THIRD INTERIM REPORT
SITE CHARACTERIZATION
NINTH AVENUE TERMINAL STUDY AREA
PORT OF OAKLAND
OAKLAND, CALIFORNIA
SCI 133.004

VOLUME V OF VI

APPENDIX G - ANALYTICAL TEST REPORTS, CHROMATOGRAPHS, AND CHAIN-OF-CUSTODY FORMS FOR SCI'S APRIL/MAY 1997 DATA GAP STUDY (PART 1)

JULY 25, 1997

Subsurface Consultants, Inc.
3736 Mt. Diablo Boulevard ■ Suite 200 ■ Lafayette, California 94549 ■ (510) 299-7960

APPENDIX G - ANALYTICAL TEST REPORTS, CHROMATOGRAPHS, AND CHAIN-OF-CUSTODY FORMS FOR SCI'S APRIL/MAY 1997 DATA GAP STUDY (PART 1)

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: 07-MAY-97
Lab Job Number: 129053
Project ID: 133.004
Location: 9th Ave. Terminal

Reviewed by: _____

Reviewed by: Tracy Bobica

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Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129053

Project Name: 9th Ave. Terminal
Project Number: 133.004

Report Date: 07 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129053-001	TP-18	Water	24-APR-97	24-APR-97	01-MAY-97	ND	mg/L	5	DRH	33774

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: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129053
Report Date: 07 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 33774**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	5	mg/L	SMWW 17:5520BF	01-MAY-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	87%	SMWW 17:5520BF	01-MAY-97
BSD	92%	SMWW 17:5520BF	01-MAY-97

		Control Limits
Average Spike Recovery	89%	80% - 120%
Relative Percent Difference	5.2%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129053-001	TP-18	33646	04/24/97	05/02/97	05/02/97	

Matrix: Water

Analyte	Units	129053-001
Diln Fac:		1
Gasoline	ug/L	<50
Surrogate		
Trifluorotoluene	%REC	82
Bromobenzene	%REC	88

Curtis & Tompkins, Ltd.

Lab #: 129053 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Water	Prep Date:	05/02/97
Batch#:	33646	Analysis Date:	05/02/97
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC44813

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	81	65-135
Bromobenzene	84	65-135

Curtis & Tompkins, Ltd.

Lab #: 129053 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

LCS Lab ID: QC44811

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	2131	2000	107	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	111	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

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129053-001	TP-18	33691	04/24/97	04/28/97	05/03/97	

Matrix: Water

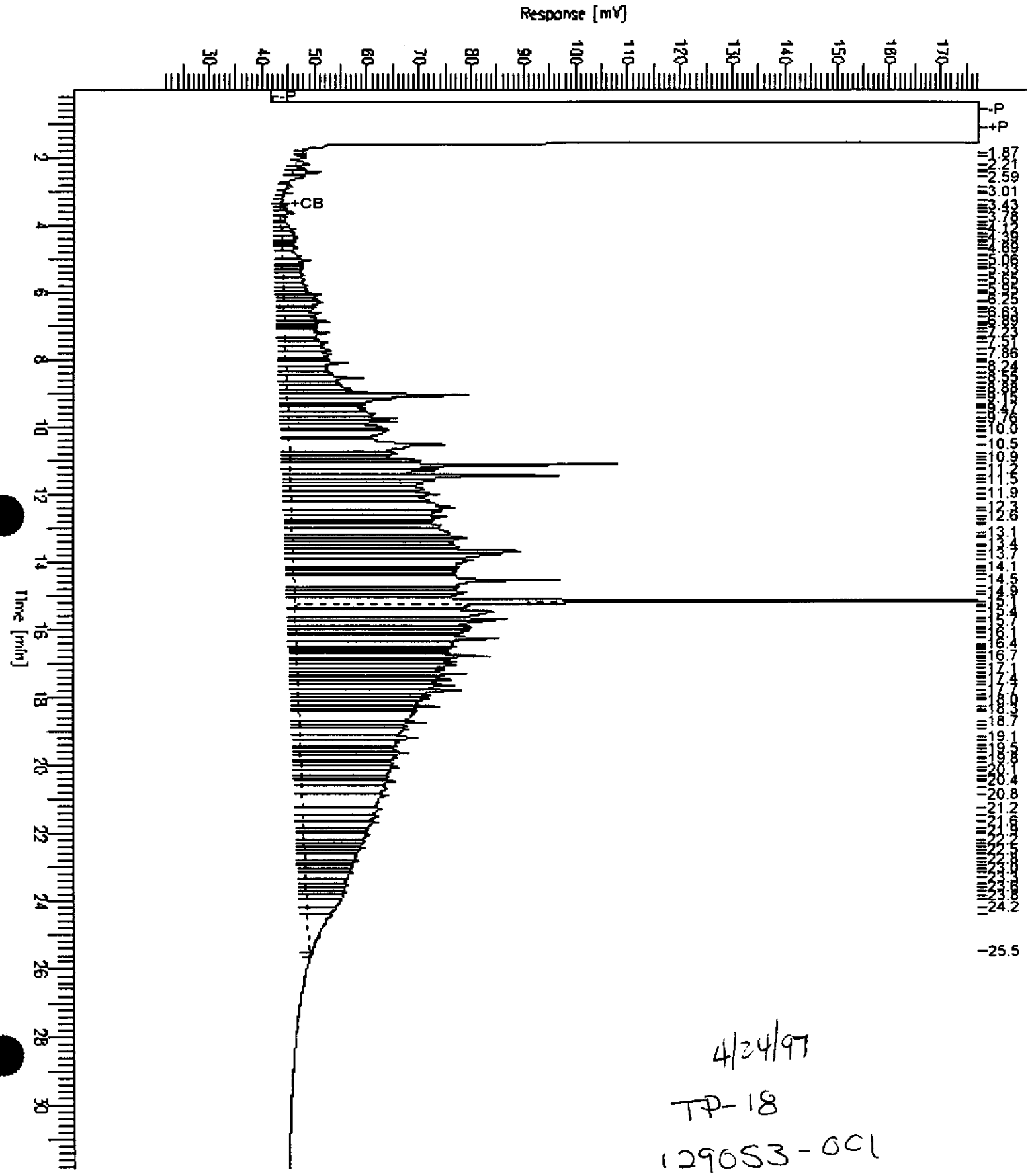
Analyte	Units	129053-001	
Diln Fac:		1	
Diesel C12-C22	ug/L	1000	YH
Motor Oil C22-C50	ug/L	2800	LH
Surrogate			
Hexacosane	%REC	87	

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 TEH

Sample Name : 129053-001,33691
FileName : G:\GC15\CHB\122B012.RAW
Method : B125TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 22 mV

Sample #: 33691 Page 1 of 1
Date : 5/6/97 10:39 AM
Time of Injection: 5/3/97 12:47 AM
Low Point : 21.83 mV High Point : 177.40 mV
Plot Scale: 155.6 mV



4/24/97

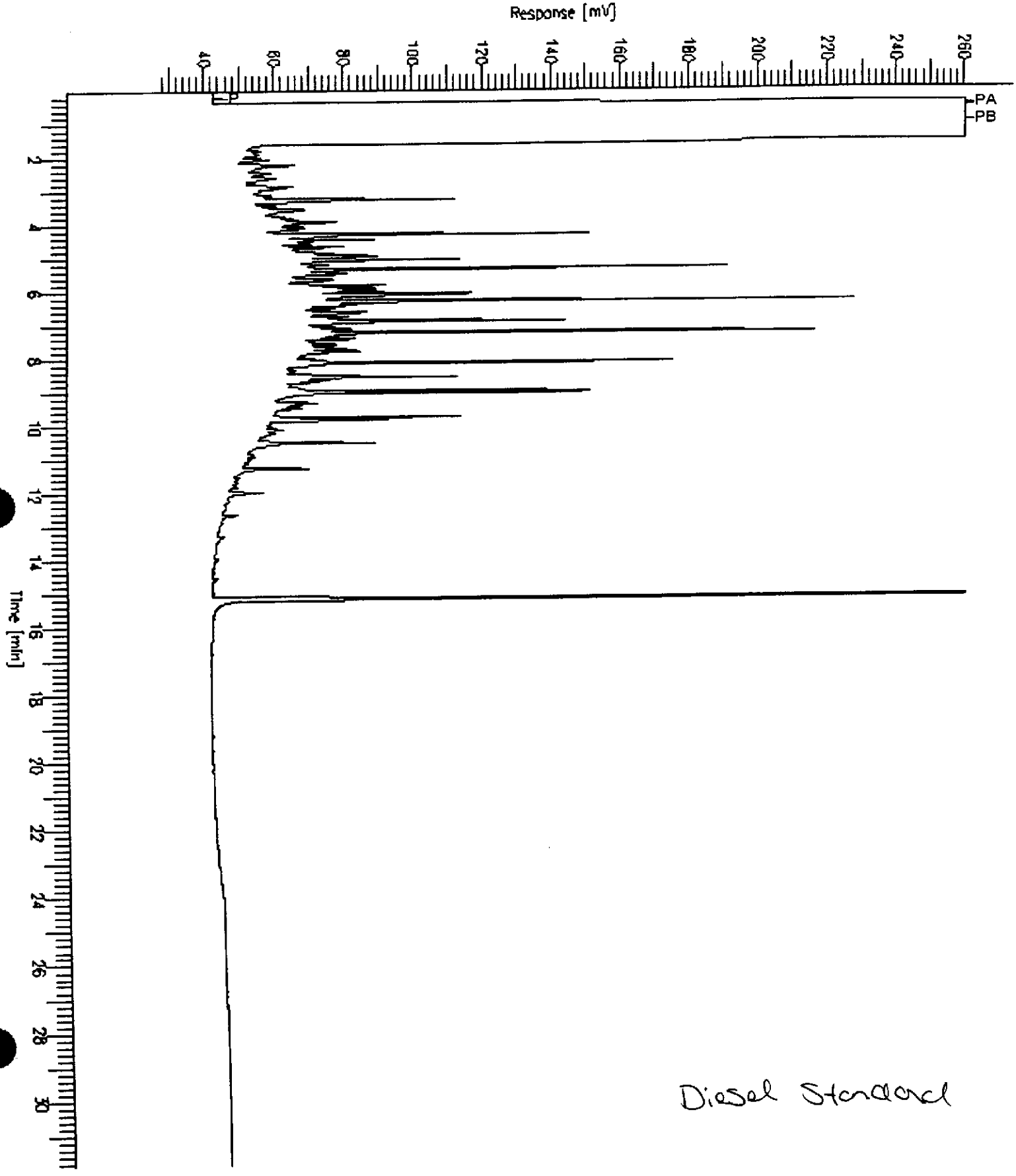
TP-18

129053-001

GC15 Channel B TEH

Sample Name : CCV,97WS3996,DS
FileName : G:\GC15\CHB\122B018.RAW
Method : B122TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 1.0 Plot Offset: 27 mV

Sample #: 500MG/L
Date : 5/5/97 10:50 AM
Time of Injection: 5/3/97 05:05 AM
Low Point : 27.17 mV
Plot Scale: 233.3 mV

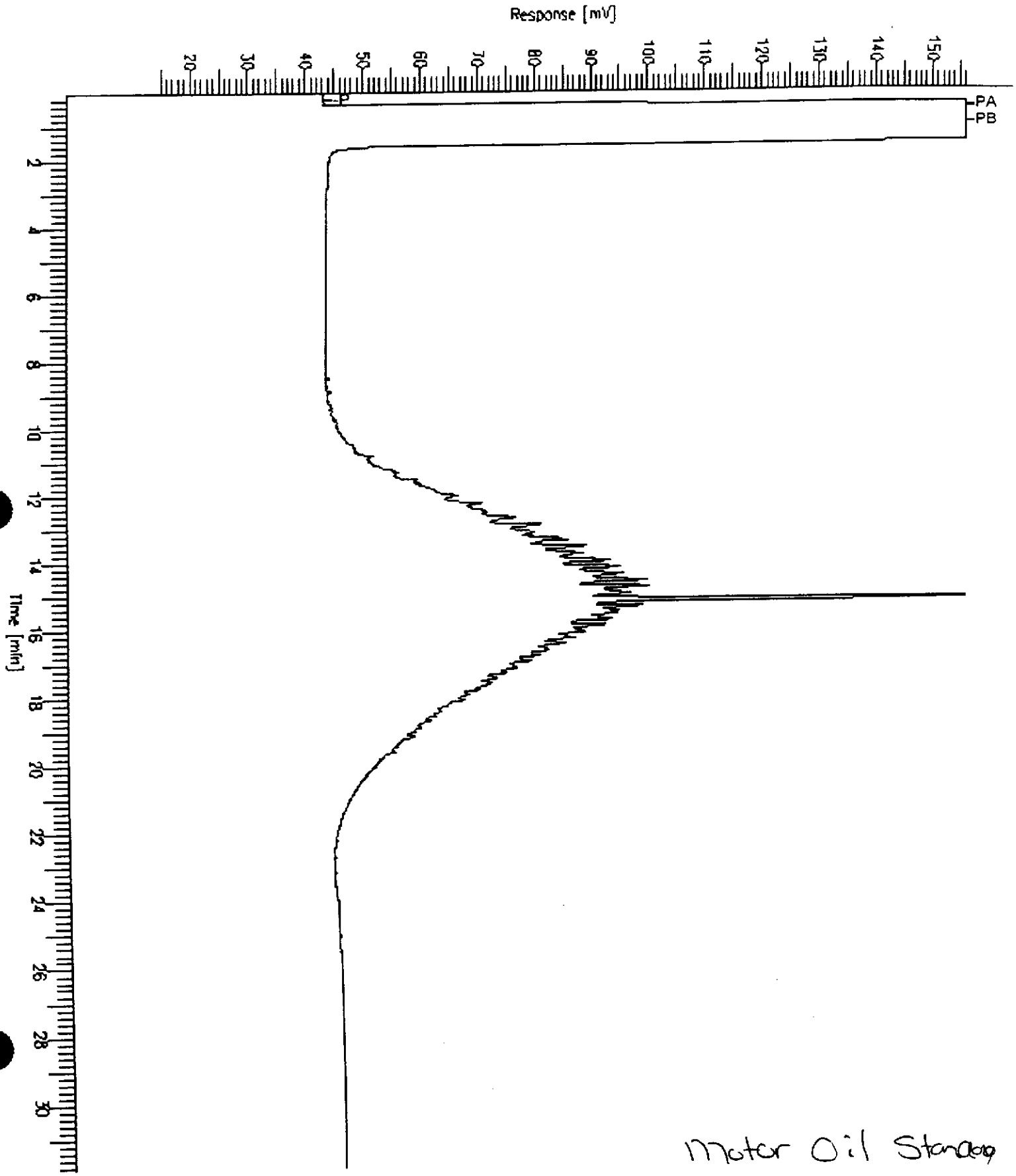


Diesel Standard

GC15 Channel B TEH

Sample Name : CCV,97WS4082,MO
FileName : G:\GC15\CHB\122BC20.RAW
Method : B122TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 14 mV

Sample #: 500MG/L
Date : 5/5/97 10:50 AM
Time of Injection: 5/3/97 06:31 AM
Low Point : 14.47 mV High Point : 154.31 mV
Plot Scale: 141.8 mV



Motor Oil Standard

Curtis & Tompkins, Ltd.

Lab #: 129053 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Water	Prep Date:	04/28/97
Batch#:	33691	Analysis Date:	04/28/97
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC44975

Analyte	Result
Diesel C12-C22	<50
Motor Oil C22-C50	<300

Surrogate	%Rec	Recovery Limits
Hexacosane	74	60-140

Lab #: 129053

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33691
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/03/97

BS Lab ID: QC44976

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1656	67	60-140
Surrogate	%Rec	Limits		
Hexacosane	94	60-140		

BSD Lab ID: QC44977

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1672	68	60-140	1	35
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
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129053-001	TP-18	33646	04/24/97	05/02/97	05/02/97	

Matrix: Water

Analyte	Units	129053-001
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	76
Bromobenzene	%REC	85

Curtis & Tompkins, Ltd.

Lab #: 129053 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

MB Lab ID: QC44813

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	75	58-130
Bromobenzene	82	62-131

Curtis & Tompkins, Ltd.

Lab #: 129053 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

LCS Lab ID: QC44812

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	16.56	20	83	80-120
Toluene	17.18	20	86	80-120
Ethylbenzene	17.39	20	87	80-120
m,p-Xylenes	34.04	40	85	80-120
o-Xylene	17.63	20	88	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	76	58-130
Bromobenzene	85	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129064-001
Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Sample Date: 04/25/97
Received Date: 04/25/97
Prep Date: 05/02/97
Analysis Date: 05/02/97

MS Lab ID: QC44827

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	20	<0.5	16.2	81	75-125
Toluene	20	<0.5	16.71	84	75-125
Ethylbenzene	20	<0.5	16.85	84	75-125
m,p-Xylenes	40	<0.5	32.8	82	75-125
o-Xylene	20	<0.5	17.11	86	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	78	58-130
Bromobenzene	90	62-131

MSD Lab ID: QC44828

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	20	16.84	84	75-125	4	20
Toluene	20	17.58	88	75-125	5	20
Ethylbenzene	20	17.96	90	75-125	6	20
m,p-Xylenes	40	34.96	87	75-125	6	20
o-Xylene	20	18.3	92	75-125	7	20

Surrogate	%Rec	Limits
Trifluorotoluene	78	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

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

Field ID:	TP-18	Sampled:	04/24/97
Lab ID:	129053-001	Received:	04/24/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33690	Analyzed:	05/03/97
Units:	ug/L		
Diln Fac:	5		

Analyte	Result	Reporting Limit
alpha-BHC	ND	0.24
beta-BHC	ND	0.24
gamma-BHC	ND	0.24
delta-BHC	ND	0.24
Heptachlor	ND	0.24
Aldrin	ND	0.24
Heptachlor epoxide B	ND	0.24
Heptachlor epoxide A	ND	0.24
Endosulfan I	ND	0.24
Dieldrin	ND	0.47
4,4'-DDE	ND	0.47
Endrin	ND	0.47
Endosulfan II	ND	0.47
Endosulfan sulfate	ND	0.47
4,4'-DDD	ND	0.47
Endrin aldehyde	ND	0.47
4,4'-DDT	ND	0.47
Chlordane	ND	2.4
Methoxychlor	ND	2.4
Toxaphene	ND	4.7
Aroclor-1016	ND	2.4
Aroclor-1221	ND	4.7
Aroclor-1232	ND	2.4
Aroclor-1242	ND	2.4
Aroclor-1248	ND	2.4
Aroclor-1254	ND	2.4
Aroclor-1260	ND	2.4

Surrogate	%Recovery	Recovery Limits
TCMX	95	34-128
Decachlorobiphenyl	285*	50-150

* Values outside of QC limits

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33690
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/02/97

MB Lab ID: QC44972

Analyte	Result	Reporting Limit
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide B	ND	0.05
Heptachlor epoxide A	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
Chlordane	ND	0.5
Methoxychlor	ND	0.5
Toxaphene	ND	1.0
Aroclor-1016	ND	0.5
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.5
Aroclor-1242	ND	0.5
Aroclor-1248	ND	0.5
Aroclor-1254	ND	0.5
Aroclor-1260	ND	0.5

Surrogate	%Rec	Recovery Limits
TCMX	74	34-128
Decachlorobiphenyl	92	50-150

Curtis & Tompkins, Ltd.

Lab #: 129053 BATCH QC REPORT

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33690
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/02/97

BS Lab ID: QC44973

Analyte	Spike Added	BS	%Rec	#	Limits
gamma-BHC	0.5	0.53	106		57-120
Heptachlor	0.5	0.49	98		51-109
Aldrin	0.5	0.53	106	*	57-105
Dieldrin	0.5	0.52	104		62-122
Endrin	0.5	0.55	110		70-128
4,4'-DDT	0.5	0.51	102		67-128

Surrogate	%Rec	Limits
TCMX	102	34-128
Decachlorobiphenyl	95	50-150

BSD Lab ID: QC44974

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
gamma-BHC	0.5	0.52	104		57-120	2		20
Heptachlor	0.5	0.44	88		51-109	11		20
Aldrin	0.5	0.52	104		57-105	2		20
Dieldrin	0.5	0.52	104		62-122	0		20
Endrin	0.5	0.54	108		70-128	2		20
4,4'-DDT	0.5	0.51	102		67-128	0		20

Surrogate	%Rec	Limits
TCMX	101	34-128
Decachlorobiphenyl	94	50-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 6 outside limits
Spike Recovery: 1 out of 12 outside limits

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129053

Project Name: 9th Ave. Terminal

Project Number: 133.004

Report Date: 07 May 97

ANALYSIS: pH

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	Method	Analyst	QC Batch
129053-001	TP-18	Water	24-APR-97	24-APR-97	24-APR-97	7.8	SU	EPA 9040	DRH	33666

Curtis & Tompkins, Ltd.

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

Client: Subsurface Consultants
Project Name: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129053
Report Date: 07 May 97

ANALYSIS: pH

QC Batch Number: 33666

Calibration Verification Results

Sample	Result	TV	Difference	Limit	Analyzed
ICV	6.98	7.00	.02	< 0.10	24-APR-97
CCV	6.99	7.00	.01	< 0.10	24-APR-97

Sample Duplicate Results

Sample	Duplicate	RPD	Analyzed
7.80	7.80	0%	24-APR-97

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: TP-18
Lab ID: 129053-001
Matrix: Water
Batch#: 33654
Units: ug/L
Diln Fac: 1

Sampled: 04/24/97
Received: 04/24/97
Extracted: 04/26/97
Analyzed: 04/26/97

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	98	87-125
Bromofluorobenzene	101	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33654
Units: ug/L
Diln Fac: 1

Prep Date: 04/26/97
Analysis Date: 04/26/97

MB Lab ID: QC44846

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	98	87-125
Bromofluorobenzene	100	79-122

Lab #: 129053

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33654
Units: ug/L
Diln Fac: 1

Prep Date: 04/26/97
Analysis Date: 04/26/97

LCS Lab ID: QC44845

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	60.85	50	122	51-180
Trichloroethene	52.34	50	105	73-141
Benzene	49.14	50	98	78-142
Toluene	50.88	50	102	76-150
Chlorobenzene	50.66	50	101	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	98	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129039-002
Matrix: Water
Batch#: 33654
Units: ug/L
Diln Fac: 1

Sample Date: 04/21/97
Received Date: 04/23/97
Prep Date: 04/26/97
Analysis Date: 04/26/97

MS Lab ID: QC44847

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	53.25	107	51-180
Trichloroethene	50	<5	47.63	95	73-141
Benzene	50	<5	45.1	90	78-142
Toluene	50	<5	47.31	95	76-150
Chlorobenzene	50	<5	47.33	95	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	106	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	99	79-122

MSD Lab ID: QC44848

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	52.44	105	51-180	2	14
Trichloroethene	50	47.08	94	73-141	1	14
Benzene	50	45.42	90	78-142	1	11
Toluene	50	48.22	96	76-150	2	13
Chlorobenzene	50	47.18	94	83-129	0	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	104	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	98	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.

LABORATORY NUMBER: 129053
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/24/97
DATE RECEIVED: 04/24/97
DATE ANALYZED: 04/30/97
BATCH#: 33733

ANALYSIS: CYANIDE
ANALYSIS METHOD: EPA 335.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129053-001	TP-18	ND	ug/L	10
METHOD BLANK	N/A	ND	ug/L	10

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: BS/BSD

RPD, %	4
RECOVERY, %	94

San Francisco Regional Office

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

May 2, 1997

Ms. Tracy Babjar
CURTIS & TOMPKINS, LTD.
2323 Fifth Street
Berkeley, CA 94710

Client Ref.: 129053
Clayton Project No.: 97043.32

Dear Ms. Babjar:

Attached is our analytical laboratory report for the samples received on April 25, 1997. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after June 1, 1997, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/las

Attachments

Clayton
ENVIRONMENTAL
CONSULTANTS

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129053
Clayton Project No. 97063.32

Sample Identification: TP-18
Lab Number: 9704332-01
Sample Matrix/Media: WATER

Date Sampled: 04/23/97
Date Received: 04/25/97

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Nitrate-N	0.13	0.05	mg/L	--	04/30/97	--	EPA 353.2
Nitrite-N	<0.05	0.05	mg/L	--	04/30/97	--	EPA 353.2

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129053
Clayton Project No. 97043.32

Sample Identification: METHOD BLANK
Lab Number: 9704332-02
Sample Matrix/Media: WATER

Date Sampled: --
Date Received: --

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Nitrate-N	<0.05	0.05	mg/L	--	04/30/97	--	EPA 353.2
Nitrite-N	<0.05	0.05	mg/L	--	04/30/97	--	EPA 353.2

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 ph
(510)486-0532 fx

9704332

Project Number: 129053

Subcontract Lab:

Clayton Environmental
1252 Quarry Lane
Pleasanton, CA 94566
(510) 426-2600

Please send report to: Tracy Babjar

Turnaround Time: Normal (5 days)

Sample ID	Date Sampled	Matrix	Analysis	C&T Lab #
TP-18	24-APR-97	Water	NITRATE/NITRITE * H_2SO_4 pl 125ml	129053-001

***Please report using Sample ID instead of C&T Lab #.

Notes:
*Due to holding time consideration sample was preserved w/ H_2SO_4 by Sample Control /ch 4/25

RELINQUISHED BY:	RECEIVED BY:
4/25/97	
Date/Time	Date/Time 4/25/97 15:25

Relinquished By: G Lumbe 4/25/97 15:23

Rec'd. Carol Hammerberg 4/25/97 1523
Rec'd in good cond.

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129053
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/24/97
DATE RECEIVED: 04/24/97
DATE ANALYZED: 04/30/97
BATCH#: 33719

ANALYSIS: TOTAL PHOSPHORUS
ANALYSIS METHOD: EPA 365.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129053-001	TP-18	0.36	mg/L	0.03
METHOD BLANK	N/A	ND	mg/L	0.03

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: MS/MSD OF SAMPLE NO:129091-001

RPD, %	6
RECOVERY, %	101

Semivolatile Organics by GC/MS

Client: Subsurface Consultants	Analysis Method: EPA 8270
Project#: 133.004	Prep Method: EPA 3520
Location: 9th Ave. Terminal	

Field ID: TP-18	Sampled: 04/24/97
Lab ID: 129053-001	Received: 04/24/97
Matrix: Water	Extracted: 04/28/97
Batch#: 33692	Analyzed: 05/01/97
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:	TP-18	Sampled:	04/24/97
Lab ID:	129053-001	Received:	04/24/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33692	Analyzed:	05/01/97
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	17	9.4
Anthracene	6.8 J	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	26	9.4
Pyrene	20	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	47
Benzo(a)anthracene	ND	9.4
Chrysene	17	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	5.8 J	9.4
Benzo(k)fluoranthene	5.7 J	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

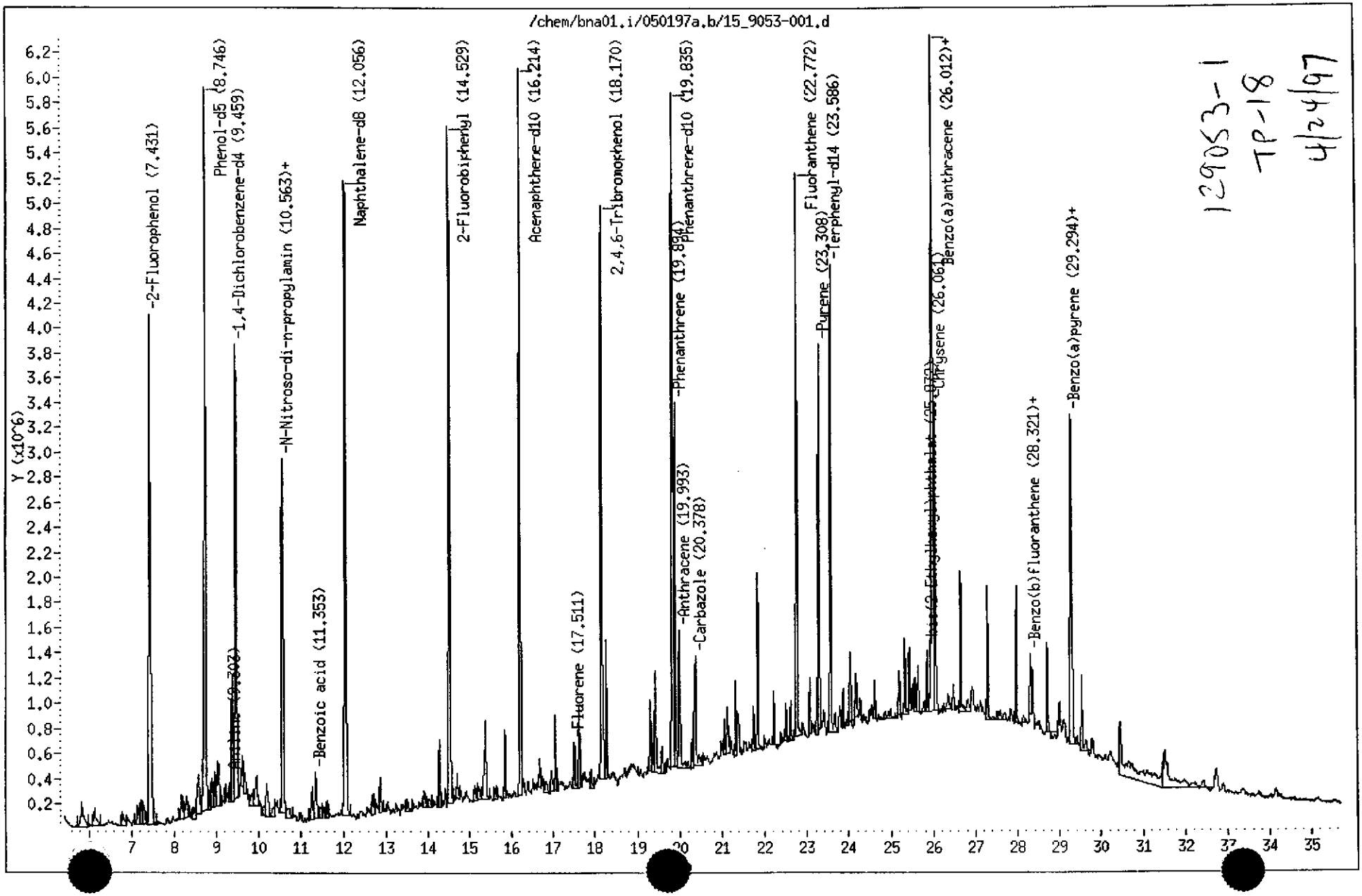
Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	65	21-110
Phenol-d5	71	10-110
2,4,6-Tribromophenol	75	10-123
Nitrobenzene-d5	81	35-114
2-Fluorobiphenyl	80	43-116
Terphenyl-d14	60	33-141

J: Estimated Value

Data File: /chem/bna01.i/050197a.b/15_9053-001.d
Date : 01-MAY-97 22:57
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



12953-1
TP-18
4/24/97

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

MB Lab ID: QC44978

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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

MB Lab ID: QC44978

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	55	21-110
Phenol-d5	60	10-110
2,4,6-Tribromophenol	57	10-123
Nitrobenzene-d5	67	35-114
2-Fluorobiphenyl	73	43-116
Terphenyl-d14	81	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

BS Lab ID: QC44979

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	100	69.05	69	12-110
2-Chlorophenol	100	74.39	74	27-123
4-Chloro-3-methylphenol	100	69.07	69	23-97
4-Nitrophenol	100	58.92	59	10-80
Pentachlorophenol	100	52.29	52	9-103
1,4-Dichlorobenzene	50	34.82	70	36-97
N-Nitroso-di-n-propylamine	50	30.37	61	41-116
1,2,4-Trichlorobenzene	50	35.47	71	39-98
Acenaphthene	50	40.65	81	46-118
2,4-Dinitrotoluene	50	26.9	54	24-96
Pyrene	50	40.05	80	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	63	21-110
Phenol-d5	66	10-110
2,4,6-Tribromophenol	67	10-123
Nitrobenzene-d5	74	35-114
2-Fluorobiphenyl	81	43-116
Terphenyl-d14	89	33-141

BSD Lab ID: QC44980

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	100	69.24	69	12-110	0	42
2-Chlorophenol	100	74.78	75	27-123	1	40
4-Chloro-3-methylphenol	100	72.09	72	23-97	4	42
4-Nitrophenol	100	62.52	63	10-80	7	50
Pentachlorophenol	100	51.97	52	9-103	0	50
1,4-Dichlorobenzene	50	35.43	71	36-97	1	28
N-Nitroso-di-n-propylamine	50	31.29	63	41-116	3	38
1,2,4-Trichlorobenzene	50	36.92	74	39-98	4	28
Acenaphthene	50	42.21	84	46-118	4	31
2,4-Dinitrotoluene	50	28.38	57	24-96	5	38
Pyrene	50	41.2	82	26-127	2	31

Surrogate	%Rec	Limits
2-Fluorophenol	64	21-110
Phenol-d5	67	10-110
2,4,6-Tribromophenol	71	10-123
Nitrobenzene-d5	78	35-114
2-Fluorobiphenyl	84	43-116
Terphenyl-d14	92	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

Curtis & Tompkins, Ltd.

SAMPLE ID: TP-18
LAB ID: 129053-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Filtrate

DATE SAMPLED: 04/24/97
DATE RECEIVED: 04/24/97
DATE REPORTED: 05/07/97

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	33717	EPA 6010A	04/30/97
Arsenic	5.6	5.0	1	33717	EPA 6010A	04/30/97
Barium	420	10	1	33717	EPA 6010A	04/30/97
Beryllium	ND	2.0	1	33717	EPA 6010A	04/30/97
Cadmium	ND	5.0	1	33717	EPA 6010A	04/30/97
Chromium (total)	ND	10	1	33717	EPA 6010A	04/30/97
Cobalt	ND	20	1	33717	EPA 6010A	04/30/97
Copper	19	10	1	33717	EPA 6010A	04/30/97
Lead	ND	3.0	1	33717	EPA 6010A	04/30/97
Mercury	ND	0.20	1	33820	EPA 7470	05/06/97
Molybdenum	ND	20	1	33717	EPA 6010A	04/30/97
Nickel	ND	20	1	33717	EPA 6010A	04/30/97
Selenium	ND	5.0	1	33717	EPA 6010A	04/30/97
Silver	ND	5.0	1	33717	EPA 6010A	04/30/97
Thallium	ND	5.0	1	33717	EPA 6010A	04/30/97
Vanadium	ND	10	1	33717	EPA 6010A	04/30/97
Zinc	220	20	1	33717	EPA 6010A	04/30/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129053
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/24/97
DATE RECEIVED: 04/24/97
DATE ANALYZED: 04/24/97
BATCH#: 33686

ANALYSIS: HEXAVALENT CHROMIUM
ANALYSIS METHOD: EPA 7196

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129053-001	TP-18	ND	mg/L	0.01
METHOD BLANK	N/A	ND	mg/L	0.01

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: MS/SAMPLE DUPLICATE OF 129053-001

RPD, %	<1
RECOVERY, %	94

Curtis & Tompkins, Ltd.

SAMPLE ID: TP-18
LAB ID: 129053-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Water

DATE SAMPLED: 04/24/97
DATE RECEIVED: 04/24/97
DATE REPORTED: 05/07/97

Metals Analytical Report

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Potassium	130000	500	1	33689	EPA 6010A	04/30/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129053

DATE REPORTED: 05/07/97

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	33717	EPA 6010A	04/30/97
Arsenic	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Barium	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Beryllium	ND	2	ug/L	1	33717	EPA 6010A	04/30/97
Cadmium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Chromium (total)	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Cobalt	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Copper	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Lead	ND	3	ug/L	1	33717	EPA 6010A	04/30/97
Mercury	ND	0.2	ug/L	1	33820	EPA 7470	05/06/97
Molybdenum	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Nickel	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Potassium	ND	500	ug/L	1	33689	EPA 6010A	04/30/97
Selenium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Silver	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Thallium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Vanadium	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Zinc	ND	20	ug/L	1	33717	EPA 6010A	04/30/97

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129053

DATE REPORTED: 05/07/97

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	491	531	ug/L	98	106	80-120	8	35	33717	EPA 6010A	04/30/97
Arsenic	2000	2060	2080	ug/L	103	104	80-120	1	35	33717	EPA 6010A	04/30/97
Barium	2000	2000	1990	ug/L	100	100	80-120	1	35	33717	EPA 6010A	04/30/97
Beryllium	50	52.1	53.1	ug/L	104	106	80-120	2	35	33717	EPA 6010A	04/30/97
Cadmium	50	53.3	53.9	ug/L	107	108	80-120	1	35	33717	EPA 6010A	04/30/97
Chromium (total)	200	197	202	ug/L	99	101	80-120	3	35	33717	EPA 6010A	04/30/97
Cobalt	500	511	522	ug/L	102	104	80-120	2	35	33717	EPA 6010A	04/30/97
Copper	250	254	257	ug/L	102	103	80-120	1	35	33717	EPA 6010A	04/30/97
Lead	500	507	514	ug/L	101	103	80-120	1	35	33717	EPA 6010A	04/30/97
Mercury	5	4.605	4.861	ug/L	92	97	80-120	5	35	33820	EPA 7470	05/06/97
Molybdenum	400	454	466	ug/L	114	117	80-120	3	35	33717	EPA 6010A	04/30/97
Nickel	500	506	511	ug/L	101	102	80-120	1	35	33717	EPA 6010A	04/30/97
Potassium	20000	18900	19010	ug/L	95	95	80-120	1	35	33689	EPA 6010A	04/30/97
Selenium	2000	1960	1980	ug/L	98	99	80-120	1	35	33717	EPA 6010A	04/30/97
Silver	100	109	111	ug/L	109	111	80-120	2	35	33717	EPA 6010A	04/30/97
Thallium	2000	1970	2010	ug/L	99	101	80-120	2	35	33717	EPA 6010A	04/30/97
Vanadium	500	514	521	ug/L	103	104	80-120	1	35	33717	EPA 6010A	04/30/97
Zinc	500	451	457	ug/L	90	91	80-120	1	35	33717	EPA 6010A	04/30/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129053

DATE REPORTED: 05/07/97

BATCH QC REPORT
SAMPLE DUPLICATE

Compound	Sample	Sample Result	Duplicate Result	Units	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	129053-001	<60	<60	ug/L	NC	20	33717	EPA 6010A	04/30/97
Arsenic	129053-001	5.63	10.9	ug/L	64*	20	33717	EPA 6010A	04/30/97
Barium	129053-001	419	418	ug/L	0	20	33717	EPA 6010A	04/30/97
Beryllium	129053-001	<2	<2	ug/L	NC	20	33717	EPA 6010A	04/30/97
Cadmium	129053-001	<5	<5	ug/L	NC	20	33717	EPA 6010A	04/30/97
Chromium (total)	129053-001	<10	<10	ug/L	NC	20	33717	EPA 6010A	04/30/97
Cobalt	129053-001	<20	<20	ug/L	NC	20	33717	EPA 6010A	04/30/97
Copper	129053-001	18.9	18	ug/L	5	20	33717	EPA 6010A	04/30/97
Lead	129053-001	<3	<3	ug/L	NC	20	33717	EPA 6010A	04/30/97
Mercury	129053-001	<0.2	<0.2	ug/L	NC	20	33820	EPA 7470	05/06/97
Molybdenum	129053-001	<20	<20	ug/L	NC	20	33717	EPA 6010A	04/30/97
Nickel	129053-001	<20	<20	ug/L	NC	20	33717	EPA 6010A	04/30/97
Potassium	129039-002	38550	40340	ug/L	5	20	33689	EPA 6010A	04/30/97
Selenium	129053-001	<5	<5	ug/L	NC	20	33717	EPA 6010A	04/30/97
Silver	129053-001	<5	<5	ug/L	NC	20	33717	EPA 6010A	04/30/97
Thallium	129053-001	<5	<5	ug/L	NC	20	33717	EPA 6010A	04/30/97
Vanadium	129053-001	<10	<10	ug/L	NC	20	33717	EPA 6010A	04/30/97
Zinc	129053-001	215	219	ug/L	2	20	33717	EPA 6010A	04/30/97

* = Out of Limits
NC = Not Calculable

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129053

DATE REPORTED: 05/07/97

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	129053-001	<60.000	474	ug/L	95	65-135	33717	EPA 6010A	04/30/97
Arsenic	2000	129053-001	5.63	1800	ug/L	90	65-135	33717	EPA 6010A	04/30/97
Barium	2000	129053-001	419	2480	ug/L	103	65-135	33717	EPA 6010A	04/30/97
Beryllium	50	129053-001	<2.000	44	ug/L	88	65-135	33717	EPA 6010A	04/30/97
Cadmium	50	129053-001	<5.000	47.4	ug/L	95	65-135	33717	EPA 6010A	04/30/97
Chromium (total)	200	129053-001	<10.000	185	ug/L	93	65-135	33717	EPA 6010A	04/30/97
Cobalt	500	129053-001	<20.000	459	ug/L	92	65-135	33717	EPA 6010A	04/30/97
Copper	250	129053-001	18.9	350	ug/L	132	65-135	33717	EPA 6010A	04/30/97
Lead	500	129053-001	<3.000	463	ug/L	93	65-135	33717	EPA 6010A	04/30/97
Mercury	5	129053-001	<0.200	3.234	ug/L	65	65-135	33820	EPA 7470	05/06/97
Molybdenum	400	129053-001	<20.000	409	ug/L	102	65-135	33717	EPA 6010A	04/30/97
Nickel	500	129053-001	<20.000	480	ug/L	96	65-135	33717	EPA 6010A	04/30/97
Potassium	20000	129039-002	38550	62330	ug/L	119	65-135	33689	EPA 6010A	04/30/97
Selenium	2000	129053-001	<5.000	1780	ug/L	89	65-135	33717	EPA 6010A	04/30/97
Silver	100	129053-001	<5.000	132	ug/L	132	65-135	33717	EPA 6010A	04/30/97
Thallium	2000	129053-001	<5.000	1690	ug/L	85	65-135	33717	EPA 6010A	04/30/97
Vanadium	500	129053-001	<10.000	494	ug/L	99	65-135	33717	EPA 6010A	04/30/97
Zinc	500	129053-001	215	655	ug/L	88	65-135	33717	EPA 6010A	04/30/97

CHAIN OF CUSTODY FORM

12905 3

PAGE 1 OF 1

PROJECT NAME: 9th Avenue Terminal

JOB NUMBER: 133.004 LAB: Curtis & Tompkins

PROJECT CONTACT: Geri Alexander TURNAROUND:

SAMPLED BY: John Wolfe / Criss O'Dea REQUESTED BY: John Wolfe / Jerome D-

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	1L Poly	1 oz ml Poly	METHOD PRESERVED: HCL	H_2SO_4	HNO_3 NaOH	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES
	TP-18	X				6	1					X					4	2	4	9 7	
	TP-18						3														
	TP-18									1	1			X							
	TP-18																				

ANALYSIS REQUESTED

- GAS/BTEX EPA 8015
- Extractable Diesel & EPA 8015
- 8240 Voc
- Semi Vol's 8270
- C. Pest + PCB's 8080
- Metals 6000/7000
- Lead 7240
- Oil & Grease SM5520
- Cyanide
- Chromium 6+
- pH and Flammability**

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)	4/24/97 1:00	RECEIVED BY: (Signature)	4/24/97 1:00

COMMENTS & NOTES:

Fix and Filter for metals

Nitrate, Sulfate K, Nitrate/Nitrite, PO4-T

128111-V, Phosph Nitrate / Nitrat

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: 09-MAY-97
Lab Job Number: 129054
Project ID: 133.004
Location: 9th Ave. Terminal

Reviewed by: _____

Reviewed by: _____

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Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129054

Project Name: 9th Ave. Terminal
Project Number: 133.004

Report Date: 09 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129054-001	TP-19	Water	24-APR-97	24-APR-97	01-MAY-97	14.	mg/L	5	DRH	33774

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: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129054
Report Date: 09 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 33774**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	5	mg/L	SMWW 17:5520BF	01-MAY-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	87%	SMWW 17:5520BF	01-MAY-97
BSD	92%	SMWW 17:5520BF	01-MAY-97

		Control Limits
Average Spike Recovery	89%	80% - 120%
Relative Percent Difference	5.2%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129054-001	TP-19	33812	04/24/97	05/06/97	05/06/97	

Matrix: Water

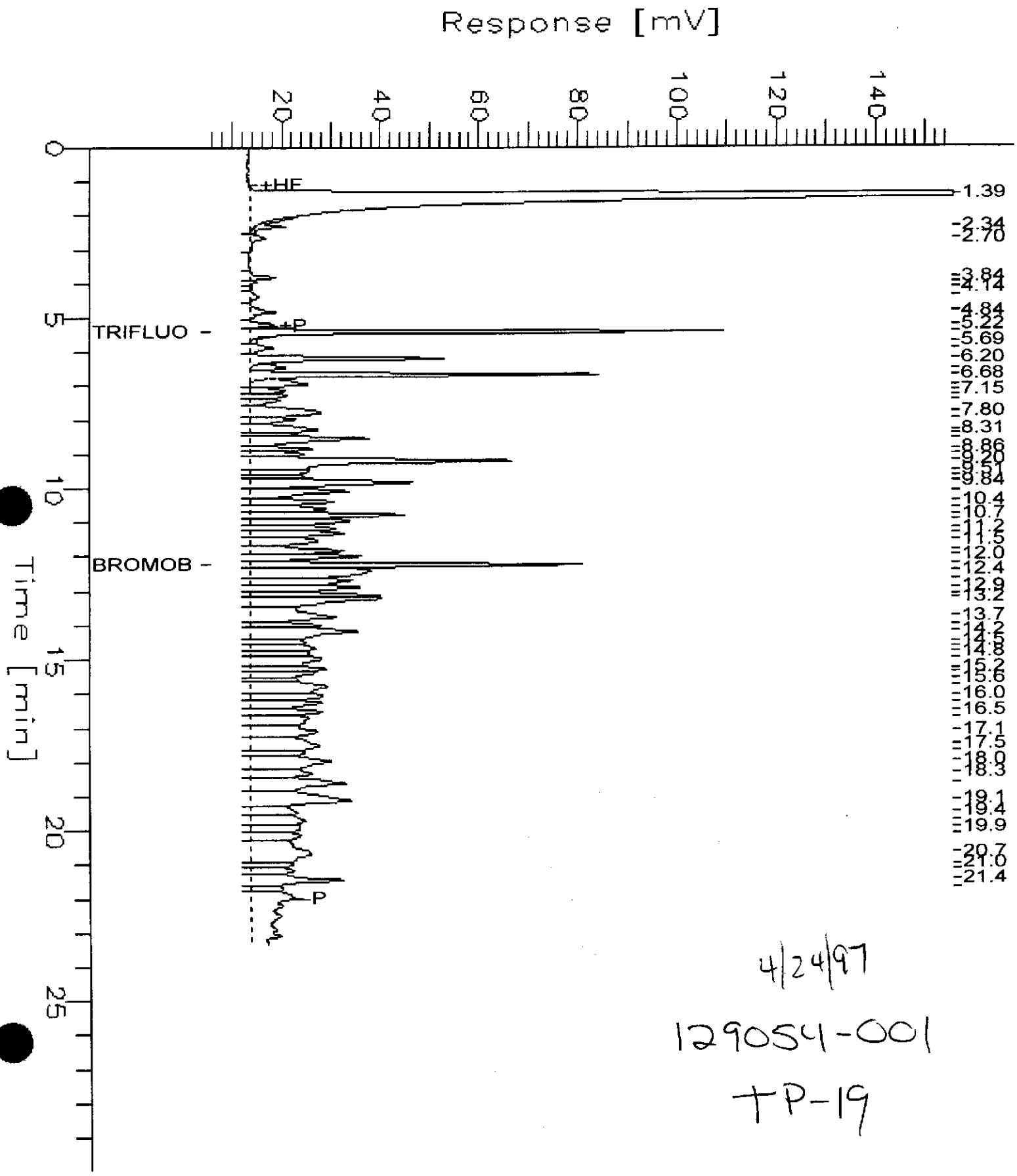
Analyte	Units	129054-001
Diln Fac:		1
Gasoline	ug/L	4300 Y
Surrogate		
Trifluorotoluene	%REC	85
Bromobenzene	%REC	110

Y: Sample exhibits fuel pattern which does not resemble standard

GC05 RTX1 TVH Chromatogram

Sample Name : S,129054-001,33812,RERUN,
FileName : G:\GC05\DATA\126H006.RAW
Method :
Start Time : 0.00 min End Time : 30.00 min
Scale Factor: -1.0 Plot Offset: 6 mV

Sample #:
Date : 5/7/97 02:59 PM
Time of Injection: 5/6/97 01:34 PM
Low Point : 5.57 mV High Point : 155.57 mV
Plot Scale: 150.0 mV



4/24/97

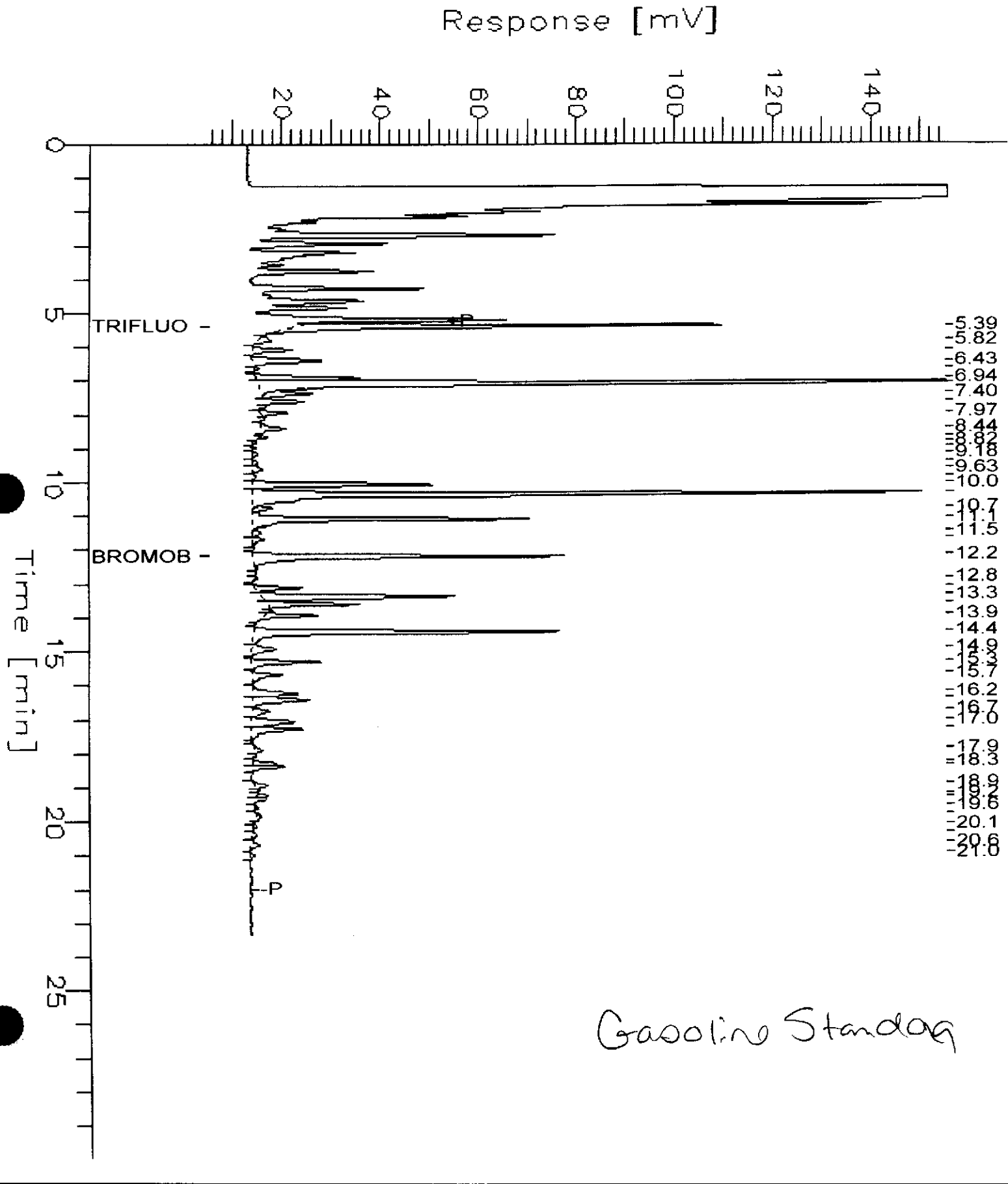
129054-001

TP-19

GC05 RTX1 TVH Chromatogram

Sample Name : CCV/LCS,QC45450,97WS4007,33812,
FileName : G:\GC05\DATA\126H002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 30.00 min
Scale Factor: -1.0 Plot Offset: 6 mV

Sample #: GAS Page 1 of 1
Date : 5/6/97 11:32 AM
Time of Injection: 5/6/97 11:08 AM
Low Point : 5.61 mV High Point : 155.61 mV
Plot Scale: 150.0 mV



Gasoline Standard

Curtis & Tompkins, Ltd.

Lab #: 129054 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Water	Prep Date:	05/06/97
Batch#:	33812	Analysis Date:	05/06/97
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC45452

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	78	65-135
Bromobenzene	83	65-135

Curtis & Tompkins, Ltd.

Lab #: 129054

BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33812
Units: ug/L
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/06/97

LCS Lab ID: QC45450

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1814	2000	91	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	83	65-135		
Bromobenzene	95	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

Lab #: 129054

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129141-002
Matrix: Water
Batch#: 33812
Units: ug/L
Diln Fac: 1

Sample Date: 05/01/97
Received Date: 05/02/97
Prep Date: 05/06/97
Analysis Date: 05/06/97

MS Lab ID: QC45453

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50	1778	89	75-125
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	84	65-135			
Bromobenzene	100	65-135			

MSD Lab ID: QC45454

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1890	95	75-125	6	35
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	82	65-135				
Bromobenzene	99	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#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129054-001	TP-19	33852	04/24/97	05/07/97	05/10/97	

Matrix: Water

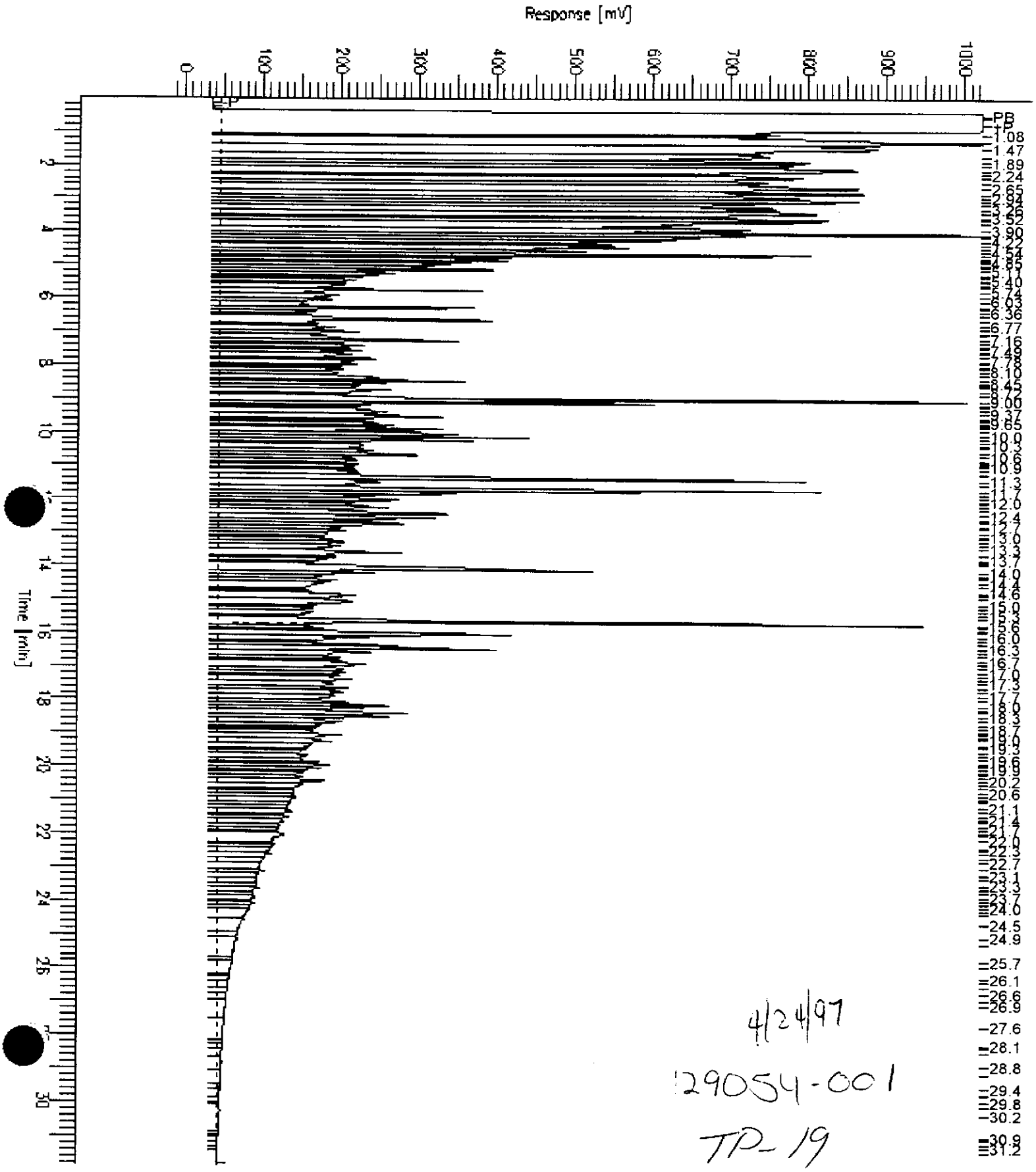
Analyte	Units	129054-001	
Diln Fac:		1	
Diesel C12-C22	ug/L	15000	LH
Motor Oil C22-C50	ug/L	10000	YLH
Surrogate			
Hexacosane	%REC	129	

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 : 129054-001,33852
File Name : G:\GC11\CHB\129B041.RAW
Method : BTEH128.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: -17 mV

Sample #: 33852 Page 1 of 1
Date : 5/12/97 01:20 PM
Time of Injection: 5/10/97 10:39 PM
Low Point : -17.03 mV High Point : 1024.00 mV
Plot Scale: 1041.0 mV



4/24/97

129054-001

TP-19

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Water	Prep Date:	05/07/97
Batch#:	33852	Analysis Date:	05/11/97
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC45623

Analyte	Result
Diesel C12-C22	<50
Motor Oil C22-C50	<300

Surrogate	%Rec	Recovery Limits
Hexacosane	104	60-140

Curtis & Tompkins, Ltd.

WATER TEH BLANK SPIKE/BLANK SPIKE DUPLICATE RECOVERY

Lab Name: Curtis & Tompkins, Ltd.

Instrument ID: GC11 CHB Run Date: 5/11/97

C&T ID: QC45624 QC45625 Batch No.: 33852

COMPOUND	SPIKE ADDED Ug/L	BLANK CONC. Ug/L	BS CONC. Ug/L	BS % REC	QC LIMITS RECOVERY
DIESEL	2475	0	2424	98 PASS	65 - 135

COMPOUND	SPIKE ADDED Ug/L	BSD CONC. Ug/L	BSD % REC	% RPD	QC LIMITS RPD	QC LIMITS RECOVERY
DIESEL	2475	2340	95 PASS	4 PASS	35	65 - 135

		HEX	
Surrogate Recoveries-	BS:	107	PASS
(Limits:65-135)	BSD	105	PASS

RPD: 0 out of 1 outside of QC limits

Spike Recovery: 0 out of 4 outside of QC limits

COMMENTS: _____

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129054-001	TP-19	33812	04/24/97	05/06/97	05/06/97	

Matrix: Water

Analyte	Units	129054-001
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	83
Bromobenzene	%REC	118

Curtis & Tompkins, Ltd.

Lab #: 129054 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33812
Units: ug/L
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/06/97

MB Lab ID: QC45452

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	72	58-130
Bromobenzene	82	62-131

Curtis & Tompkins, Ltd.

Lab #: 129054 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33812
Units: ug/L
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/06/97

LCS Lab ID: QC45451

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	17.04	20	85	80-120
Toluene	18.68	20	93	80-120
Ethylbenzene	17.4	20	87	80-120
m,p-Xylenes	37.02	40	93	80-120
o-Xylene	19.98	20	100	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	78	58-130
Bromobenzene	90	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: TP-19
Lab ID: 129054-001
Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1.25

Sampled: 04/24/97
Received: 04/24/97
Extracted: 05/02/97
Analyzed: 05/02/97

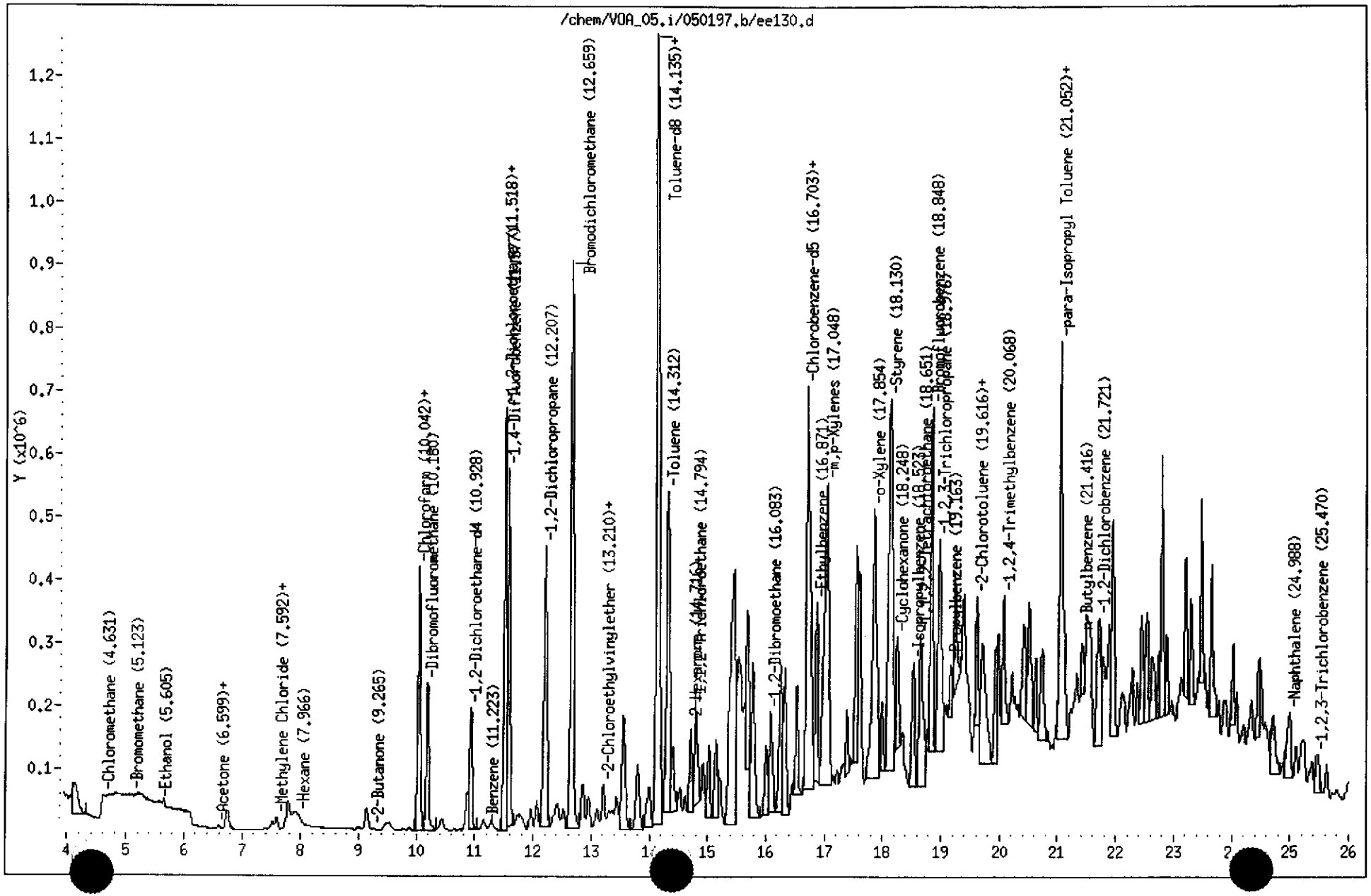
Analyte	Result	Reporting Limit
Chloromethane	ND	13
Bromomethane	ND	13
Vinyl Chloride	ND	13
Chloroethane	ND	13
Methylene Chloride	ND	25
Acetone	ND	25
Carbon Disulfide	42	6.3
Trichlorofluoromethane	ND	6.3
1,1-Dichloroethene	ND	6.3
1,1-Dichloroethane	ND	6.3
trans-1,2-Dichloroethene	ND	6.3
cis-1,2-Dichloroethene	ND	6.3
Chloroform	ND	6.3
Freon 113	ND	6.3
1,2-Dichloroethane	ND	6.3
2-Butanone	ND	13
1,1,1-Trichloroethane	ND	6.3
Carbon Tetrachloride	ND	6.3
Vinyl Acetate	ND	63
Bromodichloromethane	ND	6.3
1,2-Dichloropropane	ND	6.3
cis-1,3-Dichloropropene	ND	6.3
Trichloroethene	ND	6.3
Dibromochloromethane	ND	6.3
1,1,2-Trichloroethane	ND	6.3
Benzene	ND	6.3
trans-1,3-Dichloropropene	ND	6.3
Bromoform	ND	6.3
2-Hexanone	ND	13
4-Methyl-2-Pentanone	ND	13
1,1,2,2-Tetrachloroethane	ND	6.3
Tetrachloroethene	ND	6.3
Toluene	ND	6.3
Chlorobenzene	ND	6.3
Ethylbenzene	ND	6.3
Styrene	ND	6.3
m,p-Xylenes	ND	6.3
o-Xylene	ND	6.3

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

Data File: /chem/VOA_05.i/050197.b/ee130.d
Date : 02-MAY-97 02:36
Client ID: DYNA P&T
Sample Info: S,129054-001
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_05.i

Operator: DM
Column diameter: 0.32



EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

MB Lab ID: QC45216

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	103	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	101	79-122

Curtis & Tompkins, Ltd.

Lab #: 129054 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

MB Lab ID: QC45232

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

Curtis & Tompkins, Ltd.

Lab #: 129054 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

LCS Lab ID: QC45215

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	61.54	50	123	51-180
Trichloroethene	51.95	50	104	73-141
Benzene	53.79	50	108	78-142
Toluene	54.43	50	109	76-150
Chlorobenzene	51.68	50	103	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	102	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
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129056-014
Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1

Sample Date: 04/23/97
Received Date: 04/23/97
Prep Date: 05/01/97
Analysis Date: 05/01/97

MS Lab ID: QC45229

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	5.229	60.7	111	51-180
Trichloroethene	50	51.11	100.3	98	73-141
Benzene	50	0	51.58	103	78-142
Toluene	50	0	51.92	104	76-150
Chlorobenzene	50	0	52.22	104	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	105	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	98	79-122

MSD Lab ID: QC45230

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	61.13	112	51-180	1	14
Trichloroethene	50	97.21	92	73-141	3	14
Benzene	50	50.98	102	78-142	1	11
Toluene	50	51.98	104	76-150	0	13
Chlorobenzene	50	50.28	101	83-129	4	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	107	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	99	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

CHAIN OF CUSTODY FORM

129054

PAGE 1 OF 1

PROJECT NAME: 9th Avenue Terminal

JOB NUMBER: SCI 133.004 LAB: Curtis + Tompkins

PROJECT CONTACT: Jeri Alexander TURNAROUND:

SAMPLED BY: John Wolfe / Cross O Dog REQUESTED BY: John Wolfe

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: GAS BTEX EPA 8015	Extended Diesel EPA 8015	VOC EPA 8240	Total Oil and Grease
	TP-19					6	1			X					04	24	97	1200		X		X	X
1 F	TP-19						1								04	24	97	1200			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 23 Apr 97 1:00	RECEIVED BY: (Signature)	DATE / TIME 4/24/97 1:30 pm

COMMENTS & NOTES:

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: 07-MAY-97
Lab Job Number: 129057
Project ID: 133.004
Location: 9th Ave. Terminal

Reviewed by: _____

Reviewed by: _____

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Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129057

Project Name: 9th Ave. Terminal
Project Number: 133.004

Report Date: 07 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129057-001	SCI 66@1.0	Soil	23-APR-97	24-APR-97	29-APR-97	130	mg/Kg	50	DRH	33709
129057-002	SCI 66@5.0	Soil	23-APR-97	24-APR-97	29-APR-97	ND	mg/Kg	50	DRH	33709
129057-003	SCI 67@1.5	Soil	23-APR-97	24-APR-97	29-APR-97	290	mg/Kg	50	DRH	33709
129057-004	SCI 67@9.5	Soil	23-APR-97	24-APR-97	29-APR-97	170	mg/Kg	50	DRH	33709
129057-005	SCI 68@1.5	Soil	23-APR-97	24-APR-97	29-APR-97	230	mg/Kg	50	DRH	33709
129057-006	SCI 68@4.5	Soil	23-APR-97	24-APR-97	29-APR-97	180	mg/Kg	50	DRH	33709
129057-007	SCI 69@1.5	Soil	23-APR-97	24-APR-97	29-APR-97	86.	mg/Kg	50	DRH	33709
129057-009	SCI 70@2.0	Soil	23-APR-97	24-APR-97	29-APR-97	ND	mg/Kg	50	DRH	33709
129057-010	SCI 70@4.5	Soil	23-APR-97	24-APR-97	29-APR-97	ND	mg/Kg	50	DRH	33709
129057-011	SCI 71@2.0	Soil	23-APR-97	24-APR-97	29-APR-97	ND	mg/Kg	50	DRH	33709
129057-012	SCI 71@5.5	Soil	23-APR-97	24-APR-97	29-APR-97	ND	mg/Kg	50	DRH	33709
129057-013	SCI TP 15@2.0'	Soil	23-APR-97	24-APR-97	29-APR-97	22000	mg/Kg	50	DRH	33709
129057-014	SCI TP 16@1.0'	Soil	23-APR-97	24-APR-97	29-APR-97	21000	mg/Kg	50	DRH	33709
129057-015	SCI TP 18@3.5'	Soil	23-APR-97	24-APR-97	29-APR-97	16000	mg/Kg	50	DRH	33709
129057-016	SCI TP 18@6.5'	Soil	23-APR-97	24-APR-97	29-APR-97	250	mg/Kg	50	DRH	33709

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: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129057
Report Date: 07 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 33709**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	50	mg/Kg	SMWW 17:5520EF	29-APR-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	112%	SMWW 17:5520EF	29-APR-97
BSD	93%	SMWW 17:5520EF	29-APR-97

		Control Limits
Average Spike Recovery	102%	80% - 120%
Relative Percent Difference	18.9%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-001	SCI 66@1.0	33725	04/23/97	05/01/97	05/01/97	
129057-002	SCI 66@5.0	33725	04/23/97	05/01/97	05/01/97	
129057-003	SCI 67@1.5	33725	04/23/97	05/01/97	05/01/97	
129057-004	SCI 67@9.5	33725	04/23/97	05/01/97	05/01/97	

Matrix: Soil

Analyte Diln Fac:	Units	129057-001 1	129057-002 1	129057-003 1	129057-004 1
Gasoline	mg/Kg	<1	<1	<1	<1
Surrogate					
Trifluorotoluene	%REC	56	56	54	56
Bromobenzene	%REC	91	102	85	90

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-005	SCI 68@1.5	33725	04/23/97	05/01/97	05/01/97	
129057-006	SCI 68@4.5	33725	04/23/97	05/01/97	05/01/97	
129057-007	SCI 69@1.5	33754	04/23/97	05/01/97	05/01/97	
129057-008	SCI 69@5.5	33754	04/23/97	05/01/97	05/01/97	

Matrix: Soil

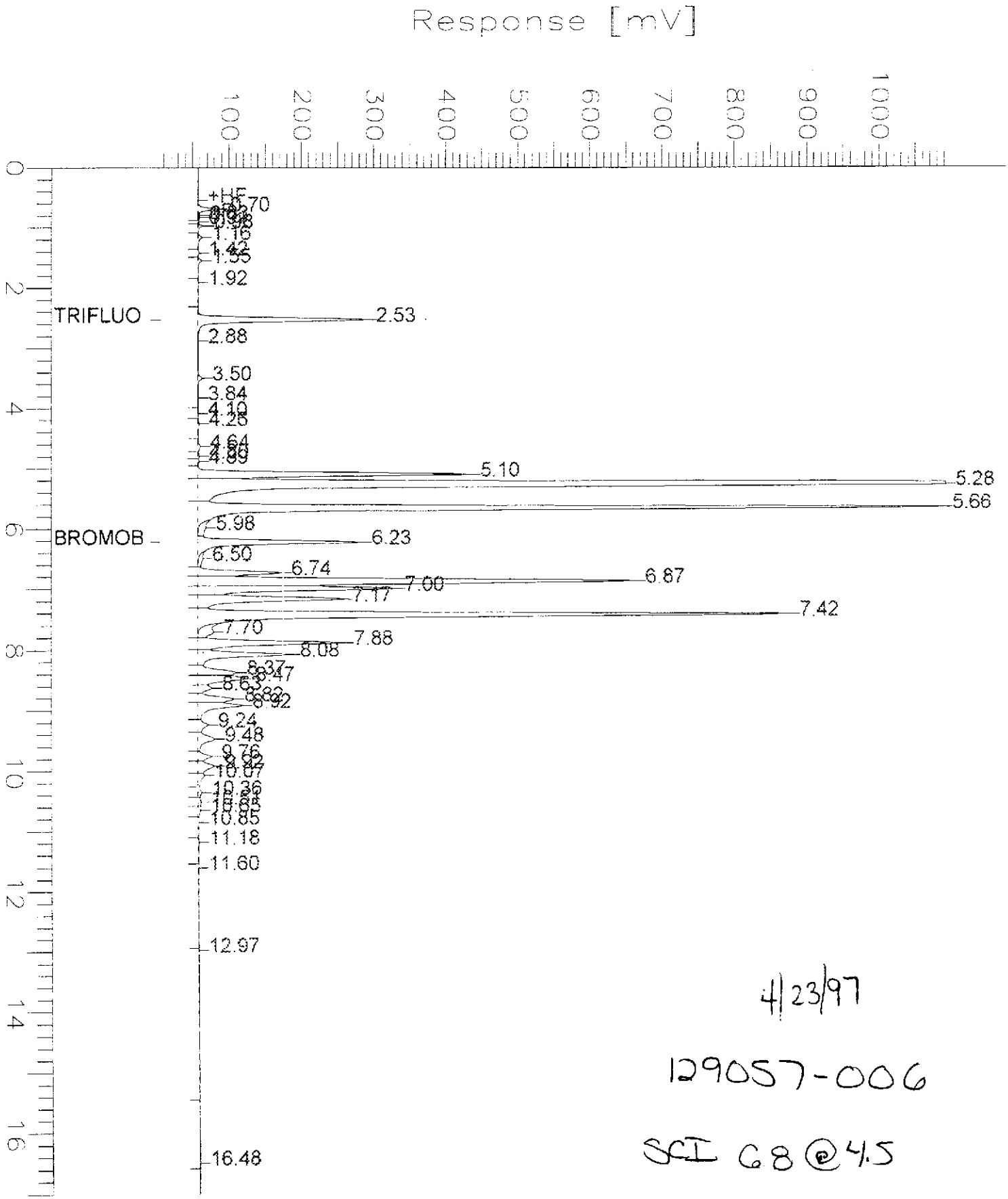
Analyte Diln Fac:	Units	129057-005 1	129057-006 1	129057-007 1	129057-008 1
Gasoline	mg/Kg	<1	19 Y	<1	<1
Surrogate					
Trifluorotoluene	%REC	55	58	55	53
Bromobenzene	%REC	87	120	91	87

Y: Sample exhibits fuel pattern which does not resemble standard

GC04 TVH 'J' Data File Rtx1FID

Sample Name : S,129057-006,33725
FileName : G:\GC04\DATA\120J031.raw
Method : TVMAR14
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 6 mV

Sample #: Page 1 of 1
Date : 5/1/97 06:27 AM
Time of Injection: 5/1/97 06:10 AM
Low Point : 5.78 mV High Point : 1094.12 mV
Plot Scale: 1088.3 mV



4/23/97

129057-006

SCI C8 @ 4.5

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-009	SCI 70@2.0	33754	04/23/97	05/01/97	05/01/97	
129057-010	SCI 70@4.5	33754	04/23/97	05/01/97	05/01/97	
129057-011	SCI 71@2.0	33754	04/23/97	05/01/97	05/01/97	
129057-012	SCI 71@5.5	33754	04/23/97	05/01/97	05/01/97	

Matrix: Soil

Analyte	Units	129057-009	129057-010	129057-011	129057-012
Diln Fac:		1	1	1	1
Gasoline	mg/Kg	<1	<1	<1	<1
Surrogate					
Trifluorotoluene	%REC	52	54	57	52
Bromobenzene	%REC	86	88	94	82

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-013	SCI TP 15@2.0'	33782	04/23/97	05/05/97	05/05/97	
129057-014	SCI TP 16@1.0'	33754	04/23/97	05/02/97	05/02/97	
129057-015	SCI TP 18@3.5'	33754	04/23/97	05/02/97	05/02/97	
129057-016	SCI TP 18@6.5'	33782	04/23/97	05/02/97	05/02/97	

Matrix: Soil

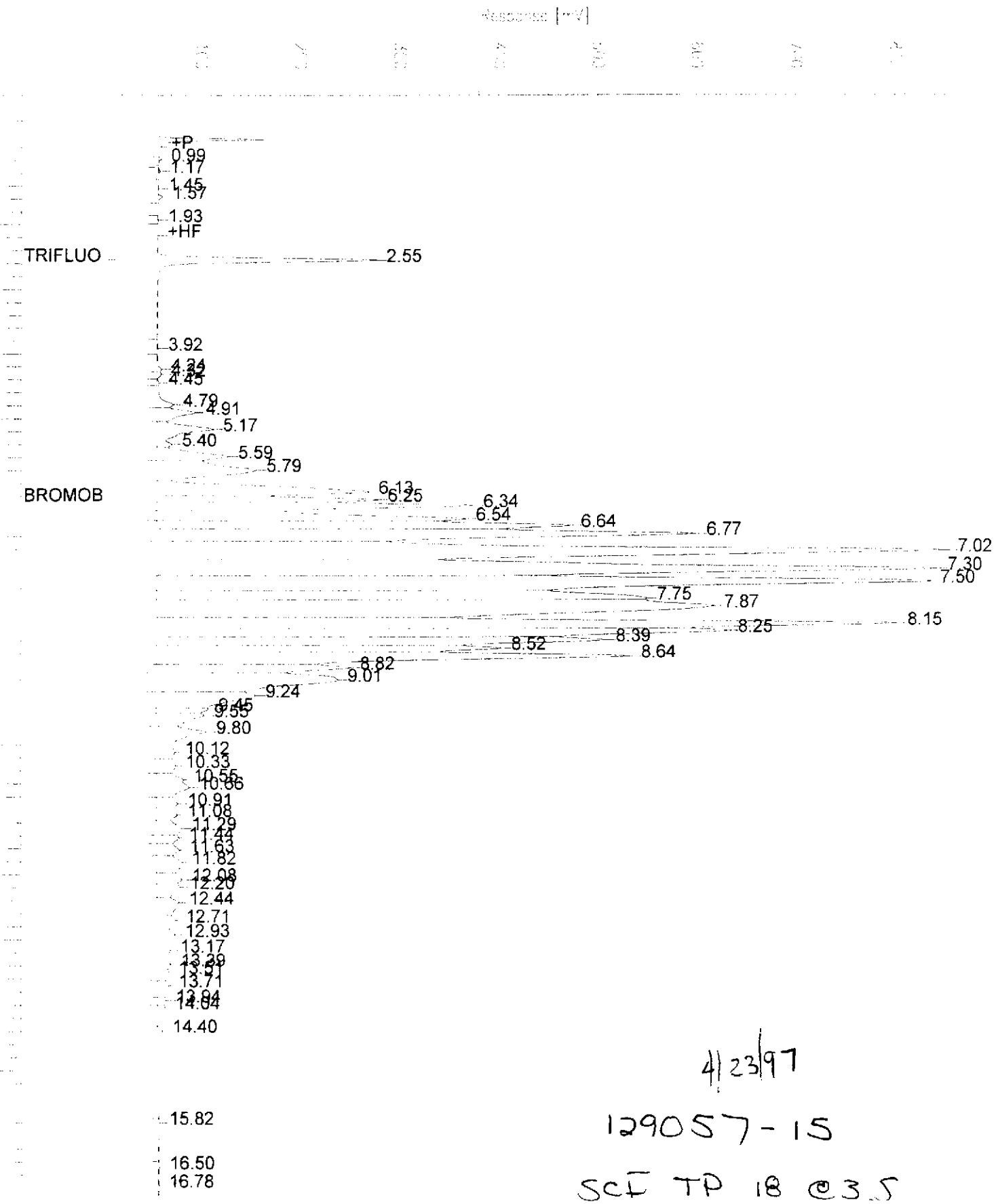
Analyte	Units	129057-013	129057-014	129057-015	129057-016
Diln Fac:		1	1	500	1
Gasoline	mg/Kg	<1	<1	1100 YH	<1
Surrogate					
Trifluorotoluene	%REC	52	52	57	57
Bromobenzene	%REC	83	84	108	96

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

GC04 TVH 'J' Data File Rtx1FID

Sample Name : D,129057-015,33754
FileName : G:\GC04\DATA\121J030.raw
Method : TVMAR14
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 16 mV

Sample #: Page 1 of 1
Date : 5/6/97 01:29 PM
Time of Injection: 5/2/97 03:58 AM
Low Point : 16.38 mV High Point : 856.29 mV
Plot Scale: 839.9 mV



4/23/97

129057-15

SCF TP 18 @3.5

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Soil	Prep Date:	04/30/97
Batch#:	33725	Analysis Date:	04/30/97
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC45107

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	57	52-127
Bromobenzene	91	45-140

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Soil	Prep Date:	05/01/97
Batch#:	33754	Analysis Date:	05/01/97
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC45224

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	57	52-127
Bromobenzene	88	45-140

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Soil	Prep Date:	05/05/97
Batch#:	33782	Analysis Date:	05/05/97
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC45337

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	56	52-127
Bromobenzene	91	45-140

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33725
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

LCS Lab ID: QC45105

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	9.5	10	95	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	81	52-127		
Bromobenzene	123	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

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

LABORATORY CONTROL SAMPLE

Matrix:	Soil	Prep Date:	05/01/97
Batch#:	33754	Analysis Date:	05/01/97
Units:	mg/Kg		
Diln Fac:	1		

LCS Lab ID: QC45222

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	9.41	10	94	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	86	52-127		
Bromobenzene	122	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

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33782
Units: mg/Kg
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

LCS Lab ID: QC45335

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	10.03	10	100	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	87	52-127		
Bromobenzene	126	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

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129038-012
Matrix: Soil
Batch#: 33725
Units: mg/Kg
Diln Fac: 1

Sample Date: 04/20/97
Received Date: 04/22/97
Prep Date: 04/30/97
Analysis Date: 04/30/97

MS Lab ID: QC45108

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	10	<1	7.89	79	65-135
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	84	52-127			
Bromobenzene	117	45-140			

MSD Lab ID: QC45109

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	10	8.22	82	65-135	4	30
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	85	52-127				
Bromobenzene	119	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#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-001	SCI 66@1.0	33642	04/23/97	04/25/97	04/29/97	
129057-002	SCI 66@5.0	33642	04/23/97	04/25/97	04/29/97	
129057-003	SCI 67@1.5	33642	04/23/97	04/25/97	04/29/97	
129057-004	SCI 67@9.5	33642	04/23/97	04/25/97	04/29/97	

Matrix: Soil

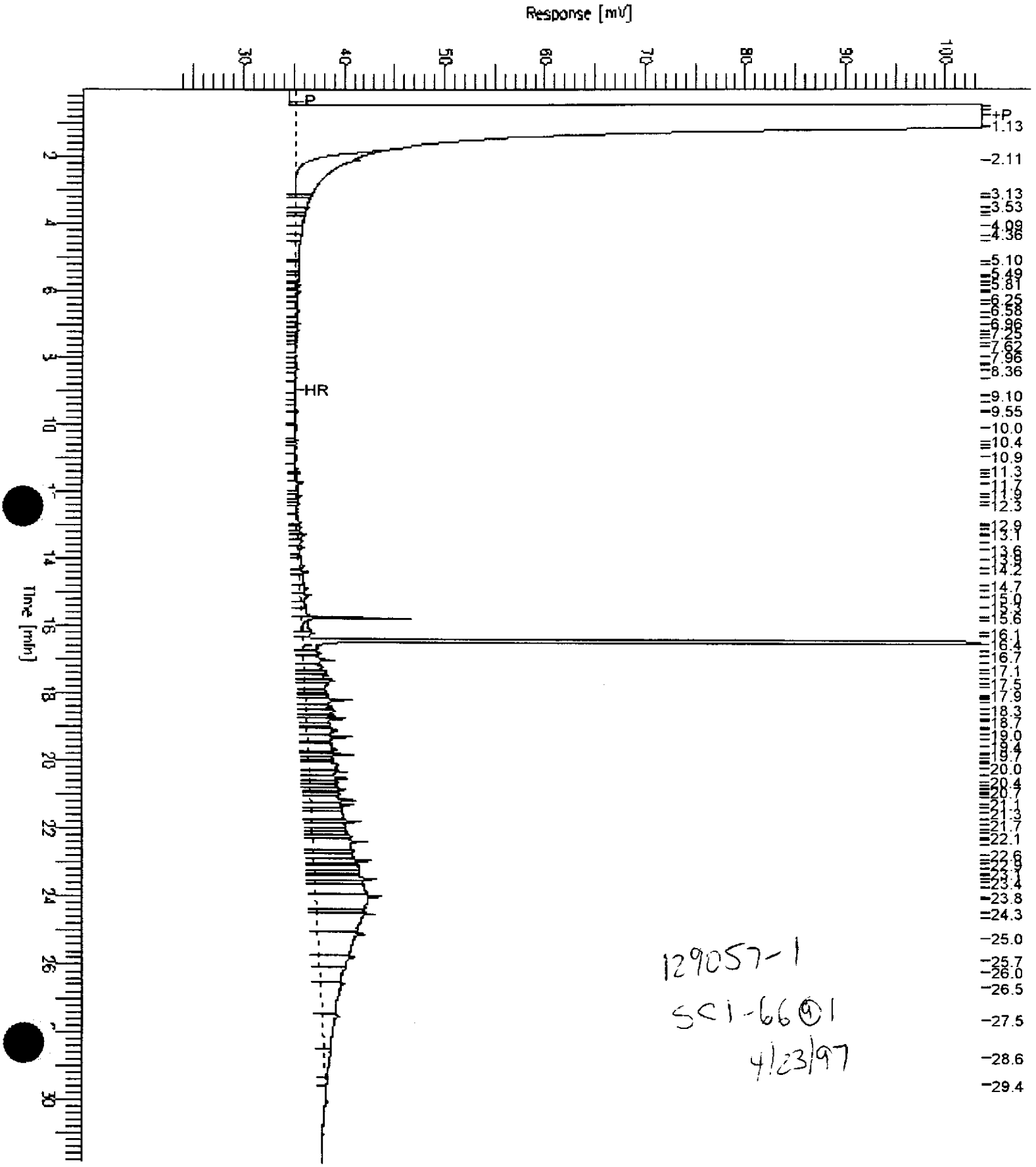
Analyte	Units	129057-001	129057-002	129057-003	129057-004
Diln Fac:		1	1	1	1
Diesel C12-C22	mg/Kg	<1	<1	4.3YH	<1
Motor Oil C22-C50	mg/Kg	9.8YH	<5	170 YH	<5
Surrogate					
Hexacosane	%REC	75	91	95	93

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

Chromatogram

Sample Name : 129057-001,33642
File Name : G:\GC13\CHA\119A008.RAW
Method : ATEH101.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 23 mV

Sample #: 33642 Page 1 of 1
Date : 4/30/97 10:52 AM
Time of Injection: 4/29/97 08:56 PM
Low Point : 23.05 mV High Point : 103.66 mV
Plot Scale: 80.6 mV

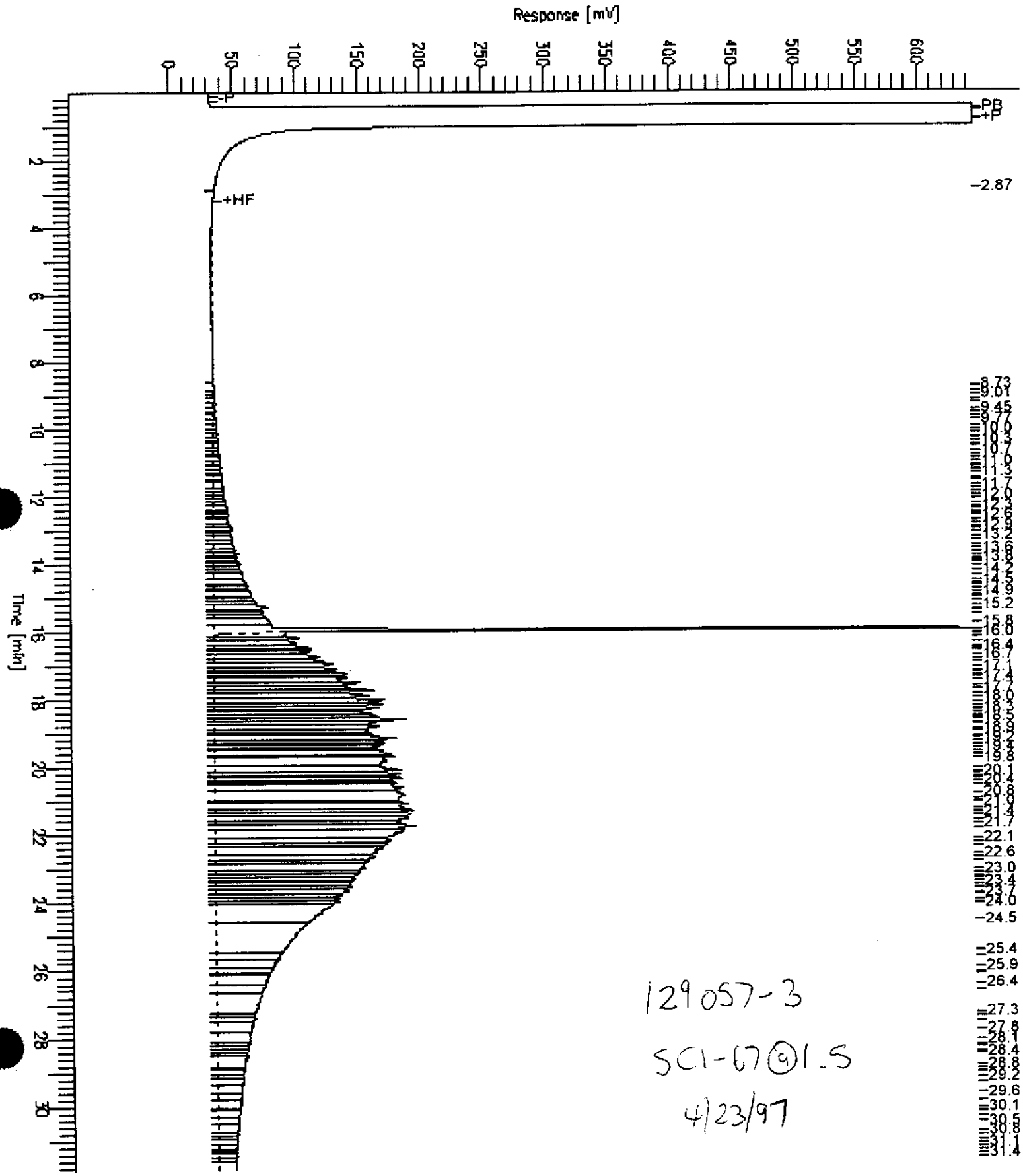


129057-1
SC1-6601
4/23/97

Chromatogram

Sample Name : 129057-003,33642
FileName : G:\GC11\CHB\118B033.RAW
Method : BTEH107.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: -6 mV

Sample #: 500MG/L
Date : 4/30/97 01:08 PM
Time of Injection: 4/29/97 01:58 PM
Low Point : -6.19 mV High Point : 645.23 mV
Plot Scale: 651.4 mV



129057-3
SC1-67@1.5
4/23/97

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-005	SCI 68@1.5	33642	04/23/97	04/25/97	04/29/97	
129057-006	SCI 68@4.5	33642	04/23/97	04/25/97	04/29/97	
129057-007	SCI 69@1.5	33642	04/23/97	04/25/97	04/29/97	
129057-008	SCI 69@5.5	33642	04/23/97	04/25/97	04/29/97	

Matrix: Soil

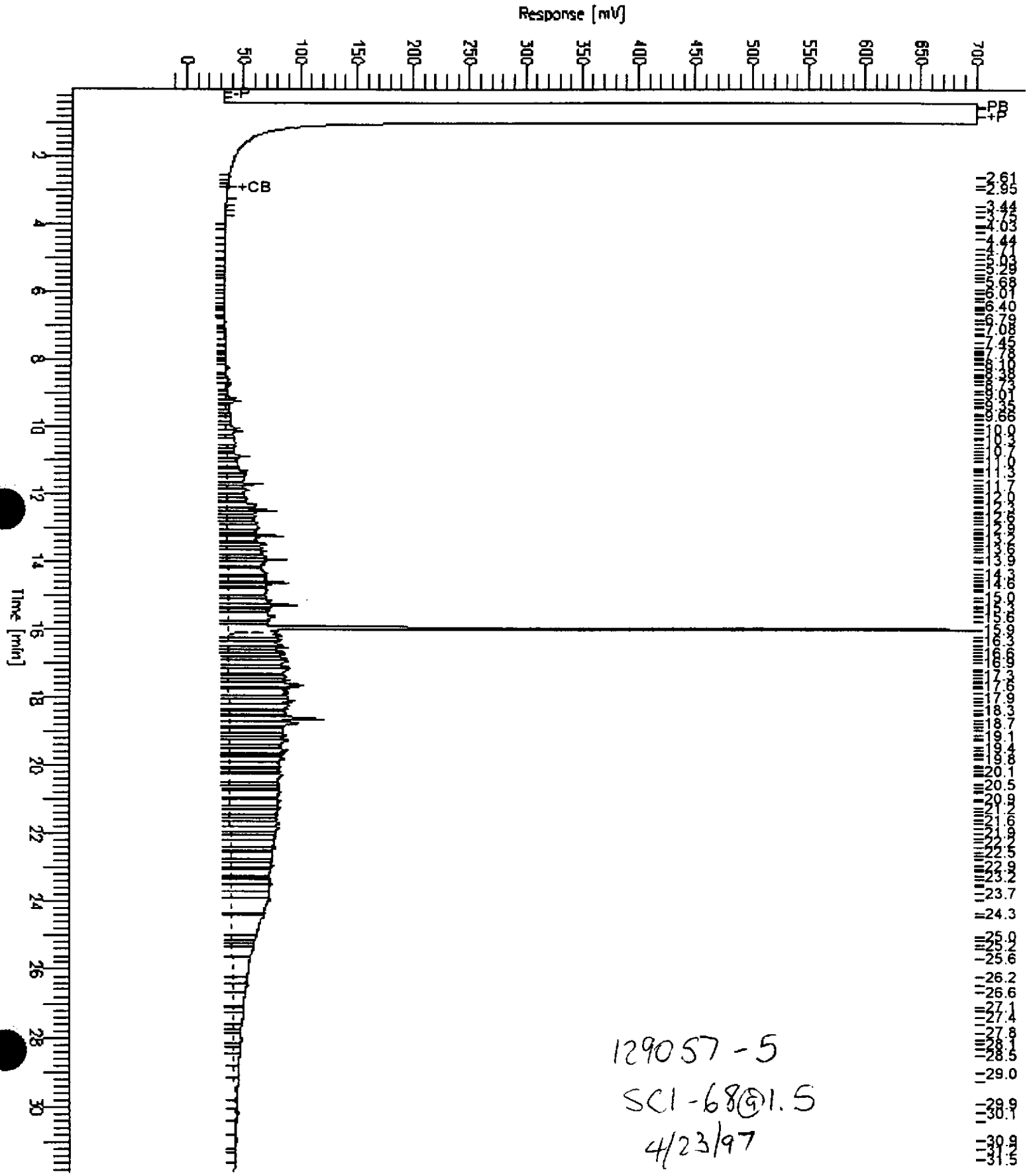
Analyte	Units	129057-005	129057-006	129057-007	129057-008
Diln Fac:		1	1	1	1
Diesel C12-C22	mg/Kg	9.3YH	19	14 YH	<1
Motor Oil C22-C50	mg/Kg	69 YH	12 YLH	89 YLH	<5
Surrogate					
Hexacosane	%REC	105	94	101	95

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 : 129057-005,33642
FileName : G:\GC11\CHB\118B034.RAW
Method : BTEH107.MTH
Start Time : 0.01 min End Time : 31.91 min
Sample Factor: 0.0 Plot Offset: -20 mV

Sample #: 500MG/L Page 1 of 1
Date : 4/30/97 01:09 PM
Time of Injection: 4/29/97 02:41 PM
Low Point : -19.92 mV High Point : 700.73 mV
Plot Scale: 720.7 mV

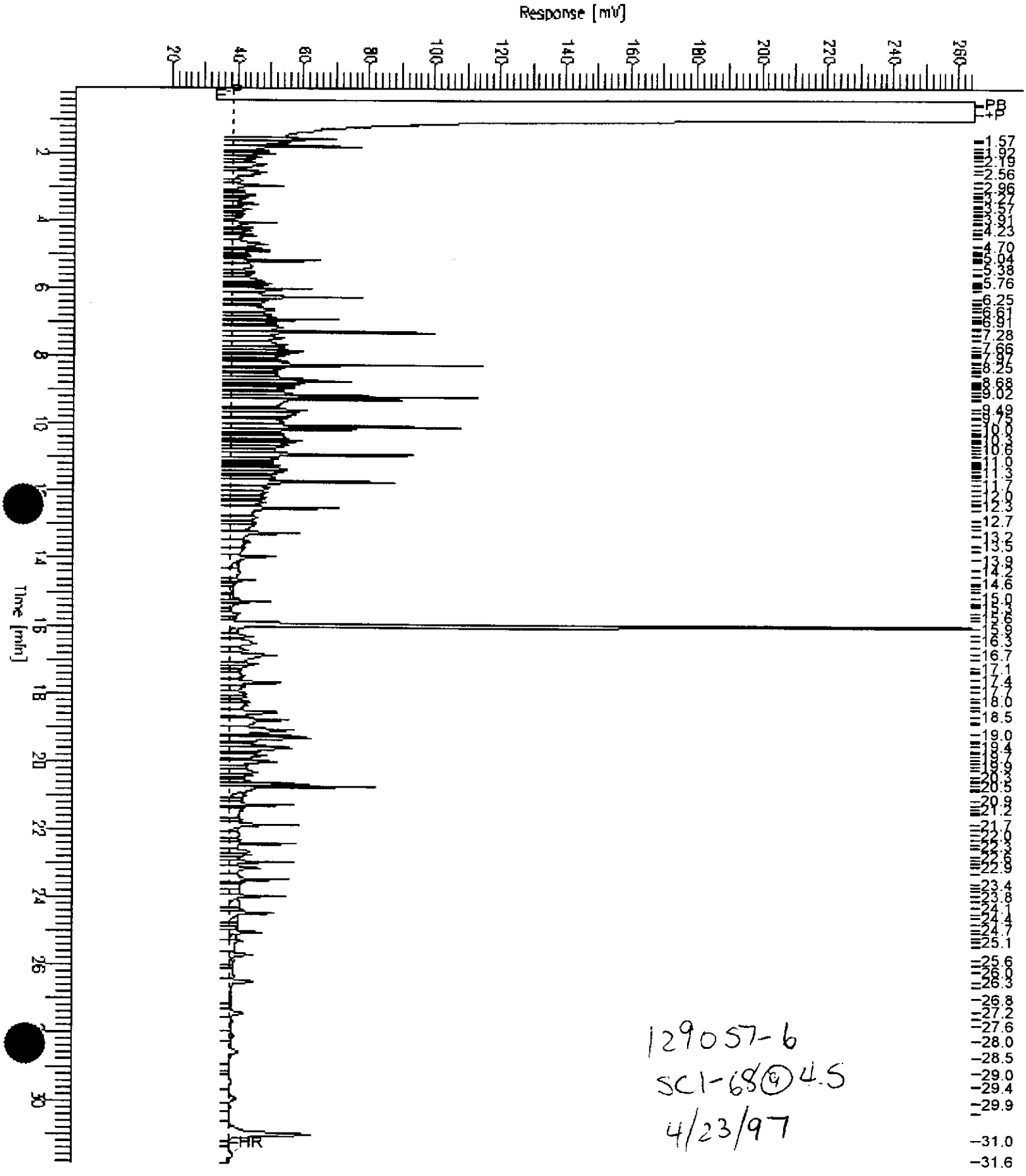


129057-5
SC1-68@1.5
4/23/97

Chromatogram

Sample Name : 129057-006,33642
File Name : G:\GC11\CHB\1188023.RAW
Method : BTEH107.MTH
Start Time : 0.07 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 18 mV

Sample #: 33642 Page 1 of 1
Date : 4/29/97 11:13 AM
Time of Injection: 4/29/97 06:41 AM
Low Point : 18.50 mV High Point : 265.10 mV
Plot Scale: 246.6 mV

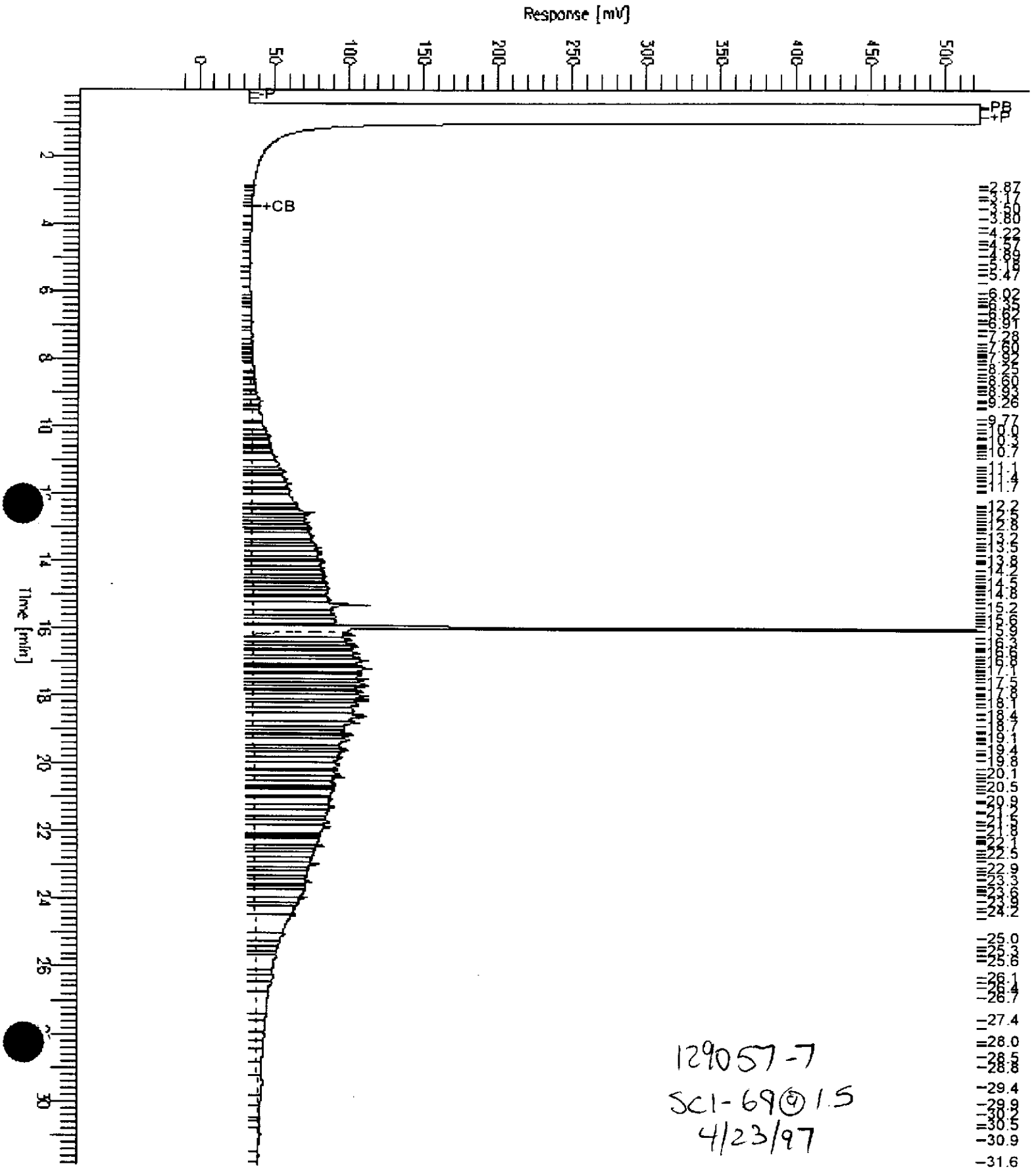


129057-6
SC1-68@4.5
4/23/97

Chromatogram

Sample Name : 129057-007,33642
File Name : G:\GC11\CHB\118B025.RAW
Method : BTEH107.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -19 mV

Sample #: 33642 Page 1 of 1
Date : 4/29/97 11:15 AM
Time of Injection: 4/29/97 08:08 AM
Low Point : -19.01 mV High Point : 524.13 mV
Plot Scale: 543.1 mV



129057-7
SC1-69@1.5
4/23/97

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-009	SCI 70@2.0	33642	04/23/97	04/25/97	04/29/97	
129057-010	SCI 70@4.5	33642	04/23/97	04/25/97	04/29/97	
129057-011	SCI 71@2.0	33642	04/23/97	04/25/97	04/29/97	
129057-012	SCI 71@5.5	33642	04/23/97	04/25/97	04/29/97	

Matrix: Soil

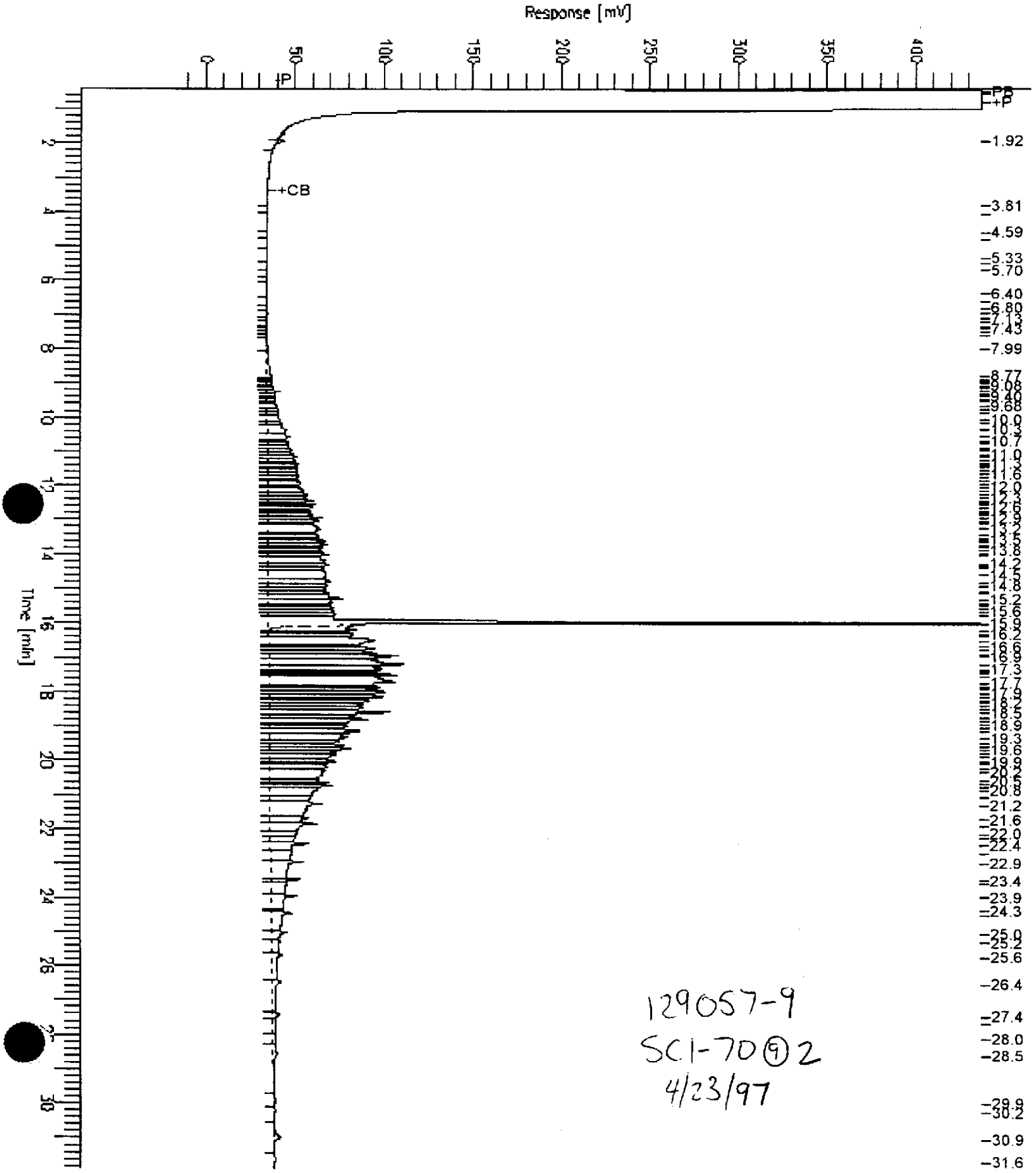
Analyte	Units	129057-009	129057-010	129057-011	129057-012
Diln Fac:		1	1	1	1
Diesel C12-C22	mg/Kg	10 YH	19 YH	15 YH	12 YH
Motor Oil C22-C50	mg/Kg	56 YLH	64 YLH	55 YLH	70 YLH
Surrogate					
Hexacosane	%REC	83	92	87	93

