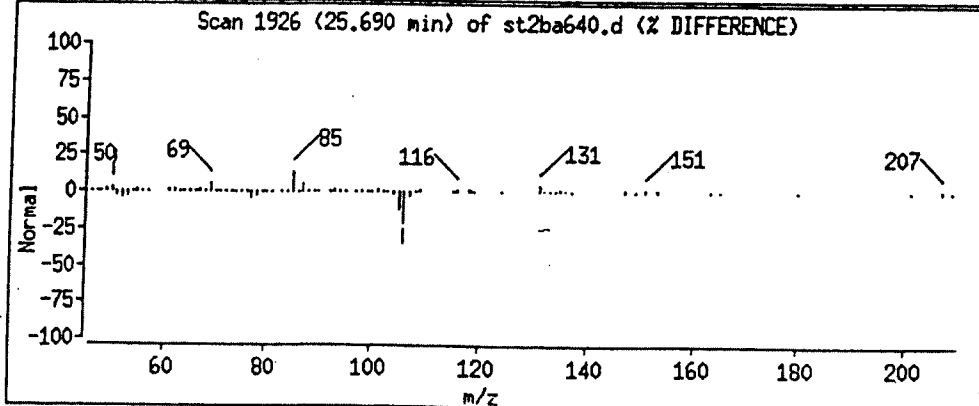
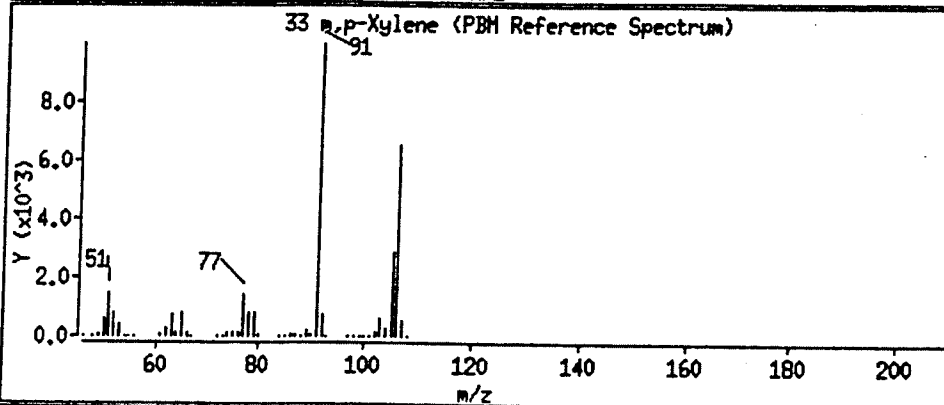
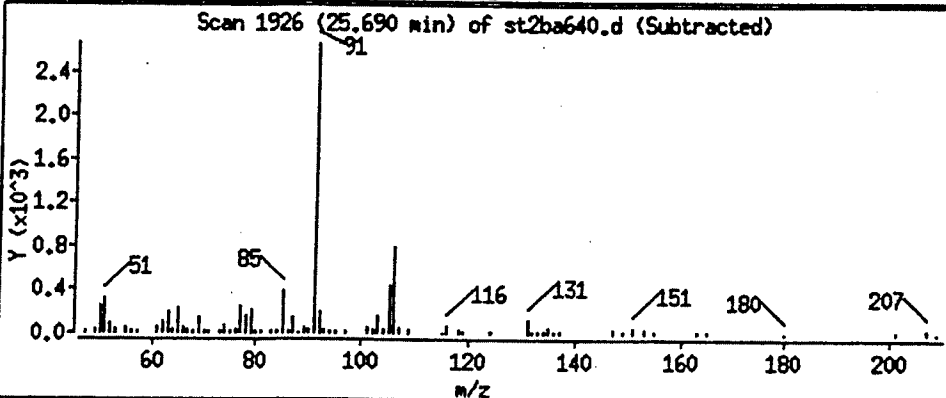
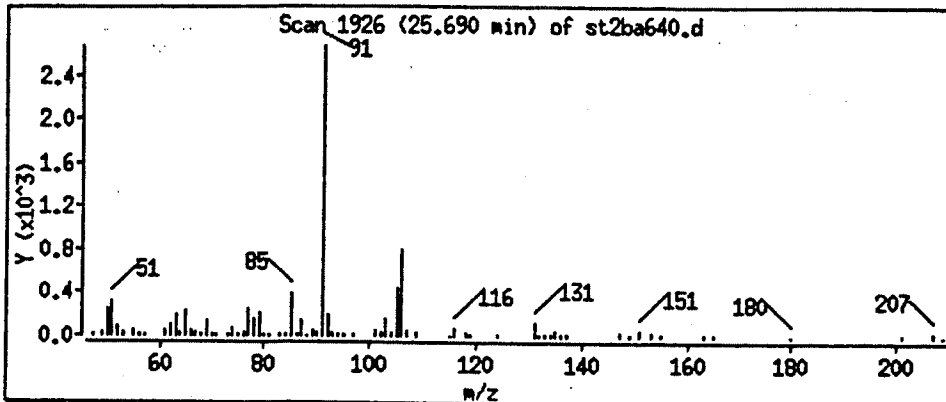
Sample ID : UNISYS · SP6

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

33 m,p-Xylene



Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba645.d
Lab. Id. : D94-12381-6 Quant Type: ESTD
Inj Date : 13-DEC-1994 17:39 Autotune Date:
Operator : SLTATUM Inst ID: saturn2.i
Smp Info : TO14_SUMMA;;121394.b;2
Misc Info : ST 12381-6 60 ML
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 14-Dec-1994 17:00 sltatum
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0
Dil Factor: 1.900 Target Version: Target 2.40
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: AIR

Compounds	QUANT SIG	RT	RESPONSE	CONCENTRATIONS	
				ON-COLUMN (ppbv/v)	FINAL (ppb v/v)
19 Benzene	78.00	22.063	2118	0.10	0.19

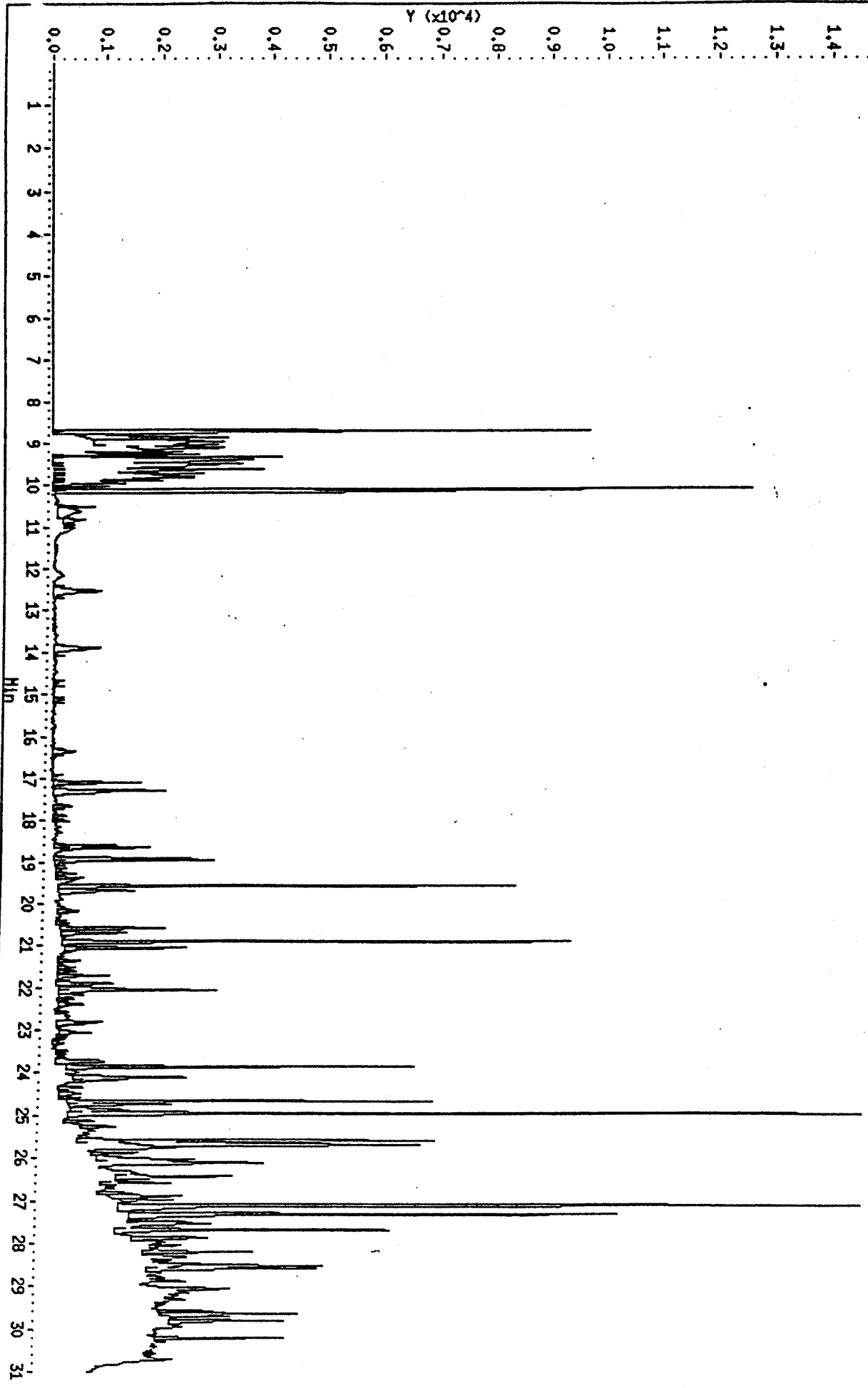
069

ANALYST [Signature] 12/15/94
REVIEW Michelle Delgado 12/15/94
DATA ENTRY M.D. 12/15/94

Data File: /chem/saturn2.1/121394.b/st2ba645.d
Date : 13-DEC-1994 17:39
Instrument : saturn2.1
Sample ID : UNISYS SP12
Column phase : DB-1
Volume Injected (ul) : 0.0

Column diameter : 0.32

/chem/saturn2.1/121394.b/st2ba645.d/st2ba645.ms



Date : 13-DEC-1994 17:39

Instrument : saturn2.1

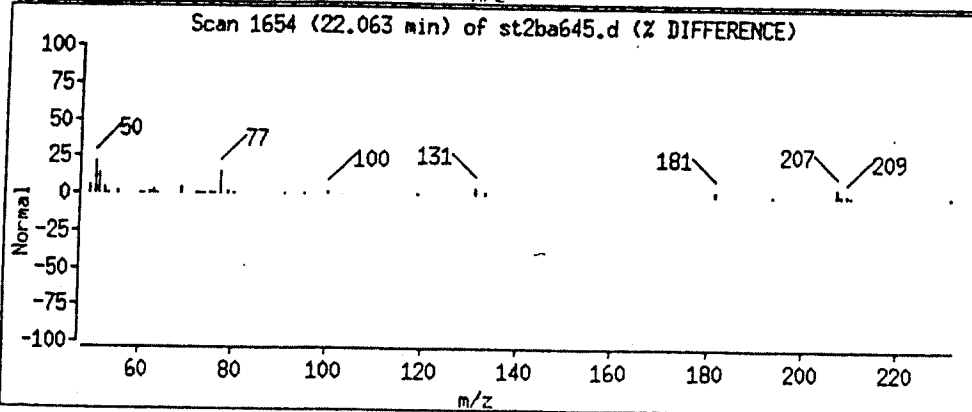
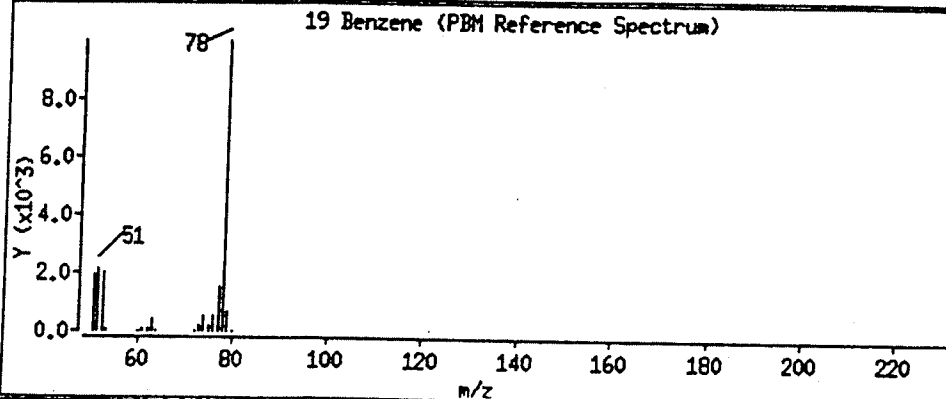
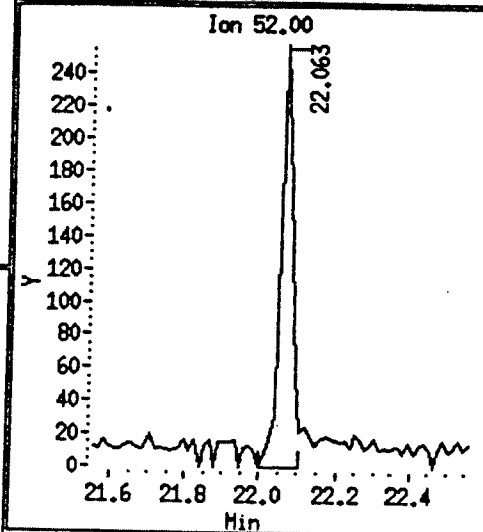
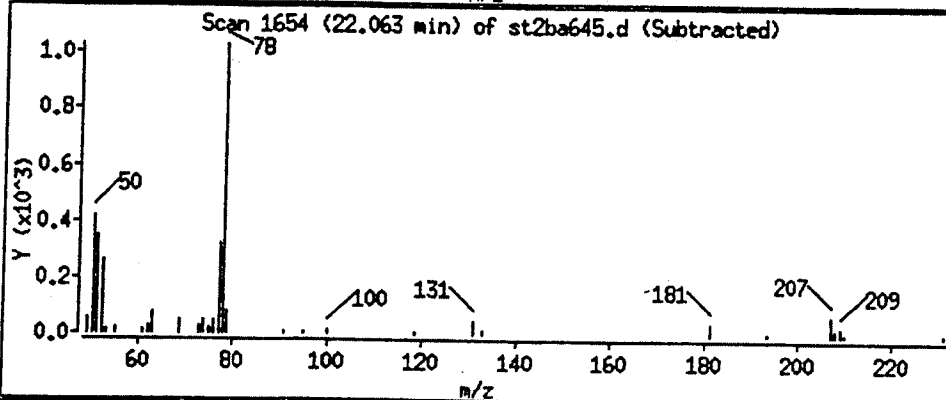
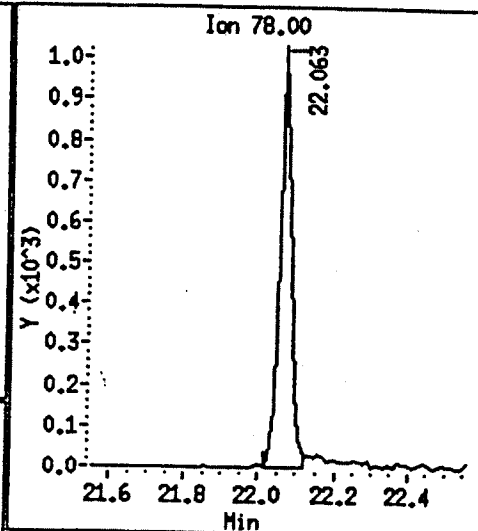
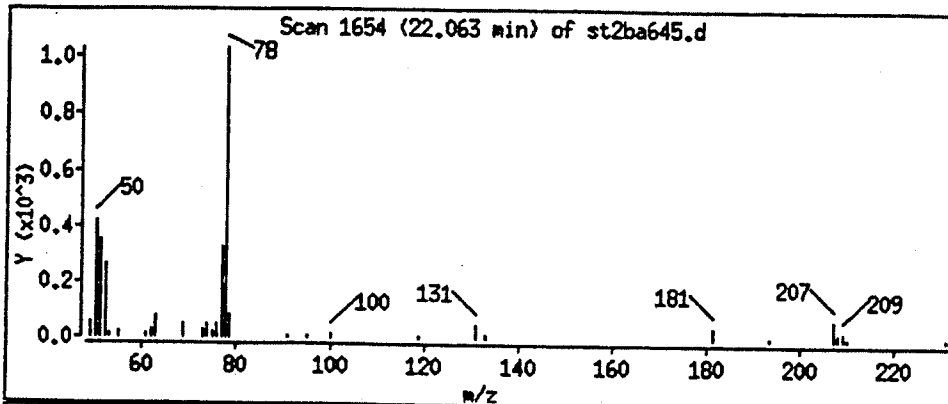
Sample ID : UNISYS SP12

