Client: U.S. ARMY CORPS OF ENGINEERS
Sample: IC-BS-7
Lab ID: W304JI11
Method: SW 846-8270 by CLP SOW 3/90

Date Extracted: 04/26/93
Date Analyzed: 04/28/93
Date Sampled: 04/18/93
Data File ID: RH1172

GC/MS
ACID EXTRACTABLE PRIORITY POLLUTANTS/HAZARDOUS SUBSTANCE LIST COMPOUNDS

DRY ___ WET X WEIGHT

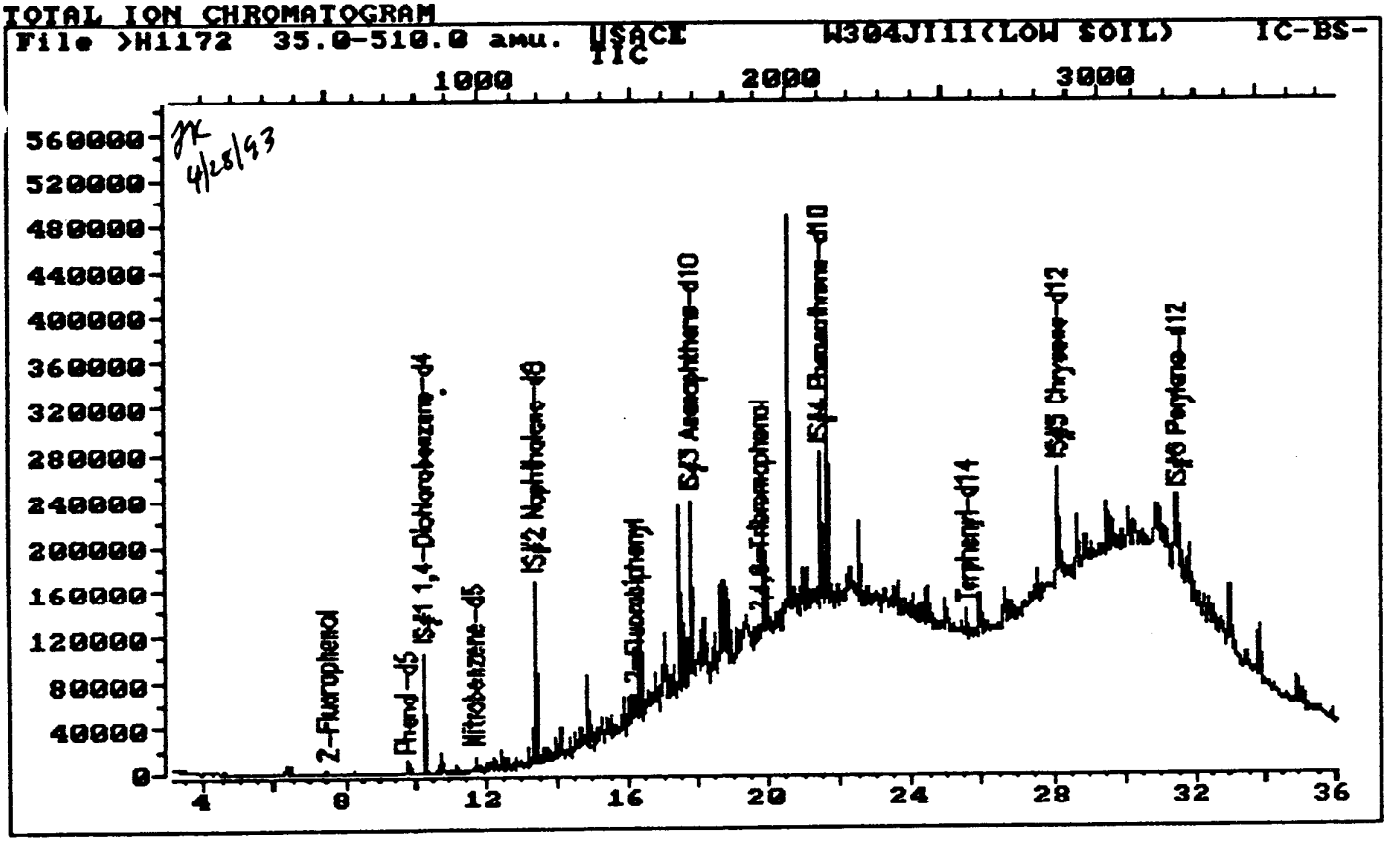
Compound	Chromatographic Retention Time (min.)	Concentration (ug/kg)	PQL (ug/kg)
Phenol		BQL	830.
2-Chlorophenol		BQL	830.
2-Nitrophenol		BQL	830.
2,4-Dimethylphenol		BQL	830.
2,4-Dichlorophenol		BQL	830.
4-Chloro-3-methylphenol		BQL	830.
2,4,6-Trichlorophenol		BQL	830.
2,4-Dinitrophenol		BQL	4200.
4-Nitrophenol		BQL	4200.
4,6-Dinitro-2-methylphenol		BQL	4200.
Pentachlorophenol		BQL	4200.
2-Methylphenol		BQL	830.
4-Methylphenol		BQL	830.
Benzoic acid		BQL	4200.
2,4,5-Trichlorophenol		BQL	4200.

SURROGATE RECOVERY	(%)	QC Range
Phenol-d5	31	24-113
2-Fluorophenol	18	25-121
2,4,6-Tribromophenol	44	19-122

Surrogate Spike Level: 3300 ug/kg
Associated Blank: BNA RH117E

B : Detected in Blank
D : Quantitated by a Secondary Dilution
J : Detected Below Quantitation Limit
CI : Cannot Calculate Recovery due to Coeluting Interference
DO : Diluted Out
BQL: Below Quantitation Limit
PQL: Practical Quantitation Limit
MS : Matrix Spike Compound Level: NA

TOTAL ION CHROMATOGRAM



Data File: >H1172::D4 Quant Output File: ^H1172::BQ
Name: USACE W304JI11
Misc: (LOW SOIL) IC-BS-7 INST H BTL#27

Id File: ID SV::DB
Title: SEMIVOLATILES BY SW846-8270/EPA 625 (CC#3796931) APR93
Last Calibration: 930428 09:30

Operator ID: LYNN
Quant Time: 930428 13:20
Injected at: 930428 12:43

Client: U.S. ARMY CORPS OF ENG.
Sample: LABORATORY CONTROL SPIKE P116T
Lab ID: BS04JI (TCLP)
Method: SW 846-8270 by CLP SOW 3/90

Date Extracted: 04/21/93
Date Analyzed: 04/27/93
Date Sampled: NA
Data File ID: RP116T

GC/MS
TCLP EXTRACTABLES

Compound	Chromatographic Retention Time (min.)	Leachate Concentration (ug/l)	POL (ug/l)	RTL (ug/l)
Pyridine	3.61	MS 42%	50.	5000.
1,4-Dichlorobenzene	9.79	MS 66%	50.	7500.
Hexachloroethane	10.95	MS 50%	50.	3000.
Nitrobenzene	11.18	MS 79%	50.	2000.
Hexachloro-1,3-butadiene	13.42	MS 47%	50.	500.
2,4-Dinitrotoluene	17.82	MS 63%	50.	130.
Hexachlorobenzene	20.06	MS 87%	50.	130.
Cresols (total)	10.72-11.11	MS 85%	50.	200000.
2,4,6-Trichlorophenol	15.42	MS 76%	50.	2000.
2,4,5-Trichlorophenol	15.51	MS 74%	250.	400000.
Pentachlorophenol	20.55	MS 63%	250.	100000.

SURROGATE RECOVERY	(%)	QC Range
Nitrobenzene-d5	74	35-114
2-Fluorobiphenyl	76	43-116
Terphenyl-d14	78	33-141
Phenol-d5	73	10-110
2-Fluorophenol	75	21-110
2,4,6-Tribromophenol	86	10-123

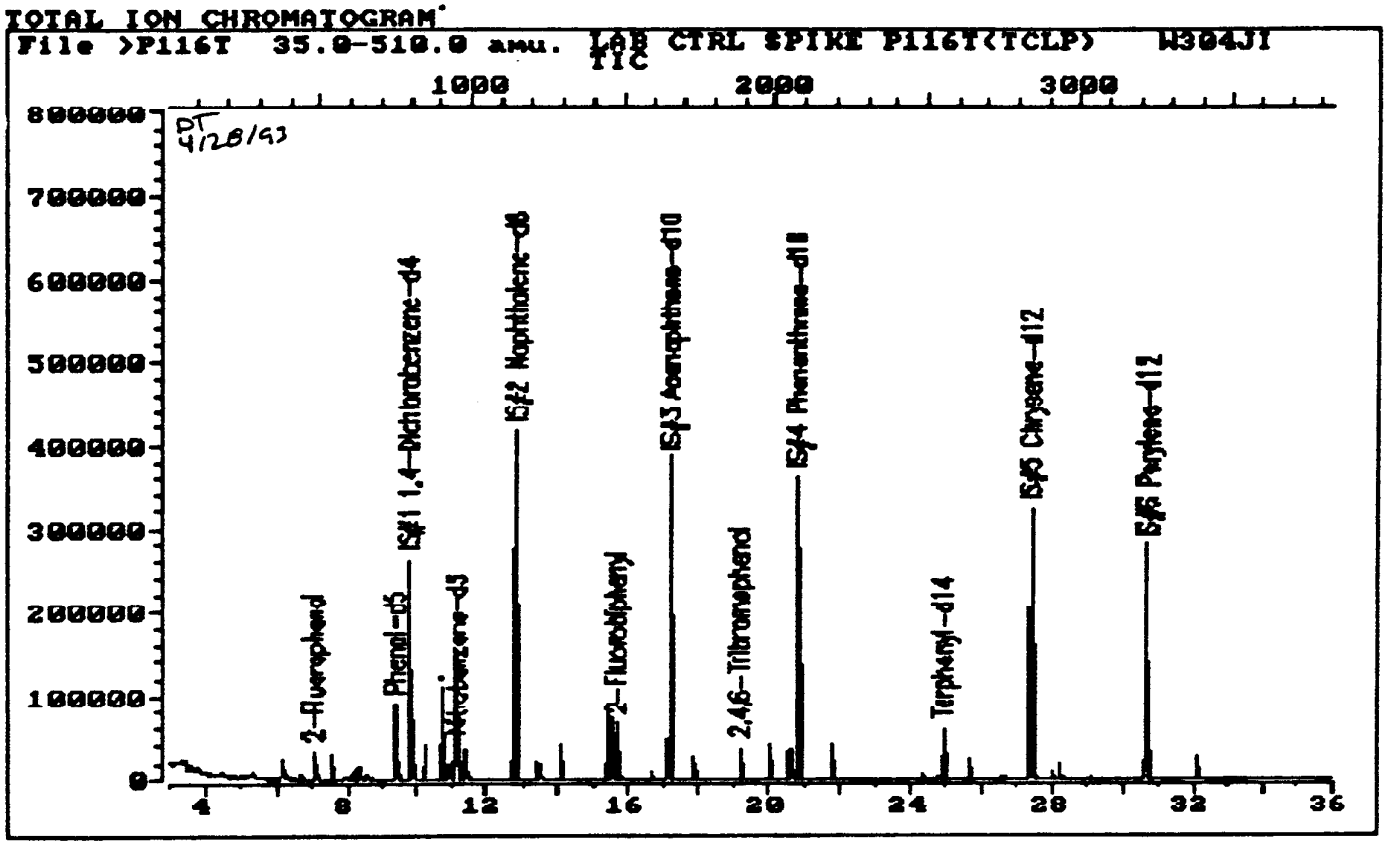
SURROGATE SPIKE LEVEL
Base/Neutral : 100 ug/l
Acid : 150 ug/l

B : Detected in Blank
D : Quantitated by a Secondary Dilution
J : Detected Below Quantitation Limit
CI : Cannot Calculate Recovery due to Coeluting Interference
DO : Diluted Out
BQL: Below Quantitation Limit
POL: Practical Quantitation Limit
RTL: Regulatory Threshold Limits
Associated Blank: BNA RP116N
MS : Matrix Spike Compound Level: 100 ug/l

