INTERIM REPORT
SITE CHARACTERIZATION
EIGHTH AVENUE AREA
NINTH AVENUE TERMINAL
PORT OF OAKLAND, CALIFORNIA
SCI 133.005

VOLUME II OF II

APPENDIX F - ANALYTICAL TEST REPORTS AND CHAIN-of-CUSTODY FORMS FOR SCI's SOIL AND GROUNDWATER INVESTIGATION

December 23, 1996

■ **Subsurface Consultants, Inc.**
3736 Mt. Diablo Boulevard, Suite 200 • Lafayette, California • (510) 299-7960

Appendix F

ANALYTICAL TEST REPORTS AND CHAIN-of-CUSTODY FORMS FOR SCI'S SOIL AND GROUNDWATER INVESTIGATION

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 17-SEP-96
Lab Job Number: 126714
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 126714

Project Name: KOT
Project Number: 133.005

Report Date: 17 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126714-001	SCI-MW-5	Water	03-SEP-96	03-SEP-96	13-SEP-96	ND	mg/L	5	TR	29816
126714-002	SCI-MW-20	Water	03-SEP-96	03-SEP-96	13-SEP-96	ND	mg/L	5	TR	29816

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126714
Report Date: 17 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29816**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	13-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	85%	SMWW 17:5520BF	13-SEP-96
BSD	86%	SMWW 17:5520BF	13-SEP-96

		Control Limits
Average Spike Recovery	85%	80% - 120%
Relative Percent Difference	1.8%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126714-001	SCI-MW-5	29639	09/03/96	09/07/96	09/07/96	
126714-002	SCI-MW-20	29639	09/03/96	09/07/96	09/07/96	

Matrix: Water

Analyte	Units	126714-001	126714-002
Diln Fac:		1	1
Gasoline	ug/L	<50	<50
Surrogate			
Trifluorotoluene	%REC	95	98
Bromobenzene	%REC	83	85

Curtis & Tompkins, Ltd.

Lab #: 126714 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/06/96
Batch#:	29639	Analysis Date:	09/06/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC29799

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	100	65-135
Bromobenzene	79	65-135

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

LCS Lab ID: QC29800

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	2007	2000	100	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	96	65-135		
Bromobenzene	103	65-135		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126718-001
Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Sample Date: 08/28/96
Received Date: 08/31/96
Prep Date: 09/06/96
Analysis Date: 09/06/96

MS Lab ID: QC29802

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	62.6	1921	96	75-125
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	96	65-135			
Bromobenzene	104	65-135			

MSD Lab ID: QC29803

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1973	99	75-125	3	35
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	96	65-135				
Bromobenzene	105	65-135				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126714-001	SCI-MW-5	29690	09/03/96	09/09/96	09/13/96	
126714-002	SCI-MW-20	29690	09/03/96	09/09/96	09/13/96	

Matrix: Water

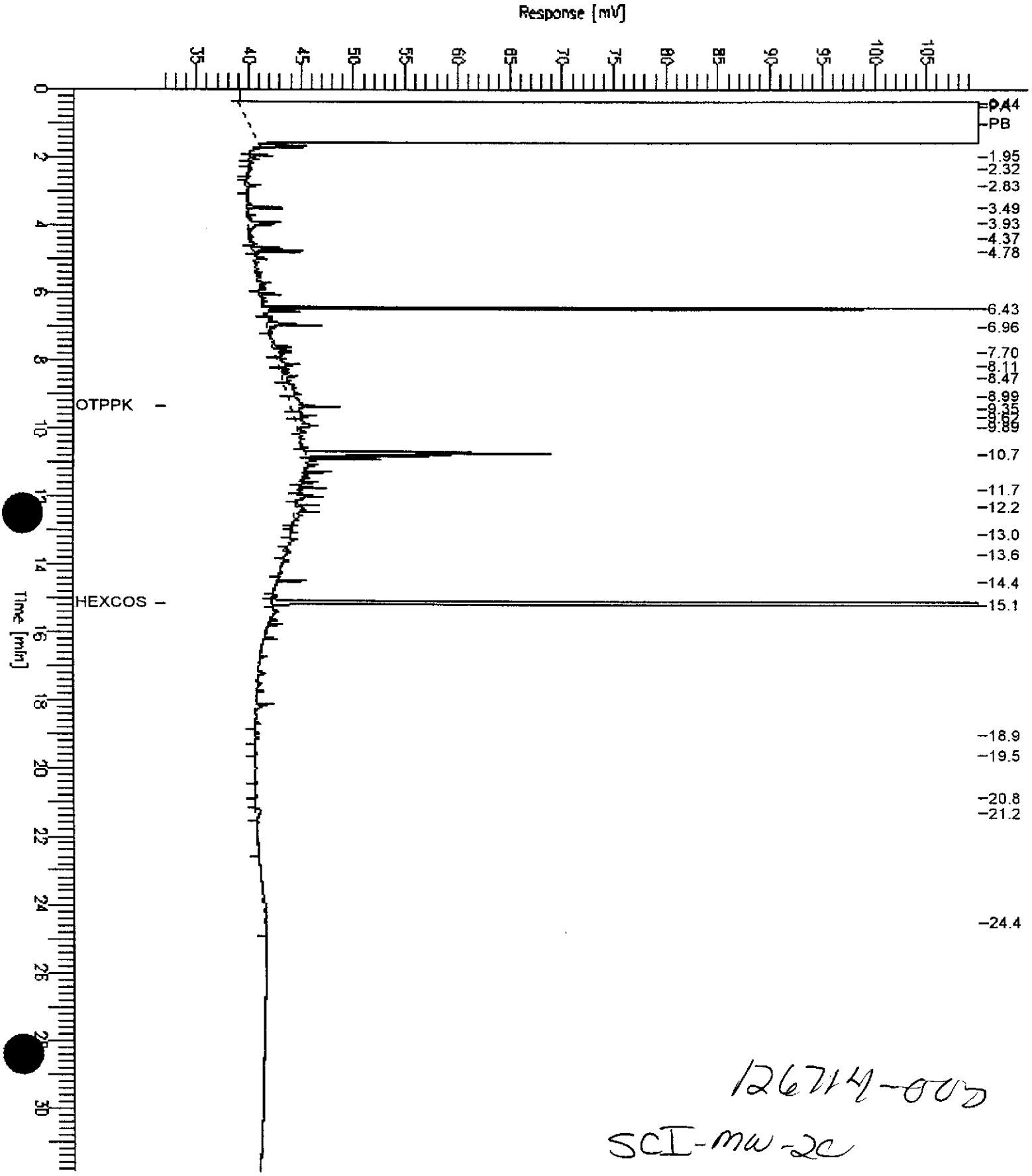
Analyte	Units	126714-001	126714-002
Diln Fac:		1	1
Diesel C12-C22	ug/L	<50	330 Y
Motor Oil C22-C50	ug/L	<250	<250
Surrogate			
Hexacosane	%REC	108	101

Y: Sample exhibits fuel pattern which does not resemble standard

GC15 Channel B Surrogate

Sample Name : 126714-002
FileName : G:\GC15\CHB\256B012.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: 32 mV

Sample #: 29690 Page 1 of 1
Date : 9/13/96 01:31 AM
Time of Injection: 9/13/96 12:56 AM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV

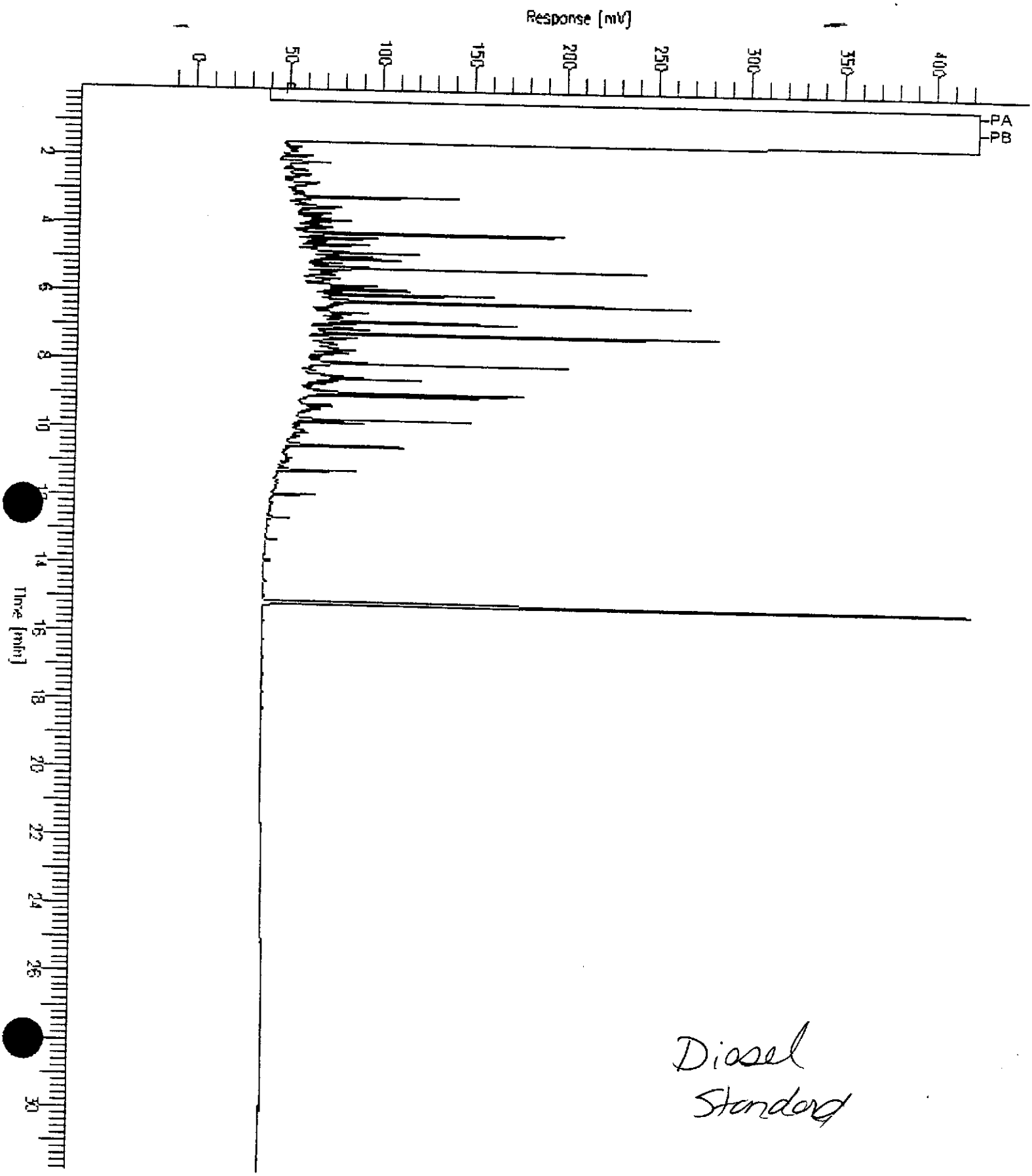


126714-002
SCI-MW-2C

GC15 Channel A TEH

Sample Name : CCV,96WS3003,DSL
FileName : G:\GC15\CHB\2568002.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: -13 mV

Sample #: 500MG/L Page 1 of 1
Date : 9/13/96 08:37 AM
Time of Injection: 9/12/96 05:42 PM
Low Point : -12.97 mV High Point : 422.91 mV
Plot Scale: 435.9 mV



Diesel Standard

Curtis & Tompkins, Ltd.

Lab #: 126714 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29690
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29965

Analyte	Result	
Diesel C12-C22	<50	
Motor Oil C22-C50	<250	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	109	60-140

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29690
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

BS Lab ID: QC29966

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1919	78	60-140
Surrogate	%Rec	Limits		
Hexacosane	109	60-140		

BSD Lab ID: QC29967

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1768	71	60-140	8	35
Surrogate	%Rec	Limits				
Hexacosane	99	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-MW-5
Lab ID: 126714-001
Matrix: Water
Batch#: 29534
Units: ug/L
Diln Fac: 1

Sampled: 09/03/96
Received: 09/03/96
Extracted: 09/04/96
Analyzed: 09/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	87	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	98	79-122

Data File: /chem/VOA_03.i/090396.b/ci334.d
Report Date: 04-Sep-1996 08:26

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_03.i/090396.b/ci334.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 04-SEP-96 03:30
Operator : LLH Inst ID: VOA_03.i
Smp Info : S,126714-001
Misc Info : 8240,,29534,5.0,5,1,
Comment :
Method : /chem/VOA_03.i/090396.b/i3m826.m
Meth Date : 04-Sep-1996 08:20 dm
Cal Date : 03-SEP-1996 14:34 Cal File: ci311.d
Als bottle: 34
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: None
Quantitative Mode : Use RF of Nearest Std

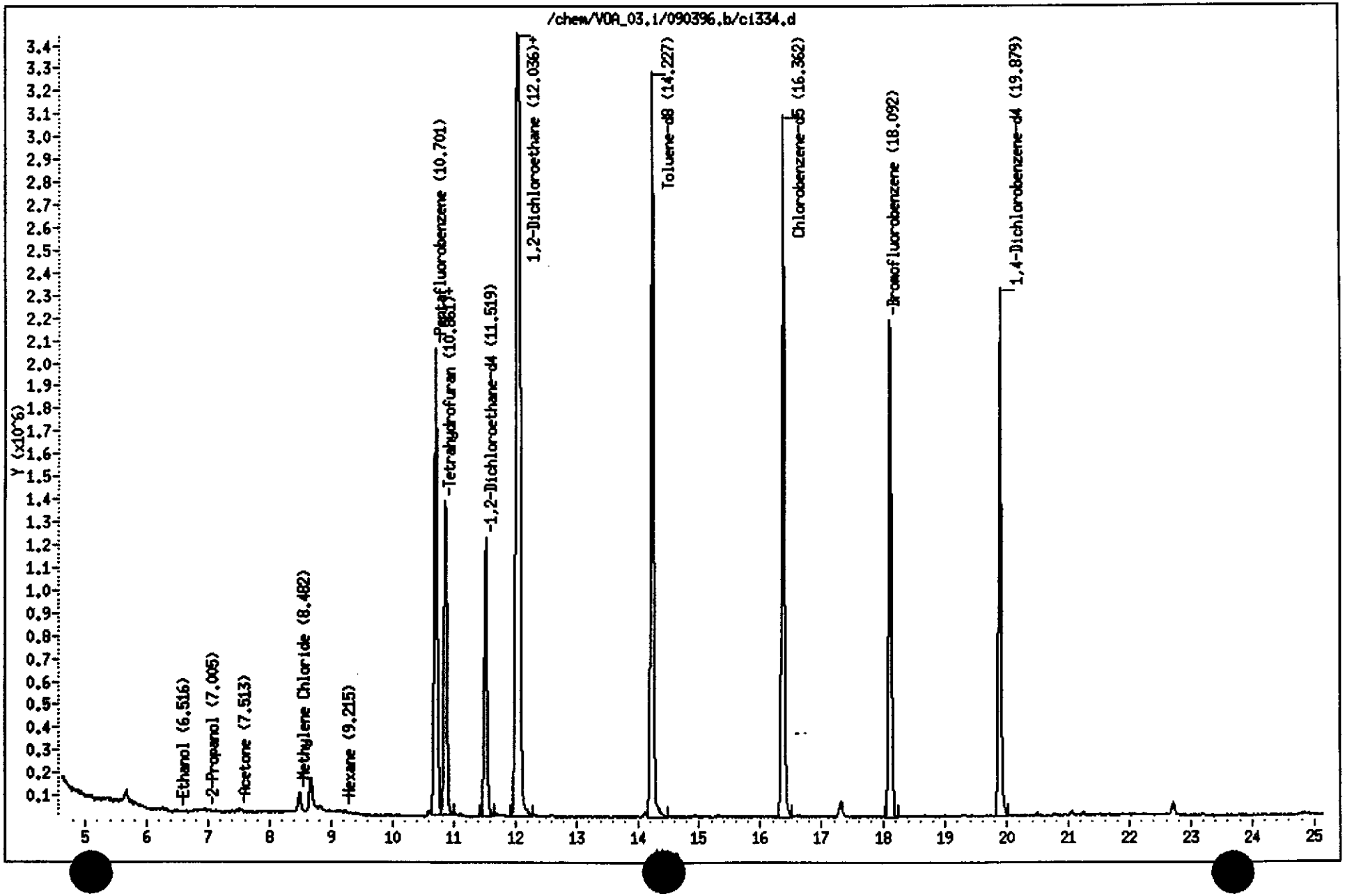
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA_03.i/090396.b/ci334.d
Date : 04-SEP-96 03:30
Client ID: DYNA P&T
Sample Info: S,126714-001

Instrument: VOA_03.i

Operator: LLH
Column diameter: 0.32

Column phase: RTx Volatiles



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-MW-20
Lab ID: 126714-002
Matrix: Water
Batch#: 29534
Units: ug/L
Diln Fac: 1

Sampled: 09/03/96
Received: 09/03/96
Extracted: 09/04/96
Analyzed: 09/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	87	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	100	79-122

Data File: /chem/VOA_03.i/090396.b/ci335.d
Report Date: 04-Sep-1996 08:26

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_03.i/090396.b/ci335.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 04-SEP-96 04:02
Operator : LLH Inst ID: VOA_03.i
Smp Info : S,126714-002
Misc Info : 8240,,29534,5.0,5,1,
Comment :
Method : /chem/VOA_03.i/090396.b/i3m826.m
Meth Date : 04-Sep-1996 08:20 dm
Cal Date : 03-SEP-1996 14:34 Cal File: ci311.d
Als bottle: 35
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: None
Quantitative Mode : Use RF of Nearest Std

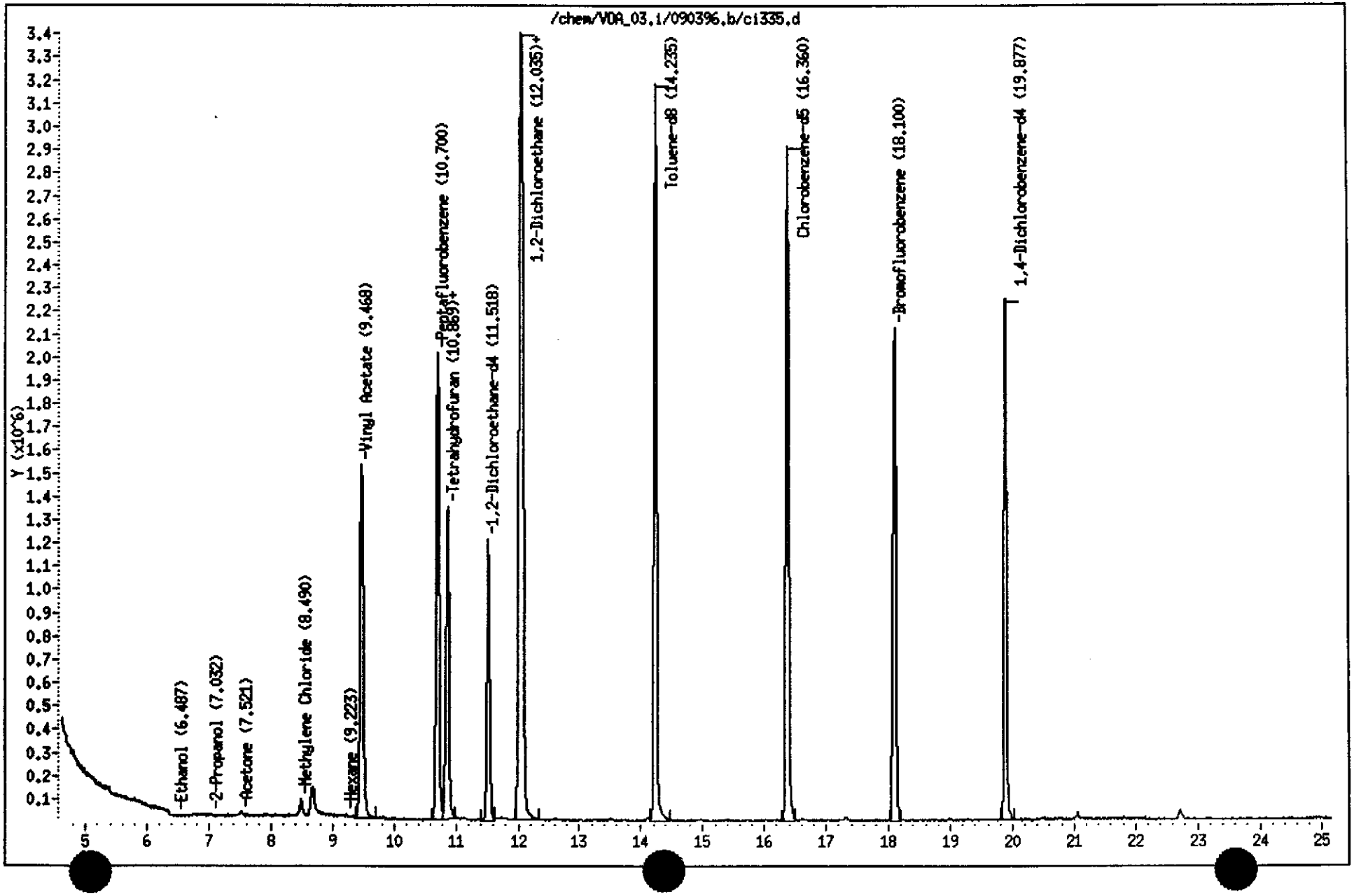
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA_03.i/090396.b/ci335.d
Date : 04-SEP-96 04:02
Client ID: DYNA P&T
Sample Info: S,126714-002

Instrument: VOA_03.i

Operator: LLH
Column diameter: 0.32

Column phase: RTx Volatiles



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: TRIP BLANK #6
Lab ID: 126714-003
Matrix: Water
Batch#: 29534
Units: ug/L
Diln Fac: 1

Sampled: 09/03/96
Received: 09/03/96
Extracted: 09/04/96
Analyzed: 09/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	81	68-126
Toluene-d8	95	87-125
Bromofluorobenzene	101	79-122

Data File: /chem/VOA_03.i/090396.b/ci332.d
Report Date: 04-Sep-1996 08:26

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_03.i/090396.b/ci332.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 04-SEP-96 02:26
Operator : LLH Inst ID: VOA_03.i
Smp Info : S,126714-003
Misc Info : 8240,,29534,5.0,5,1,
Comment :
Method : /chem/VOA_03.i/090396.b/i3m826.m
Meth Date : 04-Sep-1996 08:20 dm
Cal Date : 03-SEP-1996 14:34 Cal File: ci311.d
Als bottle: 32
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: None
Quantitative Mode : Use RF of Nearest Std

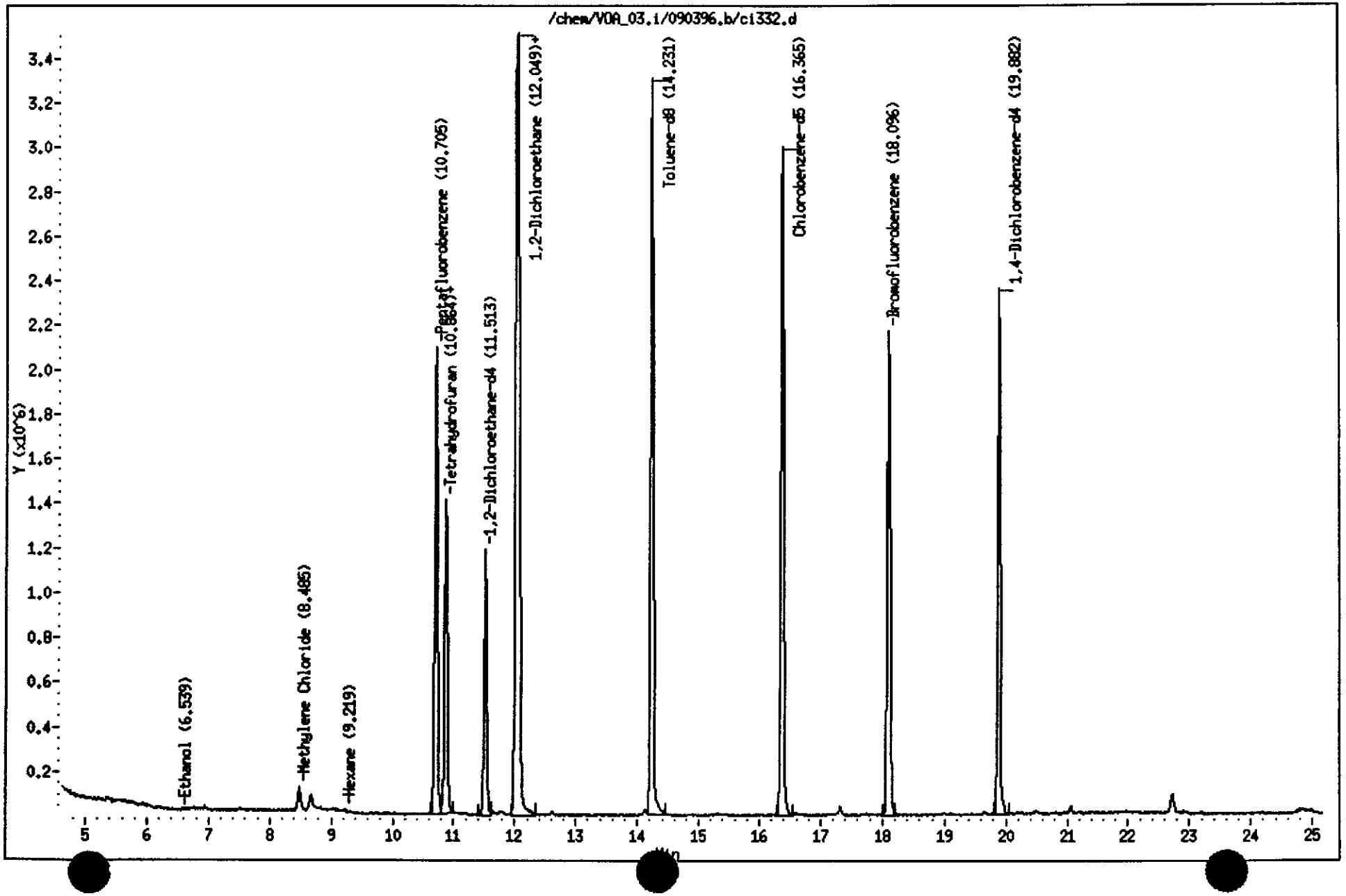
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA_03.i/090396.b/ci332.d
Date : 04-SEP-96 02:26
Client ID: DYNA P&T
Sample Info: S,126714-003

Instrument: VOA_03.i

Operator: LLH
Column diameter: 0.32

Column phase: RTx Volatiles



Curtis & Tompkins, Ltd.

Lab #: 126714 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29534
Units: ug/L
Diln Fac: 1

Prep Date: 09/03/96
Analysis Date: 09/03/96

MB Lab ID: QC29428

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	104	68-126
Toluene-d8	96	87-125
Bromofluorobenzene	87	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29534
Units: ug/L
Diln Fac: 1

Prep Date: 09/03/96
Analysis Date: 09/03/96

LCS Lab ID: QC29427

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	55.53	50	111	51-180
Trichloroethene	51.03	50	102	73-141
Benzene	52.04	50	104	78-142
Toluene	50.22	50	100	76-150
Chlorobenzene	51.74	50	103	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	105	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	87	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126708-003
Matrix: Soil
Batch#: 29534
Units: ug/Kg
Diln Fac: 25

Sample Date: 08/29/96
Received Date: 08/30/96
Prep Date: 09/03/96
Analysis Date: 09/03/96

MS Lab ID: QC29429

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	1250	<125	1081	87	51-180
Trichloroethene	1250	1989	2934	76	73-141
Benzene	1250	0	1226	98	78-142
Toluene	1250	356.3	1502	92	76-150
Chlorobenzene	1250	<125	1232	99	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	91	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	93	79-122

MSD Lab ID: QC29430

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	1250	926.3	74	51-180	15	22
Trichloroethene	1250	3147	93	73-141	7	24
Benzene	1250	1248	100	78-142	2	21
Toluene	1250	1606	100	76-150	7	21
Chlorobenzene	1250	1243	100	83-129	1	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	83	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	84	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 1 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-5
Lab ID: 126714-001
Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Sampled: 09/03/96
Received: 09/03/96
Extracted: 09/09/96
Analyzed: 09/11/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-5	Sampled:	09/03/96
Lab ID:	126714-001	Received:	09/03/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/11/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	65	21-110
Phenol-d5	70	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	67	35-114
2-Fluorobiphenyl	66	43-116
Terphenyl-d14	59	33-141

Data File: /chem/bna01.i/091196a.b/11_6714-001.d
Report Date: 12-Sep-1996 10:21

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

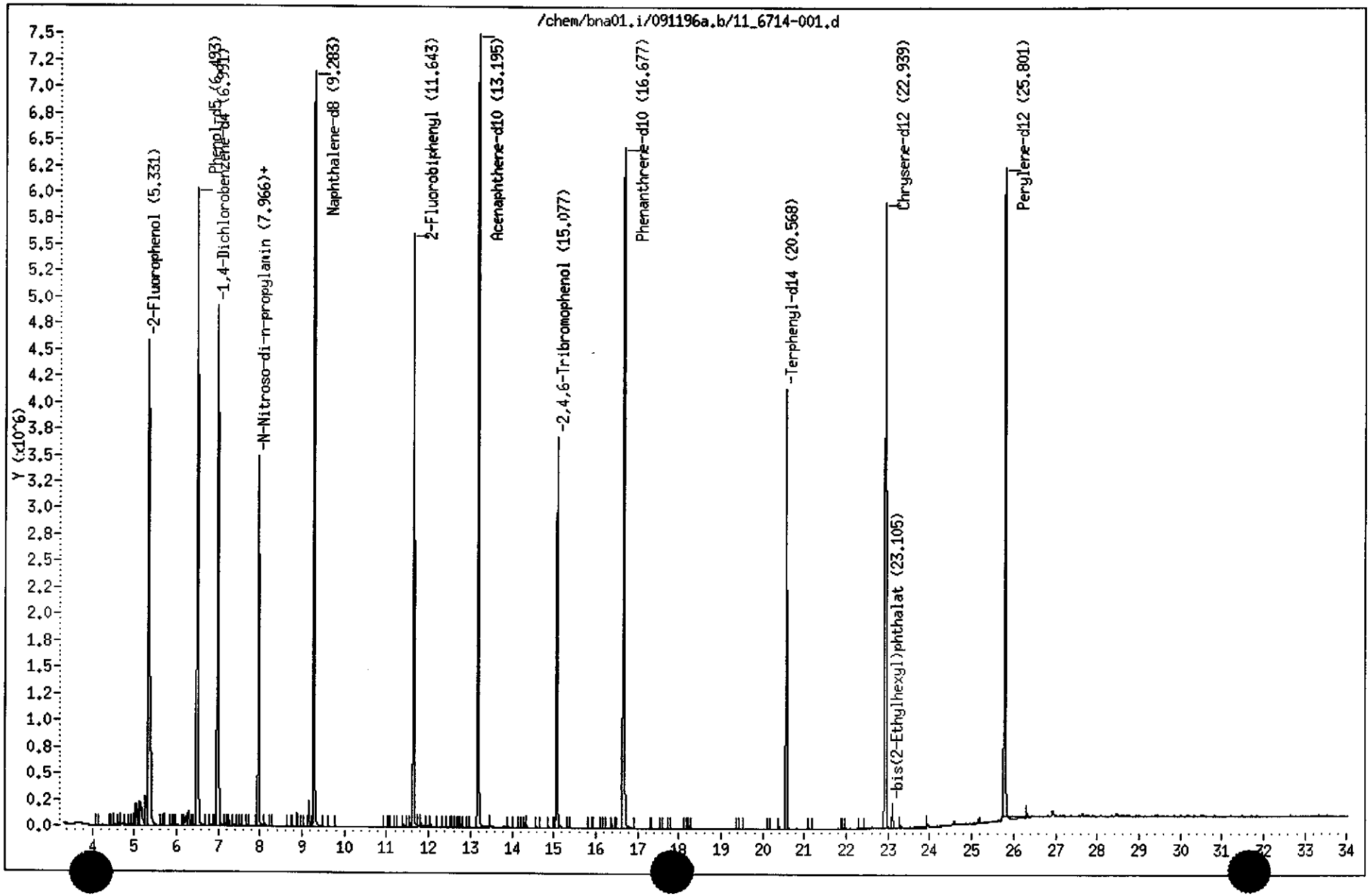
Data file : /chem/bna01.i/091196a.b/11_6714-001.d
Lab Smp Id: s,126714-001 Client Smp ID: CURTIS&TOMPKINS,LTD
Inj Date : 11-SEP-1996 20:09 Autotune Date: 10-Sep-96 15:12:2
Operator : dsh Inst ID: bna01.i
Smp Info :
Misc Info :
Comment :
Method : /chem/bna01.i/091196a.b/+bna1_6pt.m
Meth Date : 11-Sep-1996 13:59
Cal Date : 11-SEP-96 13:10 Cal File: 02_ccv0911a.d
Als bottle: 11
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/bna01.i/091196a.b/11_6714-001.d
Date : 11-SEP-1996 20:09
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i

Operator: dsh
Column diameter: 0.25



Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-20
Lab ID: 126714-002
Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Sampled: 09/03/96
Received: 09/03/96
Extracted: 09/09/96
Analyzed: 09/11/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-20	Sampled:	09/03/96
Lab ID:	126714-002	Received:	09/03/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/11/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	59	21-110
Phenol-d5	65	10-110
2,4,6-Tribromophenol	53	10-123
Nitrobenzene-d5	60	35-114
2-Fluorobiphenyl	60	43-116
Terphenyl-d14	34	33-141

Data File: /chem/bna01.i/091196a.b/12_6714-002.d
Report Date: 12-Sep-1996 10:21

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126714-002
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

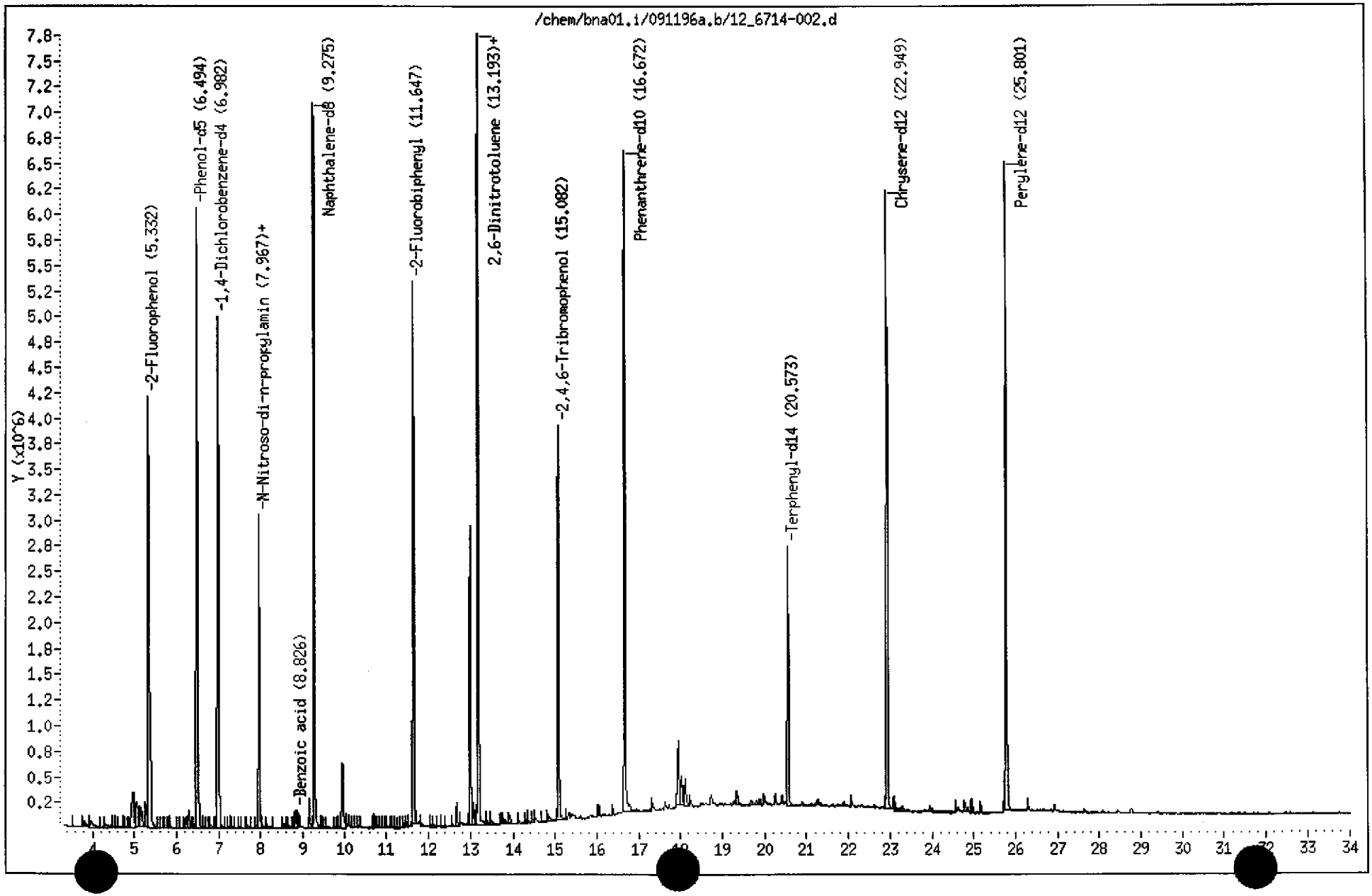
Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	503-74-2	Butanoic acid, 3-methyl-	4.981	5.17	NJ
2.	103-82-2	Benzeneacetic acid	9.958	5.21	NJ
3.	74-96-4	Ethane, bromo-	12.996	12.92	NJ
4.	109-29-5	Oxacycloheptadecan-2-one	17.952	5.66	NJ

Data File: /chem/bna01.i/091196a.b/12_6714-002.d
Date : 11-SEP-1996 20:53
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i
Operator: dsh
Column diameter: 0.25



EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29980

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	10
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29980

Analyte	Result	Reporting Limit
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	59	21-110
Phenol-d5	64	10-110
2,4,6-Tribromophenol	49	10-123
Nitrobenzene-d5	61	35-114
2-Fluorobiphenyl	62	43-116
Terphenyl-d14	64	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

BS Lab ID: QC29981

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	100	64.31	64	12-110
2-Chlorophenol	100	71.21	71	27-123
4-Chloro-3-methylphenol	100	63.38	63	23-97
4-Nitrophenol	100	50.17	50	10-80
Pentachlorophenol	100	52.23	52	9-103
1,4-Dichlorobenzene	50	29.99	60	36-97
N-Nitroso-di-n-propylamine	50	26.68	53	41-116
1,2,4-Trichlorobenzene	50	29.47	59	39-98
Acenaphthene	50	35.01	70	46-118
2,4-Dinitrotoluene	50	33.25	67	24-96
Pyrene	50	34.66	69	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	66	21-110
Phenol-d5	69	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	67	35-114
2-Fluorobiphenyl	66	43-116
Terphenyl-d14	69	33-141

BSD Lab ID: QC29982

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	100	61.22	61	12-110	5	42
2-Chlorophenol	100	68.04	68	27-123	5	40
4-Chloro-3-methylphenol	100	62.62	62	23-97	1	42
4-Nitrophenol	100	50.61	51	10-80	1	50
Pentachlorophenol	100	58.26	58	9-103	11	50
1,4-Dichlorobenzene	50	28.88	58	36-97	4	28
N-Nitroso-di-n-propylamine	50	25.86	52	41-116	3	38
1,2,4-Trichlorobenzene	50	28.62	57	39-98	3	28
Acenaphthene	50	34.94	70	46-118	0	31
2,4-Dinitrotoluene	50	33.64	67	24-96	3	38
Pyrene	50	34.51	69	26-127	0	31

Surrogate	%Rec	Limits
2-Fluorophenol	61	21-110
Phenol-d5	65	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	65	35-114
2-Fluorobiphenyl	65	43-116
Terphenyl-d14	70	33-141

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-5	Sampled:	09/03/96
Lab ID:	126714-001	Received:	09/03/96
Matrix:	Water	Extracted:	09/05/96
Batch#:	29615	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	58*	60-150
Decachlorobiphenyl	30	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-20	Sampled:	09/03/96
Lab ID:	126714-002	Received:	09/03/96
Matrix:	Water	Extracted:	09/05/96
Batch#:	29615	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	64	60-150
Decachlorobiphenyl	27*	30-130

* Values outside of QC limits

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29615
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/10/96

MB Lab ID: QC29704

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0
Surrogate	**%Rec**	**Recovery Limits**
TCMX	70	60-150
Decachlorobiphenyl	78	30-130

Curtis & Tompkins, Ltd.

Lab #: 126714 BATCH QC REPORT

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29615
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/10/96

BS Lab ID: QC29705

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.35	87	50-128
Surrogate	**%Rec**	**Limits**		
TCMX	60	60-150		
Decachlorobiphenyl	74	30-130		

BSD Lab ID: QC29706

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.45	89	50-128	2	20
Surrogate	**%Rec**	**Limits**				
TCMX	65	60-150				
Decachlorobiphenyl	69	30-130				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-5
LAB ID: 126714-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 09/03/96
DATE RECEIVED: 09/03/96
DATE REPORTED: 09/17/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	ND	5.0	1	29688	EPA 6010A	09/11/96
Barium	290	10	1	29688	EPA 6010A	09/11/96
Beryllium	2.0	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	2.0	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	ND	10	1	29688	EPA 6010A	09/11/96
Lead	ND	3.0	1	29688	EPA 6010A	09/11/96
Mercury	0.23	0.20	1	29788	EPA 7470	09/13/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	1	29688	EPA 6010A	09/11/96
Selenium	ND	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-20
LAB ID: 126714-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 09/03/96
DATE RECEIVED: 09/03/96
DATE REPORTED: 09/17/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	9.5	5.0	1	29688	EPA 6010A	09/11/96
Barium	930	10	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	ND	10	1	29688	EPA 6010A	09/11/96
Lead	ND	3.0	1	29688	EPA 6010A	09/11/96
Mercury	0.24	0.20	1	29788	EPA 7470	09/13/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	1	29688	EPA 6010A	09/11/96
Selenium	20	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126714

DATE REPORTED: 09/17/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	29688	EPA 6010A	09/11/96
Arsenic	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Barium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Copper	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Lead	ND	3	ug/L	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.2	ug/L	1	29788	EPA 7470	09/13/96
Molybdenum	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Selenium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Silver	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Thallium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	ug/L	1	29688	EPA 6010A	09/11/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126714

DATE REPORTED: 09/17/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	500	507	555	ug/L	101	111	80-120	9	35	29688	EPA 6010A	09/11/96
Arsenic	2000	1940	1970	ug/L	97	99	80-120	2	35	29688	EPA 6010A	09/11/96
Barium	2000	1980	1970	ug/L	99	99	80-120	1	35	29688	EPA 6010A	09/11/96
Beryllium	50	50.4	51.5	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Cadmium	50	52.8	53.1	ug/L	106	106	80-120	1	35	29688	EPA 6010A	09/11/96
Chromium (total)	200	198	199	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Cobalt	500	492	507	ug/L	98	101	80-120	3	35	29688	EPA 6010A	09/11/96
Copper	250	249	248	ug/L	100	99	80-120	0	35	29688	EPA 6010A	09/11/96
Lead	500	505	520	ug/L	101	104	80-120	3	35	29688	EPA 6010A	09/11/96
Mercury	5	5.422	5.696	ug/L	108	114	80-120	5	35	29788	EPA 7470	09/13/96
Molybdenum	400	406	414	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Nickel	500	507	516	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Selenium	2000	2020	2040	ug/L	101	102	80-120	1	35	29688	EPA 6010A	09/11/96
Silver	100	90.4	89.7	ug/L	90	90	80-120	1	35	29688	EPA 6010A	09/11/96
Thallium	2000	2040	2070	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Vanadium	500	495	498	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Zinc	500	480	493	ug/L	96	99	80-120	3	35	29688	EPA 6010A	09/11/96

CHAIN OF CUSTODY FORM

12614

PAGE 1 OF 1

PROJECT NAME: KOT

JOB NUMBER: 133.006 LAB: Curtis + Tompkins

PROJECT CONTACT: Jeri [redacted]/Meg Mendoza TURNAROUND: Normal

SAMPLED BY: Dennis Alexander REQUESTED BY: Jeri Alexander

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH@ gas	VOC's (8240) w/ library search	SVOC's (8270) incl PAHs w/ library search	TEHd diesel/motor oil	Heavy Metals	O&G	PCBs
-1	SCI-MW-5	X				5	5			X			X		09	03	96	1145	*	X	X	X	X	X	X	X
-2	SCI-MW-20	X				5	5			X			X		09	03	96	1100	*	X	X	X	X	X	X	X
-3	Trip Blank #6	X				1							X								X					

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dennis Alexander	9/3/96 2:15 pm	[signature]	9/3/96 4:20
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES: * Please filter & fix before metals analysis

Subsurface Consultants, Inc.

171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607

(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 10-SEP-96
Lab Job Number: 126643
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants **Laboratory Login Number: 126643**

Project Name: KOT
Project Number: 133.005

Report Date: 11 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126643-001	SCI-MW-4	Water	26-AUG-96	26-AUG-96	05-SEP-96	ND	mg/L	5	TR	29595
126643-002	SCI-MW-8	Water	26-AUG-96	26-AUG-96	05-SEP-96	ND	mg/L	5	TR	29595
126643-003	SCI-MW-10	Water	26-AUG-96	26-AUG-96	10-SEP-96	ND	mg/L	5	TR	29717

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126643
Report Date: 11 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29595**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	05-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	88%	SMWW 17:5520BF	05-SEP-96
BSD	87%	SMWW 17:5520BF	05-SEP-96

		Control Limits
Average Spike Recovery	88%	80% - 120%
Relative Percent Difference	.7%	< 20%

Q C B a t c h R e p o r t

Client: Subsurface Consultants

Laboratory Login Number: 126643

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126643-001	SCI-MW-4	29490	08/26/96	08/31/96	08/31/96	
126643-002	SCI-MW-8	29490	08/26/96	08/31/96	08/31/96	
126643-003	SCI-MW-10	29490	08/26/96	08/31/96	08/31/96	

Matrix: Water

Analyte	Units	126643-001	126643-002	126643-003
Diln Fac:		1	1	1
Gasoline	ug/L	<50	<50	<50
Surrogate				
Trifluorotoluene	%REC	98	98	99
Bromobenzene	%REC	79	78	80

Curtis & Tompkins, Ltd.

Lab #: 126643 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	08/30/96
Batch#:	29490	Analysis Date:	08/30/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC29299

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	97	65-135
Bromobenzene	76	65-135

Curtis & Tompkins, Ltd.

Lab #: 126643 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons			
Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

LABORATORY CONTROL SAMPLE

Matrix:	Water	Prep Date:	08/30/96
Batch#:	29490	Analysis Date:	08/30/96
Units:	ug/L		
Diln Fac:	1		

LCS Lab ID: QC29300

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1884	2000	94	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	92	65-135		
Bromobenzene	98	65-135		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126643 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126658-014
Matrix: Water
Batch#: 29490
Units: ug/L
Diln Fac: 1

Sample Date: 08/26/96
Received Date: 08/26/96
Prep Date: 08/31/96
Analysis Date: 08/31/96

MS Lab ID: QC29302

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50	1657	83	75-125
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	97	65-135			
Bromobenzene	99	65-135			

MSD Lab ID: QC29303

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1615	81	75-125	3	35
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	96	65-135				
Bromobenzene	98	65-135				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126643-001	SCI-MW-4	29665	08/26/96	09/08/96	09/09/96	
126643-002	SCI-MW-8	29665	08/26/96	09/08/96	09/09/96	
126643-003	SCI-MW-10	29665	08/26/96	09/08/96	09/09/96	

Matrix: Water

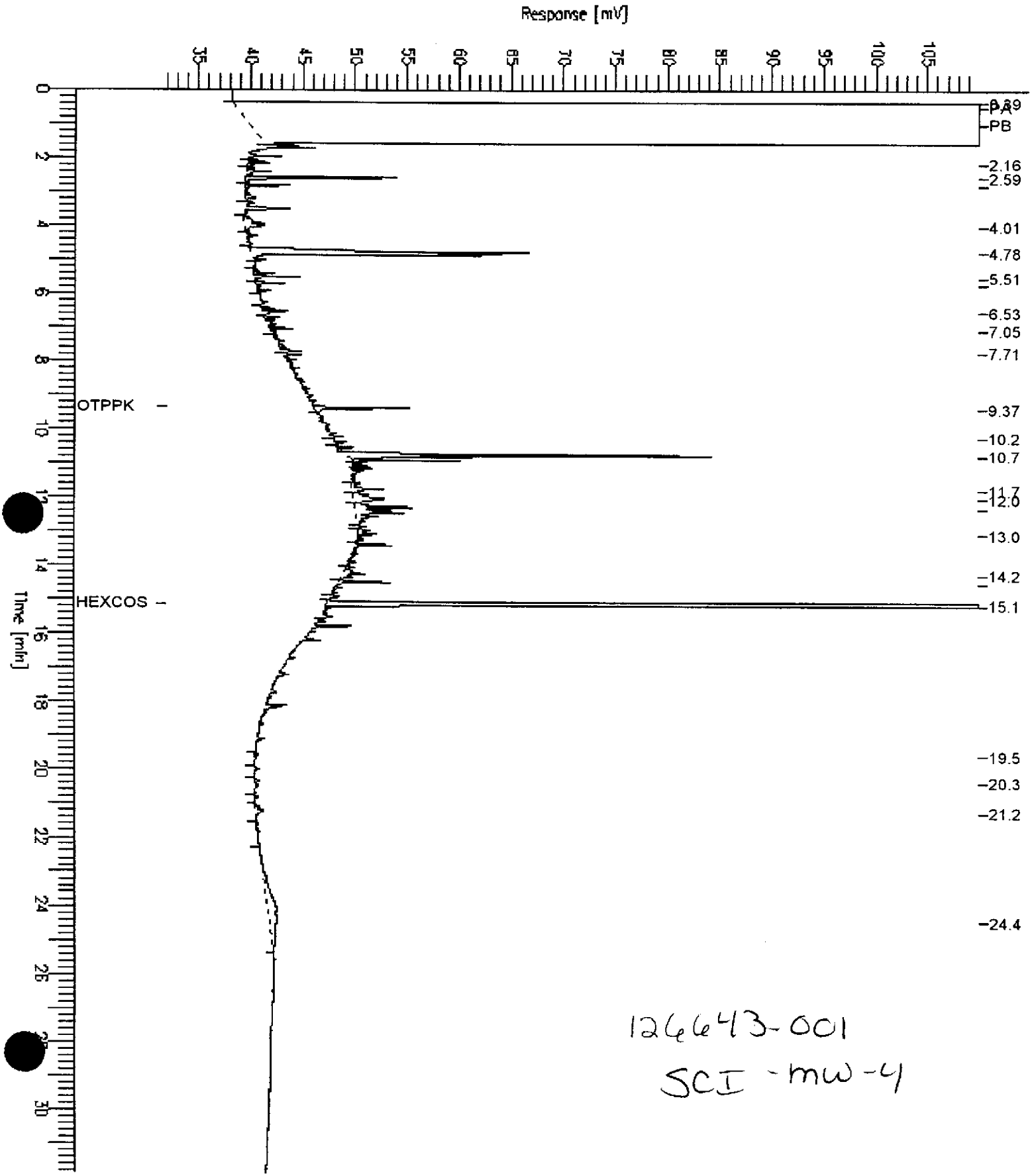
Analyte	Units	126643-001	126643-002	126643-003
Diln Fac:		1	1	1
Diesel C12-C22	ug/L	630 YH	1200 YH	1100 YH
Motor Oil C22-C50	ug/L	670 YL	1400 YL	1200 YL
Surrogate				
Hexacosane	%REC	98	107	99

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

GC15 Channel B Surrogate

Sample Name : W,126643-001
FileName : G:\GC15\CHB\253B015.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: 32 mV

Sample #: 29665 Page 1 of 1
Date : 9/8/96 10:45 PM
Time of Injection: 9/8/96 10:13 PM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV

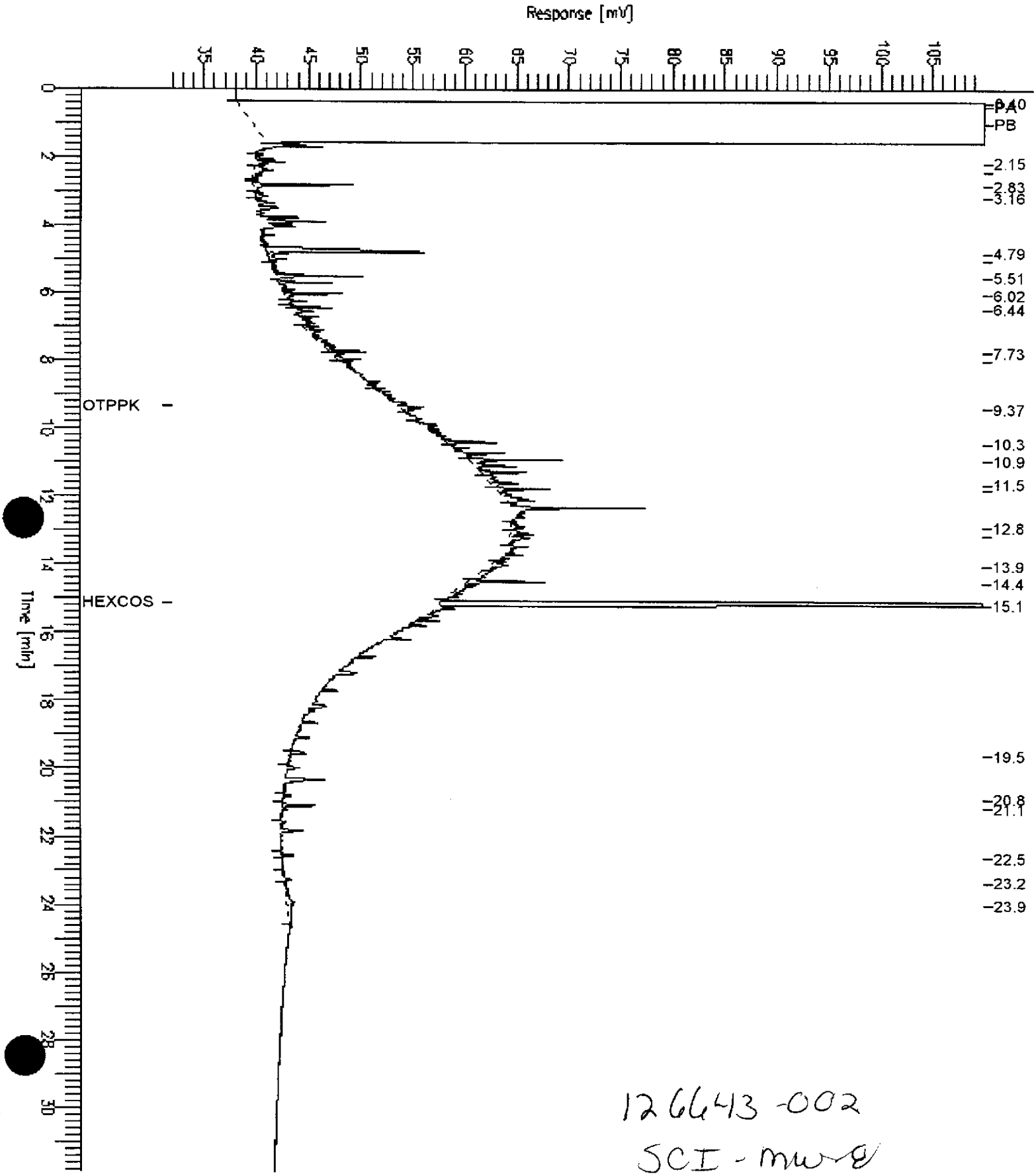


126643-001
SCI - mw-4

GC15 Channel B Surrogate

Sample Name : W,126643-002
FileName : G:\GC15\CHB\253B016.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: 32 mV

Sample #: 29665 Page 1 of 1
Date : 9/8/96 11:29 PM
Time of Injection: 9/8/96 10:57 PM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV

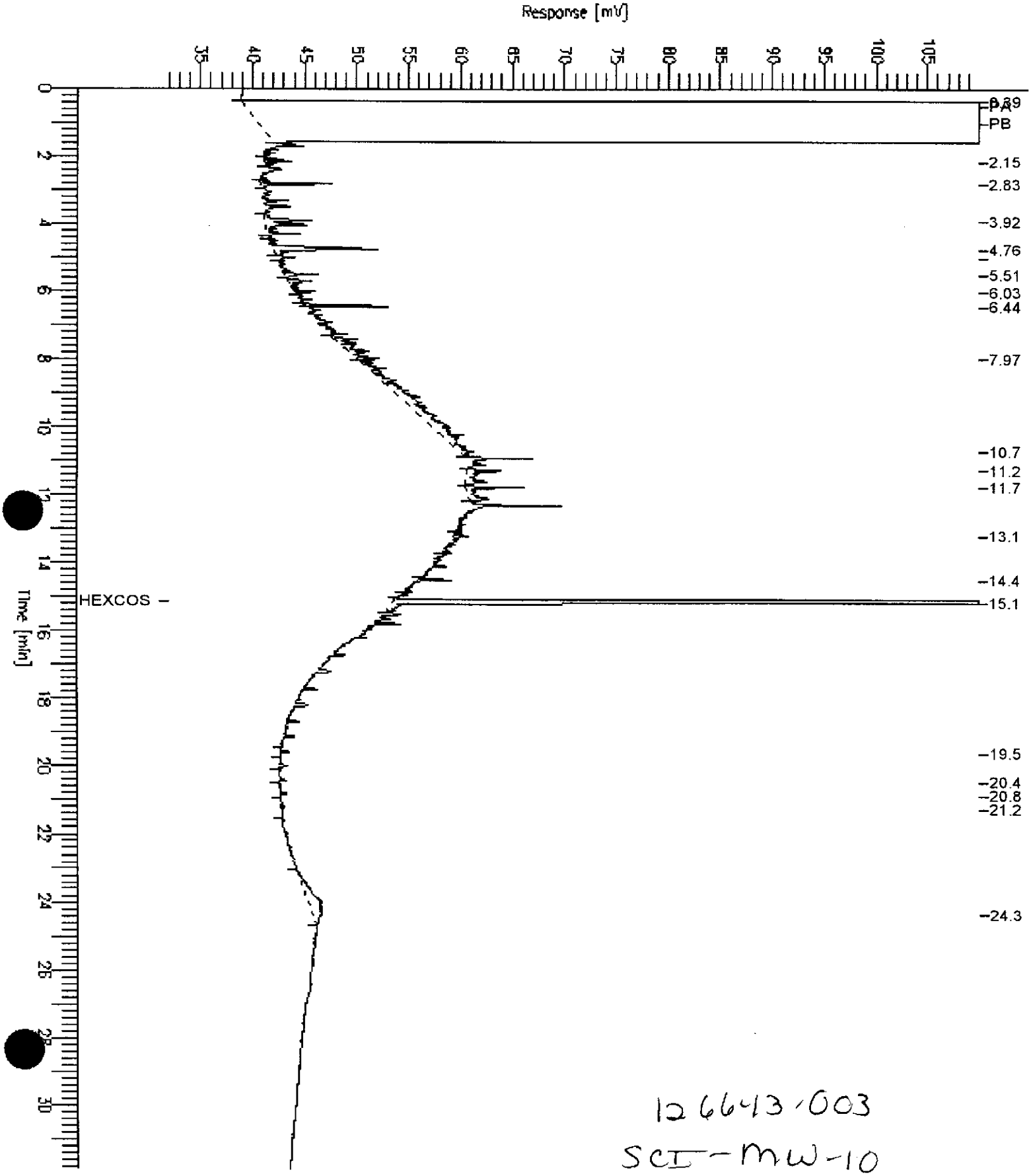


126643-002
SCI - mw 8

GC15 Channel B Surrogate

Sample Name : W,126643-003
FileName : G:\GC15\CHB\253B012.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: 32 mV

Sample #: 29665 Page 1 of 1
Date : 9/8/96 08:34 PM
Time of Injection: 9/8/96 08:02 PM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV

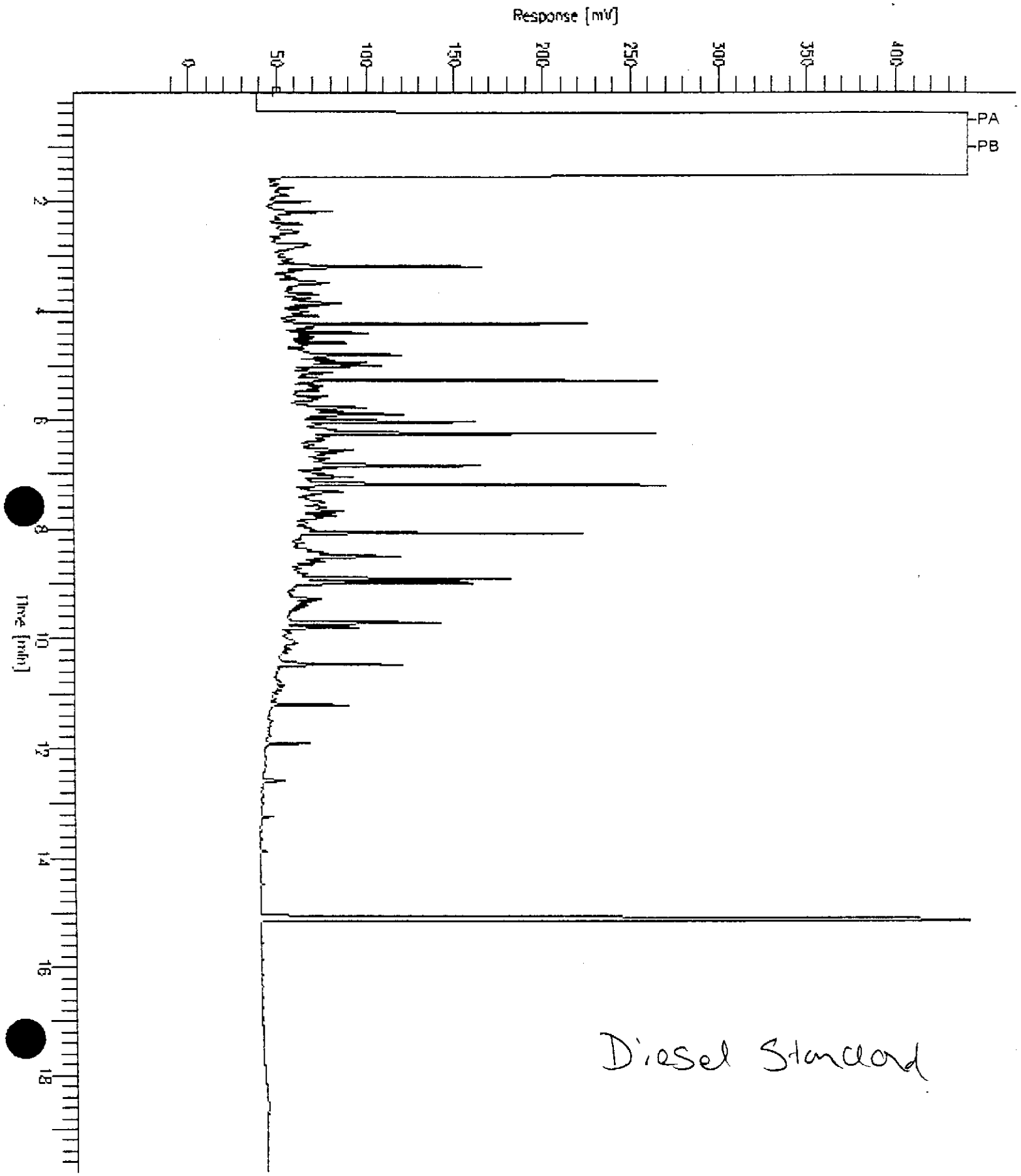


126643-003
SCI-MW-10

GC15 Channel A TEH

Sample Name : CCV,96WS3003,DSL
FileName : G:\GC15\CHB\253B041.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 19.80 min
Slope Factor: 0.0 Plot Offset: -14 mV

Sample #: 500MG/L Page 1 of 1
Date : 9/9/96 04:41 PM
Time of Injection: 9/9/96 02:38 PM
Low Point : -13.58 mV High Point : 440.89 mV
Plot Scale: 454.5 mV

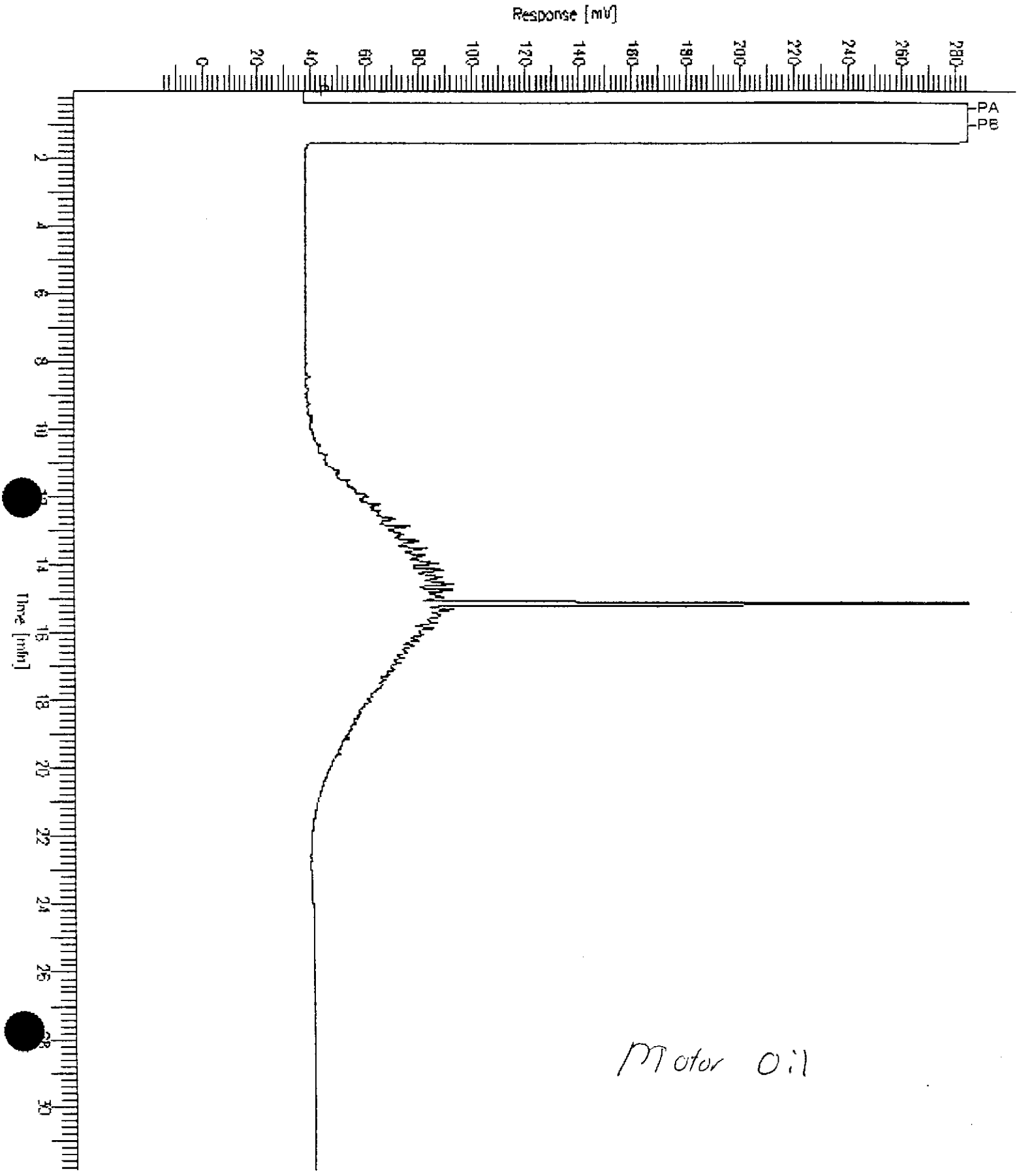


Diesel Standard

GC15 Channel A TEH

Sample Name : CCV,96WS3011,MO
FileName : G:\GC15\CHB\253B043.RAW
Method : 241TEH.MTH
[redacted]t Time : 0.01 min End Time : 31.91 min
[redacted]e Factor: 0.0 Plot Offset: -14 mV

Sample #: 500MG/L Page 1 of 1
Date : 9/9/96 04:33 PM
Time of Injection: 9/9/96 03:37 PM
Low Point : -14.21 mV High Point : 284.41 mV
Plot Scale: 298.6 mV



Motor Oil

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29665
Units: ug/L
Diln Fac: 1

Prep Date: 09/08/96
Analysis Date: 09/09/96

MB Lab ID: QC29881

Analyte	Result	
Diesel C12-C22	<50	
Motor Oil C22-C50	<250	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	99	60-140

TEH-Tot Ext Hydrocarbons	
Client: Subsurface Consultants	Analysis Method: CA LUFT (EPA 8015M)
Project#: 133.005	Prep Method: EPA 3520
Location: KOT	

BLANK SPIKE/BLANK SPIKE DUPLICATE	
Matrix: Water	Prep Date: 09/08/96
Batch#: 29665	Analysis Date: 09/09/96
Units: ug/L	
Diln Fac: 1	

BS Lab ID: QC29882

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1681	68	60-140
Surrogate	%Rec	Limits		
Hexacosane	97	60-140		

BSD Lab ID: QC29883

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1652	67	60-140	2	35
Surrogate	%Rec	Limits				
Hexacosane	102	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-MW-4
Lab ID: 126643-001
Matrix: Water
Batch#: 29407
Units: ug/L
Diln Fac: 1

Sampled: 08/26/96
Received: 08/26/96
Extracted: 08/28/96
Analyzed: 08/28/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	102	79-122

Data File: /chem/VOA_05.i/082896.b/ehs06.d
Report Date: 28-Aug-1996 12:03

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_05.i/082896.b/ehs06.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-AUG-1996 10:28
Operator : DM Inst ID: VOA_05.i
Smp Info : MSS,126643-001
Misc Info : 8240,,29407,5.0,5,1, WATER
Comment :
Method : /chem/VOA_05.i/082896.b/i5m826.m
Meth Date : 28-Aug-1996 08:26 liza
Cal Date : 26-AUG-1996 17:33 Cal File: ehq13.d
Als bottle: 6
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

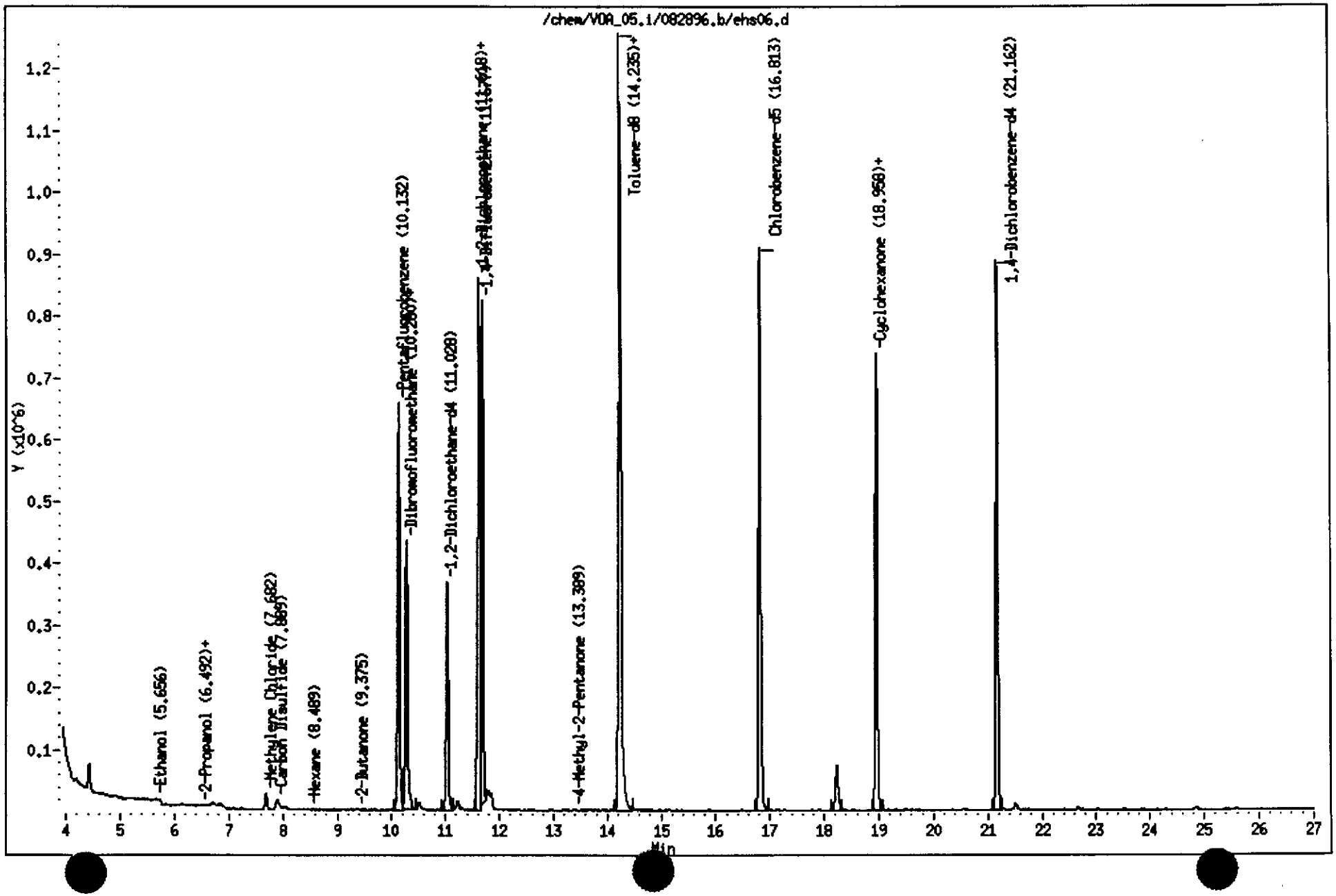
ISTD	RT	AREA	AMOUNT
* 50 Chlorobenzene-d5	16.813	2597861	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(UG/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
18.230	279940	5.39	5.39	78	nbs75k.l	41966	50

Column bleed - do not report

Data File: /chem/VOA_05.i/082896.b/ehs06.d
Date : 28-AUG-1996 10:28
Client ID: DYNA P&T
Sample Info: MSS,126643-001
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-MW-8
Lab ID: 126643-002
Matrix: Water
Batch#: 29407
Units: ug/L
Diln Fac: 1

Sampled: 08/26/96
Received: 08/26/96
Extracted: 08/28/96
Analyzed: 08/28/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	101	79-122

Data File: /chem/VOA_05.i/082896.b/ehs09.d
Report Date: 28-Aug-1996 12:50

Curtis & Tompkins Labs

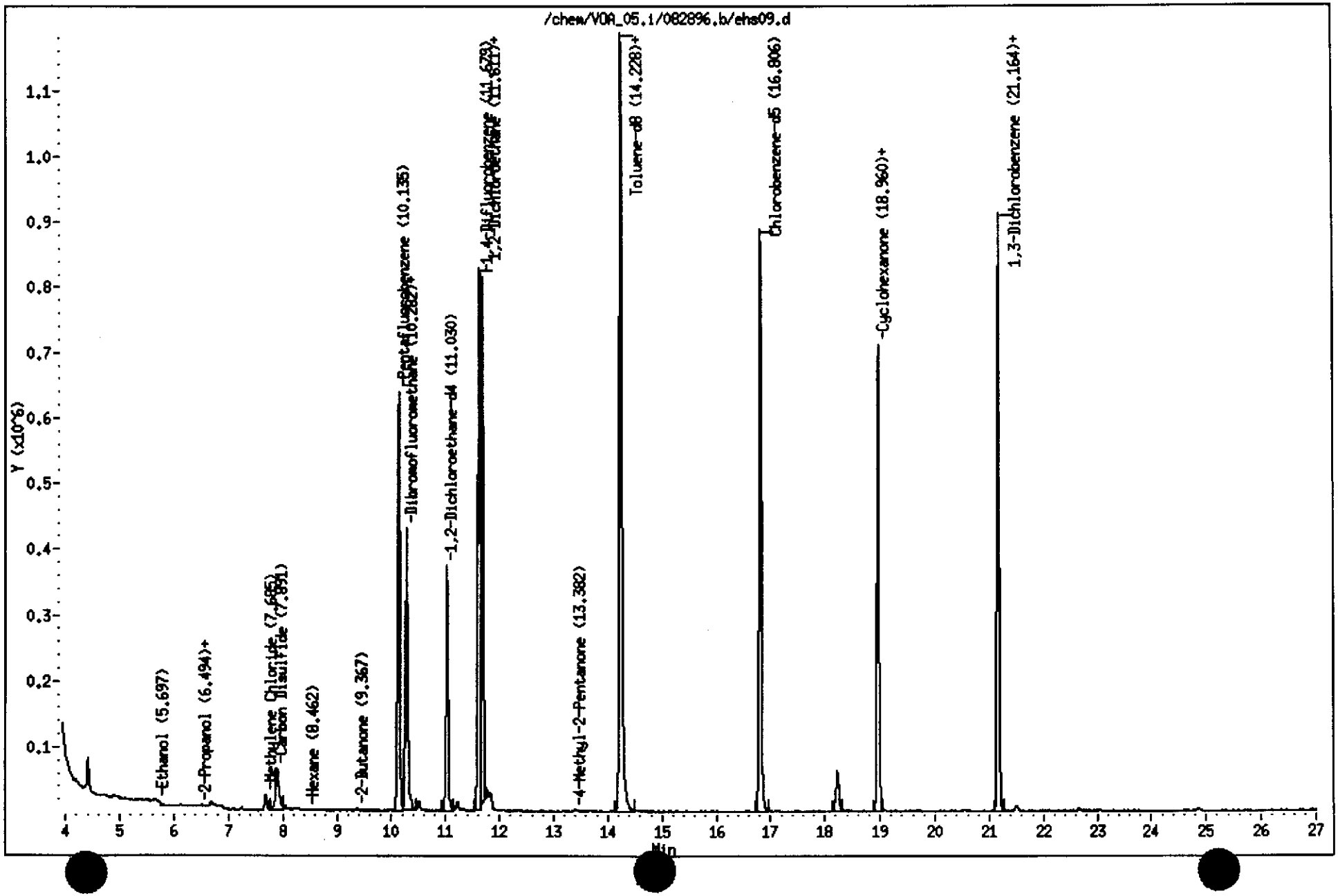
Unknown Compounds Quantitation Report

Data file : /chem/VOA_05.i/082896.b/ehs09.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-AUG-1996 12:04
Operator : DM Inst ID: VOA_05.i
Smp Info : S,126643-002
Misc Info : 8240,,29407,5.0,5,1, WATER
Comment :
Method : /chem/VOA_05.i/082896.b/i5m826.m
Meth Date : 28-Aug-1996 08:26 liza
Cal Date : 26-AUG-1996 17:33 Cal File: ehq13.d
Als bottle: 9
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA_05.i/082896.b/ehs09.d
Date : 28-AUG-1996 12:04
Client ID: DYNA P&T
Sample Info: S,126643-002
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DM
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-MW-10
Lab ID: 126643-003
Matrix: Water
Batch#: 29407
Units: ug/L
Diln Fac: 1

Sampled: 08/26/96
Received: 08/26/96
Extracted: 08/28/96
Analyzed: 08/28/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	104	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	100	79-122

Data File: /chem/VOA_05.i/082896.b/ehs10.d
Report Date: 28-Aug-1996 13:26

Curtis & Tompkins Labs

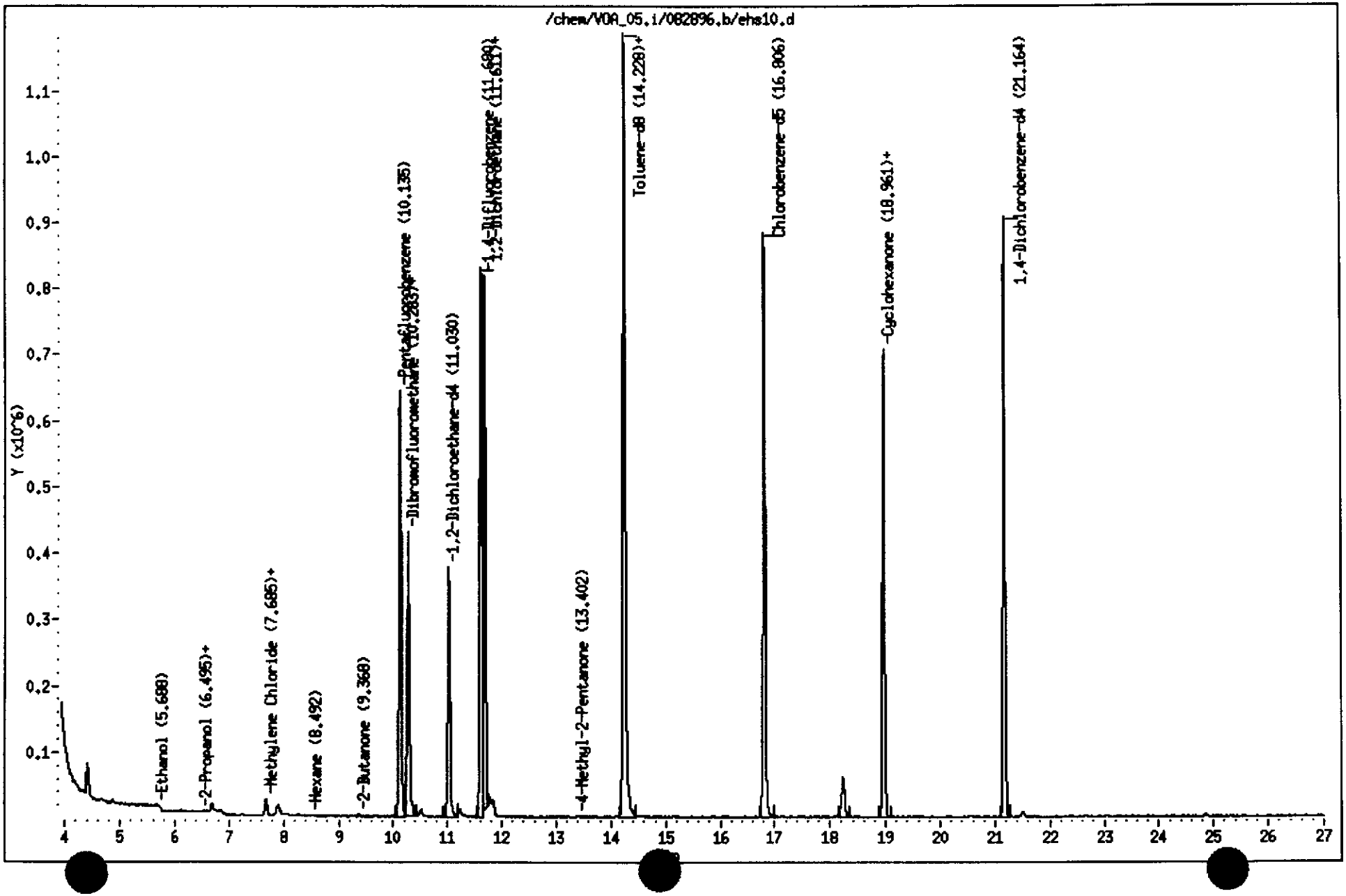
Unknown Compounds Quantitation Report

Data file : /chem/VOA_05.i/082896.b/ehs10.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-AUG-1996 12:37
Operator : DM Inst ID: VOA_05.i
Smp Info : S,126643-003
Misc Info : 8240,,29407,5.0,5,1, WATER
Comment :
Method : /chem/VOA_05.i/082896.b/i5m826.m
Meth Date : 28-Aug-1996 08:26 liza
Cal Date : 26-AUG-1996 17:33 Cal File: ehq13.d
Als bottle: 10
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA_05.i/082896.b/ehs10.d
Date : 28-AUG-1996 12:37
Client ID: DYNA PaT
Sample Info: S,126643-003
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: TRIP BLANK #1
Lab ID: 126643-004
Matrix: Water
Batch#: 29407
Units: ug/L
Diln Fac: 1

Sampled: 08/26/96
Received: 08/26/96
Extracted: 08/28/96
Analyzed: 08/28/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	100	79-122

Data File: /chem/VOA_05.i/082896.b/ehs11.d
Report Date: 28-Aug-1996 14:02

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_05.i/082896.b/ehs11.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-AUG-1996 13:09
Operator : DM Inst ID: VOA_05.i
Smp Info : S,126643-004
Misc Info : 8240,,29407,5.0,5,1, WATER
Comment :
Method : /chem/VOA_05.i/082896.b/i5m826.m
Meth Date : 28-Aug-1996 08:26 liza
Cal Date : 26-AUG-1996 17:33 Cal File: ehq13.d
Als bottle: 11
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 50 Chlorobenzene-d5	16.810	2470162	50.000

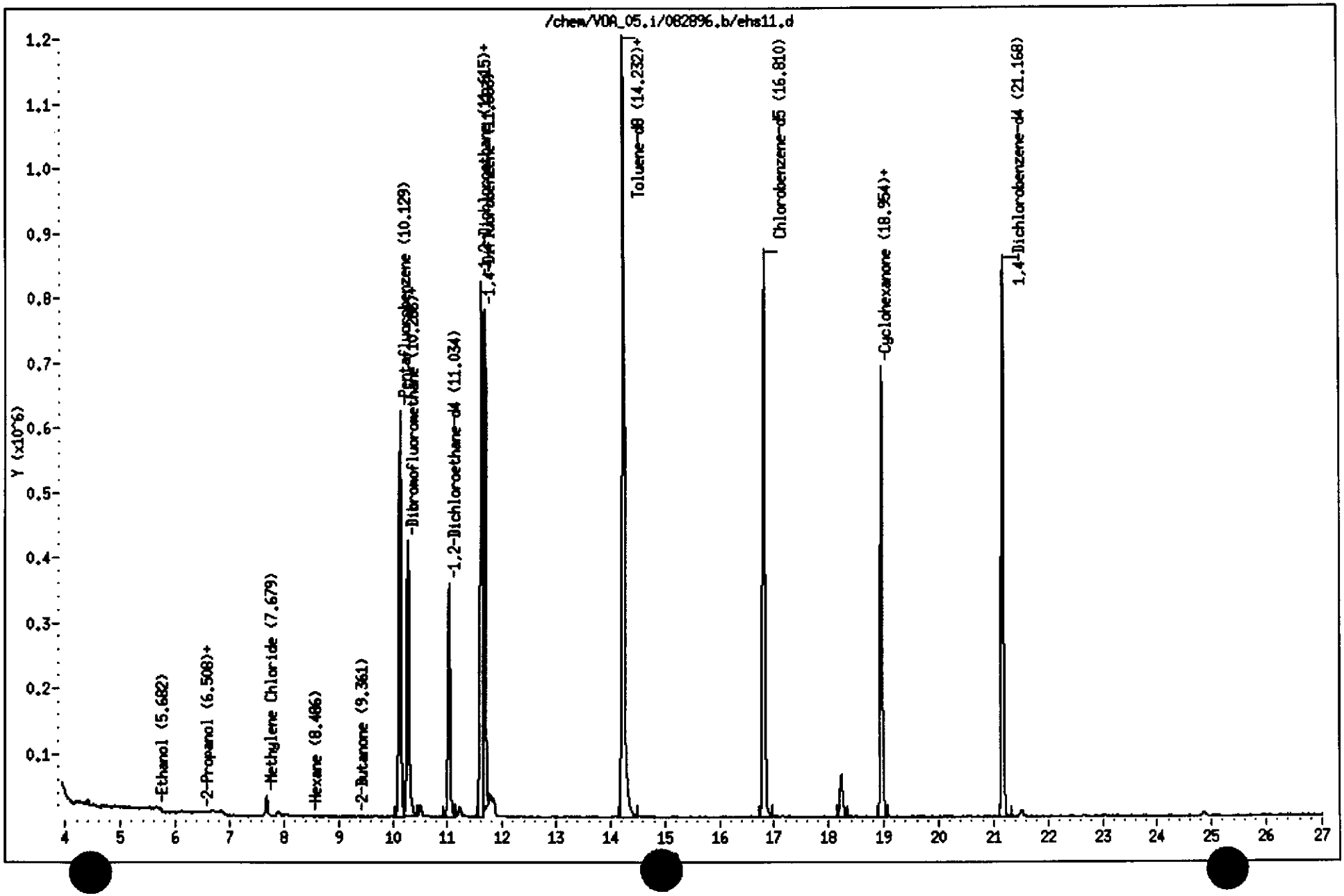
	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(UG/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
18.226	252868	5.12	5.12	91	nbs75k.l	41966	50

Column bleed do not report

Data File: /chem/VOA_05.i/082896.b/ehs11.d
Date : 28-AUG-1996 13:09
Client ID: DYNA P&T
Sample Info: S,126643-004
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i

Operator: DM
Column diameter: 0.32



Curtis & Tompkins, Ltd.

Lab #: 126643 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29407
Units: ug/L
Diln Fac: 1

Prep Date: 08/28/96
Analysis Date: 08/28/96

MB Lab ID: QC28987

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	101	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	101	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29407
Units: ug/L
Diln Fac: 1

Prep Date: 08/28/96
Analysis Date: 08/28/96

LCS Lab ID: QC28986

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	52.84	50	106	51-180
Trichloroethene	50.11	50	100	73-141
Benzene	51.85	50	104	78-142
Toluene	51.05	50	102	76-150
Chlorobenzene	50.84	50	102	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	102	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCI-MW-4
Lab ID: 126643-001
Matrix: Water
Batch#: 29407
Units: ug/Kg
Diln Fac: 1

Sample Date: 08/26/96
Received Date: 08/26/96
Prep Date: 08/28/96
Analysis Date: 08/28/96

MS Lab ID: QC28988

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	50.84	102	51-180
Trichloroethene	50	<5	48.61	97	73-141
Benzene	50	<5	50.53	101	78-142
Toluene	50	<5	48.51	97	76-150
Chlorobenzene	50	<5	49.55	99	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	102	79-122

MSD Lab ID: QC28989

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	49.74	100	51-180	2	14
Trichloroethene	50	47.49	95	73-141	2	14
Benzene	50	49.88	100	78-142	1	11
Toluene	50	47.95	96	76-150	1	13
Chlorobenzene	50	48.53	97	83-129	2	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	102	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-MW-4	Sampled:	08/26/96
Lab ID:	126643-001	Received:	08/26/96
Matrix:	Water	Extracted:	09/02/96
Batch#:	29513	Analyzed:	09/07/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	66	60-150
Decachlorobiphenyl	24*	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-MW-8	Sampled:	08/26/96
Lab ID:	126643-002	Received:	08/26/96
Matrix:	Water	Extracted:	09/02/96
Batch#:	29513	Analyzed:	09/07/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	79	60-150
Decachlorobiphenyl	29*	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-MW-10	Sampled:	08/26/96
Lab ID:	126643-003	Received:	08/26/96
Matrix:	Water	Extracted:	09/02/96
Batch#:	29513	Analyzed:	09/07/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	56*	60-150
Decachlorobiphenyl	36	30-130

* Values outside of QC limits

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520
Cleanup Method: EPA acid

METHOD BLANK

Matrix: Water
Batch#: 29513
Units: ug/L
Diln Fac: 1

Prep Date: 09/02/96
Analysis Date: 09/06/96

MB Lab ID: QC29345

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Rec	Recovery Limits
TCMX	64	60-150
Decachlorobiphenyl	53	30-130

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520
Cleanup Method: EPA acid

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29513
Units: ug/L
Diln Fac: 1

Prep Date: 09/02/96
Analysis Date: 09/06/96

BS Lab ID: QC29346

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.21	84	50-128
Surrogate	**%Rec**	**Limits**		
TCMX	63	60-150		
Decachlorobiphenyl	66	30-130		

BSD Lab ID: QC29347

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.65	93	50-128	10	20
Surrogate	**%Rec**	**Limits**				
TCMX	64	60-150				
Decachlorobiphenyl	52	30-130				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-4
Lab ID: 126643-001
Matrix: Water
Batch#: 29489
Units: ug/L
Diln Fac: 1

Sampled: 08/26/96
Received: 08/26/96
Extracted: 08/30/96
Analyzed: 09/04/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-4	Sampled:	08/26/96
Lab ID:	126643-001	Received:	08/26/96
Matrix:	Water	Extracted:	08/30/96
Batch#:	29489	Analyzed:	09/04/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	88	21-110
Phenol-d5	93	10-110
2,4,6-Tribromophenol	76	10-123
Nitrobenzene-d5	83	35-114
2-Fluorobiphenyl	83	43-116
Terphenyl-d14	36	33-141

Data File: /chem/bna01.i/090496a.b/08_6643-1re.d
Report Date: 04-Sep-1996 18:26

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: re,126643-001
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 6

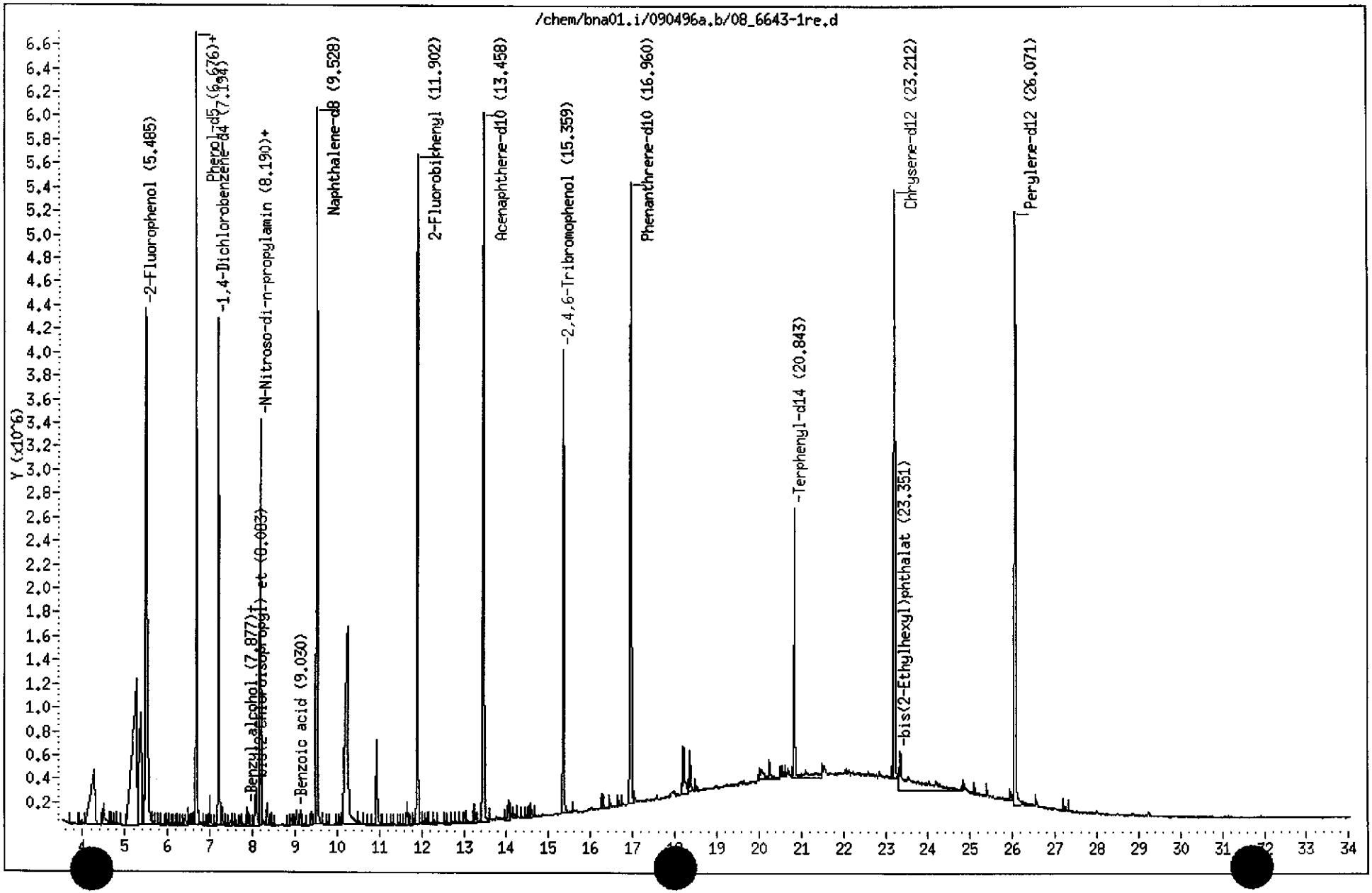
CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	79-31-2	Propanoic acid, 2-methyl-	4.273	15.86	NJ
2.	540-73-8	Hydrazine, 1,2-dimethyl-	5.279	43.77	NJ
3.	116-53-0	Butanoic acid, 2-methyl-	5.387	19.05	NJ
4.	103-82-2	Benzeneacetic acid	10.251	30.35	NJ
5.	120-72-9	Indole	10.945	4.61	NJ
6.	74630-23-2	2-Decene, 7-methyl-, (Z)-	18.202	4.40	NJ

Data File: /chem/bna01.i/090496a.b/08_6643-1re.d
Date : 04-SEP-1996 17:28
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i

Operator: dsh
Column diameter: 0.25



Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-8
Lab ID: 126643-002
Matrix: Water
Batch#: 29489
Units: ug/L
Diln Fac: 1

Sampled: 08/26/96
Received: 08/26/96
Extracted: 08/30/96
Analyzed: 09/03/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-8	Sampled:	08/26/96
Lab ID:	126643-002	Received:	08/26/96
Matrix:	Water	Extracted:	08/30/96
Batch#:	29489	Analyzed:	09/03/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	70	21-110
Phenol-d5	78	10-110
2,4,6-Tribromophenol	67	10-123
Nitrobenzene-d5	70	35-114
2-Fluorobiphenyl	71	43-116
Terphenyl-d14	49	33-141

Data File: /chem/bna01.i/090396a.b/07_6643-002.d
Report Date: 04-Sep-1996 10:20

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126643-002
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

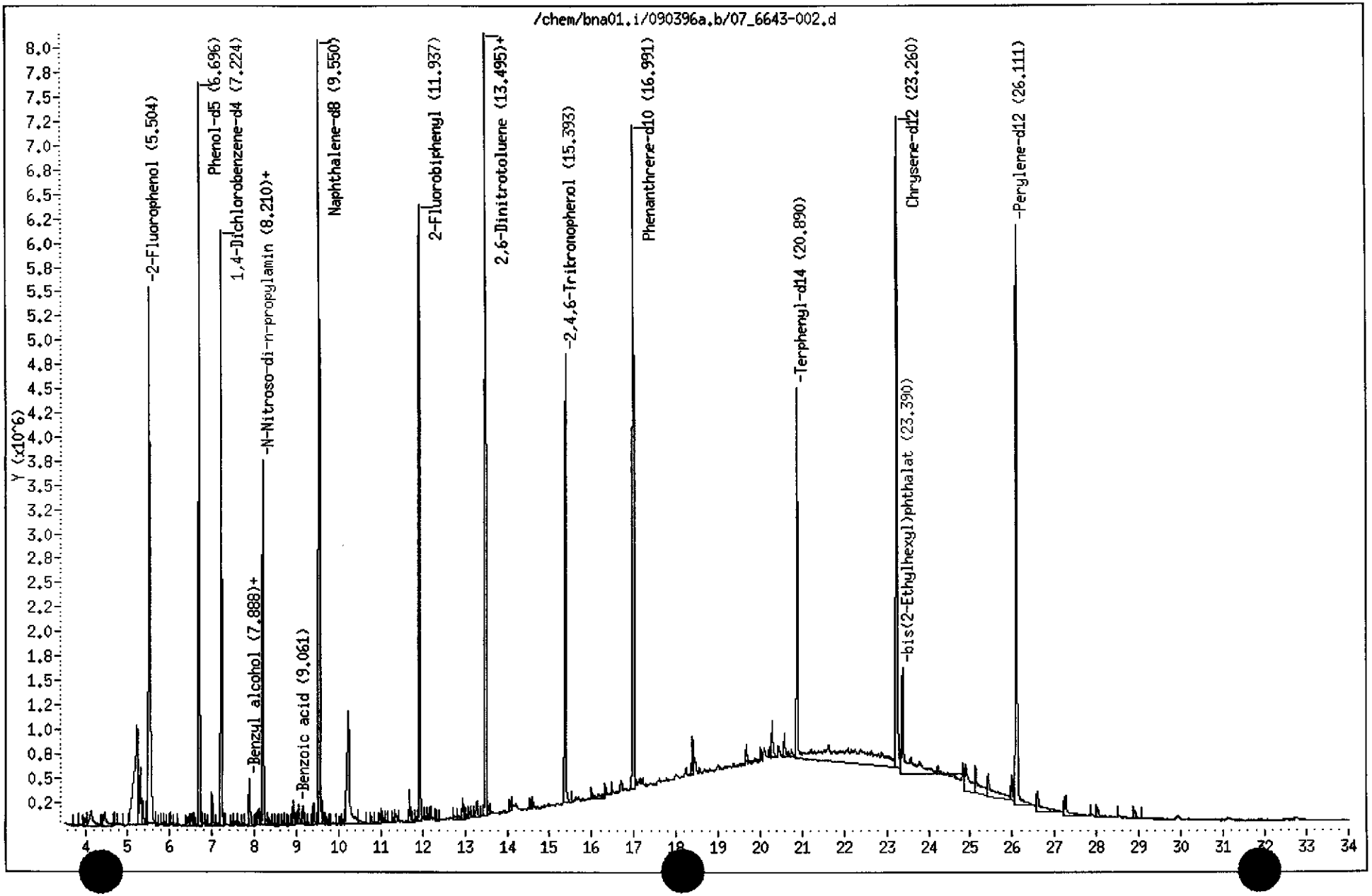
Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	503-74-2	Butanoic acid, 3-methyl-	5.220	19.45	NJ
2.	60-29-7	Ether	5.299	4.90	NJ
3.	103-82-2	Benzeneacetic acid	10.244	12.87	NJ
4.	301-02-0	9-Octadecenamide, (Z)-	24.902	4.58	NJ
5.	7683-64-9	Squalene	25.130	4.34	NJ
6.	112-95-8	Eicosane	25.437	4.97	NJ
7.	112-95-8	Eicosane	26.604	3.94	NJ

Data File: /chem/bna01.i/090396a.b/07_6643-002.d
Date : 03-SEP-1996 20:19
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i
Operator: dsh
Column diameter: 0.25



Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-10	Sampled:	08/26/96
Lab ID:	126643-003	Received:	08/26/96
Matrix:	Water	Extracted:	08/30/96
Batch#:	29489	Analyzed:	09/03/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-10	Sampled:	08/26/96
Lab ID:	126643-003	Received:	08/26/96
Matrix:	Water	Extracted:	08/30/96
Batch#:	29489	Analyzed:	09/03/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	74	21-110
Phenol-d5	84	10-110
2,4,6-Tribromophenol	70	10-123
Nitrobenzene-d5	74	35-114
2-Fluorobiphenyl	71	43-116
Terphenyl-d14	39	33-141

Data File: /chem/bna01.i/090396a.b/08_6643-003.d
Report Date: 04-Sep-1996 10:20

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126643-003
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

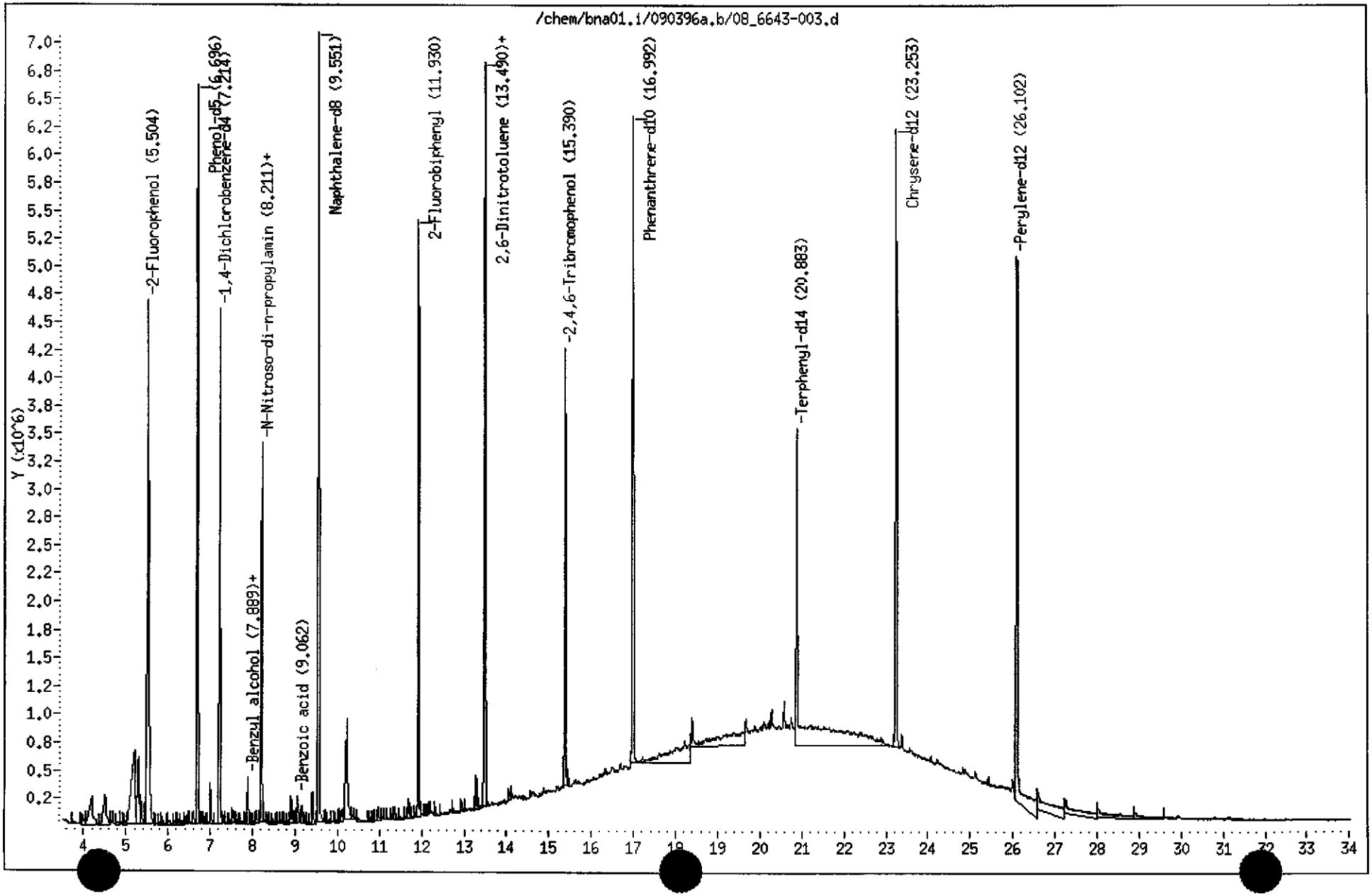
Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	79-31-2	Propanoic acid, 2-methyl-	4.205	7.25	NJ
2.	107-92-6	Butanoic acid	4.517	5.62	NJ
3.	503-74-2	Butanoic acid, 3-methyl-	5.201	17.46	NJ
4.	5039-61-2	Hydrazine, propyl-	5.299	8.03	NJ
5.	103-82-2	Benzeneacetic acid	10.226	10.77	NJ
6.	54699-31-9	2(1H)-Naphthalenone, octahy	18.399	13.14	NJ
7.	13228-36-9	1H-Indole, 5-methyl-2-pheny	26.606	8.55	NJ
8.	541-05-9	Cyclotrisiloxane, hexamethy	27.265	5.29	NJ

Data File: /chem/bna01.i/090396a.b/08_6643-003.d
Date : 03-SEP-1996 21:04
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i
Operator: dsh
Column diameter: 0.25



EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29489
Units: ug/L
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 09/03/96

MB Lab ID: QC29296

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	10
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29489
Units: ug/L
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 09/03/96

MB Lab ID: QC29296

Analyte	Result	Reporting Limit
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	80	21-110
Phenol-d5	86	10-110
2,4,6-Tribromophenol	61	10-123
Nitrobenzene-d5	79	35-114
2-Fluorobiphenyl	76	43-116
Terphenyl-d14	79	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29489
Units: ug/L
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 09/03/96

BS Lab ID: QC29297

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	100	72.39	72	12-110
2-Chlorophenol	100	69.62	70	27-123
4-Chloro-3-methylphenol	100	68.57	69	23-97
4-Nitrophenol	100	58.86	59	10-80
Pentachlorophenol	100	39.03	39	9-103
1,4-Dichlorobenzene	50	30.1	60	36-97
N-Nitroso-di-n-propylamine	50	28.24	44	41-116
1,2,4-Trichlorobenzene	50	28.96	58	39-98
Acenaphthene	50	33.35	67	46-118
2,4-Dinitrotoluene	50	31.24	62	24-96
Pyrene	50	34.67	69	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	72	21-110
Phenol-d5	75	10-110
2,4,6-Tribromophenol	59	10-123
Nitrobenzene-d5	69	35-114
2-Fluorobiphenyl	68	43-116
Terphenyl-d14	73	33-141

BSD Lab ID: QC29298

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	100	71.75	72	12-110	0	42
2-Chlorophenol	100	72.23	72	27-123	3	40
4-Chloro-3-methylphenol	100	71.29	71	23-97	3	42
4-Nitrophenol	100	64.94	65	10-80	10	50
Pentachlorophenol	100	47.03	47	9-103	19	50
1,4-Dichlorobenzene	50	30.83	62	36-97	3	28
N-Nitroso-di-n-propylamine	50	28.67	45	41-116	2	38
1,2,4-Trichlorobenzene	50	31.03	62	39-98	7	28
Acenaphthene	50	34.12	68	46-118	1	31
2,4-Dinitrotoluene	50	33.03	66	24-96	6	38
Pyrene	50	33.98	68	26-127	1	31

Surrogate	%Rec	Limits
2-Fluorophenol	75	21-110
Phenol-d5	76	10-110
2,4,6-Tribromophenol	62	10-123
Nitrobenzene-d5	74	35-114
2-Fluorobiphenyl	71	43-116
Terphenyl-d14	72	33-141

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-4
LAB ID: 126643-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/26/96
DATE RECEIVED: 08/26/96
DATE REPORTED: 09/10/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29536	EPA 6010A	09/04/96
Arsenic	12	5.0	1	29536	EPA 6010A	09/04/96
Barium	37	10	1	29536	EPA 6010A	09/04/96
Beryllium	ND	2.0	1	29536	EPA 6010A	09/04/96
Cadmium	ND	2.0	1	29536	EPA 6010A	09/04/96
Chromium (total)	ND	10	1	29536	EPA 6010A	09/04/96
Cobalt	ND	20	1	29536	EPA 6010A	09/04/96
Copper	ND	10	1	29536	EPA 6010A	09/04/96
Lead	ND	3.0	1	29536	EPA 6010A	09/04/96
Mercury	ND	0.20	1	29626	EPA 7470	09/06/96
Molybdenum	ND	20	1	29536	EPA 6010A	09/04/96
Nickel	ND	20	1	29536	EPA 6010A	09/04/96
Selenium	22	5.0	1	29536	EPA 6010A	09/04/96
Silver	ND	5.0	1	29536	EPA 6010A	09/04/96
Thallium	ND	5.0	1	29536	EPA 6010A	09/04/96
Vanadium	ND	10	1	29536	EPA 6010A	09/04/96
Zinc	ND	20	1	29536	EPA 6010A	09/04/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-8
LAB ID: 126643-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/26/96
DATE RECEIVED: 08/26/96
DATE REPORTED: 09/10/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29536	EPA 6010A	09/04/96
Arsenic	8.9	5.0	1	29536	EPA 6010A	09/04/96
Barium	72	10	1	29536	EPA 6010A	09/04/96
Beryllium	ND	2.0	1	29536	EPA 6010A	09/04/96
Cadmium	ND	2.0	1	29536	EPA 6010A	09/04/96
Chromium (total)	ND	10	1	29536	EPA 6010A	09/04/96
Cobalt	ND	20	1	29536	EPA 6010A	09/04/96
Copper	ND	10	1	29536	EPA 6010A	09/04/96
Lead	ND	3.0	1	29536	EPA 6010A	09/04/96
Mercury	ND	0.20	1	29626	EPA 7470	09/06/96
Molybdenum	ND	20	1	29536	EPA 6010A	09/04/96
Nickel	23	20	1	29536	EPA 6010A	09/04/96
Selenium	43	5.0	1	29536	EPA 6010A	09/04/96
Silver	ND	5.0	1	29536	EPA 6010A	09/04/96
Thallium	ND	5.0	1	29536	EPA 6010A	09/04/96
Vanadium	ND	10	1	29536	EPA 6010A	09/04/96
Zinc	21	20	1	29536	EPA 6010A	09/04/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-10
LAB ID: 126643-003
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/26/96
DATE RECEIVED: 08/26/96
DATE REPORTED: 09/10/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29536	EPA 6010A	09/04/96
Arsenic	15	5.0	1	29536	EPA 6010A	09/04/96
Barium	55	10	1	29536	EPA 6010A	09/04/96
Beryllium	ND	2.0	1	29536	EPA 6010A	09/04/96
Cadmium	ND	2.0	1	29536	EPA 6010A	09/04/96
Chromium (total)	ND	10	1	29536	EPA 6010A	09/04/96
Cobalt	ND	20	1	29536	EPA 6010A	09/04/96
Copper	ND	10	1	29536	EPA 6010A	09/04/96
Lead	ND	3.0	1	29536	EPA 6010A	09/04/96
Mercury	ND	0.20	1	29626	EPA 7470	09/06/96
Molybdenum	ND	20	1	29536	EPA 6010A	09/04/96
Nickel	ND	20	1	29536	EPA 6010A	09/04/96
Selenium	42	5.0	1	29536	EPA 6010A	09/04/96
Silver	ND	5.0	1	29536	EPA 6010A	09/04/96
Thallium	ND	5.0	1	29536	EPA 6010A	09/04/96
Vanadium	ND	10	1	29536	EPA 6010A	09/04/96
Zinc	ND	20	1	29536	EPA 6010A	09/04/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126643

DATE REPORTED: 09/10/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	29536	EPA 6010A	09/04/96
Arsenic	ND	5	ug/L	1	29536	EPA 6010A	09/04/96
Barium	ND	10	ug/L	1	29536	EPA 6010A	09/04/96
Beryllium	ND	2	ug/L	1	29536	EPA 6010A	09/04/96
Cadmium	ND	2	ug/L	1	29536	EPA 6010A	09/04/96
Chromium (total)	ND	10	ug/L	1	29536	EPA 6010A	09/04/96
Cobalt	ND	20	ug/L	1	29536	EPA 6010A	09/04/96
Copper	ND	10	ug/L	1	29536	EPA 6010A	09/04/96
Lead	ND	3	ug/L	1	29536	EPA 6010A	09/04/96
Mercury	ND	0.2	ug/L	1	29626	EPA 7470	09/06/96
Molybdenum	ND	20	ug/L	1	29536	EPA 6010A	09/04/96
Nickel	ND	20	ug/L	1	29536	EPA 6010A	09/04/96
Selenium	ND	5	ug/L	1	29536	EPA 6010A	09/04/96
Silver	ND	5	ug/L	1	29536	EPA 6010A	09/04/96
Thallium	ND	5	ug/L	1	29536	EPA 6010A	09/04/96
Vanadium	ND	10	ug/L	1	29536	EPA 6010A	09/04/96
Zinc	ND	20	ug/L	1	29536	EPA 6010A	09/04/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126643

DATE REPORTED: 09/10/96

BATCH QC REPORT
LABORATORY CONTROL SAMPLE

Compound	Spike Amt	Result	Units	% Rec.	QC Batch	Method	Analysis Date
Antimony	500	487	ug/L	97	29536	EPA 6010A	09/04/96
Arsenic	2000	1940	ug/L	97	29536	EPA 6010A	09/04/96
Barium	2000	2040	ug/L	102	29536	EPA 6010A	09/04/96
Beryllium	50	49.8	ug/L	100	29536	EPA 6010A	09/04/96
Cadmium	50	54.4	ug/L	109	29536	EPA 6010A	09/04/96
Chromium (total)	200	193	ug/L	97	29536	EPA 6010A	09/04/96
Cobalt	500	483	ug/L	97	29536	EPA 6010A	09/04/96
Copper	250	246	ug/L	98	29536	EPA 6010A	09/04/96
Lead	500	524	ug/L	105	29536	EPA 6010A	09/04/96
Molybdenum	400	399	ug/L	100	29536	EPA 6010A	09/04/96
Nickel	500	503	ug/L	101	29536	EPA 6010A	09/04/96
Selenium	2000	2070	ug/L	104	29536	EPA 6010A	09/04/96
Silver	100	92.7	ug/L	93	29536	EPA 6010A	09/04/96
Thallium	2000	2140	ug/L	107	29536	EPA 6010A	09/04/96
Vanadium	500	482	ug/L	96	29536	EPA 6010A	09/04/96
Zinc	500	482	ug/L	96	29536	EPA 6010A	09/04/96

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126643

DATE REPORTED: 09/10/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Mercury	5	5.418	5.323	ug/L	108	107	80-120	2	35	29626	EPA 7470	09/06/96

CHAIN OF CUSTODY FORM

12643

PAGE 1 OF 1

PROJECT NAME: KOT

JOB NUMBER: 133.005 LAB: Curtis & Tompkins

PROJECT CONTACT: Jeri Alexander TURNAROUND: Normal

SAMPLED BY: Dennis Alexander REQUESTED BY: Jeri Alexander

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVHg gas	TEH@ diesel	TEH@ motor oil	OAG	VOCs w/library search (8240s)	SVOC w/library search (8270)	Heavy Metals	PCBs
-1	SCI-MW-4	X				5	5			X			X		08	26	96	0915	*	X	X	X	X	X	X	X	X
-2	SCI-MW-8	X				5	5			X			X		08	26	96	1030	*	X	X	X	X	X	X	X	X
-3	SCI-MW-10	X				5	5			X			X		08	26	96	1215	*	X	X	X	X	X	X	X	X
-4	Trip Blank*1	X				1							X											X			

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dennis Alexander	8/26/96 3:05 p.m.		8/26/96 3:10 pm
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES: * Please filter + fix before metals analysis

Subsurface Consultants, Inc.

