Roselle Park Baseball Fields
Roselle Park, Union County, New Jersey

CERCLIS ID No.: NJSFN0204259

Site Inspection Report
(December 2001)
Volume II of II

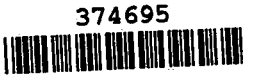
Prepared For:

U.S. Environmental Protection Agency
Region II
New York, New York 10007

Prepared By:

Region II Superfund Technical Assessment and Response Team
Roy F. Weston, Inc.
Federal Programs Division
Edison, NJ 08837

374695



SITE INSPECTION REPORT
ROSELLE PARK BASEBALL FIELDS
ROSELLE PARK, UNION COUNTY, NEW JERSEY

CERCLIS ID No.: NJSFN0204259

VOLUME II OF II

EPA Contract No.: 68-W-00-121
W.O. No.: 20103-001-001-1024-00
Document Control No.: 20103.1024.151

December 2001

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by:

Region II Site Assessment Team
Roy F. Weston, Inc.
Edison, New Jersey 08837

REFERENCE 20

START-02-392

RECORD

Roselle Park
Baseball Fields
Roselle Pk, NJ

AVERY®
White Paper
Made in U.S.A.
200 PAGE 9 5/8"X 6 1/4"
RECORD BOOK

245-2721

Thursday, 7 October 1999
C of log book assumed by Melissa Kaplan
Melissa Kaplan 10/7/99

1035 START members Melissa Kaplan and Dennis Foerter arrive at site location. Site is located on W. Webster Ave, across from the Roselle Park High School. The Roselle Park Youth Baseball Fields (RPYBF) consist of 2 fields; Adase Field and Wolf Field. Adase Field is ~80ft. from sidewalk in front of the H.S. ~~it is located~~ (MK) on the NE corner of the H.S. property. Wolf Field is ~165ft. from sidewalk in front of the NE corner of the H.S. property.
Teachers/Students use the RPYBF parking lot as a parking lot for school. It is ~5ft. from the baseball fields. The fields are fenced & ~~located~~ locked. Behind the outfield fence the vegation appears to be that which grows ontop of old landfills/dumps. Just beyond the fence are elevated RR tracks.
When facing the ballfields to the right is the Roselle Park Dept. of Public Works. Next, ~~the~~ (MK) to the DPW are the Webster Garden Apts. Apts Units F, D, A border W. ~~th~~ (MK) Webster Ave and are across from the H.S. sports fields.
To the left is a business: Lumber, Millwork, Insulation, Mason Materials → H&H Wholesale & Retail Bldg. Supply Inc. 245-0156 245-9356. The address is 140 W. Webster.
There are ~10 houses with in 200ft. of the fields.
There are storm drains along W. Webster Ave. Run off appears to go towards W. Webster Ave.
1040 Active Railroad (RR) Conrail passes
1042 NJ Transit passes
Weather noted: N/NE winds ~ 20-22mph sunny °F

Photograph log from off-site reconnaissance 10/7/99

1035 Hr — Photo No. 1-SSE view of Roselle Park Youth Baseball League (RPYBL) Building.

1035 Hr. — Photo no. 2-SSE view of both Adase Field (foreground) and Wolf Field(

1040 Hr. — Photo No. 3: SE view of Wolf outfield extending to fence that borders Department of Public Works (right), vegetation along outfield fence.

1040 Hr. — Photo No. 4-SE view of Wolf infield, the veg. lining the fence behind the field and the elevated train tracks above the vegetation.

1042 Hr. — Photo No. 5-SE view of infield of Wolf Field, Amtrak train passing on elevated train tracks.

1045 Hr. — Photo No. 6-SE view of Adase in and out fields, vegetation and train tracks in foreground, building supply bldg. to the left of the field.

1050 Hr. — Photo No. 7-NE corner of Roselle Park High School as seen from the curb of the RPYBL parking lot.

1055 Hr. — Photo No. 8-S view of Roselle Park Department of Public Works Buildings, view of vegetation in the foreground, RPYBL fields are to the left of the bldgs.

17 November 1999 (Wednesday)
START member Melissa Kaplan arrived to Roselle Park Historical Society at 9 West Lincoln Ave at approximately 1100 on 11/17/99. Met with Joe DiLellio, volunteer on Wednesdays from 10-2pm at the musuem. Kaplan was researching the history of the alleged old city dump buried beneath the Roselle Park Baseball Fields on West Webster Ave. Mr. DiLellio stated he had been living in Roselle Park for ~40 years and was unware of any dump He had, however, heard of the incinerator. He remember it had lost money for the town and was torn down after a short time. He put me in contact with Mr. Lehr. Mr. Lehr used to be a councilman in Roselle Park. He explained to me that there was in fact a dump where the current Webster Garden Apartments are and then an incinerator was built to burn the leaves. As Roselle Park began to flourish with homes complaints about the burning also flourished and the incinerator was then used as a garage for the DPW before being torn down in ~1957. He suggested I speak with the Borough Clerk at 908-245-6222. Mr. DiLellio also put START member (RK) Kaplan in touch with Vince Parlapiano, a long time resident of Roselle Park. He explained that he knew nothing of the dump but was aware of the incinerator, which he stated was refered to as the white elephant. He mentioned a bicentennial book with pictures & history of Roselle Park. He brought the book to the museum. The book contained pictures of the incinerator. Both the photographs, one of incinerator, the other of the destruction of the incinerator had no dates accompaning the pictures. Mr. Parlapiano then put me in contact with →

"the oldest longtime citizen in Roselle Park". Pat DeMarco. Mr. DeMarco remembered that the "dump" was in existance under Mayor Murray Sheldon in the early 1930's. The dump was closed when the Incinerator was built, durning Tomosello's counsil years. The incinerator was used for a short time and then the Webster Garden Apartments were built. The highschool used to be a Union County Park. He also remembered there was a dirt road, that was refered to as "dump road" It ran between Locust and Chester Streets, behind the present DPW.

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Murray Sheldon in the
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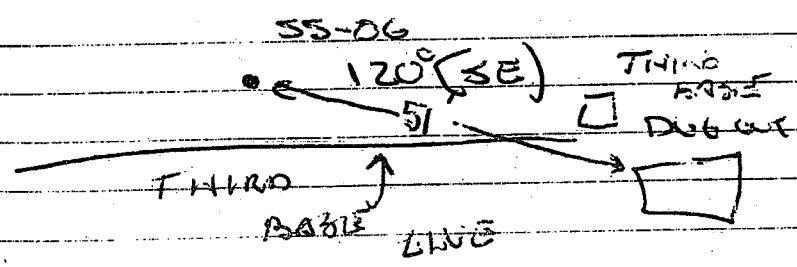
rden Apartments were
sed to be a Union County
ered there was a
rred to as "dump road"
and Chester Streets, behind

5-15-00 - Sampling Event - Arrived on site @ 0755 - START members Scott Snyder, Christoff Stennik, Shawna Rigby
0800 - Calibrated PID, FID, CGI

0820 - IPSI Arrived on-site

0830 - LEGUE OPENED GATES, REPRESENTATIVE STATED SAMPLE SHOULD BE TAKEN ALONG 3rd BASE LINE TO AVOID SPRINKLER SYSTEM - MR. DUGAN
0835 - FB-01 - Rinsate Blank for Bow/Trowel Collected

Sample SS-06 - Collected @ 0845
51' OFF OF DUG OUT CORNER
NO ORGANIC VAPOR READINGS ON PID OR
A BASE
FIELD



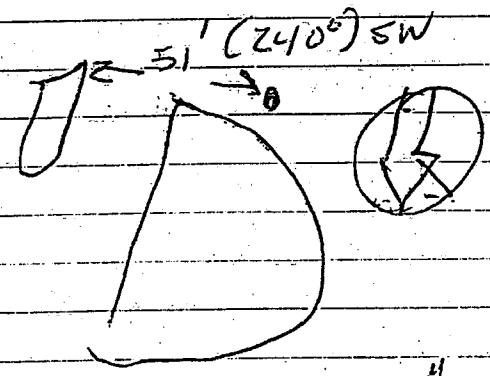
~~FID DRIVE BACKGROUND~~

SOIL BORING
0-14" - ORGANIC TOP SOIL - BLACK
14"-30" - MINERAL SOIL - LOOSE WITH PEBBLES
30"-42" - EMPTY - NO COLLECTION
42"-48" - GRAY CLAY

48"-90" - Clay - Sample Collected at a depth of 48"-57". - 0915

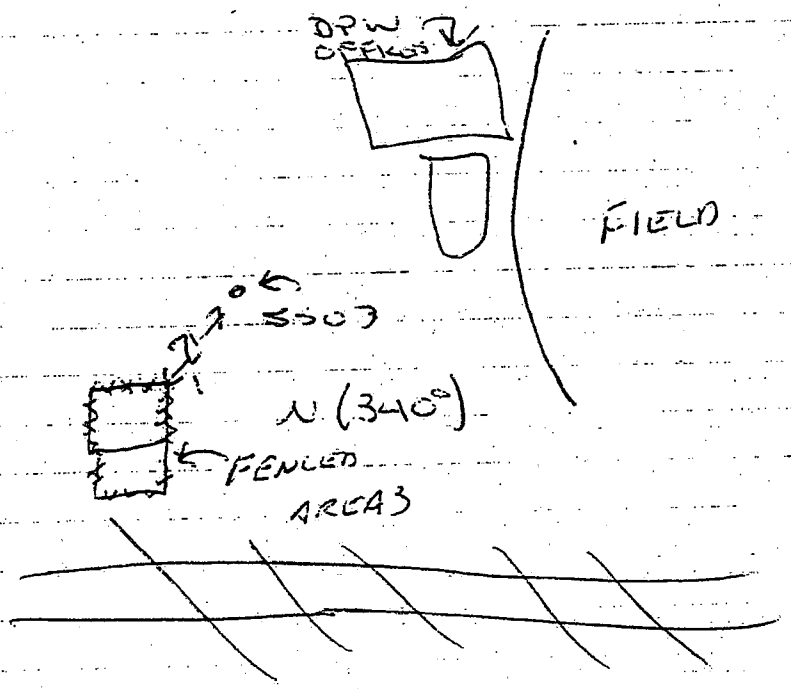
5-15-00

SS-07 BEGAN DRILLING @ 0945
53' ~~[illegible]~~ 240° (SS) OF SOUTH WESTERN CORNER OF FIELD HOUSE IN BETWEEN ADAMS / WOLF FIELD.



BORING TO DEPT OF 96"
NO ORGANIC VAPOR DETECTED ON PID OR PID ABOVE BACKGROUND.
Sample taken at 0945 FROM A DEPTH OF 48-68"
Soil Boring 0-30" - BLACK ORGANIC SOIL 30"-70" - Gray Clay.

SS-03 - DRILLING BEGAN @ 10:50
12' OFF NORTHEAST CORNER OF
FENCED AREA IN DPW YARD.
W. WEBSTER



NO READINGS ABOVE BACKGROUND
ON PID, FID.
0-28" - FILL MATERIAL - SOME LOOSE
GRAVEL, SAND, SILT.
28+ - DARK BROWN CLAY.
SAMPLE COLLECTED AT 1025 AT ADEPT

~~28"~~ AT THE INTERSECTION OF FILL MATERIAL & CLAY. 28" → 36"

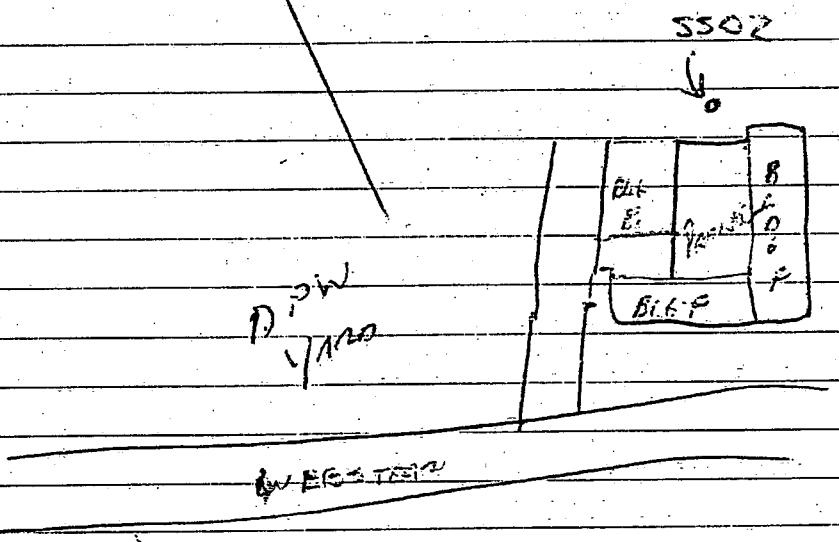
5-15-00

SSC
TO
9'
BL

of FILL
>6'
5-00

5502 - DRILLING DESIGNATION
TO A DEPTH OF 9'. Sample taken at
9', 120° SE OF SE CORNER OF
BLDG F

5-15-00



S301- DRILLING BEGAN AT 1120
DOWN TO 8' - 0-2" ORGANIC TOPSOIL
2" - 8' RED CLAY. SAMPLE TAKEN
AT - DEPT OF 4' @ 1145
205° S, SW ≈ 60' SOUTHWEST
CORNER OF SNAKE STAND

5-15-00

11

AT 1120
NITROSOL
ETABEN

NWEST
o
5-15-00

S-06 Collected at 1220
23 1/2' NORTH (0°) of "WOLFFIELD"
SIGN IN CENTERFIELD
5-15-00

507/508 Collected at 1205
31' NORTHWEST (300°) OF "ADAMSFIELD"
SIGN IN CENTERFIELD
5-15-00

503 COLLECTED AT 1310
74', 80° E OF FLAGPOLE
5-15-00

S04- Collected at 1300
51' 255° W OF FLAG POLE
S-15-00

S05- Collected at 1245
21' 260° WEST OF S502
S-15-00

S-01 TAKEN AT 1330 78', 25° W
OF SW CORNER OF SNACK STAND
5-15-00

S-02 TAKEN AT 1335 15' 75° E
OF SOUTHEAST CORNER OF SNACK
STAND 5-15-00

Site Summary

START members Scott Snyder, Shaun Rigby, and Christoph Stennik arrived at the Roselle Park Baseball Fields site at 0755 on 15 May 2000. The weather was clear skies with a temperature of approximately 60° F. START member Rigby immediately calibrated the PID, FID, and CGI.

The Geoprobe contractor Inland Pollution Services (IPSI) arrived on site at 0820. START was directed to collect subsurface samples along the third baseline of both Addesso Wolf Fields by RPI/BI representative Brian Dugan. Mr. Dugan stated that this was the only area in which he was reasonably sure that the Geoprobe would not encounter the underground sprinkler system.

Subsurface Sample # 3306 was taken from the ground at 0845. At a depth of approximately 8 ft a layer of grey clay was encountered. START directed IPSI to advance the Geoprobe an additional 4 ft. The clay layer extended down at least that far. The material from the ground surface to the clay layer consisted of fill. The fill was composed of

a mixture of organic top soil (0-30") and mineral soil composed of sand and pebbles (14"-30"). The remainder of the core was empty space from 30"-96" due to the Geoprobe merely pushing the soft material down instead of collecting in the core. A sample was collected from the boring at 0915 from a depth of 48"-57". At no time did the PID or FID register organic vapor concentrations above background. Sample # SS06 was collected at a distance of 51' 120° SE of the southeast corner of the third base line dug out.

The soil profile of sample SS07 was similar to that of SS06. Drilling for SS07 began at 0945 and was located 53' at 240° South-west of the southwestern corner of the field house located between Wolf and Adasa Fields. Boring was advanced to a depth of 96". Sample taken from a depth of 48"-68". This included the intersection of the fill and clay layers. No organic vapors were detected above background.

Samples SS04, SS05 proposed to be taken at the area between

the baseball fields and therefore were not collected when START observed that they were on property owned by START was not granted site access. In addition, an abandoned railroad was present and could have been a source of contamination not attributable to the site.

Sample SS03 was collected in the DPW yard located directly west of the site. Drilling began at 1000 12' 340° North of the fence and towards the back of the DPW yard. The boring profile consisted of 0-24" of fill material composed of loose gravel and sandy silt. Below 24" to 36" was a dark brown clay. Sample was collected at 1025 at the intersection of the fill and clay (24"-36"). No organic vapor was detected above background.

SS02 was collected in the Webster Garden Apartment Complex 9' at 120° Southeast of the SE corner of Bldg. F. Drilling began at 1040 to a depth of 8' (96"). Sample was collected at 1110.

Sample SS01 (Subsurface background) was collected at the far end of the field behind the highschool

Drilling began a 1120 to a depth of 8' (96"), 205° South, Southwest at a distance of 60' from the south west corner of the snack stand. Soil boring consisted of 0-2" of organic top soil and 2"-48" of red clay. Sample was collected at 1145 - at a depth of 48".

Sample 506 was collected in Wolf field at 23 1/2' and 0° North of the centerfield sign. Sample was collected at 1220.

Samples 507/508 were collected in Adase Field 31' and 300° North west of the centerfield sign. Sample was collected at 1205.

Sample 503 was collected from the front of the Roselle Pk. High School, 74' and 80° East of the Flag Pole. Sample was collected at 1310.

Sample 504 was also collected in front of the high school 51', 255° West of the flag pole. Sample collected at 1300.

Sample 505 was collected 21' and 260° West of 5502.

Sample 301 (surface background) was collected at the far end of the field behind the high school 75' and 250° Southwest of the SW corner of the snack stand. Sample was collected at 1330.

Sample 302 (surface background) was collected 15' and 75° E of the SE corner of the snack stand. Sample collected at 1335.

Surface Soil samples were collected by Shawna Ryby and Scott Sayd. Christoph Stanik provided sample management. At no time was there any visible evidence of contamination or readings above background.

6-1-00

REFERENCE 21

Roy F. Weston, Inc.
Federal Programs Division
Suite 201
1090 King Georges Post Road
Edison, New Jersey 08837-3703
732-225-6116 • Fax 732-225-7037
SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 68-W5-0019

22 May 2000

Ms. Cathy Moyik
U.S. Environmental Protection Agency
290 Broadway - 18th Floor
New York, NY 10007-1866

TDD NO: 02-00-02-0015
DOCUMENT CONTROL NO: START-02-F-04335
SUBJECT: SAMPLING TRIP REPORT - ROSELLE PARK BASEBALL FIELDS

Dear Ms. Moyik:

Enclosed please find the Sampling Trip Report for samples collected during the Site Inspection conducted at the Roselle Park Baseball Fields site on 15 May 2000. The samples were collected under Case No. 28069.

If you have any questions, do not hesitate to call me at (732) 225-6116.

Very truly yours,

ROY F. WESTON, INC.

Scott Snyder
Project Manager

enclosure

cc: L. Wood, Region II EPA
J. Bulich, Lockheed ESAT
W.S. Butterfield, ATL START II, w/o enclosure
START TDD file

SAMPLING TRIP REPORT

SITE NAME: Roselle Park Baseball fields
DCN #: START-02-F-04335
TDD #: 02-00-02-0015
CASE NO.: 28069

EPA I.D. NO.: To Be Assigned

SAMPLING DATE: May 15, 2000

1. Site Location: Refer to Figure 1

2. Sample Locations: Refer to Figure 2

3. Sample Descriptions: Refer to Table 1

4. Laboratories Receiving Samples:

Sample Type	Name and Address of Laboratory
Target Compound List (TCL) Organics	Datachem Laboratories 960 West LeVoy Drive Salt Lake City, UT 84123-2547
Target Analyte List (TAL) Metals (excluding cyanide)	Chemtech Consulting Group 110 Route 4 Englewood, NJ 07631

5. Sample Dispatch Data:

Fifteen soil samples and three aqueous samples for TAL metals analysis were shipped to Chemtech Consulting Group on 5/15/00 at 1530 hours via Federal Express (Airbill No. 817987245873).

Fifteen soil samples and three aqueous samples for TCL volatiles, BNA and Pesticides/PCB analysis, were shipped to Datachem Laboratories on 5/15/00 at 1530 hours via Federal Express (Airbill No. 817987245862).

6. On-Site Personnel:

Name	Company	Duties on Site
Scott Snyder	Region II START	Project Manager, Sampler
Shawna Rigby	Region II START	Site Health and Safety Officer, Sampler
Christoph Stannik	Region II START	Sample Management Officer

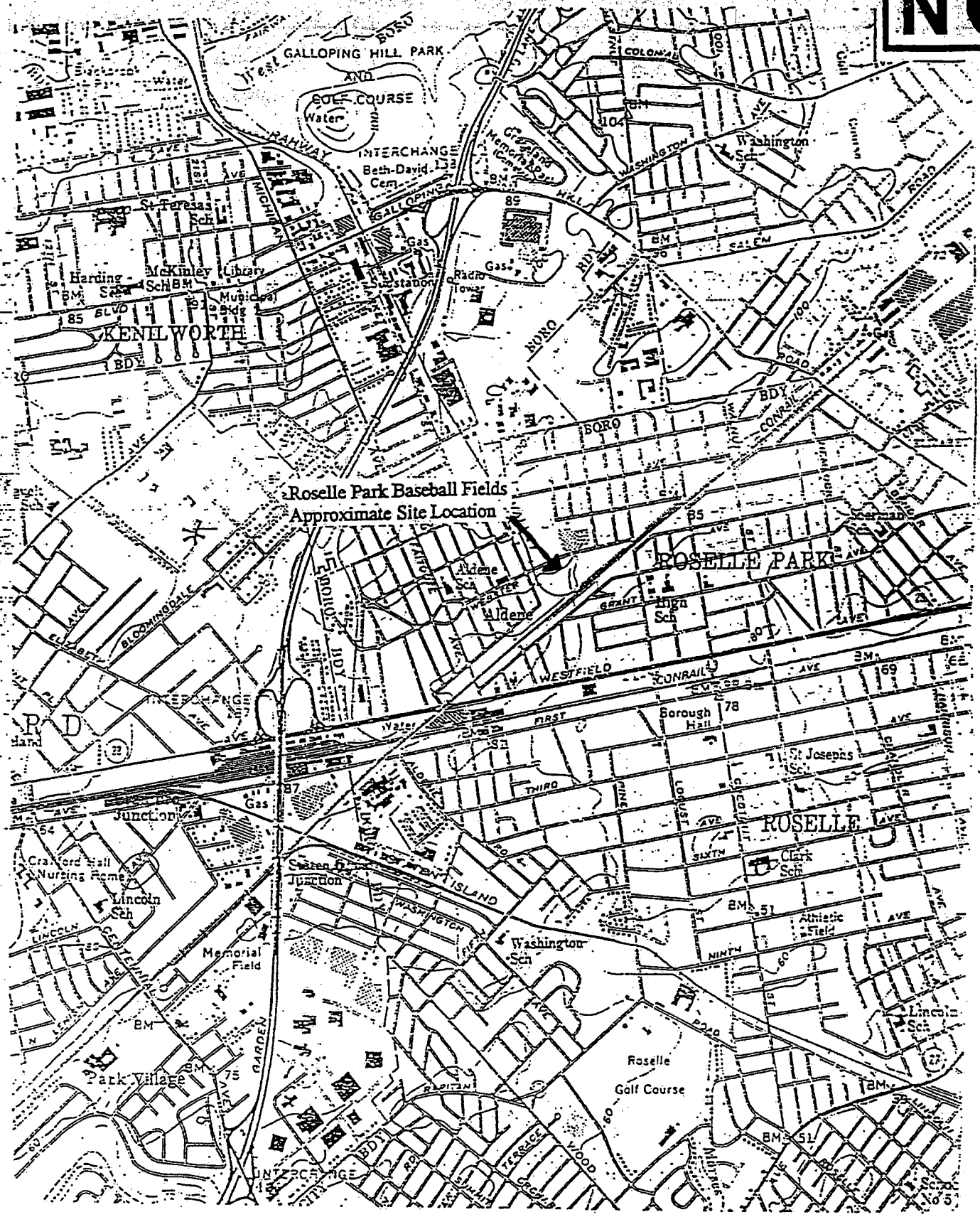
7. Additional Comments:

On May 15, 2000, the Region II Superfund Technical Assessment and Response Team (START) collected surface and subsurface soil samples from the Roselle Park Baseball Fields site. These samples were collected as part of a Site Inspection (SI) conducted on site. All samples collected by Region II START were analyzed for Target Compound List (TCL) and Target Analyte List (TAL), excluding cyanide, parameters through the U.S. EPA Contract Laboratory Program. Organic and Inorganic Traffic Reports are presented in Attachment 1.

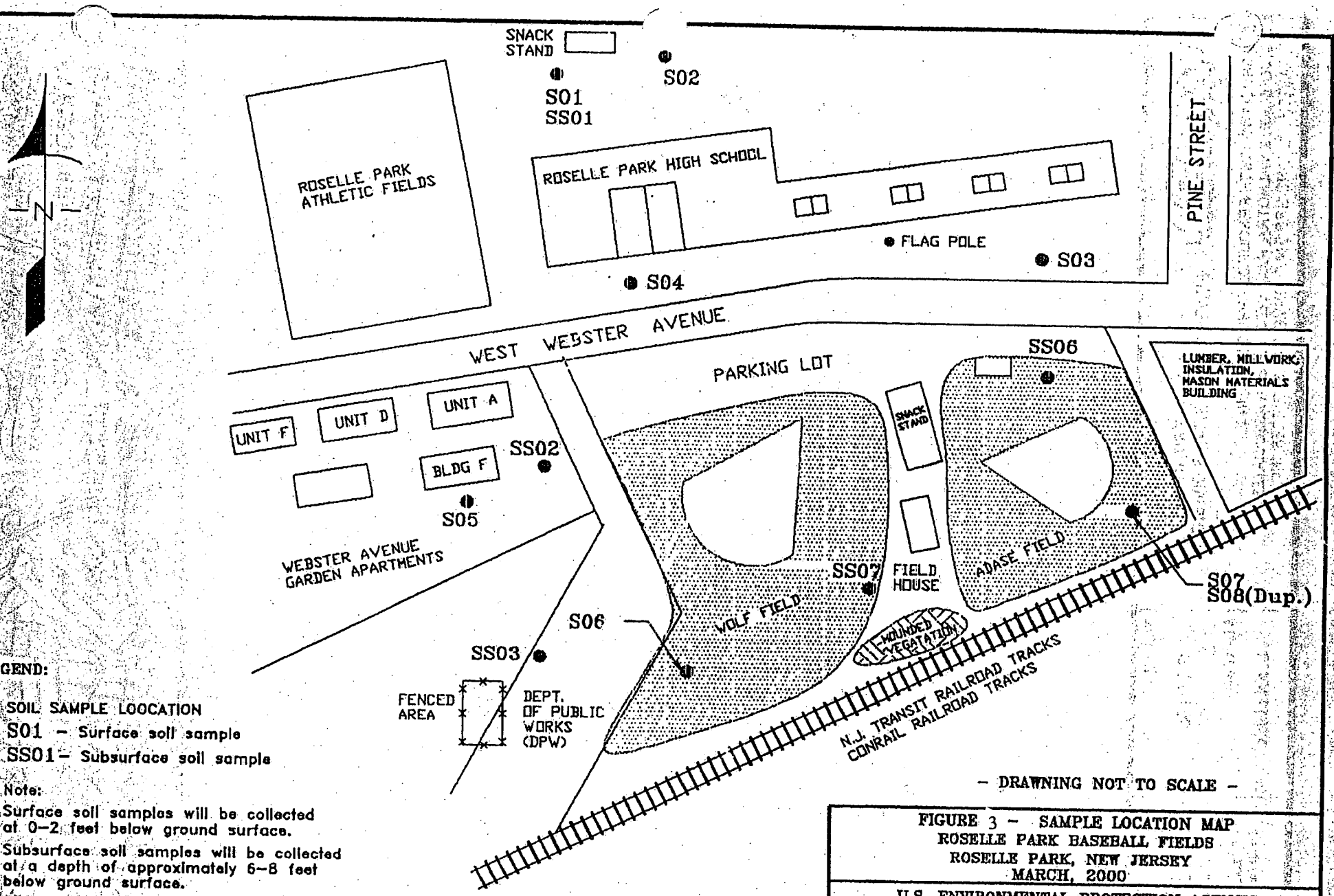
8. Report Prepared by: _____ Date: 5/18/00
Scott Snyder

9. Report Approved by: _____ Date: 5/18/00
W. S. Butterfield, CHMM

SITE LOCATION AND SAMPLING LOCATION MAPS



WESTON MANAGERS DESIGNERS CONSULTANTS	Roy F. Weston, Inc. FEDERAL PROGRAMS DIVISION	EPA TM C. Moyik	Figure 1 SITE LOCATION MAP
IN ASSOCIATION WITH RESOURCE APPLICATION, INC., C.C. JOHNSON & MALHOTRA, P.C., R.E. SARRIERA ASSOCIATES, TETRATECH INC., AND GRB ENVIRONMENTAL SERVICES, INC.		START PM S. SNYDER	Roselle Park Baseball Fields Roselle Park, Union County, New Jersey



LEGEND:

- ◐ SOIL SAMPLE LOCATION
- S01 – Surface soil sample
- SS01 – Subsurface soil sample

Note:

Surface soil samples will be collected at 0–2 feet below ground surface.

Subsurface soil samples will be collected at a depth of approximately 6–8 feet below ground surface.

– DRAWNING NOT TO SCALE –

FIGURE 3 – SAMPLE LOCATION MAP
ROSELLE PARK BASEBALL FIELDS
ROSELLE PARK, NEW JERSEY
MARCH, 2000

U.S. ENVIRONMENTAL PROTECTION AGENCY
SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
CONTRACT# 68-W5-0019

Roy F. Weston, Inc.
FEDERAL PROGRAMS DIVISION

IN ASSOCIATION WITH TETRA TECH EM, INC.,
C.C. JOHNSON & MALHOTRA, P.C., RESOURCE APPLICATIONS, INC.,
R.E. SARRIERA ASSOCIATES, AND GRB ENVIRONMENTAL SERVICES, INC.

DRAWN BY : J. L. HAMPTON JR.
EPA TASK MONITOR: C. MOYIK
START PROJECT MANAGER: S. SNYDER

D:\D 577.DWG

TABLE 1
SAMPLE DESCRIPTIONS
ROSELLE PARK BASEBALL FIELDS
ROSELLE PARK, NEW JERSEY

SAMPLE NUMBER 6577-	ORGANIC CLP NO.	INORGANIC CLP NO.	DATE	TIME	COMMENTS
FB-01	B02N0	MB026F	5/15/00	0835	Rinsate Blank collected from bowl/trowel
FB-02	B02N1	MB026G	5/15/00	0850	Rinsate Blank collected from bucket auger
FB-03	B02N2	MB026H	5/15/00	1155	Rinsate Blank collected from Geoprobe
S-01	B02KB	MB025X	5/15/00	1330	Matrix Spike/Matrix Spike Duplicate (MS/MSD)
S-02	B02KC	MB025Y	5/15/00	1335	
S-03	B02KF	MB025Z	5/15/00	1310	
S-04	B02KG	MB0260	5/15/00	1300	
S-05	B02KH	MB0261	5/15/00	1245	
S-06	B02KJ	MB0262	5/15/00	1220	
S-07	B02KK	MB0263	5/15/00	1205	
S-08	B02KN	MB0264	5/15/00	1205	Duplicate of sample S-07
SS-01	B02KP	MB0265	5/15/00	1145	
SS-02	B02KQ	MB0266	5/15/00	1100	
SS-03	B02KT	MB0267	5/15/00	1025	
SS-06	B02KY	MB026B	5/15/00	0915	
SS-07	B02KZ	MB026C	5/15/00	0945	

ATTACHMENT 1

TRAFFIC REPORTS/CHAIN OF CUSTODY RECORDS

EPA United States Environmental Protection Agency Contract Laboratory Program

Inorganic Traffic Report & Chain of Custody Record
(For Inorganic CLP Analysis)

Case No. 28069

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	WESTON	5/15/00	FED EX

Regional Information

Sampler (Name): SCOTT SNYDER

Airbill Number: 8179 8724 5873

Non-Superfund Program

Sampler Signature: [signature]

5. Ship To: CHEMTECH CONSULTING, 110 ROUTE 4, ENGLEWOOD NJ 07631

ATTN: MANSUKH PATEL

Site Name: ROSELLE PARK BASEBALL FIELDS

City, State: ROSELLE PK, NJ

Site Spill ID: ZZ

3. Purpose — Load: [X] SF, [ ] PRP, [ ] ST, [ ] FED — Early Action: [ ] CLEM, [ ] PA, [ ] REM, [ ] RI, [X] SI, [ ] ESI — Long-Term Action: [ ] FS, [ ] RD, [ ] RA, [ ] O&M, [ ] NPLD

6. Matrix (Enter in Column A): 1. Surface Water, 2. Ground Water, 3. Leachate, 4. Field QC, 5. Soil/Sediment, 6. Oil (High only), 7. Waste (High only), 8. Other (specify in Column A)

7. Preservative (Enter in Column D): 1. HCl, 2. HNO3, 3. NaOH, 4. H_2SO_4, 5. $K_2CR_2O_7$, 6. Ice only, 7. Other (specify in Column D), N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 7) Other:	E – RAS Analysis: Diss. Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct.	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K Field QC Qualifier (1 - Blank, S - Spike, D - Duplicate, R - Rinsate, PE - Perform. Eval., * - Not a QC Sample)
MB0264	5	L	G	6		X						32	S08	5/15/00 1205	B02KN	SS	
MB0260	5	L	G	6		X						16	S04	5/15/00 1300	B02KG	SS	
MB0261	5	L	G	6		X						20	S05	5/15/00 1245	B02KH	SS	
MB025Z	5	L	G	6		X						12	S03	5/15/00 1310	B02KF	SS	
MB025X	5	L	G	6		X						4	S01	5/15/00 1330	B02KB	SS	
MB025Y	5	L	G	6		X						8	S02	5/15/00 1325	B02KC	SS	

Shipment for Case Complete? (Y/N)	Page	Sample(s) to be Used for Laboratory QC	Additional Sampler Signatures	Chain of Custody Seal Number(s)
Y	2 of 2	MB025X	—	—

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	5/15/00 1345	[signature]	[signature]	5/15/00 1530	(FED EX)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

DISTRIBUTION: Green - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to CLASS

EPA Form 9110-1 (2/98)

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

A21-012-13 REV

383601

EPA United States Environmental Protection Agency Contract Laboratory Program

Inorganic Traffic Report & Chain of Custody Record
(For Inorganic CLP Analysis)

Case No. 28069

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	WESTON	5/15/00	FED EX

Regional Information

Sampler (Name): SCOTT SNYDER

Airbill Number: 817987245873

Non-Superfund Program

Sampler Signature: [signature]

5. Ship To: CHEMTECH CONSULTING - 110 ROUTE 4 ENGLEWOOD, NJ 07631

ATTN: MANSUKH PATEL

Site Name: ROSELLE PARK BASEBALL FIELDS

City, State: Roselle Pk, NJ

Site Spill ID: Z Z

3. Purpose — Lead: [X] SF [ ] PRP [ ] ST [ ] FED — Early Action: [ ] CLEM [ ] PA [ ] REM [ ] RI [X] SI [ ] ESI — Long-Term Action: [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (specify in Column A)

7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (specify in Column D) N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 7) Other:	E – RAS Analysis: Diss. Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct.	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank S = Spike D = Duplicate R = Rinsate PE = Perform. Eval. — = Not a QC Sample)
MB026F	4	L	G	2		X						67	FB01	5/15/00 0835	B02N0	CS	R
MB026G	4	L	G	2		X						74	FB02	5/15/00 0850	B02N1	CS	R
MB026H	4	L	G	2		X						81	FB03	5/15/00 1155	B02N2	CS	R
MB026B	5	L	G	6		X						56	SS06	5/15/00 0915	B02KY	SS	
MB26C	5	L	G	6		X						60	SS07	5/15/00 0945	B02KZ	SS	
MB0267	5	L	G	6		X						44	SS03	5/15/00 1025	B02KT	SS	
MB0266	5	L	G	6		X						40	SS02	5/15/00 1100	B02KQ	SS	
MB0265	5	L	G	6		X						36	SS01	5/15/00 1145	B02KP	SS	
MB0262	5	L	G	6		X						24	SS06	5/15/00 1220	B02KJ	SS	
MB0263	5	L	G	6		X						28	S07	5/15/00 1205	B02KK	SS	

Shipment for Case Complete? (Y/N): Y

Page 1 of 2

Sample(s) to be Used for Laboratory QC: —

Additional Sampler Signatures: CHRISTOPH STANNIK [signature]

Chain of Custody Seal Number(s): —

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	5/15/00 1345	[signature]	[signature]	5/15/00 1530	(FED EX)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

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A21-012-13 REV.

3600

EPA United States Environmental Protection Agency Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No. 28069

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	WESTON	5/15/00	FED EX

Regional Information

Sampler (Name): SCOTT SNYDER

Airbill Number: 817987245862

Non-Superfund Program

Sampler Signature: [signature]

5. Ship To: DATACHEM LABORATORIES, 960 WEST LEVOY DR., SALT LAKE CITY, UT 84123-2347, ATTN: RICHARD WADE

Site Name: ROSELLE PARK BASEBALL FIELDS

City, State: Roselle Pk, NJ

Site Spill ID: ZZ

3. Purpose*: Lead [X] SF [ ] PRP [ ] ST [ ] FED; Early Action [ ] CLEM [ ] PA [ ] REM [ ] RI [X] SI [ ] ESI; Long-Term Action [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify in Column A)

7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. Other (Specify in Column D) N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 7) Other:	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank S = Spike D = Duplicate R = Rinsate PE = Perform Eval. — = Not a QC Sample)
~~B02N0~~	~~4~~	~~L~~	~~G~~	~~1,5~~	~~X~~	~~X~~	~~X~~		~~61, 62, 63, 64, 65, 66~~	~~FB01~~	~~5/15/00 0835~~	~~MB026F~~	~~CS~~	~~(B)~~
~~B02N1~~	~~4~~	~~L~~	~~G~~	~~1,5~~	~~X~~	~~X~~	~~X~~		~~68-73~~	~~FB02~~	~~5/15/00 0850~~	~~MB026G~~	~~CS~~	~~(B)~~
B02N2	4	L	G	1,5	X	X	X		75-80	FB03	5/15/00 1155	MB026H	CS	R
B02KY	5	L	G	5	X	X	X		53-55	SS06	5/15/00 0915	MB026B	SS	
B02KZ	5	L	G	5	X	X	X		57-59	SS07	5/15/00 0945	MB026C	SS	
B02KT	5	L	G	5	X	X	X		41-43	SS03	5/15/00 1025	MB0267	SS	
B02KQ	5	L	G	5	X	X	X		37-39	SS02	5/15/00 1100	MB0266	SS	
B02KP	5	L	G	5	X	X	X		33-35	SS01	5/15/00 1145	MB0265	SS	
B02KJ	5	L	G	5	X	X	X		21-23	S06	5/15/00 1220	MB0262	SS	

Shipment for Case Complete? (Y/N): N

Page 1 of 1

Sample(s) to be Used for Laboratory QC: —

Additional Sampler Signatures: CHRISTOPH STAMMIK [signature]

Chain of Custody Seal Number(s): —

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	5/15/00 1345	[signature]	[signature]	5/15/00	(FED EX)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

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*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

A21-012-15 REV.

384439

EPA United States Environmental Protection Agency Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No. 28069

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	WESTON	5/15/00	FED EX

Regional Information

Sampler (Name): ~~SCOTT S~~ CHRISTOPH STANNUCH

Airbill Number: 817987245462

Non-Superfund Program

Sampler Signature: [signature]

Site Name: ROSELLE PARK BASEBALL FIELDS

City, State: Roselle PK, NJ

Site Spill ID: ZZ

3. Purpose*: Lead [X] SF [ ] PRP [ ] ST [ ] FED; Early Action [ ] CLEM [ ] PA [ ] REM [ ] RI [X] SI [ ] ESI; Long-Term Action [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

5. Ship To: DATACHEM LABORATORIES, 960 WEST LEVOY DR., SALT LAKE CITY, UT 84123-2547

ATTN: RICHARD WADE

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify in Column A)

7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. Other (Specify in Column D) N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 7) Other:	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank, S = Spike, D = Duplicate, R = Rinsate, PE = Perform. Eval., — = Not a QC Sample)
B02N0	4	L	G	1,5	X	X	X		61-66	FB01	5/15/00 0835	MB026F	CS	R
B02N1	4	L	G	1,5	X	X	X		68-73	FB02	5/15/00 0850	MB026G	CS	R

Shipment for Case Complete? (Y/N): N

Page: 1 of 1

Sample(s) to be Used for Laboratory QC: —

Additional Sampler Signatures: CHRISTOPH STANNUCH [signature]

Chain of Custody Seal Number(s): —

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	5/15/00 1345	(FED EX)			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to CLASS

EPA Form 9110-2 (2/98)

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*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

4441

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No. 28069

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	WESTON	5/15/00	FEDEX

Regional Information

Sampler (Name): Scott Snyder

Airbill Number: 817937245862

Non-Superfund Program

Sampler Signature

Site Name: ROSELLE PARK BASEBALL FIELDS

City, State: Roselle, Pk, NJ

Site Spill ID: ZZ

3. Purpose*: Lead: SF, PRP, ST, FED; Early Action: CLEM, PA, REM, RI, X SI, ESI; Long-Term Action: FS, RD, RA, O&M, NPLD

5. Ship To: DATACHEM LABORATORIES, 960 WEST LEVOY DR, SALT LAKE CITY, UT 84123-2547
ATTN: RICHARD WADE

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify in Column A)

7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. Other (Specify in Column D) N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 7) Other:	E RAS Analysis: VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank S = Spike D = Duplicate R = Rinsate PE = Perform Eval. — = Not a QC Sample)
B02KK	5	L	G	5	X	X	X		25-27	S07	5/15/00 1205	MB0263	SS	
B02KN	5	L	G	5	X	X	X		29-31	S08	5/15/00 1205	MB0264	SS	FOR B02KN
B02KG	5	L	G	5	X	X	X		13-15	S04	5/15/00 1300	MB0260	SS	
B02KH	5	L	G	5	X	X	X		17-19	S05	5/15/00 1245	MB0261	SS	
B02KF	5	L	G	5	X	X	X		9-11	S03	5/15/00 1310	MB0252	SS	
B02KB	5	L	G	5	X	X	X		1-3	S01	5/15/00 1330	MB025X	SS	
B02KC	5	L	G	5	X	X	X		5-7	S02	5/15/00 1335	MB025Y	SS	

Shipment for Case Complete? (Y/N): Y

Page 1 of ___

Sample(s) to be Used for Laboratory QC: B02KB

Additional Sampler Signatures: ___

Chain of Custody Seal Number(s): ___

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	5/15/00 1345	[signature]	[signature]	5/15/00 1530	(FED EX)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to CLASS

EPA Form 9110-2 (2/98)

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

A21-012-15 REV.

13

294440

REFERENCE 22

SOIL CLEANUP CRITERIA (mg/kg)
(LAST REVISED - 5/12/99)

This listing represents the combination of Tables 3-2 and 7-1 from the Department of Environmental Protection and Energy's February 3, 1992 proposed rule entitled Cleanup Standards for Contaminated Sites, N.J.A.C. 7:26D, as corrected based upon errors identified by the Department during or subsequent to the comment period as well as new toxicological or other information obtained since the rule proposal. Please refer to the respective footnotes for more detail. Notwithstanding, where the following criteria are based on human health impacts, the Department shall still consider environmental impacts when establishing site specific cleanup criteria. This along with other site-specific factors including background conditions may result in site specific cleanup criteria which differ from the criteria listed below. Therefore, this list shall not be assumed to represent approval by the Department of any remedial action or to represent the Department's opinion that a site requires remediation.

Note: Material bracketed **[thus]** is deleted and material underlined **thus** is added

Contaminant	CASRN	Residential Direct Contact Soil Cleanup Criteria (a) (b) (RDCSCC)	Non- Residential Direct Contact Soil Cleanup Criteria (a) (b) (NRDCSCC)	Impact to Ground water Soil Cleanup Criteria (b) (IGWSCC)
Acenaphthene	83-32-9	3400	10000(c)	100
Acetone (2-propanone)	67-64-1	1000(d)	1000(d)	100
Acrylonitrile	107-13-1	1	5	1
Aldrin	309-00-2	0.040	0.17	50
Anthracene	120-12-7	10000(c)	10000(c)	100
Antimony	7440-36-0	14	340	(h)
Arsenic	7440-38-2	20 (e)	20 (e)	(h)
Barium	7440-39-3	700	47000(n)	(h)
Benzene	71-43-2	3	13	1
→ Benzo(b)fluoranthene (3,4-Benzofluoranthene)	205-99-2	0.9	4	50
→ Benzo(a)anthracene (1,2-Benzanthracene)	56-55-3	0.9	4	500
→ Benzo(a)pyrene (BaP)	50-32-8	0.66(f)	0.66(f)	100
→ Benzo(k)fluoranthene	207-08-9	0.9	4	500
Benzyl Alcohol	100-51-6	10000(c)	10000(c)	50
Beryllium	7440-41-7	[1(f)] 2 (e)	[1(f)] 2 (e)	(h)
Bis(2-chloroethyl) ether	111-44-4	0.66(f)	3	10
Bis(2-chloroisopropyl)ether	108-60-1	2300	10000(c)	10
Bis(2-ethylhexyl) phthalate	117-81-7	49	210	100

ATTACHMENT B, 2-1

SOIL CLEANUP CRITERIA (mg/kg)
(LAST REVISED - 5/12/99)

Contaminant	CASRN	(RDCSCC)	(NRDCSCC)	(IGWSCC)
Bromodichloromethane (Dichlorobromomethane)	75-27-4	11	46	1
Bromoform	75-25-2	86	370	1
Bromomethane (Methyl bromide)	74-83-9	79	1000 (d)	1
2-Butanone (Methyl ethyl ketone) (MEK)	78-93-3	1000 (d)	1000 (d)	50
Butylbenzyl phthalate	85-68-7	1100	10000 (c)	100
Cadmium	7440-43-9	[1] 39	100	(h)
Carbon tetrachloride	56-23-5	2 (k)	4 (k)	1
4-Chloroaniline (*p*-Chloroaniline)	106-47-8	230	4200	(r)
Chlorobenzene	108-90-7	37	680	1
Chloroform	67-66-3	19 (k)	28 (k)	1
4-Chloro-3-methyl phenol (*p*-Chloro-*m*-cresol)	59-50-7	10000 (c)	10000 (c)	100
Chloromethane (Methyl chloride)	74-87-3	520	1000 (d)	10
2-Chlorophenol (*o*-Chlorophenol)	95-57-8	280	5200	10
Chromium – hexavalent (VI)	18540-29-9	240; 270 (g); (i)	6100; 20 (g); (i)	(h)
Chromium – trivalent (III)	16065-83-1	120,000	(j)	(l)
Chrysene	218-01-9	9	40	500
Copper	7440-50-8	600 (m)	600 (m)	(h)
Cyanide	57-12-5	1100	21000 (c)	(h)
4,4'-DDD (p,p'-TDE)	72-54-8	3	12	50
4,4'-DDE (p,p'-DDX)	72-55-9	2	9	50
4,4'-DDT	50-29-3	2	9	500
Dibenz(a,h)anthracene	53-70-3	0.66 (f)	0.66 (f)	100
Dibromochloromethane (Chlorodibromomethane)	124-48-1	110	1000 (d)	1
Di-n-butyl phthalate	84-74-2	5700	10000 (c)	100
Di-n-octyl phthalate	117-84-0	1100	10000 (c)	100
1,2-Dichlorobenzene (*o*-Dichlorobenzene)	95-50-1	5100	10000 (c)	50
1,3-Dichlorobenzene (*m*-Dichlorobenzene)	541-73-1	5100	10000 (c)	100
1,4-Dichlorobenzene (*p*-Dichlorobenzene)	106-46-7	570	10000 (c)	100
3,3'-Dichlorobenzidine	91-94-1	2	6	100

SOIL CLEANUP CRITERIA (mg/kg)
(LAST REVISED - 5/12/99)

Contaminant	CASRN	(RDCSCC)	(NRDCSCC)	(IGWSCC)
1,1-Dichloroethane	75-34-3	570	1000 (d)	10
1,2-Dichloroethane	107-06-2	6	24	1
1,1-Dichloroethene	75-35-4	8	150	10
1,2-Dichloroethene (trans)	156-60-5	1000 (d)	1000 (d)	50
1,2-Dichloroethene (cis)	156-59-2	79	1000 (d)	1
2,4-Dichlorophenol	120-83-2	170	3100	10
1,2-Dichloropropane	78-87-5	10	43	(r)
1,3-Dichloropropene(cis and trans)	542-75-6	4	5 (k)	1
Dieldrin	60-57-1	0.042	0.18	50
Diethyl phthalate	84-66-2	10000 (c)	10000 (c)	50
2,4-Dimethylphenol	105-67-9	1100	10000 (c)	10
Dimethyl phthalate	131-11-3	10000 (c)	10000 (c)	50
2,4-Dinitrophenol	51-28-5	110	2100	10
Dinitrotoluene(2,4-/2,6-mixture)	25321-14-6	1 (l)	4 (l)	10 (l)
Endosulfan	115-29-7	340	6200	50
Endrin	72-20-8	17	310	50
Ethylbenzene	100-41-4	1000 (d)	1000 (d)	100
→ Fluoranthene	206-44-0	2300	10000 (c)	100
Fluorene	86-73-7	2300	10000 (c)	100
Heptachlor	76-44-8	0.15	0.65	50
Hexachlorobenzene	118-74-1	0.66 (f)	2	100
Hexachlorobutadiene	87-68-3	1	21	100
Hexachlorocyclopentadiene	77-47-4	400	7300	100
Hexachloroethane	67-72-1	6	100	100
→ Indeno(1,2,3-cd)pyrene	193-39-5	0.9	4	500
Isophorone	78-59-1	1100	10000 (c)	50
Lead	7439-92-1	400 (p)	600 (q)	(h)
Lindane (gamma BHC) (gamma HCH)	58-89-9	0.52	2.2	50
2-Methylphenol (o-creosol)	95-48-7	2800	10000 (c)	(r)

SOIL CLEANUP CRITERIA (mg/kg)
(LAST REVISED - 5/12/99)

Contaminant	CASRN	(RDCSCC)	(NRDCSCC)	(IGWSCC)
4-Methylphenol (*p*-creosol)	106-44-5	2800	10000 (c)	(r)
Methoxychlor	72-43-5	280	5200	50
Mercury	7439-97-6	14	270	(h)
4-Methyl-2-pentanone (MIBK)	108-10-1	1000 (d)	1000 (d)	50
Methylene chloride (Dichloromethane)	75-09-2	49	210	1
Naphthalene	91-20-3	230	4200	100
Nickel	7440-02-0	250	2400 (k) (n)	(h)
Nitrobenzene	98-95-3	28	520	10
N-Nitrosodiphenylamine	86-30-6	140	600	100
N-Nitrosodi-n-propylamine	621-64-7	0.66 (f)	0.66 (f)	10
PCBs (Polychlorinated biphenyls)	1336-36-3	0.49	2	50
Pentachlorophenol	87-86-5	6	24	100
Phenol	108-95-2	10000 (c)	10000 (c)	50
Pyrene	129-00-0	1700	10000 (c)	100
Selenium	7782-49-2	63	3100 (n)	(h)
Silver	7440-22-4	110	4100 (n)	(h)
Styrene	100-42-5	23	97	100
1,1,1,2-Tetrachloroethane	630-20-6	170	310	1
1,1,2,2-Tetrachloroethane	79-34-5	34	70 (k)	1
Tetrachloroethene (Tetrachloroethylene) (PCE)	127-18-4	4 (k)	6 (k)	1
Thallium	7440-28-0	2 (f)	2 (f)	(h)
Toluene	108-88-3	1000 (d)	1000 (d)	500
Toxaphene	8001-35-2	0.10 (k)	0.2 (k)	50
1,2,4-Trichlorobenzene	120-82-1	68	1200	100
1,1,1-Trichloroethane	71-55-6	210	1000 (d)	50
1,1,2-Trichloroethane	79-00-5	22	420	1
Trichloroethene (Trichloroethylene) (TCE)	79-01-6	23	54 (k)	1
2,4,5-Trichlorophenol	95-95-4	5600	10000 (c)	50
2,4,6-Trichlorophenol	88-06-2	62	270	10

SOIL CLEANUP CRITERIA (mg/kg)
(LAST REVISED - 5/12/99)

Contaminant	CASRN	(RDCSCC)	(NRDCSCC)	(IGWSCC)
Vanadium	7440-62-2	370	7100 (n)	(h)
Vinyl chloride	75-01-4	2	7	10
Xylenes (Total)	1330-20-7	410	1000 (d)	[10] 67 (s)
Zinc	7440-66-6	1500 (m)	1500 (m)	(h)

Footnotes:

(a) Criteria are health based using an incidental ingestion exposure pathway except where noted below.
(b) Criteria are subject to change based on site specific factors (e.g., aquifer classification, soil type, natural background, environmental impacts, etc.).
(c) Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.
(d) Health based criterion exceeds the 1000 mg/kg maximum for total volatile organic contaminants.
(e) Cleanup standard proposal was based on natural background.
(f) Health based criterion is lower than analytical limits; cleanup criterion based on practical quantitation level.
(g) Criterion based on the inhalation exposure pathway.
(h) The impact to ground water values for inorganic constituents will be developed based upon site specific chemical and physical parameters.
(i) Site specific determination required for SCC for the allergic contact dermatitis exposure pathway.
(j) Contaminant not regulated for this exposure pathway.
(k) Criteria based on inhalation exposure pathway, which yielded a more stringent criterion than the incidental ingestion exposure pathway.
(l) No criterion derived for this contaminant.
(m) Criterion based on ecological (phytotoxicity) effects.
(n) Level of the human health based criterion is such that evaluation for potential environmental impacts on a site by site basis is recommended.
(o) Level of the criterion is such that evaluation for potential acute exposure hazard is recommended.
(p) Criterion based on the USEPA Integrated Exposure Uptake Biokinetic (IEUBK) model utilizing the default parameters. The concentration is considered to protect 95% of target population (children) at a blood lead level of 10 *ug*/dl.
(q) Criteria were derived from a model developed by the Society for Environmental Geochemistry and Health (SEGH) and were designed to be protective for adults in the workplace.
(r) Insufficient information available to calculate impact to ground water criteria.
(s) Criterion based on new drinking water standard.

ATTACHMENT B 2.5

REFERENCE 23

U.S. EP[redacted]-HOC
[redacted]perfund Program
Region II
List-8I Site/Action Listing

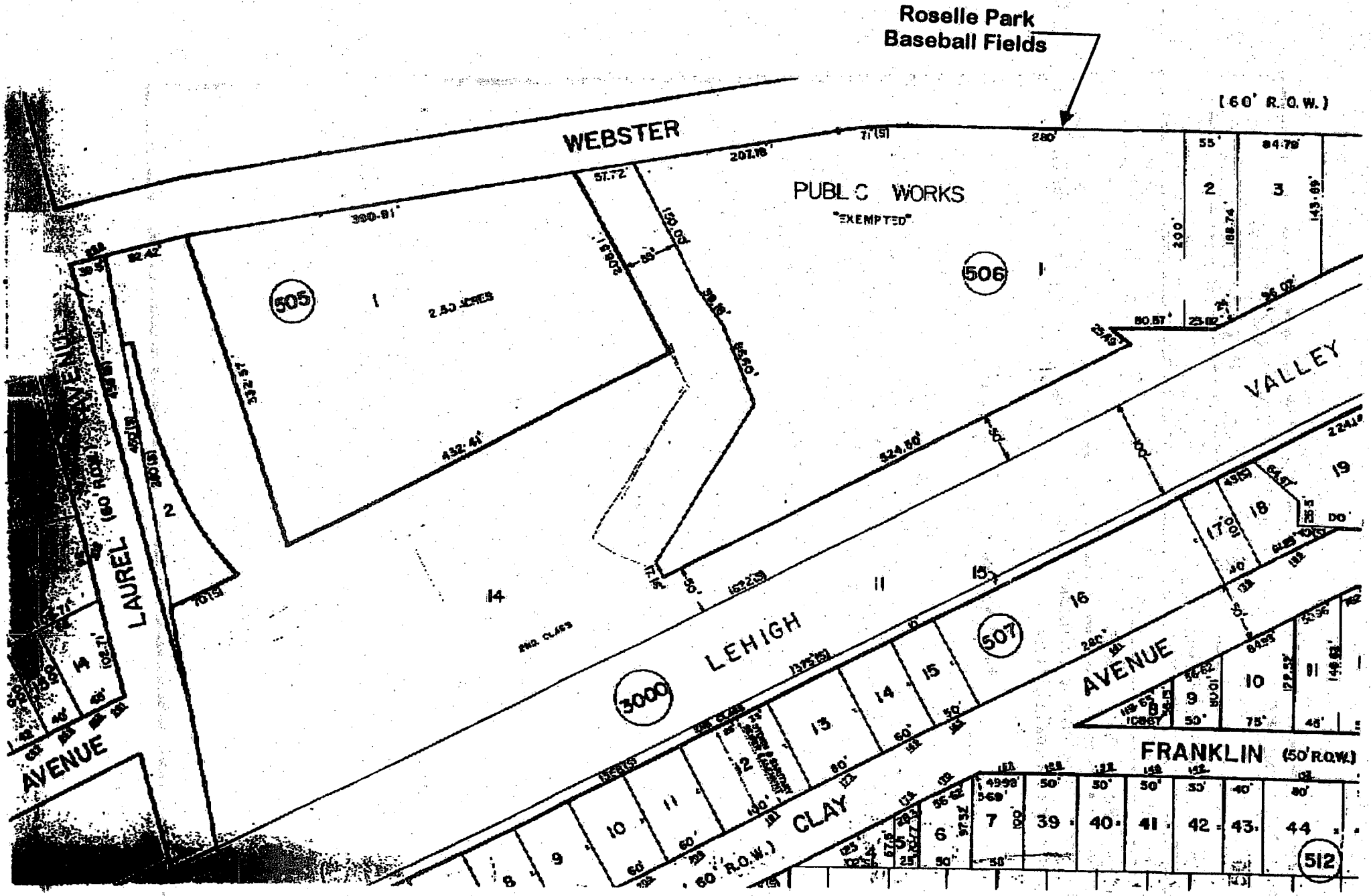
EPA ID	Site Name / Address / City / County Name	Zip Code	Cong Dist	NFRAP Flag	Oprble Unit	Action Type	Action Lead	Action Qualif	Actual Start Date	Actual Compl Date
NJD980237275	RONSON CO 55 MANUFACTURERS PL NEWARK ESSEX	07105 01	10	NFA						
					00	DS 001	F			05/01/81
						PA 001	F	N	06/01/84	06/01/84
NJD030250484	ROOSEVELT DRIVE-IN RTE 440 JERSEY CITY HUDSON	07305 01	14	NFA						
					00	DS 001	F			12/01/80
						HR 001	OH			08/01/82
						PA 001	F	L		12/01/80
						SH 001	F	N		09/30/97
						SI 001	F	L	02/01/81	08/01/82
NJSFN0204259	ROSELLE PARK BASEBALL FIELD 180 WEBSTER STREET ROSELLE PARK UNION	07204								
					00	DS 001	F			09/07/98
						PA 001	F		05/10/99	
						SI 001	F		02/23/00	
NJD980771935	ROUTE 195 TRAILER RTE 195 JACKSON TWP OCEAN	08527 02	06	NFA						
					00	DS 001	S			04/10/84
						PA 001	S	N		03/31/87
NJD980771927	ROUTE 20 TENTH AVE . CIRCLE 10TH AVE CIRLE RTE. 20 PATERSON PASSAIC	07501 03	08	NFA						
					00	DS 001	S			04/10/84
						PA 001	S	N		08/21/87
NJ0000228536	ROUTE 21 ABANDONED DRUMS 2020 MCCARTER HIGHWAY NEWARK ESSEX	07101 01	10							
					00	RS 001	F		04/13/94	06/28/94

REFERENCE 24

PROJECT NOTE	SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM	
To: Roselle Park Baseball Fields File	**Date:** 7/19/00	**Page**: 1 of 1
From: Scott Snyder		
Subject: Roselle Park Tax Map		

The attachment to this note is a Roselle Park tax map showing the Block and Lot Numbers for the Roselle Park Baseball Fields site.

Block No. 506 **Lot No. 1**


Roselle Park
Baseball Fields
(60' R.O.W.)
WEBSTER
PUBLIC WORKS
"EXEMPTED"
505
506
2.50 ACRES
LAUREL
AVENUE
LEHIGH
VALLEY
3000
507
AVENUE
FRANKLIN (50' R.O.W.)
CLAY
(60' R.O.W.)
512

REFERENCE 25

PROJECT NOTE	SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

To: Roselle Park Baseball Fields File **Date:** 7/26/00 **Page:** 1 of 1

From: Scott Snyder

Subject: Wetland Frontage

On 26 July 2000 START member Scott Snyder determined the HRS eligible wetland frontage for surface water bodies associated with the 15 downstream mile surface water pathway of the Roselle Park site. The frontage was determined by measuring the length of each HRS eligilbe wetland that fronts Morses Creek and the Arthur Kill as shown on the 15 Mile Surface Water Pathway Map (Ref No. 12).

Morses Creek - ..50 miles of frontage

Arthur Kill - 5.0 miles of frontage

REFERENCE 26

PROJECT NOTE **SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM**

To: Roselle Park Baseball Fields File **Date:** 7/19/00 **Page:** 1 of 1

From: Scott Snyder

Subject: State and Federal Soil Cleanup Criteria

The attachments to this note document the NJDEP (residential) and U.S. EPA cleanup guidelines for the PAH compounds detected in surface soil samples collected in Wolf and Adase fields on 15 May 2000. Those listed below exceed state and/or federal cleanup criteria. Concentrations given in the table below are in parts per million (ppm).

* *Exceeds both state and federal cleanup criteria*
** *Exceeds state cleanup criteria*

PAH Compound	Background	Sample S06	NJDEP	U.S. EPA
Benzo(b)fluoranthene*	.170	6.5	0.9	0.9
Benzo(a)anthracene*	.130	7.2	0.9	0.9
Benzo(k)fluoranthene**	.054	2.1	0.9	9
Indeno(1,2,3-cd)pyrene*	.10	2.9	0.9	0.9
Benzo(a)pyrene*	.054	4.5	0.66	0.09

United States
Environmental Protection
Agency

Office of Solid Waste and
Emergency Response
Washington, DC 20460

EPA/540/R95/128
May 1996

Superfund

EPA

Soil Screening Guidance: Technical Background Document

Second Edition

Table A-1. Generic SSLs [a]

CAS No.	Compound	Ingestion (mg/kg)	Inhalation volatiles (mg/kg)	Migration to ground water: 20 DAF (mg/kg)	Migration to ground water: 1 DAF (mg/kg)
	Organics				
83-32-9	Acenaphthene	4,700 [b]	— [c]	570 [b]	29 [b]
67-64-1	Acetone	7,800 [b]	1.0E+05 [d]	16 [b]	0.8 [b]
309-00-2	Aldrin	0.04 [e]	3 [e]	0.5 [e]	0.02 [e]
120-12-7	Anthracene	23,000 [b]	— [c]	12,000 [b]	590 [b]
56-55-3	Benz(*a*)anthracene	0.9 [e]	— [c]	2 [e]	0.08 [e,f]
71-43-2	Benzene	22 [e]	0.8 [e]	0.03	0.002 [f]
205-99-2	Benzo(*b*)fluoranthene	0.9 [e]	— [c]	5 [e]	0.2 [e,f]
207-08-9	Benzo(*k*)fluoranthene	9 [e]	— [c]	49 [e]	2 [e]
65-85-0	Benzoic acid	3.1E+05 [b]	— [c]	400 [b,i]	20 [b,i]
50-32-8	Benzo(*a*)pyrene	0.09 [e,f]	— [c]	8	0.4
111-44-4	Bis(2-chloroethyl)ether	0.6 [e]	0.2 [e,f]	0.0004 [e,f]	2E-05 [e,f]
117-81-7	Bis(2-ethylhexyl)phthalate	46 [e]	31,000 [d]	3,600	180
75-27-4	Bromodichloromethane	10 [e]	3,000 [d]	0.6	0.03
75-25-2	Bromoform	81 [e]	53 [e]	0.8	0.04
71-36-3	Butanol	7,800 [b]	10,000 [d]	17 [b]	0.9 [b]
85-68-7	Butyl benzyl phthalate	16,000 [b]	930 [d]	930 [d]	810 [b]
86-74-8	Carbazole	32 [e]	— [c]	0.6 [e]	0.03 [e,f]
75-15-0	Carbon disulfide	7,800 [b]	720 [d]	32 [b]	2 [b]
56-23-5	Carbon tetrachloride	5 [e]	0.3 [e]	0.07	0.003 [f]
57-74-9	Chlordane	0.5 [e]	20 [e]	10	0.5
106-47-8	*p*-Chloroaniline	310 [b]	— [c]	0.7 [b]	0.03 [b,f]
108-90-7	Chlorobenzene	1,600 [b]	130 [b]	1	0.07
124-48-1	Chlorodibromomethane	8 [e]	1,300 [d]	0.4	0.02
67-66-3	Chloroform	100 [e]	0.3 [e]	0.6	0.03
95-57-8	2-Chlorophenol	390 [b]	53,000 [d]	4 [b,i]	0.2 [b,f,i]
218-01-9	Chrysene	88 [e]	— [c]	160 [e]	8 [e]
72-54-8	DDD	3 [e]	— [c]	16 [e]	0.8 [e]
72-55-9	DDE	2 [e]	— [c]	54 [e]	3 [e]
50-29-3	DDT	2 [e]	— [g]	32 [e]	2 [e]
53-70-3	Dibenz(*a,h*)anthracene	0.09 [e,f]	— [c]	2 [e]	0.08 [e,f]
84-74-2	Di-*n*-butyl phthalate	7,800 [b]	2,300 [d]	2,300 [d]	270 [b]
95-50-1	1,2-Dichlorobenzene	7,000 [b]	560 [d]	17	0.9
106-46-7	1,4-Dichlorobenzene	27 [e]	— [g]	2	0.1 [f]
91-94-1	3,3-Dichlorobenzidine	1 [e]	— [c]	0.007 [e,f]	0.0003 [e,f]
75-34-3	1,1-Dichloroethane	7,800 [b]	1,300 [b]	23 [b]	1 [b]
107-06-2	1,2-Dichloroethane	7 [e]	0.4 [e]	0.02	0.001 [f]
75-35-4	1,1-Dichloroethylene	1 [e]	0.07 [e]	0.06	0.003 [f]
156-59-2	*cis*-1,2-Dichloroethylene	780 [b]	1,200 [d]	0.4	0.02
156-60-5	*trans*-1,2-Dichloroethylene	1,600 [b]	3,100 [d]	0.7	0.03
120-83-2	2,4-Dichlorophenol	230 [b]	— [c]	1 [b,i]	0.05 [b,f,i]

ATTACHMENT A.3.2

Table A-1 (continued)

CAS No.	Compound	Ingestion (mg/kg)	Inhalation volatiles (mg/kg)	Migration to ground water: 20 DAF (mg/kg)	Migration to ground water: 1 DAF (mg/kg)
	Organics				
78-87-5	1,2-Dichloropropane	9 [e]	15 [b]	0.03	0.001 [f]
542-75-6	1,3-Dichloropropene	4 [e]	0.1 [e]	0.004 [e]	0.0002 [e]
60-57-1	Dieldrin	0.04 [e]	1 [e]	0.004 [e]	0.0002 [e,f]
84-66-2	Diethylphthalate	63,000 [b]	2,000 [d]	470 [b]	23 [b]
105-67-9	2,4-Dimethylphenol	1,600 [b]	— [c]	9 [b]	0.4 [b]
51-28-5	2,4-Dinitrophenol	160 [b]	— [c]	0.3 [b,f,j]	0.01 [b,f,j]
121-14-2	2,4-Dinitrotoluene	0.9 [e]	— [c]	0.0008 [e,f]	4E-05 [e,f]
606-20-2	2,6-Dinitrotoluene	0.9 [e]	— [c]	0.0007 [e,f]	3E-05 [e,f]
117-84-0	Di-*n*-octyl phthalate	1,600 [b]	10,000 [d]	10,000 [d]	10,000 [d]
115-29-7	Endosulfan	470 [b]	— [c]	18 [b]	0.9 [b]
72-20-8	Endrin	23 [b]	— [c]	1	0.05
100-41-4	Ethylbenzene	7,800 [b]	400 [d]	13	0.7
→ 206-44-0	Fluoranthene	3,100 [b]	— [c]	4,300 [b]	210 [b]
86-73-7	Fluorene	3,100 [b]	— [c]	560 [b]	28 [b]
76-44-8	Heptachlor	0.1 [e]	0.1 [e]	23	1
1024-57-3	Heptachlor epoxide	0.07 [e]	5 [e]	0.7	0.03
118-74-1	Hexachlorobenzene	0.4 [e]	1 [e]	2	0.1 [f]
87-68-3	Hexachloro-1,3-butadiene	8 [e]	8 [e]	2	0.1 [f]
319-84-6	α-HCH (α-BHC)	0.1 [e]	0.8 [e]	0.0005 [e,f]	3E-05 [e,f]
319-85-7	β-HCH (β-BHC)	0.4 [e]	— [g]	0.003 [e]	0.0001 [e,f]
58-89-9	γ-HCH (Lindane)	0.5 [e]	— [c]	0.009	0.0005 [f]
77-47-4	Hexachlorocyclopentadiene	550 [b]	10 [b]	400	20
67-72-1	Hexachloroethane	46 [e]	55 [e]	0.5 [e]	0.02 [e,f]
→ 193-39-5	Indeno(1,2,3-*cd*)pyrene	0.9 [e]	— [c]	14 [e]	0.7 [e]
78-59-1	Isophorone	670 [e]	4,600 [d]	0.5 [e]	0.03 [e,f]
7439-97-6	Mercury	23 [b,l]	10 [b,i]	2 [i]	0.1 [i]
72-43-5	Methoxychlor	390 [b]	— [c]	160	8
74-83-9	Methyl bromide	110 [b]	10 [b]	0.2 [b]	0.01 [b,f]
75-09-2	Methylene chloride	85 [e]	13 [e]	0.02 [e]	0.001 [e,f]
95-48-7	2-Methylphenol	3,900 [b]	— [c]	15 [b]	0.8 [b]
91-20-3	Naphthalene	3,100 [b]	— [c]	84 [b]	4 [b]
98-95-3	Nitrobenzene	39 [b]	92 [b]	0.1 [b,f]	0.007 [b,f]
86-30-6	*N*-Nitrosodiphenylamine	130 [e]	— [c]	1 [e]	0.06 [e,f]
621-64-7	*N*-Nitrosodi-*n*-propylamine	0.09 [e,f]	— [c]	5E-05 [e,f]	2E-06 [e,f]
1336-36-3	PCBs	1 [h]	— [h]	— [h]	— [h]
87-86-5	Pentachlorophenol	3 [e,j]	— [c]	0.03 [f,j]	0.001 [f,j]
108-95-2	Phenol	47,000 [b]	— [c]	100 [b]	5 [b]
→ 129-00-0	Pyrene	2,300 [b]	— [c]	4,200 [b]	210 [b]
100-42-5	Styrene	16,000 [b]	1,500 [d]	4	0.2
79-34-5	1,1,2,2-Tetrachloroethane	3 [e]	0.6 [e]	0.003 [e,f]	0.0002 [e,f]

Table A-1 (continued)

Organics CAS No.	Compound	Ingestion (mg/kg)	Inhalation volatiles (mg/kg)	Migration to ground water 20 DAF (mg/kg)	Migration to ground water 1 DAF (mg/kg)
127-18-4	Tetrachloroethylene	12 [e]	11 [e]	0.06	0.003 [f]
108-88-3	Toluene	16,000 [b]	650 [d]	12	0.6
8001-35-2	Toxaphene	0.6 [e]	89 [e]	31	2
120-82-1	1,2,4-Trichlorobenzene	780 [b]	3,200 [d]	5	0.3 [f]
71-55-6	1,1,1-Trichloroethane	— [c]	1,200 [d]	2	0.1
79-00-5	1,1,2-Trichloroethane	11 [e]	1 [e]	0.02	0.0009 [f]
79-01-6	Trichloroethylene	58 [e]	5 [e]	0.06	0.003 [f]
95-95-4	2,4,5-Trichlorophenol	7,800 [b]	— [c]	270 [b,i]	14 [b,i]
88-06-2	2,4,6-Trichlorophenol	58 [e]	200 [e]	0.2 [e,f,i]	0.008 [e,f,i]
108-05-4	Vinyl acetate	78,000 [b]	1,000 [b]	170 [b]	8 [b]
75-01-4	Vinyl chloride	0.3 [e]	0.03 [e]	0.01 [f]	0.0007 [f]
108-38-3	*m*-Xylene	1.6E+05 [b]	420 [d]	210	10
95-47-6	*o*-Xylene	1.6E+05 [b]	410 [d]	190	9
106-42-3	*p*-Xylene	1.6E+05 [b]	460 [d]	200	10

ATTACHMENT A.2.4

Table A-1 (continued)

CAS No.	Compound	Ingestion (mg/kg)	Inhalation fugitive particulate (mg/kg)	Migration to ground water: 20 DAF (mg/kg)	Migration to ground water: 1 DAF (mg/kg)
Inorganics					
7440-36-0	Antimony	31 [b]	— [c]	5	0.3
7440-38-2	Arsenic	0.4 [e]	750 [e]	29 [i]	1 [i]
7440-39-3	Barium	5,500 [b]	6.9E+05 [b]	1,600 [i]	82 [i]
7440-41-7	Beryllium	0.1 [e]	1,300 [e]	63 [i]	3 [i]
7440-43-9	Cadmium	78 [b,m]	1,800 [e]	8 [i]	0.4 [i]
7440-47-3	Chromium (total)	390 [b]	270 [e]	38 [i]	2 [i]
16065-83-1	Chromium (III)	78,000 [b]	— [c]	— [g]	— [g]
18540-29-9	Chromium (VI)	390 [b]	270 [e]	38 [i]	2 [i]
57-12-5	Cyanide (amenable)	1,600 [b]	— [c]	40	2
7439-92-1	Lead	400 [k]	— [k]	— [k]	— [k]
7440-02-0	Nickel	1,600 [b]	13,000 [e]	130 [i]	7 [i]
7782-49-2	Selenium	390 [b]	— [c]	5 [i]	0.3 [i]
7440-22-4	Silver	390 [b]	— [c]	34 [b,i]	2 [b,i]
7440-28-0	Thallium	— [c]	— [c]	0.7 [i]	0.04 [i]
7440-62-2	Vanadium	550 [b]	— [c]	6,000 [b]	300 [b]
7440-66-6	Zinc	23,000 [b]	— [c]	12,000 [b,i]	620 [b,i]

DAF = Dilution and attenuation factor.

[a] Screening levels based on human health criteria only.

[b] Calculated values correspond to a noncancer hazard quotient of 1.

[c] No toxicity criteria available for that route of exposure.

[d] Soil saturation concentration (C_{sat}).

[e] Calculated values correspond to a cancer risk level of 1 in 1,000,000.

[f] Level is at or below Contract Laboratory Program required quantitation limit for Regular Analytical Services (RAS).

[g] Chemical-specific properties are such that this pathway is not of concern at any soil contaminant concentration.

[h] A preliminary remediation goal of 1 mg/kg has been set for PCBs based on *Guidance on Remedial Actions for Superfund Sites with PCB Contamination* (U.S. EPA, 1990) and on EPA efforts to manage PCB contamination.

[i] SSL for pH of 6.8.

[j] Ingestion SSL adjusted by a factor of 0.5 to account for dermal exposure.

[k] A screening level of 400 mg/kg has been set for lead based on *Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities* (U.S. EPA, 1994).

[l] SSL is based on RfD for mercuric chloride (CAS No. 007487-94-7).

[m] SSL is based on dietary RfD.

ATTACHMENT A, p.5

REFERENCE 27

New Jersey Codes

New Jersey County Codes

001	Atlantic County
003	Bergen County
005	Burlington County
007	Camden County
009	Cape May County
011	Cumberland County
013	Essex County
015	Gloucester County
017	Hudson County
019	Hunterdon County
021	Mercer County
023	Middlesex County
025	Monmouth County
027	Morris County
029	Ocean County
031	Passaic County
033	Salem County
035	Somerset County
037	Sussex County
→ 039	Union County
041	Warren County
099	Out of State

New Jersey State Institutions

College of New Jersey	2519
Kean University	2517
Montclair State University	2520
NJ Institute of Technology	2513
Ramapo College of New Jersey	2884
Richard Stockton College	2889
Rowan University	2515
William Paterson University	2518

Rutgers University	
Camden	2092
Cook College	2170
Douglass College	2192
Livingston	2384
Newark	2512
Rutgers College	2765
University College	2777

Other New Jersey College Codes

Bloomfield College	2044
Caldwell College	2072
Drew University	2090
Fairleigh Dickinson University	
Madison	
Rutherford	2262
Teaneck	2255
Wayne	2263
	2253

Felician College	2321
Georgian Court College	2274
Monmouth College	2416
Princeton University	2672
Rider College	2758
Seton Hall	2811
St. Peter's College	2806
Stevens Institute	2819
Upsala College	2930

If your prior institution does not appear on this list, the College's CEEB# may be obtained from that institution's Registrar's Office.

⇧

Comments, Suggestions or Problems? Send E-mail to:
webmaster@turbo.kean.edu

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ENVIRONMENTAL CHEMISTRY

Environmental Chemistry

Colin Baird
University of Western Ontario

W. H. Freeman and Company
New York

Back cover image: Chlorine monoxide (ClO) and the Antarctic ozone hole. These maps, produced by the Microwave Limb Sounder aboard the Upper Atmosphere Research Satellite, show the amount of ClO (left) and ozone (right) in the stratosphere above 20 kilometers (66,000 feet). Very small abundances of ozone appear where there are large abundances of ClO, the dominant form of chlorine that destroys ozone. Data from September 21,1991 (top) are compared with those from September 20, 1992 (bottom). (Photos supplied for both front and back covers by National Aeronautics and Space Administration.)

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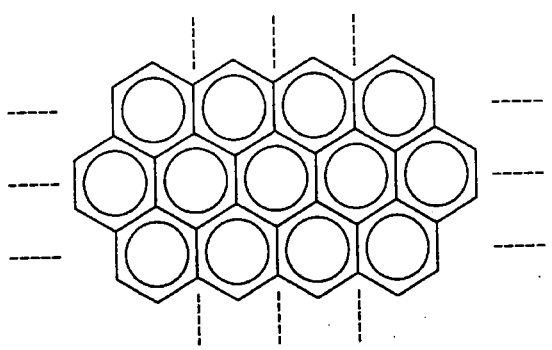
commercially since they have no uses. Some PAHs are found in coal tar derivatives in commerce, however.

PAHs AS POLLUTANTS

PAHs are common air pollutants and are strongly implicated in the degradation of human health in some cities. Typically, the concentration of PAHs in urban outdoor air amounts to a few nanograms per cubic meter, although it can reach ten times this amount in very polluted environments. PAHs are formed when carbon-containing materials are incompletely burnt. PAHs containing four or fewer rings usually remain as gases if they are released into air. Usually after spending less than a day in outside air, they are degraded by a sequence of free radical reactions that begin, as expected from our previous analysis of air chemistry (Chapter 3), by the addition of the $OH^{\bullet}$ radical to a double bond. Elevated PAH concentrations in indoor air are typically due to the smoking of tobacco and the burning of wood and coal.

In contrast to their smaller analogs, PAHs with more than four benzene rings do not exist for long in air as gaseous molecules. Owing to their low vapor pressure, they quickly condense and become adsorbed onto the surfaces of soot and ash particles. Even PAHs with two to four rings adsorb onto particles in the wintertime, since their vapor pressure decreases sharply with lowering of the temperature. Since many soot particles are of respirable size, the PAHs can be transported into the lungs by breathing.

Soot itself is mainly graphitic-like carbon; it consists of collection of tiny crystals ("crystallites"), each of which is composed of stacks of planar layers of carbon atoms, all of which occur in fused benzene rings.



graphite

REFERENCE 28

PROJECT NOTE **REGION II SITE ASSESSMENT TEAM**

To: Roselle Park Baseball Fields File **Date:** 11/2/01 **Page:** 1 of 1

From: Scott Snyder

Subject: SAT Analytical Data

The attachments to this note are U.S. EPA Contract Laboratory Program (CLP) analytical data for organic and inorganic analyses of surface soil samples collected by Region II SAT on 29 August 2001. Samples were analyzed for Target Compound List (TCL) organics (EPA Method OLM04.2) by Liberty Analytical, Cary, North Carolina and Target Analyte List (TAL) inorganics (EPA Method ILM04.1) by Chemtech Consulting Group, Englewood, New Jersey.

Attachment A - Summary Tables of TCL Volatiles

Attachment B - Summary Tables of TCL Semivolatiles

Attachment C - Summary Tables of TCL Pesticides/PCBs

Attachment D - Summary Tables of TAL Metals

Attachment E - Organic Laboratory Package; including Form Is and data validation documentation

Attachment F - Inorganic Laboratory Package; including form Is and data validation documentation

REFERENCE NO. 28

ATTACHMENT A

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Number of Soil Samples : 19
Lab. : LIBRTY
Number of Water Samples : 0
Reviewer :
Date :

Sample Number :	B0BA0		B0BA1		B0BA2		B0BA3		B0BA4	
Sampling Location :	1024-S16		1024-S17		1024-S18		1024-S19		1024-S20	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	13:25		13:50		13:55		14:00		14:05	
%Moisture :	1		0		1		0		0	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10	U	10	U	11	U	11	U	10	U
Chloromethane	10	U	10	U	11	U	11	U	10	U
Vinyl Chloride	10	U	10	U	11	U	11	U	10	U
Bromomethane	10	U	10	U	11	U	11	U	10	U
Chloroethane	10	U	10	U	11	U	11	U	10	U
Trichlorofluoromethane	4	J	4	J	4	J	4	J	5	J
1,1-Dichloroethene	10	U	10	U	11	U	11	U	10	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	U	11	U	11	U	10	U
Acetone	10	UJ	10	UJ	11	UJ	11	UJ	10	UJ
Carbon Disulfide	10	U	10	U	11	U	11	U	10	U
Methyl Acetate	1	J	10	U	11	U	1	J	2	J
Methylene Chloride	10	U	10	U	11	U	11	U	10	U
trans-1,2-Dichloroethene	10	U	10	U	11	U	11	U	10	U
Methyl tert-Butyl Ether	10	U	10	U	11	U	11	U	10	U
1,1-Dichloroethane	10	U	10	U	11	U	11	U	10	U
cis-1,2-Dichloroethene	10	U	10	U	11	U	11	U	10	U
2-Butanone	10	U	10	U	11	U	11	U	10	U
Chloroform	10	U	10	U	11	U	11	U	10	U
1,1,1-Trichloroethane	10	U	10	U	11	U	11	U	10	U
Cyclohexane	10	U	10	U	11	U	11	U	10	U
Carbon Tetrachloride	10	U	10	U	11	U	11	U	10	U
Benzene	10	U	10	U	11	U	11	U	10	U
1,2-Dichloroethane	10	U	10	U	11	U	11	U	10	U
Trichloroethene	10	U	10	U	11	U	11	U	10	U
Methylcyclohexane	10	U	10	U	11	U	11	U	10	U
1,2-Dichloropropane	10	U	10	U	11	U	11	U	10	U
Bromodichloromethane	10	U	10	U	11	U	11	U	10	U
cis-1,3-Dichloropropene	10	U	10	U	11	U	11	U	10	U
4-Methyl-2-pentanone	10	U	10	U	11	U	11	U	10	U
Toluene	10	U	10	U	11	U	11	U	10	U
trans-1,3-Dichloropropene	10	U	10	U	11	U	11	U	10	U
1,1,2-Trichloroethane	10	U	10	U	11	U	11	U	10	U
Tetrachloroethene	10	U	10	U	11	U	11	U	10	U
2-Hexanone	10	U	10	U	11	U	11	U	10	U
Dibromochloromethane	10	U	10	U	11	U	11	U	10	U
1,2-Dibromoethane	10	U	10	U	11	U	11	U	10	U
Chlorobenzene	10	U	10	U	11	U	11	U	10	U

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0BA0		B0BA1		B0BA2		B0BA3		B0BA4	
Sampling Location :	1024-S16		1024-S17		1024-S18		1024-S19		1024-S20	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	13:25		13:50		13:55		14:00		14:05	
%Moisture :	1		0		1		0		0	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	10	U	10	U	11	U	11	U	10	U
Xylenes (total)	10	U	10	U	11	U	11	U	10	U
Styrene	10	U	10	U	11	U	11	U	10	U
Bromoform	10	U	10	U	11	U	11	U	10	U
Isopropylbenzene	10	U	10	U	11	U	11	U	10	U
1,1,2,2-Tetrachloroethane	10	U	10	U	11	U	11	U	10	U
1,3-Dichlorobenzene	10	U	10	U	11	U	11	U	10	U
1,4-Dichlorobenzene	10	U	10	U	11	U	11	U	10	U
1,2-Dichlorobenzene	10	U	10	U	11	U	11	U	10	U
1,2-Dibromo-3-chloropropane	10	U	10	U	11	U	11	U	10	U
1,2,4-Trichlorobenzene	10	U	10	U	11	U	11	U	10	U

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B85		B0B85MS		B0B85MSD		B0B86		B0B87	
Sampling Location :	1024-S01		1024-S01		1024-S01		1024-S02		1024-S03	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	08:25		08:25		08:25		08:40		09:00	
%Moisture :	2		2		2		2		2	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10	U	11	U	10	U	10	U	10	U
Chloromethane	10	U	11	U	10	U	10	U	10	U
Vinyl Chloride	10	U	11	U	10	U	10	U	10	U
Bromomethane	10	U	11	U	10	U	10	U	10	U
Chloroethane	10	U	11	U	10	U	10	U	10	U
Trichlorofluoromethane	10	U	1	J	3	J	4	J	4	J
1,1-Dichloroethene	10	U	40		40		10	U	10	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	11	U	10	U	10	U	10	U
Acetone	10	UJ	11	UJ	10	UJ	10	UJ	10	UJ
Carbon Disulfide	10	U	11	U	10	U	10	U	10	U
Methyl Acetate	10	U	11	U	10	U	10	U	10	U
Methylene Chloride	10	U	11	U	10	U	10	U	10	U
trans-1,2-Dichloroethene	10	U	11	U	10	U	10	U	10	U
Methyl tert-Butyl Ether	10	U	11	U	10	U	10	U	10	U
1,1-Dichloroethane	10	U	11	U	10	U	10	U	10	U
cis-1,2-Dichloroethene	10	U	11	U	10	U	10	U	10	U
2-Butanone	10	U	11	U	10	U	10	U	10	U
Chloroform	10	U	11	U	10	U	10	U	10	U
1,1,1-Trichloroethane	10	U	11	U	10	U	10	U	10	U
Cyclohexane	10	U	11	U	10	U	10	U	10	U
Carbon Tetrachloride	10	U	11	U	10	U	10	U	10	U
Benzene	10	U	38		38		10	U	10	U
1,2-Dichloroethane	10	U	11	U	10	U	10	U	10	U
Trichloroethene	10	U	36		37		10	U	10	U
Methylcyclohexane	10	U	11	U	10	U	10	U	10	U
1,2-Dichloropropane	10	U	11	UJ	10	UJ	10	U	10	U
Bromodichloromethane	10	U	11	U	10	U	10	U	10	U
cis-1,3-Dichloropropene	10	U	11	U	10	U	10	U	10	U
4-Methyl-2-pentanone	10	U	11	U	10	U	10	U	10	U
Toluene	10	U	38		36		10	U	10	U
trans-1,3-Dichloropropene	10	U	11	U	10	U	10	U	10	U
1,1,2-Trichloroethane	10	U	11	U	10	U	10	U	10	U
Tetrachloroethene	10	U	11	U	10	U	10	U	10	U
2-Hexanone	10	U	11	U	10	U	10	U	10	U
Dibromochloromethane	10	U	11	U	10	U	10	U	10	U
1,2-Dibromoethane	10	U	11	U	10	U	10	U	10	U
Chlorobenzene	10	U	36		37		10	U	10	U

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B85		B0B85MS		B0B85MSD		B0B86		B0B87	
Sampling Location :	1024-S01		1024-S01		1024-S01		1024-S02		1024-S03	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	08:25		08:25		08:25		08:40		09:00	
%Moisture :	2		2		2		2		2	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	10	U	11	U	10	U	10	U	10	U
Xylenes (total)	10	U	11	U	10	U	10	U	10	U
Styrene	10	U	11	U	10	U	10	U	10	U
Bromoform	10	U	11	U	10	U	10	U	10	U
Isopropylbenzene	10	U	11	U	10	U	10	U	10	U
1,1,2,2-Tetrachloroethane	10	U	11	U	10	U	10	U	10	U
1,3-Dichlorobenzene	10	U	11	U	10	U	10	U	10	U
1,4-Dichlorobenzene	10	U	11	U	10	U	10	U	10	U
1,2-Dichlorobenzene	10	U	11	U	10	U	10	U	10	U
1,2-Dibromo-3-chloropropane	10	U	11	U	10	U	10	U	10	U
1,2,4-Trichlorobenzene	10	U	11	U	10	U	10	U	10	U

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B88		B0B89		B0B90		B0B91		B0B92	
Sampling Location :	1024-S04		1024-S05		1024-S06		1024-S07		1024-S08	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	09:10		09:25		09:35		09:55		10:10	
%Moisture :	2		2		2		1		1	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10	U	10	U	10	U	10	U	10	U
Chloromethane	10	U	10	U	10	U	10	U	10	U
Vinyl Chloride	10	U	10	U	10	U	10	U	10	U
Bromomethane	10	U	10	U	10	U	10	U	10	U
Chloroethane	10	U	10	U	10	U	10	U	10	U
Trichlorofluoromethane	4	J	4	J	4	J	4	J	3	J
1,1-Dichloroethene	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	U	10	U	10	U	10	U
Acetone	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
Carbon Disulfide	10	U	10	U	10	U	10	U	10	U
Methyl Acetate	2	J	10	U	10	U	10	U	10	U
Methylene Chloride	10	U	10	U	10	U	10	U	10	U
trans-1,2-Dichloroethene	10	U	10	U	10	U	10	U	10	U
Methyl tert-Butyl Ether	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethane	10	U	10	U	10	U	10	U	10	U
cis-1,2-Dichloroethene	10	U	10	U	10	U	10	U	10	U
2-Butanone	10	U	10	U	10	U	10	U	10	U
Chloroform	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane	10	U	10	U	10	U	10	U	10	U
Cyclohexane	10	U	10	U	10	U	10	U	10	U
Carbon Tetrachloride	10	U	10	U	10	U	10	U	10	U
Benzene	10	U	10	U	10	U	10	U	10	U
1,2-Dichloroethane	10	U	10	U	10	U	10	U	10	U
Trichloroethene	10	U	10	U	10	U	10	U	10	U
Methylcyclohexane	10	U	10	U	10	U	10	U	10	U
1,2-Dichloropropane	10	U	10	U	10	U	10	U	10	U
Bromodichloromethane	10	U	10	U	10	U	10	U	10	U
cis-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U
4-Methyl-2-pentanone	10	U	10	U	10	U	10	U	10	U
Toluene	10	U	10	U	10	U	10	U	10	U
trans-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloroethane	10	U	10	U	10	U	10	U	10	U
Tetrachloroethene	10	U	10	U	10	U	10	U	10	U
2-Hexanone	10	U	10	U	10	U	10	U	10	U
Dibromochloromethane	10	U	10	U	10	U	10	U	10	U
1,2-Dibromoethane	10	U	10	U	10	U	10	U	10	U
Chlorobenzene	10	U	10	U	10	U	10	U	10	U

Case #: 29681
SDG : B0B85
Site :
ROSELLE PARK BASEBALL FIELDS
Lab. :
LIBRTY
Reviewer :
Date :

Sample Number :	B0B88		B0B89		B0B90		B0B91		B0B92	
Sampling Location :	1024-S04		1024-S05		1024-S06		1024-S07		1024-S08	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	09:10		09:25		09:35		09:55		10:10	
%Moisture :	2		2		2		1		1	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	10	U	10	U	10	U	10	U	10	U
Xylenes (total)	10	U	10	U	10	U	10	U	10	U
Styrene	10	U	10	U	10	U	10	U	10	U
Bromoform	10	U	10	U	10	U	10	U	10	U
Isopropylbenzene	10	U	10	U	10	U	10	U	10	U
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U	10	U	10	U
1,3-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U
1,4-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U
1,2-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U
1,2-Dibromo-3-chloropropane	10	U	10	U	10	U	10	U	10	U
1,2,4-Trichlorobenzene	10	U	10	U	10	U	10	U	10	U

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B93		B0B94		B0B96		B0B97		B0B98	
Sampling Location :	1024-S09		1024-S010		1024-S12		1024-S13		1024-S14	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	10:30		10:40		12:30		13:05		13:10	
%Moisture :	1		1		1		1		1	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	11	U	10	U	10	U	13	U	11	U
Chloromethane	11	U	10	U	10	U	13	U	11	U
Vinyl Chloride	11	U	10	U	10	U	13	U	11	U
Bromomethane	11	U	10	U	10	U	13	U	11	U
Chloroethane	11	U	10	U	10	U	13	U	11	U
Trichlorofluoromethane	5	J	10	U	4	J	3	J	3	J
1,1-Dichloroethene	11	U	10	U	10	U	13	U	11	U
1,1,2-Trichloro-1,2,2-trifluoroethane	11	U	10	U	10	U	13	U	11	U
Acetone	11	UJ	10	UJ	10	UJ	13	UJ	11	UJ
Carbon Disulfide	11	U	10	U	10	U	13	U	11	U
Methyl Acetate	2	J	10	U	1	J	13	U	11	U
Methylene Chloride	11	U	10	U	10	U	13	U	11	U
trans-1,2-Dichloroethene	11	U	10	U	10	U	13	U	11	U
Methyl tert-Butyl Ether	11	U	10	U	10	U	13	U	11	U
1,1-Dichloroethane	11	U	10	U	10	U	13	U	11	U
cis-1,2-Dichloroethene	11	U	10	U	10	U	13	U	11	U
2-Butanone	11	U	10	U	10	U	13	U	11	U
Chloroform	11	U	10	U	10	U	13	U	11	U
1,1,1-Trichloroethane	11	U	10	U	10	U	13	U	11	U
Cyclohexane	11	U	10	U	10	U	13	U	11	U
Carbon Tetrachloride	11	U	10	U	10	U	13	U	11	U
Benzene	11	U	10	U	10	U	13	U	11	U
1,2-Dichloroethane	11	U	10	U	10	U	13	U	11	U
Trichloroethene	11	U	10	U	10	U	13	U	11	U
Methylcyclohexane	11	U	10	U	10	U	13	U	11	U
1,2-Dichloropropane	11	U	10	UJ	10	U	13	U	11	U
Bromodichloromethane	11	U	10	U	10	U	13	U	11	U
cis-1,3-Dichloropropene	11	U	10	U	10	U	13	U	11	U
4-Methyl-2-pentanone	11	U	10	U	10	U	13	U	11	U
Toluene	11	U	10	U	10	U	13	U	11	U
trans-1,3-Dichloropropene	11	U	10	U	10	U	13	U	11	U
1,1,2-Trichloroethane	11	U	10	U	10	U	13	U	11	U
Tetrachloroethene	11	U	10	U	10	U	13	U	11	U
2-Hexanone	11	U	10	U	10	U	13	U	11	U
Dibromochloromethane	11	U	10	U	10	U	13	U	11	U
1,2-Dibromoethane	11	U	10	U	10	U	13	U	11	U
Chlorobenzene	11	U	10	U	10	U	13	U	11	U

Case #: 29681
Site :
Lab. :
Reviewer :
Date :

SDG : B0B85
ROSELLE PARK BASEBALL FIELDS
LIBRTY

Sample Number :	B0B93		B0B94		B0B96		B0B97		B0B98	
Sampling Location :	1024-S09		1024-S010		1024-S12		1024-S13		1024-S14	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	10:30		10:40		12:30		13:05		13:10	
%Moisture :	1		1		1		1		1	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	11	U	10	U	10	U	13	U	11	U
Xylenes (total)	11	U	10	U	10	U	13	U	11	U
Styrene	11	U	10	U	10	U	13	U	11	U
Bromoform	11	U	10	U	10	U	13	U	11	U
Isopropylbenzene	11	U	10	U	10	U	13	U	11	U
1,1,2,2-Tetrachloroethane	11	U	10	U	10	U	13	U	11	U
1,3-Dichlorobenzene	11	U	10	U	10	U	13	U	11	U
1,4-Dichlorobenzene	11	U	10	U	10	U	13	U	11	U
1,2-Dichlorobenzene	11	U	10	U	10	U	13	U	11	U
1,2-Dibromo-3-chloropropane	11	U	10	U	10	U	13	U	11	U
1,2,4-Trichlorobenzene	11	U	10	U	10	U	13	U	11	U

Case #: 29681
SDG : B0B85
Site :
ROSELLE PARK BASEBALL FIELDS
Lab. :
LIBRTY
Reviewer :
Date :

Sample Number :	B0B99		VBLKDT		VBLKDU		VHBLKDS			
Sampling Location :	1024-S15									
Matrix :	Soil		Soil		Soil		Soil			
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg			
Date Sampled :	08/29/2001									
Time Sampled :	13:30									
%Moisture :	2									
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0			
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	12	U	10	U	10	U	10	U		
Chloromethane	12	U	10	U	10	U	10	U		
Vinyl Chloride	12	U	10	U	10	U	10	U		
Bromomethane	12	U	10	U	10	U	10	U		
Chloroethane	12	U	10	U	10	U	10	U		
Trichlorofluoromethane	4	J	10	U	10	U	10	U		
1,1-Dichloroethene	12	U	10	U	10	U	10	U		
1,1,2-Trichloro-1,2,2-trifluoroethane	12	U	10	U	10	U	10	U		
Acetone	12	UJ	4	J	4	J	3	J		
Carbon Disulfide	12	U	10	U	10	U	10	U		
Methyl Acetate	1	J	10	U	10	U	10	U		
Methylene Chloride	12	U	3	J	2	J	10	U		
trans-1,2-Dichloroethene	12	U	10	U	10	U	10	U		
Methyl tert-Butyl Ether	12	U	10	U	10	U	10	U		
1,1-Dichloroethane	12	U	10	U	10	U	10	U		
cis-1,2-Dichloroethene	12	U	10	U	10	U	10	U		
2-Butanone	12	U	10	U	10	U	10	U		
Chloroform	12	U	10	U	10	U	10	U		
1,1,1-Trichloroethane	12	U	10	U	10	U	10	U		
Cyclohexane	12	U	10	U	10	U	10	U		
Carbon Tetrachloride	12	U	10	U	10	U	10	U		
Benzene	12	U	10	U	10	U	10	U		
1,2-Dichloroethane	12	U	10	U	10	U	10	U		
Trichloroethene	12	U	10	U	10	U	10	U		
Methylcyclohexane	12	U	10	U	10	U	10	U		
1,2-Dichloropropane	12	U	10	U	10	UJ	10	UJ		
Bromodichloromethane	12	U	10	U	10	U	10	U		
cis-1,3-Dichloropropene	12	U	10	U	10	U	10	U		
4-Methyl-2-pentanone	12	U	10	U	10	U	10	U		
Toluene	12	U	4	J	2	J	2	J		
trans-1,3-Dichloropropene	12	U	10	U	10	U	10	U		
1,1,2-Trichloroethane	12	U	10	U	10	U	10	U		
Tetrachloroethene	12	U	10	U	10	U	10	U		
2-Hexanone	12	U	10	U	10	U	10	U		
Dibromochloromethane	12	U	10	U	10	U	10	U		
1,2-Dibromoethane	12	U	10	U	10	U	10	U		
Chlorobenzene	12	U	10	U	10	U	10	U		

Case #: 29681 SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B99		VBLKDT		VBLKDU		VHBLKDS			
Sampling Location :	1024-S15									
Matrix :	Soil		Soil		Soil		Soil			
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg			
Date Sampled :	08/29/2001									
Time Sampled :	13:30									
%Moisture :	2									
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0			
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	12	U	10	U	10	U	10	U		
Xylenes (total)	12	U	10	U	10	U	4	J		
Styrene	12	U	10	U	10	U	10	U		
Bromoform	12	U	2	J	1	J	10	U		
Isopropylbenzene	12	U	10	U	10	U	10	U		
1,1,2,2-Tetrachloroethane	12	U	10	U	10	U	10	U		
1,3-Dichlorobenzene	12	U	10	U	10	U	10	U		
1,4-Dichlorobenzene	12	U	10	U	10	U	10	U		
1,2-Dichlorobenzene	12	U	10	U	10	U	10	U		
1,2-Dibromo-3-chloropropane	12	U	10	U	10	U	10	U		
1,2,4-Trichlorobenzene	12	U	10	U	10	U	10	U		

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS Number of Soil Samples : 9
Lab. : LIBRTY Number of Water Samples : 0
Reviewer :
Date :

Sample Number :	B0BA5		B0BA6		B0BA7		B0BA8		B0BA9	
Sampling Location :	1024-S21		1024-S22		1024-S23		1024-S24		1024-S25	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	11:00		11:10		11:20		11:30		14:35	
%Moisture :	8		8		9		10		8	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	11	U	11	U	11	U	11	U	14	U
Chloromethane	11	U	11	U	11	U	11	U	14	U
Vinyl Chloride	11	U	11	U	11	U	11	U	14	U
Bromomethane	11	U	11	U	11	U	11	U	14	U
Chloroethane	11	UJ	11	UJ	11	UJ	11	UJ	14	UJ
Trichlorofluoromethane	11	U	2	J	5	J	3	J	6	J
1,1-Dichloroethene	11	U	11	U	11	U	11	U	14	U
1,1,2-Trichloro-1,2,2-trifluoroethane	11	U	11	U	11	U	11	U	14	U
Acetone	11	UJ	11	UJ	11	UJ	11	UJ	14	UJ
Carbon Disulfide	11	U	11	U	11	U	11	U	14	U
Methyl Acetate	11	UJ	1	J	11	UJ	11	UJ	2	J
Methylene Chloride	11	U	11	U	11	U	11	U	14	U
trans-1,2-Dichloroethene	11	U	11	U	11	U	11	U	14	U
Methyl tert-Butyl Ether	11	U	11	U	11	U	11	U	14	U
1,1-Dichloroethane	11	U	11	U	11	U	11	U	14	U
cis-1,2-Dichloroethene	11	U	11	U	11	U	11	U	14	U
2-Butanone	11	U	11	U	11	U	11	U	14	U
Chloroform	11	U	11	U	11	U	11	U	14	U
1,1,1-Trichloroethane	11	U	11	U	11	U	11	U	14	U
Cyclohexane	11	U	11	U	11	U	11	U	14	U
Carbon Tetrachloride	11	U	11	U	11	U	11	U	14	U
Benzene	11	U	11	U	11	U	11	U	14	U
1,2-Dichloroethane	11	U	11	U	11	U	11	U	14	U
Trichloroethene	11	U	11	U	11	U	11	U	14	U
Methylcyclohexane	11	U	11	U	11	U	11	U	14	U
1,2-Dichloropropane	11	U	11	U	11	U	11	U	14	U
Bromodichloromethane	11	U	11	U	11	U	11	U	14	U
cis-1,3-Dichloropropene	11	U	11	U	11	U	11	U	14	U
4-Methyl-2-pentanone	11	U	11	U	11	U	11	U	14	U
Toluene	11	U	11	U	11	U	11	U	14	U
trans-1,3-Dichloropropene	11	U	11	U	11	U	11	U	14	U
1,1,2-Trichloroethane	11	U	11	U	11	U	11	U	14	U
Tetrachloroethene	11	U	11	U	11	U	11	U	14	U
2-Hexanone	11	U	11	U	11	U	11	U	14	U
Dibromochloromethane	11	U	11	U	11	U	11	U	14	U
1,2-Dibromoethane	11	U	11	U	11	U	11	U	14	U
Chlorobenzene	11	U	11	U	11	U	11	U	14	U

Case #: 29681
SDG : B0B95
Site :
ROSELLE PARK BASEBALL FIELDS
Lab. :
LIBRTY
Reviewer :
Date :

Sample Number :	B0BA5		B0BA6		B0BA7		B0BA8		B0BA9	
Sampling Location :	1024-S21		1024-S22		1024-S23		1024-S24		1024-S25	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	11:00		11:10		11:20		11:30		14:35	
%Moisture :	8		8		9		10		8	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	11	U	11	U	11	U	11	U	14	U
Xylenes (total)	11	U	11	U	11	U	11	U	14	U
Styrene	11	U	11	U	11	U	11	U	14	U
Bromoform	11	U	11	U	11	U	11	U	14	U
Isopropylbenzene	11	U	11	U	11	U	11	U	14	U
1,1,2,2-Tetrachloroethane	11	U	11	U	11	U	11	U	14	U
1,3-Dichlorobenzene	11	U	11	U	11	U	11	U	14	U
1,4-Dichlorobenzene	11	U	11	U	11	U	11	U	14	U
1,2-Dichlorobenzene	11	U	11	U	11	U	11	U	14	U
1,2-Dibromo-3-chloropropane	11	U	11	U	11	U	11	U	14	U
1,2,4-Trichlorobenzene	11	U	11	U	11	U	11	U	14	U

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0BB0		B0BB1		B0BB2		B0B95		B0B95MS	
Sampling Location :	1024-S26		1024-S27		1024-S28		1024-S11		1024-S11	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	14:40		14:45		14:50		12:15		12:15	
%Moisture :	13		7		8		1		1	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	14	U	11	U	13	U	10	U	11	U
Chloromethane	14	U	11	U	13	U	10	U	11	U
Vinyl Chloride	14	U	11	U	13	U	10	U	11	U
Bromomethane	14	U	11	U	13	U	10	U	11	U
Chloroethane	14	UJ	11	UJ	13	UJ	10	U	11	U
Trichlorofluoromethane	6	J	4	J	3	J	4	J	4	J
1,1-Dichloroethene	14	U	11	U	13	U	10	U	46	
1,1,2-Trichloro-1,2,2-trifluoroethane	14	U	11	U	13	U	10	U	11	U
Acetone	14	UJ	11	UJ	13	UJ	10	UJ	15	UJ
Carbon Disulfide	14	U	11	U	13	U	10	U	11	U
Methyl Acetate	14	UJ	2	J	4	J	10	U	2	J
Methylene Chloride	14	U	11	U	13	U	10	U	11	U
trans-1,2-Dichloroethene	14	U	11	U	13	U	10	U	11	U
Methyl tert-Butyl Ether	14	U	11	U	13	U	10	U	11	U
1,1-Dichloroethane	14	U	11	U	13	U	10	U	11	U
cis-1,2-Dichloroethene	14	U	11	U	13	U	10	U	11	U
2-Butanone	14	U	11	U	13	U	10	U	11	U
Chloroform	14	U	11	U	13	U	10	U	11	U
1,1,1-Trichloroethane	14	U	11	U	13	U	10	U	11	U
Cyclohexane	14	U	11	U	13	U	10	U	11	U
Carbon Tetrachloride	14	U	11	U	13	U	10	U	11	U
Benzene	14	U	11	U	13	U	10	U	46	
1,2-Dichloroethane	14	U	11	U	13	U	10	U	11	U
Trichloroethene	14	U	11	U	13	U	10	U	44	
Methylcyclohexane	14	U	11	U	13	U	10	U	11	U
1,2-Dichloropropane	14	U	11	U	13	U	10	UJ	11	UJ
Bromodichloromethane	14	U	11	U	13	U	10	U	11	U
cis-1,3-Dichloropropene	14	U	11	U	13	U	10	U	11	U
4-Methyl-2-pentanone	14	U	11	U	13	U	10	U	11	U
Toluene	14	U	11	U	13	U	10	U	43	
trans-1,3-Dichloropropene	14	U	11	U	13	U	10	U	11	U
1,1,2-Trichloroethane	14	U	11	U	13	U	10	U	11	U
Tetrachloroethene	14	U	11	U	13	U	10	U	11	U
2-Hexanone	14	U	11	U	13	U	10	U	11	U
Dibromochloromethane	14	U	11	U	13	U	10	U	11	U
1,2-Dibromoethane	14	U	11	U	13	U	10	U	11	U
Chlorobenzene	14	U	11	U	13	U	10	U	44	

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0BB0		B0BB1		B0BB2		B0B95		B0B95MS	
Sampling Location :	1024-S26		1024-S27		1024-S28		1024-S11		1024-S11	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	14:40		14:45		14:50		12:15		12:15	
%Moisture :	13		7		8		1		1	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	14	U	11	U	13	U	10	U	11	U
Xylenes (total)	14	U	11	U	13	U	10	U	11	U
Styrene	14	U	11	U	13	U	10	U	11	U
Bromoform	14	U	11	U	13	U	10	U	11	U
Isopropylbenzene	14	U	11	U	13	U	10	U	11	U
1,1,2,2-Tetrachloroethane	14	U	11	U	13	U	10	U	11	U
1,3-Dichlorobenzene	14	U	11	U	13	U	10	U	11	U
1,4-Dichlorobenzene	14	U	11	U	13	U	10	U	11	U
1,2-Dichlorobenzene	14	U	11	U	13	U	10	U	11	U
1,2-Dibromo-3-chloropropane	14	U	11	U	13	U	10	U	11	U
1,2,4-Trichlorobenzene	14	U	11	U	13	U	10	U	11	U

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B95MSD		VBLKDU		VBLKEV		VHBLKEV			
Sampling Location :	1024-S11									
Matrix :	Soil		Soil		Soil		Soil			
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg			
Date Sampled :	08/29/2001									
Time Sampled :	12:15									
%Moisture :	1									
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0			
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10	U	10	U	10	U	10	U		
Chloromethane	10	U	10	U	10	U	10	U		
Vinyl Chloride	10	U	10	U	10	U	10	U		
Bromomethane	10	U	10	U	10	U	10	U		
Chloroethane	10	U	10	U	10	UJ	10	UJ		
Trichlorofluoromethane	4	J	10	U	10	U	10	U		
1,1-Dichloroethene	42		10	U	10	U	10	U		
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	U	10	U	10	U		
Acetone	18	UJ	4	J	3	J	3	J		
Carbon Disulfide	10	U	10	U	10	U	10	U		
Methyl Acetate	4	J	10	U	10	UJ	10	UJ		
Methylene Chloride	10	U	2	J	3	J	3	J		
trans-1,2-Dichloroethene	10	U	10	U	10	U	10	U		
Methyl tert-Butyl Ether	10	U	10	U	10	U	10	U		
1,1-Dichloroethane	10	U	10	U	10	U	10	U		
cis-1,2-Dichloroethene	10	U	10	U	10	U	10	U		
2-Butanone	10	U	10	U	10	U	10	U		
Chloroform	10	U	10	U	10	U	10	U		
1,1,1-Trichloroethane	10	U	10	U	10	U	10	U		
Cyclohexane	10	U	10	U	10	U	10	U		
Carbon Tetrachloride	10	U	10	U	10	U	10	U		
Benzene	42		10	U	10	U	10	U		
1,2-Dichloroethane	10	U	10	U	10	U	10	U		
Trichloroethene	39		10	U	10	U	10	U		
Methylcyclohexane	10	U	10	U	10	U	10	U		
1,2-Dichloropropane	10	UJ	10	UJ	10	U	10	U		
Bromodichloromethane	10	U	10	U	10	U	10	U		
cis-1,3-Dichloropropene	10	U	10	U	10	U	10	U		
4-Methyl-2-pentanone	10	U	10	U	10	U	10	U		
Toluene	38		2	J	4	J	4	J		
trans-1,3-Dichloropropene	10	U	10	U	10	U	10	U		
1,1,2-Trichloroethane	10	U	10	U	10	U	10	U		
Tetrachloroethene	10	U	10	U	10	U	10	U		
2-Hexanone	10	U	10	U	10	U	10	U		
Dibromochloromethane	10	U	10	U	10	U	10	U		
1,2-Dibromoethane	10	U	10	U	10	U	10	U		
Chlorobenzene	38		10	U	10	U	10	U		

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B95MSD		VBLKDU		VBLKEV		VHBLKEV			
Sampling Location :	1024-S11									
Matrix :	Soil		Soil		Soil		Soil			
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg			
Date Sampled :	08/29/2001									
Time Sampled :	12:15									
%Moisture :	1									
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0			
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	10	U	10	U	10	U	10	U		
Xylenes (total)	10	U	10	U	10	U	10	U		
Styrene	10	U	10	U	10	U	10	U		
Bromoform	10	U	1	J	2	J	2	J		
Isopropylbenzene	10	U	10	U	10	U	10	U		
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U	10	U		
1,3-Dichlorobenzene	10	U	10	U	10	U	10	U		
1,4-Dichlorobenzene	10	U	10	U	10	U	10	U		
1,2-Dichlorobenzene	10	U	10	U	10	U	10	U		
1,2-Dibromo-3-chloropropane	10	U	10	U	10	U	10	U		
1,2,4-Trichlorobenzene	10	U	10	U	10	U	10	U		

Case #: 29681
SDG : B0BB3
Site : ROSELLE PARK BASEBALL FIELDS
Number of Soil Samples : 0
Lab. : LIBRTY
Number of Water Samples : 1
Reviewer :
ate :

Sample Number :	B0BB3		VBLKFV		VHBLKFV					
Sampling Location :	1024-RB01.									
Matrix :	Water		Water		Water					
Units :	ug/L		ug/L		ug/L					
Date Sampled :	8/29/01									
Time Sampled :	08:20									
%Moisture :	N/A									
pH :										
Dilution Factor :	1.0		1.0		1.0					
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10	U	10	U	10	U				
Chloromethane	10	UJ	10	UJ	10	UJ				
Vinyl Chloride	10	U	10	U	10	U				
Bromomethane	10	U	10	U	10	U				
Chloroethane	10	U	10	U	10	U				
Trichlorofluoromethane	10	U	10	U	10	U				
1,1-Dichloroethene	10	U	10	U	10	U				
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	U	10	U				
Acetone	10	U	10	U	10	U				
Carbon Disulfide	10	U	10	U	10	U				
Methyl Acetate	10	U	10	U	10	U				
Methylene Chloride	10	U	10	U	10	U				
trans-1,2-Dichloroethene	10	U	10	U	10	U				
Methyl tert-Butyl Ether	10	U	10	U	10	U				
1,1-Dichloroethane	10	U	10	U	10	U				
cis-1,2-Dichloroethene	10	U	10	U	10	U				
2-Butanone	10	U	10	U	10	U				
Chloroform	3	J	10	U	10	U				
1,1,1-Trichloroethane	10	U	10	U	10	U				
Cyclohexane	10	U	10	U	10	U				
Carbon Tetrachloride	10	U	10	U	10	U				
Benzene	10	UJ	10	U	10	U				
1,2-Dichloroethane	10	U	10	U	10	U				
Trichloroethene	10	U	10	U	10	U				
Methylcyclohexane	10	U	10	U	10	U				
1,2-Dichloropropane	10	U	10	U	10	U				
Bromodichloromethane	10	U	10	U	10	U				
cis-1,3-Dichloropropene	10	U	10	U	10	U				
4-Methyl-2-pentanone	10	U	10	U	10	U				
Toluene	10	UJ	2	J	10	U				
trans-1,3-Dichloropropene	10	U	10	U	10	U				
1,1,2-Trichloroethane	10	U	10	U	10	U				
Tetrachloroethene	10	U	10	U	10	U				
2-Hexanone	10	U	10	U	10	U				
Dibromochloromethane	10	U	10	U	10	U				
1,2-Dibromoethane	10	U	10	U	10	U				
Chlorobenzene	10	UJ	10	U	10	U				

Case #: 29681
SDG : B0BB3
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0BB3		VBLKFV		VHBLKFV					
Sampling Location :	1024-RB01.									
Matrix :	Water		Water		Water					
Units :	ug/L		ug/L		ug/L					
Date Sampled :	8/29/01									
Time Sampled :	08:20									
%Moisture :	N/A									
pH :										
Dilution Factor :	1.0		1.0		1.0					
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	10	UJ	1	J	10	U				
Xylenes (total)	10	UJ	3	J	10	U				
Styrene	10	UJ	10	U	10	U				
Bromoform	10	U	10	U	10	U				
Isopropylbenzene	10	UJ	10	U	10	U				
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U				
1,3-Dichlorobenzene	10	UJ	10	U	10	U				
1,4-Dichlorobenzene	10	UJ	10	U	10	U				
1,2-Dichlorobenzene	10	UJ	10	U	10	U				
1,2-Dibromo-3-chloropropane	10	U	10	U	10	U				
1,2,4-Trichlorobenzene	10	UJ	10	U	10	U				

REFERENCE NO. 28

ATTACHMENT B

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Number of Soil Samples : 19
Number of Water Samples : 0

Sample Number :	B0BA0		B0BA1		B0BA2		B0BA3		B0BA4	
Sampling Location :	1024-S16		1024-S17		1024-S18		1024-S19		1024-S20	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	13:25		13:50		13:55		14:00		14:05	
%Moisture :	1		0		1		0		0	
pH :	8.0		8.1		8.0		8.2		8.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Phenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
bis-(2-Chloroethyl) ether	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Chlorophenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Methylphenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,2'-oxybis(1-Chloropropane)	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Acetophenone	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Methylphenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
N-Nitroso-di-n-propylamine	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Hexachloroethane	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Nitrobenzene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Isophorone	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Nitrophenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4-Dimethylphenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
bis(2-Chloroethoxy)methane	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4-Dichlorophenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Naphthalene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Chloroaniline	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Hexachlorobutadiene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Caprolactam	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Chloro-3-methylphenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Methylnaphthalene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Hexachlorocyclopentadiene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4,6-Trichlorophenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4,5-Trichlorophenol	840	UJ	830	UJ	840	UJ	830	UJ	830	UJ
1,1'-Biphenyl	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Chloronaphthalene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Nitroaniline	840	UJ	830	UJ	840	UJ	830	UJ	830	UJ
Dimethylphthalate	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,6-Dinitrotoluene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Acenaphthylene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
3-Nitroaniline	840	UJ	830	UJ	840	UJ	830	UJ	830	UJ
Acenaphthene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4-Dinitrophenol	840	UJ	830	UJ	840	UJ	830	UJ	830	UJ
4-Nitrophenol	840	UJ	830	UJ	840	UJ	830	UJ	830	UJ
Dibenzofuran	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4-Dinitrotoluene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ

Case #: 29681
SDG : B0B85
Site :
ROSELLE PARK BASEBALL FIELDS
Lab. :
LIBRTY
Reviewer :
ate :

Sample Number :	B0BA0		B0BA1		B0BA2		B0BA3		B0BA4	
Sampling Location :	1024-S16		1024-S17		1024-S18		1024-S19		1024-S20	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	13:25		13:50		13:55		14:00		14:05	
%Moisture :	1		0		1		0		0	
pH :	8.0		8.1		8.0		8.2		8.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Diethylphthalate	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Fluorene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Chlorophenyl-phenyl ether	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Nitroaniline	840	UJ	830	UJ	840	UJ	830	UJ	830	UJ
4,6-Dinitro-2-methylphenol	840	UJ	830	UJ	840	UJ	830	UJ	830	UJ
N-Nitrosodiphenylamine	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Bromophenyl-phenylether	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Hexachlorobenzene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Atrazine	330	R	330	R	330	R	330	R	330	R
Pentachlorophenol	840	UJ	830	UJ	840	UJ	830	UJ	830	UJ
Phenanthrene	330	UJ	330	UJ	170	J	330	UJ	330	UJ
Anthracene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Carbazole	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Di-n-butylphthalate	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Fluoranthene	330	UJ	330	UJ	220	J	34	J	330	UJ
yrene	330	UJ	120	J	130	J	52	J	330	UJ
utylbenzylphthalate	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
3,3'-Dichlorobenzidine	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Benzo(a)anthracene	330	UJ	330	UJ	120	J	330	UJ	330	UJ
Chrysene	330	UJ	330	UJ	120	J	330	UJ	330	UJ
bis(2-Ethylhexyl)phthalate	130	J	120	J	79	J	400	J	130	J
Di-n-octylphthalate	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Benzo(b)fluoranthene	330	UJ	330	UJ	98	J	330	UJ	330	UJ
Benzo(k)fluoranthene	330	UJ	330	UJ	86	J	330	UJ	330	UJ
Benzo(a)pyrene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Indeno(1,2,3-cd)pyrene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Dibenzo(a,h)anthracene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Benzo(g,h,i)perylene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ

Case #: 29681 SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B85		B0B85MS		B0B85MSD		B0B86		B0B87	
Sampling Location :	1024-S01		1024-S01		1024-S01		1024-S02		1024-S03	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	08:25		08:25		08:25		08:40		09:00	
%Moisture :	2		2		2		2		2	
pH :	8.0		8.0		8.0		8.3		8.2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Phenol	340	UJ	1400	J	1500	J	340	UJ	340	UJ
bis-(2-Chloroethyl) ether	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
2-Chlorophenol	340	UJ	1400	J	1400	J	340	UJ	340	UJ
2-Methylphenol	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
2,2'-oxybis(1-Chloropropane)	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Acetophenone	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
4-Methylphenol	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
N-Nitroso-di-n-propylamine	340	UJ	940	J	970	J	340	UJ	340	UJ
Hexachloroethane	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Nitrobenzene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Isophorone	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
2-Nitrophenol	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
2,4-Dimethylphenol	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
bis(2-Chloroethoxy)methane	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
2,4-Dichlorophenol	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Naphthalene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
4-Chloroaniline	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Hexachlorobutadiene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Caprolactam	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
4-Chloro-3-methylphenol	340	UJ	2000	J	1500	J	340	UJ	340	UJ
2-Methylnaphthalene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Hexachlorocyclopentadiene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
2,4,6-Trichlorophenol	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
2,4,5-Trichlorophenol	850	UJ	850	UJ	850	UJ	850	UJ	850	UJ
1,1'-Biphenyl	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
2-Chloronaphthalene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
2-Nitroaniline	850	UJ	850	UJ	850	UJ	850	UJ	850	UJ
Dimethylphthalate	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
2,6-Dinitrotoluene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Acenaphthylene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
3-Nitroaniline	850	UJ	850	UJ	850	UJ	850	UJ	850	UJ
Acenaphthene	340	UJ	830	J	870	J	340	UJ	340	UJ
2,4-Dinitrophenol	850	UJ	850	UJ	850	UJ	850	UJ	850	UJ
4-Nitrophenol	850	UJ	1600	J	1200	J	850	UJ	850	UJ
Dibenzofuran	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
2,4-Dinitrotoluene	340	UJ	750	J	820	J	340	UJ	340	UJ

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
ate :

Sample Number :	B0B85		B0B85MS		B0B85MSD		B0B86		B0B87	
Sampling Location :	1024-S01		1024-S01		1024-S01		1024-S02		1024-S03	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	08:25		08:25		08:25		08:40		09:00	
%Moisture :	2		2		2		2		2	
pH :	8.0		8.0		8.0		8.3		8.2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Diethylphthalate	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Fluorene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
4-Chlorophenyl-phenyl ether	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
4-Nitroaniline	850	UJ	850	UJ	850	UJ	850	UJ	850	UJ
4,6-Dinitro-2-methylphenol	850	UJ	850	UJ	850	UJ	850	UJ	850	UJ
N-Nitrosodiphenylamine	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
4-Bromophenyl-phenylether	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Hexachlorobenzene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Atrazine	340	R	340	R	340	R	340	R	340	R
Pentachlorophenol	850	UJ	440	J	360	J	850	UJ	850	UJ
Phenanthrene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Anthracene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Carbazole	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Di-n-butylphthalate	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Fluoranthene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Pyrene	340	UJ	440	J	700	J	340	UJ	340	UJ
Butylbenzylphthalate	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
3,3'-Dichlorobenzidine	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Benzo(a)anthracene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Chrysene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
bis(2-Ethylhexyl)phthalate	52	J	77	J	100	J	110	J	55	J
Di-n-octylphthalate	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Benzo(b)fluoranthene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Benzo(k)fluoranthene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Benzo(a)pyrene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Indeno(1,2,3-cd)pyrene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Dibenzo(a,h)anthracene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ
Benzo(g,h,i)perylene	340	UJ	340	UJ	340	UJ	340	UJ	340	UJ

Case #: 29681 SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B88		B0B89		B0B90		B0B91		B0B92	
Sampling Location :	1024-S04		1024-S05		1024-S06		1024-S07		1024-S08	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	09:10		09:25		09:35		09:55		10:10	
%Moisture :	2		2		2		1		1	
pH :	8.1		7.9		8.1		8.0		8.3	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Phenol	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
bis-(2-Chloroethyl) ether	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2-Chlorophenol	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2-Methylphenol	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2,2'-oxybis(1-Chloropropane)	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Acetophenone	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
4-Methylphenol	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
N-Nitroso-di-n-propylamine	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Hexachloroethane	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Nitrobenzene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Isophorone	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2-Nitrophenol	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2,4-Dimethylphenol	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
bis(2-Chloroethoxy)methane	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2,4-Dichlorophenol	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Naphthalene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
4-Chloroaniline	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Hexachlorobutadiene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Caprolactam	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
4-Chloro-3-methylphenol	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2-Methylnaphthalene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Hexachlorocyclopentadiene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2,4,6-Trichlorophenol	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2,4,5-Trichlorophenol	850	UJ	850	UJ	850	UJ	840	UJ	840	UJ
1,1'-Biphenyl	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2-Chloronaphthalene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2-Nitroaniline	850	UJ	850	UJ	850	UJ	840	UJ	840	UJ
Dimethylphthalate	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2,6-Dinitrotoluene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Acenaphthylene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
3-Nitroaniline	850	UJ	850	UJ	850	UJ	840	UJ	840	UJ
Acenaphthene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2,4-Dinitrophenol	850	UJ	850	UJ	850	UJ	840	UJ	840	UJ
4-Nitrophenol	850	UJ	850	UJ	850	UJ	840	UJ	840	UJ
Dibenzofuran	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
2,4-Dinitrotoluene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ

Case #: 29681 SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B88		B0B89		B0B90		B0B91		B0B92	
Sampling Location :	1024-S04		1024-S05		1024-S06		1024-S07		1024-S08	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	09:10		09:25		09:35		09:55		10:10	
%Moisture :	2		2		2		1		1	
pH :	8.1		7.9		8.1		8.0		8.3	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Diethylphthalate	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Fluorene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
4-Chlorophenyl-phenyl ether	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
4-Nitroaniline	850	UJ	850	UJ	850	UJ	840	UJ	840	UJ
4,6-Dinitro-2-methylphenol	850	UJ	850	UJ	850	UJ	840	UJ	840	UJ
N-Nitrosodiphenylamine	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
4-Bromophenyl-phenylether	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Hexachlorobenzene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Atrazine	340	R	340	R	340	R	330	R	330	R
Pentachlorophenol	850	UJ	850	UJ	850	UJ	840	UJ	840	UJ
Phenanthrene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Anthracene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Carbazole	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Di-n-butylphthalate	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Fluoranthene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Pyrene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Butylbenzylphthalate	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
3,3'-Dichlorobenzidine	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Benzo(a)anthracene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Chrysene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
bis(2-Ethylhexyl)phthalate	84	J	74	J	88	J	44	J	90	J
Di-n-octylphthalate	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Benzo(b)fluoranthene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Benzo(k)fluoranthene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Benzo(a)pyrene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Indeno(1,2,3-cd)pyrene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Dibenzo(a,h)anthracene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ
Benzo(g,h,i)perylene	340	UJ	340	UJ	340	UJ	330	UJ	330	UJ

Case #: 29681 SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B93		B0B94		B0B96		B0B97		B0B98	
Sampling Location :	1024-S09		1024-S010		1024-S12		1024-S13		1024-S14	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	10:30		10:40		12:30		13:05		13:10	
%Moisture :	1		1		1		1		1	
pH :	8.2		8.1		8.0		7.2		7.8	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Phenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
bis-(2-Chloroethyl) ether	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Chlorophenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Methylphenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,2'-oxybis(1-Chloropropane)	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Acetophenone	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Methylphenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
N-Nitroso-di-n-propylamine	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Hexachloroethane	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Nitrobeazene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Isophorone	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Nitrophenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4-Dimethylphenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
bis(2-Chloroethoxy)methane	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4-Dichlorophenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Naphthalene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Chloroaniline	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Hexachlorobutadiene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Caprolactam	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Chloro-3-methylphenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Methylnaphthalene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Hexachlorocyclopentadiene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4,6-Trichlorophenol	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4,5-Trichlorophenol	840	UJ	840	UJ	840	UJ	840	UJ	840	UJ
1,1'-Biphenyl	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Chloronaphthalene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2-Nitroaniline	840	UJ	840	UJ	840	UJ	840	UJ	840	UJ
Dimethylphthalate	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,6-Dinitrotoluene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Acenaphthylene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
3-Nitroaniline	840	UJ	840	UJ	840	UJ	840	UJ	840	UJ
Acenaphthene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4-Dinitrophenol	840	UJ	840	UJ	840	UJ	840	UJ	840	UJ
4-Nitrophenol	840	UJ	840	UJ	840	UJ	840	UJ	840	UJ
Dibenzofuran	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
2,4-Dinitrotoluene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
ate :

Sample Number :	B0B93		B0B94		B0B96		B0B97		B0B98	
Sampling Location :	1024-S09		1024-S010		1024-S12		1024-S13		1024-S14	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	10:30		10:40		12:30		13:05		13:10	
%Moisture :	1		1		1		1		1	
pH :	8.2		8.1		8.0		7.2		7.8	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Diethylphthalate	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Fluorene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Chlorophenyl-phenyl ether	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Nitroaniline	840	UJ	840	UJ	840	UJ	840	UJ	840	UJ
4,6-Dinitro-2-methylphenol	840	UJ	840	UJ	840	UJ	840	UJ	840	UJ
N-Nitrosodiphenylamine	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
4-Bromophenyl-phenylether	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Hexachlorobenzene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Atrazine	330	R	330	R	330	R	330	R	330	R
Pentachlorophenol	840	UJ	840	UJ	840	UJ	840	UJ	840	UJ
Phenanthrene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Anthracene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Carbazole	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Di-n-butylphthalate	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Fluoranthene	330	UJ	49	J	330	UJ	39	J	40	J
Pyrene	330	UJ	41	J	39	J	330	UJ	38	J
Butylbenzylphthalate	330	UJ	330	UJ	330	UJ	330	UJ	260	J
3,3'-Dichlorobenzidine	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Benzo(a)anthracene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Chrysene	330	UJ	37	J	330	UJ	330	UJ	36	J
bis(2-Ethylhexyl)phthalate	710	J	150	J	130	J	410	J	82	J
Di-n-octylphthalate	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Benzo(b)fluoranthene	330	UJ	37	J	330	UJ	330	UJ	330	UJ
Benzo(k)fluoranthene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Benzo(a)pyrene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Indeno(1,2,3-cd)pyrene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Dibenzo(a,h)anthracene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ
Benzo(g,h,i)perylene	330	UJ	330	UJ	330	UJ	330	UJ	330	UJ

Case #: 29681
Site :
Lab. :
Reviewer :
Date :

SDG : B0B85
ROSELLE PARK BASEBALL FIELDS
LIBRTY

Sample Number :	B0B99		SBLKLV							
Sampling Location :	1024-S15									
Matrix :	Soil		Soil							
Units :	ug/Kg		ug/Kg							
Date Sampled :	08/29/2001									
Time Sampled :	13:30									
%Moisture :	2									
pH :	7.5									
Dilution Factor :	1.0		1.0							
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	340	UJ	330	U						
Phenol	340	UJ	330	U						
bis-(2-Chloroethyl) ether	340	UJ	330	U						
2-Chlorophenol	340	UJ	330	U						
2-Methylphenol	340	UJ	330	U						
2,2'-oxybis(1-Chloropropane)	340	UJ	330	U						
Acetophenone	340	UJ	330	U						
4-Methylphenol	340	UJ	330	U						
N-Nitroso-di-n-propylamine	340	UJ	330	U						
Hexachloroethane	340	UJ	330	U						
Nitrobenzene	340	UJ	330	U						
Isophorone	340	UJ	330	U						
2-Nitrophenol	340	UJ	330	U						
2,4-Dimethylphenol	340	UJ	330	U						
bis(2-Chloroethoxy)methane	340	UJ	330	U						
2,4-Dichlorophenol	340	UJ	330	U						
Naphthalene	340	UJ	330	U						
4-Chloroaniline	340	UJ	330	U						
Hexachlorobutadiene	340	UJ	330	U						
Caprolactam	340	UJ	330	U						
4-Chloro-3-methylphenol	340	UJ	330	U						
2-Methylnaphthalene	340	UJ	330	U						
Hexachlorocyclopentadiene	340	UJ	330	U						
2,4,6-Trichlorophenol	340	UJ	330	U						
2,4,5-Trichlorophenol	850	UJ	830	U						
1,1'-Biphenyl	340	UJ	330	U						
2-Chloronaphthalene	340	UJ	330	U						
2-Nitroaniline	850	UJ	830	U						
Dimethylphthalate	340	UJ	330	UJ						
2,6-Dinitrotoluene	340	UJ	330	U						
Acenaphthylene	340	UJ	330	U						
3-Nitroaniline	850	UJ	830	U						
Acenaphthene	340	UJ	330	U						
2,4-Dinitrophenol	850	UJ	830	U						
4-Nitrophenol	850	UJ	830	U						
Dibenzofuran	340	UJ	330	U						
2,4-Dinitrotoluene	340	UJ	330	U						

Case #: 29681 SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
ate :

Sample Number :	B0B99		SBLKLV							
Sampling Location :	1024-S15									
Matrix :	Soil		Soil							
Units :	ug/Kg		ug/Kg							
Date Sampled :	08/29/2001									
Time Sampled :	13:30									
%Moisture :	2									
pH :	7.5									
Dilution Factor :	1.0		1.0							
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Diethylphthalate	340	UJ	330	U						
Fluorene	340	UJ	330	U						
4-Chlorophenyl-phenyl ether	340	UJ	330	U						
4-Nitroaniline	850	UJ	830	U						
4,6-Dinitro-2-methylphenol	850	UJ	830	U						
N-Nitrosodiphenylamine	340	UJ	330	U						
4-Bromophenyl-phenylether	340	UJ	330	UJ						
Hexachlorobenzene	340	UJ	330	U						
Atrazine	340	R	330	R						
Pentachlorophenol	850	UJ	830	U						
Phenanthrene	340	UJ	330	U						
Anthracene	340	UJ	330	UJ						
Carbazole	340	UJ	330	UJ						
Di-n-butylphthalate	340	UJ	330	U						
Fluoranthene	340	UJ	330	U						
Pyrene	340	UJ	330	U						
Butylbenzylphthalate	340	UJ	330	U						
3,3'-Dichlorobenzidine	340	UJ	330	U						
Benzo(a)anthracene	340	UJ	330	U						
Chrysene	340	UJ	330	U						
bis(2-Ethylhexyl)phthalate	280	J	330	U						
Di-n-octylphthalate	340	UJ	330	U						
Benzo(b)fluoranthene	340	UJ	330	U						
Benzo(k)fluoranthene	340	UJ	330	U						
Benzo(a)pyrene	340	UJ	330	U						
Indeno(1,2,3-cd)pyrene	340	UJ	330	U						
Dibenzo(a,h)anthracene	340	UJ	330	U						
Benzo(g,h,i)perylene	340	UJ	330	U						

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS Number of Soil Samples : 9
Lab. : LIBRTY Number of Water Samples : 0
Reviewer :
Date :

Sample Number :	B0BA5		B0BA6		B0BA7		B0BA8		B0BA9	
Sampling Location :	1024-S21		1024-S22		1024-S23		1024-S24		1024-S25	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	11:00		11:10		11:20		11:30		14:35	
%Moisture :	8		8		9		10		8	
pH :	6.3		6.5		6.1		6.3		6.2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Phenol	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
bis-(2-Chloroethyl) ether	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2-Chlorophenol	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2-Methylphenol	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2,2'-oxybis(1-Chloropropane)	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Acetophenone	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
4-Methylphenol	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
N-Nitroso-di-n-propylamine	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Hexachloroethane	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Nitrobeazene	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Isophorone	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2-Nitrophenol	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2,4-Dimethylphenol	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
bis(2-Chloroethoxy)methane	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2,4-Dichlorophenol	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Naphthalene	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
4-Chloroaniline	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Hexachlorobutadiene	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Caprolactam	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
4-Chloro-3-methylphenol	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2-Methylnaphthalene	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Hexachlorocyclopentadiene	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2,4,6-Trichlorophenol	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2,4,5-Trichlorophenol	900	UJ	900	UJ	910	UJ	920	UJ	900	UJ
1,1'-Biphenyl	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2-Chloronaphthalene	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2-Nitroaniline	900	UJ	900	UJ	910	UJ	920	UJ	900	UJ
Dimethylphthalate	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2,6-Dinitrotoluene	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Acenaphthylene	38	J	360	UJ	360	UJ	370	UJ	360	UJ
3-Nitroaniline	900	UJ	900	UJ	910	UJ	920	UJ	900	UJ
Acenaphthene	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2,4-Dinitrophenol	900	UJ	900	UJ	910	UJ	920	UJ	900	UJ
4-Nitrophenol	900	UJ	900	UJ	910	UJ	920	UJ	900	UJ
Dibenzofuran	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
2,4-Dinitrotoluene	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
ate :

Sample Number :	B0BA5		B0BA6		B0BA7		B0BA8		B0BA9	
Sampling Location :	1024-S21		1024-S22		1024-S23		1024-S24		1024-S25	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	11:00		11:10		11:20		11:30		14:35	
%Moisture :	8		8		9		10		8	
pH :	6.3		6.5		6.1		6.3		6.2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Diethylphthalate	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Fluorene	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
4-Chlorophenyl-phenyl ether	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
4-Nitroaniline	900	UJ	900	UJ	910	UJ	920	UJ	900	UJ
4,6-Dinitro-2-methylphenol	900	UJ	900	UJ	910	UJ	920	UJ	900	UJ
N-Nitrosodiphenylamine	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
4-Bromophenyl-phenylether	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Hexachlorobenzene	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Atrazine	360	R	360	R	360	R	370	R	360	R
Pentachlorophenol	900	UJ	900	UJ	910	UJ	920	UJ	900	UJ
Phenanthrene	310	J	250	J	490	J	250	J	520	J
Anthracene	50	J	41	J	76	J	52	J	73	J
Carbazole	360	UJ	360	UJ	48	J	370	UJ	48	J
Di-n-butylphthalate	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Fluoranthene	670	J	470	J	770	J	500	J	800	J
Pyrene	850	J	420	J	680	J	390	J	530	J
Butylbenzylphthalate	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
3,3'-Dichlorobenzidine	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Benzo(a)anthracene	470	J	230	J	380	J	240	J	330	J
Chrysene	450	J	230	J	430	J	250	J	350	J
bis(2-Ethylhexyl)phthalate	81	J	47	J	53	J	110	J	240	J
Di-n-octylphthalate	360	UJ	360	UJ	360	UJ	370	UJ	360	UJ
Benzo(b)fluoranthene	350	J	300	J	420	J	270	J	400	J
Benzo(k)fluoranthene	490	J	210	J	370	J	230	J	330	J
Benzo(a)pyrene	440	J	250	J	380	J	240	J	340	J
Indeno(1,2,3-cd)pyrene	320	J	210	J	260	J	180	J	230	J
Dibenzo(a,h)anthracene	140	J	89	J	130	J	87	J	110	J
Benzo(g,h,i)perylene	240	J	160	J	210	J	140	J	190	J

Case #: 29681
SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0BB0		B0BB0DL		B0BB1		B0BB2		B0B95	
Sampling Location :	1024-S26		DO NOT USE		1024-S27		1024-S28		1024-S11	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	14:40		14:40		14:45		14:50		12:15	
%Moisture :	13		13		7		8		1	
pH :	6.4		6.4		5.9		5.9		8.3	
Dilution Factor :	1.0		2.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Phenol	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
bis-(2-Chloroethyl) ether	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2-Chlorophenol	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2-Methylphenol	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2,2'-oxybis(1-Chloropropane)	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Acetophenone	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
4-Methylphenol	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
N-Nitroso-di-n-propylamine	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Hexachloroethane	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Nitrobenzene	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Isophorone	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2-Nitrophenol	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2,4-Dimethylphenol	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
bis(2-Chloroethoxy)methane	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2,4-Dichlorophenol	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Naphthalene	240	J	340	J	350	UJ	360	UJ	330	UJ
4-Chloroaniline	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Hexachlorobutadiene	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Caprolactam	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
4-Chloro-3-methylphenol	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2-Methylnaphthalene	140	J	200	J	350	UJ	360	UJ	330	UJ
Hexachlorocyclopentadiene	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2,4,6-Trichlorophenol	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2,4,5-Trichlorophenol	950	UJ	1900	UJ	890	UJ	900	UJ	840	UJ
1,1'-Biphenyl	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2-Chloronaphthalene	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2-Nitroaniline	950	UJ	1900	UJ	890	UJ	900	UJ	840	UJ
Dimethylphthalate	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
2,6-Dinitrotoluene	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Acenaphthylene	80	J	80	J	350	UJ	360	UJ	330	UJ
3-Nitroaniline	950	UJ	1900	UJ	890	UJ	900	UJ	840	UJ
Acenaphthene	450	J	590	J	350	UJ	360	UJ	330	UJ
2,4-Dinitrophenol	950	UJ	1900	UJ	890	UJ	900	UJ	840	UJ
4-Nitrophenol	950	UJ	1900	UJ	890	UJ	900	UJ	840	UJ
Dibenzofuran	300	J	390	J	350	UJ	360	UJ	330	UJ
2,4-Dinitrotoluene	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
ate :

Sample Number :	B0BB0		B0BB0DL		B0BB1		B0BB2		B0B95	
Sampling Location :	1024-S26		**DO NOT USE**		1024-S27		1024-S28		1024-S11	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	14:40		14:40		14:45		14:50		12:15	
%Moisture :	13		13		7		8		1	
pH :	6.4		6.4		5.9		5.9		8.3	
Dilution Factor :	1.0		2.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Diethylphthalate	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Fluorene	590	J	700	J	350	UJ	360	UJ	330	UJ
4-Chlorophenyl-phenyl ether	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
4-Nitroaniline	950	UJ	1900	UJ	890	UJ	900	UJ	840	UJ
4,6-Dinitro-2-methylphenol	950	UJ	1900	UJ	890	UJ	900	UJ	840	UJ
N-Nitrosodiphenylamine	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
4-Bromophenyl-phenylether	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Hexachlorobenzene	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Atrazine	380	R	760	R	350	R	360	R	330	R
Pentachlorophenol	950	UJ	1900	UJ	890	UJ	900	UJ	840	UJ
Phenanthrene	5100	JD	5100	J	550	J	350	J	330	UJ
Anthracene	790	J	920	J	83	J	42	J	330	UJ
Carbazole	510	J	530	J	350	UJ	360	UJ	330	UJ
Di-n-butylphthalate	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Fluoranthene	2800	J	3500	J	720	J	440	J	39	J
yrene	4100	JD	4100	J	660	J	430	J	43	J
utylbenzylphthalate	380	UJ	760	UJ	43	J	360	UJ	330	UJ
3,3'-Dichlorobenzidine	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Benzo(a)anthracene	1800	J	2100	J	360	J	200	J	330	UJ
Chrysene	1800	J	2000	J	350	J	230	J	330	UJ
bis(2-Ethylhexyl)phthalate	51	J	760	UJ	190	J	99	J	760	J
Di-n-octylphthalate	380	UJ	760	UJ	350	UJ	360	UJ	330	UJ
Benzo(b)fluoranthene	1300	J	1600	J	390	J	200	J	330	UJ
Benzo(k)fluoranthene	1400	J	1700	J	310	J	190	J	330	UJ
Benzo(a)pyrene	1400	J	1700	J	350	J	210	J	330	UJ
Indeno(1,2,3-cd)pyrene	940	J	1200	J	260	J	140	J	330	UJ
Dibenzo(a,h)anthracene	450	J	580	J	120	J	63	J	330	UJ
Benzo(g,h,i)perylene	710	J	890	J	220	J	110	J	330	UJ

Case #: 29681
SDG : B0B95
Site :
ROSELLE PARK BASEBALL FIELDS
Lab. :
LIBRTY
Reviewer :
Date :

Sample Number :	B0B95MS		B0B95MSD		SBLKLX					
Sampling Location :	1024-S11		1024-S11							
Matrix :	Soil		Soil		Soil					
Units :	ug/Kg		ug/Kg		ug/Kg					
Date Sampled :	08/29/2001		08/29/2001							
Time Sampled :	12:15		12:15							
%Moisture :	1		1							
pH :	8.3		8.3							
Dilution Factor :	1.0		1.0		1.0					
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	330	UJ	330	UJ	330	U				
Phenol	1400	J	1400	J	330	U				
bis-(2-Chloroethyl) ether	330	UJ	330	UJ	330	U				
2-Chlorophenol	1400	J	1300	J	330	U				
2-Methylphenol	330	UJ	330	UJ	330	U				
2,2'-oxybis(1-Chloropropane)	330	UJ	330	UJ	330	U				
Acetophenone	330	UJ	330	UJ	330	U				
4-Methylphenol	330	UJ	330	UJ	330	U				
N-Nitroso-di-n-propylamine	870	J	940	J	330	U				
Hexachloroethane	330	UJ	330	UJ	330	U				
Nitrobenzene	330	UJ	330	UJ	330	U				
Isophorone	330	UJ	330	UJ	330	U				
2-Nitrophenol	330	UJ	330	UJ	330	U				
2,4-Dimethylphenol	330	UJ	330	UJ	330	U				
bis(2-Chloroethoxy)methane	330	UJ	330	UJ	330	U				
2,4-Dichlorophenol	330	UJ	330	UJ	330	U				
Naphthalene	330	UJ	330	UJ	330	U				
4-Chloroaniline	330	UJ	330	UJ	330	U				
Hexachlorobutadiene	330	UJ	330	UJ	330	UJ				
Caprolactam	330	UJ	330	UJ	330	U				
4-Chloro-3-methylphenol	1800	J	1700	J	330	U				
2-Methylnaphthalene	330	UJ	330	UJ	330	U				
Hexachlorocyclopentadiene	330	UJ	330	UJ	330	U				
2,4,6-Trichlorophenol	330	UJ	330	UJ	330	U				
2,4,5-Trichlorophenol	840	UJ	840	UJ	830	U				
1,1'-Biphenyl	330	UJ	330	UJ	330	U				
2-Chloronaphthalene	330	UJ	330	UJ	330	U				
2-Nitroaniline	840	UJ	840	UJ	830	U				
Dimethylphthalate	330	UJ	330	UJ	330	U				
2,6-Dinitrotoluene	330	UJ	330	UJ	330	U				
Acenaphthylene	330	UJ	330	UJ	330	U				
3-Nitroaniline	840	UJ	840	UJ	830	UJ				
Acenaphthene	1300	J	1000	J	330	U				
2,4-Dinitrophenol	840	UJ	840	UJ	830	UJ				
4-Nitrophenol	2000	J	1500	J	830	UJ				
Dibenzofuran	330	UJ	330	UJ	330	U				
2,4-Dinitrotoluene	1500	J	1200	J	330	U				

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B95MS		B0B95MSD		SBLKLX					
Sampling Location :	1024-S11		1024-S11							
Matrix :	Soil		Soil		Soil					
Units :	ug/Kg		ug/Kg		ug/Kg					
Date Sampled :	08/29/2001		08/29/2001							
Time Sampled :	12:15		12:15							
%Moisture :	1		1							
pH :	8.3		8.3							
Dilution Factor :	1.0		1.0		1.0					
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Diethylphthalate	330	UJ	330	UJ	330	U				
Fluorene	330	UJ	330	UJ	330	U				
4-Chlorophenyl-phenyl ether	330	UJ	330	UJ	330	U				
4-Nitroaniline	840	UJ	840	UJ	830	U				
4,6-Dinitro-2-methylphenol	840	UJ	840	UJ	830	U				
N-Nitrosodiphenylamine	330	UJ	330	UJ	330	U				
4-Bromophenyl-phenylether	330	UJ	330	UJ	330	U				
Hexachlorobenzene	330	UJ	330	UJ	330	U				
Atrazine	330	R	330	R	330	R				
Pentachlorophenol	340	J	240	J	830	U				
Phenanthrene	330	UJ	330	UJ	330	U				
Anthracene	330	UJ	330	UJ	330	U				
Carbazole	330	UJ	330	UJ	330	U				
Di-n-butylphthalate	330	UJ	330	UJ	330	U				
Fluoranthene	35	J	330	UJ	330	U				
Pyrene	1300	J	1000	J	330	U				
Butylbenzylphthalate	330	UJ	330	UJ	330	U				
3,3'-Dichlorobenzidine	330	UJ	330	UJ	330	U				
Benzo(a)anthracene	330	UJ	330	UJ	330	U				
Chrysene	330	UJ	330	UJ	330	U				
bis(2-Ethylhexyl)phthalate	170	J	480	J	330	U				
Di-n-octylphthalate	330	UJ	330	UJ	330	UJ				
Benzo(b)fluoranthene	330	UJ	330	UJ	330	U				
Benzo(k)fluoranthene	330	UJ	330	UJ	330	U				
Benzo(a)pyrene	330	UJ	330	UJ	330	U				
Indeno(1,2,3-cd)pyrene	330	UJ	330	UJ	330	U				
Dibenzo(a,h)anthracene	330	UJ	330	UJ	330	U				
Benzo(g,h,i)perylene	330	UJ	330	UJ	330	U				

Analytical Results (Qualified Data)

Case #: 29681
Site :
Lab. :
Reviewer :
Date :

SDG : B0BB3
ROSELLE PARK BASEBALL FIELDS
LIBRTY

Number of Soil Samples : 0
Number of Water Samples : 1

Sample Number :	B0BB3		SBLKKZ							
Sampling Location :	1024-RB01.									
Matrix :	Water		Water							
Units :	ug/L		ug/L							
Date Sampled :	8/29/01									
Time Sampled :	08:20									
%Moisture :	N/A									
pH :										
Dilution Factor :	1.0		1.0							
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	10	U	10	U						
Phenol	10	U	10	U						
bis-(2-Chloroethyl) ether	10	U	10	U						
2-Chlorophenol	10	U	10	U						
2-Methylphenol	10	U	10	U						
2,2'-oxybis(1-Chloropropane)	10	U	10	U						
Acetophenone	10	U	10	U						
4-Methylphenol	10	U	10	U						
N-Nitroso-di-n-propylamine	10	U	10	U						
Hexachloroethane	10	U	10	U						
Nitrobenzene	10	U	10	U						
Isophorone	10	U	10	U						
2-Nitrophenol	10	U	10	U						
2,4-Dimethylphenol	10	U	10	U						
bis(2-Chloroethoxy)methane	10	U	10	U						
2,4-Dichlorophenol	10	U	10	U						
Naphthalene	10	U	10	U						
4-Chloroaniline	10	U	10	U						
Hexachlorobutadiene	10	U	10	U						
Caprolactam	10	U	10	U						
4-Chloro-3-methylphenol	10	U	10	U						
2-Methylnaphthalene	10	U	10	U						
Hexachlorocyclopentadiene	10	U	10	U						
2,4,6-Trichlorophenol	10	U	10	U						
2,4,5-Trichlorophenol	25	U	25	U						
1,1'-Biphenyl	10	U	10	U						
2-Chloronaphthalene	10	U	10	U						
2-Nitroaniline	25	U	25	U						
Dimethylphthalate	10	U	10	U						
2,6-Dinitrotoluene	10	U	10	U						
Acenaphthylene	10	U	10	U						
3-Nitroaniline	25	U	25	U						
Acenaphthene	10	U	10	U						
2,4-Dinitrophenol	25	UJ	25	UJ						
4-Nitrophenol	25	U	25	U						
Dibenzofuran	10	U	10	U						
2,4-Dinitrotoluene	10	U	10	U						

Case #: 29681 SDG : B0BB3
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
ate :

Sample Number :	B0BB3		SBLKKZ							
Sampling Location :	1024-RB01.									
Matrix :	Water		Water							
Units :	ug/L		ug/L							
Date Sampled :	8/29/01									
Time Sampled :	08:20									
%Moisture :	N/A									
pH :										
Dilution Factor :	1.0		1.0							
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Diethylphthalate	10	U	10	U						
Fluorene	10	U	10	U						
4-Chlorophenyl-phenyl ether	10	U	10	U						
4-Nitroaniline	25	U	25	U						
4,6-Dinitro-2-methylphenol	25	U	25	U						
N-Nitrosodiphenylamine	10	U	10	U						
4-Bromophenyl-phenylether	10	U	10	U						
Hexachlorobenzene	10	U	10	U						
Atrazine	10	R	10	R						
Pentachlorophenol	25	U	25	U						
Phenanthrene	10	U	10	U						
Anthracene	10	U	10	U						
Carbazole	10	U	10	U						
Di-n-butylphthalate	10	U	10	U						
Fluoranthene	10	U	10	U						
Pyrene	10	U	10	U						
Butylbenzylphthalate	10	U	10	U						
3,3'-Dichlorobenzidine	10	U	10	U						
Benzo(a)anthracene	10	U	10	U						
Chrysene	10	U	10	U						
bis(2-Ethylhexyl)phthalate	10	U	10	U						
Di-n-octylphthalate	10	U	10	U						
Benzo(b)fluoranthene	10	U	10	U						
Benzo(k)fluoranthene	10	U	10	U						
Benzo(a)pyrene	10	U	10	U						
Indeno(1,2,3-cd)pyrene	10	U	10	U						
Dibenzo(a,h)anthracene	10	U	10	U						
Benzo(g,h,i)perylene	10	U	10	U						

REFERENCE NO. 28

ATTACHMENT C

Analytical Results (Qualified Data)

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
ate :

Number of Soil Samples : 19
Number of Water Samples : 0

Sample Number :	B0BA0		B0BA1		B0BA2		B0BA3		B0BA4	
Sampling Location :	1024-S16		1024-S17		1024-S18		1024-S19		1024-S20	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	13:25		13:50		13:55		14:00		14:05	
%Moisture :	1		0		1		0		0	
pH :	8.0		8.1		8.0		8.2		8.0	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	0.54	J
beta-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
delta-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
gamma-BHC (Lindane)	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Heptachlor	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Aldrin	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Heptachlor epoxide	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Endosulfan I	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Dieldrin	3.3	UJ	1.3	J	3.3	UJ	3.3	UJ	3.3	UJ
4,4'-DDE	2.0	J	3.5	J	1.5	J	3.3	J	3.3	UJ
Endrin	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
Endosulfan II	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
4,4'-DDD	1.7	J	2.3	J	3.3	UJ	1.8	J	3.3	UJ
Endosulfan sulfate	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
4,4'-DDT	3.3	UJ	3.3	UJ	3.3	UJ	4.8	NJ	3.3	UJ
Methoxychlor	17	UJ	78	J	17	UJ	17	UJ	22	J
Endrin ketone	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
Endrin aldehyde	3.3	UJ	1.6	J	3.3	UJ	3.3	UJ	3.3	UJ
alpha-Chlordane	1.7	UJ	1.7	UJ	1.7	UJ	1.3	J	1.7	UJ
gamma-Chlordane	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Toxaphene	170	UJ	170	UJ	170	UJ	170	UJ	170	UJ
Aroclor-1016	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ
Aroclor-1221	68	UJ	67	UJ	68	UJ	67	UJ	67	UJ
Aroclor-1232	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ
Aroclor-1242	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ
Aroclor-1248	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ
Aroclor-1254	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ
Aroclor-1260	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B85		B0B85MS		B0B85MSD		B0B86		B0B87	
Sampling Location :	1024-S01		1024-S01		1024-S01		1024-S02		1024-S03	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	08:25		08:25		08:25		08:40		09:00	
%Moisture :	2		2		2		2		2	
pH :	8.0		8.0		8.0		8.3		8.2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
beta-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
delta-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
gamma-BHC (Lindane)	1.7	UJ	10	J	6.9	J	1.7	UJ	1.7	UJ
Heptachlor	1.7	UJ	11	J	8.9	J	1.7	UJ	1.7	UJ
Aldrin	1.7	UJ	11	J	8.9	J	1.7	UJ	1.7	UJ
Heptachlor epoxide	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Endosulfan I	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Dieldrin	3.4	UJ	24	J	20	J	3.4	UJ	3.4	UJ
4,4'-DDE	2.3	J	2.4	J	2.3	J	1.8	J	2.0	J
Endrin	3.4	UJ	29	J	28	J	3.4	UJ	3.4	UJ
Endosulfan II	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ
4,4'-DDD	3.4	UJ	3.2	J	3.1	J	3.4	UJ	3.4	UJ
Endosulfan sulfate	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ
4,4'-DDT	4.2	J	30	J	23	J	3.6	NJ	5.4	J
Methoxychlor	17	UJ	17	UJ	17	UJ	17	UJ	17	UJ
Endrin ketone	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ
Endrin aldehyde	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ
alpha-Chlordane	1.7	UJ	0.99	J	1.7	J	1.7	UJ	1.7	UJ
gamma-Chlordane	0.61	J	0.44	J	0.51	J	0.80	J	1.7	UJ
Toxaphene	170	UJ	170	UJ	170	UJ	170	UJ	170	UJ
Aroclor-1016	34	UJ	34	UJ	34	UJ	34	UJ	34	UJ
Aroclor-1221	68	UJ	68	UJ	68	UJ	68	UJ	68	UJ
Aroclor-1232	34	UJ	34	UJ	34	UJ	34	UJ	34	UJ
Aroclor-1242	34	UJ	34	UJ	34	UJ	34	UJ	34	UJ
Aroclor-1248	34	UJ	34	UJ	34	UJ	34	UJ	34	UJ
Aroclor-1254	34	UJ	34	UJ	34	UJ	34	UJ	34	UJ
Aroclor-1260	34	UJ	34	UJ	34	UJ	34	UJ	34	UJ

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
ate :

Sample Number :	B0B88		B0B89		B0B90		B0B91		B0B92	
Sampling Location :	1024-S04		1024-S05		1024-S06		1024-S07		1024-S08	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	09:10		09:25		09:35		09:55		10:10	
%Moisture :	2		2		2		2		1	
pH :	8.1		7.9		8.1		8.0		8.3	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
beta-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
delta-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
gamma-BHC (Lindane)	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Heptachlor	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Aldrin	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Heptachlor epoxide	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Endosulfan I	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Dieldrin	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.3	UJ
4,4'-DDE	2.0	J	2.4	J	2.1	J	1.9	J	1.5	J
Endrin	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.3	UJ
Endosulfan II	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.3	UJ
4,4'-DDD	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.3	UJ
Endosulfan sulfate	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.3	UJ
4,4'-DDT	3.5	J	3.4	UJ	4.3	R	4.5	J	5.4	J
ethoxychlor	17	UJ	17	UJ	17	UJ	17	UJ	17	UJ
ndrin ketone	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.3	UJ
Endrin aldehyde	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.3	UJ
alpha-Chlordane	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.0	J
gamma-Chlordane	1.7	UJ	1.1	J	1.7	UJ	1.7	UJ	0.57	J
Toxaphene	170	UJ	170	UJ	170	UJ	170	UJ	170	UJ
Aroclor-1016	34	UJ	34	UJ	34	UJ	34	UJ	33	UJ
Aroclor-1221	68	UJ	68	UJ	68	UJ	68	UJ	68	UJ
Aroclor-1232	34	UJ	34	UJ	34	UJ	34	UJ	33	UJ
Aroclor-1242	34	UJ	34	UJ	34	UJ	34	UJ	33	UJ
Aroclor-1248	34	UJ	34	UJ	34	UJ	34	UJ	33	UJ
Aroclor-1254	34	UJ	34	UJ	34	UJ	34	UJ	33	UJ
Aroclor-1260	34	UJ	34	UJ	34	UJ	34	UJ	33	UJ

Analytical Results (Qualified Data)

Case #: 29681
Site :
Lab. :
Reviewer :
Date :

SDG : B0B85
ROSELLE PARK BASEBALL FIELDS
LIBRTY

Sample Number :	B0B93		B0B94		B0B96		B0B97		B0B98	
Sampling Location :	1024-S09		1024-S010		1024-S12		1024-S13		1024-S14	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	10:30		10:40		12:30		13:05		13:10	
%Moisture :	1		1		1		1		1	
pH :	8.2		8.1		8.0		7.2		7.8	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
beta-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
delta-BHC	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
gamma-BHC (Lindane)	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Heptachlor	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Aldrin	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Heptachlor epoxide	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Endosulfan I	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
Dieldrin	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
4,4'-DDE	3.3	UJ	1.8	J	2.1	J	3.3	UJ	3.3	UJ
Endrin	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
Endosulfan II	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
4,4'-DDD	3.3	UJ	3.3	UJ	3.3	UJ	1.6	J	1.5	J
Endosulfan sulfate	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
4,4'-DDT	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
Methoxychlor	17	UJ	17	UJ	17	UJ	17	UJ	17	UJ
Endrin ketone	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
Endrin aldehyde	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
alpha-Chlordane	2.7	J	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
gamma-Chlordane	1.7	UJ	0.41	J	1.7	UJ	0.70	J	1.7	UJ
Toxaphene	170	UJ	170	UJ	170	UJ	170	UJ	170	UJ
Aroclor-1016	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ
Aroclor-1221	68	UJ	68	UJ	68	UJ	68	UJ	67	UJ
Aroclor-1232	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ
Aroclor-1242	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ
Aroclor-1248	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ
Aroclor-1254	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ
Aroclor-1260	33	UJ	33	UJ	33	UJ	33	UJ	33	UJ

Case #: 29681
SDG : B0B85
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0B99		PBLKLW							
Sampling Location :	1024-S15									
Matrix :	Soil		Soil							
Units :	ug/Kg		ug/Kg							
Date Sampled :	08/29/2001									
Time Sampled :	13:30									
%Moisture :	2									
pH :	7.5									
Dilution Factor :	1.0		1.0							
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7	UJ	1.7	UJ						
beta-BHC	1.7	UJ	1.7	UJ						
delta-BHC	1.7	UJ	1.7	UJ						
gamma-BHC (Lindane)	1.7	UJ	1.7	UJ						
Heptachlor	1.7	UJ	1.7	UJ						
Aldrin	1.7	UJ	1.7	UJ						
Heptachlor epoxide	1.7	UJ	1.7	UJ						
Endosulfan I	1.7	UJ	1.7	UJ						
Dieldrin	3.4	UJ	3.3	UJ						
4,4'-DDE	3.4	UJ	3.3	UJ						
Endrin	3.4	UJ	3.3	UJ						
Endosulfan II	3.4	UJ	3.3	UJ						
4,4'-DDD	2.5	J	3.3	UJ						
Endosulfan sulfate	3.4	UJ	3.3	UJ						
4,4'-DDT	3.4	UJ	3.3	UJ						
Methoxychlor	17	UJ	17	UJ						
Endrin ketone	3.4	UJ	3.3	UJ						
Endrin aldehyde	3.4	UJ	3.3	UJ						
alpha-Chlordane	1.7	UJ	1.7	UJ						
gamma-Chlordane	0.45	J	1.7	UJ						
Toxaphene	180	UJ	170	UJ						
Aroclor-1016	34	UJ	33	UJ						
Aroclor-1221	69	UJ	67	UJ						
Aroclor-1232	34	UJ	33	UJ						
Aroclor-1242	34	UJ	33	UJ						
Aroclor-1248	34	UJ	33	UJ						
Aroclor-1254	34	UJ	33	UJ						
Aroclor-1260	34	UJ	33	UJ						

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS Number of Soil Samples : 9
Lab. : LIBRTY Number of Water Samples : 0
Reviewer :
Date :

Sample Number :	B0BA5		B0BA5DL		B0BA6		B0BA6DL		B0BA7	
Sampling Location :	1024-S21		**DO NOT USE**		1024-S22		**DO NOT USE**		1024-S23	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	11:00		11:00		11:10		11:10		11:20	
%Moisture :	8		8		8		8		9	
pH :	6.3		6.3		6.5		6.5		6.1	
Dilution Factor :	1.0		10.0		1.0		5.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.8	UJ	18	UJ	1.8	UJ	9.2	UJ	1.9	UJ
beta-BHC	3.5	J	18	UJ	3.7	J	9.2	UJ	3.7	NJ
delta-BHC	1.8	UJ	18	UJ	1.8	UJ	9.2	UJ	1.9	UJ
gamma-BHC (Lindane)	1.8	UJ	18	UJ	1.8	UJ	9.2	UJ	1.9	UJ
Heptachlor	1.8	UJ	18	UJ	1.8	UJ	9.2	UJ	1.9	UJ
Aldrin	1.8	UJ	18	UJ	1.8	UJ	9.2	UJ	1.9	UJ
Heptachlor epoxide	11	J	20	J	11	J	17	J	37	JD
Endosulfan I	1.1	J	18	UJ	1.8	UJ	9.2	UJ	1.9	UJ
Dieldrin	3.6	J	36	UJ	2.9	J	18	UJ	4.1	J
4,4'-DDE	11	R	36	UJ	12	R	23	NJ	43	JD
Endrin	3.6	UJ	36	UJ	3.6	UJ	18	UJ	3.6	UJ
Endosulfan II	3.6	UJ	36	UJ	3.6	UJ	18	UJ	3.6	UJ
4,4'-DDD	3.6	UJ	36	UJ	3.6	UJ	18	UJ	7.2	R
Endosulfan sulfate	3.6	UJ	36	UJ	3.6	UJ	18	UJ	3.6	UJ
4,4'-DDT	12	J	36	UJ	13	J	11	J	22	J
Methoxychlor	18	UJ	180	UJ	18	UJ	92	UJ	19	UJ
Endrin ketone	6.0	J	36	UJ	6.0	J	5.5	J	3.6	UJ
Endrin aldehyde	3.6	UJ	36	UJ	3.6	UJ	18	UJ	2.5	J
alpha-Chlordane	28	NJ	51	NJ	30	NJ	40	NJ	96	NJD
gamma-Chlordane	16	NJ	33	NJ	22	NJ	19	NJ	59	JD
Toxaphene	180	UJ	1800	UJ	180	UJ	920	UJ	190	UJ
Aroclor-1016	36	UJ	360	UJ	36	UJ	180	UJ	36	UJ
Aroclor-1221	73	UJ	730	UJ	73	UJ	360	UJ	74	UJ
Aroclor-1232	36	UJ	360	UJ	36	UJ	180	UJ	36	UJ
Aroclor-1242	36	UJ	360	UJ	36	UJ	180	UJ	36	UJ
Aroclor-1248	36	UJ	360	UJ	36	UJ	180	UJ	36	UJ
Aroclor-1254	36	UJ	360	UJ	36	UJ	180	UJ	36	UJ
Aroclor-1260	36	UJ	360	UJ	36	UJ	180	UJ	36	UJ

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
ıte :

Sample Number :	B0BA7DL		B0BA8		B0BA8DL		B0BA9		B0BB0	
Sampling Location :	**DO NOT USE**		1024-S24		**DO NOT USE**		1024-S25		1024-S26	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	11:20		11:30		11:30		14:35		14:40	
%Moisture :	9		10		10		8		13	
pH :	6.1		6.3		6.3		6.2		6.4	
Dilution Factor :	10.0		1.0		5.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	19	UJ	1.9	UJ	9.4	UJ	1.8	UJ	2.0	UJ
beta-BHC	19	UJ	15	JD	15	J	5.6	J	5.4	R
delta-BHC	19	UJ	1.9	UJ	9.4	UJ	1.8	UJ	2.0	UJ
gamma-BHC (Lindane)	19	UJ	1.9	UJ	9.4	UJ	1.8	UJ	2.0	UJ
Heptachlor	19	UJ	1.9	UJ	9.4	UJ	1.8	UJ	2.0	UJ
Aldrin	19	UJ	1.9	UJ	9.4	UJ	1.8	UJ	2.0	UJ
Heptachlor epoxide	37	J	23	J	37	J	1.8	UJ	2.0	UJ
Endosulfan I	19	UJ	1.9	UJ	9.4	UJ	1.8	UJ	2.0	UJ
Dieldrin	36	UJ	5.2	J	18	UJ	3.6	UJ	3.8	UJ
4,4'-DDE	43	J	50	JD	50	J	3.6	UJ	3.8	UJ
Endrin	36	UJ	3.7	UJ	18	UJ	3.6	UJ	3.8	UJ
Endosulfan II	36	UJ	3.7	UJ	18	UJ	3.6	UJ	3.8	UJ
4,4'-DDD	36	UJ	18	JD	18	J	3.6	UJ	3.8	UJ
Endosulfan sulfate	36	UJ	3.7	UJ	18	UJ	3.6	UJ	3.8	UJ
4,4'-DDT	26	J	41	JD	41	J	3.1	J	3.8	UJ
Methoxychlor	190	UJ	19	UJ	94	UJ	18	UJ	20	UJ
Endrin ketone	36	UJ	3.7	UJ	7.0	J	3.6	UJ	3.8	UJ
Endrin aldehyde	36	UJ	3.2	J	18	UJ	3.6	UJ	3.8	UJ
alpha-Chlordane	96	NJ	67	NJD	67	NJ	1.9	UJ	2.0	UJ
gamma-Chlordane	59	J	33	NJD	33	NJ	1.8	UJ	2.0	UJ
Toxaphene	1900	UJ	190	UJ	940	UJ	180	UJ	200	UJ
Aroclor-1016	360	UJ	37	UJ	180	UJ	36	UJ	38	UJ
Aroclor-1221	740	UJ	74	UJ	370	UJ	73	UJ	77	UJ
Aroclor-1232	360	UJ	37	UJ	180	UJ	36	UJ	38	UJ
Aroclor-1242	360	UJ	37	UJ	180	UJ	36	UJ	38	UJ
Aroclor-1248	360	UJ	37	UJ	180	UJ	36	UJ	38	UJ
Aroclor-1254	360	UJ	37	UJ	180	UJ	36	UJ	38	UJ
Aroclor-1260	360	UJ	37	UJ	180	UJ	36	UJ	38	UJ