TCLP MS QC RANGES
(* QC ranges not available in published EPA methodology)
(+ EPA CLP SOW 3/90 Advisory Ranges)
(# SW 846-8270 Revision 1 November 1990)

Pyridine	: *
Hexachloroethane	:40-113#
Nitrobenzene	:35-180#
1,4-Dichlorobenzene	:36-97+
2,4-Dinitrotoluene	:24-96
Hexachloro-1,3-butadiene	:24-116#
Hexachlorobenzene	: 0-152#
Pentachlorophenol	: 9-103+
Cresols (total):	: *
2,4,6-Trichlorophenol	:37-144#
2,4,5-Trichlorophenol	: *

TOTAL ION CHROMATOGRAM



Data File: >P116T::D8 Quant Output File: ^P116T::BQ
Name: LAB CTRL SPIKE P116T
Misc: (TCLP) W304JI INST P BTL#21

Id File: ID_TP1::DB
Title: TCLP SEMIVOLATILE ANALYSIS BY SW846-8270 (CC#2639247) MAR93
Last Calibration: 930427 11:10

Operator ID: BRUCE
Quant Time: 930427 11:42
Injected at: 930427 04:39

Client: U.S. ARMY CORPS OF ENG.
Sample: BNA LAB BLANK RP116N
Lab ID: W304JI (TCLP)
Method: SW 846-8270 by CLP SOW 3/90

Date Extracted: 04/21/93
Date Analyzed: 04/27/93
Date Sampled: NA
Data File ID: RP116N

GC/MS
TCLP EXTRACTABLES

Compound	Chromatographic Retention Time (min.)	Leachate Concentration (ug/l)	PQL (ug/l)	RTL (ug/l)
Pyridine		BQL	50.	5000.
1,4-Dichlorobenzene		BQL	50.	7500.
Hexachloroethane		BQL	50.	3000.
Nitrobenzene		BQL	50.	2000.
Hexachloro-1,3-butadiene		BQL	50.	500.
2,4-Dinitrotoluene		BQL	50.	130.
Hexachlorobenzene		BQL	50.	130.
Cresols (total)		BQL	50.	200000.
2,4,6-Trichlorophenol		BQL	50.	2000.
2,4,5-Trichlorophenol		BQL	250.	400000.
Pentachlorophenol		BQL	250.	100000.

SURROGATE RECOVERY	(%)	QC Range
Nitrobenzene-d5	76	35-114
2-Fluorobiphenyl	81	43-116
Terphenyl-d14	76	33-141
Phenol-d5	74	10-110
2-Fluorophenol	71	21-110
2,4,6-Tribromophenol	81	10-123

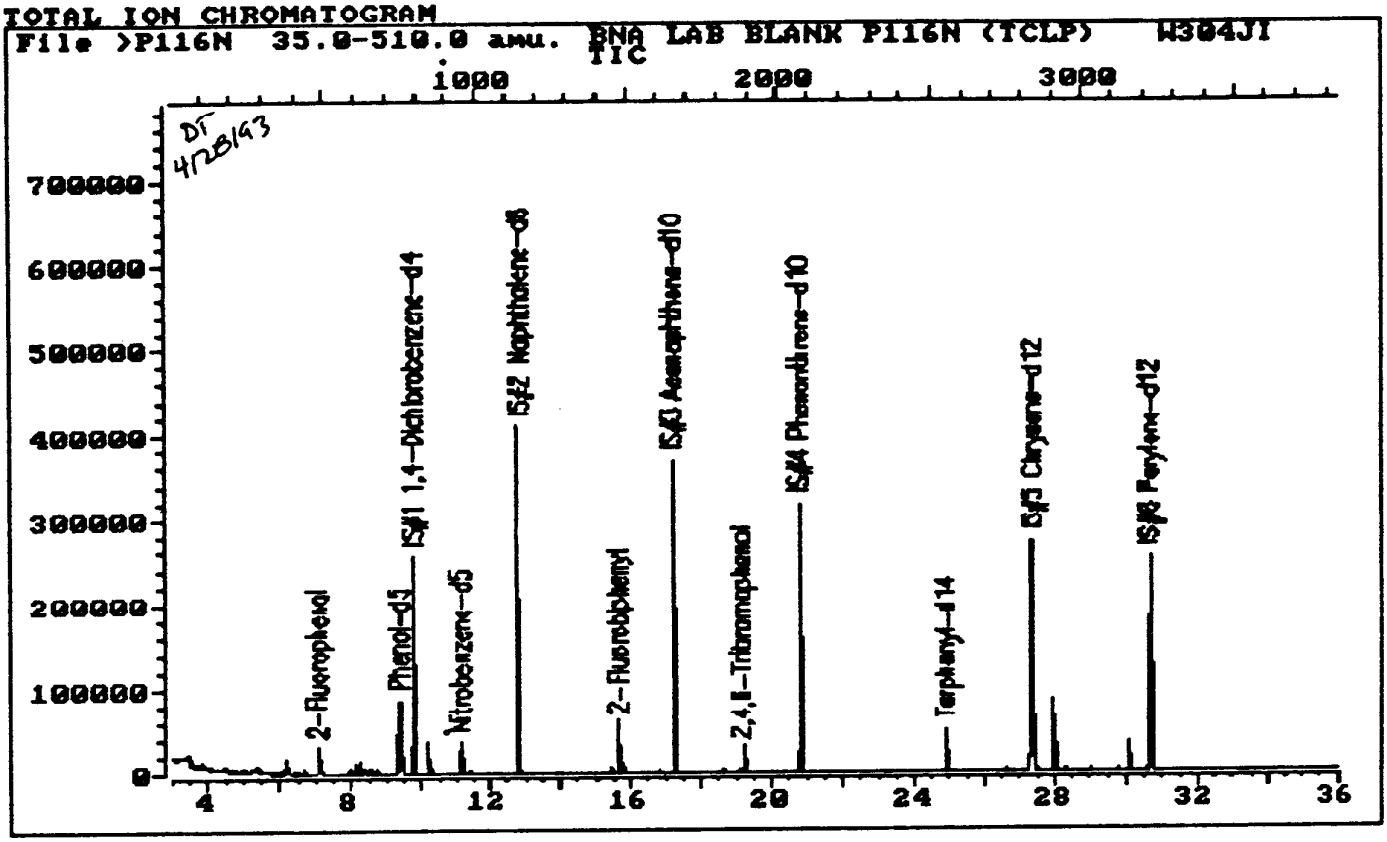
SURROGATE SPIKE LEVEL
Base/Neutral : 100 ug/l
Acid : 150 ug/l

B : Detected in Blank
D : Quantitated by a Secondary Dilution
J : Detected Below Quantitation Limit
CI : Cannot Calculate Recovery due to Coeluting Interference
DO : Diluted Out
BQL: Below Quantitation Limit
PQL: Practical Quantitation Limit
RTL : Regulatory Threshold Limits
Associated Blank: NA
MS : Matrix Spike Compound Level: NA

TCLP MS QC RANGES
(* QC ranges not available in published EPA methodology)
(+ EPA CLP SOW 3/90 Advisory Ranges)
(# SW 846-8270 Revision 1 November 1990)

Pyridine	: *
Hexachloroethane	:40-113#
Nitrobenzene	:35-180#
1,4-Dichlorobenzene	:36-97+
2,4-Dinitrotoluene	:24-96
Hexachloro-1,3-butadiene	:24-116#
Hexachlorobenzene	: 0-152#
Pentachlorophenol	: 9-103+
Cresols (total);	: *
2,4,6-Trichlorophenol	:37-144#
2,4,5-Trichlorophenol	: *

TOTAL ION CHROMATOGRAM



Data File: >P116N::D8 Quant Output File: ^P116N::BQ
Name: BNA LAB BLANK P116N
Misc: (TCLP) W304JI INST P BTL#16

Id File: ID_TP1::DB
Title: TCLP SEMIVOLATILE ANALYSIS BY SW846-8270 (CC#2639247) MAR93
Last Calibration: 930427 11:10

Operator ID: BRUCE
Quant Time: 930427 11:34
Injected at: 930427 00:16

Client: U.S. ARMY CORPS OF ENGINEERS
Sample: LABORATORY CONTROL SPIKE H117G
Lab ID: BS04JI
Method: SW 846-8270 by CLP SOW 3/90

Date Extracted: 04/26/93
Date Analyzed: 04/27/93
Date Sampled: NA
Data File ID: RH117G

GC/MS
SPECIAL SEMIVOLATILE TARGET COMPOUND ANALYSIS

DRY ___ WET X WEIGHT

Compound	Chromatographic Retention Time (min.)	Concentration (ug/kg)	POL (ug/kg)
Phenol	9.80	88% MS Recovery	170.
2-Chlorophenol	9.85	93% MS Recovery	170.
1,4-Dichlorobenzene	10.29	95% MS Recovery	170.
N-Nitroso-di-n-propylamine	11.46	70% MS Recovery	170.
1,2,4-Trichlorobenzene	13.26	96% MS Recovery	170.
4-Chloro-3-methylphenol	14.98	92% MS Recovery	170.
Acenaphthene	17.80	84% MS Recovery	170.
4-Nitrophenol	18.31	92% MS Recovery	830.
2,4-Dinitrotoluene	18.38	91% MS Recovery	170.
Pentachlorophenol	21.13	86% MS Recovery	830.
Pyrene	24.96	105% MS Recovery	170.

SURROGATE RECOVERY	(%)	QC Range
Nitrobenzene-d5	86	23-120
2-Fluorobiphenyl	92	30-115
Terphenyl-d14	92	18-137
Phenol-d5	88	24-113
2-Fluorophenol	95	25-121
2,4,6-Tribromophenol	90	19-122

Associated Blank: BNA RH117E

B : Detected in blank
D : Quantitated by a Secondary Dilution
J : Detected Below Quantitation Limit
CI : Cannot Calculate Recovery due to Coeluting Interference
DO : Diluted Out
BQL: Below Quantitation Limit
PQL: Practical Quantitation Limit
MS : Matrix Spike Compound Level: 1666 ug/kg

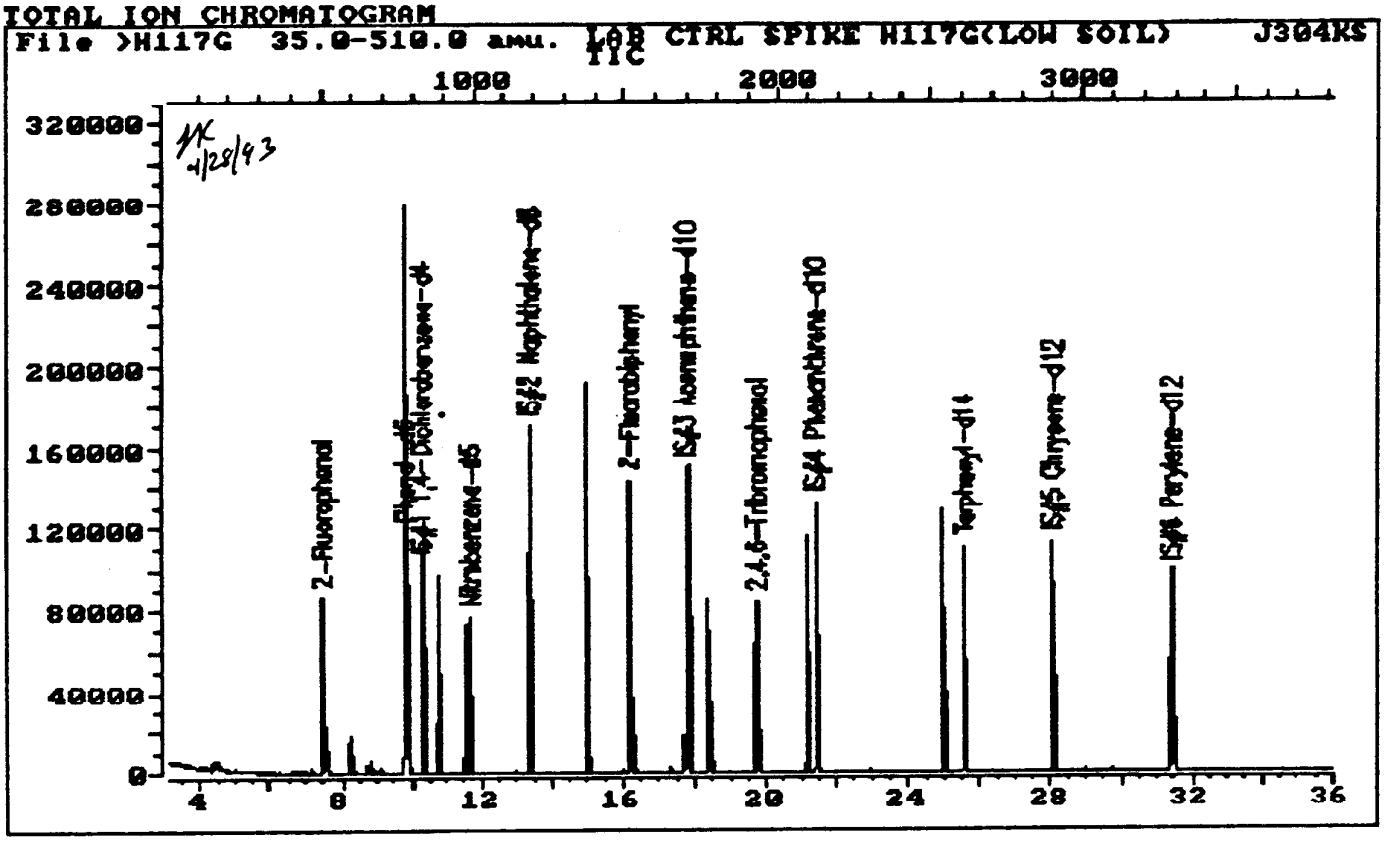
BASE/NEUTRAL MS QC RANGES
(EPA CLP SOW 3/90 Advisory Ranges)