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(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 11-SEP-96
Lab Job Number: 126673
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 126673

Project Name: KOT
Project Number: 133.005

Report Date: 11 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126673-001	SCI-MW-6	Water	28-AUG-96	28-AUG-96	05-SEP-96	ND	mg/L	5	TR	29595
126673-002	SCI-MW-11	Water	28-AUG-96	28-AUG-96	05-SEP-96	ND	mg/L	5	TR	29595

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

QC Batch Report

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126673
Report Date: 11 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29595**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	05-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	88%	SMWW 17:5520BF	05-SEP-96
BSD	87%	SMWW 17:5520BF	05-SEP-96

		Control Limits
Average Spike Recovery	88%	80% - 120%
Relative Percent Difference	.7%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126673-001	SCI-MW-6	29611	08/28/96	09/06/96	09/06/96	
126673-002	SCI-MW-11	29611	08/28/96	09/06/96	09/06/96	

Matrix: Water

Analyte	Units	126673-001	126673-002
Diln Fac:		1	1
Gasoline	ug/L	<50	<50
Surrogate			
Trifluorotoluene	%REC	99	98
Bromobenzene	%REC	85	82

Curtis & Tompkins, Ltd.

Lab #: 126673 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/05/96
Batch#:	29611	Analysis Date:	09/05/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC29686

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	98	65-135
Bromobenzene	78	65-135

Curtis & Tompkins, Ltd.

Lab #: 126673 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29611
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/05/96

LCS Lab ID: QC29687

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1850	2000	93	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	94	65-135		
Bromobenzene	96	65-135		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126673 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126710-001
Matrix: Water
Batch#: 29611
Units: ug/L
Diln Fac: 1

Sample Date: 08/28/96
Received Date: 08/30/96
Prep Date: 09/05/96
Analysis Date: 09/05/96

MS Lab ID: QC29688

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50	1649	82	75-125
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	94	65-135			
Bromobenzene	100	65-135			

MSD Lab ID: QC29689

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1667	83	75-125	1	35
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	94	65-135				
Bromobenzene	101	65-135				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126673-001	SCI-MW-6	29661	08/28/96	09/07/96	09/10/96	
126673-002	SCI-MW-11	29661	08/28/96	09/07/96	09/10/96	

Matrix: Water

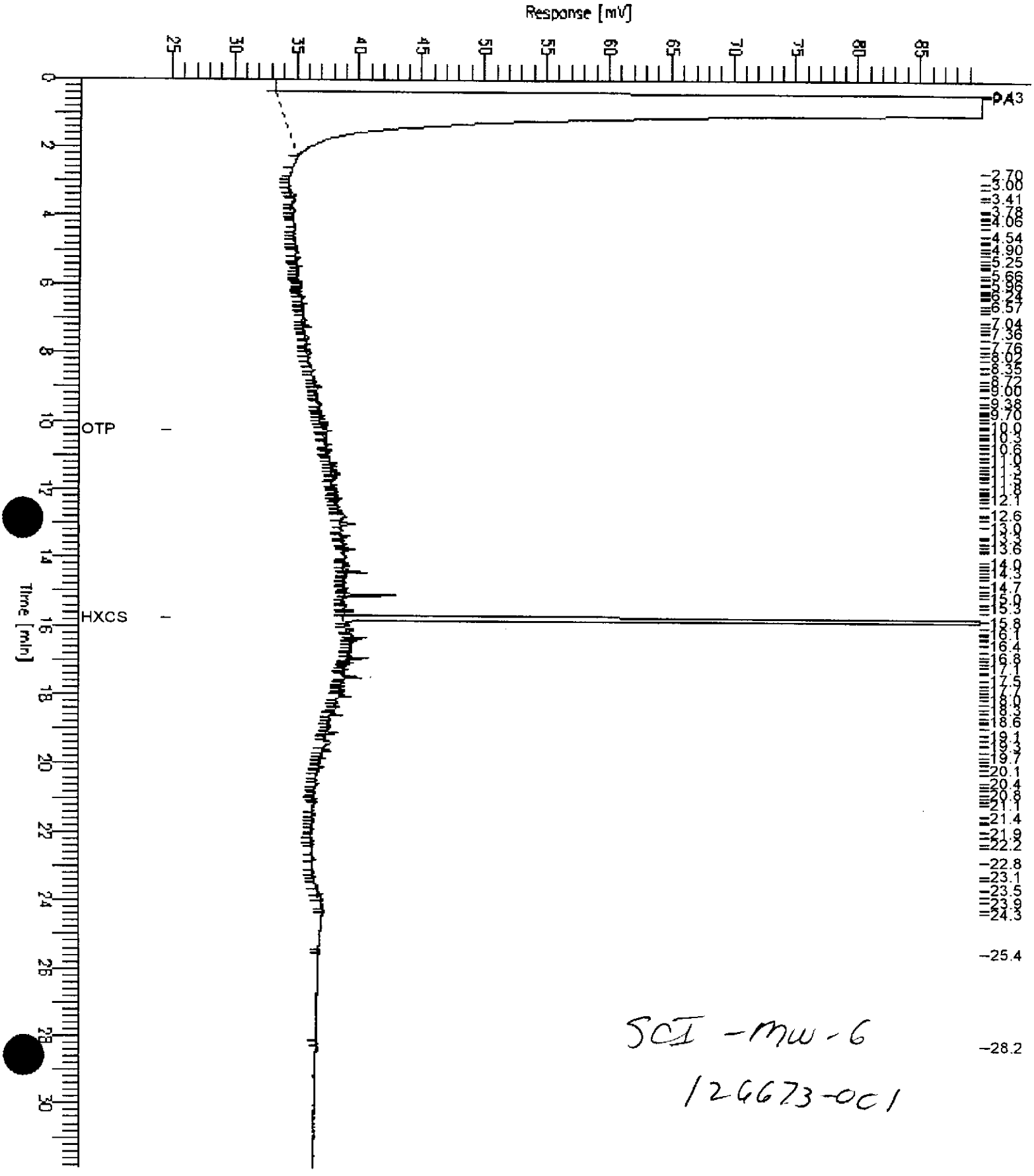
Analyte	Units	126673-001		126673-002	
Diln Fac:		1		1	
Diesel C12-C22	ug/L	150	YH	400	YLH
Motor Oil C22-C50	ug/L	260	YL	<250	
Surrogate					
Hexacosane	%REC	102		90	

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

Chromatogram

Sample Name : 126673-001,29661
FileName : G:\GC13\CHA\253A043.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: 25 mV

Sample #: 500:2.5 Page 1 of 1
Date : 9/10/96 12:23 PM
Time of Injection: 9/10/96 11:51 AM
Low Point : 25.00 mV High Point : 90.00 mV
Plot Scale: 65.0 mV

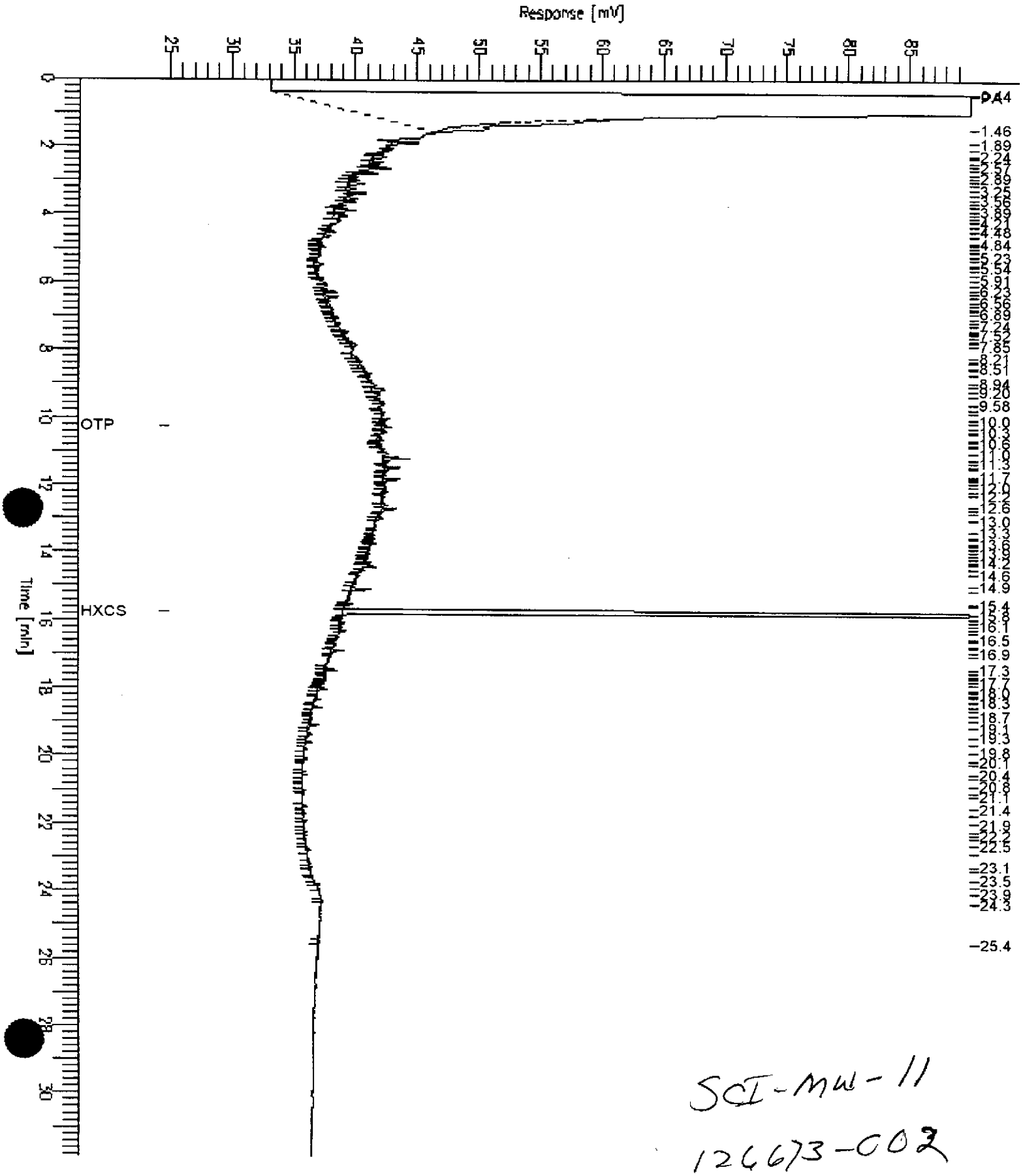


SCI -MW-6
126673-001

Chromatogram

Sample Name : 126673-002,29661
FileName : G:\GC13\CHA\253A044.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: 25 mV

Sample #: 500:2.5 Page 1 of 1
Date : 9/10/96 01:06 PM
Time of Injection: 9/10/96 12:34 PM
Low Point : 25.00 mV High Point : 90.00 mV
Plot Scale: 65.0 mV

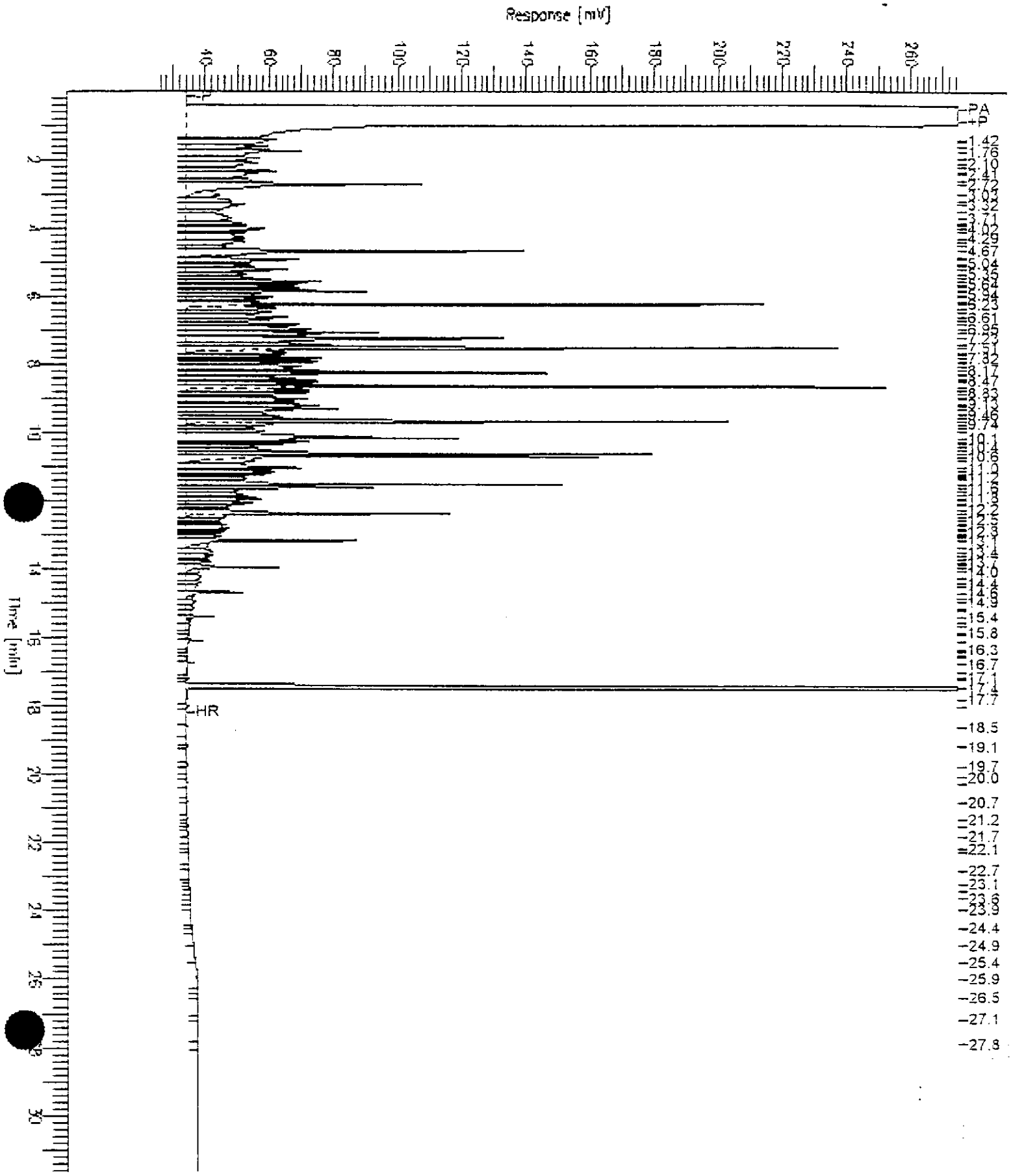


SCI-MW-11
126673-002

Chromatogram

Sample Name : CCV,96WS3003,DSL
FileName : G:\GC13\CHA\253A041.RAW
Method : ATEH0904.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 25 mV

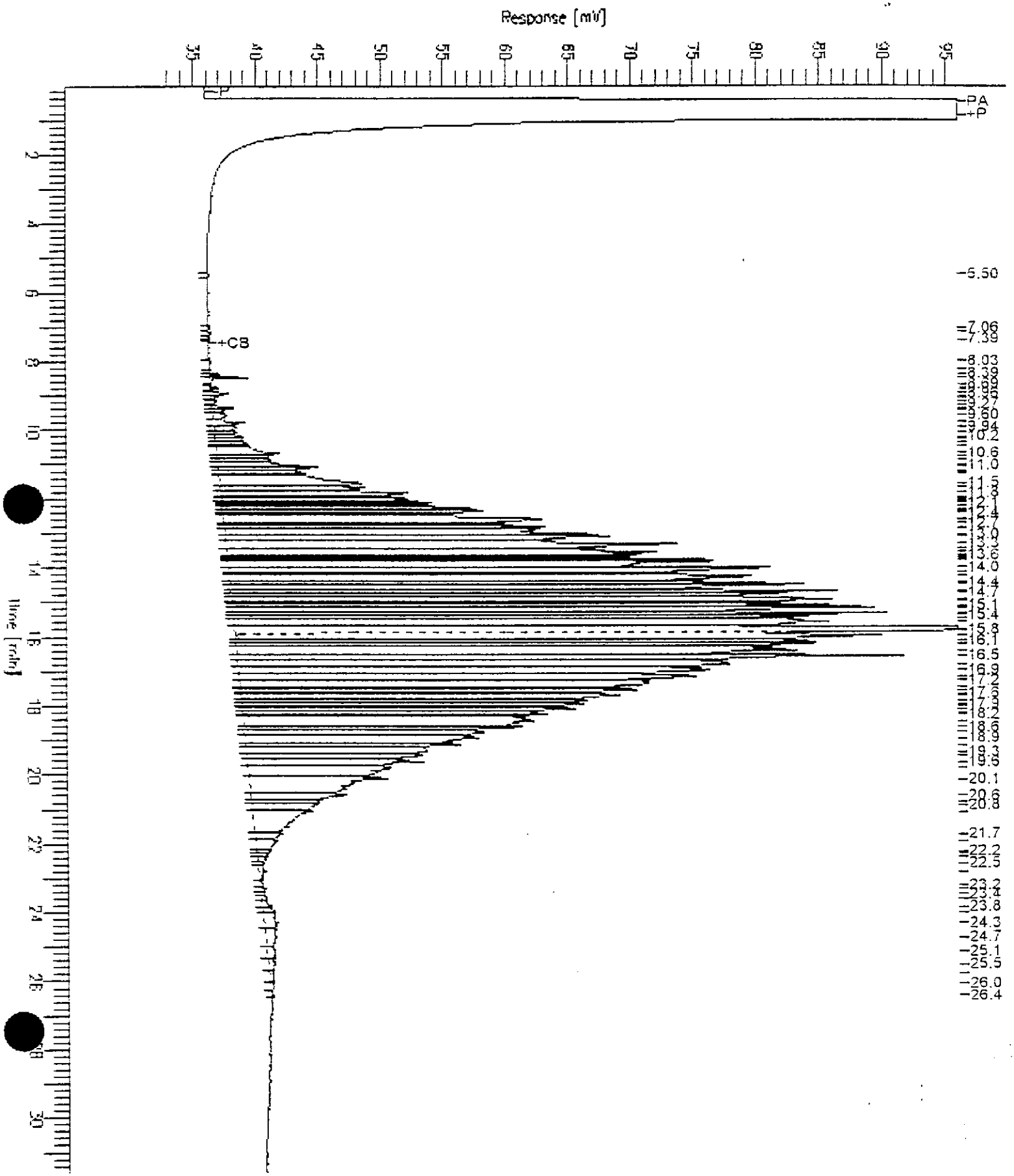
Sample #: 500MG/L Page 1 of 1
Date : 9/10/96 11:08 AM
Time of Injection: 9/10/96 10:23 AM
Low Point : 25.10 mV High Point : 274.71 mV
Plot Scale: 249.6 mV



Chromatogram

Sample Name : CCV,96WS3011,MO
FileName : G:\GC13\CHA\253A037.RAW
Method : ATZH0904.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 32 mV

Sample #: 500MG/L Page 1 of 1
Date : 9/10/96 11:37 AM
Time of Injection: 9/10/96 07:32 AM
Low Point : 32.00 mV High Point : 95.92 mV
Plot Scale: 63.9 mV



Curtis & Tompkins, Ltd.

Lab #: 126673 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons	
Client: Subsurface Consultants	Analysis Method: CA LUFT (EPA 8015M)
Project#: 133.005	Prep Method: EPA 3520
Location: KOT	

METHOD BLANK	
Matrix: Water	Prep Date: 09/07/96
Batch#: 29661	Analysis Date: 09/10/96
Units: ug/L	
Diln Fac: 1	

MB Lab ID: QC29865

Analyte	Result	
Diesel C12-C22	<50	
Motor Oil C22-C50	<250	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	96	60-140

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29661
Units: ug/L
Diln Fac: 1

Prep Date: 09/07/96
Analysis Date: 09/10/96

BS Lab ID: QC29866

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	2135	86	60-140
Surrogate	**%Rec**	**Limits**		
Hexacosane	110	60-140		

BSD Lab ID: QC29867

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	2055	83	60-140	4	35
Surrogate	**%Rec**	**Limits**				
Hexacosane	107	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Volatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8240
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

Field ID:	SCI-MW-6	Sampled:	08/28/96
Lab ID:	126673-001	Received:	08/28/96
Matrix:	Water	Extracted:	08/29/96
Batch#:	29427	Analyzed:	08/29/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	109	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	104	79-122

Data File: /chem/VOA_04.i/082996.b/dht13.d
Report Date: 29-Aug-1996 14:46

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_04.i/082996.b/dht13.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 29-AUG-96 14:25
Operator : LLH Inst ID: VOA_04.i
Smp Info : S,126673-001
Misc Info : 8240,,29427,5.0,5,1, WATER
Comment :
Method : /chem/VOA_04.i/082996.b/i4m826.m
Meth Date : 29-Aug-1996 11:20
Cal Date : 28-AUG-1996 23:53 Cal File: dhs27.d
Als bottle: 13
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

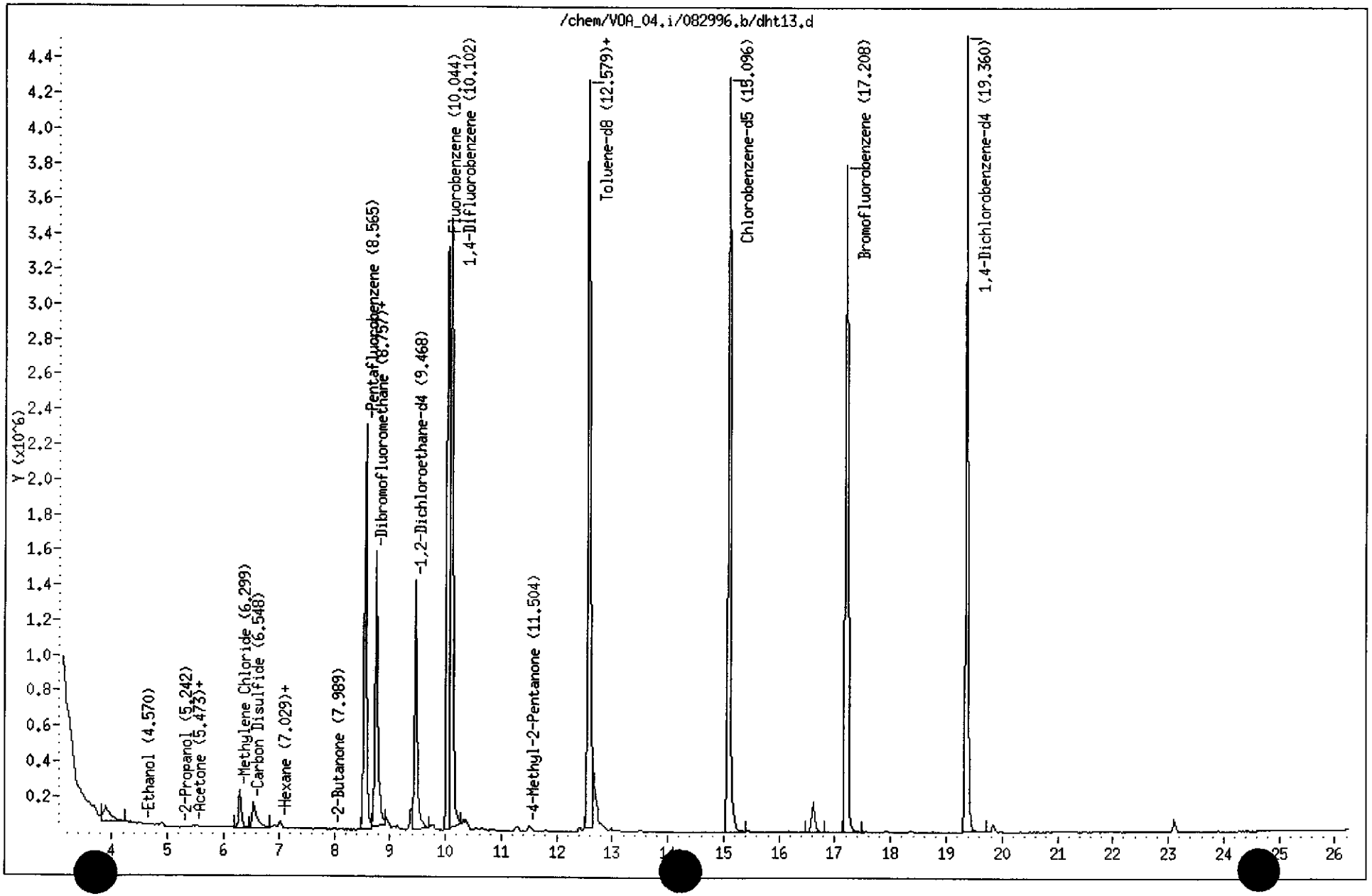
ISTD	RT	AREA	AMOUNT
* 22 Pentafluorobenzene	8.565	7461178	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(UG/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.898	760152	5.09	5.09	0		0	22

Data File: /chem/VOA_04.i/082996.b/dht13.d
Date : 29-AUG-96 14:25
Client ID: DYNA P&T
Sample Info: S,126673-001
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8240
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

Field ID:	SCI-MW-11	Sampled:	08/28/96
Lab ID:	126673-002	Received:	08/28/96
Matrix:	Water	Extracted:	08/29/96
Batch#:	29427	Analyzed:	08/29/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	108	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	104	79-122

Data File: /chem/VOA_04.i/082996.b/dht14.d
Report Date: 29-Aug-1996 15:45

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_04.i/082996.b/dht14.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 29-AUG-96 14:56
Operator : LLH Inst ID: VOA_04.i
Smp Info : S,126673-002
Misc Info : 8240,,29427,5.0,5,1, WATER
Comment :
Method : /chem/VOA_04.i/082996.b/i4m826.m
Meth Date : 29-Aug-1996 11:20
Cal Date : 28-AUG-1996 23:53 Cal File: dhs27.d
Als bottle: 14
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

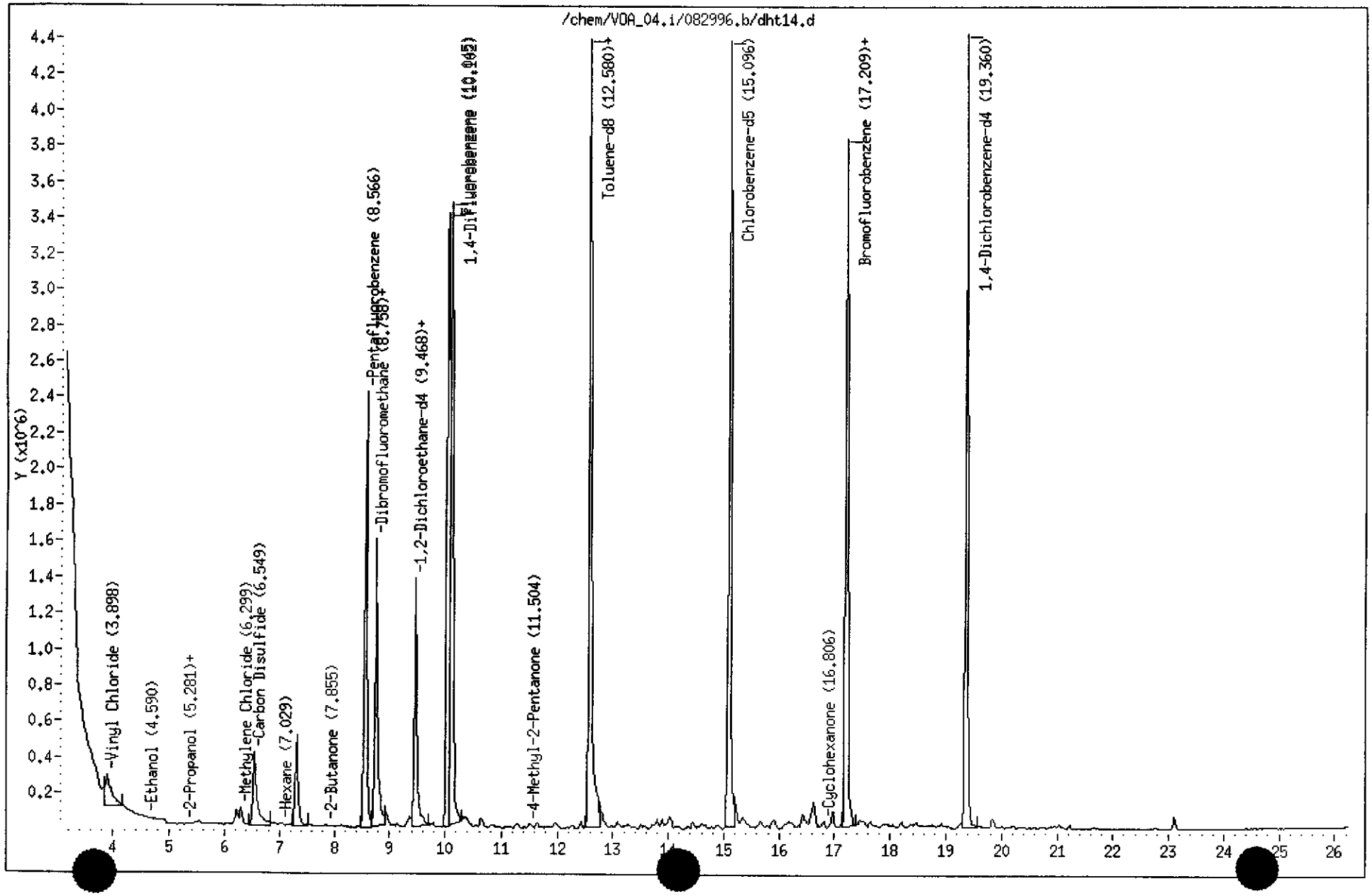
ISTD	RT	AREA	AMOUNT
* 22 Pentafluorobenzene	8.566	7740961	50.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(UG/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Diisopropyl ether			CAS #: 108-20-3				
7.317	1982366	12.80	12.80	90	nbs75k.l	63567	22

Data File: /chem/VOA_04.i/082996.b/dht14.d
Date : 29-AUG-96 14:56
Client ID: DYNA P&T
Sample Info: S,126673-002
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: TRIP BLANK#2
Lab ID: 126673-003
Matrix: Water
Batch#: 29427
Units: ug/L
Diln Fac: 1

Sampled: 08/28/96
Received: 08/28/96
Extracted: 08/29/96
Analyzed: 08/29/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	102	79-122

Data File: /chem/VOA_04.i/082996.b/dht15.d
Report Date: 29-Aug-1996 15:45

Curtis & Tompkins Labs

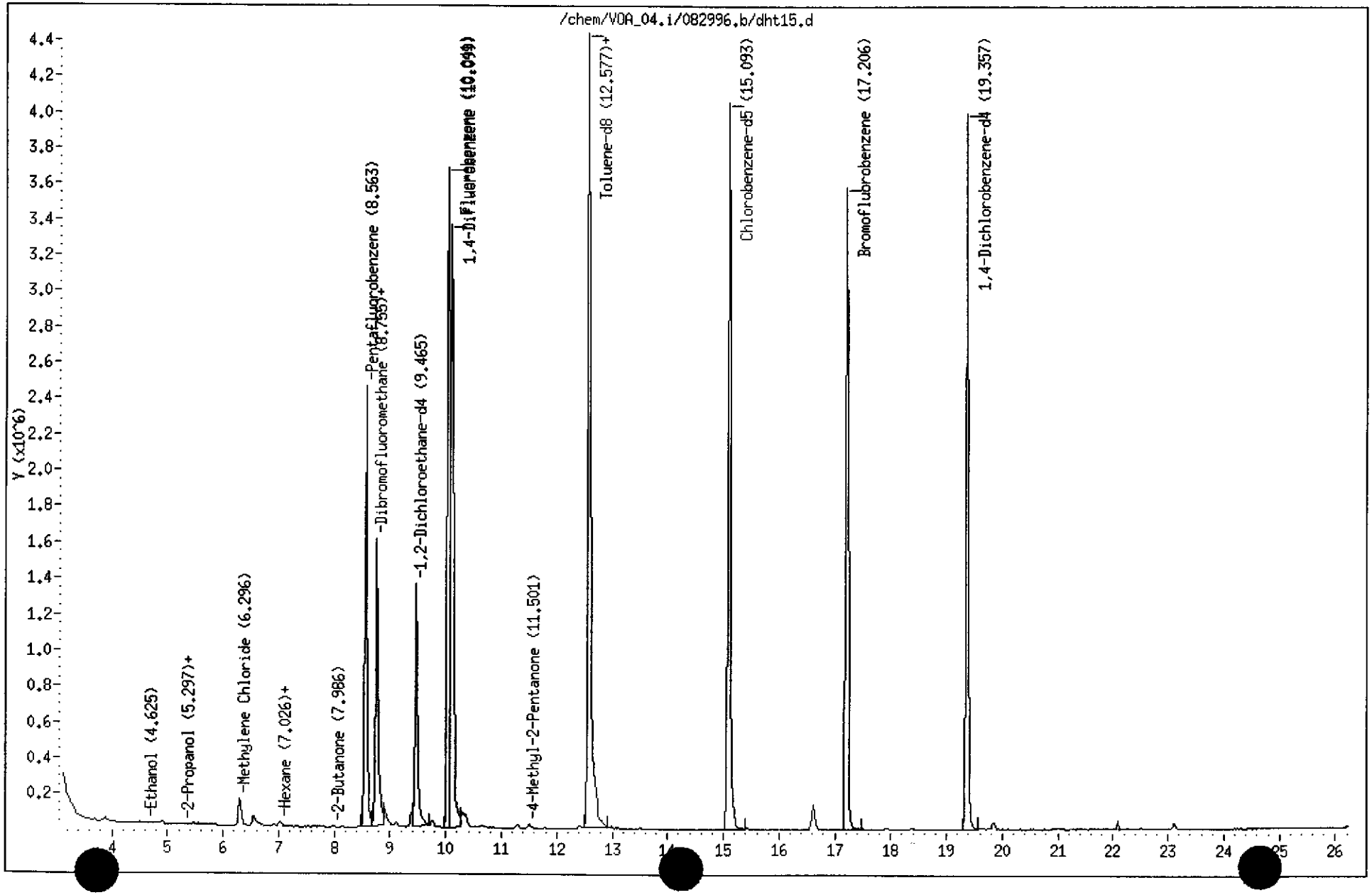
Unknown Compounds Quantitation Report

Data file : /chem/VOA_04.i/082996.b/dht15.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 29-AUG-96 15:27
Operator : LLH Inst ID: VOA_04.i
Smp Info : S,126673-003
Misc Info : 8240,,29427,5.0,5,1, WATER
Comment :
Method : /chem/VOA_04.i/082996.b/i4m826.m
Meth Date : 29-Aug-1996 11:20
Cal Date : 28-AUG-1996 23:53 Cal File: dhs27.d
Als bottle: 15
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA_04.i/082996.b/dht15.d
Date : 29-AUG-96 15:27
Client ID: DYNA P&T
Sample Info: S,126673-003
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i
Operator: LLH
Column diameter: 0.32



Curtis & Tompkins, Ltd.

Lab #: 126673 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29427
Units: ug/L
Diln Fac: 1

Prep Date: 08/29/96
Analysis Date: 08/29/96

MB Lab ID: QC29065

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	107	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126676-002
Matrix: Water
Batch#: 29427
Units: ug/L
Diln Fac: 1

Sample Date: 08/27/96
Received Date: 08/28/96
Prep Date: 08/29/96
Analysis Date: 08/29/96

MS Lab ID: QC29069

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	55.06	110	51-180
Trichloroethene	50	<5	45.06	90	73-141
Benzene	50	<5	48.04	96	78-142
Toluene	50	<5	47.57	95	76-150
Chlorobenzene	50	<5	48.44	97	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	101	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	102	79-122

MSD Lab ID: QC29070

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	56.97	114	51-180	3	14
Trichloroethene	50	46.81	94	73-141	4	14
Benzene	50	49.97	100	78-142	4	11
Toluene	50	49.07	98	76-150	3	13
Chlorobenzene	50	49.91	100	83-129	3	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	101	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	100	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29427
Units: ug/L
Diln Fac: 1

Prep Date: 08/29/96
Analysis Date: 08/29/96

LCS Lab ID: QC29064

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	51.96	50	104	51-180
Trichloroethene	46.58	50	93	73-141
Benzene	49.28	50	99	78-142
Toluene	48.44	50	97	76-150
Chlorobenzene	49.8	50	100	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	99	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT	Cleanup Method:	EPA acid
Field ID:	SCI-MW-6	Sampled:	08/28/96
Lab ID:	126673-001	Received:	08/28/96
Matrix:	Water	Extracted:	09/02/96
Batch#:	29513	Analyzed:	09/07/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	78	60-150
Decachlorobiphenyl	47	30-130

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-MW-11	Sampled:	08/28/96
Lab ID:	126673-002	Received:	08/28/96
Matrix:	Water	Extracted:	09/02/96
Batch#:	29513	Analyzed:	09/07/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	42*	60-150
Decachlorobiphenyl	31	30-130

* Values outside of QC limits

Curtis & Tompkins, Ltd.

Lab #: 126673 BATCH QC REPORT

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520
Cleanup Method: EPA acid

METHOD BLANK

Matrix: Water
Batch#: 29513
Units: ug/L
Diln Fac: 1

Prep Date: 09/02/96
Analysis Date: 09/06/96

MB Lab ID: QC29345

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Rec	Recovery Limits
TCMX	64	60-150
Decachlorobiphenyl	53	30-130

Curtis & Tompkins, Ltd.

Lab #: 126673 BATCH QC REPORT

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520
Cleanup Method: EPA acid

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29513
Units: ug/L
Diln Fac: 1

Prep Date: 09/02/96
Analysis Date: 09/06/96

BS Lab ID: QC29346

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.21	84	50-128
Surrogate	**%Rec**	**Limits**		
TCMX	63	60-150		
Decachlorobiphenyl	66	30-130		

BSD Lab ID: QC29347

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.65	93	50-128	10	20
Surrogate	**%Rec**	**Limits**				
TCMX	64	60-150				
Decachlorobiphenyl	52	30-130				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-6
Lab ID: 126673-001
Matrix: Water
Batch#: 29489
Units: ug/L
Diln Fac: 1

Sampled: 08/28/96
Received: 08/28/96
Extracted: 08/30/96
Analyzed: 09/03/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-6	Sampled:	08/28/96
Lab ID:	126673-001	Received:	08/28/96
Matrix:	Water	Extracted:	08/30/96
Batch#:	29489	Analyzed:	09/03/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	74	21-110
Phenol-d5	80	10-110
2,4,6-Tribromophenol	61	10-123
Nitrobenzene-d5	70	35-114
2-Fluorobiphenyl	65	43-116
Terphenyl-d14	30*	33-141

* Values outside of QC limits

Data File: /chem/bna01.i/090396a.b/09_6673-001.d
Report Date: 04-Sep-1996 10:20

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/bna01.i/090396a.b/09_6673-001.d
Lab Smp Id: s,126673-001 Client Smp ID: CURTIS&TOMPKINS,LTD
Inj Date : 03-SEP-1996 21:47 Autotune Date: 29-Aug-96 11:10:0
Operator : dsh Inst ID: bna01.i
Smp Info :
Misc Info :
Comment :
Method : /chem/bna01.i/090396a.b/+bna1_6pt.m
Meth Date : 03-Sep-1996 17:10
Cal Date : 03-SEP-96 16:21 Cal File: 02_ccv0903a.d
Als bottle: 9
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-11
Lab ID: 126673-002
Matrix: Water
Batch#: 29489
Units: ug/L
Diln Fac: 1

Sampled: 08/28/96
Received: 08/28/96
Extracted: 08/30/96
Analyzed: 09/03/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-11	Sampled:	08/28/96
Lab ID:	126673-002	Received:	08/28/96
Matrix:	Water	Extracted:	08/30/96
Batch#:	29489	Analyzed:	09/03/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	69	21-110
Phenol-d5	76	10-110
2,4,6-Tribromophenol	62	10-123
Nitrobenzene-d5	69	35-114
2-Fluorobiphenyl	57	43-116
Terphenyl-d14	19*	33-141

* Values outside of QC limits

Data File: /chem/bna01.i/090396a.b/10_6673-002.d
Report Date: 04-Sep-1996 10:20

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/bna01.i/090396a.b/10_6673-002.d
Lab Smp Id: s,126673-002 Client Smp ID: CURTIS&TOMPKINS,LTD
Inj Date : 03-SEP-1996 22:31 Autotune Date: 29-Aug-96 11:10:0
Operator : dsh Inst ID: bna01.i
Smp Info :
Misc Info :
Comment :
Method : /chem/bna01.i/090396a.b/+bna1_6pt.m
Meth Date : 03-Sep-1996 17:10
Cal Date : 03-SEP-96 16:21 Cal File: 02_ccv0903a.d
Als bottle: 10
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29489
Units: ug/L
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 09/03/96

MB Lab ID: QC29296

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	10
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29489
Units: ug/L
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 09/03/96

MB Lab ID: QC29296

Analyte	Result	Reporting Limit
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	80	21-110
Phenol-d5	86	10-110
2,4,6-Tribromophenol	61	10-123
Nitrobenzene-d5	79	35-114
2-Fluorobiphenyl	76	43-116
Terphenyl-d14	79	33-141

Curtis & Tompkins, Ltd.

Lab #: 126673 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29489
Units: ug/L
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 09/03/96

BS Lab ID: QC29297

Analyte	Spike Added	BS	%Rec	#	Limits
Phenol	100	72.39	72		12-110
2-Chlorophenol	100	69.62	70		27-123
4-Chloro-3-methylphenol	100	68.57	69		23-97
4-Nitrophenol	100	58.86	59		10-80
Pentachlorophenol	100	39.03	39		9-103
1,4-Dichlorobenzene	50	30.1	60		36-97
N-Nitroso-di-n-propylamine	50	28.24	56		41-116
1,2,4-Trichlorobenzene	50	28.96	58		39-98
Acenaphthene	50	33.35	67		46-118
2,4-Dinitrotoluene	50	31.24	62		24-96
Pyrene	50	34.67	69		26-127

Surrogate	%Rec	Limits
2-Fluorophenol	72	21-110
Phenol-d5	75	10-110
2,4,6-Tribromophenol	59	10-123
Nitrobenzene-d5	69	35-114
2-Fluorobiphenyl	68	43-116
Terphenyl-d14	73	33-141

BSD Lab ID: QC29298

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
Phenol	100	71.75	72		12-110	1		42
2-Chlorophenol	100	72.23	72		27-123	4		40
4-Chloro-3-methylphenol	100	71.29	71		23-97	4		42
4-Nitrophenol	100	64.94	65		10-80	10		50
Pentachlorophenol	100	47.03	47		9-103	19		50
1,4-Dichlorobenzene	50	30.83	62		36-97	2		28
N-Nitroso-di-n-propylamine	50	28.67	57		41-116	2		38
1,2,4-Trichlorobenzene	50	31.03	62		39-98	7		28
Acenaphthene	50	34.12	68		46-118	2		31
2,4-Dinitrotoluene	50	33.03	66		24-96	6		38
Pyrene	50	33.98	68		26-127	2		31

Surrogate	%Rec	Limits
2-Fluorophenol	75	21-110
Phenol-d5	76	10-110
2,4,6-Tribromophenol	62	10-123
Nitrobenzene-d5	74	35-114
2-Fluorobiphenyl	71	43-116
Terphenyl-d14	72	33-141

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-6
LAB ID: 126673-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/28/96
DATE RECEIVED: 08/28/96
DATE REPORTED: 09/11/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29536	EPA 6010A	09/04/96
Arsenic	ND	5.0	1	29536	EPA 6010A	09/04/96
Barium	100	10	1	29536	EPA 6010A	09/04/96
Beryllium	2.1	2.0	1	29536	EPA 6010A	09/04/96
Cadmium	ND	2.0	1	29536	EPA 6010A	09/04/96
Chromium (total)	ND	10	1	29536	EPA 6010A	09/04/96
Cobalt	ND	20	1	29536	EPA 6010A	09/04/96
Copper	59	10	1	29536	EPA 6010A	09/04/96
Lead	ND	3.0	1	29536	EPA 6010A	09/04/96
Mercury	ND	0.20	1	29670	EPA 7470	09/09/96
Molybdenum	ND	20	1	29536	EPA 6010A	09/04/96
Nickel	ND	20	1	29536	EPA 6010A	09/04/96
Selenium	ND	5.0	1	29536	EPA 6010A	09/04/96
Silver	ND	5.0	1	29536	EPA 6010A	09/04/96
Thallium	ND	5.0	1	29536	EPA 6010A	09/04/96
Vanadium	ND	10	1	29536	EPA 6010A	09/04/96
Zinc	240	20	1	29536	EPA 6010A	09/04/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-11
LAB ID: 126673-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/28/96
DATE RECEIVED: 08/28/96
DATE REPORTED: 09/11/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29536	EPA 6010A	09/04/96
Arsenic	ND	5.0	1	29536	EPA 6010A	09/04/96
Barium	210	10	1	29536	EPA 6010A	09/04/96
Beryllium	ND	2.0	1	29536	EPA 6010A	09/04/96
Cadmium	ND	2.0	1	29536	EPA 6010A	09/04/96
Chromium (total)	ND	10	1	29536	EPA 6010A	09/04/96
Cobalt	ND	20	1	29536	EPA 6010A	09/04/96
Copper	ND	10	1	29536	EPA 6010A	09/04/96
Lead	ND	3.0	1	29536	EPA 6010A	09/04/96
Mercury	0.62	0.20	1	29670	EPA 7470	09/09/96
Molybdenum	ND	20	1	29536	EPA 6010A	09/04/96
Nickel	ND	20	1	29536	EPA 6010A	09/04/96
Selenium	16	5.0	1	29536	EPA 6010A	09/04/96
Silver	ND	5.0	1	29536	EPA 6010A	09/04/96
Thallium	ND	5.0	1	29536	EPA 6010A	09/04/96
Vanadium	ND	10	1	29536	EPA 6010A	09/04/96
Zinc	ND	20	1	29536	EPA 6010A	09/04/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126673

DATE REPORTED: 09/11/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	29536	EPA 6010A	09/04/96
Arsenic	ND	5	ug/L	1	29536	EPA 6010A	09/04/96
Barium	ND	10	ug/L	1	29536	EPA 6010A	09/04/96
Beryllium	ND	2	ug/L	1	29536	EPA 6010A	09/04/96
Cadmium	ND	2	ug/L	1	29536	EPA 6010A	09/04/96
Chromium (total)	ND	10	ug/L	1	29536	EPA 6010A	09/04/96
Cobalt	ND	20	ug/L	1	29536	EPA 6010A	09/04/96
Copper	ND	10	ug/L	1	29536	EPA 6010A	09/04/96
Lead	ND	3	ug/L	1	29536	EPA 6010A	09/04/96
Mercury	ND	0.2	ug/L	1	29670	EPA 7470	09/09/96
Molybdenum	ND	20	ug/L	1	29536	EPA 6010A	09/04/96
Nickel	ND	20	ug/L	1	29536	EPA 6010A	09/04/96
Selenium	ND	5	ug/L	1	29536	EPA 6010A	09/04/96
Silver	ND	5	ug/L	1	29536	EPA 6010A	09/04/96
Thallium	ND	5	ug/L	1	29536	EPA 6010A	09/04/96
Vanadium	ND	10	ug/L	1	29536	EPA 6010A	09/04/96
Zinc	ND	20	ug/L	1	29536	EPA 6010A	09/04/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126673

DATE REPORTED: 09/11/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Mercury	5	5.031	5.136	ug/L	101	103	80-120	2	35	29670	EPA 7470	09/09/96

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126673

DATE REPORTED: 09/11/96

BATCH QC REPORT
LABORATORY CONTROL SAMPLE

Compound	Spike Amt	Result	Units	% Rec.	QC Batch	Method	Analysis Date
Antimony	500	487	ug/L	97	29536	EPA 6010A	09/04/96
Arsenic	2000	1940	ug/L	97	29536	EPA 6010A	09/04/96
Barium	2000	2040	ug/L	102	29536	EPA 6010A	09/04/96
Beryllium	50	49.8	ug/L	100	29536	EPA 6010A	09/04/96
Cadmium	50	54.4	ug/L	109	29536	EPA 6010A	09/04/96
Chromium (total)	200	193	ug/L	97	29536	EPA 6010A	09/04/96
Cobalt	500	483	ug/L	97	29536	EPA 6010A	09/04/96
Copper	250	246	ug/L	98	29536	EPA 6010A	09/04/96
Lead	500	524	ug/L	105	29536	EPA 6010A	09/04/96
Molybdenum	400	399	ug/L	100	29536	EPA 6010A	09/04/96
Nickel	500	503	ug/L	101	29536	EPA 6010A	09/04/96
Selenium	2000	2070	ug/L	104	29536	EPA 6010A	09/04/96
Silver	100	92.7	ug/L	93	29536	EPA 6010A	09/04/96
Thallium	2000	2140	ug/L	107	29536	EPA 6010A	09/04/96
Vanadium	500	482	ug/L	96	29536	EPA 6010A	09/04/96
Zinc	500	482	ug/L	96	29536	EPA 6010A	09/04/96

CHAIN OF CUSTODY FORM

12667 3

PAGE ____ OF ____

PROJECT NAME: KOT

JOB NUMBER: 133.005 LAB: Curtis & Tompkins

PROJECT CONTACT: Jeri Alexander TURNAROUND: Normal

SAMPLED BY: Dennis Alexander REQUESTED BY: Jeri Alexander

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH @ gas	VOCs w/ library search	TEH @ diesel	TEH @ motor oil	SVOC (8270) incl. PNAs	O&G	Metals	PCBs
	re-sample																									
-1	SCI-MW-6	X				5	5			X			X		08	28	96	1230	*	X	X	X	X	X	X	X	X
-2	SCI-MW-11	X				5	5			X			X		08	28	96	1030	*	X	X	X	X	X	X	X	X
-3	Trip Blank #2	X				1							X								X						

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dennis Alexander	8/28/96 2:30 p.m.		8/28/96 1430
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES: * Please filter + fix before metals analysis

Subsurface Consultants, Inc.

171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607

(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 11-SEP-96
Lab Job Number: 126677
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 126677

Project Name: KOT
Project Number: 133.005

Report Date: 11 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520EF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126677-001	SCIMW-10@3'	Soil	21-AUG-96	28-AUG-96	09-SEP-96	ND	mg/Kg	50	TR	29684
126677-002	SCIMW-9@6'	Soil	21-AUG-96	28-AUG-96	09-SEP-96	140	mg/Kg	50	TR	29684
126677-003	SCIMW-13@4.5'	Soil	22-AUG-96	28-AUG-96	09-SEP-96	76.	mg/Kg	50	TR	29684
126677-004	SCIMW-7@6'	Soil	20-AUG-96	28-AUG-96	09-SEP-96	840	mg/Kg	50	TR	29684

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

QC Batch Report

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126677
Report Date: 11 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29684**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:5520EF	09-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	89%	SMWW 17:5520EF	09-SEP-96
BSD	85%	SMWW 17:5520EF	09-SEP-96

		Control Limits
Average Spike Recovery	87%	80% - 120%
Relative Percent Difference	4.9%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126677-001	SCIMW-10@3'	29538	08/21/96	09/04/96	09/04/96	

Matrix: Soil

Analyte	Units	126677-001
Diln Fac:		1
Gasoline	mg/Kg	<1
Surrogate		
Trifluorotoluene	%REC	100
Bromobenzene	%REC	84

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 29538
Units: mg/Kg
Diln Fac: 1

Prep Date: 09/03/96
Analysis Date: 09/03/96

MB Lab ID: QC29445

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	103	52-127
Bromobenzene	83	45-140

Curtis & Tompkins, Ltd.

Lab #: 126677 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 29538
Units: mg/Kg
Diln Fac: 1

Prep Date: 09/03/96
Analysis Date: 09/03/96

LCS Lab ID: QC29446

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	10.1	10	101	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	99	52-127		
Bromobenzene	103	45-140		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126677-001	SCIMW-10@3'	29449	08/21/96	08/29/96	09/09/96	
126677-002	SCIMW-9@6'	29449	08/21/96	08/29/96	09/05/96	
126677-003	SCIMW-13@4.5'	29449	08/22/96	08/29/96	09/05/96	
126677-004	SCIMW-7@6'	29449	08/20/96	08/29/96	09/05/96	

Matrix: Soil

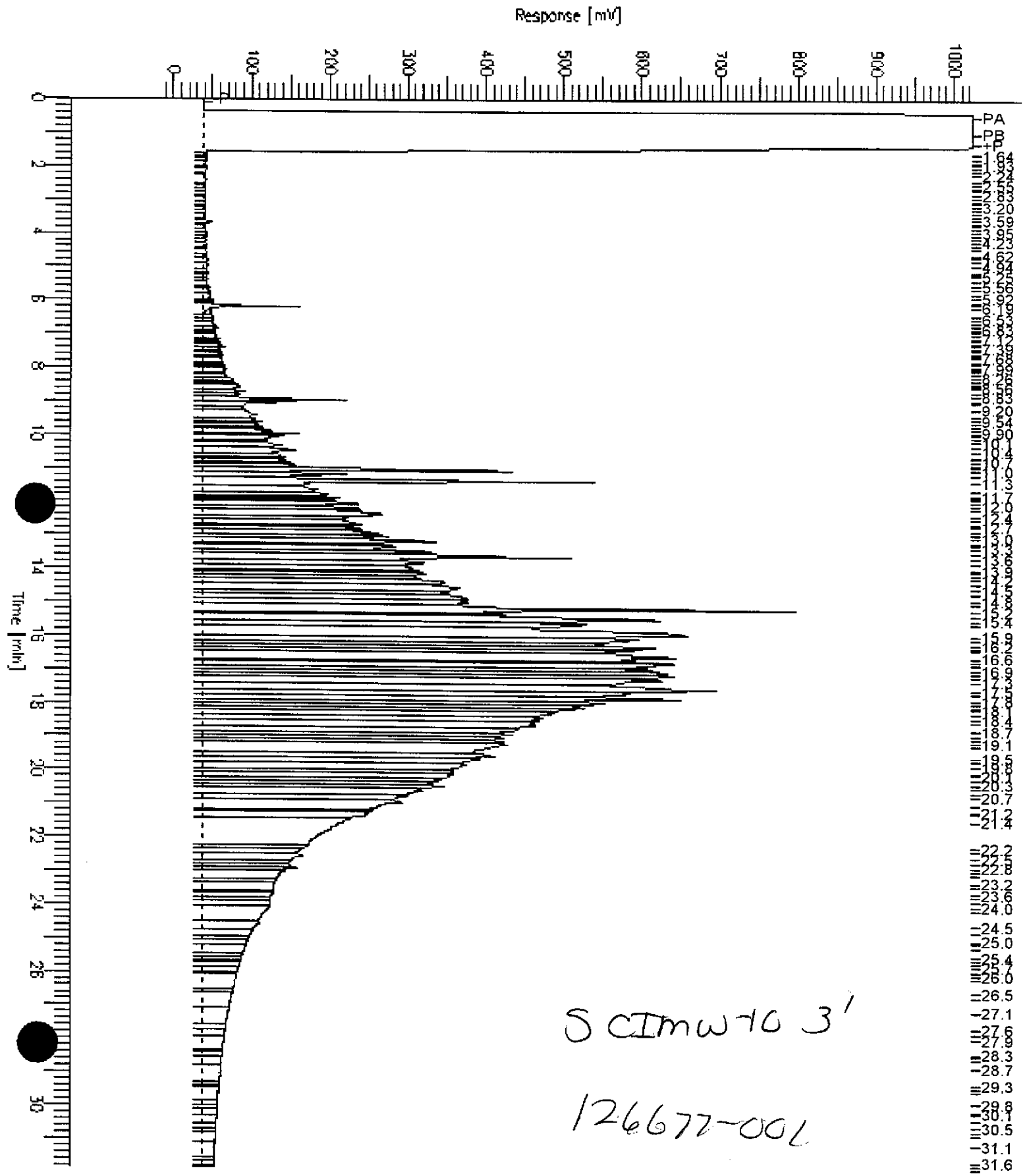
Analyte	Units	126677-001	126677-002	126677-003	126677-004
Diln Fac:		2	1	1	100
Diesel C12-C22	mg/Kg	100 YH	11 YH	2.9YH	2900 YH
Motor Oil C22-C50	mg/Kg	810	110	11	1400 YL
Surrogate					
Hexacosane	%REC	92	88	92	DO

DO: Surrogate diluted out
Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

GC15 Channel A TEH

Sample Name : 126677-001
FileName : G:\GC15\CH8\253B010.RAW
Method : 241TEH.MTH
S[redacted] Time : 0.00 min End Time : 31.90 min
[redacted] Factor: 0.0 Plot Offset: -14 mV

Sample #: 29449 Page 1 of 1
Date : 9/9/96 08:48 AM
Time of Injection: 9/8/96 06:35 PM
Low Point : -14.10 mV High Point : 1024.00 mV
Plot Scale: 1038.1 mV



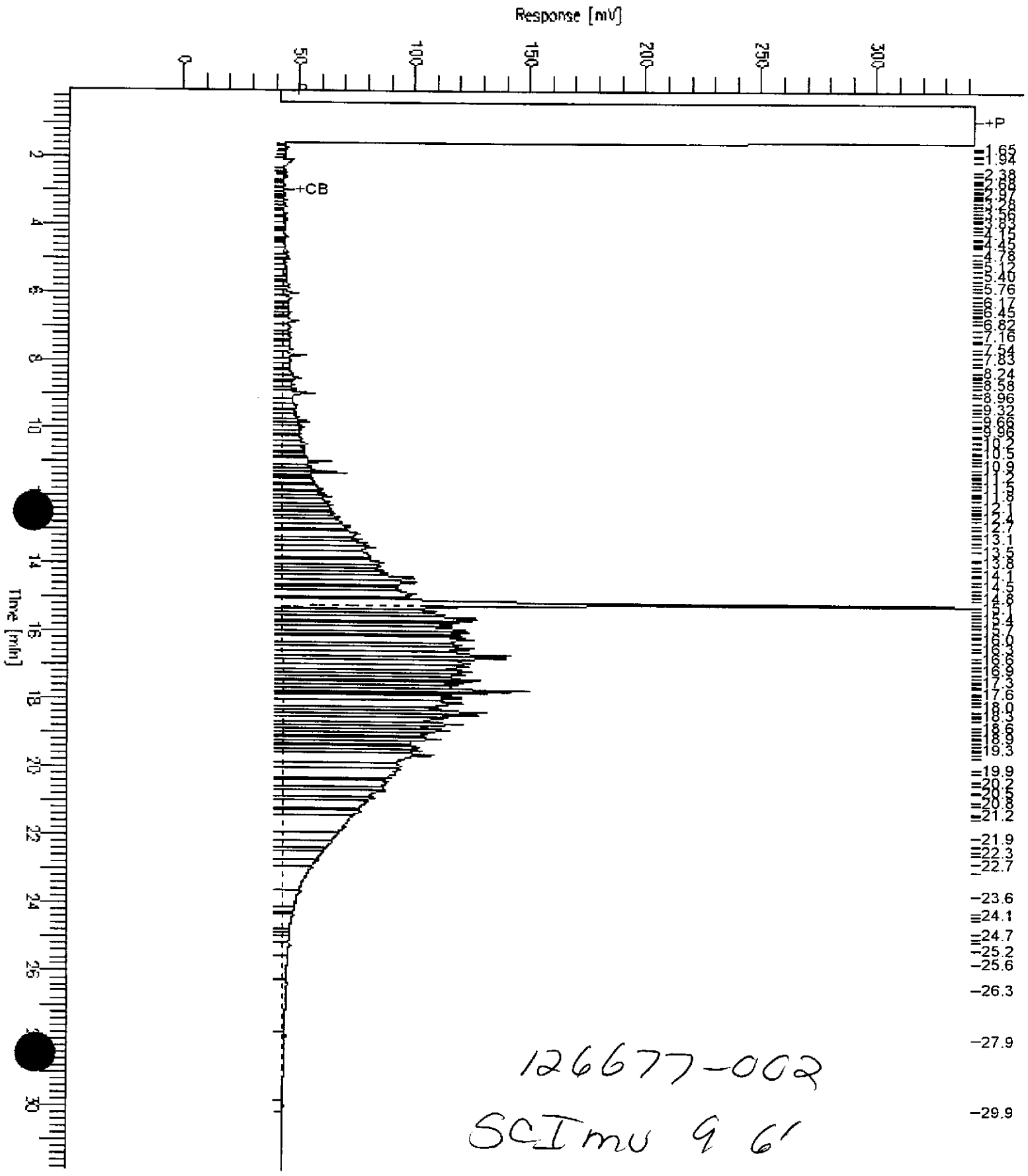
SCIm w 40 3'

126677-001

GC15 Channel A TEH

Sample Name : 126677-002
File Name : G:\GC15\CHB\248B031.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Factor: 0.0 Plot Offset: -10 mV

Sample #: 29449 Page 1 of 1
Date : 9/8/96 10:22 AM
Time of Injection: 9/5/96 01:40 AM
Low Point : -9.76 mV High Point : 342.39 mV
Plot Scale: 352.2 mV

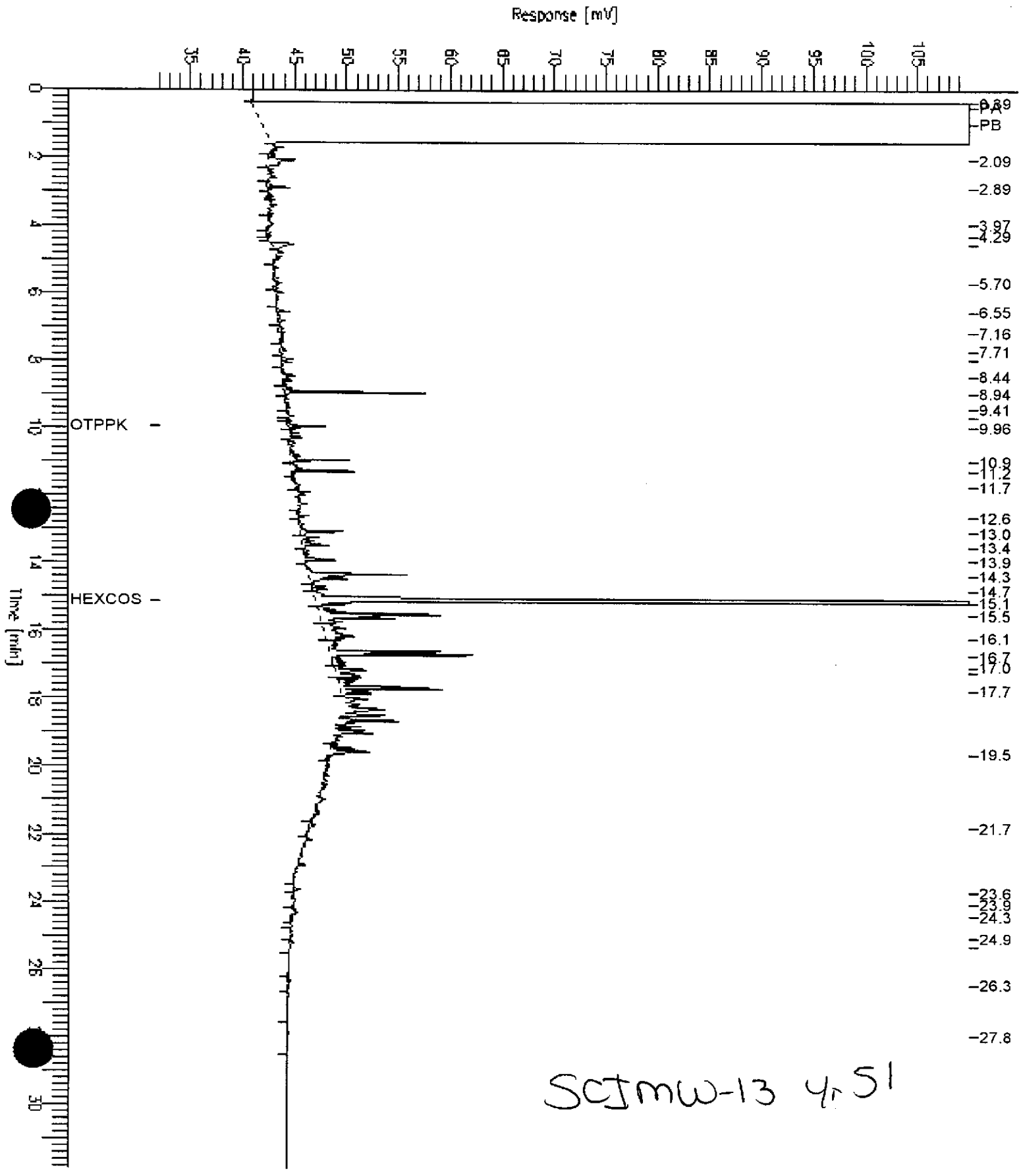


126677-002
SCImu 9 6'

GC15 Channel B Surrogate

Sample Name : 126877-003
FileName : G:\GC15\CHB\248B032.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: 32 mV

Sample #: 29449 Page 1 of 1
Date : 9/5/96 02:56 AM
Time of Injection: 9/5/96 02:24 AM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV

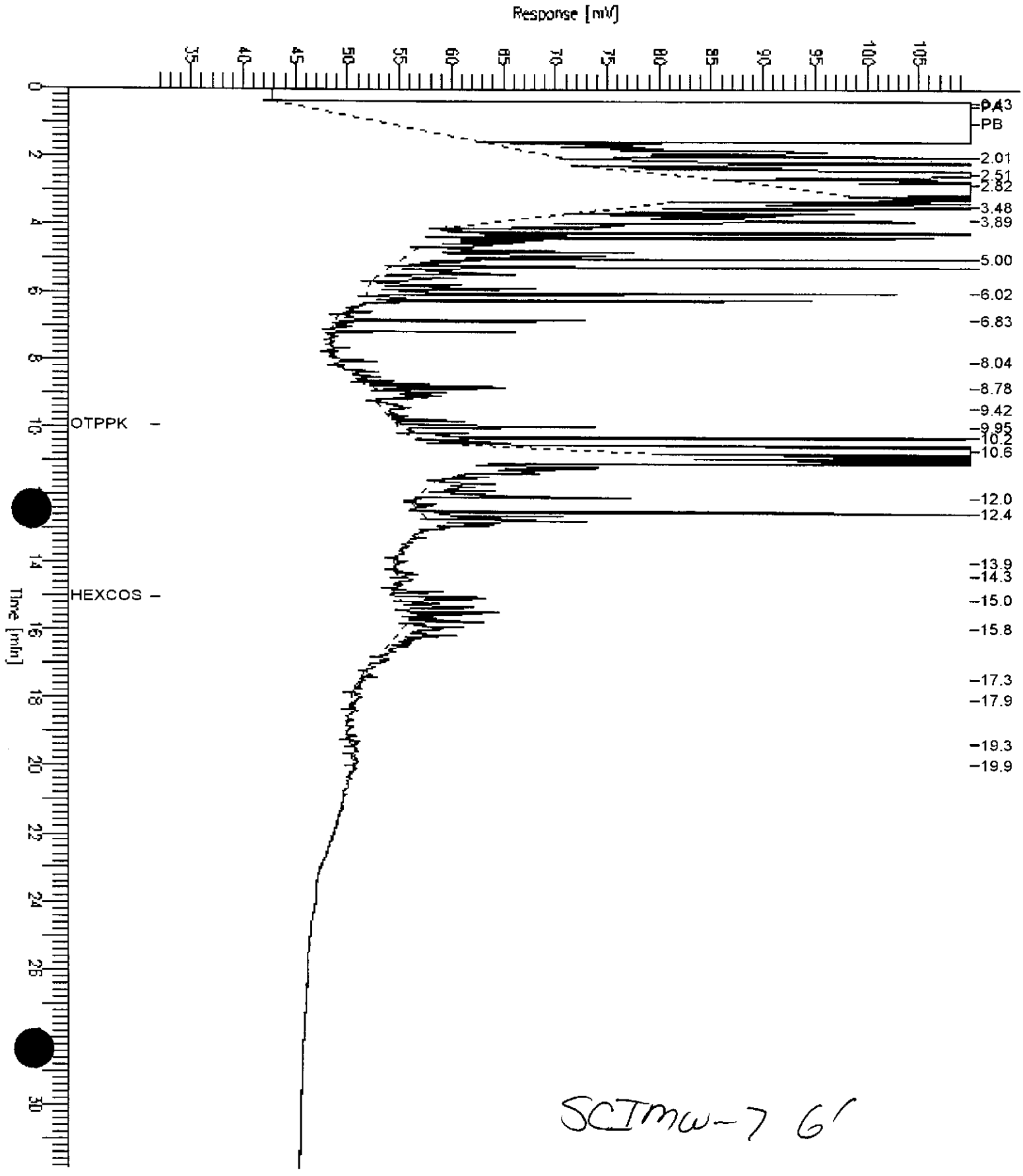


SCJMW-13 4.51

GC15 Channel B Surrogate

Sample Name : 126677-004
FileName : G:\GC15\CHB\248B033.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: 32 mV

Sample #: 29449 Page 1 of 1
Date : 9/5/96 03:39 AM
Time of Injection: 9/5/96 03:07 AM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV



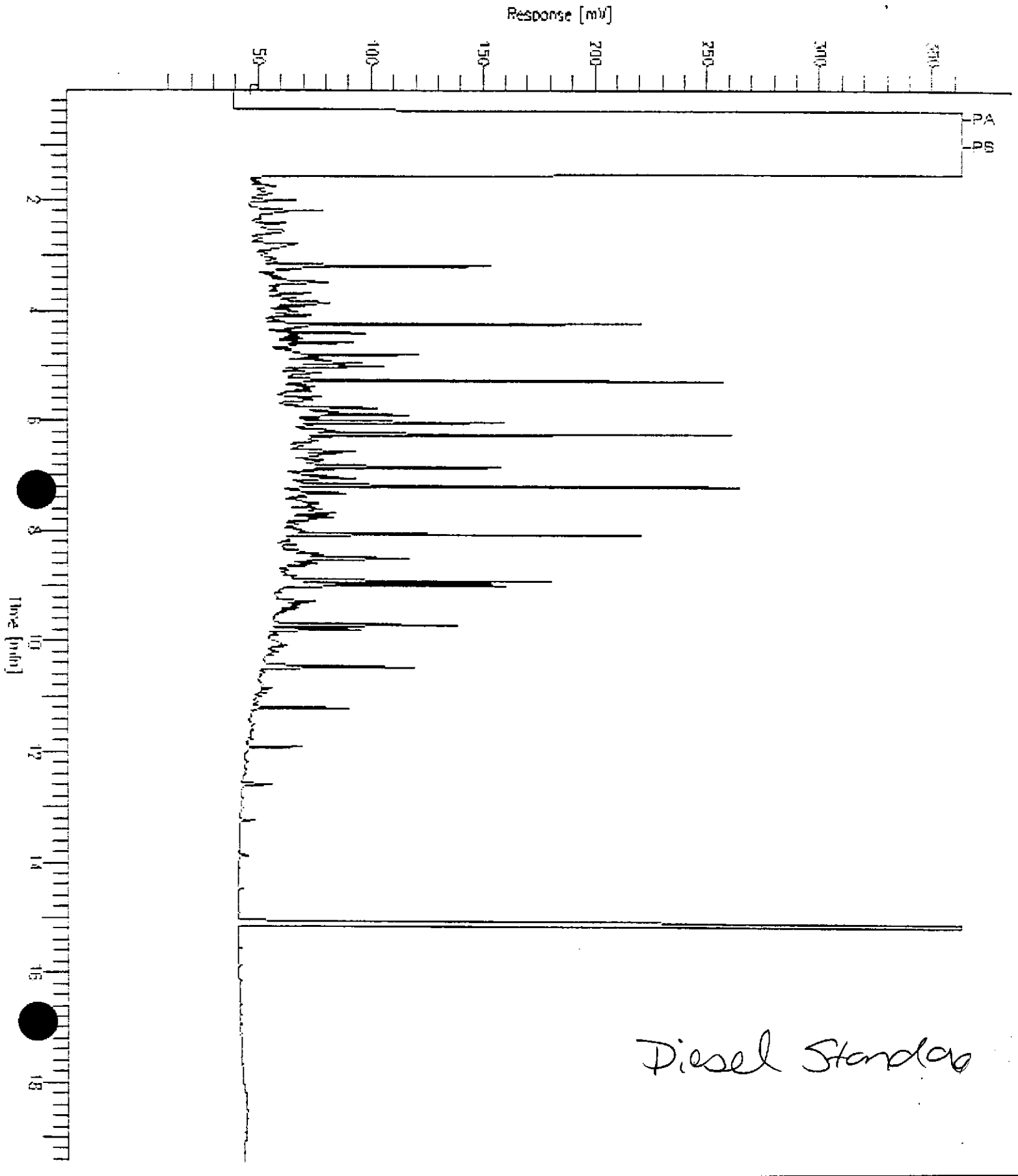
SCIMW-7 6'

GC15 Channel A TEH

Sample Name : CCV,96WS3003,DSL
FileName : G:\GC15\CHB\2478040.RAW
Method : 241TEH.MTH
Start Time : 0.01 min
Scale Factor: 0.0

End Time : 19.80 min
Plot Offset: 5 mV

Sample #: 500MG/L
Date : 9/5/96 09:51 AM
Time of Injection: 9/4/96 10:52 AM
Low Point : 5.22 mV
Plot Scale: 358.0 mV

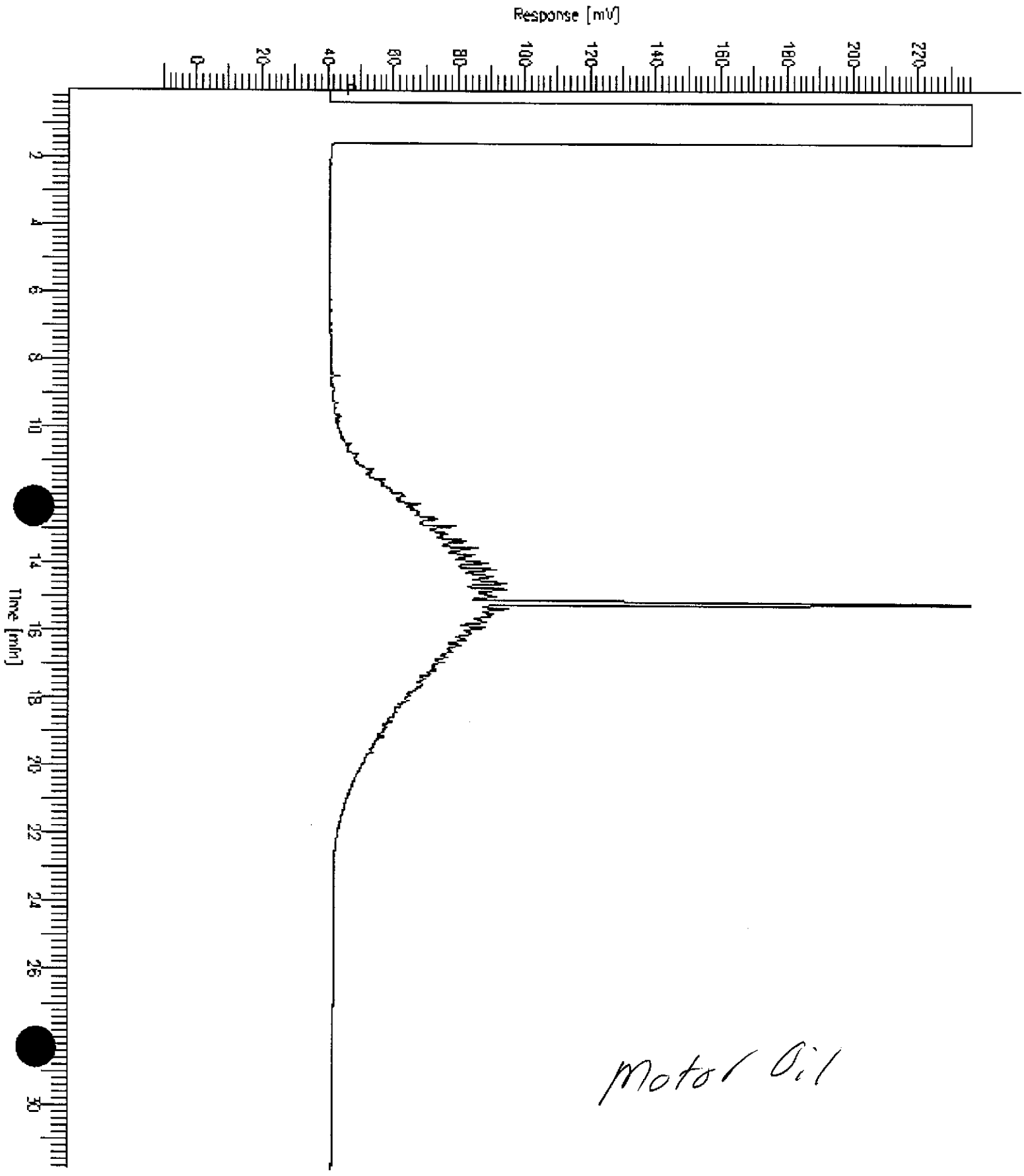


Diesel Standard

GC15 Channel A TEH

Sample Name : CCV,96WS2694,MO
FileName : G:\GC15\CHB\247B036.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -11 mV

Sample #: 500MG/L Page 1 of 1
Date : 9/11/96 10:34 AM
Time of Injection: 9/4/96 08:35 AM
Low Point : -10.94 mV High Point : 236.41 mV
Plot Scale: 247.3 mV



Motor Oil

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

METHOD BLANK

Matrix: Soil
Batch#: 29449
Units: mg/Kg
Diln Fac: 1

Prep Date: 08/29/96
Analysis Date: 09/03/96

MB Lab ID: QC29147

Analyte	Result
Diesel C12-C22	<1.0
Motor Oil C22-C50	<5.0

Surrogate	%Rec	Recovery Limits
Hexacosane	98	60-140

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 29449
Units: mg/Kg
Diln Fac: 1

Prep Date: 08/29/96
Analysis Date: 09/03/96

LCS Lab ID: QC29148

Analyte	Result	Spike Added	%Rec #	Limits
Diesel C12-C22	31.7	49.5	64	60-140
Surrogate	**%Rec**	**Limits**		
Hexacosane	87	60-140		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCIMW-10@3'
Lab ID: 126677-001
Matrix: Soil
Batch#: 29444
Units: ug/Kg
Diln Fac: 1

Sampled: 08/21/96
Received: 08/28/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	21	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	105	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	101	79-122

Data File: /chem/VOA_04.i/082996.b/dht37.d
Report Date: 30-Aug-1996 07:14

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_04.i/082996.b/dht37.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 30-AUG-96 03:35
Operator : LLH Inst ID: VOA_04.i
Smp Info : MSS,126677-001
Misc Info : 8240,,29444,5.0,5,1, SOIL
Comment :
Method : /chem/VOA_04.i/082996.b/i4m826.m
Meth Date : 30-Aug-1996 07:00
Cal Date : 28-AUG-1996 23:53 Cal File: dhs27.d
Als bottle: 37
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Curtis & Tompkins, Ltd.

Lab #: 126677 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 29444
Units: ug/Kg
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 08/30/96

MB Lab ID: QC29130

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	99	79-122

Curtis & Tompkins, Ltd.

Lab #: 126677 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 29444
Units: ug/Kg
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 08/30/96

LCS Lab ID: QC29129

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	52.1	50	104	51-180
Trichloroethene	45.51	50	91	73-141
Benzene	50.55	50	101	78-142
Toluene	48.19	50	96	76-150
Chlorobenzene	47.2	50	94	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	100	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCIMW-10@3'
Lab ID: 126677-001
Matrix: Soil
Batch#: 29444
Units: ug/Kg
Diln Fac: 1

Sample Date: 08/21/96
Received Date: 08/28/96
Prep Date: 08/30/96
Analysis Date: 08/30/96

MS Lab ID: QC29131

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	61.09	122	51-180
Trichloroethene	50	<5	48.81	96	73-141
Benzene	50	<5	51.42	103	78-142
Toluene	50	<5	52.32	102	76-150
Chlorobenzene	50	<5	50.35	101	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	86	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	101	79-122

MSD Lab ID: QC29132

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	59.78	120	51-180	2	22
Trichloroethene	50	45.15	89	73-141	8	24
Benzene	50	49.13	98	78-142	5	21
Toluene	50	48.94	96	76-150	7	21
Chlorobenzene	50	47.18	94	83-129	7	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	87	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	103	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: SCIMW-10@3'
Lab ID: 126677-001
Matrix: Soil
Batch#: 29530
Units: ug/Kg
Diln Fac: 1

Sampled: 08/21/96
Received: 08/28/96
Extracted: 09/03/96
Analyzed: 09/05/96

Analyte	Result	Reporting Limit
Phenol	ND	670
2-Chlorophenol	ND	670
Benzyl alcohol	ND	670
2-Methylphenol	ND	670
4-Methylphenol	ND	670
2-Nitrophenol	ND	3300
2,4-Dimethylphenol	ND	670
Benzoic acid	ND	3300
2,4-Dichlorophenol	ND	670
4-Chloro-3-methylphenol	ND	670
2,4,6-Trichlorophenol	ND	670
2,4,5-Trichlorophenol	ND	3300
2,4-Dinitrophenol	ND	3300
4-Nitrophenol	ND	3300
4,6-Dinitro-2-methylphenol	ND	3300
Pentachlorophenol	ND	3300
N-Nitrosodimethylamine	ND	670
Aniline	ND	670
bis(2-Chloroethyl)ether	ND	670
1,3-Dichlorobenzene	ND	670
1,4-Dichlorobenzene	ND	670
1,2-Dichlorobenzene	ND	670
bis(2-Chloroisopropyl) ether	ND	670
N-Nitroso-di-n-propylamine	ND	670
Hexachloroethane	ND	670
Nitrobenzene	ND	670
Isophorone	ND	670
bis(2-Chloroethoxy)methane	ND	670
1,2,4-Trichlorobenzene	ND	670
Naphthalene	ND	670
4-Chloroaniline	ND	670
Hexachlorobutadiene	ND	670
2-Methylnaphthalene	ND	670
Hexachlorocyclopentadiene	ND	670
2-Chloronaphthalene	ND	670
2-Nitroaniline	ND	3300
Dimethylphthalate	ND	670
Acenaphthylene	900	670

Semivolatile Organics by GC/MS

Field ID:	SCIMW-10@3'	Sampled:	08/21/96
Lab ID:	126677-001	Received:	08/28/96
Matrix:	Soil	Extracted:	09/03/96
Batch#:	29530	Analyzed:	09/05/96
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	670
3-Nitroaniline	ND	3300
Acenaphthene	ND	670
Dibenzofuran	ND	670
2,4-Dinitrotoluene	ND	670
Diethylphthalate	ND	670
4-Chlorophenyl-phenylether	ND	670
Fluorene	ND	670
4-Nitroaniline	ND	3300
N-Nitrosodiphenylamine	ND	670
Azobenzene	ND	670
4-Bromophenyl-phenylether	ND	670
Hexachlorobenzene	ND	670
Phenanthrene	1200	670
Anthracene	520 J	670
Di-n-butylphthalate	ND	670
Fluoranthene	3500	670
Benzidine	ND	670
Pyrene	5300	670
Butylbenzylphthalate	ND	670
3,3'-Dichlorobenzidine	ND	3300
Benzo(a)anthracene	1900	670
Chrysene	2900	670
bis(2-Ethylhexyl)phthalate	ND	670
Di-n-octylphthalate	ND	670
Benzo(b)fluoranthene	2300	670
Benzo(k)fluoranthene	3100	670
Benzo(a)pyrene	4100	670
Indeno(1,2,3-cd)pyrene	2000	670
Dibenz(a,h)anthracene	ND	670
Benzo(g,h,i)perylene	2400	670

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	83	25-121
Phenol-d5	90	24-113
2,4,6-Tribromophenol	25	19-122
Nitrobenzene-d5	76	23-120
2-Fluorobiphenyl	80	30-115
Terphenyl-d14	80	18-137

J: Estimated Value

Data File: /chem/bna01.i/090596a.b/15_6677-001.d
Report Date: 06-Sep-1996 10:17

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126677-001
Operator : dsh
Sample Location:
Sample Matrix: SOIL
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	~~2-Pentanone, 4-hydroxy-4-me~~ unknown	5.112	6959.85	NJ
2.	0-00-0	~~Cyclohexanespiro-2'-bicyclo~~ unknown	18.405	440.50	NJ
3.	206-44-0	~~Fluoranthene~~ unknown Alkene	20.072	336.61	NJ

Data File: /chem/bna01.i/090596a.b/15_6677-001.d
Report Date: 06-Sep-1996 10:17

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/bna01.i/090596a.b/15_6677-001.d
Lab Smp Id: s,126677-001 Client Smp ID: CURTIS&TOMPKINS,LTD
Inj Date : 05-SEP-1996 23:14 Autotune Date: 05-Sep-96 13:01:4
Operator : dsh Inst ID: bna01.i
Smp Info :
Misc Info :
Comment :
Method : /chem/bna01.i/090596a.b/+bna1_6pt.m
Meth Date : 05-Sep-1996 14:12
Cal Date : 05-SEP-96 13:24 Cal File: 02_ccv0905a.d
Als bottle: 15
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD		RT	AREA	AMOUNT
*	11 1,4-Dichlorobenzene-d4	7.151	9315305	40.000
*	65 Phenanthrene-d10	16.905	13324007	40.000
*	77 Chrysene-d12	23.185	23482134	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(NG)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
5.112	24312432	104.39	6959.85	43	nbs75k.1	3245	11

~~2-Pentanone, 4-hydroxy-4-methyl-~~ unknown CAS #: 123-42-2

18.405	2200988	6.60	440.50	46	nbs75k.1	20366	65

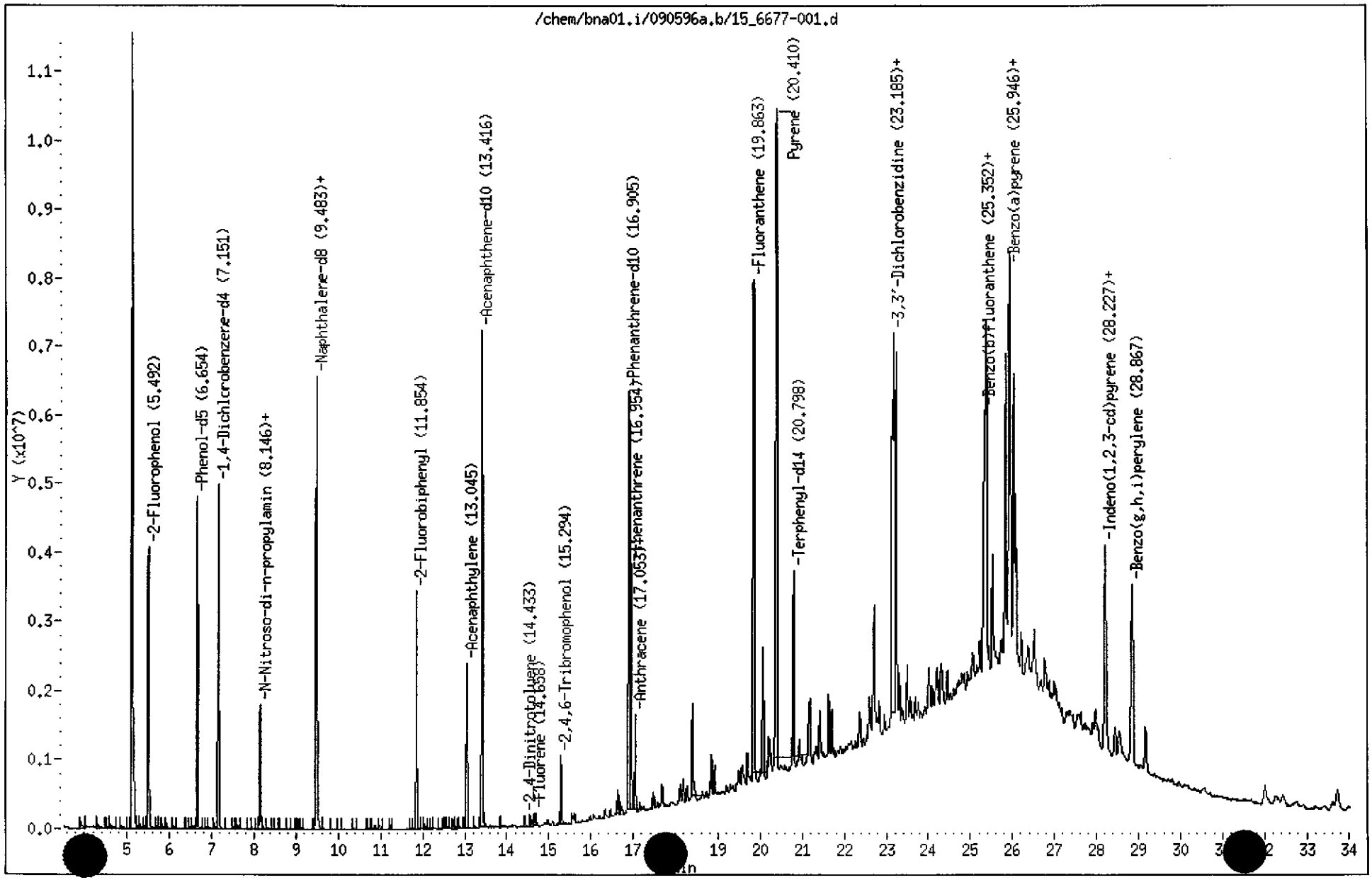
~~Cyclohexanespiro-2'-bicyclo[1.1.0]butane~~ unknown CAS #: 0-00-0

20.072	2964156	5.04	336.61	98	nbs75k.1	69814	77

~~Fluoranthene~~ unknown Alkane. CAS #: 206-44-0

Data File: /chem/bna01.i/090596a.b/15_6677-001.d
Date : 05-SEP-1996 23:14
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i
Operator: dsh
Column diameter: 0.25



EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 29530
Units: ug/Kg
Diln Fac: 1

Prep Date: 09/03/96
Analysis Date: 09/04/96

MB Lab ID: QC29419

Analyte	Result	Reporting Limit
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1700
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1700
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1700
2,4-Dinitrophenol	ND	1700
4-Nitrophenol	ND	1700
4,6-Dinitro-2-methylphenol	ND	1700
Pentachlorophenol	ND	1700
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
bis(2-Chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
bis(2-Chloroisopropyl) ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
bis(2-Chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	1700
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 29530
Units: ug/Kg
Diln Fac: 1

Prep Date: 09/03/96
Analysis Date: 09/04/96

MB Lab ID: QC29419

Analyte	Result	Reporting Limit
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Benzidine	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	95	25-121
Phenol-d5	98	24-113
2,4,6-Tribromophenol	72	19-122
Nitrobenzene-d5	89	23-120
2-Fluorobiphenyl	90	30-115
Terphenyl-d14	89	18-137

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 29530
Units: ug/Kg
Diln Fac: 1

Prep Date: 09/03/96
Analysis Date: 09/04/96

LCS Lab ID: QC29420

Analyte	Result	Spike Added	%Rec #	Limits
Phenol	2925	3333	88	26-90
2-Chlorophenol	2902	3333	87	25-102
4-Chloro-3-methylphenol	2906	3333	87	26-103
4-Nitrophenol	2640	3333	79	11-114
Pentachlorophenol	2373	3333	71	17-109
1,4-Dichlorobenzene	1357	1667	81	28-104
N-Nitroso-di-n-propylamine	1079	1667	65	41-126
1,2,4-Trichlorobenzene	1322	1667	79	38-107
Acenaphthene	1387	1667	83	31-137
2,4-Dinitrotoluene	1327	1667	80	28-89
Pyrene	1392	1667	84	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	94	25-121
Phenol-d5	95	24-113
2,4,6-Tribromophenol	78	19-122
Nitrobenzene-d5	88	23-120
2-Fluorobiphenyl	89	30-115
Terphenyl-d14	90	18-137

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 11 outside limits
DO: Surrogate diluted out

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 214909-001
Matrix: Soil
Batch#: 29530
Units: ug/Kg
Diln Fac: 1

Sample Date: 08/29/96
Received Date: 08/29/96
Prep Date: 09/03/96
Analysis Date: 09/04/96

MS Lab ID: QC29421

Analyte	Spike Added	Sample	MS	%Rec	#	Limits
Phenol	3333	<333.3	3317	100	*	26-90
2-Chlorophenol	3333	<333.3	3123	94		25-102
4-Chloro-3-methylphenol	3333	<333.3	3107	93		26-103
4-Nitrophenol	3333	<1667	2932	88		11-114
Pentachlorophenol	3333	<1667	2218	67		17-109
1,4-Dichlorobenzene	1667	<333.3	1221	73		28-104
N-Nitroso-di-n-propylamine	1667	<333.3	1203	72		41-126
1,2,4-Trichlorobenzene	1667	<333.3	1267	76		38-107
Acenaphthene	1667	<333.3	1433	86		31-137
2,4-Dinitrotoluene	1667	<333.3	1330	80		28-89
Pyrene	1667	<333.3	1461	88		35-142

Surrogate	%Rec	Limits
2-Fluorophenol	35	25-121
Phenol-d5	104	24-113
2,4,6-Tribromophenol	77	19-122
Nitrobenzene-d5	90	23-120
2-Fluorobiphenyl	94	30-115
Terphenyl-d14	95	18-137

MSD Lab ID: QC29422

Analyte	Spike Added	MSD	%Rec	#	Limits	RPD	#	Limit
Phenol	3333	3164	95	*	26-90	5		35
2-Chlorophenol	3333	2987	90		25-102	4		50
4-Chloro-3-methylphenol	3333	3038	91		26-103	2		33
4-Nitrophenol	3333	2861	86		11-114	2		50
Pentachlorophenol	3333	2076	62		17-109	7		47
1,4-Dichlorobenzene	1667	1183	71		28-104	3		27
N-Nitroso-di-n-propylamine	1667	1156	69		41-126	4		38
1,2,4-Trichlorobenzene	1667	1225	73		38-107	3		23
Acenaphthene	1667	1364	82		31-137	5		19
2,4-Dinitrotoluene	1667	1262	76		28-89	5		47
Pyrene	1667	1381	83		35-142	6		36

Surrogate	%Rec	Limits
2-Fluorophenol	29	25-121
Phenol-d5	99	24-113
2,4,6-Tribromophenol	73	19-122
Nitrobenzene-d5	85	23-120
2-Fluorobiphenyl	89	30-115
Terphenyl-d14	88	18-137

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 2 out of 22 outside limits
DO: Surrogate diluted out

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3550
Location:	KOT	Cleanup Method:	EPA Acid

Field ID:	SCIMW-10@3'	Sampled:	08/21/96
Lab ID:	126677-001	Received:	08/28/96
Matrix:	Soil	Extracted:	09/04/96
Batch#:	29558	Analyzed:	09/07/96
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	20
Aroclor-1221	ND	20
Aroclor-1232	ND	20
Aroclor-1242	ND	20
Aroclor-1248	ND	20
Aroclor-1254	ND	20
Aroclor-1260	ND	20

Surrogate	%Recovery	Recovery Limits
TCMX	77	60-150
Decachlorobiphenyl	109	61-143

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3550
Cleanup Method: EPA Acid

METHOD BLANK

Matrix: Soil
Batch#: 29558
Units: ug/Kg
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

MB Lab ID: QC29482

Analyte	Result	Reporting Limit
Aroclor-1016	ND	20
Aroclor-1221	ND	20
Aroclor-1232	ND	20
Aroclor-1242	ND	20
Aroclor-1248	ND	20
Aroclor-1254	ND	20
Aroclor-1260	ND	20

Surrogate	%Rec	Recovery Limits
TCMX	77	60-150
Decachlorobiphenyl	110	61-143

Polychlorinated Biphenyls

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3550
Location:	KOT	Cleanup Method:	EPA Acid

LABORATORY CONTROL SAMPLE

Matrix:	Soil	Prep Date:	09/04/96
Batch#:	29558	Analysis Date:	09/06/96
Units:	ug/Kg		
Diln Fac:	1		

LCS Lab ID: QC29483

Analyte	Result	Spike Added	%Rec #	Limits
Aroclor-1260	144	167	86	56-130

Surrogate	%Rec	Limits
TCMX	67	60-150
Decachlorobiphenyl	106	61-143

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3550
Cleanup Method: EPA Acid

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCIMW-10@3'
Lab ID: 126677-001
Matrix: Soil
Batch#: 29558
Units: ug/Kg
Diln Fac: 1

Sample Date: 08/21/96
Received Date: 08/28/96
Prep Date: 09/04/96
Analysis Date: 09/07/96

MS Lab ID: QC29484

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Aroclor-1260	167	<20	172.6	103	56-130
Surrogate	**%Rec**	**Limits**			
TCMX	77	60-150			
Decachlorobiphenyl	106	61-143			

MSD Lab ID: QC29485

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	167	167.8	100	56-130	3	25
Surrogate	**%Rec**	**Limits**				
TCMX	77	60-150				
Decachlorobiphenyl	113	61-143				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

SAMPLE ID: SCIMW-10@3'
LAB ID: 126677-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Soil

DATE SAMPLED: 08/21/96
DATE RECEIVED: 08/28/96
DATE REPORTED: 09/11/96

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	8.4	3.0	1	29571	EPA 6010A	09/05/96
Arsenic	2.0	0.25	1	29571	EPA 6010A	09/04/96
Barium	28	0.50	1	29571	EPA 6010A	09/04/96
Beryllium	0.28	0.10	1	29571	EPA 6010A	09/04/96
Cadmium	ND	0.10	1	29571	EPA 6010A	09/04/96
Chromium (total)	2.4	0.50	1	29571	EPA 6010A	09/04/96
Cobalt	4.0	1.0	1	29571	EPA 6010A	09/04/96
Copper	12	0.50	1	29571	EPA 6010A	09/04/96
Lead	5.9	0.15	1	29571	EPA 6010A	09/04/96
Mercury	ND	0.10	1	29671	EPA 7471	09/09/96
Molybdenum	ND	1.0	1	29571	EPA 6010A	09/04/96
Nickel	3.7	1.0	1	29571	EPA 6010A	09/04/96
Selenium	1.4	0.25	1	29571	EPA 6010A	09/04/96
Silver	ND	0.50	1	29571	EPA 6010A	09/04/96
Thallium	ND	0.25	1	29571	EPA 6010A	09/04/96
Vanadium	10	0.50	1	29571	EPA 6010A	09/04/96
Zinc	69	1.0	1	29571	EPA 6010A	09/04/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126677

DATE REPORTED: 09/11/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3	mg/Kg	1	29571	EPA 6010A	09/05/96
Arsenic	ND	0.25	mg/Kg	1	29571	EPA 6010A	09/04/96
Barium	ND	0.5	mg/Kg	1	29571	EPA 6010A	09/04/96
Beryllium	ND	0.1	mg/Kg	1	29571	EPA 6010A	09/04/96
Cadmium	ND	0.1	mg/Kg	1	29571	EPA 6010A	09/04/96
Chromium (total)	ND	0.5	mg/Kg	1	29571	EPA 6010A	09/04/96
Cobalt	ND	1	mg/Kg	1	29571	EPA 6010A	09/04/96
Copper	ND	0.5	mg/Kg	1	29571	EPA 6010A	09/04/96
Lead	ND	0.15	mg/Kg	1	29571	EPA 6010A	09/04/96
Mercury	ND	0.1	mg/Kg	1	29671	EPA 7471	09/09/96
Molybdenum	ND	1	mg/Kg	1	29571	EPA 6010A	09/04/96
Nickel	ND	1	mg/Kg	1	29571	EPA 6010A	09/04/96
Selenium	ND	0.25	mg/Kg	1	29571	EPA 6010A	09/04/96
Silver	ND	0.5	mg/Kg	1	29571	EPA 6010A	09/04/96
Thallium	ND	0.25	mg/Kg	1	29571	EPA 6010A	09/04/96
Vanadium	ND	0.5	mg/Kg	1	29571	EPA 6010A	09/04/96
Zinc	ND	1	mg/Kg	1	29571	EPA 6010A	09/04/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126677

DATE REPORTED: 09/11/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	500	435.6	431.2	ug/L	87	86	80-120	1	35	29571	EPA 6010A	09/05/96
Arsenic	2000	1740	1690	ug/L	87	85	80-120	3	35	29571	EPA 6010A	09/04/96
Barium	2000	1820	1760	ug/L	91	88	80-120	3	35	29571	EPA 6010A	09/04/96
Beryllium	50	45.8	44.8	ug/L	92	90	80-120	2	35	29571	EPA 6010A	09/04/96
Cadmium	50	48.4	47.1	ug/L	97	94	80-120	3	35	29571	EPA 6010A	09/04/96
Chromium (total)	200	179	175	ug/L	90	88	80-120	2	35	29571	EPA 6010A	09/04/96
Cobalt	500	447	437	ug/L	89	87	80-120	2	35	29571	EPA 6010A	09/04/96
Copper	250	236	227	ug/L	94	91	80-120	4	35	29571	EPA 6010A	09/04/96
Lead	500	455	445	ug/L	91	89	80-120	2	35	29571	EPA 6010A	09/04/96
Mercury	5	5.748	5.962	ug/L	115	119	80-120	4	35	29671	EPA 7470	09/09/96
Molybdenum	400	372	358	ug/L	93	90	80-120	4	35	29571	EPA 6010A	09/04/96
Nickel	500	461	451	ug/L	92	90	80-120	2	35	29571	EPA 6010A	09/04/96
Selenium	2000	1730	1690	ug/L	87	85	80-120	2	35	29571	EPA 6010A	09/04/96
Silver	100	87.7	78.5	ug/L	88	79*	80-120	11	35	29571	EPA 6010A	09/04/96
Thallium	2000	1850	1810	ug/L	93	91	80-120	2	35	29571	EPA 6010A	09/04/96
Vanadium	500	444	432	ug/L	89	86	80-120	3	35	29571	EPA 6010A	09/04/96
Zinc	500	444	432	ug/L	89	86	80-120	3	35	29571	EPA 6010A	09/04/96

* = Out of Limits

CHAIN OF CUSTODY FORM

12667

PAGE ____ OF ____

PROJECT NAME: Keep on Trucking
JOB NUMBER: 133 005
PROJECT CONTACT: Jerome de Vernier
SAMPLED BY: Jerome de Vernier
LAB: Curtis & Tompkins
TURNAROUND: standard
REQUESTED BY: Jerome de Vernier

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES
-1	SCIMW-10@3'		X						X				X		08	21	96	0200	
									/										
-2	SCIMW-9@6'		X						X				X		08	21	96		
-3	SCIMW-13@4½'		X						X				X		08	22	96		
-4	SCIMW-7@6'		X						X				X		08	20	96		

ANALYSIS REQUESTED:
- TUHg
- TEH(C-5 to C-50)
- O&G (silica gel)
- VOC (8240) with TICs
- 8270 with PAHs search
- Heavy metals (Ti + one + Zr)
- PCBs

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	8/28/96 5:30pm		
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
		Tim Bohin	8/28/96 5:30

COMMENTS & NOTES:
Please note holding time - Sample 7 days ago.