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

19 Benzene



Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14.

Data file : /chem/saturn2.i/121394.b/st2ba646.d
Lab. Id. : D94-12381-7 Quant Type: ESTD
Inj Date : 13-DEC-1994 18:20 Autotune Date:
Operator : SLTATUM Inst ID: saturn2.i
Smp Info : TO14_SUMMA;;121394.b;2
Misc Info : ST 12381-7 60 ML
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 14-Dec-1994 17:00 sltatum
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0 Target Version: Target 2.40
Dil Factor: 2.700 Compound Sublist: all.sub
Integrator: HP RTE
Sample Matrix: AIR

Compounds	QUANT	SIG	RT	RESPONSE	CONCENTRATIONS	
	MASS	ON-COLUMN			FINAL	
=====	====		==	=====	(ppbv/v)	(ppb v/v)

072

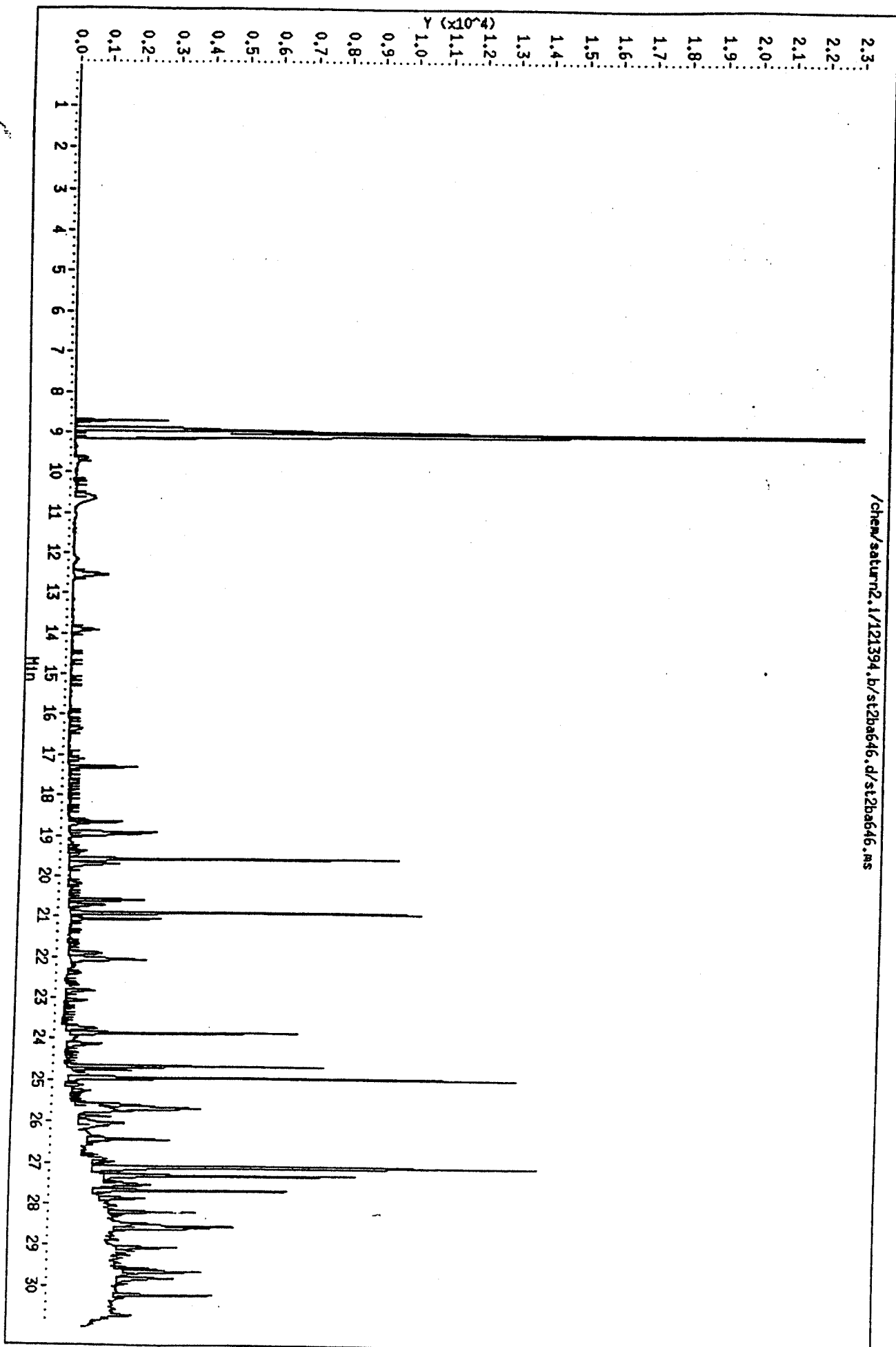
ANALYST [Signature] 12/15/94
Date
REVIEW Michelle Delgado 12/15/94
Date
DATA ENTRY M.A. 12/15/94
Date

Data File : chem/saturn2.1/121394.b/st2ba646.d
Date : 15 oct-1994 18:20
Instrument : saturn2.1
Sample ID : UNISYS SP13
Column phase : DB-1
Volume Injected (ul) : 0.0

Column diameter : 0.32

Page 1

073




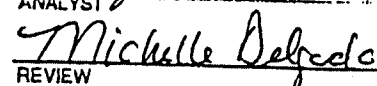

Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba647.d
Lab. Id. : D94-12381-8 Quant Type: ESTD
Inj Date : 13-DEC-1994 18:59 Autotune Date:
Operator : SLTATUM Inst ID: saturn2.i
Smp Info : TO14_SUMMA;;121394.b;2
Misc Info : ST 12381-8 60 ML
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 14-Dec-1994 17:00 sltatum
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0
Dil Factor: 2.100 Target Version: Target 2.40
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: AIR

Compounds	QUANT	SIG	RT	RESPONSE	CONCENTRATIONS
	MASS	ON-COLUMN			FINAL
=====	=====	=====	=====	=====	=====

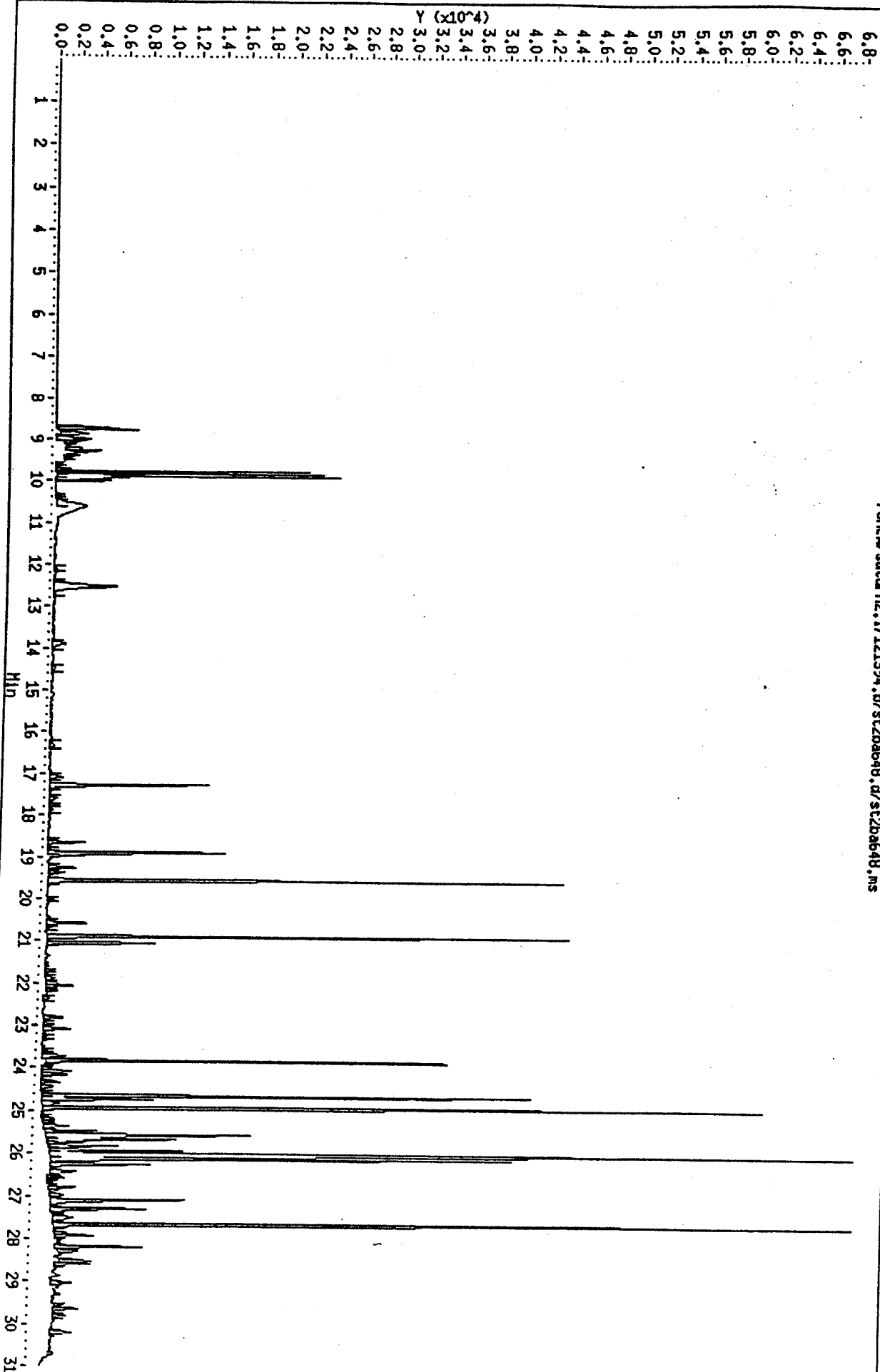
074

 12/15/94
ANALYST Date
 12/15/94
REVIEW Date
 12/15/94
DATA ENTRY Date

Date F1. chem/saturn2.1/121394.b/st2ba648.d
Date : 13-DEC-1994 19:40
Instrument : saturn2.1
Sample ID : UNISYS SP14
Column phase : DB-1
Volume Injected (uL) : 0.0