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 : 129057-009,33642
File Name : G:\GC11\CHB\118B022.RAW
Method : BTEH107.MTH
Start Time : 0.40 min End Time : 31.91 min
Tail Factor: 0.0 Plot Offset: -19 mV

Sample #: 33642 Page 1 of 1
Date : 4/29/97 11:10 AM
Time of Injection: 4/29/97 05:57 AM
Low Point : -19.04 mV High Point : 437.58 mV
Plot Scale: 456.6 mV

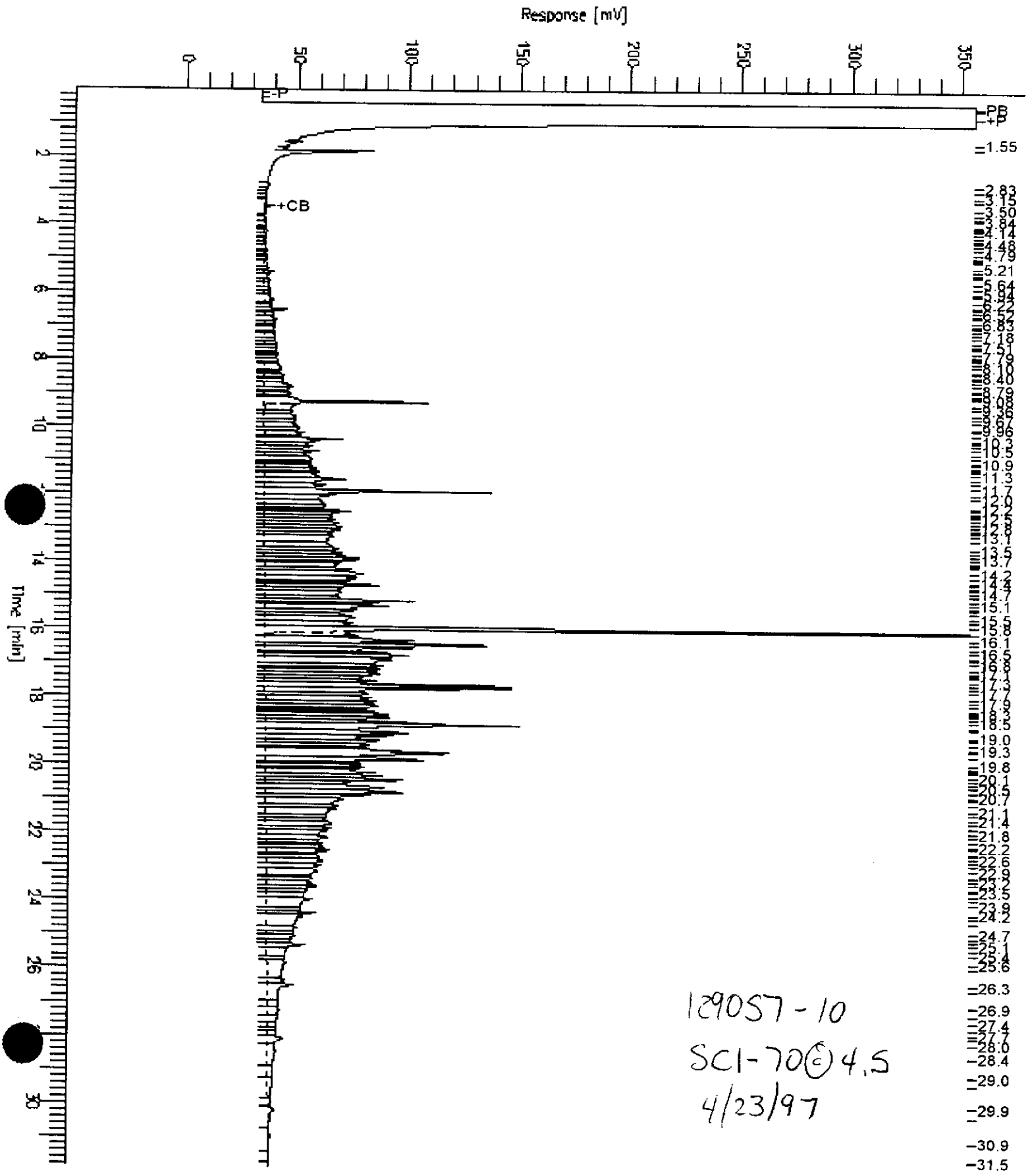


129057-9
SC1-70@2
4/23/97

Chromatogram

Sample Name : 129057-010,33642
File Name : G:\GC11\CHB\118B026.RAW
Method : BTEH107.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -9 mV

Sample #: 33642 Page 1 of 1
Date : 4/29/97 11:16 AM
Time of Injection: 4/29/97 08:52 AM
Low Point : -9.21 mV High Point : 355.98 mV
Plot Scale: 365.2 mV

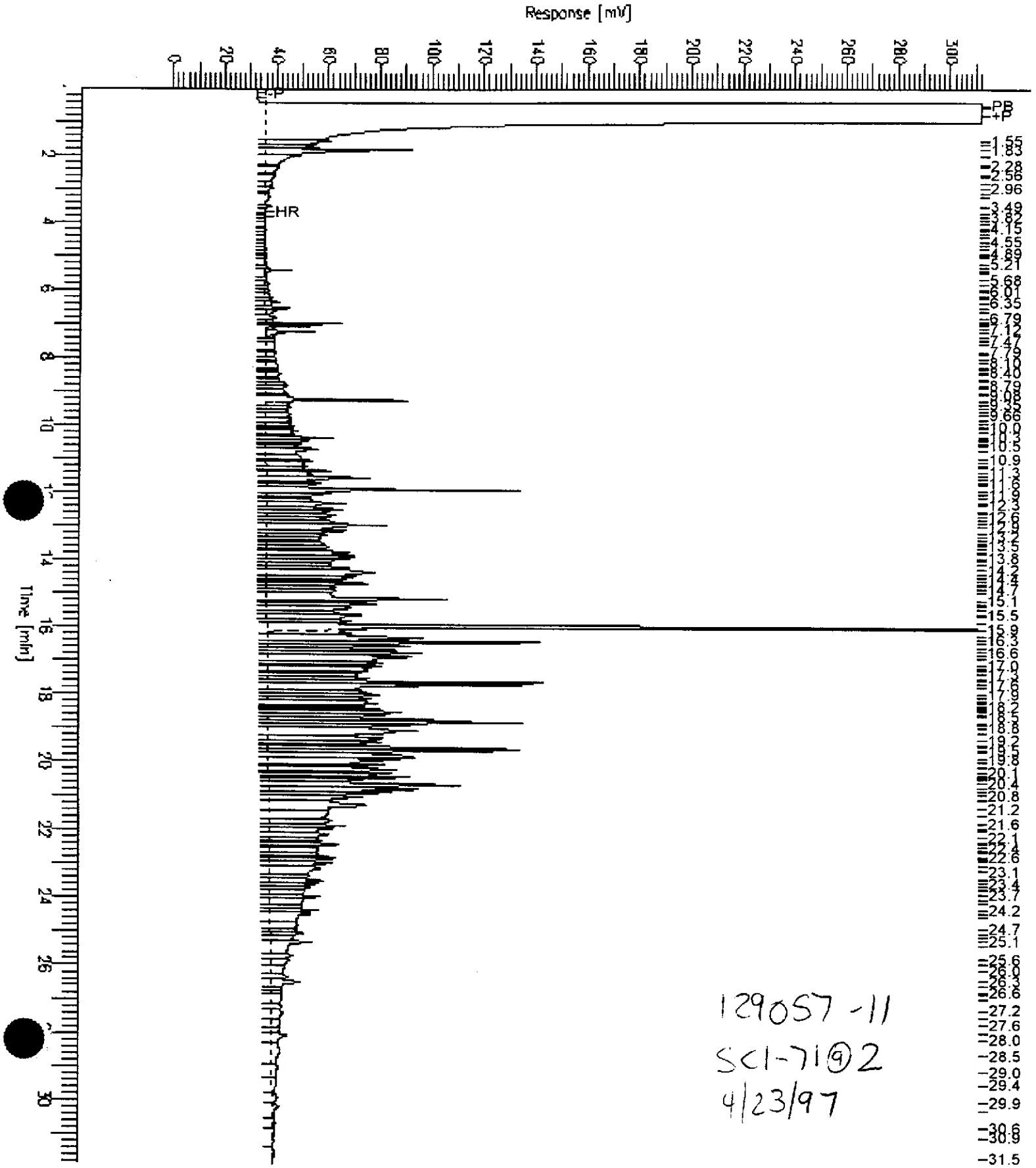


129057-10
SC1-70(c) 4.5
4/23/97

Chromatogram

Sample Name : 129057-011,33642
File Name : G:\GC11\CHB\118B027.RAW
Method : BTEH107.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -0 mV

Sample #: 33642 Page 1 of 1
Date : 4/29/97 11:18 AM
Time of Injection: 4/29/97 09:36 AM
Low Point : -0.32 mV High Point : 312.16 mV
Plot Scale: 312.5 mV

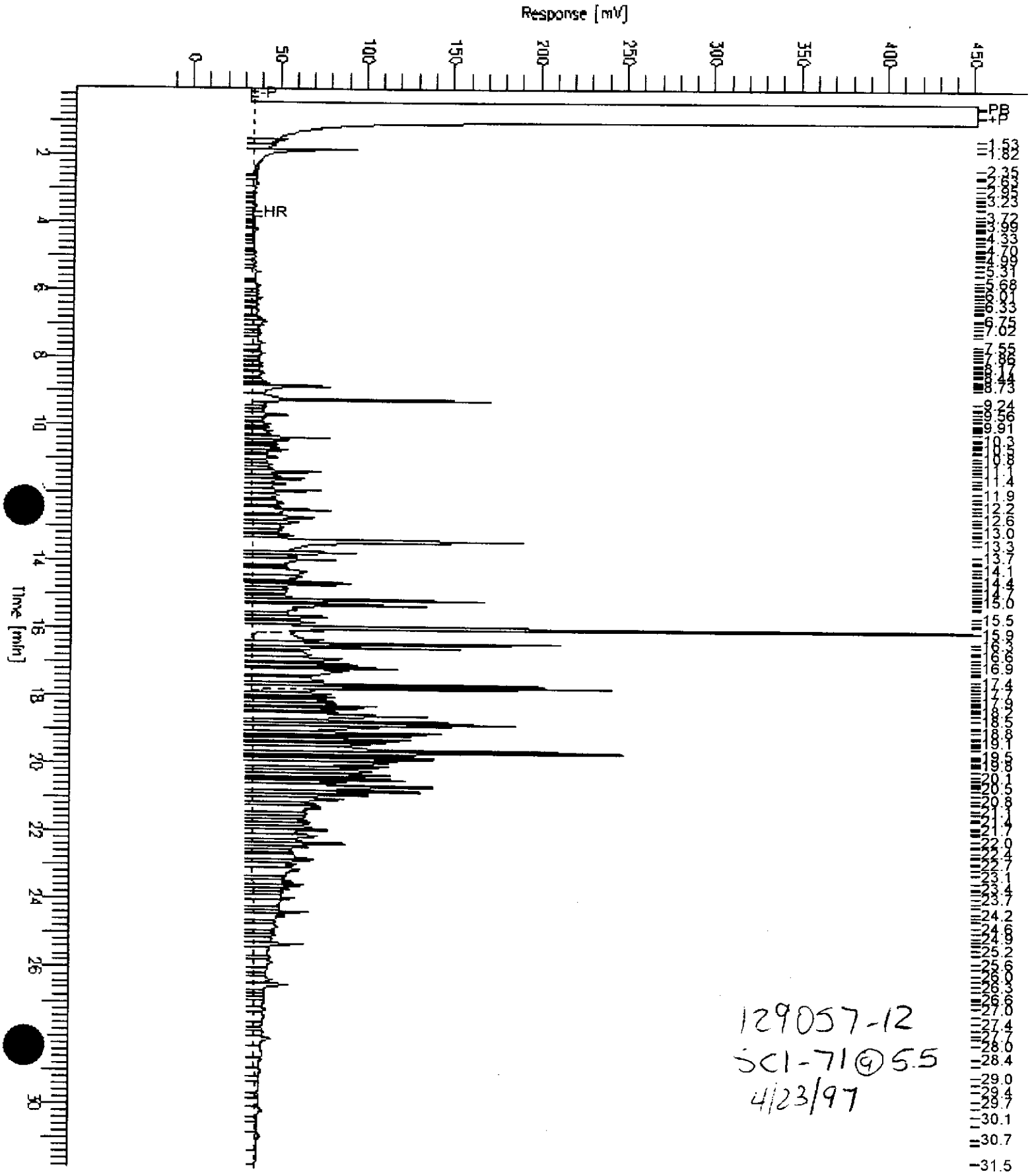


129057-11
SC1-7102
4/23/97

Chromatogram

Sample Name : 129057-012,33642
FileName : G:\GC11\CHB\118B028.RAW
Method : BTEH107.MTH
Start Time : 0.01 min End Time : 31.91 min
Multiplier: 0.0 Plot Offset: -15 mV

Sample #: 33642 Page 1 of 1
Date : 4/29/97 11:19 AM
Time of Injection: 4/29/97 10:19 AM
Low Point : -14.95 mV High Point : 451.63 mV
Plot Scale: 466.6 mV



129057-12
SC1-71 ⑨ 5.5
4/23/97

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-013	SCI TP 15@2.0'	33642	04/23/97	04/25/97	05/02/97	
129057-014	SCI TP 16@1.0'	33642	04/23/97	04/25/97	04/29/97	
129057-015	SCI TP 18@3.5'	33642	04/23/97	04/25/97	04/29/97	
129057-016	SCI TP 18@6.5'	33642	04/23/97	04/25/97	04/29/97	

Matrix: Soil

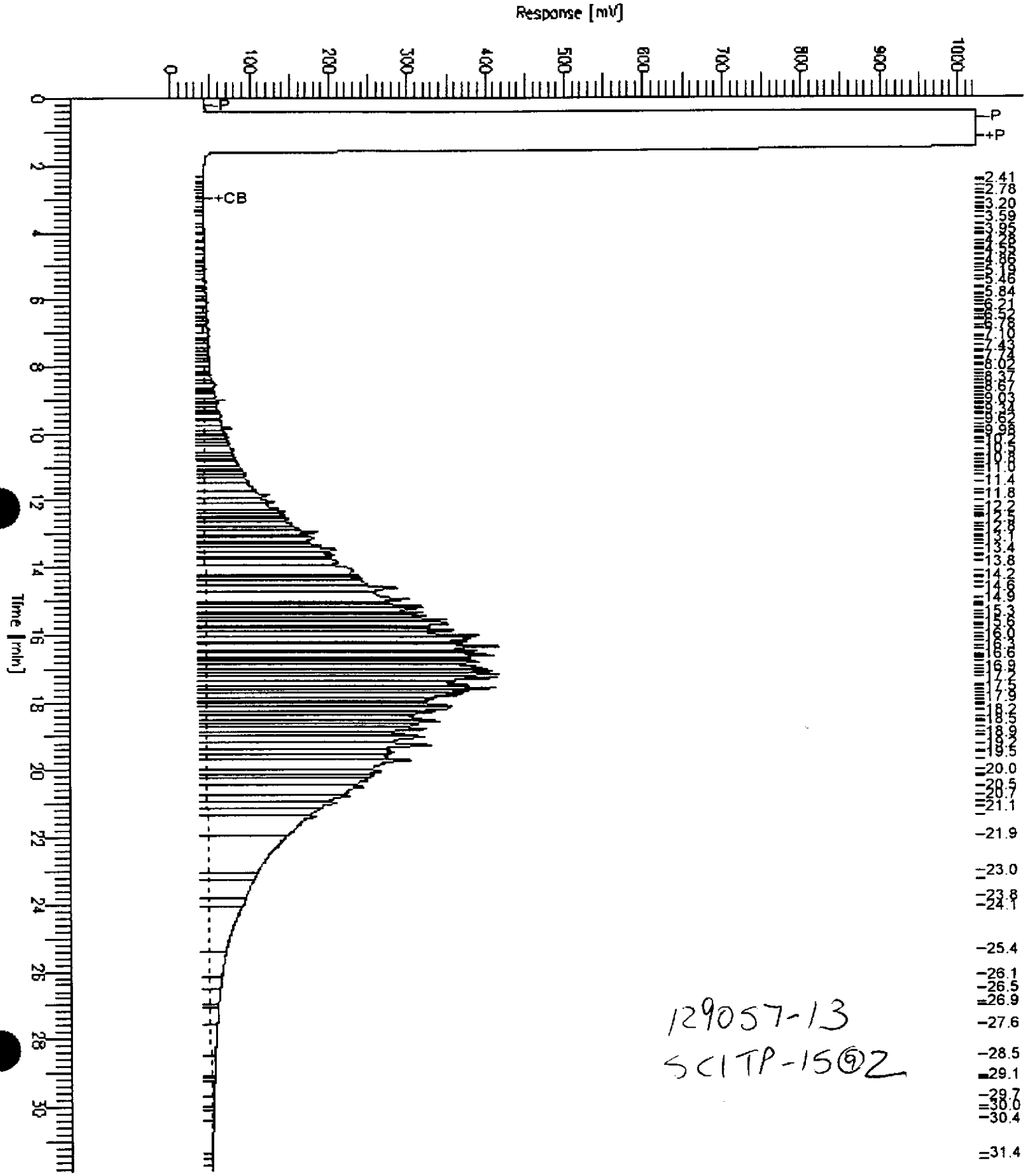
Analyte	Units	129057-013	129057-014	129057-015	129057-016
Diln Fac:		25	100	100	1
Diesel C12-C22	mg/Kg	840 YH	810 YH	10000 LH	66 YH
Motor Oil C22-C50	mg/Kg	13000 YH	20000 YH	11000 YLH	390 YH
Surrogate					
Hexacosane	%REC	DO	DO	DO	97

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 B TEH

Sample Name : 129057-013,33642
FileName : G:\GC15\CHB\121B010.RAW
Method : B122TEH.MTH
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: -10 mV

Sample #: 33642 Page 1 of 1
Date : 5/6/97 09:01 AM
Time of Injection: 5/2/97 12:44 AM
Low Point : -9.57 mV High Point : 1024.00 mV
Plot Scale: 1033.6 mV

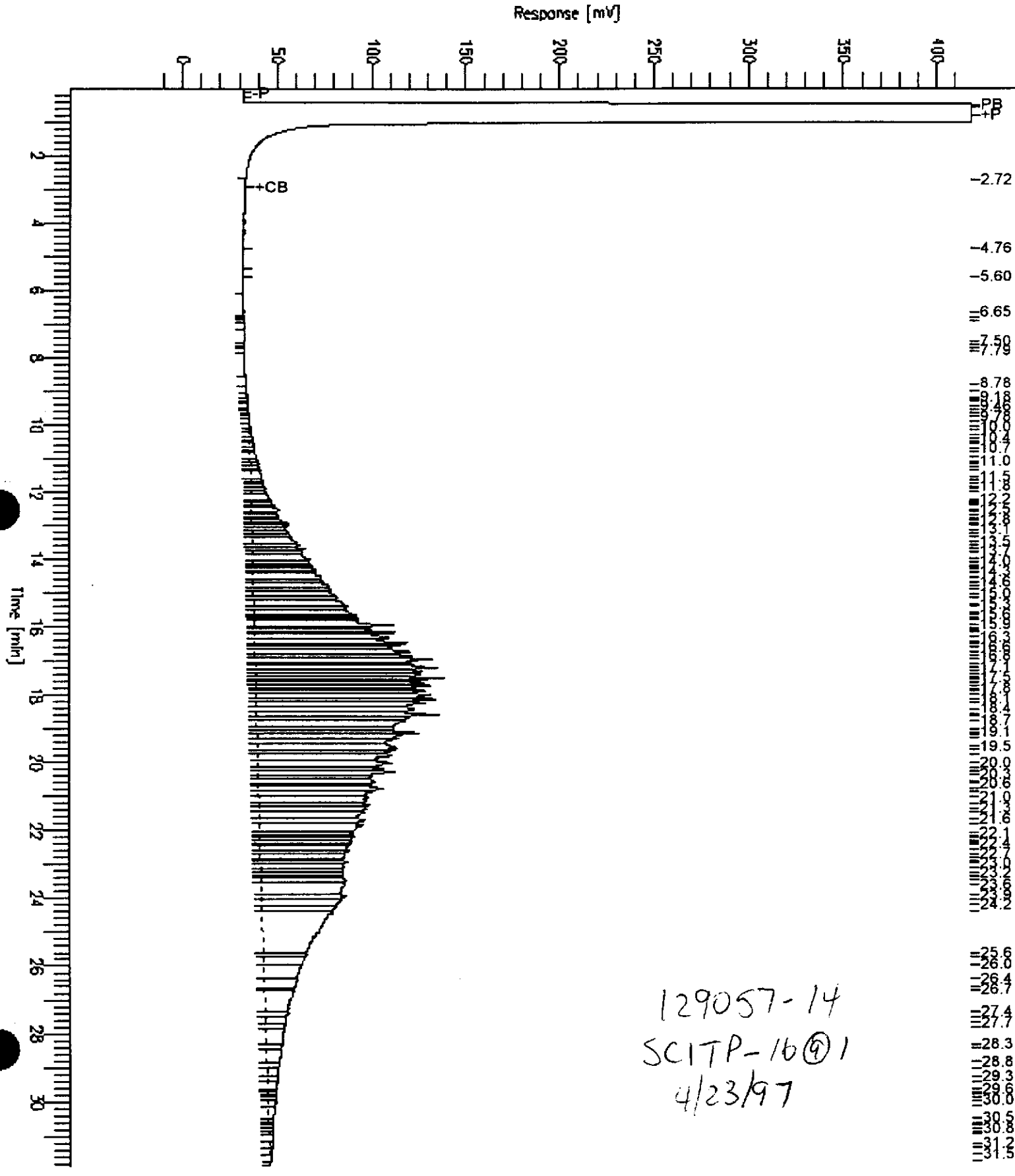


129057-13
SCITP-1502

Chromatogram

Sample Name : 129057-014,33642
FileName : G:\GC11\CHB\118B035.RAW
Method : BTEH107.MTH
rt Time : 0.01 min End Time : 31.91 min
le Factor: 0.0 Plot Offset: -11 mV

Sample #: 500MG/L Page 1 of 1
Date : 4/30/97 01:10 PM
Time of Injection: 4/29/97 03:25 PM
Low Point : -11.00 mV High Point : 418.67 mV
Plot Scale: 429.7 mV

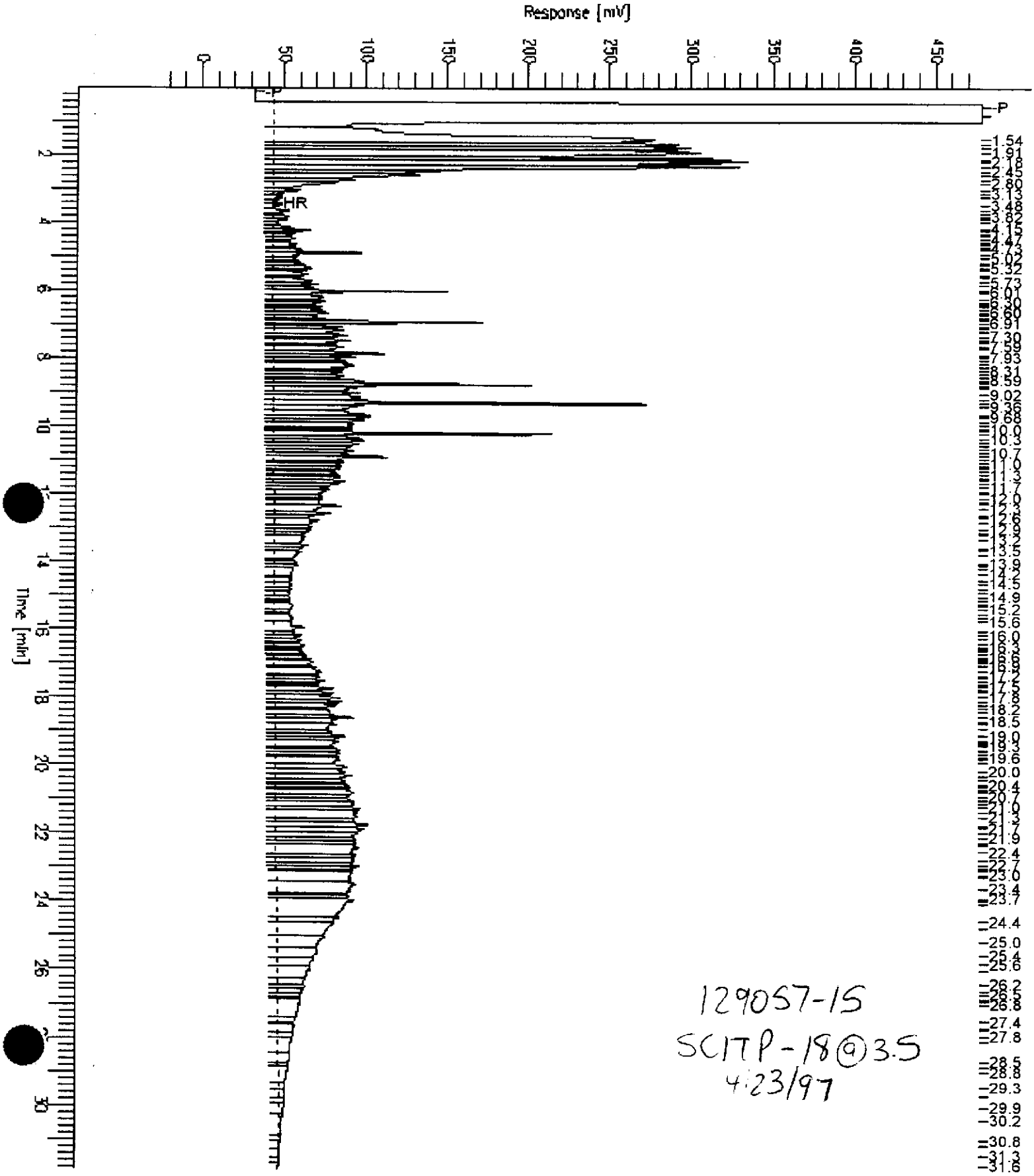


129057-14
SCITP-16@1
4/23/97

Chromatogram

Sample Name : 129057-015,33642
FileName : G:\GC11\CHB\118B036A.RAW
Method : BTEH107.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -20 mV

Sample #: 500MG/L Page 1 of 1
Date : 4/30/97 01:42 PM
Time of Injection: 4/29/97 04:47 PM
Low Point : -20.02 mV High Point : 478.58 mV
Plot Scale: 498.6 mV

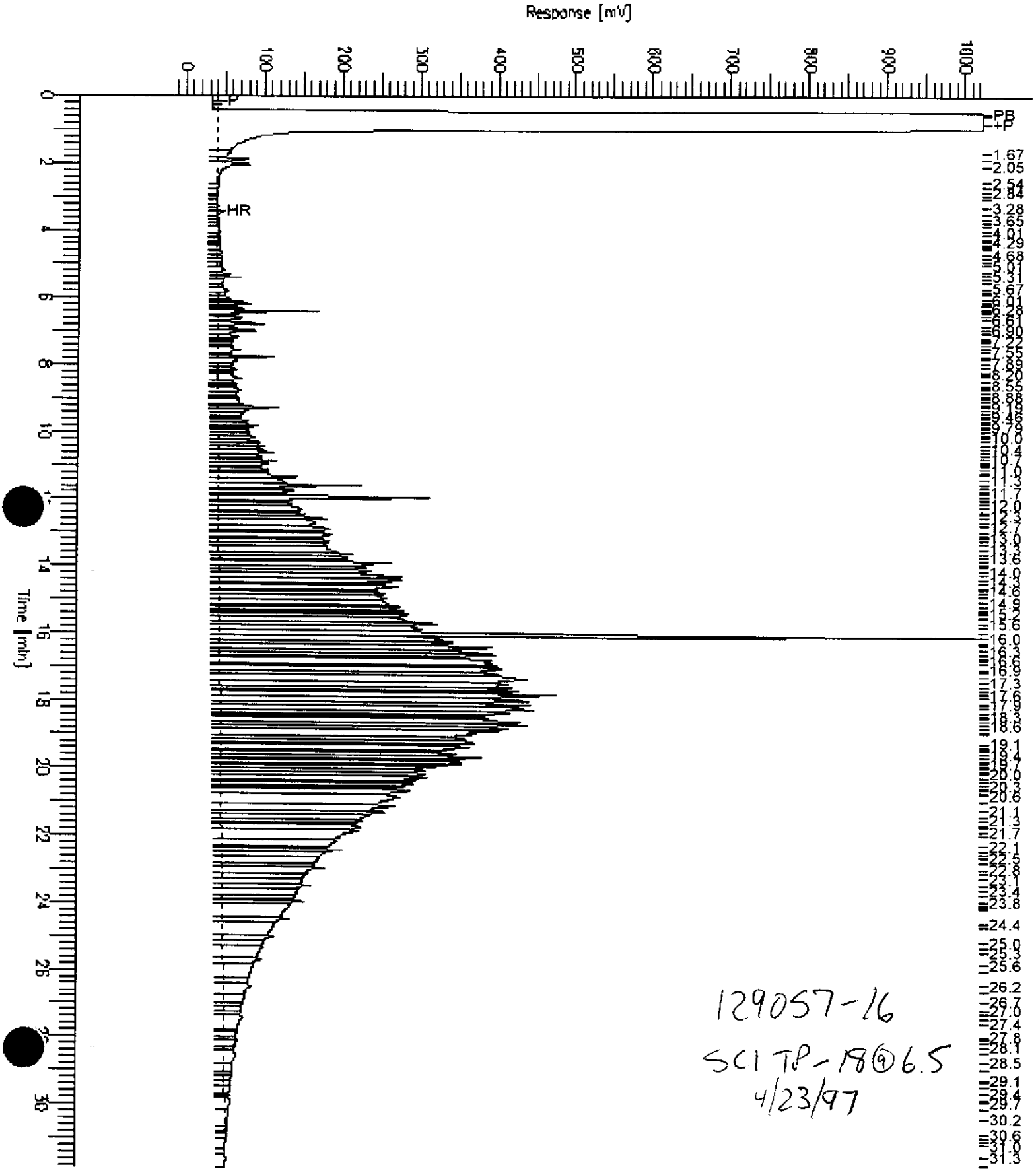


129057-15
SCITP-18@3.5
4/23/97

Chromatogram

Sample Name : 129057-016,33642
FileName : G:\GC11\CHB\118B037.RAW
Method : BTEH107.MTH
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: -20 mV

Sample #: 500MG/L Page 1 of 1
Date : 4/30/97 01:44 PM
Time of Injection: 4/29/97 05:30 PM
Low Point : -19.56 mV High Point : 1024.00 mV
Plot Scale: 1043.6 mV

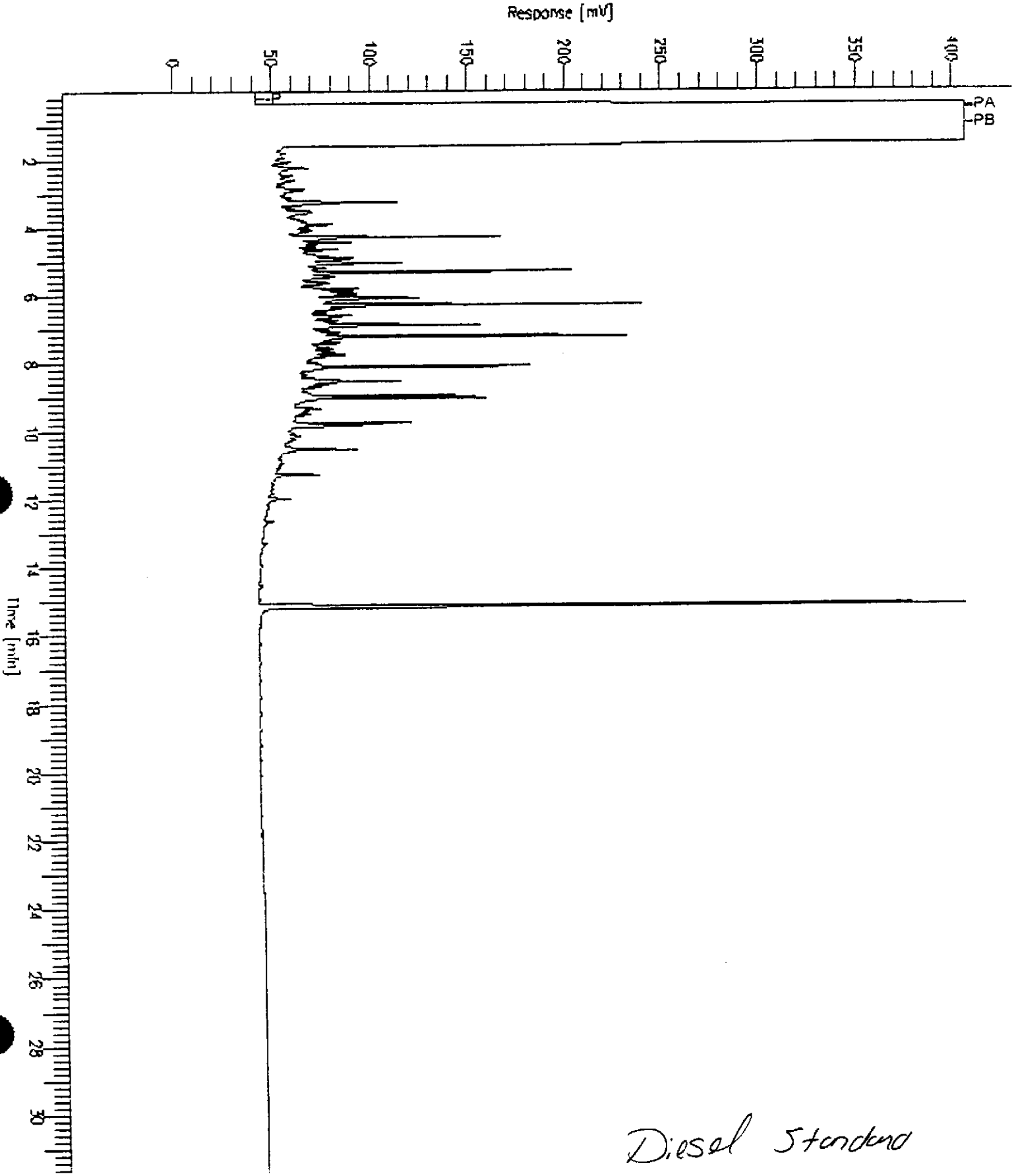


129057-16
SCI TP-1806.5
4/23/97

GC15 Channel B TEH

Sample Name : CCV,97WS3996,DS
FileName : G:\GC15\CHB\121B016.RAW
Method : B122TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: -9 mV

Sample #: 500MG/L
Date : 5/2/97 09:02 AM
Time of Injection: 5/2/97 05:02 AM
Low Point : -9.17 mV High Point : 406.78 mV
Plot Scale: 415.9 mV

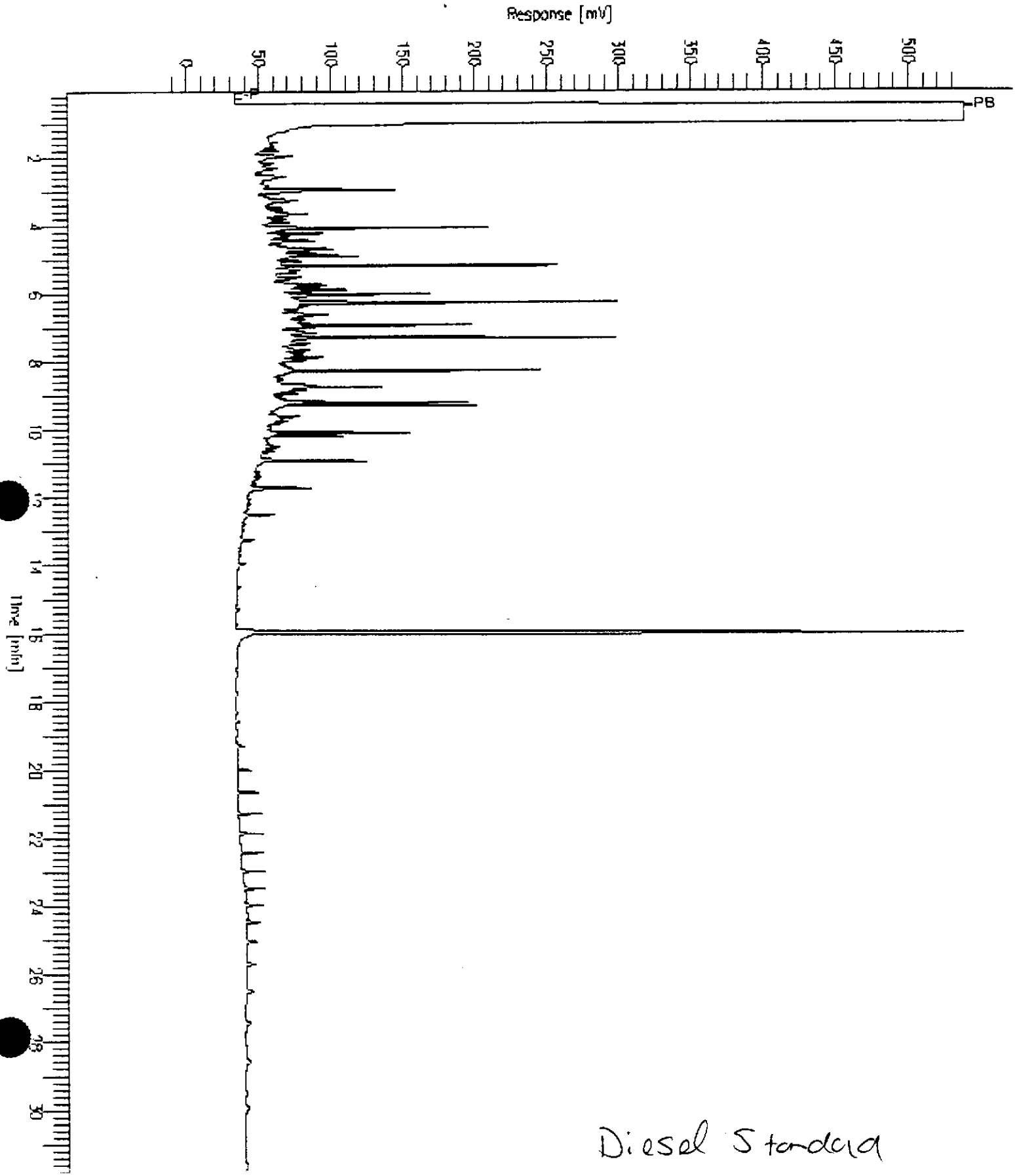


Diesel Standard

Chromatogram

Sample Name : CCV,97WG3996,DS
File Name : G:\GC11\CHB\118B016.RAW
Method : BTEH107.MTH
Start Time : 0.00 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: -19 mV

Sample #: 500MG/L Page 1 of 1
Date : 4/30/97 02:18 PM
Time of Injection: 4/29/97 01:35 AM
Low Point : -19.10 mV High Point : 538.45 mV
Plot Scale: 557.5 mV

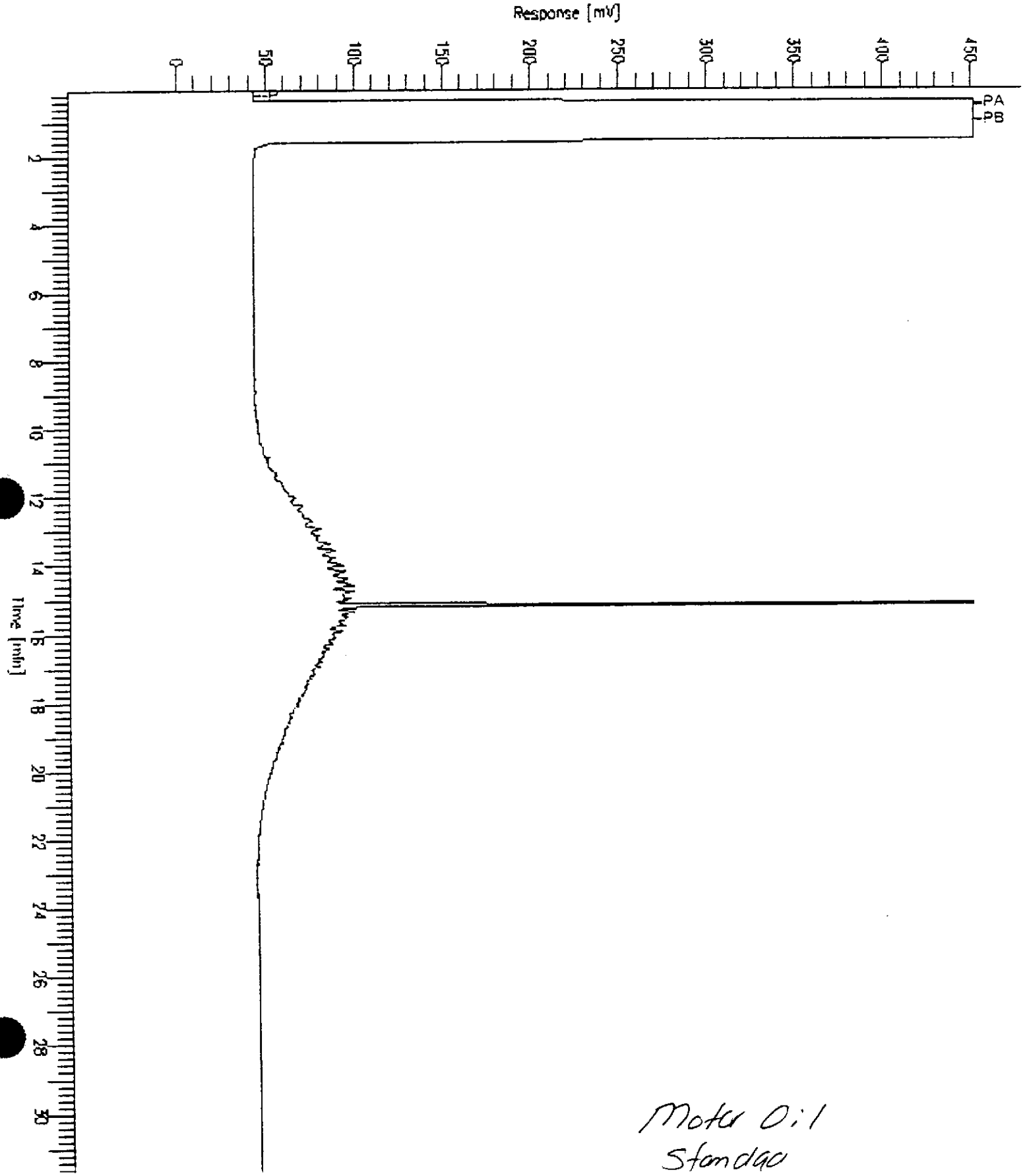


Diesel Standard

GC15 Channel B TEH

Sample Name : CCV,97WS4082,MO
FileName : G:\GC15\CHB\121B018.RAW
Method : B122TEH.MTH
Start Time : 0.07 min End Time : 31.91 min
File Factor: 0.0 Plot Offset: -9 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/2/97 09:02 AM
Time of Injection: 5/2/97 06:28 AM
Low Point : -8.85 mV High Point : 451.82 mV
Plot Scale: 460.7 mV

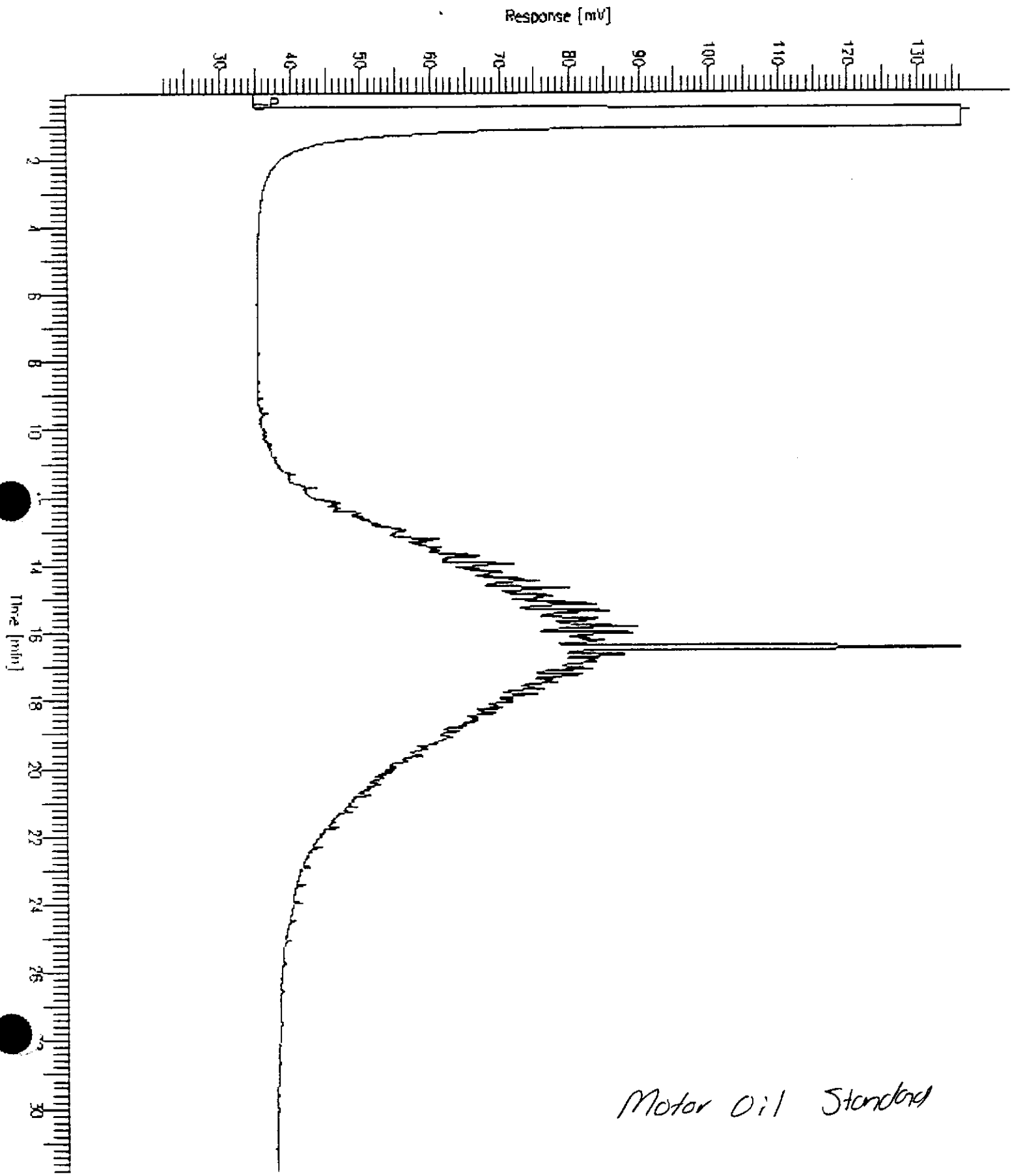


Motor Oil
Standard

Chromatogram

Sample Name : CCV,97WS4082,MO
FileName : G:\GC13\CHA\119A017.RAW
Method : ATEH120.MTH
Start Time : 0.07 min End Time : 31.85 min
Slope Factor: 0.0 Plot Offset: 21 mV

Sample #: 500MG/L Page 1 of 1
Date : 4/30/97 12:17 PM
Time of Injection: 4/30/97 03:20 AM
Low Point : 21.02 mV High Point : 136.27 mV
Plot Scale: 115.3 mV



Motor Oil Standard

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	CA LUFT
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Soil	Prep Date:	04/25/97
Batch#:	33642	Analysis Date:	04/29/97
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC44785

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

Surrogate	%Rec	Recovery Limits
Hexacosane	82	60-140

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	CA LUFT
Location:	9th Ave. Terminal		

LABORATORY CONTROL SAMPLE

Matrix:	Soil	Prep Date:	04/25/97
Batch#:	33642	Analysis Date:	04/29/97
Units:	mg/Kg		
Diln Fac:	1		

LCS Lab ID: QC44786

Analyte	Result	Spike Added	%Rec #	Limits
Diesel C12-C22	44.3	49.5	90	60-140
Surrogate	**%Rec**	**Limits**		
Hexacosane	84	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 #: 129057 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCI 68@1.5
Lab ID: 129057-005
Matrix: Soil
Batch#: 33642
Units: mg/Kg
Diln Fac: 1

Sample Date: 04/23/97
Received Date: 04/24/97
Prep Date: 04/25/97
Analysis Date: 04/30/97

MS Lab ID: QC44787

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Diesel C12-C22	49.5	9.29	59.32	101	60-140
Surrogate	%Rec	Limits			
Hexacosane	86	60-140			

MSD Lab ID: QC44788

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	49.5	57.35	97	60-140	3	30
Surrogate	%Rec	Limits				
Hexacosane	85	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-001	SCI 66@1.0	33725	04/23/97	05/01/97	05/01/97	
129057-002	SCI 66@5.0	33725	04/23/97	05/01/97	05/01/97	
129057-003	SCI 67@1.5	33725	04/23/97	05/01/97	05/01/97	
129057-004	SCI 67@9.5	33725	04/23/97	05/01/97	05/01/97	

Matrix: Soil

Analyte	Units	129057-001	129057-002	129057-003	129057-004
Diln Fac:		1	1	1	1
Benzene	ug/Kg	<5	<5	<5	<5
Toluene	ug/Kg	<5	<5	<5	<5
Ethylbenzene	ug/Kg	<5	<5	<5	<5
m,p-Xylenes	ug/Kg	<5	<5	<5	<5
o-Xylene	ug/Kg	<5	<5	<5	<5
Surrogate					
Trifluorotoluene	%REC	83	83	82	83
Bromobenzene	%REC	102	113	112	113

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-005	SCI 68@1.5	33725	04/23/97	05/01/97	05/01/97	
129057-006	SCI 68@4.5	33754	04/23/97	05/01/97	05/01/97	
129057-007	SCI 69@1.5	33754	04/23/97	05/01/97	05/01/97	
129057-008	SCI 69@5.5	33754	04/23/97	05/01/97	05/01/97	

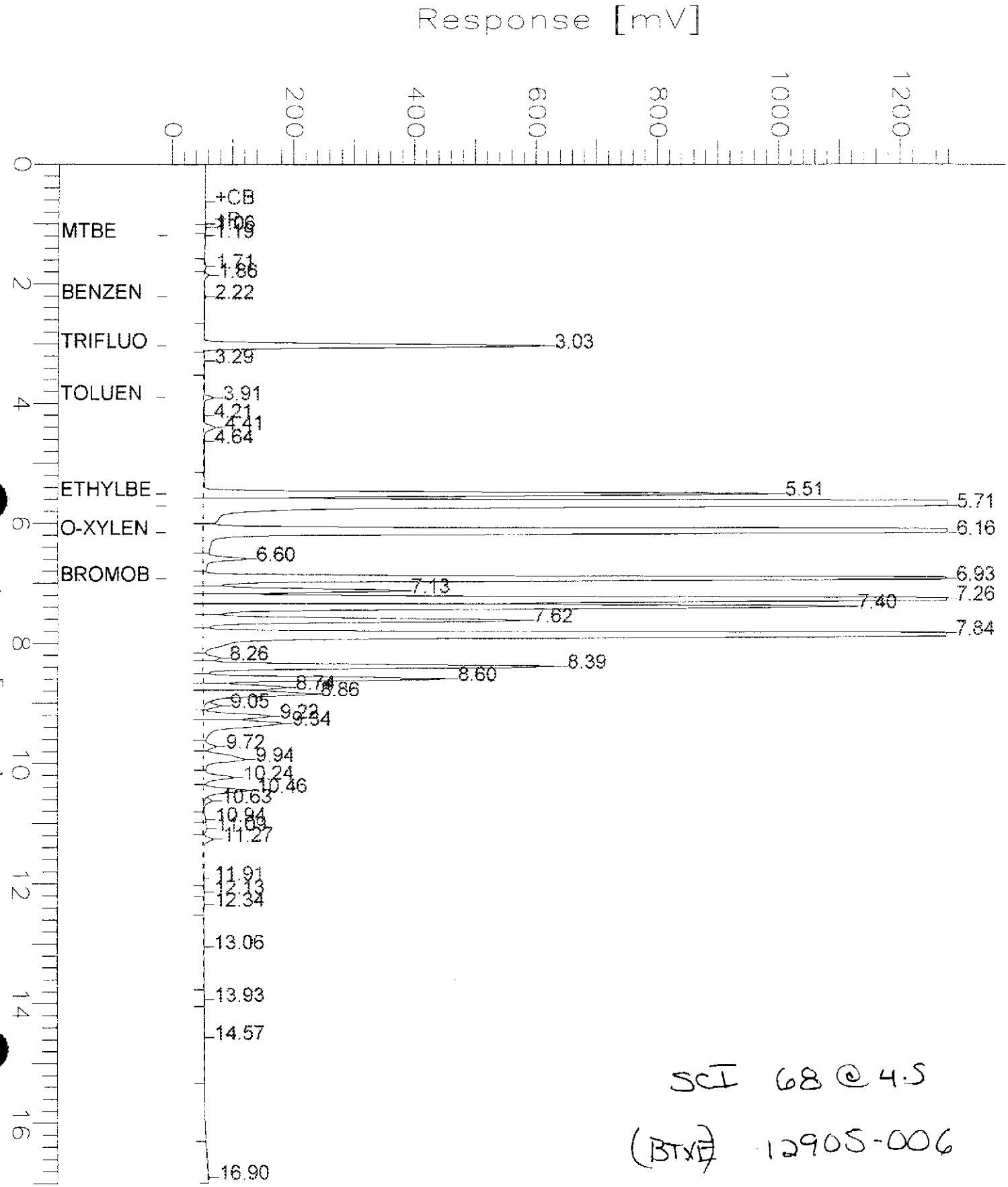
Matrix: Soil

Analyte Diln Fac:	Units	129057-005 1	129057-006 2	129057-007 1	129057-008 1
Benzene	ug/Kg	<5	<10	<5	<5
Toluene	ug/Kg	<5	19	<5	<5
Ethylbenzene	ug/Kg	<5	1100	<5	<5
m,p-Xylenes	ug/Kg	<5	2100	<5	<5
o-Xylene	ug/Kg	<5	1900	<5	<5
Surrogate					
Trifluorotoluene	%REC	83	103	81	81
Bromobenzene	%REC	114	113	101	104

GC04 BTXE 'L' File- Rtx624,PID

Sample Name : D,129057-006,33754
FileName : G:\GC04\DATA\121L014.raw
Method : LB_MAR14
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: -8 mV

Sample #: Page 1 of 1
Date : 5/1/97 08:46 PM
Time of Injection: 5/1/97 08:28 PM
Low Point : -7.55 mV High Point : 1280.32 mV
Plot Scale: 1287.9 mV



SCI 68 @ 4.5

(BTXE) 12905-006

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-009	SCI 70@2.0	33754	04/23/97	05/01/97	05/01/97	
129057-010	SCI 70@4.5	33754	04/23/97	05/01/97	05/01/97	
129057-011	SCI 71@2.0	33754	04/23/97	05/01/97	05/01/97	
129057-012	SCI 71@5.5	33754	04/23/97	05/01/97	05/01/97	

Matrix: Soil

Analyte Diln Fac:	Units	129057-009 1	129057-010 1	129057-011 1	129057-012 1
Benzene	ug/Kg	<5	<5	<5	<5
Toluene	ug/Kg	<5	<5	<5	<5
Ethylbenzene	ug/Kg	<5	<5	<5	<5
m,p-Xylenes	ug/Kg	<5	<5	<5	<5
o-Xylene	ug/Kg	<5	<5	<5	<5
Surrogate					
Trifluorotoluene	%REC	82	83	85	90
Bromobenzene	%REC	104	105	109	113

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129057-013	SCI TP 15@2.0'	33782	04/23/97	05/05/97	05/05/97	
129057-014	SCI TP 16@1.0'	33754	04/23/97	05/02/97	05/02/97	
129057-015	SCI TP 18@3.5'	33754	04/23/97	05/02/97	05/02/97	
129057-016	SCI TP 18@6.5'	33782	04/23/97	05/02/97	05/02/97	

Matrix: Soil

Analyte Diln Fac:	Units	129057-013 1	129057-014 1	129057-015 500	129057-016 1
Benzene	ug/Kg	9.8	<5	<2500	<5
Toluene	ug/Kg	<5	<5	<2500	<5
Ethylbenzene	ug/Kg	<5	<5	<2500	<5
m,p-Xylenes	ug/Kg	<5	<5	<2500	<5
o-Xylene	ug/Kg	<5	<5	<2500	<5
Surrogate					
Trifluorotoluene	%REC	81	80	93	89
Bromobenzene	%REC	113	98	114	114

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33725
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

MB Lab ID: QC45107

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	83	52-127
Bromobenzene	103	45-140

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33754
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

MB Lab ID: QC45224

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	81	52-127
Bromobenzene	100	45-140

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33782
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/05/97
Analysis Date: 05/05/97

MB Lab ID: QC45337

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	88	52-127
Bromobenzene	113	45-140

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33725
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

LCS Lab ID: QC45106

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	106.4	100	106	80-120
Toluene	107.5	100	107	80-120
Ethylbenzene	107.8	100	108	80-120
m,p-Xylenes	222.8	200	111	80-120
o-Xylene	114.8	100	115	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	82	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 5 outside limits

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33754
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

LCS Lab ID: QC45223

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	108.3	100	108	80-120
Toluene	106.8	100	107	80-120
Ethylbenzene	108.4	100	108	80-120
m,p-Xylenes	230.2	200	115	80-120
o-Xylene	114.8	100	115	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	89	52-127		
Bromobenzene	111	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 5 outside limits

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33782
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

LCS Lab ID: QC45336

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	110	100	110	80-120
Toluene	114.2	100	114	80-120
Ethylbenzene	120.4	100	120	80-120
m,p-Xylenes	229.9	200	115	80-120
o-Xylene	119.5	100	120	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	94	52-127
Bromobenzene	114	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 5 outside limits

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCI 66@1.0	Sampled:	04/23/97
Lab ID:	129057-001	Received:	04/24/97
Matrix:	Soil	Extracted:	04/25/97
Batch#:	33644	Analyzed:	05/02/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	95	29-108
Decachlorobiphenyl	96	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCI 67@9.5	Sampled:	04/23/97
Lab ID:	129057-004	Received:	04/24/97
Matrix:	Soil	Extracted:	04/25/97
Batch#:	33644	Analyzed:	05/03/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	78	29-108
Decachlorobiphenyl	99	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCI 68@4.5	Sampled:	04/23/97
Lab ID:	129057-006	Received:	04/24/97
Matrix:	Soil	Extracted:	04/25/97
Batch#:	33644	Analyzed:	05/02/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	88	29-108
Decachlorobiphenyl	98	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCI 69@1.5	Sampled:	04/23/97
Lab ID:	129057-007	Received:	04/24/97
Matrix:	Soil	Extracted:	04/25/97
Batch#:	33644	Analyzed:	05/03/97
Units:	ug/Kg		
Diln Fac:	1		

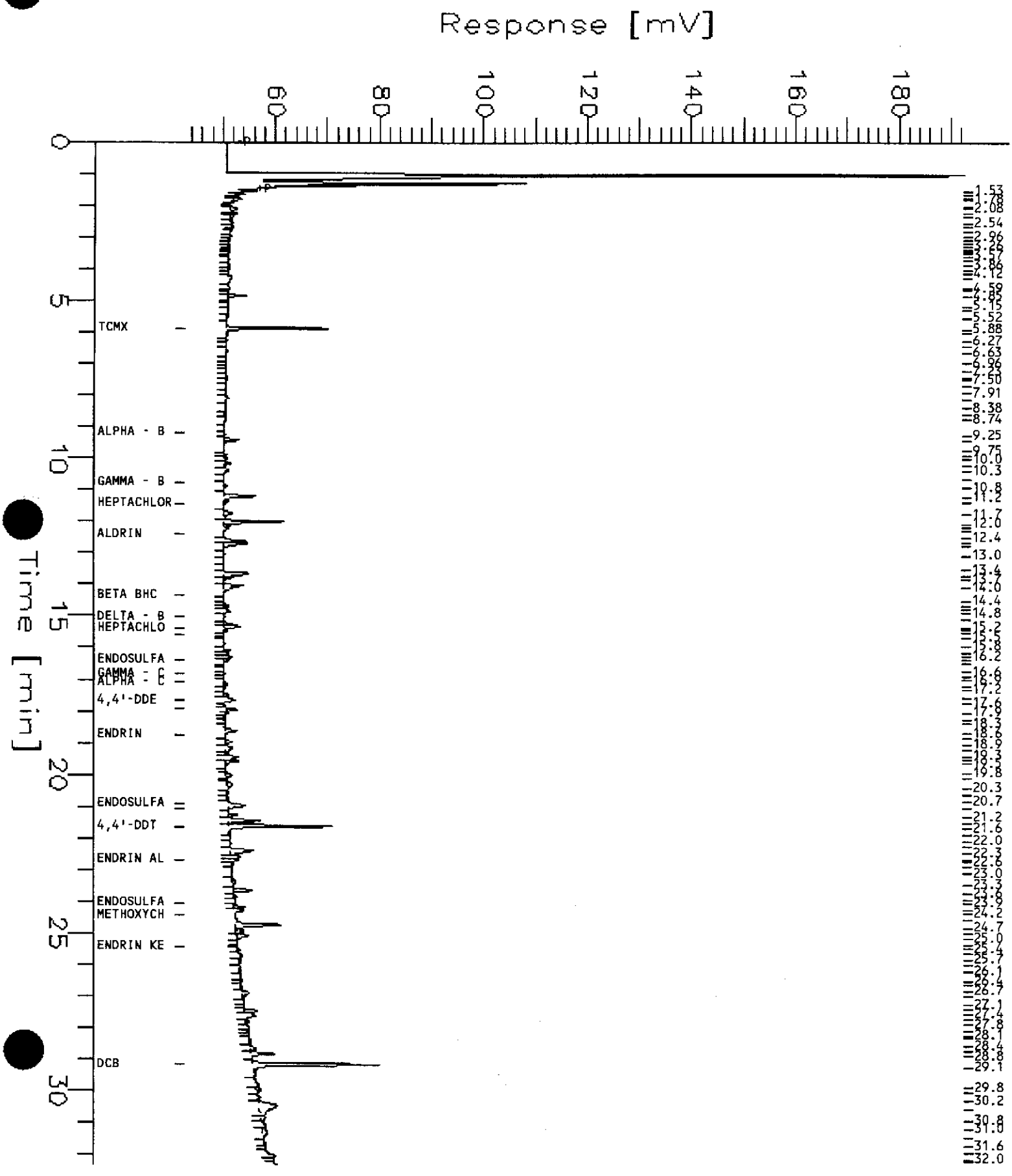
Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	20	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	24	12

Surrogate	%Recovery	Recovery Limits
TCMX	91	29-108
Decachlorobiphenyl	94	30-125

GC14 RTx1701.32mm vol in: 3ul

Sample Name : 129057-007
FileName : g:\gc14\cha\120A097.raw
Method : PEST-CNT.ins
Start Time : 0.00 min End Time : 32.35 min
Scale Factor: -1.0 Plot Offset: 43 mV

Sample #: 33644 Page 1 of 1
Date : 5/3/97 07:27 AM
Time of Injection: 5/3/97 06:55 AM
Low Point : 42.70 mV High Point : 192.70 mV
Plot Scale: 150.0 mV



Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCI 70@4.5	Sampled:	04/23/97
Lab ID:	129057-010	Received:	04/24/97
Matrix:	Soil	Extracted:	04/25/97
Batch#:	33644	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	81	29-108
Decachlorobiphenyl	110	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCI TP 15@2.0'	Sampled:	04/23/97
Lab ID:	129057-013	Received:	04/24/97
Matrix:	Soil	Extracted:	04/25/97
Batch#:	33644	Analyzed:	05/03/97
Units:	ug/Kg		
Diln Fac:	400		

Analyte	Result	Reporting Limit
alpha-BHC	ND	1200
beta-BHC	ND	1200
gamma-BHC	ND	1200
delta-BHC	ND	1200
Heptachlor	ND	1200
Aldrin	ND	1200
Heptachlor epoxide B	ND	1200
Heptachlor epoxide A	ND	1200
Endosulfan I	ND	1200
Dieldrin	ND	2400
4,4'-DDE	ND	2400
Endrin	ND	2400
Endosulfan II	ND	2400
Endosulfan sulfate	ND	2400
4,4'-DDD	ND	2400
Endrin aldehyde	ND	2400
4,4'-DDT	ND	2400
Chlordane	ND	12000
Methoxychlor	ND	12000
Toxaphene	ND	24000
Aroclor-1016	ND	4800
Aroclor-1221	ND	9600
Aroclor-1232	ND	4800
Aroclor-1242	ND	4800
Aroclor-1248	ND	4800
Aroclor-1254	ND	4800
Aroclor-1260	ND	4800

Surrogate	%Recovery	Recovery Limits
TCMX	DO*	29-108
Decachlorobiphenyl	DO*	30-125

* Values outside of QC limits
DO: Surrogate diluted out

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCI TP 16@1.0'	Sampled:	04/23/97
Lab ID:	129057-014	Received:	04/24/97
Matrix:	Soil	Extracted:	04/25/97
Batch#:	33644	Analyzed:	05/03/97
Units:	ug/Kg		
Diln Fac:	400		

Analyte	Result	Reporting Limit
alpha-BHC	ND	1200
beta-BHC	ND	1200
gamma-BHC	ND	1200
delta-BHC	ND	1200
Heptachlor	ND	1200
Aldrin	ND	1200
Heptachlor epoxide B	ND	1200
Heptachlor epoxide A	ND	1200
Endosulfan I	ND	1200
Dieldrin	ND	2400
4,4'-DDE	ND	2400
Endrin	ND	2400
Endosulfan II	ND	2400
Endosulfan sulfate	ND	2400
4,4'-DDD	ND	2400
Endrin aldehyde	ND	2400
4,4'-DDT	ND	2400
Chlordane	ND	12000
Methoxychlor	ND	12000
Toxaphene	ND	24000
Aroclor-1016	ND	4800
Aroclor-1221	ND	9600
Aroclor-1232	ND	4800
Aroclor-1242	ND	4800
Aroclor-1248	ND	4800
Aroclor-1254	ND	4800
Aroclor-1260	ND	4800

Surrogate	%Recovery	Recovery Limits
TCMX	DO*	29-108
Decachlorobiphenyl	DO*	30-125

* Values outside of QC limits
DO: Surrogate diluted out

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCI TP 18@3.5'	Sampled:	04/23/97
Lab ID:	129057-015	Received:	04/24/97
Matrix:	Soil	Extracted:	04/25/97
Batch#:	33644	Analyzed:	05/03/97
Units:	ug/Kg		
Diln Fac:	200		

Analyte	Result	Reporting Limit
alpha-BHC	ND	600
beta-BHC	ND	600
gamma-BHC	ND	600
delta-BHC	ND	600
Heptachlor	ND	600
Aldrin	ND	600
Heptachlor epoxide B	ND	600
Heptachlor epoxide A	ND	600
Endosulfan I	ND	600
Dieldrin	ND	1200
4,4'-DDE	ND	1200
Endrin	ND	1200
Endosulfan II	ND	1200
Endosulfan sulfate	ND	1200
4,4'-DDD	ND	1200
Endrin aldehyde	ND	1200
4,4'-DDT	ND	1200
Chlordane	ND	6000
Methoxychlor	ND	6000
Toxaphene	ND	12000
Aroclor-1016	ND	2400
Aroclor-1221	ND	4800
Aroclor-1232	ND	2400
Aroclor-1242	ND	2400
Aroclor-1248	ND	2400
Aroclor-1254	ND	2400
Aroclor-1260	ND	2400

Surrogate	%Recovery	Recovery Limits
TCMX	DO*	29-108
Decachlorobiphenyl	DO*	30-125

* Values outside of QC limits
DO: Surrogate diluted out

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33644
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/25/97
Analysis Date: 05/01/97

MB Lab ID: QC44793

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Rec	Recovery Limits
TCMX	93	29-108
Decachlorobiphenyl	92	30-125

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33644
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/25/97
Analysis Date: 05/01/97

LCS Lab ID: QC44794

Analyte	Result	Spike Added	%Rec #	Limits
gamma-BHC	15.86	17	95	49-115
Heptachlor	15.72	17	94	51-119
Aldrin	16.18	17	97	55-112
Dieldrin	16.6	17	100	54-123
Endrin	17.24	17	103	63-128
4,4'-DDT	15.86	17	95	57-131

Surrogate	%Rec	Limits
TCMX	96	29-108
Decachlorobiphenyl	93	30-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 6 outside limits

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129032-001
Matrix: Soil
Batch#: 33644
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/21/97
Received Date: 04/22/97
Prep Date: 04/25/97
Analysis Date: 05/02/97

MS Lab ID: QC44795

Analyte	Spike Added	Sample	MS	%Rec #	Limits
gamma-BHC	17	<3	14.96	90	53-124
Heptachlor	17	<3	15.04	90	55-128
Aldrin	17	<3	15.74	94	49-128
Dieldrin	17	<6	16.27	98	54-128
Endrin	17	<6	16.91	101	69-131
4,4'-DDT	17	<6	15.78	95	53-144

Surrogate	%Rec	Limits
TCMX	88	29-108
Decachlorobiphenyl	85	30-125

MSD Lab ID: QC44796

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
gamma-BHC	17	16.78	101	53-124	11	35
Heptachlor	17	16.79	101	55-128	11	35
Aldrin	17	17.62	106	49-128	11	35
Dieldrin	17	17.65	106	54-128	8	35
Endrin	17	18.61	112	69-131	10	35
4,4'-DDT	17	17.65	106	53-144	11	35

Surrogate	%Rec	Limits
TCMX	97	29-108
Decachlorobiphenyl	94	30-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCI 67@9.5
Lab ID: 129057-004
Matrix: Soil
Batch#: 33639
Units: ug/Kg
Diln Fac: 1

Sampled: 04/23/97
Received: 04/24/97
Extracted: 04/25/97
Analyzed: 04/25/97

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	106	68-126
Toluene-d8	87	87-125
Bromofluorobenzene	99	79-122

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCI 68@4.5
Lab ID: 129057-006
Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 2.5

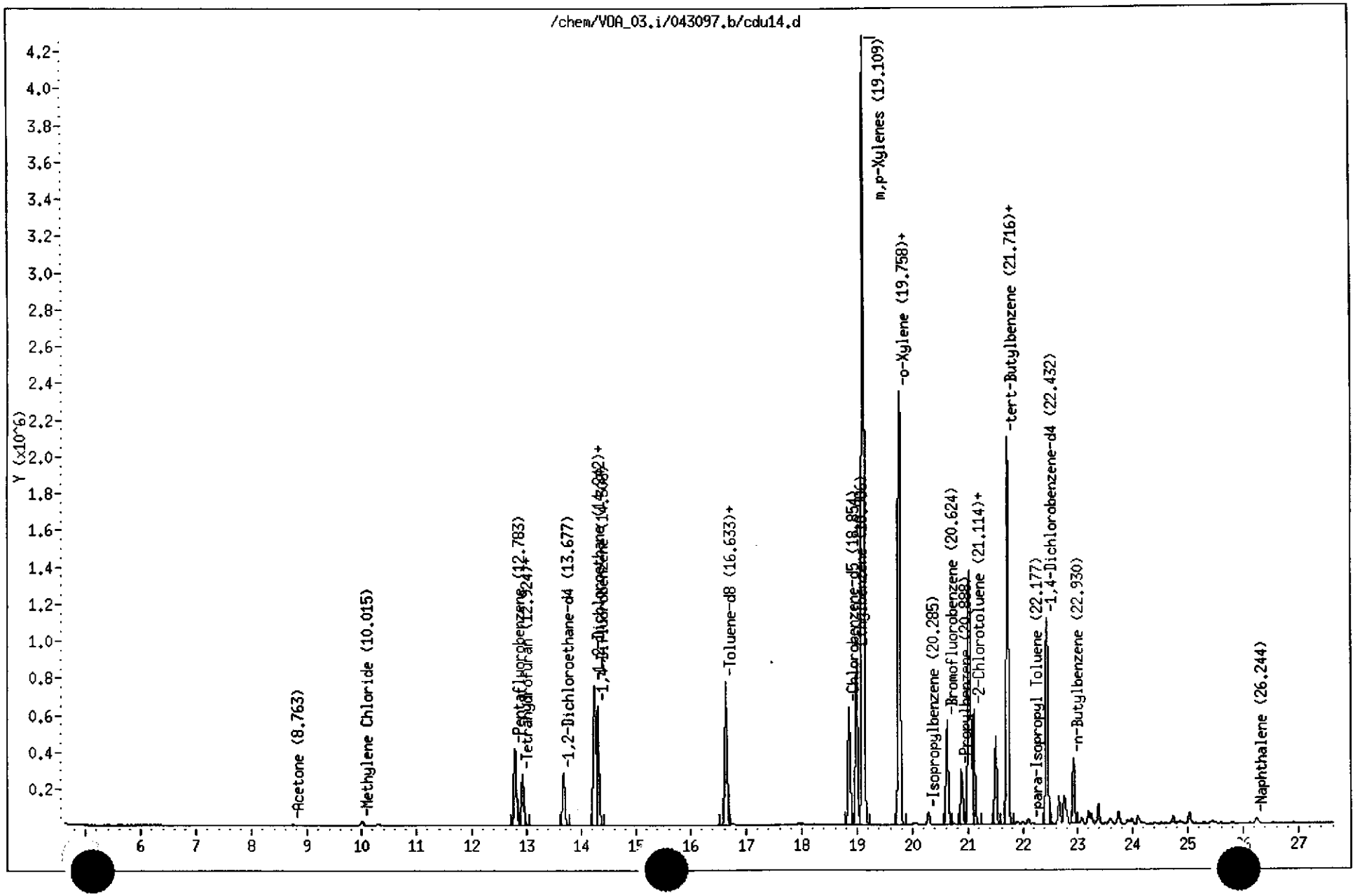
Sampled: 04/23/97
Received: 04/24/97
Extracted: 04/30/97
Analyzed: 04/30/97

Analyte	Result	Reporting Limit
Chloromethane	ND	25
Bromomethane	ND	25
Vinyl Chloride	ND	25
Chloroethane	ND	25
Methylene Chloride	ND	50
Acetone	ND	50
Carbon Disulfide	ND	13
Trichlorofluoromethane	ND	13
1,1-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
trans-1,2-Dichloroethene	ND	13
cis-1,2-Dichloroethene	ND	13
Chloroform	ND	13
Freon 113	ND	13
1,2-Dichloroethane	ND	13
2-Butanone	ND	25
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
Vinyl Acetate	ND	130
Bromodichloromethane	ND	13
1,2-Dichloropropane	ND	13
cis-1,3-Dichloropropene	ND	13
Trichloroethene	ND	13
Dibromochloromethane	ND	13
1,1,2-Trichloroethane	ND	13
Benzene	ND	13
trans-1,3-Dichloropropene	ND	13
Bromoform	ND	13
2-Hexanone	ND	25
4-Methyl-2-Pentanone	ND	25
1,1,2,2-Tetrachloroethane	ND	13
Tetrachloroethene	ND	13
Toluene	ND	13
Chlorobenzene	ND	13
Ethylbenzene	180	13
Styrene	ND	13
m,p-Xylenes	920	13
o-Xylene	480	13

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	94	68-126
Toluene-d8	103	87-125
Bromofluorobenzene	104	79-122

Data File: /chem/VOA_03.i/043097.b/cdu14.d
Date : 30-APR-97 18:25
Client ID: DYNA P&T
Sample Info: S,129057-006
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_03.i
Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCI TP 15@2.0'
Lab ID: 129057-013
Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Sampled: 04/23/97
Received: 04/24/97
Extracted: 04/30/97
Analyzed: 04/30/97

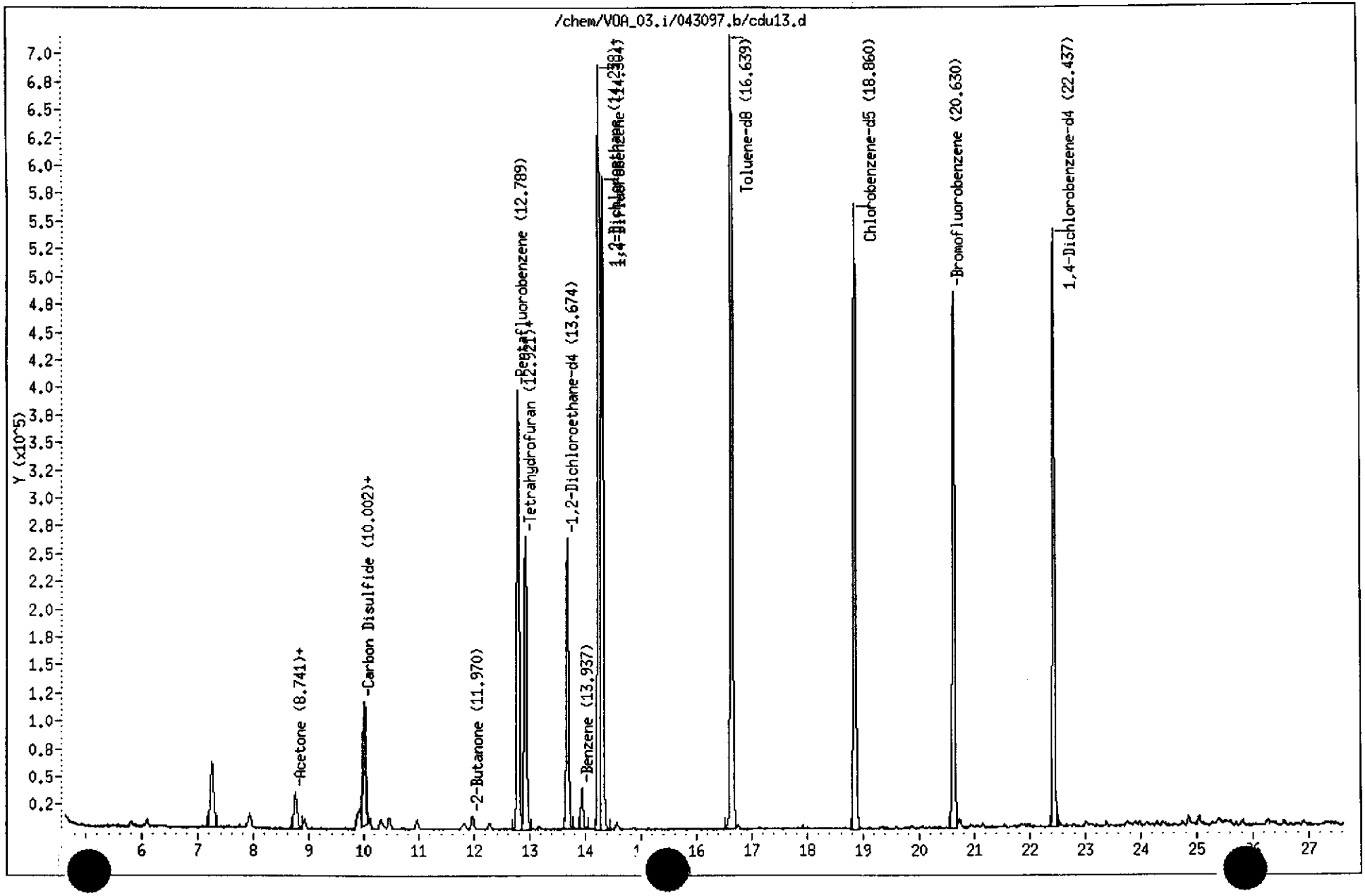
Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	31	20
Carbon Disulfide	2.5 J	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	9.0 J	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	3.6 J	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	98	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	106	79-122

J: Estimated Value

Data File: /chem/VOA_03.i/043097.b/cdu13.d
Date : 30-APR-97 17:49
Client ID: DYNA P&T
Sample Info: S,129057-013
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_03.i
Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCI TP 16@1.0'
Lab ID: 129057-014
Matrix: Soil
Batch#: 33639
Units: ug/Kg
Diln Fac: 1

Sampled: 04/23/97
Received: 04/24/97
Extracted: 04/25/97
Analyzed: 04/25/97

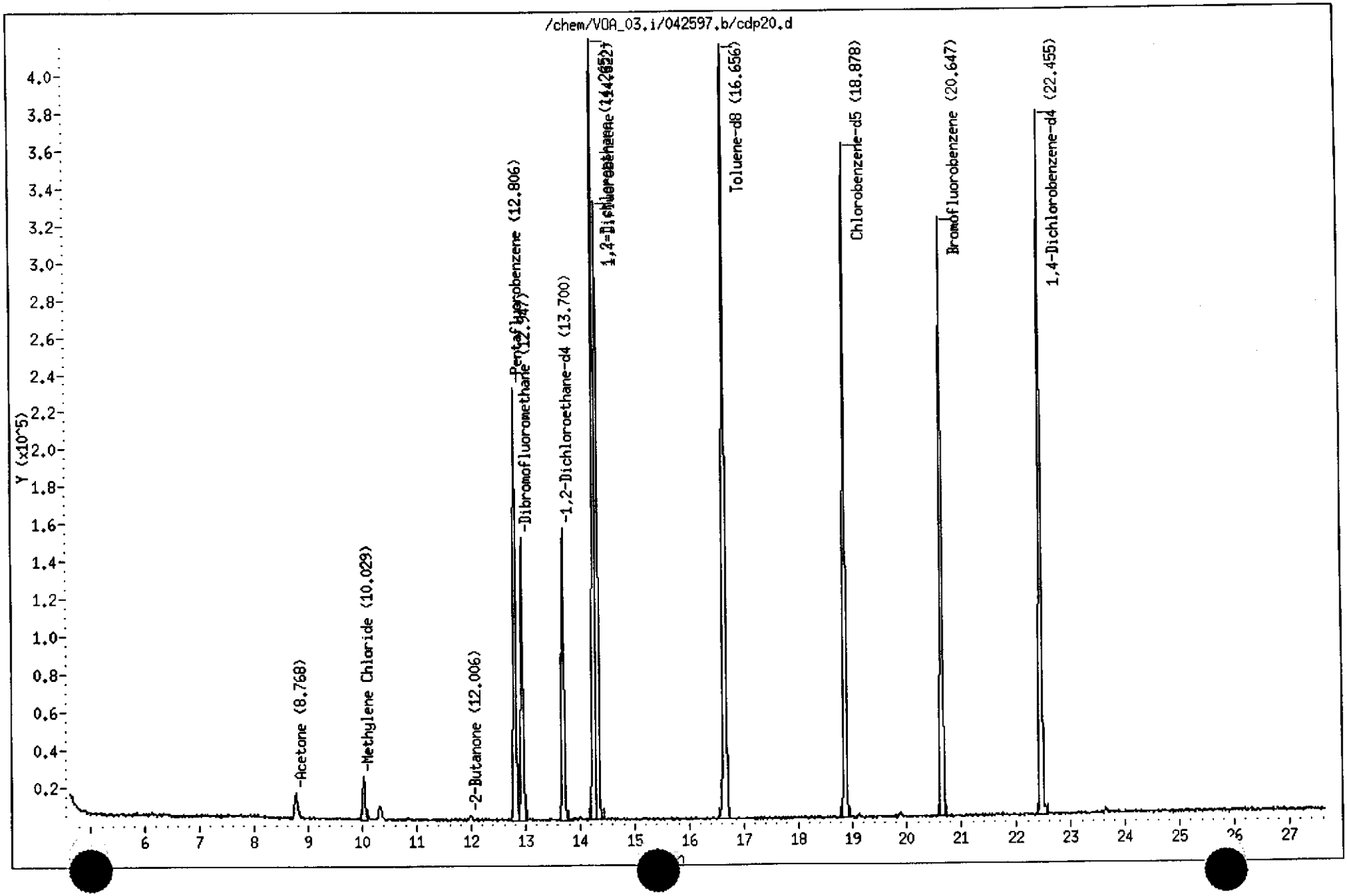
Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	24	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	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	99	68-126
Toluene-d8	106	87-125
Bromofluorobenzene	97	79-122

Data File: /chem/VOA_03.i/042597.b/cdp20.d
Date : 25-APR-97 20:54
Client ID: DYNA P&T
Sample Info: S,129057-014
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_03.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCI TP 18@3.5'
Lab ID: 129057-015
Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 5

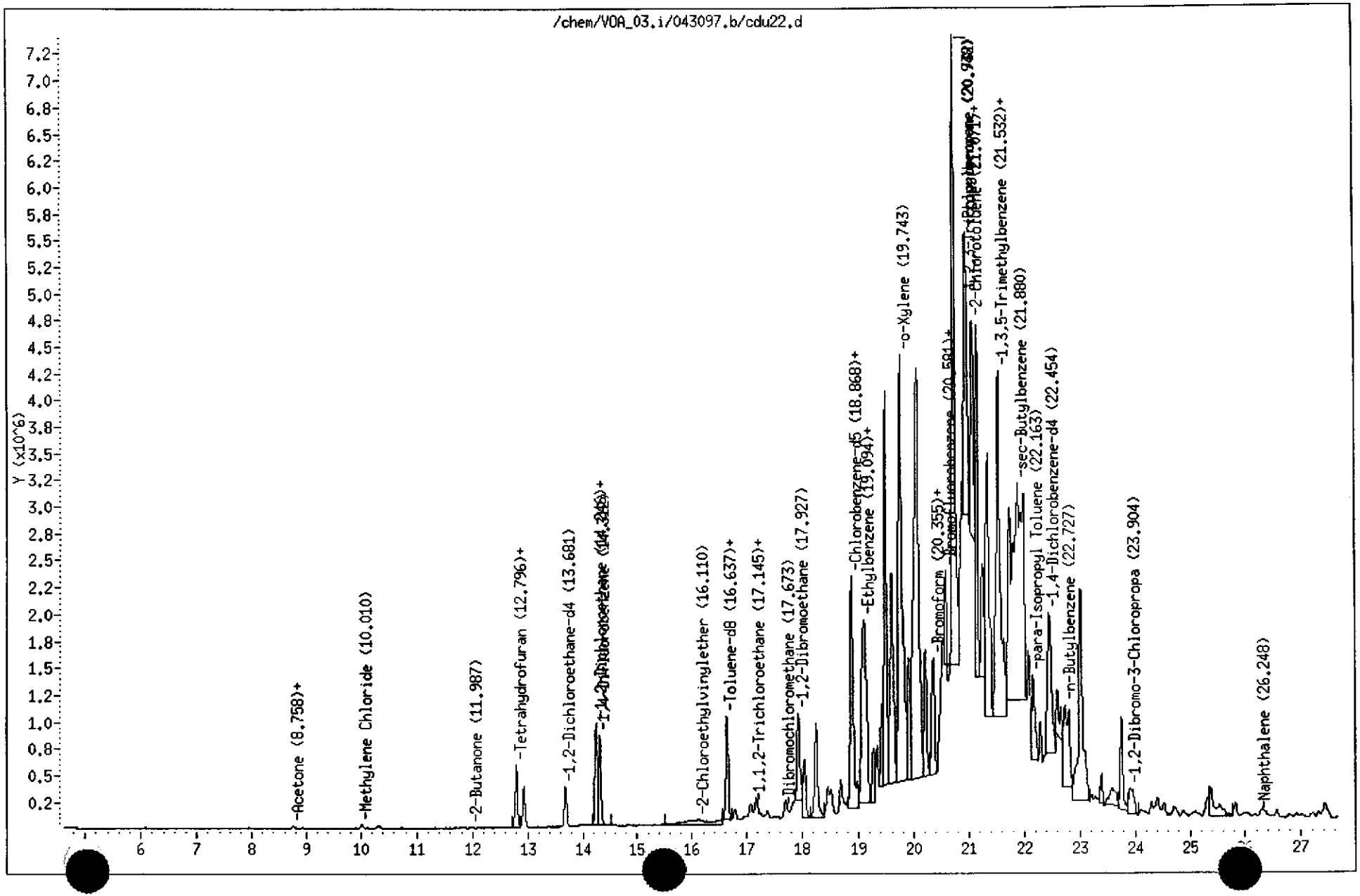
Sampled: 04/23/97
Received: 04/24/97
Extracted: 04/30/97
Analyzed: 04/30/97

Analyte	Result	Reporting Limit
Chloromethane	ND	50
Bromomethane	ND	50
Vinyl Chloride	ND	50
Chloroethane	ND	50
Methylene Chloride	ND	100
Acetone	ND	100
Carbon Disulfide	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
trans-1,2-Dichloroethene	ND	25
cis-1,2-Dichloroethene	ND	25
Chloroform	ND	25
Freon 113	ND	25
1,2-Dichloroethane	ND	25
2-Butanone	ND	50
1,1,1-Trichloroethane	ND	25
Carbon Tetrachloride	ND	25
Vinyl Acetate	ND	250
Bromodichloromethane	ND	25
1,2-Dichloropropane	ND	25
cis-1,3-Dichloropropene	ND	25
Trichloroethene	ND	25
Dibromochloromethane	ND	25
1,1,2-Trichloroethane	ND	25
Benzene	ND	25
trans-1,3-Dichloropropene	ND	25
Bromoform	ND	25
2-Hexanone	ND	50
4-Methyl-2-Pentanone	ND	50
1,1,2,2-Tetrachloroethane	ND	25
Tetrachloroethene	ND	25
Toluene	ND	25
Chlorobenzene	87	25
Ethylbenzene	ND	25
Styrene	ND	25
m,p-Xylenes	ND	25
o-Xylene	ND	25

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	94	68-126
Toluene-d8	103	87-125
Bromofluorobenzene	108	79-122

Data File: /chem/VOA_03.i/043097.b/cdu22.d
Date : 30-APR-97 23:13
Client ID: DYNA P&T
Sample Info: S,129057-015
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_03.i
Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCI TP 18@6.5'
Lab ID: 129057-016
Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Sampled: 04/23/97
Received: 04/24/97
Extracted: 04/30/97
Analyzed: 04/30/97

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	96	68-126
Toluene-d8	109	87-125
Bromofluorobenzene	107	79-122

Curtis & Tompkins, Ltd.

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33639
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/25/97
Analysis Date: 04/25/97

MB Lab ID: QC44778

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	106	87-125
Bromofluorobenzene	104	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

MB Lab ID: QC45095

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	100	68-126
Toluene-d8	106	87-125
Bromofluorobenzene	101	79-122

Curtis & Tompkins, Ltd.

Lab #: 129057 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

MB Lab ID: QC45287

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	104	87-125
Bromofluorobenzene	102	79-122

Curtis & Tompkins, Ltd.

Lab #: 129057 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33639
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/25/97
Analysis Date: 04/25/97

LCS Lab ID: QC44777

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	45.98	50	92	51-180
Trichloroethene	46.84	50	94	73-141
Benzene	51.45	50	103	78-142
Toluene	56.55	50	113	76-150
Chlorobenzene	48.49	50	97	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	104	68-126
Toluene-d8	108	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

Curtis & Tompkins, Ltd.

Lab #: 129057 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

LCS Lab ID: QC45094

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	50.37	50	101	51-180
Trichloroethene	49.2	50	98	73-141
Benzene	53.06	50	106	78-142
Toluene	60.45	50	121	76-150
Chlorobenzene	53.37	50	107	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	108	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 #: 129057 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129033-020
Matrix: Soil
Batch#: 33639
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/19/97
Received Date: 04/22/97
Prep Date: 04/25/97
Analysis Date: 04/25/97

MS Lab ID: QC44797

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	46.45	93	51-180
Trichloroethene	50	<5	47.5	95	73-141
Benzene	50	<5	49.59	99	78-142
Toluene	50	<5	56.45	113	76-150
Chlorobenzene	50	<5	48.68	97	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	109	87-125
Bromofluorobenzene	107	79-122

MSD Lab ID: QC44798

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	48.4	97	51-180	4	22
Trichloroethene	50	48.62	97	73-141	2	24
Benzene	50	51.04	102	78-142	3	21
Toluene	50	55.91	112	76-150	1	21
Chlorobenzene	50	50.84	102	83-129	4	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	92	68-126
Toluene-d8	103	87-125
Bromofluorobenzene	106	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 #: 129057 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCI TP 18@6.5'
Lab ID: 129057-016
Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/23/97
Received Date: 04/24/97
Prep Date: 05/02/97
Analysis Date: 05/02/97

MS Lab ID: QC45153

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	49.34	99	51-180
Trichloroethene	50	<5	68.59	137	73-141
Benzene	50	<5	48.18	96	78-142
Toluene	50	<5	50.24	100	76-150
Chlorobenzene	50	<5	44.47	89	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	92	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	99	79-122

MSD Lab ID: QC45154

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	50.02	100	51-180	1	22
Trichloroethene	50	70.02	140	73-141	2	24
Benzene	50	50.12	100	78-142	4	21
Toluene	50	51.53	103	76-150	3	21
Chlorobenzene	50	43.07	86	83-129	3	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	93	68-126
Toluene-d8	105	87-125
Bromofluorobenzene	99	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.

LABORATORY NUMBER: 129057
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/23/97
DATE RECEIVED: 04/24/97
DATE ANALYZED: 04/30/97
BATCH#: 33732

ANALYSIS: CYANIDE
ANALYSIS METHOD: EPA 335.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129057-016	SCI TP 18@6.5'	ND	mg/Kg	1.0
METHOD BLANK	N/A	ND	mg/Kg	1.0

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: MS/MSD OF 129057-016

RPD, %	5
RECOVERY, %	89

San Francisco Regional Office

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

May 2, 1997

Ms. Tracy Babjar
CURTIS & TOMPKINS, LTD.
2323 Fifth Street
Berkeley, CA 94710

Client Ref.: 129057
Clayton Project No.: 97043.29

Dear Ms. Babjar:

Attached is our analytical laboratory report for the samples received on April 25, 1997. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after June 1, 1997, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Andrew Bradeen for

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/las

Attachments

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129057
Clayton Project No. 97043.29

Sample Identification: See Below
Lab Number: 9704329
Sample Matrix/Media: SOIL
Method Reference: EPA 300.0

Date Received: 04/25/97
Date Analyzed: 04/25/97

Lab Number	Sample Identification	Date Sampled	Nitrate-N (mg/kg)	Method Detection Limit (mg/kg)
-01	SCI TP 16@1.0'	04/23/97	<0.5	0.5
-02	SCI TP 18@6.5'	04/23/97	<0.5	0.5
-03	METHOD BLANK	--	<0.5	0.5

<: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129057
Clayton Project No. 97043.29

Sample Identification: See Below
Lab Number: 9704329
Sample Matrix/Media: SOIL
Method Reference: EPA 300.0

Date Received: 04/25/97
Date Analyzed: 04/25/97

Lab Number	Sample Identification	Date Sampled	Nitrite-N (mg/kg)	Method Detection Limit (mg/kg)
-01	SCI TP 16@1.0'	04/23/97	<0.5	0.5
-02	SCI TP 18@6.5'	04/23/97	<0.5	0.5
-03	METHOD BLANK	--	<0.5	0.5

<: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 ph
(510)486-0532 fx

9704329

Project Number: 129057

Subcontract Lab:

Clayton Environmental
1252 Quarry Lane
Pleasanton, CA 94566
(510) 426-2600

Please send report to: Tracy Babjar

Turnaround Time: Normal (5 day)

Sample ID	Date Sampled	Matrix	Analysis	C&T Lab #
SCI TP 16@1.0'	23-APR-97	Soil	NITRATE/NITRITE	129057-014
SCI TP 18@6.5'	23-APR-97	Soil	NITRATE/NITRITE	129057-016

**Please report using Sample ID instead of C&T Lab #.

Notes:

RELINQUISHED BY: 4/25/97		RECEIVED BY:	
Date/Time			Date/Time 4/25/97 1325
Date/Time 4/25/97 15:23		Carol Hammarberg	Date/Time 4/25/97 1523

Received in good cond.

Signature on this form constitutes a firm Purchase Order for the services requested above.

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129057
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/23/97
DATE RECEIVED: 04/24/97
DATE ANALYZED: 05/06/97
BATCH#: 33830

ANALYSIS: TOTAL PHOSPHORUS
ANALYSIS METHOD: EPA 365.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129057-014	SCI TP 16@1.0'	48	mg/Kg	10
129057-016	SCI TP 18@6.5'	140	mg/Kg	50
METHOD BLANK	N/A	ND	mg/L	1.0

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: LCS

RECOVERY, %	93

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCI 68@4.5	Sampled:	04/23/97
Lab ID:	129057-006	Received:	04/24/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/29/97
Units:	ug/Kg		
Diln Fac:	1		

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 68@4.5	Sampled:	04/23/97
Lab ID:	129057-006	Received:	04/24/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/29/97
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	61	25-121
Phenol-d5	66	24-113
2,4,6-Tribromophenol	66	19-122
Nitrobenzene-d5	61	23-120
2-Fluorobiphenyl	70	30-115
Terphenyl-d14	82	18-137

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCI TP 15@2.0'	Sampled:	04/23/97
Lab ID:	129057-013	Received:	04/24/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/29/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Phenol	ND	5000
2-Chlorophenol	ND	5000
Benzyl alcohol	ND	5000
2-Methylphenol	ND	5000
4-Methylphenol	ND	5000
2-Nitrophenol	ND	25000
2,4-Dimethylphenol	ND	5000
Benzoic acid	ND	25000
2,4-Dichlorophenol	ND	5000
4-Chloro-3-methylphenol	ND	5000
2,4,6-Trichlorophenol	ND	5000
2,4,5-Trichlorophenol	ND	25000
2,4-Dinitrophenol	ND	25000
4-Nitrophenol	ND	25000
4,6-Dinitro-2-methylphenol	ND	25000
Pentachlorophenol	ND	25000
N-Nitrosodimethylamine	ND	5000
Aniline	ND	5000
bis(2-Chloroethyl)ether	ND	5000
1,3-Dichlorobenzene	ND	5000
1,4-Dichlorobenzene	ND	5000
1,2-Dichlorobenzene	ND	5000
bis(2-Chloroisopropyl) ether	ND	5000
N-Nitroso-di-n-propylamine	ND	5000
Hexachloroethane	ND	5000
Nitrobenzene	ND	5000
Isophorone	ND	5000
bis(2-Chloroethoxy)methane	ND	5000
1,2,4-Trichlorobenzene	ND	5000
Naphthalene	ND	5000
4-Chloroaniline	ND	5000
Hexachlorobutadiene	ND	5000
2-Methylnaphthalene	ND	5000
Hexachlorocyclopentadiene	ND	5000
2-Chloronaphthalene	ND	5000
2-Nitroaniline	ND	25000
Dimethylphthalate	ND	5000
Acenaphthylene	ND	5000

Semivolatile Organics by GC/MS

Field ID:	SCI TP 15@2.0'	Sampled:	04/23/97
Lab ID:	129057-013	Received:	04/24/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/29/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	5000
3-Nitroaniline	ND	25000
Acenaphthene	ND	5000
Dibenzofuran	ND	5000
2,4-Dinitrotoluene	ND	5000
Diethylphthalate	ND	5000
4-Chlorophenyl-phenylether	ND	5000
Fluorene	ND	5000
4-Nitroaniline	ND	25000
N-Nitrosodiphenylamine	ND	5000
Azobenzene	ND	5000
4-Bromophenyl-phenylether	ND	5000
Hexachlorobenzene	ND	5000
Phenanthrene	ND	5000
Anthracene	ND	5000
Di-n-butylphthalate	ND	5000
Fluoranthene	ND	5000
Benzidine	ND	5000
Pyrene	ND	5000
Butylbenzylphthalate	ND	5000
3,3'-Dichlorobenzidine	ND	25000
Benzo(a)anthracene	ND	5000
Chrysene	ND	5000
bis(2-Ethylhexyl)phthalate	ND	5000
Di-n-octylphthalate	ND	5000
Benzo(b)fluoranthene	ND	5000
Benzo(k)fluoranthene	ND	5000
Benzo(a)pyrene	ND	5000
Indeno(1,2,3-cd)pyrene	ND	5000
Dibenz(a,h)anthracene	ND	5000
Benzo(g,h,i)perylene	ND	5000

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	68	25-121
Phenol-d5	72	24-113
2,4,6-Tribromophenol	51	19-122
Nitrobenzene-d5	63	23-120
2-Fluorobiphenyl	89	30-115
Terphenyl-d14	110	18-137

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCI TP 16@1.0'	Sampled:	04/23/97
Lab ID:	129057-014	Received:	04/24/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
Units:	ug/Kg		
Diln Fac:	5		

Analyte	Result	Reporting Limit
Phenol	ND	25000
2-Chlorophenol	ND	25000
Benzyl alcohol	ND	25000
2-Methylphenol	ND	25000
4-Methylphenol	ND	25000
2-Nitrophenol	ND	130000
2,4-Dimethylphenol	ND	25000
Benzoic acid	ND	130000
2,4-Dichlorophenol	ND	25000
4-Chloro-3-methylphenol	ND	25000
2,4,6-Trichlorophenol	ND	25000
2,4,5-Trichlorophenol	ND	130000
2,4-Dinitrophenol	ND	130000
4-Nitrophenol	ND	130000
4,6-Dinitro-2-methylphenol	ND	130000
Pentachlorophenol	ND	130000
N-Nitrosodimethylamine	ND	25000
Aniline	ND	25000
bis(2-Chloroethyl)ether	ND	25000
1,3-Dichlorobenzene	ND	25000
1,4-Dichlorobenzene	ND	25000
1,2-Dichlorobenzene	ND	25000
bis(2-Chloroisopropyl) ether	ND	25000
N-Nitroso-di-n-propylamine	ND	25000
Hexachloroethane	ND	25000
Nitrobenzene	ND	25000
Isophorone	ND	25000
bis(2-Chloroethoxy)methane	ND	25000
1,2,4-Trichlorobenzene	ND	25000
Naphthalene	ND	25000
4-Chloroaniline	ND	25000
Hexachlorobutadiene	ND	25000
2-Methylnaphthalene	ND	25000
Hexachlorocyclopentadiene	ND	25000
2-Chloronaphthalene	ND	25000
2-Nitroaniline	ND	130000
Dimethylphthalate	ND	25000
Acenaphthylene	ND	25000

Semivolatile Organics by GC/MS

Field ID:	SCI TP 16@1.0'	Sampled:	04/23/97
Lab ID:	129057-014	Received:	04/24/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
Units:	ug/Kg		
Diln Fac:	5		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	25000
3-Nitroaniline	ND	130000
Acenaphthene	ND	25000
Dibenzofuran	ND	25000
2,4-Dinitrotoluene	ND	25000
Diethylphthalate	ND	25000
4-Chlorophenyl-phenylether	ND	25000
Fluorene	ND	25000
4-Nitroaniline	ND	130000
N-Nitrosodiphenylamine	ND	25000
Azobenzene	ND	25000
4-Bromophenyl-phenylether	ND	25000
Hexachlorobenzene	ND	25000
Phenanthrene	ND	25000
Anthracene	ND	25000
Di-n-butylphthalate	ND	25000
Fluoranthene	ND	25000
Benzidine	ND	25000
Pyrene	ND	25000
Butylbenzylphthalate	ND	25000
3,3'-Dichlorobenzidine	ND	130000
Benzo(a)anthracene	ND	25000
Chrysene	ND	25000
bis(2-Ethylhexyl)phthalate	ND	25000
Di-n-octylphthalate	ND	25000
Benzo(b)fluoranthene	ND	25000
Benzo(k)fluoranthene	ND	25000
Benzo(a)pyrene	ND	25000
Indeno(1,2,3-cd)pyrene	ND	25000
Dibenz(a,h)anthracene	ND	25000
Benzo(g,h,i)perylene	ND	25000

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

* Values outside of QC limits
DO: Surrogate diluted out

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCI TP 18@3.5'	Sampled:	04/23/97
Lab ID:	129057-015	Received:	04/24/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
Units:	ug/Kg		
Diln Fac:	10		

Analyte	Result	Reporting Limit
Phenol	ND	67000
2-Chlorophenol	ND	67000
Benzyl alcohol	ND	67000
2-Methylphenol	ND	67000
4-Methylphenol	ND	67000
2-Nitrophenol	ND	330000
2,4-Dimethylphenol	ND	67000
Benzoic acid	ND	330000
2,4-Dichlorophenol	ND	67000
4-Chloro-3-methylphenol	ND	67000
2,4,6-Trichlorophenol	ND	67000
2,4,5-Trichlorophenol	ND	330000
2,4-Dinitrophenol	ND	330000
4-Nitrophenol	ND	330000
4,6-Dinitro-2-methylphenol	ND	330000
Pentachlorophenol	ND	330000
N-Nitrosodimethylamine	ND	67000
Aniline	ND	67000
bis(2-Chloroethyl)ether	ND	67000
1,3-Dichlorobenzene	ND	67000
1,4-Dichlorobenzene	ND	67000
1,2-Dichlorobenzene	ND	67000
bis(2-Chloroisopropyl) ether	ND	67000
N-Nitroso-di-n-propylamine	ND	67000
Hexachloroethane	ND	67000
Nitrobenzene	ND	67000
Isophorone	ND	67000
bis(2-Chloroethoxy)methane	ND	67000
1,2,4-Trichlorobenzene	ND	67000
Naphthalene	ND	67000
4-Chloroaniline	ND	67000
Hexachlorobutadiene	ND	67000
2-Methylnaphthalene	ND	67000
Hexachlorocyclopentadiene	ND	67000
2-Chloronaphthalene	ND	67000
2-Nitroaniline	ND	330000
Dimethylphthalate	ND	67000
Acenaphthylene	ND	67000

Semivolatile Organics by GC/MS

Field ID:	SCI TP 18@3.5'	Sampled:	04/23/97
Lab ID:	129057-015	Received:	04/24/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
Units:	ug/Kg		
Diln Fac:	10		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	67000
3-Nitroaniline	ND	330000
Acenaphthene	ND	67000
Dibenzofuran	ND	67000
2,4-Dinitrotoluene	ND	67000
Diethylphthalate	ND	67000
4-Chlorophenyl-phenylether	ND	67000
Fluorene	ND	67000
4-Nitroaniline	ND	330000
N-Nitrosodiphenylamine	ND	67000
Azobenzene	ND	67000
4-Bromophenyl-phenylether	ND	67000
Hexachlorobenzene	ND	67000
Phenanthrene	ND	67000
Anthracene	ND	67000
Di-n-butylphthalate	ND	67000
Fluoranthene	ND	67000
Benzidine	ND	67000
Pyrene	ND	67000
Butylbenzylphthalate	ND	67000
3,3'-Dichlorobenzidine	ND	330000
Benzo(a)anthracene	ND	67000
Chrysene	ND	67000
bis(2-Ethylhexyl)phthalate	ND	67000
Di-n-octylphthalate	ND	67000
Benzo(b)fluoranthene	ND	67000
Benzo(k)fluoranthene	ND	67000
Benzo(a)pyrene	ND	67000
Indeno(1,2,3-cd)pyrene	ND	67000
Dibenz(a,h)anthracene	ND	67000
Benzo(g,h,i)perylene	ND	67000

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

* Values outside of QC limits
DO: Surrogate diluted out

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33695
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 04/29/97

MB Lab ID: QC44991

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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33695
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 04/29/97

MB Lab ID: QC44991

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	62	25-121
Phenol-d5	66	24-113
2,4,6-Tribromophenol	53	19-122
Nitrobenzene-d5	66	23-120
2-Fluorobiphenyl	76	30-115
Terphenyl-d14	78	18-137

Lab #: 129057

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33695
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 04/29/97

LCS Lab ID: QC44994

Analyte	Result	Spike Added	%Rec #	Limits
Phenol	2047	3333	61	26-90
2-Chlorophenol	2200	3333	66	25-102
4-Chloro-3-methylphenol	2088	3333	63	26-103
4-Nitrophenol	1552	3333	47	11-114
Pentachlorophenol	954.1	3333	29	17-109
1,4-Dichlorobenzene	981.4	1667	59	28-104
N-Nitroso-di-n-propylamine	862.9	1667	52	41-126
1,2,4-Trichlorobenzene	1037	1667	62	38-107
Acenaphthene	1108	1667	66	31-137
2,4-Dinitrotoluene	756.4	1667	45	28-89
Pyrene	1054	1667	63	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	59	25-121
Phenol-d5	60	24-113
2,4,6-Tribromophenol	51	19-122
Nitrobenzene-d5	61	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

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129033-017
Matrix: Soil
Batch#: 33695
Units: ug/Kg
Diln Fac: 2

Sample Date: 04/19/97
Received Date: 04/22/97
Prep Date: 04/28/97
Analysis Date: 05/01/97

MS Lab ID: QC44992

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Phenol	3333	<666.7	2289	69	26-90
2-Chlorophenol	3333	<666.7	2305	69	25-102
4-Chloro-3-methylphenol	3333	<666.7	2295	69	26-103
4-Nitrophenol	3333	<3333	1694	51	11-114
Pentachlorophenol	3333	<3333	673	20	17-109
1,4-Dichlorobenzene	1667	<666.7	808.5	49	28-104
N-Nitroso-di-n-propylamine	1667	<666.7	960.5	58	41-126
1,2,4-Trichlorobenzene	1667	<666.7	996.3	60	38-107
Acenaphthene	1667	<666.7	1246	75	31-137
2,4-Dinitrotoluene	1667	<666.7	767.4	46	28-89
Pyrene	1667	<666.7	1346	81	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	62	25-121
Phenol-d5	67	24-113
2,4,6-Tribromophenol	52	19-122
Nitrobenzene-d5	63	23-120
2-Fluorobiphenyl	77	30-115
Terphenyl-d14	91	18-137

MSD Lab ID: QC44993

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Phenol	3333	2558	77	26-90	11	35
2-Chlorophenol	3333	2627	79	25-102	14	50
4-Chloro-3-methylphenol	3333	2547	76	26-103	10	33
4-Nitrophenol	3333	2032	61	11-114	18	50
Pentachlorophenol	3333	906	27	17-109	30	47
1,4-Dichlorobenzene	1667	935.2	56	28-104	13	27
N-Nitroso-di-n-propylamine	1667	1092	66	41-126	13	38
1,2,4-Trichlorobenzene	1667	1147	69	38-107	14	23
Acenaphthene	1667	1420	85	31-137	13	19
2,4-Dinitrotoluene	1667	918.5	55	28-89	18	47
Pyrene	1667	1571	94	35-142	15	36

Surrogate	%Rec	Limits
2-Fluorophenol	70	25-121
Phenol-d5	74	24-113
2,4,6-Tribromophenol	61	19-122
Nitrobenzene-d5	74	23-120
2-Fluorobiphenyl	90	30-115
Terphenyl-d14	107	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

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI 68@4.5
LAB ID: 129057-006
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE SAMPLED: 04/23/97
DATE RECEIVED: 04/24/97
DATE REPORTED: 05/07/97

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3.0	1	33651	EPA 6010A	04/29/97
Arsenic	2.0	0.25	1	33651	EPA 6010A	04/29/97
Barium	400	0.50	1	33651	EPA 6010A	04/29/97
Beryllium	0.52	0.099	1	33651	EPA 6010A	04/29/97
Cadmium	0.14	0.099	1	33651	EPA 6010A	04/29/97
Chromium (total)	39	0.50	1	33651	EPA 6010A	04/29/97
Cobalt	10	0.99	1	33651	EPA 6010A	04/29/97
Copper	10	0.50	1	33651	EPA 6010A	04/29/97
Lead	5.8	0.15	1	33651	EPA 6010A	04/29/97
Mercury	ND	0.10	1	33703	EPA 7471	04/29/97
Molybdenum	ND	0.99	1	33651	EPA 6010A	04/29/97
Nickel	60	0.99	1	33651	EPA 6010A	04/29/97
Selenium	1.3	0.25	1	33651	EPA 6010A	04/29/97
Silver	ND	0.50	1	33651	EPA 6010A	04/29/97
Thallium	0.70	0.25	1	33651	EPA 6010A	04/29/97
Vanadium	31	0.50	1	33651	EPA 6010A	04/29/97
Zinc	37	0.99	1	33651	EPA 6010A	04/29/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI TP 16@1.0'
LAB ID: 129057-014
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE SAMPLED: 04/23/97
DATE RECEIVED: 04/24/97
DATE REPORTED: 05/07/97

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3.0	1	33651	EPA 6010A	04/29/97
Arsenic	3.7	0.25	1	33651	EPA 6010A	04/29/97
Barium	170	0.50	1	33651	EPA 6010A	04/29/97
Beryllium	0.25	0.10	1	33651	EPA 6010A	04/29/97
Cadmium	ND	0.10	1	33651	EPA 6010A	04/29/97
Chromium (total)	10	0.50	1	33651	EPA 6010A	04/29/97
Cobalt	7.3	1.0	1	33651	EPA 6010A	04/29/97
Copper	63	0.50	1	33651	EPA 6010A	04/29/97
Lead	200	0.15	1	33651	EPA 6010A	04/29/97
Mercury	0.17	0.095	1	33703	EPA 7471	04/29/97
Molybdenum	ND	1.0	1	33651	EPA 6010A	04/29/97
Nickel	24	1.0	1	33651	EPA 6010A	04/29/97
Selenium	1.9	0.25	1	33651	EPA 6010A	04/29/97
Silver	ND	0.50	1	33651	EPA 6010A	04/29/97
Thallium	ND	0.25	1	33651	EPA 6010A	04/29/97
Vanadium	30	0.50	1	33651	EPA 6010A	04/29/97
Zinc	110	1.0	1	33651	EPA 6010A	04/29/97

ND = Not detected at or above reporting limit

CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE REPORTED: 05/07/97

Metals Analytical Report

				Lead					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
SCI 66@1.0	129057-001	04/23/97	04/24/97	7.8	0.14	1	33651	EPA 6010A	04/29/97
SCI 66@5.0	129057-002	04/23/97	04/24/97	3.5	0.14	1	33651	EPA 6010A	04/29/97
SCI 67@1.5	129057-003	04/23/97	04/24/97	1.4	0.15	1	33651	EPA 6010A	04/29/97
SCI 67@9.5	129057-004	04/23/97	04/24/97	5.1	0.14	1	33651	EPA 6010A	04/29/97
SCI 68@1.5	129057-005	04/23/97	04/24/97	150	0.15	1	33651	EPA 6010A	04/29/97
SCI 69@1.5	129057-007	04/23/97	04/24/97	170	0.15	1	33651	EPA 6010A	04/29/97
SCI 70@4.5	129057-010	04/23/97	04/24/97	11	0.14	1	33651	EPA 6010A	04/29/97
SCI TP 15@2.0'	129057-013	04/23/97	04/24/97	33	0.14	1	33651	EPA 6010A	04/29/97
SCI TP 18@3.5'	129057-015	04/23/97	04/24/97	6.7	0.15	1	33763	EPA 6010A	05/05/97
SCI TP 18@6.5'	129057-016	04/23/97	04/24/97	44	0.14	1	33651	EPA 6010A	04/29/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE REPORTED: 05/07/97

Metals Analytical Report

				Potassium					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
SCI TP 16@1.0'	129057-014	04/23/97	04/24/97	530	25	1	33651	EPA 6010A	04/30/97
SCI TP 18@6.5'	129057-016	04/23/97	04/24/97	1000	24	1	33651	EPA 6010A	04/30/97

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CLIENT: Subsurface Consultants
JOB NUMBER: 129057

DATE REPORTED: 05/07/97

BATCH QC REPORT
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Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3	mg/Kg	1	33651	EPA 6010A	04/29/97
Arsenic	ND	0.25	mg/Kg	1	33651	EPA 6010A	04/29/97
Barium	ND	0.5	mg/Kg	1	33651	EPA 6010A	04/29/97
Beryllium	ND	0.1	mg/Kg	1	33651	EPA 6010A	04/29/97
Cadmium	ND	0.1	mg/Kg	1	33651	EPA 6010A	04/29/97
Chromium (total)	ND	0.5	mg/Kg	1	33651	EPA 6010A	04/29/97
Cobalt	ND	1	mg/Kg	1	33651	EPA 6010A	04/29/97
Copper	ND	0.5	mg/Kg	1	33651	EPA 6010A	04/29/97
Lead	ND	0.15	mg/Kg	1	33651	EPA 6010A	04/29/97
Lead	ND	0.15	mg/Kg	1	33763	EPA 6010A	05/05/97
Mercury	ND	0.1	mg/Kg	1	33703	EPA 7471	04/29/97
Molybdenum	ND	1	mg/Kg	1	33651	EPA 6010A	04/29/97
Nickel	ND	1	mg/Kg	1	33651	EPA 6010A	04/29/97
Potassium	ND	25	mg/Kg	1	33651	EPA 6010A	04/30/97
Selenium	ND	0.25	mg/Kg	1	33651	EPA 6010A	04/29/97
Silver	ND	0.5	mg/Kg	1	33651	EPA 6010A	04/29/97
Thallium	ND	0.25	mg/Kg	1	33651	EPA 6010A	04/29/97
Vanadium	ND	0.5	mg/Kg	1	33651	EPA 6010A	04/29/97
Zinc	ND	1	mg/Kg	1	33651	EPA 6010A	04/29/97

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129057

DATE REPORTED: 05/07/97

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	25	25.85	23.2	mg/Kg	103	93	80-120	11	35	33651	EPA 6010A	04/29/97
Arsenic	100	89	92	mg/Kg	89	92	80-120	3	35	33651	EPA 6010A	04/29/97
Barium	100	92	95	mg/Kg	92	95	80-120	3	35	33651	EPA 6010A	04/29/97
Beryllium	2.5	2.305	2.44	mg/Kg	92	98	80-120	6	35	33651	EPA 6010A	04/29/97
Cadmium	2.5	2.315	2.42	mg/Kg	93	97	80-120	4	35	33651	EPA 6010A	04/29/97
Chromium (total)	10	8.9	9.35	mg/Kg	89	94	80-120	5	35	33651	EPA 6010A	04/29/97
Cobalt	25	22.15	23.5	mg/Kg	89	94	80-120	6	35	33651	EPA 6010A	04/29/97
Copper	12.5	12.9	13.45	mg/Kg	103	108	80-120	4	35	33651	EPA 6010A	04/29/97
Lead	25	21.5	22.7	mg/Kg	86	91	80-120	5	35	33651	EPA 6010A	04/29/97
Lead	25	22.05	22.3	mg/Kg	88	89	80-120	1	35	33763	EPA 6010A	05/05/97
Mercury	5	4.761	4.986	ug/L	95	100	80-120	5	35	33703	EPA 7470	04/29/97
Molybdenum	20	20.25	21.25	mg/Kg	101	106	80-120	5	35	33651	EPA 6010A	04/29/97
Nickel	25	22.3	23.55	mg/Kg	89	94	80-120	6	35	33651	EPA 6010A	04/29/97
Potassium	1000	927	926	mg/Kg	93	93	80-120	0	35	33651	EPA 6010A	04/30/97
Selenium	100	83	85.5	mg/Kg	83	86	80-120	3	35	33651	EPA 6010A	04/29/97
Silver	5	4.755	5	mg/Kg	95	100	80-120	5	35	33651	EPA 6010A	04/29/97
Thallium	100	85.5	91	mg/Kg	86	91	80-120	6	35	33651	EPA 6010A	04/29/97
Vanadium	25	23.25	24.4	mg/Kg	93	98	80-120	5	35	33651	EPA 6010A	04/29/97
Zinc	25	21.75	23	mg/Kg	87	92	80-120	6	35	33651	EPA 6010A	04/29/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129057

DATE REPORTED: 05/07/97

BATCH QC REPORT
SAMPLE DUPLICATE

Compound	Sample	Sample Result	Duplicate Result	Units	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	129057-006	<3	<3	mg/Kg	NC	35	33651	EPA 6010A	04/29/97
Arsenic	129057-006	2.015	1.885	mg/Kg	7	35	33651	EPA 6010A	04/29/97
Barium	129057-006	398.5	103.5	mg/Kg	118*	35	33651	EPA 6010A	04/29/97
Beryllium	129057-006	0.5198	0.63	mg/Kg	19	35	33651	EPA 6010A	04/29/97
Cadmium	129057-006	0.1431	0.455	mg/Kg	104*	35	33651	EPA 6010A	04/29/97
Chromium (total)	129057-006	38.51	38	mg/Kg	1	35	33651	EPA 6010A	04/29/97
Cobalt	129057-006	10.4	11.7	mg/Kg	12	35	33651	EPA 6010A	04/29/97
Copper	129057-006	10.1	10.9	mg/Kg	8	35	33651	EPA 6010A	04/29/97
Lead	129057-006	5.842	5.95	mg/Kg	2	35	33651	EPA 6010A	04/29/97
Lead	129034-001	32.77	39.19	mg/Kg	18	35	33763	EPA 6010A	05/05/97
Mercury	129043-001	<0.095	<0.095	mg/Kg	NC	35	33703	EPA 7471	04/29/97
Molybdenum	129057-006	<1	<1	mg/Kg	NC	35	33651	EPA 6010A	04/29/97
Nickel	129057-006	59.9	71.5	mg/Kg	18	35	33651	EPA 6010A	04/29/97
Potassium	129057-006	1674	1770	mg/Kg	6	35	33651	EPA 6010A	04/30/97
Selenium	129057-006	1.287	1.13	mg/Kg	13	35	33651	EPA 6010A	04/29/97
Silver	129057-006	<0.5	<0.5	mg/Kg	NC	35	33651	EPA 6010A	04/29/97
Thallium	129057-006	0.698	0.4645	mg/Kg	40*	35	33651	EPA 6010A	04/29/97
Vanadium	129057-006	30.84	28.1	mg/Kg	9	35	33651	EPA 6010A	04/29/97
Zinc	129057-006	37.08	39.95	mg/Kg	7	35	33651	EPA 6010A	04/29/97

* = Out of Limits
NC = Not Calculable

CHAIN OF CUSTODY FORM

129057

PAGE 1 OF 2

PROJECT NAME: KOT

JOB NUMBER: 133.001 LAB: C&T

PROJECT CONTACT: Jerome de Vernier TURNAROUND: standard.