Subsurface Consultants, Inc.
171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607
(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 18-SEP-96
Lab Job Number: 126693
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 126693

Project Name: KOT
Project Number: 133.005

Report Date: 18 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126693-001	SCI-MW-9	Water	29-AUG-96	29-AUG-96	10-SEP-96	5.0	mg/L	5	TR	29717
126693-002	SCI-MW-12	Water	29-AUG-96	29-AUG-96	10-SEP-96	ND	mg/L	5	TR	29717
126693-003	SCI-MW-13	Water	29-AUG-96	29-AUG-96	10-SEP-96	ND	mg/L	5	TR	29717
126693-004	SCI-MW-14	Water	29-AUG-96	29-AUG-96	10-SEP-96	6.0	mg/L	5	TR	29717
126693-005	SCI-MW-15	Water	29-AUG-96	29-AUG-96	10-SEP-96	ND	mg/L	5	TR	29717
126693-006	SCI-MW-17	Water	29-AUG-96	29-AUG-96	10-SEP-96	ND	mg/L	5	TR	29717

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126693
Report Date: 18 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29717**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	10-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	82%	SMWW 17:5520BF	10-SEP-96
BSD	85%	SMWW 17:5520BF	10-SEP-96

		Control Limits
Average Spike Recovery	83%	80% - 120%
Relative Percent Difference	3.6%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126693-001	SCI-MW-9	29611	08/29/96	09/05/96	09/05/96	
126693-002	SCI-MW-12	29611	08/29/96	09/05/96	09/05/96	
126693-003	SCI-MW-13	29611	08/29/96	09/05/96	09/05/96	
126693-004	SCI-MW-14	29611	08/29/96	09/05/96	09/05/96	

Matrix: Water

Analyte Diln Fac:	Units	126693-001 1	126693-002 1	126693-003 1	126693-004 1
Gasoline	ug/L	<50	<50	<50	<50
Surrogate					
Trifluorotoluene	%REC	96	98	99	98
Bromobenzene	%REC	79	80	79	79

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126693-005	SCI-MW-15	29611	08/29/96	09/05/96	09/05/96	
126693-006	SCI-MW-17	29611	08/29/96	09/05/96	09/05/96	

Matrix: Water

Analyte	Units	126693-005	126693-006
Diln Fac:		1	1
Gasoline	ug/L	<50	<50
Surrogate			
Trifluorotoluene	%REC	99	98
Bromobenzene	%REC	80	80

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/05/96
Batch#:	29611	Analysis Date:	09/05/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC29686

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	98	65-135
Bromobenzene	78	65-135

Curtis & Tompkins, Ltd.

Lab #: 126693 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29611
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/05/96

LCS Lab ID: QC29687

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1850	2000	93	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	94	65-135		
Bromobenzene	96	65-135		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126693 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	ZZZZZZ	Sample Date:	08/28/96
Lab ID:	126710-001	Received Date:	08/30/96
Matrix:	Water	Prep Date:	09/05/96
Batch#:	29611	Analysis Date:	09/05/96
Units:	ug/L		
Diln Fac:	1		

MS Lab ID: QC29688

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50	1649	82	75-125
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	94	65-135			
Bromobenzene	100	65-135			

MSD Lab ID: QC29689

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1667	83	75-125	1	35
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	94	65-135				
Bromobenzene	101	65-135				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126693-001	SCI-MW-9	29661	08/29/96	09/07/96	09/10/96	
126693-002	SCI-MW-12	29661	08/29/96	09/07/96	09/10/96	
126693-003	SCI-MW-13	29661	08/29/96	09/07/96	09/10/96	
126693-004	SCI-MW-14	29661	08/29/96	09/07/96	09/10/96	

Matrix: Water

Analyte Diln Fac:	Units	126693-001 1	126693-002 1	126693-003 1	126693-004 1
Diesel C12-C22	ug/L	1800 YH	<50	5400 YH	2200 YH
Motor Oil C22-C50	ug/L	1100 YL	<250	2100 YL	1400 YL
Surrogate					
Hexacosane	%REC	91	94	95	112

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126693-005	SCI-MW-15	29661	08/29/96	09/07/96	09/10/96	
126693-006	SCI-MW-17	29661	08/29/96	09/07/96	09/10/96	

Matrix: Water

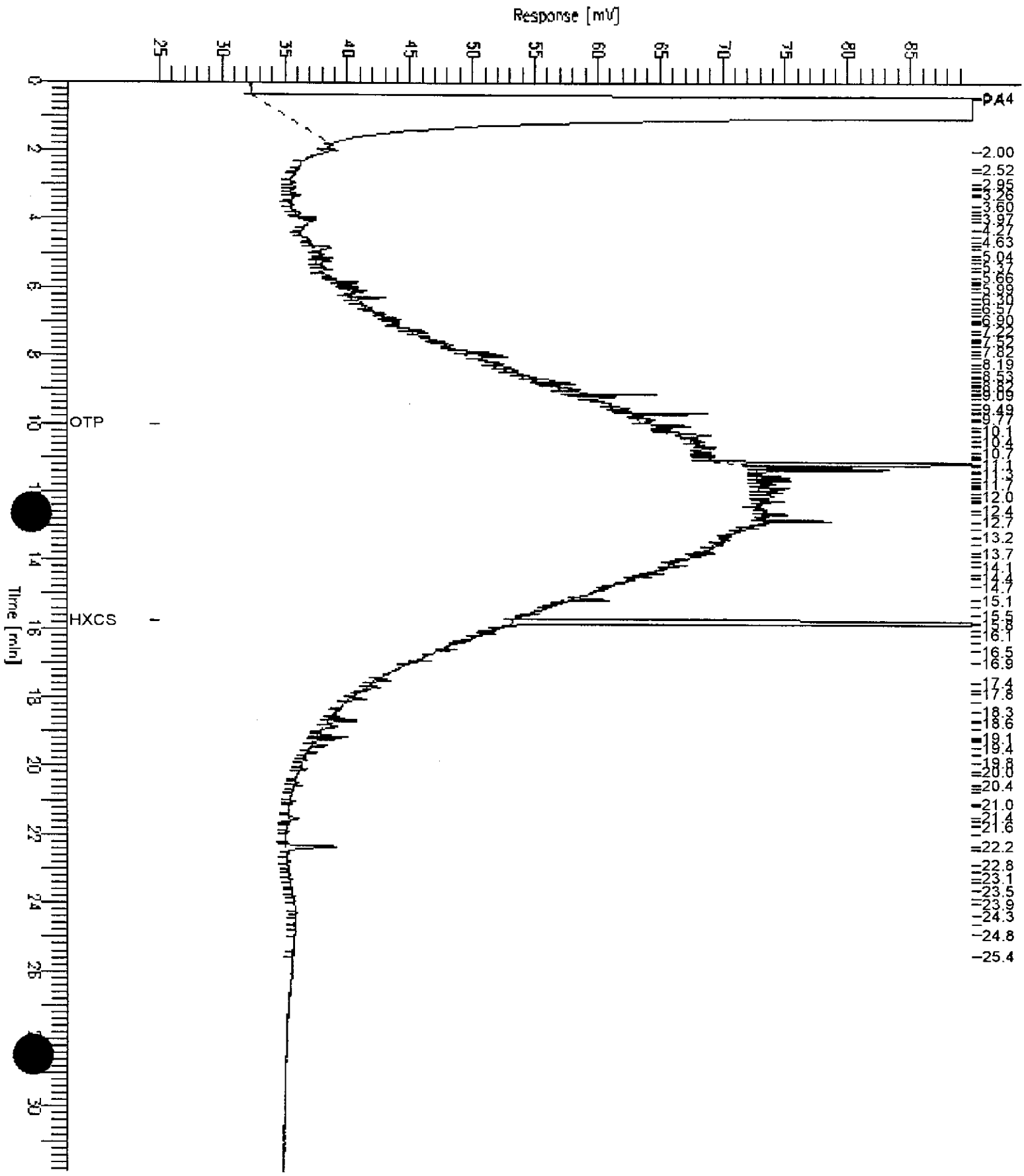
Analyte	Units	126693-005	126693-006
Diln Fac:		1	1
Diesel C12-C22	ug/L	2100 YH	190 YH
Motor Oil C22-C50	ug/L	1600 YL	<250
Surrogate			
Hexacosane	%REC	97	92

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

Chromatogram

Sample Name : 126693-001,29661
FileName : G:\GC13\CHA\253A052.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: 25 mV

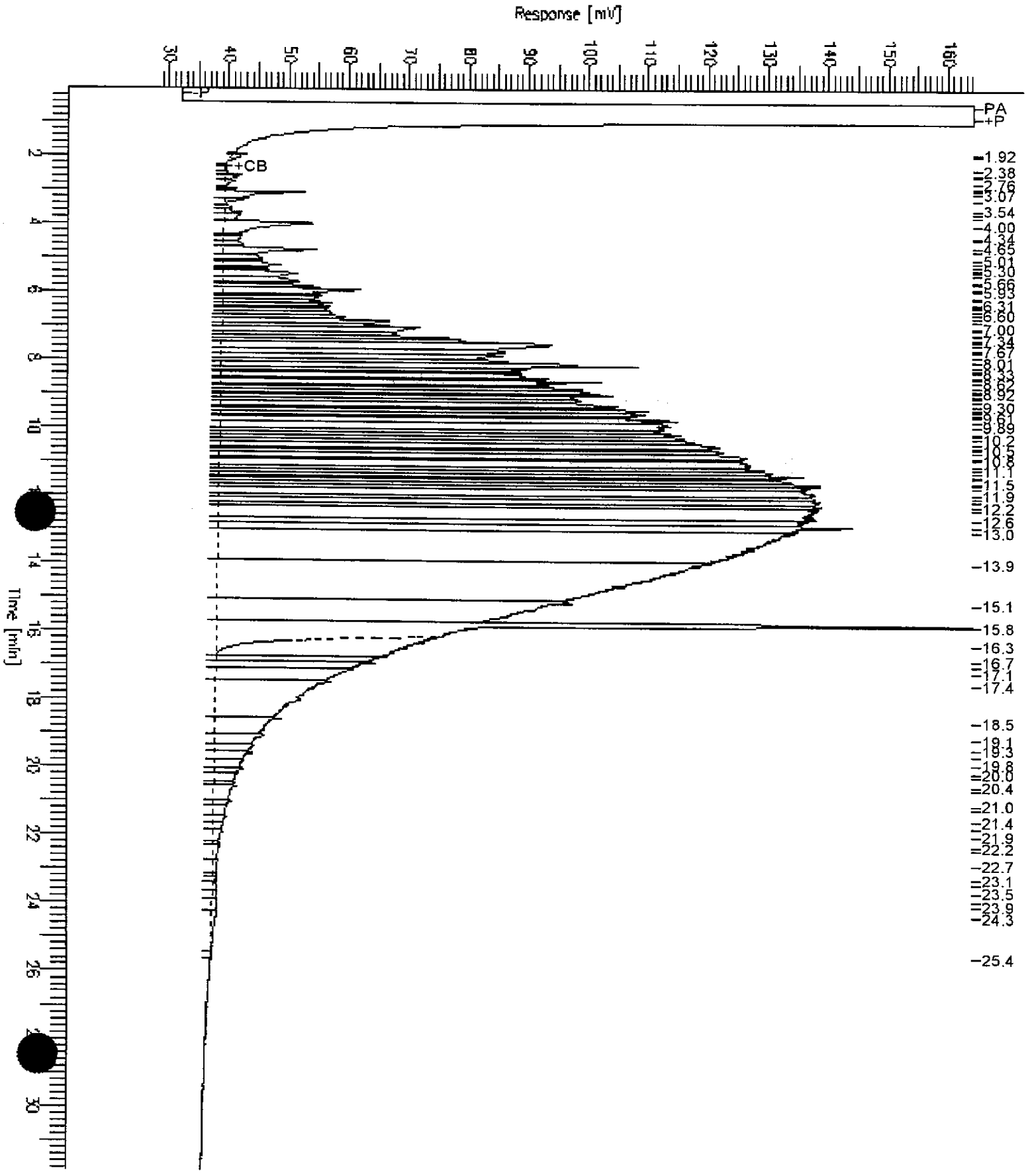
Sample #: 500:2.5 Page 1 of 1
Date : 9/10/96 07:20 PM
Time of Injection: 9/10/96 06:48 PM
Low Point : 25.00 mV High Point : 90.00 mV
Plot Scale: 65.0 mV



Chromatogram

Sample Name : 126693-003,29661
FileName : G:\GC13\CHA\253A054.RAW
Method : ATEH0904.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 29 mV

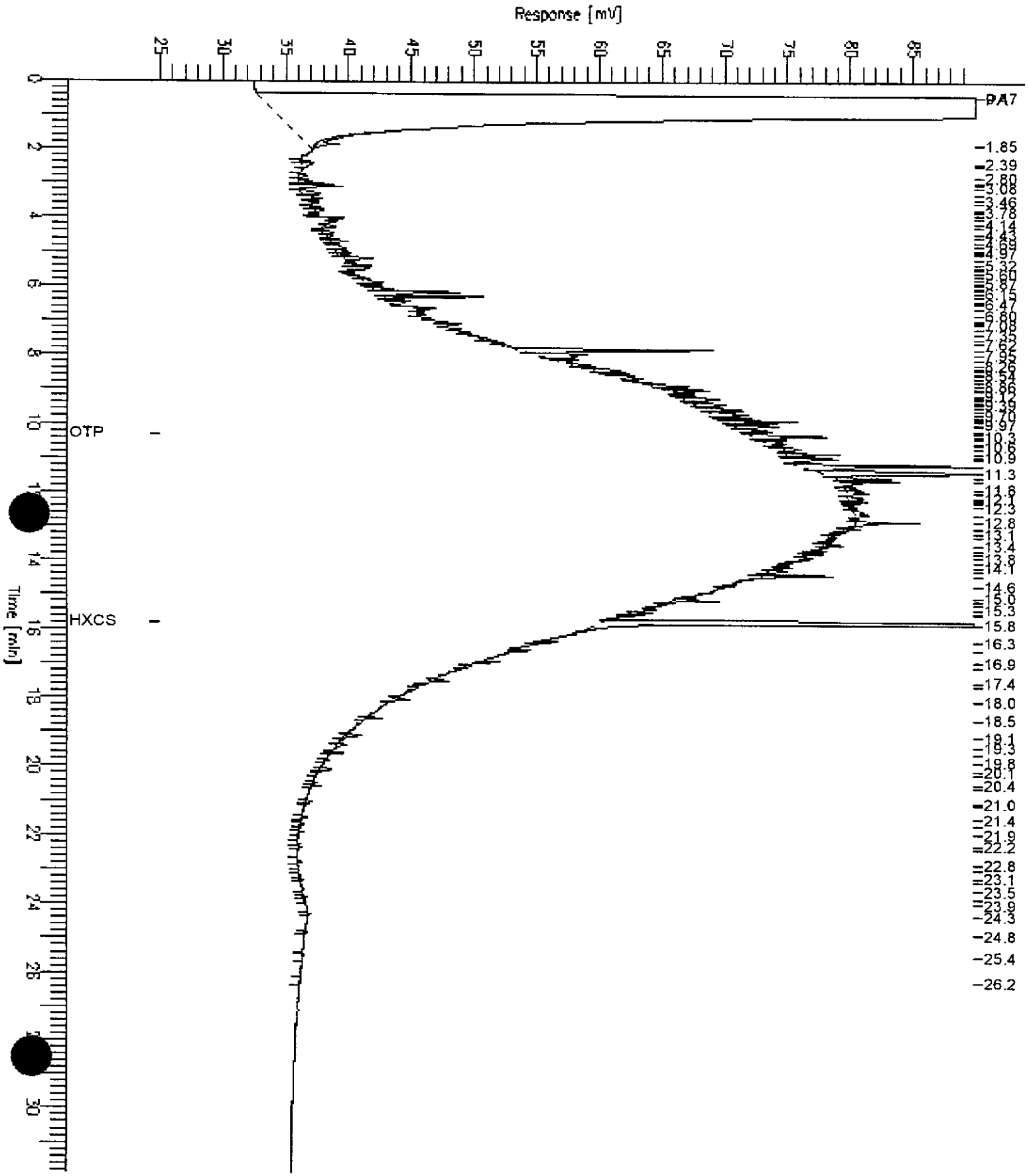
Sample #: 500:2.5 Page 1 of 1
Date : 9/11/96 11:03 AM
Time of Injection: 9/10/96 08:13 PM
Low Point : 28.50 mV High Point : 164.29 mV
Plot Scale: 135.8 mV



Chromatogram

Sample Name : 126693-004,29661
FileName : G:\GC13\CHA\253A055.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Shift Factor: 0.0 Plot Offset: 25 mV

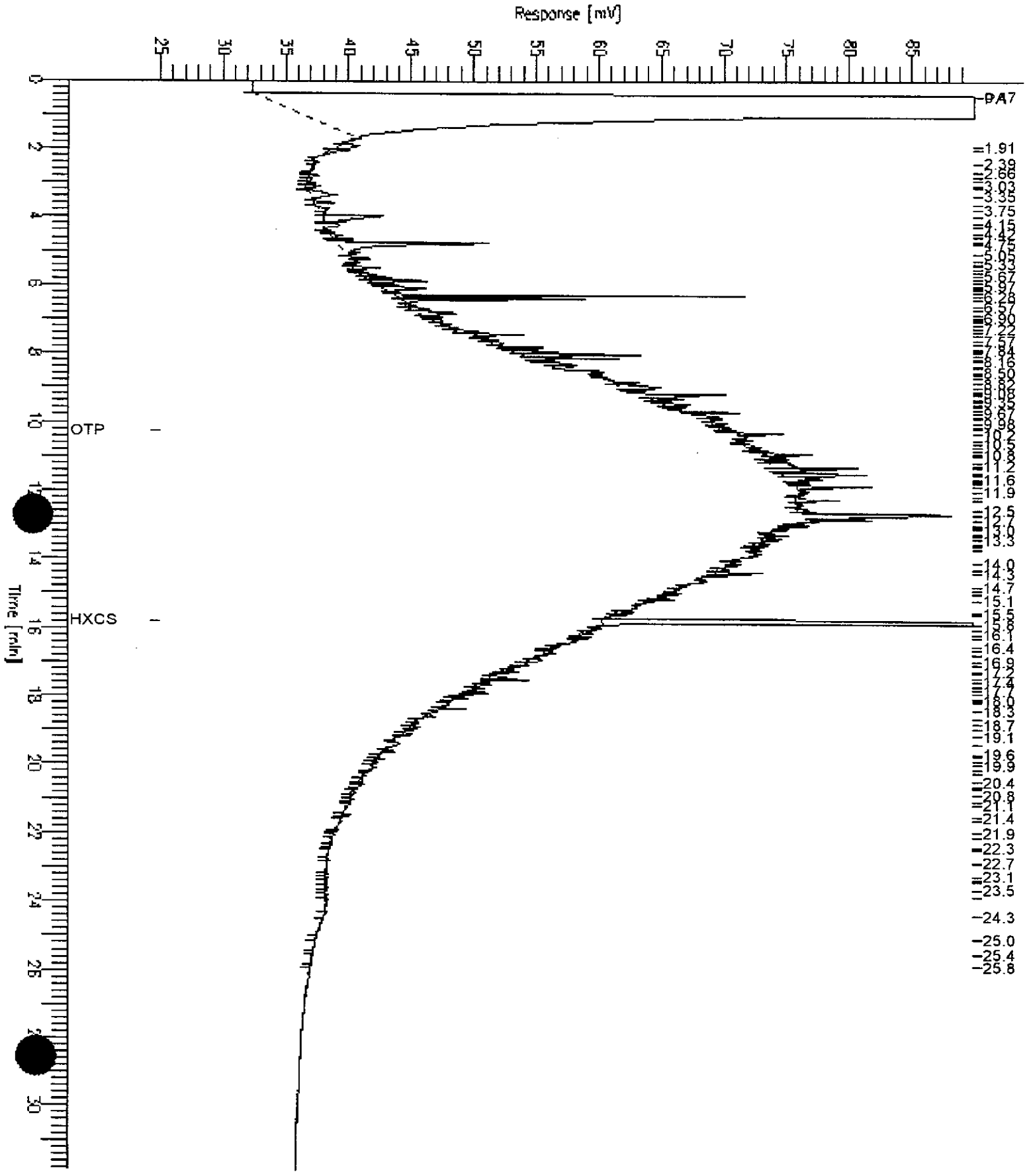
Sample #: 500:2.5 Page 1 of 1
Date : 9/10/96 09:29 PM
Time of Injection: 9/10/96 08:57 PM
Low Point : 25.00 mV High Point : 90.00 mV
Plot Scale: 65.0 mV



Chromatogram

Sample Name : 126693-005,29661
FileName : G:\GC13\CHA\253A056.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Factor: 0.0 Plot Offset: 25 mV

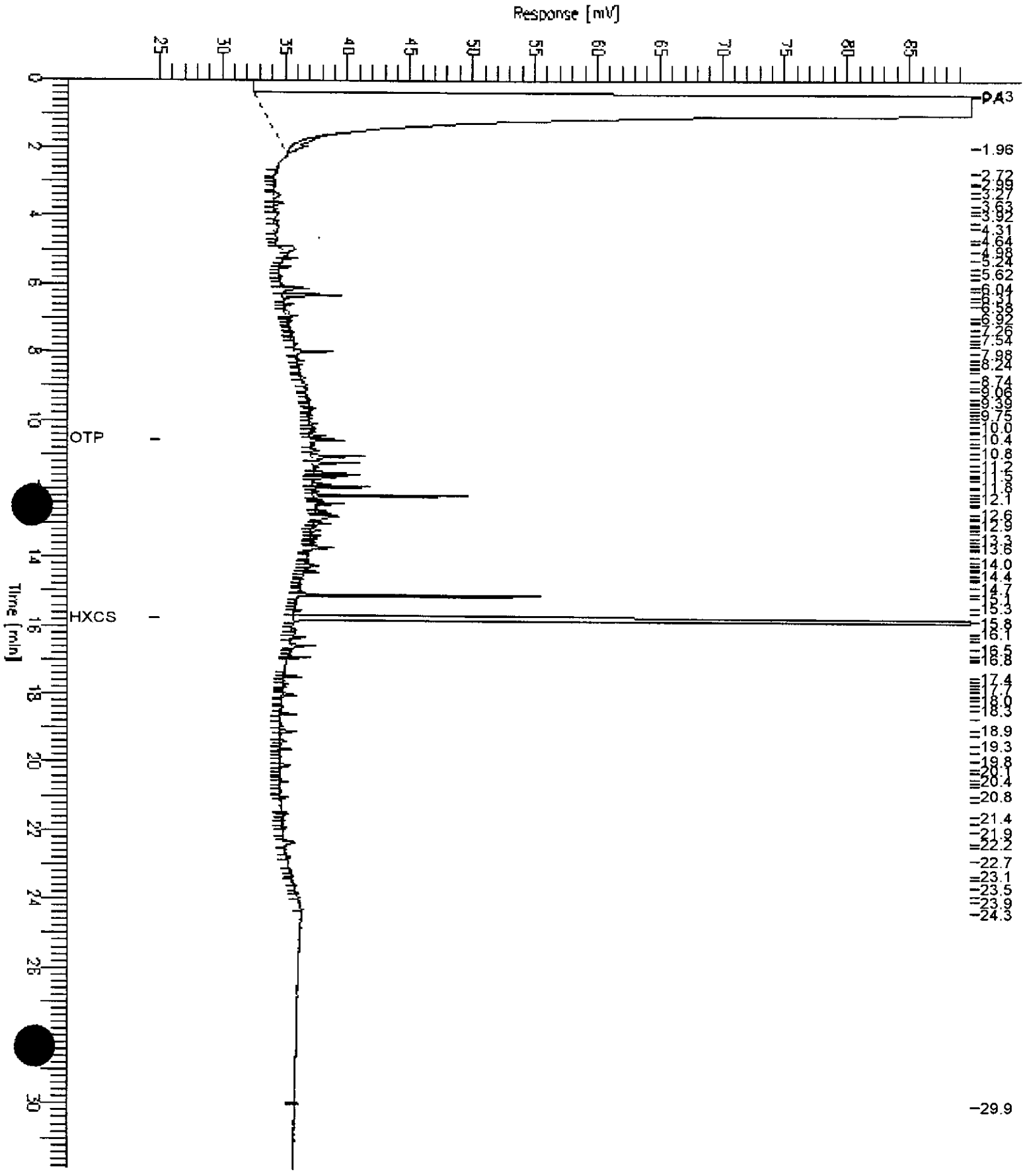
Sample #: 500:2.5 Page 1 of 1
Date : 9/10/96 10:12 PM
Time of Injection: 9/10/96 09:40 PM
Low Point : 25.00 mV High Point : 90.00 mV
Plot Scale: 65.0 mV



Chromatogram

Sample Name : 126693-006,29661
FileName : G:\GC13\CHA\253A057.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: 25 mV

Sample #: 500:2.5 Page 1 of 1
Date : 9/10/96 10:55 PM
Time of Injection: 9/10/96 10:23 PM
Low Point : 25.00 mV High Point : 90.00 mV
Plot Scale: 65.0 mV



TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29661
Units: ug/L
Diln Fac: 1

Prep Date: 09/07/96
Analysis Date: 09/10/96

MB Lab ID: QC29865

Analyte	Result
Diesel C12-C22	<50
Motor Oil C22-C50	<250

Surrogate	%Rec	Recovery Limits
Hexacosane	96	60-140

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29661
Units: ug/L
Diln Fac: 1

Prep Date: 09/07/96
Analysis Date: 09/10/96

BS Lab ID: QC29866

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	2135	86	60-140
Surrogate	%Rec	Limits		
Hexacosane	110	60-140		

BSD Lab ID: QC29867

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	2055	83	60-140	4	35
Surrogate	%Rec	Limits				
Hexacosane	107	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

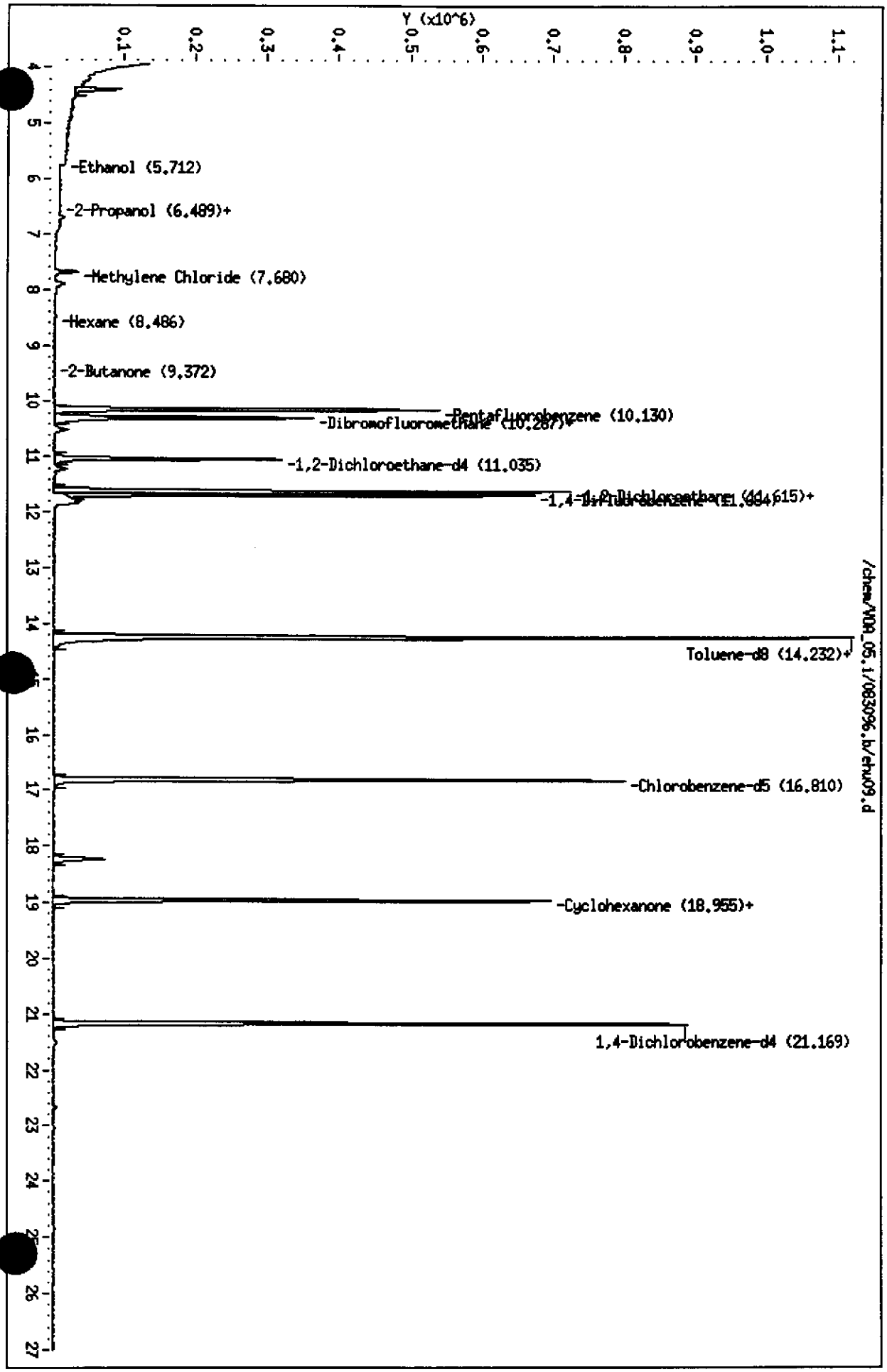
Field ID: SCI-MW-9
Lab ID: 126693-001
Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	97	79-122

126693-1



Data File: /chem/VOA_05.i/083096.b/ehu09.d
Date : 30-AUG-1996 12:44
Client ID: DYNA PaT
Sample Info: MSS,126693-001
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DM
Column diameter: 0.32

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

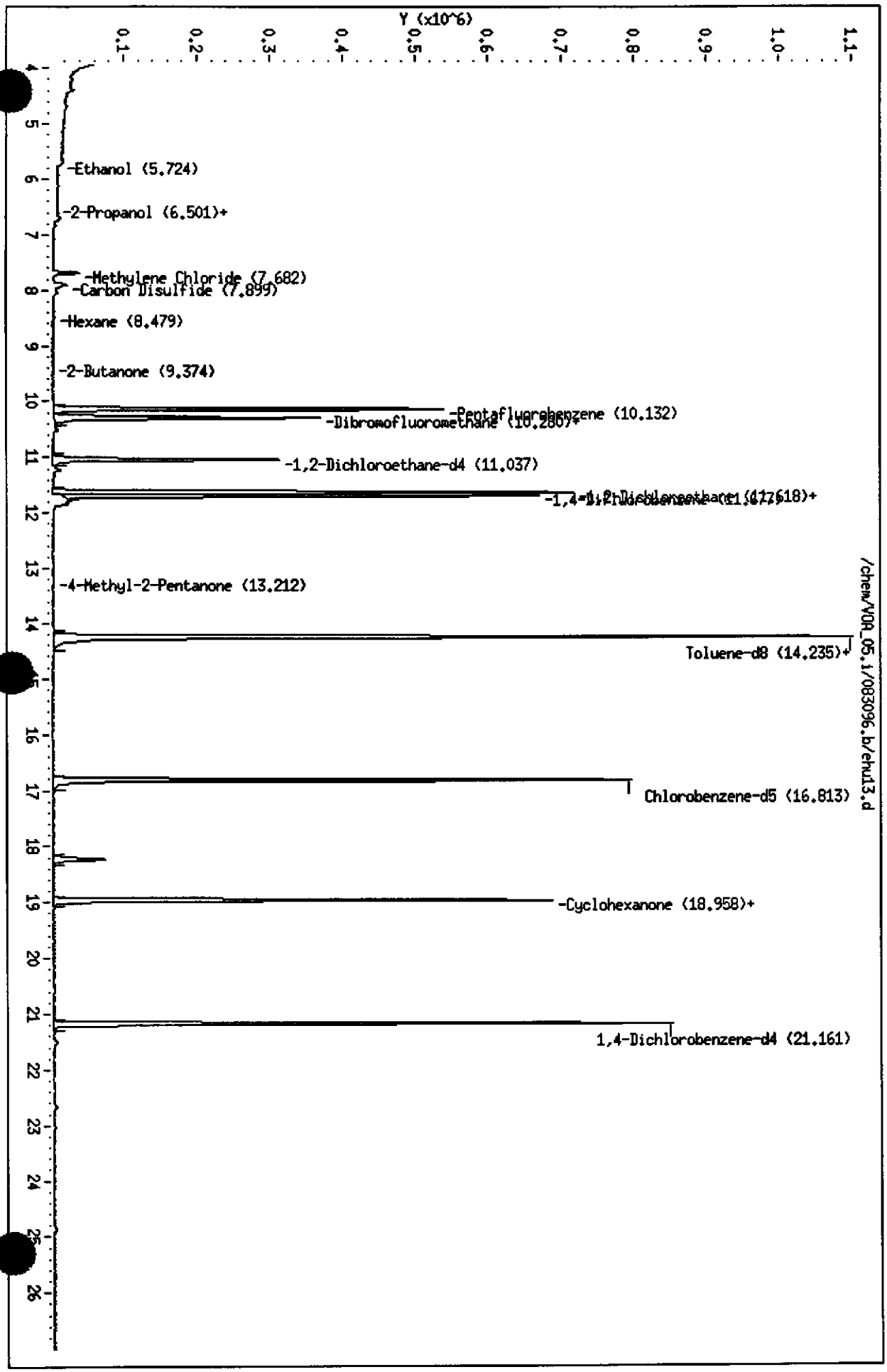
Field ID: SCI-MW-12
Lab ID: 126693-002
Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	105	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	97	79-122

126693-2



Data File: /chem/VOA_05.i/083096.b/ehu13.d
Date : 30-AUG-96 14:55
Client ID: DYNA P&T
Sample Info: S,126693-002
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DM
Column diameter: 0.32

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

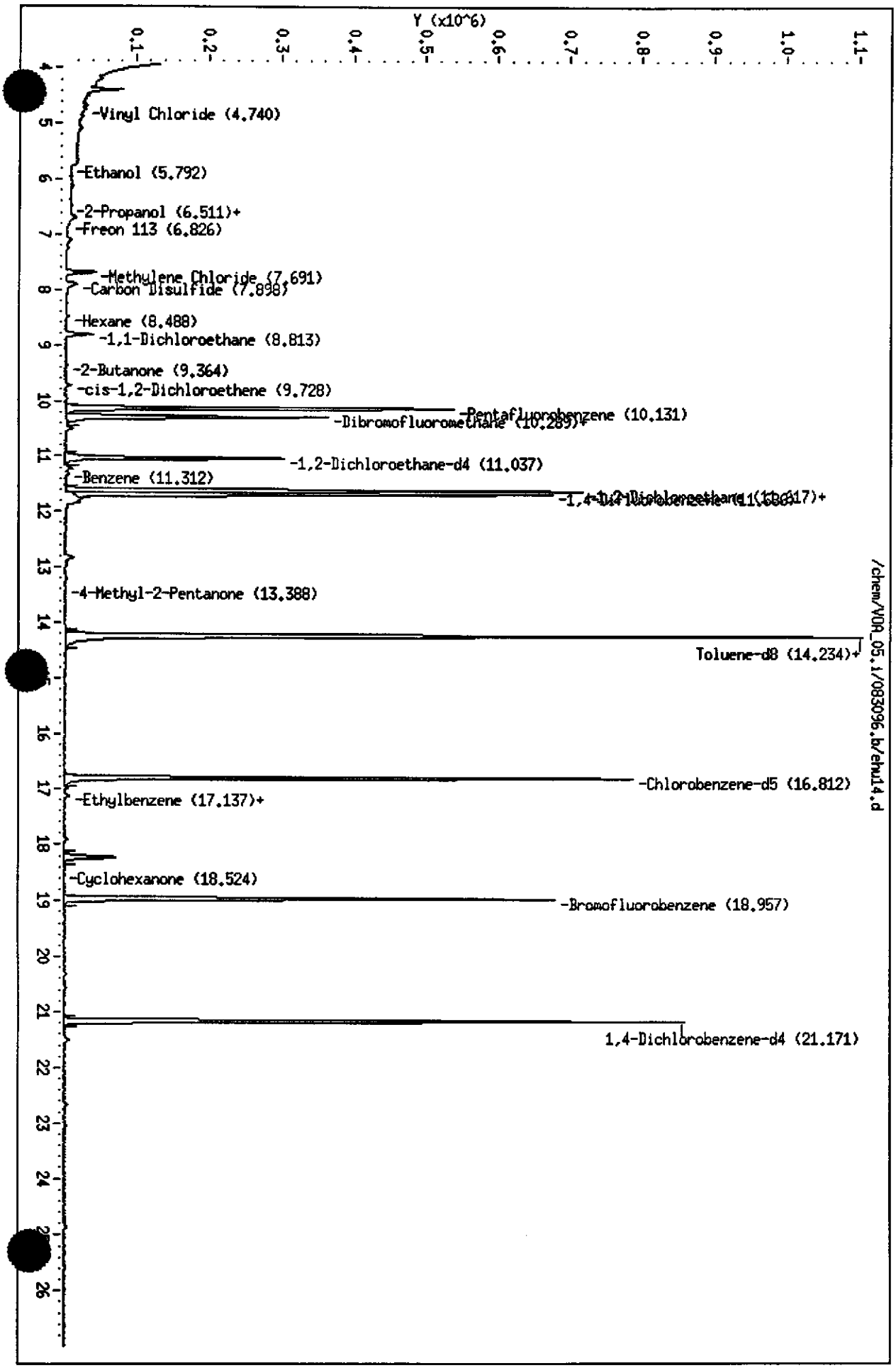
Field ID: SCI-MW-13
Lab ID: 126693-003
Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	6.7	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	95	79-122

126693-3



Data File: /chem/VOA_05.i/083096.b/ehu14.d
Date : 30-AUG-96 15:27
Client ID: DYNA PaT
Sample Info: S.126693-003
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DM
Column diameter: 0.32

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

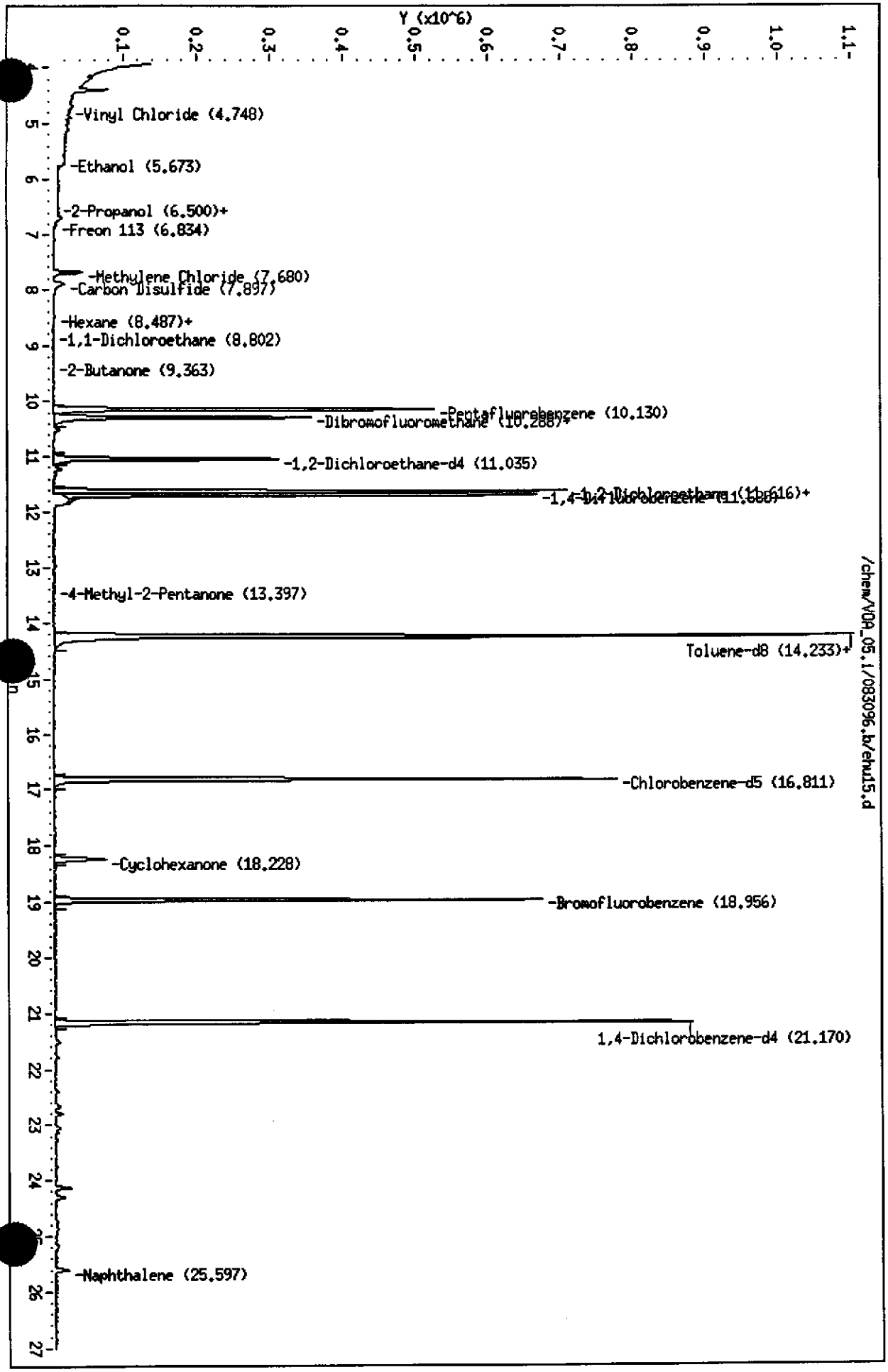
Field ID: SCI-MW-14
Lab ID: 126693-004
Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	96	79-122

126693-4



Data File: /chem/VOA_05.i/083096.b/ehu15.d
Date : 30-AUG-96 16:00
Client ID: DYNA P&T
Sample Info: S,126693-004
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DM
Column diameter: 0.32

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

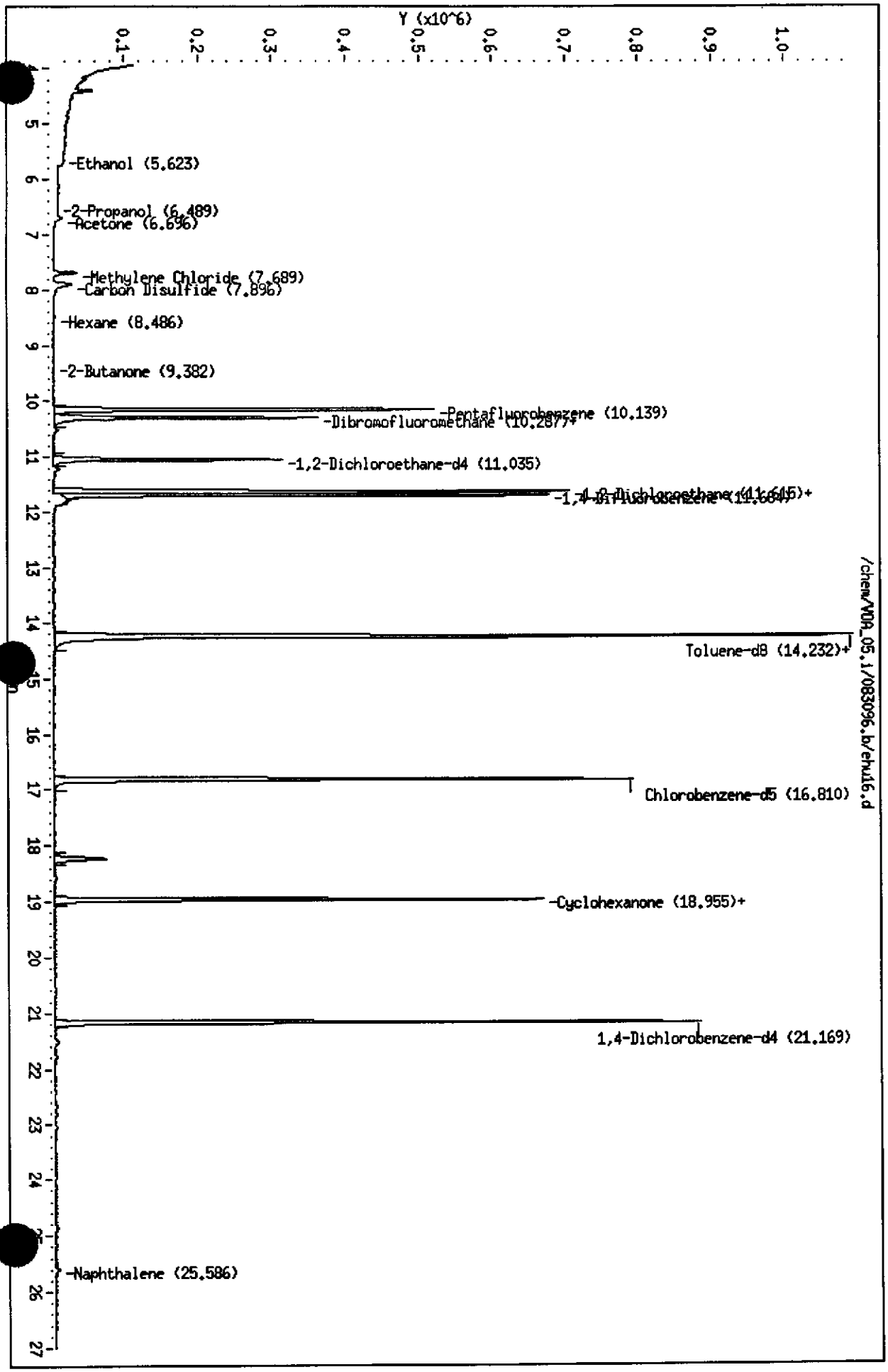
Field ID: SCI-MW-15
Lab ID: 126693-005
Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	97	79-122

126693-5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1.0
Data File: /chem/VOA_05.i/083096.b/ehu16.d
Date : 30-AUG-96 16:33
Client ID: DYNA PeT
Sample Info: S,126693-005
Purge Volume: 5.0
Column phase: RTx Volatiles
Instrument: VOA_05.i
Operator: DM
Column diameter: 0.32
/chem/VOA_05.i/083096.b/ehu16.d
-Ethanol (5.623)
-2-Propanol (6.489)
-Acetone (6.696)
-Methylene Chloride (7.689)
-Carbon Disulfide (7.896)
-Hexane (8.486)
-2-Butanone (9.382)
-Pentafluorobenzene (10.139)
-Dibromofluoromethane (10.287)+
-1,2-Dichloroethane-d4 (11.035)
-1,4-Difluorobenzene (11.684)+
Toluene-d8 (14.232)+
Chlorobenzene-d5 (16.810)
-Cyclohexanone (18.955)+
1,4-Dichlorobenzene-d4 (21.169)
-Naphthalene (25.586)

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

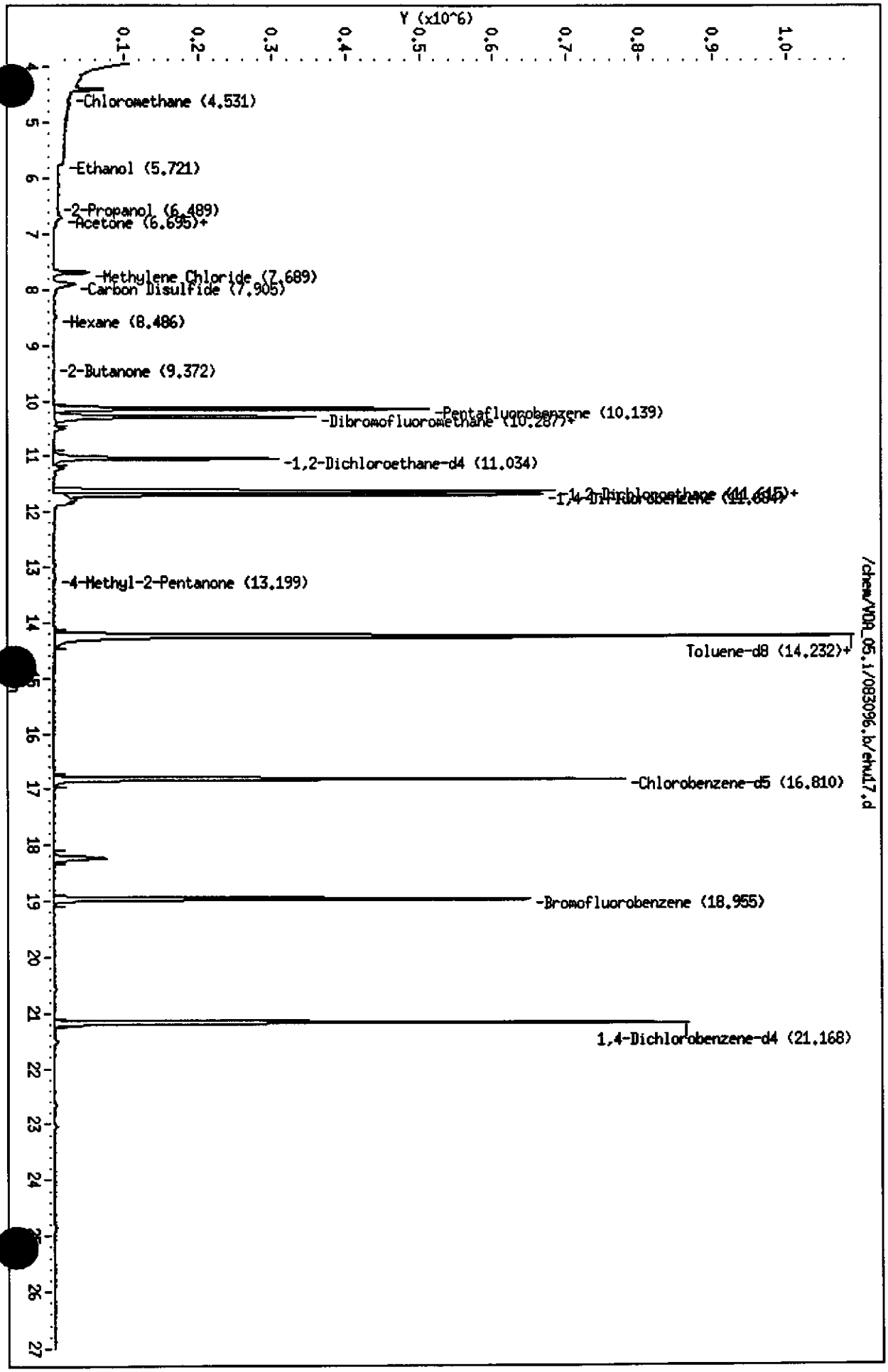
Field ID: SCI-MW-17
Lab ID: 126693-006
Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	97	79-122

126693-6



Data File: /chem/VOA_05.i/083096.b/ehw17.d
Date : 30-AUG-96 17:05
Client ID: DYNA P&T
Sample Info: 5.126693-006
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: IM
Column diameter: 0.32

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

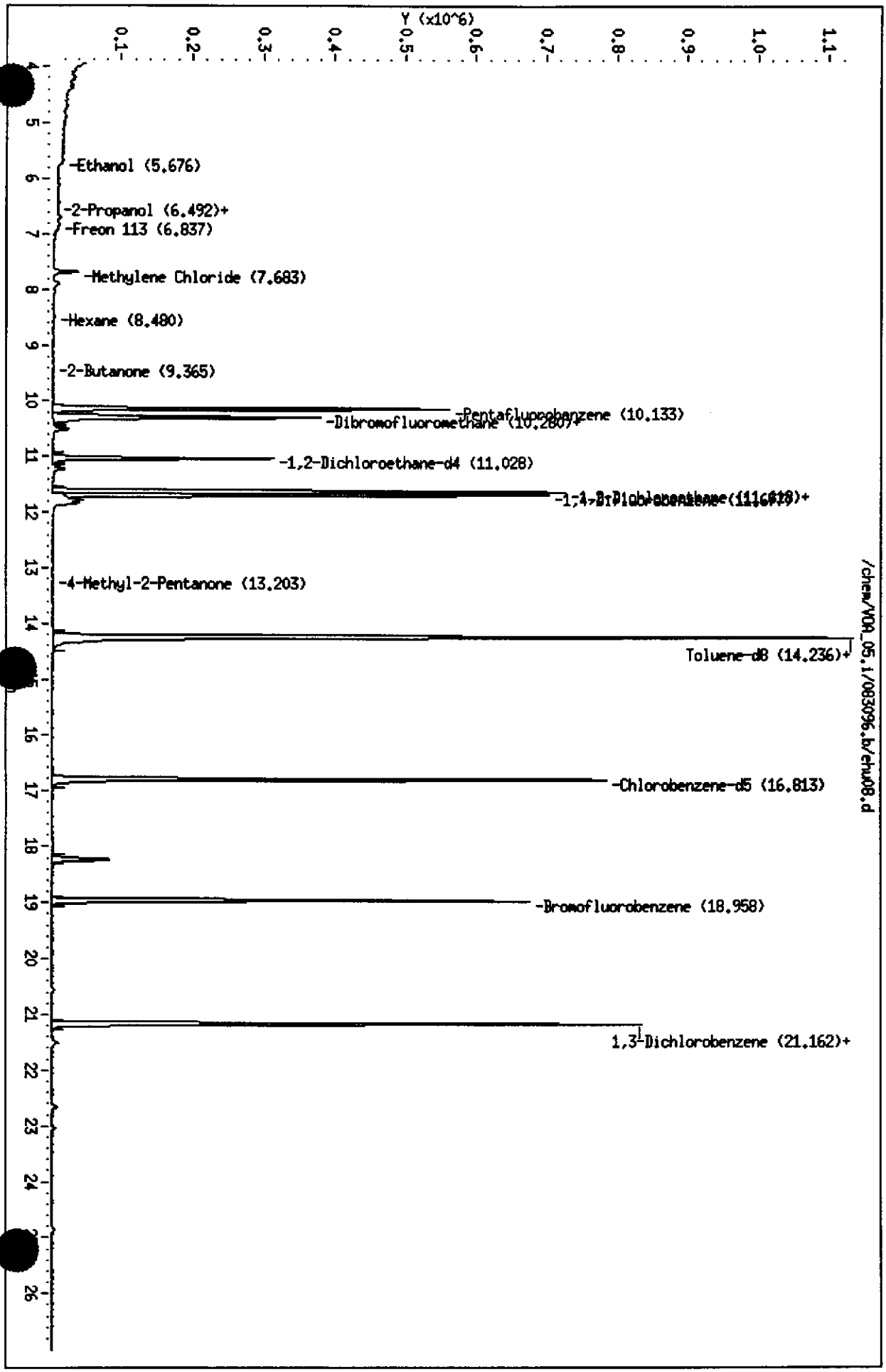
Field ID: TRIP BLANK #4
Lab ID: 126693-007
Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	100	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	99	79-122

126693-7



Data File: /chem/VOA_05.i/083096.b/ehu08.d
Date : 30-AUG-1996 12:12
Client ID: DYNA PaT
Sample Info: 5.126693-007
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DM
Column diameter: 0.32

Curtis & Tompkins, Ltd.

Lab #: 126693 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 08/30/96

MB Lab ID: QC29068

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	98	79-122

Curtis & Tompkins, Ltd.

Lab #: 126693 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 08/30/96

LCS Lab ID: QC29067

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	63.53	50	127	51-180
Trichloroethene	50.27	50	101	73-141
Benzene	51.37	50	103	78-142
Toluene	49.54	50	99	76-150
Chlorobenzene	50.41	50	101	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	97	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCI-MW-9
Lab ID: 126693-001
Matrix: Water
Batch#: 29428
Units: ug/Kg
Diln Fac: 1

Sample Date: 08/29/96
Received Date: 08/29/96
Prep Date: 08/30/96
Analysis Date: 08/30/96

MS Lab ID: QC29226

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	49.66	99	51-180
Trichloroethene	50	<5	47.34	95	73-141
Benzene	50	<5	49.43	99	78-142
Toluene	50	<5	48.43	97	76-150
Chlorobenzene	50	<5	48.9	98	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	96	79-122

MSD Lab ID: QC29227

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	46.76	94	51-180	6	14
Trichloroethene	50	46.23	93	73-141	2	14
Benzene	50	48.31	97	78-142	2	11
Toluene	50	46.02	92	76-150	5	13
Chlorobenzene	50	47.99	96	83-129	2	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	96	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-9	Sampled:	08/29/96
Lab ID:	126693-001	Received:	08/29/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/09/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-9	Sampled:	08/29/96
Lab ID:	126693-001	Received:	08/29/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/09/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	81	21-110
Phenol-d5	87	10-110
2,4,6-Tribromophenol	61	10-123
Nitrobenzene-d5	76	35-114
2-Fluorobiphenyl	74	43-116
Terphenyl-d14	48	33-141

Data File: /chem/bna01.i/090996a.b/11_6693-001.d
Report Date: 10-Sep-1996 10:18

Curtis & Tompkins, Ltd.

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126693-001
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

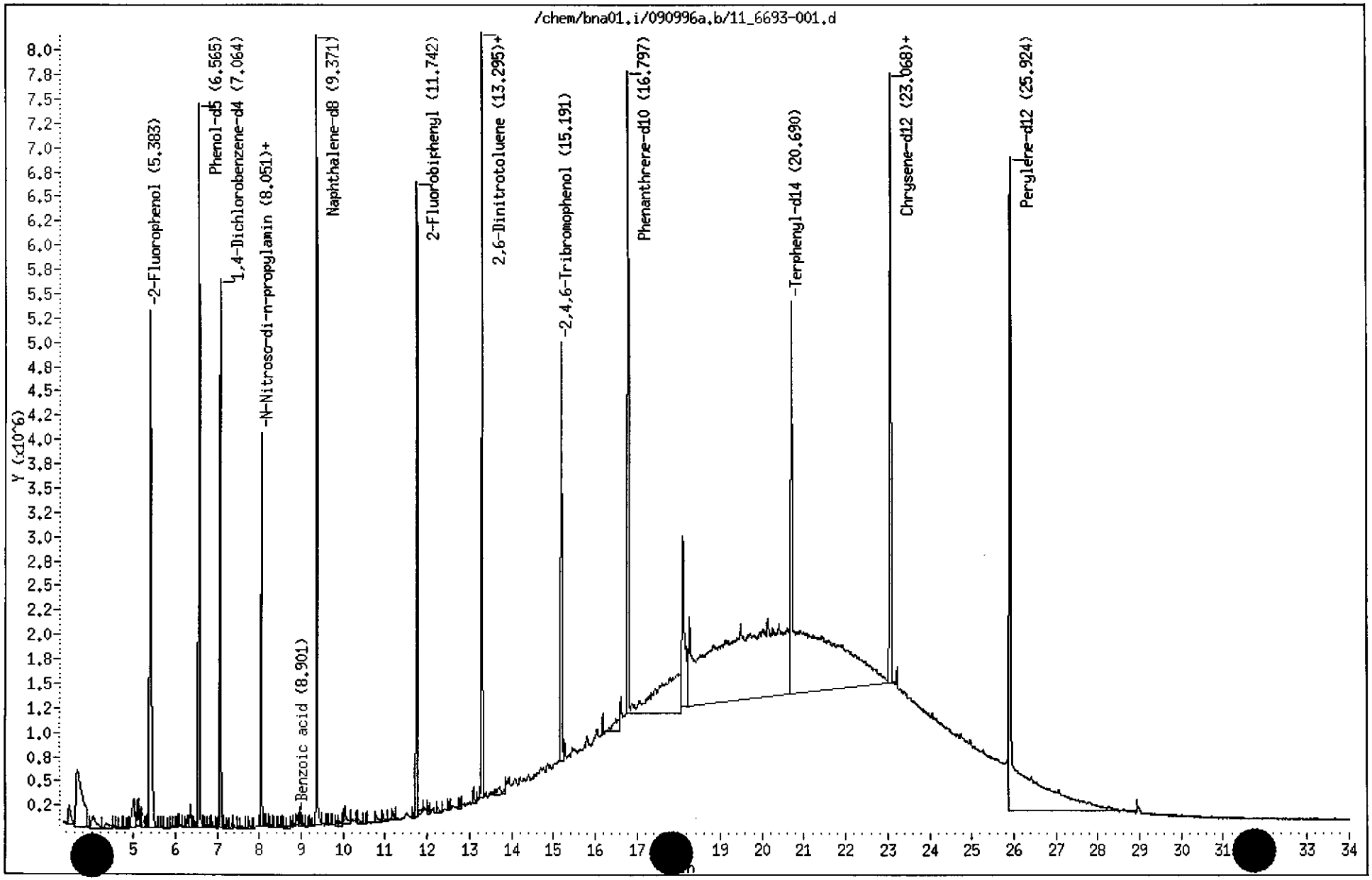
Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	593-71-5	Chloroiodomethane	3.654	23.48	NJ
2.		Unknown organic acid	5.012	5.37	NJ
3.		Unknown	18.098	10.30	NJ
4.		Unknown	18.258	108.97	NJ

Data File: /chem/bna01.i/090996a.b/11_6693-001.d
Date : 09-SEP-1996 22:12
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i
Operator: dsh
Column diameter: 0.25



12693-1

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-12
Lab ID: 126693-002
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 09/04/96
Analyzed: 09/09/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-12	Sampled:	08/29/96
Lab ID:	126693-002	Received:	08/29/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/09/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	75	21-110
Phenol-d5	79	10-110
2,4,6-Tribromophenol	53	10-123
Nitrobenzene-d5	74	35-114
2-Fluorobiphenyl	65	43-116
Terphenyl-d14	22*	33-141

* Values outside of QC limits

Data File: /chem/bna01.i/090996a.b/12_6693-002.d
Report Date: 10-Sep-1996 10:18

Curtis & Tompkins, Ltd.

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126693-002
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

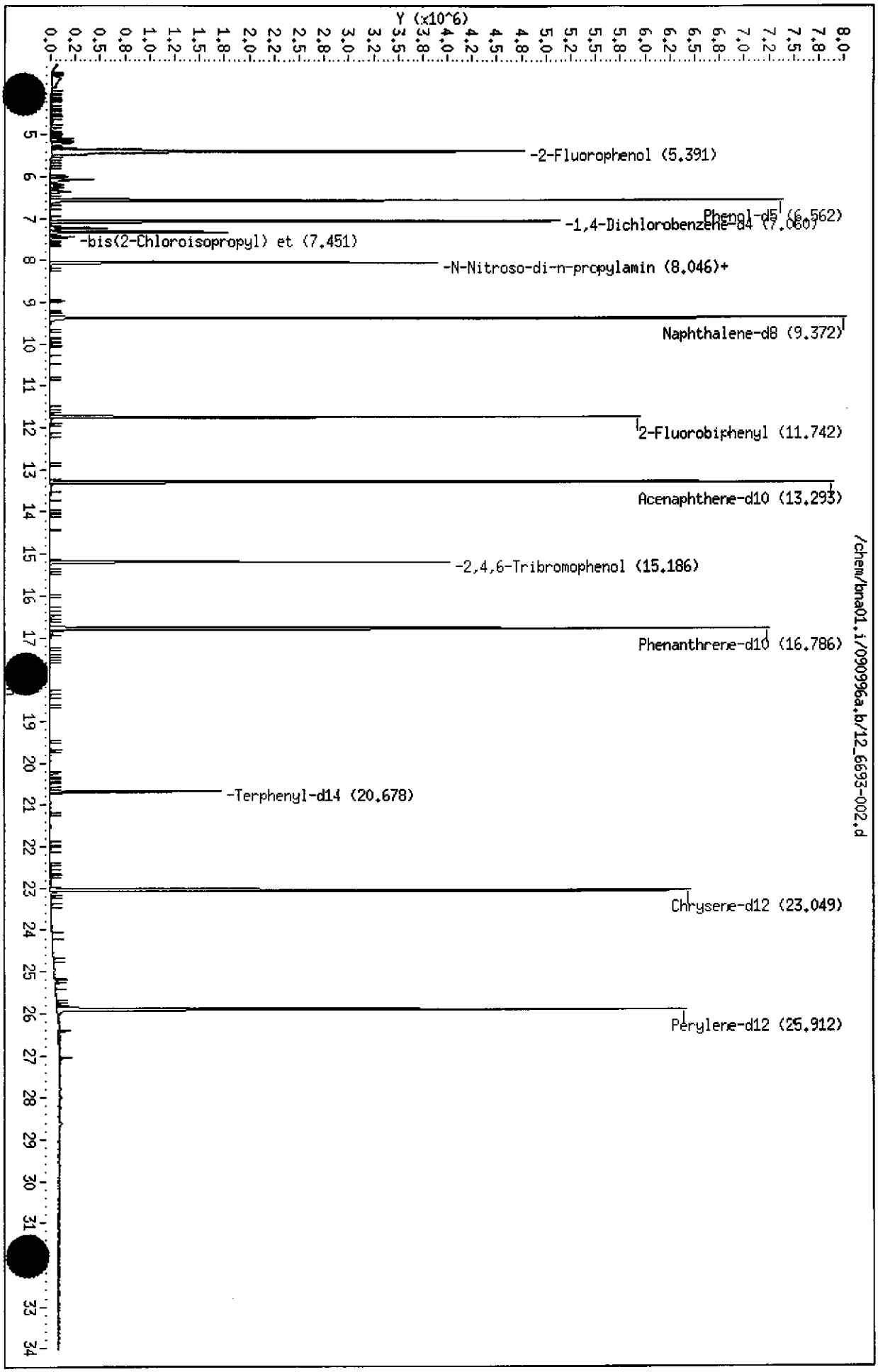
Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	593-71-5	Chloroiodomethane	3.653	3.84	NJ
2.		Unknown	6.064	3.85	NJ
3.		Unknown alcohol	7.226	3.90	NJ
4.		Unknown	7.324	11.09	NJ

126693-2



Data File: /chem/bna01.i/090996a.b/12_6693-002.d
Date : 09-SEP-1996 22:54
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i
Operator: dsh
Column diameter: 0.25

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-13
Lab ID: 126693-003
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 09/04/96
Analyzed: 09/09/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-13	Sampled:	08/29/96
Lab ID:	126693-003	Received:	08/29/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/09/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	81	21-110
Phenol-d5	89	10-110
2,4,6-Tribromophenol	62	10-123
Nitrobenzene-d5	78	35-114
2-Fluorobiphenyl	76	43-116
Terphenyl-d14	39	33-141

Data File: /chem/bna01.i/090996a.b/13_6693-003.d
Report Date: 10-Sep-1996 10:18

Curtis & Tompkins, Ltd.

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126693-003
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

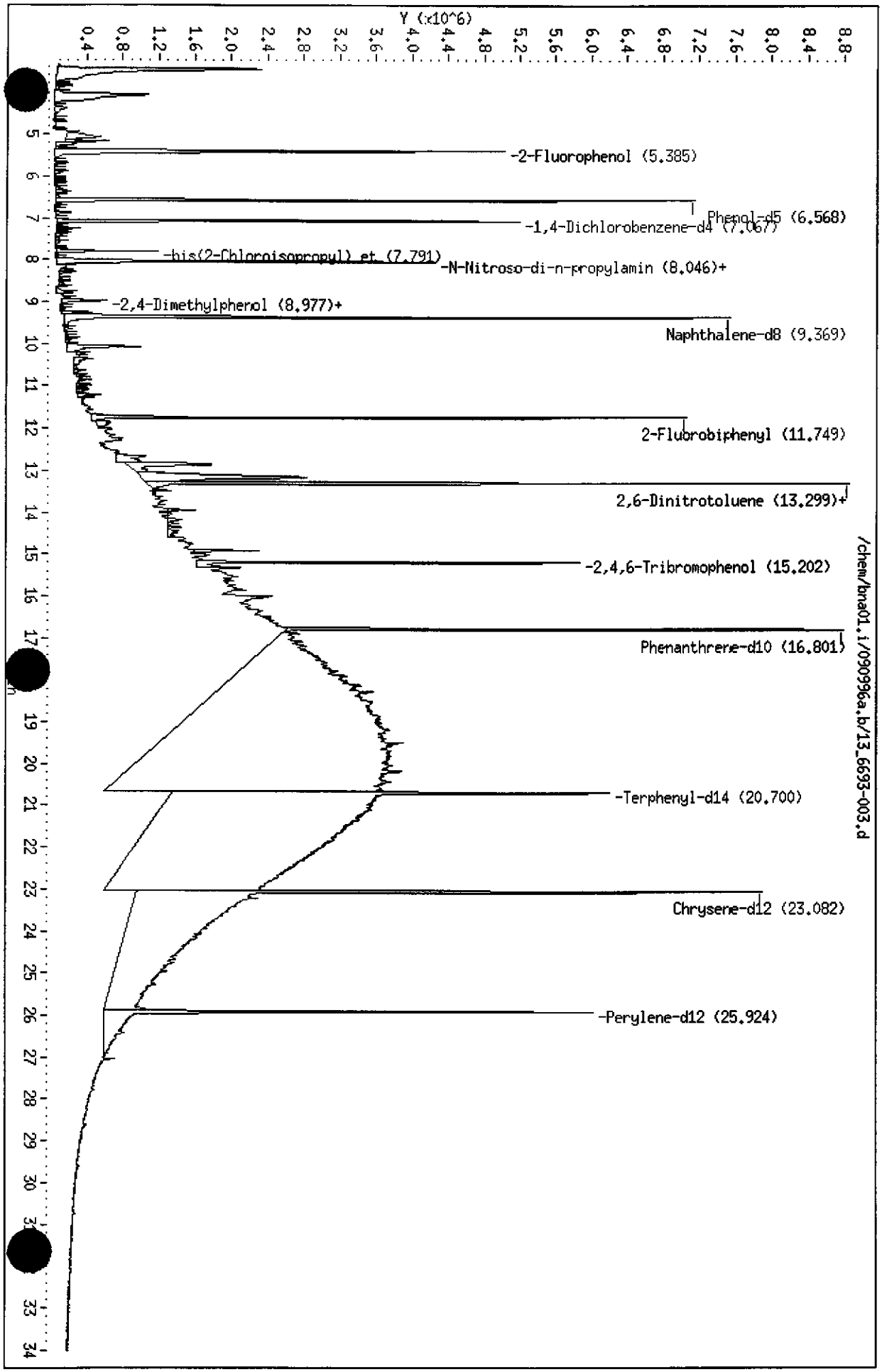
Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-91-1	1,4-Dioxane	3.449	52.28	NJ
2.	108-11-2	2-Pentanol, 4-methyl-	4.055	29.38	NJ
3.		Unknown organic acid	5.072	8.41	NJ
4.		Unknown	10.076	7.12	NJ
5.		Unknown	12.657	6.06	NJ
6.		Unknown	12.844	12.63	NJ
7.		Unknown	13.171	28.59	NJ
8.		Unknown	13.953	4.57	NJ

126693-3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Date : 09-SEP-1996 23:37
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u
Instrument: bna01.i
Operator: dsh
Column diameter: 0.25
Y (x10^6)
-2-Fluorophenol (5.385)
Phenol-d5 (6.568)
-1,4-Dichlorobenzene-d4 (7.067)
-bis(2-Chloroisopropyl) et (7.791)
-N-Nitroso-di-n-propylamin (8.046)+
-2,4-Dimethylpherol (8.977)+
Naphthalene-d8 (9.369)
2-Flubrobiphenyl (11.749)
2,6-Dinitrotoluene (13.299)+
-2,4,6-Tribromophenol (15.202)
Phenanthrene-d10 (16.801)
-Terphenyl-d14 (20.700)
Chrysene-d12 (23.082)
-Perylene-d12 (25.924)
/chem/bna01.i/090996a.b/13_6693-003.d
Time

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-14
Lab ID: 126693-004
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 09/04/96
Analyzed: 09/10/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-14	Sampled:	08/29/96
Lab ID:	126693-004	Received:	08/29/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	79	21-110
Phenol-d5	85	10-110
2,4,6-Tribromophenol	60	10-123
Nitrobenzene-d5	76	35-114
2-Fluorobiphenyl	73	43-116
Terphenyl-d14	44	33-141

Data File: /chem/bna01.i/090996a.b/14_6693-004.d
Report Date: 10-Sep-1996 10:18

Curtis & Tompkins, Ltd.

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s126693-004
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

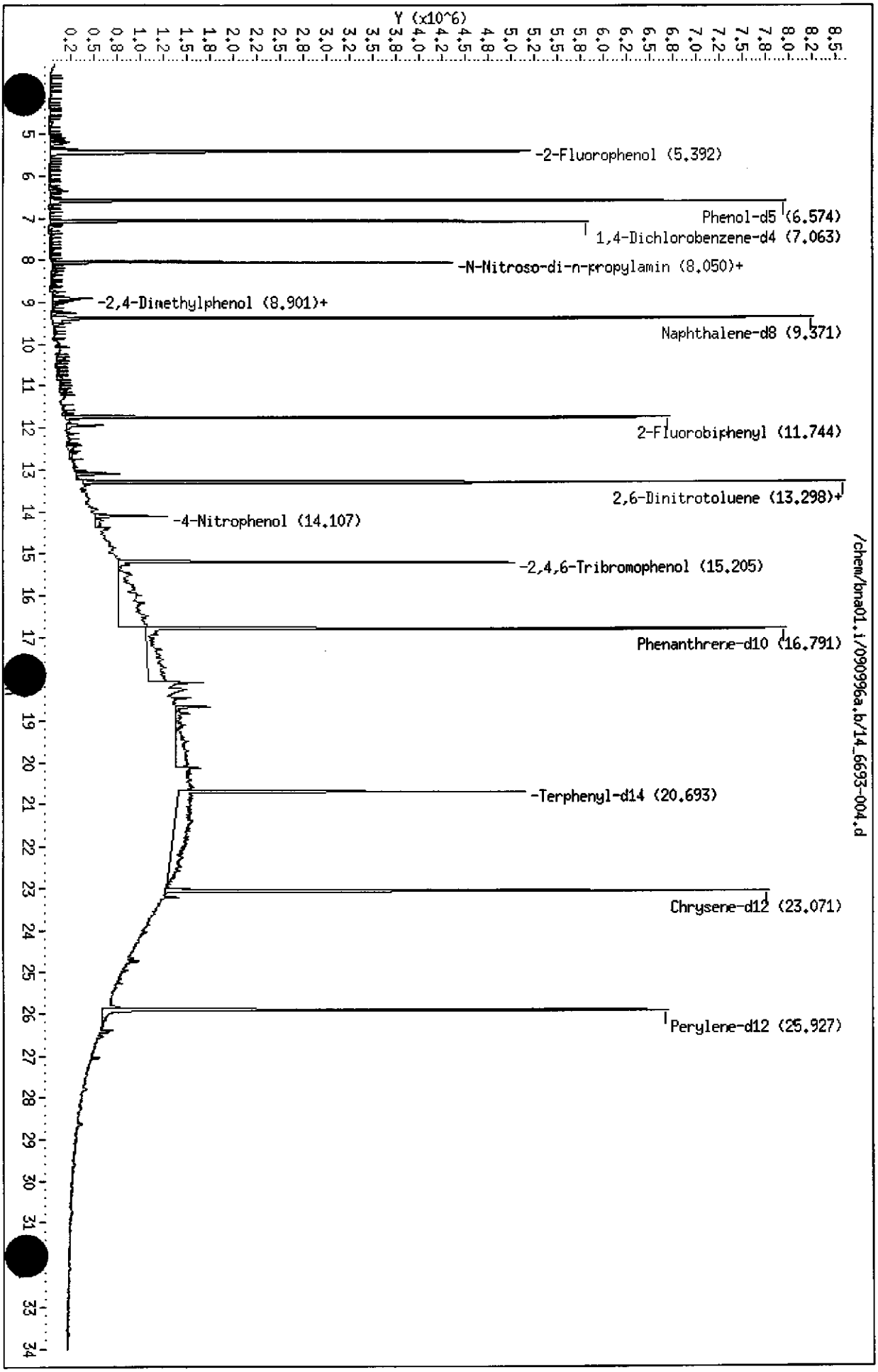
Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	18.660	10.76	NJ

126693-4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Date : 10-SEP-1996 00:22
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u
Instrument: bna01.i
Operator: dsh
Column diameter: 0.25
Y (x10^6)
-2-Fluorophenol (5.392)
Phenol-d5 (6.574)
1,4-Dichlorobenzene-d4 (7.063)
-N-Nitroso-di-n-propylamin (8.050)+
-2,4-Dimethylphenol (8.901)+
Naphthalene-d8 (9.371)
2-Fluorobiphenyl (11.744)
2,6-Dinitrotoluene (13.298)+
-4-Nitrophenol (14.107)
-2,4,6-Tribromophenol (15.205)
Phenanthrene-d10 (16.791)
-Terphenyl-d14 (20.693)
Chrysene-d12 (23.071)
Perylene-d12 (25.927)
/chem/bna01.i/090996a.b/14_6693-004.d

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-15
Lab ID: 126693-005
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 09/04/96
Analyzed: 09/10/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-15	Sampled:	08/29/96
Lab ID:	126693-005	Received:	08/29/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	81	21-110
Phenol-d5	87	10-110
2,4,6-Tribromophenol	51	10-123
Nitrobenzene-d5	74	35-114
2-Fluorobiphenyl	54	43-116
Terphenyl-d14	10*	33-141

* Values outside of QC limits

Data File: /chem/bna01.i/090996a.b/15_6693-005.d
Report Date: 10-Sep-1996 10:18

Curtis & Tompkins, Ltd.

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126693-005
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

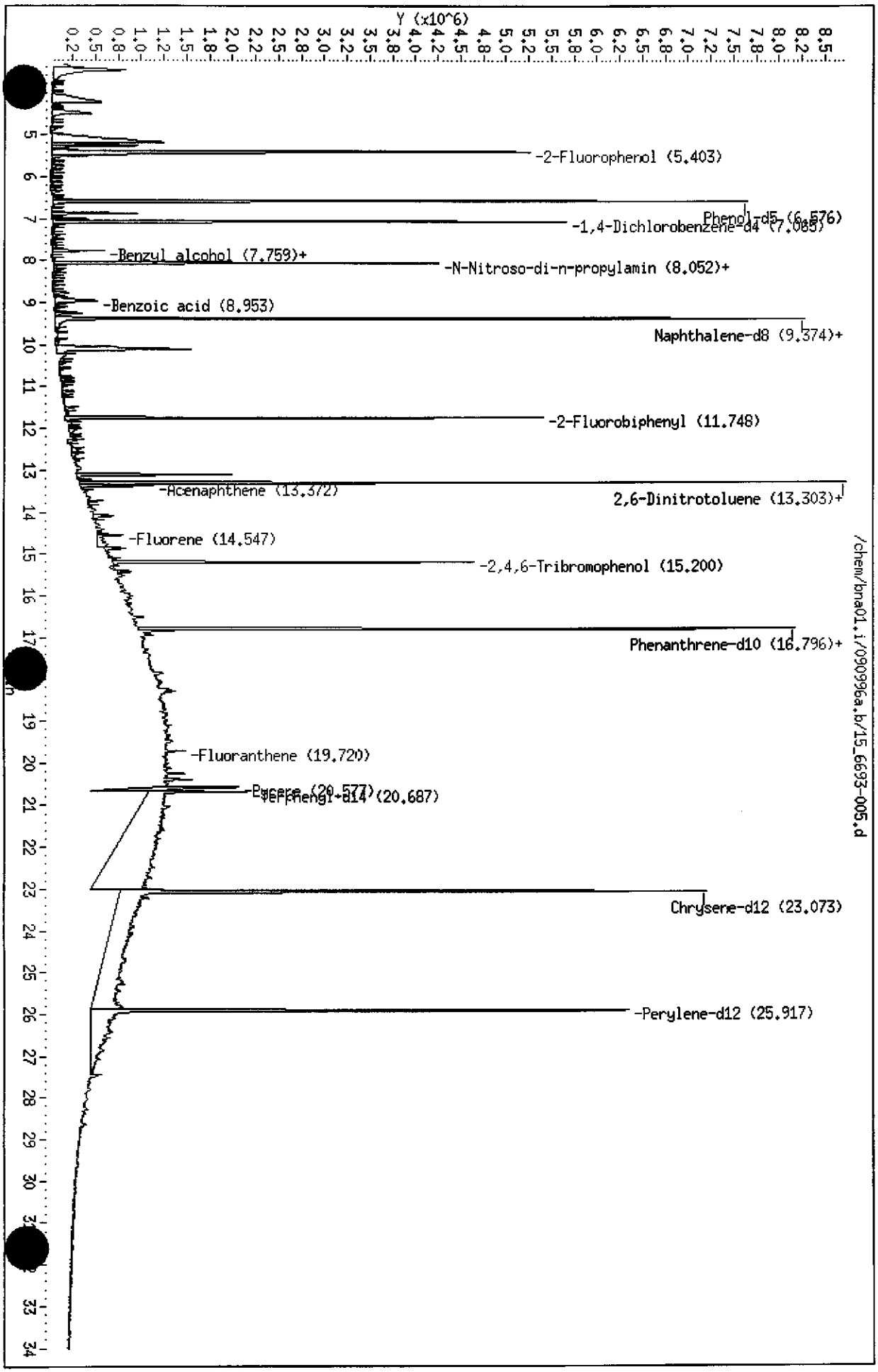
Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	79-31-2	Propanoic acid, 2-methyl-	4.230	14.26	NJ
2.	107-92-6	Butanoic acid	4.494	7.08	NJ
3.		Unknown	5.178	29.22	NJ
4.		Unknown	5.237	10.05	NJ
5.		Unknown	5.286	6.08	NJ
6.	111-90-0	Ethanol, 2-(2-ethoxyethoxy)	6.869	5.25	NJ
7.	103-82-2	Benzeneacetic acid	10.109	15.23	NJ
8.		Unknown	13.106	7.48	NJ

126693-5


Y (x10^6)
-2-Fluorophenol (5.403)
Phenol-d5 (6.576)
-1,4-Dichlorobenzene-d4 (7.085)
-Benzyl alcohol (7.759)+
-N-Nitroso-di-n-propylamin (8.052)+
-Benzoic acid (8.953)
Naphthalene-d8 (9.374)+
-2-Fluorobiphenyl (11.748)
-Acenaphthene (13.372)
2,6-Dinitrotoluene (13.303)+
-Fluorene (14.547)
-2,4,6-Tribromophenol (15.200)
Phenanthrene-d10 (16.796)+
-Fluoranthene (19.720)
Pyrene (20.577)
Terphenyl-d14 (20.687)
Chrysene-d12 (23.073)
-Perylene-d12 (25.917)
/chem/bna01.i/090996a.b/15_6693-005.d
Data File: /chem/bna01.i/090996a.b/15_6693-005.d
Date : 10-SEP-1996 01:06
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u
Instrument: bna01.i
Operator: dsh
Column diameter: 0.25

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-17
Lab ID: 126693-006
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/29/96
Extracted: 09/04/96
Analyzed: 09/10/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-17	Sampled:	08/29/96
Lab ID:	126693-006	Received:	08/29/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	77	21-110
Phenol-d5	84	10-110
2,4,6-Tribromophenol	59	10-123
Nitrobenzene-d5	74	35-114
2-Fluorobiphenyl	72	43-116
Terphenyl-d14	45	33-141

Data File: /chem/bna01.i/090996a.b/16_6693-006.d
Report Date: 10-Sep-1996 10:18

Curtis & Tompkins, Ltd.

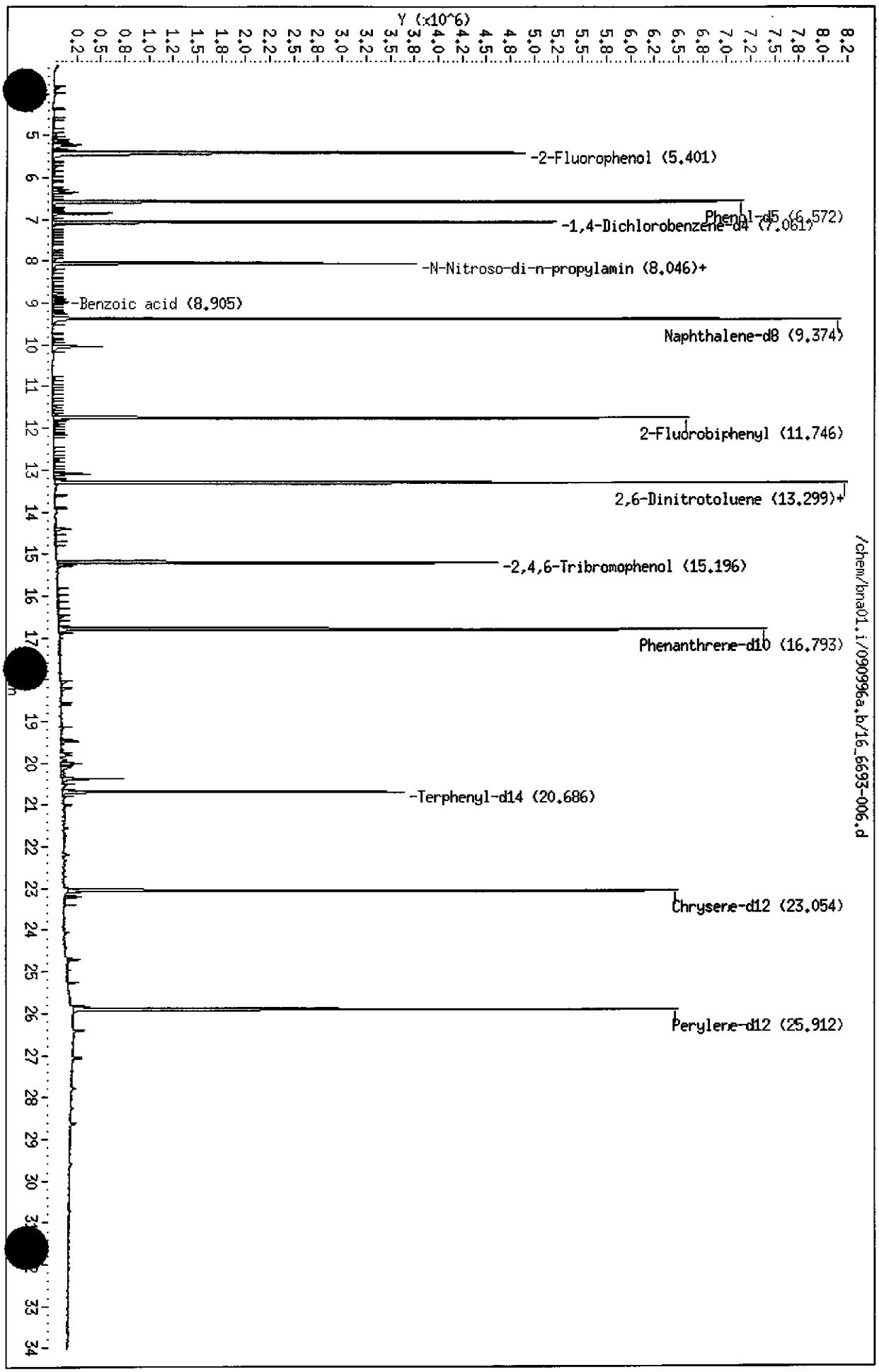
Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/bna01.i/090996a.b/16_6693-006.d
Lab Smp Id: s,126693-006 Client Smp ID: CURTIS&TOMPKINS,LTD
Inj Date : 10-SEP-1996 01:50 Autotune Date: 09-Sep-96 14:44:1
Operator : dsh Inst ID: bna01.i
Smp Info :
Misc Info :
Comment :
Method : /chem/bna01.i/090996a.b/+bna1_6pt.m
Meth Date : 09-Sep-1996 16:39
Cal Date : 09-SEP-96 15:28 Cal File: 02_ccv0909a.d
Als bottle: 16
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

126693-6



Data File: /chem/bna01.i/090996a.b/16_6693-006.d
Date : 10-SEP-1996 01:50
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i
Operator: dsh
Column diameter: 0.25

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

MB Lab ID: QC29553

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	10
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

MB Lab ID: QC29553

Analyte	Result	Reporting Limit
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	72	21-110
Phenol-d5	75	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	65	35-114
2-Fluorobiphenyl	75	43-116
Terphenyl-d14	72	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

BS Lab ID: QC29554

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	100	75.06	75	12-110
2-Chlorophenol	100	76.99	77	27-123
4-Chloro-3-methylphenol	100	69.32	69	23-97
4-Nitrophenol	100	46.32	46	10-80
Pentachlorophenol	100	59.35	59	9-103
1,4-Dichlorobenzene	50	33.99	68	36-97
N-Nitroso-di-n-propylamine	50	33.09	66	41-116
1,2,4-Trichlorobenzene	50	34.37	69	39-98
Acenaphthene	50	36.06	72	46-118
2,4-Dinitrotoluene	50	33.1	66	24-96
Pyrene	50	34.66	69	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	79	21-110
Phenol-d5	80	10-110
2,4,6-Tribromophenol	65	10-123
Nitrobenzene-d5	73	35-114
2-Fluorobiphenyl	80	43-116
Terphenyl-d14	72	33-141

BSD Lab ID: QC29555

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	100	79.13	79	12-110	5	42
2-Chlorophenol	100	81.64	82	27-123	6	40
4-Chloro-3-methylphenol	100	73.85	74	23-97	7	42
4-Nitrophenol	100	50.35	50	10-80	8	50
Pentachlorophenol	100	64.92	65	9-103	10	50
1,4-Dichlorobenzene	50	35.57	71	36-97	4	28
N-Nitroso-di-n-propylamine	50	35.21	70	41-116	6	38
1,2,4-Trichlorobenzene	50	36.04	72	39-98	4	28
Acenaphthene	50	38.35	77	46-118	7	31
2,4-Dinitrotoluene	50	35.42	71	24-96	7	38
Pyrene	50	37.49	75	26-127	8	31

Surrogate	%Rec	Limits
2-Fluorophenol	83	21-110
Phenol-d5	84	10-110
2,4,6-Tribromophenol	67	10-123
Nitrobenzene-d5	80	35-114
2-Fluorobiphenyl	83	43-116
Terphenyl-d14	77	33-141

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-9	Sampled:	08/29/96
Lab ID:	126693-001	Received:	08/29/96
Matrix:	Water	Extracted:	09/11/96
Batch#:	29758	Analyzed:	09/13/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	64	60-150
Decachlorobiphenyl	36	30-130

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-MW-12	Sampled:	08/29/96
Lab ID:	126693-002	Received:	08/29/96
Matrix:	Water	Extracted:	09/02/96
Batch#:	29513	Analyzed:	09/07/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	53*	60-150
Decachlorobiphenyl	36	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-MW-13	Sampled:	08/29/96
Lab ID:	126693-003	Received:	08/29/96
Matrix:	Water	Extracted:	09/02/96
Batch#:	29513	Analyzed:	09/07/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	63	60-150
Decachlorobiphenyl	24*	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-MW-14	Sampled:	08/29/96
Lab ID:	126693-004	Received:	08/29/96
Matrix:	Water	Extracted:	09/02/96
Batch#:	29513	Analyzed:	09/07/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	81	60-150
Decachlorobiphenyl	29*	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-MW-15	Sampled:	08/29/96
Lab ID:	126693-005	Received:	08/29/96
Matrix:	Water	Extracted:	09/02/96
Batch#:	29513	Analyzed:	09/07/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	26*	60-150
Decachlorobiphenyl	31	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-MW-17	Sampled:	08/29/96
Lab ID:	126693-006	Received:	08/29/96
Matrix:	Water	Extracted:	09/02/96
Batch#:	29513	Analyzed:	09/07/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	67	60-150
Decachlorobiphenyl	48	30-130

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520
Cleanup Method: EPA acid

METHOD BLANK

Matrix: Water
Batch#: 29513
Units: ug/L
Diln Fac: 1

Prep Date: 09/02/96
Analysis Date: 09/06/96

MB Lab ID: QC29345

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Rec	Recovery Limits
TCMX	64	60-150
Decachlorobiphenyl	53	30-130

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29758
Units: ug/L
Diln Fac: 1

Prep Date: 09/11/96
Analysis Date: 09/13/96

MB Lab ID: QC30243

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Rec	Recovery Limits
TCMX	76	60-150
Decachlorobiphenyl	84	30-130

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520
Cleanup Method: EPA acid

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29513
Units: ug/L
Diln Fac: 1

Prep Date: 09/02/96
Analysis Date: 09/06/96

BS Lab ID: QC29346

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.21	84	50-128
Surrogate	**%Rec**	**Limits**		
TCMX	63	60-150		
Decachlorobiphenyl	66	30-130		

BSD Lab ID: QC29347

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.65	93	50-128	10	20
Surrogate	**%Rec**	**Limits**				
TCMX	64	60-150				
Decachlorobiphenyl	52	30-130				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126693 BATCH QC REPORT

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29758
Units: ug/L
Diln Fac: 1

Prep Date: 09/11/96
Analysis Date: 09/13/96

BS Lab ID: QC30244

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.09	82	50-128

Surrogate	%Rec	Limits
TCMX	63	60-150
Decachlorobiphenyl	83	30-130

BSD Lab ID: QC30245

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.11	82	50-128	0	20

Surrogate	%Rec	Limits
TCMX	68	60-150
Decachlorobiphenyl	51	30-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-9
LAB ID: 126693-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/29/96
DATE RECEIVED: 08/29/96
DATE REPORTED: 09/18/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29643	EPA 6010A	09/10/96
Arsenic	21	5.0	1	29643	EPA 6010A	09/10/96
Barium	61	10	1	29643	EPA 6010A	09/10/96
Beryllium	ND	2.0	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2.0	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	1	29643	EPA 6010A	09/10/96
Cobalt	ND	20	1	29643	EPA 6010A	09/10/96
Copper	ND	10	1	29643	EPA 6010A	09/10/96
Lead	3.1	3.0	1	29643	EPA 6010A	09/10/96
Mercury	0.20	0.20	1	29701	EPA 7470	09/10/96
Molybdenum	ND	20	1	29643	EPA 6010A	09/10/96
Nickel	ND	20	1	29643	EPA 6010A	09/10/96
Selenium	37	5.0	1	29643	EPA 6010A	09/10/96
Silver	ND	5.0	1	29643	EPA 6010A	09/10/96
Thallium	ND	5.0	1	29643	EPA 6010A	09/10/96
Vanadium	ND	10	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	1	29643	EPA 6010A	09/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-12
LAB ID: 126693-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/29/96
DATE RECEIVED: 08/29/96
DATE REPORTED: 09/18/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29643	EPA 6010A	09/10/96
Arsenic	5.1	5.0	1	29643	EPA 6010A	09/10/96
Barium	64	10	1	29643	EPA 6010A	09/10/96
Beryllium	2.5	2.0	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2.0	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	1	29643	EPA 6010A	09/10/96
Cobalt	ND	20	1	29643	EPA 6010A	09/10/96
Copper	ND	10	1	29643	EPA 6010A	09/10/96
Lead	ND	3.0	1	29643	EPA 6010A	09/10/96
Mercury	ND	0.20	1	29701	EPA 7470	09/10/96
Molybdenum	ND	20	1	29643	EPA 6010A	09/10/96
Nickel	ND	20	1	29643	EPA 6010A	09/10/96
Selenium	ND	5.0	1	29643	EPA 6010A	09/10/96
Silver	ND	5.0	1	29643	EPA 6010A	09/10/96
Thallium	ND	5.0	1	29643	EPA 6010A	09/10/96
Vanadium	ND	10	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	1	29643	EPA 6010A	09/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-13
LAB ID: 126693-003
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/29/96
DATE RECEIVED: 08/29/96
DATE REPORTED: 09/18/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29643	EPA 6010A	09/10/96
Arsenic	20	5.0	1	29643	EPA 6010A	09/10/96
Barium	33	10	1	29643	EPA 6010A	09/10/96
Beryllium	ND	2.0	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2.0	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	1	29643	EPA 6010A	09/10/96
Cobalt	ND	20	1	29643	EPA 6010A	09/10/96
Copper	ND	10	1	29643	EPA 6010A	09/10/96
Lead	3.2	3.0	1	29643	EPA 6010A	09/10/96
Mercury	ND	0.20	1	29701	EPA 7470	09/10/96
Molybdenum	ND	20	1	29643	EPA 6010A	09/10/96
Nickel	ND	20	1	29643	EPA 6010A	09/10/96
Selenium	43	5.0	1	29643	EPA 6010A	09/10/96
Silver	ND	5.0	1	29643	EPA 6010A	09/10/96
Thallium	ND	5.0	1	29643	EPA 6010A	09/10/96
Vanadium	ND	10	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	1	29643	EPA 6010A	09/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-14
LAB ID: 126693-004
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/29/96
DATE RECEIVED: 08/29/96
DATE REPORTED: 09/18/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29643	EPA 6010A	09/10/96
Arsenic	9.7	5.0	1	29643	EPA 6010A	09/10/96
Barium	130	10	1	29643	EPA 6010A	09/10/96
Beryllium	ND	2.0	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2.0	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	1	29643	EPA 6010A	09/10/96
Cobalt	ND	20	1	29643	EPA 6010A	09/10/96
Copper	ND	10	1	29643	EPA 6010A	09/10/96
Lead	5.3	3.0	1	29643	EPA 6010A	09/10/96
Mercury	ND	0.20	1	29701	EPA 7470	09/10/96
Molybdenum	ND	20	1	29643	EPA 6010A	09/10/96
Nickel	ND	20	1	29643	EPA 6010A	09/10/96
Selenium	34	5.0	1	29643	EPA 6010A	09/10/96
Silver	ND	5.0	1	29643	EPA 6010A	09/10/96
Thallium	ND	5.0	1	29643	EPA 6010A	09/10/96
Vanadium	ND	10	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	1	29643	EPA 6010A	09/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-15
LAB ID: 126693-005
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/29/96
DATE RECEIVED: 08/29/96
DATE REPORTED: 09/18/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29643	EPA 6010A	09/10/96
Arsenic	16	5.0	1	29643	EPA 6010A	09/10/96
Barium	570	10	1	29643	EPA 6010A	09/10/96
Beryllium	ND	2.0	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2.0	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	1	29643	EPA 6010A	09/10/96
Cobalt	ND	20	1	29643	EPA 6010A	09/10/96
Copper	ND	10	1	29643	EPA 6010A	09/10/96
Lead	3.2	3.0	1	29643	EPA 6010A	09/10/96
Mercury	ND	0.20	1	29701	EPA 7470	09/10/96
Molybdenum	ND	20	1	29643	EPA 6010A	09/10/96
Nickel	ND	20	1	29643	EPA 6010A	09/10/96
Selenium	40	5.0	1	29643	EPA 6010A	09/10/96
Silver	ND	5.0	1	29643	EPA 6010A	09/10/96
Thallium	ND	5.0	1	29643	EPA 6010A	09/10/96
Vanadium	ND	10	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	1	29643	EPA 6010A	09/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-17
LAB ID: 126693-006
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/29/96
DATE RECEIVED: 08/29/96
DATE REPORTED: 09/18/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29643	EPA 6010A	09/10/96
Arsenic	17	5.0	1	29643	EPA 6010A	09/10/96
Barium	960	10	1	29643	EPA 6010A	09/10/96
Beryllium	ND	2.0	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2.0	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	1	29643	EPA 6010A	09/10/96
Cobalt	ND	20	1	29643	EPA 6010A	09/10/96
Copper	ND	10	1	29643	EPA 6010A	09/10/96
Lead	ND	3.0	1	29643	EPA 6010A	09/10/96
Mercury	ND	0.20	1	29701	EPA 7470	09/10/96
Molybdenum	ND	20	1	29643	EPA 6010A	09/10/96
Nickel	ND	20	1	29643	EPA 6010A	09/10/96
Selenium	18	5.0	1	29643	EPA 6010A	09/10/96
Silver	ND	5.0	1	29643	EPA 6010A	09/10/96
Thallium	ND	5.0	1	29643	EPA 6010A	09/10/96
Vanadium	ND	10	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	1	29643	EPA 6010A	09/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126693

DATE REPORTED: 09/18/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	29643	EPA 6010A	09/10/96
Arsenic	ND	5	ug/L	1	29643	EPA 6010A	09/10/96
Barium	ND	10	ug/L	1	29643	EPA 6010A	09/10/96
Beryllium	ND	2	ug/L	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2	ug/L	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	ug/L	1	29643	EPA 6010A	09/10/96
Cobalt	ND	20	ug/L	1	29643	EPA 6010A	09/10/96
Copper	ND	10	ug/L	1	29643	EPA 6010A	09/10/96
Lead	ND	3	ug/L	1	29643	EPA 6010A	09/10/96
Mercury	ND	0.2	ug/L	1	29701	EPA 7470	09/10/96
Molybdenum	ND	20	ug/L	1	29643	EPA 6010A	09/10/96
Nickel	ND	20	ug/L	1	29643	EPA 6010A	09/10/96
Selenium	ND	5	ug/L	1	29643	EPA 6010A	09/10/96
Silver	ND	5	ug/L	1	29643	EPA 6010A	09/10/96
Thallium	ND	5	ug/L	1	29643	EPA 6010A	09/10/96
Vanadium	ND	10	ug/L	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	ug/L	1	29643	EPA 6010A	09/10/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126693

DATE REPORTED: 09/18/96

BATCH QC REPORT
LABORATORY CONTROL SAMPLE

Compound	Spike Amt	Result	Units	% Rec.	QC Batch	Method	Analysis Date
Antimony	500	478	ug/L	96	29643	EPA 6010A	09/10/96
Arsenic	2000	1940	ug/L	97	29643	EPA 6010A	09/10/96
Barium	2000	2010	ug/L	101	29643	EPA 6010A	09/10/96
Beryllium	50	50.6	ug/L	101	29643	EPA 6010A	09/10/96
Cadmium	50	52.9	ug/L	106	29643	EPA 6010A	09/10/96
Chromium (total)	200	200	ug/L	100	29643	EPA 6010A	09/10/96
Cobalt	500	498	ug/L	100	29643	EPA 6010A	09/10/96
Copper	250	262	ug/L	105	29643	EPA 6010A	09/10/96
Lead	500	524	ug/L	105	29643	EPA 6010A	09/10/96
Molybdenum	400	409	ug/L	102	29643	EPA 6010A	09/10/96
Nickel	500	511	ug/L	102	29643	EPA 6010A	09/10/96
Selenium	2000	2060	ug/L	103	29643	EPA 6010A	09/10/96
Silver	100	93.4	ug/L	93	29643	EPA 6010A	09/10/96
Thallium	2000	2090	ug/L	105	29643	EPA 6010A	09/10/96
Vanadium	500	501	ug/L	100	29643	EPA 6010A	09/10/96
Zinc	500	479	ug/L	96	29643	EPA 6010A	09/10/96

CHAIN OF CUSTODY FORM

926693

PAGE ___ OF ___

PROJECT NAME: KOT

JOB NUMBER: 133.005 LAB: Curtis & Tompkins

PROJECT CONTACT: Jeri Alexander TURNAROUND: Normal

SAMPLED BY: Dennis Alexander REQUESTED BY: Jeri Alexander

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT	TUBE			METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH@ gas	TEH@ diesel	TEH @ motor oil	VOCs (8240) w/ library search	SVOCs (8270) incl. PAHs	O&G	Heavy Metals	PCB's
-1	SCI-MW-9	X						5	5					X			X		08	29	96	0815	*	X	X	X	X	X	X	X	X
-2	SCI-MW-12	X						5	5					X			X					0915	*	X	X	X	X	X	X	X	X
-3	SCI-MW-13	X						5	5					X			X					1000	*	X	X	X	X	X	X	X	X
-4	SCI-MW-14	X						5	5					X			X					1300	*	X	X	X	X	X	X	X	X
-5	SCI-MW-15	X						5	5					X			X					1215	*	X	X	X	X	X	X	X	X
-6	SCI-MW-17	X						5	5					X			X		08	29	96	1345	*	X	X	X	X	X	X	X	X
-7	Trip Blank #4	X						1									X										X				

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dennis Alexander	8/29/96 2:55 p.m.		
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
		Trip Blank	8/29/96 3:00

COMMENTS & NOTES: * Please filter + fix before metals analysis

Subsurface Consultants, Inc.