Column diameter : 0.32

/chem/saturn2.1/121394.b/st2ba648.d/st2ba648.ms



Date : 13-DEC-1994 19:40

Instrument : saturn2.1

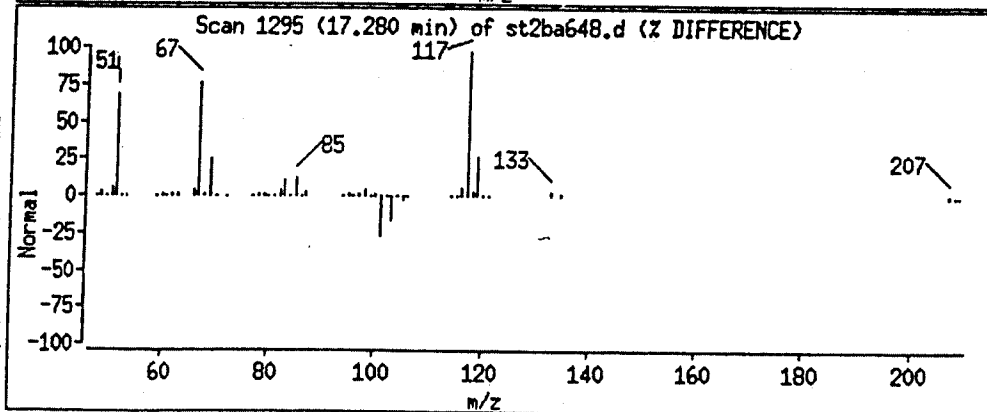
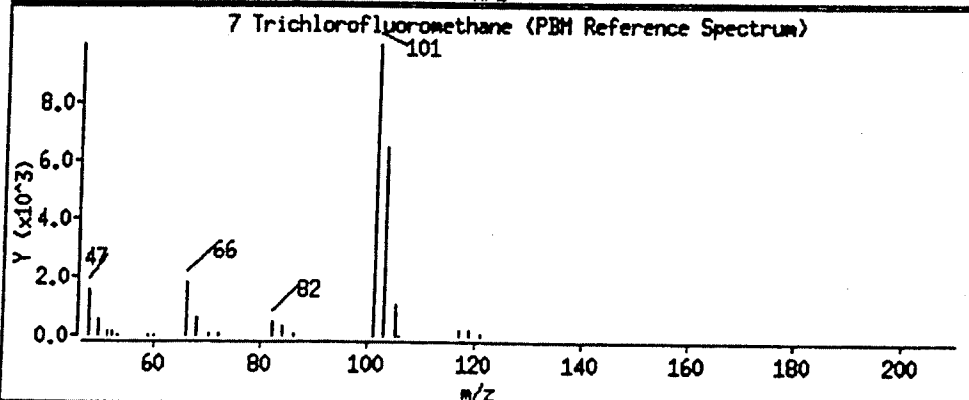
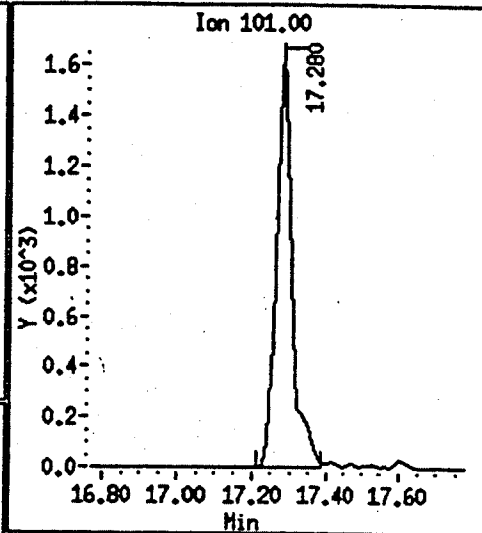
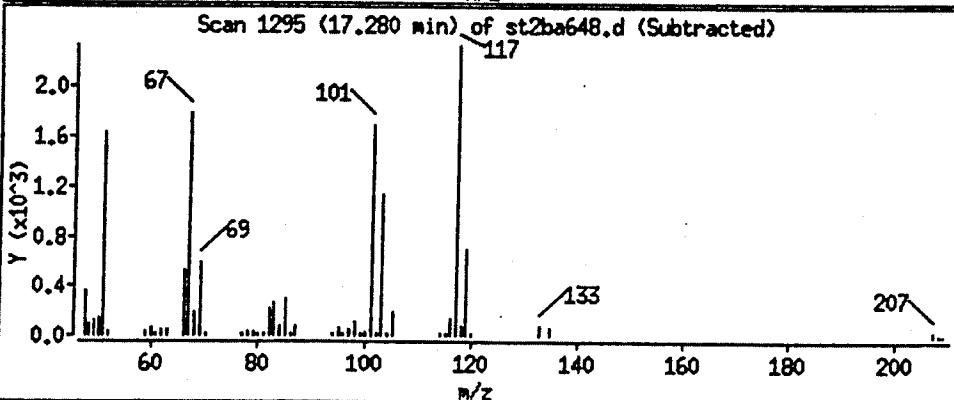
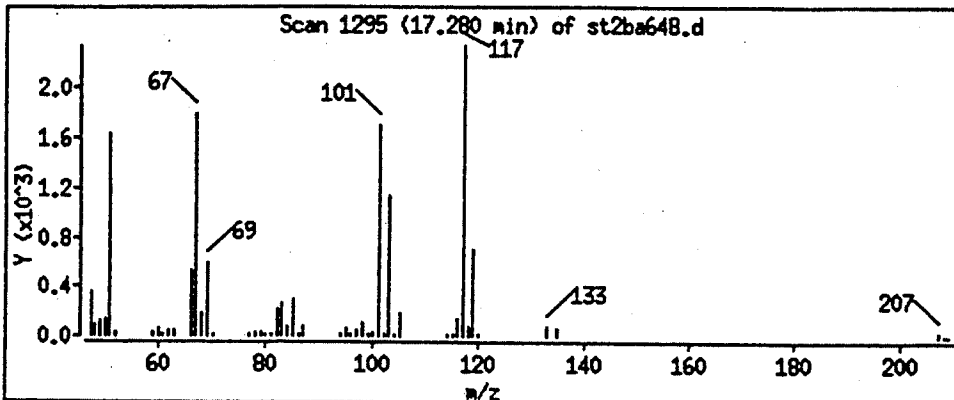
Sample ID : UNISYS SP14

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

7 Trichlorofluoromethane



Date : 13-DEC-1994 19:40

Instrument : saturn2.i

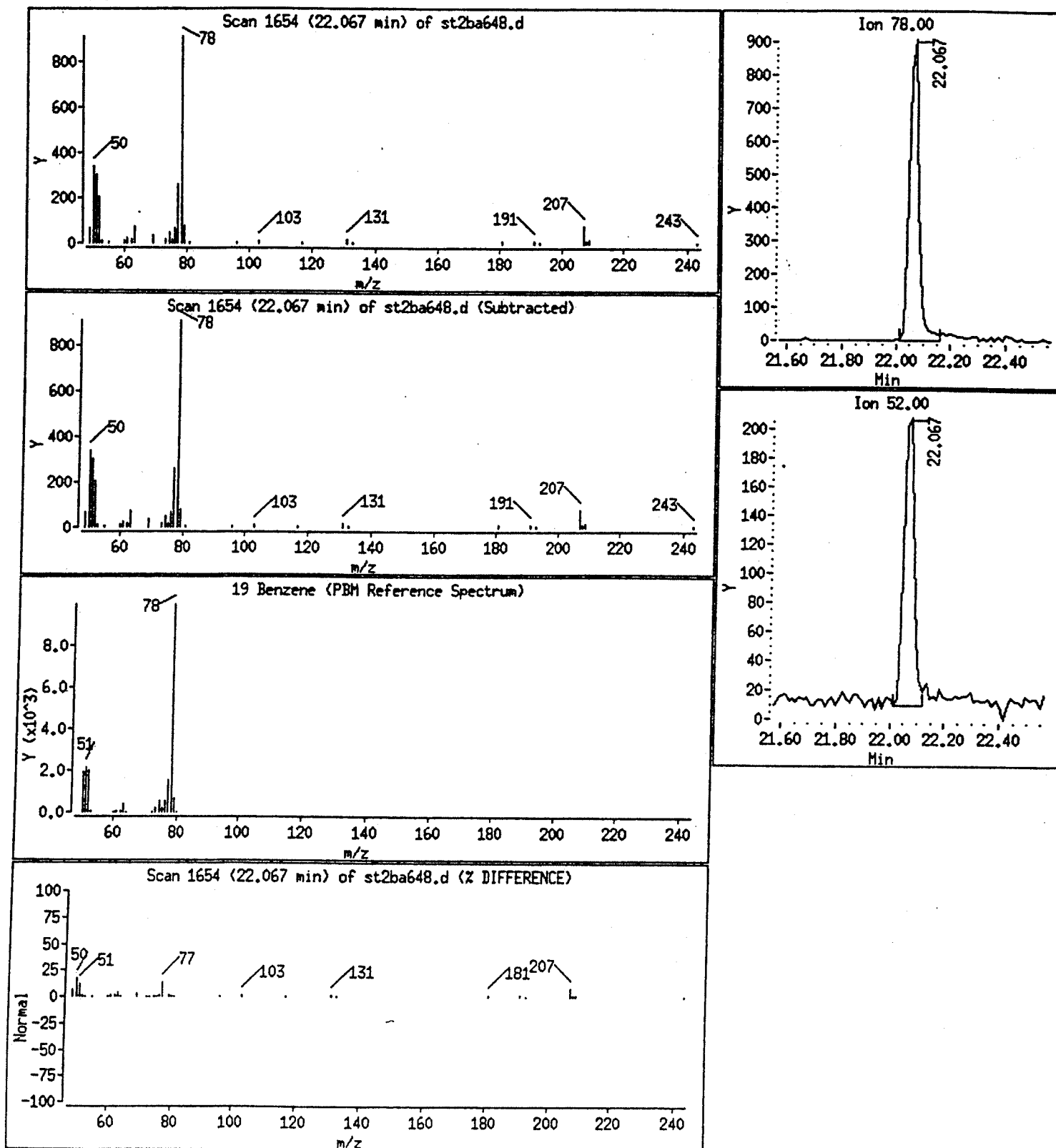
Sample ID : UNISYS SP14

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

19 Benzene



Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba649.d
Lab. Id. : D94-12381-10 Quant Type: ESTD
Inj Date : 13-DEC-1994 20:20 Autotune Date:
Operator : SLTATUM Inst ID: saturn2.i
Smp Info : TO14_SUMMA;;121394.b;2
Misc Info : ST 12381-10 60 ML
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 14-Dec-1994 17:00 sltatum
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0
Dil Factor: 2.600 Target Version: Target 2.40
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: AIR

Compounds	QUANT	SIG	RT	RESPONSE	CONCENTRATIONS	
	MASS	ON-COLUMN			FINAL	
=====	=====	=====	=====	(ppbv/v)	(ppb v/v)	

080

ANALYST [Signature] 12/15/94
REVIEW Michelle Delgado 12/15/94
DATA ENTRY M.D. 12/15/94

Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba639.d
Lab. Id. : 12381-11 Quant Type: ESTD
Inj Date : 13-DEC-1994 13:32 Autotune Date:
Operator : SLTATUM Inst ID: saturn2.i
Smp Info : TO14_SUMMA;;121394.b;2
Misc Info : ST 60 ML ZERO AIR
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 14-Dec-1994 17:00 sltatum
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0 QC Sample: BLANK
Dil Factor: 1.000 Target Version: Target 2.40
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: AIR

Compounds	QUANT SIG		RT	RESPONSE	CONCENTRATIONS	
	MASS				ON-COLUMN (ppbv/v)	FINAL (ppb v/v)
9 Methylene chloride	49.00		18.491	2846	0.13	0.13

083

ANALYST Shy Lot 12-15-94
REVIEW Michelle Delgado 12/15/94
DATA ENTRY M.D. 12/15/94