SAMPLED BY: Jerome de Vernier REQUESTED BY: ~~Brian~~ 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
-1	SCI 66 @ 1.0		X						X				X		04	23	97		
-2	SCI 66 @ 5.0																		
-3	SCI 67 @ 1.5																		
-4	SCI 67 @ 9.5																		
-5	SCI 68 @ 1.5																		
-6	SCI 68 @ 4.5																		
-7	SCI 69 @ 1.5																		
-8	SCI 69 @ 5.5																		
-9	SCI 70 @ 2.0																		
-10	SCI 70 @ 4.5																		
-11	SCI 71 @ 2.0																		
-12	SCI 71 @ 5.5																		

ANALYSIS REQUESTED

TVH/BTEX	TEH (d + mc)	VOCs	8270	8050	Heavy metals	Lead	DHC	Cr 6+	CAM
X	X			X		X	X		
X	X					X	X		
X	X					X	X		
X	X	X		X		X	X		
X	X	X	X	X	X	X	X		
X	X	X		X		X	X		
X	X	X					X		
X	X	X		X		X	X		
X	X	X					X		
X	X	X					X		

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Brian Alexander	4/24/97 2:10 p.m.		4/24/97 14:13
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:

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

CHAIN OF CUSTODY FORM

129057

PAGE 2 OF 2

PROJECT NAME: KOT

JOB NUMBER: 133.001 LAB: CET

PROJECT CONTACT: Jerome de Verniere TURNAROUND: standard

SAMPLED BY: John Wolfe REQUESTED BY: Jeriann 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/BTEX	TEH (diesel)	8240	8270	8080	Heavy Metals (filtered)	Lead	pH	Cr 6+	CN	Phosphorous / Nitrate/Nitrite
-13	SCITP1802.5		X						X						04	23	97			X	X	X	X	X		X	X		X	X
-14	SCITP1601.0		X						X											X	X	X	X	X	X	X	X			X
-15	SCITP1803.5		X						X											X	X	X	X	X		X	X			X
-16	SCITP1802.5		X						X											X	X	X				X	X		X	X

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Jeri Ueyland	4/24/97 2:15 p.m.		4/29/97 14:13
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:

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: 09-MAY-97
Lab Job Number: 129064
Project ID: 133.004
Location: 9th Ave. Terminal

Reviewed by: _____

Reviewed by: _____

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Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129064

Project Name: 9th Ave. Terminal
Project Number: 133.004

Report Date: 09 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129064-001	TP-21	Water	25-APR-97	25-APR-97	01-MAY-97	ND	mg/L	5	DRH	33774

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: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129064
Report Date: 09 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 33774**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	5	mg/L	SMWW 17:5520BF	01-MAY-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	87%	SMWW 17:5520BF	01-MAY-97
BSD	92%	SMWW 17:5520BF	01-MAY-97

		Control Limits
Average Spike Recovery	89%	80% - 120%
Relative Percent Difference	5.2%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129064-001	TP-21	33646	04/25/97	05/02/97	05/02/97	

Matrix: Water

Analyte	Units	129064-001
Diln Fac:		1
Gasoline	ug/L	<50
Surrogate		
Trifluorotoluene	%REC	83
Bromobenzene	%REC	88

Curtis & Tompkins, Ltd.

Lab #: 129064 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Water	Prep Date:	05/02/97
Batch#:	33646	Analysis Date:	05/02/97
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC44813

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	81	65-135
Bromobenzene	84	65-135

Lab #: 129064

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

LCS Lab ID: QC44811

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	2131	2000	107	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	111	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

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129064-001	TP-21	33718	04/25/97	04/29/97	05/03/97	

Matrix: Water

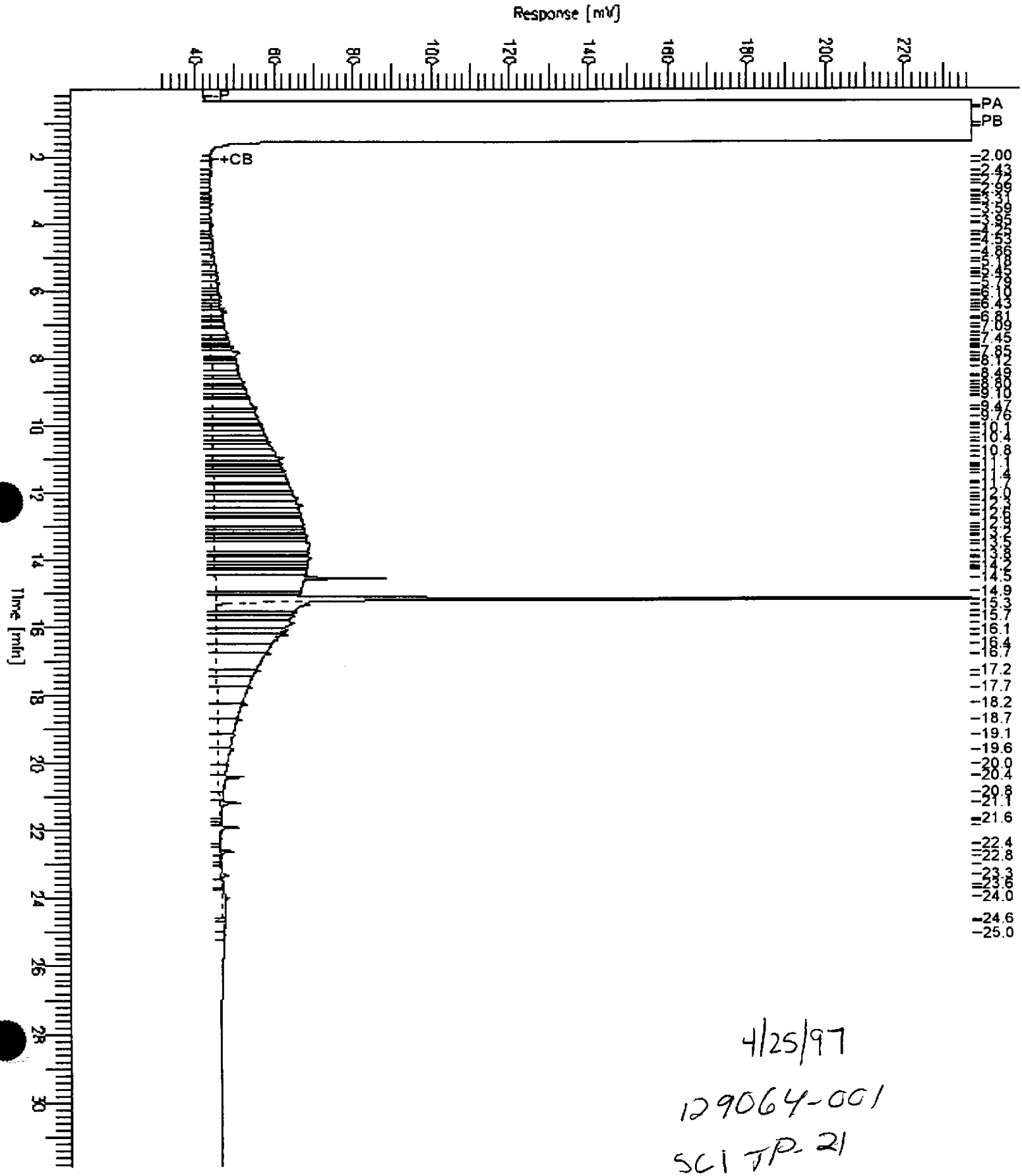
Analyte	Units	129064-001	
Diln Fac:		1	
Diesel C12-C22	ug/L	660	YH
Motor Oil C22-C50	ug/L	1200	L
Surrogate			
Hexacosane	%REC	94	

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 TEH

Sample Name : 129064-001,33718
FileName : G:\GC15\CHB\122B014.RAW
Method : B125TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Tangle Factor: 0.0 Plot Offset: 32 mV

Sample #: 33718 Page 1 of 1
Date : 5/6/97 10:41 AM
Time of Injection: 5/3/97 02:13 AM
Low Point : 31.77 mV High Point : 237.47 mV
Plot Scale: 205.7 mV

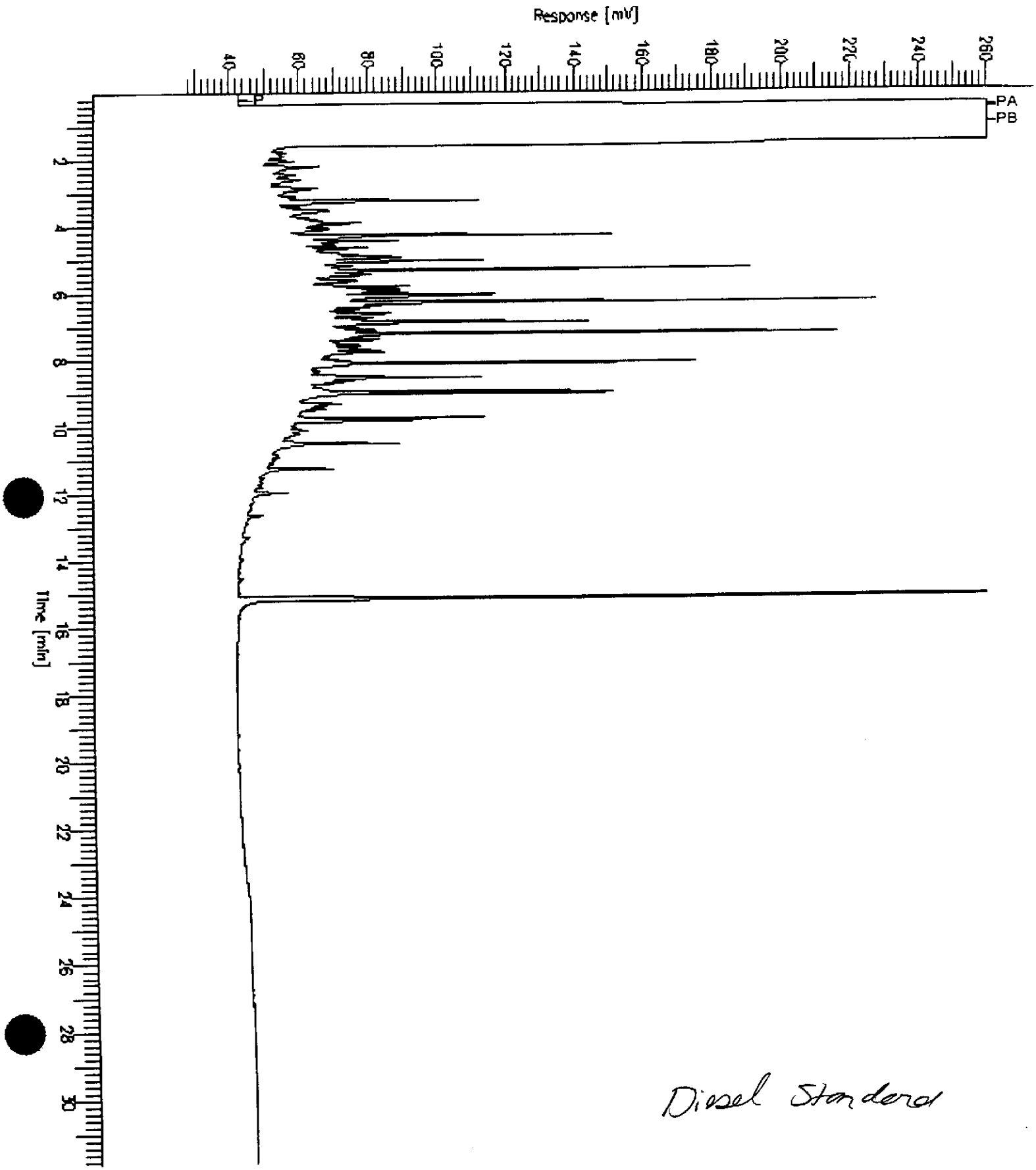


4/25/97
129064-001
SCI TP-21

GC15 Channel B TEH

Sample Name : CCV,97WS3996,DS
FileName : G:\GC15\CHB\122B018.RAW
Method : B122TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 1.0 Plot Offset: 27 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/5/97 10:50 AM
Time of Injection: 5/3/97 05:05 AM
Low Point : 27.17 mV High Point : 268.46 mV
Plot Scale: 232.3 mV

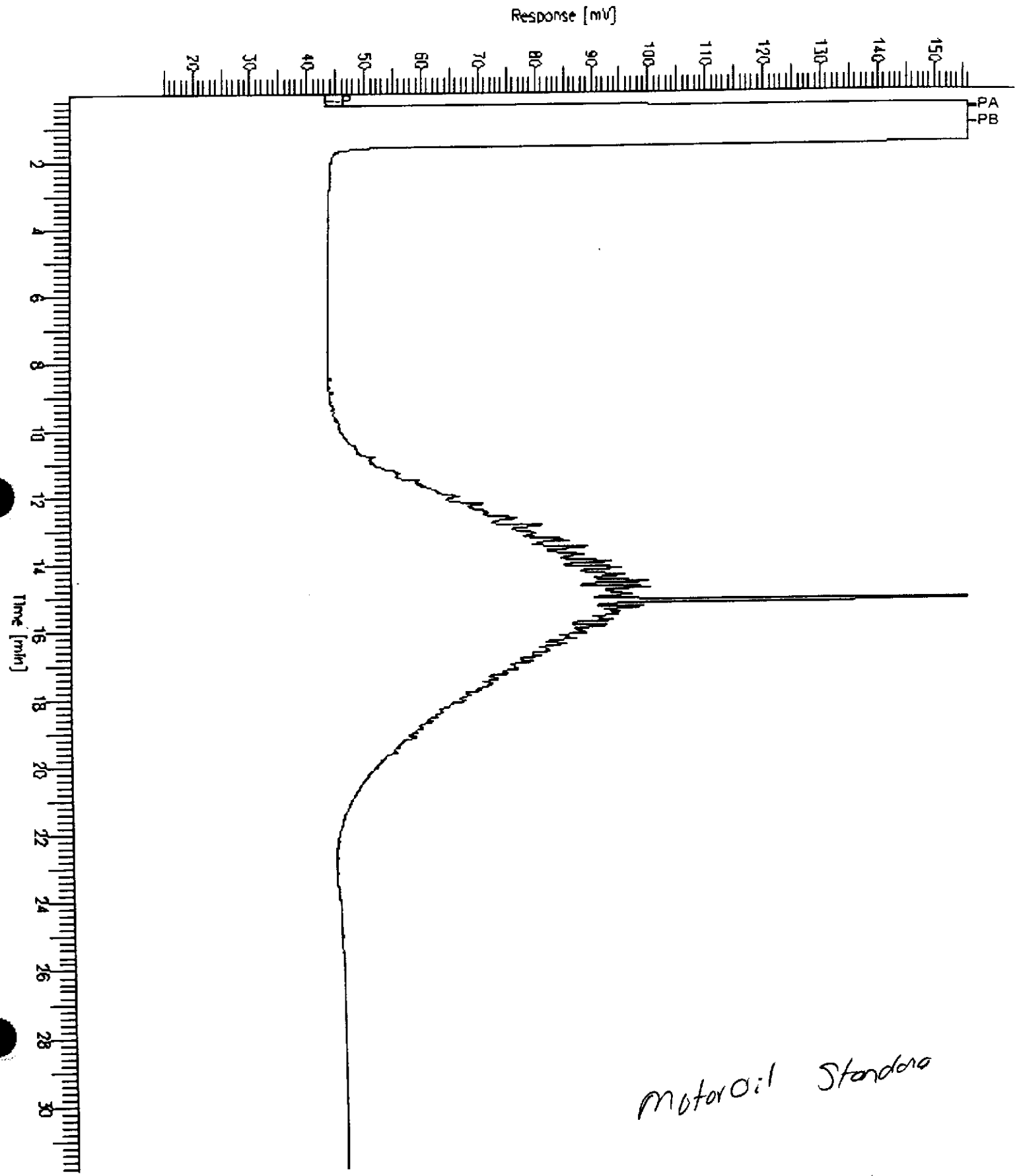


Diesel Standard

GC15 Channel B TEH

Sample Name : CCV,97WS4082,MO
FileName : G:\GC15\CHB\122B020.RAW
Method : B122TEH.MTH
Start Time : 1.01 min End Time : 31.91 min
Scale Factor: 0.1 Plot Offset: 14 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/5/97 10:50 AM
Time of Injection: 5/3/97 Do:31 AM
Low Point : 14.47 mV High Point : 156.01 mV
Plot Scale: 141.5 mV



Motor oil Standard

Curtis & Tompkins, Ltd.

Lab #: 129064 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Water	Prep Date:	04/29/97
Batch#:	33718	Analysis Date:	05/02/97
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC45086

Analyte	Result	
Diesel C12-C22	<50	
Motor Oil C22-C50	<300	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	91	60-140

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33718
Units: ug/L
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 05/03/97

BS Lab ID: QC45087

Analyte	Spike Added	BS	%Rec	#	Limits
Diesel C12-C22	2475	1614	65		60-140
Surrogate	%Rec	Limits			
Hexacosane	87	60-140			

BSD Lab ID: QC45088

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
Diesel C12-C22	2475	1661	67		60-140	3		35
Surrogate	%Rec	Limits						
Hexacosane	97	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129064-001	TP-21	33646	04/25/97	05/02/97	05/02/97	

Matrix: Water

Analyte	Units	129064-001
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	77
Bromobenzene	%REC	87

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

MB Lab ID: QC44813

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	75	58-130
Bromobenzene	82	62-131

Curtis & Tompkins, Ltd.

Lab #: 129064 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

LCS Lab ID: QC44812

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	16.56	20	83	80-120
Toluene	17.18	20	86	80-120
Ethylbenzene	17.39	20	87	80-120
m,p-Xylenes	34.04	40	85	80-120
o-Xylene	17.63	20	88	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	76	58-130
Bromobenzene	85	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.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: TP-21
Lab ID: 129064-001
Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Sample Date: 04/25/97
Received Date: 04/25/97
Prep Date: 05/02/97
Analysis Date: 05/02/97

MS Lab ID: QC44827

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	20	<0.5	16.2	81	75-125
Toluene	20	<0.5	16.71	84	75-125
Ethylbenzene	20	<0.5	16.85	84	75-125
m,p-Xylenes	40	<0.5	32.8	82	75-125
o-Xylene	20	<0.5	17.11	86	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	78	58-130
Bromobenzene	90	62-131

MSD Lab ID: QC44828

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	20	16.84	84	75-125	4	20
Toluene	20	17.58	88	75-125	5	20
Ethylbenzene	20	17.96	90	75-125	6	20
m,p-Xylenes	40	34.96	87	75-125	6	20
o-Xylene	20	18.3	92	75-125	7	20

Surrogate	%Rec	Limits
Trifluorotoluene	78	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

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

Field ID:	TP-21	Sampled:	04/25/97
Lab ID:	129064-001	Received:	04/25/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33690	Analyzed:	05/07/97
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	0.047
beta-BHC	ND	0.047
gamma-BHC	ND	0.047
delta-BHC	ND	0.047
Heptachlor	ND	0.047
Aldrin	ND	0.047
Heptachlor epoxide B	ND	0.047
Heptachlor epoxide A	ND	0.047
Endosulfan I	ND	0.047
Dieldrin	ND	0.094
4,4'-DDE	ND	0.094
Endrin	ND	0.094
Endosulfan II	ND	0.094
Endosulfan sulfate	ND	0.094
4,4'-DDD	ND	0.094
Endrin aldehyde	ND	0.094
4,4'-DDT	ND	0.094
Chlordane	ND	0.47
Methoxychlor	ND	0.47
Toxaphene	ND	0.94
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%Recovery	Recovery Limits
TCMX	58	34-128
Decachlorobiphenyl	46*	50-150

* Values outside of QC limits

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33690
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/02/97

MB Lab ID: QC44972

Analyte	Result	Reporting Limit
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide B	ND	0.05
Heptachlor epoxide A	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
Chlordane	ND	0.5
Methoxychlor	ND	0.5
Toxaphene	ND	1.0
Aroclor-1016	ND	0.5
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.5
Aroclor-1242	ND	0.5
Aroclor-1248	ND	0.5
Aroclor-1254	ND	0.5
Aroclor-1260	ND	0.5

Surrogate	%Rec	Recovery Limits
TCMX	74	34-128
Decachlorobiphenyl	92	50-150

Lab #: 129064

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33690
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/02/97

BS Lab ID: QC44973

Analyte	Spike Added	BS	%Rec	#	Limits
gamma-BHC	0.5	0.53	106		57-120
Heptachlor	0.5	0.49	98		51-109
Aldrin	0.5	0.53	106	*	57-105
Dieldrin	0.5	0.52	104		62-122
Endrin	0.5	0.55	110		70-128
4,4'-DDT	0.5	0.51	102		67-128

Surrogate	%Rec	Limits
TCMX	102	34-128
Decachlorobiphenyl	95	50-150

BSD Lab ID: QC44974

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
gamma-BHC	0.5	0.52	104		57-120	2		20
Heptachlor	0.5	0.44	88		51-109	11		20
Aldrin	0.5	0.52	104		57-105	2		20
Dieldrin	0.5	0.52	104		62-122	0		20
Endrin	0.5	0.54	108		70-128	2		20
4,4'-DDT	0.5	0.51	102		67-128	0		20

Surrogate	%Rec	Limits
TCMX	101	34-128
Decachlorobiphenyl	94	50-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 6 outside limits
Spike Recovery: 1 out of 12 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: TP-21
Lab ID: 129064-001
Matrix: Water
Batch#: 33654
Units: ug/L
Diln Fac: 1

Sampled: 04/25/97
Received: 04/25/97
Extracted: 04/26/97
Analyzed: 04/26/97

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	110	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	104	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33654
Units: ug/L
Diln Fac: 1

Prep Date: 04/26/97
Analysis Date: 04/26/97

MB Lab ID: QC44846

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	98	87-125
Bromofluorobenzene	100	79-122

Curtis & Tompkins, Ltd.

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129039-002
Matrix: Water
Batch#: 33654
Units: ug/L
Diln Fac: 1

Sample Date: 04/21/97
Received Date: 04/23/97
Prep Date: 04/26/97
Analysis Date: 04/26/97

MS Lab ID: QC44847

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	53.25	107	51-180
Trichloroethene	50	<5	47.63	95	73-141
Benzene	50	<5	45.1	90	78-142
Toluene	50	<5	47.31	95	76-150
Chlorobenzene	50	<5	47.33	95	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	106	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	99	79-122

MSD Lab ID: QC44848

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	52.44	105	51-180	2	14
Trichloroethene	50	47.08	94	73-141	1	14
Benzene	50	45.42	90	78-142	1	11
Toluene	50	48.22	96	76-150	2	13
Chlorobenzene	50	47.18	94	83-129	0	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	104	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	98	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

Lab #: 129064

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33654
Units: ug/L
Diln Fac: 1

Prep Date: 04/26/97
Analysis Date: 04/26/97

LCS Lab ID: QC44845

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	60.85	50	122	51-180
Trichloroethene	52.34	50	105	73-141
Benzene	49.14	50	98	78-142
Toluene	50.88	50	102	76-150
Chlorobenzene	50.66	50	101	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	98	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

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129064
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/25/97
DATE RECEIVED: 04/25/97
DATE ANALYZED: 04/30/97
BATCH#: 33733

ANALYSIS: CYANIDE
ANALYSIS METHOD: EPA 335.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129064-001	TP-21	ND	ug/L	10
METHOD BLANK	N/A	ND	ug/L	10

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: BS/BSD

RPD, %	4
RECOVERY, %	94

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

Field ID: TP-21
Lab ID: 129064-001
Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Sampled: 04/25/97
Received: 04/25/97
Extracted: 04/28/97
Analyzed: 05/09/97

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:	TP-21	Sampled:	04/25/97
Lab ID:	129064-001	Received:	04/25/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33692	Analyzed:	05/09/97
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	57	21-110
Phenol-d5	66	10-110
2,4,6-Tribromophenol	72	10-123
Nitrobenzene-d5	76	35-114
2-Fluorobiphenyl	65	43-116
Terphenyl-d14	45	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

MB Lab ID: QC44978

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

Curtis & Tompkins, Ltd.

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

MB Lab ID: QC44978

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	55	21-110
Phenol-d5	60	10-110
2,4,6-Tribromophenol	57	10-123
Nitrobenzene-d5	67	35-114
2-Fluorobiphenyl	73	43-116
Terphenyl-d14	81	33-141

Curtis & Tompkins, Ltd.

Lab #: 129064 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

BS Lab ID: QC44979

Analyte	Spike Added	BS	%Rec	#	Limits
Phenol	100	69.05	69		12-110
2-Chlorophenol	100	74.39	74		27-123
4-Chloro-3-methylphenol	100	69.07	69		23-97
4-Nitrophenol	100	58.92	59		10-80
Pentachlorophenol	100	52.29	52		9-103
1,4-Dichlorobenzene	50	34.82	70		36-97
N-Nitroso-di-n-propylamine	50	30.37	61		41-116
1,2,4-Trichlorobenzene	50	35.47	71		39-98
Acenaphthene	50	40.65	81		46-118
2,4-Dinitrotoluene	50	26.9	54		24-96
Pyrene	50	40.05	80		26-127

Surrogate	%Rec	Limits
2-Fluorophenol	63	21-110
Phenol-d5	66	10-110
2,4,6-Tribromophenol	67	10-123
Nitrobenzene-d5	74	35-114
2-Fluorobiphenyl	81	43-116
Terphenyl-d14	89	33-141

BSD Lab ID: QC44980

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
Phenol	100	69.24	69		12-110	0		42
2-Chlorophenol	100	74.78	75		27-123	1		40
4-Chloro-3-methylphenol	100	72.09	72		23-97	4		42
4-Nitrophenol	100	62.52	63		10-80	7		50
Pentachlorophenol	100	51.97	52		9-103	0		50
1,4-Dichlorobenzene	50	35.43	71		36-97	1		28
N-Nitroso-di-n-propylamine	50	31.29	63		41-116	3		38
1,2,4-Trichlorobenzene	50	36.92	74		39-98	4		28
Acenaphthene	50	42.21	84		46-118	4		31
2,4-Dinitrotoluene	50	28.38	57		24-96	5		38
Pyrene	50	41.2	82		26-127	2		31

Surrogate	%Rec	Limits
2-Fluorophenol	64	21-110
Phenol-d5	67	10-110
2,4,6-Tribromophenol	71	10-123
Nitrobenzene-d5	78	35-114
2-Fluorobiphenyl	84	43-116
Terphenyl-d14	92	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

Curtis & Tompkins, Ltd.

SAMPLE ID: TP-21
LAB ID: 129064-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Filtrate

DATE SAMPLED: 04/25/97
DATE RECEIVED: 04/25/97
DATE REPORTED: 05/15/97

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	33717	EPA 6010A	04/30/97
Arsenic	23	5.0	1	33717	EPA 6010A	04/30/97
Barium	360	10	1	33717	EPA 6010A	04/30/97
Beryllium	ND	2.0	1	33717	EPA 6010A	04/30/97
Cadmium	ND	5.0	1	33717	EPA 6010A	04/30/97
Chromium (total)	ND	10	1	33717	EPA 6010A	04/30/97
Cobalt	ND	20	1	33717	EPA 6010A	04/30/97
Copper	10	10	1	33717	EPA 6010A	04/30/97
Lead	ND	3.0	1	33717	EPA 6010A	04/30/97
Mercury	ND	0.20	1	33820	EPA 7470	05/06/97
Molybdenum	ND	20	1	33717	EPA 6010A	04/30/97
Nickel	ND	20	1	33717	EPA 6010A	04/30/97
Selenium	35	5.0	1	33717	EPA 6010A	04/30/97
Silver	ND	5.0	1	33717	EPA 6010A	04/30/97
Thallium	ND	5.0	1	33717	EPA 6010A	04/30/97
Vanadium	ND	10	1	33717	EPA 6010A	04/30/97
Zinc	ND	20	1	33717	EPA 6010A	04/30/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129064
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/25/97
DATE RECEIVED: 04/25/97
DATE ANALYZED: 04/25/97
DATE REVISED: 05/28/97
BATCH#: 33687

ANALYSIS: HEXAVALENT CHROMIUM
ANALYSIS METHOD: EPA 7196

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129064-001	TP-21	0.02	mg/L	0.01
METHOD BLANK	N/A	ND	mg/L	0.01

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: MATRIX SPIKE AND SAMPLE DUPLCIATE OF 129070-001

RPD, %	<1
RECOVERY, %	96

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129064

DATE REPORTED: 05/15/97

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	33717	EPA 6010A	04/30/97
Arsenic	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Barium	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Beryllium	ND	2	ug/L	1	33717	EPA 6010A	04/30/97
Cadmium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Chromium (total)	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Cobalt	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Copper	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Lead	ND	3	ug/L	1	33717	EPA 6010A	04/30/97
Mercury	ND	0.2	ug/L	1	33820	EPA 7470	05/06/97
Molybdenum	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Nickel	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Selenium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Silver	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Thallium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Vanadium	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Zinc	ND	20	ug/L	1	33717	EPA 6010A	04/30/97

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129064

DATE REPORTED: 05/15/97

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	491	531	ug/L	98	106	80-120	8	35	33717	EPA 6010A	04/30/97
Arsenic	2000	2060	2080	ug/L	103	104	80-120	1	35	33717	EPA 6010A	04/30/97
Barium	2000	2000	1990	ug/L	100	100	80-120	1	35	33717	EPA 6010A	04/30/97
Beryllium	50	52.1	53.1	ug/L	104	106	80-120	2	35	33717	EPA 6010A	04/30/97
Cadmium	50	53.3	53.9	ug/L	107	108	80-120	1	35	33717	EPA 6010A	04/30/97
Chromium (total)	200	197	202	ug/L	99	101	80-120	3	35	33717	EPA 6010A	04/30/97
Cobalt	500	511	522	ug/L	102	104	80-120	2	35	33717	EPA 6010A	04/30/97
Copper	250	254	257	ug/L	102	103	80-120	1	35	33717	EPA 6010A	04/30/97
Lead	500	507	514	ug/L	101	103	80-120	1	35	33717	EPA 6010A	04/30/97
Mercury	5	4.605	4.861	ug/L	92	97	80-120	5	35	33820	EPA 7470	05/06/97
Molybdenum	400	454	466	ug/L	114	117	80-120	3	35	33717	EPA 6010A	04/30/97
Nickel	500	506	511	ug/L	101	102	80-120	1	35	33717	EPA 6010A	04/30/97
Selenium	2000	1960	1980	ug/L	98	99	80-120	1	35	33717	EPA 6010A	04/30/97
Silver	100	109	111	ug/L	109	111	80-120	2	35	33717	EPA 6010A	04/30/97
Thallium	2000	1970	2010	ug/L	99	101	80-120	2	35	33717	EPA 6010A	04/30/97
Vanadium	500	514	521	ug/L	103	104	80-120	1	35	33717	EPA 6010A	04/30/97
Zinc	500	451	457	ug/L	90	91	80-120	1	35	33717	EPA 6010A	04/30/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129064

DATE REPORTED: 05/15/97

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	129053-001	<60.000	474	ug/L	95	65-135	33717	EPA 6010A	04/30/97
Arsenic	2000	129053-001	5.63	1800	ug/L	90	65-135	33717	EPA 6010A	04/30/97
Barium	2000	129053-001	419	2480	ug/L	103	65-135	33717	EPA 6010A	04/30/97
Beryllium	50	129053-001	<2.000	44	ug/L	88	65-135	33717	EPA 6010A	04/30/97
Cadmium	50	129053-001	<5.000	47.4	ug/L	95	65-135	33717	EPA 6010A	04/30/97
Chromium (total)	200	129053-001	<10.000	185	ug/L	93	65-135	33717	EPA 6010A	04/30/97
Cobalt	500	129053-001	<20.000	459	ug/L	92	65-135	33717	EPA 6010A	04/30/97
Copper	250	129053-001	18.9	350	ug/L	132	65-135	33717	EPA 6010A	04/30/97
Lead	500	129053-001	<3.000	463	ug/L	93	65-135	33717	EPA 6010A	04/30/97
Mercury	5	129053-001	<0.200	3.234	ug/L	65	65-135	33820	EPA 7470	05/06/97
Molybdenum	400	129053-001	<20.000	409	ug/L	102	65-135	33717	EPA 6010A	04/30/97
Nickel	500	129053-001	<20.000	480	ug/L	96	65-135	33717	EPA 6010A	04/30/97
Selenium	2000	129053-001	<5.000	1780	ug/L	89	65-135	33717	EPA 6010A	04/30/97
Silver	100	129053-001	<5.000	132	ug/L	132	65-135	33717	EPA 6010A	04/30/97
Thallium	2000	129053-001	<5.000	1690	ug/L	85	65-135	33717	EPA 6010A	04/30/97
Vanadium	500	129053-001	<10.000	494	ug/L	99	65-135	33717	EPA 6010A	04/30/97
Zinc	500	129053-001	215	655	ug/L	88	65-135	33717	EPA 6010A	04/30/97

129064

CHAIN OF CUSTODY FORM

PAGE 1 OF 1

PROJECT NAME: 9th Avenue Terminal

JOB NUMBER: SCI 133.004 LAB: Curtis + Tompkins

PROJECT CONTACT: Jeri Alexander/Jerome D TURNAROUND:

SAMPLED BY: John Wolfe/Chris O'Dea REQUESTED BY: John Wolfe

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT	TUBE	1L Poly	500ml Poly	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES
1	TP-21							6	3			1	1	X			X		04	25	97	1030	
2									1								X	X					
3																	X						
4																	X						
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

ANALYSIS REQUESTED

GAS BTEX EPA 8015	Extended Diesel + oil EPA 8015	VOC EPA 8240	SEMI'S EPA 8270	Chl. Pest/PCB's EPA 8080	Metals EPA 6010/7000	Lead EPA 7240	Oil + Grease SM5520	Chromium 6+	Cyanide
X	X	X		X	X	X	X	X	X

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
John Wolfe	4/25/97 1225		
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:

* Fix and Filter for metals + lead

Subsurface Consultants, Inc.

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

(510) 268-0461 - FAX: 510-268-0137

P.2/2

APR 25 '97 11:56AM 5102997970SCI

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: 08-MAY-97
Lab Job Number: 129072
Project ID: 133.004
Location: 9th Ave. Terminal

Reviewed by: _____

Reviewed by: _____

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Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129072

Project Name: 9th Ave. Terminal
Project Number: 133.004

Report Date: 08 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129072-002	SCI-74	Water	24-APR-97	25-APR-97	01-MAY-97	16.	mg/L	5	DRH	33774

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: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129072
Report Date: 08 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 33774**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	5	mg/L	SMWW 17:5520BF	01-MAY-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	87%	SMWW 17:5520BF	01-MAY-97
BSD	92%	SMWW 17:5520BF	01-MAY-97

		Control Limits
Average Spike Recovery	89%	80% - 120%
Relative Percent Difference	5.2%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129072-001	SCI-72	33646	04/24/97	05/02/97	05/02/97	
129072-002	SCI-74	33646	04/24/97	05/02/97	05/02/97	

Matrix: Water

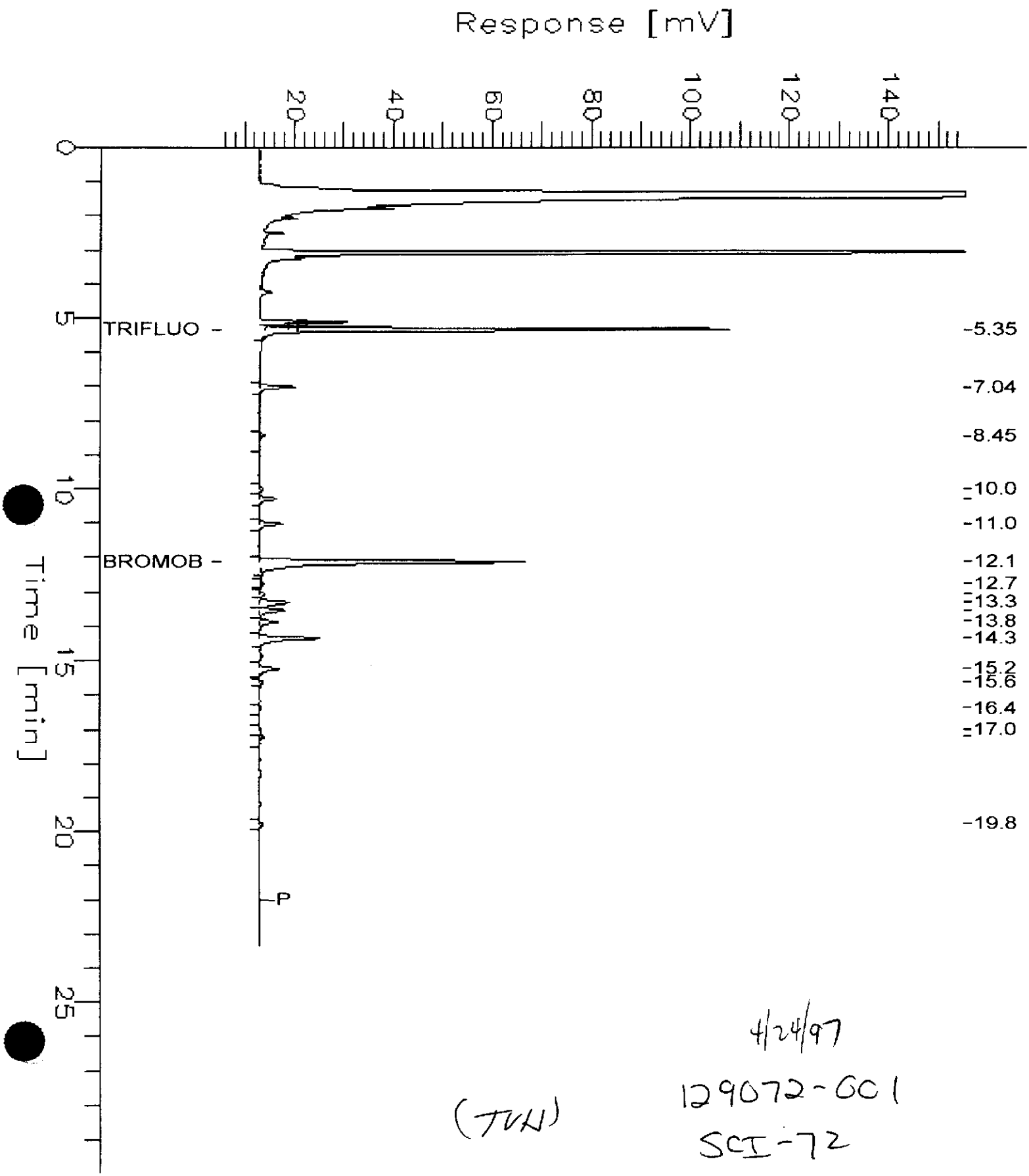
Analyte	Units	129072-001	129072-002
Diln Fac:		1	1
Gasoline	ug/L	130	3600 YH
Surrogate			
Trifluorotoluene	%REC	80	84
Bromobenzene	%REC	87	95

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

GC05 RTX1 TVH Chromatogram

Sample Name : S,129072-001,33646,
FileName : G:\GC05\DATA\122H019.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 30.00 min
Scale Factor: -1.0 Plot Offset: 5 mV

Sample #: Page 1 of 1
Date : 5/2/97 09:19 PM
Time of Injection: 5/2/97 08:55 PM
Low Point : 5.43 mV High Point : 155.43 mV
Plot Scale: 150.0 mV

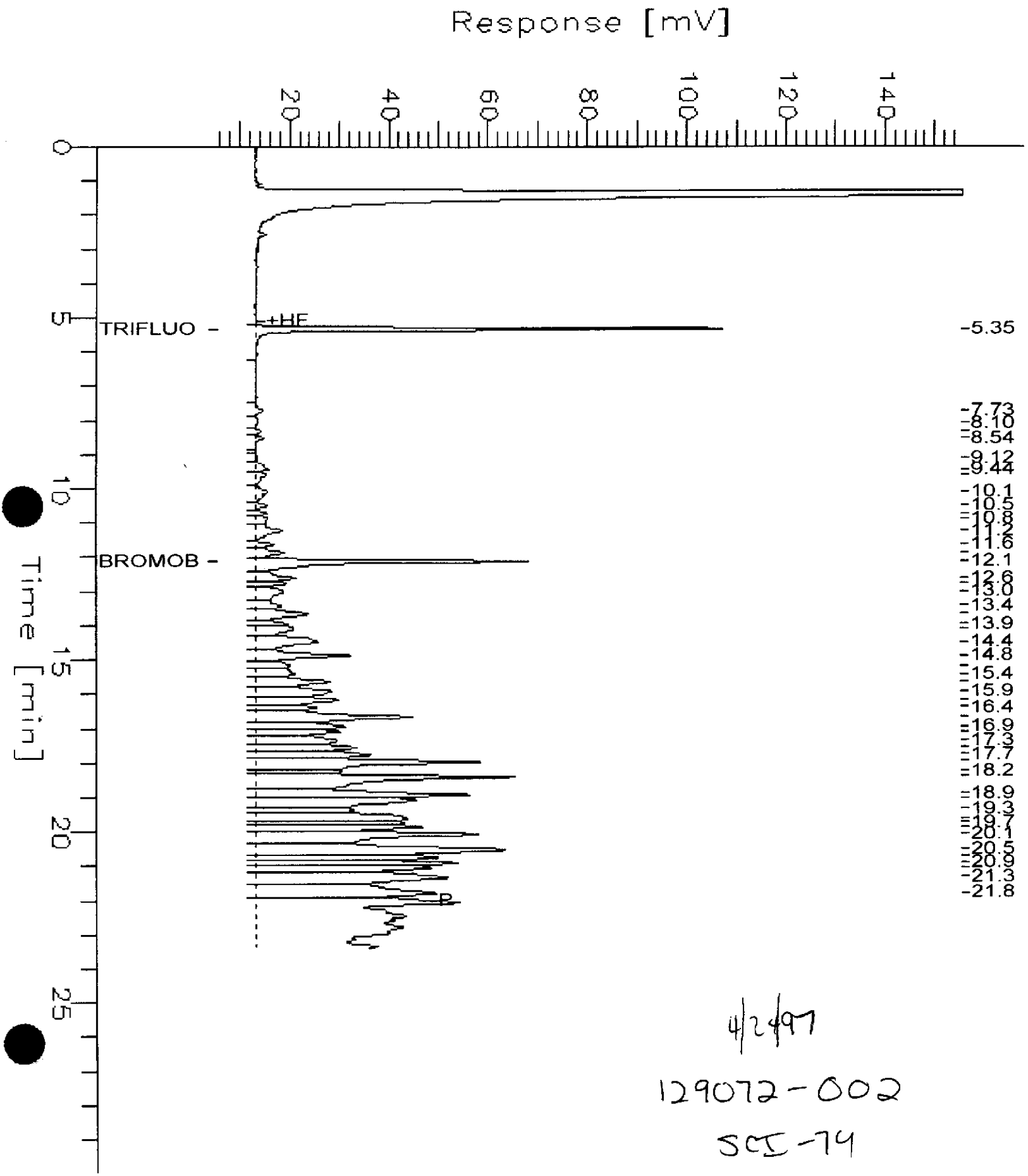


4/24/97
129072-001
SCI-72
(TVH)

GC05 RTX1 TVH Chromatogram

Sample Name : S,129072-002,33646,
FileName : G:\GC05\DATA\122H020.RAW
Method :
Start Time : 0.00 min End Time : 30.00 min
Scale Factor: -1.0 Plot Offset: 6 mV

Sample #: Page 1 of 1
Date : 5/5/97 12:08 PM
Time of Injection: 5/2/97 09:30 PM
Low Point : 5.53 mV High Point : 155.53 mV
Plot Scale: 150.0 mV



4/24/97

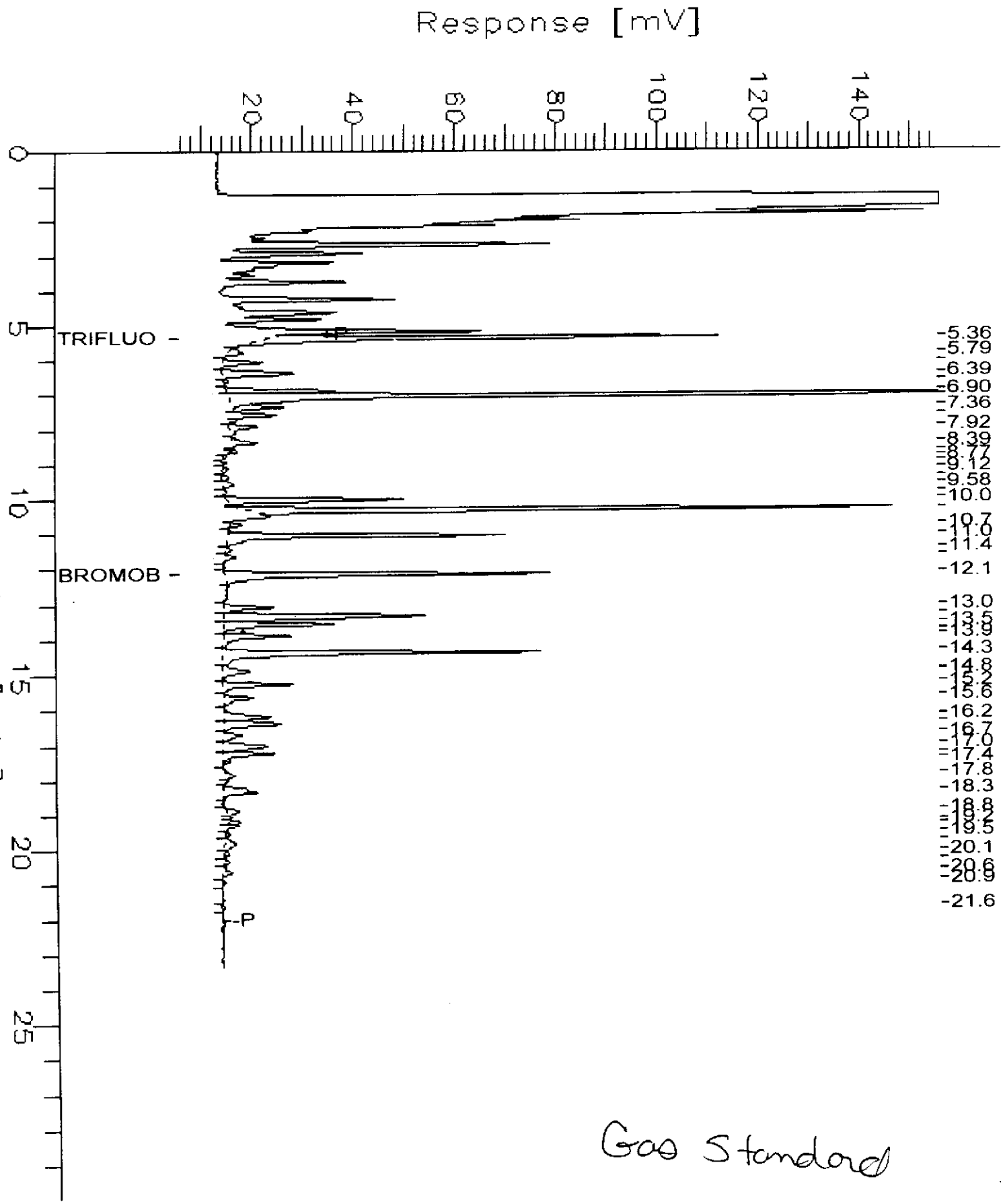
129072-002

SCI-74

GC05 RTX1 TVH Chromatogram

Sample Name : CCV/LCS,QC44811,97WS4007,33646,
FileName : G:\GC05\DATA\122H002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 30.00 min
Scale Factor: -1.0 Plot Offset: 6 mV

Sample #: GAS
Date : 5/2/97 10:12 AM
Time of Injection: 5/2/97 09:48 AM
Low Point : 5.65 mV High Point : 155.65 mV
Plot Scale: 150.0 mV



Gas Standard

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

METHOD BLANK

Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

MB Lab ID: QC44813

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	81	65-135
Bromobenzene	84	65-135

Curtis & Tompkins, Ltd.

Lab #: 129072 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

LCS Lab ID: QC44811

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	2131	2000	107	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	111	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

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129072-002	SCI-74	33718	04/24/97	04/29/97	05/06/97	

Matrix: Water

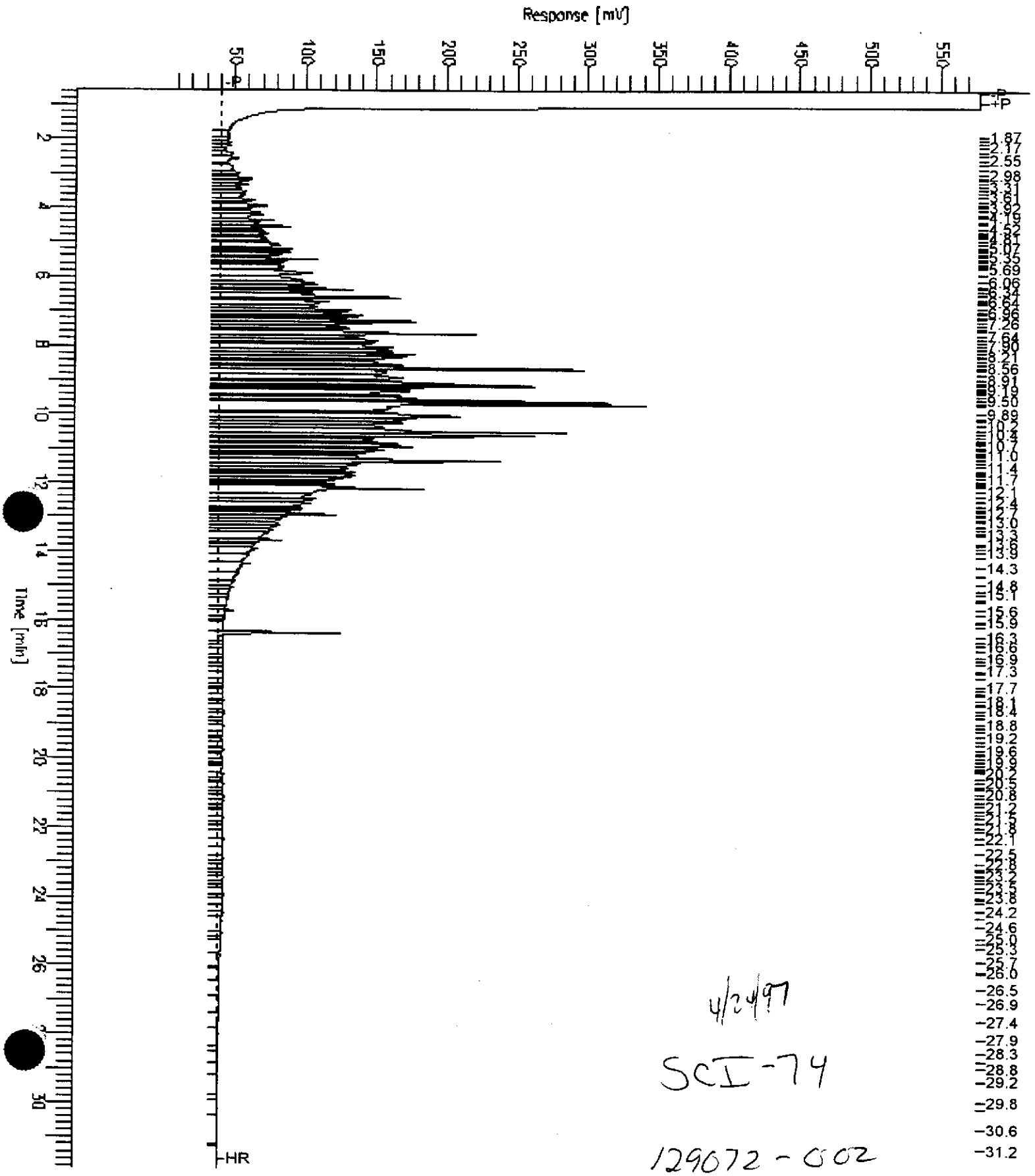
Analyte	Units	129072-002	
Diln Fac:		10	
Diesel C12-C22	ug/L	84000	
Motor Oil C22-C50	ug/L	7400	YL
Surrogate			
Hexacosane	%REC	DO	

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

Chromatogram

Sample Name : 129072-002,33718
FileName : G:\GC13\CHA\125A042.RAW
Method : ATEH127.MTH
[illegible] Time : 0.56 min End Time : 31.91 min
[illegible] Factor: 0.0 Plot Offset: 3 mV

Sample #: 33718 Page 1 of 1
Date : 5/7/97 02:30 PM
Time of Injection: 5/6/97 09:50 PM
Low Point : 2.77 mV High Point : 578.12 mV
Plot Scale: 575.4 mV



4/24/97

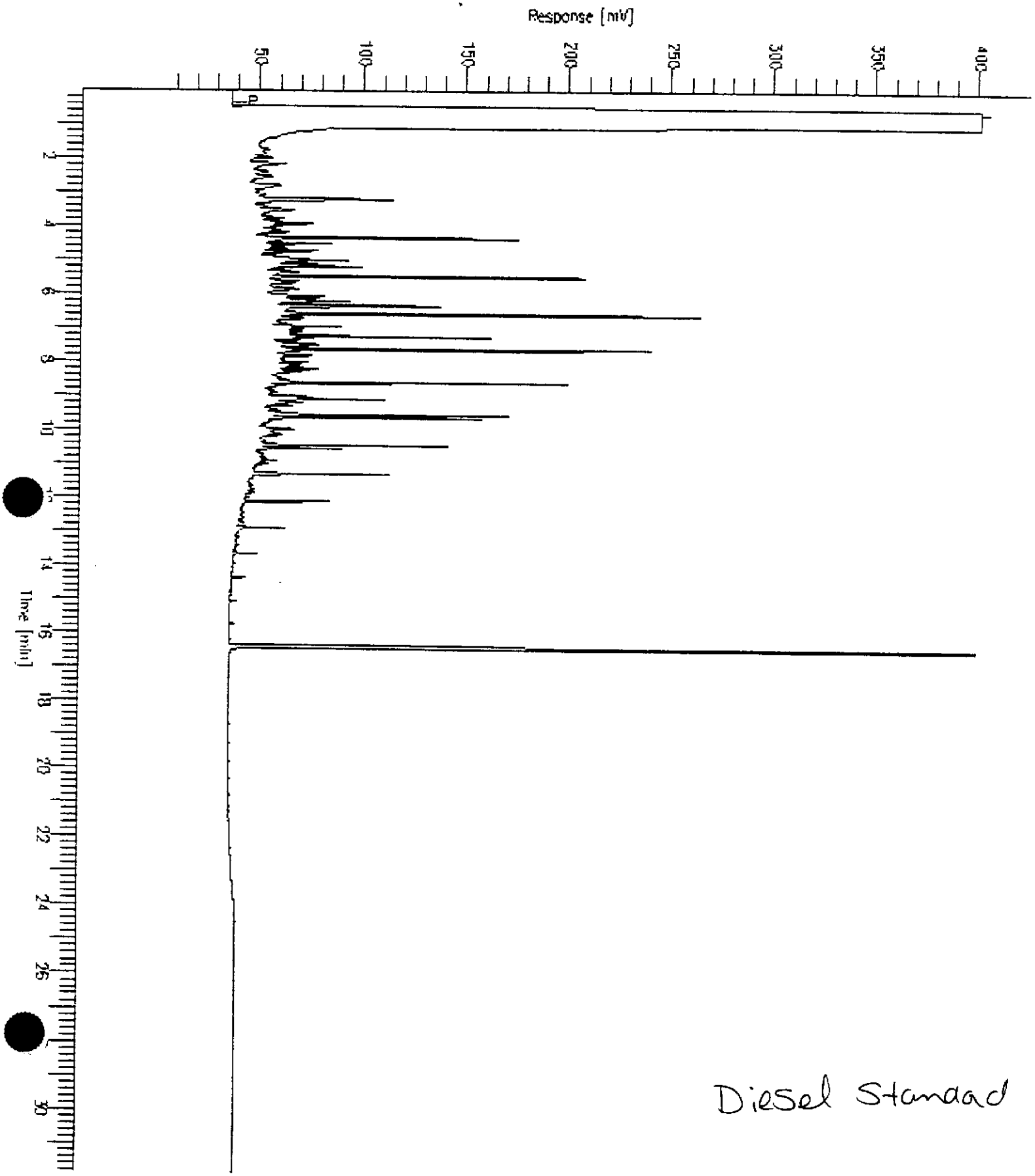
SCI-74

129072-002

Chromatogram

Sample Name : CCV,97WG3996,DS
File-Name : C:\GC13\CHA\125A017.RAW
Method : ATEH127.MTH
Start Time : 0.01 min End Time : 31.91 min
Multiplier Factor: 1.0 Plot Offset: 9 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/7/97 11:55 AM
Time of Injection: 5/6/97 04:03 AM
Low Point : 8.59 mV High Point : 401.37 mV
Plot Scale: 392.8 mV

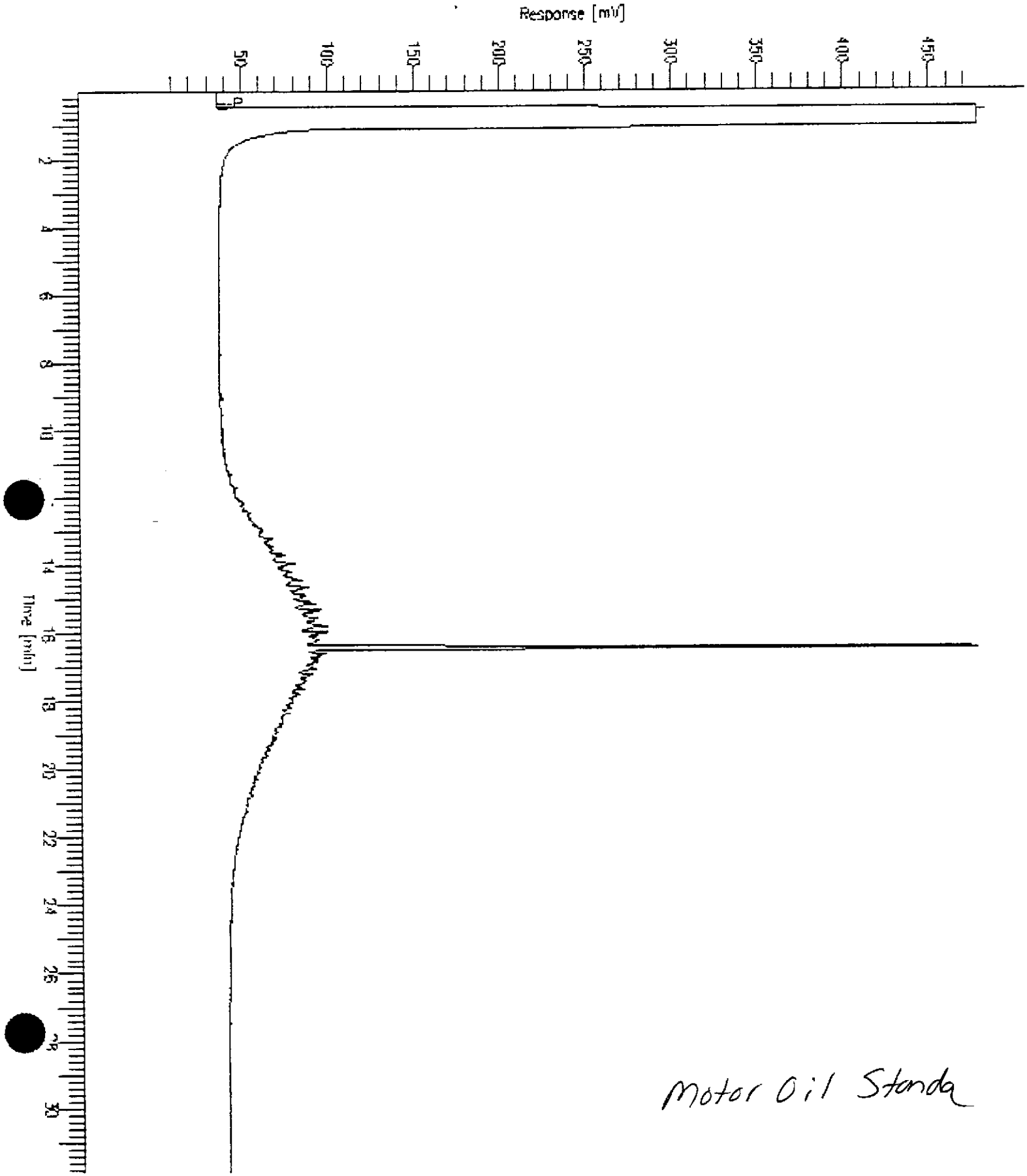


Diesel Standard

Chromatogram

Sample Name : 227,97WG4082,MO
File Name : G:\GC13\CHA\125A051.RAW
Method : ATSH127.MTH
Start Time : 0.01 min
End Time : 31.91 min
Plot Offset: 9 mV

Sample #: 500MG/L
Date : 5/7/97 11:53 AM
Time of Injection: 5/7/97 04:12 AM
Low Point : 8.80 mV
High Point : 478.12 mV
Plot Scale: 469.3 mV



Motor Oil Standa

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Water	Prep Date:	04/29/97
Batch#:	33718	Analysis Date:	05/02/97
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC45086

Analyte	Result	
Diesel C12-C22	<50	
Motor Oil C22-C50	<300	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	91	60-140

Lab #: 129072

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33718
Units: ug/L
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 05/03/97

BS Lab ID: QC45087

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1614	65	60-140
Surrogate	**%Rec**	**Limits**		
Hexacosane	87	60-140		

BSD Lab ID: QC45088

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1661	67	60-140	3	35
Surrogate	**%Rec**	**Limits**				
Hexacosane	97	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129072-001	SCI-72	33646	04/24/97	05/02/97	05/02/97	
129072-002	SCI-74	33646	04/24/97	05/02/97	05/02/97	

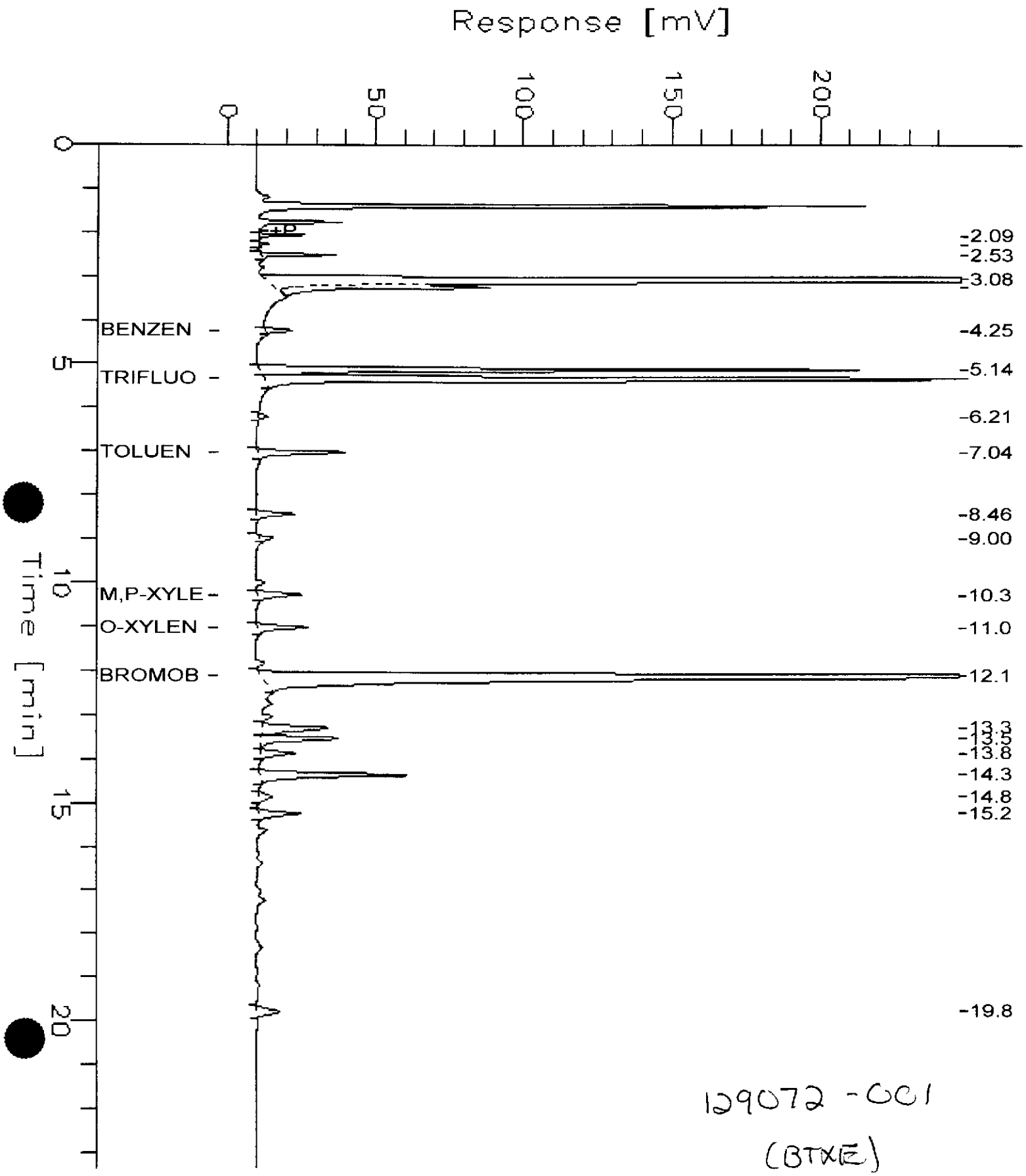
Matrix: Water

Analyte	Units	129072-001	129072-002
Diln Fac:		1	1
Benzene	ug/L	1.1	<0.5
Toluene	ug/L	4.9	<0.5
Ethylbenzene	ug/L	<0.5	<0.5
m,p-Xylenes	ug/L	2.7	<0.5
o-Xylene	ug/L	3.6	<0.5
Surrogate			
Trifluorotoluene	%REC	79	78
Bromobenzene	%REC	83	86

GC05 RTX1 BTXE Chromatogram

Sample Name : S,129072-001,33646,
FileName : G:\GC05\DATA\122G019.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 23.40 min
Scale Factor: -1.0 Plot Offset: -3 mV

Sample #: Page 1 of 1
Date : 5/2/97 09:18 PM
Time of Injection: 5/2/97 08:55 PM
Low Point : -2.56 mV High Point : 247.44 mV
Plot Scale: 250.0 mV

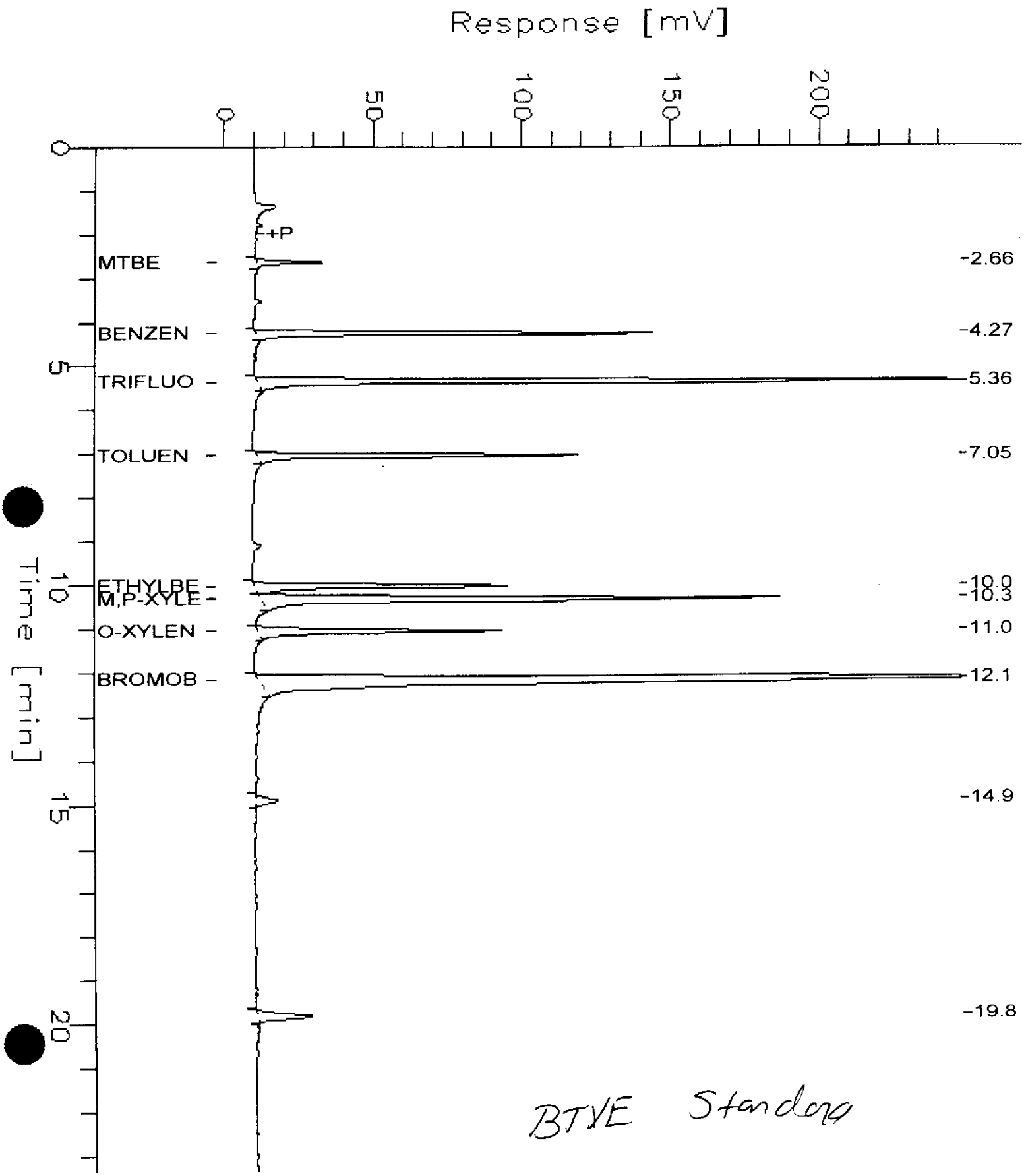


129072 - 001
(BTXE)

GC05 RTX1 BTXE Chromatogram

Sample Name : LCS,QC44812,97WS4074,33646,
FileName : G:\GC05\DATA\122G003.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 23.40 min
Scale Factor: -1.0 Plot Offset: -2 mV

Sample #: BTEX Page 1 of 1
Date : 5/2/97 10:47 AM
Time of Injection: 5/2/97 10:23 AM
Low Point : -2.44 mV High Point : 247.56 mV
Plot Scale: 250.0 mV



BTXE Standard

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

MB Lab ID: QC44813

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	75	58-130
Bromobenzene	82	62-131

Curtis & Tompkins, Ltd.

Lab #: 129072

BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

LCS Lab ID: QC44812

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	16.56	20	83	80-120
Toluene	17.18	20	86	80-120
Ethylbenzene	17.39	20	87	80-120
m,p-Xylenes	34.04	40	85	80-120
o-Xylene	17.63	20	88	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	76	58-130
Bromobenzene	85	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

Lab #: 129072

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129064-001
Matrix: Water
Batch#: 33646
Units: ug/L
Diln Fac: 1

Sample Date: 04/25/97
Received Date: 04/25/97
Prep Date: 05/02/97
Analysis Date: 05/02/97

MS Lab ID: QC44827

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	20	<0.5	16.2	81	75-125
Toluene	20	<0.5	16.71	84	75-125
Ethylbenzene	20	<0.5	16.85	84	75-125
m,p-Xylenes	40	<0.5	32.8	82	75-125
o-Xylene	20	<0.5	17.11	86	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	78	58-130
Bromobenzene	90	62-131

MSD Lab ID: QC44828

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	20	16.84	84	75-125	4	20
Toluene	20	17.58	88	75-125	5	20
Ethylbenzene	20	17.96	90	75-125	6	20
m,p-Xylenes	40	34.96	87	75-125	6	20
o-Xylene	20	18.3	92	75-125	7	20

Surrogate	%Rec	Limits
Trifluorotoluene	78	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

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		
Field ID:	SCI-74	Sampled:	04/24/97
Lab ID:	129072-002	Received:	04/25/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33690	Analyzed:	05/07/97
Units:	ug/L		
Diln Fac:	10		

Analyte	Result	Reporting Limit
alpha-BHC	ND	0.47
beta-BHC	ND	0.47
gamma-BHC	ND	0.47
delta-BHC	ND	0.47
Heptachlor	ND	0.47
Aldrin	ND	0.47
Heptachlor epoxide B	ND	0.47
Heptachlor epoxide A	ND	0.47
Endosulfan I	ND	0.47
Dieldrin	ND	0.94
4,4'-DDE	ND	0.94
Endrin	ND	0.94
Endosulfan II	ND	0.94
Endosulfan sulfate	ND	0.94
4,4'-DDD	ND	0.94
Endrin aldehyde	ND	0.94
4,4'-DDT	ND	0.94
Chlordane	ND	4.7
Methoxychlor	ND	4.7
Toxaphene	ND	9.4
Aroclor-1016	ND	4.7
Aroclor-1221	ND	9.4
Aroclor-1232	ND	4.7
Aroclor-1242	ND	4.7
Aroclor-1248	ND	4.7
Aroclor-1254	ND	4.7
Aroclor-1260	ND	4.7

Surrogate	%Recovery	Recovery Limits
TCMX	DO*	34-128
Decachlorobiphenyl	DO*	50-150

* Values outside of QC limits
DO: Surrogate diluted out

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33690
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/02/97

MB Lab ID: QC44972

Analyte	Result	Reporting Limit
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide B	ND	0.05
Heptachlor epoxide A	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
Chlordane	ND	0.5
Methoxychlor	ND	0.5
Toxaphene	ND	1.0
Aroclor-1016	ND	0.5
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.5
Aroclor-1242	ND	0.5
Aroclor-1248	ND	0.5
Aroclor-1254	ND	0.5
Aroclor-1260	ND	0.5

Surrogate	%Rec	Recovery Limits
TCMX	74	34-128
Decachlorobiphenyl	92	50-150

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33690
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/02/97

BS Lab ID: QC44973

Analyte	Spike Added	BS	%Rec	#	Limits
gamma-BHC	0.5	0.53	106		57-120
Heptachlor	0.5	0.49	98		51-109
Aldrin	0.5	0.53	106	*	57-105
Dieldrin	0.5	0.52	104		62-122
Endrin	0.5	0.55	110		70-128
4,4'-DDT	0.5	0.51	102		67-128

Surrogate	%Rec	Limits
TCMX	102	34-128
Decachlorobiphenyl	95	50-150

BSD Lab ID: QC44974

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
gamma-BHC	0.5	0.52	104		57-120	2		20
Heptachlor	0.5	0.44	88		51-109	11		20
Aldrin	0.5	0.52	104		57-105	2		20
Dieldrin	0.5	0.52	104		62-122	0		20
Endrin	0.5	0.54	108		70-128	2		20
4,4'-DDT	0.5	0.51	102		67-128	0		20

Surrogate	%Rec	Limits
TCMX	101	34-128
Decachlorobiphenyl	94	50-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 6 outside limits
Spike Recovery: 1 out of 12 outside limits

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129072

Project Name: 9th Ave. Terminal

Project Number: 133.004

Report Date: 08 May 97

ANALYSIS: pH

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	Method	Analyst	QC Batch
129072-002	SC1-74	Water	24-APR-97	25-APR-97	25-APR-97	11.5	SU	EPA 9040	DRH	33668

Curtis & Tompkins, Ltd.

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

Client: Subsurface Consultants
Project Name: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129072
Report Date: 08 May 97

ANALYSIS: pH

QC Batch Number: 33668

Calibration Verification Results

Sample	Result	TV	Difference	Limit	Analyzed
ICV	10.02	10.00	.02	< 0.10	25-APR-97
CCV	10.03	10.00	.03	< 0.10	25-APR-97

Sample Duplicate Results

Sample	Duplicate	RPD	Analyzed
11.48	11.50	.2%	25-APR-97

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129072-001
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH AVE. TERMINAL
SAMPLE ID: SCI-74

DATE SAMPLED: 04/24/97
DATE RECEIVED: 04/25/97
DATE ANALYZED: 04/29/97
DATE REPORTED: 05/08/97
BATCH NO: 33698

EPA METHOD 8240: VOLATILE ORGANICS IN WATER

COMPOUND	Result ug/L	Reporting Limit (ug/L)
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
Ethyl benzene	ND	5.0
Styrene	ND	5.0
Total xylenes	ND	5.0

ND = Not detected at or above reporting limit

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	97 %
Toluene-d8	101 %
Bromofluorobenzene	102 %

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129072-METHOD BLANK
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH AVE. TERMINAL
SAMPLE ID: MB

DATE ANALYZED: 04/29/97
DATE REPORTED: 05/08/97
BATCH NO: 33698

EPA METHOD 8240: VOLATILE ORGANICS IN WATER

COMPOUND	Result ug/L	Reporting Limit (ug/L)
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
Ethyl benzene	ND	5.0
Styrene	ND	5.0
Total xylenes	ND	5.0

ND = Not detected at or above reporting limit

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	98 %
Toluene-d8	98 %
Bromofluorobenzene	101 %

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33698
Units: ug/L
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 04/29/97

LCS Lab ID: QC45004

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	51.85	50	104	51-180
Trichloroethene	48.31	50	97	73-141
Benzene	46.14	50	92	78-142
Toluene	50.14	50	100	76-150
Chlorobenzene	48.58	50	97	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	101	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCI-74
Lab ID: 129072-002
Matrix: Water
Batch#: 33698
Units: ug/L
Diln Fac: 1

Sample Date: 04/24/97
Received Date: 04/25/97
Prep Date: 04/29/97
Analysis Date: 04/29/97

MS Lab ID: QC45032

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	49.4	99	51-180
Trichloroethene	50	<5	49.17	98	73-141
Benzene	50	<5	44.58	89	78-142
Toluene	50	<5	49.31	98	76-150
Chlorobenzene	50	<5	47.93	96	83-129

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

MSD Lab ID: QC45033

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	48.44	97	51-180	2	14
Trichloroethene	50	50.34	101	73-141	2	14
Benzene	50	45.02	90	78-142	1	11
Toluene	50	50.13	99	76-150	2	13
Chlorobenzene	50	48.78	98	83-129	2	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	91	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
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

San Francisco Regional Office

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

May 5, 1997

Ms. Tracy Babjar
CURTIS & TOMPKINS, LTD.
2323 Fifth Street
Berkeley, CA 94710

Client Ref.: 129072
Clayton Project No.: 97043.54

Dear Ms. Babjar:

Attached is our analytical laboratory report for the samples received on April 28, 1997. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after June 4, 1997, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Andrew Bradem for

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/las

Attachments

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129072
Clayton Project No. 97043.54

Sample Identification: See Below
Lab Number: 9704354
Sample Matrix/Media: WATER
Method Reference: EPA 353.2

Date Received: 04/28/97
Date Analyzed: 04/30/97

Lab Number	Sample Identification	Date Sampled	Nitrate-N (mg/L)	Method Detection Limit (mg/L)
-01	SCI-74	04/24/97	21 a	0.05
-02	METHOD BLANK	--	<0.05	0.05

ND: Not detected at or above limit of detection
-- Information not available or not applicable

a Sample received past recommended holding times for this analysis.

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129072
Clayton Project No. 97043.54

Sample Identification: See Below
Lab Number: 9704354
Sample Matrix/Media: WATER
Method Reference: EPA 353.2

Date Received: 04/28/97
Date Analyzed: 04/30/97

Lab Number	Sample Identification	Date Sampled	Nitrite-N (mg/L)	Method Detection Limit (mg/L)
-01	SCI-74	04/24/97	3.2 a	0.05
-02	METHOD BLANK	--	<0.05	0.05

ND: Not detected at or above limit of detection
--: Information not available or not applicable

a Sample received past recommended holding times for this analysis.

9704354

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 ph
(510)486-0532 fx

Project Number: 129072

Subcontract Lab:

Clayton Environmental
1252 Quarry Lane
Pleasanton, CA 94566
(510) 426-2600

Please send report to: Tracy Babjar

Turnaround Time: Normal (5 day)

Sample ID	Date Sampled	Matrix	Analysis	C&T Lab #
SCI-74	24-APR-97	125mL PL Water	NITRATE/NITRITE	129072-002

**Please report using Sample ID instead of C&T Lab #.

Notes:

RELINQUISHED BY:		RECEIVED BY:	
	Date/Time		Date/Time
	Date/Time	Carol Hammerberg	Date/Time

4/28/97 15:52

4/28/97 1552

Rec'd in good condition

Signature on this form constitutes a firm Purchase Order for the services requested above.

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129072
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/24/97
DATE RECEIVED: 04/25/97
DATE ANALYZED: 04/30/97
BATCH#: 33719

ANALYSIS: TOTAL PHOSPHORUS
ANALYSIS METHOD: EPA 365.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129072-002	SCI-74	ND	mg/L	0.03
METHOD BLANK	N/A	ND	mg/L	0.03

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: MS/MSD OF 129091-001

RPD, %	6
RECOVERY, %	101

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

Field ID:	SCI-74	Sampled:	04/24/97
Lab ID:	129072-002	Received:	04/25/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33692	Analyzed:	05/12/97
Units:	ug/L		
Diln Fac:	5		

Analyte	Result	Reporting Limit
Phenol	ND	53
2-Chlorophenol	ND	53
Benzyl alcohol	ND	53
2-Methylphenol	ND	53
4-Methylphenol	ND	53
2-Nitrophenol	ND	260
2,4-Dimethylphenol	ND	53
Benzoic acid	ND	260
2,4-Dichlorophenol	ND	53
4-Chloro-3-methylphenol	ND	53
2,4,6-Trichlorophenol	ND	53
2,4,5-Trichlorophenol	ND	260
2,4-Dinitrophenol	ND	260
4-Nitrophenol	ND	260
4,6-Dinitro-2-methylphenol	ND	260
Pentachlorophenol	ND	260
N-Nitrosodimethylamine	ND	53
Aniline	ND	53
bis(2-Chloroethyl)ether	ND	53
1,3-Dichlorobenzene	ND	53
1,4-Dichlorobenzene	ND	53
1,2-Dichlorobenzene	ND	53
bis(2-Chloroisopropyl) ether	ND	53
N-Nitroso-di-n-propylamine	ND	53
Hexachloroethane	ND	53
Nitrobenzene	ND	53
Isophorone	ND	53
bis(2-Chloroethoxy)methane	ND	53
1,2,4-Trichlorobenzene	ND	53
Naphthalene	ND	53
4-Chloroaniline	ND	53
Hexachlorobutadiene	ND	53
2-Methylnaphthalene	ND	53
Hexachlorocyclopentadiene	ND	53
2-Chloronaphthalene	ND	53
2-Nitroaniline	ND	260
Dimethylphthalate	ND	53
Acenaphthylene	ND	53

Semivolatile Organics by GC/MS

Field ID:	SCI-74	Sampled:	04/24/97
Lab ID:	129072-002	Received:	04/25/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33692	Analyzed:	05/12/97
Units:	ug/L		
Diln Fac:	5		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	53
3-Nitroaniline	ND	260
Acenaphthene	ND	53
Dibenzofuran	ND	53
2,4-Dinitrotoluene	ND	53
Diethylphthalate	ND	53
4-Chlorophenyl-phenylether	ND	53
Fluorene	ND	53
4-Nitroaniline	ND	260
N-Nitrosodiphenylamine	ND	53
Azobenzene	ND	53
4-Bromophenyl-phenylether	ND	53
Hexachlorobenzene	ND	53
Phenanthrene	ND	53
Anthracene	ND	53
Di-n-butylphthalate	ND	53
Fluoranthene	ND	53
Pyrene	ND	53
Butylbenzylphthalate	ND	53
3,3'-Dichlorobenzidine	ND	260
Benzo(a)anthracene	ND	53
Chrysene	ND	53
bis(2-Ethylhexyl)phthalate	ND	53
Di-n-octylphthalate	ND	53
Benzo(b)fluoranthene	ND	53
Benzo(k)fluoranthene	ND	53
Benzo(a)pyrene	ND	53
Indeno(1,2,3-cd)pyrene	ND	53
Dibenz(a,h)anthracene	ND	53
Benzo(g,h,i)perylene	ND	53

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	65	21-110
Phenol-d5	72	10-110
2,4,6-Tribromophenol	19	10-123
Nitrobenzene-d5	59	35-114
2-Fluorobiphenyl	0*	43-116
Terphenyl-d14	0*	33-141

* Values outside of QC limits

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

MB Lab ID: QC44978

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

Curtis & Tompkins, Ltd.

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

MB Lab ID: QC44978

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	55	21-110
Phenol-d5	60	10-110
2,4,6-Tribromophenol	57	10-123
Nitrobenzene-d5	67	35-114
2-Fluorobiphenyl	73	43-116
Terphenyl-d14	81	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

BS Lab ID: QC44979

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	100	69.05	69	12-110
2-Chlorophenol	100	74.39	74	27-123
4-Chloro-3-methylphenol	100	69.07	69	23-97
4-Nitrophenol	100	58.92	59	10-80
Pentachlorophenol	100	52.29	52	9-103
1,4-Dichlorobenzene	50	34.82	70	36-97
N-Nitroso-di-n-propylamine	50	30.37	61	41-116
1,2,4-Trichlorobenzene	50	35.47	71	39-98
Acenaphthene	50	40.65	81	46-118
2,4-Dinitrotoluene	50	26.9	54	24-96
Pyrene	50	40.05	80	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	63	21-110
Phenol-d5	66	10-110
2,4,6-Tribromophenol	67	10-123
Nitrobenzene-d5	74	35-114
2-Fluorobiphenyl	81	43-116
Terphenyl-d14	89	33-141

BSD Lab ID: QC44980

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	100	69.24	69	12-110	0	42
2-Chlorophenol	100	74.78	75	27-123	1	40
4-Chloro-3-methylphenol	100	72.09	72	23-97	4	42
4-Nitrophenol	100	62.52	63	10-80	7	50
Pentachlorophenol	100	51.97	52	9-103	0	50
1,4-Dichlorobenzene	50	35.43	71	36-97	1	28
N-Nitroso-di-n-propylamine	50	31.29	63	41-116	3	38
1,2,4-Trichlorobenzene	50	36.92	74	39-98	4	28
Acenaphthene	50	42.21	84	46-118	4	31
2,4-Dinitrotoluene	50	28.38	57	24-96	5	38
Pyrene	50	41.2	82	26-127	2	31

Surrogate	%Rec	Limits
2-Fluorophenol	64	21-110
Phenol-d5	67	10-110
2,4,6-Tribromophenol	71	10-123
Nitrobenzene-d5	78	35-114
2-Fluorobiphenyl	84	43-116
Terphenyl-d14	92	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

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-74
LAB ID: 129072-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Filtrate

DATE SAMPLED: 04/24/97
DATE RECEIVED: 04/25/97
DATE REPORTED: 05/08/97

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	33717	EPA 6010A	05/01/97
Arsenic	ND	5.0	1	33717	EPA 6010A	05/01/97
Barium	670	10	1	33717	EPA 6010A	05/01/97
Beryllium	ND	2.0	1	33717	EPA 6010A	05/01/97
Cadmium	ND	5.0	1	33717	EPA 6010A	05/01/97
Chromium (total)	ND	10	1	33717	EPA 6010A	05/01/97
Cobalt	ND	20	1	33717	EPA 6010A	05/01/97
Copper	ND	10	1	33717	EPA 6010A	05/01/97
Lead	ND	3.0	1	33717	EPA 6010A	05/01/97
Mercury	ND	0.20	1	33820	EPA 7470	05/06/97
Molybdenum	23	20	1	33717	EPA 6010A	05/01/97
Nickel	ND	20	1	33717	EPA 6010A	05/01/97
Selenium	ND	5.0	1	33717	EPA 6010A	05/01/97
Silver	ND	5.0	1	33717	EPA 6010A	05/01/97
Thallium	ND	5.0	1	33717	EPA 6010A	05/01/97
Vanadium	12	10	1	33717	EPA 6010A	05/01/97
Zinc	ND	20	1	33717	EPA 6010A	05/01/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-74
LAB ID: 129072-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Water

DATE SAMPLED: 04/24/97
DATE RECEIVED: 04/25/97
DATE REPORTED: 05/08/97

Metals Analytical Report

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Potassium	130000	500	1	33689	EPA 6010A	04/30/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129072

DATE REPORTED: 05/08/97

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	33717	EPA 6010A	04/30/97
Arsenic	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Barium	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Beryllium	ND	2	ug/L	1	33717	EPA 6010A	04/30/97
Cadmium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Chromium (total)	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Cobalt	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Copper	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Lead	ND	3	ug/L	1	33717	EPA 6010A	04/30/97
Mercury	ND	0.2	ug/L	1	33820	EPA 7470	05/06/97
Molybdenum	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Nickel	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Potassium	ND	500	ug/L	1	33689	EPA 6010A	04/30/97
Selenium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Silver	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Thallium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Vanadium	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Zinc	ND	20	ug/L	1	33717	EPA 6010A	04/30/97

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129072

DATE REPORTED: 05/08/97

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	491	531	ug/L	98	106	80-120	8	35	33717	EPA 6010A	04/30/97
Arsenic	2000	2060	2080	ug/L	103	104	80-120	1	35	33717	EPA 6010A	04/30/97
Barium	2000	2000	1990	ug/L	100	100	80-120	1	35	33717	EPA 6010A	04/30/97
Beryllium	50	52.1	53.1	ug/L	104	106	80-120	2	35	33717	EPA 6010A	04/30/97
Cadmium	50	53.3	53.9	ug/L	107	108	80-120	1	35	33717	EPA 6010A	04/30/97
Chromium (total)	200	197	202	ug/L	99	101	80-120	3	35	33717	EPA 6010A	04/30/97
Cobalt	500	511	522	ug/L	102	104	80-120	2	35	33717	EPA 6010A	04/30/97
Copper	250	254	257	ug/L	102	103	80-120	1	35	33717	EPA 6010A	04/30/97
Lead	500	507	514	ug/L	101	103	80-120	1	35	33717	EPA 6010A	04/30/97
Mercury	5	4.605	4.861	ug/L	92	97	80-120	5	35	33820	EPA 7470	05/06/97
Molybdenum	400	454	466	ug/L	114	117	80-120	3	35	33717	EPA 6010A	04/30/97
Nickel	500	506	511	ug/L	101	102	80-120	1	35	33717	EPA 6010A	04/30/97
Potassium	20000	18900	19010	ug/L	95	95	80-120	1	35	33689	EPA 6010A	04/30/97
Selenium	2000	1960	1980	ug/L	98	99	80-120	1	35	33717	EPA 6010A	04/30/97
Silver	100	109	111	ug/L	109	111	80-120	2	35	33717	EPA 6010A	04/30/97
Thallium	2000	1970	2010	ug/L	99	101	80-120	2	35	33717	EPA 6010A	04/30/97
Vanadium	500	514	521	ug/L	103	104	80-120	1	35	33717	EPA 6010A	04/30/97
Zinc	500	451	457	ug/L	90	91	80-120	1	35	33717	EPA 6010A	04/30/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129072

DATE REPORTED: 05/08/97

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	129053-001	<60.000	474	ug/L	95	65-135	33717	EPA 6010A	04/30/97
Arsenic	2000	129053-001	5.63	1800	ug/L	90	65-135	33717	EPA 6010A	04/30/97
Barium	2000	129053-001	419	2480	ug/L	103	65-135	33717	EPA 6010A	04/30/97
Beryllium	50	129053-001	<2.000	44	ug/L	88	65-135	33717	EPA 6010A	04/30/97
Cadmium	50	129053-001	<5.000	47.4	ug/L	95	65-135	33717	EPA 6010A	04/30/97
Chromium (total)	200	129053-001	<10.000	185	ug/L	93	65-135	33717	EPA 6010A	04/30/97
Cobalt	500	129053-001	<20.000	459	ug/L	92	65-135	33717	EPA 6010A	04/30/97
Copper	250	129053-001	18.9	350	ug/L	132	65-135	33717	EPA 6010A	04/30/97
Lead	500	129053-001	<3.000	463	ug/L	93	65-135	33717	EPA 6010A	04/30/97
Mercury	5	129053-001	<0.200	3.234	ug/L	65	65-135	33820	EPA 7470	05/06/97
Molybdenum	400	129053-001	<20.000	409	ug/L	102	65-135	33717	EPA 6010A	04/30/97
Nickel	500	129053-001	<20.000	480	ug/L	96	65-135	33717	EPA 6010A	04/30/97
Potassium	20000	129039-002	38550	62330	ug/L	119	65-135	33689	EPA 6010A	04/30/97
Selenium	2000	129053-001	<5.000	1780	ug/L	89	65-135	33717	EPA 6010A	04/30/97
Silver	100	129053-001	<5.000	132	ug/L	132	65-135	33717	EPA 6010A	04/30/97
Thallium	2000	129053-001	<5.000	1690	ug/L	85	65-135	33717	EPA 6010A	04/30/97
Vanadium	500	129053-001	<10.000	494	ug/L	99	65-135	33717	EPA 6010A	04/30/97
Zinc	500	129053-001	215	655	ug/L	88	65-135	33717	EPA 6010A	04/30/97

CHAIN OF CUSTODY FORM

129072

PROJECT NAME: KOT

JOB NUMBER: 133.004 LAB: C&T

PROJECT CONTACT: Jerome de Vanier TURNAROUND: standard

SAMPLED BY: JD REQUESTED BY: JD

PAGE OF

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: TUH/BTEX	TEH	8080	lead	8240	8270	Reactive metals (Fe)	pH	nitrate/nitrite, phosphate	petroleum
-1	SCI-72	X						2						X			X		04	24	97	1500		X									
-2	SCI-74	X						4	1					X			X						*	X	X	X		X	X	X	X	X	X
	SCI-74	X							4								X	X															

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dan Olefard	4/25/97 3:20 p.m.		
		RECEIVED BY: (Signature) 4/25/97	15:20

COMMENTS & NOTES:

* If running 8240 - skip 8020 for BTEX

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: 13-MAY-97
Lab Job Number: 129073
Project ID: 133.004
Location: 9th Ave. Terminal

Reviewed by: _____

Reviewed by: Tracy Babian

This package may be reproduced only in its entirety.