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(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 18-SEP-96
Lab Job Number: 126699
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 126699

Project Name: KOT
Project Number: 133.005

Report Date: 18 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126699-001	SCI-MW-16	Water	30-AUG-96	30-AUG-96	11-SEP-96	ND	mg/L	5	TR	29752
126699-002	SCI-MW-19	Water	30-AUG-96	30-AUG-96	11-SEP-96	ND	mg/L	5	TR	29752

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126699
Report Date: 18 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29752**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	11-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	85%	SMWW 17:5520BF	11-SEP-96
BSD	89%	SMWW 17:5520BF	11-SEP-96

		Control Limits
Average Spike Recovery	87%	80% - 120%
Relative Percent Difference	6.6%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126699-001	SCI-MW-16	29611	08/30/96	09/06/96	09/06/96	
126699-002	SCI-MW-19	29611	08/30/96	09/06/96	09/06/96	

Matrix: Water

Analyte	Units	126699-001	126699-002
Diln Fac:		1	1
Gasoline	ug/L	<50	<50
Surrogate			
Trifluorotoluene	%REC	97	97
Bromobenzene	%REC	83	82

Curtis & Tompkins, Ltd.

Lab #: 126699 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/05/96
Batch#:	29611	Analysis Date:	09/05/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC29686

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	98	65-135
Bromobenzene	78	65-135

Curtis & Tompkins, Ltd.

Lab #: 126699 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29611
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/05/96

LCS Lab ID: QC29687

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1850	2000	93	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	94	65-135		
Bromobenzene	96	65-135		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126699 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126710-001
Matrix: Water
Batch#: 29611
Units: ug/L
Diln Fac: 1

Sample Date: 08/28/96
Received Date: 08/30/96
Prep Date: 09/05/96
Analysis Date: 09/05/96

MS Lab ID: QC29688

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50	1649	82	75-125
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	94	65-135			
Bromobenzene	100	65-135			

MSD Lab ID: QC29689

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1667	83	75-125	1	35
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	94	65-135				
Bromobenzene	101	65-135				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126699-001	SCI-MW-16	29690	08/30/96	09/09/96	09/11/96	
126699-002	SCI-MW-19	29690	08/30/96	09/09/96	09/11/96	

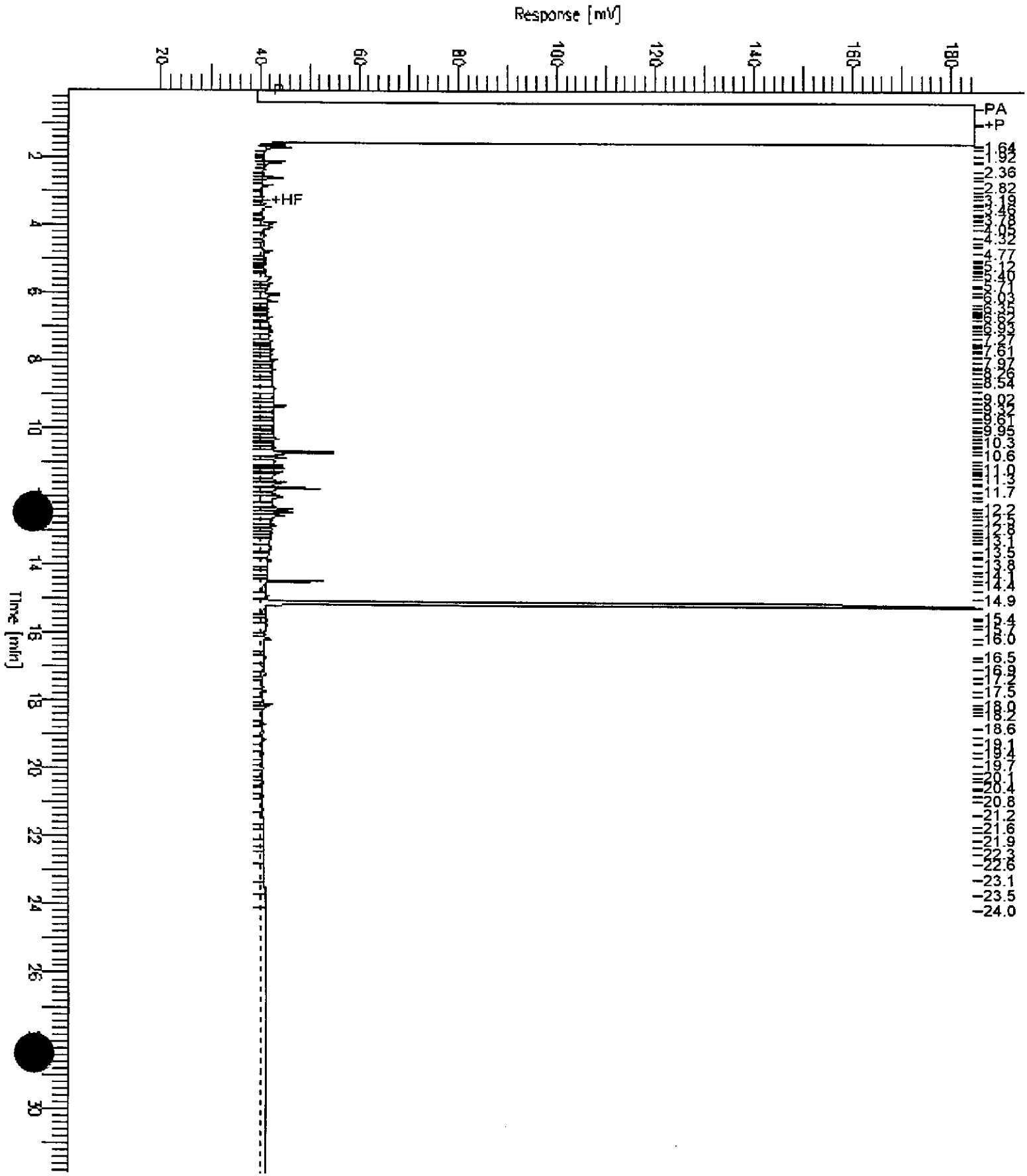
Matrix: Water

Analyte	Units	126699-001	126699-002
Diln Fac:		1	1
Diesel C12-C22	ug/L	180	180
Motor Oil C22-C50	ug/L	<250	<250
Surrogate			
Hexacosane	%REC	104	102

GC15 Channel A TEH

Sample Name : W,126699-001
FileName : G:\GC15\CHB\255B012.RAW
Method :
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 20 mV

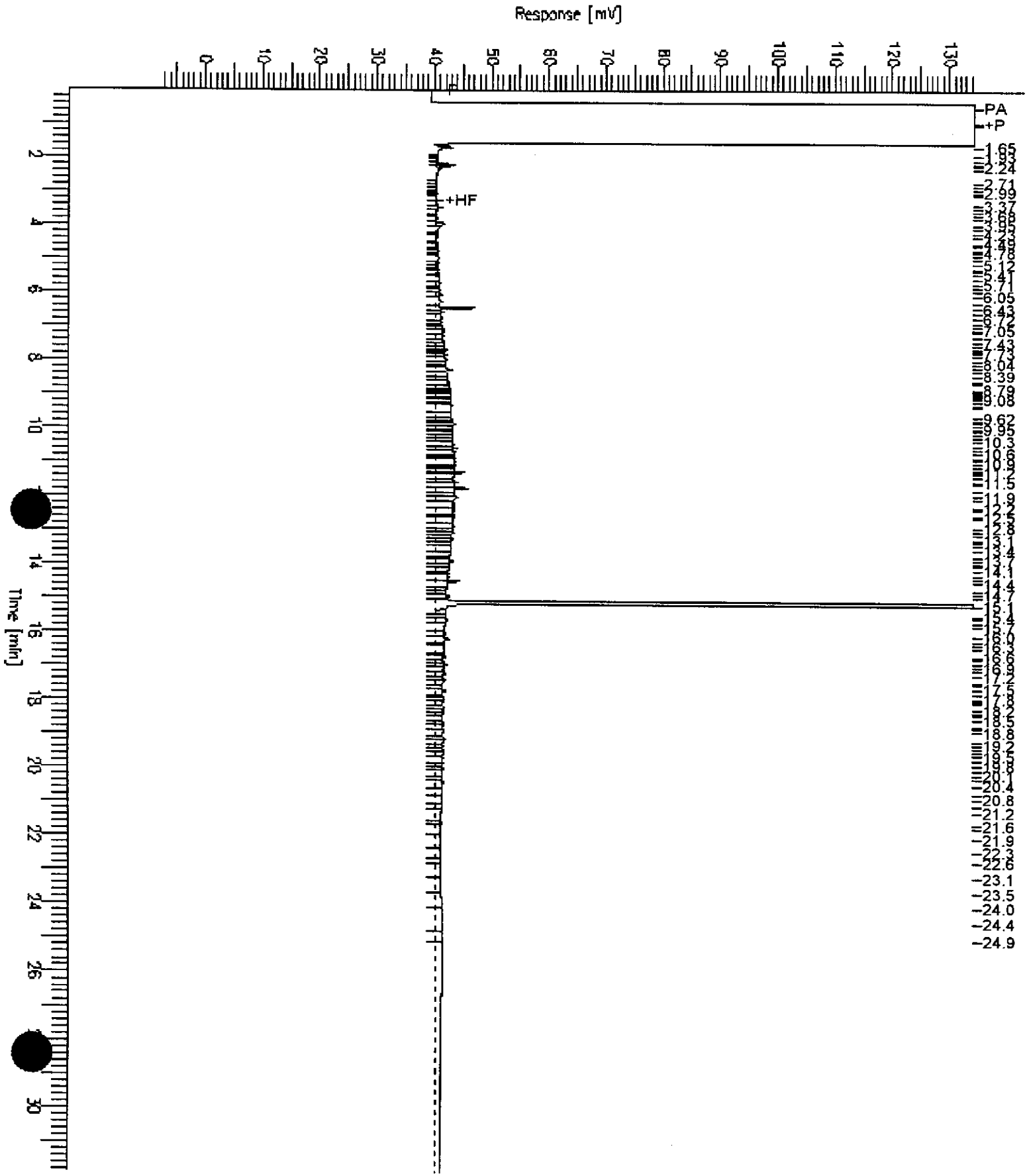
Sample #: 29690 Page 1 of 1
Date : 9/18/96 04:07 PM
Time of Injection: 9/11/96 05:37 PM
Low Point : 19.78 mV High Point : 184.84 mV
Plot Scale: 165.1 mV



GC15 Channel A TEH

Sample Name : W,126699-002
FileName : G:\GC15\CHB\255B013.RAW
Method :
Start Time : 0.01 min End Time : 31.91 min
Smooth Factor: 0.0 Plot Offset: -8 mV

Sample #: 29690 Page 1 of 1
Date : 9/18/96 04:01 PM
Time of Injection: 9/11/96 06:20 PM
Low Point : -7.76 mV High Point : 134.44 mV
Plot Scale: 142.2 mV



Curtis & Tompkins, Ltd.

Lab #: 126699 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/09/96
Batch#:	29690	Analysis Date:	09/11/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC29965

Analyte	Result	
Diesel C12-C22	<50	
Motor Oil C22-C50	<250	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	109	60-140

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29690
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

BS Lab ID: QC29966

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1919	78	60-140
Surrogate	%Rec	Limits		
Hexacosane	109	60-140		

BSD Lab ID: QC29967

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1768	71	60-140	8	35
Surrogate	%Rec	Limits				
Hexacosane	99	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-MW-16
Lab ID: 126699-001
Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Sampled: 08/30/96
Received: 08/30/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	96	79-122

Data File: /chem/VOA_05.i/083096.b/ehu18.d
Report Date: 01-Sep-1996 15:11

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_05.i/083096.b/ehu18.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 30-AUG-96 17:38
Operator : DM Inst ID: VOA_05.i
Smp Info : S,126699-001
Misc Info : 8240,,29428,5.0,5,1, WATER
Comment :
Method : /chem/VOA_05.i/083096.b/i5m826.m
Meth Date : 01-Sep-1996 15:10 liza
Cal Date : 26-AUG-1996 17:33 Cal File: ehq13.d
Als bottle: 18
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
50 Chlorobenzene-d5	16.811	2206264	50.000

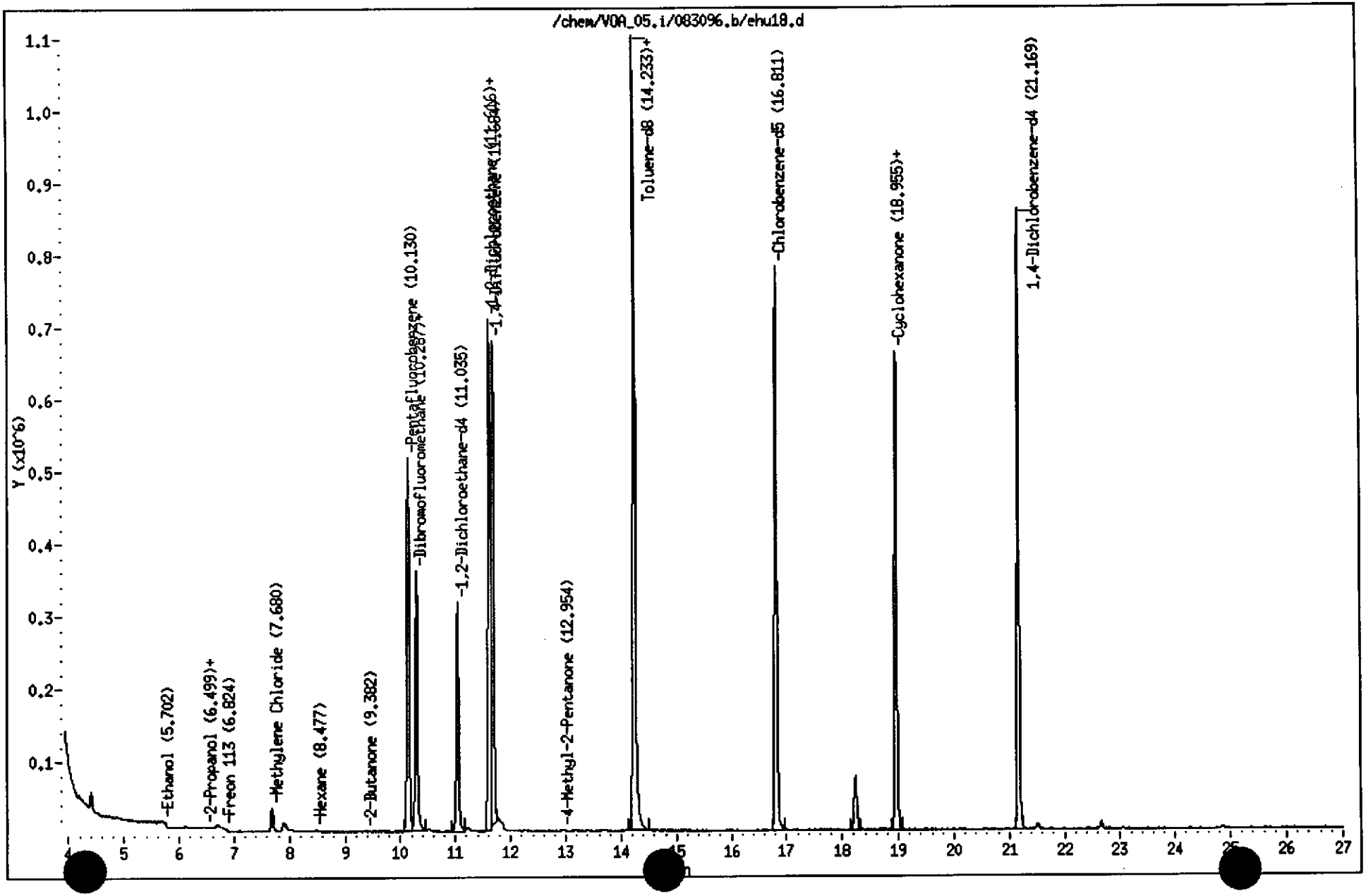
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(UG/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl- column bleed				CAS #: 556-67-2			
18.227	277709	6.29	6.29	83	nbs75k.l	41966	50

No TICS

Data File: /chem/VOA_05.i/083096.b/ehu18.d
Date : 30-AUG-96 17:38
Client ID: DYNA P&T
Sample Info: S,126699-001
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i

Operator: DM
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-MW-19
Lab ID: 126699-002
Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Sampled: 08/30/96
Received: 08/30/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	98	79-122

Data File: /chem/VOA_05.i/083096.b/ehu19.d
Report Date: 01-Sep-1996 15:11

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_05.i/083096.b/ehu19.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 30-AUG-96 18:10
Operator : DM Inst ID: VOA_05.i
Smp Info : S,126699-002
Misc Info : 8240,,29428,5.0,5,1, WATER
Comment :
Method : /chem/VOA_05.i/083096.b/i5m826.m
Meth Date : 01-Sep-1996 15:10 liza
Cal Date : 26-AUG-1996 17:33 Cal File: ehq13.d
Als bottle: 19
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
50 Chlorobenzene-d5	16.809	2255421	50.000

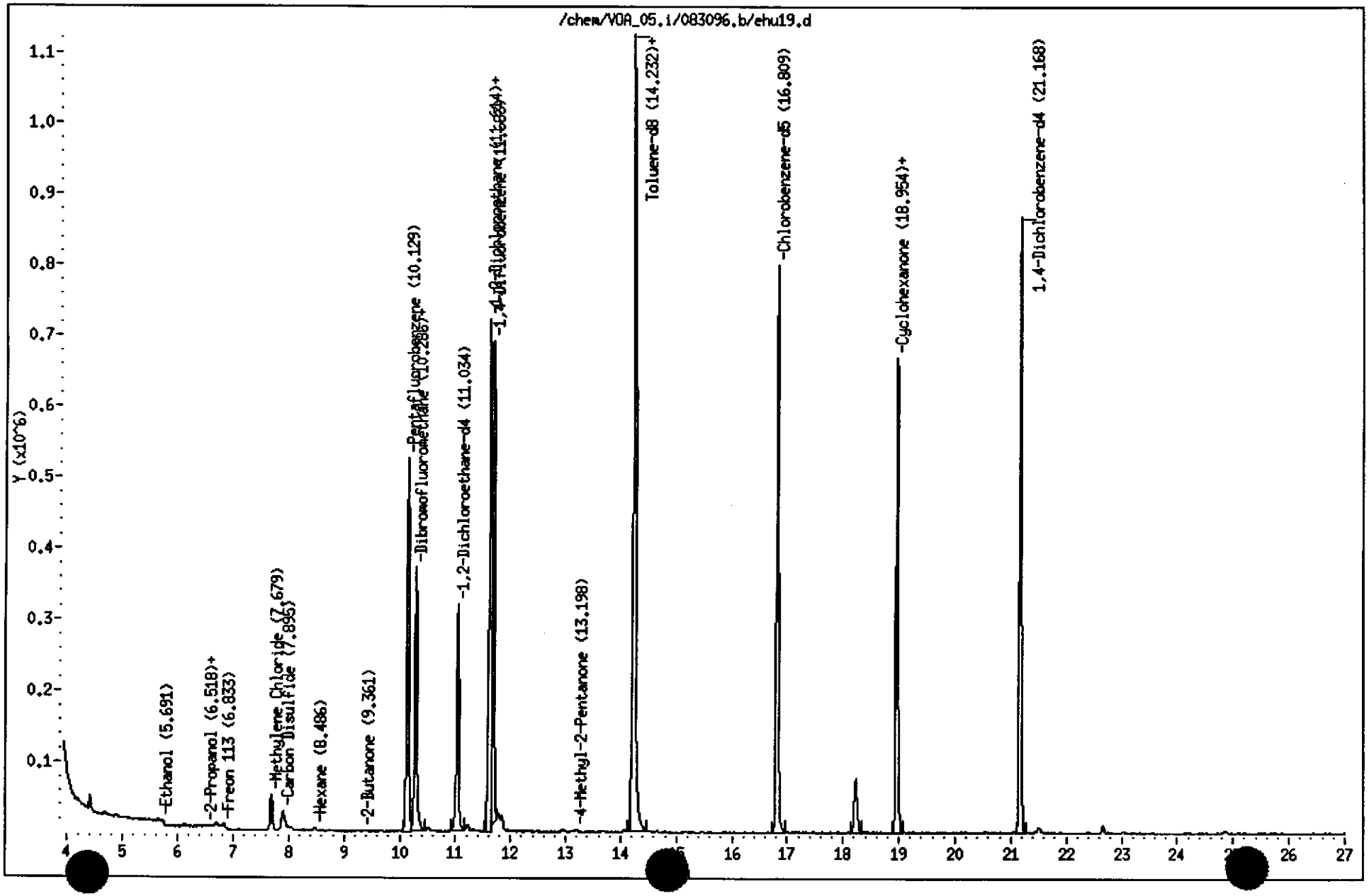
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(UG/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclotetrasiloxane, octamethyl- column bleed					CAS #: 556-67-2		
18.226	285886	6.34	6.34	86	nbs75k.l	41966	50

9/13/96

DO NOT ICS

Data File: /chem/VOA_05.i/083096.b/ehu19.d
Date : 30-AUG-96 18:10
Client ID: DYNA P&T
Sample Info: S,126699-002
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: XA
Lab ID: 126699-003
Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Sampled: 08/30/96
Received: 08/30/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	105	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	98	79-122

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: TRIP BLANK #5
Lab ID: 126699-004
Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Sampled: 08/30/96
Received: 08/30/96
Extracted: 08/30/96
Analyzed: 08/30/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	101	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	97	79-122

Curtis & Tompkins, Ltd.

Lab #: 126699 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 08/30/96

MB Lab ID: QC29068

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	98	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29428
Units: ug/L
Diln Fac: 1

Prep Date: 08/30/96
Analysis Date: 08/30/96

LCS Lab ID: QC29067

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	63.53	50	127	51-180
Trichloroethene	50.27	50	101	73-141
Benzene	51.37	50	103	78-142
Toluene	49.54	50	99	76-150
Chlorobenzene	50.41	50	101	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	97	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126693-001
Matrix: Water
Batch#: 29428
Units: ug/Kg
Diln Fac: 1

Sample Date: 08/29/96
Received Date: 08/29/96
Prep Date: 08/30/96
Analysis Date: 08/30/96

MS Lab ID: QC29226

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	49.66	99	51-180
Trichloroethene	50	<5	47.34	95	73-141
Benzene	50	<5	49.43	99	78-142
Toluene	50	<5	48.43	97	76-150
Chlorobenzene	50	<5	48.9	98	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	96	79-122

MSD Lab ID: QC29227

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	46.76	94	51-180	6	14
Trichloroethene	50	46.23	93	73-141	2	14
Benzene	50	48.31	97	78-142	2	11
Toluene	50	46.02	92	76-150	5	13
Chlorobenzene	50	47.99	96	83-129	2	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	96	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-16
Lab ID: 126699-001
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/30/96
Received: 08/30/96
Extracted: 09/04/96
Analyzed: 09/16/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-16	Sampled:	08/30/96
Lab ID:	126699-001	Received:	08/30/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/16/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	82	21-110
Phenol-d5	86	10-110
2,4,6-Tribromophenol	69	10-123
Nitrobenzene-d5	82	35-114
2-Fluorobiphenyl	78	43-116
Terphenyl-d14	42	33-141

Data File: /chem/bna01.i/091696a.b/15_6699-1re.d
Report Date: 17-Sep-1996 14:16

Curtis & Tompkins, Ltd.

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126699-001
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 3

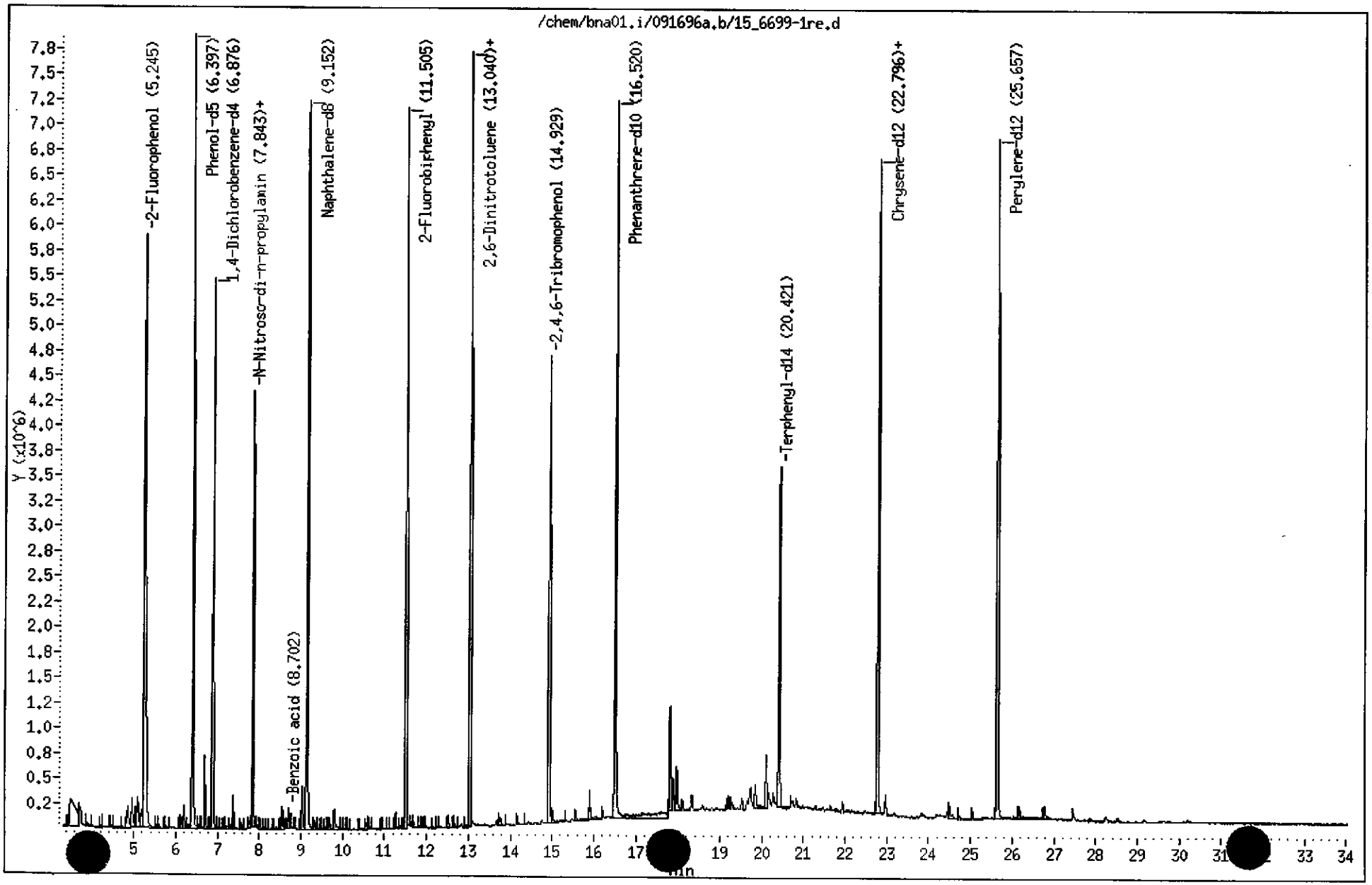
CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	593-71-5	Chloroiodomethane	3.507	10.98	NJ
2.	111-90-0	Ethanol, 2-(2-ethoxyethoxy)	6.690	4.30	NJ
3.	2091-29-4	9-Hexadecenoic acid	17.818	5.87	NJ

Data File: /chem/bna01.i/091696a.b/15_6699-1re.d
Date : 16-SEP-1996 22:39
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i

Operator: dsh
Column diameter: 0.25



Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-19
Lab ID: 126699-002
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/30/96
Received: 08/30/96
Extracted: 09/04/96
Analyzed: 09/11/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-19	Sampled:	08/30/96
Lab ID:	126699-002	Received:	08/30/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/11/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	80	21-110
Phenol-d5	84	10-110
2,4,6-Tribromophenol	69	10-123
Nitrobenzene-d5	82	35-114
2-Fluorobiphenyl	79	43-116
Terphenyl-d14	45	33-141

Data File: /chem/bna01.i/091196a.b/07_6699-2re.d
Report Date: 12-Sep-1996 10:20

Curtis & Tompkins, Ltd.

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126699-002
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

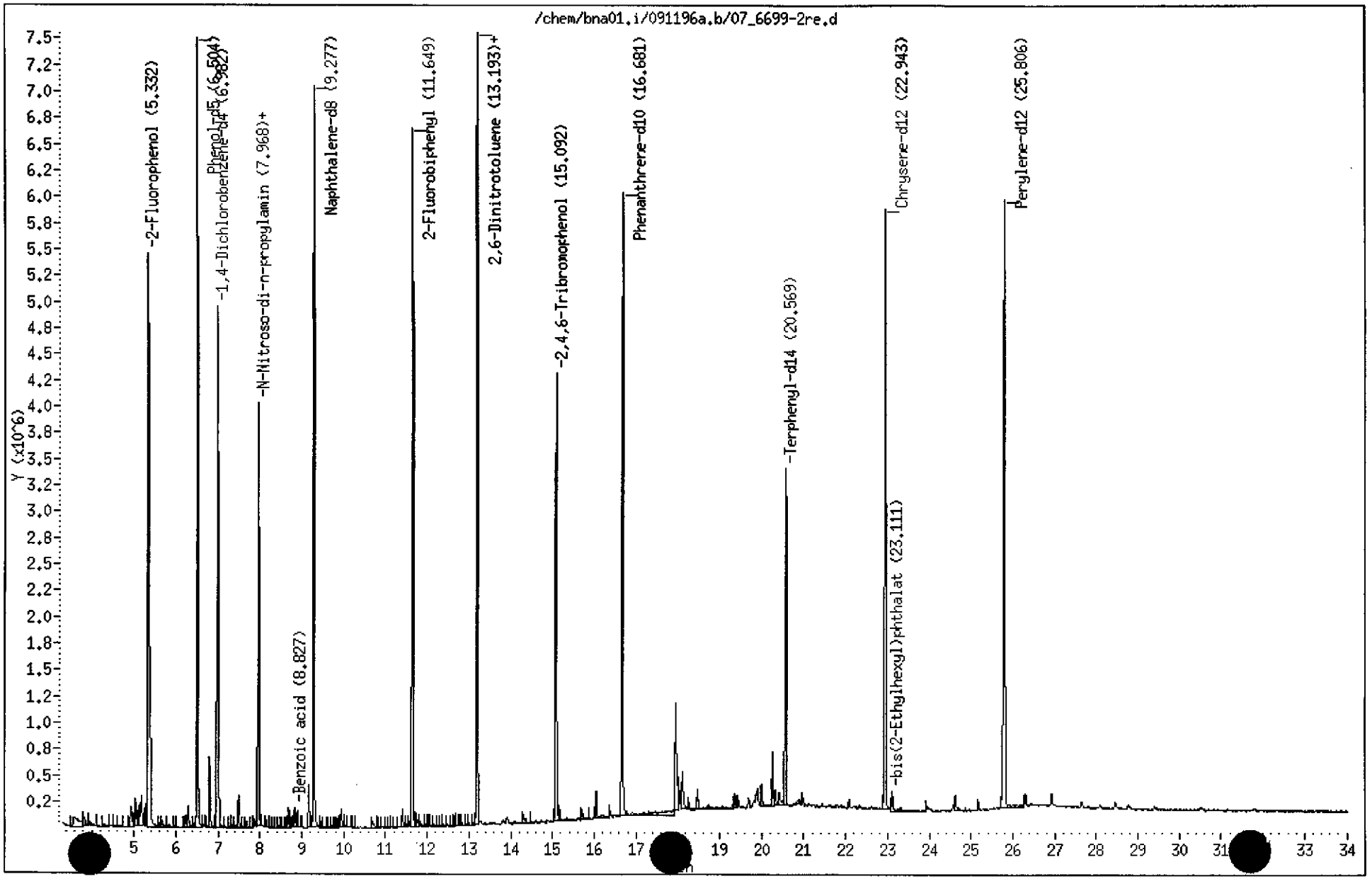
Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	111-90-0	Ethanol, 2-(2-ethoxyethoxy)	6.797	4.06	NJ
2.	2091-29-4	9-Hexadecenoic acid	17.958	6.92	NJ

Data File: /chem/bna01.i/091196a.b/07_6699-2re.d
Date : 11-SEP-1996 17:14
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i
Operator: dsh
Column diameter: 0.25



EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

MB Lab ID: QC29553

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	10
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

MB Lab ID: QC29553

Analyte	Result	Reporting Limit
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	72	21-110
Phenol-d5	75	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	65	35-114
2-Fluorobiphenyl	75	43-116
Terphenyl-d14	72	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

BS Lab ID: QC29554

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	100	75.06	75	12-110
2-Chlorophenol	100	76.99	77	27-123
4-Chloro-3-methylphenol	100	69.32	69	23-97
4-Nitrophenol	100	46.32	46	10-80
Pentachlorophenol	100	59.35	59	9-103
1,4-Dichlorobenzene	50	33.99	68	36-97
N-Nitroso-di-n-propylamine	50	33.09	66	41-116
1,2,4-Trichlorobenzene	50	34.37	69	39-98
Acenaphthene	50	36.06	72	46-118
2,4-Dinitrotoluene	50	33.1	66	24-96
Pyrene	50	34.66	69	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	79	21-110
Phenol-d5	80	10-110
2,4,6-Tribromophenol	65	10-123
Nitrobenzene-d5	73	35-114
2-Fluorobiphenyl	80	43-116
Terphenyl-d14	72	33-141

BSD Lab ID: QC29555

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	100	79.13	79	12-110	5	42
2-Chlorophenol	100	81.64	82	27-123	6	40
4-Chloro-3-methylphenol	100	73.85	74	23-97	7	42
4-Nitrophenol	100	50.35	50	10-80	8	50
Pentachlorophenol	100	64.92	65	9-103	10	50
1,4-Dichlorobenzene	50	35.57	71	36-97	4	28
N-Nitroso-di-n-propylamine	50	35.21	70	41-116	6	38
1,2,4-Trichlorobenzene	50	36.04	72	39-98	4	28
Acenaphthene	50	38.35	77	46-118	7	31
2,4-Dinitrotoluene	50	35.42	71	24-96	7	38
Pyrene	50	37.49	75	26-127	8	31

Surrogate	%Rec	Limits
2-Fluorophenol	83	21-110
Phenol-d5	84	10-110
2,4,6-Tribromophenol	67	10-123
Nitrobenzene-d5	80	35-114
2-Fluorobiphenyl	83	43-116
Terphenyl-d14	77	33-141

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

Curtis & Tompkins, Ltd.

Corrective Action Report

2425

From: PCB- Lara Wheeling Client: Subsurface Consultants
Job #: _____ Date: 9-11-96 Time: _____

Sample Control	Subcontract	Organics	Metals	Gen. Chem.	Project Management
BREAKAGE	BREAKAGE	TAT	TAT	TAT	REPORT ERROR
VOLUME	LOST	HOLDING TIME	HOLDING TIME	HOLDING TIME	REVIEW ERROR
CONTAINER	VOLUME	QC LIMITS	QC LIMITS	QC LIMITS	INVOICE ERROR
DOCUMENT	TAT	DILUTION	DILUTION	DILUTION	JOB JACKET ERROR
PRESERVATION	HOLDING TIME	WORKSHEET	WORKSHEET	WORKSHEET	COMM. ERROR
LOST	NARRATIVE	ANAL. NOTES	ANAL. NOTES	ANAL. NOTES	OTHER
OTHER	OTHER	OTHER	OTHER	OTHER	

Description of problem/nonconformance:

Sample 126693-001 in Batch 29513 and samples 126699-002, 126720-001 and 126705-002 in Batch 29615 all have Failing surrogates.

QC limits are	60-150	+/- 30-130
126693-001	59%	27%
126699-002	44%	27%
126720-001	51%	25%
126705-002	31%	17%

Summary of corrective action(s):

(1a) Re-analyze → done

(1b) Re-extract to check for matrix effect.

126693-001	came up to passing	54% 35%
126699-002	came up to passing	56% 31%
126720-001	still Fails	24% 27%
126705-002	still Fails	43% 25%

	YES	NO	Resolver	Initials	Date
Is this a recurring problem?			X Analyst	LW	9-11-96
Should SOP be modified?			X Group Leader	CAH	9-16-96
Should training be given?			P.M.		
Should customer be educated?			QA Officer		
Should operations be changed?			Lab Director		

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-16	Sampled:	08/30/96
Lab ID:	126699-001	Received:	08/30/96
Matrix:	Water	Extracted:	09/05/96
Batch#:	29615	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	66	60-150
Decachlorobiphenyl	35	30-130

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-19	Sampled:	08/30/96
Lab ID:	126699-002	Received:	08/30/96
Matrix:	Water	Extracted:	09/11/96
Batch#:	29758	Analyzed:	09/13/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	65	60-150
Decachlorobiphenyl	31	30-130

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29615
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/10/96

MB Lab ID: QC29704

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Rec	Recovery Limits
TCMX	70	60-150
Decachlorobiphenyl	78	30-130

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29758
Units: ug/L
Diln Fac: 1

Prep Date: 09/11/96
Analysis Date: 09/13/96

MB Lab ID: QC30243

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Rec	Recovery Limits
TCMX	76	60-150
Decachlorobiphenyl	84	30-130

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29615
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/10/96

BS Lab ID: QC29705

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.35	87	50-128

Surrogate	%Rec	Limits
TCMX	60	60-150
Decachlorobiphenyl	74	30-130

SD Lab ID: QC29706

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.45	89	50-128	2	20

Surrogate	%Rec	Limits
TCMX	65	60-150
Decachlorobiphenyl	69	30-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29758
Units: ug/L
Diln Fac: 1

Prep Date: 09/11/96
Analysis Date: 09/13/96

BS Lab ID: QC30244

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.09	82	50-128

Surrogate	%Rec	Limits
TCMX	63	60-150
Decachlorobiphenyl	83	30-130

BSD Lab ID: QC30245

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.11	82	50-128	0	20

Surrogate	%Rec	Limits
TCMX	68	60-150
Decachlorobiphenyl	51	30-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-16
LAB ID: 126699-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/30/96
DATE RECEIVED: 08/30/96
DATE REPORTED: 09/18/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	14	5.0	1	29688	EPA 6010A	09/11/96
Barium	300	10	1	29688	EPA 6010A	09/11/96
Beryllium	3.1	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	ND	10	1	29688	EPA 6010A	09/11/96
Lead	ND	3.0	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.20	1	29731	EPA 7470	09/11/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	1	29688	EPA 6010A	09/11/96
Selenium	40	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	12	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-19
LAB ID: 126699-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/30/96
DATE RECEIVED: 08/30/96
DATE REPORTED: 09/18/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	32	5.0	1	29688	EPA 6010A	09/11/96
Barium	140	10	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	ND	10	1	29688	EPA 6010A	09/11/96
Lead	6.2	3.0	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.20	1	29731	EPA 7470	09/11/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	1	29688	EPA 6010A	09/11/96
Selenium	32	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	11	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126699

DATE REPORTED: 09/18/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	29688	EPA 6010A	09/11/96
Arsenic	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Barium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Copper	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Lead	ND	3	ug/L	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.2	ug/L	1	29731	EPA 7470	09/11/96
Molybdenum	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Selenium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Silver	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Thallium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	ug/L	1	29688	EPA 6010A	09/11/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126699

DATE REPORTED: 09/18/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	500	507	555	ug/L	101	111	80-120	9	35	29688	EPA 6010A	09/11/96
Arsenic	2000	1940	1970	ug/L	97	99	80-120	2	35	29688	EPA 6010A	09/11/96
Barium	2000	1980	1970	ug/L	99	99	80-120	1	35	29688	EPA 6010A	09/11/96
Beryllium	50	50.4	51.5	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Cadmium	50	52.8	53.1	ug/L	106	106	80-120	1	35	29688	EPA 6010A	09/11/96
Chromium (total)	200	198	199	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Cobalt	500	492	507	ug/L	98	101	80-120	3	35	29688	EPA 6010A	09/11/96
Copper	250	249	248	ug/L	100	99	80-120	0	35	29688	EPA 6010A	09/11/96
Lead	500	505	520	ug/L	101	104	80-120	3	35	29688	EPA 6010A	09/11/96
Mercury	5	5.06	5.412	ug/L	101	108	80-120	7	35	29731	EPA 7470	09/11/96
Molybdenum	400	406	414	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Nickel	500	507	516	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Selenium	2000	2020	2040	ug/L	101	102	80-120	1	35	29688	EPA 6010A	09/11/96
Silver	100	90.4	89.7	ug/L	90	90	80-120	1	35	29688	EPA 6010A	09/11/96
Thallium	2000	2040	2070	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Vanadium	500	495	498	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Zinc	500	480	493	ug/L	96	99	80-120	3	35	29688	EPA 6010A	09/11/96

CHAIN OF CUSTODY FORM

1260

PAGE ___ OF ___

PROJECT NAME: KOT

JOB NUMBER: 133.005 LAB: Curtis & Tompkins

PROJECT CONTACT: Jeri Alexander TURNAROUND: Normal

SAMPLED BY: Dennis Alexander REQUESTED BY: Jeri Alexander

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT	TUBE			METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH @ gas	TEH @ diesel	TEH @ motor oil	VOCs (8240) U/Library search	SVOCs (8270 incl. PAHs)	O&G	Heavy Metals	PCBs
-1	SCI-MW-16	X						5	5					X			X		08	30	96	0815	*	X	X	X	X	X	X	X	X
-2	SCI-MW-19	X						5	5					X			X		08	30	96	0930	*	X	X	X	X	X	X	X	X
-3	XA	X						5	5					X			X		08	30	96	0830	*				X				
-4	Trip Blank #5	X						1									X										X				

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dennis Alexander	8/30/96 11:30 a.m.		
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
		Trip Blazer	8/31 8:35

COMMENTS & NOTES: * Please filter & fix before metals analysis. Also hold remainder of XA sample for possible future analysis.

Subsurface Consultants, Inc.

171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607

(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 16-SEP-96
Lab Job Number: 126705
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 126705

Project Name: KOT
Project Number: 133.005

Report Date: 16 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126705-001	SCI-32	Water	29-AUG-96	30-AUG-96	11-SEP-96	ND	mg/L	5	TR	29752
126705-002	SCI-33	Water	29-AUG-96	30-AUG-96	11-SEP-96	ND	mg/L	5	TR	29752
126705-003	SCI-35	Water	29-AUG-96	30-AUG-96	11-SEP-96	240	mg/L	10	TR	29752
126705-004	SCI-36	Water	30-AUG-96	30-AUG-96	11-SEP-96	ND	mg/L	5	TR	29752
126705-005	SCI-38	Water	30-AUG-96	30-AUG-96	11-SEP-96	ND	mg/L	5	TR	29752
126705-006	SCI-39	Water	30-AUG-96	30-AUG-96	11-SEP-96	ND	mg/L	5	TR	29752

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126705
Report Date: 16 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29752**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	11-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	85%	SMWW 17:5520BF	11-SEP-96
BSD	89%	SMWW 17:5520BF	11-SEP-96

		Control Limits
Average Spike Recovery	87%	80% - 120%
Relative Percent Difference	6.6%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126705-001	SCI-32	29611	08/29/96	09/06/96	09/06/96	
126705-002	SCI-33	29611	08/29/96	09/06/96	09/06/96	
126705-003	SCI-35	29503	08/29/96	09/02/96	09/02/96	
126705-005	SCI-38	29611	08/30/96	09/06/96	09/06/96	

Matrix: Water

Analyte Diln Fac:	Units	126705-001 1	126705-002 1	126705-003 10	126705-005 1
Gasoline	ug/L	<50	<50	16000 Y	<50
Surrogate					
Trifluorotoluene	%REC	98	98	100	97
Bromobenzene	%REC	83	83	92	82

Y: Sample exhibits fuel pattern which does not resemble standard

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126705-006	SCI-39	29611	08/30/96	09/06/96	09/06/96	

Matrix: Water

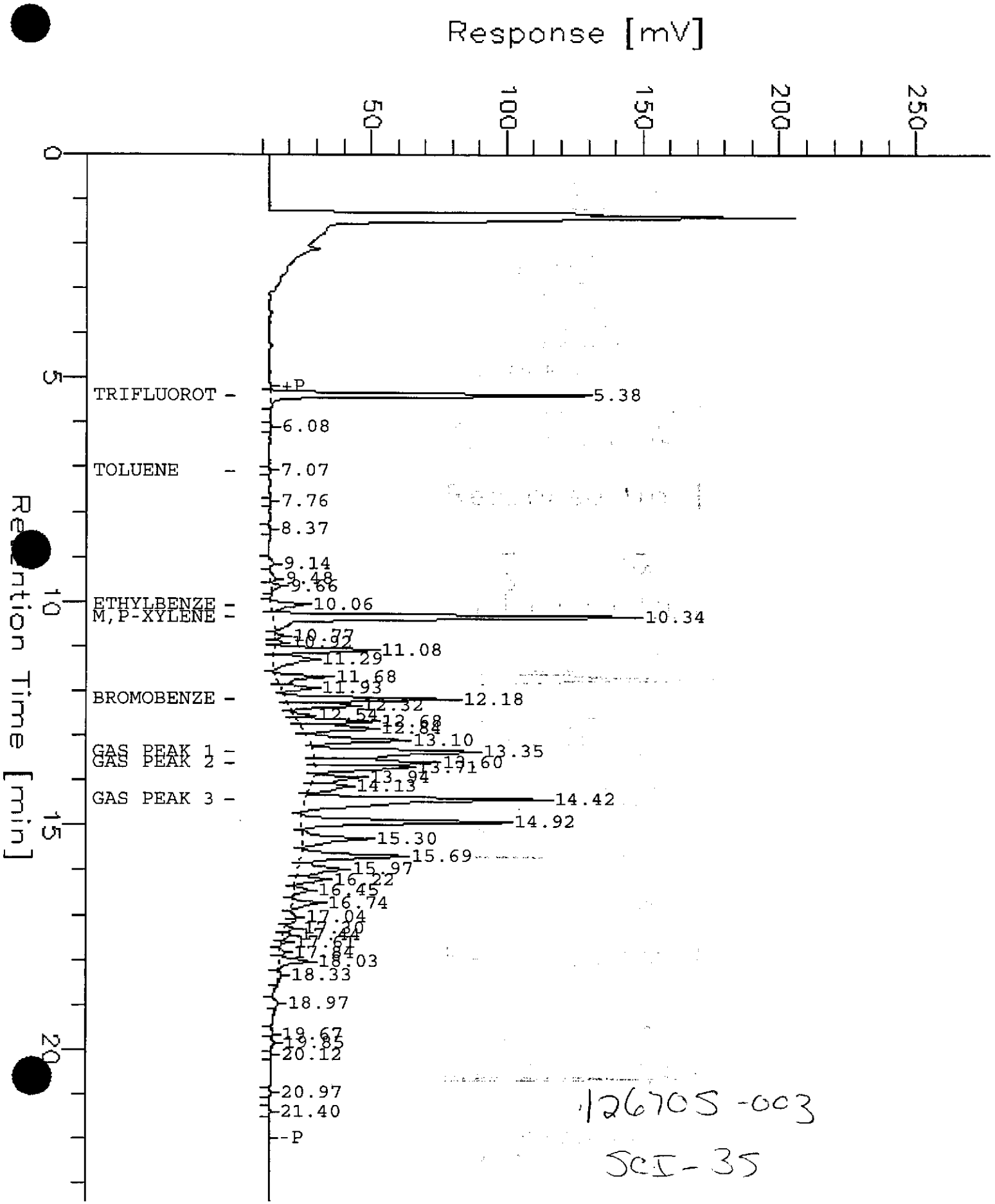
Analyte	Units	126705-006
Diln Fac:		1
Gasoline	ug/L	<50
Surrogate		
Trifluorotoluene	%REC	98
Bromobenzene	%REC	84

TVH2 - GC-05 RTX-1

FileName : G:\GC05\245H025.raw
Start Time : 0.00 min
End Time : 23.42 min
Scale Factor: -1
Plot Offset: 0 mV

Date : 9/2/96 2:41 PM
Low Point : 0.04 mV
Plot Scale: 250 mV

High Point : 250.04 mV



126705-003

SCI-35

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/01/96
Batch#:	29503	Analysis Date:	09/01/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC29331

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	98	65-135
Bromobenzene	76	65-135

Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29611
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/05/96

MB Lab ID: QC29686

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	98	65-135
Bromobenzene	78	65-135

Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

LABORATORY CONTROL SAMPLE

Matrix:	Water	Prep Date:	09/01/96
Batch#:	29503	Analysis Date:	09/01/96
Units:	ug/L		
Diln Fac:	1		

LCS Lab ID: QC29332

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1877	2000	94	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	95	65-135		
Bromobenzene	101	65-135		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29611
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/05/96

LCS Lab ID: QC29687

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1850	2000	93	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	94	65-135		
Bromobenzene	96	65-135		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126710-001
Matrix: Water
Batch#: 29611
Units: ug/L
Diln Fac: 1

Sample Date: 08/28/96
Received Date: 08/30/96
Prep Date: 09/05/96
Analysis Date: 09/05/96

MS Lab ID: QC29688

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50	1649	82	75-125
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	94	65-135			
Bromobenzene	100	65-135			

MSD Lab ID: QC29689

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1667	83	75-125	1	35
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	94	65-135				
Bromobenzene	101	65-135				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126705-001	SCI-32	29690	08/29/96	09/09/96	09/12/96	
126705-002	SCI-33	29690	08/29/96	09/09/96	09/12/96	
126705-003	SCI-35	29690	08/29/96	09/09/96	09/12/96	
126705-004	SCI-36	29690	08/30/96	09/09/96	09/12/96	

Matrix: Water

Analyte Diln Fac:	Units	126705-001 1	126705-002 1	126705-003 10	126705-004 1
Diesel C12-C22	ug/L	340 Y	190 Y	220000 Y	3800 Y
Motor Oil C22-C50	ug/L	440 Y	460 Y	230000 Y	3000 YL
Surrogate					
Hexacosane	%REC	98	99	DO	84

DO: Surrogate diluted out
Y: Sample exhibits fuel pattern which does not resemble standard
L: Lighter hydrocarbons than indicated standard

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126705-005	SCI-38	29690	08/30/96	09/09/96	09/12/96	
126705-006	SCI-39	29690	08/30/96	09/09/96	09/12/96	

Matrix: Water

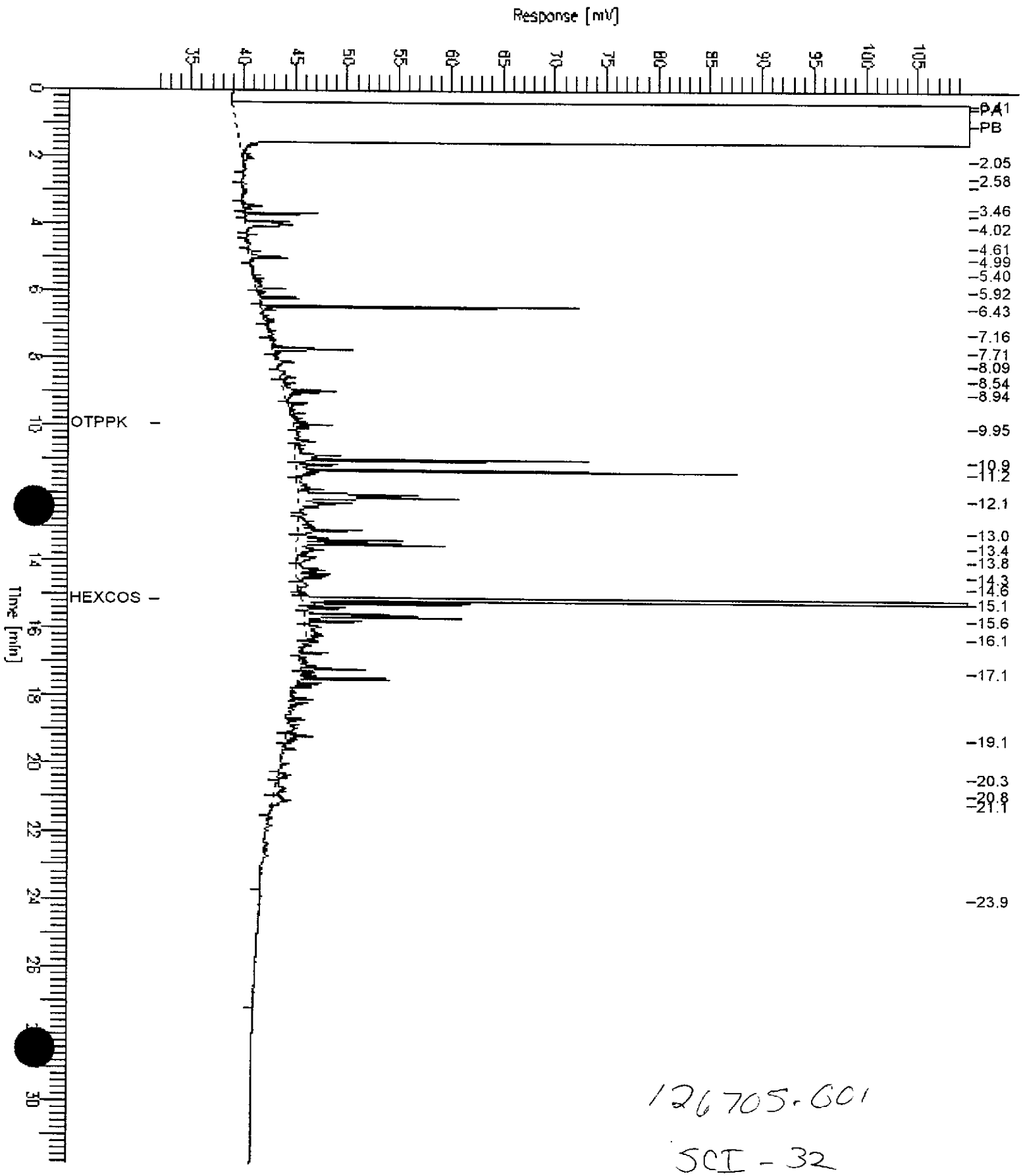
Analyte	Units	126705-005		126705-006	
Diln Fac:		1		1	
Diesel C12-C22	ug/L	990	Y	1000	Y
Motor Oil C22-C50	ug/L	640	YL	730	Y
Surrogate					
Hexacosane	%REC	91		93	

Y: Sample exhibits fuel pattern which does not resemble standard
L: Lighter hydrocarbons than indicated standard

GC15 Channel B Surrogate

Sample Name : 126705-001
FileName : G:\GC15\CHB\2568005.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: 32 mV

Sample #: 29690 Page 1 of 1
Date : 9/12/96 08:27 PM
Time of Injection: 9/12/96 07:52 PM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV



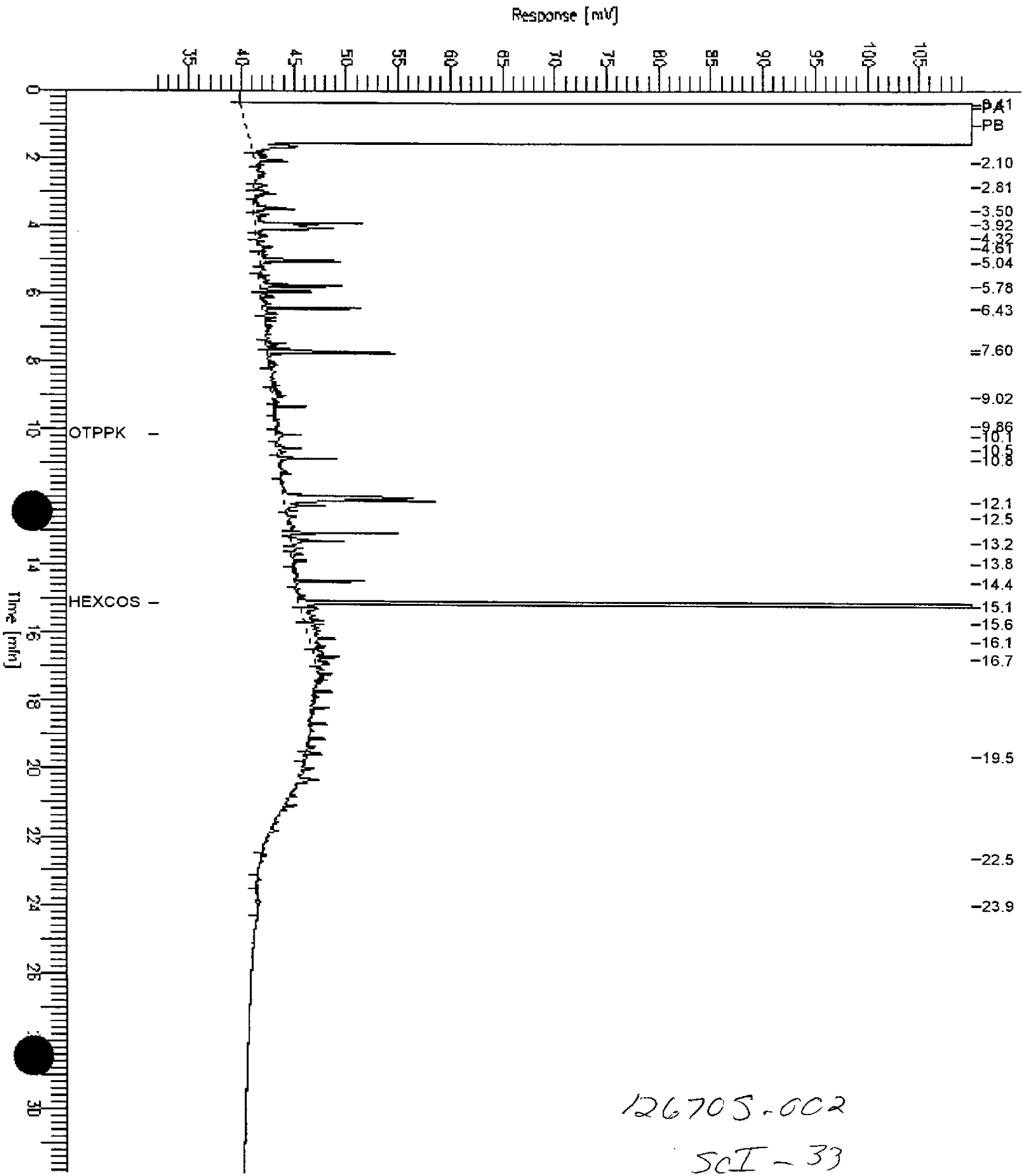
126705-001

SCI - 32

GC15 Channel B Surrogate

Sample Name : 126705-002
FileName : G:\GC15\CHB\256B006.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: 32 mV

Sample #: 29690 Page 1 of 1
Date : 9/12/96 09:10 PM
Time of Injection: 9/12/96 08:35 PM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV



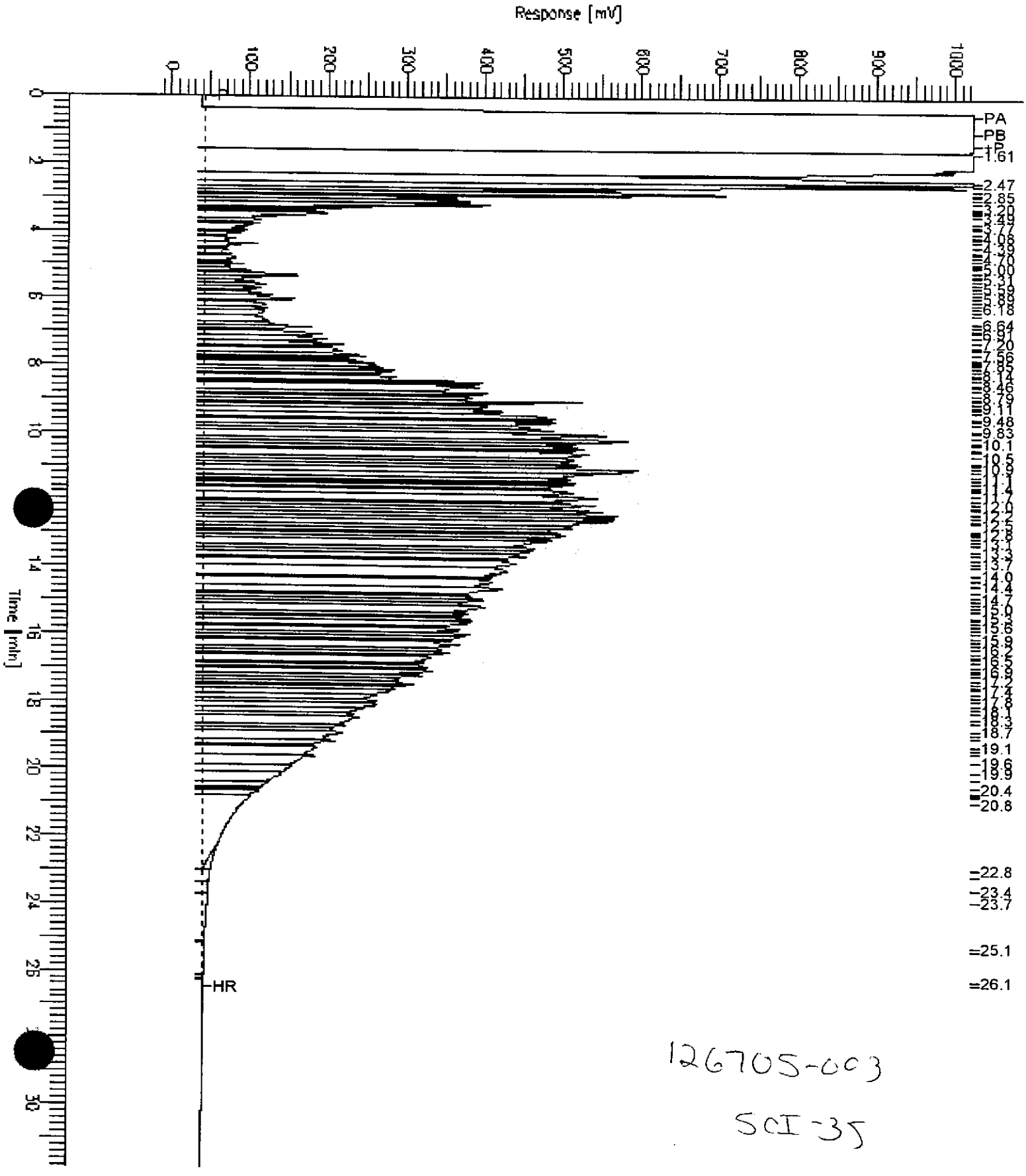
126705-002

SCI - 33

GC15 Channel A TEH

Sample Name : 126705-003
FileName : G:\GC15\CHB\256B007.RAW
Method : 241TSH.MTH
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: -14 mV

Sample #: 29690 Page 1 of 1
Date : 9/13/96 08:44 AM
Time of Injection: 9/12/96 09:19 PM
Low Point : -13.98 mV High Point : 1024.00 mV
Plot Scale: 1038.0 mV



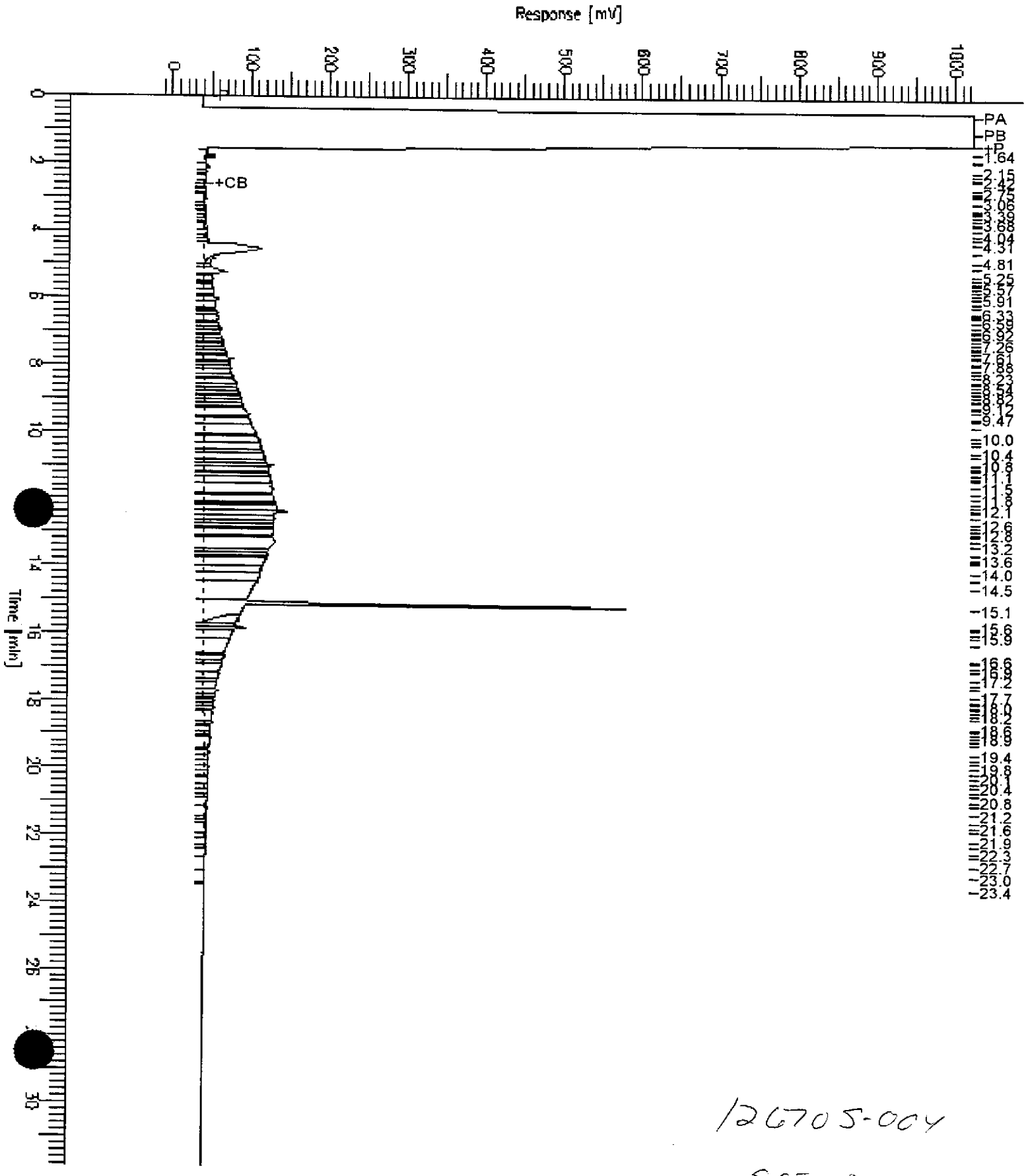
126705-003

SCI-35

GC15 Channel A TEH

Sample Name : 126705-004
FileName : G:\GC15\CHB\256B008.RAW
Method : 241TEH.MTH
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: -14 mV

Sample #: 29690 Page 1 of 1
Date : 9/13/96 08:46 AM
Time of Injection: 9/12/96 10:02 PM
Low Point : -14.41 mV High Point : 1024.00 mV
Plot Scale: 1038.4 mV



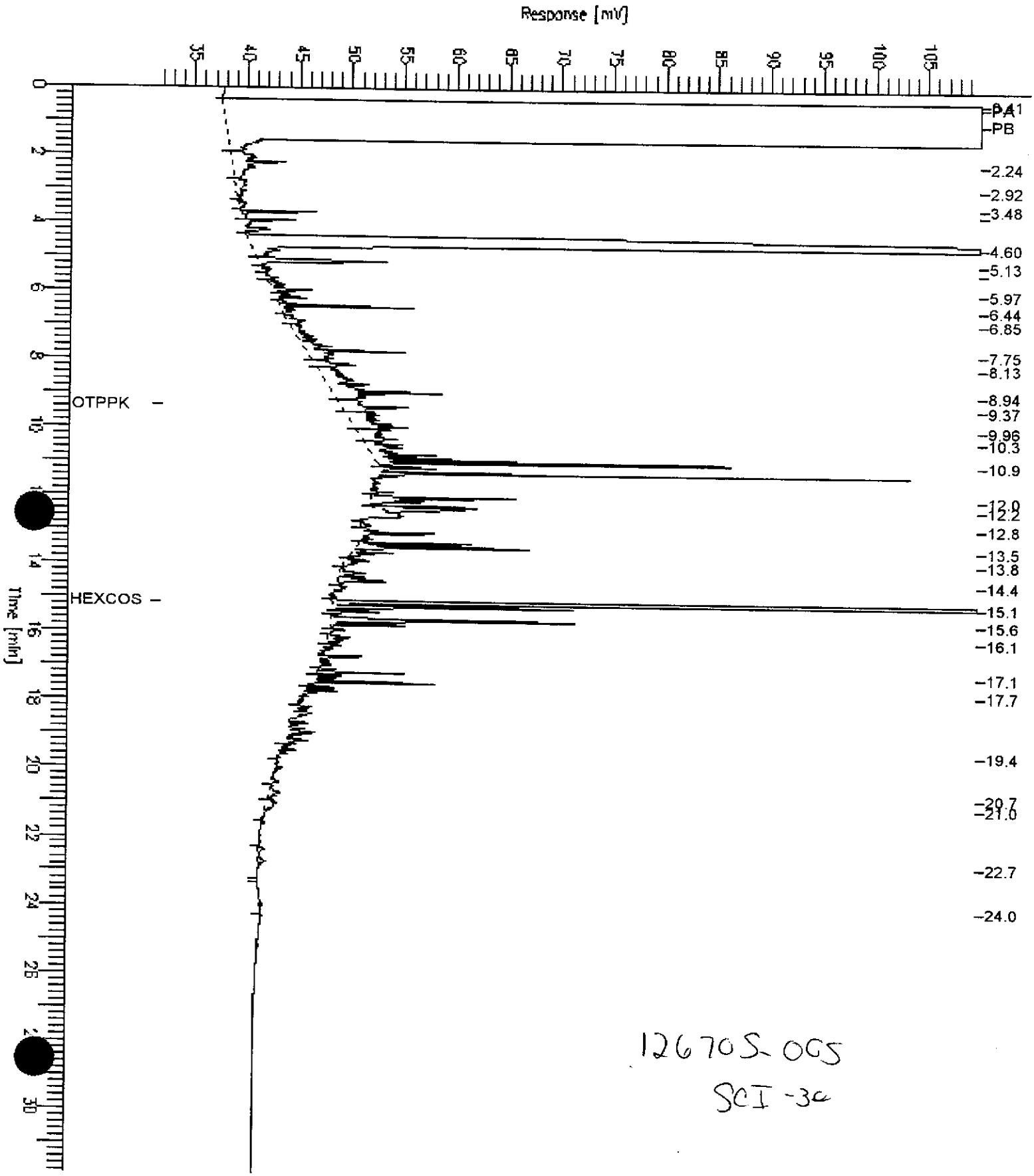
126705-004

SCT - 3r

GC15 Channel B Surrogate

Sample Name : 126705-005
FileName : G:\GC15\CHB\256B009.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: 32 mV

Sample #: 29690 Page 1 of 1
Date : 9/12/96 11:20 PM
Time of Injection: 9/12/96 10:45 PM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV

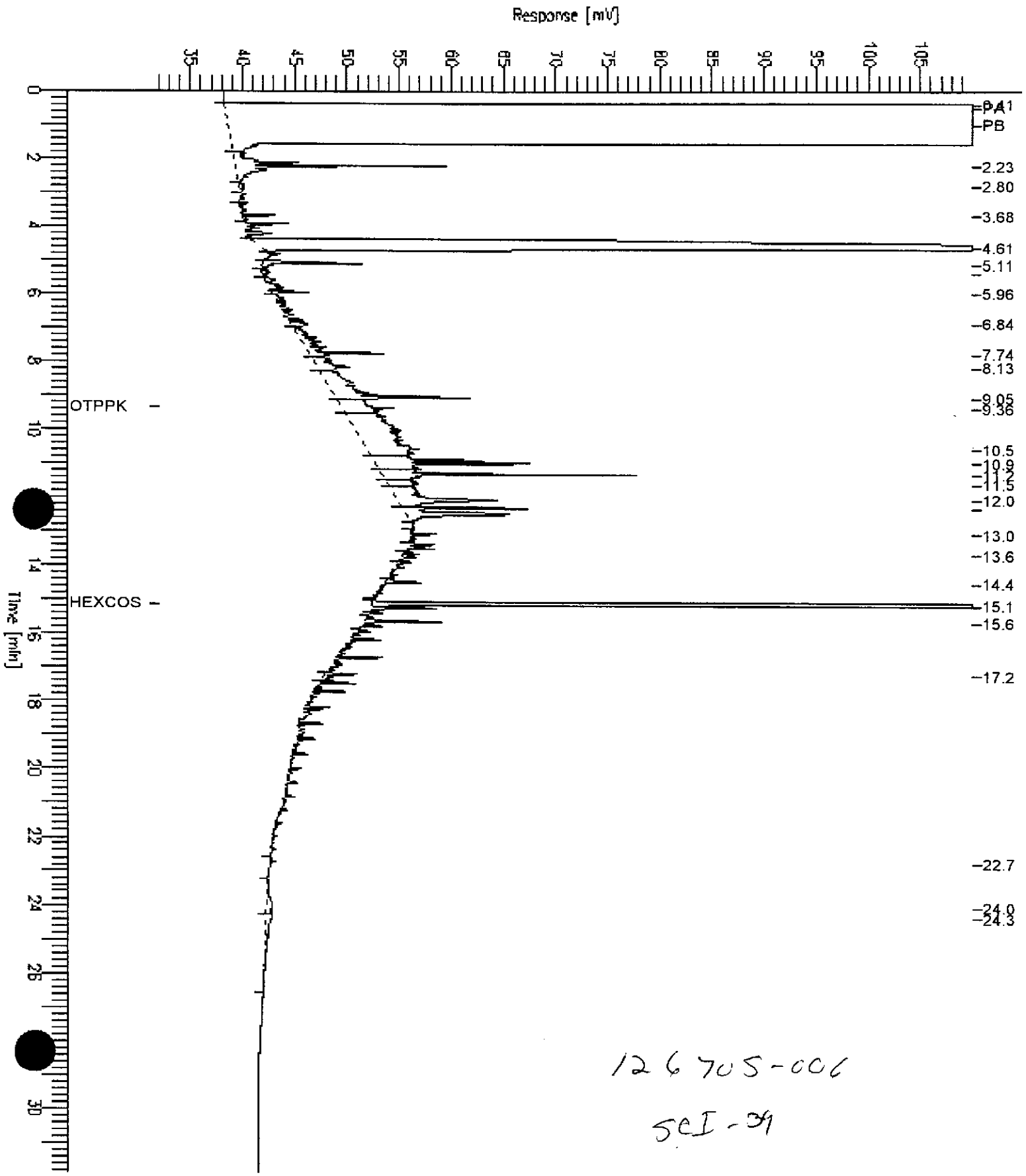


126705-005
SCI -3a

GC15 Channel B Surrogate

Sample Name : 126705-006
FileName : G:\GC15\CHB\256B010.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: 32 mV

Sample #: 29690 Page 1 of 1
Date : 9/13/96 12:04 AM
Time of Injection: 9/12/96 11:29 PM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV



126705-006

SEI-09

Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/09/96
Batch#:	29690	Analysis Date:	09/11/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC29965

Analyte	Result
Diesel C12-C22	<50
Motor Oil C22-C50	<250

Surrogate	%Rec	Recovery Limits
Hexacosane	109	60-140

Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29690
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

BS Lab ID: QC29966

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1919	78	60-140
Surrogate	%Rec	Limits		
Hexacosane	109	60-140		

BSD Lab ID: QC29967

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1768	71	60-140	8	35
Surrogate	%Rec	Limits				
Hexacosane	99	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

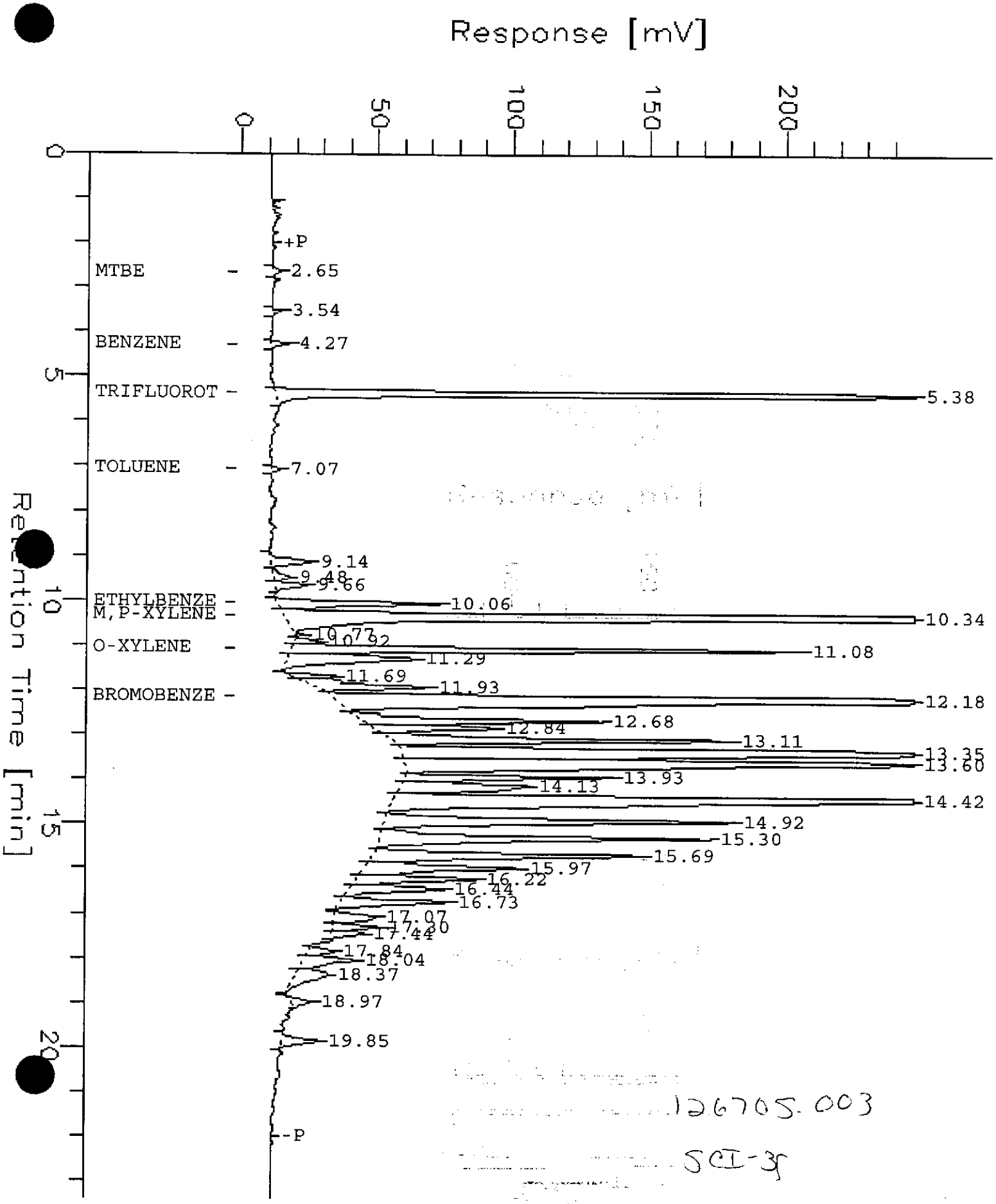
Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126705-003	SCI-35	29503	08/29/96	09/02/96	09/02/96	
126705-004	SCI-36	29503	08/30/96	09/02/96	09/02/96	

Matrix: Water

Analyte	Units	126705-003	126705-004
Diln Fac:		10	1
Benzene	ug/L	<5	<0.5
Toluene	ug/L	<5	<0.5
Ethylbenzene	ug/L	120	<0.5
m,p-Xylenes	ug/L	1600	<0.5
o-Xylene	ug/L	300	<0.5
Surrogate			
Trifluorotoluene	%REC	102	101
Bromobenzene	%REC	97	93

BTXE2 - GC-05 RTX-1

FileName : G:\GC05\245G025.raw
Start Time : 0.00 min
Scale Factor: -1
End Time : 23.42 min
Plot Offset: -2 mV
Date : 9/2/96 2:41 PM
Low Point : -1.83 mV
Plot Scale: 250 mV
Page 1 of 1
High Point : 248.17 mV



126705.003

SCI-3

Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29503
Units: ug/L
Diln Fac: 1

Prep Date: 09/01/96
Analysis Date: 09/01/96

MB Lab ID: QC29331

Analyte	Result
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	100	58-130
Bromobenzene	86	62-131

Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29503
Units: ug/L
Diln Fac: 1

Prep Date: 09/01/96
Analysis Date: 09/01/96

LCS Lab ID: QC29333

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	19.3	20	97	80-120
Toluene	18.2	20	91	80-120
Ethylbenzene	18.7	20	94	80-120
m,p-Xylenes	48.1	40	120	80-120
o-Xylene	18.6	20	93	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	101	58-130
Bromobenzene	88	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126703-001
Matrix: Water
Batch#: 29503
Units: ug/L
Diln Fac: 1

Sample Date: 08/30/96
Received Date: 08/30/96
Prep Date: 09/02/96
Analysis Date: 09/02/96

MS Lab ID: QC29334

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	20	<0.5	20.4	102	75-125
Toluene	20	<0.5	18.9	95	75-125
Ethylbenzene	20	<0.5	19.3	97	75-125
m,p-Xylenes	40	<0.5	49	123	75-125
o-Xylene	20	<0.5	19.3	97	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	99	58-130
Bromobenzene	90	62-131

MSD Lab ID: QC29335

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	20	20.5	103	75-125	1	20
Toluene	20	18.9	95	75-125	0	20
Ethylbenzene	20	19.2	96	75-125	1	20
m,p-Xylenes	40	48.6	122	75-125	1	20
o-Xylene	20	19.3	97	75-125	0	20

Surrogate	%Rec	Limits
Trifluorotoluene	100	58-130
Bromobenzene	90	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-32
Lab ID: 126705-001
Matrix: Water
Batch#: 29555
Units: ug/L
Diln Fac: 1.67

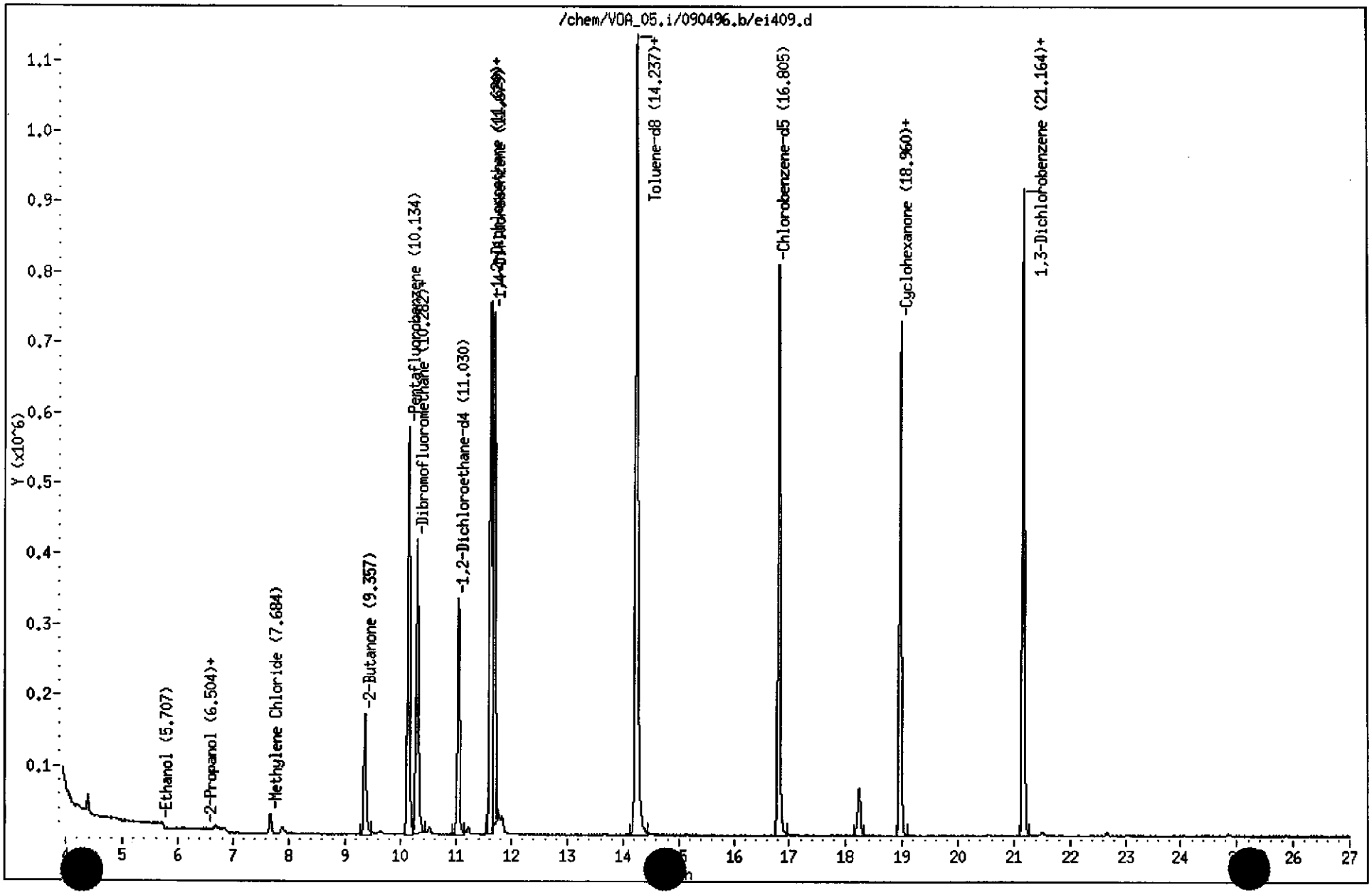
Sampled: 08/29/96
Received: 08/30/96
Extracted: 09/04/96
Analyzed: 09/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	17
Bromomethane	ND	17
Vinyl Chloride	ND	17
Chloroethane	ND	17
Methylene Chloride	ND	33
Acetone	ND	33
Carbon Disulfide	ND	8.3
Trichlorofluoromethane	ND	8.3
1,1-Dichloroethene	ND	8.3
1,1-Dichloroethane	ND	8.3
trans-1,2-Dichloroethene	ND	8.3
cis-1,2-Dichloroethene	ND	8.3
Chloroform	ND	8.3
Freon 113	ND	8.3
1,2-Dichloroethane	ND	8.3
2-Butanone	240	17
1,1,1-Trichloroethane	ND	8.3
Carbon Tetrachloride	ND	8.3
Vinyl Acetate	ND	83
Bromodichloromethane	ND	8.3
1,2-Dichloropropane	ND	8.3
cis-1,3-Dichloropropene	ND	8.3
Trichloroethene	ND	8.3
Dibromochloromethane	ND	8.3
1,1,2-Trichloroethane	ND	8.3
Benzene	ND	8.3
trans-1,3-Dichloropropene	ND	8.3
Bromoform	ND	8.3
2-Hexanone	ND	17
4-Methyl-2-Pentanone	ND	17
1,1,2,2-Tetrachloroethane	ND	8.3
Tetrachloroethene	ND	8.3
Toluene	ND	8.3
Chlorobenzene	ND	8.3
Ethylbenzene	ND	8.3
Styrene	ND	8.3
m,p-Xylenes	ND	8.3
o-Xylene	ND	8.3

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	95	79-122

Data File: /chem/VOA_05.i/090496.b/ei409.d
Date : 04-SEP-1996 12:33
Client ID: DYNA P&T
Sample Info: S,126705-001
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DM
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-33
Lab ID: 126705-002
Matrix: Water
Batch#: 29516
Units: ug/L
Diln Fac: 1

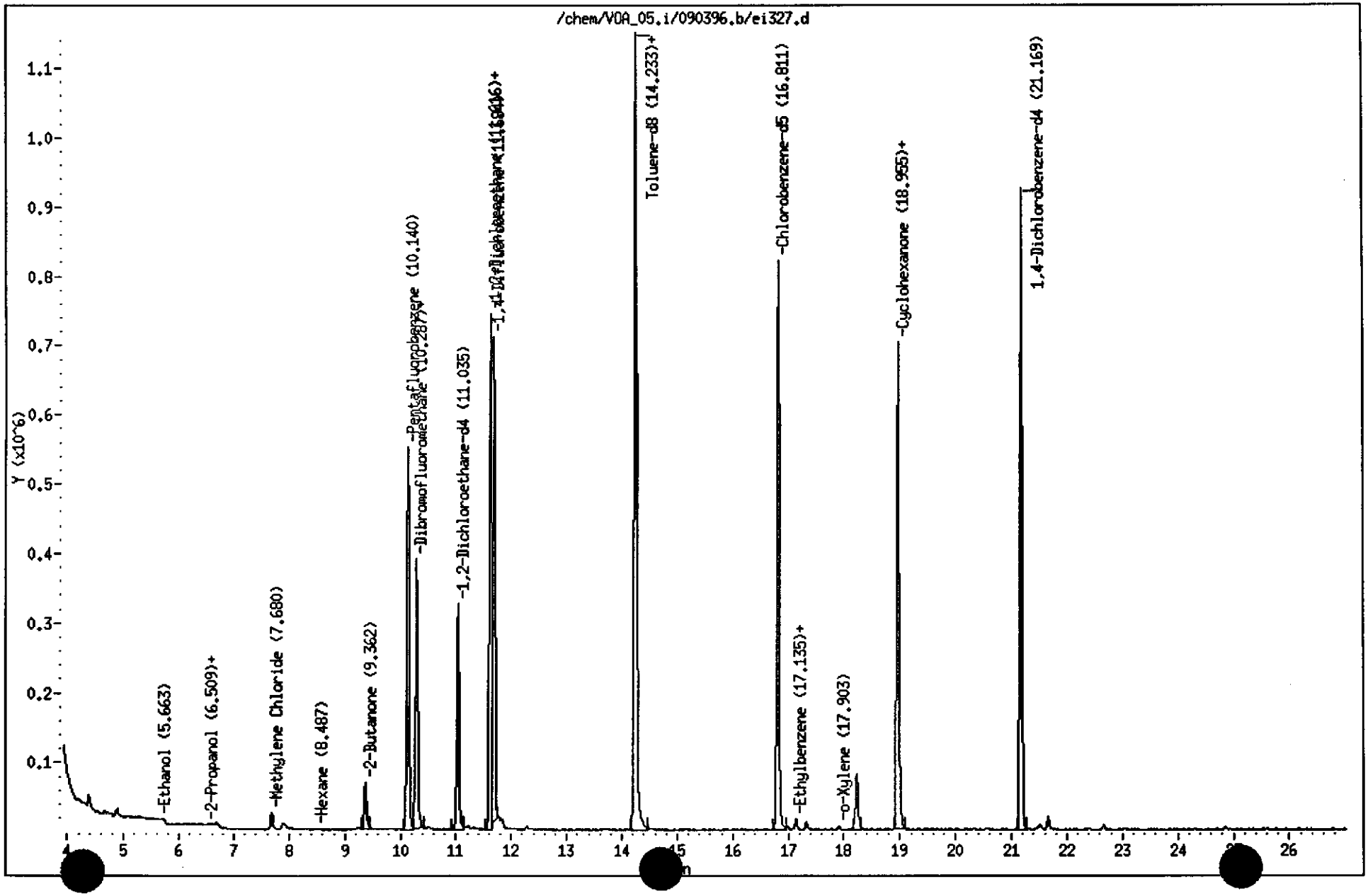
Sampled: 08/29/96
Received: 08/30/96
Extracted: 09/03/96
Analyzed: 09/03/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	58	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	100	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	95	79-122

Data File: /chem/VOA_05.i/090396.b/ei327.d
Date : 03-SEP-1996 22:24
Client ID: DYNA P&T
Sample Info: S,126705-002
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DM
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-38
Lab ID: 126705-005
Matrix: Water
Batch#: 29555
Units: ug/L
Diln Fac: 1

Sampled: 08/30/96
Received: 08/30/96
Extracted: 09/04/96
Analyzed: 09/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	100	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	96	79-122

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-39
Lab ID: 126705-006
Matrix: Water
Batch#: 29516
Units: ug/L
Diln Fac: 1

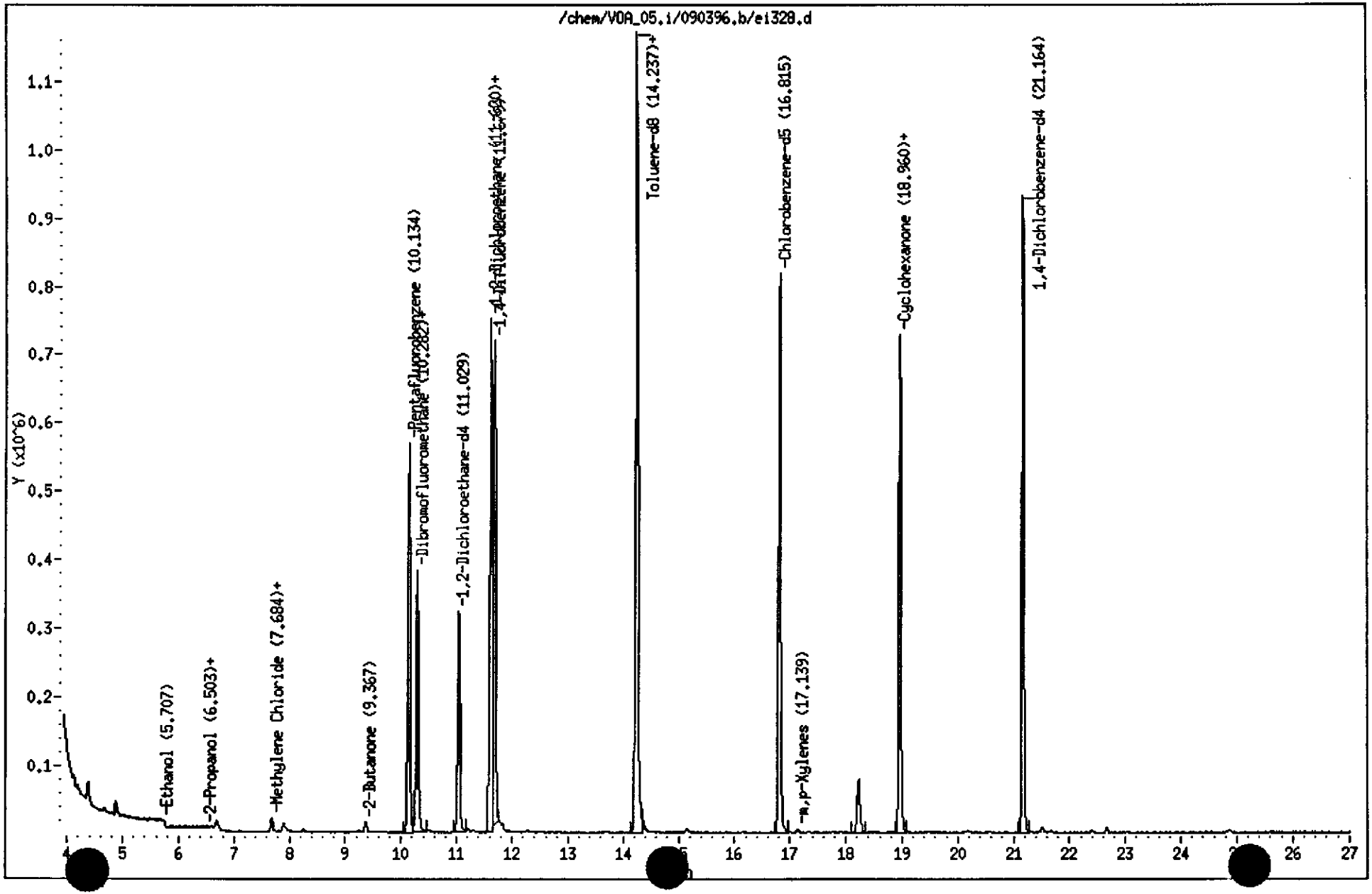
Sampled: 08/30/96
Received: 08/30/96
Extracted: 09/03/96
Analyzed: 09/03/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	13	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	101	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	96	79-122

Data File: /chem/VOA_05.i/090396.b/ei328.d
Date : 03-SEP-1996 22:57
Client ID: DYNA P&T
Sample Info: S,126705-006
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i
Operator: DM
Column diameter: 0.32



Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29516
Units: ug/L
Diln Fac: 1

Prep Date: 09/03/96
Analysis Date: 09/03/96

MB Lab ID: QC29356

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	96	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	97	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29516
Units: ug/L
Diln Fac: 1

Prep Date: 09/03/96
Analysis Date: 09/03/96

MB Lab ID: QC29368

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	96	79-122

Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29555
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/04/96

MB Lab ID: QC29471

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	96	79-122

Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29516
Units: ug/L
Diln Fac: 1

Prep Date: 09/03/96
Analysis Date: 09/03/96

LCS Lab ID: QC29355

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	49.73	50	100	51-180
Trichloroethene	48.75	50	98	73-141
Benzene	50.21	50	100	78-142
Toluene	49.94	50	100	76-150
Chlorobenzene	49.84	50	100	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	93	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	95	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29555
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/04/96

LCS Lab ID: QC29470

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	49.73	50	100	51-180
Trichloroethene	47.81	50	96	73-141
Benzene	49.24	50	99	78-142
Toluene	46.63	50	93	76-150
Chlorobenzene	49.1	50	98	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	93	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	94	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126705 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126700-001
Matrix: Water
Batch#: 29516
Units: ug/L
Diln Fac: 1

Sample Date: 08/29/96
Received Date: 08/30/96
Prep Date: 09/03/96
Analysis Date: 09/03/96

MS Lab ID: QC29365

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	0	46.86	94	51-180
Trichloroethene	50	0	46.35	93	73-141
Benzene	50	0	48.36	97	78-142
Toluene	50	0	47.63	95	76-150
Chlorobenzene	50	0	47.48	95	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	95	79-122

MSD Lab ID: QC29366

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	47.3	95	51-180	1	14
Trichloroethene	50	45.88	92	73-141	1	14
Benzene	50	47.83	96	78-142	1	11
Toluene	50	45.78	92	76-150	4	13
Chlorobenzene	50	47.5	95	83-129	0	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	101	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	95	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCI-38
Lab ID: 126705-005
Matrix: Water
Batch#: 29555
Units: ug/L
Diln Fac: 1

Sample Date: 08/30/96
Received Date: 08/30/96
Prep Date: 09/04/96
Analysis Date: 09/04/96

MS Lab ID: QC29480

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	45.83	92	51-180
Trichloroethene	50	<5	46.75	94	73-141
Benzene	50	<5	48.23	96	78-142
Toluene	50	<5	46.37	92	76-150
Chlorobenzene	50	<5	47.89	96	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	94	79-122

MSD Lab ID: QC29481

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	44.36	89	51-180	3	14
Trichloroethene	50	44.93	90	73-141	4	14
Benzene	50	47.21	94	78-142	2	11
Toluene	50	43.99	87	76-150	5	13
Chlorobenzene	50	46.61	93	83-129	3	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	95	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-32
Lab ID: 126705-001
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/30/96
Extracted: 09/04/96
Analyzed: 09/09/96

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	50
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10

Semivolatile Organics by GC/MS

Field ID:	SCI-32	Sampled:	08/29/96
Lab ID:	126705-001	Received:	08/30/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/09/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	51	21-110
Phenol-d5	64	10-110
2,4,6-Tribromophenol	54	10-123
Nitrobenzene-d5	58	35-114
2-Fluorobiphenyl	61	43-116
Terphenyl-d14	46	33-141

Data File: /chem/bna02.i/090996x.b/06_6705-001.d
Report Date: 10-Sep-1996 11:41

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126705-001
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

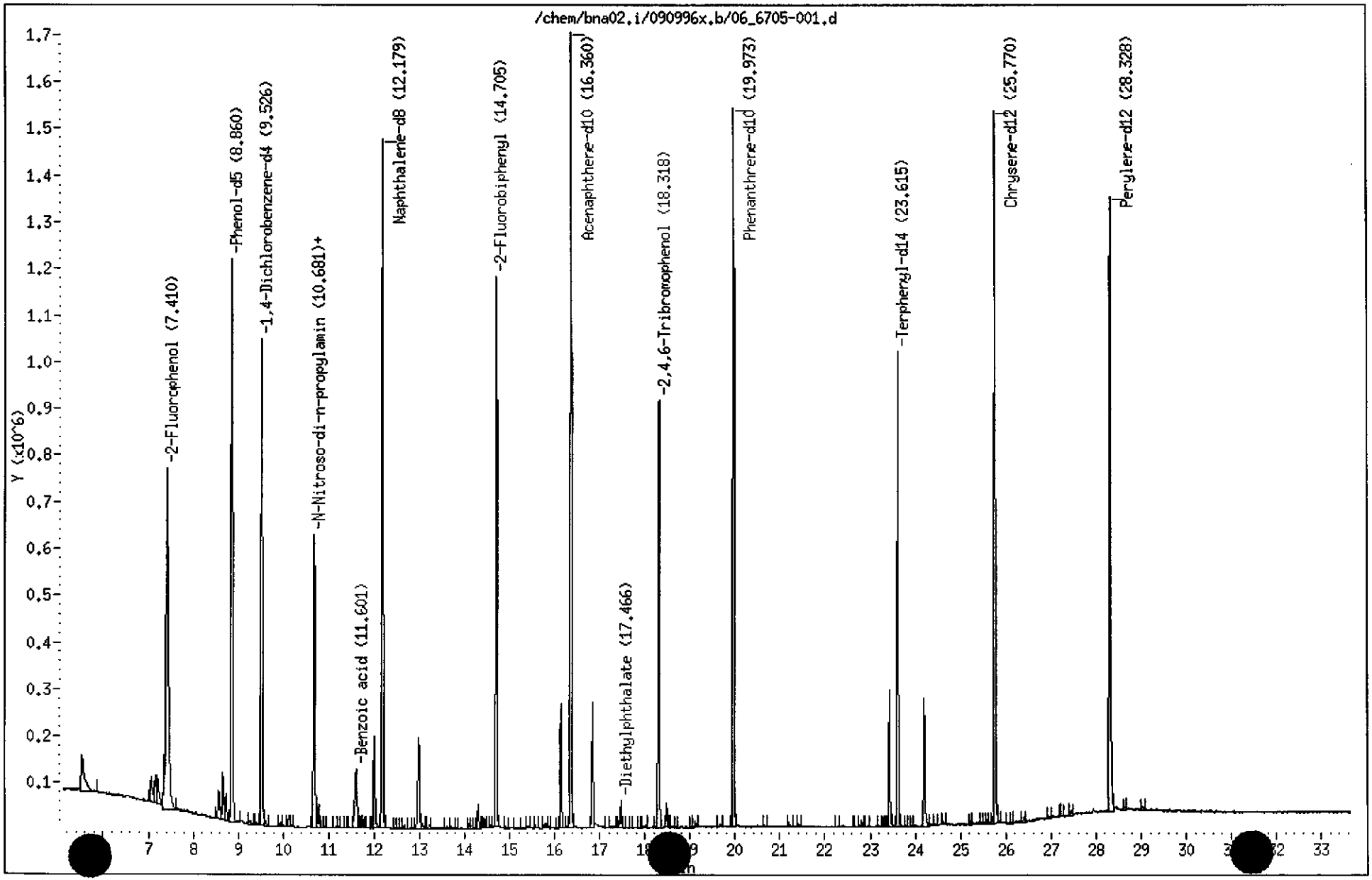
Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	4254-15-3	(S)-(+)-1,2-Propanediol	5.540	7.25	NJ
2.	1462-03-9	Cyclopentanol, 1-methyl-	8.654	4.24	NJ
3.	112-34-5	Ethanol, 2-(2-butoxyethoxy)	11.993	5.31	NJ
4.	112-05-0	Nonanoic acid	12.982	6.83	NJ
5.	4501-58-0	3-Cyclopentene-1-acetaldehy	16.134	5.27	NJ
6.	143-07-7	Dodecanoic acid	16.839	6.67	NJ
7.	80-05-7	Phenol, 4,4'-(1-methylethyl	23.428	6.55	NJ
8.	55669-84-6	1-Aziridineacetic acid, 2-m	24.202	7.56	NJ

Data File: /chem/bna02.i/090996x.b/06_6705-001.d
Date : 09-SEP-1996 16:59
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i
Operator: dsh
Column diameter: 0.25



Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-33
Lab ID: 126705-002
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/29/96
Received: 08/30/96
Extracted: 09/04/96
Analyzed: 09/09/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-33	Sampled:	08/29/96
Lab ID:	126705-002	Received:	08/30/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/09/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	45	21-110
Phenol-d5	67	10-110
2,4,6-Tribromophenol	46	10-123
Nitrobenzene-d5	61	35-114
2-Fluorobiphenyl	47	43-116
Terphenyl-d14	7*	33-141

* Values outside of QC limits

Data File: /chem/bna02.i/090996x.b/07_6705-002.d
Report Date: 10-Sep-1996 10:12

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126705-002
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