Data File: /chem/saturn2.1/121394.b/st2ba639.d

Date : 13-DEC-1994 13:32

Instrument : saturn2.1

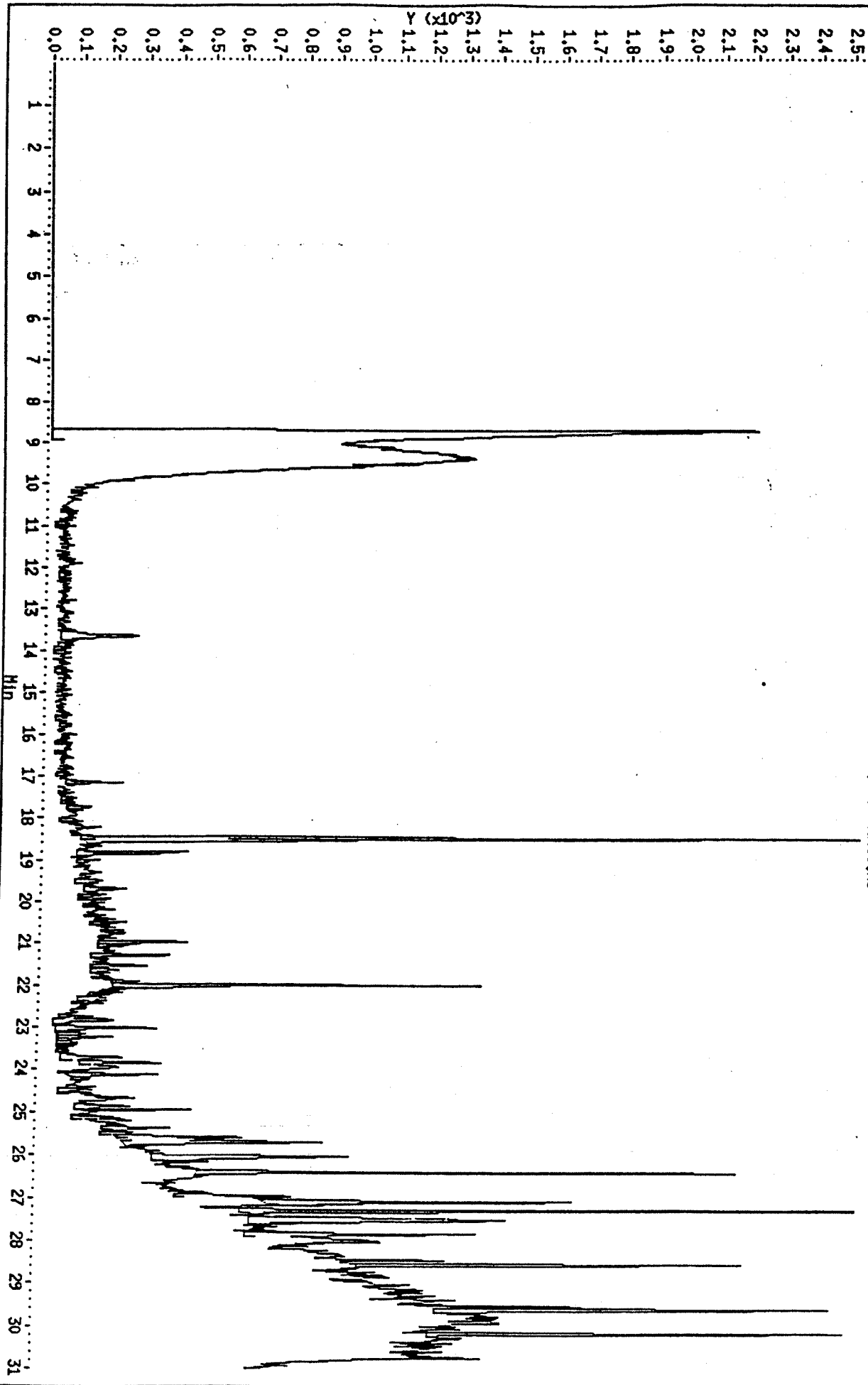
Sample ID : sp16

Column phase : DB-1

Volume Injected (ul) : 0.0

Column diameter : 0.32

/chem/saturn2.1/121394.b/st2ba639.d/st2ba639.ms



Date : 13-DEC-1994 13:32

Instrument : saturn2.1

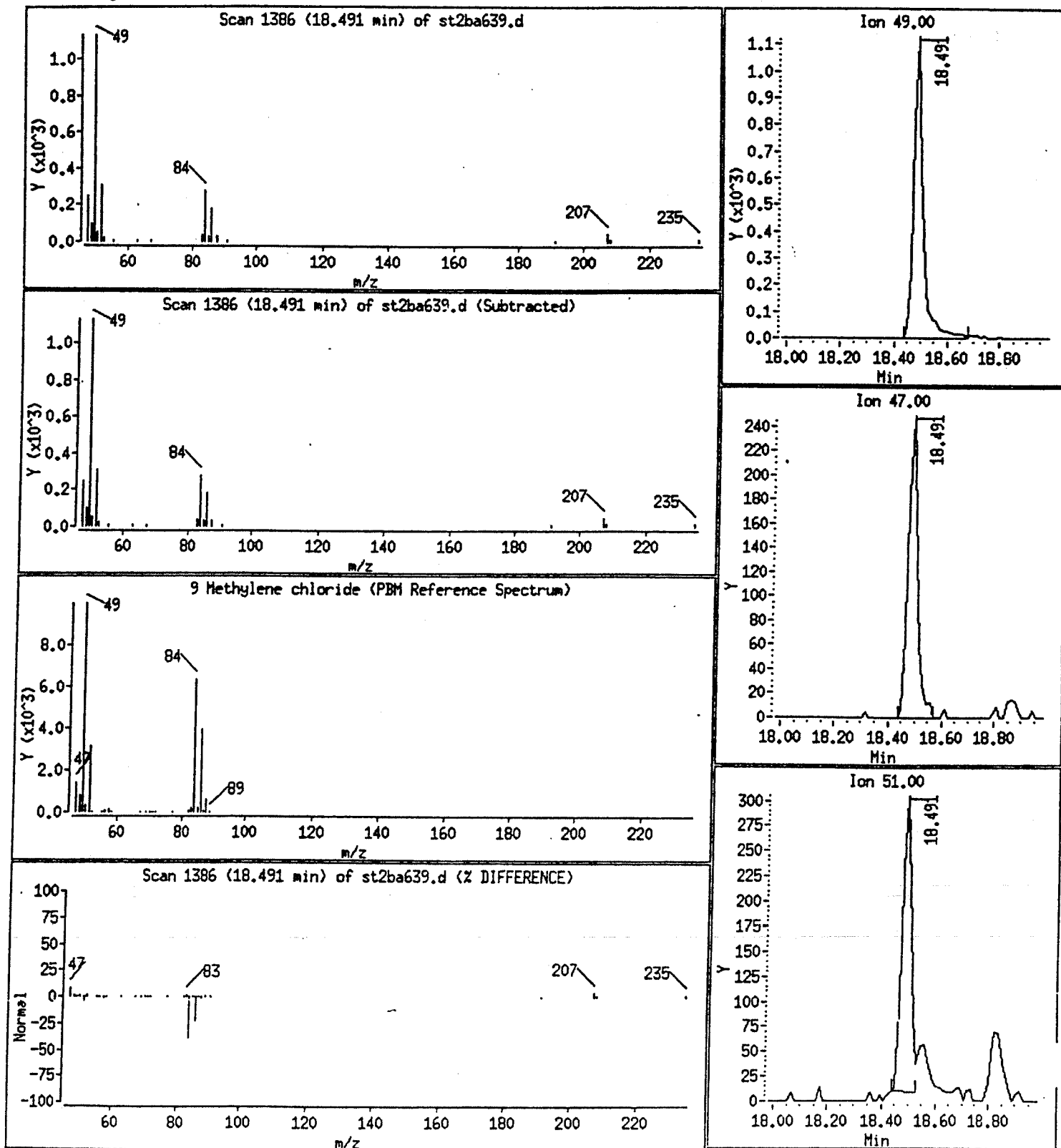
Sample ID : sp16

Column phase : DB-1

Column diameter : 0.32

Volume Injected (uL) : 0.0

9 Methylene chloride



Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba650.d
Lab. Id. : 12381-12 Quant Type: ESTD
Inj Date : 13-DEC-1994 21:00 Autotune Date:
Operator : SLTATUM Inst ID: saturn2.i
Smp Info : TO14_SUMMA;;121394.b;2
Misc Info : ST 12381-10dup 60 ML
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 14-Dec-1994 17:00 sltatum
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0 Target Version: Target 2.40
Dil Factor: 2.600 Compound Sublist: all.sub
Integrator: HP RTE
Sample Matrix: AIR

Compounds	QUANT SIG	RT	RESPONSE	CONCENTRATIONS	
	MASS			ON-COLUMN	FINAL
=====	=====	==	=====	(ppbv/v)	(ppb v/v)
				=====	=====

086

ANALYST Shy Lal 12-15-94
Date
REVIEW Michelle Delgado 12/15/94
Date
DATA ENTRY M.D. 12/15/94
Date

Data File: /chem/saturn2.1/121394.b/st2ba650.d

Date: 13-DEC-1994 21:00

Instrument: saturn2.1

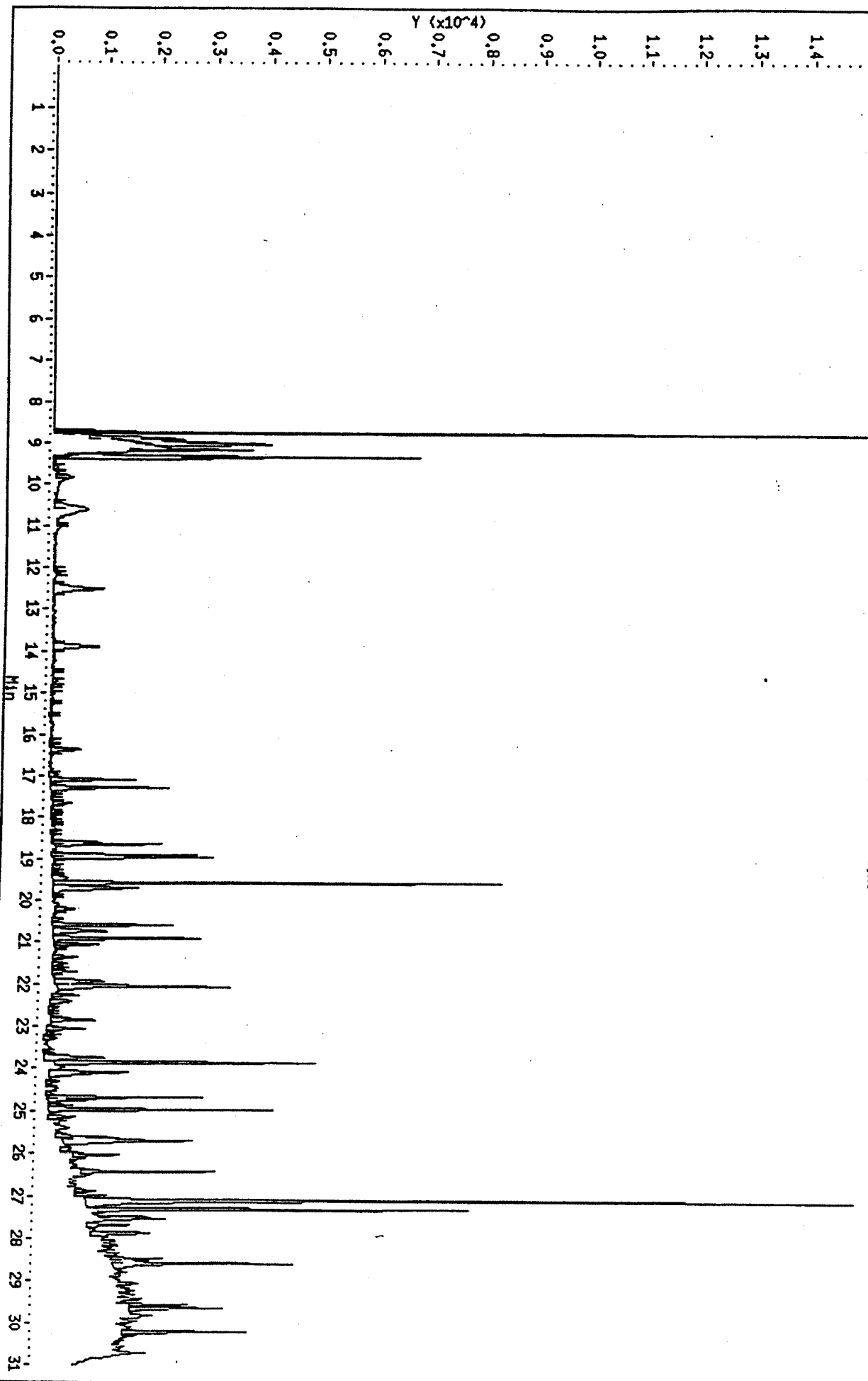
Sample ID: UNISYS SP15

Column phase: DB-1

Volume Injected (uL): 0.0

Column diameter: 0.32

/chem/saturn2.1/121394.b/st2ba650.d/st2ba650.ms





Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

CALIBRATION DATA

Inchcape Testing Services - Dallas

INITIAL CALIBRATION DATA

Start Cal Date : 08-DEC-1994 11:52
 End Cal Date : 13-DEC-1994 10:17
 Quant Method : ESTD
 Cal Curve Type : Averaged
 Target Version : Target 2.40
 Integrator : HP RTE
 Method file : /chem/saturn2.i/121394.b/TO14.m
 Cal Date : 13-Dec-1994 11:25 bsrandal

Calibration File Names:

Level 1: /chem/saturn2.i/121394.b/st2ba636.d
 Level 3: /chem/saturn2.i/121394.b/st2ba635.d
 Level 4: /chem/saturn2.i/121394.b/st2ba637.d

Compound	1	10	20		
	Level 1	Level 3	Level 4	RRF	% RSD/R ²
1 Dichlorodifluoromethane	26692	32825	31369	30296	10.578
2 Chloromethane	4665	4826	4485	4659	3.662
3 Dichlorotetrafluoroethane	33449	40347	36847	36881	9.353
4 Vinyl Chloride	5366	6739	6543	6216	11.948
5 Bromomethane	13537	15795	14949	14761	7.730
6 Chloroethane	1436	1675	1587	1566	7.738
7 Trichlorofluoromethane	28897	32036	30135	30356	5.209
8 1,1-Dichloroethene	8381	9169	8432	8661	5.096
9 Methylene chloride	17753	21572	20111	19812	9.728
11 Trichlorotrifluoroethane	24165	24258	22664	23696	3.776
13 1,1-Dichloroethane	2727	2919	2574	2740	6.308
14 cis-1,2-Dichloroethene	9742	9972	8848	9521	6.235
15 Chloroform	26882	26802	25598	26427	2.721
17 1,2-Dichloroethane	17769	19873	18727	18790	5.607
18 1,1,1-Trichloroethane	28357	27814	25400	27191	5.788
19 Benzene	20299	20447	18720	19822	4.829
20 Carbon Tetrachloride	27978	27209	25168	26785	5.421
21 1,2-Dichloropropane	8109	9252	8532	8631	6.699
22 Trichloroethene	13179	13878	13255	13437	2.856
23 cis-1,3-Dichloropropene	9804	11110	9866	10261	7.184
24 trans-1,3-Dichloropropene	9845	11323	10775	10648	7.019
25 1,1,2-Trichloroethane	11316	11500	10919	11245	2.642
26 Toluene	17342	18085	16667	17365	4.085
28 Ethylenedibromide	25853	29605	26149	27203	7.670
29 Tetrachloroethene	13179	13346	12080	12869	5.344
30 Chlorobenzene	29973	29274	27696	28981	4.023
32 Ethylbenzene	48279	52034	46766	49027	5.533
33 m,p-Xylene	14574	15010	14000	14529	3.487
34 Styrene	6834	8270	7427	7510	9.609

Inchcape Testing Services - Dallas

INITIAL CALIBRATION DATA

Start Cal Date : 08-DEC-1994 11:52
 End Cal Date : 13-DEC-1994 10:17
 Quant Method : ESTD
 Cal Curve Type : Averaged
 Target Version : Target 2.40
 Integrator : HP RTE
 Method file : /chem/saturn2.i/121394.b/TO14.m
 Cal Date : 13-Dec-1994 11:25 bsrandal

Compound	1 Level 1	10 Level 3	20 Level 4	RRF	% RSD/R ²
35 1,1,2,2-Tetrachloroethane	33249	32484	28938	31557	7.288
36 o-Xylene	13204	14696	15009	14304	6.746
37 4-Ethyltoluene	29047	33946	29069	30688	9.196
38 1,3,5-Trimethylbenzene	27663	33226	23043	27978	18.223
39 1,2,4-Trimethylbenzene	43972	44314	40474	42920	4.951
40 Benzylchloride	2201	2774	3226	2734	18.799
41 1,3-Dichlorobenzene	29824	33599	31932	31785	5.952
42 1,4-Dichlorobenzene	37273	32456	31932	33887	8.687
43 1,2-Dichlorobenzene	29993	29490	28004	29163	3.545
44 1,2,4-Trichlorobenzene	15641	15334	15593	15523	1.063
45 Hexachlorobutadiene	22028	20997	20127	21051	4.518
\$ 12 Bromochloromethane	++++	++++	++++	0.00000	++++ <-
\$ 16 1,4-Difluorobenzene	++++	++++	++++	0.00000	++++ <-
\$ 27 Chlorobenzene-d5	++++	++++	++++	0.00000	++++ <-
\$ 31 Bromofluorobenzene	++++	++++	++++	0.00000	++++ <-

Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba636.d
Lab. Id. : 1 PPBV/V STD Quant Type: ESTD
Inj Date : 13-DEC-1994 10:17 Autotune Date:
Operator : S. TATUM Inst ID: saturn2.i
Smp Info : TO-14 CAL STD
Misc Info : ST 1 PPBV/V STD
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 13-Dec-1994 11:38 bsrandal
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0 Calibration Sample, Level: 1
Dil Factor: 1.000 Target Version: Target 2.40
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: AIR