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129073

Project Name: 9th Ave. Terminal
Project Number: 133.004

Report Date: 09 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129073-005	SCI-74@4.5	Soil	24-APR-97	25-APR-97	06-MAY-97	ND	mg/Kg	50	DLP	33832
129073-007	SCITP-17@1.5	Soil	24-APR-97	25-APR-97	06-MAY-97	21000	mg/Kg	50	DLP	33832
129073-008	SCITP-19@6.0	Soil	24-APR-97	25-APR-97	06-MAY-97	98.	mg/Kg	50	DLP	33832
129073-009	SCITP-20@3.0	Soil	24-APR-97	25-APR-97	06-MAY-97	130	mg/Kg	50	DLP	33832
129073-011	SCITP-21@2.0	Soil	25-APR-97	25-APR-97	06-MAY-97	3500	mg/Kg	50	DLP	33832
129073-012	SCITP-21@7.0	Soil	25-APR-97	25-APR-97	06-MAY-97	62.	mg/Kg	50	DLP	33832

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: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129073
Report Date: 09 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) QC Batch Number: 33832

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	50	mg/Kg	SMWW 17:5520EF	06-MAY-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	86%	SMWW 17:5520EF	06-MAY-97
BSD	102%	SMWW 17:5520EF	06-MAY-97

		Control Limits
Average Spike Recovery	94%	80% - 120%
Relative Percent Difference	17.2%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129073-001	SCI-72@1.5	33662	04/24/97	04/28/97	04/28/97	
129073-002	SCI-72@5.5	33662	04/24/97	04/28/97	04/28/97	
129073-003	SCI-73@5	33662	04/24/97	04/28/97	04/28/97	
129073-004	SCI-74@2	33662	04/24/97	04/28/97	04/28/97	

Matrix: Soil

Analyte	Units	129073-001	129073-002	129073-003	129073-004
Diln Fac:		1	1	1	1
Gasoline	mg/Kg	<1	<1	<1	<1
Surrogate					
Trifluorotoluene	%REC	54	53	54	54
Bromobenzene	%REC	83	87	86	88

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129073-005	SCI-74@4.5	33662	04/24/97	04/28/97	04/28/97	
129073-006	SCITP-17@0.8	33662	04/24/97	04/28/97	04/28/97	
129073-007	SCITP-17@1.5	33754	04/24/97	05/02/97	05/02/97	
129073-008	SCITP-19@6.0	33754	04/24/97	05/01/97	05/01/97	

Matrix: Soil

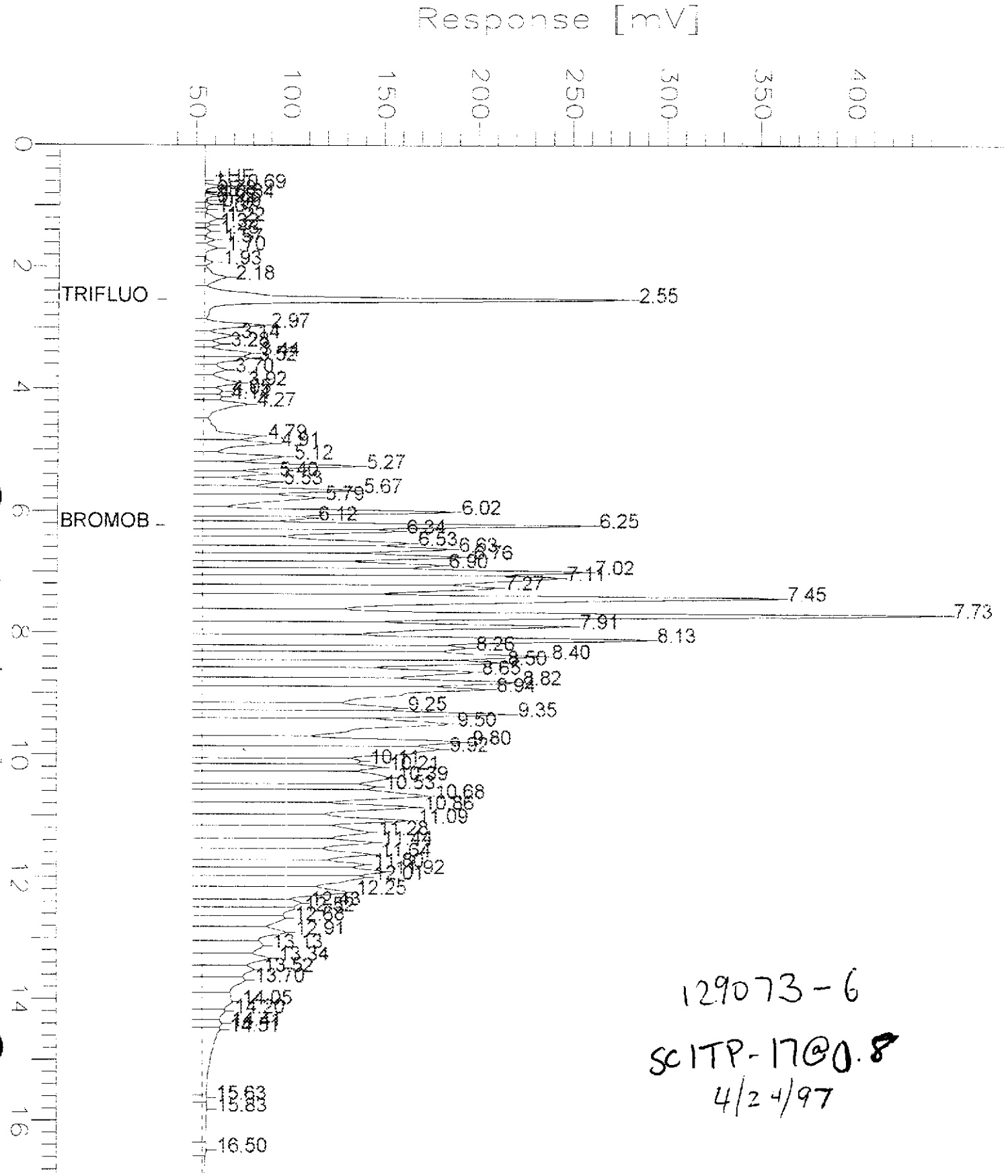
Analyte	Units	129073-005	129073-006	129073-007	129073-008
Diln Fac:		1	1	100	1
Gasoline	mg/Kg	<1	27 H	370 H	25 YH
Surrogate					
Trifluorotoluene	%REC	52	67	68	65
Bromobenzene	%REC	81	107	106	117

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

GC04 TVH 'J' Data File Rtx1FID

Sample Name : S,129073-006,33662,
FileName : G:\GC04\DATA\118J013.RAW
Method :
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 35 mV

Sample #: Page 1 of 1
Date : 4/30/97 08:52 PM
Time of Injection: 4/28/97 07:20 AM
Low Point : 34.91 mV High Point : 448.23 mV
Plot Scale: 413.3 mV

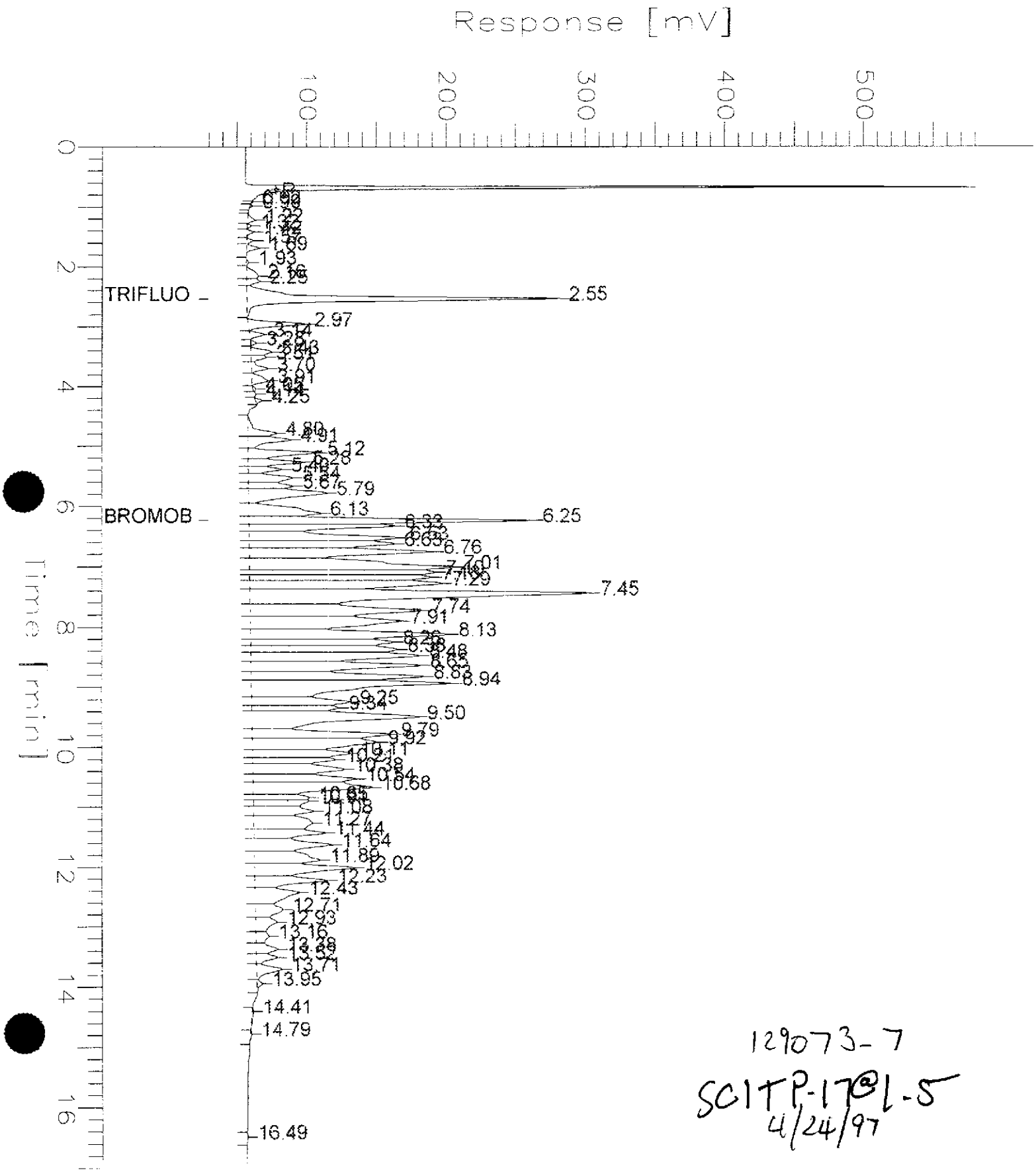


129073-6
SCITP-17@0.8
4/24/97

GC04 TVH 'J' Data File Rtx1FID

Sample Name : D,129073-007,33754,
FileName : G:\GC04\DATA\121J026.raw
Method : TVMAR14
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 30 mV

Sample #: Page 1 of 1
Date : 5/2/97 02:23 AM
Time of Injection: 5/2/97 02:06 AM
Low Point : 29.98 mV High Point : 580.29 mV
Plot Scale: 550.3 mV

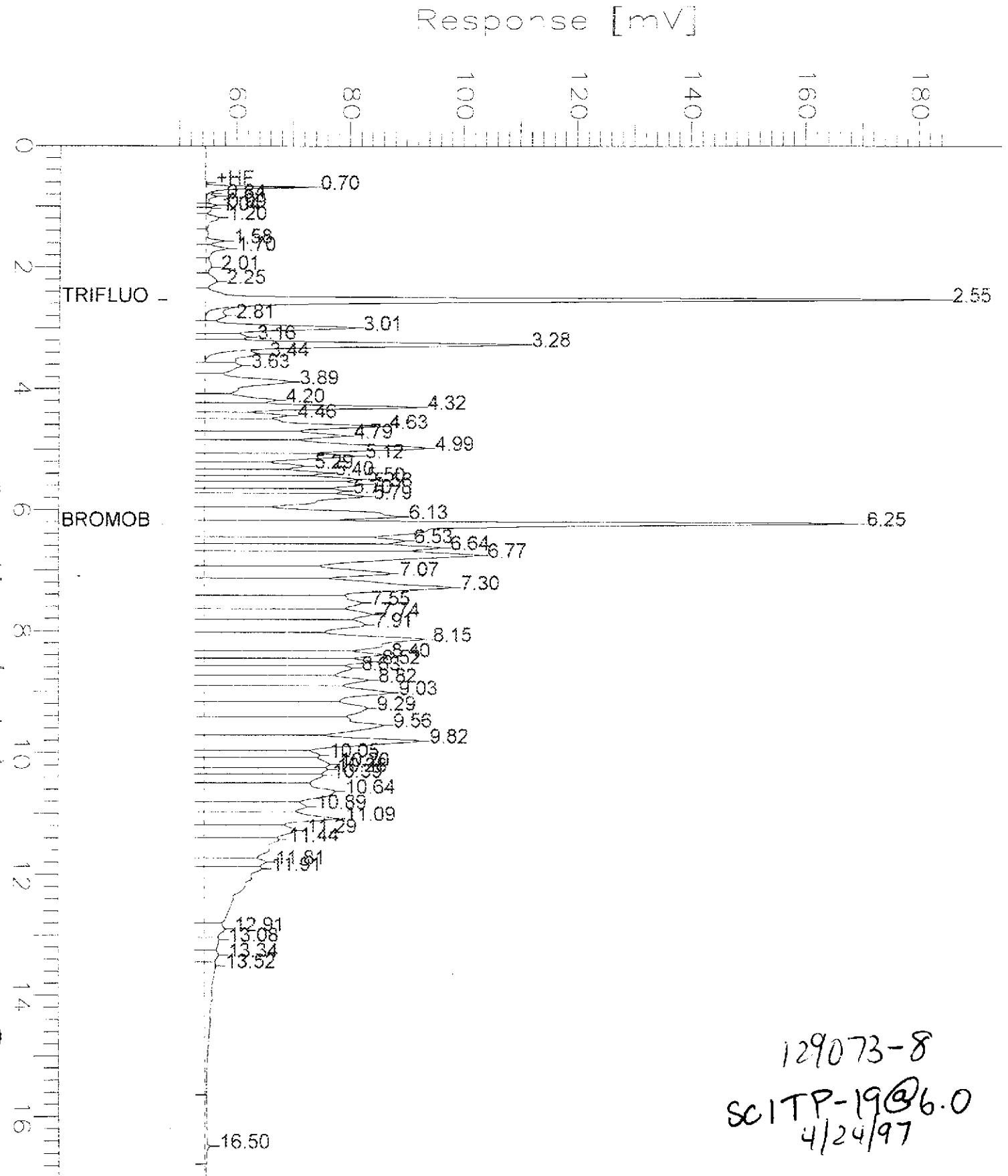


129073-7
SCITP-17@1-5
4/24/97

GC04 TVH 'J' Data File Rtx1FID

Sample Name : S,129073-008,33662,
FileName : G:\GC04\DATA\118J014.RAW
Method :
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 48 mV

Sample #: Page 1 of 1
Date : 4/30/97 08:53 PM
Time of Injection: 4/28/97 07:48 AM
Low Point : 48.01 mV High Point : 184.30 mV
Plot Scale: 136.3 mV

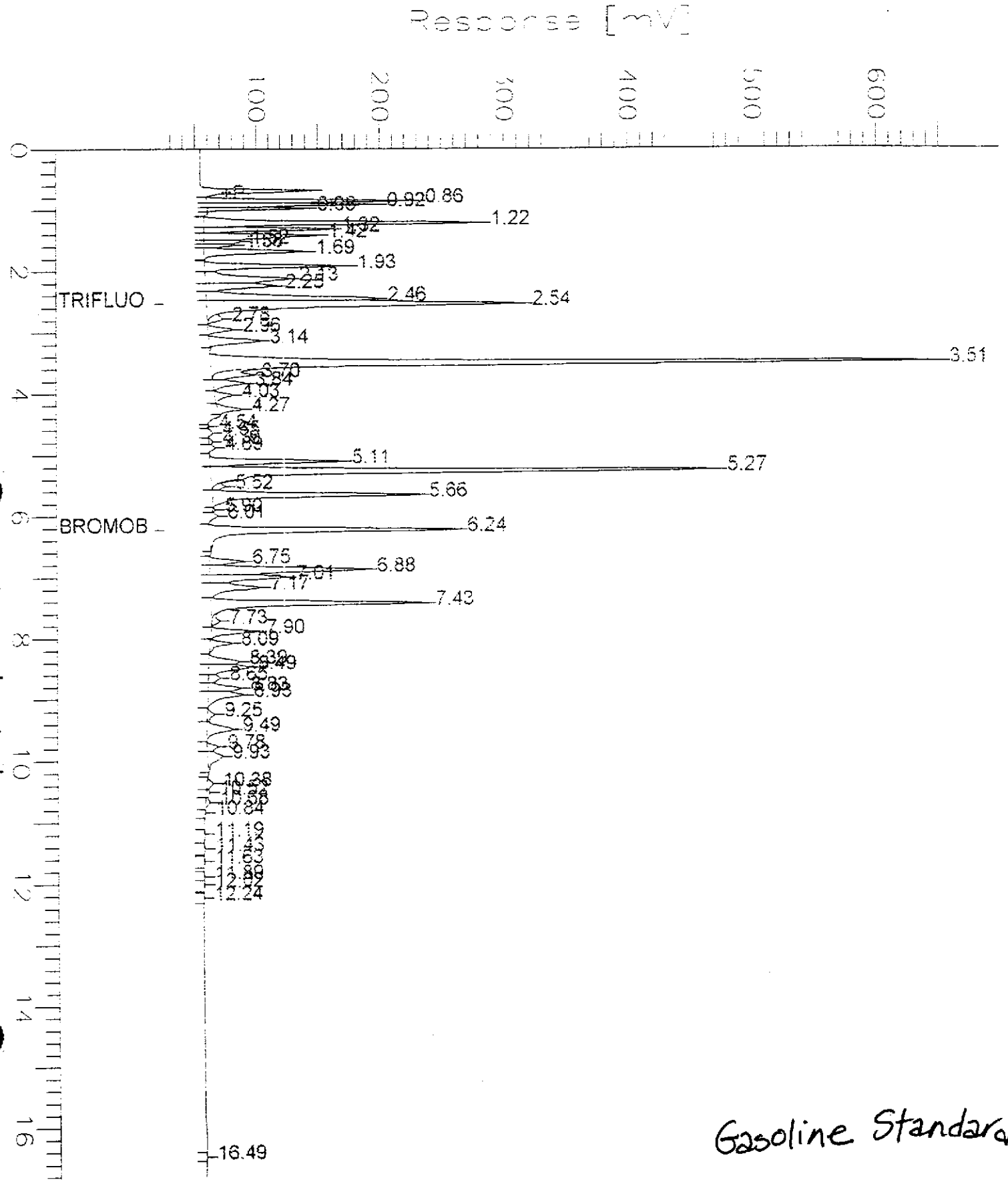


129073-8
SCITP-19@6.0
4/24/97

GC04 TVH 'J' Data File Rtx1FID

Sample Name : LCS/CCV,QC44871,33662,
FileName : G:\GC04\DATA\118J002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 25 mV

Sample #: 97WS4007 G
Date : 4/28/97 02:14 AM
Time of Injection: 4/28/97 01:57 AM
Low Point : 24.65 mV High Point : 651.57 mV
Plot Scale: 626.9 mV



Gasoline Standard

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129073-009	SCITP-20@3.0	33754	04/24/97	05/01/97	05/01/97	
129073-011	SCITP-21@2.0	33754	04/25/97	05/01/97	05/01/97	
129073-012	SCITP-21@7.0	33754	04/25/97	05/02/97	05/02/97	
129073-013	SCITP-22@1.0	33754	04/25/97	05/02/97	05/02/97	

Matrix: Soil

Analyte	Units	129073-009	129073-011	129073-012	129073-013
Diln Fac:		1	1	1	1
Gasoline	mg/Kg	<1	<1	<1	<1
Surrogate					
Trifluorotoluene	%REC	54	55	56	52
Bromobenzene	%REC	90	92	90	62

Lab #: 129073

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Soil	Prep Date:	05/01/97
Batch#:	33754	Analysis Date:	05/01/97
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC45224

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	57	52-127
Bromobenzene	88	45-140

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Soil	Prep Date:	04/28/97
Batch#:	33662	Analysis Date:	04/28/97
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC44873

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	52	52-127
Bromobenzene	90	45-140

Curtis & Tompkins, Ltd.

Lab #: 129073 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33662
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 04/28/97

LCS Lab ID: QC44871

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	9.61	10	96	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	88	52-127		
Bromobenzene	124	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

Lab #: 129073

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

LABORATORY CONTROL SAMPLE

Matrix:	Soil	Prep Date:	05/01/97
Batch#:	33754	Analysis Date:	05/01/97
Units:	mg/Kg		
Diln Fac:	1		

LCS Lab ID: QC45222

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	9.41	10	94	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	86	52-127		
Bromobenzene	122	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

Lab #: 129073

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCI-74@4.5
Lab ID: 129073-005
Matrix: Soil
Batch#: 33662
Units: mg/Kg
Diln Fac: 1

Sample Date: 04/24/97
Received Date: 04/25/97
Prep Date: 04/28/97
Analysis Date: 04/28/97

MS Lab ID: QC44874

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	10	<1	8.38	84	65-135
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	84	52-127			
Bromobenzene	116	45-140			

MSD Lab ID: QC44875

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	10	8.33	83	65-135	1	30
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	84	52-127				
Bromobenzene	117	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#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129073-001	SCI-72@1.5	33677	04/24/97	04/28/97	05/03/97	
129073-002	SCI-72@5.5	33677	04/24/97	04/28/97	05/03/97	
129073-003	SCI-73@5	33677	04/24/97	04/28/97	05/03/97	
129073-004	SCI-74@2	33677	04/24/97	04/28/97	05/03/97	

Matrix: Soil

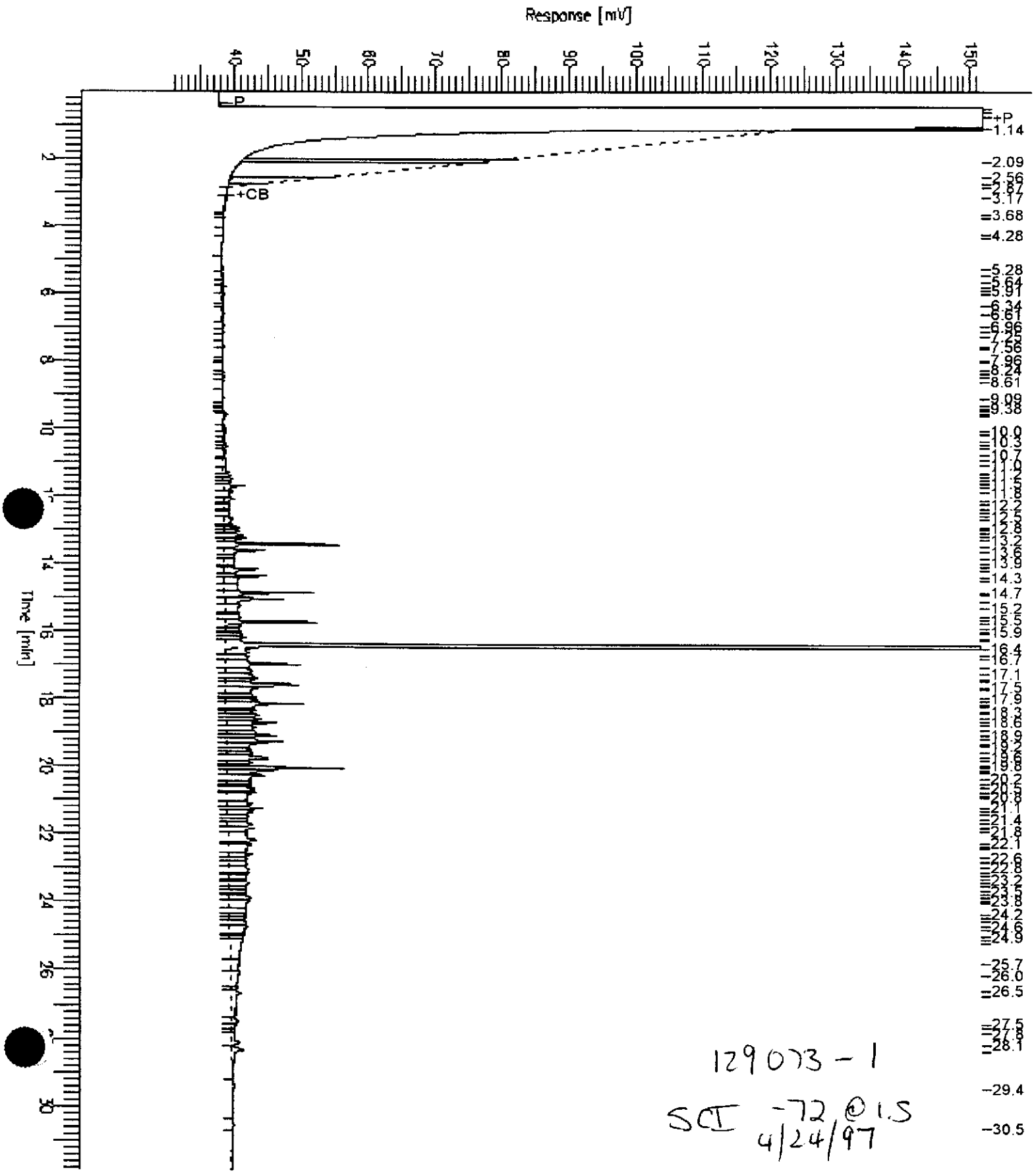
Analyte	Units	129073-001	129073-002	129073-003	129073-004
Diln Fac:		1	1	1	1
Diesel C12-C22	mg/Kg	<1	<1	68 YH	870
Motor Oil C22-C50	mg/Kg	6.2YH	<5	21 YHL	180 YLH
Surrogate					
Hexacosane	%REC	86	75	82	88

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 : 129073-001,33677
File-Name : G:\GC13\CHA\071A027.RAW
Method : ATEH120.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 31 mV

Sample #: 33677 Page 1 of 1
Date : 5/5/97 01:01 PM
Time of Injection: 5/3/97 07:37 AM
Low Point : 30.80 mV High Point : 151.94 mV
Plot Scale: 121.1 mV



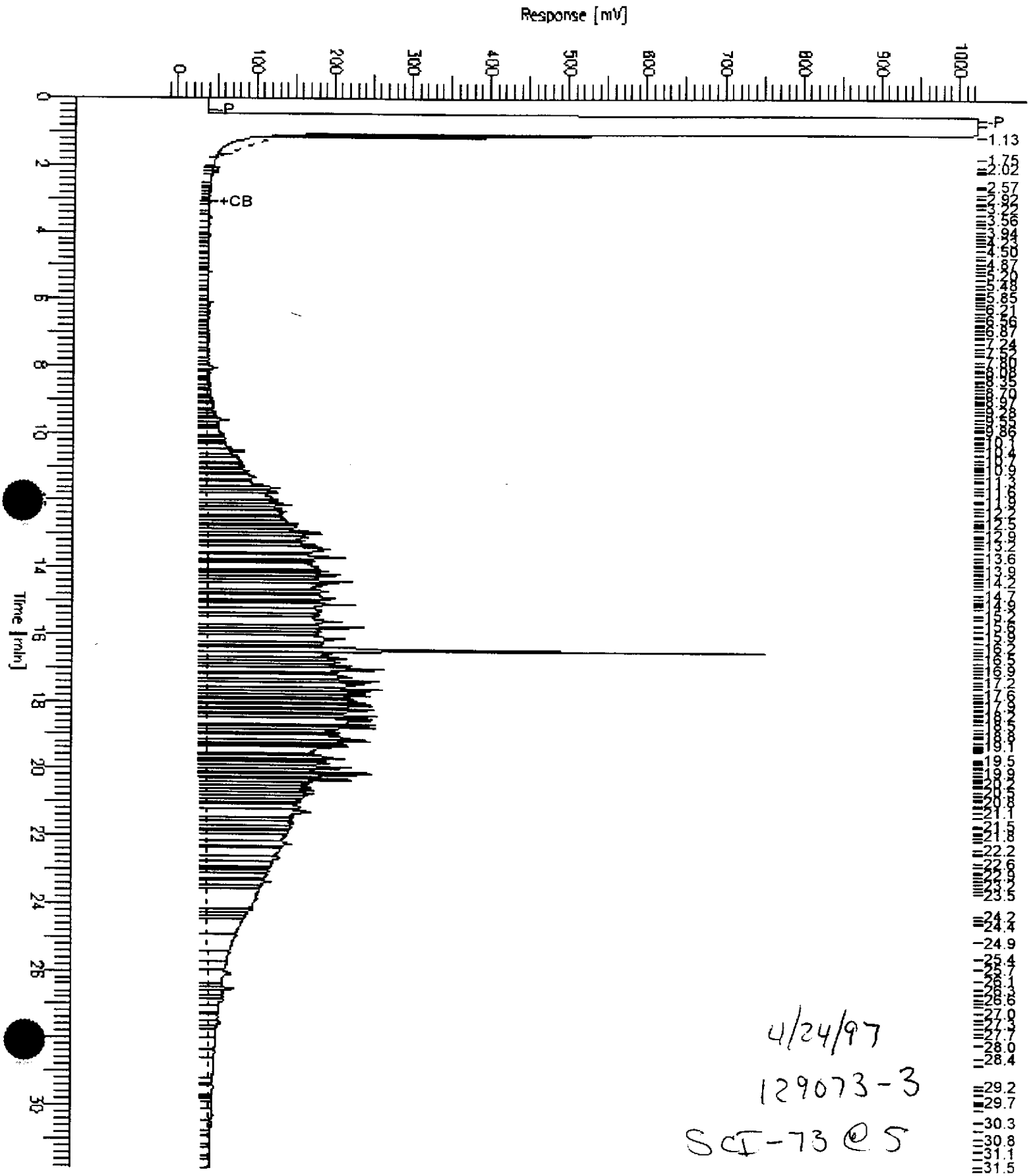
129073 - 1

SCI -72 @ 1.5
4/24/97

Chromatogram

Sample Name : 129073-003,33677
FileName : G:\GC13\CHA\071A029.RAW
Method : ATEH120.MTH
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: -14 mV

Sample #: 33677 Page 1 of 1
Date : 5/5/97 01:03 PM
Time of Injection: 5/3/97 09:03 AM
Low Point : -14.40 mV High Point : 1024.00 mV
Plot Scale: 1038.4 mV

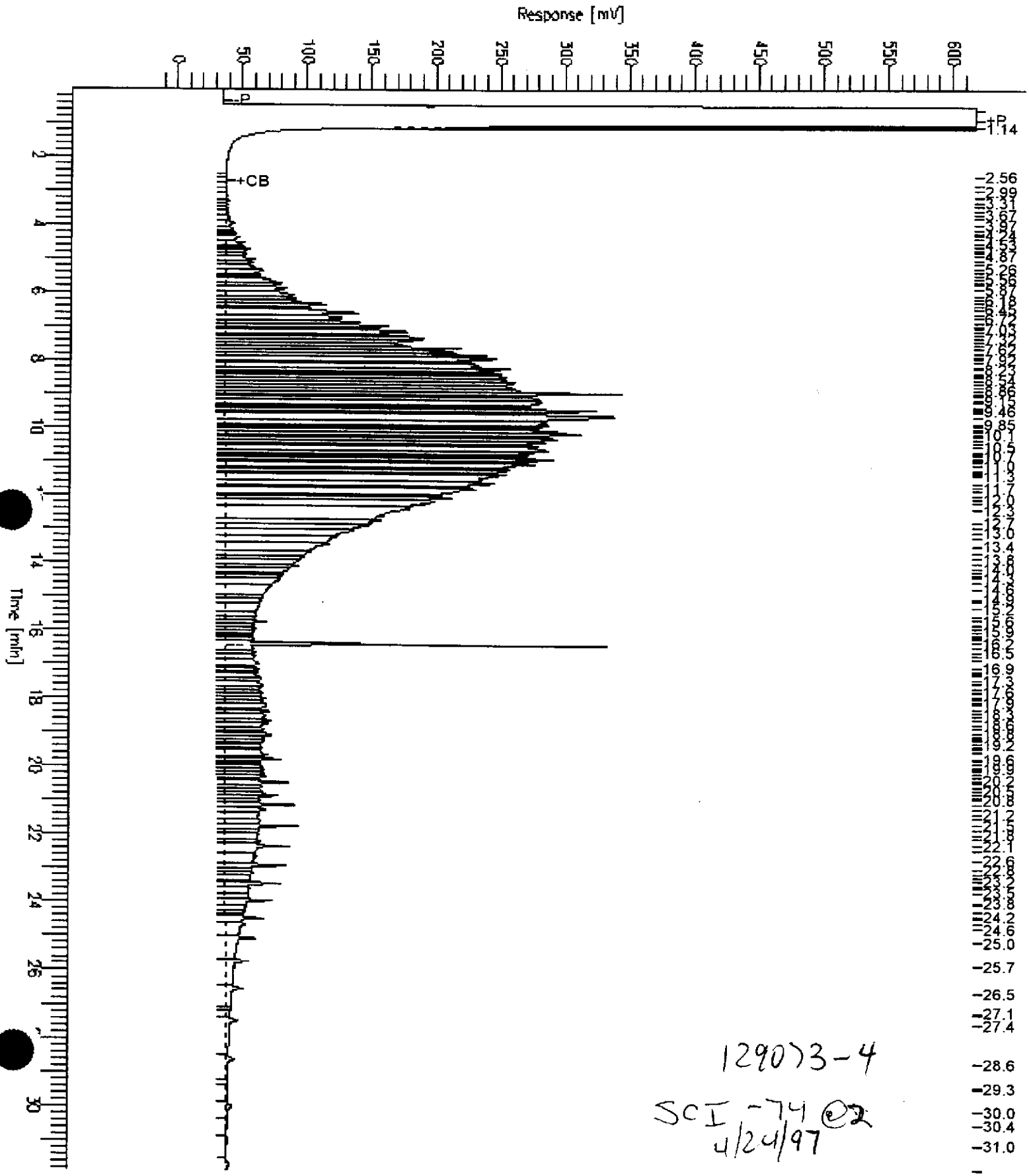


4/24/97
129073-3
SCI-7305

Chromatogram

Sample Name : 129073-004,33677
FileName : G:\GC13\CHA\125A011.RAW
Method : ATEH127.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -11 mV

Sample #: 33677 Page 1 of 1
Date : 5/7/97 02:19 PM
Time of Injection: 5/5/97 11:47 PM
Low Point : -11.01 mV High Point : 618.48 mV
Plot Scale: 629.5 mV



129073-4
SCI -74 @2
4/24/97

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129073-005	SCI-74@4.5	33677	04/24/97	04/28/97	05/03/97	
129073-006	SCITP-17@0.8	33677	04/24/97	04/28/97	05/03/97	
129073-007	SCITP-17@1.5	33677	04/24/97	04/28/97	05/03/97	
129073-008	SCITP-19@6.0	33677	04/24/97	04/28/97	05/03/97	

Matrix: Soil

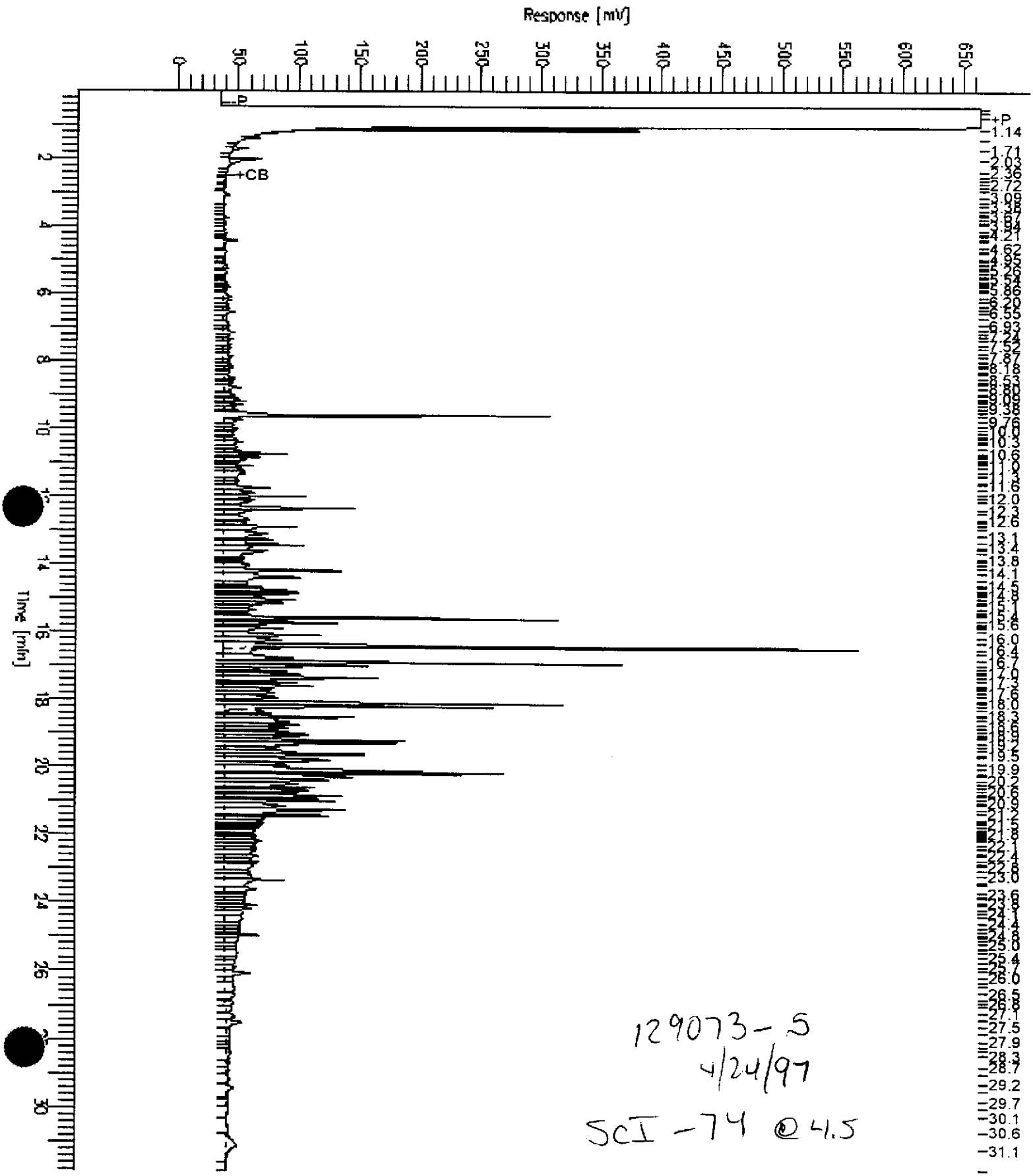
Analyte	Units	129073-005	129073-006	129073-007	129073-008
Diln Fac:		1	20	50	1
Diesel C12-C22	mg/Kg	23 YH	1600 YH	1600 YH	33 YH
Motor Oil C22-C50	mg/Kg	7.9YHL	9500 H	10000 H	18 YLH
Surrogate					
Hexacosane	%REC	77	DO	DO	94

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

Chromatogram

Sample Name : 129073-005,33677
FileName : G:\GC13\CHA\071A034.RAW
Method : ATEH120.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -7 mV

Sample #: 33677 Page 1 of 1
Date : 5/5/97 02:19 PM
Time of Injection: 5/3/97 12:37 PM
Low Point : -6.86 mV High Point : 664.33 mV
Plot Scale: 671.2 mV

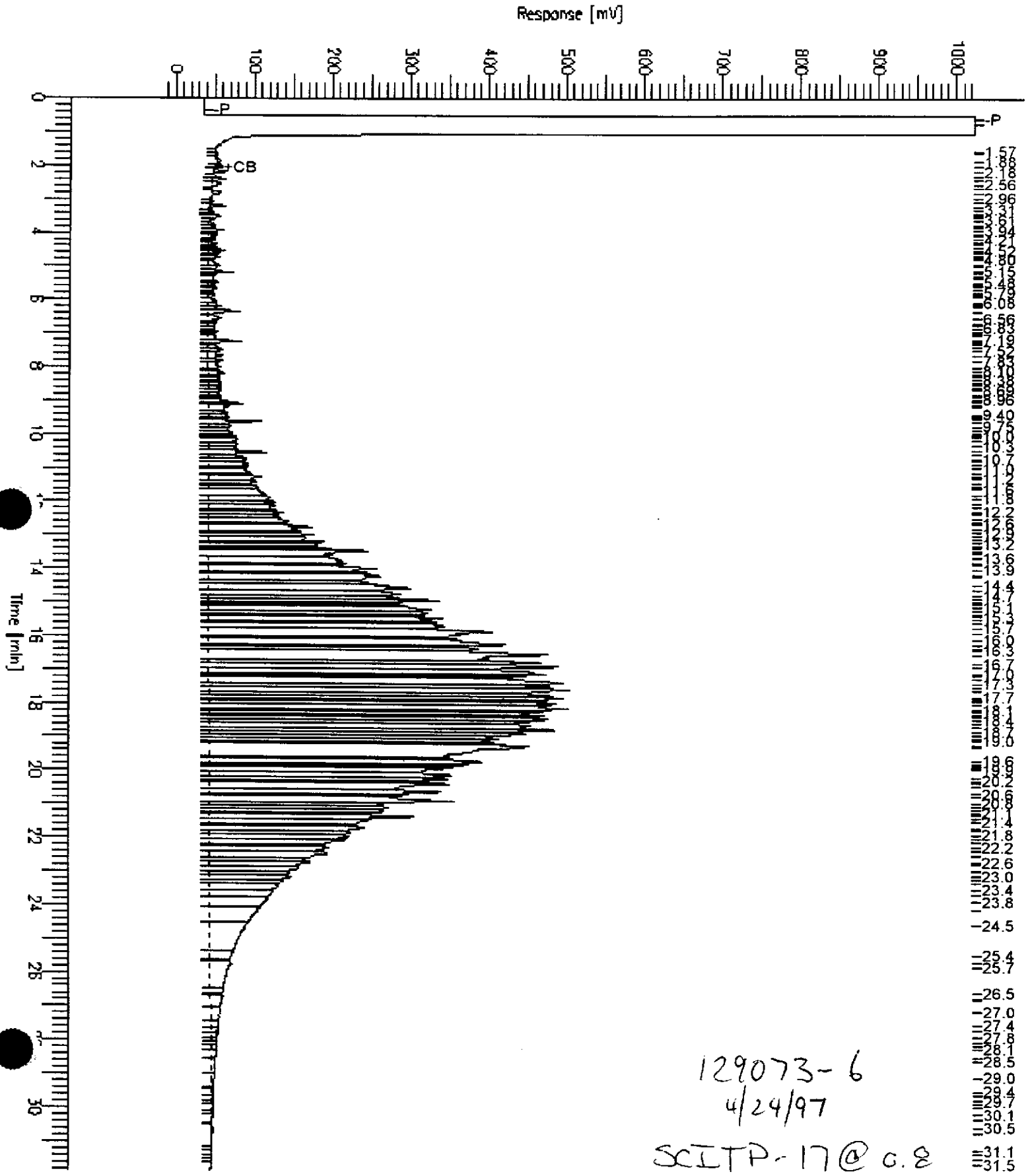


129073-5
4/24/97
SCI-74 @ 4.5

Chromatogram

Sample Name : 129073-006,33677
FileName : G:\GC13\CHA\071A039.RAW
Method : ATEH120.MTH
Start Time : 0.00 min End Time : 31.90 min
Skim Factor: 0.0 Plot Offset: -17 mV

Sample #: 33677 Page 1 of 1
Date : 5/5/97 02:02 PM
Time of Injection: 5/3/97 04:11 PM
Low Point : -16.76 mV High Point : 1024.00 mV
Plot Scale: 1040.8 mV

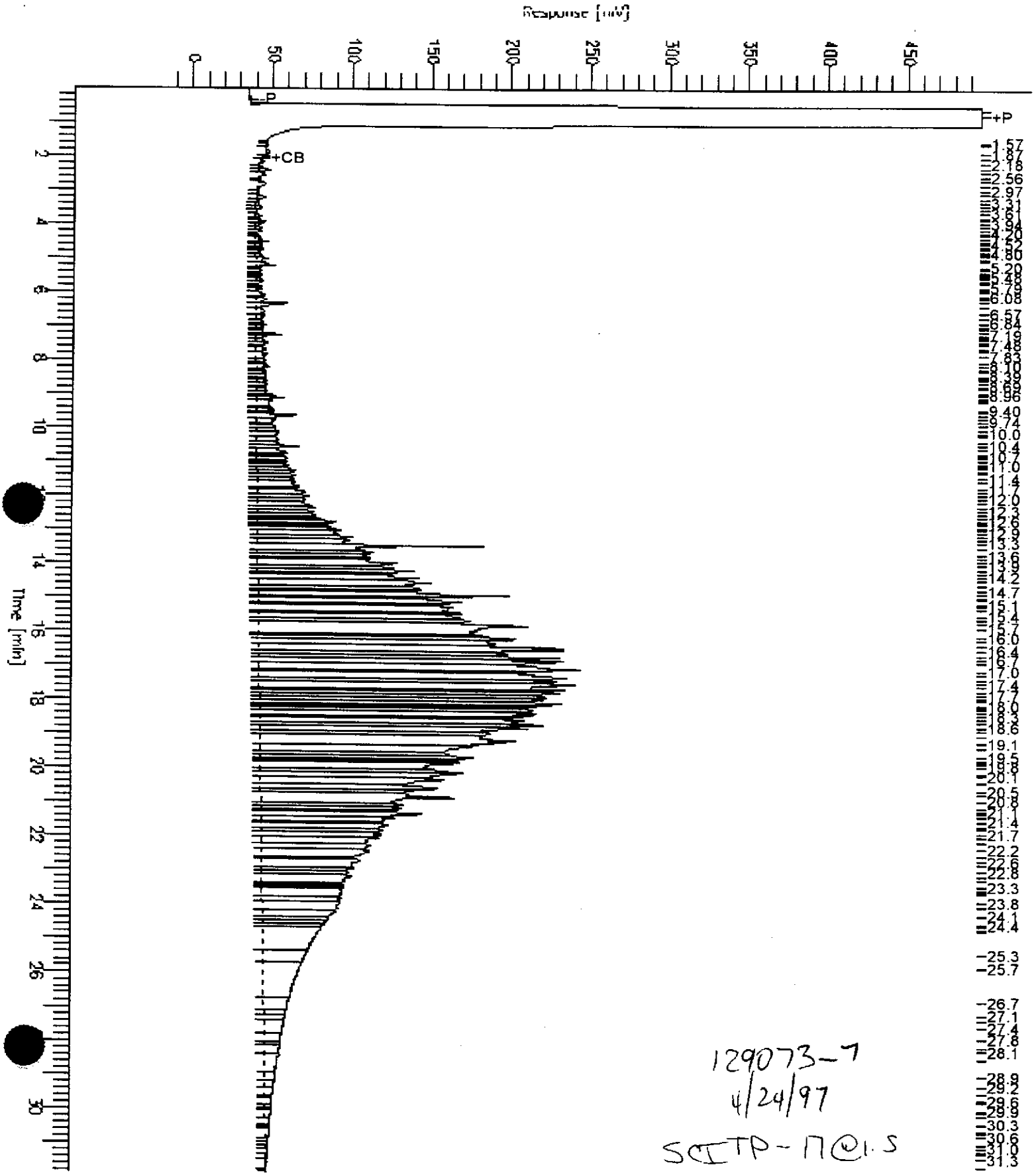


129073-6
4/24/97
SCITP-17 @ 0.8

Chromatogram

Sample Name : 129073-007,33677
FileName : G:\GC13\CHA\071A040.RAW
Method : ATEH120.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -17 mV

Sample #: 33677 Page 1 of 1
Date : 5/5/97 02:03 PM
Time of Injection: 5/3/97 04:54 PM
Low Point : -16.71 mV High Point : 496.38 mV
Plot Scale: 513.1 mV

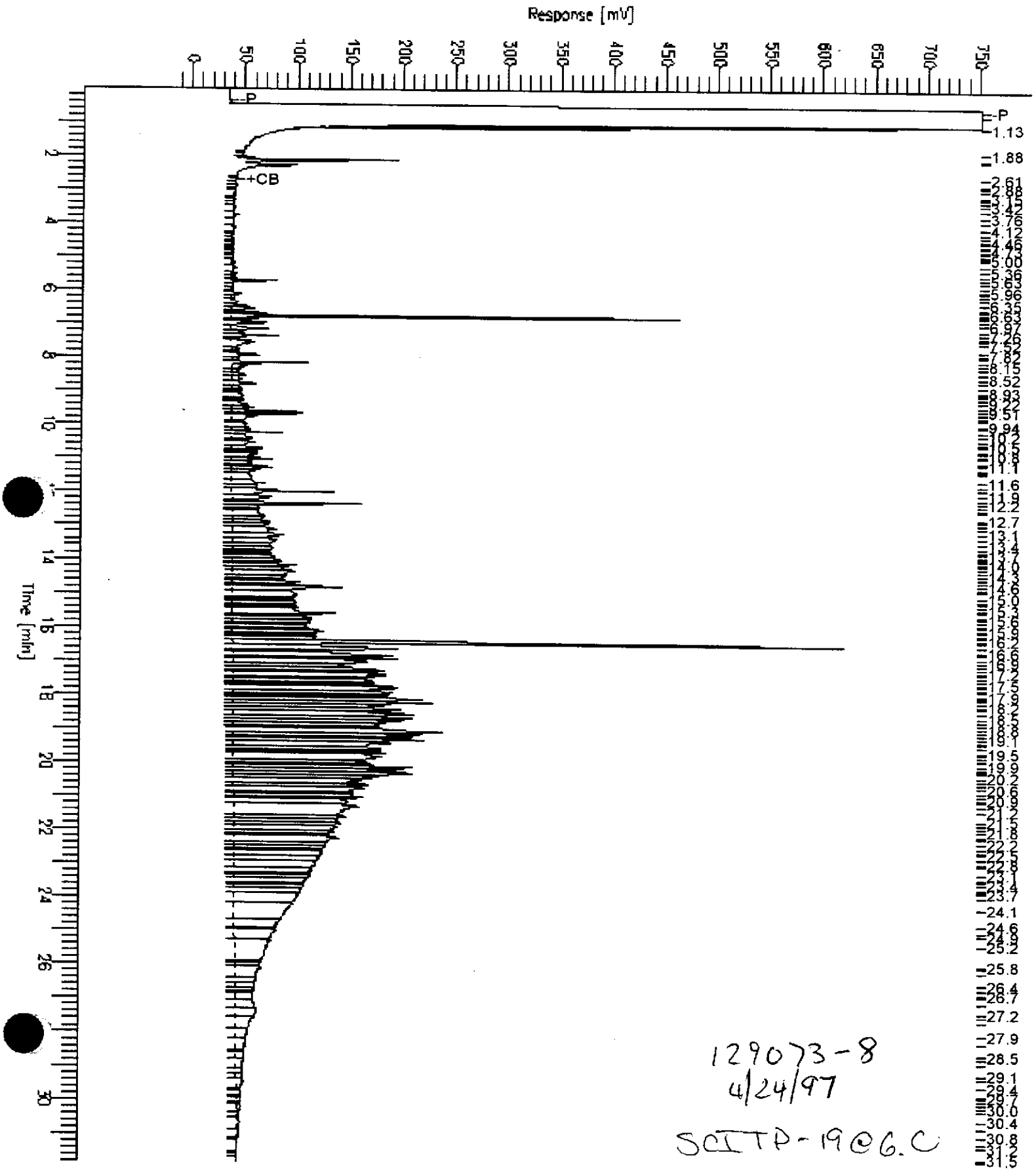


129073-7
4/24/97
SCITP-TCE1.5

Chromatogram

Sample Name : 129073-008,33677
FileName : G:\GC13\CHA\071A035.RAW
Method : ATEH120.MTH
Start Time : 0.01 min End Time : 31.85 min
Slope Factor: 0.0 Plot Offset: -17 mV

Sample #: 33677 Page 1 of 1
Date : 5/5/97 01:51 PM
Time of Injection: 5/3/97 01:20 PM
Low Point : -16.61 mV High Point : 751.85 mV
Plot Scale: 768.5 mV



129073-8
4/24/97
SCITP-1906.C

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129073-009	SCITP-20@3.0	33677	04/24/97	04/28/97	05/03/97	
129073-010	SCITP-19@2.5	33677	04/24/97	04/28/97	05/03/97	
129073-011	SCITP-21@2.0	33677	04/25/97	04/28/97	05/03/97	
129073-012	SCITP-21@7.0	33677	04/25/97	04/28/97	05/03/97	

Matrix: Soil

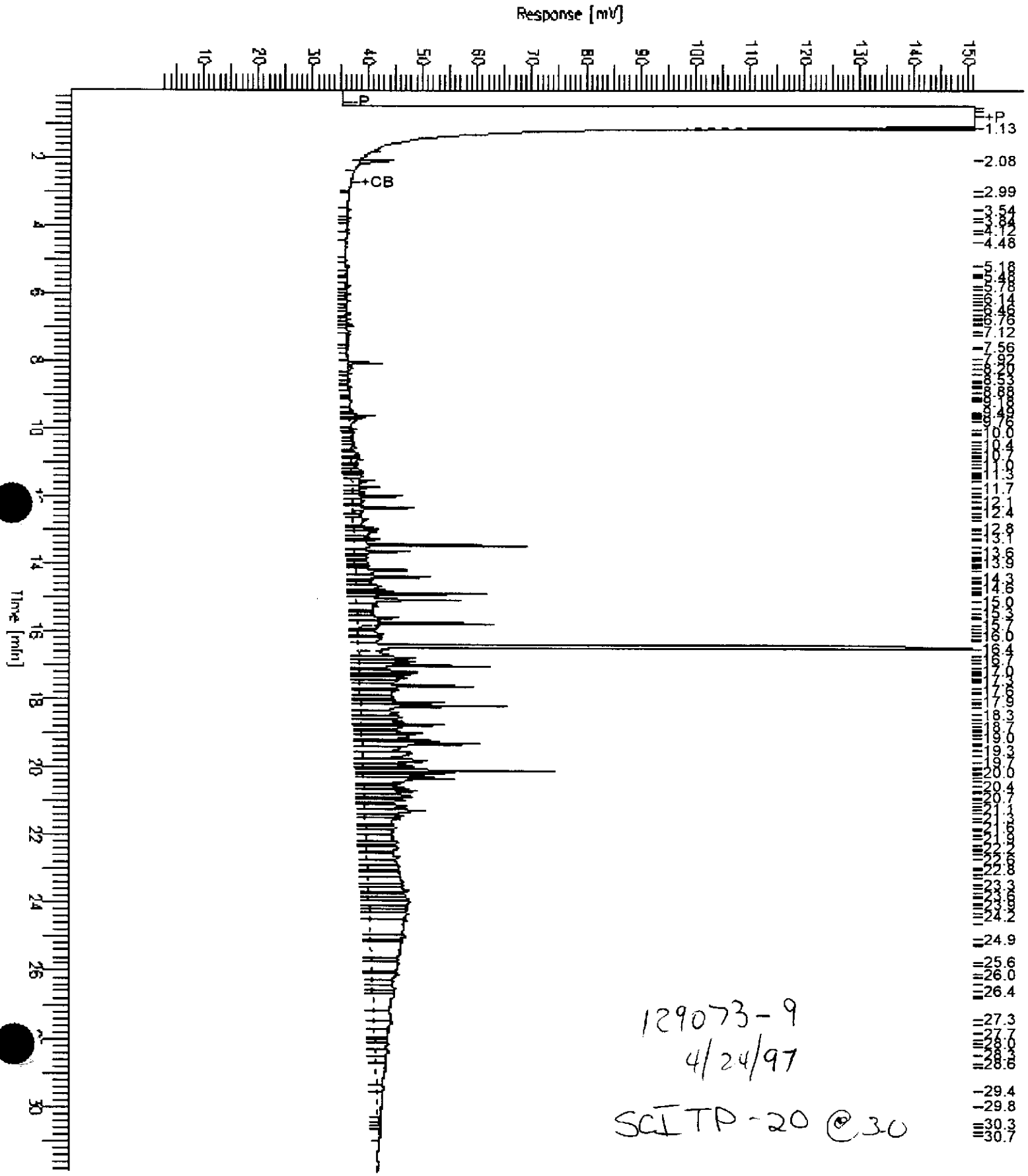
Analyte	Units	129073-009	129073-010	129073-011	129073-012
Diln Fac:		1	200	1	1
Diesel C12-C22	mg/Kg	2 YH	38000 YH	30 YH	12 YH
Motor Oil C22-C50	mg/Kg	13 YLH	32000 YLH	230 YLH	82 YLH
Surrogate					
Hexacosane	%REC	74	DO	92	91

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

Chromatogram

Sample Name : 129073-009,33677
File-Name : G:\GC13\CHA\071A036.RAW
Method : ATEH120.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 3 mV

Sample #: 33677 Page 1 of 1
Date : 5/5/97 01:53 PM
Time of Injection: 5/3/97 02:03 PM
Low Point : 2.50 mV High Point : 151.23 mV
Plot Scale: 148.7 mV



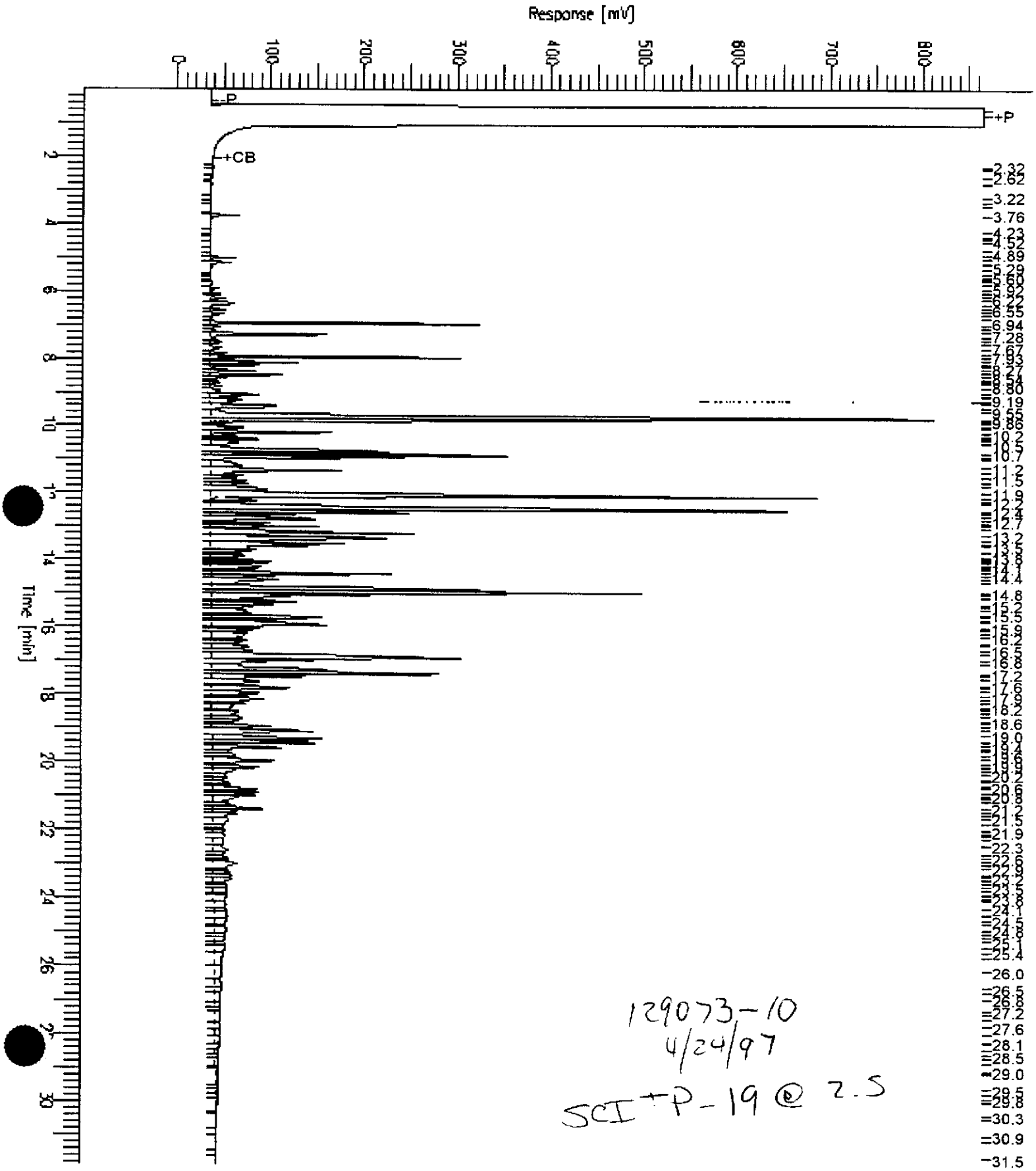
129073-9
4/24/97

SCITP-20 @ 30

Chromatogram

Sample Name : 129073-010,33677
FileName : G:\GC13\CHA\071A042.RAW
Method : ATEH120.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 9.0 Plot Offset: -2 mV

Sample #: 33677 Page 1 of 1
Date : 5/5/97 02:05 PM
Time of Injection: 5/3/97 06:20 PM
Low Point : -2.21 mV High Point : 865.81 mV
Plot Scale: 868.0 mV

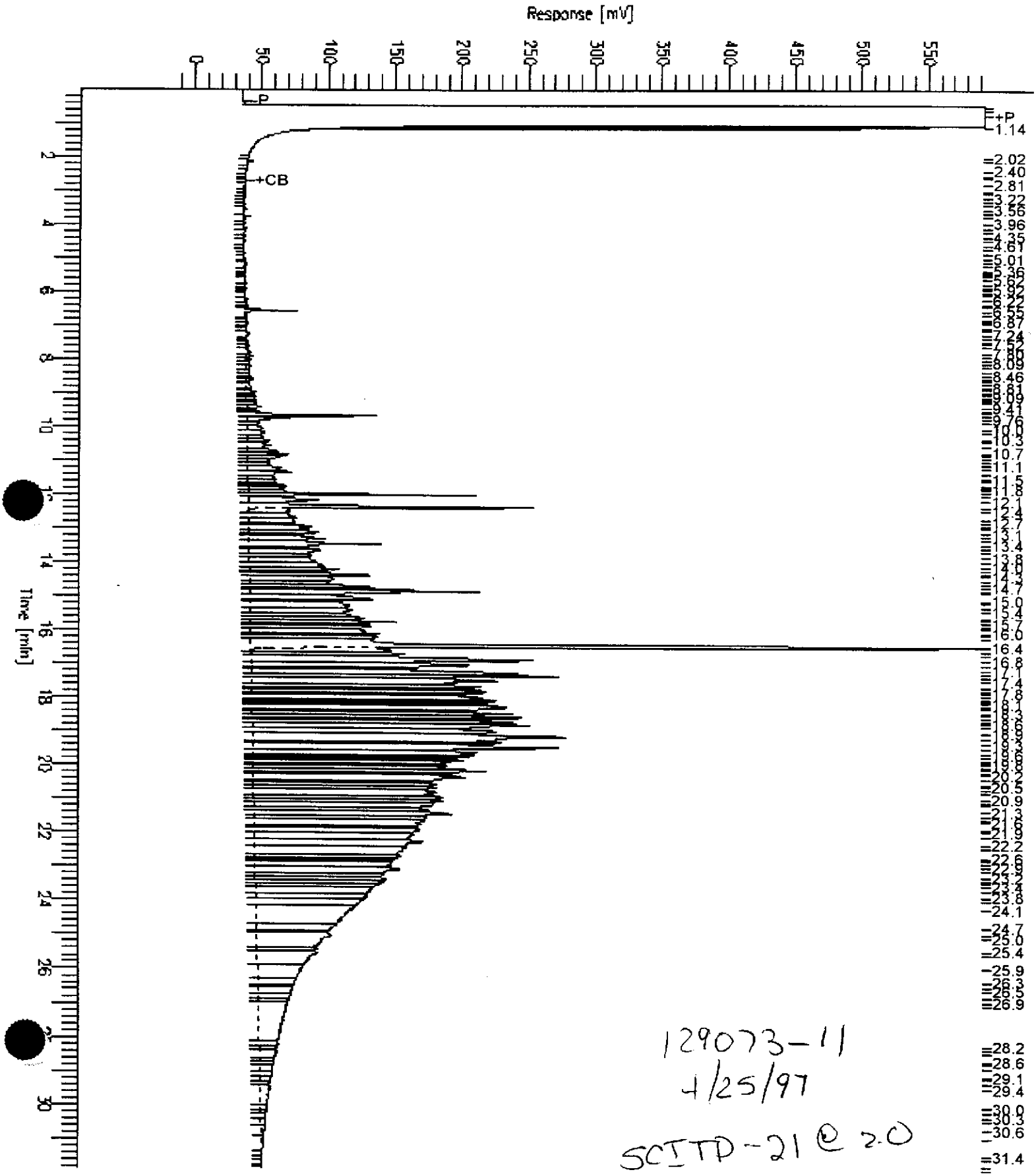


129073-10
4/24/97
SCI +P-19 @ 2.5

Chromatogram

Sample Name : 129073-011,33677
FileName : G:\GC13\CHA\071A037.RAW
Method : ATEH120.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -17 mV

Sample #: 33677 Page 1 of 1
Date : 5/5/97 01:59 PM
Time of Injection: 5/3/97 02:46 PM
Low Point : -16.83 mV High Point : 592.39 mV
Plot Scale: 609.2 mV

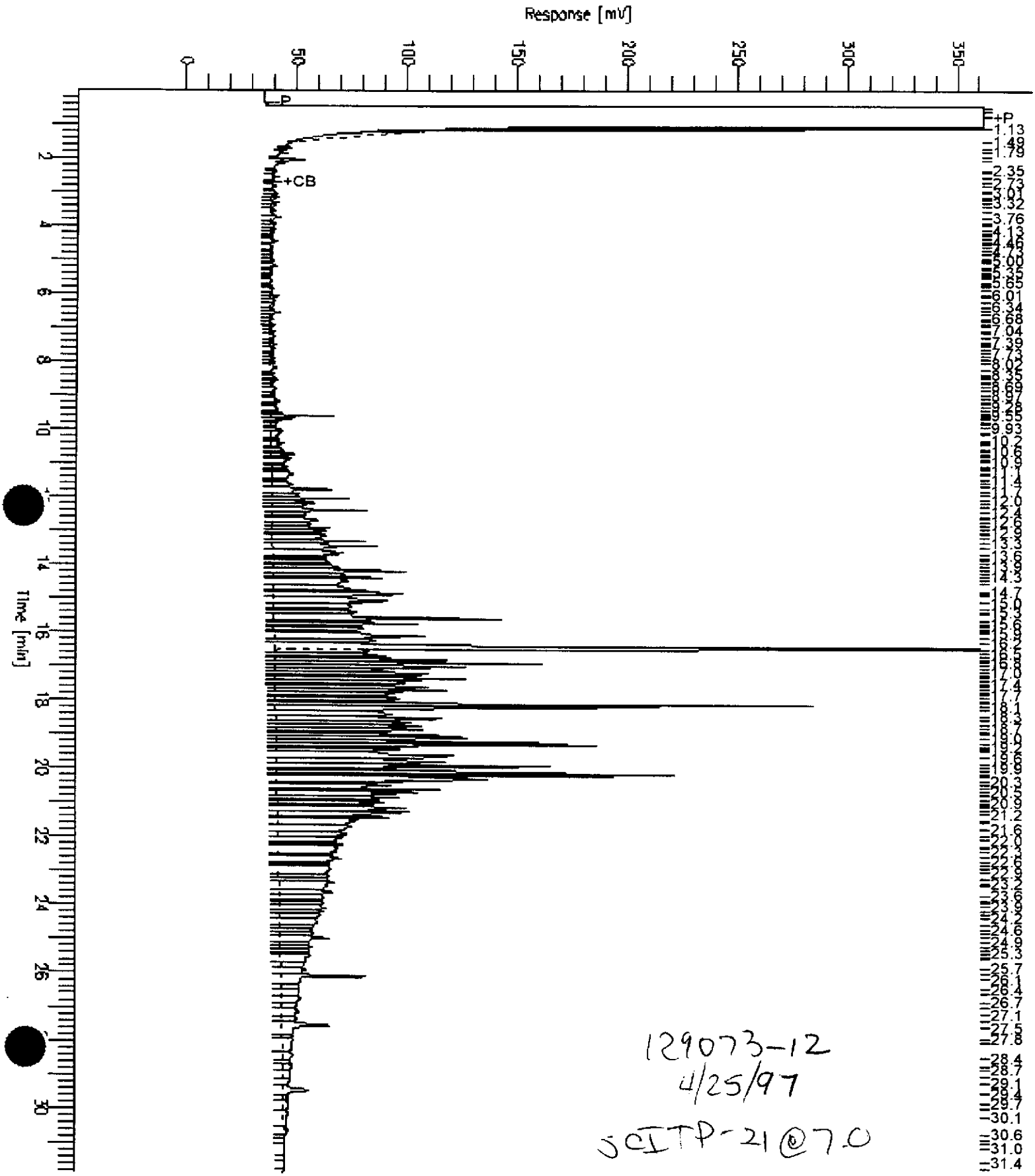


129073-11
4/25/97
SCITP-21 @ 2.0

Chromatogram

Sample Name : 129073-012,33677
FileName : G:\GC13\CHA\071A038.RAW
Method : ATEH120.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -7 mV

Sample #: 33677 Page 1 of 1
Date : 5/5/97 02:00 PM
Time of Injection: 5/3/97 03:29 PM
Low Point : -7.30 mV High Point : 361.99 mV
Plot Scale: 369.3 mV



129073-12
4/25/97
SCITP-21@7.0

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129073-013	SCITP-22@1.0	33677	04/25/97	04/28/97	04/03/97	

Matrix: Soil

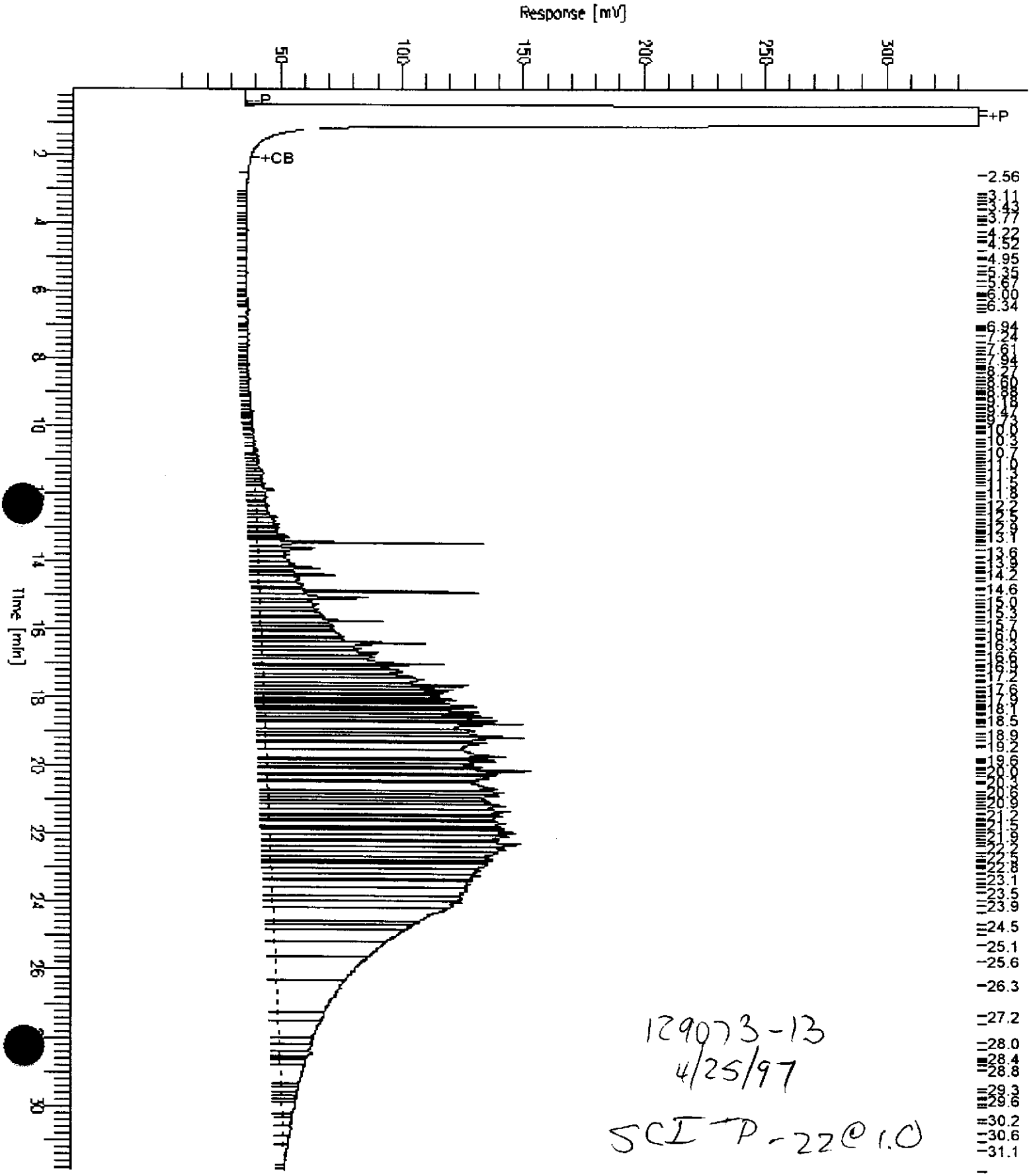
Analyte	Units	129073-013	
Diln Fac:		50	
Diesel C12-C22	mg/Kg	440	YH
Motor Oil C22-C50	mg/Kg	13000	YH
Surrogate			
Hexacosane	%REC	DO	

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

Chromatogram

Sample Name : 129073-013,33677
FileName : G:\GC13\CHA\071A041.RAW
Method : ATEH120.MTH
Start Time : 0.01 min End Time : 31.91 min
Skim Factor: 0.0 Plot Offset: 3 mV

Sample #: 33677 Page 1 of 1
Date : 5/5/97 02:04 PM
Time of Injection: 5/3/97 05:37 PM
Low Point : 2.5int : 338.21 mV
Plot Scale: 335.6 mV

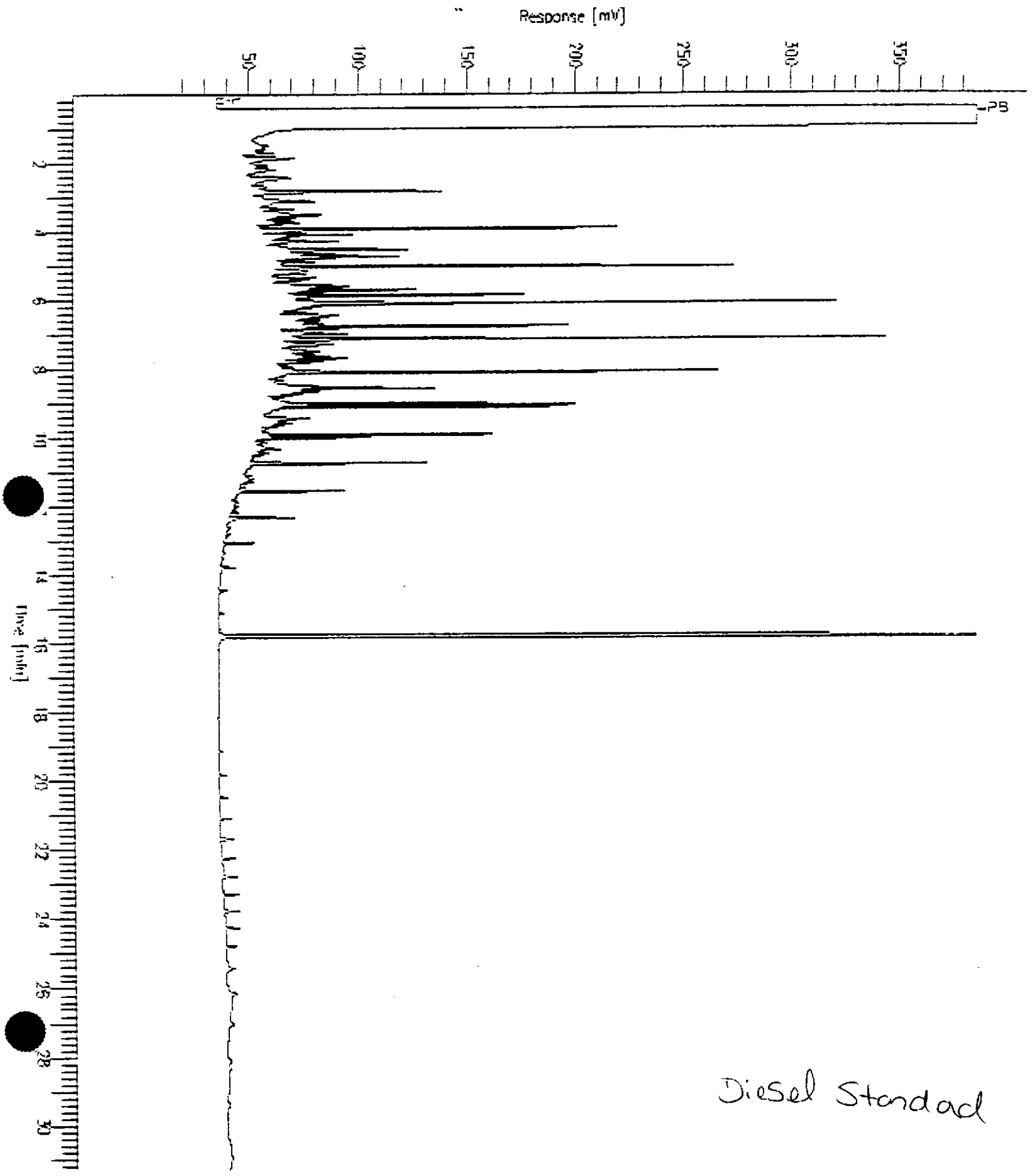


129073-13
4/25/97
SCI P-22@1.0

Chromatogram

Sample Name : CCV,97WG3996,DG
File Name : G:\GC11\CHB\120B016.RAW
Method : BTEH114.MTH
Start Time : 3.01 min End Time : 31.91 min
Scale Factor : 1.0 Plot Offset: 12 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/1/97 11:14 AM
Time of Injection: 5/1/97 01:16 AM
Low Point : 11.73 mV High Point : 386.05 mV
Plot Scale: 374.3 mV



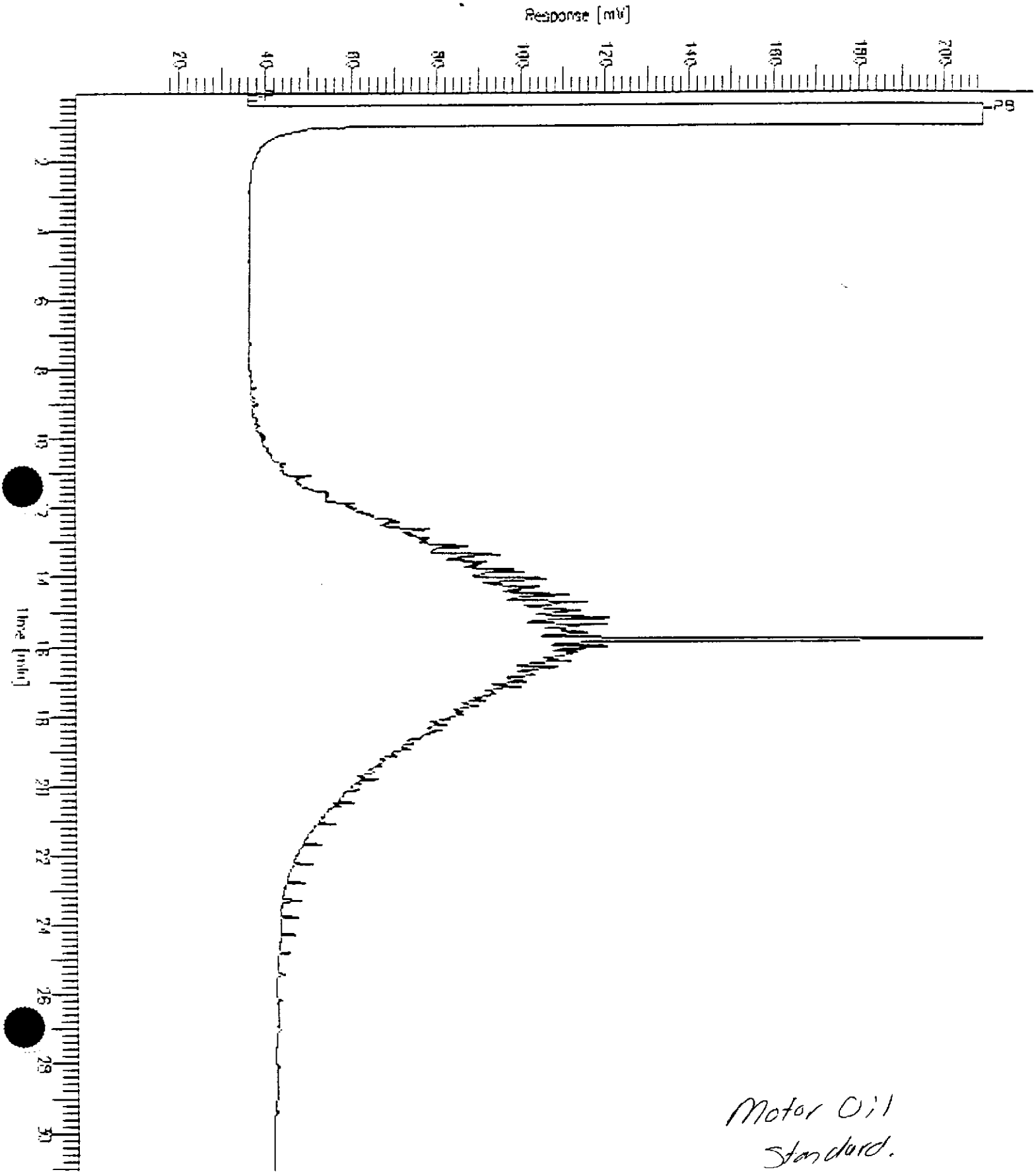
Diesel Standard

Chromatogram

MO 9705 4082 5-7-97

Sample Name : ~~CCV, 3.MG3830,KEROSENE~~
File Name : G:\GC11\CHB\120B018.RAW
Method : BTEH114.MTH
Start Time : 0.07 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 17 mV

Sample #: 250MG/L Page 1 of 1
Date : 5/1/97 11:13 AM
Time of Injection: 5/1/97 02:43 AM
Low Point : 17.44 mV High Point : 209.04 mV
Plot Scale: 191.6 mV



Motor Oil
Standard.

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

METHOD BLANK

Matrix: Soil
Batch#: 33677
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 04/30/97

MB Lab ID: QC44912

Analyte	Result	
Diesel C12-C22	<1.0	
Motor Oil C22-C50	<5.0	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	97	60-140

Lab #: 129073

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33677
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 04/30/97

LCS Lab ID: QC44915

Analyte	Result	Spike Added	%Rec #	Limits
Diesel C12-C22	37.6	49.5	76	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

Lab #: 129073

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	CA LUFT
Location:	9th Ave. Terminal		

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	ZZZZZZ	Sample Date:	04/18/97
Lab ID:	129063-003	Received Date:	04/25/97
Matrix:	Soil	Prep Date:	04/28/97
Batch#:	33677	Analysis Date:	04/30/97
Units:	mg/Kg dry weight	Moisture:	7%
Diln Fac:	1		

MS Lab ID: QC44913

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Diesel C12-C22	53.23	<1.075	42.17	71	60-140
Surrogate	%Rec	Limits			
Hexacosane	91	60-140			

MSD Lab ID: QC44914

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	53.23	48.82	84	60-140	15	30
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

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129073-001	SCI-72@1.5	33662	04/24/97	04/28/97	04/28/97	
129073-002	SCI-72@5.5	33662	04/24/97	04/28/97	04/28/97	
129073-003	SCI-73@5	33662	04/24/97	04/28/97	04/28/97	
129073-004	SCI-74@2	33662	04/24/97	04/28/97	04/28/97	

Matrix: Soil

Analyte	Units	129073-001	129073-002	129073-003	129073-004
Diln Fac:		1	1	1	1
Benzene	ug/Kg	<5	<5	<5	<5
Toluene	ug/Kg	<5	<5	<5	<5
Ethylbenzene	ug/Kg	<5	<5	<5	<5
m,p-Xylenes	ug/Kg	<5	<5	<5	<5
o-Xylene	ug/Kg	<5	<5	<5	<5
Surrogate					
Trifluorotoluene	%REC	81	85	82	86
Bromobenzene	%REC	101	113	100	114

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129073-005	SCI-74@4.5	33662	04/24/97	04/28/97	04/28/97	
129073-006	SCITP-17@0.8	33662	04/24/97	04/28/97	04/28/97	
129073-007	SCITP-17@1.5	33754	04/24/97	05/02/97	05/02/97	
129073-008	SCITP-19@6.0	33754	04/24/97	05/01/97	05/01/97	

Matrix: Soil

Analyte	Units	129073-005	129073-006	129073-007	129073-008
Diln Fac:		1	1	100	1
Benzene	ug/Kg	<5	13 C	<500	<5
Toluene	ug/Kg	<5	11	<500	<5
Ethylbenzene	ug/Kg	<5	110	2700	<5
m,p-Xylenes	ug/Kg	<5	250 C	2200 C	<5
o-Xylene	ug/Kg	<5	160	970	<5
Surrogate					
Trifluorotoluene	%REC	83	97	95	118
Bromobenzene	%REC	107	114	113	113

C: Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129073-009	SCITP-20@3.0	33754	04/24/97	05/01/97	05/01/97	
129073-011	SCITP-21@2.0	33754	04/25/97	05/01/97	05/01/97	
129073-012	SCITP-21@7.0	33754	04/25/97	05/02/97	05/02/97	
129073-013	SCITP-22@1.0	33754	04/25/97	05/02/97	05/02/97	

Matrix: Soil

Analyte Diln Fac:	Units	129073-009 1	129073-011 1	129073-012 1	129073-013 1
Benzene	ug/Kg	<5	<5	<5	<5
Toluene	ug/Kg	<5	<5	<5	<5
Ethylbenzene	ug/Kg	<5	<5	<5	<5
m,p-Xylenes	ug/Kg	<5	<5	<5	7.1C
o-Xylene	ug/Kg	<5	<5	<5	<5
Surrogate					
Trifluorotoluene	%REC	82	83	84	77
Bromobenzene	%REC	108	113	110	86

C: Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33754
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

MB Lab ID: QC45224

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	81	52-127
Bromobenzene	100	45-140

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33662
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 04/28/97

MB Lab ID: QC44873

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	78	52-127
Bromobenzene	114	45-140

Lab #: 129073

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33662
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 04/28/97

LCS Lab ID: QC44872

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	108.3	100	108	80-120
Toluene	110.9	100	111	80-120
Ethylbenzene	111.9	100	112	80-120
m,p-Xylenes	218.7	200	109	80-120
o-Xylene	112.1	100	112	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	92	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 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 129073 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33754
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

LCS Lab ID: QC45223

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	108.3	100	108	80-120
Toluene	106.8	100	107	80-120
Ethylbenzene	108.4	100	108	80-120
m,p-Xylenes	230.2	200	115	80-120
o-Xylene	114.8	100	115	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	89	52-127
Bromobenzene	111	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 5 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129057-007
Matrix: Soil
Batch#: 33754
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/23/97
Received Date: 04/24/97
Prep Date: 05/01/97
Analysis Date: 05/01/97

MS Lab ID: QC45225

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	100	<5	95.85	96	75-125
Toluene	100	<5	85.74	86	75-125
Ethylbenzene	100	<5	75.14	75	75-125
m,p-Xylenes	200	<5	149.8	75	75-125
o-Xylene	100	<5	75.28	75	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	90	52-127
Bromobenzene	113	45-140

MSD Lab ID: QC45226

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	100	97.99	98	75-125	2	20
Toluene	100	90.48	90	75-125	5	20
Ethylbenzene	100	78.91	79	75-125	5	20
m,p-Xylenes	200	160.5	80	75-125	7	20
o-Xylene	100	83.01	83	75-125	10	20

Surrogate	%Rec	Limits
Trifluorotoluene	88	52-127
Bromobenzene	113	45-140

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

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCI-72@1.5	Sampled:	04/24/97
Lab ID:	129073-001	Received:	04/25/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	4		

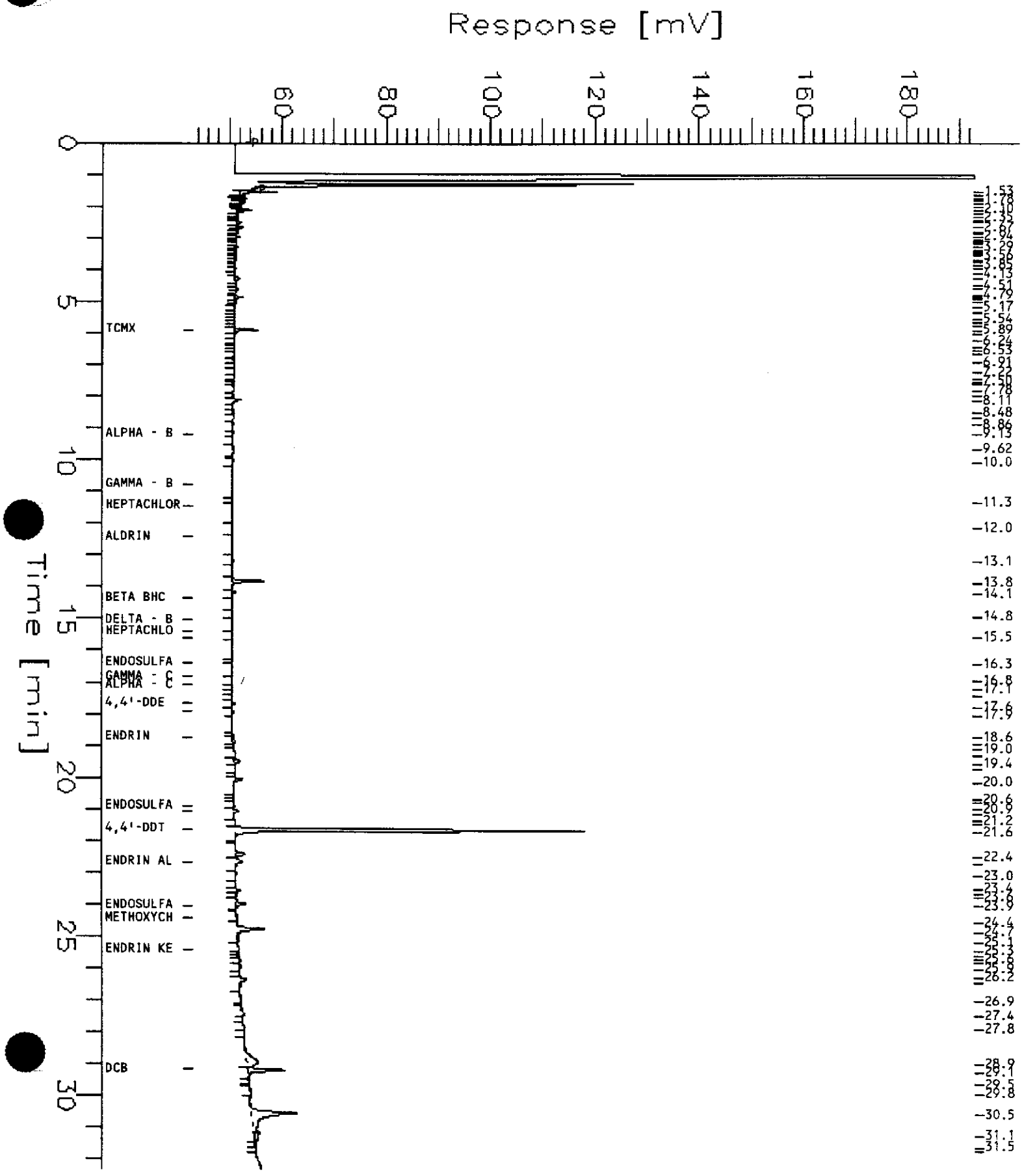
Analyte	Result	Reporting Limit
alpha-BHC	ND	12
beta-BHC	ND	12
gamma-BHC	ND	12
delta-BHC	ND	12
Heptachlor	ND	12
Aldrin	ND	12
Heptachlor epoxide B	ND	12
Heptachlor epoxide A	ND	12
Endosulfan I	ND	12
Dieldrin	ND	24
4,4'-DDE	ND	24
Endrin	ND	24
Endosulfan II	ND	24
Endosulfan sulfate	ND	24
4,4'-DDD	ND	24
Endrin aldehyde	ND	24
4,4'-DDT	280	24
Chlordane	ND	120
Methoxychlor	ND	120
Toxaphene	ND	240
Aroclor-1016	ND	48
Aroclor-1221	ND	96
Aroclor-1232	ND	48
Aroclor-1242	ND	48
Aroclor-1248	ND	48
Aroclor-1254	ND	48
Aroclor-1260	ND	48

Surrogate	%Recovery	Recovery Limits
TCMX	89	29-108
Decachlorobiphenyl	115	30-125

GC14 RTx1701.32mm vol in: 3ul

Sample Name : 129073-001
FileName : g:\gc14\cha\125A048.raw
Method : PEST-CNT.ins
Start Time : 0.00 min End Time : 32.35 min
Scale Factor: -1.0 Plot Offset: 43 mV

Sample #: 33769 Page 1 of 1
Date : 5/7/97 06:04 AM
Time of Injection: 5/7/97 05:31 AM
Low Point : 43.08 mV High Point : 193.08 mV
Plot Scale: 150.0 mV



Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCI-74@2	Sampled:	04/24/97
Lab ID:	129073-004	Received:	04/25/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	3		

Analyte	Result	Reporting Limit
alpha-BHC	ND	9.0
beta-BHC	ND	9.0
gamma-BHC	ND	9.0
delta-BHC	ND	9.0
Heptachlor	ND	9.0
Aldrin	ND	9.0
Heptachlor epoxide B	ND	9.0
Heptachlor epoxide A	ND	9.0
Endosulfan I	ND	9.0
Dieldrin	ND	18
4,4'-DDE	ND	18
Endrin	ND	18
Endosulfan II	ND	18
Endosulfan sulfate	ND	18
4,4'-DDD	ND	18
Endrin aldehyde	ND	18
4,4'-DDT	ND	18
Chlordane	ND	90
Methoxychlor	ND	90
Toxaphene	ND	180
Aroclor-1016	ND	36
Aroclor-1221	ND	72
Aroclor-1232	ND	36
Aroclor-1242	ND	36
Aroclor-1248	ND	36
Aroclor-1254	ND	36
Aroclor-1260	ND	36

Surrogate	%Recovery	Recovery Limits
TCMX	88	29-108
Decachlorobiphenyl	102	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCI-74@4.5	Sampled:	04/24/97
Lab ID:	129073-005	Received:	04/25/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	81	29-108
Decachlorobiphenyl	77	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP-17@0.8	Sampled:	04/24/97
Lab ID:	129073-006	Received:	04/25/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	20		

Analyte	Result	Reporting Limit
alpha-BHC	ND	60
beta-BHC	ND	60
gamma-BHC	ND	60
delta-BHC	ND	60
Heptachlor	ND	60
Aldrin	ND	60
Heptachlor epoxide B	ND	60
Heptachlor epoxide A	ND	60
Endosulfan I	ND	60
Dieldrin	ND	120
4,4'-DDE	ND	120
Endrin	ND	120
Endosulfan II	ND	120
Endosulfan sulfate	ND	120
4,4'-DDD	ND	120
Endrin aldehyde	ND	120
4,4'-DDT	ND	120
Chlordane	ND	600
Methoxychlor	ND	600
Toxaphene	ND	1200
Aroclor-1016	ND	240
Aroclor-1221	ND	480
Aroclor-1232	ND	240
Aroclor-1242	ND	240
Aroclor-1248	ND	240
Aroclor-1254	ND	240
Aroclor-1260	ND	240

Surrogate	%Recovery	Recovery Limits
TCMX	DO*	29-108
Decachlorobiphenyl	DO*	30-125

* Values outside of QC limits
DO: Surrogate diluted out

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP-17@1.5	Sampled:	04/24/97
Lab ID:	129073-007	Received:	04/25/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	120		

Analyte	Result	Reporting Limit
alpha-BHC	ND	360
beta-BHC	ND	360
gamma-BHC	ND	360
delta-BHC	ND	360
Heptachlor	ND	360
Aldrin	ND	360
Heptachlor epoxide B	ND	360
Heptachlor epoxide A	ND	360
Endosulfan I	ND	360
Dieldrin	ND	720
4,4'-DDE	ND	720
Endrin	ND	720
Endosulfan II	ND	720
Endosulfan sulfate	ND	720
4,4'-DDD	ND	720
Endrin aldehyde	ND	720
4,4'-DDT	ND	720
Chlordane	ND	3600
Methoxychlor	ND	3600
Toxaphene	ND	7200
Aroclor-1016	ND	1400
Aroclor-1221	ND	2900
Aroclor-1232	ND	1400
Aroclor-1242	ND	1400
Aroclor-1248	ND	1400
Aroclor-1254	ND	1400
Aroclor-1260	ND	1400

Surrogate	%Recovery	Recovery Limits
TCMX	DO*	29-108
Decachlorobiphenyl	DO*	30-125

* Values outside of QC limits
DO: Surrogate diluted out

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP-19@6.0	Sampled:	04/24/97
Lab ID:	129073-008	Received:	04/25/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	5		

Analyte	Result	Reporting Limit
alpha-BHC	ND	15
beta-BHC	ND	15
gamma-BHC	ND	15
delta-BHC	ND	15
Heptachlor	ND	15
Aldrin	ND	15
Heptachlor epoxide B	ND	15
Heptachlor epoxide A	ND	15
Endosulfan I	ND	15
Dieldrin	ND	30
4,4'-DDE	ND	30
Endrin	ND	30
Endosulfan II	ND	30
Endosulfan sulfate	ND	30
4,4'-DDD	ND	30
Endrin aldehyde	ND	30
4,4'-DDT	ND	30
Chlordane	ND	150
Methoxychlor	ND	150
Toxaphene	ND	300
Aroclor-1016	ND	60
Aroclor-1221	ND	120
Aroclor-1232	ND	60
Aroclor-1242	ND	60
Aroclor-1248	ND	60
Aroclor-1254	ND	60
Aroclor-1260	ND	60

Surrogate	%Recovery	Recovery Limits
TCMX	86	29-108
Decachlorobiphenyl	114	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP-20@3.0	Sampled:	04/24/97
Lab ID:	129073-009	Received:	04/25/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/03/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	56	29-108
Decachlorobiphenyl	56	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP-21@2.0	Sampled:	04/25/97
Lab ID:	129073-011	Received:	04/25/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	10		

Analyte	Result	Reporting Limit
alpha-BHC	ND	30
beta-BHC	ND	30
gamma-BHC	ND	30
delta-BHC	ND	30
Heptachlor	ND	30
Aldrin	ND	30
Heptachlor epoxide B	ND	30
Heptachlor epoxide A	ND	30
Endosulfan I	ND	30
Dieldrin	ND	60
4,4'-DDE	ND	60
Endrin	ND	60
Endosulfan II	ND	60
Endosulfan sulfate	ND	60
4,4'-DDD	ND	60
Endrin aldehyde	ND	60
4,4'-DDT	ND	60
Chlordane	ND	300
Methoxychlor	ND	300
Toxaphene	ND	600
Aroclor-1016	ND	120
Aroclor-1221	ND	240
Aroclor-1232	ND	120
Aroclor-1242	ND	120
Aroclor-1248	ND	120
Aroclor-1254	ND	120
Aroclor-1260	ND	120

Surrogate	%Recovery	Recovery Limits
TCMX	DO*	29-108
Decachlorobiphenyl	DO*	30-125

* Values outside of QC limits
DO: Surrogate diluted out

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP-21@7.0	Sampled:	04/25/97
Lab ID:	129073-012	Received:	04/25/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	70	29-108
Decachlorobiphenyl	83	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP-22@1.0	Sampled:	04/25/97
Lab ID:	129073-013	Received:	04/25/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	200		

Analyte	Result	Reporting Limit
alpha-BHC	ND	1800
beta-BHC	ND	1800
gamma-BHC	ND	1800
delta-BHC	ND	1800
Heptachlor	ND	1800
Aldrin	ND	1800
Heptachlor epoxide B	ND	1800
Heptachlor epoxide A	ND	1800
Endosulfan I	ND	1800
Dieldrin	ND	3600
4,4'-DDE	ND	3600
Endrin	ND	3600
Endosulfan II	ND	3600
Endosulfan sulfate	ND	3600
4,4'-DDD	ND	3600
Endrin aldehyde	ND	3600
4,4'-DDT	ND	3600
Chlordane	ND	18000
Methoxychlor	ND	18000
Toxaphene	ND	36000
Aroclor-1016	ND	7200
Aroclor-1221	ND	14000
Aroclor-1232	ND	7200
Aroclor-1242	ND	7200
Aroclor-1248	ND	7200
Aroclor-1254	ND	7200
Aroclor-1260	ND	7200

Surrogate	%Recovery	Recovery Limits
TCMX	DO*	29-108
Decachlorobiphenyl	DO*	30-125

* Values outside of QC limits
DO: Surrogate diluted out

Curtis & Tompkins, Ltd.

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33769
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/02/97

MB Lab ID: QC45283

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Rec	Recovery Limits
TCMX	95	29-108
Decachlorobiphenyl	90	30-125

Lab #: 129073

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33769
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/02/97

LCS Lab ID: QC45284

Analyte	Result	Spike Added	%Rec #	Limits
gamma-BHC	16.04	17	96	49-115
Heptachlor	16.21	17	97	51-119
Aldrin	16.51	17	99	55-112
Dieldrin	16.73	17	100	54-123
Endrin	17.92	17	107	63-128
4,4'-DDT	16.2	17	97	57-131

Surrogate	%Rec	Limits
TCMX	94	29-108
Decachlorobiphenyl	89	30-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 6 outside limits

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129073

Project Name: 9th Ave. Terminal
Project Number: 133.004

Report Date: 13 May 97

ANALYSIS: pH

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	Method	Analyst	QC Batch
129073-004	SCI-74@2	Soil	24-APR-97	25-APR-97	01-MAY-97	11.1	SU #	EPA 9045	DRH	33777

Soil pH measured in 0.01 M CaCl2

Curtis & Tompkins, Ltd.