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	B0BB1		B0BB1DL		B0BB2		B0BB2DL		B0B95	
Sampling Location :	1024-S27		DO NOT USE		1024-S28		DO NOT USE		1024-S11	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	14:45		14:45		14:50		14:50		12:15	
%Moisture :	7		7		8		8		1	
pH :	5.9		5.9		5.9		5.9		8.3	
Dilution Factor :	1.0		2.0		1.0		2.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.8	UJ	3.7	UJ	1.8	UJ	3.7	UJ	1.7	UJ
beta-BHC	4.5	J	3.7	UJ	3.9	J	4.8	J	1.7	UJ
delta-BHC	1.8	UJ	3.7	UJ	1.8	UJ	3.7	UJ	1.7	UJ
gamma-BHC (Lindane)	1.8	UJ	3.7	UJ	1.8	UJ	3.7	UJ	1.7	UJ
Heptachlor	1.8	UJ	3.7	UJ	1.8	UJ	3.7	UJ	1.7	UJ
Aldrin	1.8	UJ	3.7	UJ	1.8	UJ	3.7	UJ	1.7	UJ
Heptachlor epoxide	6.1	J	8.8	J	7.7	J	9.5	J	1.7	UJ
Endosulfan I	0.72	J	3.7	UJ	1.8	UJ	3.7	UJ	1.7	UJ
Dieldrin	3.6	UJ	3.4	J	3.6	UJ	7.2	UJ	3.3	UJ
4,4'-DDE	7.5	NJ	11	NJ	11	NJ	11	NJ	3.2	J
Endrin	3.6	UJ	7.1	UJ	3.6	UJ	7.2	UJ	3.3	UJ
Endosulfan II	3.6	UJ	7.1	UJ	3.6	UJ	7.2	UJ	3.3	UJ
4,4'-DDD	3.6	UJ	7.1	UJ	3.6	UJ	7.2	UJ	1.4	J
Endosulfan sulfate	3.6	UJ	7.1	UJ	3.6	UJ	7.2	UJ	3.3	UJ
4,4'-DDT	8.3	J	8.6	J	12	J	13	J	5.1	J
Methoxychlor	18	UJ	37	UJ	18	UJ	37	UJ	17	UJ
Endrin ketone	3.6	UJ	7.1	UJ	3.6	UJ	7.2	UJ	3.3	UJ
Endrin aldehyde	3.6	UJ	7.1	UJ	3.6	UJ	7.2	UJ	3.3	UJ
alpha-Chlordane	11	NJ	15	NJ	15	NJ	18	NJ	1.1	J
gamma-Chlordane	7.5	NJD	7.5	NJ	14	JD	14	J	0.83	J
Toxaphene	180	UJ	370	UJ	180	UJ	370	UJ	170	UJ
Aroclor-1016	36	UJ	71	UJ	36	UJ	72	UJ	33	UJ
Aroclor-1221	72	UJ	140	UJ	73	UJ	140	UJ	67	UJ
Aroclor-1232	36	UJ	71	UJ	36	UJ	72	UJ	33	UJ
Aroclor-1242	36	UJ	71	UJ	36	UJ	72	UJ	33	UJ
Aroclor-1248	36	UJ	71	UJ	36	UJ	72	UJ	33	UJ
Aroclor-1254	36	UJ	71	UJ	36	UJ	72	UJ	33	UJ
Aroclor-1260	36	UJ	71	UJ	36	UJ	72	UJ	33	UJ

Case #: 29681 SDG : B0B95
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : LIBRTY
Reviewer :
ate :

Sample Number :	B0B95MS		B0B95MSD		PBLKLY					
Sampling Location :	1024-S11		1024-S11							
Matrix :	Soil		Soil		Soil					
Units :	ug/Kg		ug/Kg		ug/Kg					
Date Sampled :	08/29/2001		08/29/2001							
Time Sampled :	12:15		12:15							
%Moisture :	1		1							
pH :	8.3		8.3							
Dilution Factor :	1.0		1.0		1.0					
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7	UJ	1.7	UJ	1.7	U				
beta-BHC	1.7	UJ	1.7	UJ	1.7	U				
delta-BHC	1.7	UJ	1.7	UJ	1.7	U				
gamma-BHC (Lindane)	11	J	8.0	J	1.7	U				
Heptachlor	12	J	8.4	J	1.7	U				
Aldrin	11	J	8.4	J	1.7	U				
Heptachlor epoxide	1.7	UJ	1.7	UJ	1.7	U				
Endosulfan I	1.7	UJ	1.7	UJ	1.7	U				
Dieldrin	24	J	17	J	3.3	U				
4,4'-DDE	3.1	J	2.3	J	3.3	U				
Endrin	27	J	19	J	3.3	U				
Endosulfan II	3.3	UJ	3.3	UJ	3.3	U				
4,4'-DDD	3.3	UJ	3.3	UJ	3.3	U				
Endosulfan sulfate	3.3	UJ	3.3	UJ	3.3	U				
4,4'-DDT	26	J	19	J	3.3	U				
Methoxychlor	17	UJ	17	UJ	17	U				
Endrin ketone	3.3	UJ	3.3	UJ	3.3	U				
Endrin aldehyde	3.3	UJ	3.3	UJ	3.3	U				
alpha-Chlordane	1.0	J	0.62	J	1.7	U				
gamma-Chlordane	1.7	UJ	1.7	UJ	1.7	U				
Toxaphene	170	UJ	170	UJ	170	U				
Aroclor-1016	33	UJ	33	UJ	33	U				
Aroclor-1221	67	UJ	67	UJ	67	U				
Aroclor-1232	33	UJ	33	UJ	33	U				
Aroclor-1242	33	UJ	33	UJ	33	U				
Aroclor-1248	33	UJ	33	UJ	33	U				
Aroclor-1254	33	UJ	33	UJ	33	U				
Aroclor-1260	33	UJ	33	UJ	33	U				

Case #: 29681
SDG : B0BB3
Site : ROSELLE PARK BASEBALL FIELDS
Number of Soil Samples : 0
Lab. : LIBRTY
Number of Water Samples : 1
Reviewer :
Date :

Sample Number :	B0BB3		PBLKLB							
Sampling Location :	1024-RB01.									
Matrix :	Water		Water							
Units :	ug/L		ug/L							
Date Sampled :	8/29/01									
Time Sampled :	08:20									
%Moisture :	N/A									
pH :										
Dilution Factor :	1.0		1.0							
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	0.053	U	0.050	U						
beta-BHC	0.053	U	0.050	U						
delta-BHC	0.053	U	0.050	U						
gamma-BHC (Lindane)	0.053	U	0.050	U						
Heptachlor	0.053	U	0.050	U						
Aldrin	0.053	U	0.050	U						
Heptachlor epoxide	0.053	U	0.050	U						
Endosulfan I	0.053	U	0.050	U						
Dieldrin	0.10	U	0.10	U						
4,4'-DDE	0.10	U	0.10	U						
Endrin	0.10	U	0.10	U						
Endosulfan II	0.10	U	0.10	U						
4,4'-DDD	0.10	U	0.10	U						
Endosulfan sulfate	0.10	U	0.10	U						
4,4'-DDT	0.10	U	0.10	U						
Methoxychlor	0.53	U	0.50	U						
Endrin ketone	0.10	U	0.10	U						
Endrin aldehyde	0.10	U	0.10	U						
alpha-Chlordane	0.053	U	0.050	U						
gamma-Chlordane	0.053	U	0.050	U						
Toxaphene	5.3	U	5.0	U						
Aroclor-1016	1.0	U	1.0	U						
Aroclor-1221	2.1	U	2.0	U						
Aroclor-1232	1.0	U	1.0	U						
Aroclor-1242	1.0	U	1.0	U						
Aroclor-1248	1.0	U	1.0	U						
Aroclor-1254	1.0	U	1.0	U						
Aroclor-1260	1.0	U	1.0	U						

REFERENCE NO. 28

ATTACHMENT D

Analytical Results (Qualified Data) Page ____ of ____

Case #: 29681 SDG : MB0AY7
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : CHEM
Reviewer : C. STANCA/ESAT
Date : 10/12/01

Sample Number :	MB0B00		MB0B01		MB0B02		MB0B03		MB0B04	
Sampling Location :	1024-S24		1024-S25		1024-S26		1024-S27		1024-S28	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	11:30		14:35		14:40		14:45		14:50	
%Solids :	89.9		93.5		89.0		93.0		93.4	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	7930		9820		10900		9120		8280	
ANTIMONY	1.1	U	3.0	B	6.2	B	2.1	B	2.2	B
ARSENIC	11.1	J	12.8	J	17.6	J	16.1	J	14.3	J
BARIUM	127		891		2370		652		440	
BERYLLIUM	0.65	BJ	0.75	BJ	1.9	R	0.92	BJ	0.74	BJ
CADMIUM	0.090	U	0.11	B	0.41	B	0.090	U	0.080	U
CALCIUM	2860		4240		10800		3600		2850	
CHROMIUM	17.0		36.0		46.9		28.4		30.6	
COBALT	5.1	B	8.3	B	16.0		10.5	B	8.9	B
COPPER	63.6		179		435		143		133	
IRON	13600		38900		61500		23300		19700	
LEAD	235	J	914	J	3750	J	750	J	796	J
MAGNESIUM	2070		2960		4970		2680		2290	
MANGANESE	237		688		920		396		503	
MERCURY	0.26		0.50		1.3		0.34		0.37	
NICKEL	13.7	J	28.4	J	83.5	J	35.1	J	32.0	J
POTASSIUM	684	B	1080	J	1360	J	830	B	631	B
SELENIUM	0.96	U	0.93	U	0.98	U	0.94	U	0.91	U
SILVER	0.15	U	0.15	U	10.2		4.1	J	2.6	J
SODIUM	205	B	236	B	1180		335	B	222	B
THALLIUM	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
VANADIUM	22.7		40.4		37.9		36.9		34.3	
ZINC	226		1790		2320		531		458	
CYANIDE	N/A		N/A		N/A		N/A		N/A	

Analytical Results (Qualified Data)

Case #: 29681
SDG : MB0AY7
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : CHEM
Reviewer : C. STANCA/ESAT
Date : 10/12/01

Sample Number :	IDL(ug/L)									
Sampling Location :										
Matrix :	Soil									
Units :	mg/Kg									
Date Sampled :										
Time Sampled :										
%Solids :										
Dilution Factor :	1.0									
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	6.8									
ANTIMONY	4.9									
ARSENIC	2.0									
BARIUM	4.3									
BERYLLIUM	0.10									
CADMIUM	0.40									
CALCIUM	1.9									
CHROMIUM	0.50									
COBALT	0.70									
COPPER	0.40									
IRON	19.4									
LEAD	1.3									
MAGNESIUM	5.3									
MANGANESE	0.10									
MERCURY	0.10									
NICKEL	0.90									
POTASSIUM	14.8									
SELENIUM	4.4									
SILVER	0.70									
SODIUM	63.3									
THALLIUM	5.6									
VANADIUM	0.90									
ZINC	2.0									
CYANIDE	N/A									

Analytical Results (Qualified Data)

Case #: 29681
Site :
Lab. :
Reviewer :
Date :

SDG : MB0AY7
ROSELLE PARK BASEBALL FIELDS
CHEM
C. STANCA/ESAT
10/12/01

Sample Number :	MB0B05		IDL							
Sampling Location :	1024-RB01									
Matrix :	Water		Water							
Units :	ug/L		ug/L							
Date Sampled :	08/29/2001									
Time Sampled :	08:20									
%Solids :	0.0									
Dilution Factor :	1.0		1.0							
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	41.1	B	6.8							
ANTIMONY	4.9	U	4.9							
ARSENIC	2.6	BJ	2.0							
BARIUM	4.3	U	4.3							
BERYLLIUM	1.3	BJ	0.10							
CADMIUM	0.40	U	0.40							
CALCIUM	83.1	B	1.9							
CHROMIUM	12.6		0.50							
COBALT	0.70	U	0.70							
COPPER	5.0	B	0.40							
IRON	126		19.4							
LEAD	1.7	B	1.3							
MAGNESIUM	22.3	B	5.3							
MANGANESE	61.9		0.10							
MERCURY	0.10	U	0.10							
NICKEL	3.5	B	0.90							
POTASSIUM	14.8	U	14.8							
SELENIUM	4.4	U	4.4							
SILVER	0.70	U	0.70							
SODIUM	132	B	63.3							
THALLIUM	6.0	BJ	5.6							
VANADIUM	0.90	U	0.90							
ZINC	22.5		2.0							
CYANIDE	N/A		N/A							

Analytical Results (Qualified Data)

Case #: 29681
SDG : MB0AX7
Site : ROSELLE PARK BASEBALL FIELDS
Number of Soil Samples : 20
Lab. : CHEM
Number of Water Samples : 0
Reviewer : C. STANCA/ESAT
ate : 10/12/01

Sample Number :	MB0AX7		MB0AX7A-Do Not Use		MB0AX7D-Do Not Use		MB0AX7S-Do Not Use		MB0AX8	
Sampling Location :	1024-S01		1024-S01		1024-S01		1024-S01		1024-S02	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	08:25		08:25		08:25		08:25		08:40	
%Solids :	98.5		98.5		98.4		98.5		98.4	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	6960				6960				4630	
ANTIMONY	0.99	UJ	120		0.99	U	62.6		0.98	UJ
ARSENIC	5.1	J			6.0		14.0		4.3	J
BARIUM	22.3	B			22.6	B	397		14.4	B
BERYLLIUM	0.42	BJ			0.43	B	10.2		0.31	BJ
CADMIUM	0.080	U			0.080	U	9.1		0.080	U
CALCIUM	23700				26900				8050	
CHROMIUM	20.1				20.1		57.4		19.7	
COBALT	2.3	B			2.3	B	98.2		1.8	B
COPPER	17.4				19.1		69.8		17.9	
IRON	16500				17200				15500	
LEAD	8.0	J			8.1		12.0		6.2	J
MAGNESIUM	1790				1900				971	B
MANGANESE	71.3				78.0		178		46.1	R
MERCURY	0.050	U			0.050	U	0.52		0.050	U
NICKEL	4.7	B			5.3	B	100		2.6	B
POTASSIUM	624	B			663	B			365	B
SELENIUM	0.89	UR	12.9		0.89	U	0.89	U	0.88	UR
SILVER	0.16	B			0.14	U	12.0		0.14	U
SODIUM	89.2	B			128	B			65.1	B
THALLIUM	1.1	U			1.1	U	9.5		1.1	U
VANADIUM	24.2				25.0		119		20.1	
ZINC	28.4				30.7		130		21.1	R
CYANIDE	N/A		N/A		N/A		N/A		N/A	

Analytical Results (Qualified Data) Page ____ of ____

Case #: 29681 SDG : MB0AX7
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : CHEM
Reviewer : C. STANCA/ESAT
Date : 10/12/01

Sample Number :	MB0AX9		MB0AY0		MB0AY1		MB0AY2		MB0AY3	
Sampling Location :	1024-S03		1024-S04		1024-S05		1024-S06		1024-S07	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	09:00		09:10		09:25		09:35		09:55	
%Solids :	98.0		98.7		98.7		98.5		98.4	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	4130		4800		6020		4540		7280	
ANTIMONY	0.99	UJ	0.96	UJ	0.97	UJ	0.99	UJ	1.0	UJ
ARSENIC	4.1	J	4.1	J	5.2	J	3.7		6.0	J
BARIUM	12.9	B	14.6	B	17.8	B	13.9	B	22.4	B
BERYLLIUM	0.28	BJ	0.30	BJ	0.41	BJ	0.27	BJ	0.40	BJ
CADMIUM	0.080	U	0.080	U	0.080	U	0.080	U	0.080	U
CALCIUM	5450		4550		2610		4860		12100	
CHROMIUM	14.6		15.1		19.7		14.4		21.6	
COBALT	1.5	B	1.7	B	2.1	B	1.5	B	2.4	B
COPPER	14.5		13.7		13.6		17.6		18.8	
IRON	14100		13400		17200		12500		18400	
LEAD	6.4	J	5.9	J	7.2	J	6.4	J	7.5	J
MAGNESIUM	796	B	815	B	689	B	817	B	1260	
MANGANESE	39.2	R	43.1	R	50.9	R	45.6	R	71.1	
MERCURY	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
NICKEL	2.4	B	3.0	B	3.7	B	2.5	B	5.0	B
POTASSIUM	268	B	459	B	518	B	318	B	609	B
SELENIUM	0.89	UR	0.87	UR	0.87	UR	0.89	UR	0.89	UR
SILVER	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U
SODIUM	51.1	B	81.9	B	62.5	B	70.1	B	71.4	B
THALLIUM	1.1	U	1.1	U	1.1	U	1.2	B	1.1	U
VANADIUM	19.6		18.9		24.4		17.0		25.9	
ZINC	20.5	R	20.8	R	20.3	R	18.3	R	23.3	
CYANIDE	N/A		N/A		N/A		N/A		N/A	

Case #: 29681
SDG : MB0AX7
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : CHEM
Reviewer : C. STANCA/ESAT
ate : 10/12/01

Sample Number :	MB0AY4		MB0AY5		MB0AY6		MB0AY8		MB0AY9	
Sampling Location :	1024-S08		1024-S09		1024-S10		1024-S12		1024-S13	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	10:10		10:30		10:40		12:30		13:05	
%Solids :	98.7		98.9		99.2		99.1		98.2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	5620		4180		4900		5400		7880	
ANTIMONY	0.98	UJ	0.96	UJ	0.96	UJ	0.96	UJ	1.0	UJ
ARSENIC	4.6	J	4.4	J	4.0	J	4.9	J	7.7	J
BARIUM	16.9	B	21.4	B	16.1	B	17.2	B	21.8	B
BERYLLIUM	0.33	BJ	0.32	BJ	0.34	BJ	0.31	BJ	0.50	BJ
CADMIUM	0.080	U	0.080	U	0.080	U	0.080	U	0.080	U
CALCIUM	32100		21600		4650		36700		4050	
CHROMIUM	15.6		17.0		17.5		18.3		28.7	
COBALT	1.8	B	1.4	B	1.9		1.7	B	2.6	B
COPPER	16.3		14.6		19.9		16.1		20.8	
IRON	13400		11900		13300		14500		22900	
LEAD	6.8	J	5.7	J	6.5	J	8.4	J	7.9	J
MAGNESIUM	2140		1480		794	B	2320		761	B
MANGANESE	68.0		52.6	R	45.9	R	75.2		66.2	
MERCURY	0.050	U	0.050	U	0.090	B	0.050	U	0.050	U
NICKEL	4.2	B	2.4	B	3.2	B	3.1	B	4.9	B
POTASSIUM	589	B	438	B	486	B	611	B	695	B
SELENIUM	0.88	UR	0.86	UR	0.86	UR	0.86	UR	0.90	UR
SILVER	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U
SODIUM	101	B	60.4	B	72.8	B	116	B	178	B
THALLIUM	1.1	U	1.1	U	1.1	U	1.1	U	1.2	B
VANADIUM	18.6		17.4		19.6		19.7		34.0	
ZINC	26.8		33.9		22.9		28.2		23.7	
CYANIDE	N/A		N/A		N/A		N/A		N/A	

Analytical Results (Qualified Data)

Case #: 29681
Site :
Lab. :
Reviewer :
Date :

SDG : MB0AX7
ROSELLE PARK BASEBALL FIELDS
CHEM
C. STANCA/ESAT
10/12/01

Sample Number :	MB0AZ0		MB0AZ1		MB0AZ2		MB0AZ3		MB0AZ4	
Sampling Location :	1024-S14		1024-S15		1024-S16		1024-S17		1024-S18	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	13:10		13:30		13:25		13:50		13:55	
%Solids :	99.7		99.5		99.2		99.8		99.3	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	7340		5290		5280		5500		6600	
ANTIMONY	0.97	UJ	0.96	UJ	0.96	UJ	0.96	UJ	0.96	UJ
ARSENIC	6.8	J	5.9	J	5.2	J	5.6	J	5.6	J
BARIUM	22.8	B	17.3	B	17.0	B	22.4	B	21.7	B
BERYLLIUM	0.45	BJ	0.37	BJ	0.35	BJ	0.38	BJ	0.38	BJ
CADMIUM	0.080	U	0.080	U	0.080	U	0.080	U	0.080	U
CALCIUM	6220		4410		3480		41100		41000	
CHROMIUM	26.7		17.8		19.3		19.1		17.5	
COBALT	2.6	B	2.0	B	1.9	B	2.0	B	2.1	B
COPPER	18.1		16.8		11.2		17.3		13.2	
IRON	21100		16300		15500		13900		15900	
LEAD	9.2	J	7.3	J	7.1	J	11.1	J	10.5	J
MAGNESIUM	937	B	704	B	650	B	2520		2500	
MANGANESE	71.3		56.0	R	50.5	R	82.6		90.2	
MERCURY	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
NICKEL	4.4	B	3.0	B	2.9	B	3.3	B	3.5	B
POTASSIUM	702	B	485	B	450	B	505	B	692	B
SELENIUM	0.87	UR	0.86	UR	0.86	UR	0.86	UR	0.86	UR
SILVER	0.14	U	0.14	U	0.14	U	0.14	U	0.14	B
SODIUM	123	B	171	B	50.1	B	80.8	B	95.2	B
THALLIUM	1.1	U	1.1	U	1.1	U	1.4	B	1.1	U
VANADIUM	32.6		23.7		23.0		19.4		23.6	
ZINC	35.2		19.4	R	18.9	R	36.0		32.7	
CYANIDE	N/A		N/A		N/A		N/A		N/A	

Case #: 29681 SDG : MB0AX7
Site : ROSELLE PARK BASEBALL FIELDS
Lab. : CHEM
Reviewer : C. STANCA/ESAT
Date : 10/12/01

Sample Number :	MB0AZ5		MB0AZ6		MB0AZ7		IDL(ug/L)			
Sampling Location :	1024-S19		1024-S20		1024-S21					
Matrix :	Soil		Soil		Soil		Soil			
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg			
Date Sampled :	08/29/2001		08/29/2001		08/29/2001					
Time Sampled :	14:00		14:05		11:00					
%Solids :	99.3		99.8		92.0					
Dilution Factor :	1.0		1.0		1.0					
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	6350		3710		9110		6.8			
ANTIMONY	0.98	UJ	0.96	UJ	1.0	UJ	4.9			
ARSENIC	4.3	J	3.8		9.2	J	2.0			
BARIUM	30.1	B	15.0	B	98.2		4.3			
BERYLLIUM	0.27	BJ	0.32	BJ	0.56	BJ	0.10			
CADMIUM	0.080	U	0.080	U	0.080	U	0.40			
CALCIUM	44300		5000		2210		1.9			
CHROMIUM	14.7		14.6		16.1		0.50			
COBALT	2.0	B	1.6	B	5.9	B	0.70			
COPPER	14.8		12.3		48.1		0.40			
IRON	10700		12000		16400		19.4			
LEAD	16.3	J	6.7	J	121	J	1.3			
MAGNESIUM	3190		613	B	2260		5.3			
MANGANESE	90.7		40.9	R	276		0.10			
MERCURY	0.11		0.050	U	0.13		0.10			
NICKEL	4.7	B	2.6	B	14.3	J	0.90			
POTASSIUM	393	B	370	B	801	B	14.8			
SELENIUM	0.88	UR	0.86	UR	0.93	UR	4.4			
SILVER	0.14	U	0.14	U	0.35	BJ	0.70			
SODIUM	88.8	B	52.1	B	129	B	63.3			
THALLIUM	1.1	U	1.1	U	1.2	U	5.6			
VANADIUM	15.2		17.2		25.0		0.90			
ZINC	74.8		20.0	R	142		2.0			
CYANIDE	N/A		N/A		N/A		N/A			

Analytical Results (Qualified Data) Page ____ of ____

Case #: 29681
SDG : MB0AY7
Site : ROSELLE PARK BASEBALL FIELDS
Number of Soil Samples : 8
Lab. : CHEM
Number of Water Samples : 1
Reviewer : C. STANCA/ESAT
Date : 10/12/01

Sample Number :	MB0AY7		MB0AY7D-Do Not Use		MB0AY7S-Do Not Use		MB0AZ8		MB0AZ9	
Sampling Location :	1024-S11		1024-S11		1024-S11		1024-S22		1024-S23	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	08/29/2001		08/29/2001		08/29/2001		08/29/2001		08/29/2001	
Time Sampled :	12:15		12:15		12:15		11:10		11:20	
%Solids :	99.7		99.8		99.7		92.5		90.9	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	4760		6450				10400		8850	
ANTIMONY	0.98	U	0.98	U	94.6		1.0	U	1.0	U
ARSENIC	5.0	J	5.1		13.4		9.5	J	10.2	J
BARIUM	20.7	B	22.3	B	391		109		151	
BERYLLIUM	0.42	BJ	0.46	B	10.0		0.70	BJ	0.65	BJ
CADMIUM	0.080	U	0.080	U	8.7		0.090	U	0.090	U
CALCIUM	39000		43200				2390		2430	
CHROMIUM	16.1		17.7		54.5		17.0		18.3	
COBALT	2.0	B	2.0	B	94.7		6.6	B	6.7	B
COPPER	17.5		14.5		69.5		45.7		52.0	
IRON	14300		16000				16000		18900	
LEAD	11.6	J	13.7		14.8		145	J	167	J
MAGNESIUM	2290		2640				2600		2550	
MANGANESE	83.8		89.4		179		330		365	
MERCURY	0.050	U	0.050	B	0.57		0.19	J	0.31	
NICKEL	3.0	B	3.8	B	97.0		14.6	J	15.5	J
POTASSIUM	404	B	682	B			982	B	972	B
SELENIUM	0.88	U	0.88	U	2.5		0.93	U	0.94	U
SILVER	0.14	U	0.14	U	11.8		0.15	U	0.15	U
SODIUM	87.5	B	98.4	B			131	B	183	B
THALLIUM	1.1	U	1.1	U	7.9		1.2	U	1.2	U
VANADIUM	21.6		22.8		114		25.7		26.1	
ZINC	34.5		37.1		125		151		200	
CYANIDE	N/A		N/A		N/A		N/A		N/A	

REFERENCE NO. 28

ATTACHMENT E

RECORD OF COMMUNICATION

TO: Yonru Yang

FROM: *JANET TROTTER*
Region 2, ESAT/RSCC

DATE: Oct. 25, 2001

SUBJECT: QUALITY ASSURED DATA

MESSAGE:

PLEASE SIGN BELOW IN ACKNOWLEDGEMENT OF RECEIPT OF THE FOLLOWING AND RETURN **ONE** COPY OF THIS RECORD OF COMMUNICATION TO THE RSCC - REGION II.

① Roselle Park Baseball Fields 29681 Libety Org 285/1W

REPLY BY: _____

SIGNATURE: _____ DATE: 11/2/01

DATE RECEIVED BY RSCC: _____

REV: 1/5/00

RECORD OF COMMUNICATION

REGIONAL SAMPLE CONTROL CENTER

DATE: SEPT. 25, 2001
SUBJECT: CLP Data Package for Quality Assurance Review
FROM: RSCC / ESAT
TO: George Karras, Hazardous Waste Support Section

OCT 16 2001

Attached is the following ORGANIC Data Package to be reviewed for Quality Assurance

SITE ROSELLE PARK BASEBALL FIELDS CASE# 29681 / SDG # B0BB3, B0B85, B0B95

SAMPLER SAT	#SAMPLES	MATRIX
PHASE SI	28	SOIL
LAB LIBRTY	1	WATER
TURN-AROUND-TIME 21 DAYS	FRACTION FULL TCL	
CERCLIS ID # NJSFN0204259	SITE SPILL # ZZ	

REGION II RSCC DATA TRANSFER LOG

Relinquished By		Received By	
Signature	Date/Time	Signature	Date/Time
		John Balicki	9-19-01
John Balicki	9-25-01	SA	10/04/01
SA	10/15/2001	D. Karras	10/16/01
D Karras	10/16/01	J. Trotter	10/16/01

(over for instructions) revised 7/00

CLP DATA ASSESSMENT

Functional Guidelines for Evaluating Organic Analysis

CASE No.: 29681 SDG No.: B0B85
LABORATORY: COMPUCHEM SITE: Roselle Park Baseball Fields

DATA ASSESSMENT

The current SOP HW-6 (Revision 11) June 1996, USEPA Region II Data Validation SOP for Statement of Work OLMO 4.2. for evaluating organic data have been applied.

All data are valid and acceptable except those analytes rejected "R"(unusable). Due to the detection of QC problems, some analytes may have the "J" (estimated), "N"(presumptive evidence for the presence of the material, "U" (non-detect) or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's Signature: Shobitha Amin Date: October 15, 2001

Verified By: Date: 10/16/2001

CLP DATA ASSESSMENT

SDG # B0B85

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

DC-106: The following semivolatile soil samples are outside primary extraction holding time criteria. Hits are qualified "J" and non-detects are qualified "UJ".

B0B85, B0B85MS, B0B85MSD, B0B86, B0B87, B0B88, B0B89, B0B90, B0B91, B0B92, B0B93, B0B94, B0B96, B0B97, B0B98, B0B99, B0BA0, B0BA1, B0BA2, B0BA3, B0BA4

The soil samples have been extracted within contractual Holding time.

DC-167: The following pesticides soil samples are outside primary extraction holding time criteria. Hits are qualified "J" and non-detects are qualified "UJ".

B0B85, B0B85MS, B0B85MSD, B0B86, B0B87, B0B88, B0B89, B0B90, B0B91, B0B92, B0B93, B0B94, B0B96, B0B97, B0B98, B0B99, B0BA0, B0BA1, B0BA2, B0BA3, B0BA4

The soil samples have been extracted within contractual Holding time

2. SURROGATES

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

VOA: No problems.

DC-174: The following pesticide samples have surrogate percent recoveries which exceed the upper limit of the criteria window. If %R for both surrogates on both column are > contract limit, hits are flagged "J".

B0B97
Data has not been qualified for surrogate recovery.

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for

CLP DATA ASSESSMENT

additional qualification of data.
No qualification based on MS/MSD data.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than 5 times the blank contaminant level (10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) Method blank contamination:

DC-72: The blank associated with the following SV sample was qualified "R" during a previous qualification. Hits are not flagged and non-detects are not flagged.

Atrazine
B0B85, B0B85MS, B0B85MSD, B0B86, B0B87, B0B88, B0B89, B0B90, B0B91, B0B92, B0B93, B0B94, B0B96, B0B97, B0B98, B0B99, B0BA0, B0BA1, B0BA2, B0BA3, B0BA4

DC-199: The following volatile samples have analyte concentrations reported below the CRQL and less than or equal to five times (5X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

B0B94
Toluene

DC-200: The following volatile samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

B0B85, B0B85MS, B0B85MSD, B0B86, B0B87, B0B88, B0B89, B0B90, B0B91, B0B92, B0B93, B0B94, B0B96, B0B97, B0B98, B0B99, B0BA0, B0BA1, B0BA2, B0BA3, B0BA4
Acetone

B) Field or rinse blank contamination:

VOA:
Qualification not performed using field blank contamination.

C) Trip blank contamination for VOA aqueous samples:

CLP DATA ASSESSMENT

Not applicable.

D) **Storage Blank associated with VOA samples only**

DC-402: The following volatile samples are associated with a contaminated storage blank. Hits are qualified "U" and non-detects are not flagged.

Xylenes (total)
B0B94

E) **Tics "R" rejected**

VOA:
The concentration of the TIC's < 5 times the associated blank concentration in the following samples: B0B85, B0B86, B0B87, B0B88, B0B89, B0B90, B0B91, B0B92, B0B93, B0B94, B0B96, B0B97, B0B98, B0B99, B0BA0, B0BA1, B0BA2, B0BA3, B0BA4

BNA:
The concentration of the TIC's < 5 times the associated blank concentration in the following samples: B0B85, B0B86, B0B87, B0B88, B0B89, B0B90, B0B91, B0B92, B0B93, B0B94, B0B96, B0B97, B0B98, B0B99, B0BA0, B0BA1, B0BA2, B0BA3, B0BA4
Phthalates in the following sample: B0BA1

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenyl-phosphine (DFTPP).

If the mass calibration is in error, all associated data will be classified as unusable "R".

No problems.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) **Response Factor GC/MS:**

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be ≥ 0.05 in both initial and continuing calibrations. A value < 0.05 indicates a serious detection and quantitation problem (poor sensitivity).

CLP DATA ASSESSMENT

Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be < 30% and %D must be < 25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:

DC-22: The following volatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and non-detects are not flagged.

B0B85, B0B85MS, B0B85MSD, B0B86, B0B87, B0B88, B0B89, B0B90, B0B91, B0B92, B0B93, B0B94, B0B96, B0B97, B0B98, B0B99, B0BA0, B0BA1, B0BA2, B0BA3, B0BA4, VBLKDT, VBLKDU, VHBLKDS
Acetone

DC-23: The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

B0B85MS, B0B85MSD, B0B94, VBLKDU, VHBLKDS
1,2-Dichloropropane

DC-97: The following semivolatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) greater than 90 %. Hits are flagged "J" and non-detects are qualified "R".

B0B85, B0B85MS, B0B85MSD, B0B86, B0B87, B0B88, B0B89, B0B90, B0B91, B0B92, B0B93, B0B94, B0B96, B0B97, B0B98, B0B99, B0BA0, B0BA1, B0BA2, B0BA3, B0BA4, SBLKLV
Atrazine

DC-100: The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

CLP DATA ASSESSMENT

B0B85, B0B85MS, B0B85MSD, B0B86, B0B87, B0B88, B0B89, B0B90, B0B91, B0B92, B0B93, B0B94, B0B96, B0B97, B0B98, B0B99, B0BA0, B0BA1, SBLKLV
Dimethylphthalate, 4-Bromophenyl-phenylether, Anthracene, Carbazole

B0BA2, B0BA3, B0BA4
Hexachlorobutadiene, 3-Nitroaniline, 2,4-Dinitrophenol, 4-Nitrophenol, Di-n-octylphthalate

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction.

No problems.

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

B) Pesticide Fraction:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract.

DC-422: The following pesticide samples have analytes for which the percent difference between column results exceeds primary criteria. Hits > CRQL are flagged "J". Or: if %D is > 50% and value is < CRQL, sample result is elevated to the CRQL and

QUALIFIED "U":

CLP DATA ASSESSMENT

B0B86
4,4'-DDD, alpha-Chlordane
B0B88
gamma-Chlordane
B0B91
gamma-Chlordane
B0B93
alpha-BHC, gamma-Chlordane
B0B94
alpha-Chlordane
B0B97
4,4'-DDE
B0B98
4,4'-DDE
B0B99
4,4'-DDE, 4,4'-DDT
B0BA0
alpha-Chlordane
B0BA2
alpha-Chlordane
B0BA4
Heptachlor epoxide, gamma-Chlordane

QUALIFIED "J":
B0B85
4,4'-DDE, 4,4'-DDT, gamma-Chlordane
B0B85MS
gamma-BHC (Lindane), Heptachlor
B0B85MSD
Aldrin, 4,4'-DDT, gamma-Chlordane
B0B86
4,4'-DDE
B0B88
4,4'-DDE, 4,4'-DDT
B0B90
4,4'-DDE
B0B91
4,4'-DDE, 4,4'-DDT
B0B92
4,4'-DDE, gamma-Chlordane
B0B97
4,4'-DDD
B0B99
4,4'-DDD
B0BA1
4,4'-DDD
B0BA2

CLP DATA ASSESSMENT

4,4'-DDE
B0BA3
4,4'-DDE, alpha-Chlordane
B0BA4
alpha-BHC

DC-423: The following pesticide samples have analytes for which the percent difference between column results exceeds expanded criteria. Hits > CRQL are flagged "NJ"; or "R" when %D >100; or "NJ" when %D is between 100-200 (interference detected). Hits < CRQL are elevated to the CRQL and **QUALIFIED "U":**

B0B85
4,4'-DDD, alpha-Chlordane
B0B85MSD
gamma-BHC (Lindane)
B0B89
4,4'-DDD, 4,4'-DDT, alpha-Chlordane
B0B90
Heptachlor epoxide, gamma-Chlordane
B0B91
alpha-Chlordane
B0B93
4,4'-DDE, 4,4'-DDD
B0B94
4,4'-DDD, 4,4'-DDT
B0B96
Heptachlor epoxide, 4,4'-DDT, gamma-Chlordane
B0B97
4,4'-DDT
B0B98
Heptachlor epoxide, 4,4'-DDT, gamma-Chlordane
B0B99
Endrin aldehyde, alpha-Chlordane
B0BA0
4,4'-DDT
B0BA1
4,4'-DDT
B0BA2
4,4'-DDT
B0BA3
gamma-Chlordane
B0BA4
4,4'-DDE, alpha-Chlordane

QUALIFIED "JN":

B0B86
4,4'-DDT
B0BA3

CLP DATA ASSESSMENT

4,4'-DDT

QUALIFIED "R":
B0B90
4,4'-DDT

10. CONTRACT PROBLEMS NON-COMPLIANCE:

11. FIELD DOCUMENTATION:

12. OTHER PROBLEMS

Percent Moisture : No problems.

PESTICIDES: The chromatograms and GC integration report are missing for standard PEMTR associatde with column CLPPEST2.

13. **This package contains reextractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified not to be used.**

YES NO N/A

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: 29681 LABORATORY: COMPUCHEM

SITE NAME: ROSELLE PARK BASEBALL FIELDS. SDG Number(s): B0B85

1.0 Chain of Custody and Sampling Trip Reports

1.1 Are the Traffic Reports/Chain-of-Custody Records present for all samples? [✓] ___ ___

ACTION: If no, contact RSCC, or contact the TOPO to obtain replacement of missing or illegible copies from the lab.

1.2 Is the Sampling Trip Report present for all samples and all fractions? [✓] ___ ___

ACTION: If no, contact either RSCC or ask the TOPO to obtain this information from the prime contractor.

2.0 Data Completeness and Deliverables

2.1 Have any missing deliverables been received and added to the data package? ___ ✓

NOTE: The lab is required to submit data for only two analyses, for each fraction. (i.e., the original sample and one dilution, or the most concentrated dilution analyzed and one further dilution.)

ACTION: Contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the lab. If lab cannot provide them, note the effect on the review of the package in the Contract Problems/Non-compliance section of the Data Assessment.

2.2 Was CLASS CCS checklist included with package? [✓] ___ ___

	YES	NO	N/A
2.3 Are there any discrepancies between the Traffic Reports/Chain-of-Custody Records, Sampling Report and Sample Tags?		[✓]	

ACTION: If yes, contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the laboratory.

3.0 Cover Letter SDG Narrative

3.1 Is the Narrative or Cover Letter Present?	[✓]		
3.2 Are case number, SDG number and contract number contained in the SDG Narrative or cover letter (see SOW, Exhibit B, section 2.6.1)? EPA sample numbers in the SDG, detailed documentation of any quality control, sample, shipment, and/or analytical problems encountered in processing the samples? Corrective action taken?	[✓]		
3.3 Does the narrative contain the following information:			
VOA: description of trap and columns used for sample analyses?	[✓]		
VOA: a NOTE stating whether Volatile low level soil samples prepared according to the modified SW-846 Method 5035?(p. B-9/VOA, sec 2.6.1)	[✓]		
VOA: any discrepancies between low level soil weights determined in the field and in the Laboratory? (p. B-10/VOA, sec. 2.6.1)		[ ]	
BNA: description of columns used for sample analyses?	[✓]		
Pest: description of columns used for sample analyses?	[✓]		

NOTE: As per section 6.23.3.1 SOW/p. D-11/Pest,

	YES	NO	N/A
Packed columns are not permitted.			
3.4 Does the narrative, VOA and BNA sections, contain a list of all TIC's identified as alkanes and their estimated concentrations?	[✓]	___	___
3.5 Is the temperature indicator bottle present in the cooler? If not, did the Laboratory document in the SDG Narrative the alternative technique used to determine the cooler temperature? (Exhibit A/ p. A-5 sec. 4.2.1.2.3.3)	[ ]	___	___
3.6 Does the narrative contain a record of all cooler temperatures? If the temperature of a cooler was exceeded, > 10° C, the lab must list by fraction and sample number, all affected samples.	[✓]	___	___
3.7 Does the Narrative contain a list of sample reanalyses submitted? Did the Lab distinguish whether the reanalysis is billable, and if so why?	[✓]	___	___
3.8 Does the narrative contain a list of the pH values determined for each water sample submitted for volatile analysis (SOW Exhibit B, section 2.6.1.2)?	[ ]	___	✓
3.9 Does the Case Narrative contain the statement, "verbatim", as required in Section B of the SOW?	[✓]	___	___

ACTION: If "No", to any question in this section, contact the TOPO to obtain all necessary resubmittals. If information is not available, document in the Data Assessment under Contract Problems/Non-Compliance section.

4.0 Data Validation Checklist

4.1 Check the package for the following discrepancies:			
a. Is the package paginated in ascending order starting from the SDG narrative?	[✓]	___	___

	YES	NO	N/A
b. Are all forms and copies legible?	✓		
c. Is each fraction assembled in the order set forth in the SOW?	✓		

The following checklist is divided into three parts. Part A is for any VOA analyses, Part B is for BNA's and Part C is Pesticide/PCB's.

Does this package contain:

VOA Data?	✓		
BNA Data?	✓		
Pesticide/PCB data?	✓		

ACTION: Complete corresponding parts of checklist.

YES NO N/A

PART A: VOA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody Records, Sampling Report or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data shall be flagged as estimated (J). If a soil sample other than TCLP contains more than 90% water, then qualify positive results "J", and non-detects "R".

ACTION: If samples were not iced or the ice was melted upon arrival at the laboratory and the cooler temperature was elevated (> 10° C), then flag all positive results with a "J" and all non-detects "UJ".

ACTION: If both VOA vials for a sample have air bubbles or the VOA vial analyzed had air bubbles, flag all positive results "J" and all non-detects "R".

ACTION: The smallest soil size permitted is 0.5g. If any soil sample is smaller than 0.5g, document in the Data Assessment under Contract Problems/Non-Compliance.

2.0 Holding Times

2.1 Have any VOA technical holding times, determined from date of collection to date of analysis, been exceeded? ___ [✓] ___

Technical Holding Times for AQUEOUS AND SOIL NON-ENCORE SAMPLES: If unpreserved, aqueous samples, maintained at 4° C for aromatic hydrocarbons analysis must be analyzed within 7 days of collection. If

YES NO N/A

preserved with HCl (pH < 2) and stored at 4° C, then aqueous samples must be analyzed within 14 days of collection. If uncertain about preservation, contact sampler to determine whether or not samples were preserved. The holding time for non-Encore soils is 10 days from date of collection.

ACTION: If technical holding times for aqueous samples and soil non-Encore samples are exceeded, flag all positive results as estimated "J" and sample quantitation limits as estimated "UJ", and document in the Data Assessment that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all results must be qualified "J", but the reviewer may determine that non-detect data are unusable "R". If holding times are exceeded by more than 28 days, all non detect data are unusable "R".

NOTE: Contractual Holding Times: Analysis of water samples must be completed within 10 days of Validated Time of Sample Receipt (VTSR). This requirement does not apply to Performance Evaluation (PE) samples.

Technical Holding Times for soils Encore samples:

i) If sample was preserved ≤ 2 days of VTSR:

1. and analyzed ≤ 14 days from DoC, NO action needed.
2. and analyzed > 14 days from DoC, qualify positive results "J" and non-detects "UJ".
3. and analyzed > 28 days from DoC, qualify positive results "J" and non-detects "R".

ii) If sample was NOT preserved, or preserved > 2 days of VTSR

1. and analyzed ≤ 7 days from DoC, No action needed.
2. and analyzed > 7 days from DoC, qualify AROMATIC analytes

YES NO N/A

only, both positive and non-detects, as estimated "J".

3. and analyzed > 10 days from DoC, qualify ALL positive analytes "J" and ALL non-detects as "UJ".
4. and analyzed ≥ 20 days from DoC, qualify positive results "J" and non-detects "R".

Note: CONTRACT holding times for soil Encore samples are:

1. Samples must be preserved within two (2) days of VTSR and must be analyzed within ten (10) days of VTSR.

2. Samples NOT preserved within two (2) days of VTSR must be analyzed within two (2) days of VTSR.

ACTION: If contractual holding times are exceeded, document in the Data Assessment.

NOTE: The data reviewer must note in the Data Assessment <u>whether or not</u> technical and contractual holding times were met.

<u>Table of Holding Time Violations</u>

(See Chain-of-Custody Records)

Sample ID	Sample Matrix	Was Sample Preserved?	Date Sampled	Date Lab Received	Date Analyzed

	YES	NO	N/A
3.0 System Monitoring Compound (SMC) Recovery (Form II)			
3.1 Are the VOA SMC Recovery Summaries (Form II) present for each of the following matrices:			
a. Low Water?	[ ]	___	✓
b. Low Soil?	[✓]	___	___
c. Med Soil?	[ ]	___	✓
3.2 Are all the VOA samples listed on the appropriate System Monitoring Compound Recovery Summary for each of the following matrices:			
a. Low Water?	[X]	___	NA
b. Low Soil?	[✓]	___	___
c. Med Soil?	[X]	___	NA

ACTION: Contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.3 Were outliers marked correctly with an asterisk?	[ ]	___	✓

ACTION: Circle all outliers with red pencil.

3.4 Was one or more VOA system monitoring compound recovery outside of contract specifications for any sample or method blank?	___	[✓]	___
If yes, were samples re-analyzed?	[ ]	___	✓
Were method blanks re-analyzed?	[ ]	___	✓

ACTION: If recoveries are ≥ 10%, but 1 or more compounds fail to meet SOW specifications:

YES NO N/A

1. All positive results are qualified as estimated "J".

2. Flag all non-detects as estimated detection limits "UJ" where recovery is less than the lower acceptance limit.

3. If SMC recoveries are above allowable levels, qualify positive results "J" and do not qualify non-detects.

ACTION: If any system monitoring compound recovery is < 10%:

1. Flag all positive results as estimated "J".

2. Flag all non-detects as unusable "R".

Professional judgement should be used to qualify data that only have method blank SMC recoveries out of specification in both original and re-analyses. Check the internal standard areas.

NOTE: Contractual requirements state that if any SMC fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

NOTE: The laboratory must submit the following data:

1. If SMC recoveries and internal standard responses meet the acceptance criteria in the re-analyzed sample, then the laboratory must submit only the re-analysis.

2. If an SMC recovery and/or internal standard response fails to meet the acceptance criteria upon re-analysis, then submit data from both analyses.

(Refer to section 11.4.3.2, page D-45/VOA of the

	YES	NO	N/A
SOW for more information.)			
3.5 Are there any transcription/calculation errors between raw data and Form II?		[✓]	

ACTION: If large errors exist, contact the TOPO to obtain an explanation or resubmittal of corrected deliverables from the laboratory. Make any necessary corrections and note the effect in the Data Assessment.

4.0 Matrix Spikes (Form III)

4.1 Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present?	[✓]		
4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices:			
a. Low Water?	[ ]		[✓]
b. Low Soil?	[✓]		
c. Med Soil?	[ ]		[✓]

ACTION: If any matrix spike data are missing, take the action specified in section 3.2 above.

ACTION: No action is taken based upon MS/MSD data alone. However, using informed professional judgement, the MS/MSD results may be used in conjunction with other QC criteria to determine the need for qualification of the data.

ACTION: Circle all outliers with red pencil.

5.0 Blanks (Form IV)

5.1 Is the Method Blank Summary (Form IV) present?	[✓]		
5.2 Frequency of Analysis: for the analysis of VOA TCL compounds, has a reagent/method blank been analyzed during every 12-hour time period on each			

		YES	NO	N/A
	GC/MS system, before any samples, and for each matrix?(water, low soil or medium soil)	[✓]	___	___
5.3	Has a VOA method blank been analyzed at least once every twelve hours for each matrix/concentration and GC/MS system used?	[✓]	___	___
5.4	Was a VOA instrument blank analyzed after each sample/dilution which contained a target compound that exceeded the initial calibration range?	[ ]	___	✓
5.5	Was a VOA storage blank analyzed at the end of all samples for each SDG in a case?	[✓]	___	___

ACTION: If any method/instrument blank data are missing, contact the TOPO to obtain any missing deliverables from the laboratory. If method blank data are not available, reject "R" all associated positive data. However, using professional judgement, the data reviewer may substitute field blank or trip blank data for missing method blank data.

If the instrument blank was not analyzed after a sample with high concentration of reported values, inspect the chromatogram of the sample analyzed immediately after this analysis for possible carryover. Use professional judgement to determine if any contamination occurred and qualify analyte(s) accordingly.

If storage blank data is missing, contact the TOPO to obtain any missing deliverables from the laboratory. If unavailable, note in the Contract Problems/Non-Compliance section of the Data Assessment.

Note: A storage blank shall be analyzed and reported as a water sample unless the SDG contains only soil samples. Then, the storage blank may be analyzed and reported as a soil sample. (p. D-49/VOA sec. 12.1.3.5)

YES NO N/A

5.6 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-30, section 3.3.7.3 of the SOW for further information.

Was the correct identification scheme used for all VOA blanks? [✓] ___ ___

ACTION: Contact the TOPO to obtain missing deliverables from the lab, or make the required corrections on the forms. Document in the Data Assessment under Contract Problems/Non-compliance if corrections were made by the validator.

5.7 Chromatography: review the blank raw data-chromatograms (RICs), quant. reports or data system printouts and spectra. Is the chromatographic performance (baseline stability) for each instrument acceptable for VOA's? [✓] ___ ___

ACTION: Use professional judgement to determine the effect on the data.

5.8 Are all detected hits for target compounds in method, instrument and storage blanks less than the CRQL for that analyte? [✓] ___ ___

Exception: Acetone and 2-butanone must be less than 5 times the CRQL, and methylene chloride and Cyclohexane must be less than 2.5 times its CRQL. (p. D-50/VOA sec. 12.1.4.6)

ACTION: If no, an explanation and laboratory's corrective actions must be addressed in the case narrative. If the narrative contains no explanation, then make a note in the Contract Problems/Non-Compliance section of the Data Assessment.

6.0 Contamination

NOTE: "Water blanks", "drill blanks", and "distilled water blanks" are validated like any other sample, and are not used to qualify data. Do not

YES NO N/A

confuse them with the other QC blanks discussed below.

6.1 Do any method/instrument/reagent/storage blanks have positive results (TCL and/or TIC) for VOA's? ✓ [ ] ___

NOTE: When applied as directed in the table below, the contaminant concentration in these blanks are multiplied by the sample dilution factor and corrected for %moisture when necessary.

NOTE: A contaminated instrument blank is not allowable under this SOW. The instrument blank must meet the technical acceptance criteria for blank analyses(sec. 12.1.4). See page D-48/VOA, section 12.1.2.4 for additional information. Document in the Data Assessment under Contract Problems/Non-Compliance if contaminated instrument blank was submitted.

6.2 Do any field/trip/rinse blanks have positive VOA results (TCL and/or TIC)? ✓ [ ] ___

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated with a particular group of samples (may exceed one per case) must be used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped and are not required for non-aqueous matrices. Blanks may not be qualified because of contamination in another blank. Field Blanks & Trip Blanks must be qualified for system monitoring compound, instrument performance criteria, spectral or calibration, and Internal standard QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks. If any blanks are grossly contaminated, all associated data should be

YES NO N/A

qualified as unusable "R".

NOTE: Analytes qualified "U" for blank contamination are till considered as "hits" when qualifying for calibration criteria.

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R".

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
TCL COMPOUNDS			
Methylene Chloride Acetone Toluene 2-Butanone Cyclohexane	Sample conc. is > CRQL, but ≤ 10x blank value.	Sample conc. is < CRQL and ≤ 10x blank value.	Sample conc. is > CRQL and > 10x blank value.
Other Conta-minants	Sample conc. is > CRQL, but ≤ 5x blank value.	Sample conc. is < CRQL and ≤ 5x blank value.	Sample conc. is > CRQL and > 5x blank value.

6.3 Are there field/rinse/equipment blanks associated with every sample? ☑1 ___ ___

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For samples with high concentrations of suspected blank contaminants, use professional judgement to qualify these values and make a note in the Data Assessment.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 GC/MS Instrument Performance Check (Form V)

	YES	NO	N/A
7.1 Are the GC/MS Instrument Performance Check Forms (Form V) present for Bromofluorobenzene (BFB)?	✓		
7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the BFB provided for each twelve hour shift?	✓		
7.3 Is the mass spectrum of BFB acquired according to sec. 9.2.4.1 D-23/VOA?	✓		

Note: Sec. 9.2.4.1 states that "the mass spectrum of BFB MUST be acquired in the following manner. Three scans (the peak apex scan and the scans immediately preceding and following the apex) are acquired and averaged. Background subtraction is required, and MUST be accomplished using a single scan no more than 20 scans prior to the elution of BFB. DO NOT background subtract part of the BFB peak." See Attachment 2 for BFB criteria.

Action: If not, reject "R" all samples associated with that particular BFB.

7.4 Has an instrument performance check been analyzed for every analytical sequence on each instrument?	✓		

ACTION: List date, time, instrument ID, and sample numbers for which associated GC/MS tuning data are unavailable.

DATE	TIME	INSTRUMENT	SAMPLE NUMBERS

ACTION: Notify the TOPO to obtain missing data, if possible. If the lab cannot provide the missing data, reject, "R", all data generated outside an acceptable twelve hour calibration interval.

	YES	NO	N/R
7.5 Have the ion abundances been normalized to m/z 95 as specified in Exhibit D, page D-56/VOA?	[✓]	___	___
NOTE: All ion abundance ratios must be normalized to m/z 95, the nominal base peak, even though the ion abundance of m/z 174 may be up to 120% that of m/z 95.			
ACTION: If mass assignment is in error, qualify all associated data as unusable "R".			
7.6 Have the ion abundance criteria been met for each instrument used?	[✓]	___	___
ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).			
ACTION: If ion abundance criteria are not met, the Region II TPO must be notified.			
7.7 Are there any transcription/calculation errors between mass lists and Form Vs? (Check at least two values, but if errors are found check more.)	___	[✓]	___
7.8 Is the number of significant figures for the reported relative abundances consistent with the number given for each ion in the ion abundance criteria column?	[✓]	___	___
ACTION: If large errors exist, take action as specified in section 3.5 above.			
7.9 Are the spectra of the mass calibration compound acceptable?	[ ]	___	___
ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.			

8.0 Target Compound List (TCL) Analytes (FORM I VOA)

8.1 Are the Organic Analysis Data Sheets (Form I VOA) present with required header information on each page, for each of the following:

	YES	NO	N/A
a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates?	[✓]	___	___
c. Blanks?	[✓]	___	___

8.2 Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant. reports) included in the sample package for each of the following:

a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates (mass spectra not required)?	[✓]	___	___
c. Blanks?	[✓]	___	___

ACTION: If any data are missing, take action specified in 3.2 above.

8.3 Is chromatographic performance acceptable with respect to:

a. Baseline stability?	[✓]	___	___
b. Resolution?	[✓]	___	___
c. Peak shape?	[✓]	___	___
d. Full-scale graph (attenuation)?	[✓]	___	___
e. Other: _____?	[ ]	___	___

ACTION: Use professional judgement to determine the acceptability of the data.

8.4 Are the lab-generated standard mass spectra of the identified VOA compounds present for each sample? [✓] ___ ___

ACTION: If any mass spectra are missing, take action as specified in 3.2 above. If the lab does not

YES NO N/A

generate its own standard spectra, document in the Contract Problems/Non-compliance section of the Data Assessment.

8.5 Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration? [✓] ___ ___

8.6 Are all ions present in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum? [✓] ___ ___

8.7 Do sample and standard relative ion intensities agree within ±20%? [ ] ___ ___

ACTION: Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all such data should be rejected "R", flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected "U" at the calculated detection limit. In order to be positively identified, the data must comply with the criteria listed in 8.5, 8.6, and 8.7.

ACTION: When sample carry-over is suspected, use professional judgement determine if instrument cross-contamination has affected positive compound identifications.

9.0 Tentatively Identified Compounds (TIC)

9.1 Are all Tentatively Identified Compound Forms (Form I Part B) present; and do listed TIC's include scan number or retention time, estimated concentration and "JN" qualifier? [✓] ___ ___

9.2 Are the mass spectra for the TIC's and associated "best match" spectra included in the sample package for each of the following:

a. Samples and/or fractions as appropriate? [✓] ___ ___

b. Blanks? [ ] ___ ___

	YES	NO	N/A
c. Are Alkanes listed in/or part of the Case Narrative?	[ ]	___	___

ACTION: If any TIC data are missing, take action specified in 3.2 above.

ACTION: Add "JN" qualifier to all chemically named TIC's, if missing.

9.3 Are any TCL compounds (from any fraction including all PCB congeners) listed as TIC compounds? (Example: 1,2- dimethylbenzene is xylene, a VOA TCL analyte, and should not be reported as a TIC.)	___	[/]	___

ACTION: Flag with "R" any TCL compound listed as a TIC.

9.4 Are any TIC's reported earlier than 30 sec before the first purgeable compound, or three (3) min. after the last purgeable compound listed in Exhibit C (Volatiles)?	___	[ ]	___

ACTION: Flag with "R" any TIC compound reported. (p. D38-VOA, sec. 11.1.2.2)

9.5 Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	[/]	___	___
9.6 Do TIC and "best match" standard relative ion intensities agree within ±20%?	[/]	___	___

ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined an incorrect identification was made, change the identification to "unknown," or to some less specific identification as appropriate. (Example: "C3 substituted benzene.")

Also, when a compound is not found in any blank, but is detected in a sample and is a suspected artifact of a common laboratory contaminant, the result should be qualified as

YES NO N/A

unusable "R". (E.g., Common Lab Contaminants: CO_2 (M/E 44), Siloxanes (M/E 73) hexane, aldol condensation products, solvent preservatives, and related by-products.

9.7 Are TIC's with responses < 10% of the internal standard (as determined by inspection of the peak areas or height) reported? — [ ] —

ACTION: If yes, cross out questionable TIC's.

10.0 Compound Quantitation and Reported Detection Limits

10.1 Are there any transcription/calculation errors in Form I results? (Check at least two positive values. Verify that the correct internal standards, quantitation ions, and RRF were used to calculate Form I results.) — [ ] —

10.2 Are the CRQL's adjusted to reflect sample dilutions and, for soils, sample moisture? [ ] — —

ACTION: If errors are large, take action as specified in section 3.2 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQL's are used (unless a QC exceedance dictates the use of the higher CRQL data from the diluted sample). Replace concentrations that exceeded the calibration range in the original analysis by crossing out the "E" and its corresponding value on the original Form I and substituting the data from the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form Is not to be used, including any in the data summary package.

11.0 Standards Data (GC/MS)

11.1 Are the Reconstructed Ion Chromatograms, and data system printouts (quant. reports) present for each initial and continuing calibration? [ ] — —

	YES	NO	N/A

ACTION: If any calibration standard data are missing, take action specified in 3.2 above.

12.0 GC/MS Initial Calibration (Form VI)

12.1 Are the Initial Calibration Forms (Form VI) present and complete at concentrations of 10, 20, 50, 100, 200ng for separate calibrations of low water/med soils (unheated purge) and low soils (heated purge)?	[✓]	___	___

ACTION: If any calibration standard forms are missing, take action specified in 3.2 above.

12.2 Were all low level soil standards, blanks and samples analyzed by heated purge?	[✓]	___	___

ACTION: If low level soil samples were not heated during purge, qualify positive hits "J" (estimated) and non-detects "R".

12.3 Are the % relative standard deviation (%RSD) values for VOA's ≤ 30% over the concentration range of the calibration?	[ ]	✓	___

NOTE: Although 23 VOA compounds have a contractual minimum RRF and no maximum %RSD, the technical acceptance criteria are the same for all analytes.

ACTION: Circle all outliers with red pencil.

ACTION: If %RSD is > 30.0%, qualify associated positive results for that analyte "J" (estimated). Do not qualify non-detects. When %RSD is > 90%, flag all non-detects for that analyte "R" (unusable) and positive hits "J" .

NOTE: Analytes previously qualified "U" for blank contamination are still considered as "hits" when qualifying for initial calibration criteria.

12.4 Are any average RRFs < 0.05?	___	[✓]	___

YES NO N/A

ACTION: Circle all outliers with red pencil.

ACTION: If the average RRF is < 0.05, then qualify associated non-detects with an "R" and flag associated positive data as estimated "J".

NOTE: Contract Requirement: The SOW allows up to two of the required analytes to fail contractual %RSD or RRF criteria, provided the %RSD is ≤ 40% and RRF is ≥ 0.010. (See Table 5, page D-61/VOA and analytes marked with a "*" on Form VI for required analytes and contractual criteria.) Technical criteria, however, are the same for all analytes.

ACTION: If more than two analytes failed %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance.

12.5 Are there any transcription/calculation errors in the reporting of average relative response factors (RRF) or %RSD? (Check at least 2 values, but if errors are found, check more.) ___ ☑ ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, contact the TOPO to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance.

13.0 GC/MS Continuing Calibration (Form VII)

13.1 Are the Continuing Calibration Forms (Form VII) present and complete for separate calibration of low water/med soil and low soil samples? ☑ ___ ___

13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument? ☑ ___ ___

ACTION: If any forms are missing or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, contact

YES NO N/A

the TOPO to request an explanation/resubmittal from the lab. If continuing calibration data are not available, flag all associated sample data as unusable "R".

ACTION: List below all sample(s) that were not analyzed within twelve hours of the previous continuing calibration.

_____

_____

_____

13.3 Do any volatile compounds have a percent difference (%D) between the initial and continuing RRF which exceeds the ±25% criteria? J [ ] ___

NOTE: Although 23 VOA compounds have a contractual minimum RRF and no maximum %D, the technical acceptance criteria are the same for all analytes.

ACTION: Circle all outliers with red pencil.

ACTION: Qualify both positive results and non-detects for the outlier compound(s) as estimated. When %D is > 90%, qualify all non-detects for that analyte unusable (R) and positive results estimated (J) .

13.4 Are any continuing calibration RRFs < 0.05? ___ [ ] ___

ACTION: Circle all outliers with red pencil.

ACTION: If the RRF is < 0.05, qualify the associated non-detects as unusable "R" and the associated positive values "J".

NOTE: Contract Requirement: The SOW allows up to two of the required analytes to fail contractual %D and RRF criteria, provided that the %D is ≤ 40% and the RRF is ≥ 0.010. (See Table 5 pg. D-61/VOA or

YES NO N/A

analytes marked with a "*" on Form VI for required analytes.) Technical criteria, however, are the same for all analytes.

ACTION: If more than two analytes failed %D and RRF, criteria document in the Data Assessment under contract Problems/Non-Compliance.

13.5 Are there any transcription/calculation errors in the reporting of RRF or %D between initial and continuing RRFs? (Check at least two values, but if errors are found, check more.) — [✓] —

ACTION: Circle errors with red pencil.

ACTION: If errors are large, contact the TOPO to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance.

).0 **Internal Standard (Form VIII)**

14.1 Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to +100%) for each continuing calibration? [✓] — —

If no, was the sample re-analyzed? [ ] — —

ACTION: 1. Circle all outliers with red pencil.

2. List all the outliers below.

Sample #	Internal Std.	Area	Lower/Upper Limit
			/
			/
			/

(Attach additional sheets if necessary, or attach copies of Form VIIIs.)

YES NO N/A

ACTION: If any sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

ACTION: 1. If the internal standard area count is outside the upper or lower limit, flag with "J" all positive results quantitated with this internal standard.

2. Do not qualify non-detects when associated IS area counts are > 100%.

3. If the IS area in the sample is below the "lower limit," < 50%, qualify all analytes associated with that IS estimated, "J". If the area counts are extremely low, < 25% of the area in the 12 hour standard, or if performance exhibits a major abrupt drop- off, flag all associated non-detects as unusable, "R", and positive hits estimated, "J".

14.2 Are the retention times of the internal standards within 30 seconds of the associated calibration standard? [J] ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 30 seconds.

NOTE: Contractual requirements state that if any internal standard fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

15.0 Field Duplicates

15.1 Were any field duplicates submitted for VOA analysis? [N] [J] ___

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

YES NO N/A

ACTION: Any gross variation between duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

YES NO N/A

PART B: BNA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody records or laboratory SDG Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special notations affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data should be flagged as estimated "J". If a soil sample, other than TCLP, contains more than 90% water, qualify positive hits "J" and non-detects "R".

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

2.0 Holding Times

2.1 Have any BNA technical holding times, determined from date of collection to date of extraction, been exceeded? [✓] [ ] ___

NOTE: Technical Holding Time: Continuous extraction of water samples for BNA analysis must be started within seven days of the date of collection. Soil/sediment samples must be extracted within 7 days of collection. Extracts must be analyzed within 40 days of the date of extraction.

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample Analyzed	Sample Matrix	Date Sampled	Date Lab Received	Date Extracted	Date Analyzed
ALL	SOIL	SAMPLES	WERE	EXTRACTED	OUT OF
HOLD	TIME				

YES NO N/A

ACTION: If technical holding times were exceeded, flag all positive results as estimated (J) and sample quantitation limits as estimated (UJ), and document in the Data Assessment that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon reanalysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on sample results. At a minimum, all results should be qualified "J", but the reviewer may determine that non-detect data are unusable "R". If holding times were exceeded by more than 28 days, all non-detect data must be qualified "R", unusable.

NOTE: Contractual Holding Times: Extraction of water samples must be started within 5 days VTSR. Soil/sediment samples must be extracted within 10 days of VTSR. This requirement does not apply to Performance Evaluation (PE) samples. Water and soil/sediment extracts must be analyzed within 40 days following extraction.

ACTION: If contractual holding times are exceeded, document in the Data Assessment.

NOTE: The data reviewer must note in the Data Assessment whether or not technical and contractual holding times were met.

3.0 Surrogate Recovery (Form II)

3.1 Are BNA Surrogate Recovery Summaries (Form II) present for each of the following matrices:

a. Low Water? [ ] ___ ✓

b. Low Soil? [✓] ___ ___

	YES	NO	N/A
c. Med Soil?	[ ]	___	✓

3.2 Are all the BNA samples listed on the appropriate Surrogate Recovery Summaries for each of the following matrices:

a. Low Water?	[ ]	___	✓
b. Low Soil?	[✓]	___	___
c. Med Soil?	[ ]	___	✓

ACTION: Contact the TOPO to request an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.3 Were outliers marked correctly with an asterisk?	[✓]	___	___

ACTION: Circle all outliers with red pencil.

3.4 Were two or more base-neutral OR acid surrogate recoveries out of specification for any sample or method blank?	___	[✓]	___
If yes, were samples reanalysed?	[ ]	___	✓
Were method blanks reanalysed?	[ ]	___	✓

ACTION: If all BNA surrogate recoveries are ≥ 10%, but two within the base-neutral or acid fraction do not meet SOW specifications, for the affected fraction only (i.e. acid or base-neutral compounds):

1. Flag all positive results as estimated (J).

2. Flag all non-detects as estimated detection limits ("UJ") when recoveries are less than the lower acceptance limit.

3. Do not qualify non-detects if recoveries are greater than the upper acceptance limit.

YES NO N/A

ACTION: If any base-neutral or acid surrogate has a recovery of < 10%:

1. Qualify positive results for that fraction as estimated (J).

2. Qualify non-detects for that fraction as unusable (R).

Professional judgement should be used to qualify data that have method blank surrogate recoveries out of specification in both original and reanalyses. Also check the internal standard areas.

NOTE: Contractual requirements state that if two surrogate fails acceptance criteria,within the same fraction,i.e. Acid or BN, the sample must be re-analyzed. If sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

NOTE: The laboratory must submit the following data:

1. If surrogate recoveries and internal standard responses meet the acceptance criteria in the re-analyzed sample, then the laboratory must submit only the re-analysis.

2. If surrogate recoveries and/or internal standard responses fail to meet the acceptance criteria upon re-analysis, then submit data from both analyses.

3.5 Are there any transcription/calculation errors between raw data and Form II? — [✓] —

ACTION: If large errors exist, contact the TOPO to request an explanation or resubmittal of corrected deliverables from the laboratory. Make necessary corrections and note errors in the Data Assessment.

	YES	NO	N/A

4.0 Matrix Spikes (Form III)

4.1 Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present? [✓] ___ ___

4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices:

a. Low Water? [ ] ___ ✓

b. Low Soil? [✓] ___ ___

c. Med Soil? [ ] ___ ✓

ACTION: If any matrix spike data are missing, take the action specified in 3.2 above.

ACTION: No action is taken based upon MS/MSD data alone. However, using informed professional judgement, the data reviewer may use the matrix spike and matrix spike duplicate results in conjunction with other QC criteria and determine the need for some qualification of the data.

ACTION: Circle all outliers with red pencil.

5.0 Blanks (Form IV)

5.1 Is the Method Blank Summary (Form IV) present? [✓] ___ ___

5.2 Frequency of Analysis: Has a reagent/method blank analysis been reported per 20 samples of similar matrix, or concentration level, and for each time samples are extracted? [✓] ___ ___

5.3 Has a BNA method blank been analyzed for each GC/MS system used? (See SOW pg. D-55/SVOA, Section 12.1.2.) [✓] ___ ___

ACTION: If any method blank data are missing, contact the TOPO to obtain an explanation/resubmittal from the lab. If resubmittals are unavailable, use professional judgement to determine if the

YES NO N/A

associated sample data should be qualified.

5.4 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-30, sec. 3.3.7.3 of the SOW for further information.

Was the correct identification scheme used for all BNA blanks? [✓] ___ ___

ACTION: Contact the TOPO to obtain resubmittals from the lab or make the required corrections on the forms. Document all corrections made by the validator in the Data Assessment under Contract Problems/Non-Compliance.

5.5 Chromatography: review the blank raw data - chromatograms (RICs), quant. reports or data system printouts and spectra. Is the chromatographic performance (baseline stability) acceptable for each instrument? [✓] ___ ___

ACTION: Use professional judgement to determine the effect on the data.

5.6 Are all detected hits for target compounds less than the CRQL for that analyte in all method blanks? [✓] ___ ___

Exception: Phthalate esters must be less than five times (5×) the CRQL.

6.0 Contamination

NOTE: "Water blanks", "drill blanks" and "distilled water blanks" are validated like any other sample and are not used to qualify data. Do not confuse them with the other QC blanks discussed below.

6.1 Do any method/reagent blanks have positive results (TCL and/or TIC)? ___ [✓] ___

NOTE: Water: When applied as directed in the table below (page 33), the contaminant concentration in method/

YES NO N/A

instrument/reagent blanks is multiplied by the sample dilution factor, where necessary.

Soil: If the lab has not already done so, the contaminant concentration in soil blanks is multiplied by 33 times the sample dilution factor and corrected for %moisture (fraction of solid) where necessary. 30 grams of sodium sulfate (1 gram for medium level soils) are used to prepare the soil reagent/method blank as instructed on page D-54/SVOA, section 12.1.3. Contact the TOPO to obtain resubmittals if the soil blanks are not reported in soil units (µg/kg).

6.2 Do any field/rinse blanks have positive BNA results (TCL and/or TIC)? ___ IVI ___

ACTION: Prepare a list of samples associated with each contaminated blank. (Attach a separate sheet.)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case) must be used to qualify sample data. Do not convert field blank results to account for the difference in soil CRQLs. Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, spectral, instrument performance,calibration and Internal standard QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks. If gross contamination exists, all data in the associated samples should be qualified as unusable "R".

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
Common Phthalate-ters	Sample conc. is > CRQL, but ≤ 10× blank value.	Sample conc. is < CRQL and ≤ 10× blank value.	Sample conc. is > CRQL and > 10× blank value.

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
Other Contaminants	Sample conc. is > CRQL, but ≤ 5× blank value.	Sample conc. is < CRQL and ≤ 5× blank value.	Sample conc. is > CRQL and > 5× blank value.

NOTE: Analytes qualified "U" for blank contamination are still treated as "hits" when qualifying for calibration criteria.

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R" (unusable).

	YES	NO	N/A
6.3 Are there field/rinse/equipment blanks associated with every sample?	[✓]	___	___

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For analytes with high concentration, use professional judgement on qualification of these values and make a note in the Data Assessment.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 GC/MS Instrument Performance Check

7.1 Are the GC/MS Instrument Performance Check Forms (Form V) present for Decafluorotriphenylphosphine (DFTPP)?	[✓]	___	___
7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the DFTPP provided for each twelve hour shift?	[✓]	___	___
7.3 Has an instrument performance check solution been analyzed for every twelve hours of sample			

	YES	NO	N/A
analysis per instrument?	[ ]	___	___

ACTION: List date, time, instrument ID, and sample number for which no associated GC/MS tuning data are valid.

SAMPLE NUMBERS	DATE	TIME	INSTRUMENT ID

ACTION: If the TOPO cannot obtain missing data from the lab, reject "R" all data generated outside an acceptable twelve hour calibration interval.

7.4 Have the ion abundances been normalized to m/z 198 (see SOW, page D-62/SVOA)?	[✓]	___	___

NOTE: All ion abundance ratios must be normalized to m/z 198, the nominal base peak, even though the ion abundance of m/z 442 may up to 110% that of m/z 198.

ACTION: If mass assignment is in error, flag all associated sample data as unusable "R".

7.5 Have the ion abundance criteria been met for each instrument used?	[✓]	___	___

ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).

ACTION: If ion abundance criteria are not met, the Region II TPO must be notified.

7.6 Are there any transcription/calculation errors between mass lists and Form Vs? (Check at least two values, but if errors are found check more.)	___	[✓]	___

	YES	NO	N/A
7.7 Is the number of significant figures for the reported relative abundances consistent with the number given for each ion in the ion abundance criteria column?	[✓]	___	___

ACTION: If large errors exist, take action as specified in section 3.5 above.

7.8 Is the mass spectrum of DFTPP acquired according to sec. 9.2.4.2 p. D-20/SVOA ?	[✓]	___	___

NOTE: Sec. 9.2.4.2 states that "the mass spectrum of DFTPP MUST be acquired in the following manner: Three scans (the peak apex scan and the scans immediately preceding and following the apex) are acquired and averaged. Background subtraction is required, and MUST be accomplished using a single scan acquired no more than 20 scans prior to the elution of DFTPP. Do NOT subtract part of the DFTPP peak." See Attachment 3 for DFTPP criteria.

ACTION: If not, then reject "R" all data analyzed under that particular tune.

7.9 Are the spectra of the mass calibration compound acceptable?	[✓]	___	___

ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.

8.0 Target Compound List (TCL) Analytes (FORM I SV)

8.1 Are the Organic Analysis Data Sheets (Form I SV) present with required header information on each page, for each of the following:			
a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates?	[✓]	___	___
c. Blanks?	[✓]	___	___
8.2 Has GPC cleanup been performed on all soil/			

	YES	NO	N/A
sediment sample extracts?	[✓]	___	___
Has the Laboratory provided the TWO most recent UV traces of the calibration solution? GPC calibration and GPC CCV?(D-39/SVOA,sec.10.3.4.4)	[ ]	___	___

ACTION: If data suggests that GPC was not performed, use professional judgement. Make note in Contract Problems/Non-Compliance section of the Data Assessment.

8.3 Are the BNA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant. reports) included in the sample package for each of the following:			
a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates (mass spectra not required)?	[✓]	___	___
c. Blanks?	[✓]	___	___

ACTION: If any data are missing, take action specified in 3.2 above.

8.4 Is chromatographic performance acceptable with respect to:			
Baseline stability?	[✓]	___	___
Resolution?	[✓]	___	___
Peak shape?	[✓]	___	___
Full-scale graph (attenuation)?	[ ]	___	___
Other:_____?	[ ]	___	___

ACTION: Use professional judgement to determine the acceptability of the data.

8.5 Are lab-generated standard mass spectra of

	YES	NO	N/A
identified BNA compounds present for each sample?	[✓]	___	___

ACTION: If any mass spectra are missing, take action specified in 3.2 above. Note under Contract Non-compliance if lab does not generate their own standard spectra. If spectra are missing, reject all positive data.

8.6	Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	[✓]	___	___
8.7	Are all ions present in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	[✓]	___	___
8.8	Do sample and standard relative ion intensities agree within ±20%?	[ ]	___	___

ACTION: Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all such data should be rejected "R", flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected "U" at the calculated detection limit. In order to be positively identified, the data must comply with the criteria listed in 8.6, 8.7, and 8.8.

ACTION: When sample carry-over is a possibility, professional judgement should be used to determine if instrument cross-contamination has affected any positive compound identification.

NOTE : The maximum dilution factor permitted for low level soils is 30. If a low level soil sample requires a dilution greater than 30, then the medium level method shall be utilized.(p. D-43) SVOA, sec. 10.6.5.4 . Document in the Data Assessment under Contract Problems/Non compliance if any low level soil was analyzed at a dilution factor greater than 30.

	YES	NO	N/A
9.0 Tentatively Identified Compounds (TIC)			
9.1 Are all Tentatively Identified Compound Forms (Form I, Part B) present? and do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier?	[✓]	___	___
9.2 Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			
a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Blanks?	[ ]	___	___
c. Are Alkanes listed in/or part of the Case Narrative?	[ ]	___	___

ACTION: If any TIC data are missing, take action specified in 3.2 above.

ACTION: Add "N" qualifier to all chemically named TIC's, if missing.

9.3 Are any TCL compounds (from any fraction) listed as TIC compounds? (Example: 1,2-dimethylbenzene is xylene - a VOA TCL - and should not be reported as a TIC.)	___	[✓]	___

ACTION: Flag with "R" any TCL compound listed as a TIC.

9.4 Are any TICS reported earlier than 30 sec. before the first semivolatile compound, or three (3) minutes after the last semivolatile compound listed in Exhibit C SVOA?(p.D-45/SVOA,11.1.2.2)	✓	[ ]	___

ACTION: Flag with "R" any TIC compound reported.

9.5 Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	[ ]	___	___
9.6 Do TIC and "best match" standard relative ion			

	YES	NO	N/A
intensities agree within ±20%?	[ ]	___	___

ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined that an incorrect identification was made, change the identification to "unknown," or to some less specific identification (example: "C3 substituted benzene") as appropriate. Also, when a compound is not found in any blank, but is a suspected artifact of a common laboratory contaminant, the result should be qualified as unusable, "R".

9.7	Are any TICs with responses < 10% of the internal standard (as determined by inspection of the peak areas or height) reported?	___	[✓]	___

ACTION: If yes, cross out questionable TIC(s).

10.0 Compound Quantitation and Reported Detection Limits

10.1	Are there any transcription/calculation errors in Form I results? (Check at least two positive values. Verify that the correct internal standard, quantitation ion, and RRF were used to calculate Form I result.)	___	[✓]	___
10.2	Are the CRQLs adjusted to reflect sample dilutions and, for soils, sample moisture?	[✓]	___	___

ACTION: If errors are large, take action as specified in section 3.5 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the "E" and its associated value on the original Form I and substituting the data from the analysis of the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form Is

	YES	NO	N/A

that should not be used, including any in the summary package.

11.0 Standards Data (GC/MS)

11.1 Are the Reconstructed Ion Chromatograms, and data system printouts (quant. reports) present for initial and continuing calibration? [✓] ___ ___

ACTION: If any calibration standard data are missing, take action specified in 3.2 above.

12.0 GC/MS Initial Calibration (Form VI)

12.1 Are the Initial Calibration Forms (Form VI) present and complete for the BNA fraction? [✓] ___ ___

ACTION: If any calibration standard forms are missing; take action specified in 3.2 above.

12.2 Are the % relative standard deviation (%RSD) values for BNAs ≤ 30% over the concentration range of the calibration? [ ] [✓] ___

ACTION: Circle all outliers with red pencil.

NOTE: Although 25 BNA compounds have a contractual minimum RRF and no maximum %RSD, the technical criteria are the same for all analytes.

NOTE: Eight BNA compounds do not require a 20ng standard. They are 2,4-Dinitrophenol, 2,4,5-Trichlorophenol, 2-Nitroaniline, 3-Nitroaniline, 4-Nitroaniline, 4-Nitrophenol, 4,6-Dinitro-2-methylphenol, and Pentachlorophenol.

ACTION: If the %RSD is > 30.0%, qualify only positive results for that analyte "J" and do not qualify non-detects. When %RSD is > 90%, flag all non-detect results for that analyte "R" (unusable) and all positive results "J" (estimated) for ALL samples analyzed under that particular Initial Calibration.

YES NO N/A

NOTE: Analytes previously qualified "U" due to blank contamination are still considered as "hits" when qualifying for calibration criteria.

12.3 Are any average RRFs < 0.05? ___ ☑ ___

ACTION: Circle all outliers with red pencil.

ACTION: If the average RRF is < 0.05 then:

1. "R" all non-detects for ALL samples analyzed under that particular Initial Calibration.

2. "J" all positive results for ALL samples analyzed under that particular Initial Calibration.

12.4 Are there any transcription/calculation errors in the reporting of RRFs and/or %RSDs? (Check at least two values; if errors are found check more.) ___ ☑ ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, take action as specified in section 3.5 above.

NOTE: Contract Requirement: The SOW allows up to four of the required analytes to fail contractual %RSD or RRF criteria provided the %RSD is ≤ 40% or RRF is ≥ 0.010. (See Table 5, page D-67/SVOA and analytes marked with a "*" on Form VI for a list of required analytes and contractual criteria.) Technical criteria, however, are the same for all analytes.

ACTION: If more than four analytes fail %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance.

13.0 GC/MS Continuing Calibration (Form VII)

13.1 Are the Continuing Calibration Forms (Form VII) present and complete for the BNA fraction? ☑ ___ ___

	YES	NO	N/A
13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument?	[✓]		

ACTION: List below all sample analyses that were not analyzed within twelve hours of a continuing calibration standard for each instrument used.

_____

_____

_____

ACTION: If any forms are missing, or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, contact the TOPO to obtain an explanation/resubmittal from the lab. If continuing calibration data are unavailable, flag all associated sample data as unusable "R".

13.3 Does any BNA compound have a percent difference (%D) between the initial and continuing calibration RRFs which exceeds the ±25.0% criteria?	✓	[ ]	

ACTION: Circle all outliers with red pencil.

ACTION: Qualify both positive results and non-detects for the outlier compound(s) as estimated "J". When %D is > 90%, reject all non-detects for that analyte, "R", and qualify positive results "J" (estimated) for ALL samples analyzed under that particular Continuing Calibration.

13.4 Are any continuing RRFs < 0.05?		[✓]	

ACTION: Circle all outliers with red pencil.

ACTION: If the RRF is < 0.05, qualify as unusable (R) associated non-detects and "J" associated positive values for ALL samples analyzed under that particular Continuing Calibration.

YES NO N/A

NOTE: Contract Requirement: The SOW allows up to four of the required analytes to fail contractual %D and RRF criteria, provided that the %D is ≤ 40% and the RRF is ≥ 0.010. (See Table 5 page D-67/SVOA or analytes marked with a "*" on Form VI for a list of the required analytes.) Technical criteria, however, are the same for all analytes.

ACTION: If more than four analytes failed %D and RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance.

13.5 Are there any transcription/calculation errors in the reporting of average relative response factors (RRF) or %difference (%D) between initial and continuing RRFs? (Check at least two values, but if errors are found, check more.) — [✓] —

ACTION: Circle errors with red pencil.

ACTION: If errors are large, take action as specified in section 3.5 above.

14.0 Internal Standards (Form VIII)

14.1 Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to +100%) for each continuing calibration? [✓] — —

If no, was sample re-analyzed? [ ] — ✓

ACTION: 1. Circle all outliers with red pencil.

2. List all the outliers below.

ACTION: If sample was not reanalysed, document in Data Assessment in Contract Problems/Non-Compliance.

Sample #	Internal Std.	Area	Lower/Upper Limit
			/
			/

YES NO N/A

(Attach additional sheets if necessary.)
(or attach copies of Form VIIIs)

ACTION: 1. If the internal standard area count is outside the "upper" or "lower" limit, flag with "J" all positive results and non-detects quantitated with this internal standard with the following exceptions:

A. Do not qualify non-detects associated with IS area > 100%.

B. If the IS area in the sample is < 50%, qualify all analytes associated with that IS estimated (J). If area counts are extremely low (< 25% of the area in the 12 hour standard), or if performance exhibits a major abrupt drop-off, flag all associated non-detects as unusable (R) and positive hits estimated (J).

14.2 Are the retention times of the internal standards within 30 seconds of the associated calibration standard? [✓] ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 30 seconds.

NOTE: Contractual requirements state that if any internal standard fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

15.0 **Field Duplicates**

15.1 Were any field duplicates submitted for BNA analysis? [ ] ✓ ___ ___

YES NO N/A

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

YES NO N/A

PART C: PESTICIDE/PCB ANALYSIS

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody Records or SDG Narrative indicate any problems with sample receipt, condition of the samples, analytical problems or special circumstances affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data should be qualified as estimated "J". If a soil sample, other than TCLP, contains more than 90% water, qualify positive results "J" and non-detects "R".

ACTION: If samples were not iced, or if the ice was melted upon arrival at the laboratory, and the temperature of the cooler was elevated > 10^0 C, flag all positive results "J" and all non-detects "UJ".

ACTION: Check aqueous extraction log for sample pH, if adjustment was needed, it should have been noted in the SDG Narrative. If more information is needed, notify the TOPO to contact the lab.

2.0 Holding Times

2.1 Have any PEST/PCB technical holding times, determined from date of collection to date of extraction, been exceeded? ✓ [ ] ___

NOTE: Technical Holding Times: Water and soil samples for PEST/PCB analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date extraction.

ACTION: If technical holding times are exceeded, flag all positive results as estimated "J" and sample quantitation limits "UJ" and document in the

YES NO N/A

narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all the data should at least be qualified "J", but the reviewer may determine that non-detects are unusable "R".

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample Analyzed	Sample Matrix	Date Sampled	Date Lab Received	Date Extracted	Date Analyzed
ALL SOIL SAMPLES ARE EXTRACTED OUT OF TECHNICAL HOLD TIME.					

NOTE: Contractual Holding Times: Extraction of water samples must be completed within 5 days VTSR. Soil/sediment samples must be extracted within 10 days of VTSR. This requirement does not apply to Performance Evaluation (PE) samples. Extracts of water and soil/sediment samples must be analyzed within 40 days following start of extraction.

ACTION: If contractual holding times are exceeded, document in the Data Assessment.

NOTE: The data reviewer must note in the Data Assessment whether or not technical and contractual holding times were met.

3.0 Surrogate Recovery (Form II)

3.1 Are the PEST/PCB Surrogate Recovery Summaries

	YES	NO	N/A
(Form II) present for each of the following matrices:			
a. Low Water?	[ ]	___	✓
b. Soil?	[✓]	___	___
3.2 Are all the PEST/PCB samples listed on the appropriate Surrogate Recovery Summary for each of the following matrices:			
a. Low Water?	[ ]	___	✓
b. Soil?	[✓]	___	___

ACTION: Contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.3 Were outliers marked correctly with an asterisk?	[✓]	___	___

ACTION: Circle all outliers with red pencil.

3.4 Were surrogate recoveries of TCX or DCB outside of the contract specification for any sample, method blank or sulfur clean-up blank (30-150%)?	___	[ ]	✓

ACTION: In the absence of matrix interference, qualification of the data is not required in the following three situations:

1. When surrogates on both columns are diluted out.

2. When one surrogate on one column was outside (either above or below) the contract limits but above 10%.

3. When the same surrogate on both columns is above the contract limit.

ACTION: If the same surrogate on both columns is below the contract limit but above 10%, check

YES NO N/A

chromatograms for interference. The reviewer may use professional judgement, and qualify only those analytes which elute in the region of the GC chromatogram where interference was observed.

ACTION: If the same surrogate on both columns is below the contract limit but above 10% (with no interference), qualify non-detects and positive hits "J" (estimated).

ACTION: If recoveries for both surrogates on both columns are below the contract limit but above 10%, flag positive results and non-detects for that sample "J".

ACTION: If recoveries are above the contract limit for both surrogates on both columns, then qualify positive values "J".

ACTION: If both surrogates on one column are below the contract limit but above 10%, then use the data from the other column, providing both surrogates on that column are within contract limits. The validator must check from which column the concentration is reported for each analyte. If the value is reported from the failed column, then cross it out and use the value from the other column. Document this change in the Data Assessment.

ACTION: If recovery is below 10% for either surrogate on any column, qualify positive results "J" and flag non-detects "R".

3.5 Were surrogate retention times (RT) within the windows established during the initial 3-point analysis of Individual Standard Mixture A (see Form VI Pest-1)? [✓] ___ ___

ACTION: If the RT limits are not met, positive results and non-detects for that sample may be qualified unusable, "R", based on professional judgement.

	YES	NO	N/A
3.6 Are there any transcription/calculation errors between raw data and Form II?		☑	

ACTION: If large errors exist, contact the TOPO to obtain an explanation or resubmittal of corrected deliverables from the laboratory. Make any necessary corrections and document the effect in the Data Assessment.

4.0 Matrix Spikes (Form III)

	YES	NO	N/A
4.1 Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present?	☑		
4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices (one MS/MSD must be performed for every 20 samples of similar matrix or concentration level):			
a. Low Water?	☐		☑
b. Soil?	☑		

ACTION: If any matrix spike data are missing, take the action specified in 3.2 above.

ACTION: Circle all outliers with red pencil.

ACTION: No action is taken on MS/MSD data alone. However, using informed professional judgement, the data reviewer may use the matrix spike and matrix spike duplicate results in conjunction with other QC criteria and determine the need for some qualification of the data.

5.0 Blanks (Form IV)

	YES	NO	N/A
5.1 Is the Method Blank Summary (Form IV) present?	☑		
5.2 Frequency of Analysis: Has a reagent/method blank been analyzed for each SDG, every 20 samples of similar matrix and concentration level or each extraction batch, whichever is more frequent?			

YES NO N/A

ACTION: If any blank data are missing, take action as specified above in section 3.2. If blank data is not available, reject "R" all associated positive data. However, using professional judgement, the data reviewer may substitute field blank data for missing method blank data.

5.3 A separate Form IV should be present if part of an extraction batch required sulfur removal. In such cases some samples will be listed on two blank summary forms - once under the method blank, and once under the sulfur clean-up blank (PCBLK). Was this additional blank raw data and Form IV submitted when required? [ ] ___ ✓

ACTION: If sulfur clean-up blank data and Form IV are missing, take action as specified in 3.2 above.

5.4 Has a PEST/PCB instrument blank been analyzed at the beginning of every 12 hr. period following the initial calibration sequence (minimum contract requirement)? [✓] ___ ___

ACTION: If any blank data are missing, take action as specified in section 3.2 above.

5.5 Was the correct identification scheme used for all Pest/PCB blanks? (See page B-30, sec. 3.3.7.3 of the SOW for further information.) [✓] ___ ___

ACTION: Contact the TOPO to obtain resubmittals or make the required corrections on the forms. Document in the Data Assessment under Contract Problems/Non-Compliance all corrections made by the validator.

5.6 Chromatography: review the blank raw data - chromatograms, quant. reports and data system printouts. Is the chromatographic performance (baseline stability) for each instrument acceptable? [✓] ___ ___

ACTION: Use professional judgement to determine the

YES NO N/A

effect on the data.

6.0 Contamination

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are not used to qualify the data. Do not confuse them with the other QC blanks discussed below.

6.1 Do any method/reagent, instrument, or cleanup blanks show positive hits for pest/PCBs? ___ ☑ ___

6.2 If any method blanks and/or sulfur clean-up blanks contain "hits" for target compounds, are these hits greater than the CRQL for that analyte? ___ ☑ ___

6.3 In any instrument blanks, is the concentration of any target hit > 0.5 times CRQL for that analyte (see SOW, section 12.1.4.3.3, page D-73/PEST)? ___ ☑ ___

NOTE: Most labs will report 0.5 times CRQLs on the instrument blank Form I instead of the actual method CRQLs. If the lab reported the actual CRQLs, then check if any detected hits are above 0.5 times the CRQLs reported on the Form I.

ACTION: If yes to any of the above questions: note in the Data Assessment under Contract Problems/Non-Compliance if any method or clean-up blanks contain hits > the CRQL, or of instrument blank contained hits > 0.5 times CRQL for that analyte.

6.4 Do any field/rinse blanks have positive pest/PCB results? ___ ☑ ___

ACTION: Prepare a list of the samples associated with each contaminated blank. (Attach a separate sheet)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case or one per day) may be used to qualify data. Do not convert

YES NO N/A

field blank results to account for the difference in soil CRQLs. Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, and/or calibration QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks.

NOTE: When applied as directed in the table below, the contaminant concentration in method/instrument/reagent/cleanup blanks is multiplied by the sample dilution factor, where necessary.

If the laboratory has not already done so, the contaminant concentration in soil blanks is multiplied by 33 times the sample dilution factor and corrected for %moisture (fraction of solid) where necessary. 30 grams of sodium sulfate are used to prepare each soil reagent/method blank as instructed on page D-69/PEST, section 12.1.2.3.1. Ask the TOPO to contact the laboratory if the soil blanks are not reported in soil units (µg/kg).

Flag sample result with a "U":	Report CRQL & qualify "U":	No qualification is needed:
Sample conc. > CRQL, but ≤ 5× blank.	Sample conc. < CRQL & is ≤ 5× blank value.	Sample conc. > CRQL & > 5× blank value.

NOTE: If gross blank contamination exists, all data in the associated samples should be qualified as "R", unusable.

6.5 Are there field/rinse/equipment blanks associated with every sample? [✓] ___ ___

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For analytes with high concentrations, use professional judgement

	YES	NO	N/A

to qualify these values and document in the Data Assessment.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 Calibration and GC Performance

7.1 Are the following Gas Chromatograms and Data Systems Printouts for both columns present for all samples, blanks and MS/MSD:

	YES	NO	N/A
a. Peak resolution check?	✓		
b. Performance evaluation mixtures?	✓		
c. Aroclor 1016/1260?	✓		
d. Aroclors 1221, 1232, 1242, 1248, 1254?	✓		
e. Toxaphene?	✓		
f. Low points individual mixtures A & B?	✓		
g. Med points individual mixtures A & B?	✓		
h. High points individual mixtures A & B?	✓		
I. Instrument blanks?	✓		
j. Were the appropriate GC columns used as specified on pg. D-10/PEST, sections 6.23.3 to 6.23.3.7, in the SOW?	✓		

7.2 Do the chromatograms for all Individual Standard Mixtures and PEM analyses display single component analytes at > 10% but < 100% of full scale (see sections 9.3.5.8.1 thru 9.3.5.8.4, pages D-30 & 31/PEST)? ✓

Have chromatograms for Individual Standard Mixtures and PEM analyses been replotted, showing scaling factor(s), to meet the above requirements when necessary? ✓

YES NO N/A

NOTE: All standard chromatograms must clearly display all peaks at > 10% but < 100% of full scale, and replotted if necessary to accommodate peaks not properly scaled in the initial chromatogram(s). Both the initial and replotted chromatograms must be submitted with the data package.

ACTION: If all single component peaks are not clearly displayed on chromatograms for all Individual Standard Mixtures and PEM analyses, notify the TOPO to obtain resubmittal of the necessary data.

7.3 Are Forms VI PEST 1-7 present and complete for each column and each analytical sequence? [✓] ___ ___

ACTION: If no, take action as specified in 3.2 above.

7.4 Are there any transcription/ calculation errors between raw data and Forms VI? ___ [✓] ___

ACTION: If large errors exist, take action as specified in section 3.2 above.

7.5 Do all standard retention times, including each pesticide in each level of Individual Mixtures A & B, fall within the windows established during the Initial Calibration (see Form VI PEST-1)? [✓] ___ ___

ACTION: If no, all samples in the entire analytical sequence are potentially affected. Check to see if the chromatograms contain peaks within an expanded window surrounding the expected retention times. If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present and cannot be identified through pattern recognition or using a revised RT window, qualify all positive results "JN" and non-detects as unusable (R). For Aroclors, the RT may be outside the window, but the Aroclor may still be identified from its distinctive pattern.

7.6 Are the linearity criteria for the initial

	YES	NO	N/A
analyses of Individual Standards A & B within limits for both columns? (%RSD must be ≤ 25.0 for alpha and delta BHC, ≤ 30.0 for the two surrogates and ≤ 20% for all other analytes.)	[✓]	___	___

NOTE: Contractual requirements allow up to two single component TCL compounds, but not surrogates, on each column to exceed the criteria provided the %RSD is ≤ 30%. (See page D-26/Pest, sec. 9.2.5.7 in the SOW.) Technical criteria, however, are the same for all analytes.

ACTION: If technical criteria were not met, qualify all associated positive results generated during the entire analytical sequence "J" and all non-detects "UJ". When %RSD > 90%, flag all non-detect results for that analyte "R" (unusable), and positive results as "J" estimated.

ACTION: If more than two analytes failed %RSD, document in the Data Assessment Contract Problems/Non-Compliance section.

7.7 Is the resolution between each pair of adjacent peaks in the Resolution Check Mixture ≥ 60.0% for both columns? (See Form VI PEST-4.)(D-25/Pest)	[✓]	___	___

ACTION: If no, qualify positive results for compounds that were not adequately resolved "J". Use professional judgement to determine if non-detects which elute in areas affected by co-eluting peaks should be qualified "N" as presumptive evidence of presence or unusable (R).

7.8 Is Form VI PEST-5 present and complete for each Performance Evaluation Mixture (PEM) standard used for both initial and continuing calibrations (see SOW section 3.12.4.4, page B-48)?	[✓]	___	___

ACTION: If no, take action as specified in section 3.2 above.

7.9 For each PEM standard, was the resolution between

	YES	NO	N/A
each pair of adjacent peaks ≥ 90.0% on both columns?	[✓]		

ACTION: Qualify positive results for compounds not adequately resolved estimated (J). Qualify non-detects based on professional judgement.

7.10 Have Forms VI PEST-6 & PEST-7 been completed for all midpoint Individual Standards A and B used for initial calibration?	[✓]		
For each standard, was the resolution between each pair of adjacent peaks ≥ 90.0% on both columns?	[✓]		

ACTION: If no, qualify positive results for compounds that were not adequately resolved estimated (J). Use professional judgement to determine if non-detects which elute in areas affected by co-eluting peaks should be qualified "N" as presumptive evidence of presence or unusable "R".

7.11 Is Form VII Pest-1 present and complete for each PEM standard analyzed during the analytical sequence for both columns?	[✓]		

NOTE: If a PEM or Individual std mixture does not meet technical criteria listed on sec. 9.3.5.8.1 through 9.3.5.8.4, it MUST be reinjected immediately. If the second injection meets the criteria, sample analysis may continue. Otherwise, ALL data collection MUST BE STOPPED. Document it in the Data Assessment under Contract Problems/Non compliance.(p. D-31/Pest, sec. 9.3.6.4).

Was the %Breakdown of DDT and Endrin calculated using the equations given on page D-24/PEST, sec. 9.2.4.8 in the SOW?	[✓]		
Were all pesticides and surrogates in each PEM standard within the RT windows established during the Initial Calibration?	[✓]		

	YES	NO	N/A

ACTION: If no, take action as specified in 3.2 above.

7.12 Has the individual percent breakdown for DDT/Endrin exceeded 20.0% in any PEM on either column? (See Form VII PEST-1.)

- for 4,4'-DDT?	___	☑	___
- for Endrin?	___	☑	___
Has the combined percent breakdown for DDT/Endrin exceeded 30.0% in any PEM on either column (required for all PEM analyses)?	___	☑	___

ACTION: 1. If any percent breakdown has failed the QC criteria in either PEM in steps 2 and 17 in the initial calibration sequence (page D-21/Pest, sec. 9.2.3.4 in the SOW), qualify all samples in the entire analytical sequence as described in sections 2.a, b and c below.

2. If any percent breakdown failed the QC criteria in a PEM calibration verification analysis, review data beginning with the samples which followed the last in-control standard until the next acceptable PEM and qualify the data as described below.

a. 4,4'-DDT Breakdown: If DDT breakdown was > 20.0%:

I. Qualify all positive results for DDT with "J". If DDT was not detected, but DDD and DDE are positive, then qualify the quantitation limit for DDT unusable, "R".

ii. Qualify positive results for DDD and/or DDE as presumptively present at an approximated quantity "JN".

b. Endrin Breakdown: If endrin breakdown was > 20.0%:

I. Qualify all positive results for endrin

YES NO N/A

with "J". If endrin was not detected, but endrin aldehyde and endrin ketone are positive, then qualify the quantitation limit for Endrin as unusable "R".

ii. Qualify positive results for endrin ketone and endrin aldehyde as presumptively present at an approximated quantity "JN".

c. Combined Breakdown: If the combined 4,4'-DDT and endrin breakdown is greater than 30.0%:

I. Qualify all positive results for DDT and Endrin with "J". If endrin was not detected, but endrin aldehyde and endrin ketone are positive, then qualify the quantitation limit for endrin as unusable "R". If DDT was not detected, but DDD and DDE are positive, then qualify the quantitation limit for DDT as unusable "R".

ii. Qualify positive results for endrin ketone and endrin aldehyde as presumptively present at an approximated quantity "JN". Qualify positive results for DDD and/or DDE as presumptively present at an approximated quantity "JN".

7.13 Are all percent difference (%D) values for PEM analytes and surrogates on both columns ≥ -25% and ≤ +25.0%? (See Form VII PEST-1.) [✓] ___ ___

ACTION: If no, qualify all associated positive results generated during the analytical sequence "J" and sample quantitation limits "UJ".

NOTE: If the failing PEM is part of the initial calibration, all samples are potentially affected. If the offending standard is a calibration verification, the associated samples are those which followed the last in-control standard until the next passing standard.

7.14 Is Form VII Pest-2 present and complete for each

	YES	NO	N/A
INDA and INDB calibration verification analyzed?	[✓]	___	___

ACTION: If no, take action specified in 3.2 above.

7.15 Are there any transcription/calculation errors between raw data and Form VII Pest-2?	___	[ ]	___

ACTION: If large errors exists, take action as specified in section 3.6 above.

7.16 Do all standard retention times for each INDA and INDB calibration verification fall within the RT windows established during the initial calibration sequence? (See Form VII PEST-2.)	[✓]	___	___

ACTION: If no, beginning with the samples which followed the last in-control standard, check to see if the chromatograms contain peaks within an expanded window surrounding the expected retention times. If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present and cannot be identified through pattern recognition or using a revised RT window, qualify all positive results and non-detects as unusable (R).

7.17 Are all %D values for INDA and INDB calibration verification compounds ≥ -25.0% and ≤ +25.0%?	[✓]	___	___

ACTION: If the %D is outside the ±25.0% range for any compound(s), qualify associated positive results for that compound "J" and non-detects "UJ". The "associated samples" are those which followed the last in-control standard up to the next passing standard containing the analyte(s) in question. If the %D is > 90%, flag all non-detects for that analyte "R" (unusable).

8.0 Analytical Sequence Check (Form VIII-PEST)

8.1 Is Form VIII present and complete for each column and each period of analyses?	[✓]	___	___

ACTION: If no, take action specified in 3.2 above.

	YES	NO	N/A
8.2 Was the proper analytical sequence followed for each initial calibration and subsequent analyses, and all standards analyzed at the required frequency for each GC/ECD instrument used.? (See SOW pages D-21 & D-55/PEST.)	[✓]	___	___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify accordingly. Generally, the effect is negligible unless the sequence was grossly altered and/or the calibration was out of QC limits.

8.3 Were all samples analyzed within a 12 hour time period beginning with the injection of an instrument blank and bracketed by acceptable analyses of the proper standards?	[✓]	___	___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify accordingly. Document in the Data Assessment under Contract Problems/Non-Compliance.

8.4 If a multi-component analyte was detected in a sample, was a matching multi-component standard analyzed within 72 hours of the injection of the sample and within a valid 12 hour sequence?	[ ]	___	✓

NOTE: This additional standard is for identification purposes only. Positive results for Aroclors and Toxaphene are quantitated from the initial calibration.

ACTION: If no, document in the Data Assessment under Contract Problems/Non-Compliance.

9.0 Cleanup Efficiency Verification (Form IX)

9.1 Is Form IX PEST-1 present and complete for each lot of Florisil Cartridges used? (Florisil Cleanup is required for all Pest/PCB extracts.)	[✓]	___	___

Are all samples listed on the Pesticide Florisil

	YES	NO	N/A
Cartridge Check Form?	[✓]	___	___

ACTION: If no, take action specified in 3.2 above. If data suggests florisil clean-up was not performed, document in the Data Assessment under the Contract Non-compliance section.

9.2	Are percent recoveries (%REC) of the pesticide and surrogate compounds used to check the efficiency of the florisil clean-up procedure within QC limits of 80 - 120%?	[✓]	___	___

ACTION: Qualify only the analyte(s) which failed the recovery criteria as follows:

If %REC is < 80%, qualify positive results "J" and non-detects "UJ".

If any pesticide %REC was zero, flag non-detects "R" for that compound.

Use professional judgement to qualify positive results if any recoveries are > 120%.

NOTE: Sample data should be evaluated for potential interferences if recovery of 2,4,5-trichlorophenol was > 5% in the Florisil Cartridge Performance Check analysis. Document any problems found in the Data Assessment under the Contract Problems/Non-Compliance section.

9.3	If GPC Cleanup was performed (mandatory for all soil sample extracts), is Form IX Pest-2 present?	[✓]	___	___
	Are all soil samples listed on Form IX Pest-2?	[✓]	___	___

ACTION: If no, take action specified in 3.2 above. If data suggests GPC clean-up was not performed when required, document in the Data Assessment under the Contract Problems/Non-Compliance section.

Are the %REC values for all pesticides in the GPC

YES NO N/A

calibration solution between 80 - 110%? [✓] ___ ___

ACTION: Qualify only those analytes which failed the recovery criteria as follows:

If %REC are < 80%, qualify positive results "J" and non-detects "UJ".

If any pesticide %REC was zero, flag non-detects "R" for that compound.

Use professional judgement to qualify positive results if any recoveries are > 110%.

NOTE: An Aroclor mixture containing Aroclors 1016 and 1260 is also analyzed during GPC calibration; however, Aroclor data is not listed on Form IX PEST-2. The raw GPC data for Aroclors 1016/1260 must be evaluated for pattern similarity with previously analyzed Aroclor standards.

9.4 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-30, sec. 3.3.7.2 and 3.3.7.9 of the SOW for further information.

Was the correct identification scheme used for GPC and Florisil blanks? [✓] ___ ___

10.0 Pesticide/PCB Identification

10.1 Is Form X complete for every sample in which a pesticide or PCB was detected? [✓] ___ ___

ACTION: If no, take action specified in 3.2 above.

10.2 Are all sample chromatograms properly scaled, attenuated, etc. as required for proper identification of single and multi-component analytes? (Refer to SOW sections 11.3.7.1 thru 11.3.7.8, page D-67/Pest for specific details.) [ ] ___ ___

NOTE: Proper verification of Pest/PCB results depends

	YES	NO	N/A

on clear, legible presentation of the raw data. Single component pesticides and all peaks chosen for quantitation of multi-component analytes must appear at less than full scale. Toxaphene and PCB patterns must be clearly visible to enable comparison with standard chromatograms.

ACTION: If retention times or apex of peaks cannot be verified, or if multi-component peak patterns cannot be discerned, contact the TOPO to obtain rescaled chromatograms from the lab.

10.3 Are there any transcription/calculation errors between raw data and Forms 10A and 10B?	___	[✓]	___

ACTION: If large errors exist, take action as specified in section 3.2 above.

10.4 Are RTs of sample compounds within the established RT windows for analyses on both columns?	[ ]	___	___
Was GC/MS confirmation provided when required (when compound concentration is > 10 ug/mℓ in the final extract)?	[ ]	___	✓

ACTION: Use professional judgement to qualify positive results which were not confirmed by GC/MS analysis. Qualify as unusable (R) all positive results which were not confirmed on a second GC column. Also qualify as unusable (R) all positive results which do not meet RT window criteria, unless associated standard compounds are similarly biased. Use professional judgement to assign an appropriate quantitation limit.

10.5 Is the percent difference (%D) calculated for the positive sample results on both columns > 25.0%?	✓	[ ]	___

ACTION: If the reviewer finds neither column shows interference for the positive hits, the Pesticide data should be flagged as follows:

YES NO N/A

% Difference	Qualifier
0 - 25%	None
26 - 70%	"J"
71 - 100%	"JN"
100 - 200% (No Interference)	"R"
100 - 200% (Interference detected)*	"JN"
> 50% (Pesticide value is < CRQL)**	"U"
> 200%	"R"

* When the reported %D is 100- 200%, but interference is detected on either column, qualify the data with "JN".

** When the reported pesticide value is lower than the CRQL, and the %D is > 50%, raise the value to the CRQL and qualify "U", undetected.

NOTE: For Aroclors, if the %D is > 50%, but the pattern of GC peaks on both columns indicates a specific Aroclor is present, qualify that Aroclor "J".

NOTE: The lower of the two values is reported on Form I. If using professional judgement, the reviewer determines that the higher result was more acceptable, the reviewer should replace the value and indicate the reason for the change in the Data Assessment.

10.6 Check chromatograms for false negatives, especially the multiple-peak compounds (Toxaphene and the PCBs). Were there any false negatives? ___ [1] ___

ACTION: Use professional judgement to decide if the compound should be reported. If the appropriate PCB standards were not analyzed within 72 hrs. of the sample(s) in question, qualify the data unusable "R".

Also note in Data Assessment under Contract Problems/Non-Compliance if the lab failed to analyze Aroclor standards when required.

11.0 Target Compound List (TCL) Analytes

11.1 Are the Organic Analysis Data Sheets (Form I

	YES	NO	N/A
Pest) present with required header information on each page, for each of the following:			
a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates?	[✓]	___	___
c. Blanks?	[✓]	___	___
d. Instrument Blanks (per column & analysis)?	[✓]	___	___
11.2 Are the Pest chromatograms and quant. reports included in the sample data package for each of the following:			
a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates?	[✓]	___	___
c. Blanks?	[✓]	___	___
d. Instrument Blanks (per column & analysis)?	[ ]	___	___
ACTION: If any data are missing, take action specified in 3.2 above.			
11.3 Is chromatographic performance acceptable with respect to:			
a. Baseline stability?	[✓]	___	___
b. Resolution?	[ ]	___	___
c. Peak shape?	[ ]	___	___
d. Full-scale graph attenuation?	[ ]	___	___
e. Other: _____?	[ ]	___	___
11.4 Were any electropositive displacement (negative peaks) or unusual peaks seen?	___	[✓]	___
ACTION: Use professional judgement to determine the acceptability of the data. Address comments			

YES NO N/A

under System Performance section of the Data Assessment.

12.0 Compound Quantitation and Reported Detection Limits

12.1 Are there any transcription/calculation errors in Form I results? Check at least two positive results. Were any errors found? — ☑ —

NOTE: Single-peak pesticide results can be checked for rough agreement between quantitative results obtained on the two GC columns. Use professional judgement to decide whether a large discrepancy indicates the presence of an interfering compound. If an interfering compound is visible on the chromatogram, the lower of the two values should be reported and qualified as presumptively present at an approximated quantity "JN". This necessitates a determination of an estimated concentration on the confirmation column. The narrative should indicate that the presence of interferences has interfered with the evaluation of the second column confirmation.

12.2 Are the CRQLs adjusted to reflect sample dilutions? ☑ — —

ACTION: If large errors exist, take action as specified in section 3.2 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQLs from the diluted sample). Replace concentrations which exceed the calibration range in the original analysis by crossing out the "E" value on the original Form I and substituting it with the result from the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including those in the data summary package.

ACTION: Quantitation limits affected by large, off-scale

YES NO N/A

peaks should be qualified as unusable (R). If the interference is on-scale, the reviewer may offer an approximated quantitation limit (UJ) for each affected compound.

NOTE: If a sample required greater than a 10 times dilution, then a 10 times more concentrated analysis must also be performed and submitted (see SOW, page D-57/PEST, section 10.2.3.5).

ACTION: If a more concentrated analysis is unavailable, document in the Contract Problems/Non-Compliance section of the Data Assessment. Use professional judgement to qualify non-detects and positive hits below the CRQL.

13.0 Field Duplicates

13.1 Were any field duplicates submitted? [ ] ✓ ___

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

SAMPLENUM	CLIENTID	QUOTENUMREF	LOGINNUM	MATNUM	ACCTNUM	PROJECTNUM	RECEIVEDATE
B0B85-1	B0B85	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-2	B0B86	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-3	B0B87	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-4	B0B88	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-5	B0B89	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-6	B0B90	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-7	B0B91	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-8	B0B92	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-9	B0B93	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-10	B0B94	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-11	B0B96	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-12	B0B97	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-13	B0B98	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-14	B0B99	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-15	B0BA0	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-16	B0BA1	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-17	B0BA2	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-18	B0BA3	29681	B0B85	SO	EPA	68W99071-1A	8/30/01
B0B85-19	B0BA4	29681	B0B85	SO	EPA	68W99071-1A	8/30/01

CompuChem
a division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SEP 19 2001

SDG NARRATIVE
CASE #29681
SDG #B0B85
CONTRACT # 68W99071

SAMPLE IDENTIFICATIONS: B0B85 B0B86 B0B87 B0B88 B0B89 B0B90 B0B91 B0B92 B0B93 B0B94 B0B96 B0B97 B0B98 B0B99 B0BA0 B0BA1 B0BA2 B0BA3 B0BA4

The nineteen soil samples listed above were received intact in EnCore samplers, at 4 degrees C, with proper documentation, in sealed shipping containers, on August 30, 2001. All samples were submitted for volatile, semivolatile and pesticide-PCB analysis. The samples were prepared by SW846 Method 5035, and analyzed following Contract Laboratory Protocol(CLP) Statement of Work(SOW), document OLM04.2. This portion of the SDG narrative deals with the volatile fractions only. All pertinent Quality Assurance Notices are included in the narrative section, and all pertinent Laboratory Notices for Case # 29681, SDG # B0B85 are included in the sample data sections.

Analysis holding time requirements were met for all of these samples, and sample dry weight values ranged from 0 to 2 percent. No Target Compound List(TCL) analytes were identified above the Contract Required Quantitation Limit(CRQL) in the submitted samples.

One early eluting Tentatively Identified Compound(TIC) was present in all samples.

All Bromofluorobenzene (BFB) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.
The system monitoring compounds (SMCs) met recovery criteria in the analyses of these samples, and all of the internal standards met retention time and response criteria in the analyses of these samples.
The associated method blanks met all quality control criteria, and did not contain any target analytes above the CRQL.
The asssociated storage blank met all QC criteria, and also did not contain any TCL analytes above the CRQL.

Duplicate matrix spikes were generated from the original B0B85 as designated by the region, and all QC precision and accuracy criteria were met without exception..
Manual quantitations were performed on the process files in some of the the associated initial, and continuing calibration(s), and in samples B0B88, B0B91, B0B96, B0B99, B0BA0, B0BA3, and B0B93. The reasons have been coded with explanations provided in the notice included in the narrative section of this SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Roy Sutton
Case Reviewer
September 17, 2001

ALKANE NARRATIVE REPORT
Report date : 09/17/2001
SDG: B0B85

Client Sample ID: VBLKDT Lab Sample ID: WG12703-2 File ID: WG12703-[illegible]7

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.35	14.51	J

Client Sample ID: VBLKDU Lab Sample ID: WG12703-3 File ID: WG12703-3A7

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.35	9.60	J

Client Sample ID: VHBLKDS Lab Sample ID: WG12703-6 File ID: WG12703-6B

Compound	RT	Est. Conc.	Q
Branched Alkane	4.95	45.08	J

Client Sample ID: B0B94 Lab Sample ID: B0B85-10 File ID: B0B85-10R2B71

Compound	RT	Est. Conc.	Q
Branched Alkane	4.96	35.57	J

B0B85 was used as the original to prepare the duplicate matrix spikes as requested. The duplicate matrix spikes met accuracy and precison criteria, with some exceptions. The recovery of pyrene was flagged as an outlier in the MS and the recovery of pentachlorophenol was flagged as an outlier in the MSD. The relative percent difference value for pyrene was flagged as an outlier in the comparison of the duplicate matrix spikes.

In the analyses of the Initial and Continuing Calibration standards and all of the samples, manual quantitations were performed. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his/her designee, as verified by the following signature:

Patricia B. Hopkins

Patricia B. Hopkins
Data Analyst II
18 September 2001

Note: This report is paginated for reference and accountability in numerical sequence.

COMPUCHEM
A division of Liberty Analytical Corporation
501 Madison Ave.
Cary, NC 27513

SDG NARRATIVE

CASE #29681
SDG #B0B85
CONTRACT #68W99071

SAMPLE IDENTIFICATIONS:

B0B85 B0B86 B0B87 B0B88 B0B89 B0B90 B0B91 B0B92 B0B93 B0B94
B0B96 B0B97 B0B98 B0B99 B0BA0 B0BA1 B0BA2 B0BA3 B0BA4

This portion of the SDG narrative deals with the semivolatile fractions for the nineteen samples above only. For the receiving information associated with these samples, please refer to the volatile SDG narrative.

All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices are included in the sample data sections.

SEMIVOLATILE

The semivolatile fractions were extracted and analyzed within the required holding time. The percent moisture values for the samples ranged from 0% to 2% and the pH values ranged from 7.2 to 8.3.

One Target Compound List (TCL) analyte, bis(2-ethylhexyl)phthalate were detected with concentrations above the Contract Required Quantitation Limit (CRQL) in three of the samples.

One to fifteen Tentatively Identified Compounds (TIC) were detected in the samples. These TICs were assessed as unknowns and phthalates. Other TICs were detected and assessed as unknown alkanes in some of the samples. The TICs that were characterized as alkanes have been summarized on the Alkane Narrative Report that is located in the narrative section of the data package. The TIC spectra for the alkanes are located in the data section for the individual samples.

QC SUMMARY

All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.

The surrogates met recovery criteria for the semivolatile fractions. The internal standards met area response and retention time criteria. The associated blanks met Quality Control criteria.

ALKANE NARRATIVE REPORT
Report date : 09/18/2001
SDG: B0B85

Client Sample ID: B0B93 Lab Sample ID: B0B85-9 File ID: B0B85-9A70

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	17.08	79.13	J

Client Sample ID: B0B97 Lab Sample ID: B0B85-12 File ID: B0B85-12A70

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	15.92	69.62	J
Straight-Chain Alkane	16.45	174.1	J
Straight-Chain Alkane	17.07	198.0	J
Straight-Chain Alkane	17.82	164.4	J
Straight-Chain Alkane	18.71	178.3	J
Straight-Chain Alkane	19.74	161.1	J
Straight-Chain Alkane	20.54	157.4	J
Straight-Chain Alkane	21.40	106.9	J
Straight-Chain Alkane	22.40	89.22	J

Client Sample ID: B0B98 Lab Sample ID: B0B85-13 File ID: B0B85-13A70

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	17.07	79.53	J

Client Sample ID: B0BA2 Lab Sample ID: B0B85-17 File ID: B0B85-17A70

Compound	RT	Est. Conc.	Q
Branched Alkane	16.46	68.22	J
Straight-Chain Alkane	17.09	76.00	J

KC

CompuChem

a division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE

CASE #29681
SDG #B0B85
CONTRACT #68W99071

SAMPLE IDENTIFICATIONS: B0B85, B0B86, B0B87, B0B88, B0B89, B0B90, B0B91, B0B92, B0B93, B0B94, B0B96, B0B97, B0B98, B0B99, B0BA0, B0BA1, B0BA2, B0BA4, B0BA3

The nineteen soil samples listed above were scheduled for the requested analyses of the pesticide fractions. The samples were analyzed and extracted following EPA SOW OLM04.2.

Extraction and analysis holding time requirements were met for all of the samples. Target compounds were present in each of the sample analyses.

The surrogate, Tetrachloro-m-xylene, exhibited high recovery on one column for sample B0B97. All of the remaining surrogates met recovery and retention time criteria in the analyses. The associated method blank met all quality control criteria. Duplicate matrix spikes were prepared on sample B0B97 and met advisory limits for all compounds except for gamma-BHC which was low in the matrix spike duplicate.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted electronically has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Katrina L. Travis
GC/HPLC Manager
September 18, 2001

CompuChem
a division of Liberty Analytical Corp.

ORIGINAL

Sample Delivery Group (SDG)
Cover Sheet

SDG Number B0B85

Laboratory Name CompuChem Laboratory Code LIBRTY

Contract No. 68W99071 Case No. 29681

Analysis Price _____ SDG Turnaround 21

EPA Sample Numbers in SDG (Listed in Numerical Order)

1)	B0B85	7)	B0B91	13)	B0B98	19)	B0BA4
2)	B0B86	8)	B0B92	14)	B0B99	20)	
3)	B0B87	9)	B0B93	15)	B0BA0	21)	
4)	B0B88	10)	B0B94	16)	B0BA1	22)	
5)	B0B89	11)	B0B96	17)	B0BA2	23)	
6)	B0B90	12)	B0B97	18)	B0BA3	24)	

B0B85
First Sample in SDG

B0BA4
Last Sample in SDG

08/30/01
First Sample Receipt Date

08/30/01
Last Sample Receipt Date

Note: There are a maximum of 20 **field** samples (excluding PE samples in an SDG. Attach TRs to this form in alphanumeric order (the order listed above on this form).

Signature Alice Evans Date 08/30/01

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B85

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-1

Sample wt/vol: 4.95(g/mL) G Lab File ID: B0B85-1RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 ~~3~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B85

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-1

Sample wt/vol: 4.95(g/mL) G Lab File ID: B0B85-1RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B85

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-1

Sample wt/vol: 4.95 (g/mL) G Lab File ID: B0B85-1RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	9	~~NJB~~ R
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
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26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B86

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-2

Sample wt/vol: 5.43(g/mL) G Lab File ID: B0B85-2RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	~~10~~ 3	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B86

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-2

Sample wt/vol: 5.43 (g/mL) G Lab File ID: B0B85-2RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B86

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-2

Sample wt/vol: 5.43 (g/mL) G Lab File ID: B0B85-2RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	8	~~NJB~~ R
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B87

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-3

Sample wt/vol: 5.16(g/mL) G Lab File ID: B0B85-3RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 ~~2~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B87

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-3

Sample wt/vol: 5.16(g/mL) G Lab File ID: B0B85-3RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B87

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-3

Sample wt/vol: 5.16 (g/mL) G Lab File ID: B0B85-3RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	8	~~NJBR~~
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B88

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-4

Sample wt/vol: 5.03 (g/mL) G Lab File ID: B0B85-4RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 ~~4~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	2	J
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B88

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-4

Sample wt/vol: 5.03 (g/mL) G Lab File ID: B0B85-4RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B88

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-4

Sample wt/vol: 5.03 (g/mL) G Lab File ID: B0B85-4RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 1

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	9	~~NJB~~ R
2.					
3.					
4.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B89

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-5

Sample wt/vol: 5.43 (g/mL) G Lab File ID: B0B85-5RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	~~10~~ 3	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B89

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-5

Sample wt/vol: 5.43 (g/mL) G Lab File ID: B0B85-5RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B89

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-5

Sample wt/vol: 5.43 (g/mL) G Lab File ID: B0B85-5RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	8	~~NJBR~~
2.					
3.					
4.					
5.					
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B0B90

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-6

Sample wt/vol: 5.35(g/mL) G Lab File ID: B0B85-6RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 5	JB UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B90

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-6

Sample wt/vol: 5.35(g/mL) G Lab File ID: B0B85-6RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B90

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-6

Sample wt/vol: 5.35 (g/mL) G Lab File ID: B0B85-6RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 1

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	9	~~NJB~~ R
2.					
3.					
4.					
5.					
6.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B91

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-7

Sample wt/vol: 4.86(g/mL) G Lab File ID: B0B85-7RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	✓ 10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 ~~3~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B91

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-7

Sample wt/vol: 4.86(g/mL) G Lab File ID: B0B85-7RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B0B91

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-7

Sample wt/vol: 4.86 (g/mL) G Lab File ID: B0B85-7RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	9	~~NJB~~ R
2.					
3.					
4.					
5.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B92

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-8

Sample wt/vol: 5.27(g/mL) G Lab File ID: B0B85-8RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	3	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10-4	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B92

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-8

Sample wt/vol: 5.27(g/mL) G Lab File ID: B0B85-8RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B92

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-8

Sample wt/vol: 5.27 (g/mL) G Lab File ID: B0B85-8RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	9	~~NJB~~ R
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B93

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-9

Sample wt/vol: 4.53 (g/mL) G Lab File ID: B0B85-9RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	5	J
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	~~5~~ 11	~~JB~~ UJ
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	2	J
75-09-2	Methylene Chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B93

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-9

Sample wt/vol: 4.53 (g/mL) G Lab File ID: B0B85-9RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B93

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-9

Sample wt/vol: 4.53 (g/mL) G Lab File ID: B0B85-9RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	10	~~NJBP~~
2.					
3.					
4.					
5.					
6.					
7.					
8.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B94

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-10

Sample wt/vol: 5.00(g/mL) G Lab File ID: B0B85-10R2B71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 ~~5~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B94

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-10

Sample wt/vol: 5.00(g/mL) G Lab File ID: B0B85-10R2B71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U J
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10 ~~2~~	~~JB~~ U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10 ~~2~~	~~J~~ U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

EPA SAMPLE NO.

B0B94

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-10

Sample wt/vol: 5.00 (g/mL) G Lab File ID: B0B85-10R2B71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	8	NJB
2.					
3.					
4.					
5.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B96

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-11

Sample wt/vol: 4.86(g/mL) G Lab File ID: B0B85-11A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 4	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	1	J
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B96

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-11

Sample wt/vol: 4.86(g/mL) G Lab File ID: B0B85-11A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B96

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-11

Sample wt/vol: 4.86 (g/mL) G Lab File ID: B0B85-11A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	10	NJB
2.					
3.					
4.					
5.					
6.					
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9.					
10.					
11.					
12.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B97

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-12

Sample wt/vol: 3.97(g/mL) G Lab File ID: B0B85-12A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	13	U
74-87-3	Chloromethane	13	U
75-01-4	Vinyl Chloride	13	U
74-83-9	Bromomethane	13	U
75-00-3	Chloroethane	13	U
75-69-4	Trichlorofluoromethane	3	J
75-35-4	1,1-Dichloroethene	13	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	13	U
67-64-1	Acetone	13 ~~8~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	13	U
79-20-9	Methyl Acetate	13	U
75-09-2	Methylene Chloride	13	U
156-60-5	trans-1,2-Dichloroethene	13	U
1634-04-4	Methyl-tert-butyl ether	13	U
75-34-3	1,1-Dichloroethane	13	U
156-59-2	cis-1,2-Dichloroethene	13	U
78-93-3	2-Butanone	13	U
67-66-3	Chloroform	13	U
71-55-6	1,1,1-Trichloroethane	13	U
110-82-7	Cyclohexane	13	U
56-23-5	Carbon Tetrachloride	13	U
71-43-2	Benzene	13	U
107-06-2	1,2-Dichloroethane	13	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B97

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-12

Sample wt/vol: 3.97(g/mL) G Lab File ID: B0B85-12A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	13	U
108-87-2	Methylcyclohexane	13	U
78-87-5	1,2-Dichloropropane	13	U
75-27-4	Bromodichloromethane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
108-88-3	Toluene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
79-00-5	1,1,2-Trichloroethane	13	U
127-18-4	Tetrachloroethene	13	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	13	U
106-93-4	1,2-Dibromoethane	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
1330-20-7	Xylene (Total)	13	U
100-42-5	Styrene	13	U
75-25-2	Bromoform	13	U
98-82-8	Isopropylbenzene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
541-73-1	1,3-Dichlorobenzene	13	U
106-46-7	1,4-Dichlorobenzene	13	U
95-50-1	1,2-Dichlorobenzene	13	U
96-12-8	1,2-Dibromo-3-Chloropropane	13	U
120-82-1	1,2,4-Trichlorobenzene	13	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B97

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-12

Sample wt/vol: 3.97 (g/mL) G Lab File ID: B0B85-12A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	12	~~NJB~~ R
2.					
3.					
4.					
5.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B98

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-13

Sample wt/vol: 4.75(g/mL) G Lab File ID: B0B85-13A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	3	J
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	~~11~~ 4	~~JB~~ U J
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene Chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B98

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-13

Sample wt/vol: 4.75(g/mL) G Lab File ID: B0B85-13A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B98

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-13

Sample wt/vol: 4.75 (g/mL) G Lab File ID: B0B85-13A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	9	~~NJB~~ K
2.					
3.					
4.					
5.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B99

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-14

Sample wt/vol: 4.38 (g/mL) G Lab File ID: B0B85-14A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	12	U
74-87-3	Chloromethane	12	U
75-01-4	Vinyl Chloride	12	U
74-83-9	Bromomethane	12	U
75-00-3	Chloroethane	12	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	12	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	12	U
67-64-1	Acetone	~~12~~ 5	~~JB~~ UJ
75-15-0	Carbon Disulfide	12	U
79-20-9	Methyl Acetate	1	J
75-09-2	Methylene Chloride	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
1634-04-4	Methyl-tert-butyl ether	12	U
75-34-3	1,1-Dichloroethane	12	U
156-59-2	cis-1,2-Dichloroethene	12	U
78-93-3	2-Butanone	12	U
67-66-3	Chloroform	12	U
71-55-6	1,1,1-Trichloroethane	12	U
110-82-7	Cyclohexane	12	U
56-23-5	Carbon Tetrachloride	12	U
71-43-2	Benzene	12	U
107-06-2	1,2-Dichloroethane	12	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B99

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-14

Sample wt/vol: 4.38(g/mL) G Lab File ID: B0B85-14A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	12	U
108-87-2	Methylcyclohexane	12	U
78-87-5	1,2-Dichloropropane	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
108-88-3	Toluene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
127-18-4	Tetrachloroethene	12	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	12	U
106-93-4	1,2-Dibromoethane	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
1330-20-7	Xylene (Total)	12	U
100-42-5	Styrene	12	U
75-25-2	Bromoform	12	U
98-82-8	Isopropylbenzene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
96-12-8	1,2-Dibromo-3-Chloropropane	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B99

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-14

Sample wt/vol: 4.38 (g/mL) G Lab File ID: B0B85-14A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 2 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	10	~~NJBR~~
2.					
3.					
4.					
5.					
6.					
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8.					
9.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-15

Sample wt/vol: 4.89(g/mL) G Lab File ID: B0B85-15A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 ~~3~~	~~JB~~ VJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	1	J
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-15

Sample wt/vol: 4.89(g/mL) G Lab File ID: B0B85-15A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-15

Sample wt/vol: 4.89 (g/mL) G Lab File ID: B0B85-15A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	9	~~NJB~~ R
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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15.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-16

Sample wt/vol: 5.10(g/mL) G Lab File ID: B0B85-16A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 4	JBVJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-16

Sample wt/vol: 5.10(g/mL) G Lab File ID: B0B85-16A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-16

Sample wt/vol: 5.10 (g/mL) G Lab File ID: B0B85-16A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	8	~~NJB~~ R
2.					
3.					
4.					
5.					
6.					
7.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-17

Sample wt/vol: 4.64(g/mL) G Lab File ID: B0B85-17A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	11 ~~4~~	~~JB~~ U J
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene Chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-17

Sample wt/vol: 4.64(g/mL) G Lab File ID: B0B85-17A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-17

Sample wt/vol: 4.64 (g/mL) G Lab File ID: B0B85-17A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	9	~~NJB~~ R
2.					
3.					
4.					
5.					
6.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-18

Sample wt/vol: 4.48(g/mL) G Lab File ID: B0B85-18A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	11 ~~5~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	1	J
75-09-2	Methylene Chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-18

Sample wt/vol: 4.48(g/mL) G Lab File ID: B0B85-18A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-18

Sample wt/vol: 4.48 (g/mL) G Lab File ID: B0B85-18A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	10	NJBR
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA4

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-19

Sample wt/vol: 4.78(g/mL) G Lab File ID: B0B85-19A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	5	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 ~~5~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	2	J
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA4

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-19

Sample wt/vol: 4.78(g/mL) G Lab File ID: B0B85-19A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA4

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-19

Sample wt/vol: 4.78 (g/mL) G Lab File ID: B0B85-19A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/06/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	10	NJB
2.					
3.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B85

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-1

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-1A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	340	U
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
98-86-2	Acetophenone	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
105-60-2	Caprolactam	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	850	U
92-52-4	1,1'-Biphenyl	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	850	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
208-96-8	Acenaphthylene	340	U
99-09-2	3-Nitroaniline	850	U
83-32-9	Acenaphthene	340	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B85

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-1

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-1A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	850	UJ
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
100-01-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	N-nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	UJ
1912-24-9	Atrazine	340	~~U~~ K
87-86-5	Pentachlorophenol	850	UJ
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	UJ
117-81-7	bis(2-Ethylhexyl)phthalate	52	~~J~~ J
117-84-0	Di-n-octylphthalate	340	UJ
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	UJ

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: B0B85

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-1A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 Decanted: (Y/N) N Date Extracted:09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	120	~~JB~~ R
2.		UNKNOWN	16.70	84	J
3.					
4.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B86

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-2

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-2A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	340	U
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
98-86-2	Acetophenone	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
105-60-2	Caprolactam	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	850	U
92-52-4	1,1'-Biphenyl	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	850	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
208-96-8	Acenaphthylene	340	U
99-09-2	3-Nitroaniline	850	U
83-32-9	Acenaphthene	340	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B86

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-2

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-2A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	850	U J
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
100-01-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	N-nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U J
1912-24-9	Atrazine	340	~~U~~ R
87-86-5	Pentachlorophenol	850	U J
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U J
117-84-0	Di-n-octylphthalate	110	~~J~~ J
205-99-2	Benzo(b)fluoranthene	340	U J
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B86

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-2

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-2A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/09/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Extraction: (Type) SONC

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	130	~~JB~~ R
2.		UNKNOWN	16.71	70	J
3.					
4.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B87

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-3A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	340	U
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
98-86-2	Acetophenone	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
105-60-2	Caprolactam	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	850	U
92-52-4	1,1'-Biphenyl	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	850	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
208-96-8	Acenaphthylene	340	U
99-09-2	3-Nitroaniline	850	U
83-32-9	Acenaphthene	340	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B87

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B8

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-3A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	850	U J
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
100-01-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	N-nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
1912-24-9	Atrazine	340	U J
87-86-5	Pentachlorophenol	340	~~U~~ R
85-01-8	Phenanthrene	850	U J
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U J
117-84-0	Di-n-octylphthalate	55	~~J~~ J
205-99-2	Benzo(b)fluoranthene	340	U J
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

B0B87

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-3

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-3A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 Decanted: (Y/N) N Date Extracted:09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Extraction: (Type) SONC

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	120	~~JB~~ R
2.					
3.					
4.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B88

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-4

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-4A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	340	UJ
108-95-2	Phenol	340	UA
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
98-86-2	Acetophenone	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
105-60-2	Caprolactam	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	340	U
92-52-4	1,1'-Biphenyl	850	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	340	U
131-11-3	Dimethylphthalate	850	U
606-20-2	2,6-Dinitrotoluene	340	U
208-96-8	Acenaphthylene	340	U
99-09-2	3-Nitroaniline	340	U
83-32-9	Acenaphthene	850	UJ
		340	UJ

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B88

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-4

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-4A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	850	UJ
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
100-01-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	N-nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	UJ
1912-24-9	Atrazine	340	~~U~~ R
87-86-5	Pentachlorophenol	850	UJ
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	84	~~U~~ J
117-84-0	Di-n-octylphthalate	340	UJ
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	UJ

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: B0B88

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-4

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-4A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/09/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.62	160	~~JB~~ R
2.					
3.					
4.					
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30.					

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B89

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-5

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-5A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	340	UJ
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
98-86-2	Acetophenone	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
105-60-2	Caprolactam	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	340	U
92-52-4	1,1'-Biphenyl	850	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	340	U
131-11-3	Dimethylphthalate	850	U
606-20-2	2,6-Dinitrotoluene	340	U
208-96-8	Acenaphthylene	340	U
99-09-2	3-Nitroaniline	340	U
83-32-9	Acenaphthene	850	UJ
		340	UJ

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B89

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-5

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-5A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	850	UJ
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
100-01-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	N-nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	UJ
1912-24-9	Atrazine	340	~~U~~R
87-86-5	Pentachlorophenol	850	UJ
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	UJ
117-81-7	bis(2-Ethylhexyl)phthalate	74	~~J~~J
117-84-0	Di-n-octylphthalate	340	UJ
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	UJ

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B89

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-5

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-5A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/09/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Extraction: (Type) SONC

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	110	~~JB~~ R
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B90

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-6A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	340	U
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
98-86-2	Acetophenone	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
105-60-2	Caprolactam	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	850	U
92-52-4	1,1'-Biphenyl	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	850	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
208-96-8	Acenaphthylene	340	U
99-09-2	3-Nitroaniline	850	U
83-32-9	Acenaphthene	340	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B90

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-6A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	850	U J
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
100-01-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	N-nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U J
1912-24-9	Atrazine	340	~~U~~ R
87-86-5	Pentachlorophenol	850	U J
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U J
117-81-7	bis(2-Ethylhexyl)phthalate	88	~~J~~ J
117-84-0	Di-n-octylphthalate	340	U J
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B90

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-6

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-6A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/09/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	110	~~JB~~ R
2.					
3.					
4.					
5.					
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30.					

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B91

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-7

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-7A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	840	U
92-52-4	1,1'-Biphenyl	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	840	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	840	U
83-32-9	Acenaphthene	330	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B91

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-7

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-7A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	UJ
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	330	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-nitrosodiphenylamine (1)	840	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
1912-24-9	Atrazine	330	UJ
87-86-5	Pentachlorophenol	330	UR
85-01-8	Phenanthrene	840	UJ
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	UJ
117-84-0	Di-n-octylphthalate	44	UJ
205-99-2	Benzo(b)fluoranthene	330	UJ
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	UJ

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B0B91

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-7

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-7A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	100	~~JB~~ R
2.	106-28-5	2,6,10-DODECATRIEN-1-OL, 3,7	16.70	95	NJ
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B92

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-8

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-8A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	840	U
92-52-4	1,1'-Biphenyl	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	840	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	840	U
83-32-9	Acenaphthene	330	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B92

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-8

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-8A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
1912-24-9	Atrazine	330	~~U~~ R
87-86-5	Pentachlorophenol	840	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	90	J
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B92

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-8

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-8A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Extraction: (Type) SONC

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	130	JB R
2.					
3.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B93

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-9

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-9A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U J
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	330	U
92-52-4	1,1'-Biphenyl	840	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	330	U
131-11-3	Dimethylphthalate	840	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	330	U
83-32-9	Acenaphthene	840	U
		330	U J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B93

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-9

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-9A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
1912-24-9	Atrazine	330	U
87-86-5	Pentachlorophenol	330	UR
85-01-8	Phenanthrene	840	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	710	J
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B93

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-9

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-9A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Extraction: (Type) SONC

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.61	130	~~JB~~ R.
2.		UNKNOWN	15.97	71	J
3.		UNKNOWN	16.71	95	J
4.		UNKNOWN	21.07	140	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B94

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-10

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-10A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U J
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	840	U
92-52-4	1,1'-Biphenyl	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	840	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	840	U
83-32-9	Acenaphthene	330	U J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B94

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-10

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-10A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
1912-24-9	Atrazine	330	~~U~~ R
87-86-5	Pentachlorophenol	840	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	49	~~J~~ J
129-00-0	Pyrene	41	~~J~~ J
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	37	~~J~~ J
117-81-7	bis(2-Ethylhexyl)phthalate	150	~~J~~ J
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	37	~~J~~ J
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: B0B94

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-10A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 Decanted: (Y/N) N Date Extracted:09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	140	~~JB~~ R
2.		UNKNOWN	16.70	97	J
3.		UNKNOWN	17.09	68	J
4.		UNKNOWN	21.06	98 ~~97~~	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B96

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-11

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-11A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	UJ
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	840	U
92-52-4	1,1'-Biphenyl	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	840	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	840	U
83-32-9	Acenaphthene	330	UJ

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B96

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-11

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-11A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U J
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U J
1912-24-9	Atrazine	330	U R
87-86-5	Pentachlorophenol	840	U J
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U J
129-00-0	Pyrene	39	J J
85-68-7	Butylbenzylphthalate	330	U J
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U J
117-81-7	bis(2-Ethylhexyl)phthalate	130	J J
117-84-0	Di-n-octylphthalate	330	U J
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B96

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-11

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-11A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	130	~~JB~~ R
2.		UNKNOWN	16.70	82	J
3.					
4.					
5.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B97

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-12

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-12A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	330	U
92-52-4	1,1'-Biphenyl	840	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	330	U
131-11-3	Dimethylphthalate	840	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	330	U
83-32-9	Acenaphthene	840	U
		330	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B97

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-12

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-12A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U J
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U J
1912-24-9	Atrazine	330	~~U~~ R
87-86-5	Pentachlorophenol	840	U J
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U J
206-44-0	Fluoranthene	39	~~J~~ J
129-00-0	Pyrene	330	U J
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	410	J
117-84-0	Di-n-octylphthalate	330	U J
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B97

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-12A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2 Extraction: (Type) SONC

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	130	~~JB~~ R
2.		UNKNOWN	16.70	110	J
3.		UNKNOWN	23.58	72	J
4.		UNKNOWN	24.98	69	J
5.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B98

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-13

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-13A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	UJ
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	840	U
92-52-4	1,1'-Biphenyl	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	840	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	840	U
83-32-9	Acenaphthene	330	UJ

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B98

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-13

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-13A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U J
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U J
1912-24-9	Atrazine	330	~~U~~ R
87-86-5	Pentachlorophenol	840	U J
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U J
206-44-0	Fluoranthene	40	~~J~~ J
129-00-0	Pyrene	38	~~J~~ J
85-68-7	Butylbenzylphthalate	260	~~J~~ J
91-94-1	3,3'-Dichlorobenzidine	330	U J
56-55-3	Benzo(a)anthracene	330	U J
218-01-9	Chrysene	36	~~J~~ J
117-81-7	bis(2-Ethylhexyl)phthalate	82	~~J~~ J
117-84-0	Di-n-octylphthalate	330	U J
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U J

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

B0B98

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-13

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-13A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/09/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	130	~~JB~~ R
2.		UNKNOWN	21.06	130	J
3.					
4.					
5.					
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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B99

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-14

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-14A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	340	U
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
98-86-2	Acetophenone	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
105-60-2	Caprolactam	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	850	U
92-52-4	1,1'-Biphenyl	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	850	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
208-96-8	Acenaphthylene	340	U
99-09-2	3-Nitroaniline	850	U
83-32-9	Acenaphthene	340	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B99

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-14

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-14A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	850	U
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
100-01-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	N-nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
1912-24-9	Atrazine	340	U
87-86-5	Pentachlorophenol	340	~~U~~ R
85-01-8	Phenanthrene	850	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	280	~~J~~
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B99

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-14

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-14A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 2 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	130	~~JB~~ R
2.		UNKNOWN	16.70	79	J
3.					
4.					
5.					
6.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-15

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-15A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	840	U
92-52-4	1,1'-Biphenyl	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	840	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	840	U
83-32-9	Acenaphthene	330	U

FORM I SV-1 OLM04.2

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-15

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-15A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	UJ
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	UJ
1912-24-9	Atrazine	330	~~U~~ R
87-86-5	Pentachlorophenol	840	UJ
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	UJ
117-81-7	bis(2-Ethylhexyl)phthalate	130	~~J~~ J
117-84-0	Di-n-octylphthalate	330	UJ
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	UJ

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B0BA0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-15

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-15A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 Decanted: (Y/N) N Date Extracted:09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.60	130	~~JB~~ R
2.		UNKNOWN	16.70	100	J
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FORM I SV-TIC OLM04.2

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-16

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-16A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
92-52-4	1,1'-Biphenyl	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-16

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-16A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	830	UJ
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	UJ
1912-24-9	Atrazine	330	R
87-86-5	Pentachlorophenol	830	UJ
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	UJ
129-00-0	Pyrene	120	J
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	120	J
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: B0BA1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-16

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-16A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted:09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Extraction: (Type) SONC

Number TICs found: 15 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.62	130	~~JB~~ R.
2.		UNKNOWN	12.76	78	J
3.		UNKNOWN PHTHALATE	14.89	86	~~J~~ R
4.		UNKNOWN PHTHALATE	16.18	160	~~J~~ R
5.		UNKNOWN PHTHALATE	16.36	140	J R
6.		UNKNOWN PHTHALATE	16.51	210	J R
7.		UNKNOWN PHTHALATE	16.62	99	~~J~~ R
8.		UNKNOWN	16.70	220	J
9.		UNKNOWN PHTHALATE	16.77	180	~~J~~ R
10.		UNKNOWN PHTHALATE	16.87	170	J R
11.		UNKNOWN PHTHALATE	16.95	90	~~J~~ R
12.		UNKNOWN PHTHALATE	17.06	84	~~J~~ R
13.		UNKNOWN	21.06	280	J
14.		UNKNOWN	21.14	70	J
15.		UNKNOWN	21.63	96	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-17

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-17A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	330	U
92-52-4	1,1'-Biphenyl	840	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	330	U
131-11-3	Dimethylphthalate	840	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	330	U
83-32-9	Acenaphthene	840	U
		330	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-17

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-17A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U J
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	330	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-nitrosodiphenylamine (1)	840	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
1912-24-9	Atrazine	330	U J
87-86-5	Pentachlorophenol	330	~~U~~ R
85-01-8	Phenanthrene	840	U J
120-12-7	Anthracene	170	J J
86-74-8	Carbazole	330	U J
84-74-2	Di-n-butylphthalate	330	U J
206-44-0	Fluoranthene	330	U J
129-00-0	Pyrene	220	J J
85-68-7	Butylbenzylphthalate	130	J J
91-94-1	3,3'-Dichlorobenzidine	330	U J
56-55-3	Benzo(a)anthracene	330	U J
218-01-9	Chrysene	120	J J
117-81-7	bis(2-Ethylhexyl)phthalate	120	J J
117-84-0	Di-n-octylphthalate	79	J J
205-99-2	Benzo(b)fluoranthene	330	U J
207-08-9	Benzo(k)fluoranthene	98	J J
50-32-8	Benzo(a)pyrene	86	J J
193-39-5	Indeno(1,2,3-cd)pyrene	330	U J
53-70-3	Dibenzo(a,h)anthracene	330	U J
191-24-2	Benzo(g,h,i)perylene	330	U J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: B0BA2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-17

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-17A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/10/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.61	140	~~JB~~ K.
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-18

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-18A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U J
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	330	U
92-52-4	1,1'-Biphenyl	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	330	U
131-11-3	Dimethylphthalate	830	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	330	U
83-32-9	Acenaphthene	830	U
		330	U J

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-18

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-18A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	830	U J
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U J
1912-24-9	Atrazine	330	~~U~~ R
87-86-5	Pentachlorophenol	830	U J
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U J
206-44-0	Fluoranthene	34	~~U~~ J
129-00-0	Pyrene	52	~~U~~ J
85-68-7	Butylbenzylphthalate	330	U J
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U J
117-81-7	bis(2-Ethylhexyl)phthalate	400	J
117-84-0	Di-n-octylphthalate	330	U J
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-18

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-18A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted:09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Extraction: (Type) SONC

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.61	140	~~JB~~ R
2.		UNKNOWN	16.71	79	J
3.		UNKNOWN	21.07	230	J
4.		UNKNOWN	21.63	87	J
5.					
6.					
7.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA4

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-19

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-19A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	U
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
92-52-4	1,1'-Biphenyl	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA4

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-19

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B85-19A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	330	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-nitrosodiphenylamine (1)	830	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
1912-24-9	Atrazine	330	U
87-86-5	Pentachlorophenol	330	U R
85-01-8	Phenanthrene	830	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	130	J
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA4

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-19

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B85-19A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted:09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Extraction: (Type) SONC

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.61	110	~~JB~~ R
2.		UNKNOWN	21.07	95	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B85

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 2 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/13/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	UJ
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.4	UJ
72-55-9	4,4'-DDE	2.3	~~JP~~ J
72-20-8	Endrin	3.4	UJ
33213-65-9	Endosulfan II	3.4	UJ
72-54-8	4,4'-DDD	3.4 ~~1.4~~	~~JP~~ UJ
1031-07-8	Endosulfan sulfate	3.4	UJ
50-29-3	4,4'-DDT	4.2	~~P~~ J
72-43-5	Methoxychlor	17	UJ
53494-70-5	Endrin ketone	3.4	UJ
7421-93-4	Endrin aldehyde	3.4	UJ
5103-71-9	alpha-Chlordane	1.7 ~~0.68~~	~~JP~~ UJ
5103-74-2	gamma-Chlordane	0.61	~~JP~~ J
8001-35-2	Toxaphene	170	UJ
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	UJ

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B86

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-2

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 2 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/13/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	UJ
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.4	UJ
72-55-9	4,4'-DDE	1.8	~~JP~~ J
72-20-8	Endrin	3.4	UJ
33213-65-9	Endosulfan II	3.4	UJ
72-54-8	4,4'-DDD	3.4 ~~1.4~~	~~JP~~ UJ
1031-07-8	Endosulfan sulfate	3.4	UJ
50-29-3	4,4'-DDT	3.6	~~P~~ JN
72-43-5	Methoxychlor	17	UJ
53494-70-5	Endrin ketone	3.4	UJ
7421-93-4	Endrin aldehyde	3.4	UJ
5103-71-9	alpha-Chlordane	1.7 ~~1.3~~	~~JP~~ UJ
5103-74-2	gamma-Chlordane	0.80	~~J~~ J
8001-35-2	Toxaphene	170	UJ
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	UJ

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B87

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 2 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U J
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.4	U J
72-55-9	4,4'-DDE	2.0	~~J~~ J
72-20-8	Endrin	3.4	U
33213-65-9	Endosulfan II	3.4	U
72-54-8	4,4'-DDD	3.4	U
1031-07-8	Endosulfan sulfate	3.4	U J
50-29-3	4,4'-DDT	5.4	J
72-43-5	Methoxychlor	17	U J
53494-70-5	Endrin ketone	3.4	U
7421-93-4	Endrin aldehyde	3.4	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U J

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B88

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-4

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 2 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	UJ
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.4	UJ
72-55-9	4,4'-DDE	2.0	~~JP~~ J
72-20-8	Endrin	3.4	UJ
33213-65-9	Endosulfan II	3.4	U
72-54-8	4,4'-DDD	3.4	U
1031-07-8	Endosulfan sulfate	3.4	UJ
50-29-3	4,4'-DDT	3.5	~~P~~ J
72-43-5	Methoxychlor	17	~~U~~ J
53494-70-5	Endrin ketone	3.4	UJ
7421-93-4	Endrin aldehyde	3.4	UJ
5103-71-9	alpha-Chlordane	1.7	UJ
5103-74-2	gamma-Chlordane	~~1.7~~ ~~0.75~~	~~JP~~ UJ
8001-35-2	Toxaphene	170	UJ
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	UJ

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B89

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-5

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 2 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U J
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.4	U J
72-55-9	4,4'-DDE	2.4	~~J~~ J
72-20-8	Endrin	3.4	U J
33213-65-9	Endosulfan II	3.4	U J
72-54-8	4,4'-DDD	3.4 ~~1.6~~	~~JP~~ UJ
1031-07-8	Endosulfan sulfate	3.4	U J
50-29-3	4,4'-DDT	3.4 ~~2.5~~	~~JP~~ UJ
72-43-5	Methoxychlor	17	U J
53494-70-5	Endrin ketone	3.4	U J
7421-93-4	Endrin aldehyde	3.4	U J
5103-71-9	alpha-Chlordane	1.7 ~~0.62~~	~~JP~~ UJ
5103-74-2	gamma-Chlordane	1.1	~~J~~ J
8001-35-2	Toxaphene	170	U J
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U J

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B90

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 2 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	UJ
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	UJ
1024-57-3	Heptachlor epoxide	1.7 ~~0.52~~	~~JP~~ UJ
959-98-8	Endosulfan I	1.7	UJ
60-57-1	Dieldrin	3.4	UJ
72-55-9	4,4'-DDE	2.1	~~JP~~ J
72-20-8	Endrin	3.4	UJ
33213-65-9	Endosulfan II	3.4	UJ
72-54-8	4,4'-DDD	3.4	UJ
1031-07-8	Endosulfan sulfate	3.4	UJ
50-29-3	4,4'-DDT	4.3	~~P~~ R
72-43-5	Methoxychlor	17	UJ
53494-70-5	Endrin ketone	3.4	UJ
7421-93-4	Endrin aldehyde	3.4	UJ
5103-71-9	alpha-Chlordane	1.7	UJ
5103-74-2	gamma-Chlordane	1.7 ~~0.38~~	~~JP~~ UJ
8001-35-2	Toxaphene	170	UJ
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	UJ

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B91

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-7

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 2 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U J
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.4	U J
72-55-9	4,4'-DDE	1.9	~~JP~~ J
72-20-8	Endrin	3.4	U J
33213-65-9	Endosulfan II	3.4	U J
72-54-8	4,4'-DDD	3.4	U J
1031-07-8	Endosulfan sulfate	3.4	U J
50-29-3	4,4'-DDT	4.5	~~P~~ J
72-43-5	Methoxychlor	17	U J
53494-70-5	Endrin ketone	3.4	U J
7421-93-4	Endrin aldehyde	3.4	U J
5103-71-9	alpha-Chlordane	~~1.7~~ ~~0.56~~	~~JP~~ UJ
5103-74-2	gamma-Chlordane	~~1.7~~ ~~0.42~~	~~JP~~ UJ
8001-35-2	Toxaphene	170	U J
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U J

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B92

Lab Name: COMPUCHEM Contract: 68W99071

Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-8

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 1 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U J
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U J
72-55-9	4,4'-DDE	1.5	~~JP~~ J
72-20-8	Endrin	3.3	U J
33213-65-9	Endosulfan II	3.3	U J
72-54-8	4,4'-DDD	3.3	U J
1031-07-8	Endosulfan sulfate	3.3	U J
50-29-3	4,4'-DDT	5.4	J
72-43-5	Methoxychlor	17	U J
53494-70-5	Endrin ketone	3.3	U J
7421-93-4	Endrin aldehyde	3.3	U J
5103-71-9	alpha-Chlordane	1.0	~~J~~ J
5103-74-2	gamma-Chlordane	0.57	~~JP~~ J
8001-35-2	Toxaphene	170	U J
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U J

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B93

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-9

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 1 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/14/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7 ~~0.48~~	~~JP~~ UJ
319-85-7	beta-BHC	1.7	UJ
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	UJ
72-55-9	4,4'-DDE	3.3 ~~2.1~~	~~JP~~ UJ
72-20-8	Endrin	3.3	UJ
33213-65-9	Endosulfan II	3.3	UJ
72-54-8	4,4'-DDD	3.3 ~~1.5~~	~~JP~~ UJ
1031-07-8	Endosulfan sulfate	3.3	UJ
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-93-4	Endrin aldehyde	3.3	UJ
5103-71-9	alpha-Chlordane	2.7	J
5103-74-2	gamma-Chlordane	1.7 ~~1.4~~	~~JP~~ UJ
8001-35-2	Toxaphene	170	UJ
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B94

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-10

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 1 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U J
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U J
72-55-9	4,4'-DDE	1.8	~~J~~ J
72-20-8	Endrin	3.3	U J
33213-65-9	Endosulfan II	3.3	U J
72-54-8	4,4'-DDD	3.3 ~~1.3~~	~~JP~~ UJ
1031-07-8	Endosulfan sulfate	3.3	U J
50-29-3	4,4'-DDT	3.3 ~~2.7~~	~~JP~~ UJ
72-43-5	Methoxychlor	17	U J
53494-70-5	Endrin ketone	3.3	U J
7421-93-4	Endrin aldehyde	3.3	U J
5103-71-9	alpha-Chlordane	1.7 ~~1.2~~	~~JP~~ UJ
5103-74-2	gamma-Chlordane	0.41	~~J~~ J
8001-35-2	Toxaphene	170	U J
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U J

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B96

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-11

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 1 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	~~1.7~~	U J
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U J
1024-57-3	Heptachlor epoxide	1.7 ~~0.98~~	~~JP~~ UJ
959-98-8	Endosulfan I	1.7	U J
60-57-1	Dieldrin	3.3	U J
72-55-9	4,4'-DDE	2.1	~~J~~ J
72-20-8	Endrin	3.3	U J
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U J
50-29-3	4,4'-DDT	3.3 ~~1.7~~	~~JP~~ UJ
72-43-5	Methoxychlor	17	U J
53494-70-5	Endrin ketone	3.3	U J
7421-93-4	Endrin aldehyde	3.3	U J
5103-71-9	alpha-Chlordane	1.7	U J
5103-74-2	gamma-Chlordane	1.7 ~~0.52~~	~~JP~~ UJ
8001-35-2	Toxaphene	170	U J
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	68 ~~67~~	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U J

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B97

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-12

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 1 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	1.7	U J
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U J
72-55-9	4,4'-DDE	3.3 ~~2.1~~	~~JP~~ UJ
72-20-8	Endrin	3.3	U J
33213-65-9	Endosulfan II	3.3	U J
72-54-8	4,4'-DDD	1.6	~~JP~~ J
1031-07-8	Endosulfan sulfate	3.3	U J
50-29-3	4,4'-DDT	3.3 ~~1.6~~	~~JP~~ UJ
72-43-5	Methoxychlor	17	U J
53494-70-5	Endrin ketone	3.3	U J
7421-93-4	Endrin aldehyde	3.3	U J
5103-71-9	alpha-Chlordane	1.7	U J
5103-74-2	gamma-Chlordane	0.70	~~J~~ J
8001-35-2	Toxaphene	170	U J
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U J

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B98

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-13

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 1 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/14/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	UJ
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	UJ
1024-57-3	Heptachlor epoxide	~~1.7~~ 0.62	~~JP~~ UJ
959-98-8	Endosulfan I	1.7	UJ
60-57-1	Dieldrin	3.3	UJ
72-55-9	4,4'-DDE	~~3.3~~ 3	~~JP~~ UJ
72-20-8	Endrin	3.3	UJ
33213-65-9	Endosulfan II	3.3	UJ
72-54-8	4,4'-DDD	1.5	~~J~~ J
1031-07-8	Endosulfan sulfate	3.3	UJ
50-29-3	4,4'-DDT	~~3.3~~ 2.1	~~JP~~ UJ
72-43-5	Methoxychlor	17	UJ
53494-70-5	Endrin ketone	3.3	UJ
7421-93-4	Endrin aldehyde	3.3	UJ
5103-71-9	alpha-Chlordane	1.7	UJ
5103-74-2	gamma-Chlordane	~~1.7~~ 0.57	~~JP~~ UJ
8001-35-2	Toxaphene	170	UJ
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	UJ

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B99

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-14

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 2 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	UJ
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.4	UJ
72-55-9	4,4'-DDE	3.4 ~~1.6~~	~~JP~~ UJ
72-20-8	Endrin	3.4	UJ
33213-65-9	Endosulfan II	3.4	UJ
72-54-8	4,4'-DDD	2.5	~~JP~~ J
1031-07-8	Endosulfan sulfate	3.4	UJ
50-29-3	4,4'-DDT	3.4 ~~2.7~~	~~JP~~ UJ
72-43-5	Methoxychlor	17	UJ
53494-70-5	Endrin ketone	3.4	UJ
7421-93-4	Endrin aldehyde	3.4 ~~0.68~~	~~JP~~ UJ
5103-71-9	alpha-Chlordane	1.7 ~~0.59~~	~~JP~~ UJ
5103-74-2	gamma-Chlordane	0.45	~~J~~ J
8001-35-2	Toxaphene	170	UJ
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	69	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	UJ

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-15

Sample wt/vol: 30.0(g/mL) G Lab File ID:

% Moisture: 1 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	UJ
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	UJ
72-55-9	4,4'-DDE	2.0	~~J~~ J
72-20-8	Endrin	3.3	UJ
33213-65-9	Endosulfan II	3.3	UJ
72-54-8	4,4'-DDD	1.7	~~J~~ J
1031-07-8	Endosulfan sulfate	3.3	UJ
50-29-3	4,4'-DDT	3.3 ~~2.1~~	~~JP~~ UJ
72-43-5	Methoxychlor	17	UJ
53494-70-5	Endrin ketone	3.3	UJ
7421-93-4	Endrin aldehyde	3.3	UJ
5103-71-9	alpha-Chlordane	~~1.7~~ ~~1.2~~	~~JP~~ UJ
5103-74-2	gamma-Chlordane	1.7	UJ
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	UJ

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA1

Lab Name: COMPUCHEM Contract: 68W99071

Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-16

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 0 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U J
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U J
60-57-1	Dieldrin	1.3	~~J~~ J
72-55-9	4,4'-DDE	3.5	J
72-20-8	Endrin	3.3	U J
33213-65-9	Endosulfan II	3.3	U J
72-54-8	4,4'-DDD	2.3	~~JP~~ J
1031-07-8	Endosulfan sulfate	3.3	U J
50-29-3	4,4'-DDT	~~3.3~~ 3.0	~~JP~~ VJ
72-43-5	Methoxychlor	78	J
53494-70-5	Endrin ketone	3.3	U J
7421-93-4	Endrin aldehyde	1.6	~~J~~ J
5103-71-9	alpha-Chlordane	1.7	U J
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U J

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-17

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 1 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/14/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	UJ
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	UJ
72-55-9	4,4'-DDE	1.5	~~JP~~ J
72-20-8	Endrin	3.3	UJ
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	UJ
50-29-3	4,4'-DDT	3.3 ~~2.7~~	~~JP~~ UJ
72-43-5	Methoxychlor	17	UJ
53494-70-5	Endrin ketone	3.3	UJ
7421-93-4	Endrin aldehyde	3.3	UJ
5103-71-9	alpha-Chlordane	~~1.7~~ ~~1.0~~	~~JP~~ UJ
5103-74-2	gamma-Chlordane	1.7	UJ
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	UJ

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-18

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 0 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	UJ
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	3.3	UJ
60-57-1	Dieldrin	3.3	JP J
72-55-9	4,4'-DDE	3.3	UJ
72-20-8	Endrin	3.3	UJ
33213-65-9	Endosulfan II	1.8	~~J~~ J
72-54-8	4,4'-DDD	3.3	UJ
1031-07-8	Endosulfan sulfate	4.8	~~P~~ JN
50-29-3	4,4'-DDT	17	UJ
72-43-5	Methoxychlor	3.3	UJ
53494-70-5	Endrin ketone	3.3	UJ
7421-93-4	Endrin aldehyde	1.3	JP J
5103-71-9	alpha-Chlordane	1.7 ~~0.46~~	~~JP~~ UJ
5103-74-2	gamma-Chlordane	170	UJ
8001-35-2	Toxaphene	33	U
12674-11-2	Aroclor-1016	67	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	UJ

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA4

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B85

Matrix: (soil/water) SOIL Lab Sample ID: B0B85-19

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 0 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	0.54	~~JP~~ J
319-85-7	beta-BHC	~~1.7~~	UJ
319-86-8	delta-BHC	1.7	UJ
58-89-9	gamma-BHC (Lindane)	1.7	UJ
76-44-8	Heptachlor	1.7	UJ
309-00-2	Aldrin	1.7	UJ
1024-57-3	Heptachlor epoxide	~~1.7~~ ~~1.2~~	~~JP~~ UJ
959-98-8	Endosulfan I	1.7	UJ
60-57-1	Dieldrin	3.3	UJ
72-55-9	4,4'-DDE	~~3.3~~ ~~1.7~~	~~JP~~ UJ
72-20-8	Endrin	3.3	UJ
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	UJ
72-43-5	Methoxychlor	22	J
53494-70-5	Endrin ketone	3.3	UJ
7421-93-4	Endrin aldehyde	3.3	UJ
5103-71-9	alpha-Chlordane	~~1.7~~ ~~0.93~~	~~JP~~ UJ
5103-74-2	gamma-Chlordane	~~1.7~~ ~~1.2~~	~~JP~~ UJ
8001-35-2	Toxaphene	170	UJ
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	UJ

Functional Guidelines for Evaluating Organic Analysis

CASE No.: 29681 SDG No.: B0BB3
LABORATORY: LIBERTY SITE: ROSELLE PARK

DATA ASSESSMENT

The current SOP HW-6 (Revision 11) June 1996, USEPA Region II Data Validation SOP for Statement of Work OLMO 4.2. for evaluating organic data have been applied.

All data are valid and acceptable except those analytes rejected "R"(unusable). Due to the detection of QC problems, some analytes may have the "J" (estimated), "N"(presumptive evidence for the presence of the material, "U" (non-detect) or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's Signature: Andy Panayiotou Date: October 12, 2001

Verified By: D Karras Date: 10/16/2001

SDG#B0BB3

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

DC-X: The following unpreserved liquid volatile samples have aromatic analytes outside primary technical holding time criteria. Contractual holding times were met.
Hits are qualified "J" and non-detects are qualified "UJ".

B0BB3

Benzene, Toluene, Chlorobenzene, Ethylbenzene, Xylenes (total), Styrene, Isopropylbenzene 1,3-Dichlorobenzene, 1,4-Dichlorobenzene 1,2-Dichlorobenzene , 1,2,4-Trichlorobenzene

2. SURROGATES

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

VOA/BNA/PEST:
No problems

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

No qualification is performed based on MS/MSD recovery.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than 5 times the blank contaminant level (10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) Method blank contamination:

Not Applicable. Sample is a rinsate blank.

B) Field or rinse blank contamination:

Not Applicable. Sample is a rinsate blank.

C) Trip blank contamination for VOA aqueous samples:

Not Applicable.

D) Storage Blank associated with VOA samples only

No contamination in the storage blank.

E) Tics "R" rejected

None

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenyl-phosphine (DFTPP).

If the mass calibration is in error, all associated data will be classified as unusable "R".

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of

producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be ≥ 0.05 in both initial and continuing calibrations. A value < 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

No problem.

B)Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be < 30% and %D must be < 25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:

DC-23: The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

B0BB3, VBLKFV, VHBLKFV
Chloromethane

DC-xxx: The following semivolatile samples are associated with an Initial calibration percent relative standard deviation (%RSD) outside expanded criteria.
Hits are qualified "J" and non-detects are qualified "R".

B0BB3, SBLKKZ
Atrazine

DC-100: The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

B0BB3, SBLKKZ
2,4-Dinitrophenol

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction.

No problem.

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

B) Pesticide Fraction:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract.

No problems.

10. CONTRACT PROBLEMS NON-COMPLIANCE:

11. FIELD DOCUMENTATION:

12. OTHER PROBLEMS

13. This package contains reextractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified not to be used.

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YES NO N/A

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: 29681 LABORATORY: LIBERTY

SITE NAME: Roselle Park Baseball Field SDG Number(s): BOB95, BOBB3

1.0 Chain of Custody and Sampling Trip Reports

1.1 Are the Traffic Reports/Chain-of-Custody Records present for all samples? [✓] ___ ___

ACTION: If no, contact RSCC, or contact the TOPO to obtain replacement of missing or illegible copies from the lab.

1.2 Is the Sampling Trip Report present for all samples and all fractions? [✓] ___ ___

ACTION: If no, contact either RSCC or ask the TOPO to obtain this information from the prime contractor.

2.0 Data Completeness and Deliverables

2.1 Have any missing deliverables been received and added to the data package? ___ ✓

NOTE: The lab is required to submit data for only two analyses, for each fraction. (i.e., the original sample and one dilution, or the most concentrated dilution analyzed and one further dilution.)

ACTION: Contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the lab. If lab cannot provide them, note the effect on the review of the package in the Contract Problems/Non-compliance section of the Data Assessment.

2.2 Was CLASS CCS checklist included with package? [✓] ___ ___

	YES	NO	N/A
2.3 Are there any discrepancies between the Traffic Reports/Chain-of-Custody Records, Sampling Report and Sample Tags?	___	[✓]	___

ACTION: If yes, contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the laboratory.