Compounds	QUANT SIG		RT	RESPONSE	CONCENTRATIONS	
	MASS				ON-COLUMN	FINAL
	=====	=====	==	=====	(ppbv/v)	(ug/L) (ppbv/v)
1 Dichlorodifluoromethane	85.00		10.810	26692	0.88	0.88
2 Chloromethane	50.00		11.945	4665	1.00	1.00(M)
3 Dichlorotetrafluoroethane	85.00		12.972	33449	0.90	0.90(M)
4 Vinyl Chloride	62.00		13.250	5366	0.86	0.86
5 Bromomethane	94.00		14.784	13537	0.91	0.91
6 Chloroethane	49.00		15.463	1436	0.91	0.91(M)
7 Trichlorofluoromethane	101.00		17.253	28897	0.95	0.95
8 1,1-Dichloroethene	96.00		18.278	8381	0.96	0.96
9 Methylene chloride	49.00		18.532	17753	0.89	0.89
11 Trichlorotrifluoroethane	101.00		18.904	24165	1.02	1.02
13 1,1-Dichloroethane	83.00		19.824	2727	0.99	0.99
14 cis-1,2-Dichloroethene	96.00		20.624	9742	1.02	1.02
15 Chloroform	83.00		20.891	26882	1.01	1.01
17 1,2-Dichloroethane	62.00		21.478	17769	0.94	0.94
18 1,1,1-Trichloroethane	97.00		21.665	28357	1.04	1.04
19 Benzene	78.00		22.023	20299	1.02	1.02
20 Carbon Tetrachloride	117.00		22.130	27978	1.04	1.04
21 1,2-Dichloropropane	63.00		22.625	8109	0.93	0.93
22 Trichloroethene	130.00		22.785	13179	0.98	0.98
23 cis-1,3-Dichloropropene	75.00		23.385	14706	1.43	1.43
24 trans-1,3-Dichloropropene	75.00		23.745	9845	0.92	0.92
25 1,1,2-Trichloroethane	83.00		23.865	11316	1.00	1.00
26 Toluene	92.00		24.065	17342	0.99	0.99
28 Ethylenedibromide	107.00		24.532	25853	0.95	0.95
29 Tetrachloroethene	166.00		24.838	13179	1.02	1.02
30 Chlorobenzene	112.00		25.318	29973	1.03	1.03
32 Ethylbenzene	91.00		25.558	48279	0.98	0.98
33 m,p-Xylene	106.00		25.666	29149	2.00	2.00
34 Styrene	104.00		25.918	6834	0.91	0.91

Compounds	QUANT SIG MASS	RT	RESPONSE	CONCENTRATIONS	
				ON-COLUMN (ppbv/v)	FINAL (ug/L) (ppbv/v)
35 1,1,2,2-Tetrachloroethane	83.00	25.984	33249	1.05	1.05
36 o-Xylene	106.00	25.998	13204	0.92	0.92
37 4-Ethyltoluene	105.00	26.945	29047	0.94	0.94(M)
38 1,3,5-Trimethylbenzene	105.00	26.945	27663	0.98	0.98(M)
39 1,2,4-Trimethylbenzene	105.00	27.292	43972	1.02	1.02
40 Benzylchloride	91.00	27.439	2201	0.80	0.80(M)
41 1,3-Dichlorobenzene	146.00	27.451	29824	0.93	0.93
42 1,4-Dichlorobenzene	146.00	27.491	37273	1.10	1.10(M)
43 1,2-Dichlorobenzene	146.00	27.812	29993	1.02	1.02
44 1,2,4-Trichlorobenzene	180.00	29.610	15641	1.00	1.00
45 Hexachlorobutadiene	225.00	30.184	22028	1.04	1.04

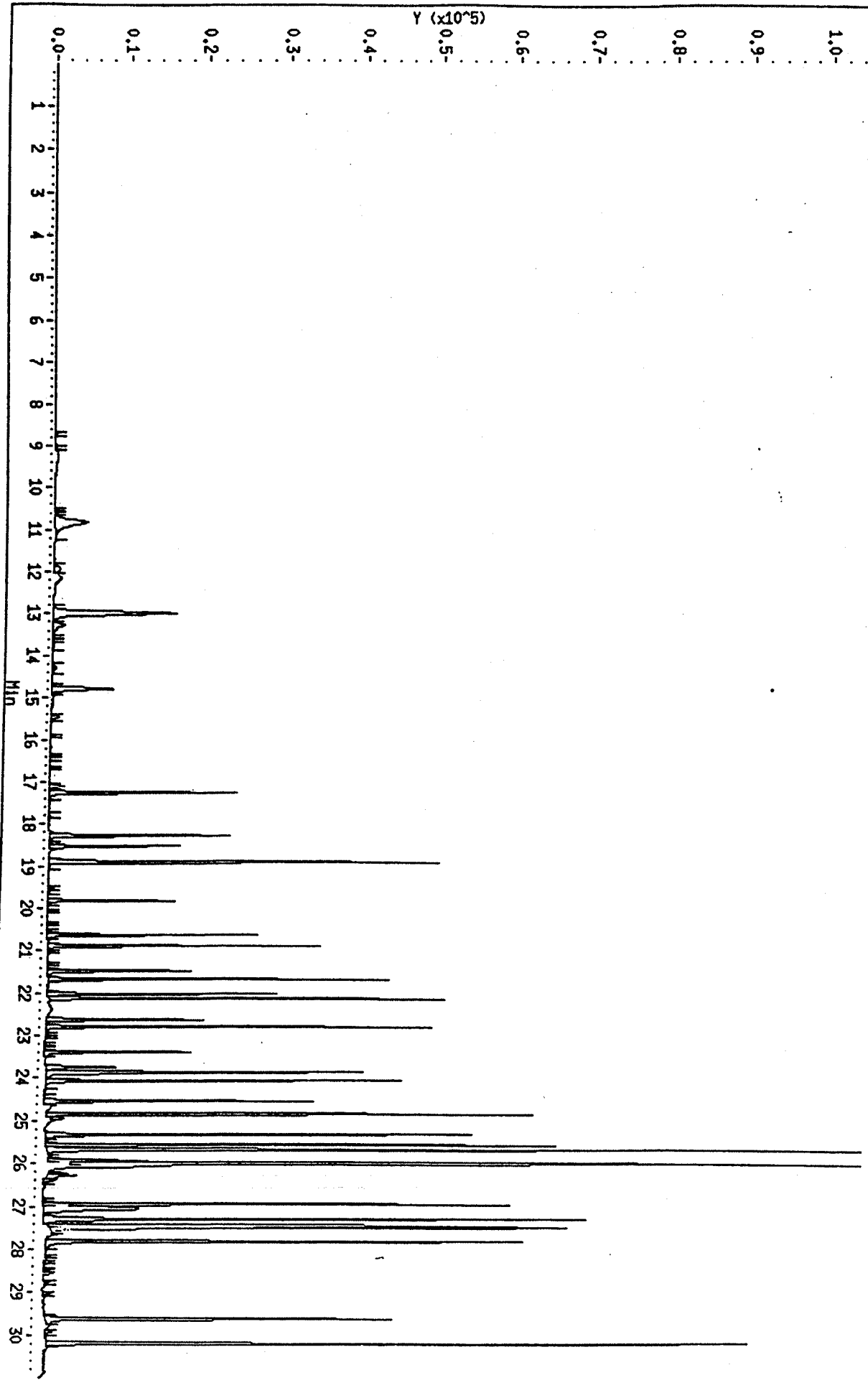
QC Flag Legend

- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File : chem/saturn2.1/121394.b/st2ba636.d
 Date : 13-DEC-1994 10:17
 Instrument : saturn2.1
 Sample ID : SP1
 Column phase : DB-1
 Volume Injected (uL) : 0.0

Column diameter : 0.32

/chem/saturn2.1/121394.b/st2ba636.d/st2ba636.ms



Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba635.d
Lab. Id. : 10 PPBV/V STD Quant Type: ESTD
Inj Date : 13-DEC-1994 09:37 Autotune Date:
Operator : S. TATUM Inst ID: saturn2.i
Smp Info : TO-14 CAL STD
Misc Info : ST 10 PPBV/V STD
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 13-Dec-1994 11:38 bsrandal
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0 Calibration Sample, Level: 3
Dil Factor: 1.000 Target Version: Target 2.40
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: AIR

Compounds	QUANT SIG		RT	RESPONSE	CONCENTRATIONS	
	MASS	====			ON-COLUMN (ppbv/v)	FINAL (ppbv/v)
1 Dichlorodifluoromethane	85.00	==	10.853	328255	10.15	10.15
2 Chloromethane	50.00		11.853	48264	9.83	9.83(M)
3 Dichlorotetrafluoroethane	85.00		12.920	403477	10.13	10.13(M)
4 Vinyl Chloride	62.00		13.187	67391	9.84	9.84(M)
5 Bromomethane	94.00		14.720	157956	9.98	9.98(M)
6 Chloroethane	49.00		15.415	16757	10.29	10.29
7 Trichlorofluoromethane	101.00		17.255	320360	9.85	9.85
8 1,1-Dichloroethene	96.00		18.267	91698	9.77	9.77
9 Methylene chloride	49.00		18.521	215729	10.18	10.18(M)
11 Trichlorotrifluoroethane	101.00		18.908	242589	9.51	9.51
13 1,1-Dichloroethane	83.00		19.813	29190	9.96	9.96
14 cis-1,2-Dichloroethene	96.00		20.627	99725	9.62	9.62
15 Chloroform	83.00		20.881	268020	9.68	9.68
17 1,2-Dichloroethane	62.00		21.469	198733	9.81	9.81
18 1,1,1-Trichloroethane	97.00		21.668	278145	9.50	9.50
19 Benzene	78.00		22.015	204479	9.79	9.79
20 Carbon Tetrachloride	117.00		22.134	272094	9.49	9.49
21 1,2-Dichloropropane	63.00		22.616	92526	9.81	9.81
22 Trichloroethene	130.00		22.789	138784	9.65	9.65
23 cis-1,3-Dichloropropene	75.00		23.374	166664	14.68	14.68
24 trans-1,3-Dichloropropene	75.00		23.720	113233	9.29	9.29
25 1,1,2-Trichloroethane	83.00		23.855	115005	9.33	9.33
26 Toluene	92.00		24.054	180856	9.62	9.62
28 Ethylenedibromide	107.00		24.533	296056	9.95	9.95
29 Tetrachloroethene	166.00		24.841	133465	9.39	9.39
30 Chlorobenzene	112.00		25.321	292740	9.29	9.29
32 Ethylbenzene	91.00		25.548	520349	9.79	9.79
33 m,p-Xylene	106.00		25.659	300212	18.86	18.86
34 Styrene	104.00		25.907	82701	8.06	8.06

Compounds	QUANT SIG MASS	RT	RESPONSE	CONCENTRATIONS	
				ON-COLUMN (ppbv/v)	FINAL 10.4 (ppbv/v) <i>12-15-94</i>
35 1,1,2,2-Tetrachloroethane	83.00	25.974	324840	9.45	9.45
36 o-Xylene	106.00	25.987	146969	9.18	9.18
37 4-Ethyltoluene	105.00	26.935	339462	11.76	11.76(H)
38 1,3,5-Trimethylbenzene	105.00	26.935	332261	9.93	9.93(H)
39 1,2,4-Trimethylbenzene	105.00	27.281	443142	9.42	9.42
40 Benzylchloride	91.00	27.414	27741	8.31	8.31
41 1,3-Dichlorobenzene	146.00	27.442	335991	9.35	9.35
42 1,4-Dichlorobenzene	146.00	27.494	324567	8.69	8.69(H)
43 1,2-Dichlorobenzene	146.00	27.801	294906	9.10	9.10
44 1,2,4-Trichlorobenzene	180.00	29.600	153346	9.02	9.02
45 Hexachlorobutadiene	225.00	30.187	209974	9.18	9.18

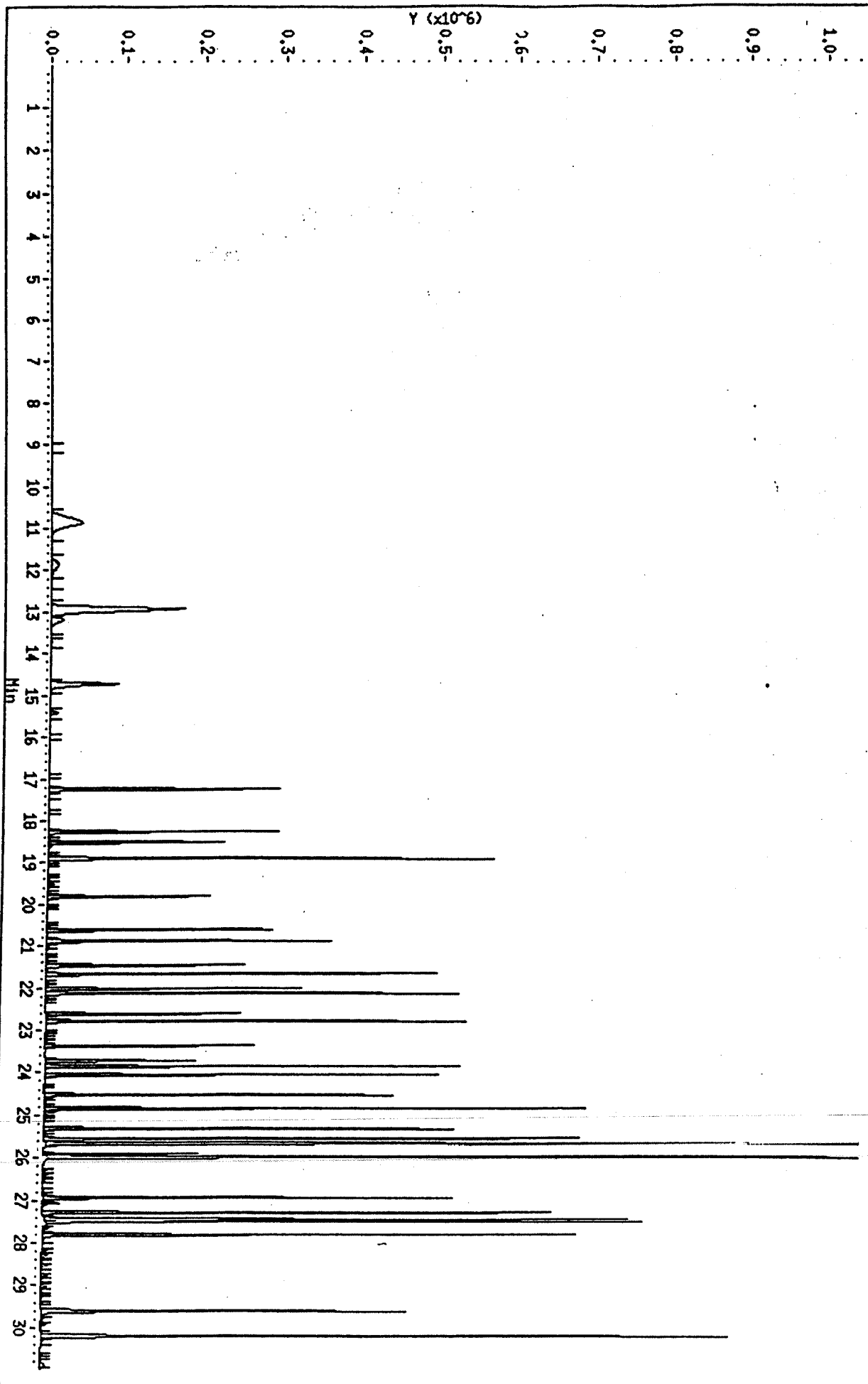
QC Flag Legend

- M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/saturn2.1/121394.b/st2ba635.d
Date : 13-DEC-1994 09:37
Instrument : saturn2.1
Sample ID : SP1
Column phase : DB-1
Volume Injected (uL) : 0.0