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

Client: Subsurface Consultants
Project Name: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129073
Report Date: 09 May 97

ANALYSIS: pH

QC Batch Number: 33777

Calibration Verification Results

Sample	Result	TV	Difference	Limit	Analyzed
ICV	6.98	7.00	.02	< 0.10	01-MAY-97
CCV	6.97	7.00	.03	< 0.10	01-MAY-97
CCV	6.97	7.00	.03	< 0.10	01-MAY-97

Sample Duplicate Results

Sample	Duplicate	RPD	Analyzed
11.06	10.88	1.6%	01-MAY-97
7.73	7.75	.3%	01-MAY-97

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

Client: Subsurface Consultants

Laboratory Login Number: 129073

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCI-72@1.5
Lab ID: 129073-001
Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Sampled: 04/24/97
Received: 04/25/97
Extracted: 04/29/97
Analyzed: 04/29/97

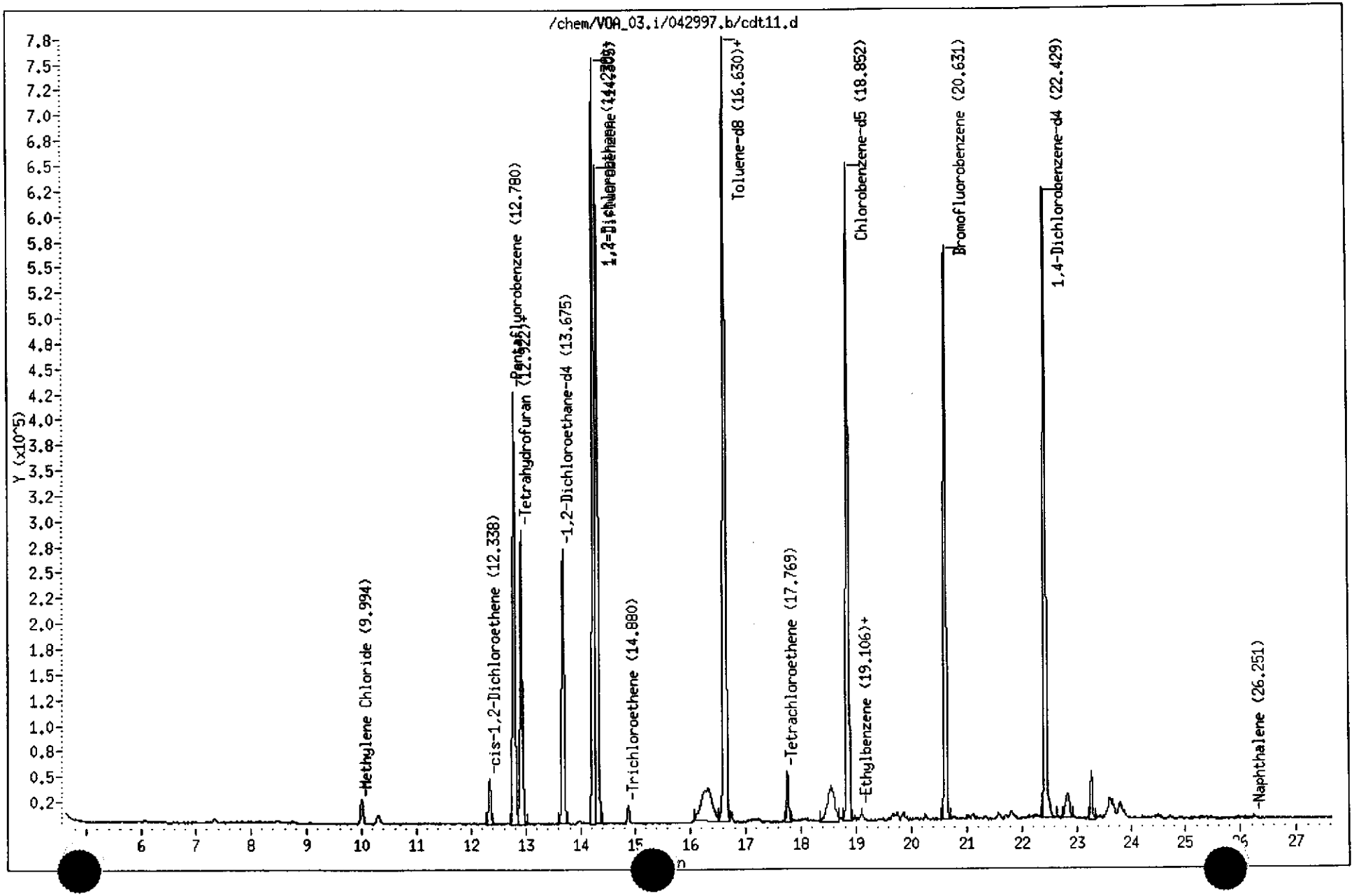
Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	6.6	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	6.0	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	93	68-126
Toluene-d8	107	87-125
Bromofluorobenzene	109	79-122

Data File: /chem/VOA_03.i/042997.b/cdt11.d
Date : 29-APR-97 15:31
Client ID: DYNA P&T
Sample Info: S,129073-001
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_03.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCI-73@5
Lab ID: 129073-003
Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Sampled: 04/24/97
Received: 04/25/97
Extracted: 04/29/97
Analyzed: 04/29/97

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	14	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	4.2 J	5.0
o-Xylene	ND	5.0

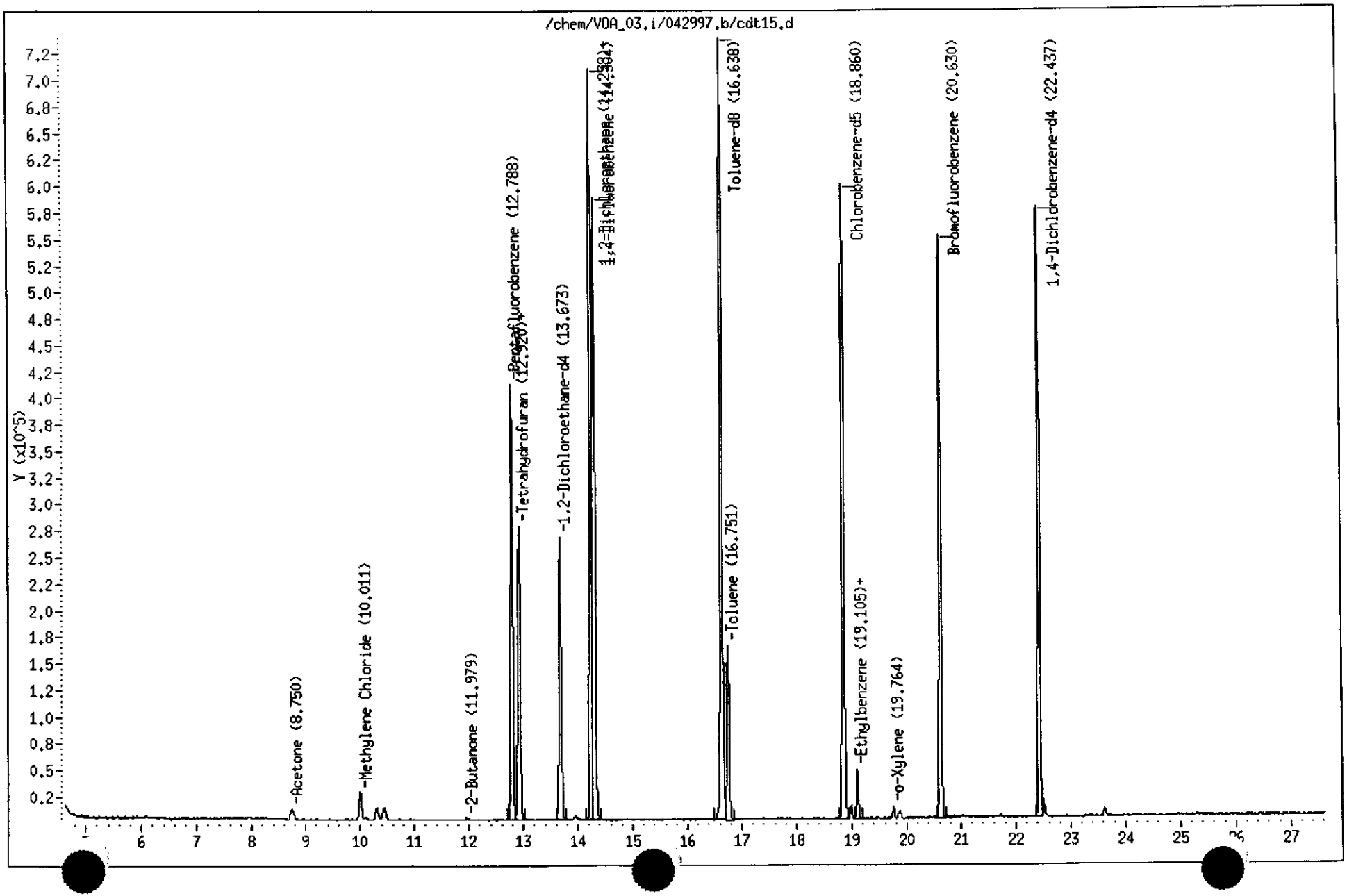
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	96	68-126
Toluene-d8	107	87-125
Bromofluorobenzene	110	79-122

J: Estimated Value

Data File: /chem/VOA_03.i/042997.b/cdt15.d
Date : 29-APR-97 17:54
Client ID: DYNA P&T
Sample Info: S,129073-003
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_03.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCI-74@2
Lab ID: 129073-004
Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Sampled: 04/24/97
Received: 04/25/97
Extracted: 04/29/97
Analyzed: 04/29/97

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	102	87-125
Bromofluorobenzene	106	79-122

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP-17@0.8
Lab ID: 129073-006
Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Sampled: 04/24/97
Received: 04/25/97
Extracted: 04/29/97
Analyzed: 04/29/97

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	41	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	8.0 J	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	3.8 J	5.0
Ethylbenzene	10	5.0
Styrene	ND	5.0
m,p-Xylenes	29	5.0
o-Xylene	25	5.0

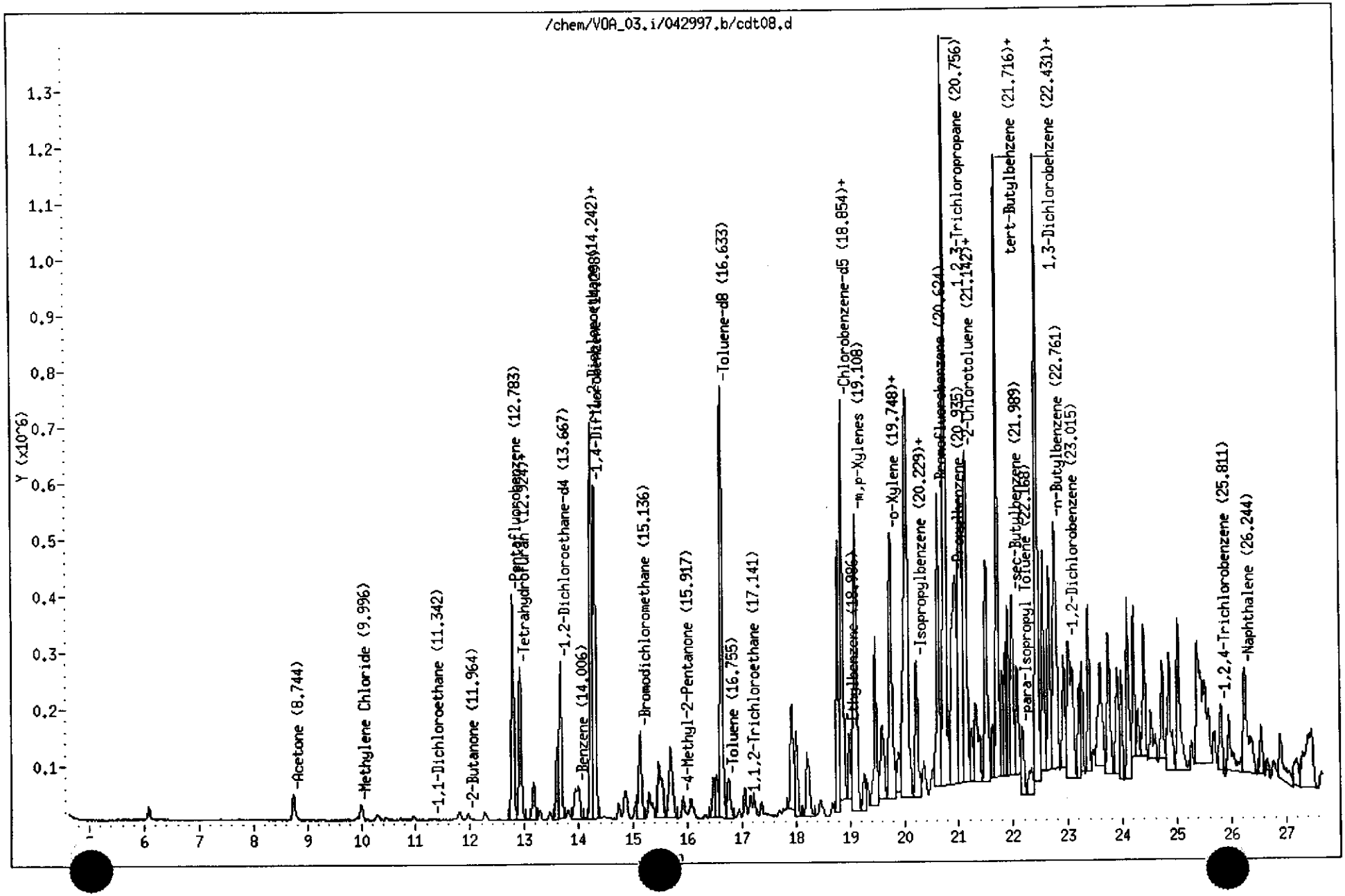
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	93	68-126
Toluene-d8	107	87-125
Bromofluorobenzene	110	79-122

J: Estimated Value

Data File: /chem/VOA_03.i/042997.b/cdt08.d
Date : 29-APR-97 13:43
Client ID: DYNA P&T
Sample Info: MSS,129073-006
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_03.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP-17@1.5
Lab ID: 129073-007
Matrix: Soil
Batch#: 33752
Units: ug/Kg
Diln Fac: 33.33

Sampled: 04/24/97
Received: 04/25/97
Extracted: 05/02/97
Analyzed: 05/02/97

Analyte	Result	Reporting Limit
Chloromethane	ND	330
Bromomethane	ND	330
Vinyl Chloride	ND	330
Chloroethane	ND	330
Methylene Chloride	ND	670
Acetone	ND	670
Carbon Disulfide	ND	170
Trichlorofluoromethane	ND	170
1,1-Dichloroethene	ND	170
1,1-Dichloroethane	ND	170
trans-1,2-Dichloroethene	ND	170
cis-1,2-Dichloroethene	ND	170
Chloroform	ND	170
Freon 113	ND	170
1,2-Dichloroethane	ND	170
2-Butanone	ND	330
1,1,1-Trichloroethane	ND	170
Carbon Tetrachloride	ND	170
Vinyl Acetate	ND	1700
Bromodichloromethane	ND	170
1,2-Dichloropropane	ND	170
cis-1,3-Dichloropropene	ND	170
Trichloroethene	ND	170
Dibromochloromethane	ND	170
1,1,2-Trichloroethane	ND	170
Benzene	ND	170
trans-1,3-Dichloropropene	ND	170
Bromoform	ND	170
2-Hexanone	ND	330
4-Methyl-2-Pentanone	ND	330
1,1,2,2-Tetrachloroethane	ND	170
Tetrachloroethene	ND	170
Toluene	ND	170
Chlorobenzene	99 J	170
Ethylbenzene	830	170
Styrene	ND	170
m,p-Xylenes	610	170
o-Xylene	320	170

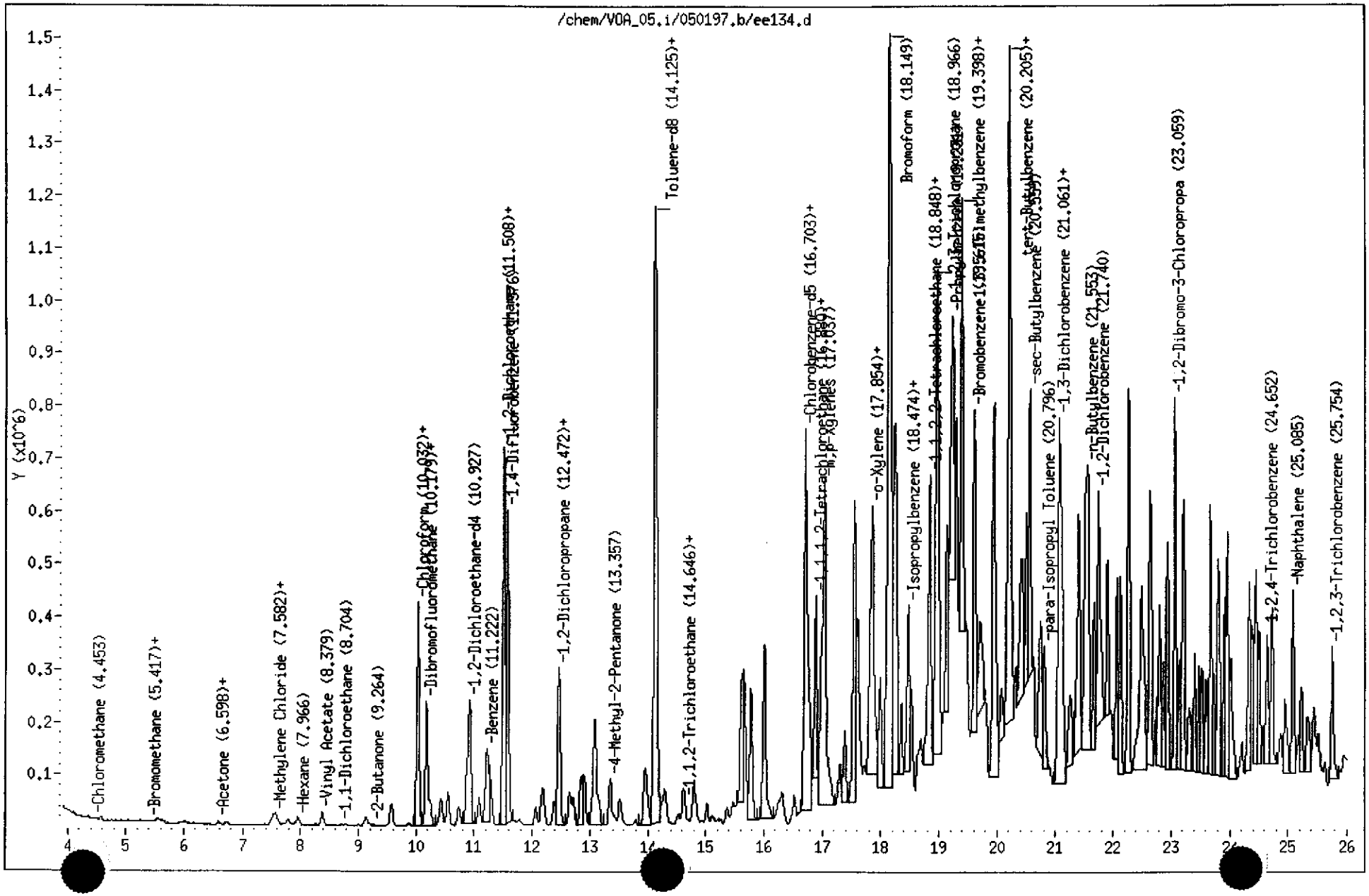
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	100	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	110	79-122

J: Estimated Value

Data File: /chem/VOA_05.i/050197.b/ee134.d
Date : 02-MAY-97 04:50
Client ID: DYNA P&T
Sample Info: S,129073-007
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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP-19@6.0
Lab ID: 129073-008
Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Sampled: 04/24/97
Received: 04/25/97
Extracted: 04/29/97
Analyzed: 04/29/97

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	106	87-125
Bromofluorobenzene	115	79-122

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP-20@3.0
Lab ID: 129073-009
Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Sampled: 04/24/97
Received: 04/25/97
Extracted: 04/29/97
Analyzed: 04/29/97

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	107	87-125
Bromofluorobenzene	105	79-122

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP-21@2.0
Lab ID: 129073-011
Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Sampled: 04/25/97
Received: 04/25/97
Extracted: 04/29/97
Analyzed: 04/29/97

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	26	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	5.1 J	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

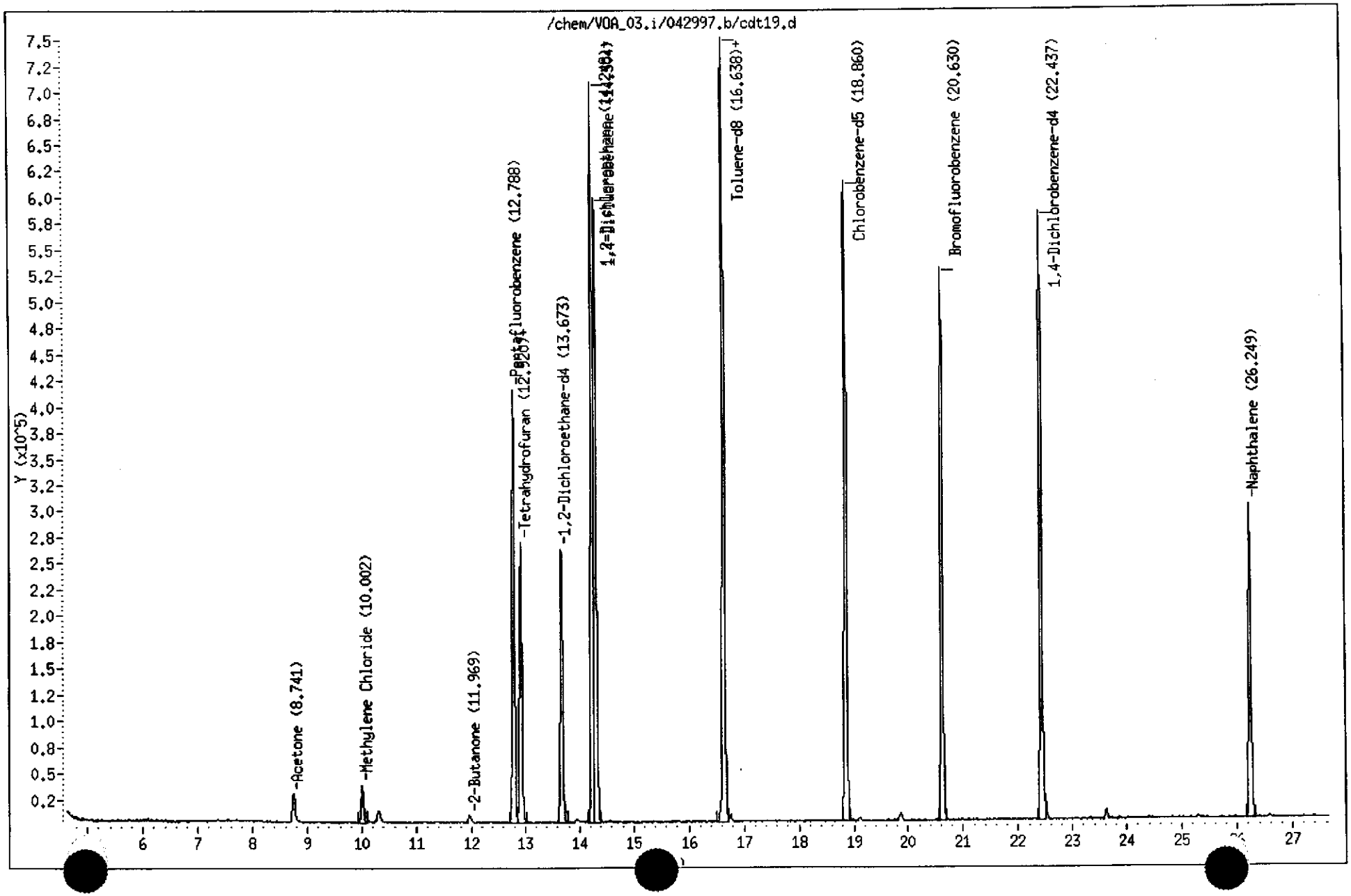
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	94	68-126
Toluene-d8	106	87-125
Bromofluorobenzene	109	79-122

J: Estimated Value

Data File: /chem/VOA_03.i/042997.b/cdt19.d
Date : 29-APR-97 20:13
Client ID: DYNA P&T
Sample Info: S,129073-011
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_03.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP-21@7.0
Lab ID: 129073-012
Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Sampled: 04/25/97
Received: 04/25/97
Extracted: 04/29/97
Analyzed: 04/29/97

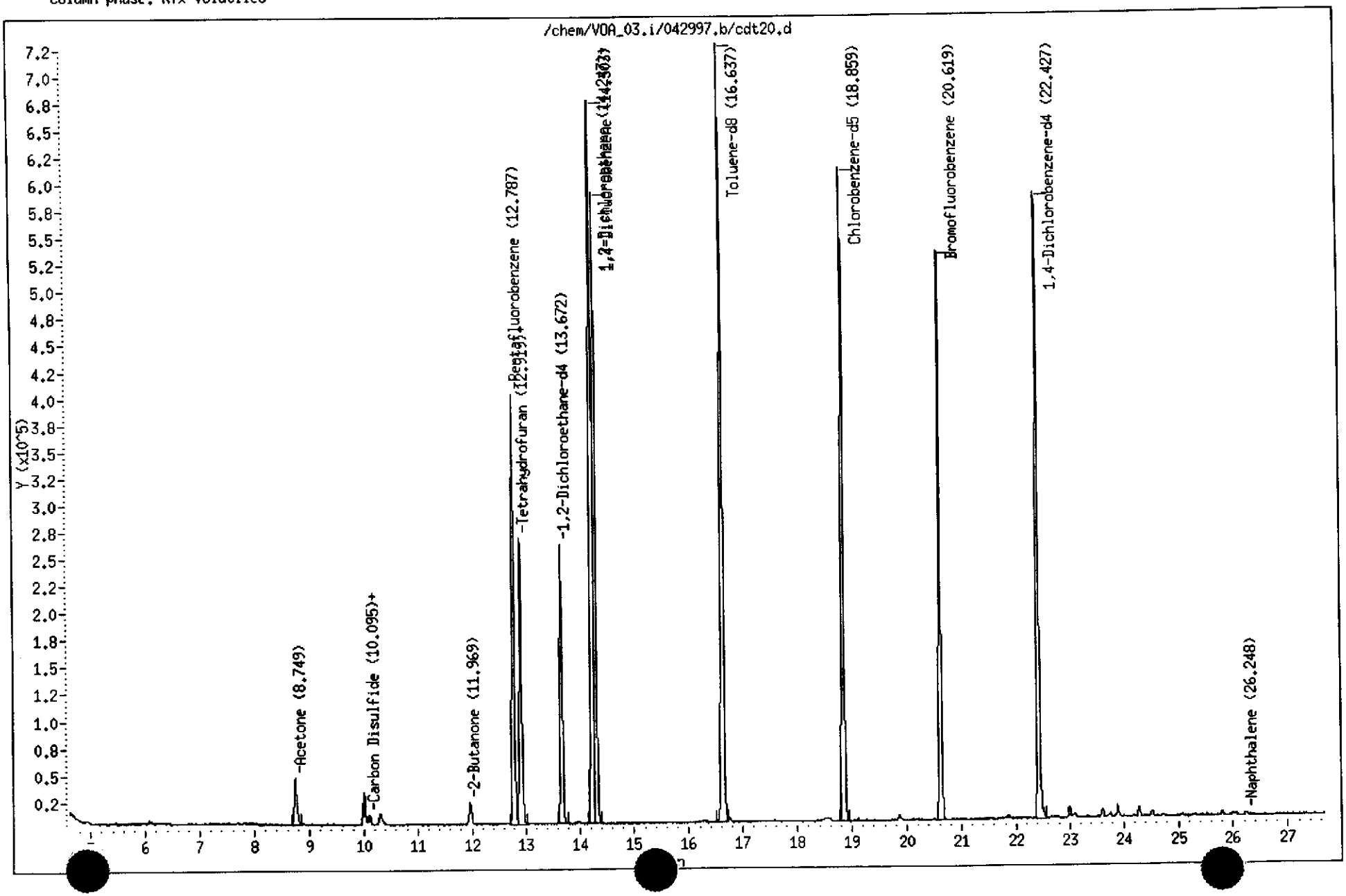
Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	40	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	14	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	107	87-125
Bromofluorobenzene	109	79-122

Data File: /chem/VOA_03.i/042997.b/cdt20.d
Date : 29-APR-97 20:48
Client ID: DYNA P&T
Sample Info: S,129073-012
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_03.i

Operator: LLH
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP-22@1.0
Lab ID: 129073-013
Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

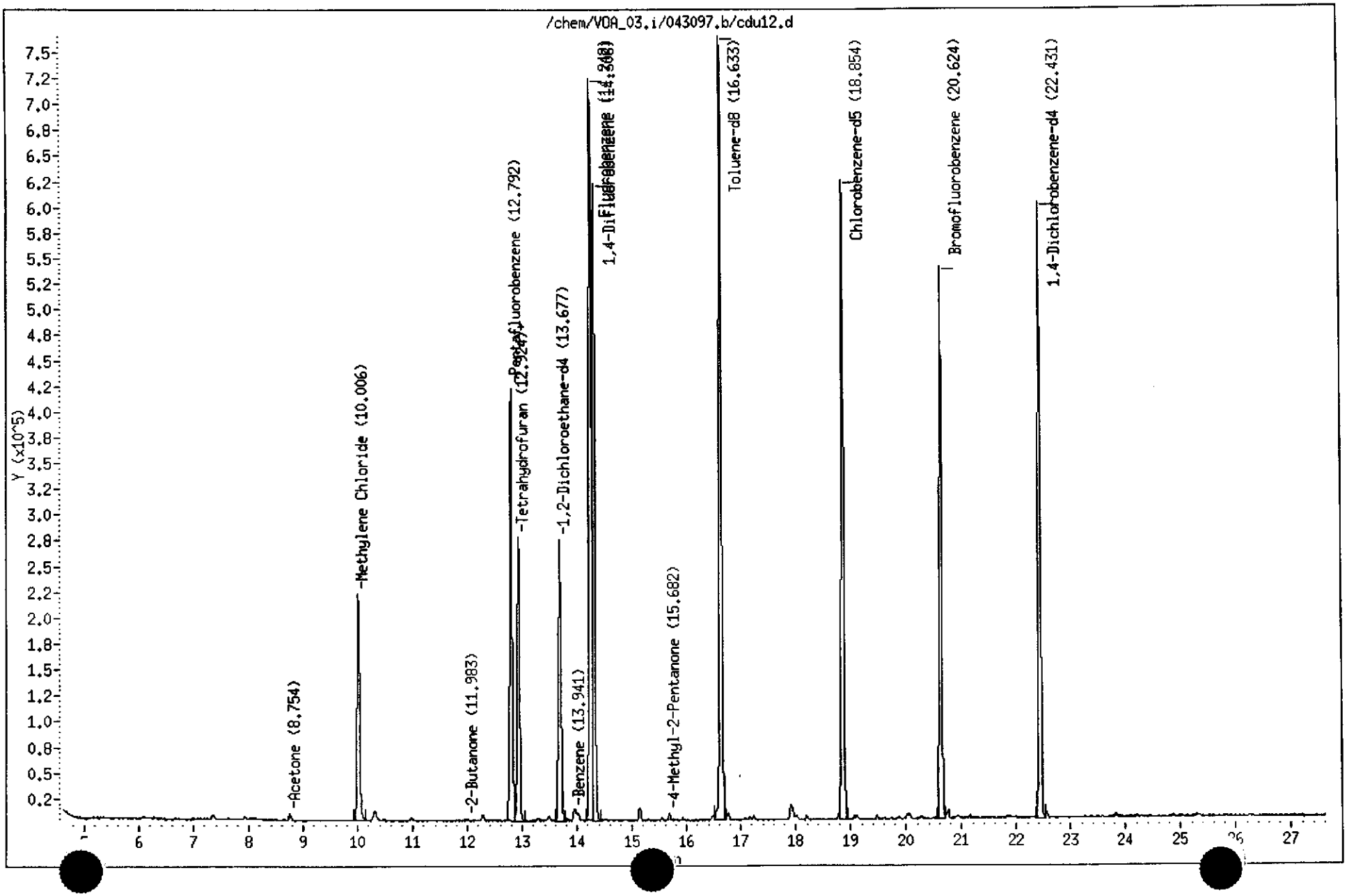
Sampled: 04/25/97
Received: 04/25/97
Extracted: 04/30/97
Analyzed: 04/30/97

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	37	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	105	87-125
Bromofluorobenzene	108	79-122

Data File: /chem/VOA_03.i/043097.b/cdu12.d
Date : 30-APR-97 17:14
Client ID: DYNA P&T
Sample Info: S,129073-013
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_03.i
Operator: LLH
Column diameter: 0.32



EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 04/29/97

MB Lab ID: QC45008

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	106	87-125
Bromofluorobenzene	105	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

MB Lab ID: QC45287

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	104	87-125
Bromofluorobenzene	102	79-122

Curtis & Tompkins, Ltd.

Lab #: 129073 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

MB Lab ID: QC45232

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

Curtis & Tompkins, Ltd.

Lab #: 129073 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 04/29/97

LCS Lab ID: QC45007

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	44.74	50	89	51-180
Trichloroethene	45.75	50	92	73-141
Benzene	50.1	50	100	78-142
Toluene	56.04	50	112	76-150
Chlorobenzene	49.62	50	99	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	105	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

LCS Lab ID: QC45094

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	50.37	50	101	51-180
Trichloroethene	49.2	50	98	73-141
Benzene	53.06	50	106	78-142
Toluene	60.45	50	121	76-150
Chlorobenzene	53.37	50	107	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	108	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 #: 129073 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

LCS Lab ID: QC45215

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	61.54	50	123	51-180
Trichloroethene	51.95	50	104	73-141
Benzene	53.79	50	108	78-142
Toluene	54.43	50	109	76-150
Chlorobenzene	51.68	50	103	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	102	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
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCITP-17@0.8
Lab ID: 129073-006
Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/24/97
Received Date: 04/25/97
Prep Date: 04/29/97
Analysis Date: 04/29/97

MS Lab ID: QC45017

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	40.14	80	51-180
Trichloroethene	50	<5	41.7	83	73-141
Benzene	50	<5	46.83	94	78-142
Toluene	50	<5	49.65	99	76-150
Chlorobenzene	50	3.779	42.21	77 *	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	108	87-125
Bromofluorobenzene	115	79-122

MSD Lab ID: QC45018

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	40.08	80	51-180	0	22
Trichloroethene	50	42.36	85	73-141	2	24
Benzene	50	48.05	96	78-142	3	21
Toluene	50	52.29	105	76-150	5	21
Chlorobenzene	50	45.44	83	83-129	7	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	94	68-126
Toluene-d8	107	87-125
Bromofluorobenzene	114	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

Curtis & Tompkins, Ltd.

Lab #: 129073 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129057-016
Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/23/97
Received Date: 04/24/97
Prep Date: 05/02/97
Analysis Date: 05/02/97

MS Lab ID: QC45153

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	49.34	99	51-180
Trichloroethene	50	<5	68.59	137	73-141
Benzene	50	<5	48.18	96	78-142
Toluene	50	<5	50.24	100	76-150
Chlorobenzene	50	<5	44.47	89	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	92	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	99	79-122

MSD Lab ID: QC45154

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	50.02	100	51-180	1	22
Trichloroethene	50	70.02	140	73-141	2	24
Benzene	50	50.12	100	78-142	4	21
Toluene	50	51.53	103	76-150	3	21
Chlorobenzene	50	43.07	86	83-129	3	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	93	68-126
Toluene-d8	105	87-125
Bromofluorobenzene	99	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 #: 129073 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129056-014
Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1

Sample Date: 04/23/97
Received Date: 04/23/97
Prep Date: 05/01/97
Analysis Date: 05/01/97

MS Lab ID: QC45229

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	5.229	60.7	111	51-180
Trichloroethene	50	51.11	100.3	98	73-141
Benzene	50	0	51.58	103	78-142
Toluene	50	0	51.92	104	76-150
Chlorobenzene	50	0	52.22	104	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	105	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	98	79-122

MSD Lab ID: QC45230

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	61.13	112	51-180	1	22
Trichloroethene	50	97.21	92	73-141	3	24
Benzene	50	50.98	102	78-142	1	21
Toluene	50	51.98	104	76-150	0	21
Chlorobenzene	50	50.28	101	83-129	4	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	107	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	99	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.

LABORATORY NUMBER: 129073
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/24,25/97
DATE RECEIVED: 04/25/97
DATE ANALYZED: 04/30/97
BATCH#: 33732

ANALYSIS: CYANIDE
ANALYSIS METHOD: EPA 335.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129073-001	SCI-72@1.5	ND	mg/Kg	1.0
129073-002	SCI-72@5.5	ND	mg/Kg	1.0
129073-007	SCITP-17@1.5	ND	mg/Kg	1.0
129073-008	SCITP-19@6.0	ND	mg/Kg	1.0
129073-009	SCITP-20@3.0	ND	mg/Kg	1.0
129073-013	SCITP-22@1.0	ND	mg/Kg	1.0
METHOD BLANK	N/A	ND	mg/Kg	1.0

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: MS/MSD OF 129057-016

RPD, %	5
RECOVERY, %	89

San Francisco Regional Office

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

May 5, 1997

Ms. Tracy Babjar
CURTIS & TOMPKINS, LTD.
2323 Fifth Street
Berkeley, CA 94710

Client Ref.: 129073
Clayton Project No.: 97043.55

Dear Ms. Babjar:

Attached is our analytical laboratory report for the samples received on April 28, 1997. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after June 4, 1997, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Andrew Bradeen for
Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/las

Attachments

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129073
Clayton Project No. 97043.55

Sample Identification: See Below
Lab Number: 9704355
Sample Matrix/Media: SOIL
Method Reference: EPA 353.2

Date Received: 04/28/97
Date Analyzed: 04/30/97

Lab Number	Sample Identification	Date Sampled	Nitrate-N (mg/kg)	Method Detection Limit (mg/kg)
-01	SCI-74@2	04/24/97	8.9	0.5
-02	METHOD BLANK	--	<0.5	0.5

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129073
Clayton Project No. 97043.55

Sample Identification: See Below
Lab Number: 9704355
Sample Matrix/Media: SOIL
Method Reference: EPA 353.3 (Modified)

Date Received: 04/28/97
Date Analyzed: 04/30/97

Lab Number	Sample Identification	Date Sampled	Nitrite-N (mg/kg)	Method Detection Limit (mg/kg)
-01	SCI-74@2	04/24/97	1.0	0.5
-02	METHOD BLANK	--	<0.5	0.5

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

San Francisco Regional Office

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

May 8, 1997

Ms. Tracy Babjar
CURTIS & TOMPKINS, LTD.
2323 Fifth Street
Berkeley, CA 94710

Client Ref.: 129073
Clayton Project No.: 97050.13

Dear Ms. Babjar:

Attached is our analytical laboratory report for the samples received on May 1, 1997. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after June 7, 1997, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/las

Attachments

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129073
Clayton Project No. 97050.13

Sample Identification: See Below
Lab Number: 9705013
Sample Matrix/Media: SOIL
Method Reference: EPA 300.0

Date Received: 05/01/97
Date Analyzed: 05/02/97

Lab Number	Sample Identification	Date Sampled	Nitrate-N (mg/kg)	Method Detection Limit (mg/kg)
-01	SCITP-22@1.0	04/25/97	<1	1
-02	METHOD BLANK	--	<1	1

ND: Not detected at or above limit of detection
: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129073
Clayton Project No. 97050.13

Sample Identification: See Below
Lab Number: 9705013
Sample Matrix/Media: SOIL
Method Reference: EPA 300.0

Date Received: 05/01/97
Date Analyzed: 05/02/97

Lab Number	Sample Identification	Date Sampled	Nitrite-N (mg/kg)	Method Detection Limit (mg/kg)
-01	SCITP-22@1.0	04/25/97	<0.5	0.5
-02	METHOD BLANK	--	<0.5	0.5

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

9705013

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 ph
(510)486-0532 fx

Project Number: 129073

Subcontract Lab:

Clayton Environmental
1252 Quarry Lane
Pleasanton, CA 94566
(510) 426-2600

Please send report to: Tracy Babjar

Turnaround Time: Normal (5 day)

Sample ID	Date Sampled	Matrix	Analysis	C&T Lab #
~~SCI-7400~~	~~24-APR-97~~	~~Soil~~	~~NITRATE/NITRITE~~	~~129073-004~~
SCITP-22@1.0	25-APR-97	Soil 60ml sealed	NITRATE/NITRITE	129073-013

***Please report using Sample ID instead of C&T Lab #.

Notes:	RELINQUISHED BY:	RECEIVED BY:
	~~4/30/97~~ 5/1/97 Date/Time	5/1/97 1020 Date/Time
	5/1/97 11:08 Date/Time	5/1/97 11:10 Date/Time

Signature on this form constitutes a firm Purchase Order for the services requested above.

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 ph
(510)486-0532 fx

9704355

Project Number: 129073

Subcontract Lab:

Clayton Environmental
1252 Quarry Lane
Pleasanton, CA 94566
(510) 426-2600

Please send report to: Tracy Babjar

Turnaround Time: Normal (5 day)

Sample ID	Date Sampled	Matrix	Analysis	C&T Lab #
SCI-74@2	24-APR-97	60ml Glass Soil	NITRATE/NITRITE	129073-004 -01A

Please report using Sample ID instead of C&T Lab #.

Notes:

RELINQUISHED BY:		RECEIVED BY:	
	Date/Time		Date/Time 4/28/97 15:00
	Date/Time 4/28/97 15:52	Carol Hammarberg Rec'd in good condition	Date/Time 4/28/97 1552

Signature on this form constitutes a firm Purchase Order for the services requested above.

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129073
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/24,25/97
DATE RECEIVED: 04/25/97
DATE ANALYZED: 05/06/97
BATCH#: 33830

ANALYSIS: TOTAL PHOSPHORUS
ANALYSIS METHOD: EPA 365.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129073-004	SCI-74@2	ND	mg/Kg	1.0
129073-013	SCITP-22@1.0	3.2	mg/Kg	2.0
METHOD BLANK	N/A	ND	mg/Kg	1.0

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: LCS

RECOVERY, %	93

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCI-72@1.5	Sampled:	04/24/97
Lab ID:	129073-001	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
Units:	ug/Kg		
Diln Fac:	1		

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-72@1.5	Sampled:	04/24/97
Lab ID:	129073-001	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
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	66	25-121
Phenol-d5	71	24-113
2,4,6-Tribromophenol	67	19-122
Nitrobenzene-d5	73	23-120
2-Fluorobiphenyl	85	30-115
Terphenyl-d14	91	18-137

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCI-74@2	Sampled:	04/24/97
Lab ID:	129073-004	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	05/01/97
Units:	ug/Kg		
Diln Fac:	1		

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-74@2	Sampled:	04/24/97
Lab ID:	129073-004	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	05/01/97
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	32	25-121
Phenol-d5	73	24-113
2,4,6-Tribromophenol	20	19-122
Nitrobenzene-d5	86	23-120
2-Fluorobiphenyl	107	30-115
Terphenyl-d14	102	18-137

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCITP-17@0.8	Sampled:	04/24/97
Lab ID:	129073-006	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
Units:	ug/Kg		
Diln Fac:	10		

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:	SCITP-17@0.8	Sampled:	04/24/97
Lab ID:	129073-006	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
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	ND	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	55	25-121
Phenol-d5	61	24-113
2,4,6-Tribromophenol	48	19-122
Nitrobenzene-d5	62	23-120
2-Fluorobiphenyl	74	30-115
Terphenyl-d14	102	18-137

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCITP-17@1.5	Sampled:	04/24/97
Lab ID:	129073-007	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
Units:	ug/Kg		
Diln Fac:	5		

Analyte	Result	Reporting Limit
Phenol	ND	25000
2-Chlorophenol	ND	25000
Benzyl alcohol	ND	25000
2-Methylphenol	ND	25000
4-Methylphenol	ND	25000
2-Nitrophenol	ND	130000
2,4-Dimethylphenol	ND	25000
Benzoic acid	ND	130000
2,4-Dichlorophenol	ND	25000
4-Chloro-3-methylphenol	ND	25000
2,4,6-Trichlorophenol	ND	25000
2,4,5-Trichlorophenol	ND	130000
2,4-Dinitrophenol	ND	130000
4-Nitrophenol	ND	130000
4,6-Dinitro-2-methylphenol	ND	130000
Pentachlorophenol	ND	130000
N-Nitrosodimethylamine	ND	25000
Aniline	ND	25000
bis(2-Chloroethyl)ether	ND	25000
1,3-Dichlorobenzene	ND	25000
1,4-Dichlorobenzene	ND	25000
1,2-Dichlorobenzene	ND	25000
bis(2-Chloroisopropyl) ether	ND	25000
N-Nitroso-di-n-propylamine	ND	25000
Hexachloroethane	ND	25000
Nitrobenzene	ND	25000
Isophorone	ND	25000
bis(2-Chloroethoxy)methane	ND	25000
1,2,4-Trichlorobenzene	ND	25000
Naphthalene	ND	25000
4-Chloroaniline	ND	25000
Hexachlorobutadiene	ND	25000
2-Methylnaphthalene	ND	25000
Hexachlorocyclopentadiene	ND	25000
2-Chloronaphthalene	ND	25000
2-Nitroaniline	ND	130000
Dimethylphthalate	ND	25000
Acenaphthylene	ND	25000

Semivolatile Organics by GC/MS

Field ID:	SCITP-17@1.5	Sampled:	04/24/97
Lab ID:	129073-007	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
Units:	ug/Kg		
Diln Fac:	5		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	25000
3-Nitroaniline	ND	130000
Acenaphthene	ND	25000
Dibenzofuran	ND	25000
2,4-Dinitrotoluene	ND	25000
Diethylphthalate	ND	25000
4-Chlorophenyl-phenylether	ND	25000
Fluorene	ND	25000
4-Nitroaniline	ND	130000
N-Nitrosodiphenylamine	ND	25000
Azobenzene	ND	25000
4-Bromophenyl-phenylether	ND	25000
Hexachlorobenzene	ND	25000
Phenanthrene	ND	25000
Anthracene	ND	25000
Di-n-butylphthalate	ND	25000
Fluoranthene	ND	25000
Benzidine	ND	25000
Pyrene	ND	25000
Butylbenzylphthalate	ND	25000
3,3'-Dichlorobenzidine	ND	130000
Benzo(a)anthracene	ND	25000
Chrysene	ND	25000
bis(2-Ethylhexyl)phthalate	ND	25000
Di-n-octylphthalate	ND	25000
Benzo(b)fluoranthene	ND	25000
Benzo(k)fluoranthene	ND	25000
Benzo(a)pyrene	ND	25000
Indeno(1,2,3-cd)pyrene	ND	25000
Dibenz(a,h)anthracene	ND	25000
Benzo(g,h,i)perylene	ND	25000

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

* Values outside of QC limits
DO: Surrogate diluted out

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: SCITP-19@2.5
Lab ID: 129073-010
Matrix: Soil
Batch#: 33695
Units: ug/Kg
Diln Fac: 25

Sampled: 04/24/97
Received: 04/25/97
Extracted: 04/28/97
Analyzed: 05/01/97

Analyte	Result	Reporting Limit
Phenol	ND	210000
2-Chlorophenol	ND	210000
Benzyl alcohol	ND	210000
2-Methylphenol	ND	210000
4-Methylphenol	ND	210000
2-Nitrophenol	ND	1000000
2,4-Dimethylphenol	ND	210000
Benzoic acid	ND	1000000
2,4-Dichlorophenol	ND	210000
4-Chloro-3-methylphenol	ND	210000
2,4,6-Trichlorophenol	ND	210000
2,4,5-Trichlorophenol	ND	1000000
2,4-Dinitrophenol	ND	1000000
4-Nitrophenol	ND	1000000
4,6-Dinitro-2-methylphenol	ND	1000000
Pentachlorophenol	ND	1000000
N-Nitrosodimethylamine	ND	210000
Aniline	ND	210000
bis(2-Chloroethyl)ether	ND	210000
1,3-Dichlorobenzene	ND	210000
1,4-Dichlorobenzene	ND	210000
1,2-Dichlorobenzene	ND	210000
bis(2-Chloroisopropyl) ether	ND	210000
N-Nitroso-di-n-propylamine	ND	210000
Hexachloroethane	ND	210000
Nitrobenzene	ND	210000
Isophorone	ND	210000
bis(2-Chloroethoxy)methane	ND	210000
1,2,4-Trichlorobenzene	ND	210000
Naphthalene	140000 J	210000
4-Chloroaniline	ND	210000
Hexachlorobutadiene	ND	210000
2-Methylnaphthalene	110000 J	210000
Hexachlorocyclopentadiene	ND	210000
2-Chloronaphthalene	ND	210000
2-Nitroaniline	ND	1000000
Dimethylphthalate	ND	210000
Acenaphthylene	ND	210000

Semivolatile Organics by GC/MS

Field ID:	SCITP-19@2.5	Sampled:	04/24/97
Lab ID:	129073-010	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	05/01/97
Units:	ug/Kg		
Diln Fac:	25		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	210000
3-Nitroaniline	ND	1000000
Acenaphthene	890000	210000
Dibenzofuran	450000	210000
2,4-Dinitrotoluene	ND	210000
Diethylphthalate	ND	210000
4-Chlorophenyl-phenylether	ND	210000
Fluorene	870000	210000
4-Nitroaniline	ND	1000000
N-Nitrosodiphenylamine	ND	210000
Azobenzene	ND	210000
4-Bromophenyl-phenylether	ND	210000
Hexachlorobenzene	ND	210000
Phenanthrene	3800000	210000
Anthracene	1800000	210000
Di-n-butylphthalate	ND	210000
Fluoranthene	3000000	210000
Benzidine	ND	210000
Pyrene	3400000	210000
Butylbenzylphthalate	ND	210000
3,3'-Dichlorobenzidine	ND	1000000
Benzo(a)anthracene	1600000	210000
Chrysene	2000000	210000
bis(2-Ethylhexyl)phthalate	ND	210000
Di-n-octylphthalate	ND	210000
Benzo(b)fluoranthene	900000	210000
Benzo(k)fluoranthene	1700000	210000
Benzo(a)pyrene	1500000	210000
Indeno(1,2,3-cd)pyrene	420000	210000
Dibenz(a,h)anthracene	230000	210000
Benzo(g,h,i)perylene	370000	210000

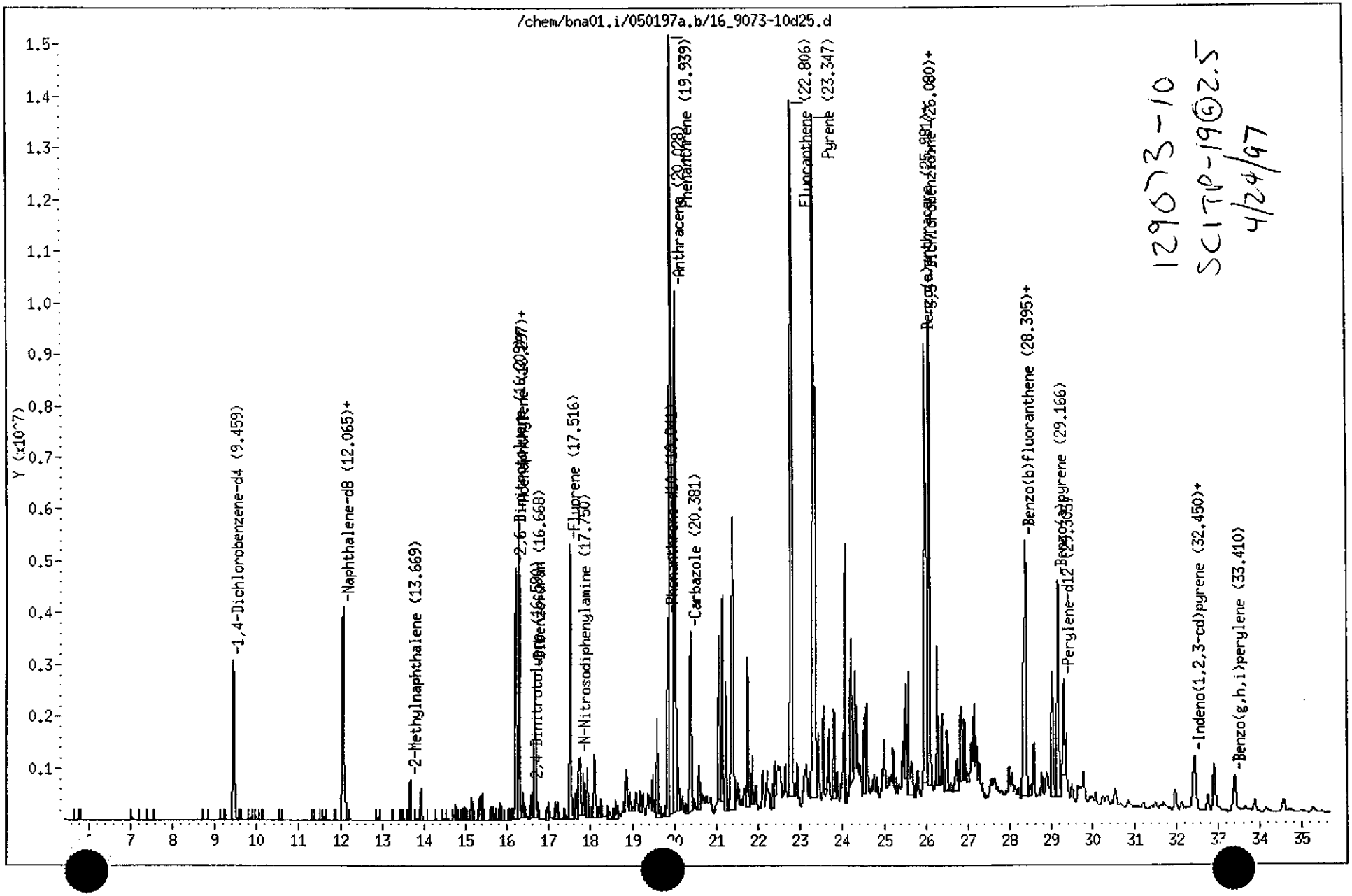
Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	DO*	25-121
Phenol-d5	DO*	24-113
2,4,6-Tribromophenol	DO*	19-122
Nitrobenzene-d5	DO*	23-120
2-Fluorobiphenyl	DO*	30-115
Terphenyl-d14	DO*	18-137

J: Estimated Value
* Values outside of QC limits

Data File: /chem/bna01.i/050197a.b/16_9073-10d25.d
Date : 01-MAY-97 23:44
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



129073-10
SC1740-19@2.5
4/24/97

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCITP-21@2.0	Sampled:	04/25/97
Lab ID:	129073-011	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
Units:	ug/Kg		
Diln Fac:	1		

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:	SCITP-21@2.0	Sampled:	04/25/97
Lab ID:	129073-011	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
Units:	ug/Kg		
Diln Fac:	1		

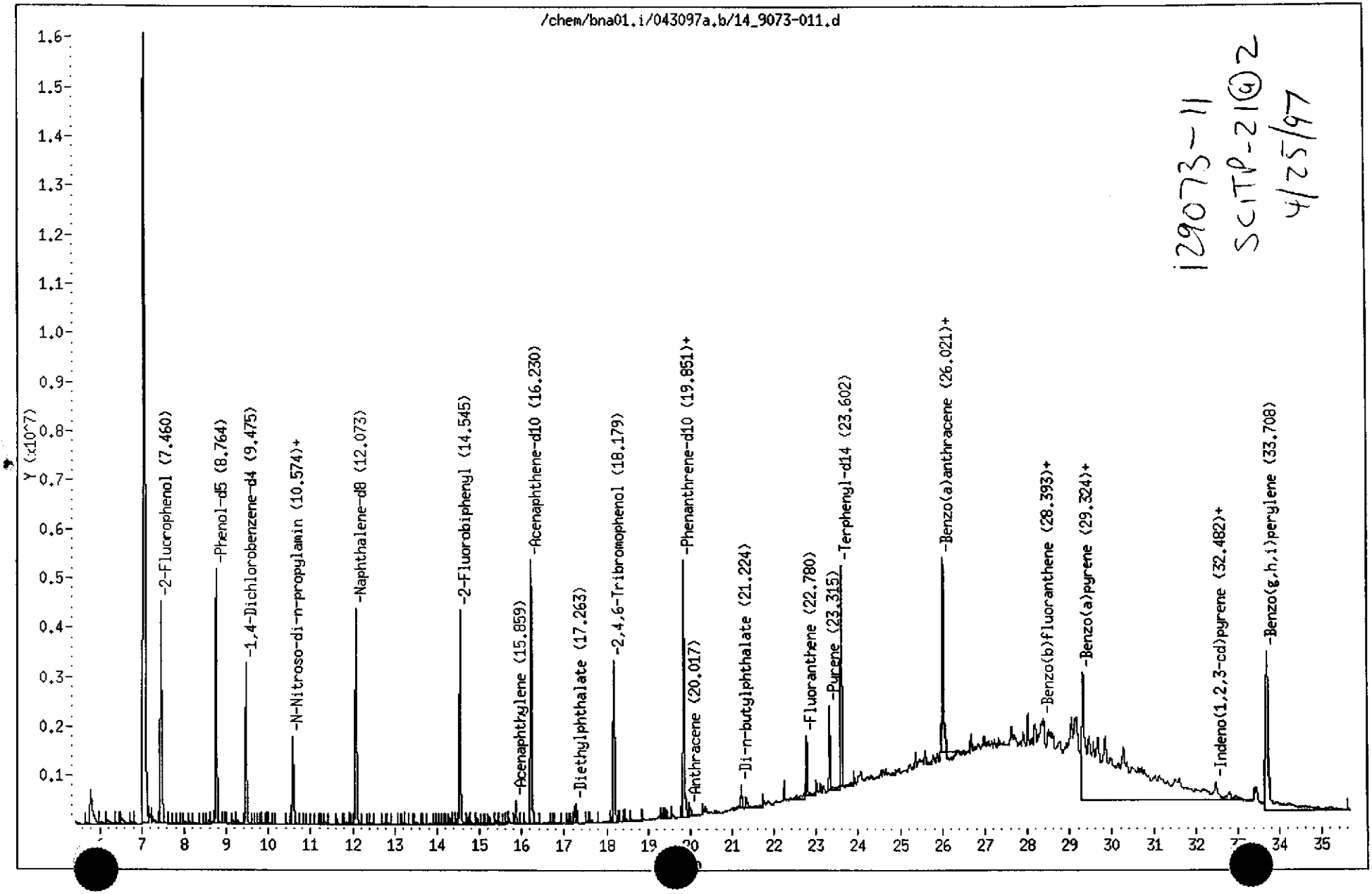
Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	260 J	330
Benzidine	ND	330
Pyrene	450	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	230 J	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	250 J	330
Benzo(k)fluoranthene	350	330
Benzo(a)pyrene	420	330
Indeno(1,2,3-cd)pyrene	240 J	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	340	330

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	54	25-121
Phenol-d5	58	24-113
2,4,6-Tribromophenol	53	19-122
Nitrobenzene-d5	59	23-120
2-Fluorobiphenyl	71	30-115
Terphenyl-d14	93	18-137

J: Estimated Value

Data File: /chem/bna01.i/043097a.b/14_9073-011.d
Date : 30-APR-97 22:15
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



129073-11
SCITP-2102
4/25/97

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCITP-21@7.0	Sampled:	04/25/97
Lab ID:	129073-012	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
Units:	ug/Kg		
Diln Fac:	1		

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

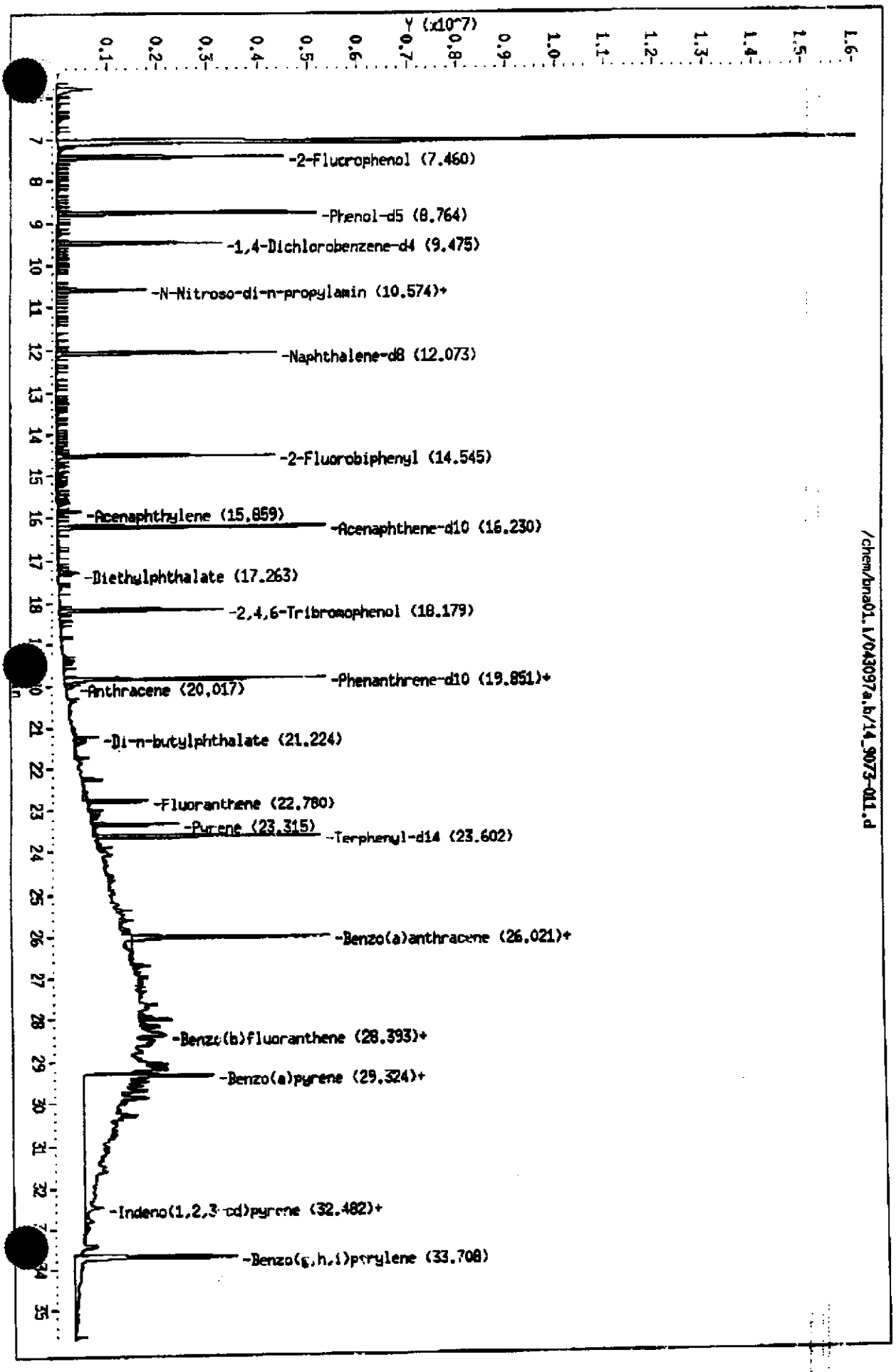
Semivolatile Organics by GC/MS

Field ID:	SCITP-21@7.0	Sampled:	04/25/97
Lab ID:	129073-012	Received:	04/25/97
Matrix:	Soil	Extracted:	04/28/97
Batch#:	33695	Analyzed:	04/30/97
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	310 J	330
Benzidine	ND	330
Pyrene	420	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	220 J	330
Chrysene	430	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	410	330
Benzo(k)fluoranthene	490	330
Benzo(a)pyrene	370	330
Indeno(1,2,3-cd)pyrene	250 J	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	340	330

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	69	25-121
Phenol-d5	76	24-113
2,4,6-Tribromophenol	62	19-122
Nitrobenzene-d5	74	23-120
2-Fluorobiphenyl	88	30-115
Terphenyl-d14	108	18-137

J: Estimated Value


Data File: /chem/bna01.i/043097a.b/14_9073-011.d
Date : 30-APR-97 22:15
Client ID: CURTIS&TOMPKINS,LTD
Sample Info:
Volume Injected (uL): 1.0
Column phase: Xtl 5 x .5 u
Instrument: bna01.i
Column diameter: 0.25
/chem/bna01.i/043097a.b/14_9073-011.d
Y (x10^7)
-2-Fluorophenol (7.460)
-Phenol-d5 (8.764)
-1,4-Dichlorobenzene-d4 (9.475)
-N-Nitroso-di-n-propylamin (10.574)+
-Naphthalene-d8 (12.073)
-2-Fluorobiphenyl (14.545)
-Acenaphthylene (15.859)
-Acenaphthene-d10 (16.230)
-Diethylphthalate (17.263)
-2,4,6-Tribromophenol (18.179)
-Phenanthrene-d10 (19.851)+
-Anthracene (20.017)
-Di-n-butylphthalate (21.224)
-Fluoranthene (22.780)
-Pyrene (23.315)
-Terphenyl-d14 (23.602)
-Benzo(a)anthracene (26.021)+
-Benzo(b)fluoranthene (28.393)+
-Benzo(a)pyrene (29.324)+
-Indeno(1,2,3-cd)pyrene (32.482)+
-Benzo(g,h,i)perylene (33.708)

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: SCITP-22@1.0
Lab ID: 129073-013
Matrix: Soil
Batch#: 33713
Units: ug/Kg
Diln Fac: 20

Sampled: 04/25/97
Received: 04/25/97
Extracted: 04/29/97
Analyzed: 05/09/97

Analyte	Result	Reporting Limit
Phenol	ND	100000
2-Chlorophenol	ND	100000
Benzyl alcohol	ND	100000
2-Methylphenol	ND	100000
4-Methylphenol	ND	100000
2-Nitrophenol	ND	500000
2,4-Dimethylphenol	ND	100000
Benzoic acid	ND	500000
2,4-Dichlorophenol	ND	100000
4-Chloro-3-methylphenol	ND	100000
2,4,6-Trichlorophenol	ND	100000
2,4,5-Trichlorophenol	ND	500000
2,4-Dinitrophenol	ND	500000
4-Nitrophenol	ND	500000
4,6-Dinitro-2-methylphenol	ND	500000
Pentachlorophenol	ND	500000
N-Nitrosodimethylamine	ND	100000
Aniline	ND	100000
bis(2-Chloroethyl)ether	ND	100000
1,3-Dichlorobenzene	ND	100000
1,4-Dichlorobenzene	ND	100000
1,2-Dichlorobenzene	ND	100000
bis(2-Chloroisopropyl) ether	ND	100000
N-Nitroso-di-n-propylamine	ND	100000
Hexachloroethane	ND	100000
Nitrobenzene	ND	100000
Isophorone	ND	100000
bis(2-Chloroethoxy)methane	ND	100000
1,2,4-Trichlorobenzene	ND	100000
Naphthalene	ND	100000
4-Chloroaniline	ND	100000
Hexachlorobutadiene	ND	100000
2-Methylnaphthalene	ND	100000
Hexachlorocyclopentadiene	ND	100000
2-Chloronaphthalene	ND	100000
2-Nitroaniline	ND	500000
Dimethylphthalate	ND	100000
Acenaphthylene	ND	100000

Semivolatile Organics by GC/MS

Field ID:	SCITP-22@1.0	Sampled:	04/25/97
Lab ID:	129073-013	Received:	04/25/97
Matrix:	Soil	Extracted:	04/29/97
Batch#:	33713	Analyzed:	05/09/97
Units:	ug/Kg		
Diln Fac:	20		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	100000
3-Nitroaniline	ND	500000
Acenaphthene	ND	100000
Dibenzofuran	ND	100000
2,4-Dinitrotoluene	ND	100000
Diethylphthalate	ND	100000
4-Chlorophenyl-phenylether	ND	100000
Fluorene	ND	100000
4-Nitroaniline	ND	500000
N-Nitrosodiphenylamine	ND	100000
Azobenzene	ND	100000
4-Bromophenyl-phenylether	ND	100000
Hexachlorobenzene	ND	100000
Phenanthrene	ND	100000
Anthracene	ND	100000
Di-n-butylphthalate	ND	100000
Fluoranthene	ND	100000
Benzidine	ND	100000
Pyrene	ND	100000
Butylbenzylphthalate	ND	100000
3,3'-Dichlorobenzidine	ND	500000
Benzo(a)anthracene	ND	100000
Chrysene	ND	100000
bis(2-Ethylhexyl)phthalate	ND	100000
Di-n-octylphthalate	ND	100000
Benzo(b)fluoranthene	ND	100000
Benzo(k)fluoranthene	ND	100000
Benzo(a)pyrene	ND	100000
Indeno(1,2,3-cd)pyrene	ND	100000
Dibenz(a,h)anthracene	ND	100000
Benzo(g,h,i)perylene	ND	100000

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

* Values outside of QC limits
DO: Surrogate diluted out

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33695
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 04/29/97

MB Lab ID: QC44991

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

Curtis & Tompkins, Ltd.

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33695
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 04/29/97

MB Lab ID: QC44991

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	62	25-121
Phenol-d5	66	24-113
2,4,6-Tribromophenol	53	19-122
Nitrobenzene-d5	66	23-120
2-Fluorobiphenyl	76	30-115
Terphenyl-d14	78	18-137

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33713
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 05/05/97

MB Lab ID: QC45067

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

Curtis & Tompkins, Ltd.

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33713
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 05/05/97

MB Lab ID: QC45067

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	63	25-121
Phenol-d5	69	24-113
2,4,6-Tribromophenol	57	19-122
Nitrobenzene-d5	72	23-120
2-Fluorobiphenyl	87	30-115
Terphenyl-d14	88	18-137

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33695
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 04/29/97

LCS Lab ID: QC44994

Analyte	Result	Spike Added	%Rec #	Limits
Phenol	2047	3333	61	26-90
2-Chlorophenol	2200	3333	66	25-102
4-Chloro-3-methylphenol	2088	3333	63	26-103
4-Nitrophenol	1552	3333	47	11-114
Pentachlorophenol	954.1	3333	29	17-109
1,4-Dichlorobenzene	981.4	1667	59	28-104
N-Nitroso-di-n-propylamine	862.9	1667	52	41-126
1,2,4-Trichlorobenzene	1037	1667	62	38-107
Acenaphthene	1108	1667	66	31-137
2,4-Dinitrotoluene	756.4	1667	45	28-89
Pyrene	1054	1667	63	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	59	25-121
Phenol-d5	60	24-113
2,4,6-Tribromophenol	51	19-122
Nitrobenzene-d5	61	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 #: 129073 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33713
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 05/05/97

LCS Lab ID: QC45068

Analyte	Result	Spike Added	%Rec #	Limits
Phenol	2544	3333	76	26-90
2-Chlorophenol	2652	3333	80	25-102
4-Chloro-3-methylphenol	2576	3333	77	26-103
4-Nitrophenol	2177	3333	65	11-114
Pentachlorophenol	2066	3333	62	17-109
1,4-Dichlorobenzene	1221	1667	73	28-104
N-Nitroso-di-n-propylamine	819.2	1667	49	41-126
1,2,4-Trichlorobenzene	1260	1667	76	38-107
Acenaphthene	1426	1667	86	31-137
2,4-Dinitrotoluene	930.4	1667	56	28-89
Pyrene	1367	1667	82	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	69	25-121
Phenol-d5	72	24-113
2,4,6-Tribromophenol	67	19-122
Nitrobenzene-d5	75	23-120
2-Fluorobiphenyl	88	30-115
Terphenyl-d14	92	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129033-017
Matrix: Soil
Batch#: 33695
Units: ug/Kg
Diln Fac: 2

Sample Date: 04/19/97
Received Date: 04/22/97
Prep Date: 04/28/97
Analysis Date: 05/01/97

MS Lab ID: QC44992

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Phenol	3333	<666.7	2289	69	26-90
2-Chlorophenol	3333	<666.7	2305	69	25-102
4-Chloro-3-methylphenol	3333	<666.7	2295	69	26-103
4-Nitrophenol	3333	<3333	1694	51	11-114
Pentachlorophenol	3333	<3333	673	20	17-109
1,4-Dichlorobenzene	1667	<666.7	808.5	49	28-104
N-Nitroso-di-n-propylamine	1667	<666.7	960.5	58	41-126
1,2,4-Trichlorobenzene	1667	<666.7	996.3	60	38-107
Acenaphthene	1667	<666.7	1246	75	31-137
2,4-Dinitrotoluene	1667	<666.7	767.4	46	28-89
Pyrene	1667	<666.7	1346	81	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	62	25-121
Phenol-d5	67	24-113
2,4,6-Tribromophenol	52	19-122
Nitrobenzene-d5	63	23-120
2-Fluorobiphenyl	77	30-115
Terphenyl-d14	91	18-137

MSD Lab ID: QC44993

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Phenol	3333	2558	77	26-90	11	35
2-Chlorophenol	3333	2627	79	25-102	14	50
4-Chloro-3-methylphenol	3333	2547	76	26-103	10	33
4-Nitrophenol	3333	2032	61	11-114	18	50
Pentachlorophenol	3333	906	27	17-109	30	47
1,4-Dichlorobenzene	1667	935.2	56	28-104	13	27
N-Nitroso-di-n-propylamine	1667	1092	66	41-126	13	38
1,2,4-Trichlorobenzene	1667	1147	69	38-107	14	23
Acenaphthene	1667	1420	85	31-137	13	19
2,4-Dinitrotoluene	1667	918.5	55	28-89	18	47
Pyrene	1667	1571	94	35-142	15	36

Surrogate	%Rec	Limits
2-Fluorophenol	70	25-121
Phenol-d5	74	24-113
2,4,6-Tribromophenol	61	19-122
Nitrobenzene-d5	74	23-120
2-Fluorobiphenyl	90	30-115
Terphenyl-d14	107	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

Curtis & Tompkins, Ltd.

Lab #: 129073 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129034-020
Matrix: Soil
Batch#: 33713
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/22/97
Received Date: 04/22/97
Prep Date: 04/29/97
Analysis Date: 05/05/97

MS Lab ID: QC45069

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Phenol	3333	<333.3	2303	69	26-90
2-Chlorophenol	3333	<333.3	2471	74	25-102
4-Chloro-3-methylphenol	3333	<333.3	2299	69	26-103
4-Nitrophenol	3333	<1667	1923	58	11-114
Pentachlorophenol	3333	<1667	692.5	21	17-109
1,4-Dichlorobenzene	1667	<333.3	998.3	60	28-104
N-Nitroso-di-n-propylamine	1667	<333.3	1007	60	41-126
1,2,4-Trichlorobenzene	1667	<333.3	1121	67	38-107
Acenaphthene	1667	<333.3	1247	75	31-137
2,4-Dinitrotoluene	1667	<333.3	886.8	53	28-89
Pyrene	1667	<333.3	1124	67	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	65	25-121
Phenol-d5	67	24-113
2,4,6-Tribromophenol	59	19-122
Nitrobenzene-d5	72	23-120
2-Fluorobiphenyl	80	30-115
Terphenyl-d14	81	18-137

MSD Lab ID: QC45070

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Phenol	3333	2438	73	26-90	6	35
2-Chlorophenol	3333	2607	78	25-102	5	50
4-Chloro-3-methylphenol	3333	2583	77	26-103	11	33
4-Nitrophenol	3333	2257	68	11-114	16	50
Pentachlorophenol	3333	1056	32	17-109	42	47
1,4-Dichlorobenzene	1667	1096	66	28-104	10	27
N-Nitroso-di-n-propylamine	1667	1045	63	41-126	5	38
1,2,4-Trichlorobenzene	1667	1227	74	38-107	10	23
Acenaphthene	1667	1407	84	31-137	11	19
2,4-Dinitrotoluene	1667	1018	61	28-89	14	47
Pyrene	1667	1367	82	35-142	20	36

Surrogate	%Rec	Limits
2-Fluorophenol	69	25-121
Phenol-d5	71	24-113
2,4,6-Tribromophenol	70	19-122
Nitrobenzene-d5	78	23-120
2-Fluorobiphenyl	90	30-115
Terphenyl-d14	95	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

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-72@5.5
LAB ID: 129073-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE SAMPLED: 04/24/97
DATE RECEIVED: 04/25/97
DATE REPORTED: 05/13/97

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.9	1	33688	EPA 6010A	04/30/97
Arsenic	3.9	0.25	1	33688	EPA 6010A	04/29/97
Barium	81	0.49	1	33688	EPA 6010A	04/29/97
Beryllium	0.39	0.098	1	33688	EPA 6010A	04/29/97
Cadmium	0.32	0.098	1	33688	EPA 6010A	04/29/97
Chromium (total)	43	0.49	1	33688	EPA 6010A	04/29/97
Cobalt	10	0.98	1	33688	EPA 6010A	04/29/97
Copper	7.8	0.49	1	33688	EPA 6010A	04/29/97
Lead	6.6	0.15	1	33688	EPA 6010A	04/29/97
Mercury	ND	0.095	1	33703	EPA 7471	04/29/97
Molybdenum	ND	0.98	1	33688	EPA 6010A	04/29/97
Nickel	43	0.98	1	33688	EPA 6010A	04/29/97
Selenium	1.5	0.25	1	33688	EPA 6010A	04/30/97
Silver	ND	0.49	1	33688	EPA 6010A	04/29/97
Thallium	ND	0.25	1	33688	EPA 6010A	04/30/97
Vanadium	34	0.49	1	33688	EPA 6010A	04/29/97
Zinc	26	0.98	1	33688	EPA 6010A	04/29/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI-74@4.5
LAB ID: 129073-005
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE SAMPLED: 04/24/97
DATE RECEIVED: 04/25/97
DATE REPORTED: 05/13/97

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.9	1	33688	EPA 6010A	04/29/97
Arsenic	7.5	0.24	1	33688	EPA 6010A	04/29/97
Barium	18	0.49	1	33688	EPA 6010A	04/29/97
Beryllium	0.30	0.097	1	33688	EPA 6010A	04/29/97
Cadmium	0.83	0.097	1	33688	EPA 6010A	04/29/97
Chromium (total)	37	0.49	1	33688	EPA 6010A	04/29/97
Cobalt	10	0.97	1	33688	EPA 6010A	04/29/97
Copper	8.8	0.49	1	33688	EPA 6010A	04/29/97
Lead	5.9	0.15	1	33688	EPA 6010A	04/29/97
Mercury	ND	0.091	1	33703	EPA 7471	04/29/97
Molybdenum	1.0	0.97	1	33688	EPA 6010A	04/29/97
Nickel	50	0.97	1	33688	EPA 6010A	04/29/97
Selenium	1.2	0.24	1	33688	EPA 6010A	04/29/97
Silver	ND	0.49	1	33688	EPA 6010A	04/29/97
Thallium	ND	0.24	1	33688	EPA 6010A	04/29/97
Vanadium	30	0.49	1	33688	EPA 6010A	04/29/97
Zinc	50	0.97	1	33688	EPA 6010A	04/29/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCITP-22@1.0
LAB ID: 129073-013
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE SAMPLED: 04/25/97
DATE RECEIVED: 04/25/97
DATE REPORTED: 05/13/97

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3.0	1	33688	EPA 6010A	05/08/97
Arsenic	3.5	0.25	1	33688	EPA 6010A	04/29/97
Barium	53	0.50	1	33688	EPA 6010A	04/29/97
Beryllium	0.23	0.10	1	33688	EPA 6010A	04/29/97
Cadmium	0.28	0.10	1	33688	EPA 6010A	04/29/97
Chromium (total)	15	0.50	1	33688	EPA 6010A	04/29/97
Cobalt	6.9	1.0	1	33688	EPA 6010A	04/29/97
Copper	13	0.50	1	33688	EPA 6010A	04/29/97
Lead	23	0.15	1	33688	EPA 6010A	04/29/97
Mercury	ND	0.10	1	33845	EPA 7471	05/07/97
Molybdenum	ND	1.0	1	33688	EPA 6010A	04/29/97
Nickel	45	1.0	1	33688	EPA 6010A	04/29/97
Selenium	0.29	0.25	1	33688	EPA 6010A	04/29/97
Silver	ND	0.50	1	33688	EPA 6010A	04/29/97
Thallium	1.3	0.25	1	33688	EPA 6010A	05/08/97
Vanadium	21	0.50	1	33688	EPA 6010A	04/29/97
Zinc	32	1.0	1	33688	EPA 6010A	04/29/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129073
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/24,25/97
DATE RECEIVED: 04/25/97
DATE ANALYZED: 05/06/97
BATCH#: 33828

ANALYSIS: HEXAVALENT CHROMIUM
ANALYSIS METHOD: EPA 7196A

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129073-001	SCI-72@1.5	ND	mg/Kg	0.01
129073-002	SCI-72@5.5	ND	mg/Kg	0.01
129073-007	SCITP-17@1.5	ND	mg/Kg	0.01
129073-008	SCITP-19@6.0	0.02	mg/Kg	0.01
129073-009	SCITP-20@3.0	ND	mg/Kg	0.01
129073-013	SCITP-22@1.0	0.02	mg/Kg	0.01
METHOD BLANK	N/A	ND	mg/Kg	0.01

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: MATRIX SPIKE AND SAMPLE DUPLCIATE OF 129073-002

RPD, %	<1
RECOVERY, %	91

CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE REPORTED: 05/13/97

Metals Analytical Report

				Lead					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
SCI-73@5	129073-003	04/24/97	04/25/97	45	0.14	1	33688	EPA 6010A	04/29/97
SCITP-17@1.5	129073-007	04/24/97	04/25/97	89	0.14	1	33688	EPA 6010A	04/29/97
SCITP-19@6.0	129073-008	04/24/97	04/25/97	25	0.15	1	33688	EPA 6010A	04/29/97
SCITP-20@3.0	129073-009	04/24/97	04/25/97	6.8	0.15	1	33688	EPA 6010A	04/29/97
SCITP-21@2.0	129073-011	04/25/97	04/25/97	23	0.14	1	33688	EPA 6010A	04/29/97
SCITP-21@7.0	129073-012	04/25/97	04/25/97	360	0.15	1	33688	EPA 6010A	04/29/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE REPORTED: 05/13/97

Metals Analytical Report

				Potassium					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
SCI-74@2	129073-004	04/24/97	04/25/97	510	24	1	33786	EPA 6010A	05/06/97
SCITP-22@1.0	129073-013	04/25/97	04/25/97	570	25	1	33688	EPA 6010A	05/08/97

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129073

DATE REPORTED: 05/13/97

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3	mg/Kg	1	33688	EPA 6010A	04/29/97
Arsenic	ND	0.25	mg/Kg	1	33688	EPA 6010A	04/29/97
Barium	ND	0.5	mg/Kg	1	33688	EPA 6010A	04/29/97
Beryllium	ND	0.1	mg/Kg	1	33688	EPA 6010A	04/29/97
Cadmium	ND	0.1	mg/Kg	1	33688	EPA 6010A	04/29/97
Chromium (total)	ND	0.5	mg/Kg	1	33688	EPA 6010A	04/29/97
Cobalt	ND	1	mg/Kg	1	33688	EPA 6010A	04/29/97
Copper	ND	0.5	mg/Kg	1	33688	EPA 6010A	04/29/97
Lead	ND	0.15	mg/Kg	1	33688	EPA 6010A	04/29/97
Mercury	ND	0.1	mg/Kg	1	33703	EPA 7471	04/29/97
Mercury	ND	0.1	mg/Kg	1	33845	EPA 7471	05/07/97
Molybdenum	ND	1	mg/Kg	1	33688	EPA 6010A	04/29/97
Nickel	ND	1	mg/Kg	1	33688	EPA 6010A	04/29/97
Potassium	ND	25	mg/Kg	1	33688	EPA 6010A	04/30/97
Potassium	ND	25	mg/Kg	1	33786	EPA 6010A	05/06/97
Selenium	ND	0.25	mg/Kg	1	33688	EPA 6010A	04/29/97
Silver	ND	0.5	mg/Kg	1	33688	EPA 6010A	04/29/97
Thallium	ND	0.25	mg/Kg	1	33688	EPA 6010A	04/29/97
Vanadium	ND	0.5	mg/Kg	1	33688	EPA 6010A	04/29/97
Zinc	ND	1	mg/Kg	1	33688	EPA 6010A	04/29/97

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129073

DATE REPORTED: 05/13/97

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	25	25.3	25	mg/Kg	101	100	80-120	1	35	33688	EPA 6010A	04/30/97
Arsenic	100	97	97.5	mg/Kg	97	98	80-120	1	35	33688	EPA 6010A	04/30/97
Barium	100	98	98	mg/Kg	98	98	80-120	0	35	33688	EPA 6010A	04/30/97
Beryllium	2.5	2.55	2.575	mg/Kg	102	103	80-120	1	35	33688	EPA 6010A	04/30/97
Cadmium	2.5	2.58	2.62	mg/Kg	103	105	80-120	2	35	33688	EPA 6010A	04/30/97
Chromium (total)	10	9.7	9.8	mg/Kg	97	98	80-120	1	35	33688	EPA 6010A	04/30/97
Cobalt	25	25.3	25.55	mg/Kg	101	102	80-120	1	35	33688	EPA 6010A	04/30/97
Copper	12.5	12.85	12.9	mg/Kg	103	103	80-120	0	35	33688	EPA 6010A	04/30/97
Lead	25	24.3	24.5	mg/Kg	97	98	80-120	1	35	33688	EPA 6010A	04/30/97
Mercury	5	4.761	4.986	ug/L	95	100	80-120	5	35	33703	EPA 7470	04/29/97
Mercury	5	4.729	4.815	ug/L	95	96	80-120	2	35	33845	EPA 7470	05/07/97
Molybdenum	20	22.75	23.05	mg/Kg	114	115	80-120	1	35	33688	EPA 6010A	04/30/97
Nickel	25	24.95	25.1	mg/Kg	100	100	80-120	1	35	33688	EPA 6010A	04/30/97
Potassium	1000	837.5	851	mg/Kg	84	85	80-120	2	35	33688	EPA 6010A	04/30/97
Potassium	1000	878	893	mg/Kg	88	89	80-120	2	35	33786	EPA 6010A	05/06/97
Selenium	100	96.5	97	mg/Kg	97	97	80-120	1	35	33688	EPA 6010A	04/30/97
Silver	5	5.1	5.1	mg/Kg	102	102	80-120	0	35	33688	EPA 6010A	04/30/97
Thallium	100	94	95	mg/Kg	94	95	80-120	1	35	33688	EPA 6010A	04/30/97
Vanadium	25	25.25	25.45	mg/Kg	101	102	80-120	1	35	33688	EPA 6010A	04/30/97
Zinc	25	23.7	23.9	mg/Kg	95	96	80-120	1	35	33688	EPA 6010A	04/30/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129073

DATE REPORTED: 05/13/97

BATCH QC REPORT
SAMPLE DUPLICATE

Compound	Sample	Sample Result	Duplicate Result	Units	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	129073-005	<3.015	<3.015	mg/Kg	NC	35	33688	EPA 6010A	04/29/97
Arsenic	129073-005	7.524	7.136	mg/Kg	5	35	33688	EPA 6010A	04/29/97
Barium	129073-005	17.62	15.58	mg/Kg	12	35	33688	EPA 6010A	04/29/97
Beryllium	129073-005	0.3039	0.2658	mg/Kg	13	35	33688	EPA 6010A	04/29/97
Cadmium	129073-005	0.835	0.8543	mg/Kg	2	35	33688	EPA 6010A	04/29/97
Chromium (total)	129073-005	36.8	33.87	mg/Kg	8	35	33688	EPA 6010A	04/29/97
Cobalt	129073-005	10.29	9.799	mg/Kg	5	35	33688	EPA 6010A	04/29/97
Copper	129073-005	8.835	8.09	mg/Kg	9	35	33688	EPA 6010A	04/29/97
Lead	129073-005	5.922	5.377	mg/Kg	10	35	33688	EPA 6010A	04/29/97
Mercury	129043-001	<0.095	<0.095	mg/Kg	NC	35	33703	EPA 7471	04/29/97
Molybdenum	129073-005	1.029	<1.005	mg/Kg	NC	35	33688	EPA 6010A	04/29/97
Nickel	129073-005	50.49	46.88	mg/Kg	7	35	33688	EPA 6010A	04/29/97
Potassium	129073-005	1807	1682	mg/Kg	7	35	33688	EPA 6010A	04/30/97
Potassium	129120-002	775.6	746.8	mg/Kg	4	35	33786	EPA 6010A	05/06/97
Selenium	129073-005	1.248	1.025	mg/Kg	20	35	33688	EPA 6010A	04/29/97
Silver	129073-005	<0.503	<0.503	mg/Kg	NC	35	33688	EPA 6010A	04/29/97
Thallium	129073-005	<0.251	<0.251	mg/Kg	NC	35	33688	EPA 6010A	04/29/97
Vanadium	129073-005	29.51	25.93	mg/Kg	13	35	33688	EPA 6010A	04/29/97
Zinc	129073-005	49.51	43.37	mg/Kg	13	35	33688	EPA 6010A	04/29/97

NC = Not Calculable

CHAIN OF CUSTODY FORM

129073

PAGE 1 OF 2

PROJECT NAME: KOT

JOB NUMBER: 133.004 LAB: C&T

PROJECT CONTACT: Jerome de Verrier TURNAROUND: standard

SAMPLED BY: JD REQUESTED BY: JD

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/BTEX	TEH (diesel)	8080	Lead	016	8240	8270	Heavy Metals	Cr 6+	CAM	pH, nitrate/nitrite, phosphate
-1	SC1-72@1½		X						X				X		04	24	97	0910	*	X	X	X			X			X	X	
-2	SC1-72@5½																	0900		X	X							X	X	
-3	SC1-73@5		X						X						04	24	97	1106	*	X	X		X		X						X
-4	SC1-74@2																	1300	*	X	X	X		X	X						
-5	SC1-74@4½																	1300		X	X	X		X				X			
-6	SC1TP-17@0.8														04	24	97		*	X	X	X			X						
-7	SC1TP-17@1.5																		*	X	X	X	X	X	X	X			X	X	
-8	SC1TP-19@6.0																		*	X	X	X	X	X	X				X	X	
-9	SC1TP-20@3.0																		*	X	X	X	X	X	X				X	X	
-10	SC1TP-19@2.5																		3	X						X					
-11	SC1TP-21@2.0														04	25	97			X	X	X	X	X	X	X					
-12	SC1TP-21@7.0																			X	X	X	X	X	X	X					

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Rick Alexander	4/25/97 3:20 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
		[illegible]	4/25/97 15:20

COMMENTS & NOTES:

Need run BTEX & 8240 requested

Subsurface Consultants, Inc.

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

(510) 268-0461 • FAX: 510-268-0137

CHAIN OF CUSTODY FORM

129073

PAGE 2 OF 2

PROJECT NAME: KOT

JOB NUMBER: 133.004 LAB: CSS

PROJECT CONTACT: JD TURNAROUND: 10d

SAMPLED BY: JD REQUESTED BY: JD

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX						CONTAINERS						METHOD PRESERVED					SAMPLING DATE				NOTES	ANALYSIS REQUESTED									
		WATER	SOIL	WASTE	AIR			VOA	LITER	PINT	TUBE			HCL	H_2SO_4	HNO_3	ICE	NONE	MONTH	DAY	YEAR	TIME		TEH (diesel)	8015	Lead	0&G	8270				
-13	SCITP-2201.0		X									+					X		04	25	97			X	X	X	X	X					

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dan Allgaier	4/25/97 3:20 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
		4/25/97	15:20

COMMENTS & NOTES:

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: 09-MAY-97
Lab Job Number: 129080
Project ID: 133.004
Location: 9th Ave. Terminal

Reviewed by: Tracy Babcock

Reviewed by:

This package may be reproduced only in its entirety.

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129080

Project Name: 9th Ave. Terminal
Project Number: 133.004

Report Date: 09 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129080-002	SCITP 23A@6'	Soil	26-APR-97	28-APR-97	06-MAY-97	12000	mg/Kg	50	DLP	33832
129080-004	SCITP 23B@6'	Soil	26-APR-97	28-APR-97	06-MAY-97	ND	mg/Kg	50	DLP	33832
129080-005	SCITP 24A@1.5'	Soil	26-APR-97	28-APR-97	06-MAY-97	2500	mg/Kg	50	DLP	33832
129080-006	SCITP 24 CANNERYLINE	Soil	26-APR-97	28-APR-97	06-MAY-97	26000	mg/Kg	50	DLP	33832

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

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants **Laboratory Login Number: 129080**

Project Name: 9th Ave. Terminal
Project Number: 133.004

Report Date: 09 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129080-007	SCITP 23A	Water	26-APR-97	28-APR-97	07-MAY-97	970	mg/L	9	DLP	33851
129080-008	SCITP 24A	Water	26-APR-97	28-APR-97	07-MAY-97	2400	mg/L	9	DLP	33851

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: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129080
Report Date: 09 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 33832**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	50	mg/Kg	SMWW 17:5520EF	06-MAY-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	86%	SMWW 17:5520EF	06-MAY-97
BSD	102%	SMWW 17:5520EF	06-MAY-97

		Control Limits
Average Spike Recovery	94%	80% - 120%
Relative Percent Difference	17.2%	< 20%

Curtis & Tompkins, Ltd.

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

Client: Subsurface Consultants
Project Name: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129080
Report Date: 09 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 33851**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	5	mg/L	SMWW 17:5520BF	07-MAY-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	87%	SMWW 17:5520BF	07-MAY-97
BSD	84%	SMWW 17:5520BF	07-MAY-97

		Control Limits
Average Spike Recovery	85%	80% - 120%
Relative Percent Difference	3.0%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129080-002	SCITP 23A@6'	33854	04/26/97	05/09/97	05/09/97	
129080-004	SCITP 23B@6'	33854	04/26/97	05/08/97	05/08/97	
129080-006	SCITP 24 CANNERYLINE	33854	04/26/97	05/09/97	05/09/97	

Matrix: Soil

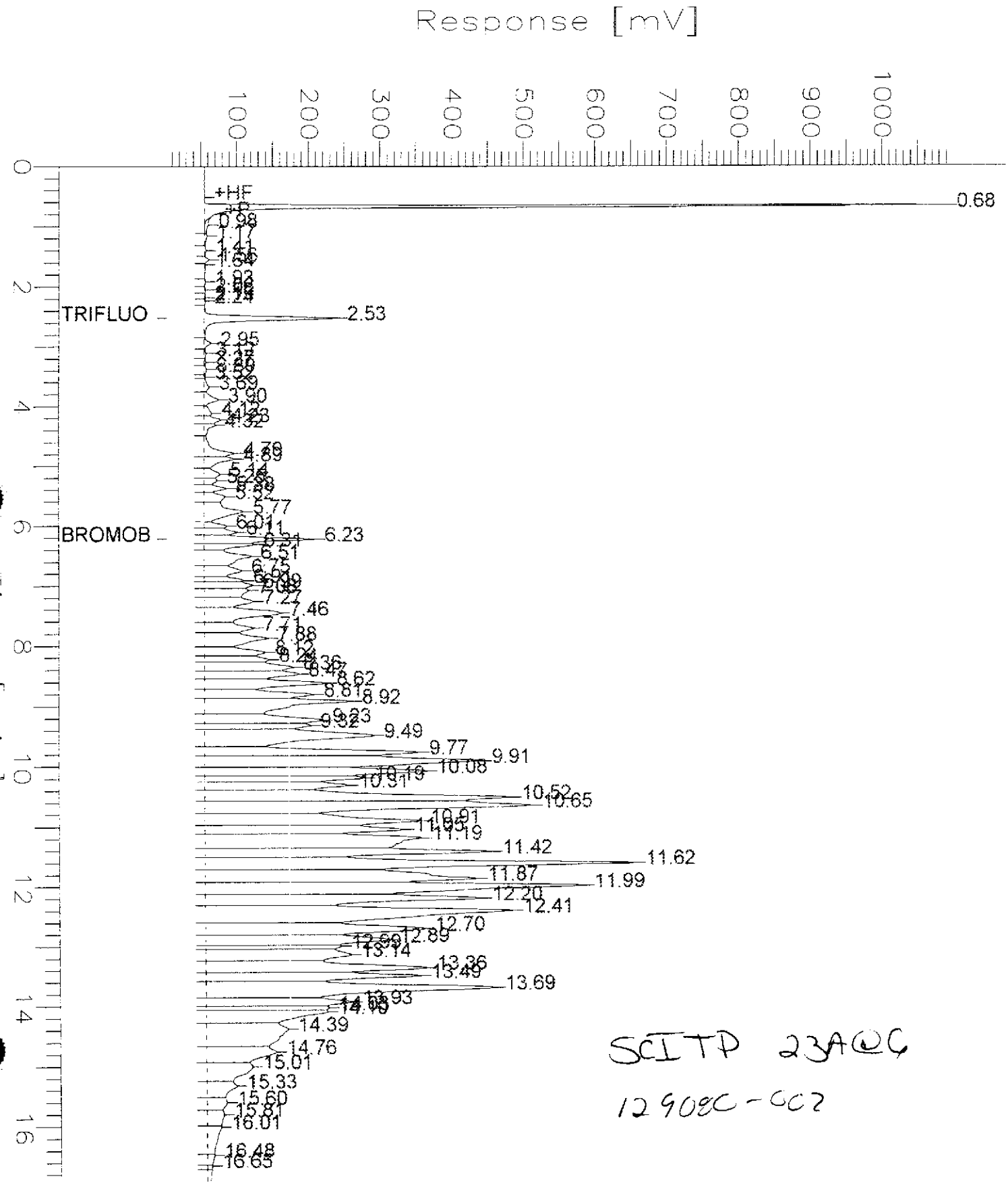
Analyte	Units	129080-002		129080-004	129080-006	
Diln Fac:		50		1	2	
Gasoline	mg/Kg	320	YH	<1	97	YH
Surrogate						
Trifluorotoluene	%REC	49	*	53	54	
Bromobenzene	%REC	86		85	128	

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

GC04 TVH 'J' Data File Rtx1FID

Sample Name : D,129080-002,33854
FileName : G:\GC04\DATA\128J032.raw
Method : TVMAR14
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 3 mV

Sample #:
Date : 5/9/97 04:57 AM
Time of Injection: 5/9/97 04:39 AM
Low Point : 3.23 mV High Point : 1091.23 mV
Plot Scale: 1088.0 mV

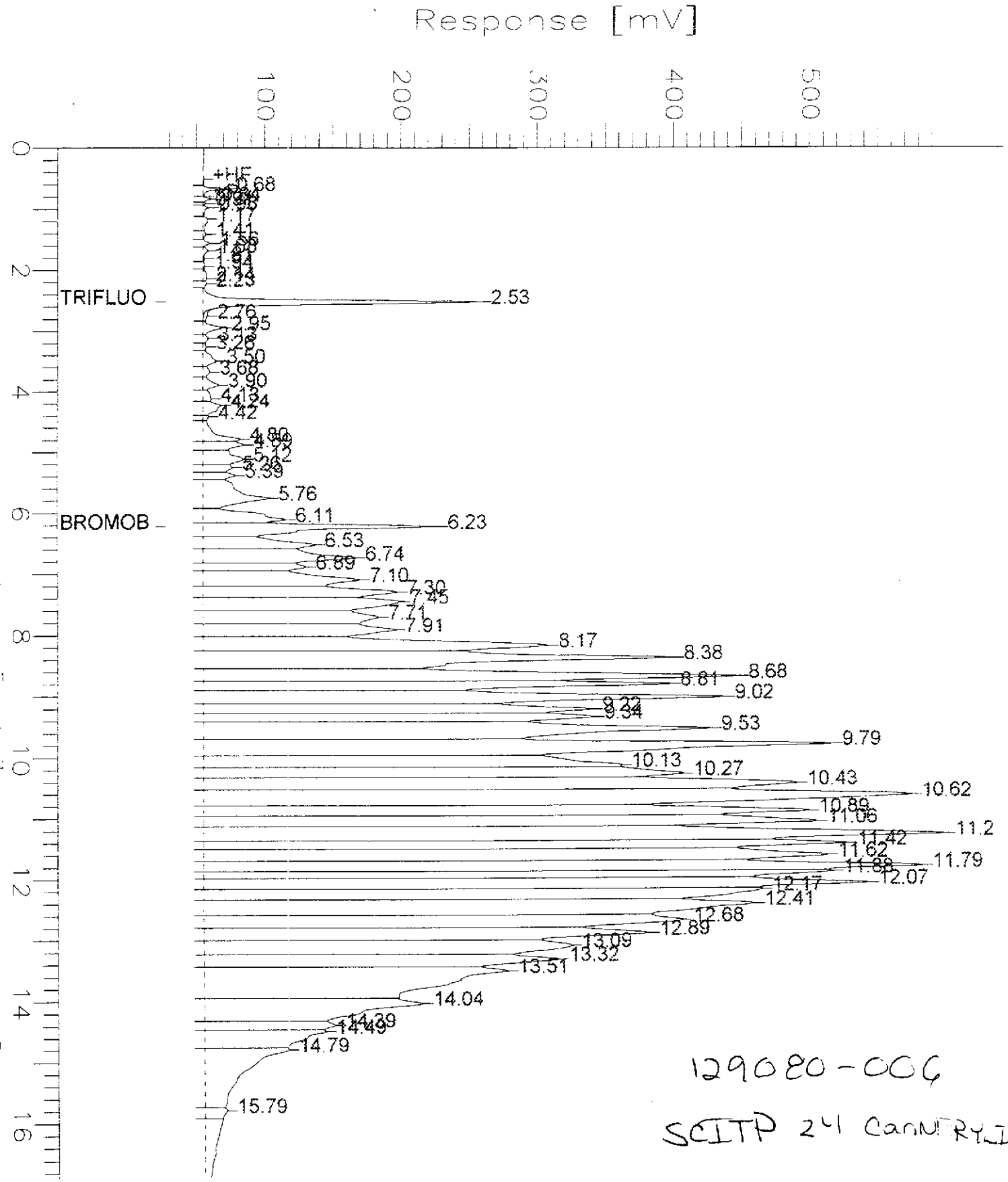


SCITP 23A@C
129080-002

GC04 TVH 'J' Data File Rtx1FID

Sample Name : D,129080-006,33854
FileName : G:\GC04\DATA\128J030.raw
Method : TVMAR14
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 28 mV

Sample #:
Date : 5/9/97 04:01 AM
Time of Injection: 5/9/97 03:44 AM
Low Point : 27.61 mV High Point : 599.92 mV
Plot Scale: 572.3 mV



129080-006

SCITP 241 CarNTRYLN

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129080-007	SCITP 23A	33702	04/26/97	04/29/97	04/29/97	
129080-008	SCITP 24A	33744	04/26/97	05/01/97	05/01/97	

Matrix: Water

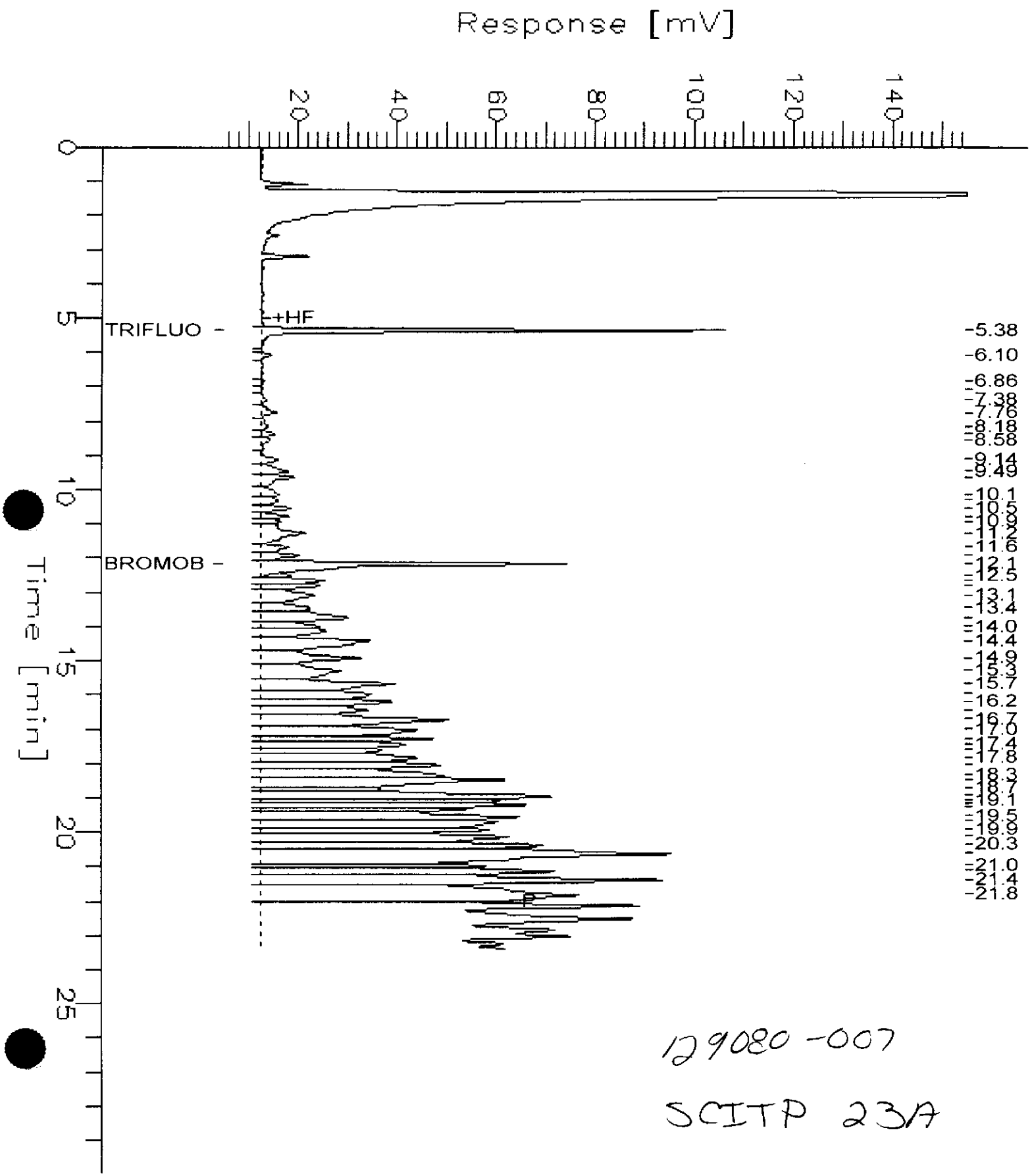
Analyte	Units	129080-007	129080-008
Diln Fac:		1	1
Gasoline	ug/L	5600 YH	2100 YH
Surrogate			
Trifluorotoluene	%REC	82	85
Bromobenzene	%REC	115	89

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

GC05 RTX1 TVH Chromatogram

Sample Name : MSS,129080-007,33702,
FileName : G:\GC05\DATA\119H009.RAW
Method :
Start Time : 0.00 min End Time : 30.00 min
Plot Factor: -1.0 Plot Offset: 5 mV

Sample #: Page 1 of 1
Date : 4/30/97 11:12 PM
Time of Injection: 4/29/97 02:18 PM
Low Point : 4.96 mV High Point : 154.96 mV
Plot Scale: 150.0 mV



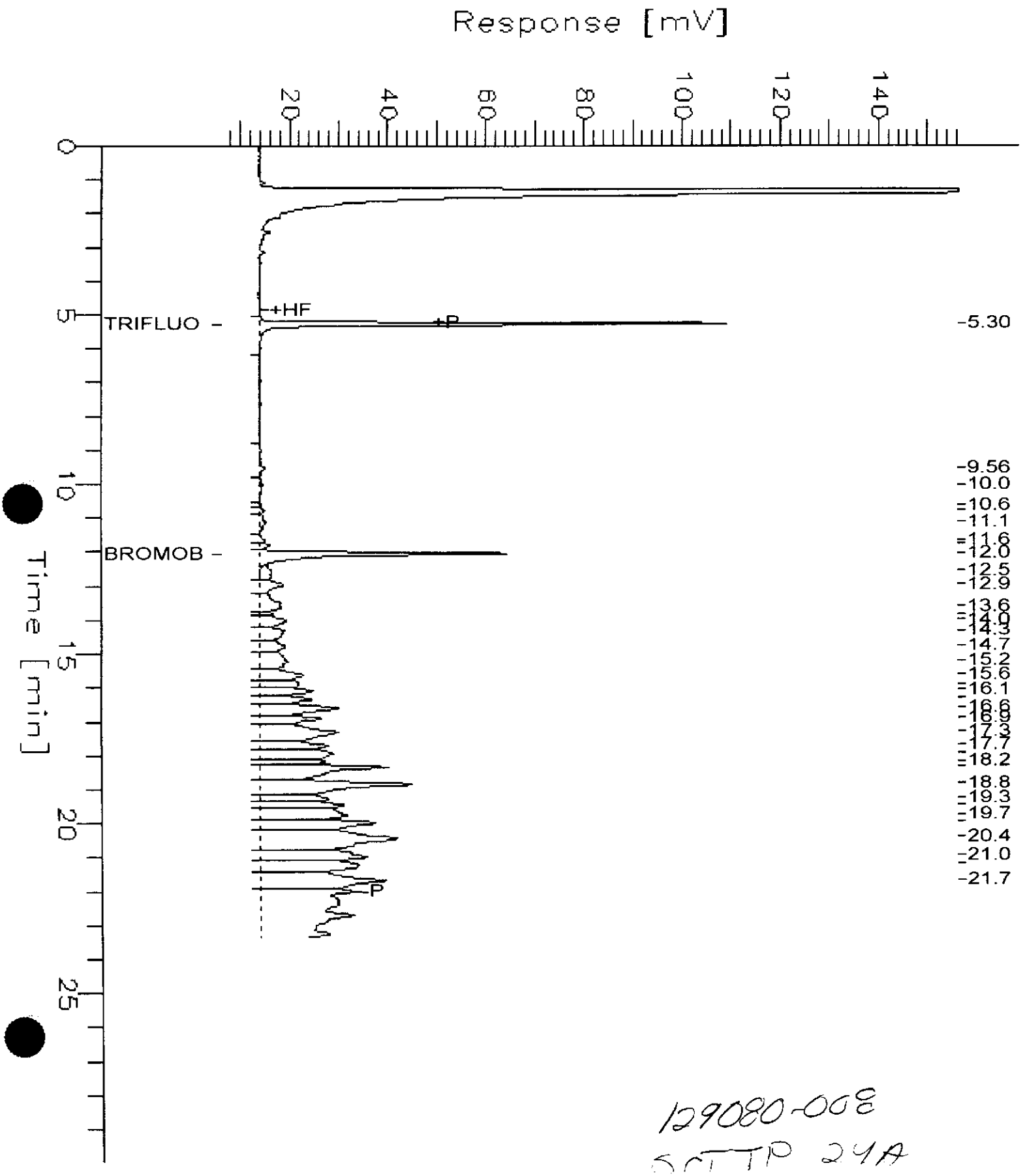
129080-007

SCITP 23A

GC05 RTX1 TVH Chromatogram

Sample Name : S,129080-008,33744,RERUN,
FileName : G:\GC05\DATA\120H021.RAW
Method :
Start Time : 0.00 min End Time : 30.00 min
Scale Factor: -1.0 Plot Offset: 6 mV

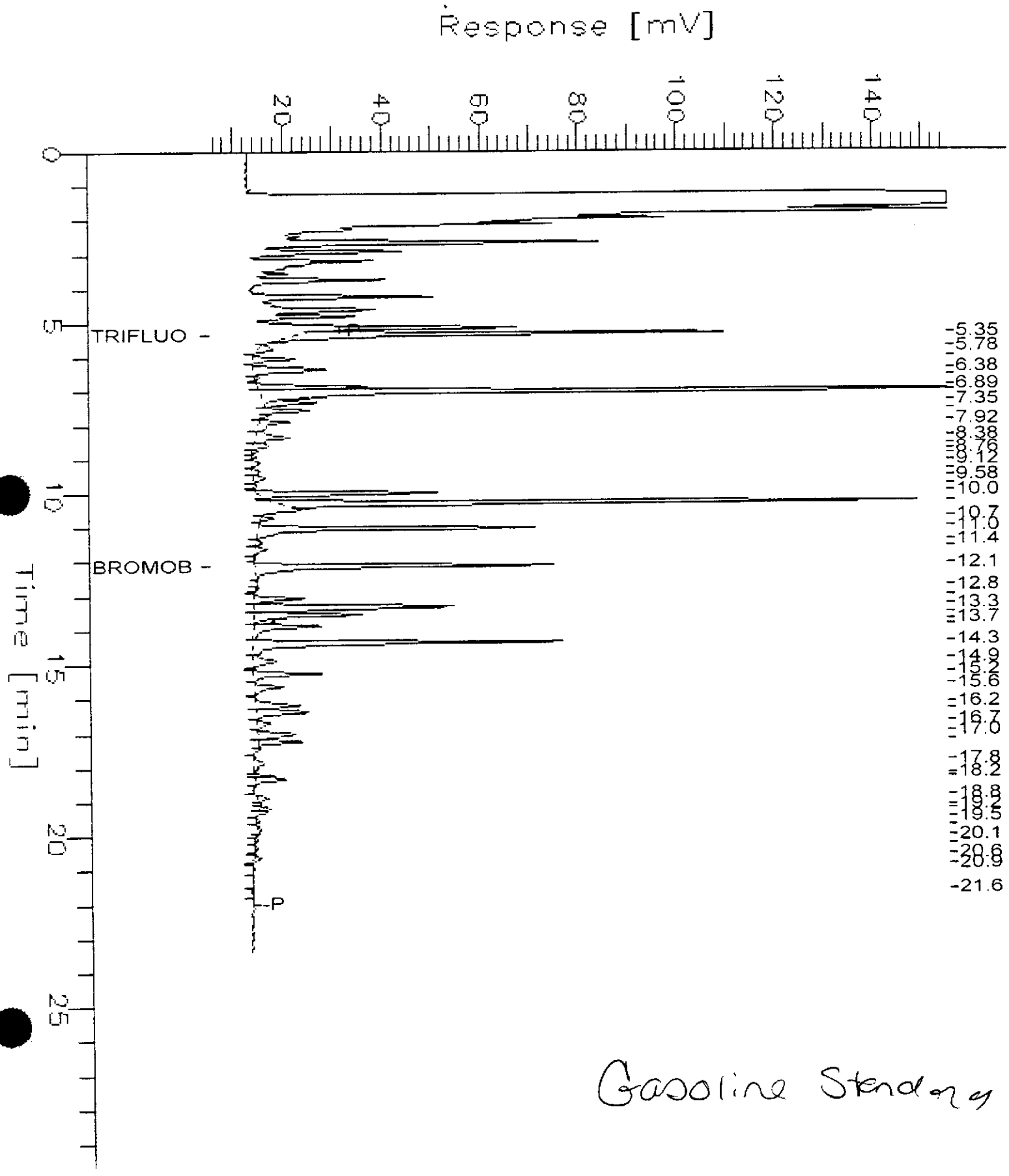
Sample #: Page 1 of 1
Date : 5/1/97 07:49 AM
Time of Injection: 5/1/97 06:59 AM
Low Point : 6.26 mV High Point : 156.26 mV
Plot Scale: 150.0 mV



129080-008
SCTTP 24A

GC05 RTX1 TVH Chromatogram

Sample #: GAS
Date : 4/29/97 09:49 AM
Plot Offset: 5 mV
Plot Scale: 150.0 mV



Gasoline Standard

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

METHOD BLANK

Matrix: Soil
Batch#: 33854
Units: mg/Kg
Diln Fac: 1

Prep Date: 05/08/97
Analysis Date: 05/08/97

MB Lab ID: QC45681

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	52	52-127
Bromobenzene	84	45-140

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33854
Units: mg/Kg
Diln Fac: 1

Prep Date: 05/08/97
Analysis Date: 05/08/97

LCS Lab ID: QC45679

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	9.91	10	99	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	84	52-127		
Bromobenzene	118	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.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

METHOD BLANK

Matrix: Water
Batch#: 33702
Units: ug/L
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 04/29/97

MB Lab ID: QC45021

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	79	65-135
Bromobenzene	80	65-135

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

METHOD BLANK

Matrix: Water
Batch#: 33744
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

MB Lab ID: QC45186

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	80	65-135
Bromobenzene	82	65-135

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33702
Units: ug/L
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 04/29/97

LCS Lab ID: QC45019

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1813	2000	91	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	81	65-135		
Bromobenzene	92	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

Lab #: 129080

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33744
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

LCS Lab ID: QC45184

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1912	2000	96	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	82	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.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129102-001
Matrix: Water
Batch#: 33744
Units: ug/L
Diln Fac: 1

Sample Date: 04/25/97
Received Date: 04/29/97
Prep Date: 04/30/97
Analysis Date: 04/30/97

MS Lab ID: QC45187

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50	2047	102	75-125
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	85	65-135			
Bromobenzene	98	65-135			

MSD Lab ID: QC45188

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1990	100	75-125	3	35
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	86	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#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129080-001	SCITP 23A@4'	33700	04/26/97	04/29/97	05/03/97	
129080-002	SCITP 23A@6'	33700	04/26/97	04/29/97	05/08/97	
129080-003	SCITP 23B@3'	33700	04/26/97	04/29/97	05/04/97	
129080-004	SCITP 23B@6'	33918	04/26/97	05/12/97	05/13/97	

Matrix: Soil

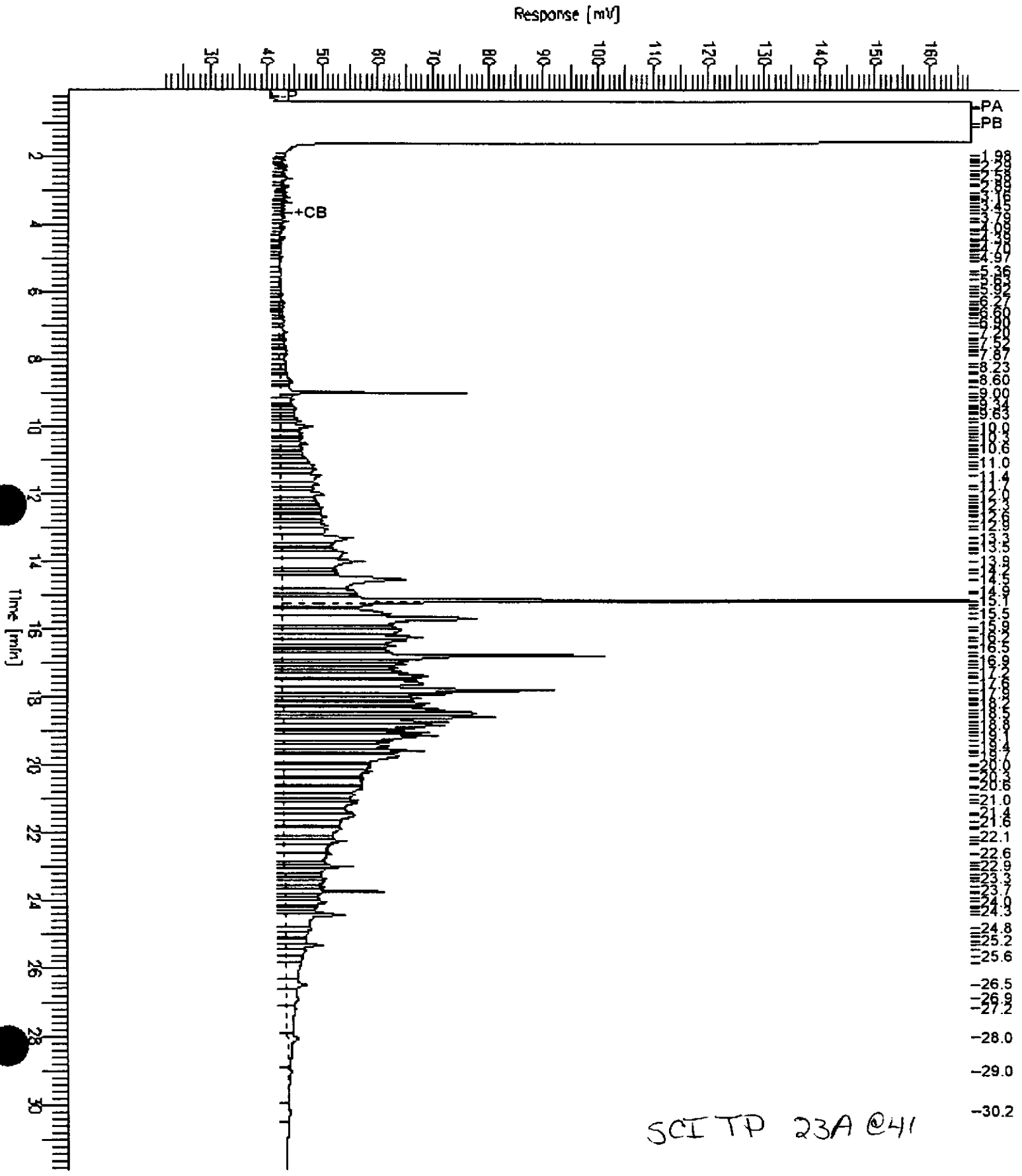
Analyte	Units	129080-001	129080-002	129080-003	129080-004
Diln Fac:		1	50	20	1
Diesel C12-C22	mg/Kg	3.7YH	180000	430 YH	1.7YH
Motor Oil C22-C50	mg/Kg	41 YH	10000 YL	2400 L	5.7L
Surrogate					
Hexacosane	%REC	78	DO	DO	107

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 B TEH

Sample Name : 120980-001,33700
FileName : G:\GC15\CHB\122B043.RAW
Method : B125TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 21 mV

Sample #: 33700 Page 1 of 1
Date : 5/6/97 10:58 AM
Time of Injection: 5/3/97 11:06 PM
Low Point : 21.04 mV High Point : 167.63 mV
Plot Scale: 146.6 mV