Acenaphthene	:31-137
1,4-Dichlorobenzene	:28-104
2,4-Dinitrotoluene	:28-89
N-Nitroso-di-propylamine	:41-126
Pyrene	:35-142
1,2,4-Trichlorobenzene	:38-107

ACID MS QC RANGES

4-Chloro-3-methylphenol	:26-103
2-Chlorophenol	:25-102
4-Nitrophenol	:11-114
Pentachlorophenol	:17-109
Phenol	:26-90

TOTAL ION CHROMATOGRAM



Data File: >H117G::D3 Quant Output File: ^H117G::BQ
Name: LAB CTRL SPIKE H117G
Misc: (LOW SOIL) J304KS/W304JI INST H BTL# 3

Id File: ID_SV::DB
Title: SEMIVOLATILES BY SW846-8270/EPA 625 (CC#3796931) APR93
Last Calibration: 930427 16:27

Operator ID: LYNN
Quant Time: 930427 19:56
Injected at: 930427 19:19

Client: U.S. ARMY CORPS OF ENGINEERS
Sample: BNA LAB BLANK RH117E
Lab ID: W304JI
Method: SW 846-8270 by CLP SOW 3/90

Date Extracted: 04/26/93
Date Analyzed: 04/27/93
Date Sampled: NA
Data File ID: RH117E

GC/MS
BASE/NEUTRAL PRIORITY POLLUTANTS/HAZARDOUS SUBSTANCE LIST COMPOUNDS

DRY ___ WET _X_ WEIGHT

Compound	Chromatographic Retention Time (min.)	Concentration (ug/kg)	PQL (ug/kg)
Benzidine		BQL	830.
bis(2-Chloroethyl)ether		BQL	170.
1,3-Dichlorobenzene		BQL	170.
1,4-Dichlorobenzene		BQL	170.
1,2-Dichlorobenzene		BQL	170.
bis(2-Chloroisopropyl)ether		BQL	170.
N-Nitroso-di-n-propylamine		BQL	170.
Hexachloroethane		BQL	170.
Nitrobenzene		BQL	170.
Isophorone		BQL	170.
bis(2-Chloroethoxy)methane		BQL	170.
1,2,4-Trichlorobenzene		BQL	170.
Naphthalene		BQL	170.
Hexachlorobutadiene		BQL	170.
Hexachlorocyclopentadiene		BQL	170.
2-Chloronaphthalene		BQL	170.
Dimethylphthalate		BQL	170.
2,6-Dinitrotoluene		BQL	170.
Acenaphthylene		BQL	170.
Acenaphthene		BQL	170.
2,4-Dinitrotoluene		BQL	170.
Diethylphthalate		BQL	170.
4-Chlorophenyl-phenylether		BQL	170.
Fluorene		BQL	170.
N-Nitrosodiphenylamine (1)		BQL	170.
4-Bromophenyl-phenylether		BQL	170.
Hexachlorobenzene		BQL	170.
Phenanthrene		BQL	170.
Anthracene		BQL	170.
Pyrene		BQL	170.
Di-n-butylphthalate		BQL	170.
Fluoranthene		BQL	170.
Butylbenzylphthalate		BQL	170.
3,3'-Dichlorobenzidine		BQL	330.
Benzo(a)anthracene		BQL	170.
bis(2-Ethylhexyl)phthalate		BQL	170.
Chrysene		BQL	170.
Di-n-octylphthalate		BQL	170.
Benzo(b)fluoranthene		BQL	170.
N-Nitrosodimethylamine		BQL	170.
1,2-Diphenylhydrazine (2)		BQL	170.

(1) Cannot be Distinguished from Diphenylamine
(2) Cannot be Distinguished from Azobenzene

- Continued -

Client: U.S. ARMY CORPS OF ENGINEERS
Sample: BNA LAB BLANK RH117E

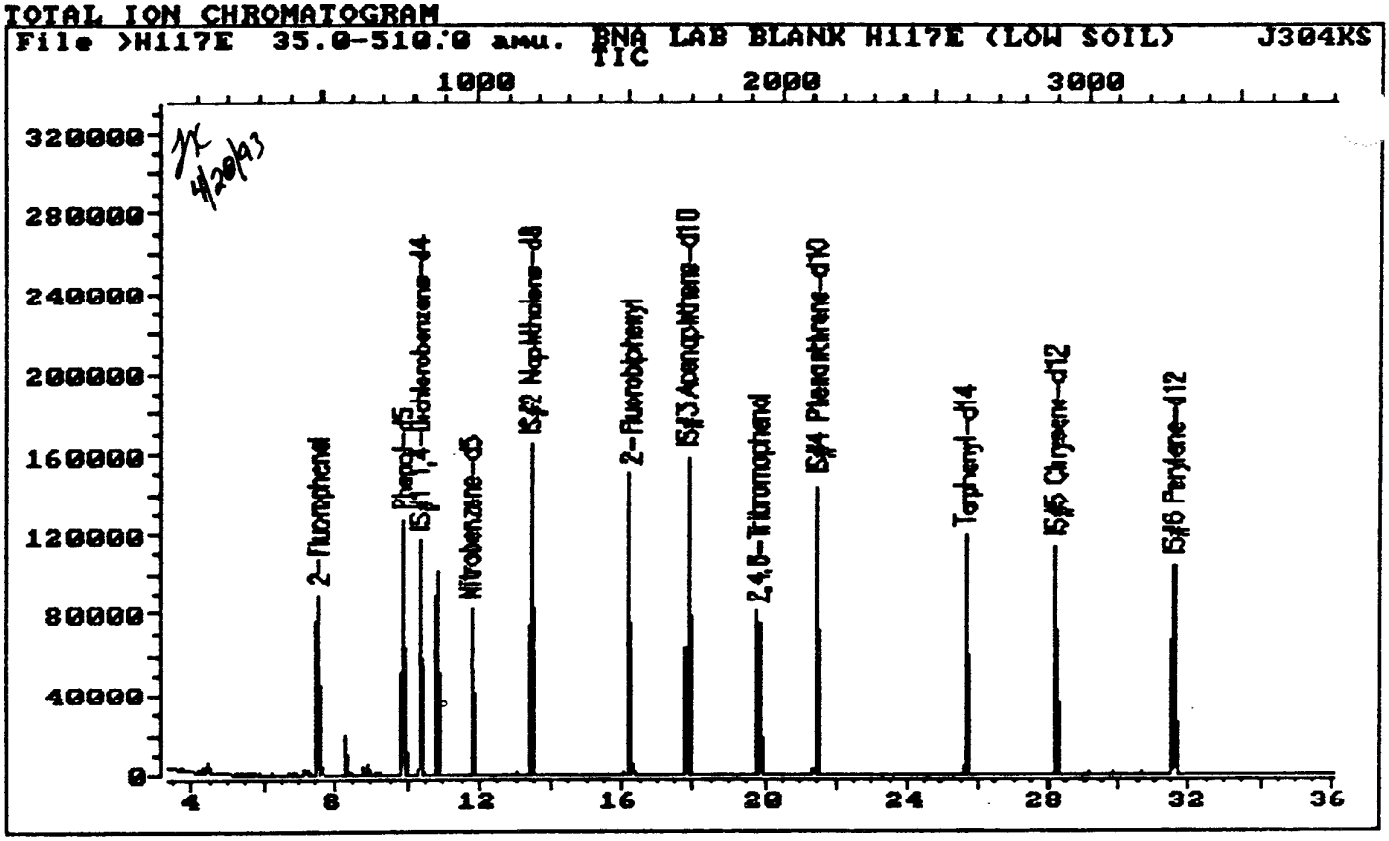
Benzo(k)fluoranthene	BQL	170.
Benzo(a)pyrene	BQL	170.
Indeno(1,2,3-cd)pyrene	BQL	170.
Dibenz(a,h)anthracene	BQL	170.
Benzo(g,h,i)perylene	BQL	170.
Benzyl alcohol	BQL	170.
4-Chloroaniline	BQL	170.
Dibenzofuran	BQL	170.
2-Methylnaphthalene	BQL	170.
2-Nitroaniline	BQL	830.
3-Nitroaniline	BQL	830.
4-Nitroaniline	BQL	830.

SURROGATE RECOVERY	(%)	QC Range
Nitrobenzene-d5	89	23-120
2-Fluorobiphenyl	95	30-115
Terphenyl-d14	92	18-137

Surrogate Spike Level: 1700 ug/kg
Associated Blank: NA

B : Detected in Blank
D : Quantitated by a Secondary Dilution
J : Detected Below Quantitation Limit
CI : Cannot Calculate Recovery due to Coeluting Interference
DO : Diluted Out
BQL: Below Quantitation Limit
PQL: Practical Quantitation Limit
MS : Matrix Spike Compound Level: NA

TOTAL ION CHROMATOGRAM



Data File: >H117E::D3 Quant Output File: ^H117E::BQ
Name: BNA LAB BLANK H117E
Misc: (LOW SOIL) J304KS/W304JI INST H BTL# 1

Id File: ID SV::DB
Title: SEMIVOLATILES BY SW846-8270/EPA 625 (CC#3796931) APR93
Last Calibration: 930427 16:27

Operator ID: LYNN
Quant Time: 930427 18:18
Injected at: 930427 17:40

Client: U.S. ARMY CORPS OF ENGINEERS
Sample: BNA LAB BLANK RH117E
Lab ID: W304JI
Method: SW 846-8270 by CLP SOW 3/90

Date Extracted: 04/26/93
Date Analyzed: 04/27/93
Date Sampled: NA
Data File ID: RH117E

GC/MS

ACID EXTRACTABLE PRIORITY POLLUTANTS/HAZARDOUS SUBSTANCE LIST COMPOUNDS

DRY ___ WET X WEIGHT

Compound	Chromatographic Retention Time (min.)	Concentration (ug/kg)	PQL (ug/kg)
Phenol		BQL	170.
2-Chlorophenol		BQL	170.
2-Nitrophenol		BQL	170.
2,4-Dimethylphenol		BQL	170.
2,4-Dichlorophenol		BQL	170.
4-Chloro-3-methylphenol		BQL	170.
2,4,6-Trichlorophenol		BQL	170.
2,4-Dinitrophenol		BQL	830.
4-Nitrophenol		BQL	830.
4,6-Dinitro-2-methylphenol		BQL	830.
Pentachlorophenol		BQL	830.
2-Methylphenol		BQL	170.
4-Methylphenol		BQL	170.
Benzoic acid		BQL	830.
2,4,5-Trichlorophenol		BQL	830.