Column diameter : 0.32

/chem/saturn2.1/121394.b/st2ba635.d/st2ba635.ms



Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba637.d
Lab. Id. : 20 PPBV/V STD Quant Type: ESTD
Inj Date : 13-DEC-1994 11:00 Autotune Date:
Operator : S. TATUM Inst ID: saturn2.i
Smp Info : TO-14 CAL STD
Misc Info : ST 20 PPBV/V STD
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 13-Dec-1994 11:38 bsrandal
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0 Calibration Sample, Level: 4
Dil Factor: 1.000 Target Version: Target 2.40
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: AIR

Compounds	QUANT SIG		RESPONSE	CONCENTRATIONS	
	MASS	RT		ON-COLUMN (ppbv/v)	FINAL (ug/L) (ppbv/v)
1 Dichlorodifluoromethane	85.00	10.798	627396	20.70	20.70
2 Chloromethane	50.00	11.850	89707	19.25	19.25
3 Dichlorotetrafluoroethane	85.00	12.891	736943	19.98	19.98
4 Vinyl Chloride	62.00	13.156	130866	21.05	21.05(M)
5 Bromomethane	94.00	14.677	298990	20.25	20.25
6 Chloroethane	49.00	15.372	31742	20.26	20.26
7 Trichlorofluoromethane	101.00	17.225	602702	19.85	19.85
8 1,1-Dichloroethene	96.00	18.239	168647	19.47	19.47
9 Methylene chloride	49.00	18.492	402223	20.30	20.30
11 Trichlorotrifluoroethane	101.00	18.878	453288	19.12	19.12
13 1,1-Dichloroethane	83.00	19.798	51481	18.78	18.78
14 cis-1,2-Dichloroethene	96.00	20.598	176971	18.58	18.58
15 Chloroform	83.00	20.864	511969	19.37	19.37
17 1,2-Dichloroethane	62.00	21.451	374553	19.93	19.93
18 1,1,1-Trichloroethane	97.00	21.652	508010	18.68	18.68
19 Benzene	78.00	21.998	374410	18.88	18.88
20 Carbon Tetrachloride	117.00	22.118	503369	18.79	18.79
21 1,2-Dichloropropane	63.00	22.598	170643	19.77	19.77
22 Trichloroethene	130.00	22.771	265101	19.72	19.72
23 cis-1,3-Dichloropropene	75.00	23.359	296000	28.84	28.84
24 trans-1,3-Dichloropropene	75.00	23.706	215510	20.24	20.24
25 1,1,2-Trichloroethane	83.00	23.839	218381	19.42	19.42
26 Toluene	92.00	24.038	333349	19.19	19.19
28 Ethylenedibromide	107.00	24.519	522982	19.22	19.22
29 Tetrachloroethene	166.00	24.824	241610	18.77	18.77
30 Chlorobenzene	112.00	25.305	553939	19.11	19.11
32 Ethylbenzene	91.00	25.546	935323	19.07	19.07
33 m,p-Xylene	106.00	25.651	560019	38.54	38.54
34 Styrene	104.00	25.892	148547	19.77	19.77

Compounds	QUANT SIG		RESPONSE	CONCENTRATIONS	
	MASS	RT		ON-COLUMN (ppbv/v)	FINAL <i>12-15-94</i> <i>(ppbv/v)</i>
=====	=====	=====	=====	=====	=====
35 1,1,2,2-Tetrachloroethane	83.00	25.958	578765	18.34	18.34
36 o-Xylene	106.00	25.972	300192	20.98	20.98
37 4-Ethyltoluene	105.00	26.933	581398	18.94	18.94(M)
38 1,3,5-Trimethylbenzene	105.00	26.933	460874	16.47	16.47(M)
39 1,2,4-Trimethylbenzene	105.00	27.279	809490	18.86	18.86
40 Benzylchloride	91.00	27.398	64530	23.60	23.60(M)
41 1,3-Dichlorobenzene	146.00	27.424	623953	19.78	19.78(M)
42 1,4-Dichlorobenzene	146.00	27.477	638642	18.84	18.84
43 1,2-Dichlorobenzene	146.00	27.786	560095	19.20	19.20
44 1,2,4-Trichlorobenzene	180.00	29.585	311877	20.09	20.09
45 Hexachlorobutadiene	225.00	30.171	402558	19.12	19.12

QC Flag Legend

- M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: new/saturn2.1/121394.b/st2ba637.d

Date: 13-DEC-1994 11:00

Instrument: saturn2.1

Sample ID: SP1

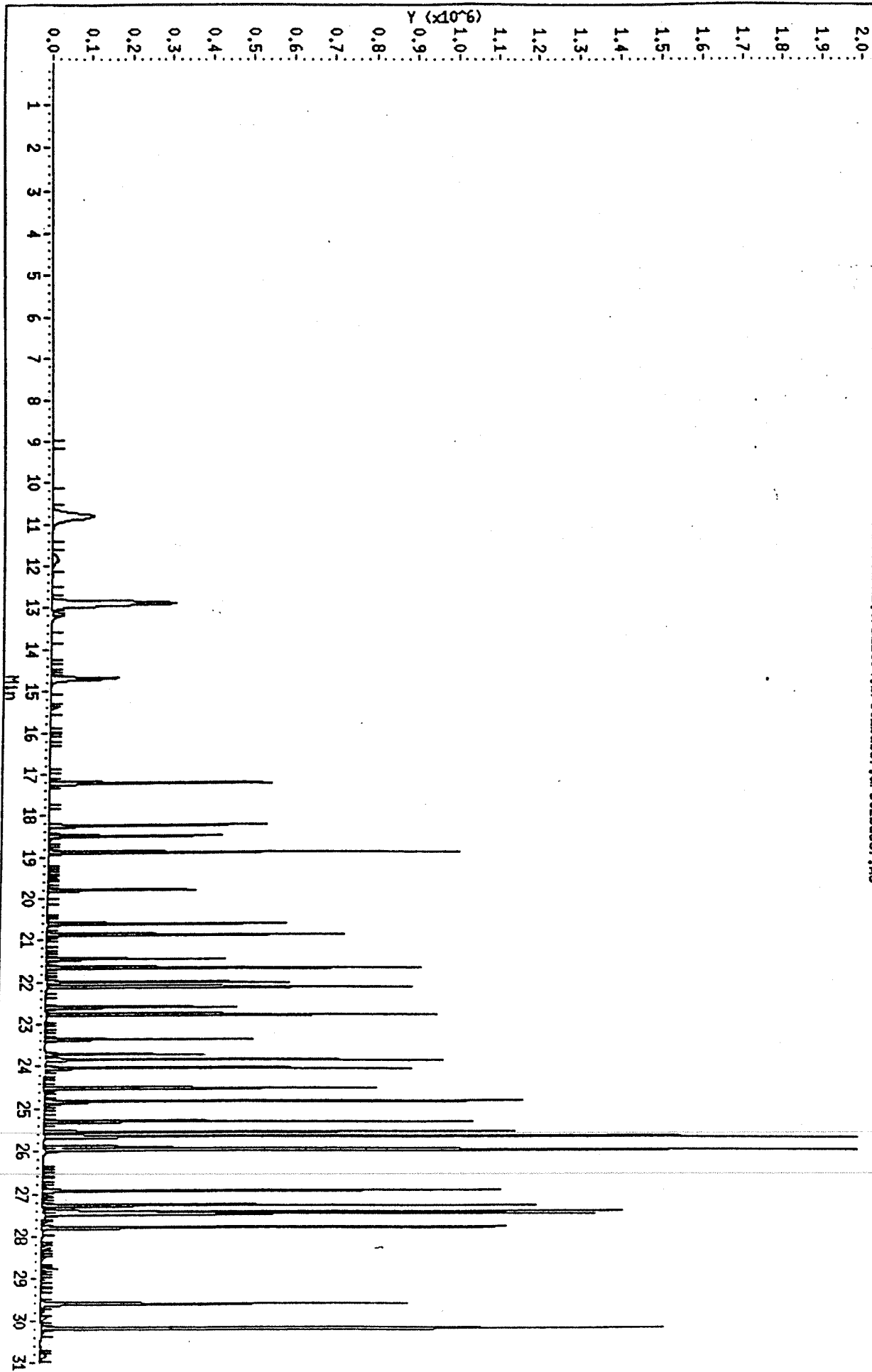
Column phase: DB-1

Volume Injected (uL): 0.0

Page 3

Column diameter: 0.32

/chem/saturn2.1/121394.b/st2ba637.d/st2ba637.ms



Inchcape Testing Services - Dallas

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: saturn2.i Injection Date: 13-DEC-1994 09:37
Lab File ID: st2ba635.d Init. Calibration Date(s): 12/08/94 12/13/94
Analysis Type: AIR Init. Calibration Times: 11:52 11:00
Lab Sample ID: 10 PPBV/V STD Method File: /chem/saturn2.i/121394.b/TO14.m
Quant Type: ESTD

COMPOUND	RRF	RF10	MIN RRF	2D	MAX 2D
1 Dichlorodifluoromethane	30295.767	32825.500	0.010	8.4	40.0
2 Chloromethane	4658.917	4826.400	0.010	3.6	40.0
3 Dichlorotetrafluoroethane	36881.283	40347.700	0.010	9.4	40.0
4 Vinyl Chloride	6216.133	6739.100	0.010	8.4	40.0
5 Bromomethane	14760.700	15795.600	0.010	7.0	40.0
6 Chloroethane	1566.267	1675.700	0.010	7.0	40.0
7 Trichlorofluoromethane	30356.033	32036.000	0.010	5.5	40.0
8 1,1-Dichloroethene	8661.050	9169.800	0.010	5.9	40.0
9 Methylene chloride	19812.350	21572.900	0.010	8.9	40.0
11 Trichlorotrifluoroethane	23696.100	24258.900	0.010	2.4	40.0
\$ 12 Bromochloromethane	++++	++++	0.010	++++	40.0 <-
13 1,1-Dichloroethane	2740.017	2919.000	0.010	6.5	40.0
14 cis-1,2-Dichloroethene	9521.017	9972.500	0.010	4.7	40.0
15 Chloroform	26427.483	26802.000	0.010	1.4	40.0
\$ 16 1,4-Difluorobenzene	++++	++++	0.010	++++	40.0 <-
17 1,2-Dichloroethane	18789.983	19873.300	0.010	5.8	40.0
18 1,1,1-Trichloroethane	27190.667	27814.500	0.010	2.3	40.0
19 Benzene	19822.467	20447.900	0.010	3.2	40.0
20 Carbon Tetrachloride	26785.283	27209.400	0.010	1.6	40.0
21 1,2-Dichloropropane	8631.250	9252.600	0.010	7.2	40.0
22 Trichloroethene	13437.483	13878.400	0.010	3.3	40.0
23 cis-1,3-Dichloropropene	10260.533	11110.933	0.010	8.3	40.0
24 trans-1,3-Dichloropropene	10647.933	11323.300	0.010	6.3	40.0
25 1,1,2-Trichloroethane	11245.183	11500.500	0.010	2.3	40.0
26 Toluene	17365.017	18085.600	0.010	4.1	40.0
\$ 27 Chlorobenzene-d5	++++	++++	0.010	++++	40.0 <-
28 Ethylenedibromide	27202.567	29605.600	0.010	8.8	40.0
29 Tetrachloroethene	12868.667	13346.500	0.010	3.7	40.0
30 Chlorobenzene	28981.317	29274.000	0.010	1.0	40.0
\$ 31 Bromofluorobenzene	++++	++++	0.010	++++	40.0 <-
32 Ethylbenzene	49026.683	52034.900	0.010	6.1	40.0
33 m,p-Xylene	14528.525	15010.600	0.010	3.3	40.0
34 Styrene	7510.483	8270.100	0.010	10.1	40.0
35 1,1,2,2-Tetrachloroethane	31557.083	32484.000	0.010	2.9	40.0
36 o-Xylene	14303.500	14696.900	0.010	2.8	40.0
37 4-Ethyltoluene	30687.700	33946.200	0.010	10.6	40.0
38 1,3,5-Trimethylbenzene	27977.600	33226.100	0.010	18.8	40.0
39 1,2,4-Trimethylbenzene	42920.233	44314.200	0.010	3.2	40.0
40 Benzylchloride	2733.867	2774.100	0.010	1.5	40.0
41 1,3-Dichlorobenzene	31540.250	33599.100	0.010	6.5	40.0

Inchcape Testing Services - Dallas

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: saturn2.i Injection Date: 13-DEC-1994 09:37
Lab File ID: st2ba635.d Init. Calibration Date(s): 12/08/94 12/13/94
Analysis Type: AIR Init. Calibration Times: 11:52 11:00
Lab Sample ID: 10 PPBV/V STD Method File: /chem/saturn2.i/121394.b/TO14.m
Quant Type: ESTD

COMPOUND	RRF	RF10	MIN RRF	2D	MAX 2D
42 1,4-Dichlorobenzene	33887.267	32456.700	0.010	4.2	40.0
43 1,2-Dichlorobenzene	29162.783	29490.600	0.010	1.1	40.0
44 1,2,4-Trichlorobenzene	15523.150	15334.600	0.010	1.2	40.0
45 Hexachlorobutadiene	21051.100	20997.400	0.010	0.3	40.0