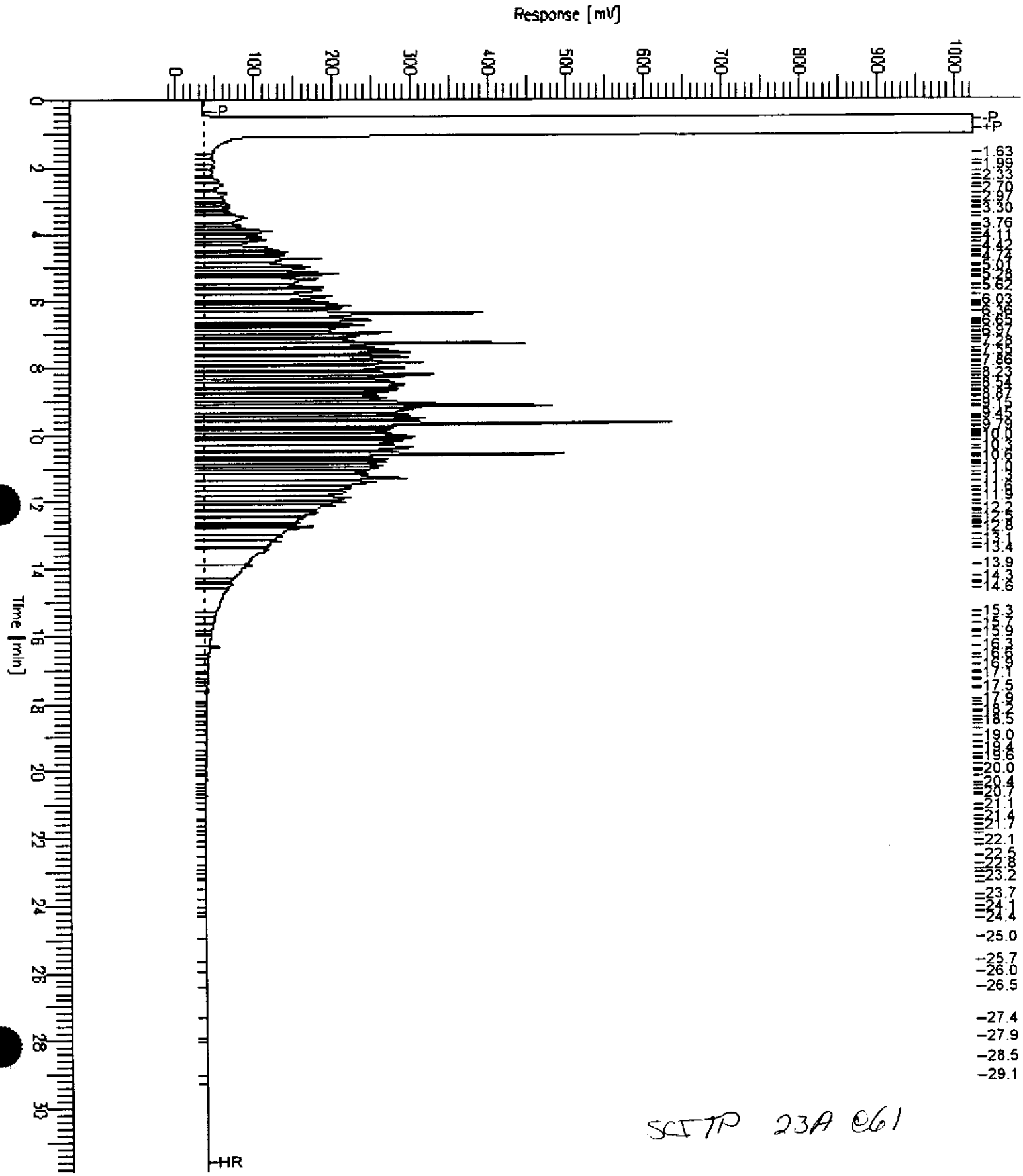


SCI TP 23A @41

Chromatogram

Sample Name : 129080-002,33700
FileName : G:\GC13\CHA\127A040.RAW
Method : ATEH127.MTH
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: -18 mV

Sample #: 33700 Page 1 of 1
Date : 5/12/97 02:31 PM
Time of Injection: 5/8/97 09:36 PM
Low Point : -17.90 mV High Point : 1024.00 mV
Plot Scale: 1041.9 mV

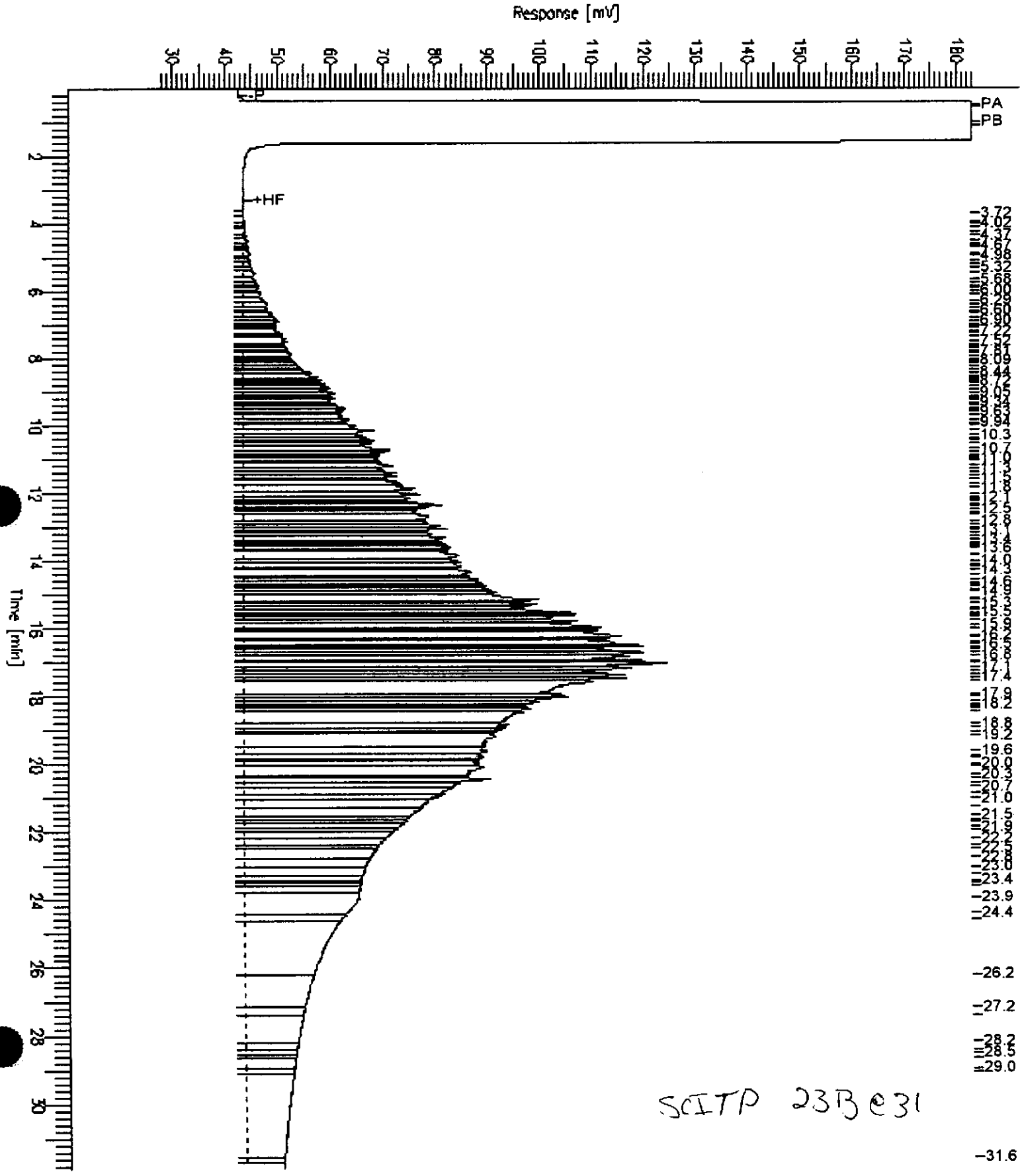


SCTP 23A 061

GC15 Channel B TEH

Sample Name : 129080-003,33700
FileName : G:\GC15\CHB\122B055.RAW
Method : B125TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 28 mV

Sample #: 33700 Page 1 of 1
Date : 5/6/97 11:09 AM
Time of Injection: 5/4/97 07:42 AM
Low Point : 27.62 mV High Point : 183.05 mV
Plot Scale: 155.4 mV

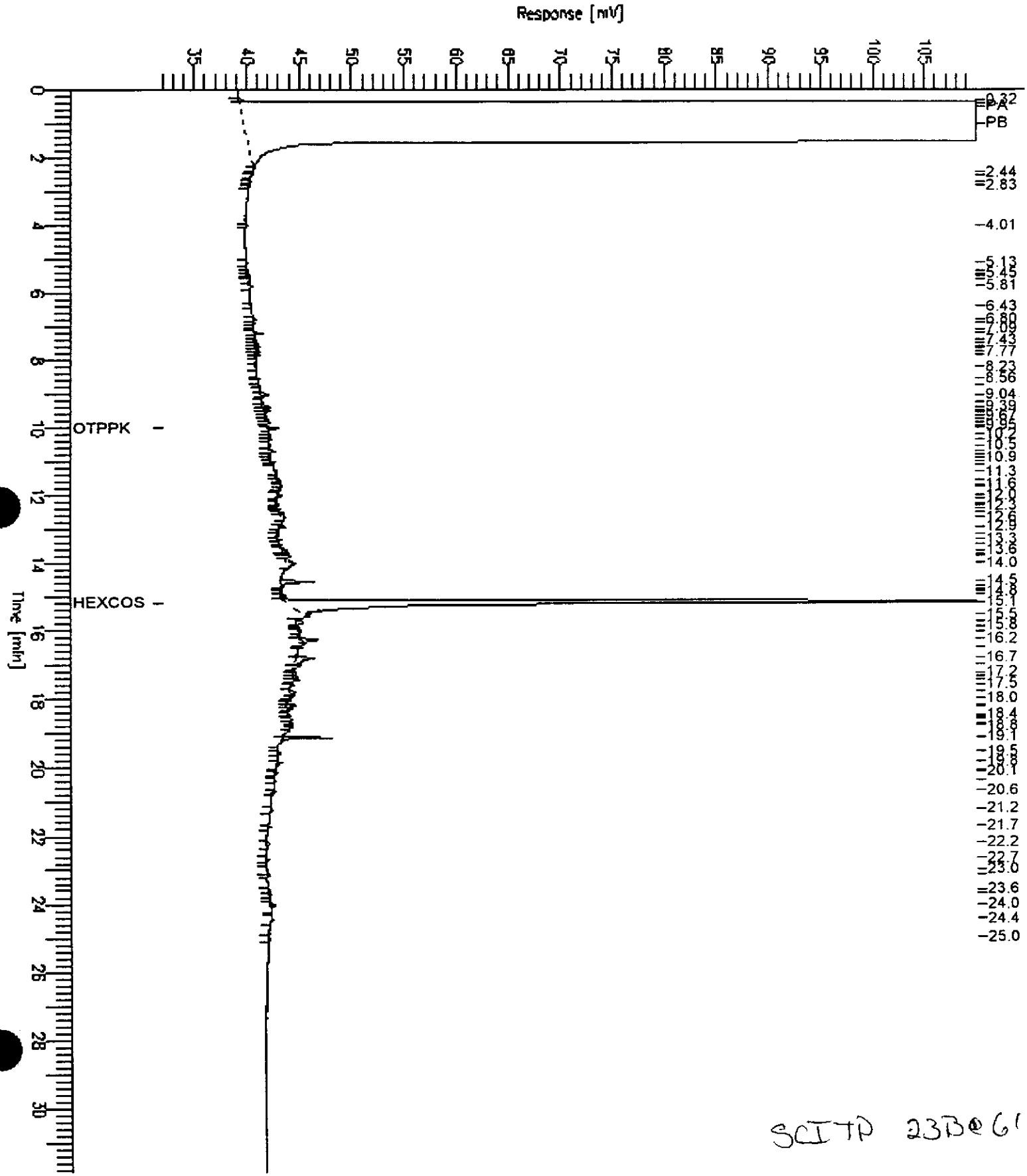


SCITP 23B e31

GC15 Channel B Surrogate

Sample Name : 129080-004,33918
FileName : G:\GC15\CHB\133B005.raw
Method : SNGL
rt Time : 0.00 min End Time : 31.90 min
le Factor: 0.0 Plot Offset: 32 mV

Sample #: 33918 Page 1 of 1
Date : 5/13/97 02:08 PM
Time of Injection: 5/13/97 01:36 PM
Low Point : 32.00 mV High Point : 110.00 mV
Plot Scale: 78.0 mV



SCITP 23B@61

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129080-005	SCITP 24A@1.5'	33700	04/26/97	04/29/97	05/04/97	
129080-006	SCITP 24 CANNERYLINE	33700	04/26/97	04/29/97	05/04/97	

Matrix: Soil

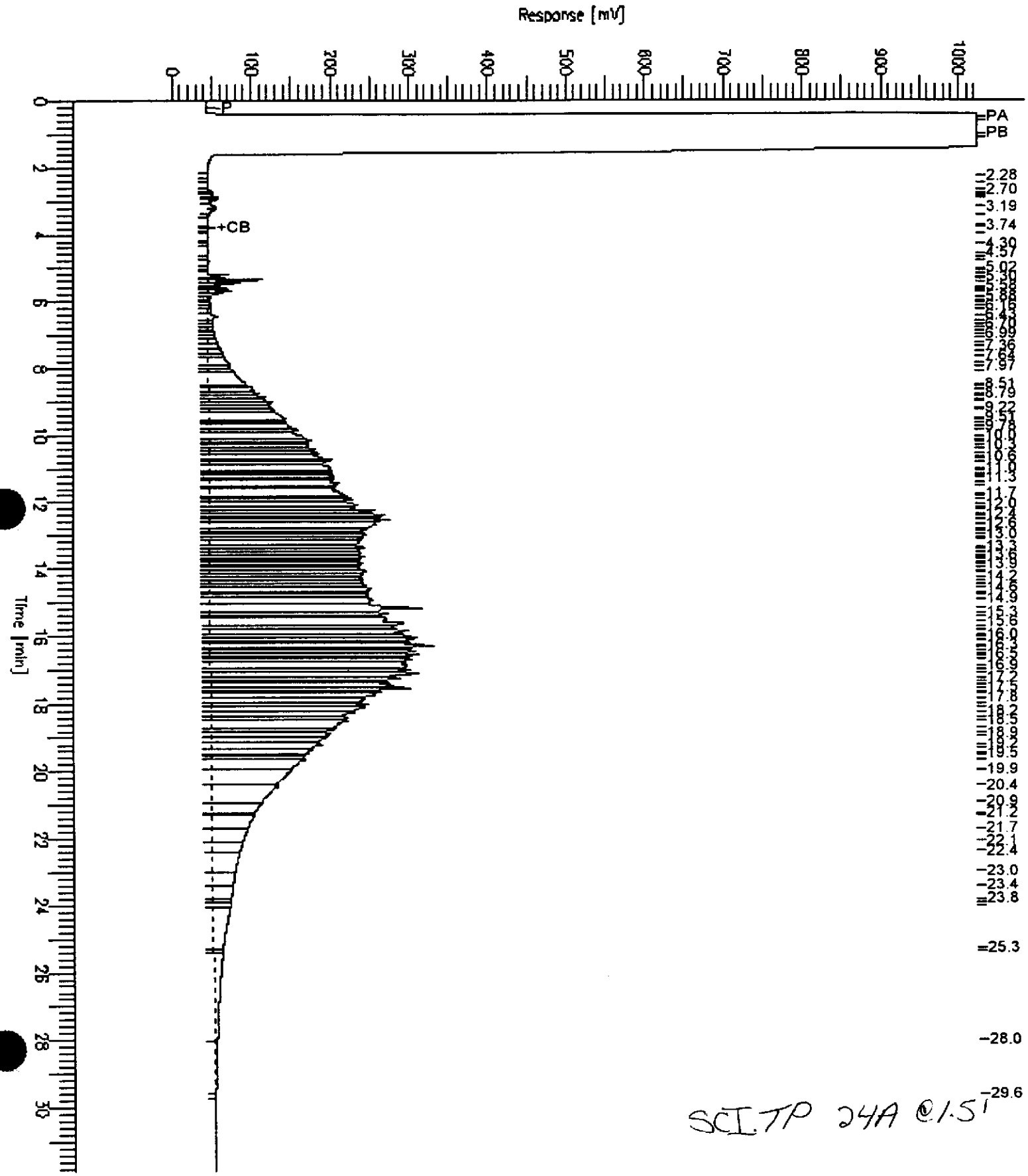
Analyte	Units	129080-005		129080-006
Diln Fac:		10		10
Diesel C12-C22	mg/Kg	1100	YH	4100
Motor Oil C22-C50	mg/Kg	3700	L	2100
Surrogate				
Hexacosane	%REC	DO		DO

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 B TEH

Sample Name : 129080-005,33700
FileName : G:\GC15\CHB\122B053.RAW
Method : B125TEH.MTH
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: -8 mV

Sample #: 33700 Page 1 of 1
Date : 5/6/97 11:07 AM
Time of Injection: 5/4/97 06:15 AM
Low Point : -8.27 mV High Point : 1024.00 mV
Plot Scale: 1032.3 mV

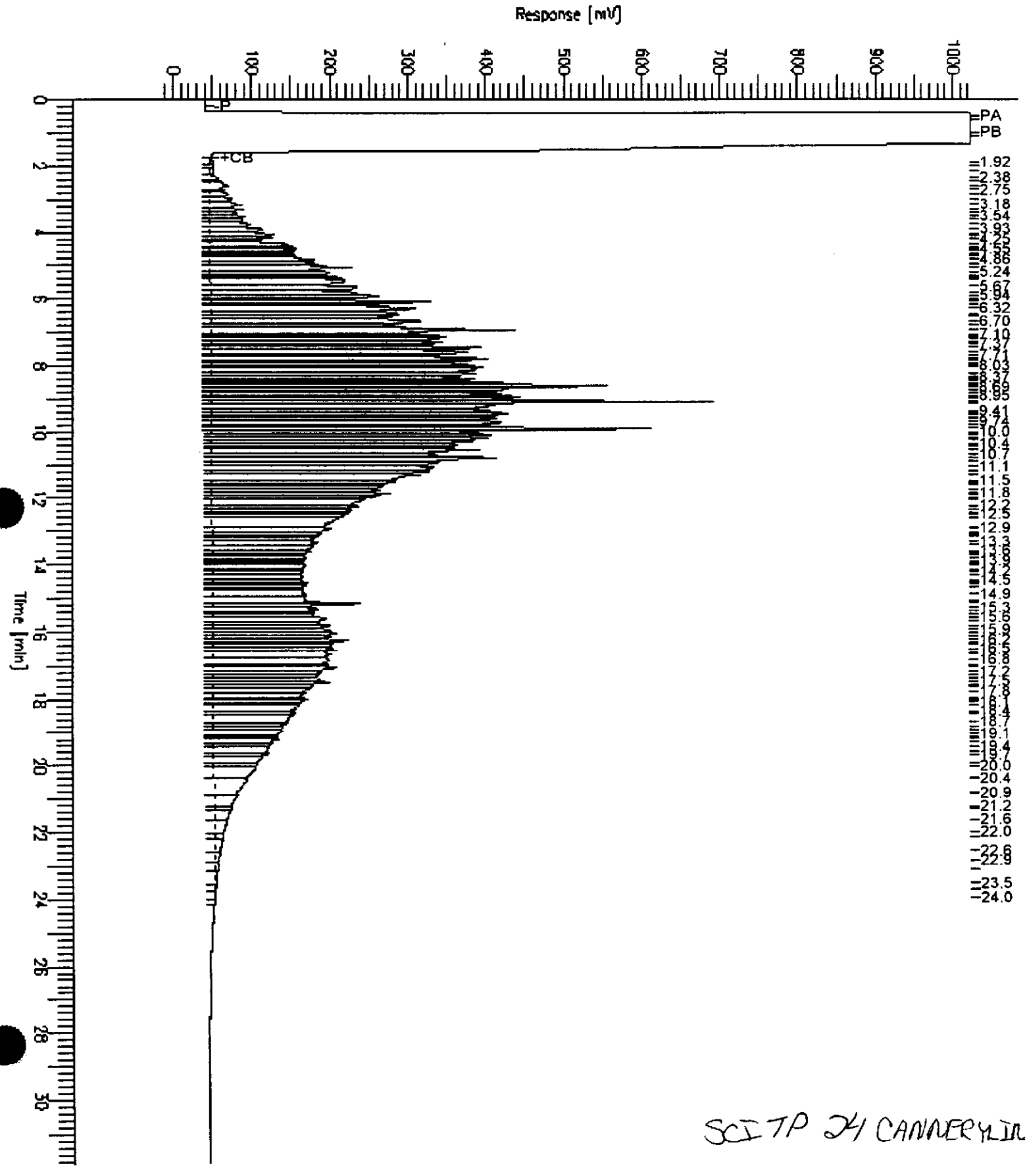


SCITP 24A @1.5

GC15 Channel B TEH

Sample Name : 129080-006,33700
FileName : G:\GC15\CHB\122B045.RAW
Method : B125TEH.MTH
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: -11 mV

Sample #: 33700 Page 1 of 1
Date : 5/6/97 11:00 AM
Time of Injection: 5/4/97 12:32 AM
Low Point : -11.24 mV High Point : 1024.00 mV
Plot Scale: 1035.2 mV



SCITP 24/ CANNERYLIN

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129080-007	SCITP 23A	33718	04/26/97	04/29/97	05/06/97	
129080-008	SCITP 24A	33718	04/26/97	04/29/97	05/08/97	

Matrix: Water

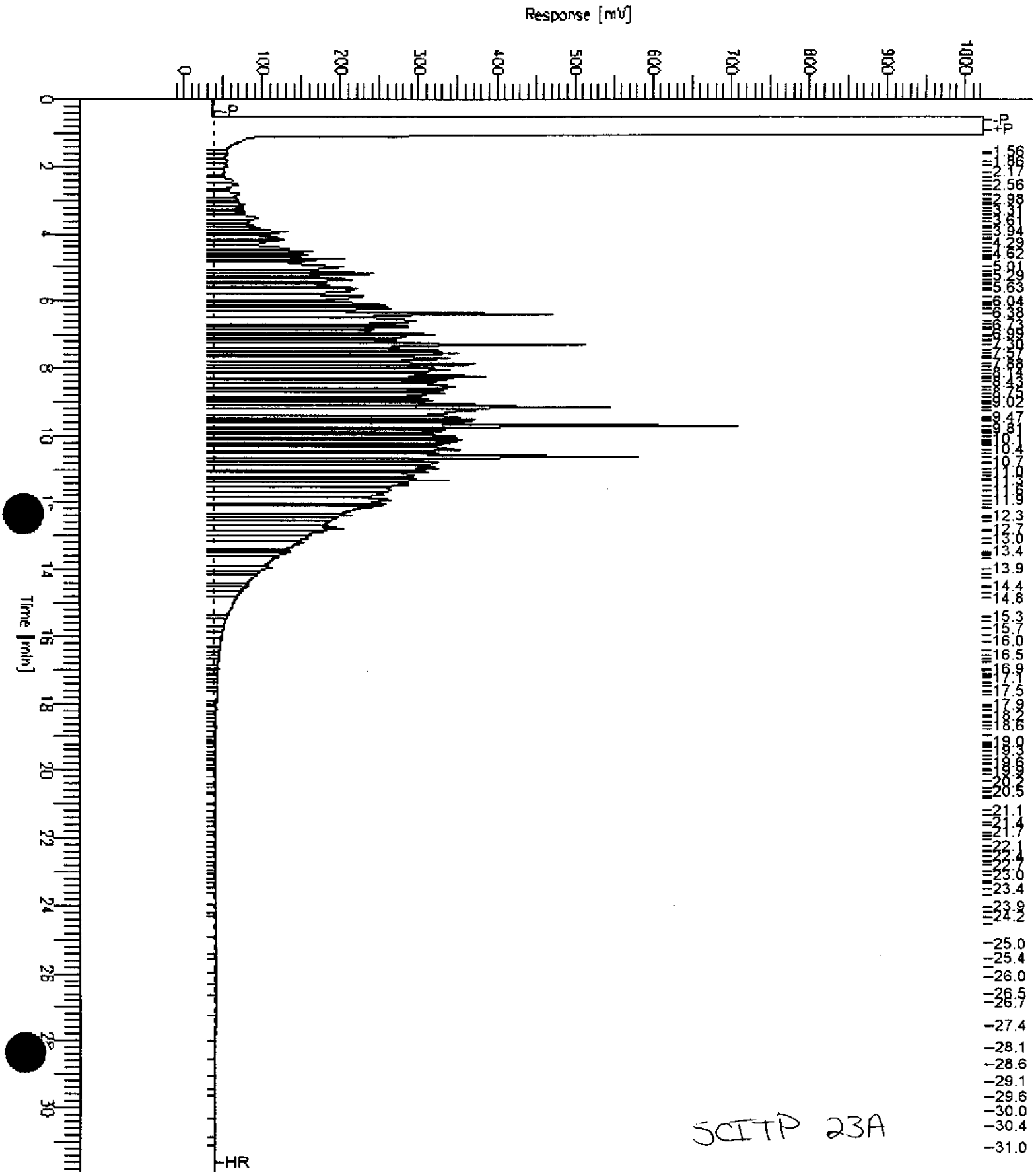
Analyte	Units	129080-007		129080-008	
Diln Fac:		100		125	
Diesel C12-C22	ug/L	8700000		520000	
Motor Oil C22-C50	ug/L	470000	YL	44000	YL
Surrogate					
Hexacosane	%REC	DO		DO	

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

Chromatogram

Sample Name : 129080-007,33718
FileName : G:\GC13\CHA\125A043.RAW
Method : ATEH127.MTH
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: -16 mV

Sample #: 33718 Page 1 of 1
Date : 5/7/97 02:58 PM
Time of Injection: 5/6/97 10:32 PM
Low Point : -15.96 mV High Point : 1024.00 mV
Plot Scale: 1040.0 mV

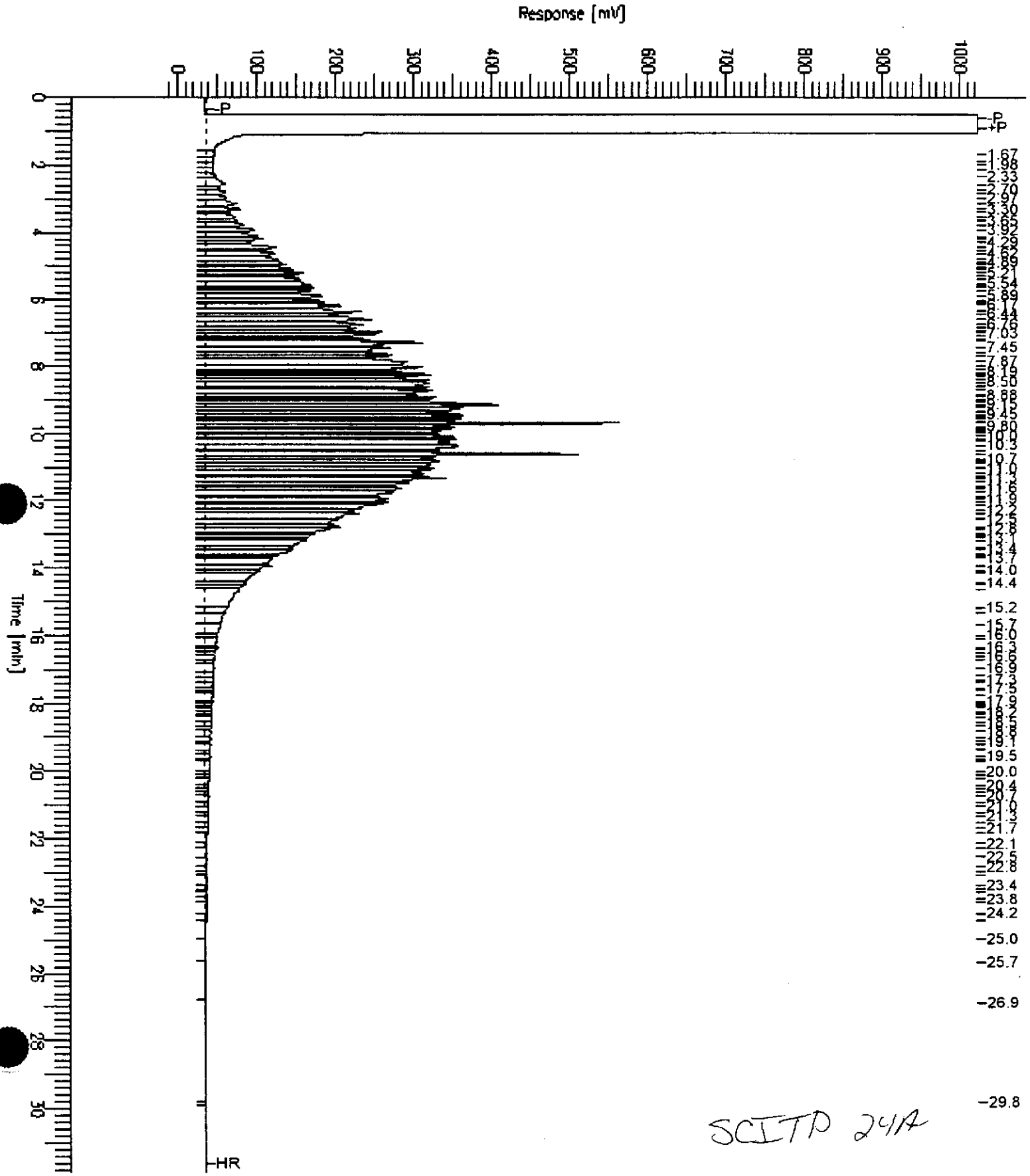


SCITP 23A

Chromatogram

Sample Name : 129080-008,33718
FileName : G:\GC13\CHA\127A039.RAW
Method : ATEH127.MTH
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: -18 mV

Sample #: 33718 Page 1 of 1
Date : 5/12/97 02:30 PM
Time of Injection: 5/8/97 08:53 PM
Low Point : -17.83 mV High Point : 1024.00 mV
Plot Scale: 1041.8 mV

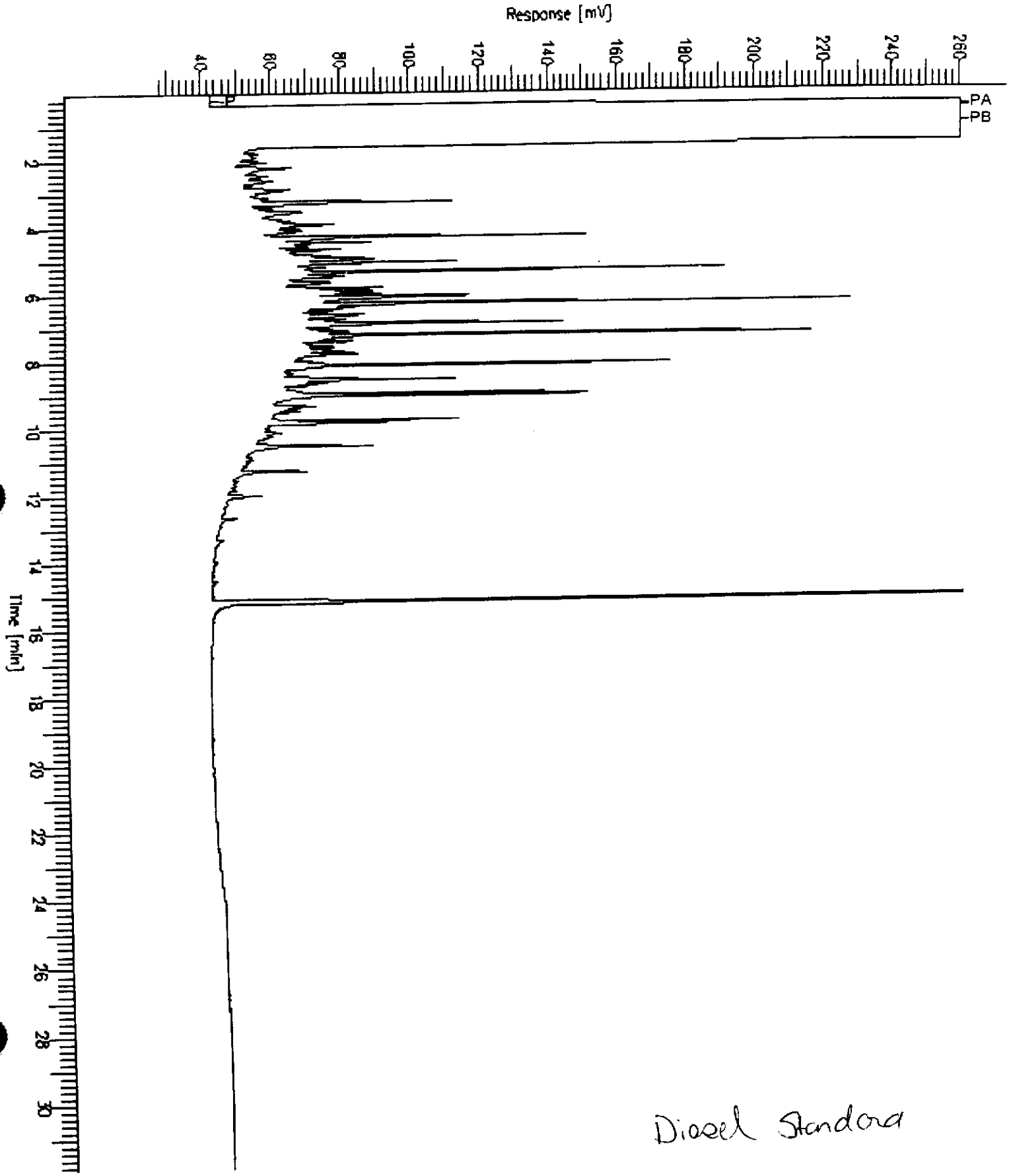


SCITP 24A

GC15 Channel B TEH

Sample Name : CCV,97WS3996,DS
FileName : G:\GC15\CHB\122B018.RAW
Method : B122TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #: 500MG/L
Date : 5/5/97 10:50 AM
Time of Injection: 5/3/97 05:01 AM
Low Point : 27.17 mV High Point : 260.46 mV
Plot Scale: 233.3 mV

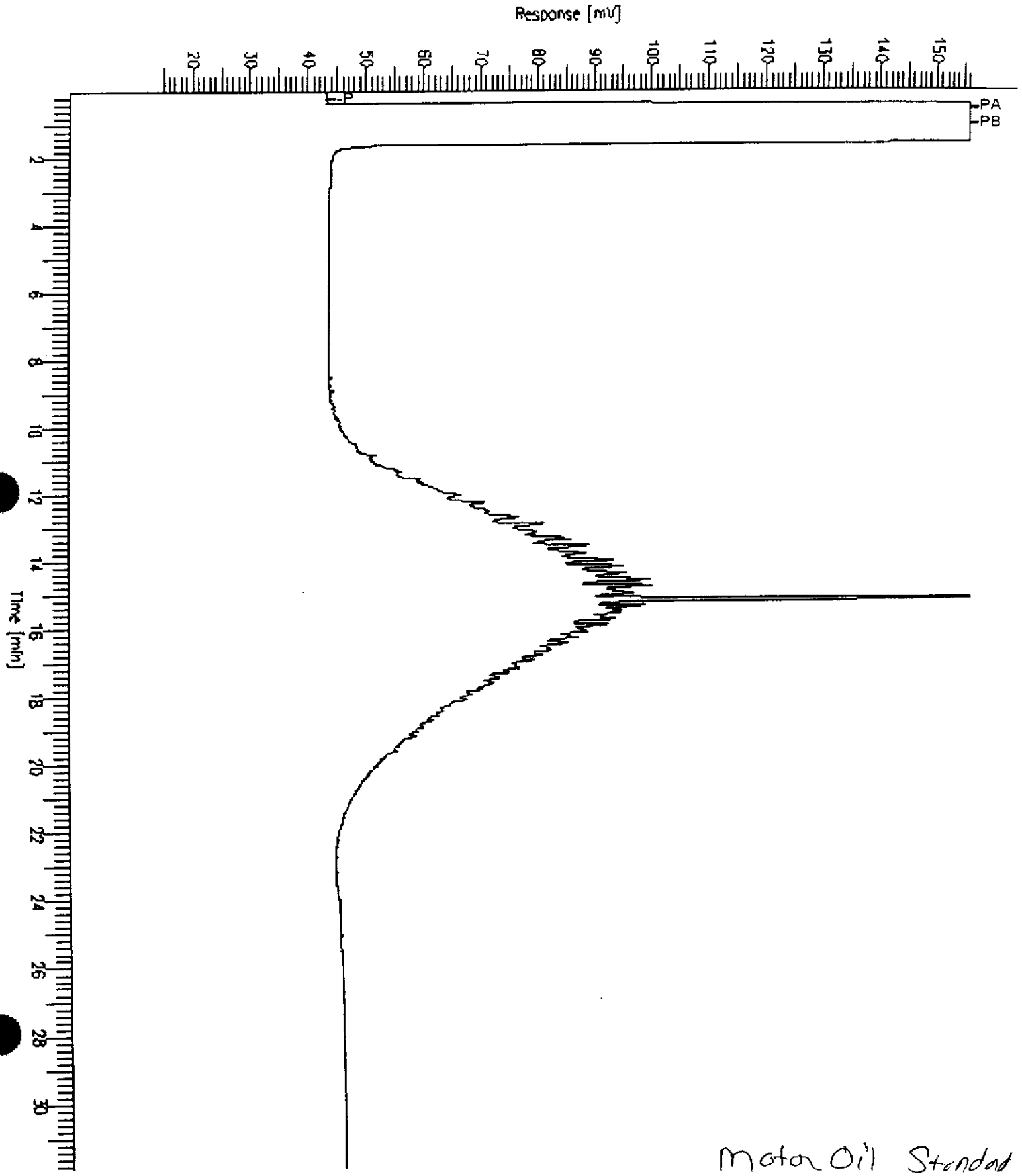


Diesel Standard

GC15 Channel B TEH

Sample Name : CCV,97WS4082,MO
FileName : G:\GC15\CHB\122B020.RAW
Method : B122TEH.MTH
Start Time : 1.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 14 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/5/97 10:50 AM
Time of Injection: 5/3/97 06:31 AM
Low Point : 14.47 mV High Point : 156.01 mV
Plot Scale: 141.5 mV

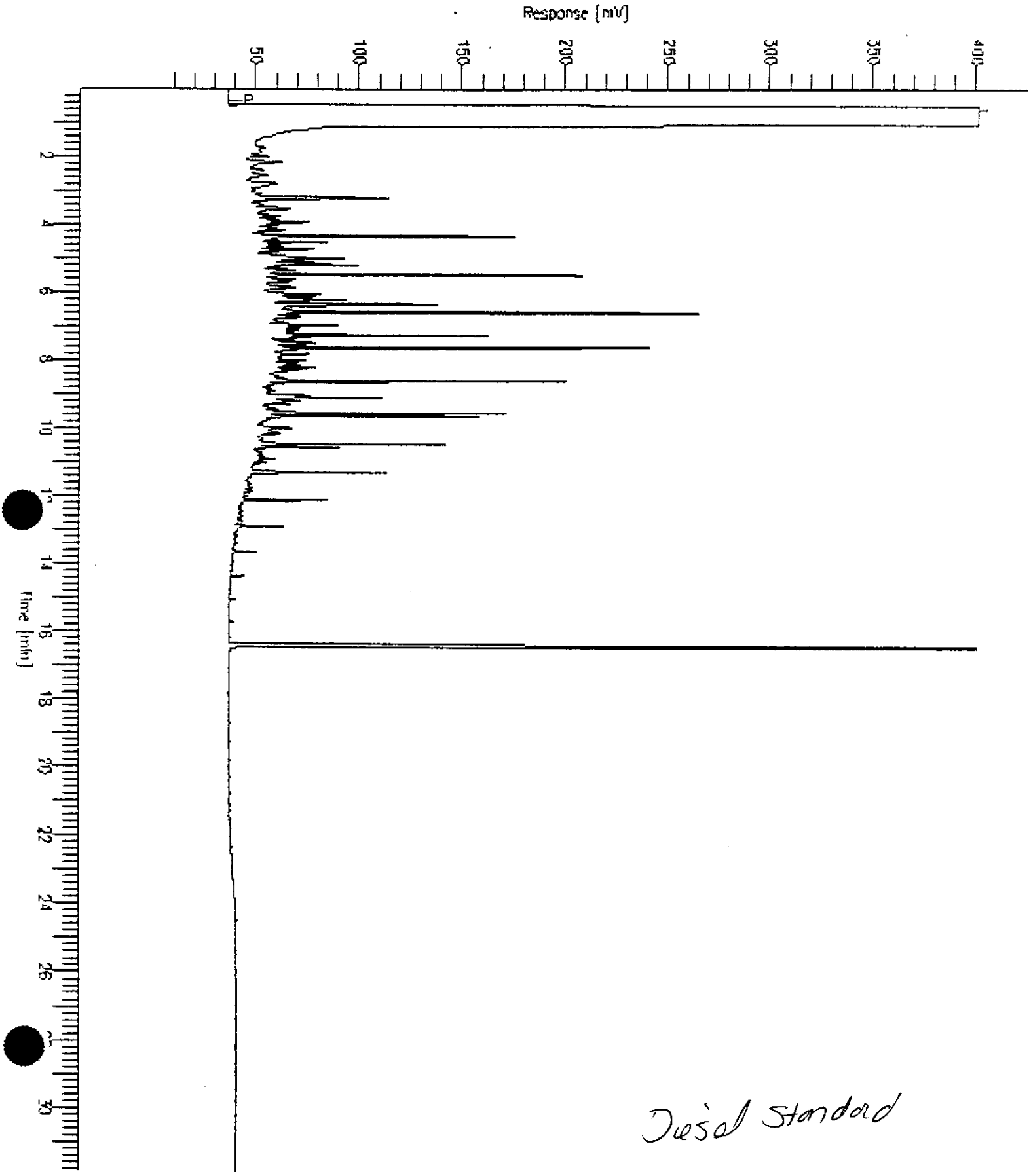


Motor Oil Standard

Chromatogram

Sample Name : CCV,97WSJ996,DS
File-Name : G:\GC13\CHA\125A017.RAW
Method : ATEH127.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 9 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/7/97 11:55 AM
Time of Injection: 5/6/97 04:03 AM
Low Point : 8.59 mV High Point : 401.37 mV
Plot Scale: 392.8 mV

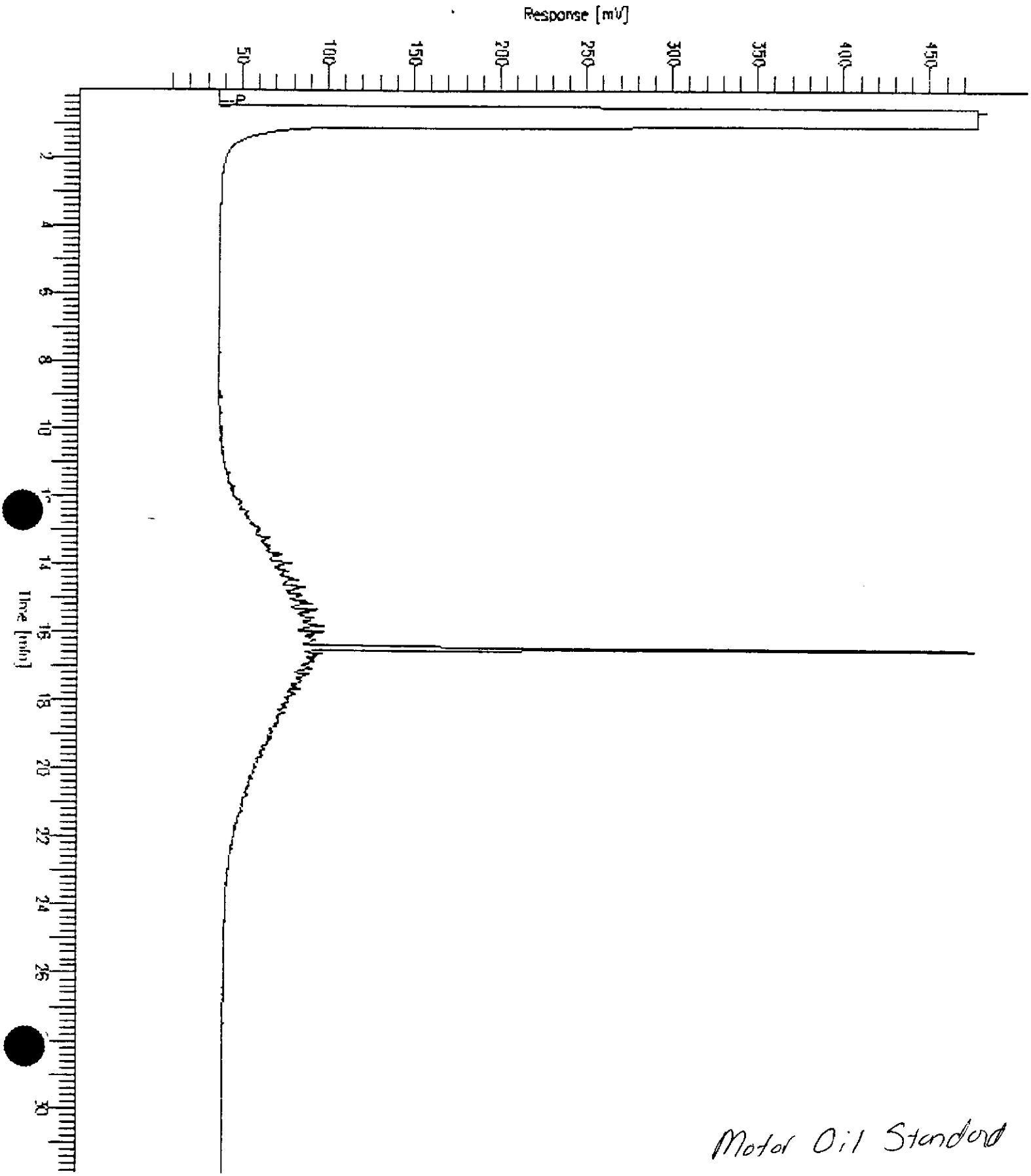


Diesel Standard

Chromatogram

Sample Name : CCV,97WS4082,MO
FileName : G:\GC13\CHA\125A051.RAW
Method : ATEH127.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 9 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/7/97 11:53 AM
Time of Injection: 5/7/97 04:12 AM
Low Point : 8.80 mV High Point : 478.12 mV
Plot Scale: 469.3 mV



Motor Oil Standard

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	CA LUFT
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Soil	Prep Date:	04/29/97
Batch#:	33700	Analysis Date:	05/03/97
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC45009

Analyte	Result	
Diesel C12-C22	<1.0	
Motor Oil C22-C50	<5.0	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	94	60-140

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Water	Prep Date:	04/29/97
Batch#:	33718	Analysis Date:	05/02/97
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC45086

Analyte	Result
Diesel C12-C22	<50
Motor Oil C22-C50	<300

Surrogate	%Rec	Recovery Limits
Hexacosane	91	60-140

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT Page 1 of 1

TEH-Tot Ext Hydrocarbons	
Client: Subsurface Consultants	Analysis Method: CA LUFT (EPA 8015M)
Project#: 133.004	Prep Method: CA LUFT
Location: 9th Ave. Terminal	

METHOD BLANK	
Matrix: Soil	Prep Date: 05/12/97
Batch#: 33918	Analysis Date: 05/13/97
Units: mg/Kg	
Diln Fac: 1	

MB Lab ID: QC45896

Analyte	Result	
Diesel C12-C22	<1.0	
Motor Oil C22-C50	<5.0	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	80	60-140

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33700
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 05/03/97

LCS Lab ID: QC45010

Analyte	Result	Spike Added	%Rec #	Limits
Diesel C12-C22	36.1	49.5	73	60-140
Surrogate	**%Rec**	**Limits**		
Hexacosane	98	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

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33718
Units: ug/L
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 05/03/97

BS Lab ID: QC45087

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1614	65	60-140

Surrogate	%Rec	Limits
Hexacosane	87	60-140

BSD Lab ID: QC45088

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1661	67	60-140	3	35

Surrogate	%Rec	Limits
Hexacosane	97	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

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33918
Units: mg/Kg
Diln Fac: 1

Prep Date: 05/12/97
Analysis Date: 05/13/97

LCS Lab ID: QC45897

Analyte	Result	Spike Added	%Rec #	Limits
Diesel C12-C22	35.2	49.5	71	60-140
Surrogate	**%Rec**	**Limits**		
Hexacosane	83	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

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129034-001
Matrix: Soil
Batch#: 33700
Units: mg/Kg
Diln Fac: 1

Sample Date: 04/21/97
Received Date: 04/22/97
Prep Date: 04/29/97
Analysis Date: 05/03/97

MS Lab ID: QC45011

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Diesel C12-C22	49.5	1.997	32	61	60-140
Surrogate	%Rec	Limits			
Hexacosane	82	60-140			

MSD Lab ID: QC45012

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	49.5	31.5	60	60-140	2	30
Surrogate	%Rec	Limits				
Hexacosane	75	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

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129231-002
Matrix: Soil
Batch#: 33918
Units: mg/Kg
Diln Fac: 1

Sample Date: 05/08/97
Received Date: 05/09/97
Prep Date: 05/12/97
Analysis Date: 05/13/97

MS Lab ID: QC45898

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Diesel C12-C22	49.5	180.8	226.8	93	60-140
Surrogate	%Rec	Limits			
Hexacosane	94	60-140			

MSD Lab ID: QC45899

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	49.5	212.2	63	60-140	7	30
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
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129080-002	SCITP 23A@6'	33854	04/26/97	05/09/97	05/09/97	
129080-004	SCITP 23B@6'	33854	04/26/97	05/08/97	05/08/97	
129080-006	SCITP 24 CANNERYLINE	33854	04/26/97	05/09/97	05/09/97	

Matrix: Soil

Analyte	Units	129080-002	129080-004	129080-006
Diln Fac:		50	1	2
Benzene	ug/Kg	<250	<5	<10
Toluene	ug/Kg	<250	<5	19
Ethylbenzene	ug/Kg	<250	<5	<10
m,p-Xylenes	ug/Kg	<250	<5	<10
o-Xylene	ug/Kg	<250	<5	<10
Surrogate				
Trifluorotoluene	%REC	80	83	87
Bromobenzene	%REC	105	99	113

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129080-007	SCITP 23A	33702	04/26/97	04/29/97	04/29/97	
129080-008	SCITP 24A	33744	04/26/97	05/01/97	05/01/97	

Matrix: Water

Analyte	Units	129080-007	129080-008
Diln Fac:		1	1
Benzene	ug/L	<0.5	<0.5
Toluene	ug/L	<0.5	<0.5
Ethylbenzene	ug/L	<0.5	<0.5
m,p-Xylenes	ug/L	2.7C	<0.5
o-Xylene	ug/L	<0.5	<0.5
Surrogate			
Trifluorotoluene	%REC	82	76
Bromobenzene	%REC	94	82

C: Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

BTXE	
Client: Subsurface Consultants	Analysis Method: EPA 8020
Project#: 133.004	Prep Method: EPA 5030
Location: 9th Ave. Terminal	

METHOD BLANK	
Matrix: Soil	Prep Date: 05/08/97
Batch#: 33854	Analysis Date: 05/08/97
Units: ug/Kg	
Diln Fac: 1	

MB Lab ID: QC45681

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	82	52-127
Bromobenzene	97	45-140

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33854
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/08/97
Analysis Date: 05/08/97

LCS Lab ID: QC45680

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	98.6	100	99	80-120
Toluene	93.84	100	94	80-120
Ethylbenzene	96.66	100	97	80-120
m,p-Xylenes	172.8	200	86	80-120
o-Xylene	103.8	100	104	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	87	52-127
Bromobenzene	108	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 5 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33702
Units: ug/L
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 04/29/97

MB Lab ID: QC45021

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	72	58-130
Bromobenzene	78	62-131

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33744
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

MB Lab ID: QC45186

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	73	58-130
Bromobenzene	80	62-131

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

BTXE	
Client: Subsurface Consultants	Analysis Method: EPA 8020
Project#: 133.004	Prep Method: EPA 5030
Location: 9th Ave. Terminal	

LABORATORY CONTROL SAMPLE	
Matrix: Water	Prep Date: 04/29/97
Batch#: 33702	Analysis Date: 04/29/97
Units: ug/L	
Diln Fac: 1	

LCS Lab ID: QC45020

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	16.46	20	82	80-120
Toluene	16.67	20	83	80-120
Ethylbenzene	16.77	20	84	80-120
m,p-Xylenes	32.91	40	82	80-120
o-Xylene	16.9	20	85	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	74	58-130
Bromobenzene	82	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 #: 129080 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33744
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

LCS Lab ID: QC45185

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	16.39	20	82	80-120
Toluene	16.91	20	85	80-120
Ethylbenzene	16.99	20	85	80-120
m,p-Xylenes	33.41	40	84	80-120
o-Xylene	17.21	20	86	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	75	58-130
Bromobenzene	85	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.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SCITP 23A
Lab ID: 129080-007
Matrix: Water
Batch#: 33702
Units: ug/L
Diln Fac: 1

Sample Date: 04/26/97
Received Date: 04/28/97
Prep Date: 04/29/97
Analysis Date: 04/29/97

MS Lab ID: QC45022

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	20	<0.5	17.69	88	75-125
Toluene	20	<0.5	19.13	96	75-125
Ethylbenzene	20	<0.5	21.15	106	75-125
m,p-Xylenes	40	2.73	39.9	93	75-125
o-Xylene	20	<0.5	25	125	75-125

Surrogate	%Rec	Limits
Trifluorotoluene	81	58-130
Bromobenzene	98	62-131

MSD Lab ID: QC45023

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	20	17.55	88	75-125	1	20
Toluene	20	18.95	95	75-125	1	20
Ethylbenzene	20	19.96	100	75-125	6	20
m,p-Xylenes	40	40.2	94	75-125	1	20
o-Xylene	20	26.23	131 *	75-125	5	20

Surrogate	%Rec	Limits
Trifluorotoluene	81	58-130
Bromobenzene	98	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: 1 out of 10 outside limits

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP 23A@6'	Sampled:	04/26/97
Lab ID:	129080-002	Received:	04/28/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	50		

Analyte	Result	Reporting Limit
alpha-BHC	ND	150
beta-BHC	ND	150
gamma-BHC	ND	150
delta-BHC	ND	150
Heptachlor	ND	150
Aldrin	ND	150
Heptachlor epoxide B	ND	150
Heptachlor epoxide A	ND	150
Endosulfan I	ND	150
Dieldrin	ND	300
4,4'-DDE	250 J	300
Endrin	ND	300
Endosulfan II	ND	300
Endosulfan sulfate	ND	300
4,4'-DDD	2100	300
Endrin aldehyde	ND	300
4,4'-DDT	ND	300
Chlordane	ND	1500
Methoxychlor	ND	1500
Toxaphene	ND	3000
Aroclor-1016	ND	600
Aroclor-1221	ND	1200
Aroclor-1232	ND	600
Aroclor-1242	ND	600
Aroclor-1248	ND	600
Aroclor-1254	ND	600
Aroclor-1260	ND	600

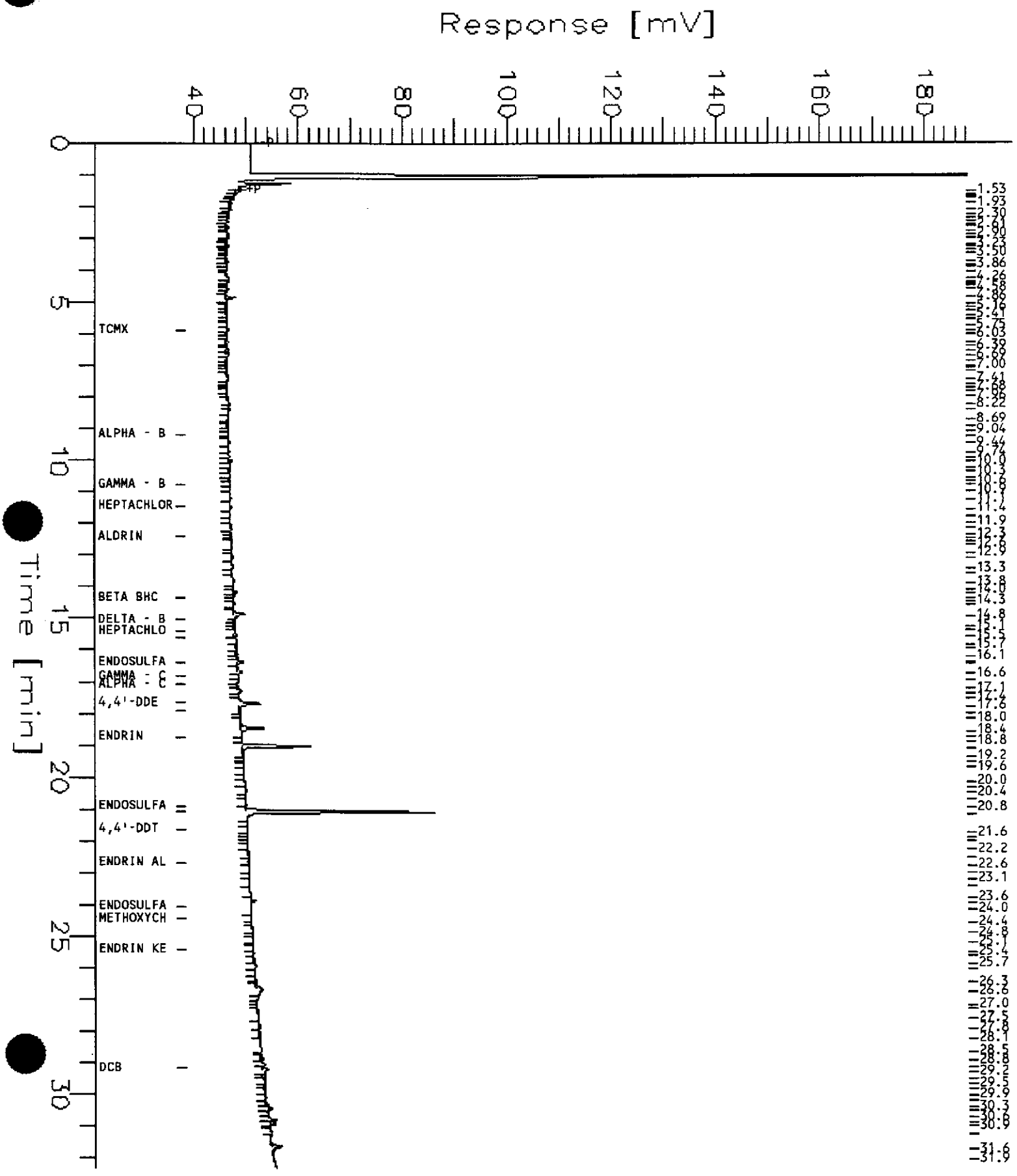
Surrogate	%Recovery	Recovery Limits
TCMX	DO*	29-108
Decachlorobiphenyl	DO*	30-125

J: Estimated Value
* Values outside of QC limits
DO: Surrogate diluted out

GC14 RTx1701.32mm vol in: 3ul

Sample Name : 129080-002
FileName : g:\gc14\cha\125A046.raw
Method : PEST-CNT.ins
Start Time : 0.00 min End Time : 32.35 min
Scale Factor: -1.0 Plot Offset: 38 mV

Sample #: 33769 Page 1 of 1
Date : 5/7/97 04:47 AM
Time of Injection: 5/7/97 04:15 AM
Low Point : 38.49 mV High Point : 188.49 mV
Plot Scale: 150.0 mV



Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP 23B@6'	Sampled:	04/26/97
Lab ID:	129080-004	Received:	04/28/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/03/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	79	29-108
Decachlorobiphenyl	91	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCITP 24 CANNERYLINE	Sampled:	04/26/97
Lab ID:	129080-006	Received:	04/28/97
Matrix:	Soil	Extracted:	05/01/97
Batch#:	33769	Analyzed:	05/07/97
Units:	ug/Kg		
Diln Fac:	20		

Analyte	Result	Reporting Limit
alpha-BHC	ND	60
beta-BHC	ND	60
gamma-BHC	ND	60
delta-BHC	ND	60
Heptachlor	ND	60
Aldrin	ND	60
Heptachlor epoxide B	ND	60
Heptachlor epoxide A	ND	60
Endosulfan I	ND	60
Dieldrin	ND	120
4,4'-DDE	150	120
Endrin	ND	120
Endosulfan II	ND	120
Endosulfan sulfate	ND	120
4,4'-DDD	1600	120
Endrin aldehyde	ND	120
4,4'-DDT	ND	120
Chlordane	ND	600
Methoxychlor	ND	600
Toxaphene	ND	1200
Aroclor-1016	ND	240
Aroclor-1221	ND	480
Aroclor-1232	ND	240
Aroclor-1242	ND	240
Aroclor-1248	ND	240
Aroclor-1254	ND	240
Aroclor-1260	ND	240

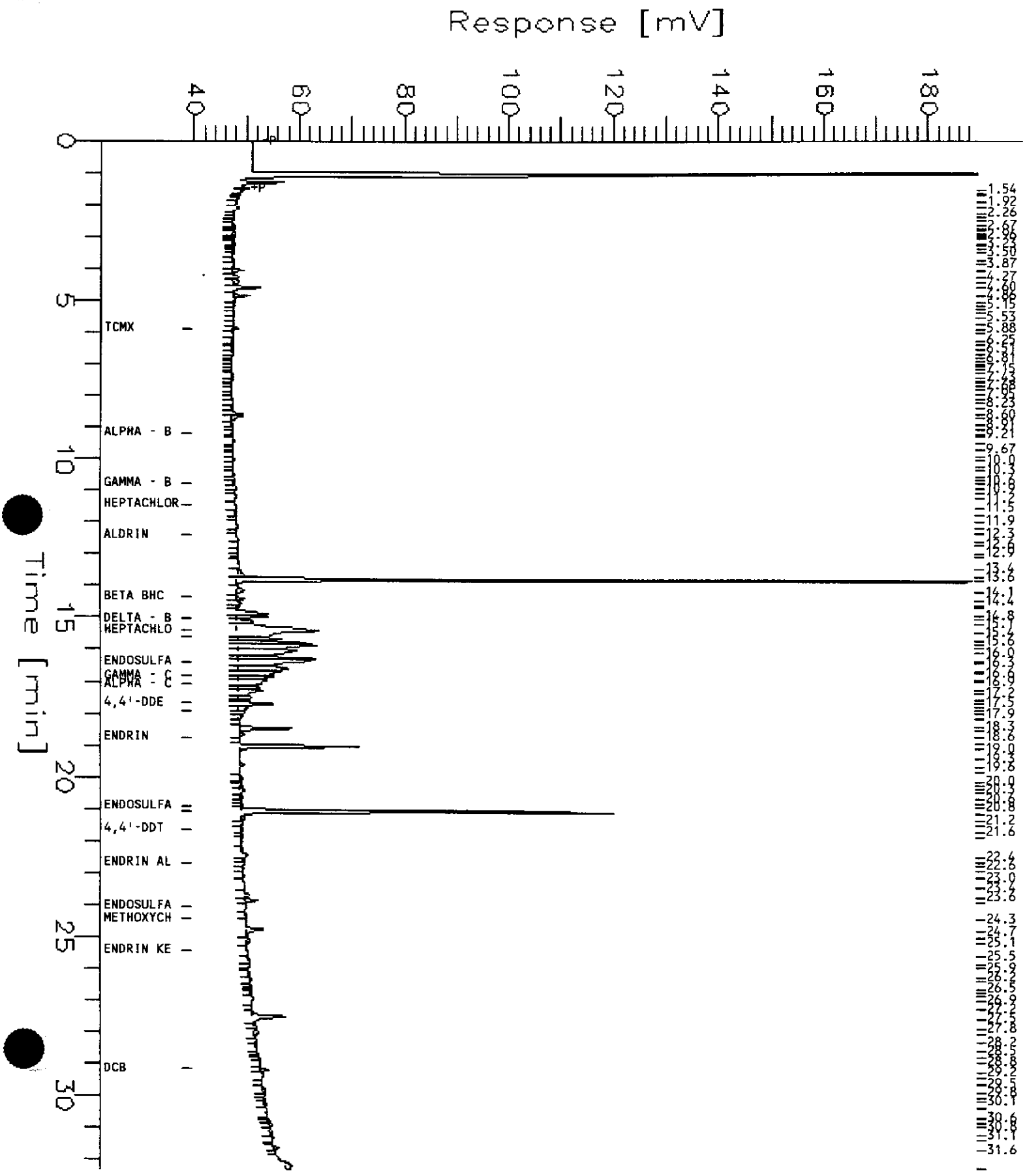
Surrogate	%Recovery	Recovery Limits
TCMX	DO*	29-108
Decachlorobiphenyl	DO*	30-125

* Values outside of QC limits
DO: Surrogate diluted out

GC14 RTx1701.32mm vol in: 3ul

Sample Name : 129080-006
FileName : g:\gc14\cha\125A050.raw
Method : PEST-CNT.ins
Start Time : 0.00 min End Time : 32.35 min
Scale Factor: -1.0 Plot Offset: 40 mV

Sample #: 33769 Page 1 of 1
Date : 5/7/97 07:20 AM
Time of Injection: 5/7/97 06:48 AM
Low Point : 39.58 mV High Point : 189.58 mV
Plot Scale: 150.0 mV



Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

Field ID:	SCITP 23A	Sampled:	04/26/97
Lab ID:	129080-007	Received:	04/28/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33690	Analyzed:	05/07/97
Units:	ug/L		
Diln Fac:	600		

Analyte	Result	Reporting Limit
alpha-BHC	ND	57
beta-BHC	ND	57
gamma-BHC	ND	57
delta-BHC	ND	57
Heptachlor	ND	57
Aldrin	ND	57
Heptachlor epoxide B	ND	57
Heptachlor epoxide A	ND	57
Endosulfan I	ND	57
Dieldrin	ND	110
4,4'-DDE	96 J	110
Endrin	ND	110
Endosulfan II	ND	110
Endosulfan sulfate	ND	110
4,4'-DDD	730	110
Endrin aldehyde	ND	110
4,4'-DDT	ND	110
Chlordane	ND	570
Methoxychlor	ND	570
Toxaphene	ND	1100
Aroclor-1016	ND	570
Aroclor-1221	ND	1100
Aroclor-1232	ND	570
Aroclor-1242	ND	570
Aroclor-1248	ND	570
Aroclor-1254	ND	570
Aroclor-1260	ND	570

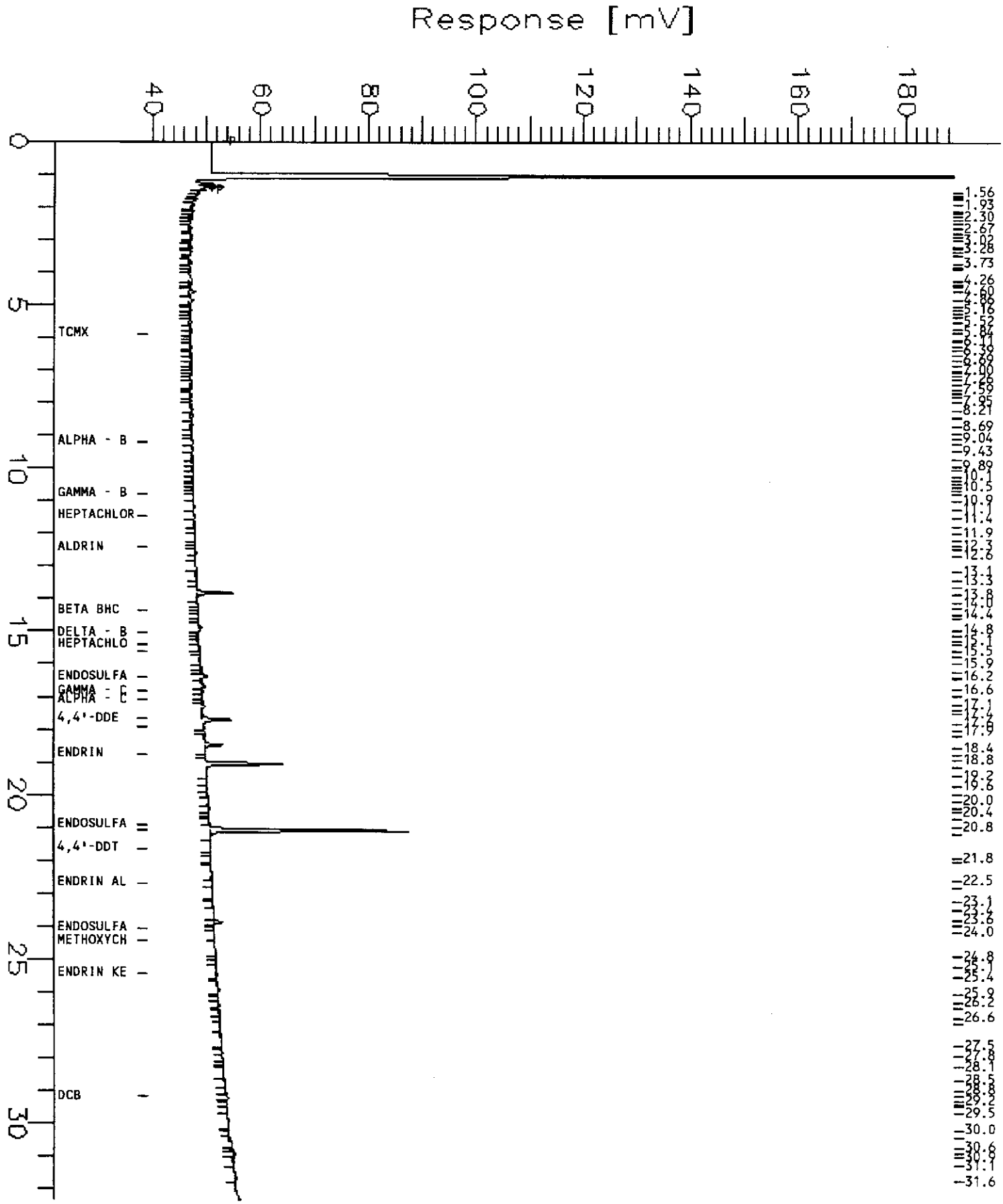
Surrogate	%Recovery	Recovery Limits
TCMX	DO*	34-128
Decachlorobiphenyl	DO*	50-150

J: Estimated Value
* Values outside of QC limits
DO: Surrogate diluted out

GC14 RTx1701.32mm vol in: 3ul

Sample Name : 129080-007
FileName : g:\gc14\cha\125A044.raw
Method : PEST-CNT.ins
Start Time : 0.00 min End Time : 32.35 min
Scale Factor: -1.0 Plot Offset: 39 mV

Sample #: 33690 Page 1 of 1
Date : 5/7/97 03:30 AM
Time of Injection: 5/7/97 02:58 AM
Low Point : 39.18 mV High Point : 189.18 mV
Plot Scale: 150.0 mV



Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

Field ID:	SCITP 24A	Sampled:	04/26/97
Lab ID:	129080-008	Received:	04/28/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33690	Analyzed:	05/07/97
Units:	ug/L		
Diln Fac:	600		

Analyte	Result	Reporting Limit
alpha-BHC	ND	120
beta-BHC	ND	120
gamma-BHC	ND	120
delta-BHC	ND	120
Heptachlor	ND	120
Aldrin	ND	120
Heptachlor epoxide B	ND	120
Heptachlor epoxide A	ND	120
Endosulfan I	ND	120
Dieldrin	ND	240
4,4'-DDE	130 J	240
Endrin	ND	240
Endosulfan II	ND	240
Endosulfan sulfate	ND	240
4,4'-DDD	1700	240
Endrin aldehyde	ND	240
4,4'-DDT	ND	240
Chlordane	ND	1200
Methoxychlor	ND	1200
Toxaphene	ND	2400
Aroclor-1016	ND	1200
Aroclor-1221	ND	2400
Aroclor-1232	ND	1200
Aroclor-1242	ND	1200
Aroclor-1248	ND	1200
Aroclor-1254	ND	1200
Aroclor-1260	ND	1200

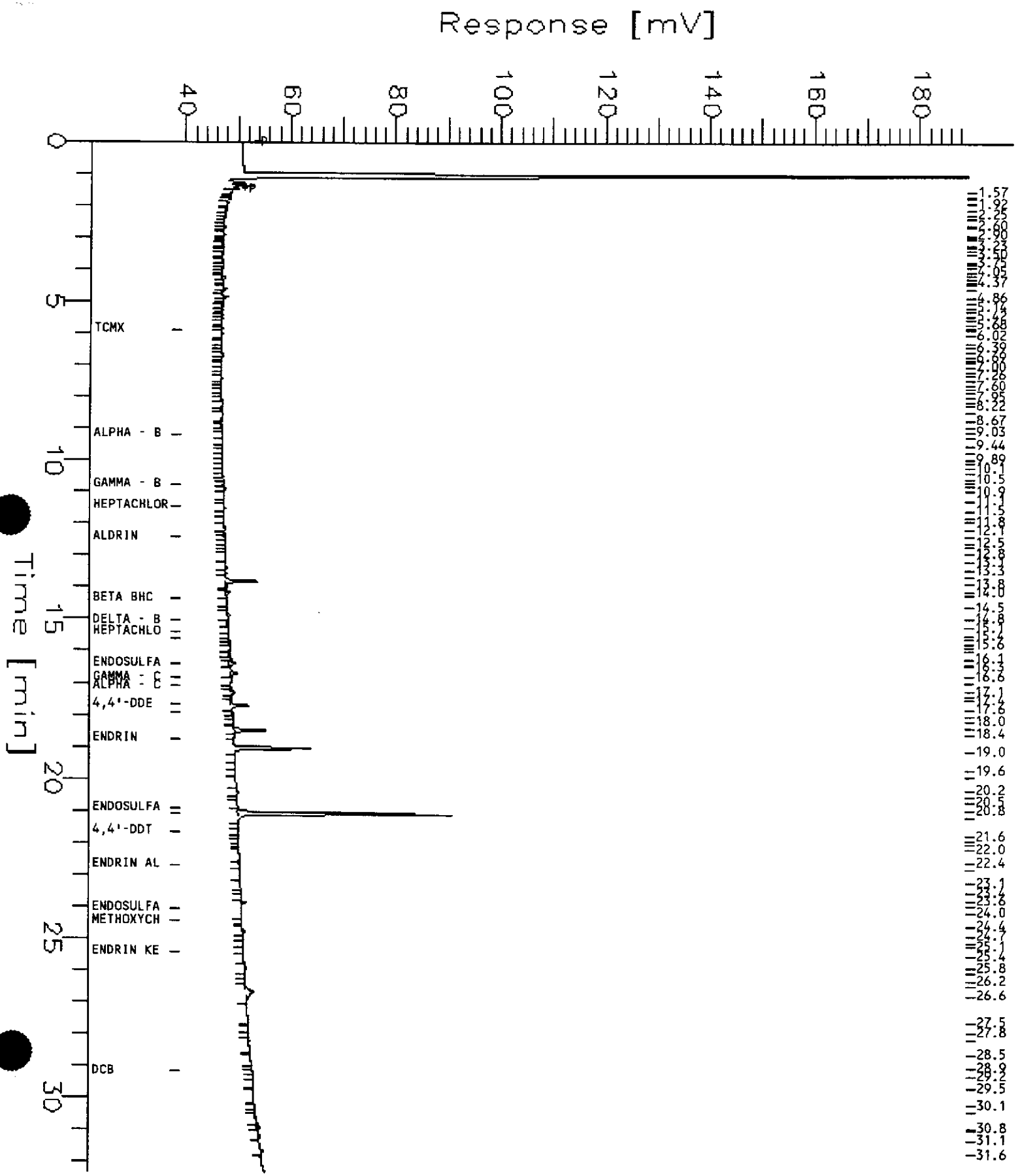
Surrogate	%Recovery	Recovery Limits
TCMX	DO*	34-128
Decachlorobiphenyl	DO*	50-150

J: Estimated Value
* Values outside of QC limits
O: Surrogate diluted out

GC14 RTx1701.32mm vol in: 3ul

Sample Name : 129080-008
FileName : g:\gc14\cha\125A045.raw
Method : PEST-CNT.ins
Start Time : 0.00 min End Time : 32.35 min
Scale Factor: -1.0 Plot Offset: 39 mV

Sample #: 33690 Page 1 of 1
Date : 5/7/97 04:09 AM
Time of Injection: 5/7/97 03:36 AM
Low Point : 39.28 mV High Point : 189.28 mV
Plot Scale: 150.0 mV



Curtis & Tompkins, Ltd.

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33690
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/02/97

MB Lab ID: QC44972

Analyte	Result	Reporting Limit
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide B	ND	0.05
Heptachlor epoxide A	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
Chlordane	ND	0.5
Methoxychlor	ND	0.5
Toxaphene	ND	1.0
Aroclor-1016	ND	0.5
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.5
Aroclor-1242	ND	0.5
Aroclor-1248	ND	0.5
Aroclor-1254	ND	0.5
Aroclor-1260	ND	0.5

Surrogate	%Rec	Recovery Limits
TCMX	74	34-128
Decachlorobiphenyl	92	50-150

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33769
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/02/97

MB Lab ID: QC45283

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Rec	Recovery Limits
TCMX	95	29-108
Decachlorobiphenyl	90	30-125

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33769
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/02/97

LCS Lab ID: QC45284

Analyte	Result	Spike Added	%Rec #	Limits
gamma-BHC	16.04	17	96	49-115
Heptachlor	16.21	17	97	51-119
Aldrin	16.51	17	99	55-112
Dieldrin	16.73	17	100	54-123
Endrin	17.92	17	107	63-128
4,4'-DDT	16.2	17	97	57-131

Surrogate	%Rec	Limits
TCMX	94	29-108
Decachlorobiphenyl	89	30-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 6 outside limits

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129073-001
Matrix: Soil
Batch#: 33769
Units: ug/Kg
Diln Fac: 4

Sample Date: 04/24/97
Received Date: 04/25/97
Prep Date: 05/01/97
Analysis Date: 05/07/97

MS Lab ID: QC45285

Analyte	Spike Added	Sample	MS	%Rec #	Limits
gamma-BHC	17	<12	16.4	98	53-124
Heptachlor	17	<12	17.17	103	55-128
Aldrin	17	<12	17.97	108	49-128
Dieldrin	17	<24	18.27	110	54-128
Endrin	17	<24	21.26	127	69-131
4,4'-DDT	17	276.5	93.74	-1096 *	53-144

Surrogate	%Rec	Limits
TCMX	98	29-108
Decachlorobiphenyl	128*	30-125

MSD Lab ID: QC45286

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
gamma-BHC	17	22.1	133 *	53-124	30	35
Heptachlor	17	23.74	142 *	55-128	32	35
Aldrin	17	24.22	145 *	49-128	30	35
Dieldrin	17	24.5	147 *	54-128	29	35
Endrin	17	28.35	170 *	69-131	29	35
4,4'-DDT	17	149.7	-760 *	53-144	36 *	35

Surrogate	%Rec	Limits
TCMX	127*	29-108
Decachlorobiphenyl	138*	30-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 1 out of 6 outside limits
Spike Recovery: 7 out of 12 outside limits

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33690
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/02/97

BS Lab ID: QC44973

Analyte	Spike Added	BS	%Rec	#	Limits
gamma-BHC	0.5	0.53	106		57-120
Heptachlor	0.5	0.49	98		51-109
Aldrin	0.5	0.53	106	*	57-105
Dieldrin	0.5	0.52	104		62-122
Endrin	0.5	0.55	110		70-128
4,4'-DDT	0.5	0.51	102		67-128

Surrogate	%Rec	Limits
TCMX	102	34-128
Decachlorobiphenyl	95	50-150

BSD Lab ID: QC44974

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
gamma-BHC	0.5	0.52	104		57-120	2		20
Heptachlor	0.5	0.44	88		51-109	11		20
Aldrin	0.5	0.52	104		57-105	2		20
Dieldrin	0.5	0.52	104		62-122	0		20
Endrin	0.5	0.54	108		70-128	2		20
4,4'-DDT	0.5	0.51	102		67-128	0		20

Surrogate	%Rec	Limits
TCMX	101	34-128
Decachlorobiphenyl	94	50-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 6 outside limits
Spike Recovery: 1 out of 12 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP 23A@6'
Lab ID: 129080-002
Matrix: Soil
Batch#: 33752
Units: ug/Kg
Diln Fac: 50

Sampled: 04/26/97
Received: 04/28/97
Extracted: 05/02/97
Analyzed: 05/02/97

Analyte	Result	Reporting Limit
Chloromethane	ND	500
Bromomethane	ND	500
Vinyl Chloride	ND	500
Chloroethane	ND	500
Methylene Chloride	ND	1000
Acetone	ND	1000
Carbon Disulfide	ND	250
Trichlorofluoromethane	ND	250
1,1-Dichloroethene	ND	250
1,1-Dichloroethane	ND	250
trans-1,2-Dichloroethene	ND	250
cis-1,2-Dichloroethene	ND	250
Chloroform	ND	250
Freon 113	ND	250
1,2-Dichloroethane	ND	250
2-Butanone	ND	500
1,1,1-Trichloroethane	ND	250
Carbon Tetrachloride	ND	250
Vinyl Acetate	ND	2500
Bromodichloromethane	ND	250
1,2-Dichloropropane	ND	250
cis-1,3-Dichloropropene	ND	250
Trichloroethene	ND	250
Dibromochloromethane	ND	250
1,1,2-Trichloroethane	ND	250
Benzene	ND	250
trans-1,3-Dichloropropene	ND	250
Bromoform	ND	250
2-Hexanone	ND	500
4-Methyl-2-Pentanone	ND	500
1,1,2,2-Tetrachloroethane	ND	250
Tetrachloroethene	ND	250
Toluene	ND	250
Chlorobenzene	ND	250
Ethylbenzene	ND	250
Styrene	ND	250
m,p-Xylenes	ND	250
o-Xylene	ND	250

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	102	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	97	79-122

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP 23B@6'
Lab ID: 129080-004
Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Sampled: 04/26/97
Received: 04/28/97
Extracted: 04/29/97
Analyzed: 04/29/97

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	91	68-126
Toluene-d8	108	87-125
Bromofluorobenzene	105	79-122

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP 24 CANNERYLINE
Lab ID: 129080-006
Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 5

Sampled: 04/26/97
Received: 04/28/97
Extracted: 04/30/97
Analyzed: 04/30/97

Analyte	Result	Reporting Limit
Chloromethane	ND	50
Bromomethane	ND	50
Vinyl Chloride	ND	50
Chloroethane	ND	50
Methylene Chloride	ND	100
Acetone	ND	100
Carbon Disulfide	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
trans-1,2-Dichloroethene	ND	25
cis-1,2-Dichloroethene	ND	25
Chloroform	ND	25
Freon 113	ND	25
1,2-Dichloroethane	ND	25
2-Butanone	ND	50
1,1,1-Trichloroethane	ND	25
Carbon Tetrachloride	ND	25
Vinyl Acetate	ND	250
Bromodichloromethane	ND	25
1,2-Dichloropropane	ND	25
cis-1,3-Dichloropropene	ND	25
Trichloroethene	ND	25
Dibromochloromethane	ND	25
1,1,2-Trichloroethane	ND	25
Benzene	ND	25
trans-1,3-Dichloropropene	ND	25
Bromoform	ND	25
2-Hexanone	ND	50
4-Methyl-2-Pentanone	ND	50
1,1,2,2-Tetrachloroethane	ND	25
Tetrachloroethene	ND	25
Toluene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
Styrene	ND	25
m,p-Xylenes	13 J	25
o-Xylene	ND	25

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	93	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	111	79-122

J: Estimated Value

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP 23A
Lab ID: 129080-007
Matrix: Water
Batch#: 33698
Units: ug/L
Diln Fac: 5

Sampled: 04/26/97
Received: 04/28/97
Extracted: 04/29/97
Analyzed: 04/29/97

Analyte	Result	Reporting Limit
Chloromethane	ND	50
Bromomethane	ND	50
Vinyl Chloride	ND	50
Chloroethane	ND	50
Methylene Chloride	ND	100
Acetone	ND	100
Carbon Disulfide	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
trans-1,2-Dichloroethene	ND	25
cis-1,2-Dichloroethene	ND	25
Chloroform	ND	25
Freon 113	ND	25
1,2-Dichloroethane	ND	25
2-Butanone	ND	50
1,1,1-Trichloroethane	ND	25
Carbon Tetrachloride	ND	25
Vinyl Acetate	ND	250
Bromodichloromethane	ND	25
1,2-Dichloropropane	ND	25
cis-1,3-Dichloropropene	ND	25
Trichloroethene	ND	25
Dibromochloromethane	ND	25
1,1,2-Trichloroethane	ND	25
Benzene	ND	25
trans-1,3-Dichloropropene	ND	25
Bromoform	ND	25
2-Hexanone	ND	50
4-Methyl-2-Pentanone	ND	50
1,1,2,2-Tetrachloroethane	ND	25
Tetrachloroethene	ND	25
Toluene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
Styrene	ND	25
m,p-Xylenes	ND	25
o-Xylene	ND	25

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	88	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	98	79-122

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP 24A
Lab ID: 129080-008
Matrix: Water
Batch#: 33698
Units: ug/L
Diln Fac: 10

Sampled: 04/26/97
Received: 04/28/97
Extracted: 04/29/97
Analyzed: 04/29/97

Analyte	Result	Reporting Limit
Chloromethane	ND	100
Bromomethane	ND	100
Vinyl Chloride	ND	100
Chloroethane	ND	100
Methylene Chloride	ND	200
Acetone	ND	200
Carbon Disulfide	ND	50
Trichlorofluoromethane	ND	50
1,1-Dichloroethene	ND	50
1,1-Dichloroethane	ND	50
trans-1,2-Dichloroethene	ND	50
cis-1,2-Dichloroethene	ND	50
Chloroform	ND	50
Freon 113	ND	50
1,2-Dichloroethane	ND	50
2-Butanone	ND	100
1,1,1-Trichloroethane	ND	50
Carbon Tetrachloride	ND	50
Vinyl Acetate	ND	500
Bromodichloromethane	ND	50
1,2-Dichloropropane	ND	50
cis-1,3-Dichloropropene	ND	50
Trichloroethene	ND	50
Dibromochloromethane	ND	50
1,1,2-Trichloroethane	ND	50
Benzene	ND	50
trans-1,3-Dichloropropene	ND	50
Bromoform	ND	50
2-Hexanone	ND	100
4-Methyl-2-Pentanone	ND	100
1,1,2,2-Tetrachloroethane	ND	50
Tetrachloroethene	ND	50
Toluene	ND	50
Chlorobenzene	ND	50
Ethylbenzene	ND	50
Styrene	ND	50
m,p-Xylenes	ND	50
o-Xylene	ND	50

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	88	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	99	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33698
Units: ug/L
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 04/29/97

MB Lab ID: QC45005

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	98	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	101	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 04/29/97

MB Lab ID: QC45008

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	106	87-125
Bromofluorobenzene	105	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

MB Lab ID: QC45095

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	100	68-126
Toluene-d8	106	87-125
Bromofluorobenzene	101	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/02/97
Analysis Date: 05/02/97

MB Lab ID: QC45287

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	104	87-125
Bromofluorobenzene	102	79-122

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

MB Lab ID: QC45216

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	103	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	101	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

MB Lab ID: QC45232

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

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33698
Units: ug/L
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 04/29/97

LCS Lab ID: QC45004

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	51.85	50	104	51-180
Trichloroethene	48.31	50	97	73-141
Benzene	46.14	50	92	78-142
Toluene	50.14	50	100	76-150
Chlorobenzene	48.58	50	97	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	101	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 04/29/97

LCS Lab ID: QC45007

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	44.74	50	89	51-180
Trichloroethene	45.75	50	92	73-141
Benzene	50.1	50	100	78-142
Toluene	56.04	50	112	76-150
Chlorobenzene	49.62	50	99	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	105	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

LCS Lab ID: QC45094

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	50.37	50	101	51-180
Trichloroethene	49.2	50	98	73-141
Benzene	53.06	50	106	78-142
Toluene	60.45	50	121	76-150
Chlorobenzene	53.37	50	107	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	108	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/01/97

LCS Lab ID: QC45215

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	61.54	50	123	51-180
Trichloroethene	51.95	50	104	73-141
Benzene	53.79	50	108	78-142
Toluene	54.43	50	109	76-150
Chlorobenzene	51.68	50	103	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	102	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
Spike Recovery: 0 out of 5 outside limits

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129072-002
Matrix: Water
Batch#: 33698
Units: ug/L
Diln Fac: 1

Sample Date: 04/24/97
Received Date: 04/25/97
Prep Date: 04/29/97
Analysis Date: 04/29/97

MS Lab ID: QC45032

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	49.4	99	51-180
Trichloroethene	50	<5	49.17	98	73-141
Benzene	50	<5	44.58	89	78-142
Toluene	50	<5	49.31	98	76-150
Chlorobenzene	50	<5	47.93	96	83-129

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

MSD Lab ID: QC45033

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	48.44	97	51-180	2	14
Trichloroethene	50	50.34	101	73-141	2	14
Benzene	50	45.02	90	78-142	1	11
Toluene	50	50.13	99	76-150	2	13
Chlorobenzene	50	48.78	98	83-129	2	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	91	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
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129073-006
Matrix: Soil
Batch#: 33699
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/24/97
Received Date: 04/25/97
Prep Date: 04/29/97
Analysis Date: 04/29/97

MS Lab ID: QC45017

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	40.14	80	51-180
Trichloroethene	50	<5	41.7	83	73-141
Benzene	50	<5	46.83	94	78-142
Toluene	50	<5	49.65	99	76-150
Chlorobenzene	50	3.779	42.21	77 *	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	108	87-125
Bromofluorobenzene	115	79-122

MSD Lab ID: QC45018

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	40.08	80	51-180	0	22
Trichloroethene	50	42.36	85	73-141	2	24
Benzene	50	48.05	96	78-142	3	21
Toluene	50	52.29	105	76-150	5	21
Chlorobenzene	50	45.44	83	83-129	7	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	94	68-126
Toluene-d8	107	87-125
Bromofluorobenzene	114	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

Curtis & Tompkins, Ltd.

Lab #: 129080 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129057-016
Matrix: Soil
Batch#: 33720
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/23/97
Received Date: 04/24/97
Prep Date: 05/02/97
Analysis Date: 05/02/97

MS Lab ID: QC45153

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	49.34	99	51-180
Trichloroethene	50	<5	68.59	137	73-141
Benzene	50	<5	48.18	96	78-142
Toluene	50	<5	50.24	100	76-150
Chlorobenzene	50	<5	44.47	89	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	92	68-126
Toluene-d8	104	87-125
Bromofluorobenzene	99	79-122

MSD Lab ID: QC45154

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	50.02	100	51-180	1	22
Trichloroethene	50	70.02	140	73-141	2	24
Benzene	50	50.12	100	78-142	4	21
Toluene	50	51.53	103	76-150	3	21
Chlorobenzene	50	43.07	86	83-129	3	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	93	68-126
Toluene-d8	105	87-125
Bromofluorobenzene	99	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129056-014
Matrix: Water
Batch#: 33752
Units: ug/L
Diln Fac: 1

Sample Date: 04/23/97
Received Date: 04/23/97
Prep Date: 05/01/97
Analysis Date: 05/01/97

MS Lab ID: QC45229

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	5.229	60.7	111	51-180
Trichloroethene	50	51.11	100.3	98	73-141
Benzene	50	0	51.58	103	78-142
Toluene	50	0	51.92	104	76-150
Chlorobenzene	50	0	52.22	104	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	105	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	98	79-122

MSD Lab ID: QC45230

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	61.13	112	51-180	1	14
Trichloroethene	50	97.21	92	73-141	3	14
Benzene	50	50.98	102	78-142	1	11
Toluene	50	51.98	104	76-150	0	13
Chlorobenzene	50	50.28	101	83-129	4	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	107	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	99	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.

LABORATORY NUMBER: 129080
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/26/97
DATE RECEIVED: 04/28/97
DATE ANALYZED: 05/08/97
BATCH#: 33880

ANALYSIS: CYANIDE
ANALYSIS METHOD: EPA 9010A

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129080-007	SCITP 23A	ND	ug/L	10
129080-008	SCITP 24A	ND	ug/L	10
METHOD BLANK	N/A	ND	ug/L	10

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: BS/BSD

RPD, %	6
RECOVERY, %	94

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP 23A@6'	Sampled:	04/26/97
Lab ID:	129080-002	Received:	04/28/97
Matrix:	Soil	Extracted:	04/29/97
Batch#:	33713	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	50		

Analyte	Result	Reporting Limit
Phenol	ND	33000
2-Chlorophenol	ND	33000
Benzyl alcohol	ND	33000
2-Methylphenol	ND	33000
4-Methylphenol	ND	33000
2-Nitrophenol	ND	170000
2,4-Dimethylphenol	ND	33000
Benzoic acid	ND	170000
2,4-Dichlorophenol	ND	33000
4-Chloro-3-methylphenol	ND	33000
2,4,6-Trichlorophenol	ND	33000
2,4,5-Trichlorophenol	ND	170000
2,4-Dinitrophenol	ND	170000
4-Nitrophenol	ND	170000
4,6-Dinitro-2-methylphenol	ND	170000
Pentachlorophenol	ND	170000
N-Nitrosodimethylamine	ND	33000
Aniline	ND	33000
bis(2-Chloroethyl)ether	ND	33000
1,3-Dichlorobenzene	ND	33000
1,4-Dichlorobenzene	ND	33000
1,2-Dichlorobenzene	ND	33000
bis(2-Chloroisopropyl) ether	ND	33000
N-Nitroso-di-n-propylamine	ND	33000
Hexachloroethane	ND	33000
Nitrobenzene	ND	33000
Isophorone	ND	33000
bis(2-Chloroethoxy)methane	ND	33000
1,2,4-Trichlorobenzene	ND	33000
Naphthalene	ND	33000
4-Chloroaniline	ND	33000
Hexachlorobutadiene	ND	33000
2-Methylnaphthalene	ND	33000
Hexachlorocyclopentadiene	ND	33000
2-Chloronaphthalene	ND	33000
2-Nitroaniline	ND	170000
Dimethylphthalate	ND	33000
Acenaphthylene	ND	33000

Semivolatile Organics by GC/MS

Field ID:	SCITP 23A@6'	Sampled:	04/26/97
Lab ID:	129080-002	Received:	04/28/97
Matrix:	Soil	Extracted:	04/29/97
Batch#:	33713	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	50		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	33000
3-Nitroaniline	ND	170000
Acenaphthene	ND	33000
Dibenzofuran	ND	33000
2,4-Dinitrotoluene	ND	33000
Diethylphthalate	ND	33000
4-Chlorophenyl-phenylether	ND	33000
Fluorene	ND	33000
4-Nitroaniline	ND	170000
N-Nitrosodiphenylamine	ND	33000
Azobenzene	ND	33000
4-Bromophenyl-phenylether	ND	33000
Hexachlorobenzene	ND	33000
Phenanthrene	ND	33000
Anthracene	ND	33000
Di-n-butylphthalate	ND	33000
Fluoranthene	ND	33000
Benzidine	ND	33000
Pyrene	ND	33000
Butylbenzylphthalate	ND	33000
3,3'-Dichlorobenzidine	ND	170000
Benzo(a)anthracene	ND	33000
Chrysene	ND	33000
bis(2-Ethylhexyl)phthalate	ND	33000
Di-n-octylphthalate	ND	33000
Benzo(b)fluoranthene	ND	33000
Benzo(k)fluoranthene	ND	33000
Benzo(a)pyrene	ND	33000
Indeno(1,2,3-cd)pyrene	ND	33000
Dibenz(a,h)anthracene	ND	33000
Benzo(g,h,i)perylene	ND	33000

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

* Values outside of QC limits
DO: Surrogate diluted out

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP 24 CANNERYLINE	Sampled:	04/26/97
Lab ID:	129080-006	Received:	04/28/97
Matrix:	Soil	Extracted:	04/29/97
Batch#:	33713	Analyzed:	05/12/97
Units:	ug/Kg		
Diln Fac:	10		

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:	SCITP 24 CANNERYLINE	Sampled:	04/26/97
Lab ID:	129080-006	Received:	04/28/97
Matrix:	Soil	Extracted:	04/29/97
Batch#:	33713	Analyzed:	05/12/97
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	1800 J	3300
Butylbenzylphthalate	ND	3300
3,3'-Dichlorobenzidine	ND	17000
Benzo(a)anthracene	ND	3300
Chrysene	ND	3300
bis(2-Ethylhexyl)phthalate	ND	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	76	25-121
Phenol-d5	82	24-113
2,4,6-Tribromophenol	58	19-122
Nitrobenzene-d5	121*	23-120
2-Fluorobiphenyl	89	30-115
Terphenyl-d14	97	18-137

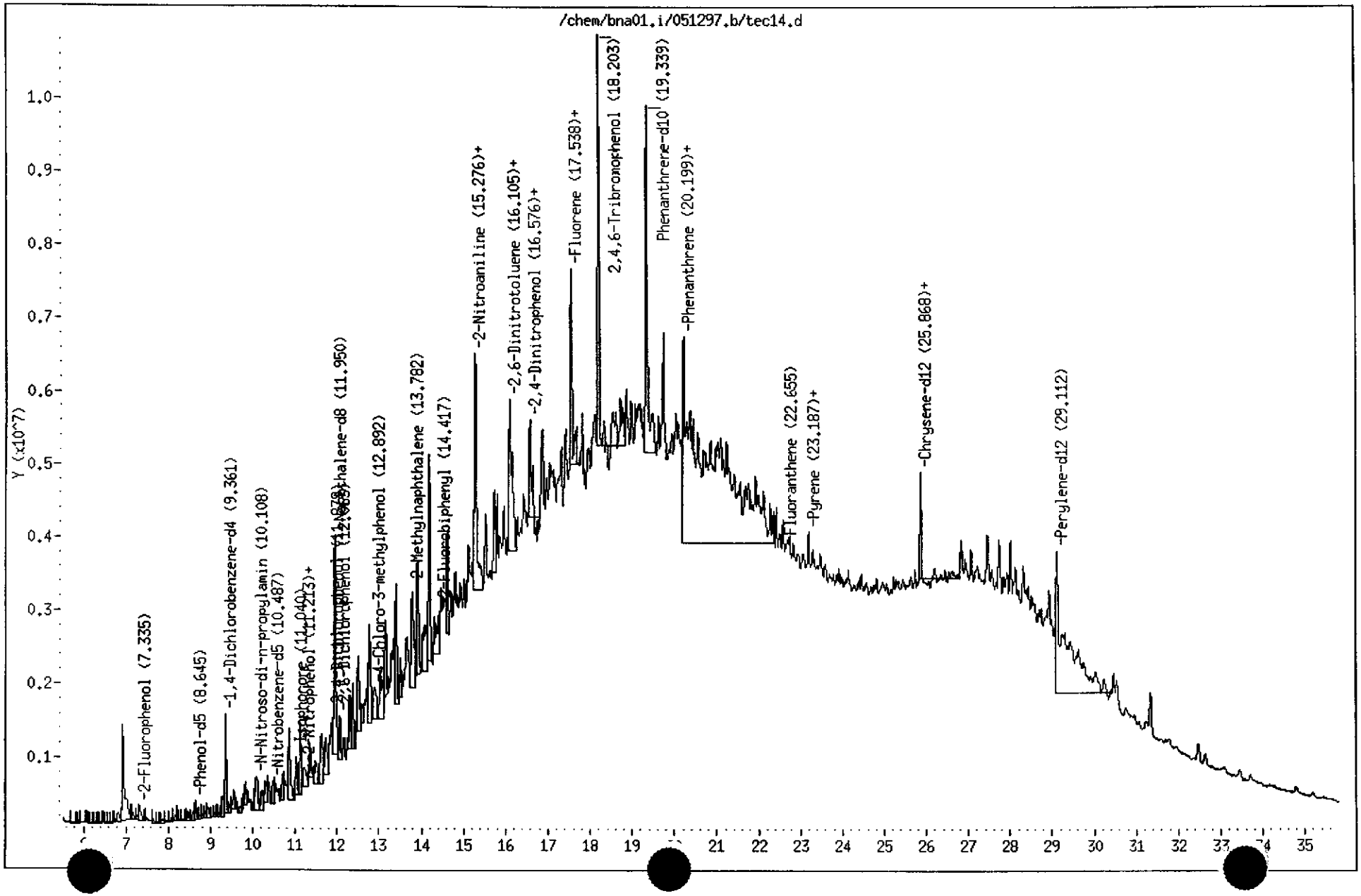
J: Estimated Value

* Values outside of QC limits

Data File: /chem/bna01.i/051297.b/tec14.d
Date : 12-MAY-97 22:47
Client ID: CURTIS&TOMPKINS,LTD
Sample Info: 8270,,33713,30,1000,10
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#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

Field ID:	SCITP 23A	Sampled:	04/26/97
Lab ID:	129080-007	Received:	04/28/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33692	Analyzed:	05/12/97
Units:	ug/L		
Diln Fac:	50		

Analyte	Result	Reporting Limit
Phenol	ND	2400
2-Chlorophenol	ND	2400
Benzyl alcohol	ND	2400
2-Methylphenol	ND	2400
4-Methylphenol	ND	2400
2-Nitrophenol	ND	12000
2,4-Dimethylphenol	ND	2400
Benzoic acid	ND	12000
2,4-Dichlorophenol	ND	2400
4-Chloro-3-methylphenol	ND	2400
2,4,6-Trichlorophenol	ND	2400
2,4,5-Trichlorophenol	ND	12000
2,4-Dinitrophenol	ND	12000
4-Nitrophenol	ND	12000
4,6-Dinitro-2-methylphenol	ND	12000
Pentachlorophenol	ND	12000
N-Nitrosodimethylamine	ND	2400
Aniline	ND	2400
bis(2-Chloroethyl)ether	ND	2400
1,3-Dichlorobenzene	ND	2400
1,4-Dichlorobenzene	ND	2400
1,2-Dichlorobenzene	ND	2400
bis(2-Chloroisopropyl) ether	ND	2400
N-Nitroso-di-n-propylamine	ND	2400
Hexachloroethane	ND	2400
Nitrobenzene	ND	2400
Isophorone	ND	2400
bis(2-Chloroethoxy)methane	ND	2400
1,2,4-Trichlorobenzene	ND	2400
Naphthalene	ND	2400
4-Chloroaniline	ND	2400
Hexachlorobutadiene	ND	2400
2-Methylnaphthalene	ND	2400
Hexachlorocyclopentadiene	ND	2400
2-Chloronaphthalene	ND	2400
2-Nitroaniline	ND	12000
Dimethylphthalate	ND	2400
Acenaphthylene	ND	2400

Semivolatile Organics by GC/MS

Field ID:	SCITP 23A	Sampled:	04/26/97
Lab ID:	129080-007	Received:	04/28/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33692	Analyzed:	05/12/97
Units:	ug/L		
Diln Fac:	50		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	2400
3-Nitroaniline	ND	12000
Acenaphthene	ND	2400
Dibenzofuran	ND	2400
2,4-Dinitrotoluene	ND	2400
Diethylphthalate	ND	2400
4-Chlorophenyl-phenylether	ND	2400
Fluorene	ND	2400
4-Nitroaniline	ND	12000
N-Nitrosodiphenylamine	ND	2400
Azobenzene	ND	2400
4-Bromophenyl-phenylether	ND	2400
Hexachlorobenzene	ND	2400
Phenanthrene	ND	2400
Anthracene	ND	2400
Di-n-butylphthalate	ND	2400
Fluoranthene	ND	2400
Pyrene	ND	2400
Butylbenzylphthalate	ND	2400
3,3'-Dichlorobenzidine	ND	12000
Benzo(a)anthracene	ND	2400
Chrysene	ND	2400
bis(2-Ethylhexyl)phthalate	ND	2400
Di-n-octylphthalate	ND	2400
Benzo(b)fluoranthene	ND	2400
Benzo(k)fluoranthene	ND	2400
Benzo(a)pyrene	ND	2400
Indeno(1,2,3-cd)pyrene	ND	2400
Dibenz(a,h)anthracene	ND	2400
Benzo(g,h,i)perylene	ND	2400

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

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		
Field ID:	SCITP 24A	Sampled:	04/26/97
Lab ID:	129080-008	Received:	04/28/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33692	Analyzed:	05/13/97
Units:	ug/L		
Diln Fac:	50		

Analyte	Result	Reporting Limit
Phenol	ND	4700
2-Chlorophenol	ND	4700
Benzyl alcohol	ND	4700
2-Methylphenol	ND	4700
4-Methylphenol	ND	4700
2-Nitrophenol	ND	24000
2,4-Dimethylphenol	ND	4700
Benzoic acid	ND	24000
2,4-Dichlorophenol	ND	4700
4-Chloro-3-methylphenol	ND	4700
2,4,6-Trichlorophenol	ND	4700
2,4,5-Trichlorophenol	ND	24000
2,4-Dinitrophenol	ND	24000
4-Nitrophenol	ND	24000
4,6-Dinitro-2-methylphenol	ND	24000
Pentachlorophenol	ND	24000
N-Nitrosodimethylamine	ND	4700
Aniline	ND	4700
bis(2-Chloroethyl)ether	ND	4700
1,3-Dichlorobenzene	ND	4700
1,4-Dichlorobenzene	ND	4700
1,2-Dichlorobenzene	ND	4700
bis(2-Chloroisopropyl) ether	ND	4700
N-Nitroso-di-n-propylamine	ND	4700
Hexachloroethane	ND	4700
Nitrobenzene	ND	4700
Isophorone	ND	4700
bis(2-Chloroethoxy)methane	ND	4700
1,2,4-Trichlorobenzene	ND	4700
Naphthalene	ND	4700
4-Chloroaniline	ND	4700
Hexachlorobutadiene	ND	4700
2-Methylnaphthalene	ND	4700
Hexachlorocyclopentadiene	ND	4700
2-Chloronaphthalene	ND	4700
2-Nitroaniline	ND	24000
Dimethylphthalate	ND	4700
Acenaphthylene	ND	4700

Semivolatile Organics by GC/MS

Field ID:	SCITP 24A	Sampled:	04/26/97
Lab ID:	129080-008	Received:	04/28/97
Matrix:	Water	Extracted:	04/28/97
Batch#:	33692	Analyzed:	05/13/97
Units:	ug/L		
Diln Fac:	50		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	4700
3-Nitroaniline	ND	24000
Acenaphthene	ND	4700
Dibenzofuran	ND	4700
2,4-Dinitrotoluene	ND	4700
Diethylphthalate	ND	4700
4-Chlorophenyl-phenylether	ND	4700
Fluorene	ND	4700
4-Nitroaniline	ND	24000
N-Nitrosodiphenylamine	ND	4700
Azobenzene	ND	4700
4-Bromophenyl-phenylether	ND	4700
Hexachlorobenzene	ND	4700
Phenanthrene	ND	4700
Anthracene	ND	4700
Di-n-butylphthalate	ND	4700
Fluoranthene	ND	4700
Pyrene	ND	4700
Butylbenzylphthalate	ND	4700
3,3'-Dichlorobenzidine	ND	24000
Benzo(a)anthracene	ND	4700
Chrysene	ND	4700
bis(2-Ethylhexyl)phthalate	ND	4700
Di-n-octylphthalate	ND	4700
Benzo(b)fluoranthene	ND	4700
Benzo(k)fluoranthene	ND	4700
Benzo(a)pyrene	ND	4700
Indeno(1,2,3-cd)pyrene	ND	4700
Dibenz(a,h)anthracene	ND	4700
Benzo(g,h,i)perylene	ND	4700

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

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33713
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 05/05/97

MB Lab ID: QC45067

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

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33713
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 05/05/97

MB Lab ID: QC45067

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	63	25-121
Phenol-d5	69	24-113
2,4,6-Tribromophenol	57	19-122
Nitrobenzene-d5	72	23-120
2-Fluorobiphenyl	87	30-115
Terphenyl-d14	88	18-137

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129034-020
Matrix: Soil
Batch#: 33713
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/22/97
Received Date: 04/22/97
Prep Date: 04/29/97
Analysis Date: 05/05/97

MS Lab ID: QC45069

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Phenol	3333	<333.3	2303	69	26-90
2-Chlorophenol	3333	<333.3	2471	74	25-102
4-Chloro-3-methylphenol	3333	<333.3	2299	69	26-103
4-Nitrophenol	3333	<1667	1923	58	11-114
Pentachlorophenol	3333	<1667	692.5	21	17-109
1,4-Dichlorobenzene	1667	<333.3	998.3	60	28-104
N-Nitroso-di-n-propylamine	1667	<333.3	1007	60	41-126
1,2,4-Trichlorobenzene	1667	<333.3	1121	67	38-107
Acenaphthene	1667	<333.3	1247	75	31-137
2,4-Dinitrotoluene	1667	<333.3	886.8	53	28-89
Pyrene	1667	<333.3	1124	67	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	65	25-121
Phenol-d5	67	24-113
2,4,6-Tribromophenol	59	19-122
Nitrobenzene-d5	72	23-120
2-Fluorobiphenyl	80	30-115
Terphenyl-d14	81	18-137

MSD Lab ID: QC45070

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Phenol	3333	2438	73	26-90	6	35
2-Chlorophenol	3333	2607	78	25-102	5	50
4-Chloro-3-methylphenol	3333	2583	77	26-103	11	33
4-Nitrophenol	3333	2257	68	11-114	16	50
Pentachlorophenol	3333	1056	32	17-109	42	47
1,4-Dichlorobenzene	1667	1096	66	28-104	10	27
N-Nitroso-di-n-propylamine	1667	1045	63	41-126	5	38
1,2,4-Trichlorobenzene	1667	1227	74	38-107	10	23
Acenaphthene	1667	1407	84	31-137	11	19
2,4-Dinitrotoluene	1667	1018	61	28-89	14	47
Pyrene	1667	1367	82	35-142	20	36

Surrogate	%Rec	Limits
2-Fluorophenol	69	25-121
Phenol-d5	71	24-113
2,4,6-Tribromophenol	70	19-122
Nitrobenzene-d5	78	23-120
2-Fluorobiphenyl	90	30-115
Terphenyl-d14	95	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

Lab #: 129080

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33713
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/29/97
Analysis Date: 05/05/97

LCS Lab ID: QC45068

Analyte	Result	Spike Added	%Rec #	Limits
Phenol	2544	3333	76	26-90
2-Chlorophenol	2652	3333	80	25-102
4-Chloro-3-methylphenol	2576	3333	77	26-103
4-Nitrophenol	2177	3333	65	11-114
Pentachlorophenol	2066	3333	62	17-109
1,4-Dichlorobenzene	1221	1667	73	28-104
N-Nitroso-di-n-propylamine	819.2	1667	49	41-126
1,2,4-Trichlorobenzene	1260	1667	76	38-107
Acenaphthene	1426	1667	86	31-137
2,4-Dinitrotoluene	930.4	1667	56	28-89
Pyrene	1367	1667	82	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	69	25-121
Phenol-d5	72	24-113
2,4,6-Tribromophenol	67	19-122
Nitrobenzene-d5	75	23-120
2-Fluorobiphenyl	88	30-115
Terphenyl-d14	92	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

MB Lab ID: QC44978

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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

MB Lab ID: QC44978

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	55	21-110
Phenol-d5	60	10-110
2,4,6-Tribromophenol	57	10-123
Nitrobenzene-d5	67	35-114
2-Fluorobiphenyl	73	43-116
Terphenyl-d14	81	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33692
Units: ug/L
Diln Fac: 1

Prep Date: 04/28/97
Analysis Date: 05/05/97

BS Lab ID: QC44979

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	100	69.05	69	12-110
2-Chlorophenol	100	74.39	74	27-123
4-Chloro-3-methylphenol	100	69.07	69	23-97
4-Nitrophenol	100	58.92	59	10-80
Pentachlorophenol	100	52.29	52	9-103
1,4-Dichlorobenzene	50	34.82	70	36-97
N-Nitroso-di-n-propylamine	50	30.37	61	41-116
1,2,4-Trichlorobenzene	50	35.47	71	39-98
Acenaphthene	50	40.65	81	46-118
2,4-Dinitrotoluene	50	26.9	54	24-96
Pyrene	50	40.05	80	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	63	21-110
Phenol-d5	66	10-110
2,4,6-Tribromophenol	67	10-123
Nitrobenzene-d5	74	35-114
2-Fluorobiphenyl	81	43-116
Terphenyl-d14	89	33-141

BSD Lab ID: QC44980

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	100	69.24	69	12-110	0	42
2-Chlorophenol	100	74.78	75	27-123	1	40
4-Chloro-3-methylphenol	100	72.09	72	23-97	4	42
4-Nitrophenol	100	62.52	63	10-80	7	50
Pentachlorophenol	100	51.97	52	9-103	0	50
1,4-Dichlorobenzene	50	35.43	71	36-97	1	28
N-Nitroso-di-n-propylamine	50	31.29	63	41-116	3	38
1,2,4-Trichlorobenzene	50	36.92	74	39-98	4	28
Acenaphthene	50	42.21	84	46-118	4	31
2,4-Dinitrotoluene	50	28.38	57	24-96	5	38
Pyrene	50	41.2	82	26-127	2	31

Surrogate	%Rec	Limits
2-Fluorophenol	64	21-110
Phenol-d5	67	10-110
2,4,6-Tribromophenol	71	10-123
Nitrobenzene-d5	78	35-114
2-Fluorobiphenyl	84	43-116
Terphenyl-d14	92	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

Curtis & Tompkins, Ltd.