SURROGATE RECOVERY	(%)	QC Range
Phenol-d5	92	24-113
2-Fluorophenol	95	25-121
2,4,6-Tribromophenol	90	19-122

Surrogate Spike Level: 2500 ug/kg
Associated Blank: NA

B : Detected in Blank
D : Quantitated by a Secondary Dilution
J : Detected Below Quantitation Limit
CI : Cannot Calculate Recovery due to Coeluting Interference
DO : Diluted Out
BQL: Below Quantitation Limit
PQL: Practical Quantitation Limit
MS : Matrix Spike Compound Level: NA

Client: U.S. Army Corps of Eng.
Sample: IC-BS-1

Lab ID: W304JI01
Extraction Method: SW-846 5030
Clean-up Method: N/R
GC Analytical Method: SW-846 8021
Corresponding Blank: N117A001

Date Sampled: 04/15/93
Date Extracted: N/A
Date Analyzed: 04/27/93
Time Analyzed: 22:17
Analyst: LSK

File ID: 1:N090A/N117A013
Dilution Factor: 1.0

Aromatic Volatiles Analysis

Compound	Chrom. Ret. Time Col. 1 (min.)	Chrom. Ret. Time Col. 2 * (min.)	Sample Concentration (ug/kg)	PQL (ug/kg)
Benzene	14.97		3.33	1.00
Toluene	20.73		26.2	1.00
Ethylbenzene	25.62		2.91	1.00
m-/p-Xylenes	25.87		9.19	2.00
o-Xylene	27.25		4.09	1.00

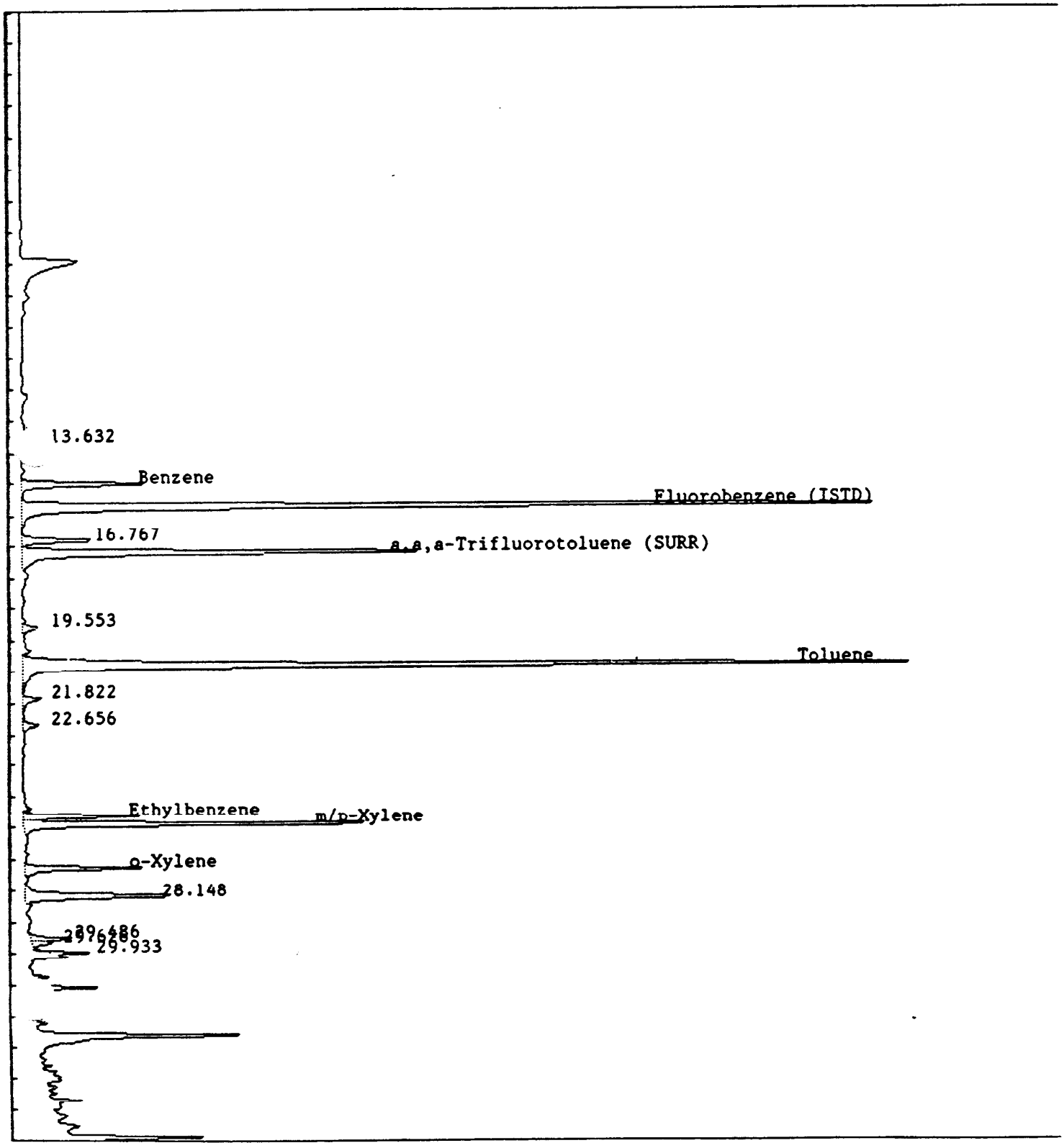
Surrogate Recovery	Spike Level (ug/kg)	%Rec	QC Range
a,a,a-Trifluorotoluene	30.0	99	92-111 ***

NOTES:
Sample Results Based on Wet Weight
PQL: Practical Quantitation Limit
BQL: Below Quantitation Limit
* : Col. 1: 60 M x 0.75 mm VOCOL (FSCC/PID)
Col. 2: none
N/R: Procedure Not Required
***: Recovery Limits Indicated are Advisory Only

BTEX Analysis
File ID: /DATA/LOOP/RESULT/N117A013.RES

Sample Name: W304JI01 IC-BS-1
Analyzed: 2217 27Apr1993
Column: 60 M x 0.75 mm VOCOL (Glass Capillary)
Detector: Photoionization (PID)

Sample Size: 5.000000 g/mL
Instrument: GC-N (HP 5890 II)
Seq/Smpl: 1/ 13
Bottle : 13
Run Time: 36.00 min.



Client: U.S. Army Corps of Eng.
Sample: Laboratory Control Spike

Lab ID: N117LCS
Extraction Method: SW-846 5030
Clean-up Method: N/R
GC Analytical Method: SW-846 8021
Corresponding Blank: N117A001

Date Sampled: N/A
Date Extracted: N/A
Date Analyzed: 04/27/93
Time Analyzed: 13:12
Analyst: LSK

File ID: 1:N090A/N117A004
Dilution Factor: 1.0

Aromatic Volatiles Analysis

Compound		Chrom. Ret. Time Col. 1 Col. 2 * (min.)	Sample Concentration (ug/kg)	PQL (ug/kg)
Benzene	MS	14.99	120% Recovery	1.00
Toluene	MS	20.76	105% Recovery	1.00
Chlorobenzene	MS	25.42	110% Recovery	1.00
Ethylbenzene			BQL	1.00
m-/p-Xylenes			BQL	2.00
o-Xylene			BQL	1.00

Surrogate Recovery	Spike Level (ug/kg)	%Rec	QC Range
a,a,a-Trifluorotoluene	30.0	102	92-111 ***

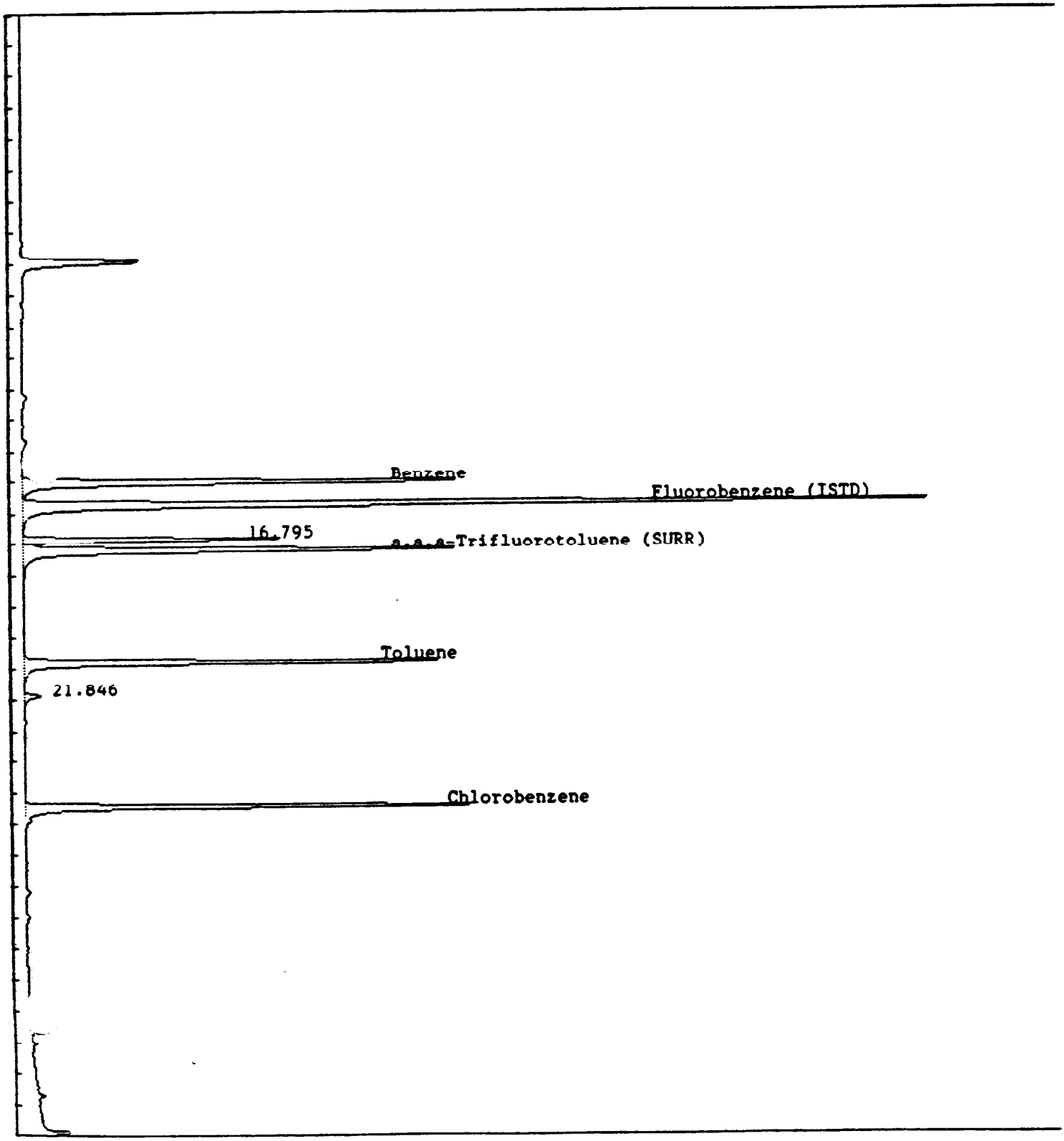
NOTES:
Sample Results Based on Wet Weight
PQL: Practical Quantitation Limit
BQL: Below Quantitation Limit
* : Col. 1: 60 M x 0.75 mm VOCOL (FSCC/PID)
Col. 2: none
N/R: Procedure Not Required
***: Recovery Limits Indicated are Advisory Only
MS : Matrix Spike Compound:

Matrix Spike Compound:	Spike Level (ug/kg):	QC Range
Benzene	10.0	75-133
Toluene	10.0	54-142
Chlorobenzene	10.0	83-129 ***

BTEX Analysis
File ID: /DATA/LOOP/RESULT/N117A004.RES

Sample Name: N117LCS Lab Cont Spk
D' Analyzed: 1312 27Apr1993
C an: 60 M x 0.75 mm VOCOL (Glass Capillary)
Detector: Photoionization (PID)

Sample Size: 5.000000 g/mL
Instrument: GC-N (HP 5890 II)
Seq/Smpl: 1/ 4
Bottle : 4
Run Time: 36.00 min.