Inchcape Testing Services - Dallas

VOLATILE SAMPLE REPORT * Method TO-14

Data file : /chem/saturn2.i/121394.b/st2ba635.d
Lab. Id. : 10 PPBV/V STD Quant Type: ESTD
Inj Date : 13-DEC-1994 09:37 Autotune Date:
Operator : S. TATUM Inst ID: saturn2.i
Smp Info : TO-14 CAL STD
Misc Info : ST 10 PPBV/V STD
Comment :
Method : /chem/saturn2.i/121394.b/TO14.m
Meth Date : 13-Dec-1994 13:49 bsrandal
Cal Date : 13-DEC-1994 09:37 Cal File: st2ba635.d
Als bottle: 0 Continuing Calibration Sample
Dil Factor: 1.000 Target Version: Target 2.40
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: AIR

Compounds	QUANT SIG			CONCENTRATIONS	
	MASS	RT	RESPONSE	ON-COLUMN (ppbv/v)	FINAL (ppbv/v)
1 Dichlorodifluoromethane	85.00	10.853	328255	10.83	10.83
2 Chloromethane	50.00	11.853	48264	10.35	10.35(M)
3 Dichlorotetrafluoroethane	85.00	12.920	403477	10.94	10.94(M)
4 Vinyl Chloride	62.00	13.187	67391	10.84	10.84(M)
5 Bromomethane	94.00	14.720	157956	10.70	10.70(M)
6 Chloroethane	49.00	15.415	16757	10.69	10.69
7 Trichlorofluoromethane	101.00	17.255	320360	10.55	10.55
8 1,1-Dichloroethene	96.00	18.267	91698	10.58	10.58
9 Methylene chloride	49.00	18.521	215729	10.88	10.88(M)
11 Trichlorotrifluoroethane	101.00	18.908	242589	10.23	10.23
13 1,1-Dichloroethane	83.00	19.813	29190	10.65	10.65
14 cis-1,2-Dichloroethene	96.00	20.627	99725	10.47	10.47
15 Chloroform	83.00	20.881	268020	10.14	10.14
17 1,2-Dichloroethane	62.00	21.469	198733	10.57	10.57
18 1,1,1-Trichloroethane	97.00	21.668	278145	10.22	10.22
19 Benzene	78.00	22.015	204479	10.31	10.31
20 Carbon Tetrachloride	117.00	22.134	272094	10.15	10.15
21 1,2-Dichloropropane	63.00	22.616	92526	10.72	10.72
22 Trichloroethene	130.00	22.789	138784	10.32	10.32
23 cis-1,3-Dichloropropene	75.00	23.374	166664	16.24	16.24
24 trans-1,3-Dichloropropene	75.00	23.720	113233	10.63	10.63
25 1,1,2-Trichloroethane	83.00	23.855	115005	10.22	10.22
26 Toluene	92.00	24.054	180856	10.41	10.41
28 Ethylenedibromide	107.00	24.533	296056	10.88	10.88
29 Tetrachloroethene	166.00	24.841	133465	10.37	10.37
30 Chlorobenzene	112.00	25.321	292740	10.10	10.10
32 Ethylbenzene	91.00	25.548	520349	10.61	10.61
33 m,p-Xylene	106.00	25.669	300212	20.66	20.66
34 Styrene	104.00	25.907	82701	11.01	11.01

Compounds	QUANT SIG		RT	RESPONSE	CONCENTRATIONS	
	MASS	====			ON-COLUMN (ppbv/v)	FINAL (ug/L) (ppbv/v) <i>12-15-94</i>
35 1,1,2,2-Tetrachloroethane	83.00	====	25.974	324840	10.29	10.29
36 o-Xylene	106.00	====	25.987	146969	10.27	10.27
37 4-Ethyltoluene	105.00	====	26.935	339462	11.06	11.06(M)
38 1,3,5-Trimethylbenzene	105.00	====	26.935	332261	11.87	11.87(M)
39 1,2,4-Trimethylbenzene	105.00	====	27.281	443142	10.32	10.32
40 Benzylchloride	91.00	====	27.414	27741	10.14	10.14
41 1,3-Dichlorobenzene	146.00	====	27.442	335991	10.65	10.65
42 1,4-Dichlorobenzene	146.00	====	27.494	324567	9.57	9.57(H)
43 1,2-Dichlorobenzene	146.00	====	27.801	294906	10.11	10.11
44 1,2,4-Trichlorobenzene	180.00	====	29.600	153346	9.87	9.87
45 Hexachlorobutadiene	225.00	====	30.187	209974	9.97	9.97

QC Flag Legend

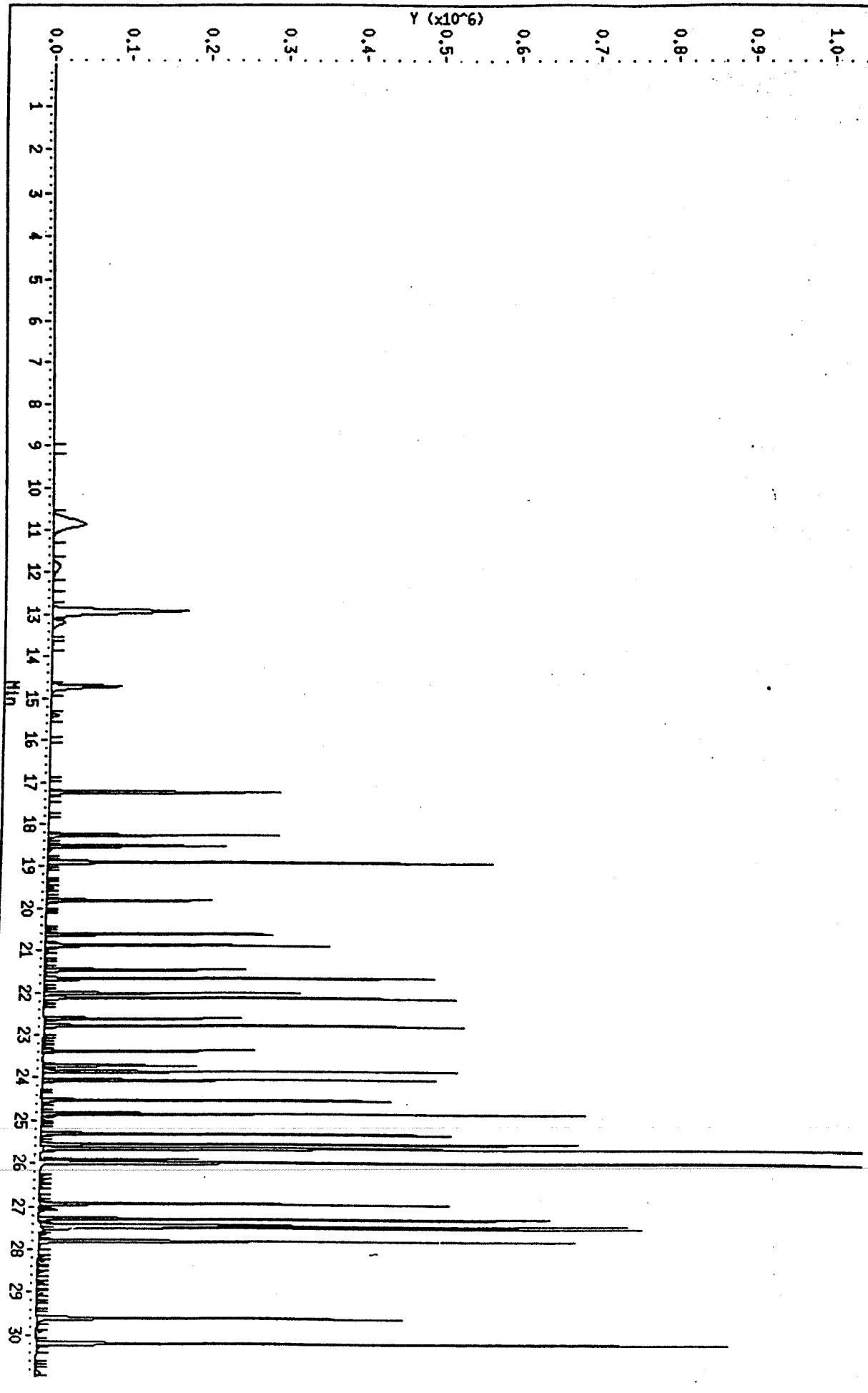
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/saturn2.1/121394.b/st2ba635.d
Date: 13-DEC-1994 09:37
Instrument: saturn2.1
Sample ID: SP1
Column phase: DB-1
Volume Injected (uL): 0.0