SAMPLE ID: SCITP 23A@6'
LAB ID: 129080-002
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE SAMPLED: 04/26/97
DATE RECEIVED: 04/28/97
DATE REPORTED: 05/09/97

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.9	1	33688	EPA 6010A	05/01/97
Arsenic	2.9	0.25	1	33688	EPA 6010A	04/29/97
Barium	31	0.49	1	33688	EPA 6010A	04/29/97
Beryllium	0.16	0.098	1	33688	EPA 6010A	04/29/97
Cadmium	0.24	0.098	1	33688	EPA 6010A	04/29/97
Chromium (total)	18	0.49	1	33688	EPA 6010A	04/29/97
Cobalt	6.9	0.98	1	33688	EPA 6010A	04/29/97
Copper	30	0.49	1	33688	EPA 6010A	04/29/97
Lead	28	0.15	1	33688	EPA 6010A	04/29/97
Mercury	0.099	0.091	1	33845	EPA 7471	05/07/97
Molybdenum	ND	0.98	1	33688	EPA 6010A	04/29/97
Nickel	35	0.98	1	33688	EPA 6010A	04/29/97
Selenium	0.51	0.25	1	33688	EPA 6010A	04/29/97
Silver	ND	0.49	1	33688	EPA 6010A	04/29/97
Thallium	ND	0.25	1	33688	EPA 6010A	05/01/97
Vanadium	21	0.49	1	33688	EPA 6010A	04/29/97
Zinc	49	0.98	1	33688	EPA 6010A	04/29/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCITP 24 CANNERYLINE
LAB ID: 129080-006
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE SAMPLED: 04/26/97
DATE RECEIVED: 04/28/97
DATE REPORTED: 05/19/97

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3.0	1	33688	EPA 6010A	05/16/97
Arsenic	11	0.25	1	33688	EPA 6010A	04/29/97
Barium	70	0.50	1	33688	EPA 6010A	04/29/97
Beryllium	ND	0.10	1	33688	EPA 6010A	04/29/97
Cadmium	3.2	0.10	1	33688	EPA 6010A	04/29/97
Chromium (total)	37	0.50	1	33688	EPA 6010A	04/29/97
Cobalt	5.6	1.0	1	33688	EPA 6010A	04/29/97
Copper	75	0.50	1	33688	EPA 6010A	04/29/97
Lead	400	0.15	1	33688	EPA 6010A	04/29/97
Mercury	0.23	0.091	1	33845	EPA 7471	05/07/97
Molybdenum	1.7	1.0	1	33688	EPA 6010A	04/29/97
Nickel	28	1.0	1	33688	EPA 6010A	04/29/97
Selenium	1.4	0.25	1	33688	EPA 6010A	05/01/97
Silver	ND	0.50	1	33688	EPA 6010A	04/29/97
Thallium	ND	0.25	1	33688	EPA 6010A	05/01/97
Vanadium	22	0.50	1	33688	EPA 6010A	04/29/97
Zinc	10000	100	100	33688	EPA 6010A	05/01/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCITP 23A
LAB ID: 129080-007
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Filtrate

DATE SAMPLED: 04/26/97
DATE RECEIVED: 04/28/97
DATE REPORTED: 05/09/97

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	33717	EPA 6010A	05/01/97
Arsenic	18	5.0	1	33717	EPA 6010A	05/01/97
Barium	170	10	1	33717	EPA 6010A	05/01/97
Beryllium	ND	2.0	1	33717	EPA 6010A	05/01/97
Cadmium	ND	5.0	1	33717	EPA 6010A	05/01/97
Chromium (total)	ND	10	1	33717	EPA 6010A	05/01/97
Cobalt	ND	20	1	33717	EPA 6010A	05/01/97
Copper	ND	10	1	33717	EPA 6010A	05/01/97
Lead	4.1	3.0	1	33717	EPA 6010A	05/01/97
Mercury	0.21	0.20	1	33872	EPA 7470	05/08/97
Molybdenum	ND	20	1	33717	EPA 6010A	05/01/97
Nickel	ND	20	1	33717	EPA 6010A	05/01/97
Selenium	14	5.0	1	33717	EPA 6010A	05/01/97
Silver	ND	5.0	1	33717	EPA 6010A	05/01/97
Thallium	ND	5.0	1	33717	EPA 6010A	05/01/97
Vanadium	ND	10	1	33717	EPA 6010A	05/01/97
Zinc	ND	20	1	33717	EPA 6010A	05/01/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCITP 24A
LAB ID: 129080-008
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Filtrate

DATE SAMPLED: 04/26/97
DATE RECEIVED: 04/28/97
DATE REPORTED: 05/09/97

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	33717	EPA 6010A	05/01/97
Arsenic	8.0	5.0	1	33717	EPA 6010A	05/01/97
Barium	200	10	1	33717	EPA 6010A	05/01/97
Beryllium	ND	2.0	1	33717	EPA 6010A	05/01/97
Cadmium	ND	5.0	1	33717	EPA 6010A	05/01/97
Chromium (total)	ND	10	1	33717	EPA 6010A	05/01/97
Cobalt	ND	20	1	33717	EPA 6010A	05/01/97
Copper	ND	10	1	33717	EPA 6010A	05/01/97
Lead	5.9	3.0	1	33717	EPA 6010A	05/01/97
Mercury	ND	0.20	1	33872	EPA 7470	05/08/97
Molybdenum	ND	20	1	33717	EPA 6010A	05/01/97
Nickel	ND	20	1	33717	EPA 6010A	05/01/97
Selenium	15	5.0	1	33717	EPA 6010A	05/01/97
Silver	ND	5.0	1	33717	EPA 6010A	05/01/97
Thallium	ND	5.0	1	33717	EPA 6010A	05/01/97
Vanadium	ND	10	1	33717	EPA 6010A	05/01/97
Zinc	ND	20	1	33717	EPA 6010A	05/01/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129080
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/26/97
DATE RECEIVED: 04/28/97
DATE ANALYZED: 05/08/97
BATCH#: 33880

ANALYSIS: HEXAVALENT CHROMIUM
ANALYSIS METHOD: EPA 7196A

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129080-002	SCITP 23A@6'	ND	mg/Kg	0.05
129080-004	SCITP 23B@6'	ND	mg/Kg	0.05
129080-006	SCITP 24 CANNERYLINE	ND	mg/Kg	0.05
METHOD BLANK	N/A	ND	mg/Kg	0.05

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: MS/SAMPLE DUPLICATE OF SAMPLE NO:129097-004

RPD, %	<1
RECOVERY, %	97

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129080
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/26/97
DATE RECEIVED: 04/28/97
DATE ANALYZED: 04/28/97
BATCH#: 33696

ANALYSIS: HEXAVALENT CHROMIUM
ANALYSIS METHOD: EPA 7196

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129080-007	SCITP 23A	0.06	mg/L	0.01
129080-008	SCITP 24A	0.03	mg/L	0.01
METHOD BLANK	N/A	ND	mg/L	0.01

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: LCS/SAMPLE DUPLICATE OF 129080-008

RPD, %	<1
RECOVERY, %	95

Curtis & Tompkins, Ltd.

SAMPLE ID: SCITP 23B@6'
LAB ID: 129080-004
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE SAMPLED: 04/26/97
DATE RECEIVED: 04/28/97
DATE REPORTED: 05/09/97

Metals Analytical Report

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Lead	3.2	0.15	1	33688	EPA 6010A	04/29/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129080

DATE REPORTED: 05/19/97

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3	mg/Kg	1	33688	EPA 6010A	04/29/97
Antimony	ND	60	ug/L	1	33717	EPA 6010A	04/30/97
Arsenic	ND	0.25	mg/Kg	1	33688	EPA 6010A	04/29/97
Arsenic	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Barium	ND	0.5	mg/Kg	1	33688	EPA 6010A	04/29/97
Barium	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Beryllium	ND	0.1	mg/Kg	1	33688	EPA 6010A	04/29/97
Beryllium	ND	2	ug/L	1	33717	EPA 6010A	04/30/97
Cadmium	ND	0.1	mg/Kg	1	33688	EPA 6010A	04/29/97
Cadmium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Chromium (total)	ND	0.5	mg/Kg	1	33688	EPA 6010A	04/29/97
Chromium (total)	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Cobalt	ND	1	mg/Kg	1	33688	EPA 6010A	04/29/97
Cobalt	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Copper	ND	0.5	mg/Kg	1	33688	EPA 6010A	04/29/97
Copper	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Lead	ND	0.15	mg/Kg	1	33688	EPA 6010A	04/29/97
Lead	ND	3	ug/L	1	33717	EPA 6010A	04/30/97
Mercury	ND	0.1	mg/Kg	1	33845	EPA 7471	05/07/97
Mercury	ND	0.2	ug/L	1	33872	EPA 7470	05/08/97
Molybdenum	ND	1	mg/Kg	1	33688	EPA 6010A	04/29/97
Molybdenum	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Nickel	ND	1	mg/Kg	1	33688	EPA 6010A	04/29/97
Nickel	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Selenium	ND	0.25	mg/Kg	1	33688	EPA 6010A	04/29/97
Selenium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Silver	ND	0.5	mg/Kg	1	33688	EPA 6010A	04/29/97
Silver	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Thallium	ND	0.25	mg/Kg	1	33688	EPA 6010A	04/29/97
Thallium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129080

DATE REPORTED: 05/19/97

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Vanadium	ND	0.5	mg/Kg	1	33688	EPA 6010A	04/29/97
Vanadium	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Zinc	ND	1	mg/Kg	1	33688	EPA 6010A	04/29/97
Zinc	ND	20	ug/L	1	33717	EPA 6010A	04/30/97

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129080

DATE REPORTED: 05/19/97

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	25	25.3	25	mg/Kg	101	100	80-120	1	35	33688	EPA 6010A	04/30/97
Antimony	500	491	531	ug/L	98	106	80-120	8	35	33717	EPA 6010A	04/30/97
Arsenic	100	97	97.5	mg/Kg	97	98	80-120	1	35	33688	EPA 6010A	04/30/97
Arsenic	2000	2060	2080	ug/L	103	104	80-120	1	35	33717	EPA 6010A	04/30/97
Barium	100	98	98	mg/Kg	98	98	80-120	0	35	33688	EPA 6010A	04/30/97
Barium	2000	2000	1990	ug/L	100	100	80-120	1	35	33717	EPA 6010A	04/30/97
Beryllium	2.5	2.55	2.575	mg/Kg	102	103	80-120	1	35	33688	EPA 6010A	04/30/97
Beryllium	50	52.1	53.1	ug/L	104	106	80-120	2	35	33717	EPA 6010A	04/30/97
Cadmium	2.5	2.58	2.62	mg/Kg	103	105	80-120	2	35	33688	EPA 6010A	04/30/97
Cadmium	50	53.3	53.9	ug/L	107	108	80-120	1	35	33717	EPA 6010A	04/30/97
Chromium (total)	10	9.7	9.8	mg/Kg	97	98	80-120	1	35	33688	EPA 6010A	04/30/97
Chromium (total)	200	197	202	ug/L	99	101	80-120	3	35	33717	EPA 6010A	04/30/97
Cobalt	25	25.3	25.55	mg/Kg	101	102	80-120	1	35	33688	EPA 6010A	04/30/97
Cobalt	500	511	522	ug/L	102	104	80-120	2	35	33717	EPA 6010A	04/30/97
Copper	12.5	12.85	12.9	mg/Kg	103	103	80-120	0	35	33688	EPA 6010A	04/30/97
Copper	250	254	257	ug/L	102	103	80-120	1	35	33717	EPA 6010A	04/30/97
Lead	25	24.3	24.5	mg/Kg	97	98	80-120	1	35	33688	EPA 6010A	04/30/97
Lead	500	507	514	ug/L	101	103	80-120	1	35	33717	EPA 6010A	04/30/97
Mercury	5	4.729	4.815	ug/L	95	96	80-120	2	35	33845	EPA 7470	05/07/97
Mercury	5	5.163	5.671	ug/L	103	113	80-120	9	35	33872	EPA 7470	05/08/97
Molybdenum	20	22.75	23.05	mg/Kg	114	115	80-120	1	35	33688	EPA 6010A	04/30/97
Molybdenum	400	454	466	ug/L	114	117	80-120	3	35	33717	EPA 6010A	04/30/97
Nickel	25	24.95	25.1	mg/Kg	100	100	80-120	1	35	33688	EPA 6010A	04/30/97
Nickel	500	506	511	ug/L	101	102	80-120	1	35	33717	EPA 6010A	04/30/97
Selenium	100	96.5	97	mg/Kg	97	97	80-120	1	35	33688	EPA 6010A	04/30/97
Selenium	2000	1960	1980	ug/L	98	99	80-120	1	35	33717	EPA 6010A	04/30/97
Silver	5	5.1	5.1	mg/Kg	102	102	80-120	0	35	33688	EPA 6010A	04/30/97
Silver	100	109	111	ug/L	109	111	80-120	2	35	33717	EPA 6010A	04/30/97
Thallium	100	94	95	mg/Kg	94	95	80-120	1	35	33688	EPA 6010A	04/30/97
Thallium	2000	1970	2010	ug/L	99	101	80-120	2	35	33717	EPA 6010A	04/30/97
Vanadium	25	25.25	25.45	mg/Kg	101	102	80-120	1	35	33688	EPA 6010A	04/30/97
Vanadium	500	514	521	ug/L	103	104	80-120	1	35	33717	EPA 6010A	04/30/97
Zinc	25	23.7	23.9	mg/Kg	95	96	80-120	1	35	33688	EPA 6010A	04/30/97
Zinc	500	451	457	ug/L	90	91	80-120	1	35	33717	EPA 6010A	04/30/97

CHAIN OF CUSTODY FORM

129080

PAGE 1 OF 2

PROJECT NAME: KOT

JOB NUMBER: 133.004 LAB: C&T

PROJECT CONTACT: Jerome DeVerniex TURNAROUND: Standard

SAMPLED BY: John Wolfe REQUESTED BY: JWA

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	Sludge	CONTAINERS: VOA	LITER	PINT	TUBE	OTHER	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH/BTEX	TEH (C13-M)	8010	Lead	8015	8240	8270	Heavy Metals	Chromium VI
-1	SCITP23A2'		X							X					X		04	26	97				X							
-2	SCITP23A6'		X							X					X		04	26	97			X	X	X	X	X	X	X	X	X
-3	SCITP23Ba3'		X							X					X		04	26	97				X							
-4	SCITP23Ba6'		X							X					X		04	26	97			X	X	X	X	X	X			X
-5	SCITP24A2.5		X																				X		X				
-6	SCITP24Concrete Line Contact					X				X	X				X		04	26	97			X	X	X		X	X	X	X	X
															X		04	26	97			X	X	X		X	X	X	X	X

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dennis Alexander	4/25/97 1:20 p.m.	[signature]	4/28/97 1317
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:

Subsurface Consultants, Inc.

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

(510) 268-0461 • FAX: 510-268-0137

CHAIN OF CUSTODY FORM

129080

PROJECT NAME: KOT

JOB NUMBER: 133004 LAB: CLT

PROJECT CONTACT: Jerome DeVerniere TURNAROUND: STANDARD

SAMPLED BY: JWolfe REQUESTED BY: JNA

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT	TUBE	Poly 500g		METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE		SAMPLING DATE: MONTH	DAY	YEAR	TIME			NOTES	ANALYSIS REQUESTED: TVH/BTEX	TEH (diesel) 8015	Lead	8010	8270	Heavy Metals	Chromium VI	
X	SCITP 23A	X						4						X			X			04	26	97											
									3								X			04	26	97											
									1					X			X			04	26	97				X	X	X		X	X	X	X
												3					X			04	26	97											
												1				X	X			04	26	97											
8	SCITP 24A	X						4						X			X			04	26	97											
									3								X			04	26	97				X	X	X		X	X	X	X
									1					X			X			04	26	97											
												3					X			04	26	97											
												1				X	X			04	26	97											

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Denis Alexander	4/28/97 1:20 p.m.		4/4/97 13:17
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:

Filter & Fix

Add Cyanide to H2O program 4/29/97 5

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: 15-MAY-97
Lab Job Number: 129097
Project ID: 133.004
Location: 9th Ave. Terminal

Reviewed by: _____

Reviewed by: _____

This package may be reproduced only in its entirety.

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129097

Project Name: 9th Ave. Terminal
Project Number: 133.004

Report Date: 15 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129097-001	SCITP 25@1.5'	Soil	28-APR-97	29-APR-97	08-MAY-97	11000	mg/Kg	50	DLP	33875
129097-004	SCITP 26@3'	Soil	28-APR-97	29-APR-97	08-MAY-97	470	mg/Kg	50	DLP	33875
129097-006	SCITP 27@3.0'	Soil	28-APR-97	29-APR-97	08-MAY-97	ND	mg/Kg	50	DLP	33875

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

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129097

Project Name: 9th Ave. Terminal
Project Number: 133.004

Report Date: 15 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129097-007	SCI TP27	Water	28-APR-97	29-APR-97	07-MAY-97	ND	mg/L	8	DLP	33851

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: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129097
Report Date: 15 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 33875**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	50	mg/Kg	SMWW 17:5520EF	08-MAY-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	88%	SMWW 17:5520EF	08-MAY-97
BSD	87%	SMWW 17:5520EF	08-MAY-97

		Control Limits
Average Spike Recovery	88%	80% - 120%
Relative Percent Difference	1.6%	< 20%

Curtis & Tompkins, Ltd.

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

Client: Subsurface Consultants
Project Name: 9th Ave. Terminal
Project Number: 133.004

Laboratory Login Number: 129097
Report Date: 15 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 33851**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	5	mg/L	SMWW 17:5520BF	07-MAY-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	87%	SMWW 17:5520BF	07-MAY-97
BSD	84%	SMWW 17:5520BF	07-MAY-97

		Control Limits
Average Spike Recovery	85%	80% - 120%
Relative Percent Difference	3.0%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129097-004	SCITP 26@3'	33889	04/28/97	05/10/97	05/10/97	
129097-006	SCITP 27@3.0'	33889	04/28/97	05/10/97	05/10/97	

Matrix: Soil

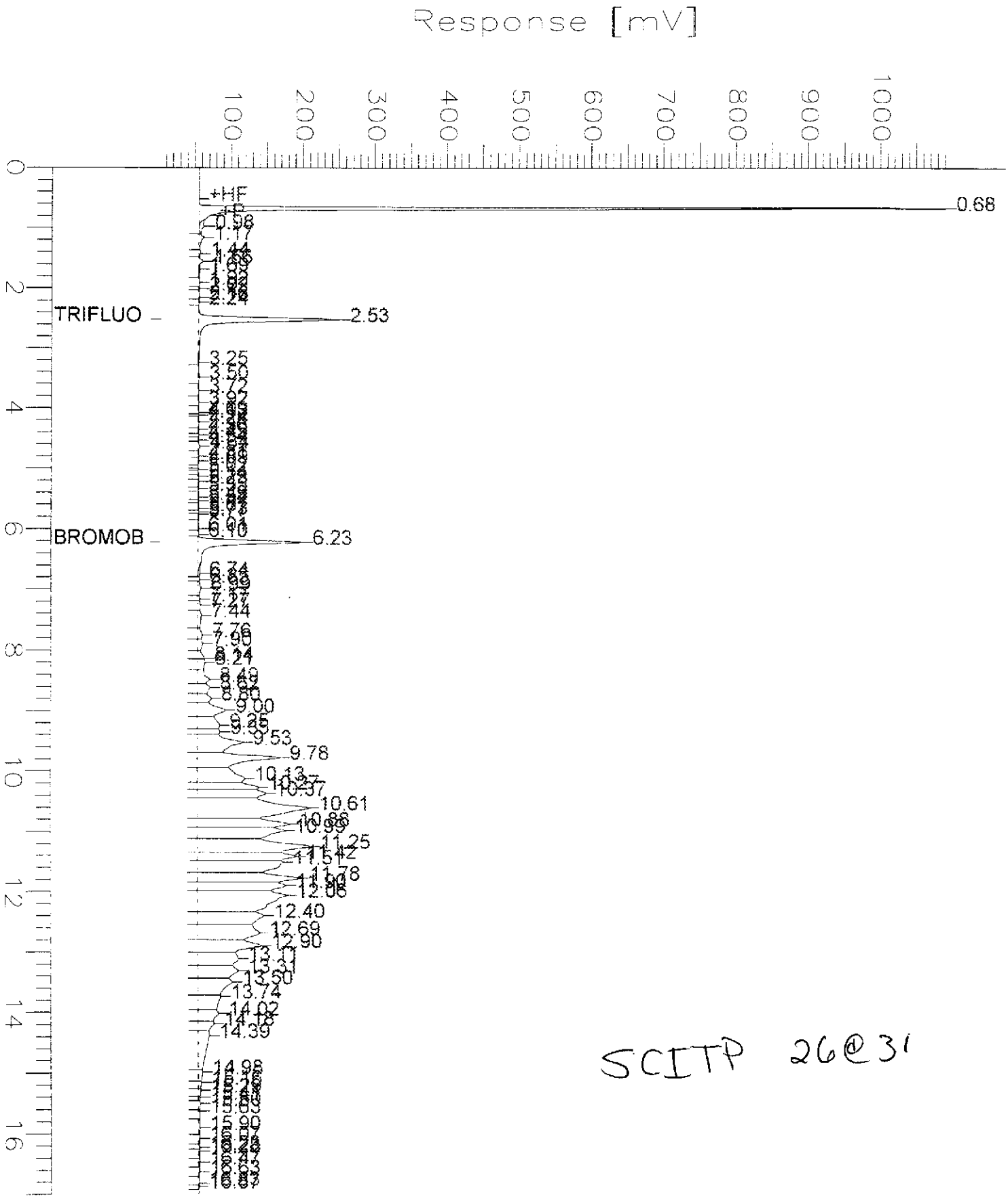
Analyte	Units	129097-004	129097-006
Diln Fac:		50	1
Gasoline	mg/Kg	71 YH	<1
Surrogate			
Trifluorotoluene	%REC	54	52
Bromobenzene	%REC	85	89

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

GC04 TVH 'J' Data File Rtx1FID

Sample Name : D,129097-004,33889,50X
FileName : G:\GC04\DATA\129J030.raw
Method : TVMAR14
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 3 mV

Sample #: Page 1 of 1
Date : 5/10/97 03:41 AM
Time of Injection: 5/10/97 03:24 AM
Low Point : 3.46 mV High Point : 1091.95 mV
Plot Scale: 1088.5 mV

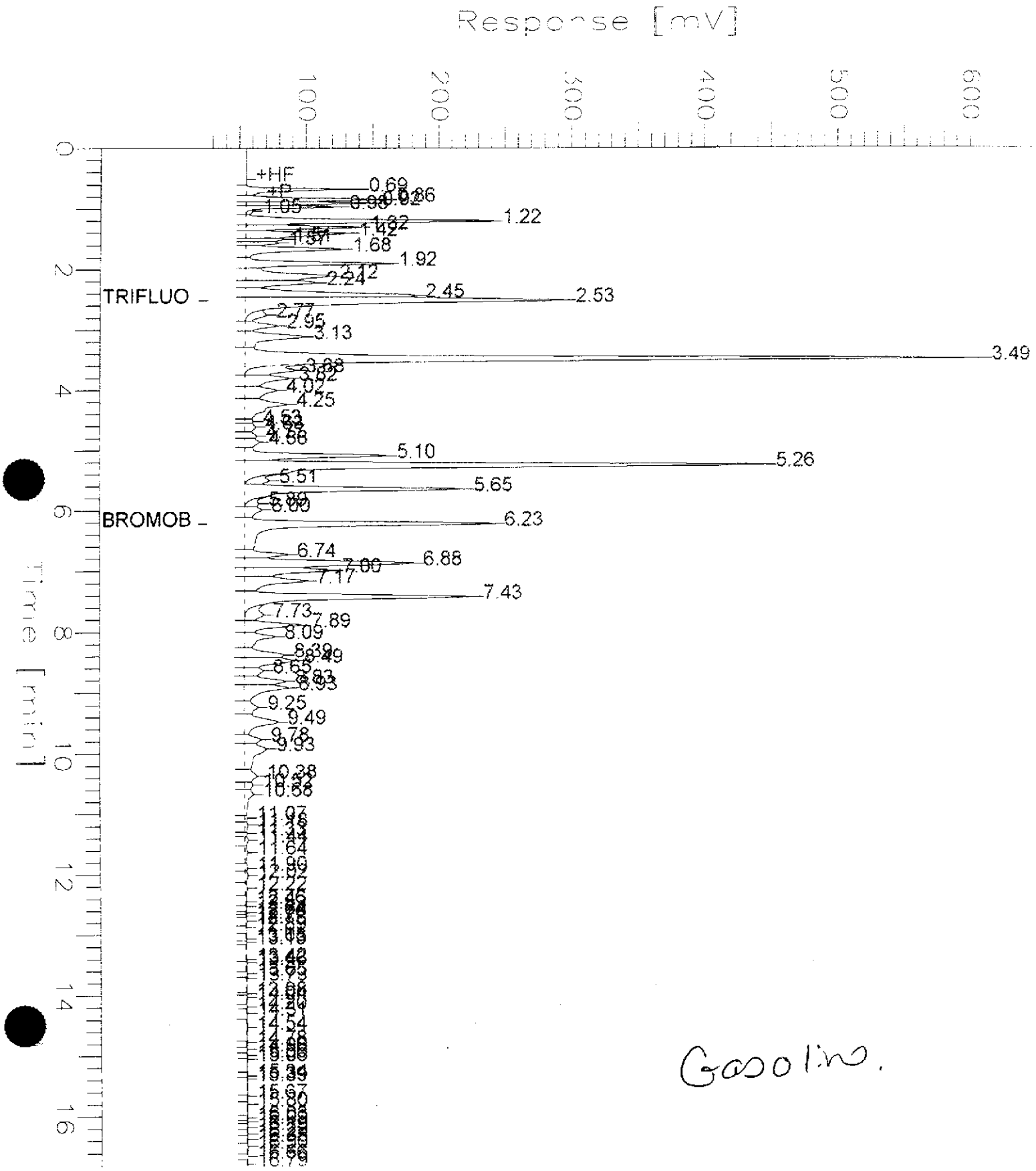


SCITP 26@31

GC04 TVH 'J' Data File Rtx1FID

Sample Name : LCS/CCV,QC45758,33889,
FileName : G:\GC04\DATA\129J002.raw
Method : TVMAR14
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 27 mV

Sample #: 97WS4007 G Page 1 of 1
Date : 5/9/97 10:39 AM
Time of Injection: 5/9/97 10:22 AM
Low Point : 27.20 mV High Point : 610.37 mV
Plot Scale: 583.2 mV



Gasoline.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129097-007	SCI TP27	33744	04/28/97	05/01/97	05/01/97	

Matrix: Water

Analyte	Units	129097-007
Diln Fac:		1
Gasoline	ug/L	<50
Surrogate		
Trifluorotoluene	%REC	82
Bromobenzene	%REC	85

Curtis & Tompkins, Ltd.

Lab #: 129097 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Water	Prep Date:	04/30/97
Batch#:	33744	Analysis Date:	04/30/97
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC45186

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	80	65-135
Bromobenzene	82	65-135

Lab #: 129097

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33744
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

LCS Lab ID: QC45184

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1912	2000	96	75-125
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	82	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

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129102-001
Matrix: Water
Batch#: 33744
Units: ug/L
Diln Fac: 1

Sample Date: 04/25/97
Received Date: 04/29/97
Prep Date: 04/30/97
Analysis Date: 04/30/97

MS Lab ID: QC45187

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50	2047	102	75-125
Surrogate	%Rec	Limits			
Trifluorotoluene	85	65-135			
Bromobenzene	98	65-135			

MSD Lab ID: QC45188

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1990	100	75-125	3	35
Surrogate	%Rec	Limits				
Trifluorotoluene	86	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

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal		

METHOD BLANK

Matrix:	Soil	Prep Date:	05/09/97
Batch#:	33889	Analysis Date:	05/09/97
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC45760

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	52	52-127
Bromobenzene	88	45-140

Curtis & Tompkins, Ltd.

Lab #: 129097 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33889
Units: mg/Kg
Diln Fac: 1

Prep Date: 05/09/97
Analysis Date: 05/09/97

LCS Lab ID: QC45758

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	9.16	10	92	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	79	52-127		
Bromobenzene	115	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

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129217-001
Matrix: Soil
Batch#: 33889
Units: mg/Kg
Diln Fac: 1

Sample Date: 05/07/97
Received Date: 05/08/97
Prep Date: 05/09/97
Analysis Date: 05/09/97

MS Lab ID: QC45761

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	10	2.24	9.21	70	65-135

Surrogate	%Rec	Limits
Trifluorotoluene	104	52-127
Bromobenzene	113	45-140

MSD Lab ID: QC45762

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	10	16.75	145 *	65-135	70 *	30

Surrogate	%Rec	Limits
Trifluorotoluene	95	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: 1 out of 1 outside limits
Spike Recovery: 1 out of 2 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129097-001	SCITP 25@1.5'	33824	04/28/97	05/06/97	05/08/97	
129097-002	SCITP 25@3.5'	33824	04/28/97	05/06/97	05/11/97	
129097-003	SCITP 25@6'	33824	04/28/97	05/06/97	05/08/97	
129097-004	SCITP 26@3'	33824	04/28/97	05/06/97	05/08/97	

Matrix: Soil

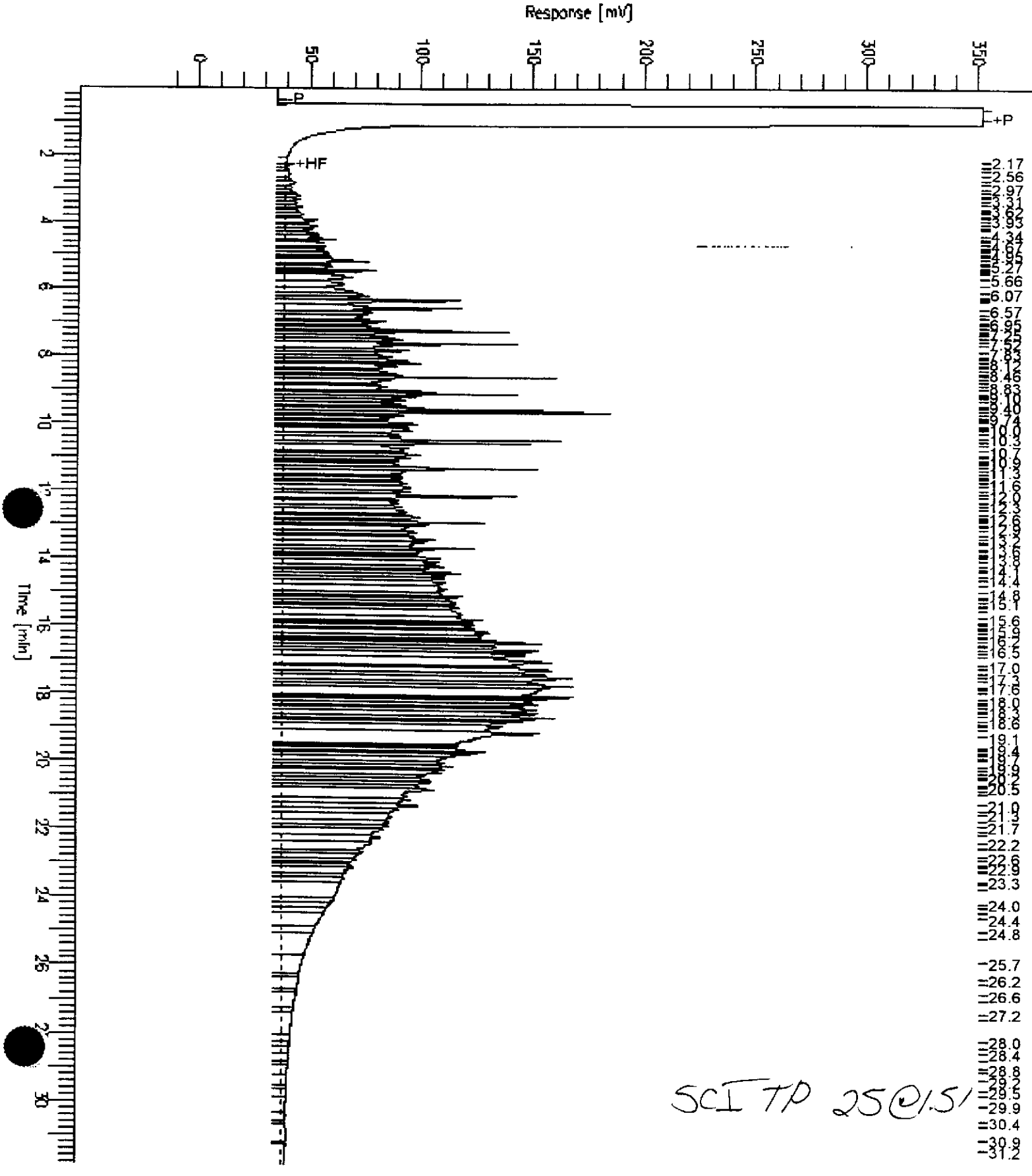
Analyte	Units	129097-001	129097-002	129097-003	129097-004
Diln Fac:		100	20	1	10
Diesel C12-C22	mg/Kg	9000 H	190 YH	14 YH	200 YLH
Motor Oil C22-C50	mg/Kg	13000	1000	62 YHL	610 L
Surrogate					
Hexacosane	%REC	DO	DO	87	DO

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

Chromatogram

Sample Name : 129097-001,33824
FileName : G:\GC13\CHA\127A013.RAW
Method : ATEH129.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -12 mV

Sample #: 33824 Page 1 of 1
Date : 5/9/97 10:59 AM
Time of Injection: 5/8/97 02:24 AM
Low Point : -12.14 mV High Point : 352.39 mV
Plot Scale: 364.5 mV

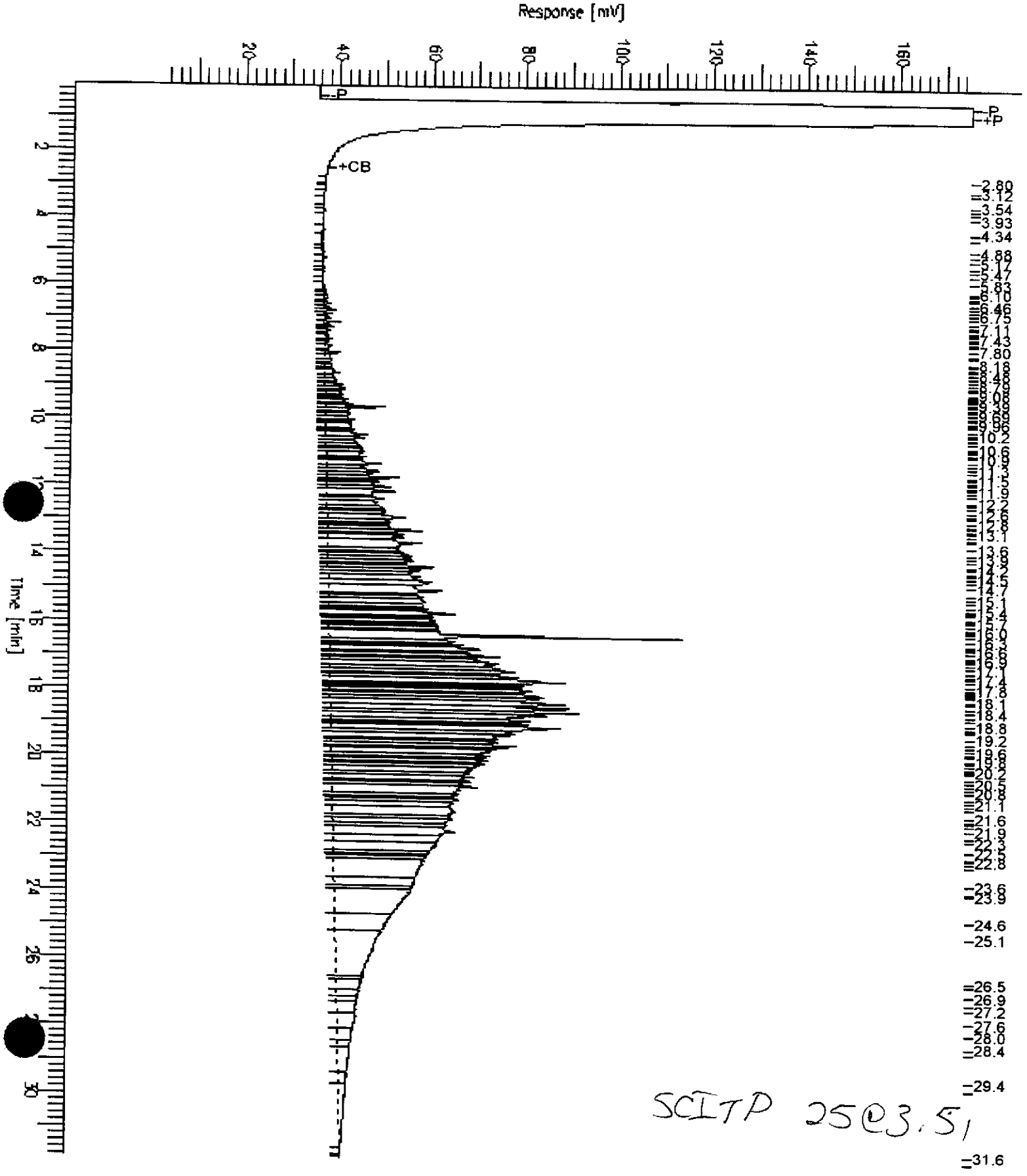


SCI TP 25@1.5/

Chromatogram

Sample Name : 129097-002,33824
FileName : G:\GC13\CHA\129A049.RAW
Method : ATEH129.MTH
Start Time : 0.07 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: 3 mV

Sample #: 33824 Page 1 of 1
Date : 5/19/97 01:38 PM
Time of Injection: 5/11/97 03:42 AM
Low Point : 2.75 mV High Point : 175.46 mV
Plot Scale: 172.7 mV

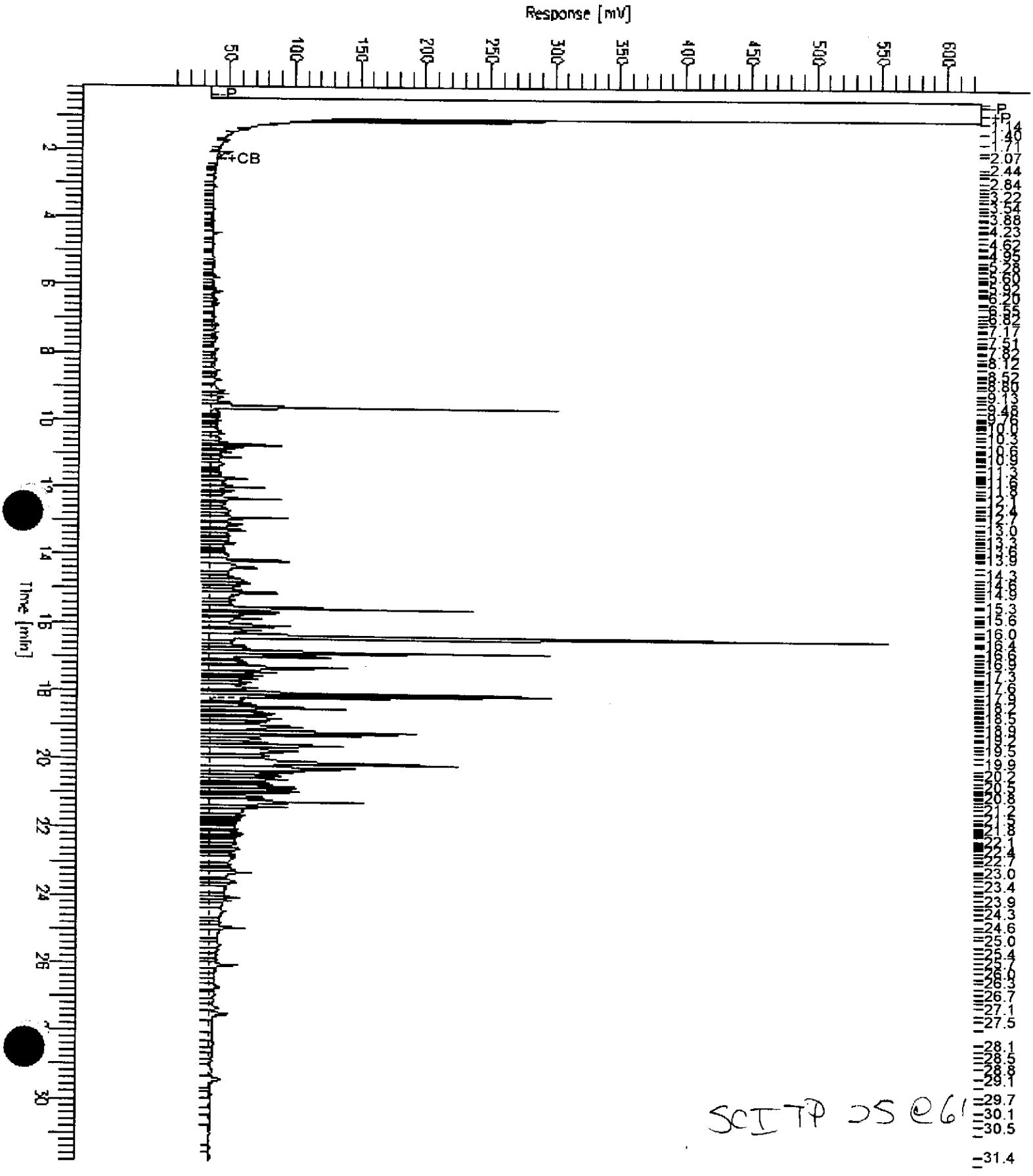


SCITP 2503.5,

Chromatogram

Sample Name : 129097-003,33824
FileName : G:\GC13\CHA\127A015.RAW
Method : ATEH129.MTH
Start Time : 0.12 min End Time : 31.85 min
Slope Factor: 0.0 Plot Offset: 7 mV

Sample #: 33824 Page 1 of 1
Date : 5/15/97 10:20 AM
Time of Injection: 5/8/97 03:49 AM
Low Point : 7.00 mV High Point : 625.85 mV
Plot Scale: 618.9 mV

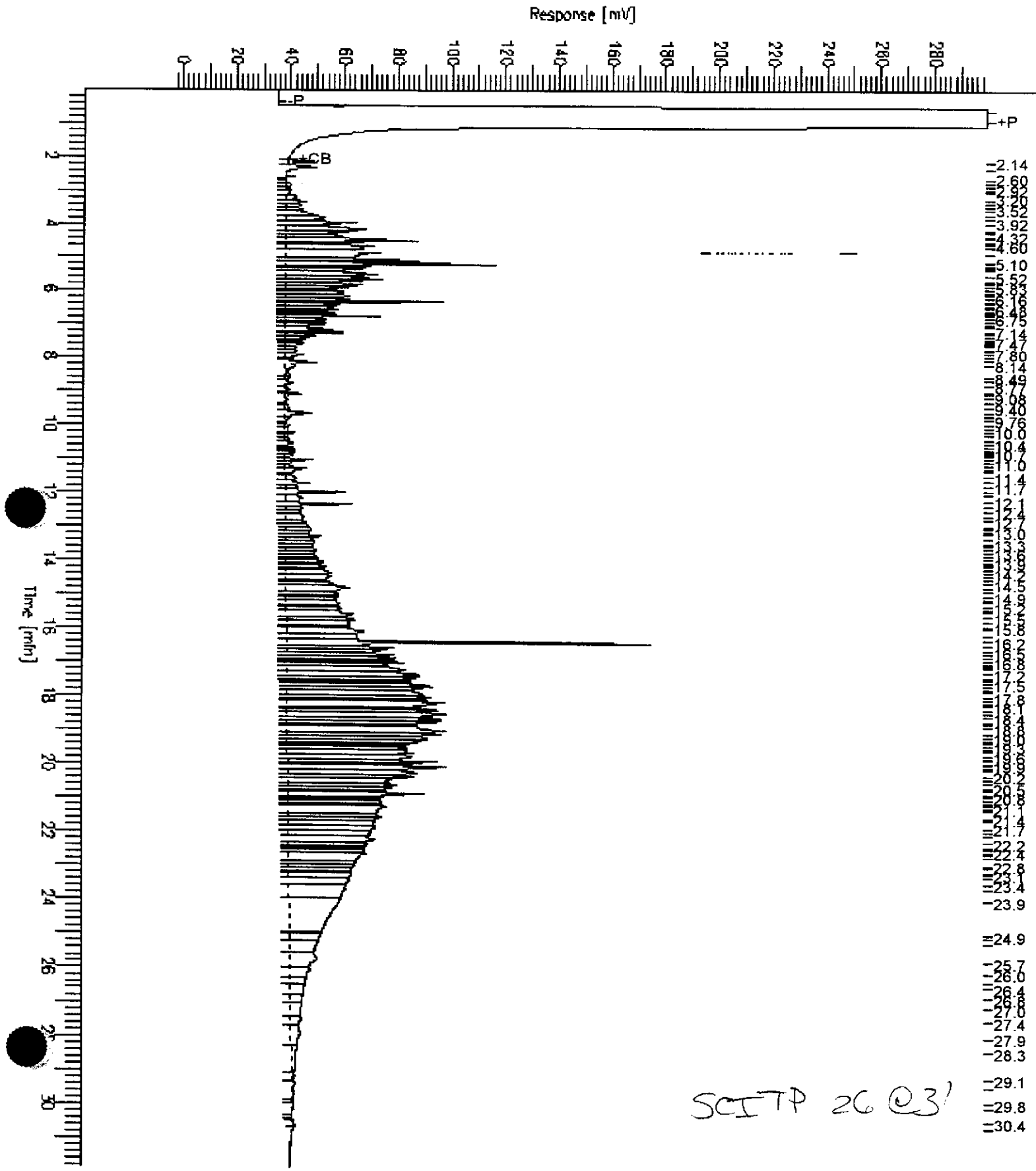


SCI TP 25 @61

Chromatogram

Sample Name : 129097-004,33824
FileName : G:\GC13\CHA\127A016.RAW
Method : ATEH129.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -3 mV

Sample #: 33824 Page 1 of 1
Date : 5/15/97 10:22 AM
Time of Injection: 5/8/97 04:32 AM
Low Point : -2.58 mV High Point : 299.62 mV
Plot Scale: 302.2 mV



SCITP 26 @3'

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129097-005	SCITP 26@5'	33824	04/28/97	05/06/97	05/08/97	
129097-006	SCITP 27@3.0'	33824	04/28/97	05/06/97	05/08/97	

Matrix: Soil

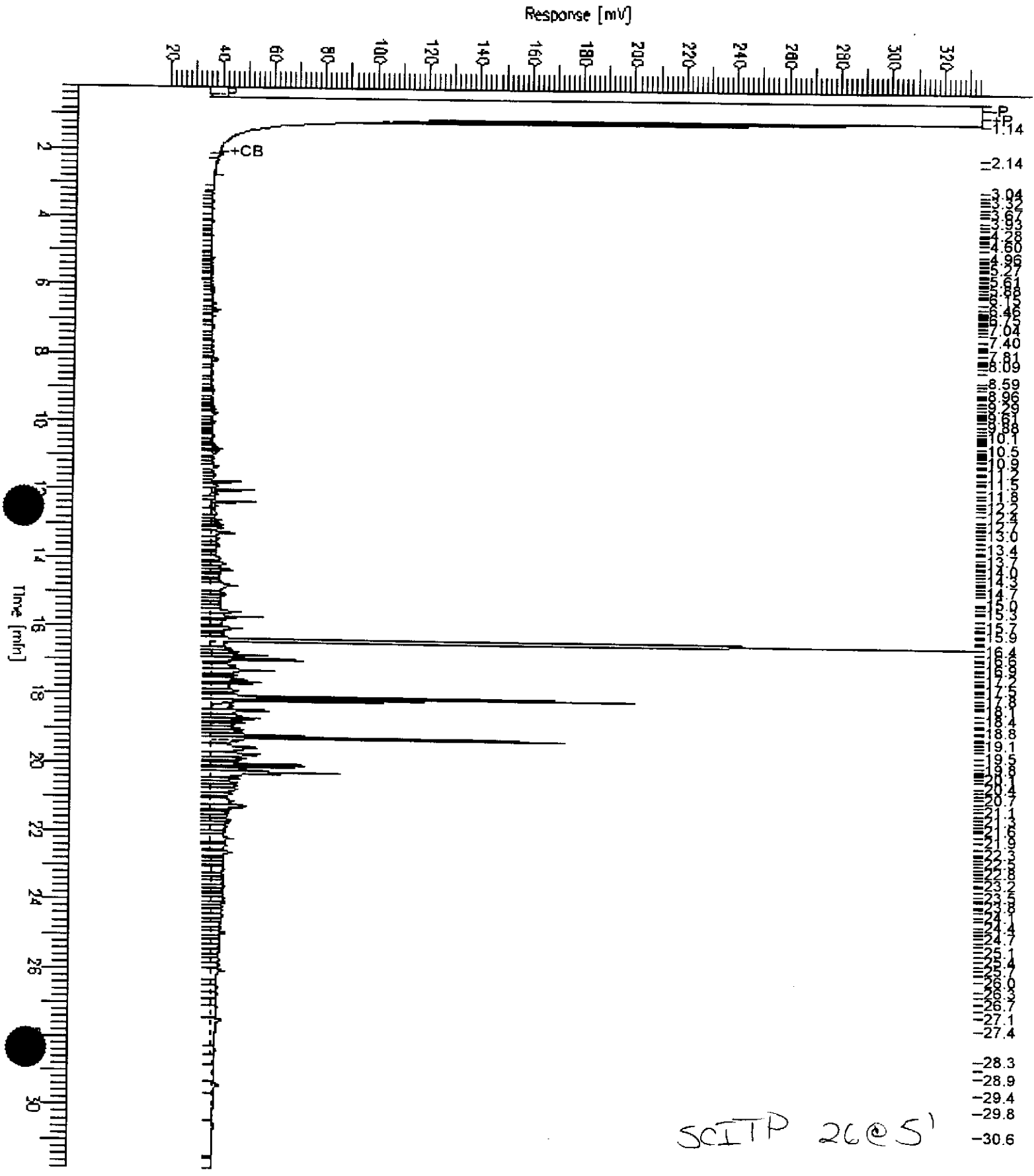
Analyte	Units	129097-005	129097-006
Diln Fac:		1	1
Diesel C12-C22	mg/Kg	2.2YH	14 YH
Motor Oil C22-C50	mg/Kg	17 YH	79 H
Surrogate			
Hexacosane	%REC	73	79

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

Chromatogram

Sample Name : 129097-005,33824
FileName : G:\GC13\CHA\127A017.RAW
Method : ATEH129.MTH
Start Time : 0.17 min End Time : 31.85 min
Slope Factor: 0.0 Plot Offset: 19 mV

Sample #: 33824 Page 1 of 1
Date : 5/15/97 10:24 AM
Time of Injection: 5/8/97 05:14 AM
Low Point : 19.12 mV High Point : 334.76 mV
Plot Scale: 315.6 mV

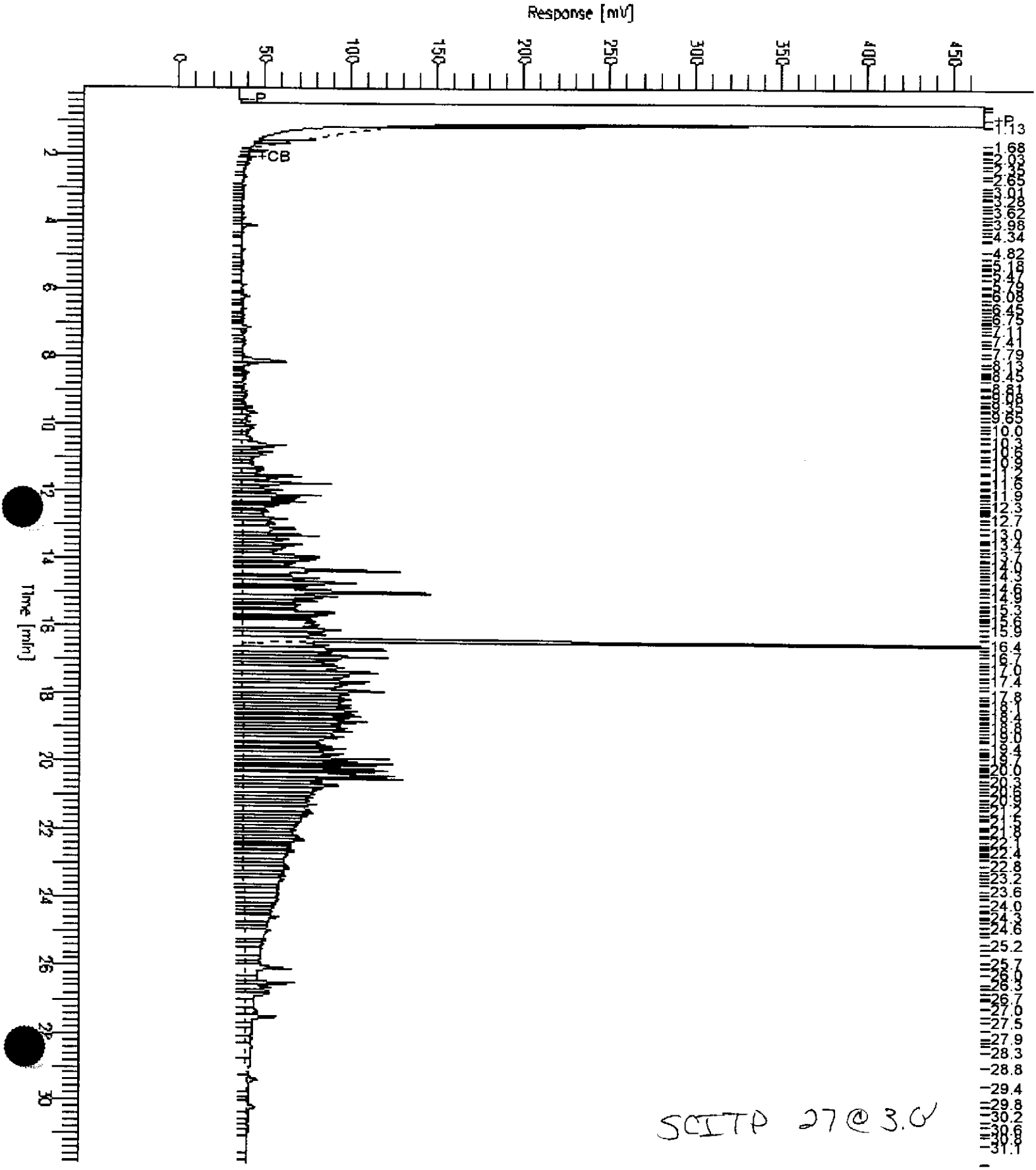


SCITP 26@5'

Chromatogram

Sample Name : 129097-006,33824
FileName : G:\GC13\CHA\127A022.RAW
Method : ATEH129.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -2 mV

Sample #: 33824 Page 1 of 1
Date : 5/15/97 10:26 AM
Time of Injection: 5/8/97 08:48 AM
Low Point : -2.31 mV High Point : 467.67 mV
Plot Scale: 470.0 mV

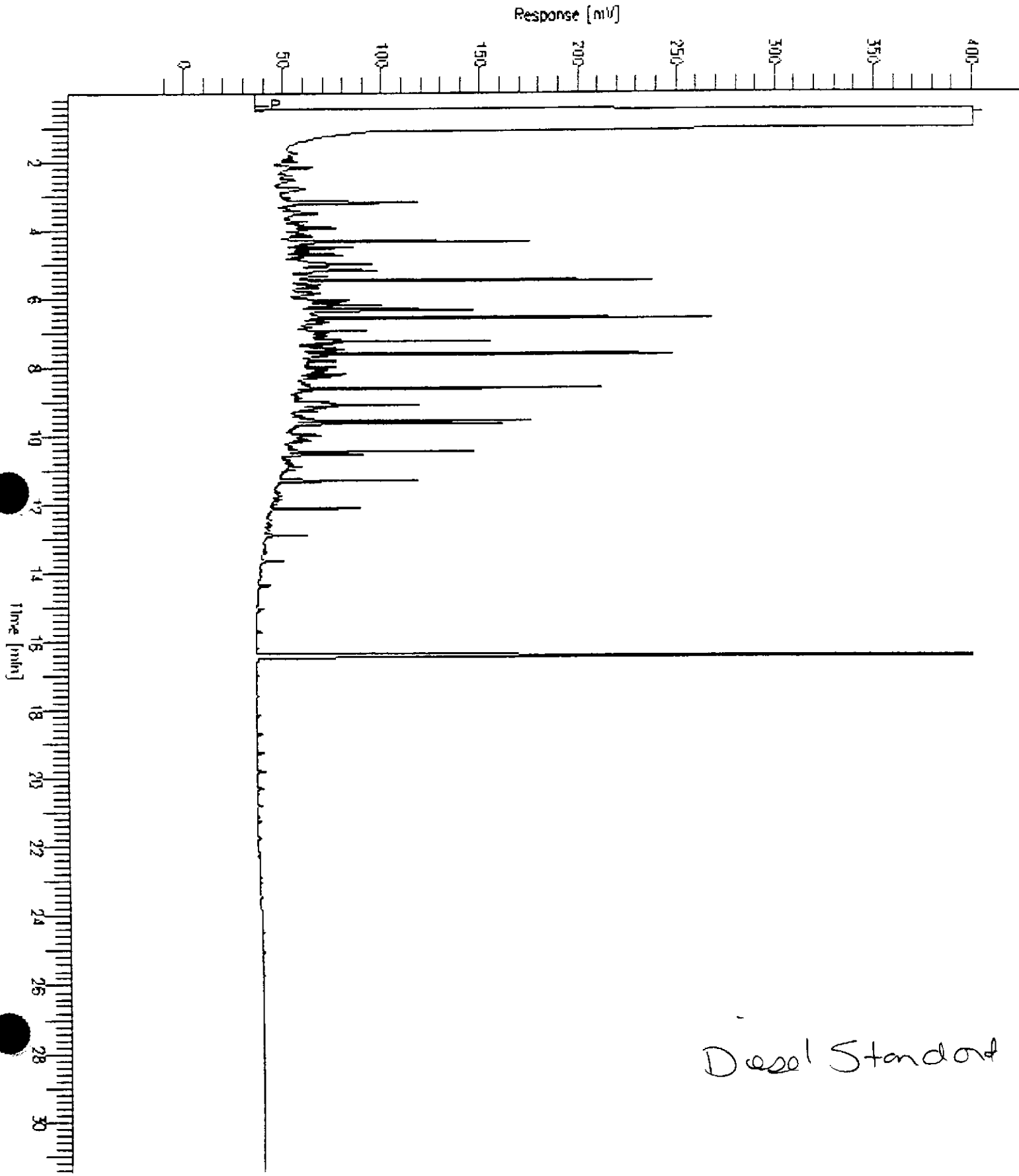


SCITP 27 @ 3.0

Chromatogram

Sample Name : rev,97ws3996,ds
File Name : D:\DATA\CHA\071A014A.RAW
Method : ATEH130.MTH
Start Time : 0.01 min End Time : 31.91 min
Plot Offset: -11 mV

Sample #: 500mg/l Page 1 of 1
Date : 5/5/97 10:35 AM
Time of Injection: 5/5/97 [illegible] PM
Low Point : -11.46 mV High Point : 400.44 mV
Plot Scale: 411.4 mV

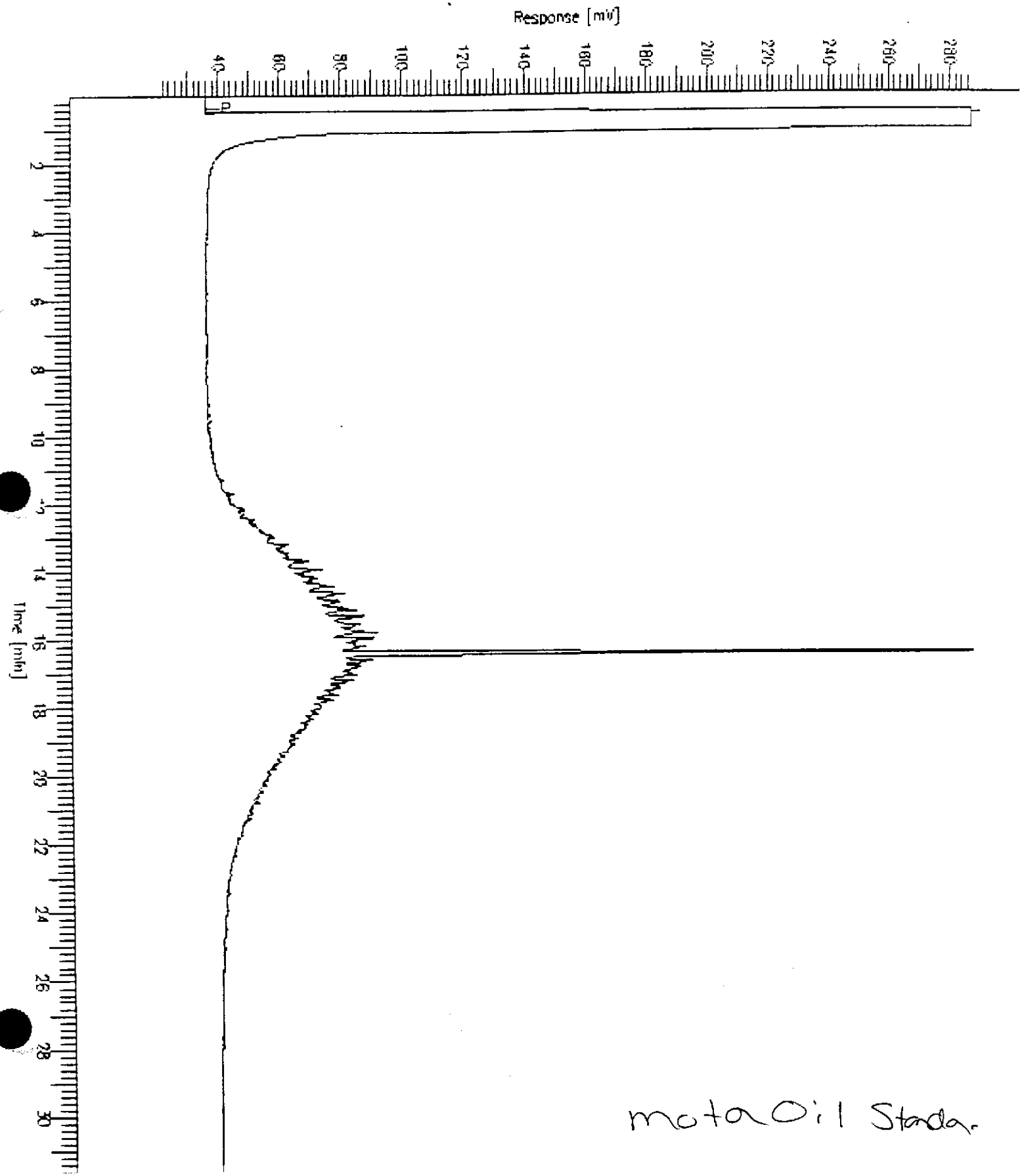


Diesel Standard

Chromatogram

Sample Name : SCV,97WS4082,MO
File Name : G:\GC13\CHA\071A032.RAW
Method : ATEH120.MTH
Start Time : 0.01 min End Time : 31.91 min
Plot Factor : 1.0 Plot Offset: 21 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/5/97 10:20 AM
Time of Injection: 5/3/97 11:12 AM
Low Point : 21.49 mV High Point : 287.29 mV
Plot Scale: 265.8 mV

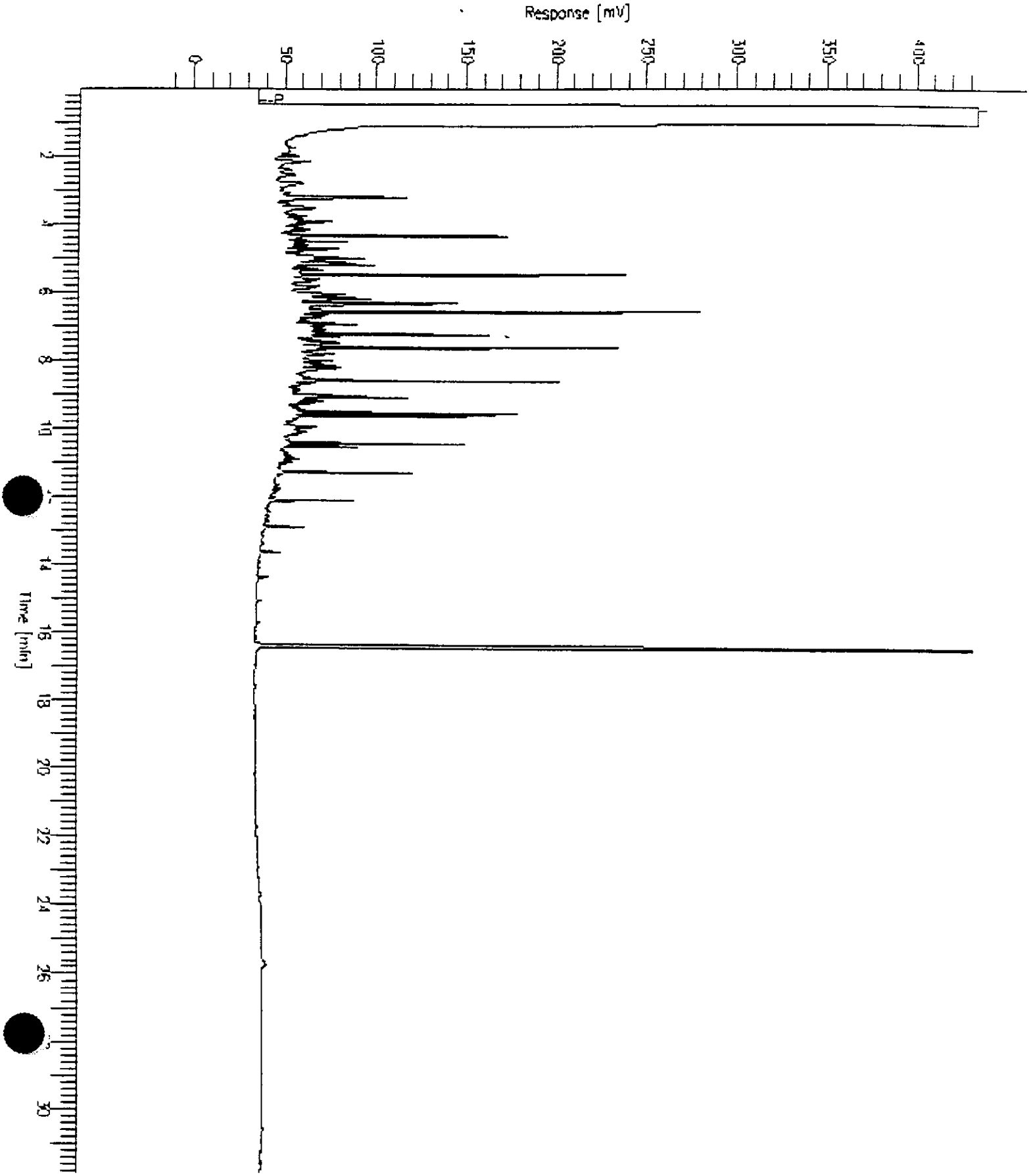


motor Oil Standard

Chromatogram

Sample Name : CCV,97WS4141,DS
FileName : G:\GC13\CHA\127A018.RAW
Method : ATEH129.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: -12 mV

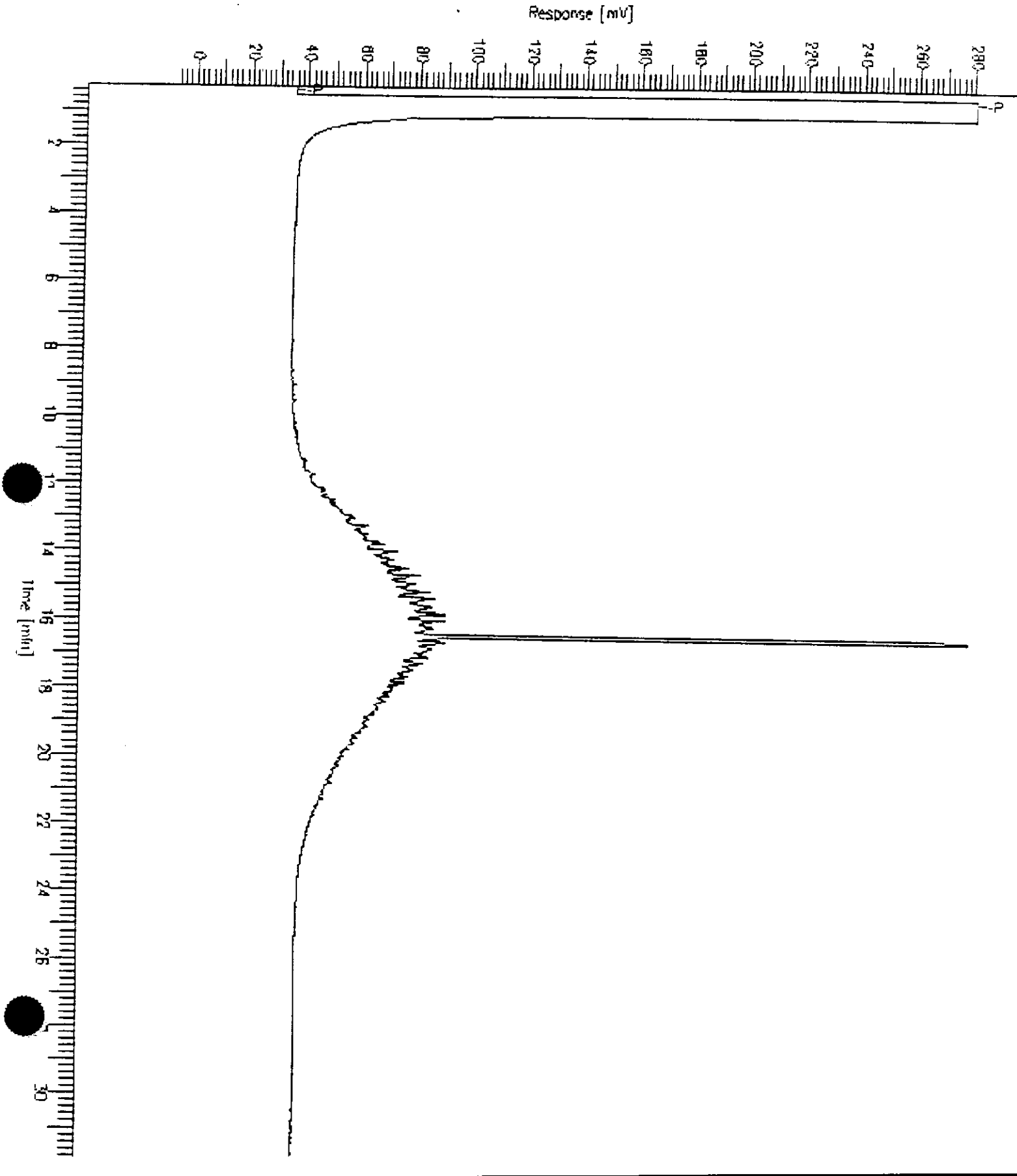
Sample #: 500MG/L Page 1 of 1
Date : 5/9/97 10:41 AM
Time of Injection: 5/8/97 05:57 AM
Low Point : -12.10 mV High Point : 434.04 mV
Plot Scale: 446.1 mV



Chromatogram

Sample Name : CCV,97WS4082,MO
FileName : G:\GC13\CHA\127A021.RAW
Method : ATEH129.MTH
Start Time : 0.24 min End Time : 31.91 min
Sample Factor: 0.0 Plot Offset: -7 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/9/97 10:42 AM
Time of Injection: 5/8/97 08:05 AM
Low Point : -7.10 mV High Point : 280.55 mV
Plot Scale: 287.7 mV



Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129097-007	SCI TP27	33767	04/28/97	05/01/97	05/03/97	

Matrix: Water

Analyte	Units	129097-007
Diln Fac:		1
Diesel C12-C22	ug/L	<50
Motor Oil C22-C50	ug/L	<300
Surrogate		
Hexacosane	%REC	83

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

METHOD BLANK

Matrix: Water
Batch#: 33767
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/03/97

MB Lab ID: QC45277

Analyte	Result	
Diesel C12-C22	<50	
Motor Oil C22-C50	<300	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	83	60-140

Curtis & Tompkins, Ltd.

Lab #: 129097 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

METHOD BLANK

Matrix: Soil
Batch#: 33824
Units: mg/Kg
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/07/97

MB Lab ID: QC45506

Analyte	Result	
Diesel C12-C22	<1.0	
Motor Oil C22-C50	<5.0	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	82	60-140

Curtis & Tompkins, Ltd.

Lab #: 129097 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33767
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/03/97

BS Lab ID: QC45278

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1616	65	60-140
Surrogate	%Rec	Limits		
Hexacosane	74	60-140		

BSD Lab ID: QC45279

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1714	69	60-140	6	35
Surrogate	%Rec	Limits				
Hexacosane	78	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

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33824
Units: mg/Kg
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/07/97

LCS Lab ID: QC45507

Analyte	Result	Spike Added	%Rec #	Limits
Diesel C12-C22	38.2	49.5	77	60-140
Surrogate	%Rec	Limits		
Hexacosane	85	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

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129105-002
Matrix: Soil
Batch#: 33824
Units: mg/Kg
Diln Fac: 1

Sample Date: 04/25/97
Received Date: 04/29/97
Prep Date: 05/06/97
Analysis Date: 05/11/97

MS Lab ID: QC45508

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Diesel C12-C22	49.5	<1	29.54	60	60-140
Surrogate	%Rec	Limits			
Hexacosane	64	60-140			

MSD Lab ID: QC45509

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	49.5	35.49	72	60-140	18	30
Surrogate	%Rec	Limits				
Hexacosane	81	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129097-004	SCITP 26@3'	33889	04/28/97	05/10/97	05/10/97	
129097-006	SCITP 27@3.0'	33889	04/28/97	05/10/97	05/10/97	

Matrix: Soil

Analyte	Units	129097-004	129097-006
Diln Fac:		50	1
Benzene	ug/Kg	<250	<5
Toluene	ug/Kg	<250	<5
Ethylbenzene	ug/Kg	<250	<5
m,p-Xylenes	ug/Kg	<250	<5
o-Xylene	ug/Kg	<250	<5
Surrogate			
Trifluorotoluene	%REC	85	83
Bromobenzene	%REC	110	100

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129097-007	SCI TP27	33744	04/28/97	05/01/97	05/01/97	

Matrix: Water

Analyte	Units	129097-007
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	74
Bromobenzene	%REC	82

Lab #: 129097

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33744
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

MB Lab ID: QC45186

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	73	58-130
Bromobenzene	80	62-131

Curtis & Tompkins, Ltd.

Lab #: 129097 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33744
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

LCS Lab ID: QC45185

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	16.39	20	82	80-120
Toluene	16.91	20	85	80-120
Ethylbenzene	16.99	20	85	80-120
m,p-Xylenes	33.41	40	84	80-120
o-Xylene	17.21	20	86	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	75	58-130
Bromobenzene	85	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33889
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/09/97
Analysis Date: 05/09/97

MB Lab ID: QC45760

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	83	52-127
Bromobenzene	100	45-140

Curtis & Tompkins, Ltd.

Lab #: 129097

BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33889
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/09/97
Analysis Date: 05/09/97

LCS Lab ID: QC45759

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	101	100	101	80-120
Toluene	96.71	100	97	80-120
Ethylbenzene	100.9	100	101	80-120
m,p-Xylenes	179.7	200	90	80-120
o-Xylene	106.5	100	107	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	86	52-127
Bromobenzene	109	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 5 outside limits

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP 25@1.5'	Sampled:	04/28/97
Lab ID:	129097-001	Received:	04/29/97
Matrix:	Soil	Extracted:	05/05/97
Batch#:	33806	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	40		

Analyte	Result	Reporting Limit
alpha-BHC	ND	120
beta-BHC	ND	120
gamma-BHC	ND	120
delta-BHC	ND	120
Heptachlor	ND	120
Aldrin	ND	120
Heptachlor epoxide B	ND	120
Heptachlor epoxide A	ND	120
Endosulfan I	ND	120
Dieldrin	ND	240
4,4'-DDE	ND	240
Endrin	ND	240
Endosulfan II	ND	240
Endosulfan sulfate	ND	240
4,4'-DDD	2600	240
Endrin aldehyde	ND	240
4,4'-DDT	ND	240
Chlordane	ND	1200
Methoxychlor	ND	1200
Toxaphene	ND	2400
Aroclor-1016	ND	480
Aroclor-1221	ND	960
Aroclor-1232	ND	480
Aroclor-1242	ND	480
Aroclor-1248	ND	480
Aroclor-1254	ND	480
Aroclor-1260	ND	480

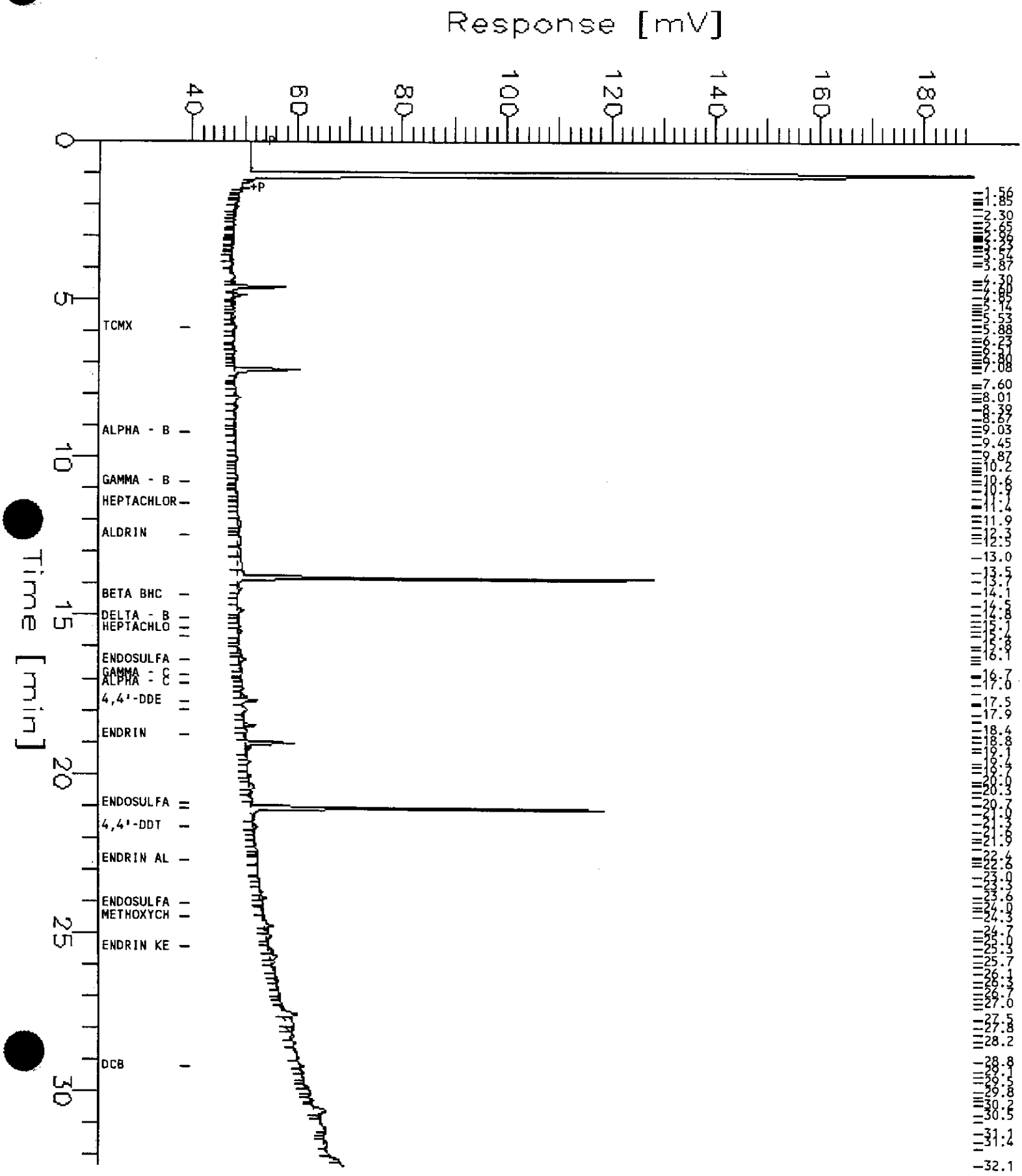
Surrogate	%Recovery	Recovery Limits
TCMX	DO*	29-108
Decachlorobiphenyl	DO*	30-125

* Values outside of QC limits
DO: Surrogate diluted out

GC14 RTx1701.32mm vol in: 3ul

Sample Name : 129097-001
FileName : g:\gc14\cha\132A070.raw
Method : PEST-CNT.ins
Start Time : 0.00 min End Time : 32.35 min
Scale Factor: -1.0 Plot Offset: 40 mV

Sample #: 33806 Page 1 of 1
Date : 5/14/97 05:57 PM
Time of Injection: 5/14/97 05:25 PM
Low Point : 39.59 mV High Point : 189.59 mV
Plot Scale: 150.0 mV



Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		

Field ID:	SCITP 26@3'	Sampled:	04/28/97
Lab ID:	129097-004	Received:	04/29/97
Matrix:	Soil	Extracted:	05/05/97
Batch#:	33806	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	5		

Analyte	Result	Reporting Limit
alpha-BHC	ND	15
beta-BHC	ND	15
gamma-BHC	ND	15
delta-BHC	ND	15
Heptachlor	ND	15
Aldrin	ND	15
Heptachlor epoxide B	ND	15
Heptachlor epoxide A	ND	15
Endosulfan I	ND	15
Dieldrin	ND	30
4,4'-DDE	ND	30
Endrin	ND	30
Endosulfan II	ND	30
Endosulfan sulfate	ND	30
4,4'-DDD	ND	30
Endrin aldehyde	ND	30
4,4'-DDT	ND	30
Chlordane	ND	150
Methoxychlor	ND	150
Toxaphene	ND	300
Aroclor-1016	ND	60
Aroclor-1221	ND	120
Aroclor-1232	ND	60
Aroclor-1242	ND	60
Aroclor-1248	ND	60
Aroclor-1254	ND	60
Aroclor-1260	ND	60

Surrogate	%Recovery	Recovery Limits
TCMX	81	29-108
Decachlorobiphenyl	76	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal		
Field ID:	SCITP 27@3.0'	Sampled:	04/28/97
Lab ID:	129097-006	Received:	04/29/97
Matrix:	Soil	Extracted:	05/05/97
Batch#:	33806	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	93	29-108
Decachlorobiphenyl	71	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		

Field ID:	SCI TP27	Sampled:	04/28/97
Lab ID:	129097-007	Received:	04/29/97
Matrix:	Water	Extracted:	04/30/97
Batch#:	33742	Analyzed:	05/03/97
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	0.047
beta-BHC	ND	0.047
gamma-BHC	ND	0.047
delta-BHC	ND	0.047
Heptachlor	ND	0.047
Aldrin	ND	0.047
Heptachlor epoxide B	ND	0.047
Heptachlor epoxide A	ND	0.047
Endosulfan I	ND	0.047
Dieldrin	ND	0.094
4,4'-DDE	ND	0.094
Endrin	ND	0.094
Endosulfan II	ND	0.094
Endosulfan sulfate	ND	0.094
4,4'-DDD	ND	0.094
Endrin aldehyde	ND	0.094
4,4'-DDT	ND	0.094
Chlordane	ND	0.47
Methoxychlor	ND	0.47
Toxaphene	ND	0.94
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%Recovery	Recovery Limits
TCMX	65	34-128
Decachlorobiphenyl	29*	50-150

* Values outside of QC limits

Curtis & Tompkins, Ltd.

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33742
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 05/02/97

MB Lab ID: QC45178

Analyte	Result	Reporting Limit
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide B	ND	0.05
Heptachlor epoxide A	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
Chlordane	ND	0.5
Methoxychlor	ND	0.5
Toxaphene	ND	1.0
Aroclor-1016	ND	0.5
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.5
Aroclor-1242	ND	0.5
Aroclor-1248	ND	0.5
Aroclor-1254	ND	0.5
Aroclor-1260	ND	0.5

Surrogate	%Rec	Recovery Limits
TCMX	81	34-128
Decachlorobiphenyl	86	50-150

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33742
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 05/02/97

BS Lab ID: QC45179

Analyte	Spike Added	BS	%Rec	#	Limits
gamma-BHC	0.5	0.52	104		57-120
Heptachlor	0.5	0.47	94		51-109
Aldrin	0.5	0.51	102		57-105
Dieldrin	0.5	0.5	100		62-122
Endrin	0.5	0.53	106		70-128
4,4'-DDT	0.5	0.51	102		67-128

Surrogate	%Rec	Limits
TCMX	86	34-128
Decachlorobiphenyl	92	50-150

BSD Lab ID: QC45180

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
gamma-BHC	0.5	0.54	108		57-120	4		20
Heptachlor	0.5	0.49	98		51-109	4		20
Aldrin	0.5	0.54	108	*	57-105	6		20
Dieldrin	0.5	0.52	104		62-122	4		20
Endrin	0.5	0.56	112		70-128	6		20
4,4'-DDT	0.5	0.53	106		67-128	4		20

Surrogate	%Rec	Limits
TCMX	86	34-128
Decachlorobiphenyl	94	50-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 6 outside limits
Spike Recovery: 1 out of 12 outside limits

Curtis & Tompkins, Ltd.

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33806
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/05/97
Analysis Date: 05/08/97

MB Lab ID: QC45434

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Rec	Recovery Limits
TCMX	87	29-108
Decachlorobiphenyl	83	30-125

Lab #: 129097

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8080
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33806
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/05/97
Analysis Date: 05/08/97

LCS Lab ID: QC45435

Analyte	Result	Spike Added	%Rec #	Limits
gamma-BHC	14.4	17	86	49-115
Heptachlor	14.2	17	85	51-119
Aldrin	14.38	17	86	55-112
Dieldrin	15.39	17	92	54-123
Endrin	16.11	17	97	63-128
4,4'-DDT	13.96	17	84	57-131

Surrogate	%Rec	Limits
TCMX	75	29-108
Decachlorobiphenyl	81	30-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 6 outside limits

@AIR TOXICS LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 9704340

Work Order Summary

CLIENT:	Ms. Tracy Babjar Curtis & Tompkins, Ltd. 2323 Fifth Street Berkeley, CA 94710	**BILL TO:** Same	
PHONE:	510-486-0900	**P.O. #**	129097
FAX:	510-486-0532	**PROJECT #**	129097
DATE RECEIVED:	4/30/97		
DATE COMPLETED:	5/16/97		

FRACTION #	NAME	TEST
01A	SCITP 25@1.5'	Mod. ASTM D-3416
02A	SCITP 25@6'	Mod. ASTM D-3416
03A	SCITP 26@5'	Mod. ASTM D-3416
04A	SCITP 27@3.0'	Mod. ASTM D-3416
05A	Lab Blank	Mod. ASTM D-3416

LAB NARRATIVE:
Results are qualitative in nature due to analysis method. Soil sample sizes not accounted for in final concentrations.

CERTIFIED BY: Robert J. Soman
Laboratory Director

DATE: 5/16/97

Certification numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630
(916) 985-1000 • (800) 985-5955 • FAX (916) 985-1020

AIR TOXICS LTD.

Methane by Modified ASTM D-3416
GC/FID

Field Sample I.D.	Lab Sample I.D.	File Name	Sample Date	Analyzed For	Dilution Factor	Det. Limit (uG/mL)	Amount (uG/mL)
SCITP 25@1.5'	9704340-01A	3050612	4/28/97	Methane	1.00	**0.001**	**0.004**
SCITP 25@6'	9704340-02A	3050613	4/28/97	Methane	1.00	**0.001**	**0.37**
SCITP 26@5'	9704340-03A	3050614	4/28/97	Methane	1.00	**0.001**	**0.20**
SCITP 27@3.0'	9704340-04A	3050615	4/28/97	Methane	1.00	**0.001**	**0.002**
Lab Blank	9704340-05A	3050611	NA	Methane	1.00	**0.001**	**Not Detected**

Analysis Date: 5/6/97
Container Type: VOA Vial

COMMENTS: NA = Not Applicable

9704340

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 ph
(510)486-0532 fx

Project Number: 129097

Subcontract Lab:

Air Toxics (*FEES NEGOTIABLE*)
180 Blue Ravine Road Suite B
Folsom, CA 95630
(800) 985-5955

Please send report to: Tracy Babjar

Turnaround Time: Normal

Sample ID	Date Sampled	Matrix	Analysis	C&T Lab #
SCITP 25@1.5'	28-APR-97	Soil	METHANE	129097-001
SCITP 25@6'	28-APR-97	Soil	METHANE	129097-003
SCITP 26@5'	28-APR-97	Soil	METHANE	129097-005
SCITP 27@3.0'	28-APR-97	Soil	METHANE	129097-006

***Please report using Sample ID instead of C&T Lab #.

Notes:

RELINQUISHED BY:	RECEIVED BY:
Date/Time 4/29/97	Date/Time
Date/Time	Date/Time 4/30/97 1045

Signature on this form constitutes a firm Purchase Order for the services requested above.

Condition when received good

~~Custody Seal intact? Y N None~~ Temp. _____ ok 4/30/97

Custody Seal intact? Y N None Temp: Ambient ok
on ice 4/30/97

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCI TP27
Lab ID: 129097-007
Matrix: Water
Batch#: 33723
Units: ug/L
Diln Fac: 1

Sampled: 04/28/97
Received: 04/29/97
Extracted: 04/30/97
Analyzed: 04/30/97

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	100	87-125
Bromofluorobenzene	99	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 33723
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

MB Lab ID: QC45101

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	103	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	98	79-122

Curtis & Tompkins, Ltd.

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33723
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 04/30/97

LCS Lab ID: QC45100

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	58.01	50	116	51-180
Trichloroethene	51.5	50	103	73-141
Benzene	51.02	50	102	78-142
Toluene	52.61	50	105	76-150
Chlorobenzene	52.83	50	106	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	101	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	96	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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129085-002
Matrix: Water
Batch#: 33723
Units: ug/L
Diln Fac: 1

Sample Date: 04/28/97
Received Date: 04/28/97
Prep Date: 04/30/97
Analysis Date: 04/30/97

MS Lab ID: QC45133

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	51.55	103	51-180
Trichloroethene	50	<5	46.73	93	73-141
Benzene	50	<5	47.19	93	78-142
Toluene	50	<5	49.38	98	76-150
Chlorobenzene	50	19.63	67.73	96	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	106	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	96	79-122

MSD Lab ID: QC45134

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	54.11	108	51-180	5	14
Trichloroethene	50	48.51	97	73-141	4	14
Benzene	50	49.55	98	78-142	5	11
Toluene	50	50.62	100	76-150	2	13
Chlorobenzene	50	68.56	98	83-129	1	13

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	106	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
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Forensic Analytical
Analytical Report

San Francisco • 3777 Depot Road, Suite 409, Hayward, CA 94545 • Phone 510/887-8828 • Fax 510/887-4218
Los Angeles • 2959 Pacific Commerce Dr., Rancho Dominguez, CA 90221 • Phone 310/763-2374 • Fax 310/763-8684

Bulk Material Analysis

Method: 40 CFR 763, Subpart F, Appendix A (AHERA)

Client:
Curtis & Tompkins, Ltd.

2323 Fifth Street
Berkeley, CA 94710

Client ID: 1137
Report Number: 267446
Date Received: 04/30/97
Date Analyzed: 04/30/97

P.O. Num: 129097
Job ID: 129097
Site:

Sample Number / Gross Description/Comments	Lab Number	Total Asbestos	Total Fibrous Non-Asbestos	(Breakdown by type)
SCITP25@3/5'	19731397	25-30%	Trace%	Chrysotile (25-30%)
Brown soil.				Cellulose (Trace%)

David Kahane, C.I.H., Laboratory Director, Hayward Laboratory

Analytical results and reports are generated by Forensic Analytical at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by Forensic Analytical to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full with approval from Forensic Analytical. The client is solely responsible for the use and interpretation of test results and reports requested from Forensic Analytical. This report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. Forensic Analytical is not able to assess the degree of hazard resulting from materials analyzed. Forensic Analytical reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 ph
(510)486-0532 fx

Project Number: 129097

Subcontract Lab:

Forensic Analytical
3777 Depot Road Suite 409
Hayward, CA 94545
(510) 887-8828

Please send report to: Tracy Babjar

Turnaround Time: Normal

Sample ID	Date Sampled	Matrix	Analysis	C&T Lab #
SCITP 25@3.5'	28-APR-97	Soil	ASBESTOS-PLM	129097-002

Please report using Sample ID instead of C&T Lab #.

Notes:

RELINQUISHED BY:	RECEIVED BY:
4/29/97 Date/Time	Date/Time
Date/Time	Date/Time

Signature on this form constitutes a firm Purchase Order for the services requested above.

EC Charles
4/30/97
1027

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129097
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97
DATE ANALYZED: 05/02/97
QC BATCH#: 33780

ANALYSIS: CYANIDE
METHOD REFERENCE: EPA 335.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129097-007	SCI TP27	ND	ug/L	10
METHOD BLANK	N/A	ND	ug/L	10

ND = Not detected at or above the reporting limit.

QA/QC SUMMARY:BS/BSD

RPD, %	4
RECOVERY,%	96

San Francisco Regional Office

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

May 7, 1997

Ms. Tracy Babjar
CURTIS & TOMPKINS, LTD.
2323 Fifth Street
Berkeley, CA 94710

Client Ref.: 129097
Clayton Project No.: 97043.83

Dear Ms. Babjar:

Attached is our analytical laboratory report for the samples received on April 30, 1997. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after June 6, 1997, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/seh

Attachments

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129097
Clayton Project No. 97043.83

Sample Identification: See Below
Lab Number: 9704383
Sample Matrix/Media: SOIL
Method Reference: EPA 353.2

Date Received: 04/30/97
Date Analyzed: 04/30/97

Lab Number	Sample Identification	Date Sampled	Nitrate-N (mg/kg)	Method Detection Limit (mg/kg)
-01	SCITP 25@1.5'	04/28/97	<0.5	0.5
-02	SCITP 26@3'	04/28/97	<0.5	0.5
-04	METHOD BLANK	--	<0.5	0.5

<: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129097
Clayton Project No. 97043.83

Sample Identification: See Below
Lab Number: 9704383
Sample Matrix/Media: WATER
Method Reference: EPA 353.2

Date Received: 04/30/97
Date Analyzed: 04/30/97

Lab Number	Sample Identification	Date Sampled	Nitrate-N (mg/L)	Method Detection Limit (mg/L)
-03	SCITP 27	04/28/97	<0.05	0.05
-05	METHOD BLANK	--	<0.05	0.05

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129097
Clayton Project No. 97043.83

Sample Identification: See Below
Lab Number: 9704383
Sample Matrix/Media: SOIL
Method Reference: EPA 353.3 (Modified)

Date Received: 04/30/97
Date Analyzed: 04/30/97

Lab Number	Sample Identification	Date Sampled	Nitrite-N (mg/kg)	Method Detection Limit (mg/kg)
-01	SCITP 25@1.5'	04/28/97	<0.5	0.5
-02	SCITP 26@3'	04/28/97	<0.5	0.5
-04	METHOD BLANK	--	<0.5	0.5

<: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129097
Clayton Project No. 97043.83

Sample Identification: See Below
Lab Number: 9704383
Sample Matrix/Media: WATER
Method Reference: EPA 353.2

Date Received: 04/30/97
Date Analyzed: 04/30/97

Lab Number	Sample Identification	Date Sampled	Nitrite-N (mg/L)	Method Detection Limit (mg/L)
-03	SCITP 27	04/28/97	<0.05	0.05
-05	METHOD BLANK	--	<0.05	0.05

ND: Not detected at or above limit of detection
--: Information not available or not applicable

9704383

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 ph
(510)486-0532 fx

Project Number: 129097

Subcontract Lab:

Clayton Environmental
1252 Quarry Lane
Pleasanton, CA 94566
(510) 426-2600

Please send report to: Tracy Babjar

Turnaround Time: Normal (5 day)

Sample ID	Date Sampled	Matrix	Analysis	Pres.	Cont.	C&T Lab #
SCITP 25@1.5'	28-APR-97	Soil	NITRATE/NITRITE	Cool	glass jar	129097-001
SCITP 26@3'	28-APR-97	Soil	NITRATE/NITRITE	Cool	↓	129097-004
SCI TP27	28-APR-97	Water	NITRATE/NITRITE	Unpres*	pl125mL	129097-007

* Sample Control preservation/H2SO4 pending as Hold time expires today.

***Please report using Sample ID instead of C&T Lab #.

Notes:	RELINQUISHED BY:		RECEIVED BY:	
	[signature]	4/29/97 Date/Time	[signature]	4/30/97 9:08 Date/Time
	[signature]	4/30/97 10:37 Date/Time	Carol Hammerberg	4/30/97 10:37 Date/Time
			Received in good condition	

Signature on this form constitutes a firm Purchase Order for the services requested above.

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129097
CLIENT: SUBSURFACE CONSULTANTS
PROJECT#: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97
DATE ANALYZED: 05/15/97
BATCH#: 33989

ANALYSIS: TOTAL PHOSPHORUS
ANALYSIS METHOD: EPA 365.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129097-001	SCITP 25@1.5'	54	mg/Kg	15
129097-004	SCITP 26@3'	75	mg/Kg	15
METHOD BLANK	N/A	ND	mg/Kg	0.30

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: LCS

RECOVERY, %	95

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129097
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97
DATE ANALYZED: 05/19/97
QC BATCH#: 34029

ANALYSIS: TOTAL PHOSPHORUS
METHOD REFERENCE: EPA 365.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129097-007	SCI TP27	2.3	mg/L	0.15
METHOD BLANK	N/A	ND	mg/L	0.03

ND = Not detected at or above the reporting limit.

QA/QC SUMMARY:LCS

RECOVERY,%	102

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal		
Field ID:	SCI TP27	Sampled:	04/28/97
Lab ID:	129097-007	Received:	04/29/97
Matrix:	Water	Extracted:	04/30/97
Batch#:	33743	Analyzed:	05/14/97
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 TP27	Sampled:	04/28/97
Lab ID:	129097-007	Received:	04/29/97
Matrix:	Water	Extracted:	04/30/97
Batch#:	33743	Analyzed:	05/14/97
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	64	21-110
Phenol-d5	69	10-110
2,4,6-Tribromophenol	58	10-123
Nitrobenzene-d5	75	35-114
2-Fluorobiphenyl	55	43-116
Terphenyl-d14	27*	33-141

* Values outside of QC limits

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33743
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 05/01/97

MB Lab ID: QC45181

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#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33743
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 05/01/97

MB Lab ID: QC45181

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	42	21-110
Phenol-d5	46	10-110
2,4,6-Tribromophenol	46	10-123
Nitrobenzene-d5	52	35-114
2-Fluorobiphenyl	54	43-116
Terphenyl-d14	65	33-141

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33743
Units: ug/L
Diln Fac: 1

Prep Date: 04/30/97
Analysis Date: 05/01/97

BS Lab ID: QC45182

Analyte	Spike Added	BS	%Rec #	Limits
Phenol	100	65.22	65	12-110
2-Chlorophenol	100	69.8	70	27-123
4-Chloro-3-methylphenol	100	68.53	69	23-97
4-Nitrophenol	100	56.24	56	10-80
Pentachlorophenol	100	47.17	47	9-103
1,4-Dichlorobenzene	50	30.21	60	36-97
N-Nitroso-di-n-propylamine	50	32.39	65	41-116
1,2,4-Trichlorobenzene	50	32.46	65	39-98
Acenaphthene	50	38.33	77	46-118
2,4-Dinitrotoluene	50	28.83	58	24-96
Pyrene	50	40.92	82	26-127

Surrogate	%Rec	Limits
2-Fluorophenol	59	21-110
Phenol-d5	63	10-110
2,4,6-Tribromophenol	65	10-123
Nitrobenzene-d5	72	35-114
2-Fluorobiphenyl	76	43-116
Terphenyl-d14	86	33-141

BSD Lab ID: QC45183

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Phenol	100	69.76	70	12-110	7	42
2-Chlorophenol	100	74.87	75	27-123	7	40
4-Chloro-3-methylphenol	100	72.94	73	23-97	6	42
4-Nitrophenol	100	63.72	64	10-80	13	50
Pentachlorophenol	100	50.96	51	9-103	8	50
1,4-Dichlorobenzene	50	34.14	68	36-97	13	28
N-Nitroso-di-n-propylamine	50	33.82	68	41-116	5	38
1,2,4-Trichlorobenzene	50	35.61	71	39-98	9	28
Acenaphthene	50	43.16	86	46-118	11	31
2,4-Dinitrotoluene	50	31.87	64	24-96	10	38
Pyrene	50	43.47	87	26-127	6	31

Surrogate	%Rec	Limits
2-Fluorophenol	63	21-110
Phenol-d5	66	10-110
2,4,6-Tribromophenol	72	10-123
Nitrobenzene-d5	76	35-114
2-Fluorobiphenyl	83	43-116
Terphenyl-d14	93	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

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI TP27
LAB ID: 129097-007
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Filtrate

DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/29/97
DATE REPORTED: 05/15/97

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	170	60	1	33717	EPA 6010A	05/01/97
Arsenic	8.8	5.0	1	33717	EPA 6010A	05/01/97
Barium	140	10	1	33717	EPA 6010A	05/01/97
Beryllium	ND	2.0	1	33717	EPA 6010A	05/01/97
Cadmium	ND	5.0	1	33717	EPA 6010A	05/01/97
Chromium (total)	ND	10	1	33717	EPA 6010A	05/01/97
Cobalt	ND	20	1	33717	EPA 6010A	05/01/97
Copper	61	10	1	33717	EPA 6010A	05/01/97
Lead	63	3.0	1	33717	EPA 6010A	05/01/97
Mercury	ND	0.20	1	33961	EPA 7470	05/14/97
Molybdenum	ND	20	1	33717	EPA 6010A	05/01/97
Nickel	ND	20	1	33717	EPA 6010A	05/01/97
Selenium	ND	5.0	1	33717	EPA 6010A	05/01/97
Silver	ND	5.0	1	33717	EPA 6010A	05/01/97
Thallium	ND	5.0	1	33717	EPA 6010A	05/01/97
Vanadium	ND	10	1	33717	EPA 6010A	05/01/97
Zinc	210	20	1	33717	EPA 6010A	05/01/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129097
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97
DATE ANALYZED: 05/08/97
QC BATCH#: 33884

ANALYSIS: HEXAVALENT CHROMIUM
METHOD REFERENCE: EPA 7196A

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129097-004	SCITP 26@3'	ND	mg/Kg	0.05
METHOD BLANK	N/A	ND	mg/Kg	0.05

ND = Not detected at or above the reporting limit.

QA/QC SUMMARY: MS/SAMPLE DUPLICATE OF 129097-004

RPD, %	<1
RECOVERY,%	97

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129097
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH AVE. TERMINAL

DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97
DATE ANALYZED: 04/29/97
QC BATCH#: 33712

ANALYSIS: HEXAVALENT CHROMIUM
METHOD REFERENCE: EPA 7196

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129097-007	SCI TP27	ND	mg/L	0.01
METHOD BLANK	N/A	ND	mg/L	0.01

ND = Not detected at or above the reporting limit.

QA/QC SUMMARY: MS/SAMPLE DUPLICATE OF 129097-007

RPD, %	<1
RECOVERY,%	103

CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE REPORTED: 05/15/97

Metals Analytical Report

				Lead					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
SCITP 25@1.5'	129097-001	04/28/97	04/29/97	210	0.15	1	33786	EPA 6010A	05/05/97
SCITP 26@3'	129097-004	04/28/97	04/29/97	150	0.15	1	33786	EPA 6010A	05/05/97
SCITP 27@3.0'	129097-006	04/28/97	04/29/97	38	0.15	1	33786	EPA 6010A	05/05/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Soil

DATE REPORTED: 05/15/97

Metals Analytical Report

				Potassium					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
SCITP 25@1.5'	129097-001	04/28/97	04/29/97	810	25	1	33786	EPA 6010A	05/06/97
SCITP 26@3'	129097-004	04/28/97	04/29/97	800	24	1	33786	EPA 6010A	05/06/97

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

SAMPLE ID: SCI TP27
LAB ID: 129097-007
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal
MATRIX: Water

DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/29/97
DATE REPORTED: 05/15/97

Metals Analytical Report

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Potassium	170000	500	1	33764	EPA 6010A	05/09/97

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129097

DATE REPORTED: 05/15/97

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	33717	EPA 6010A	04/30/97
Arsenic	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Barium	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Beryllium	ND	2	ug/L	1	33717	EPA 6010A	04/30/97
Cadmium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Chromium (total)	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Cobalt	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Copper	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Lead	ND	3	ug/L	1	33717	EPA 6010A	04/30/97
Lead	ND	0.15	mg/Kg	1	33786	EPA 6010A	05/05/97
Mercury	ND	0.2	ug/L	1	33961	EPA 7470	05/14/97
Molybdenum	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Nickel	ND	20	ug/L	1	33717	EPA 6010A	04/30/97
Potassium	ND	500	ug/L	1	33764	EPA 6010A	05/09/97
Potassium	ND	25	mg/Kg	1	33786	EPA 6010A	05/06/97
Selenium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Silver	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Thallium	ND	5	ug/L	1	33717	EPA 6010A	04/30/97
Vanadium	ND	10	ug/L	1	33717	EPA 6010A	04/30/97
Zinc	ND	20	ug/L	1	33717	EPA 6010A	04/30/97

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129097

DATE REPORTED: 05/15/97

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	491	531	ug/L	98	106	80-120	8	35	33717	EPA 6010A	04/30/97
Arsenic	2000	2060	2080	ug/L	103	104	80-120	1	35	33717	EPA 6010A	04/30/97
Barium	2000	2000	1990	ug/L	100	100	80-120	1	35	33717	EPA 6010A	04/30/97
Beryllium	50	52.1	53.1	ug/L	104	106	80-120	2	35	33717	EPA 6010A	04/30/97
Cadmium	50	53.3	53.9	ug/L	107	108	80-120	1	35	33717	EPA 6010A	04/30/97
Chromium (total)	200	197	202	ug/L	99	101	80-120	3	35	33717	EPA 6010A	04/30/97
Cobalt	500	511	522	ug/L	102	104	80-120	2	35	33717	EPA 6010A	04/30/97
Copper	250	254	257	ug/L	102	103	80-120	1	35	33717	EPA 6010A	04/30/97
Lead	500	507	514	ug/L	101	103	80-120	1	35	33717	EPA 6010A	04/30/97
Lead	25	22.5	21.75	mg/Kg	90	87	80-120	3	35	33786	EPA 6010A	05/05/97
Mercury	5	4.908	4.857	ug/L	98	97	80-120	1	35	33961	EPA 7470	05/14/97
Molybdenum	400	454	466	ug/L	114	117	80-120	3	35	33717	EPA 6010A	04/30/97
Nickel	500	506	511	ug/L	101	102	80-120	1	35	33717	EPA 6010A	04/30/97
Potassium	20000	19800	20120	ug/L	99	101	80-120	2	35	33764	EPA 6010A	05/09/97
Potassium	1000	878	893	mg/Kg	88	89	80-120	2	35	33786	EPA 6010A	05/06/97
Selenium	2000	1960	1980	ug/L	98	99	80-120	1	35	33717	EPA 6010A	04/30/97
Silver	100	109	111	ug/L	109	111	80-120	2	35	33717	EPA 6010A	04/30/97
Thallium	2000	1970	2010	ug/L	99	101	80-120	2	35	33717	EPA 6010A	04/30/97
Vanadium	500	514	521	ug/L	103	104	80-120	1	35	33717	EPA 6010A	04/30/97
Zinc	500	451	457	ug/L	90	91	80-120	1	35	33717	EPA 6010A	04/30/97

CHAIN OF CUSTODY FORM

129097

PROJECT NAME: KOT

JOB NUMBER: 133.004 LAB: CST

PROJECT CONTACT: Jerome DeVerniere TURNAROUND: Standard

SAMPLED BY: JD/JW REQUESTED BY: JWA

PAGE OF

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT	TUBE	JAR		METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME				NOTES	ANALYSIS REQUESTED: TVH/BTEX	TPH (Mod.)	8240	8270	8080	Heavy Metals	Lead	TPG - 5520 f	Chromium, Lead, Nickel, Zinc	Minerals, Phosphate, Sulfate	
-1	SCITP2521.5		X								X						X		04	28	97						X	X			X	X	X	X	X
-2	SCITP2435		X									X					X		04	28	97							X							
-3	SCITP2506		X								X						X		04	28	97							X							
-4	SCITP2603		X								X						X		04	28	97						X	X			X	X	X	X	X
-5	SCITP2645		X								X						X		04	28	97							X							
-6	SCITP2723.5		X								X						X		04	28	97						X	X			X	X	X		

Samples to be held pending analysis (Until 5/1/97)

Asbestos X

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dan Offenbacher	4/28/97 11:40		4/28/97 11:40
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:

Subsurface Consultants, Inc.