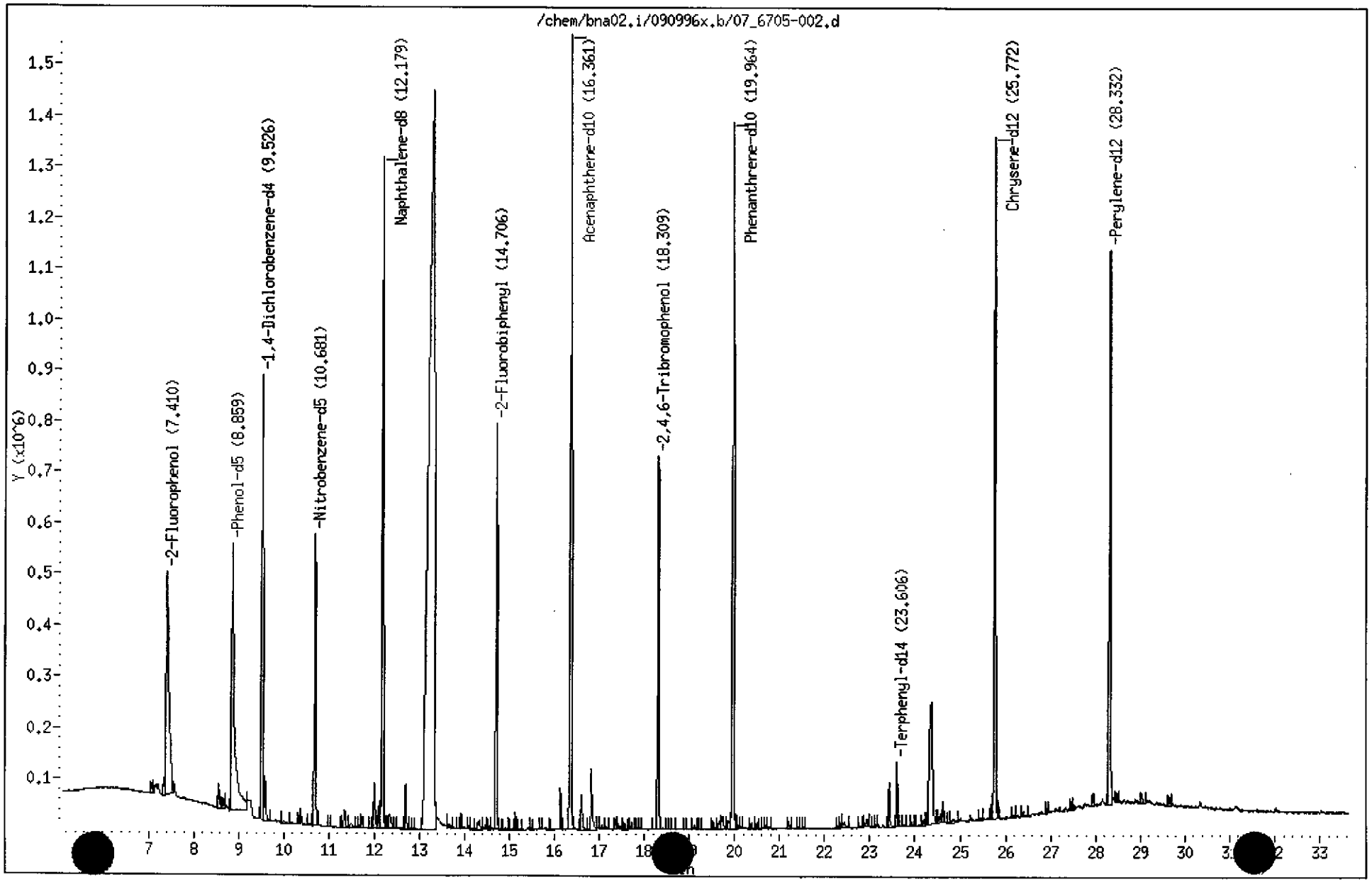
Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~104-76-7~~	~~1-Hexanol, 2-ethyl-~~ Unk	9.594	4.30	NJ
2.	105-60-2	~~Caprolactam~~ ✓ (unk) 49%	13.306	173.76	NJ
3.	0-00-0	~~Diptych(boroxazolidin), B-e~~ unk	24.370	16.06	NJ

Data File: /chem/bna02.i/090996x.b/07_6705-002.d
Date : 09-SEP-1996 17:40
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i
Operator: dsh
Column diameter: 0.25



Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-38
Lab ID: 126705-005
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/30/96
Received: 08/30/96
Extracted: 09/04/96
Analyzed: 09/09/96

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	50
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10

Semivolatile Organics by GC/MS

Field ID:	SCI-38	Sampled:	08/30/96
Lab ID:	126705-005	Received:	08/30/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/09/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	14	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	32	21-110
Phenol-d5	62	10-110
2,4,6-Tribromophenol	53	10-123
Nitrobenzene-d5	59	35-114
2-Fluorobiphenyl	63	43-116
Terphenyl-d14	50	33-141

Data File: /chem/bna02.i/090996x.b/08_6705-005.d
Report Date: 10-Sep-1996 10:12

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126705-005
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

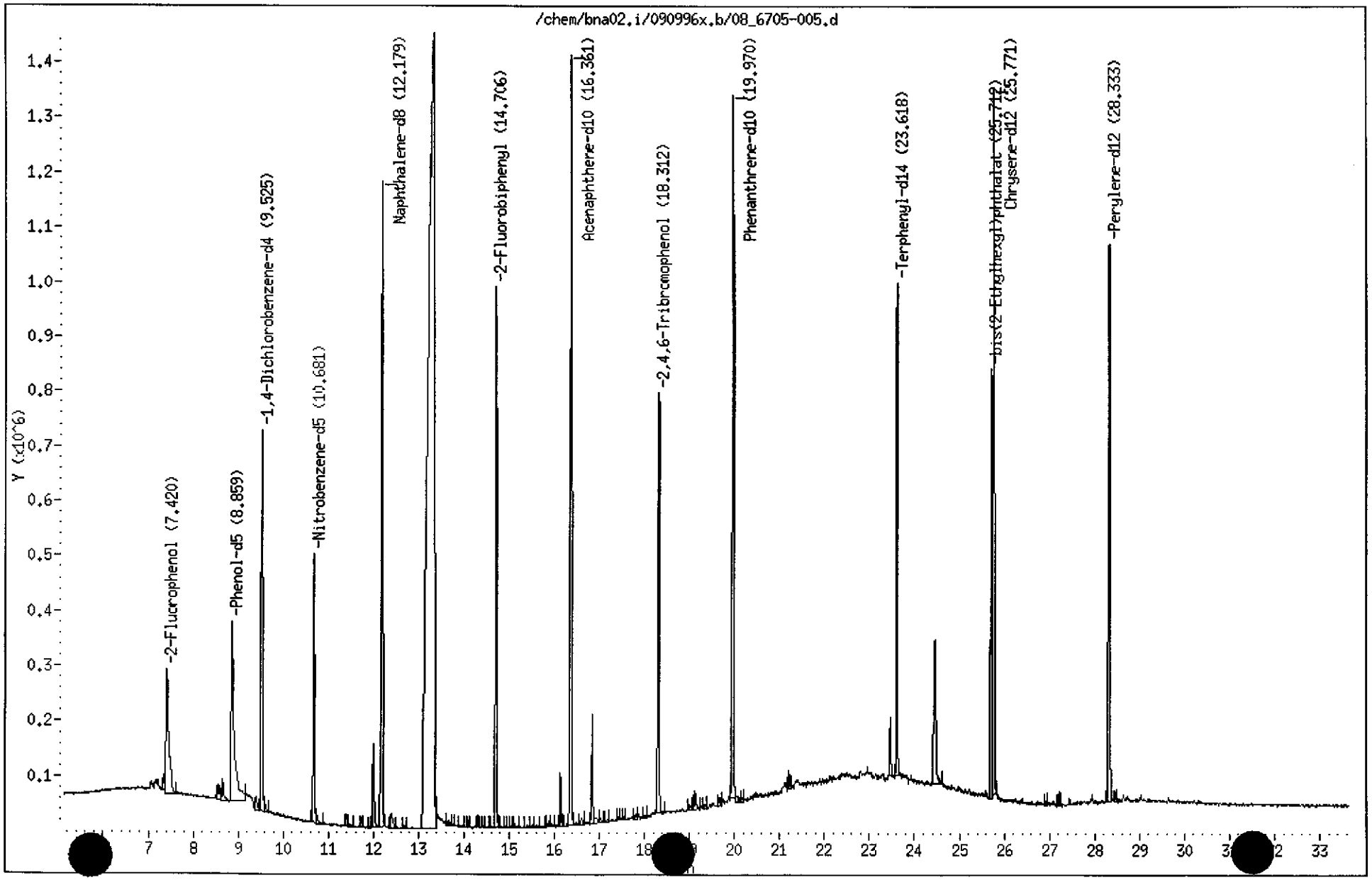
Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	112-34-5	Ethanol, 2-(2-butoxyethoxy)	11.992	5.02	NJ
2.	105-60-2	Caprolactam	13.325	226.70	NJ
3.	143-07-7	Dodecanoic acid	16.841	6.10	NJ
4.	0-00-0	Diptych(boroxazolidin), B-e	24.464	13.91	NJ

Data File: /chem/bna02.i/090996x.b/08_6705-005.d
Date : 09-SEP-1996 18:24
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i
Operator: dsh
Column diameter: 0.25



Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-39
Lab ID: 126705-006
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/30/96
Received: 08/30/96
Extracted: 09/04/96
Analyzed: 09/09/96

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	50
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10

Semivolatile Organics by GC/MS

Field ID:	SCI-39	Sampled:	08/30/96
Lab ID:	126705-006	Received:	08/30/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/09/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	27	21-110
Phenol-d5	59	10-110
2,4,6-Tribromophenol	52	10-123
Nitrobenzene-d5	59	35-114
2-Fluorobiphenyl	63	43-116
Terphenyl-d14	52	33-141

Data File: /chem/bna02.i/090996x.b/09_6705-006.d
Report Date: 10-Sep-1996 10:12

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126705-006
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

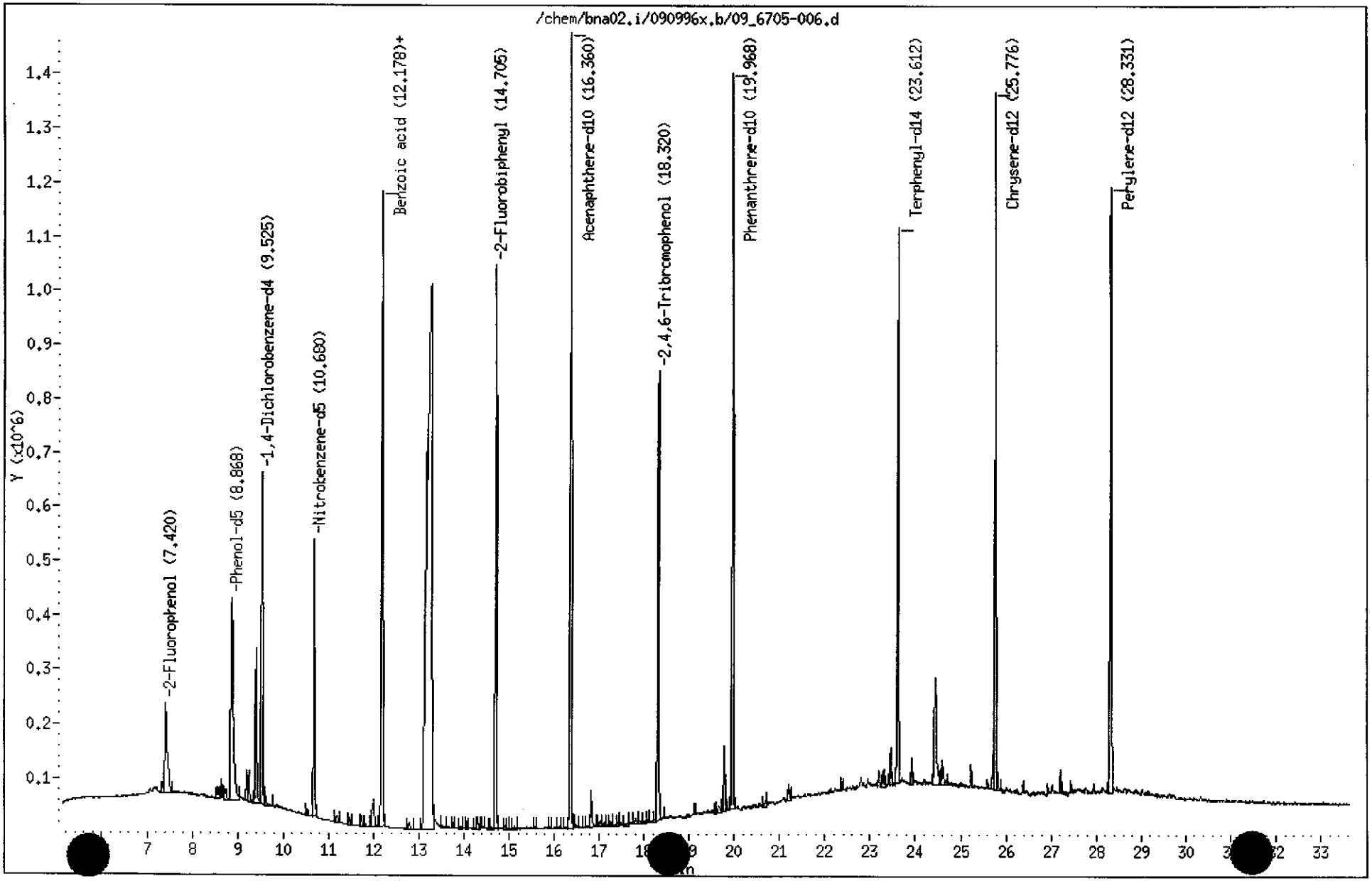
Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	9.241	4.09	J
2.	13429-07-7	2-Propanol, 1-(2-methoxypro	9.397	16.97	NJ
3.	105-60-2	Caprolactam	13.266	125.10	NJ
4.	3518-83-0	N-Ethyl-4-hydroxypiperidine	24.439	10.03	NJ

Data File: /chem/bna02.i/090996x.b/09_6705-006.d
Date : 09-SEP-1996 19:08
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i
Operator: dsh
Column diameter: 0.25



EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

MB Lab ID: QC29553

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	10
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

MB Lab ID: QC29553

Analyte	Result	Reporting Limit
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	72	21-110
Phenol-d5	75	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	65	35-114
2-Fluorobiphenyl	75	43-116
Terphenyl-d14	72	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

BS Lab ID: QC29554

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	50	75.06	75	12-110
2-Chlorophenol	50	76.99	77	27-123
4-Chloro-3-methylphenol	50	69.32	69	23-97
4-Nitrophenol	50	46.32	46	10-80
Pentachlorophenol	50	59.35	59	9-103
1,4-Dichlorobenzene	25	33.99	68	36-97
N-Nitroso-di-n-propylamine	25	33.09	66	41-116
1,2,4-Trichlorobenzene	25	34.37	69	39-98
Acenaphthene	25	36.06	72	46-118
2,4-Dinitrotoluene	25	33.1	66	24-96
Pyrene	25	34.66	69	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	79	21-110
Phenol-d5	80	10-110
2,4,6-Tribromophenol	65	10-123
Nitrobenzene-d5	73	35-114
2-Fluorobiphenyl	80	43-116
Terphenyl-d14	72	33-141

BSD Lab ID: QC29555

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	50	79.13	79	12-110	5	42
2-Chlorophenol	50	81.64	82	27-123	6	40
4-Chloro-3-methylphenol	50	73.85	74	23-97	7	42
4-Nitrophenol	50	50.35	50	10-80	8	50
Pentachlorophenol	50	64.92	65	9-103	10	50
1,4-Dichlorobenzene	25	35.57	71	36-97	4	28
N-Nitroso-di-n-propylamine	25	35.21	70	41-116	6	38
1,2,4-Trichlorobenzene	25	36.04	72	39-98	4	28
Acenaphthene	25	38.35	77	46-118	7	31
2,4-Dinitrotoluene	25	35.42	71	24-96	7	38
Pyrene	25	37.49	75	26-127	8	31

Surrogate	%Rec	Limits
2-Fluorophenol	83	21-110
Phenol-d5	84	10-110
2,4,6-Tribromophenol	67	10-123
Nitrobenzene-d5	80	35-114
2-Fluorobiphenyl	83	43-116
Terphenyl-d14	77	33-141

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-32	Sampled:	08/29/96
Lab ID:	126705-001	Received:	08/30/96
Matrix:	Water	Extracted:	09/05/96
Batch#:	29615	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	44*	60-150
Decachlorobiphenyl	33	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-33	Sampled:	08/29/96
Lab ID:	126705-002	Received:	08/30/96
Matrix:	Water	Extracted:	09/05/96
Batch#:	29615	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	31*	60-150
Decachlorobiphenyl	17*	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-38	Sampled:	08/30/96
Lab ID:	126705-005	Received:	08/30/96
Matrix:	Water	Extracted:	09/05/96
Batch#:	29615	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	61	60-150
Decachlorobiphenyl	27*	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-39	Sampled:	08/30/96
Lab ID:	126705-006	Received:	08/30/96
Matrix:	Water	Extracted:	09/05/96
Batch#:	29615	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	69	60-150
Decachlorobiphenyl	19*	30-130

* Values outside of QC limits

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29615
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/10/96

MB Lab ID: QC29704

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Rec	Recovery Limits
TCMX	70	60-150
Decachlorobiphenyl	78	30-130

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29615
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/10/96

BS Lab ID: QC29705

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.35	87	50-128

Surrogate	%Rec	Limits
TCMX	60	60-150
Decachlorobiphenyl	74	30-130

BSD Lab ID: QC29706

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.45	89	50-128	2	20

Surrogate	%Rec	Limits
TCMX	65	60-150
Decachlorobiphenyl	69	30-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-32
LAB ID: 126705-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/29/96
DATE RECEIVED: 08/30/96
DATE REPORTED: 09/16/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29643	EPA 6010A	09/10/96
Arsenic	11	5.0	1	29643	EPA 6010A	09/10/96
Barium	210	10	1	29643	EPA 6010A	09/10/96
Beryllium	3.2	2.0	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2.0	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	1	29643	EPA 6010A	09/10/96
Cobalt	64	20	1	29643	EPA 6010A	09/10/96
Copper	ND	10	1	29643	EPA 6010A	09/10/96
Lead	ND	3.0	1	29643	EPA 6010A	09/10/96
Mercury	ND	0.20	1	29731	EPA 7470	09/11/96
Molybdenum	ND	20	1	29643	EPA 6010A	09/10/96
Nickel	51	20	1	29643	EPA 6010A	09/10/96
Selenium	9.9	5.0	1	29643	EPA 6010A	09/10/96
Silver	ND	5.0	1	29643	EPA 6010A	09/10/96
Thallium	ND	5.0	1	29643	EPA 6010A	09/10/96
Vanadium	ND	10	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	1	29643	EPA 6010A	09/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-33
LAB ID: 126705-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/29/96
DATE RECEIVED: 08/30/96
DATE REPORTED: 09/16/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29643	EPA 6010A	09/10/96
Arsenic	29	5.0	1	29643	EPA 6010A	09/10/96
Barium	390	10	1	29643	EPA 6010A	09/10/96
Beryllium	ND	2.0	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2.0	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	1	29643	EPA 6010A	09/10/96
Cobalt	ND	20	1	29643	EPA 6010A	09/10/96
Copper	ND	10	1	29643	EPA 6010A	09/10/96
Lead	ND	3.0	1	29643	EPA 6010A	09/10/96
Mercury	ND	0.20	1	29731	EPA 7470	09/11/96
Molybdenum	38	20	1	29643	EPA 6010A	09/10/96
Nickel	80	20	1	29643	EPA 6010A	09/10/96
Selenium	16	5.0	1	29643	EPA 6010A	09/10/96
Silver	ND	5.0	1	29643	EPA 6010A	09/10/96
Thallium	ND	5.0	1	29643	EPA 6010A	09/10/96
Vanadium	ND	10	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	1	29643	EPA 6010A	09/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-38
LAB ID: 126705-005
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/30/96
DATE RECEIVED: 08/30/96
DATE REPORTED: 09/16/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29643	EPA 6010A	09/10/96
Arsenic	21	5.0	1	29643	EPA 6010A	09/10/96
Barium	1800	10	1	29643	EPA 6010A	09/10/96
Beryllium	2.4	2.0	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2.0	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	1	29643	EPA 6010A	09/10/96
Cobalt	ND	20	1	29643	EPA 6010A	09/10/96
Copper	ND	10	1	29643	EPA 6010A	09/10/96
Lead	ND	3.0	1	29643	EPA 6010A	09/10/96
Mercury	ND	0.20	1	29731	EPA 7470	09/11/96
Molybdenum	ND	20	1	29643	EPA 6010A	09/10/96
Nickel	ND	20	1	29643	EPA 6010A	09/10/96
Selenium	28	5.0	1	29643	EPA 6010A	09/10/96
Silver	ND	5.0	1	29643	EPA 6010A	09/10/96
Thallium	ND	5.0	1	29643	EPA 6010A	09/10/96
Vanadium	11	10	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	1	29643	EPA 6010A	09/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-39
LAB ID: 126705-006
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/30/96
DATE RECEIVED: 08/30/96
DATE REPORTED: 09/16/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29643	EPA 6010A	09/10/96
Arsenic	10	5.0	1	29643	EPA 6010A	09/10/96
Barium	89	10	1	29643	EPA 6010A	09/10/96
Beryllium	3.0	2.0	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2.0	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	1	29643	EPA 6010A	09/10/96
Cobalt	ND	20	1	29643	EPA 6010A	09/10/96
Copper	ND	10	1	29643	EPA 6010A	09/10/96
Lead	ND	3.0	1	29643	EPA 6010A	09/10/96
Mercury	ND	0.20	1	29731	EPA 7470	09/11/96
Molybdenum	ND	20	1	29643	EPA 6010A	09/10/96
Nickel	20	20	1	29643	EPA 6010A	09/10/96
Selenium	21	5.0	1	29643	EPA 6010A	09/10/96
Silver	ND	5.0	1	29643	EPA 6010A	09/10/96
Thallium	ND	5.0	1	29643	EPA 6010A	09/10/96
Vanadium	ND	10	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	1	29643	EPA 6010A	09/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126705

DATE REPORTED: 09/16/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	29643	EPA 6010A	09/10/96
Arsenic	ND	5	ug/L	1	29643	EPA 6010A	09/10/96
Barium	ND	10	ug/L	1	29643	EPA 6010A	09/10/96
Beryllium	ND	2	ug/L	1	29643	EPA 6010A	09/10/96
Cadmium	ND	2	ug/L	1	29643	EPA 6010A	09/10/96
Chromium (total)	ND	10	ug/L	1	29643	EPA 6010A	09/10/96
Cobalt	ND	20	ug/L	1	29643	EPA 6010A	09/10/96
Copper	ND	10	ug/L	1	29643	EPA 6010A	09/10/96
Lead	ND	3	ug/L	1	29643	EPA 6010A	09/10/96
Mercury	ND	0.2	ug/L	1	29731	EPA 7470	09/11/96
Molybdenum	ND	20	ug/L	1	29643	EPA 6010A	09/10/96
Nickel	ND	20	ug/L	1	29643	EPA 6010A	09/10/96
Selenium	ND	5	ug/L	1	29643	EPA 6010A	09/10/96
Silver	ND	5	ug/L	1	29643	EPA 6010A	09/10/96
Thallium	ND	5	ug/L	1	29643	EPA 6010A	09/10/96
Vanadium	ND	10	ug/L	1	29643	EPA 6010A	09/10/96
Zinc	ND	20	ug/L	1	29643	EPA 6010A	09/10/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126705

DATE REPORTED: 09/16/96

BATCH QC REPORT
LABORATORY CONTROL SAMPLE

Compound	Spike Amt	Result	Units	% Rec.	QC Batch	Method	Analysis Date
Antimony	500	478	ug/L	96	29643	EPA 6010A	09/10/96
Arsenic	2000	1940	ug/L	97	29643	EPA 6010A	09/10/96
Barium	2000	2010	ug/L	101	29643	EPA 6010A	09/10/96
Beryllium	50	50.6	ug/L	101	29643	EPA 6010A	09/10/96
Cadmium	50	52.9	ug/L	106	29643	EPA 6010A	09/10/96
Chromium (total)	200	200	ug/L	100	29643	EPA 6010A	09/10/96
Cobalt	500	498	ug/L	100	29643	EPA 6010A	09/10/96
Copper	250	262	ug/L	105	29643	EPA 6010A	09/10/96
Lead	500	524	ug/L	105	29643	EPA 6010A	09/10/96
Molybdenum	400	409	ug/L	102	29643	EPA 6010A	09/10/96
Nickel	500	511	ug/L	102	29643	EPA 6010A	09/10/96
Selenium	2000	2060	ug/L	103	29643	EPA 6010A	09/10/96
Silver	100	93.4	ug/L	93	29643	EPA 6010A	09/10/96
Thallium	2000	2090	ug/L	105	29643	EPA 6010A	09/10/96
Vanadium	500	501	ug/L	100	29643	EPA 6010A	09/10/96
Zinc	500	479	ug/L	96	29643	EPA 6010A	09/10/96

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126705

DATE REPORTED: 09/16/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Mercury	5	5.06	5.412	ug/L	101	108	80-120	7	35	29731	EPA 7470	09/11/96

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126705

DATE REPORTED: 09/16/96

BATCH QC REPORT
SAMPLE DUPLICATE

Compound	Sample	Sample Result	Duplicate Result	Units	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	126700-001	<60.000	<60.000	ug/L	NC	20	29643	EPA 6010A	09/10/96
Arsenic	126700-001	17.3	17.3	ug/L	0	20	29643	EPA 6010A	09/10/96
Barium	126700-001	52.4	51.6	ug/L	2	20	29643	EPA 6010A	09/10/96
Beryllium	126700-001	2.15	2.08	ug/L	3	20	29643	EPA 6010A	09/10/96
Cadmium	126700-001	<2.000	<2.000	ug/L	NC	20	29643	EPA 6010A	09/10/96
Chromium (total)	126700-001	<10.000	<10.000	ug/L	NC	20	29643	EPA 6010A	09/10/96
Cobalt	126700-001	<20.000	<20.000	ug/L	NC	20	29643	EPA 6010A	09/10/96
Copper	126700-001	<10.000	<10.000	ug/L	NC	20	29643	EPA 6010A	09/10/96
Lead	126700-001	<3.000	<3.000	ug/L	NC	20	29643	EPA 6010A	09/10/96
Mercury	126699-001	<0.200	<0.200	ug/L	NC	20	29731	EPA 7470	09/11/96
Molybdenum	126700-001	53.2	51.7	ug/L	3	20	29643	EPA 6010A	09/10/96
Nickel	126700-001	<20.000	<20.000	ug/L	NC	20	29643	EPA 6010A	09/10/96
Selenium	126700-001	<5.000	6.07	ug/L	11	20	29643	EPA 6010A	09/10/96
Silver	126700-001	<5.000	<5.000	ug/L	NC	20	29643	EPA 6010A	09/10/96
Thallium	126700-001	<5.000	<5.000	ug/L	NC	20	29643	EPA 6010A	09/10/96
Vanadium	126700-001	<10.000	<10.000	ug/L	NC	20	29643	EPA 6010A	09/10/96
Zinc	126700-001	<20.000	<20.000	ug/L	NC	20	29643	EPA 6010A	09/10/96

NC = Not Calculable

Curtis & Tompkins, Ltd.

Corrective Action Report

2425

From: PCB- Lara Wheeling Client: Subsurface Consultants

Job #: _____ Date: 9-11-96 Time: _____

Sample Control	Subcontract	Organics	Metals	Gen. Chem.	Project Management
BREAKAGE	BREAKAGE	TAT	TAT	TAT	REPORT ERROR
VOLUME	LOST	HOLDING TIME	HOLDING TIME	HOLDING TIME	REVIEW ERROR
CONTAINER	VOLUME	QC LIMITS	QC LIMITS	QC LIMITS	INVOICE ERROR
DOCUMENT	TAT	DILUTION	DILUTION	DILUTION	JOB JACKET ERROR
PRESERVATION	HOLDING TIME	WORKSHEET	WORKSHEET	WORKSHEET	COMM. ERROR
LOST	NARRATIVE	ANAL. NOTES	ANAL. NOTES	ANAL. NOTES	OTHER
OTHER	OTHER	OTHER	OTHER	OTHER	

Description of problem/nonconformance:

Sample 126693-001 in Batch 29513 and samples 126699-002, 126720-001, and 126705-002 in Batch 29615 all have Failing surrogates.

The limits are 60-150 / 30-130

126693-001	59%	27%
126699-002	47%	27%
126720-001	51%	25%
126705-002	31%	17%

Summary of corrective action(s):

(1a) Re-analyze → done

(1b) Re-extract to check for matrix effect.

126693-001	came up to passing	54% 35%
126699-002	came up to passing	65~~6~~% 31~~5~~%
126720-001	still Fails	24% 27%
126705-002	still Fails	48% 25%

	YES	NO	Resolver	Initials	Date
Is this a recurring problem?	___	___	X Analyst	LW	9-11-96
Should SOP be modified?	___	___	X Group Leader	CAH	9-16-96
Should training be given?	___	___	___ P.M.	___	___-___-___
Should customer be educated?	___	___	___ QA Officer	___	___-___-___
Should operations be changed?	___	___	___ Lab Director	___	___-___-___

CHAIN OF CUSTODY FORM

12/05

PAGE ___ OF ___

PROJECT NAME: KOT

JOB NUMBER: 133 005

PROJECT CONTACT: Jerome de Verteuil

SAMPLED BY: Jerome de Verteuil

LAB: Curtis & Tompkins

TURNAROUND: normal

REQUESTED BY: Jerome de Verteuil

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT	TUBE			METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TPH gas	BTEX	TEH (diesel + motor oil)	TEH (diesel only)	CAM (silica gel)	8015 w/ library search	8270 w/ PAH & library search	Hexavalent Chromium	8265
-1	SCI-32	1						6	6					1L			X	5L	08	29	96	1500		X		X		X	X	X	X	
														6vom																		
-2	SCI-33	1						6	6					1L				5L				1600		X		X		X	X	X	X	
														6vom																		
-3	SCI-35	1						3	2					3vom				2L				1700	X	(X)		(X)		X	X	X	(X)	
-4	SCI-36	1						3	2					1L				1L	08	30	96	1200			X		X	X					
														3vom																		
-5	SCI-38	1						6	6					1L				5L				1400		X		X		X	X	X	X	
														6vom																		
-6	SCI-39	1						6	6					1L				5L				1500		X		X		1	1	X	X	
														6vom																		

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	8/30/96 1600	[signature]	8/30/96 17:00
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES:

* contains Free Product - Beware!

(X) - indicates analyze.

[signature]

Subsurface Consultants, Inc.

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(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 17-SEP-96
Lab Job Number: 126720
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 126720

Project Name: KOT
Project Number: 133.005

Report Date: 17 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126720-001	SCI-34	Water	30-AUG-96	31-AUG-96	13-SEP-96	ND	mg/L	5	TR	29816
126720-002	SCI-37	Water	30-AUG-96	31-AUG-96	13-SEP-96	ND	mg/L	5	TR	29816

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

QC Batch Report

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126720
Report Date: 17 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29816**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	13-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	85%	SMWW 17:5520BF	13-SEP-96
BSD	86%	SMWW 17:5520BF	13-SEP-96

		Control Limits
Average Spike Recovery	85%	80% - 120%
Relative Percent Difference	1.8%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126720-001	SCI-34	29611	08/30/96	09/06/96	09/06/96	

Matrix: Water

Analyte	Units	126720-001
Diln Fac:		1
Gasoline	ug/L	<50
Surrogate		
Trifluorotoluene	%REC	98
Bromobenzene	%REC	83

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/05/96
Batch#:	29611	Analysis Date:	09/05/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC29686

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	98	65-135
Bromobenzene	78	65-135

Curtis & Tompkins, Ltd.

Lab #: 126720 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29611
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/05/96

LCS Lab ID: QC29687

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1850	2000	93	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	94	65-135		
Bromobenzene	96	65-135		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126720 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126710-001
Matrix: Water
Batch#: 29611
Units: ug/L
Diln Fac: 1

Sample Date: 08/28/96
Received Date: 08/30/96
Prep Date: 09/05/96
Analysis Date: 09/05/96

MS Lab ID: QC29688

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50	1649	82	75-125
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	94	65-135			
Bromobenzene	100	65-135			

MSD Lab ID: QC29689

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1667	83	75-125	1	35
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	94	65-135				
Bromobenzene	101	65-135				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126720-001	SCI-34	29690	08/30/96	09/09/96	09/13/96	
126720-002	SCI-37	29690	08/30/96	09/09/96	09/13/96	

Matrix: Water

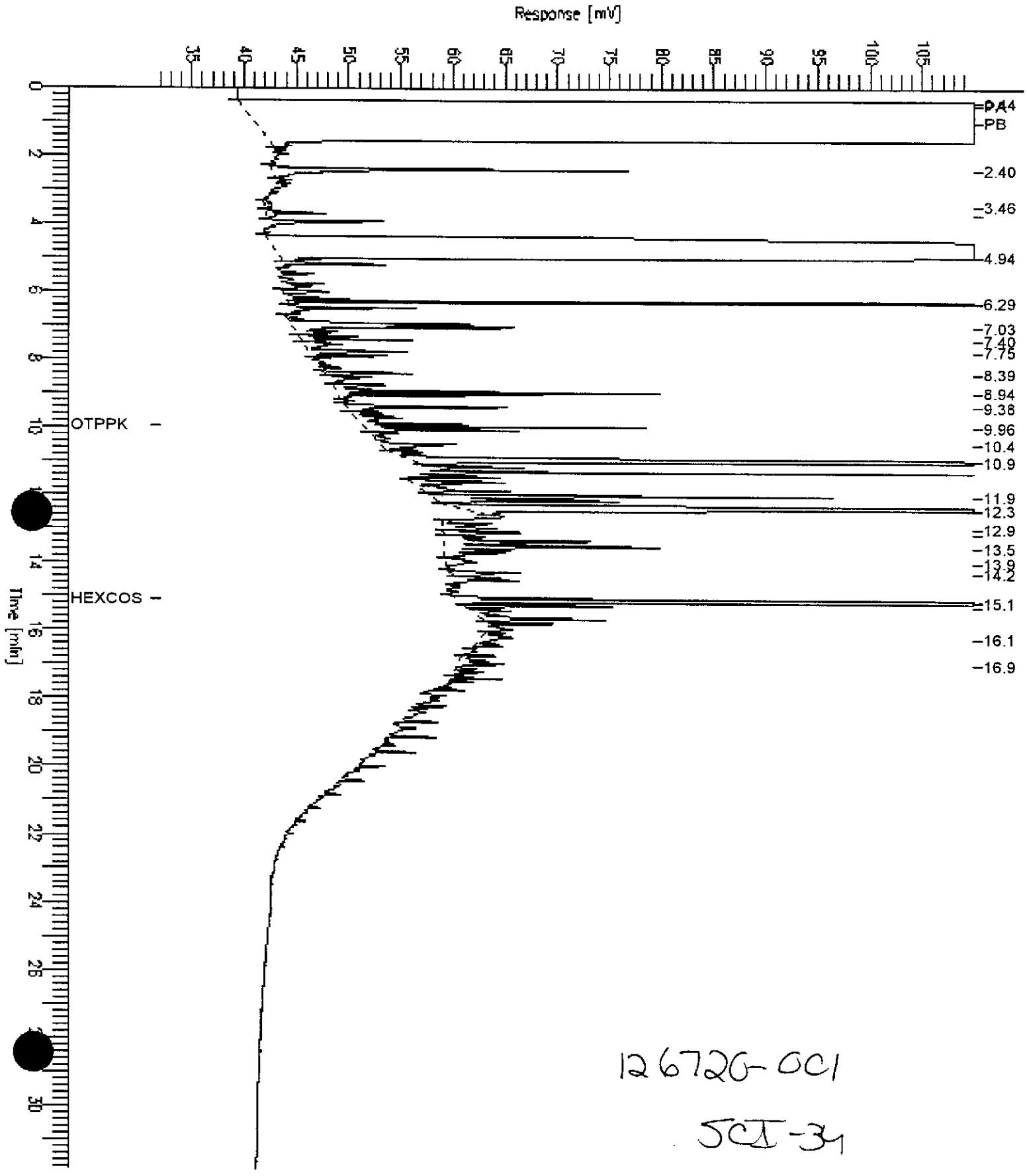
Analyte	Units	126720-001		126720-002	
Diln Fac:		1		1	
Diesel C12-C22	ug/L	1900	YL	1300	YH
Motor Oil C22-C50	ug/L	1500	YH	650	YL
Surrogate					
Hexacosane	%REC	50	*	103	

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

GC15 Channel B Surrogate

Sample Name : 126720-001
FileName : G:\GC15\CHB\256B016.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Factor: 0.0 Plot Offset: 32 mV

Sample #: 29690 Page 1 of 1
Date : 9/13/96 04:24 AM
Time of Injection: 9/13/96 03:49 AM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV



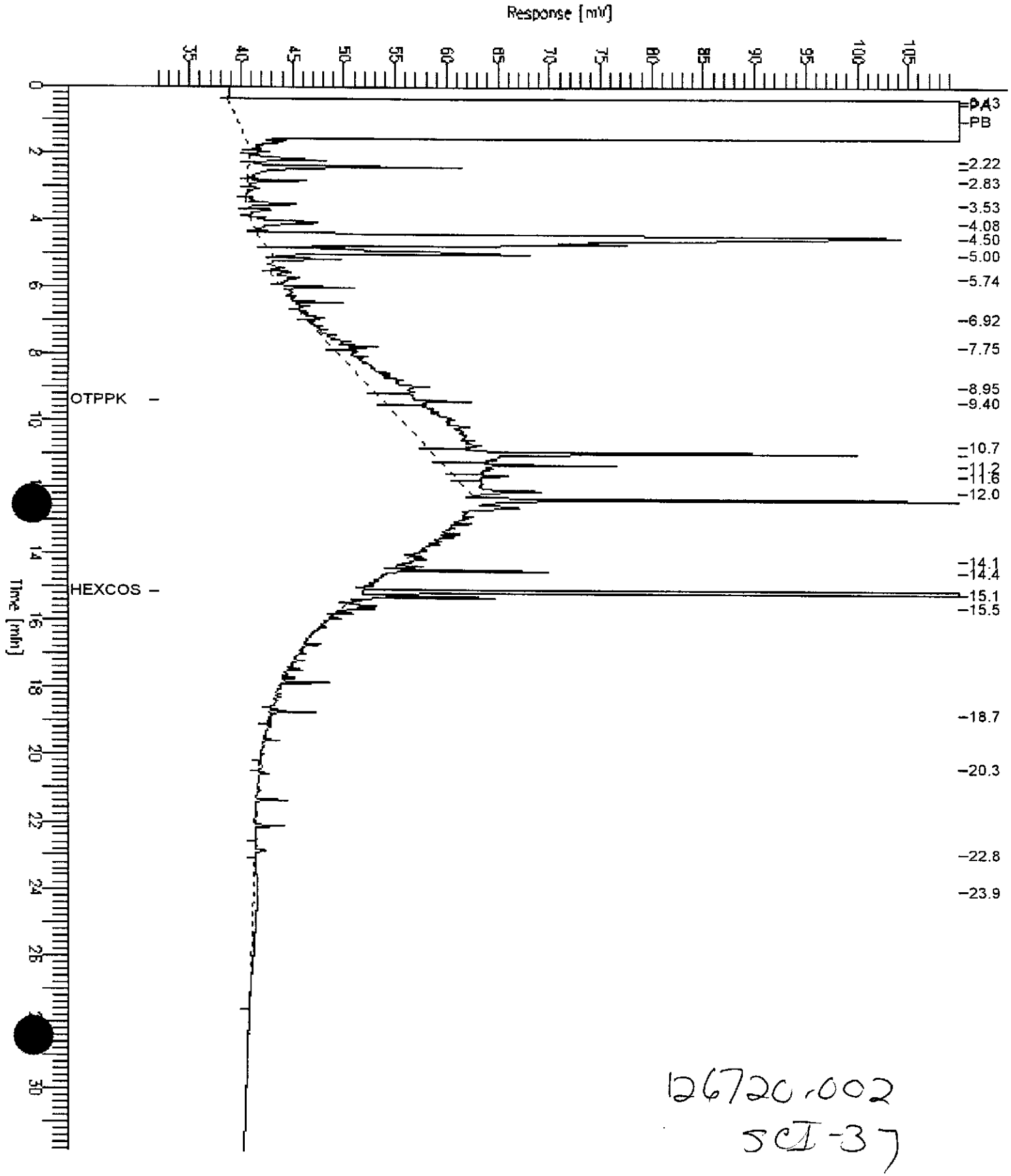
126720-001

SCT-34

GC15 Channel B Surrogate

Sample Name : 126720-002
FileName : G:\GC15\CHB\256B017.raw
Method : DUAL
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: 32 mV

Sample #: 29690 Page 1 of 1
Date : 9/13/96 05:07 AM
Time of Injection: 9/13/96 04:32 AM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV

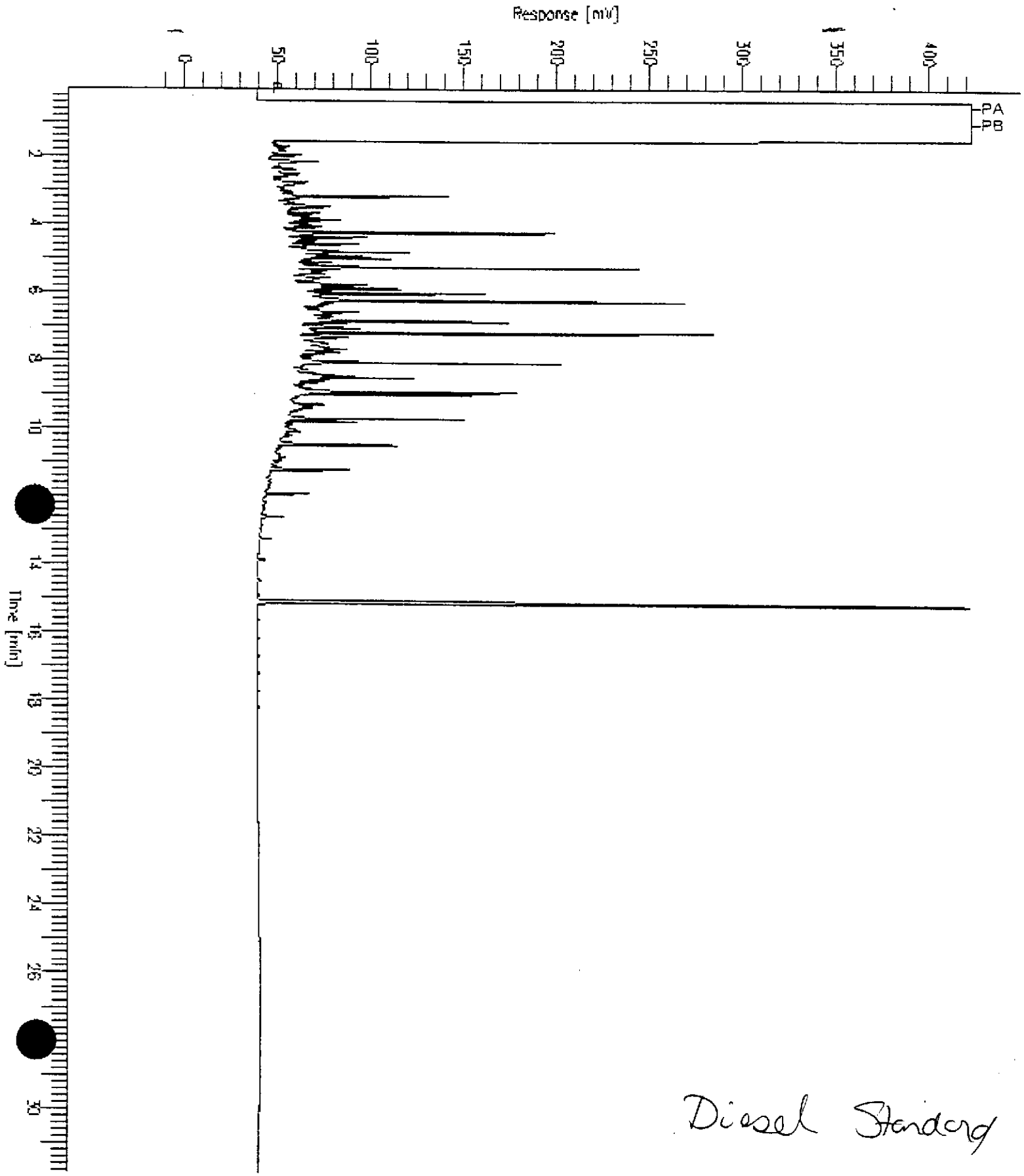


126720.002
SCI-37

GC15 Channel A TEH

Sample Name : CCV,96WS3003,DSL
FileName : G:\GC15\CHB\2568002.RAW
Method : 241TEH.MTH
Start Time : 0.61 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -13 mV

Sample #: 500MG/L Page 1 of 1
Date : 9/13/96 08:37 AM
Time of Injection: 9/12/96 05:42 PM
Low Point : -12.97 mV High Point : 422.91 mV
Plot Scale: 435.9 mV

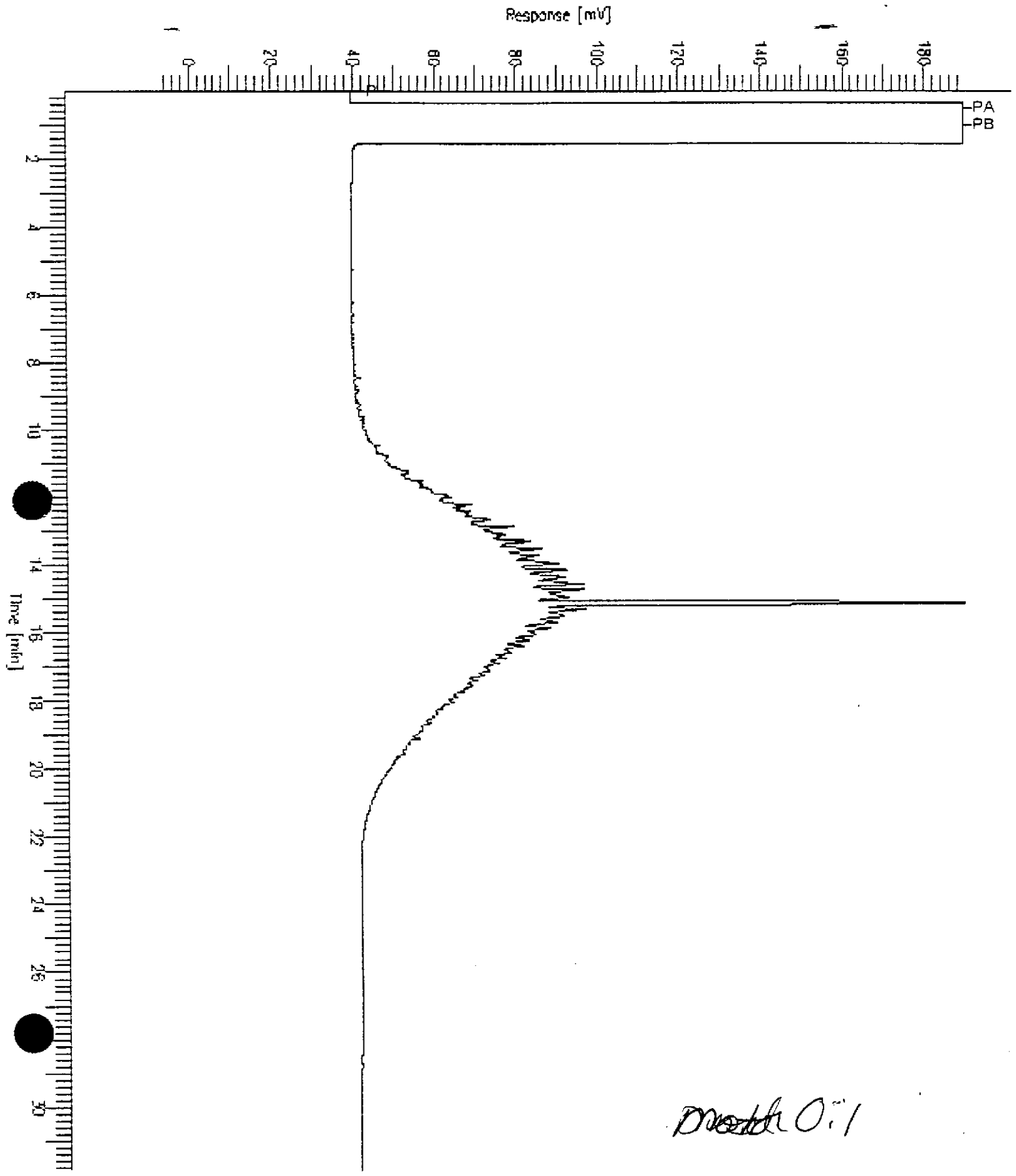


Diesel Standard

GC15 Channel A TEH

Sample Name : CCV,96WS3011,MO
FileName : G:\GC15\CHB\256B015.RAW
Method : 241TEH.MTH
St Time : 0.01 min End Time : 31.91 min
S Factor: 0.0 Plot Offset: -8 mV

Sample #: 500MG/L Page 1 of 1
Date : 9/13/96 08:54 AM
Time of Injection: 9/13/96 03:05 AM
Low Point : -7.81 mV High Point : 189.41 mV
Plot Scale: 197.2 mV



Month 0.1

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29690
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29965

Analyte	Result
Diesel C12-C22	<50
Motor Oil C22-C50	<250

Surrogate	%Rec	Recovery Limits
Hexacosane	109	60-140

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29690
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

BS Lab ID: QC29966

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1919	78	60-140
Surrogate	%Rec	Limits		
Hexacosane	109	60-140		

BSD Lab ID: QC29967

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1768	71	60-140	8	35
Surrogate	%Rec	Limits				
Hexacosane	99	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126720-002	SCI-37	29641	08/30/96	09/06/96	09/06/96	

Matrix: Water

Analyte	Units	126720-002
Diln Fac:		1
Benzene	ug/L	<0.5
Toluene	ug/L	<0.5
Ethylbenzene	ug/L	<0.5
m,p-Xylenes	ug/L	<0.5
o-Xylene	ug/L	<0.5
Surrogate		
Trifluorotoluene	%REC	102
Bromobenzene	%REC	92

Curtis & Tompkins, Ltd.

Lab #: 126720 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29641
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

MB Lab ID: QC29812

Analyte	Result
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	101	58-130
Bromobenzene	86	62-131

Curtis & Tompkins, Ltd.

Lab #: 126720 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29641
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

LCS Lab ID: QC29813

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	19.3	20	97	80-120
Toluene	17.7	20	89	80-120
Ethylbenzene	17.9	20	90	80-120
m,p-Xylenes	46.2	40	116	80-120
o-Xylene	18.1	20	91	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	101	58-130
Bromobenzene	88	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCI-37
Lab ID: 126720-002
Matrix: Water
Batch#: 29641
Units: ug/L
Diln Fac: 1

Sample Date: 08/30/96
Received Date: 08/31/96
Prep Date: 09/06/96
Analysis Date: 09/06/96

MS Lab ID: QC29804

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	20	<0.5	21	105	75-125
Toluene	20	<0.5	20.4	102	75-125
Ethylbenzene	20	<0.5	18	90	75-125
m,p-Xylenes	40	<0.5	47.2	118	75-125
o-Xylene	20	<0.5	19.8	99	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	103	58-130
Bromobenzene	95	62-131

MSD Lab ID: QC29805

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	20	21.4	107	75-125	2	20
Toluene	20	20.8	104	75-125	2	20
Ethylbenzene	20	18.2	91	75-125	1	20
m,p-Xylenes	40	48	120	75-125	2	20
o-Xylene	20	20.1	101	75-125	2	20

Surrogate	%Rec	Limits
Trifluorotoluene	103	58-130
Bromobenzene	95	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-34
Lab ID: 126720-001
Matrix: Water
Batch#: 29555
Units: ug/L
Diln Fac: 1

Sampled: 08/30/96
Received: 08/31/96
Extracted: 09/05/96
Analyzed: 09/05/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	180	20
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	96	79-122

Data File: /chem/VOA_04.i/090596.b/di507.d
Report Date: 05-Sep-1996 13:11

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

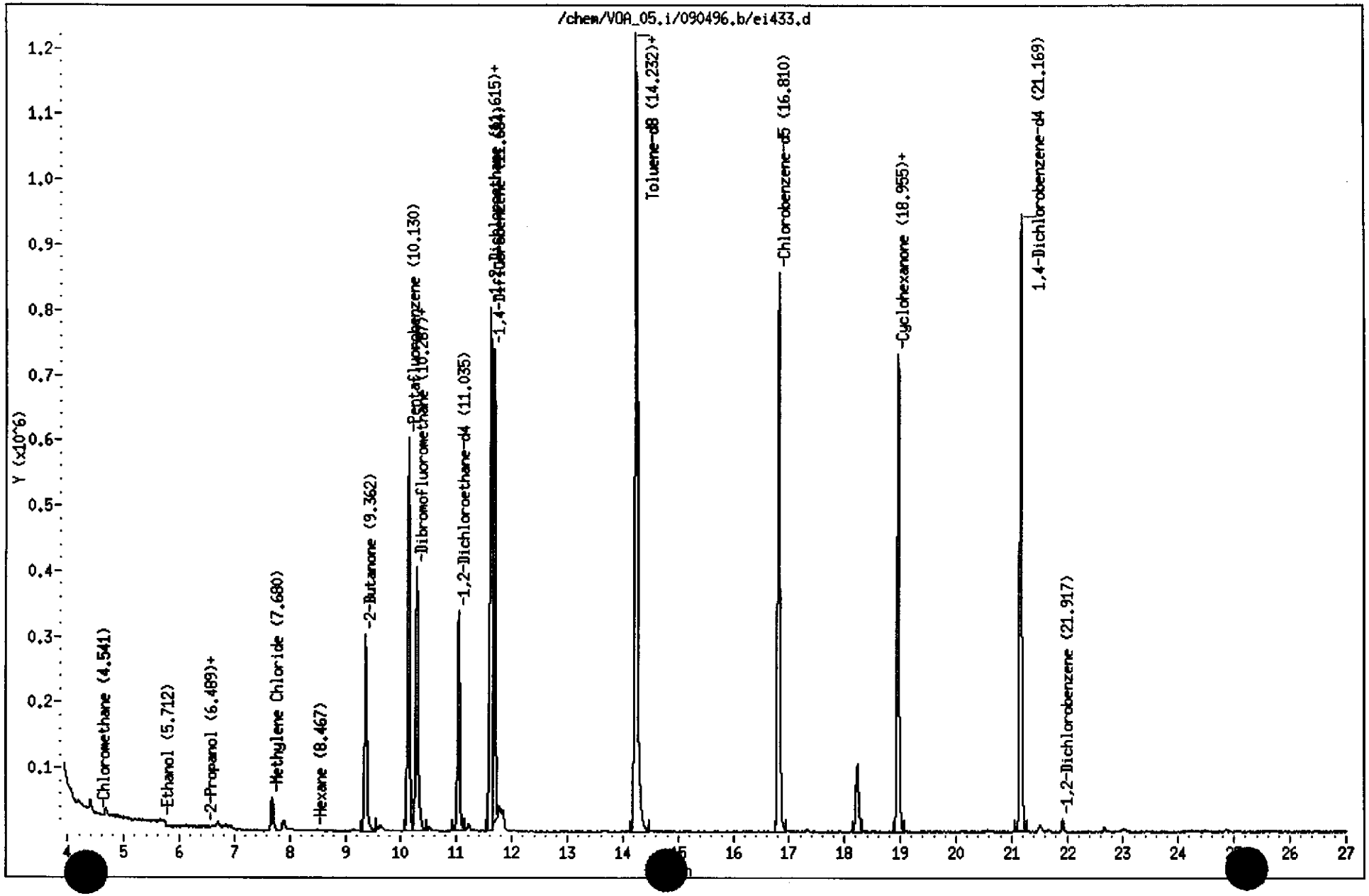
Data file : /chem/VOA_04.i/090596.b/di507.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 05-SEP-96 11:53
Operator : LLH Inst ID: VOA_04.i
Smp Info : MSS,126720-001
Misc Info : 8240,,29589,2.5,5,1, WATER
Comment :
Method : /chem/VOA_04.i/090596.b/i4m826.m
Meth Date : 05-Sep-1996 11:34
Cal Date : 28-AUG-1996 23:53 Cal File: dhs27.d
Als bottle: 7
Dil Factor: 2.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA_05.i/090496.b/ei433.d
Date : 05-SEP-1996 01:44
Client ID: DYNA P&T
Sample Info: S,126720-001
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i

Operator: DM
Column diameter: 0.32



Curtis & Tompkins, Ltd.

Lab #: 126720 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29555
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/04/96

MB Lab ID: QC29471

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	96	79-122

Curtis & Tompkins, Ltd.

Lab #: 126720 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29555
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/04/96

MB Lab ID: QC29529

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	96	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	93	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29555
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/04/96

LCS Lab ID: QC29470

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	49.73	50	100	51-180
Trichloroethene	47.81	50	96	73-141
Benzene	49.24	50	99	78-142
Toluene	46.63	50	93	76-150
Chlorobenzene	49.1	50	98	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	93	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	94	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126720 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126705-005
Matrix: Water
Batch#: 29555
Units: ug/L
Diln Fac: 1

Sample Date: 08/30/96
Received Date: 08/30/96
Prep Date: 09/04/96
Analysis Date: 09/04/96

MS Lab ID: QC29480

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	45.83	92	51-180
Trichloroethene	50	<5	46.75	94	73-141
Benzene	50	<5	48.23	96	78-142
Toluene	50	<5	46.37	92	76-150
Chlorobenzene	50	<5	47.89	96	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	94	79-122

MSD Lab ID: QC29481

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	44.36	89	51-180	3	14
Trichloroethene	50	44.93	90	73-141	4	14
Benzene	50	47.21	94	78-142	2	11
Toluene	50	43.99	87	76-150	5	13
Chlorobenzene	50	46.61	93	83-129	3	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	95	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-34
Lab ID: 126720-001
Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Sampled: 08/30/96
Received: 08/31/96
Extracted: 09/04/96
Analyzed: 09/11/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-34	Sampled:	08/30/96
Lab ID:	126720-001	Received:	08/31/96
Matrix:	Water	Extracted:	09/04/96
Batch#:	29577	Analyzed:	09/11/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	13	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	73	21-110
Phenol-d5	73	10-110
2,4,6-Tribromophenol	52	10-123
Nitrobenzene-d5	68	35-114
2-Fluorobiphenyl	55	43-116
Terphenyl-d14	12*	33-141

* Values outside of QC limits

Data File: /chem/bna02.i/091196x.b/04_6720-001.d
Report Date: 11-Sep-1996 15:15

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126720-001
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 4

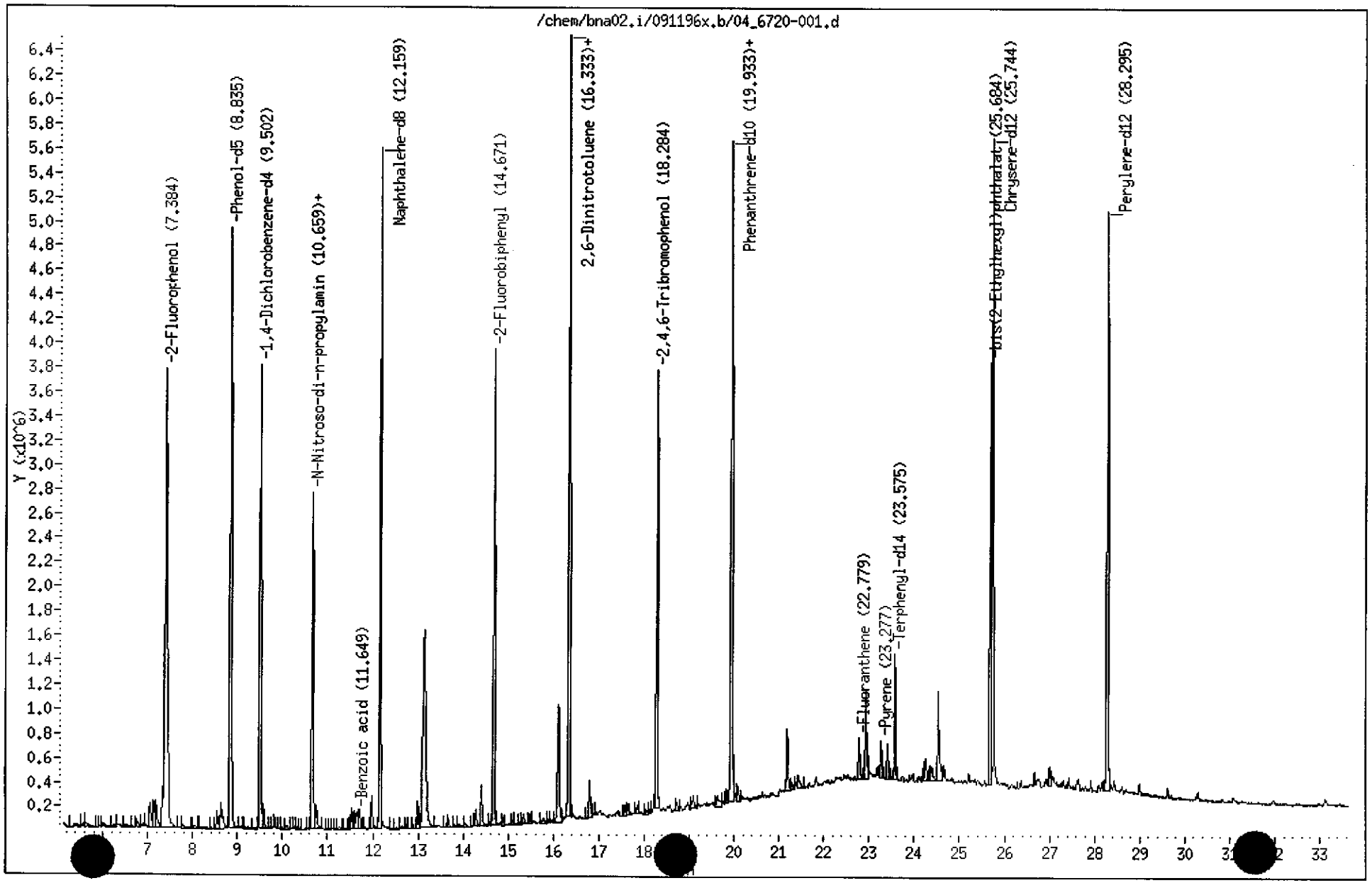
CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	105-60-2	Caprolactam	13.130	24.25	NJ
2.	98-73-7	Benzoic acid, p-tert-butyl-	16.106	8.55	NJ
3.	57-11-4	Octadecanoic acid	22.928	4.92	NJ
4.	301-02-0	9-Octadecenamide, (Z)-	24.530	6.04	NJ

Data File: /chem/bna02.i/091196x.b/04_6720-001.d
Date : 11-SEP-1996 14:18
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i

Operator: dsh
Column diameter: 0.25



EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

MB Lab ID: QC29553

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	10
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

MB Lab ID: QC29553

Analyte	Result	Reporting Limit
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	72	21-110
Phenol-d5	75	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	65	35-114
2-Fluorobiphenyl	75	43-116
Terphenyl-d14	72	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29577
Units: ug/L
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/06/96

BS Lab ID: QC29554

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	50	75.06	75	12-110
2-Chlorophenol	50	76.99	77	27-123
4-Chloro-3-methylphenol	50	69.32	69	23-97
4-Nitrophenol	50	46.32	46	10-80
Pentachlorophenol	50	59.35	59	9-103
1,4-Dichlorobenzene	25	33.99	68	36-97
N-Nitroso-di-n-propylamine	25	33.09	66	41-116
1,2,4-Trichlorobenzene	25	34.37	69	39-98
Acenaphthene	25	36.06	72	46-118
2,4-Dinitrotoluene	25	33.1	66	24-96
Pyrene	25	34.66	69	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	79	21-110
Phenol-d5	80	10-110
2,4,6-Tribromophenol	65	10-123
Nitrobenzene-d5	73	35-114
2-Fluorobiphenyl	80	43-116
Terphenyl-d14	72	33-141

BSD Lab ID: QC29555

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	50	79.13	79	12-110	5	42
2-Chlorophenol	50	81.64	82	27-123	6	40
4-Chloro-3-methylphenol	50	73.85	74	23-97	7	42
4-Nitrophenol	50	50.35	50	10-80	8	50
Pentachlorophenol	50	64.92	65	9-103	10	50
1,4-Dichlorobenzene	25	35.57	71	36-97	4	28
N-Nitroso-di-n-propylamine	25	35.21	70	41-116	6	38
1,2,4-Trichlorobenzene	25	36.04	72	39-98	4	28
Acenaphthene	25	38.35	77	46-118	7	31
2,4-Dinitrotoluene	25	35.42	71	24-96	7	38
Pyrene	25	37.49	75	26-127	8	31

Surrogate	%Rec	Limits
2-Fluorophenol	83	21-110
Phenol-d5	84	10-110
2,4,6-Tribromophenol	67	10-123
Nitrobenzene-d5	80	35-114
2-Fluorobiphenyl	83	43-116
Terphenyl-d14	77	33-141

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-34	Sampled:	08/30/96
Lab ID:	126720-001	Received:	08/31/96
Matrix:	Water	Extracted:	09/05/96
Batch#:	29615	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	51*	60-150
Decachlorobiphenyl	25*	30-130

* Values outside of QC limits

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29615
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/10/96

MB Lab ID: QC29704

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Rec	Recovery Limits
TCMX	70	60-150
Decachlorobiphenyl	78	30-130

Curtis & Tompkins, Ltd.

Lab #: 126720 BATCH QC REPORT

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29615
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/10/96

BS Lab ID: QC29705

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.35	87	50-128

Surrogate	%Rec	Limits
TCMX	60	60-150
Decachlorobiphenyl	74	30-130

BSD Lab ID: QC29706

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.45	89	50-128	2	20

Surrogate	%Rec	Limits
TCMX	65	60-150
Decachlorobiphenyl	69	30-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-34
LAB ID: 126720-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 08/30/96
DATE RECEIVED: 08/31/96
DATE REPORTED: 09/17/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	15	5.0	1	29688	EPA 6010A	09/11/96
Barium	1200	10	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	2.6	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	27	10	1	29688	EPA 6010A	09/11/96
Lead	8.5	3.0	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.20	1	29788	EPA 7470	09/13/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	45	20	1	29688	EPA 6010A	09/11/96
Selenium	19	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	17	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126720

DATE REPORTED: 09/17/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	29688	EPA 6010A	09/11/96
Arsenic	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Barium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Copper	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Lead	ND	3	ug/L	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.2	ug/L	1	29788	EPA 7470	09/13/96
Molybdenum	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Selenium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Silver	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Thallium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	ug/L	1	29688	EPA 6010A	09/11/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126720

DATE REPORTED: 09/17/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	500	507	555	ug/L	101	111	80-120	9	35	29688	EPA 6010A	09/11/96
Arsenic	2000	1940	1970	ug/L	97	99	80-120	2	35	29688	EPA 6010A	09/11/96
Barium	2000	1980	1970	ug/L	99	99	80-120	1	35	29688	EPA 6010A	09/11/96
Beryllium	50	50.4	51.5	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Cadmium	50	52.8	53.1	ug/L	106	106	80-120	1	35	29688	EPA 6010A	09/11/96
Chromium (total)	200	198	199	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Cobalt	500	492	507	ug/L	98	101	80-120	3	35	29688	EPA 6010A	09/11/96
Copper	250	249	248	ug/L	100	99	80-120	0	35	29688	EPA 6010A	09/11/96
Lead	500	505	520	ug/L	101	104	80-120	3	35	29688	EPA 6010A	09/11/96
Mercury	5	5.422	5.696	ug/L	108	114	80-120	5	35	29788	EPA 7470	09/13/96
Molybdenum	400	406	414	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Nickel	500	507	516	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Selenium	2000	2020	2040	ug/L	101	102	80-120	1	35	29688	EPA 6010A	09/11/96
Silver	100	90.4	89.7	ug/L	90	90	80-120	1	35	29688	EPA 6010A	09/11/96
Thallium	2000	2040	2070	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Vanadium	500	495	498	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Zinc	500	480	493	ug/L	96	99	80-120	3	35	29688	EPA 6010A	09/11/96

Curtis & Tompkins, Ltd.

Corrective Action Report

2425

From: PCB- Lara Wheeling Client: Subsurface Consultants

Job #: _____ Date: 9-11-96 Time: _____

Sample Control	Subcontract	Organics	Metals	Gen. Chem.	Project Management
BREAKAGE	BREAKAGE	TAT	TAT	TAT	REPORT ERROR
VOLUME	LOST	HOLDING TIME	HOLDING TIME	HOLDING TIME	REVIEW ERROR
CONTAINER	VOLUME	QC LIMITS	QC LIMITS	QC LIMITS	INVOICE ERROR
DOCUMENT	TAT	DILUTION	DILUTION	DILUTION	JOB JACKET ERROR
PRESERVATION	HOLDING TIME	WORKSHEET	WORKSHEET	WORKSHEET	COMM. ERROR
LOST	NARRATIVE	ANAL. NOTES	ANAL. NOTES	ANAL. NOTES	OTHER
OTHER	OTHER	OTHER	OTHER	OTHER	

Description of problem/nonconformance:

Sample 126693-001 in Batch 29513 and samples 126699-002, 126720-001 and 126705-002 in Batch 29615 all have Failing surrogates.

QC limits are	50-150	30-130
126693-001	59%	27%
126699-002	44%	27%
126720-001	51%	25%
126705-002	31%	17%

Summary of corrective action(s):

(1a) Re-analyze → done

(1b) Re-extract to check for matrix effect.

126693-001	came up to Passing	64%	36%
126699-002	came up to Passing	65~~67~~%	31~~35~~%
126720-001	still Failing	21%	27%
126705-002	still Failing	43%	25%

	YES	NO	Resolver	Initials	Date
Is this a recurring problem?			X Analyst	LW	9-11-96
Should SOP be modified?			X Group Leader	LAH	9-16-96
Should training be given?			P.M.		
Should customer be educated?			QA Officer		
Should operations be changed?			Lab Director		

CHAIN OF CUSTODY FORM

126720

PAGE ____ OF ____

PROJECT NAME: KOT

JOB NUMBER: 133.005

PROJECT CONTACT: Jerome de Vernier

SAMPLED BY: Jerome de Verrier

LAB: Curtis & Tompkins

TURNAROUND: standard

REQUESTED BY: Jerome de Verrier

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH gcd	TEH (diesel + motor oil)	O & G	VOC w/ library search (8240)	8270 w/ PNA & library search	Heavy metals	PCBs	BTEX	TEH (diesel only)
-1	SCI-34	x				6	6			6 VOA			X	2	08	30	96			x	x	x	x	x	x	x		
										1L																		
-2	SCI-37	x				3	2			3 VOA			X	1L								x					x	x
										1L																		

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	9/3/96 1800	[signature]	9/4 800

COMMENTS & NOTES:

* SCI-34 limited sample for Diesel.

Subsurface Consultants, Inc.

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(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 13-SEP-96
Lab Job Number: 126721
Project ID: 133.005
Location: KOT

Reviewed by: Damara Moore

Reviewed by:

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 126721

Project Name: KOT
Project Number: 133.005

Report Date: 13 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520EF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126721-001	SC1-32@5	Soil	29-AUG-96	03-SEP-96	13-SEP-96	ND	mg/Kg	50	TR	29811
126721-005	SC1-36@3.5	Soil	30-AUG-96	03-SEP-96	13-SEP-96	120	mg/Kg	50	TR	29811
126721-006	SC1-37@2.5	Soil	30-AUG-96	03-SEP-96	13-SEP-96	ND	mg/Kg	50	TR	29811
126721-007	SC1-38@3	Soil	30-AUG-96	03-SEP-96	13-SEP-96	1200	mg/Kg	50	TR	29811

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126721
Report Date: 13 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29811**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:5520EF	13-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	88%	SMWW 17:5520EF	13-SEP-96
BSD	90%	SMWW 17:5520EF	13-SEP-96

		Control Limits
Average Spike Recovery	89%	80% - 120%
Relative Percent Difference	2.7%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126721-001	SCI-32@5	29704	08/29/96	09/10/96	09/10/96	
126721-002	SCI-34@3.5	29704	08/29/96	09/10/96	09/10/96	
126721-003	SCI-35@3	29704	08/29/96	09/10/96	09/10/96	
126721-004	SCI-35@8	29704	08/29/96	09/11/96	09/11/96	

Matrix: Soil

Analyte Diln Fac:	Units	126721-001 1	126721-002 1	126721-003 1	126721-004 1
Gasoline	mg/Kg	<1	<1	2.6Y	5.2Y
Surrogate					
Trifluorotoluene	%REC	102	101	102	95
Bromobenzene	%REC	92	87	93	83

Y: Sample exhibits fuel pattern which does not resemble standard

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126721-007	SCI-38@3	29704	08/30/96	09/10/96	09/10/96	

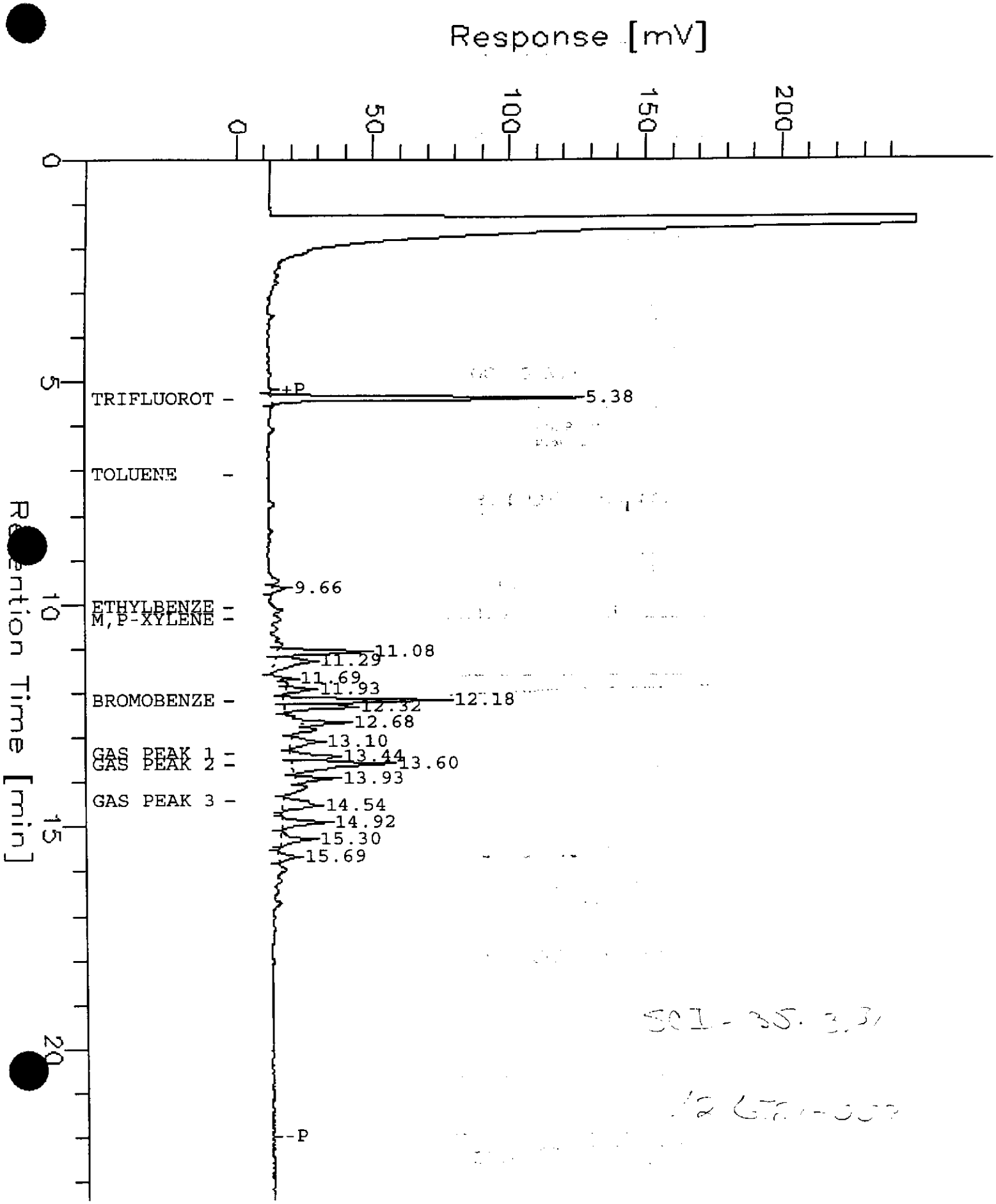
Matrix: Soil

Analyte	Units	126721-007
Diln Fac:		1
Gasoline	mg/Kg	<1
Surrogate		
Trifluorotoluene	%REC	102
Bromobenzene	%REC	92

TVH2 - GC-05 RTX-1

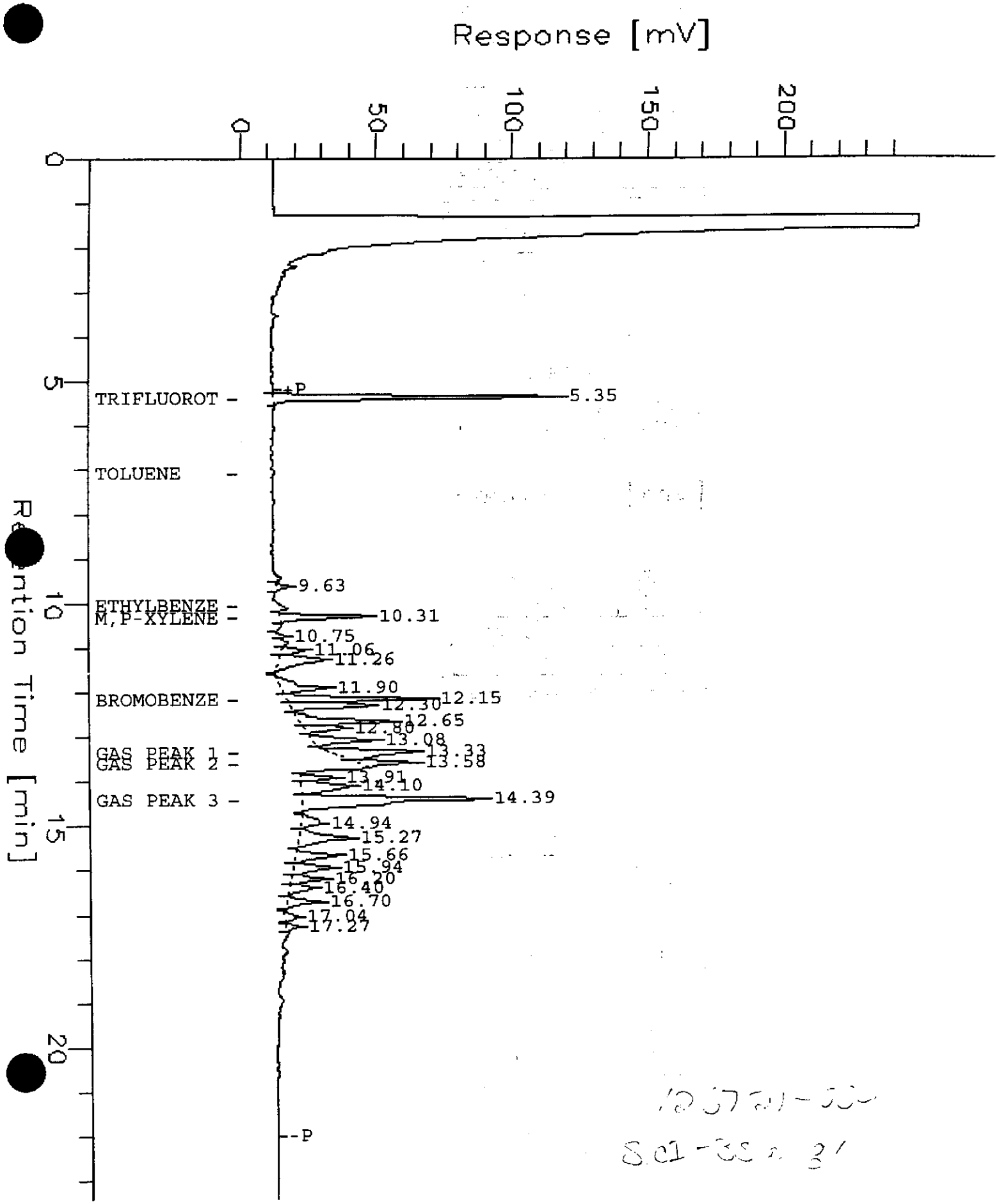
FileName : G:\GC05\254H019.raw
Start Time : 0.00 min
End Time : 23.42 min
Scale Factor: -1
Plot Offset: 0 mV
Date : 9/10/96 11:22 PM
Low Point : -0.18 mV
Plot Scale: 250 mV

High Point : 249.82 mV



TVH2 - GC-05 RTX-1

FileName : G:\GC05\254H034.raw
Start Time : 0.00 min
End Time : 23.42 min
Scale Factor: -1
Plot Offset: 0 mV
Date : 9/11/96 9:05 AM
Low Point : -0.13 mV
Plot Scale: 250 mV
Page 1 of 1
High Point : 249.87 mV



Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

METHOD BLANK

Matrix:	Soil	Prep Date:	09/10/96
Batch#:	29704	Analysis Date:	09/10/96
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC30022

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	99	52-127
Bromobenzene	85	45-140

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 29704
Units: mg/Kg
Diln Fac: 1

Prep Date: 09/10/96
Analysis Date: 09/10/96

LCS Lab ID: QC30023

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	9.8	10	98	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	102	52-127		
Bromobenzene	113	45-140		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126719-001
Matrix: Soil
Batch#: 29704
Units: mg/Kg dry weight
Diln Fac: 1

Sample Date: 08/28/96
Received Date: 08/31/96
Prep Date: 09/10/96
Analysis Date: 09/10/96
Moisture: 28%

MS Lab ID: QC30025

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	13.89	<1.389	11.39	82	65-135
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	94	52-127			
Bromobenzene	108	45-140			

MSD Lab ID: QC30026

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	13.89	11.39	82	65-135	0	30
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	96	52-127				
Bromobenzene	108	45-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126721-001	SCI-32@5	29588	08/29/96	09/05/96	09/05/96	
126721-002	SCI-34@3.5	29588	08/29/96	09/05/96	09/06/96	
126721-003	SCI-35@3	29588	08/29/96	09/05/96	09/06/96	
126721-004	SCI-35@8	29588	08/29/96	09/05/96	09/06/96	

Matrix: Soil

Analyte	Units	126721-001	126721-002	126721-003	126721-004
Diln Fac:		1	1	100	1
Diesel C12-C22	mg/Kg	<1	840 YH	6700 Y	17 Y
Motor Oil C22-C50	mg/Kg	<5	2500	5200 YL	34 Y
Surrogate					
Hexacosane	%REC	86	DO	DO	78

DO: Surrogate diluted out
Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126721-005	SCI-36@3.5	29588	08/30/96	09/05/96	09/06/96	
126721-006	SCI-37@2.5	29588	08/30/96	09/05/96	09/06/96	
126721-007	SCI-38@3	29588	08/30/96	09/05/96	09/06/96	

Matrix: Soil

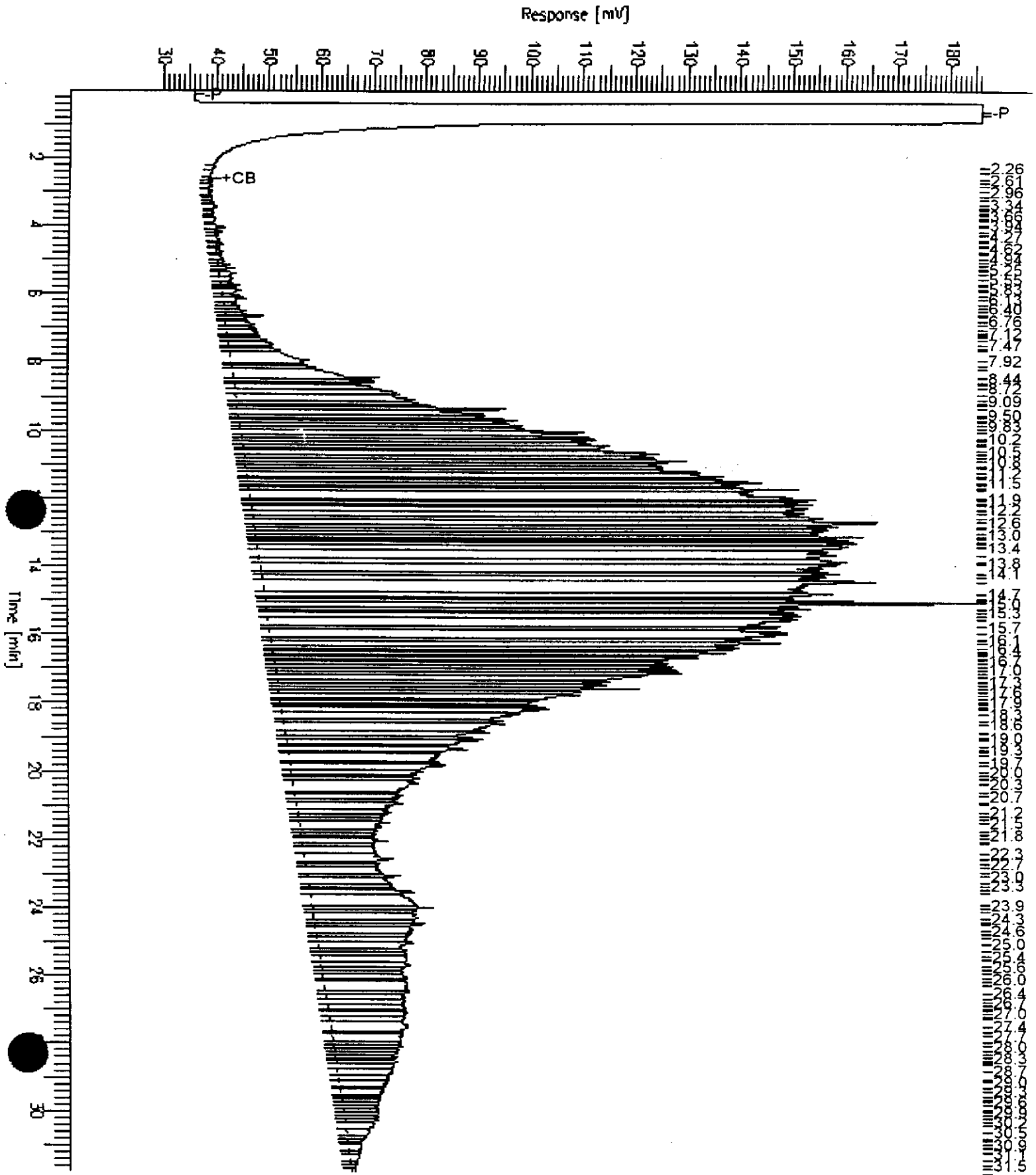
Analyte	Units	126721-005		126721-006		126721-007	
Diln Fac:		1		1		5	
Diesel C12-C22	mg/Kg	12	YH	10	YH	220	YLH
Motor Oil C22-C50	mg/Kg	100		46		2300	
Surrogate							
Hexacosane	%REC	89		89		130	

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

GC11

Sample Name : 126721-002,29588
FileName : G:\GC11\CHB\248B070.RAW
Method : BTEH0904.MTH
Start Time : 0.01 min End Time : 31.80 min
Slope Factor: 0.0 Plot Offset: 30 mV

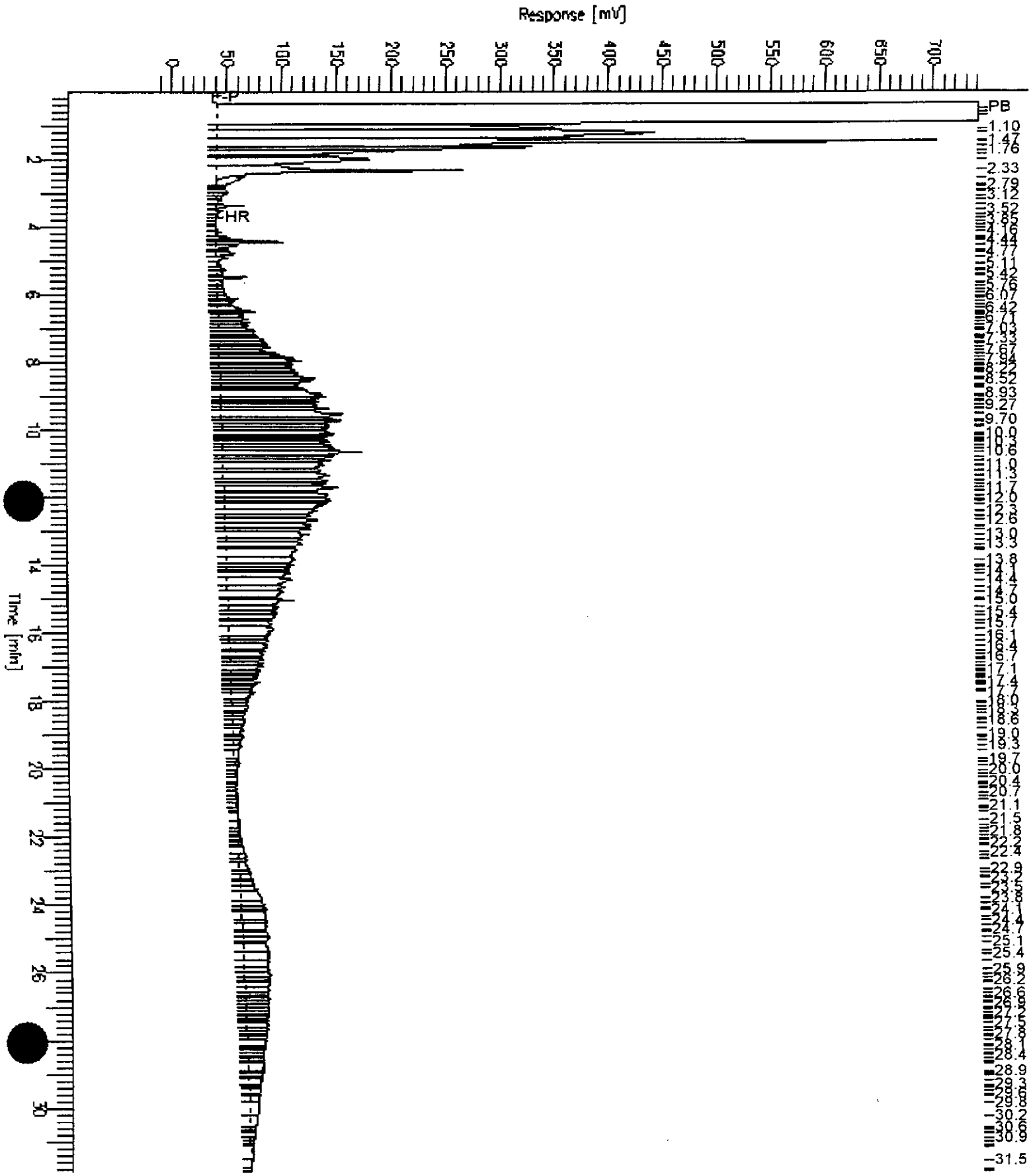
Sample #: 50:100 Page 1 of 1
Date : 9/6/96 06:01 PM
Time of Injection: 9/6/96 02:21 PM
Low Point : 29.94 mV High Point : 186.21 mV
Plot Scale: 156.3 mV



GC11

Sample Name : 126721-003,29588
FileName : G:\GC11\CHB\248B069.RAW
Method :
Time : 0.01 min End Time : 31.91 min
Factor: 0.0 Plot Offset: -10 mV

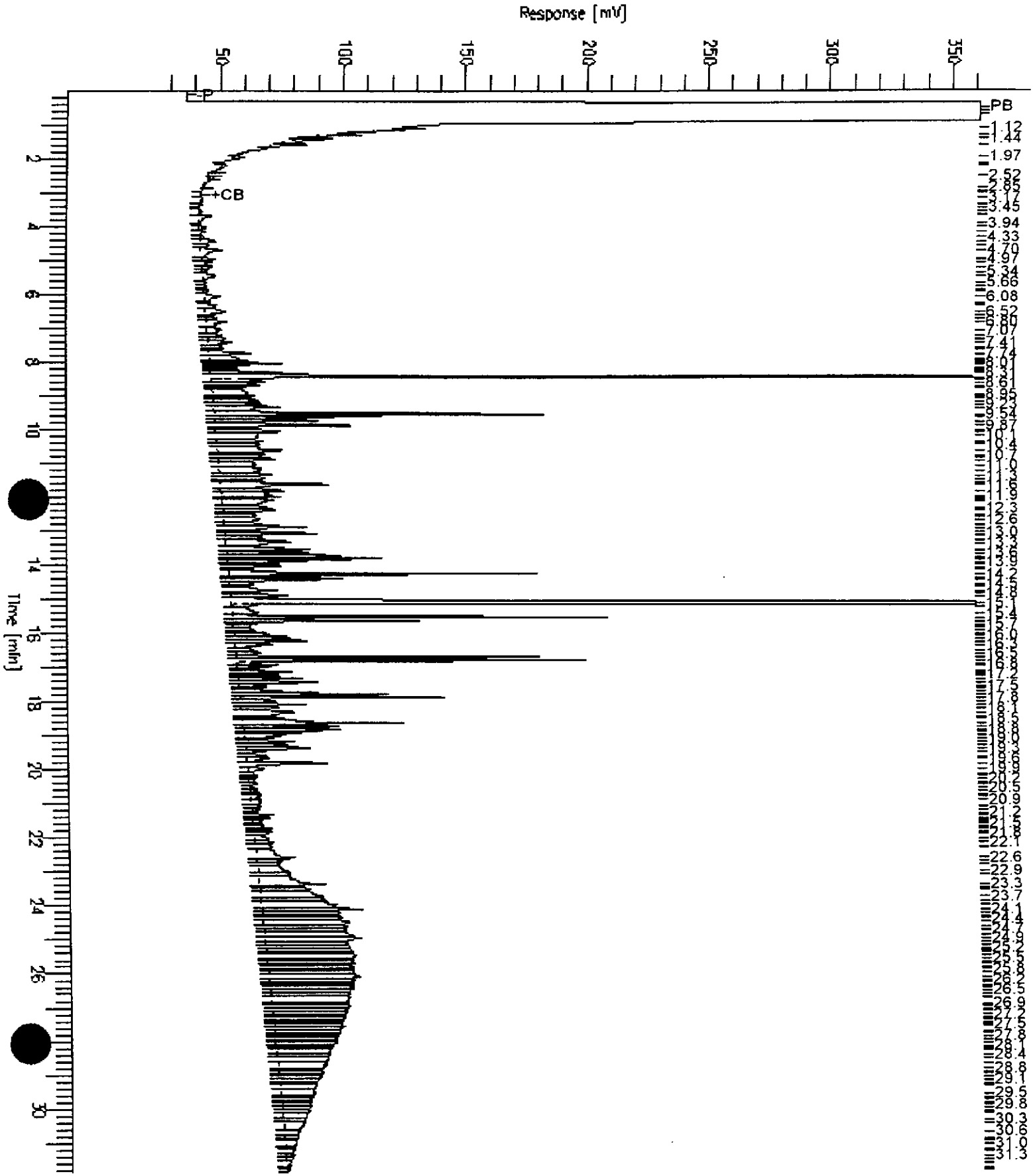
Sample #: 50:500 Page 1 of 1
Date : 9/6/96 05:36 PM
Time of Injection: 9/6/96 01:37 PM
Low Point : -10.27 mV High Point : 741.88 mV
Plot Scale: 752.2 mV



GC11

Sample Name : 126721-004,29588
FileName : G:\GC11\CHB\248B068.RAW
Method : BTEH0904.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 26 mV

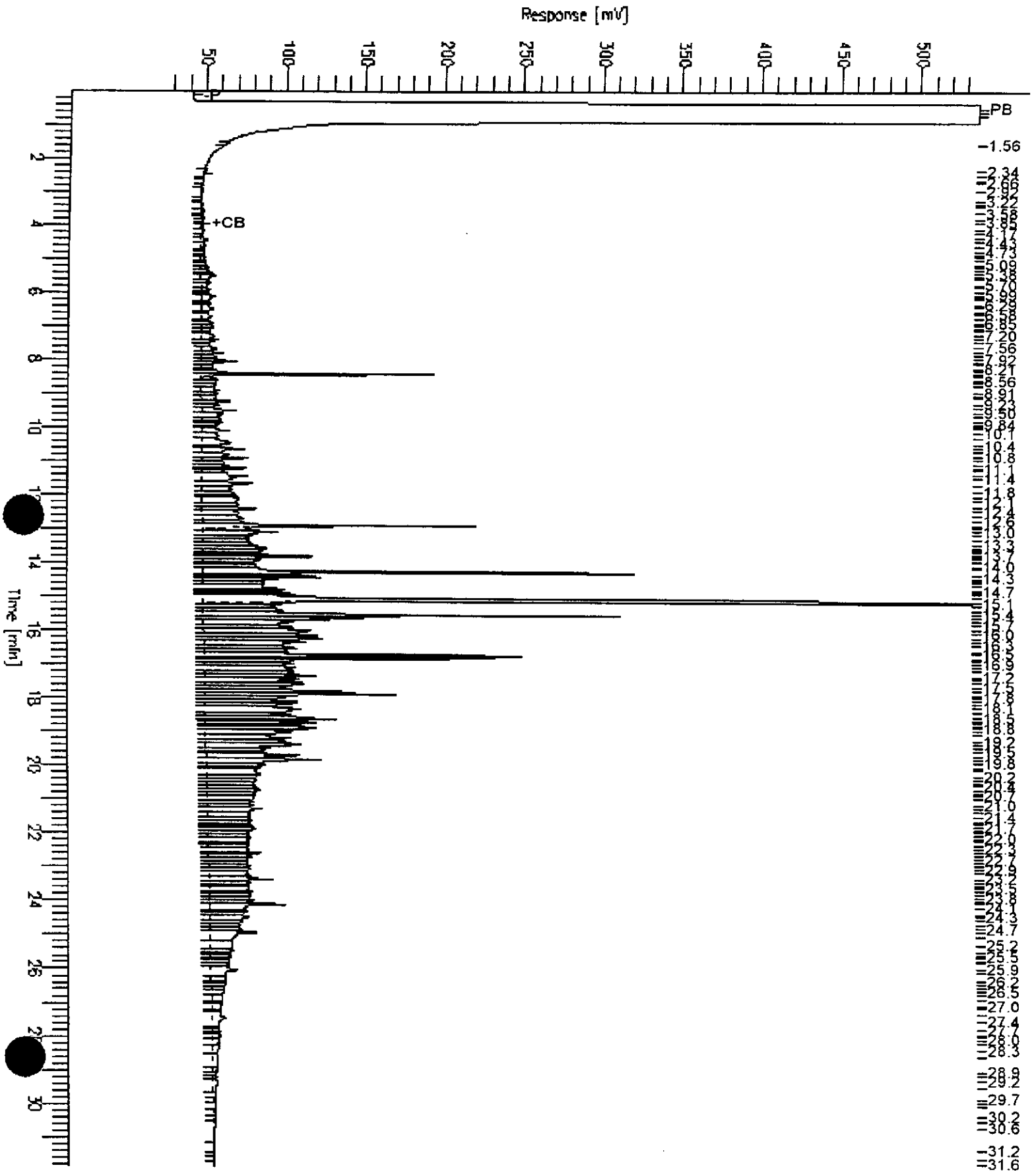
Sample #: 50:5,29588 Page 1 of 1
Date : 9/6/96 05:14 PM
Time of Injection: 9/6/96 12:53 PM
Low Point : 25.61 mV High Point : 361.40 mV
Plot Scale: 335.8 mV



GC11

Sample Name : 126721-005,29588
FileName : G:\GC11\CHB\248B059.RAW
Method : BTEH0904.MTH
Start Time : 0.01 min End Time : 31.91 min
Factor: 0.0 Plot Offset: 23 mV

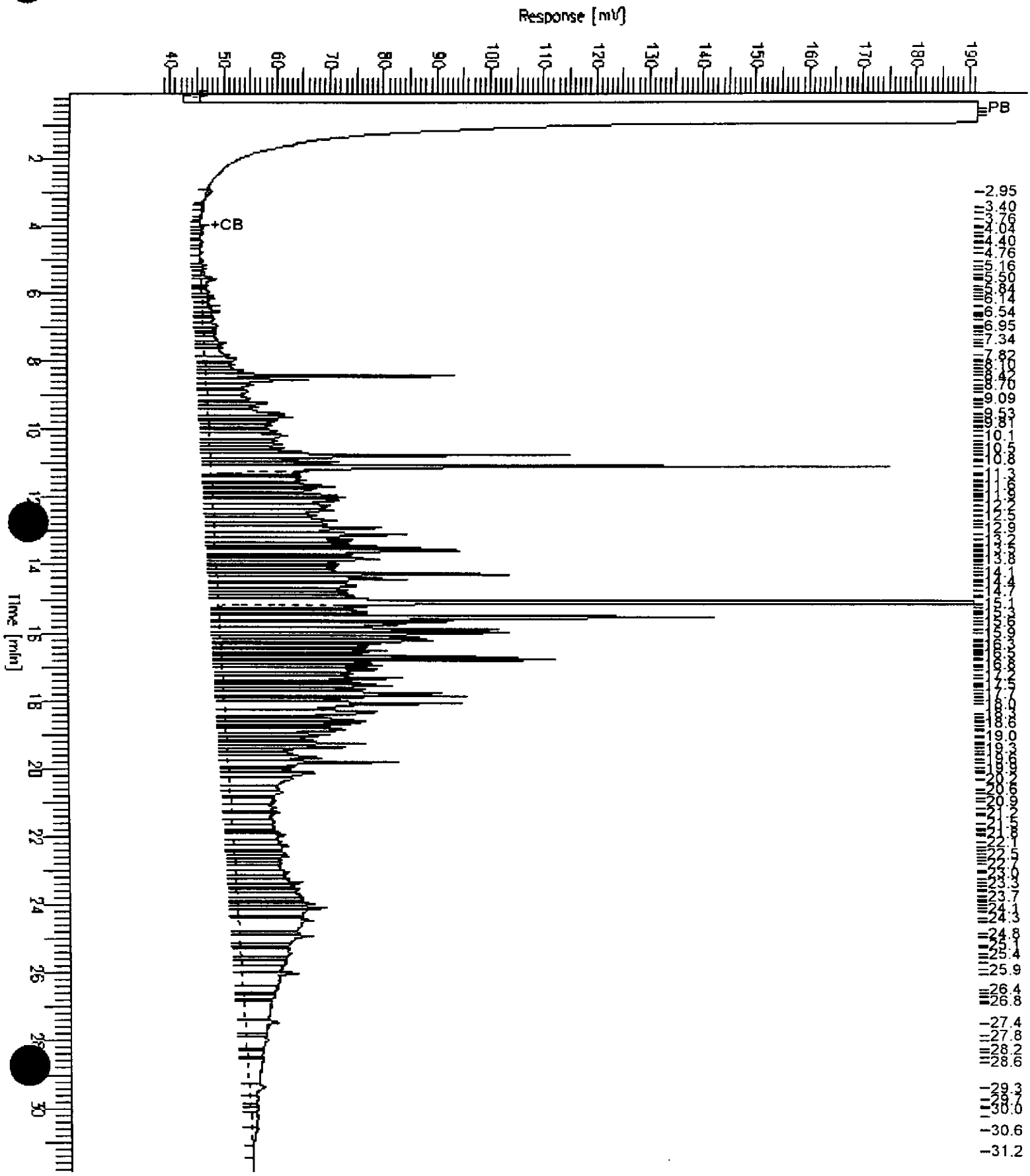
Sample #: 50:5,29588 Page 1 of 1
Date : 9/6/96 11:43 AM
Time of Injection: 9/6/96 06:19 AM
Low Point : 23.04 mV High Point : 537.48 mV
Plot Scale: 514.4 mV



GC11

Sample Name : 126721-006,29588
FileName : G:\GC11\CHB\248B060.RAW
Method : BTEH0904.MTH
Start Time : 0.07 min End Time : 31.91 min
Factor: 0.0 Plot Offset: 39 mV

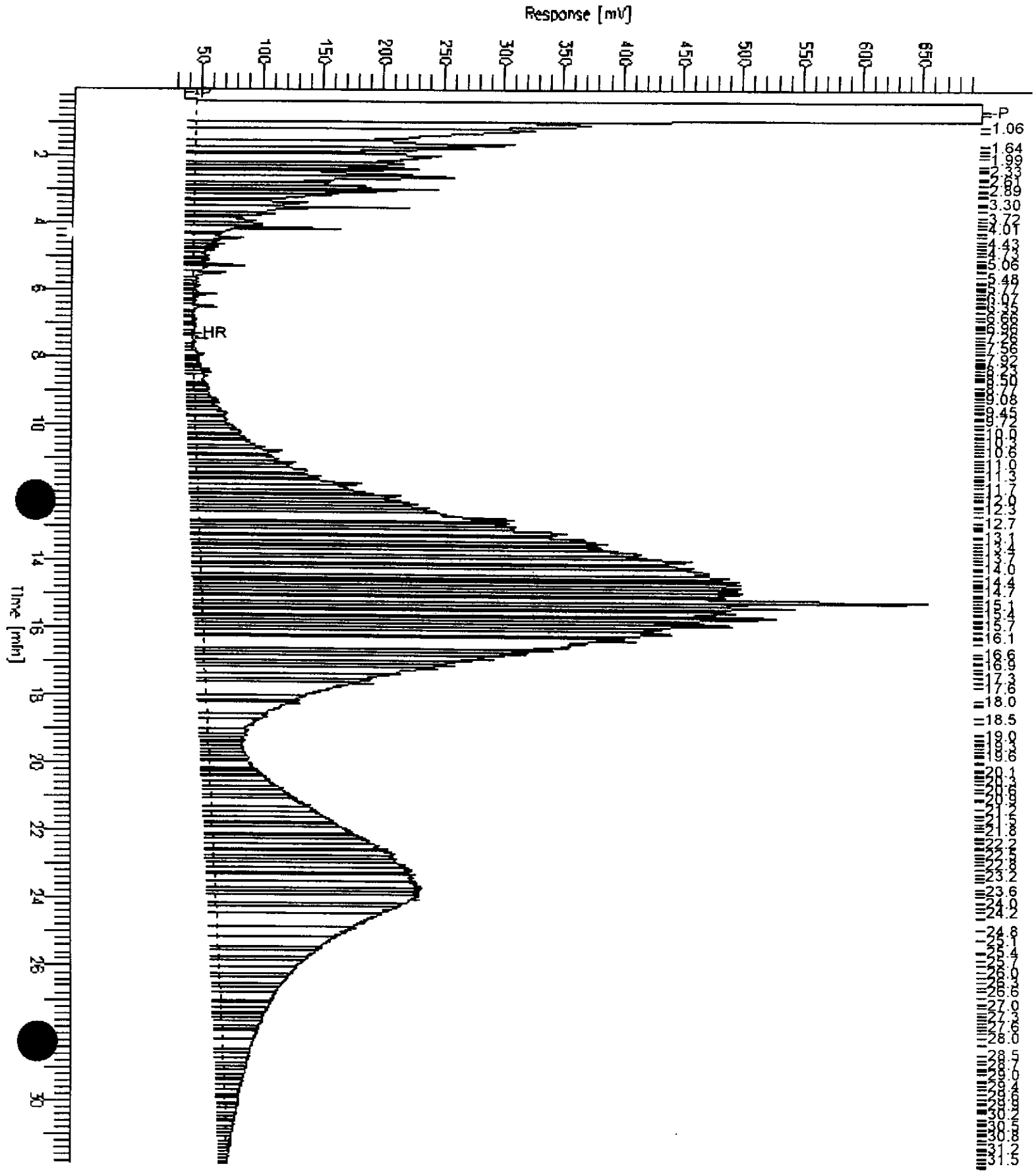
Sample #: 50:5,29588 Page 1 of 1
Date : 9/6/96 11:42 AM
Time of Injection: 9/6/96 07:03 AM
Low Point : 38.58 mV High Point : 191.79 mV
Plot Scale: 153.2 mV