3.0 Cover Letter SDG Narrative

3.1 Is the Narrative or Cover Letter Present?	[✓]	___	___
3.2 Are case number, SDG number and contract number contained in the SDG Narrative or cover letter (see SOW, Exhibit B, section 2.6.1)? EPA sample numbers in the SDG, detailed documentation of any quality control, sample, shipment, and/or analytical problems encountered in processing the samples? Corrective action taken?	[✓]	___	___
3.3 Does the narrative contain the following information:			
VOA: description of trap and columns used for sample analyses?	[✓]	___	___
VOA: a NOTE stating whether Volatile low level soil samples prepared according to the modified SW-846 Method 5035? (p. B-9/VOA, sec 2.6.1)	[✓]	___	___
VOA: any discrepancies between low level soil weights determined in the field and in the Laboratory? (p. B-10/VOA, sec. 2.6.1)	___	[✓]	___
BNA: description of columns used for sample analyses?	[✓]	___	___
Pest: description of columns used for sample analyses?	[✓]	___	___

NOTE: As per section 6.23.3.1 SOW/p. D-11/Pest,

	YES	NO	N/A
Packed columns are not permitted.			
3.4 Does the narrative, VOA and BNA sections, contain a list of all TIC's identified as alkanes and their estimated concentrations?	[✓]	___	___
3.5 Is the temperature indicator bottle present in the cooler? If not, did the Laboratory document in the SDG Narrative the alternative technique used to determine the cooler temperature? (Exhibit A/ p. A-5 sec. 4.2.1.2.3.3)	[✓]	___	___
3.6 Does the narrative contain a record of all cooler temperatures? If the temperature of a cooler was exceeded, > 10° C, the lab must list by fraction and sample number, all affected samples.	[✓]	___	___
3.7 Does the Narrative contain a list of sample reanalyses submitted? Did the Lab distinguish whether the reanalysis is billable, and if so why?	[✓]	___	___
3.8 Does the narrative contain a list of the pH values determined for each water sample submitted for volatile analysis (SOW Exhibit B, section 2.6.1.2)?	[ ]	___	✓
3.9 Does the Case Narrative contain the statement, "verbatim", as required in Section B of the SOW?	[✓]	___	___

ACTION: If "No", to any question in this section, contact the TOPO to obtain all necessary resubmittals. If information is not available, document in the Data Assessment under Contract Problems/Non-Compliance section.

4.0 Data Validation Checklist

4.1 Check the package for the following discrepancies:			
a. Is the package paginated in ascending order starting from the SDG narrative?	[✓]	___	___

	YES	NO	N/A
b. Are all forms and copies legible?	[✓]	___	___
c. Is each fraction assembled in the order set forth in the SOW?	[✓]	___	___

The following checklist is divided into three parts. Part A is for any VOA analyses, Part B is for BNA's and Part C is Pesticide/PCB's.

Does this package contain:

VOA Data?	✓	___	
BNA Data?	✓	___	
Pesticide/PCB data?	✓	___	

ACTION: Complete corresponding parts of checklist.

YES NO N/A

PART A: VOA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody Records, Sampling Report or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data? ___ [√] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data shall be flagged as estimated (J). If a soil sample other than TCLP contains more than 90% water, then qualify positive results "J", and non-detects "R".

ACTION: If samples were not iced or the ice was melted upon arrival at the laboratory and the cooler temperature was elevated (> 10° C), then flag all positive results with a "J" and all non-detects "UJ".

ACTION: If both VOA vials for a sample have air bubbles or the VOA vial analyzed had air bubbles, flag all positive results "J" and all non-detects "R".

ACTION: The smallest soil size permitted is 0.5g. If any soil sample is smaller than 0.5g, document in the Data Assessment under Contract Problems/Non-Compliance.

2.0 Holding Times

for BoBB3 Aromatics ok.

for BoB95

2.1 Have any VOA technical holding times, determined from date of collection to date of analysis, been exceeded? [√] ___

Technical Holding Times for AQUEOUS AND SOIL NON-ENCORE SAMPLES: If unpreserved, aqueous samples, maintained at 4° C for aromatic hydrocarbons analysis must be analyzed within 7 days of collection. If

YES NO N/A

preserved with HCl (pH < 2) and stored at 4° C, then aqueous samples must be analyzed within 14 days of collection. If uncertain about preservation, contact sampler to determine whether or not samples were preserved. The holding time for non-Encore soils is 10 days from date of collection.

ACTION: If technical holding times for aqueous samples and soil non-Encore samples are exceeded, flag all positive results as estimated "J" and sample quantitation limits as estimated "UJ", and document in the Data Assessment that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all results must be qualified "J", but the reviewer may determine that non-detect data are unusable "R". If holding times are exceeded by more than 28 days, all non detect data are unusable "R".

NOTE: Contractual Holding Times: Analysis of water and Non-Encore soil samples must be completed within 10 days of Validated Time of Sample Receipt (VTSR). This requirement does not apply to Performance Evaluation (PE) samples.

Technical Holding Times for soils Encore samples:

i) If sample was preserved ≤ 2 days of VTSR:

1. and analyzed ≤ 14 days from DoC, NO action needed.
2. and analyzed > 14 days from DoC, qualify positive results "J" and non-detects "UJ".
3. and analyzed > 28 days from DoC, qualify positive results "J" and non-detects "R".

ii) If sample was NOT preserved, or preserved > 2 days of VTSR

1. and analyzed ≤ 7 days from DoC, No action needed.

YES NO N/A

2. and analyzed > 7 days from DoC, qualify AROMATIC analytes only, both positive and non-detects, as estimated "J".
3. and analyzed > 10 days from DoC, qualify ALL positive analytes "J" and ALL non-detects as "UJ".
4. and analyzed ≥ 20 days from DoC, qualify positive results "J" and non-detects "R".

Note: CONTRACT holding times for soil Encore samples are:

1. Samples must be preserved within two (2) days of VTSR and must be analyzed within ten (10) days of VTSR.

2. Samples NOT preserved within two (2) days of VTSR must be analyzed within two (2) days of VTSR.

ACTION: If contractual holding times are exceeded, document in the Data Assessment.

NOTE: The data reviewer must note in the Data Assessment <u>whether or not</u> technical and contractual holding times were met.

<u>Table of Holding Time Violations</u>

(See Chain-of-Custody Records)

Sample ID	Sample Matrix	Was Sample Preserved?	Date Sampled	Date Lab Received	Date Analyzed

	YES	NO	N/A
3.0 System Monitoring Compound (SMC) Recovery (Form II)			
3.1 Are the VOA SMC Recovery Summaries (Form II) present for each of the following matrices:			
a. Low Water?	[✓]	___	X (AP)
b. Low Soil?	[✓]	___	___
c. Med Soil?	[ ]	___	✓
3.2 Are all the VOA samples listed on the appropriate System Monitoring Compound Recovery Summary for each of the following matrices:			
a. Low Water?	[✓]	___	X (AP)
b. Low Soil?	[✓]	___	___
c. Med Soil?	[ ]	___	✓
ACTION: Contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.			
3.3 Were outliers marked correctly with an asterisk?	[ ]	___	✓
ACTION: Circle all outliers with red pencil.			
3.4 Was one or more VOA system monitoring compound recovery outside of contract specifications for any sample or method blank?	___	[✓]	___
If yes, were samples re-analyzed?	[ ]	___	✓
Were method blanks re-analyzed?	[ ]	___	✓
ACTION: If recoveries are ≥ 10%, but 1 or more compounds fail to meet SOW specifications:			

YES NO N/A

1. All positive results are qualified as estimated "J".

2. Flag all non-detects as estimated detection limits "UJ" where recovery is less than the lower acceptance limit.

3. If SMC recoveries are above allowable levels, qualify positive results "J" and do not qualify non-detects.

ACTION: If any system monitoring compound recovery is < 10%:

1. Flag all positive results as estimated "J".

2. Flag all non-detects as unusable "R".

Professional judgement should be used to qualify data that only have method blank SMC recoveries out of specification in both original and re-analyses. Check the internal standard areas.

NOTE: Contractual requirements state that if any SMC fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

NOTE: The laboratory must submit the following data:

1. If SMC recoveries and internal standard responses meet the acceptance criteria in the re-analyzed sample, then the laboratory must submit only the re-analysis.

2. If an SMC recovery and/or internal standard response fails to meet the acceptance criteria upon re-analysis, then submit data from both analyses.

(Refer to section 11.4.3.2, page D-45/VOA of the

	YES	NO	N/A

SOW for more information.)

3.5 Are there any transcription/calculation errors between raw data and Form II? ___ [✓] ___

ACTION: If large errors exist, contact the TOPO to obtain an explanation or resubmittal of corrected deliverables from the laboratory. Make any necessary corrections and note the effect in the Data Assessment.

4.0 Matrix Spikes (Form III)

4.1 Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present? [✓] ___ ___

4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices:

a. Low Water? [ ] ___ [✓]

b. Low Soil? [✓] ___ ___

c. Med Soil? [ ] ___ [✓]

ACTION: If any matrix spike data are missing, take the action specified in section 3.2 above.

ACTION: No action is taken based upon MS/MSD data alone. However, using informed professional judgement, the MS/MSD results may be used in conjunction with other QC criteria to determine the need for qualification of the data.

ACTION: Circle all outliers with red pencil.

5.0 Blanks (Form IV)

5.1 Is the Method Blank Summary (Form IV) present? [✓] ___ ___

5.2 Frequency of Analysis: for the analysis of VOA TCL compounds, has a reagent/method blank been analyzed during every 12-hour time period on each

		YES	NO	N/A
	GC/MS system, before any samples, and for each matrix? (water, low soil or medium soil)	[✓]	___	___
5.3	Has a VOA method blank been analyzed at least once every twelve hours for each matrix/concentration and GC/MS system used?	[✓]	___	___
5.4	Was a VOA instrument blank analyzed after each sample/dilution which contained a target compound that exceeded the initial calibration range?	[ ]	___	✓
5.5	Was a VOA storage blank analyzed at the end of all samples for each SDG in a case?	[✓]	___	___

ACTION: If any method/instrument blank data are missing, contact the TOPO to obtain any missing deliverables from the laboratory. If method blank data are not available, reject "R" all associated positive data. However, using professional judgement, the data reviewer may substitute field blank or trip blank data for missing method blank data.

If the instrument blank was not analyzed after a sample with high concentration of reported values, inspect the chromatogram of the sample analyzed immediately after this analysis for possible carryover. Use professional judgement to determine if any contamination occurred and qualify analyte(s) accordingly.

If storage blank data is missing, contact the TOPO to obtain any missing deliverables from the laboratory. If unavailable, note in the Contract Problems/Non-Compliance section of the Data Assessment.

Note: A storage blank shall be analyzed and reported as a water sample unless the SDG contains only soil samples. Then, the storage blank may be analyzed and reported as a soil sample. (p. D-49/VOA sec. 12.1.3.5)

YES NO N/A

5.6 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-30, section 3.3.7.3 of the SOW for further information.

Was the correct identification scheme used for all VOA blanks? [✓] ___ ___

ACTION: Contact the TOPO to obtain missing deliverables from the lab, or make the required corrections on the forms. Document in the Data Assessment under Contract Problems/Non-compliance if corrections were made by the validator.

5.7 Chromatography: review the blank raw data-chromatograms (RICs), quant. reports or data system printouts and spectra. Is the chromatographic performance (baseline stability) for each instrument acceptable for VOA's? [✓] ___ ___

ACTION: Use professional judgement to determine the effect on the data.

5.8 Are all detected hits for target compounds in method, instrument and storage blanks less than the CRQL for that analyte? [✓] ___ ___

Exception: Acetone and 2-butanone must be less than 5 times the CRQL, and methylene chloride and Cyclohexane must be less than 2.5 times its CRQL. (p. D-50/VOA sec. 12.1.4.6)

ACTION: If no, an explanation and laboratory's corrective actions must be addressed in the case narrative. If the narrative contains no explanation, then make a note in the Contract Problems/Non-Compliance section of the Data Assessment.

6.0 Contamination

NOTE: "Water blanks", "drill blanks", and "distilled water blanks" are validated like any other sample, and are not used to qualify data. Do not

YES NO N/A

confuse them with the other QC blanks discussed below.

6.1 Do any method/instrument/reagent/storage blanks have positive results (TCL and/or TIC) for VOA's? ✓ [ ] ___

NOTE: When applied as directed in the table below, the contaminant concentration in these blanks are multiplied by the sample dilution factor and corrected for %moisture when necessary.

NOTE: A contaminated instrument blank is not allowable under this SOW. The instrument blank must meet the technical acceptance criteria for blank analyses(sec. 12.1.4). See page D-48/VOA, section 12.1.2.4 for additional information. Document in the Data Assessment under Contract Problems/Non-Compliance if contaminated instrument blank was submitted.

6.2 Do any field/trip/rinse blanks have positive VOA results (TCL and/or TIC)? SOIL BORE3 ✓ [ ] X

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated with a particular group of samples (may exceed one per case) must be used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped and are not required for non-aqueous matrices. Blanks may not be qualified because of contamination in another blank. Field Blanks & Trip Blanks must be qualified for system monitoring compound, instrument performance criteria, spectral or calibration, and Internal standard QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks. If any blanks are grossly contaminated, all associated data should be

YES NO N/A

qualified as unusable "R".

NOTE: Analytes qualified "U" for blank contamination are till considered as "hits" when qualifying for calibration criteria.

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R".

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
TCL COMPOUNDS			
Methylene Chloride Acetone Toluene 2-Butanone Cyclohexane	Sample conc. is > CRQL, but ≤ 10x blank value.	Sample conc. is < CRQL and ≤ 10x blank value.	Sample conc. is > CRQL and > 10x blank value.
Other Conta-minants	Sample conc. is > CRQL, but ≤ 5x blank value.	Sample conc. is < CRQL and ≤ 5x blank value.	Sample conc. is > CRQL and > 5x blank value.

6.3 Are there field/rinse/equipment blanks associated with every sample? In Another SDG # Bobb3 [✓] ___ [X] AP

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For samples with high concentrations of suspected blank contaminants, use professional judgement to qualify these values and make a note in the Data Assessment.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 GC/MS Instrument Performance Check (Form V)

	YES	NO	N/A
7.1 Are the GC/MS Instrument Performance Check Forms (Form V) present for Bromofluorobenzene (BFB)?	[✓]	___	___
7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the BFB provided for each twelve hour shift?	[✓]	___	___
7.3 Is the mass spectrum of BFB acquired according to sec. 9.2.4.1 D-23/VOA?	[✓]	___	___

Note: Sec. 9.2.4.1 states that "the mass spectrum of BFB MUST be acquired in the following manner. Three scans (the peak apex scan and the scans immediately preceding and following the apex) are acquired and averaged. Background subtraction is required, and MUST be accomplished using a single scan no more than 20 scans prior to the elution of BFB. DO NOT background subtract part of the BFB peak." See Attachment 2 for BFB criteria.

Action: If not, reject "R" all samples associated with that particular BFB.

7.4 Has an instrument performance check been analyzed for every analytical sequence on each instrument?	[✓]	___	___

ACTION: List date, time, instrument ID, and sample numbers for which associated GC/MS tuning data are unavailable.

DATE	TIME	INSTRUMENT	SAMPLE NUMBERS
_____	_____	_____	_____
_____	_____	_____	_____

ACTION: Notify the TOPO to obtain missing data, if possible. If the lab cannot provide the missing data, reject, "R", all data generated outside an acceptable twelve hour calibration interval.

	YES	NO	N/A
7.5 Have the ion abundances been normalized to m/z 95 as specified in Exhibit D, page D-56/VOA?	[✓]		

NOTE: All ion abundance ratios must be normalized to m/z 95, the nominal base peak, even though the ion abundance of m/z 174 may be up to 120% that of m/z 95.

ACTION: If mass assignment is in error, qualify all associated data as unusable "R".

7.6 Have the ion abundance criteria been met for each instrument used?	[✓]		

ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).

ACTION: If ion abundance criteria are not met, the Region II TPO must be notified.

7.7 Are there any transcription/calculation errors between mass lists and Form Vs? (Check at least two values, but if errors are found check more.)		[✓]	
7.8 Is the number of significant figures for the reported relative abundances consistent with the number given for each ion in the ion abundance criteria column?	[✓]		

ACTION: If large errors exist, take action as specified in section 3.5 above.

7.9 Are the spectra of the mass calibration compound acceptable?	[✓]		

ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.

8.0 Target Compound List (TCL) Analytes (FORM I VOA)

8.1 Are the Organic Analysis Data Sheets (Form I VOA) present with required header information on each page, for each of the following:

	YES	NO	N/A
a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates?	[✓]	___	___
c. Blanks?	[✓]	___	___

8.2 Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant. reports) included in the sample package for each of the following:

a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates (mass spectra not required)?	[✓]	___	___
c. Blanks?	[✓]	___	___

ACTION: If any data are missing, take action specified in 3.2 above.

8.3 Is chromatographic performance acceptable with respect to:

a. Baseline stability?	[✓]	___	___
b. Resolution?	[✓]	___	___
c. Peak shape?	[✓]	___	___
d. Full-scale graph (attenuation)?	[✓]	___	___
e. Other: _____?	[ ]	___	✓

ACTION: Use professional judgement to determine the acceptability of the data.

8.4 Are the lab-generated standard mass spectra of the identified VOA compounds present for each sample? [✓] ___ ___

ACTION: If any mass spectra are missing, take action as specified in 3.2 above. If the lab does not

YES NO N/A

generate its own standard spectra, document in the Contract Problems/Non-compliance section of the Data Assessment.

8.5 Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration? [✓] ___ ___

8.6 Are all ions present in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum? [✓] ___ ___

8.7 Do sample and standard relative ion intensities agree within ±20%? [✓] ___ ___

ACTION: Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all such data should be rejected "R", flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected "U" at the calculated detection limit. In order to be positively identified, the data must comply with the criteria listed in 8.5, 8.6, and 8.7.

ACTION: When sample carry-over is suspected, use professional judgement determine if instrument cross-contamination has affected positive compound identifications.

9.0 <u>Tentatively Identified Compounds (TIC)</u>

9.1 Are all Tentatively Identified Compound Forms (Form I Part B) present; and do listed TIC's include scan number or retention time, estimated concentration and "JN" qualifier? [✓] ___ ___

9.2 Are the mass spectra for the TIC's and associated "best match" spectra included in the sample package for each of the following:

a. Samples and/or fractions as appropriate? [✓] ___ ___

b. Blanks? [✓] ___ ___

	YES	NO	N/A
c. Are Alkanes listed in/or part of the Case Narrative?	☑		

ACTION: If any TIC data are missing, take action specified in 3.2 above.

ACTION: Add "JN" qualifier to all chemically named TIC's, if missing.

9.3 Are any TCL compounds (from any fraction including all PCB congeners) listed as TIC compounds? (Example: 1,2- dimethylbenzene is xylene, a VOA TCL analyte, and should not be reported as a TIC.)		☑	

ACTION: Flag with "R" any TCL compound listed as a TIC.

9.4 Are any TIC's reported earlier than 30 sec before the first purgeable compound, or three (3) min. after the last purgeable compound listed in Exhibit C (Volatiles)?		☑	

ACTION: Flag with "R" any TIC compound reported. (p. D38-VOA, sec. 11.1.2.2)

9.5 Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	☑		
9.6 Do TIC and "best match" standard relative ion intensities agree within ±20%?	☑		

ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined an incorrect identification was made, change the identification to "unknown," or to some less specific identification as appropriate. (Example: "C3 substituted benzene.")

Also, when a compound is not found in any blank, but is detected in a sample and is a suspected artifact of a common laboratory contaminant, the result should be qualified as

YES NO N/A

unusable "R". (E.g., Common Lab Contaminants: CO_2 (M/E 44), Siloxanes (M/E 73) hexane, aldol condensation products, solvent preservatives, and related by-products.

9.7 Are TIC's with responses < 10% of the internal standard (as determined by inspection of the peak areas or height) reported? ___ [✓] ___

ACTION: If yes, cross out questionable TIC's.

10.0 **Compound Quantitation and Reported Detection Limits**

10.1 Are there any transcription/calculation errors in Form I results? (Check at least two positive values. Verify that the correct internal standards, quantitation ions, and RRF were used to calculate Form I results.) ___ [✓] ___

10.2 Are the CRQL's adjusted to reflect sample dilutions and, for soils, sample moisture? [✓] ___ ___

ACTION: If errors are large, take action as specified in section 3.2 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQL's are used (unless a QC exceedance dictates the use of the higher CRQL data from the diluted sample). Replace concentrations that exceeded the calibration range in the original analysis by crossing out the "E" and its corresponding value on the original Form I and substituting the data from the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form Is not to be used, including any in the data summary package.

11.0 **Standards Data (GC/MS)**

11.1 Are the Reconstructed Ion Chromatograms, and data system printouts (quant. reports) present for each initial and continuing calibration? [✓] ___ ___

	YES	NO	N/A

ACTION: If any calibration standard data are missing, take action specified in 3.2 above.

12.0 GC/MS Initial Calibration (Form VI)

12.1 Are the Initial Calibration Forms (Form VI) present and complete at concentrations of 10, 20, 50, 100, 200ng for separate calibrations of low water/med soils (unheated purge) and low soils (heated purge)? [✓] ___ ___

ACTION: If any calibration standard forms are missing, take action specified in 3.2 above.

12.2 Were all low level soil standards, blanks and samples analyzed by heated purge? [✓] ___ ___

ACTION: If low level soil samples were not heated during purge, qualify positive hits "J" (estimated) and non-detects "R".

12.3 Are the % relative standard deviation (%RSD) values for VOA's ≤ 30% over the concentration range of the calibration? [ ] ✓ ___

NOTE: Although 23 VOA compounds have a contractual minimum RRF and no maximum %RSD, the technical acceptance criteria are the same for all analytes.

ACTION: Circle all outliers with red pencil.

ACTION: If %RSD is > 30.0%, qualify associated positive results for that analyte "J" (estimated). Do not qualify non-detects. When %RSD is > 90%, flag all non-detects for that analyte "R" (unusable) and positive hits "J" .

NOTE: Analytes previously qualified "U" for blank contamination are still considered as "hits" when qualifying for initial calibration criteria.

12.4 Are any average RRFs < 0.05? ___ [✓] ___

YES NO N/A

ACTION: Circle all outliers with red pencil.

ACTION: If the average RRF is < 0.05, then qualify associated non-detects with an "R" and flag associated positive data as estimated "J".

NOTE: Contract Requirement: The SOW allows up to two of the required analytes to fail contractual %RSD or RRF criteria, provided the %RSD is ≤ 40% and RRF is ≥ 0.010. (See Table 5, page D-61/VOA and analytes marked with a "*" on Form VI for required analytes and contractual criteria.) Technical criteria, however, are the same for all analytes.

ACTION: If more than two analytes failed %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance.

12.5 Are there any transcription/calculation errors in the reporting of average relative response factors (RRF) or %RSD? (Check at least 2 values, but if errors are found, check more.) ___ [✓] ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, contact the TOPO to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance.

13.0 GC/MS Continuing Calibration (Form VII)

13.1 Are the Continuing Calibration Forms (Form VII) present and complete for separate calibration of low water/med soil and low soil samples? [✓] ___ ___

13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument? [✓] ___ ___

ACTION: If any forms are missing or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, contact

YES NO N/A

the TOPO to request an explanation/resubmittal from the lab. If continuing calibration data are not available, flag all associated sample data as unusable "R".

ACTION: List below all sample(s) that were not analyzed within twelve hours of the previous continuing calibration.

_____

_____

_____

13.3 Do any volatile compounds have a percent difference (%D) between the initial and continuing RRF which exceeds the ±25% criteria? ✓ [ ] ___

NOTE: Although 23 VOA compounds have a contractual minimum RRF and no maximum %D, the technical acceptance criteria are the same for all analytes.

ACTION: Circle all outliers with red pencil.

ACTION: Qualify both positive results and non-detects for the outlier compound(s) as estimated. When %D is > 90%, qualify all non-detects for that analyte unusable (R) and positive results estimated (J) .

13.4 Are any continuing calibration RRFs < 0.05? ___ [✓] ___

ACTION: Circle all outliers with red pencil.

ACTION: If the RRF is < 0.05, qualify the associated non-detects as unusable "R" and the associated positive values "J".

NOTE: Contract Requirement: The SOW allows up to two of the required analytes to fail contractual %D and RRF criteria, provided that the %D is ≤ 40% and the RRF is ≥ 0.010. (See Table 5 pg. D-61/VOA or

	YES	NO	N/A

analytes marked with a "*" on Form VI for required analytes.) Technical criteria, however, are the same for all analytes.

ACTION: If more than two analytes failed %D and RRF, criteria document in the Data Assessment under contract Problems/Non-Compliance.

13.5 Are there any transcription/calculation errors in the reporting of RRF or %D between initial and continuing RRFs? (Check at least two values, but if errors are found, check more.) ___ [✓] ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, contact the TOPO to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance.

14.0 Internal Standard (Form VIII)

14.1 Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to +100%) for each continuing calibration? [✓] ___ ___

If no, was the sample re-analyzed? [ ] ___ ✓

ACTION: 1. Circle all outliers with red pencil.

2. List all the outliers below.

Sample #	Internal Std.	Area	Lower/Upper Limit
			/
			/
			/

(Attach additional sheets if necessary, or attach copies of Form VIIIs.)

YES NO N/A

ACTION: If any sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

ACTION: 1. If the internal standard area count is outside the upper or lower limit, flag with "J" all positive results quantitated with this internal standard.

2. Do not qualify non-detects when associated IS area counts are > 100%.

3. If the IS area in the sample is below the "lower limit," < 50%, qualify all analytes associated with that IS estimated, "J". If the area counts are extremely low, < 25% of the area in the 12 hour standard, or if performance exhibits a major abrupt drop- off, flag all associated non-detects as unusable, "R", and positive hits estimated, "J".

14.2 Are the retention times of the internal standards within 30 seconds of the associated calibration standard? [✓] ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 30 seconds.

NOTE: Contractual requirements state that if any internal standard fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

15.0 **Field Duplicates**

15.1 Were any field duplicates submitted for VOA analysis? [✓] ___ ___

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

BoBA5) ok
BoBA6

BoBB1) ok
BoBB2

YES NO N/A

PART B: BNA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody records or laboratory SDG Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special notations affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data should be flagged as estimated "J". If a soil sample, other than TCLP, contains more than 90% water, qualify positive hits "J" and non-detects "R".

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

2.0 Holding Times

2.1 Have any BNA technical holding times, determined from date of collection to date of extraction, been exceeded? ✓ [ ] ___

All samples exceeded Technical but met Contractual holding time criteria in SOW95.

NOTE: Technical Holding Time: Continuous extraction of water samples for BNA analysis must be started within seven days of the date of collection. Soil/sediment samples must be extracted within 7 days of collection. Extracts must be analyzed within 40 days of the date of extraction.

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample Analyzed	Sample Matrix	Date Sampled	Date Lab Received	Date Extracted	Date Analyzed

YES NO N/A

ACTION: If technical holding times were exceeded, flag all positive results as estimated (J) and sample quantitation limits as estimated (UJ), and document in the Data Assessment that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon reanalysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on sample results. At a minimum, all results should be qualified "J", but the reviewer may determine that non-detect data are unusable "R". If holding times were exceeded by more than 28 days, all non-detect data must be qualified "R", unusable.

NOTE: Contractual Holding Times: Extraction of water samples must be started within 5 days VTSR. Soil/sediment samples must be extracted within 10 days of VTSR. This requirement does not apply to Performance Evaluation (PE) samples. Water and soil/sediment extracts must be analyzed within 40 days following extraction.

ACTION: If contractual holding times are exceeded, document in the Data Assessment.

NOTE: The data reviewer must note in the Data Assessment whether or not technical and contractual holding times were met.

3.0 Surrogate Recovery (Form II)

3.1 Are BNA Surrogate Recovery Summaries (Form II) present for each of the following matrices:

in BOBB3 ↑ in BOB9 ↑

a. Low Water? [✓] ___ ✓

b. Low Soil? [✓] ___ ___

	YES	NO	N/A
c. Med Soil?	[ ]	___	✓

3.2 Are all the BNA samples listed on the appropriate Surrogate Recovery Summaries for each of the following matrices:

a. Low Water?	[✓] (in BoBB3)	___	✓ (in BoB95)
b. Low Soil?	[✓]	___	___
c. Med Soil?	[ ]	___	✓

ACTION: Contact the TOPO to request an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.3 Were outliers marked correctly with an asterisk? [✓] ___ ___

ACTION: Circle all outliers with red pencil.

3.4 Were two or more base-neutral OR acid surrogate recoveries out of specification for any sample or method blank? (one advisory surrogate less than 10% in Bo895 NO ACTION) ___ [✓] ___

If yes, were samples reanalyzed? [ ] ___ ✓

Were method blanks reanalyzed? [ ] ___ ___ ✓

ACTION: If all BNA surrogate recoveries are ≥ 10%, but two within the base-neutral or acid fraction do not meet SOW specifications, for the affected fraction only (i.e. acid or base-neutral compounds):

1. Flag all positive results as estimated (J).

2. Flag all non-detects as estimated detection limits ("UJ") when recoveries are less than the lower acceptance limit.

3. Do not qualify non-detects if recoveries are greater than the upper acceptance limit.

YES NO N/A

ACTION: If any base-neutral or acid surrogate has a recovery of < 10%:

1. Qualify positive results for that fraction as estimated (J).

2. Qualify non-detects for that fraction as unusable (R).

Professional judgement should be used to qualify data that have method blank surrogate recoveries out of specification in both original and reanalyses. Also check the internal standard areas.

NOTE: Contractual requirements state that if two surrogate fails acceptance criteria,within the same fraction,i.e. Acid or BN, the sample must be re-analyzed. If sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

NOTE: The laboratory must submit the following data:

1. If surrogate recoveries and internal standard responses meet the acceptance criteria in the re-analyzed sample, then the laboratory must submit only the re-analysis.

2. If surrogate recoveries and/or internal standard responses fail to meet the acceptance criteria upon re-analysis, then submit data from both analyses.

3.5 Are there any transcription/calculation errors between raw data and Form II? ___ [✓] ___

ACTION: If large errors exist, contact the TOPO to request an explanation or resubmittal of corrected deliverables from the laboratory. Make necessary corrections and note errors in the Data Assessment.

	YES	NO	N/A

4.0 Matrix Spikes (Form III)

4.1	Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present?	[✓]	___	___
4.2	Were matrix spikes analyzed at the required frequency for each of the following matrices:			
	a. Low Water?	[ ]	___	✓
	b. Low Soil?	[✓]	___	___
	c. Med Soil?	[ ]	___	✓

ACTION: If any matrix spike data are missing, take the action specified in 3.2 above.

ACTION: No action is taken based upon MS/MSD data alone. However, using informed professional judgement, the data reviewer may use the matrix spike and matrix spike duplicate results in conjunction with other QC criteria and determine the need for some qualification of the data.

ACTION: Circle all outliers with red pencil.

5.0 Blanks (Form IV)

5.1	Is the Method Blank Summary (Form IV) present?	[✓]	___	___
5.2	Frequency of Analysis: Has a reagent/method blank analysis been reported per 20 samples of similar matrix, or concentration level, and for each time samples are extracted?	[✓]	___	___
5.3	Has a BNA method blank been analyzed for each GC/MS system used? (See SOW pg. D-55/SVOA, Section 12.1.2.)	[✓]	___	___

ACTION: If any method blank data are missing, contact the TOPO to obtain an explanation/resubmittal from the lab. If resubmittals are unavailable, use professional judgement to determine if the

YES NO N/A

associated sample data should be qualified.

5.4 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-30, sec. 3.3.7.3 of the SOW for further information.

Was the correct identification scheme used for all BNA blanks? [✓] ___ ___

ACTION: Contact the TOPO to obtain resubmittals from the lab or make the required corrections on the forms. Document all corrections made by the validator in the Data Assessment under Contract Problems/Non-Compliance.

5.5 Chromatography: review the blank raw data - chromatograms (RICs), quant. reports or data system printouts and spectra. Is the chromatographic performance (baseline stability) acceptable for each instrument? [✓] ___ ___

ACTION: Use professional judgement to determine the effect on the data.

5.6 Are all detected hits for target compounds less than the CRQL for that analyte in all method blanks? [✓] ___ ___

Exception: Phthalate esters must be less than five times (5x) the CRQL.

6.0 Contamination

NOTE: "Water blanks", "drill blanks" and "distilled water blanks" are validated like any other sample and are not used to qualify data. Do not confuse them with the other QC blanks discussed below.

6.1 Do any method/reagent blanks have positive results (TCL and/or TIC)? ___ [✓] ___ Only one unknown TIC

NOTE: Water: When applied as directed in the table below (page 33), the contaminant concentration in method/

YES NO N/A

instrument/reagent blanks is multiplied by the sample dilution factor, where necessary.

Soil: If the lab has not already done so, the contaminant concentration in soil blanks is multiplied by 33 times the sample dilution factor and corrected for %moisture (fraction of solid) where necessary. 30 grams of sodium sulfate (1 gram for medium level soils) are used to prepare the soil reagent/method blank as instructed on page D-54/SVOA, section 12.1.3. Contact the TOPO to obtain resubmittals if the soil blanks are not reported in soil units (µg/kg).

6.2 Do any field/rinse blanks have positive BNA results (TCL and/or TIC)? in another SDG. ___ [ ] ✓

ACTION: Prepare a list of samples associated with each contaminated blank. (Attach a separate sheet.)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case) must be used to qualify sample data. Do not convert field blank results to account for the difference in soil CRQLs. Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, spectral, instrument performance, calibration and Internal standard QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks. If gross contamination exists, all data in the associated samples should be qualified as unusable "R".

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
mmon nthalate-Esters	Sample conc. is > CRQL, but ≤ 10× blank value.	Sample conc. is < CRQL and ≤ 10× blank value.	Sample conc. is > CRQL and > 10× blank value.

YES NO N/A

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
Other Conta-minants	Sample conc. is > CRQL, but ≤ 5x blank value.	Sample conc. is < CRQL and ≤ 5x blank value.	Sample conc. is > CRQL and > 5x blank value.

NOTE: Analytes qualified "U" for blank contamination are still treated as "hits" when qualifying for calibration criteria.

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R" (unusable).

6.3 Are there field/rinse/equipment blanks associated with every sample? in another SOP. BOBB3 [✓] ___ ___

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For analytes with high concentration, use professional judgement on qualification of these values and make a note in the Data Assessment.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 GC/MS Instrument Performance Check

7.1 Are the GC/MS Instrument Performance Check Forms (Form V) present for Decafluorotriphenylphosphine (DFTPP)? [✓] ___ ___

7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the DFTPP provided for each twelve hour shift? [✓] ___ ___

7.3 Has an instrument performance check solution been analyzed for every twelve hours of sample

	YES	NO	N/A
analysis per instrument?	[✓]	___	___

ACTION: List date, time, instrument ID, and sample number for which no associated GC/MS tuning data are valid.

SAMPLE NUMBERS	DATE	TIME	INSTRUMENT ID

ACTION: If the **TOPO** cannot obtain missing data from the lab, reject "R" all data generated outside an acceptable twelve hour calibration interval.

7.4 Have the ion abundances been normalized to m/z 198 (see SOW, page D-62/SVOA)?	[✓]	___	___

NOTE: All ion abundance ratios must be normalized to m/z 198, the nominal base peak, even though the ion abundance of m/z 442 may up to 110% that of m/z 198.

ACTION: If mass assignment is in error, flag all associated sample data as unusable "R".

7.5 Have the ion abundance criteria been met for each instrument used?	[✓]	___	___

ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).

ACTION: If ion abundance criteria are not met, the Region II TPO must be notified.

7.6 Are there any transcription/calculation errors between mass lists and Form Vs? (Check at least two values, but if errors are found check more.)	___	[✓]	___

	YES	NO	N/A
7.7 Is the number of significant figures for the reported relative abundances consistent with the number given for each ion in the ion abundance criteria column?	[✓]	___	___

ACTION: If large errors exist, take action as specified in section 3.5 above.

7.8 Is the mass spectrum of DFTPP acquired according to sec. 9.2.4.2 p. D-20/SVOA ?	[✓]	___	___

NOTE: Sec. 9.2.4.2 states that "the mass spectrum of DFTPP MUST be acquired in the following manner: Three scans (the peak apex scan and the scans immediately preceding and following the apex) are acquired and averaged. Background subtraction is required, and MUST be accomplished using a single scan acquired no more than 20 scans prior to the elution of DFTPP. Do NOT subtract part of the DFTPP peak." See Attachment 3 for DFTPP criteria.

ACTION: If not, then reject "R" all data analyzed under that particular tune.

7.9 Are the spectra of the mass calibration compound acceptable?	[✓]	___	___

ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.

8.0 Target Compound List (TCL) Analytes (FORM I SV)

8.1 Are the Organic Analysis Data Sheets (Form I SV) present with required header information on each page, for each of the following:			
a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates?	[✓]	___	___
c. Blanks?	[✓]	___	___
8.2 Has GPC cleanup been performed on all soil/			

	YES	NO	N/A
sediment sample extracts?	[✓]	___	___
Has the Laboratory provided the TWO most recent UV traces of the calibration solution? GPC calibration and GPC CCV? (D-39/SVOA, sec.10.3.4.4)	[✓]	___	___

ACTION: If data suggests that GPC was not performed, use professional judgement. Make note in Contract Problems/Non-Compliance section of the Data Assessment.

8.3 Are the BNA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant. reports) included in the sample package for each of the following:

a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates (mass spectra not required)?	[✓]	___	___
c. Blanks?	[✓]	___	___

ACTION: If any data are missing, take action specified in 3.2 above.

8.4 Is chromatographic performance acceptable with respect to:

Baseline stability?	[✓]	___	___
Resolution?	[✓]	___	___
Peak shape?	[✓]	___	___
Full-scale graph (attenuation)?	[✓]	___	___
Other:_____?	[ ]	___	✓

ACTION: Use professional judgement to determine the acceptability of the data.

8.5 Are lab-generated standard mass spectra of

	YES	NO	N/A
identified BNA compounds present for each sample?	[✓]	___	___

ACTION: If any mass spectra are missing, take action specified in 3.2 above. Note under Contract Non-compliance if lab does not generate their own standard spectra. If spectra are missing, reject all positive data.

8.6 Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	[✓]	___	___
8.7 Are all ions present in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	[✓]	___	___
8.8 Do sample and standard relative ion intensities agree within ±20%?	[✓]	___	___

ACTION: Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all such data should be rejected "R", flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected "U" at the calculated detection limit. In order to be positively identified, the data must comply with the criteria listed in 8.6, 8.7, and 8.8.

ACTION: When sample carry-over is a possibility, professional judgement should be used to determine if instrument cross-contamination has affected any positive compound identification.

NOTE : The maximum dilution factor permitted for low level soils is 30. If a low level soil sample requires a dilution greater than 30, then the medium level method shall be utilized.(p. D-43) SVOA, sec. 10.6.5.4 . Document in the Data Assessment under Contract Problems/Non compliance if any low level soil was analyzed at a dilution factor greater than 30.

	YES	NO	N/A

9.0 Tentatively Identified Compounds (TIC)

		YES	NO	N/A
9.1	Are all Tentatively Identified Compound Forms (Form I, Part B) present? and do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier?	✓		
9.2	Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			
	a. Samples and/or fractions as appropriate?	✓		
	b. Blanks?	✓		
	c. Are Alkanes listed in/or part of the Case Narrative?	✓		

ACTION: If any TIC data are missing, take action specified in 3.2 above.

ACTION: Add "N" qualifier to all chemically named TIC's, if missing.

		YES	NO	N/A
9.3	Are any TCL compounds (from any fraction) listed as TIC compounds? (Example: 1,2-dimethylbenzene is xylene - a VOA TCL - and should not be reported as a TIC.)		✓	

ACTION: Flag with "R" any TCL compound listed as a TIC.

		YES	NO	N/A
9.4	Are any TICS reported earlier than 30 sec. before the first semivolatile compound, or three (3) minutes after the last semivolatile compound listed in Exhibit C SVOA? (p.D-45/SVOA,11.1.2.2)		✓	

ACTION: Flag with "R" any TIC compound reported.

		YES	NO	N/A
9.5	Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	✓		
9.6	Do TIC and "best match" standard relative ion			

	YES	NO	N/A
intensities agree within ±20%?	[✓]	___	___

ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined that an incorrect identification was made, change the identification to "unknown," or to some less specific identification (example: "C3 substituted benzene") as appropriate. Also, when a compound is not found in any blank, but is a suspected artifact of a common laboratory contaminant, the result should be qualified as unusable, "R".

9.7 Are any TICs with responses < 10% of the internal standard (as determined by inspection of the peak areas or height) reported?	___	[✓]	___

ACTION: If yes, cross out questionable TIC(s).

10.0 Compound Quantitation and Reported Detection Limits

10.1 Are there any transcription/calculation errors in Form I results? (Check at least two positive values. Verify that the correct internal standard, quantitation ion, and RRF were used to calculate Form I result.)	___	[✓]	___
10.2 Are the CRQLs adjusted to reflect sample dilutions and, for soils, sample moisture?	[✓]	___	___

ACTION: If errors are large, take action as specified in section 3.5 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the "E" and its associated value on the original Form I and substituting the data from the analysis of the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form Is

YES NO N/A

that should not be used, including any in the summary package.

11.0 Standards Data (GC/MS)

11.1 Are the Reconstructed Ion Chromatograms, and data system printouts (quant. reports) present for initial and continuing calibration? [✓] ___ ___

ACTION: If any calibration standard data are missing, take action specified in 3.2 above.

12.0 GC/MS Initial Calibration (Form VI)

12.1 Are the Initial Calibration Forms (Form VI) present and complete for the BNA fraction? [✓] ___ ___

ACTION: If any calibration standard forms are missing, take action specified in 3.2 above.

12.2 Are the % relative standard deviation (%RSD) values for BNAs ≤ 30% over the concentration range of the calibration? [ ] ✓ ___

ACTION: Circle all outliers with red pencil.

NOTE: Although 25 BNA compounds have a contractual minimum RRF and no maximum %RSD, the technical criteria are the same for all analytes.

NOTE: Eight BNA compounds do not require a 20ng standard. They are 2,4-Dinitrophenol, 2,4,5-Trichlorophenol, 2-Nitroaniline, 3-Nitroaniline, 4-Nitroaniline, 4-Nitrophenol, 4,6-Dinitro-2-methylphenol, and Pentachlorophenol.

ACTION: If the %RSD is > 30.0%, qualify only positive results for that analyte "J" and do not qualify non-detects. When %RSD is > 90%, flag all non-detect results for that analyte "R" (unusable) and all positive results "J" (estimated) for ALL samples analyzed under that particular Initial Calibration. } Atrazine %RSD = 99.6% out in both SDG's.

YES NO N/A

NOTE: Analytes previously qualified "U" due to blank contamination are still considered as "hits" when qualifying for calibration criteria.

12.3 Are any average RRFs < 0.05? Individual YES. ___ [✓] ___

ACTION: Circle all outliers with red pencil.

ACTION: If the average RRF is < 0.05 then:

1. "R" all non-detects for ALL samples analyzed under that particular Initial Calibration.

2. "J" all positive results for ALL samples analyzed under that particular Initial Calibration.

12.4 Are there any transcription/calculation errors in the reporting of RRFs and/or %RSDs? (Check at least two values; if errors are found check more.) ___ [✓] ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, take action as specified in section 3.5 above.

NOTE: Contract Requirement: The SOW allows up to four of the required analytes to fail contractual %RSD or RRF criteria provided the %RSD is ≤ 40% or RRF is ≥ 0.010. (See Table 5, page D-67/SVOA and analytes marked with a "*" on Form VI for a list of required analytes and contractual criteria.) Technical criteria, however, are the same for all analytes.

ACTION: If more than four analytes fail %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance.

13.0 GC/MS Continuing Calibration (Form VII)

13.1 Are the Continuing Calibration Forms (Form VII) present and complete for the BNA fraction? [✓] ___ ___

	YES	NO	N/A
13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument?	[✓]	___	___

ACTION: List below all sample analyses that were not analyzed within twelve hours of a continuing calibration standard for each instrument used.

_____

_____

_____

ACTION: If any forms are missing, or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, contact the TOPO to obtain an explanation/resubmittal from the lab. If continuing calibration data are unavailable, flag all associated sample data as unusable "R".

13.3 Does any BNA compound have a percent difference (%D) between the initial and continuing calibration RRFs which exceeds the ±25.0% criteria?	✓	[ ]	___

ACTION: Circle all outliers with red pencil.

ACTION: Qualify both positive results and non-detects for the outlier compound(s) as estimated "J". When %D is > 90%, reject all non-detects for that analyte, "R", and qualify positive results "J" (estimated) for ALL samples analyzed under that particular Continuing Calibration.

13.4 Are any continuing RRFs < 0.05?	___	[✓]	___

ACTION: Circle all outliers with red pencil.

ACTION: If the RRF is < 0.05, qualify as unusable (R) associated non-detects and "J" associated positive values for ALL samples analyzed under that particular Continuing Calibration.

YES NO N/A

NOTE: Contract Requirement: The SOW allows up to four of the required analytes to fail contractual %D and RRF criteria, provided that the %D is ≤ 40% and the RRF is ≥ 0.010. (See Table 5 page D-67/SVOA or analytes marked with a "*" on Form VI for a list of the required analytes.) Technical criteria, however, are the same for all analytes.

ACTION: If more than four analytes failed %D and RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance.

13.5 Are there any transcription/calculation errors in the reporting of average relative response factors (RRF) or %difference (%D) between initial and continuing RRFs? (Check at least two values, but if errors are found, check more.) ___ [✓] ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, take action as specified in section 3.5 above.

14.0 Internal Standards (Form VIII)

14.1 Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to +100%) for each continuing calibration? [✓] ___ ___

If no, was sample re-analyzed? [ ] ___ ✓

ACTION: 1. Circle all outliers with red pencil.

2. List all the outliers below.

ACTION: If sample was not reanalysed, document in Data Assessment in Contract Problems/Non-Compliance.

Sample #	Internal Std.	Area	Lower/Upper Limit
			/
			/

YES NO N/A

(Attach additional sheets if necessary.)
(or attach copies of Form VIIIs)

ACTION: 1. If the internal standard area count is outside the "upper" or "lower" limit, flag with "J" all positive results and non-detects quantitated with this internal standard with the following exceptions:

A. Do not qualify non-detects associated with IS area > 100%.

B. If the IS area in the sample is < 50%, qualify all analytes associated with that IS estimated (J). If area counts are extremely low (< 25% of the area in the 12 hour standard), or if performance exhibits a major abrupt drop-off, flag all associated non-detects as unusable (R) and positive hits estimated (J).

14.2 Are the retention times of the internal standards within 30 seconds of the associated calibration standard? ☑ ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 30 seconds.

NOTE: Contractual requirements state that if any internal standard fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

15.0 Field Duplicates

15.1 Were any field duplicates submitted for BNA analysis? ☑ ___ ___

BoBA5) OK
BoBA6

BoBB1) OK
BoBB2

YES NO N/A

PART C: PESTICIDE/PCB ANALYSIS

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody Records or SDG Narrative indicate any problems with sample receipt, condition of the samples, analytical problems or special circumstances affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data should be qualified as estimated "J". If a soil sample, other than TCLP, contains more than 90% water, qualify positive results "J" and non-detects "R".

ACTION: If samples were not iced, or if the ice was melted upon arrival at the laboratory, and the temperature of the cooler was elevated > 10^0 C, flag all positive results "J" and all non-detects "UJ".

ACTION: Check aqueous extraction log for sample pH, if adjustment was needed, it should have been noted in the SDG Narrative. If more information is needed, notify the TOPO to contact the lab.

2.0 Holding Times

2.1 Have any PEST/PCB technical holding times, determined from date of collection to date of extraction, been exceeded? *All samples.* ✓ [ ] ___

NOTE: Technical Holding Times: Water and soil samples for PEST/PCB analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date extraction.

ACTION: If technical holding times are exceeded, flag all positive results as estimated "J" and sample quantitation limits "UJ" and document in the

YES NO N/A

narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all the data should at least be qualified "J", but the reviewer may determine that non-detects are unusable "R".

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample Analyzed	Sample Matrix	Date Sampled	Date Lab Received	Date Extracted	Date Analyzed

NOTE: Contractual Holding Times: Extraction of water samples must be completed within 5 days VTSR. Soil/sediment samples must be extracted within 10 days of VTSR. This requirement does not apply to Performance Evaluation (PE) samples. Extracts of water and soil/sediment samples must be analyzed within 40 days following start of extraction.

ACTION: If contractual holding times are exceeded, document in the Data Assessment.

NOTE: The data reviewer must note in the Data Assessment whether or not technical and contractual holding times were met.

3.0 Surrogate Recovery (Form II)

3.1 Are the PEST/PCB Surrogate Recovery Summaries

	YES	NO	N/A
(Form II) present for each of the following matrices:			
a. Low Water?	[ ]	___	✓
b. Soil?	[✓]	___	___
3.2 Are all the PEST/PCB samples listed on the appropriate Surrogate Recovery Summary for each of the following matrices:			
a. Low Water?	[ ]	___	✓
b. Soil?	[✓]	___	___

ACTION: Contact the TOPO to obtain an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.3 Were outliers marked correctly with an asterisk?	[✓]	___	___

ACTION: Circle all outliers with red pencil.

3.4 Were surrogate recoveries of TCX or DCB outside of the contract specification for any sample, method blank or sulfur clean-up blank (30-150%)?	✓	[ ]	___

ACTION: In the absence of matrix interference, qualification of the data is not required in the following three situations:

1. When surrogates on both columns are diluted out.

2. When one surrogate on one column was outside (either above or below) the contract limits but above 10%.

3. When the same surrogate on both columns is ✓ above the contract limit.

ACTION: If the same surrogate on both columns is below the contract limit but above 10%, check

YES NO N/

chromatograms for interference. The reviewer may use professional judgement, and qualify only those analytes which elute in the region of the GC chromatogram where interference was observed.

ACTION: If the same surrogate on both columns is below the contract limit but above 10% (with no interference), qualify non-detects and positive hits "J" (estimated).

ACTION: If recoveries for both surrogates on both columns are below the contract limit but above 10%, flag positive results and non-detects for that sample "J".

ACTION: If recoveries are above the contract limit for both surrogates on both columns, then qualify positive values "J".

ACTION: If both surrogates on one column are below the contract limit but above 10%, then use the data from the other column, providing both surrogates on that column are within contract limits. The validator must check from which column the concentration is reported for each analyte. If the value is reported from the failed column, then cross it out and use the value from the other column. Document this change in the Data Assessment.

ACTION: If recovery is below 10% for either surrogate on any column, qualify positive results "J" and flag non-detects "R".

3.5 Were surrogate retention times (RT) within the windows established during the initial 3-point analysis of Individual Standard Mixture A (see Form VI Pest-1)? [✓] ___ ___

ACTION: If the RT limits are not met, positive results and non-detects for that sample may be qualified unusable, "R", based on professional judgement.

	YES	NO	N/A
3.6 Are there any transcription/calculation errors between raw data and Form II?		☑	

ACTION: If large errors exist, contact the TOPO to obtain an explanation or resubmittal of corrected deliverables from the laboratory. Make any necessary corrections and document the effect in the Data Assessment.

4.0 Matrix Spikes (Form III)

	YES	NO	N/A
4.1 Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present?	☑		
4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices (one MS/MSD must be performed for every 20 samples of similar matrix or concentration level):			
a. Low Water?	☐		☑
b. Soil?	☑		

ACTION: If any matrix spike data are missing, take the action specified in 3.2 above.

ACTION: Circle all outliers with red pencil.

ACTION: No action is taken on MS/MSD data alone. However, using informed professional judgement, the data reviewer may use the matrix spike and matrix spike duplicate results in conjunction with other QC criteria and determine the need for some qualification of the data.

5.0 Blanks (Form IV)

	YES	NO	N/A
5.1 Is the Method Blank Summary (Form IV) present?	☑		
5.2 Frequency of Analysis: Has a reagent/method blank been analyzed for each SDG, every 20 samples of similar matrix and concentration level or each extraction batch, whichever is more frequent?			

YES NO N/A

ACTION: If any blank data are missing, take action as specified above in section 3.2. If blank data is not available, reject "R" all associated positive data. However, using professional judgement, the data reviewer may substitute field blank data for missing method blank data.

5.3 A separate Form IV should be present if part of an extraction batch required sulfur removal. In such cases some samples will be listed on two blank summary forms - once under the method blank, and once under the sulfur clean-up blank (PCBLK). Was this additional blank raw data and Form IV submitted when required? [ ] ___ ✓

ACTION: If sulfur clean-up blank data and Form IV are missing, take action as specified in 3.2 above.

5.4 Has a PEST/PCB instrument blank been analyzed at the beginning of every 12 hr. period following the initial calibration sequence (minimum contract requirement)? [✓] ___ ___

ACTION: If any blank data are missing, take action as specified in section 3.2 above.

5.5 Was the correct identification scheme used for all Pest/PCB blanks? (See page B-30, sec. 3.3.7.3 of the SOW for further information.) [✓] ___ ___

ACTION: Contact the TOPO to obtain resubmittals or make the required corrections on the forms. Document in the Data Assessment under Contract Problems/Non-Compliance all corrections made by the validator.

5.6 Chromatography: review the blank raw data - chromatograms, quant. reports and data system printouts. Is the chromatographic performance (baseline stability) for each instrument acceptable? [✓] ___ ___

ACTION: Use professional judgement to determine the

YES NO N/A

effect on the data.

6.0 Contamination

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are not used to qualify the data. Do not confuse them with the other QC blanks discussed below.

6.1 Do any method/reagent, instrument, or cleanup blanks show positive hits for pest/PCBs? ___ [✓] ___

6.2 If any method blanks and/or sulfur clean-up blanks contain "hits" for target compounds, are these hits greater than the CRQL for that analyte? ___ [✓] ___

6.3 In any instrument blanks, is the concentration of any target hit > 0.5 times CRQL for that analyte (see SOW, section 12.1.4.3.3, page D-73/PEST)? ___ [✓] ___

NOTE: Most labs will report 0.5 times CRQLs on the instrument blank Form I instead of the actual method CRQLs. If the lab reported the actual CRQLs, then check if any detected hits are above 0.5 times the CRQLs reported on the Form I.

ACTION: If yes to any of the above questions: note in the Data Assessment under Contract Problems/Non-Compliance if any method or clean-up blanks contain hits > the CRQL, or of instrument blank contained hits > 0.5 times CRQL for that analyte.

6.4 Do any field/rinse blanks have positive pest/PCB results? in another SDG. ___ [ ] ✓

ACTION: Prepare a list of the samples associated with each contaminated blank. (Attach a separate sheet)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case or one per day) may be used to qualify data. Do not convert

YES NO N/A

field blank results to account for the difference in soil CRQLs. Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, and/or calibration QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks.

NOTE: When applied as directed in the table below, the contaminant concentration in method/instrument/reagent/cleanup blanks is multiplied by the sample dilution factor, where necessary.

If the laboratory has not already done so, the contaminant concentration in soil blanks is multiplied by 33 times the sample dilution factor and corrected for %moisture (fraction of solid) where necessary. 30 grams of sodium sulfate are used to prepare each soil reagent/method blank as instructed on page D-69/PEST, section 12.1.2.3.1. Ask the **TOPO** to contact the laboratory if the soil blanks are not reported in soil units (µg/kg).

Flag sample result with a "U":	**Report CRQL & qualify "U":**	**No qualification is needed:**
Sample conc. > CRQL, but ≤ 5× blank.	Sample conc. < CRQL & is ≤ 5× blank value.	Sample conc. > CRQL & > 5× blank value.

NOTE: If gross blank contamination exists, all data in the associated samples should be qualified as "R", unusable.

6.5 Are there field/rinse/equipment blanks associated with every sample? [Y] ___ ___

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For analytes with high concentrations, use professional judgement

	YES	NO	N/A

to qualify these values and document in the Data Assessment.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 Calibration and GC Performance

7.1 Are the following Gas Chromatograms and Data Systems Printouts for both columns present for all samples, blanks and MS/MSD:

	YES	NO	N/A
a. Peak resolution check?	[✓]	___	___
b. Performance evaluation mixtures?	[✓]	___	___
c. Aroclor 1016/1260?	[✓]	___	___
d. Aroclors 1221, 1232, 1242, 1248, 1254?	[✓]	___	___
e. Toxaphene?	[✓]	___	___
f. Low points individual mixtures A & B?	[✓]	___	___
g. Med points individual mixtures A & B?	[✓]	___	___
h. High points individual mixtures A & B?	[✓]	___	___
I. Instrument blanks?	[✓]	___	___
j. Were the appropriate GC columns used as specified on pg. D-10/PEST, sections 6.23.3 to 6.23.3.7, in the SOW?	[✓]	___	___

7.2 Do the chromatograms for all Individual Standard Mixtures and PEM analyses display single component analytes at > 10% but < 100% of full scale (see sections 9.3.5.8.1 thru 9.3.5.8.4, pages D-30 & 31/PEST)? [✓] ___ ___

Have chromatograms for Individual Standard Mixtures and PEM analyses been replotted, showing scaling factor(s), to meet the above requirements when necessary? [ ] ___ [✓]

YES NO N/A

NOTE: All standard chromatograms must clearly display all peaks at > 10% but < 100% of full scale, and replotted if necessary to accommodate peaks not properly scaled in the initial chromatogram(s). Both the initial and replotted chromatograms must be submitted with the data package.

ACTION: If all single component peaks are not clearly displayed on chromatograms for all Individual Standard Mixtures and PEM analyses, notify the **TOPO** to obtain resubmittal of the necessary data.

7.3 Are Forms VI PEST 1-7 present and complete for each column and each analytical sequence? [✓] ___ ___

ACTION: If no, take action as specified in 3.2 above.

7.4 Are there any transcription/ calculation errors between raw data and Forms VI? ___ [✓] ___

ACTION: If large errors exist, take action as specified in section 3.2 above.

7.5 Do all standard retention times, including each pesticide in each level of Individual Mixtures A & B, fall within the windows established during the Initial Calibration (see Form VI PEST-1)? [✓] ___ ___

ACTION: If no, all samples in the entire analytical sequence are potentially affected. Check to see if the chromatograms contain peaks within an expanded window surrounding the expected retention times. If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present and cannot be identified through pattern recognition or using a revised RT window, qualify all positive results "JN" and non-detects as unusable (R). For Aroclors, the RT may be outside the window, but the Aroclor may still be identified from its distinctive pattern.

7.6 Are the linearity criteria for the initial

YES NO N/A

analyses of Individual Standards A & B within limits for both columns? (%RSD must be ≤ 25.0 for alpha and delta BHC, ≤ 30.0 for the two surrogates and ≤ 20% for all other analytes.) [✓] ___ ___

NOTE: Contractual requirements allow up to two single component TCL compounds, but not surrogates, on each column to exceed the criteria provided the %RSD is ≤ 30%. (See page D-26/Pest, sec. 9.2.5.7 in the SOW.) Technical criteria, however, are the same for all analytes.

ACTION: If technical criteria were not met, qualify all associated positive results generated during the entire analytical sequence "J" and all non-detects "UJ". When %RSD > 90%, flag all non-detect results for that analyte "R" (unusable), and positive results as "J" estimated.

ACTION: If more than two analytes failed %RSD, document in the Data Assessment Contract Problems/Non-Compliance section.

7.7 Is the resolution between each pair of adjacent peaks in the Resolution Check Mixture ≥ 60.0% for both columns? (See Form VI PEST-4.)(D-25/Pest) [✓] ___ ___

ACTION: If no, qualify positive results for compounds that were not adequately resolved "J". Use professional judgement to determine if non-detects which elute in areas affected by co-eluting peaks should be qualified "N" as presumptive evidence of presence or unusable (R).

7.8 Is Form VI PEST-5 present and complete for each Performance Evaluation Mixture (PEM) standard used for both initial and continuing calibrations (see SOW section 3.12.4.4, page B-48)? [✓] ___ ___

ACTION: If no, take action as specified in section 3.2 above.

7.9 For each PEM standard, was the resolution between

	YES	NO	N/A
each pair of adjacent peaks ≥ 90.0% on both columns?	[✓]		

ACTION: Qualify positive results for compounds not adequately resolved estimated (J). Qualify non-detects based on professional judgement.

7.10 Have Forms VI PEST-6 & PEST-7 been completed for all midpoint Individual Standards A and B used for initial calibration?	[✓]		
For each standard, was the resolution between each pair of adjacent peaks ≥ 90.0% on both columns?	[✓]		

ACTION: If no, qualify positive results for compounds that were not adequately resolved estimated (J). Use professional judgement to determine if non-detects which elute in areas affected by co-eluting peaks should be qualified "N" as presumptive evidence of presence or unusable "R".

7.11 Is Form VII Pest-1 present and complete for each PEM standard analyzed during the analytical sequence for both columns?	[✓]		

NOTE: If a PEM or Individual std mixture does not meet technical criteria listed on sec. 9.3.5.8.1 through 9.3.5.8.4, it MUST be reinjected immediately. If the second injection meets the criteria, sample analysis may continue. Otherwise, ALL data collection MUST BE STOPPED. Document it in the Data Assessment under Contract Problems/Non compliance.(p. D-31/Pest, sec. 9.3.6.4).

Was the %Breakdown of DDT and Endrin calculated using the equations given on page D-24/PEST, sec. 9.2.4.8 in the SOW?	[✓]		
Were all pesticides and surrogates in each PEM standard within the RT windows established during the Initial Calibration?	[✓]		

	YES	NO	N/A

ACTION: If no, take action as specified in 3.2 above.

7.12 Has the individual percent breakdown for DDT/Endrin exceeded 20.0% in any PEM on either column? (See Form VII PEST-1.)

- for 4,4'-DDT?	___	☑	___
- for Endrin?	___	☑	___
Has the combined percent breakdown for DDT/Endrin exceeded 30.0% in any PEM on either column (required for all PEM analyses)?	___	☑	___

ACTION: 1. If any percent breakdown has failed the QC criteria in either PEM in steps 2 and 17 in the initial calibration sequence (page D-21/Pest, sec. 9.2.3.4 in the SOW), qualify all samples in the entire analytical sequence as described in sections 2.a, b and c below.

2. If any percent breakdown failed the QC criteria in a PEM calibration verification analysis, review data beginning with the samples which followed the last in-control standard until the next acceptable PEM and qualify the data as described below.

a. 4,4'-DDT Breakdown: If DDT breakdown was > 20.0%:

I. Qualify all positive results for DDT with "J". If DDT was not detected, but DDD and DDE are positive, then qualify the quantitation limit for DDT unusable, "R".

ii. Qualify positive results for DDD and/or DDE as presumptively present at an approximated quantity "JN".

b. Endrin Breakdown: If endrin breakdown was > 20.0%:

I. Qualify all positive results for endrin

YES NO N/

with "J". If endrin was not detected, but endrin aldehyde and endrin ketone are positive, then qualify the quantitation limit for Endrin as unusable "R".

ii. Qualify positive results for endrin ketone and endrin aldehyde as presumptively present at an approximated quantity "JN".

c. Combined Breakdown: If the combined 4,4'-DDT and endrin breakdown is greater than 30.0%:

I. Qualify all positive results for DDT and Endrin with "J". If endrin was not detected, but endrin aldehyde and endrin ketone are positive, then qualify the quantitation limit for endrin as unusable "R". If DDT was not detected, but DDD and DDE are positive, then qualify the quantitation limit for DDT as unusable "R".

ii. Qualify positive results for endrin ketone and endrin aldehyde as presumptively present at an approximated quantity "JN". Qualify positive results for DDD and/or DDE as presumptively present at an approximated quantity "JN".

7.13 Are all percent difference (%D) values for PEM analytes and surrogates on both columns ≥ -25% and ≤ +25.0%? (See Form VII PEST-1.) IM ___ ___

ACTION: If no, qualify all associated positive results generated during the analytical sequence "J" and sample quantitation limits "UJ".

NOTE: If the failing PEM is part of the initial calibration, all samples are potentially affected. If the offending standard is a calibration verification, the associated samples are those which followed the last in-control standard until the next passing standard.

7.14 Is Form VII Pest-2 present and complete for each

	YES	NO	N/A
INDA and INDB calibration verification analyzed?	☑		

ACTION: If no, take action specified in 3.2 above.

7.15 Are there any transcription/calculation errors between raw data and Form VII Pest-2?		☑	

ACTION: If large errors exists, take action as specified in section 3.6 above.

7.16 Do all standard retention times for each INDA and INDB calibration verification fall within the RT windows established during the initial calibration sequence? (See Form VII PEST-2.)	☑		

ACTION: If no, beginning with the samples which followed the last in-control standard, check to see if the chromatograms contain peaks within an expanded window surrounding the expected retention times. If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present and cannot be identified through pattern recognition or using a revised RT window, qualify all positive results and non-detects as unusable (R).

7.17 Are all %D values for INDA and INDB calibration verification compounds ≥ -25.0% and ≤ +25.0%?	☑		

ACTION: If the %D is outside the ±25.0% range for any compound(s), qualify associated positive results for that compound "J" and non-detects "UJ". The "associated samples" are those which followed the last in-control standard up to the next passing standard containing the analyte(s) in question. If the %D is > 90%, flag all non-detects for that analyte "R" (unusable).

8.0 Analytical Sequence Check (Form VIII-PEST)

8.1 Is Form VIII present and complete for each column and each period of analyses?	☑		

ACTION: If no, take action specified in 3.2 above.

	YES	NO	N/A
8.2 Was the proper analytical sequence followed for each initial calibration and subsequent analyses, and all standards analyzed at the required frequency for each GC/ECD instrument used.? (See SOW pages D-21 & D-55/PEST.)	[✓]	___	___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify accordingly. Generally, the effect is negligible unless the sequence was grossly altered and/or the calibration was out of QC limits.

8.3 Were all samples analyzed within a 12 hour time period beginning with the injection of an instrument blank and bracketed by acceptable analyses of the proper standards?	[✓]	___	___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify accordingly. Document in the Data Assessment under Contract Problems/Non-Compliance.

8.4 If a multi-component analyte was detected in a sample, was a matching multi-component standard analyzed within 72 hours of the injection of the sample and within a valid 12 hour sequence?	[ ]	___	✓

NOTE: This additional standard is for identification purposes only. Positive results for Aroclors and Toxaphene are quantitated from the initial calibration.

ACTION: If no, document in the Data Assessment under Contract Problems/Non-Compliance.

9.0 Cleanup Efficiency Verification (Form IX)

9.1 Is Form IX PEST-1 present and complete for each lot of Florisil Cartridges used? (Florisil Cleanup is required for all Pest/PCB extracts.)	[✓]	___	___

Are all samples listed on the Pesticide Florisil

	YES	NO	N/A
Cartridge Check Form?	☑		

ACTION: If no, take action specified in 3.2 above. If data suggests florisil clean-up was not performed, document in the Data Assessment under the Contract Non-compliance section.

9.2 Are percent recoveries (%REC) of the pesticide and surrogate compounds used to check the efficiency of the florisil clean-up procedure within QC limits of 80 - 120%?	☑		

ACTION: Qualify only the analyte(s) which failed the recovery criteria as follows:

If %REC is < 80%, qualify positive results "J" and non-detects "UJ".

If any pesticide %REC was zero, flag non-detects "R" for that compound.

Use professional judgement to qualify positive results if any recoveries are > 120%.

NOTE: Sample data should be evaluated for potential interferences if recovery of 2,4,5-trichlorophenol was > 5% in the Florisil Cartridge Performance Check analysis. Document any problems found in the Data Assessment under the Contract Problems/Non-Compliance section.

9.3 If GPC Cleanup was performed (mandatory for all soil sample extracts), is Form IX Pest-2 present?	☑		
Are all soil samples listed on Form IX Pest-2?	☑		

ACTION: If no, take action specified in 3.2 above. If data suggests GPC clean-up was not performed when required, document in the Data Assessment under the Contract Problems/Non-Compliance section.

Are the %REC values for all pesticides in the GPC

YES NO N/A

calibration solution between 80 - 110%? [✓] ___ ___

ACTION: Qualify only those analytes which failed the recovery criteria as follows:

If %REC are < 80%, qualify positive results "J" and non-detects "UJ".

If any pesticide %REC was zero, flag non-detects "R" for that compound.

Use professional judgement to qualify positive results if any recoveries are > 110%.

NOTE: An Aroclor mixture containing Aroclors 1016 and 1260 is also analyzed during GPC calibration; however, Aroclor data is not listed on Form IX PEST-2. The raw GPC data for Aroclors 1016/1260 must be evaluated for pattern similarity with previously analyzed Aroclor standards.

9.4 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-30, sec. 3.3.7.2 and 3.3.7.9 of the SOW for further information.

Was the correct identification scheme used for GPC and Florisil blanks? [✓] ___ ___

10.0 Pesticide/PCB Identification

10.1 Is Form X complete for every sample in which a pesticide or PCB was detected? [✓] ___ ___

ACTION: If no, take action specified in 3.2 above.

10.2 Are all sample chromatograms properly scaled, attenuated, etc. as required for proper identification of single and multi-component analytes? (Refer to SOW sections 11.3.7.1 thru 11.3.7.8, page D-67/Pest for specific details.) [✓] ___ ___

NOTE: Proper verification of Pest/PCB results depends

	YES	NO	N/A

on clear, legible presentation of the raw data. Single component pesticides and all peaks chosen for quantitation of multi-component analytes must appear at less than full scale. Toxaphene and PCB patterns must be clearly visible to enable comparison with standard chromatograms.

ACTION: If retention times or apex of peaks cannot be verified, or if multi-component peak patterns cannot be discerned, contact the TOPO to obtain rescaled chromatograms from the lab.

10.3 Are there any transcription/calculation errors between raw data and Forms 10A and 10B?	___	[✓]	___

ACTION: If large errors exist, take action as specified in section 3.2 above.

10.4 Are RTs of sample compounds within the established RT windows for analyses on both columns?	[✓]	___	___
Was GC/MS confirmation provided when required (when compound concentration is > 10 ug/mℓ in the final extract)?	[ ]	___	✓

ACTION: Use professional judgement to qualify positive results which were not confirmed by GC/MS analysis. Qualify as unusable (R) all positive results which were not confirmed on a second GC column. Also qualify as unusable (R) all positive results which do not meet RT window criteria, unless associated standard compounds are similarly biased. Use professional judgement to assign an appropriate quantitation limit.

10.5 Is the percent difference (%D) calculated for the positive sample results on both columns > 25.0%?	✓	[ ]	___

ACTION: If the reviewer finds neither column shows interference for the positive hits, the Pesticide data should be flagged as follows:

YES NO N/

% Difference	Qualifier
0 - 25%	None
26 - 70%	"J"
71 - 100%	"JN"
100 - 200% (No Interference)	**"R"**
100 - 200% (Interference detected)*	**"JN"**
> 50% (Pesticide value is < CRQL)**	"U"
> 200%	"R"

* When the reported %D is 100- 200%, but interference is detected on either column, qualify the data with "JN".

** When the reported pesticide value is lower than the CRQL, and the %D is > 50%, raise the value to the CRQL and qualify "U", undetected.

NOTE: For Aroclors, if the %D is > 50%, but the pattern of GC peaks on both columns indicates a specific Aroclor is present, qualify that Aroclor "J".

NOTE: The lower of the two values is reported on Form I. If using professional judgement, the reviewer determines that the higher result was more acceptable, the reviewer should replace the value and indicate the reason for the change in the Data Assessment.

10.6 Check chromatograms for false negatives, especially the multiple-peak compounds (Toxaphene and the PCBs). Were there any false negatives? ___ IV ___

ACTION: Use professional judgement to decide if the compound should be reported. If the appropriate PCB standards were not analyzed within 72 hrs. of the sample(s) in question, qualify the data unusable "R".

Also note in Data Assessment under Contract Problems/Non-Compliance if the lab failed to analyze Aroclor standards when required.

11.0 Target Compound List (TCL) Analytes

11.1 Are the Organic Analysis Data Sheets (Form I

	YES	NO	N/A
Pest) present with required header information on each page, for each of the following:			
a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates?	[✓]	___	___
c. Blanks?	[✓]	___	___
d. Instrument Blanks (per column & analysis)?	[✓]	___	___
11.2 Are the Pest chromatograms and quant. reports included in the sample data package for each of the following:			
a. Samples and/or fractions as appropriate?	[✓]	___	___
b. Matrix spikes and matrix spike duplicates?	[✓]	___	___
c. Blanks?	[✓]	___	___
d. Instrument Blanks (per column & analysis)?	[✓]	___	___
ACTION: If any data are missing, take action specified in 3.2 above.			
11.3 Is chromatographic performance acceptable with respect to:			
a. Baseline stability?	[✓]	___	___
b. Resolution?	[✓]	___	___
c. Peak shape?	[✓]	___	___
d. Full-scale graph attenuation?	[✓]	___	___
e. Other: _____? AP 10-11-9	[X]	___	✓
11.4 Were any electropositive displacement (negative peaks) or unusual peaks seen?	___	[✓]	___
ACTION: Use professional judgement to determine the acceptability of the data. Address comments			

YES NO N/

under System Performance section of the Data Assessment.

12.0 Compound Quantitation and Reported Detection Limits

12.1 Are there any transcription/calculation errors in Form I results? Check at least two positive results. Were any errors found? ___ IM ___

NOTE: Single-peak pesticide results can be checked for rough agreement between quantitative results obtained on the two GC columns. Use professional judgement to decide whether a large discrepancy indicates the presence of an interfering compound. If an interfering compound is visible on the chromatogram, the lower of the two values should be reported and qualified as presumptively present at an approximated quantity "JN". This necessitates a determination of an estimated concentration on the confirmation column. The narrative should indicate that the presence of interferences has interfered with the evaluation of the second column confirmation.

12.2 Are the CRQLs adjusted to reflect sample dilutions? IM ___ ___

ACTION: If large errors exist, take action as specified in section 3.2 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQLs from the diluted sample). Replace concentrations which exceed the calibration range in the original analysis by crossing out the "E" value on the original Form I and substituting it with the result from the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including those in the data summary package.

ACTION: Quantitation limits affected by large, off-scale

YES NO N/A

peaks should be qualified as unusable (R). If the interference is on-scale, the reviewer may offer an approximated quantitation limit (UJ) for each affected compound.

NOTE: If a sample required greater than a 10 times dilution, then a 10 times more concentrated analysis must also be performed and submitted (see SOW, page D-57/PEST, section 10.2.3.5).

ACTION: If a more concentrated analysis is unavailable, document in the Contract Problems/Non-Compliance section of the Data Assessment. Use professional judgement to qualify non-detects and positive hits below the CRQL.

13.0 Field Duplicates

13.1 Were any field duplicates submitted? Y ___ ___

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference. ok

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

SAMPLENUM	CLIENTID	QUOTENUMREF	LOGINNUM	MATNUM	ACCTNUM	PROJECTNUM	RECEIVEDATE
B0BB3-1	B0BB3	29681	B0BB3	WA	EPA	68W99071-1A	8/30/01

SEP 19 2001

CompuChem

a division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
CASE #29681
SDG #B0BB3
CONTRACT # 68W99071

SAMPLE IDENTIFICATIONS: B0BB3

The one water sample listed above was received intact, at 4 degrees c, with proper documentation, in sealed shipping containers, on August 30, 2001. The sample was scheduled for volatile, semivolatile, and pesticide-PCB analysis. The sample was prepared and analyzed following Contract Laboratory Protocol(CLP) Statement of Work(SOW), document OLM04.2. This portion of the SDG narrative deals with the volatile fractions only. All pertinent Quality Assurance Notices are included in the narrative section, and all pertinent Laboratory Notices for Case # 29681, SDG # B0BB3 are included in the sample data sections.
Analysis holding time requirements were met for this sample and the pH was less than 2.0. The pH results are tabulated in the sheets following this narrative.
No Target Compound List(TCL) analytes were identified above the Contract Required Quantitation Limit(CRQL).

No reportable Tentatively Identified Compounds(TICs) were present in this sample.

All Bromofluorobenzene (BFB) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.

The system monitoring compounds (SMCs) met recovery criteria in the analysis of this sample, and all of the internal standards met retention time and response criteria in the analysis of this sample.

The associated method blank met all quality control criteria, and did not contain any target analytes above the CRQL.
The asssociated storage blank met all QC criteria, and also did not contain any TCL analytes above the CRQL.

No duplicate matrix spikes were generated at the request of the client.

Manual quantitations were performed on the process files in some of the the associated initial, and continuing calibration(s). The reasons have been coded with explanations provided in the notice included in the narrative section of this SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Roy Sutton
Case Reviewer
September 17, 2001

ALKANE NARRATIVE REPORT
Report date : 09/17/2001
SDG: B0BB3

Client Sample ID: VBLKFV Lab Sample ID: WG12783-1 File ID: WG12783-1B5

Compound	RT	Est. Conc.	Q
Branched Alkane	4.16	52.46	J

Client Sample ID: B0BB3 Lab Sample ID: B0BB3-1 File ID: B0BB3-1B59

Compound	RT	Est. Conc.	Q
Branched Alkane	4.16	14.96	JB

COMPUCHEM
A division of Liberty Analytical Corporation
501 Madison Ave.
Cary, NC 27513

SDG NARRATIVE

CASE #29681
SDG #B0BB3
CONTRACT #68W99071

SAMPLE IDENTIFICATION: **B0BB3**

This portion of the SDG narrative deals with the semivolatile fraction for the sample above only. For the receiving information associated with the sample, please refer to the volatile SDG narrative.

All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices are included in the sample data sections.

SEMIVOLATILE
The semivolatile fraction was extracted and analyzed within the required holding time. More than the method-specified amount of raw sample was used for the extraction of B0BB3. The higher sample volume yielded slightly lower detection limits for the sample. No Target Compound List (TCL) analyte were detected with concentrations above the Contract Required Quantitation Limit (CRQL) in the sample.

No Tentatively Identified Compounds (TIC) were detected in the sample.

QC SUMMARY
All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.

The surrogates met recovery criteria for the semivolatile fractions. The internal standards met area response and retention time criteria. The associated blanks met Quality Control criteria.

B0BB3 was identified as a rinsate blank, therefore, duplicate matrix spikes were not prepared or analyzed with this SDG.

In the analyses of the Initial and Continuing Calibration standards and the sample, manual quantitations were performed. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of

the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his/her designee, as verified by the following signature:

Patricia B. Hopkins

Patricia B. Hopkins
Data Analyst II
17 September 2001

Note: This report is paginated for reference and accountability in numerical sequence.

CompuChem

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501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE

CASE #29681
SDG #B0BB3
CONTRACT #68W99071

SAMPLE IDENTIFICATIONS: B0BB3

The one water sample listed above were scheduled for the requested analyses of the pesticide fractions. The sample was analyzed and extracted following EPA SOW OLM04.2.

Extraction and analysis holding time requirements were met for all of the sample. No target compounds were present in the sample.

All surrogates met recovery and retention time criteria in the analyses. The associated method blank met all quality control criteria. Duplicate matrix spikes were not required because the sample was a rinsate blank.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted electronically has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Katrina L. Travis
GC/HPLC Manager
September 17, 2001

CompuChem
a division of Liberty Analytical Corp.

ORIGINAL

Sample Delivery Group (SDG)
Cover Sheet

SDG Number B0BB3

Laboratory Name CompuChem Laboratory Code LIBRTY

Contract No. 68W99071 Case No. 29681

Analysis Price _____ SDG Turnaround 21

EPA Sample Numbers in SDG (Listed in Numerical Order)

1)	B0BB3	7)		13)		19)	
2)		8)		14)		20)	
3)		9)		15)		21)	
4)		10)		16)		22)	
5)		11)		17)		23)	
6)		12)		18)		24)	

B0BB3
First Sample in SDG

B0BB3
Last Sample in SDG

08/30/01
First Sample Receipt Date

08/30/01
Last Sample Receipt Date

Note: There are a maximum of 20 **field** samples (excluding PE samples in an SDG. Attach TRs to this form in alphanumeric order (the order listed above on this form).

Signature Alice Evans Date 08/30/01

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RB B0BB3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0BB3

Matrix: (soil/water) WATER Lab Sample ID: B0BB3-1

Sample wt/vol: 5 (g/mL) ML Lab File ID: B0BB3-1B59

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/08/01

GC Column: J&W DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	UJ
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-Butyl Ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	3	J
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	UJ
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RB B0BB3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0BB3

Matrix: (soil/water) WATER Lab Sample ID: B0BB3-1

Sample wt/vol: 5 (g/mL) ML Lab File ID: B0BB3-1B59

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/08/01

GC Column: J&W DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	UJ
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	UJ
100-41-4	Ethylbenzene	10	UJ
1330-20-7	Xylene (Total)	10	UJ
100-42-5	Styrene	10	UJ
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	UJ
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	UJ
106-46-7	1,4-Dichlorobenzene	10	UJ
95-50-1	1,2-Dichlorobenzene	10	UJ
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	UJ

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB B0BB3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0BB3

Matrix: (soil/water) WATER Lab Sample ID: B0BB3-1

Sample wt/vol: 5 (g/mL) ML Lab File ID: B0BB3-1B59

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. _____ Date Analyzed: 09/08/01

GC Column: J&W DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0BB3

Matrix: (soil/water) WATER Lab Sample ID: B0BB3-1

Sample wt/vol: 1050 (g/mL) ML Lab File ID: B0BB3-1A66

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/03/01

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/05/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-52-7	Benzaldehyde	10	U
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
98-86-2	Acetophenone	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
105-60-2	Caprolactam	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
92-52-4	1,1'-Biphenyl	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0BB3

Matrix: (soil/water) WATER Lab Sample ID: B0BB3-1

Sample wt/vol: 1050 (g/mL) ML Lab File ID: B0BB3-1A66

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/03/01

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/05/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	UJ
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
1912-24-9	Atrazine	~~10~~	~~U~~ R
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BB3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0BB3

Matrix: (soil/water) WATER Lab Sample ID: B0BB3-1

Sample wt/vol: 1050 (g/mL) ML Lab File ID: B0BB3-1A66

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted:09/03/01

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/05/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Extraction: (Type) CONT

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB3

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0BB3

Matrix: (soil/water) WATER Lab Sample ID: B0BB3-1

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) _____ Date Received: 08/30/01

Extraction: (Type) SEPF Date Extracted: 09/04/01

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/12/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.053	U
319-85-7	beta-BHC	0.053	U
319-86-8	delta-BHC	0.053	U
58-89-9	gamma-BHC (Lindane)	0.053	U
76-44-8	Heptachlor	0.053	U
309-00-2	Aldrin	0.053	U
1024-57-3	Heptachlor epoxide	0.053	U
959-98-8	Endosulfan I	0.053	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.53	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.053	U
5103-74-2	gamma-Chlordane	0.053	U
8001-35-2	Toxaphene	5.3	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.1	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

Functional Guidelines for Evaluating Organic Analysis

CASE No.: 29681 SDG No.: B0B95
LABORATORY: LIBERTY SITE: ROSELLE PARK

DATA ASSESSMENT

The current SOP HW-6 (Revision 11) June 1996, USEPA Region II Data Validation SOP for Statement of Work OLMO 4.2. for evaluating organic data have been applied.

All data are valid and acceptable except those analytes rejected "R"(unusable). Due to the detection of QC problems, some analytes may have the "J" (estimated), "N"(presumptive evidence for the presence of the material, "U" (non-detect) or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's Signature: Andy Pamayiotou Date: October 12, 2001

Verified By: D Farras Date: 10/12/2001

SDG#B0B95

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

DC-106: The following semivolatile soil samples are outside primary technical extraction holding time criteria. Samples met Contractual criteria. **Hits are qualified "J" and non-detects are qualified "UJ".**

B0B95, B0B95MS, B0B95MSD, B0BA5, B0BA6, B0BA7
B0BA8, B0BA9, B0BB0, B0BB0DL, B0BB1, B0BB2

DC-163: The following pesticide soil samples are outside primary technical extraction holding time criteria. Samples met Contractual criteria. **Hits are qualified "J" and non-detects are qualified "UJ".**

B0BA5DL, B0BA7DL, B0BB2DL
B0B95, B0B95MS, B0B95MSD, B0BA5, B0BA6, B0BA6DL
B0BA7, B0BA8, B0BA8DL, B0BA9, B0BB0, B0BB1
B0BB1DL, B0BB2

2. SURROGATES

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

VOA/BNA/PEST:
No problems.

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

No qualification is performed based on MS/MSD recovery.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than 5 times the blank contaminant level (10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) Method blank contamination:

DC-031: The following **volatile** samples have analyte concentrations reported above the CRQL and less than or equal to ten times (10X) the associated method blank concentration.
Hits are flagged "U" and non-detects are not flagged.

B0B95MS, BOB95MSD
Acetone

DC-200: The following **volatile** samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL.
Hits are flagged "U" and non-detects are not flagged.

B0B95, BA5, BA6, BA7, BA8, BA9, BB0
B0BB1, BB2
Acetone

B) Field or rinse blank contamination:

VOA/BNA/PEST:
No additional qualification necessary based on field blank contamination.

C) Trip blank contamination for VOA aqueous samples:

Not Applicable.

D) Storage Blank associated with VOA samples only

No additional qualification necessary based on storage blank contamination.

E) Tics "R" rejected
VOA:

Methane Dimethoxy - B0B95, BA5, BA6, BA7, BA8, BA9, BB0, BB1, BB2
Lab Artifact - B0BA6, BA7, BB0, BB1

BNA:

The following TIC's are qualified "R". Their concentration is five times (5X) less than their associated method blank concentration.
Unknown at 4.60 min - B0B95, BA6, BA7, BA8, BA9, BB1, BB2

The following TIC's are qualified "R". They have been identified as Target analytes.
Benzo(k)fluoranthene - B0BA5, BA6, BA8, BB0, BB0DL, BB2

The following TIC's are qualified "R". They have been reported twice at different retention times.
Anthracene, 1-Methyl - B0BB0DL
Benzo(e)pyrene - B0BB0DL

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenyl-phosphine (DFTPP).

No problems found for this qualification.

If the mass calibration is in error, all associated data will be classified as unusable "R".

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be $\geq$ 0.05 in both initial and continuing calibrations. A value < 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

B)Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be < 30% and %D must be < 25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:

DC-22: The following **volatile** samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria.
Hits are flagged "J" and non-detects are not flagged.

B0B95, B95MS, B95MSD, BA5, BA6, BA7, BA8
B0BA9, BB0, BB1, BB2, VBLKDU, VBLKEV, VHBLKEV
Acetone

DC-23: The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

B0B95, B95MS, B95MSD, VBLKDU
1,2-Dichloropropane

B0BA5, BA6, BA7, BA8, BA9, BB0, BB1, BB2
VBLKEV, VHBLKEV
Chloroethane, Methyl Acetate

DC-xxx: The following semivolatile samples are associated with an Initial calibration percent relative standard deviation (%RSD) outside expanded criteria.
Hits are qualified "J" and non-detects are qualified "R".

B0B95, B95MS, B95MSD, BA5, BA6, BA7, BA8, BA9
B0BB0, BB1, BB2, SBLKLX
Atrazine

DC-100: The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

SBLKLX, B0B95, B95MS, B95MSD, BA5, BA6
B0BA7, BA8, BA9, BB0, BB1, BB2
Hexachlorobutadiene, 3-Nitroaniline
2,4-Dinitrophenol, 4-Nitrophenol
Di-n-octylphthalate

B0BB0DL
Hexachlorocyclopentadiene, 1,1'-Biphenyl
2,4-Dinitrophenol, 4-Nitrophenol
4,6-Dinitro-2-methylphenol, Di-n-octylphthalate

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction.

No problems found for this qualification.

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

B) Pesticide Fraction:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract.

DC-422: The following pesticide samples have analytes for which the percent difference between column results exceeds primary criteria. Hits > CRQL are flagged "J". Or: if %D is > 50% and

value is < CRQL, sample result is elevated to the CRQL and qualified "U".

Analytes qualified "J".

B0BA5, BA6, BA8, BA9, BB2
beta-BHC

B0BA5, BA5DL, BA6, BA6DL, BA7
Heptachlor epoxide

B0BA5, BB1
Endosulfan I

B0B95MS, B95MSD, BA8
4,4'-DDE

B0B95, BA8
4,4'-DDD

B0BA6, BA7, BA8, BB1DL
Dieldrin

B0BA6DL, BB1
4,4'-DDT

B0BA8
Endrin aldehyde

B0B95, B95MSD
alpha-Chlordane

B0B95, BA6, BA7DL, BB2DL
gamma-Chlordane

DC-423: The following pesticide samples have analytes for which the percent difference between column results exceeds expanded criteria. Hits > CRQL are flagged "NJ"; or "R" when %D >100; or "NJ" when %D is between 100-200 (interference detected). **Hits < CRQL are elevated to the CRQL and qualified "U".**

Analytes qualified "R".

B0BA5, BA6
4,4'-DDE

B0BA7
4,4'-DDD

B0BB0
beta-BHC

Analytes qualified "JN".

B0BA7
beta-BHC

B0BA6DL, BA7, BB1, BB1DL, BB2, BB2DL
4,4'-DDE

B0BA5, BA5DL, BA6, BA6DL, BA7DL, BA8
B0BB1, BB1DL, BB2, BB2DL
alpha-Chlordane

B0BA5, BA5DL, BA6DL, BA8, BB1, BB1DL
B0BB2
gamma-Chlordane

Analytes qualified "U".

B0BB1DL
beta-BHC

B0BA9, BB1
Heptachlor

B0BA6, BA6DL, BA7, BA9, BB1DL, BB2DL
Endosulfan I

B0BA5DL, BA9, BB0
4,4'-DDE

B0BA6DL, BA7DL
4,4'-DDD

B0BB0
4,4'-DDT

B0BB0
Methoxychlor

B0B95, B95MSD
Heptachlor epoxide

B0BB2
Dieldrin

B0BA6
Endrin aldehyde

B0BA8
Endrin ketone

B0BB0
alpha-Chlordane

B0B95MS, B95MSD, BA9
gamma-Chlordane

10. CONTRACT PROBLEMS NON-COMPLIANCE:

11. FIELD DOCUMENTATION:

12. OTHER PROBLEMS

B0BA5 - Endrin ketone was reported as a false negative. The Validator manually calculated the value of Endrin ketone and reported it on Form I Pest.

B0BA5 & B0BA6 - These samples are field duplicates. The percent difference (%D) between columns for gamma-Chlordane is inconsistent (see pp. 1197 and 1200). The Validator can not verify the reason for this significant discrepancy. Therefore, using professional judgement, all values of gamma-Chlordane in both the diluted and undiluted analyses are qualified as "JN".

13. This package contains reextractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified not to be used.

BNA:

B0BB0DL

PEST:

B0BA5DL, BA6DL, BA7DL, BA8DL, BB1DL, BB2DL

SAMPLENUM	CLIENTID	QUOTENUMREF	LOGINNUM	MATNUM	ACCTNUM	PROJECTNUM	RECEIVEDATE
B0B95-1	B0B95	29681	B0B95	SO	EPA	68W99071-1A	8/30/01
B0B95-2	B0BA5	29681	B0B95	SO	EPA	68W99071-1A	8/30/01
B0B95-3	B0BA6	29681	B0B95	SO	EPA	68W99071-1A	8/30/01
B0B95-4	B0BA7	29681	B0B95	SO	EPA	68W99071-1A	8/30/01
B0B95-5	B0BA8	29681	B0B95	SO	EPA	68W99071-1A	8/30/01
B0B95-6	B0BA9	29681	B0B95	SO	EPA	68W99071-1A	8/30/01
B0B95-7	B0BB0	29681	B0B95	SO	EPA	68W99071-1A	8/30/01
B0B95-8	B0BB1	29681	B0B95	SO	EPA	68W99071-1A	8/30/01
B0B95-9	B0BB2	29681	B0B95	SO	EPA	68W99071-1A	8/30/01

DUPS

DUPS

CompuChem
a division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SEP 19 2001

SDG NARRATIVE
CASE #29681
SDG #B0B95
CONTRACT # 68W99071

SAMPLE IDENTIFICATIONS: B0B95 B0BA5 B0BA6 B0BA7 B0BA8 B0BA9 B0BB0 B0BB1 B0BB2

The nine soil samples listed above were received intact in EnCore samplers, at 4 degrees C, with proper documentation, in sealed shipping containers, on August 30, 2001. All samples were submitted for volatile, semivolatile and pesticide-PCB analysis. The samples were prepared by SW846 Method 5035, and analyzed following Contract Laboratory Protocol(CLP) Statement of Work(SOW), document OLM04.2. This portion of the SDG narrative deals with the volatile fractions only. All pertinent Quality Assurance Notices are included in the narrative section, and all pertinent Laboratory Notices for Case # 29681, SDG # B0B95 are included in the sample data sections.

Analysis holding time requirements were met for all of these samples, and sample dry weight values ranged from 1 to 13 percent. No Target Compound List(TCL) analytes were identified above the Contract Required Quantitation Limit(CRQL) in the submitted samples.

Other than laboratory artifact peaks, one early eluting Tentatively Identified Compound(TIC) was present in all samples.

All Bromofluorobenzene (BFB) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.
The system monitoring compounds (SMCs) met recovery criteria in the analyses of these samples, and all of the internal standards met retention time and response criteria in the analyses of these samples.
The associated method blanks met all quality control criteria, and did not contain any target analytes above the CRQL.
The asssociated storage blank met all QC criteria, and also did not contain any TCL analytes above the CRQL.

Duplicate matrix spikes were generated from the original B0B95 as designated by the region, and all QC precision and accuracy criteria were met without exception..
Manual quantitations were performed on the process files in some of the the associated initial, and continuing calibration(s). The reasons have been coded with explanations provided in the notice included in the narrative section of this SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Roy Sutton
Case Reviewer
September 17, 2001

ALKANE NARRATIVE REPORT
Report date : 09/17/2001
SDG: B0B95

Client Sample ID: VBLKDU Lab Sample ID: WG12703-3 File ID: WG12703-3A7

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.35	9.60	J

Client Sample ID: VBLKEV Lab Sample ID: WG12728-1 File ID: WG12728-1A7

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.35	13.55	J

Client Sample ID: VHBLKEV Lab Sample ID: WG12728-6 File ID: WG12728-6R

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.35	13.78	JB

Client Sample ID: B0BA5 Lab Sample ID: B0B95-2 File ID: B0B95-2R2A71

Compound	RT	Est. Conc.	Q
Branched Alkane	4.96	13.45	J

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A division of Liberty Analytical Corporation
501 Madison Ave.
Cary, NC 27513

SDG NARRATIVE

CASE # 29681
SDG # B0B95
CONTRACT #68W99071

SAMPLE IDENTIFICATIONS:

B0B95 B0BA5 B0BA6 B0BA7 B0BA8 B0BA9 B0BB0 B0BB1 B0BB2

This portion of the SDG narrative deals with the semivolatile fractions for the nine samples above only. For the receiving information associated with these samples, please refer to the volatile SDG narrative.

All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices are included in the sample data sections.

SEMIVOLATILE
The semivolatile fractions were extracted and analyzed within the required holding time. The percent moisture values for the samples ranged from 1% to 13% and the pH values ranged from 5.9 to 8.3.

One to fifteen Target Compound List (TCL) analytes were detected with concentrations above the Contract Required Quantitation Limit (CRQL) in the samples. These analytes were bis(2-ethylhexyl)phthalate, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, phenanthrene, acenaphthene, fluorene, anthracene, carbazole, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene and benzo(g,h,i)perylene.

One to thirty Tentatively Identified Compounds (TIC) were detected in the samples. These TICs were assessed as unknowns, aldehydes, PAHs, thiophenes, amines, carboxylic acids, naphthalenes and quinoline. Other TICs were detected and assessed as unknown alkanes in some of the samples. The TICs that were characterized as alkanes have been summarized on the Alkane Narrative Report that is located in the narrative section of the data package. The TIC spectra for the alkanes are located in the data section for the individual samples.

In the analyses of B0BA5, B0BA6, B0BA7, B0BA8, B0BB0 and B0BB2, one or more TICs were assessed as TCL analytes. However, the retention times of these TICs did not compare well to the analyte retention times in the associated Continuing Calibration standard. In accordance with the EPA CLP Statement of Work, Document number OLM04.2, TICs at or above 85% purity should be assessed as the compound [page D-46/SVOA; section 11.1.2.5.6].

In the initial undiluted analysis of B0BB0, the on-column amounts of one or more analytes exceeded the instrument's analytical range as defined by the highest concentration level of the Initial Calibration. The sample was reanalyzed at a 5x dilution in order to bring the on-column amount into range. The undiluted and diluted analyses of the sample have been reported and billed for.

QC SUMMARY

All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.

The surrogates met recovery criteria for the semivolatile fractions. The internal standards met area response and retention time criteria.

The associated blank met overall Quality Control criteria. The recovery of the advisory surrogate 1,2-dichlorobenzene-d4 was flagged as an outlier in SBLKLX.

B0B95 was used as the original to prepare the duplicate matrix spikes as requested. The duplicate matrix spikes met accuracy and precison criteria, with some exceptions. The recoveries of 2,4-dinitrotoluene and pentachlorophenol were flagged as outliers in the MS and the recovery of pentachlorophenol was flagged as an outlier in the MSD. The relative percent difference value for acenaphthene was flagged as an outlier in the comparison of the duplicate matrix spikes.

In the analyses of the Initial and Continuing Calibration standards and all of the samples, manual quantitations were performed. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his/her designee, as verified by the following signature:

Patricia B. Hopkins
Data Analyst II
17 September 2001

Note: This report is paginated for reference and accountability in numerical sequence.

ALKANE NARRATIVE REPORT
Report date : 09/17/2001
SDG: B0B95

Client Sample ID: B0B95 Lab Sample ID: B0B95-1 File ID: B0B95-1A

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	17.09	69.37	J

Client Sample ID: B0BA5 Lab Sample ID: B0B95-2 File ID: B0B95-2A70

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	15.93	285.5	J
Straight-Chain Alkane	16.47	168.7	J
Straight-Chain Alkane	17.09	446.9	J
Straight-Chain Alkane	18.75	697.5	J
Straight-Chain Alkane	20.56	971.3	J

Client Sample ID: B0BA6 Lab Sample ID: B0B95-3 File ID: B0B95-3A70

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	16.46	180.6	J
Straight-Chain Alkane	17.09	345.6	J
Straight-Chain Alkane	18.74	499.2	J

Client Sample ID: B0BA7 Lab Sample ID: B0B95-4 File ID: B0B95-4A7

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	16.46	138.4	J
Straight-Chain Alkane	17.08	270.2	J
Straight-Chain Alkane	18.74	488.9	J

Client Sample ID: B0BA8 Lab Sample ID: B0B95-5 File ID: B0B95-5A70

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	15.03	77.18	J
Unknown Alkane	15.94	77.89	J
Unknown Alkane	16.47	192.4	J
Straight-Chain Alkane	17.09	231.1	J
Straight-Chain Alkane	18.75	367.9	J

Client Sample ID: B0BA9 Lab Sample ID: B0B95-6 File ID: B0B95-6A70

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	15.92	90.50	J
Straight-Chain Alkane	16.47	161.8	J
Straight-Chain Alkane	17.09	324.4	J
Straight-Chain Alkane	18.75	545.1	J

Client Sample ID: B0BB1 Lab Sample ID: B0B95-8 File ID: B0B95-8A70

Compound	RT	Est. Conc.	Q

Straight-Chain Alkane	14.12	87.15	J
Straight-Chain Alkane	15.03	94.51	J
Straight-Chain Alkane	15.94	116.7	J
Straight-Chain Alkane	16.46	222.6	J
Straight-Chain Alkane	17.09	568.3	J
Straight-Chain Alkane	18.75	967.7	J
Straight-Chain Alkane	20.57	871.1	J

Client Sample ID: B0BB2 Lab Sample ID: B0B95-9 File ID: B0B95-9A70

Compound	RT	Est. Conc.	Q
Unknown Alkane	15.46	93.31	J
Straight-Chain Alkane	15.93	105.8	J
Straight-Chain Alkane	16.46	169.5	J
Straight-Chain Alkane	17.10	368.5	J
Straight-Chain Alkane	18.74	606.2	J
Straight-Chain Alkane	20.58	682.6	J

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SDG NARRATIVE

CASE #29681
SDG #B0B95
CONTRACT #68W99071

SAMPLE IDENTIFICATIONS: B0B95, B0BA5, B0BA6, B0BA7, B0BA8, B0BA9, B0BB0, B0BB1, B0BB2

The nine soil samples listed above were scheduled for the requested analyses of the pesticide fractions. The samples were analyzed and extracted following EPA SOW OLM04.2.

Extraction and analysis holding time requirements were met for all of the samples. Target compounds were present in each of the sample analyses. Samples B0BA5, B0BA6, B0BA7, B0BA8, B0BB1 and B0BB2 were analyzed at a billable dilution as well as 10X more concentrated or neat due to target compounds that exceeded the calibration range.

The surrogate, decachlorobiphenyl, exhibited high recovery for sample B0BB0. All of the remaining surrogates met recovery and retention time criteria in the analyses. The associated method blank met all quality control criteria. Duplicate matrix spikes were prepared on sample B0B95 and met advisory limits for all compounds.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted electronically has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Katrina L. Travis
GC/HPLC Manager
September 18, 2001

CompuChem
a division of Liberty Analytical Corp.

ORIGINAL

Sample Delivery Group (SDG)
Cover Sheet

SDG Number B0B95

Laboratory Name CompuChem Laboratory Code LIBRTY

Contract No. 68W99071 Case No. 29681

Analysis Price _____ SDG Turnaround 21

EPA Sample Numbers in SDG (Listed in Numerical Order)

1)	B0B95	7)	B0BB0	13)		19)	
2)	B0BA5	8)	B0BB1	14)		20)	
3)	B0BA6	9)	B0BB2	15)		21)	
4)	B0BA7	10)		16)		22)	
5)	B0BA8	11)		17)		23)	
6)	B0BA9	12)		18)		24)	

B0B95
First Sample in SDG

B0BB2
Last Sample in SDG

08/30/01
First Sample Receipt Date

08/30/01
Last Sample Receipt Date

Note: There are a maximum of 20 **field** samples (excluding PE samples in an SDG. Attach TRs to this form in alphanumeric order (the order listed above on this form).

Signature Alice Evans Date 08/30/01

20

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B95

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-1

Sample wt/vol: 5.40(g/mL) G Lab File ID: B0B95-1B71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 3	~~JB~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B95

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-1

Sample wt/vol: 5.40 (g/mL) G Lab File ID: B0B95-1B71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U J
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B95

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-1

Sample wt/vol: 5.40 (g/mL) G Lab File ID: B0B95-1B71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 1 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	~~8 NJB~~ R	
2.					
3.					
4.					
5.					
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8.					
9.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA5

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-2

Sample wt/vol: 5.00(g/mL) G Lab File ID: B0B95-2R2A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	UJ
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	11 ~~5~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	UJ
75-09-2	Methylene Chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA5

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-2

Sample wt/vol: 5.00(g/mL) G Lab File ID: B0B95-2R2A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B0BA5

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-2

Sample wt/vol: 5.00 (g/mL) G Lab File ID: B0B95-2R2A71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	~~9 NJB~~ R	
2.					
3.					
4.					
5.					
6.					
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8.					
9.					
10.					
11.					
12.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA6

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-3

Sample wt/vol: 4.82(g/mL) G Lab File ID: B0B95-3RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	UJ
75-35-4	1,1-Dichloroethene	2	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	~~4~~	~~JB~~ UJ
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene Chloride	1	~~J~~ J
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA6

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-3

Sample wt/vol: 4.82 (g/mL) G Lab File ID: B0B95-3RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA6

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-3

Sample wt/vol: 4.82 (g/mL) G Lab File ID: B0B95-3RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	~~11~~ NJB	~~J~~ R
2.		LABORATORY ARTIFACT	13.02	~~7~~ J	~~J~~ R
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA7

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-4

Sample wt/vol: 4.85(g/mL) G Lab File ID: B0B95-4RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 9 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	UJ
75-69-4	Trichlorofluoromethane	5	J
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	11 ~~3~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	UJ
75-09-2	Methylene Chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA7

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-4

Sample wt/vol: 4.85(g/mL) G Lab File ID: B0B95-4RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 9 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA7

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-4

Sample wt/vol: 4.85 (g/mL) G Lab File ID: B0B95-4RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 9 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	~~11~~ ~~NJB~~ R	
2.		LABORATORY ARTIFACT	13.02	~~9~~ ~~J~~ R	
3.					
4.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA8

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-5

Sample wt/vol: 4.88(g/mL) G Lab File ID: B0B95-5RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 10 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	UJ
75-69-4	Trichlorofluoromethane	3	J
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	11 ~~4~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	UJ
75-09-2	Methylene Chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA8

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-5

Sample wt/vol: 4.88 (g/mL) G Lab File ID: B0B95-5RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 10 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA8

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-5

Sample wt/vol: 4.88 (g/mL) G Lab File ID: B0B95-5RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 10 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	~~10~~ NJB	R
2.					
3.					
4.					
5.					
6.					
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8.					
9.					
10.					
11.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA9

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-6

Sample wt/vol: 3.81(g/mL) G Lab File ID: B0B95-6RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl Chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	UJ
75-69-4	Trichlorofluoromethane	6	J
75-35-4	1,1-Dichloroethene	14	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	14	U
67-64-1	Acetone	14 ~~8~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	14	U
79-20-9	Methyl Acetate	2	~~J~~ J
75-09-2	Methylene Chloride	14	U
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	Methyl-tert-butyl ether	14	U
75-34-3	1,1-Dichloroethane	14	U
156-59-2	cis-1,2-Dichloroethene	14	U
78-93-3	2-Butanone	14	U
67-66-3	Chloroform	14	U
71-55-6	1,1,1-Trichloroethane	14	U
110-82-7	Cyclohexane	14	U
56-23-5	Carbon Tetrachloride	14	U
71-43-2	Benzene	14	U
107-06-2	1,2-Dichloroethane	14	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA9

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-6

Sample wt/vol: 3.81(g/mL) G Lab File ID: B0B95-6RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	14	U
108-87-2	Methylcyclohexane	14	U
78-87-5	1,2-Dichloropropane	14	U
75-27-4	Bromodichloromethane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
108-88-3	Toluene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	14	U
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
1330-20-7	Xylene (Total)	14	U
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
98-82-8	Isopropylbenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
96-12-8	1,2-Dibromo-3-Chloropropane	14	U
120-82-1	1,2,4-Trichlorobenzene	14	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA9

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-6

Sample wt/vol: 3.81 (g/mL) G Lab File ID: B0B95-6RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.00	~~15~~ ~~NJB~~ R	
2.					
3.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-7

Sample wt/vol: 4.20(g/mL) G Lab File ID: B0B95-7RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 13 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl Chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	UJ
75-69-4	Trichlorofluoromethane	6	J
75-35-4	1,1-Dichloroethene	14	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	14	U
67-64-1	Acetone	14 ~~5~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	14	U
79-20-9	Methyl Acetate	14	UJ
75-09-2	Methylene Chloride	14	U
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	Methyl-tert-butyl ether	14	U
75-34-3	1,1-Dichloroethane	14	U
156-59-2	cis-1,2-Dichloroethene	14	U
78-93-3	2-Butanone	14	U
67-66-3	Chloroform	14	U
71-55-6	1,1,1-Trichloroethane	14	U
110-82-7	Cyclohexane	14	U
56-23-5	Carbon Tetrachloride	14	U
71-43-2	Benzene	14	U
107-06-2	1,2-Dichloroethane	14	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-7

Sample wt/vol: 4.20(g/mL) G Lab File ID: B0B95-7RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 13 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	14	U
108-87-2	Methylcyclohexane	14	U
78-87-5	1,2-Dichloropropane	14	U
75-27-4	Bromodichloromethane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
108-88-3	Toluene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	14	U
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
1330-20-7	Xylene (Total)	14	U
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
98-82-8	Isopropylbenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
96-12-8	1,2-Dibromo-3-Chloropropane	14	U
120-82-1	1,2,4-Trichlorobenzene	14	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BB0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-7

Sample wt/vol: 4.20 (g/mL) G Lab File ID: B0B95-7RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 13 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	~~13~~ ~~NJB~~	R
2.		LABORATORY ARTIFACT	13.02	~~11~~ ~~J~~	R
3.		LABORATORY ARTIFACT	14.49	~~9~~ ~~J~~	R
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-8

Sample wt/vol: 4.93(g/mL) G Lab File ID: B0B95-8RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 7 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	UJ
75-69-4	Trichlorofluoromethane	4	J
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	11 ~~6~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	2	~~J~~ J
75-09-2	Methylene Chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-8

Sample wt/vol: 4.93(g/mL) G Lab File ID: B0B95-8RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 7 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BB1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-8

Sample wt/vol: 4.93 (g/mL) G Lab File ID: B0B95-8RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 7 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	~~11~~ ~~NJB~~	R
2.		LABORATORY ARTIFACT	13.02	~~6~~ ~~J~~	R
3.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-9

Sample wt/vol: 4.18(g/mL) G Lab File ID: B0B95-9RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	13	U
74-87-3	Chloromethane	13	U
75-01-4	Vinyl Chloride	13	U
74-83-9	Bromomethane	13	U
75-00-3	Chloroethane	13	UJ
75-69-4	Trichlorofluoromethane	3	J
75-35-4	1,1-Dichloroethene	13	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	13	U
67-64-1	Acetone	13 ~~9~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	13	U
79-20-9	Methyl Acetate	4	~~J~~ J
75-09-2	Methylene Chloride	13	U
156-60-5	trans-1,2-Dichloroethene	13	U
1634-04-4	Methyl-tert-butyl ether	13	U
75-34-3	1,1-Dichloroethane	13	U
156-59-2	cis-1,2-Dichloroethene	13	U
78-93-3	2-Butanone	13	U
67-66-3	Chloroform	13	U
71-55-6	1,1,1-Trichloroethane	13	U
110-82-7	Cyclohexane	13	U
56-23-5	Carbon Tetrachloride	13	U
71-43-2	Benzene	13	U
107-06-2	1,2-Dichloroethane	13	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-9

Sample wt/vol: 4.18(g/mL) G Lab File ID: B0B95-9RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	13	U
108-87-2	Methylcyclohexane	13	U
78-87-5	1,2-Dichloropropane	13	U
75-27-4	Bromodichloromethane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
108-88-3	Toluene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
79-00-5	1,1,2-Trichloroethane	13	U
127-18-4	Tetrachloroethene	13	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	13	U
106-93-4	1,2-Dibromoethane	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
1330-20-7	Xylene (Total)	13	U
100-42-5	Styrene	13	U
75-25-2	Bromoform	13	U
98-82-8	Isopropylbenzene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
541-73-1	1,3-Dichlorobenzene	13	U
106-46-7	1,4-Dichlorobenzene	13	U
95-50-1	1,2-Dichlorobenzene	13	U
96-12-8	1,2-Dibromo-3-Chloropropane	13	U
120-82-1	1,2,4-Trichlorobenzene	13	U

1F

EPA SAMPLE NO.

B0BB2

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-9

Sample wt/vol: 4.18 (g/mL) G Lab File ID: B0B95-9RA71

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: not dec. 8 Date Analyzed: 09/07/01

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-87-5	METHANE, DIMETHOXY-	6.01	~~15~~ NJB	R
2.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B95

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-1

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-1A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	330	UJ
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	330	U
92-52-4	1,1'-Biphenyl	840	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	330	U
131-11-3	Dimethylphthalate	840	U
606-20-2	2,6-Dinitrotoluene	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	330	U
83-32-9	Acenaphthene	840	U
		330	UJ

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B95

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-1

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-1A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	UJ
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	UJ
118-74-1	Hexachlorobenzene	~~330~~	~~U~~ R
1912-24-9	Atrazine	330	UJ
87-86-5	Pentachlorophenol	840	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	UJ
206-44-0	Fluoranthene	39	~~J~~ J
129-00-0	Pyrene	43	~~J~~ J
85-68-7	Butylbenzylphthalate	330	UJ
91-94-1	3,3'-Dichlorobenzidine	330	UJ
56-55-3	Benzo(a)anthracene	330	UJ
218-01-9	Chrysene	330	UJ
117-81-7	bis(2-Ethylhexyl)phthalate	760	J
117-84-0	Di-n-octylphthalate	330	UJ
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	UJ

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0B95

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B95-1A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 1 Decanted: (Y/N) N Date Extracted:09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Extraction: (Type) SONC

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.61	~~90~~ ~~JB~~ R	
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA5

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-2

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B95-2A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/10/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	360	UJ
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
92-52-4	1,1'-Biphenyl	360	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
606-20-2	2,6-Dinitrotoluene	360	UJ
208-96-8	Acenaphthylene	38	~~J~~ J
99-09-2	3-Nitroaniline	900	UJ
83-32-9	Acenaphthene	360	UJ

FORM I SV-1 OLM04.2

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA5

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-2

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-2A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	UJ
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	UJ
1912-24-9	Atrazine	~~360~~	~~U~~ R
87-86-5	Pentachlorophenol	900	UJ
85-01-8	Phenanthrene	310	~~J~~ J
120-12-7	Anthracene	50	~~J~~ J
86-74-8	Carbazole	360	UJ
84-74-2	Di-n-butylphthalate	360	UJ
206-44-0	Fluoranthene	670	J
129-00-0	Pyrene	850	J
85-68-7	Butylbenzylphthalate	360	UJ
91-94-1	3,3'-Dichlorobenzidine	360	UJ
56-55-3	Benzo(a)anthracene	470	J
218-01-9	Chrysene	450	J
117-81-7	bis(2-Ethylhexyl)phthalate	81	~~J~~ J
117-84-0	Di-n-octylphthalate	360	UJ
205-99-2	Benzo(b)fluoranthene	350	~~J~~ J
207-08-9	Benzo(k)fluoranthene	490	J
50-32-8	Benzo(a)pyrene	440	J
193-39-5	Indeno(1,2,3-cd)pyrene	320	~~J~~ J
53-70-3	Dibenzo(a,h)anthracene	140	~~J~~ J
191-24-2	Benzo(g,h,i)perylene	240	~~J~~ J

(1) - Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B0BA5

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-2

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B95-2A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/10/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

Number TICs found: 30 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	4.92	200	J
2.	203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRE	12.34	86	NJ
3.	57-10-3	HEXADECANOIC ACID	12.39	140	NJ
4.	84-65-1	9,10-ANTHRACENEDIONE	12.65	110	NJ
5.		UNKNOWN	13.09	74	J
6.	243-17-4	11H-BENZO[B]FLUORENE	13.95	150	NJ
7.		METHYLPYRENE	14.08	99	J
8.	82-05-3	7H-BENZ[DE]ANTHRACEN-7-ONE	14.66	160	NJ
9.		UNKNOWN	14.84	250	J
10.		UNKNOWN	15.27	170	J
11.		UNKNOWN	15.40	220	J
12.	1705-84-6	TRIPHENYLENE, 2-METHYL-	15.69	190	NJ
13.		UNKNOWN	16.03	180	J
14.	207-08-9	BENZO[K]FLUORANTHENE	16.94	~~160~~ ~~NJ~~	R
15.		UNKNOWN	17.18	320	J
16.	207-08-9	BENZO[K]FLUORANTHENE	17.28	~~470~~ ~~NJ~~	R
17.	193-39-5	INDENO[1,2,3-CD]PYRENE	19.88	270	NJ R
18.		UNKNOWN PAH	20.34	230	J
19.		UNKNOWN	20.72	250	J
20.		UNKNOWN	21.10	280	J
21.		UNKNOWN	21.25	250	J
22.		UNKNOWN	21.43	340	J
23.		UNKNOWN	21.52	330	J
24.		UNKNOWN	21.60	220	J
25.		UNKNOWN	21.74	150	J
26.		UNKNOWN	22.16	260	J
27.		UNKNOWN	22.35	470	J
28.		UNKNOWN	22.82	270	J
29.		UNKNOWN	23.73	270	J
30.		UNKNOWN	24.04	140	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA6

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-3A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	360	UJ
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
92-52-4	1,1'-Biphenyl	360	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
606-20-2	2,6-Dinitrotoluene	360	U
208-96-8	Acenaphthylene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	UJ

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA6

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-3A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	UJ
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	UJ
118-74-1	Hexachlorobenzene	~~360~~	~~U~~ R
1912-24-9	Atrazine	360	UJ
87-86-5	Pentachlorophenol	900	UJ
85-01-8	Phenanthrene	250	~~J~~ J
120-12-7	Anthracene	41	~~J~~ J
86-74-8	Carbazole	360	UJ
84-74-2	Di-n-butylphthalate	360	UJ
206-44-0	Fluoranthene	470	J
129-00-0	Pyrene	420	J
85-68-7	Butylbenzylphthalate	360	UJ
91-94-1	3,3'-Dichlorobenzidine	360	UJ
56-55-3	Benzo(a)anthracene	230	~~J~~ J
218-01-9	Chrysene	230	~~J~~ J
117-81-7	bis(2-Ethylhexyl)phthalate	47	~~J~~ J
117-84-0	Di-n-octylphthalate	360	UJ
205-99-2	Benzo(b)fluoranthene	300	~~J~~ J
207-08-9	Benzo(k)fluoranthene	210	~~J~~
50-32-8	Benzo(a)pyrene	250	~~J~~
193-39-5	Indeno(1,2,3-cd)pyrene	210	~~J~~
53-70-3	Dibenzo(a,h)anthracene	89	~~J~~
191-24-2	Benzo(g,h,i)perylene	160	~~J~~ J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA6

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-3

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B95-3A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

Number TICs found: 18 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.62	~~98~~ ~~JB~~	R
2.		UNKNOWN	4.92	150	J
3.	238-84-6	11H-BENZO[A]FLUORENE	13.94	79	NJ
4.	50-32-8	BENZO[A]PYRENE	16.95	100	~~NJ~~ R
5.	207-08-9	BENZO[K]FLUORANTHENE	17.27	~~270~~ ~~NJ~~	R
6.		UNKNOWN	19.87	100	J
7.		UNKNOWN PAH	20.33	110	J
8.		UNKNOWN PAH	20.41	160	J
9.		UNKNOWN	20.72	150	J
10.		UNKNOWN	21.04	200	J
11.		UNKNOWN	21.26	190	J
12.		UNKNOWN	21.43	220	J
13.		UNKNOWN	21.51	240	J
14.		UNKNOWN	21.61	160	J
15.		UNKNOWN	22.16	150	J
16.		UNKNOWN	22.34	300	J
17.		UNKNOWN	22.80	200	J
18.		UNKNOWN	23.73	170	J
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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA7

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-4

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-4A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 9 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	360	UJ
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	910	U
92-52-4	1,1'-Biphenyl	360	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	360	U
606-20-2	2,6-Dinitrotoluene	360	U
208-96-8	Acenaphthylene	360	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	360	UJ

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA7

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-4

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-4A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 9 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	910	UJ
100-02-7	4-Nitrophenol	910	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	N-nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	UJ
1912-24-9	Atrazine	~~360~~ U	R
87-86-5	Pentachlorophenol	910	UJ
85-01-8	Phenanthrene	490	J
120-12-7	Anthracene	76	J
86-74-8	Carbazole	48	J
84-74-2	Di-n-butylphthalate	360	UJ
206-44-0	Fluoranthene	770	J
129-00-0	Pyrene	680	J
85-68-7	Butylbenzylphthalate	360	UJ
91-94-1	3,3'-Dichlorobenzidine	360	UJ
56-55-3	Benzo(a)anthracene	380	J
218-01-9	Chrysene	430	J
117-81-7	bis(2-Ethylhexyl)phthalate	53	J
117-84-0	Di-n-octylphthalate	360	UJ
205-99-2	Benzo(b)fluoranthene	420	J
207-08-9	Benzo(k)fluoranthene	370	J
50-32-8	Benzo(a)pyrene	380	J
193-39-5	Indeno(1,2,3-cd)pyrene	260	J
53-70-3	Dibenzo(a,h)anthracene	130	J
191-24-2	Benzo(g,h,i)perylene	210	J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA7

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-4

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B95-4A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 9 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/10/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

Number TICs found: 15 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.63	~~150~~ ~~JB~~ R	
2.		UNKNOWN	4.92	140	J
3.		CYCLOBUTAPHENANTHRENE	12.35	99	J
4.	57-10-3	HEXADECANOIC ACID	12.39	120	NJ
5.	238-84-6	11H-BENZO[A]FLUORENE	13.94	92	NJ
6.	3442-78-2	PYRENE, 2-METHYL-	14.08	74	NJ
7.	207-08-9	BENZO[K]FLUORANTHENE	16.95	110 ~~NJ~~ R	
8.	192-97-2	BENZO[E]PYRENE	17.27	410	NJ
9.		UNKNOWN	19.87	140	J
10.		UNKNOWN PAH	20.35	150	J
11.		UNKNOWN PAH	20.41	130	J
12.		UNKNOWN	21.04	280	J
13.		UNKNOWN	21.44	120	J
14.		UNKNOWN	21.53	210	J
15.		UNKNOWN	22.34	290	J
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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA8

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-5

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-5A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 10 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	370	U J
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
98-86-2	Acetophenone	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
105-60-2	Caprolactam	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	370	U
92-52-4	1,1'-Biphenyl	920	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	370	U
131-11-3	Dimethylphthalate	920	U
606-20-2	2,6-Dinitrotoluene	370	U
208-96-8	Acenaphthylene	370	U
99-09-2	3-Nitroaniline	370	U
83-32-9	Acenaphthene	920	U
		370	U J

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA8

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-5

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-5A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 10 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	920	UJ
100-02-7	4-Nitrophenol	920	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
86-73-7	Fluorene	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
100-01-6	4-Nitroaniline	920	U
534-52-1	4,6-Dinitro-2-methylphenol	920	U
86-30-6	N-nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	UJ
1912-24-9	Atrazine	~~370~~	~~U~~ R
87-86-5	Pentachlorophenol	920	UJ
85-01-8	Phenanthrene	250	J J
120-12-7	Anthracene	52	J J
86-74-8	Carbazole	370	UJ
84-74-2	Di-n-butylphthalate	370	UJ
206-44-0	Fluoranthene	500	J
129-00-0	Pyrene	390	J
85-68-7	Butylbenzylphthalate	370	UJ
91-94-1	3,3'-Dichlorobenzidine	370	UJ
56-55-3	Benzo(a)anthracene	240	J J
218-01-9	Chrysene	250	J J
117-81-7	bis(2-Ethylhexyl)phthalate	110	J J
117-84-0	Di-n-octylphthalate	370	UJ
205-99-2	Benzo(b)fluoranthene	270	J J
207-08-9	Benzo(k)fluoranthene	230	J
50-32-8	Benzo(a)pyrene	240	J
193-39-5	Indeno(1,2,3-cd)pyrene	180	J
53-70-3	Dibenzo(a,h)anthracene	87	J
191-24-2	Benzo(g,h,i)perylene	140	J J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: B0BA8

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-5

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B95-5A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 10 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

Number TICs found: 25 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.62	~~94~~ JB	~~J~~ R
2.		UNKNOWN	4.92	120	J
3.		CYCLOPENTAPHENANTHRENE	12.34	83	J
4.	57-10-3	HEXADECANOIC ACID	12.39	140	NJ
5.	243-17-4	11H-BENZO[B]FLUORENE	13.95	82	NJ
6.	207-08-9	BENZO[K]FLUORANTHENE	16.96	~~93~~ NJ	~~NJ~~ R
7.		UNKNOWN	17.19	340	J
8.	192-97-2	BENZO[E]PYRENE	17.28	290	NJ
9.	2765-11-9	PENTADECANAL-	18.26	120	NJ
10.		UNKNOWN	19.88	120	J
11.		UNKNOWN	20.18	190	J
12.		UNKNOWN PAH	20.35	160	J
13.		UNKNOWN PAH	20.42	150	J
14.		UNKNOWN	20.72	150	J
15.		UNKNOWN	20.83	110	J
16.		UNKNOWN	21.10	240	J
17.		UNKNOWN	21.26	180	J
18.		UNKNOWN	21.45	180	J
19.		UNKNOWN	21.54	290	J
20.		UNKNOWN	21.62	170	J
21.		UNKNOWN	21.75	160	J
22.		UNKNOWN	22.18	100	J
23.		UNKNOWN	22.36	290	J
24.		UNKNOWN PAH	23.43	91	J
25.		UNKNOWN	23.77	130	J
26.					
27.					
28.					
29.					
30.					

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA9

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-6A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	360	UJ
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	360	U
92-52-4	1,1'-Biphenyl	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	360	U
131-11-3	Dimethylphthalate	900	U
606-20-2	2,6-Dinitrotoluene	360	U
208-96-8	Acenaphthylene	360	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	900	U
		360	UJ

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA9

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-6A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	UJ
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
100-01-6	4-Nitroaniline	360	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-nitrosodiphenylamine (1)	900	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
1912-24-9	Atrazine	360	UJ
87-86-5	Pentachlorophenol	~~360~~	~~U~~ R
85-01-8	Phenanthrene	900	UJ
120-12-7	Anthracene	520	J
86-74-8	Carbazole	73	~~J~~ J
84-74-2	Di-n-butylphthalate	48	~~J~~ J
206-44-0	Fluoranthene	360	UJ
129-00-0	Pyrene	800	J
85-68-7	Butylbenzylphthalate	530	J
91-94-1	3,3'-Dichlorobenzidine	360	UJ
56-55-3	Benzo(a)anthracene	360	UJ
218-01-9	Chrysene	330	~~J~~ J
117-81-7	bis(2-Ethylhexyl)phthalate	350	~~J~~ J
117-84-0	Di-n-octylphthalate	240	~~J~~ J
205-99-2	Benzo(b)fluoranthene	360	UJ
207-08-9	Benzo(k)fluoranthene	400	J
50-32-8	Benzo(a)pyrene	330	~~J~~ J
193-39-5	Indeno(1,2,3-cd)pyrene	340	~~J~~ J
53-70-3	Dibenzo(a,h)anthracene	230	~~J~~ J
191-24-2	Benzo(g,h,i)perylene	110	~~J~~ J
		190	~~J~~ J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BA9

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-6

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B95-6A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/10/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Extraction: (Type) SONC

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.62	~~110~~ ~~JB~~ R	
2.		UNKNOWN	4.92	150	J
3.		UNKNOWN	8.02	93	J
4.		UNKNOWN	12.36	83	J
5.	57-10-3	HEXADECANOIC ACID	12.39	95	NJ
6.	84-65-1	9,10-ANTHRACENEDIONE	12.65	77	NJ
7.	243-17-4	11H-BENZO[B]FLUORENE	13.95	93	NJ
8.		UNKNOWN	17.18	450	J
9.	192-97-2	BENZO[E]PYRENE	17.28	350	NJ
10.		UNKNOWN	19.88	190	J
11.		UNKNOWN	20.18	140	J
12.		UNKNOWN PAH	20.35	220	J
13.		UNKNOWN PAH	20.42	190	J
14.		UNKNOWN	20.72	250	J
15.		UNKNOWN	20.81	160	J
16.		UNKNOWN	21.08	740	J
17.		UNKNOWN	21.26	220	J
18.		UNKNOWN	21.45	270	J
19.		UNKNOWN	21.54	500	J
20.		UNKNOWN	21.75	260	J
21.		UNKNOWN	22.18	140	J
22.		UNKNOWN	22.36	590	J
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-7

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-7A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 13 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	380	UJ
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U
98-86-2	Acetophenone	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
91-20-3	Naphthalene	380	UJ
106-47-8	4-Chloroaniline	240	~~J~~ J
87-68-3	Hexachlorobutadiene	380	UJ
105-60-2	Caprolactam	380	UJ
59-50-7	4-Chloro-3-methylphenol	380	UJ
91-57-6	2-Methylnaphthalene	380	UJ
77-47-4	Hexachlorocyclopentadiene	140	~~J~~ J
88-06-2	2,4,6-Trichlorophenol	380	UJ
95-95-4	2,4,5-Trichlorophenol	380	U
92-52-4	1,1'-Biphenyl	950	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	380	U
131-11-3	Dimethylphthalate	950	U
606-20-2	2,6-Dinitrotoluene	380	U
208-96-8	Acenaphthylene	380	UJ
99-09-2	3-Nitroaniline	80	~~J~~ J
83-32-9	Acenaphthene	950	UJ
		450	J

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-7

Sample wt/vol.: 30.0(g/mL) G Lab File ID: B0B95-7A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 13 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	950	UJ
100-02-7	4-Nitrophenol	950	UJ
132-64-9	Dibenzofuran	300	~~J~~ J
121-14-2	2,4-Dinitrotoluene	380	UJ
84-66-2	Diethylphthalate	380	UJ
86-73-7	Fluorene	590	J
7005-72-3	4-Chlorophenyl-phenylether	380	UJ
100-01-6	4-Nitroaniline	950	U
534-52-1	4,6-Dinitro-2-methylphenol	950	U
86-30-6	N-nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	UJ
1912-24-9	Atrazine	~~380~~ ~~U~~	R
87-86-5	Pentachlorophenol	950	UJ
85-01-8	Phenanthrene	* 5100 ~~3500~~	~~E~~ J
120-12-7	Anthracene	790	J
86-74-8	Carbazole	510	J
84-74-2	Di-n-butylphthalate	380	UJ
206-44-0	Fluoranthene	2800	J
129-00-0	Pyrene	* 4100 ~~3900~~	~~E~~ J
85-68-7	Butylbenzylphthalate	380	UJ
91-94-1	3,3'-Dichlorobenzidine	380	UJ
56-55-3	Benzo(a)anthracene	1800	J
218-01-9	Chrysene	1800	J
117-81-7	bis(2-Ethylhexyl)phthalate	51	~~J~~ J
117-84-0	Di-n-octylphthalate	380	UJ
205-99-2	Benzo(b)fluoranthene	1300	J
207-08-9	Benzo(k)fluoranthene	1400	J
50-32-8	Benzo(a)pyrene	1400	J
193-39-5	Indeno(1,2,3-cd)pyrene	940	J
53-70-3	Dibenzo(a,h)anthracene	450	J
191-24-2	Benzo(g,h,i)perylene	710	J

(1) - Cannot be separated from Diphenylamine

* Values transferred from dilution run.

1G

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B0BB0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-7

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B95-7A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 13 Decanted: (Y/N) N Date Extracted:09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

Number TICs found: 30 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	10.98	210	J
2.		UNKNOWN	11.26	200	J
3.		UNKNOWN	11.32	210	J
4.	613-12-7	ANTHRACENE, 2-METHYL-	12.20	480	NJ
5.		METHYLANTHRACENE	12.24	470	J
6.		UNKNOWN	12.29	230	J
7.	203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRE	12.35	890	NJ
8.	612-94-2	NAPHTHALENE, 2-PHENYL-	12.62	210	NJ
9.	84-65-1	9,10-ANTHRACENEDIONE	12.66	260	NJ
10.		CYCLOPENTAPHENANTHRENONE	13.10	220	J
11.		UNKNOWN	13.57	370	J
12.	243-17-4	11H-BENZO[B]FLUORENE	13.81	580	NJ
13.	238-84-6	11H-BENZO[A]FLUORENE	13.96	1500	NJ
14.		BENZOFLUORENE	14.04	590	J
15.		UNKNOWN	14.09	1100	J
16.	3442-78-2	PYRENE, 2-METHYL-	14.21	520	NJ
17.		BENZOFLUORENE	14.25	740	J
18.		UNKNOWN	14.55	830	J
19.	82-05-3	7H-BENZ[DE]ANTHRACEN-7-ONE	14.67	870	NJ
20.	239-35-0	BENZO[B]NAPHTHO[2,1-D]THIOPH	14.79	480	NJ
21.		UNKNOWN	14.85	1100	J
22.	82-05-3	7H-BENZ[DE]ANTHRACEN-7-ONE	14.94	670	NJ
23.		UNKNOWN	15.28	670	J
24.	243-51-6	11H-INDENO(1,2-B)QUINOLINE	15.41	680	NJ
25.	2693-46-1	3-FLUORANTHENAMINE	15.50	770	NJ
26.	1705-84-6	TRIPHENYLENE, 2-METHYL-	15.70	790	NJ
27.		UNKNOWN	15.77	560	J
28.		UNKNOWN	15.85	590	J
29.		UNKNOWN	15.90	780	J
30.	207-08-9	BENZO[K]FLUORANTHENE	17.29	~~1000~~ NJ	R

FORM I SV-TIC OLM04.2

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-8

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-8A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 7 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	350	UJ
108-95-2	Phenol	350	U
111-44-4	bis(2-Chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2'-oxybis(1-Chloropropane)	350	U
98-86-2	Acetophenone	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
111-91-1	bis(2-Chloroethoxy)methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
105-60-2	Caprolactam	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	350	U
92-52-4	1,1'-Biphenyl	890	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	350	U
131-11-3	Dimethylphthalate	890	U
606-20-2	2,6-Dinitrotoluene	350	U
208-96-8	Acenaphthylene	350	U
99-09-2	3-Nitroaniline	350	U
83-32-9	Acenaphthene	890	U
		350	UJ

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-8

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-8A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 7 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	890	UJ
100-02-7	4-Nitrophenol	890	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
86-73-7	Fluorene	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
100-01-6	4-Nitroaniline	890	U
534-52-1	4,6-Dinitro-2-methylphenol	890	U
86-30-6	N-nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
1912-24-9	Atrazine	350	UJ
87-86-5	Pentachlorophenol	~~350~~	~~U~~ R
85-01-8	Phenanthrene	890	UJ
120-12-7	Anthracene	550	J
86-74-8	Carbazole	83	~~J~~ J
84-74-2	Di-n-butylphthalate	350	UJ
206-44-0	Fluoranthene	350	UJ
129-00-0	Pyrene	720	J
85-68-7	Butylbenzylphthalate	660	J
91-94-1	3,3'-Dichlorobenzidine	43	~~J~~ J
56-55-3	Benzo(a)anthracene	350	UJ
218-01-9	Chrysene	360	J
117-81-7	bis(2-Ethylhexyl)phthalate	350	J
117-84-0	Di-n-octylphthalate	190	~~J~~ J
205-99-2	Benzo(b)fluoranthene	350	UJ
207-08-9	Benzo(k)fluoranthene	390	J
50-32-8	Benzo(a)pyrene	310	~~J~~ J
193-39-5	Indeno(1,2,3-cd)pyrene	350	~~J~~
53-70-3	Dibenzo(a,h)anthracene	260	~~J~~
191-24-2	Benzo(g,h,i)perylene	120	~~J~~
		220	~~J~~ J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0BB1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-8

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B95-8A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 7 Decanted: (Y/N) N Date Extracted:09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Extraction: (Type) SONC

Number TICs found: 23 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.64	~~110~~ JB R	
2.		UNKNOWN	4.92	130	J
3.		CYCLOPENTAPHENANTHRENE	12.34	100	J
4.	57-10-3	HEXADECANOIC ACID	12.39	150	NJ
5.	243-17-4	11H-BENZO[B]FLUORENE	13.95	95	NJ
6.	629-96-9	1-EICOSANOL	17.17	880	NJ
7.	205-82-3	BENZO[J]FLUORANTHENE	17.28	410	NJ
8.		UNKNOWN	18.26	170	J
9.		UNKNOWN	19.89	360	J
10.		UNKNOWN ALDEHYDE	20.18	300	J
11.		UNKNOWN	20.33	580	J
12.		UNKNOWN	20.74	480	J
13.		UNKNOWN	21.08	1300	J
14.		UNKNOWN	21.26	460	J
15.		UNKNOWN	21.45	710	J
16.		UNKNOWN	21.53	780	J
17.		UNKNOWN	21.62	430	J
18.		UNKNOWN	21.75	590	J
19.		UNKNOWN	21.94	490	J
20.		UNKNOWN	22.18	420	J
21.	58-22-0	TESTOSTERONE	22.36	1100	NJ
22.		UNKNOWN	22.80	330	J
23.		UNKNOWN	23.75	440	J
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-9

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-9A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	360	U J
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	360	U
92-52-4	1,1'-Biphenyl	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	360	U
131-11-3	Dimethylphthalate	900	U
606-20-2	2,6-Dinitrotoluene	360	U
208-96-8	Acenaphthylene	360	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	900	U
		360	U J

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-9

Sample wt/vol: 30.0(g/mL) G Lab File ID: B0B95-9A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	UJ
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
1912-24-9	Atrazine	360	UJ
87-86-5	Pentachlorophenol	~~360~~	~~J~~ R
85-01-8	Phenanthrene	900	UJ
120-12-7	Anthracene	350	J
86-74-8	Carbazole	42	J
84-74-2	Di-n-butylphthalate	360	UJ
206-44-0	Fluoranthene	360	UJ
129-00-0	Pyrene	440	J
85-68-7	Butylbenzylphthalate	430	J
91-94-1	3,3'-Dichlorobenzidine	360	UJ
56-55-3	Benzo(a)anthracene	360	UJ
218-01-9	Chrysene	200	J
117-81-7	bis(2-Ethylhexyl)phthalate	230	J
117-84-0	Di-n-octylphthalate	99	J
205-99-2	Benzo(b)fluoranthene	360	UJ
207-08-9	Benzo(k)fluoranthene	200	J
50-32-8	Benzo(a)pyrene	190	J
193-39-5	Indeno(1,2,3-cd)pyrene	210	J
53-70-3	Dibenzo(a,h)anthracene	140	J
191-24-2	Benzo(g,h,i)perylene	63	J
		110	J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: B0BB2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-9

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0B95-9A70

Level: (low/med) LOW Date Received: 08/30/01

% Moisture: 8 Decanted: (Y/N) N Date Extracted: 09/06/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/10/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Extraction: (Type) SONC

Number TICs found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	4.63	~~130~~ ~~JB~~ R	
2.		UNKNOWN	4.93	96	J
3.		CYCLOBUTAPHENANTHRENE	12.35	86	J
4.	57-10-3	HEXADECANOIC ACID	12.39	120	NJ
5.	243-17-4	11H-BENZO[B]FLUORENE	13.94	78	NJ
6.		UNKNOWN	15.04	110	J
7.	629-96-9	1-EICOSANOL	17.17	520	NJ
8.	207-08-9	BENZO[K]FLUORANTHENE	17.27	~~300~~ ~~NJ~~ R	
9.		UNKNOWN	20.34	310	J
10.		UNKNOWN	20.63	820	J
11.		UNKNOWN	20.73	270	J
12.		UNKNOWN	21.07	770	J
13.		UNKNOWN	21.26	240	J
14.		UNKNOWN	21.44	360	J
15.		UNKNOWN	21.53	420	J
16.		UNKNOWN	21.75	250	J
17.		UNKNOWN	21.95	220	J
18.		UNKNOWN	22.17	190	J
19.	58-22-0	TESTOSTERONE	22.36	470	NJ
20.		UNKNOWN	23.74	250	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0B95

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-1

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 1 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	UJ
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	UJ
1024-57-3	Heptachlor epoxide	1.7 ~~0.67~~	~~JP~~ UJ
959-98-8	Endosulfan I	1.7	UJ
60-57-1	Dieldrin	3.3	UJ
72-55-9	4,4'-DDE	3.2	~~J~~ J
72-20-8	Endrin	3.3	UJ
33213-65-9	Endosulfan II	3.3	UJ
72-54-8	4,4'-DDD	1.4	~~JP~~ J
1031-07-8	Endosulfan sulfate	3.3	UJ
50-29-3	4,4'-DDT	5.1	J
72-43-5	Methoxychlor	17	UJ
53494-70-5	Endrin ketone	3.3	UJ
7421-93-4	Endrin aldehyde	3.3	UJ
5103-71-9	alpha-Chlordane	1.1	~~JP~~ J
5103-74-2	gamma-Chlordane	0.83	~~JP~~ J
8001-35-2	Toxaphene	170	UJ
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	UJ

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA5

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-2

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 8 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/14/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	UJ
319-85-7	beta-BHC	3.5	~~P~~ J
319-86-8	delta-BHC	1.8	UJ
58-89-9	gamma-BHC (Lindane)	1.8	UJ
76-44-8	Heptachlor	1.8	UJ
309-00-2	Aldrin	1.8	UJ
1024-57-3	Heptachlor epoxide	11	~~P~~ J
959-98-8	Endosulfan I	1.1	~~JP~~ J
60-57-1	Dieldrin	3.6	J
72-55-9	4,4'-DDE	~~11~~ ~~P~~	R
72-20-8	Endrin	3.6	UJ
33213-65-9	Endosulfan II	3.6	UJ
72-54-8	4,4'-DDD	3.6	UJ
1031-07-8	Endosulfan sulfate	3.6	UJ
50-29-3	4,4'-DDT	12	J
72-43-5	Methoxychlor	18	UJ
53494-70-5	Endrin ketone	6.0 ~~3.6~~	~~U~~ J
7421-93-4	Endrin aldehyde	3.6 ~~1.8~~	~~JP~~ UJ
5103-71-9	alpha-Chlordane	28	~~P~~ JN
5103-74-2	gamma-Chlordane	16	~~P~~ JN
8001-35-2	Toxaphene	180	UJ
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	73	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	UJ

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA6

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 8 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/15/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
319-84-6	alpha-BHC		1.8	UJ
319-85-7	beta-BHC		3.7	~~P~~ J
319-86-8	delta-BHC		1.8	UJ
58-89-9	gamma-BHC (Lindane)		1.8	UJ
76-44-8	Heptachlor		1.8	UJ
309-00-2	Aldrin		1.8	UJ
1024-57-3	Heptachlor epoxide		11	~~P~~ J
959-98-8	Endosulfan I	1.8	~~0.70~~	~~JP~~ UJ
60-57-1	Dieldrin		2.9	~~JP~~ J
72-55-9	4,4'-DDE		~~12~~	~~P~~ R
72-20-8	Endrin		3.6	UJ
33213-65-9	Endosulfan II		3.6	UJ
72-54-8	4,4'-DDD		3.6	UJ
1031-07-8	Endosulfan sulfate		3.6	UJ
50-29-3	4,4'-DDT		13	J
72-43-5	Methoxychlor		18	UJ
53494-70-5	Endrin ketone		6.0	J
7421-93-4	Endrin aldehyde	3.6	~~2.3~~	~~JP~~ UJ
5103-71-9	alpha-Chlordane		30	~~EP~~ JN
5103-74-2	gamma-Chlordane		22	~~P~~ JN
8001-35-2	Toxaphene		180	UJ
12674-11-2	Aroclor-1016		36	UJ
11104-28-2	Aroclor-1221		73	UJ
11141-16-5	Aroclor-1232		36	UJ
53469-21-9	Aroclor-1242		36	UJ
12672-29-6	Aroclor-1248		36	UJ
11097-69-1	Aroclor-1254		36	UJ
11096-82-5	Aroclor-1260		36	UJ

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA7

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-4

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 9 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/15/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
319-84-6	alpha-BHC		1.9	UJ
319-85-7	beta-BHC		3.7	~~P~~ JN
319-86-8	delta-BHC		1.9	UJ
58-89-9	gamma-BHC (Lindane)		1.9	UJ
76-44-8	Heptachlor		1.9	UJ
309-00-2	Aldrin		1.9	UJ
1024-57-3	Heptachlor epoxide	* 37	~~22~~	~~P~~ J
959-98-8	Endosulfan I	1.9	~~0.77~~	~~JP~~ UJ
60-57-1	Dieldrin		4.1	~~P~~ J
72-55-9	4,4'-DDE	* 43	~~16~~	~~P~~ J
72-20-8	Endrin		3.6	UJ
33213-65-9	Endosulfan II		3.6	UJ
72-54-8	4,4'-DDD		~~7.2~~	~~P~~ R
1031-07-8	Endosulfan sulfate		3.6	UJ
50-29-3	4,4'-DDT		22	J
72-43-5	Methoxychlor		19	UJ
53494-70-5	Endrin ketone		3.6	UJ
7421-93-4	Endrin aldehyde		2.5	~~J~~ J
5103-71-9	alpha-Chlordane	* 96	~~69~~	~~EP~~ JN
5103-74-2	gamma-Chlordane	* 59	~~41~~	~~E~~ J
8001-35-2	Toxaphene		190	UJ
12674-11-2	Aroclor-1016		36	UJ
11104-28-2	Aroclor-1221		74	UJ
11141-16-5	Aroclor-1232		36	UJ
53469-21-9	Aroclor-1242		36	UJ
12672-29-6	Aroclor-1248		36	UJ
11097-69-1	Aroclor-1254		36	UJ
11096-82-5	Aroclor-1260		36	UJ

* Values transferred from dilution run.

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA8

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-5

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 10 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/15/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
319-84-6	alpha-BHC		1.9	UJ
319-85-7	beta-BHC	* 15	~~5.4~~	~~P~~ J
319-86-8	delta-BHC		1.9	UJ
58-89-9	gamma-BHC (Lindane)		1.9	UJ
76-44-8	Heptachlor		1.9	UJ
309-00-2	Aldrin		1.9	UJ
1024-57-3	Heptachlor epoxide		23	J
959-98-8	Endosulfan I		1.9	UJ
60-57-1	Dieldrin		5.2	~~P~~ J
72-55-9	4,4'-DDE	* 50	~~22~~	~~P~~ J
72-20-8	Endrin		3.7	UJ
33213-65-9	Endosulfan II		3.7	UJ
72-54-8	4,4'-DDD	* 18	~~6.4~~	~~P~~ J
1031-07-8	Endosulfan sulfate		3.7	UJ
50-29-3	4,4'-DDT	* 41	~~32~~	J
72-43-5	Methoxychlor		19	UJ
53494-70-5	Endrin ketone	3.7	~~1.9~~	~~JP~~ UJ
7421-93-4	Endrin aldehyde		3.2	~~JP~~ J
5103-71-9	alpha-Chlordane	* 67	~~46~~	~~EP~~ JN
5103-74-2	gamma-Chlordane	* 33	~~24~~	~~P~~ JN
8001-35-2	Toxaphene		190	UJ
12674-11-2	Aroclor-1016		37	U
11104-28-2	Aroclor-1221		74	U
11141-16-5	Aroclor-1232		37	U
53469-21-9	Aroclor-1242		37	U
12672-29-6	Aroclor-1248		37	U
11097-69-1	Aroclor-1254		37	U
11096-82-5	Aroclor-1260		37	UJ

* Values transferred from dilution run.

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BA9

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 8 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 09/15/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
319-84-6	alpha-BHC		1.8	UJ
319-85-7	beta-BHC		5.6	~~P~~ J
319-86-8	delta-BHC		1.8	UJ
58-89-9	gamma-BHC (Lindane)		1.8	UJ
76-44-8	Heptachlor	1.8	~~1.2~~	~~JP~~ UJ
309-00-2	Aldrin		1.8	UJ
1024-57-3	Heptachlor epoxide		1.8	UJ
959-98-8	Endosulfan I	1.8	~~0.43~~	~~JP~~ UJ
60-57-1	Dieldrin		3.6	UJ
72-55-9	4,4'-DDE	3.6	~~1.6~~	~~JP~~ UJ
72-20-8	Endrin		3.6	UJ
33213-65-9	Endosulfan II		3.6	UJ
72-54-8	4,4'-DDD		3.6	UJ
1031-07-8	Endosulfan sulfate		3.6	UJ
50-29-3	4,4'-DDT		3.1	~~J~~ J
72-43-5	Methoxychlor		18	UJ
53494-70-5	Endrin ketone		3.6	UJ
7421-93-4	Endrin aldehyde		3.6	UJ
5103-71-9	alpha-Chlordane		1.8	UJ
5103-74-2	gamma-Chlordane	1.8	~~1.0~~	~~JP~~ UJ
8001-35-2	Toxaphene		180	UJ
12674-11-2	Aroclor-1016		36	U
11104-28-2	Aroclor-1221		73	U
11141-16-5	Aroclor-1232		36	U
53469-21-9	Aroclor-1242		36	U
12672-29-6	Aroclor-1248		36	U
11097-69-1	Aroclor-1254		36	U
11096-82-5	Aroclor-1260		36	UJ

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB0

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-7

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 13 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/15/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	UJ
319-85-7	beta-BHC	~~5.4~~	~~P~~ R
319-86-8	delta-BHC	2.0	UJ
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.8	UJ
72-55-9	4,4'-DDE	3.8 ~~1.1~~	~~JP~~ UJ
72-20-8	Endrin	3.8	UJ
33213-65-9	Endosulfan II	3.8	UJ
72-54-8	4,4'-DDD	3.8	UJ
1031-07-8	Endosulfan sulfate	3.8	UJ
50-29-3	4,4'-DDT	3.8 ~~1.9~~	~~JP~~ UJ
72-43-5	Methoxychlor	20 ~~16~~	~~JP~~ UJ
53494-70-5	Endrin ketone	3.8	UJ
7421-93-4	Endrin aldehyde	3.8	UJ
5103-71-9	alpha-Chlordane	2.0 ~~1.3~~	~~JP~~ UJ
5103-74-2	gamma-Chlordane	2.0	UJ
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	77	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	UJ

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB1

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-8

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 7 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/15/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	UJ
319-85-7	beta-BHC	4.5	J
319-86-8	delta-BHC	1.8	UJ
58-89-9	gamma-BHC (Lindane)	1.8	UJ
76-44-8	Heptachlor	1.8 ~~0.97~~	~~JP~~ UJ
309-00-2	Aldrin	1.8	UJ
1024-57-3	Heptachlor epoxide	6.1	J
959-98-8	Endosulfan I	0.72	~~JP~~ J
60-57-1	Dieldrin	3.6	UJ
72-55-9	4,4'-DDE	7.5	~~P~~ JN
72-20-8	Endrin	3.6	UJ
33213-65-9	Endosulfan II	3.6	UJ
72-54-8	4,4'-DDD	3.6	UJ
1031-07-8	Endosulfan sulfate	3.6	UJ
50-29-3	4,4'-DDT	8.3	~~P~~ J
72-43-5	Methoxychlor	18	UJ
53494-70-5	Endrin ketone	3.6	UJ
7421-93-4	Endrin aldehyde	3.6	UJ
5103-71-9	alpha-Chlordane	11	~~P~~ JN
5103-74-2	gamma-Chlordane	* 7.5 ~~5.7~~	~~P~~ JN
8001-35-2	Toxaphene	180	UJ
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	72	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	UJ

* Value transferred from dilution run.

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0BB2

Lab Name: COMPUCHEM Contract: 68W99071

Lab Code: LIBRTY Case No.: 29681 SAS No.: SDG No.: B0B95

Matrix: (soil/water) SOIL Lab Sample ID: B0B95-9

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 8 Decanted: (Y/N) N Date Received: 08/30/01

Extraction: (Type) SONC Date Extracted: 09/06/01

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/15/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	UJ
319-85-7	beta-BHC	3.9	~~P~~ J
319-86-8	delta-BHC	1.8	UJ
58-89-9	gamma-BHC (Lindane)	1.8	UJ
76-44-8	Heptachlor	1.8	UJ
309-00-2	Aldrin	1.8	UJ
1024-57-3	Heptachlor epoxide	~~7.7~~	J
959-98-8	Endosulfan I	1.8	UJ
60-57-1	Dieldrin	3.6 ~~1.5~~	~~JP~~ UJ
72-55-9	4,4'-DDE	11	~~P~~ JN
72-20-8	Endrin	3.6	UJ
33213-65-9	Endosulfan II	3.6	UJ
72-54-8	4,4'-DDD	3.6	UJ
1031-07-8	Endosulfan sulfate	3.6	UJ
50-29-3	4,4'-DDT	12	J
72-43-5	Methoxychlor	18	UJ
53494-70-5	Endrin ketone	3.6	UJ
7421-93-4	Endrin aldehyde	3.6	UJ
5103-71-9	alpha-Chlordane	15	~~P~~ JN
5103-74-2	gamma-Chlordane	* 14 ~~6.9~~	~~P~~ J
8001-35-2	Toxaphene	180	UJ
12674-11-2	Aroclor-1016	36	UJ
11104-28-2	Aroclor-1221	72	UJ
11141-16-5	Aroclor-1232	36	UJ
53469-21-9	Aroclor-1242	36	UJ
12672-29-6	Aroclor-1248	36	UJ
11097-69-1	Aroclor-1254	36	UJ
11096-82-5	Aroclor-1260	36	UJ

* value transferred from dilution run.

REFERENCE NO. 28

ATTACHMENT F

RECORD OF COMMUNICATION

TO: Yunru Yang

FROM: *JANET TROTTER*
Region 2, ESAT/RSCC

DATE: Oct. 26, 2001

SUBJECT: QUALITY ASSURED DATA

MESSAGE:

PLEASE SIGN BELOW IN ACKNOWLEDGEMENT OF RECEIPT OF THE FOLLOWING AND RETURN **ONE** COPY OF THIS RECORD OF COMMUNICATION TO THE RSCC - REGION II.

① Roselle Park Baseball Fields 29681 Chem Inorg 28S/1W
② Bordentown City Mun. Dump 29702 Chemed Inorg 11S/1W

REPLY BY: _____

SIGNATURE: _____ DATE: 10/29/01

DATE RECEIVED BY RSCC: _____

REV: 1/5/00

RECORD OF COMMUNICATION

REGIONAL SAMPLE CONTROL CENTER

DATE: SEPT. 21, 2001
SUBJECT: CLP Data Package for Quality Assurance Review
FROM: RSCC / ESAT
TO: Hanif Sheikh, Hazardous Waste Support Section

OCT 17 2001

Attached is the following INORGANIC Data Package to be reviewed for Quality Assurance

SITE ROSELLE PARK BASEBALL FIELDS CASE# 29681 / SDG# MB0AX7 MB0AY7

	#SAMPLES	MATRIX
SAMPLER SAT		
PHASE SI	28	SOIL
LAB CHEM	1	WATER
TURN-AROUND-TIME 21 DAYS	FRACTION TAL ONLY	
CERCLIS ID # NJSFN0204259	SITE SPILL # ZZ	

REGION II RSCC DATA TRANSFER LOG

Relinquished By		Received By	
Signature	Date/Time	Signature	Date/Time
John Bulich	9-21-01	John Bulich	9-20-01
CS	10/15/01	CS	10/01/01
SA	10/15/01	SA	10/15/01
Hanif Shaikh	10/16/01	Hanif Shaikh	10/15/01
Russell Duncan	10/17/01	Russell Duncan	10/17/01
Hanif Sheikh	10/17/01	Hanif Shaikh	10/17/01
		Janet Trotter	10/17/01

(over for instructions) revised 7/01

Title: Evaluation of Metals Data for the Contract Laboratory Program
Appendix A.2: Data Assessment Narrative

Date: Jan. 1992
Number: HW-2
Revision: 11

CASE: 29681	SITE: ROSELLE PARK BASEBALL FIELD	SOIL: 28
SDG: MB0AX7, MB0AY7	LAB: CHEMTECH	WATER: 1
CONTRACTOR: SAT	REVIEWER: C. STANCA/ESAT	OTHER:

A.VALIDATION flags -The following flags have been applied in red by the data validator and must be considered by the data user.

J -This flag indicates the result qualified as **estimated.**

Red-Line - A red-line drawn through a sample result indicates **unusable** value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

Fully Usable Data -The results that do not carry "J" or "red-line" are fully usable.

Contractual Qualifiers -The legend of contractual qualifiers applied by the lab on Form I's is found on page B-20 of SOW ILM01.0

A.2.2. The data assessment is given below and on the attached sheets.

This case consists of one (1) aqueous and twenty-eight (28) soil samples collected at the Roselle Park Baseball Field site on 08/29/01 for TAL Metals analysis according to the USEPA CLP SOW No. ILM04.1. The following sample was identified as field blank: MB0B05. Samples MB0AZ7/MB0AZ8 and MB0B03/MB0B04 are the field duplicate pairs for this sampling event. Matrix spike, laboratory duplicate and serial dilution analyses were performed on samples MB0AX7 and MB0AY7. No laboratory QC analyses were performed for aqueous matrix since the only water sample in the package was identified as a field blank.
All QC parameters, other than those discussed here, have been met.

CSF

SDG MB0AY7: Page 185A was inserted.

SDG MB0AX7 (SOIL)

CRDL STANDARD

The CRDL standard recoveries fell outside the control limits of 80 - 120% for Be ($\%R_1$ = 124.8; $\%R_2$ = 125.0; $\%R_3$ = 131.0), Pb ($\%R_2$ = 130.7), Se ($\%R_1$ = 129.0), Ag ($\%R_3$ = 131.2), and Tl ($\%R_3$ = 123.0). (Only out

A.2.2. (continuation)

of control recoveries that affected samples in this SDG were mentioned.) All associated positive results within the affected range of True Value ± 2CRDL have been considered estimated and flagged "J".

"J": Be in MB0AX7 –>MB0AX9, MB0AY0 –>MB0AY6, MB0AY8, MB0AY9, MB0AZ0 –>MB0AZ7
Ag in MB0AZ7

Note: The Pb, Se, and Tl associated results were out of the affected range or undetect. No action was required.

MATRIX SPIKE

The matrix spike recovery was outside the control limits of 75 - 125% when sample concentration was less than 4 X spike concentration for Sb (%R = 61.7) and Se (%R = 0.0). All associated Sb results have been considered estimated and flagged "J". All associated Se results have been considered rejected and flagged "R".

Sb in MB0AX7 –>MB0AX9, MB0AY0 –>MB0AY6, MB0AY8, MB0AY9, MB0AZ0 –>MB0AZ7

"R": Se in MB0AX7 –>MB0AX9, MB0AY0 –>MB0AY6, MB0AY8, MB0AY9, MB0AZ0 –>MB0AZ7

ICP SERIAL DILUTION

The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 when the initial concentration was equal to or greater than 10 X IDL for As (%D = 26.1), Co (%D = 11.2), Pb (%D = 22.9), Ni (%D = 13.6), K (%D = 32.1), and Be (%D = 129.4). All associated sample results greater or equal to CRDL or 10 X IDL, whichever is greater, have been considered estimated and flagged "J".

"J": As in MB0AX7 –>MB0AX9, MB0AY0, MB0AY1, MB0AY3 –>MB0AY6, MB0AY8, MB0AY9, MB0AZ0 –>MB0Z5, MB0AZ7
Pb in MB0AX7–>MB0AX9, MB0AY0 –>MB0AY6, MB0AY8, MB0AY9, MB0AZ0 –>MB0AZ7
Ni in MB0AZ7

FIELD BLANK

The Cr (12.6 ug/l), Fe (126.0 ug/l), Mn (61.9 ug/l), Zn (22.5 ug/l) results in field blank MB0B05 were greater than the CRDL indicating sample contamination due to poor decontamination procedures. All associated positive sample results less than 5 X field blank value have been rejected and flagged "R". (Please note that t**eld blank belongs to SDG MB0AY7.)**

A.2.2. (continuation)

belongs to SDG MB0AY7.)

"R": Mn in MB0AX8, MB0AX9, MB0AY0 -->MB0AY2, MB0AY5, MB0AY6, MB0AZ1, MB0AZ2, MB0AZ6
Zn in MB0AX8, MB0AX9, MB0AY0 -->MB0AY2, MB0AZ1, MB0AZ2, MB0AZ6

SDG MB0AY7 (SOIL + AQUEOUS)

CRDL STANDARD

The CRDL standard recoveries fell outside the control limits of 80 - 120% for Be ($\%R_3$ = 131.0; $\%R_4$ = 132.8), Ag ($\%R_3$ = 131.2; $\%R_4$ = 131.0), Tl ($\%R_3$ = 123.0; $\%R_4$ = 128.9), As ($\%R_4$ = 138.9), and Hg, both 9/17/01 (%R = 130.0) and 9/18/01 (%R = 130.0) runs. (Only out of control recoveries that affected samples in this SDG were mentioned.) All associated positive results within the affected range of True Value $\pm$ 2CRDL for ICP and True Value $\pm$ CRDL for AA have been considered estimated and flagged "J".

"J": Be in MB0AY7, MB0AZ8, MB0AZ9, MB0B00, MB0B01, MB0B03 -->MB0B05
Ag in MB0B03, MB0B04
Tl, As in MB0B05
Hg in MB0AZ8

ICP SERIAL DILUTION

The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 when the initial concentration was equal to or greater than 10 X IDL for As (%D = 90.4), Pb (%D = 15.4), Ni (%D = 15.7), and K (%D = 29.1). The percent difference was greater than 100 for Be (%D = 177.1). All associated As, Pb, Ni, and K results greater or equal to CRDL or 10 X IDL, whichever is greater, have been considered estimated and flagged "J". All associated Be results greater or equal to CRDL or 10 X IDL, whichever is greater, have been considered rejected and flagged "R".

01 02 03

"J": As, Pb in MB0AY7, MB0AZ8, MB0AZ9, MB0B00 -->MB0B04
Ni in MB0AZ8, MB0AZ9, MB0B00 -->MB0B04
K in MB0B01, MB0B02

"R": Be in MB0B02

A.2.2. (continuation)

FIELD BLANK

The Cr (12.6 ug/l), Fe (126.0 ug/l), Mn (61.9 ug/l), Zn (22.5 ug/l) results in field blank MB0B05 were greater than the CRDL indicating sample contamination due to poor decontamination procedures. No action was required as all the associated sample results in this SDG were above the action limit of 5 x field blank concentration.

A.2.3. **Contract-Problems/Non-Compliance:** None.

MMB Reviewer: _____ Date: _____
Signature

Contractor Reviewer: Christine Stamm Date: 10/12/01
Signature

Verified by: HS Date: 10/17/01
Signature

Title: Evaluation of Metals Data for the Contract Laboratory Program
Appendix A.3: Contract Non-Compliance (SMO Report)

Date: Jan. 1992
Number: HW-2
Revision: 11

CONTRACT NON-COMPLIANCE
(SMO REPORT)

Regional Review of Uncontrolled Hazardous Waste Site Contract Laboratory Data Package

CASE NO. 2968/

he hardcopied (laboratory name)_____
norganic data package received at Region II has been reviewed and the quality assurance and erformance data summarized. The data reviewed included:
MO Sample No.:_____

onc. & Matrix:_____

ontract No.(_____) requires that specific analytical work be done and hat associated reports be provided by the contractor to the Regions, EMSL-LV, and SMO. The eneral criteria used to determine the performance were based on an examination of:

- Data Completeness
- Matrix Spike Results
- Calibration Standards Results
- Duplicate Analysis Results
- Blank Analysis Results
- MSA Results

tems of non-compliance with the above contract are described below.

omments:_____

CS
Reviewer's Initial

10/12/01
Date

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Guam Trust Territories of Pacific
Islands, Wake Island
ALI, CAL Weston, S-Cubed, IT_CA,
Vegas

10. USEPA Region X Laboratory
P.O. Box 549
Manchester, WA 98353
Gerald Muth
(206) 442-0370
AK, ID, OR, WA
Laucks Testing Labs, Century Testing
Labs (For VOA Only), Weyerhauser Co.,
Columbia Testing, Silver Valley

11. Carla Dempsey - (OS-230)
USEPA
401 "M" Street S.W.
Washington, DC 20460
FTS 382-5746

12. Edward Kantor
USEPA
EMSL-LV
944 E. Harmon Avenue
Box 93478
Las Vegas, NV 89119

13. Sample Management Office
Viar and Company
P.O. Box 818
Alexandria, VA 22313

CLP DATA ASSESSMENT SUMMARY FORM

TYPE OF REVIEW: INORGANIC **DATE:** 10/12/01 **CASE #:** 29681

SITE: ROSELLE PARK **LAB NAME:** CHEMTECH

REVIEWER'S INITIALS: CS **NUMBER OF SAMPLES:** 1 WATER
28 SOIL

ANALYTES REJECTED DUE TO EXCEEDING REVIEW CRITERIA:*

	Holding Time	CRDL	Prep Blank	Field Blank	Inter-ference	Spike Recov.	Det. Limit	LCS	Serial Dil.	MSA	Total Analytes	Rejections
ICP				18		20			1		638	39
Flame AA												
Furnace AA												
Mercury											29	0
Cyanide												
Total				18		20			1		667	39

ANALYTES FLAGGED AS ESTIMATED (J) DUE TO EXCEEDING CRITERIA FOR:*

	Holding Time	CRDL	Prep Blan	% Solids	Preser vation	Spike Recov.	Dup Lab	Dup Field	Det. Limit	LCS	Serial Dilution	MSA	Total Analytes	Estim ation
ICP		33				20					84		638	137
Flame AA														
Furnace AA														
Mercury		1											29	1
Cyanide														
Total		34				20					84		667	138

Note: Asterisk (*) indicates additional exceedances of review criteria.

Region II

INORGANIC REGIONAL DATA ASSESSMENT

CASE NO.: 29681

SITE: ROSELLE PARK

LABORATORY: CHEMTECH

NO. OF SAMPLES/MATRIX: 1 WATER, 28 SOIL

SDG#: MB0AX7, MB0AY7

REVIEWER (IF NOT ESD):

SOW#: ILM04.1

REVIEWER'S NAME: C. STANCA

DPO: ACTION FYI

COMPLETION DATE: 10/12/01

DATA ASSESSMENT SUMMARY

	ICP	AA	MERCURY	CYANIDE
Holding Times	O		O	
Calibration	O		O	
Blanks	Z		O	
ICS	O		N/A	N/A
LCS	O		N/A	N/A
Duplicate Analysis	O		O	
Matrix Spike	Z		O	
MSA	N/A		N/A	N/A
Serial Dilution	O		N/A	N/A
Sample Verification	O		O	
Other QC	O		O	
Overall Assessment	M		O	

O = Data has no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

AREAS OF CONCERN:

[illegible]LE PERFORMANCE:

U.S. EPA - CLP

SEP 20 2001

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

SOW No.: ILM04.1

EPA SAMPLE #	Lab Sample ID.
MB0AX7	1412R-03S
MB0AX7D	1412R-03S2
MB0AX7S	1412R-03MS
MB0AX8	1412R-04S
MB0AX9	1412R-05S
MB0AY0	1412R-06S
MB0AY1	1412R-07S
MB0AY2	1412R-08S
MB0AY3	1412R-09S
MB0AY4	1412R-10S
MB0AY5	1412R-11S
MB0AY6	1412R-01S
MB0AY8	1412R-02S
MB0AY9	1412R-12S
MB0AZ0	1412R-13S
MB0AZ1	1412R-14S
MB0AZ2	1412R-15S
MB0AZ3	1412R-16S
MB0AZ4	1412R-17S
MB0AZ5	1412R-18S
MB0AZ6	1412R-19S
MB0AZ7	1412R-20S

Were ICP interelement corrections applied?	Yes/No	YES
Were ICP background corrections applied?	Yes/No	YES
If yes-were raw data generated before application of background corrections?	Yes/No	NO

Comments:
The "E" qualifiers on Form I and IX for Potassium indicate chemical or physical interference effects, which were suspected during that element's analyses only.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: PARVEEN HASAN Title: QA/QC OFFICER Date: 09/19/2001

SDG NARRATIVE

USEPA
LABORATORY NAME: CHEMTECH CONSULTING GROUP
Case # 29681
SDG # MB0AX7
Contract # 68-W0-0089
LAB CODE: CHEM
Chemtech Project # 1412R

A. Number of Samples and Date of Receipt
20 Soil Samples were delivered to the laboratory on 08/30/2001.

B. Parameters
Test requested was for Total Metals.

C. Cooler Temp
Indicator Bottle: **Presence**/Absence
Cooler Temp: 4.0 Deg. C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

E. Corrective Action taken for above:

F. Analytical Techniques:
All analysis done by using **CLP Methodology.**

G. Analytical Problem:

H. QA/ QC
Calibrations met requirements. Blank analyses did not indicate the presence of contamination. Interference Check Sample and Laboratory Control Sample were within Control Limits. The Spike Sample was within Control Limits except for the Antimony and Selenium. Serial Dilution met requirements except for the Potassium. Duplicate analyses and RPDs did met requirements.

I certify that the data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signature _____ Name: Parveen Hasan

Date 09/19/2001 Title: QA/QC Officer

000002

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SD6 # MBOAX7
MBOAY7

Evaluation of Metals Data for the Contract Laboratory Program (CLP)

based on

SOW. 3/90

(SOP Revision XI)

PARED BY: Hanif Sheikh DATE: 1-30-92
Hanif Sheikh, Quality Assurance Chemist
Toxic and Hazardous Waste Section

ROVED BY: Kevin Kubik DATE: 1-30-92
Kevin Kubik, Chief
Toxic and Hazardous Waste Section

ROVED BY: Robert Runyon DATE: 1/31/92
Robert Runyon, Chief
Monitoring Management Branch

STANDARD OPERATING PROCEDURE

Page 1 of 34

Evaluation of Metals Data for the Contract Laboratory Program

Date: Jan. 1992
Number: HW-2
Revision: 11

Scope

This procedure is applicable to inorganic data obtained from contractor laboratories working for Hazardous Waste Site Contract Laboratory Program (CLP).

The data validation is based upon analytical and quality assurance requirements specified in Statement of Work (SOW) 3/90 .

Responsibilities - Data reviewers will complete the following tasks as assigned by the Data Review Coordinator:

For a total review:

Data Assessment - "Total Review-Inorganics" Checklist Appendix (A.1).
The reviewer must answer every question on the checklist.

Data Assessment - Data Assessment Narrative (Appendix A.2)
The answer on the checklist must match the action in the narrative (appendix A.2) and on Form I's. Do not use pencil to write the narrative.

Contract Non-Compliance - SMO Report (Appendix A.3)
This report is to be completed only when a serious contract violation is encountered, or upon the request of the Data Validation Task Monitor, or Technical Project Officer (TPO). Forward 5 copies: one each for internal files, appropriate Regional TPO, Sample Management Office (SMO) and last two addresses of Mailing List for Data Reviewers (Appendix A.4). In other cases, all contract violations should be appended to the end of the Data Assessment Narrative (Sec. A.2.2).

CLP Data Assessment Summary Forms

Appendix A.5
Fill in the total number of analytes analyzed by different analyses and the number of analytes rejected or flagged as estimated due to corresponding quality control criteria. Place an "X" in boxes where analyses were not performed, or criteria do not apply.

Appendix A.6
Data reviewer is also required to fill out Inorganic Regional Data Assessment form (Appendix A.7) provided by EPA Headquarters. Codes listed on the form will be used to describe the Data Assessment Summary.