Client: U.S. Army Corps of Eng.
Sample: Instrument Blank

Lab ID: N117BLK
Extraction Method: SW-846 5030
Clean-up Method: N/R
GC Analytical Method: SW-846 8021

Date Sampled: N/A
Date Extracted: N/A
Date Analyzed: 04/27/93
Time Analyzed: 10:33
Analyst: LSK

File ID: 1:N090A/N117A001
Dilution Factor: 1.0

Aromatic Volatiles Analysis

Compound	Chrom. Ret. Time Col. 1 (min.)	Chrom. Ret. Time Col. 2 * (min.)	Sample Concentration (ug/kg)	PQL (ug/kg)
Benzene			BQL	1.00
Toluene			BQL	1.00
Chlorobenzene			BQL	1.00
Ethylbenzene			BQL	1.00
m-/p-Xylenes			BQL	2.00
o-Xylene			BQL	1.00

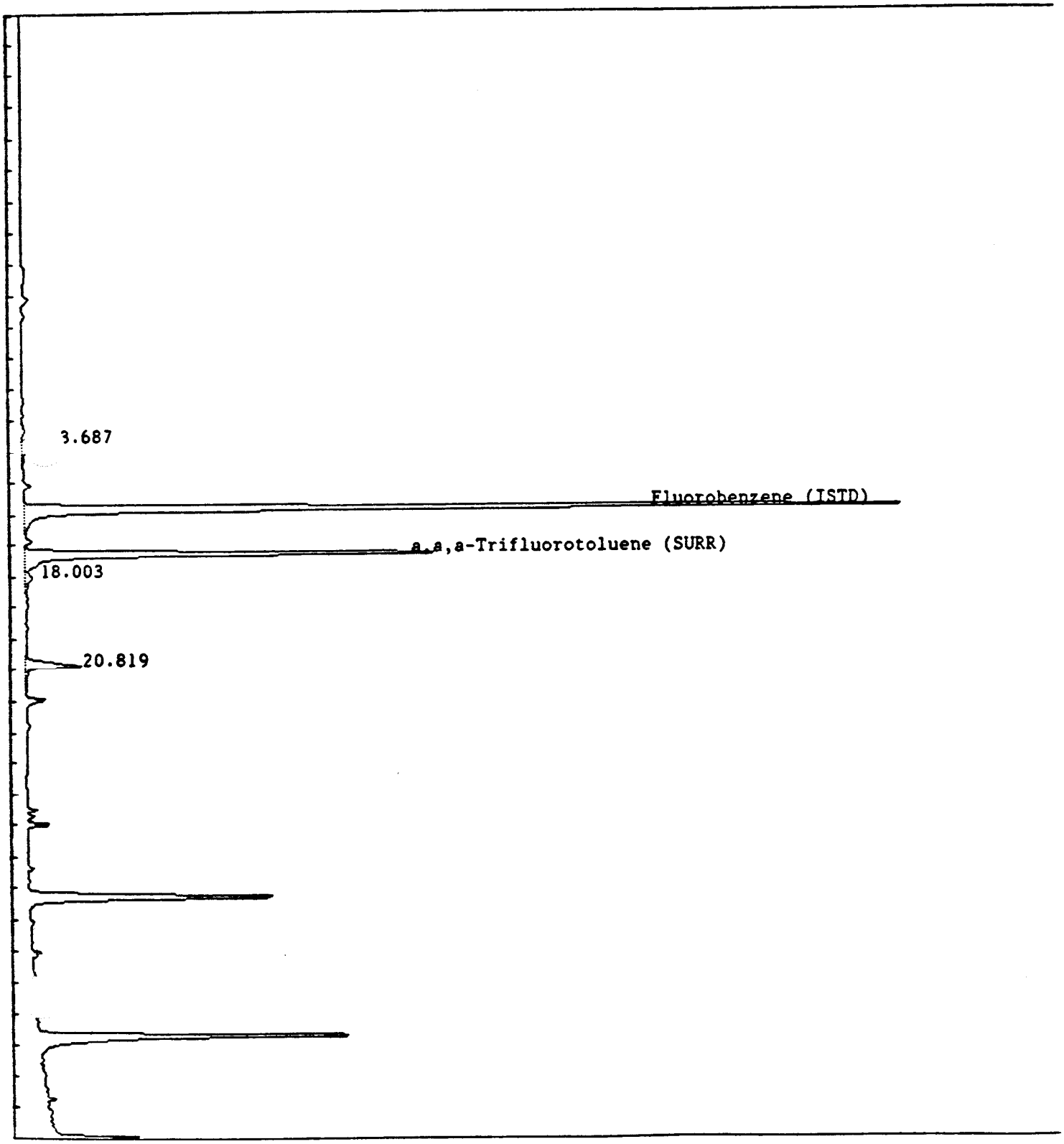
Surrogate Recovery	Spike Level (ug/kg)	%Rec	QC Range
a,a,a-Trifluorotoluene	30.0	101	92-111 ***

NOTES: PQL: Practical Quantitation Limit
BQL: Below Quantitation Limit
* : Col. 1: 60 M x 0.75 mm VOCOL (FSCC/PID)
Col. 2: none
N/R: Procedure Not Required
***: Recovery Limits Indicated are Advisory Only

BTEX Analysis
File ID: /DATA/LOOP/RESULT/N117A001.RES

Sample Name: N117BLK Inst. Blank
Data Analyzed: 1033 27Apr1993
Column: 60 M x 0.75 mm VOCOL (Glass Capillary)
Detector: Photoionization (PID)

Sample Size: 5.000000 g/mL
Instrument: GC-N (HP 5890 II)
Seq/Smpl: 1/ 1
Bottle : 1
Run Time: 36.00 min.



Client: U.S. ARMY CORPS OF ENGINEERS
Sample: IC-BS-6

Lab ID: W304JI04
Extraction Method: SW-846 3550
Clean-up Method: N/R
GC Analytical Method: SW-846 8121
Corresponding Blank: R119A004

Date Sampled: 04/16/93
Date Extracted: 04/27/93
Date Analyzed: 04/29/93
Time Analyzed: 20:08
Analyst: ED

File ID: 4:R118A/R119A007
Dilution Factor: 1.0

Chlorinated Hydrocarbons Analysis

Compound	Chrom. Ret. Time Col. 1 (min.)	Chrom. Ret. Time Col. 2 * (min.)	Sample Concentration (ug/kg)	PQL (ug/kg)
1,3-Dichlorobenzene			BQL	83.1
1,4-Dichlorobenzene			BQL	296
1,2-Dichlorobenzene			BQL	89.7
Hexachloroethane			BQL	1.66
1,2,4-Trichlorobenzene			BQL	43.2
Hexachlorobutadiene			BQL	1.66
2-Chloronaphthalene			BQL	432
Hexachlorobenzene			BQL	1.66

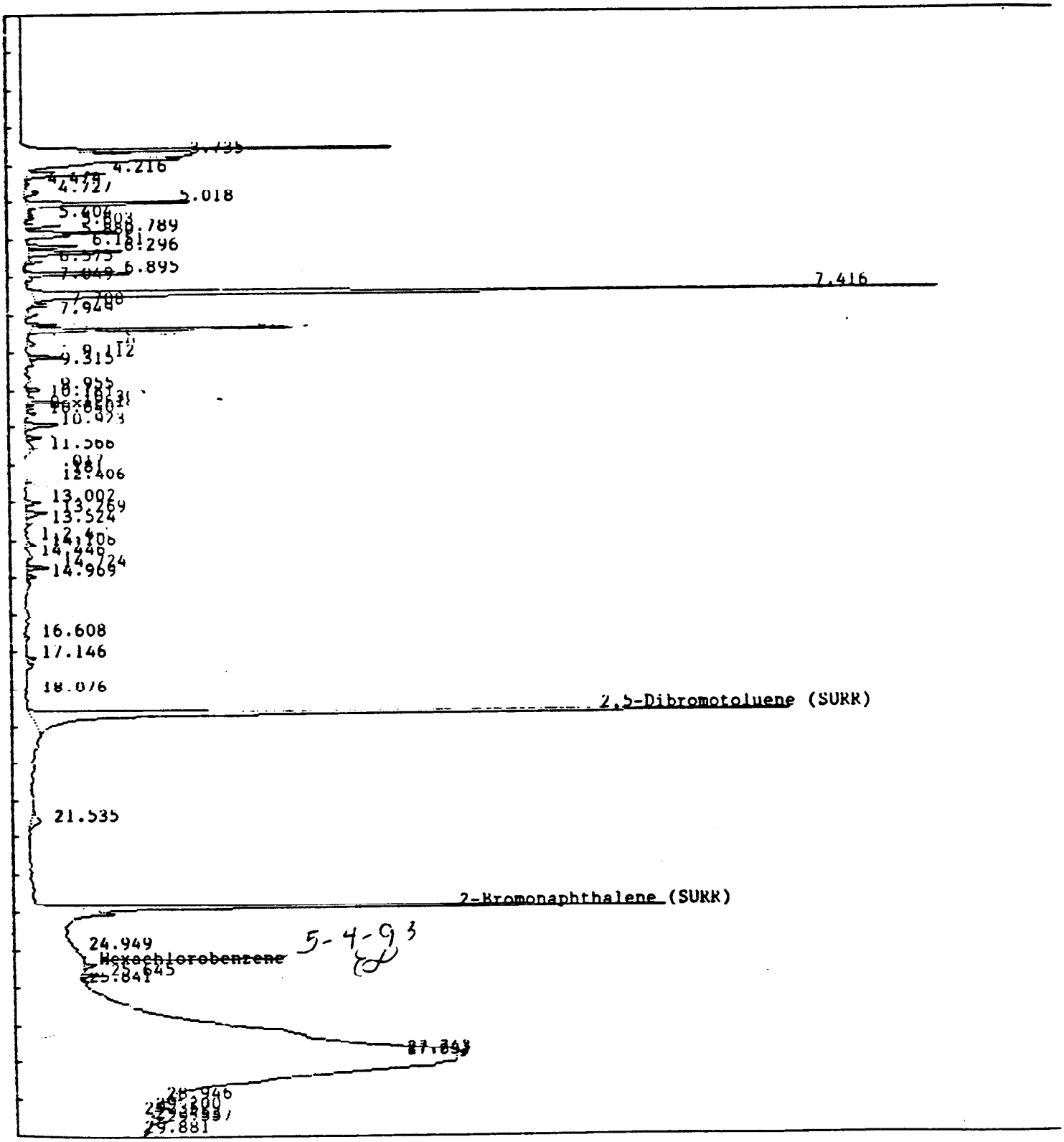
Surrogate Recovery	Spike Level (ug/kg)	%Rec	QC Range
2,5-Dibromotoluene	664.	70	53-168 ***
2-Bromonaphthalene	664.	76	42-129 ***

NOTES:
Sample Results Based on Wet Weight
PQL: Practical Quantitation Limit
BQL: Below Quantitation Limit
* : Col. 1: 30 M x 0.32 mm DB-17 (FSCC)
Col. 2: 30 M x 0.32 mm DB-1701 (FSCC)
N/R: Procedure Not Required
***: Recovery Limits Indicated are Advisory Only

Chlorinated Hydrocarbons Analysis (Primary Run)
File ID: /DATA/LOOP/RESULT/R119A007.RES

Sample Name: W304JI04
Date Analyzed: 2008 29Apr1993
Column: 30 M x 0.32 mm DB-17 (FSCC)
Detector: Electron Capture (ECD)
Inj. Volume: 1.0 uL