11.362

Column diameter: 0.32

/chem/saturn2.1/121394.b/st2ba635.d/st2ba635.ms





Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

TUNING DATA

Data File: /chem/saturn2.i/121394.b/st2ba634.d

Page 1

Date : 13-DEC-1994 09:04

Instrument : saturn2.i

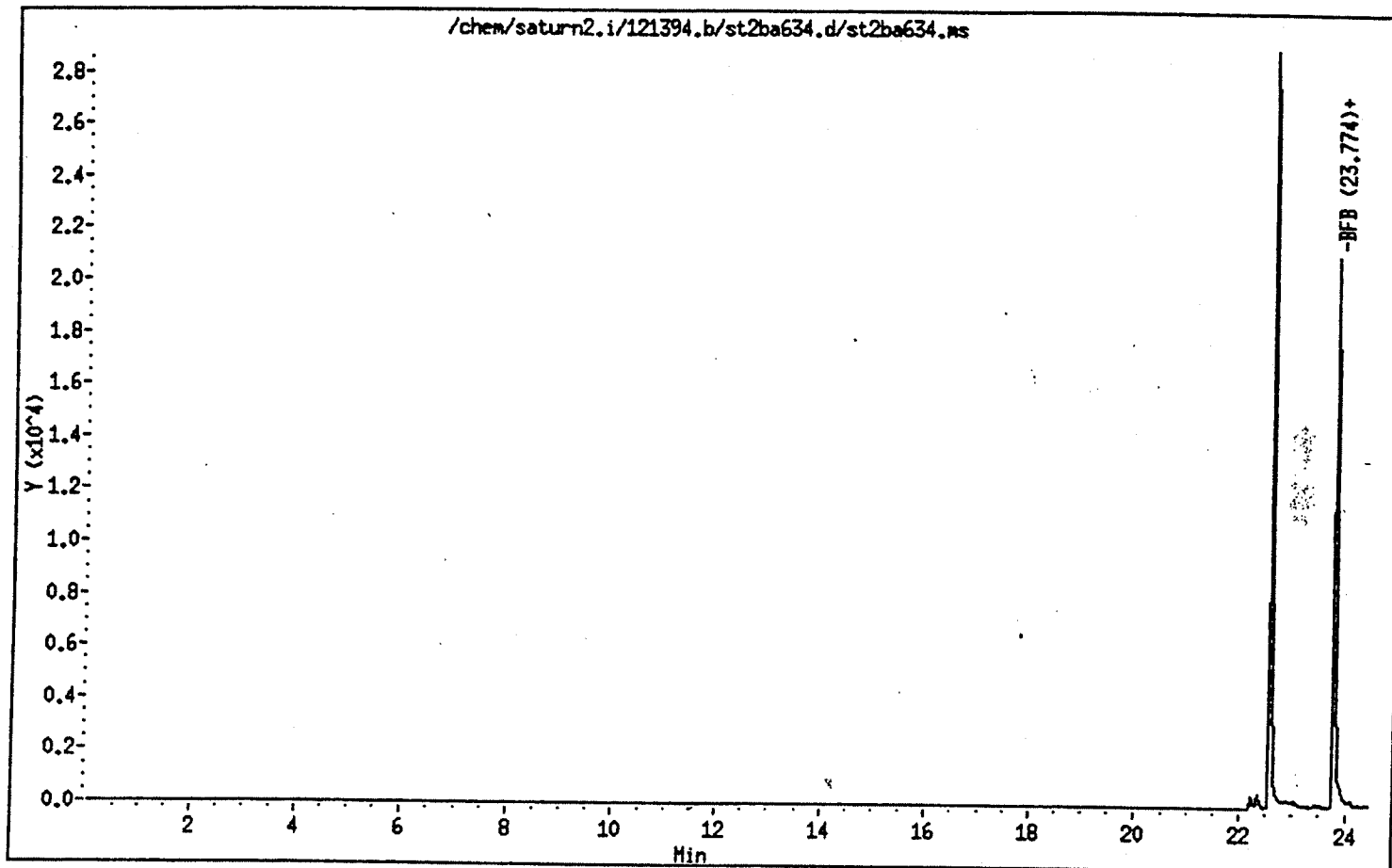
Sample ID : BFB

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0

/chem/saturn2.i/121394.b/st2ba634.d/st2ba634.ms



Date : 13-DEC-1994 09:04

Instrument : saturn2.i

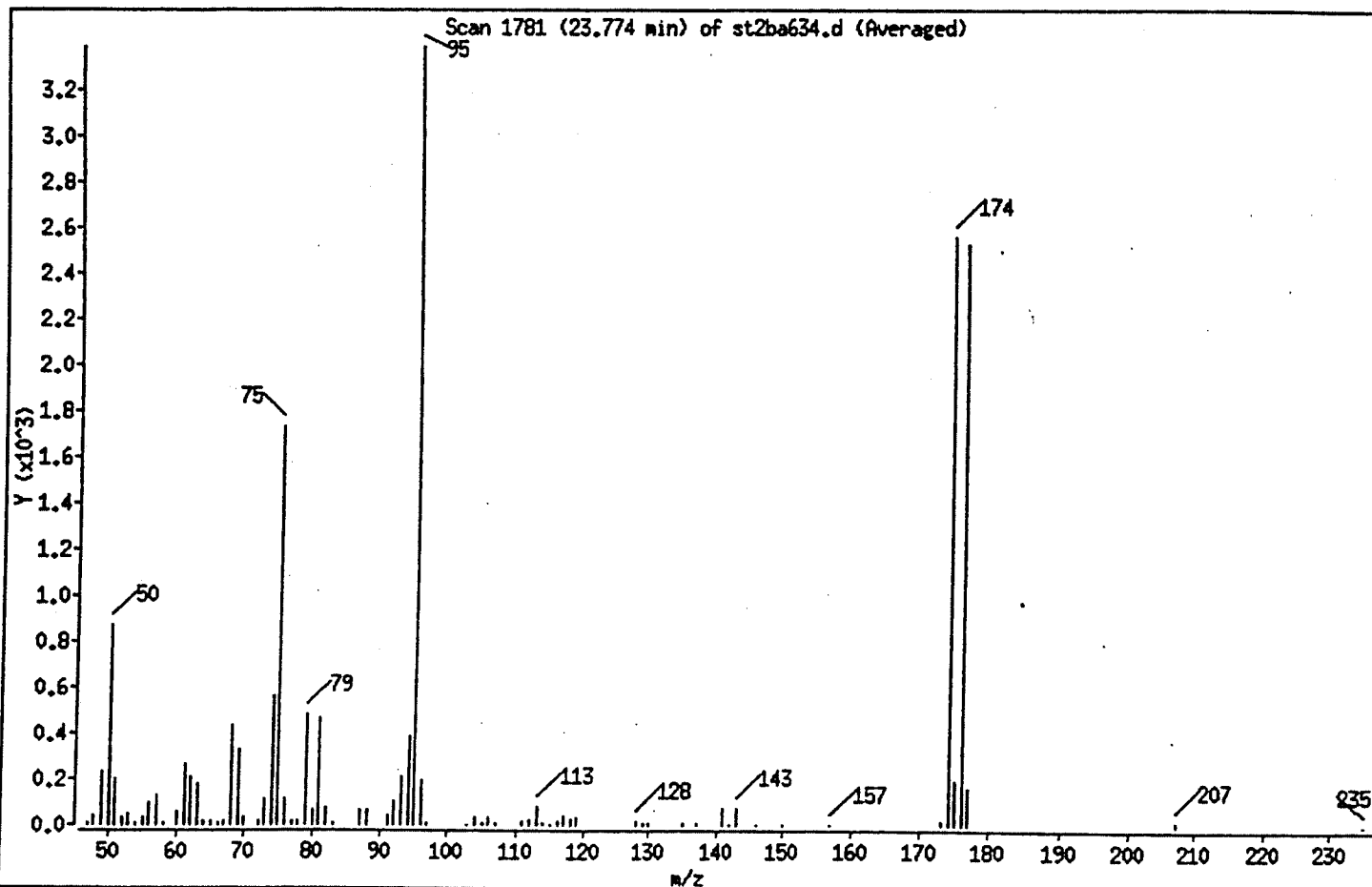
Sample ID : BFB

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.0
50	8.00 - 40.00% of mass 95	25.7
75	30.00 - 66.00% of mass 95	51.5
96	5.00 - 9.00% of mass 95	5.8
173	Less than 2.00% of mass 174	0.6
174	50.00 - 120.00% of mass 95	75.7
175	4.00 - 9.00% of mass 174	7.4
176	93.00 - 101.00% of mass 174	98.9
177	5.00 - 9.00% of mass 176	6.2

Date : 13-DEC-1994 09:04

Instrument : saturn2.i

Sample ID : BFB

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0

Spectrum: Scans 1781-1785 (23.774 min), Subtraction Scan 1776
 Location of Maximum: 95.00
 Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
47.00	11	67.00	18	92.00	100	119.00	34
48.00	38	68.00	428	93.00	205	128.00	15
49.00	232	69.00	329	94.00	385	129.00	5
50.00	868	70.00	33	95.00	3377	130.00	10
51.00	200	72.00	14	96.00	195	135.00	5
52.00	20	73.00	109	97.00	11	137.00	7
53.00	49	74.00	559	103.00	1	141.00	72
54.00	9	75.00	1739	104.00	29	142.00	3
55.00	19	76.00	108	105.00	7	143.00	75
56.00	93	77.00	16	106.00	29	146.00	3
57.00	124	78.00	7	107.00	6	150.00	2
58.00	6	79.00	482	111.00	18	157.00	2
60.00	57	80.00	64	112.00	22	173.00	16
61.00	267	81.00	460	113.00	78	174.00	2558
62.00	210	82.00	70	114.00	6	175.00	189
63.00	176	83.00	11	115.00	3	176.00	2531
64.00	15	87.00	60	116.00	17	177.00	158
65.00	15	88.00	67	117.00	30	235.00	3
66.00	8	91.00	40	118.00	24		

Flux Chamber Field Data Sheet

Date: 11/30/94 Time: 1405 Sampler: Bill Anthony

Location: FG-1 Sample # FG-1 Chamber Volume = 71.8 L

Bottle Pressure (PSI) Working Pressure (PSI): 45

Before: 2375
After: 2100

Air Temperature (C)							
Time:	Sweep Air Rate, Q, (L/min)	Residence Time (V/Q)	Grab Sample Reading (PPM)	Chamber	Ambient	Air Canister #	Comments
1405	10	0	N/A	21.0	12.6	6718	
1412	10	1		19.9	13.4		
1419	10	2		19.5	13.0		
1426	10	3		19.1	12.4		
1433	10	4		15.9	11.5		Begin Sampling @ 200m
1503	10			12.7	10.8		

Surface Description: Gravel over sandy soil

Comments: No PID available
Composite Air sample taken for 30 min

Flux Chamber Field Data Sheet

Date: 11/30/94 Time: 1520 Sampler: Rick Anthony

Location: FG 2 Sample # FG-2 Chamber Volume = 71.8 L

Bottle Pressure (PSI)

Working Pressure (PSI): 45

Before: 2100

After: _____

Air Temperature (C)							
Time:	Sweep Air Rate, Q. (L/min)	Residence Time (V/Q)	Grab Sample Reading (PPM)	Chamber	Ambient	Air Canister #	Comments
1520	10	0	N/A	11.6	10.2	6717	
1527	10	1		10.5	9.9		
1534	10	2		10.0	9.8		
1541	10	3		9.9	9.6		
1548	10	4	↓	9.6	9.4		Begin Sampling at 200 ml/min
1618				8.6	9.2		End Sampling

Surface Description: Gravel & sand

Comments: No P.D. Available
Composite Air sample taken for 30 min

Flux Chamber Field Data Sheet

Date: 12/1/94 Time: 0719 Sampler: Rick Anthony

Location: FB-2 Sample # FB-2 Chamber Volume = 71.8 L

Bottle Pressure (PSI)

Working Pressure (PSI): 45

Before: 1800

After: 1650

Air Temperature (C)

Time:	Sweep Air Rate, Q, (L/min)	Residence Time (V/Q)	Grab Sample Reading (PPM)	Chamber	Ambient	Air Canister #	Comments
0720	10	0	0.0	0.6	2.2	0710	wind SW @ 8 mph
0727	10	1	0	0.8	2.4		
0734	10	2	0	0.9	2.3		
0741	10	3	0	1.2	2.6		PID = 0
0748	10	4	0	1.5	2.8		Begin Sample @ 200.
0818				2.6	3.2		End Sample

Surface Description: Teflon pad on concrete

Comments: Used PID - Battery may be low, not sure of calibration
100 ppm Isobutylene
Composite Air sample taken for 30 min
This is the Equipment field Teflon

Flux Chamber Field Data Sheet

Date: 12/1/94 Time: 0823 Sampler: Burl Anthony
 Location: BG-1 Sample # BG-1 Chamber Volume = 71.8 L
 Bottle Pressure (PSI) Working Pressure (PSI): 45
 Before: 1650
 After: 1525

Air Temperature (C)							
Time:	Sweep Air Rate, Q, (L/min)	Residence Time (V/Q)	Grab Sample Reading (PPM)	Chamber	Ambient	Air Canister #	Comments
0823	10	0	0.0	5.7	4.6	0707	
0830	10	1	0.0	6.7	4.2		
0837	10	2	0.0	6.5	4.1		
0844	10	3	0.0	7.7	3.9		
0851	10	4	0.0	7.8	5.3		Begin sampling
0921				11.5	5.5		End sampling

@ 200 ml/min

Surface Description: Pea Gravel and sand

Comments: composite air sample taken for 30 min
This is the Background sample

Flux Chamber Field Data Sheet

Date: 12/1/94 Time: 0926 Sampler: Rail Anthony

Location: FG-5 Sample # FG-5 Chamber Volume = 71.8 L

Bottle Pressure (PSI) Working Pressure (PSI): 45

Before: 1525

After: 1350

Air Temperature (C)							
Time:	Sweep Air Rate, Q, (L/min)	Residence Time (V/Q)	Grab Sample Reading (PPM)	Chamber	Ambient	Air Canister #	Comments
0926	10	0	0	9.6	4.6	0001	
0933	10	1	0	11.4	4.9		
0940	10	2	0	11.6	4.6		
0947	10	3	0	12.2	4.2		
0954	10	4	0	12.3	4.7		Begin Sampling @ 200 m
1024			0	14.7	5.3		End Sampling

Surface Description: Grass & soil

Comments: composite air sample taken for 30 min

Flux Chamber Field Data Sheet

Date: 12/1/94 Time: 1025 Sampler: Rail Anthony

Location: FG-5 Dup Sample # FG-5 Dup Chamber Volume = 71.8 L

Bottle Pressure (PSI) Working Pressure (PSI) : 45

Before: 1350
After: 1275

Air Temperature (C)							
Time:	Sweep Air Rate, Q, (L/min)	Residence Time (V/Q)	Grab Sample Reading (PPM)	Chamber	Ambient	Air Canister #	Comments
1025	10		0.5 *	14.8	5.2	0794	Begin Sampling @ 200 ml/min
1055			N/A	16.9	4.7		End sampling

Surface Description: Soil & Grass

Comments: * ambient air PID = 0.4 ppm Battery low
Composite Air sample taken for 30 min

Flux Chamber Field Data Sheet

Date: 12/1/94 Time: 1102 Sampler: Bill Anthony

Location: FC-6 Sample # FC-6 Chamber Volume = 71.8 L

Bottle Pressure (PSI) Working Pressure (PSI): 45

Before: 1275
After: 1125

Air Temperature (C)

Time:	Sweep Air Rate, Q, (L/min)	Residence Time (V/Q)	Grab Sample Reading (PPM)	Chamber	Ambient	Air Canister #	Comments
1102	10	0	N/A	17.6	6.9	0793	
1109	10	1		16.7	7.3		
1116	10	2		17.2	6.2		
1123	10	3		17.5	6.7		
1130	10	4	↓	17.6	6.2		Begin Sampling @ 200.
1200				19.2	7.8		End sampling

Surface Description: Grass + soil

Comments: PID Not Available (N/A)
Composite air sample taken for 30 min

Company: <u>Figuring FUNDLER</u>	Company: _____	INVOICE to	ANALYSIS REQUESTED	<div style="border: 1px solid black; width: 100px; height: 100px; margin: 0 auto; text-align: center; line-height: 100px;"> (C70) </div>	<div style="border: 1px solid black; width: 100px; height: 100px; margin: 0 auto; text-align: center; line-height: 100px;"> f </div>	Lab use only Due Date: _____					
Address: <u>C.E.A.</u>	Address: _____										
Phone: <u>P.O. Box 317</u>	Phone: _____										
Contact: <u>PAUL PA 19331</u>	Contact: <u>Frank Fendler</u>										
Phone: <u>FRANK FUNDLER</u>	Phone: _____										
Phone: <u>(610) 648-2133</u>	PO/SO #: _____	Temp. of coolers when received (C): _____	<table border="1" style="width: 100px; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5	Custody Seal N/Y	Intact N/Y	Screened For Radioactivity <input type="checkbox"/>
1	2	3	4	5							
Company: <u>Figuring FUNDLER</u>	Company: _____	Temp. of coolers when received (C): _____	<table border="1" style="width: 100px; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5	Custody Seal N/Y	Intact N/Y	Screened For Radioactivity <input type="checkbox"/>
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Address: <u>C.E.A.</u>	Address: _____	Temp. of coolers when received (C): _____	<table border="1" style="width: 100px; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5	Custody Seal N/Y	Intact N/Y	Screened For Radioactivity <input type="checkbox"/>
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Phone: <u>P.O. Box 317</u>	Phone: _____	Temp. of coolers when received (C): _____	<table border="1" style="width: 100px; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5	Custody Seal N/Y	Intact N/Y	Screened For Radioactivity <input type="checkbox"/>
1	2	3	4	5							
Contact: <u>PAUL PA 19331</u>	Contact: <u>Frank Fendler</u>	Temp. of coolers when received (C): _____	<table border="1" style="width: 100px; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5	Custody Seal N/Y	Intact N/Y	Screened For Radioactivity <input type="checkbox"/>
1	2	3	4	5							
Phone: <u>FRANK FUNDLER</u>	Phone: _____	Temp. of coolers when received (C): _____	<table border="1" style="width: 100px; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5	Custody Seal N/Y	Intact N/Y	Screened For Radioactivity <input type="checkbox"/>
1	2	3	4	5							
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1	2	3	4	5							
Fax: _____		Temp. of coolers when received (C): _____	<table border="1" style="width: 100px; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5	Custody Seal N/Y	Intact N/Y	Screened For Radioactivity <input type="checkbox"/>
1	2	3	4	5							
Sampler's Name	Sampler's Signature	Temp. of coolers when received (C): _____	<table border="1" style="width: 100px; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5	Custody Seal N/Y	Intact N/Y	Screened For Radioactivity <input type="checkbox"/>
1	2	3	4	5							
<u>Bill Anthony</u>	<u>Bill Anthony</u>	Temp. of coolers when received (C): _____	<table border="1" style="width: 100px; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5	Custody Seal N/Y	Intact N/Y	Screened For Radioactivity <input type="checkbox"/>
1	2	3	4	5							

[illegible]

Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)	Date:	Time:	Remarks	
<i>Bill Anthony</i>								<i>CLP Reporting</i>
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)	Date:	Time:		
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)	Date:	Time:		

Client's delivery of samples constitutes acceptance of Indscape/NDRC's terms and conditions contained in the Price Schedule.

Matrix	W - Water	S - Soil	SD - Solid	L - Liquid	A - Air Bag	C - Charcoal tube	SL - Sludge	O - Oil
Container	WW - Wastewater	A/G - Amber / Or Glass	1 Liter	250 ml - Glass wide mouth		P/O - Plastic or other		
	VOA - 40 ml vial							

NDRC cannot accept verbal changes.
Please Fax written changes to
214-238-5592

OFFICE USE ONLY

[illegible]

	W - Water	S - Soil	SD - Solid	L - Liquid	A - Air Bag	C - Charcoal tube	SL - Sludge	O - Oil
' Matrix				250 ml -		P/O - Plastic or other		
' Container	WW - Wastewater							
	VOA - 40 ml vial		A/G - Amber / Or Glass 1 Liter					

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[illegible]

Matrix	WW - Wastewater VOA - 40 ml vial	W - Water A/G - Amber / Or Glass	S - Soil SD - Solid	L - Liquid 250 ml - Glass wide mouth	A - Air Bag P/O - Plastic or other	SL - Sludge	O - Oil
Container							

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OFFICE USE ONLY
214-238-399Z

OFFICE USE ONLY

**ARC cannot accept verbal changes.
Please Fax written changes to
214-238-5592**