2.1.5 Data Review Log: It is recommended that each data reviewer should maintain a log of the reviews completed to include: a. date of start of case review

b. date of completion of case review
c. site
d. case number
e. contract laboratory
f. number of samples
g. matrix
h. hours worked
i. reviewer's initials

2.1.6 Telephone Record Log - the data reviewer should enter the bare facts of inquiry, before initiating any phone conversation with CLP laboratory. After the case review has been completed, mail white copy of Telephone Record Log to the laboratory and pink copy to SMO. File yellow copy in the Telephone Record Log folder, and attach a xerox copy of the Telephone Record Log to the completed Data Assessment Narrative (Appendix A.2).

2.1.7 Forwarded Paperwork

2.1.7.1 Upon completion of review, the following are to be forwarded to the Regional Sample Control Center (RSCC) located in the Surveillance and Monitoring Branch:

a. data package
b. completed data assessment checklist (Appendix A.1,original)
c. SMO Contract Compliance Screening (CCS)
d. Record of Communication (copy)
e. CLP Reanalysis Request/Approval Record (original + 3 copies)
f. Appendix A.6 (original).

2.1.7.2 Forward 2 copies of completed Data Assessment Narrative (Appendix A.2) along with 2 copies of the Inorganic Data Assessment Form (Appendix A.6) and Telephone Record Log , if any,: one each for appropriate Regional TPO, and the other one to EPA EMSL office in Las Vegas. The addresses of TPOs and EPA office in Las Vegas are given in Appendix A-4.

2.1.8 Filed Paperwork - Upon completion of review, the following are to be filed within MMB files:

a. Two copies of completed Data Assessment Narrative (Appendix A.2) each carrying Appendix A.6.
b. Telephone Record Log (copy)
c. SMO Report (copy Appendix A-3)
d. CLP Reanalysis Request/Approval Record (copy)

3.0 Data Completeness
Each data package is checked by a Regional Sample Control Coordinator (RSSC) for completeness. A data package is assumed to be complete when all the deliverables required under the contract are present. If a data package is incomplete, the RSSC would call the laboratory for missing document(s). If the laboratory does not respond within a week, SMO and MMB coordinator of Region II will be notified.

4.0 Rejection of Data - All values determined to be unacceptable on the Inorganic Analysis Data Sheet (Form I) must be lined over with a red pencil. As soon as any review criteria causes data to be rejected, that data can be eliminated from any further review or consideration.

5.0 Acceptance Criteria - In order that reviews be consistent among reviewers, acceptance criteria as stated in Appendix A.1 (pages 4-25) should be used. Additional guidance can be found in the National Inorganic Functional Guidelines of October 1, 1989.

6.0 SMO Contract Compliance Screening (CCS) - This is intended to aid reviewer in locating any problems, both corrected and uncorrected. However, the validation should be carried out even if CCS is not present. Resubmittals received from laboratory in response to CCS must be used by the reviewer.

7.0 Request for Reanalysis - Data reviewers must note all items of contract non-compliance within Data Assessment Narrative. If holding times and sample storage times have not been exceeded, TPO may request reanalysis if items of non-compliance are critical to data assessment. Requests are to be made on "CLP Re-Analysis Request/Approval Record".

8.0 Record of Communication - Provided by the Regional Sample Control Center (RSCC) to indicate which data packages have been received and are ready to be reviewed.

9.0 Rounding off numbers - The data reviewer will follow the standard practice.

	YES	NO	N/A
A.1.1 Contract Compliance Screening Report (CCS) - Present?	[✓]	—	—
ACTION: If no, contact RSCC.			
A.1.2 Record of Communication (from RSCC) - Present?	[✓]	—	—
ACTION: If no, request from RSCC.			
A.1.3 Trip Report - Present and complete?	[✓]	—	—
ACTION: If no, contact RSCC for trip report.			
A.1.4 Sample Traffic Report - Present?	[✓]	—	—
Legible?	[✓]	—	—
ACTION: If no, request from Regional Sample Control Center (RSCC).			
A.1.5 Cover Page - Present?	[✓]	—	—
Is cover page properly filled in and signed by the lab manager or the manager's designee?	[✓]	—	—
ACTION: If no, prepare Telephone Record Log, and contact laboratory.			
Do numbers of samples correspond to numbers on Record of Communication?	[✓]	—	—
Do sample numbers on cover page agree with sample numbers on: (a) Traffic Report Sheet?	[✓]	—	—
(b) Form I's?	[✓]	—	—
ACTION: If no for any of the above, contact RSCC for clarification.			

		Yes	No	N/A
A.1.6	Form I to IX			
A.1.6.1	Are all the Form I through Form IX labeled with:			
	Laboratory name?	[✓]	—	—
	Case/SAS number?	[✓]	—	—
	EPA sample No.?	[✓]	—	—
	SDG No.?	[✓]	—	—
	Contract No.?	[✓]	—	—
	Correct units?	[✓]	—	—
	Matrix?	[✓]	—	—

ACTION: If no for any of the above, note under Contract Problem/Non-Compliance section of the "Data Assessment Narrative".

A.1.6.2	Do any computation/transcription errors exceed 10% of reported values on Forms I-IX for:			
	(NOTE: Check all forms against raw data.)			
	(a) all analytes analyzed by ICP?	[✓]	—	—
	(b) all analytes analyzed by GFAA?	[ ]	—	✓
	(c) all analytes analyzed by AA Flame?	[ ]	—	✓
	(d) Mercury?	[✓]	—	—
	(e) Cyanide?	[ ]	—	✓

ACTION: If yes, prepare Telephone Log, contact laboratory for corrected data and correct errors with red pencil and initial.

Title: Evaluation of Metals Data for the Contract Laboratory Program
Appendix A.1: Data Assessment - Contract Compliance (Total Review)

Date: Jan. 1992
Number: HW-2
Revision: 11

		YES	NO	N/A
A.1.7	Raw Data			
A.1.7.1	Digestion Log* for flame AA/ICP (Form XIII) present?	[✓]	—	—
	Digestion Log for furnace AA Form XIII present?	[ ]	—	✓
	Distillation Log for mercury Form XIII present?	[✓]	—	—
	Distillation Log for cyanides Form XIII present?	[ ]	—	✓
	Are pH values (pH<2 for all metals, pH>12 for cyanide) present?	[✓]	—	—
	*Weights, dilutions and volumes used to obtain values.			
	Percent solids calculation present for soils/sediments?	[✓]	—	—
	Are preparation dates present on sample preparation logs/bench sheets?	[✓]	—	—
A.1.7.2	Measurement read out record present? ICP	[✓]	—	—
	Flame AA	[ ]	—	✓
	Furnace AA	[ ]	—	✓
	Mercury	[✓]	—	—
	Cyanides	[ ]	—	✓
A.1.7.3	Are all raw data to support all sample analyses and QC operations present?	[✓]	—	—
	Legible?	[✓]	—	—
	Properly Labeled?	[✓]	—	—

ACTION: If no for any of the above questions in sections A.1.7.1 through A.1.7.3, write Telephone Record Log and contact laboratory for resubmittals.

Title: Evaluation of Metals for the Contract Laboratory Program
Appendix A.1: Data Assessment - Contract Compliance (Total Review)

Date: Jan. 1992
Number: HW-2
Revision: 11

		YES	NO	N/A
A.1.8	Holding Times - (aqueous and soil samples) (Examine sample traffic reports and digestion/distillation logs.)			
	Mercury analysis (28 days). . . . . exceeded?	___	[✓]	___
	Cyanide distillation (14 days). . . . . exceeded?	___	[✓]	___ ✓
	Other Metals analysis (6 months). . . . exceeded?	___	[ ]	___
	NOTE: Prepare a list of all samples and analytes for which holding times have been exceeded. Specify the number of days from date of collection to the date of preparation (from raw data). Attach to checklist.			
	ACTION: If yes, reject (red-line) values less than Instrument Detection Limit (IDL) and flag as estimated (J) the values above IDL even though sample(s) was preserved properly.			
A.1.8.2	Is pH of aqueous samples for: Metals Analysis >2?	___	[✓]	___
	Cyanides Analysis <12?	___	[ ]	___ ✓
	Action: If yes, flag the associated metals and cyanides data as estimated.			
A.1.9	Form I (Final Data)			
A.1.9.1	Are all Form I's present and complete?	[✓]	___	___
	ACTION: If no, prepare telephone record log and contact laboratory for submittal.			
A.1.9.2	Are correct units (ug/l for waters and mg/kg for soils) indicated on Form I's?	[✓]	___	___
	Are soil sample results for each parameter corrected for percent solids?	[✓]	___	___
	Are all "less than IDL" values properly coded with "U"?	[✓]	___	___

		YES	NO	N/A
	Are the correct concentration qualifiers used with final data?	[✓]	—	—
	ACTION: If no for any of the above, prepare Telephone Record Log, and contact laboratory for corrected data.			
A.1.9.3	Are EPA sample # s and corresponding laboratory sample ID # s the same as on the Cover Page, Form I's and in the raw data?	[✓]	—	—
	Was a brief physical description of samples given on Form I's?	[✓]	—	—
	Was the dilution of any sample diluted beyond the requirements of the contract noted on Form I or Form XIV?	—	[✓]	—
	ACTION: If no for any of the above, note under Contract-Problem/Non-Compliance of the "Data Assessment Narrative".			
A.1.10	Calibration			
A.1.10.1	Is record of at least 2 point calibration present for ICP analysis?	[✓]	—	—
	Is record of 5 point calibration present for Hg analysis?	[✓]	—	—
	Is record of 4 point calibration present for:			
	Flame AA?	[ ]	—	[✓]
	Furnace AA?	[ ]	—	[✓]
	Cyanides?	[ ]	—	[✓]
	Is one calibration standard at the CRDL level for all AA (except Hg) and cyanides analyses?	[ ]	—	[✓]
	ACTION: If no for any of the above, write in the Contract Problem/Non-Compliance section of the "Data Assessment Narrative".			

		YES	NO	N/A
A.1.10.2	Is correlation coefficient less than 0.995 for:		✓	
	Mercury Analysis?	[ ]	[ ]	✓
	Cyanide Analysis?	[ ]	[ ]	✓
	Atomic Absorption Analysis?	[ ]	[ ]	

ACTION: If yes, flag the associated data as estimated.

NOTE: The data validator shall calculate the correlation coefficient using concentrations of the standards and the corresponding instrument response (e.g. absorbance, peak area, peak height, etc.).

A.1.10.3	In the instance where less than 4 standards are measured in absorbance (or peak area, peak height, etc.) mode, are the remaining standards analyzed in concentration mode immediately after calibration within ±10% of the true values?	[ ]		✓

ACTION: If no, flag the associated data as estimated if standards are not within ±10% of true values. Do not flag the data as estimated in linear range indicated by good recovery of standard(s).

A.1.11	Form II A (Initial and Continuing Calibration Verification)-		✓	
A.1.11.1	Present and complete for every metal and cyanide?	[ ]		
	Present and complete for AA and ICP when both are used for the same analyte?	[ ]		✓

ACTION: If no for any of the above, prepare Telephone Record Log and contact laboratory.

A.1.11.2	Circle on each Form IIA all percent recoveries that are outside the contract windows. Are all calibration standards (initial and continuing) within control limits:		✓	
	Metals- 90-110%R?	[ ]		
	Hg - 80-120%R?	[ ]	✓	
	Cyanides- 85-115%R?	[ ]		J

		YES	NO	N/A
	ACTION: Flag as estimated (J) all positive data (not flagged with a "U") analyzed between a calibration standard with %R between 75-89% (65-79% for Hg; 70-84% for CN) or 111-125% (121-135% for Hg; 116-130% for CN) recovery and nearest good calibration standard. Qualify results <IDL as estimated (UJ) if the ICV or CCV %R is 75-89% (CN, 70-84% ; HG, 65-79%). Reject (red-line) as unacceptable data if recovery of the ICV or CCV is outside the range 75-125% (CN, 70-130%; Hg, 65-135%). Qualify five samples on either side of verification standard out of control limits.			
A.1.11.3	Was continuing calibration performed every 10 samples or every 2 hours?	[✓]	—	—
	Was ICV for cyanides distilled?	[ ]	—	✓
	ACTION: If no for any of the above, write in the Contract-Problem/Non-Compliance section of the "Data Assessment Narrative".			
A.1.12	Form II B (CRDL Standards for AA and ICP) -			
A.1.12.1	Was a CRDL standard (CRA) analyzed after initial calibration for all AA metals (except Hg)?	[✓]	—	—
	Was a mid-range calib. verification standard distilled and analyzed for cyanide analysis?	[ ]	—	✓
	Was a 2xCRDL (or 2xIDL when IDL>CRDL) analyzed (CRI) for each ICP run? (Note: CRI for AL,Ba,Ca,Fe,Mg,Na,or K is not required.)	[✓]	—	—
	ACTION: If no for any of the above, flag as estimated all data falling within the affected ranges. The affected ranges are: AA Analysis - **True Value ± CRDL; ICP Analysis - **True Value ± 2CRDL; CN Analysis - **True Value ± 0.5 x True Value.			

**True value of CRA, CRI or mid-range standard. Substitute IDL for CRDL when IDL > CRDL. Compute the concentration of the missing mid-range standard from the calibration range.

		YES	NO	N/A
A.1.12.2	Was CRI analyzed after ICV/ICB and before the final CCV/CCB, and twice every eight hours of ICP run?	[✓]		
	ACTION: If no, write in Contract Problem/Non-Compliance Section of the "Data Assessment Narrative".			
A.1.12.3	Circle on each Form IIB all the percent recoveries that are outside the acceptance windows.			
	Are CRA and CRI standards within control limits:			
	Metals 80 - 120%R?	[ ]	✓	
	Is mid-range standard within control limits:			
	Cyanide 80 - 120%R?	[ ]		✓
	ACTION: Flag as estimated all sample results within the affected range if the recovery of the standard is between 50-79%; flag only positive data within the affected range if the recovery is between 121-150%; reject all data within the affected range if the recovery is less than 50%; reject only positive data within the affected range if the recovery is greater than 150%. Qualify 50% of the samples on either side of CRI standard outside the control limits.			
	Note: Flag or reject the final results only when sample raw data are within the affected ranges and the CRDL standards are outside the acceptance windows.			
A.1.13	Form III (Initial and Continuing Calibration Blanks)			
A.1.13.1	Present and complete?	[✓]		
	For both AA and ICP when both are used for the same analyte?	[ ]		✓
	Was an initial calibration blank analyzed?	[✓]		
	Was a continuing calibration blank analyzed after every 10 samples or every 2 hours (which ever is more frequent)?	[✓]		

		YES	NO	N/A
	ACTION: If no, prepare Telephone Record Log, contact laboratory and write in the Contract-Problems/ Non-Compliance section of the "Data Assessment Narrative".			
A.1.13.2	Circle on each Form III all calibration blank values that are above CRDL (or 2 x IDL when IDL > CRDL).			
	Are all calibration blanks (when IDL<CRDL) less than or equal to the Contract Required Detection Limits (CRDLs)?	✓	—	—
	Are all calibration blanks less than two times Instrument Detection Limit (when IDL>CRDL)?	✓	—	—
	ACTION: If no for any of the above, flag as estimated (J) positive sample results when raw sample value is less than or equal to calibration blank value analyzed between calibration blank with value over CRDL (or 2xIDL) and nearest good calibration blank. Flag five samples on either side of the calibration blank outside the control limits.			
A.1.14	FORM III (Preparation Blank) - (Note: The preparation blank for mercury is the same as the calibration blank.)			
A.1.14.1	Was one prep. blank analyzed for:			
	each Sample Delivery Group (SDG)?	✓	—	—
	each batch of digested samples?	✓	—	—
	each matrix type?	✓	—	—
	both AA and ICP when both are used for the same analyte?		—	✓
	ACTION: If no for any of the above, flag as estimated (J) all the associated positive data <10 x IDLs for which prep. blank was not analyzed.			
	NOTE: If only one blank was analyzed for more than 20 samples, then first 20 samples analyzed do not have to be flagged as estimated (J).			

		YES	NO	N/A
A.1.14.2	Is concentration of prep. blank value greater than the CRDL when IDL is less than or equal to CRDL?	___	[✓]	___
	If yes, is the concentration of the sample with the least concentrated analyte less than 10 times the prep.blank?	___	[___]	✓
	ACTION: If yes, reject (red-line) all associated data greater than CRDL concentration but less than ten times the prep. blank value.			
A.1.14.3	Is concentration of prep. blank value (Form III) less than two times IDL, when IDL is greater than CRDL?	[___]	___	✓
	ACTION: If no, reject (red-line) all positive sample results when sample raw data are less than 10 times the prep. blank value.			
A.1.14.4	Is concentration of prep. blank below the negative CRDL?	___	[✓]	___
	ACTION: If yes, reject (red-line) all associated sample results less than 10xCRDL.			
A.1.15	Form IV (ICP Interference Check Sample)	[✓]	___	___
A.1.15.1	Present and complete?			
	(NOTE: Not required for furnace AA, flame AA, mercury, cyanide and Ca, Mg, K and Na.)			
	Was ICS analyzed at beginning and end of run (or at least twice every 8 hours)?	[✓]	___	___
	ACTION: If no, flag as estimated (J) all the samples for which AL, Ca, Fe, or Mg is higher than in ICS.			
A.1.15.2	Circle all values on each Form IV that are more than ± 20% of true or established mean value.			
	Are all Interference Check Sample results inside the control limits (± 20%)?	[✓]	___	___
	If no, is concentration of Al, Ca, Fe, or Mg lower than the respective concentration in ICS?	[___]	___	✓

		YES	NO	N/A
	ACTION: If no, flag as estimated (J) those positive results for which ICS recovery is between 121-150%; flag all sample results as estimated if ICS recovery falls within 50-79%; reject (red-line) those sample results for which ICS recovery is less than 50%; if ICS recovery is above 150%, reject positive results only (not flagged with a "U").			
A.1.16	Form V A (Spiked Sample Recovery - Pre-Digestion/Pre-Distillation)- (Note: Not required for Ca, Mg, K, and Na (both matrices), Al, and Fe (soil only.)			
A.1.16.1	Present and complete for: each SDG?	[✓]	—	—
	each matrix type?	[✓]	—	—
	each conc. range (i.e. low, med., high)?	[✓]	—	—
	For both AA and ICP when both are used for the same analyte?	[ ]	—	✓
	ACTION: If no for any of the above, flag as estimated (J) all the positive data less than four times the spiking levels specified in SOW for which spiked sample was not analyzed.			
	NOTE: If one spiked sample was analyzed for more than 20 samples, then first 20 samples analyzed do not have to be flagged as estimated (J).			
A.1.16.2	Was field blank used for spiked sample?	—	✓	—
	ACTION: If yes, flag all positive data less than 4 x spike added as estimated (J) for which field blank was used as spiked sample.			
A.1.16.3	Circle on each Form VA all spike recoveries that are outside control limits (75% to 125%).			
	Are all recoveries within control limits?	✓	—	—
	If no, is sample concentration greater than or equal to four times spike concentration?	[ ]	✓	—

	YES	NO	N/A
ACTION: If yes, disregard spike recoveries for analytes whose concentrations are greater than or equal to four times spike added. If no, circle those analytes on Form V for which sample concentration is less than four times the spike concentration.			
Are results outside the control limits (75-125%) flagged with "N" on Form I's and Form VA?	✓	—	—
ACTION: If no, write in the Contract - Problem/Non - Compliance section of "Data Assessment Narrative".			
A.1.16.4 Aqueous Are any spike recoveries:			
(a) less than 30%?	—	—	✓
(b) between 30-74%?	—	—	✓
(c) between 126-150%?	—	—	✓
(d) greater than 150%?	—	—	✓
ACTION: If less than 30%, reject all associated aqueous data; if between 30-74%, flag all associated aqueous data as estimated (J); if between 126-150%, flag as estimated (J) all associated aqueous data not flagged with a "U"; if greater than 150%, reject (red-line) all associated aqueous data not flagged with a "U".			
A.1.16.5 Soil/Sediment Are any spike recoveries:			
(a) less than 10%?	✓	—	—
(b) between 10-74%?	✓	—	—
(c) between 126-200%?	—	✓	—
(d) greater than 200%?	—	✓	—

		YES	NO	N/A
	ACTION: If less than 10%, reject all associated data; if between 10-74%, flag all associated data as estimated; if between 126-200%, flag as estimated all associated data was not flagged with a "U"; if greater than 200%, reject all associated data not flagged with a "U".			
A.1.17	Form VI (Lab Duplicates)			
A.1.17.1	Present and complete for: each SDG?	[✓]	—	—
	each matrix type?	[✓]	—	—
	each concentration range (i.e. low, med., high)?	[✓]	—	—
	both AA and ICP when both are used for the same analyte?	[ ]	—	✓
	ACTION: If no for any the above, flag as estimated (J) all the data ≥CRDL* for which duplicate sample was not analyzed.			
	Note: 1. If one duplicate sample was analyzed for more than 20 samples, then first 20 samples do not have to be flagged as estimated.			
	2. If percent solids for soil sample and its duplicate differ by more than 1%, prepare a Form VI for each duplicate pair, report concentrations in ug/L on wet weight basis and calculate RPD or Difference for each analyte.			
A.1.17.2	Was field blank used for duplicate analysis?	—	[✓]	—
	ACTION: If yes, flag all data ≥CRDL* as estimated (J) for which field blank was used as duplicate.			
A.1.17.3	Are all values within control limits (RPD 20% or difference ≤ ±CRDL)?	[ ]	✓	—
	If no, are all results outside the control limits flagged with an * on Form I's and VI?	[✓]	—	—
	ACTION: If no, write in the Contract - Problems/Non-Compliance section of "Data Assessment Narrative".			

* Substitute IDL for CRDL when IDL > CRDL.

	YES	NO	N/A

NOTE: 1. RPD is not calculable for an analyte of the sample - duplicate pair when both values are less than IDL.
2. If the result of lab duplicate analyzed by GFAA is rejectable due to coefficient of correlation of MSA, analytical spike recovery, or duplicate injections criteria, do not apply precision criteria to metals analyzed by GFAA.

A.1.17.4 Aqueous

Circle on each Form VI all values that are:

RPD > 50%, or
Difference > CRDL*

Is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times *CRDL?	___	[ ]	✓
Is any difference** between sample and duplicate greater than *CRDL where sample and/or duplicate is less than 5 times *CRDL?	___	[ ]	✓

ACTION: If yes, flag the associated data as estimated.

A.1.17.5 Soil/Sediment

Circle on each Form VI all values that are:

RPD > 100%, or

Difference > 2 x CRDL*

Is any RPD (where sample and duplicate are both greater than or equal to 5 times *CRDL) : > 100%?	___	✓ [ ]	___
Is any **difference between sample and duplicate (where sample and/or duplicate is less than 5x*CRDL) : > 2x*CRDL?	___	✓ [ ]	___

* Substitute IDL for CRDL when IDL > CRDL.
** Use absolute values of sample and duplicate to calculate the difference.

		YES	NO	N/A
	ACTION: If yes, flag the associated data as estimated.			
A.1.18	Field Duplicates			
A.1.18.1	Were field duplicates analyzed?	[✓]	—	—
	ACTION: If yes, prepare a Form VI for each aqueous field duplicate pair. Prepare a Form VI for each soil duplicate pair, if percent solids for sample and its duplicate differ by more than 1%; report concentrations of soils in ug/l on wet weight basis and calculate RPDs or Difference for each analyte.			
	NOTE: 1. Do not calculate RPD when both values are less than IDL. 2. Flag all associated data only for field duplicate pair.			
A.1.18.2	Aqueous			
	Circle all values on self prepared Form VI for field duplicates that are: RPD > 50%, or Difference > CRDL*			
	Is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times *CRDL?	—	[—]	✓
	Is any **difference between sample and duplicate greater than *CRDL where sample and/or duplicate is less than 5 times *CRDL?	—	[—]	✓
	ACTION: If yes, flag the associated data as estimated.			

* Substitute IDL for CRDL when IDL > CRDL.
** Use absolute values of sample and duplicate to calculate the difference.

		YES	NO	N/A
A.1.18.3	Soil/Sediment			
	Circle all values on self prepared Form VI for field duplicates that are:			
	RPD >100%, or			
	Difference > 2 x CRDL*			
	Is any RPD (where sample and duplicate are both greater than 5 times *CRDL) : >100%?	___	[✓]	___
	Is any **difference between sample and duplicate (where sample and/or duplicate is less than 5x *CRDL): >2x *CRDL?	___	[✓]	___
	ACTION: If yes, flag the associated data as estimated.			
A.1.19	Form VII (Laboratory Control Sample) (Note: LCS - not required for aqueous Hg and cyanide analyses.)			
A.1.19.1	Was one LCS prepared and analyzed for:			
	each SDG?	[✓]	___	___
	each batch samples digested/distilled?	[✓]	___	___
	both AA and ICP when both are used for the same analyte?	[ ]	___	[✓]
	ACTION: If no for any of the above, prepare Telephone Record Log and contact laboratory for submittal of results of LCS. Flag as estimated (J) all the data for which LCS was not analyzed.			
	NOTE: If only one LCS was analyzed for more than 20 samples, then first 20 samples close to LCS do not have to be flagged as estimated.			

* Substitute IDL for CRDL when IDL > CRDL.
** Use absolute values of sample and duplicate to calculate the difference.

		YES	NO	N/A
A.1.19.2	**Aqueous LCS**			
	Circle on each Form VII the LCS percent recoveries outside control limits (80 - 120%) except for aqueous Ag and Sb.			
	Is any LCS recovery: less than 50%?	___	☑	___
	between 50% and 79%?	___	☑	___
	between 121% and 150%?	___	☑	___
	greater than 150%?	___	☑	___
	ACTION: Less than 50%, reject (red-line) all data; between 50% and 79%, flag all associated data as estimated (J); between 121% and 150%, flag all positive (not flagged with a "U") results as estimated; greater than 150%, reject all positive results.			
A.1.19.3	**Solid LCS**			
	NOTE: 1. If "Found" value of LCS is rejectable due to duplicate injections or analytical spike recovery criteria, regardless of LCS recovery, flag the associated data as estimated (J). 2. If IDL of an analyte is equal to or greater than true value of LCS, disregard the "Action" below even though LCS is out of control limits.			
	Is LCS "Found" value higher than the control limits on Form VII?	___	☑	___
	ACTION: If yes, qualify all associated positive data as estimated.			
	Is LCS "Found" value lower than the Control limits on Form VII?	___	☑	___
	ACTION: If yes, qualify all associated data as estimated.			

		YES	NO	N/A
A.1.20	Form IX (ICP Serial Dilution) -			
	NOTE: Serial dilution analysis is required only for initial concentrations equal to or greater than 10 x IDL.			
A.1.20.1	Was Serial Dilution analysis performed for: each SDG?	✓	—	—
	each matrix type?	✓	—	—
	each concentration range (i.e. low, med.)?	✓	—	—
	ACTION: If no for any of the above, flag as estimated all the positive data ≥ 10xIDLs or ≥ CRDL when 10xIDL ≤ CRDL for which Serial Dilution Analysis was not performed.			
A.1.20.2	Was field blank(s) used for Serial Dilution Analysis?	—	✓	—
	ACTION: If yes, flag all associated data ≥ 10 x IDL as estimated (J). If 10xIDL ≤ CRDL, flag all data ≥ CRDL.			
A.1.20.3	Are results outside control limit flagged with an "E" on Form I's and Form IX when initial concentration on Form IX is equal to 50 times IDL or greater.	✓	—	—
	ACTION: If no, write in the Contract-Problem/Non-Compliance section of the "Data Assessment Narrative".			
A.1.20.4	Circle on each Form IX all percent difference that are outside the control limits for initial concentrations equal to or greater than 10 x IDLs only.			
	Are any % difference values: > 10%?	✓		—
	≥ 100%?	✓		—

		YES	NO	N/A
	ACTION: Flag as estimated (J) all the associated sample data ≥ 10xIDLs (or ≥ CRDL when 10xIDL ≤ CRDL) for which percent difference is greater than 10% but less than 100%. Reject (red-line) all the associated sample results equal to or greater than 10xIDLs (or ≥ CRDL when 10xIDL ≤ CRDL) for which PD is greater than or equal to 100%.			
	Note: Flag or reject on Form I's only the sample results whose associated raw data are ≥ 10xIDL (or ≥ CRDL when 10xIDL≤ CRDL)			
A.1.21	Furnace Atomic Absorbtion (AA) QC Analysis			
A.1.21.1	Are duplicate injections present in furnace raw data (except during full Method of Standard Addition) for each sample analyzed by GFAA?	[ ]	—	✓ —
	ACTION: If no, reject the data on Form I's for which duplicate injections were not performed.			
A.1.21.2	Do the duplicate injection readings agree within 20% Relative Standard Deviation (RSD) or Coefficient of Variation (CV) for concentration greater than CRDL?	[ ]	—	✓ —
	Was a dilution analyzed for sample with analytical spike recovery less than 40%?	[ ]	—	✓ —
	ACTION: If no for any of the above, flag all the associated data as estimated.			
A.1.21.3	Is *analytical spike recovery outside the control limits (85-115%) for any sample?	—	[ ]	✓ —
	ACTION: If yes, flag as estimated the affected sample results if the recovery is between 10-84%; if the recovery is between 115-200%, flag the associated positive sample results as estimated; reject the associated sample results if the recovery is less than 10%; reject positive sample results if the recovery is greater than 200%.			

* Analytical spike is not required on the pre-digestion spiked sample.

		YES	NO	N/A
	NOTE: Reject or flag the data only when the affected sample(s) was not subsequently analyzed by Method of Standard Addition.			
A.1.22	Form VIII (Method of Standard Addition Results)			✓
A.1.22.1	Present?	[ ]	___	___
	If no, is any Form I result coded with "S" or a "+"?	___	[ ]	✓
	ACTION: If yes, write request on Telephone Record Log and contact laboratory for submittal of Form VIII.			
A.1.22.2	Is coefficient of correlation for MSA less than 0.990 for any sample?	___	[ ]	✓
	ACTION: If yes, reject (red-line) the affected data.			✓
A.1.22.3	Was *MSA required for any sample but not performed?	___	[ ]	___
	Is coefficient of correlation for MSA less than 0.995?	___	[ ]	✓
	Are MSA calculations outside the linear range of the calibration curve generated at the beginning of the analytical run?	___	[ ]	✓
	ACTION: If yes for any of the above, flag all the associated data as estimated (J).			
A.1.22.4	Was proper quantitation procedure followed correctly as outlined in the SOW on page E-23?	[ ]	___	✓
	ACTION: If no, note exception under Contract Problem/ Non-Compliance section of the "Data Assessment Narrative", and prepare a separate list.			

* MSA is not required on LCS and prep. blank.

		YES	NO	N/A
A.1.23	Dissolved/Total or Inorganic/Total Analytes -			
A.1.23.1	Were any analyses performed for dissolved as well as total analytes on the same sample(s).	___	[✓]	___
	Were any analyses performed for inorganic as well as total (organic + inorganic) analytes on the same sample(s)?	___	[✓]	___
	NOTE: 1. If yes, prepare a list comparing differences between all dissolved (or inorganic) and total analytes. Compute the differences as a percent of the total analyte only when dissolved concentration is greater than CRDL as well as total concentration. 2. Apply the following questions only if inorganic (or dissolved) results are (i) above CRDL, and (ii) greater than total constituents. 3. At least one preparation blank, ICS, and LCS should be analyzed in each analytical run.			
A.1.23.2	Is the concentration of any dissolved (or inorganic) analyte greater than its total concentration by more than 10%?	___	[ ]	✓ ___
A.1.23.3	Is the concentration of any dissolved (or inorganic) analyte greater than its total concentration by more than 50%?	___	[ ]	✓ ___
	ACTION: If more than 10%, flag both dissolved (or inorganic) and total values as estimated (J); if more than 50%, reject (red-line) the data for both values.			
A.1.24	Form I (Field Blank) -			
	(Note: Designate "Field Blank" as such on Form I.)			
A.1.24.1	Circle all field blank values on Form I that are greater than CRDL, (or 2 x IDL when IDL > CRDL).			
	Is field blank concentration less than CRDL (or 2 x IDL when IDL > CRDL) for all parameters of associated aqueous and soil samples?	[ ]	✓ ___	___

	YES	NO	N/A
If no, was field blank value already rejected due to other QC criteria?	[ ]	✓	

ACTION: If no, reject (except field blank results) all associated positive sample data less than or equal to five times the field blank value. Reject on Form I's the soil sample results that when converted to ug/L on wet basis are less than or equal to five times the field blank value in ug/L.

A.1.25 Form X, XI, XII (Verification of Instrumental Parameters).

A.1.25.1	Is verification report present for:			
	Instrument Detection Limits (quarterly)?	✓ [ ]		
	ICP Interelement Correction Factors (annually)?	[ ]		
	ICP Linear Ranges (quarterly)?	[ ]		

ACTION: If no, contact TPO of the lab.

A.1.25.2	Form X (Instrument Detection Limits) - (Note: IDL is not required for Cyanide.)			
A.1.25.2.1	Are IDLs present for: all the analytes?	✓ [ ]		
	all the instruments used?	✓ [ ]		
	For both AA and ICP when both are used for the same analyte?	[ ]		✓

ACTION: If no for any of the above, prepare Telephone Record Log and contact laboratory.

A.1.25.2.2	Is IDL greater than CRDL for any analyte?		✓ [ ]	
	If yes, is the concentration on Form I of the sample analyzed on the instrument whose IDL exceeds CRDL, greater than 5 x IDL.	[ ]		✓

	YES	NO	N/A
Action: If no, flag as estimated all values less than five times IDL of the instrument whose IDL exceeds CRDL.			
A.1.25.3 Form XI (Linear Ranges)			
A.1.25.3.1 Was any sample result higher than high linear range of ICP.	___	[ ] ✓	___
Was any sample result higher than the highest calibration standard for non-ICP parameters?	___	[ ] ✓	___
If yes for any of the above, was the sample diluted to obtain the result on Form I?	[ ]	___	___ ✓
ACTION: If no, flag the result reported on Form I as estimated(J).			
A.1.26 Percent Solids of Sediments		✓	
A.1.26.1 Are percent solids in sediment(s): < 50%?	___	[ ] ✓	___
< 10%?	___	[ ] ✓	___
ACTION: If yes, qualify as estimated all the results of a sample that has per cent solids between 10%-50% (i.e. moisture content between 50%-90%). Reject all the results of a sample that has per cent solids less than 10% (i.e. moisture content greater than 90%).			
NOTE: Reject or flag(J) only the sample results that were not previously rejected or flaged due to other QC criteria.			

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AX7

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-03S

Level (low/med): MED Date Received: 08/30/01

% Solids: 98.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6960			P
7440-36-0	Antimony	0.99	U	N J	P
7440-38-2	Arsenic	5.1		J	P
7440-39-3	Barium	22.3	B		P
7440-41-7	Beryllium	0.42	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	23700			P
7440-47-3	Chromium	20.1			P
7440-48-4	Cobalt	2.3	B		P
7440-50-8	Copper	17.4			P
7439-89-6	Iron	16500			P
7439-92-1	Lead	8.0		J	P
7439-95-4	Magnesium	1790			P
7439-96-5	Manganese	71.3			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	4.7	B		P
7440-09-7	Potassium	624	B	E	P
7782-49-2	Selenium	~~0.89~~	U	N	P
7440-22-4	Silver	0.16	B		P
7440-23-5	Sodium	89.2	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	24.2			P
7440-66-6	Zinc	28.4			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AX8

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-04S

Level (low/med): MED Date Received: 08/30/01

% Solids: 98.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4630			P
7440-36-0	Antimony	0.98	U	N J	P
7440-38-2	Arsenic	4.3			P
7440-39-3	Barium	14.4	B		P
7440-41-7	Beryllium	0.31	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	8050			P
7440-47-3	Chromium	19.7			P
7440-48-4	Cobalt	1.8	B		P
7440-50-8	Copper	17.9			P
7439-89-6	Iron	15500			P
7439-92-1	Lead	6.2		J	P
7439-95-4	Magnesium	971	B		P
7439-96-5	Manganese	~~46.1~~			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	2.6	B		P
7440-09-7	Potassium	365	B	E	P
7782-49-2	Selenium	~~0.88~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	65.1	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	20.1			P
7440-66-6	Zinc	~~21.1~~			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AX9

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-05S

Level (low/med): MED Date Received: 08/30/01

% Solids: 98.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4130			P
7440-36-0	Antimony	0.99	U	N	P
7440-38-2	Arsenic	4.1		J	P
7440-39-3	Barium	12.9	B		P
7440-41-7	Beryllium	0.28	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	5450			P
7440-47-3	Chromium	14.6			P
7440-48-4	Cobalt	1.5	B		P
7440-50-8	Copper	14.5			P
7439-89-6	Iron	14100			P
7439-92-1	Lead	6.4		J	P
7439-95-4	Magnesium	796	B		P
7439-96-5	Manganese	~~39.2~~	-		P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	2.4	B		P
7440-09-7	Potassium	268	B	E	P
7782-49-2	Selenium	~~0.89~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	51.1	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	19.6			P
7440-66-6	Zinc	~~20.5~~			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

FORM I - IN ILM04.1

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AY0

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-06S

Level (low/med): MED Date Received: 08/30/01

% Solids: 98.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4800			P
7440-36-0	Antimony	0.96	U	N J	P
7440-38-2	Arsenic	4.1		J	P
7440-39-3	Barium	14.6	B		P
7440-41-7	Beryllium	0.30	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	4550			P
7440-47-3	Chromium	15.1			P
7440-48-4	Cobalt	1.7	B		P
7440-50-8	Copper	13.7			P
7439-89-6	Iron	13400			P
7439-92-1	Lead	5.9		J	P
7439-95-4	Magnesium	815	B		P
7439-96-5	Manganese	~~43.1~~			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	3.0	B		P
7440-09-7	Potassium	459	B	E	P
7782-49-2	Selenium	~~0.87~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	81.9	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	18.9			P
7440-66-6	Zinc	~~20.8~~			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AY1

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-07S

Level (low/med): MED Date Received: 08/30/01

% Solids: 98.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6020			P
7440-36-0	Antimony	0.97	U	N J	P
7440-38-2	Arsenic	5.2		J	P
7440-39-3	Barium	17.8	B		P
7440-41-7	Beryllium	0.41	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	2610			P
7440-47-3	Chromium	19.7			P
7440-48-4	Cobalt	2.1	B		P
7440-50-8	Copper	13.6			P
7439-89-6	Iron	17200			P
7439-92-1	Lead	7.2		J	P
7439-95-4	Magnesium	689	B		P
7439-96-5	Manganese	~~50.9~~ ✓			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	3.7	B		P
7440-09-7	Potassium	518	B	E	P
7782-49-2	Selenium	~~0.87~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	62.5	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	24.4			P
7440-66-6	Zinc	~~20.3~~			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AY2

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-08S

Level (low/med): MED Date Received: 08/30/01

Solids: 98.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q		M
7429-90-5	Aluminum	4540				P
7440-36-0	Antimony	0.99	U	N	J	P
7440-38-2	Arsenic	3.7				P
7440-39-3	Barium	13.9	B			P
7440-41-7	Beryllium	0.27	B		J	P
7440-43-9	Cadmium	0.08	U			P
7440-70-2	Calcium	4860				P
7440-47-3	Chromium	14.4				P
7440-48-4	Cobalt	1.5	B			P
7440-50-8	Copper	17.6				P
7439-89-6	Iron	12500				P
7439-92-1	Lead	6.4			J	P
7439-95-4	Magnesium	817	B			P
7439-96-5	Manganese	~~45.6~~				P
7439-97-6	Mercury	0.05	U			CV
7440-02-0	Nickel	2.5	B			P
7440-09-7	Potassium	318	B	E		P
7782-49-2	Selenium	~~0.89~~	U	N		P
7440-22-4	Silver	0.14	U			P
7440-23-5	Sodium	70.1	B			P
7440-28-0	Thallium	1.2	B			P
7440-62-2	Vanadium	17.0				P
7440-66-6	Zinc	~~18.3~~				P
	Cyanide					NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AY3

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-09S

Level (low/med): MED Date Received: 08/30/01

% Solids: 98.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7280			P
7440-36-0	Antimony	1.0	U	N	P
7440-38-2	Arsenic	6.0		J	P
7440-39-3	Barium	22.4	B		P
7440-41-7	Beryllium	0.40	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	12100			P
7440-47-3	Chromium	21.6			P
7440-48-4	Cobalt	2.4	B		P
7440-50-8	Copper	18.8			P
7439-89-6	Iron	18400			P
7439-92-1	Lead	7.5		J	P
7439-95-4	Magnesium	1260			P
7439-96-5	Manganese	71.1			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	5.0	B		P
7440-09-7	Potassium	609	B	E	P
7782-49-2	Selenium	~~0.89~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	71.4	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	25.9			P
7440-66-6	Zinc	23.3			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AY4

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-10S

Level (low/med): MED Date Received: 08/30/01

% Solids: 98.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5620			P
7440-36-0	Antimony	0.98	U	N	P
7440-38-2	Arsenic	4.6			P
7440-39-3	Barium	16.9	B		P
7440-41-7	Beryllium	0.33	B		P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	32100			P
7440-47-3	Chromium	15.6			P
7440-48-4	Cobalt	1.8	B		P
7440-50-8	Copper	16.3			P
7439-89-6	Iron	13400			P
7439-92-1	Lead	6.8			P
7439-95-4	Magnesium	2140			P
7439-96-5	Manganese	68.0			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	4.2	B		P
7440-09-7	Potassium	589	B	E	P
7782-49-2	Selenium	~~0.88~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	101	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	18.6			P
7440-66-6	Zinc	26.8			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AY5

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-11S

Level (low/med): MED Date Received: 08/30/01

% Solids: 98.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4180			P
7440-36-0	Antimony	0.96	U	N J	P
7440-38-2	Arsenic	4.4		J	P
7440-39-3	Barium	21.4	B		P
7440-41-7	Beryllium	0.32	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	21600			P
7440-47-3	Chromium	17.0			P
7440-48-4	Cobalt	1.4	B		P
7440-50-8	Copper	14.6			P
7439-89-6	Iron	11900			P
7439-92-1	Lead	5.7		J	P
7439-95-4	Magnesium	1480			P
7439-96-5	Manganese	~~52.6~~	✓		P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	2.4	B		P
7440-09-7	Potassium	438	B	E	P
7782-49-2	Selenium	~~0.86~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	60.4	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	17.4			P
7440-66-6	Zinc	33.9			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AY6

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-01S

Level (low/med): MED Date Received: 08/30/01

% Solids: 99.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4900			P
7440-36-0	Antimony	0.96	U	N J	P
7440-38-2	Arsenic	4.0		J	P
7440-39-3	Barium	16.1	B		P
7440-41-7	Beryllium	0.34	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	4650			P
7440-47-3	Chromium	17.5			P
7440-48-4	Cobalt	1.9	B		P
7440-50-8	Copper	19.9			P
7439-89-6	Iron	13300			P
7439-92-1	Lead	6.5		J	P
7439-95-4	Magnesium	794	B		P
7439-96-5	Manganese	~~45.9~~			P
7439-97-6	Mercury	0.09	B		CV
7440-02-0	Nickel	3.2	B		P
7440-09-7	Potassium	486	B	E	P
7782-49-2	Selenium	~~0.86~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	72.8	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	19.6			P
7440-66-6	Zinc	22.9			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AY8

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-02S

Level (low/med): MED Date Received: 08/30/01

% Solids: 99.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5400			P
7440-36-0	Antimony	0.96	U	N J	P
7440-38-2	Arsenic	4.9		J	P
7440-39-3	Barium	17.2	B		P
7440-41-7	Beryllium	0.31	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	36700			P
7440-47-3	Chromium	18.3			P
7440-48-4	Cobalt	1.7	B		P
7440-50-8	Copper	16.1			P
7439-89-6	Iron	14500			P
7439-92-1	Lead	8.4		J	P
7439-95-4	Magnesium	2320			P
7439-96-5	Manganese	75.2			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	3.1	B		P
7440-09-7	Potassium	611	B	E	P
7782-49-2	Selenium	~~0.86~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	116	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	19.7			P
7440-66-6	Zinc	28.2			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AY9

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-12S

Level (low/med): MED Date Received: 08/30/01

% Solids: 98.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7880			P
7440-36-0	Antimony	1.0	U	N	P
7440-38-2	Arsenic	7.7			P
7440-39-3	Barium	21.8	B		P
7440-41-7	Beryllium	0.50	B		P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	4050			P
7440-47-3	Chromium	28.7			P
7440-48-4	Cobalt	2.6	B		P
7440-50-8	Copper	20.8			P
7439-89-6	Iron	22900			P
7439-92-1	Lead	7.9			P
7439-95-4	Magnesium	761	B		P
7439-96-5	Manganese	66.2			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	4.9	B		P
7440-09-7	Potassium	695	B	E	P
7782-49-2	Selenium	~~0.90~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	178	B		P
7440-28-0	Thallium	1.2	B		P
7440-62-2	Vanadium	34.0			P
7440-66-6	Zinc	23.7			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AZ0

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-13S

Level (low/med): MED Date Received: 08/30/01

% Solids: 99.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7340			P
7440-36-0	Antimony	0.97	U	N J	P
7440-38-2	Arsenic	6.8		J	P
7440-39-3	Barium	22.8	B		P
7440-41-7	Beryllium	0.45	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	6220			P
7440-47-3	Chromium	26.7			P
7440-48-4	Cobalt	2.6	B		P
7440-50-8	Copper	18.1			P
7439-89-6	Iron	21100			P
7439-92-1	Lead	9.2		J	P
7439-95-4	Magnesium	937	B		P
7439-96-5	Manganese	71.3			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	4.4	B		P
7440-09-7	Potassium	702	B	E	P
7782-49-2	Selenium	~~0.87~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	123	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	32.6			P
7440-66-6	Zinc	35.2			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AZ1

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-14S

Level (low/med): MED Date Received: 08/30/01

% Solids: 99.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5290			P
7440-36-0	Antimony	0.96	U	N J	P
7440-38-2	Arsenic	5.9		J	P
7440-39-3	Barium	17.3	B		P
7440-41-7	Beryllium	0.37	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	4410			P
7440-47-3	Chromium	17.8			P
7440-48-4	Cobalt	2.0	B		P
7440-50-8	Copper	16.8			P
7439-89-6	Iron	16300			P
7439-92-1	Lead	7.3		J	P
7439-95-4	Magnesium	704	B		P
7439-96-5	Manganese	~~56.0~~			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	3.0	B		P
7440-09-7	Potassium	485	B	E	P
7782-49-2	Selenium	~~0.86~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	171	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	23.7			P
7440-66-6	Zinc	~~19.4~~			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AZ2

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-15S

Level (low/med): MED Date Received: 08/30/01

% Solids: 99.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5280			P
7440-36-0	Antimony	0.96	U	N	P
7440-38-2	Arsenic	5.2		J	P
7440-39-3	Barium	17.0	B		P
7440-41-7	Beryllium	0.35	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	3480			P
7440-47-3	Chromium	19.3			P
7440-48-4	Cobalt	1.9	B		P
7440-50-8	Copper	11.2			P
7439-89-6	Iron	15500			P
7439-92-1	Lead	7.1		J	P
7439-95-4	Magnesium	650	B		P
7439-96-5	Manganese	~~50.5~~			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	2.9	B		P
7440-09-7	Potassium	450	B	E	P
7782-49-2	Selenium	~~0.86~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	50.1	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	23.0			P
7440-66-6	Zinc	~~18.9~~			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AZ3

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-16S

Level (low/med): MED Date Received: 08/30/01

% Solids: 99.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5500			P
7440-36-0	Antimony	0.96	U	N	P
7440-38-2	Arsenic	5.6		J	P
7440-39-3	Barium	22.4	B		P
7440-41-7	Beryllium	0.38	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	41100			P
7440-47-3	Chromium	19.1			P
7440-48-4	Cobalt	2.0	B		P
7440-50-8	Copper	17.3			P
7439-89-6	Iron	13900			P
7439-92-1	Lead	11.1		J	P
7439-95-4	Magnesium	2520			P
7439-96-5	Manganese	82.6			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	3.3	B		P
7440-09-7	Potassium	505	B	E	P
7782-49-2	Selenium	~~0.86~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	80.8	B		P
7440-28-0	Thallium	1.4	B		P
7440-62-2	Vanadium	19.4			P
7440-66-6	Zinc	36.0			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AZ4

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-17S

Level (low/med): MED Date Received: 08/30/01

% Solids: 99.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6600			P
7440-36-0	Antimony	0.96	U	N J	P
7440-38-2	Arsenic	5.6			P
7440-39-3	Barium	21.7	B		P
7440-41-7	Beryllium	0.38	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	41000			P
7440-47-3	Chromium	17.5			P
7440-48-4	Cobalt	2.1	B		P
7440-50-8	Copper	13.2			P
7439-89-6	Iron	15900			P
7439-92-1	Lead	10.5		J	P
7439-95-4	Magnesium	2500			P
7439-96-5	Manganese	90.2			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	3.5	B		P
7440-09-7	Potassium	692	B	E	P
7782-49-2	Selenium	~~0.86~~	U	N	P
7440-22-4	Silver	0.14	B		P
7440-23-5	Sodium	95.2	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	23.6			P
7440-66-6	Zinc	32.7			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AZ5

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-18S

Level (low/med): MED Date Received: 08/30/01

% Solids: 99.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6350			P
7440-36-0	Antimony	0.98	U	N	P
7440-38-2	Arsenic	4.3		J	P
7440-39-3	Barium	30.1	B		P
7440-41-7	Beryllium	0.27	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	44300			P
7440-47-3	Chromium	14.7			P
7440-48-4	Cobalt	2.0	B		P
7440-50-8	Copper	14.8			P
7439-89-6	Iron	10700			P
7439-92-1	Lead	16.3		J	P
7439-95-4	Magnesium	3190			P
7439-96-5	Manganese	90.7			P
7439-97-6	Mercury	0.11			CV
7440-02-0	Nickel	4.7	B		P
7440-09-7	Potassium	393	B	E	P
7782-49-2	Selenium	~~0.88~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	88.8	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	15.2			P
7440-66-6	Zinc	74.8			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AZ6

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-19S

Level (low/med): MED Date Received: 08/30/01

% Solids: 99.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3710			P
7440-36-0	Antimony	0.96	U	N J	P
7440-38-2	Arsenic	3.8			P
7440-39-3	Barium	15.0	B		P
7440-41-7	Beryllium	0.32	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	5000			P
7440-47-3	Chromium	14.6			P
7440-48-4	Cobalt	1.6	B		P
7440-50-8	Copper	12.3			P
7439-89-6	Iron	12000			P
7439-92-1	Lead	6.7		J	P
7439-95-4	Magnesium	613	B		P
7439-96-5	Manganese	~~40.9~~			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	2.6	B		P
7440-09-7	Potassium	370	B	E	P
7782-49-2	Selenium	~~0.86~~	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	52.1	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	17.2			P
7440-66-6	Zinc	~~20.0~~			P
_____	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AZ7

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AX7

Matrix (soil/water): SOIL Lab Sample ID: 1412R-20S

Level (low/med): MED Date Received: 08/30/01

% Solids: 92.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9110			P
7440-36-0	Antimony	1.0	U	N J	P
7440-38-2	Arsenic	9.2		J	P
7440-39-3	Barium	98.2			P
7440-41-7	Beryllium	0.56	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	2210			P
7440-47-3	Chromium	16.1			P
7440-48-4	Cobalt	5.9	B		P
7440-50-8	Copper	48.1			P
7439-89-6	Iron	16400			P
7439-92-1	Lead	121		J	P
7439-95-4	Magnesium	2260			P
7439-96-5	Manganese	276			P
7439-97-6	Mercury	0.13			CV
7440-02-0	Nickel	14.3		J	P
7440-09-7	Potassium	801	B	E	P
7782-49-2	Selenium	~~0.93~~	U	N	P
7440-22-4	Silver	0.35	B	J	P
7440-23-5	Sodium	129	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	25.0			P
7440-66-6	Zinc	142			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: CHEMTECH CONSULTING GROUP Contract No.: 68-W0-0089

Lab Code: CHEM Case No.: 29681

Full Sample Analysis Price in Contract: $ ___

SDG No./First Sample in SDG. MB0AX7 Sample Receipt Date: 08/30/01
(Lowest EPA Sample Number in first shipment of samples received under SDG.) (MM/DD/YY)

Last Sample in SDG: MB0AZ7 Sample Receipt Date: 08/30/01
(Highest EPA Sample Number in last shipment of samples received under SDG.) (MM/DD/YY)

EPA Sample Numbers in the SDG (listed in alphanumeric order)

1	MB0AX7	12	MB0AY9
2	MB0AX8	13	MB0AZ0
3	MB0AX9	14	MB0AZ1
4	MB0AY0	15	MB0AZ2
5	MB0AY1	16	MB0AZ3
6	MB0AY2	17	MB0AZ4
7	MB0AY3	18	MB0AZ5
8	MB0AY4	19	MB0AZ6
9	MB0AY5	20	MB0AZ7
10	MB0AY6	21	
11	MB0AY8	22	

Note: There are a maximum of 20 field samples in an SDG.

Attach Traffic Reports to this form in alphanumeric order
(i.e.. the order listed on this form).

R SCR
Signature

08/30/01
Date

000181

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SEP 20 2001

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AY7

SOW No.: ILM04.1

EPA SAMPLE #	Lab Sample ID.
MB0AY7	1413R-01S
MB0AY7D	1413R-01S2
MB0AY7S	1413R-01MS
MB0AZ8	1413R-02S
MB0AZ9	1413R-03S
MB0B00	1413R-04S
MB0B01	1413R-05S
MB0B02	1413R-06S
MB0B03	1413R-07S
MB0B04	1413R-08S
MB0B05	1413R-09S

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

The "E" qualifiers on Form I and IX for the Potassium indicate chemical or physical interference effects, which were suspected during those elements' analyses only.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: PARVEEN HASAN Title: QA/QC OFFICER Date: 09/19/2001

SDG NARRATIVE

USEPA
LABORATORY NAME: CHEMTECH CONSULTING GROUP
Case # 29681
SDG # MB0AY7
Contract # 68-W0-0089
LAB CODE: CHEM
Chemtech Project # 1413R

A. Number of Samples and Date of Receipt
08 Soil and 01 Field Blank Samples were delivered to the laboratory on 08/30/2001.

B. Parameters
Test requested was for Total Metals.

C. Cooler Temp
Indicator Bottle: **Presence**/Absence
Cooler Temp: 4.0 Deg. C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

E. Corrective Action taken for above:

F. Analytical Techniques:
All analysis done by using **CLP Methodology.**

G. Analytical Problem:

H. QA/ QC
Calibrations met requirements. Blank analyses did not indicate the presence of contamination. Interference Check Sample and Laboratory Control Sample were within Control Limits. The Spike Sample was within Control Limits. Serial Dilution met requirements except for the Potassium.. Duplicate analyses and RPDs did met requirements except for the Aluminum.

I certify that the data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signature _____ Name: Parveen Hasan

Date 09/19/2001 Title: QA/QC Officer

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AY7

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AY7

Matrix (soil/water): SOIL Lab Sample ID: 1413R-01S

Level (low/med): MED Date Received: 08/30/01

% Solids: 99.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4760		*	P
7440-36-0	Antimony	0.98	U		P
7440-38-2	Arsenic	5.0			P
7440-39-3	Barium	20.7	B		P
7440-41-7	Beryllium	0.42	B		P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	39000			P
7440-47-3	Chromium	16.1			P
7440-48-4	Cobalt	2.0	B		P
7440-50-8	Copper	17.5			P
7439-89-6	Iron	14300			P
7439-92-1	Lead	11.6			P
7439-95-4	Magnesium	2290			P
7439-96-5	Manganese	83.8			P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	3.0	B		P
7440-09-7	Potassium	404	B	E	P
7782-49-2	Selenium	0.88	U		P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	87.5	B		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	21.6			P
7440-66-6	Zinc	34.5			P
	Cyanide				NR

olor Before: BROWN Clarity Before: Texture: MEDIUM

olor After: YELLOW Clarity After: Artifacts:

omments:

FORM I - IN ILM04.1

000003

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AZ8

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AY7

Matrix (soil/water): SOIL Lab Sample ID: 1413R-02S

Level (low/med): MED Date Received: 08/30/01

% Solids: 92.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10400		*	P
7440-36-0	Antimony	1.0	U		P
7440-38-2	Arsenic	9.5		J	P
7440-39-3	Barium	109			P
7440-41-7	Beryllium	0.70	B	J	P
7440-43-9	Cadmium	0.09	U		P
7440-70-2	Calcium	2390			P
7440-47-3	Chromium	17.0			P
7440-48-4	Cobalt	6.6	B		P
7440-50-8	Copper	45.7			P
7439-89-6	Iron	16000			P
7439-92-1	Lead	145		J	P
7439-95-4	Magnesium	2600			P
7439-96-5	Manganese	330			P
7439-97-6	Mercury	0.19		J	CV
7440-02-0	Nickel	14.6		J	P
7440-09-7	Potassium	982	B	E	P
7782-49-2	Selenium	0.93	U		P
7440-22-4	Silver	0.15	U		P
7440-23-5	Sodium	131	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	25.7			P
7440-66-6	Zinc	151			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0AZ9

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AY7

Matrix (soil/water): SOIL Lab Sample ID: 1413R-03S

Level (low/med): MED Date Received: 08/30/01

% Solids: 90.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8850		*	P
7440-36-0	Antimony	1.0	U		P
7440-38-2	Arsenic	10.2		J	P
7440-39-3	Barium	151			P
7440-41-7	Beryllium	0.65	B	J	P
7440-43-9	Cadmium	0.09	U		P
7440-70-2	Calcium	2430			P
7440-47-3	Chromium	18.3			P
7440-48-4	Cobalt	6.7	B		P
7440-50-8	Copper	52.0			P
7439-89-6	Iron	18900			P
7439-92-1	Lead	167		J	P
7439-95-4	Magnesium	2550			P
7439-96-5	Manganese	365			P
7439-97-6	Mercury	0.31			CV
7440-02-0	Nickel	15.5		J	P
7440-09-7	Potassium	972	B	E	P
7782-49-2	Selenium	0.94	U		P
7440-22-4	Silver	0.15	U		P
7440-23-5	Sodium	183	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	26.1			P
7440-66-6	Zinc	200			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0B00

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AY7

Matrix (soil/water): SOIL Lab Sample ID: 1413R-04S

Level (low/med): MED Date Received: 08/30/01

% Solids: 89.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7930		*	P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	11.1		J	P
7440-39-3	Barium	127			P
7440-41-7	Beryllium	0.65	B	J	P
7440-43-9	Cadmium	0.09	U		P
7440-70-2	Calcium	2860			P
7440-47-3	Chromium	17.0			P
7440-48-4	Cobalt	5.1	B		P
7440-50-8	Copper	63.6			P
7439-89-6	Iron	13600			P
7439-92-1	Lead	235		J	P
7439-95-4	Magnesium	2070			P
7439-96-5	Manganese	237			P
7439-97-6	Mercury	0.26			CV
7440-02-0	Nickel	13.7		J	P
7440-09-7	Potassium	684	B	E	P
7782-49-2	Selenium	0.96	U		P
7440-22-4	Silver	0.15	U		P
7440-23-5	Sodium	205	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	22.7			P
7440-66-6	Zinc	226			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0B01

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AY7

Matrix (soil/water): SOIL Lab Sample ID: 1413R-05S

Level (low/med): MED Date Received: 08/30/01

% Solids: 93.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9820		*	P
7440-36-0	Antimony	3.0	B		P
7440-38-2	Arsenic	12.8		J	P
7440-39-3	Barium	891			P
7440-41-7	Beryllium	0.75	B	J	P
7440-43-9	Cadmium	0.11	B		P
7440-70-2	Calcium	4240			P
7440-47-3	Chromium	36.0			P
7440-48-4	Cobalt	8.3	B		P
7440-50-8	Copper	179			P
7439-89-6	Iron	38900			P
7439-92-1	Lead	914		J	P
7439-95-4	Magnesium	2960			P
7439-96-5	Manganese	688			P
7439-97-6	Mercury	0.50			CV
7440-02-0	Nickel	28.4		J	P
7440-09-7	Potassium	1080		E J	P
7782-49-2	Selenium	0.93	U		P
7440-22-4	Silver	0.15	U		P
7440-23-5	Sodium	236	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	40.4			P
7440-66-6	Zinc	1790			P
	Cyanide				NR

olor Before: BROWN Clarity Before: Texture: MEDIUM

olor After: YELLOW Clarity After: Artifacts:

omments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0B02

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AY7

Matrix (soil/water): SOIL Lab Sample ID: 1413R-06S

Level (low/med): MED Date Received: 08/30/01

% Solids: 89.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10900		*	P
7440-36-0	Antimony	6.2	B		P
7440-38-2	Arsenic	17.6		J	P
7440-39-3	Barium	2370			P
7440-41-7	Beryllium	~~1.9~~			P
7440-43-9	Cadmium	0.41	B		P
7440-70-2	Calcium	10800			P
7440-47-3	Chromium	46.9			P
7440-48-4	Cobalt	16.0			P
7440-50-8	Copper	435			P
7439-89-6	Iron	61500			P
7439-92-1	Lead	3750		J	P
7439-95-4	Magnesium	4970			P
7439-96-5	Manganese	920			P
7439-97-6	Mercury	1.3			CV
7440-02-0	Nickel	83.5		J	P
7440-09-7	Potassium	1360		E J	P
7782-49-2	Selenium	0.98	U		P
7440-22-4	Silver	10.2			P
7440-23-5	Sodium	1180			P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	37.9			P
7440-66-6	Zinc	2320			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0B03

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AY7

Matrix (soil/water): SOIL Lab Sample ID: 1413R-07S

Level (low/med): MED Date Received: 08/30/01

% Solids: 93.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9120		*	P
7440-36-0	Antimony	2.1	B		P
7440-38-2	Arsenic	16.1		J	P
7440-39-3	Barium	652			P
7440-41-7	Beryllium	0.92	B	J	P
7440-43-9	Cadmium	0.09	U		P
7440-70-2	Calcium	3600			P
7440-47-3	Chromium	28.4			P
7440-48-4	Cobalt	10.5	B		P
7440-50-8	Copper	143			P
7439-89-6	Iron	23300			P
7439-92-1	Lead	750		J	P
7439-95-4	Magnesium	2680			P
7439-96-5	Manganese	396			P
7439-97-6	Mercury	0.34			CV
7440-02-0	Nickel	35.1		J	P
7440-09-7	Potassium	830	B	E	P
7782-49-2	Selenium	0.94	U		P
7440-22-4	Silver	4.1		J	P
7440-23-5	Sodium	335	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	36.9			P
7440-66-6	Zinc	531			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0B04

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AY7

Matrix (soil/water): SOIL Lab Sample ID: 1413R-08S

Level (low/med): MED Date Received: 08/30/01

% Solids: 93.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8280		*	P
7440-36-0	Antimony	2.2	B		P
7440-38-2	Arsenic	14.3		J	P
7440-39-3	Barium	440			P
7440-41-7	Beryllium	0.74	B	J	P
7440-43-9	Cadmium	0.08	U		P
7440-70-2	Calcium	2850			P
7440-47-3	Chromium	30.6			P
7440-48-4	Cobalt	8.9	B		P
7440-50-8	Copper	133			P
7439-89-6	Iron	19700			P
7439-92-1	Lead	796		J	P
7439-95-4	Magnesium	2290			P
7439-96-5	Manganese	503			P
7439-97-6	Mercury	0.37			CV
7440-02-0	Nickel	32.0		J	P
7440-09-7	Potassium	631	B	E	P
7782-49-2	Selenium	0.91	U		P
7440-22-4	Silver	2.6		J	P
7440-23-5	Sodium	222	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	34.3			P
7440-66-6	Zinc	458		E	P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE #

MB0B05
FIELD BLANK

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68-W0-0089

Lab Code: CHEM Case No.: 29681 SAS No.: SDG No.: MB0AY7

Matrix (soil/water): WATER Lab Sample ID: 1413R-09S

Level (low/med): MED Date Received: 08/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.1	B		P
7440-36-0	Antimony	4.9	U		P
7440-38-2	Arsenic	2.6	B	J	P
7440-39-3	Barium	4.3	U		P
7440-41-7	Beryllium	1.3	B	J	P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	83.1	B		P
7440-47-3	Chromium	12.6			P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	5.0	B		P
7439-89-6	Iron	126			P
7439-92-1	Lead	1.7	B		P
7439-95-4	Magnesium	22.3	B		P
7439-96-5	Manganese	61.9			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	3.5	B		P
7440-09-7	Potassium	14.8	U		P
7782-49-2	Selenium	4.4	U		P
7440-22-4	Silver	0.70	U		P
7440-23-5	Sodium	132	B		P
7440-28-0	Thallium	6.0	B	J	P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	22.5			P
	Cyanide				NR

olor Before: COLORLESS Clarity Before: CLEAR Texture:

olor After: COLORLESS Clarity After: CLEAR Artifacts:

omments:

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: CHEMTECH CONSULTING GROUP Contract No.: 68-W0-0089

Lab Code: CHEM Case No.: 29681

Full Sample Analysis Price in Contract: :

SDG No./First Sample in SDG. MB0AY7 Sample Receipt Date: 08/30/01
(Lowest EPA Sample Number in first shipment of samples received under SDG.) (MM/DD/YY)

Last Sample in SDG: MB0B05 Sample Receipt Date: 08/30/01
(Highest EPA Sample Number in last shipment of samples received under SDG.) (MM/DD/YY)

EPA Sample Numbers in the SDG (listed in alphanumeric order)

1	MB0AY7	12
2	MB0AZ8	13
3	MB0AZ9	14
4	MB0B00	15
5	MB0B01	16
6	MB0B02	17
7	MB0B03	18
8	MB0B04	19
9	MB0B05	20
10		21
11		22

Note: There are a maximum of 20 field samples in an SDG.

Attach Traffic Reports to this form in alphanumeric order
(i.e.. the order listed on this form).

K Sol
Signature

08/30/01.
Date

REFERENCE 29

TELECON NOTE	REGION II SITE ASSESSMENT TEAM

W. O. NO.: 20103-001-001-1024-00 **DATE:** 11/2/01 **TIME:** 1320

DISTRIBUTION: Roselle Park File

BETWEEN: Sam Appello **OF:** Roselle Park High School Physical Education Dept.
PHONE: (908) 241-4550

AND: Scott Snyder **Subject:** School's use of the Roselle Park site

Region II SAT conducted a telephone conversation with Mr. Sam Appello of the Roselle Park High School Physical Education Department; to determine if the school utilizes Wolf and Adase fields for their students' activities. Mr. Appello stated that the Roselle Park High School does not utilize the site for student activities and that the facility is used only by the town.

REFERENCE 30

Pace Analytical™
www.pacelabs.com

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Fax: 612.607.6444

September 20, 2001

Mr. Scott Synder
Roy F. Weston, Inc.
Raritan Plaza III, Suite 2B
101 Fieldcrest Avenue
Edison, NJ 08837-3622

RE: Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Dear Mr. Synder:

Enclosed are the analytical results for sample(s) received by the laboratory on August 31, 2001. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report please feel free to contact me.

Sincerely,

Daryl Peterson
Project Manager

State of Minnesota laboratory 027-053-137

Enclosures

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

DATA ASSESSMENT

Lab Project No.: 1048288
LABORATORY: Pace Analytical Services-MN
SITE: Roselle Park

DATA ASSESSMENT

USEPA Region II Data Validation SOP HW-6, Revision 12, March 2001, for Statement of Work OLM04.2 for evaluating organic data was followed to qualify air sample results generated by using USEPA Compendium Method TO-14A, Determination of Volatile Organic Compounds in Ambient Air using Specially Prepared Canisters With Subsequent Analysis By Gas Chromatography.

It should be noted that specific quality control (QC) limits were not established by Method TO-14A. As a result, the QC limits established in the laboratory SOPs were used for data evaluation. The data validation principles outlined in USEPA SOP HW-12 were used to apply data qualifiers.

All data are valid and acceptable except those analytes rejected "R"(unusable). Due to the detection of QC problems, some analytes may have the "J" (estimated), "N"(presumptive evidence for the presence of the material, "U" (non-detect) or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's Signature: Yunru Yang **Date:** 12/05/2001

DATA ASSESSMENT

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

None

2. SURROGATES

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

Not Applicable

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

Not Applicable

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than 5 times the blank contaminant level (10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

DATA ASSESSMENT

A) Method blank contamination:

None

B) Field or rinse blank contamination:

None

C) Trip blank contamination:

None

D) Storage Blank

Not applicable.

E) Tics "R" rejected

Not Applicable

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenyl-phosphine (DFTPP).
If the mass calibration is in error, all associated data will be classified as unusable "R".

The lab tuned the instrument on a daily (every 24 hours) basis. . By examining the internal standard area counts, it was revealed that the internal standard area counts remained stable. Therefore no qualifications were required.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily

performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be ≥ 0.05 in both initial and continuing calibrations. A value < 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

The average RRF of 1,2,4-Trichlorobenzene was less than 0.05 in the initial calibration performed on 9/12/01 on instrument 10MSV09. As a result, the non-detects of 1,2,4-trichlorobenzene reported for the following samples were rejected (R): SG01 through SG04, SG06 through SG10, and SG06Dup (the laboratory duplicate).

7. CALIBRATION:

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be < 30% and %D must be < 25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:

The laboratory SOP specified that the %D must be ≤30 for the continuing calibration verification.

"R"	*1,2,4-Trichlorobenzene*	*SG05*
"J/UJ"	*hexachlorobenzene*	*SG05, SG13, SG14, SG16, SG22, SG23, SG25 through SG27, SG29, and SG14 dup (lab duplicate)*

DATA ASSESSMENT

methylene chloride, tetrachloroethene *SG11, SG12, SG15, SG17 through SG21, SG24, SG28, and SG20dup (lab duplicate)*

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction.

One internal standard area count was below the required QC limit in the analysis of SG20dup (a lab duplicate). The following non-detected compounds were qualified (UJ): dichlorodifluoromethane through 1,1,2-trichloroethane, and dichlorotetrafluoroethane through benzyl chloride.

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

None; library search was not performed to identify TICs.

DATA ASSESSMENT

B) Pesticide Fraction:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract.

Not applicable

10. CONTRACT PROBLEMS NON-COMPLIANCE:

None

11. FIELD DOCUMENTATION:

None

12. OTHER PROBLEMS

a. *Sample SG05 and its dilution were quantified using a calibration of external standards due to the presence of high concentrations of compounds of interest. Other samples were quantified using calibrations of internal standards.*

b. *The recovery of 1,2,4-trichlorobenzene in one laboratory control sample (LCS) was less than 10%. The non-detect of 1,2,4-trichlorobenzene reported for SG05 was rejected (R).*

13. This package contains re-extractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified to be used.

Dilution analysis was performed for sample SG05 due to benzene concentration exceeding the calibration range. The original analysis was used with benzene result taken from the dilution analysis.

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Minneapolis, MN 55414
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September 19, 2001

SDG# 1048288

GC/MS Volatile Analyses - Method TO14

Hold Times. All samples were analyzed within two weeks of collection.

GC/MS Tuning. All BFB tuning criteria were met prior to the analysis of calibration standards and samples. The tune time is 24 hours long.

Instrumental Calibrations. The criteria for all Initial Calibrations (ICAL) are based on a maximum 30% RSD for average curves or 0.995 for linear curves for all compounds. The following outliers were noted: the calibration for 10MSV09 run on 8/15/01 was not in control for 1,2,4-trichlorobenzene and hexachlorobutadiene; the calibration for 10MSV20 run on 9/12/01 was not in control for hexachlorobutadiene. Results for out of control compounds should be considered estimates (flag 1 on forms). No hits for any out of control compounds were found.

Continuing Calibration Verification Continuing calibration verification (CCV) acceptance criteria is based on a maximum 30%difference (%D) for all compounds The CCV run on 10MSV09 for 9/10/01 was out of control for 1,2,4-trichlorobenzene and hexachlorobutadiene. However, since the ical for these compounds was not in control it is to be expected that it would not pass the CCV. No CCV are necessary if the data are analyzed immediately following an ical.

Method Blanks. All method blanks were within method criteria.

LCS Recoveries.
The CCV or the mid point of the opening ical were used as the LCS. All of the recoveries were within QC limits with the following exceptions: 1,2,4-trichlorobenzene was low on 10MSV09 for 9/10/01; hexachlorobutadiene was low on 10MSV20 for 9/12/01. All of the compounds that failed LCS recovery did not pass ical criteria.

Internal Standard Response. Internal Standard responses were noted for only the ambient analyses. All internal standard responses were within method criteria with the exception of SG20DUP. Fluorobenzene response

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was low in this sample, biasing results high. No hits were detected in this sample, however.

Duplicates. Duplicate analyses were performed each day for Quality Control. The data for all duplicate analyses applicable to this data were included. All data were within QC limits of 30%RPD.

ANALYSIS COMMENTS. All sample analyses was completed on a DB5 column. For ppbv analysis (ambient): 500 cc of sample was concentrated using an Entech 7000 sample concentration system. For ppmv analysis (source): 10 cc of sample was concentrated using an Entech 7000 sample concentration system.

Sample SG05 was the only sample that was analyzed source. No other samples had reportable hits at the source level.

Samples SG01-SG04 and SG06-SG10 were run ambient at a 1:20 dilution. Samples SG11-SG29 were run ambient at a 1:10 dilution. The samples were run at a dilution after some test runs determined matrix interference made 1:1 runs impossible. An early eluting unidentified compound that was present in large amounts in most samples caused the interference. The compound has a primary ion of 44, which would indicate that the compound is most likely carbon dioxide. This can not be confirmed with the analysis done, however, because the instrument does not scan low enough in the ion range to get the confirming ions for carbon dioxide.

Narrative completed on 9/19/01 by MTG

Pace Analytical™

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Minneapolis, MN 55414
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Client Roy F Weston

SDG 104828

TO-14 Volatile

QC Summary Package

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

ab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix Spike - Sample No.: MBLANK253

COMPOUND	SPIKE ADDED (ppmv)	SAMPLE CONCENTRATION (ppmv)	LCS CONCENTRATION (ppmv)	LCS % REC #	QC. LIMITS REC.
Chloromethane	0.480	0.00	0.412	86	50-150
Freon 114 (12DC1122FlAN	0.500	0.00	0.534	107	66-134
Vinyl Chloride	0.500	0.00	0.525	105	64-136
Bromomethane	0.500	0.00	0.503	101	60-140
Chloroethane	0.510	0.00	0.535	105	67-133
Trichlorofluoromethane	0.500	0.00	0.498	100	70-130
1,1-Dichloroethene	0.470	0.00	0.502	107	68-132
Freon 113	0.510	0.00	0.533	104	69-131
Methylene Chloride	0.480	0.00	0.516	108	57-142
1,1-Dichloroethane	0.480	0.00	0.479	100	63-137
cis-1,2-Dichloroethene	0.500	0.00	0.539	108	59-141
Chloroform	0.480	0.00	0.483	101	69-130
1,1,1-Trichloroethane	0.450	0.00	0.455	101	71-128
1,2-Dichloroethane	0.460	0.00	0.447	97	62-137
Benzene	0.450	0.00	0.457	102	65-135
Carbon Tetrachloride	0.470	0.00	0.509	108	65-135
1,2-Dichloropropane	0.430	0.00	0.420	98	67-133
Trichloroethene	0.460	0.00	0.483	105	58-142
Dichlorodifluoromethane	0.500	0.00	0.532	106	50-150
cis-1,3-Dichloropropene	0.530	0.00	0.535	101	65-135
Hexachlorobutadiene	0.420	0.00	0.214	51	50-150
trans-1,3-Dichloroprope	0.540	0.00	0.616	114	58-141
Toluene	0.480	0.00	0.488	102	58-142
1,1,2-Trichloroethane	0.500	0.00	0.480	96	65-135
1,2-Dibromoethane	0.520	0.00	0.509	98	56-144
Tetrachloroethene	0.480	0.00	0.487	101	63-137
Chlorobenzene	0.460	0.00	0.449	98	62-138
Ethyl Benzene	0.480	0.00	0.469	98	52-148

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix Spike - Sample No.: MBLANK253

COMPOUND	SPIKE ADDED (ppmv)	SAMPLE CONCENTRATION (ppmv)	LCS CONCENTRATION (ppmv)	LCS % REC #	QC. LIMITS REC.
mp-Xylene	0.930	0.00	0.891	96	56-144
Styrene	0.470	0.00	0.455	97	56-143
o-Xylene	0.460	0.00	0.417	91	60-140
1,1,2,2-Tetrachloroetha	0.510	0.00	0.382	75	63-137
1,3,5-Trimethylbenzene	0.510	0.00	0.428	84	63-137
1,2,4-Trimethylbenzene	0.450	0.00	0.373	83	61-1
1,3-Dichlorobenzene	0.210	0.00	0.210	100	50-150
1,4-Dichlorobenzene	0.470	0.00	0.470	100	50-150
1,2-Dichlorobenzene	0.410	0.00	0.412	100	50-150
1,2,4-Trichlorobenzene	0.360	0.00	0.00601	2*	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 38 outside limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix Spike - Sample No.: AMBLANK254

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	9.90	0.00	7.92	80	50-125
Chloromethane	9.70	0.00	7.22	74	50-125
Vinyl Chloride	10.1	0.00	8.04	80	50-125
Bromomethane	10.4	0.00	8.19	79	50-125
Chloroethane	10.3	0.00	8.14	79	50-125
Trichlorofluoromethane	9.60	0.00	7.39	77	50-125
1,1-Dichloroethene	9.80	0.00	7.75	79	50-125
Methylene Chloride	9.40	0.00	8.84	94	50-125
1,1-Dichloroethane	9.60	0.00	7.49	78	50-125
cis-1,2-Dichloroethene	9.40	0.00	7.66	81	56-125
Chloroform	9.60	0.00	7.55	79	59-125
1,1,1-Trichloroethane	9.30	0.00	7.36	79	61-125
Carbon Tetrachloride	9.00	0.00	7.37	82	62-125
Benzene	8.90	0.00	6.96	78	61-125
1,2-Dichloroethane	8.70	0.00	7.01	80	50-125
Trichloroethene	8.60	0.00	6.97	81	57-125
1,2-Dichloropropane	8.50	0.00	6.77	80	58-125
Toluene	9.40	0.00	8.25	88	60-125
1,1,2-Trichloroethane	9.10	0.00	7.76	85	57-125
Tetrachloroethene	9.00	0.00	8.89	99	58-125
1,2-Dibromoethane	9.60	0.00	7.74	81	64-125
Chlorobenzene	8.40	0.00	6.97	83	62-125
Ethyl Benzene	8.40	0.00	7.09	84	58-125
m&p-Xylene	16.2	0.00	12.8	79	50-136
o-Xylene	7.60	0.00	6.30	83	50-130
Styrene	6.90	0.00	4.44	64	50-150
1,1,2,2-Tetrachloroetha	7.60	0.00	4.93	65	51-125
1,3,5-Trimethylbenzene	6.30	0.00	6.43	102	59-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix Spike - Sample No.: AMBLANK254

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
1,2,4-Trimethylbenzene	5.60	0.00	6.06	108	69-125
1,3-Dichlorobenzene	6.40	0.00	5.92	92	60-125
1,4-Dichlorobenzene	5.40	0.00	4.87	90	65-125
1,2-Dichlorobenzene	5.10	0.00	4.86	95	62-125
1,2,4-Trichlorobenzene	7.10	0.00	7.02	99	50-150
Hexachlorobutadiene	7.10	0.00	6.33	89	54-125
Dichlorotetrafluoroetha	10.0	0.00	7.65	76	50-1
Freon 113	10.2	0.00	7.84	77	50-137
cis-1,3-Dichloropropene	10.1	0.00	8.26	82	55-125
trans-1,3-Dichloroprope	10.2	0.00	8.56	84	52-125
Benzyl Chloride -	6.40	0.00	5.74	90	62-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 39 outside limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix Spike - Sample No.: AMBLANK255

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	9.90	0.00	10.2	103	50-125
Chloromethane	9.70	0.00	9.81	101	50-125
Vinyl Chloride	10.1	0.00	10.3	102	50-125
Bromomethane	10.4	0.00	10.6	102	50-125
Chloroethane	10.3	0.00	10.6	103	50-125
Trichlorofluoromethane	9.60	0.00	9.64	100	50-125
1,1-Dichloroethene	9.80	0.00	10.0	102	50-125
Methylene Chloride	9.40	0.00	9.54	101	50-125
1,1-Dichloroethane	9.60	0.00	9.75	102	50-125
cis-1,2-Dichloroethene	9.40	0.00	9.59	102	56-125
Chloroform	9.60	0.00	9.53	99	59-125
1,1,1-Trichloroethane	9.30	0.00	9.47	102	61-125
Carbon Tetrachloride	9.00	0.00	9.27	103	62-125
Benzene	8.90	0.00	8.94	100	61-125
1,2-Dichloroethane	8.70	0.00	8.76	101	50-125
Trichloroethene	8.60	0.00	8.71	101	57-125
1,2-Dichloropropane	8.50	0.00	8.71	102	58-125
Toluene	9.40	0.00	10.0	106	60-125
1,1,2-Trichloroethane	9.10	0.00	9.58	105	57-125
Tetrachloroethene	9.00	0.00	9.17	102	58-125
1,2-Dibromoethane	9.60	0.00	10.0	104	64-125
Chlorobenzene	8.40	0.00	8.90	106	62-125
Ethyl Benzene	8.40	0.00	9.59	114	58-125
m&p-Xylene	16.2	0.00	17.9	110	50-136
o-Xylene	7.60	0.00	8.48	112	50-130
Styrene	6.90	0.00	7.90	114	50-150
1,1,2,2-Tetrachloroetha	7.60	0.00	8.17	108	51-125
1,3,5-Trimethylbenzene	6.30	0.00	7.07	112	59-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix Spike - Sample No.: AMBLANK255

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
1,2,4-Trimethylbenzene	5.60	0.00	6.42	115	69-125
1,3-Dichlorobenzene	6.40	0.00	6.68	104	60-125
1,4-Dichlorobenzene	5.40	0.00	5.60	104	65-125
1,2-Dichlorobenzene	5.10	0.00	5.65	111	62-125
1,2,4-Trichlorobenzene	7.10	0.00	7.85	110	50-150
Hexachlorobutadiene	7.10	0.00	9.08	128*	54-125
Dichlorotetrafluoroetha	10.0	0.00	10.2	102	50-1
Freon 113	10.2	0.00	10.4	102	50-1
cis-1,3-Dichloropropene	10.1	0.00	10.2	101	55-125
trans-1,3-Dichloroprope	10.2	0.00	11.1	109	52-125
Benzyl Chloride	6.40	0.00	7.47	117	62-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 39 outside limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix Spike - Sample No.: AMBLANK255

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	9.90	0.00	9.85	99	50-125
Chloromethane	9.70	0.00	9.70	100	50-125
Vinyl Chloride	10.1	0.00	10.2	101	50-125
Bromomethane	10.4	0.00	10.5	101	50-125
Chloroethane	10.3	0.00	10.5	102	50-125
Trichlorofluoromethane	9.60	0.00	9.66	101	50-125
1,1-Dichloroethene	9.80	0.00	9.81	100	50-125
Methylene Chloride	9.40	0.00	9.36	100	50-125
1,1-Dichloroethane	9.60	0.00	9.69	101	50-125
cis-1,2-Dichloroethene	9.40	0.00	9.72	103	56-125
Chloroform	9.60	0.00	9.78	102	59-125
1,1,1-Trichloroethane	9.30	0.00	9.46	102	61-125
Carbon Tetrachloride	9.00	0.00	9.25	103	62-125
Benzene	8.90	0.00	8.78	99	61-125
1,2-Dichloroethane	8.70	0.00	8.99	103	50-125
Trichloroethene	8.60	0.00	8.69	101	57-125
1,2-Dichloropropane	8.50	0.00	8.80	104	58-125
Toluene	9.40	0.00	9.85	105	60-125
1,1,2-Trichloroethane	9.10	0.00	9.46	104	57-125
Tetrachloroethene	9.00	0.00	9.25	103	58-125
1,2-Dibromoethane	9.60	0.00	10.1	105	64-125
Chlorobenzene	8.40	0.00	8.73	104	62-125
Ethyl Benzene	8.40	0.00	8.88	106	58-125
m&p-Xylene	16.2	0.00	17.0	105	50-136
o-Xylene	7.60	0.00	8.02	106	50-130
Styrene	6.90	0.00	7.60	110	50-150
1,1,2,2-Tetrachloroetha	7.60	0.00	8.08	106	51-125
1,3,5-Trimethylbenzene	6.30	0.00	6.88	109	59-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix Spike - Sample No.: AMBLANK255

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
1,2,4-Trimethylbenzene	5.60	0.00	6.07	108	69-125
1,3-Dichlorobenzene	6.40	0.00	6.78	106	60-125
1,4-Dichlorobenzene	5.40	0.00	5.64	104	65-125
1,2-Dichlorobenzene	5.10	0.00	5.45	107	62-125
1,2,4-Trichlorobenzene	7.10	0.00	7.85	110	50-150
Hexachlorobutadiene	7.10	0.00	7.66	108	54-125
Dichlorotetrafluoroetha	10.0	0.00	10.0	100	50-1
Freon 113	10.2	0.00	10.0	98	50-1
cis-1,3-Dichloropropene	10.1	0.00	10.7	106	55-125
trans-1,3-Dichloroprope	10.2	0.00	11.0	108	52-125
Benzyl Chloride -	6.40	0.00	7.29	114	62-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 39 outside limits

COMMENTS: _____

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO

MBLANK253

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID: 25304 Lab Sample ID: 102982055

Date Analyzed: 09/10/01 Time Analyzed: 0658

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: 10MSV09

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MBLANK253LCS	102982063	25302L	0602
02	SG05	102962198	25311	1227
03	SG05DL	102962198DL	25312	1256
04				
05				
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COMMENTS:

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO

AMBLANK254

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID: 25410 Lab Sample ID: 102986932

Date Analyzed: 09/11/01 Time Analyzed: 1140

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: 10MSV20

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	AMBLANK254LC	102986940	25404L	0743
02	SG18	102962321	25419	1729
03	SG11	102962255	25420	1800
04	SG20	102962347	25421	1831
05	SG20DUP	102986957	25422	1902
06	SG24	102962396	25423	1933
07	SG28	102962453	25424	2005
08	SG17	102962313	25425	2037
09	SG12	102962263	25426	2108
10	SG19	102962339	25427	2140
11	SG21	102962354	25428	2213
12	SG15	102962297	25429	2245
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COMMENTS:

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO

AMBLANK255

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID: 25516 Lab Sample ID: 102986965

Date Analyzed: 09/12/01 Time Analyzed: 1703

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: 10MSV20

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	AMBLANK255LC	102986973	25510L	1307
02	SG29	102962461	25519	1838
03	SG26	102962420	25520	1910
04	SG27	102962438	25521	1942
05	SG25	102962404	25522	2015
06	SG16	102962305	25523	2047
07	SG23	102962370	25524	2120
08	SG13	102962271	25525	2152
09	SG14	102962289	25526	2224
10	SG14DUP	102986981	25527	2257
11	SG22	102962362	25528	2330
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COMMENTS:

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO

AMBLANK255

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID: 25509 Lab Sample ID: 102987336

Date Analyzed: 09/12/01 Time Analyzed: 1347

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: 10MSV09

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	AMBLANK255LC	102987344	25505L	1110
02	SG09	102962230	25512	1524
03	SG08	102962222	25513	1554
04	SG06	102962206	25514	1623
05	SG06DUP	102987351	25515	1653
06	SG04	102962180	25517	1754
07	SG02	102962164	25518	1825
08	SG10	102962248	25519	1855
09	SG03	102962172	25520	1926
10	SG01	102962156	25521	1956
11	SG07	102962214	25522	2026
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QUALITY CONTROL DATA

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1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

LABORATORY CONTROL SAMPLE: 102986940

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Trichloroethene	ppbv	8.600	6.972	81	
cis-1,3-Dichloropropene	ppbv	10.1	8.264	82	
trans-1,3-Dichloropropene	ppbv	10.2	8.560	84	
Toluene	ppbv	9.400	8.247	88	
1,1,2-Trichloroethane	ppbv	9.100	7.761	85	
1,2-Dibromoethane (EDB)	ppbv	9.600	7.740	81	
Tetrachloroethene	ppbv	9.000	8.887	99	
Chlorobenzene	ppbv	8.400	6.971	83	
Ethylbenzene	ppbv	8.400	7.094	84	
m&p-Xylene	ppbv	16.2	12.85	79	
o-Xylene	ppbv	7.600	6.298	83	
Styrene	ppbv	6.900	4.445	64	
1,1,2,2-Tetrachloroethane	ppbv	7.600	4.932	65	
1,3,5-Trimethylbenzene	ppbv	6.300	6.433	102	
2,4-Trimethylbenzene	ppbv	5.600	6.063	108	
.3-Dichlorobenzene	ppbv	6.400	5.923	92	
1,4-Dichlorobenzene	ppbv	5.400	4.869	90	
1,2-Dichlorobenzene	ppbv	5.100	4.863	95	
1,2,4-Trichlorobenzene	ppbv	7.100	7.020	99	
Hexachloro-1,3-butadiene	ppbv	7.100	6.335	89	

SAMPLE DUPLICATE: 102986957

Parameter	Units	102962347 Result	DUP Result	RPD	Footnotes
Dichlorodifluoromethane	ppbv	ND	ND	NC	
Chloromethane	ppbv	ND	ND	NC	
Dichlorotetrafluoroethane	ppbv	ND	ND	NC	
Vinyl chloride	ppbv	ND	ND	NC	
Bromomethane	ppbv	ND	ND	NC	
Chloroethane	ppbv	ND	ND	NC	
Trichlorofluoromethane	ppbv	ND	ND	NC	
1,1-Dichloroethene	ppbv	ND	ND	NC	
1,1,2-Trichlorotrifluoroethane	ppbv	ND	ND	NC	
Methylene chloride	ppbv	ND	ND	NC	

Date: 09/18/01

TE DKD 9/19/02

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

SAMPLE DUPLICATE: 102986957

Parameter	Units	102962347 Result	DUP Result	RPD	Footnotes
1,1-Dichloroethane	ppbv	ND	ND	NC	
cis-1,2-Dichloroethene	ppbv	ND	ND	NC	
Chloroform	ppbv	ND	ND	NC	
1,1,1-Trichloroethane	ppbv	ND	ND	NC	
1,2-Dichloroethane	ppbv	ND	ND	NC	
Benzene	ppbv	ND	ND	NC	
Carbon tetrachloride	ppbv	ND	ND	NC	
1,2-Dichloropropane	ppbv	ND	ND	NC	
Trichloroethene	ppbv	ND	ND	NC	
cis-1,3-Dichloropropene	ppbv	ND	ND	NC	
trans-1,3-Dichloropropene	ppbv	ND	ND	NC	
Toluene	ppbv	ND	ND	NC	
1,1,2-Trichloroethane	ppbv	ND	ND	NC	
1,2-Dibromoethane (EDB)	ppbv	ND	ND	NC	
Tetrachloroethene	ppbv	ND	ND	NC	
Chlorobenzene	ppbv	ND	ND	NC	
Ethylbenzene	ppbv	ND	ND	NC	
m&p-Xylene	ppbv	ND	ND	NC	
o-Xylene	ppbv	ND	ND	NC	
Styrene	ppbv	ND	ND	NC	
1,1,2,2-Tetrachloroethane	ppbv	ND	ND	NC	
1,3,5-Trimethylbenzene	ppbv	ND	ND	NC	
1,2,4-Trimethylbenzene	ppbv	ND	ND	NC	
1,3-Dichlorobenzene	ppbv	ND	ND	NC	
1,4-Dichlorobenzene	ppbv	ND	ND	NC	
1,2-Dichlorobenzene	ppbv	ND	ND	NC	
1,2,4-Trichlorobenzene	ppbv	ND	ND	NC	
Hexachloro-1,3-butadiene	ppbv	ND	ND	NC	

DKP 9/19/01

Date: 09/18/01

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

LABORATORY CONTROL SAMPLE: 102986973

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Trichloroethene	ppbv	8.600	8.714	101	
cis-1,3-Dichloropropene	ppbv	10.1	10.20	101	
trans-1,3-Dichloropropene	ppbv	10.2	11.08	109	
Toluene	ppbv	9.400	10.03	107	
1,1,2-Trichloroethane	ppbv	9.100	9.584	105	
1,2-Dibromoethane (EDB)	ppbv	9.600	10.03	105	
Tetrachloroethene	ppbv	9.000	9.169	102	
Chlorobenzene	ppbv	8.400	8.900	106	
Ethylbenzene	ppbv	8.400	9.589	114	
m&p-Xylene	ppbv	16.2	17.93	111	
o-Xylene	ppbv	7.600	8.481	112	
Styrene	ppbv	6.900	7.905	115	
1,1,2,2-Tetrachloroethane	ppbv	7.600	8.169	107	
1,3,5-Trimethylbenzene	ppbv	6.300	7.073	112	
1,2,4-Trimethylbenzene	ppbv	5.600	6.416	115	
1,3-Dichlorobenzene	ppbv	6.400	6.680	104	
1,4-Dichlorobenzene	ppbv	5.400	5.600	104	
1,2-Dichlorobenzene	ppbv	5.100	5.649	111	
1,2,4-Trichlorobenzene	ppbv	7.100	7.850	111	
Hexachloro-1,3-butadiene	ppbv	7.100	9.079	128	1

SAMPLE DUPLICATE: 102986981

Parameter	Units	102962289 Result	DUP Result	RPD	Footnotes
Dichlorodifluoromethane	ppbv	ND	ND	NC	
Chloromethane	ppbv	ND	ND	NC	
Dichlorotetrafluoroethane	ppbv	ND	ND	NC	
Vinyl chloride	ppbv	ND	ND	NC	
Bromomethane	ppbv	ND	ND	NC	
Chloroethane	ppbv	ND	ND	NC	
Trichlorofluoromethane	ppbv	ND	ND	NC	
1,1-Dichloroethene	ppbv	ND	ND	NC	
1,1,2-Trichlorotrifluoroethane	ppbv	ND	ND	NC	
Methylene chloride	ppbv	ND	ND	NC	

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

SAMPLE DUPLICATE: 102986981

Parameter	Units	102962289 Result	DUP Result	RPD	Footnotes
1,1-Dichloroethane	ppbv	ND	ND	NC	
cis-1,2-Dichloroethene	ppbv	ND	ND	NC	
Chloroform	ppbv	ND	ND	NC	
1,1,1-Trichloroethane	ppbv	ND	ND	NC	
1,2-Dichloroethane	ppbv	ND	ND	NC	
Benzene	ppbv	ND	ND	NC	
Carbon tetrachloride	ppbv	ND	ND	NC	
1,2-Dichloropropane	ppbv	ND	ND	NC	
Trichloroethene	ppbv	ND	ND	NC	
cis-1,3-Dichloropropene	ppbv	ND	ND	NC	
trans-1,3-Dichloropropene	ppbv	ND	ND	NC	
Toluene	ppbv	ND	ND	NC	
1,1,2-Trichloroethane	ppbv	ND	ND	NC	
1,2-Dibromoethane (EDB)	ppbv	ND	ND	NC	
Tetrachloroethene	ppbv	ND	ND	NC	
Chlorobenzene	ppbv	ND	ND	NC	
Ethylbenzene	ppbv	ND	ND	NC	
m&p-Xylene	ppbv	ND	ND	NC	
o-Xylene	ppbv	ND	ND	NC	
Styrene	ppbv	ND	ND	NC	
1,1,2,2-Tetrachloroethane	ppbv	ND	ND	NC	
1,3,5-Trimethylbenzene	ppbv	ND	ND	NC	
1,2,4-Trimethylbenzene	ppbv	ND	ND	NC	
1,3-Dichlorobenzene	ppbv	ND	ND	NC	
1,4-Dichlorobenzene	ppbv	ND	ND	NC	
1,2-Dichlorobenzene	ppbv	ND	ND	NC	
1,2,4-Trichlorobenzene	ppbv	ND	ND	NC	
Hexachloro-1,3-butadiene	ppbv	ND	ND	NC	1

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QUALITY CONTROL DATA

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

LABORATORY CONTROL SAMPLE: 102987344

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Trichloroethene	ppbv	8.600	8.690	101	
cis-1,3-Dichloropropene	ppbv	10.1	10.71	106	
trans-1,3-Dichloropropene	ppbv	10.2	11.00	108	
Toluene	ppbv	9.400	9.849	105	
1,1,2-Trichloroethane	ppbv	9.100	9.461	104	
1,2-Dibromoethane (EDB)	ppbv	9.600	10.13	106	
Tetrachloroethene	ppbv	9.000	9.249	103	
Chlorobenzene	ppbv	8.400	8.728	104	
Ethylbenzene	ppbv	8.400	8.884	106	
m&p-Xylene	ppbv	16.2	17.01	105	
o-Xylene	ppbv	7.600	8.019	106	
Styrene	ppbv	6.900	7.601	110	
1,1,2,2-Tetrachloroethane	ppbv	7.600	8.083	106	
1,3,5-Trimethylbenzene	ppbv	6.300	6.881	109	
1,2,4-Trimethylbenzene	ppbv	5.600	6.073	108	
1,3-Dichlorobenzene	ppbv	6.400	6.778	106	
1,4-Dichlorobenzene	ppbv	5.400	5.646	105	
1,2-Dichlorobenzene	ppbv	5.100	5.449	107	
1,2,4-Trichlorobenzene	ppbv	7.100	7.639	108	
Hexachloro-1,3-butadiene	ppbv	7.100	7.665	108	

SAMPLE DUPLICATE: 102987351

Parameter	Units	102962206 Result	DUP Result	RPD	Footnotes
Dichlorodifluoromethane	ppbv	ND	ND	NC	
Chloromethane	ppbv	ND	ND	NC	
Dichlorotetrafluoroethane	ppbv	ND	ND	NC	
Vinyl chloride	ppbv	ND	ND	NC	
Bromomethane	ppbv	ND	ND	NC	
Chloroethane	ppbv	ND	ND	NC	
Trichlorofluoromethane	ppbv	ND	ND	NC	
1,1-Dichloroethene	ppbv	ND	ND	NC	
1,1,2-Trichlorotrifluoroethane	ppbv	ND	ND	NC	
Methylene chloride	ppbv	ND	ND	NC	

Date: 09/18/01

DKP 9/19/01

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

QUALITY CONTROL DATA

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

SAMPLE DUPLICATE: 102987351

Parameter	Units	102962206 Result	DUP Result	RPD	Footnotes
1,1-Dichloroethane	ppbv	ND	ND	NC	
cis-1,2-Dichloroethene	ppbv	ND	ND	NC	
Chloroform	ppbv	ND	ND	NC	
1,1,1-Trichloroethane	ppbv	ND	ND	NC	
1,2-Dichloroethane	ppbv	ND	ND	NC	
Benzene	ppbv	ND	ND	NC	
Carbon tetrachloride	ppbv	ND	ND	NC	
1,2-Dichloropropane	ppbv	ND	ND	NC	
Trichloroethene	ppbv	ND	ND	NC	
cis-1,3-Dichloropropene	ppbv	ND	ND	NC	
trans-1,3-Dichloropropene	ppbv	ND	ND	NC	
Toluene	ppbv	ND	ND	NC	
1,1,2-Trichloroethane	ppbv	ND	ND	NC	
1,2-Dibromoethane (EDB)	ppbv	ND	ND	NC	
Tetrachloroethene	ppbv	ND	ND	NC	
Chlorobenzene	ppbv	ND	ND	NC	
Ethylbenzene	ppbv	ND	ND	NC	
m&p-Xylene	ppbv	ND	ND	NC	
o-Xylene	ppbv	ND	ND	NC	
Styrene	ppbv	ND	ND	NC	
1,1,2,2-Tetrachloroethane	ppbv	ND	ND	NC	
1,3,5-Trimethylbenzene	ppbv	ND	ND	NC	
1,2,4-Trimethylbenzene	ppbv	ND	ND	NC	
1,3-Dichlorobenzene	ppbv	ND	ND	NC	
1,4-Dichlorobenzene	ppbv	ND	ND	NC	
1,2-Dichlorobenzene	ppbv	ND	ND	NC	
1,2,4-Trichlorobenzene	ppbv	ND	ND	NC	
Hexachloro-1,3-butadiene	ppbv	ND	ND	NC	

Date: 09/18/01

Duplicate

REPORT OF LABORATORY ANALYSIS

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Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

LCS(D) Laboratory Control Sample (Duplicate)
MS(D) Matrix Spike (Duplicate)
DUP Sample Duplicate
ND Not Detected
NC Not Calculable
RPD Relative Percent Difference
[1] The initial calibration for this compound was outside the method control limits. The result for this compound should be considered an estimate.

Date: 09/18/01

DKP 2/19/01

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REPORT OF LABORATORY ANALYSIS

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FORM 5
BFB ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID: 22702 BFB Injection Date: 08/15/01

Instrument ID: 10MSV09 BFB Injection Time: 0548

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.2
75	30.0 - 60.0% of mass 95	47.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	77.6
175	5.0 - 9.0% of mass 174	6.1 (7.9)1
176	95.0 - 101.0% of mass 174	74.2 (95.6)1
177	5.0 - 9.0% of mass 176	4.8 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	0.5PPMV	0.5PPMV	22704	08/15/01	0646
02	0.1PPMV	0.1PPMV	22705	08/15/01	0713
03	1.0PPMV	1.0PPMV	22706	08/15/01	0746
04					
05					
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FORM 5
BFB ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID: 25301 BFB Injection Date: 09/10/01

Instrument ID: 10MSV09 BFB Injection Time: 0546

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.3
75	30.0 - 60.0% of mass 95	46.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	79.3
175	5.0 - 9.0% of mass 174	6.3 (7.9)1
176	95.0 - 101.0% of mass 174	77.1 (97.3)1
177	5.0 - 9.0% of mass 176	5.0 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCAL	CCAL	25302	09/10/01	0602
02	MBLANK253LCS	102982063	25302L	09/10/01	0602
03	MBLANK253	102982055	25304	09/10/01	0658
04	SG05	102962198	25311	09/10/01	1227
05	SG05DL	102962198DL	25312	09/10/01	1256
06					
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FORM 5
BFB ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID: 25401 BFB Injection Date: 09/11/01

Instrument ID: 10MSV20 BFB Injection Time: 0536

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.9
75	30.0 - 60.0% of mass 95	40.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	75.2
175	5.0 - 9.0% of mass 174	5.5 (7.3)1
176	95.0 - 101.0% of mass 174	72.1 (95.9)1
177	5.0 - 9.0% of mass 176	5.0 (7.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	10PPBV	10PPBV	25404	09/11/01	0743
02	AMBLANK254LC	102986940	25404L	09/11/01	0743
03	0.5PPBV	0.5PPBV	25405	09/11/01	0822
04	1PPBV	1PPBV	25406	09/11/01	0856
05	5PPBV	5PPBV	25407	09/11/01	0931
06	20PPBV	20PPBV	25408	09/11/01	1010
07	AMBLANK254	102986932	25410	09/11/01	1140
08	SG18	102962321	25419	09/11/01	1729
09	SG11	102962255	25420	09/11/01	1800
10	SG20	102962347	25421	09/11/01	1831
11	SG20DUP	102986957	25422	09/11/01	1902
12	SG24	102962396	25423	09/11/01	1933
13	SG28	102962453	25424	09/11/01	2005
14	SG17	102962313	25425	09/11/01	2037
15	SG12	102962263	25426	09/11/01	2108
16	SG19	102962339	25427	09/11/01	2140
17	SG21	102962354	25428	09/11/01	2213
18	SG15	102962297	25429	09/11/01	2245
19					
20					
21					
22					

FORM 5
BFB ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID: 25501 BFB Injection Date: 09/12/01

Instrument ID: 10MSV20 BFB Injection Time: 0539

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.8
75	30.0 - 60.0% of mass 95	39.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	68.7
175	5.0 - 9.0% of mass 174	4.5 (6.6)1
176	95.0 - 101.0% of mass 174	68.4 (99.5)1
177	5.0 - 9.0% of mass 176	4.5 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	20PPBV	20PPBV	25509	09/12/01	1225
02	10PPBV	10PPBV	25510	09/12/01	1307
03	AMBLANK255LC	102986973	25510L	09/12/01	1307
04	5PPBV	5PPBV	25511	09/12/01	1406
05	1PPBV	1PPBV	25512	09/12/01	1440
06	0.5PPBV	0.5PPBV	25513	09/12/01	1513
07	AMBLANK255	102986965	25516	09/12/01	1703
08	SG29	102962461	25519	09/12/01	1838
09	SG26	102962420	25520	09/12/01	1910
10	SG27	102962438	25521	09/12/01	1942
11	SG25	102962404	25522	09/12/01	2015
12	SG16	102962305	25523	09/12/01	2047
13	SG23	102962370	25524	09/12/01	2120
14	SG13	102962271	25525	09/12/01	2152
15	SG14	102962289	25526	09/12/01	2224
16	SG14DUP	102986981	25527	09/12/01	2257
17	SG22	102962362	25528	09/12/01	2330
18					
19					
20					
21					
22					

FORM 5
BFB ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID: 25501 BFB Injection Date: 09/12/01

Instrument ID: 10MSV09 BFB Injection Time: 0541

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.4
75	30.0 - 60.0% of mass 95	46.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	82.0
175	5.0 - 9.0% of mass 174	6.5 (8.0)1
176	95.0 - 101.0% of mass 174	79.5 (96.9)1
177	5.0 - 9.0% of mass 176	5.2 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	1PPBV	1PPBV	25503	09/12/01	1007
02	5PPBV	5PPBV	25504	09/12/01	1037
03	10PPBV	10PPBV	25505	09/12/01	1110
04	AMBLANK255LC	102987344	25505L	09/12/01	1110
05	20PPBV	20PPBV	25506	09/12/01	1145
06	0.5PPBV	0.5PPBV	25507	09/12/01	1226
07	AMBLANK255	102987336	25509	09/12/01	1347
08	SG09	102962230	25512	09/12/01	1524
09	SG08	102962222	25513	09/12/01	1554
10	SG06	102962206	25514	09/12/01	1623
11	SG06DUP	102987351	25515	09/12/01	1653
12	SG04	102962180	25517	09/12/01	1754
13	SG02	102962164	25518	09/12/01	1825
14	SG10	102962248	25519	09/12/01	1855
15	SG03	102962172	25520	09/12/01	1926
16	SG01	102962156	25521	09/12/01	1956
17	SG07	102962214	25522	09/12/01	2026
18					
19					
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FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID (Standard): 25408 Date Analyzed: 09/11/01

Instrument ID: 10MSV20 Time Analyzed: 1010

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	AREA #	RT #
	12 HOUR STD	749922	8.72	432490	13.97		
	UPPER LIMIT	1499844	9.22	864980	14.47		
	LOWER LIMIT	374961	8.22	216245	13.47		
	CLIENT SAMPLE NO.						
01	AMBLANK254LC	812262	8.71	471889	13.96		
02	AMBLANK254	734305	8.72	376988	13.97		
03	SG18	574579	8.76	308189	13.98		
04	SG11	613301	8.75	286398	13.98		
05	SG20	548763	8.75	267742	13.98		
06	SG20DUP	315221*	8.73	246198	13.98		
07	SG24	555963	8.73	235119	13.98		
08	SG28	571020	8.72	242717	13.98		
09	SG17	587121	8.72	251613	13.98		
10	SG12	580520	8.73	270079	13.97		
11	SG19	497611	8.75	247454	13.98		
12	SG21	526827	8.74	260878	13.98		
13	SG15	526585	8.74	266883	13.98		
14							
15							
16							
17							
18							
19							
20							

IS1 = Fluorobenzene
IS2 = p-Bromofluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID (Standard): 25513 Date Analyzed: 09/12/01

Instrument ID: 10MSV20 Time Analyzed: 1513

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	AREA #	RT #
	12 HOUR STD	1034713	8.70	568316	13.96		
	UPPER LIMIT	2069426	9.20	1136632	14.46		
	LOWER LIMIT	517356	8.20	284158	13.46		
	CLIENT SAMPLE NO.						
01	AMBLANK255LC	1070523	8.71	632949	13.96		
02	AMBLANK255	1087371	8.71	471133	13.96		
03	SG29	914204	8.71	442226	13.96		
04	SG26	904015	8.71	450928	13.96		
05	SG27	910469	8.71	451944	13.96		
06	SG25	917912	8.70	508582	13.96		
07	SG16	909800	8.70	438247	13.96		
08	SG23	897805	8.71	454669	13.96		
03	SG13	875021	8.71	416460	13.96		
10	SG14	859962	8.72	441910	13.96		
11	SG14DUP	884524	8.72	455785	13.96		
12	SG22	903593	8.70	424965	13.96		
13							
14							
15							
16							
17							
18							
19							
20							

IS1 = Fluorobenzene
IS2 = p-Bromofluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Lab File ID (Standard): 25507 Date Analyzed: 09/12/01

Instrument ID: 10MSV09 Time Analyzed: 1226

GC Column: J&W DB-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

	CLIENT SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #	AREA #	RT #
	12 HOUR STD	2654962	6.94	1517025	12.02		
	UPPER LIMIT	5309924	7.44	3034050	12.52		
	LOWER LIMIT	1327481	6.44	758512	11.52		
01	AMBLANK255LC	2312201	6.95	1338999	12.02		
02	AMBLANK255	2640853	6.94	1512106	12.02		
03	SG09	2052291	6.94	1167903	12.02		
04	SG08	2010573	6.93	1147041	12.02		
05	SG06	2030233	6.94	1263979	12.02		
06	SG06DUP	2030982	6.95	1080527	12.03		
07	SG04	2058645	6.94	1243976	12.02		
08	SG02	1999542	6.94	1061366	12.02		
09	SG10	2105302	6.93	1075659	12.02		
10	SG03	1988975	6.93	1052172	12.02		
11	SG01	2048649	6.93	1094374	12.02		
12	SG07	2414433	6.93	1182606	12.02		
13							
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18							
19							
20							

IS1 = Fluorobenzene
IS2 = p-Bromofluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Client Roy F Weston

SDG 104828

TO-14 Volatile

Sample Data Package

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Roy F. Weston, Inc.
Raritan Plaza III, Suite 2B
101 Fieldcrest Avenue
Edison, NJ 08837-3622

Attn: Mr. Scott Synder
Phone: 732-417-5812

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962156
Client Sample ID: SG01

Project Sample Number: 1048288-001
Matrix: Air

Date Collected: 08/29/01 00:00
Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
Air							
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air						
Dichlorodifluoromethane	ND	ppbv	13.	09/12/01 19:56 MTG	75-71-8		
Chloromethane	ND	ppbv	13.	09/12/01 19:56 MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	15.	09/12/01 19:56 MTG	76-14-2		
Vinyl chloride	ND	ppbv	13.	09/12/01 19:56 MTG	75-01-4		
Bromomethane	ND	ppbv	13.	09/12/01 19:56 MTG	74-83-9		
Chloroethane	ND	ppbv	13.	09/12/01 19:56 MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	14.	09/12/01 19:56 MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	13.	09/12/01 19:56 MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	14.	09/12/01 19:56 MTG	76-13-1		
Methylene chloride	ND	ppbv	13.	09/12/01 19:56 MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	13.	09/12/01 19:56 MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	13.	09/12/01 19:56 MTG	156-59-2		
Chloroform	ND	ppbv	13.	09/12/01 19:56 MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	12.	09/12/01 19:56 MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	11.	09/12/01 19:56 MTG	107-06-2		
Benzene	ND	ppbv	12.	09/12/01 19:56 MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	11.	09/12/01 19:56 MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	9.9	09/12/01 19:56 MTG	78-87-5		
Trichloroethene	ND	ppbv	11.	09/12/01 19:56 MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 19:56 MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 19:56 MTG	10061-02-6		
Toluene	ND	ppbv	13.	09/12/01 19:56 MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	12.	09/12/01 19:56 MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	12.	09/12/01 19:56 MTG	106-93-4		
Tetrachloroethene	ND	ppbv	13.	09/12/01 19:56 MTG	127-18-4		
Chlorobenzene	ND	ppbv	11.	09/12/01 19:56 MTG	108-90-7		
Ethylbenzene	ND	ppbv	11.	09/12/01 19:56 MTG	100-41-4		
m&p-Xylene	ND	ppbv	11.	09/12/01 19:56 MTG			

Date: 09/18/01

DKP 9/19/01

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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962156 Project Sample Number: 1048288-001 Date Collected: 08/29/01 00:00
Client Sample ID: SG01 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
o-Xylene	ND	ppbv	10.	09/12/01 19:56 MTG	95-47-6		
Styrene	ND	ppbv	11.	09/12/01 19:56 MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	10.	09/12/01 19:56 MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	13.	09/12/01 19:56 MTG	108-67-8		
1,2,4-Trimethylbenzene	18.	ppbv	13.	09/12/01 19:56 MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	8.0	09/12/01 19:56 MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	8.0	09/12/01 19:56 MTG	106-46-7		
1,2-Dichlorobenzene	ND	ppbv	13.	09/12/01 19:56 MTG	95-50-1		
1,2,4-Trichlorobenzene	~~ND~~ R	ppbv	~~5.6~~	09/12/01 19:56 MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	3.5	09/12/01 19:56 MTG	87-68-3		

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Date: 09/18/01

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Data file : /chem/10msv09.i/RFW48288-0912.b/25521.d
Lab Smp Id: 102962156 Client Smp ID: SG01
Inj Date : 12-SEP-2001 19:56
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 20
Dil Factor: 26.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	26.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	6.932	6.939	(1.000)	2048649	10.0000	
* 41 p-Bromofluorobenzene	95	12.020	12.020	(1.000)	1094374	10.0000	
43 1,2,4-Trimethylbenzene	105	13.327	13.327	(1.109)	116291	0.65766 ✓	17.6 ✓

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25521.d
Lab Smp Id: 102962156
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: SG01
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2048649	-11.40
41 p-Bromofluorobenz	1338999	669500	2677998	1094374	-18.27

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.93	-0.24
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

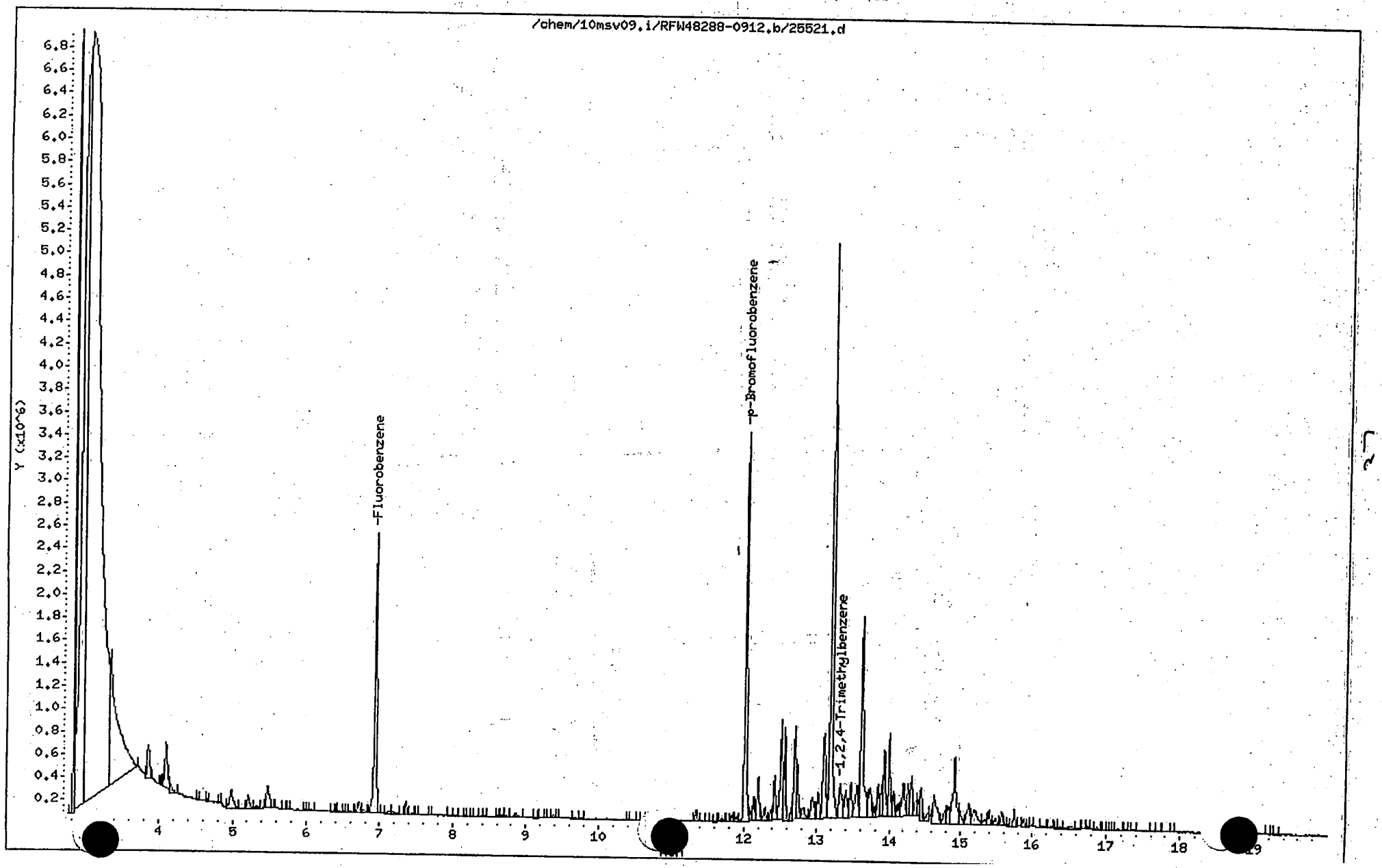
Data File: /chem/10msv09.i/RFW48288-0912.b/25521.d
Date : 12-SEP-2001 19:56
Client ID: SG01
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

000033



Data File: /chem/10msv09.i/RFW48288-0912.b/25521.d

Date : 12-SEP-2001 19:56

Client ID: SG01

Instrument: 10msv09.i

Sample Info:

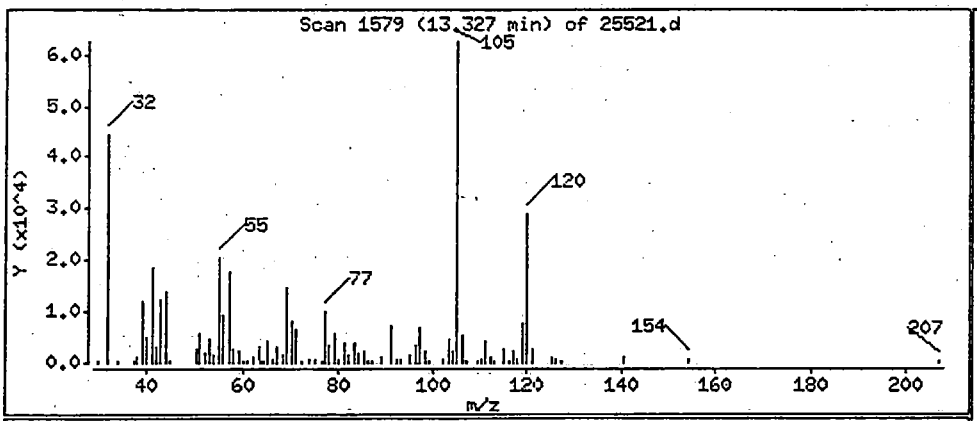
Operator: mtg

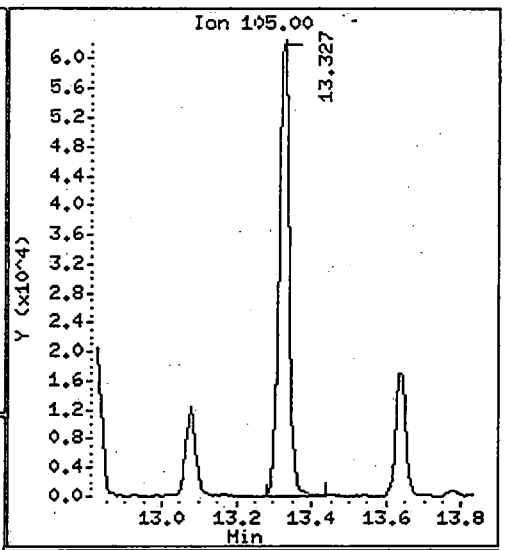
Column phase: J&W DB-5

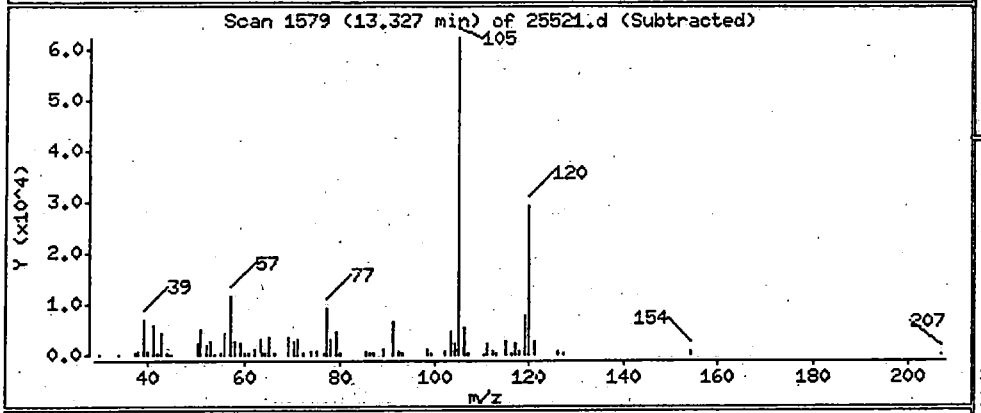
Column diameter: 0.32

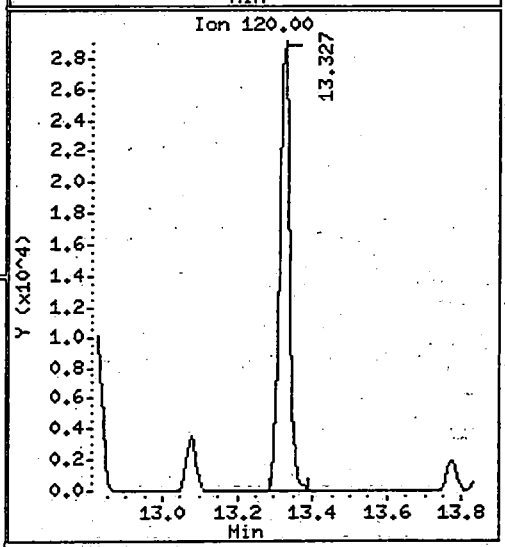
43 1,2,4-Trimethylbenzene

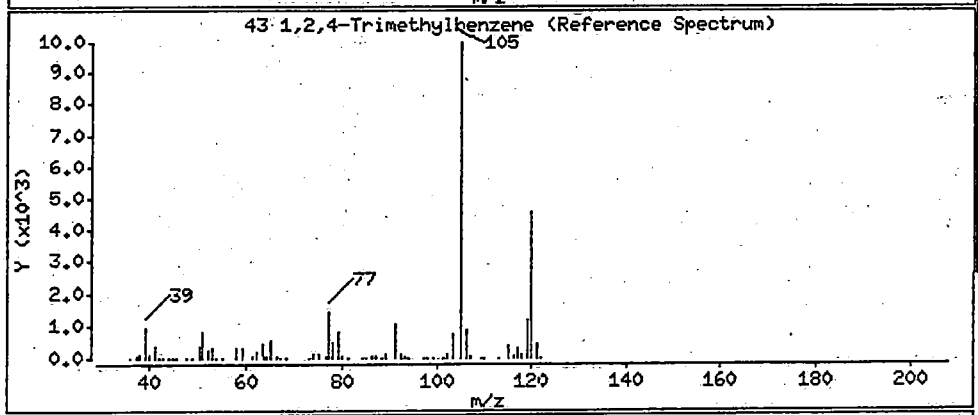
Concentration: 17.6 ppbv

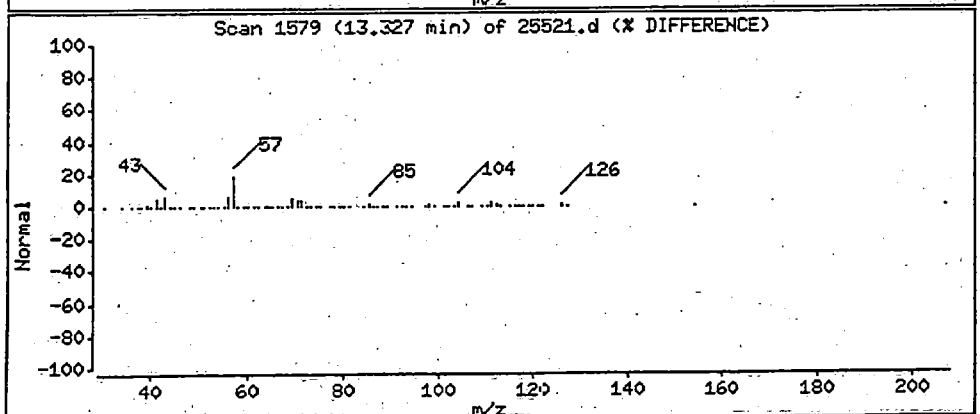












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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962164 Project Sample Number: 1048288-002 Date Collected: 08/29/01 00:00
Client Sample ID: SG02 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Req Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	13.	09/12/01 18:25	MTG	75-71-8		
Chloromethane	ND	ppbv	13.	09/12/01 18:25	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	15.	09/12/01 18:25	MTG	76-14-2		
Vinyl chloride	ND	ppbv	13.	09/12/01 18:25	MTG	75-01-4		
Bromomethane	ND	ppbv	13.	09/12/01 18:25	MTG	74-83-9		
Chloroethane	ND	ppbv	13.	09/12/01 18:25	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	14.	09/12/01 18:25	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	13.	09/12/01 18:25	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	14.	09/12/01 18:25	MTG	76-13-1		
Methylene chloride	ND	ppbv	13.	09/12/01 18:25	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	13.	09/12/01 18:25	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	13.	09/12/01 18:25	MTG	156-59-2		
Chloroform	ND	ppbv	13.	09/12/01 18:25	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	12.	09/12/01 18:25	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	11.	09/12/01 18:25	MTG	107-06-2		
Benzene	ND	ppbv	12.	09/12/01 18:25	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	11.	09/12/01 18:25	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	9.9	09/12/01 18:25	MTG	78-87-5		
Trichloroethene	ND	ppbv	11.	09/12/01 18:25	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 18:25	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 18:25	MTG	10061-02-6		
Toluene	ND	ppbv	13.	09/12/01 18:25	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	12.	09/12/01 18:25	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	12.	09/12/01 18:25	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	13.	09/12/01 18:25	MTG	127-18-4		
Chlorobenzene	ND	ppbv	11.	09/12/01 18:25	MTG	108-90-7		
Ethylbenzene	ND	ppbv	11.	09/12/01 18:25	MTG	100-41-4		
m&p-Xylene	ND	ppbv	11.	09/12/01 18:25	MTG			
o-Xylene	ND	ppbv	10.	09/12/01 18:25	MTG	95-47-6		
Styrene	ND	ppbv	11.	09/12/01 18:25	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	10.	09/12/01 18:25	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	13.	09/12/01 18:25	MTG	108-67-8		
1,2,4-Trimethylbenzene	17.	ppbv	13.	09/12/01 18:25	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	8.0	09/12/01 18:25	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	8.0	09/12/01 18:25	MTG	106-46-7		

Date: 09/18/01

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962164 Project Sample Number: 1048288-002 Date Collected: 08/29/01 00:00
Client Sample ID: SG02 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	13.	09/12/01 18:25	MTG	95-50-1		
1,2,4-Trichlorobenzene	~~ND~~ R	ppbv	~~5.6~~	09/12/01 18:25	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	3.5	09/12/01 18:25	MTG	87-68-3		

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Date: 09/18/01

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Data file : /chem/10msv09.i/RFW48288-0912.b/25518.d
Lab Smp Id: 102962164 Client Smp ID: SG02
Inj Date : 12-SEP-2001 18:25
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 17
Dil Factor: 26.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	26.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	6.942	6.939	(1.000)	1999542	10.0000	
* 41 p-Bromofluorobenzene	95	12.023	12.020	(1.000)	1061366	10.0000	
43 1,2,4-Trimethylbenzene	105	13.324	13.327	(1.108)	108647	0.63353	17.0

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25518.d
Lab Smp Id: 102962164
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: SG02
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	1999542	-13.52
41 p-Bromofluorobenz	1338999	669500	2677998	1061366	-20.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.94	-0.09
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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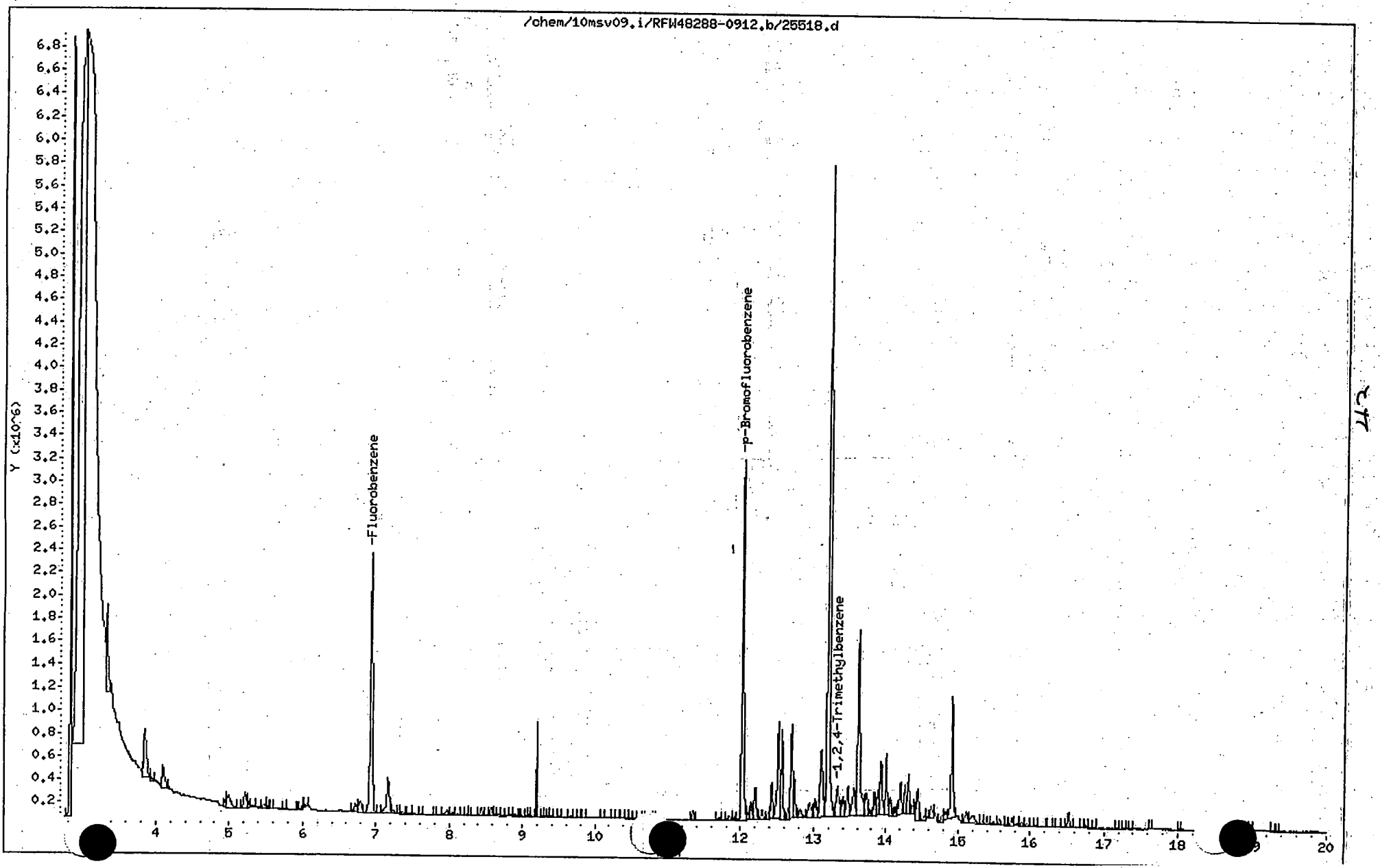
Data File: /chem/10msv09.i/RFW48288-0912.b/25518.d
Date : 12-SEP-2001 18:25
Client ID: SG02
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



Data File: /chem/10msv09.i/RFW4828S-0912.b/25518.d

Date : 12-SEP-2001 18:25

Client ID: SG02

Instrument: 10msv09.i

Sample Info:

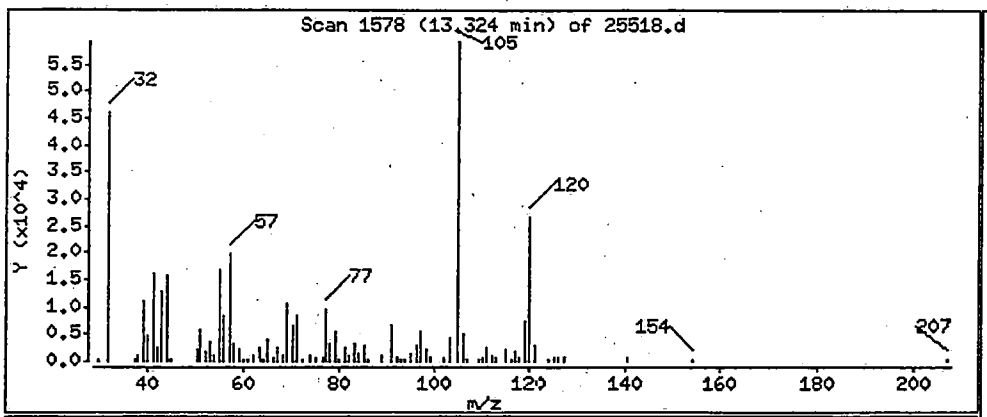
Operator: ntg

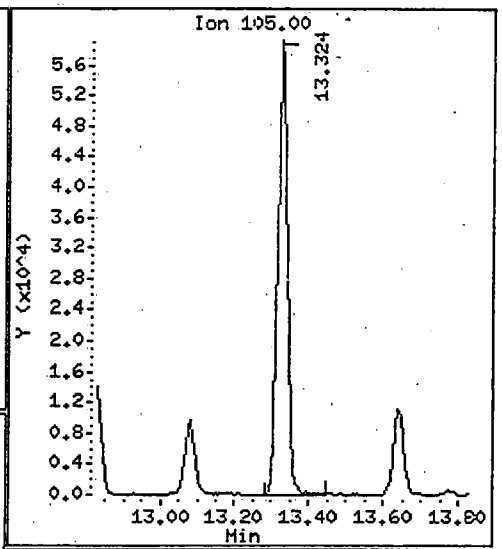
Column phase: J&W DB-5

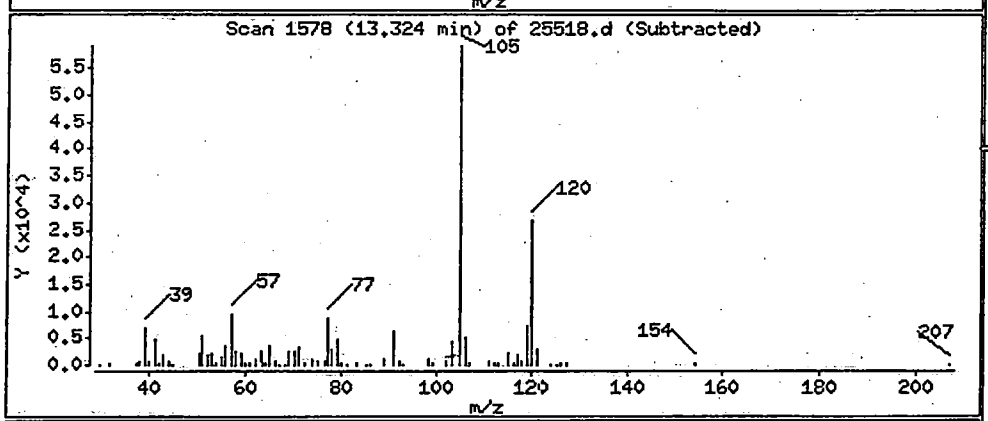
Column diameter: 0.32

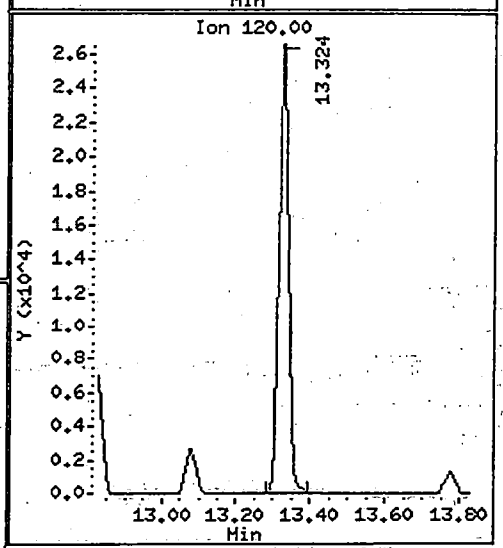
43 1,2,4-Trimethylbenzene

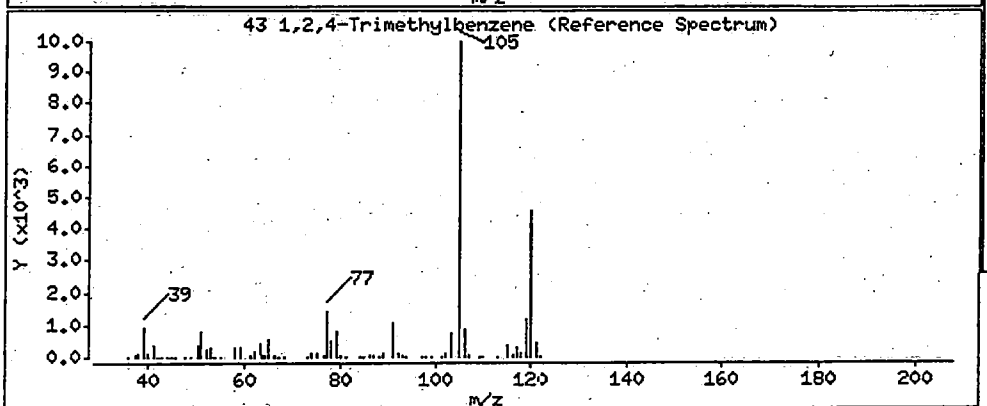
Concentration: 17.0 ppbv

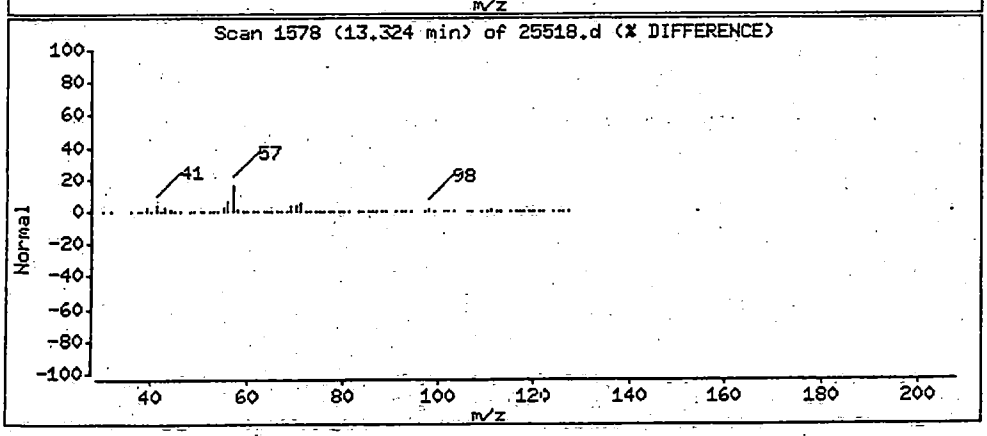












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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962172 Project Sample Number: 1048288-003 Date Collected: 08/29/01 00:00
Client Sample ID: SG03 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	13.	09/12/01 19:26	MTG	75-71-8		
Chloromethane	ND	ppbv	13.	09/12/01 19:26	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	15.	09/12/01 19:26	MTG	76-14-2		
Vinyl chloride	ND	ppbv	13.	09/12/01 19:26	MTG	75-01-4		
Bromomethane	ND	ppbv	13.	09/12/01 19:26	MTG	74-83-9		
Chloroethane	ND	ppbv	13.	09/12/01 19:26	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	14.	09/12/01 19:26	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	13.	09/12/01 19:26	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	14.	09/12/01 19:26	MTG	76-13-1		
Methylene chloride	ND	ppbv	13.	09/12/01 19:26	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	13.	09/12/01 19:26	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	13.	09/12/01 19:26	MTG	156-59-2		
Chloroform	ND	ppbv	13.	09/12/01 19:26	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	12.	09/12/01 19:26	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	11.	09/12/01 19:26	MTG	107-06-2		
Benzene	ND	ppbv	12.	09/12/01 19:26	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	11.	09/12/01 19:26	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	9.9	09/12/01 19:26	MTG	78-87-5		
Trichloroethene	ND	ppbv	11.	09/12/01 19:26	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 19:26	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 19:26	MTG	10061-02-6		
Toluene	ND	ppbv	13.	09/12/01 19:26	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	12.	09/12/01 19:26	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	12.	09/12/01 19:26	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	13.	09/12/01 19:26	MTG	127-18-4		
Chlorobenzene	ND	ppbv	11.	09/12/01 19:26	MTG	108-90-7		
Ethylbenzene	ND	ppbv	11.	09/12/01 19:26	MTG	100-41-4		
m&p-Xylene	ND	ppbv	11.	09/12/01 19:26	MTG			
o-Xylene	ND	ppbv	10.	09/12/01 19:26	MTG	95-47-6		
Styrene	ND	ppbv	11.	09/12/01 19:26	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	10.	09/12/01 19:26	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	13.	09/12/01 19:26	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	13.	09/12/01 19:26	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	8.0	09/12/01 19:26	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	8.0	09/12/01 19:26	MTG	106-46-7		

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Date: 09/18/01

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Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962172 Project Sample Number: 1048288-003 Date Collected: 08/29/01 00:00
Client Sample ID: SG03 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	13.	09/12/01 19:26	MTG	95-50-1		
1,2,4-Trichlorobenzene	~~ND~~ R	ppbv	~~5.6~~ R	09/12/01 19:26	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	3.5	09/12/01 19:26	MTG	87-68-3		

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Data file : /chem/10msv09.i/RFW48288-0912.b/25520.d
Lab Smp Id: 102962172 Client Smp ID: SG03
Inj Date : 12-SEP-2001 19:26
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 19
Dil Factor: 26.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	26.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	6.934	6.939	(1.000)	1988975	10.0000	
* 41 p-Bromofluorobenzene	95	12.015	12.020	(1.000)	1052172	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25520.d
Lab Smp Id: 102962172
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: SG03
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	1988975	-13.98
41 p-Bromofluorobenz	1338999	669500	2677998	1052172	-21.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.93	-0.20
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

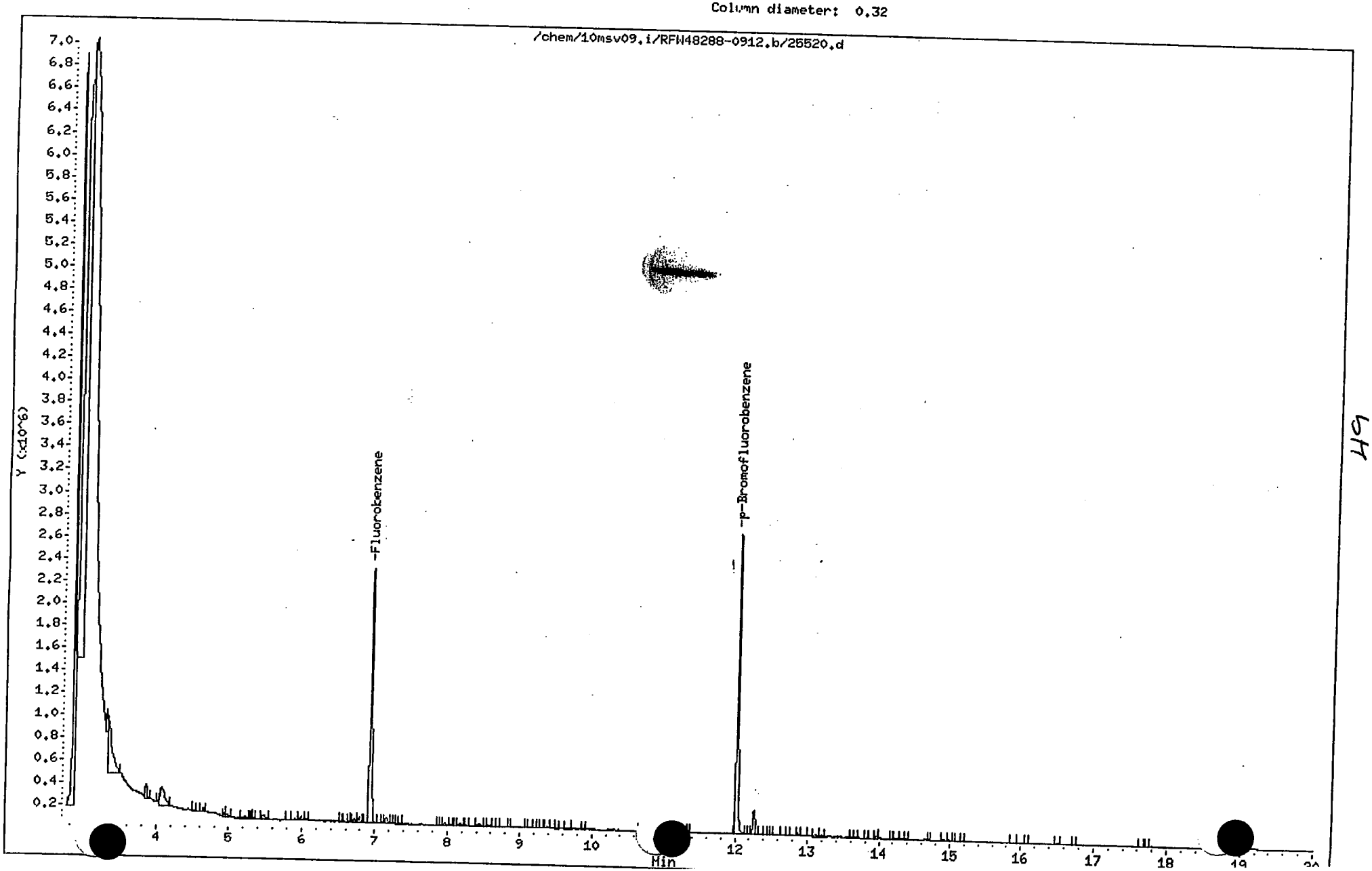
Data File: /chem/10msv09.i/RFW48288-0912.b/25520.d
Date : 12-SEP-2001 19:26
Client ID: SC03
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

000045



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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962180 Project Sample Number: 1048288-004 Date Collected: 08/29/01 00:00
Client Sample ID: SG04 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
Air							
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air						
Dichlorodifluoromethane	ND	ppbv	13.	09/12/01 17:54 MTG	75-71-8		
Chloromethane	ND	ppbv	13.	09/12/01 17:54 MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	15.	09/12/01 17:54 MTG	76-14-2		
Vinyl chloride	ND	ppbv	13.	09/12/01 17:54 MTG	75-01-4		
Bromomethane	ND	ppbv	13.	09/12/01 17:54 MTG	74-83-9		
Chloroethane	ND	ppbv	13.	09/12/01 17:54 MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	14.	09/12/01 17:54 MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	13.	09/12/01 17:54 MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	14.	09/12/01 17:54 MTG	76-13-1		
Methylene chloride	ND	ppbv	13.	09/12/01 17:54 MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	13.	09/12/01 17:54 MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	13.	09/12/01 17:54 MTG	156-59-2		
Chloroform	ND	ppbv	13.	09/12/01 17:54 MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	12.	09/12/01 17:54 MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	11.	09/12/01 17:54 MTG	107-06-2		
Benzene	ND	ppbv	12.	09/12/01 17:54 MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	11.	09/12/01 17:54 MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	9.9	09/12/01 17:54 MTG	78-87-5		
Trichloroethene	ND	ppbv	11.	09/12/01 17:54 MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 17:54 MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 17:54 MTG	10061-02-6		
Toluene	ND	ppbv	13.	09/12/01 17:54 MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	12.	09/12/01 17:54 MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	12.	09/12/01 17:54 MTG	106-93-4		
Tetrachloroethene	ND	ppbv	13.	09/12/01 17:54 MTG	127-18-4		
Chlorobenzene	ND	ppbv	11.	09/12/01 17:54 MTG	108-90-7		
Ethylbenzene	ND	ppbv	11.	09/12/01 17:54 MTG	100-41-4		
m&p-Xylene	ND	ppbv	11.	09/12/01 17:54 MTG			
o-Xylene	ND	ppbv	10.	09/12/01 17:54 MTG	95-47-6		
Styrene	ND	ppbv	11.	09/12/01 17:54 MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	10.	09/12/01 17:54 MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	13.	09/12/01 17:54 MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	13.	09/12/01 17:54 MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	8.0	09/12/01 17:54 MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	8.0	09/12/01 17:54 MTG	106-46-7		

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962180 Project Sample Number: 1048288-004 Date Collected: 08/29/01 00:00
Client Sample ID: SG04 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	13.	09/12/01 17:54 MTG	95-50-1		
1,2,4-Trichlorobenzene	~~ND~~ R	ppbv	~~5.6~~	09/12/01 17:54 MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	3.5	09/12/01 17:54 MTG	87-68-3		

Date: 09/18/01

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Data file : /chem/10msv09.i/RFW48288-0912.b/25517.d
Lab Smp Id: 102962180 Client Smp ID: SG04
Inj Date : 12-SEP-2001 17:54
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 16
Dil Factor: 26.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	26.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	6.942	6.939	(1.000)	2058645	10.0000	
* 41 p-Bromofluorobenzene	95	12.023	12.020	(1.000)	1243976	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25517.d
Lab Smp Id: 102962180
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: SG04
Level: LOW
Sample Type: AIR
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2058645	-10.97
41 p-Bromofluorobenz	1338999	669500	2677998	1243976	-7.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.94	-0.09
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	0.00

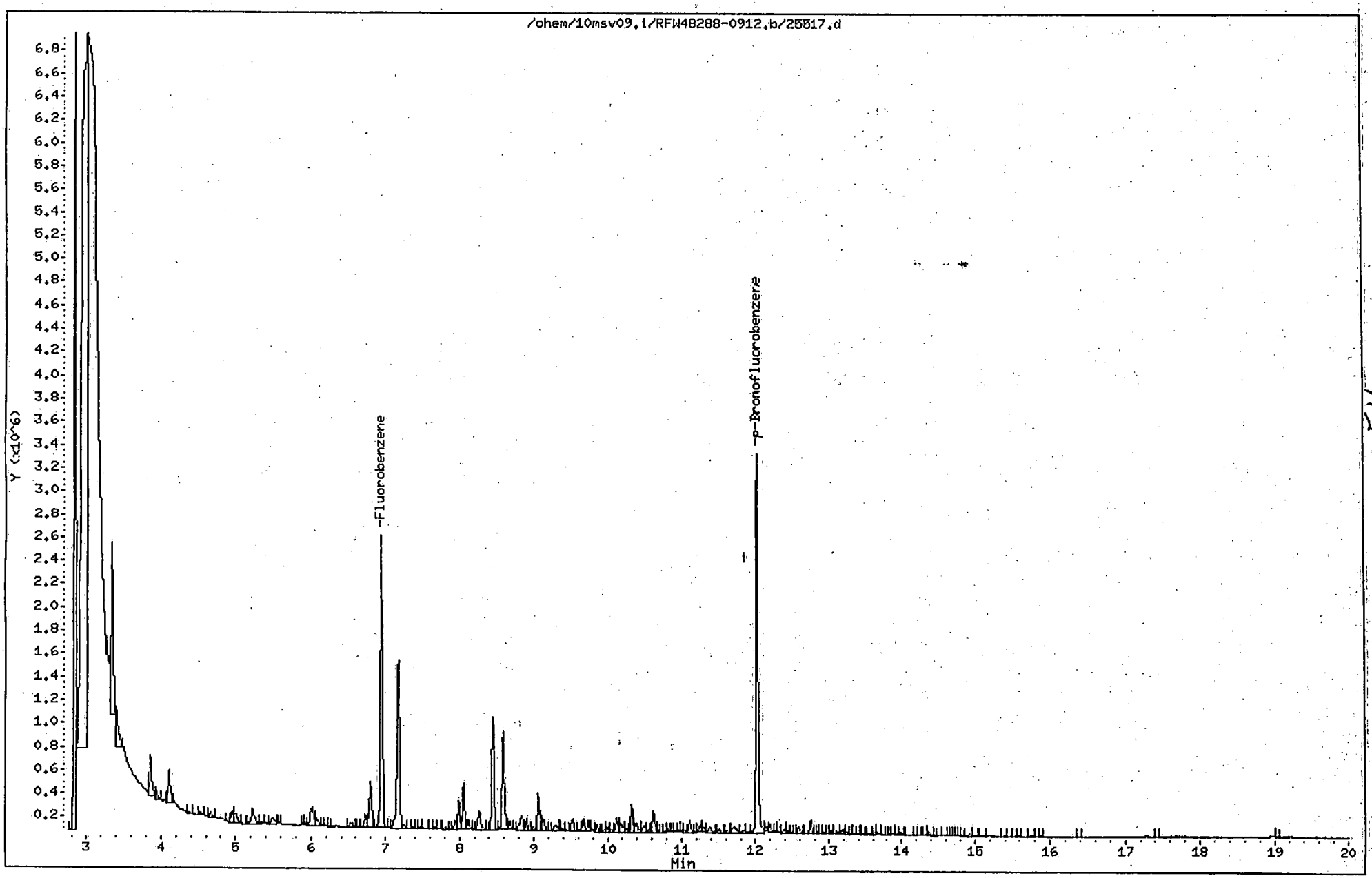
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv09.i/RFW48288-0912.b/25517.d
Date : 12-SEP-2001 17:54
Client ID: SG04
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962198 Project Sample Number: 1048288-005 Date Collected: 08/29/01 00:00
Client Sample ID: SG05 Matrix: Air Date Received: 08/31/01 10:50

Air

GC/MS VOCs, in Air — Prep/Method: TO-14 Source / TO-14 Source

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Dichlorodifluoromethane	ND	ppmv	0.13	09/10/01 12:27	MTG	75-71-8		
Chloromethane	ND	ppmv	0.13	09/10/01 12:27	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppmv	0.13	09/10/01 12:27	MTG	76-14-2		
Vinyl chloride	ND	ppmv	0.13	09/10/01 12:27	MTG	75-01-4		
Bromomethane	ND	ppmv	0.13	09/10/01 12:27	MTG	74-83-9		
Chloroethane	ND	ppmv	0.13	09/10/01 12:27	MTG	75-00-3		
Trichlorofluoromethane	ND	ppmv	0.13	09/10/01 12:27	MTG	75-69-4		
1,1-Dichloroethene	ND	ppmv	0.13	09/10/01 12:27	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppmv	0.13	09/10/01 12:27	MTG	76-13-1		
Methylene chloride	ND	ppmv	0.13	09/10/01 12:27	MTG	75-09-2		
1,1-Dichloroethane	ND	ppmv	0.13	09/10/01 12:27	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppmv	0.13	09/10/01 12:27	MTG	156-59-2		
Chloroform	ND	ppmv	0.13	09/10/01 12:27	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppmv	0.13	09/10/01 12:27	MTG	71-55-6		
1,2-Dichloroethane	ND	ppmv	0.13	09/10/01 12:27	MTG	107-06-2		
Benzene	1.6 *	ppmv	0.67	09/10/01 12:27	MTG	71-43-2		
Carbon tetrachloride	ND	ppmv	0.13	09/10/01 12:27	MTG	56-23-5		
1,2-Dichloropropane	ND	ppmv	0.13	09/10/01 12:27	MTG	78-87-5		
Trichloroethene	ND	ppmv	0.13	09/10/01 12:27	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppmv	0.13	09/10/01 12:27	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppmv	0.13	09/10/01 12:27	MTG	10061-02-6		
Toluene	ND	ppmv	0.13	09/10/01 12:27	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppmv	0.13	09/10/01 12:27	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppmv	0.13	09/10/01 12:27	MTG	106-93-4		
Tetrachloroethene	ND	ppmv	0.13	09/10/01 12:27	MTG	127-18-4		
Chlorobenzene	ND	ppmv	0.13	09/10/01 12:27	MTG	108-90-7		
Ethylbenzene	0.39	ppmv	0.13	09/10/01 12:27	MTG	100-41-4		
m&p-Xylene	1.0	ppmv	0.13	09/10/01 12:27	MTG			
o-Xylene	ND	ppmv	0.13	09/10/01 12:27	MTG	95-47-6		
Styrene	ND	ppmv	0.13	09/10/01 12:27	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppmv	0.13	09/10/01 12:27	MTG	79-34-5		
1,3,5-Trimethylbenzene	0.41	ppmv	0.13	09/10/01 12:27	MTG	108-67-8		
1,2,4-Trimethylbenzene	0.76	ppmv	0.13	09/10/01 12:27	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppmv	0.13	09/10/01 12:27	MTG	541-73-1		

* from dilution analysis

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Date: 09/18/01

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962198 Project Sample Number: 1048288-005 Date Collected: 08/29/01 00:00
Client Sample ID: SG05 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,4-Dichlorobenzene	ND	ppmv	0.13	09/10/01 12:27	MTG	106-46-7		
1,2-Dichlorobenzene	ND	ppmv	0.13	09/10/01 12:27	MTG	95-50-1		
1,2,4-Trichlorobenzene	~~ND~~ R	ppmv	~~0.13~~	09/10/01 12:27	MTG	120-82-1	1	
Hexachloro-1,3-butadiene	ND	ppmv	0.13 UJ	09/10/01 12:27	MTG	87-68-3	1	

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Data file : /chem/10msv09.i/RFW48288-0910.b/25311.d
Lab Smp Id: 102962198 Client Smp ID: SG05
Inj Date : 10-SEP-2001 12:27
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0910.b/TO14LP227.m
Meth Date : 18-Sep-2001 13:53 mgurnsey Quant Type: ESTD
Cal Date : 15-AUG-2001 07:46 Cal File: 22706.d
Als bottle: 10
Dil Factor: 1.34000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.34000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppmv)	FINAL (ppmv)
17 Benzene	78	6.717	6.751	-0.034	493561	1.23558 ✓	1.66
28 Ethyl Benzene	106	10.786	10.813	-0.027	49877	0.29005	0.389
29 mp-Xylene	106	10.940	10.967	-0.027	168614	0.74844	1.00
33 1,3,5-Trimethylbenzene	105	12.824	12.844	-0.020	146297	0.30362	0.407 (M)
34 1,2,4-Trimethylbenzene	105	13.327	13.347	-0.020	297842	0.56678 ✓	0.759 ✓

QC Flag Legend

M - Compound response manually integrated.