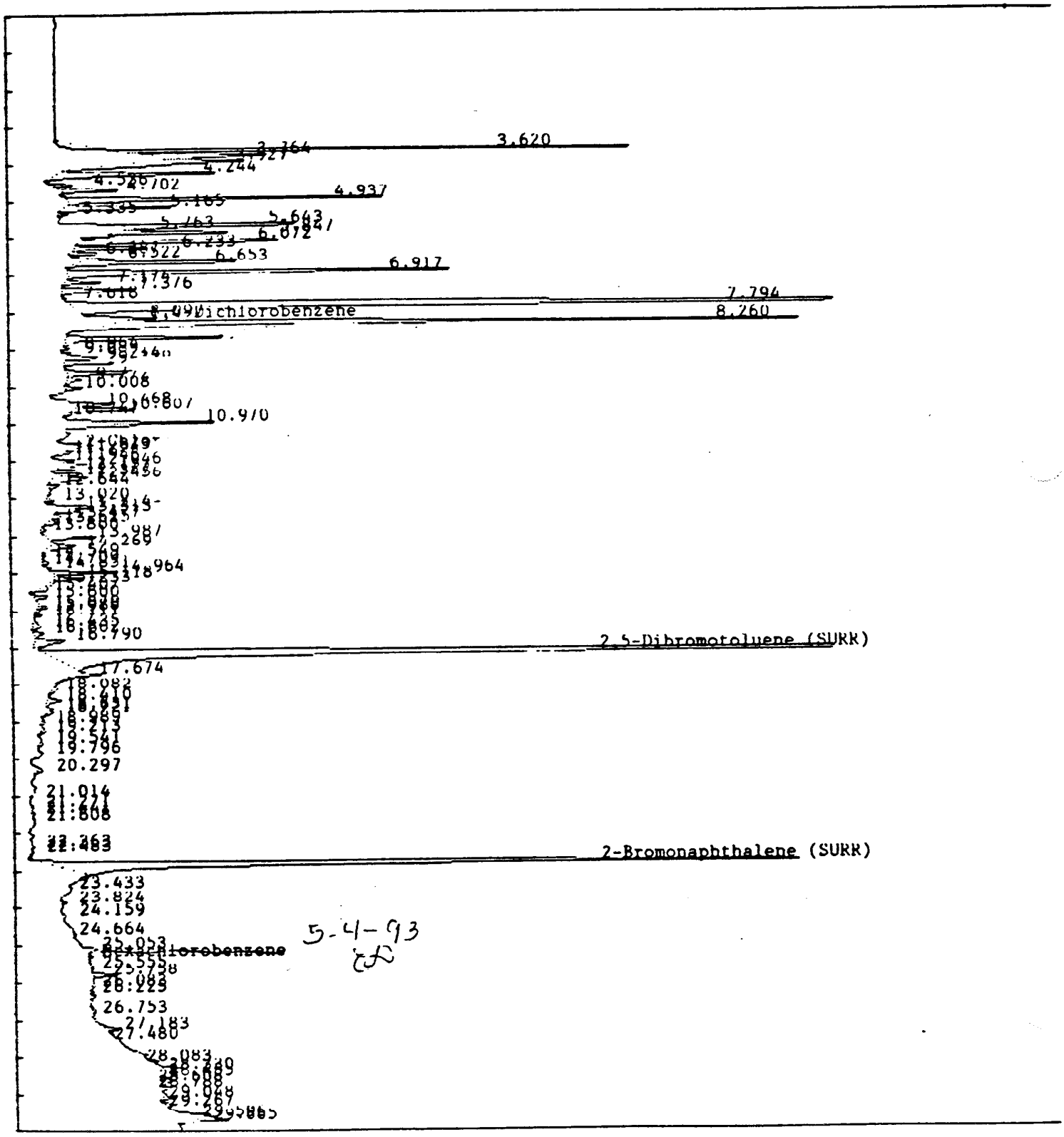
Dil. Factor: 1.0
Instrument: GC-R (HP 5890 II)
Seq/Smpl: 1/ 7
Bottle : 7
Run Time: 30.02 min.



Chlorinated Hydrocarbons Analysis (Secondary Run)
File ID: /DATA/LOOP/RESULT/R119B007.RES

Sample Name: W304JI04
Date Analyzed: 2008 29Apr1993
Column: 30 M x 0.32 mm DB-1701 (FSCC)
Detector: Electron Capture (ECD)
Inj. Volume: 1.0 uL

Dil. Factor: 1.0
Instrument: GC-R (HP 5890 II)
Seq/Smpl: 1/ 7
Bottle : 7
Run Time: 30.00 min.



Client: U.S. ARMY CORPS OF ENGINEERS
Sample: IC-BS-6
Matrix Spike
Lab ID: MS04JI04
Extraction Method: SW-846 3550
Clean-up Method: N/R
GC Analytical Method: SW-846 8121
Corresponding Blank: R119A004

Date Sampled: 04/16/93
Date Extracted: 04/27/93
Date Analyzed: 04/29/93
Time Analyzed: 20:44
Analyst: ED
File ID: 4:R118A/R119A008
Dilution Factor: 1.0

Chlorinated Hydrocarbons Analysis

Compound		Chrom. Ret. Time Col. 1 (min.)	Chrom. Ret. Time Col. 2 * (min.)	Sample Concentration (ug/kg)	PQL (ug/kg)
1,3-Dichlorobenzene				BQL	83.1
1,4-Dichlorobenzene				BQL	296
1,2-Dichlorobenzene				BQL	89.7
Hexachloroethane	MS	10.36	9.52	76% Recovery	1.66
1,2,4-Trichlorobenzene				BQL	43.2
Hexachlorobutadiene	MS	14.04	13.23	71% Recovery	1.66
2-Chloronaphthalene				BQL	432
Hexachlorobenzene	MS	25.82	25.24	75% Recovery	1.66

Surrogate Recovery	Spike Level (ug/kg)	%Rec	QC Range
2,5-Dibromotoluene	664.	70	53-168 ***
2-Bromonaphthalene	664.	70	42-129 ***

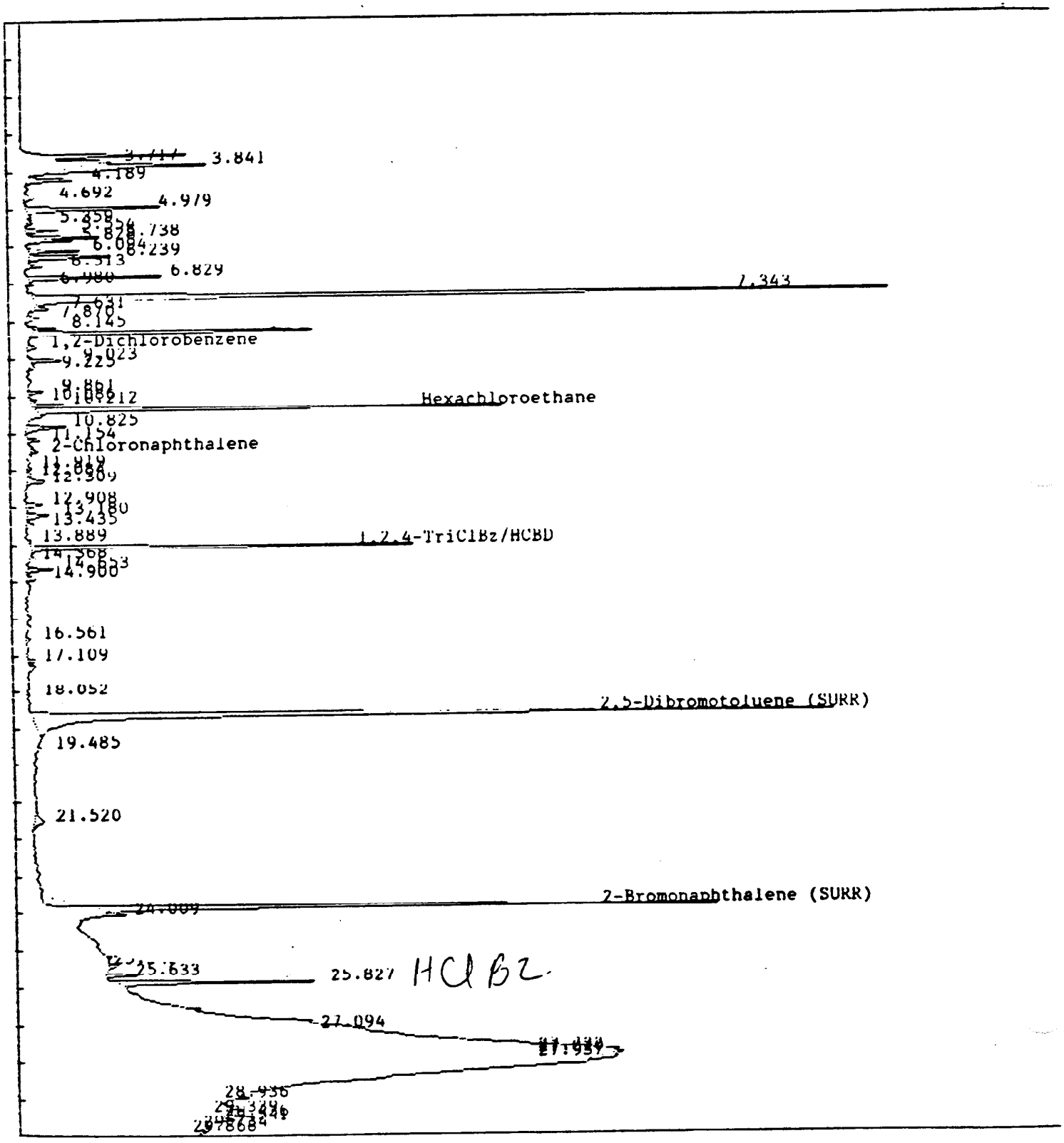
NOTES:
Sample Results Based on Wet Weight
PQL: Practical Quantitation Limit
BQL: Below Quantitation Limit
* : Col. 1: 30 M x 0.32 mm DB-17 (FSCC)
Col. 2: 30 M x 0.32 mm DB-1701 (FSCC)
N/R: Procedure Not Required
***: Recovery Limits Indicated are Advisory Only
MS : Matrix Spike Compound:

Matrix Spike Compound:	Spike Level (ug/kg):	QC Range
Hexachloroethane	33.2	0-112 ***
Hexachlorobutadiene	33.2	27-103 ***
Hexachlorobenzene	33.2	0-117 ***

Chlorinated Hydrocarbons Analysis (Primary Run)
File ID: /DATA/LOOP/RESULT/R119A008.RES

Sample Name: MS04JI04
Date Analyzed: 2044 29Apr1993
Column: 30 M x 0.32 mm DB-17 (FSCC)
Detector: Electron Capture (ECD)
Inj. Volume: 1.0 uL