GC11

Sample Name : 126721-007,29588
FileName : G:\GC11\CHB\248B071.RAW
Method : BTEH0904.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 21 mV

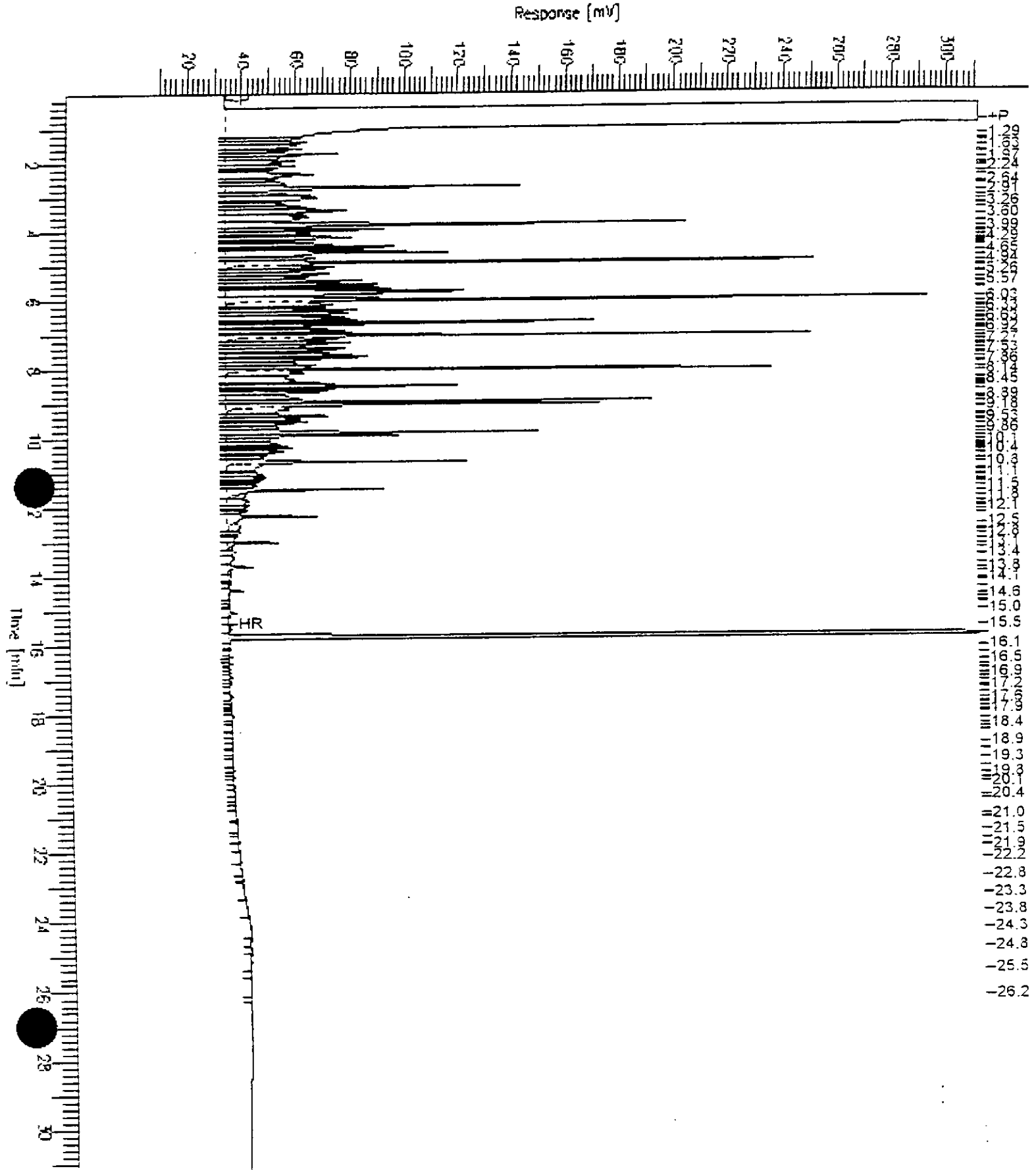
Sample #: 50:25 Page 1 of 1
Date : 9/6/96 06:05 PM
Time of Injection: 9/6/96 03:05 PM
Low Point : 21.26 mV High Point : 699.11 mV
Plot Scale: 677.9 mV



Chromatogram

Sample Name : CCV,96WS3003,OSL
FileName : G:\GC13\CHA\248A046.RAW
Me[redacted] : ATEH0904.MTH
St[redacted]ime : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 9 mV

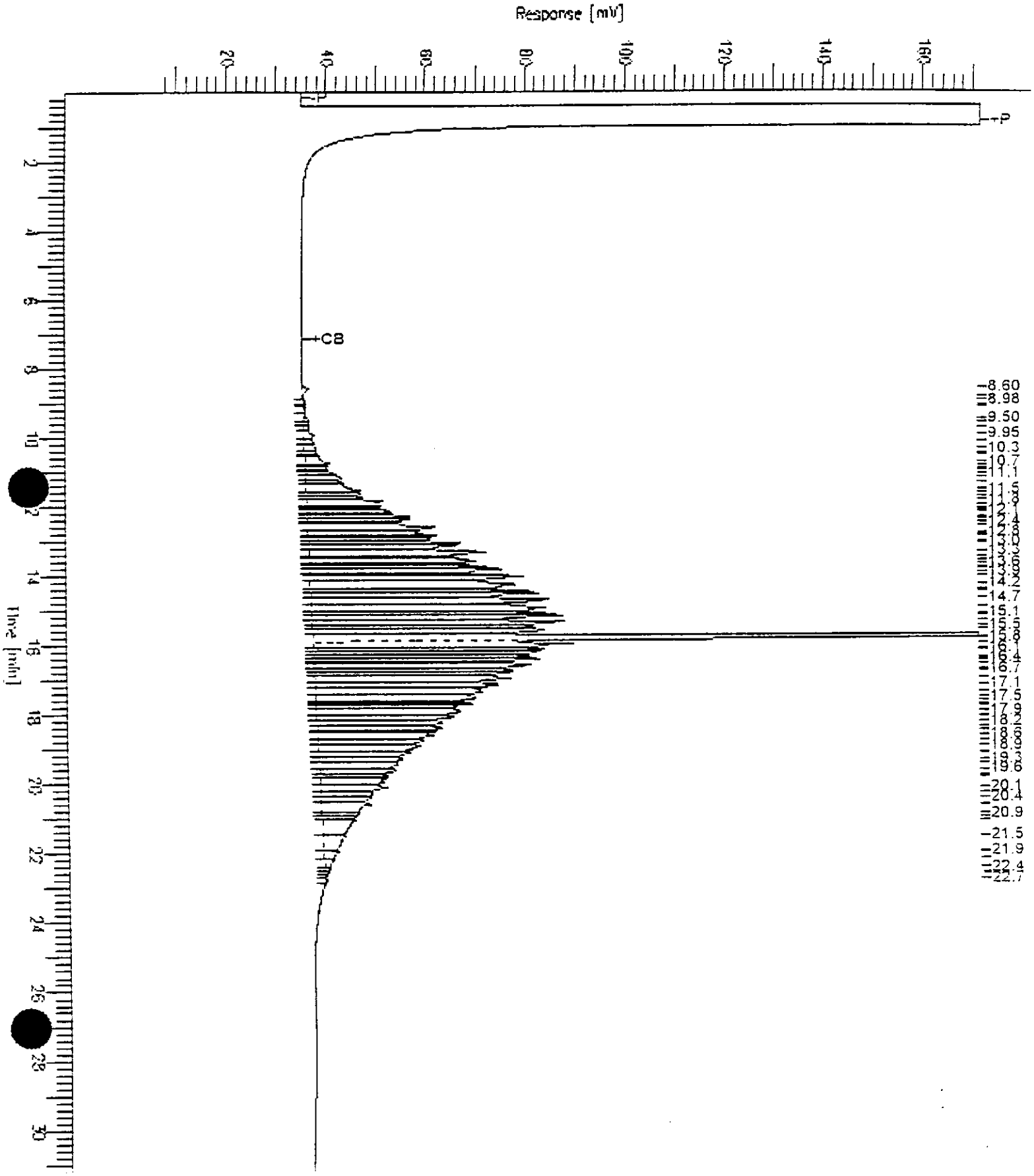
Sample #: 500MG/L Page 1 of 1
Date : 9/6/96 12:03 PM
Time of Injection: 9/5/96 07:16 PM
Low Point : 9.36 mV High Point : 311.38 mV
Plot Scale: 302.0 mV



Chromatogram

Sample Name : CCV,96WG2694,MO
FileName : G:\GC13\CHA\248A022.RAW
M[redacted] : ATEH0904.MTH
S[redacted]Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 6 mV

Sample #: 500MG/L Page 1 of 1
Date : 9/5/96 12:32 PM
Time of Injection: 9/5/96 02:06 AM
Low Point : 6.45 mV High Point : 171.33 mV
Plot Scale: 164.9 mV



Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	LUFT
Location:	KOT		

METHOD BLANK

Matrix:	Soil	Prep Date:	09/05/96
Batch#:	29588	Analysis Date:	09/05/96
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC29594

Analyte	Result
Diesel C12-C22	<1.0
Motor Oil C22-C50	<5.0

Surrogate	%Rec	Recovery Limits
Hexacosane	87	60-140

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 29588
Units: mg/Kg
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/05/96

LCS Lab ID: QC29595

Analyte	Result	Spike Added	%Rec #	Limits
Diesel C12-C22	37.9	49.5	77	60-140
Surrogate	%Rec	Limits		
Hexacosane	96	60-140		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT
Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCI-34@3.5
Lab ID: 126721-002
Matrix: Soil
Batch#: 29588
Units: mg/Kg
Diln Fac: 1
Sample Date: 08/29/96
Received Date: 09/03/96
Prep Date: 09/05/96
Analysis Date: 09/05/96

MS Lab ID: QC29596

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Diesel C12-C22	49.5	837.2	0	0 *	60-140
Surrogate	%Rec	Limits			
Hexacosane	0*	60-140			

MSD Lab ID: QC29597

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	49.5	0	0 *	60-140	0	30
Surrogate	%Rec	Limits				
Hexacosane	0*	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 2 out of 2 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126721-003	SCI-35@3	29616	08/29/96	09/06/96	09/06/96	
126721-004	SCI-35@8	29616	08/29/96	09/06/96	09/06/96	
126721-005	SCI-36@3.5	29616	08/30/96	09/06/96	09/06/96	
126721-006	SCI-37@2.5	29616	08/30/96	09/06/96	09/06/96	

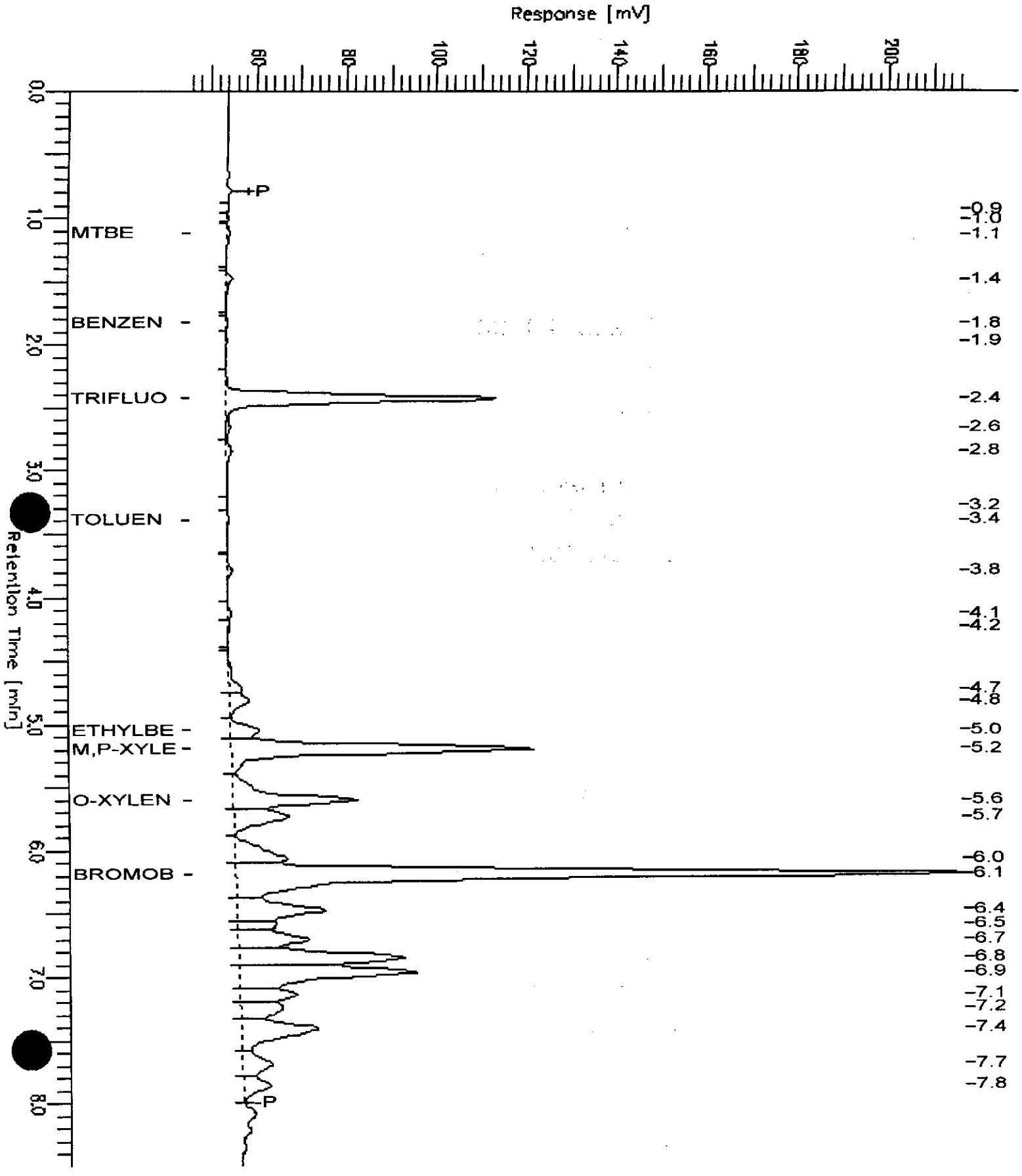
Matrix: Soil

Analyte Diln Fac:	Units	126721-003 1	126721-004 1	126721-005 1	126721-006 1
Benzene	ug/Kg	<5	<5	<5	<5
Toluene	ug/Kg	<5	<5	6.8	6.6
Ethylbenzene	ug/Kg	38	170	<5	<5
m,p-Xylenes	ug/Kg	260	1000	<5	<5
o-Xylene	ug/Kg	160	460	<5	<5
Surrogate					
Trifluorotoluene	%REC	96	96	96	95
Bromobenzene	%REC	94	105	88	89

BTXE - GC-04 RTX-1

Sample Name : S,126721-003,BATCH 29616
FileName : G:\GC04\249K027.raw
Method : QBTXE
Start Time : 0.00 min End Time : 8.50 min
Scale Factor: 1.0 Plot Offset: 46 mV

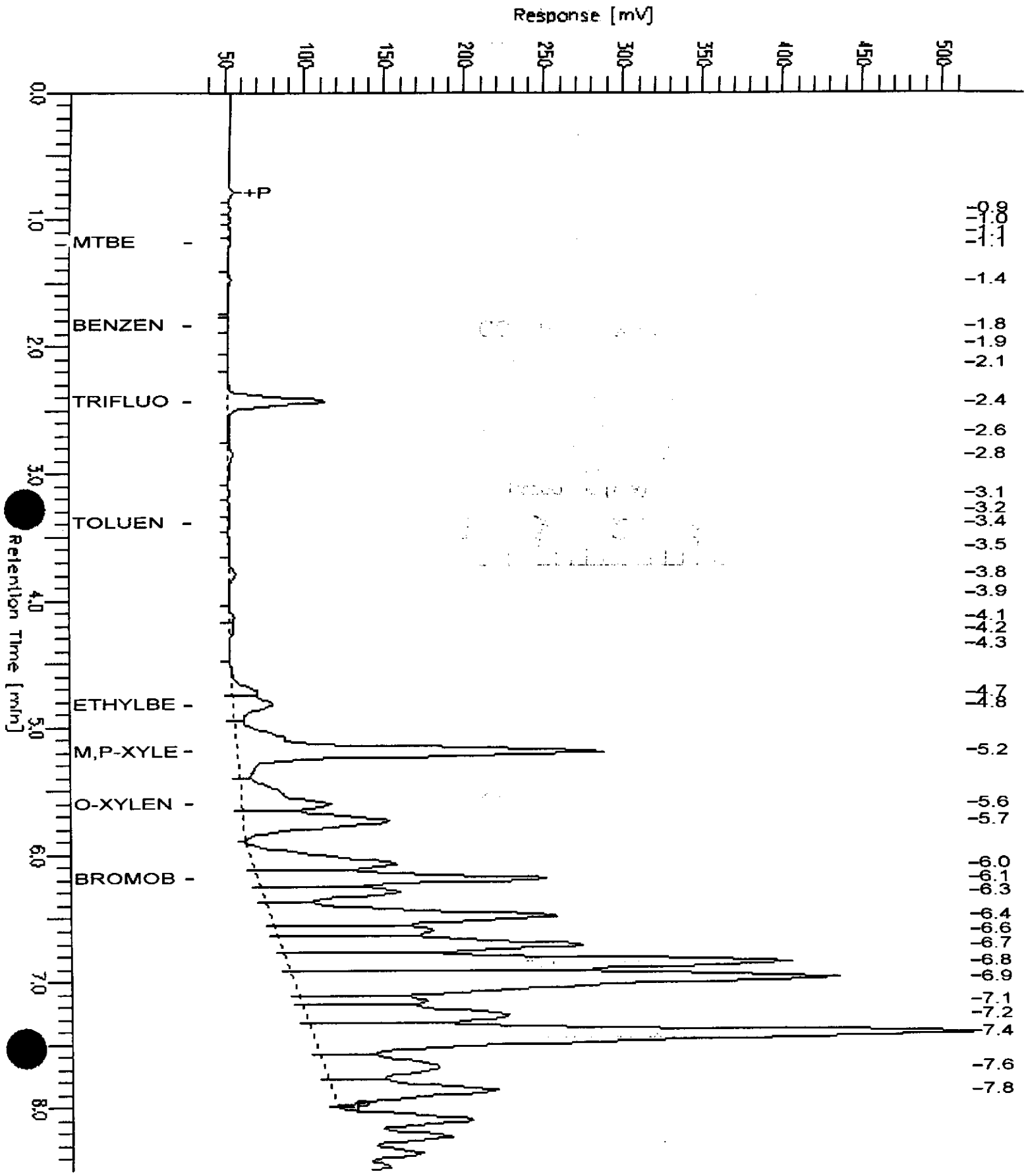
Sample #: Page 1 of 1
Date : 9/6/96 09:05 AM
Time of Injection: 9/6/96 08:56 AM
Low Point : 45.71 mV High Point : 216.83 mV
Plot Scale: 171.1 mV



BTXE - GC-04 RTX-1

Sample Name : S,126721-004,BATCH 29616
FileName : G:\GC04\249K026.raw
Method : QBTXE
Start Time : 0.00 min End Time : 8.50 min
Scale Factor: 1.0 Plot Offset: 31 mV

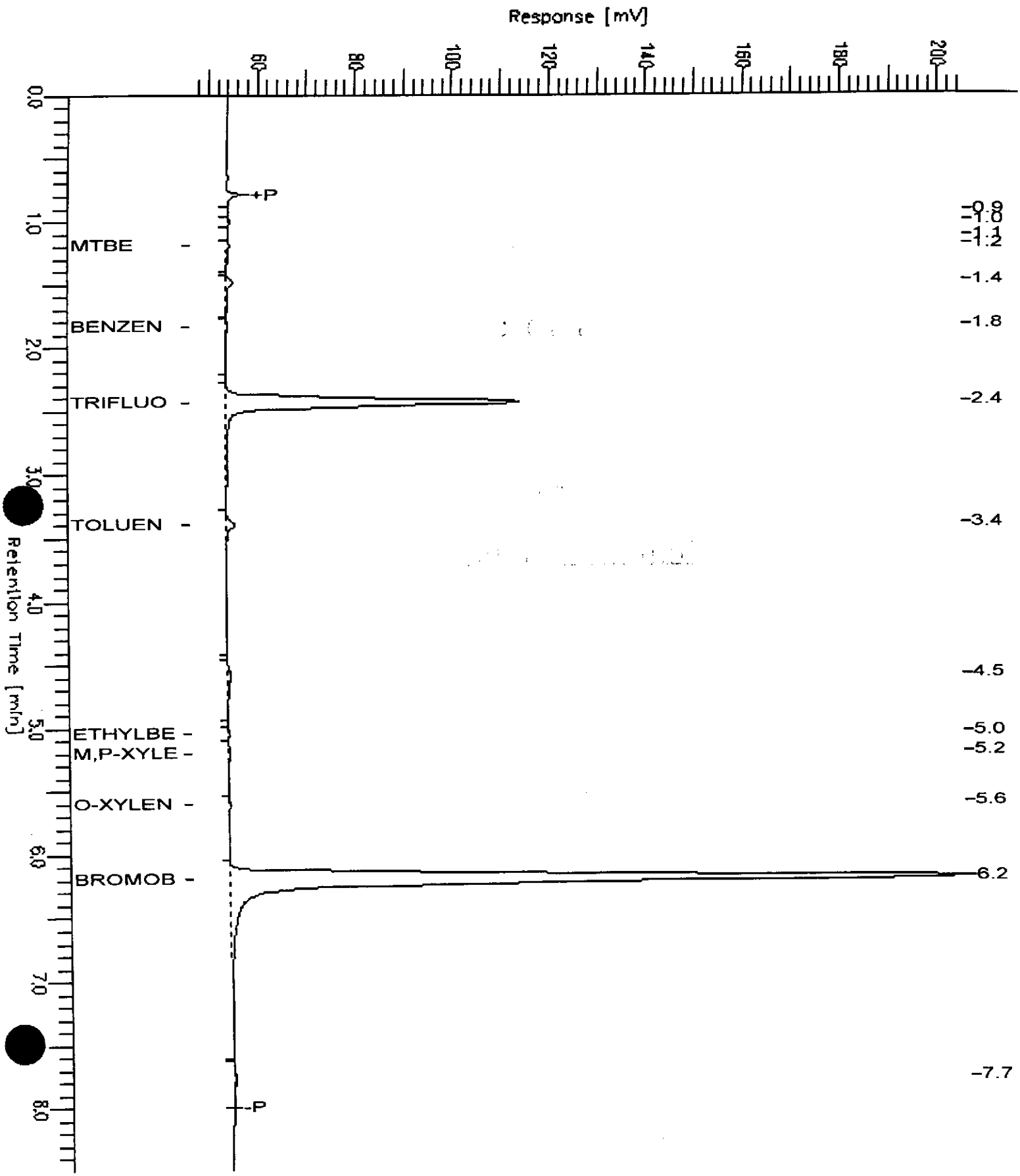
Sample #: Page 1 of 1
Date : 9/6/96 08:36 AM
Time of Injection: 9/6/96 08:28 AM
Low Point : 30.67 mV High Point : 517.81 mV
Plot Scale: 487.1 mV



BTXE - GC-04 RTX-1

Sample Name : S,126721-005,BATCH 29616
FileName : G:\GC04\249K024.raw
Method : QBTXE
Time : 0.00 min End Time : 8.50 min
Factor: 1.0 Plot Offset: 46 mV

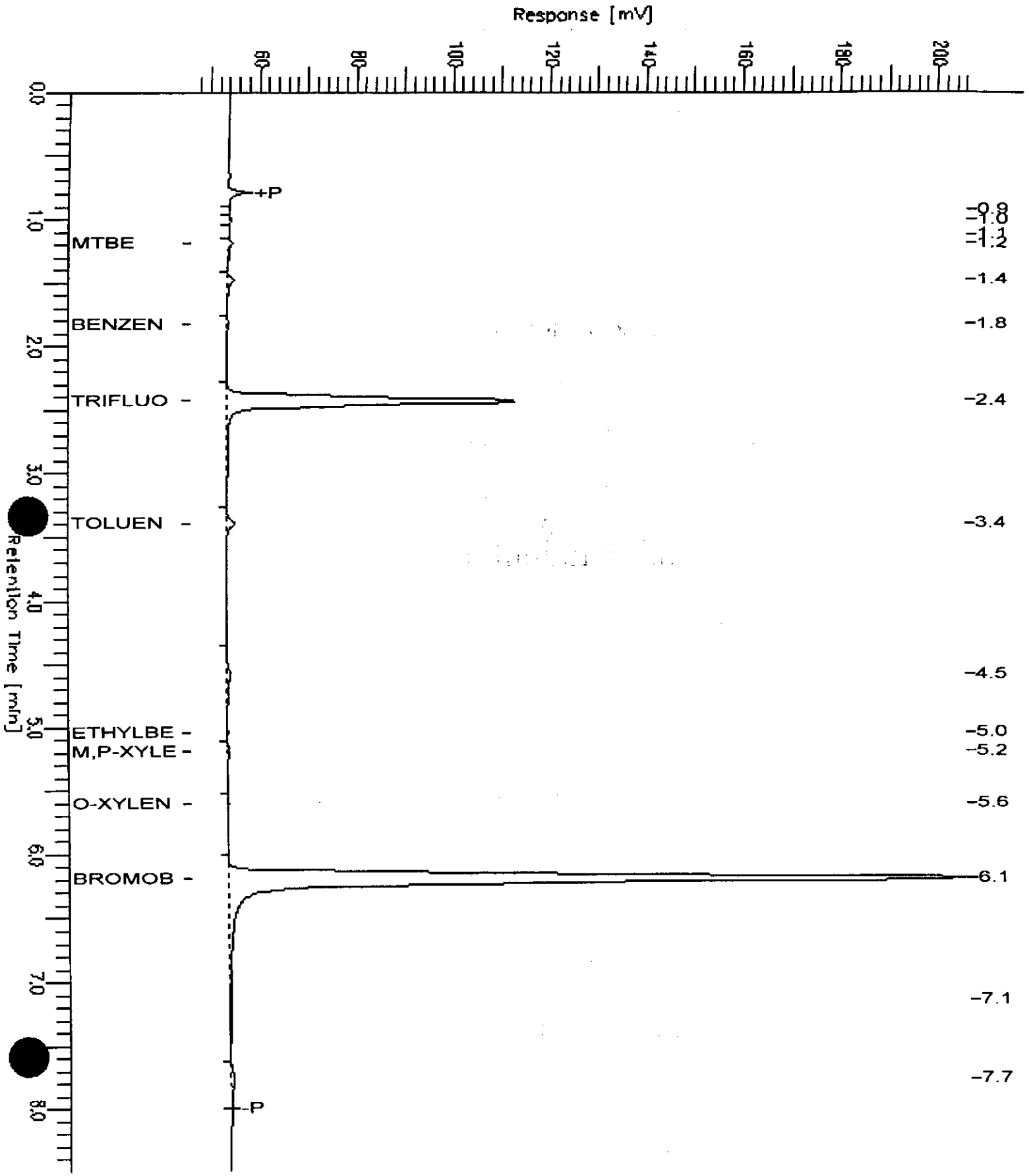
Sample #:
Date : 9/6/96 07:40 AM
Time of Injection: 9/6/96 07:31 AM
Low Point : 46.27 mV High Point : 205.77 mV
Plot Scale: 159.5 mV



BTXE - GC-04 RTX-1

Sample Name : S,126721-006,BATCH 29616
FileName : G:\GC04\249K023.raw
Method : QBTXE
Start Time : 0.00 min End Time : 8.50 min
Factor: 1.0 Plot Offset: 46 mV

Sample #:
Date : 9/6/96 07:12 AM
Time of Injection: 9/6/96 07:03 AM
Low Point : 46.25 mV High Point : 206.54 mV
Plot Scale: 160.3 mV



Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 29616
Units: ug/Kg
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/05/96

MB Lab ID: QC29707

Analyte	Result
Benzene	<5.0
Toluene	<5.0
Ethylbenzene	<5.0
m,p-Xylenes	<5.0
o-Xylene	<5.0

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	99	58-130
Bromobenzene	88	62-131

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 29616
Units: ug/Kg
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/05/96

LCS Lab ID: QC29708

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	94.2	100	94	80-120
Toluene	99	100	99	80-120
Ethylbenzene	101.3	100	101	80-120
m,p-Xylenes	197.1	200	99	80-120
o-Xylene	102.6	100	103	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	104	58-130		
Bromobenzene	101	62-131		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126702-001
Matrix: Soil
Batch#: 29616
Units: ug/Kg dry weight
Diln Fac: 1

Sample Date: 08/26/96
Received Date: 08/30/96
Prep Date: 09/05/96
Analysis Date: 09/05/96
Moisture: 8%

MS Lab ID: QC29709

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	108.7	<5.435	95.22	88	75-125
Toluene	108.7	<5.435	101.1	93	75-125
Ethylbenzene	108.7	<5.435	100.2	92	75-125
m,p-Xylenes	217.4	<5.435	196.3	90	75-125
o-Xylene	108.7	<5.435	111.3	102	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	100	43-114
Bromobenzene	93	47-112

MSD Lab ID: QC29710

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	108.7	96.74	89	75-125	2	20
Toluene	108.7	102.4	94	75-125	1	20
Ethylbenzene	108.7	100.7	93	75-125	0	20
m,p-Xylenes	217.4	197.4	91	75-125	1	20
o-Xylene	108.7	112.5	104	75-125	1	20

Surrogate	%Rec	Limits
Trifluorotoluene	100	58-130
Bromobenzene	92	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Volatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8240
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		
Field ID:	SCI-32@5	Sampled:	08/29/96
Lab ID:	126721-001	Received:	09/03/96
Matrix:	Soil	Extracted:	09/05/96
Batch#:	29557	Analyzed:	09/05/96
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	2.8 J	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	107	87-125
Bromofluorobenzene	101	79-122

J: Estimated Value

Data File: /chem/VOA_04.i/090496.b/di432.d
Report Date: 05-Sep-1996 08:26

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

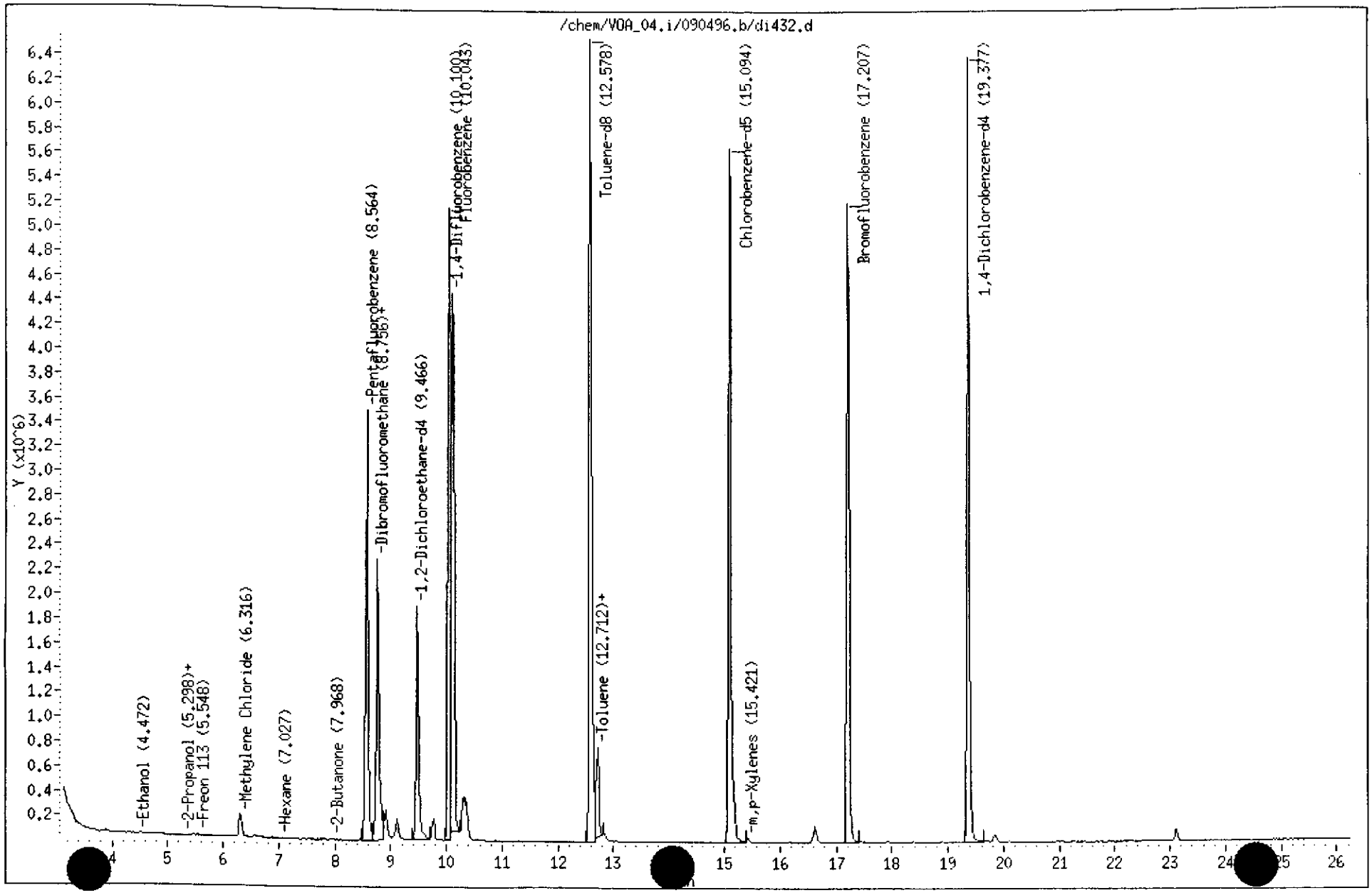
Data file : /chem/VOA_04.i/090496.b/di432.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 05-SEP-96 02:29
Operator : LLH Inst ID: VOA_04.i
Smp Info : S,126721-001
Misc Info : 8240,,29557,5.0,5,1, SOIL
Comment :
Method : /chem/VOA_04.i/090496.b/i4m826.m
Meth Date : 04-Sep-1996 18:00
Cal Date : 28-AUG-1996 23:53 Cal File: dhs27.d
Als bottle: 32
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA_04.i/090496.b/di432.d
Date : 05-SEP-96 02:29
Client ID: DYNA P&T
Sample Info: S,126721-001
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-34@3.5
Lab ID: 126721-002
Matrix: Soil
Batch#: 29557
Units: ug/Kg
Diln Fac: 1

Sampled: 08/29/96
Received: 09/03/96
Extracted: 09/05/96
Analyzed: 09/05/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	18
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	6.3	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	109	87-125
Bromofluorobenzene	107	79-122

Data File: /chem/VOA_04.i/090496.b/di433.d
Report Date: 05-Sep-1996 08:26

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_04.i/090496.b/di433.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 05-SEP-96 03:00
Operator : LLH Inst ID: VOA_04.i
Smp Info : S,126721-002
Misc Info : 8240,,29557,5.0,5,1, SOIL
Comment :
Method : /chem/VOA_04.i/090496.b/i4m826.m
Meth Date : 04-Sep-1996 18:00
Cal Date : 28-AUG-1996 23:53 Cal File: dhs27.d
Als bottle: 33
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

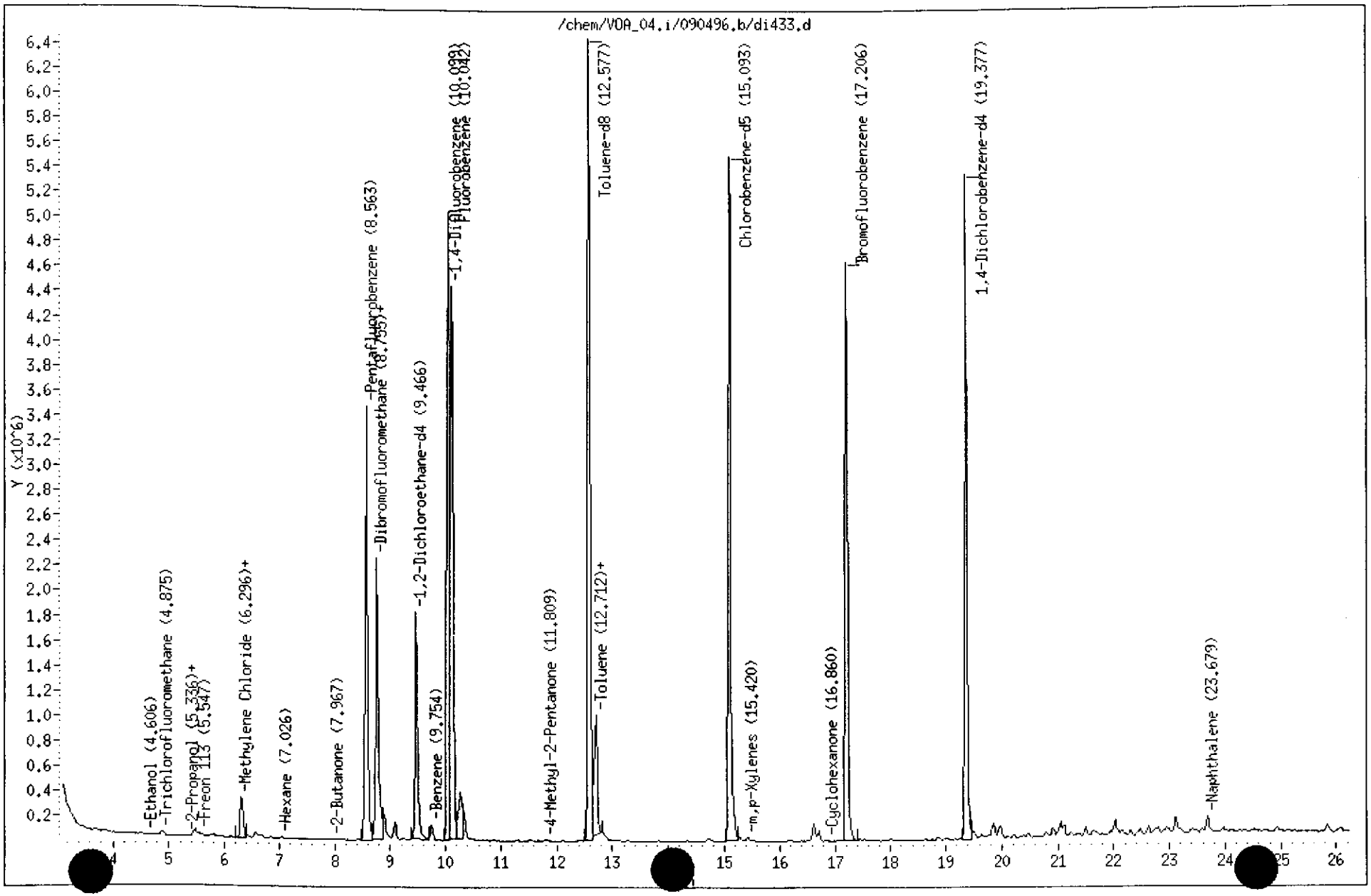
ISTD	RT	AREA	AMOUNT
* 32 1,4-Difluorobenzene	10.099	14558415	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/L)	FINAL(UG/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Benzene, fluoro-				CAS #: 462-06-6			
10.272	2065454	7.09	7.09	76	nbs75k.l	63109	32

Data File: /chem/VOA_04.i/090496.b/di433.d
Date : 05-SEP-96 03:00
Client ID: DYNA P&T
Sample Info: S,126721-002
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-38@3
Lab ID: 126721-007
Matrix: Soil
Batch#: 29557
Units: ug/Kg
Diln Fac: 1

Sampled: 08/30/96
Received: 09/03/96
Extracted: 09/05/96
Analyzed: 09/05/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	23	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	3.6
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	3.7
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	8.7
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	4.1 J	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	101	68-126
Toluene-d8	113	87-125
Bromofluorobenzene	99	79-122

J: Estimated Value

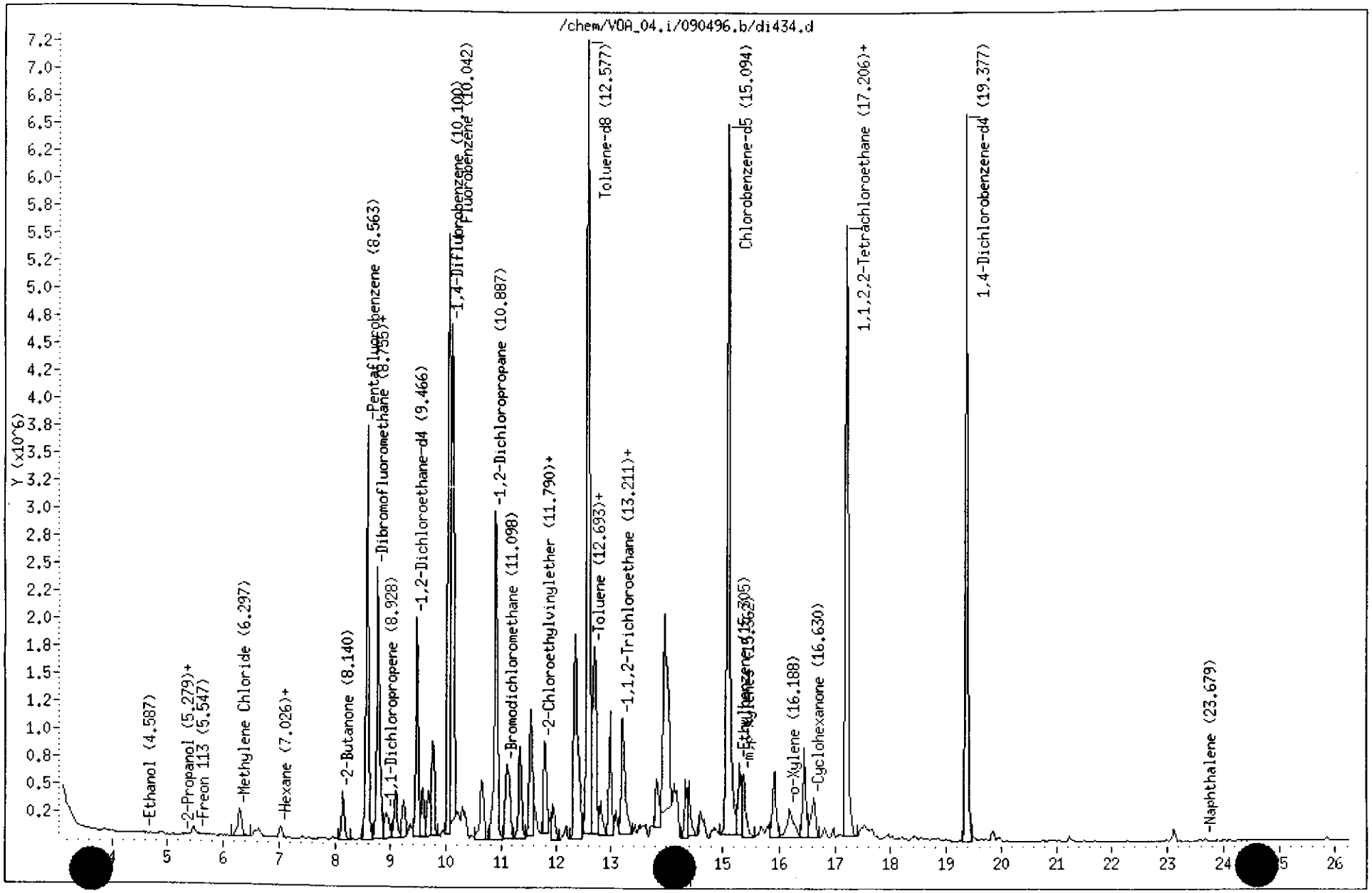
Data File: /chem/VOA_04.i/090496.b/di434.d
Report Date: 05-Sep-1996 08:26

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(UG/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Cyclohexane, 1,1,3-trimethyl-				CAS #: 3073-66-3			
13.960	10751238	23.73	23.73	95	nbs75k.l	4647	50
Cyclohexane, 1,1-dimethyl-				CAS #: 590-66-9			
15.919	2576254	5.69	5.69	64	nbs75k.l	2671	50
Bicyclo[3.3.1]nonane				CAS #: 280-65-9			
16.457	3135561	6.92	6.92	53	nbs75k.l	4233	50

Data File: /chem/VOA_04.i/090496.b/di434.d
Date : 05-SEP-96 03:31
Client ID: DYNA P&T
Sample Info: S,126721-007
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i

Operator: LLH
Column diameter: 0.32



Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 29557
Units: ug/Kg
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/04/96

MB Lab ID: QC29479

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	108	87-125
Bromofluorobenzene	106	79-122

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 29557
Units: ug/Kg
Diln Fac: 1

Prep Date: 09/04/96
Analysis Date: 09/04/96

LCS Lab ID: QC29477

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	53.6	50	107	51-180
Trichloroethene	46.06	50	92	73-141
Benzene	>LR	0	NM	78-142
Toluene	>LR	0	NM	76-150
Chlorobenzene	48.92	50	98	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	93	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	99	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits
NM: Not meaningful
LR: Over linear range
DO: Surrogate diluted out

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126722-010
Matrix: Soil
Batch#: 29557
Units: ug/Kg
Diln Fac: 1

Sample Date: 09/03/96
Received Date: 09/03/96
Prep Date: 09/04/96
Analysis Date: 09/04/96

MS Lab ID: QC29486

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	60.31	121	51-180
Trichloroethene	50	100.9	137	72 *	73-141
Benzene	50	0	>LR	NM	78-142
Toluene	50	0	>LR	NM	76-150
Chlorobenzene	50	<5	48.66	97	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	83	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	95	79-122

MSD Lab ID: QC29487

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	58.48	117	51-180	3	22
Trichloroethene	50	162.8	124	73-141	17	24
Benzene	50	>LR	NM	78-142	NM	21
Toluene	50	>LR	NM	76-150	NM	21
Chlorobenzene	50	48.59	97	83-129	0	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	84	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	103	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 1 out of 10 outside limits
NM: Not meaningful
LR: Over linear range
DO: Surrogate diluted out

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: SCI-32@5
Lab ID: 126721-001
Matrix: Soil
Batch#: 29691
Units: ug/Kg
Diln Fac: 1

Sampled: 08/29/96
Received: 09/03/96
Extracted: 09/09/96
Analyzed: 09/11/96

Analyte	Result	Reporting Limit
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1700
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1700
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1700
2,4-Dinitrophenol	ND	1700
4-Nitrophenol	ND	1700
4,6-Dinitro-2-methylphenol	ND	1700
Pentachlorophenol	ND	1700
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
bis(2-Chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
bis(2-Chloroisopropyl) ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
bis(2-Chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	1700
Dimethylphthalate	ND	330
Acenaphthylene	ND	330

Semivolatile Organics by GC/MS

Field ID:	SCI-32@5	Sampled:	08/29/96
Lab ID:	126721-001	Received:	09/03/96
Matrix:	Soil	Extracted:	09/09/96
Batch#:	29691	Analyzed:	09/11/96
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Benzidine	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	68	25-121
Phenol-d5	70	24-113
2,4,6-Tribromophenol	50	19-122
Nitrobenzene-d5	62	23-120
2-Fluorobiphenyl	70	30-115
Terphenyl-d14	67	18-137

Data File: /chem/bna02.i/091196x.b/07_6721-001.d
Report Date: 12-Sep-1996 10:01

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126721-001
Operator : dsh
Sample Location:
Sample Matrix: SOIL
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 2

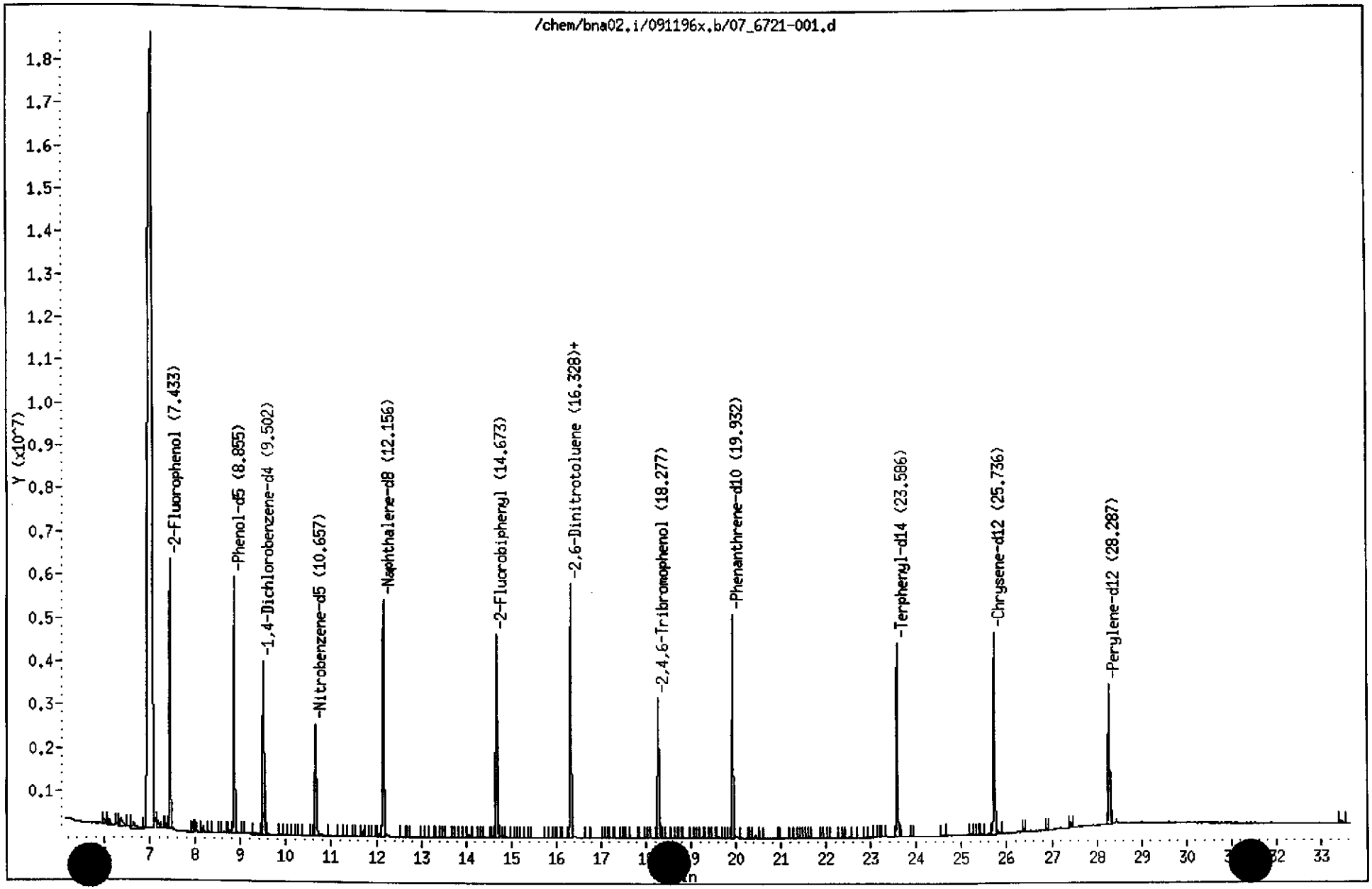
CONCENTRATION UNITS:
(ug/L or ug/KG) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	6.344	133.82	_J__
2.		Unknown	7.051	18151.03	NJ__

Data File: /chem/bna02.i/091196x.b/07_6721-001.d
Date : 11-SEP-1996 16:47
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i

Operator: dsh
Column diameter: 0.25



Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: SCI-34@3.5
Lab ID: 126721-002
Matrix: Soil
Batch#: 29691
Units: ug/Kg
Diln Fac: 10

Sampled: 08/29/96
Received: 09/03/96
Extracted: 09/09/96
Analyzed: 09/18/96

Analyte	Result	Reporting Limit
Phenol	ND	3300
2-Chlorophenol	ND	3300
Benzyl alcohol	ND	3300
2-Methylphenol	ND	3300
4-Methylphenol	ND	3300
2-Nitrophenol	ND	17000
2,4-Dimethylphenol	ND	3300
Benzoic acid	ND	17000
2,4-Dichlorophenol	ND	3300
4-Chloro-3-methylphenol	ND	3300
2,4,6-Trichlorophenol	ND	3300
2,4,5-Trichlorophenol	ND	17000
2,4-Dinitrophenol	ND	17000
4-Nitrophenol	ND	17000
4,6-Dinitro-2-methylphenol	ND	17000
Pentachlorophenol	ND	17000
N-Nitrosodimethylamine	ND	3300
Aniline	ND	3300
bis(2-Chloroethyl)ether	ND	3300
1,3-Dichlorobenzene	ND	3300
1,4-Dichlorobenzene	ND	3300
1,2-Dichlorobenzene	ND	3300
bis(2-Chloroisopropyl) ether	ND	3300
N-Nitroso-di-n-propylamine	ND	3300
Hexachloroethane	ND	3300
Nitrobenzene	ND	3300
Isophorone	ND	3300
bis(2-Chloroethoxy)methane	ND	3300
1,2,4-Trichlorobenzene	ND	3300
Naphthalene	ND	3300
4-Chloroaniline	ND	3300
Hexachlorobutadiene	ND	3300
2-Methylnaphthalene	ND	3300
Hexachlorocyclopentadiene	ND	3300
2-Chloronaphthalene	ND	3300
2-Nitroaniline	ND	17000
Dimethylphthalate	ND	3300
Acenaphthylene	ND	3300

Semivolatile Organics by GC/MS

Field ID:	SCI-34@3.5	Sampled:	08/29/96
Lab ID:	126721-002	Received:	09/03/96
Matrix:	Soil	Extracted:	09/09/96
Batch#:	29691	Analyzed:	09/18/96
Units:	ug/Kg		
Diln Fac:	10		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	3300
3-Nitroaniline	ND	17000
Acenaphthene	ND	3300
Dibenzofuran	ND	3300
2,4-Dinitrotoluene	ND	3300
Diethylphthalate	ND	3300
4-Chlorophenyl-phenylether	ND	3300
Fluorene	ND	3300
4-Nitroaniline	ND	17000
N-Nitrosodiphenylamine	ND	3300
Azobenzene	ND	3300
4-Bromophenyl-phenylether	ND	3300
Hexachlorobenzene	ND	3300
Phenanthrene	ND	3300
Anthracene	ND	3300
Di-n-butylphthalate	ND	3300
Fluoranthene	ND	3300
Benzidine	ND	3300
Pyrene	ND	3300
Butylbenzylphthalate	ND	3300
3,3'-Dichlorobenzidine	ND	17000
Benzo(a)anthracene	ND	3300
Chrysene	ND	3300
bis(2-Ethylhexyl)phthalate	4000	3300
Di-n-octylphthalate	ND	3300
Benzo(b)fluoranthene	ND	3300
Benzo(k)fluoranthene	ND	3300
Benzo(a)pyrene	ND	3300
Indeno(1,2,3-cd)pyrene	ND	3300
Dibenz(a,h)anthracene	ND	3300
Benzo(g,h,i)perylene	ND	3300

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	73	25-121
Phenol-d5	74	24-113
2,4,6-Tribromophenol	64	19-122
Nitrobenzene-d5	82	23-120
2-Fluorobiphenyl	77	30-115
Terphenyl-d14	114	18-137

Data File: /chem/bna02.i/091896x.b/10_6721-2rd10.d
Report Date: 19-Sep-1996 16:53

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: dl,126721-002
Operator : dsh
Sample Location:
Sample Matrix: SOIL
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 8

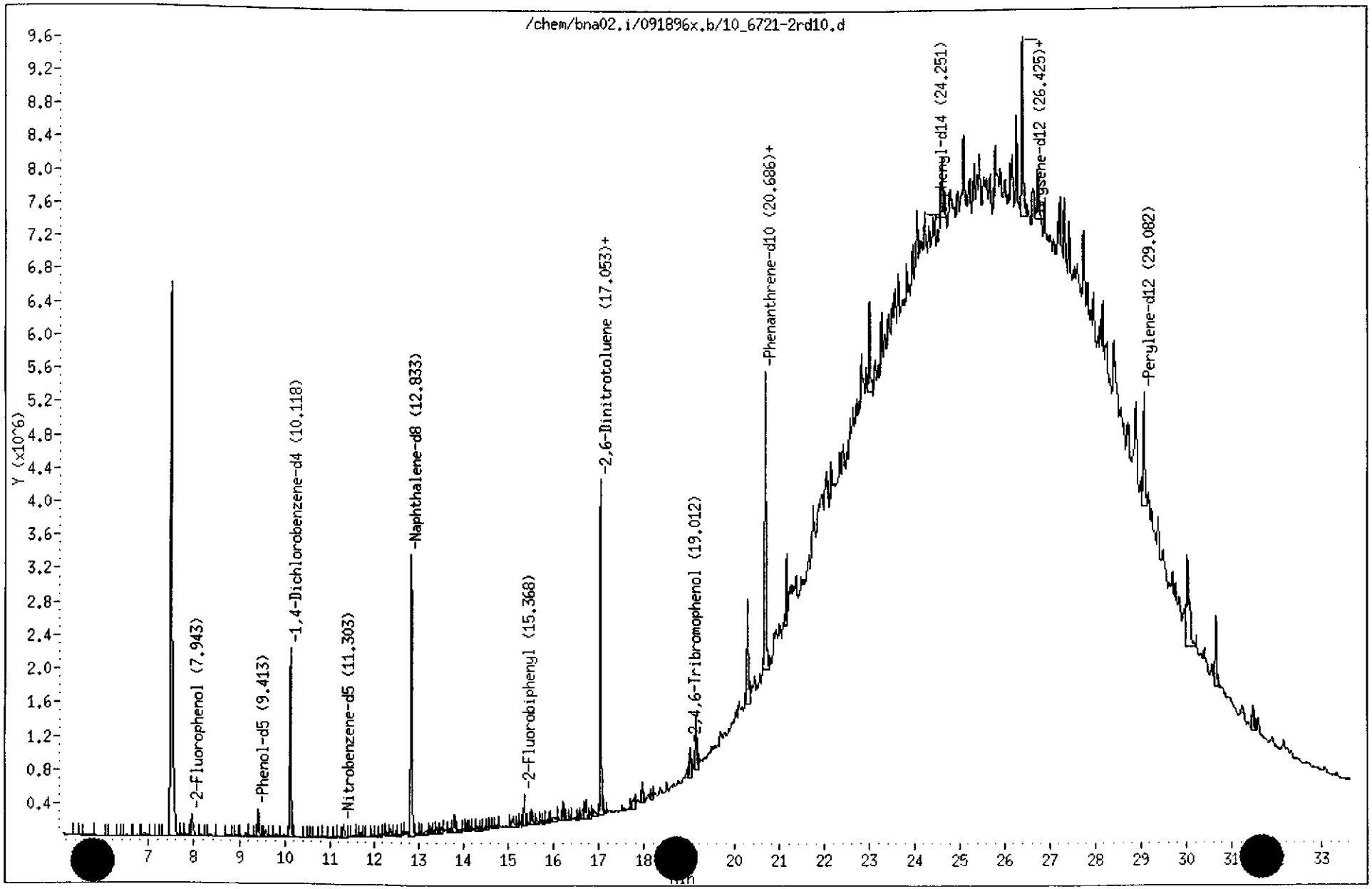
CONCENTRATION UNITS:
(ug/L or ug/KG) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.493	46297.26	NJ
2.		Unknown	19.141	2209.11	NJ
3.		Unknown	20.296	5032.39	NJ
4.		Unknown	21.156	3034.89	NJ
5.		Unknown	23.002	4476.74	NJ
6.		Unknown	30.039	17970.86	NJ
7.		Unknown	30.681	8626.52	NJ
8.		Unknown	31.491	3244.91	NJ

Data File: /chem/bna02.i/091896x.b/10_6721-2rd10.d
Date : 18-SEP-1996 19:53
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i

Operator: dsh
Column diameter: 0.25



Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: SCI-38@3
Lab ID: 126721-007
Matrix: Soil
Batch#: 29691
Units: ug/Kg
Diln Fac: 1

Sampled: 08/30/96
Received: 09/03/96
Extracted: 09/09/96
Analyzed: 09/13/96

Analyte	Result	Reporting Limit
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1700
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1700
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1700
2,4-Dinitrophenol	ND	1700
4-Nitrophenol	ND	1700
4,6-Dinitro-2-methylphenol	ND	1700
Pentachlorophenol	ND	1700
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
bis(2-Chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
bis(2-Chloroisopropyl) ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
bis(2-Chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	1700
Dimethylphthalate	ND	330
Acenaphthylene	ND	330

Semivolatile Organics by GC/MS

Field ID:	SCI-38@3	Sampled:	08/30/96
Lab ID:	126721-007	Received:	09/03/96
Matrix:	Soil	Extracted:	09/09/96
Batch#:	29691	Analyzed:	09/13/96
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Benzidine	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	65	25-121
Phenol-d5	69	24-113
2,4,6-Tribromophenol	48	19-122
Nitrobenzene-d5	63	23-120
2-Fluorobiphenyl	68	30-115
Terphenyl-d14	76	18-137

Data File: /chem/bna02.i/091996x.b/17_6721-7r3.d
Report Date: 20-Sep-1996 10:17

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126721-007
Operator : dsh
Sample Location:
Sample Matrix: SOIL
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 4

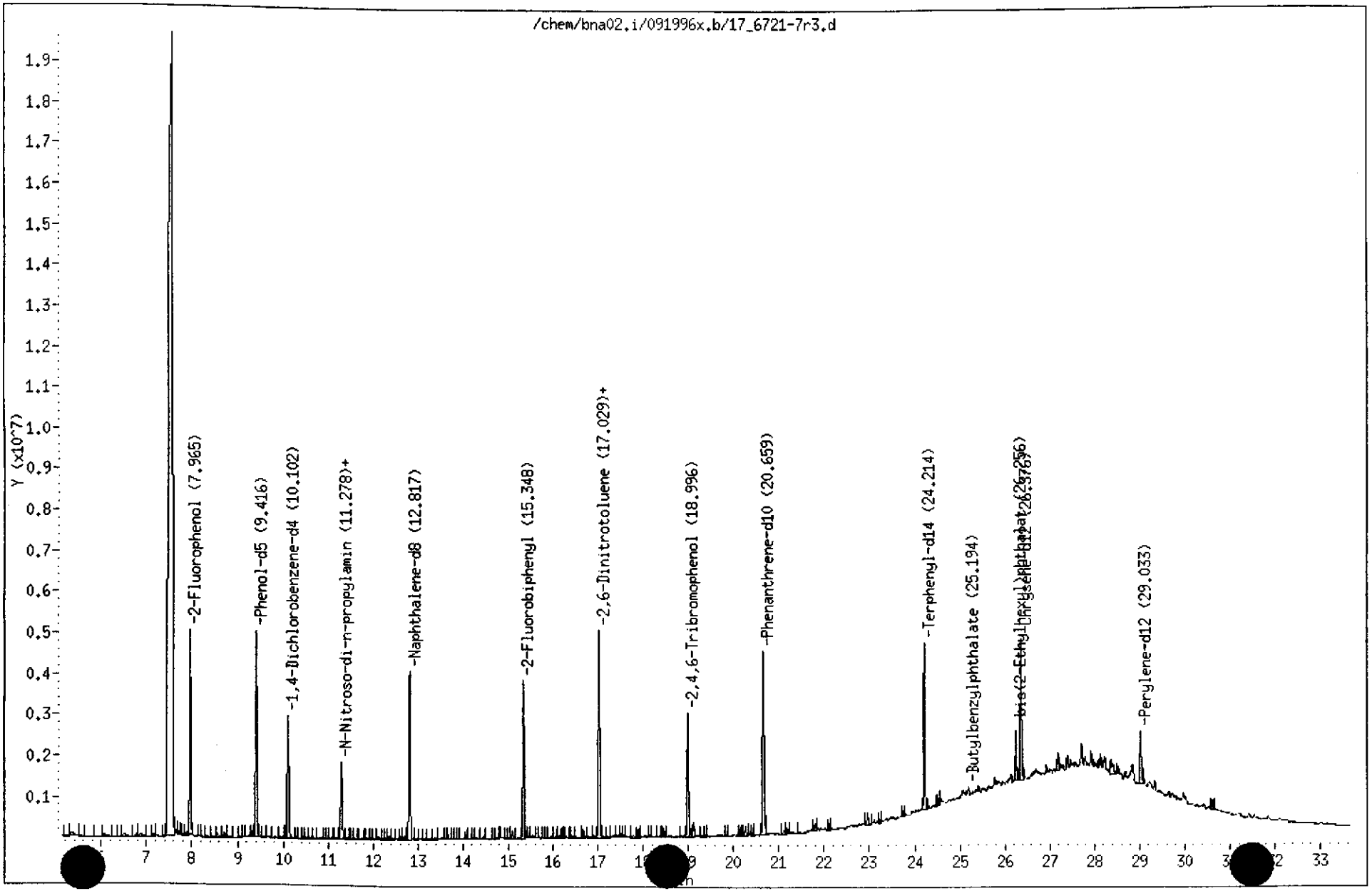
CONCENTRATION UNITS:
(ug/L or ug/KG) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.563	24909.28	NJ
2.		Unknown	27.190	158.86	NJ
3.		Unknown	28.369	610.25	NJ
4.		Unknown	30.616	261.84	NJ

Data File: /chem/bna02.i/091996x.b/17_6721-7r3.d
Date : 19-SEP-1996 23:47
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i

Operator: dsh
Column diameter: 0.25



EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 29691
Units: ug/Kg
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/10/96

MB Lab ID: QC29968

Analyte	Result	Reporting Limit
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1700
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1700
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1700
2,4-Dinitrophenol	ND	1700
4-Nitrophenol	ND	1700
4,6-Dinitro-2-methylphenol	ND	1700
Pentachlorophenol	ND	1700
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
bis(2-Chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
bis(2-Chloroisopropyl) ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
bis(2-Chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	1700
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 29691
Units: ug/Kg
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/10/96

MB Lab ID: QC29968

Analyte	Result	Reporting Limit
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Benzidine	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	67	25-121
Phenol-d5	70	24-113
2,4,6-Tribromophenol	49	19-122
Nitrobenzene-d5	65	23-120
2-Fluorobiphenyl	70	30-115
Terphenyl-d14	73	18-137

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 29691
Units: ug/Kg
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/10/96

LCS Lab ID: QC29969

Analyte	Result	Spike Added	%Rec #	Limits
Phenol	2201	3333	66	26-90
2-Chlorophenol	2390	3333	72	25-102
4-Chloro-3-methylphenol	2181	3333	65	26-103
4-Nitrophenol	1588	3333	48	11-114
Pentachlorophenol	1718	3333	52	17-109
1,4-Dichlorobenzene	1168	1667	70	28-104
N-Nitroso-di-n-propylamine	846	1667	51	41-126
1,2,4-Trichlorobenzene	1126	1667	68	38-107
Acenaphthene	1169	1667	70	31-137
2,4-Dinitrotoluene	1103	1667	66	28-89
Pyrene	1118	1667	67	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	68	25-121
Phenol-d5	71	24-113
2,4,6-Tribromophenol	54	19-122
Nitrobenzene-d5	67	23-120
2-Fluorobiphenyl	70	30-115
Terphenyl-d14	70	18-137

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 11 outside limits
DO: Surrogate diluted out

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 214908-016
Matrix: Soil
Batch#: 29691
Units: ug/Kg
Diln Fac: 1

Sample Date: 08/29/96
Received Date: 08/29/96
Prep Date: 09/09/96
Analysis Date: 09/10/96

MS Lab ID: QC29970

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Phenol	3333	<333.3	2118	64	26-90
2-Chlorophenol	3333	<333.3	2314	69	25-102
4-Chloro-3-methylphenol	3333	<333.3	2112	63	26-103
4-Nitrophenol	3333	<1667	1595	48	11-114
Pentachlorophenol	3333	<1667	1762	53	17-109
1,4-Dichlorobenzene	1667	<333.3	934.6	56	28-104
N-Nitroso-di-n-propylamine	1667	<333.3	819.4	49	41-126
1,2,4-Trichlorobenzene	1667	<333.3	984.7	59	38-107
Acenaphthene	1667	<333.3	1137	68	31-137
2,4-Dinitrotoluene	1667	<333.3	1062	64	28-89
Pyrene	1667	<333.3	1141	68	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	66	25-121
Phenol-d5	69	24-113
2,4,6-Tribromophenol	53	19-122
Nitrobenzene-d5	64	23-120
2-Fluorobiphenyl	67	30-115
Terphenyl-d14	71	18-137

MSD Lab ID: QC29971

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Phenol	3333	2070	62	26-90	3	35
2-Chlorophenol	3333	2265	68	25-102	1	50
4-Chloro-3-methylphenol	3333	2114	63	26-103	0	33
4-Nitrophenol	3333	1516	45	11-114	6	50
Pentachlorophenol	3333	1624	49	17-109	8	47
1,4-Dichlorobenzene	1667	948.9	57	28-104	2	27
N-Nitroso-di-n-propylamine	1667	798.7	48	41-126	3	38
1,2,4-Trichlorobenzene	1667	989.4	59	38-107	0	23
Acenaphthene	1667	1133	68	31-137	0	19
2,4-Dinitrotoluene	1667	1028	62	28-89	3	47
Pyrene	1667	1140	68	35-142	0	36

Surrogate	%Rec	Limits
2-Fluorophenol	64	25-121
Phenol-d5	67	24-113
2,4,6-Tribromophenol	51	19-122
Nitrobenzene-d5	62	23-120
2-Fluorobiphenyl	66	30-115
Terphenyl-d14	70	18-137

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3550
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-32@5	Sampled:	08/29/96
Lab ID:	126721-001	Received:	09/03/96
Matrix:	Soil	Extracted:	09/11/96
Batch#:	29753	Analyzed:	09/13/96
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	20
Aroclor-1221	ND	20
Aroclor-1232	ND	20
Aroclor-1242	ND	20
Aroclor-1248	ND	20
Aroclor-1254	ND	20
Aroclor-1260	ND	20

Surrogate	%Recovery	Recovery Limits
TCMX	80	60-150
Decachlorobiphenyl	102	61-143

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3550
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-34@3.5	Sampled:	08/29/96
Lab ID:	126721-002	Received:	09/03/96
Matrix:	Soil	Extracted:	09/11/96
Batch#:	29753	Analyzed:	09/13/96
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	20
Aroclor-1221	ND	20
Aroclor-1232	ND	20
Aroclor-1242	ND	20
Aroclor-1248	ND	20
Aroclor-1254	ND	20
Aroclor-1260	380	20

Surrogate	%Recovery	Recovery Limits
TCMX	99	60-150
Decachlorobiphenyl	104	61-143

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3550
Location:	KOT	Cleanup Method:	EPA acid

Field ID:	SCI-38@3	Sampled:	08/30/96
Lab ID:	126721-007	Received:	09/03/96
Matrix:	Soil	Extracted:	09/11/96
Batch#:	29753	Analyzed:	09/13/96
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	20
Aroclor-1221	ND	20
Aroclor-1232	ND	20
Aroclor-1242	ND	20
Aroclor-1248	ND	20
Aroclor-1254	ND	20
Aroclor-1260	46	20

Surrogate	%Recovery	Recovery Limits
TCMX	111	60-150
Decachlorobiphenyl	91	61-143

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

Polychlorinated Biphenyls

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3550
Location:	KOT	Cleanup Method:	EPA acid

METHOD BLANK

Matrix:	Soil	Prep Date:	09/11/96
Batch#:	29753	Analysis Date:	09/12/96
Units:	ug/Kg		
Diln Fac:	1		

MB Lab ID: QC30223

Analyte	Result	Reporting Limit
Aroclor-1016	ND	20
Aroclor-1221	ND	20
Aroclor-1232	ND	20
Aroclor-1242	ND	20
Aroclor-1248	ND	20
Aroclor-1254	ND	20
Aroclor-1260	ND	20

Surrogate	%Rec	Recovery Limits
TCMX	79	60-150
Decachlorobiphenyl	98	61-143

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

Polychlorinated Biphenyls

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3550
Location:	KOT	Cleanup Method:	EPA acid

LABORATORY CONTROL SAMPLE

Matrix:	Soil	Prep Date:	09/11/96
Batch#:	29753	Analysis Date:	09/12/96
Units:	ug/Kg		
Diln Fac:	1		

LCS Lab ID: QC30224

Analyte	Result	Spike Added	%Rec #	Limits
Aroclor-1260	164	167	98	56-130
Surrogate	**%Rec**	**Limits**		
TCMX	87	60-150		
Decachlorobiphenyl	104	61-143		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126721 BATCH QC REPORT

Polychlorinated Biphenyls

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3550
Location:	KOT	Cleanup Method:	EPA acid

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	SCI-32@5	Sample Date:	08/29/96
Lab ID:	126721-001	Received Date:	09/03/96
Matrix:	Soil	Prep Date:	09/11/96
Batch#:	29753	Analysis Date:	09/12/96
Units:	ug/Kg		
Diln Fac:	1		

MS Lab ID: QC30225

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Aroclor-1260	170	<20	158.4	93	56-130
Surrogate	**%Rec**	**Limits**			
TCMX	78	60-150			
Decachlorobiphenyl	103	61-143			

MSD Lab ID: QC30226

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	170	170.9	101	56-130	8	25
Surrogate	**%Rec**	**Limits**				
TCMX	79	60-150				
Decachlorobiphenyl	105	61-143				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-32@5
LAB ID: 126721-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Soil

DATE SAMPLED: 08/29/96
DATE RECEIVED: 09/03/96
DATE REPORTED: 09/13/96

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.8	1	29776	EPA 6010A	09/13/96
Arsenic	2.2	0.24	1	29776	EPA 6010A	09/13/96
Barium	200	0.47	1	29776	EPA 6010A	09/13/96
Beryllium	0.36	0.095	1	29776	EPA 6010A	09/13/96
Cadmium	ND	0.095	1	29776	EPA 6010A	09/13/96
Chromium (total)	31	0.47	1	29776	EPA 6010A	09/13/96
Cobalt	14	0.95	1	29776	EPA 6010A	09/13/96
Copper	11	0.47	1	29776	EPA 6010A	09/13/96
Lead	5.1	0.14	1	29776	EPA 6010A	09/13/96
Mercury	ND	0.10	1	29793	EPA 7471	09/13/96
Molybdenum	ND	0.95	1	29776	EPA 6010A	09/13/96
Nickel	52	0.95	1	29776	EPA 6010A	09/13/96
Selenium	0.83	0.24	1	29776	EPA 6010A	09/13/96
Silver	ND	0.47	1	29776	EPA 6010A	09/13/96
Thallium	ND	0.24	1	29776	EPA 6010A	09/13/96
Vanadium	22	0.47	1	29776	EPA 6010A	09/13/96
Zinc	31	0.95	1	29776	EPA 6010A	09/13/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-38@3
LAB ID: 126721-007
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Soil

DATE SAMPLED: 08/30/96
DATE RECEIVED: 09/03/96
DATE REPORTED: 09/13/96

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.9	1	29776	EPA 6010A	09/13/96
Arsenic	3.6	0.24	1	29776	EPA 6010A	09/13/96
Barium	260	0.48	1	29776	EPA 6010A	09/13/96
Beryllium	0.36	0.096	1	29776	EPA 6010A	09/13/96
Cadmium	0.33	0.096	1	29776	EPA 6010A	09/13/96
Chromium (total)	7.9	0.48	1	29776	EPA 6010A	09/13/96
Cobalt	8.4	0.96	1	29776	EPA 6010A	09/13/96
Copper	7.7	0.48	1	29776	EPA 6010A	09/13/96
Lead	18	0.14	1	29776	EPA 6010A	09/13/96
Mercury	ND	0.095	1	29793	EPA 7471	09/13/96
Molybdenum	ND	0.96	1	29776	EPA 6010A	09/13/96
Nickel	9.0	0.96	1	29776	EPA 6010A	09/13/96
Selenium	2.8	0.24	1	29776	EPA 6010A	09/13/96
Silver	ND	0.48	1	29776	EPA 6010A	09/13/96
Thallium	ND	0.24	1	29776	EPA 6010A	09/13/96
Vanadium	47	0.48	1	29776	EPA 6010A	09/13/96
Zinc	100	0.96	1	29776	EPA 6010A	09/13/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126721

DATE REPORTED: 09/13/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3	mg/Kg	1	29776	EPA 6010A	09/13/96
Arsenic	ND	0.25	mg/Kg	1	29776	EPA 6010A	09/13/96
Barium	ND	0.5	mg/Kg	1	29776	EPA 6010A	09/13/96
Beryllium	ND	0.1	mg/Kg	1	29776	EPA 6010A	09/13/96
Cadmium	ND	0.1	mg/Kg	1	29776	EPA 6010A	09/13/96
Chromium (total)	ND	0.5	mg/Kg	1	29776	EPA 6010A	09/13/96
Cobalt	ND	1	mg/Kg	1	29776	EPA 6010A	09/13/96
Copper	ND	0.5	mg/Kg	1	29776	EPA 6010A	09/13/96
Lead	ND	0.15	mg/Kg	1	29776	EPA 6010A	09/13/96
Mercury	ND	0.1	mg/Kg	1	29793	EPA 7471	09/13/96
Molybdenum	ND	1	mg/Kg	1	29776	EPA 6010A	09/13/96
Nickel	ND	1	mg/Kg	1	29776	EPA 6010A	09/13/96
Selenium	ND	0.25	mg/Kg	1	29776	EPA 6010A	09/13/96
Silver	ND	0.5	mg/Kg	1	29776	EPA 6010A	09/13/96
Thallium	ND	0.25	mg/Kg	1	29776	EPA 6010A	09/13/96
Vanadium	ND	0.5	mg/Kg	1	29776	EPA 6010A	09/13/96
Zinc	ND	1	mg/Kg	1	29776	EPA 6010A	09/13/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126721

DATE REPORTED: 09/13/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	500	539	492	ug/L	108	98	80-120	9	35	29776	EPA 6010A	09/13/96
Arsenic	2000	1810	1690	ug/L	91	85	80-120	7	35	29776	EPA 6010A	09/13/96
Barium	2000	1880	1770	ug/L	94	89	80-120	6	35	29776	EPA 6010A	09/13/96
Beryllium	50	49.9	45.8	ug/L	100	92	80-120	9	35	29776	EPA 6010A	09/13/96
Cadmium	50	50.3	46.4	ug/L	101	93	80-120	8	35	29776	EPA 6010A	09/13/96
Chromium (total)	200	195	179	ug/L	98	90	80-120	9	35	29776	EPA 6010A	09/13/96
Cobalt	500	490	446	ug/L	98	89	80-120	9	35	29776	EPA 6010A	09/13/96
Copper	250	250	237	ug/L	100	95	80-120	5	35	29776	EPA 6010A	09/13/96
Lead	500	485	445	ug/L	97	89	80-120	9	35	29776	EPA 6010A	09/13/96
Mercury	5	5.123	5.258	ug/L	103	105	80-120	3	35	29793	EPA 7470	09/13/96
Molybdenum	400	379	355	ug/L	95	89	80-120	7	35	29776	EPA 6010A	09/13/96
Nickel	500	497	459	ug/L	99	92	80-120	8	35	29776	EPA 6010A	09/13/96
Selenium	2000	1820	1690	ug/L	91	85	80-120	7	35	29776	EPA 6010A	09/13/96
Silver	100	86.9	81.2	ug/L	87	81	80-120	7	35	29776	EPA 6010A	09/13/96
Thallium	2000	1940	1790	ug/L	97	90	80-120	8	35	29776	EPA 6010A	09/13/96
Vanadium	500	477	444	ug/L	95	89	80-120	7	35	29776	EPA 6010A	09/13/96
Zinc	500	477	445	ug/L	95	89	80-120	7	35	29776	EPA 6010A	09/13/96

CHAIN OF CUSTODY FORM

12672

PAGE 1 OF

PROJECT NAME: KOT

JOB NUMBER: 133.005 LAB: CURTIS & TOMPKINS

PROJECT CONTACT: MEG MENDOZA TURNAROUND: NORMAL

SAMPLED BY: JEROME DE VERTEUIL REQUESTED BY: MEG MENDOZA

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT	TUBE			METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVHg	TEH (gasoline + diesel)	OBG (SGT-HS)	VOC w/1,3 soak	SVOC w/1,3 soak	Heavy Metals	PCB's	BTEX	TPH as diesel
-1	SCI-32 @ 5'		X								X						X		08	2	9	9 6		9	3	0		X	X	X	X	X	X	X		
	SCI-33 @ 6½		X								X						X																
-2	SCI-34 @ 3½		X								X						X																
SCI-35030-3	SCI-35 @ 3½		X								X						X					1	2	3	0		X	X						
-4	SCI-35 @ 8		X								X						X		08	2	10/11/96	1	2	3	0	*	X	X						
-5	SCI-36 @ 3½		X								X						X		08	2	10	96		9	1	5				X			X	X
-6	SCI-37 @ 2½		X								X						X		08	3	10	96		1	0	0				X			X	X
-7	SCI-38 @ 3		X								X						X		08	3	10	9 6	1	0	3	0		X	X	X	X	X	X		
	SCI-39 @ 3		X								X						X		08	3	10	9 6	1	1	3	0		X	X	X	X	X	X		

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	9/3/96 1800	Tracy Dickson	9/4 1820

COMMENTS & NOTES:

* - hold remainder of sample for possible future analysis

Subsurface Consultants, Inc.

171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607

(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 18-SEP-96
Lab Job Number: 126734
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 126734

Project Name: KOT
Project Number: 133.005

Report Date: 19 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126734-001	SCI-MW-2	Water	04-SEP-96	04-SEP-96	16-SEP-96	8.0	mg/L	5	TR	29850

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126734
Report Date: 19 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29850**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	16-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	87%	SMWW 17:5520BF	16-SEP-96
BSD	84%	SMWW 17:5520BF	16-SEP-96

		Control Limits
Average Spike Recovery	85%	80% - 120%
Relative Percent Difference	4.4%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126734-001	SCI-MW-2	29639	09/04/96	09/07/96	09/07/96	

Matrix: Water

Analyte	Units	126734-001
Diln Fac:		1
Gasoline	ug/L	<50
Surrogate		
Trifluorotoluene	%REC	99
Bromobenzene	%REC	91

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126734-002	MW-4	29639	09/04/96	09/08/96	09/08/96	
126734-003	MW-5	29639	09/04/96	09/07/96	09/07/96	

Matrix: Water

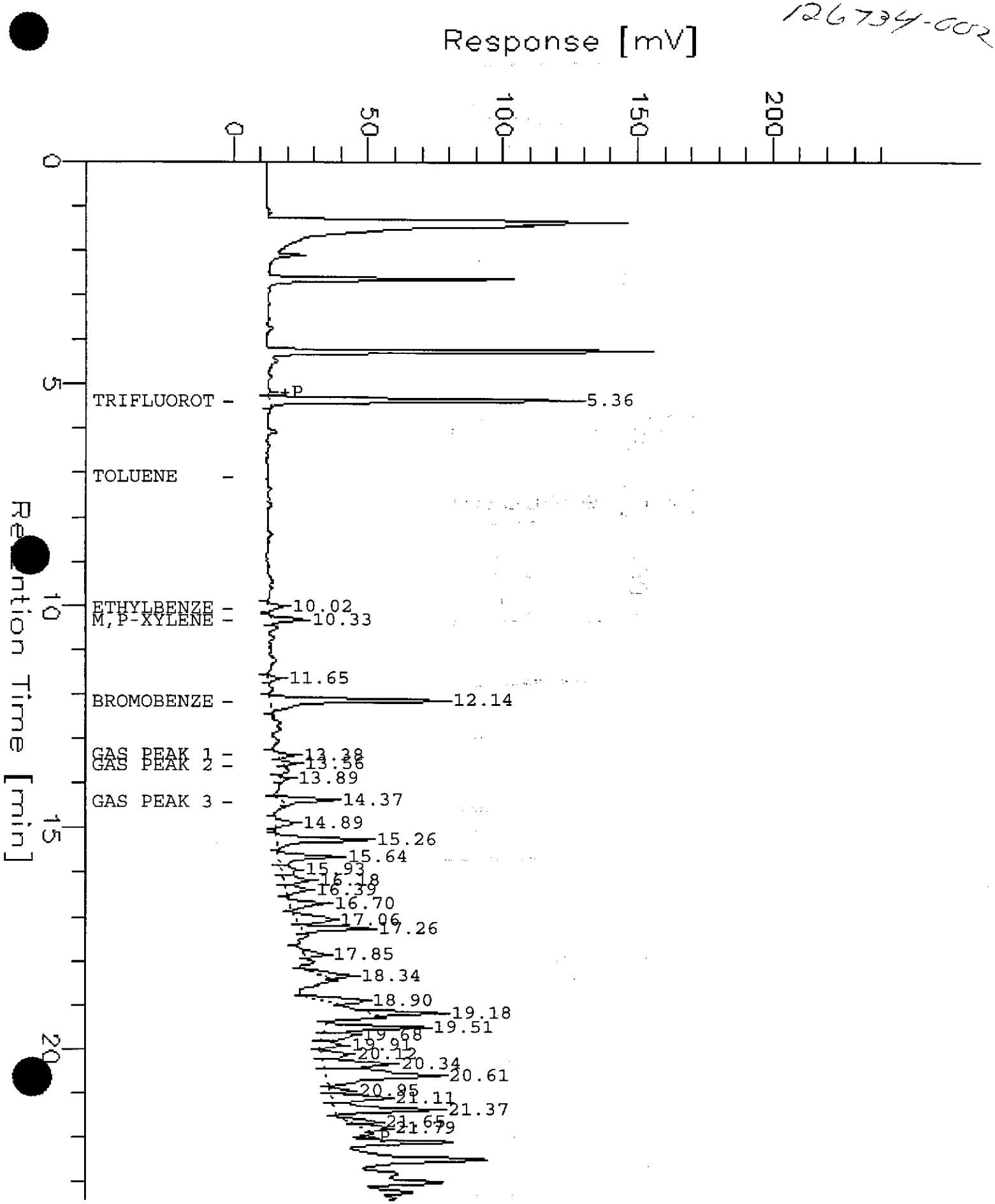
Analyte	Units	126734-002	126734-003
Diln Fac:		1	1
Gasoline	ug/L	1000 H	<50
Surrogate			
Trifluorotoluene	%REC	98	96
Bromobenzene	%REC	96	85

H: Heavier hydrocarbons than indicated standard

TVH2 - GC-05 RTX-1

FileName : G:\GC05\250H045.raw
Start Time : 0.00 min
Scale Factor: -1
End Time : 23.42 min
Plot Offset: 0 mV
Date : 9/8/96 8:56 PM
Low Point : -0.19 mV
Plot Scale: 250 mV
Page 1 of 1
High Point : 249.81 mV

126734-002



Curtis & Tompkins, Ltd.

Lab #: 126734 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/06/96
Batch#:	29639	Analysis Date:	09/06/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC29799

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	100	69-120
Bromobenzene	79	70-122

Curtis & Tompkins, Ltd.

Lab #: 126734 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

LCS Lab ID: QC29800

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	2007	2000	100	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	96	69-120		
Bromobenzene	103	70-122		

\# Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126718-001
Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Sample Date: 08/28/96
Received Date: 08/31/96
Prep Date: 09/06/96
Analysis Date: 09/06/96

MS Lab ID: QC29802

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	62.6	1921	96	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	96	69-120
Bromobenzene	104	70-122

MSD Lab ID: QC29803

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1973	99	75-125	3	20

Surrogate	%Rec	Limits
Trifluorotoluene	96	69-120
Bromobenzene	105	70-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126734-001	SCI-MW-2	29815	09/04/96	09/13/96	09/16/96	
126734-002	MW-4	29815	09/04/96	09/13/96	09/17/96	
126734-003	MW-5	29815	09/04/96	09/13/96	09/16/96	

Matrix: Water

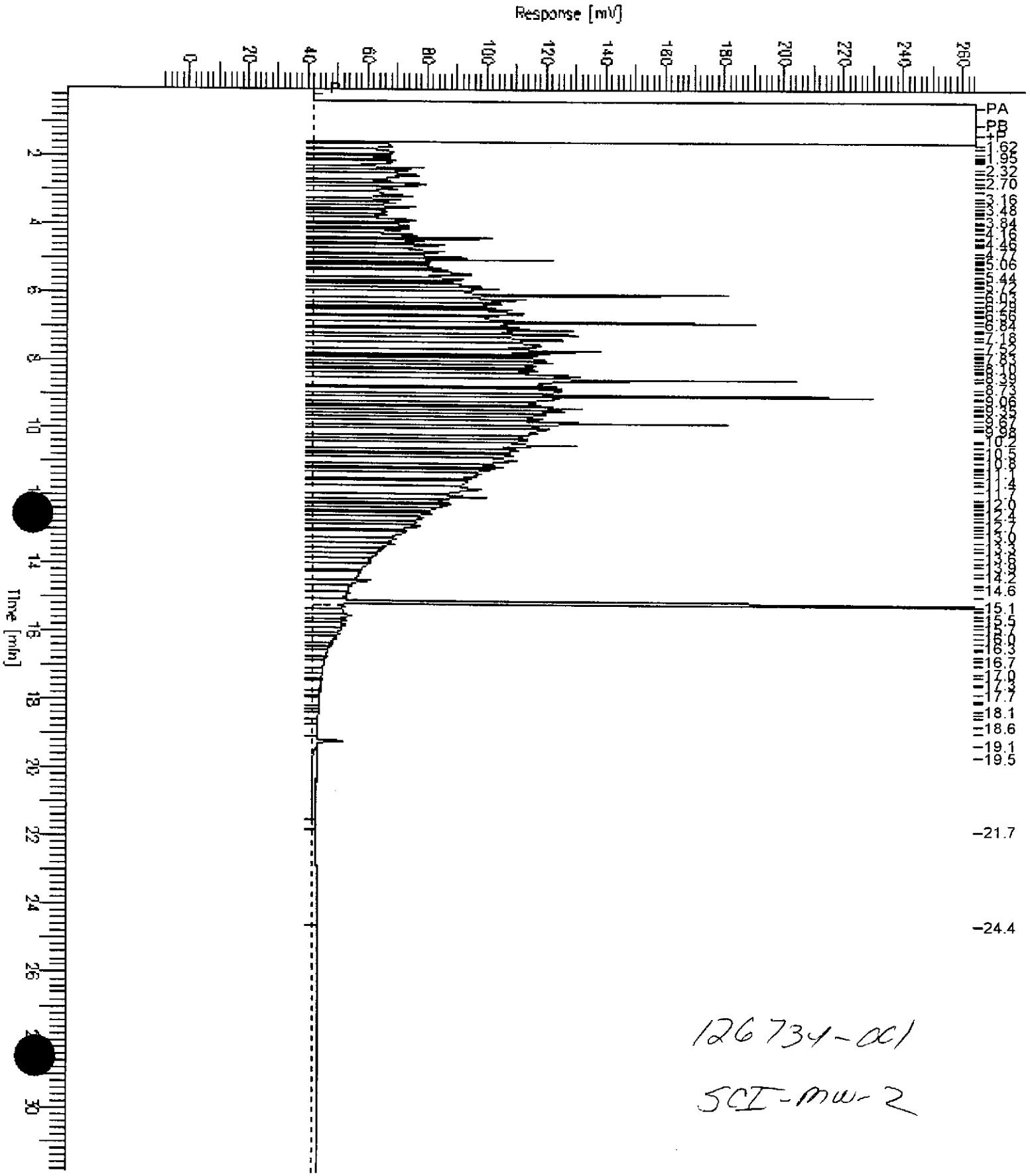
Analyte	Units	126734-001		126734-002		126734-003	
Diln Fac:		1		20		1	
Diesel C12-C22	ug/L	5100		240000		7700	YH
Motor Oil C22-C50	ug/L	770	YL	26000	YL	1900	YL
Surrogate							
Hexacosane	%REC	89			DO	100	

DO: Surrogate diluted out
Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

GC15 Channel A TEH

Sample Name : W,126734-001
FileName : G:\GC15\CHB\260B018.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -10 mV

Sample #: 29815 Page 1 of 1
Date : 9/17/96 09:39 AM
Time of Injection: 9/16/96 08:46 PM
Low Point : -9.88 mV High Point : 264.55 mV
Plot Scale: 274.4 mV



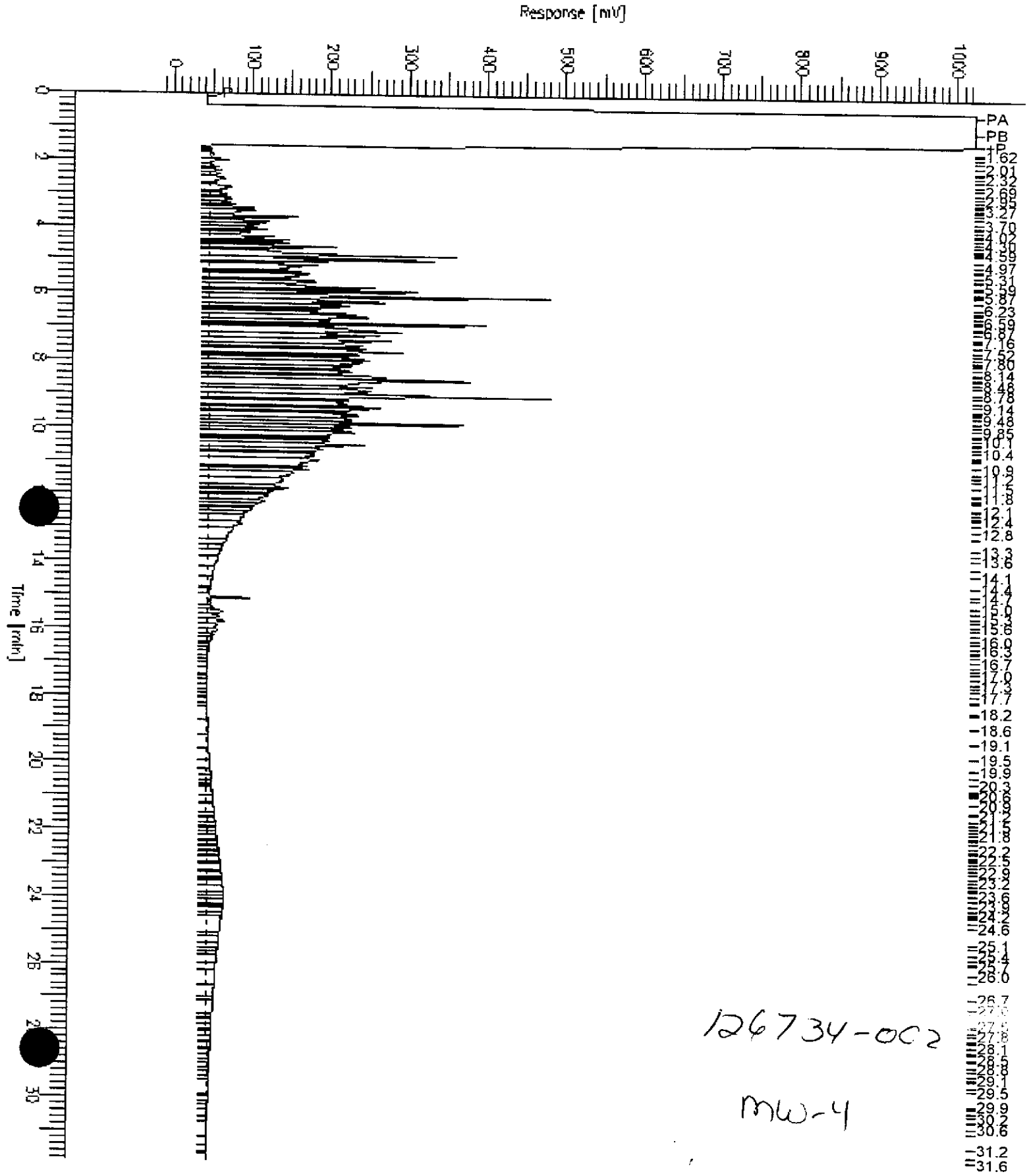
126734-001

SCI-MW-2

GC15 Channel A TEH

Sample Name : W,126734-002
FileName : G:\GC15\CHB\260B044.RAW
Method : 241TEH.MTH
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: -11 mV

Sample #: 29815 Page 1 of 1
Date : 9/17/96 01:20 PM
Time of Injection: 9/17/96 12:43 PM
Low Point : -10.76 mV High Point : 1024.00 mV
Plot Scale: 1034.8 mV



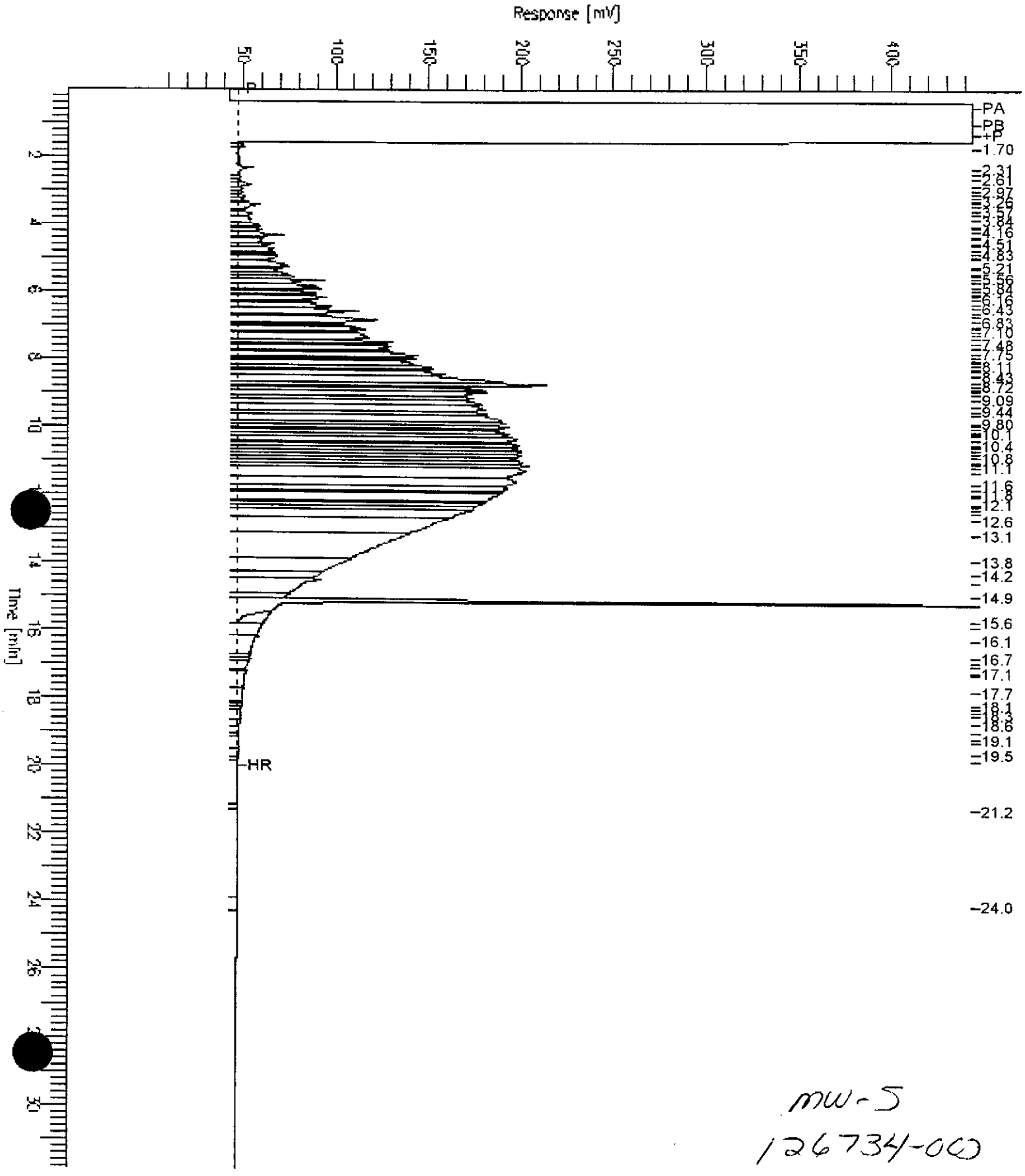
126734-002

MW-4

GC15 Channel A TEH

Sample Name : W,126734-003
FileName : G:\GC15\CHB\260B020.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 5 mV

Sample #: 29815 Page 1 of 1
Date : 9/17/96 09:48 AM
Time of Injection: 9/16/96 10:12 PM
Low Point : 5.06 mV High Point : 443.76 mV
Plot Scale: 438.7 mV

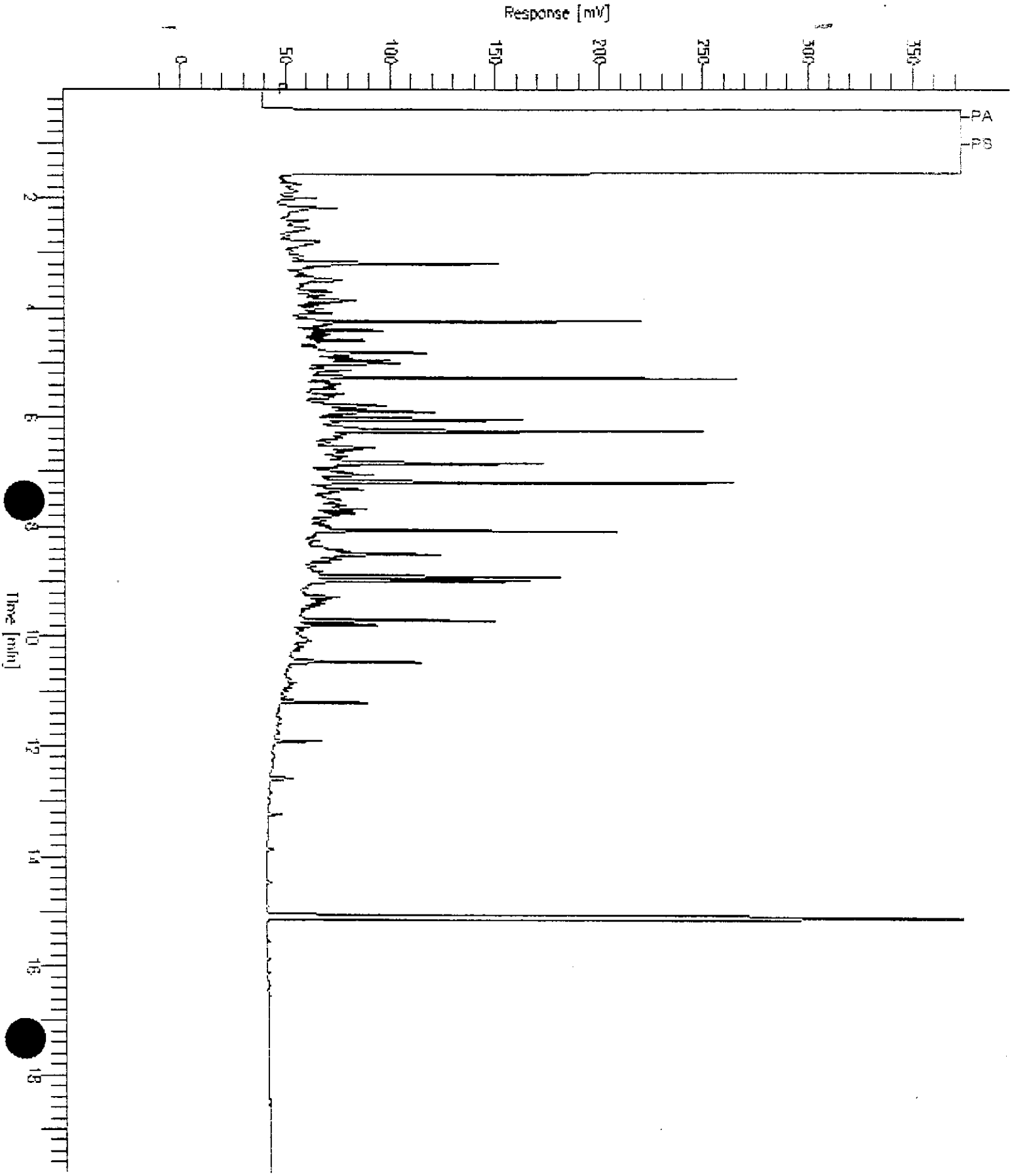


MW-5
126734-003

GC15 Channel A TEH

Sample Name : CCV,96WG3003,DSL
FileName : G:\GC15\CHB\2608010.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 19.80 min
Slope Factor: 0.0 Plot Offset: -13 mV

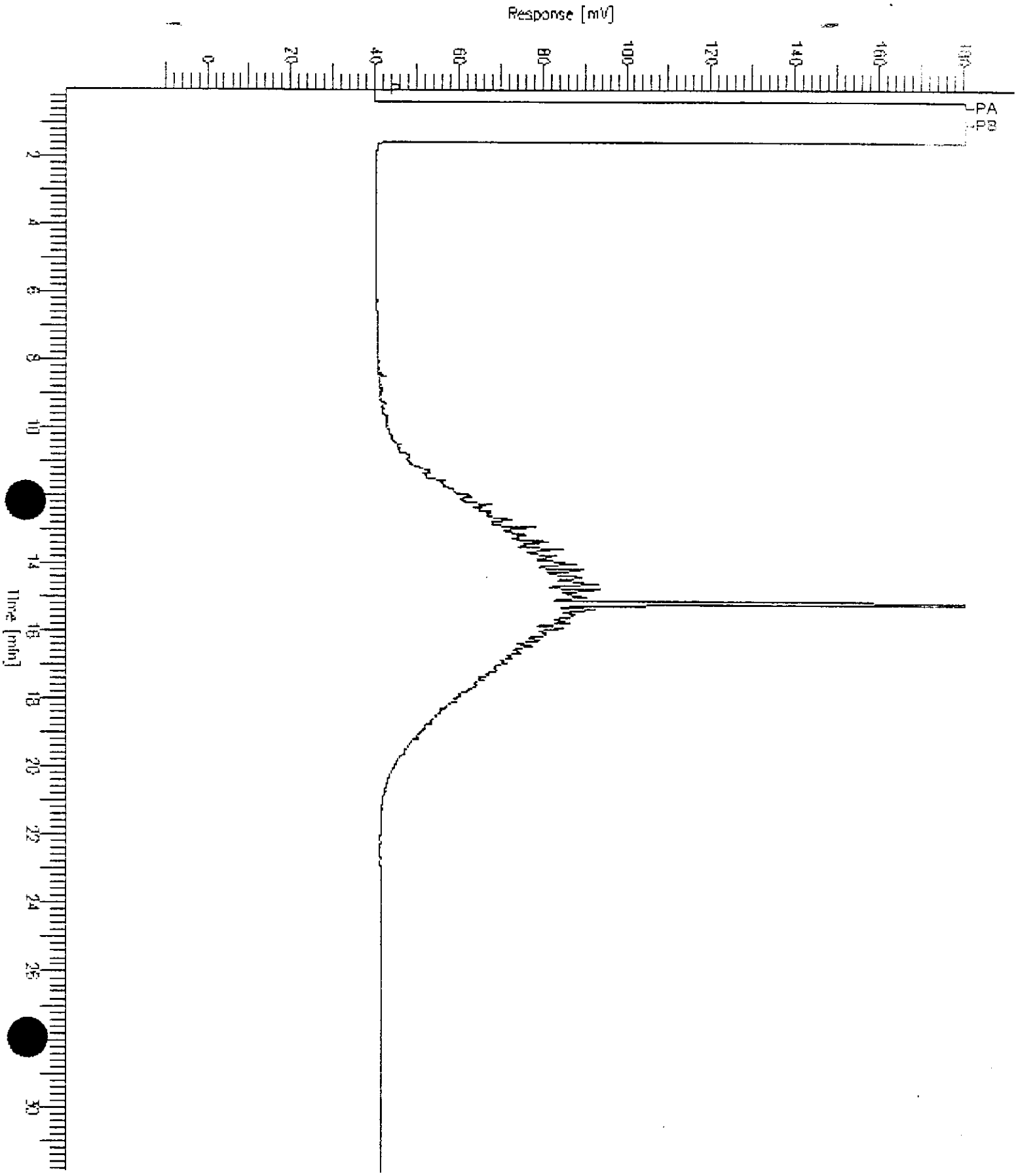
Sample #: 500MG/L Page 1 of 1
Date : 9/17/96 11:42 AM
Time of Injection: 9/16/96 01:16 PM
Low Point : -12.58 mV High Point : 372.73 mV
Plot Scale: 385.3 mV



GC15 Channel A TEH

Sample Name : ccv,96ws3011,mo
FileName : G:\GC15\CHB\260B013.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -12 mV

Sample #: 500mg/l Page 1 of 1
Date : 9/17/96 11:40 AM
Time of Injection: 9/16/96 05:11 PM
Low Point : -11.93 mV High Point : 180.56 mV
Plot Scale: 192.5 mV



TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29815
Units: ug/L
Diln Fac: 1

Prep Date: 09/13/96
Analysis Date: 09/16/96

MB Lab ID: QC30453

Analyte	Result
Diesel C12-C22	<50
Motor Oil C22-C50	<250

Surrogate	%Rec	Recovery Limits
Hexacosane	80	60-140

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29815
Units: ug/L
Diln Fac: 1

Prep Date: 09/13/96
Analysis Date: 09/16/96

BS Lab ID: QC30454

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1612	65	60-140
Surrogate	%Rec	Limits		
Hexacosane	80	60-140		

BSD Lab ID: QC30455

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1714	69	60-140	6	35
Surrogate	%Rec	Limits				
Hexacosane	86	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126734-002	MW-4	29639	09/04/96	09/08/96	09/08/96	
126734-003	MW-5	29639	09/04/96	09/07/96	09/07/96	

Matrix: Water

Analyte	Units	126734-002	126734-003
Diln Fac:		1	1
Benzene	ug/L	100	<0.5
Toluene	ug/L	<0.5	<0.5
Ethylbenzene	ug/L	5.2	<0.5
m,p-Xylenes	ug/L	7.2	<0.5
o-Xylene	ug/L	<0.5	<0.5
Surrogate			
Trifluorotoluene	%REC	99	100
Bromobenzene	%REC	96	96

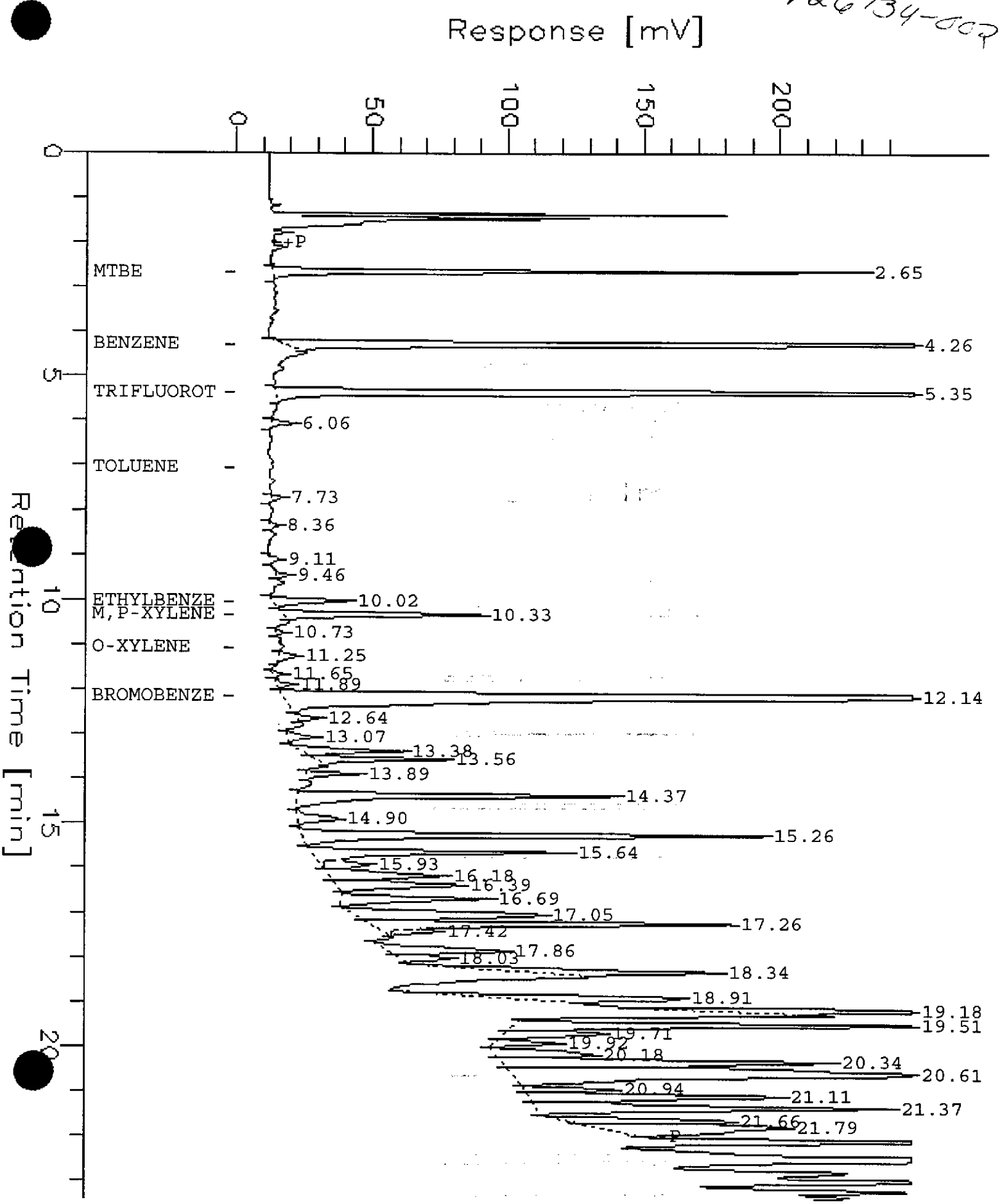
BTXE2 - GC-05 RTX-1

FileName : G:\GC05\250G045.raw
Start Time : 0.00 min End Time : 23.42 min
Scale Factor: -1 Plot Offset: -1 mV

Date : 9/8/96 8:55 PM
Low Point : -0.55 mV
Plot Scale: 250 mV

High Point : 249.45 mV

126734-00P



BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

MB Lab ID: QC29799

Analyte	Result
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	103	58-130
Bromobenzene	90	62-131

Curtis & Tompkins, Ltd.