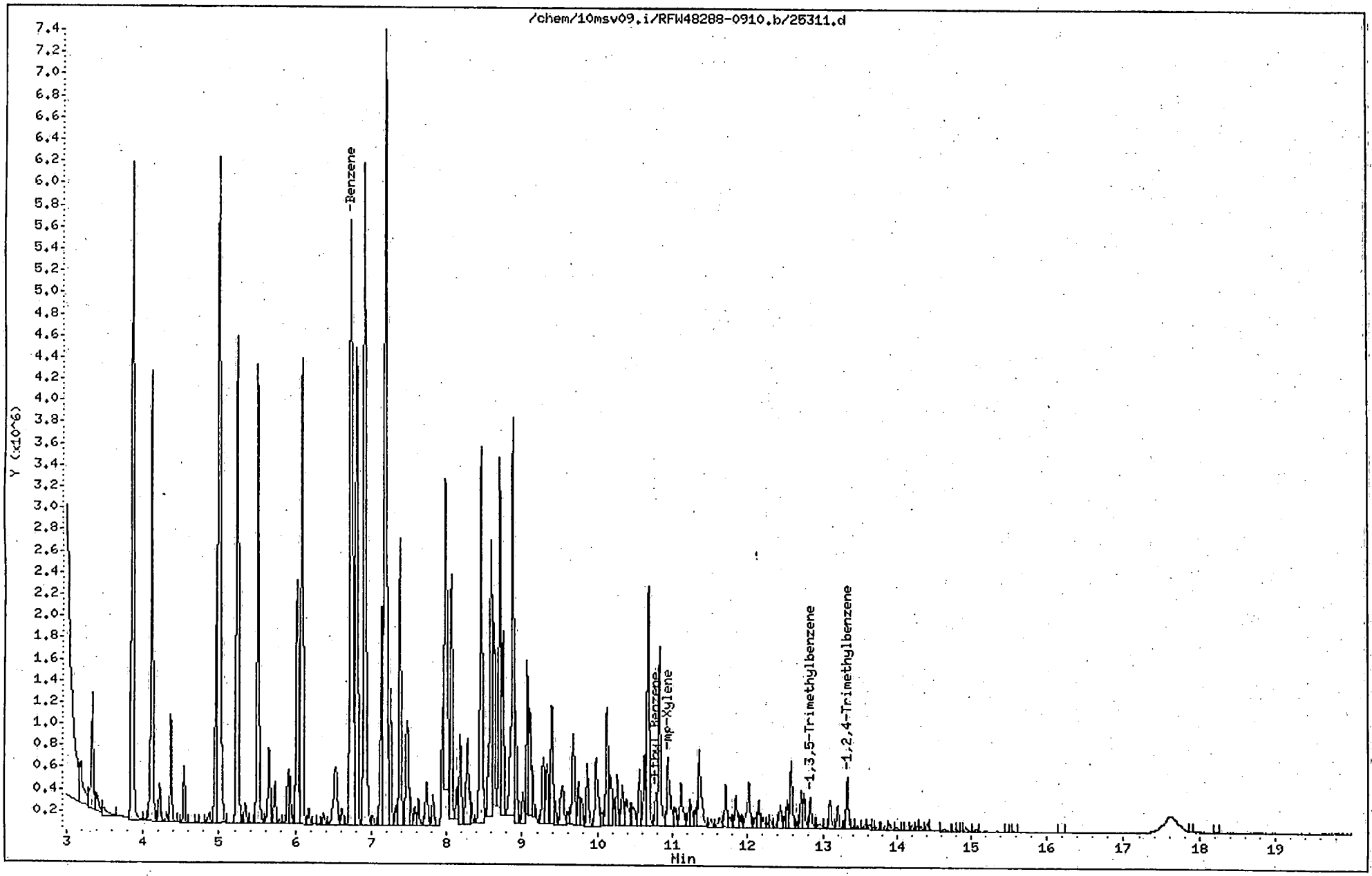
000054

Data File: /chem/10msv09.i/RFW48288-0910.b/25311.d
Date : 10-SEP-2001 12:27
Client ID: SC05
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Data File: /chem/10msv09.i/RFW48288-0910.b/25311.d

Date : 10-SEP-2001 12:27

Client ID: SG05

Instrument: 10msv09.i

ample Info:

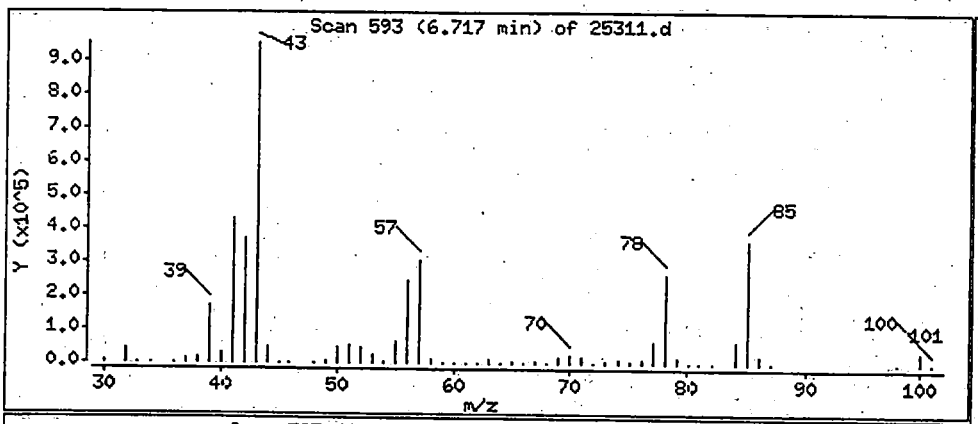
Operator: mtg

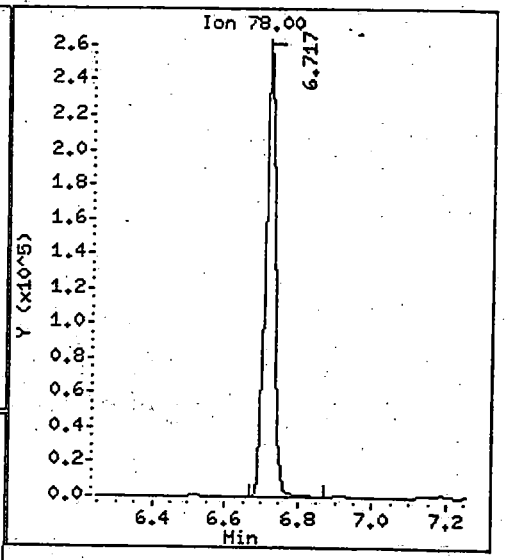
Column phase: J&W DB-5

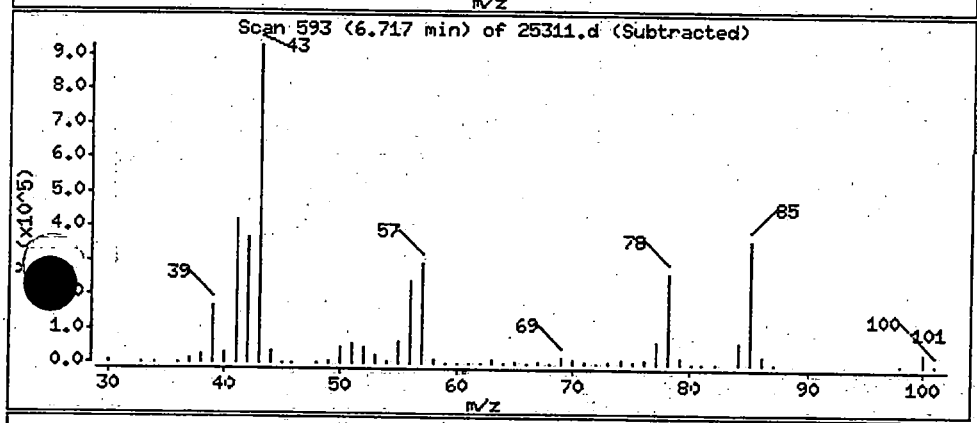
Column diameter: 0.32

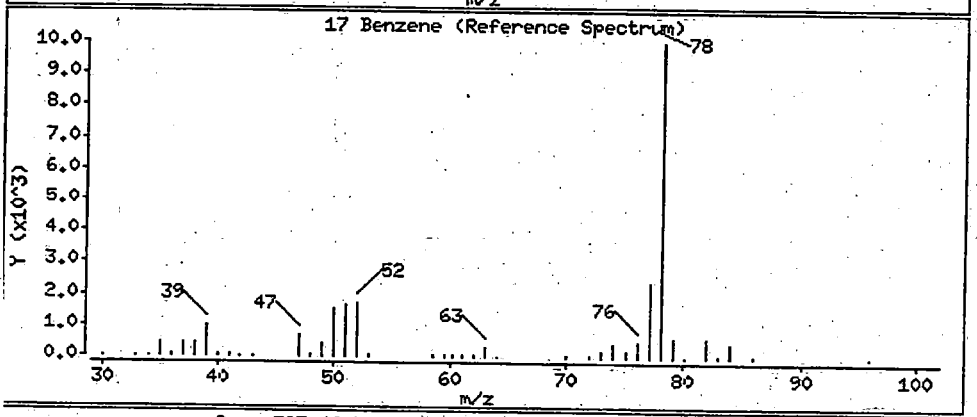
17 Benzene

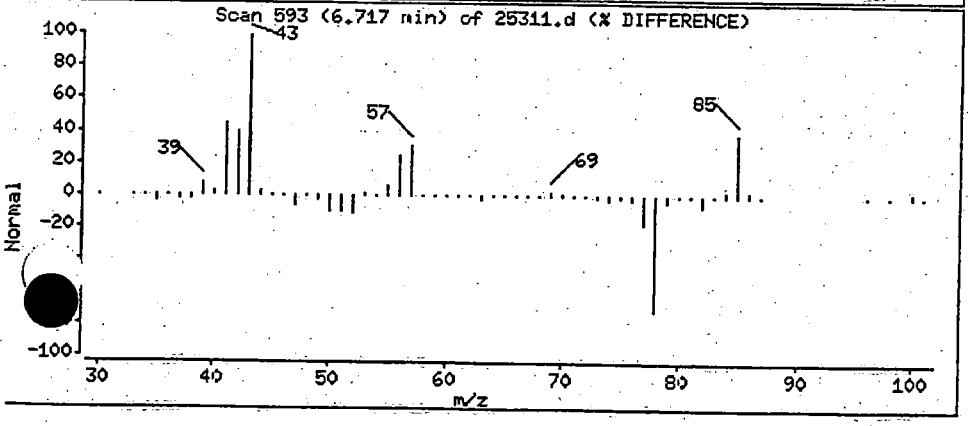
Concentration: 1.66 ppmv











Data File: /chem/10msv09.i/RFW48288-0910.b/25311.d

Date : 10-SEP-2001 12:27

Client ID: SG05

Instrument: 10msv09.i

Sample Info:

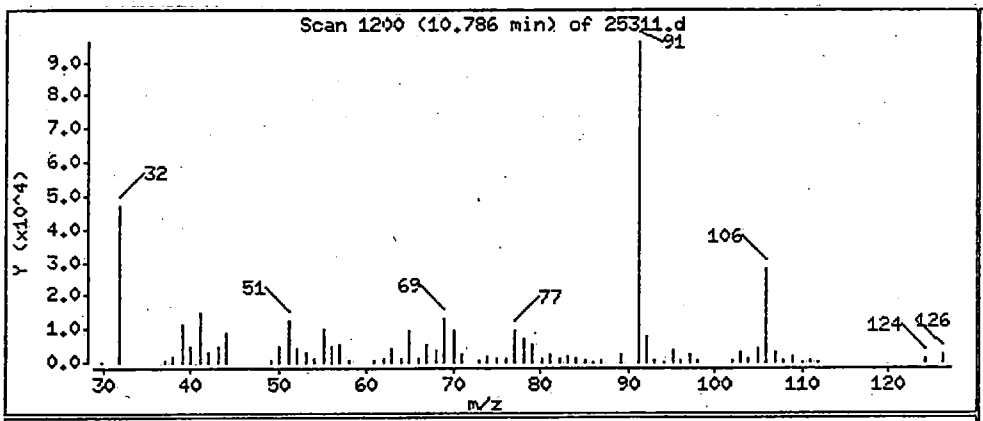
Operator: ntg

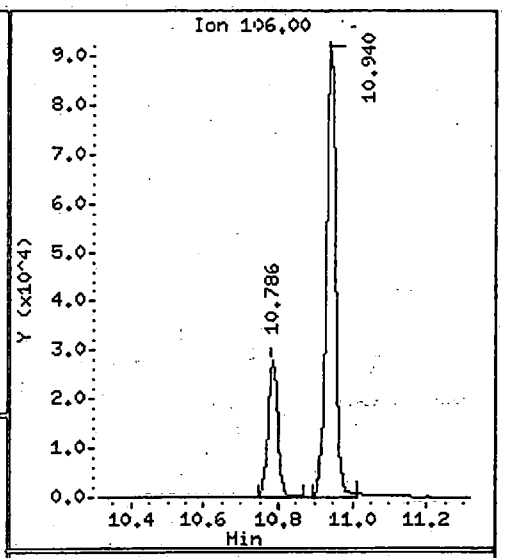
Column phase: J&W DB-5

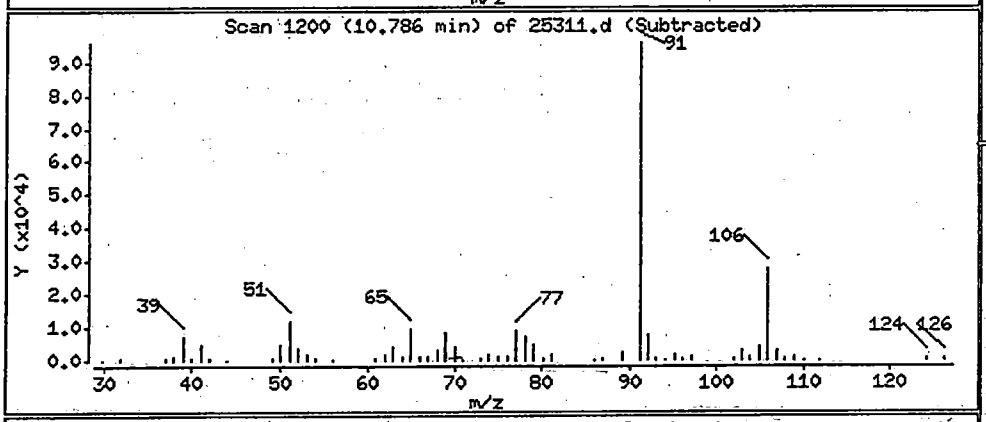
Column diameter: 0.32

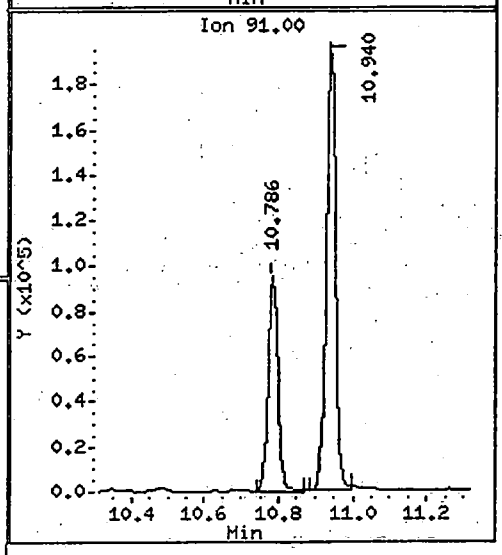
28 Ethyl Benzene

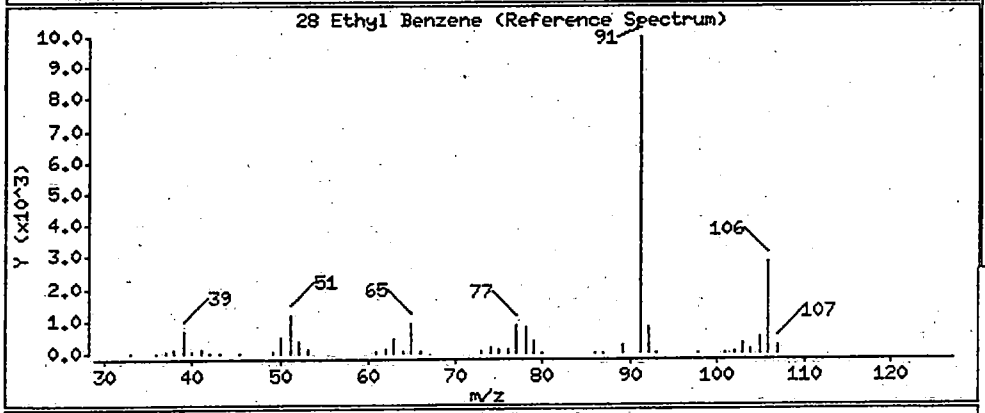
Concentration: 0.389 ppmv

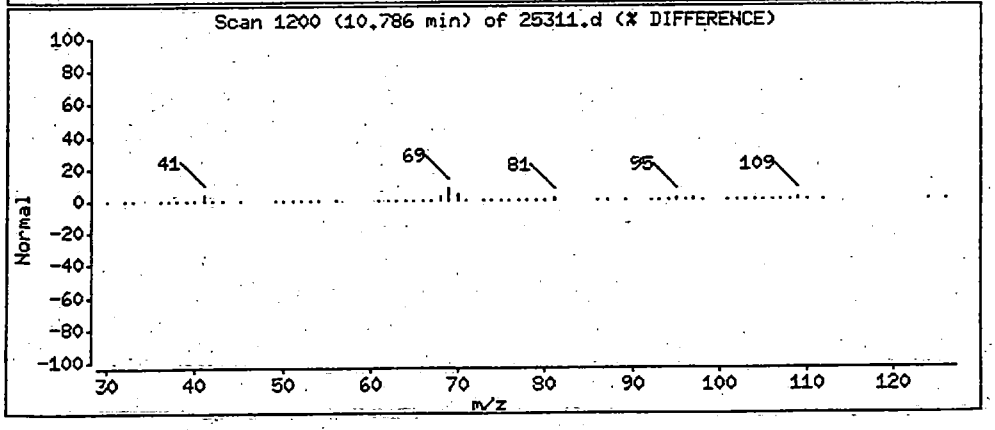












Data File: /chem/10msv09.i/RFW48288-0910.b/25311.d

Date : 10-SEP-2001 12:27

Client ID: SC05

Sample Info:

Instrument: 10msv09.i

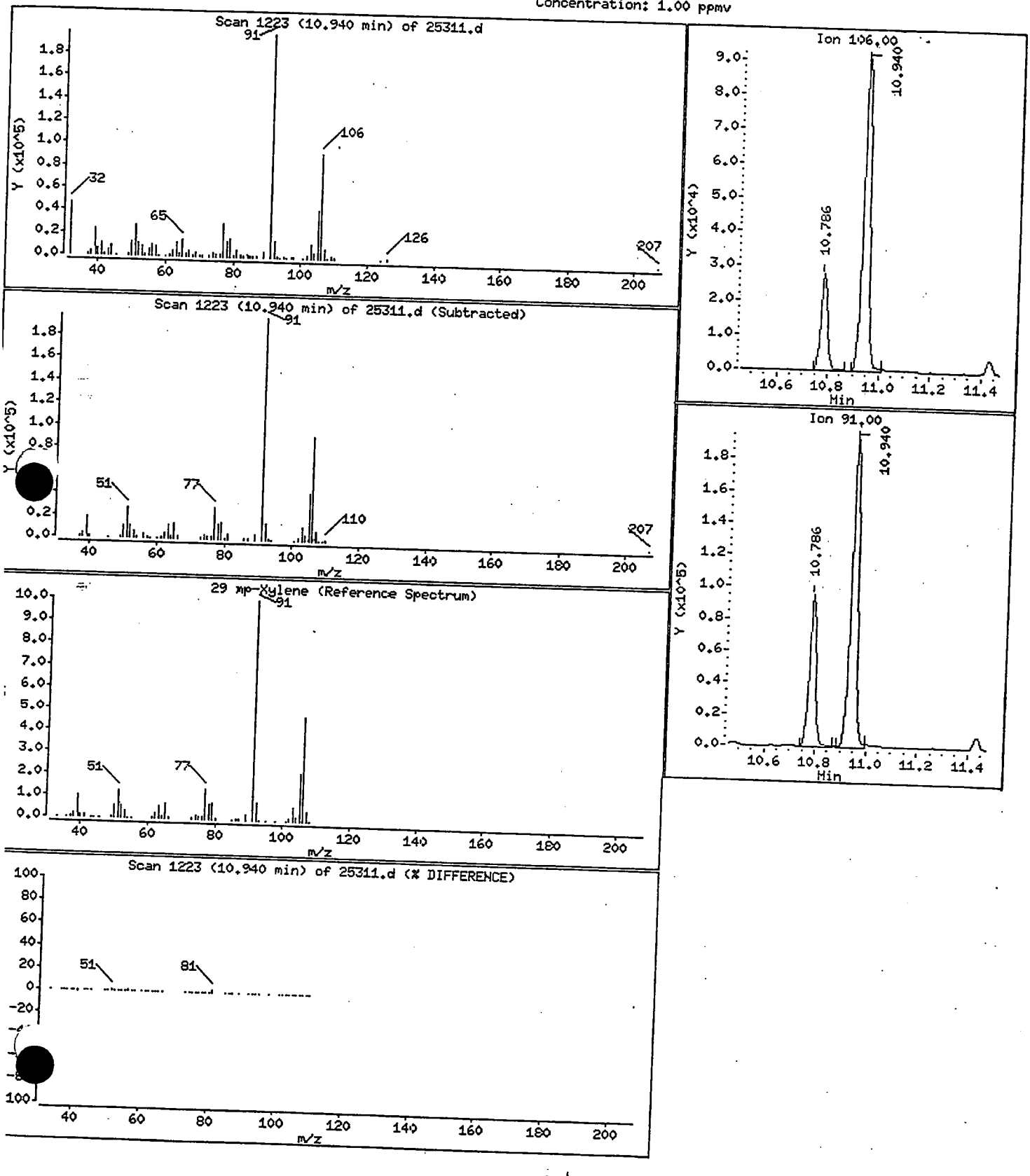
Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32

29 mp-Xylene

Concentration: 1.00 ppmv



Data File: /chem/10msv09.i/RFW48288-0910.b/25311.d

Date : 10-SEP-2001 12:27

Client ID: SG05

Instrument: 10msv09.i

Sample Info:

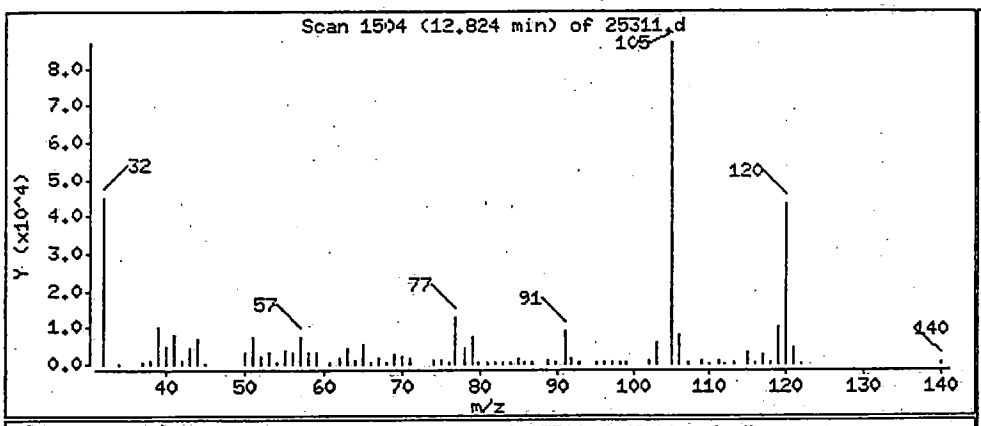
Operator: ntg

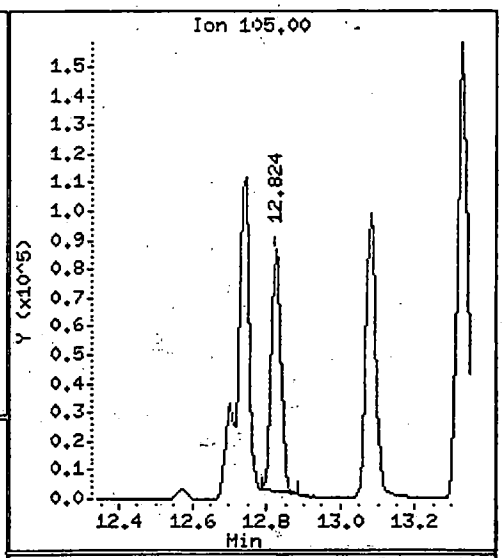
Column phase: J&W DB-5

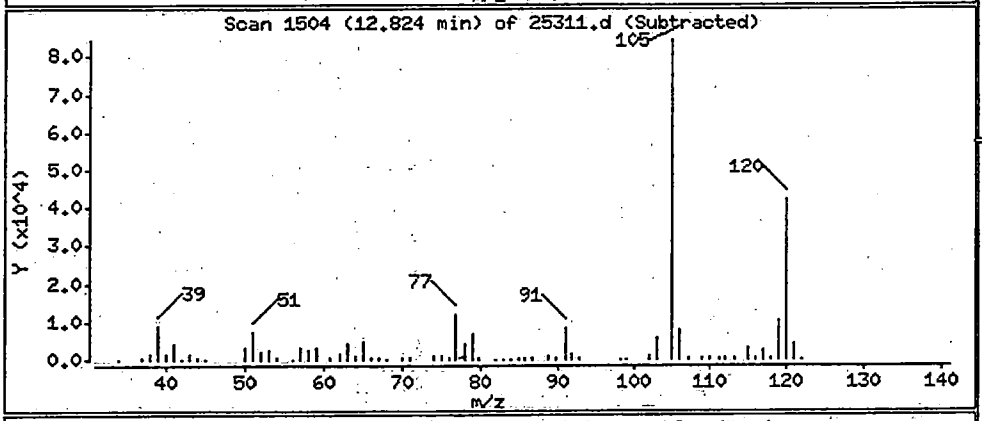
Column diameter: 0.32

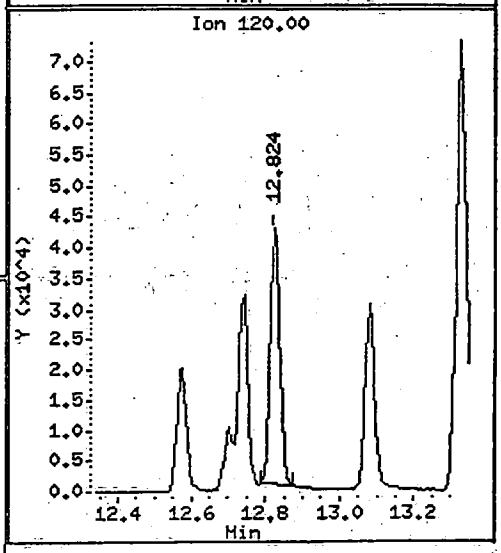
33 1,3,5-Trimethylbenzene

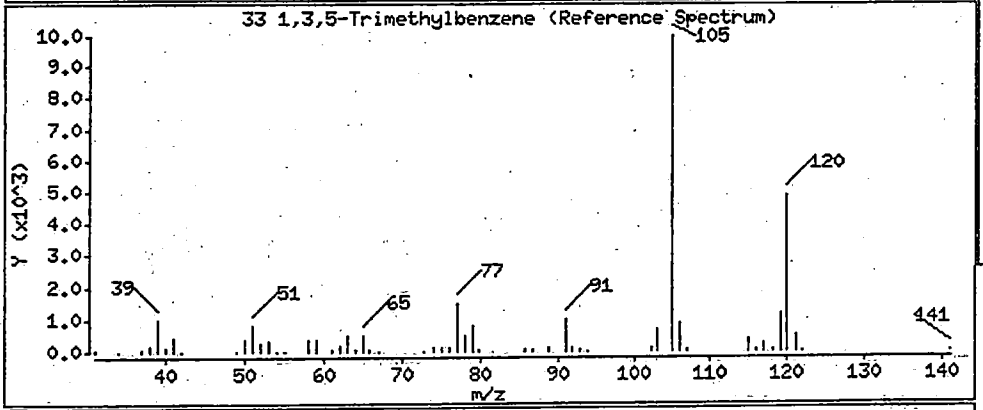
Concentration: 0.407 ppmv

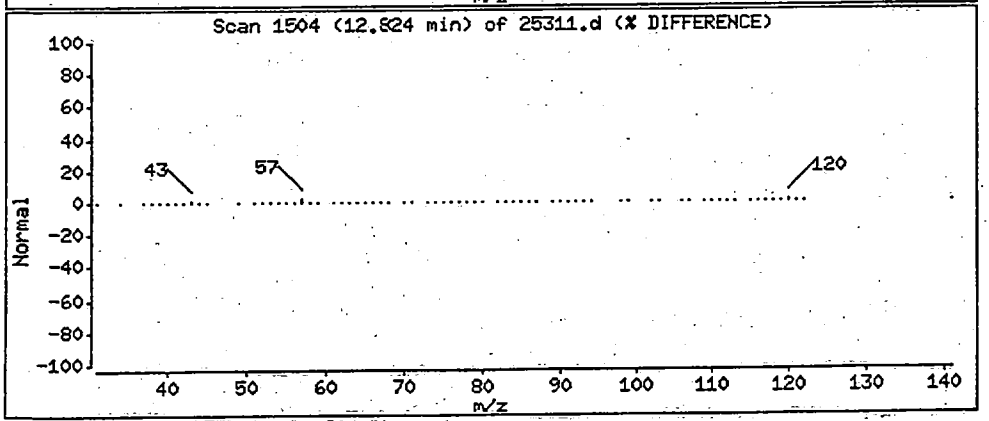












62

Data File: /chem/10msv09.i/RFW48288-0910.b/25311.d

Date : 10-SEP-2001 12:27

Client ID: SG05

Instrument: 10msv09.i

Sample Info:

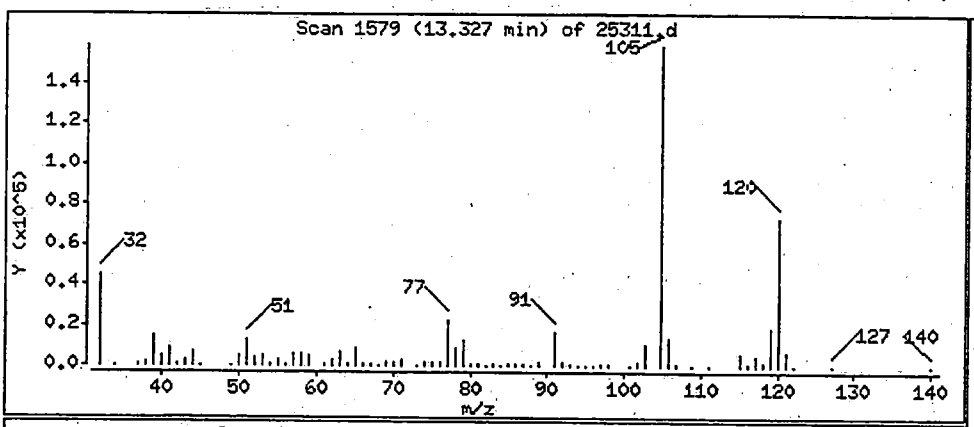
Operator: mtg

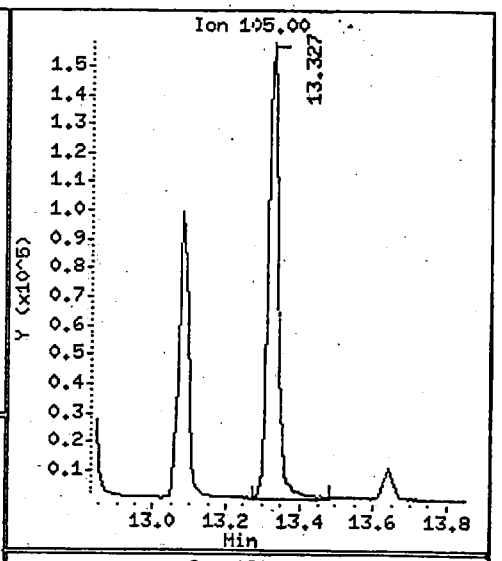
Column phase: J&W DB-5

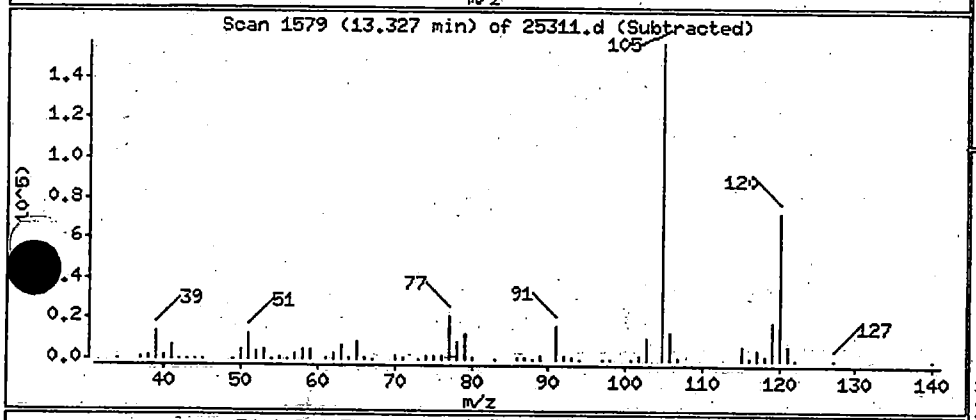
Column diameter: 0.32

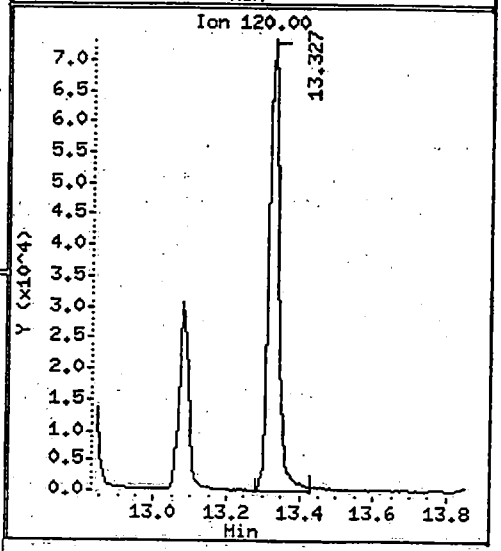
34 1,2,4-Trimethylbenzene

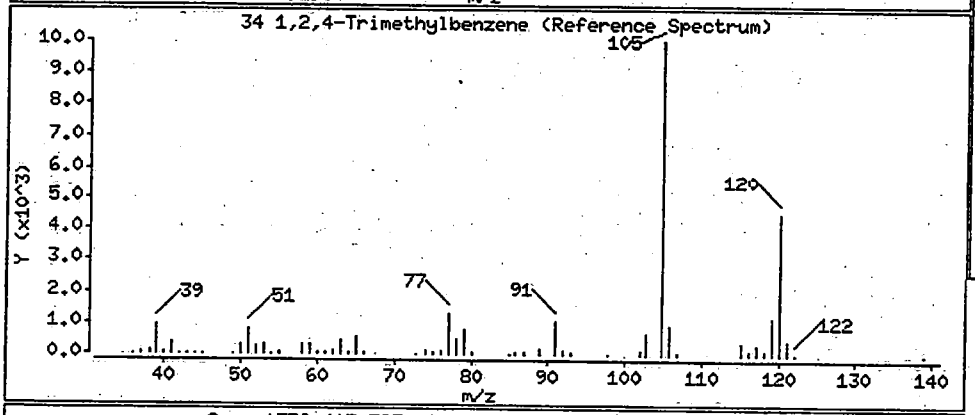
Concentration: 0.759 ppmv

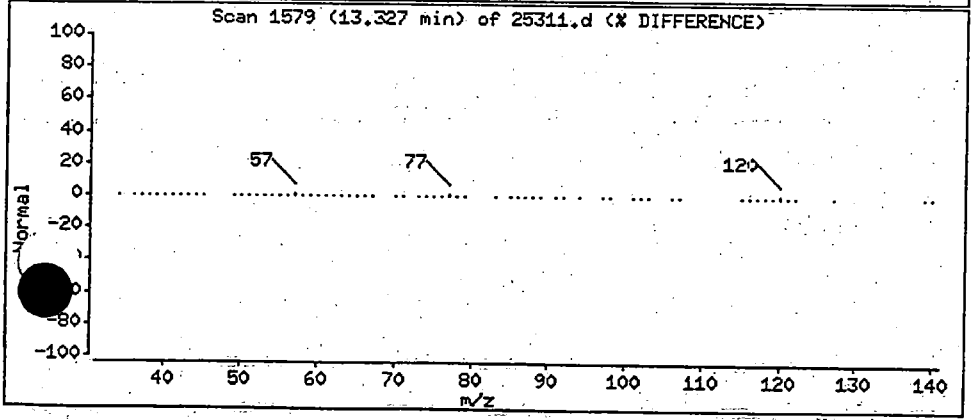












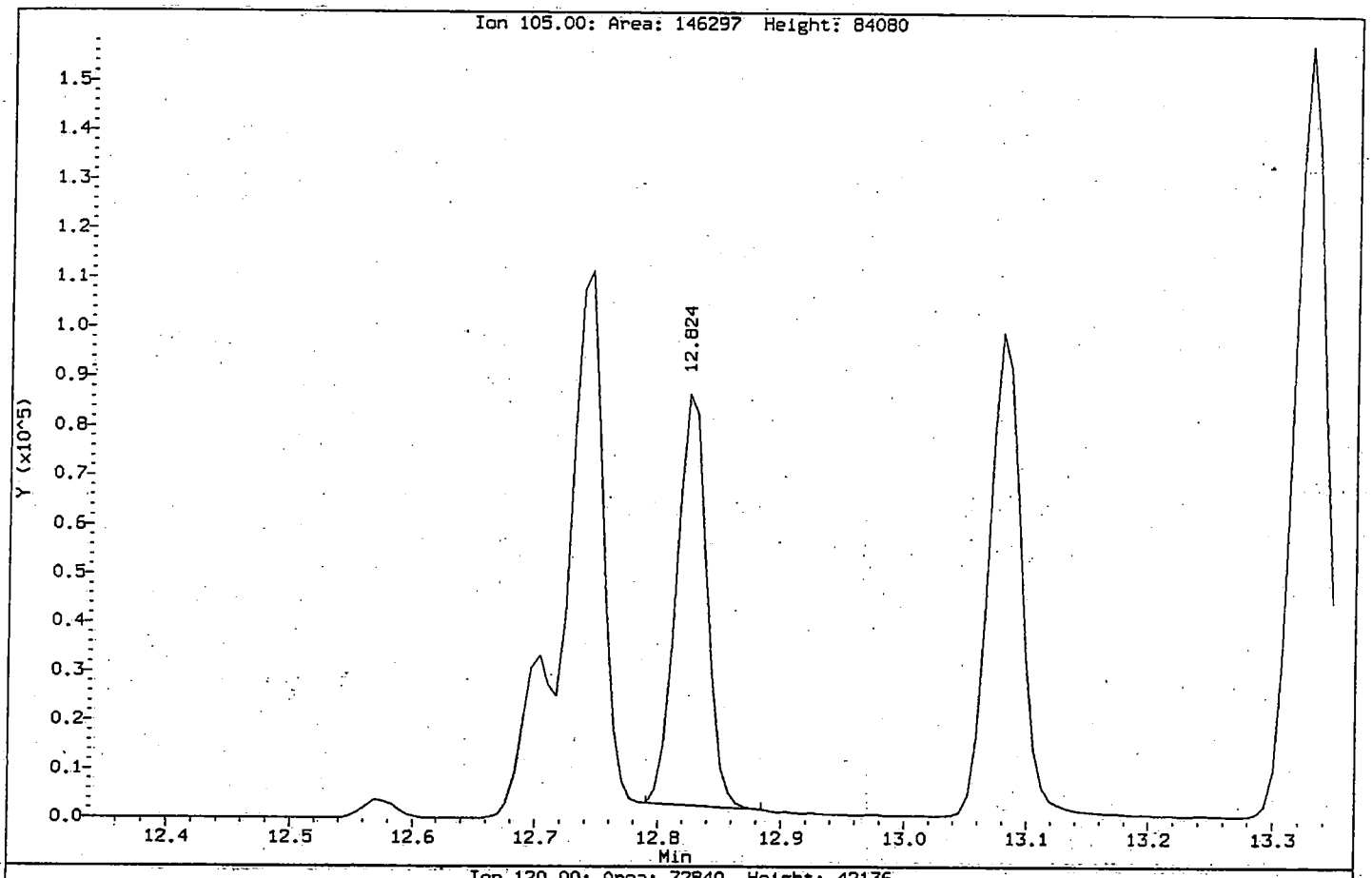
000059

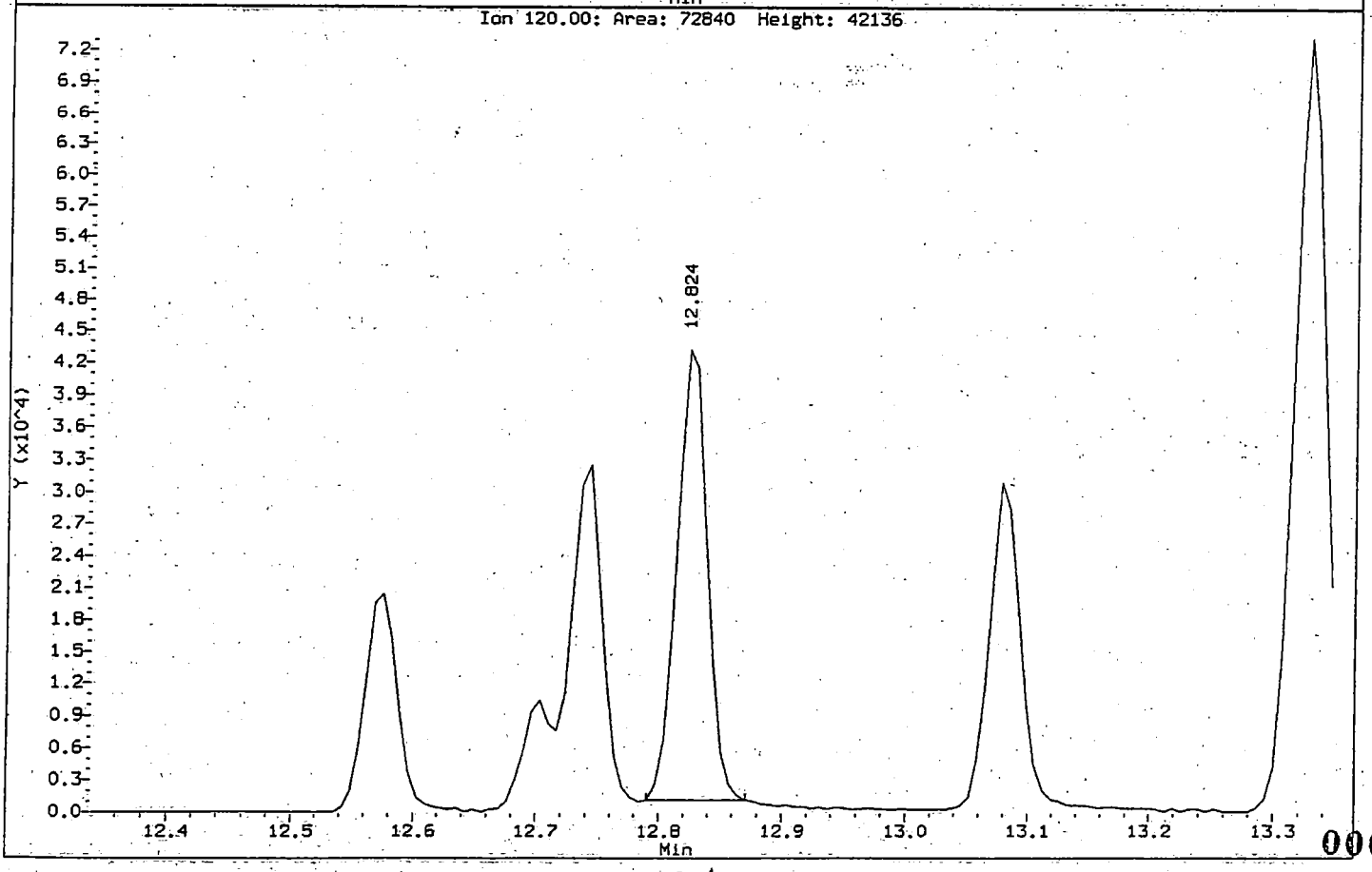
After

MTG 9/18/01

Data File: /chem/10msv09.i/RFW48288-0910.b/25311.d
Injection Date: 10-SEP-2001 12:27
Instrument: 10msv09.i
Client Sample ID: SG05

Compound: 1,3,5-Trimethylbenzene
CAS Number: 108-67-8





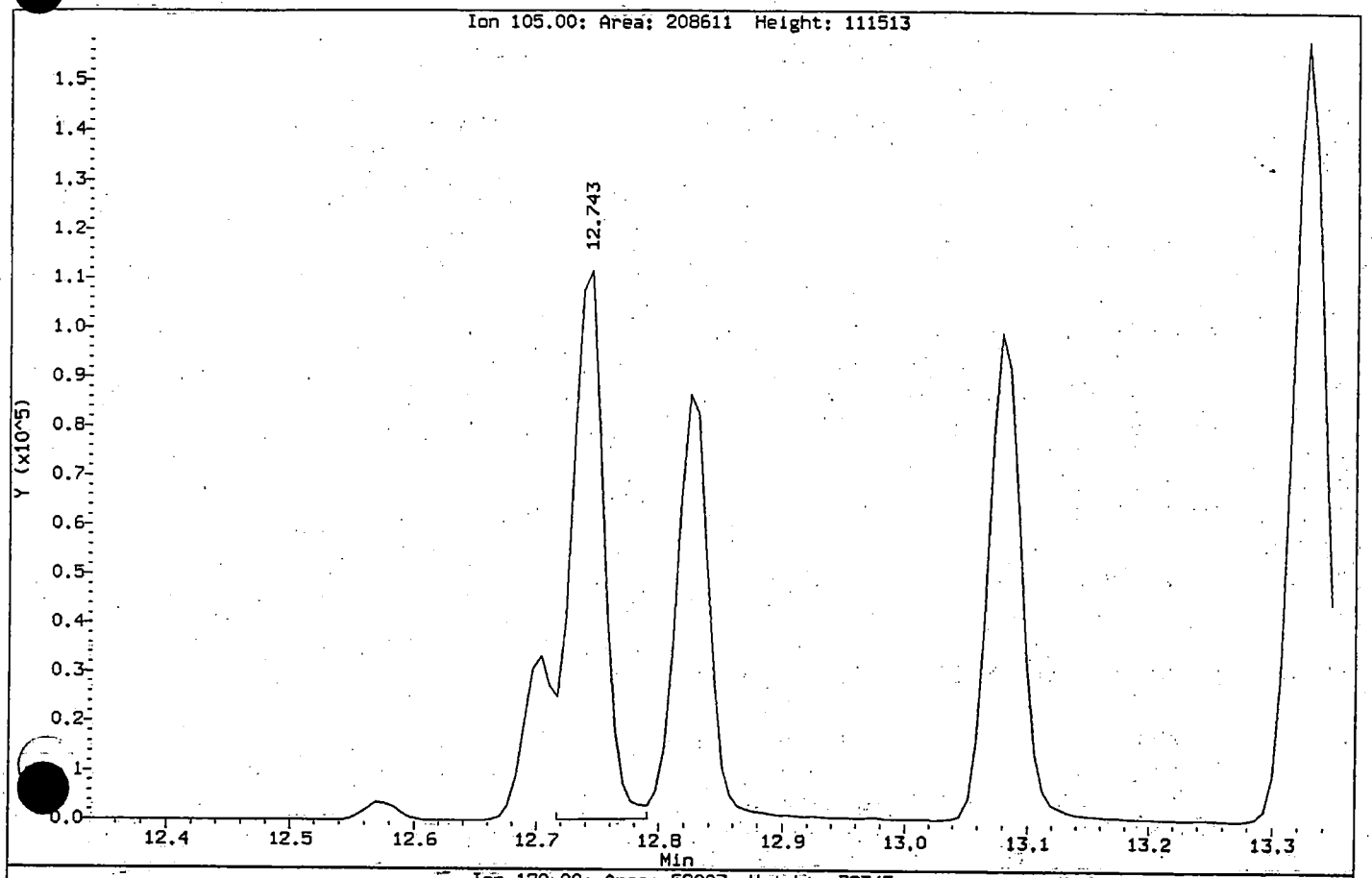
000060

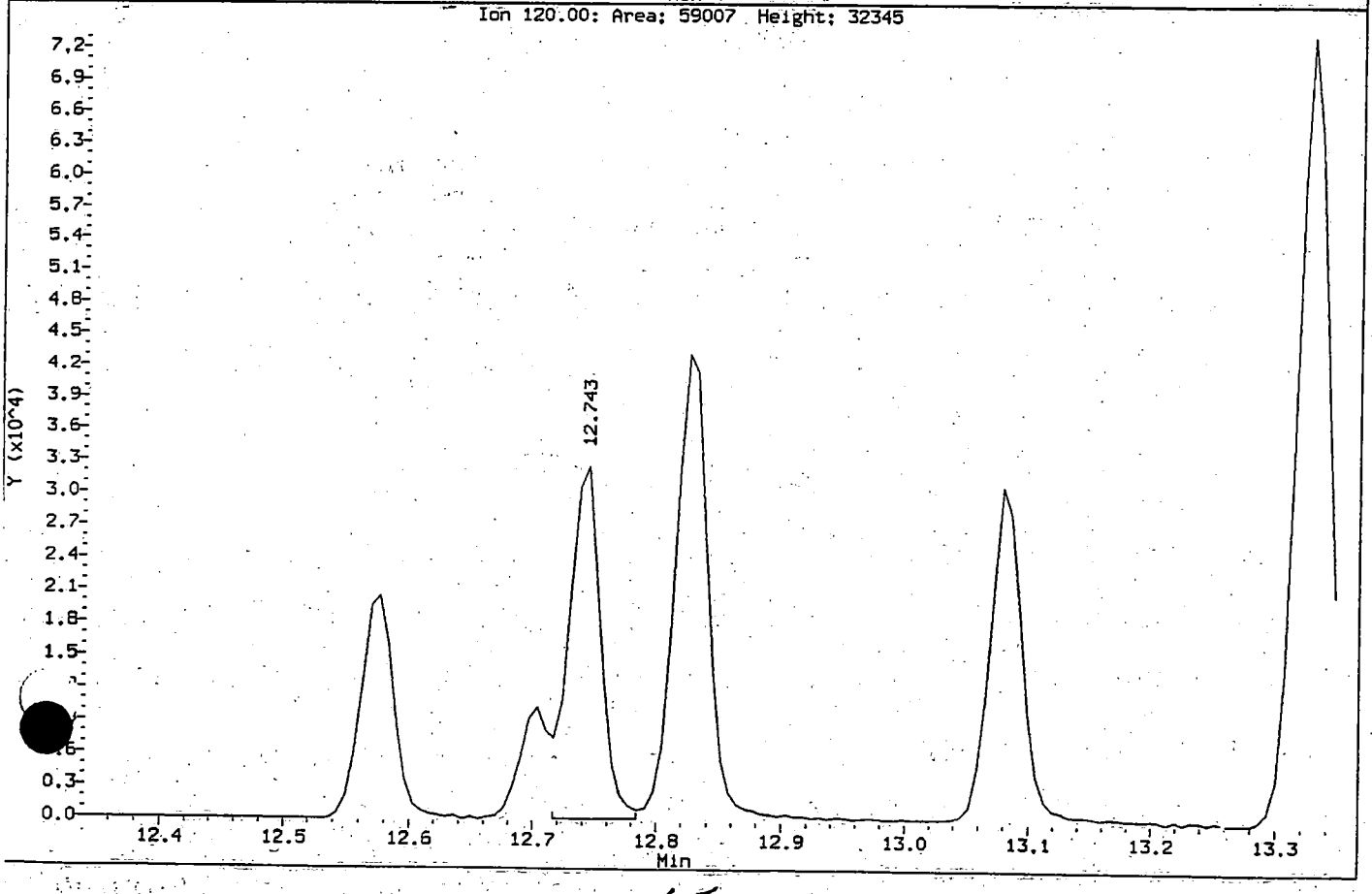
G4

Data File: /chem/10msv09.i/RFW48288-0910.b/25311.d
Injection Date: 10-SEP-2001 12:27
Instrument: 10msv09.i
Client Sample ID: SG05

Before
MTC 9/18/01

und: 1,3,5-Trimethylbenzene
umber: 108-67-8





Pace Analytical Services, Inc.

PACE, Inc. Air Analytical Laboratory

Data file : /chem/10msv09.i/RFW48288-0910.b/25312.d
Lab Smp Id: 102962198DL Client Smp ID: SG05DL
Inj Date : 10-SEP-2001 12:56
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0910.b/TO14LP227.m
Meth Date : 18-Sep-2001 13:53 mgurnsey Quant Type: ESTD
Cal Date : 15-AUG-2001 07:46 Cal File: 22706.d
Als bottle: 11
Dil Factor: 6.70000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	6.70000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppmv)	FINAL (ppmv)
17 Benzene	78	6.734	6.751	-0.017	97718	0.24462	1.64

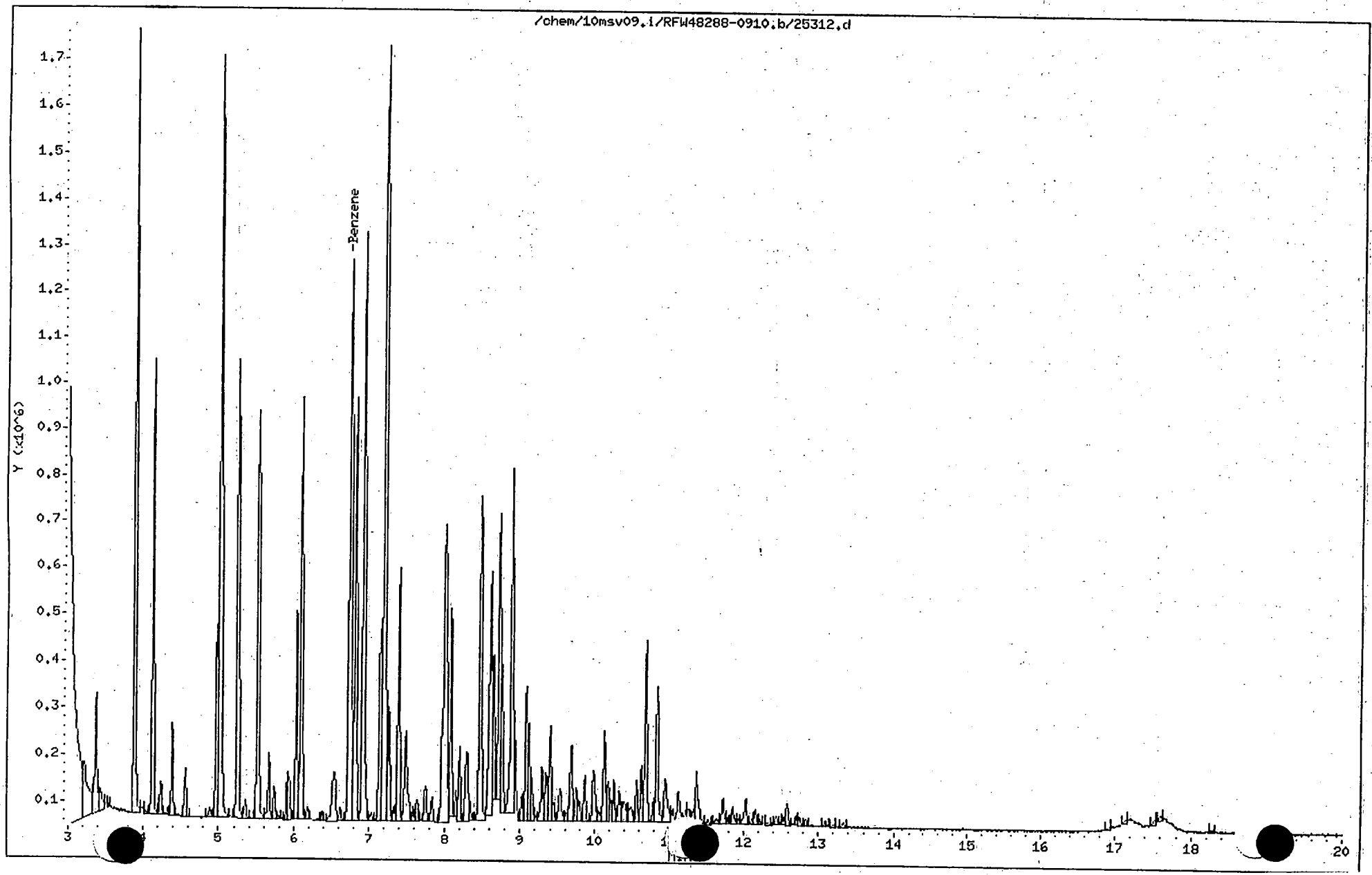
Data File: /chem/10msv09.i/RFW48288-0910.b/25312.d
Date : 10-SEP-2001 12:56
Client ID: SG05DL
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

000063



Data File: /chem/10msv09.i/RFW48288-0910.b/25312.d

Date : 10-SEP-2001 12:56

Client ID: SG05DL

Instrument: 10msv09.i

Sample Info:

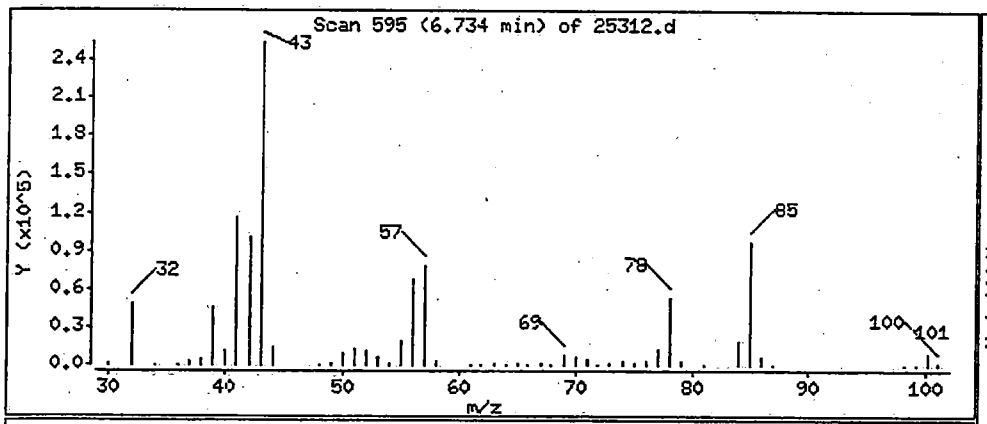
Operator: mtg

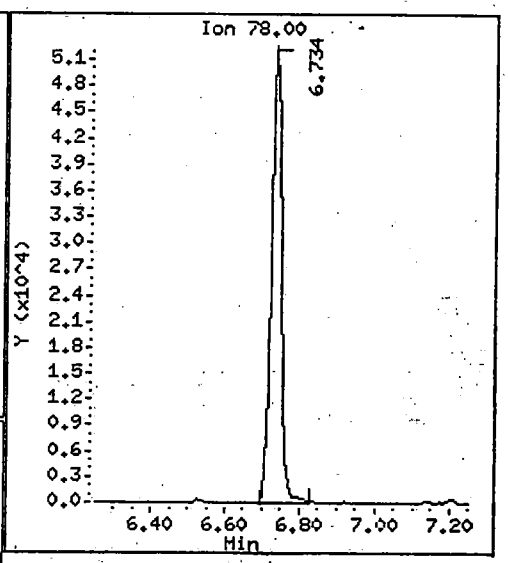
Column phase: J&W DB-5

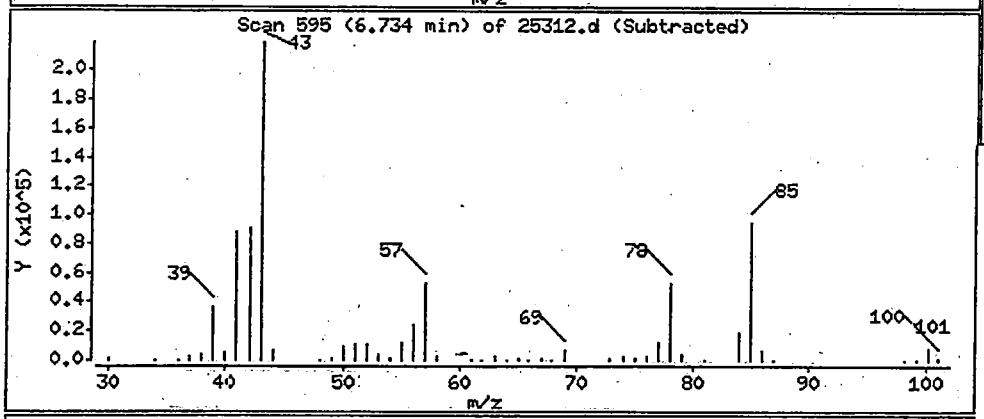
Column diameter: 0.32

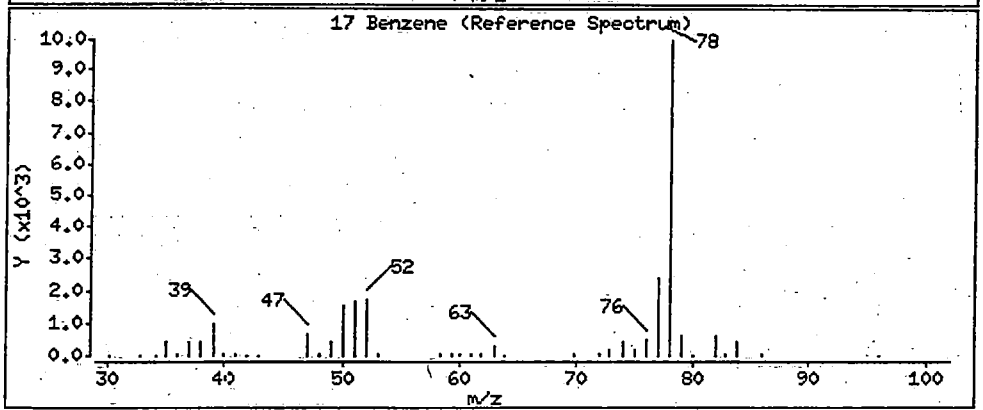
17 Benzene

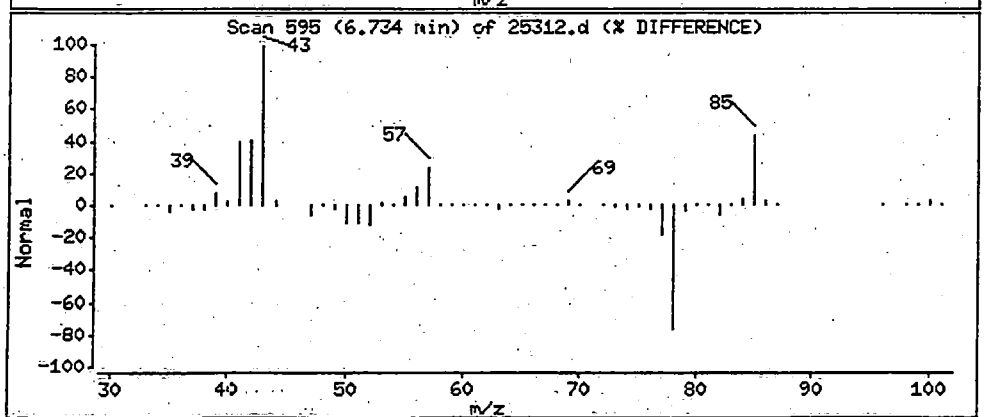
Concentration: 1.64 ppmv











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www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962206 Project Sample Number: 1048288-006 Date Collected: 08/29/01 00:00
Client Sample ID: SG06 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	13.	09/12/01 16:23	MTG	75-71-8		
Chloromethane	ND	ppbv	13.	09/12/01 16:23	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	15.	09/12/01 16:23	MTG	76-14-2		
Vinyl chloride	ND	ppbv	13.	09/12/01 16:23	MTG	75-01-4		
Bromomethane	ND	ppbv	13.	09/12/01 16:23	MTG	74-83-9		
Chloroethane	ND	ppbv	13.	09/12/01 16:23	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	14.	09/12/01 16:23	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	13.	09/12/01 16:23	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	14.	09/12/01 16:23	MTG	76-13-1		
Methylene chloride	ND	ppbv	13.	09/12/01 16:23	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	13.	09/12/01 16:23	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	13.	09/12/01 16:23	MTG	156-59-2		
Chloroform	ND	ppbv	13.	09/12/01 16:23	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	12.	09/12/01 16:23	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	11.	09/12/01 16:23	MTG	107-06-2		
Benzene	ND	ppbv	12.	09/12/01 16:23	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	11.	09/12/01 16:23	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	9.9	09/12/01 16:23	MTG	78-87-5		
Trichloroethene	ND	ppbv	11.	09/12/01 16:23	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 16:23	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 16:23	MTG	10061-02-6		
Toluene	ND	ppbv	13.	09/12/01 16:23	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	12.	09/12/01 16:23	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	12.	09/12/01 16:23	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	13.	09/12/01 16:23	MTG	127-18-4		
Chlorobenzene	ND	ppbv	11.	09/12/01 16:23	MTG	108-90-7		
Ethylbenzene	ND	ppbv	11.	09/12/01 16:23	MTG	100-41-4		
m&p-Xylene	ND	ppbv	11.	09/12/01 16:23	MTG			
o-Xylene	ND	ppbv	10.	09/12/01 16:23	MTG	95-47-6		
Styrene	ND	ppbv	11.	09/12/01 16:23	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	10.	09/12/01 16:23	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	13.	09/12/01 16:23	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	13.	09/12/01 16:23	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	8.0	09/12/01 16:23	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	8.0	09/12/01 16:23	MTG	106-46-7		

DYP 9/19/01

Date: 09/18/01

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962206 Project Sample Number: 1048288-006 Date Collected: 08/29/01 00:00
Client Sample ID: SG06 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	13.	09/12/01 16:23 MTG	95-50-1		
1,2,4-Trichlorobenzene	~~ND~~ R	ppbv	~~5.6~~	09/12/01 16:23 MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	3.5	09/12/01 16:23 MTG	87-68-3		

Date: 09/18/01

9/19/01 DWP

REPORT OF LABORATORY ANALYSIS

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Data file : /chem/10msv09.i/RFW48288-0912.b/25514.d
Lab Smp Id: 102962206 Client Smp ID: SG06
Inj Date : 12-SEP-2001 16:23
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 13
Dil Factor: 26.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	26.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	6.938	6.939	(1.000)	2030233	10.0000	
* 41 p-Bromofluorobenzene	95	12.019	12.020	(1.000)	1263979	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25514.d
Lab Smp Id: 102962206
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: SG06
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2030233	-12.19
41 p-Bromofluorobenz	1338999	669500	2677998	1263979	-5.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.94	-0.14
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

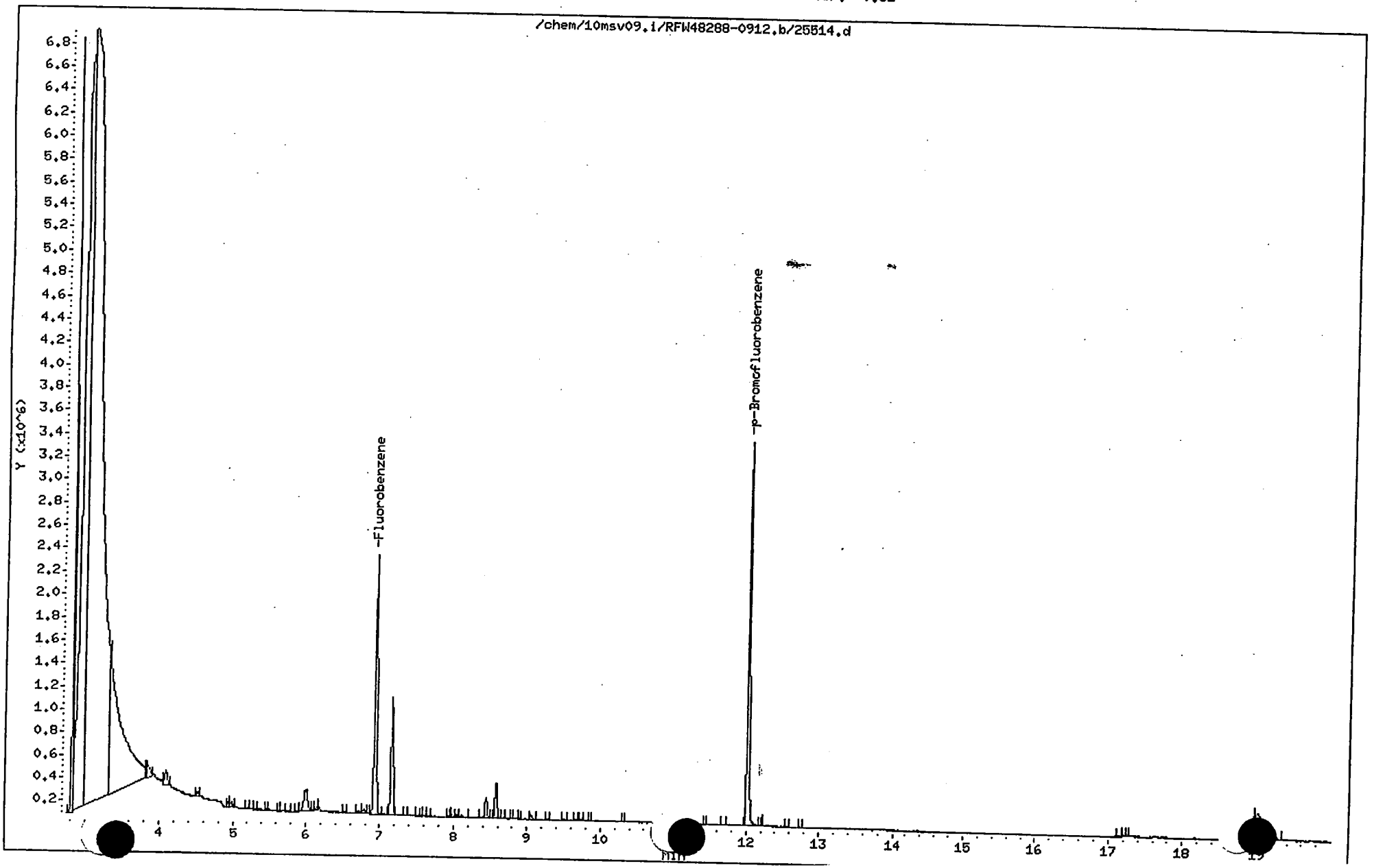
Data File: /chem/10msv09.i/RFW48288-0912.b/25514.d
Date : 12-SEP-2001 16:23
Client ID: SC06
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

000069



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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROYFWESTON SAMPLE NO.

SG06DUP

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix: (soil/water) AIR Lab Sample ID: 102987351

Sample wt/vol: _____ (g/mL) ML Lab File ID: 25515

Level: (low/med) LOW Date Received: 08/31/01

% Moisture: not dec. _____ Date Analyzed: 09/12/01

GC Column: J&W DB-5 ID: 0.32 (mm) Dilution Factor: 26.8

Soil Extract Volume:_____(uL) Soil Aliquot Volume:_____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	13.4	U
74-87-3	Chloromethane	12.9	U
75-01-4	Vinyl Chloride	13.4	U
74-83-9	Bromomethane	13.4	U
75-00-3	Chloroethane	13.4	U
75-69-4	Trichlorofluoromethane	13.9	U
75-35-4	1,1-Dichloroethene	12.9	U
75-09-2	Methylene Chloride	13.4	U
75-34-3	1,1-Dichloroethane	12.9	U
156-59-2	cis-1,2-Dichloroethene	12.9	U
67-66-3	Chloroform	12.9	U
71-55-6	1,1,1-Trichloroethane	11.5	U
56-23-5	Carbon Tetrachloride	11.2	U
71-43-2	Benzene	11.5	U
107-06-2	1,2-Dichloroethane	10.7	U
79-01-6	Trichloroethene	11.0	U
78-87-5	1,2-Dichloropropane	9.92	U
108-88-3	Toluene	12.9	U
79-00-5	1,1,2-Trichloroethane	11.8	U
127-18-4	Tetrachloroethene	12.9	U
106-93-4	1,2-Dibromoethane	11.5	U
108-90-7	Chlorobenzene	11.2	U
100-41-4	Ethyl Benzene	11.2	U
7816-60-0	m&p-Xylene	10.7	U
95-47-6	o-Xylene	10.2	U
100-42-5	Styrene	10.7	U
79-34-5	1,1,2,2-Tetrachloroethane	10.2	U
108-67-8	1,3,5-Trimethylbenzene	12.9	U
95-63-6	1,2,4-Trimethylbenzene	12.9	U
541-73-1	1,3-Dichlorobenzene	8.04	U
106-46-7	1,4-Dichlorobenzene	8.04	U
95-50-1	1,2-Dichlorobenzene	12.9	U
95-63-6	1,2,4-Trichlorobenzene	~~5.63~~	~~U~~ R

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROYFWESTON SAMPLE NO.

SG06DUP

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix: (soil/water) AIR Lab Sample ID: 102987351

Sample wt/vol: _____ (g/mL) ML Lab File ID: 25515

Level: (low/med) LOW Date Received: 08/31/01

% Moisture: not dec. _____ Date Analyzed: 09/12/01

GC Column: J&W DB-5 ID: 0.32 (mm) Dilution Factor: 26.8

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	3.48	U
76-14-2	Dichlorotetrafluoroethane	15.3	U
76-13-1	Freon 113	14.2	U
10061-01-5	cis-1,3-Dichloropropene	12.9	U
10061-02-6	trans-1,3-Dichloropropene	13.4	U
100-44-7	Benzyl Chloride	12.9	U

Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv09.i/RFW48288-0912.b/25515.d
Lab Smp Id: 102987351 Client Smp ID: SG06DUP
Inj Date : 12-SEP-2001 16:53
Operator : mtg Inst ID: 10msv09.i
Smp Info : DUP
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 14
Dil Factor: 26.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	26.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	6.951	6.939	(1.000)	2030982	10.0000	
* 41 p-Bromofluorobenzene	95	12.026	12.020	(1.000)	1080527	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25515.d
Lab Smp Id: 102987351
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: SG06DUP
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2030982	-12.16
41 p-Bromofluorobenz	1338999	669500	2677998	1080527	-19.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.95	0.04
41 p-Bromofluorobenz	12.02	11.52	12.52	12.03	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

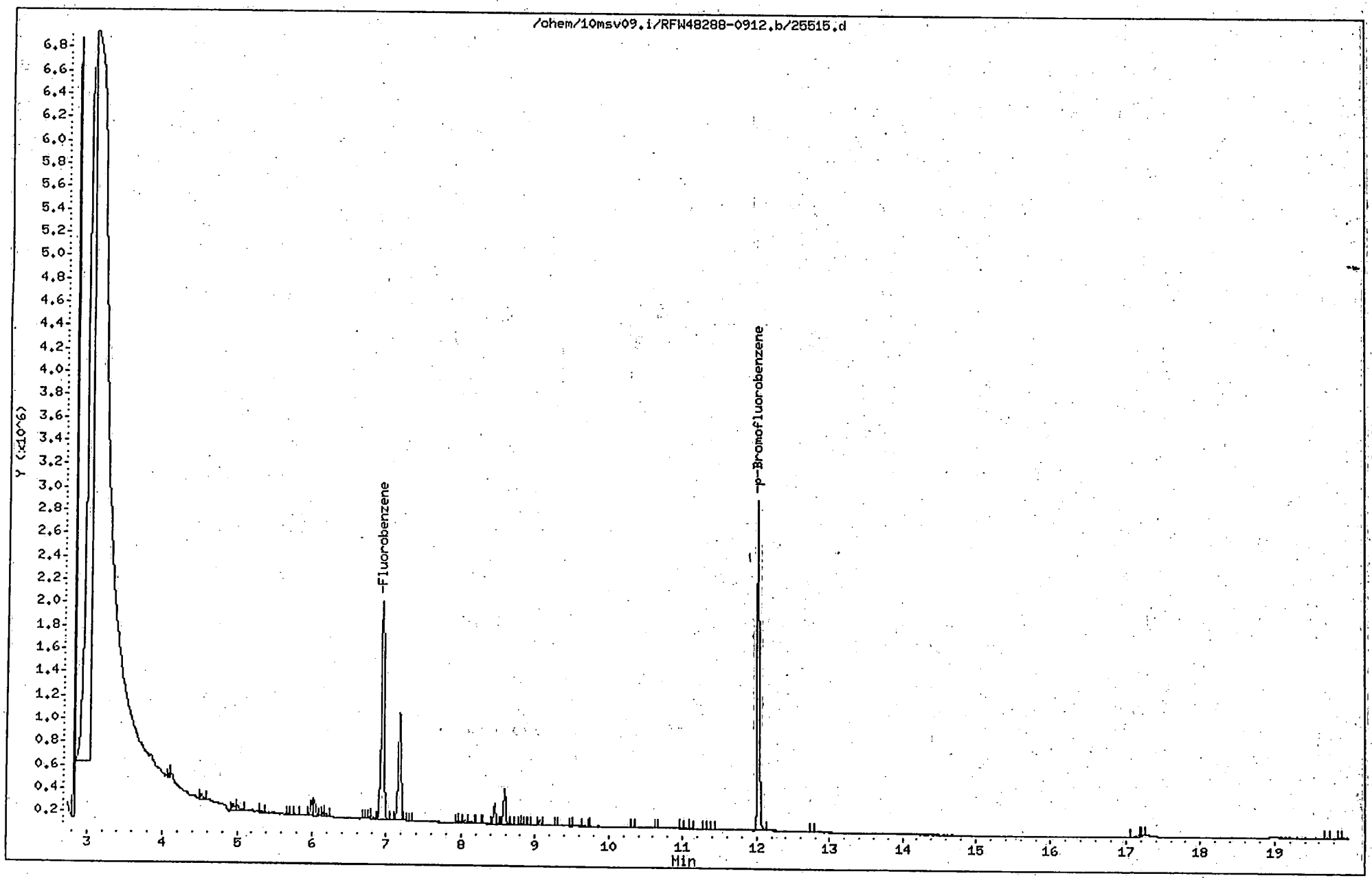
470074

Data File: /chem/10msv09.i/RFW48288-0912.b/25515.d
Date : 12-SEP-2001 16:53
Client ID: SG06DUP
Sample Info: DUP

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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1700 Elm Street, Suite 200
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Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962214 Project Sample Number: 1048288-007 Date Collected: 08/29/01 00:00
Client Sample ID: SG07 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	14.	09/12/01 20:26	MTG	75-71-8		
Chloromethane	ND	ppbv	13.	09/12/01 20:26	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	16.	09/12/01 20:26	MTG	76-14-2		
Vinyl chloride	ND	ppbv	14.	09/12/01 20:26	MTG	75-01-4		
Bromomethane	ND	ppbv	14.	09/12/01 20:26	MTG	74-83-9		
Chloroethane	ND	ppbv	14.	09/12/01 20:26	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	14.	09/12/01 20:26	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	13.	09/12/01 20:26	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	15.	09/12/01 20:26	MTG	76-13-1		
Methylene chloride	ND	ppbv	14.	09/12/01 20:26	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	13.	09/12/01 20:26	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	13.	09/12/01 20:26	MTG	156-59-2		
Chloroform	ND	ppbv	13.	09/12/01 20:26	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	12.	09/12/01 20:26	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	11.	09/12/01 20:26	MTG	107-06-2		
Benzene	ND	ppbv	12.	09/12/01 20:26	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	12.	09/12/01 20:26	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	10.	09/12/01 20:26	MTG	78-87-5		
Trichloroethene	ND	ppbv	11.	09/12/01 20:26	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 20:26	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	14.	09/12/01 20:26	MTG	10061-02-6		
Toluene	ND	ppbv	13.	09/12/01 20:26	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	12.	09/12/01 20:26	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	12.	09/12/01 20:26	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	13.	09/12/01 20:26	MTG	127-18-4		
Chlorobenzene	ND	ppbv	12.	09/12/01 20:26	MTG	108-90-7		
Ethylbenzene	ND	ppbv	12.	09/12/01 20:26	MTG	100-41-4		
m&p-Xylene	ND	ppbv	11.	09/12/01 20:26	MTG			
o-Xylene	ND	ppbv	10.	09/12/01 20:26	MTG	95-47-6		
Styrene	ND	ppbv	11.	09/12/01 20:26	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	10.	09/12/01 20:26	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	13.	09/12/01 20:26	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	13.	09/12/01 20:26	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	8.3	09/12/01 20:26	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	8.3	09/12/01 20:26	MTG	106-46-7		

ok 9/19/01

Date: 09/18/01

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.644

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962214 Project Sample Number: 1048288-007 Date Collected: 08/29/01 00:00
Client Sample ID: SG07 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	13.	09/12/01 20:26 MTG	95-50-1		
1,2,4-Trichlorobenzene	~~ND~~ R	ppbv	~~5.8~~	09/12/01 20:26 MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	3.6	09/12/01 20:26 MTG	87-68-3		

DKP 9/19/01

Date: 09/18/01

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REPORT OF LABORATORY ANALYSIS

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Data file : /chem/10msv09.i/RFW48288-0912.b/25522.d
Lab Smp Id: 102962214 Client Smp ID: SG07
Inj Date : 12-SEP-2001 20:26
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 21
Dil Factor: 27.60000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	27.60000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	6.928	6.939	(1.000)	2414433	10.0000	
* 41 p-Bromofluorobenzene	95	12.016	12.020	(1.000)	1182606	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25522.d
Lab Smp Id: 102962214
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: SG07
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2414433	4.42
41 p-Bromofluorobenz	1338999	669500	2677998	1182606	-11.68

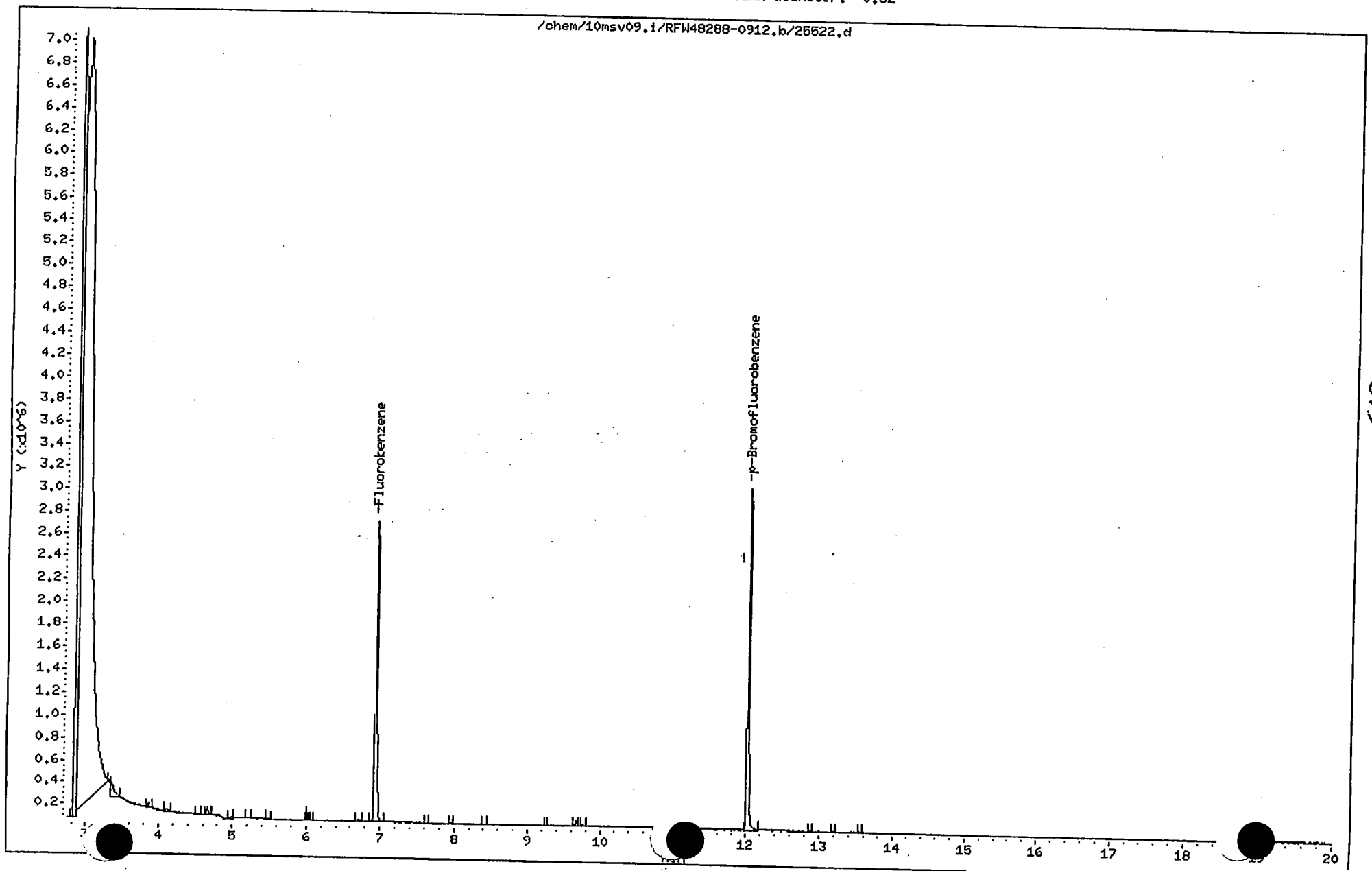
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.93	-0.29
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv09.i/RFW48288-0912.b/25522.d
Date : 12-SEP-2001 20:26
Client ID: SG07
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column phase: J&W DB-5
Column diameter: 0.32



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1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962222 Project Sample Number: 1048288-008 Date Collected: 08/29/01 00:00
Client Sample ID: SG08 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	13.	09/12/01 15:54	MTG	75-71-8		
Chloromethane	ND	ppbv	13.	09/12/01 15:54	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	15.	09/12/01 15:54	MTG	76-14-2		
Vinyl chloride	ND	ppbv	13.	09/12/01 15:54	MTG	75-01-4		
Bromomethane	ND	ppbv	13.	09/12/01 15:54	MTG	74-83-9		
Chloroethane	ND	ppbv	13.	09/12/01 15:54	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	14.	09/12/01 15:54	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	13.	09/12/01 15:54	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	14.	09/12/01 15:54	MTG	76-13-1		
Methylene chloride	ND	ppbv	13.	09/12/01 15:54	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	13.	09/12/01 15:54	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	13.	09/12/01 15:54	MTG	156-59-2		
Chloroform	ND	ppbv	13.	09/12/01 15:54	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	12.	09/12/01 15:54	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	11.	09/12/01 15:54	MTG	107-06-2		
Benzene	ND	ppbv	12.	09/12/01 15:54	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	11.	09/12/01 15:54	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	9.9	09/12/01 15:54	MTG	78-87-5		
Trichloroethene	ND	ppbv	11.	09/12/01 15:54	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 15:54	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 15:54	MTG	10061-02-6		
Toluene	ND	ppbv	13.	09/12/01 15:54	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	12.	09/12/01 15:54	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	12.	09/12/01 15:54	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	13.	09/12/01 15:54	MTG	127-18-4		
Chlorobenzene	ND	ppbv	11.	09/12/01 15:54	MTG	108-90-7		
Ethylbenzene	ND	ppbv	11.	09/12/01 15:54	MTG	100-41-4		
m&p-Xylene	ND	ppbv	11.	09/12/01 15:54	MTG			
o-Xylene	ND	ppbv	10.	09/12/01 15:54	MTG	95-47-6		
Styrene	ND	ppbv	11.	09/12/01 15:54	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	10.	09/12/01 15:54	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	13.	09/12/01 15:54	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	13.	09/12/01 15:54	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	8.0	09/12/01 15:54	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	8.0	09/12/01 15:54	MTG	106-46-7		

PKP 9/19/01

Date: 09/18/01

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Phone: 612.607.1700
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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962222 Project Sample Number: 1048288-008 Date Collected: 08/29/01 00:00
Client Sample ID: SG08 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	13.	09/12/01 15:54	MTG	95-50-1		
1,2,4-Trichlorobenzene	~~ND~~ R	ppbv	~~5.6~~	09/12/01 15:54	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	3.5	09/12/01 15:54	MTG	87-68-3		

DKP 9/19/01

Date: 09/18/01

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Data file : /chem/10msv09.i/RFW48288-0912.b/25513.d
Lab Smp Id: 102962222 Client Smp ID: SG08
Inj Date : 12-SEP-2001 15:54
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 12
Dil Factor: 26.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	26.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	6.935	6.939	(1.000)	2010573	10.0000	
* 41 p-Bromofluorobenzene	95	12.023	12.020	(1.000)	1147041	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25513.d
Lab Smp Id: 102962222
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: SG08
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2010573	-13.05
41 p-Bromofluorobenz	1338999	669500	2677998	1147041	-14.34

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.93	-0.20
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	0.00

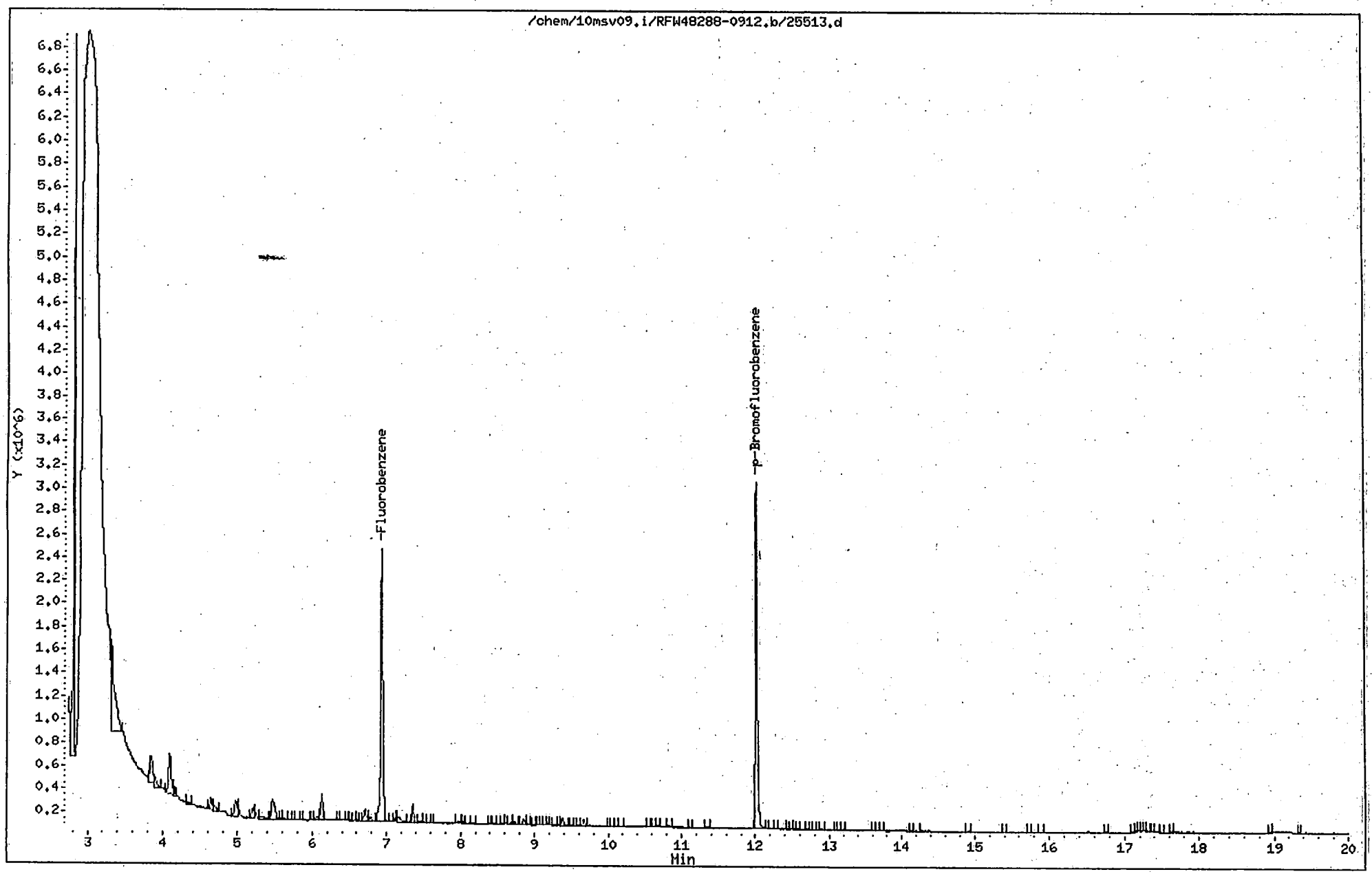
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv09.i/RFW48288-0912.b/25513.d
Date : 12-SEP-2001 15:54
Client ID: SG08
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962230 Project Sample Number: 1048288-009 Date Collected: 08/29/01 00:00
Client Sample ID: SG09 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	13.	09/12/01 15:24	MTG	75-71-8		
Chloromethane	ND	ppbv	13.	09/12/01 15:24	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	15.	09/12/01 15:24	MTG	76-14-2		
Vinyl chloride	ND	ppbv	13.	09/12/01 15:24	MTG	75-01-4		
Bromomethane	ND	ppbv	13.	09/12/01 15:24	MTG	74-83-9		
Chloroethane	ND	ppbv	13.	09/12/01 15:24	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	14.	09/12/01 15:24	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	13.	09/12/01 15:24	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	14.	09/12/01 15:24	MTG	76-13-1		
Methylene chloride	ND	ppbv	13.	09/12/01 15:24	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	13.	09/12/01 15:24	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	13.	09/12/01 15:24	MTG	156-59-2		
Chloroform	ND	ppbv	13.	09/12/01 15:24	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	12.	09/12/01 15:24	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	11.	09/12/01 15:24	MTG	107-06-2		
Benzene	ND	ppbv	12.	09/12/01 15:24	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	11.	09/12/01 15:24	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	9.9	09/12/01 15:24	MTG	78-87-5		
Trichloroethene	ND	ppbv	11.	09/12/01 15:24	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 15:24	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 15:24	MTG	10061-02-6		
Toluene	ND	ppbv	13.	09/12/01 15:24	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	12.	09/12/01 15:24	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	12.	09/12/01 15:24	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	13.	09/12/01 15:24	MTG	127-18-4		
Chlorobenzene	ND	ppbv	11.	09/12/01 15:24	MTG	108-90-7		
Ethylbenzene	ND	ppbv	11.	09/12/01 15:24	MTG	100-41-4		
m&p-Xylene	ND	ppbv	11.	09/12/01 15:24	MTG			
o-Xylene	ND	ppbv	10.	09/12/01 15:24	MTG	95-47-6		
Styrene	ND	ppbv	11.	09/12/01 15:24	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	10.	09/12/01 15:24	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	13.	09/12/01 15:24	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	13.	09/12/01 15:24	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	8.0	09/12/01 15:24	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	8.0	09/12/01 15:24	MTG	106-46-7		

Date: 09/18/01

PKP 9/19/01

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Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962230 Project Sample Number: 1048288-009 Date Collected: 08/29/01 00:00
Client Sample ID: SG09 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	13.	09/12/01 15:24	MTG	95-50-1		
1,2,4-Trichlorobenzene	~~ND~~ R	ppbv	~~5.6~~	09/12/01 15:24	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	3.5	09/12/01 15:24	MTG	87-68-3		

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Date: 09/18/01

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Data file : /chem/10msv09.i/RFW48288-0912.b/25512.d
Lab Smp Id: 102962230 Client Smp ID: SG09
Inj Date : 12-SEP-2001 15:24
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 11
Dil Factor: 26.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	26.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	6.939	6.939	(1.000)	2052291	10.0000	
* 41 p-Bromofluorobenzene	95	12.020	12.020	(1.000)	1167903	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25512.d
Lab Smp Id: 102962230
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: SG09
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2052291	-11.24
41 p-Bromofluorobenz	1338999	669500	2677998	1167903	-12.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.94	-0.14
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	-0.02

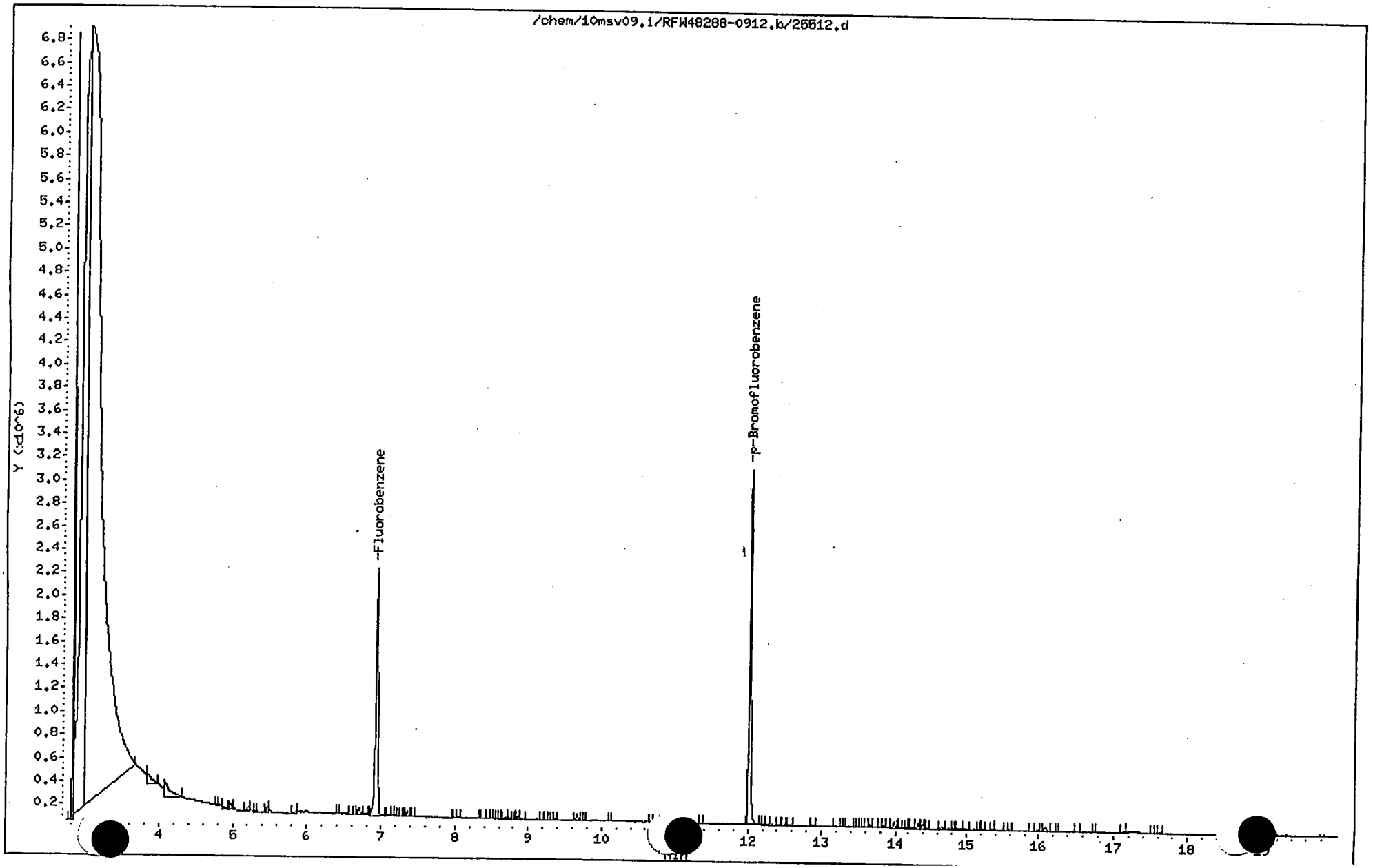
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv09.i/RFW48288-0912.b/25512.d
Date : 12-SEP-2001 15:24
Client ID: SG09
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962248 Project Sample Number: 1048288-010 Date Collected: 08/29/01 00:00
Client Sample ID: SG10 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	13.	09/12/01 18:55	MTG	75-71-8		
Chloromethane	ND	ppbv	13.	09/12/01 18:55	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	15.	09/12/01 18:55	MTG	76-14-2		
Vinyl chloride	ND	ppbv	13.	09/12/01 18:55	MTG	75-01-4		
Bromomethane	ND	ppbv	13.	09/12/01 18:55	MTG	74-83-9		
Chloroethane	ND	ppbv	13.	09/12/01 18:55	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	14.	09/12/01 18:55	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	13.	09/12/01 18:55	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	14.	09/12/01 18:55	MTG	76-13-1		
Methylene chloride	ND	ppbv	13.	09/12/01 18:55	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	13.	09/12/01 18:55	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	13.	09/12/01 18:55	MTG	156-59-2		
Chloroform	ND	ppbv	13.	09/12/01 18:55	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	12.	09/12/01 18:55	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	11.	09/12/01 18:55	MTG	107-06-2		
Benzene	ND	ppbv	12.	09/12/01 18:55	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	11.	09/12/01 18:55	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	9.9	09/12/01 18:55	MTG	78-87-5		
Trichloroethene	ND	ppbv	11.	09/12/01 18:55	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 18:55	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	13.	09/12/01 18:55	MTG	10061-02-6		
Toluene	ND	ppbv	13.	09/12/01 18:55	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	12.	09/12/01 18:55	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	12.	09/12/01 18:55	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	13.	09/12/01 18:55	MTG	127-18-4		
Chlorobenzene	ND	ppbv	11.	09/12/01 18:55	MTG	108-90-7		
Ethylbenzene	ND	ppbv	11.	09/12/01 18:55	MTG	100-41-4		
m&p-Xylene	ND	ppbv	11.	09/12/01 18:55	MTG			
o-Xylene	ND	ppbv	10.	09/12/01 18:55	MTG	95-47-6		
Styrene	ND	ppbv	11.	09/12/01 18:55	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	10.	09/12/01 18:55	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	13.	09/12/01 18:55	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	13.	09/12/01 18:55	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	8.0	09/12/01 18:55	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	8.0	09/12/01 18:55	MTG	106-46-7		

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962248 Project Sample Number: 1048288-010 Date Collected: 08/29/01 00:00
Client Sample ID: SG10 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	13.	09/12/01 18:55 MTG	95-50-1		
1,2,4-Trichlorobenzene	~~ND~~ R	ppbv	~~5.6~~	09/12/01 18:55 MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	3.5	09/12/01 18:55 MTG	87-68-3		

Date: 09/18/01

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Data file : /chem/10msv09.i/RFW48288-0912.b/25519.d
Lab Smp Id: 102962248 Client Smp ID: SG10
Inj Date : 12-SEP-2001 18:55
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 18
Dil Factor: 26.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	26.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	6.934	6.939	(1.000)	2105302	10.0000	
* 41 p-Bromofluorobenzene	95	12.021	12.020	(1.000)	1075659	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25519.d
Lab Smp Id: 102962248
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: SG10
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2105302	-8.95
41 p-Bromofluorobenz	1338999	669500	2677998	1075659	-19.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.93	-0.21
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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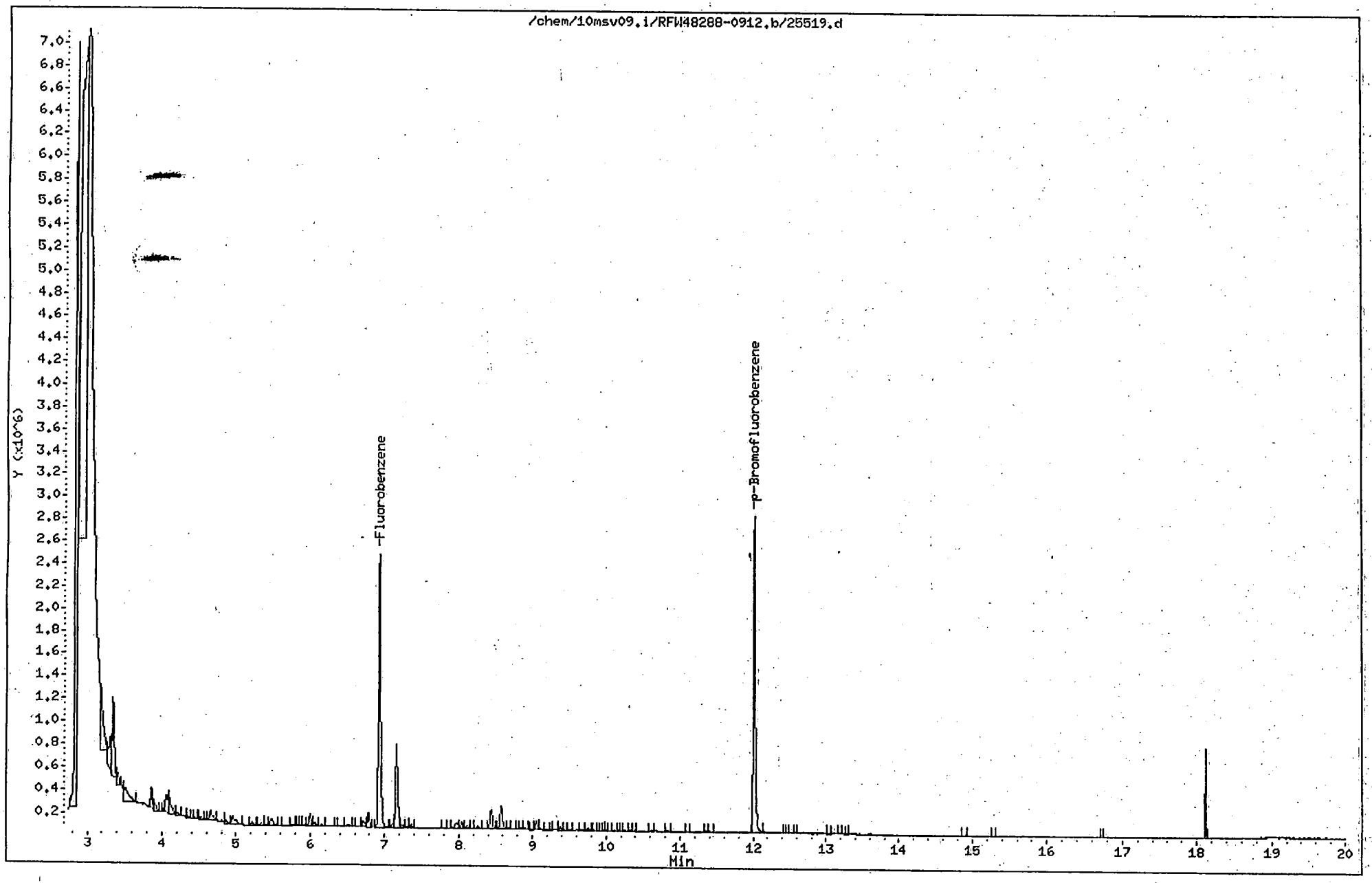
Data File: /chem/10msv09.i/RFW48288-0912.b/25519.d
Date : 12-SEP-2001 18:55
Client ID: SG10
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962255 Project Sample Number: 1048288-011 Date Collected: 08/29/01 00:00
Client Sample ID: SG11 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
Air							
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air						
Dichlorodifluoromethane	ND	ppbv	6.9	09/11/01 18:00 MTG	75-71-8		
Chloromethane	ND	ppbv	6.6	09/11/01 18:00 MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.9	09/11/01 18:00 MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.9	09/11/01 18:00 MTG	75-01-4		
Bromomethane	ND	ppbv	6.9	09/11/01 18:00 MTG	74-83-9		
Chloroethane	ND	ppbv	6.9	09/11/01 18:00 MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.2	09/11/01 18:00 MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.6	09/11/01 18:00 MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.3	09/11/01 18:00 MTG	76-13-1		
Methylene chloride	ND	ppbv	6.9 UJ	09/11/01 18:00 MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.6	09/11/01 18:00 MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.6	09/11/01 18:00 MTG	156-59-2		
Chloroform	ND	ppbv	6.6	09/11/01 18:00 MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.9	09/11/01 18:00 MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.5	09/11/01 18:00 MTG	107-06-2		
Benzene	ND	ppbv	5.9	09/11/01 18:00 MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.8	09/11/01 18:00 MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.1	09/11/01 18:00 MTG	78-87-5		
Trichloroethene	ND	ppbv	5.7	09/11/01 18:00 MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.6	09/11/01 18:00 MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.9	09/11/01 18:00 MTG	10061-02-6		
Toluene	ND	ppbv	6.6	09/11/01 18:00 MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.1	09/11/01 18:00 MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.9	09/11/01 18:00 MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.6 UJ	09/11/01 18:00 MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.8	09/11/01 18:00 MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.8	09/11/01 18:00 MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.5	09/11/01 18:00 MTG			
o-Xylene	ND	ppbv	5.2	09/11/01 18:00 MTG	95-47-6		
Styrene	ND	ppbv	5.5	09/11/01 18:00 MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.2	09/11/01 18:00 MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.6	09/11/01 18:00 MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.6	09/11/01 18:00 MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.1	09/11/01 18:00 MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.1	09/11/01 18:00 MTG	106-46-7		

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962255 Project Sample Number: 1048288-011 Date Collected: 08/29/01 00:00
Client Sample ID: SG11 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.6	09/11/01 18:00	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.9	09/11/01 18:00	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.8	09/11/01 18:00	MTG	87-68-3		

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Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0911.b/25420.d
Lab Smp Id: 102962255 Client Smp ID: SG11
Inj Date : 11-SEP-2001 18:00
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 19
Dil Factor: 13.80000
Integrator: HP RTE
Target Version: 3.50 Compound Sublist: to14.sub

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
23 Fluorobenzene	96	8.746	8.722	(1.000)	613301	10.0000	
41 p-Bromofluorobenzene	95	13.983	13.971	(1.000)	286398	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25420.d
Lab Smp Id: 102962255
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: SG11
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	613301	-24.49
41 p-Bromofluorobenz	471889	235944	943778	286398	-39.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.75	0.43
41 p-Bromofluorobenz	13.96	13.46	14.46	13.98	0.13

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

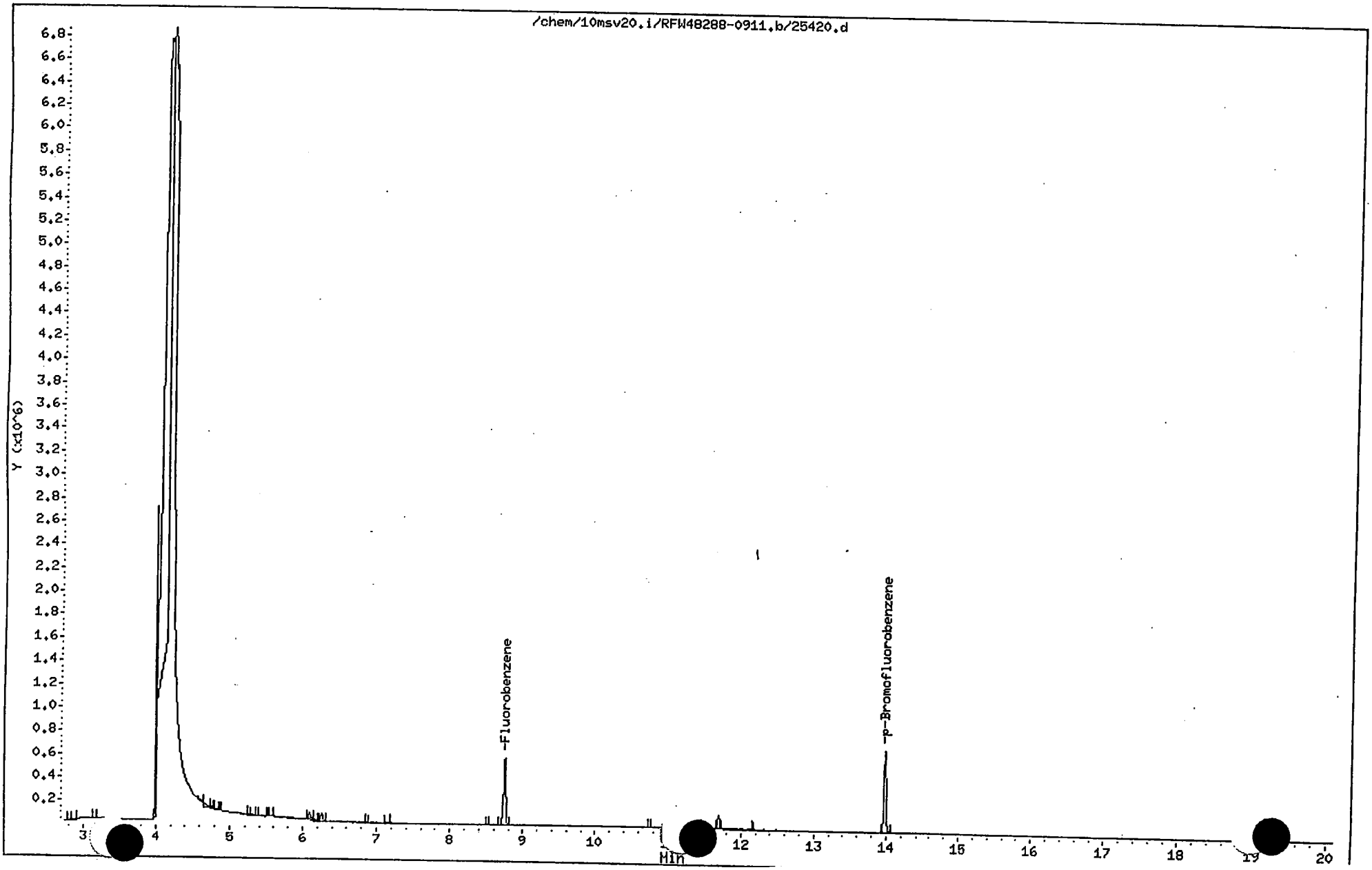
000099

Data File: /chem/10msv20.i/RFW48288-0911.b/25420.d
Date : 11-SEP-2001 18:00
Client ID: SG11
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962263 Project Sample Number: 1048288-012 Date Collected: 08/29/01 00:00
Client Sample ID: SG12 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.9	09/11/01 21:08	MTG	75-71-8		
Chloromethane	ND	ppbv	6.6	09/11/01 21:08	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.9	09/11/01 21:08	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.9	09/11/01 21:08	MTG	75-01-4		
Bromomethane	ND	ppbv	6.9	09/11/01 21:08	MTG	74-83-9		
Chloroethane	ND	ppbv	6.9	09/11/01 21:08	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.2	09/11/01 21:08	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.6	09/11/01 21:08	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.3	09/11/01 21:08	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.9 UJ	09/11/01 21:08	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.6	09/11/01 21:08	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.6	09/11/01 21:08	MTG	156-59-2		
Chloroform	ND	ppbv	6.6	09/11/01 21:08	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.9	09/11/01 21:08	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.5	09/11/01 21:08	MTG	107-06-2		
Benzene	ND	ppbv	5.9	09/11/01 21:08	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.8	09/11/01 21:08	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.1	09/11/01 21:08	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.7	09/11/01 21:08	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.6	09/11/01 21:08	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.9	09/11/01 21:08	MTG	10061-02-6		
Toluene	ND	ppbv	6.6	09/11/01 21:08	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.1	09/11/01 21:08	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.9	09/11/01 21:08	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.6 UJ	09/11/01 21:08	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.8	09/11/01 21:08	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.8	09/11/01 21:08	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.5	09/11/01 21:08	MTG			
o-Xylene	ND	ppbv	5.2	09/11/01 21:08	MTG	95-47-6		
Styrene	ND	ppbv	5.5	09/11/01 21:08	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.2	09/11/01 21:08	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.6	09/11/01 21:08	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.6	09/11/01 21:08	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.1	09/11/01 21:08	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.1	09/11/01 21:08	MTG	106-46-7		

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Date: 09/18/01

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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962263 Project Sample Number: 1048288-012 Date Collected: 08/29/01 00:00
Client Sample ID: SG12 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.6	09/11/01 21:08	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.9	09/11/01 21:08	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.8	09/11/01 21:08	MTG	87-68-3		

Date: 09/18/01

PKP 9/19/01

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Data file : /chem/10msv20.i/RFW48288-0911.b/25426.d
Lab Smp Id: 102962263 Client Smp ID: SG12
Inj Date : 11-SEP-2001 21:08
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 25
Dil Factor: 13.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.726	8.722	(1.000)	580520	10.0000	
* 41 p-Bromofluorobenzene	95	13.975	13.971	(1.000)	270079	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25426.d
Lab Smp Id: 102962263
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: SG12
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	580520	-28.53
41 p-Bromofluorobenz	471889	235944	943778	270079	-42.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.73	0.19
41 p-Bromofluorobenz	13.96	13.46	14.46	13.97	0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

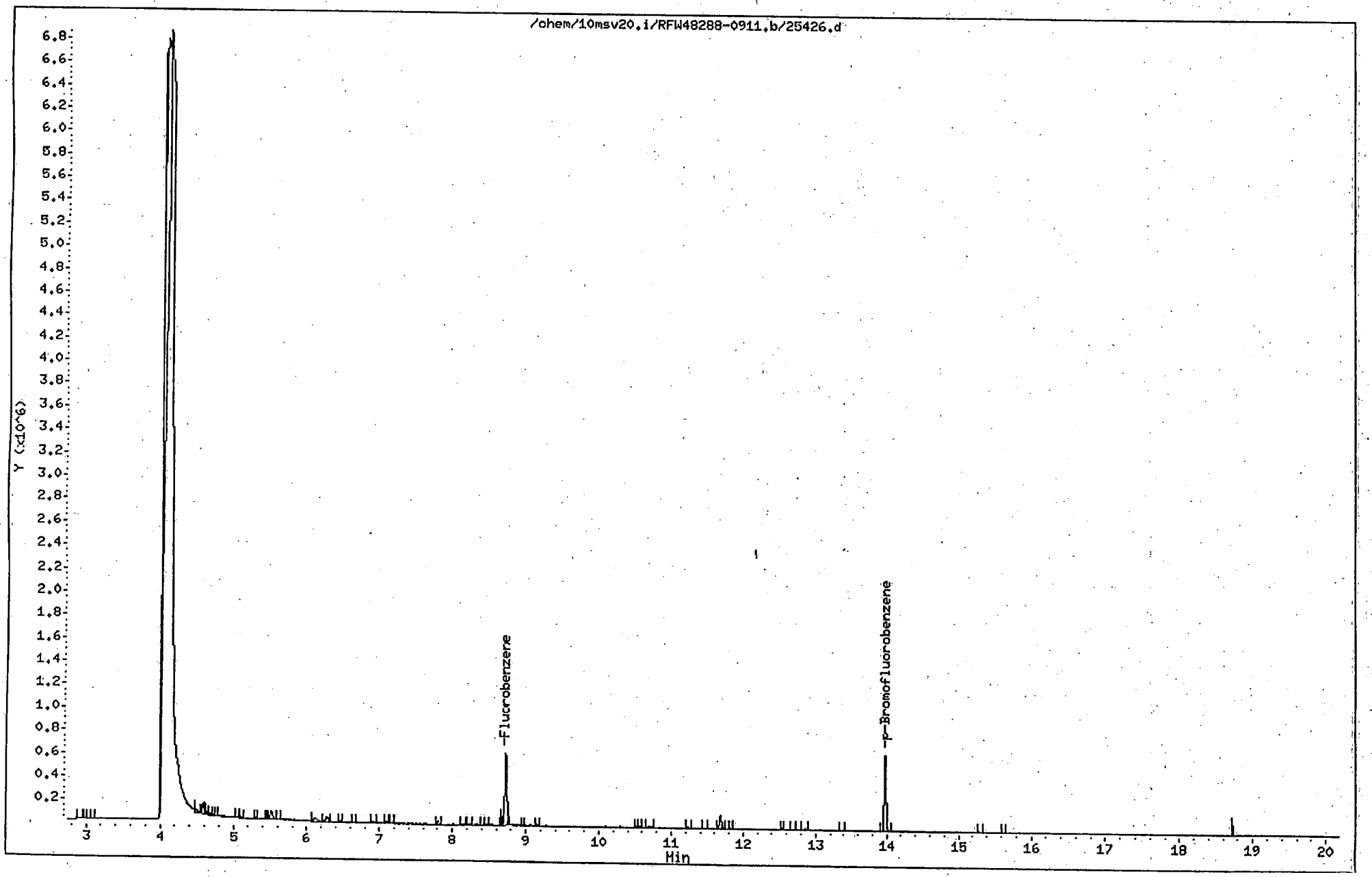
000104

Data File: /chem/10msv20.i/RFW48288-0911.b/25426.d
Date : 11-SEP-2001 21:08
Client ID: SC12
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962271 Project Sample Number: 1048288-013 Date Collected: 08/29/01 00:00
Client Sample ID: SG13 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	7.4	09/12/01 21:52	MTG	75-71-8		
Chloromethane	ND	ppbv	7.1	09/12/01 21:52	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	8.4	09/12/01 21:52	MTG	76-14-2		
Vinyl chloride	ND	ppbv	7.4	09/12/01 21:52	MTG	75-01-4		
Bromomethane	ND	ppbv	7.4	09/12/01 21:52	MTG	74-83-9		
Chloroethane	ND	ppbv	7.4	09/12/01 21:52	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.7	09/12/01 21:52	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	7.1	09/12/01 21:52	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.8	09/12/01 21:52	MTG	76-13-1		
Methylene chloride	ND	ppbv	7.4	09/12/01 21:52	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	7.1	09/12/01 21:52	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	7.1	09/12/01 21:52	MTG	156-59-2		
Chloroform	ND	ppbv	7.1	09/12/01 21:52	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	6.4	09/12/01 21:52	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.9	09/12/01 21:52	MTG	107-06-2		
Benzene	ND	ppbv	6.4	09/12/01 21:52	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	6.2	09/12/01 21:52	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.5	09/12/01 21:52	MTG	78-87-5		
Trichloroethene	ND	ppbv	6.1	09/12/01 21:52	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	7.1	09/12/01 21:52	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	7.4	09/12/01 21:52	MTG	10061-02-6		
Toluene	ND	ppbv	7.1	09/12/01 21:52	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.5	09/12/01 21:52	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	6.4	09/12/01 21:52	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	7.1	09/12/01 21:52	MTG	127-18-4		
Chlorobenzene	ND	ppbv	6.2	09/12/01 21:52	MTG	108-90-7		
Ethylbenzene	ND	ppbv	6.2	09/12/01 21:52	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.9	09/12/01 21:52	MTG			
o-Xylene	ND	ppbv	5.6	09/12/01 21:52	MTG	95-47-6		
Styrene	ND	ppbv	5.9	09/12/01 21:52	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.6	09/12/01 21:52	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	7.1	09/12/01 21:52	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	7.1	09/12/01 21:52	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.4	09/12/01 21:52	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.4	09/12/01 21:52	MTG	106-46-7		

Date: 09/18/01

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962271 Project Sample Number: 1048288-013 Date Collected: 08/29/01 00:00
Client Sample ID: SG13 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	7.1	09/12/01 21:52	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	3.1	09/12/01 21:52	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.9 UJ	09/12/01 21:52	MTG	87-68-3	1	

Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0912.b/25525.d
Lab Smp Id: 102962271 Client Smp ID: SG13
Inj Date : 12-SEP-2001 21:52
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 24
Dil Factor: 14.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	14.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.715	8.703	(1.000)	875021	10.0000	
* 41 p-Bromofluorobenzene	95	13.957	13.964	(1.000)	416460	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25525.d
Lab Smp Id: 102962271
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: SG13
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	875021	-18.26
41 p-Bromofluorobenz	632949	316474	1265898	416460	-34.20

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	0.06
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	-0.05

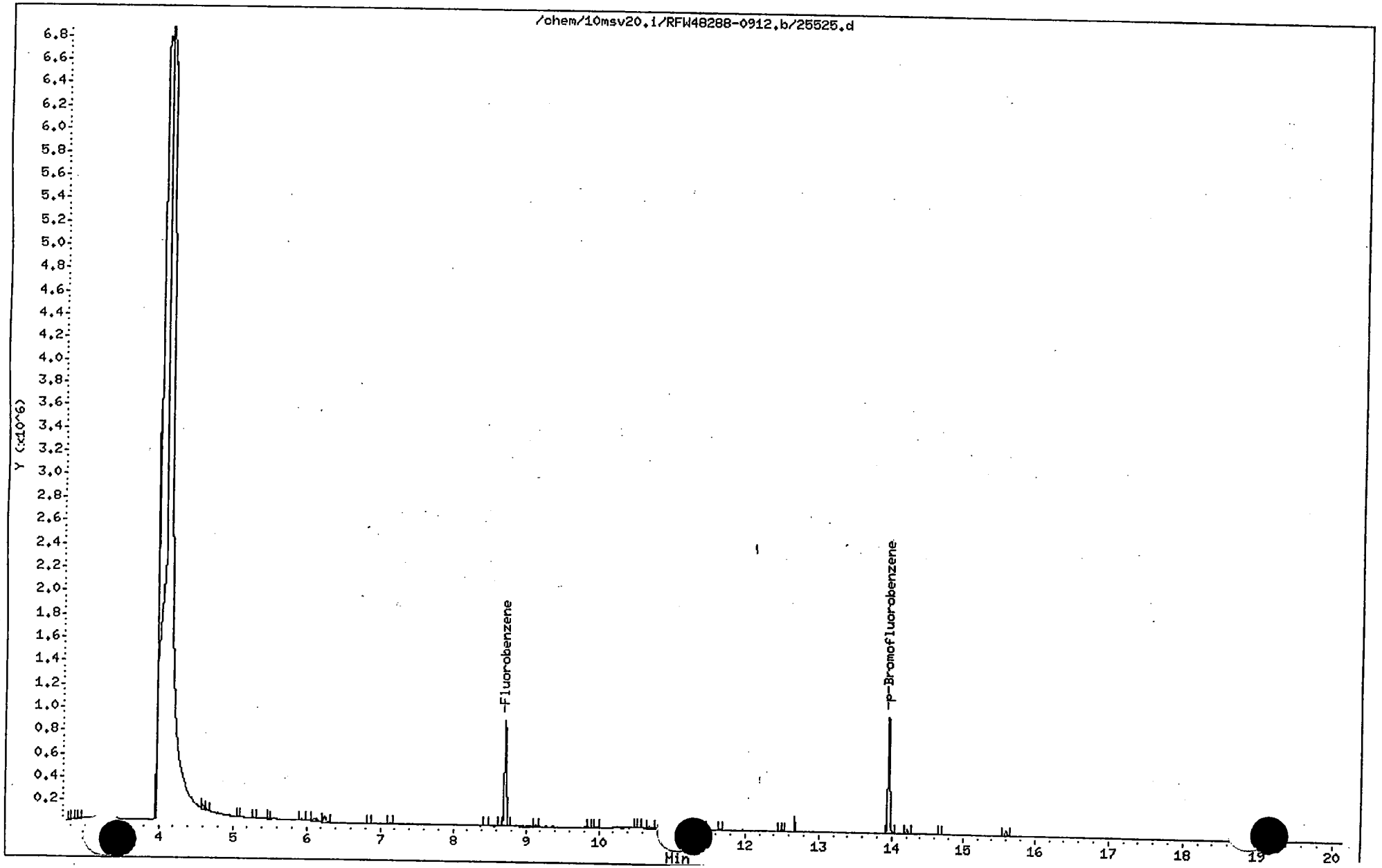
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0912.b/25525.d
Date : 12-SEP-2001 21:52
Client ID: SC13
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962289 Project Sample Number: 1048288-014 Date Collected: 08/29/01 00:00
Client Sample ID: SG14 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.7	09/12/01 22:24	MTG	75-71-8		
Chloromethane	ND	ppbv	6.4	09/12/01 22:24	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.6	09/12/01 22:24	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.7	09/12/01 22:24	MTG	75-01-4		
Bromomethane	ND	ppbv	6.7	09/12/01 22:24	MTG	74-83-9		
Chloroethane	ND	ppbv	6.7	09/12/01 22:24	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.0	09/12/01 22:24	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.4	09/12/01 22:24	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.1	09/12/01 22:24	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.7	09/12/01 22:24	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.4	09/12/01 22:24	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.4	09/12/01 22:24	MTG	156-59-2		
Chloroform	ND	ppbv	6.4	09/12/01 22:24	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.8	09/12/01 22:24	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.4	09/12/01 22:24	MTG	107-06-2		
Benzene	ND	ppbv	5.8	09/12/01 22:24	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.6	09/12/01 22:24	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.0	09/12/01 22:24	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.5	09/12/01 22:24	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.4	09/12/01 22:24	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.7	09/12/01 22:24	MTG	10061-02-6		
Toluene	ND	ppbv	6.4	09/12/01 22:24	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	5.9	09/12/01 22:24	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.8	09/12/01 22:24	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.4	09/12/01 22:24	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.6	09/12/01 22:24	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.6	09/12/01 22:24	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.4	09/12/01 22:24	MTG			
o-Xylene	ND	ppbv	5.1	09/12/01 22:24	MTG	95-47-6		
Styrene	ND	ppbv	5.4	09/12/01 22:24	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.1	09/12/01 22:24	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.4	09/12/01 22:24	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.4	09/12/01 22:24	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.0	09/12/01 22:24	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.0	09/12/01 22:24	MTG	106-46-7		

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Date: 09/18/01

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962289 Project Sample Number: 1048288-014 Date Collected: 08/29/01 00:00
Client Sample ID: SG14 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Req Limit
1,2-Dichlorobenzene	ND	ppbv	6.4	09/12/01 22:24	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.8	09/12/01 22:24	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.7 UJ	09/12/01 22:24	MTG	87-68-3	1	

Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0912.b/25526.d
Lab Smp Id: 102962289 Client Smp ID: SG14
Inj Date : 12-SEP-2001 22:24
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 25
Dil Factor: 13.40000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.40000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.716	8.703	(1.000)	859962	10.0000	
* 41 p-Bromofluorobenzene	95	13.958	13.964	(1.000)	441910	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25526.d
Lab Smp Id: 102962289
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: SG14
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	859962	-19.67
41 p-Bromofluorobenz	632949	316474	1265898	441910	-30.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.72	0.07
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

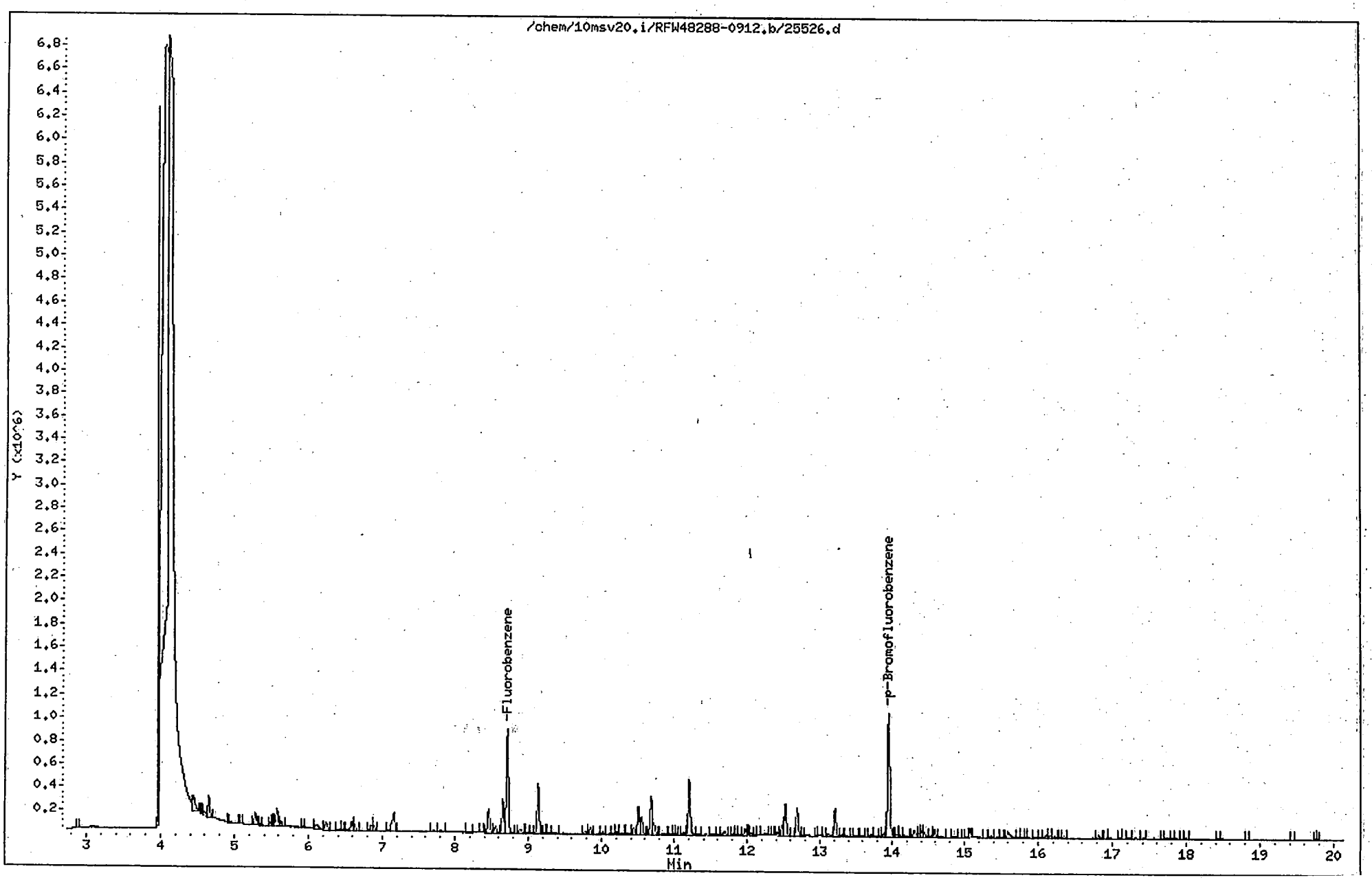
000114

Data File: /ohem/10msv20.i/RFW48288-0912.b/25526.d
Date : 12-SEP-2001 22:24
Client ID: SG14
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROYFWESTON SAMPLE NO.

SG14DUP

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix: (soil/water) AIR Lab Sample ID: 102962289DUP

Sample wt/vol: _____ (g/mL) ML Lab File ID: 25527

Level: (low/med) LOW Date Received: 08/31/01

% Moisture: not dec. _____ Date Analyzed: 09/12/01

GC Column: J&W DB-5 ID: 0.32 (mm) Dilution Factor: 13.4

Soil Extract Volume:_____(uL) Soil Aliquot Volume:_____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	6.70	U
74-87-3	Chloromethane	6.43	U
75-01-4	Vinyl Chloride	6.70	U
74-83-9	Bromomethane	6.70	U
75-00-3	Chloroethane	6.70	U
75-69-4	Trichlorofluoromethane	6.97	U
75-35-4	1,1-Dichloroethene	6.43	U
75-09-2	Methylene Chloride	6.70	U
75-34-3	1,1-Dichloroethane	6.43	U
156-59-2	cis-1,2-Dichloroethene	6.43	U
67-66-3	Chloroform	6.43	U
71-55-6	1,1,1-Trichloroethane	5.76	U
56-23-5	Carbon Tetrachloride	5.63	U
71-43-2	Benzene	5.76	U
107-06-2	1,2-Dichloroethane	5.36	U
79-01-6	Trichloroethene	5.49	U
78-87-5	1,2-Dichloropropane	4.96	U
108-88-3	Toluene	6.43	U
79-00-5	1,1,2-Trichloroethane	5.90	U
127-18-4	Tetrachloroethene	6.43	U
106-93-4	1,2-Dibromoethane	5.76	U
108-90-7	Chlorobenzene	5.63	U
100-41-4	Ethyl Benzene	5.63	U
7816-60-0	m&p-Xylene	5.36	U
95-47-6	o-Xylene	5.09	U
100-42-5	Styrene	5.36	U
79-34-5	1,1,2,2-Tetrachloroethane	5.09	U
108-67-8	1,3,5-Trimethylbenzene	6.43	U
95-63-6	1,2,4-Trimethylbenzene	6.43	U
541-73-1	1,3-Dichlorobenzene	4.02	U
106-46-7	1,4-Dichlorobenzene	4.02	U
95-50-1	1,2-Dichlorobenzene	6.43	U
95-63-6	1,2,4-Trichlorobenzene	2.81	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROYFWESTON SAMPLE NO.

SG14DUP

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix: (soil/water) AIR Lab Sample ID: 102962289DUP

Sample wt/vol: _____ (g/mL) ML Lab File ID: 25527

Level: (low/med) LOW Date Received: 08/31/01

% Moisture: not dec. _____ Date Analyzed: 09/12/01

GC Column: J&W DB-5 ID: 0.32 (mm) Dilution Factor: 13.4

Soil Extract Volume:_____(uL) Soil Aliquot Volume:_____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	1.74	UJ
76-14-2	Dichlorotetrafluoroethane	7.64	U
76-13-1	Freon 113	7.10	U
10061-01-5	cis-1,3-Dichloropropene	6.43	U
10061-02-6	trans-1,3-Dichloropropene	6.70	U
100-44-7	Benzyl Chloride	6.43	U

Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0912.b/25527.d
Lab Smp Id: 102986981 Client Smp ID: SG14DUP
Inj Date : 12-SEP-2001 22:57
Operator : mtg Inst ID: 10msv20.i
Smp Info : DUP
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 26
Dil Factor: 13.40000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.40000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.716	8.703	(1.000)	884524	10.0000	
* 41 p-Bromofluorobenzene	95	13.958	13.964	(1.000)	455785	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25527.d
Lab Smp Id: 102986981
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: SG14DUP
Level: LOW
Sample Type: AIR
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	884524	-17.37
41 p-Bromofluorobenz	632949	316474	1265898	455785	-27.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.72	0.07
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	-0.04

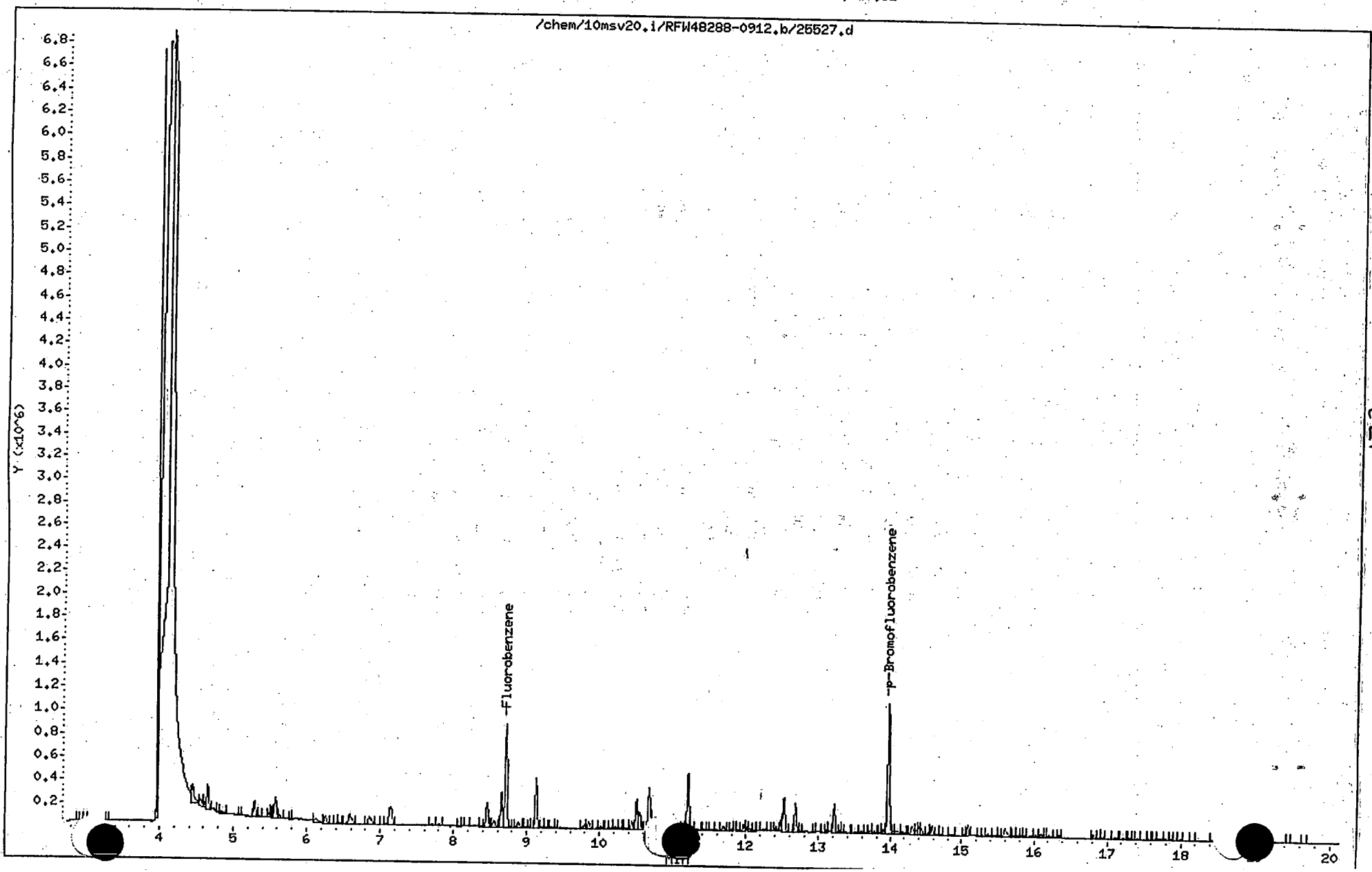
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0912.b/25527.d
Date : 12-SEP-2001 22:57
Client ID: SG14DUP
Sample Info: DUP

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



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Pace Analytical Services, Inc.
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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962297 Project Sample Number: 1048288-015 Date Collected: 08/29/01 00:00
Client Sample ID: SG15 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.9	09/11/01 22:45	MTG	75-71-8		
Chloromethane	ND	ppbv	6.6	09/11/01 22:45	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.9	09/11/01 22:45	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.9	09/11/01 22:45	MTG	75-01-4		
Bromomethane	ND	ppbv	6.9	09/11/01 22:45	MTG	74-83-9		
Chloroethane	ND	ppbv	6.9	09/11/01 22:45	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.2	09/11/01 22:45	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.6	09/11/01 22:45	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.3	09/11/01 22:45	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.9 UJ	09/11/01 22:45	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.6	09/11/01 22:45	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.6	09/11/01 22:45	MTG	156-59-2		
Chloroform	ND	ppbv	6.6	09/11/01 22:45	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.9	09/11/01 22:45	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.5	09/11/01 22:45	MTG	107-06-2		
Benzene	ND	ppbv	5.9	09/11/01 22:45	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.8	09/11/01 22:45	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.1	09/11/01 22:45	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.7	09/11/01 22:45	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.6	09/11/01 22:45	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.9	09/11/01 22:45	MTG	10061-02-6		
Toluene	ND	ppbv	6.6	09/11/01 22:45	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.1	09/11/01 22:45	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.9	09/11/01 22:45	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.6 UJ	09/11/01 22:45	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.8	09/11/01 22:45	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.8	09/11/01 22:45	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.5	09/11/01 22:45	MTG			
o-Xylene	ND	ppbv	5.2	09/11/01 22:45	MTG	95-47-6		
Styrene	ND	ppbv	5.5	09/11/01 22:45	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.2	09/11/01 22:45	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.6	09/11/01 22:45	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.6	09/11/01 22:45	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.1	09/11/01 22:45	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.1	09/11/01 22:45	MTG	106-46-7		

DKP 9/19/01

Date: 09/18/01

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962297 Project Sample Number: 1048288-015 Date Collected: 08/29/01 00:00
Client Sample ID: SG15 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.6	09/11/01 22:45	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.9	09/11/01 22:45	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.8	09/11/01 22:45	MTG	87-68-3		

Date: 09/18/01

PKP 9/19/01

REPORT OF LABORATORY ANALYSIS

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PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0911.b/25429.d
Lab Smp Id: 102962297 Client Smp ID: SG15
Inj Date : 11-SEP-2001 22:45
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 28
Dil Factor: 13.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable - Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.741	8.722	(1.000)	526585	10.0000	
* 41 p-Bromofluorobenzene	95	13.977	13.971	(1.000)	266883	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25429.d
Lab Smp Id: 102962297
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: SG15
Level: LOW
Sample Type: AIR
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	526585	-35.17
41 p-Bromofluorobenz	471889	235944	943778	266883	-43.44

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.74	0.36
41 p-Bromofluorobenz	13.96	13.46	14.46	13.98	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

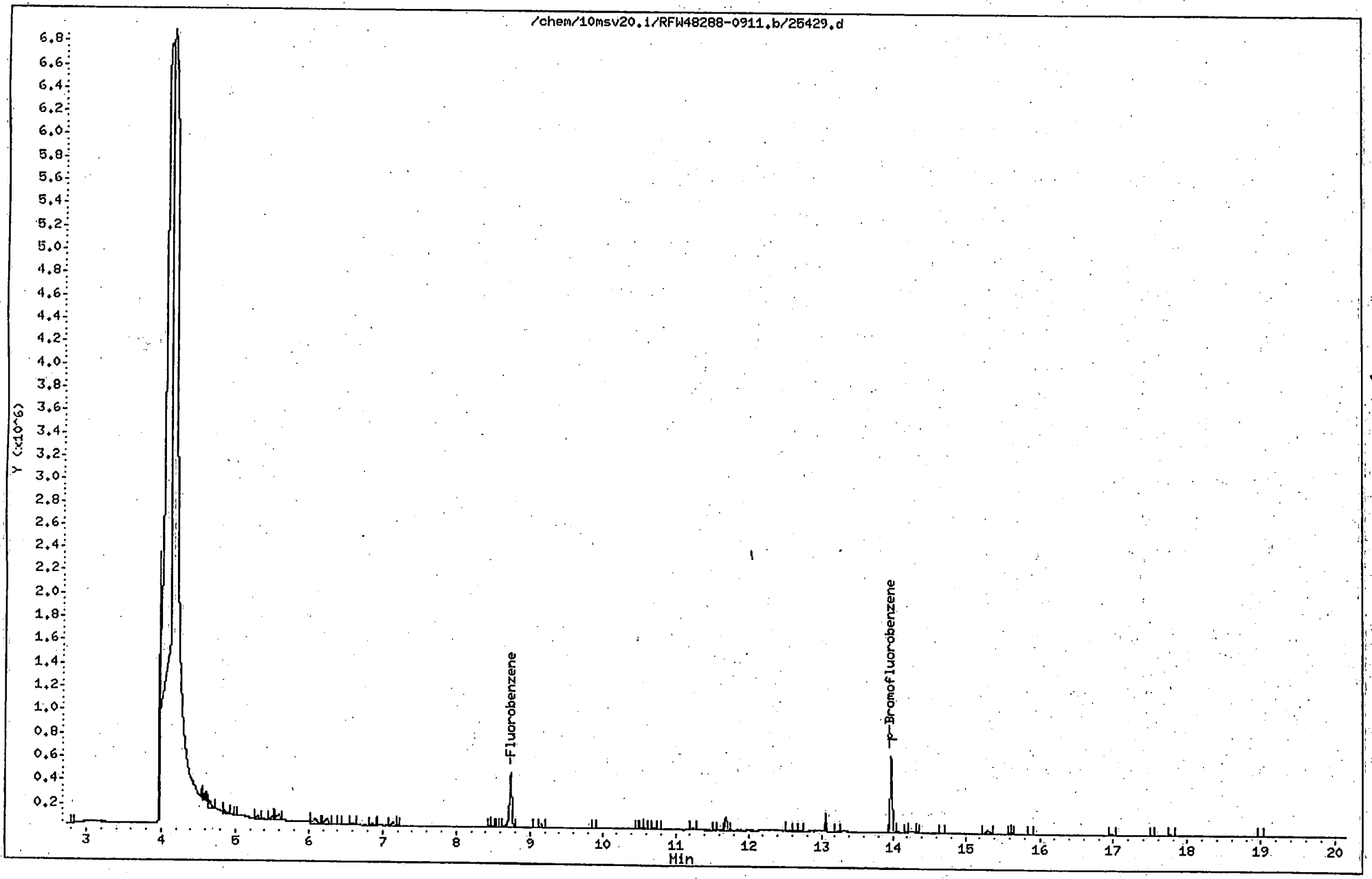
000124

Data File: /chem/10msv20.i/RFW48288-0911.b/25429.d
Date : 11-SEP-2001 22:45
Client ID: SG15
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962305 Project Sample Number: 1048288-016 Date Collected: 08/29/01 00:00
Client Sample ID: SG16 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.9	09/12/01 20:47	MTG	75-71-8		
Chloromethane	ND	ppbv	6.6	09/12/01 20:47	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.9	09/12/01 20:47	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.9	09/12/01 20:47	MTG	75-01-4		
Bromomethane	ND	ppbv	6.9	09/12/01 20:47	MTG	74-83-9		
Chloroethane	ND	ppbv	6.9	09/12/01 20:47	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.2	09/12/01 20:47	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.6	09/12/01 20:47	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.3	09/12/01 20:47	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.9	09/12/01 20:47	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.6	09/12/01 20:47	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.6	09/12/01 20:47	MTG	156-59-2		
Chloroform	ND	ppbv	6.6	09/12/01 20:47	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.9	09/12/01 20:47	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.5	09/12/01 20:47	MTG	107-06-2		
Benzene	ND	ppbv	5.9	09/12/01 20:47	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.8	09/12/01 20:47	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.1	09/12/01 20:47	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.7	09/12/01 20:47	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.6	09/12/01 20:47	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.9	09/12/01 20:47	MTG	10061-02-6		
Toluene	ND	ppbv	6.6	09/12/01 20:47	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.1	09/12/01 20:47	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.9	09/12/01 20:47	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.6	09/12/01 20:47	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.8	09/12/01 20:47	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.8	09/12/01 20:47	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.5	09/12/01 20:47	MTG			
o-Xylene	ND	ppbv	5.2	09/12/01 20:47	MTG	95-47-6		
Styrene	ND	ppbv	5.5	09/12/01 20:47	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.2	09/12/01 20:47	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.6	09/12/01 20:47	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.6	09/12/01 20:47	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.1	09/12/01 20:47	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.1	09/12/01 20:47	MTG	106-46-7		

pkp 9/19/01

Date: 09/18/01

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Phone: 612.607.1700
Fax: 612.607.644

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962305 Project Sample Number: 1048288-016 Date Collected: 08/29/01 00:00
Client Sample ID: SG16 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.6	09/12/01 20:47	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.9	09/12/01 20:47	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.8 UJ	09/12/01 20:47	MTG	87-68-3	1	

pkp 9/19/01

Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0912.b/25523.d
Lab Smp Id: 102962305 Client Smp ID: SG16
Inj Date : 12-SEP-2001 20:47
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 22
Dil Factor: 13.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
* 23 Fluorobenzene	96	8.704	8.703	(1.000)	909800	10.0000	
* 41 p-Bromofluorobenzene	95	13.958	13.964	(1.000)	438247	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25523.d
Lab Smp Id: 102962305
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: SG16
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	909800	-15.01
41 p-Bromofluorobenz	632949	316474	1265898	438247	-30.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.70	-0.07
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

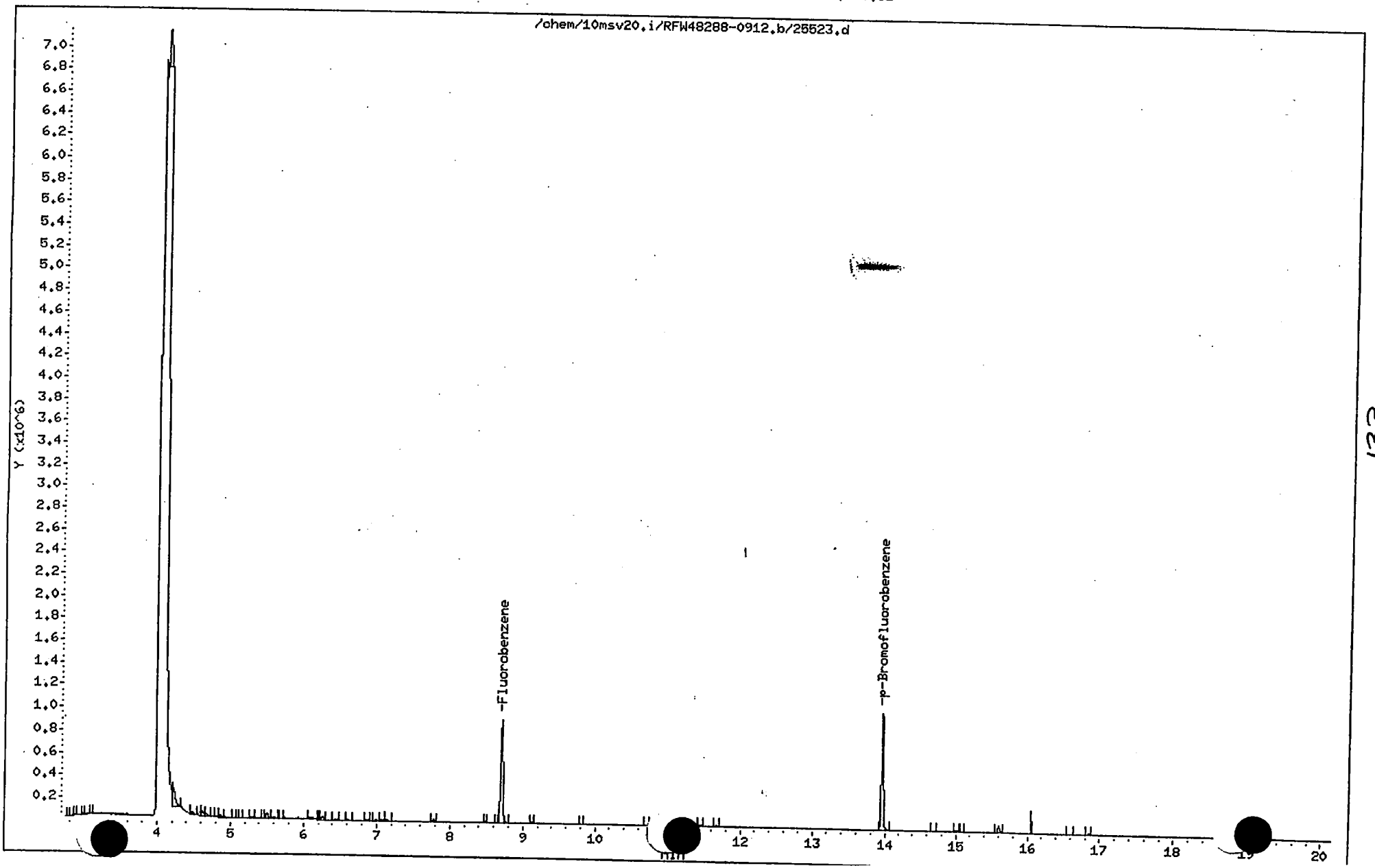
000129

Data File: /chem/10msv20.i/RFW48288-0912.b/25523.d
Date : 12-SEP-2001 20:47
Client ID: SG16
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962313 Project Sample Number: 1048288-017 Date Collected: 08/29/01 00:00
Client Sample ID: SG17 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.9	09/11/01 20:37	MTG	75-71-8		
Chloromethane	ND	ppbv	6.6	09/11/01 20:37	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.9	09/11/01 20:37	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.9	09/11/01 20:37	MTG	75-01-4		
Bromomethane	ND	ppbv	6.9	09/11/01 20:37	MTG	74-83-9		
Chloroethane	ND	ppbv	6.9	09/11/01 20:37	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.2	09/11/01 20:37	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.6	09/11/01 20:37	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.3	09/11/01 20:37	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.9 UJ	09/11/01 20:37	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.6	09/11/01 20:37	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.6	09/11/01 20:37	MTG	156-59-2		
Chloroform	ND	ppbv	6.6	09/11/01 20:37	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.9	09/11/01 20:37	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.5	09/11/01 20:37	MTG	107-06-2		
Benzene	ND	ppbv	5.9	09/11/01 20:37	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.8	09/11/01 20:37	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.1	09/11/01 20:37	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.7	09/11/01 20:37	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.6	09/11/01 20:37	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.9	09/11/01 20:37	MTG	10061-02-6		
Toluene	ND	ppbv	6.6	09/11/01 20:37	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.1	09/11/01 20:37	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.9	09/11/01 20:37	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.6 UJ	09/11/01 20:37	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.8	09/11/01 20:37	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.8	09/11/01 20:37	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.5	09/11/01 20:37	MTG			
o-Xylene	ND	ppbv	5.2	09/11/01 20:37	MTG	95-47-6		
Styrene	ND	ppbv	5.5	09/11/01 20:37	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.2	09/11/01 20:37	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.6	09/11/01 20:37	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.6	09/11/01 20:37	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.1	09/11/01 20:37	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.1	09/11/01 20:37	MTG	106-46-7		

DKP 9/19/01

Date: 09/18/01

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962313 Project Sample Number: 1048288-017 Date Collected: 08/29/01 00:00
Client Sample ID: SG17 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.6	09/11/01 20:37	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.9	09/11/01 20:37	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.8	09/11/01 20:37	MTG	87-68-3		

Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0911.b/25425.d
Lab Smp Id: 102962313 Client Smp ID: SG17
Inj Date : 11-SEP-2001 20:37
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 24
Dil Factor: 13.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable - Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.721	8.722	(1.000)	587121	10.0000	
* 41 p-Bromofluorobenzene	95	13.976	13.971	(1.000)	251613	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25425.d
Lab Smp Id: 102962313
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: SG17
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	587121	-27.72
41 p-Bromofluorobenz	471889	235944	943778	251613	-46.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.72	0.13
41 p-Bromofluorobenz	13.96	13.46	14.46	13.98	0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

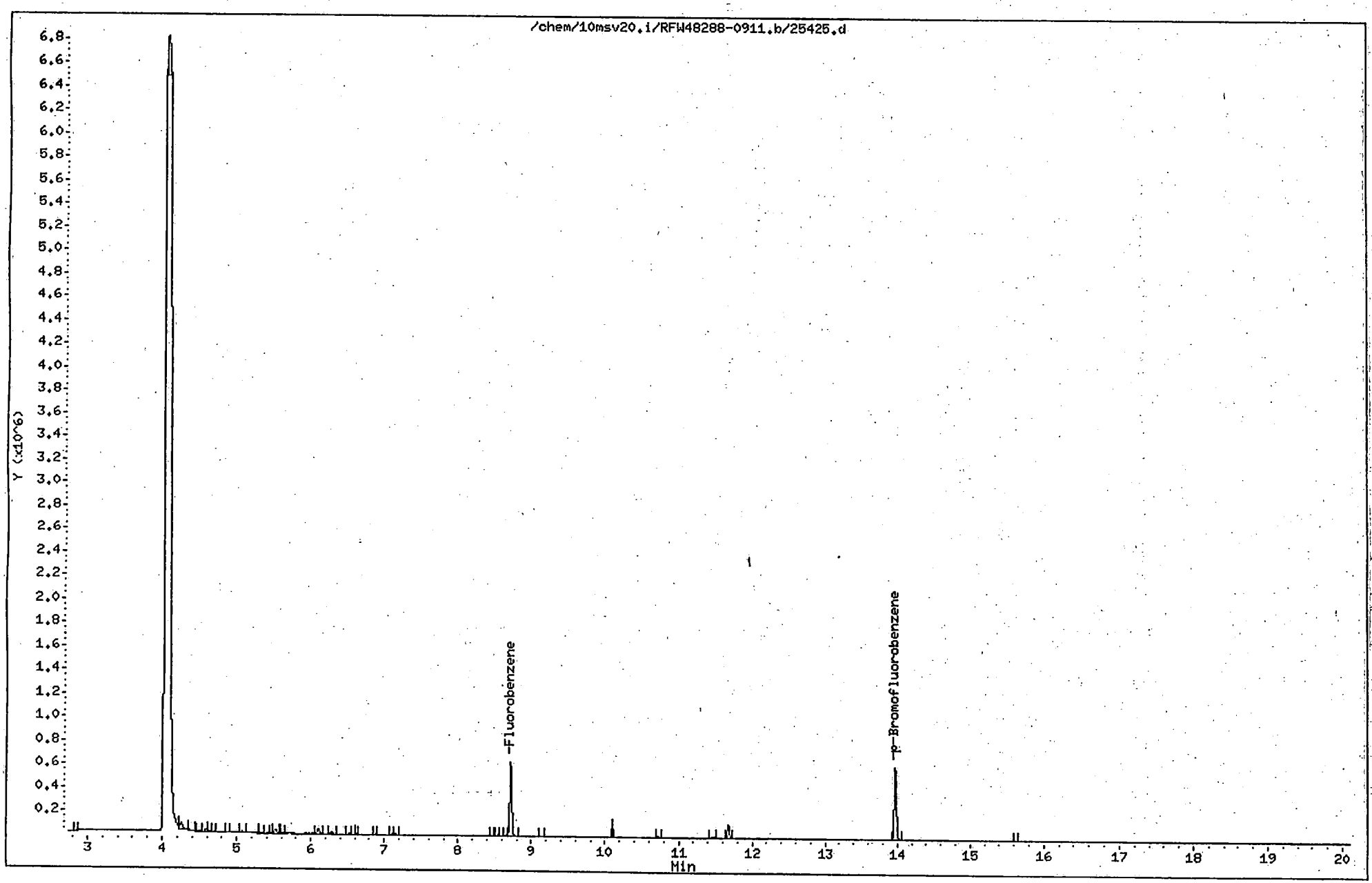
000134

Data File: /chem/10msv20.i/RFW48288-0911.b/25425.d
Date : 11-SEP-2001 20:37
Client ID: SG17
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Phone: 612.607.1700
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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962321 Project Sample Number: 1048288-018 Date Collected: 08/29/01 00:00
Client Sample ID: SG18 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.9	09/11/01 17:29	MTG	75-71-8		
Chloromethane	ND	ppbv	6.6	09/11/01 17:29	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.9	09/11/01 17:29	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.9	09/11/01 17:29	MTG	75-01-4		
Bromomethane	ND	ppbv	6.9	09/11/01 17:29	MTG	74-83-9		
Chloroethane	ND	ppbv	6.9	09/11/01 17:29	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.2	09/11/01 17:29	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.6	09/11/01 17:29	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.3	09/11/01 17:29	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.9 UJ	09/11/01 17:29	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.6	09/11/01 17:29	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.6	09/11/01 17:29	MTG	156-59-2		
Chloroform	ND	ppbv	6.6	09/11/01 17:29	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.9	09/11/01 17:29	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.5	09/11/01 17:29	MTG	107-06-2		
Benzene	ND	ppbv	5.9	09/11/01 17:29	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.8	09/11/01 17:29	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.1	09/11/01 17:29	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.7	09/11/01 17:29	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.6	09/11/01 17:29	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.9	09/11/01 17:29	MTG	10061-02-6		
Toluene	ND	ppbv	6.6	09/11/01 17:29	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.1	09/11/01 17:29	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.9	09/11/01 17:29	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.6 UJ	09/11/01 17:29	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.8	09/11/01 17:29	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.8	09/11/01 17:29	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.5	09/11/01 17:29	MTG			
o-Xylene	ND	ppbv	5.2	09/11/01 17:29	MTG	95-47-6		
Styrene	ND	ppbv	5.5	09/11/01 17:29	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.2	09/11/01 17:29	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.6	09/11/01 17:29	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.6	09/11/01 17:29	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.1	09/11/01 17:29	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.1	09/11/01 17:29	MTG	106-46-7		

QMP 9/19/01

Date: 09/18/01

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962321 Project Sample Number: 1048288-018 Date Collected: 08/29/01 00:00
Client Sample ID: SG18 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.6	09/11/01 17:29	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.9	09/11/01 17:29	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.8	09/11/01 17:29	MTG	87-68-3		

OKP 9/19/01

Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0911.b/25419.d
Lab Smp Id: 102962321 Client Smp ID: SG18
Inj Date : 11-SEP-2001 17:29
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 18
Dil Factor: 13.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable - Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
* 23 Fluorobenzene	96	8.759	8.722	(1.000)	574579	10.0000	
* 41 p-Bromofluorobenzene	95	13.983	13.971	(1.000)	308189	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25419.d
Lab Smp Id: 102962321
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: SG18
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	574579	-29.26
41 p-Bromofluorobenz	471889	235944	943778	308189	-34.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.76	0.57
41 p-Bromofluorobenz	13.96	13.46	14.46	13.98	0.14

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

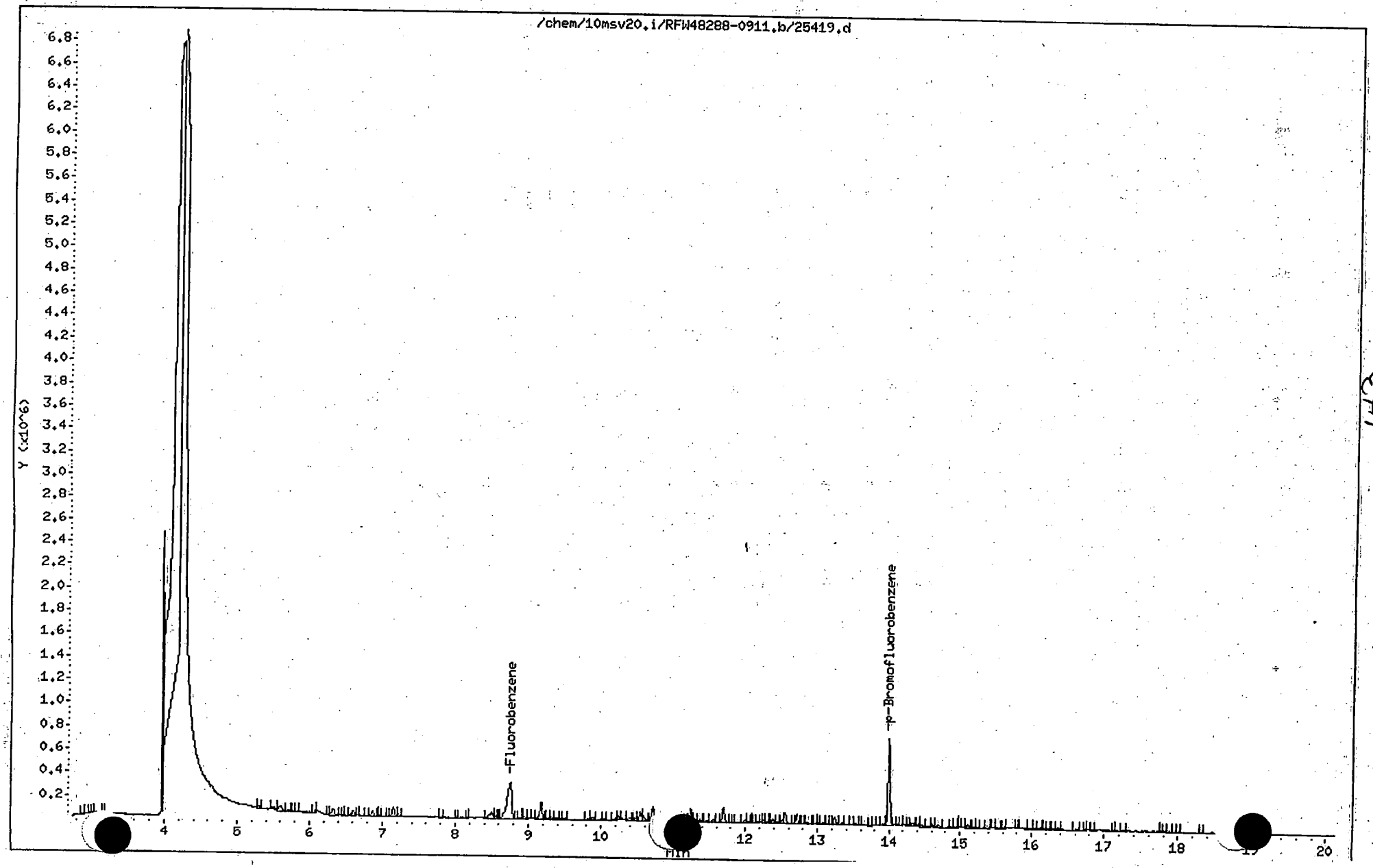
Data File: /chem/10msv20.i/RFW48288-0911.b/25419.d
Date : 11-SEP-2001 17:29
Client ID: SG18
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

000139



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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962339 Project Sample Number: 1048288-019 Date Collected: 08/29/01 00:00
Client Sample ID: SG19 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.7	09/11/01 21:40	MTG	75-71-8		
Chloromethane	ND	ppbv	6.4	09/11/01 21:40	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.6	09/11/01 21:40	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.7	09/11/01 21:40	MTG	75-01-4		
Bromomethane	ND	ppbv	6.7	09/11/01 21:40	MTG	74-83-9		
Chloroethane	ND	ppbv	6.7	09/11/01 21:40	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.0	09/11/01 21:40	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.4	09/11/01 21:40	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.1	09/11/01 21:40	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.7 UJ	09/11/01 21:40	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.4	09/11/01 21:40	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.4	09/11/01 21:40	MTG	156-59-2		
Chloroform	ND	ppbv	6.4	09/11/01 21:40	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.8	09/11/01 21:40	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.4	09/11/01 21:40	MTG	107-06-2		
Benzene	ND	ppbv	5.8	09/11/01 21:40	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.6	09/11/01 21:40	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.0	09/11/01 21:40	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.5	09/11/01 21:40	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.4	09/11/01 21:40	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.7	09/11/01 21:40	MTG	10061-02-6		
Toluene	ND	ppbv	6.4	09/11/01 21:40	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	5.9	09/11/01 21:40	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.8	09/11/01 21:40	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.4 UJ	09/11/01 21:40	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.6	09/11/01 21:40	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.6	09/11/01 21:40	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.4	09/11/01 21:40	MTG			
o-Xylene	ND	ppbv	5.1	09/11/01 21:40	MTG	95-47-6		
Styrene	ND	ppbv	5.4	09/11/01 21:40	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.1	09/11/01 21:40	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.4	09/11/01 21:40	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.4	09/11/01 21:40	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.0	09/11/01 21:40	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.0	09/11/01 21:40	MTG	106-46-7		

DKP 9/19/01

Date: 09/18/01

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962339 Project Sample Number: 1048288-019 Date Collected: 08/29/01 00:00
Client Sample ID: SG19 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.4	09/11/01 21:40	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.8	09/11/01 21:40	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.7	09/11/01 21:40	MTG	87-68-3		

Date: 09/18/01

DKP 9/19/01

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REPORT OF LABORATORY ANALYSIS

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Data file : /chem/10msv20.i/RFW48288-0911.b/25427.d
Lab Smp Id: 102962339 Client Smp ID: SG19
Inj Date : 11-SEP-2001 21:40
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 26
Dil Factor: 13.40000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.40000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
* 23 Fluorobenzene	96	8.752	8.722	(1.000)	497611	10.0000	
* 41 p-Bromofluorobenzene	95	13.982	13.971	(1.000)	247454	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25427.d
Lab Smp Id: 102962339
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: SG19
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	497611	-38.74
41 p-Bromofluorobenz	471889	235944	943778	247454	-47.56

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.75	0.49
41 p-Bromofluorobenz	13.96	13.46	14.46	13.98	0.13

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

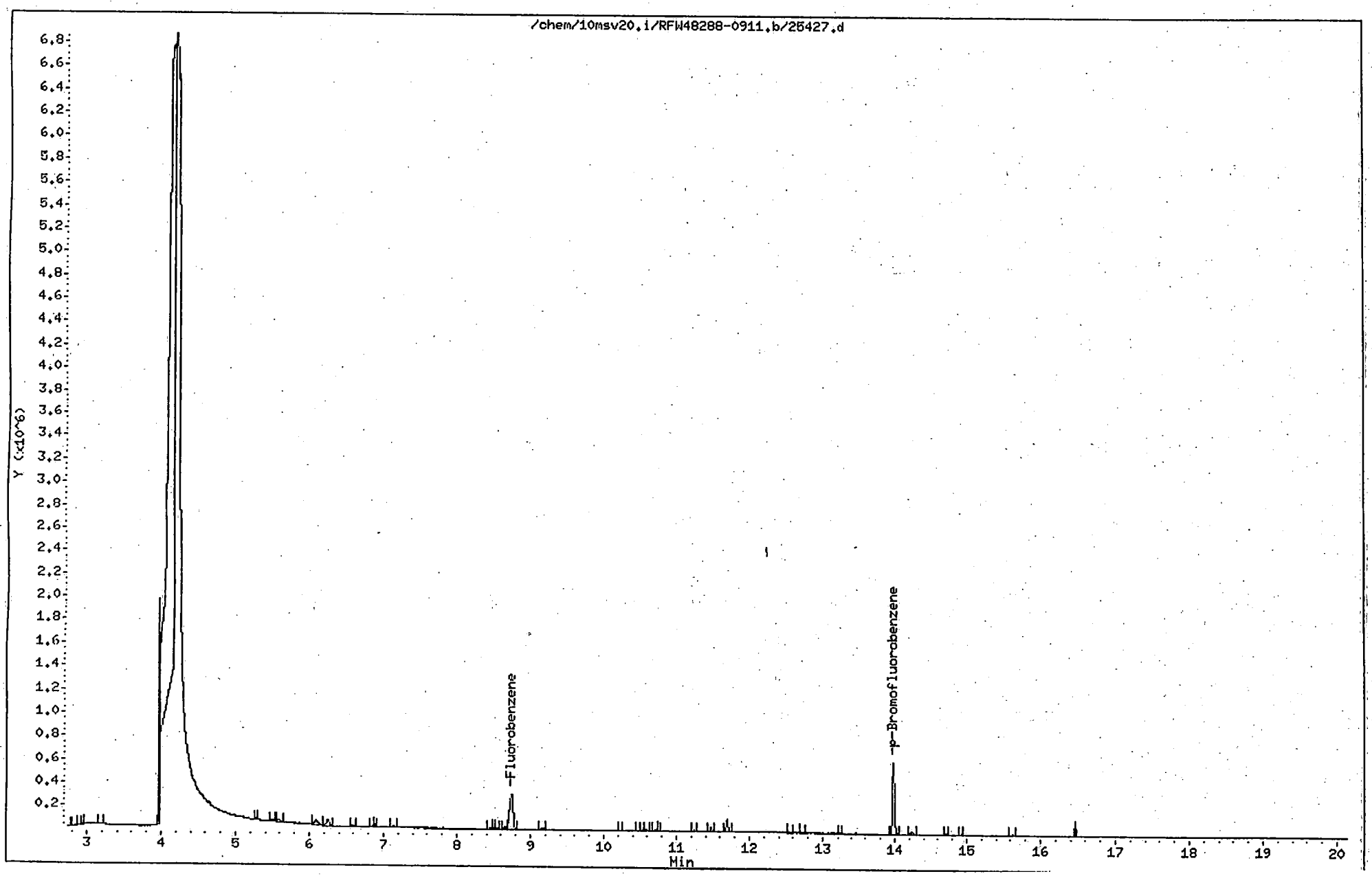
000144

Data File: /chem/10msv20.i/RFW48288-0911.b/25427.d
Date : 11-SEP-2001 21:40
Client ID: SG19
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962347 Project Sample Number: 1048288-020 Date Collected: 08/29/01 00:00
Client Sample ID: SG20 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.7	09/11/01 18:31	MTG	75-71-8		
Chloromethane	ND	ppbv	6.4	09/11/01 18:31	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.6	09/11/01 18:31	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.7	09/11/01 18:31	MTG	75-01-4		
Bromomethane	ND	ppbv	6.7	09/11/01 18:31	MTG	74-83-9		
Chloroethane	ND	ppbv	6.7	09/11/01 18:31	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.0	09/11/01 18:31	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.4	09/11/01 18:31	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.1	09/11/01 18:31	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.7 UJ	09/11/01 18:31	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.4	09/11/01 18:31	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.4	09/11/01 18:31	MTG	156-59-2		
Chloroform	ND	ppbv	6.4	09/11/01 18:31	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.8	09/11/01 18:31	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.4	09/11/01 18:31	MTG	107-06-2		
Benzene	ND	ppbv	5.8	09/11/01 18:31	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.6	09/11/01 18:31	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.0	09/11/01 18:31	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.5	09/11/01 18:31	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.4	09/11/01 18:31	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.7	09/11/01 18:31	MTG	10061-02-6		
Toluene	ND	ppbv	6.4	09/11/01 18:31	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	5.9	09/11/01 18:31	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.8	09/11/01 18:31	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.4 UJ	09/11/01 18:31	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.6	09/11/01 18:31	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.6	09/11/01 18:31	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.4	09/11/01 18:31	MTG			
o-Xylene	ND	ppbv	5.1	09/11/01 18:31	MTG	95-47-6		
Styrene	ND	ppbv	5.4	09/11/01 18:31	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.1	09/11/01 18:31	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.4	09/11/01 18:31	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.4	09/11/01 18:31	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.0	09/11/01 18:31	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.0	09/11/01 18:31	MTG	106-46-7		

Date: 09/18/01

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Phone: 612.607.1700
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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962347 Project Sample Number: 1048288-020 Date Collected: 08/29/01 00:00
Client Sample ID: SG20 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.4	09/11/01 18:31 MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.8	09/11/01 18:31 MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.7	09/11/01 18:31 MTG	87-68-3		

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Data file : /chem/10msv20.i/RFW48288-0911.b/25421.d
Lab Smp Id: 102962347 Client Smp ID: SG20
Inj Date : 11-SEP-2001 18:31
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 20
Dil Factor: 13.40000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.40000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.752	8.722	(1.000)	548763	10.0000	
* 41 p-Bromofluorobenzene	95	13.982	13.971	(1.000)	267742	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25421.d
Lab Smp Id: 102962347
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: SG20
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	548763	-32.44
41 p-Bromofluorobenz	471889	235944	943778	267742	-43.26

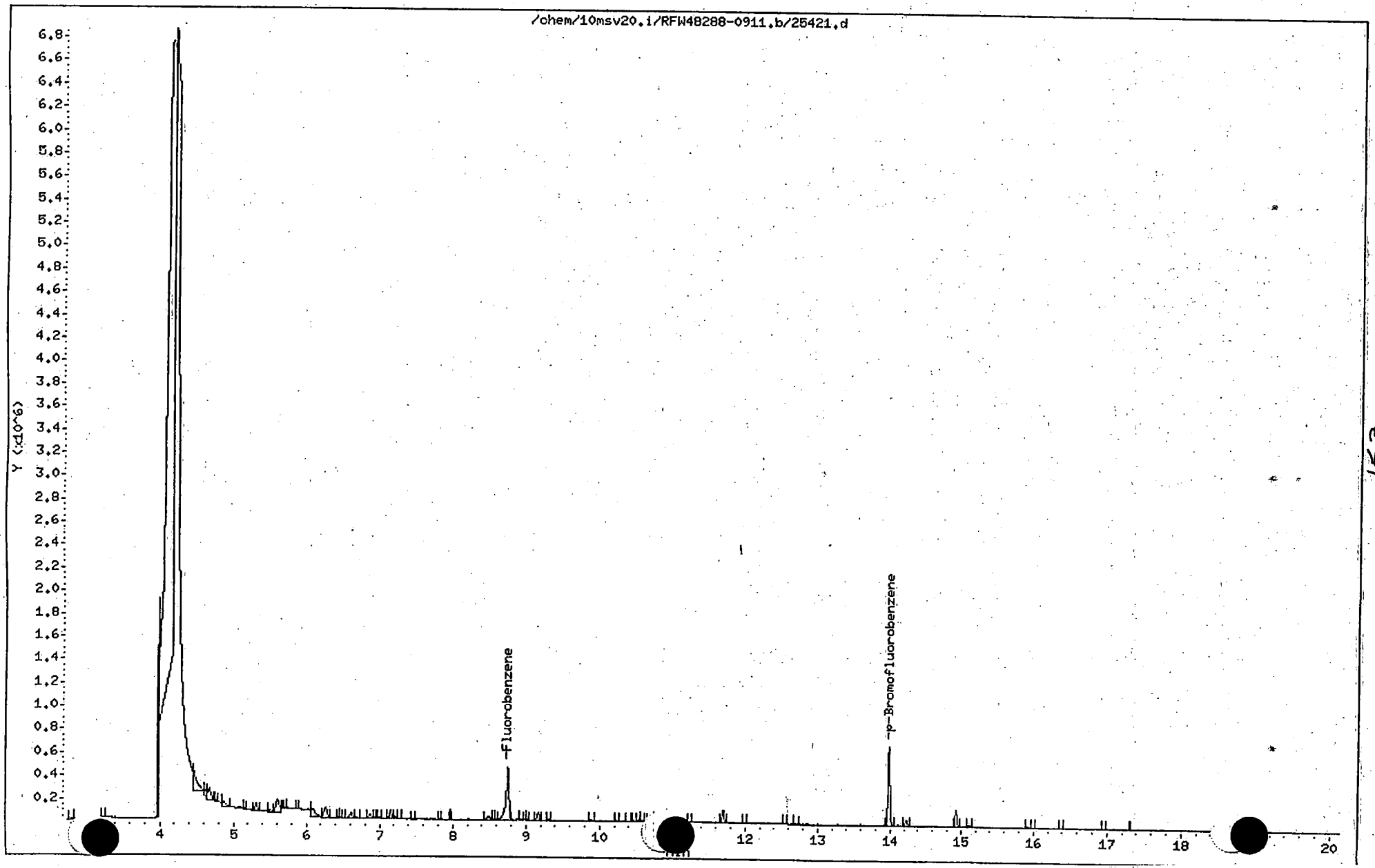
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.75	0.48
41 p-Bromofluorobenz	13.96	13.46	14.46	13.98	0.13

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0911.b/25421.d
Date : 11-SEP-2001 18:31
Client ID: SG20
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column phase: J&W DB-5
Column diameter: 0.32



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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROYFWESTON SAMPLE NO.