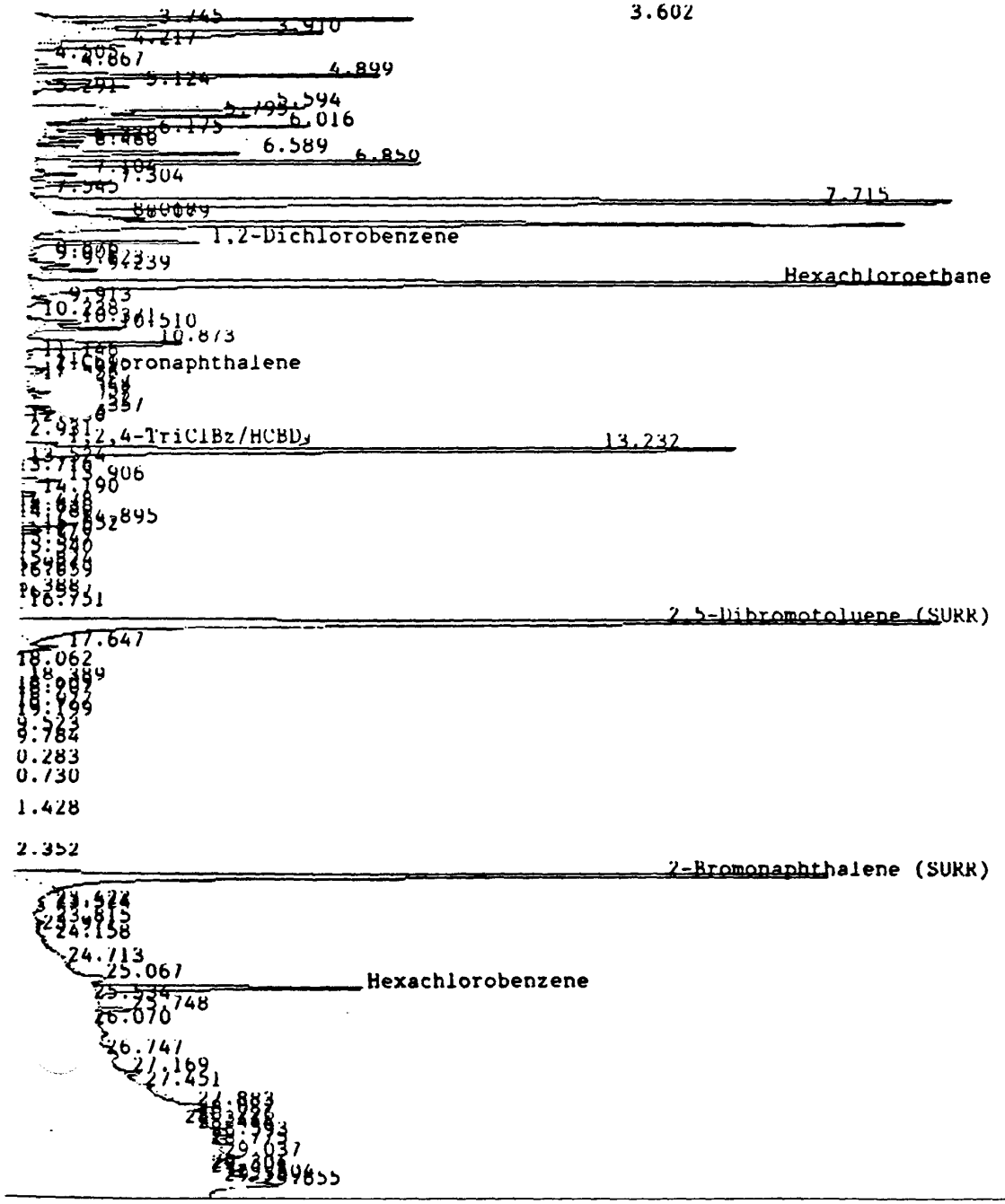
Dil. Factor: 1.0
Instrument: GC-R (HP 5890 II)
Seq/Smpl: 1/ 8
Bottle : 8
Run Time: 30.00 min.



inated Hydrocarbons Analysis (Secondary Run)
ID: /DATA/LOOP/RESULT/R119B008.RES

e Name: MS04JI04
An[illegible]ed: 2044 29Apr1993
n: 30 M x 0.32 mm DB-1701 (FSCC)
tor: Electron Capture (ECD)
Volume: 1.0 uL

Dil. Factor: 1.0
Instrument: GC-R (HP 5890 II)
Seq/Smpl: 1/ 8
Bottle : 8
Run Time: 30.00 min.



Client: U.S. ARMY CORPS OF ENGINEERS
Sample: IC-BS-6
Matrix Spike Duplicate
Lab ID: MD04JI04
Extraction Method: SW-846 3550
Clean-up Method: N/R
GC Analytical Method: SW-846 8121
Corresponding Blank: R119A004

Date Sampled: 04/16/93
Date Extracted: 04/27/93
Date Analyzed: 04/29/93
Time Analyzed: 21:18
Analyst: ED

File ID: 4:R118A/R119A009
Dilution Factor: 1.0

Chlorinated Hydrocarbons Analysis

Compound		Chrom. Ret. Time Col. 1 (min.)	Chrom. Ret. Time Col. 2 * (min.)	Sample Concentration (ug/kg)	PQL (ug/kg)
1,3-Dichlorobenzene				BQL	83.1
1,4-Dichlorobenzene				BQL	296
1,2-Dichlorobenzene				BQL	89.7
Hexachloroethane	MS	10.37	9.51	60% Recovery	1.66
1,2,4-Trichlorobenzene				BQL	43.2
Hexachlorobutadiene	MS	14.09	13.27	54% Recovery	1.66
2-Chloronaphthalene				BQL	432
Hexachlorobenzene	MS	25.81	25.23	61% Recovery	1.66

Surrogate Recovery	Spike Level (ug/kg)	%Rec	QC Range
2,5-Dibromotoluene	664.	58	53-168 ***
2-Bromonaphthalene	664.	51	42-129 ***

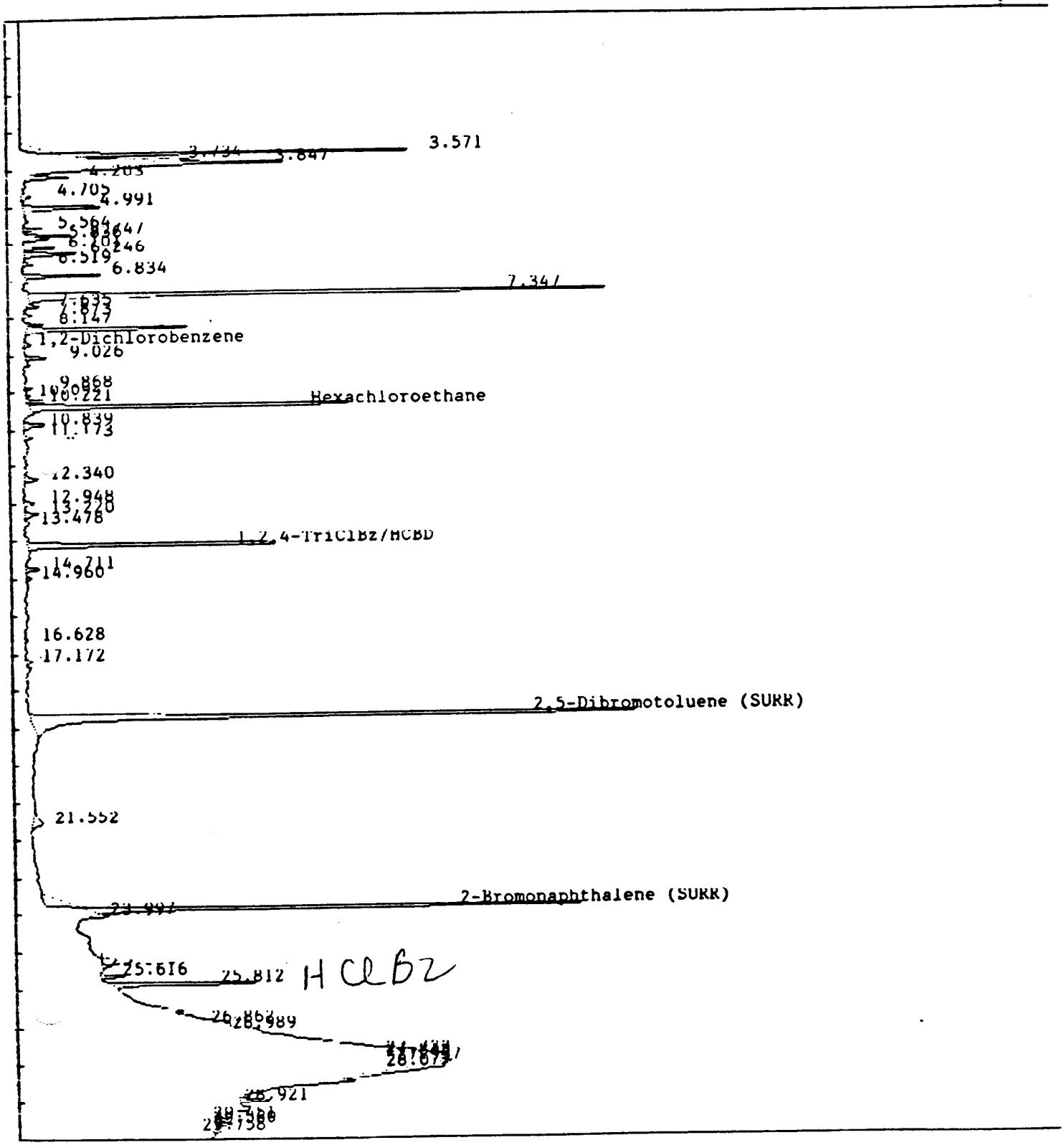
NOTES:
Sample Results Based on Wet Weight
PQL: Practical Quantitation Limit
BQL: Below Quantitation Limit
* : Col. 1: 30 M x 0.32 mm DB-17 (FSCC)
Col. 2: 30 M x 0.32 mm DB-1701 (FSCC)
N/R: Procedure Not Required
***: Recovery Limits Indicated are Advisory Only
MS : Matrix Spike Compound:

Matrix Spike Compound:	Spike Level (ug/kg):	QC Range
Hexachloroethane	33.2	0-112 ***
Hexachlorobutadiene	33.2	27-103 ***
Hexachlorobenzene	33.2	0-117 ***

Chlorinated Hydrocarbons Analysis (Primary Run)
File ID: /DATA/LOOP/RESULT/R119A009.RES

Sample Name: MSD04JI04
Date Analyzed: 2118 29Apr1993
Column: 30 M x 0.32 mm DB-17 (FSCC)
Detector: Electron Capture (ECD)
Inj. Volume: 1.0 uL

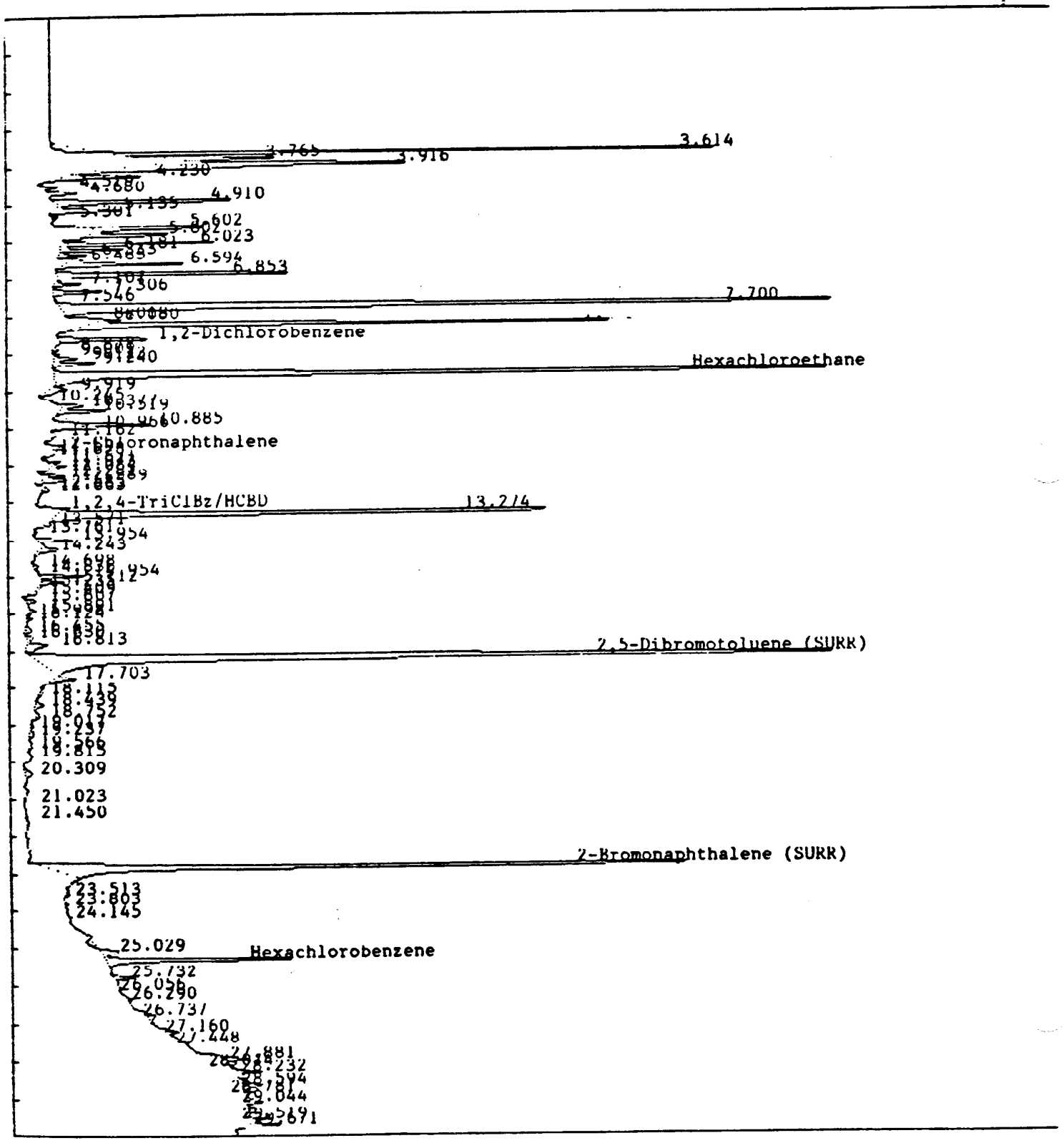
Dil. Factor: 1.0
Instrument: GC-K (HP 5890 II)
Seq/Smpl: 1/ 9
Bottle : 9
Run Time: 30.00 min.