Lab #: 126734 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

LCS Lab ID: QC29801

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	19.9	20	100	80-120
Toluene	18.3	20	92	80-120
Ethylbenzene	17.3	20	87	80-120
m,p-Xylenes	44.5	40	111	80-120
o-Xylene	18.8	20	94	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	103	58-130
Bromobenzene	91	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-MW-2
Lab ID: 126734-001
Matrix: Water
Batch#: 29710
Units: ug/L
Diln Fac: 1

Sampled: 09/04/96
Received: 09/04/96
Extracted: 09/10/96
Analyzed: 09/10/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	90	68-126
Toluene-d8	120	87-125
Bromofluorobenzene	106	79-122

Data File: /chem/bna01.i/091196a.b/08_mb29694.d
Report Date: 12-Sep-1996 10:20

Curtis & Tompkins, Ltd.

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

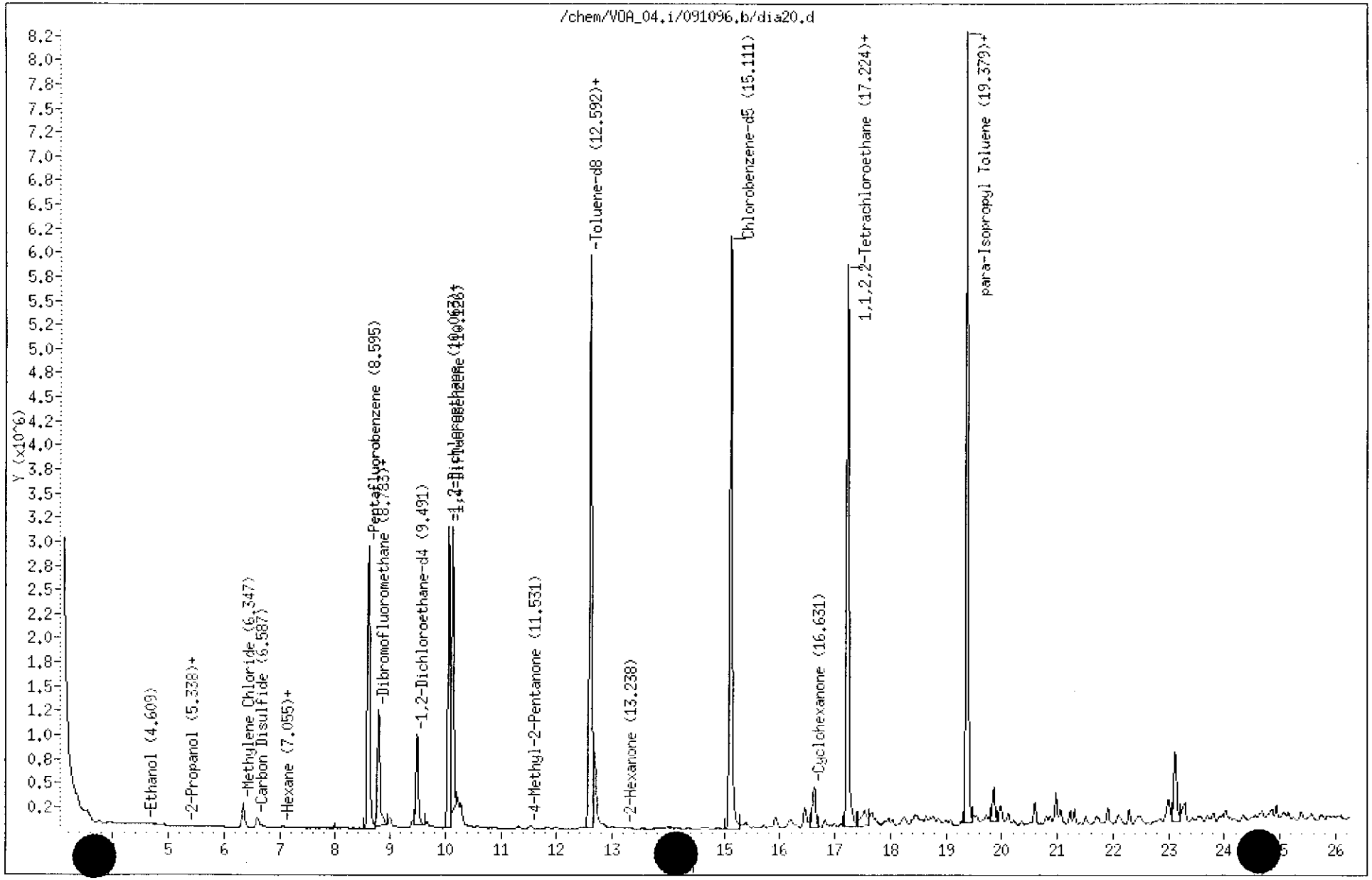
Data file : /chem/bna01.i/091196a.b/08_mb29694.d
Lab Smp Id: mb,qc29980 Client Smp ID: CURTIS&TOMPKINS,LTD
Inj Date : 11-SEP-1996 17:59 Autotune Date: 10-Sep-96 15:12:2
Operator : dsh Inst ID: bna01.i
Smp Info :
Misc Info :
Comment :
Method : /chem/bna01.i/091196a.b/+bna1_6pt.m
Meth Date : 11-Sep-1996 13:59
Cal Date : 11-SEP-96 13:10 Cal File: 02_ccv0911a.d
Als bottle: 8
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

No TIC

Data File: /chem/VOA_04.i/091096.b/dia20.d
Date : 10-SEP-96 20:32
Client ID: DYNA P&T
Sample Info: S,126734-001
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i
Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: TRIP BLANK #7
Lab ID: 126734-004
Matrix: Water
Batch#: 29710
Units: ug/L
Diln Fac: 1

Sampled: 09/04/96
Received: 09/04/96
Extracted: 09/10/96
Analyzed: 09/10/96

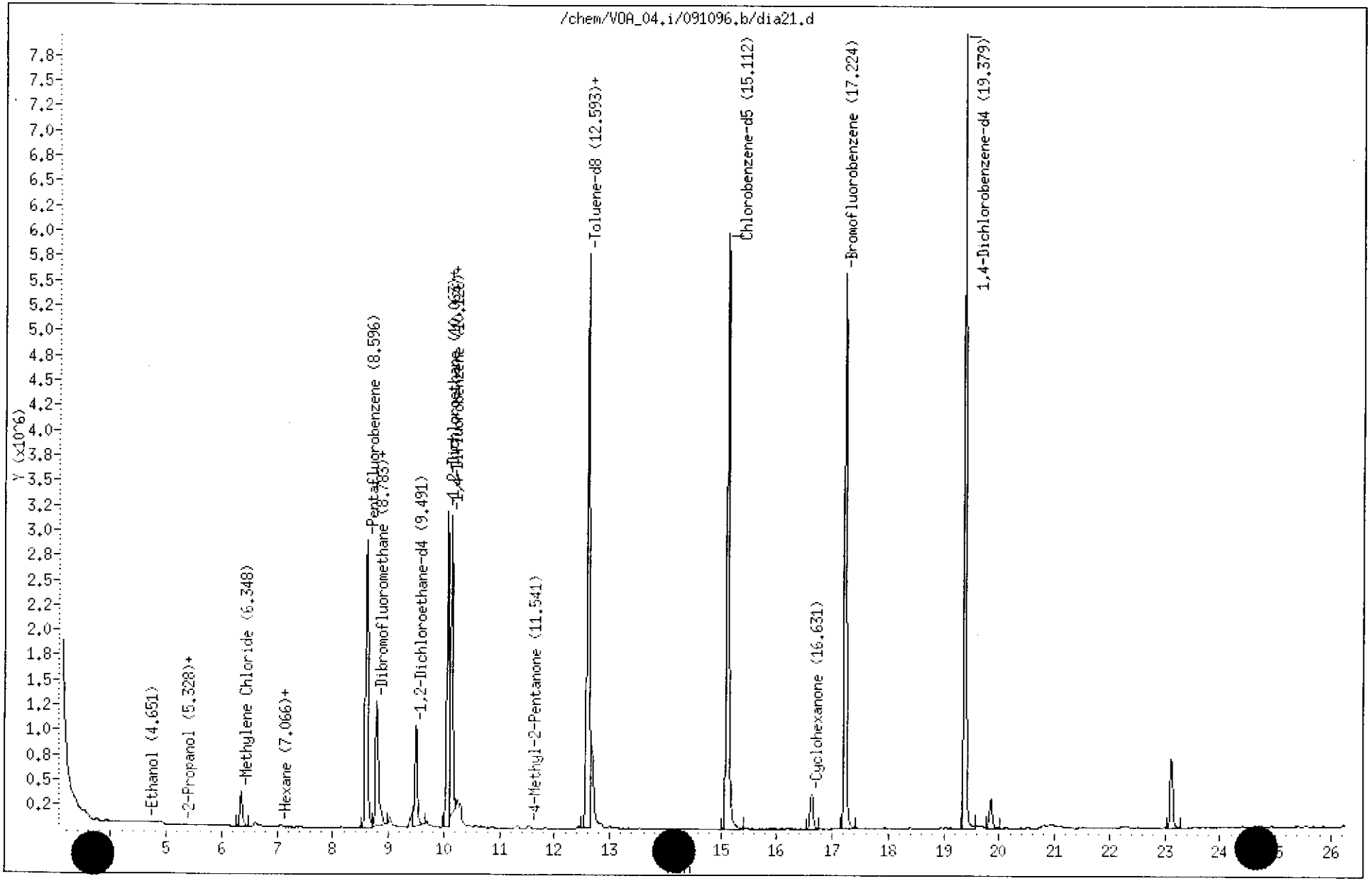
Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	116	87-125
Bromofluorobenzene	103	79-122

Data File: /chem/VOA_04.i/091096.b/dia21.d
Date : 10-SEP-96 21:03
Client ID: DYNA P&T
Sample Info: S,126734-004
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i

Operator: LLH
Column diameter: 0.32



Curtis & Tompkins, Ltd.

Lab #: 126734 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29710
Units: ug/L
Diln Fac: 1

Prep Date: 09/10/96
Analysis Date: 09/10/96

MB Lab ID: QC30056

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	96	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	104	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29710
Units: ug/L
Diln Fac: 1

Prep Date: 09/10/96
Analysis Date: 09/10/96

LCS Lab ID: QC30054

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	49.66	50	99	51-180
Trichloroethene	48	50	96	73-141
Benzene	48.95	50	98	78-142
Toluene	48.98	50	98	76-150
Chlorobenzene	49.74	50	100	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	96	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	99	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126765-010
Matrix: Water
Batch#: 29710
Units: ug/L
Diln Fac: 1

Sample Date: 09/05/96
Received Date: 09/06/96
Prep Date: 09/11/96
Analysis Date: 09/11/96

MS Lab ID: QC30079

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	48.78	98	51-180
Trichloroethene	50	<5	45.93	92	73-141
Benzene	50	<5	49.78	100	78-142
Toluene	50	<5	46.24	93	76-150
Chlorobenzene	50	<5	48.7	97	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	109	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	101	79-122

MSD Lab ID: QC30080

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	51.53	103	51-180	5	14
Trichloroethene	50	47.02	94	73-141	2	14
Benzene	50	50.86	102	78-142	2	11
Toluene	50	48.77	98	76-150	5	13
Chlorobenzene	50	50.09	100	83-129	3	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	109	68-126
Toluene-d8	103	87-125
Bromofluorobenzene	101	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-2	Sampled:	09/04/96
Lab ID:	126734-001	Received:	09/04/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/11/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	6.0 J	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-2	Sampled:	09/04/96
Lab ID:	126734-001	Received:	09/04/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/11/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	56	21-110
Phenol-d5	62	10-110
2,4,6-Tribromophenol	60	10-123
Nitrobenzene-d5	61	35-114
2-Fluorobiphenyl	60	43-116
Terphenyl-d14	40	33-141

J: Estimated Value

Data File: /chem/bna01.i/091196a.b/15_6734-001.d
Report Date: 12-Sep-1996 10:21

Curtis & Tompkins, Ltd.

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126734-001
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 20

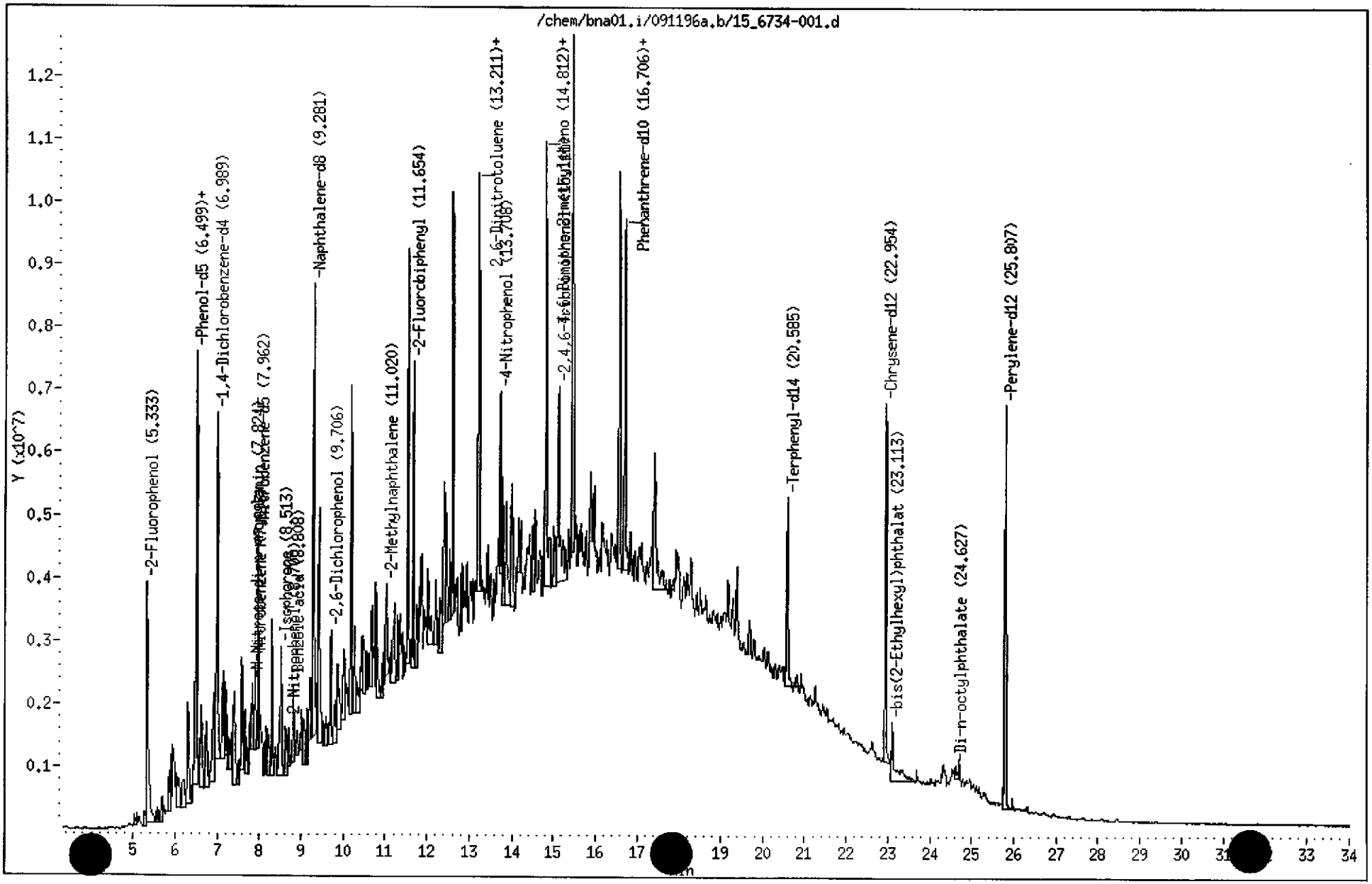
CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	6.302	14.73	NJ
2.		Unknown	6.626	13.04	NJ
3.		Unknown	6.920	16.64	NJ
4.		Unknown	7.392	14.73	NJ
5.		Unknown	7.579	13.01	NJ
6.		Unknown	8.297	14.86	NJ
7.	17301-23-4	Undecane, 2,6-dimethyl-	9.410	23.94	NJ
8.		Unknown alkane	10.180	23.42	NJ
9.		Unknown	11.208	12.29	NJ
10.		Unknown alkane	11.535	33.95	NJ
11.		Unknown	12.011	10.83	NJ
12.	571-61-9	Naphthalene, 1,5-dimethyl-	12.398	18.02	NJ
13.		Unknown alkane	12.596	34.76	NJ
14.	2245-38-7	Naphthalene, 1,6,7-trimethy	13.768	13.50	NJ
15.		Unknown	13.847	12.35	NJ
16.		Unknown	13.966	17.66	NJ
17.		Unknown	15.001	11.00	NJ
18.		Unknown	15.450	49.52	NJ
19.	112-95-8	Eicosane	16.566	39.37	NJ
20.		Unknown alkane	17.405	26.96	NJ

Data File: /chem/bna01.i/091196a.b/15_6734-001.d
Date : 11-SEP-1996 23:06
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna01.i

Operator: dsh
Column diameter: 0.25



EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29980

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	10
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29980

Analyte	Result	Reporting Limit
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	59	21-110
Phenol-d5	64	10-110
2,4,6-Tribromophenol	49	10-123
Nitrobenzene-d5	61	35-114
2-Fluorobiphenyl	62	43-116
Terphenyl-d14	64	33-141

Curtis & Tompkins, Ltd.

Lab #: 126734 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

BS Lab ID: QC29981

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	100	64.31	64	12-110
2-Chlorophenol	100	71.21	71	27-123
4-Chloro-3-methylphenol	100	63.38	63	23-97
4-Nitrophenol	100	50.17	50	10-80
Pentachlorophenol	100	52.23	52	9-103
1,4-Dichlorobenzene	50	29.99	60	36-97
N-Nitroso-di-n-propylamine	50	26.68	53	41-116
1,2,4-Trichlorobenzene	50	29.47	59	39-98
Acenaphthene	50	35.01	70	46-118
2,4-Dinitrotoluene	50	33.25	67	24-96
Pyrene	50	34.66	69	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	66	21-110
Phenol-d5	69	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	67	35-114
2-Fluorobiphenyl	66	43-116
Terphenyl-d14	69	33-141

BSD Lab ID: QC29982

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	100	61.22	61	12-110	5	42
2-Chlorophenol	100	68.04	68	27-123	5	40
4-Chloro-3-methylphenol	100	62.62	62	23-97	1	42
4-Nitrophenol	100	50.61	51	10-80	1	50
Pentachlorophenol	100	58.26	58	9-103	11	50
1,4-Dichlorobenzene	50	28.88	58	36-97	4	28
N-Nitroso-di-n-propylamine	50	25.86	52	41-116	3	38
1,2,4-Trichlorobenzene	50	28.62	57	39-98	3	28
Acenaphthene	50	34.94	70	46-118	0	31
2,4-Dinitrotoluene	50	33.64	67	24-96	3	38
Pyrene	50	34.51	69	26-127	0	31

Surrogate	%Rec	Limits
2-Fluorophenol	61	21-110
Phenol-d5	65	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	65	35-114
2-Fluorobiphenyl	65	43-116
Terphenyl-d14	70	33-141

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-2	Sampled:	09/04/96
Lab ID:	126734-001	Received:	09/04/96
Matrix:	Water	Extracted:	09/05/96
Batch#:	29615	Analyzed:	09/10/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	44*	60-150
Decachlorobiphenyl	33	30-130

* Values outside of QC limits

Curtis & Tompkins, Ltd.

Lab #: 126734 BATCH QC REPORT

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29615
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/10/96

MB Lab ID: QC29704

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Rec	Recovery Limits
TCMX	70	60-150
Decachlorobiphenyl	78	30-130

Curtis & Tompkins, Ltd.

Lab #: 126734 BATCH QC REPORT

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29615
Units: ug/L
Diln Fac: 1

Prep Date: 09/05/96
Analysis Date: 09/10/96

BS Lab ID: QC29705

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.35	87	50-128
Surrogate	**%Rec**	**Limits**		
TCMX	60	60-150		
Decachlorobiphenyl	74	30-130		

BSD Lab ID: QC29706

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.45	89	50-128	2	20
Surrogate	**%Rec**	**Limits**				
TCMX	65	60-150				
Decachlorobiphenyl	69	30-130				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-2
LAB ID: 126734-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 09/04/96
DATE RECEIVED: 09/04/96
DATE REPORTED: 09/18/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	15	5.0	1	29688	EPA 6010A	09/11/96
Barium	320	10	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	ND	10	1	29688	EPA 6010A	09/11/96
Lead	ND	3.0	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.20	1	29838	EPA 7470	09/16/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	1	29688	EPA 6010A	09/11/96
Selenium	ND	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126734

DATE REPORTED: 09/18/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	29688	EPA 6010A	09/11/96
Arsenic	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Barium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Copper	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Lead	ND	3	ug/L	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.2	ug/L	1	29838	EPA 7470	09/16/96
Molybdenum	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Selenium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Silver	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Thallium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	ug/L	1	29688	EPA 6010A	09/11/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126734

DATE REPORTED: 09/18/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	500	507	555	ug/L	101	111	80-120	9	35	29688	EPA 6010A	09/11/96
Arsenic	2000	1940	1970	ug/L	97	99	80-120	2	35	29688	EPA 6010A	09/11/96
Barium	2000	1980	1970	ug/L	99	99	80-120	1	35	29688	EPA 6010A	09/11/96
Beryllium	50	50.4	51.5	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Cadmium	50	52.8	53.1	ug/L	106	106	80-120	1	35	29688	EPA 6010A	09/11/96
Chromium (total)	200	198	199	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Cobalt	500	492	507	ug/L	98	101	80-120	3	35	29688	EPA 6010A	09/11/96
Copper	250	249	248	ug/L	100	99	80-120	0	35	29688	EPA 6010A	09/11/96
Lead	500	505	520	ug/L	101	104	80-120	3	35	29688	EPA 6010A	09/11/96
Mercury	5	5.22	5.002	ug/L	104	100	80-120	4	35	29838	EPA 7470	09/16/96
Molybdenum	400	406	414	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Nickel	500	507	516	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Selenium	2000	2020	2040	ug/L	101	102	80-120	1	35	29688	EPA 6010A	09/11/96
Silver	100	90.4	89.7	ug/L	90	90	80-120	1	35	29688	EPA 6010A	09/11/96
Thallium	2000	2040	2070	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Vanadium	500	495	498	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Zinc	500	480	493	ug/L	96	99	80-120	3	35	29688	EPA 6010A	09/11/96

CHAIN OF CUSTODY FORM

126736

PAGE 1 of 1

PROJECT NAME: KOT

JOB NUMBER: 133.005 LAB: Curtis + Tompkins

PROJECT CONTACT: Jeri Alexander / Meg Mendoza TURNAROUND: Normal

SAMPLED BY: Dennis Alexander REQUESTED BY: Jeri Alexander / Meg Mendoza

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT	TUBE			METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH & gas	BTXE	TEH diesel + motor oil	VOCs (8240) w/ library search	SVOCs 8270 incl. PNAs	O&G	Heavy Metals	PCBs
-1	SCI-MW-2	X						5	5					X			X		09	04	96	1200	*	X		X	X	X	X	X	X
-2	MW-4	X						3	1					X			X		09	04	96	1300		X	X	X					
-3	MW-5	X						3	1					X			X		09	04	96	1315		X	X	X					
-4	Trip Blank #7	X						1									X										X				

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dennis Alexander	9/4/96 2:20 p.m.		9/4/96 @ 14:20
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES: * Please filter & fix before metals analysis

Subsurface Consultants, Inc.

171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607

(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories. Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 23-SEP-96
Lab Job Number: 126738
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: Tracy Bubjar

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-35
Lab ID: 126738-001
Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 50

Sampled: 08/30/96
Received: 09/04/96
Extracted: 09/09/96
Analyzed: 09/18/96

Analyte	Result	Reporting Limit
Phenol	ND	470
2-Chlorophenol	ND	470
Benzyl alcohol	ND	470
2-Methylphenol	ND	470
4-Methylphenol	ND	470
2-Nitrophenol	ND	2400
2,4-Dimethylphenol	ND	470
Benzoic acid	ND	2400
2,4-Dichlorophenol	ND	470
4-Chloro-3-methylphenol	ND	470
2,4,6-Trichlorophenol	ND	470
2,4,5-Trichlorophenol	ND	2400
2,4-Dinitrophenol	ND	2400
4-Nitrophenol	ND	2400
4,6-Dinitro-2-methylphenol	ND	2400
Pentachlorophenol	ND	2400
N-Nitrosodimethylamine	ND	470
Aniline	ND	470
bis(2-Chloroethyl)ether	ND	470
1,3-Dichlorobenzene	ND	470
1,4-Dichlorobenzene	ND	470
1,2-Dichlorobenzene	ND	470
bis(2-Chloroisopropyl) ether	ND	470
N-Nitroso-di-n-propylamine	ND	470
Hexachloroethane	ND	470
Nitrobenzene	ND	470
Isophorone	ND	470
bis(2-Chloroethoxy)methane	ND	470
1,2,4-Trichlorobenzene	ND	470
Naphthalene	ND	470
4-Chloroaniline	ND	470
Hexachlorobutadiene	ND	470
2-Methylnaphthalene	ND	470
Hexachlorocyclopentadiene	ND	470
2-Chloronaphthalene	ND	470
2-Nitroaniline	ND	2400
Dimethylphthalate	ND	470
Acenaphthylene	ND	470

Semivolatile Organics by GC/MS

Field ID:	SCI-35	Sampled:	08/30/96
Lab ID:	126738-001	Received:	09/04/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/18/96
Units:	ug/L		
Diln Fac:	50		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	470
3-Nitroaniline	ND	2400
Acenaphthene	ND	470
Dibenzofuran	ND	470
2,4-Dinitrotoluene	ND	470
Diethylphthalate	ND	470
4-Chlorophenyl-phenylether	ND	470
Fluorene	ND	470
4-Nitroaniline	ND	2400
N-Nitrosodiphenylamine	ND	470
Azobenzene	ND	470
4-Bromophenyl-phenylether	ND	470
Hexachlorobenzene	ND	470
Phenanthrene	ND	470
Anthracene	ND	470
Di-n-butylphthalate	ND	470
Fluoranthene	ND	470
Pyrene	ND	470
Butylbenzylphthalate	ND	470
3,3'-Dichlorobenzidine	ND	2400
Benzo(a)anthracene	ND	470
Chrysene	ND	470
bis(2-Ethylhexyl)phthalate	ND	470
Di-n-octylphthalate	ND	470
Benzo(b)fluoranthene	ND	470
Benzo(k)fluoranthene	ND	470
Benzo(a)pyrene	ND	470
Indeno(1,2,3-cd)pyrene	ND	470
Dibenz(a,h)anthracene	ND	470
Benzo(g,h,i)perylene	ND	470

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	DO*	21-110
Phenol-d5	DO*	10-110
2,4,6-Tribromophenol	DO*	10-123
Nitrobenzene-d5	DO*	35-114
2-Fluorobiphenyl	DO*	43-116
Terphenyl-d14	DO*	33-141

* Values outside of QC limits
DO: Surrogate diluted out

Data File: /chem/bna02.i/091896x.b/15_6738-1d50.d
Report Date: 19-Sep-1996 15:43

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: dl,126738-001
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 20

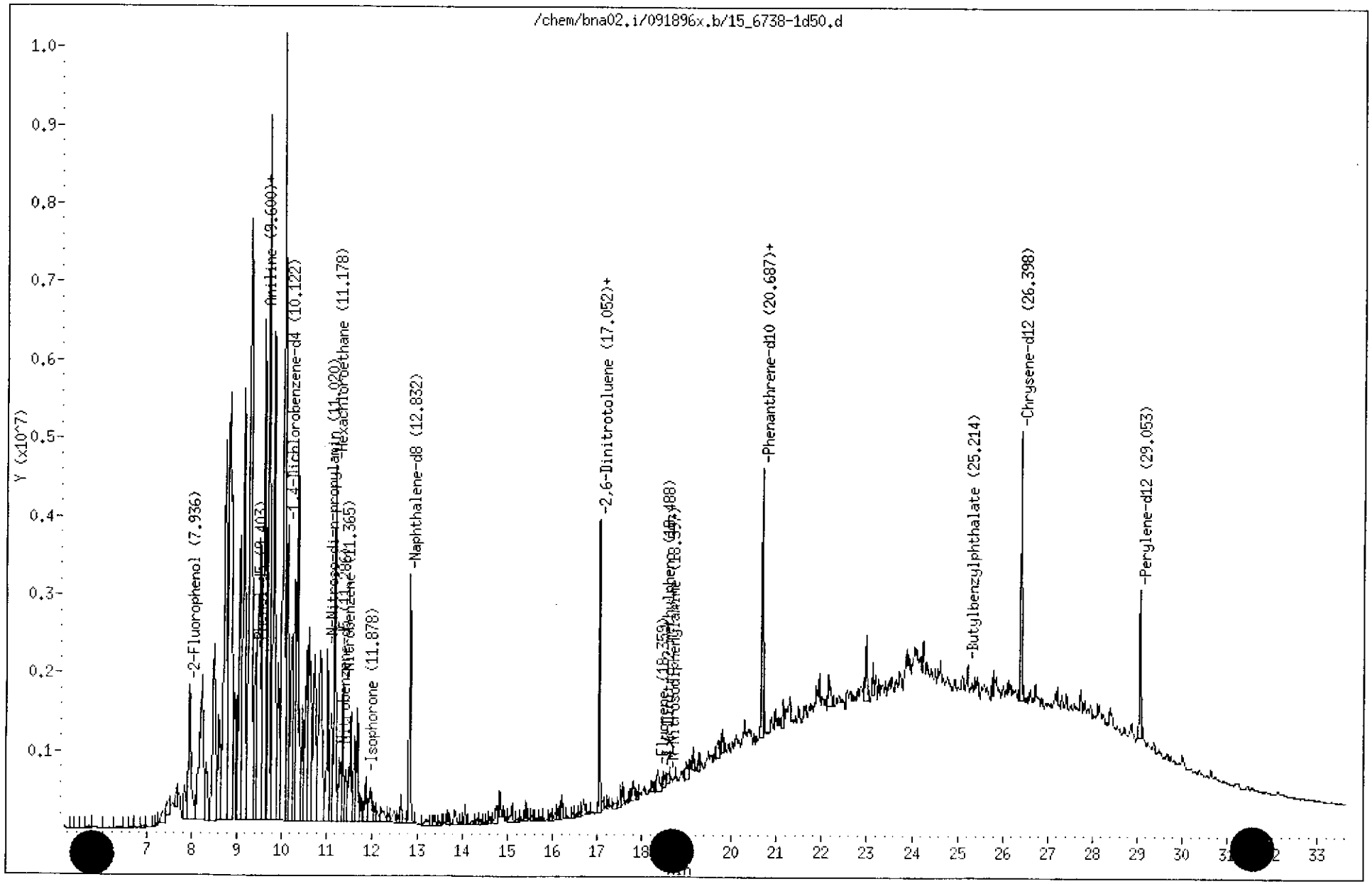
CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	8.231	1732.23	NJ
2.		Unknown	8.487	1557.33	NJ
3.		Unknown	8.605	912.43	NJ
4.	5911-04-6	Nonane, 3-methyl-	8.742	3216.46	NJ
5.		Unknown	8.821	4583.46	NJ
6.		Unknown	9.068	1831.71	NJ
7.	17301-94-9	Nonane, 4-methyl-	9.146	3112.58	NJ
8.		Unknown	9.294	5002.66	NJ
9.		Unknown	9.511	3205.73	NJ
10.	124-18-5	Decane	9.708	3278.07	NJ
11.	95-36-3	1,2,4-Trimethylbenzene	9.807	3567.25	NJ
12.		Unknown	9.925	1182.88	NJ
13.	2847-72-5	Decane, 4-methyl-	10.043	4880.48	NJ
14.		Unknown	10.221	1406.26	NJ
15.		Unknown	10.290	1609.58	NJ
16.		Unknown	10.350	2720.89	NJ
17.	13151-35-4	Decane, 5-methyl-	10.556	1158.18	NJ
18.		Unknown	10.606	1604.76	NJ
19.		Unknown	10.734	1364.98	NJ
20.		Unknown	10.872	2028.24	NJ

Data File: /chem/bna02.i/091896x.b/15_6738-1d50.d
Date : 18-SEP-1996 23:34
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i

Operator: dsh
Column diameter: 0.25



EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29980

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	10
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29980

Analyte	Result	Reporting Limit
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	59	21-110
Phenol-d5	64	10-110
2,4,6-Tribromophenol	49	10-123
Nitrobenzene-d5	61	35-114
2-Fluorobiphenyl	62	43-116
Terphenyl-d14	64	33-141

Curtis & Tompkins, Ltd.

Lab #: 126738 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

BS Lab ID: QC29981

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	100	64.31	64	12-110
2-Chlorophenol	100	71.21	71	27-123
4-Chloro-3-methylphenol	100	63.38	63	23-97
4-Nitrophenol	100	50.17	50	10-80
Pentachlorophenol	100	52.23	52	9-103
1,4-Dichlorobenzene	50	29.99	60	36-97
N-Nitroso-di-n-propylamine	50	26.68	53	41-116
1,2,4-Trichlorobenzene	50	29.47	59	39-98
Acenaphthene	50	35.01	70	46-118
2,4-Dinitrotoluene	50	33.25	67	24-96
Pyrene	50	34.66	69	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	66	21-110
Phenol-d5	69	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	67	35-114
2-Fluorobiphenyl	66	43-116
Terphenyl-d14	69	33-141

BSD Lab ID: QC29982

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	100	61.22	61	12-110	5	42
2-Chlorophenol	100	68.04	68	27-123	5	40
4-Chloro-3-methylphenol	100	62.62	62	23-97	1	42
4-Nitrophenol	100	50.61	51	10-80	1	50
Pentachlorophenol	100	58.26	58	9-103	11	50
1,4-Dichlorobenzene	50	28.88	58	36-97	4	28
N-Nitroso-di-n-propylamine	50	25.86	52	41-116	3	38
1,2,4-Trichlorobenzene	50	28.62	57	39-98	3	28
Acenaphthene	50	34.94	70	46-118	0	31
2,4-Dinitrotoluene	50	33.64	67	24-96	3	38
Pyrene	50	34.51	69	26-127	0	31

Surrogate	%Rec	Limits
2-Fluorophenol	61	21-110
Phenol-d5	65	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	65	35-114
2-Fluorobiphenyl	65	43-116
Terphenyl-d14	70	33-141

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

Curtis & Tompkins, Ltd

Corrective Action Report

2423

From: Extraction Lab
Job #: 126738 8270-1 (KOT)

Client: Subsurface Consultants
Date: 09-09-96 Time: 1158

Sample Control	Subcontract	Organics	Metals	Gen. Chem.	Project Management
BREAKAGE	BREAKAGE	TAT	TAT	TAT	REPORT ERROR
VOLUME	LOST	HOLDING TIME	✓ HOLDING TIME	HOLDING TIME	REVIEW ERROR
CONTAINER	VOLUME	QC LIMITS	QC LIMITS	QC LIMITS	INVOICE ERROR
DOCUMENT	TAT	DILUTION	DILUTION	DILUTION	JOB JACKET ERROR
PRESERVATION	HOLDING TIME	WORKSHEET	WORKSHEET	WORKSHEET	COMM. ERROR
LOST	NARRATIVE	ANAL. NOTES	ANAL. NOTES	ANAL. NOTES	OTHER
OTHER	OTHER	OTHER	OTHER	OTHER	

Description of problem/nonconformance:

8270 water sample hold time was missed.

Summary of corrective action(s):

(1) Contact (inform or) client; decide whether to extract past hold. per client's

(2) Also inform client of 7 day hold for Organics for H_2O. (sample on 8/30 received/ordered 9/4/96)

(3) Train extraction chemists to READ HOLD ALERT BACKLOG!! regardless of scheduled extraction batches

	YES	NO
Is this a recurring problem?		✓
Should SOP be modified?		✓
Should training be given?	✓	
Should customer be educated?	✓	
Should operations be changed?		✓

Resolver	Initials	Date
Analyst		
Group Leader	QC	9-9-96
P.M.	DS	9-9-96
QA Officer		
Lab Director		

CHAIN OF CUSTODY FORM

12038

PAGE

PROJECT NAME: KOT

JOB NUMBER: 133.005 LAB: Curtis & Tompkins

PROJECT CONTACT: J. de Verrier TURNAROUND: standard

SAMPLED BY: J. de Verrier REQUESTED BY: Jeriann Alexander

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	MATRIX: SOIL	MATRIX: WASTE	MATRIX: AIR	CONTAINERS: VOA	CONTAINERS: LITER	CONTAINERS: PINT	CONTAINERS: TUBE	METHOD PRESERVED: HCL	METHOD PRESERVED: H_2SO_4	METHOD PRESERVED: HNO_3	METHOD PRESERVED: ICE	METHOD PRESERVED: NONE	SAMPLING DATE: MONTH	SAMPLING DATE: DAY	SAMPLING DATE: YEAR	SAMPLING DATE: TIME	NOTES	ANALYSIS REQUESTED: 8270 w/ PNA & Library search
1	SCI-35	X					X						X	X	08	30	96		*	X

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	9/4/96 1630	[signature]	9/4/96 1650
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES:

Extract sample from top of container (2")

Invoice Jonathan Redding directly.

Subsurface Consultants, Inc.

171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607

(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 23-SEP-96
Lab Job Number: 126747
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 126747

Project Name: KOT
Project Number: 133.005

Report Date: 23 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126747-002	MW-6	Water	05-SEP-96	05-SEP-96	16-SEP-96	89.	mg/L	5	TR	29850
126747-003	MW-7	Water	05-SEP-96	05-SEP-96	16-SEP-96	ND	mg/L	5	TR	29850
126747-004	SC1-MW-3	Water	05-SEP-96	05-SEP-96	16-SEP-96	ND	mg/L	5	TR	29850

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126747
Report Date: 23 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29850**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	16-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	87%	SMWW 17:5520BF	16-SEP-96
BSD	84%	SMWW 17:5520BF	16-SEP-96

		Control Limits
Average Spike Recovery	85%	80% - 120%
Relative Percent Difference	4.4%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126747-001	MW-2	29639	09/05/96	09/08/96	09/08/96	

Matrix: Water

Analyte	Units	126747-001
Diln Fac:		1
Gasoline	ug/L	58 Z
Surrogate		
Trifluorotoluene	%REC	97
Bromobenzene	%REC	91

Z: Sample exhibits unknown single peak or peaks

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126747-002	MW-6	29639	09/05/96	09/07/96	09/07/96	
126747-003	MW-7	29639	09/05/96	09/07/96	09/07/96	
126747-004	SCI-MW-3	29639	09/05/96	09/07/96	09/07/96	

Matrix: Water

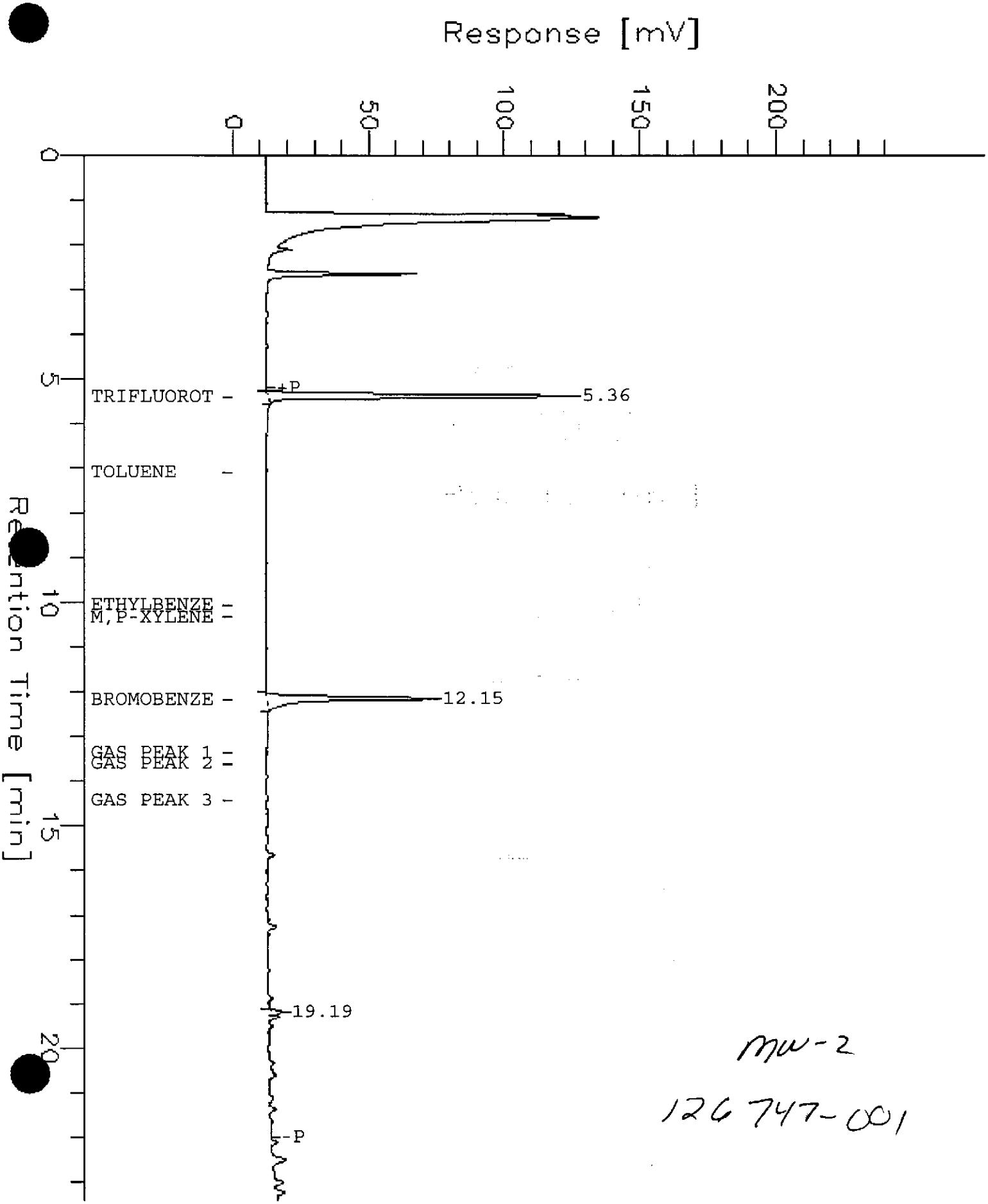
Analyte	Units	126747-002	126747-003	126747-004
Diln Fac:		1	1	1
Gasoline	ug/L	200 H	<50	<50
Surrogate				
Trifluorotoluene	%REC	95	96	96
Bromobenzene	%REC	91	85	83

H: Heavier hydrocarbons than indicated standard

TVH2 - GC-05 RTX-1

FileName : G:\GC05\250H046.raw
Start Time : 0.00 min
Scale Factor: -1
End Time : 23.42 min
Plot Offset: 0 mV
Date : 9/8/96 9:30 PM
Low Point : -0.28 mV
Plot Scale: 250 mV

High Point : 249.72 mV



MW-2

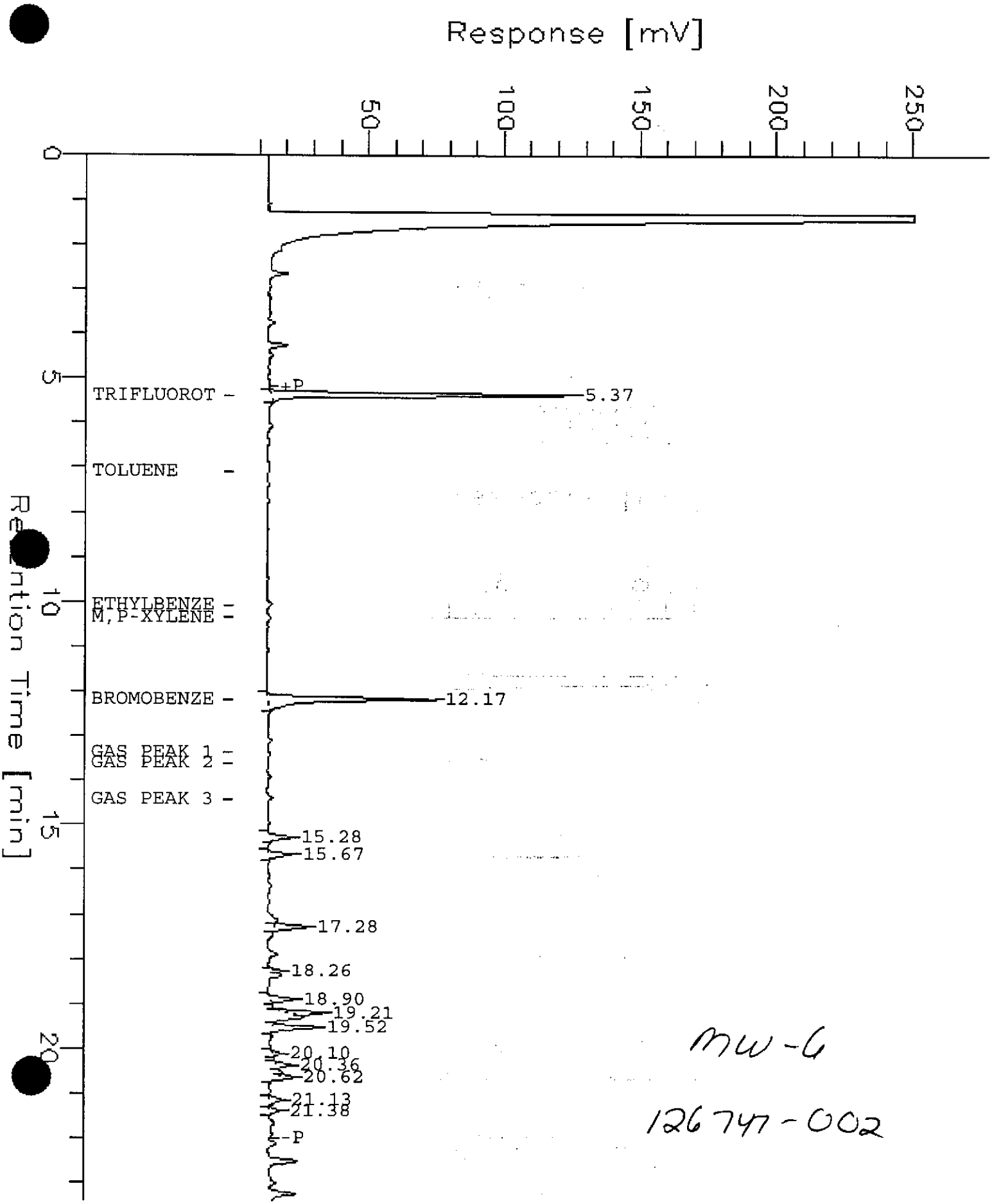
126747-001

TVH2 - GC-05 RTX-1

FileName : G:\GC05\250H034.raw
Start Time : 0.00 min
End Time : 23.42 min
Scale Factor: -1
Plot Offset: 1 mV

Date : 9/7/96 10:20 AM
Low Point : 0.65 mV
Plot Scale: 250 mV

High Point : 250.65 mV



MW-6

126747-002

Curtis & Tompkins, Ltd.

Lab #: 126747 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

MB Lab ID: QC29799

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	100	69-120
Bromobenzene	79	70-122

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

LCS Lab ID: QC29800

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	2007	2000	100	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	96	69-120		
Bromobenzene	103	70-122		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126747 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	ZZZZZZ	Sample Date:	08/28/96
Lab ID:	126718-001	Received Date:	08/31/96
Matrix:	Water	Prep Date:	09/06/96
Batch#:	29639	Analysis Date:	09/06/96
Units:	ug/L		
Diln Fac:	1		

MS Lab ID: QC29802

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	62.6	1921	96	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	96	69-120
Bromobenzene	104	70-122

MSD Lab ID: QC29803

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1973	99	75-125	3	20

Surrogate	%Rec	Limits
Trifluorotoluene	96	69-120
Bromobenzene	105	70-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126747-001	MW-2	29815	09/05/96	09/13/96	09/16/96	
126747-002	MW-6	29815	09/05/96	09/13/96	09/17/96	
126747-003	MW-7	29815	09/05/96	09/13/96	09/17/96	
126747-004	SCI-MW-3	29815	09/05/96	09/13/96	09/17/96	

Matrix: Water

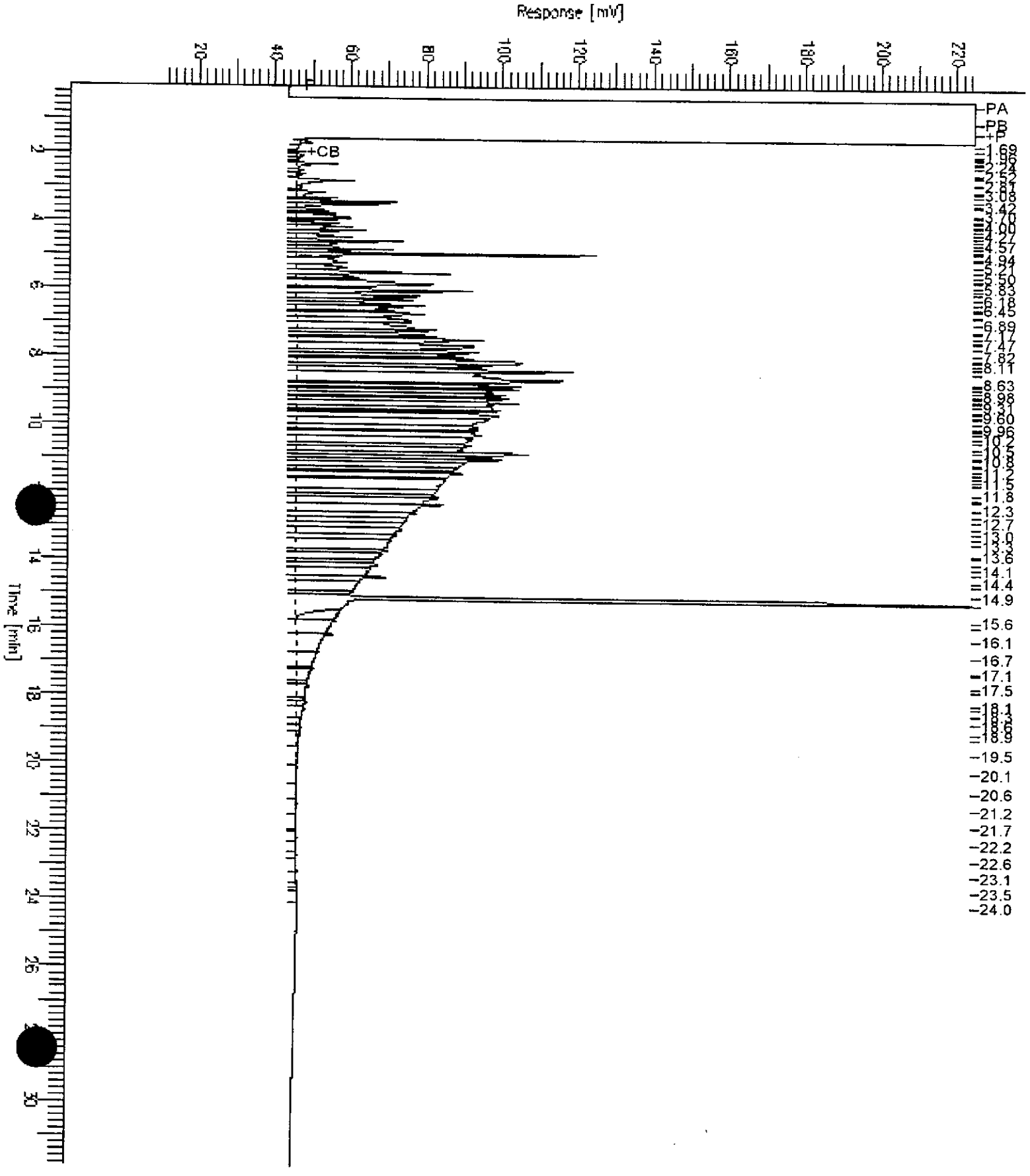
Analyte	Units	126747-001	126747-002	126747-003	126747-004
Diln Fac:		1	3	1	1
Diesel C12-C22	ug/L	2900	50000	480 YH	8800 YH
Motor Oil C22-C50	ug/L	760 YL	3200 YL	310 YL	4400 YL
Surrogate					
Hexacosane	%REC	96	108	97	107

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

GC15 Channel A TEH

Sample Name : W,126747-001
FileName : G:\GC15\CHB\260B021.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 10 mV

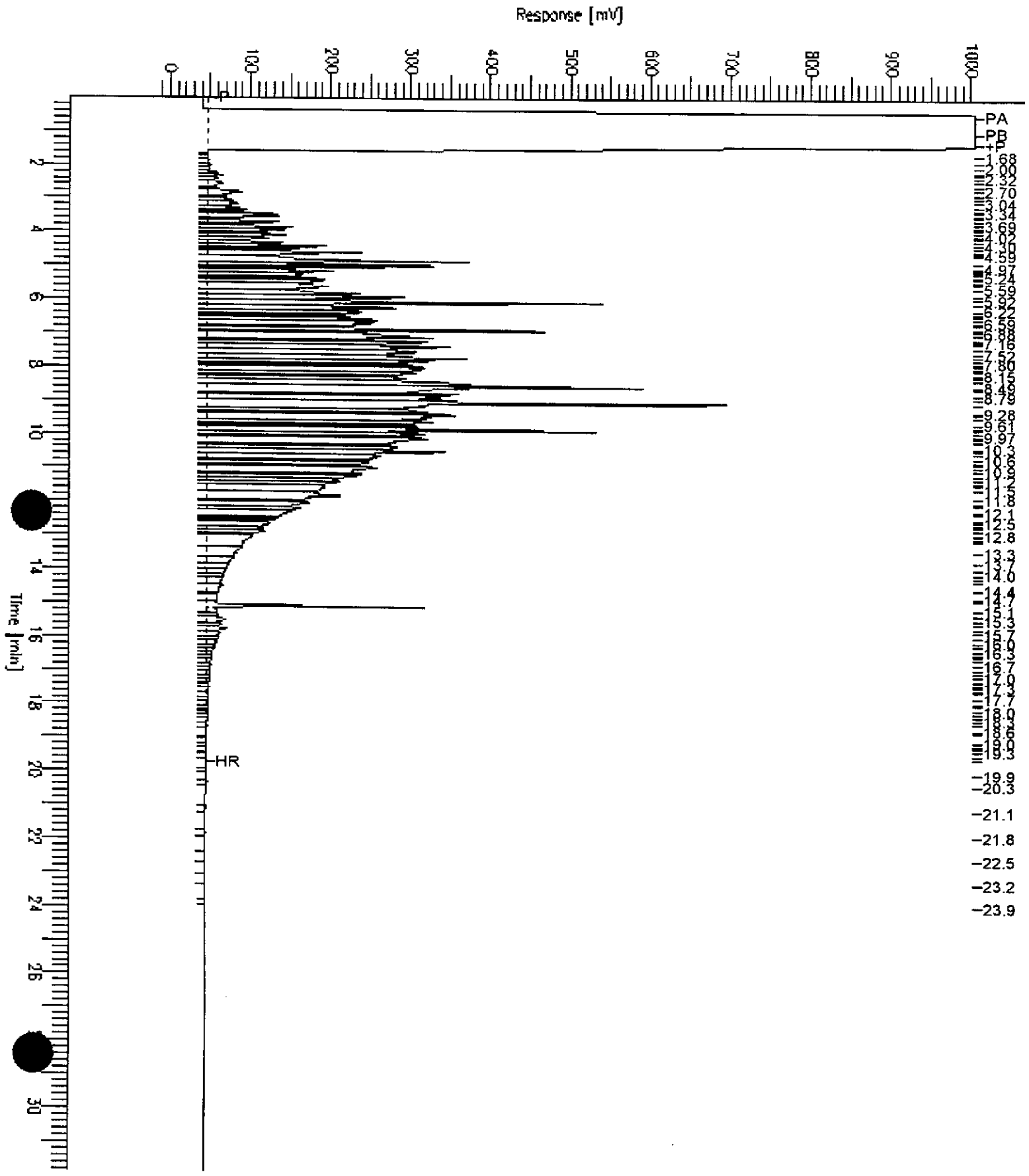
Sample #: 29815 Page 1 of 1
Date : 9/17/96 09:50 AM
Time of Injection: 9/16/96 10:55 PM
Low Point : 10.28 mV High Point : 224.81 mV
Plot Scale: 214.5 mV



GC15 Channel A TEH

Sample Name : W,126747-002
FileName : G:\GC15\CHB\261B005.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Factor: 0.0 Plot Offset: -11 mV

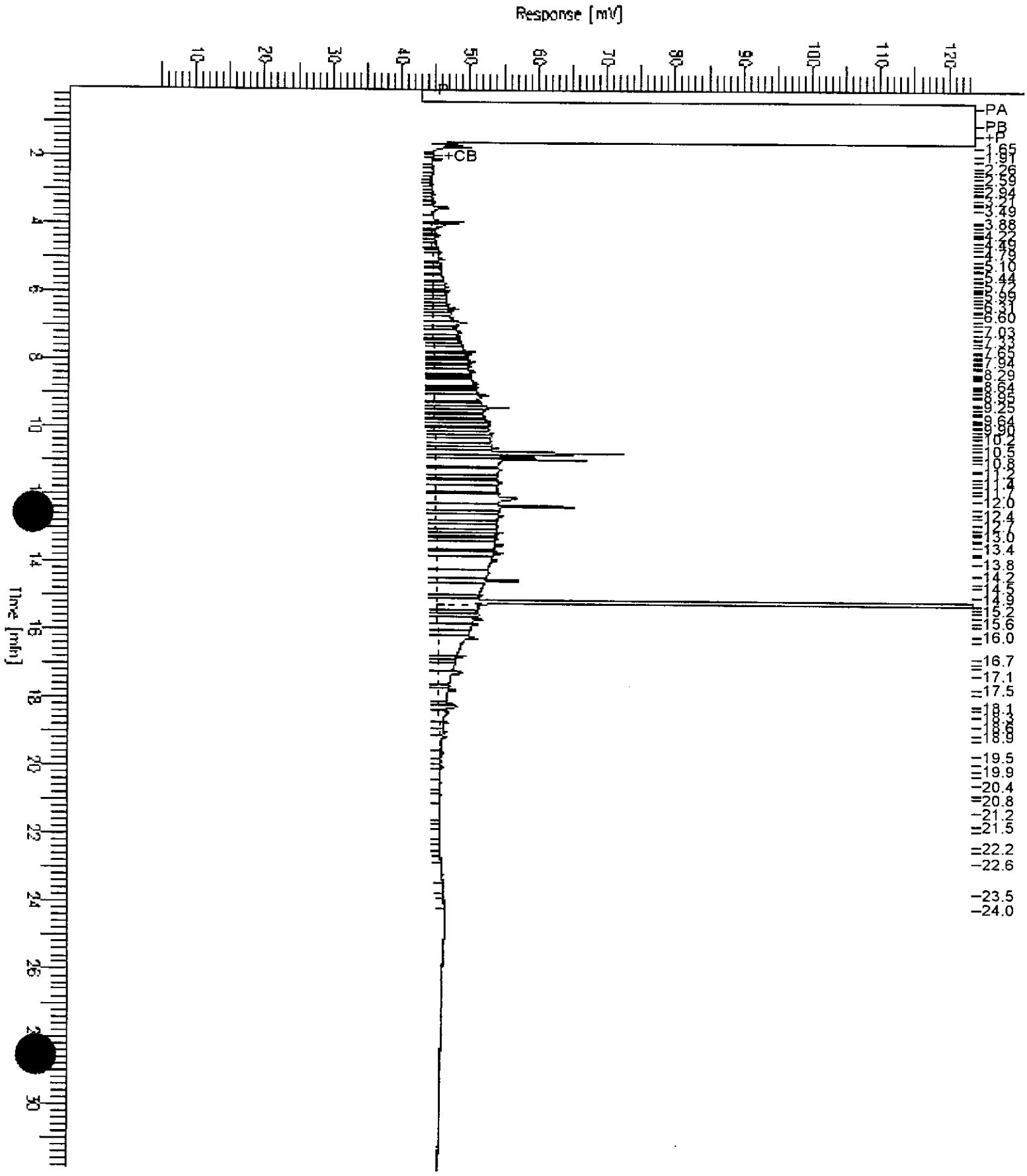
Sample #: 29815 Page 1 of 1
Date : 9/18/96 08:40 AM
Time of Injection: 9/17/96 07:56 PM
Low Point : -10.65 mV High Point : 1005.88 mV
Plot Scale: 1016.5 mV



GC15 Channel A TEH

Sample Name : W,126747-003
FileName : G:\GC15\CHB\260B023.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Factor: 0.0 Plot Offset: 5 mV

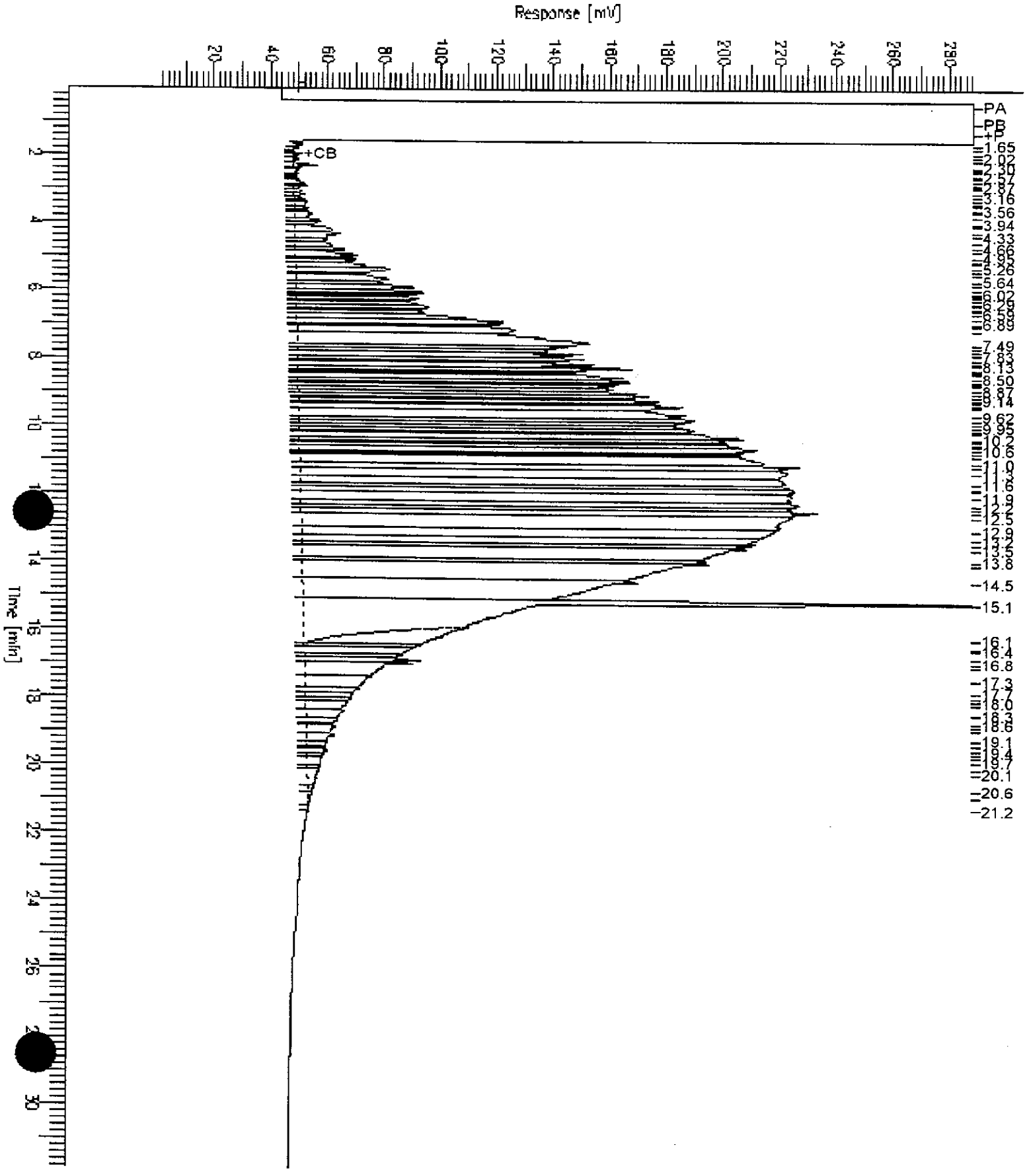
Sample #: 29815 Page 1 of 1
Date : 9/17/96 09:53 AM
Time of Injection: 9/17/96 12:21 AM
Low Point : 4.99 mV High Point : 123.83 mV
Plot Scale: 118.8 mV



GC15 Channel A TEH

Sample Name : W,126747-004
FileName : G:\GC15\CHB\260B024.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 1 mV

Sample #: 29815 Page 1 of 1
Date : 9/17/96 09:54 AM
Time of Injection: 9/17/96 01:05 AM
Low Point : 1.09 mV High Point : 288.74 mV
Plot Scale: 287.6 mV



TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/13/96
Batch#:	29815	Analysis Date:	09/16/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC30453

Analyte	Result
Diesel C12-C22	<50
Motor Oil C22-C50	<250

Surrogate	%Rec	Recovery Limits
Hexacosane	80	60-140

Curtis & Tompkins, Ltd.

Lab #: 126747 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29815
Units: ug/L
Diln Fac: 1

Prep Date: 09/13/96
Analysis Date: 09/16/96

BS Lab ID: QC30454

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1612	65	60-140
Surrogate	%Rec	Limits		
Hexacosane	80	60-140		

BSD Lab ID: QC30455

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1714	69	60-140	6	35
Surrogate	%Rec	Limits				
Hexacosane	86	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126747-001	MW-2	29639	09/05/96	09/08/96	09/08/96	

Matrix: Water

Analyte	Units	126747-001
Diln Fac:		1
Benzene	ug/L	<0.5
Toluene	ug/L	<0.5
Ethylbenzene	ug/L	<0.5
m,p-Xylenes	ug/L	<0.5
o-Xylene	ug/L	<0.5
Surrogate		
Trifluorotoluene	%REC	98
Bromobenzene	%REC	96

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

MB Lab ID: QC29799

Analyte	Result
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	103	58-130
Bromobenzene	90	62-131

Curtis & Tompkins, Ltd.

Lab #: 126747 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

LCS Lab ID: QC29801

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	19.9	20	100	80-120
Toluene	18.3	20	92	80-120
Ethylbenzene	17.3	20	87	80-120
m,p-Xylenes	44.5	40	111	80-120
o-Xylene	18.8	20	94	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	103	58-130
Bromobenzene	91	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: MW-6
Lab ID: 126747-002
Matrix: Water
Batch#: 29895
Units: ug/L
Diln Fac: 1

Sampled: 09/05/96
Received: 09/05/96
Extracted: 09/18/96
Analyzed: 09/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	5.3	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	103	87-125
Bromofluorobenzene	102	79-122

Data File: /chem/VOA_04.i/091896.b/dii23.d
Report Date: 20-Sep-1996 13:06

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_04.i/091896.b/dii23.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 18-SEP-96 20:33
Operator : LLH Inst ID: VOA_04.i
Smp Info : S,126747-002
Misc Info : 8240,,29895,5.0,5,1, WATER
Comment :
Method : /chem/VOA_04.i/091896.b/i4m826.m
Meth Date : 18-Sep-1996 17:57
Cal Date : 13-SEP-96 19:47 Cal File: did15.d
Als bottle: 23
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
73 1,4-Dichlorobenzene-d4	19.365	13250403	50.000

	RT	AREA	CONCENTRATIONS ON-COL(ug/L)	CONCENTRATIONS FINAL(UG/L)	QUAL	QUANT LIBRARY	QUANT LIB ENTRY	QUANT CPND #
Benzene, 1-ethyl-2-methyl-					CAS #: 611-14-3			
	17.752	273791	1.03	1.03	95	nbs75k.l	64559	73(ML)
2,3-Dihydro-1-methylindene					CAS #: 27133-93-3			
	20.968	3773107	14.24	14.24	94	nbs75k.l	5901	73
2,3-Dihydro-1-methylindene					CAS #: 27133-93-3			
	22.124	3851602	14.53	14.53	94	nbs75k.l	5901	73
Benzene, 1,2,3,4-tetramethyl-					CAS #: 488-23-3			
	22.280	4320277	16.30	16.30	97	nbs75k.l	6202	73
1H-Indene, 2,3-dihydro-4-methyl-					CAS #: 824-22-6			
	22.446	8493720	32.05	32.05	94	nbs75k.l	5893	73
Naphthalene, 1,2,3,4-tetrahydro-					CAS #: 119-64-2			
	22.863	7104484	26.81	26.81	96	nbs75k.l	65415	73

Naphthalene

3:1 w/IL

quantitated by IS method from 8260 ie-- quant as a target cmp.

Data File: /chem/VOA_04.i/091896.b/dii23.d
Report Date: 20-Sep-1996 13:06

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(UG/L)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
1H-Indene, 2,3-dihydro-1,6-dimethyl-					CAS #: 17059-48-2		
22.977	3794351	14.32	14.32	96	nbs75k.l	8967	73
1H-Indene, 2,3-dihydro-1,6-dimethyl-					CAS #: 17059-48-2		
23.279	4749753	17.92	17.92	95	nbs75k.l	8967	73
Naphthalene, 1,2,3,4-tetrahydro-6-methyl					CAS #: 1680-51-9		
24.809	5629107	21.24	21.24	95	nbs75k.l	66500	73
Naphthalene, 1,2,3,4-tetrahydro-6-methyl					CAS #: 1680-51-9		
25.548	3723357	14.05	14.05	94	nbs75k.l	66499	73
Naphthalene, 2-methyl-					CAS #: 91-57-6		
25.829	6361591	24.01	24.01	94	nbs75k.l	66235	73

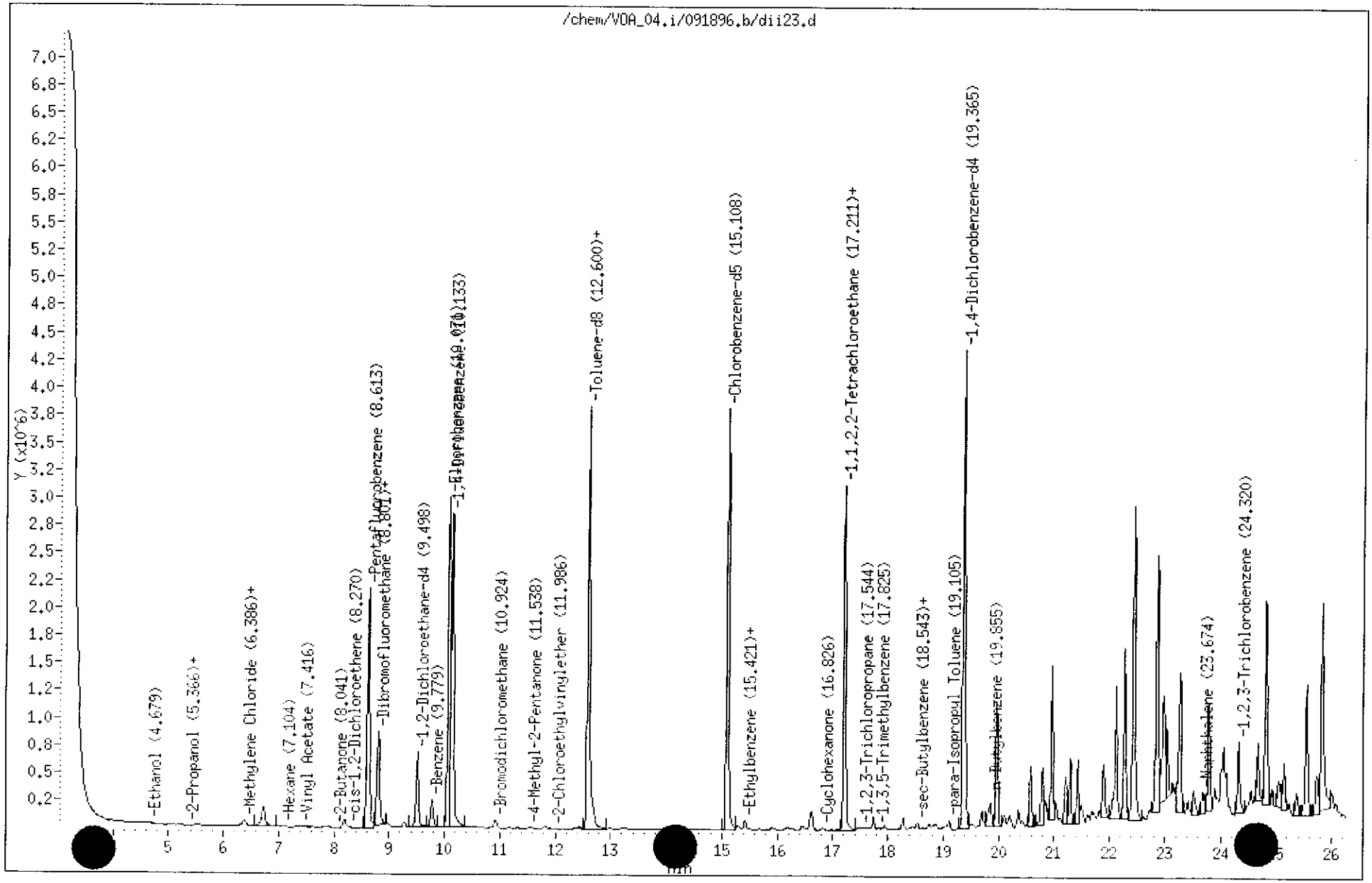
QC Flag Legend

M - Compound response manually integrated.
L - Operator selected an alternate library search match.

Data File: /chem/VOA_04.i/091896.b/dii23.d
Date : 18-SEP-96 20:33
Client ID: DYNA P&T
Sample Info: S.126747-002
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: MW-7
Lab ID: 126747-003
Matrix: Water
Batch#: 29895
Units: ug/L
Diln Fac: 1

Sampled: 09/05/96
Received: 09/05/96
Extracted: 09/18/96
Analyzed: 09/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	101	79-122

Data File: /chem/VOA_04.i/091896.b/dii24.d
Report Date: 19-Sep-1996 08:21

Curtis & Tompkins Labs

Unknown Compounds Quantitation Report

Data file : /chem/VOA_04.i/091896.b/dii24.d
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 18-SEP-96 21:05
Operator : LLH Inst ID: VOA_04.i
Smp Info : S,126747-003
Misc Info : 8240,,29895,5.0,5,1, WATER
Comment :
Method : /chem/VOA_04.i/091896.b/i4m826.m
Meth Date : 18-Sep-1996 17:57
Cal Date : 13-SEP-96 19:47 Cal File: did15.d
Als bottle: 24
Dil Factor: 1.000 Target Version: 3.10
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 73 1,4-Dichlorobenzene-d4	19.363	10322117	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(UG/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Naphthalene, 2,6-dimethyl-				CAS #: 581-42-0			
19.581	1114276	5.40	5.40	98	nbs75k.l	67337	73

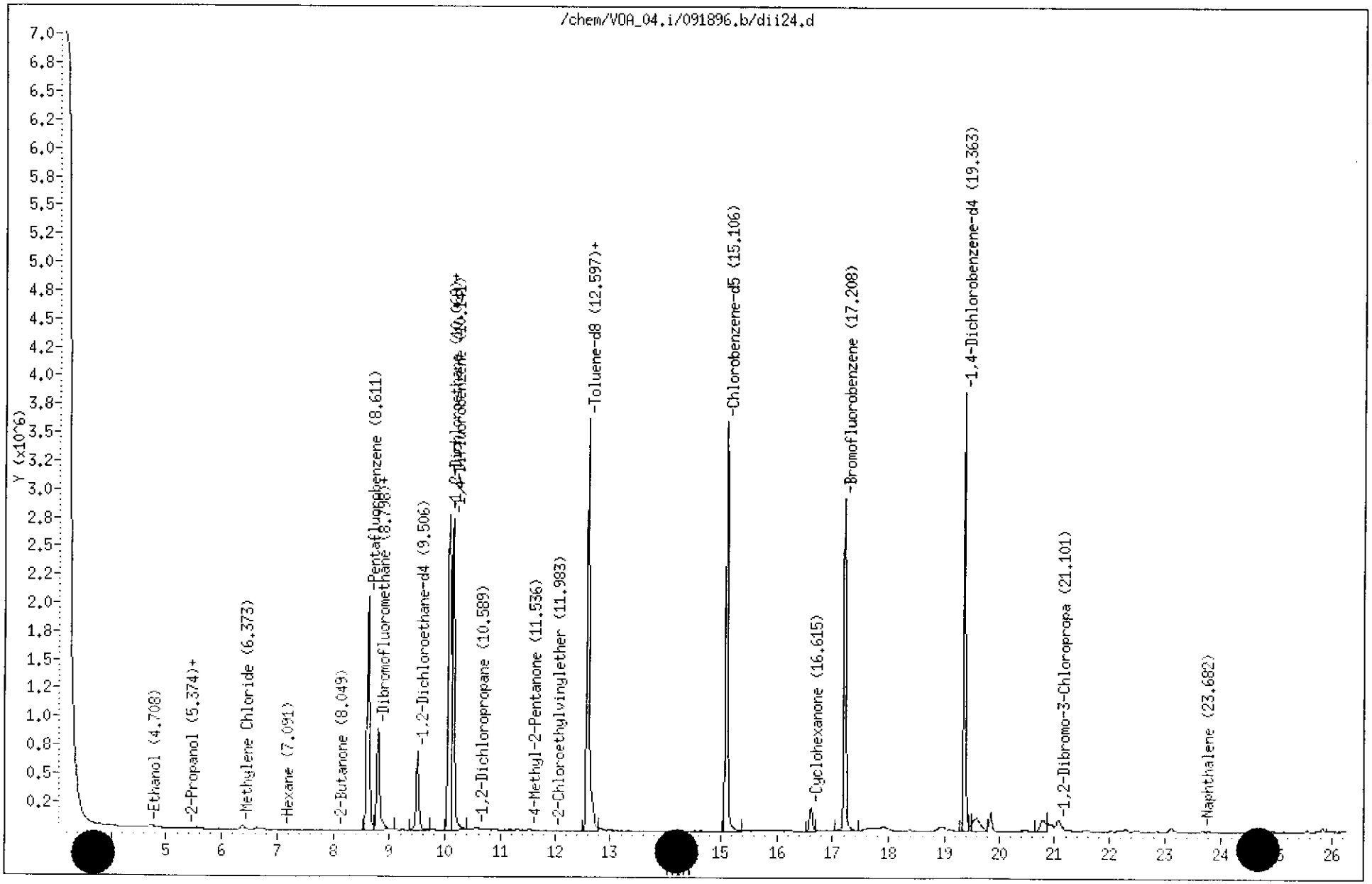
✓

AW 9/20/96

Data File: /chem/VOA_04.i/091896.b/dii24.d
Date : 18-SEP-96 21:05
Client ID: DYNA P&T
Sample Info: S,126747-003
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-MW-3
Lab ID: 126747-004
Matrix: Water
Batch#: 29856
Units: ug/L
Diln Fac: 1

Sampled: 09/05/96
Received: 09/05/96
Extracted: 09/17/96
Analyzed: 09/17/96

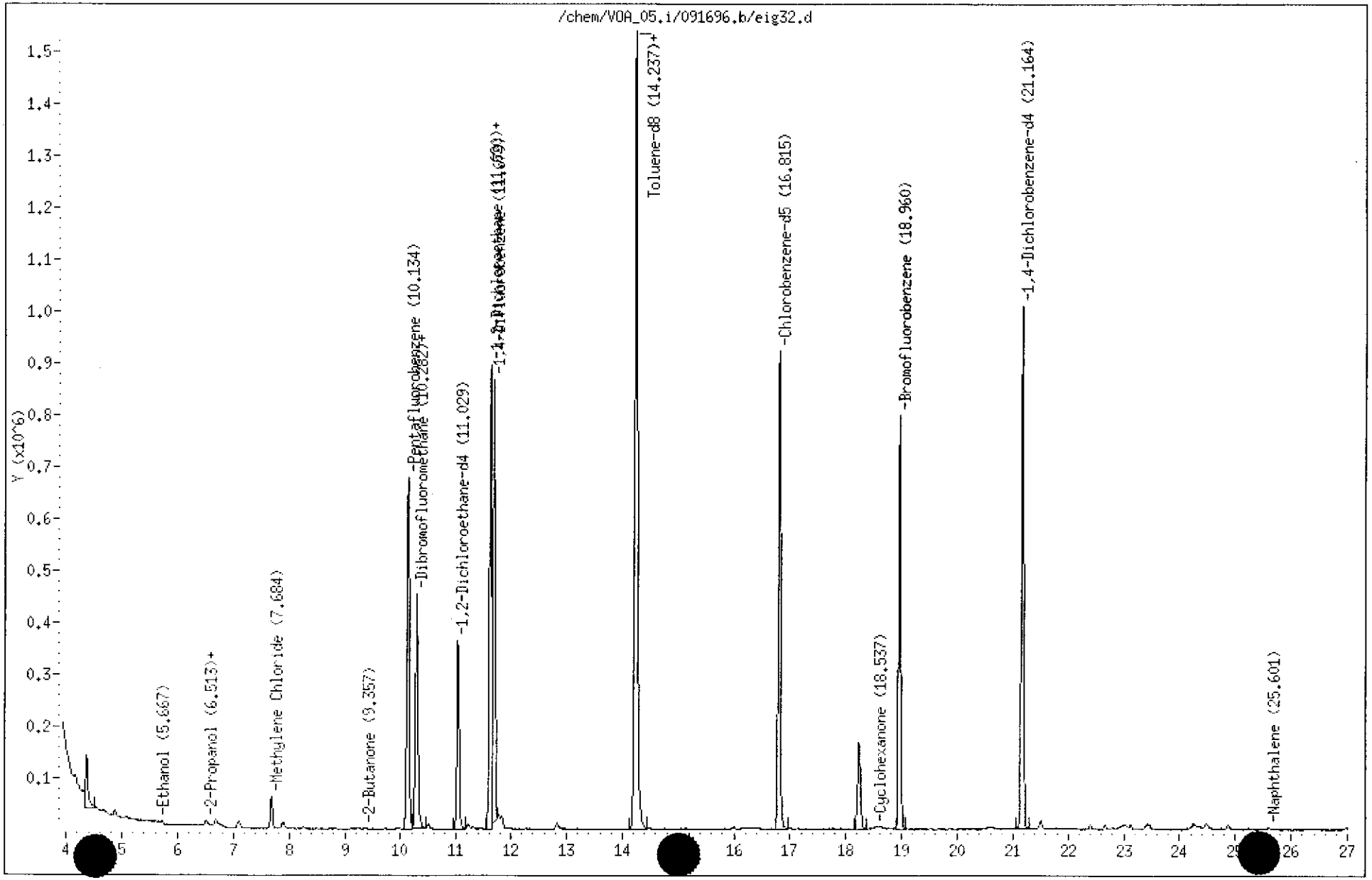
Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	90	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	91	79-122

Data File: /chem/VOA_05.i/091696.b/eig32.d
Date : 17-SEP-1996 01:37
Client ID: DYNA P&T
Sample Info: MSS,126747-004
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i

Operator: DM
Column diameter: 0.32



Volatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8240
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		
Field ID:	XB	Sampled:	09/05/96
Lab ID:	126747-005	Received:	09/05/96
Matrix:	Water	Extracted:	09/17/96
Batch#:	29856	Analyzed:	09/17/96
Units:	ug/L		
Diln Fac:	1		

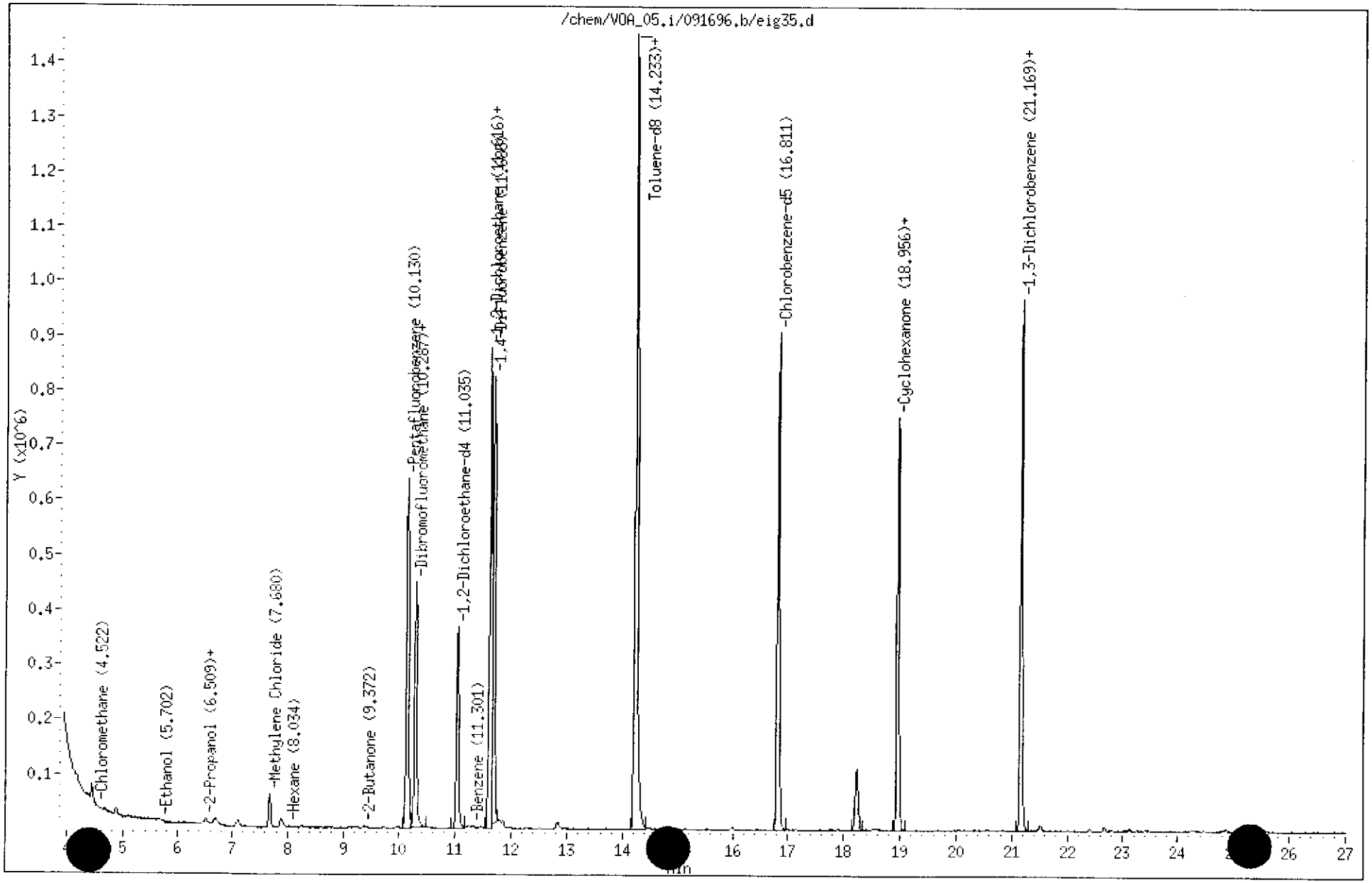
Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	96	87-125
Bromofluorobenzene	93	79-122

Data File: /chem/VOA_05.i/091696.b/eig35.d
Date : 17-SEP-1996 03:16
Client ID: DYNA P&T
Sample Info: S,126747-005
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i

Operator: DM
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: TRIP BLANK #8
Lab ID: 126747-006
Matrix: Water
Batch#: 29856
Units: ug/L
Diln Fac: 1

Sampled: 09/05/96
Received: 09/05/96
Extracted: 09/16/96
Analyzed: 09/16/96

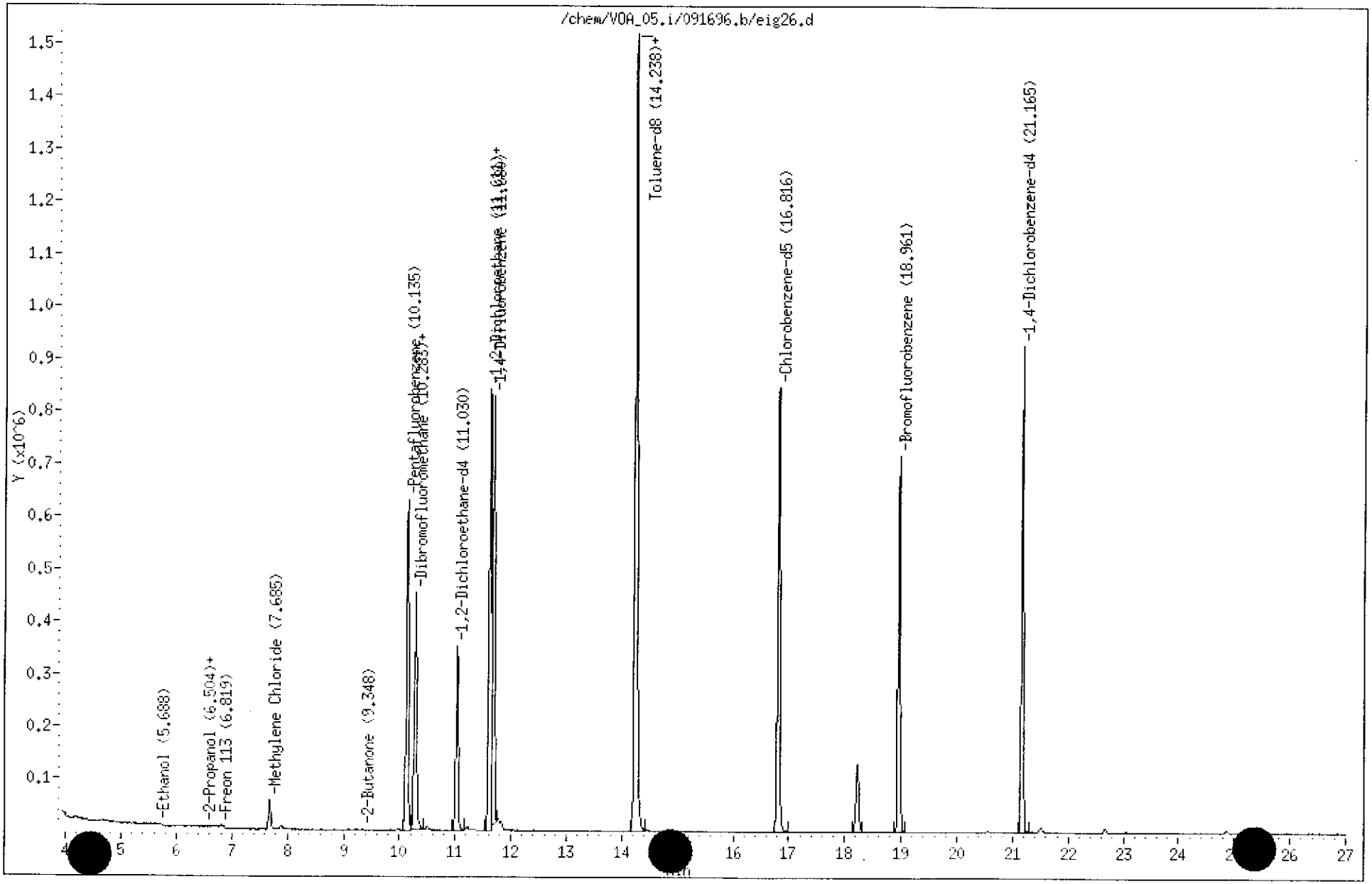
Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	88	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	90	79-122

Data File: /chem/VOA_05.i/091696.b/eig26.d
Date : 16-SEP-1996 22:20
Client ID: DYNA P&T
Sample Info: S,126747-006
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i

Operator: DM
Column diameter: 0.32



Curtis & Tompkins, Ltd.

Lab #: 126747 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29856
Units: ug/L
Diln Fac: 1

Prep Date: 09/16/96
Analysis Date: 09/16/96

MB Lab ID: QC30608

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	85	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	88	79-122

Curtis & Tompkins, Ltd.

Lab #: 126747 | BATCH QC REPORT | Page 1 of 1

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29895
Units: ug/L
Diln Fac: 1

Prep Date: 09/18/96
Analysis Date: 09/18/96

MB Lab ID: QC30752

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	105	79-122

Curtis & Tompkins, Ltd.

Lab #: 126747 | BATCH QC REPORT | Page 1 of 1

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29895
Units: ug/L
Diln Fac: 1

Prep Date: 09/18/96
Analysis Date: 09/18/96

MB Lab ID: QC30815

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	91	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	106	79-122

Curtis & Tompkins, Ltd.