SG20DUP

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix: (soil/water) AIR Lab Sample ID: 102986957

Sample wt/vol: _____ (g/mL) ML Lab File ID: 25422

Level: (low/med) LOW Date Received: 08/31/01

% Moisture: not dec. _____ Date Analyzed: 09/11/01

GC Column: J&W DB-5 ID: 0.32 (mm) Dilution Factor: 13.4

Soil Extract Volume:_____(uL) Soil Aliquot Volume:_____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	6.70	UJ
74-87-3	Chloromethane	6.43	U
75-01-4	Vinyl Chloride	6.70	U
74-83-9	Bromomethane	6.70	U
75-00-3	Chloroethane	6.70	U
75-69-4	Trichlorofluoromethane	6.97	U
75-35-4	1,1-Dichloroethene	6.43	U
75-09-2	Methylene Chloride	6.70	UJ
75-34-3	1,1-Dichloroethane	6.43	U
156-59-2	cis-1,2-Dichloroethene	6.43	U
67-66-3	Chloroform	6.43	U
71-55-6	1,1,1-Trichloroethane	5.76	U
56-23-5	Carbon Tetrachloride	5.63	U
71-43-2	Benzene	5.76	U
107-06-2	1,2-Dichloroethane	5.36	U
79-01-6	Trichloroethene	5.49	U
78-87-5	1,2-Dichloropropane	4.96	U
108-88-3	Toluene	6.43	U
79-00-5	1,1,2-Trichloroethane	5.90	U
127-18-4	Tetrachloroethene	6.43	UJ
106-93-4	1,2-Dibromoethane	5.76	U
108-90-7	Chlorobenzene	5.63	U
100-41-4	Ethyl Benzene	5.63	U
7816-60-0	m&p-Xylene	5.36	U
95-47-6	o-Xylene	5.09	U
100-42-5	Styrene	5.36	U
79-34-5	1,1,2,2-Tetrachloroethane	5.09	U
108-67-8	1,3,5-Trimethylbenzene	6.43	U
95-63-6	1,2,4-Trimethylbenzene	6.43	U
541-73-1	1,3-Dichlorobenzene	4.02	U
106-46-7	1,4-Dichlorobenzene	4.02	U
95-50-1	1,2-Dichlorobenzene	6.43	U
95-63-6	1,2,4-Trichlorobenzene	2.81	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROYFWESTON SAMPLE NO.

SG20DUP

Lab Name: PACE ANALYTICAL Contract:

Lab Code: PACE Case No.: SAS No.: SDG No.: 1048288

Matrix: (soil/water) AIR Lab Sample ID: 102986957

Sample wt/vol: _____ (g/mL) ML Lab File ID: 25422

Level: (low/med) LOW Date Received: 08/31/01

% Moisture: not dec. _____ Date Analyzed: 09/11/01

GC Column: J&W DB-5 ID: 0.32 (mm) Dilution Factor: 13.4

Soil Extract Volume:_____(uL) Soil Aliquot Volume:_____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	1.74	U
76-14-2	Dichlorotetrafluoroethane	7.64	UJ
76-13-1	Freon 113	7.10	UJ
10061-01-5	cis-1,3-Dichloropropene	6.43	U
10061-02-6	trans-1,3-Dichloropropene	6.70	U
100-44-7	Benzyl Chloride	6.43	U

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Data file : /chem/10msv20.i/RFW48288-0911.b/25422.d
Lab Smp Id: 102986957 Client Smp ID: SG20DUP
Inj Date : 11-SEP-2001 19:02
Operator : mtg Inst ID: 10msv20.i
Smp Info : DUP
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 21
Dil Factor: 13.40000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.40000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable - Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
* 23 Fluorobenzene	96	8.728	8.722	(1.000)	315221	10.0000	
* 41 p-Bromofluorobenzene	95	13.983	13.971	(1.000)	246198	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25422.d
Lab Smp Id: 102986957
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: SG20DUP
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
23 Fluorobenzene	812262	406131	1624524	315221	-61.19	*
41 p-Bromofluorobenz	471889	235944	943778	246198	-47.83	

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COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.73	0.21
41 p-Bromofluorobenz	13.96	13.46	14.46	13.98	0.13

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

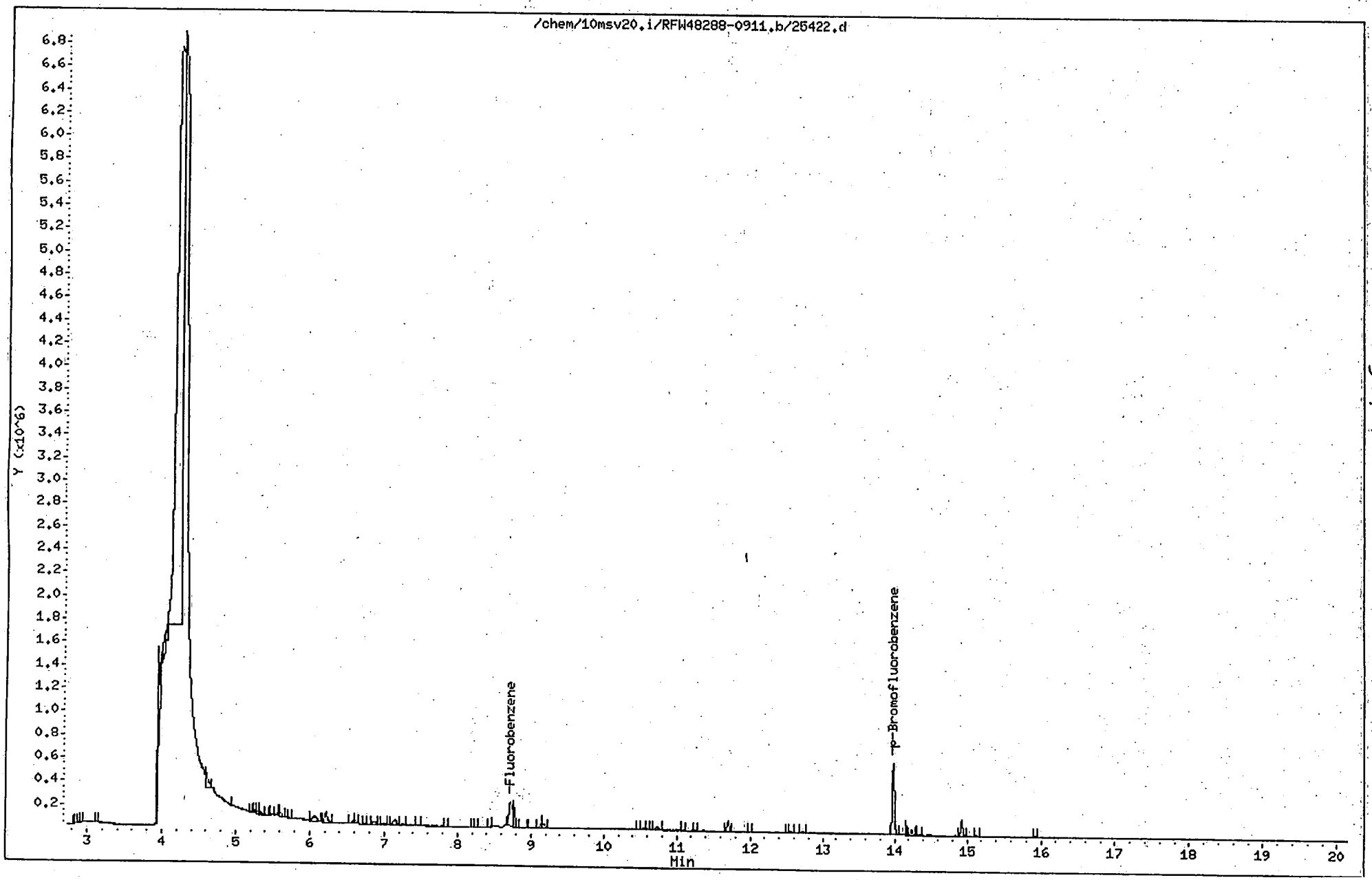
000154

Data File: /chem/10msv20.i/RFW48288-0911.b/25422.d
Date : 11-SEP-2001 19:02
Client ID: SG20DUP
Sample Info: DUP

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962354 Project Sample Number: 1048288-021 Date Collected: 08/29/01 00:00
Client Sample ID: SG21 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.8	09/11/01 22:13	MTG	75-71-8		
Chloromethane	ND	ppbv	6.5	09/11/01 22:13	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.8	09/11/01 22:13	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.8	09/11/01 22:13	MTG	75-01-4		
Bromomethane	ND	ppbv	6.8	09/11/01 22:13	MTG	74-83-9		
Chloroethane	ND	ppbv	6.8	09/11/01 22:13	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.1	09/11/01 22:13	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.5	09/11/01 22:13	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.2	09/11/01 22:13	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.8 UJ	09/11/01 22:13	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.5	09/11/01 22:13	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.5	09/11/01 22:13	MTG	156-59-2		
Chloroform	ND	ppbv	6.5	09/11/01 22:13	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.8	09/11/01 22:13	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.4	09/11/01 22:13	MTG	107-06-2		
Benzene	ND	ppbv	5.8	09/11/01 22:13	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.7	09/11/01 22:13	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.0	09/11/01 22:13	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.6	09/11/01 22:13	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.5	09/11/01 22:13	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.8	09/11/01 22:13	MTG	10061-02-6		
Toluene	ND	ppbv	6.5	09/11/01 22:13	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.0	09/11/01 22:13	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.8	09/11/01 22:13	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.5 UJ	09/11/01 22:13	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.7	09/11/01 22:13	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.7	09/11/01 22:13	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.4	09/11/01 22:13	MTG			
o-Xylene	ND	ppbv	5.2	09/11/01 22:13	MTG	95-47-6		
Styrene	ND	ppbv	5.4	09/11/01 22:13	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.2	09/11/01 22:13	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.5	09/11/01 22:13	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.5	09/11/01 22:13	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.1	09/11/01 22:13	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.1	09/11/01 22:13	MTG	106-46-7		

Date: 09/18/01

DKP 9/19/01

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Phone: 612.607.1700
Fax: 612.607.644

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962354 Project Sample Number: 1048288-021 Date Collected: 08/29/01 00:00
Client Sample ID: SG21 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Req Limit
1,2-Dichlorobenzene	ND	ppbv	6.5	09/11/01 22:13	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.9	09/11/01 22:13	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.8	09/11/01 22:13	MTG	87-68-3		

Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0911.b/25428.d
Lab Smp Id: 102962354 Client Smp ID: SG21
Inj Date : 11-SEP-2001 22:13
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 27
Dil Factor: 13.60000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.60000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable - Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
* 23 Fluorobenzene	96	8.739	8.722	(1.000)	526827	10.0000	
* 41 p-Bromofluorobenzene	95	13.975	13.971	(1.000)	260878	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25428.d
Lab Smp Id: 102962354
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: SG21
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	526827	-35.14
41 p-Bromofluorobenz	471889	235944	943778	260878	-44.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.74	0.34
41 p-Bromofluorobenz	13.96	13.46	14.46	13.98	0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0911.b/25428.d
Date : 11-SEP-2001 22:13
Client ID: SG21
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

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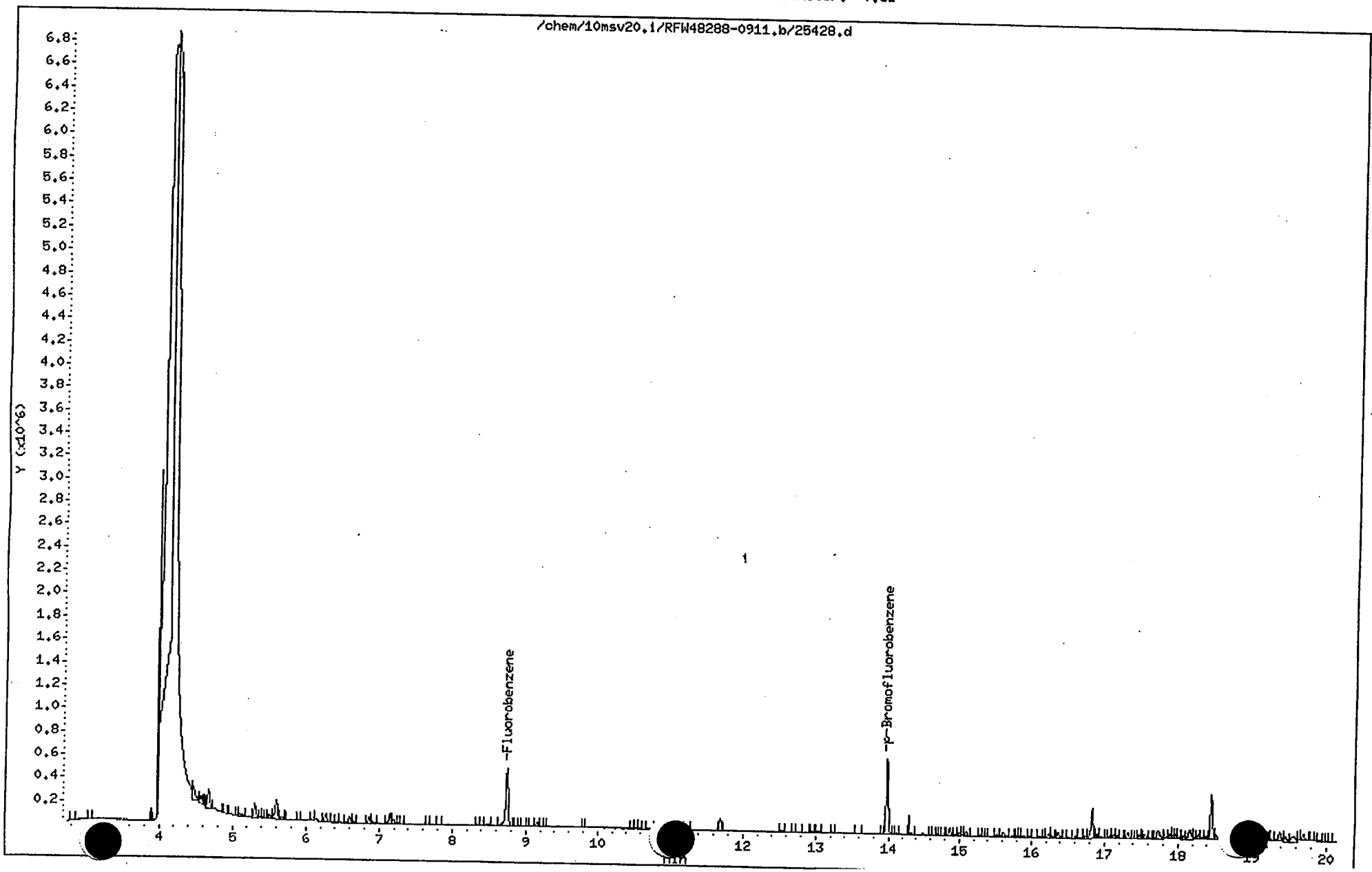

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Equipment Blank

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962362 Project Sample Number: 1048288-022 Date Collected: 08/29/01 00:00
Client Sample ID: SG22 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.1	09/12/01 23:30	MTG	75-71-8		
Chloromethane	ND	ppbv	5.9	09/12/01 23:30	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.0	09/12/01 23:30	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.1	09/12/01 23:30	MTG	75-01-4		
Bromomethane	ND	ppbv	6.1	09/12/01 23:30	MTG	74-83-9		
Chloroethane	ND	ppbv	6.1	09/12/01 23:30	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	6.3	09/12/01 23:30	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	5.9	09/12/01 23:30	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	6.5	09/12/01 23:30	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.1	09/12/01 23:30	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	5.9	09/12/01 23:30	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	5.9	09/12/01 23:30	MTG	156-59-2		
Chloroform	ND	ppbv	5.9	09/12/01 23:30	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.2	09/12/01 23:30	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	4.9	09/12/01 23:30	MTG	107-06-2		
Benzene	ND	ppbv	5.2	09/12/01 23:30	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.1	09/12/01 23:30	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	4.5	09/12/01 23:30	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.0	09/12/01 23:30	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	5.9	09/12/01 23:30	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.1	09/12/01 23:30	MTG	10061-02-6		
Toluene	ND	ppbv	5.9	09/12/01 23:30	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	5.4	09/12/01 23:30	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.2	09/12/01 23:30	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	5.9	09/12/01 23:30	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.1	09/12/01 23:30	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.1	09/12/01 23:30	MTG	100-41-4		
m&p-Xylene	ND	ppbv	4.9	09/12/01 23:30	MTG			
o-Xylene	ND	ppbv	4.6	09/12/01 23:30	MTG	95-47-6		
Styrene	ND	ppbv	4.9	09/12/01 23:30	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	4.6	09/12/01 23:30	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	5.9	09/12/01 23:30	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	5.9	09/12/01 23:30	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	3.7	09/12/01 23:30	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	3.7	09/12/01 23:30	MTG	106-46-7		

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Phone: 612.607.1700
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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962362 Project Sample Number: 1048288-022 Date Collected: 08/29/01 00:00
Client Sample ID: SG22 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	5.9	09/12/01 23:30	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.6	09/12/01 23:30	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.6	09/12/01 23:30	MTG	87-68-3	1	

Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0912.b/25528.d
Lab Smp Id: 102962362 Client Smp ID: SG22
Inj Date : 12-SEP-2001 23:30
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 27
Dil Factor: 12.20000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	12.20000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.698	8.703	(1.000)	903593	10.0000	
* 41 p-Bromofluorobenzene	95	13.959	13.964	(1.000)	424965	10.0000	

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INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25528.d
Lab Smp Id: 102962362
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: SG22
Level: LOW
Sample Type: AIR
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	903593	-15.59
41 p-Bromofluorobenz	632949	316474	1265898	424965	-32.86

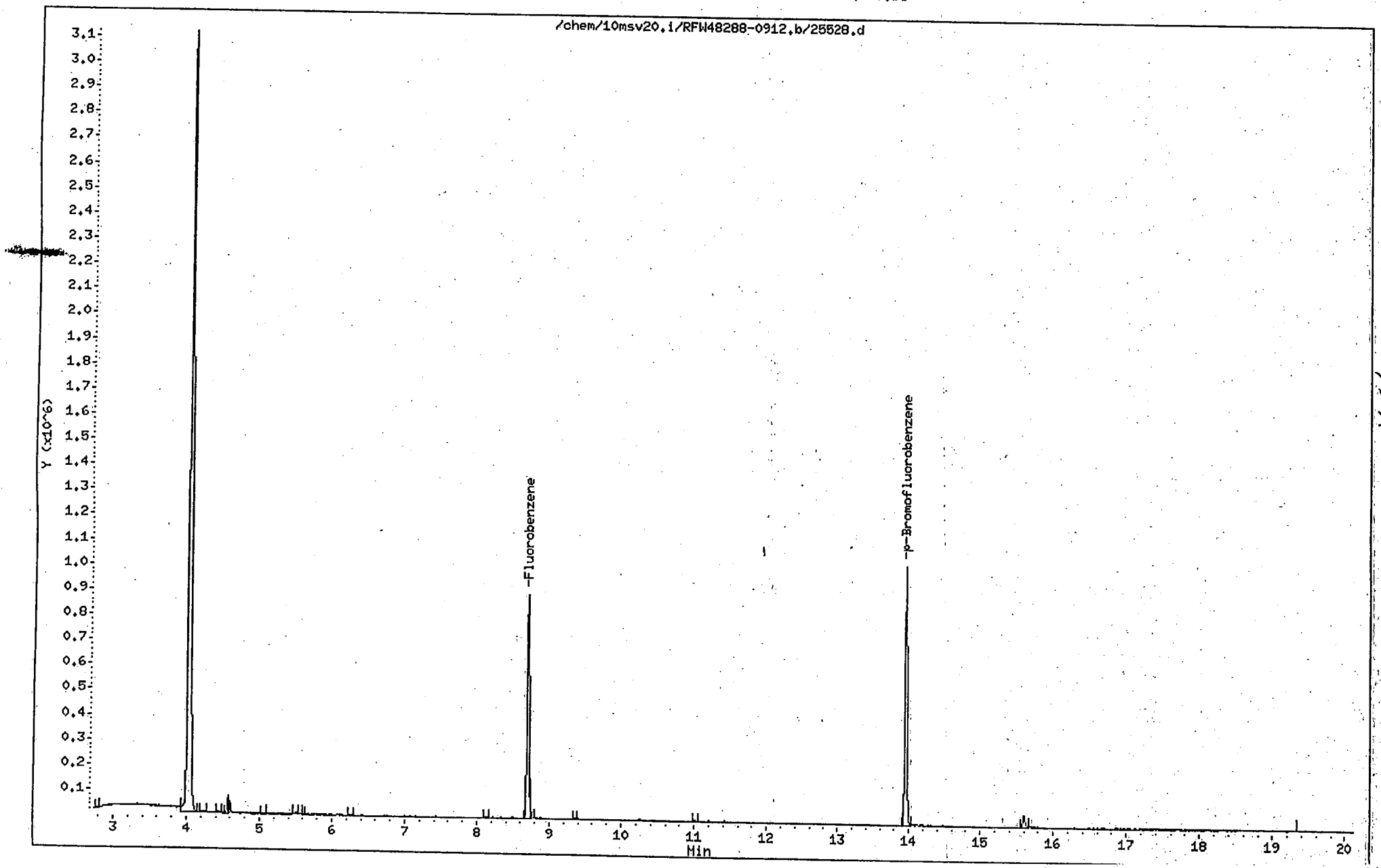
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.70	-0.14
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0912.b/25528.d
Date : 12-SEP-2001 23:30
Client ID: SC22
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column phase: J&W DB-5
Column diameter: 0.72



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Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962370 Project Sample Number: 1048288-023 Date Collected: 08/29/01 00:00
Client Sample ID: SG23 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.7	09/12/01 21:20	MTG	75-71-8		
Chloromethane	ND	ppbv	6.4	09/12/01 21:20	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.6	09/12/01 21:20	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.7	09/12/01 21:20	MTG	75-01-4		
Bromomethane	ND	ppbv	6.7	09/12/01 21:20	MTG	74-83-9		
Chloroethane	ND	ppbv	6.7	09/12/01 21:20	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.0	09/12/01 21:20	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.4	09/12/01 21:20	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.1	09/12/01 21:20	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.7	09/12/01 21:20	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.4	09/12/01 21:20	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.4	09/12/01 21:20	MTG	156-59-2		
Chloroform	ND	ppbv	6.4	09/12/01 21:20	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.8	09/12/01 21:20	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.4	09/12/01 21:20	MTG	107-06-2		
Benzene	ND	ppbv	5.8	09/12/01 21:20	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.6	09/12/01 21:20	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.0	09/12/01 21:20	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.5	09/12/01 21:20	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.4	09/12/01 21:20	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.7	09/12/01 21:20	MTG	10061-02-6		
Toluene	ND	ppbv	6.4	09/12/01 21:20	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	5.9	09/12/01 21:20	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.8	09/12/01 21:20	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.4	09/12/01 21:20	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.6	09/12/01 21:20	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.6	09/12/01 21:20	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.4	09/12/01 21:20	MTG			
o-Xylene	ND	ppbv	5.1	09/12/01 21:20	MTG	95-47-6		
Styrene	ND	ppbv	5.4	09/12/01 21:20	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.1	09/12/01 21:20	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.4	09/12/01 21:20	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.4	09/12/01 21:20	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.0	09/12/01 21:20	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.0	09/12/01 21:20	MTG	106-46-7		

Date: 09/18/01

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Phone: 612.607.1700
Fax: 612.607.644

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962370 Project Sample Number: 1048288-023 Date Collected: 08/29/01 00:00
Client Sample ID: SG23 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.4	09/12/01 21:20 MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.8	09/12/01 21:20 MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.7 UJ	09/12/01 21:20 MTG	87-68-3	1	

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Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0912.b/25524.d
Lab Smp Id: 102962370 Client Smp ID: SG23
Inj Date : 12-SEP-2001 21:20
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 23
Dil Factor: 13.40000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.40000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.710	8.703	(1.000)	897805	10.0000	
* 41 p-Bromofluorobenzene	95	13.958	13.964	(1.000)	454669	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25524.d
Lab Smp Id: 102962370
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: SG23
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	897805	-16.13
41 p-Bromofluorobenz	632949	316474	1265898	454669	-28.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	0.00
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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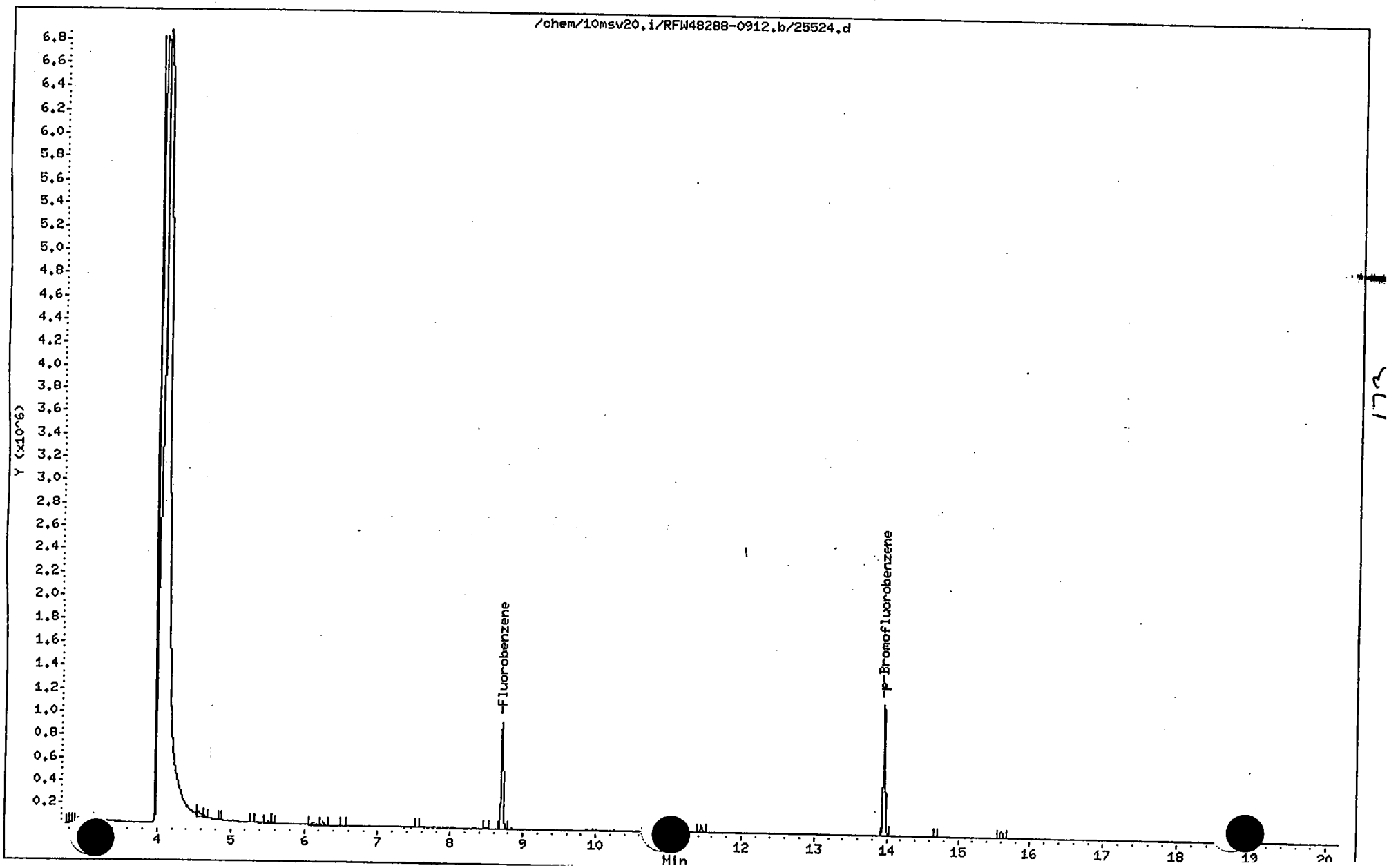
Data File: /chem/10msv20.i/RFW48288-0912.b/25524.d
Date : 12-SEP-2001 21:20
Client ID: SC23
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Fax: 612.607.64

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962396 Project Sample Number: 1048288-024 Date Collected: 08/29/01 00:00
Client Sample ID: SG24 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.7	09/11/01 19:33	MTG	75-71-8		
Chloromethane	ND	ppbv	6.4	09/11/01 19:33	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.6	09/11/01 19:33	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.7	09/11/01 19:33	MTG	75-01-4		
Bromomethane	ND	ppbv	6.7	09/11/01 19:33	MTG	74-83-9		
Chloroethane	ND	ppbv	6.7	09/11/01 19:33	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.0	09/11/01 19:33	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.4	09/11/01 19:33	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.1	09/11/01 19:33	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.7 UJ	09/11/01 19:33	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.4	09/11/01 19:33	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.4	09/11/01 19:33	MTG	156-59-2		
Chloroform	ND	ppbv	6.4	09/11/01 19:33	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.8	09/11/01 19:33	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.4	09/11/01 19:33	MTG	107-06-2		
Benzene	ND	ppbv	5.8	09/11/01 19:33	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.6	09/11/01 19:33	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.0	09/11/01 19:33	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.5	09/11/01 19:33	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.4	09/11/01 19:33	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.7	09/11/01 19:33	MTG	10061-02-6		
Toluene	ND	ppbv	6.4	09/11/01 19:33	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	5.9	09/11/01 19:33	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.8	09/11/01 19:33	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.4 UJ	09/11/01 19:33	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.6	09/11/01 19:33	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.6	09/11/01 19:33	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.4	09/11/01 19:33	MTG			
o-Xylene	ND	ppbv	5.1	09/11/01 19:33	MTG	95-47-6		
Styrene	ND	ppbv	5.4	09/11/01 19:33	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.1	09/11/01 19:33	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.4	09/11/01 19:33	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.4	09/11/01 19:33	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.0	09/11/01 19:33	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.0	09/11/01 19:33	MTG	106-46-7		

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Date: 09/18/01

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Phone: 612.607.1700
Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962396 Project Sample Number: 1048288-024 Date Collected: 08/29/01 00:00
Client Sample ID: SG24 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.4	09/11/01 19:33	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.8	09/11/01 19:33	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.7	09/11/01 19:33	MTG	87-68-3		

Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0911.b/25423.d
Lab Smp Id: 102962396 Client Smp ID: SG24
Inj Date : 11-SEP-2001 19:33
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 22
Dil Factor: 13.40000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.40000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
* 23 Fluorobenzene	96	8.728	8.722	(1.000)	555963	10.0000	
* 41 p-Bromofluorobenzene	95	13.976	13.971	(1.000)	235119	10.0000	

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25423.d
Lab Smp Id: 102962396
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: SG24
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	555963	-31.55
41 p-Bromofluorobenz	471889	235944	943778	235119	-50.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.73	0.21
41 p-Bromofluorobenz	13.96	13.46	14.46	13.98	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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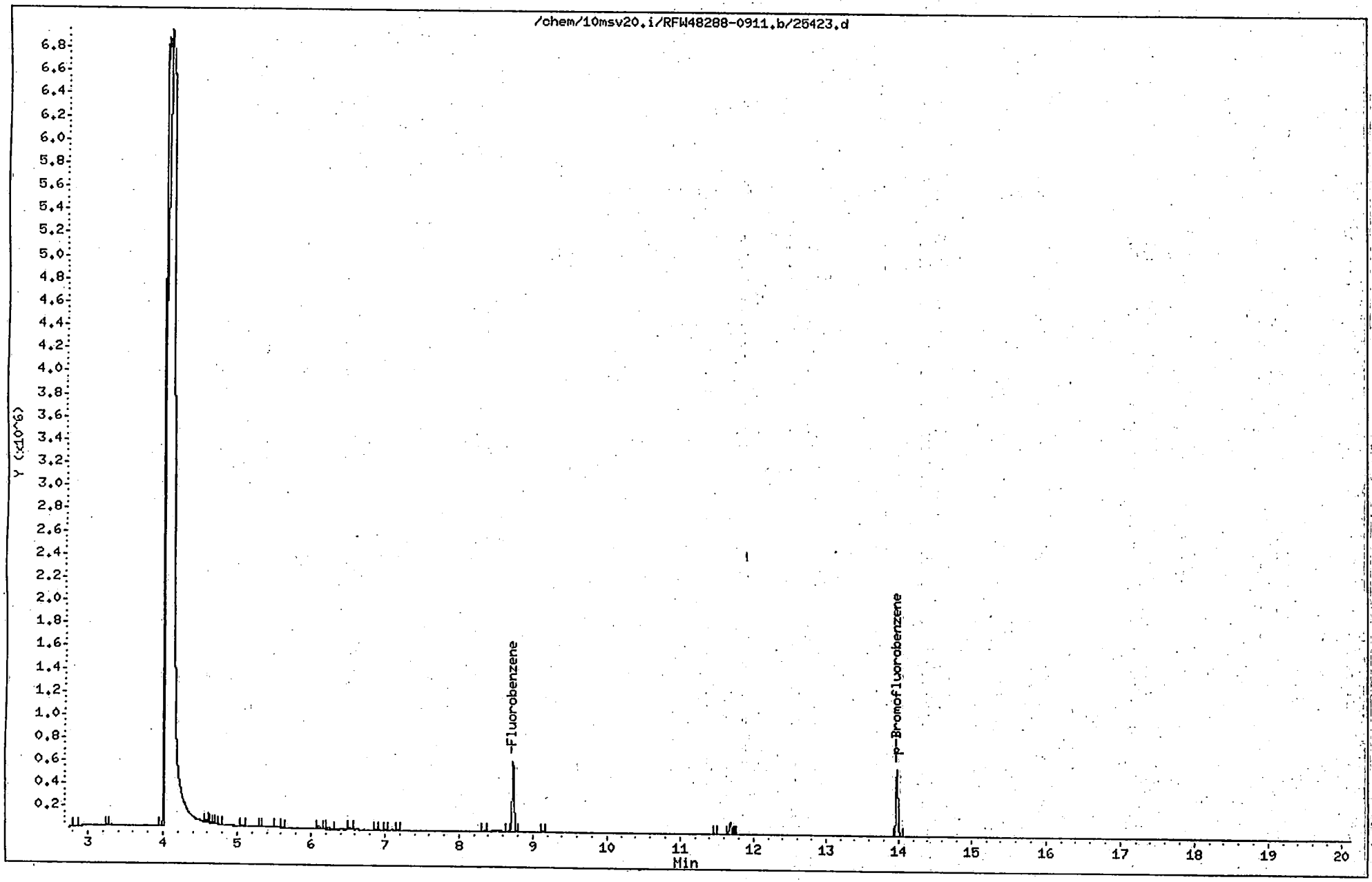
Data File: /chem/10msv20.i/RFW48288-0911.b/25423.d
Date : 11-SEP-2001 19:33
Client ID: SG24
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962404 Project Sample Number: 1048288-025 Date Collected: 08/29/01 00:00
Client Sample ID: SG25 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.9	09/12/01 20:15	MTG	75-71-8		
Chloromethane	ND	ppbv	6.6	09/12/01 20:15	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.9	09/12/01 20:15	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.9	09/12/01 20:15	MTG	75-01-4		
Bromomethane	ND	ppbv	6.9	09/12/01 20:15	MTG	74-83-9		
Chloroethane	ND	ppbv	6.9	09/12/01 20:15	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.2	09/12/01 20:15	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.6	09/12/01 20:15	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.3	09/12/01 20:15	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.9	09/12/01 20:15	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.6	09/12/01 20:15	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.6	09/12/01 20:15	MTG	156-59-2		
Chloroform	ND	ppbv	6.6	09/12/01 20:15	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.9	09/12/01 20:15	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.5	09/12/01 20:15	MTG	107-06-2		
Benzene	ND	ppbv	5.9	09/12/01 20:15	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.8	09/12/01 20:15	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.1	09/12/01 20:15	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.7	09/12/01 20:15	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.6	09/12/01 20:15	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.9	09/12/01 20:15	MTG	10061-02-6		
Toluene	ND	ppbv	6.6	09/12/01 20:15	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.1	09/12/01 20:15	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.9	09/12/01 20:15	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.6	09/12/01 20:15	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.8	09/12/01 20:15	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.8	09/12/01 20:15	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.5	09/12/01 20:15	MTG			
o-Xylene	ND	ppbv	5.2	09/12/01 20:15	MTG	95-47-6		
Styrene	ND	ppbv	5.5	09/12/01 20:15	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.2	09/12/01 20:15	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.6	09/12/01 20:15	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.6	09/12/01 20:15	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.1	09/12/01 20:15	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.1	09/12/01 20:15	MTG	106-46-7		

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962404 Project Sample Number: 1048288-025 Date Collected: 08/29/01 00:00
Client Sample ID: SG25 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.6	09/12/01 20:15	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.9	09/12/01 20:15	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.8 UJ	09/12/01 20:15	MTG	87-68-3	1	

Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0912.b/25522.d
Lab Smp Id: 102962404 Client Smp ID: SG25
Inj Date : 12-SEP-2001 20:15
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 21
Dil Factor: 13.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
23 Fluorobenzene	96	8.704	8.703	(1.000)	917912	10.0000	
41 p-Bromofluorobenzene	95	13.965	13.964	(1.000)	508582	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25522.d
Lab Smp Id: 102962404
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: SG25
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	917912	-14.26
41 p-Bromofluorobenz	632949	316474	1265898	508582	-19.65

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.70	-0.07
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	0.00

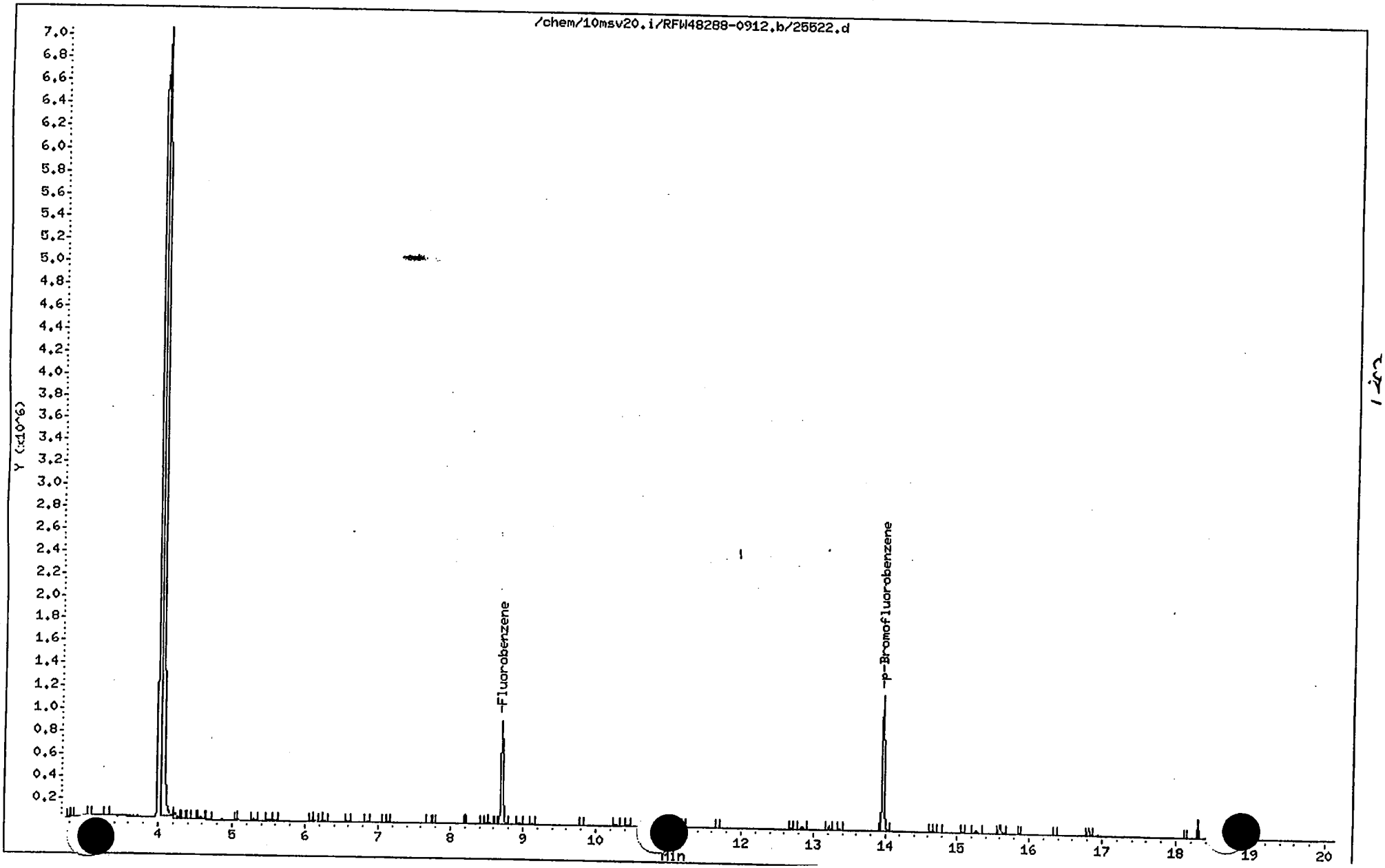
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0912.b/25522.d
Date : 12-SEP-2001 20:15
Client ID: SG25
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



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Fax: 612.607.644

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962420 Project Sample Number: 1048288-026 Date Collected: 08/29/01 00:00
Client Sample ID: SG26 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
Air							
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air						
Dichlorodifluoromethane	ND	ppbv	6.9	09/12/01 19:10 MTG	75-71-8		
Chloromethane	ND	ppbv	6.6	09/12/01 19:10 MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.9	09/12/01 19:10 MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.9	09/12/01 19:10 MTG	75-01-4		
Bromomethane	ND	ppbv	6.9	09/12/01 19:10 MTG	74-83-9		
Chloroethane	ND	ppbv	6.9	09/12/01 19:10 MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.2	09/12/01 19:10 MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.6	09/12/01 19:10 MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.3	09/12/01 19:10 MTG	76-13-1		
Methylene chloride	ND	ppbv	6.9	09/12/01 19:10 MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.6	09/12/01 19:10 MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.6	09/12/01 19:10 MTG	156-59-2		
Chloroform	ND	ppbv	6.6	09/12/01 19:10 MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.9	09/12/01 19:10 MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.5	09/12/01 19:10 MTG	107-06-2		
Benzene	ND	ppbv	5.9	09/12/01 19:10 MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.8	09/12/01 19:10 MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.1	09/12/01 19:10 MTG	78-87-5		
Trichloroethene	ND	ppbv	5.7	09/12/01 19:10 MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.6	09/12/01 19:10 MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.9	09/12/01 19:10 MTG	10061-02-6		
Toluene	ND	ppbv	6.6	09/12/01 19:10 MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.1	09/12/01 19:10 MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.9	09/12/01 19:10 MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.6	09/12/01 19:10 MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.8	09/12/01 19:10 MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.8	09/12/01 19:10 MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.5	09/12/01 19:10 MTG			
o-Xylene	ND	ppbv	5.2	09/12/01 19:10 MTG	95-47-6		
Styrene	ND	ppbv	5.5	09/12/01 19:10 MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.2	09/12/01 19:10 MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.6	09/12/01 19:10 MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.6	09/12/01 19:10 MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.1	09/12/01 19:10 MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.1	09/12/01 19:10 MTG	106-46-7		

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Date: 09/18/01

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962420 Project Sample Number: 1048288-026 Date Collected: 08/29/01 00:00
Client Sample ID: SG26 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.6	09/12/01 19:10	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.9	09/12/01 19:10	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.8 UJ	09/12/01 19:10	MTG	87-68-3	1	

Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0912.b/25520.d
Lab Smp Id: 102962420 Client Smp ID: SG26
Inj Date : 12-SEP-2001 19:10
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 19
Dil Factor: 13.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.710	8.703	(1.000)	904015	10.0000	
* 41 p-Bromofluorobenzene	95	13.965	13.964	(1.000)	450928	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25520.d
Lab Smp Id: 102962420
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: SG26
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	904015	-15.55
41 p-Bromofluorobenz	632949	316474	1265898	450928	-28.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	0.00
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

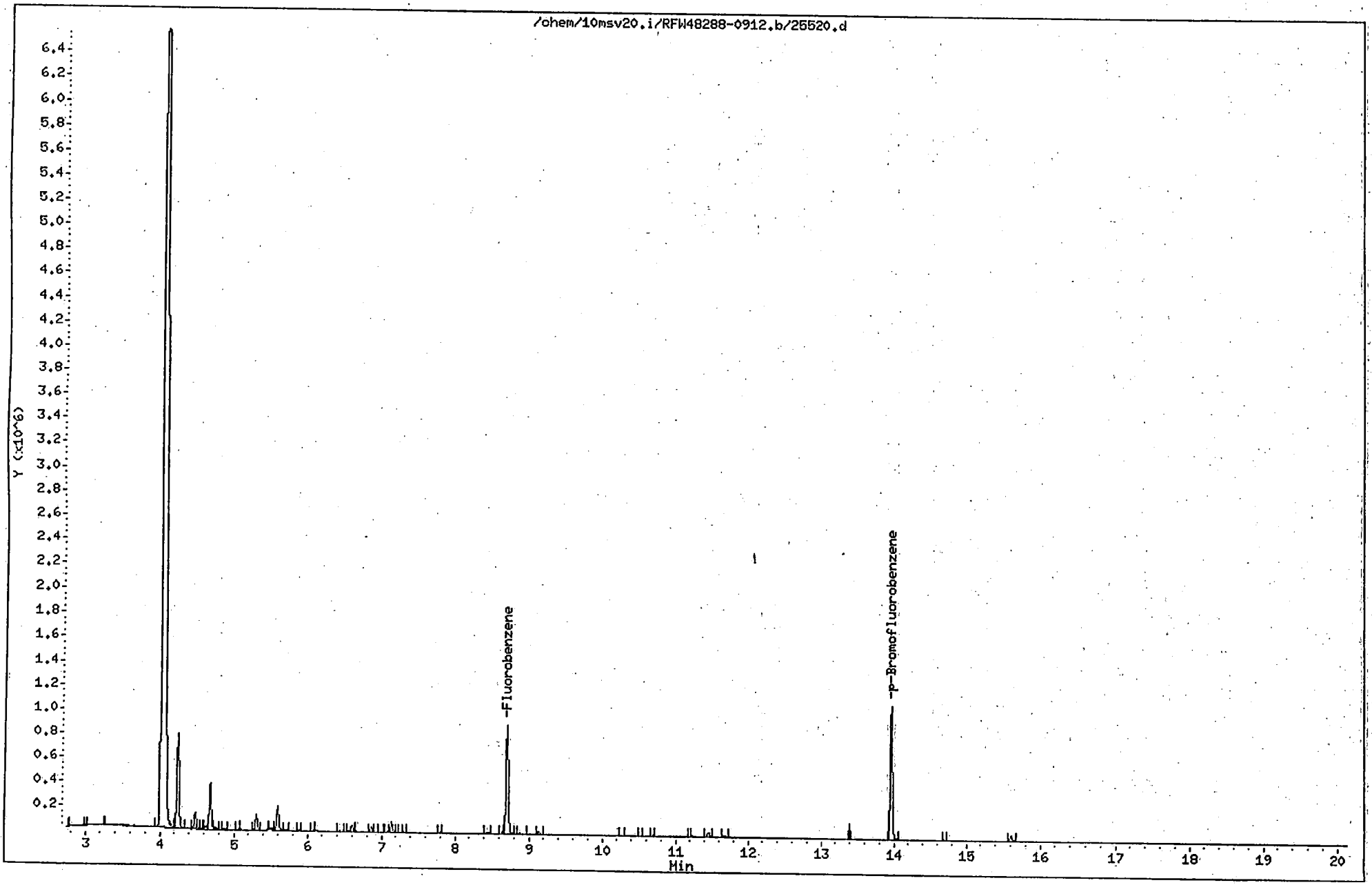
000184

Data File: /chem/10msv20.i/RFW48288-0912.b/25520.d
Date : 12-SEP-2001 19:10
Client ID: SC26
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Fax: 612.607.6444

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962438 Project Sample Number: 1048288-027 Date Collected: 08/29/01 00:00
Client Sample ID: SG27 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.9	09/12/01 19:42	MTG	75-71-8		
Chloromethane	ND	ppbv	6.6	09/12/01 19:42	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.9	09/12/01 19:42	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.9	09/12/01 19:42	MTG	75-01-4		
Bromomethane	ND	ppbv	6.9	09/12/01 19:42	MTG	74-83-9		
Chloroethane	ND	ppbv	6.9	09/12/01 19:42	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.2	09/12/01 19:42	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.6	09/12/01 19:42	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.3	09/12/01 19:42	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.9	09/12/01 19:42	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.6	09/12/01 19:42	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.6	09/12/01 19:42	MTG	156-59-2		
Chloroform	ND	ppbv	6.6	09/12/01 19:42	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.9	09/12/01 19:42	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.5	09/12/01 19:42	MTG	107-06-2		
Benzene	ND	ppbv	5.9	09/12/01 19:42	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.8	09/12/01 19:42	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.1	09/12/01 19:42	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.7	09/12/01 19:42	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.6	09/12/01 19:42	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.9	09/12/01 19:42	MTG	10061-02-6		
Toluene	ND	ppbv	6.6	09/12/01 19:42	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.1	09/12/01 19:42	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.9	09/12/01 19:42	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.6	09/12/01 19:42	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.8	09/12/01 19:42	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.8	09/12/01 19:42	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.5	09/12/01 19:42	MTG			
o-Xylene	ND	ppbv	5.2	09/12/01 19:42	MTG	95-47-6		
Styrene	ND	ppbv	5.5	09/12/01 19:42	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.2	09/12/01 19:42	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.6	09/12/01 19:42	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.6	09/12/01 19:42	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.1	09/12/01 19:42	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.1	09/12/01 19:42	MTG	106-46-7		

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Date: 09/18/01

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Fax: 612.607.644

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962438 Project Sample Number: 1048288-027 Date Collected: 08/29/01 00:00
Client Sample ID: SG27 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.6	09/12/01 19:42	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.9	09/12/01 19:42	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.8 UJ	09/12/01 19:42	MTG	87-68-3	1	

DKP 9/19/01

Date: 09/18/01

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Data file : /chem/10msv20.i/RFW48288-0912.b/25521.d
Lab Smp Id: 102962438 Client Smp ID: SG27
Inj Date : 12-SEP-2001 19:42
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 20
Dil Factor: 13.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
23 Fluorobenzene	96	8.707	8.703	(1.000)	910469	10.0000	
41 p-Bromofluorobenzene	95	13.962	13.964	(1.000)	451944	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25521.d
Lab Smp Id: 102962438
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: SG27
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	910469	-14.95
41 p-Bromofluorobenz	632949	316474	1265898	451944	-28.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	-0.03
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

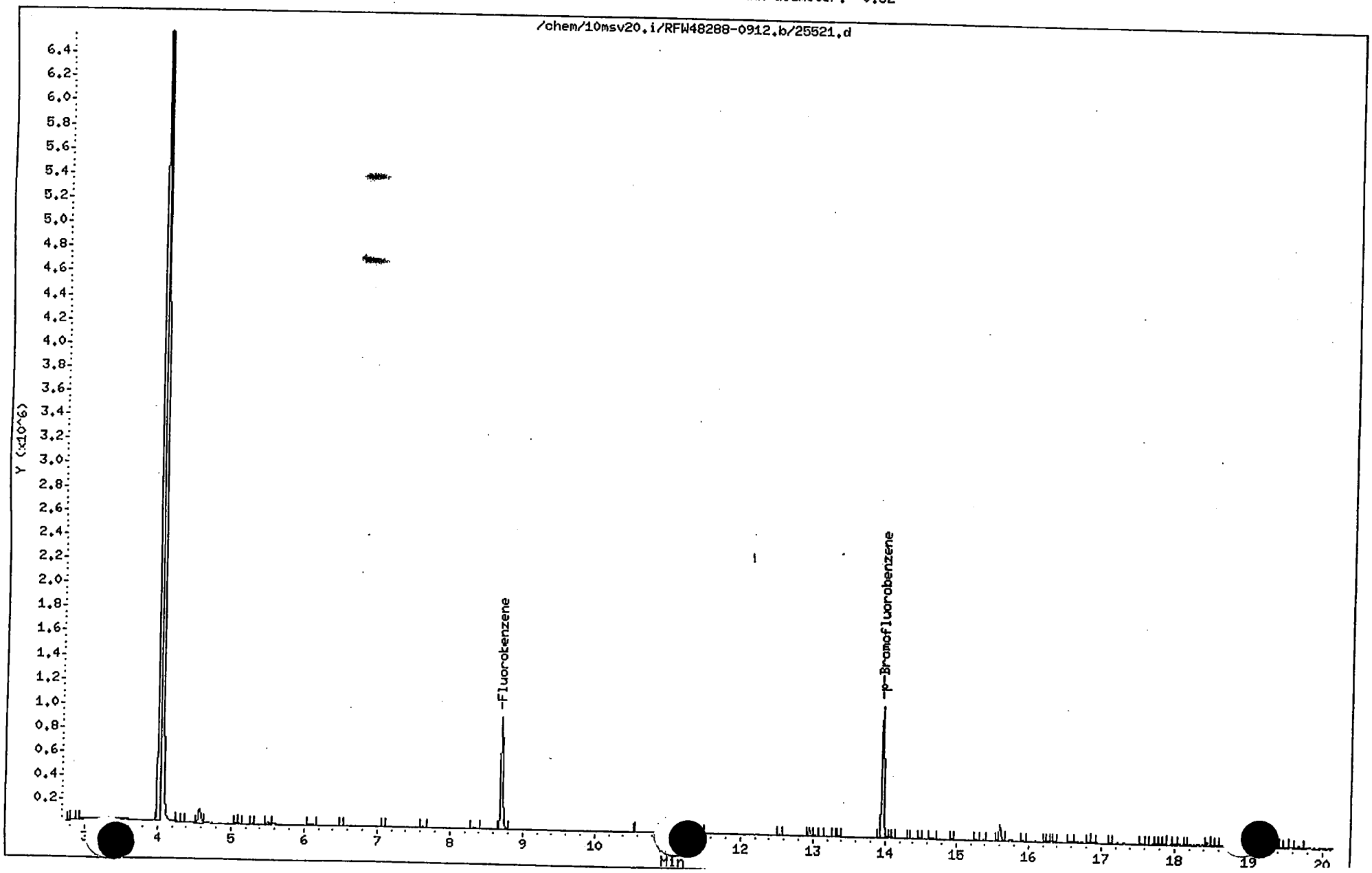
Data File: /chem/10msv20.i/RFW48288-0912.b/25521.d
Date : 12-SEP-2001 19:42
Client ID: SG27
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

000189



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SG27

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962453 Project Sample Number: 1048288-028 Date Collected: 08/29/01 00:00
Client Sample ID: SG28 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
Air								
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air							
Dichlorodifluoromethane	ND	ppbv	6.9	09/11/01 20:05	MTG	75-71-8		
Chloromethane	ND	ppbv	6.6	09/11/01 20:05	MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	7.9	09/11/01 20:05	MTG	76-14-2		
Vinyl chloride	ND	ppbv	6.9	09/11/01 20:05	MTG	75-01-4		
Bromomethane	ND	ppbv	6.9	09/11/01 20:05	MTG	74-83-9		
Chloroethane	ND	ppbv	6.9	09/11/01 20:05	MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	7.2	09/11/01 20:05	MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	6.6	09/11/01 20:05	MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	7.3	09/11/01 20:05	MTG	76-13-1		
Methylene chloride	ND	ppbv	6.9 UJ	09/11/01 20:05	MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	6.6	09/11/01 20:05	MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	6.6	09/11/01 20:05	MTG	156-59-2		
Chloroform	ND	ppbv	6.6	09/11/01 20:05	MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	5.9	09/11/01 20:05	MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	5.5	09/11/01 20:05	MTG	107-06-2		
Benzene	ND	ppbv	5.9	09/11/01 20:05	MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	5.8	09/11/01 20:05	MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	5.1	09/11/01 20:05	MTG	78-87-5		
Trichloroethene	ND	ppbv	5.7	09/11/01 20:05	MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	6.6	09/11/01 20:05	MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	6.9	09/11/01 20:05	MTG	10061-02-6		
Toluene	ND	ppbv	6.6	09/11/01 20:05	MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	6.1	09/11/01 20:05	MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	5.9	09/11/01 20:05	MTG	106-93-4		
Tetrachloroethene	ND	ppbv	6.6 UJ	09/11/01 20:05	MTG	127-18-4		
Chlorobenzene	ND	ppbv	5.8	09/11/01 20:05	MTG	108-90-7		
Ethylbenzene	ND	ppbv	5.8	09/11/01 20:05	MTG	100-41-4		
m&p-Xylene	ND	ppbv	5.5	09/11/01 20:05	MTG			
o-Xylene	ND	ppbv	5.2	09/11/01 20:05	MTG	95-47-6		
Styrene	ND	ppbv	5.5	09/11/01 20:05	MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	5.2	09/11/01 20:05	MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	6.6	09/11/01 20:05	MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	6.6	09/11/01 20:05	MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	4.1	09/11/01 20:05	MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	4.1	09/11/01 20:05	MTG	106-46-7		

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962453
Client Sample ID: SG28

Project Sample Number: 1048288-028
Matrix: Air

Date Collected: 08/29/01 00:00
Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	6.6	09/11/01 20:05 MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	2.9	09/11/01 20:05 MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	1.8	09/11/01 20:05 MTG	87-68-3		

Date: 09/18/01

pkp 9/19/01

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Data file : /chem/10msv20.i/RFW48288-0911.b/25424.d
Lab Smp Id: 102962453 Client Smp ID: SG28
Inj Date : 11-SEP-2001 20:05
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 23
Dil Factor: 13.80000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	13.80000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.720	8.722	(1.000)	571020	10.0000	
* 41 p-Bromofluorobenzene	95	13.975	13.971	(1.000)	242717	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25424.d
Lab Smp Id: 102962453
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: SG28
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	571020	-29.70
41 p-Bromofluorobenz	471889	235944	943778	242717	-48.56

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
Fluorobenzene	8.71	8.21	9.21	8.72	0.13
41 p-Bromofluorobenz	13.96	13.46	14.46	13.98	0.08

REA UPPER LIMIT = +100% of internal standard area.
REA LOWER LIMIT = - 50% of internal standard area.
T UPPER LIMIT = + 0.50 minutes of internal standard RT.
T LOWER LIMIT = - 0.50 minutes of internal standard RT.

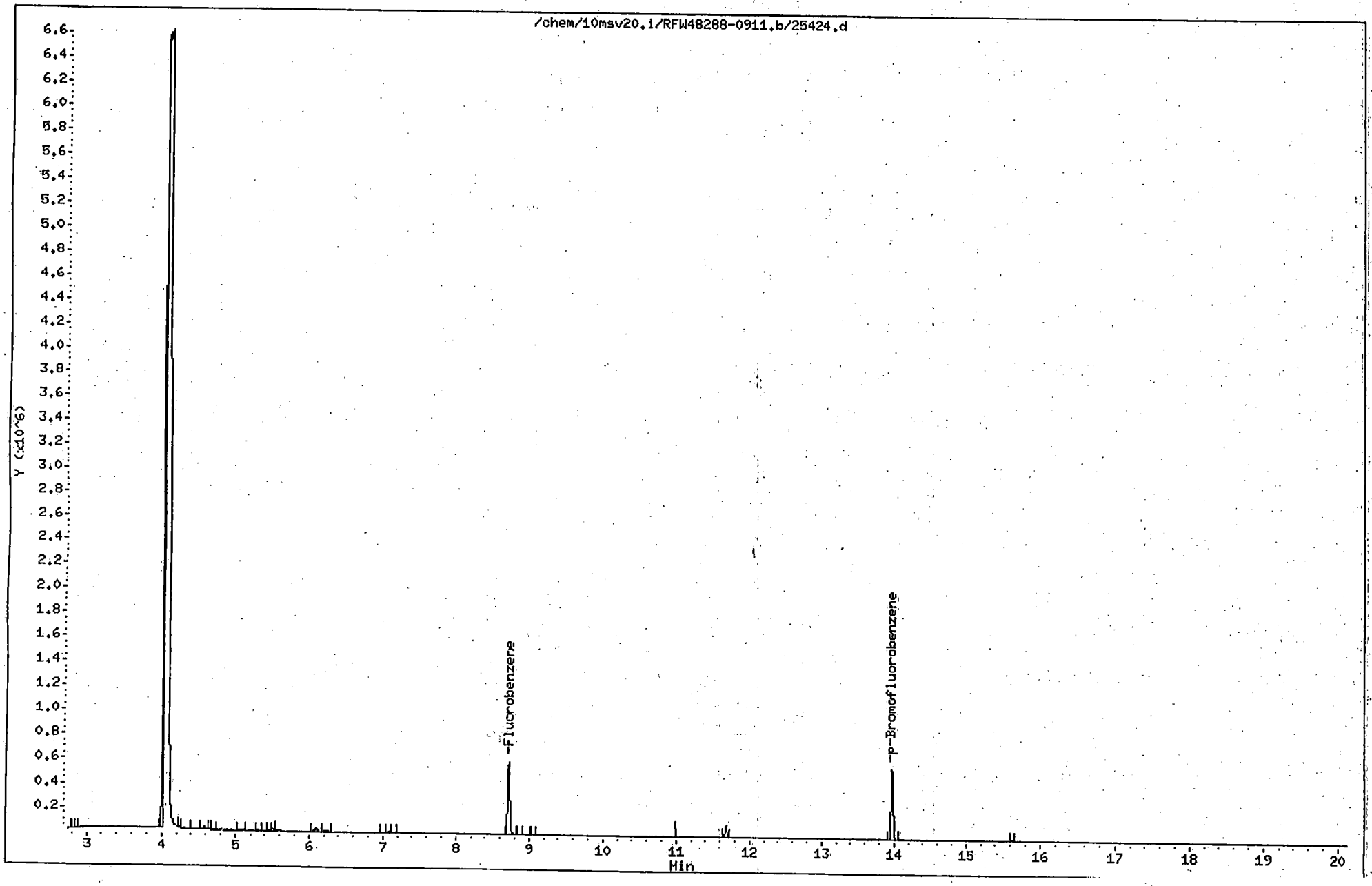
000194

Data File: /chem/10msv20.i/RFW48288-0911.b/25424.d
Date : 11-SEP-2001 20:05
Client ID: SG28
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Trip Blank

Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962461 Project Sample Number: 1048288-029 Date Collected: 08/29/01 00:00
Client Sample ID: SG29 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed	CAS No.	Ftnote	Reg Limit
Air							
GC/MS VOCs, in Air	Prep/Method: TO-14 Ambient Air / TO-14 Ambient Air						
Dichlorodifluoromethane	ND	ppbv	63.	09/12/01 18:38 MTG	75-71-8		
Chloromethane	ND	ppbv	61.	09/12/01 18:38 MTG	74-87-3		
Dichlorotetrafluoroethane	ND	ppbv	72.	09/12/01 18:38 MTG	76-14-2		
Vinyl chloride	ND	ppbv	63.	09/12/01 18:38 MTG	75-01-4		
Bromomethane	ND	ppbv	63.	09/12/01 18:38 MTG	74-83-9		
Chloroethane	ND	ppbv	63.	09/12/01 18:38 MTG	75-00-3		
Trichlorofluoromethane	ND	ppbv	66.	09/12/01 18:38 MTG	75-69-4		
1,1-Dichloroethene	ND	ppbv	61.	09/12/01 18:38 MTG	75-35-4		
1,1,2-Trichlorotrifluoroethane	ND	ppbv	67.	09/12/01 18:38 MTG	76-13-1		
Methylene chloride	ND	ppbv	63.	09/12/01 18:38 MTG	75-09-2		
1,1-Dichloroethane	ND	ppbv	61.	09/12/01 18:38 MTG	75-34-3		
cis-1,2-Dichloroethene	ND	ppbv	61.	09/12/01 18:38 MTG	156-59-2		
Chloroform	ND	ppbv	61.	09/12/01 18:38 MTG	67-66-3		
1,1,1-Trichloroethane	ND	ppbv	54.	09/12/01 18:38 MTG	71-55-6		
1,2-Dichloroethane	ND	ppbv	51.	09/12/01 18:38 MTG	107-06-2		
Benzene	ND	ppbv	54.	09/12/01 18:38 MTG	71-43-2		
Carbon tetrachloride	ND	ppbv	53.	09/12/01 18:38 MTG	56-23-5		
1,2-Dichloropropane	ND	ppbv	47.	09/12/01 18:38 MTG	78-87-5		
Trichloroethene	ND	ppbv	52.	09/12/01 18:38 MTG	79-01-6		
cis-1,3-Dichloropropene	ND	ppbv	61.	09/12/01 18:38 MTG	10061-01-5		
trans-1,3-Dichloropropene	ND	ppbv	63.	09/12/01 18:38 MTG	10061-02-6		
Toluene	ND	ppbv	61.	09/12/01 18:38 MTG	108-88-3		
1,1,2-Trichloroethane	ND	ppbv	56.	09/12/01 18:38 MTG	79-00-5		
1,2-Dibromoethane (EDB)	ND	ppbv	54.	09/12/01 18:38 MTG	106-93-4		
Tetrachloroethene	ND	ppbv	61.	09/12/01 18:38 MTG	127-18-4		
Chlorobenzene	ND	ppbv	53.	09/12/01 18:38 MTG	108-90-7		
Ethylbenzene	ND	ppbv	53.	09/12/01 18:38 MTG	100-41-4		
m&p-Xylene	ND	ppbv	51.	09/12/01 18:38 MTG			
o-Xylene	ND	ppbv	48.	09/12/01 18:38 MTG	95-47-6		
Styrene	ND	ppbv	51.	09/12/01 18:38 MTG	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ppbv	48.	09/12/01 18:38 MTG	79-34-5		
1,3,5-Trimethylbenzene	ND	ppbv	61.	09/12/01 18:38 MTG	108-67-8		
1,2,4-Trimethylbenzene	ND	ppbv	61.	09/12/01 18:38 MTG	95-63-6		
1,3-Dichlorobenzene	ND	ppbv	38.	09/12/01 18:38 MTG	541-73-1		
1,4-Dichlorobenzene	ND	ppbv	38.	09/12/01 18:38 MTG	106-46-7		

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Date: 09/18/01

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Lab Project Number: 1048288
Client Project ID: ROSELLE PARK

Lab Sample No: 102962461 Project Sample Number: 1048288-029 Date Collected: 08/29/01 00:00
Client Sample ID: SG29 Matrix: Air Date Received: 08/31/01 10:50

Parameters	Results	Units	Report Limit	Analyzed		CAS No.	Ftnote	Reg Limit
1,2-Dichlorobenzene	ND	ppbv	61.	09/12/01 18:38	MTG	95-50-1		
1,2,4-Trichlorobenzene	ND	ppbv	27.	09/12/01 18:38	MTG	120-82-1		
Hexachloro-1,3-butadiene	ND	ppbv	16. UJ	09/12/01 18:38	MTG	87-68-3	1	

Date: 09/18/01

akp 9/19/01

REPORT OF LABORATORY ANALYSIS

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PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0912.b/25519.d
Lab Smp Id: 102962461 Client Smp ID: SG29
Inj Date : 12-SEP-2001 18:38
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 18
Dil Factor: 126.40000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	126.40000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
23 Fluorobenzene	96	8.709	8.703	(1.000)	914204	10.0000	
41 p-Bromofluorobenzene	95	13.963	13.964	(1.000)	442226	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25519.d
Lab Smp Id: 102962461
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: SG29
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	914204	-14.60
41 p-Bromofluorobenz	632949	316474	1265898	442226	-30.13

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	-0.01
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	-0.01

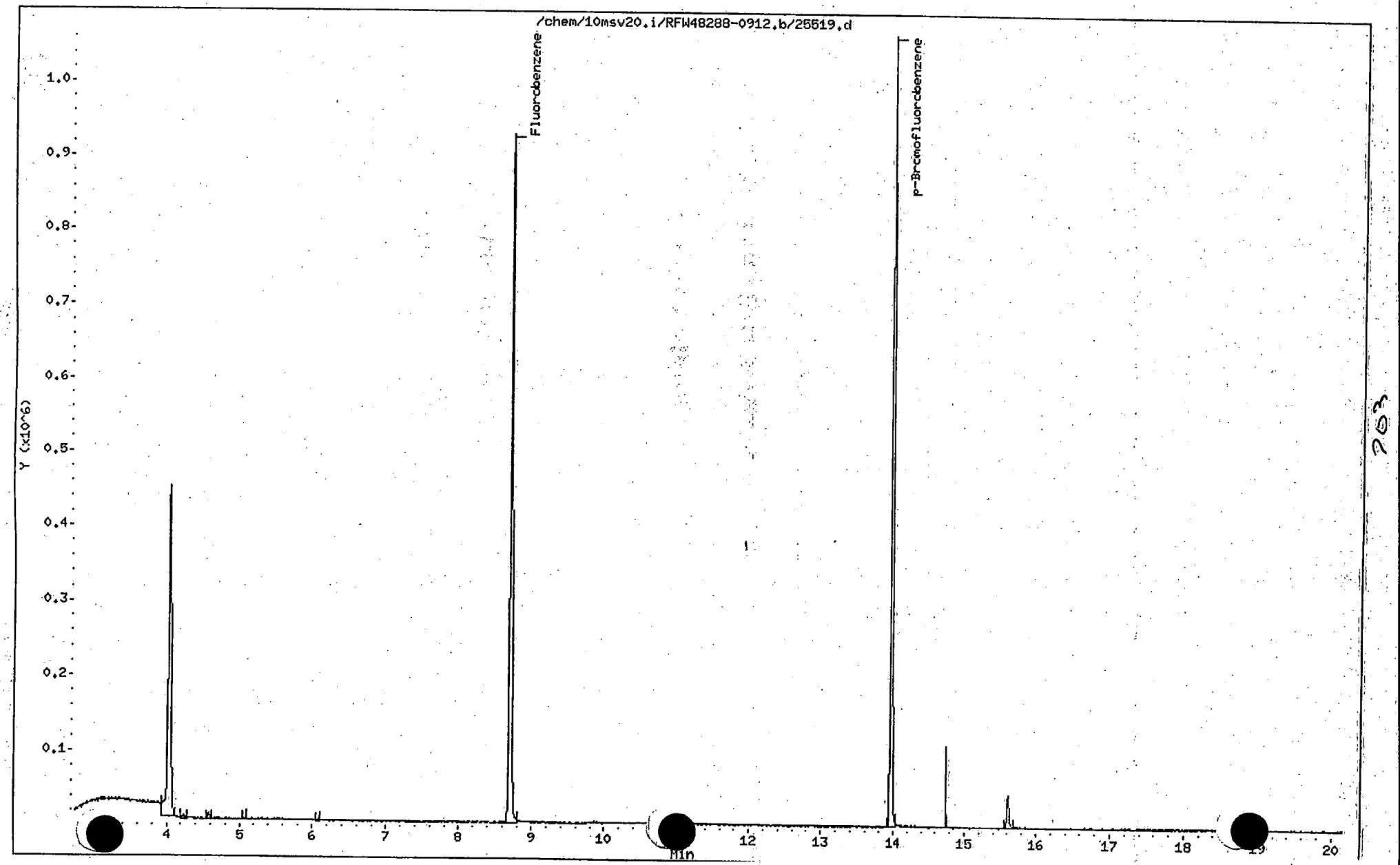
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0912.b/25519.d
Date : 12-SEP-2001 18:38
Client ID: SG29
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



Pace Analytical™

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Client Roy F Weston

SDG 104R288

TO-14 Volatile

Standards Data Package

Pace Analytical™

Pace Analytical Services, Inc.
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Fax: 612.607.6444

Initial Calibration

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JUL-2001 07:54
End Cal Date : 15-AUG-2001 07:46
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/10msv09.i/RFW48288-0815.b/TO14LP227.m
Cal Date : 18-Sep-2001 13:36 mgurnsey
Curve Type : Average

Calibration File Names:
Level 1: /chem/10msv09.i/RFW48288-0815.b/22705.d
Level 2: /chem/10msv09.i/RFW48288-0815.b/22704.d
Level 3: /chem/10msv09.i/RFW48288-0815.b/22706.d

Compound	0.10000 Level 1	0.50000 Level 2	1.000 Level 3	___ RRF	% RSD
1 Dichlorodifluoromethane	251980	325160	230227	269122	18.480
2 Chloromethane	220031	183854	147046	183644	19.872
3 Freon 114 (12DC1122FlANE)	295121	381244	306617	327661	14.271
4 Vinyl Chloride	105556	133526	109955	116345	12.928
5 Bromomethane	105929	125626	103229	111595	10.956
6 Chloroethane	54950	67839	58336	60375	11.068
7 Trichlorofluoromethane	211263	273792	229332	238129	13.513
9 1,1-Dichloroethene	98468	121613	103850	107977	11.217
10 Freon 113	199353	252524	212707	221528	12.486
11 Methylene Chloride	117906	138615	122992	126504	8.531
12 1,1-Dichloroethane	215621	249167	228303	231030	7.332
13 cis-1,2-Dichloroethene	104232	115386	104360	107992	5.929
14 Chloroform	224358	266471	236539	242456	8.938
15 1,1,1-Trichloroethane	182111	226098	192831	200347	11.448
16 1,2-Dichloroethane	163451	192511	161298	172420	10.111
17 Benzene	389326	420013	389061	399467	4.455
18 Carbon Tetrachloride	143160	205985	176529	175224	17.939
19 1,2-Dichloropropane	161965	168988	149036	159997	6.326
20 Trichloroethene	132868	153533	138048	141483	7.599
21 cis-1,3-Dichloropropene	175514	210257	181705	189159	9.797
22 trans-1,3-Dichloropropene	109083	135700	128394	124392	11.055
23 Toluene	259292	303877	258051	273740	9.537
24 1,1,2-Trichloroethane	167444	172310	142917	160891	9.792
25 1,2-Dibromoethane	210913	228248	194166	211109	8.073
26 Tetrachloroethene	202737	225933	188297	205656	9.233
27 Chlorobenzene	382522	400333	331607	371487	9.601
28 Ethyl Benzene	173589	185335	156953	171959	8.294
29 mp-Xylene	235382	242103	198377	225287	10.451

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JUL-2001 07:54
End Cal Date : 15-AUG-2001 07:46
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/10msv09.i/RFW48288-0815.b/TO14LP227.m
Cal Date : 18-Sep-2001 13:36 mgurnsey
Curve Type : Average

Compound	0.10000 Level 1	0.50000 Level 2	1.000 Level 3	RRF	% RSD	
30 Styrene	293527	304721	274743	290997	5.206	
31 o-Xylene	249769	240091	199154	229671	11.699	
32 1,1,2,2-Tetrachloroethane	646347	508818	491457	548874	15.461	
33 1,3,5-Trimethylbenzene	540198	478198	427123	481840	11.752	
34 1,2,4-Trimethylbenzene	583556	516969	475974	525500	10.332	
35 1,3-Dichlorobenzene	435395	796043	673637	635025	28.880	
36 1,4-Dichlorobenzene	195160	337040	319821	284007	27.261	
37 1,2-Dichlorobenzene	237909	392117	288362	306129	25.683	
38 1,2,4-Trichlorobenzene	777986	93247	44436	305223	134.378	<-
39 Hexachlorobutadiene	376518	344764	158432	293238	40.179	<-

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PACE, Inc. Air Analytical Laboratory

Data file : /chem/10msv09.i/RFW48288-0815.b/22705.d
Lab Smp Id: 0.1ppmv Client Smp ID: 0.1ppmv
Inj Date : 15-AUG-2001 07:13
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0815.b/TO14LP227.m
Meth Date : 18-Sep-2001 13:36 mgurnsey Quant Type: ESTD
Cal Date : 15-AUG-2001 07:13 Cal File: 22705.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ppmv)	ON-COL (ppmv)
1 Dichlorodifluoromethane	85	3.147	3.147	0.000	29217	0.10000	0.0897(a)
2 Chloromethane	50	3.147	3.147	0.000	21123	0.09600	0.115
3 Freon 114 (12DC1122FlANE)	85	3.147	3.147	0.000	29217	0.09900	0.0892(a)
4 Vinyl Chloride	62	3.260	3.260	0.000	10450	0.09900	0.0898(a)
5 Bromomethane	94	3.535	3.535	0.000	10487	0.09900	0.0940(a)
6 Chloroethane	64	3.616	3.616	0.000	5550	0.10100	0.0919(a)
7 Trichlorofluoromethane	101	3.958	3.958	0.000	20915	0.09900	0.0878(a)
9 1,1-Dichloroethene	96	4.353	4.353	0.000	9256	0.09400	0.0857(a)
10 Freon 113	101	4.447	4.447	0.000	20334	0.10200	0.0918(a)
11 Methylene Chloride	84	4.527	4.527	0.000	11319	0.09600	0.0895(a)
12 1,1-Dichloroethane	63	5.171	5.171	0.000	20484	0.09500	0.0887(a)
13 cis-1,2-Dichloroethene	96	5.680	5.680	0.000	9902	0.09500	0.0917(a)
14 Chloroform	83	5.855	5.855	0.000	21314	0.09500	0.0879(a)
15 1,1,1-Trichloroethane	97	6.404	6.404	0.000	16390	0.09000	0.0818(a)
16 1,2-Dichloroethane	62	6.445	6.445	0.000	14874	0.09100	0.0863
17 Benzene	78	6.733	6.733	0.000	34650	0.08900	0.0867

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ppmv)	ON-COL (ppmv)
18 Carbon Tetrachloride	117	6.753	6.753	0.000	13457	0.09400	0.0768(a)
19 1,2-Dichloropropane	63	7.437	7.437	0.000	13929	0.08600	0.0870
20 Trichloroethene	130	7.463	7.463	0.000	12091	0.09100	0.0854(a)
21 cis-1,3-Dichloropropene	75	8.254	8.254	0.000	18429	0.10500	0.0974(a)
22 trans-1,3-Dichloropropene	75	8.750	8.750	0.000	11781	0.10800	0.0947(a)
23 Toluene	92	8.884	8.884	0.000	24892	0.09600	0.0909
24 1,1,2-Trichloroethane	97	8.905	8.905	0.000	16577	0.09900	0.103
25 1,2-Dibromoethane	107	9.729	9.729	0.000	21724	0.10300	0.103
26 Tetrachloroethene	166	9.810	9.810	0.000	19260	0.09500	0.0936(a)
27 Chlorobenzene	112	10.560	10.560	0.000	35192	0.09200	0.0947
28 Ethyl Benzene	106	10.828	10.828	0.000	16491	0.09500	0.0959
29 mp-Xylene	106	10.976	10.976	0.000	43781	0.18600	0.194
30 Styrene	104	11.412	11.412	0.000	27298	0.09300	0.0938
31 o-Xylene	106	11.472	11.472	0.000	22729	0.09100	0.0990
32 1,1,2,2-Tetrachloroethane	83	11.753	11.753	0.000	65281	0.10100	0.119
33 1,3,5-Trimethylbenzene	105	12.866	12.866	0.000	54560	0.10100	0.113
34 1,2,4-Trimethylbenzene	105	13.369	13.369	0.000	52520	0.09000	0.0999
35 1,3-Dichlorobenzene	146	13.677	13.677	0.000	35267	0.08100	0.0555(a)
36 1,4-Dichlorobenzene	146	13.784	13.784	0.000	36690	0.18800	0.129(M)
37 1,2-Dichlorobenzene	146	14.234	14.234	0.000	39017	0.16400	0.127
1,2,4-Trichlorobenzene	180	16.687	16.687	0.000	110474	0.14200	0.362
Hexachlorobutadiene	225	17.257	17.257	0.000	63255	0.16800	0.216

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

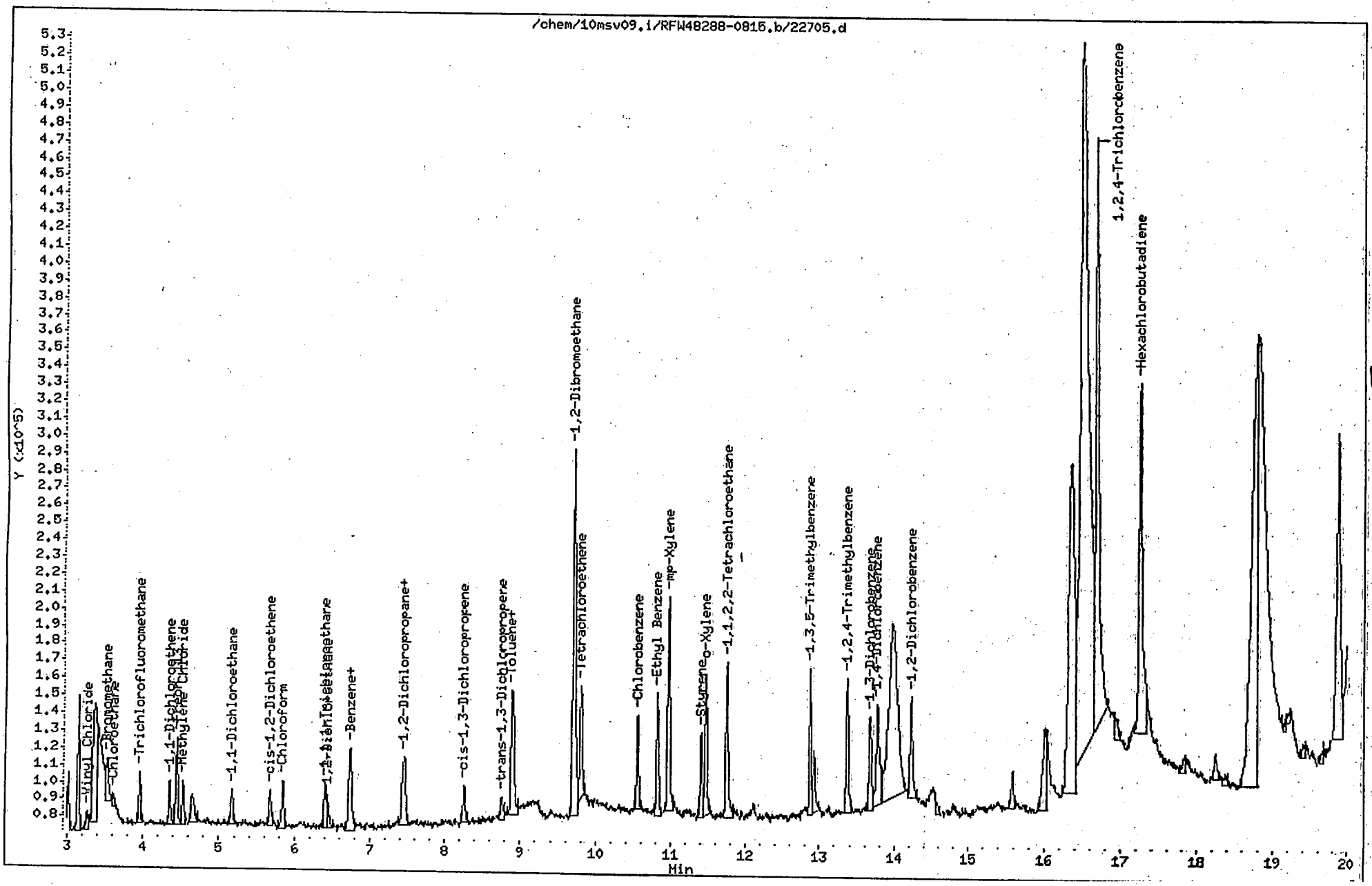
Data File: /chem/10msv09.i/RFW48288-0815.b/22705.d
Date : 15-AUG-2001 07:13
Client ID: 0.1ppmv
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

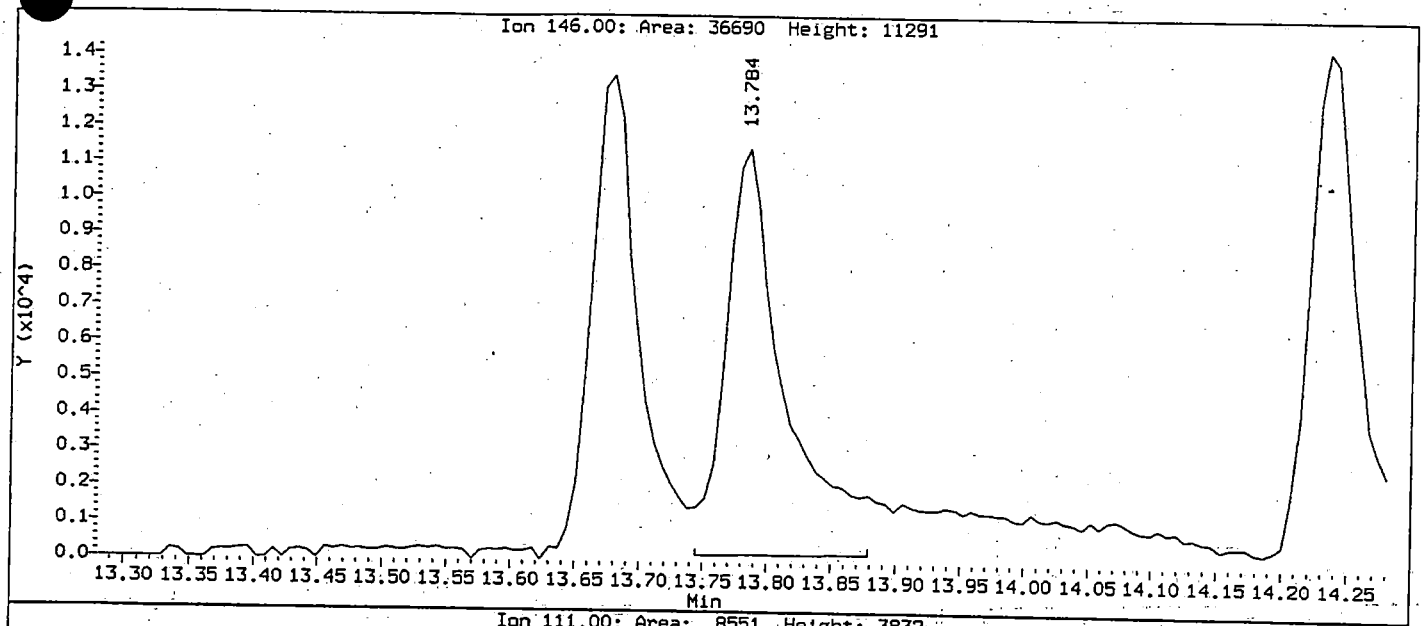
000206

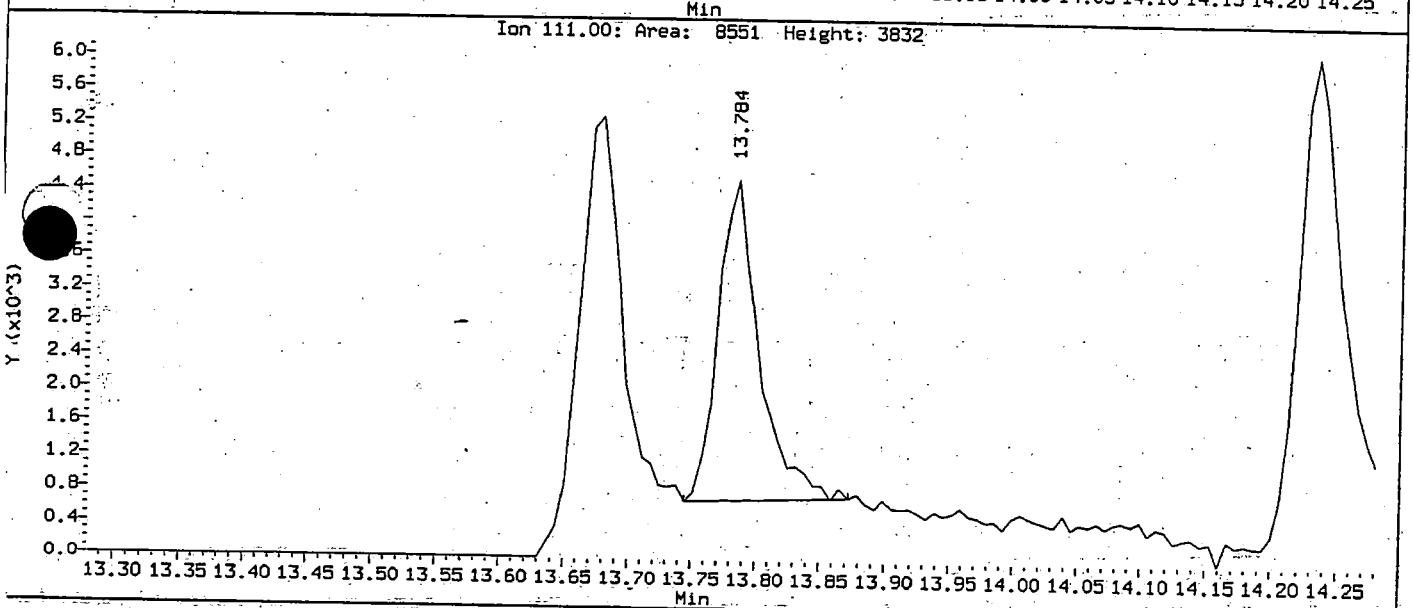


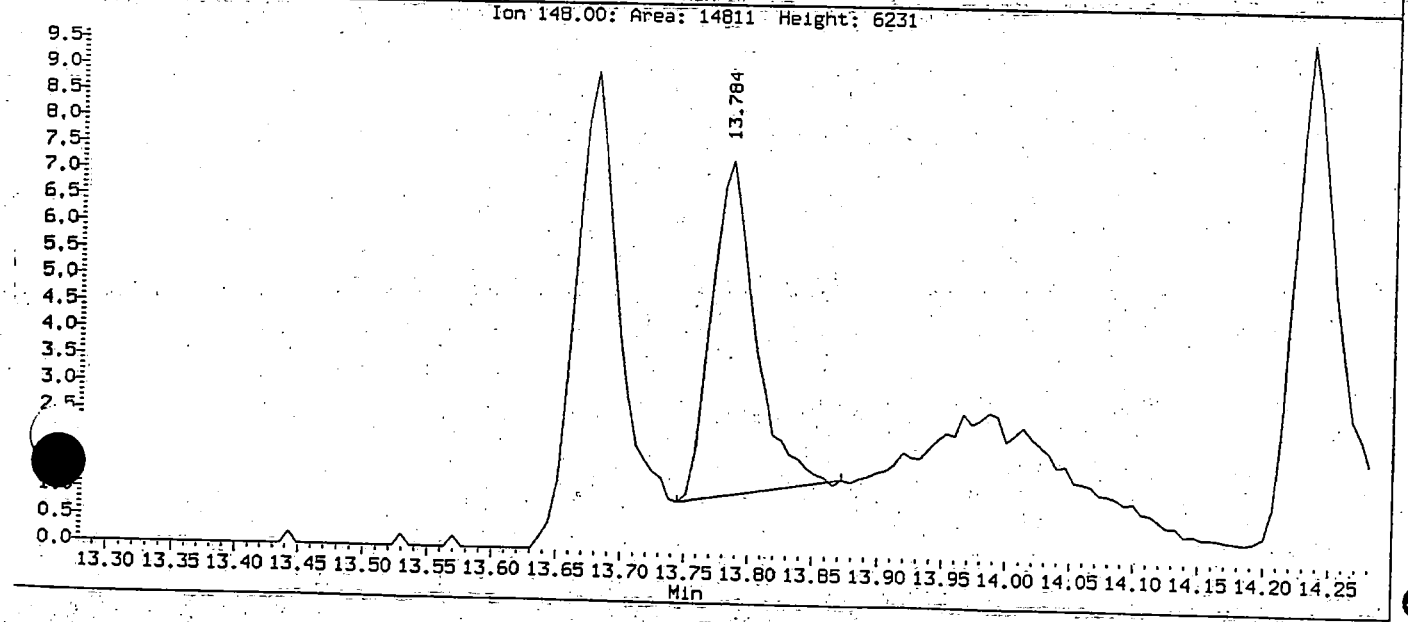
Data File: /chem/10msv09.i/RFW48288-0815.b/22705.d
Injection Date: 15-AUG-2001 07:13
Instrument: 10msv09.i
Client Sample ID: 0.1ppmv

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7

After MT6 9/18/01







000207

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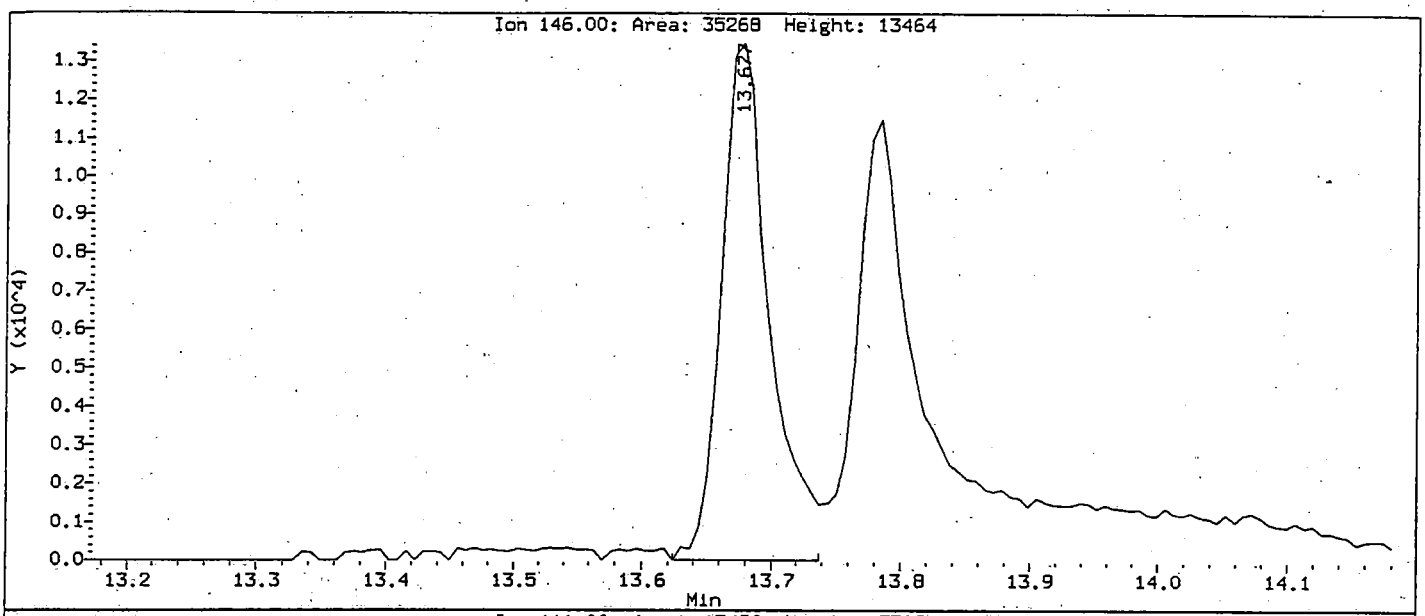
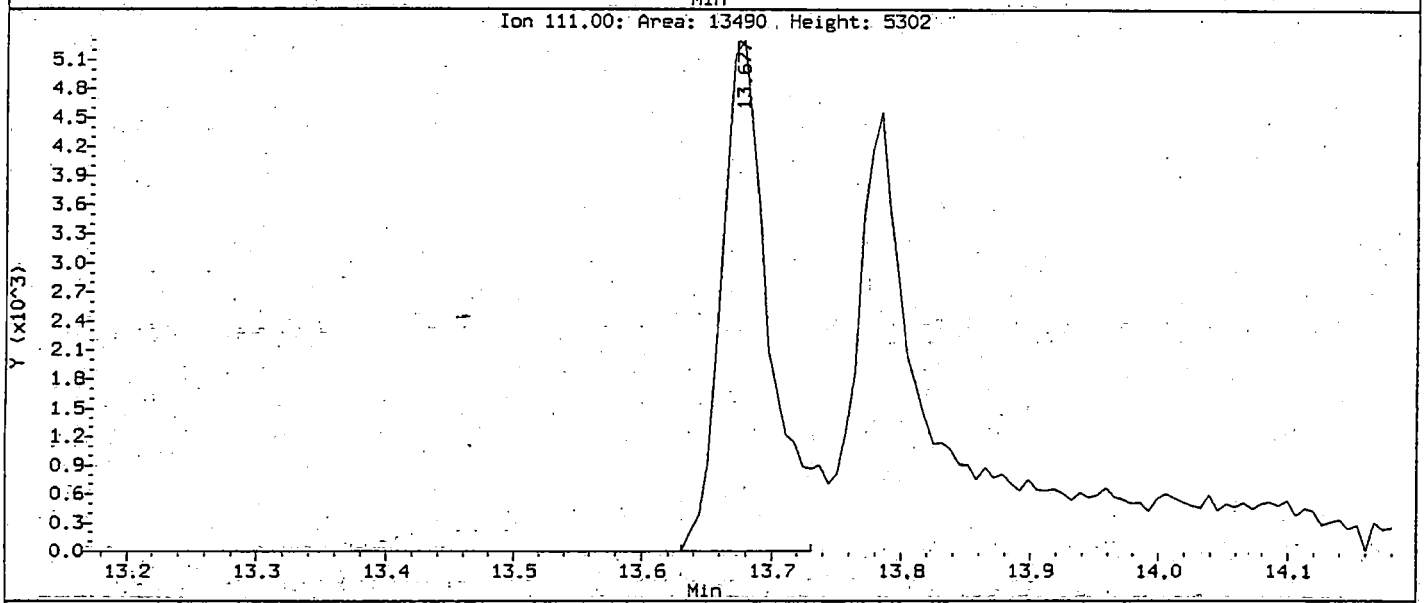
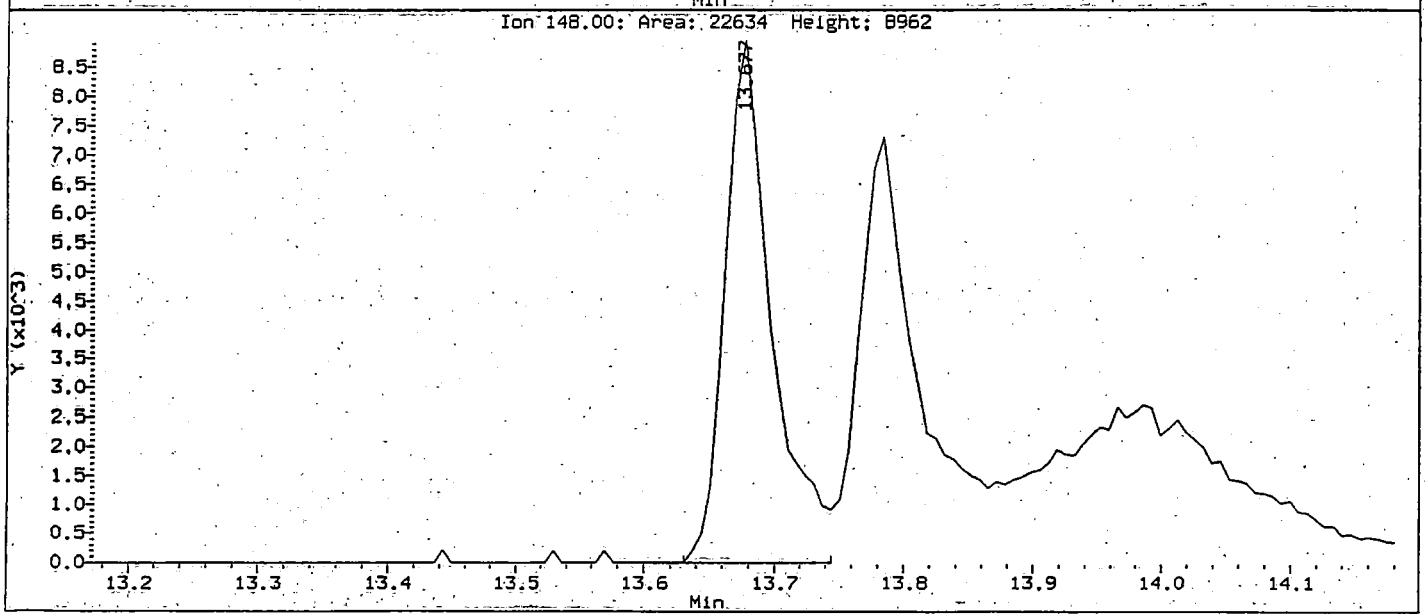
Before
MTG
9/18/01

Data File: /chem/10msv09.i/RFW48288-0815.b/22705.d
Injection Date: 15-AUG-2001 07:13
Instrument: 10msv09.i
Client Sample ID: 0.1ppmv

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7







000208

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Pace Analytical Services, Inc.

PACE, Inc. Air Analytical Laboratory

Data file : /chem/10msv09.i/RFW48288-0815.b/22704.d
Lab Smp Id: 0.5ppmv Client Smp ID: 0.5ppmv
Inj Date : 15-AUG-2001 06:46
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0815.b/TO14LP227.m
Meth Date : 18-Sep-2001 13:36 mgurnsey Quant Type: ESTD
Cal Date : 15-AUG-2001 06:46 Cal File: 22704.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ppmv)	AMOUNTS ON-COL (ppmv)
1 Dichlorodifluoromethane	85	3.154	3.154	0.000	190622	0.50000	0.585
2 Chloromethane	50	3.147	3.147	0.000	88250	0.48000	0.480
3 Freon 114 (12DC1122FlANE)	85	3.154	3.154	0.000	190622	0.50000	0.582
4 Vinyl Chloride	62	3.268	3.268	0.000	66763	0.50000	0.574
5 Bromomethane	94	3.536	3.536	0.000	62813	0.50000	0.563
6 Chloroethane	64	3.616	3.616	0.000	34598	0.51000	0.573
7 Trichlorofluoromethane	101	3.965	3.965	0.000	136896	0.50000	0.575
9 1,1-Dichloroethene	96	4.354	4.354	0.000	57158	0.47000	0.529
10 Freon 113	101	4.448	4.448	0.000	128787	0.51000	0.581
11 Methylene Chloride	84	4.521	4.521	0.000	66535	0.48000	0.526
12 1,1-Dichloroethane	63	5.165	5.165	0.000	119600	0.48000	0.518
13 cis-1,2-Dichloroethene	96	5.674	5.674	0.000	57693	0.50000	0.534
[illegible] Chloroform	83	5.842	5.842	0.000	127906	0.48000	0.528
[illegible],1,1-Trichloroethane	97	6.405	6.405	0.000	101744	0.45000	0.508
[illegible],2-Dichloroethane	62	6.439	6.439	0.000	88555	0.46000	0.514
17 Benzene	78	6.727	6.727	0.000	189006	0.45000	0.473

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ppmv)	ON-COL (ppmv)
18 Carbon Tetrachloride	117	6.747	6.747	0.000	96813	0.47000	0.552
19 1,2-Dichloropropane	63	7.424	7.424	0.000	72665	0.43000	0.454
20 Trichloroethene	130	7.457	7.457	0.000	70625	0.46000	0.499
21 cis-1,3-Dichloropropene	75	8.248	8.248	0.000	111436	0.53000	0.589
22 trans-1,3-Dichloropropene	75	8.744	8.744	0.000	73278	0.54000	0.589
23 Toluene	92	8.879	8.879	0.000	145861	0.48000	0.533
24 1,1,2-Trichloroethane	97	8.905	8.905	0.000	86155	0.50000	0.535
25 1,2-Dibromoethane	107	9.723	9.723	0.000	118689	0.52000	0.562
26 Tetrachloroethene	166	9.804	9.804	0.000	108448	0.48000	0.527
27 Chlorobenzene	112	10.554	10.554	0.000	184153	0.46000	0.496
28 Ethyl Benzene	106	10.822	10.822	0.000	88961	0.48000	0.517
29 mp-Xylene	106	10.977	10.977	0.000	225156	0.93000	0.999
30 Styrene	104	11.406	11.406	0.000	143219	0.47000	0.492
31 o-Xylene	106	11.473	11.473	0.000	110442	0.46000	0.481
32 1,1,2,2-Tetrachloroethane	83	11.747	11.747	0.000	259497	0.51000	0.473
33 1,3,5-Trimethylbenzene	105	12.867	12.867	0.000	243881	0.51000	0.506
34 1,2,4-Trimethylbenzene	105	13.370	13.370	0.000	232636	0.45000	0.443
35 1,3-Dichlorobenzene	146	13.671	13.671	0.000	167169	0.21000	0.263
36 1,4-Dichlorobenzene	146	13.779	13.779	0.000	158409	0.47000	0.558
37 1,2-Dichlorobenzene	146	14.234	14.234	0.000	160768	0.41000	0.525 (M)
38 1,2,4-Trichlorobenzene	180	16.835	16.835	0.000	33569	0.36000	0.110 (M)
39 Hexachlorobutadiene	225	17.258	17.258	0.000	144801	0.42000	0.494

QC Flag Legend

M - Compound response manually integrated.

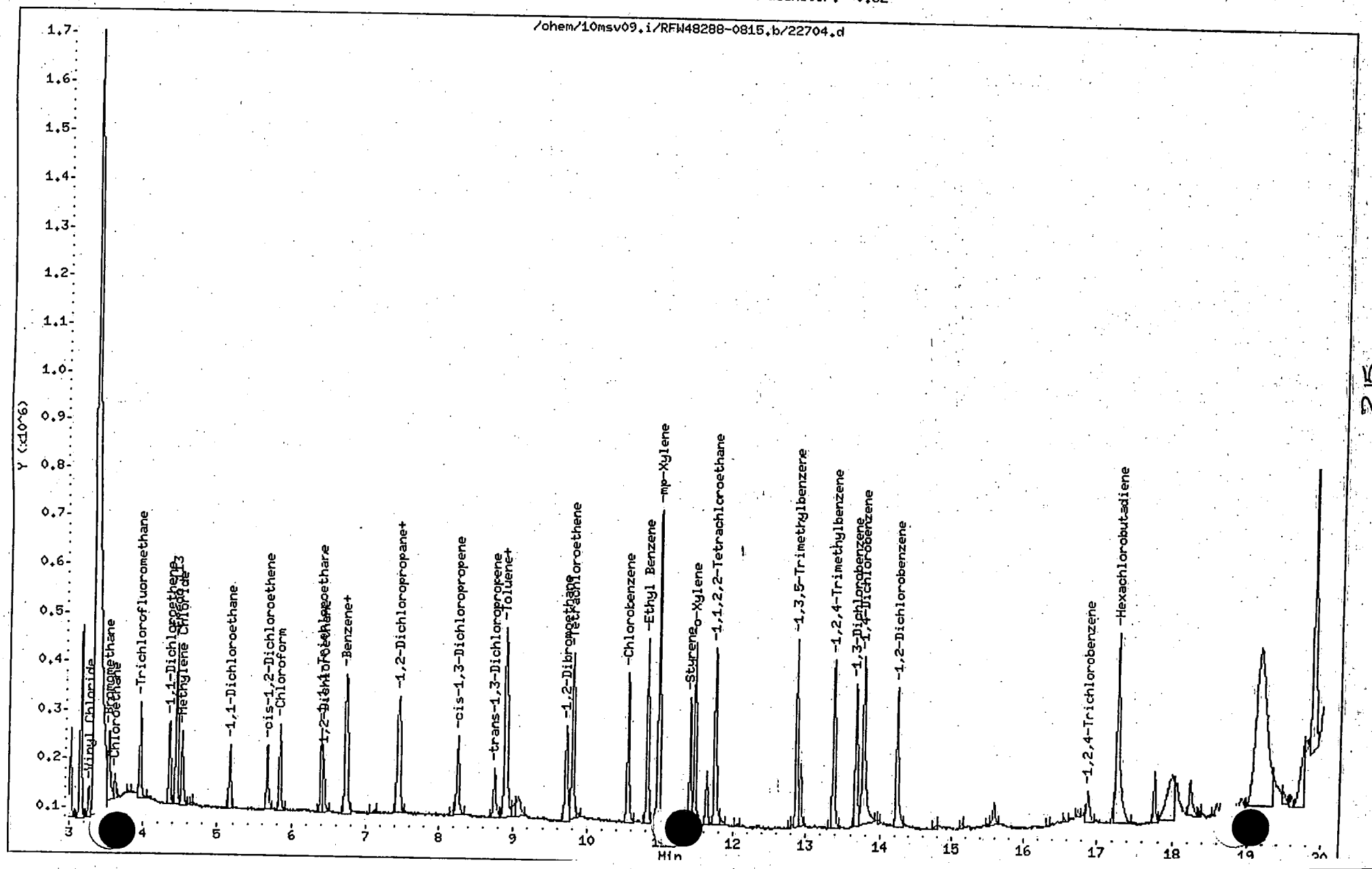
000211

Data File: /chem/10msv09.i/RFW48288-0815.b/22704.d
Date : 15-AUG-2001 06:46
Client ID: 0.5ppmv
Sample Info:

Instrument: 10msv09.i

Column phase: J&W DB-5

Operator: mtg
Column diameter: 0.32



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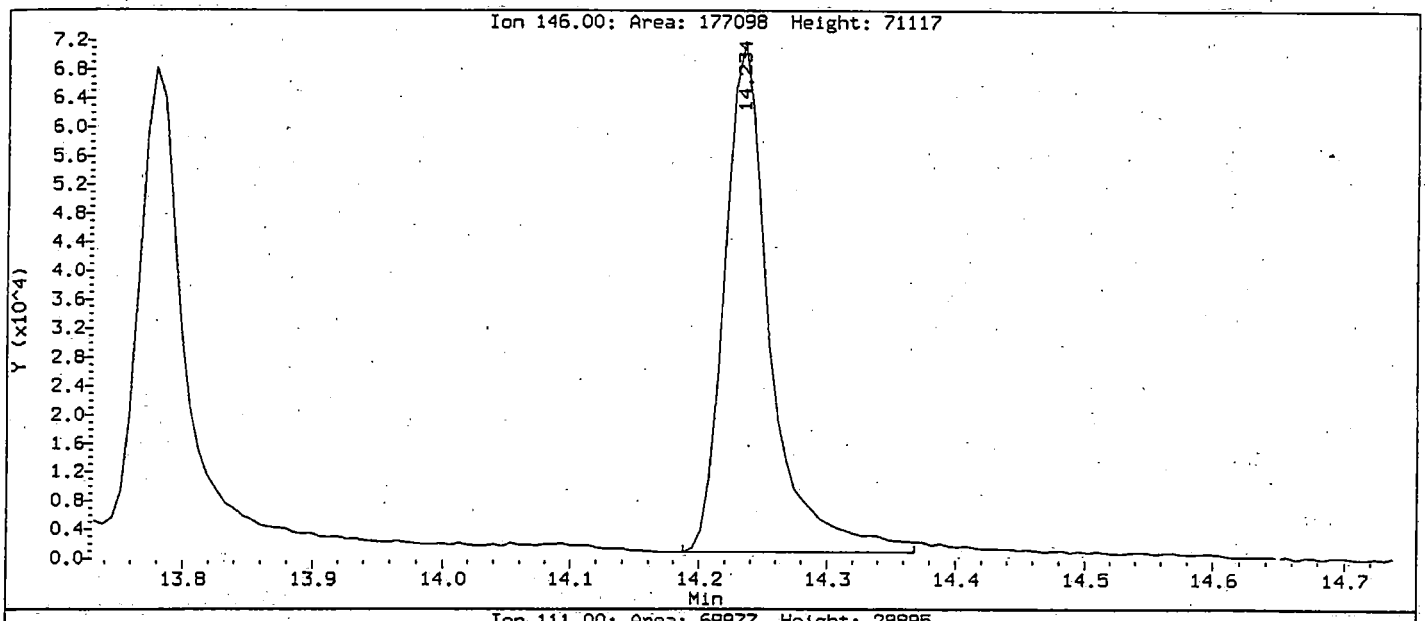
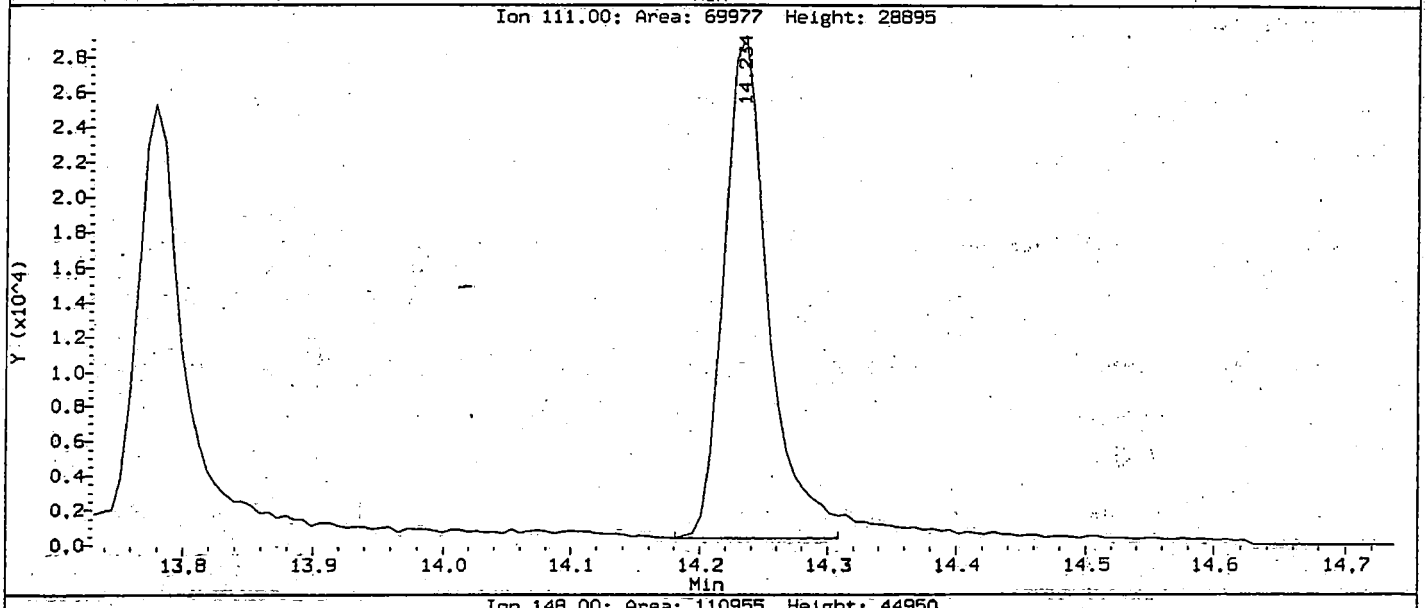
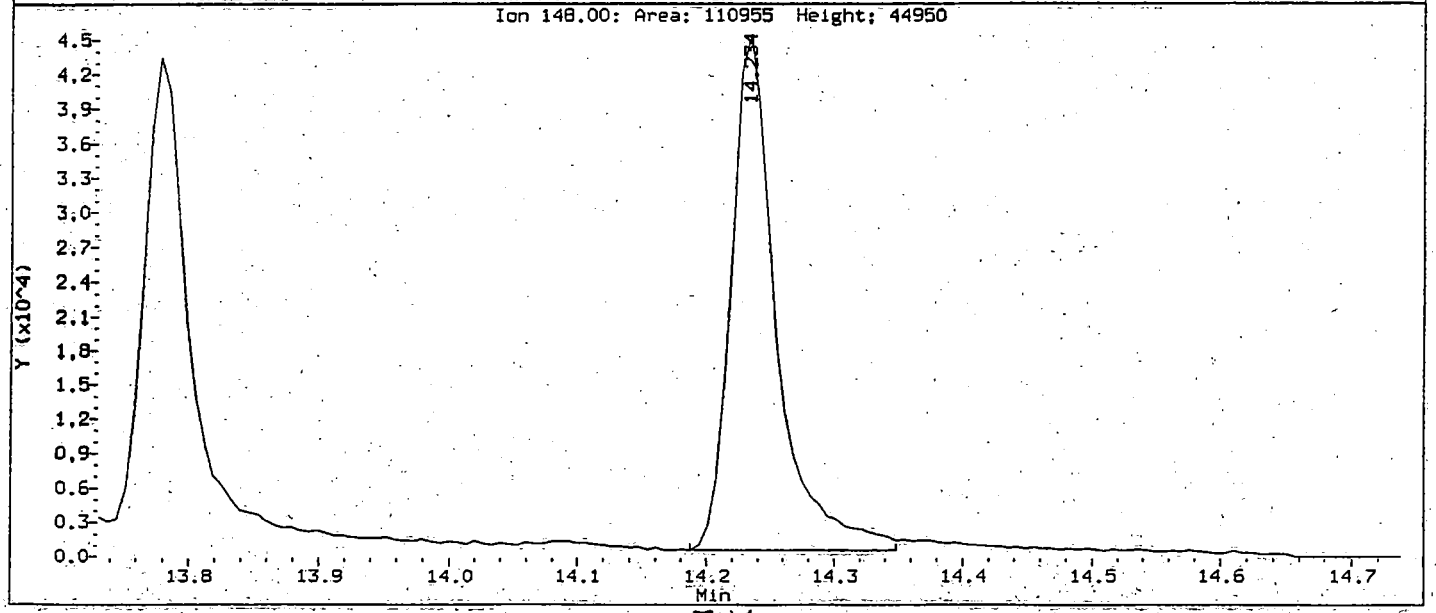
Data File: /chem/10msv09.i/RFW48288-0815.b/22704.d
Injection Date: 15-AUG-2001 06:46
Instrument: 10msv09.i
Client Sample ID: 0.5ppmv

Before
MTG 9/18/01

Compound: 1,2-Dichlorobenzene
CAS Number: 95-50-1



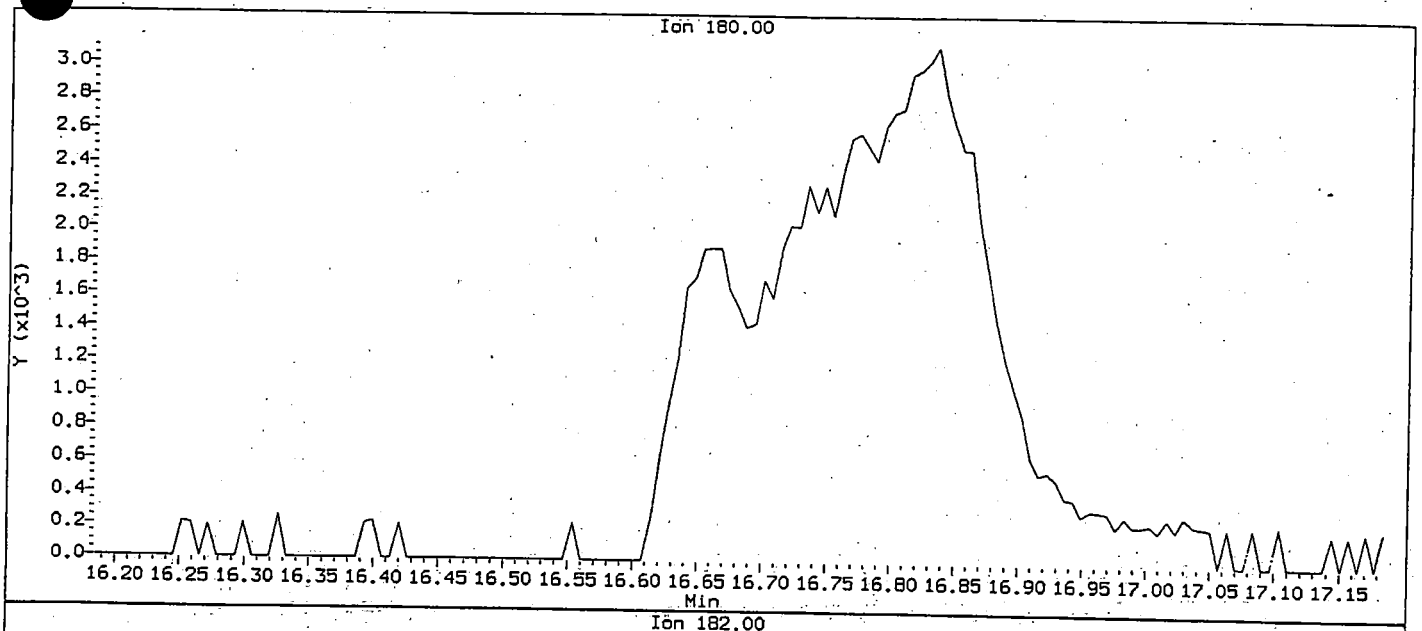


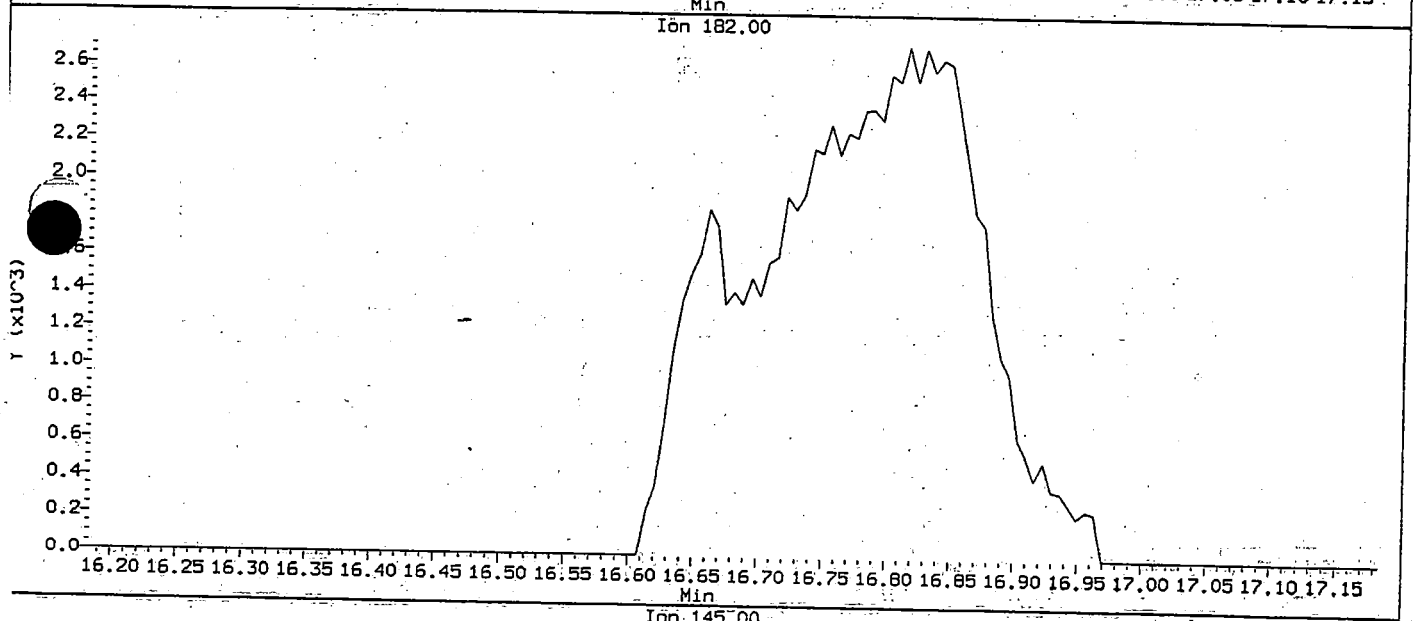


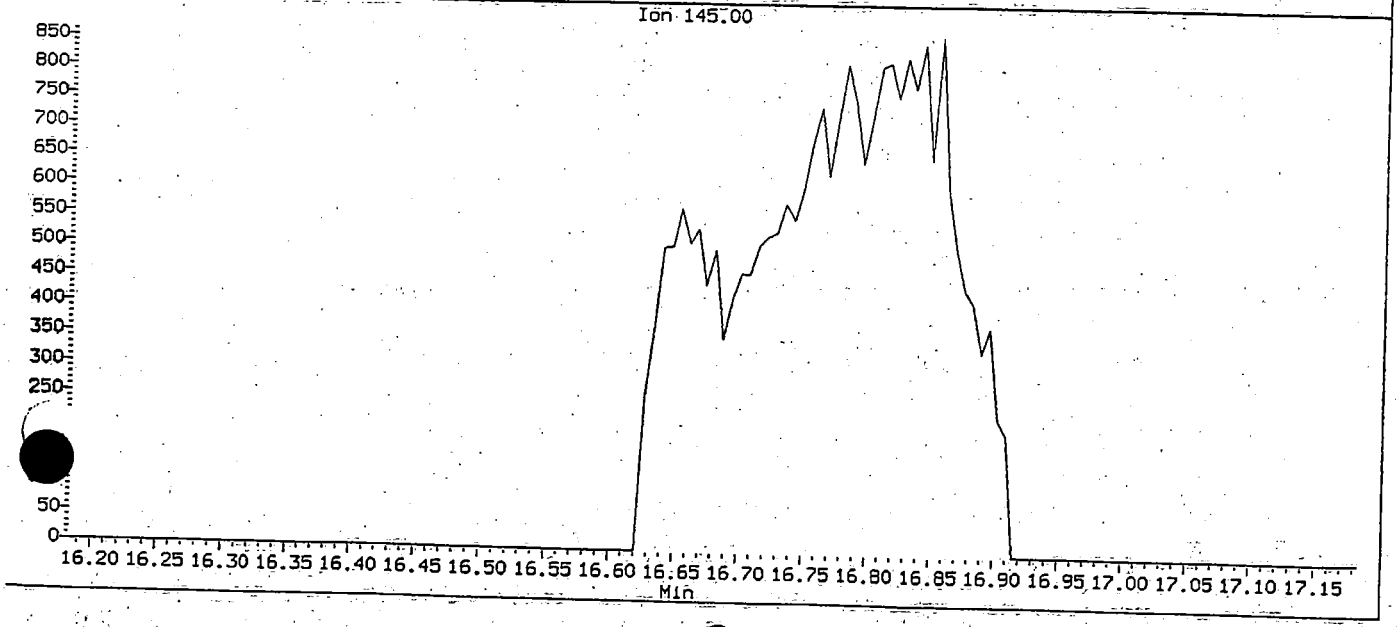
Data File: /chem/10msv09.i/RFW48288-0815.b/22704.d
Injection Date: 15-AUG-2001 06:46
Instrument: 10msv09.i
Client Sample ID: 0.5ppmv

Compound: 1,2,4-Trichlorobenzene
CAS Number: 95-63-6

Before
MTG 9/18/01



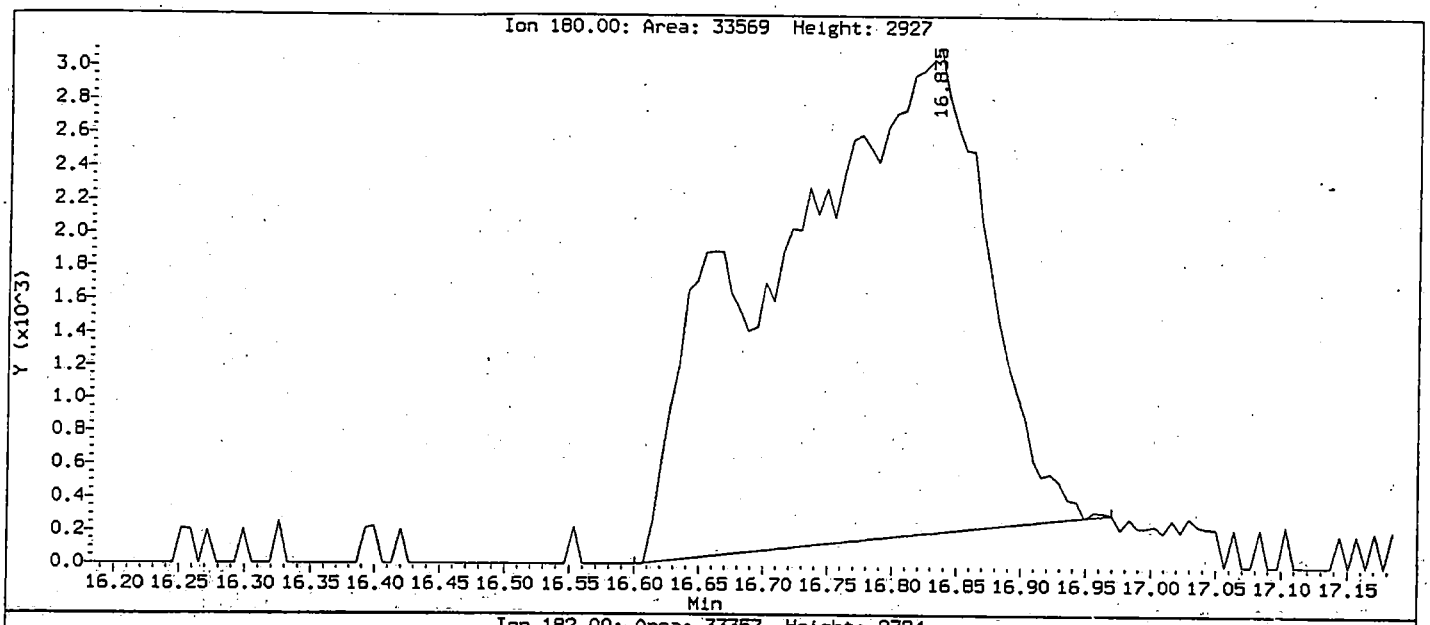


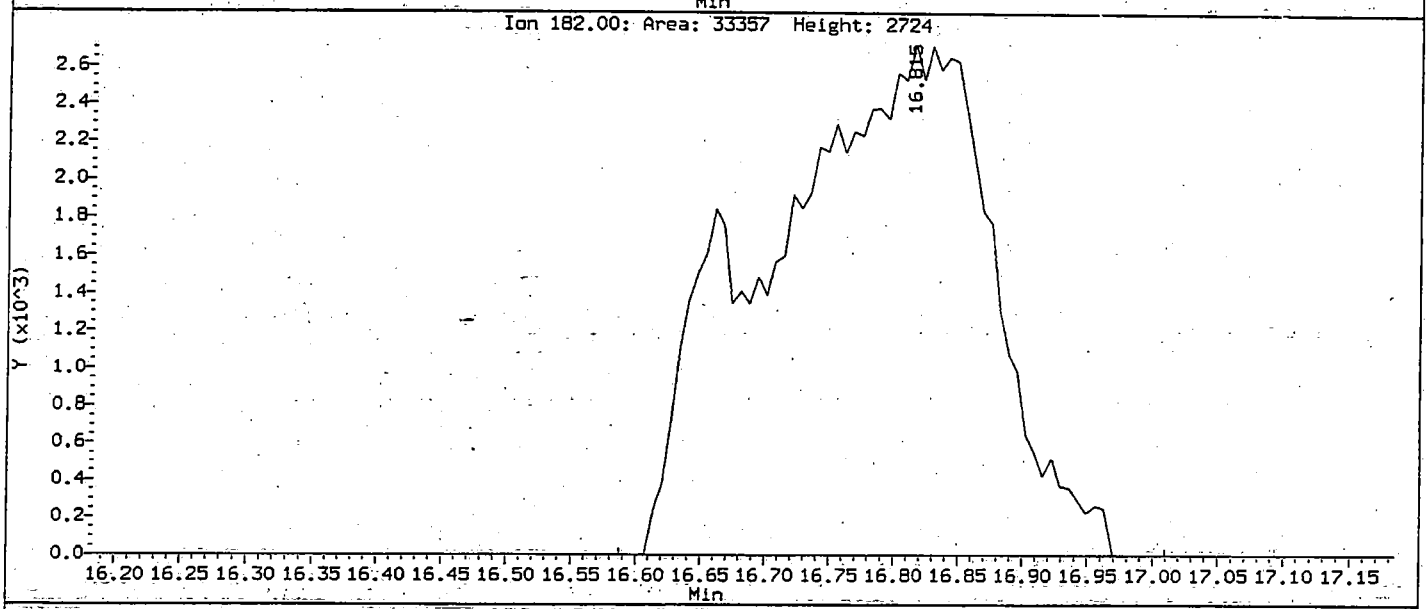


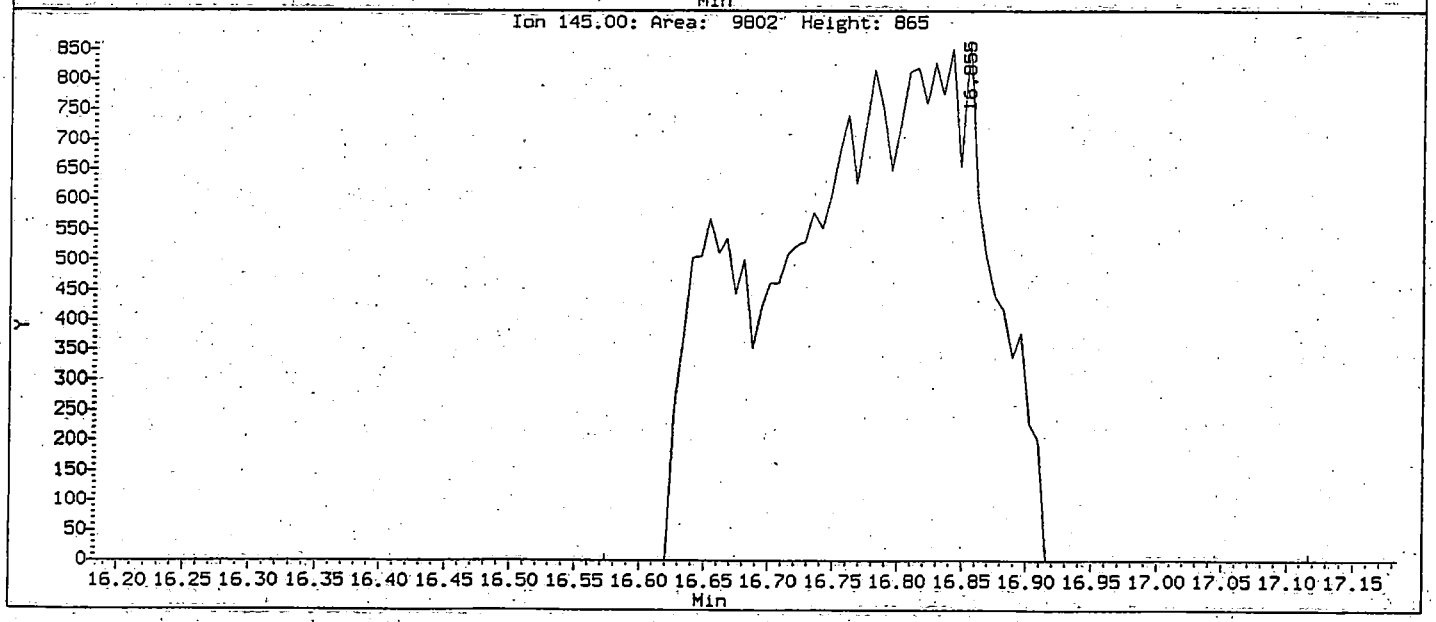
Data File: /chem/10msv09.i/RFW48288-0815.b/22704.d
Injection Date: 15-AUG-2001 06:46
Instrument: 10msv09.i
Client Sample ID: 0.5ppmv

After
mTG 9/18/01

Compound: 1,2,4-Trichlorobenzene
CAS Number: 95-63-6



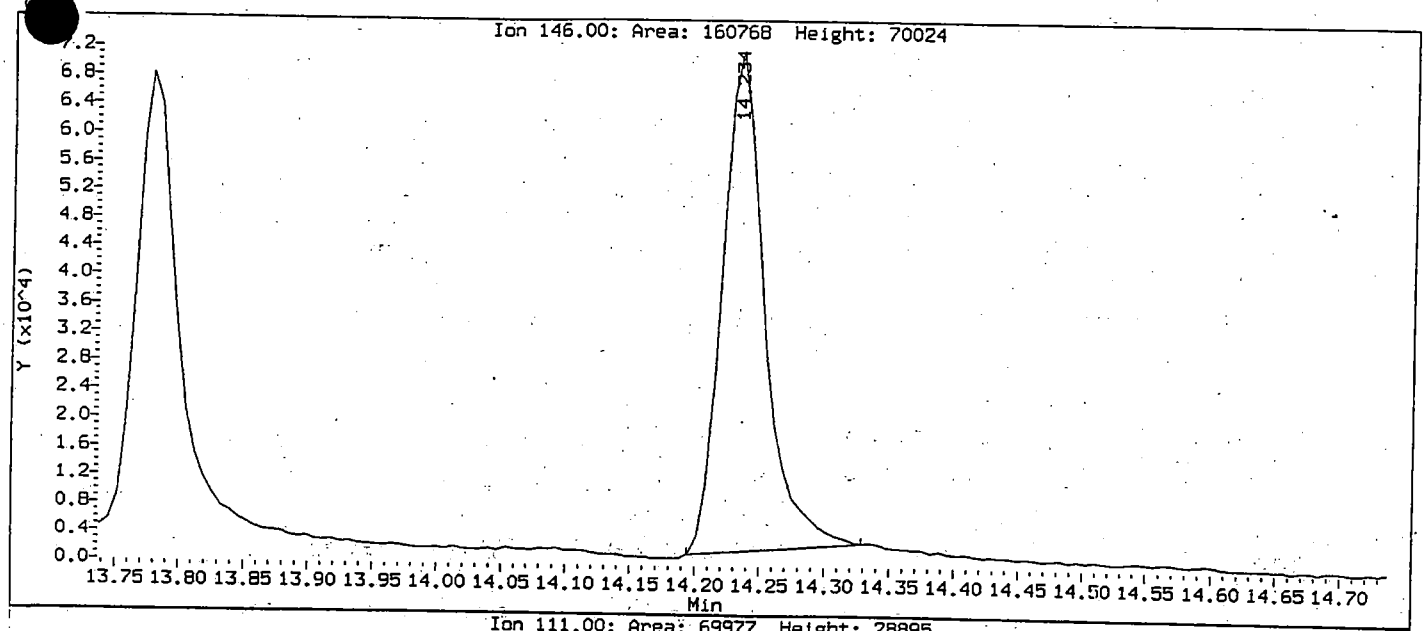


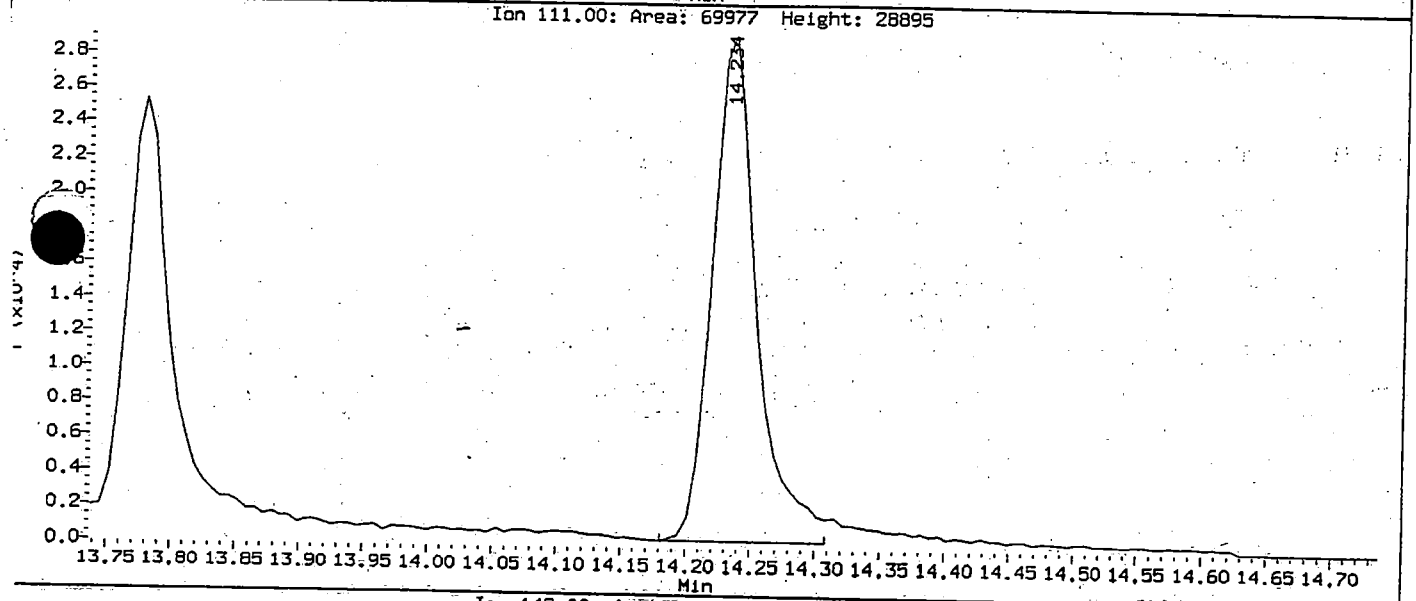


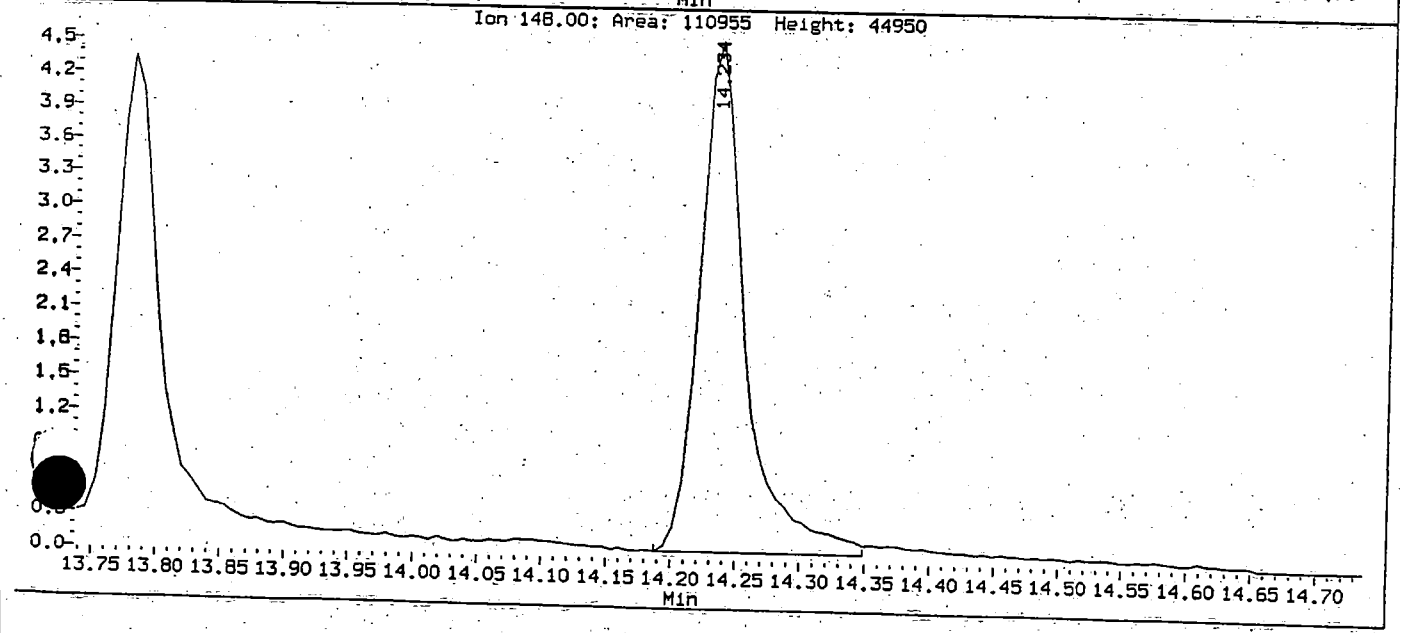
Data File: /chem/10msv09.i/RFW48288-0815.b/22704.d
Injection Date: 15-AUG-2001 06:46
Instrument: 10msv09.i
Client Sample ID: 0.5ppmv

Compound: 1,2-Dichlorobenzene
CAS Number: 95-50-1

After MT6 9/18/01







Pace Analytical Services, Inc.

PACE, Inc. Air Analytical Laboratory

Data file : /chem/10msv09.i/RFW48288-0815.b/22706.d
Lab Smp Id: 1.0ppmv Client Smp ID: 1.0ppmv
Inj Date : 15-AUG-2001 07:46
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0815.b/TO14LP227.m
Meth Date : 18-Sep-2001 13:36 mgurnsey Quant Type: ESTD
Cal Date : 15-AUG-2001 07:46 Cal File: 22706.d
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ppmv)	ON-COL (ppmv)
1 Dichlorodifluoromethane	85	3.132	3.132	0.000	303551	1.00000	0.932
2 Chloromethane	50	3.132	3.132	0.000	141164	0.96000	0.769
3 Freon 114 (12DC1122FlANE)	85	3.132	3.132	0.000	303551	0.99000	0.926
4 Vinyl Chloride	62	3.246	3.246	0.000	108855	0.99000	0.936
5 Bromomethane	94	3.514	3.514	0.000	102197	0.99000	0.916
6 Chloroethane	64	3.601	3.601	0.000	58919	1.01000	0.976
7 Trichlorofluoromethane	101	3.943	3.943	0.000	227039	0.99000	0.953
9 1,1-Dichloroethene	96	4.338	4.338	0.000	97619	0.94000	0.904
10 Freon 113	101	4.439	4.439	0.000	216961	1.02000	0.979
11 Methylene Chloride	84	4.513	4.513	0.000	118072	0.96000	0.933
12 1,1-Dichloroethane	63	5.163	5.163	0.000	216888	0.95000	0.939
13 cis-1,2-Dichloroethene	96	5.672	5.672	0.000	103316	0.99000	0.957
14 Chloroform	83	5.847	5.847	0.000	224712	0.95000	0.927
15 1,1,1-Trichloroethane	97	6.410	6.410	0.000	173548	0.90000	0.866
16 1,2-Dichloroethane	62	6.443	6.443	0.000	146781	0.91000	0.851
17 Benzene	78	6.731	6.731	0.000	346264	0.89000	0.867

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ppmv)	ON-COL (ppmv)
18 Carbon Tetrachloride	117	6.752	6.752	0.000	165937	0.94000	0.947 (A)
19 1,2-Dichloropropane	63	7.435	7.435	0.000	128171	0.86000	0.801
20 Trichloroethene	130	7.462	7.462	0.000	125624	0.91000	0.888
21 cis-1,3-Dichloropropene	75	8.246	8.246	0.000	190790	1.05000	1.01
22 trans-1,3-Dichloropropene	75	8.742	8.742	0.000	138665	1.08000	1.11 (A)
23 Toluene	92	8.883	8.883	0.000	247729	0.96000	0.905
24 1,1,2-Trichloroethane	97	8.903	8.903	0.000	141488	0.99000	0.879
25 1,2-Dibromoethane	107	9.728	9.728	0.000	199991	1.03000	0.947
26 Tetrachloroethene	166	9.808	9.808	0.000	178882	0.95000	0.870
27 Chlorobenzene	112	10.559	10.559	0.000	305078	0.92000	0.821
28 Ethyl Benzene	106	10.827	10.827	0.000	149105	0.95000	0.867
29 mp-Xylene	106	10.975	10.975	0.000	368982	1.86000	1.64
30 Styrene	104	11.410	11.410	0.000	255511	0.93000	0.878
31 o-Xylene	106	11.477	11.477	0.000	181230	0.91000	0.789
32 1,1,2,2-Tetrachloroethane	83	11.752	11.752	0.000	442311	0.90000	0.806
33 1,3,5-Trimethylbenzene	105	12.872	12.872	0.000	431394	1.01000	0.895
34 1,2,4-Trimethylbenzene	105	13.374	13.374	0.000	428377	0.90000	0.815
35 1,3-Dichlorobenzene	146	13.676	13.676	0.000	276191	0.41000	0.435 (A)
36 1,4-Dichlorobenzene	146	13.783	13.783	0.000	300632	0.94000	1.06 (AH)
37 1,2-Dichlorobenzene	146	14.239	14.239	0.000	236457	0.82000	0.772
38 1,2,4-Trichlorobenzene	180	16.686	16.686	0.000	31994	0.72000	0.105
39 Hexachlorobutadiene	225	17.269	17.269	0.000	133083	0.84000	0.454

C Flag Legend

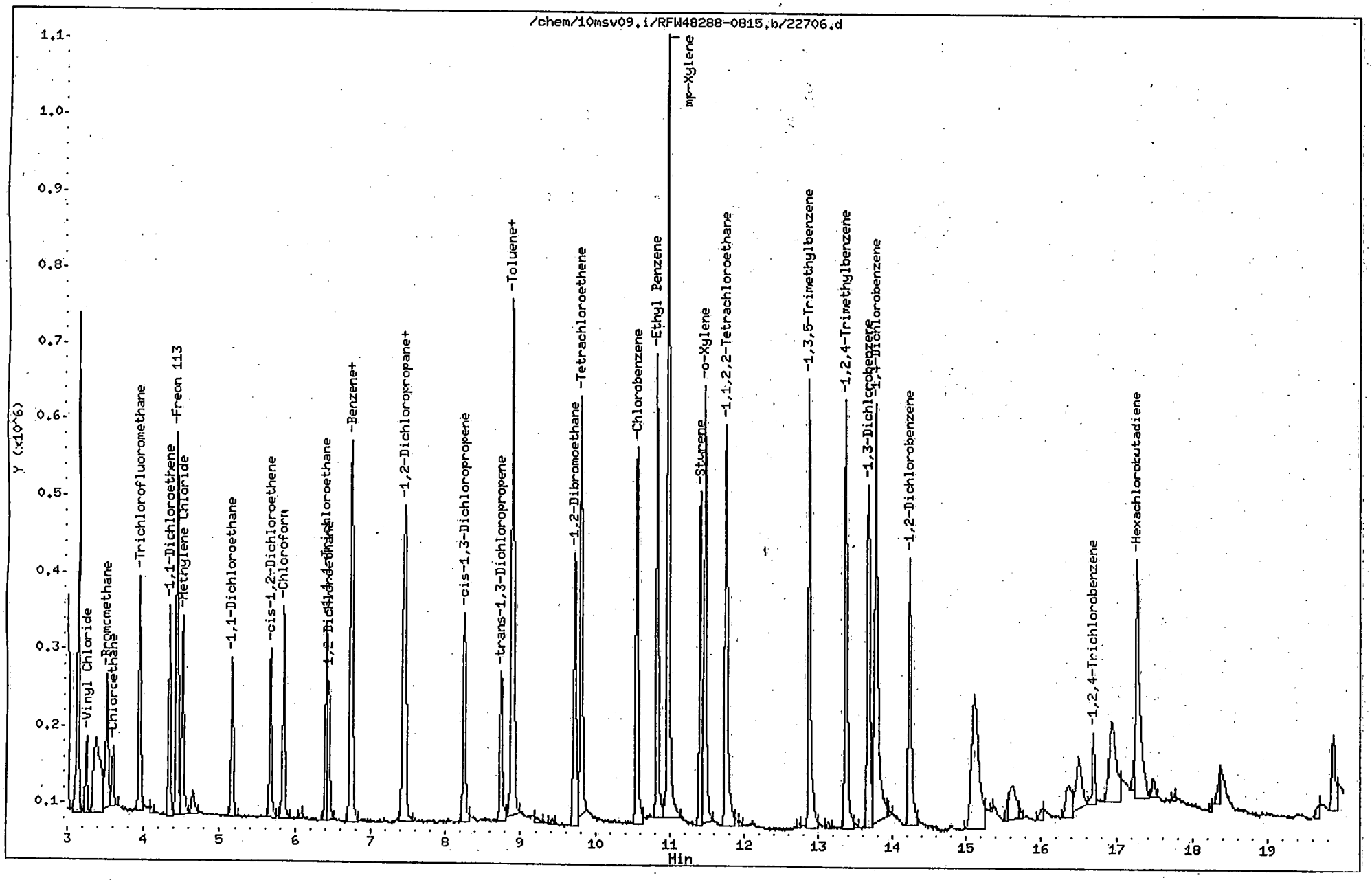
- Target compound detected but, quantitated amount exceeded maximum amount.
- Operator selected an alternate compound hit.