Chlorinated Hydrocarbons Analysis (Secondary Run)
File ID: /DATA/LOOP/RESULT/R119B009.RES

Sample Name: MSD04JI04
Date Analyzed: 2118 29Apr1993
Column: 30 M x 0.32 mm DB-1701 (FSCC)
Detector: Electron Capture (ECD)
Inj. Volume: 1.0 uL

Dil. Factor: 1.0
Instrument: GC-R (HP 5890 II)
Seq/Smpl: 1/ 9
Bottle : 9
Run Time: 30.00 min.



Client: U.S. ARMY CORPS OF ENGINEERS
Sample: IC-BS-2

Lab ID: W304JI07
Extraction Method: SW-846 3550
Clean-up Method: N/R
GC Analytical Method: SW-846 8121
Corresponding Blank: R119A004

Date Sampled: 04/17/93
Date Extracted: 04/27/93
Date Analyzed: 04/29/93
Time Analyzed: 21:53
Analyst: ED

File ID: 4:R118A/R119A010
Dilution Factor: 1.0

Chlorinated Hydrocarbons Analysis

Compound	Chrom. Ret. Time Col. 1 (min.)	Chrom. Ret. Time Col. 2 * (min.)	Sample Concentration (ug/kg)	PQL (ug/kg)
1,3-Dichlorobenzene			BQL	83.1
1,4-Dichlorobenzene			BQL	296
1,2-Dichlorobenzene			BQL	89.7
Hexachloroethane			BQL	1.66
1,2,4-Trichlorobenzene			BQL	43.2
Hexachlorobutadiene			BQL	1.66
2-Chloronaphthalene			BQL	432
Hexachlorobenzene			BQL	1.66

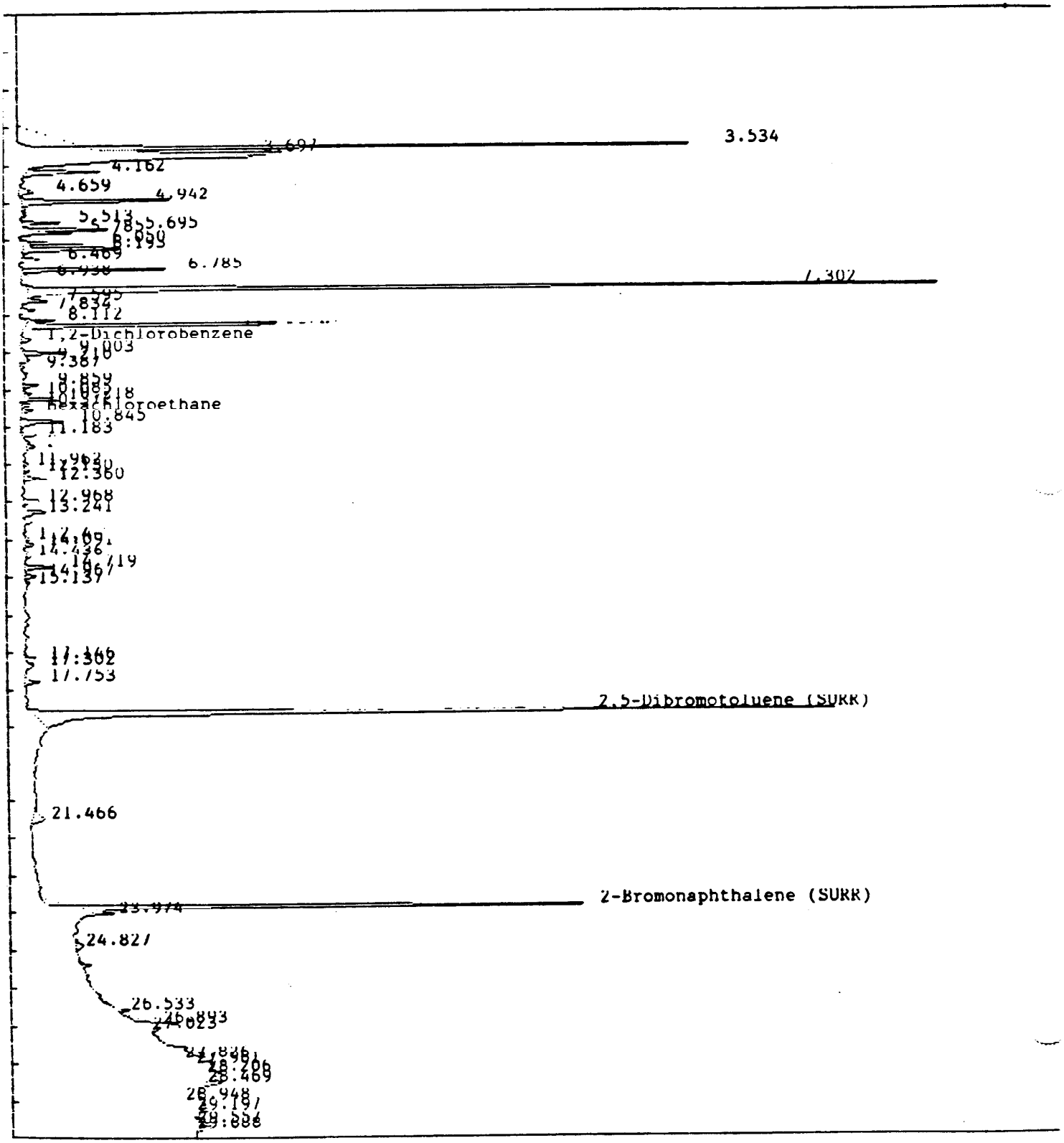
Surrogate Recovery	Spike Level (ug/kg)	%Rec	QC Range
2,5-Dibromotoluene	664.	64	53-168 ***
2-Bromonaphthalene	664.	60	42-129 ***

NOTES:
Sample Results Based on Wet Weight
PQL: Practical Quantitation Limit
BQL: Below Quantitation Limit
* : Col. 1: 30 M x 0.32 mm DB-17 (FSCC)
Col. 2: 30 M x 0.32 mm DB-1701 (FSCC)
N/R: Procedure Not Required
***: Recovery Limits Indicated are Advisory Only

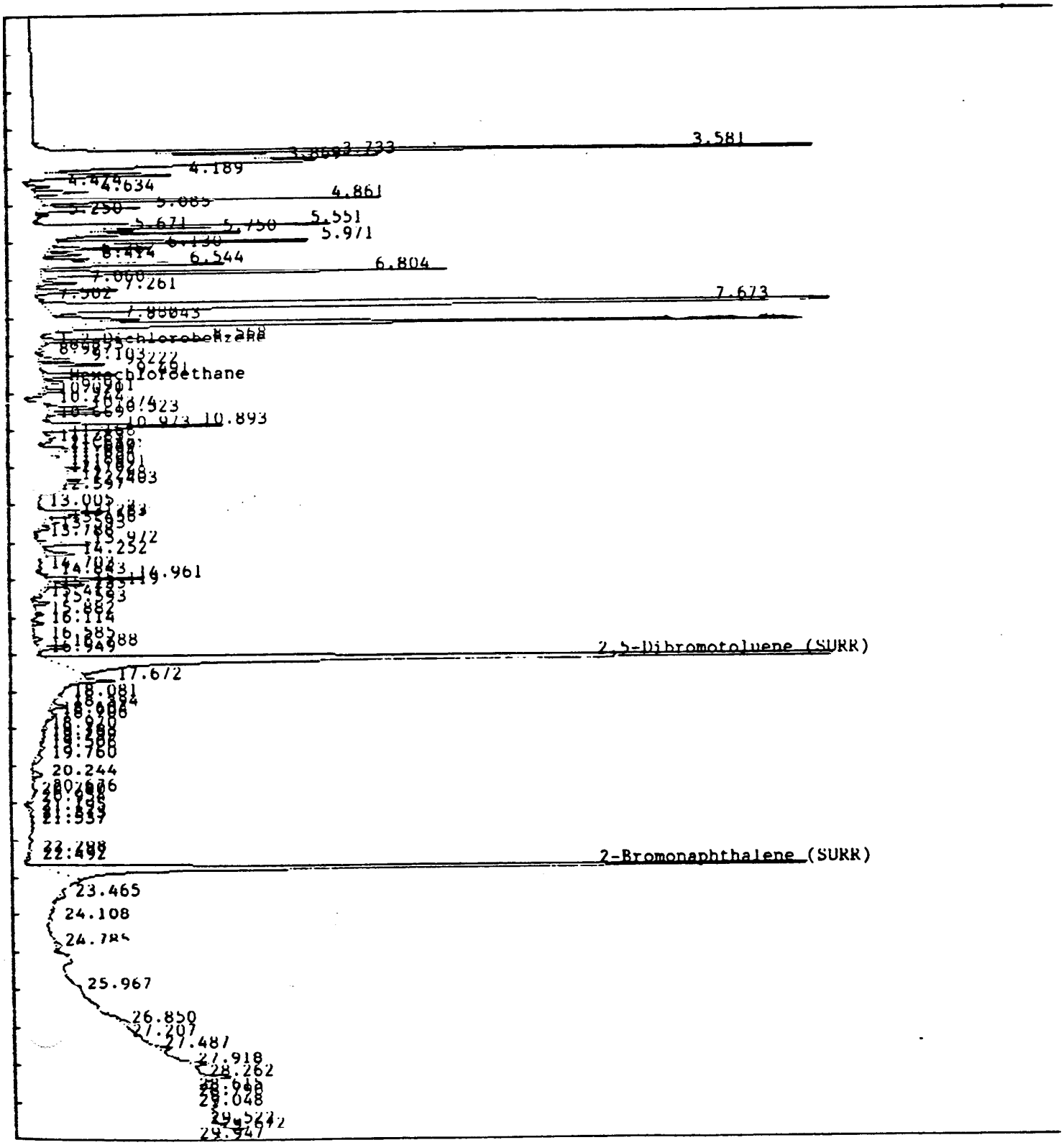
Chlorinated Hydrocarbons Analysis (Primary Run)
File ID: /DATA/LOOP/RESULT/R119A010.RES

Sample Name: W304JI07
Date Analyzed: 2153 29Apr1993
Column: 30 M x 0.32 mm DB-17 (FSCC)
Detector: Electron Capture (ECD)
Inj. Volume: 1.0 uL

Dil. Factor: 1.0
Instrument: GC-R (HP 5890 II)
Seq/Smpl: 17 10
Bottle : 10
Run Time: 30.00 min.



Chlorinated Hydrocarbons Analysis (Secondary Run)
File ID: /DATA/LOOP/RESULT/R119B010.RES

Sample Name: W304J107
Date Analyzed: 2153 29Apr1993
Column: 30 M x 0.32 mm DB-1701 (FSCC)
Detector: Electron Capture (ECD)
Inj. Volume: 1.0 uL

Dil. Factor: 1.0
Instrument: GC-R (HP 5890 II)
Seq/Smpl: 1/ 10
Bottle : 10
Run Time: 30.00 min.