Lab #: 126747 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29856
Units: ug/L
Diln Fac: 1

Prep Date: 09/16/96
Analysis Date: 09/16/96

LCS Lab ID: QC30607

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	51.33	50	103	51-180
Trichloroethene	46.29	50	93	73-141
Benzene	49.57	50	99	78-142
Toluene	46.69	50	93	76-150
Chlorobenzene	48.84	50	98	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	82	68-126
Toluene-d8	96	87-125
Bromofluorobenzene	89	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126747 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29895
Units: ug/L
Diln Fac: 1

Prep Date: 09/18/96
Analysis Date: 09/18/96

LCS Lab ID: QC30751

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	54.41	50	109	51-180
Trichloroethene	52.12	50	104	73-141
Benzene	57.61	50	115	78-142
Toluene	57.44	50	115	76-150
Chlorobenzene	57.05	50	114	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	94	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	103	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126747 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCI-MW-3
Lab ID: 126747-004
Matrix: Water
Batch#: 29856
Units: ug/L
Diln Fac: 1

Sample Date: 09/05/96
Received Date: 09/05/96
Prep Date: 09/17/96
Analysis Date: 09/17/96

MS Lab ID: QC30609

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	41.55	83	51-180
Trichloroethene	50	<5	42.28	85	73-141
Benzene	50	<5	45.97	92	78-142
Toluene	50	<5	42.17	84	76-150
Chlorobenzene	50	<5	45.29	91	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	89	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	93	79-122

MSD Lab ID: QC30610

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	42	84	51-180	1	14
Trichloroethene	50	42.72	85	73-141	1	14
Benzene	50	46.43	93	78-142	1	11
Toluene	50	42.42	85	76-150	1	13
Chlorobenzene	50	45.72	91	83-129	1	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	89	68-126
Toluene-d8	96	87-125
Bromofluorobenzene	93	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126747 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126838-003
Matrix: Water
Batch#: 29895
Units: ug/L
Diln Fac: 1

Sample Date: 09/12/96
Received Date: 09/13/96
Prep Date: 09/18/96
Analysis Date: 09/18/96

MS Lab ID: QC30753

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	0	42.62	85	51-180
Trichloroethene	50	30.44	74.4	88	73-141
Benzene	50	0	51.71	103	78-142
Toluene	50	0.2593	53.66	107	76-150
Chlorobenzene	50	0	51.81	104	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	90	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	103	79-122

MSD Lab ID: QC30754

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	44.46	89	51-180	4	14
Trichloroethene	50	73.99	87	73-141	1	14
Benzene	50	51.77	104	78-142	0	11
Toluene	50	52.11	104	76-150	3	13
Chlorobenzene	50	51.37	103	83-129	1	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	92	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	104	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: MW-6
Lab ID: 126747-002
Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 50

Sampled: 09/05/96
Received: 09/05/96
Extracted: 09/09/96
Analyzed: 09/18/96

Analyte	Result	Reporting Limit
Phenol	ND	470
2-Chlorophenol	ND	470
Benzyl alcohol	ND	470
2-Methylphenol	ND	470
4-Methylphenol	ND	470
2-Nitrophenol	ND	2400
2,4-Dimethylphenol	ND	470
Benzoic acid	ND	2400
2,4-Dichlorophenol	ND	470
4-Chloro-3-methylphenol	ND	470
2,4,6-Trichlorophenol	ND	470
2,4,5-Trichlorophenol	ND	2400
2,4-Dinitrophenol	ND	2400
4-Nitrophenol	ND	2400
4,6-Dinitro-2-methylphenol	ND	2400
Pentachlorophenol	ND	2400
N-Nitrosodimethylamine	ND	470
Aniline	ND	470
bis(2-Chloroethyl)ether	ND	470
1,3-Dichlorobenzene	ND	470
1,4-Dichlorobenzene	ND	470
1,2-Dichlorobenzene	ND	470
bis(2-Chloroisopropyl) ether	ND	470
N-Nitroso-di-n-propylamine	ND	470
Hexachloroethane	ND	470
Nitrobenzene	ND	470
Isophorone	ND	470
bis(2-Chloroethoxy)methane	ND	470
1,2,4-Trichlorobenzene	ND	470
Naphthalene	ND	470
4-Chloroaniline	ND	470
Hexachlorobutadiene	ND	470
2-Methylnaphthalene	410 J	470
Hexachlorocyclopentadiene	ND	470
2-Chloronaphthalene	ND	470
2-Nitroaniline	ND	2400
Dimethylphthalate	ND	470
Acenaphthylene	ND	470

Semivolatile Organics by GC/MS

Field ID:	MW-6	Sampled:	09/05/96
Lab ID:	126747-002	Received:	09/05/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/18/96
Units:	ug/L		
Diln Fac:	50		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	470
3-Nitroaniline	ND	2400
Acenaphthene	ND	470
Dibenzofuran	ND	470
2,4-Dinitrotoluene	ND	470
Diethylphthalate	ND	470
4-Chlorophenyl-phenylether	ND	470
Fluorene	ND	470
4-Nitroaniline	ND	2400
N-Nitrosodiphenylamine	ND	470
Azobenzene	ND	470
4-Bromophenyl-phenylether	ND	470
Hexachlorobenzene	ND	470
Phenanthrene	ND	470
Anthracene	ND	470
Di-n-butylphthalate	ND	470
Fluoranthene	ND	470
Pyrene	ND	470
Butylbenzylphthalate	ND	470
3,3'-Dichlorobenzidine	ND	2400
Benzo(a)anthracene	ND	470
Chrysene	ND	470
bis(2-Ethylhexyl)phthalate	ND	470
Di-n-octylphthalate	ND	470
Benzo(b)fluoranthene	ND	470
Benzo(k)fluoranthene	ND	470
Benzo(a)pyrene	ND	470
Indeno(1,2,3-cd)pyrene	ND	470
Dibenz(a,h)anthracene	ND	470
Benzo(g,h,i)perylene	ND	470

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	DO*	21-110
Phenol-d5	DO*	10-110
2,4,6-Tribromophenol	DO*	10-123
Nitrobenzene-d5	DO*	35-114
2-Fluorobiphenyl	DO*	43-116
Terphenyl-d14	DO*	33-141

J: Estimated Value
* Values outside of QC limits
DO: Surrogate diluted out

Data File: /chem/bna02.i/091896x.b/11_6747-2d50.d
Report Date: 19-Sep-1996 10:07

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: dl,126747-002
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 20

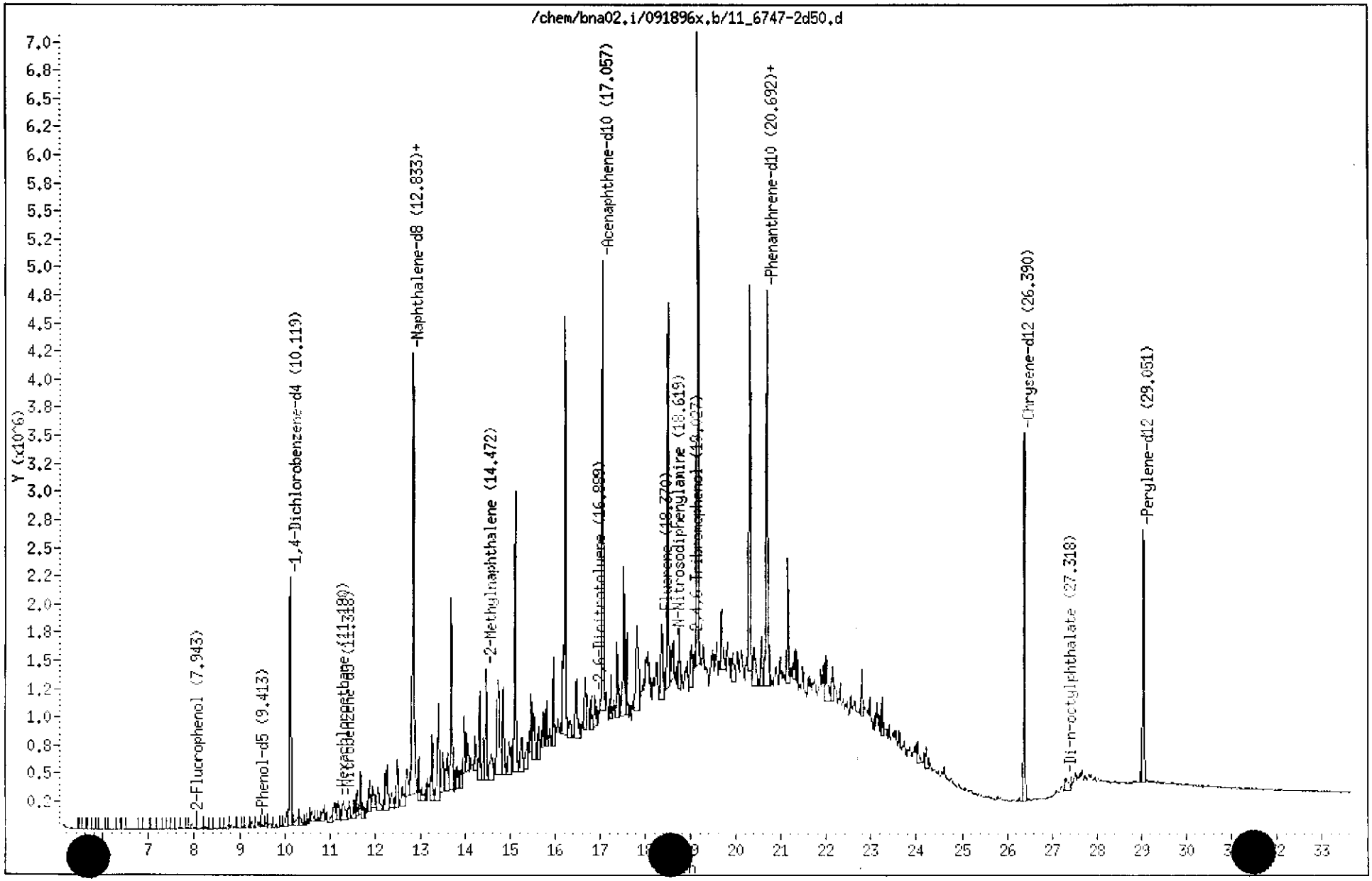
CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	12.272	283.56	NJ
2.		UNKNOWN	13.395	472.18	NJ
3.		UNKNOWN	13.682	671.31	NJ
4.		UNKNOWN	14.323	331.92	NJ
5.	264-09-5	Benzocycloheptatriene	14.739	664.35	NJ
6.		UNKNOWN	14.838	419.73	NJ
7.	3891-98-3	Dodecane, 2,6,10-trimethyl-	15.115	1102.63	NJ
8.	571-61-9	Naphthalene, 1,5-dimethyl-	15.966	405.58	NJ
9.		UNKNOWN	16.224	1845.89	NJ
10.		UNKNOWN	16.472	429.61	NJ
11.		UNKNOWN	17.375	342.85	NJ
12.		UNKNOWN	17.524	621.51	NJ
13.		UNKNOWN	17.594	316.93	NJ
14.		UNKNOWN	17.813	663.25	NJ
15.	1560-89-0	Heptadecane, 2-methyl-	18.499	1396.02	NJ
16.	1921-70-6	Pentadecane, 2,6,10,14-tetr	19.156	2414.41	NJ
17.		UNKNOWN	19.684	314.75	NJ
18.	31295-56-4	Dodecane, 2,6,11-trimethyl-	20.293	1579.28	NJ
19.		UNKNOWN	20.393	369.47	NJ
20.		UNKNOWN	21.151	508.71	NJ

Data File: /chem/bna02.i/091896x.b/11_6747-2d50.d
Date : 18-SEP-1996 20:38
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i

Operator: dsh
Column diameter: 0.25



Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: MW-7
Lab ID: 126747-003
Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Sampled: 09/05/96
Received: 09/05/96
Extracted: 09/09/96
Analyzed: 09/18/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	MW-7	Sampled:	09/05/96
Lab ID:	126747-003	Received:	09/05/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/18/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	72	21-110
Phenol-d5	78	10-110
2,4,6-Tribromophenol	87	10-123
Nitrobenzene-d5	85	35-114
2-Fluorobiphenyl	81	43-116
Terphenyl-d14	39	33-141

Data File: /chem/bna02.i/091896x.b/07_6747-3re.d
Report Date: 19-Sep-1996 10:06

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126747-003
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

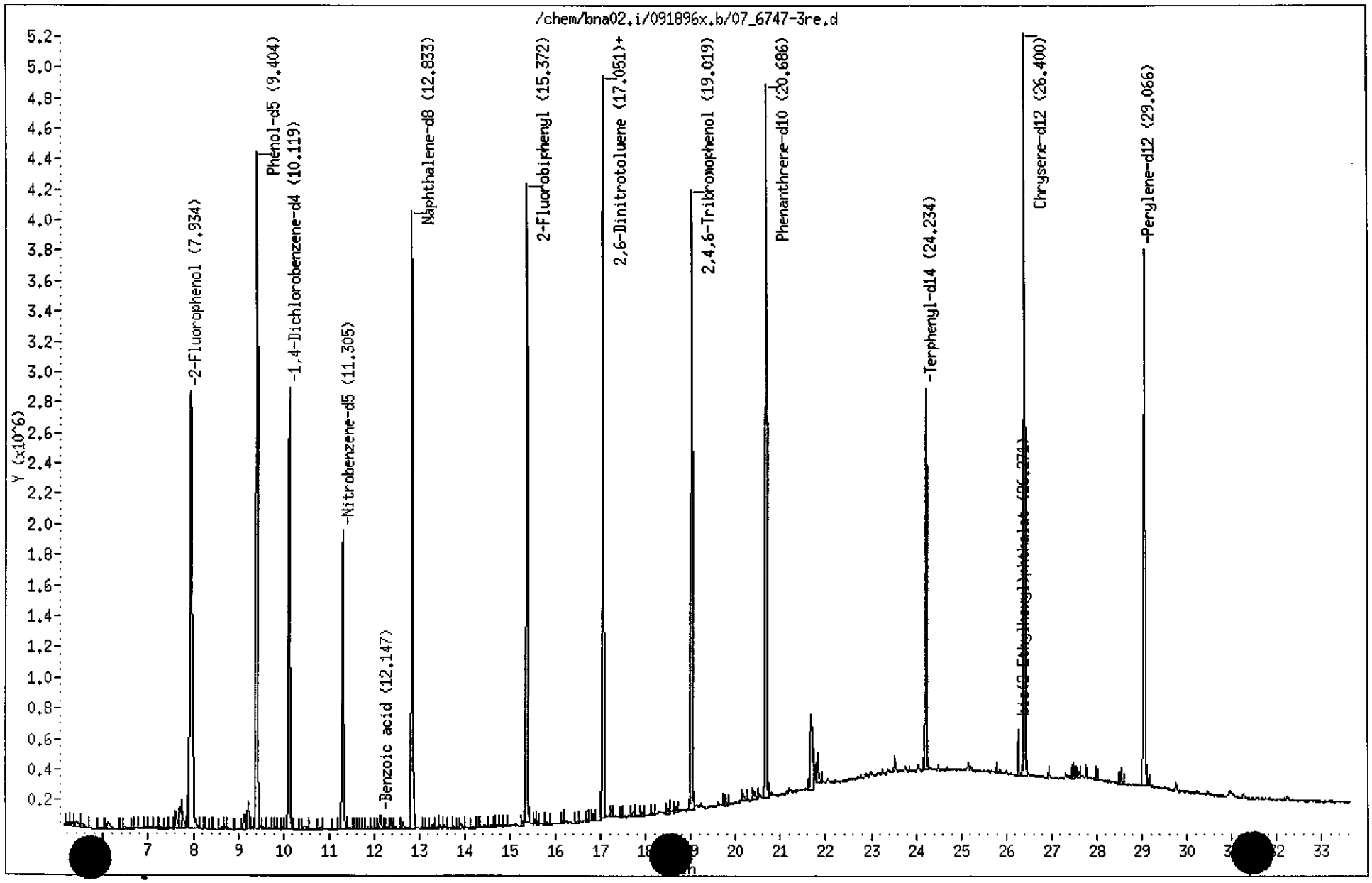
Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	21.685	6.68	NJ

Data File: /chem/bna02.i/091896x.b/07_6747-3re.d
Date : 18-SEP-1996 17:40
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i
Operator: dsh
Column diameter: 0.25



Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-3
Lab ID: 126747-004
Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Sampled: 09/05/96
Received: 09/05/96
Extracted: 09/09/96
Analyzed: 09/13/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-3	Sampled:	09/05/96
Lab ID:	126747-004	Received:	09/05/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/13/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	5.5 J	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	71	21-110
Phenol-d5	75	10-110
2,4,6-Tribromophenol	79	10-123
Nitrobenzene-d5	69	35-114
2-Fluorobiphenyl	63	43-116
Terphenyl-d14	49	33-141

J: Estimated Value

Data File: /chem/bna02.i/091396x.b/11_6747-004.d
Report Date: 16-Sep-1996 17:00

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126747-004
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

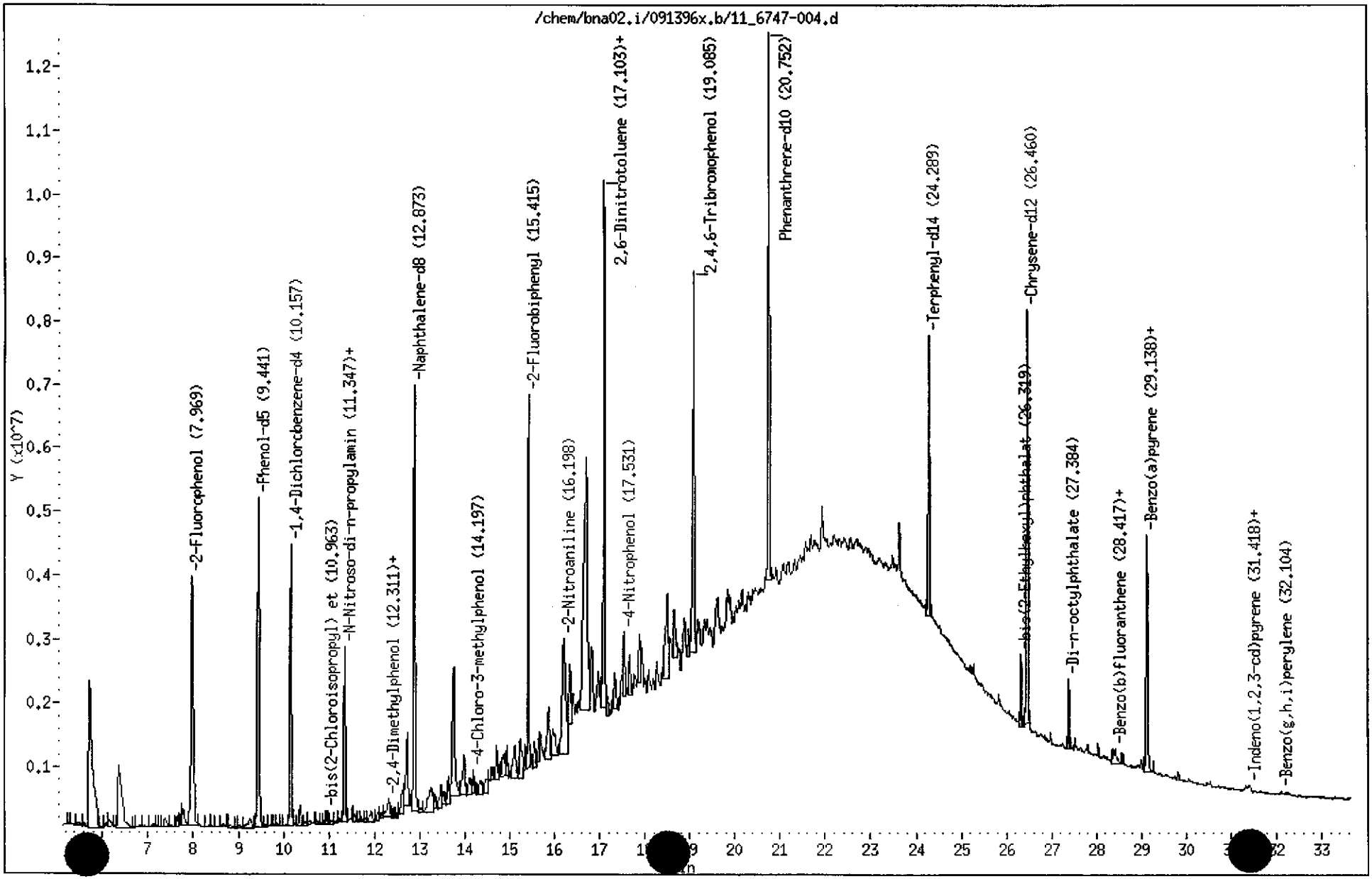
Number TICs found: 16

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-91-1	1,4-Dioxane	5.733	47.93	NJ
2.	108-11-2	2-Pentanol, 4-methyl-	6.350	24.79	NJ
3.		UNKNOWN	12.725	9.79	NJ
4.		UNKNOWN	13.258	7.35	NJ
5.		UNKNOWN	13.752	18.94	NJ
6.		UNKNOWN	13.980	7.15	NJ
7.		UNKNOWN	15.117	5.72	NJ
8.		UNKNOWN	15.236	5.72	NJ
9.		UNKNOWN	15.871	6.87	NJ
10.		UNKNOWN	15.970	4.46	NJ
11.		UNKNOWN	16.347	6.34	NJ
12.		UNKNOWN	16.705	48.95	NJ
13.		UNKNOWN	17.660	3.77	NJ
14.		UNKNOWN	17.879	5.05	NJ
15.		UNKNOWN	18.497	13.12	NJ
16.		UNKNOWN	18.656	5.77	NJ

Data File: /chem/bna02.i/091396x.b/11_6747-004.d
Date : 13-SEP-1996 20:03
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i
Operator: dsh
Column diameter: 0.25



EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29980

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	10
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29980

Analyte	Result	Reporting Limit
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	59	21-110
Phenol-d5	64	10-110
2,4,6-Tribromophenol	49	10-123
Nitrobenzene-d5	61	35-114
2-Fluorobiphenyl	62	43-116
Terphenyl-d14	64	33-141

Curtis & Tompkins, Ltd.

Lab #: 126747 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

BS Lab ID: QC29981

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	100	64.31	64	12-110
2-Chlorophenol	100	71.21	71	27-123
4-Chloro-3-methylphenol	100	63.38	63	23-97
4-Nitrophenol	100	50.17	50	10-80
Pentachlorophenol	100	52.23	52	9-103
1,4-Dichlorobenzene	50	29.99	60	36-97
N-Nitroso-di-n-propylamine	50	26.68	53	41-116
1,2,4-Trichlorobenzene	50	29.47	59	39-98
Acenaphthene	50	35.01	70	46-118
2,4-Dinitrotoluene	50	33.25	67	24-96
Pyrene	50	34.66	69	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	66	21-110
Phenol-d5	69	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	67	35-114
2-Fluorobiphenyl	66	43-116
Terphenyl-d14	69	33-141

BSD Lab ID: QC29982

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	100	61.22	61	12-110	5	42
2-Chlorophenol	100	68.04	68	27-123	5	40
4-Chloro-3-methylphenol	100	62.62	62	23-97	1	42
4-Nitrophenol	100	50.61	51	10-80	1	50
Pentachlorophenol	100	58.26	58	9-103	11	50
1,4-Dichlorobenzene	50	28.88	58	36-97	4	28
N-Nitroso-di-n-propylamine	50	25.86	52	41-116	3	38
1,2,4-Trichlorobenzene	50	28.62	57	39-98	3	28
Acenaphthene	50	34.94	70	46-118	0	31
2,4-Dinitrotoluene	50	33.64	67	24-96	3	38
Pyrene	50	34.51	69	26-127	0	31

Surrogate	%Rec	Limits
2-Fluorophenol	61	21-110
Phenol-d5	65	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	65	35-114
2-Fluorobiphenyl	65	43-116
Terphenyl-d14	70	33-141

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	MW-6	Sampled:	09/05/96
Lab ID:	126747-002	Received:	09/05/96
Matrix:	Water	Extracted:	09/11/96
Batch#:	29758	Analyzed:	09/13/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	36*	60-150
Decachlorobiphenyl	26*	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	MW-7	Sampled:	09/05/96
Lab ID:	126747-003	Received:	09/05/96
Matrix:	Water	Extracted:	09/11/96
Batch#:	29758	Analyzed:	09/13/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	56*	60-150
Decachlorobiphenyl	18*	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-3	Sampled:	09/05/96
Lab ID:	126747-004	Received:	09/05/96
Matrix:	Water	Extracted:	09/11/96
Batch#:	29758	Analyzed:	09/13/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	55*	60-150
Decachlorobiphenyl	22*	30-130

* Values outside of QC limits

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29758
Units: ug/L
Diln Fac: 1

Prep Date: 09/11/96
Analysis Date: 09/13/96

MB Lab ID: QC30243

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Rec	Recovery Limits
TCMX	76	60-150
Decachlorobiphenyl	84	30-130

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29758
Units: ug/L
Diln Fac: 1

Prep Date: 09/11/96
Analysis Date: 09/13/96

BS Lab ID: QC30244

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.09	82	50-128
Surrogate	**%Rec**	**Limits**		
TCMX	63	60-150		
Decachlorobiphenyl	83	30-130		

BSD Lab ID: QC30245

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.11	82	50-128	0	20
Surrogate	**%Rec**	**Limits**				
TCMX	68	60-150				
Decachlorobiphenyl	51	30-130				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

Corrective Action Report

2427

From: PCBs - Lara Wheeling Client: Subsurface

Job #: _____ Date: 9-16-96 Time: 1:00

Sample Control	Subcontract	Organics	Metals	Gen. Chem.	Project Management
BREAKAGE	BREAKAGE	TAT	TAT	TAT	REPORT ERROR
VOLUME	LOST	HOLDING TIME	HOLDING TIME	HOLDING TIME	REVIEW ERROR
CONTAINER	VOLUME	QC LIMITS	QC LIMITS	QC LIMITS	INVOICE ERROR
DOCUMENT	TAT	DILUTION	DILUTION	DILUTION	JOB JACKET ERROR
PRESERVATION	HOLDING TIME	WORKSHEET	WORKSHEET	WORKSHEET	COMM. ERROR
LOST	NARRATIVE	ANAL. NOTES	ANAL. NOTES	ANAL. NOTES	OTHER
OTHER	OTHER	OTHER X	OTHER	OTHER	

Description of problem/nonconformance: Samples 126747-002, 126747-003, 126747-004 and 126759-003 have failing surrogates in both runs.

Summary of corrective action(s):

① ~~Re-extract to confirm passive matrix effect~~ CK 9/16/96. LK 9/16/96

② Report / Narrate site's demonstrated matrix effects on surrogates.

	YES	NO	Resolver	Initials	Date
Is a recurring problem?		✓	X Analyst	KW	9-16-96
Should SOP be modified?		✓	Group Leader	KW	9-16-96
Should training be given?	✓		P.M.		
Should customer be educated?		✓	QA Officer		
Should operations be changed?		✓	X ~~Lab Director~~ CP, MS		

Curtis & Tompkins, Ltd.

SAMPLE ID: MW-6
LAB ID: 126747-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 09/05/96
DATE RECEIVED: 09/05/96
DATE REPORTED: 09/23/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	8.9	5.0	1	29688	EPA 6010A	09/11/96
Barium	420	10	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	ND	10	1	29688	EPA 6010A	09/11/96
Lead	3.5	3.0	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.20	1	29868	EPA 7470	09/17/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	1	29688	EPA 6010A	09/11/96
Selenium	27	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: MW-7
LAB ID: 126747-003
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 09/05/96
DATE RECEIVED: 09/05/96
DATE REPORTED: 09/23/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	10	5.0	1	29688	EPA 6010A	09/11/96
Barium	78	10	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	ND	10	1	29688	EPA 6010A	09/11/96
Lead	ND	3.0	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.20	1	29868	EPA 7470	09/17/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	1	29688	EPA 6010A	09/11/96
Selenium	20	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-3
LAB ID: 126747-004
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 09/05/96
DATE RECEIVED: 09/05/96
DATE REPORTED: 09/23/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	8.5	5.0	1	29688	EPA 6010A	09/11/96
Barium	170	10	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	ND	10	1	29688	EPA 6010A	09/11/96
Lead	4.6	3.0	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.20	1	29868	EPA 7470	09/17/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	1	29688	EPA 6010A	09/11/96
Selenium	31	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126747

DATE REPORTED: 09/23/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	500	507	555	ug/L	101	111	80-120	9	35	29688	EPA 6010A	09/11/96
Arsenic	2000	1940	1970	ug/L	97	99	80-120	2	35	29688	EPA 6010A	09/11/96
Barium	2000	1980	1970	ug/L	99	99	80-120	1	35	29688	EPA 6010A	09/11/96
Beryllium	50	50.4	51.5	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Cadmium	50	52.8	53.1	ug/L	106	106	80-120	1	35	29688	EPA 6010A	09/11/96
Chromium (total)	200	198	199	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Cobalt	500	492	507	ug/L	98	101	80-120	3	35	29688	EPA 6010A	09/11/96
Copper	250	249	248	ug/L	100	99	80-120	0	35	29688	EPA 6010A	09/11/96
Lead	500	505	520	ug/L	101	104	80-120	3	35	29688	EPA 6010A	09/11/96
Mercury	5	5.427	5.612	ug/L	109	112	80-120	3	35	29868	EPA 7470	09/17/96
Molybdenum	400	406	414	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Nickel	500	507	516	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Selenium	2000	2020	2040	ug/L	101	102	80-120	1	35	29688	EPA 6010A	09/11/96
Silver	100	90.4	89.7	ug/L	90	90	80-120	1	35	29688	EPA 6010A	09/11/96
Thallium	2000	2040	2070	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Vanadium	500	495	498	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Zinc	500	480	493	ug/L	96	99	80-120	3	35	29688	EPA 6010A	09/11/96

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126747

DATE REPORTED: 09/23/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	29688	EPA 6010A	09/11/96
Arsenic	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Barium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Copper	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Lead	ND	3	ug/L	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.2	ug/L	1	29868	EPA 7470	09/17/96
Molybdenum	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Selenium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Silver	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Thallium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	ug/L	1	29688	EPA 6010A	09/11/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126747

DATE REPORTED: 09/23/96

BATCH QC REPORT
SAMPLE DUPLICATE

Compound	Sample	Sample Result	Duplicate Result	Units	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	126699-001	<60.000	<60.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Arsenic	126699-001	14	8.56	ug/L	48*	20	29688	EPA 6010A	09/11/96
Barium	126699-001	295	281	ug/L	5	20	29688	EPA 6010A	09/11/96
Beryllium	126699-001	3.07	<2.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Cadmium	126699-001	<2.000	<2.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Chromium (total)	126699-001	<10.000	<10.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Cobalt	126699-001	<20.000	<20.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Copper	126699-001	<10.000	<10.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Lead	126699-001	<3.000	<3.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Mercury	126810-025	<0.200	<0.200	ug/L	NC	20	29868	EPA 7470	09/17/96
Molybdenum	126699-001	<20.000	<20.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Nickel	126699-001	<20.000	<20.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Selenium	126699-001	39.7	25.5	ug/L	44*	20	29688	EPA 6010A	09/11/96
Silver	126699-001	<5.000	<5.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Thallium	126699-001	<5.000	<5.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Vanadium	126699-001	11.7	<10.000	ug/L	NC	20	29688	EPA 6010A	09/11/96
Zinc	126699-001	<20.000	<20.000	ug/L	NC	20	29688	EPA 6010A	09/11/96

* = Out of Limits
NC = Not Calculable

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126747

DATE REPORTED: 09/23/96

BATCH QC REPORT
SAMPLE SPIKE

Compound	Spike Amount	Sample	Sample Result	Spike Result	Units	Percent Rec.	Rec. Limit	QC Batch	Method	Analysis Date
Antimony	500	126699-001	<60.000	490	ug/L	98	75-125	29688	EPA 6010A	09/11/96
Arsenic	2000	126699-001	14	1610	ug/L	80	75-125	29688	EPA 6010A	09/11/96
Barium	2000	126699-001	295	2170	ug/L	94	75-125	29688	EPA 6010A	09/11/96
Beryllium	50	126699-001	3.07	43	ug/L	80	75-125	29688	EPA 6010A	09/11/96
Cadmium	50	126699-001	<2.000	43.4	ug/L	87	75-125	29688	EPA 6010A	09/11/96
Chromium (total)	200	126699-001	<10.000	183	ug/L	92	75-125	29688	EPA 6010A	09/11/96
Cobalt	500	126699-001	<20.000	444	ug/L	89	75-125	29688	EPA 6010A	09/11/96
Copper	250	126699-001	<10.000	310	ug/L	124	75-125	29688	EPA 6010A	09/11/96
Lead	500	126699-001	<3.000	463	ug/L	93	75-125	29688	EPA 6010A	09/11/96
Mercury	5	126810-025	<0.200	5.739	ug/L	115	75-125	29868	EPA 7470	09/17/96
Molybdenum	400	126699-001	<20.000	336	ug/L	84	75-125	29688	EPA 6010A	09/11/96
Nickel	500	126699-001	<20.000	469	ug/L	94	75-125	29688	EPA 6010A	09/11/96
Selenium	2000	126699-001	39.7	1880	ug/L	92	75-125	29688	EPA 6010A	09/11/96
Silver	100	126699-001	<5.000	106	ug/L	106	75-125	29688	EPA 6010A	09/11/96
Thallium	2000	126699-001	<5.000	1590	ug/L	80	75-125	29688	EPA 6010A	09/11/96
Vanadium	500	126699-001	11.7	456	ug/L	89	75-125	29688	EPA 6010A	09/11/96
Zinc	500	126699-001	<20.000	442	ug/L	88	75-125	29688	EPA 6010A	09/11/96

CHAIN OF CUSTODY FORM

126747

PROJECT NAME: KOT

JOB NUMBER: 133.005 LAB: Curtis & Tompkins

PROJECT CONTACT: Jeri Alexander / Meg Mendoza TURNAROUND: Normal

SAMPLED BY: Dennis Alexander REQUESTED BY: Jeri Alexander / Meg Mendoza

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	TVH @ gas	BTXE	TEH @ diesel + motor oil	VOC's (8240) w/ library search	SVOC's (8270) including PNAs	OWG	Heavy Metals	POBs
-1	MW-2	X				3	1			X			X		09	05	96	1100		X	X	X					
-2	MW-6	X				5	5			X			X					1030	*	X		X	X	X	X	X	X
-3	MW-7	X				5	5			X			X					1130	*	X		X	X	X	X	X	X
-4	SCI-MW-3	X				5	5			X			X					1345	*	X		X	X	X	X	X	X
-5	XB	X				3				X			X		09	05	96	1345					X				
-6	Trip Blank #8	X				1							X										X				

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dennis Alexander	9/5/96 2:45 p.m.		9/5/96 1450
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES: * Please filter & fix before metals analysis

Subsurface Consultants, Inc.
171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607
(510) 268-0461 • FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 23-SEP-96
Lab Job Number: 126759
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 126759

Project Name: KOT
Project Number: 133.005

Report Date: 23 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
126759-002	SCI-MW-1	Water	06-SEP-96	06-SEP-96	18-SEP-96	ND	mg/L	5	TR	29899
126759-003	SCI-MW-7	Water	06-SEP-96	06-SEP-96	18-SEP-96	ND	mg/L	5	TR	29899
126759-004	SCI-MW-18	Water	06-SEP-96	06-SEP-96	18-SEP-96	ND	mg/L	5	TR	29899

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Subsurface Consultants
Project Name: KOT
Project Number: 133.005

Laboratory Login Number: 126759
Report Date: 23 September 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 29899**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	18-SEP-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	84%	SMWW 17:5520BF	18-SEP-96
BSD	87%	SMWW 17:5520BF	18-SEP-96

		Control Limits
Average Spike Recovery	86%	80% - 120%
Relative Percent Difference	3.5%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126759-001	MW-1	29639	09/06/96	09/07/96	09/07/96	

Matrix: Water

Analyte	Units	126759-001
Diln Fac:		1
Gasoline	ug/L	<50
Surrogate		
Trifluorotoluene	%REC	95
Bromobenzene	%REC	85

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126759-002	SCI-MW-1	29741	09/06/96	09/11/96	09/11/96	
126759-003	SCI-MW-7	29741	09/06/96	09/12/96	09/12/96	
126759-004	SCI-MW-18	29741	09/06/96	09/11/96	09/11/96	

Matrix: Water

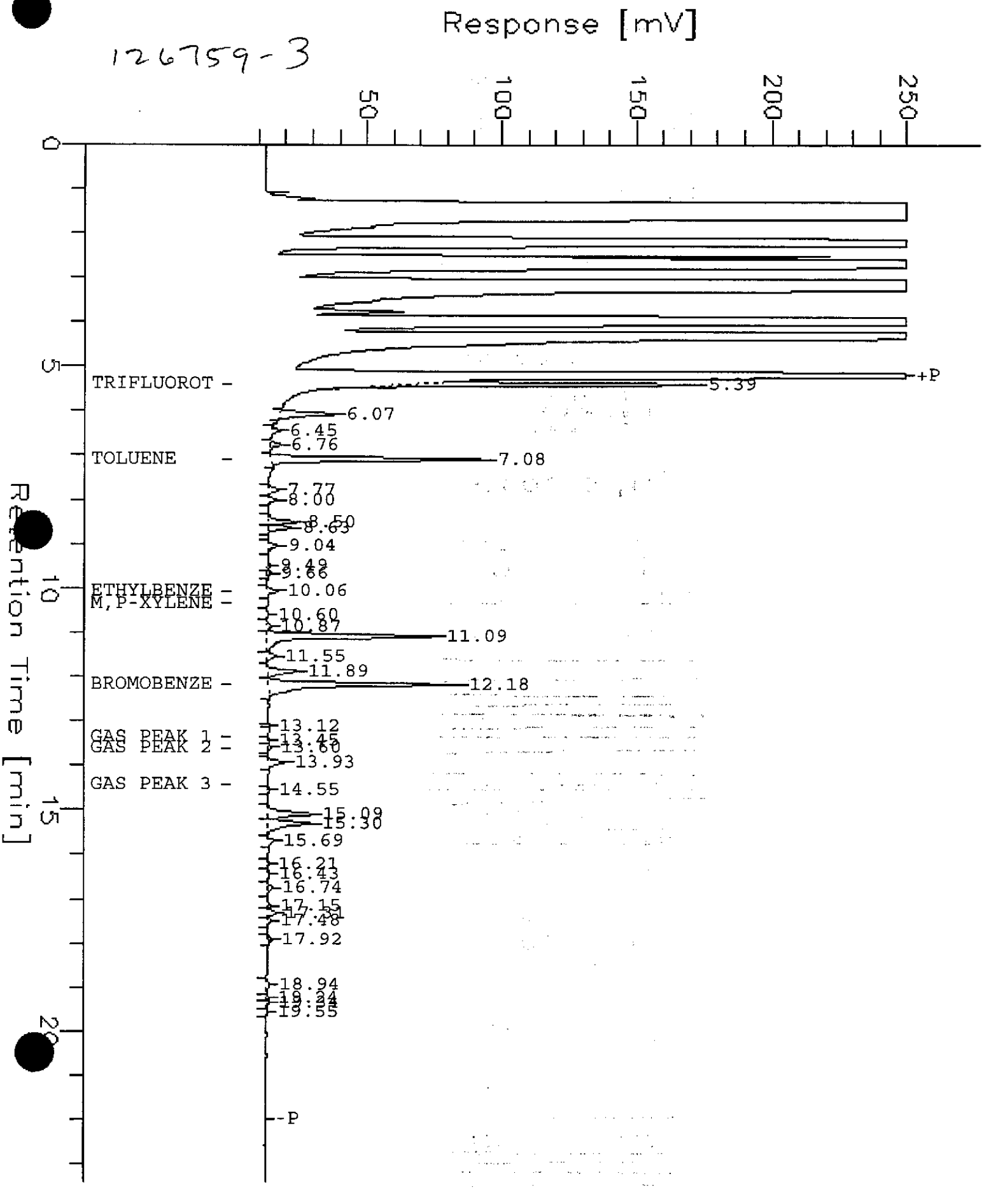
Analyte Diln Fac:	Units	126759-002 1	126759-003 1	126759-004 1
Gasoline	ug/L	<50	540	<50
Surrogate				
Trifluorotoluene	%REC	102	96	101
Bromobenzene	%REC	89	105	90

TVH2 - GC-05 RTX-1

FileName : G:\GC05\255H019.raw
Start Time : 0.00 min
Scale Factor: -1
End Time : 23.42 min
Plot Offset: 0 mV
Date : 9/12/96 1:11 AM
Low Point : 0.00 mV
Plot Scale: 250 mV

High Point : 250.00 mV

126759-3



Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/06/96
Batch#:	29639	Analysis Date:	09/06/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC29799

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	100	69-120
Bromobenzene	79	70-122

Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

LCS Lab ID: QC29800

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	2007	2000	100	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	96	69-120
Bromobenzene	103	70-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126718-001
Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Sample Date: 08/28/96
Received Date: 08/31/96
Prep Date: 09/06/96
Analysis Date: 09/06/96

MS Lab ID: QC29802

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	62.6	1921	93	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	96	69-120
Bromobenzene	104	70-122

MSD Lab ID: QC29803

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1973	96	75-125	3	20

Surrogate	%Rec	Limits
Trifluorotoluene	96	69-120
Bromobenzene	105	70-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.005	Prep Method:	EPA 5030
Location:	KOT		

METHOD BLANK

Matrix:	Water	Prep Date:	09/11/96
Batch#:	29741	Analysis Date:	09/11/96
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC30172

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	97	65-135
Bromobenzene	81	65-135

Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29741
Units: ug/L
Diln Fac: 1

Prep Date: 09/11/96
Analysis Date: 09/11/96

LCS Lab ID: QC30173

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1887	2000	94	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	95	65-135
Bromobenzene	104	65-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126744-011
Matrix: Water
Batch#: 29741
Units: ug/L
Diln Fac: 1

Sample Date: 09/03/96
Received Date: 09/05/96
Prep Date: 09/11/96
Analysis Date: 09/11/96

MS Lab ID: QC30174

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50	1867	93	75-125
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	97	65-135			
Bromobenzene	110	65-135			

MSD Lab ID: QC30175

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1959	98	75-125	5	35
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	98	65-135				
Bromobenzene	111	65-135				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126759-001	MW-1	29815	09/06/96	09/13/96	09/17/96	
126759-002	SCI-MW-1	29815	09/06/96	09/13/96	09/17/96	
126759-003	SCI-MW-7	29815	09/06/96	09/13/96	09/17/96	
126759-004	SCI-MW-18	29815	09/06/96	09/13/96	09/17/96	

Matrix: Water

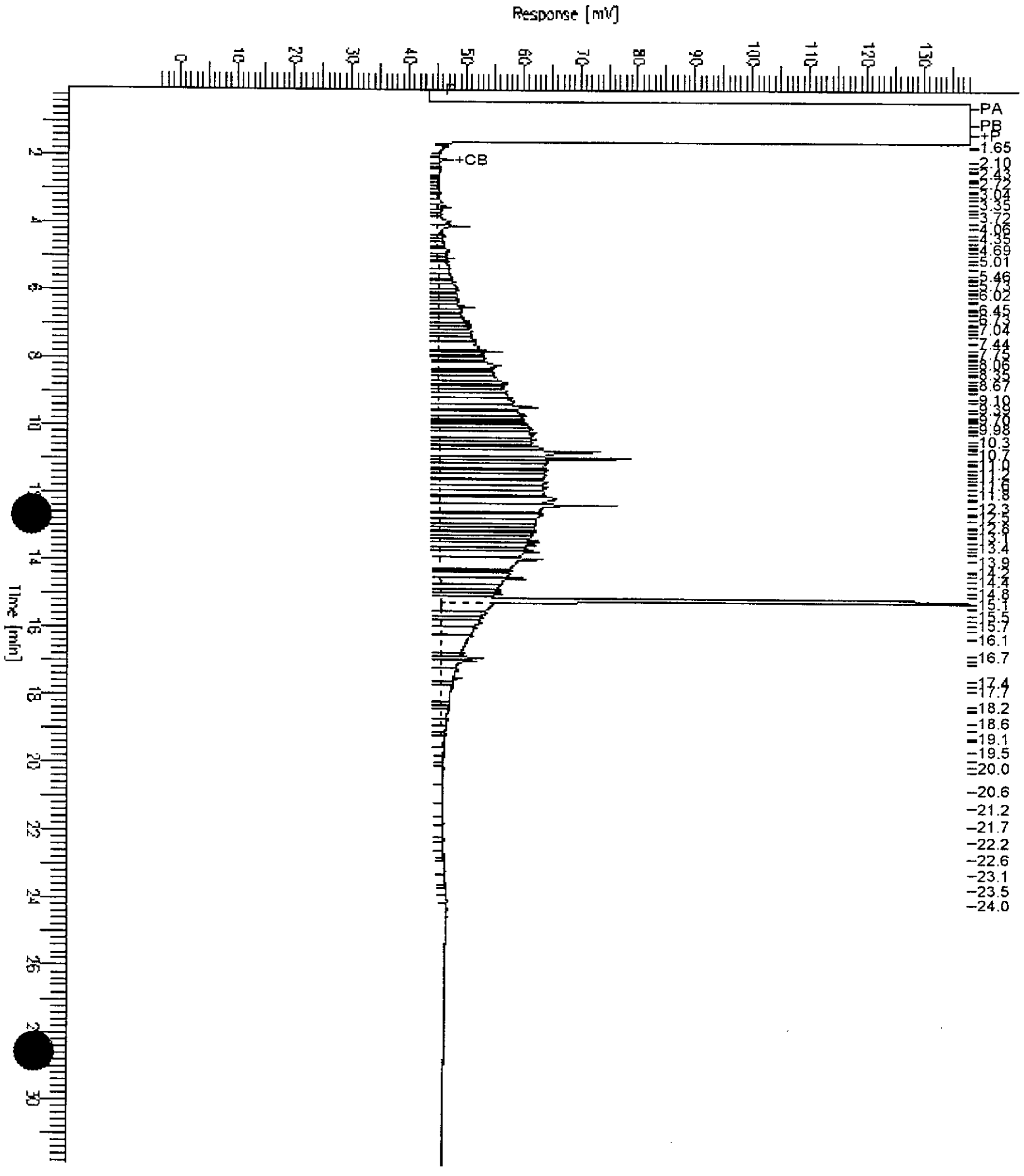
Analyte Diln Fac:	Units	126759-001 1	126759-002 1	126759-003 1	126759-004 1
Diesel C12-C22	ug/L	850 YH	870 YH	6100 Y	2200 YH
Motor Oil C22-C50	ug/L	490 YL	<250	1900 YL	1600 YL
Surrogate					
Hexacosane	%REC	102	108	104	98

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

GC15 Channel A TEH

Sample Name : W,126759-001
FileName : G:\GC15\CHB\260B028.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Factor: 0.0 Plot Offset: ~3 mV

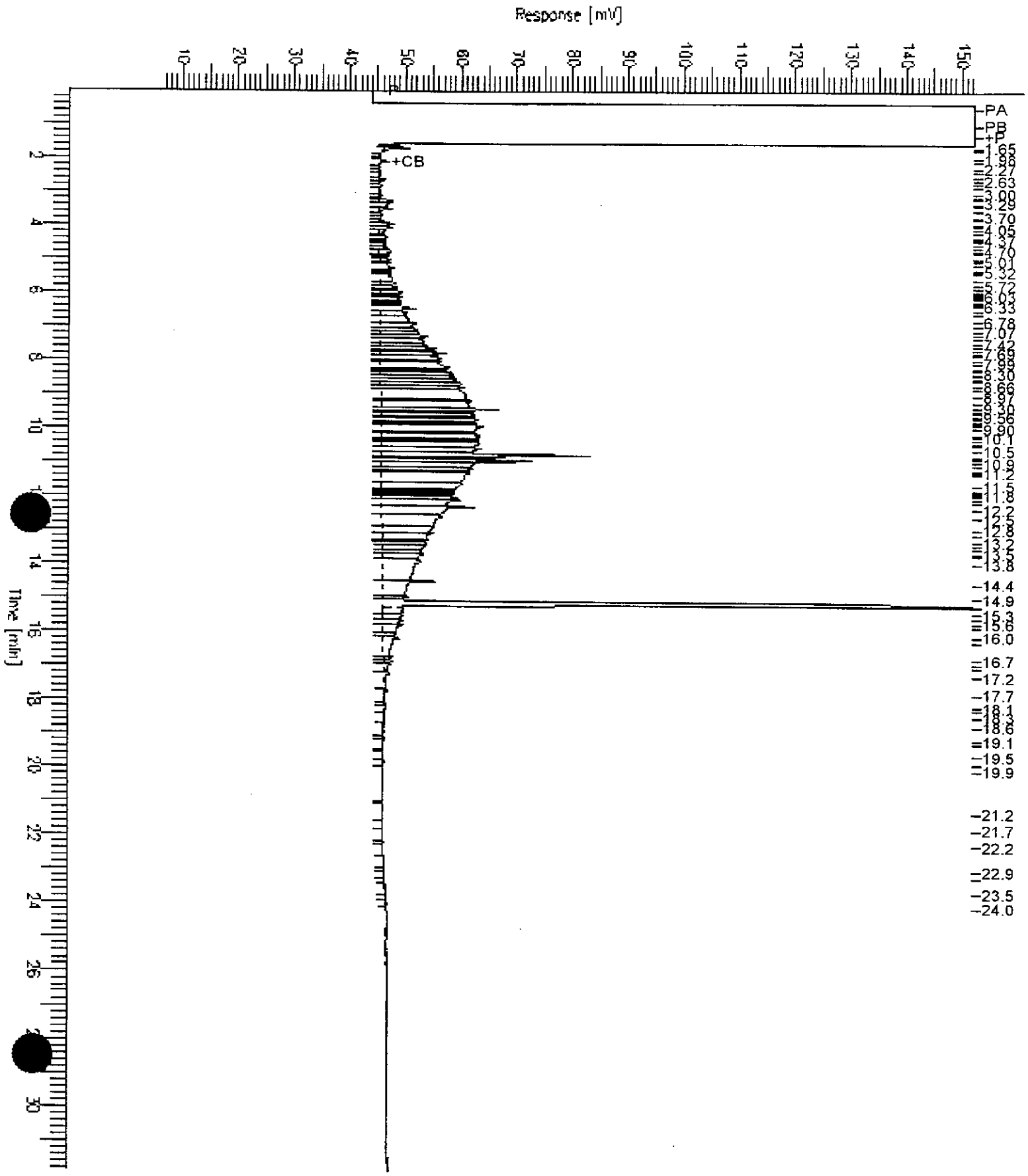
Sample #: 29815 Page 1 of 1
Date : 9/17/96 10:09 AM
Time of Injection: 9/17/96 03:32 AM
Low Point : -3.46 mV High Point : 138.05 mV
Plot Scale: 141.5 mV



GC15 Channel A TEH

Sample Name : W,126759-002
FileName : G:\GC15\CHB\260B029.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Factor: 0.0 Plot Offset: 6 mV

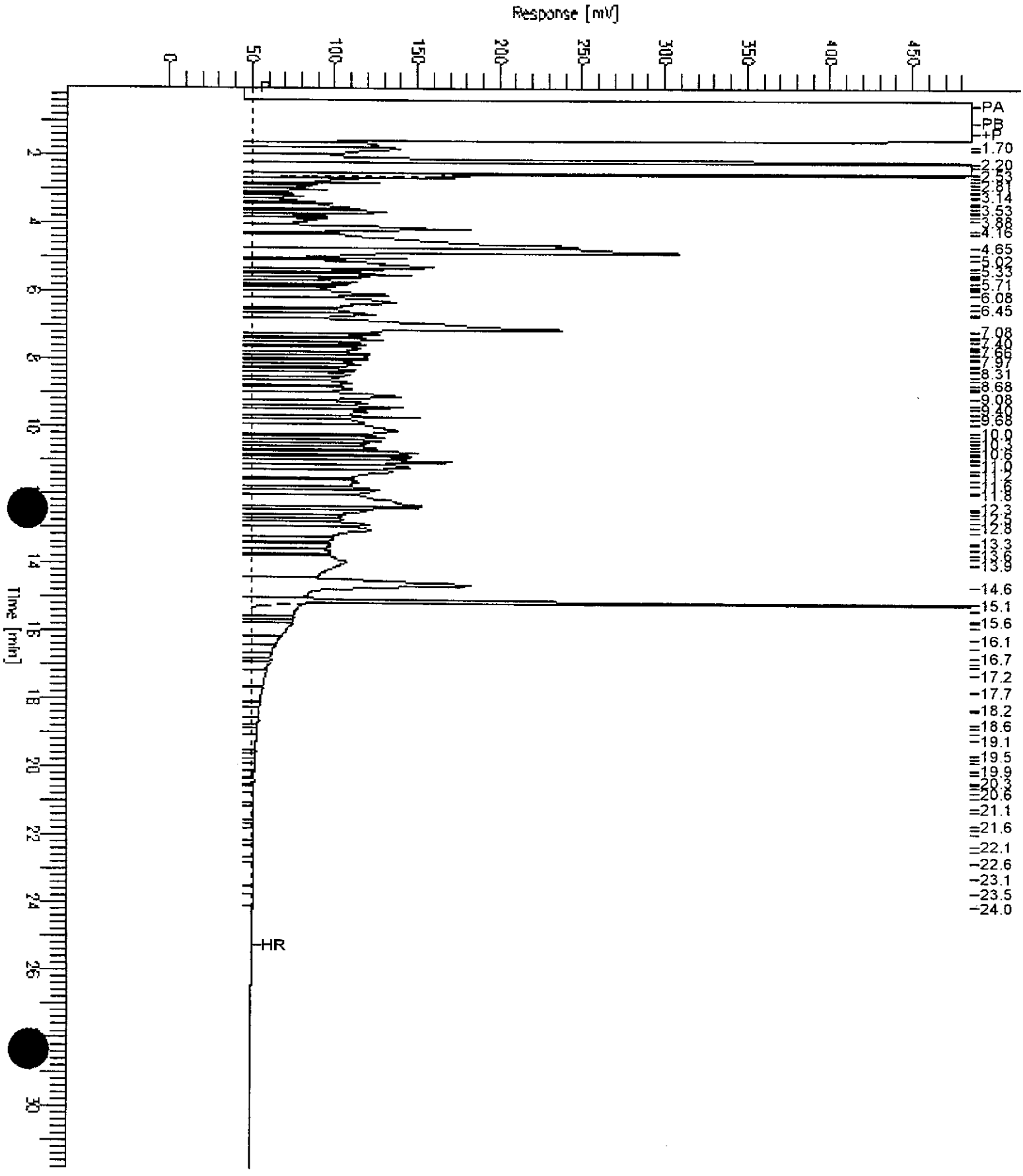
Sample #: 29815 Page 1 of 1
Date : 9/17/96 10:10 AM
Time of Injection: 9/17/96 04:16 AM
Low Point : 6.13 mV High Point : 152.24 mV
Plot Scale: 146.1 mV



GC15 Channel A TEH

Sample Name : W,126759-003
FileName : G:\GC15\CHB\260B030.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.85 min
Slope Factor: 0.0 Plot Offset: -6 mV

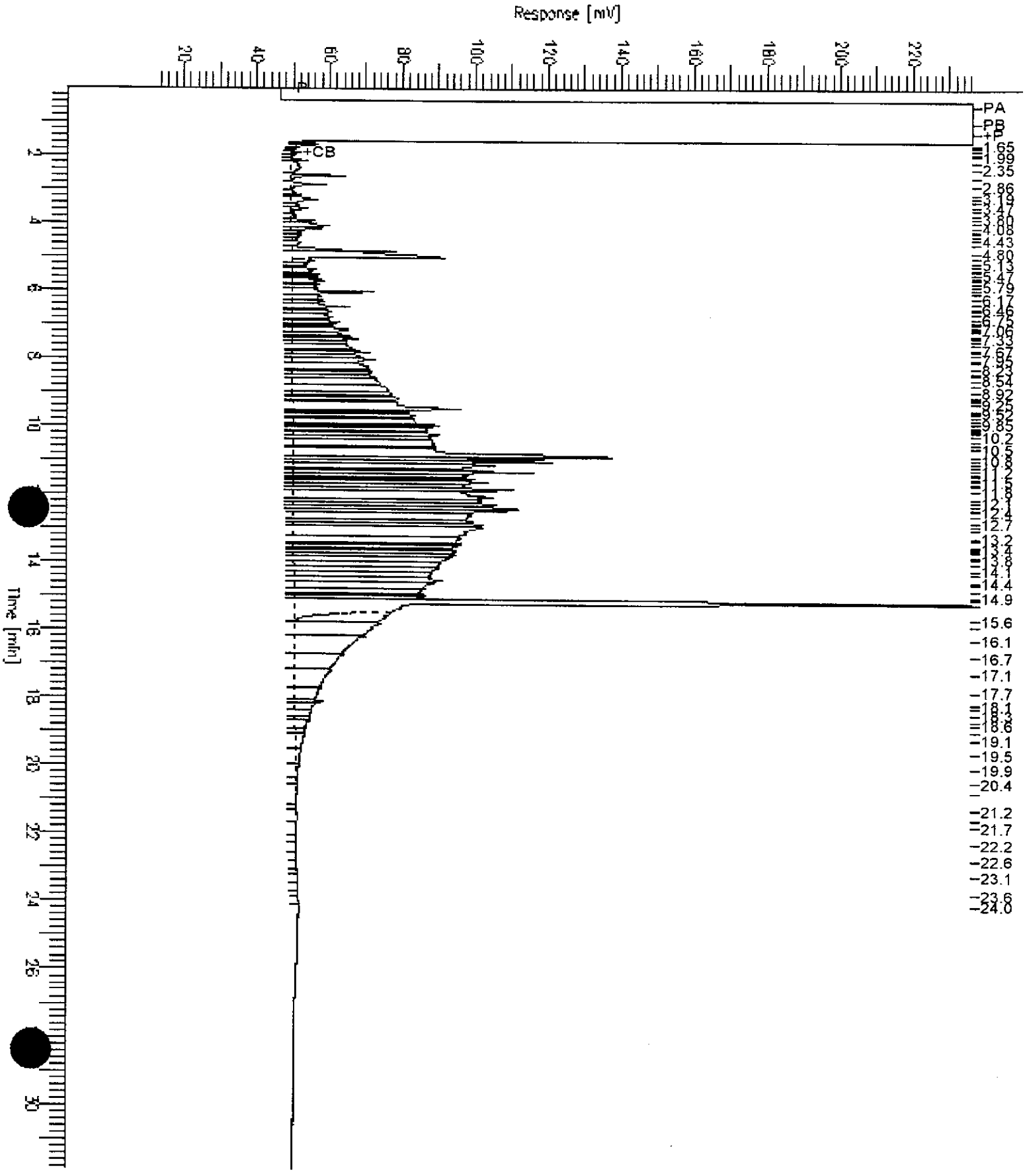
Sample #: 29815 Page 1 of 1
Date : 9/17/96 10:15 AM
Time of Injection: 9/17/96 05:00 AM
Low Point : -6.42 mV High Point : 485.94 mV
Plot Scale: 492.4 mV



GC15 Channel A TEH

Sample Name : W,126759-C04
FileName : G:\GC15\CHB\260B031.RAW
Method : 241TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 13 mV

Sample #: 29815 Page 1 of 1
Date : 9/17/96 10:17 AM
Time of Injection: 9/17/96 05:44 AM
Low Point : 13.41 mV High Point : 236.42 mV
Plot Scale: 223.0 mV



TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29815
Units: ug/L
Diln Fac: 1

Prep Date: 09/13/96
Analysis Date: 09/16/96

MB Lab ID: QC30453

Analyte	Result
Diesel C12-C22	<50
Motor Oil C22-C50	<250

Surrogate	%Rec	Recovery Limits
Hexacosane	80	60-140

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29815
Units: ug/L
Diln Fac: 1

Prep Date: 09/13/96
Analysis Date: 09/16/96

BS Lab ID: QC30454

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1612	65	60-140
Surrogate	%Rec	Limits		
Hexacosane	80	60-140		

BSD Lab ID: QC30455

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1714	69	60-140	6	35
Surrogate	%Rec	Limits				
Hexacosane	86	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126759-001	MW-1	29639	09/06/96	09/07/96	09/07/96	

Matrix: Water

Analyte	Units	126759-001
Diln Fac:		1
Benzene	ug/L	<0.5
Toluene	ug/L	<0.5
Ethylbenzene	ug/L	<0.5
m,p-Xylenes	ug/L	<0.5
o-Xylene	ug/L	<0.5
Surrogate		
Trifluorotoluene	%REC	99
Bromobenzene	%REC	97

Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

MB Lab ID: QC29799

Analyte	Result
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	103	58-130
Bromobenzene	90	62-131

Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29639
Units: ug/L
Diln Fac: 1

Prep Date: 09/06/96
Analysis Date: 09/06/96

LCS Lab ID: QC29801

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	19.9	20	100	80-120
Toluene	18.3	20	92	80-120
Ethylbenzene	17.3	20	87	80-120
m,p-Xylenes	44.5	40	111	80-120
o-Xylene	18.8	20	94	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	103	58-130
Bromobenzene	91	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

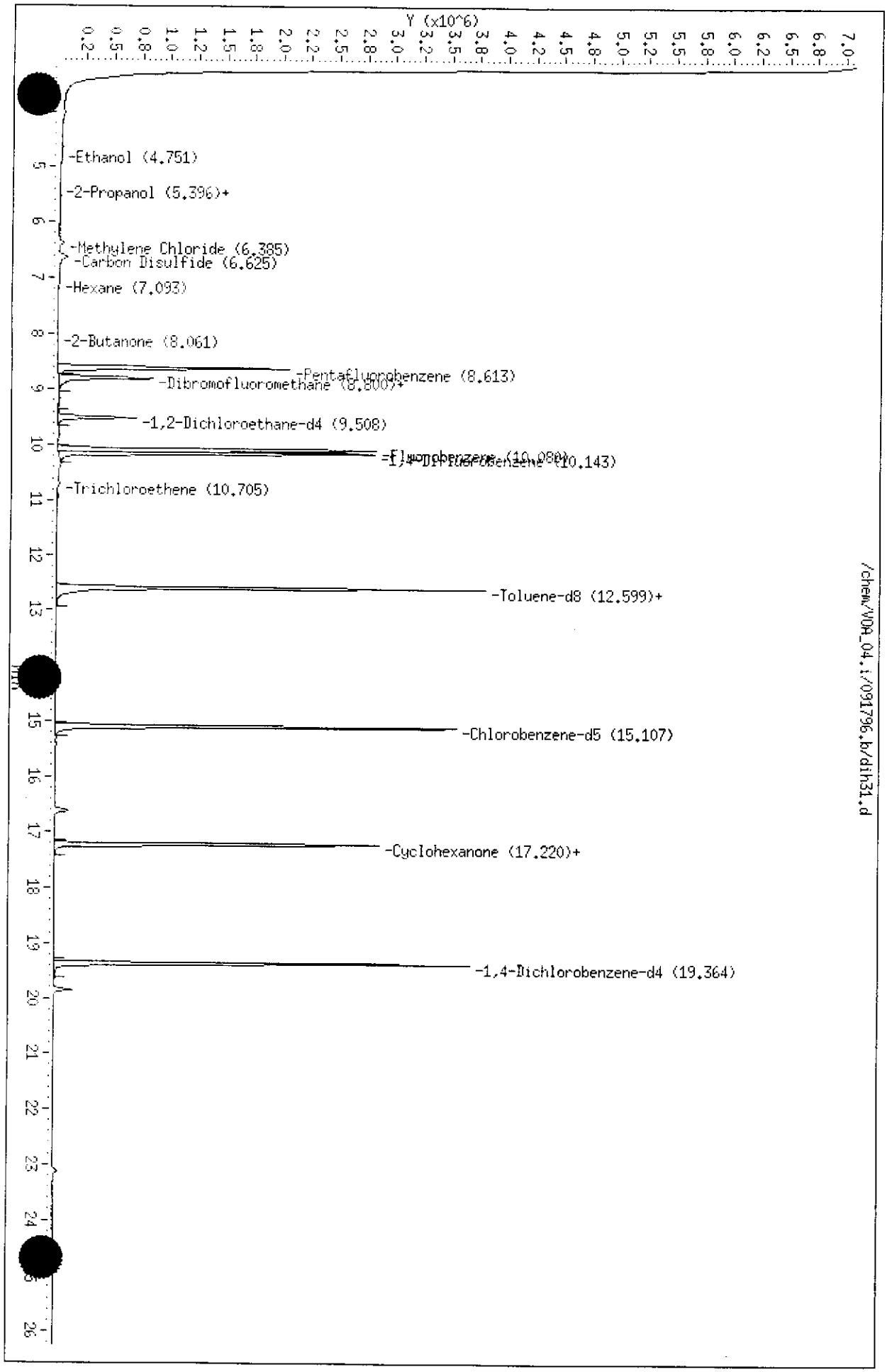
Field ID: SCI-MW-1
Lab ID: 126759-002
Matrix: Water
Batch#: 29862
Units: ug/L
Diln Fac: 1

Sampled: 09/06/96
Received: 09/06/96
Extracted: 09/18/96
Analyzed: 09/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	106	79-122

126759-2



Data File: /chem/VOA_04.i/091796.b/dih31.d
Date : 18-SEP-96 00:33
Client ID: DYNA P&T
Sample Info: S,126759-002
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i
Operator: LLH
Column diameter: 0.32

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SCI-MW-7
Lab ID: 126759-003
Matrix: Water
Batch#: 29895
Units: ug/L
Diln Fac: 250

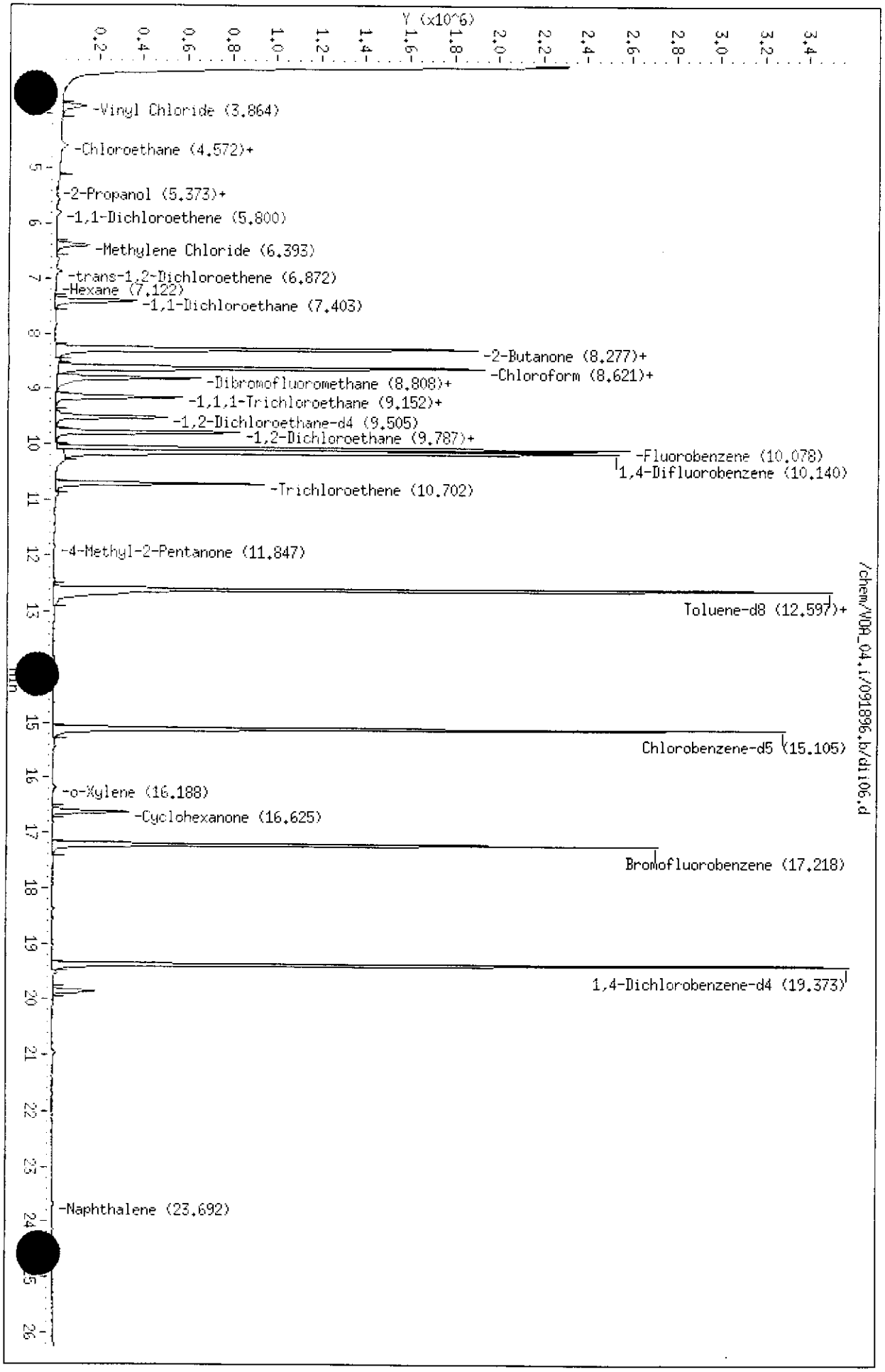
Sampled: 09/06/96
Received: 09/06/96
Extracted: 09/18/96
Analyzed: 09/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	2500
Bromomethane	ND	2500
Vinyl Chloride	8900	2500
Chloroethane	2400 J	2500
Methylene Chloride	ND	5000
Acetone	ND	5000
Carbon Disulfide	ND	1300
Trichlorofluoromethane	ND	1300
1,1-Dichloroethene	ND	1300
1,1-Dichloroethane	8100	1300
trans-1,2-Dichloroethene	ND	1300
cis-1,2-Dichloroethene	27000	1300
Chloroform	ND	1300
Freon 113	ND	1300
1,2-Dichloroethane	ND	1300
2-Butanone	ND	2500
1,1,1-Trichloroethane	10000	1300
Carbon Tetrachloride	ND	1300
Vinyl Acetate	ND	13000
Bromodichloromethane	ND	1300
1,2-Dichloropropane	ND	1300
cis-1,3-Dichloropropene	ND	1300
Trichloroethene	7900	1300
Dibromochloromethane	ND	1300
1,1,2-Trichloroethane	ND	1300
Benzene	5300	1300
trans-1,3-Dichloropropene	ND	1300
Bromoform	ND	1300
2-Hexanone	ND	2500
4-Methyl-2-Pentanone	ND	2500
1,1,2,2-Tetrachloroethane	ND	1300
Tetrachloroethene	ND	1300
Toluene	ND	1300
Chlorobenzene	ND	1300
Ethylbenzene	ND	1300
Styrene	ND	1300
m,p-Xylenes	ND	1300
o-Xylene	ND	1300

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	80	68-126
Toluene-d8	105	87-125
Bromofluorobenzene	103	79-122

J: Estimated Value

126759-3



Data File: /chem/VOA_04.i/091896.b/di06.d
Date : 18-SEP-96 11:37
Client ID: DYNA P&T
Sample Info: S,126759-003
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i
Operator: LLH
Column diameter: 0.32

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

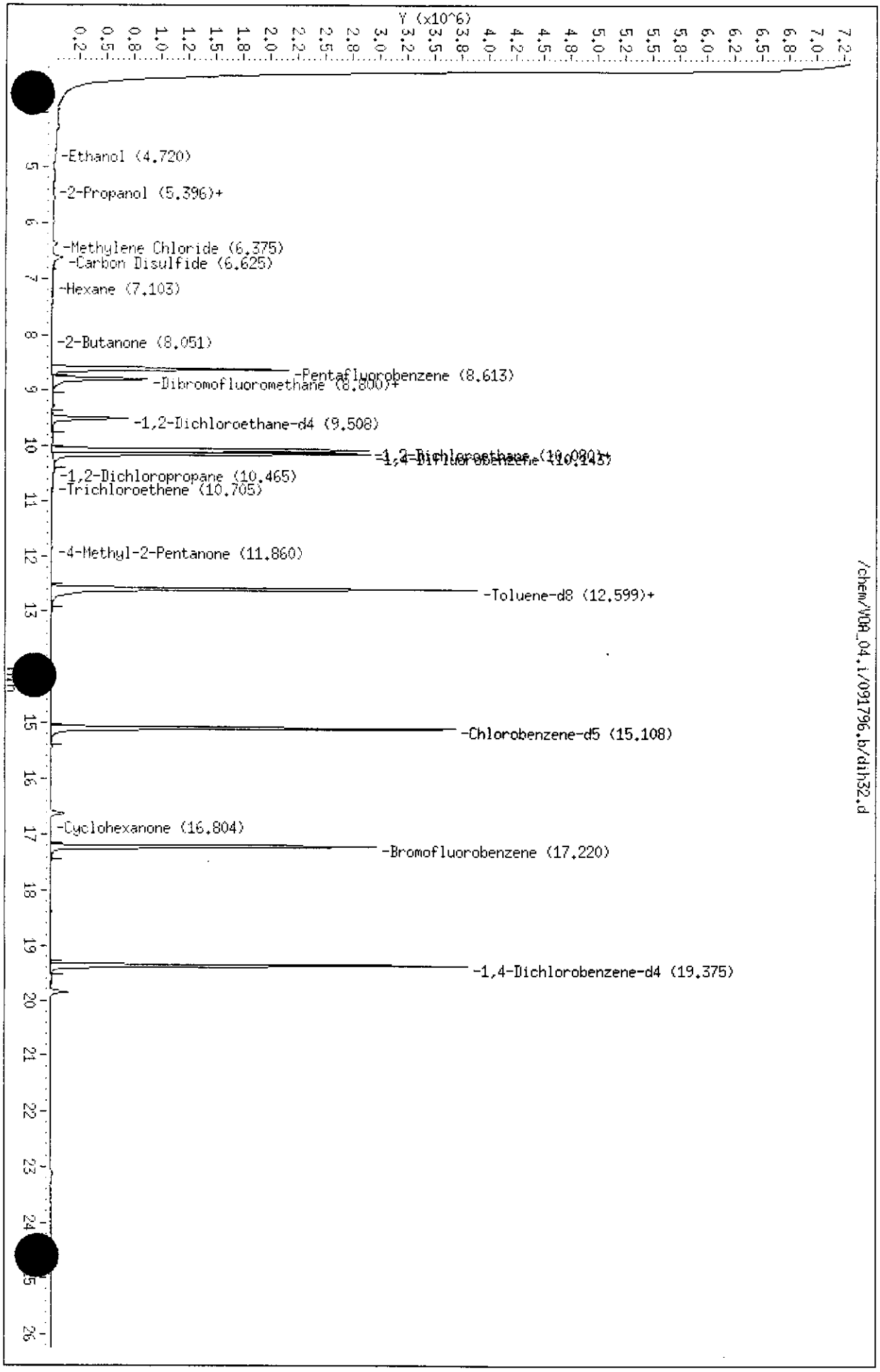
Field ID: SCI-MW-18
Lab ID: 126759-004
Matrix: Water
Batch#: 29862
Units: ug/L
Diln Fac: 1

Sampled: 09/06/96
Received: 09/06/96
Extracted: 09/18/96
Analyzed: 09/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	103	87-125
Bromofluorobenzene	106	79-122

126759-4



Data File: /chem/VOA_04.i/091796.b/dih32.d
Date : 18-SEP-96 01:04
Client ID: DYNA P&T
Sample Info: S,126759-004
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i
Operator: LLH
Column diameter: 0.32

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: TRIP BLANK #9
Lab ID: 126759-005
Matrix: Water
Batch#: 29823
Units: ug/L
Diln Fac: 1

Sampled: 09/06/96
Received: 09/06/96
Extracted: 09/16/96
Analyzed: 09/16/96

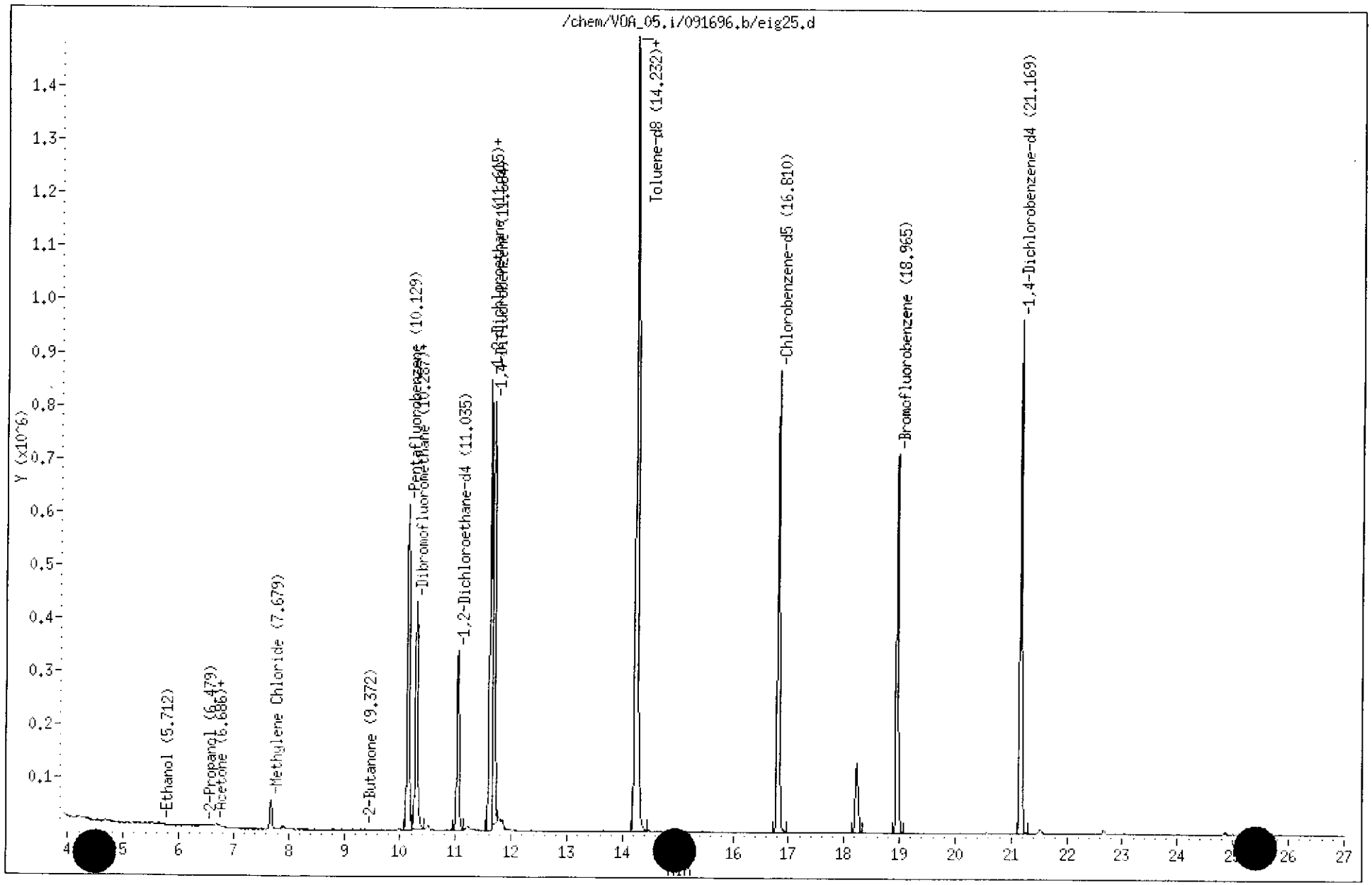
Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	87	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	89	79-122

Data File: /chem/VOA_05.i/091696.b/eig25.d
Date : 16-SEP-1996 21:47
Client ID: DYNA P&T
Sample Info: S,126759-005
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i

Operator: DM
Column diameter: 0.32



126759-5

Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29823
Units: ug/L
Diln Fac: 1

Prep Date: 09/16/96
Analysis Date: 09/16/96

MB Lab ID: QC30477

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	86	68-126
Toluene-d8	96	87-125
Bromofluorobenzene	88	79-122

Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29862
Units: ug/L
Diln Fac: 1

Prep Date: 09/17/96
Analysis Date: 09/17/96

MB Lab ID: QC30644

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	96	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	105	79-122

Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 29895
Units: ug/L
Diln Fac: 1

Prep Date: 09/18/96
Analysis Date: 09/18/96

MB Lab ID: QC30752

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	105	79-122

Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29823
Units: ug/L
Diln Fac: 1

Prep Date: 09/16/96
Analysis Date: 09/16/96

LCS Lab ID: QC30471

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	50.48	50	101	51-180
Trichloroethene	47.42	50	95	73-141
Benzene	49.55	50	99	78-142
Toluene	47.56	50	95	76-150
Chlorobenzene	50.23	50	100	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	86	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	90	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 126759 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29862
Units: ug/L
Diln Fac: 1

Prep Date: 09/17/96
Analysis Date: 09/17/96

LCS Lab ID: QC30632

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	58.99	50	118	51-180
Trichloroethene	52.42	50	105	73-141
Benzene	57.08	50	114	78-142
Toluene	56.51	50	113	76-150
Chlorobenzene	55.63	50	111	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	101	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	103	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 29895
Units: ug/L
Diln Fac: 1

Prep Date: 09/18/96
Analysis Date: 09/18/96

LCS Lab ID: QC30751

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	54.41	50	109	51-180
Trichloroethene	52.12	50	104	73-141
Benzene	57.61	50	115	78-142
Toluene	57.44	50	115	76-150
Chlorobenzene	57.05	50	114	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	94	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	103	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126825-073
Matrix: Soil
Batch#: 29823
Units: ug/Kg
Diln Fac: 25

Sample Date: 09/12/96
Received Date: 09/12/96
Prep Date: 09/16/96
Analysis Date: 09/16/96

MS Lab ID: QC30474

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	1250	<125	1292	103	51-180
Trichloroethene	1250	281.7	1695	95	73-141
Benzene	1250	0	1268	101	78-142
Toluene	1250	0	1202	96	76-150
Chlorobenzene	1250	<125	1272	102	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	78	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	94	79-122

MSD Lab ID: QC30475

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	1250	1239	99	51-180	4	14
Trichloroethene	1250	1687	95	73-141	0	14
Benzene	1250	1255	100	78-142	1	11
Toluene	1250	1195	96	76-150	1	13
Chlorobenzene	1250	1270	102	83-129	0	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	78	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	93	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126847-005
Matrix: Water
Batch#: 29862
Units: ug/L
Diln Fac: 1

Sample Date: 09/16/96
Received Date: 09/16/96
Prep Date: 09/17/96
Analysis Date: 09/17/96

MS Lab ID: QC30645

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	49.74	100	51-180
Trichloroethene	50	9.798	57.38	95	73-141
Benzene	50	<5	53.32	107	78-142
Toluene	50	<5	54.87	110	76-150
Chlorobenzene	50	<5	53.56	107	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	94	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	103	79-122

MSD Lab ID: QC30646

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	52.46	105	51-180	5	14
Trichloroethene	50	59.32	99	73-141	3	14
Benzene	50	55.72	111	78-142	4	11
Toluene	50	55.19	110	76-150	1	13
Chlorobenzene	50	53.84	108	83-129	1	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	103	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 126838-003
Matrix: Water
Batch#: 29895
Units: ug/L
Diln Fac: 1

Sample Date: 09/12/96
Received Date: 09/13/96
Prep Date: 09/18/96
Analysis Date: 09/18/96

MS Lab ID: QC30753

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	0	42.62	85	51-180
Trichloroethene	50	30.44	74.4	88	73-141
Benzene	50	0	51.71	103	78-142
Toluene	50	0.2593	53.66	107	76-150
Chlorobenzene	50	0	51.81	104	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	90	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	103	79-122

MSD Lab ID: QC30754

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	44.46	89	51-180	4	14
Trichloroethene	50	73.99	87	73-141	1	14
Benzene	50	51.77	104	78-142	0	11
Toluene	50	52.11	104	76-150	3	13
Chlorobenzene	50	51.37	103	83-129	1	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	92	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	104	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-1	Sampled:	09/06/96
Lab ID:	126759-002	Received:	09/06/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/13/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-1	Sampled:	09/06/96
Lab ID:	126759-002	Received:	09/06/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/13/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	68	21-110
Phenol-d5	74	10-110
2,4,6-Tribromophenol	78	10-123
Nitrobenzene-d5	68	35-114
2-Fluorobiphenyl	65	43-116
Terphenyl-d14	46	33-141

Data File: /chem/bna02.i/091396x.b/12_6759-002.d
Report Date: 16-Sep-1996 17:01

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126759-002
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

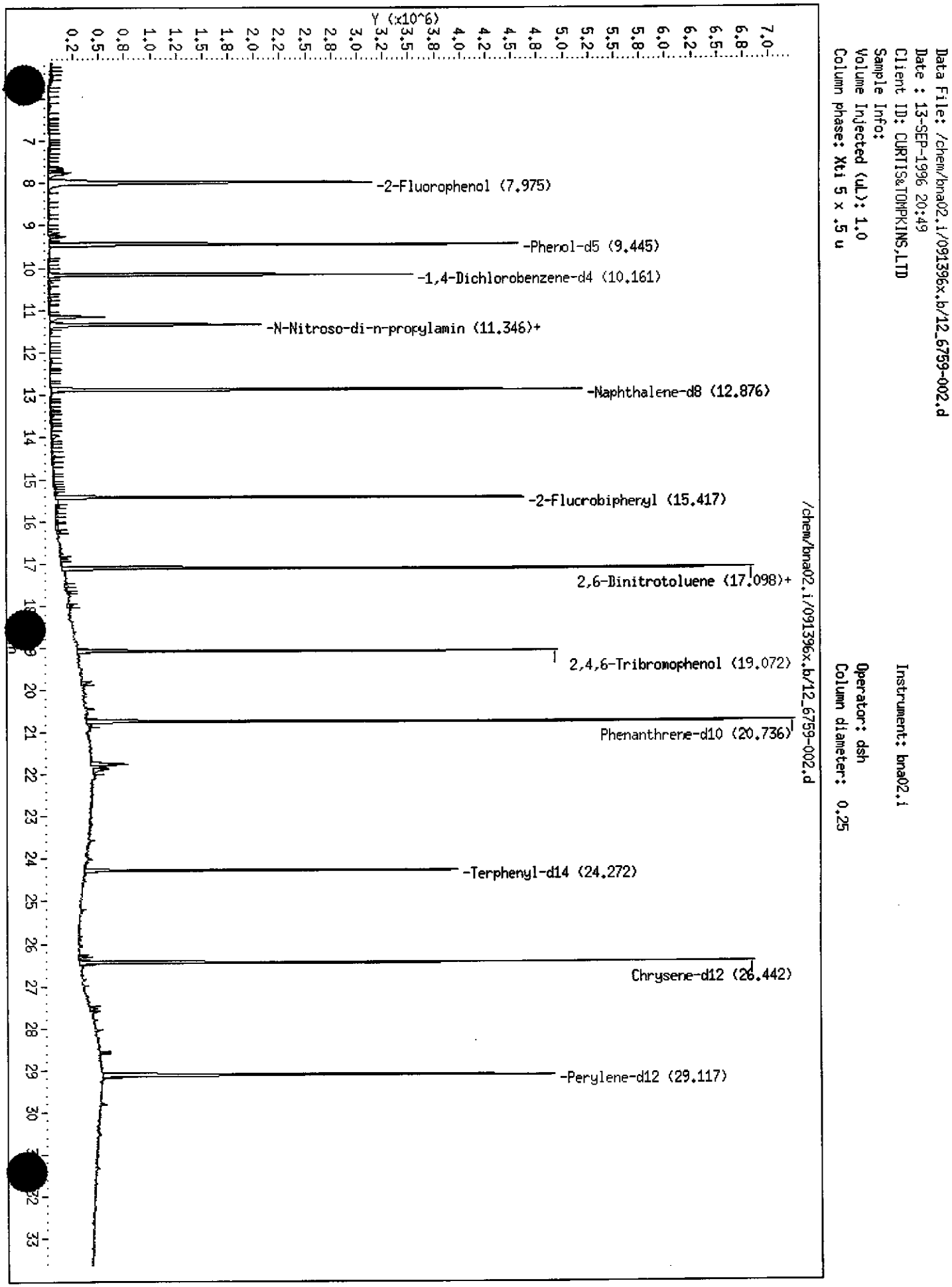
Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	11.160	6.29	NJ

126759-2


Data File: /chem/bna02.i/091396x.b/12_6759-002.d
Date : 13-SEP-1996 20:49
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u
Instrument: bna02.i
Operator: dsh
Column diameter: 0.25
Y (x10^6)
-2-Fluorophenol (7.975)
-Phenol-d5 (9.445)
-1,4-Dichlorobenzene-d4 (10.161)
-N-Nitroso-di-n-propylamin (11.346)+
-Naphthalene-d8 (12.876)
-2-Flucrobipheryl (15.417)
2,6-Dinitrotoluene (17.098)+
2,4,6-Tribromophenol (19.072)
Phenanthrene-d10 (20.736)
-Terphenyl-d14 (24.272)
Chrysene-d12 (26.442)
-Perylene-d12 (29.117)
/chem/bna02.i/091396x.b/12_6759-002.d

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-7	Sampled:	09/06/96
Lab ID:	126759-003	Received:	09/06/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/18/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	4.7 J	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-7	Sampled:	09/06/96
Lab ID:	126759-003	Received:	09/06/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/18/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	22	21-110
Phenol-d5	84	10-110
2,4,6-Tribromophenol	92	10-123
Nitrobenzene-d5	93	35-114
2-Fluorobiphenyl	85	43-116
Terphenyl-d14	43	33-141

J: Estimated Value

Data File: /chem/bna02.i/091896x.b/08_6759-3re.d
Report Date: 19-Sep-1996 10:06

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126759-003
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

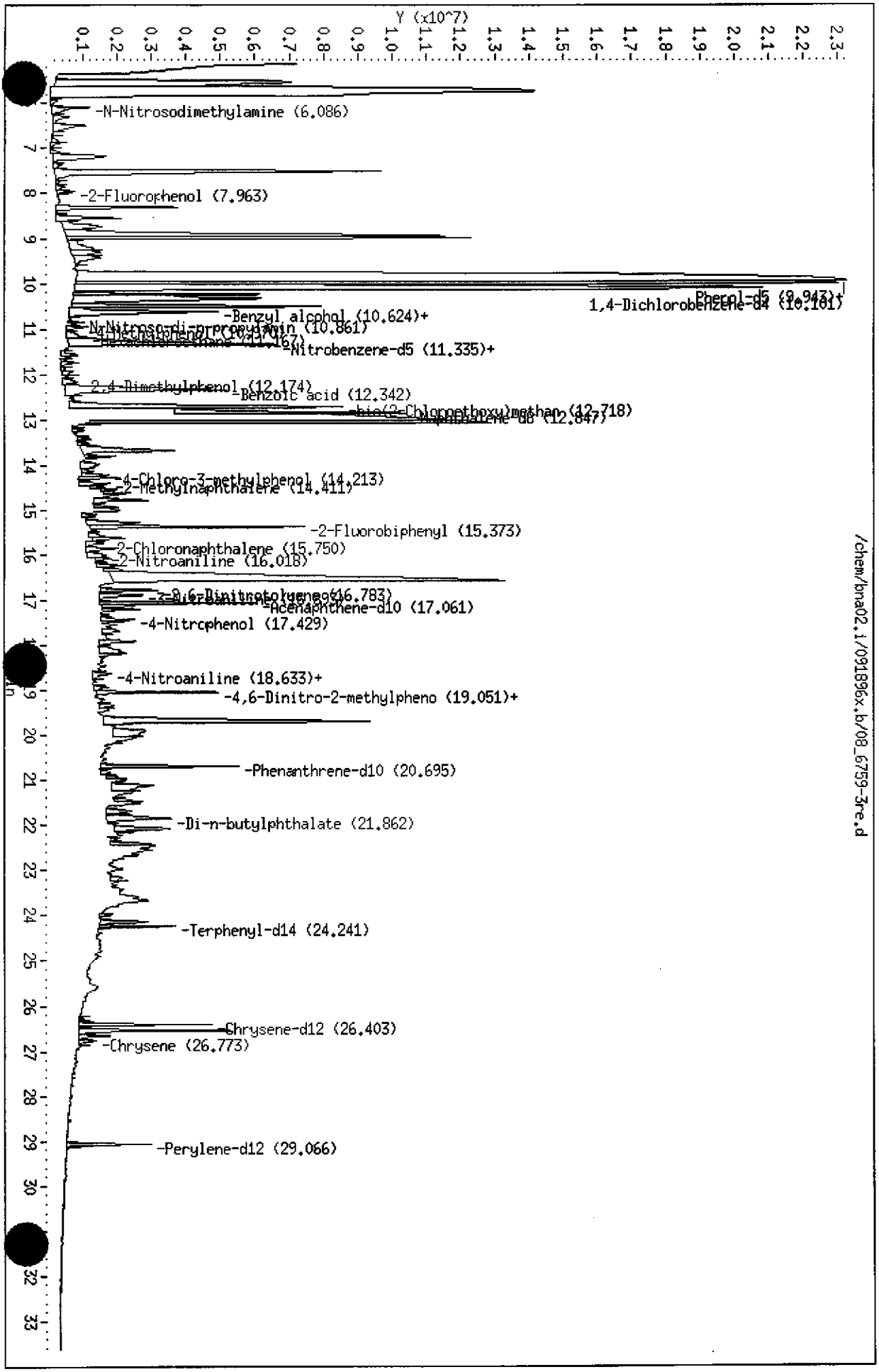
Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 17

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	79-01-6	Trichloroethylene	5.535	15.86	NJ
2.	123-91-1	1,4-Dioxane	5.722	54.59	NJ
3.		Unknown	7.500	13.65	NJ
4.		Unknown	8.948	17.68	NJ
5.	107-41-5	Hexylene Glycol	8.997	12.38	NJ
6.	20324-32-7	2-Propanol, 1-(2-methoxy-1-	10.002	26.05	NJ
7.		Unknown	10.229	4.59	NJ
8.		Unknown	10.328	11.81	NJ
9.		Unknown	10.506	7.13	NJ
10.		Unknown	13.054	65.01	NJ
11.	118-90-1	Benzoic acid, 2-methyl-	13.678	21.02	NJ
12.		Unknown	16.565	355.26	NJ
13.		Unknown	19.698	138.91	NJ
14.		Unknown	19.907	32.80	NJ
15.		Unknown	21.113	31.71	NJ
16.		Unknown	22.081	28.91	NJ
17.		Unknown	26.553	62.18	NJ

126759-3



Data File: /chem/bna02.i/091896x.b/08_6759-3re.d
Date : 18-SEP-1996 18:25
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i
Operator: dsh
Column diameter: 0.25

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: SCI-MW-18
Lab ID: 126759-004
Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Sampled: 09/06/96
Received: 09/06/96
Extracted: 09/09/96
Analyzed: 09/18/96

Analyte	Result	Reporting Limit
Phenol	ND	9.4
2-Chlorophenol	ND	9.4
Benzyl alcohol	ND	9.4
2-Methylphenol	ND	9.4
4-Methylphenol	ND	9.4
2-Nitrophenol	ND	47
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
2,4-Dichlorophenol	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	47
2,4-Dinitrophenol	ND	47
4-Nitrophenol	ND	47
4,6-Dinitro-2-methylphenol	ND	47
Pentachlorophenol	ND	47
N-Nitrosodimethylamine	ND	9.4
Aniline	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
1,2-Dichlorobenzene	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
bis(2-Chloroethoxy)methane	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	47
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4

Semivolatile Organics by GC/MS

Field ID:	SCI-MW-18	Sampled:	09/06/96
Lab ID:	126759-004	Received:	09/06/96
Matrix:	Water	Extracted:	09/09/96
Batch#:	29694	Analyzed:	09/18/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	47
Acenaphthene	ND	9.4
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
Fluorene	ND	9.4
4-Nitroaniline	ND	47
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	71	21-110
Phenol-d5	79	10-110
2,4,6-Tribromophenol	85	10-123
Nitrobenzene-d5	87	35-114
2-Fluorobiphenyl	77	43-116
Terphenyl-d14	37	33-141

Data File: /chem/bna02.i/091896x.b/09_6759-4re.d
Report Date: 19-Sep-1996 10:06

Curtis & Tompkins Labs

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: CURTIS & TOMPKINS
Lab Smp Id: s,126759-004
Operator : dsh
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

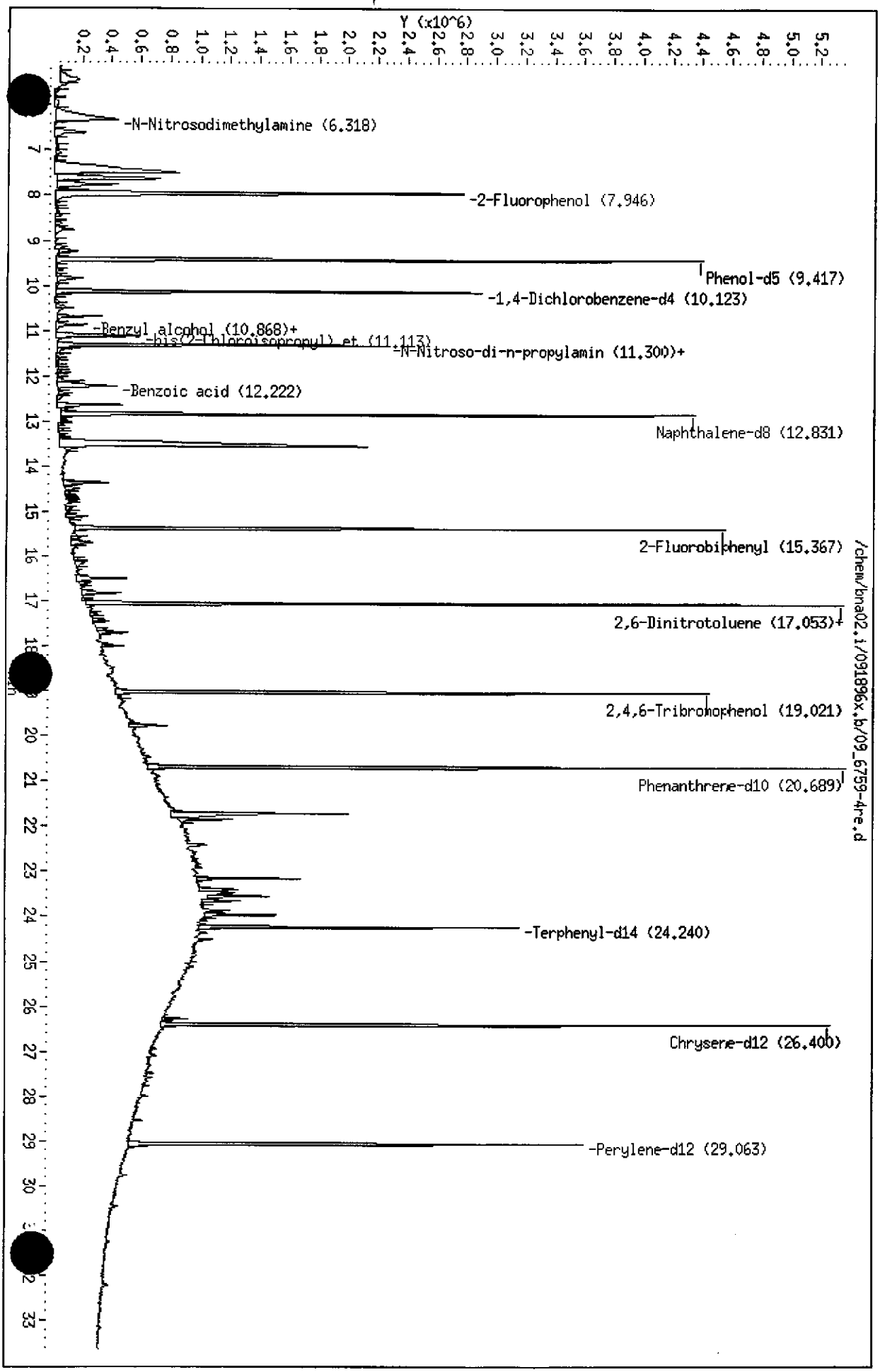
Client SDG: 8270
Client Smp ID: CURTIS&TOMPKINS,LTD
Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 13

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	5.417	5.59	NJ
2.	107-92-6	Butanoic acid	6.602	5.03	NJ
3.	503-74-2	Butanoic acid, 3-methyl-	7.495	38.70	NJ
4.		Unknown	7.632	17.01	NJ
5.		Unknown	7.750	9.78	NJ
6.	2548-87-0	2-Octenal, (E)-	10.682	4.03	NJ
7.		Unknown	12.634	5.24	NJ
8.	103-82-2	Benzeneacetic acid	13.539	42.08	NJ
9.	91-64-5	2H-1-Benzopyran-2-one	16.500	3.96	NJ
10.		Unknown	21.714	13.39	NJ
11.		Unknown	23.161	4.32	NJ
12.		Unknown	23.550	3.84	NJ
13.		Unknown	23.970	4.40	NJ

126759-4



Data File: /chem/bna02.i/091896x.b/09_6759-4re.d
Date : 18-SEP-1996 19:09
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xti 5 x .5 u

Instrument: bna02.i
Operator: dsh
Column diameter: 0.25

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29980

Analyte	Result	Reporting Limit
Phenol	ND	10
2-Chlorophenol	ND	10
Benzyl alcohol	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
2-Nitrophenol	ND	50
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
2,4-Dichlorophenol	ND	10
4-Chloro-3-methylphenol	ND	10
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	50
2,4-Dinitrophenol	ND	50
4-Nitrophenol	ND	50
4,6-Dinitro-2-methylphenol	ND	50
Pentachlorophenol	ND	10
N-Nitrosodimethylamine	ND	10
Aniline	ND	10
bis(2-Chloroethyl)ether	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10
bis(2-Chloroisopropyl) ether	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
bis(2-Chloroethoxy)methane	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	50
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	50

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

MB Lab ID: QC29980

Analyte	Result	Reporting Limit
Acenaphthene	ND	10
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
4-Chlorophenyl-phenylether	ND	10
Fluorene	ND	10
4-Nitroaniline	ND	50
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	50
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	59	21-110
Phenol-d5	64	10-110
2,4,6-Tribromophenol	49	10-123
Nitrobenzene-d5	61	35-114
2-Fluorobiphenyl	62	43-116
Terphenyl-d14	64	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29694
Units: ug/L
Diln Fac: 1

Prep Date: 09/09/96
Analysis Date: 09/11/96

BS Lab ID: QC29981

Analyte	Spike Added	BS	%Rec	#	Limits
Phenol	100	64.31	64		12-110
2-Chlorophenol	100	71.21	71		27-123
4-Chloro-3-methylphenol	100	63.38	63		23-97
4-Nitrophenol	100	50.17	50		10-80
Pentachlorophenol	100	52.23	52		9-103
1,4-Dichlorobenzene	50	29.99	60		36-97
N-Nitroso-di-n-propylamine	50	26.68	53		41-116
1,2,4-Trichlorobenzene	50	29.47	59		39-98
Acenaphthene	50	35.01	70		46-118
2,4-Dinitrotoluene	50	33.25	67		24-96
Pyrene	50	34.66	69		26-127

Surrogate	%Rec	Limits
2-Fluorophenol	66	21-110
Phenol-d5	69	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	67	35-114
2-Fluorobiphenyl	66	43-116
Terphenyl-d14	69	33-141

BSD Lab ID: QC29982

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
Phenol	100	61.22	61		12-110	5		42
2-Chlorophenol	100	68.04	68		27-123	5		40
4-Chloro-3-methylphenol	100	62.62	62		23-97	1		42
4-Nitrophenol	100	50.61	51		10-80	1		50
Pentachlorophenol	100	58.26	58		9-103	11		50
1,4-Dichlorobenzene	50	28.88	58		36-97	4		28
N-Nitroso-di-n-propylamine	50	25.86	52		41-116	3		38
1,2,4-Trichlorobenzene	50	28.62	57		39-98	3		28
Acenaphthene	50	34.94	70		46-118	0		31
2,4-Dinitrotoluene	50	33.64	67		24-96	3		38
Pyrene	50	34.51	69		26-127	0		31

Surrogate	%Rec	Limits
2-Fluorophenol	61	21-110
Phenol-d5	65	10-110
2,4,6-Tribromophenol	55	10-123
Nitrobenzene-d5	65	35-114
2-Fluorobiphenyl	65	43-116
Terphenyl-d14	70	33-141

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits
DO: Surrogate diluted out

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-1	Sampled:	09/06/96
Lab ID:	126759-002	Received:	09/06/96
Matrix:	Water	Extracted:	09/11/96
Batch#:	29758	Analyzed:	09/13/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	83	60-150
Decachlorobiphenyl	26*	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-7	Sampled:	09/06/96
Lab ID:	126759-003	Received:	09/06/96
Matrix:	Water	Extracted:	09/11/96
Batch#:	29758	Analyzed:	09/13/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	53*	60-150
Decachlorobiphenyl	23*	30-130

* Values outside of QC limits

PCBs

Client:	Subsurface Consultants	Analysis Method:	PCB
Project#:	133.005	Prep Method:	EPA 3520
Location:	KOT		

Field ID:	SCI-MW-18	Sampled:	09/06/96
Lab ID:	126759-004	Received:	09/06/96
Matrix:	Water	Extracted:	09/11/96
Batch#:	29758	Analyzed:	09/14/96
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Recovery	Recovery Limits
TCMX	66	60-150
Decachlorobiphenyl	31	30-130

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 29758
Units: ug/L
Diln Fac: 1

Prep Date: 09/11/96
Analysis Date: 09/13/96

MB Lab ID: QC30243

Analyte	Result	Reporting Limit
Aroclor-1016	ND	1.0
Aroclor-1221	ND	1.0
Aroclor-1232	ND	1.0
Aroclor-1242	ND	1.0
Aroclor-1248	ND	1.0
Aroclor-1254	ND	1.0
Aroclor-1260	ND	1.0

Surrogate	%Rec	Recovery Limits
TCMX	76	60-150
Decachlorobiphenyl	84	30-130

Polychlorinated Biphenyls

Client: Subsurface Consultants
Project#: 133.005
Location: KOT

Analysis Method: PCB
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 29758
Units: ug/L
Diln Fac: 1

Prep Date: 09/11/96
Analysis Date: 09/13/96

BS Lab ID: QC30244

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4.09	82	50-128

Surrogate	%Rec	Limits
TCMX	63	60-150
Decachlorobiphenyl	83	30-130

BSD Lab ID: QC30245

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.11	82	50-128	0	20

Surrogate	%Rec	Limits
TCMX	68	60-150
Decachlorobiphenyl	51	30-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-1
LAB ID: 126759-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 09/06/96
DATE RECEIVED: 09/06/96
DATE REPORTED: 09/23/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	ND	5.0	1	29688	EPA 6010A	09/11/96
Barium	150	10	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	ND	10	1	29688	EPA 6010A	09/11/96
Lead	ND	3.0	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.20	1	29896	EPA 7470	09/18/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	1	29688	EPA 6010A	09/11/96
Selenium	17	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-7
LAB ID: 126759-003
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 09/06/96
DATE RECEIVED: 09/06/96
DATE REPORTED: 09/23/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	24	5.0	1	29688	EPA 6010A	09/11/96
Barium	290	10	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	13	10	1	29688	EPA 6010A	09/11/96
Lead	ND	3.0	1	29688	EPA 6010A	09/11/96
Mercury	0.52	0.20	1	29896	EPA 7470	09/18/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	29	20	1	29688	EPA 6010A	09/11/96
Selenium	18	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	12	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-MW-18
LAB ID: 126759-004
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Filtrate

DATE SAMPLED: 09/06/96
DATE RECEIVED: 09/06/96
DATE REPORTED: 09/23/96

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	29688	EPA 6010A	09/11/96
Arsenic	20	5.0	1	29688	EPA 6010A	09/11/96
Barium	160	10	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2.0	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2.0	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	1	29688	EPA 6010A	09/11/96
Copper	ND	10	1	29688	EPA 6010A	09/11/96
Lead	ND	3.0	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.20	1	29896	EPA 7470	09/18/96
Molybdenum	ND	20	1	29688	EPA 6010A	09/11/96
Nickel	26	20	1	29688	EPA 6010A	09/11/96
Selenium	22	5.0	1	29688	EPA 6010A	09/11/96
Silver	ND	5.0	1	29688	EPA 6010A	09/11/96
Thallium	ND	5.0	1	29688	EPA 6010A	09/11/96
Vanadium	19	10	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	1	29688	EPA 6010A	09/11/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126759

DATE REPORTED: 09/23/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	29688	EPA 6010A	09/11/96
Arsenic	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Barium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Beryllium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Cadmium	ND	2	ug/L	1	29688	EPA 6010A	09/11/96
Chromium (total)	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Cobalt	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Copper	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Lead	ND	3	ug/L	1	29688	EPA 6010A	09/11/96
Mercury	ND	0.2	ug/L	1	29896	EPA 7470	09/18/96
Molybdenum	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Nickel	ND	20	ug/L	1	29688	EPA 6010A	09/11/96
Selenium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Silver	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Thallium	ND	5	ug/L	1	29688	EPA 6010A	09/11/96
Vanadium	ND	10	ug/L	1	29688	EPA 6010A	09/11/96
Zinc	ND	20	ug/L	1	29688	EPA 6010A	09/11/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126759

DATE REPORTED: 09/23/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	500	507	555	ug/L	101	111	80-120	9	35	29688	EPA 6010A	09/11/96
Arsenic	2000	1940	1970	ug/L	97	99	80-120	2	35	29688	EPA 6010A	09/11/96
Barium	2000	1980	1970	ug/L	99	99	80-120	1	35	29688	EPA 6010A	09/11/96
Beryllium	50	50.4	51.5	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Cadmium	50	52.8	53.1	ug/L	106	106	80-120	1	35	29688	EPA 6010A	09/11/96
Chromium (total)	200	198	199	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Cobalt	500	492	507	ug/L	98	101	80-120	3	35	29688	EPA 6010A	09/11/96
Copper	250	249	248	ug/L	100	99	80-120	0	35	29688	EPA 6010A	09/11/96
Lead	500	505	520	ug/L	101	104	80-120	3	35	29688	EPA 6010A	09/11/96
Mercury	5	4.596	4.36	ug/L	92	87	80-120	5	35	29896	EPA 7470	09/18/96
Molybdenum	400	406	414	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Nickel	500	507	516	ug/L	101	103	80-120	2	35	29688	EPA 6010A	09/11/96
Selenium	2000	2020	2040	ug/L	101	102	80-120	1	35	29688	EPA 6010A	09/11/96
Silver	100	90.4	89.7	ug/L	90	90	80-120	1	35	29688	EPA 6010A	09/11/96
Thallium	2000	2040	2070	ug/L	102	104	80-120	2	35	29688	EPA 6010A	09/11/96
Vanadium	500	495	498	ug/L	99	100	80-120	1	35	29688	EPA 6010A	09/11/96
Zinc	500	480	493	ug/L	96	99	80-120	3	35	29688	EPA 6010A	09/11/96

CHAIN OF CUSTODY FORM

126759

PAGE 0

PROJECT NAME: KOT

JOB NUMBER: 133.005

PROJECT CONTACT: Jeri Alexander/Meg Mendoza

SAMPLED BY: Dennis Alexander

LAB: Curtis & Tompkins

TURNAROUND: Normal

REQUESTED BY: Jeri Alexander

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	MATRIX: SOIL	MATRIX: WASTE	MATRIX: AIR	CONTAINERS: VOA	CONTAINERS: LITER	CONTAINERS: PINT	CONTAINERS: TUBE	METHOD PRESERVED: HCL	METHOD PRESERVED: H_2SO_4	METHOD PRESERVED: HNO_3	METHOD PRESERVED: ICE	METHOD PRESERVED: NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH@ 8015	BTXE	TEH @ diesel + motor oil w/ library search	VOC's (8240) including PNAs	SVOC's (8270) including PNAs	O&G	Heavy Metals	PCBs
-1	MW-1	X				3	1			X			X		09	06	96	0900		X	X	X	[redacted]				
-2	SCI-MW-4	X				5	5			X			X					0830	*	X		X	X	X	X	X	X
-3	SCI-MW-7	X				5	5			X			X					1015	*	X		X	X	X	X	X	X
-4	SCI-MW-18	X				5	5			X			X		09	06	96	0930	*	X		X	X	X	X	X	X
-5	Trip Blank #9	X				1							X										X				

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dennis Alexander	9/6/96 12:30 p.m.	[signature]	9/6/96 12:50
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES: * Please filter & fix before metals analysis.

Subsurface Consultants, Inc.
171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607
(510) 268-0461 · FAX: 510-268-0137

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 24-SEP-96
Lab Job Number: 126834
Project ID: 133.005
Location: KOT

Reviewed by: _____

Reviewed by: Tracy Bobus

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-34@3.0
LAB ID: 126834-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.005
LOCATION: KOT
MATRIX: Soil

DATE SAMPLED: 08/29/96
DATE RECEIVED: 09/13/96
DATE REPORTED: 09/24/96

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	11	2.9	1	29987	EPA 6010A	09/24/96
Arsenic	46	0.24	1	29987	EPA 6010A	09/24/96
Barium	100	0.48	1	29987	EPA 6010A	09/24/96
Beryllium	0.18	0.096	1	29987	EPA 6010A	09/24/96
Cadmium	2.6	0.096	1	29987	EPA 6010A	09/24/96
Chromium (total)	35	0.48	1	29987	EPA 6010A	09/24/96
Cobalt	7.1	0.96	1	29987	EPA 6010A	09/24/96
Copper	470	0.48	1	29987	EPA 6010A	09/24/96
Lead	3800	14	100	29987	EPA 6010A	09/24/96
Mercury	1.7	0.095	1	29867	EPA 7471	09/17/96
Molybdenum	2.9	0.96	1	29987	EPA 6010A	09/24/96
Nickel	44	0.96	1	29987	EPA 6010A	09/24/96
Selenium	1.3	0.24	1	29987	EPA 6010A	09/24/96
Silver	0.71	0.48	1	29987	EPA 6010A	09/24/96
Thallium	0.91	0.24	1	29987	EPA 6010A	09/24/96
Vanadium	25	0.48	1	29987	EPA 6010A	09/24/96
Zinc	280	96	100	29987	EPA 6010A	09/24/96

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 126834

DATE REPORTED: 09/24/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	500	570	512	ug/L	114	102	80-120	11	35	29987	EPA 6010A	09/24/96
Arsenic	2000	1720	1740	ug/L	86	87	80-120	1	35	29987	EPA 6010A	09/24/96
Barium	2000	1780	1820	ug/L	89	91	80-120	2	35	29987	EPA 6010A	09/24/96
Beryllium	50	47.3	48.1	ug/L	95	96	80-120	2	35	29987	EPA 6010A	09/24/96
Cadmium	50	47.7	48.2	ug/L	95	96	80-120	1	35	29987	EPA 6010A	09/24/96
Chromium (total)	200	184	186	ug/L	92	93	80-120	1	35	29987	EPA 6010A	09/24/96
Cobalt	500	462	461	ug/L	92	92	80-120	0	35	29987	EPA 6010A	09/24/96
Copper	250	237	242	ug/L	95	97	80-120	2	35	29987	EPA 6010A	09/24/96
Lead	500	459	461	ug/L	92	92	80-120	0	35	29987	EPA 6010A	09/24/96
Mercury	5	5.747	5.461	ug/L	115	109	80-120	5	35	29867	EPA 7470	09/17/96
Molybdenum	400	364	369	ug/L	91	92	80-120	1	35	29987	EPA 6010A	09/24/96
Nickel	500	474	477	ug/L	95	95	80-120	1	35	29987	EPA 6010A	09/24/96
Selenium	2000	1790	1790	ug/L	90	90	80-120	0	35	29987	EPA 6010A	09/24/96
Silver	100	83.7	82.8	ug/L	84	83	80-120	1	35	29987	EPA 6010A	09/24/96
Thallium	2000	1820	1840	ug/L	91	92	80-120	1	35	29987	EPA 6010A	09/24/96
Vanadium	500	453	460	ug/L	91	92	80-120	2	35	29987	EPA 6010A	09/24/96
Zinc	500	457	463	ug/L	91	93	80-120	1	35	29987	EPA 6010A	09/24/96