Data File: /chem/10msv09.i/RFW48288-0815.b/22706.d
Date : 15-AUG-2001 07:46
Client ID: 1.0ppmv
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



900218

222

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

:art Cal Date : 15-AUG-2001 07:12
ıd Cal Date : 11-SEP-2001 11:00
ıant Method : ISTD
ırget Version : 3.50
ıtegrator : HP RTE
ethod file : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
ıl Date : 18-Sep-2001 12:16 mgurnsey

alibration File Names:
evel 1: /chem/10msv20.i/RFW48288-0911.b/25405.d
evel 2: /chem/10msv20.i/RFW48288-0911.b/25406.d
evel 3: /chem/10msv20.i/RFW48288-0911.b/25407.d
evel 4: /chem/10msv20.i/RFW48288-0911.b/25404.d
evel 5: /chem/10msv20.i/RFW48288-0911.b/25408.d

Compound	0.5000 Level 1	1 Level 2	5 Level 3	10 Level 4	20 Level 5	Curve	Coefficients b	m1 $\bar{X}$	m2	%RSD or R^2
1 Dichlorodifluoromethane	1.59547	1.30027	0.98170	0.90983	0.89867	AVRG		1.13719		26.72226
2 Chloromethane	0.69340	0.55962	0.43748	0.36082	0.37398	AVRG		0.48506		28.97333
3 Dichlorotetrafluoroethane	1.78097	1.41457	1.11704	0.95584	0.97567	AVRG		1.24882		27.98297
4 Vinyl chloride	0.48778	0.39706	0.31073	0.28156	0.29005	AVRG		0.35344		24.89110
6 Bromomethane	0.54221	0.42865	0.33908	0.30303	0.31040	AVRG		0.38467		26.32224
7 Chloroethane	0.22437	0.17730	0.14208	0.12730	0.13479	AVRG		0.16117		24.93929
8 Trichlorofluoromethane	1.24746	1.00709	0.78796	0.68480	0.72026	AVRG		0.88952		26.53341
10 1,1-Dichloroethene	0.51699	0.40578	0.31840	0.28911	0.29846	AVRG		0.36575		26.33856
11 Freon 113	1.12925	0.91126	0.70568	0.61155	0.62226	AVRG		0.79600		27.85908
12 Methylene chloride	0.92295 32540	0.62291 42847	0.38886 [illegible]36	0.33012 [illegible]059	0.33921 [illegible]78233	LINR	-0.07948	0.32205	$\bar{X}$ = 0.52101	48.8 ~~[illegible].99825~~
14 1,1-Dichloroethane	0.85081	0.67893	0.53762	0.47337	0.49436	AVRG		0.60702		26.04455
17 cis-1,2-Dichloroethene	0.49438	0.40662	0.33149	0.30090	0.31157	AVRG		0.36899		22.04844
18 Chloroform	0.98765	0.80015	0.63996	0.56204	0.58420	AVRG		0.71480		24.99907
19 1,1,1-Trichloroethane	0.85638	0.66702	0.54129	0.48244	0.49869	AVRG		0.60916		25.60790
20 1,2-Dichloroethane	0.63415	0.51378	0.42793	0.37904	0.39763	AVRG		0.47051		22.32672
21 Benzene	1.50830	1.18753	0.93265	0.82887	0.83978	AVRG		1.05943		27.33163
22 Carbon tetrachloride	0.89868	0.71921	0.58000	0.53648	0.54273	AVRG		0.65542		23.60905

σ_{n-1} = 0.25451

223

000219

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

tart Cal Date : 15-AUG-2001 07:12
nd Cal Date : 11-SEP-2001 11:00
uant Method : ISTD
arget Version : 3.50
ntegrator : HP RTE
ethod file : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
al Date : 18-Sep-2001 12:16 mgurnsey

Compound	0.5000 Level 1	1 Level 2	5 Level 3	10 Level 4	20 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
24 1,2-Dichloropropane	0.51730	0.42675	0.31366	0.29581	0.30233	AVRG		0.37117		26.31817
25 Trichloroethene	0.67665	0.54087	0.43500	0.39755	0.40194	AVRG		0.49040		24.28927
27 cis-1,3-Dichloropropene	0.55836	0.47189	0.47104	0.39178	0.50095	AVRG		0.47880		12.57545
29 trans-1,3-Dichloropropene	0.45984	0.36442	0.31495	0.30767	0.38618	AVRG		0.36661		16.82641
30 Toluene	1.10121	0.89434	0.70877	0.73078	0.72979	AVRG		0.83298		20.10952
31 1,1,2-Trichloroethane	0.66748	0.53336	0.44262	0.42668	0.43127	AVRG		0.50028		20.61692
33 1,2-Dibromoethane	1.60935	1.18639	0.92605	0.91529	1.03916	AVRG		1.13525		25.25346
34 Tetrachloroethene	4.76682 1.82483	2.63724 1.96309	1.20300 1.35396	1.08943 1.52682	1.02457 1.97607	LINR	-0.15866	0.93615	$\bar{X}$=2.144212	~~0.99912~~ 75.1
35 Chlorobenzene	2.51796	1.81820	1.39689	1.45766	1.59195	AVRG		1.75653		25.92245
36 Ethyl Benzene	1.19876	0.90813	0.70924	0.73689	0.80990	AVRG		0.87258		22.68126
37 m&p-Xylene	1.52627	1.17105	0.91135	0.86905	1.00025	AVRG		1.09560		24.38653
38 Styrene	1.53874	1.22560	1.16063	0.81374	1.57695	AVRG		1.26313		24.66675
39 o-Xylene	1.53697	1.17598	0.90480	0.91916	1.00897	AVRG		1.10917		23.65584
40 1,1,2,2-Tetrachloroethane	2.32420	1.83056	1.44855	1.08919	1.69907	AVRG		1.67831		27.31496
42 1,3,5-Trimethylbenzene	1.19794	0.90161	0.75279	1.00695	1.07139	AVRG		0.98613		17.13083
43 1,2,4-Trimethylbenzene	1.29009	1.01739	0.90462	1.17720	1.04679	AVRG		1.08722		13.72789
44 1,3-Dichlorobenzene	1.07235	0.77758	0.61585	0.71395	0.67759	AVRG		0.77147		23.08824
45 Benzyl chloride	0.56563	0.40729	0.38525	0.42170	0.57004	AVRG		0.46998		19.20904
46 1,4-Dichlorobenzene	1.29097	0.93906	0.74133	0.82307	0.76988	AVRG		0.91286		24.59150
47 1,2-Dichlorobenzene	0.98201	0.70518	0.54092	0.69052	0.70190	AVRG		0.72411		22.05842
48 1,2,4-Trichlorobenzene	0.36277	0.24089	0.20983	0.25377	0.21599	AVRG		0.25665		24.14706
49 Hexachlorobutadiene	0.81711	0.58814	0.40157	0.49494	0.47182	AVRG		0.55472		29.04913

σ_{n-1} = 1.61037

224

000220

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-AUG-2001 07:12
End Cal Date : 11-SEP-2001 11:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Cal Date : 18-Sep-2001 12:16 mgurnsey

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

522

122000

Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0911.b/25405.d
Lab Smp Id: 0.5ppbv Client Smp ID: 0.5ppbv
Inj Date : 11-SEP-2001 08:22
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 08:22 Cal File: 25405.d
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
1 Dichlorodifluoromethane	85	4.278	4.278	(0.491)	59243	0.49500	0.694
2 Chloromethane	50	4.450	4.450	(0.511)	25227	0.48500	0.693
3 Dichlorotetrafluoroethane	85	4.450	4.450	(0.511)	66799	0.50000	0.713
4 Vinyl Chloride	62	4.598	4.598	(0.528)	18478	0.50500	0.697
6 Bromomethane	94	4.936	4.936	(0.567)	21150	0.52000	0.733
7 Chloroethane	64	5.034	5.034	(0.578)	8668	0.51500	0.717
8 Trichlorofluoromethane	101	5.452	5.452	(0.626)	44917	0.48000	0.673
10 1,1-Dichloroethene	96	5.907	5.907	(0.678)	19003	0.49000	0.693
11 Freon 113	101	5.999	5.999	(0.689)	43202	0.51000	0.724
12 Methylene Chloride	84	6.085	6.085	(0.699)	32540	0.47000	0.552
14 1,1-Dichloroethane	63	6.810	6.810	(0.782)	30635	0.48000	0.673
17 cis-1,2-Dichloroethene	96	7.351	7.351	(0.844)	17430	0.47000	0.630
18 Chloroform	83	7.542	7.542	(0.866)	35562	0.48000	0.663
19 1,1,1-Trichloroethane	97	8.150	8.150	(0.936)	29872	0.46500	0.654
20 1,2-Dichloroethane	62	8.169	8.169	(0.938)	20693	0.43500	0.586
21 Benzene	78	8.494	8.494	(0.975)	50349	0.44500	0.634

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
22	Carbon Tetrachloride	117	8.519	8.519	(0.978)	30336	0.45000	0.617
* 23	Fluorobenzene	96	8.709	8.709	(1.000)	750140	10.0000	
24	1,2-Dichloropropane	63	9.207	9.207	(1.057)	16492	0.42500	0.592
25	Trichloroethene	130	9.238	9.238	(1.061)	21826	0.43000	0.593
27	cis-1,3-Dichloropropene	75	10.037	10.037	(1.152)	21152	0.50500	0.589
29	trans-1,3-Dichloropropene	75	10.529	10.529	(1.209)	17592	0.51000	0.640
30	Toluene	92	10.713	10.713	(1.230)	38825	0.47000	0.621
31	1,1,2-Trichloroethane	97	10.719	10.719	(1.231)	22782	0.45500	0.607
33	1,2-Dibromoethane	107	11.592	11.592	(0.830)	29704	0.48000	0.680
34	Tetrachloroethene	166	11.672	11.672	(0.836)	82483	0.45000	0.705
35	Chlorobenzene	112	12.440	12.440	(0.891)	40665	0.42000	0.602
36	Ethyl Benzene	106	12.692	12.692	(0.909)	19360	0.42000	0.577
37	m&p-Xylene	106	12.846	12.846	(0.920)	47538	0.81000	1.13
38	Styrene	104	13.288	13.288	(0.952)	20413	0.34500	0.420
39	o-Xylene	106	13.362	13.362	(0.957)	22458	0.38000	0.526
40	1,1,2,2-Tetrachloroethane	83	13.626	13.626	(0.976)	33961	0.38000	0.526
* 41	p-Bromofluorobenzene	95	13.964	13.964	(1.000)	384524	10.0000	
42	1,3,5-Trimethylbenzene	105	14.763	14.763	(1.057)	14510	0.31500	0.383(a)
43	1,2,4-Trimethylbenzene	105	15.280	15.280	(1.094)	13890	0.28000	0.332(a)
44	1,3-Dichlorobenzene	146	15.611	15.611	(1.118)	13195	0.32000	0.445
	Benzyl Chloride	91	15.685	15.685	(1.123)	6960	0.32000	0.385(a)
	1,4-Dichlorobenzene	146	15.716	15.716	(1.125)	13403	0.27000	0.382(H)
47	1,2-Dichlorobenzene	146	16.189	16.189	(1.159)	9629	0.25500	0.346(a)
48	1,2,4-Trichlorobenzene	180	18.691	18.691	(1.338)	4952	0.35500	0.502
49	Hexachlorobutadiene	225	19.305	19.305	(1.382)	11154	0.35500	0.523

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25405.d
Lab Smp Id: 0.5ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: 0.5ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	750140	-7.65
41 p-Bromofluorobenz	471889	235944	943778	384524	-18.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	0.00
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	0.00

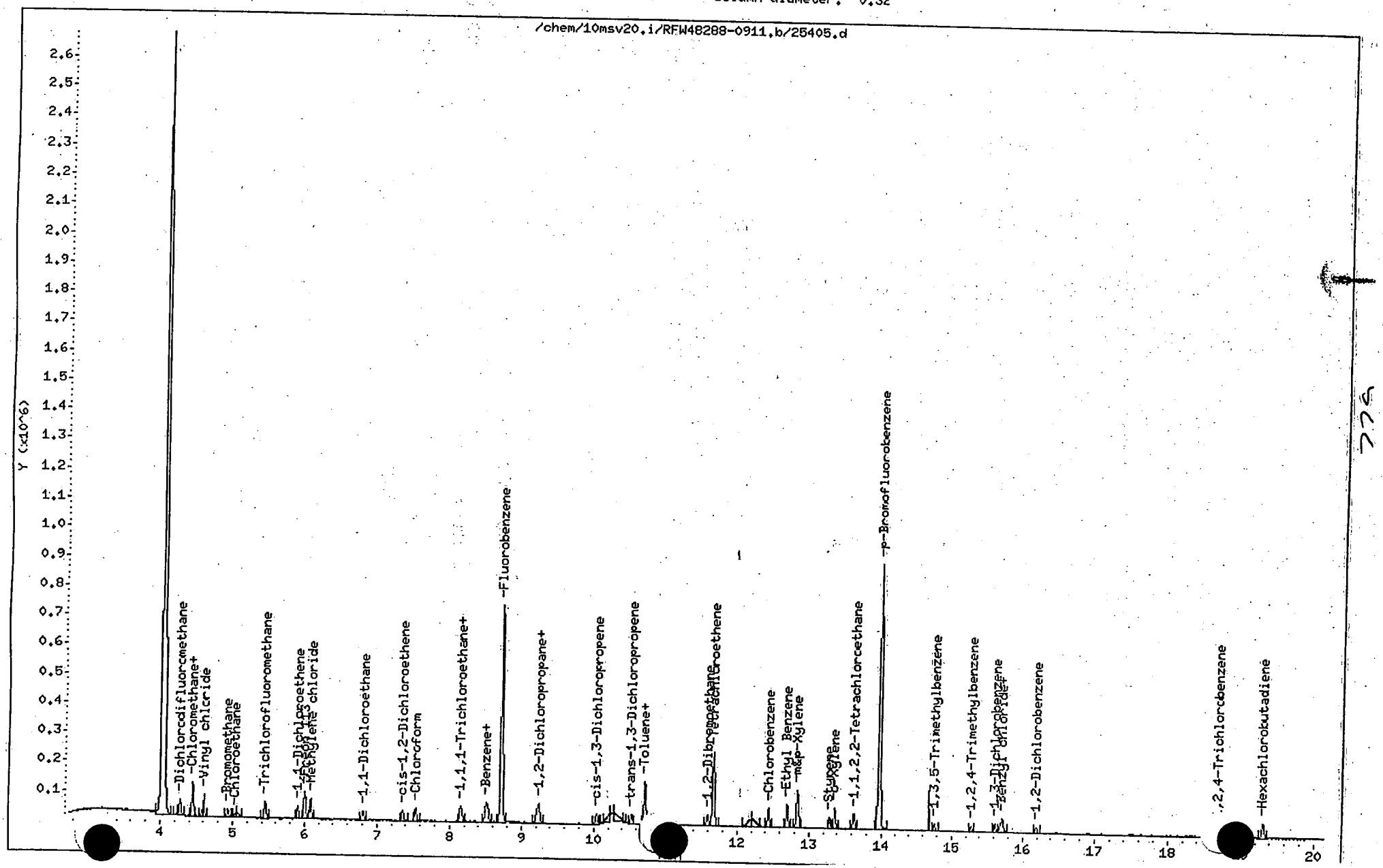
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0911.b/25405.d
Date : 11-SEP-2001 08:22
Client ID: 0.5ppbv
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0911.b/25406.d
Lab Smp Id: 1ppbv Client Smp ID: 1ppbv
Inj Date : 11-SEP-2001 08:56
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 08:56 Cal File: 25406.d
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
1 Dichlorodifluoromethane	85	4.279	4.284	(0.491)	93829	0.99000	1.13
2 Chloromethane	50	4.451	4.457	(0.511)	39567	0.97000	1.12
3 Dichlorotetrafluoroethane	85	4.451	4.457	(0.511)	103108	1.00000	1.13
4 Vinyl Chloride	62	4.598	4.610	(0.528)	29231	1.01000	1.13
6 Bromomethane	94	4.936	4.942	(0.567)	32494	1.04000	1.16
7 Chloroethane	64	5.041	5.047	(0.579)	13311	1.03000	1.13
8 Trichlorofluoromethane	101	5.453	5.458	(0.626)	70471	0.96000	1.09
10 1,1-Dichloroethene	96	5.907	5.913	(0.678)	28986	0.98000	1.09
11 Freon 113	101	6.000	6.011	(0.689)	67750	1.02000	1.17
12 Methylene Chloride	84	6.086	6.097	(0.699)	42847	0.94000	1.03
14 1,1-Dichloroethane	63	6.811	6.823	(0.782)	47508	0.96000	1.07
17 cis-1,2-Dichloroethene	96	7.352	7.364	(0.844)	27860	0.94000	1.04
18 Chloroform	83	7.542	7.548	(0.866)	55990	0.96000	1.07
19 1,1,1-Trichloroethane	97	8.151	8.156	(0.936)	45216	0.93000	1.02
20 1,2-Dichloroethane	62	8.169	8.181	(0.938)	32581	0.87000	0.950
21 Benzene	78	8.495	8.507	(0.975)	77038	0.89000	0.998
22 Carbon Tetrachloride	117	8.520	8.531	(0.978)	47181	0.90000	0.988

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
* 23 Fluorobenzene	96	8.710	8.722	(1.000)	728902	10.0000	
24 1,2-Dichloropropane	63	9.214	9.220	(1.058)	26440	0.85000	0.977
25 Trichloroethene	130	9.245	9.250	(1.061)	33905	0.86000	0.948
27 cis-1,3-Dichloropropene	75	10.038	10.043	(1.152)	34740	1.01000	0.995
29 trans-1,3-Dichloropropene	75	10.529	10.541	(1.209)	27094	1.02000	1.01
30 Toluene	92	10.714	10.725	(1.230)	61277	0.94000	1.01
31 1,1,2-Trichloroethane	97	10.720	10.725	(1.231)	35378	0.91000	0.970
33 1,2-Dibromoethane	107	11.592	11.598	(0.830)	46214	0.96000	1.00
34 Tetrachloroethene	166	11.672	11.678	(0.836)	96309	0.90000	0.949
35 Chlorobenzene	112	12.441	12.446	(0.891)	61972	0.84000	0.869
36 Ethyl Benzene	106	12.699	12.704	(0.909)	30953	0.84000	0.874
37 m&p-Xylene	106	12.846	12.852	(0.920)	76978	1.62000	1.73
38 Styrene	104	13.289	13.294	(0.952)	34314	0.69000	0.669
39 o-Xylene	106	13.363	13.368	(0.957)	36265	0.76000	0.806
40 1,1,2,2-Tetrachloroethane	83	13.627	13.632	(0.976)	56451	0.76000	0.829
* 41 p-Bromofluorobenzene	95	13.965	13.971	(1.000)	405765	10.0000	
42 1,3,5-Trimethylbenzene	105	14.764	14.763	(1.057)	23048	0.63000	0.576
43 1,2,4-Trimethylbenzene	105	15.280	15.280	(1.094)	23118	0.56000	0.524
44 1,3-Dichlorobenzene	146	15.618	15.618	(1.118)	20193	0.64000	0.645
45 Benzyl Chloride	91	15.686	15.685	(1.123)	10577	0.64000	0.555
1,4-Dichlorobenzene	146	15.716	15.722	(1.125)	20576	0.54000	0.555 (H)
1,2-Dichlorobenzene	146	16.196	16.195	(1.160)	14593	0.51000	0.497
48 1,2,4-Trichlorobenzene	180	18.697	18.697	(1.339)	6940	0.71000	0.666
49 Hexachlorobutadiene	225	19.306	19.311	(1.382)	16944	0.71000	0.753

QC Flag Legend

H - Operator selected an alternate compound hit.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25406.d
Lab Smp Id: 1ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: 1ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	728902	-10.26
41 p-Bromofluorobenz	471889	235944	943778	405765	-14.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	0.01
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	0.01

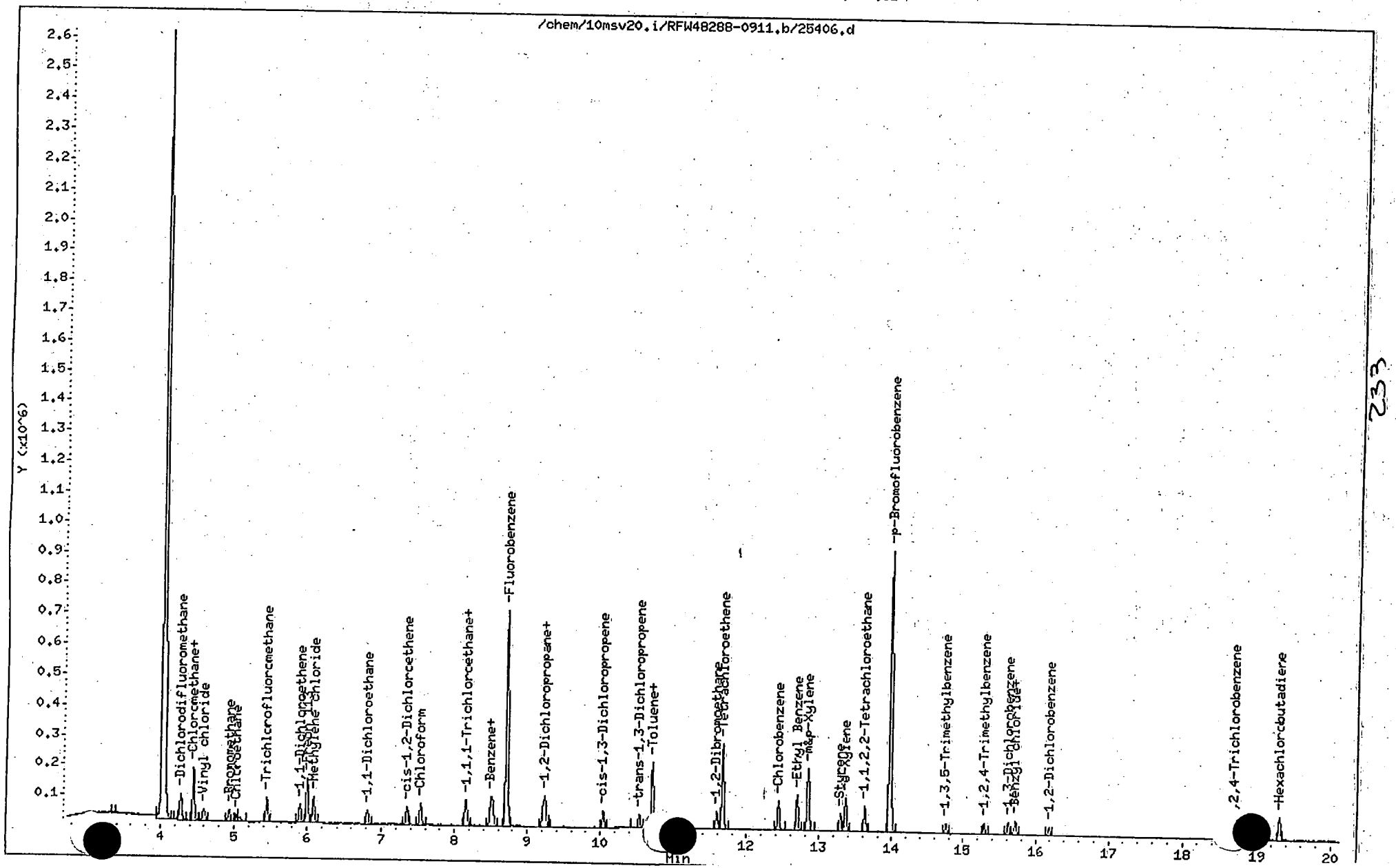
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0911.b/25406.d
Date : 11-SEP-2001 08:56
Client ID: 1ppbv
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



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Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0911.b/25407.d
Lab Smp Id: 5ppbv
Client Smp ID: 5ppbv
Inj Date : 11-SEP-2001 09:31
Operator : mtg
Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey
Quant Type: ISTD
Cal Date : 11-SEP-2001 09:31
Cal File: 25407.d
Als bottle: 6
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable — Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
1 Dichlorodifluoromethane	85	4.284	4.284	(0.491)	352924	4.95000	4.27
2 Chloromethane	50	4.456	4.457	(0.511)	154096	4.85000	4.37
3 Dichlorotetrafluoroethane	85	4.456	4.457	(0.511)	405635	5.00000	4.47
4 Vinyl Chloride	62	4.604	4.610	(0.528)	113966	5.05000	4.44
6 Bromomethane	94	4.942	4.942	(0.567)	128058	5.20000	4.58
7 Chloroethane	64	5.046	5.047	(0.579)	53143	5.15000	4.54
8 Trichlorofluoromethane	101	5.458	5.458	(0.626)	274688	4.80000	4.25
10 1,1-Dichloroethene	96	5.913	5.913	(0.678)	113308	4.90000	4.26
11 Freon 113	101	6.011	6.011	(0.689)	261381	5.10000	4.52
12 Methylene Chloride	84	6.091	6.097	(0.698)	132736	4.70000	4.88
14 1,1-Dichloroethane	63	6.817	6.823	(0.782)	187419	4.80000	4.25
17 cis-1,2-Dichloroethene	96	7.364	7.364	(0.844)	113153	4.70000	4.22
18 Chloroform	83	7.548	7.548	(0.865)	223094	4.80000	4.30
19 1,1,1-Trichloroethane	97	8.156	8.156	(0.935)	182801	4.65000	4.13
20 1,2-Dichloroethane	62	8.181	8.181	(0.938)	135195	4.35000	3.96
21 Benzene	78	8.507	8.507	(0.975)	301423	4.45000	3.92
22 Carbon Tetrachloride	117	8.531	8.531	(0.978)	189557	4.50000	3.98

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
* 23 Fluorobenzene	96	8.722	8.722	(1.000)	726267	10.0000	
24 1,2-Dichloropropane	63	9.220	9.220	(1.057)	96815	4.25000	3.59
25 Trichloroethene	130	9.250	9.250	(1.061)	135847	4.30000	3.81
27 cis-1,3-Dichloropropene	75	10.043	10.043	(1.151)	172760	5.05000	4.97
29 trans-1,3-Dichloropropene	75	10.541	10.541	(1.209)	116657	5.10000	4.38
30 Toluene	92	10.719	10.725	(1.229)	241935	4.70000	4.00
31 1,1,2-Trichloroethane	97	10.725	10.725	(1.230)	146264	4.55000	4.02
33 1,2-Dibromoethane	107	11.598	11.598	(0.830)	193286	4.80000	3.92
34 Tetrachloroethene	166	11.678	11.678	(0.836)	235396	4.50000	4.20
35 Chlorobenzene	112	12.446	12.446	(0.891)	255114	4.20000	3.34
36 Ethyl Benzene	106	12.698	12.704	(0.909)	129528	4.20000	3.41
37 m&p-Xylene	106	12.852	12.852	(0.920)	320992	8.10000	6.74
38 Styrene	104	13.294	13.294	(0.952)	174114	3.45000	3.17
39 o-Xylene	106	13.368	13.368	(0.957)	149506	3.80000	3.10
40 1,1,2,2-Tetrachloroethane	83	13.626	13.632	(0.975)	239354	3.80000	3.28
* 41 p-Bromofluorobenzene	95	13.970	13.971	(1.000)	434833	10.0000	
42 1,3,5-Trimethylbenzene	105	14.763	14.763	(1.057)	103112	3.15000	2.40
43 1,2,4-Trimethylbenzene	105	15.280	15.280	(1.094)	110141	2.80000	2.33
44 1,3-Dichlorobenzene	146	15.618	15.618	(1.118)	85694	3.20000	2.55
45 Benzyl Chloride	91	15.685	15.685	(1.123)	53606	3.20000	2.62
1,4-Dichlorobenzene	146	15.716	15.722	(1.125)	87036	2.70000	2.19 (H)
1,2-Dichlorobenzene	146	16.189	16.195	(1.159)	59979	2.55000	1.90
48 1,2,4-Trichlorobenzene	180	18.697	18.697	(1.338)	32391	3.55000	2.90
49 Hexachlorobutadiene	225	19.305	19.311	(1.382)	61989	3.55000	2.57

QC Flag Legend

H - Operator selected an alternate compound hit.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25407.d
Lab Smp Id: 5ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: 5ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	726267	-10.59
41 p-Bromofluorobenz	471889	235944	943778	434833	-7.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.72	0.14
41 p-Bromofluorobenz	13.96	13.46	14.46	13.97	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

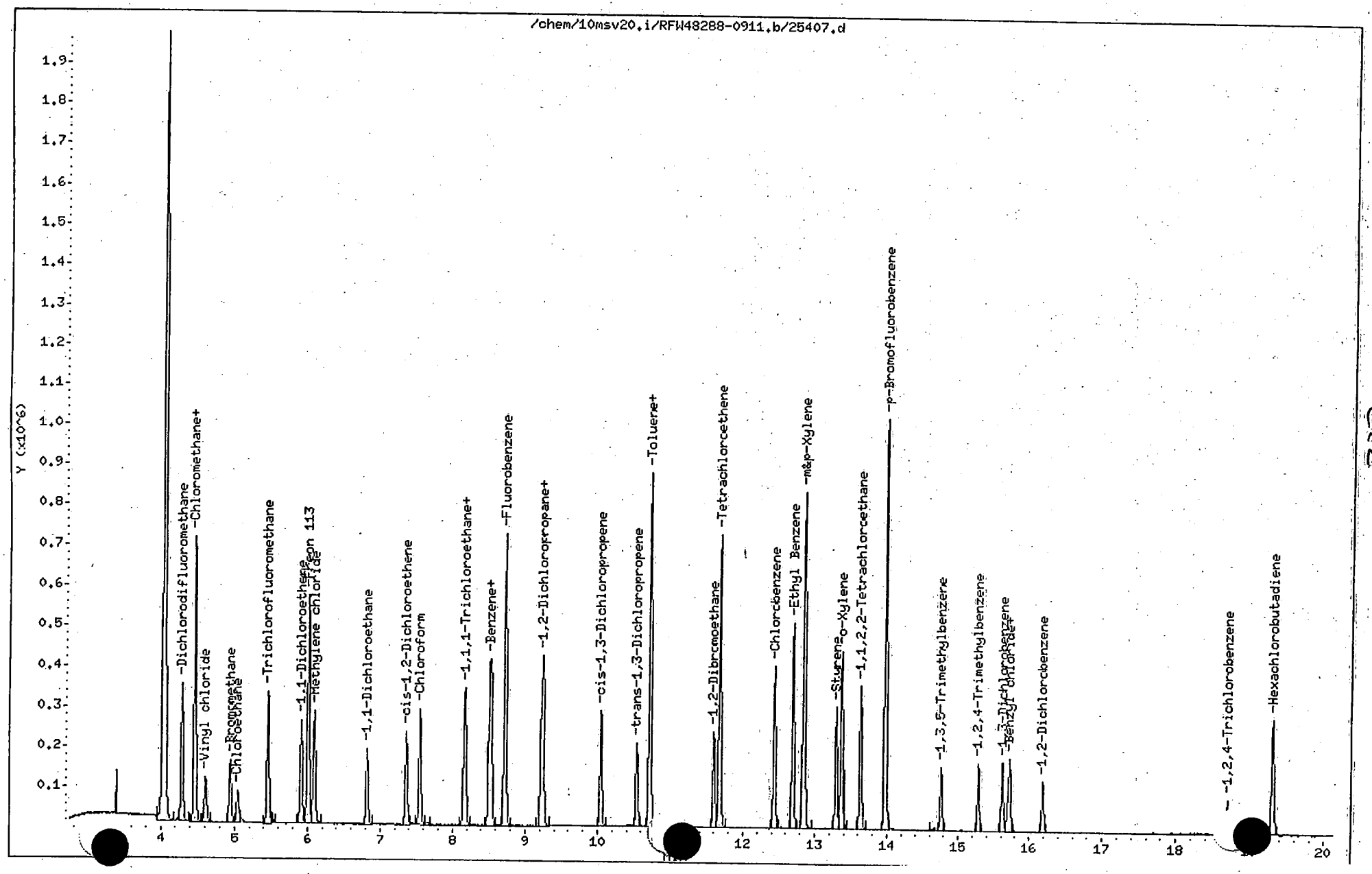
Data File: /chem/10msv20.i/RFW48288-0911.b/25407.d
Date : 11-SEP-2001 09:31
Client ID: 5ppbv
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

000233



Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0911.b/25404.d
Lab Smp Id: 10ppbv Client Smp ID: 10ppbv
Inj Date : 11-SEP-2001 07:43
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:39 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 07:43 Cal File: 25404.d
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
1 Dichlorodifluoromethane	85	4.284	4.284	(0.492)	731629	9.90000	7.92
2 Chloromethane	50	4.450	4.450	(0.511)	284286	9.70000	7.22
3 Dichlorotetrafluoroethane	85	4.450	4.450	(0.511)	776389	10.0000	7.65
4 Vinyl Chloride	62	4.604	4.604	(0.529)	230986	10.1000	8.04
6 Bromomethane	94	4.936	4.936	(0.567)	255988	10.4000	8.19
7 Chloroethane	64	5.040	5.040	(0.579)	106500	10.3000	8.14
8 Trichlorofluoromethane	101	5.452	5.452	(0.626)	533988	9.60000	7.39
10 1,1-Dichloroethene	96	5.907	5.907	(0.678)	230138	9.80000	7.75
11 Freon 113	101	5.999	5.999	(0.689)	506674	10.2000	7.84
12 Methylene Chloride	84	6.085	6.085	(0.699)	252059	9.40000	8.84
14 1,1-Dichloroethane	63	6.810	6.810	(0.782)	369121	9.60000	7.49
17 cis-1,2-Dichloroethene	96	7.351	7.351	(0.844)	229748	9.40000	7.66
18 Chloroform	83	7.535	7.535	(0.865)	438264	9.60000	7.55
19 1,1,1-Trichloroethane	97	8.150	8.150	(0.936)	364436	9.30000	7.36
20 1,2-Dichloroethane	62	8.168	8.168	(0.938)	267857	8.70000	7.01
21 Benzene	78	8.494	8.494	(0.975)	599199	8.90000	6.96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
	22 Carbon Tetrachloride	117	8.519	8.519	(0.978)	392189	9.00000	7.37
*	23 Fluorobenzene	96	8.709	8.709	(1.000)	812262	10.0000	
	24 1,2-Dichloropropane	63	9.213	9.213	(1.058)	204233	8.50000	6.77
	25 Trichloroethene	130	9.238	9.238	(1.061)	277705	8.60000	6.97
	27 cis-1,3-Dichloropropene	75	10.037	10.037	(1.152)	321410	10.1000	8.26
	29 trans-1,3-Dichloropropene	75	10.529	10.529	(1.209)	254906	10.2000	8.56
	30 Toluene	92	10.713	10.713	(1.230)	557966	9.40000	8.25
	31 1,1,2-Trichloroethane	97	10.713	10.713	(1.230)	315387	9.10000	7.76
	33 1,2-Dibromoethane	107	11.592	11.592	(0.830)	414639	9.60000	7.74
	34 Tetrachloroethene	166	11.672	11.672	(0.836)	462682	9.00000	8.89
	35 Chlorobenzene	112	12.440	12.440	(0.891)	577796	8.40000	6.97
	36 Ethyl Benzene	106	12.692	12.692	(0.909)	292095	8.40000	7.09
	37 m&p-Xylene	106	12.846	12.846	(0.920)	664357	16.2000	12.8
	38 Styrene	104	13.288	13.288	(0.952)	264956	6.90000	4.44
	39 o-Xylene	106	13.362	13.362	(0.957)	329644	7.60000	6.30
	40 1,1,2,2-Tetrachloroethane	83	13.620	13.620	(0.975)	390622	7.60000	4.93
*	41 p-Bromofluorobenzene	95	13.964	13.964	(1.000)	471889	10.0000	
	42 1,3,5-Trimethylbenzene	105	14.757	14.757	(1.057)	299355	6.30000	6.43
	43 1,2,4-Trimethylbenzene	105	15.273	15.273	(1.094)	311084	5.60000	6.06
	44 1,3-Dichlorobenzene	146	15.611	15.611	(1.118)	215620	6.40000	5.92
	Benzyl Chloride	91	15.679	15.679	(1.123)	127358	6.40000	5.74
	1,4-Dichlorobenzene	146	15.716	15.716	(1.125)	209736	5.40000	4.87(H)
	47 1,2-Dichlorobenzene	146	16.189	16.189	(1.159)	166184	5.10000	4.86
	48 1,2,4-Trichlorobenzene	180	18.690	18.690	(1.338)	85022	7.10000	7.02
	49 Hexachlorobutadiene	225	19.305	19.305	(1.382)	165824	7.10000	6.33

QC Flag Legend

H - Operator selected an alternate compound hit.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25404.d
Lab Smp Id: 10ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: 10ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	812262	0.00
41 p-Bromofluorobenz	471889	235944	943778	471889	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	0.00
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	0.00

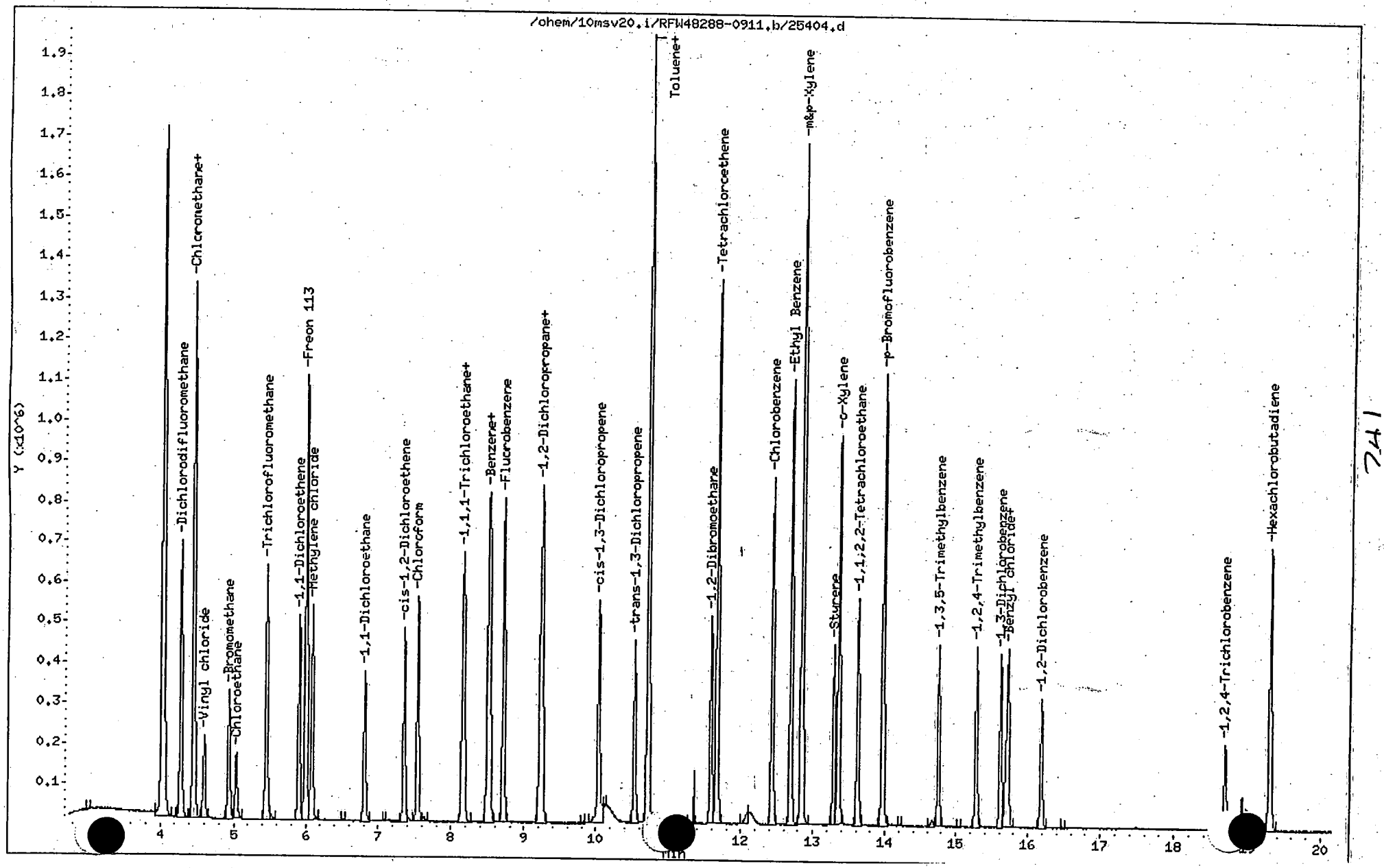
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0911.b/25404.d
Date : 11-SEP-2001 07:43
Client ID: 10ppbv
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



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Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0911.b/25408.d
Lab Smp Id: 20ppbv Client Smp ID: 20ppbv
Inj Date : 11-SEP-2001 10:10
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable - Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
1 Dichlorodifluoromethane	85	4.284	4.284	(0.491)	1334389	19.8000	15.6
2 Chloromethane	50	4.457	4.457	(0.511)	544081	19.4000	15.0
3 Dichlorotetrafluoroethane	85	4.457	4.457	(0.511)	1463348	20.0000	15.6
4 Vinyl Chloride	62	4.610	4.610	(0.529)	439384	20.2000	16.6
6 Bromomethane	94	4.942	4.942	(0.567)	484176	20.8000	16.8
7 Chloroethane	64	5.047	5.047	(0.579)	208229	20.6000	17.2
8 Trichlorofluoromethane	101	5.458	5.458	(0.626)	1037070	19.2000	15.5
10 1,1-Dichloroethene	96	5.913	5.913	(0.678)	438693	19.6000	16.0
11 Freon 113	101	6.011	6.011	(0.689)	951958	20.4000	15.9
12 Methylene Chloride	84	6.097	6.097	(0.699)	478233	18.8000	19.0
14 1,1-Dichloroethane	63	6.823	6.823	(0.782)	711807	19.2000	15.6
17 cis-1,2-Dichloroethene	96	7.364	7.364	(0.844)	439273	18.8000	15.9
18 Chloroform	83	7.548	7.548	(0.865)	841156	19.2000	15.7
19 1,1,1-Trichloroethane	97	8.156	8.156	(0.935)	695598	18.6000	15.2
20 1,2-Dichloroethane	62	8.181	8.181	(0.938)	518853	17.4000	14.7
21 Benzene	78	8.507	8.507	(0.975)	1120985	17.8000	14.1
22 Carbon Tetrachloride	117	8.531	8.531	(0.978)	732605	18.0000	14.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
* 23 Fluorobenzene	96	8.722	8.722	(1.000)	749922	10.0000	
24 1,2-Dichloropropane	63	9.220	9.220	(1.057)	385426	17.0000	13.8
25 Trichloroethene	130	9.250	9.250	(1.061)	518444	17.2000	14.1
27 cis-1,3-Dichloropropene	75	10.043	10.043	(1.151)	758867	20.2000	21.1(A)
29 trans-1,3-Dichloropropene	75	10.541	10.541	(1.209)	590795	20.4000	21.5(A)
30 Toluene	92	10.725	10.725	(1.230)	1028901	18.8000	16.5
31 1,1,2-Trichloroethane	97	10.725	10.725	(1.230)	588622	18.2000	15.7
33 1,2-Dibromoethane	107	11.598	11.598	(0.830)	862897	19.2000	17.6(A)
34 Tetrachloroethene	166	11.678	11.678	(0.836)	797607	18.0000	18.1
35 Chlorobenzene	112	12.446	12.446	(0.891)	1156685	16.8000	15.2
36 Ethyl Benzene	106	12.704	12.704	(0.909)	588458	16.8000	15.6
37 m&p-Xylene	106	12.852	12.852	(0.920)	1401611	32.4000	29.6
38 Styrene	104	13.294	13.294	(0.952)	941181	13.8000	17.2(A)
39 o-Xylene	106	13.368	13.368	(0.957)	663281	15.2000	13.8
40 1,1,2,2-Tetrachloroethane	83	13.632	13.632	(0.976)	1116944	15.2000	15.4(A)
* 41 p-Bromofluorobenzene	95	13.971	13.971	(1.000)	432490	10.0000	
42 1,3,5-Trimethylbenzene	105	14.763	14.763	(1.057)	583840	12.6000	13.7
43 1,2,4-Trimethylbenzene	105	15.280	15.280	(1.094)	507054	11.2000	10.8
44 1,3-Dichlorobenzene	146	15.618	15.618	(1.118)	375104	12.8000	11.2
45 Benzyl Chloride	91	15.685	15.685	(1.123)	315567	12.8000	15.5
1,4-Dichlorobenzene	146	15.722	15.722	(1.125)	359603	10.8000	9.11(H)
1,2-Dichlorobenzene	146	16.195	16.195	(1.159)	309637	10.2000	9.89
48 1,2,4-Trichlorobenzene	180	18.697	18.697	(1.338)	132646	14.2000	12.0
49 Hexachlorobutadiene	225	19.311	19.311	(1.382)	289762	14.2000	12.1

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25408.d
Lab Smp Id: 20ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: 20ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	749922	-7.67
41 p-Bromofluorobenz	471889	235944	943778	432490	-8.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.72	0.14
41 p-Bromofluorobenz	13.96	13.46	14.46	13.97	0.05

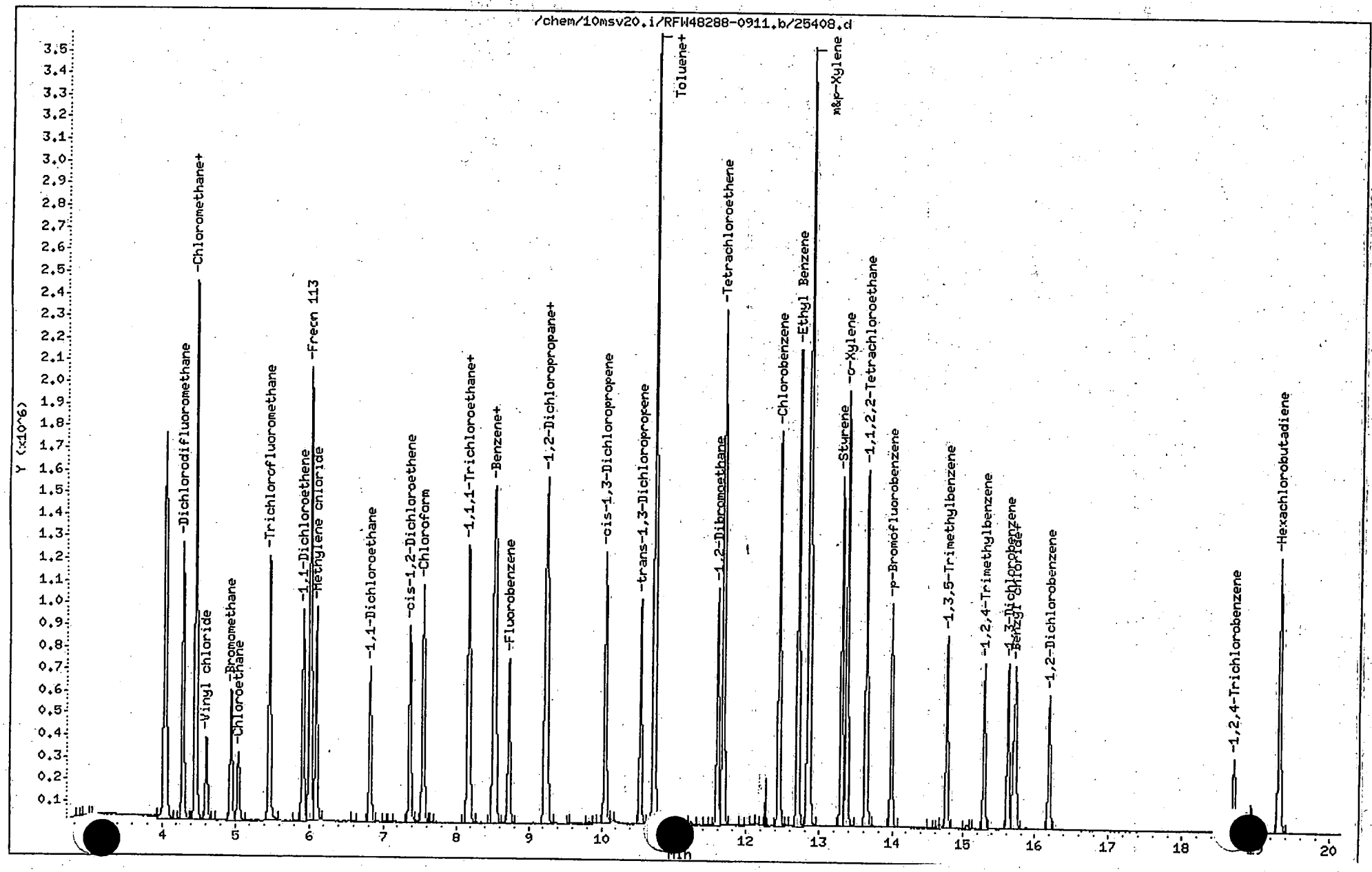
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0911.b/25408.d
Date : 11-SEP-2001 10:10
Client ID: 20ppbv
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-AUG-2001 07:12
End Cal Date : 12-SEP-2001 15:13
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Cal Date : 18-Sep-2001 10:03 mgurnsey
Curve Type : Average

Calibration File Names:
Level 1: /chem/10msv20.i/RFW48288-0912.b/25513.d
Level 2: /chem/10msv20.i/RFW48288-0912.b/25512.d
Level 3: /chem/10msv20.i/RFW48288-0912.b/25511.d
Level 4: /chem/10msv20.i/RFW48288-0912.b/25510.d
Level 5: /chem/10msv20.i/RFW48288-0912.b/25509.d

Compound	0.50000 Level 1	1.000 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	RRF	% RSD
1 Dichlorodifluoromethane	0.58024	0.64222	0.63192	0.64024	0.62301	0.62353	4.067
2 Chloromethane	0.26853	0.28897	0.26837	0.27512	0.25876	0.27195	4.103
3 Dichlorotetrafluoroethane	0.67047	0.73670	0.69577	0.71027	0.67096	0.69683	4.017
4 Vinyl chloride	0.19170	0.21246	0.19816	0.20457	0.19910	0.20120	3.864
6 Bromomethane	0.20948	0.22498	0.21230	0.22035	0.21074	0.21557	3.132
7 Chloroethane	0.08357	0.09710	0.09162	0.09426	0.08950	0.09121	5.629
8 Trichlorofluoromethane	0.47559	0.53659	0.51193	0.50890	0.50102	0.50681	4.328
10 1,1-Dichloroethene	0.18654	0.20571	0.20285	0.20449	0.19932	0.19978	3.894
11 Freon 113	0.42094	0.46157	0.44165	0.44318	0.41371	0.43621	4.381
12 Methylene chloride	0.21134	0.23133	0.22821	0.22636	0.21796	0.22305	3.676
14 1,1-Dichloroethane	0.32749	0.35584	0.34227	0.34730	0.33619	0.34182	3.150
17 cis-1,2-Dichloroethene	0.20137	0.21014	0.20948	0.21256	0.20798	0.20831	2.023
18 Chloroform	0.39769	0.42972	0.40500	0.40547	0.40386	0.40835	3.023
19 1,1,1-Trichloroethane	0.33177	0.35953	0.35123	0.35501	0.34629	0.34877	3.060
20 1,2-Dichloroethane	0.28638	0.29295	0.28195	0.28804	0.28147	0.28616	1.653
21 Benzene	0.58765	0.61559	0.58489	0.58960	0.55633	0.58681	3.584
22 Carbon tetrachloride	0.35076	0.38259	0.38079	0.38912	0.38561	0.37778	4.082
24 1,2-Dichloropropane	0.21692	0.21958	0.20870	0.22022	0.20908	0.21490	2.618
25 Trichloroethene	0.26301	0.27309	0.27495	0.27614	0.27539	0.27252	1.990
27 cis-1,3-Dichloropropene	0.26469	0.27651	0.27333	0.29489	0.35085	0.29206	11.867
29 trans-1,3-Dichloropropene	0.20064	0.22307	0.22778	0.25648	0.27303	0.23620	12.112
30 Toluene	0.39620	0.43486	0.46499	0.48968	0.50820	0.45879	9.700
31 1,1,2-Trichloroethane	0.25455	0.26983	0.28060	0.29580	0.30352	0.28086	7.008
33 1,2-Dibromoethane	0.58730	0.63007	0.63762	0.66566	0.66353	0.63684	4.992
34 Tetrachloroethene	0.57300	0.62726	0.60121	0.61350	0.59613	0.60222	3.368
35 Chlorobenzene	0.83748	0.95730	0.97395	1.01935	1.02219	0.96206	7.809

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-AUG-2001 07:12
End Cal Date : 12-SEP-2001 15:13
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Cal Date : 18-Sep-2001 10:03 mgurnsey
Curve Type : Average

Compound	0.50000 Level 1	1.000 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	RRF	% RSD
36 Ethyl Benzene	0.33051	0.43327	0.47816	0.51764	0.50777	0.45348	16.793
37 m&p-Xylene	0.46859	0.55658	0.60351	0.64237	0.63060	0.58033	12.173
38 Styrene	0.60744	0.76646	0.87998	0.97652	1.03122	0.85232	19.940
39 o-Xylene	0.46731	0.54358	0.61921	0.65103	0.63571	0.58337	13.182
40 1,1,2,2-Tetrachloroethane	0.90271	0.95084	0.98445	1.06253	1.04193	0.98849	6.620
1,3,5-Trimethylbenzene	0.86270	1.07190	1.19348	1.17326	0.92349	1.04497	14.130
1,2,4-Trimethylbenzene	0.69095	0.86979	1.02619	1.01660	0.83275	0.88726	15.722
44 1,3-Dichlorobenzene	0.59941	0.61829	0.61511	0.62272	0.52756	0.59663	6.635
45 Benzyl chloride	0.49472	0.56966	0.64103	0.69892	0.59037	0.59895	12.812
46 1,4-Dichlorobenzene	0.64310	0.69088	0.66704	0.67599	0.58215	0.65184	6.540
47 1,2-Dichlorobenzene	0.58791	0.63550	0.67113	0.70152	0.57079	0.63338	8.668
48 1,2,4-Trichlorobenzene	0.08942	0.10045	0.10230	0.11333	0.10702	0.10251	8.616
49 Hexachlorobutadiene	0.05893	0.17336	0.18142	0.20778	0.19088	0.16248	36.476

Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0912.b/25513.d
Lab Smp Id: 0.5ppbv Client Smp ID: 0.5ppbv
Inj Date : 12-SEP-2001 15:13
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 12 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
1 Dichlorodifluoromethane	85	4.278	4.278	(0.492)	29719	0.49500	0.461(a)
2 Chloromethane	50	4.444	4.444	(0.511)	13476	0.48500	0.479(a)
3 Dichlorotetrafluoroethane	85	4.450	4.450	(0.511)	34687	0.50000	0.481(a)
4 Vinyl Chloride	62	4.598	4.598	(0.528)	10017	0.50500	0.481(a)
6 Bromomethane	94	4.936	4.936	(0.567)	11271	0.52000	0.505
7 Chloroethane	64	5.028	5.028	(0.578)	4453	0.51500	0.472(a)
8 Trichlorofluoromethane	101	5.446	5.446	(0.626)	23621	0.48000	0.450(a)
10 1,1-Dichloroethene	96	5.901	5.901	(0.678)	9458	0.49000	0.458(a)
11 Freon 113	101	5.993	5.993	(0.689)	22213	0.51000	0.492(a)
12 Methylene Chloride	84	6.079	6.079	(0.698)	10278	0.47000	0.445(a)
14 1,1-Dichloroethane	63	6.804	6.804	(0.782)	16265	0.48000	0.460(a)
17 cis-1,2-Dichloroethene	96	7.345	7.345	(0.844)	9793	0.47000	0.454(a)
18 Chloroform	83	7.536	7.536	(0.866)	19752	0.48000	0.467(a)
19 1,1,1-Trichloroethane	97	8.138	8.138	(0.935)	15963	0.46500	0.442
20 1,2-Dichloroethane	62	8.162	8.162	(0.938)	12890	0.43500	0.435
21 Benzene	78	8.488	8.488	(0.975)	27058	0.44500	0.446

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
	22 Carbon Tetrachloride	117	8.519	8.519	(0.979)	16332	0.45000	0.418 (a)
*	23 Fluorobenzene	96	8.703	8.703	(1.000)	1034713	10.0000	
	24 1,2-Dichloropropane	63	9.207	9.207	(1.058)	9539	0.42500	0.429
	25 Trichloroethene	130	9.238	9.238	(1.061)	11702	0.43000	0.415
	27 cis-1,3-Dichloropropene	75	10.031	10.031	(1.153)	13831	0.50500	0.458 (a)
	29 trans-1,3-Dichloropropene	75	10.529	10.529	(1.210)	10588	0.51000	0.433 (a)
	30 Toluene	92	10.713	10.713	(1.231)	19268	0.47000	0.406 (a)
	31 1,1,2-Trichloroethane	97	10.713	10.713	(1.231)	11984	0.45500	0.412 (a)
	33 1,2-Dibromoethane	107	11.586	11.586	(0.830)	16021	0.48000	0.443
	34 Tetrachloroethene	166	11.672	11.672	(0.836)	14654	0.45000	0.428 (a)
	35 Chlorobenzene	112	12.434	12.434	(0.890)	19990	0.42000	0.366 (a)
	36 Ethyl Benzene	106	12.692	12.692	(0.909)	7889	0.42000	0.306 (a)
	37 m&p-Xylene	106	12.840	12.840	(0.919)	21571	0.81000	0.654
	38 Styrene	104	13.288	13.288	(0.952)	11910	0.34500	0.246 (a)
	39 o-Xylene	106	13.356	13.356	(0.956)	10092	0.38000	0.304 (a)
	40 1,1,2,2-Tetrachloroethane	83	13.620	13.620	(0.975)	19495	0.38000	0.347 (a)
*	41 p-Bromofluorobenzene	95	13.964	13.964	(1.000)	568316	10.0000	
	42 1,3,5-Trimethylbenzene	105	14.757	14.757	(1.057)	15444	0.31500	0.260 (a)
	43 1,2,4-Trimethylbenzene	105	15.280	15.280	(1.094)	10995	0.28000	0.218 (a)
	44 1,3-Dichlorobenzene	146	15.611	15.611	(1.118)	10901	0.32000	0.321
	Benzyl Chloride	91	15.685	15.685	(1.123)	8997	0.32000	0.264 (a)
	,4-Dichlorobenzene	146	15.716	15.716	(1.125)	9868	0.27000	0.266 (a)
	1,2-Dichlorobenzene	146	16.189	16.189	(1.159)	8520	0.25500	0.237 (a)
	48 1,2,4-Trichlorobenzene	180	18.697	18.697	(1.339)	1804	0.35500	0.310
	49 Hexachlorobutadiene	225	19.305	19.305	(1.382)	1189	0.35500	0.129 (a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation (BLOQ).

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25513.d
Lab Smp Id: 0.5ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: 0.5ppbv
Level: LOW
Sample Type: AIR
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	1034713	-3.35
41 p-Bromofluorobenz	632949	316474	1265898	568316	-10.21

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.70	-0.07
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

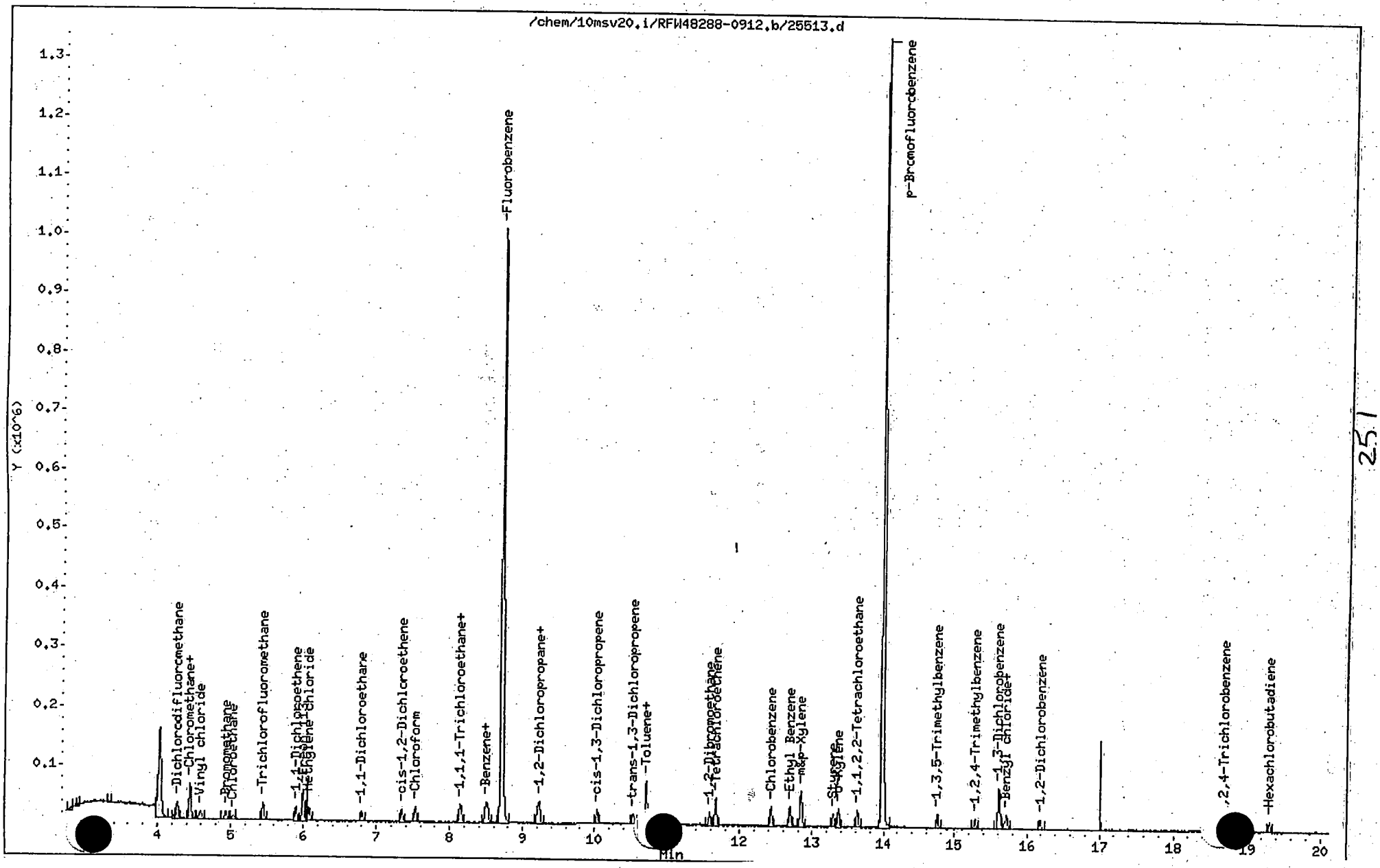
Data File: /chem/10msv20.i/RFW48288-0912.b/25513.d
Date : 12-SEP-2001 15:13
Client ID: 0.5ppbv
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

000247



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Data file : /chem/10msv20.i/RFW48288-0912.b/25512.d
Lab Smp Id: 1ppbv Client Smp ID: 1ppbv
Inj Date : 12-SEP-2001 14:40
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 14:40 Cal File: 25512.d
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
1 Dichlorodifluoromethane	85	4.285	4.285	(0.492)	67105	0.99000	1.02
2 Chloromethane	50	4.457	4.457	(0.512)	29584	0.97000	1.03
3 Dichlorotetrafluoroethane	85	4.457	4.457	(0.512)	77754	1.00000	1.06
4 Vinyl Chloride	62	4.604	4.604	(0.529)	22648	1.01000	1.07
6 Bromomethane	94	4.936	4.936	(0.567)	24695	1.04000	1.08
7 Chloroethane	64	5.040	5.040	(0.579)	10556	1.03000	1.10
8 Trichlorofluoromethane	101	5.452	5.452	(0.626)	54368	0.96000	1.02
10 1,1-Dichloroethene	96	5.907	5.907	(0.679)	21277	0.98000	1.01
11 Freon 113	101	5.999	5.999	(0.689)	49690	1.02000	1.08
12 Methylene Chloride	84	6.085	6.085	(0.699)	22951	0.94000	0.975
14 1,1-Dichloroethane	63	6.804	6.804	(0.782)	36054	0.96000	0.999
17 cis-1,2-Dichloroethene	96	7.345	7.345	(0.844)	20848	0.94000	0.948
18 Chloroform	83	7.536	7.536	(0.866)	43540	0.96000	1.01
19 1,1,1-Trichloroethane	97	8.144	8.144	(0.936)	35290	0.93000	0.959
20 1,2-Dichloroethane	62	8.163	8.163	(0.938)	26900	0.87000	0.891
21 Benzene	78	8.488	8.488	(0.975)	57825	0.89000	0.934

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
	22 Carbon Tetrachloride	117	8.519	8.519	(0.979)	36342	0.90000	0.911
*	23 Fluorobenzene	96	8.704	8.704	(1.000)	1055438	10.0000	
	24 1,2-Dichloropropane	63	9.207	9.207	(1.058)	19699	0.85000	0.868
	25 Trichloroethene	130	9.232	9.232	(1.061)	24788	0.86000	0.862
	27 cis-1,3-Dichloropropene	75	10.037	10.037	(1.153)	29476	1.01000	0.956
	29 trans-1,3-Dichloropropene	75	10.529	10.529	(1.210)	24014	1.02000	0.963
	30 Toluene	92	10.713	10.713	(1.231)	43143	0.94000	0.891
	31 1,1,2-Trichloroethane	97	10.713	10.713	(1.231)	25916	0.91000	0.874
	33 1,2-Dibromoethane	107	11.586	11.586	(0.830)	35043	0.96000	0.950
	34 Tetrachloroethene	166	11.666	11.666	(0.835)	32706	0.90000	0.937
	35 Chlorobenzene	112	12.434	12.434	(0.890)	46587	0.84000	0.836
	36 Ethyl Benzene	106	12.692	12.692	(0.909)	21085	0.84000	0.802
	37 m&p-Xylene	106	12.840	12.840	(0.919)	52237	1.62000	1.55
	38 Styrene	104	13.288	13.288	(0.952)	30639	0.69000	0.620
	39 o-Xylene	106	13.356	13.356	(0.956)	23934	0.76000	0.708
	40 1,1,2,2-Tetrachloroethane	83	13.620	13.620	(0.975)	41866	0.76000	0.731
*	41 p-Bromofluorobenzene	95	13.964	13.964	(1.000)	579347	10.0000	
	42 1,3,5-Trimethylbenzene	105	14.757	14.757	(1.057)	39123	0.63000	0.646
	43 1,2,4-Trimethylbenzene	105	15.280	15.280	(1.094)	28219	0.56000	0.549
	44 1,3-Dichlorobenzene	146	15.612	15.612	(1.118)	22925	0.64000	0.663
	Benzyl Chloride	91	15.685	15.685	(1.123)	21122	0.64000	0.609
	1,4-Dichlorobenzene	146	15.716	15.716	(1.125)	21614	0.54000	0.572
	47 1,2-Dichlorobenzene	146	16.183	16.183	(1.159)	18777	0.51000	0.512
	48 1,2,4-Trichlorobenzene	180	18.691	18.691	(1.338)	4132	0.71000	0.696
	49 Hexachlorobutadiene	225	19.299	19.299	(1.382)	7131	0.71000	0.758

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25512.d
Lab Smp Id: 1ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: 1ppbv
Level: LOW
Sample Type: AIR
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	1055438	-1.41
41 p-Bromofluorobenz	632949	316474	1265898	579347	-8.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.70	-0.07
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	0.00

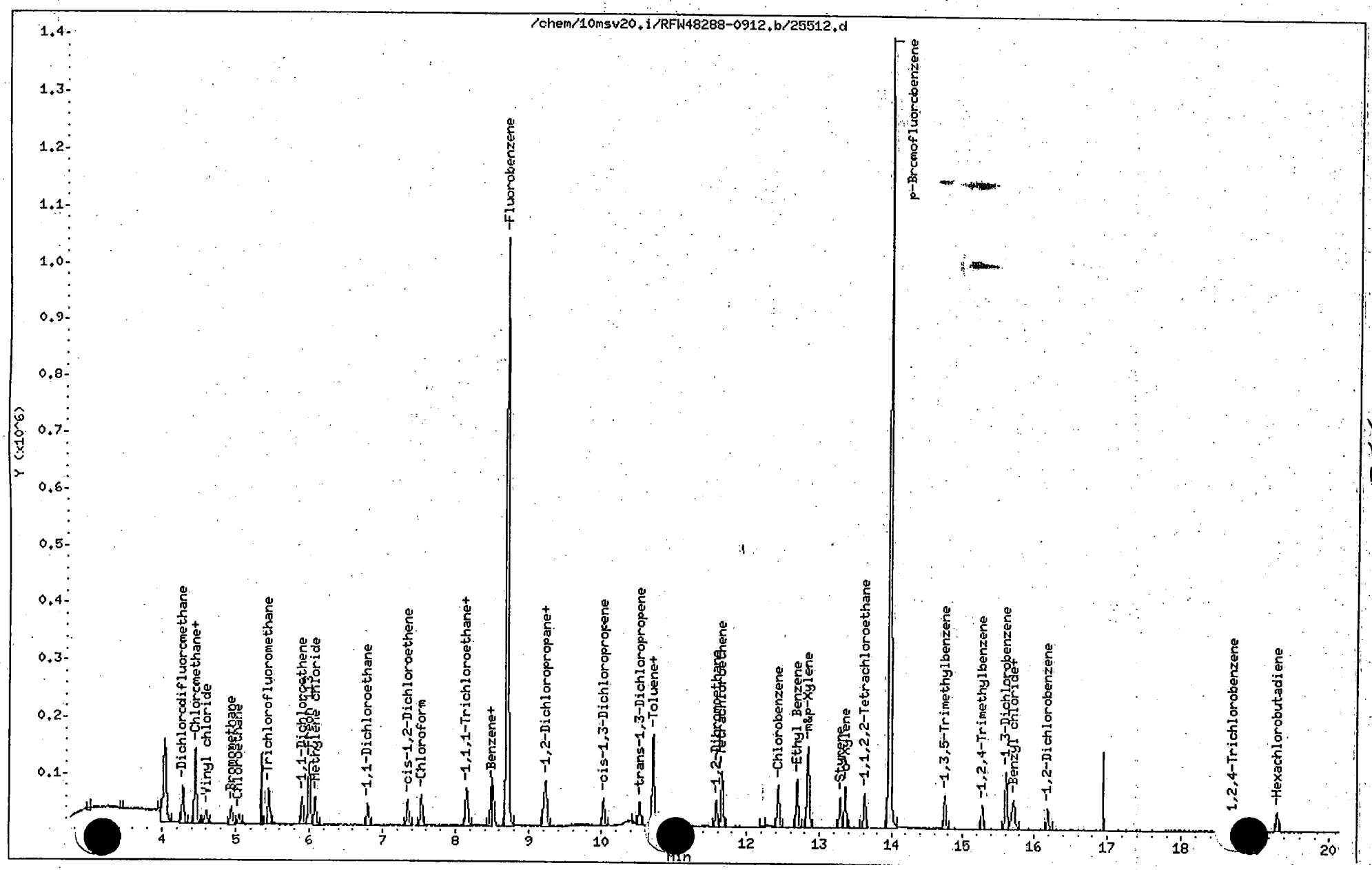
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0912.b/25512.d
Date : 12-SEP-2001 14:40
Client ID: 1ppbv
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



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Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0912.b/25511.d
Lab Smp Id: 5ppbv Client Smp ID: 5ppbv
Inj Date : 12-SEP-2001 14:06
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 14:06 Cal File: 25511.d
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
1 Dichlorodifluoromethane	85	4.279	4.279	(0.491)	336096	4.95000	5.02
2 Chloromethane	50	4.451	4.451	(0.511)	139855	4.85000	4.79
3 Dichlorotetrafluoroethane	85	4.451	4.451	(0.511)	373792	5.00000	4.99
4 Vinyl Chloride	62	4.598	4.598	(0.528)	107523	5.05000	4.97
6 Bromomethane	94	4.936	4.936	(0.567)	118619	5.20000	5.12
7 Chloroethane	64	5.035	5.035	(0.578)	50698	5.15000	5.17
8 Trichlorofluoromethane	101	5.452	5.452	(0.626)	264025	4.80000	4.85
10 1,1-Dichloroethene	96	5.907	5.907	(0.678)	106800	4.90000	4.98
11 Freon 113	101	5.999	5.999	(0.689)	242016	5.10000	5.16
12 Methylene Chloride	84	6.085	6.085	(0.699)	115249	4.70000	4.81
14 1,1-Dichloroethane	63	6.805	6.805	(0.781)	176525	4.80000	4.81
17 cis-1,2-Dichloroethene	96	7.345	7.345	(0.843)	105789	4.70000	4.73
18 Chloroform	83	7.536	7.536	(0.865)	208879	4.80000	4.76
19 1,1,1-Trichloroethane	97	8.144	8.144	(0.935)	175488	4.65000	4.68
20 1,2-Dichloroethane	62	8.163	8.163	(0.937)	131781	4.35000	4.28
21 Benzene	78	8.495	8.495	(0.975)	279658	4.45000	4.44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
22 Carbon Tetrachloride	117	8.519	8.519	(0.978)	184117	4.50000	4.54
* 23 Fluorobenzene	96	8.710	8.710	(1.000)	1074476	10.0000	
24 1,2-Dichloropropane	63	9.208	9.208	(1.057)	95304	4.25000	4.13
25 Trichloroethene	130	9.238	9.238	(1.061)	127033	4.30000	4.34
27 cis-1,3-Dichloropropene	75	10.037	10.037	(1.152)	148314	5.05000	4.73
29 trans-1,3-Dichloropropene	75	10.529	10.529	(1.209)	124820	5.10000	4.92
30 Toluene	92	10.713	10.713	(1.230)	234823	4.70000	4.76
31 1,1,2-Trichloroethane	97	10.713	10.713	(1.230)	137182	4.55000	4.54
33 1,2-Dibromoethane	107	11.592	11.592	(0.830)	186416	4.80000	4.80
34 Tetrachloroethene	166	11.672	11.672	(0.836)	164785	4.50000	4.49
35 Chlorobenzene	112	12.434	12.434	(0.890)	249153	4.20000	4.25
36 Ethyl Benzene	106	12.692	12.692	(0.909)	122322	4.20000	4.43
37 m&p-Xylene	106	12.846	12.846	(0.920)	297751	8.10000	8.42
38 Styrene	104	13.289	13.289	(0.952)	184916	3.45000	3.56
39 o-Xylene	106	13.362	13.362	(0.957)	143318	3.80000	4.03
40 1,1,2,2-Tetrachloroethane	83	13.620	13.620	(0.975)	227855	3.80000	3.78
* 41 p-Bromofluorobenzene	95	13.965	13.965	(1.000)	609089	10.0000	
42 1,3,5-Trimethylbenzene	105	14.758	14.758	(1.057)	228985	3.15000	3.60
43 1,2,4-Trimethylbenzene	105	15.274	15.274	(1.094)	175011	2.80000	3.24
44 1,3-Dichlorobenzene	146	15.612	15.612	(1.118)	119891	3.20000	3.30
lenzyl Chloride	91	15.679	15.679	(1.123)	124942	3.20000	3.42
1,4-Dichlorobenzene	146	15.716	15.716	(1.125)	109698	2.70000	2.76
47 1,2-Dichlorobenzene	146	16.190	16.190	(1.159)	104239	2.55000	2.70
48 1,2,4-Trichlorobenzene	180	18.691	18.691	(1.338)	22119	3.55000	3.54
49 Hexachlorobutadiene	225	19.306	19.306	(1.382)	39228	3.55000	3.96

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25511.d
Lab Smp Id: 5ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: 5ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	1074476	0.37
41 p-Bromofluorobenz	632949	316474	1265898	609089	-3.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	0.00
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	0.00

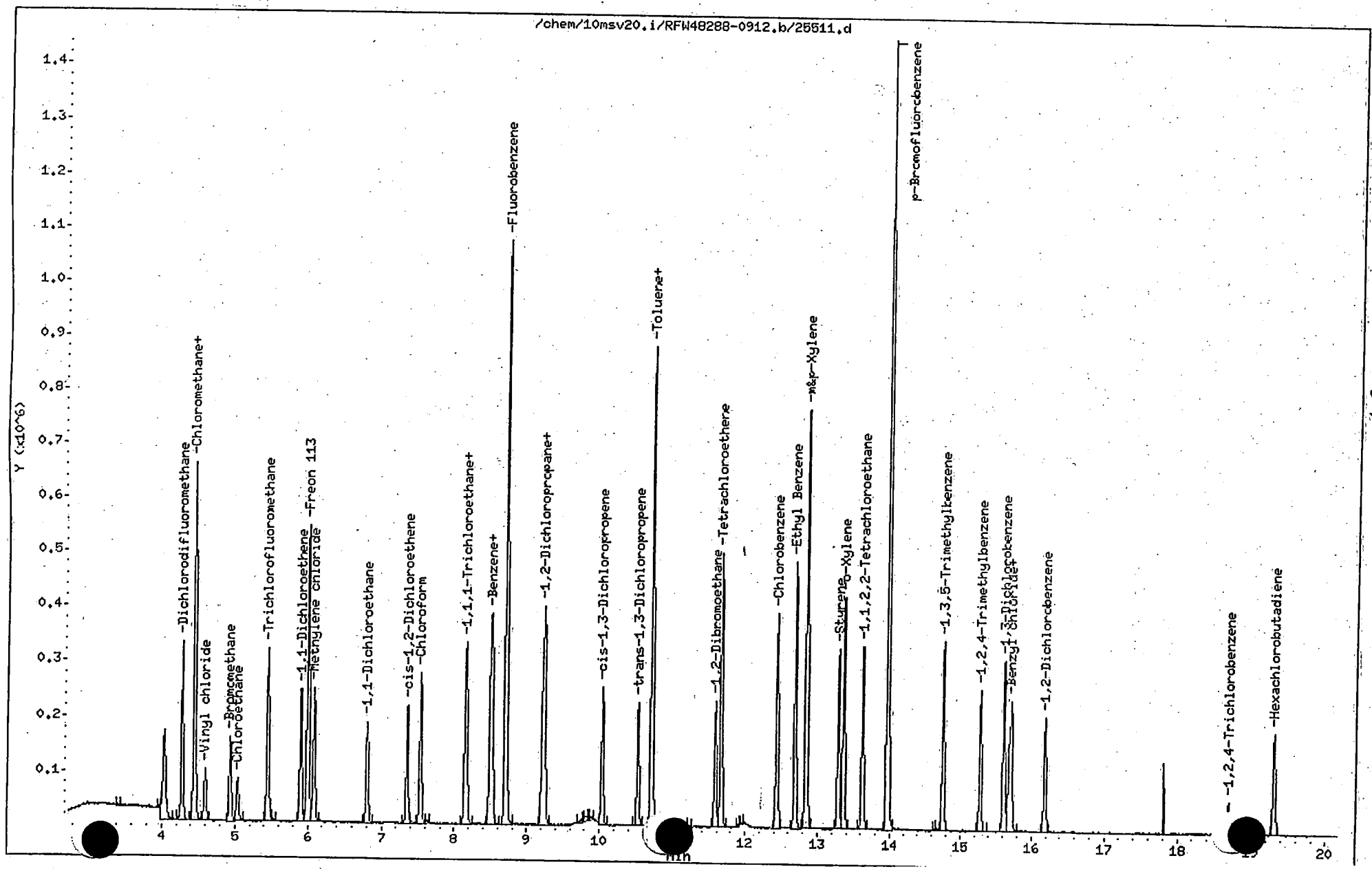
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0912.b/25511.d
Date : 12-SEP-2001 14:06
Client ID: 5ppbv
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0912.b/25510.d
Lab Smp Id: 10ppbv Client Smp ID: 10ppbv
Inj Date : 12-SEP-2001 13:07
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:13 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 13:07 Cal File: 25510.d
Als bottle: 9 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
1 Dichlorodifluoromethane	85	4.285	4.285	(0.492)	678533	9.90000	10.2
2 Chloromethane	50	4.457	4.457	(0.512)	285682	9.70000	9.81
3 Dichlorotetrafluoroethane	85	4.457	4.457	(0.512)	760357	10.0000	10.2
4 Vinyl Chloride	62	4.604	4.604	(0.529)	221192	10.1000	10.3
6 Bromomethane	94	4.942	4.942	(0.567)	245322	10.4000	10.6
7 Chloroethane	64	5.041	5.041	(0.579)	103933	10.3000	10.6
8 Trichlorofluoromethane	101	5.459	5.459	(0.627)	522994	9.60000	9.64
10 1,1-Dichloroethene	96	5.913	5.913	(0.679)	214534	9.80000	10.0
11 Freon 113	101	6.006	6.006	(0.690)	483928	10.2000	10.4
12 Methylene Chloride	84	6.085	6.085	(0.699)	227789	9.40000	9.54
14 1,1-Dichloroethane	63	6.811	6.811	(0.782)	356921	9.60000	9.75
17 cis-1,2-Dichloroethene	96	7.352	7.352	(0.844)	213901	9.40000	9.59
18 Chloroform	83	7.536	7.536	(0.865)	416705	9.60000	9.53
19 1,1,1-Trichloroethane	97	8.150	8.150	(0.936)	353442	9.30000	9.47
20 1,2-Dichloroethane	62	8.169	8.169	(0.938)	268272	8.70000	8.76
21 Benzene	78	8.495	8.495	(0.975)	561751	8.90000	8.94

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
22 Carbon Tetrachloride	117	8.519	8.519	(0.978)	374907	9.00000	9.27
* 23 Fluorobenzene	96	8.710	8.710	(1.000)	1070523	10.0000	
24 1,2-Dichloropropane	63	9.214	9.214	(1.058)	200390	8.50000	8.71
25 Trichloroethene	130	9.238	9.238	(1.061)	254232	8.60000	8.71
27 cis-1,3-Dichloropropene	75	10.037	10.037	(1.152)	318847	10.1000	10.2
29 trans-1,3-Dichloropropene	75	10.529	10.529	(1.209)	280055	10.2000	11.1
30 Toluene	92	10.713	10.713	(1.230)	492760	9.40000	10.0
31 1,1,2-Trichloroethane	97	10.720	10.720	(1.231)	288160	9.10000	9.58
33 1,2-Dibromoethane	107	11.592	11.592	(0.830)	404474	9.60000	10.0
34 Tetrachloroethene	166	11.672	11.672	(0.836)	349482	9.00000	9.17
35 Chlorobenzene	112	12.440	12.440	(0.891)	541963	8.40000	8.90
36 Ethyl Benzene	106	12.692	12.692	(0.909)	275218	8.40000	9.59
37 m&p-Xylene	106	12.846	12.846	(0.920)	658667	16.2000	17.9
38 Styrene	104	13.289	13.289	(0.952)	426480	6.90000	7.90
39 o-Xylene	106	13.362	13.362	(0.957)	313172	7.60000	8.48
40 1,1,2,2-Tetrachloroethane	83	13.627	13.627	(0.976)	511121	7.60000	8.17
41 p-Bromofluorobenzene	95	13.965	13.965	(1.000)	632949	10.0000	
42 1,3,5-Trimethylbenzene	105	14.757	14.757	(1.057)	467848	6.30000	7.07
43 1,2,4-Trimethylbenzene	105	15.280	15.280	(1.094)	360337	5.60000	6.42
44 1,3-Dichlorobenzene	146	15.612	15.612	(1.118)	252254	6.40000	6.68
[illegible]nzyl Chloride	91	15.685	15.685	(1.123)	283123	6.40000	7.47
[illegible]4-Dichlorobenzene	146	15.716	15.716	(1.125)	231049	5.40000	5.60
47 1,2-Dichlorobenzene	146	16.189	16.189	(1.159)	226455	5.10000	5.65
48 1,2,4-Trichlorobenzene	180	18.691	18.691	(1.338)	50932	7.10000	7.85
49 Hexachlorobutadiene	225	19.305	19.305	(1.382)	93373	7.10000	9.08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25510.d
Lab Smp Id: 10ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: 10ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	1070523	0.00
41 p-Bromofluorobenz	632949	316474	1265898	632949	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	0.00
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

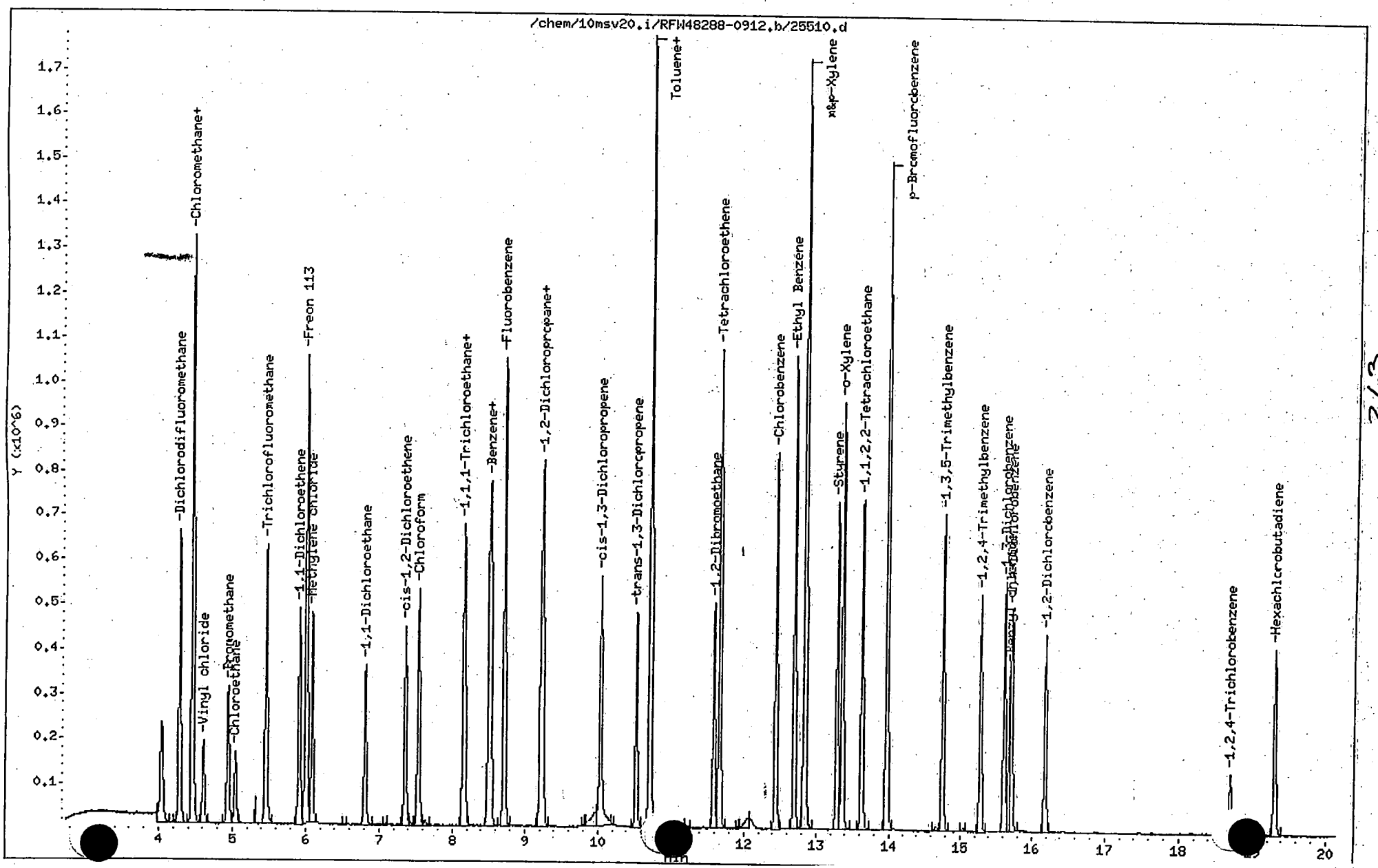
000259

Data File: /chem/10msv20.i/RFW48288-0912.b/25510.d
Date : 12-SEP-2001 13:07
Client ID: 10ppbv
Sample Info:

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0912.b/25509.d
Lab Smp Id: 20ppbv Client Smp ID: 20ppbv
Inj Date : 12-SEP-2001 12:25
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:13 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:25 Cal File: 25509.d
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
1 Dichlorodifluoromethane	85	4.290	4.290	(0.492)	1317551	19.8000	19.8
2 Chloromethane	50	4.462	4.462	(0.512)	536184	19.4000	18.4
3 Dichlorotetrafluoroethane	85	4.462	4.462	(0.512)	1433300	20.0000	19.2
4 Vinyl Chloride	62	4.609	4.609	(0.529)	429568	20.2000	20.0(A)
6 Bromomethane	94	4.947	4.947	(0.568)	468178	20.8000	20.3(A)
7 Chloroethane	64	5.046	5.046	(0.579)	196915	20.6000	20.2(A)
8 Trichlorofluoromethane	101	5.464	5.464	(0.627)	1027452	19.2000	19.0
10 1,1-Dichloroethene	96	5.912	5.912	(0.678)	417268	19.6000	19.6(A)
11 Freon 113	101	6.011	6.011	(0.690)	901429	20.4000	19.3
12 Methylene Chloride	84	6.090	6.090	(0.699)	437671	18.8000	18.4
14 1,1-Dichloroethane	63	6.816	6.816	(0.782)	689432	19.2000	18.9
17 cis-1,2-Dichloroethene	96	7.357	7.357	(0.844)	417618	18.8000	18.8
18 Chloroform	83	7.541	7.541	(0.865)	828215	19.2000	19.0
19 1,1,1-Trichloroethane	97	8.156	8.156	(0.936)	687953	18.6000	18.5(A)
20 1,2-Dichloroethane	62	8.174	8.174	(0.938)	523108	17.4000	17.1(A)
21 Benzene	78	8.500	8.500	(0.975)	1057698	17.8000	16.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
	22 Carbon Tetrachloride	117	8.530	8.530	(0.979)	741360	18.0000	18.4(A)
*	23 Fluorobenzene	96	8.715	8.715	(1.000)	1068090	10.0000	
	24 1,2-Dichloropropane	63	9.219	9.219	(1.058)	379645	17.0000	16.5(A)
	25 Trichloroethene	130	9.243	9.243	(1.061)	505915	17.2000	17.4(A)
	27 cis-1,3-Dichloropropene	75	10.042	10.042	(1.152)	756978	20.2000	24.3(A)
	29 trans-1,3-Dichloropropene	75	10.534	10.534	(1.209)	594901	20.4000	23.6(A)
	30 Toluene	92	10.718	10.718	(1.230)	1020470	18.8000	20.8
	31 1,1,2-Trichloroethane	97	10.725	10.725	(1.231)	590020	18.2000	19.7(A)
	33 1,2-Dibromoethane	107	11.597	11.597	(0.830)	875648	19.2000	20.0(A)
	34 Tetrachloroethene	166	11.677	11.677	(0.836)	737533	18.0000	17.8
	35 Chlorobenzene	112	12.439	12.439	(0.890)	1180346	16.8000	17.8(A)
	36 Ethyl Benzene	106	12.697	12.697	(0.909)	586330	16.8000	18.8(A)
	37 m&p-Xylene	106	12.851	12.851	(0.920)	1404325	32.4000	35.2(A)
	38 Styrene	104	13.294	13.294	(0.952)	978132	13.8000	16.7(A)
	39 o-Xylene	106	13.367	13.367	(0.957)	664157	15.2000	16.6(A)
	40 1,1,2,2-Tetrachloroethane	83	13.625	13.625	(0.975)	1088548	15.2000	16.0(A)
*	41 p-Bromofluorobenzene	95	13.970	13.970	(1.000)	687333	10.0000	
	42 1,3,5-Trimethylbenzene	105	14.762	14.762	(1.057)	799776	12.6000	11.1
	43 1,2,4-Trimethylbenzene	105	15.279	15.279	(1.094)	641059	11.2000	10.5
	44 1,3-Dichlorobenzene	146	15.617	15.617	(1.118)	464144	12.8000	11.3
	Benzyl Chloride	91	15.684	15.684	(1.123)	519402	12.8000	12.6
	,4-Dichlorobenzene	146	15.721	15.721	(1.125)	432145	10.8000	9.64
	1,2-Dichlorobenzene	146	16.188	16.188	(1.159)	400170	10.2000	9.19
	48 1,2,4-Trichlorobenzene	180	18.696	18.696	(1.338)	104451	14.2000	14.8(A)
	49 Hexachlorobutadiene	225	19.304	19.304	(1.382)	186306	14.2000	16.7

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25509.d
Lab Smp Id: 20ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: 20ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	1068090	-0.23
41 p-Bromofluorobenz	632949	316474	1265898	687333	8.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	0.06
41 p-Bromofluorobenz	13.96	13.46	14.46	13.97	0.04

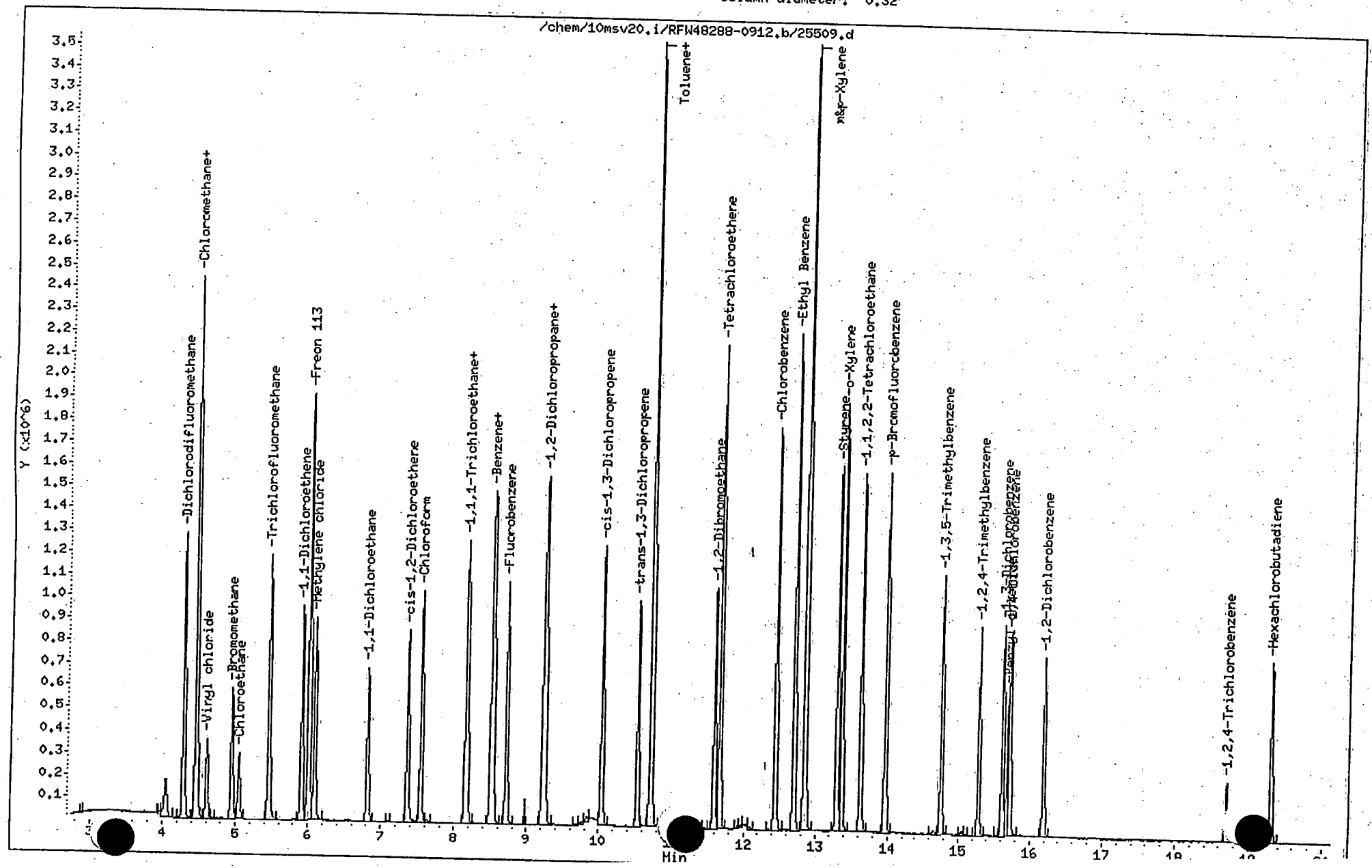
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0912.b/25509.d
Date : 12-SEP-2001 12:25
Client ID: 20ppbv
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-JUL-2001 14:38
End Cal Date : 12-SEP-2001 12:26
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Cal Date : 18-Sep-2001 11:44 mgurnsey
Curve Type : Average

Calibration File Names:
Level 1: /chem/10msv09.i/RFW48288-0912.b/25507.d
Level 2: /chem/10msv09.i/RFW48288-0912.b/25503.d
Level 3: /chem/10msv09.i/RFW48288-0912.b/25504.d
Level 4: /chem/10msv09.i/RFW48288-0912.b/25505.d
Level 5: /chem/10msv09.i/RFW48288-0912.b/25506.d

Compound	0.50000 Level 1	1.000 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	RRF	% RSD
1 Dichlorodifluoromethane	0.83296	0.57556	0.74643	0.71114	0.70635	0.71449	12.986
2 Chloromethane	0.44812	0.31193	0.39238	0.37744	0.35819	0.37761	13.163
3 Dichlorotetrafluoroethane	0.99023	0.67021	0.86101	0.83163	0.78952	0.82852	13.997
4 Vinyl chloride	0.34531	0.23563	0.30286	0.29974	0.30006	0.29672	13.216
6 Bromomethane	0.30987	0.21596	0.26760	0.26532	0.25818	0.26339	12.675
7 Chloroethane	0.16897	0.11452	0.15071	0.14834	0.14716	0.14594	13.478
8 Trichlorofluoromethane	0.73475	0.50533	0.64746	0.62890	0.60704	0.62469	13.202
10 1,1-Dichloroethene	0.30507	0.20698	0.26060	0.25754	0.25571	0.25718	13.507
11 Freon 113	0.65357	0.44077	0.55865	0.52878	0.51181	0.53872	14.380
12 Methylene chloride	0.38195	0.25994	0.32437	0.31877	0.31473	0.31995	13.528
14 1,1-Dichloroethane	0.63539	0.43868	0.57143	0.55491	0.54846	0.54977	12.916
17 cis-1,2-Dichloroethene	0.31280	0.21780	0.28743	0.28735	0.28368	0.27781	12.782
18 Chloroform	0.65556	0.45990	0.58684	0.58252	0.57305	0.57158	12.334
19 1,1,1-Trichloroethane	0.51835	0.37525	0.48023	0.47046	0.46805	0.46247	11.411
20 1,2-Dichloroethane	0.45431	0.32967	0.43001	0.42420	0.41438	0.41051	11.579
21 Benzene	1.17189	0.76920	0.93015	0.91788	0.86395	0.93061	16.017
22 Carbon tetrachloride	0.55133	0.38640	0.50510	0.49940	0.48663	0.48577	12.493
24 1,2-Dichloropropane	0.37557	0.26931	0.34940	0.34862	0.33964	0.33651	11.853
25 Trichloroethene	0.43593	0.29295	0.37724	0.37194	0.36231	0.36807	13.840
27 cis-1,3-Dichloropropene	0.49092	0.33578	0.47037	0.47845	0.48105	0.45131	14.403
29 trans-1,3-Dichloropropene	0.38535	0.26790	0.38206	0.39448	0.39901	0.36576	15.073
30 Toluene	0.63282	0.43216	0.58301	0.59196	0.58483	0.56496	13.622
31 1,1,2-Trichloroethane	0.36579	0.26056	0.33598	0.33894	0.32885	0.32602	12.019
33 1,2-Dibromoethane	0.91245	0.62586	0.84085	0.86548	0.85584	0.82010	13.636
34 Tetrachloroethene	0.90219	0.60135	0.79179	0.79483	0.77713	0.77346	14.015
35 Chlorobenzene	1.46386	0.98674	1.31386	1.34090	1.34690	1.29045	13.894

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-JUL-2001 14:38
End Cal Date : 12-SEP-2001 12:26
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Cal Date : 18-Sep-2001 11:44 mgurnsey
Curve Type : Average

Compound	0.50000 Level 1	1.000 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	___ RRF	% RSD
36 Ethyl Benzene	0.64743	0.43477	0.59673	0.62067	0.63457	0.58683	14.835
37 m&p-Xylene	0.83025	0.55399	0.75125	0.77288	0.77282	0.73624	14.400
38 Styrene	1.24559	0.83398	1.22864	1.31033	1.32874	1.18946	17.078
39 o-Xylene	0.82079	0.55321	0.74210	0.77646	0.78700	0.73591	14.393
40 1,1,2,2-Tetrachloroethane	1.46447	0.99726	1.37389	1.41808	1.41324	1.33339	14.296
42 1,3,5-Trimethylbenzene	1.66278	1.10609	1.62306	1.71358	1.73941	1.56899	16.740
1,2,4-Trimethylbenzene	1.69232	1.14508	1.67470	1.75212	1.81468	1.61578	16.637
1,3-Dichlorobenzene	1.22161	0.82317	1.12469	1.16985	1.18377	1.10462	14.585
45 Benzyl chloride	1.21131	0.84559	1.33531	1.44416	1.50438	1.26815	20.604
46 1,4-Dichlorobenzene	1.45145	0.99221	1.33080	1.36647	1.39381	1.30695	13.878
47 1,2-Dichlorobenzene	1.28197	0.86019	1.19540	1.24684	1.25038	1.16696	14.934
48 1,2,4-Trichlorobenzene	0.04490	0.02540	0.03596	0.04364	0.05291	0.04056	25.620
49 Hexachlorobutadiene	0.26807	0.20677	0.24688	0.25900	0.21877	0.23990	10.932

Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv09.i/RFW48288-0912.b/25507.d
Lab Smp Id: 0.5ppbv Client Smp ID: 0.5ppbv
Inj Date : 12-SEP-2001 12:26
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 6 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
1 Dichlorodifluoromethane	85	3.065	3.065	(0.442)	109468	0.49500	0.577
2 Chloromethane	50	3.192	3.192	(0.460)	57703	0.48500	0.576
3 Dichlorotetrafluoroethane	85	3.199	3.199	(0.461)	131451	0.50000	0.598
4 Vinyl Chloride	62	3.306	3.306	(0.476)	46298	0.50500	0.588
6 Bromomethane	94	3.574	3.574	(0.515)	42780	0.52000	0.612
7 Chloroethane	64	3.661	3.661	(0.528)	23104	0.51500	0.596
8 Trichlorofluoromethane	101	3.996	3.996	(0.576)	93635	0.48000	0.564
10 1,1-Dichloroethene	96	4.379	4.379	(0.631)	39687	0.49000	0.581
11 Freon 113	101	4.479	4.479	(0.645)	88496	0.51000	0.619
12 Methylene Chloride	84	4.546	4.546	(0.655)	47661	0.47000	0.561
14 1,1-Dichloroethane	63	5.183	5.183	(0.747)	80973	0.48000	0.555
17 cis-1,2-Dichloroethene	96	5.672	5.672	(0.817)	39032	0.47000	0.529
18 Chloroform	83	5.847	5.847	(0.843)	83544	0.48000	0.550
19 1,1,1-Trichloroethane	97	6.396	6.396	(0.922)	63993	0.46500	0.521
20 1,2-Dichloroethane	62	6.436	6.436	(0.928)	52469	0.43500	0.481
21 Benzene	78	6.718	6.718	(0.968)	138454	0.44500	0.560

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
	22 Carbon Tetrachloride	117	6.738	6.738	(0.971)	65869	0.45000	0.511
*	23 Fluorobenzene	96	6.939	6.939	(1.000)	2654962	10.0000	
	24 1,2-Dichloropropane	63	7.408	7.408	(1.068)	42378	0.42500	0.474
	25 Trichloroethene	130	7.435	7.435	(1.071)	49767	0.43000	0.509
	27 cis-1,3-Dichloropropene	75	8.213	8.213	(1.184)	65820	0.50500	0.549
	29 trans-1,3-Dichloropropene	75	8.702	8.702	(1.254)	52178	0.51000	0.537
	30 Toluene	92	8.850	8.850	(1.275)	78965	0.47000	0.526
	31 1,1,2-Trichloroethane	97	8.863	8.863	(1.277)	44188	0.45500	0.510
	33 1,2-Dibromoethane	107	9.681	9.681	(0.805)	66442	0.48000	0.534
	34 Tetrachloroethene	166	9.768	9.768	(0.813)	61589	0.45000	0.525
	35 Chlorobenzene	112	10.512	10.512	(0.875)	93270	0.42000	0.476
	36 Ethyl Benzene	106	10.780	10.780	(0.897)	41251	0.42000	0.463
	37 m&p-Xylene	106	10.934	10.934	(0.910)	102020	0.81000	0.913
	38 Styrene	104	11.363	11.363	(0.945)	65191	0.34500	0.361(a)
	39 o-Xylene	106	11.430	11.430	(0.951)	47316	0.38000	0.424
	40 1,1,2,2-Tetrachloroethane	83	11.705	11.705	(0.974)	84422	0.38000	0.417
*	41 p-Bromofluorobenzene	95	12.020	12.020	(1.000)	1517025	10.0000	
	42 1,3,5-Trimethylbenzene	105	12.831	12.831	(1.067)	79458	0.31500	0.334(a)
	43 1,2,4-Trimethylbenzene	105	13.327	13.327	(1.109)	71884	0.28000	0.293(a)
	44 1,3-Dichlorobenzene	146	13.629	13.629	(1.134)	59303	0.32000	0.354
	Benzyl Chloride	91	13.723	13.723	(1.142)	58803	0.32000	0.306(a)
	1,4-Dichlorobenzene	146	13.743	13.743	(1.143)	59451	0.27000	0.300
	47 1,2-Dichlorobenzene	146	14.192	14.192	(1.181)	49592	0.25500	0.280(a)
	48 1,2,4-Trichlorobenzene	180	16.645	16.645	(1.385)	2418	0.35500	0.393(M)
	49 Hexachlorobutadiene	225	17.222	17.222	(1.433)	14437	0.35500	0.397

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25507.d
Lab Smp Id: 0.5ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: 0.5ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2654962	14.82
41 p-Bromofluorobenz	1338999	669500	2677998	1517025	13.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.94	-0.13
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

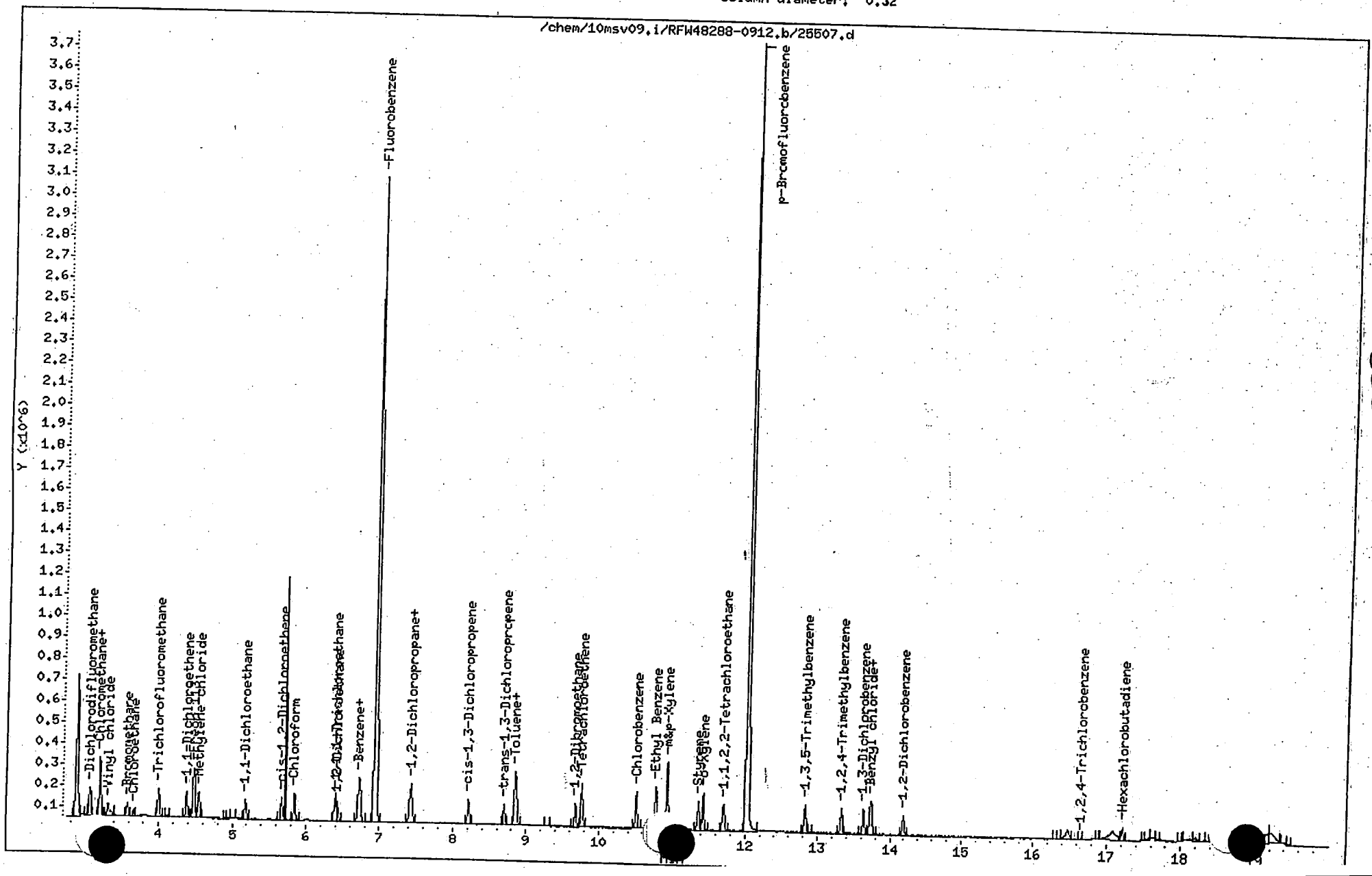
000269

Data File: /chem/10msv09.i/RFW48288-0912.b/25507.d
Date : 12-SEP-2001 12:26
Client ID: 0.5ppbv
Sample Info:

Instrument: 10msv09.i

Column phase: J&W DB-5

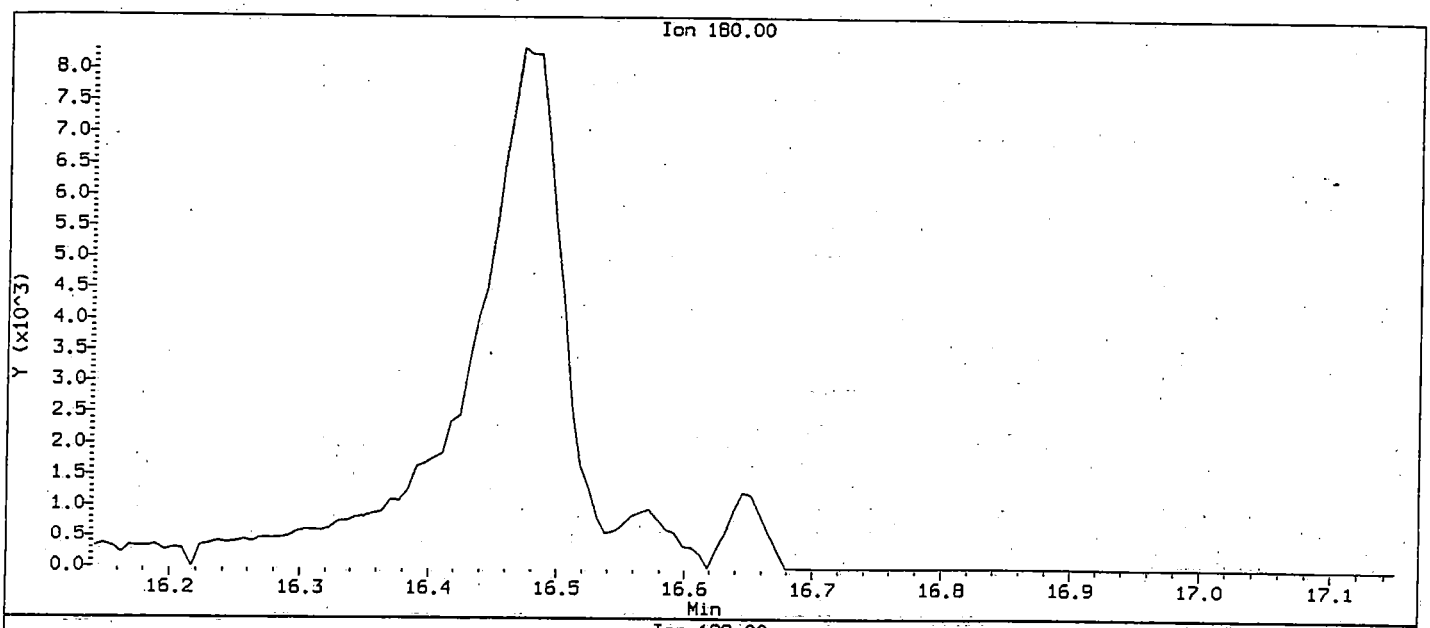
Operator: mtg
Column diameter: 0.32

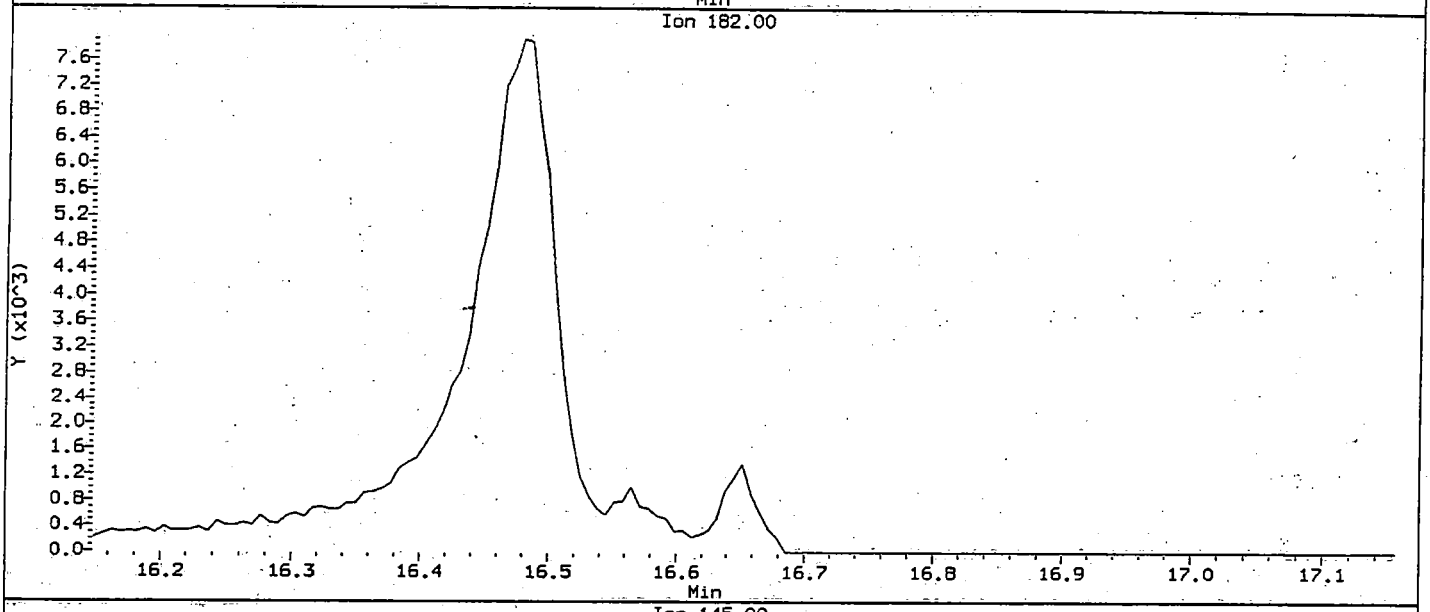


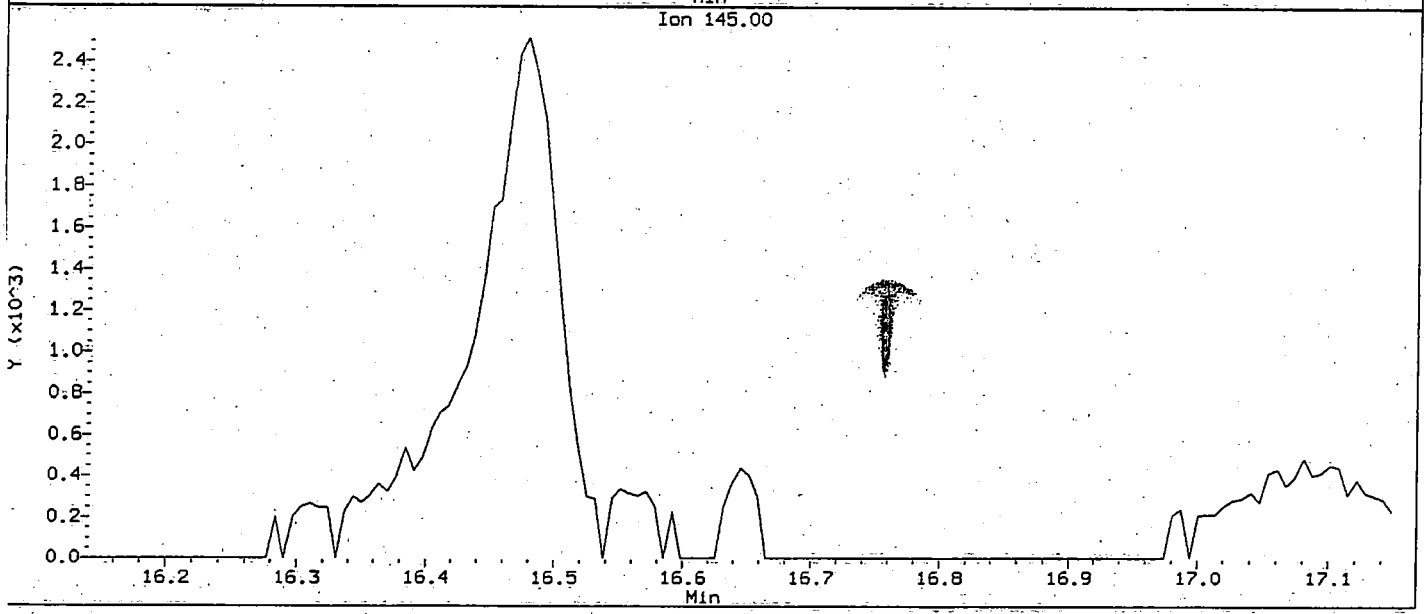
Data File: /chem/10msv09.i/RFW48288-0912.b/25507.d
Injection Date: 12-SEP-2001 12:26
Instrument: 10msv09.i
Client Sample ID: 0.5ppbv

Compound: 1,2,4-Trichlorobenzene
CAS Number: 95-63-6

Before
MTG 9/18/01







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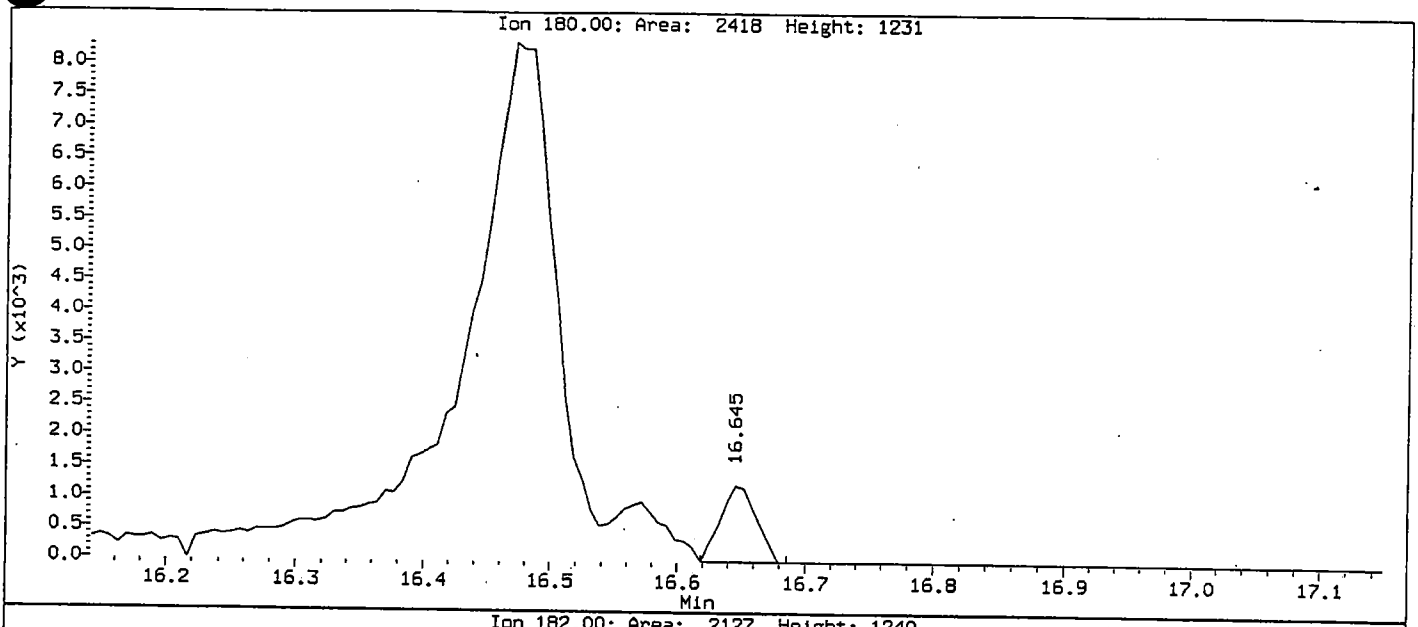
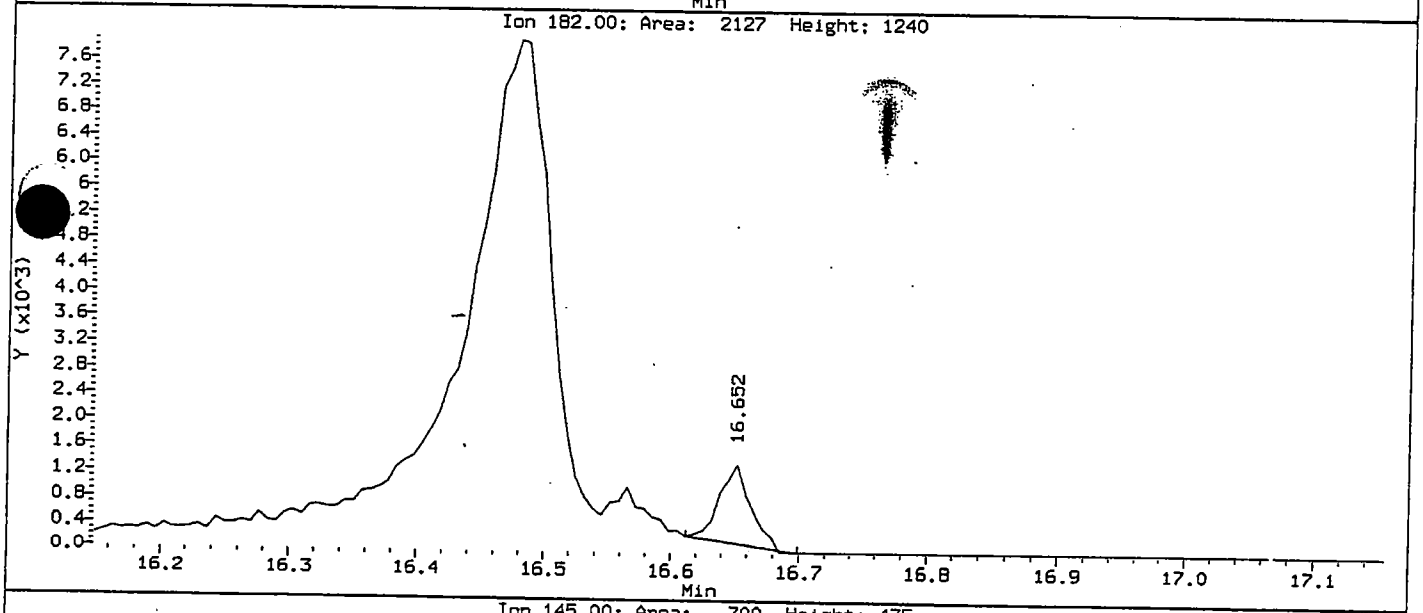
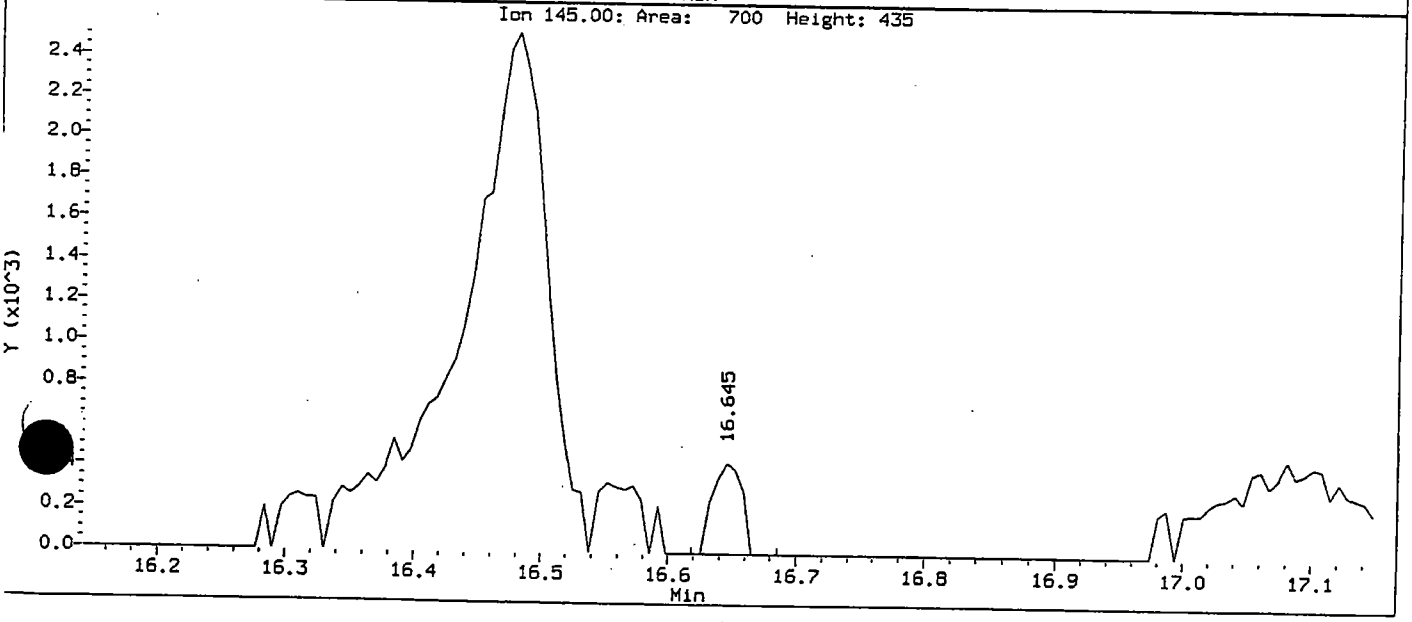
Injection Date: 12-SEP-2001 12:26
Instrument: 10msv09.i
Client Sample ID: 0.5ppbv

After
MTG 9/18/01

ound: 1,2,4-Trichlorobenzene
Number: 95-63-6







Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv09.i/RFW48288-0912.b/25503.d
Lab Smp Id: 1ppbv Client Smp ID: 1ppbv
Inj Date : 12-SEP-2001 10:07
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:02 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 10:07 Cal File: 25503.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
1 Dichlorodifluoromethane	85	3.057	3.057	(0.441)	123914	0.99000	0.797
2 Chloromethane	50	3.185	3.185	(0.459)	65799	0.97000	0.801
3 Dichlorotetrafluoroethane	85	3.192	3.192	(0.460)	145750	1.00000	0.809
4 Vinyl Chloride	62	3.299	3.299	(0.476)	51754	1.01000	0.802
6 Bromomethane	94	3.567	3.567	(0.515)	48844	1.04000	0.853
7 Chloroethane	64	3.654	3.654	(0.527)	25652	1.03000	0.808
8 Trichlorofluoromethane	101	3.989	3.989	(0.575)	105497	0.96000	0.776
10 1,1-Dichloroethene	96	4.371	4.371	(0.631)	44112	0.98000	0.789
11 Freon 113	101	4.465	4.465	(0.644)	97771	1.02000	0.834
12 Methylene Chloride	84	4.539	4.539	(0.655)	53137	0.94000	0.764
14 1,1-Dichloroethane	63	5.176	5.176	(0.747)	91583	0.96000	0.766
17 cis-1,2-Dichloroethene	96	5.665	5.665	(0.817)	44522	0.94000	0.737
18 Chloroform	83	5.839	5.839	(0.842)	96014	0.96000	0.772
19 1,1,1-Trichloroethane	97	6.389	6.389	(0.922)	75892	0.93000	0.755
20 1,2-Dichloroethane	62	6.429	6.429	(0.927)	62372	0.87000	0.699
21 Benzene	78	6.711	6.711	(0.968)	148876	0.89000	0.736

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
	22 Carbon Tetrachloride	117	6.731	6.731	(0.971)	75627	0.90000	0.716
*	23 Fluorobenzene	96	6.932	6.932	(1.000)	2174682	10.0000	
	24 1,2-Dichloropropane	63	7.401	7.401	(1.068)	49782	0.85000	0.680
	25 Trichloroethene	130	7.428	7.428	(1.072)	54789	0.86000	0.684
	27 cis-1,3-Dichloropropene	75	8.206	8.206	(1.184)	73751	1.01000	0.751
	29 trans-1,3-Dichloropropene	75	8.695	8.695	(1.254)	59424	1.02000	0.747
	30 Toluene	92	8.842	8.842	(1.276)	88343	0.94000	0.719
	31 1,1,2-Trichloroethane	97	8.856	8.856	(1.278)	51563	0.91000	0.727
	33 1,2-Dibromoethane	107	9.680	9.680	(0.805)	77001	0.96000	0.733
	34 Tetrachloroethene	166	9.761	9.761	(0.812)	69361	0.90000	0.700
	35 Chlorobenzene	112	10.511	10.511	(0.875)	106226	0.84000	0.642
	36 Ethyl Benzene	106	10.780	10.780	(0.897)	46805	0.84000	0.622
	37 m&p-Xylene	106	10.927	10.927	(0.909)	115019	1.62000	1.22
	38 Styrene	104	11.363	11.363	(0.945)	73749	0.69000	0.484
	39 o-Xylene	106	11.423	11.423	(0.950)	53883	0.76000	0.571
	40 1,1,2,2-Tetrachloroethane	83	11.705	11.705	(0.974)	97134	0.76000	0.568
*	41 p-Bromofluorobenzene	95	12.020	12.020	(1.000)	1281590	10.0000	
	42 1,3,5-Trimethylbenzene	105	12.824	12.824	(1.067)	89306	0.63000	0.444(a)
	43 1,2,4-Trimethylbenzene	105	13.327	13.327	(1.109)	82181	0.56000	0.397(a)
	44 1,3-Dichlorobenzene	146	13.628	13.628	(1.134)	67518	0.64000	0.477
	45 Benzyl Chloride	91	13.716	13.716	(1.141)	69357	0.64000	0.427(a)
	46 1,4-Dichlorobenzene	146	13.736	13.736	(1.143)	68667	0.54000	0.410
	47 1,2-Dichlorobenzene	146	14.191	14.191	(1.181)	56223	0.51000	0.376(a)
	48 1,2,4-Trichlorobenzene	180	16.645	16.645	(1.385)	2311	0.71000	0.444
	49 Hexachlorobutadiene	225	17.215	17.215	(1.432)	18815	0.71000	0.612

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25503.d
Lab Smp Id: 1ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: 1ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2174682	-5.95
41 p-Bromofluorobenz	1338999	669500	2677998	1281590	-4.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.93	-0.24
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	-0.03

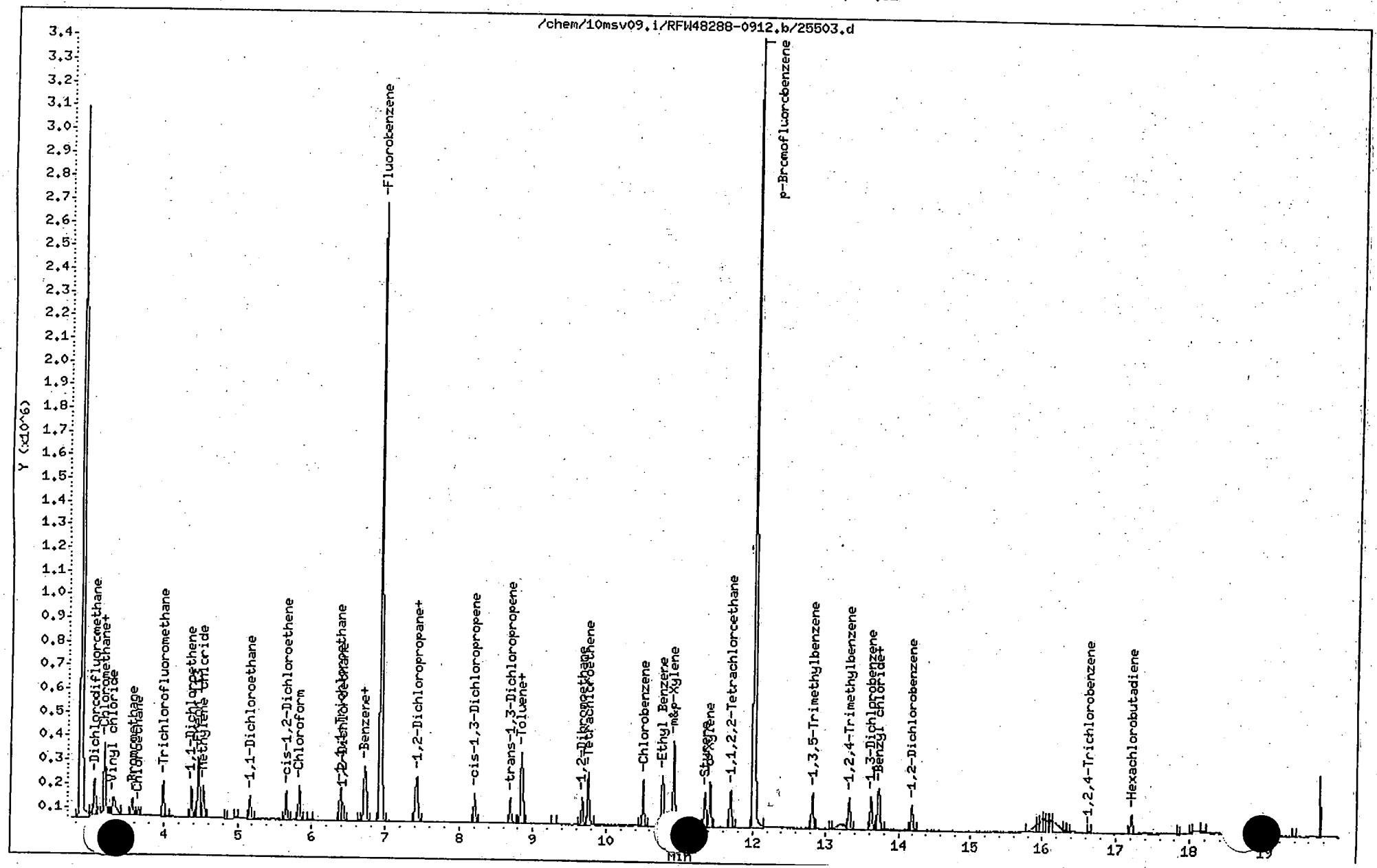
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv09.i/RFW48288-0912.b/25503.d
Date : 12-SEP-2001 10:07
Client ID: 1ppbv
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32



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Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv09.i/RFW48288-0912.b/25504.d
Lab Smp Id: 5ppbv Client Smp ID: 5ppbv
Inj Date : 12-SEP-2001 10:37
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:02 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 10:37 Cal File: 25504.d
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
1 Dichlorodifluoromethane	85	3.058	3.058	(0.440)	817095	4.95000	5.17
2 Chloromethane	50	3.193	3.193	(0.460)	420851	4.85000	5.04
3 Dichlorotetrafluoroethane	85	3.199	3.199	(0.461)	952045	5.00000	5.20
4 Vinyl Chloride	62	3.306	3.306	(0.476)	338229	5.05000	5.15
6 Bromomethane	94	3.575	3.575	(0.515)	307726	5.20000	5.28
7 Chloroethane	64	3.662	3.662	(0.527)	171642	5.15000	5.32
8 Trichlorofluoromethane	101	3.997	3.997	(0.575)	687275	4.80000	4.97
10 1,1-Dichloroethene	96	4.379	4.379	(0.630)	282391	4.90000	4.96
11 Freon 113	101	4.480	4.480	(0.645)	630069	5.10000	5.29
12 Methylene Chloride	84	4.547	4.547	(0.655)	337144	4.70000	4.76
14 1,1-Dichloroethane	63	5.183	5.183	(0.746)	606571	4.80000	4.99
17 cis-1,2-Dichloroethene	96	5.679	5.679	(0.818)	298754	4.70000	4.86
18 Chloroform	83	5.854	5.854	(0.843)	622925	4.80000	4.93
19 1,1,1-Trichloroethane	97	6.403	6.403	(0.922)	493833	4.65000	4.83
20 1,2-Dichloroethane	62	6.444	6.444	(0.928)	413666	4.35000	4.56
21 Benzene	78	6.725	6.725	(0.968)	915356	4.45000	4.45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
	22 Carbon Tetrachloride	117	6.745	6.745	(0.971)	502655	4.50000	4.68
*	23 Fluorobenzene	96	6.946	6.946	(1.000)	2211457	10.0000	
	24 1,2-Dichloropropane	63	7.416	7.416	(1.068)	328393	4.25000	4.41
	25 Trichloroethene	130	7.442	7.442	(1.071)	358732	4.30000	4.41
	27 cis-1,3-Dichloropropene	75	8.220	8.220	(1.183)	525302	5.05000	5.26
	29 trans-1,3-Dichloropropene	75	8.709	8.709	(1.254)	430905	5.10000	5.33
	30 Toluene	92	8.857	8.857	(1.275)	605968	4.70000	4.85
	31 1,1,2-Trichloroethane	97	8.877	8.877	(1.278)	338069	4.55000	4.69
	33 1,2-Dibromoethane	107	9.695	9.695	(0.806)	525245	4.80000	4.92
	34 Tetrachloroethene	166	9.775	9.775	(0.813)	463685	4.50000	4.61
	35 Chlorobenzene	112	10.519	10.519	(0.875)	718130	4.20000	4.28
	36 Ethyl Benzene	106	10.787	10.787	(0.897)	326161	4.20000	4.27
	37 m&p-Xylene	106	10.941	10.941	(0.910)	791902	8.10000	8.26
	38 Styrene	104	11.370	11.370	(0.945)	551629	3.45000	3.56
	39 o-Xylene	106	11.437	11.437	(0.951)	366988	3.80000	3.83
	40 1,1,2,2-Tetrachloroethane	83	11.706	11.706	(0.973)	679421	3.80000	3.92
*	41 p-Bromofluorobenzene	95	12.027	12.027	(1.000)	1301377	10.0000	
	42 1,3,5-Trimethylbenzene	105	12.825	12.825	(1.066)	665348	3.15000	3.26
	43 1,2,4-Trimethylbenzene	105	13.328	13.328	(1.108)	610237	2.80000	2.90
	44 1,3-Dichlorobenzene	146	13.629	13.629	(1.133)	468367	3.20000	3.26
	Benzyl Chloride	91	13.717	13.717	(1.140)	556077	3.20000	3.37
	1,4-Dichlorobenzene	146	13.737	13.737	(1.142)	467607	2.70000	2.75
	47 1,2-Dichlorobenzene	146	14.192	14.192	(1.180)	396695	2.55000	2.61
	48 1,2,4-Trichlorobenzene	180	16.646	16.646	(1.384)	16612	3.55000	3.15
	49 Hexachlorobutadiene	225	17.222	17.222	(1.432)	114058	3.55000	3.65

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25504.d
Lab Smp Id: 5ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: 5ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2211457	-4.36
41 p-Bromofluorobenz	1338999	669500	2677998	1301377	-2.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.95	-0.03
41 p-Bromofluorobenz	12.02	11.52	12.52	12.03	0.04

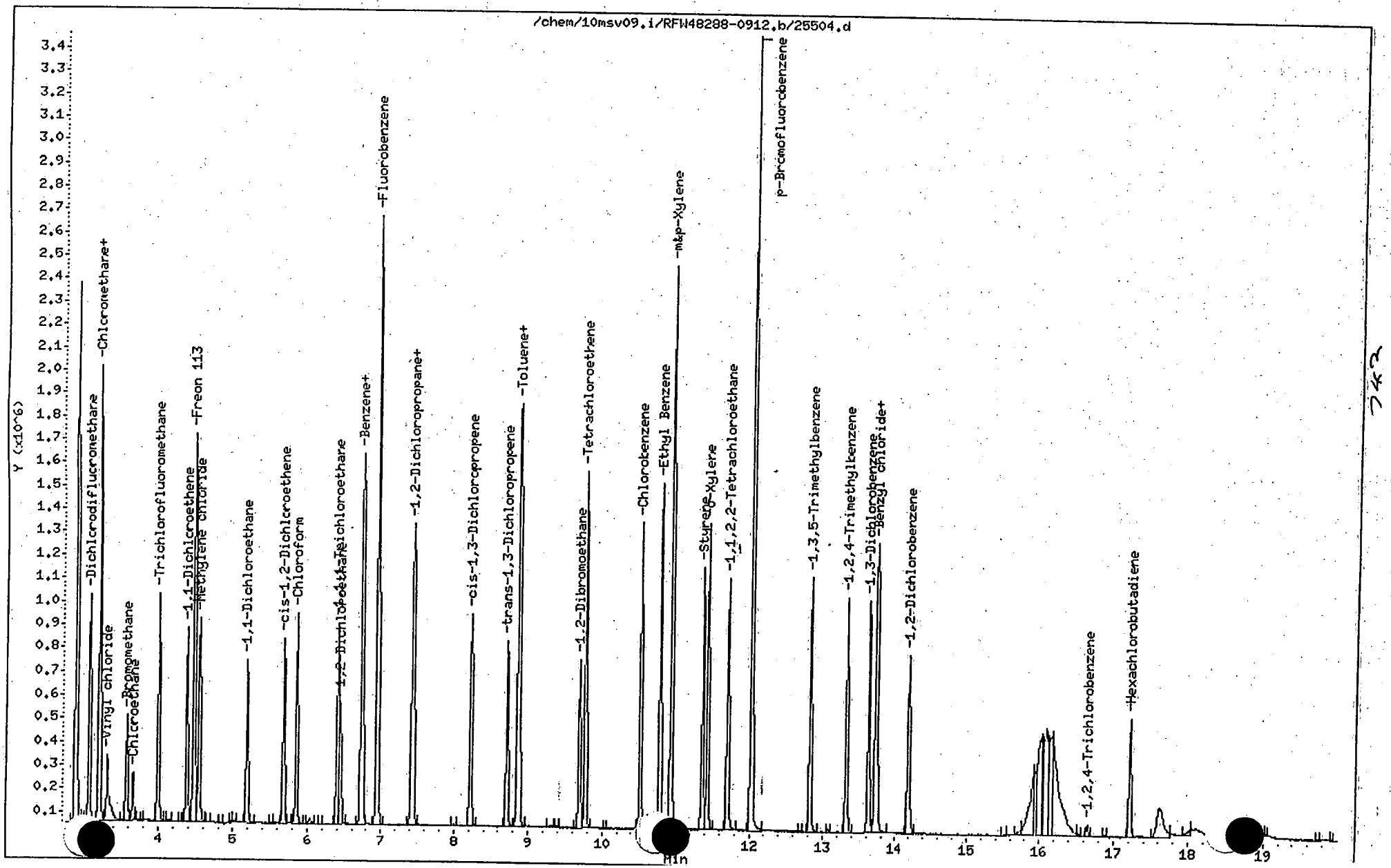
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv09.i/RFW48288-0912.b/25504.d
Date : 12-SEP-2001 10:37
Client ID: 5ppbv
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv09.i/RFW48288-0912.b/25505.d
Lab Smp Id: 10ppbv Client Smp ID: 10ppbv
Inj Date : 12-SEP-2001 11:10
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 11:10 Cal File: 25505.d
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
1 Dichlorodifluoromethane	85	3.054	3.054	(0.440)	1627861	9.90000	9.85
2 Chloromethane	50	3.188	3.188	(0.459)	846534	9.70000	9.70
3 Dichlorotetrafluoroethane	85	3.195	3.195	(0.460)	1922904	10.0000	10.0
4 Vinyl Chloride	62	3.309	3.309	(0.476)	699980	10.1000	10.2
6 Bromomethane	94	3.570	3.570	(0.514)	638013	10.4000	10.5
7 Chloroethane	64	3.657	3.657	(0.526)	353276	10.3000	10.5
8 Trichlorofluoromethane	101	3.999	3.999	(0.576)	1395974	9.60000	9.66
10 1,1-Dichloroethene	96	4.381	4.381	(0.630)	583565	9.80000	9.81
11 Freon 113	101	4.482	4.482	(0.645)	1247107	10.2000	10.0
12 Methylene Chloride	84	4.549	4.549	(0.655)	692833	9.40000	9.36
14 1,1-Dichloroethane	63	5.185	5.185	(0.746)	1231750	9.60000	9.69
17 cis-1,2-Dichloroethene	96	5.681	5.681	(0.818)	624550	9.40000	9.72
18 Chloroform	83	5.856	5.856	(0.843)	1293028	9.60000	9.78
19 1,1,1-Trichloroethane	97	6.412	6.412	(0.923)	1011652	9.30000	9.46
20 1,2-Dichloroethane	62	6.452	6.452	(0.929)	853318	8.70000	8.99
21 Benzene	78	6.734	6.734	(0.969)	1888867	8.90000	8.78

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
	22 Carbon Tetrachloride	117	6.754	6.754	(0.972)	1039239	9.00000	9.25
*	23 Fluorobenzene	96	6.948	6.948	(1.000)	2312201	10.0000	
	24 1,2-Dichloropropane	63	7.424	7.424	(1.068)	685176	8.50000	8.80
	25 Trichloroethene	130	7.451	7.451	(1.072)	739596	8.60000	8.69
	27 cis-1,3-Dichloropropene	75	8.229	8.229	(1.184)	1117333	10.1000	10.7
	29 trans-1,3-Dichloropropene	75	8.711	8.711	(1.254)	930350	10.2000	11.0
	30 Toluene	92	8.859	8.859	(1.275)	1286601	9.40000	9.85
	31 1,1,2-Trichloroethane	97	8.879	8.879	(1.278)	713166	9.10000	9.46
	33 1,2-Dibromoethane	107	9.697	9.697	(0.807)	1112526	9.60000	10.1
	34 Tetrachloroethene	166	9.777	9.777	(0.813)	957850	9.00000	9.25
	35 Chlorobenzene	112	10.521	10.521	(0.875)	1508191	8.40000	8.73
	36 Ethyl Benzene	106	10.789	10.789	(0.897)	698099	8.40000	8.88
	37 m&p-Xylene	106	10.943	10.943	(0.910)	1676514	16.2000	17.0
	38 Styrene	104	11.373	11.373	(0.946)	1210622	6.90000	7.60
	39 o-Xylene	106	11.440	11.440	(0.951)	790161	7.60000	8.02
	40 1,1,2,2-Tetrachloroethane	83	11.708	11.708	(0.974)	1443098	7.60000	8.08
*	41 p-Bromofluorobenzene	95	12.023	12.023	(1.000)	1338999	10.0000	
	42 1,3,5-Trimethylbenzene	105	12.827	12.827	(1.067)	1445526	6.30000	6.88
	43 1,2,4-Trimethylbenzene	105	13.330	13.330	(1.109)	1313811	5.60000	6.07
	44 1,3-Dichlorobenzene	146	13.631	13.631	(1.134)	1002516	6.40000	6.78
	Benzyl Chloride	91	13.719	13.719	(1.141)	1237590	6.40000	7.29
	1,4-Dichlorobenzene	146	13.739	13.739	(1.143)	988042	5.40000	5.64
	47 1,2-Dichlorobenzene	146	14.195	14.195	(1.181)	851451	5.10000	5.45
	48 1,2,4-Trichlorobenzene	180	16.648	16.648	(1.385)	41485	7.10000	7.64
	49 Hexachlorobutadiene	225	17.218	17.218	(1.432)	246233	7.10000	7.66

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25505.d
Lab Smp Id: 10ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: 10ppbv
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2312201	0.00
41 p-Bromofluorobenz	1338999	669500	2677998	1338999	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.95	0.00
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

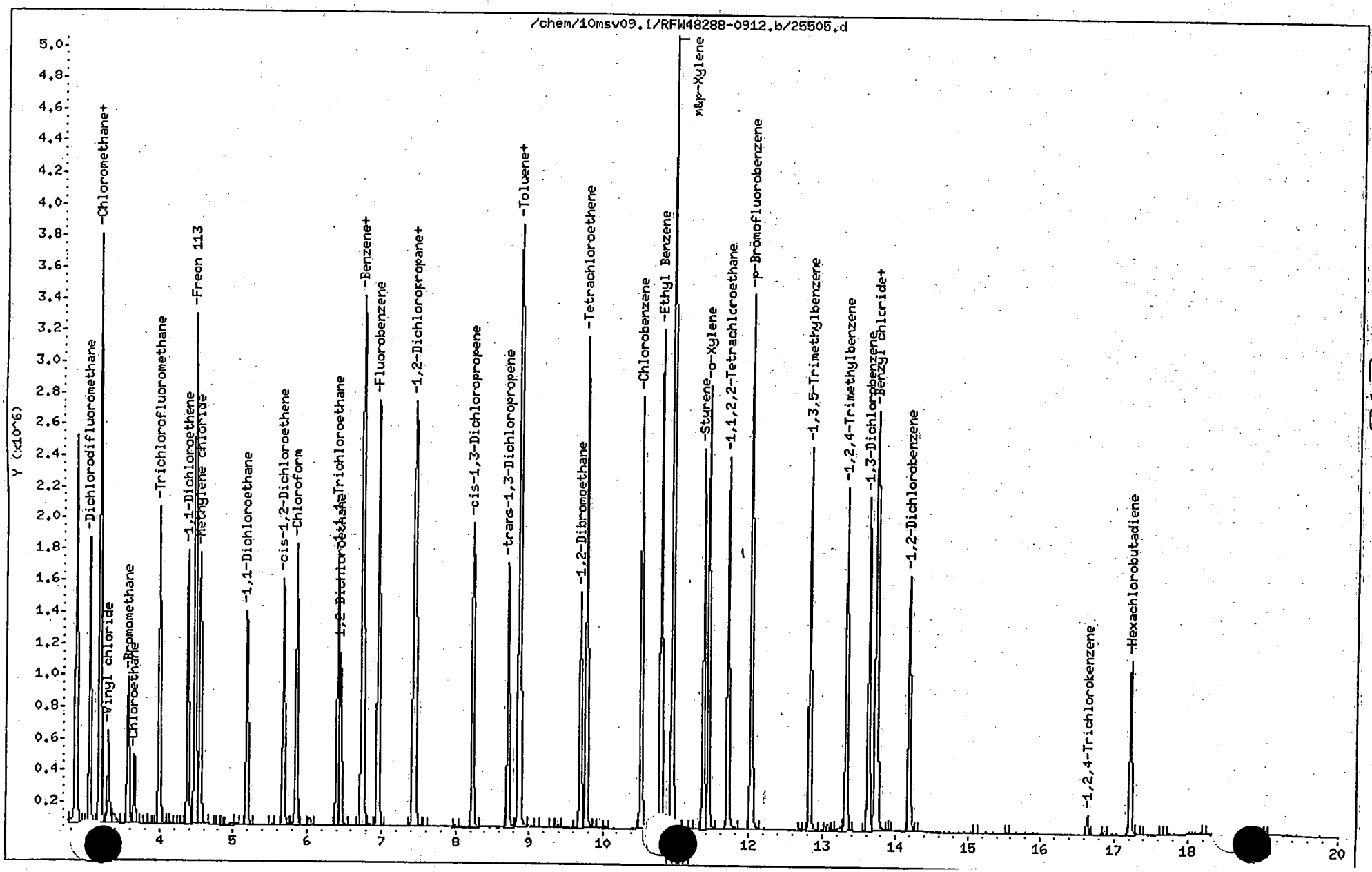
000283

Data File: /chem/10msv09.i/RFW48288-0912.b/25505.d
Date : 12-SEP-2001 11:10
Client ID: 10ppbv
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



287

Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv09.i/RFW48288-0912.b/25506.d
Lab Smp Id: 20ppbv Client Smp ID: 20ppbv
Inj Date : 12-SEP-2001 11:45
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 11:45 Cal File: 25506.d
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	AMOUNTS ON-COL (ppbv)
1 Dichlorodifluoromethane	85	3.053	3.053	(0.439)	3282285	19.8000	19.6
2 Chloromethane	50	3.187	3.187	(0.458)	1630820	19.4000	18.4
3 Dichlorotetrafluoroethane	85	3.194	3.194	(0.459)	3705789	20.0000	19.0
4 Vinyl Chloride	62	3.301	3.301	(0.475)	1422507	20.2000	20.4 (A)
6 Bromomethane	94	3.569	3.569	(0.513)	1260317	20.8000	20.4 (A)
7 Chloroethane	64	3.657	3.657	(0.526)	711435	20.6000	20.8 (A)
8 Trichlorofluoromethane	101	3.998	3.998	(0.575)	2735304	19.2000	18.6
10 1,1-Dichloroethene	96	4.381	4.381	(0.630)	1176248	19.6000	19.5 (A)
11 Freon 113	101	4.481	4.481	(0.644)	2450359	20.4000	19.4
12 Methylene Chloride	84	4.548	4.548	(0.654)	1388637	18.8000	18.5
14 1,1-Dichloroethane	63	5.185	5.185	(0.746)	2471358	19.2000	19.2 (A)
17 cis-1,2-Dichloroethene	96	5.688	5.688	(0.818)	1251612	18.8000	19.2 (A)
18 Chloroform	83	5.862	5.862	(0.843)	2582171	19.2000	19.2 (A)
19 1,1,1-Trichloroethane	97	6.412	6.412	(0.922)	2043140	18.6000	18.8 (A)
20 1,2-Dichloroethane	62	6.452	6.452	(0.928)	1692154	17.4000	17.6 (A)
21 Benzene	78	6.733	6.733	(0.968)	3609090	17.8000	16.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ppbv)	ON-COL (ppbv)
	22 Carbon Tetrachloride	117	6.753	6.753	(0.971)	2055707	18.0000	18.0(A)
*	23 Fluorobenzene	96	6.955	6.955	(1.000)	2346873	10.0000	
	24 1,2-Dichloropropane	63	7.424	7.424	(1.067)	1355067	17.0000	17.2(A)
	25 Trichloroethene	130	7.451	7.451	(1.071)	1462508	17.2000	16.9(A)
	27 cis-1,3-Dichloropropene	75	8.228	8.228	(1.183)	2280529	20.2000	21.5(A)
	29 trans-1,3-Dichloropropene	75	8.717	8.717	(1.253)	1910305	20.4000	22.2(A)
	30 Toluene	92	8.858	8.858	(1.274)	2580351	18.8000	19.5(A)
	31 1,1,2-Trichloroethane	97	8.878	8.878	(1.277)	1404599	18.2000	18.4(A)
	33 1,2-Dibromoethane	107	9.696	9.696	(0.806)	2219732	19.2000	20.0(A)
	34 Tetrachloroethene	166	9.777	9.777	(0.813)	1889607	18.0000	18.1
	35 Chlorobenzene	112	10.527	10.527	(0.875)	3056684	16.8000	17.5(A)
	36 Ethyl Benzene	106	10.789	10.789	(0.897)	1440101	16.8000	18.2(A)
	37 m&p-Xylene	106	10.943	10.943	(0.910)	3382417	32.4000	34.0(A)
	38 Styrene	104	11.372	11.372	(0.945)	2476996	13.8000	15.4(A)
	39 o-Xylene	106	11.439	11.439	(0.951)	1615943	15.2000	16.2(A)
	40 1,1,2,2-Tetrachloroethane	83	11.707	11.707	(0.973)	2901787	15.2000	16.1(A)
*	41 p-Bromofluorobenzene	95	12.029	12.029	(1.000)	1350844	10.0000	
	42 1,3,5-Trimethylbenzene	105	12.833	12.833	(1.067)	2960590	12.6000	14.0
	43 1,2,4-Trimethylbenzene	105	13.329	13.329	(1.108)	2745511	11.2000	12.6
	44 1,3-Dichlorobenzene	146	13.631	13.631	(1.133)	2046839	12.8000	13.7(A)
	Benzyl Chloride	91	13.718	13.718	(1.140)	2601188	12.8000	15.2
	1,4-Dichlorobenzene	146	13.738	13.738	(1.142)	2033446	10.8000	11.5
	47 1,2-Dichlorobenzene	146	14.194	14.194	(1.180)	1722856	10.2000	10.9
	48 1,2,4-Trichlorobenzene	180	16.647	16.647	(1.384)	101494	14.2000	18.5(A)
	49 Hexachlorobutadiene	225	17.217	17.217	(1.431)	419647	14.2000	12.9

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25506.d
Lab Smp Id: 20ppbv
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: 20ppbv
Level: LOW
Sample Type: AIR
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2346873	1.50
41 p-Bromofluorobenz	1338999	669500	2677998	1350844	0.88

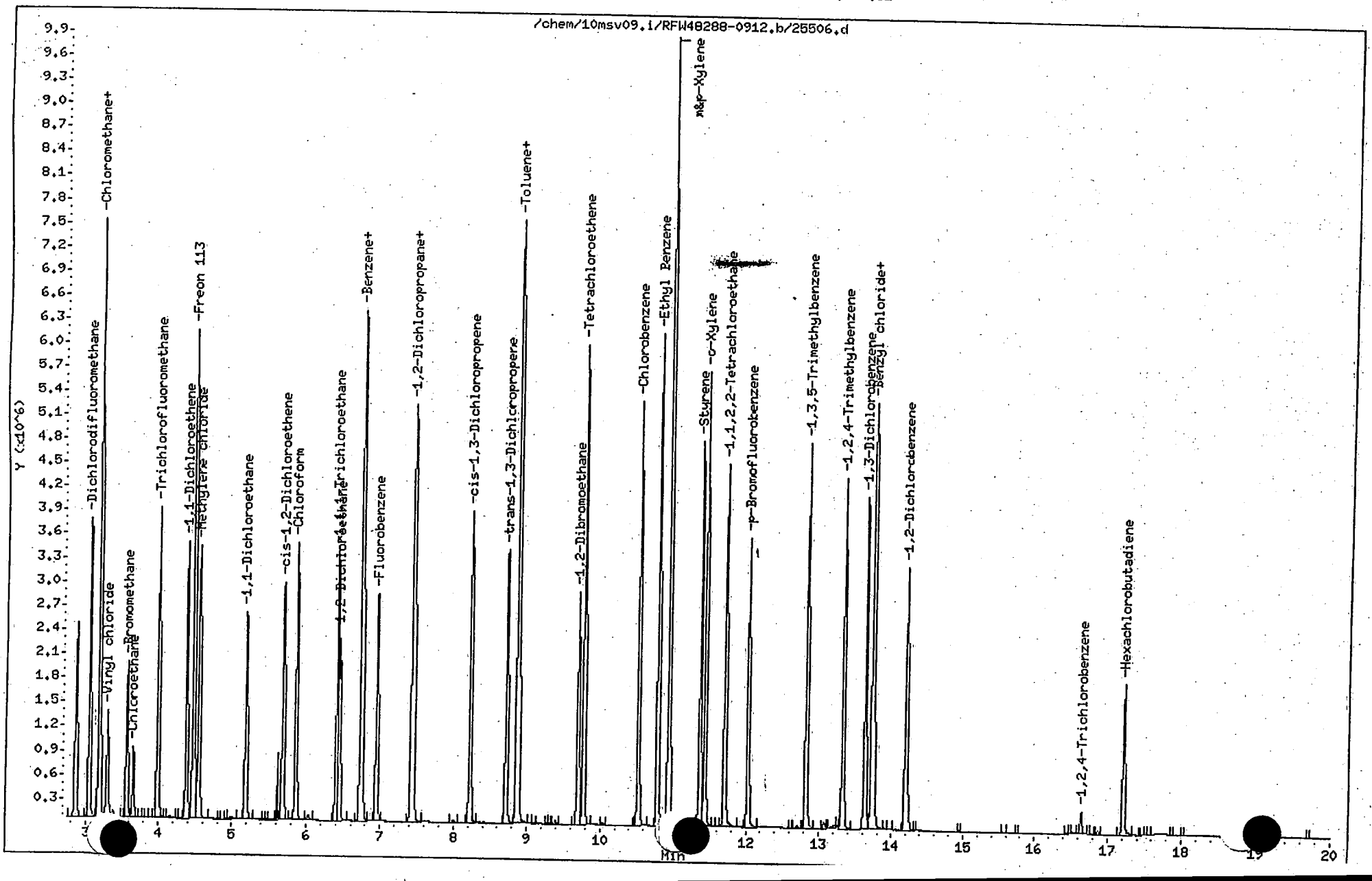
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.95	0.09
41 p-Bromofluorobenz	12.02	11.52	12.52	12.03	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv09.i/RFW48288-0912.b/25506.d
Date : 12-SEP-2001 11:45
Client ID: 20ppbv
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column phase: J&W DB-5
Column diameter: 0.32



Pace Analytical™

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Continuing Calibration Verification

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv09.i
Lab File ID: 25302.d
Analysis Type: AIR
Lab Sample ID: CCAL
Method: /chem/10msv09.i/RFW48288-0910.b/TO14LP227.m

Injection Date: 10-SEP-2001 06:02
Init. Cal. Date(s): 06-JUL-2001 15-AUG-2001
Init. Cal. Times: 07:54 07:46
Quant Type: ESTD

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF0.500	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	269122	286240	0.010	-6.4	30.0	Averaged
2 Chloromethane	183644	157502	0.010	14.2	30.0	Averaged
3 Freon 114 (12DC1122FlANE)	327661	350098	0.010	-6.8	30.0	Averaged
4 Vinyl Chloride	116345	122082	0.010	-4.9	30.0	Averaged
5 Bromomethane	111595	112350	0.010	-0.7	30.0	Averaged
6 Chloroethane	60375	63375	0.010	-5.0	30.0	Averaged
7 Trichlorofluoromethane	238129	237216	0.010	0.4	30.0	Averaged
9 1,1-Dichloroethene	107977	115409	0.010	-6.9	30.0	Averaged
10 Freon 113	221528	231420	0.010	-4.5	30.0	Averaged
11 Methylene Chloride	126504	135973	0.010	-7.5	30.0	Averaged
12 1,1-Dichloroethane	231030	230723	0.010	0.1	30.0	Averaged
13 cis-1,2-Dichloroethene	107992	116464	0.010	-7.8	30.0	Averaged
14 Chloroform	242456	244035	0.010	-0.7	30.0	Averaged
15 1,1,1-Trichloroethane	200347	202456	0.010	-1.1	30.0	Averaged
16 1,2-Dichloroethane	172420	167498	0.010	2.9	30.0	Averaged
17 Benzene	399467	405458	0.010	-1.5	30.0	Averaged
18 Carbon Tetrachloride	175224	189785	0.010	-8.3	30.0	Averaged
19 1,2-Dichloropropane	159997	156153	0.010	2.4	30.0	Averaged
20 Trichloroethene	141483	148633	0.010	-5.1	30.0	Averaged
21 cis-1,3-Dichloropropene	189159	190989	0.010	-1.0	30.0	Averaged
22 trans-1,3-Dichloropropene	124392	141874	0.010	-14.1	30.0	Averaged
23 Toluene	273740	278621	0.010	-1.8	30.0	Averaged
24 1,1,2-Trichloroethane	160891	154616	0.010	3.9	30.0	Averaged
25 1,2-Dibromoethane	211109	206679	0.010	2.1	30.0	Averaged
26 Tetrachloroethene	205656	208798	0.010	-1.5	30.0	Averaged
27 Chlorobenzene	371487	362563	0.010	2.4	30.0	Averaged
28 Ethyl Benzene	171959	168154	0.010	2.2	30.0	Averaged
29 mp-Xylene	225287	215858	0.010	4.2	30.0	Averaged
30 Styrene	290997	281977	0.010	3.1	30.0	Averaged
31 o-Xylene	229671	208098	0.010	9.4	30.0	Averaged
32 1,1,2,2-Tetrachloroethane	548874	411661	0.010	25.0	30.0	Averaged
33 1,3,5-Trimethylbenzene	481840	404194	0.010	16.1	30.0	Averaged
34 1,2,4-Trimethylbenzene	525500	435451	0.010	17.1	30.0	Averaged
35 1,3-Dichlorobenzene	635025	635157	0.010	0.0	30.0	Averaged
36 1,4-Dichlorobenzene	284007	283794	0.010	0.1	30.0	Averaged

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv09.i
Lab File ID: 25302.d
Analysis Type: AIR
Lab Sample ID: CCAL
Method: /chem/10msv09.i/RFW48288-0910.b/TO14LP227.m

Injection Date: 10-SEP-2001 06:02
Init. Cal. Date(s): 06-JUL-2001 15-AUG-2001
Init. Cal. Times: 07:54 07:46
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
37 1,2-Dichlorobenzene	306129	307785	0.010	-0.5	30.0	Averaged	
38 1,2,4-Trichlorobenzene	305223	5097	0.010	98.3	30.0	Averaged	<-
39 Hexachlorobutadiene	293238	149621	0.010	49.0	30.0	Averaged	<-

Pace Analytical Services, Inc.

PACE, Inc. Air Analytical Laboratory

Data file : /chem/10msv09.i/RFW48288-0910.b/25302.d
Lab Smp Id: CCAL Client Smp ID: CCAL
Inj Date : 10-SEP-2001 06:02
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0910.b/TO14LP227.m
Meth Date : 18-Sep-2001 13:53 mgurnsey Quant Type: ESTD
Cal Date : 15-AUG-2001 07:46 Cal File: 22706.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ppmv)	AMOUNTS ON-COL (ppmv)
1 Dichlorodifluoromethane	85	3.064	3.064	0.000	143120	0.50000	0.532
2 Chloromethane	50	3.198	3.198	0.000	75601	0.48000	0.412
3 Freon 114 (12DC1122FlANE)	85	3.212	3.212	0.000	175049	0.50000	0.534
4 Vinyl Chloride	62	3.319	3.319	0.000	61041	0.50000	0.525
5 Bromomethane	94	3.587	3.587	0.000	56175	0.50000	0.503
6 Chloroethane	64	3.674	3.674	0.000	32321	0.51000	0.535
7 Trichlorofluoromethane	101	4.016	4.016	0.000	118608	0.50000	0.498
9 1,1-Dichloroethene	96	4.398	4.398	0.000	54242	0.47000	0.502
10 Freon 113	101	4.499	4.499	0.000	118024	0.51000	0.533
11 Methylene Chloride	84	4.566	4.566	0.000	65267	0.48000	0.516
12 1,1-Dichloroethane	63	5.209	5.209	0.000	110747	0.48000	0.479
13 cis-1,2-Dichloroethene	96	5.699	5.699	0.000	58232	0.50000	0.539
14 Chloroform	83	5.873	5.873	0.000	117137	0.48000	0.483
15 .1-Trichloroethane	97	6.429	6.429	0.000	91105	0.45000	0.455
16 -Dichloroethane	62	6.470	6.470	0.000	77049	0.46000	0.447
17 Benzene	78	6.751	6.751	0.000	182456	0.45000	0.457

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ppmv)	ON-COL (ppmv)
18 Carbon Tetrachloride	117	6.765	6.765	0.000	89199	0.47000	0.509
19 1,2-Dichloropropane	63	7.455	7.455	0.000	67146	0.43000	0.420
20 Trichloroethene	130	7.468	7.468	0.000	68371	0.46000	0.483
21 cis-1,3-Dichloropropene	75	8.280	8.280	0.000	101224	0.53000	0.535
22 trans-1,3-Dichloropropene	75	8.762	8.762	0.000	76612	0.54000	0.616
23 Toluene	92	8.889	8.889	0.000	133738	0.48000	0.488
24 1,1,2-Trichloroethane	97	8.923	8.923	0.000	77308	0.50000	0.480
25 1,2-Dibromoethane	107	9.734	9.734	0.000	107473	0.52000	0.509
26 Tetrachloroethene	166	9.808	9.808	0.000	100223	0.48000	0.487
27 Chlorobenzene	112	10.552	10.552	0.000	166779	0.46000	0.449
28 Ethyl Benzene	106	10.813	10.813	0.000	80714	0.48000	0.469
29 mp-Xylene	106	10.967	10.967	0.000	200748	0.93000	0.891
30 Styrene	104	11.396	11.396	0.000	132529	0.47000	0.455
31 o-Xylene	106	11.464	11.464	0.000	95725	0.46000	0.417
32 1,1,2,2-Tetrachloroethane	83	11.732	11.732	0.000	209947	0.51000	0.382
33 1,3,5-Trimethylbenzene	105	12.844	12.844	0.000	206139	0.51000	0.428
34 1,2,4-Trimethylbenzene	105	13.347	13.347	0.000	195953	0.45000	0.373
35 1,3-Dichlorobenzene	146	13.649	13.649	0.000	133383	0.21000	0.210
36 1,4-Dichlorobenzene	146	13.649	13.649	0.000	133383	0.47000	0.470
37 1,2-Dichlorobenzene	146	14.212	14.212	0.000	126192	0.41000	0.412
38 1,2,4-Trichlorobenzene	180	16.786	16.786	0.000	1835	0.36000	0.00601(aM)
39 Hexachlorobutadiene	225	17.235	17.235	0.000	62841	0.42000	0.214

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

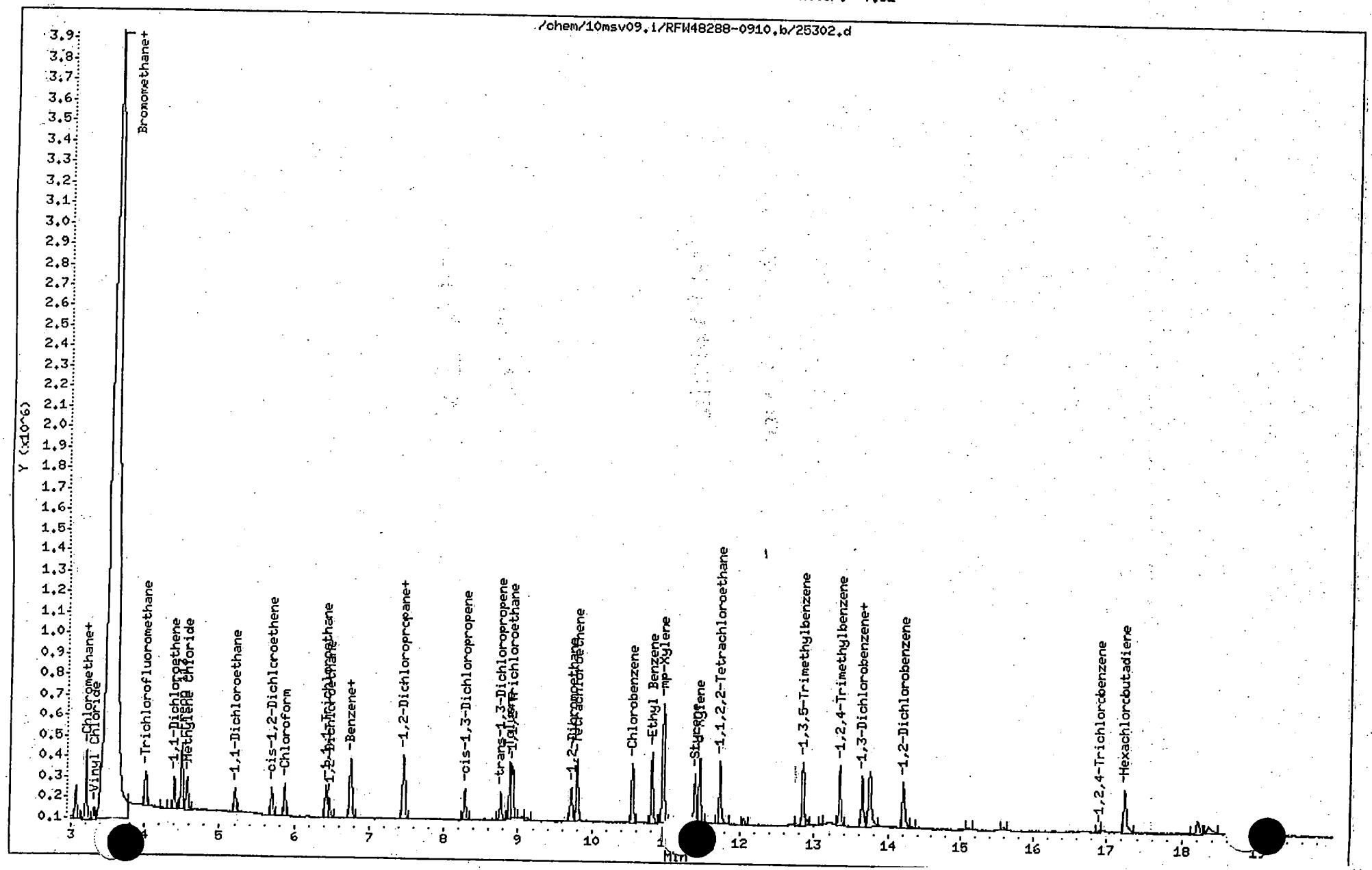
Data File: /chem/10msv09.i/RFW48288-0910.b/25302.d
Date : 10-SEP-2001 06:02
Client ID: CCAL
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

000293



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Client Roy F Weston

SDG 1048288

TO-14 Volatile

Raw QC Data Package

Pace Analytical™

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Fax: 612.607.6444

Tune

Pace Analytical Services, Inc.

AIR TOXICS LABORATORY

Data file : /chem/10msv09.i/RFW48288-0815.b/22702.d
Lab Smp Id: 50ng bfb Client Smp ID: 50ng bfb
Inj Date : 15-AUG-2001 05:48
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : 50NG_BFB
Method : /chem/10msv09.i/RFW48288-0815.b/50ng_bfb.m
Meth Date : 14-Aug-2001 05:59 mgurnsey Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
VI	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
6.050	6.150	(0.000)	95	138653			0.00- 0.00	100.00
6.050	6.150	(0.000)	50	27964			15.00- 40.00	20.17
6.050	6.150	(0.000)	75	65458			30.00- 60.00	47.21
6.050	6.150	(0.000)	96	9181			5.00- 9.00	6.62
6.050	6.150	(0.000)	173	0			0.00- 2.00	0.00
6.050	6.150	(0.000)	174	107648			50.00- 0.00	77.64
6.050	6.150	(0.000)	175	8502			5.00- 9.00	7.90
6.050	6.150	(0.000)	176	102885			95.00- 101.00	95.58
6.050	6.150	(0.000)	177	6640			5.00- 9.00	6.45

Data File: /chem/10msv09.i/RFW48288-0815.b/22702.d

Date : 15-AUG-2001 05:48

Client ID: 50ng bfb

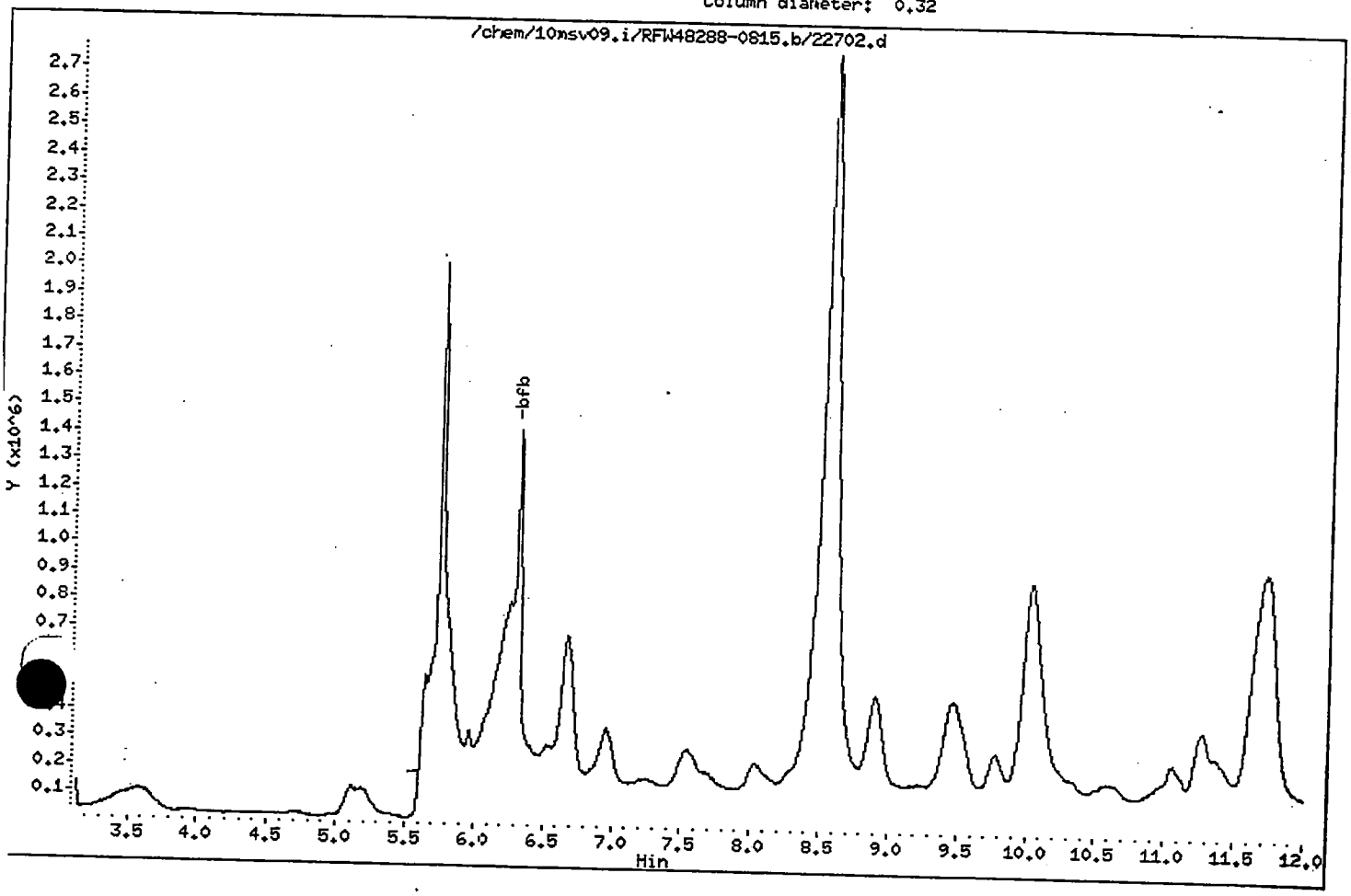
Instrument: 10msv09.i

ample Info:

Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32



Data File: /chem/10msv09.i/RFW48288-0815.b/22702.d

Date : 15-AUG-2001 05:48

Client ID: 50ng bfb

Instrument: 10msv09.i

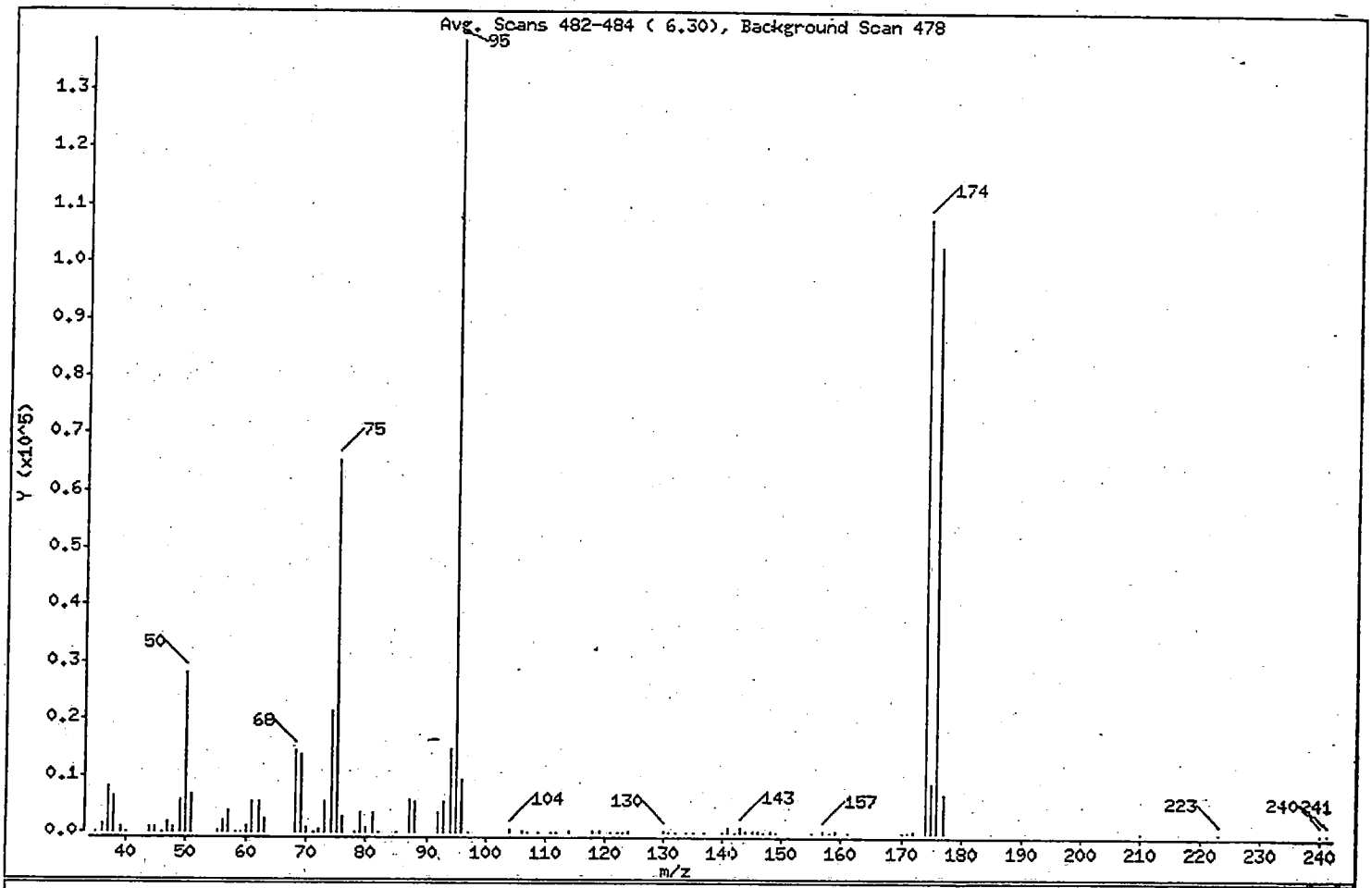
Sample Info:

Operator: mtg

Column phase: J&W DB-5

Column diameter: 0.32

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.17
75	30.00 - 60.00% of mass 95	47.21
96	5.00 - 9.00% of mass 95	6.62
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	77.64
175	5.00 - 9.00% of mass 174	6.13 (7.90)
176	95.00 - 101.00% of mass 174	74.20 (95.68)
177	5.00 - 9.00% of mass 176	4.79 (6.45)

Data File: /chem/10msv09.i/RFW48288-0815.b/22702.d

Date : 15-AUG-2001 05:48

Client ID: 50ng bfb

Instrument: 10msv09.i

Sample Info:

Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 22702.d

Spectrum: Avg. Scans 482-484 (6.30), Background Scan 478

Location of Maximum: 95.00

Number of points: 91

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	66	68.00	14476	104.00	505	144.00	216
36.00	1677	69.00	13804	106.00	443	145.00	161
37.00	7943	70.00	1077	107.00	60	146.00	359
38.00	6514	71.00	55	109.00	10	147.00	51
39.00	1003	72.00	782	111.00	11	148.00	321
40.00	15	73.00	5454	112.00	88	149.00	103
44.00	893	74.00	21496	114.00	268	155.00	158
45.00	1032	75.00	65456	118.00	251	157.00	284
46.00	95	76.00	2796	119.00	470	158.00	72
47.00	1900	78.00	15	121.00	1	159.00	261
48.00	1089	79.00	3593	122.00	18	161.00	41
49.00	5844	80.00	982	123.00	77	170.00	14
50.00	27960	81.00	3664	124.00	184	171.00	70
51.00	6763	82.00	108	130.00	357	172.00	212
55.00	197	85.00	42	131.00	142	174.00	107648
56.00	2208	87.00	5631	132.00	68	175.00	8502
57.00	3674	88.00	5482	134.00	1	176.00	102880
58.00	103	92.00	3395	135.00	78	177.00	6640
59.00	134	93.00	5336	137.00	40	210.00	27
60.00	1146	94.00	14649	140.00	49	223.00	29
61.00	5459	95.00	138624	141.00	803	240.00	40
62.00	5265	96.00	9181	142.00	76	241.00	140
63.00	2461	97.00	122	143.00	900		

Pace Analytical Services, Inc.

AIR TOXICS LABORATORY

Data file : /chem/10msv09.i/RFW48288-0910.b/25301.d
Lab Smp Id: 50ng bfb Client Smp ID: 50ng bfb
Inj Date : 10-SEP-2001 05:46
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : 50NG_BFB
Method : /chem/10msv09.i/RFW48288-0910.b/50ng_bfb.m
Meth Date : 29-Aug-2001 06:19 mgurnsey Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
VI	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
7.750	7.850	(0.000)	95	486394			0.00- 0.00	100.00
7.750	7.850	(0.000)	50	94003			15.00- 40.00	19.33
7.750	7.850	(0.000)	75	224692			30.00- 60.00	46.20
7.750	7.850	(0.000)	96	33851			5.00- 9.00	6.96
7.750	7.850	(0.000)	173	0			0.00- 2.00	0.00
7.750	7.850	(0.000)	174	385525			50.00- 0.00	79.26
7.750	7.850	(0.000)	175	30517			5.00- 9.00	7.92
7.750	7.850	(0.000)	176	375225			95.00- 101.00	97.33
7.750	7.850	(0.000)	177	24140			5.00- 9.00	6.43

Data File: /chem/10msv09.i/RFW48288-0910.b/25301.d

Date : 10-SEP-2001 05:46

Client ID: 50ng bfb

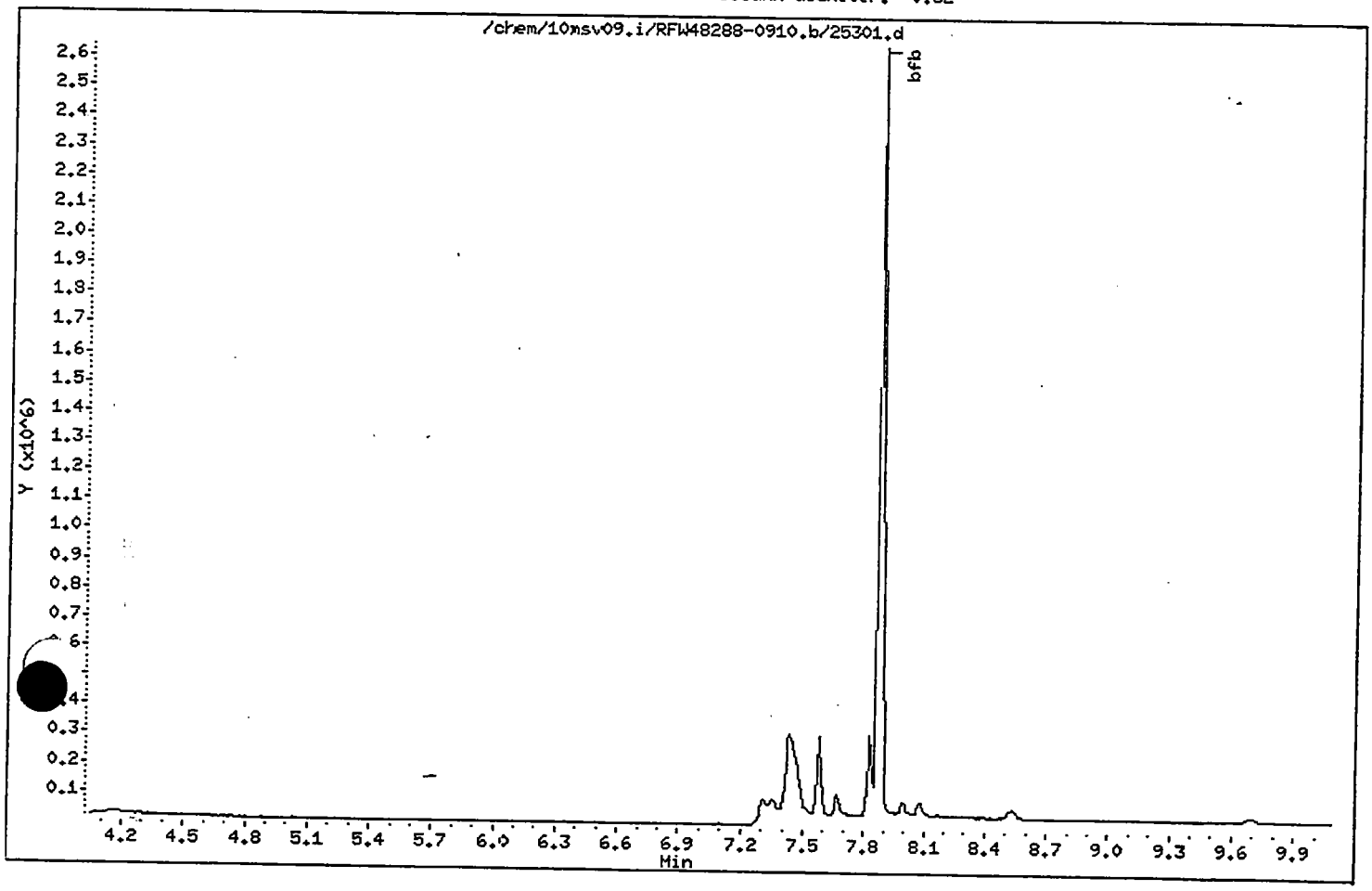
Instrument: 10msv09.i

Sample Info:

Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32



Data File: /chem/10msv09.i/RFW48288-0910.b/25301.d

Date : 10-SEP-2001 05:46

Client ID: 50ng bfb

Instrument: 10msv09.i

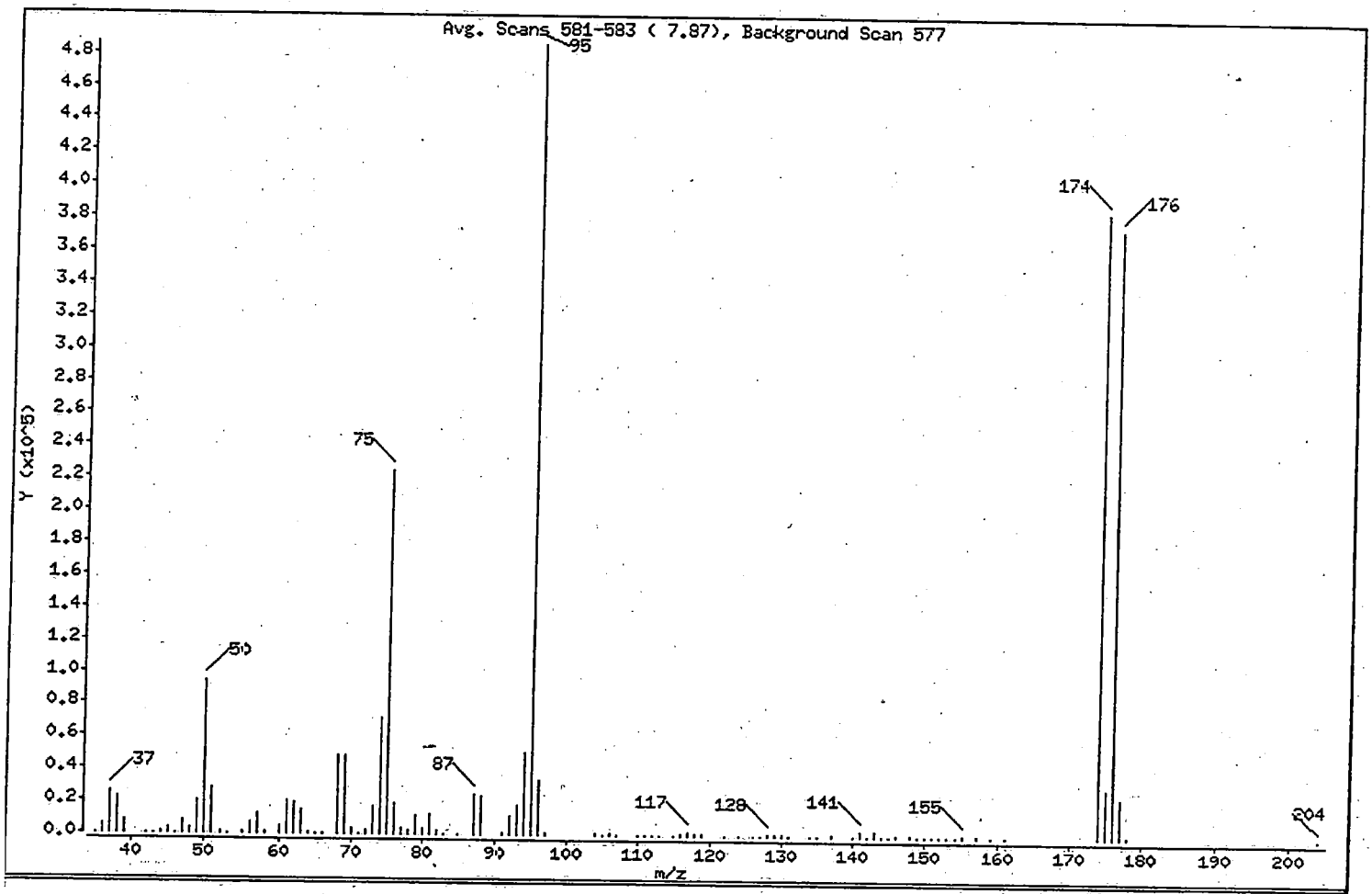
Sample Info:

Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.33
75	30.00 - 60.00% of mass 95	46.20
96	5.00 - 9.00% of mass 95	6.96
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	79.26
175	5.00 - 9.00% of mass 174	6.27 (7.92)
176	95.00 - 101.00% of mass 174	77.14 (97.33)
177	5.00 - 9.00% of mass 176	4.96 (6.43)

Data File: /chem/10msv09.i/RFW48288-0910.b/25301.d

Date : 10-SEP-2001 05:46

Client ID: 50ng bfb

Instrument: 10msv09.i

Sample Info:

Operator: mtg

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 25301.d

Spectrum: Avg. Scans 581-583 (7.87), Background Scan 577

Location of Maximum: 95.00

Number of points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	192	65.00	134	96.00	33848	140.00	88
36.00	5506	66.00	230	97.00	980	141.00	3031
37.00	26072	68.00	48352	104.00	1316	142.00	473
38.00	22328	69.00	47680	105.00	357	143.00	2918
39.00	8131	70.00	3910	106.00	1563	144.00	168
42.00	107	71.00	206	107.00	382	145.00	181
43.00	170	72.00	2453	110.00	313	146.00	784
44.00	1223	73.00	17232	111.00	88	148.00	904
45.00	3866	74.00	71456	112.00	96	149.00	96
46.00	267	75.00	224640	113.00	329	150.00	426
47.00	7778	76.00	18592	115.00	313	151.00	143
48.00	3351	77.00	3037	116.00	1373	152.00	326
49.00	20168	78.00	2513	117.00	1872	153.00	391
50.00	94000	79.00	11716	118.00	978	154.00	213
51.00	27816	80.00	3507	119.00	1384	155.00	1031
52.00	1450	81.00	11936	122.00	79	157.00	709
53.00	32	82.00	2099	124.00	275	159.00	451
55.00	1179	83.00	322	126.00	111	161.00	282
56.00	6887	85.00	169	127.00	67	174.00	385472
57.00	12534	87.00	24840	128.00	1463	175.00	30512
58.00	617	88.00	23744	129.00	758	176.00	375168
60.00	4196	91.00	1395	130.00	1443	177.00	24136
61.00	20328	92.00	11260	131.00	417	178.00	560
62.00	19424	93.00	17904	134.00	144	204.00	14
63.00	14162	94.00	50720	135.00	334		
64.00	1346	95.00	486336	137.00	614		

Pace Analytical Services, Inc.

AIR TOXICS LABORATORY

Data file : /chem/10msv20.i/RFW48288-0911.b/25401.d
Lab Smp Id: 50ng bfb Client Smp ID: 50ng bfb
Inj Date : 11-SEP-2001 05:36
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : 50NG_BFB
Method : /chem/10msv20.i/RFW48288-0911.b/50ng_bfb.m
Meth Date : 09-Sep-2001 07:33 mgurnsey Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
VI	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
6.450	6.550	(0.000)	95	33605			0.00- 0.00	100.00
6.450	6.550	(0.000)	50	6366			15.00- 40.00	18.94
6.450	6.550	(0.000)	75	13577			30.00- 60.00	40.40
6.450	6.550	(0.000)	96	2558			5.00- 9.00	7.61
6.450	6.550	(0.000)	173	0			0.00- 2.00	0.00
6.450	6.550	(0.000)	174	25262			50.00- 0.00	75.17
6.450	6.550	(0.000)	175	1846			5.00- 9.00	7.31
6.450	6.550	(0.000)	176	24226			95.00- 101.00	95.90
6.450	6.550	(0.000)	177	1688			5.00- 9.00	6.97

Data File: /chem/10msv20.i/RFW48288-0911.b/25401.d

Date : 11-SEP-2001 05:36

Client ID: 50ng bfb

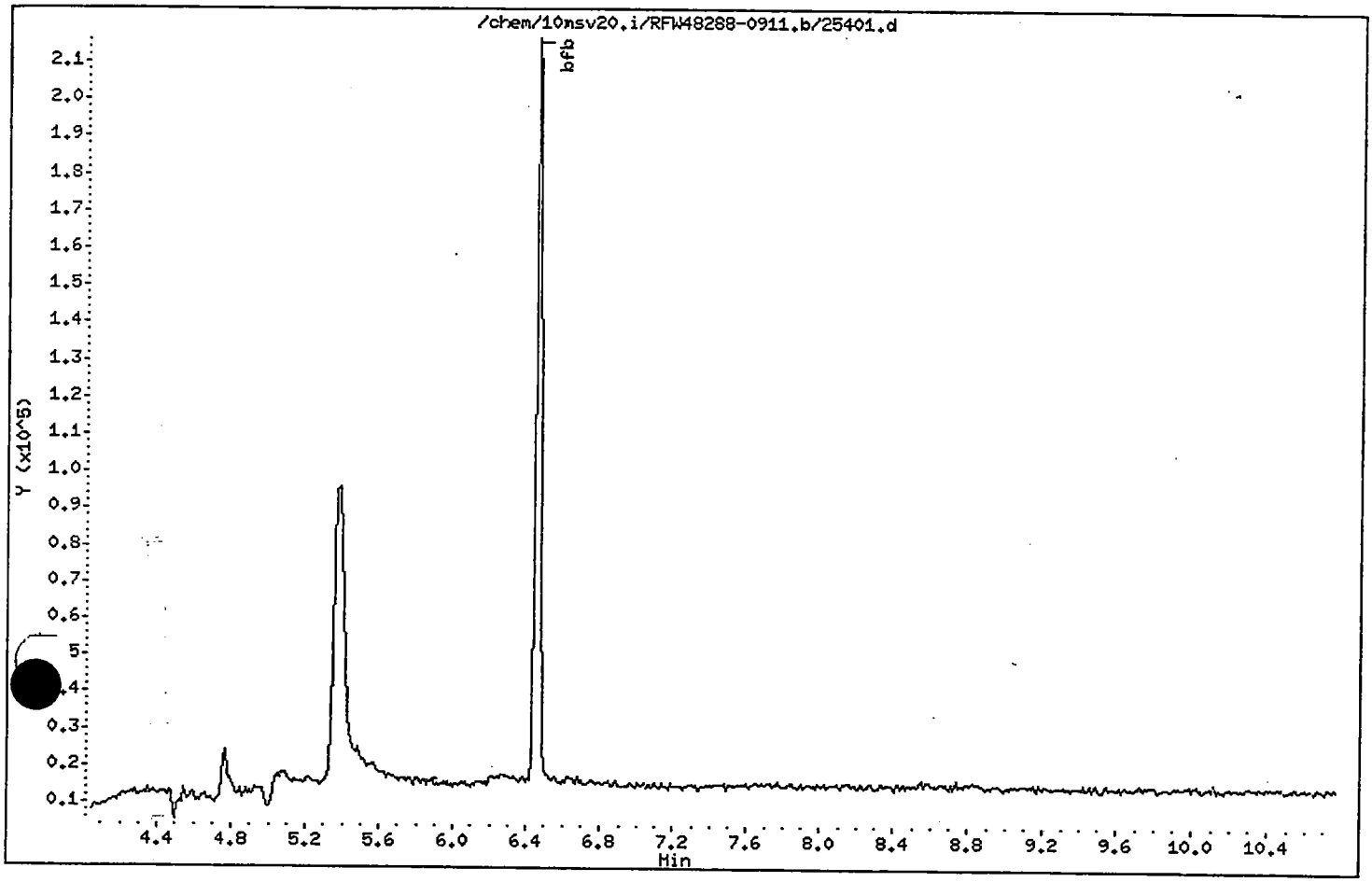
Instrument: 10msv20.i

Sample Info:

Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32



Data File: /chem/10msv20.i/RFW48288-0911.b/25401.d

Date : 11-SEP-2001 05:36

Client ID: 50ng bfb

Instrument: 10msv20.i

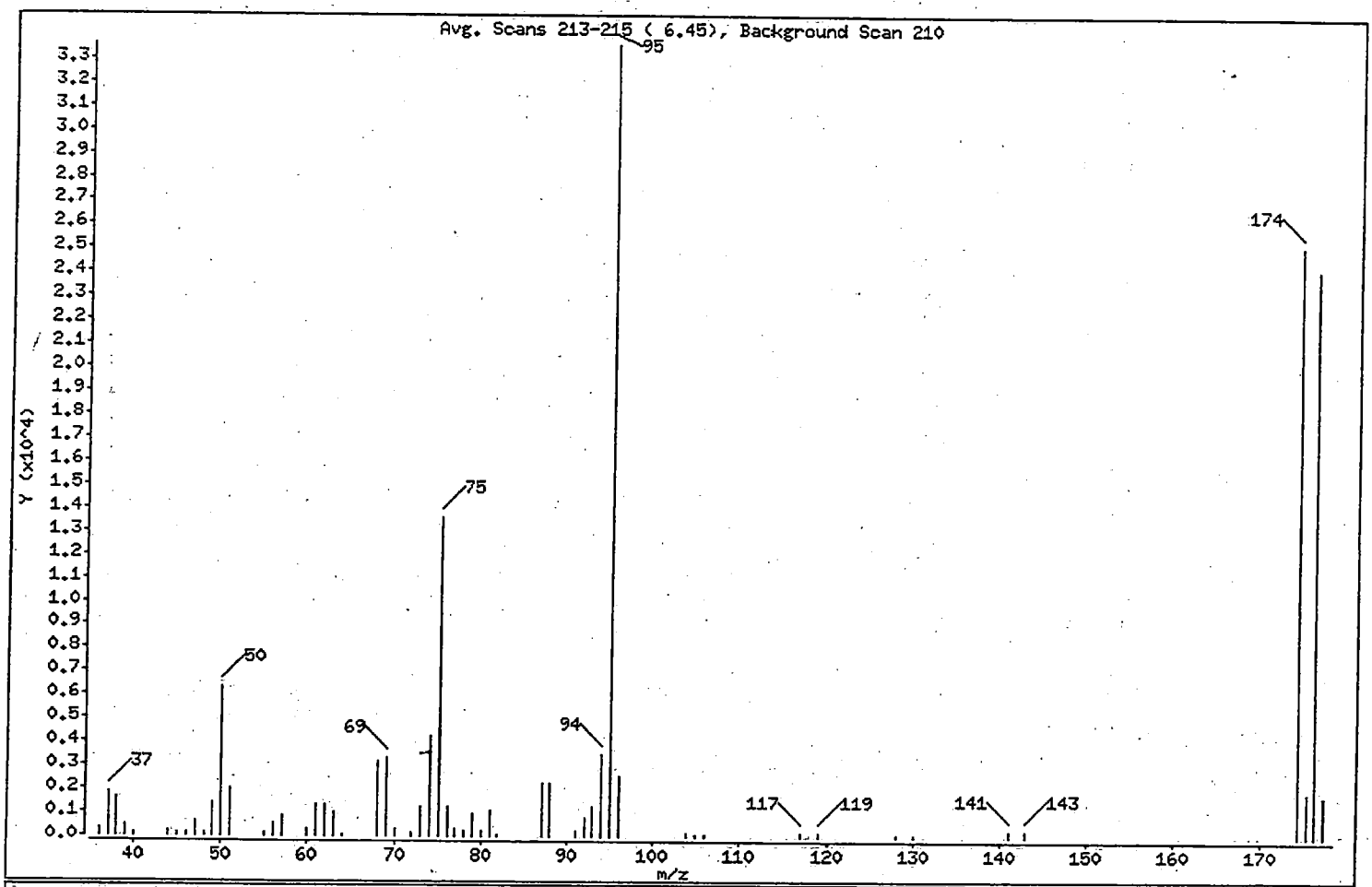
Sample Info:

Operator: mtg

Column phase: J&W DB-5

Column diameter: 0.32

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.94
75	30.00 - 60.00% of mass 95	40.40
96	5.00 - 9.00% of mass 95	7.61
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	75.17
175	5.00 - 9.00% of mass 174	5.49 (7.31)
176	95.00 - 101.00% of mass 174	72.09 (95.90)
177	5.00 - 9.00% of mass 176	5.02 (6.97)

Data File: /chem/10msv20.i/RFW48288-0911.b/25401.d

Date : 11-SEP-2001 05:36

Client ID: 50ng bfb

Instrument: 10msv20.i

Sample Info:

Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 25401.d

Spectrum: Avg. Scans 213-215 (6.45), Background Scan 210

Location of Maximum: 95.00

Number of points: 56

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	295	57.00	847	78.00	198	106.00	53
37.00	1878	60.00	323	79.00	931	117.00	163
38.00	1625	61.00	1337	80.00	254	119.00	143
39.00	492	62.00	1308	81.00	1075	128.00	63
40.00	171	63.00	1000	82.00	76	130.00	114
44.00	229	64.00	64	87.00	2261	141.00	202
45.00	155	68.00	3173	88.00	2208	143.00	196
46.00	133	69.00	3312	91.00	219	174.00	25256
47.00	636	70.00	333	92.00	754	175.00	1846
48.00	124	72.00	124	93.00	1250	176.00	24224
49.00	1413	73.00	1214	94.00	3449	177.00	1688
50.00	6366	74.00	4264	95.00	33600		
51.00	1974	75.00	13577	96.00	2558		
55.00	131	76.00	1271	104.00	143		
56.00	533	77.00	337	105.00	59		

Pace Analytical Services, Inc.

AIR TOXICS LABORATORY

Data file : /chem/10msv20.i/RFW48288-0912.b/25501.d
Lab Smp Id: 50ng bfb Client Smp ID: 50ng bfb
Inj Date : 12-SEP-2001 05:39
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : 50NG_BFB
Method : /chem/10msv20.i/RFW48288-0912.b/50ng_bfb.m
Meth Date : 13-Sep-2001 07:01 mgurnsey Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
VI	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
6.450	6.550	(0.000)	95	20664			0.00- 0.00	100.00
6.450	6.550	(0.000)	50	4087			15.00- 40.00	19.78
6.450	6.550	(0.000)	75	8211			30.00- 60.00	39.74
6.450	6.550	(0.000)	96	1584			5.00- 9.00	7.67
6.450	6.550	(0.000)	173	0			0.00- 2.00	0.00
6.450	6.550	(0.000)	174	14202			50.00- 0.00	68.73
6.450	6.550	(0.000)	175	934			5.00- 9.00	6.58
6.450	6.550	(0.000)	176	14130			95.00- 101.00	99.49
6.450	6.550	(0.000)	177	926			5.00- 9.00	6.55

Data File: /chem/10msv20.i/RFW48288-0912.b/25501.d

Date : 12-SEP-2001 05:39

Client ID: 50ng bfb

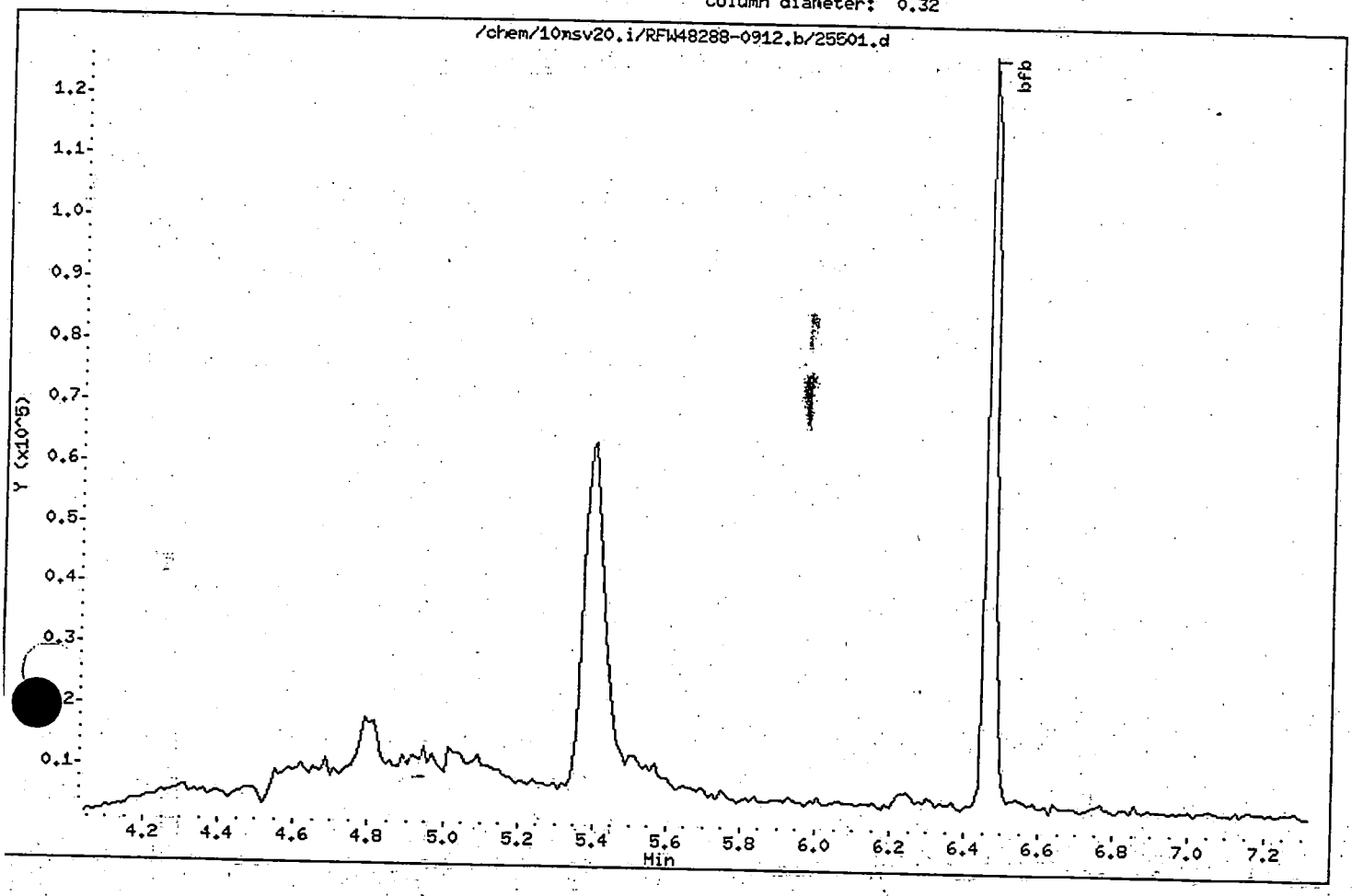
Sample Info:

Instrument: 10msv20.i

Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32



Data File: /chem/10msv20.i/RFW48288-0912.b/25501.d

Date : 12-SEP-2001 05:39

Client ID: 50ng bfb

Instrument: 10msv20.i

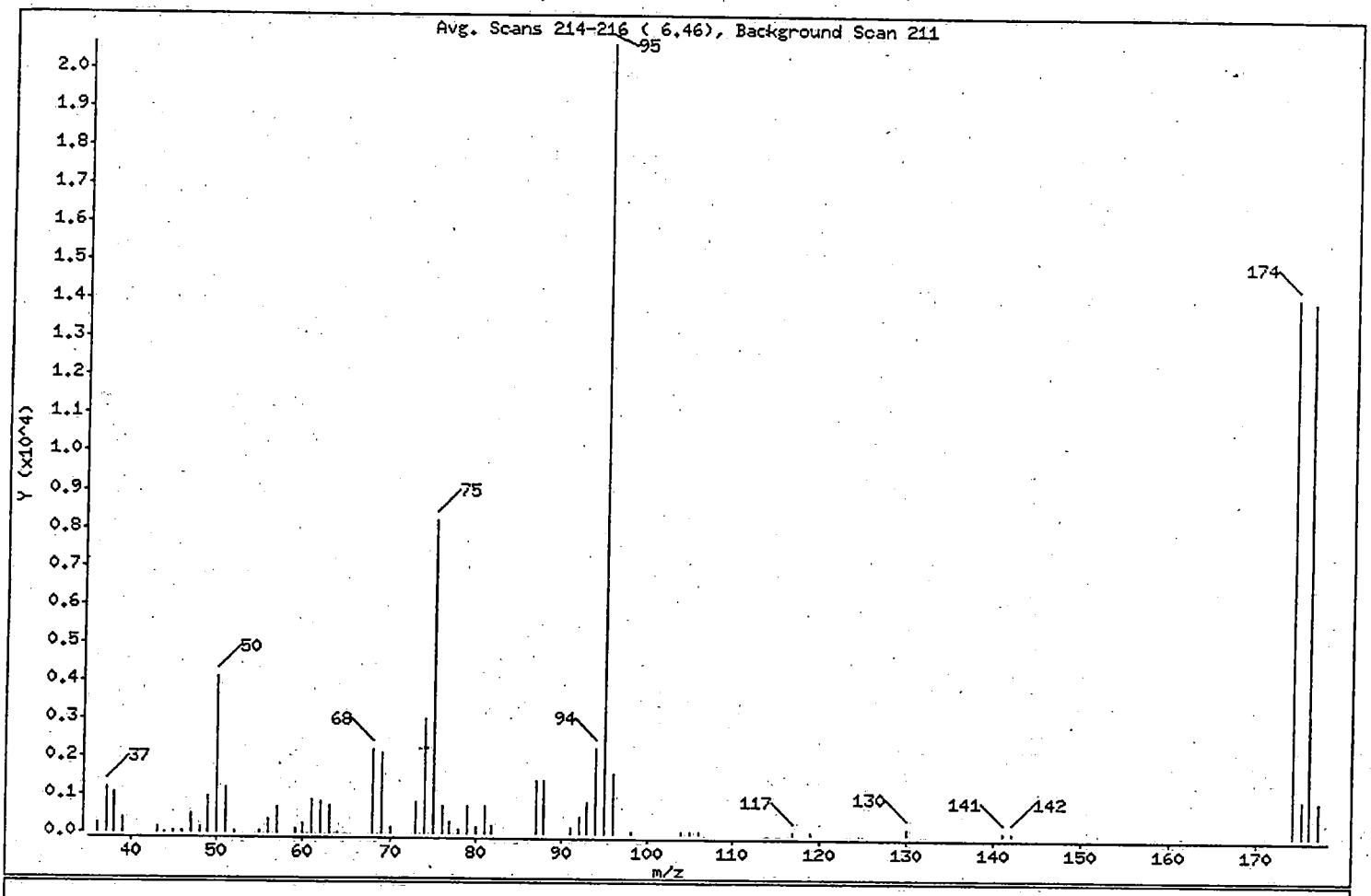
Sample Info:

Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.78
75	30.00 - 60.00% of mass 95	39.74
96	5.00 - 9.00% of mass 95	7.67
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	68.73
175	5.00 - 9.00% of mass 174	4.52 (6.58)
176	95.00 - 101.00% of mass 174	68.38 (99.49)
177	5.00 - 9.00% of mass 176	4.48 (6.55)

Data File: /chem/10msv20.i/RFW48288-0912.b/25501.d

Date : 12-SEP-2001 05:39

Client ID: 50ng bfb

Instrument: 10msv20.i

Sample Info:

Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 25501.d

Spectrum: Avg. Scans 214-216 (6.46), Background Scan 211

Location of Maximum: 95.00

Number of points: 56

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	227	56.00	354	78.00	79	105.00	55
37.00	1199	57.00	654	79.00	691	106.00	67
38.00	1066	59.00	79	80.00	146	117.00	50
39.00	385	60.00	225	81.00	729	119.00	57
43.00	126	61.00	878	82.00	189	130.00	136
44.00	6	62.00	818	87.00	1354	141.00	54
45.00	27	63.00	697	88.00	1393	142.00	53
46.00	39	68.00	2195	91.00	147	174.00	14202
47.00	460	69.00	2078	92.00	426	175.00	934
48.00	156	70.00	158	93.00	812	176.00	14130
49.00	931	73.00	822	94.00	2211	177.00	926
50.00	4087	74.00	2992	95.00	20664		
51.00	1210	75.00	8211	96.00	1584		
52.00	68	76.00	695	98.00	58		
55.00	65	77.00	265	104.00	61		

Pace Analytical Services, Inc.

AIR TOXICS LABORATORY

Data file : /chem/10msv09.i/RFW48288-0912.b/25501.d
Lab Smp Id: 50ng bfb Client Smp ID: 50ng bfb
Inj Date : 12-SEP-2001 05:41
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : 50NG BFB
Method : /chem/10msv09.i/RFW48288-0912.b/50ng_bfb.m
Meth Date : 13-Sep-2001 08:31 mgurnsey Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
VI	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
6.650	6.750	(0.000)	95	374370			0.00- 0.00	100.00
6.650	6.750	(0.000)	50	72610			15.00- 40.00	19.40
6.650	6.750	(0.000)	75	172473			30.00- 60.00	46.07
6.650	6.750	(0.000)	96	27627			5.00- 9.00	7.38
6.650	6.750	(0.000)	173	0			0.00- 2.00	0.00
6.650	6.750	(0.000)	174	307072			50.00- 0.00	82.02
6.650	6.750	(0.000)	175	24461			5.00- 9.00	7.97
6.650	6.750	(0.000)	176	297705			95.00- 101.00	96.95
6.650	6.750	(0.000)	177	19539			5.00- 9.00	6.56

Data File: /chem/10msv09.i/RFW48288-0912.b/25501.d

Date : 12-SEP-2001 05:41

Client ID: 50ng bfb

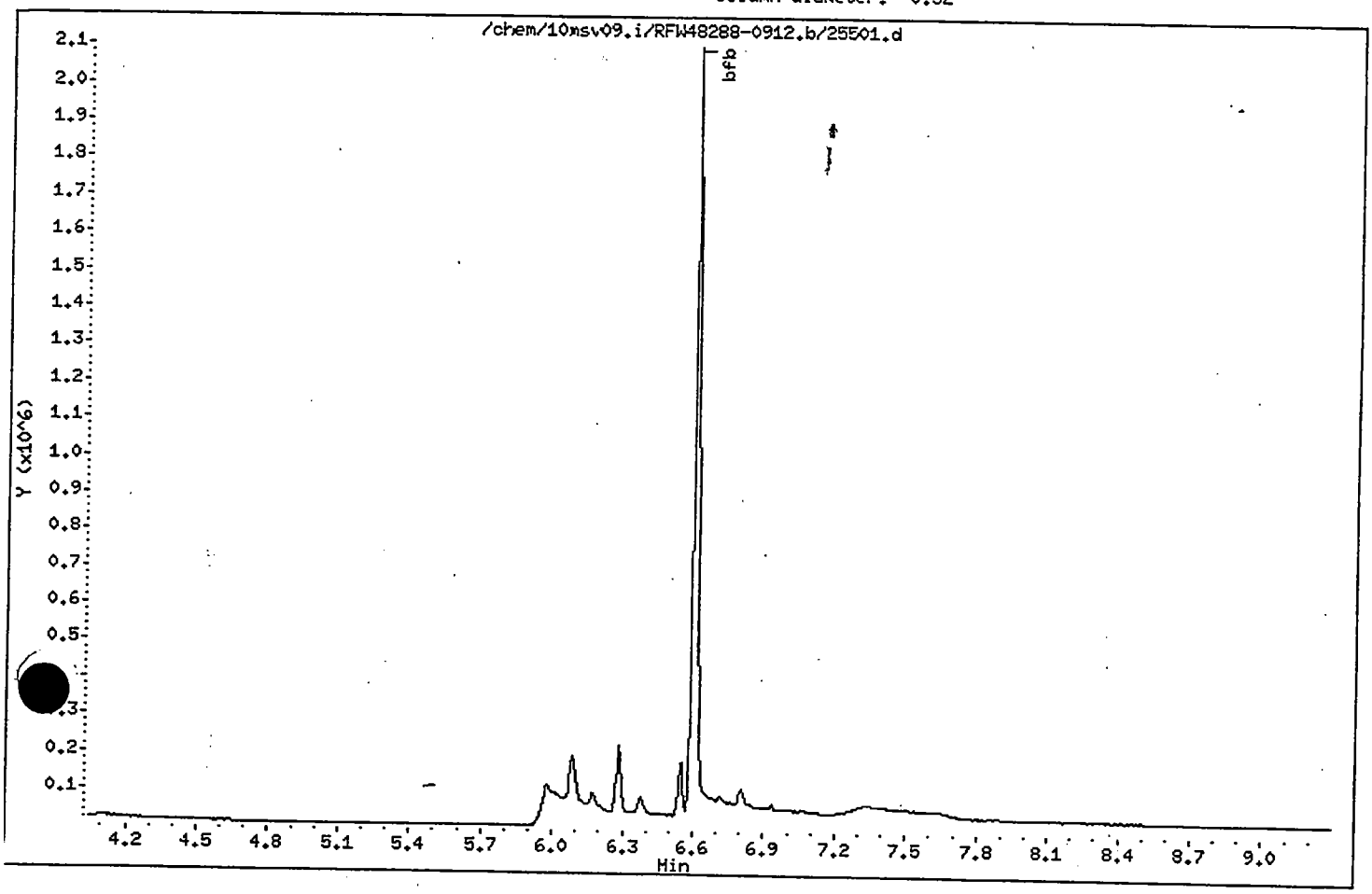
Instrument: 10msv09.i

Sample Info:

Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32



Data File: /chem/10msv09.i/RFW48288-0912.b/25501.d

Date : 12-SEP-2001 05:41

Client ID: 50ng bfb

Instrument: 10msv09.i

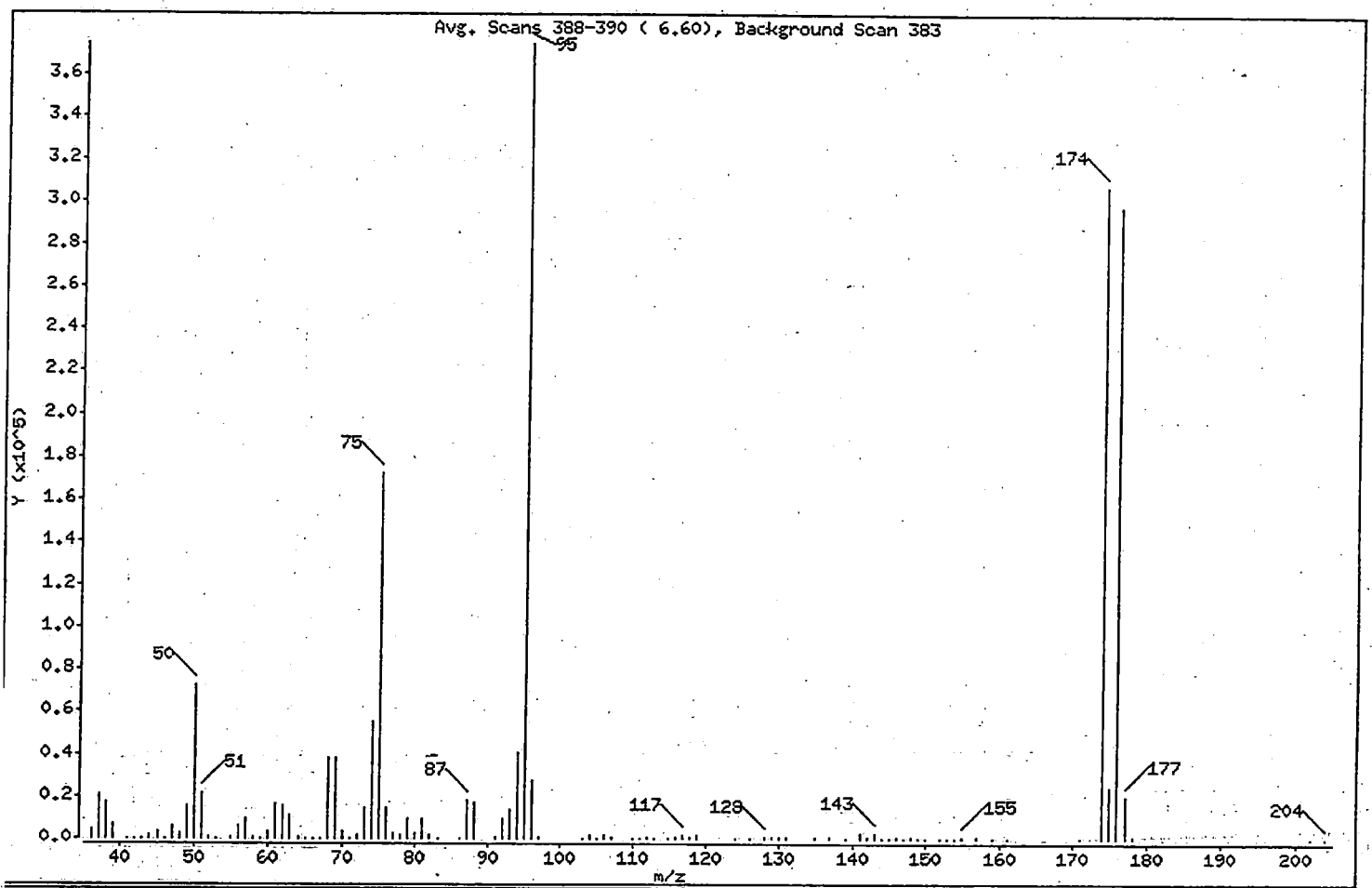
Sample Info:

Operator: ntg

Column phase: J&W DB-5

Column diameter: 0.32

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.40
75	30.00 - 60.00% of mass 95	46.07
96	5.00 - 9.00% of mass 95	7.38
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	82.02
175	5.00 - 9.00% of mass 174	6.53 (7.97)
176	95.00 - 101.00% of mass 174	79.52 (96.95)
177	5.00 - 9.00% of mass 176	5.22 (6.56)

Data File: /chem/10msv09.i/RFW48288-0912.b/25501.d

Date : 12-SEP-2001 05:41

Client ID: 50ng bfb

Instrument: 10msv09.i

Sample Info:

Operator: mtg

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 25501.d

Spectrum: Avg. Scans 388-390 (6.60), Background Scan 383

Location of Maximum: 95.00

Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4165	65.00	167	96.00	27624	143.00	2502
37.00	20416	66.00	17	97.00	1101	144.00	72
38.00	16984	67.00	372	103.00	40	145.00	183
39.00	6547	68.00	37872	104.00	1488	146.00	469
41.00	29	69.00	37640	105.00	421	147.00	314
42.00	40	70.00	3455	106.00	1416	148.00	800
43.00	30	71.00	89	107.00	471	149.00	335
44.00	1497	72.00	1747	110.00	240	150.00	356
45.00	3334	73.00	14505	111.00	287	152.00	328
46.00	99	74.00	55464	112.00	439	153.00	354
47.00	5601	75.00	172416	113.00	350	154.00	330
48.00	2771	76.00	15051	115.00	284	155.00	797
49.00	15579	77.00	2242	116.00	1098	157.00	552
50.00	72608	78.00	1887	117.00	1876	159.00	367
51.00	21376	79.00	9226	118.00	1161	161.00	352
52.00	1007	80.00	2599	119.00	1342	171.00	74
53.00	179	81.00	9628	124.00	81	174.00	307072
55.00	937	82.00	1859	126.00	90	175.00	24456
56.00	5618	83.00	244	128.00	1200	176.00	297664
57.00	9742	86.00	148	129.00	635	177.00	19536
58.00	581	87.00	17792	130.00	1157	178.00	638
59.00	85	88.00	16968	131.00	485	202.00	70
60.00	3519	91.00	1218	135.00	593	204.00	101
61.00	16184	92.00	9395	137.00	546		
62.00	15656	93.00	13926	139.00	102		
63.00	11066	94.00	40256	141.00	2281		
64.00	1074	95.00	374336	142.00	479		

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1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Method Blank

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PACE, Inc. Air Analytical Laboratory

Data file : /chem/10msv09.i/RFW48288-0910.b/25304.d
Lab Smp Id: 102982055 Client Smp ID: MBLANK253
Inj Date : 10-SEP-2001 06:58
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0910.b/TO14LP227.m
Meth Date : 18-Sep-2001 13:53 mgurnsey Quant Type: ESTD
Cal Date : 15-AUG-2001 07:46 Cal File: 22706.d
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

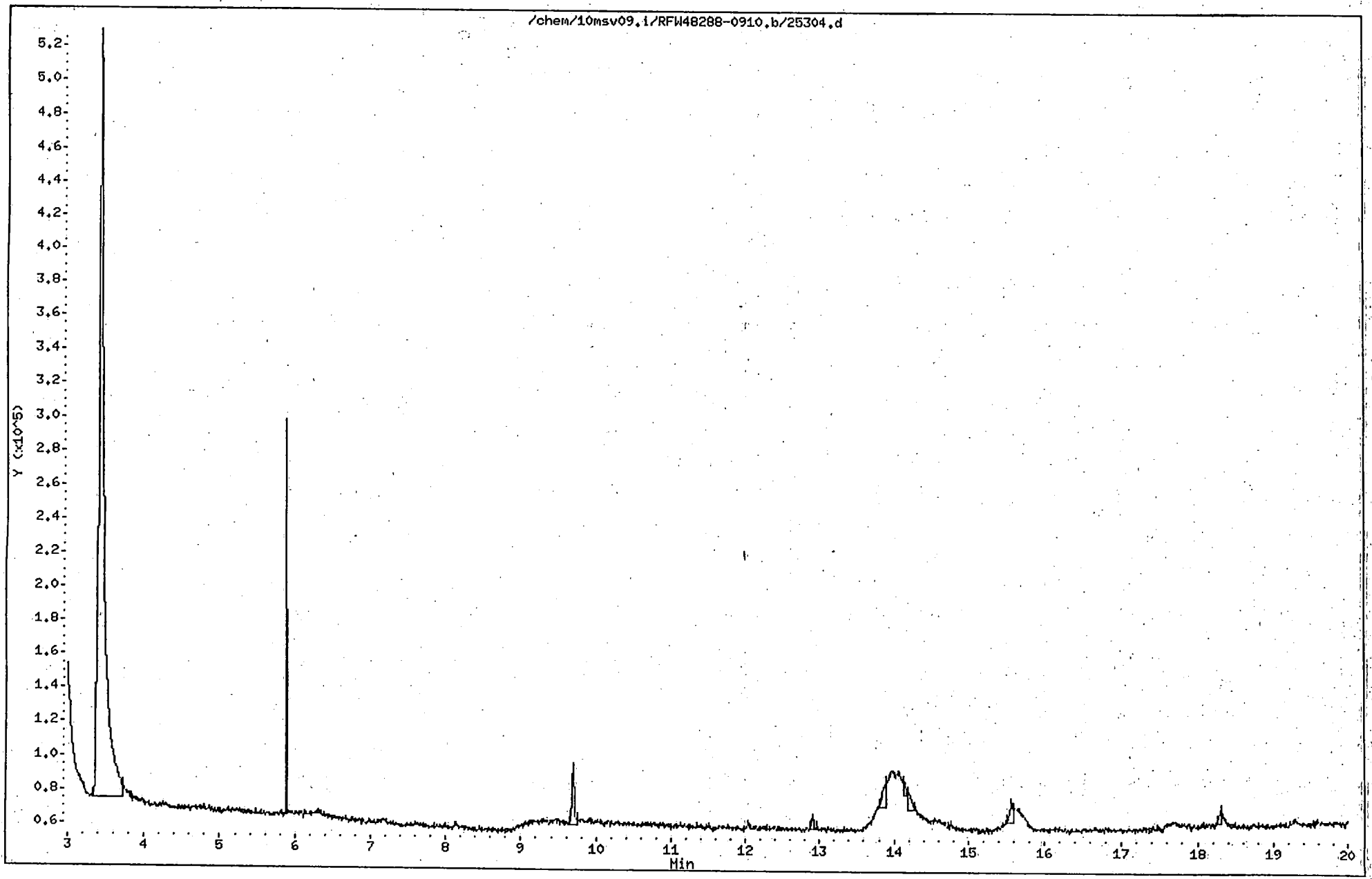
Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppmv)	FINAL (ppmv)

Data File: /chem/10msv09.i/RFW48288-0910.b/25304.d
Date : 10-SEP-2001 06:58
Client ID: MBLANK253
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32



3272

Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0911.b/25410.d
Lab Smp Id: 102986932 Client Smp ID: AMBLANK254
Inj Date : 11-SEP-2001 11:40
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:40 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 10:10 Cal File: 25408.d
Als bottle: 9 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 23 Fluorobenzene	96	8.716	8.722	(1.000)	734305	10.0000	
* 41 p-Bromofluorobenzene	95	13.971	13.971	(1.000)	376988	10.0000	

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INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25410.d
Lab Smp Id: 102986932
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: AMBLANK254
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	734305	-9.60
41 p-Bromofluorobenz	471889	235944	943778	376988	-20.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.72	0.07
41 p-Bromofluorobenz	13.96	13.46	14.46	13.97	0.05

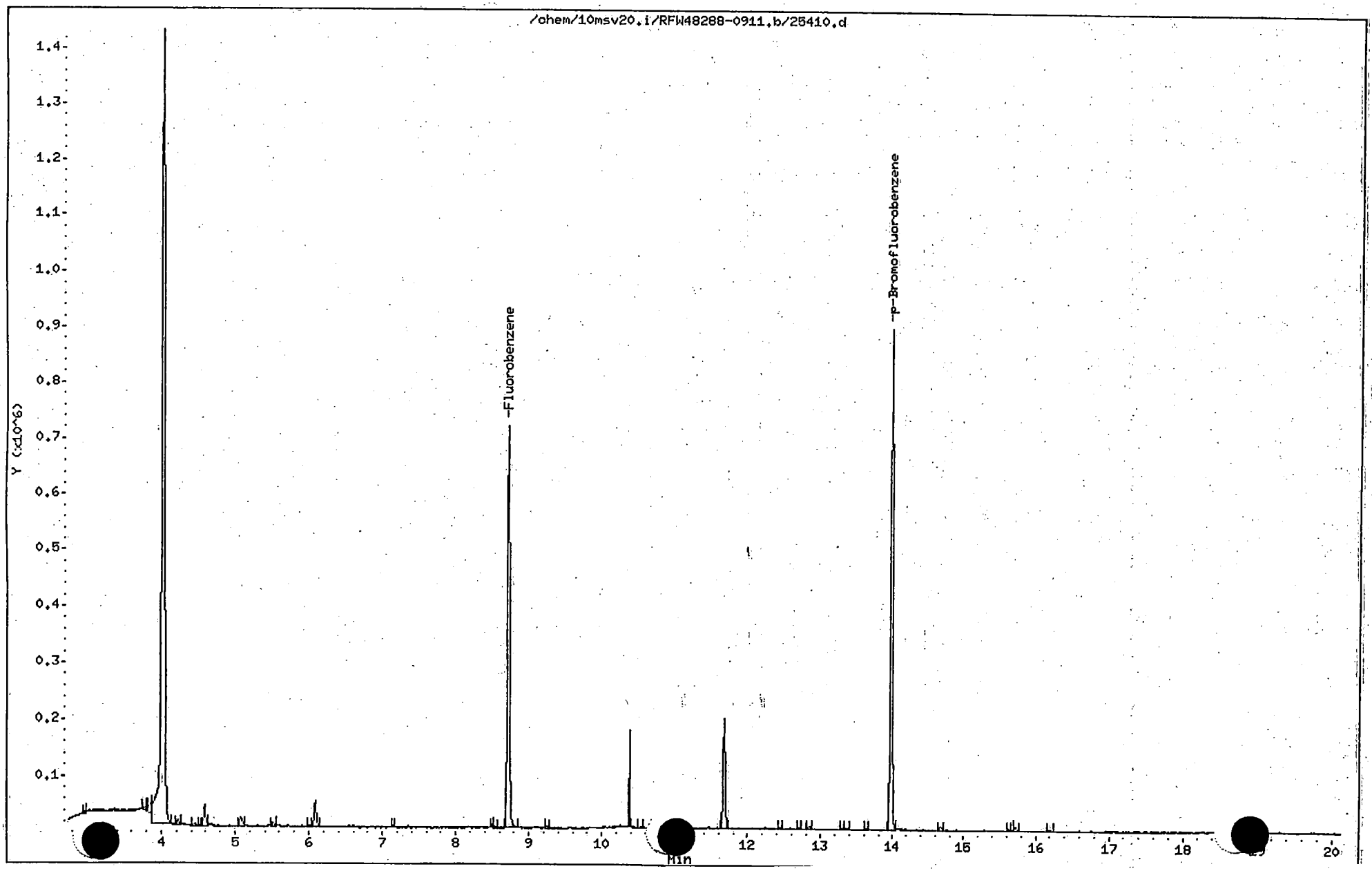
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0911.b/25410.d
Date : 11-SEP-2001 11:40
Client ID: AMBLANK254
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



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Data file : /chem/10msv09.i/RFW48288-0912.b/25509.d
Lab Smp Id: 102987336 Client Smp ID: AMBLANK255
Inj Date : 12-SEP-2001 13:47
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 12:26 Cal File: 25507.d
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
* 23 Fluorobenzene	96	6.939	6.939	(1.000)	2640853	10.0000	
* 41 p-Bromofluorobenzene	95	12.020	12.020	(1.000)	1512106	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25509.d
Lab Smp Id: 102987336
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: AMBLANK255
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2640853	14.21
41 p-Bromofluorobenz	1338999	669500	2677998	1512106	12.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.94	-0.13
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

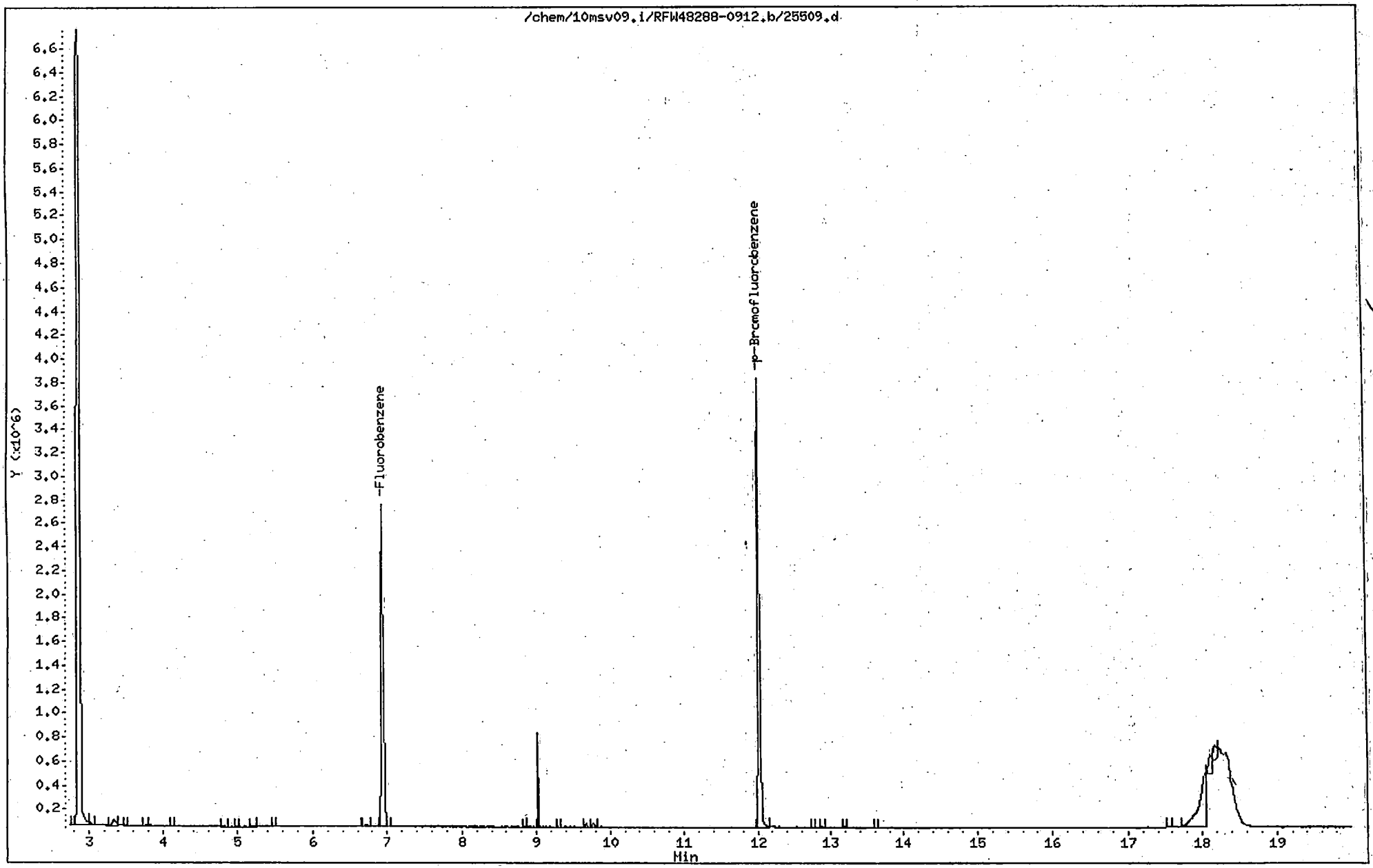
000324

Data File: /chem/10msv09.i/RFW48288-0912.b/25509.d
Date : 12-SEP-2001 13:47
Client ID: AMBLANK255
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



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Data file : /chem/10msv20.i/RFW48288-0912.b/25516.d
Lab Smp Id: 102986965 Client Smp ID: AMBLANK255
Inj Date : 12-SEP-2001 17:03
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:14 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 15:13 Cal File: 25513.d
Als bottle: 15 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
23 Fluorobenzene	96	8.709	8.703	(1.000)	1087371	10.0000	
41 p-Bromofluorobenzene	95	13.964	13.964	(1.000)	471133	10.0000	

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25516.d
Lab Smp Id: 102986965
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: AMBLANK255
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	1087371	1.57
41 p-Bromofluorobenz	632949	316474	1265898	471133	-25.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	-0.01
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

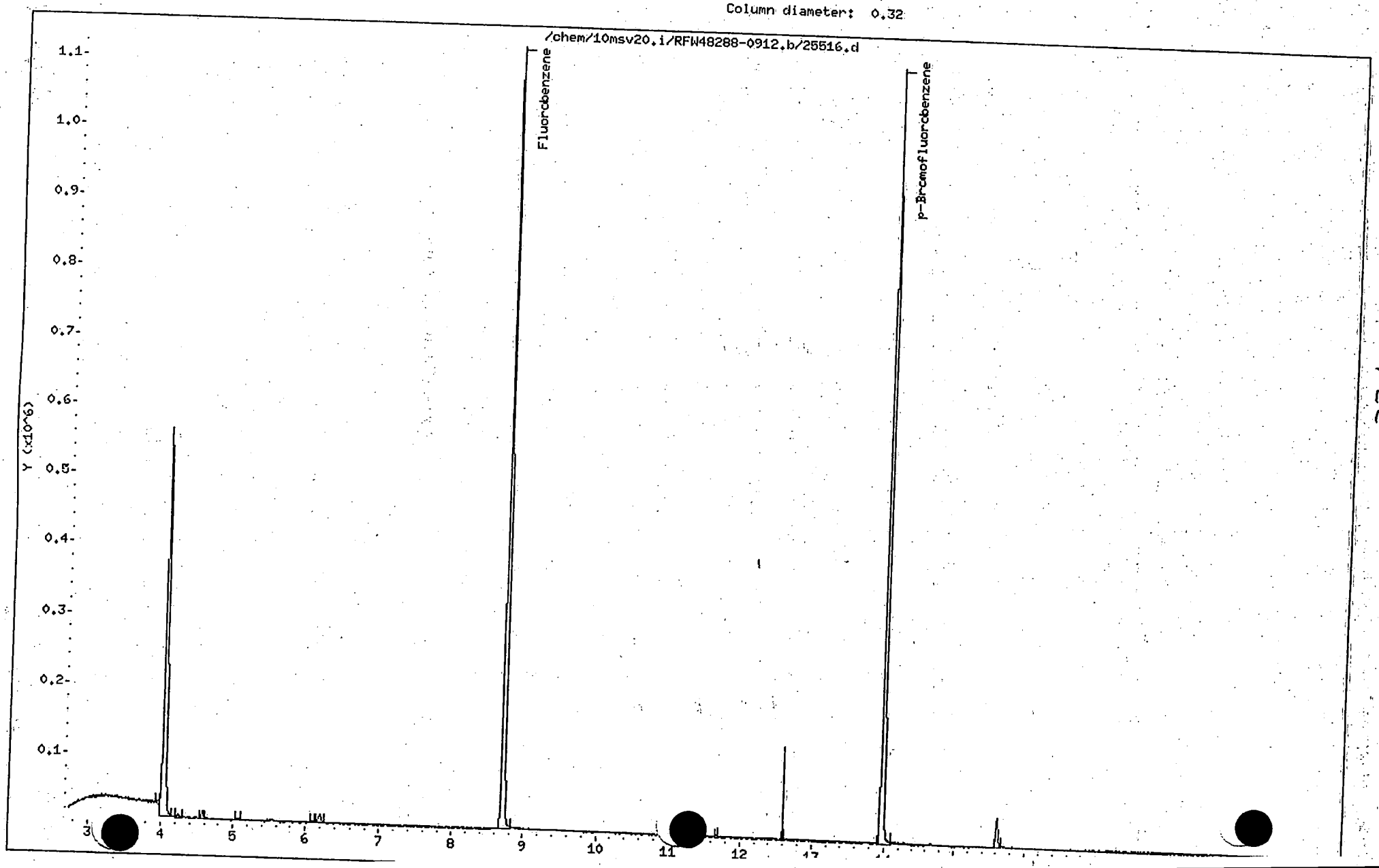
Data File: /chem/10msv20.i/RFW48288-0912.b/25516.d
Date : 12-SEP-2001 17:03
Client ID: AMBLANK255
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

000327



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Laboratory Control Spike

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PACE, Inc. Air Analytical Laboratory

Data file : /chem/10msv09.i/RFW48288-0910.b/25302L.d
Lab Smp Id: 102982063 Client Smp ID: MBLANK253LCS
Inj Date : 10-SEP-2001 06:02
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0910.b/TO14LP227.m
Meth Date : 18-Sep-2001 13:53 mgurnsey Quant Type: ESTD
Cal Date : 15-AUG-2001 07:46 Cal File: 22706.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppmv)	FINAL (ppmv)
1 Dichlorodifluoromethane	85	3.064	3.064	0.000	143120	0.53180	0.532
2 Chloromethane	50	3.198	3.198	0.000	75601	0.41167	0.412
3 Freon 114 (12DC1122FlANE)	85	3.212	3.212	0.000	175049	0.53424	0.534
4 Vinyl Chloride	62	3.319	3.319	0.000	61041	0.52465	0.525
5 Bromomethane	94	3.587	3.587	0.000	56175	0.50338	0.503
6 Chloroethane	64	3.674	3.674	0.000	32321	0.53534	0.535
7 Trichlorofluoromethane	101	4.016	4.016	0.000	118608	0.49808	0.498
9 1,1-Dichloroethene	96	4.398	4.398	0.000	54242	0.50235	0.502
10 Freon 113	101	4.499	4.499	0.000	118024	0.53277	0.533
11 Methylene Chloride	84	4.566	4.566	0.000	65267	0.51593	0.516
12 1,1-Dichloroethane	63	5.209	5.209	0.000	110747	0.47936	0.479
13 cis-1,2-Dichloroethene	96	5.699	5.699	0.000	58232	0.53922	0.539
Chloroform	83	5.873	5.873	0.000	117137	0.48313	0.483
1,1,1-Trichloroethane	97	6.429	6.429	0.000	91105	0.45474	0.455
16 1,2-Dichloroethane	62	6.470	6.470	0.000	77049	0.44687	0.447
17 Benzene	78	6.751	6.751	0.000	182456	0.45675	0.457

Compounds	QUANT SIG MASS	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppmv)	FINAL (ppmv)
18 Carbon Tetrachloride	117	6.765	6.765	0.000	89199	0.50906	0.509
19 1,2-Dichloropropane	63	7.455	7.455	0.000	67146	0.41967	0.420
20 Trichloroethene	130	7.468	7.468	0.000	68371	0.48325	0.483
21 cis-1,3-Dichloropropene	75	8.280	8.280	0.000	101224	0.53513	0.535
22 trans-1,3-Dichloropropene	75	8.762	8.762	0.000	76612	0.61589	0.616
23 Toluene	92	8.889	8.889	0.000	133738	0.48856	0.488
24 1,1,2-Trichloroethane	97	8.923	8.923	0.000	77308	0.48050	0.480
25 1,2-Dibromoethane	107	9.734	9.734	0.000	107473	0.50909	0.509
26 Tetrachloroethene	166	9.808	9.808	0.000	100223	0.48733	0.487
27 Chlorobenzene	112	10.552	10.552	0.000	166779	0.44895	0.449
28 Ethyl Benzene	106	10.813	10.813	0.000	80714	0.46938	0.469
29 mp-Xylene	106	10.967	10.967	0.000	200748	0.89107	0.891
30 Styrene	104	11.396	11.396	0.000	132529	0.45543	0.455
31 o-Xylene	106	11.464	11.464	0.000	95725	0.41679	0.417
32 1,1,2,2-Tetrachloroethane	83	11.732	11.732	0.000	209947	0.38251	0.382
33 1,3,5-Trimethylbenzene	105	12.844	12.844	0.000	206139	0.42782	0.428
34 1,2,4-Trimethylbenzene	105	13.347	13.347	0.000	195953	0.37289	0.373
35 1,3-Dichlorobenzene	146	13.649	13.649	0.000	133383	0.21004	0.210
36 1,4-Dichlorobenzene	146	13.649	13.649	0.000	133383	0.46965	0.470
37 1,2-Dichlorobenzene	146	14.212	14.212	0.000	126192	0.41222	0.412
38 1,2,4-Trichlorobenzene	180	16.786	16.786	0.000	1835	0.00601	0.00601(aRM)
39 Hexachlorobutadiene	225	17.235	17.235	0.000	62841	0.21430	0.214

QC Flag Legend

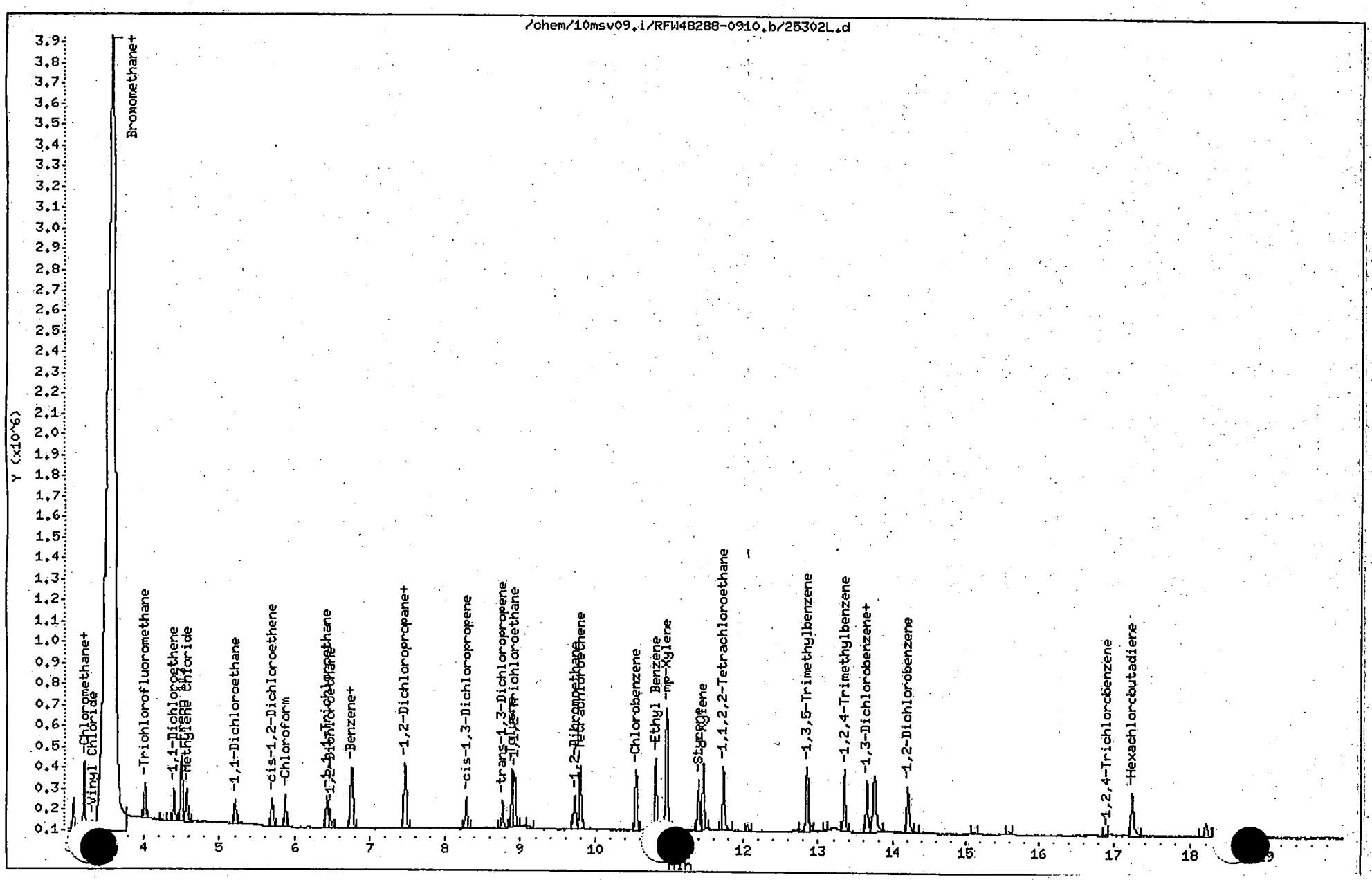
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/10msv09.i/RFW48288-0910.b/25302L.d
Date : 10-SEP-2001 06:02
Client ID: MBLANK253LCS
Sample Info:

Instrument: 10msv09.i

Operator: mtg
Column diameter: 0.32

Column phase: J&W DB-5



000331

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PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0911.b/25404L.d
Lab Smp Id: 102986940 Client Smp ID: AMBLANK254LCS
Inj Date : 11-SEP-2001 07:43
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Meth Date : 18-Sep-2001 12:39 mgurnsey Quant Type: ISTD
Cal Date : 11-SEP-2001 07:43 Cal File: 25404.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
1 Dichlorodifluoromethane	85	4.284	4.284	(0.492)	731629	7.92068	7.92
2 Chloromethane	50	4.450	4.450	(0.511)	284286	7.21550	7.22
3 Dichlorotetrafluoroethane	85	4.450	4.450	(0.511)	776389	7.65393	7.65
4 Vinyl Chloride	62	4.604	4.604	(0.529)	230986	8.04598	8.04
6 Bromomethane	94	4.936	4.936	(0.567)	255988	8.19276	8.19
7 Chloroethane	64	5.040	5.040	(0.579)	106500	8.13532	8.14
8 Trichlorofluoromethane	101	5.452	5.452	(0.626)	533988	7.39064	7.39
10 1,1-Dichloroethene	96	5.907	5.907	(0.678)	230138	7.74657	7.75
11 Freon 113	101	5.999	5.999	(0.689)	506674	7.83646	7.84
12 Methylene Chloride	84	6.085	6.085	(0.699)	252059	8.84076	8.84
14 1,1-Dichloroethane	63	6.810	6.810	(0.782)	369121	7.48634	7.49
17 cis-1,2-Dichloroethene	96	7.351	7.351	(0.844)	229748	7.66547	7.66
18 Chloroform	83	7.535	7.535	(0.865)	438264	7.54842	7.55
19 1,1,1-Trichloroethane	97	8.150	8.150	(0.936)	364436	7.36530	7.36
20 1,2-Dichloroethane	62	8.168	8.168	(0.938)	267857	7.00876	7.01
21 Benzene	78	8.494	8.494	(0.975)	599199	6.96312	6.96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
	22 Carbon Tetrachloride	117	8.519	8.519	(0.978)	392189	7.36681	7.37
*	23 Fluorobenzene	96	8.709	8.709	(1.000)	812262	10.0000	
	24 1,2-Dichloropropane	63	9.213	9.213	(1.058)	204233	6.77421	6.77
	25 Trichloroethene	130	9.238	9.238	(1.061)	277705	6.97167	6.97
	27 cis-1,3-Dichloropropene	75	10.037	10.037	(1.152)	321410	8.26427	8.26
	29 trans-1,3-Dichloropropene	75	10.529	10.529	(1.209)	254906	8.56007	8.56
	30 Toluene	92	10.713	10.713	(1.230)	557966	8.24667	8.25
	31 1,1,2-Trichloroethane	97	10.713	10.713	(1.230)	315387	7.76125	7.76
	33 1,2-Dibromoethane	107	11.592	11.592	(0.830)	414639	7.73997	7.74
	34 Tetrachloroethene	166	11.672	11.672	(0.836)	462682	8.88699	8.89
	35 Chlorobenzene	112	12.440	12.440	(0.891)	577796	6.97074	6.97
	36 Ethyl Benzene	106	12.692	12.692	(0.909)	292095	7.09377	7.09
	37 m&p-Xylene	106	12.846	12.846	(0.920)	664357	12.8502	12.8
	38 Styrene	104	13.288	13.288	(0.952)	264956	4.44515	4.44
	39 o-Xylene	106	13.362	13.362	(0.957)	329644	6.29804	6.30
	40 1,1,2,2-Tetrachloroethane	83	13.620	13.620	(0.975)	390622	4.93223	4.93
	41 p-Bromofluorobenzene	95	13.964	13.964	(1.000)	471889	10.0000	
	42 1,3,5-Trimethylbenzene	105	14.757	14.757	(1.057)	299355	6.43295	6.43
	43 1,2,4-Trimethylbenzene	105	15.273	15.273	(1.094)	311084	6.06346	6.06
	44 1,3-Dichlorobenzene	146	15.611	15.611	(1.118)	215620	5.92288	5.92
	enzyl Chloride	91	15.679	15.679	(1.123)	127358	5.74253	5.74
	4-Dichlorobenzene	146	15.716	15.716	(1.125)	209736	4.86887	4.87(H)
	47 1,2-Dichlorobenzene	146	16.189	16.189	(1.159)	166184	4.86346	4.86
	48 1,2,4-Trichlorobenzene	180	18.690	18.690	(1.338)	85022	7.02022	7.02
	49 Hexachlorobutadiene	225	19.305	19.305	(1.382)	165824	6.33486	6.33

C Flag Legend

- Operator selected an alternate compound hit.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25404L.d
Lab Smp Id: 102986940
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0911.b/TO15_254.m
Misc Info:

Calibration Date: 11-SEP-2001
Calibration Time: 07:43
Client Smp ID: AMBLANK254LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	812262	406131	1624524	812262	0.00
41 p-Bromofluorobenz	471889	235944	943778	471889	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	0.00
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

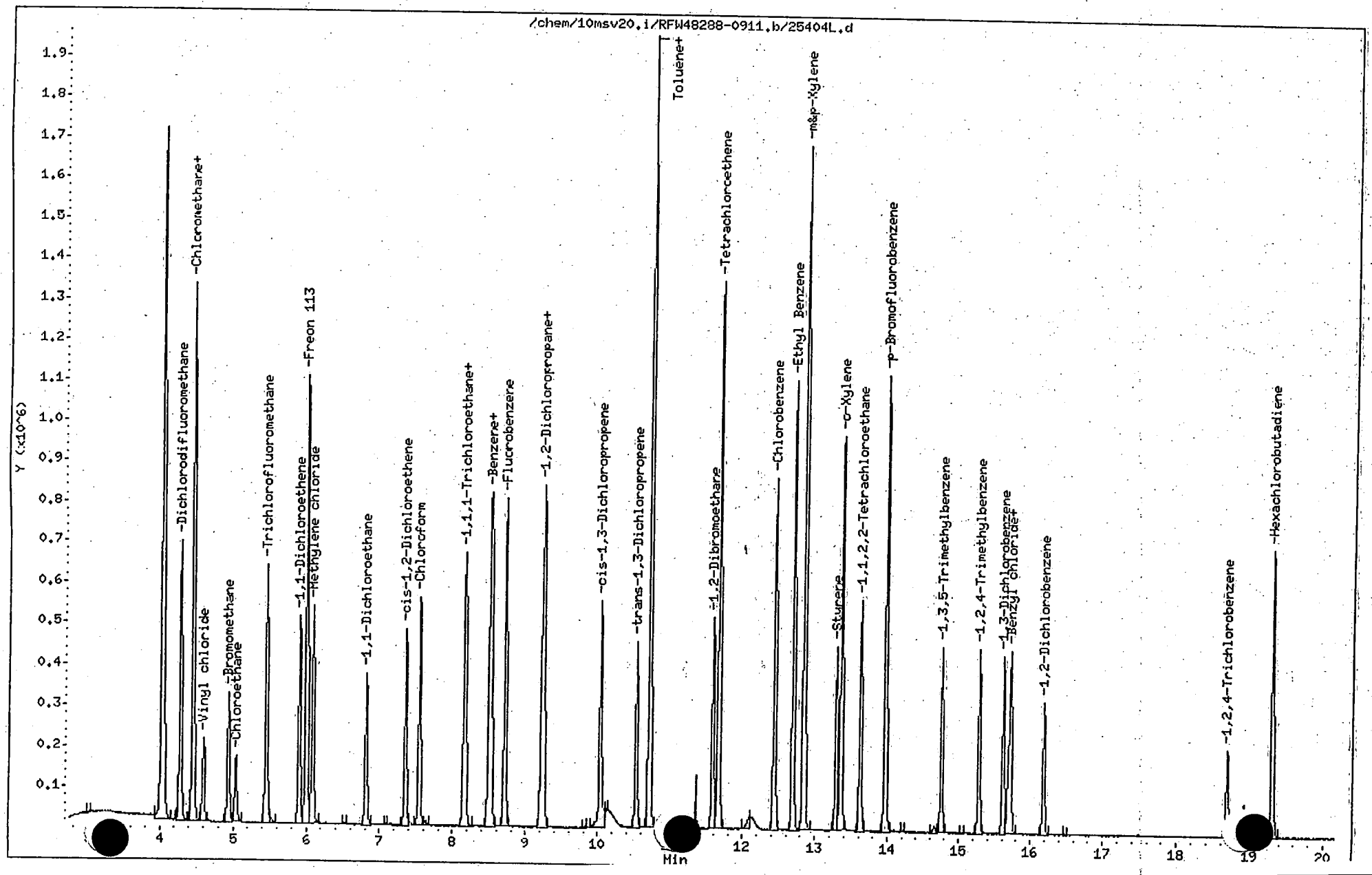
Data File: /chem/10msv20.i/RFW48288-0911.b/25404L.d
Date : 11-SEP-2001 07:43
Client ID: AMBLANK254LCS
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32

000335



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Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv20.i/RFW48288-0912.b/25510L.d
Lab Smp Id: 102986973 Client Smp ID: AMBLANK255LCS
Inj Date : 12-SEP-2001 13:07
Operator : mtg Inst ID: 10msv20.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Meth Date : 18-Sep-2001 10:13 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 13:07 Cal File: 25510.d
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
1 Dichlorodifluoromethane	85	4.285	4.285	(0.492)	678533	10.1653	10.2
2 Chloromethane	50	4.457	4.457	(0.512)	285682	9.81286	9.81
3 Dichlorotetrafluoroethane	85	4.457	4.457	(0.512)	760357	10.1928	10.2
4 Vinyl Chloride	62	4.604	4.604	(0.529)	221192	10.2695	10.3
6 Bromomethane	94	4.942	4.942	(0.567)	245322	10.6305	10.6
7 Chloroethane	64	5.041	5.041	(0.579)	103933	10.6445	10.6
8 Trichlorofluoromethane	101	5.459	5.459	(0.627)	522994	9.63964	9.64
10 1,1-Dichloroethene	96	5.913	5.913	(0.679)	214534	10.0309	10.0
11 Freon 113	101	6.006	6.006	(0.690)	483928	10.3631	10.4
12 Methylene Chloride	84	6.085	6.085	(0.699)	227789	9.53994	9.54
14 1,1-Dichloroethane	63	6.811	6.811	(0.782)	356921	9.75402	9.75
17 cis-1,2-Dichloroethene	96	7.352	7.352	(0.844)	213901	9.59212	9.59
18 Chloroform	83	7.536	7.536	(0.865)	416705	9.53235	9.53
19 1,1,1-Trichloroethane	97	8.150	8.150	(0.936)	353442	9.46643	9.47
20 1,2-Dichloroethane	62	8.169	8.169	(0.938)	268272	8.75732	8.76
21 Benzene	78	8.495	8.495	(0.975)	561751	8.94231	8.94

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
	22 Carbon Tetrachloride	117	8.519	8.519	(0.978)	374907	9.27034	9.27
*	23 Fluorobenzene	96	8.710	8.710	(1.000)	1070523	10.0000	
	24 1,2-Dichloropropane	63	9.214	9.214	(1.058)	200390	8.71047	8.71
	25 Trichloroethene	130	9.238	9.238	(1.061)	254232	8.71449	8.71
	27 cis-1,3-Dichloropropene	75	10.037	10.037	(1.152)	318847	10.1981	10.2
	29 trans-1,3-Dichloropropene	75	10.529	10.529	(1.209)	280055	11.0757	11.1
	30 Toluene	92	10.713	10.713	(1.230)	492760	10.0329	10.0
	31 1,1,2-Trichloroethane	97	10.720	10.720	(1.231)	288160	9.58402	9.58
	33 1,2-Dibromoethane	107	11.592	11.592	(0.830)	404474	10.0345	10.0
	34 Tetrachloroethene	166	11.672	11.672	(0.836)	349482	9.16857	9.17
	35 Chlorobenzene	112	12.440	12.440	(0.891)	541963	8.90025	8.90
	36 Ethyl Benzene	106	12.692	12.692	(0.909)	275218	9.58871	9.59
	37 m&p-Xylene	106	12.846	12.846	(0.920)	658667	17.9317	17.9
	38 Styrene	104	13.289	13.289	(0.952)	426480	7.90543	7.90
	39 o-Xylene	106	13.362	13.362	(0.957)	313172	8.48149	8.48
	40 1,1,2,2-Tetrachloroethane	83	13.627	13.627	(0.976)	511121	8.16924	8.17
*	41 p-Bromofluorobenzene	95	13.965	13.965	(1.000)	632949	10.0000	
	42 1,3,5-Trimethylbenzene	105	14.757	14.757	(1.057)	467848	7.07350	7.07
	43 1,2,4-Trimethylbenzene	105	15.280	15.280	(1.094)	360337	6.41640	6.42
	44 1,3-Dichlorobenzene	146	15.612	15.612	(1.118)	252254	6.67994	6.68
	Benzyl Chloride	91	15.685	15.685	(1.123)	283123	7.46833	7.47
	,4-Dichlorobenzene	146	15.716	15.716	(1.125)	231049	5.60014	5.60
	1,2-Dichlorobenzene	146	16.189	16.189	(1.159)	226455	5.64877	5.65
	48 1,2,4-Trichlorobenzene	180	18.691	18.691	(1.338)	50932	7.85024	7.85
	49 Hexachlorobutadiene	225	19.305	19.305	(1.382)	93373	9.07957	9.08 (R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv20.i
Lab File ID: 25510L.d
Lab Smp Id: 102986973
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv20.i/RFW48288-0912.b/TO15_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 13:07
Client Smp ID: AMBLANK255LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	1070523	535262	2141046	1070523	0.00
41 p-Bromofluorobenz	632949	316474	1265898	632949	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	8.71	8.21	9.21	8.71	0.00
41 p-Bromofluorobenz	13.96	13.46	14.46	13.96	0.00

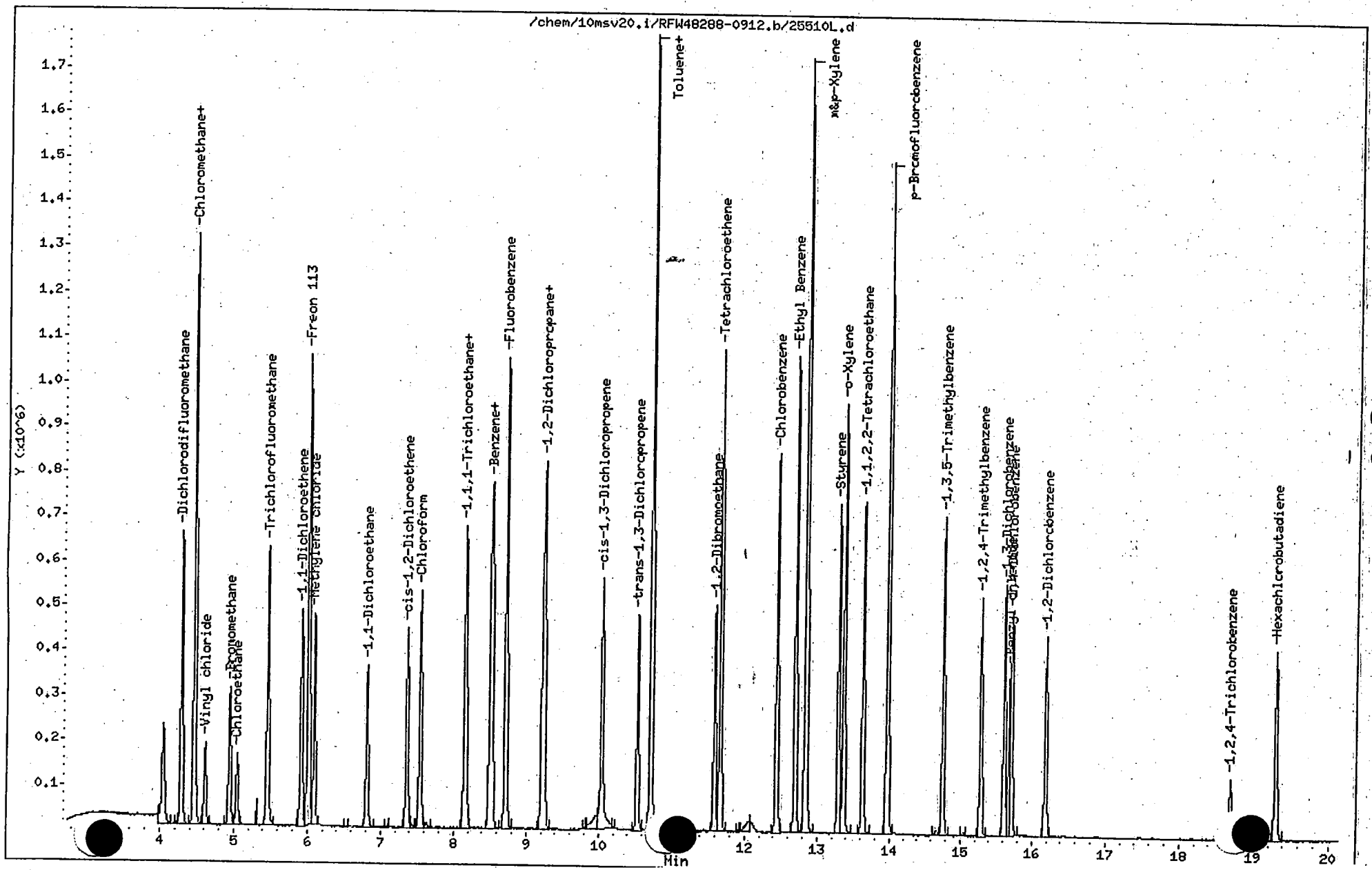
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/10msv20.i/RFW48288-0912.b/25510L.d
Date : 12-SEP-2001 13:07
Client ID: AMBLANK255LCS
Sample Info:

Column phase: J&W DB-5

Instrument: 10msv20.i

Operator: mtg
Column diameter: 0.32



Pace Analytical Services, Inc.

PACE Analytical Services

Data file : /chem/10msv09.i/RFW48288-0912.b/25505L.d
Lab Smp Id: 102987344 Client Smp ID: AMBLANK255LCS
Inj Date : 12-SEP-2001 11:10
Operator : mtg Inst ID: 10msv09.i
Smp Info :
Misc Info :
Comment : Volatile Organic Compounds in Air
Method : /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Meth Date : 18-Sep-2001 12:03 mgurnsey Quant Type: ISTD
Cal Date : 12-SEP-2001 11:10 Cal File: 25505.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: to14.sub
Target Version: 3.50
Processing Host: hpchemsv

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
1 Dichlorodifluoromethane	85	3.054	3.054	(0.440)	1627861	9.85364	9.85
2 Chloromethane	50	3.188	3.188	(0.459)	846534	9.69555	9.70
3 Dichlorotetrafluoroethane	85	3.195	3.195	(0.460)	1922904	10.0376	10.0
4 Vinyl Chloride	62	3.309	3.309	(0.476)	699980	10.2027	10.2
6 Bromomethane	94	3.570	3.570	(0.514)	638013	10.4763	10.5
7 Chloroethane	64	3.657	3.657	(0.526)	353276	10.4692	10.5
8 Trichlorofluoromethane	101	3.999	3.999	(0.576)	1395974	9.66462	9.66
10 1,1-Dichloroethene	96	4.381	4.381	(0.630)	583565	9.81356	9.81
11 Freon 113	101	4.482	4.482	(0.645)	1247107	10.0119	10.0
12 Methylene Chloride	84	4.549	4.549	(0.655)	692833	9.36522	9.36
14 1,1-Dichloroethane	63	5.185	5.185	(0.746)	1231750	9.68974	9.69
17 cis-1,2-Dichloroethene	96	5.681	5.681	(0.818)	624550	9.72281	9.72
18 Chloroform	83	5.856	5.856	(0.843)	1293028	9.78383	9.78
19 1,1,1-Trichloroethane	97	6.412	6.412	(0.923)	1011652	9.46072	9.46
20 1,2-Dichloroethane	62	6.452	6.452	(0.929)	853318	8.98995	8.99
21 Benzene	78	6.734	6.734	(0.969)	1888867	8.77822	8.78

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	CONCENTRATIONS FINAL (ppbv)
	22 Carbon Tetrachloride	117	6.754	6.754	(0.972)	1039239	9.25246	9.25
*	23 Fluorobenzene	96	6.948	6.948	(1.000)	2312201	10.0000	
	24 1,2-Dichloropropane	63	7.424	7.424	(1.068)	685176	8.80597	8.80
	25 Trichloroethene	130	7.451	7.451	(1.072)	739596	8.69026	8.69
	27 cis-1,3-Dichloropropene	75	8.229	8.229	(1.184)	1117333	10.7073	10.7
	29 trans-1,3-Dichloropropene	75	8.711	8.711	(1.254)	930350	11.0008	11.0
	30 Toluene	92	8.859	8.859	(1.275)	1286601	9.84927	9.85
	31 1,1,2-Trichloroethane	97	8.879	8.879	(1.278)	713166	9.46056	9.46
	33 1,2-Dibromoethane	107	9.697	9.697	(0.807)	1112526	10.1313	10.1
	34 Tetrachloroethene	166	9.777	9.777	(0.813)	957850	9.24872	9.25
	35 Chlorobenzene	112	10.521	10.521	(0.875)	1508191	8.72838	8.73
	36 Ethyl Benzene	106	10.789	10.789	(0.897)	698099	8.88427	8.88
	37 m&p-Xylene	106	10.943	10.943	(0.910)	1676514	17.0063	17.0
	38 Styrene	104	11.373	11.373	(0.946)	1210622	7.60115	7.60
	39 o-Xylene	106	11.440	11.440	(0.951)	790161	8.01878	8.02
	40 1,1,2,2-Tetrachloroethane	83	11.708	11.708	(0.974)	1443098	8.08274	8.08
*	41 p-Bromofluorobenzene	95	12.023	12.023	(1.000)	1338999	10.0000	
	42 1,3,5-Trimethylbenzene	105	12.827	12.827	(1.067)	1445526	6.88061	6.88
	43 1,2,4-Trimethylbenzene	105	13.330	13.330	(1.109)	1313811	6.07254	6.07
	44 1,3-Dichlorobenzene	146	13.631	13.631	(1.134)	1002516	6.77794	6.78
	Benzyl Chloride	91	13.719	13.719	(1.141)	1237590	7.28829	7.29
	.,4-Dichlorobenzene	146	13.739	13.739	(1.143)	988042	5.64594	5.64
	1,2-Dichlorobenzene	146	14.195	14.195	(1.181)	851451	5.44910	5.45
	48 1,2,4-Trichlorobenzene	180	16.648	16.648	(1.385)	41485	7.63851	7.64
	49 Hexachlorobutadiene	225	17.218	17.218	(1.432)	246233	7.66535	7.66

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv09.i
Lab File ID: 25505L.d
Lab Smp Id: 102987344
Analysis Type: VOA
Quant Type: ISTD
Operator: mtg
Method File: /chem/10msv09.i/RFW48288-0912.b/TO14_255.m
Misc Info:

Calibration Date: 12-SEP-2001
Calibration Time: 11:10
Client Smp ID: AMBLANK255LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	2312201	1156100	4624402	2312201	0.00
41 p-Bromofluorobenz	1338999	669500	2677998	1338999	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Fluorobenzene	6.95	6.45	7.45	6.95	0.00
41 p-Bromofluorobenz	12.02	11.52	12.52	12.02	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

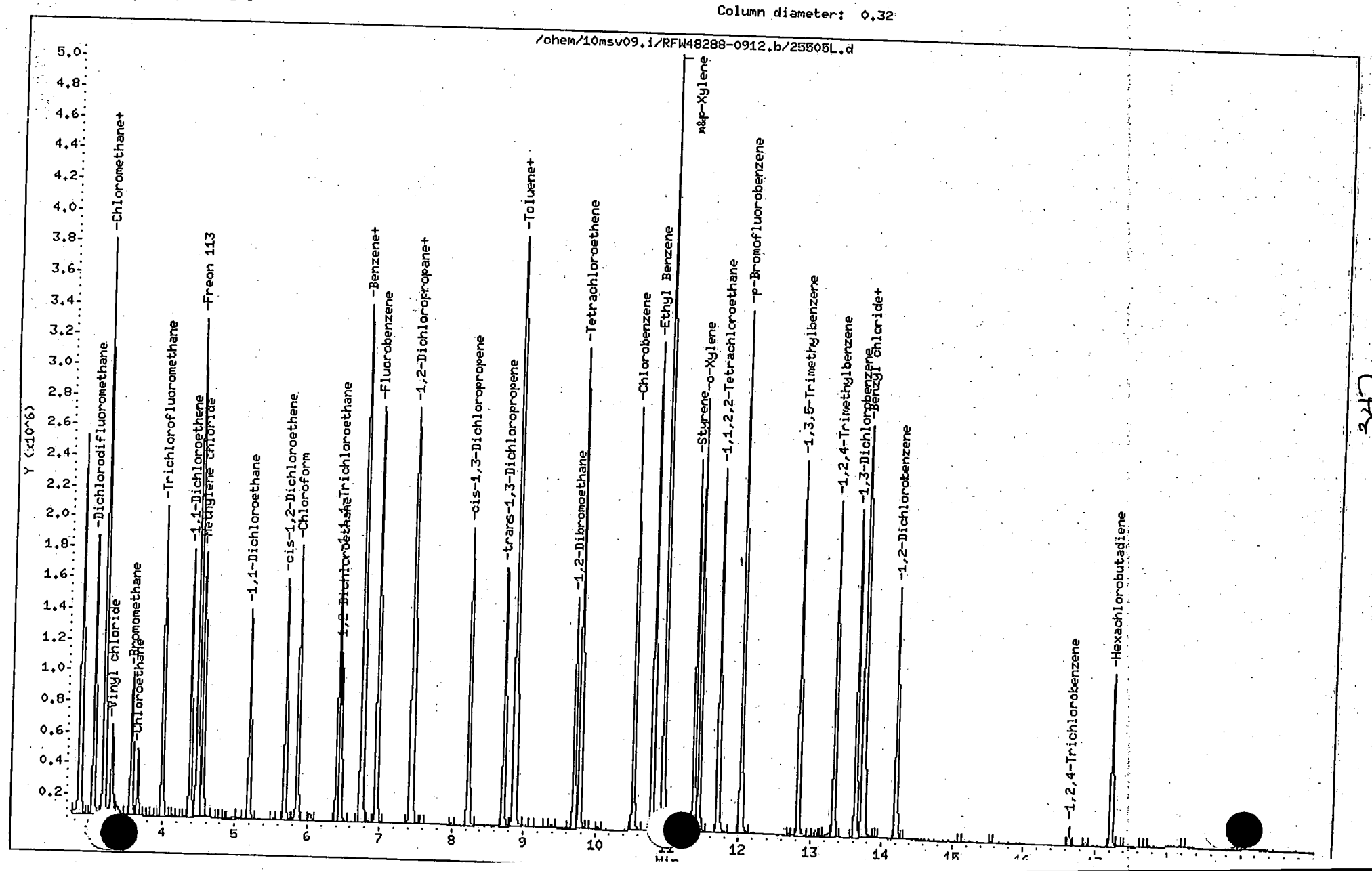
Data File: /chem/10msv09.i/RFW48288-0912.b/25505L.d
Date : 12-SEP-2001 11:10
Client ID: AMBLANK255LCS
Sample Info:

Instrument: 10msv09.i

Column phase: J&W DB-5

Operator: mtg
Column diameter: 0.32

000343



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Pace Analytical™

Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Miscellaneous

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

591491

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000345

Page: of

Required Client Information: Section A

Company: Roy F. Weston, Inc.
Address: One Weston Way
West Chester, PA
19380
Phone: (610) 701 7305 Fax: 7401

Required Client Information: Section B

Report To: Nelson Feick
Copy To: Scott Snyder
Invoice To: Yunru Yang
P.O.
Project Name: Roselle Park
Project Number:

Client Information (Check quote/contract):
Requested Due Date: *TAT:

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

To Be Completed by Pace Analytical and Client Section C

Quote Reference:
Project Manager: DKP
Project #: 1048288
Profile #: 10138

Section D Required Client Information:

SAMPLE ID
One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Requested Analysis:

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh:mm a/p)	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	TO14	canister #	Remarks / Lab ID
1	SG01	AR	08/29/02										X	300	2962156
2	SG02													055	164
3	SG03													041	172
4	SG04													272	180
5	SG05													285	198
6	SG06													302	206
7	SG07													301	214
8	SG08													282	222
9	SG09													081	230
10	SG10													175	248
11	SG11													292	255
12	SG12													130	263

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature]	30 Aug 01		Fed Ex		
				[signature] Pace	8-31-01	10:50

Additional Comments:

Pace Project No.:

SAMPLE CONDITION

Temp: ___ °C | Received on Ice: Y / N | Sealed Cooler: Y / N | Samples Intact: Y / N | pH ___

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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352 00346

Page: of

Section A — Required Client Information:

Company: Ray F. Weston, Inc.
Address: One Weston Way, West Chester, PA 19380
Phone: (610)701-7301 Fax: 7401

Section B — Required Client Information:

Report To: Nelson Faick
Copy To: Scott Snyder
Invoice To: Yunru Yang
P.O.:
Project Name: Rosella Park
Project Number:

Client Information (Check quote/contract):
Requested Due Date: *TAT:

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) In calendar days.

Section C — To Be Completed by Pace Analytical and Client

Quote Reference:
Project Manager:
Project #: 1048286
Profile #:

Requested Analysis: TO14

Section D — Required Client Information:

SAMPLE ID
One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh: mm a/p)	# Containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	canister #	Remarks / Lab ID
1	5613	A	08/29/02			X							296	2962271
2	5614												310	289
3	5615												308	297
4	5616												284	305
5	5617												312	313
6	5618												309	321
7	5619												303	339
8	5620												306	347
9	5621												103	354
10	5622												060	362
11	5623												075	370
12	5624												001	396

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
				FedEx		
				Ryan Pace	8-31-02	10:50

Additional Comments:

Pace Project No.:

SAMPLE CONDITION

Temp: ___ °C	Received on Ice: Y / N	Sealed Cooler: Y / N	Samples Intact: Y / N	pH ___

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical™ www.pacelabs.com

591489

000347 351

Page: of

To Be Completed by Pace Analytical and Client — Section C

Section A — Required Client Information:

Company: Roy F. Weston, Inc.
Address: One Weston Way, West Chester, PA 19380
Phone: (610) 701-7305 Fax: 7401

Section B — Required Client Information:

Report To: Nelson Faick
Copy To: Scott Snyder
Invoice To: Junru Yang
P.O.:
Project Name: Rosalie Park
Project Number:

Client Information (Check quote/contract):
Requested Due Date: TAT:

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

Quote Reference:
Project Manager:
Project #: 1049288
Profile #:

Section D — Required Client Information:

SAMPLE ID
One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Requested Analysis: TO14

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh:mm a/p)	# Containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	canister #	Remarks / Lab ID
1	5625	A	08/29/01			X							048	2962404
2	5626												137	420
3	5627												059	438
4	5628												114	453
5	5629												072	461
6														
7														
8														
9														
10														
11														
12														

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS

Additional Comments:

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
		31Aug01		FedEx		
				Pace	8/31/01	10:15

Pace Project No.:

SAMPLE CONDITION

Temp: °C | Received on Ice: Y / N | Sealed Cooler: Y / N | Samples I... N | pH

GC/MS AIR INSTRUMENT RUN LOG

Instrument: 10MSV09

Calendar Date: 8 / 15 / 01 Julian Date: 227

Calibration Information:

Target Method: LP 227 . m

Calibration Date: —

Continuing Calibration Standard: —

Internal Standard: —

Analytical System Information:

GC Oven Temperature Program No.: 1 (from page 2)

Entech Method Designation: 10/s

Autotune Date: 8 / 2 / 01 Autotune File: bfb EM Volts: 2506

Source Pressure: (1.2-4) Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/ 08(50) . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size CC	Analyst	Status
Inj	Tune 50ng bfb		1			2ml	MTG	NO
Comments:						??	lots	0' peaks
Inj			2			2ml		OK
Comments:								
std	T014 10ppbv		3			500		NO
Comments:								
loop	T014 5ppmv		4			5.0		ICAL
Comments:								
loop	1ppmv		5			1.0		
Comments:								
loop	1ppmv		6			10.0		
Comments:								
loop	blk		7			10.0		NO
Comments:								
loop	blk		8			10.0		OK
Comments:								
loop	921745758		9	238		10.0		OK
Comments:	(1.3) x1.38							

REVIEWED BY: [signature] Date: 9 / 19 / 01

GC/MS AIR INSTRUMENT RUN LOG

Instrument: 10MSV09

Calendar Date: 9/10/01 Julian Date: 253

Calibration Information:

Target Method: TO14 LP227 .m

Calibration Date: —/—/—

Continuing Calibration Standard: —

Internal Standard: —

Analytical System Information:

GC Oven Temperature Program No.: 1 (from page 2)

Entech Method Designation: 10S

Autotune Date: 8/2/01 Autotune File: bc6 EM Volts: 2506

Source Pressure: 1.8(-4) Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/09100/ .b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size	Analyst	Status
Inj	Tune 50ng bfb		1			2ml	MTG	OK
Comments:								
loop	TO14 10ppbv		2			5.0		OK
Comments:								
loop	blk		3			10.0		NO
Comments:								
loop	blk		4			10.0		OK
Comments:								
loop	2962222		5	282		10.0		DNR
Comments: (03) x1.34								Amb x10
loop	2962206		6	302		10.0		DNR
Comments: (03) x1.34								Amb x10
loop	2962214		7	301		10.0		DNR
Comments: (03) x1.34								Amb x10
loop	2962156		8	302		10.0		DNR
Comments: (03) x1.34								Amb x10
loop	2962164		9	55		10.0		DNR
Comments: (03) x1.34								Amb x10

REVIEWED BY: [signature] Date: 9/19/01

353

Instrument: 10MSV09

Calendar Date: ___/___/___ Julian Date: _____

Calibration Information:

Target Method: _____ . m

Calibration Date: ___/___/___

Continuing Calibration Standard: _____

Internal Standard: _____

See p 74

Analytical System Information:

GC Oven Temperature Program No.: _____ (from page 2)

Entech Method Designation: _____

Autotune Date: ___/___/___ Autotune File: _____ EM Volts: _____

Source Pressure: _____ Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/_____ . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size cc	Analyst	Status
loop	2962248		10	175		10.0	MTG	DNR
Comments: (0.5) x1.34 Amb x10								
loop	2962198		11	285		10.0		OK
Comments: (0.5) x1.34								
loop	2962198d1		12	285		2.0		OK
Comments: x6.7								
loop	2980232		13	TB		10.0		OK
Comments: recv OOH TCA								
loop	2980232d1		14	TB		~~10~~ 10		OK
Comments: x10								
std			15					
Comments:								
Comments:								
Comments:								
Comments:								

REVIEWED BY: _____ Date: 9/19/01

Instrument: 10MSV09

Calendar Date: 9 / 12 / 01 Julian Date: 255

Calibration Information:

Target Method: TO14 255 . m

Calibration Date: / /

Continuing Calibration Standard: 487,89X

Internal Standard: 487,91P

Analytical System Information:

GC Oven Temperature Program No.: 1 (from page 2)

Entech Method Designation: TO15

Autotune Date: 8 / 2 / 01 Autotune File: bfb EM Volts: 2506

Source Pressure: 1.0 (-4) Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/ 091201 . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size cc	Analyst	Status
Inj	Tune 50ng bfb		1			2ml	MTG	OK
Comments:								
std	TO14 .5ppbv		2			25		NO
Comments:								
Std	1ppbv		3			50		ICAL
Comments:								
Std	5ppbv		4			250		
Comments:								
Std	10ppbv		5			500		
Comments:								
Std	20ppbv		6			1000		
Comments:								
Std	.5ppbv		7			25		
Comments:								
15	blk		8			500		NO
Comments:								
15	blk		9			500		OK
Comments:								

REVIEWED BY: Mll Date: 9 / 19 / 01

L077a 000351

355

Instrument: 10MSV09

Calendar Date: ___/___/___ Julian Date: _____

Calibration Information:

Target Method: _____ . m

Calibration Date: ___/___/___

Continuing Calibration Standard: _____

Internal Standard: _____

Sep 78

Analytical System Information:

GC Oven Temperature Program No.: _____ (from page 2)

Entech Method Designation: _____

Autotune Date: ___/___/___ Autotune File: _____ EM Volts: _____

Source Pressure: _____ Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/_____ . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size CC	Analyst	Status
4	CCIS		10		R-31	50	MTG	DNR
Comments:								
5	296214	RFW	11	301		50		DNR
Comments: (-1x)								
6	~~296214~~ 296230		12	~~307~~ 81	MTG 9/12/01	25		OK
Comments: MTG 9/12/01 ~~(1x)~~ (0.5) x26.8								
7	~~296220~~ 296222		13	~~81~~ 262	MTG 9/12/01			OK
Comments: MTG 9/12/01 ~~(0.5)~~ (0.5) x26.8								
8	296206		14	302				OK
Comments: (0.5) x26.8								
8	296206 dup		15	302				OK
Comments: 26.8								
9	—		16					DNR
Comments:								
10	296180		17	272				OK
Comments: (0.5) x26.8								
11	296164		18	55				OK
Comments: (0.5) x26.8								

REVIEWED BY: _____ Date: 9/19/01

L077a

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Instrument: 10MSV09

Calendar Date: ___/___/___ Julian Date: _____

Calibration Information:

Target Method: _____ . m

Calibration Date: ___/___/___

Continuing Calibration Standard: _____ See p 78

Internal Standard: _____

Analytical System Information:

GC Oven Temperature Program No.: _____ (from page 2)

Entech Method Designation: _____

Autotune Date: ___/___/___ Autotune File: _____ EM Volts: _____

Source Pressure: _____ Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/_____ . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size cc	Analyst	Status
12	2962248		19	175		25	MTG	OK
Comments: (035) x26.8								
13	2962172		20	41				OK
Comments: (035) x26.6								
14	29 62156		21	300				OK
Comments: (035) x26.6								
X5	29 62214		22	301				OK
Comments: MTG 9/12/01 (035) x27.6								
2	CL 218		23		R-29	30		RC
Comments:								
3	CL83		24		R-31			Amb
Comments:								
4	CC156		25		R-31			RC
Comments:								
	29 68633	Max	26	287				OK
Comments: (-035) x1.36								
Comments:								

REVIEWED BY: _____ Date: 9/19/01

L077a

Instrument: 10MSV~~09~~ 20

Calendar Date: 9/11/01 Julian Date: 254

Calibration Information:

Target Method: TO15 254 .m

Calibration Date: ~~1/1~~

Continuing Calibration Standard: 487,89 ✓

Internal Standard: 487,91 N

Analytical System Information:

GC Oven Temperature Program No.: 1 (from page 2)

Entech Method Designation: TO15

Autotune Date: 8/10/01 Autotune File: bfb EM Volts: 1882

Source Pressure: ~~1/1~~ Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/09110/ .b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size cc	Analyst	Status
Inj	Tune 50ng bfb		1			2mL	MTG	OK
Comments:								
std	TO14 10ppbv		2			500.		NO
Comments:						std can not open		
Std	10ppbv		3			500		~~RECAL~~ NO
Comments:								MTG 9/11/01
Std	10ppbv		4			500		RECAL
Comments:								
Std	5ppbv		5			25		
Comments:								
Std	1ppbv		6			50		
Comments:								
Std	5ppbv		7			250		
Comments:								
Std	20ppbv		8			1000		
Comments:								
Std	5ppbv		9			25		NO
Comments:								

REVIEWED BY: [signature] Date: 9/19/01

L077a

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Pace Analytical

GC/MS AIR INSTRUMENT RUN LOG

Instrument: 10MSV~~09~~ 20 MTG 9/11/01

Calendar Date: ___/___/___ Julian Date: _____

Calibration Information:

Target Method: _____ . m

Calibration Date: ___/___/___

Continuing Calibration Standard: _____

Internal Standard: _____

See p81

Analytical System Information:

GC Oven Temperature Program No.: _____ (from page 2)

Entech Method Designation: _____

Autotune Date: ___/___/___ Autotune File: _____ EM Volts: _____

Source Pressure: _____ Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/_____ . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size	Analyst	Status
15	blk		10			500	MTG	OK
Comments:								
4	CC 242		11		R-33			RC
Comments:								
4	CC 14		12		R-33			Amb
Comments:								
15	blk		13					DNC
Comments:								
6	2971843	Max	14	241		✓		OK
Comments:	(-135)	x1.38						Mech xs
1	2959087 d1		15	298		25		OK
Comments:	(-135)	(1.38)(20) = x27.6						
2	2959129 d1		16	304				NO
Comments:	(-135)	(1.38)(20)(128) = x3532.8						+x4
3	2959103 d1		17	5		✓		OK
Comments:	(-135)	(1.38)(20)(64) = x1766.4						
15	blk		18			500		DNC
Comments:								

REVIEWED BY: [signature]

Date: 9/19/01

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Instrument: 10MSV09 ~~09~~ 20 MTG 9/11/01

Calendar Date: ___/___/___ Julian Date: _____

Calibration Information:

Target Method: _____ . m

Calibration Date: ___/___/___

Continuing Calibration Standard: _____ Sep 8/

Internal Standard: _____

Analytical System Information:

GC Oven Temperature Program No.: _____ (from page 2)

Entech Method Designation: _____

Autotune Date: ___/___/___ Autotune File: _____ EM Volts: _____

Source Pressure: _____ Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/_____ . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size (cc)	Analyst	Status
5	296232l	RFW	19	309		50	MTG	OK
Comments: MTG 9/11/01 (-13) x13.8								
4	296225		20	292				OK
Comments: (-13) x13.8								
7	296234 7		21	306				OK
Comments: (0 >) x13.4								
7	296234 7 dup		22	306				OK
Comments: x13.4								
8	296239 6		23					OK
Comments: (0 >) x13.4 IS↓ clean								
9	296245 3		24	114				OK
Comments: (-1 >) x13.8								
10	296231 3		25	312				OK
Comments: (-13) x13.8								
11	296226 3		26	130				OK
Comments: (-13) x13.8								
12	296233 9		27	303				OK
Comments: (0 >) x13.4								

REVIEWED BY: _____ Date: 9/19/01

Instrument: 10MSV~~09~~ 20 MTG 9/11/01

Calendar Date: ___/___/___ Julian Date: _____

Calibration Information:

Target Method: _____ . m

Calibration Date: ___/___/___

Continuing Calibration Standard: _____

Internal Standard: _____

See p8?

Analytical System Information:

GC Oven Temperature Program No.: _____ (from page 2)

Entech Method Designation: _____

Autotune Date: ___/___/___ Autotune File: _____ EM Volts: _____

Source Pressure: _____ Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/_____ . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size ___ cc	Analyst	Status
13	2962354		28	103		50	MTG	OK
Comments: (~.505) x13.6								
14	2962297		29	308		✓	✓	OK
Comments: (~1.05) x13.8								
Comments:								
Comments:								
Comments:								
Comments:								
Comments:								
Comments:								
mments:								

REVIEWED BY: [signature] Date: 9/19/01

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Pace Analytical GC/MS AIR INSTRUMENT RUN LOG Page 85 of 100

Instrument: 10MSV~~09~~ 20 MTG 9/12/01

Calendar Date: 9/12/01 Julian Date: 255

Calibration Information:

Target Method: TO1255 . m

Calibration Date: / /

Continuing Calibration Standard: 487,89 W

Internal Standard: 487,9/0

Analytical System Information:

GC Oven Temperature Program No.: 1 (from page 2)

Entech Method Designation: TO1s

Autotune Date: 8/10/01 Autotune File: bfb EM Volts: 1882

Source Pressure: — Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/ 091201 . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size cc	Analyst	Status
Inj	Tune 50 ng bfb		1			2ml	MTG	OK
Comments:								
Std	TO14 10 ppbv		2			500		NO
Comments:								
Std	10 ppbv		3			500		NO
Comments:								out of std remake
Std	10 ppbv		4			500		NO
Comments:								
Std	5 ppbv		5			25		
Comments:								
Std	1 ppbv		6			50		
Comments:								
Std	5 ppbv		7			250		
Comments:								
Std	20 ppbv		8			1000		
Comments:								
Std	20 ppbv		9			1000		ICAL
Comments:								

REVIEWED BY: [signature] Date: 9/19/01 362

Instrument: 10MSV09 ~~09~~ 20 MTG 9/12/01

Calendar Date: ___/___/___ Julian Date: _____

Calibration Information:

Target Method: _____ . m

Calibration Date: ___/___/___

Continuing Calibration Standard: _____

Internal Standard: _____

See p 85

Analytical System Information:

GC Oven Temperature Program No.: _____ (from page 2)

Entech Method Designation: _____

Autotune Date: ___/___/___ Autotune File: _____ EM Volts: _____

Source Pressure: _____ Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/_____ . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size ____	Analyst	Status
Std	TO14 10ppbv		10			500	MTG	ICAL
Comments:								
Std	5ppbv		11			250		
Comments:								
Std	1ppbv		12			50		
Comments:								
Std	.5ppbv		13			25		✓
Comments:								
						Hexn Cl		
IS	blk		14			500		OK
Comments:								
IS	blk		15					OK
Comments:								
IS	blk		16			✓		OK
Comments:								
1	29716431	MnX	17			50		OK
Comments:	(HSS)	x13.8						
2	29591291		18			25		OK
Comments:	(HSS)	(12)(1.38)(20)= x	14131.2					

REVIEWED BY: _____ Date: 9/19/01

Instrument: 10MSV~~09~~ 20 MTG 9/12/01

Calendar Date: ___/___/___ Julian Date: _____

Calibration Information:

Target Method: _____ . m

Calibration Date: ___/___/___

Continuing Calibration Standard: _____

Internal Standard: _____

See p 85

Analytical System Information:

GC Oven Temperature Program No.: _____ (from page 2)

Entech Method Designation: _____

Autotune Date: ___/___/___ Autotune File: _____ EM Volts: _____

Source Pressure: _____ Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/_____ . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size cc	Analyst	Status
13	29 62461	RFW	19	72		50	MTG	OK
Comments: (-28>) x126.4 some sort of blk? clean								
14	29 62420		20	137				OK
Comments: (4>) x13.8								
3	29 62438		21	59				OK
Comments: (-1>) x13.8								
4	296 2404		22	48				OK
Comments: (-1>) x13.8								
5	29 62305		23	284				OK
Comments: (-1>) x13.8								
6	29 62370		24	73				OK
Comments: (0>) x13.4								
7	29 6227		25	296				OK
Comments: (-3>) x14.8								
8	2 962289		26	310				OK
Comments: (0>) x13.4								
8	296 2289 dup		27	310				OK
Comments: x13.4								

REVIEWED BY: _____ Date: 9/19/01 364

L077a

Instrument: 10MSV~~09~~ MTG 9/12/01
20

Calendar Date: ___/___/___ Julian Date: _____

Calibration Information:

Target Method: _____ . m

Calibration Date: ___/___/___

Continuing Calibration Standard: _____

Internal Standard: _____

See p85

Analytical System Information:

GC Oven Temperature Program No.: _____ (from page 2)

Entech Method Designation: _____

Autotune Date: ___/___/___ Autotune File: _____ EM Volts: _____

Source Pressure: _____ Torr

Please see pages 1 and 2 for additional GC/MS and sample acquisition conditions.

Batch Root Directory: /chem/hp9.i/_____ . b

Auto Sample Port	PACE Sample Identification	Client Sample Identification	File Identification	Can No.	Clean Lot No.	Sample Size CC	Analyst	Status
9	2962362		28	60		~~500~~ 50	MTG	OK
Comments:	(+1.5)	x12.2				MTG 9/12/01		
~~15~~ 9	2962362		29	60		500		OK
Comments: MTG 9/12/01		x1.22	OOCH					~~[illegible] 1.10 m~~
10	CC87		30		R-34			RC
Comments:								
11	CC178		31		R-34			Amb
Comments:								
12	CC116		32		R-29			RC
Comments:								
Comments:								
Comments:								
Comments:								
mments:								

REVIEWED BY: [signature] Date: 9/19/01

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Pace Analytical

SUMMA® Canister Leak Checking / Lot Cleaning Logbook

000362

Canister Cleaning Lot No. R-12 Cleaning System ID B

Technician afm

Positive Pressure Leak Check

	Canister ID No.	Initial Pressure (PSIA)	Date/Time of Reading	Final Pressure (PSIA)	Date/Time of Reading	Pressure Change (+/-) (PSI)	Pass/ Fail (P/F)	Source or Ambient (S/A) Canister	Canister Submitted for Lot Cert.	Pass/ Fail (P/F)	Date Certified/ File Name
1	132	21.5	8/10/01 0905	21.5	8/12/01 1105	0	P/F	S/A		P/F	
2	244	21.5	↓	21.5	↓	0	P/F	S/A		P/F	
3	153	22		22		0	P/F	S/A	153	P/F	
4	41	22		22		0	P/F	S/A		P/F	
5	157	22		22		0	P/F	S/A		P/F	
6	105	21.5		21.5		0	P/F	S/A		P/F	
7	177	21.0	↓	21.5	↓	0	P/F	S/A	177	P/F	
8							P/F	S/A		P/F	
9							P/F	S/A		P/F	
10							P/F	S/A		P/F	

Acceptance Criteria: Canisters with a ± 2PSI change over a 24-hour period are a failure and are NOT accepted.

Comments: #4 was not open during cleaning, must be cleaned.

Cleaning Information:

Start Date 8/12/01 Start Time: 1110

Stop Date 8/13/01 Stop Time: 1100

Heat Method: ☒ Heating Bands

☐ Other

L073O (3/01)

Pace Analytical

SUMMA® Canister Leak Checking Logbook

000363

Canister Cleaning Lot No. R-15 Cleaning System ID 5

Technician [signature]

Positive Pressure Leak Check

	Canister ID No.	Initial Pressure (PSIA)	Date/Time of Reading	Final Pressure (PSIA)	Date/Time of Reading	Pressure Change (+/-) (PSI)	Pass/ Fail (P/F)	Source or Ambient (S/A) Canister	Canister Submitted for Lot Cert.	Pass/ Fail (P/F)	Date Certified/ File Name
1	235	21.0	8/15/01 0915	21.0	8/16/01 0920	0	P/F	S / A		P/F	
2	128	21.5	↓	21.5	↓	0	P/F	S / A		P/F	
3	79	21.0		21		0	P/F	S / A		P/F	
4	47	21.5		21.5		0	P/F	S / A		P/F	
5	246	21.0		21.0		0	P/F	S / A		P/F	
6	146	21.0		21.0		0	P/F	S / A		P/F	
7	48	21.5		21.5		0	P/F	S / A	48	P/F	
8	55	21.5		21.0		0.5	P/F	S / A	55	P/F	
9							P/F	S / A		P/F	
10							P/F	S / A		P/F	

Acceptance Criteria: Canisters with a ± 2PSI change over a 24-hour period are a failure and are NOT accepted.

Comments:

Cleaning Information:

Start Date 8/17/01 Start Time: 0830

Stop Date 8/19/01 Stop Time: 1000

Heat Method: ☒ Heating Bands

☐ Other

Pace Analytic

SUMMA® Canister Lea[illegible]hecking / Lot Cleaning Log[illegible]ok

000364

Canister Cleaning Lot No. R-16 Cleaning System ID B

Technician dm

Positive Pressure Leak Check

	Canister ID No.	Initial Pressure (PSIA)	Date/Time of Reading	Final Pressure (PSIA)	Date/Time of Reading	Pressure Change (+/-) (PSI)	Pass/ Fail (P/F)	Source or Ambient (S/A) Canister	Canister Submitted for Lot Cert.	Pass/ Fail (P/F)	Date Certified/ File Name
1	282	22	8/16/01 1100	21.5	8/17/01 1110	0.5	P/F	S / A		P/F	
2	283	21.5	↓	21.5	↓	0	P/F	S / A		P/F	
3	284	21.5	↓	21.5	↓	0	P/F	S / A	284	(P)/F	
4	285	22	↓	22	↓	0	P/F	S / A		P/F	
5	286	22	↓	22	↓	0	P/F	S / A		P/F	
6	287	22	↓	22	↓	0	P/F	S / A		P/F	
7	288	22	↓	22	↓	0	P/F	S / A		P/F	
8	289	22	✓	19	✓	3.0	P/(F)	S / A		P/F	
9	41	See p 44					P/F	S / A	41	(P)/F	
10							P/F	S / A		P/F	

Acceptance Criteria: Canisters with a ± 2PSI change over a 24-hour period are a failure and are NOT accepted.

Comments:

Cleaning Information:

Start Date 8/19/01 Start Time: 1035

Stop Date 8/20/01 Stop Time: 1010

Heat Method: ☑ Heating Bands

☐ Other

3648

Pace Analytical

SUMMA® Canister Leak Checking / Lot Cleaning Logbook

000365

Canister Cleaning Lot No. R-17 Cleaning System ID A

Technician afm.

Positive Pressure Leak Check

	Canister ID No.	Initial Pressure (PSIA)	Date/Time of Reading	Final Pressure (PSIA)	Date/Time of Reading	Pressure Change (+/-) (PSI)	Pass/ Fail (P/F)	Source or Ambient (S/A) Canister	Canister Submitted for Lot Cert.	Pass/ Fail (P/F)	Date Certified/ File Name
1	290	21.5	8/16/01 1130	4.5	8/17/01 1130	17.0	P/F	S / A		P/F	
2	291	22		21.5		0.5	P/F	S / A		P/F	
3	292	21		21.0		0	P/F	S / A	292	P/F	
4	293	21.5		21.5		0	P/F	S / A		P/F	
5	294	21.5		21.5		0	P/F	S / A		P/F	
6	295	21.5		21.0		0.5	P/F	S / A		P/F	
7	296	21.5		21.0		0.5	P/F	S / A	296	P/F	
8	297	21.5		21.0		0.5	P/F	S / A		P/F	
9							P/F	S / A		P/F	
10							P/F	S / A		P/F	

Acceptance Criteria: Canisters with a ± 2PSI change over a 24-hour period are a failure and are NOT accepted.

Comments: 290 was not cleaned.

Cleaning Information:

Start Date 8/14/01 Start Time: 1030

Stop Date 8/20/01 Stop Time: 1015

Heat Method: ☒ Heating Bands

☐ Other

Pace Analy

SUMMA® Canister L Checking / Lot Cleaning Logbook

000366

Canister Cleaning Lot No. R-18 Cleaning System ID A

Technician

Positive Pressure Leak Check

	Canister ID No.	Initial Pressure (PSIA)	Date/Time of Reading	Final Pressure (PSIA)	Date/Time of Reading	Pressure Change (+/-) (PSI)	Pass/ Fail (P/F)	Source or Ambient (S/A) Canister	Canister Submitted for Lot Cert.	Pass/ Fail (P/F)	Date Certified/ File Name
1	298	21.5	8/16/01 1150	21	8/17/01 1150	0.5	P/F	S / A		P/F	
2	299	22		22		0	P/F	S / A		P/F	
3	300	22		22		0	P/F	S / A		P/F	
4	301	22		22		0	P/F	S / A		P/F	
5	302	21.5		21.0		0.5	P/F	S / A		P/F	
6	303	21.5		21.5		0	P/F	S / A	303	(P)/F	
7	304	21.5		21.5		0	P/F	S / A		P/F	
8	305	22		21.5		0.5	P/F	S / A	305	(P)/F	
9							P/F	S / A		P/F	
10							P/F	S / A		P/F	

Acceptance Criteria: Canisters with a ± 2PSI change over a 24-hour period are a failure and are NOT accepted.

Comments:

Cleaning Information:

Start Date 8/17/01 Start Time: 1410

Stop Date 8/19/01 Stop Time: 1000

Heat Method: ☒ Heating Bands

☐ Other

L073O (3/01)

Pace Analytical

SUMMA® Canister Leak Checking / Lot Cleaning Logbook

000367

Canister Cleaning Lot No. R-19 Cleaning System ID A

Technician JM

Positive Pressure Leak Check

	Canister ID No.	Initial Pressure (PSIA)	Date/Time of Reading	Final Pressure (PSIA)	Date/Time of Reading	Pressure Change (+/-) (PSI)	Pass/ Fail (P/F)	Source or Ambient (S/A) Canister	Canister Submitted for Lot Cert.	Pass/ Fail (P/F)	Date Certified/ File Name
1	306	22	8/16/01 1215	22	8/17/01 1215	0	(P)/F	S / A		P / F	
2	307	21.5	↓	2.5	↓	19	P/(F)	S / A		P / F	
3	308	21.0		21.		0	P/F	S / A		P / F	
4	309	21.5		21.5		0	P/F	S / A	309	(P)/F	
5	310	21.5		21.5		0	P/F	S / A		P / F	
6	311	22		22		0	P/F	S / A		P / F	
7	312	22	↓	21.5	↓	0.5	P/F	S / A		P / F	
8	72	see q-19					P/F	S / A	72	(P)/F	
9							P/F	S / A		P / F	
10							P/F	S / A		P / F	

Acceptance Criteria: Canisters with a ± 2PSI change over a 24-hour period are a failure and are NOT accepted.

Comments: 311 was inst cleaned

Cleaning Information:

Start Date 8/20/01 Start Time: 1205

Stop Date 8/21/01 Stop Time: 1020

Heat Method: ☒ Heating Bands

☐ Other

Pace Analytical

SUMMA® Canister Leak Checking / Lot Cleaning Logbook

000368

Canister Cleaning Lot No. ✓ Cleaning System ID ✓ (A)

Technician ✓

Positive Pressure Leak Check											
	Canister ID No.	Initial Pressure (PSIA)	Date/Time of Reading	Final Pressure (PSIA)	Date/Time of Reading	Pressure Change (+/-) (PSI)	Pass/ Fail (P/F)	Source or Ambient (S/A) Canister	Canister Submitted for Lot Cert.	Pass/ Fail (P/F)	Date Certified/ File Name
1	72	~~205~~ dm 8/11 20.5	8/17/01 1155	20.5	8/20/01 1120	0	(P)/F	S / A		P / F	
2	290	21	↓	14.5	↓	6.5	P/(F)	S / A		P / F	
3	289	21	↓	14.5	↓	6.5	P/(F)	S / A		P / F	
4	500 ★	20	↓	0	↓	20	P/(F)	S / A		P / F	
5	501 ★	22	↓	10	↓	12	P/(F)	S / A		P / F	
6	307	21.5	↓	4.5	↓	17	P/(F)	S / A		P / F	
7	289	21	8/20/01 1140	21	8/20/01	0	(P)/F	S / A		P / F	
8	290	21.5	↓	17	↓	5.5	P/(F)	S / A		P / F	
9	307	21.0	↓	20.5	↓	0.5	(P)/F	S / A		P / F	
10	311	see P 20					P / F	S / A		P / F	

Acceptance Criteria: Canisters with a ± 2PSI change over a 24-hour period are a failure and are NOT accepted.

Comments: ★ 500, 501 ~~are stripped cans used to check valves~~ dm 8/20/01 are good valves used to check cans

★ 290, 307, 311 } all cleaned on A ~~[illegible]~~ 1) second cleaning on B
8/29/01 - 1100
8/30/01 - 1020

Cleaning Information:

Start Date 8/21/01 Start Time: 1200

Stop Date 8/22/01 Stop Time: 1015

Heat Method: [x] Heating Bands

[ ] Other

L073O (3/01)

Pace Analytical

SUMMA® Canister Leak Checking / Lot Cleaning Logbook

000369

Canister Cleaning Lot No. R-21 Cleaning System ID A

Technician [signature]

Positive Pressure Leak Check

	Canister ID No.	Initial Pressure (PSIA)	Date/Time of Reading	Final Pressure (PSIA)	Date/Time of Reading	Pressure Change (+/-) (PSI)	Pass/ Fail (P/F)	Source or Ambient (S/A) Canister	Canister Submitted for Lot Cert.	Pass/ Fail (P/F)	Date Certified/ File Name
1	5	21	8/21/01 1025	21	8/22/01 1040	0	P/F	S/A		P/F	
2	75	21.5		21.5		0	P/F	S/A		P/F	
3	175	21.5		21		0.5	P/F	S/A		P/F	
4	241	22		22		0	P/F	S/A		P/F	
5	103	22.5		22.5		0	P/F	S/A	103	P/F	
6	137	22		22		0	P/F	S/A		P/F	
7	272	22		22		0	P/F	S/A	272	P/F	
8	81	22		22		0	P/F	S/A		P/F	
9							P/F	S/A		P/F	
10							P/F	S/A		P/F	

Acceptance Criteria: Canisters with a ± 2PSI change over a 24-hour period are a failure and are NOT accepted.

Comments:

Cleaning Information:

Start Date 8/22/01 Start Time: 1100

Stop Date 8/23/01 Stop Time: 1000

Heat Method: ☒ Heating Bands

☐ Other

Pace Analyti

SUMMA® Canister Le[illegible]hecking / Lot Cleaning Log[illegible]ook

000370

Canister Cleaning Lot No. R-22 Cleaning System ID A

Technician [signature]

Positive Pressure Leak Check

	Canister ID No.	Initial Pressure (PSIA)	Date/Time of Reading	Final Pressure (PSIA)	Date/Time of Reading	Pressure Change (+/-) (PSI)	Pass/ Fail (P/F)	Source or Ambient (S/A) Canister	Canister Submitted for Lot Cert.	Pass/ Fail (P/F)	Date Certified/ File Name
1	60	22.5	8/23/01 1050	22	8/24/01 1055	0.5	P/F	S / A		P / F	
2	126	22	↓	21.5	↓	0.5	P/F	S / A		P / F	
3	114	21.5		21.5		0	P/F	S / A		P / F	
4	130	22.5		22		0.5	P/F	S / A	130	P / F	
5	1	22		22		0	P/F	S / A	1	P / F	
6	196	21.5		21.5		0.5	P/F	S / A		P / F	
7	189	22		21.5		0	P/F	S / A		P / F	
8	59	22	↓	22	↓		P/F	S / A		P / F	
9							P/F	S / A		P / F	
10							P/F	S / A		P / F	

Acceptance Criteria: Canisters with a ± 2PSI change over a 24-hour period are a failure and are NOT accepted.

Comments:

Cleaning Information:

Start Date 8/24/01 Start Time: 1110

Stop Date 8/24/01 Stop Time: 1820

Heat Method: ☑ Heating Bands

☐ Other

L073O (3/01)

STATIC DILUTION

Analysis Date: 01-09-2001
Analysis Time: 08:21:07
Operator :

Barometric Pressure: 29.92
Room Temperature: 24 C
Flask Temperature: 24C
Flask Volume: 2000 ml
Canister Pressure: 30 psig
Canister Volume : 15000 ml
Flask Concentration: 285.587 PPM

Approximate Transfer Volume of Each Analyte: 100 ul
Total ul in Vial:
Transfer Volume 1 (Vial to Flask): 203.71 ul
Transfer Volume 2 (Flask to Cyl.): 4.7661 ml
8cc

.....CANISTER CONTENTS.....

	M.W.	Density	Wf	VOL(ul)	Conc.(ppb)
4-Bromofluorobenzene (BFB)	175.01	1.593	1	109.86	50
Fluorobenzene	96.10	1.024	1	93.85	50

Gas Injections

Name	Inject(cc)
None	

4.8 ml of cocktail → 2L flask, heat to 65°C
Vent after 8cc to 15L canister
Pressurize to 30 psi

MTG 1/9/01

487, 91A neat cocktail
91B MTG 1/9/01
91C MTG 1/11/01
91D MTG 1/29/01
91E MTG 2/26/01
91F MTG 3/26/01
91G MTG 4/19/01
91H MTG 5/14/01
91I MTG 5/30/01
91J MTG 5/31/01
91K MTG 6/19/01
91L RJS 7/5/01
91M MTG 7/20/01
91N MTG 8/1/01
91O MTG 9/12/01
91P MTG 9/12/01

TITLE

Project No.
Book No. 487

8

TO14 STD – 10 ppbv
TO14mix 45.25 cc/min
N2 – 4901

CYLINDER SERIAL NUMBER	SX-33588
CGA OUTLET:	350 SIZE: 1l
PRESSURE:	1025 psig (@ 70 °F)
CONTENTS:	72 cubic feet
WORK ORDER NUMBER	109982
MIXTURE ID or LOT NUMBER	P7483-Recertification

TOXI-MAT-14 STANDARD analyzed 7/17/00 (date)

By:Jeff Medlock

ANALYTICAL METHOD: GC/FID

MIXTURE COMPOSITION by volume

component	nominal	actual	unit
halocarbon 12	1.00	0.99	ppm
chloromethane	1.00	0.97	ppm
halocarbon 114	1.00	1.00	ppm
vinyl chloride	1.00	1.01	ppm
methyl bromide	1.00	1.04	ppm
chloroethane	1.00	1.03	ppm
trichlorofluoromethane	1.00	0.96	ppm
1,1-dichloroethene	1.00	0.98	ppm
methylene chloride	1.00	0.94	ppm
halocarbon 113	1.00	1.02	ppm
1,1-dichloroethane	1.00	0.96	ppm
cis-1,2-dichloroethene	1.00	0.94	ppm
chloroform	1.00	0.96	ppm
1,2-dichloroethane	1.00	0.87	ppm
1,1,1-trichloroethane	1.00	0.93	ppm
benzene	1.00	0.89	ppm
carbon tetrachloride	1.00	0.90	ppm
1,2-dichloropropane	1.00	0.86	ppm
trichloroethylene	1.00	0.86	ppm
cis-1,3-dichloropropene	1.00	1.01	ppm
trans-1,3-dichloropropene	1.00	1.02	ppm
1,1,2-trichloroethane	1.00	0.91	ppm
toluene	1.00	0.94	ppm
1,2-dibromoethane	1.00	0.96	ppm
tetrachloroethylene	1.00	0.90	ppm
chlorobenzene	1.00	0.84	ppm
ethyl benzene	1.00	0.84	ppm
m-xylene	1.00	0.81	ppm
p-xylene	1.00	0.81	ppm
styrene	1.00	0.69	ppm
tetrachloroethane & o-xylene	1.00	0.76	ppm
1,3,5-trimethylbenzene	1.00	0.63	ppm
1,2,4-trimethylbenzene	1.00	0.56	ppm
benzyl chloride	1.00	0.64	ppm
m-dichlorobenzene	1.00	0.64	ppm
p-dichlorobenzene	1.00	0.54	ppm
o-dichlorobenzene	1.00	0.51	ppm
1,2,4-trichlorobenzene	1.00	0.71	ppm
hexachloro-1,3-butadiene	1.00	0.71	ppm
nitrogen, VOC-free	balance	balance	

MTG 8/31/00

TO14-10ppbv	487,89A	8/31/00 MTG
	487,89B	9/13/00 MTG
	487,89C	9/13/00 MTG
	487,89D	9/26/00 MTG
	487,89E	10/5/00 MTG
	487,89F	10/18/00 MTG
	487,89G	11/3/00 MTG
	487,89H	11/20/00 MTG
	487,89I	11/29/00 MTG
	487,89J	12/14/00 MTG
	487,89K	1/9/01 MTG
	487,89L	1/29/01 MTG
	487,89M	2/26/01 MTG
	487,89N	3/26/01 MTG
	487,89O	4/19/01 MTG
	487,89P	5/14/01 MTG
	487,89Q	5/30/01 MTG
	487,89R	6/19/01 MTG
	487,89S	7/5/01 RSS
	487,89T	7/20/01 MTG
	487,89U	8/1/01 MTG
	487,89V	8/29/01 MTG
	89W	9/12/01 MTG
	89X	9/12/01 MTG

To Page No.

Witn

ented by

Date

Recorded by

356

000372

Matheson®
GAS PRODUCTS, INC

CYLINDER SERIAL NUMBER	SX-33588		
CGA OUTLET:	350	SIZE:	1l
PRESSURE:	1025	psig (@ 70 °F)	
CONTENTS:	72	cubic feet	
WORK ORDER NUMBER	109982		
MIXTURE ID or LOT NUMBER	P7483-Recertification		

TOXI-MAT-14 STANDARD analyzed 7/17/00 (date)

By:Jeff Medlock

ANALYTICAL METHOD: GC/FID

MIXTURE COMPOSITION by volume

component	nominal	actual	unit
halocarbon 12	1.00	0.99	ppm
chloromethane	1.00	0.97	ppm
halocarbon 114	1.00	1.00	ppm
vinyl chloride	1.00	1.01	ppm
methyl bromide	1.00	1.04	ppm
chloroethane	1.00	1.03	ppm
trichlorofluoromethane	1.00	0.96	ppm
1,1-dichloroethene	1.00	0.98	ppm
methylene chloride	1.00	0.94	ppm
halocarbon 113	1.00	1.02	ppm
1,1-dichloroethane	1.00	0.96	ppm
cis-1,2-dichloroethene	1.00	0.94	ppm
chloroform	1.00	0.96	ppm
1,2-dichloroethane	1.00	0.87	ppm
1,1,1-trichloroethane	1.00	0.93	ppm
benzene	1.00	0.89	ppm
carbon tetrachloride	1.00	0.90	ppm

information continued on other side of this tag

component	nominal	actual	unit
1,2-dichloropropane	1.00	0.85	ppm
trichloroethylene	1.00	0.86	ppm
cis-1,3-dichloropropene	1.00	1.01	ppm
trans-1,3-dichloropropene	1.00	1.02	ppm
1,1,2-trichloroethane	1.00	0.91	ppm
toluene	1.00	0.94	ppm
1,2-dibromoethane	1.00	0.96	ppm
tetrachloroethylene	1.00	0.90	ppm
chlorobenzene	1.00	0.84	ppm
ethyl benzene	1.00	0.84	ppm
m-xylene	1.00	0.81	ppm
p-xylene	1.00	0.81	ppm
styrene	1.00	0.69	ppm
tetrachloroethane & o-xylene	1.00	0.76	ppm
1,3,5-trimethylbenzene	1.00	0.63	ppm
1,2,4-trimethylbenzene	1.00	0.56	ppm
benzyl chloride	1.00	0.64	ppm
m-dichlorobenzene	1.00	0.64	ppm
p-dichlorobenzene	1.00	0.54	ppm
o-dichlorobenzene	1.00	0.51	ppm
1,2,4-trichlorobenzene	1.00	0.71	ppm
hexachloro-1,3-butadiene	1.00	0.71	ppm
nitrogen, VOC-free	balance	balance	

REFERENCE 31

SAMPLING TRIP REPORT

SITE NAME: Roselle Park Baseball Fields
DCN NO.: 20103.1024.103
W.O.: 20103-001-001-1024-00
CASE NO.: 29681

EPA I.D. NO.: NJSFN0204259

SAMPLING DATE : 29 August 2001

1. Site Location: Refer to Figure 1

2. Sample Locations: Refer to Figure 2

3. Sample Descriptions: Refer to Table 1

4. Laboratories Receiving Samples:

Analysis	Name and Address of Laboratory
Target Compound List (TCL) Organics	Liberty Analytical 501 Madison Avenue Cary, NC 27513
Target Analyte List (TAL) Metals	Chemtech Consulting Group 110 Route 4 Englewood, NJ 07631
EPA TO-14 Volatile Organic Compounds (VOCs)	Pace Analytical Services, Inc. 1700 Elm Street, Suite 200 Minneapolis, MN 55414

5. Sample Dispatch Data:

One aqueous sample and 28 soil samples for TAL metals (excluding cyanide) analysis were shipped to Chemtech Consulting on 8/29/01 at 1700 hours via Federal Express (Airbill No. 818366878347).

One aqueous sample and 28 soil samples for TCL volatiles, BNA and Pesticides/PCB analysis were shipped to Liberty Analytical on 8/29/01 at 1700 hours via Federal Express (Airbill No. 818366878336).

Twenty-nine soil gas samples for EPA TO-14 VOCs analysis were shipped to Pace Analytical Services, Inc., on 8/30/01 at 1730 hours via Federal Express (Airbill Nos. 791648511749, 791648512837, 790954566374, 790146962759, 792440845815, 790146965221, 790146966445, and 792440847553).

6. On-Site Personnel:

Name	Company	Duties on Site
Scott Snyder	WESTON	Project Manager, Sampler, Site Health and Safety Officer
Gerry Gilliland	WESTON	Sample Management Officer
Alison Sedlak	WESTON	Sampler
Nelson Feick	WESTON	Sampler
Joe Leonard	WESTON	Sampler
Linda Wood	U.S. EPA	EPA Oversite

7. Additional Comments:

On 29 August 2001, Roy F. Weston, Inc., (WESTON) personnel collected surface soil (depth: 0 to 3 inches) and soil gas (depth: 3 feet) samples from the Roselle Park Baseball Fields site. All soil samples analyzed for volatile organics were collected using EnCore™ dedicated sampling devises. All soil gas samples were collected using evacuated 6-liter summa canisters. Soil gas sample SG22 (equipment blank) was collected on 30 August 2001 at the WESTON office by filling a summa canister with nitrogen in the following manner: A cannister of pressurized nitrogen (provided by WESTON) was connected to an evacuated cannister with a clean piece of Teflon tubing (same tubing and length used during sampling). The pressurized canister was opened to allow the nitrogen to flow into the tubing. The evacuated cannister was then opened to collect the nitrogen until the cannister was full. All samples were collected as part of the Site Inspection (SI) conducted on site. All soil samples collected by WESTON were analyzed for Target Compound List (TCL) and Target Analyte List (TAL) (excluding cyanide), parameters through the U.S. EPA Contract Laboratory Program. All soil gas samples collected by WESTON were analyzed for EPA TO-14 VOCs by a non-CLP laboratory contracted by WESTON.

8. Report Prepared by: _____ Date: 9/5/01
Scott Snyder

9. Report Approved by: _____ Date: 9/5/01
W. S. Butterfield, CHMM

SITE LOCATION AND SAMPLING LOCATION MAPS

LEGEND:

GRAPHIC SCALE

1000 0 1000 2000

1 inch = 2000 ft.

SOURCE: USGS TOPO QUAD - ROSELLE NJ

TITLE:

SITE LOCATION MAP

PROJECT: ROSELLE PARK BASEBALL FIRLDS
ROSELLE PARK, NEW JERSEY

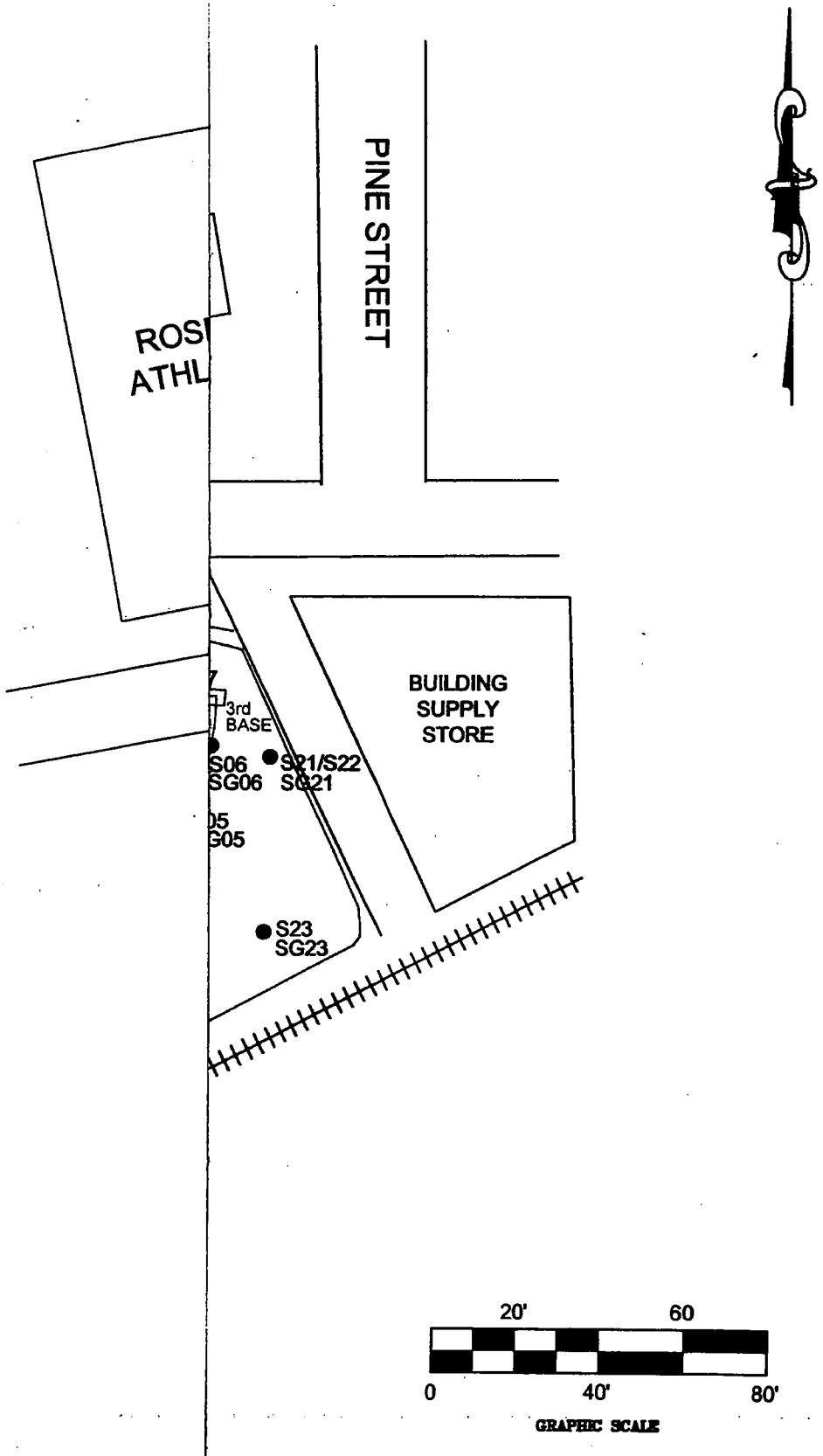
CLIENT NAME: U.S. ENVIRONMENTAL PROTECTION AGENCY

WESTON

DATE: AUGUST 2001

FIGURE #: 1

00426



SAMPLE LOCATION MAP

	DATE:	FIGURE #:
WESTON	SEPTEMBER 2001	3A

00425

TABLE 1
SAMPLE DESCRIPTIONS
ROSELLE PARK BASEBALL FIELDS
ROSELLE PARK, NEW JERSEY

SAMPLE NUMBER 1024-	ORGANIC CLP NO.	INORGANIC CLP NO.	DATE	TIME	COMMENTS
S01	B0B85	MB0AX7	8/29/01	0825	Surface soil sample collected from Adase Field; 20 feet from home plate between home plate and 1st base [Matrix Spike/Matrix Spike Duplicate (MS/MSD)].
S02	B0B86	MB0AX8	8/29/01	0840	Surface soil sample collected from Adase Field; 40 feet from home plate between home plate and 1st base.
S03	B0B87	MB0AX9	8/29/01	0900	Surface soil sample collected from Adase Field; 20 feet from 1st base between 1st and 2nd base.
S04	B0B88	MB0AY0	8/29/01	0910	Surface soil sample collected from Adase Field; 40 feet from 1st base between 1st and 2nd base.
S05	B0B89	MB0AY1	8/29/01	0925	Surface soil sample collected from Adase Field; 20 feet from 2nd base between 2nd and 3rd base.
S06	B0B90	MB0AY2	8/29/01	0935	Surface soil sample collected from Adase Field; 40 feet from 2nd base between 2nd and 3rd base.
S07	B0B91	MB0AY3	8/29/01	0955	Surface soil sample collected from Adase Field; 20 feet from 3rd base between 3rd base and home plate.
S08	B0B92	MB0AY4	8/29/01	1010	Surface soil sample collected from Adase Field; 40 feet from 3rd base between 3rd base and home plate.
S09	B0B93	MB0AY5	8/29/01	1030	Surface soil sample collected from Adase Field; adjacent to home plate.
S10	B0B94	MB0AY6	8/29/01	1040	Surface soil sample collected from Adase Field; adjacent to pitcher's mound.
S11	B0B95	MB0AY7	8/29/01	1215	Surface soil sample collected from Wolf Field; 20 feet from home plate between home plate and 1st base (MS/MSD).
S12	B0B96	MB0AY8	8/29/01	1230	Surface soil sample collected from Wolf Field; 40 feet from home plate between home plate and 1st base.

SAMPLE NUMBER 1024-	ORGANIC CLP NO.	INORGANIC CLP NO.	DATE	TIME	COMMENTS
S13	B0B97	MB0AY9	8/29/01	1305	Surface soil sample collected from Wolf Field: 20 feet from 1st base between 1st and 2nd base.
S14	B0B98	MB0AZ0	8/29/01	1310	Surface soil sample collected from Wolf Field; 40 feet from 1st base between 1st and 2nd base.
S15	B0B99	MB0AZ1	8/29/01	1330	Surface soil sample collected from Wolf field; 20 feet from 2nd base between 2nd and 3rd base.
S16	B0BA0	MB0AZ2	8/29/01	1325	Surface soil sample collected from Wolf Field; 40 feet from 2nd base between 2nd and 3rd base.
S17	B0BA1	MB0AZ3	8/29/01	1350	Surface soil sample collected from Wolf Field; 20 feet from 3rd base between 3rd base and home plate.
S18	B0BA2	MB0AZ4	8/29/01	1355	Surface soil sample collected from Wolf Field; 40 feet from 3rd base between 3rd base and home plate.
S19	B0BA3	MB0AZ5	8/29/01	1400	Surface soil sample collected from Wolf Field; adjacent to home plate.
S20	B0BA4	MB0AZ6	8/29/01	1405	Surface soil sample collected from Wolf Field; adjacent to pitcher's mound.
S21	B0BA5	MB0AZ7	8/29/01	1100	Surface soil sample collected from Adase Field; left field.
S22	B0BA6	MB0AZ8	8/29/01	1110	Duplicate of S21.
S23	B0BA7	MB0AZ9	8/29/01	1120	Surface soil sample collected from Adase Field; center field.
S24	B0BA8	MB0B00	8/29/01	1130	Surface soil sample collected from Adase Field; right field.
S25	B0BA9	MB0B01	8/29/01	1435	Surface soil sample collected from Wolf Field; left field.
S26	B0BB0	MB0B02	8/29/01	1440	Surface soil sample collected from Wolf Field; center field.
S27	B0BB1	MB0B03	8/29/01	1445	Surface soil sample collected from Wolf Field; right field.
S28	B0BB2	MB0B04	8/29/01	1450	Duplicate of S27.
RB01	B0BB3	MB0B05	8/29/01	0820	Rinsate Blank; bowl/trowel.

SAMPLE NUMBER 1024-	ORGANIC CLP NO.	INORGANIC CLP NO.	DATE	TIME	COMMENTS
SG01	N/A	N/A	8/29/01	0850	Soil gas sample collected adjacent to S01.
SG02	N/A	N/A	8/29/01	0910	Soil gas sample collected adjacent to S02.
SG03	N/A	N/A	8/29/01	0925	Soil gas sample collected adjacent to S03.
SG04	N/A	N/A	8/29/01	0935	Soil gas sample collected adjacent to S04.
SG05	N/A	N/A	8/29/01	0950	Soil gas sample collected adjacent to S05.
SG06	N/A	N/A	8/29/01	1000	Soil gas sample collected adjacent to S06.
SG07	N/A	N/A	8/29/01	1010	Soil gas sample collected adjacent to S07.
SG08	N/A	N/A	8/29/01	1025	Soil gas sample collected adjacent to S08.
SG09	N/A	N/A	8/29/01	1040	Soil gas sample collected adjacent to S09.
SG10	N/A	N/A	8/29/01	1055	Soil gas sample collected adjacent to S10.
SG11	N/A	N/A	8/29/01	1240	Soil gas sample collected adjacent to S11.
SG12	N/A	N/A	8/29/01	1230	Soil gas sample collected adjacent to S12.
SG13	N/A	N/A	8/29/01	1305	Soil gas sample collected adjacent to S13.
SG14	N/A	N/A	8/29/01	1330	Soil gas sample collected adjacent to S14.
SG15	N/A	N/A	8/29/01	1345	Soil gas sample collected adjacent to S15.
SG16	N/A	N/A	8/29/01	1355	Soil gas sample collected adjacent to S16.
SG17	N/A	N/A	8/29/01	1405	Soil gas sample collected adjacent to S17.
SG18	N/A	N/A	8/29/01	1420	Soil gas sample collected adjacent to S18.
SG19	N/A	N/A	8/29/01	1430	Soil gas sample collected adjacent to S19.
SG20	N/A	N/A	8/29/01	1440	Soil gas sample collected adjacent to S20.
SG21	N/A	N/A	8/29/01	1125	Soil gas sample collected adjacent to S21/S22.
SG22	N/A	N/A	8/30/01	1400	Equipment Blank.
SG23	N/A	N/A	8/29/01	1135	Soil gas sample collected adjacent to S23.
SG24	N/A	N/A	8/29/01	1145	Soil gas sample collected adjacent to S24.
SG25	N/A	N/A	8/29/01	1450	Soil gas sample collected adjacent to S25.

SAMPLE NUMBER 1024-	ORGANIC CLP NO.	INORGANIC CLP NO.	DATE	TIME	COMMENTS
SG26	N/A	N/A	8/29/01	1500	Soil gas sample collected adjacent to S26.
SG27	N/A	N/A	8/29/01	1515	Soil gas sample collected adjacent to S27.
SG28	N/A	N/A	8/29/01	1515	Duplicate of SG27.
SG29	N/A	N/A	*	*	Trip Blank.

* A summa cannister trip blank is a cannister that is received with the same batch of canisters that is used for soil gas sampling. The trip blank cannister is returned unopened to the laboratory along with the sample canisters. Analytical results of the trip blank are utilized in the evaluation of potential cross contamination between samples during shipment/storage, or if on-site atmospheric contaminants are seeping into the sample canisters.

ATTACHMENT 1

TRAFFIC REPORTS/CHAIN OF CUSTODY RECORDS

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 29681
DAS No:

R

Region:	2
Project Code:	
Account Code:	
CERCLIS ID:	NJSFN0204259
Spill ID:	24
Site Name/State:	Roselle Park Baseball Fields/NJ
Project Leader:	Scott Snyder
Action:	Site Inspection
Sampling Co:	Roy F. Weston, Inc.

Date Shipped:	8/29/01
Carrier Name:	FedEx
Airbill:	8183 6687 8336
Shipped to:	Liberty Analytical 501 Madison Avenue Cary NC 27513 (919) 379-4080

Chain of Custody Record

Sampler Signature: Gerald Gilliland

Relinquished By (Date / Time)	Received By (Date / Time)
Gerald Gilliland 8-29-01/1700	→ FedEx
2	
3	
4	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
B0B85	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (8)	1024-S01	S: 8/29/01 8:25	MB0AX7	--
B0B86	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S02	S: 8/29/01 8:40	MB0AX8	--
B0B87	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S03	S: 8/29/01 9:00	MB0AX9	--
B0B88	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S04	S: 8/29/01 9:10	MB0AY0	--
B0B89	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S05	S: 8/29/01 9:25	MB0AY1	--
B0B90	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S06	S: 8/29/01 9:35	MB0AY2	--
B0B91	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S07	S: 8/29/01 9:55	MB0AY3	--
B0B92	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S08	S: 8/29/01 10:10	MB0AY4	--
B0B93	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S09	S: 8/29/01 10:30	MB0AY5	--
B0B94	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S10	S: 8/29/01 10:40	MB0AY6	--

Shipment for Case Complete? N	**Sample(s) to be used for laboratory QC:** B0B85	**Additional Sampler Signature(s):**	**Chain of Custody Seal Number:**
Analysis Key:	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?**_____

BNA/PEST = CLP TCL Semivolatiles and Pesticides/PC, BNA/PEST-a = CLP TCL Semivolatiles and Pesticides/, H2O% = CLP Moisture Content, VOA = CLP TCL Volatiles, VOC-a = CLP TCL Volatiles (aqueous)

TR 2-382696984-082901-0001

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EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 29681
DAS No:
R

Region:	2
Project Code:	
Account Code:	
CERCLIS ID:	NJSFN0204259
Spill ID:	24
Site Name/State:	Roselle Park Baseball Fields/NJ
Project Leader:	Scott Snyder
Action:	Site Inspection
Sampling Co:	Roy F. Weston, Inc.

Date Shipped:	8/29/01
Carrier Name:	FedEx
Airbill:	8183 6687 8336
Shipped to:	Liberty Analytical 501 Madison Avenue Cary NC 27513 (919) 379-4080

Chain of Custody Record

Sampler Signature: [signature]

Relinquished By (Date / Time)	Received By (Date / Time)
1 [signature] 8-29-01 / 1700	→ FedEx
2	
3	
4	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
B0BA5	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S21	S: 8/29/01 11:00	MB0AZ7	–
B0BA6	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S22	S: 8/29/01 11:10	MB0AZ8	Field Duplicate
B0BB3	Rinsate Blank/ Gerry Gilliland	L/G	BNA/PEST-a (21), VOC-a (21)	(Ice Only) (6)	1024-RB01	S: 8/29/01 8:20	MB0B05	Rinsate

Shipment for Case Complete? N	**Sample(s) to be used for laboratory QC:** B0B85	**Additional Sampler Signature(s):**	**Chain of Custody Seal Number:**
Analysis Key:	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?**_____

BNA/PEST = CLP TCL Semivolatiles and Pesticides/PC, BNA/PEST-a = CLP TCL Semivolatiles and Pesticides/, H2O% = CLP Moisture Content, VOA = CLP TCL Volatiles, VOC-a = CLP TCL Volatiles (aqueous)

TR 2-382696984-082901-0001

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Send Co ontract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., , VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

F2V

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 29681
DAS No:
R

Region:	2
Project Code:	
Account Code:	
CERCLIS ID:	NJSFN0204259
Spill ID:	24
Site Name/State:	Roselle Park Baseball Fields/NJ
Project Leader:	Scott Snyder
Action:	Site Inspection
Sampling Co:	Roy F. Weston, Inc.

Date Shipped:	8/29/01
Carrier Name:	FedEx
Airbill:	8183 6687 8336
Shipped to:	Liberty Analytical 501 Madison Avenue Cary NC 27513 (919) 379-4080

Chain of Custody Record

Sampler Signature: Gerald Gilliland

Relinquished By (Date / Time)	Received By (Date / Time)
Gerald Gilliland 8-29-01 / 1700	→ FedEx
2	
3	
4	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
B0B95	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (8)	1024-S11	S: 8/29/01 12:15	MB0AY7	--
B0B96	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S12	S: 8/29/01 12:30	MB0AY8	--
B0B97	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S13	S: 8/29/01 13:05	MB0AY9	--
B0B98	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S14	S: 8/29/01 13:10	MB0AZ0	--
B0B99	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S15	S: 8/29/01 13:30	MB0AZ1	--
B0BA0	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S16	S: 8/29/01 13:25	MB0AZ2	--
B0BA1	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S17	S: 8/29/01 13:50	MB0AZ3	--
B0BA2	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S18	S: 8/29/01 13:55	MB0AZ4	--
B0BA3	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S19	S: 8/29/01 14:00	MB0AZ5	--
B0BA4	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S20	S: 8/29/01 14:05	MB0AZ6	--

Shipment for Case Complete? Y	**Sample(s) to be used for laboratory QC:** B0B95	**Additional Sampler Signature(s):**	**Chain of Custody Seal Number:**
Analysis Key:	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?**_____

BNA/PEST = CLP TCL Semivolatiles and Pesticides/PC, H2O% = CLP Moisture Content, VOA = CLP TCL Volatiles

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EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 29681
DAS No:
R

Region:	2
Project Code:	
Account Code:	
CERCLIS ID:	NJSFN0204259
Spill ID:	24
Site Name/State:	Roselle Park Baseball Fields/NJ
Project Leader:	Scott Snyder
Action:	Site Inspection
Sampling Co:	Roy F. Weston, Inc.

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Carrier Name:	FedEx
Airbill:	8183 6687 8336
Shipped to:	Liberty Analytical 501 Madison Avenue Cary NC 27513 (919) 379-4080

Chain of Custody Record

Sampler Signature: Gerald Gilliland

Relinquished By (Date / Time)	Received By (Date / Time)
1 Gerald Gilliland 8-29-01 1700	→ FedEx
2	
3	
4	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
B0BA7	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S23	S: 8/29/01 11:20	MB0AZ9	–
B0BA8	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S24	S: 8/29/01 11:30	MB0B00	–
B0BA9	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S25	S: 8/29/01 14:35	MB0B01	–
B0BB0	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S26	S: 8/29/01 14:40	MB0B02	–
B0BB1	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S27	S: 8/29/01 14:45	MB0B03	–
B0BB2	Surface Soil (0"-3")/ Gerry Gilliland	M/G	BNA/PEST (21), H2O% (21), VOA (21)	(Ice Only) (5)	1024-S28	S: 8/29/01 14:50	MB0B04	Field Duplicate

Shipment for Case Complete? Y	**Sample(s) to be used for laboratory QC:** B0B95	**Additional Sampler Signature(s):**	**Chain of Custody Seal Number:**
Analysis Key:	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?**_____

BNA/PEST = CLP TCL Semivolatiles and Pesticides/PC, H2O% = CLP Moisture Content, VOA = CLP TCL Volatiles

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F2V

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 29681
DAS No:

R

Region:	2
Project Code:	
Account Code:	
CERCLIS ID:	NJSFN0204259
Spill ID:	24
Site Name/State:	Roselle Park Baseball Fields/NJ
Project Leader:	Scott Snyder
Action:	Site Inspection
Sampling Co:	Roy F. Weston, Inc.

Date Shipped:	8/29/01
Carrier Name:	FedEx
Airbill:	8183 6687 8347
Shipped to:	Chemtech Consulting Group (CHEM) 110 Route 4 Englewood NJ 07631 (201) 568-7400

Chain of Custody Record

Sampler Signature: Gerald Gilliland

Relinquished By (Date / Time)	Received By (Date / Time)
1 Gerald Gilliland 8-29-01 / 1700	→ Fed Ex
2	
3	
4	

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
MB0AX7	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S01	S: 8/29/01 8:25	B0B85	–
MB0AX8	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S02	S: 8/29/01 8:40	B0B86	–
MB0AX9	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S03	S: 8/29/01 9:00	B0B87	–
MB0AY0	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S04	S: 8/29/01 9:10	B0B88	–
MB0AY1	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S05	S: 8/29/01 9:25	B0B89	–
MB0AY2	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S06	S: 8/29/01 9:35	B0B90	–
MB0AY3	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S07	S: 8/29/01 9:55	B0B91	–
MB0AY4	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S08	S: 8/29/01 10:10	B0B92	–
MB0AY5	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S09	S: 8/29/01 10:30	B0B93	–
MB0AY6	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S10	S: 8/29/01 10:40	B0B94	–

Shipment for Case Complete? Y	**Sample(s) to be used for laboratory QC:** MB0AX7 & MB0AY7	**Additional Sampler Signature(s):**	**Chain of Custody Seal Number:**
Analysis Key:	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?**_____

TM = CLP TAL Total Metals, TM-s = CLP TAL Total Metals (solid)

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EPA USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 29681
DAS No:
R

Region: 2	Date Shipped: 8/29/01	**Chain of Custody Record**	Sampler Signature: Gerry Gilliland
Project Code:	Carrier Name: FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:	Airbill: 8183 6687 8347	Gerry Gilliland 8-29-01 / 1700	→ FedEx
CERCLIS ID: NJSFN0204259	Shipped to: Chemtech Consulting Group (CHEM) 110 Route 4 Englewood NJ 07631 (201) 568-7400	2	
Spill ID: 24		3	
Site Name/State: Roselle Park Baseball Fields/NJ		4	
Project Leader: Scott Snyder			
Action: Site Inspection			
Sampling Co: Roy F. Weston, Inc.			

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MB0AY7	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S11	S: 8/29/01	12:15	B0B95	--
MB0AY8	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S12	S: 8/29/01	12:30	B0B96	--
MB0AY9	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S13	S: 8/29/01	13:05	B0B97	--
MB0AZ0	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S14	S: 8/29/01	13:10	B0B98	--
MB0AZ1	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S15	S: 8/29/01	13:30	B0B99	--
MB0AZ2	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S16	S: 8/29/01	13:25	B0BA0	--
MB0AZ3	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S17	S: 8/29/01	13:50	B0BA1	--
MB0AZ4	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S18	S: 8/29/01	13:55	B0BA2	--
MB0AZ5	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S19	S: 8/29/01	14:00	B0BA3	--
MB0AZ6	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S20	S: 8/29/01	14:05	B0BA4	--

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
	MB0AX7 & MB0AY7		
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?_____
TM = CLP TAL Total Metals, TM-s = CLP TAL Total Metals (solid)			

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F2V[redacted]

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 29681 **R**
DAS No:

Region:	2	**Date Shipped:**	8/29/01
Project Code:		**Carrier Name:**	FedEx
Account Code:		**Airbill:**	8183 6687 8347
CERCLIS ID:	NJSFN0204259	**Shipped to:**	Chemtech Consulting Group (CHEM) 110 Route 4 Englewood NJ 07631 (201) 568-7400
Spill ID:	24		
Site Name/State:	Roselle Park Baseball Fields/NJ		
Project Leader:	Scott Snyder		
Action:	Site Inspection		
Sampling Co:	Roy F. Weston, Inc.		

Chain of Custody Record — **Sampler Signature:** Gerald Gilliland

Relinquished By (Date / Time)	Received By (Date / Time)
1 Gerald Gilliland 8-29-01/1700	→ FedEx
2	
3	
4	

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
MB0AZ7	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S21	S: 8/29/01 11:00	B0BA5	–
MB0AZ8	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S22	S: 8/29/01 11:10	B0BA6	Field Duplicate
MB0AZ9	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S23	S: 8/29/01 11:20	B0BA7	–
MB0B00	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S24	S: 8/29/01 11:30	B0BA8	–
MB0B01	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S25	S: 8/29/01 14:35	B0BA9	–
MB0B02	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S26	S: 8/29/01 14:40	B0BB0	–
MB0B03	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S27	S: 8/29/01 14:45	B0BB1	–
MB0B04	Surface Soil (0"-3")/ Gerry Gilliland	M/G	TM-s (21)	(Ice Only) (1)	1024-S28	S: 8/29/01 14:50	B0BB2	Field Duplicate
MB0B05	Rinsate Blank/ Gerry Gilliland	L/G	TM (21)	(HNO3) (1)	1024-RB01	S: 8/29/01 8:20	B0BB3	Rinsate

Shipment for Case Complete? Y	**Sample(s) to be used for laboratory QC:** MB0AX7 & MB0AY7	**Additional Sampler Signature(s):**	**Chain of Custody Seal Number:**
Analysis Key:	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?**_____

TM = CLP TAL Total Metals, TM-s = CLP TAL Total Metals (solid)

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