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

(510) 268-0461 • FAX: 510-268-0137

CHAIN OF CUSTODY FORM

129097

PAGE ____ OF ____

PROJECT NAME: KOT

JOB NUMBER: 133004 LAB: CST

PROJECT CONTACT: Jerome DeVersterir TURNAROUND: Standard

SAMPLED BY: JD/JW REQUESTED BY: JNA

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT	TUBE	POLY	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH/BTEX	TEH (mod)	8240	8080	8270	Heavy Metals Pb	TCLP	Chromium	CN-	Minerals
X	SCI TP27	X						6					X			X		04	28	97												
									3							X		04	28	97			X	X	X	X	X	X	X	X	X	X
									1				X			X		04	28	97												
												3				X		04	28	97												

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Dan Alexander	4/24/97 11:40 a.m.		4/29/97 11:40
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:

Filters Fix

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: 14-MAY-97
Lab Job Number: 129116
Project ID: 133.004
Location: 9th Ave. Terminal/KOT

Reviewed by: _____

Reviewed by: _____

This package may be reproduced only in its entirety.

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129116

Project Name: 9th Ave. Terminal/KOT
Project Number: 133.004

Report Date: 14 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129116-001	SCIMW-21@2.0'	Soil	28-APR-97	30-APR-97	08-MAY-97	ND	mg/Kg	50	DLP	33875
129116-002	SCIMW-22@3.5'	Soil	28-APR-97	30-APR-97	08-MAY-97	76.	mg/Kg	50	DLP	33875
129116-003	SCITP-28@1.5'	Soil	29-APR-97	30-APR-97	08-MAY-97	710	mg/Kg	50	DLP	33875
129116-004	SCITP-29@5.0'	Soil	29-APR-97	30-APR-97	08-MAY-97	72.	mg/Kg	50	DLP	33875
129116-005	SCITP-30@3.0'	Soil	29-APR-97	30-APR-97	08-MAY-97	940	mg/Kg	50	DLP	33875
129116-006	SCIMW-23@5.5'	Soil	28-APR-97	30-APR-97	08-MAY-97	210	mg/Kg	50	DLP	33875
129116-007	SCIMW-24@3.0'	Soil	29-APR-97	30-APR-97	08-MAY-97	ND	mg/Kg	50	DLP	33875
129116-008	SCIMW-25@10.5'	Soil	29-APR-97	30-APR-97	08-MAY-97	1000	mg/Kg	50	DLP	33875

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

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129116

Project Name: 9th Ave. Terminal/KOT
Project Number: 133.004

Report Date: 19 May 97

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

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
129116-010	SCITP-28	Water	29-APR-97	30-APR-97	12-MAY-97	ND	mg/L	5	DLP	33926
129116-011	SCITP-30	Water	29-APR-97	30-APR-97	12-MAY-97	ND	mg/L	5	DLP	33926

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: 9th Ave. Terminal/KOT
Project Number: 133.004

Laboratory Login Number: 129116
Report Date: 14 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 33875**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	50	mg/Kg	SMWW 17:5520EF	08-MAY-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	88%	SMWW 17:5520EF	08-MAY-97
BSD	87%	SMWW 17:5520EF	08-MAY-97

		Control Limits
Average Spike Recovery	88%	80% - 120%
Relative Percent Difference	1.6%	< 20%

Curtis & Tompkins, Ltd.

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

Client: Subsurface Consultants
Project Name: 9th Ave. Terminal/KOT
Project Number: 133.004

Laboratory Login Number: 129116
Report Date: 19 May 97

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 33926**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	5	mg/L	SMWW 17:5520BF	12-MAY-97

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	94%	SMWW 17:5520BF	12-MAY-97
BSD	89%	SMWW 17:5520BF	12-MAY-97

		Control Limits
Average Spike Recovery	91%	80% - 120%
Relative Percent Difference	5.8%	< 20%

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129116-001	SCIMW-21@2.0'	33823	04/28/97	05/07/97	05/07/97	
129116-002	SCIMW-22@3.5'	33823	04/28/97	05/07/97	05/07/97	
129116-004	SCITP-29@5.0'	33823	04/29/97	05/07/97	05/07/97	
129116-005	SCITP-30@3.0'	33823	04/29/97	05/07/97	05/07/97	

Matrix: Soil

Analyte Diln Fac:	Units	129116-001 1	129116-002 1	129116-004 1	129116-005 1
Gasoline	mg/Kg	<1	<1	<1	<1
Surrogate					
Trifluorotoluene	%REC	56	55	53	55
Bromobenzene	%REC	86	89	86	87

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129116-007	SCIMW-24@3.0'	33889	04/29/97	05/10/97	05/10/97	
129116-008	SCIMW-25@10.5'	33823	04/29/97	05/07/97	05/07/97	
129116-009	SCIMW-24@6.0'	33854	04/29/97	05/08/97	05/08/97	

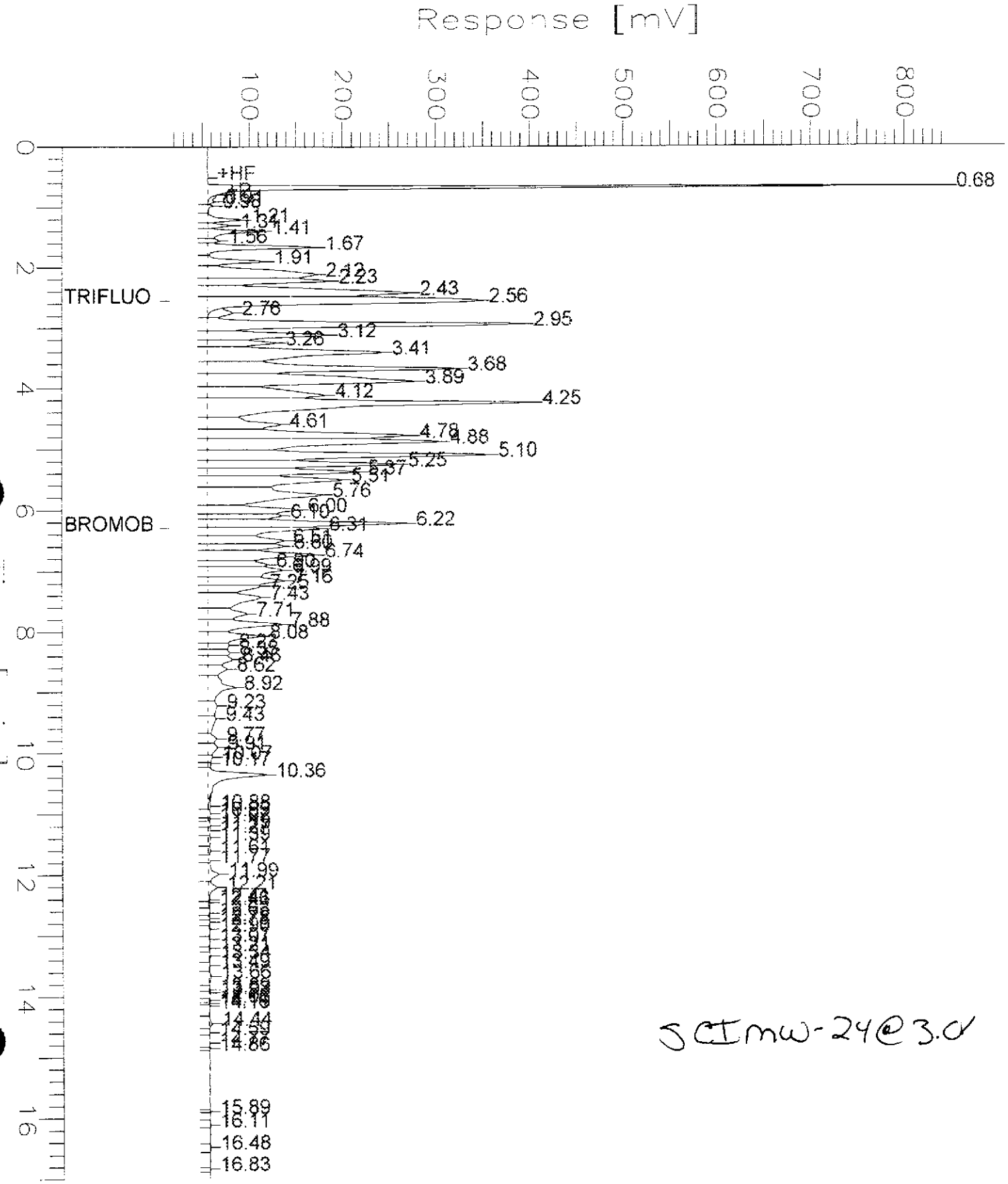
Matrix: Soil

Analyte Diln Fac:	Units	129116-007 100	129116-008 1	129116-009 200
Gasoline	mg/Kg	440	<1	910
Surrogate				
Trifluorotoluene	%REC	115	52	106
Bromobenzene	%REC	74	90	129

GC04 TVH 'J' Data File Rtx1FID

Sample Name : D,129116-007,33889,100X
FileName : G:\GC04\DATA\129J036.raw
Method : TVMAR14
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 16 mV

Sample #: Page 1 of 1
Date : 5/10/97 06:29 AM
Time of Injection: 5/10/97 06:12 AM
Low Point : 15.76 mV High Point : 845.68 mV
Plot Scale: 829.9 mV

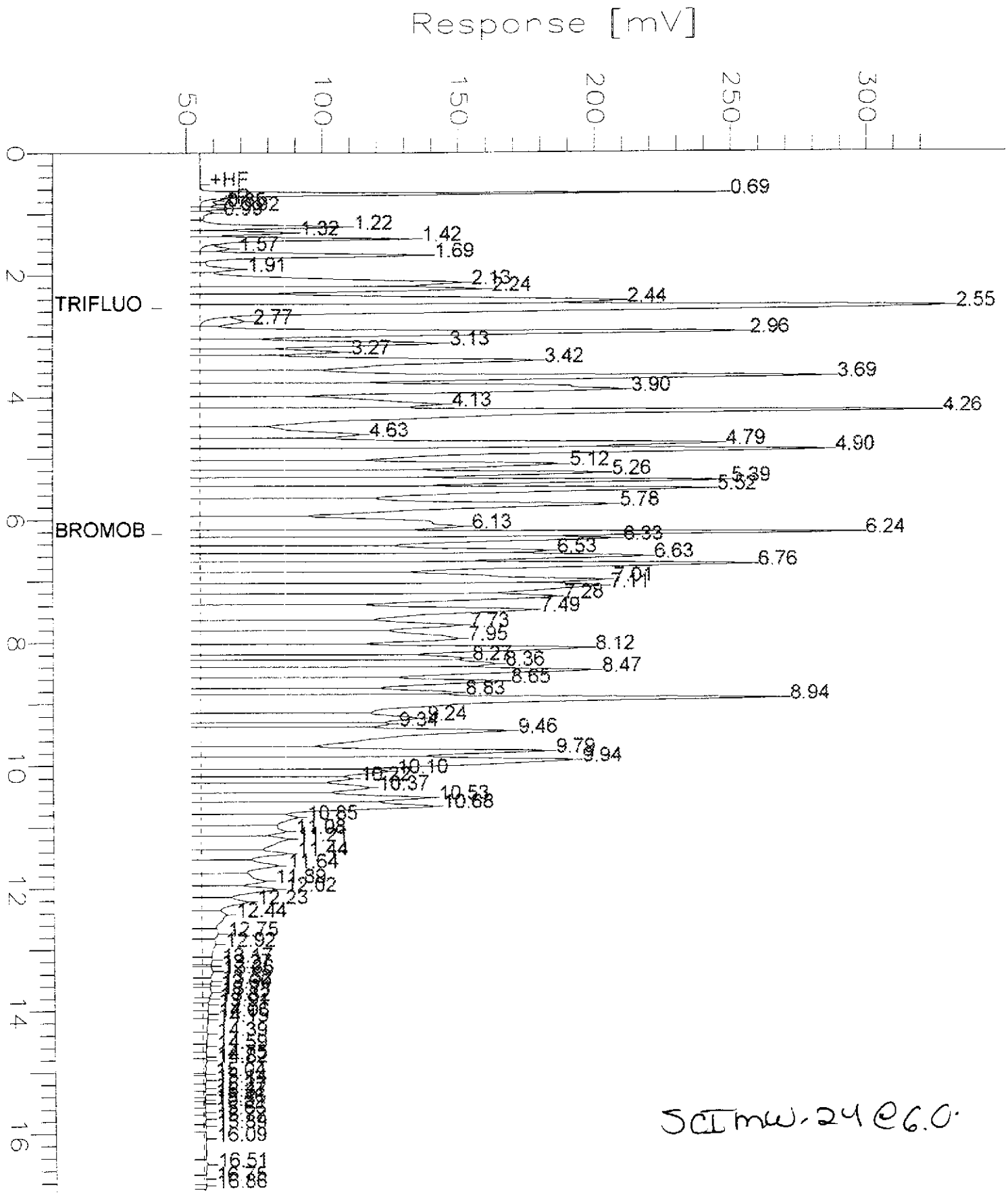


SCImw-24@3.0

GC04 TVH 'J' Data File Rtx1FID

Sample Name : D,129116-009,33854
FileName : G:\GC04\DATA\128J011.raw
Method : TVMAR14
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 41 mV

Sample #: Page 1 of 1
Date : 5/8/97 07:06 PM
Time of Injection: 5/8/97 06:49 PM
Low Point : 40.99 mV High Point : 329.54 mV
Plot Scale: 288.6 mV

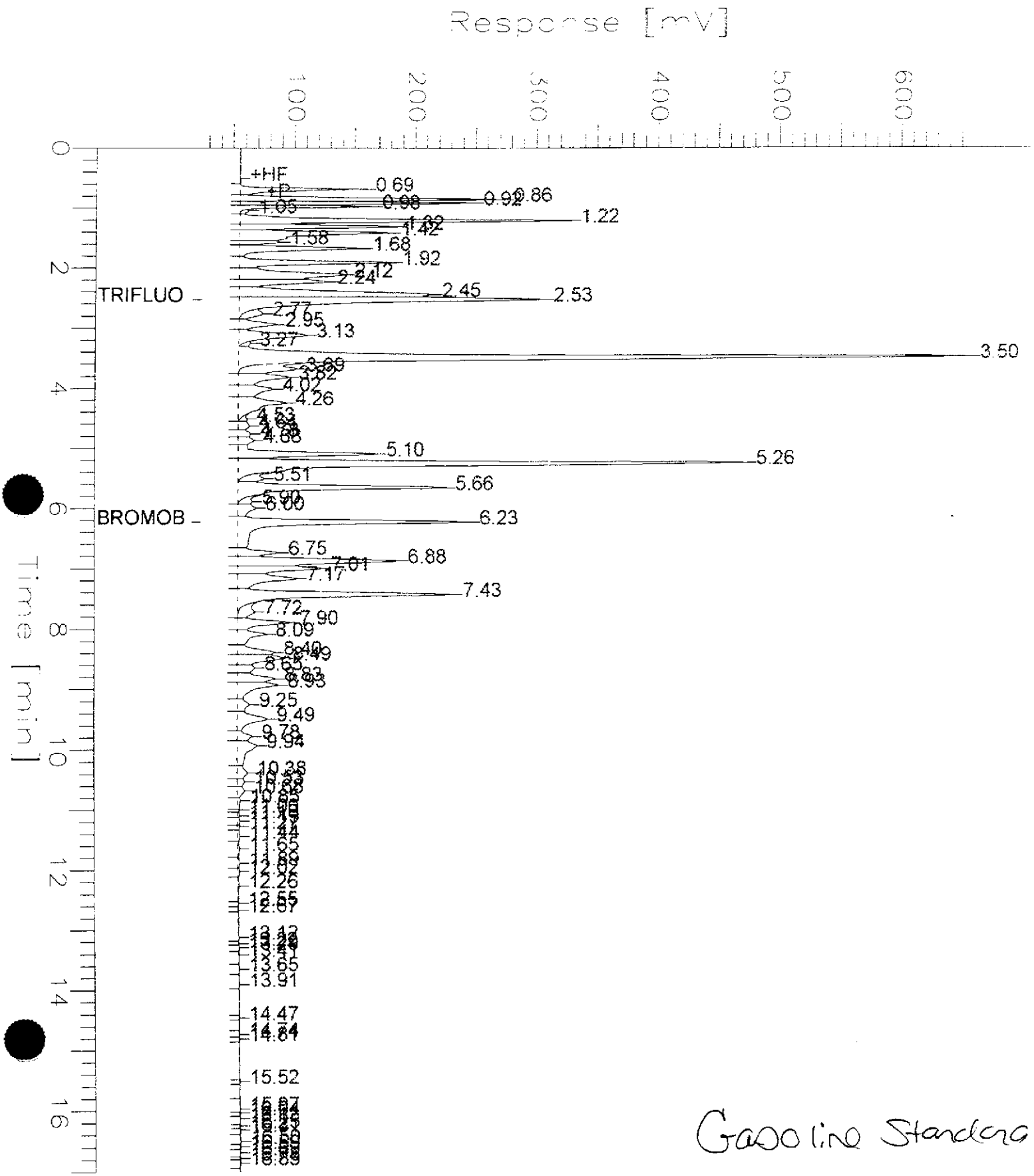


SCImw.24@6.0

GC04 TVH 'J' Data File Rtx1FID

Sample Name : LCS/CCV,QC45679,33854
FileName : G:\GC04\DATA\128J002.raw
Method : TVMAR14
Start Time : 0.00 min End Time : 17.00 min
Scale Factor: 1.0 Plot Offset: 25 mV

Sample #: 97WS4007 Page 1 of 1
Date : 5/8/97 12:37 PM
Time of Injection: 5/8/97 12:20 PM
Low Point : 24.96 mV High Point : 658.45 mV
Plot Scale: 633.5 mV



Gasoline Standard

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons			
Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal/KOT		
METHOD BLANK			
Matrix:	Soil	Prep Date:	05/07/97
Batch#:	33823	Analysis Date:	05/07/97
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC45505

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	52	52-127
Bromobenzene	82	45-140

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal/KOT		

METHOD BLANK

Matrix:	Soil	Prep Date:	05/08/97
Batch#:	33854	Analysis Date:	05/08/97
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC45681

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	52	52-127
Bromobenzene	84	45-140

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33823
Units: mg/Kg
Diln Fac: 1

Prep Date: 05/07/97
Analysis Date: 05/07/97

LCS Lab ID: QC45503

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	9.61	10	96	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	88	52-127		
Bromobenzene	104	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 #: 129116 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33854
Units: mg/Kg
Diln Fac: 1

Prep Date: 05/08/97
Analysis Date: 05/08/97

LCS Lab ID: QC45679

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	9.91	10	99	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	84	52-127		
Bromobenzene	118	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

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	EPA 5030
Location:	9th Ave. Terminal/KOT		

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	ZZZZZZ	Sample Date:	04/22/97
Lab ID:	129149-002	Received Date:	05/02/97
Matrix:	Soil	Prep Date:	05/07/97
Batch#:	33823	Analysis Date:	05/07/97
Units:	mg/Kg dry weight	Moisture:	15%
Diln Fac:	1		

MS Lab ID: QC45534

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	11.76	<1.176	10.56	90	65-135
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	88	52-127			
Bromobenzene	116	45-140			

MSD Lab ID: QC45535

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	11.76	9.482	81	65-135	11	30
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	83	52-127				
Bromobenzene	109	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

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129080-004
Matrix: Soil
Batch#: 33854
Units: mg/Kg
Diln Fac: 1

Sample Date: 04/26/97
Received Date: 04/28/97
Prep Date: 05/10/97
Analysis Date: 05/10/97

MS Lab ID: QC45682

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	10	<1	9.11	91	65-135
Surrogate	%Rec	Limits			
Trifluorotoluene	88	52-127			
Bromobenzene	117	45-140			

MSD Lab ID: QC45683

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	10	8.82	88	65-135	3	30
Surrogate	%Rec	Limits				
Trifluorotoluene	85	52-127				
Bromobenzene	115	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#: 133.004
Location: 9th Ave. Terminal/KOT

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129116-001	SCIMW-21@2.0'	33831	04/28/97	05/06/97	05/10/97	
129116-002	SCIMW-22@3.5'	33831	04/28/97	05/06/97	05/10/97	
129116-003	SCITP-28@1.5'	33831	04/29/97	05/06/97	05/10/97	
129116-004	SCITP-29@5.0'	33831	04/29/97	05/06/97	05/10/97	

Matrix: Soil

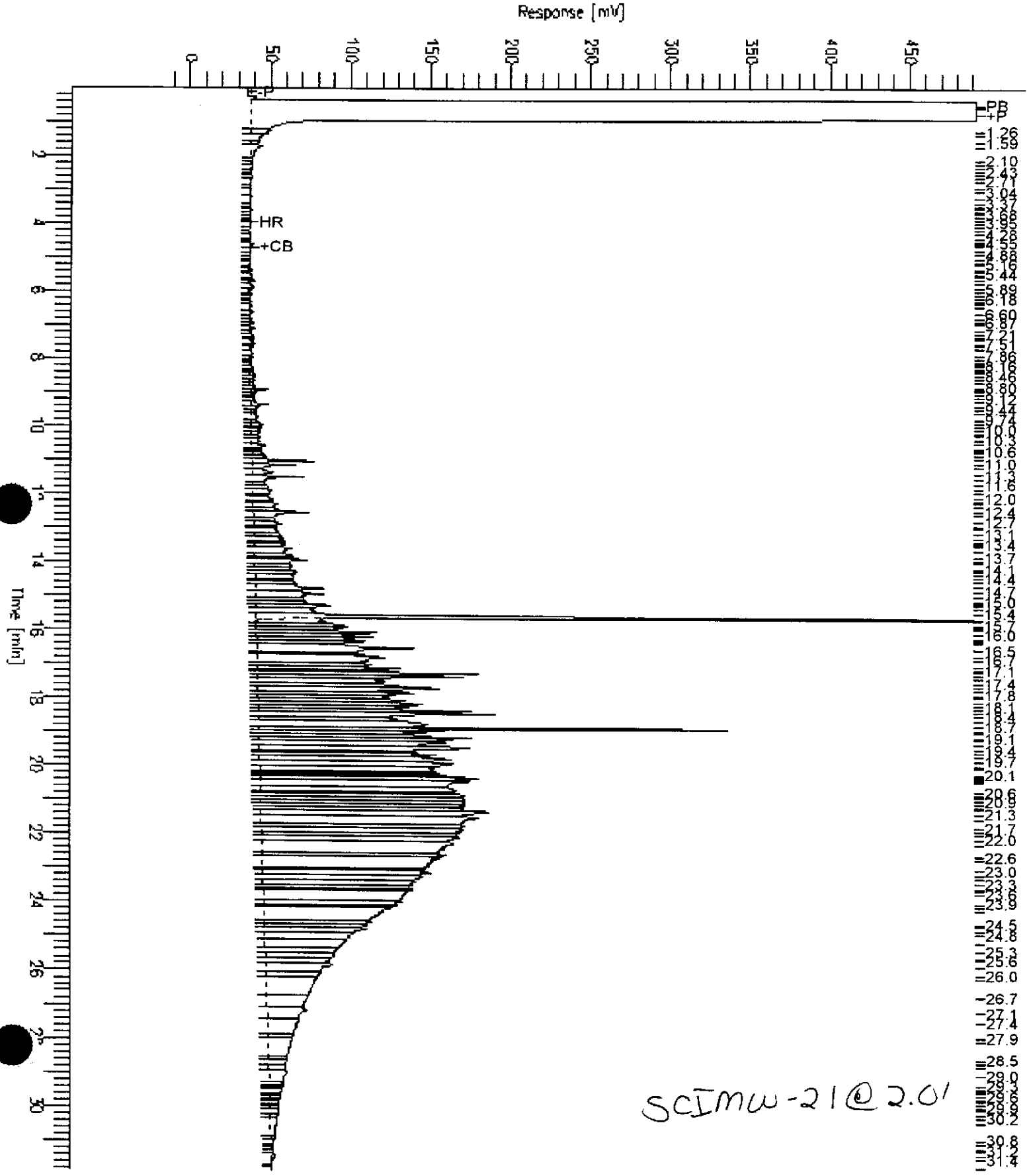
Analyte	Units	129116-001	129116-002	129116-003	129116-004
Diln Fac:		1	1	10	1
Diesel C12-C22	mg/Kg	6.6YH	4.2YLH	1100 H	11 YH
Motor Oil C22-C50	mg/Kg	150 YH	50 YH	1100 YH	100 Y
Surrogate					
Hexacosane	%REC	114	111	DO	92

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

Chromatogram

Sample Name : 129116-001,33831
FileName : G:\GC11\CHB\129B010.RAW
Method : BTEH128.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: -17 mV

Sample #: 33831 Page 1 of 1
Date : 5/12/97 12:56 PM
Time of Injection: 5/10/97 12:15 AM
Low Point : -16.59 mV High Point : 491.79 mV
Plot Scale: 508.4 mV

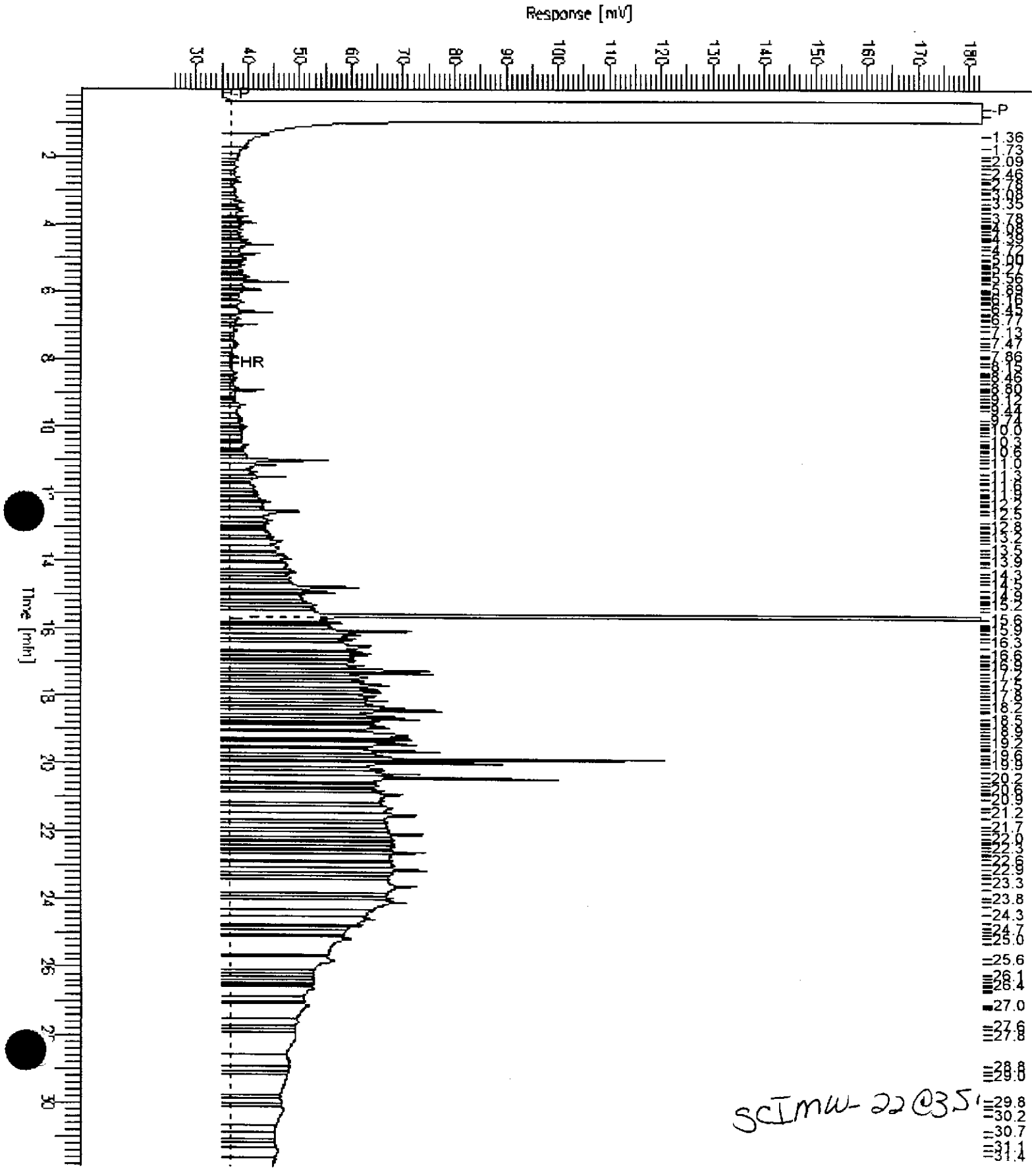


SCIMW-21@2.01

Chromatogram

Sample Name : 129116-002,33831
FileName : G:\GC11\CHB\129B011.RAW
Method : BTEH128.MTH
Start Time : 0.01 min End Time : 31.91 min
Shift Factor: 0.0 Plot Offset: 26 mV

Sample #: 33831 Page 1 of 1
Date : 5/12/97 02:39 PM
Time of Injection: 5/10/97 12:56 AM
Low Point : 25.59 mV High Point : 182.87 mV
Plot Scale: 157.0 mV

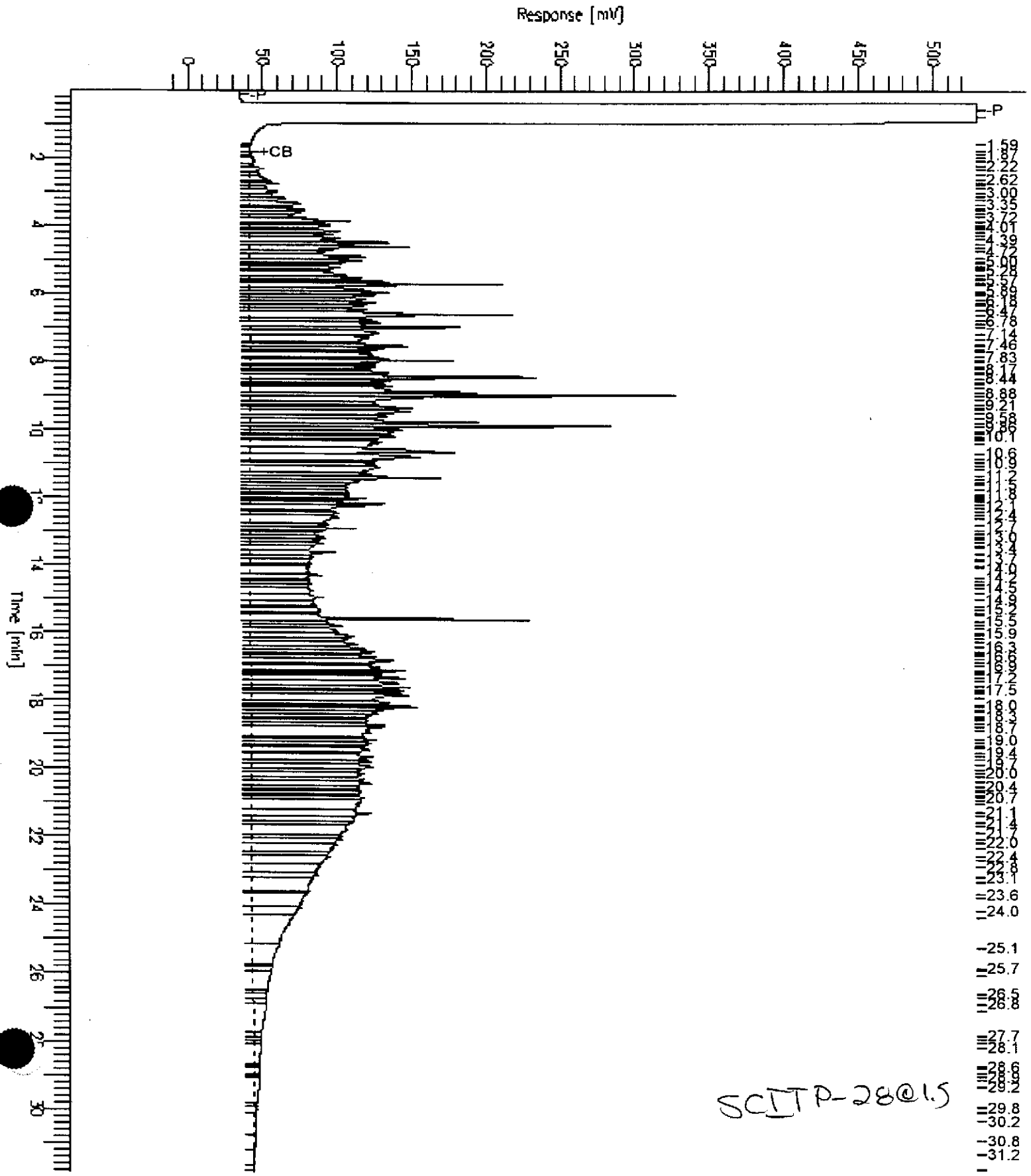


SCIMW-22@35

Chromatogram

Sample Name : 129116-003,33831
FileName : G:\GC11\CHB\129B012.RAW
Method : BTEH128.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -17 mV

Sample #: 33831 Page 1 of 1
Date : 5/13/97 08:53 AM
Time of Injection: 5/10/97 01:42 AM
Low Point : -16.74 mV High Point : 530.00 mV
Plot Scale: 546.7 mV

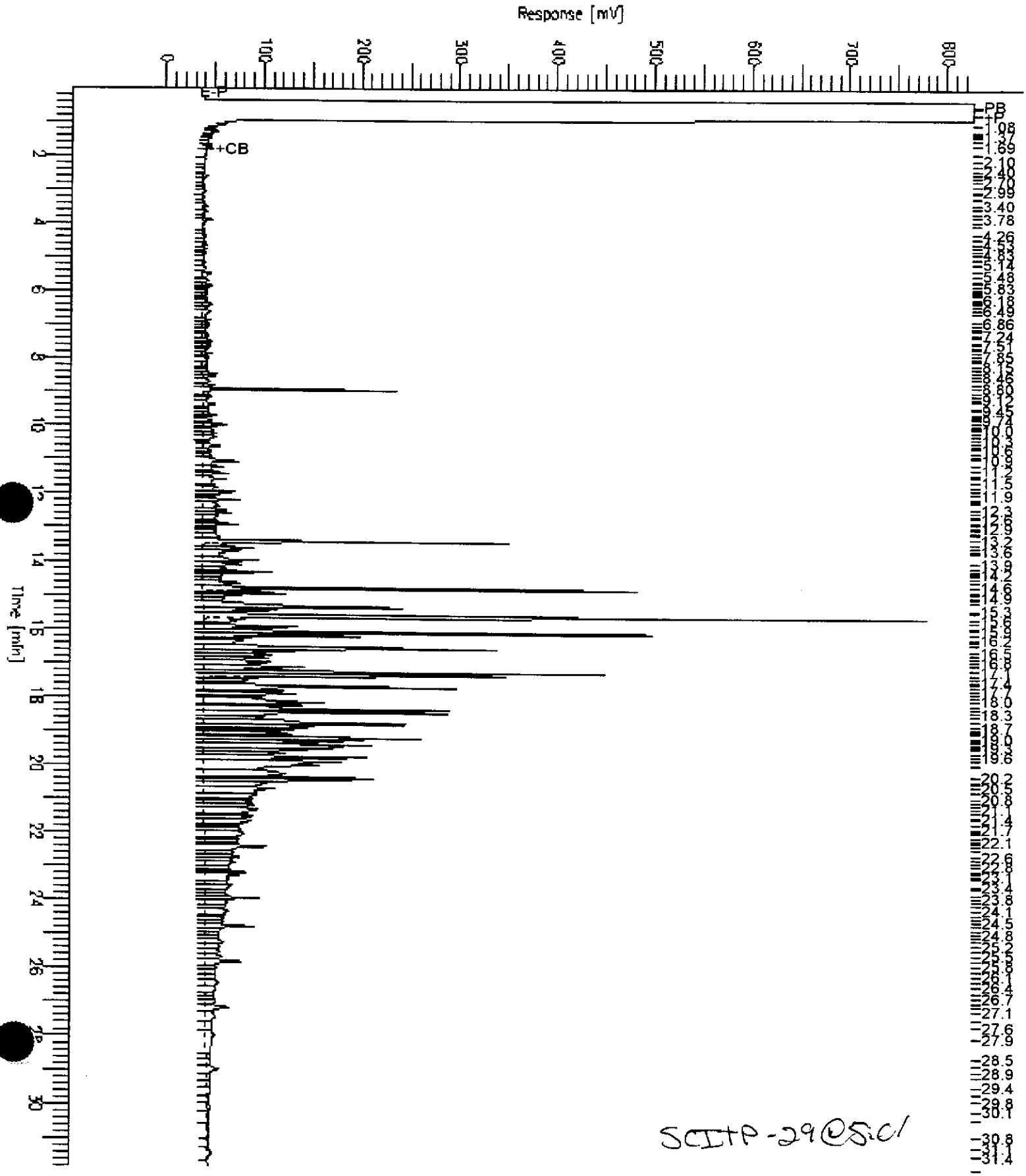


SCITP-28@1.5

Chromatogram

Sample Name : 129116-004,33831
FileName : G:\GC11\CHB\129B013.RAW
Method : BTEH128.MTH
Start Time : 0.01 min End Time : 31.85 min
Slope Factor: 0.0 Plot Offset: -2 mV

Sample #: 33831 Page 1 of 1
Date : 5/13/97 08:54 AM
Time of Injection: 5/10/97 02:25 AM
Low Point : -2.32 mV High Point : 827.45 mV
Plot Scale: 829.8 mV



SCITP-29@5:01

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129116-005	SCITP-30@3.0'	33831	04/29/97	05/06/97	05/10/97	
129116-006	SCIMW-23@5.5'	33831	04/28/97	05/06/97	05/10/97	
129116-007	SCIMW-24@3.0'	33831	04/29/97	05/06/97	05/10/97	
129116-008	SCIMW-25@10.5'	33831	04/29/97	05/06/97	05/13/97	

Matrix: Soil

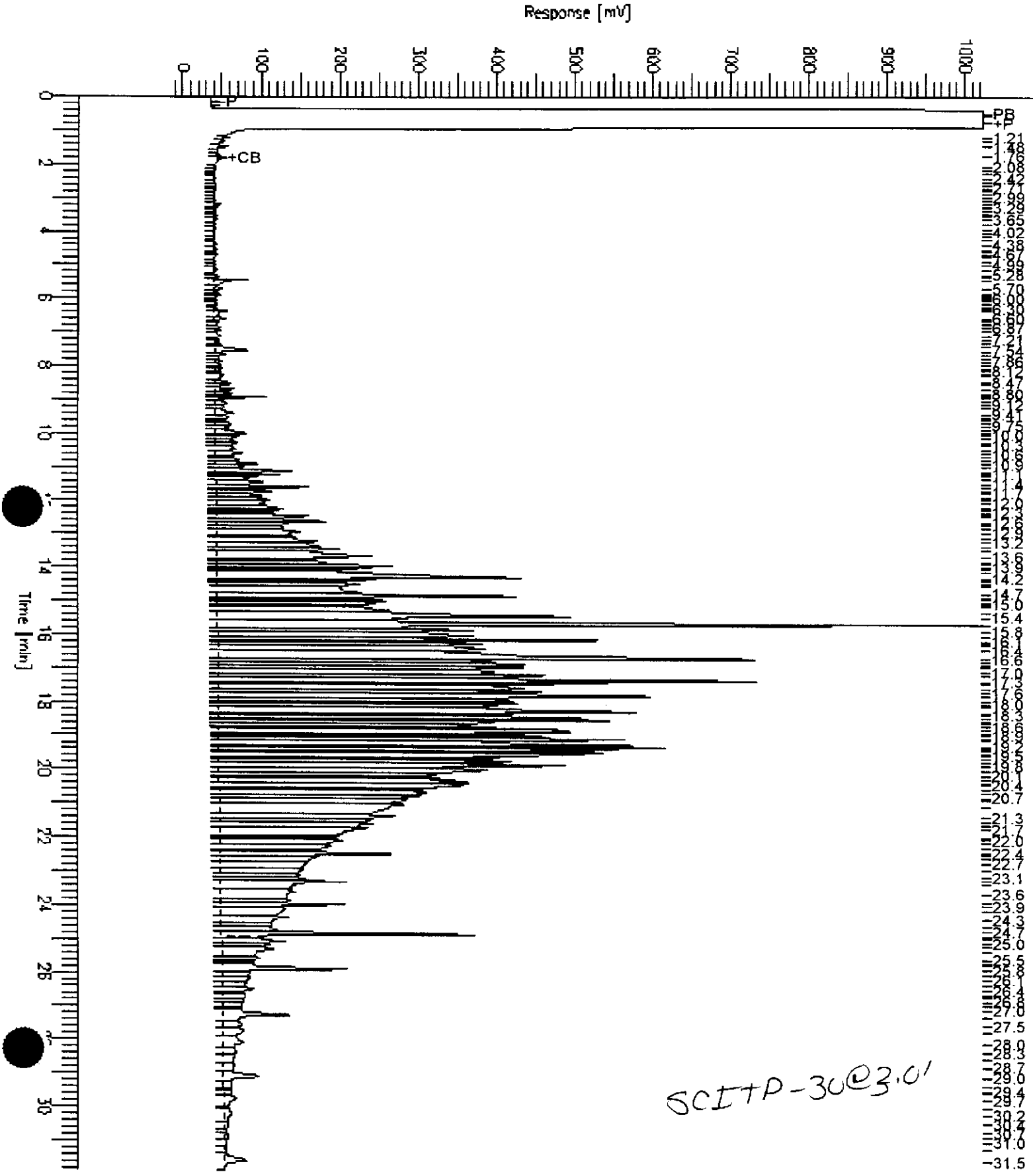
Analyte	Units	129116-005	129116-006	129116-007	129116-008
Diln Fac:		1	1	1	1
Diesel C12-C22	mg/Kg	38 YH	9 YH	20 YLH	21 Y
Motor Oil C22-C50	mg/Kg	430	72 YLH	140	87 YHL
Surrogate					
Hexacosane	%REC	111	96	112	117

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 : 129116-005,33831
File Name : G:\GC11\CHB\129B014.RAW
Method : BTEH128.MTH
Start Time : 0.00 min End Time : 31.90 min
Slope Factor: 0.0 Plot Offset: -17 mV

Sample #: 33831 Page 1 of 1
Date : 5/13/97 08:55 AM
Time of Injection: 5/10/97 03:09 AM
Low Point : -16.53 mV High Point : 1024.00 mV
Plot Scale: 1040.5 mV

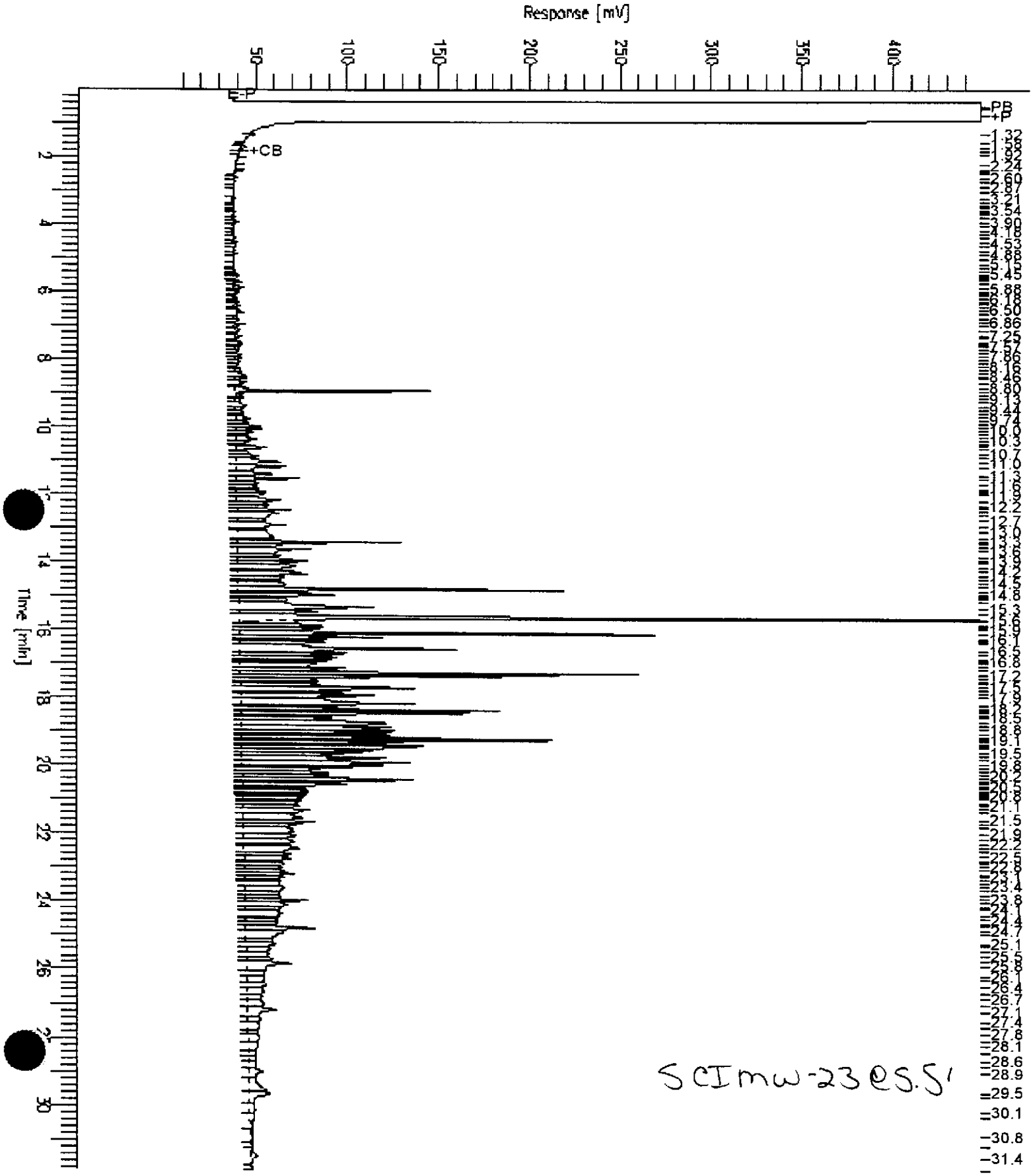


SCITP-30@3.0'

Chromatogram

Sample Name : 129116-006,33831
FileName : G:\GC11\CHB\129B015.RAW
Method : BTEH128.MTH
Start Time : 0.01 min End Time : 31.91 min
Tail Factor: 0.0 Plot Offset: 3 mV

Sample #: 33831 Page 1 of 1
Date : 5/13/97 08:56 AM
Time of Injection: 5/10/97 03:52 AM
Low Point : 2.77 mV High Point : 446.65 mV
Plot Scale: 445.9 mV

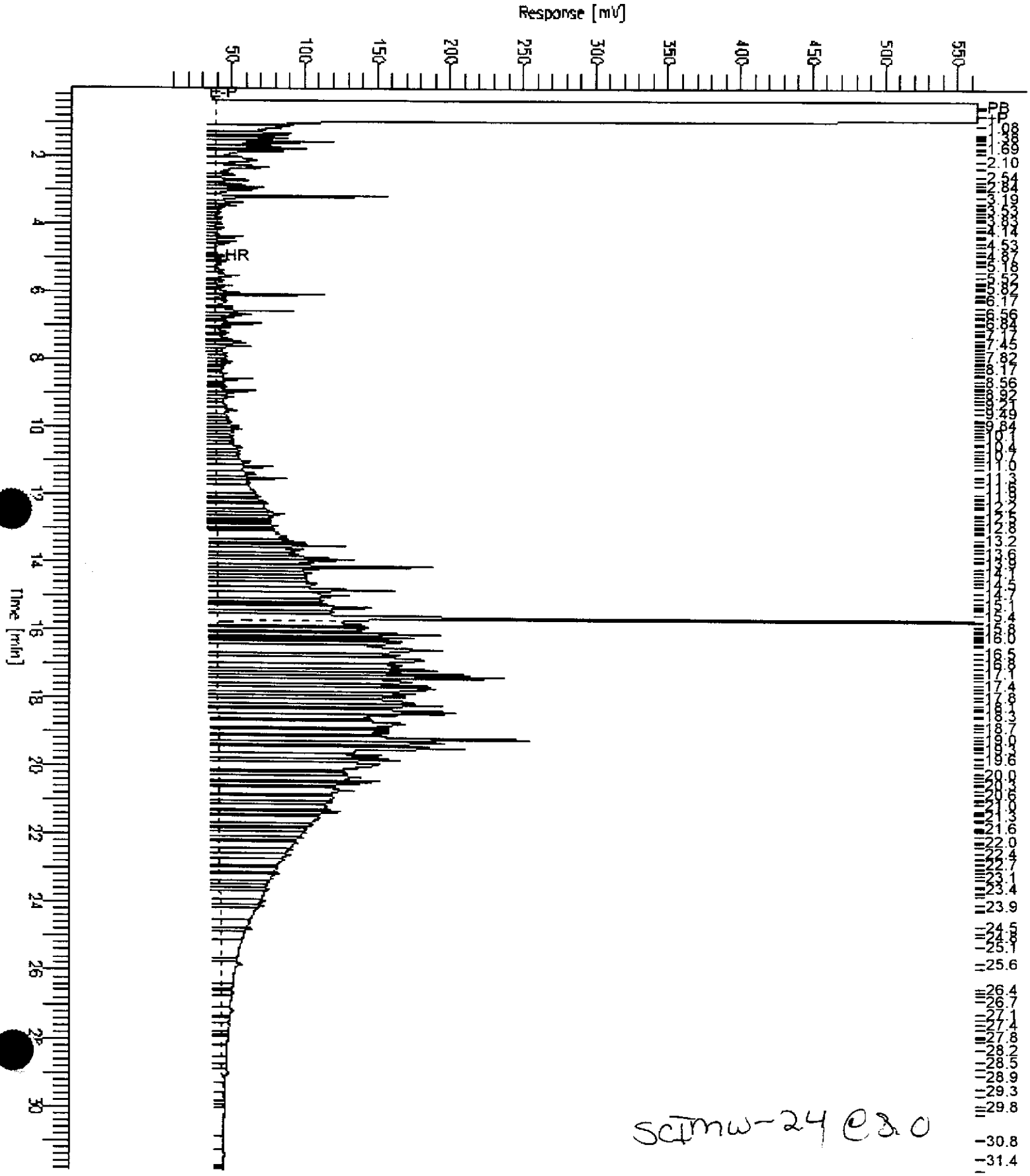


SCImw-23es.5

Chromatogram

Sample Name : 129116-007,33831
FileName : G:\GC11\CHB\129B019.RAW
Method : BTEH128.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 3 mV

Sample #: 33831 Page 1 of 1
Date : 5/13/97 09:34 AM
Time of Injection: 5/10/97 06:46 AM
Low Point : 2.70 mV High Point : 563.80 mV
Plot Scale: 561.1 mV

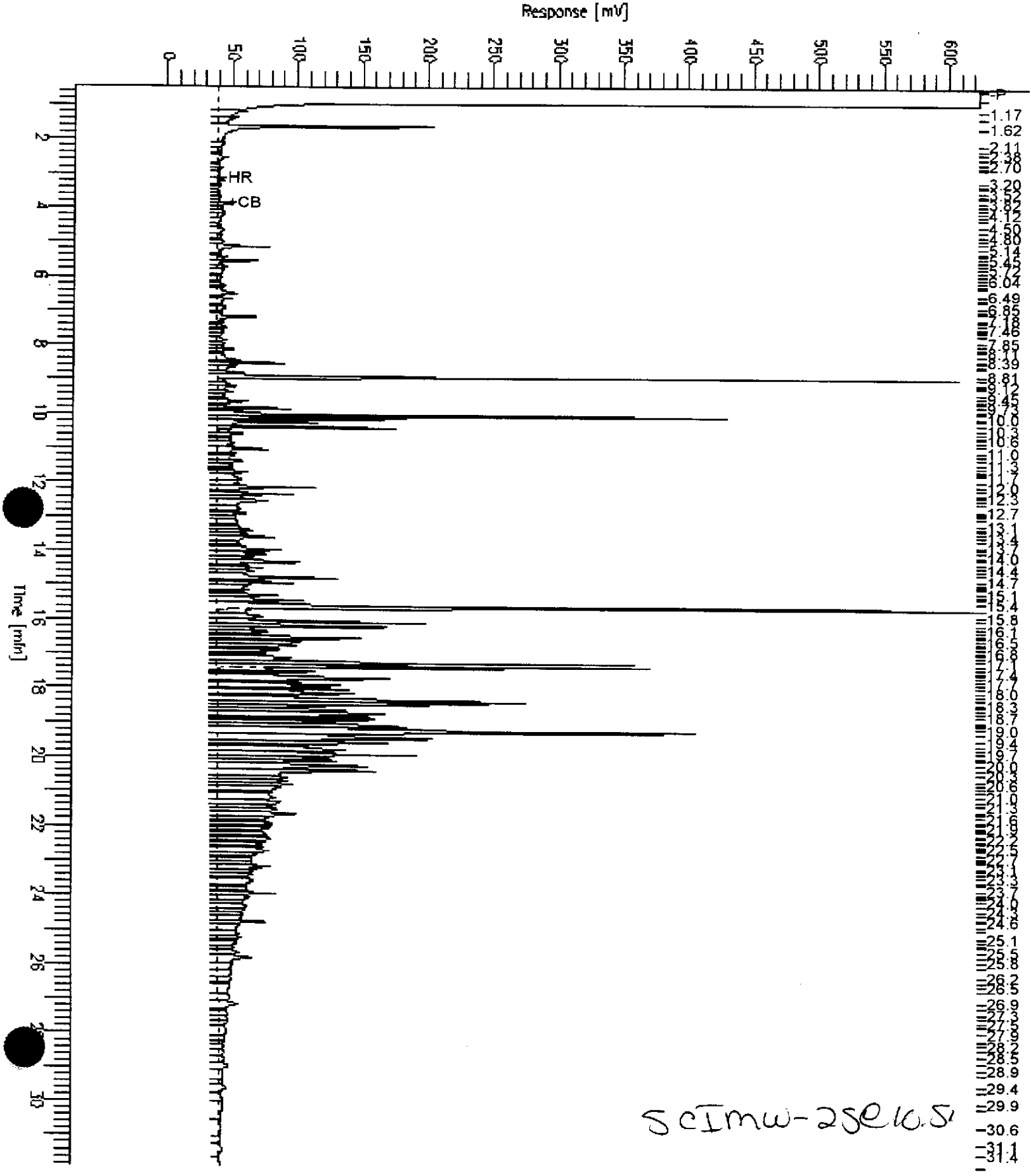


SCTMW-24 @ 30

Chromatogram

Sample Name : 129116-008,33831
FileName : G:\GC11\CHB\133B005.RAW
Method : BTEH128.MTH
Start Time : 0.45 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: -1 mV

Sample #: 33831 Page 1 of 1
Date : 5/13/97 03:05 PM
Time of Injection: 5/13/97 01:51 PM
Low Point : -0.77 mV High Point : 623.69 mV
Plot Scale: 624.5 mV



SCIMW-25e10.5

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129116-009	SCIMW-24@6.0'	33831	04/29/97	05/06/97	05/10/97	

Matrix: Soil

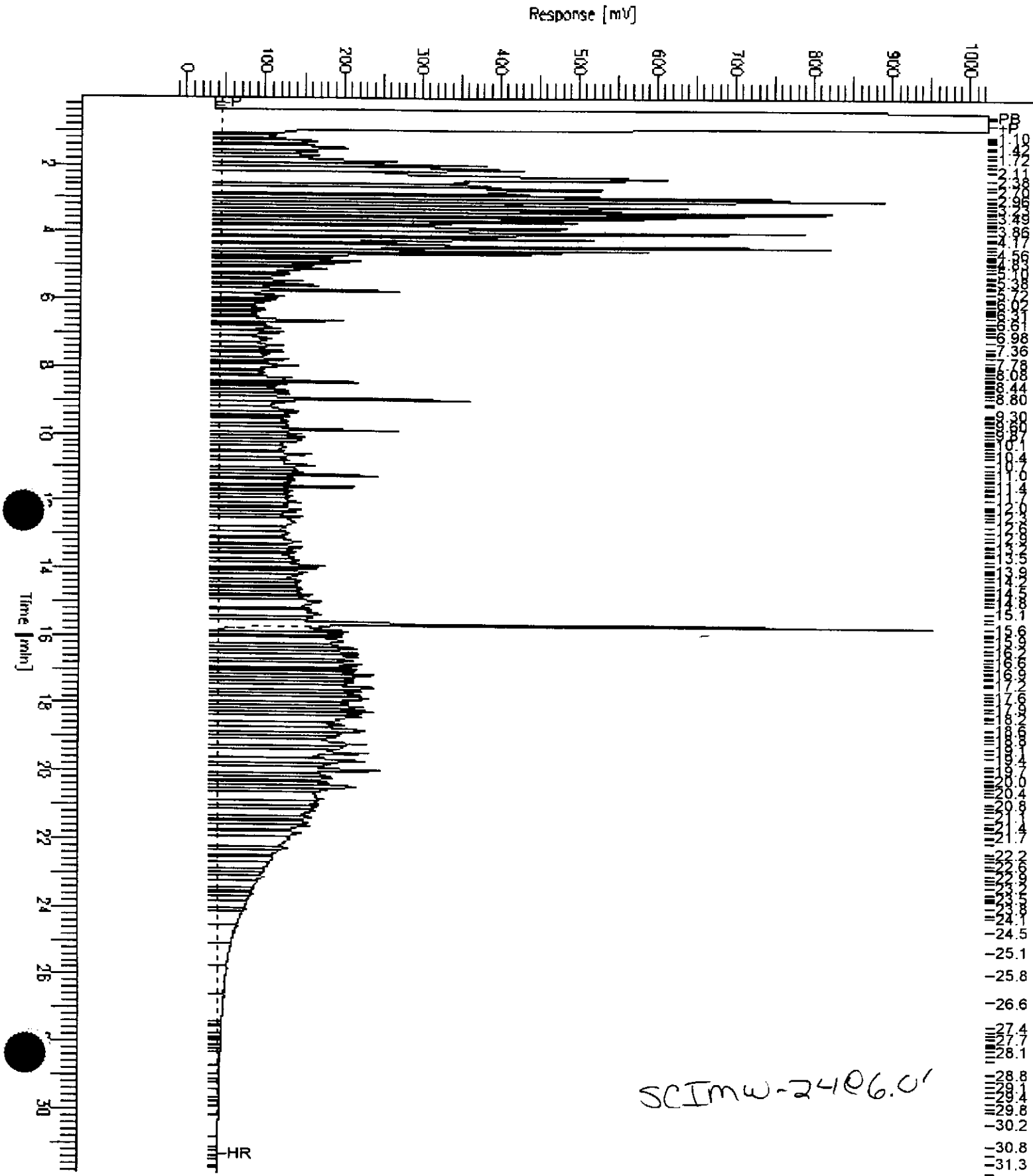
Analyte	Units	129116-009	
Diln Fac:		1	
Diesel C12-C22	mg/Kg	140	LH
Motor Oil C22-C50	mg/Kg	200	
Surrogate			
Hexacosane	%REC	114	

H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

Chromatogram

Sample Name : 129116-009,33831
FileName : G:\GC11\CHB\129B021.RAW
Method : BTEH128.MTH
Start Time : 0.01 min End Time : 31.91 min
Slope Factor: 0.0 Plot Offset: -16 mV

Sample #: 33831 Page 1 of 1
Date : 5/13/97 09:00 AM
Time of Injection: 5/10/97 08:12 AM
Low Point : -16.38 mV High Point : 1024.00 mV
Plot Scale: 1040.4 mV

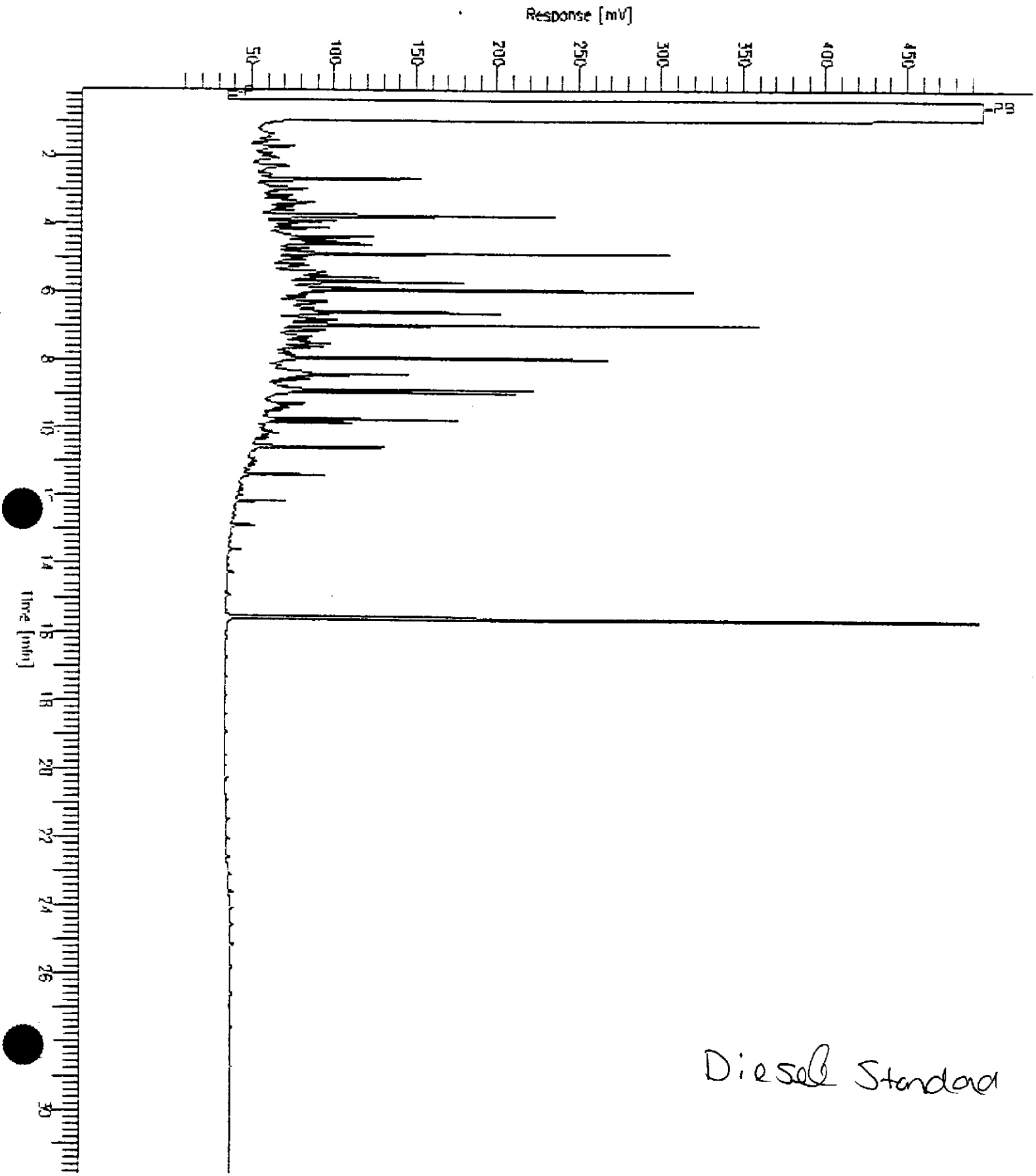


SCImw-2406.0'

Chromatogram

Sample Name : CCV,97WS4141,DS
FileName : G:\GC11\CHB\133B016.RAW
Method : BTEH128.MTH
Start Time : 0.07 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 2 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/14/97 09:37 AM
Time of Injection: 5/13/97 10:45 PM
Low Point : 2.49 mV High Point : 496.51 mV
Plot Scale: 494.0 mV

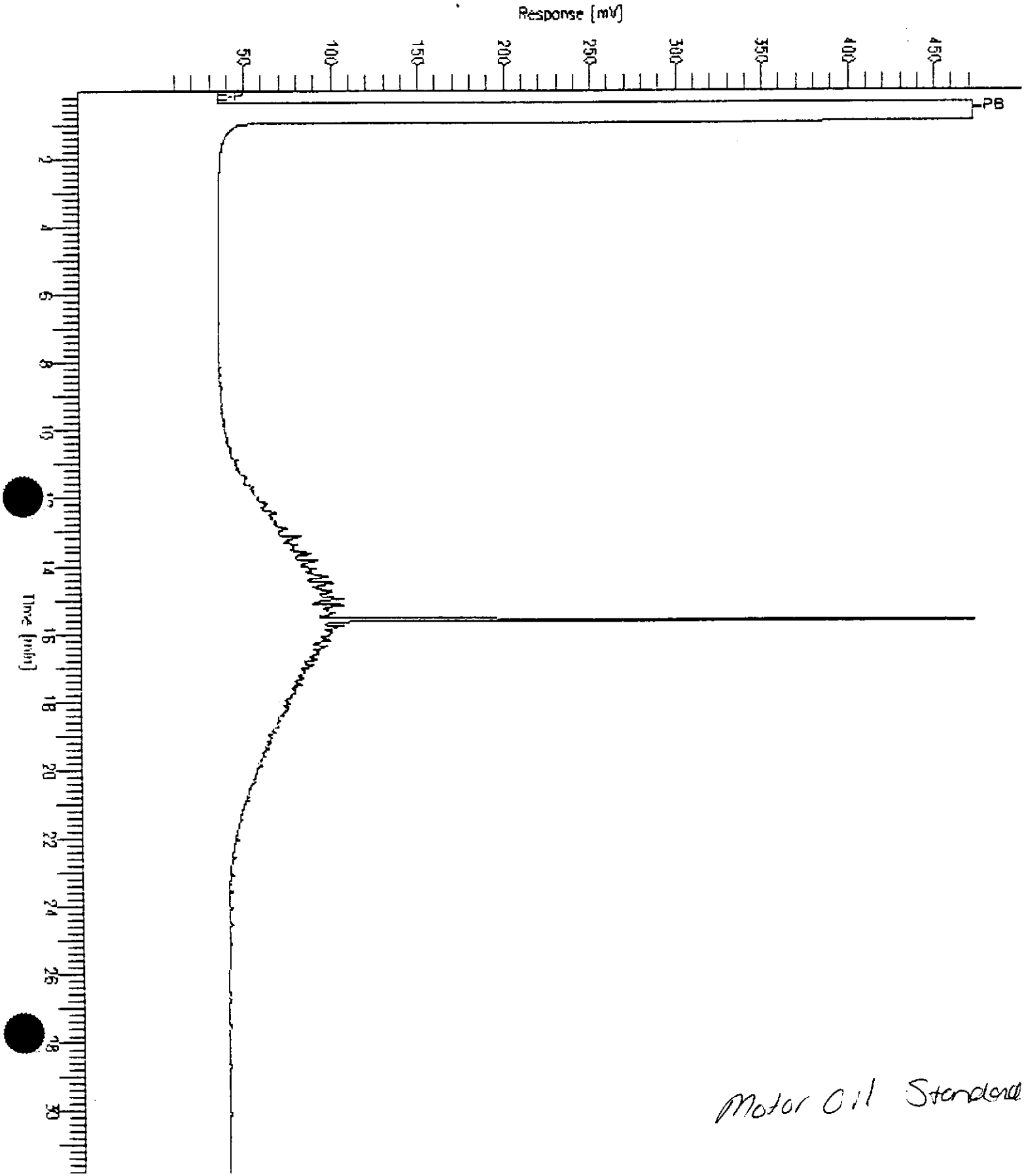


Diesel Standard

Chromatogram

Sample Name : CCV,97WG4154,MO
FileName : G:\GC11\CHB\133B018.RAW
Method : BTEH128.MTH
Start Time : 0.01 min End Time : 31.85 min
Slope Factor: 0.0 Plot Offset: 7 mV

Sample #: 500MG/L
Date : 5/14/97 09:37 AM
Time of Injection: 5/14/97 12:14 AM
Low Point : 6.99 mV High Point : 472.24 mV
Plot Scale: 465.2 mV

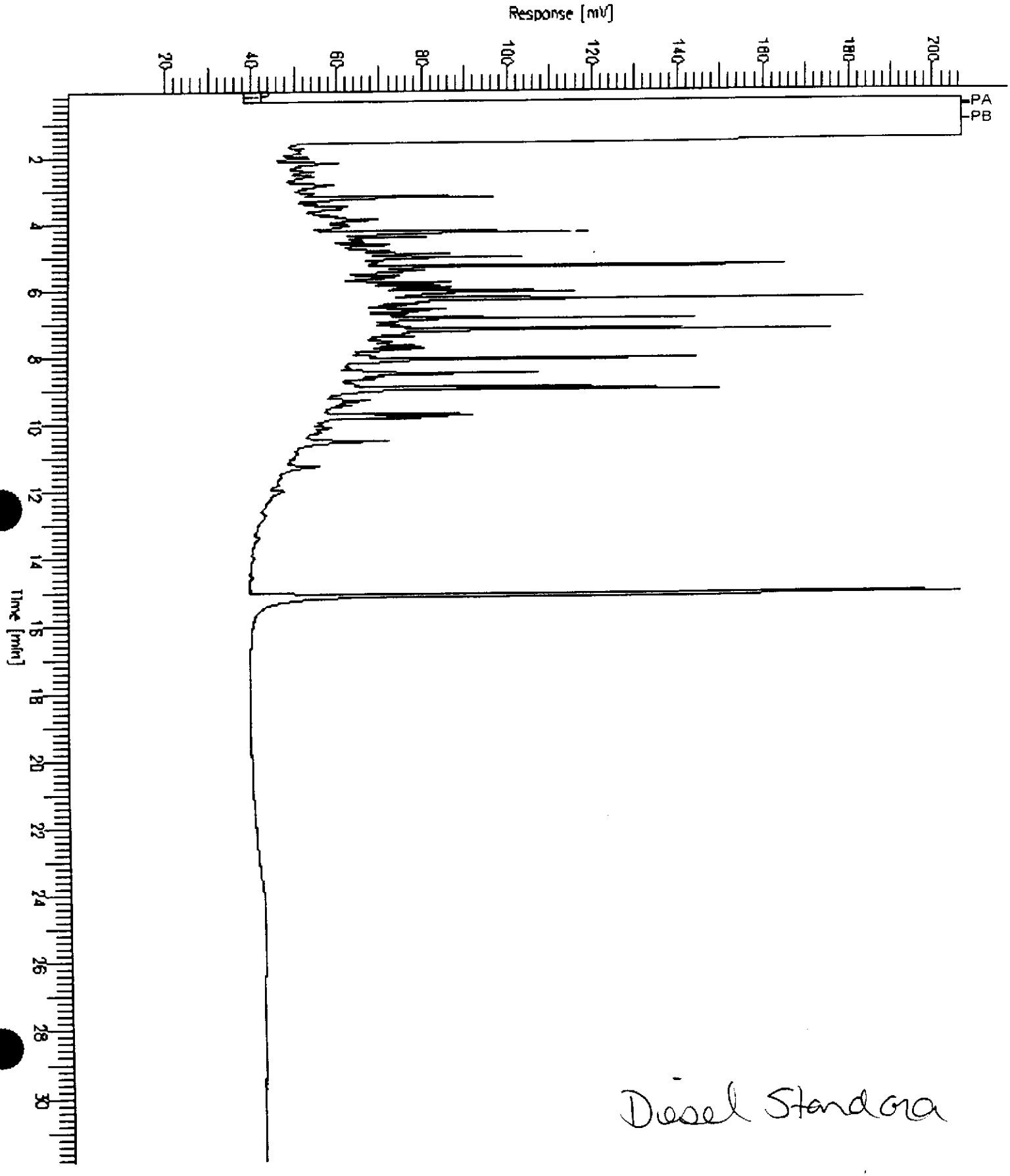


Motor Oil Standard

GC15 Channel B TEH

Sample Name : CCV,97WS4141,DS
FileName : G:\GC15\CHB\127B058.RAW
Method : B125TEH.MTH
Start Time : 0.07 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 19 mV

Sample #: 500MG/L
Date : 5/9/97 11:03 AM
Time of Injection: 5/9/97 07:45 AM
Low Point : 18.69 mV High Point : 206.92 mV
Plot Scale: 188.2 mV

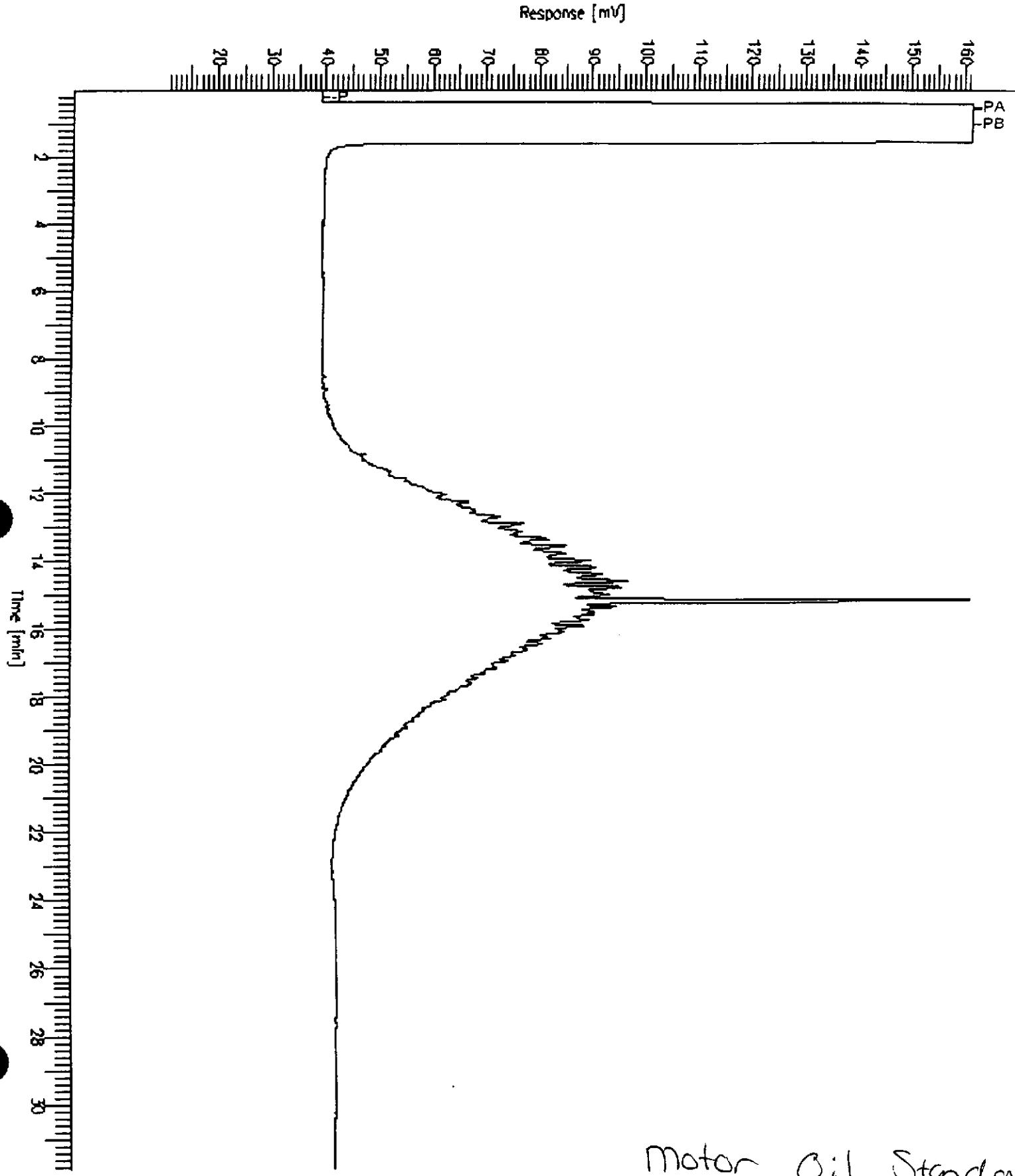


Diesel Standard

GC15 Channel B TEH

Sample Name : CCV,97WS4082,MO
FileName : G:\GC15\CHB\127B060.RAW
Method : B125TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 10 mV

Sample #: 500MG/L Page 1 of 1
Date : 5/9/97 11:03 AM
Time of Injection: 5/9/97 09:1[illegible] AM
Low Point : 10.13 mV High Point : 161.64 mV
Plot Scale: 151.5 mV



Motor Oil Standa

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129116-010	SCITP-28	33767	04/29/97	05/01/97	05/03/97	
129116-011	SCITP-30	33767	04/29/97	05/01/97	05/03/97	

Matrix: Water

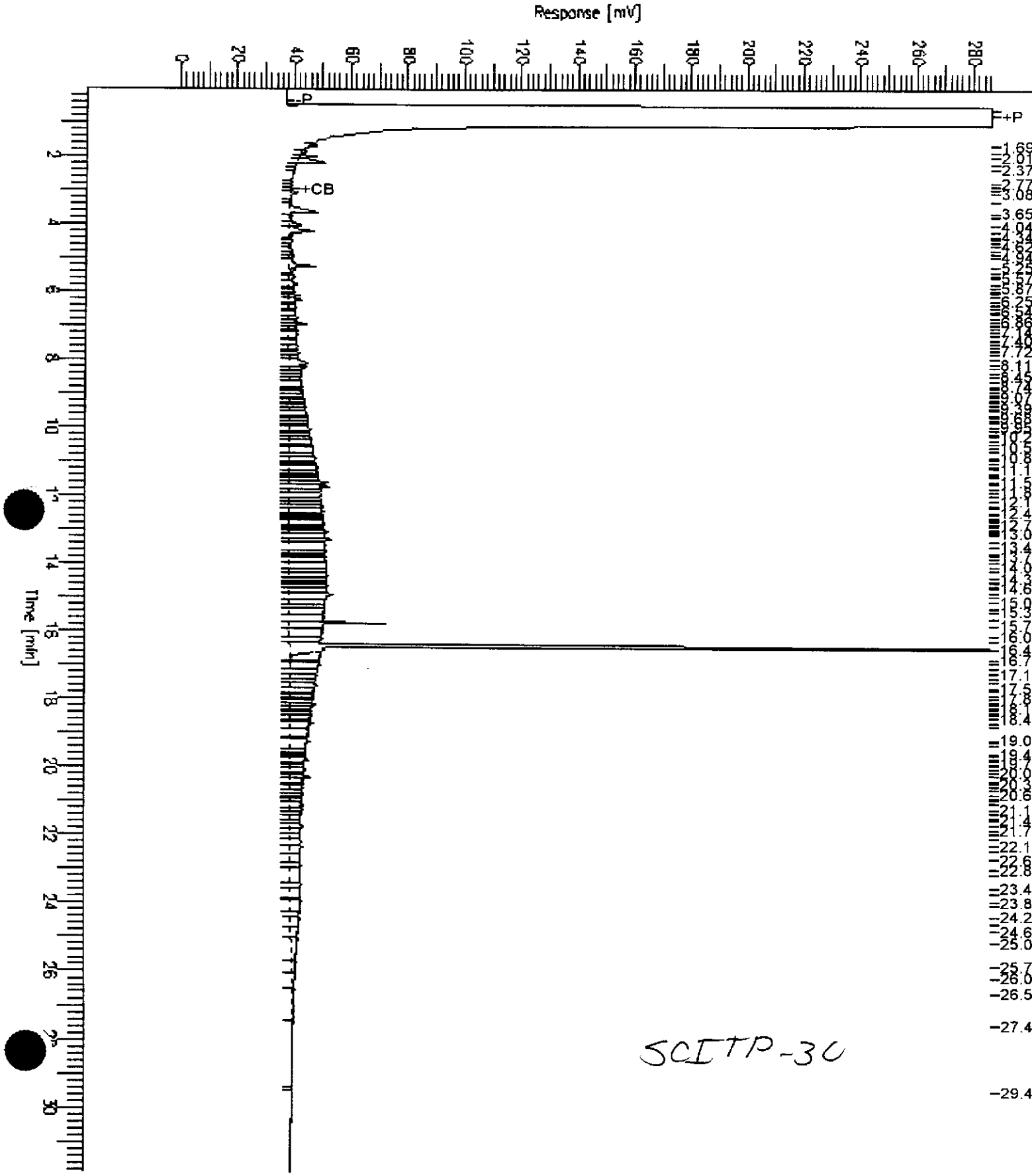
Analyte	Units	129116-010	129116-011
Diln Fac:		1	1
Diesel C12-C22	ug/L	<50	600 YH
Motor Oil C22-C50	ug/L	<300	810 YLH
Surrogate			
Hexacosane	%REC	79	78

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 : 129116-011,33767
FileName : G:\GC13\CHA\071A020A.RAW
Method : ATEH120.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: -1 mV

Sample #: 33767 Page 1 of 1
Date : 5/5/97 12:00 PM
Time of Injection: 5/3/97 02:39 AM
Low Point : -0.69 mV High Point : 286.62 mV
Plot Scale: 287.3 mV



SCITP-30

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129116-010	SCITP-28	33838	04/29/97	05/06/97	05/06/97	

Matrix: Filtrate

Analyte	Units	129116-010
Diln Fac:		1
Diesel C12-C22	ug/L	<50
Motor Oil C22-C50	ug/L	<300
Surrogate		
Hexacosane	%REC	90

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	CA LUFT
Location:	9th Ave. Terminal/KOT		

METHOD BLANK

Matrix:	Soil	Prep Date:	05/06/97
Batch#:	33831	Analysis Date:	05/09/97
Units:	mg/Kg		
Diln Fac:	1		

MB Lab ID: QC45530

Analyte	Result	
Diesel C12-C22	<1.0	
Motor Oil C22-C50	<5.0	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	105	60-140

Lab #: 129116

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33831
Units: mg/Kg
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/09/97

LCS Lab ID: QC45531

Analyte	Result	Spike Added	%Rec #	Limits
Diesel C12-C22	33.3	49.5	67	60-140
Surrogate	**%Rec**	**Limits**		
Hexacosane	94	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 #: 129116 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	133.004	Prep Method:	CA LUFT
Location:	9th Ave. Terminal/KOT		

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	SCIMW-21@2.0'	Sample Date:	04/28/97
Lab ID:	129116-001	Received Date:	04/30/97
Matrix:	Soil	Prep Date:	05/06/97
Batch#:	33831	Analysis Date:	05/09/97
Units:	mg/Kg		
Diln Fac:	1		

MS Lab ID: QC45532

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Diesel C12-C22	49.5	6.62	42.9	73	60-140
Surrogate	%Rec	Limits			
Hexacosane	114	60-140			

MSD Lab ID: QC45533

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	49.5	46.3	80	60-140	9	30
Surrogate	%Rec	Limits				
Hexacosane	123	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

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

METHOD BLANK

Matrix: Water
Batch#: 33767
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/03/97

MB Lab ID: QC45277

Analyte	Result	
Diesel C12-C22	<50	
Motor Oil C22-C50	<300	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	83	60-140

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33767
Units: ug/L
Diln Fac: 1

Prep Date: 05/01/97
Analysis Date: 05/03/97

BS Lab ID: QC45278

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1616	65	60-140
Surrogate	%Rec	Limits		
Hexacosane	74	60-140		

BSD Lab ID: QC45279

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1714	69	60-140	6	35
Surrogate	%Rec	Limits				
Hexacosane	78	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

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

METHOD BLANK

Matrix: Water
Batch#: 33838
Units: ug/L
Diln Fac: 1

Prep Date: 05/07/97
Analysis Date: 05/09/97

MB Lab ID: QC45556

Analyte	Result	
Diesel C12-C22	<50	
Motor Oil C22-C50	<300	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	95	60-140

Lab #: 129116

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

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

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33838
Units: ug/L
Diln Fac: 1

Prep Date: 05/07/97
Analysis Date: 05/09/97

BS Lab ID: QC45557

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C12-C22	2475	1645	66	60-140
Surrogate	%Rec	Limits		
Hexacosane	89	60-140		

BSD Lab ID: QC45558

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	2475	1552	63	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#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129116-001	SCIMW-21@2.0'	33823	04/28/97	05/07/97	05/07/97	
129116-002	SCIMW-22@3.5'	33823	04/28/97	05/07/97	05/07/97	
129116-004	SCITP-29@5.0'	33823	04/29/97	05/07/97	05/07/97	
129116-005	SCITP-30@3.0'	33823	04/29/97	05/07/97	05/07/97	

Matrix: Soil

Analyte Diln Fac:	Units	129116-001 1	129116-002 1	129116-004 1	129116-005 1
Benzene	ug/Kg	24	<5	<5	<5
Toluene	ug/Kg	7.3	<5	8.6	<5
Ethylbenzene	ug/Kg	14	<5	<5	<5
m,p-Xylenes	ug/Kg	6.8	<5	<5	<5
o-Xylene	ug/Kg	<5	<5	<5	<5
Surrogate					
Trifluorotoluene	%REC	85	84	83	83
Bromobenzene	%REC	101	99	97	95

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
129116-007	SCIMW-24@3.0'	33889	04/29/97	05/10/97	05/10/97	
129116-008	SCIMW-25@10.5'	33823	04/29/97	05/07/97	05/07/97	
129116-009	SCIMW-24@6.0'	33854	04/29/97	05/08/97	05/08/97	

Matrix: Soil

Analyte	Units	129116-007		129116-008	129116-009
Diln Fac:		100		1	200
Benzene	ug/Kg	1500	C	<5	<1000
Toluene	ug/Kg	<500		<5	<1000
Ethylbenzene	ug/Kg	11000		<5	<1000
m,p-Xylenes	ug/Kg	4900		<5	3900
o-Xylene	ug/Kg	1500		<5	<1000
Surrogate					
Trifluorotoluene	%REC	100		83	101
Bromobenzene	%REC	135		99	138

C: Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two

Curtis & Tompkins, Ltd.

Lab #: 129116

BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33823
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/07/97
Analysis Date: 05/07/97

MB Lab ID: QC45505

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	93	52-127
Bromobenzene	113	45-140

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33854
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/08/97
Analysis Date: 05/08/97

MB Lab ID: QC45681

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	82	52-127
Bromobenzene	97	45-140

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33889
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/09/97
Analysis Date: 05/09/97

MB Lab ID: QC45760

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	83	52-127
Bromobenzene	100	45-140

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33823
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/07/97
Analysis Date: 05/07/97

LCS Lab ID: QC45504

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	101.5	100	102	80-120
Toluene	107.5	100	108	80-120
Ethylbenzene	107.8	100	108	80-120
m,p-Xylenes	204.8	200	102	80-120
o-Xylene	101	100	101	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	96	52-127
Bromobenzene	114	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 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 129116

BATCH QC REPORT

BTXE

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33854
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/08/97
Analysis Date: 05/08/97

LCS Lab ID: QC45680

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	98.6	100	99	80-120
Toluene	93.84	100	94	80-120
Ethylbenzene	96.66	100	97	80-120
m,p-Xylenes	172.8	200	86	80-120
o-Xylene	103.8	100	104	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	87	52-127
Bromobenzene	108	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 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

BTXE	
Client: Subsurface Consultants	Analysis Method: EPA 8020
Project#: 133.004	Prep Method: EPA 5030
Location: 9th Ave. Terminal/KOT	
LABORATORY CONTROL SAMPLE	
Matrix: Soil	Prep Date: 05/09/97
Batch#: 33889	Analysis Date: 05/09/97
Units: ug/Kg	
Diln Fac: 1	

LCS Lab ID: QC45759

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	101	100	101	80-120
Toluene	96.71	100	97	80-120
Ethylbenzene	100.9	100	101	80-120
m,p-Xylenes	179.7	200	90	80-120
o-Xylene	106.5	100	107	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	86	52-127
Bromobenzene	109	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 5 outside limits

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal/KOT		

Field ID:	SCIMW-21@2.0'	Sampled:	04/28/97
Lab ID:	129116-001	Received:	04/30/97
Matrix:	Soil	Extracted:	05/05/97
Batch#:	33806	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	79	29-108
Decachlorobiphenyl	87	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal/KOT		

Field ID:	SCIMW-22@3.5'	Sampled:	04/28/97
Lab ID:	129116-002	Received:	04/30/97
Matrix:	Soil	Extracted:	05/05/97
Batch#:	33806	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	65	29-108
Decachlorobiphenyl	84	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal/KOT		
Field ID:	SCITP-28@1.5'	Sampled:	04/29/97
Lab ID:	129116-003	Received:	04/30/97
Matrix:	Soil	Extracted:	05/05/97
Batch#:	33806	Analyzed:	05/15/97
Units:	ug/Kg		
Diln Fac:	5		

Analyte	Result	Reporting Limit
alpha-BHC	ND	15
beta-BHC	ND	15
gamma-BHC	ND	15
delta-BHC	ND	15
Heptachlor	ND	15
Aldrin	ND	15
Heptachlor epoxide B	ND	15
Heptachlor epoxide A	ND	15
Endosulfan I	ND	15
Dieldrin	ND	30
4,4'-DDE	ND	30
Endrin	ND	30
Endosulfan II	ND	30
Endosulfan sulfate	ND	30
4,4'-DDD	ND	30
Endrin aldehyde	ND	30
4,4'-DDT	ND	30
Chlordane	ND	150
Methoxychlor	ND	150
Toxaphene	ND	300
Aroclor-1016	ND	60
Aroclor-1221	ND	120
Aroclor-1232	ND	60
Aroclor-1242	ND	60
Aroclor-1248	ND	60
Aroclor-1254	ND	60
Aroclor-1260	ND	60

Surrogate	%Recovery	Recovery Limits
TCMX	124*	29-108
Decachlorobiphenyl	125	30-125

* Values outside of QC limits

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal/KOT		

Field ID:	SCITP-29@5.0'	Sampled:	04/29/97
Lab ID:	129116-004	Received:	04/30/97
Matrix:	Soil	Extracted:	05/05/97
Batch#:	33806	Analyzed:	05/13/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	83	29-108
Decachlorobiphenyl	95	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal/KOT		
Field ID:	SCITP-30@3.0'	Sampled:	04/29/97
Lab ID:	129116-005	Received:	04/30/97
Matrix:	Soil	Extracted:	05/05/97
Batch#:	33806	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	88	29-108
Decachlorobiphenyl	83	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal/KOT		
Field ID:	SCIMW-23@5.5'	Sampled:	04/28/97
Lab ID:	129116-006	Received:	04/30/97
Matrix:	Soil	Extracted:	05/05/97
Batch#:	33806	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	74	29-108
Decachlorobiphenyl	89	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal/KOT		

Field ID:	SCIMW-24@3.0'	Sampled:	04/29/97
Lab ID:	129116-007	Received:	04/30/97
Matrix:	Soil	Extracted:	05/05/97
Batch#:	33806	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Recovery	Recovery Limits
TCMX	84	29-108
Decachlorobiphenyl	82	30-125

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal/KOT		

Field ID:	SCIMW-25@10.5'	Sampled:	04/29/97
Lab ID:	129116-008	Received:	04/30/97
Matrix:	Soil	Extracted:	05/05/97
Batch#:	33806	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	20		

Analyte	Result	Reporting Limit
alpha-BHC	ND	60
beta-BHC	ND	60
gamma-BHC	ND	60
delta-BHC	ND	60
Heptachlor	ND	60
Aldrin	ND	60
Heptachlor epoxide B	ND	60
Heptachlor epoxide A	ND	60
Endosulfan I	ND	60
Dieldrin	ND	120
4,4'-DDE	ND	120
Endrin	ND	120
Endosulfan II	ND	120
Endosulfan sulfate	ND	120
4,4'-DDD	ND	120
Endrin aldehyde	ND	120
4,4'-DDT	ND	120
Chlordane	ND	600
Methoxychlor	ND	600
Toxaphene	ND	1200
Aroclor-1016	ND	240
Aroclor-1221	ND	480
Aroclor-1232	ND	240
Aroclor-1242	ND	240
Aroclor-1248	ND	240
Aroclor-1254	ND	240
Aroclor-1260	ND	240

Surrogate	%Recovery	Recovery Limits
TCMX	DO*	29-108
Decachlorobiphenyl	DO*	30-125

* Values outside of QC limits
DO: Surrogate diluted out

Organochlorine Pesticides and PCBs

Client:	Subsurface Consultants	Analysis Method:	EPA 8080
Project#:	133.004	Prep Method:	EPA 3520
Location:	9th Ave. Terminal/KOT		

Field ID:	SCITP-28	Sampled:	04/29/97
Lab ID:	129116-010	Received:	04/30/97
Matrix:	Water	Extracted:	05/06/97
Batch#:	33837	Analyzed:	05/14/97
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
alpha-BHC	ND	0.1
beta-BHC	ND	0.1
gamma-BHC	ND	0.1
delta-BHC	ND	0.1
Heptachlor	ND	0.1
Aldrin	ND	0.1
Heptachlor epoxide B	ND	0.1
Heptachlor epoxide A	ND	0.1
Endosulfan I	ND	0.1
Dieldrin	ND	0.2
4,4'-DDE	ND	0.2
Endrin	ND	0.2
Endosulfan II	ND	0.2
Endosulfan sulfate	ND	0.2
4,4'-DDD	ND	0.2
Endrin aldehyde	ND	0.2
4,4'-DDT	ND	0.2
Chlordane	ND	1.0
Methoxychlor	ND	1.0
Toxaphene	ND	2.0
Aroclor-1016	ND	1.0
Aroclor-1221	ND	2.0
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	34-128
Decachlorobiphenyl	72	50-150

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129116-010
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH AVE. TERMINAL/KOT
SAMPLE ID: SCITP-28

DATE SAMPLED: 04/29/97
DATE RECEIVED: 04/30/97
DATE EXTRACTED: 05/06/97
DATE ANALYZED: 05/13/97
DATE REPORTED: 05/15/97
BATCH NO: 33837

EPA 8080: Organochlorine Pesticides and PCBs in Filtrate
Extraction Method: EPA 3520

COMPOUND	RESULT ug/L	REPORTING LIMIT ug/L
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC (Lindane)	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor Epoxide B	ND	0.05
Heptachlor Epoxide A	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan Sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin Aldehyde	ND	0.1
4,4'-DDT	ND	0.1
Chlordane	ND	0.5
Methoxychlor	ND	0.5
Toxaphene	ND	1
PCBs:		
Aroclor 1016	ND	0.5
Aroclor 1221	ND	1
Aroclor 1232	ND	0.5
Aroclor 1242	ND	0.5
Aroclor 1248	ND	0.5
Aroclor 1254	ND	0.5
Aroclor 1260	ND	0.5

ND = Not detected at or above reporting limit.

SURROGATE RECOVERY:

TCMX, %	64
DECACHLOROBIPHENYL, %	91

Lab #: 129116

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8080
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33837
Units: ug/L
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/06/97

MB Lab ID: QC45553

Analyte	Result	Reporting Limit
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide B	ND	0.05
Heptachlor epoxide A	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
Chlordane	ND	0.5
Methoxychlor	ND	0.5
Toxaphene	ND	1.0
Aroclor-1016	ND	0.5
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.5
Aroclor-1242	ND	0.5
Aroclor-1248	ND	0.5
Aroclor-1254	ND	0.5
Aroclor-1260	ND	0.5

Surrogate	%Rec	Recovery Limits
TCMX	75	34-128
Decachlorobiphenyl	93	50-150

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8080
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33806
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/05/97
Analysis Date: 05/08/97

MB Lab ID: QC45434

Analyte	Result	Reporting Limit
alpha-BHC	ND	3.0
beta-BHC	ND	3.0
gamma-BHC	ND	3.0
delta-BHC	ND	3.0
Heptachlor	ND	3.0
Aldrin	ND	3.0
Heptachlor epoxide B	ND	3.0
Heptachlor epoxide A	ND	3.0
Endosulfan I	ND	3.0
Dieldrin	ND	6.0
4,4'-DDE	ND	6.0
Endrin	ND	6.0
Endosulfan II	ND	6.0
Endosulfan sulfate	ND	6.0
4,4'-DDD	ND	6.0
Endrin aldehyde	ND	6.0
4,4'-DDT	ND	6.0
Chlordane	ND	30
Methoxychlor	ND	30
Toxaphene	ND	60
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%Rec	Recovery Limits
TCMX	87	29-108
Decachlorobiphenyl	83	30-125

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8080
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33806
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/05/97
Analysis Date: 05/08/97

LCS Lab ID: QC45435

Analyte	Result	Spike Added	%Rec #	Limits
gamma-BHC	14.4	17	86	49-115
Heptachlor	14.2	17	85	51-119
Aldrin	14.38	17	86	55-112
Dieldrin	15.39	17	92	54-123
Endrin	16.11	17	97	63-128
4,4'-DDT	13.96	17	84	57-131

Surrogate	%Rec	Limits
TCMX	75	29-108
Decachlorobiphenyl	81	30-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 6 outside limits

EPA 8080 Pesticides & PCBs

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8080
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33837
Units: ug/L
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/13/97

BS Lab ID: QC45554

Analyte	Spike Added	BS	%Rec #	Limits
gamma-BHC	0.5	0.51	102	57-120
Heptachlor	0.5	0.49	98	51-109
Aldrin	0.5	0.52	104	57-105
Dieldrin	0.5	0.5	100	62-122
Endrin	0.5	0.54	108	70-128
4,4'-DDT	0.5	0.51	102	67-128

Surrogate	%Rec	Limits
TCMX	78	34-128
Decachlorobiphenyl	96	50-150

BSD Lab ID: QC45555

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
gamma-BHC	0.5	0.53	106	57-120	4	20
Heptachlor	0.5	0.47	94	51-109	4	20
Aldrin	0.5	0.5	100	57-105	4	20
Dieldrin	0.5	0.49	98	62-122	2	20
Endrin	0.5	0.53	106	70-128	2	20
4,4'-DDT	0.5	0.49	98	67-128	4	20

Surrogate	%Rec	Limits
TCMX	72	34-128
Decachlorobiphenyl	94	50-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

Curtis & Tompkins, Ltd.

Client: Subsurface Consultants

Laboratory Login Number: 129116

Project Name: 9th Ave. Terminal/KOT
Project Number: 133.004

Report Date: 14 May 97

ANALYSIS: pH

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	Method	Analyst	QC Batch
129116-001	SCIMW-21@2.0'	Soil	28-APR-97	30-APR-97	07-MAY-97	7.4	SU #	EPA 9045	DRH	33859
129116-002	SCIMW-22@3.5'	Soil	28-APR-97	30-APR-97	07-MAY-97	8.2	SU *	EPA 9045	DRH	33859
129116-003	SCITP-28@1.5'	Soil	29-APR-97	30-APR-97	07-MAY-97	5.2	SU #	EPA 9045	DRH	33859
129116-006	SCIMW-23@5.5'	Soil	28-APR-97	30-APR-97	07-MAY-97	7.2	SU *	EPA 9045	DRH	33859

* Soil pH measured as water
\# Soil pH measured in 0.01 M CaCl2

Curtis & Tompkins, Ltd.

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

Client: Subsurface Consultants
Project Name: 9th Ave. Terminal/KOT
Project Number: 133.004

Laboratory Login Number: 129116
Report Date: 14 May 97

ANALYSIS: pH

QC Batch Number: 33859

Calibration Verification Results

Sample	Result	TV	Difference	Limit	Analyzed
ICV	7.00	7.00	.00	< 0.10	07-MAY-97
CCV	7.00	7.00	.00	< 0.10	07-MAY-97

Sample Duplicate Results

Sample	Duplicate	RPD	Analyzed
7.17	7.17	0%	07-MAY-97

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCIMW-21@2.0'
Lab ID: 129116-001
Matrix: Soil
Batch#: 33794
Units: ug/Kg
Diln Fac: 1

Sampled: 04/28/97
Received: 04/30/97
Extracted: 05/04/97
Analyzed: 05/04/97

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	46	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	9.4 J	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	4.7 J	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

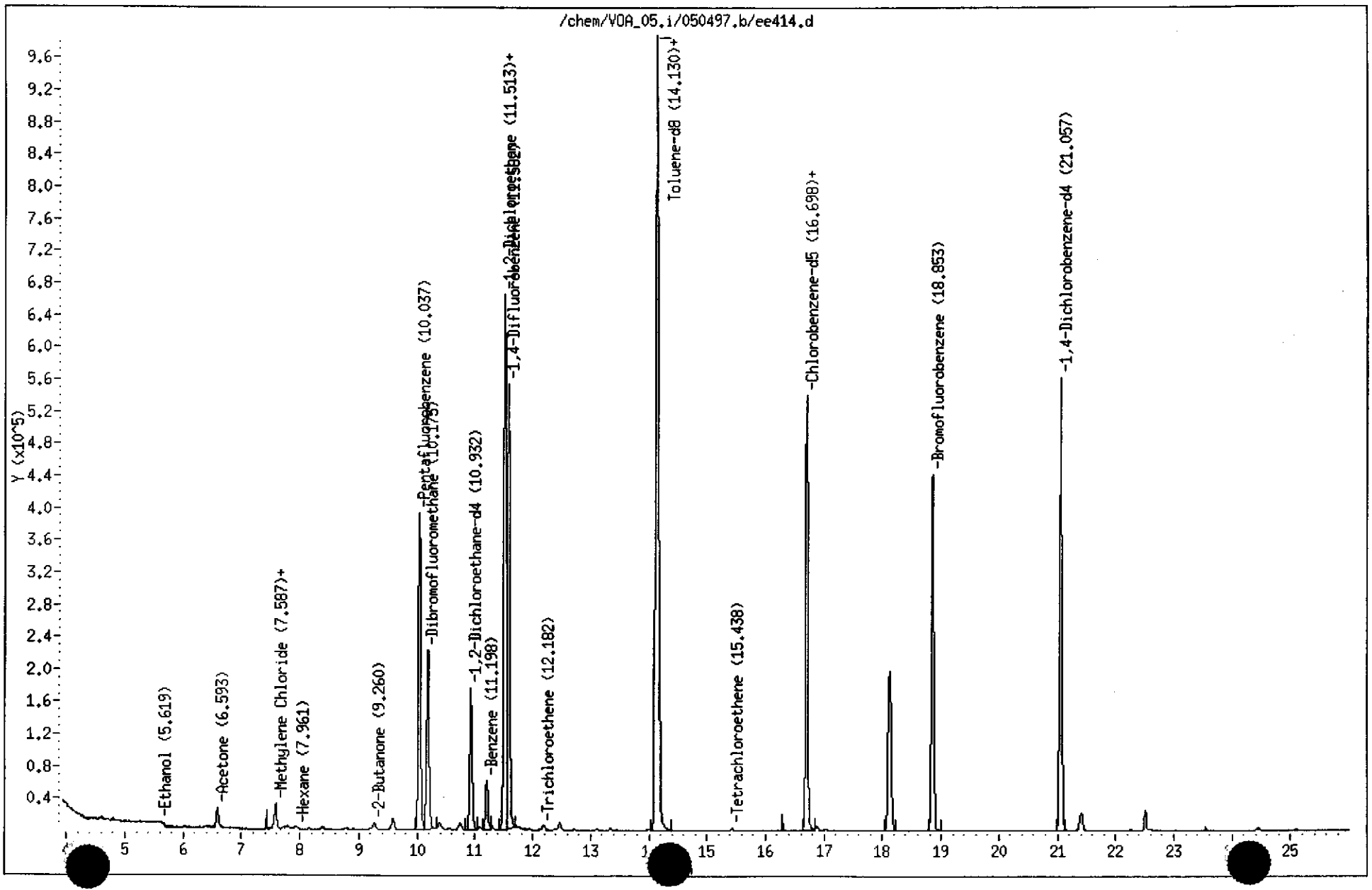
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	96	87-125
Bromofluorobenzene	93	79-122

J: Estimated Value

Data File: /chem/VOA_05.i/050497.b/ee414.d
Date : 04-MAY-97 19:23
Client ID: DYNA P&T
Sample Info: S,129116-001
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#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCIMW-22@3.5'
Lab ID: 129116-002
Matrix: Soil
Batch#: 33794
Units: ug/Kg
Diln Fac: 1

Sampled: 04/28/97
Received: 04/30/97
Extracted: 05/04/97
Analyzed: 05/04/97

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	97	87-125
Bromofluorobenzene	95	79-122

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCITP-29@5.0'
Lab ID: 129116-004
Matrix: Soil
Batch#: 33800
Units: ug/Kg
Diln Fac: 2.5

Sampled: 04/29/97
Received: 04/30/97
Extracted: 05/05/97
Analyzed: 05/05/97

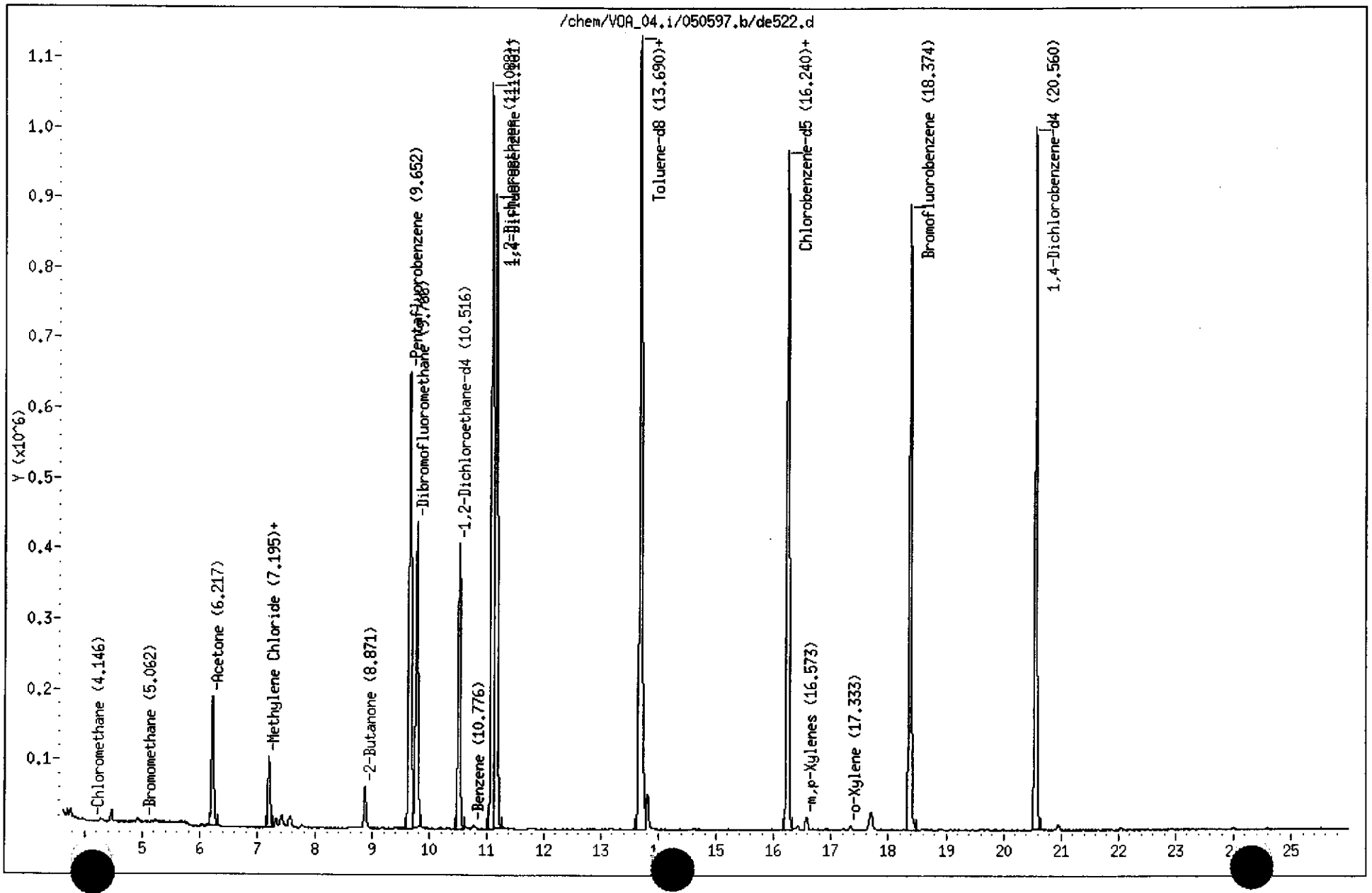
Analyte	Result	Reporting Limit
Chloromethane	ND	25
Bromomethane	ND	25
Vinyl Chloride	ND	25
Chloroethane	ND	25
Methylene Chloride	ND	50
Acetone	270	50
Carbon Disulfide	ND	13
Trichlorofluoromethane	ND	13
1,1-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
trans-1,2-Dichloroethene	ND	13
cis-1,2-Dichloroethene	ND	13
Chloroform	ND	13
Freon 113	ND	13
1,2-Dichloroethane	ND	13
2-Butanone	62	25
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
Vinyl Acetate	ND	130
Bromodichloromethane	ND	13
1,2-Dichloropropane	ND	13
cis-1,3-Dichloropropene	ND	13
Trichloroethene	ND	13
Dibromochloromethane	ND	13
1,1,2-Trichloroethane	ND	13
Benzene	ND	13
trans-1,3-Dichloropropene	ND	13
Bromoform	ND	13
2-Hexanone	ND	25
4-Methyl-2-Pentanone	ND	25
1,1,2,2-Tetrachloroethane	ND	13
Tetrachloroethene	ND	13
Toluene	ND	13
Chlorobenzene	ND	13
Ethylbenzene	ND	13
Styrene	ND	13
m,p-Xylenes	ND	13
o-Xylene	ND	13

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	104	79-122

Data File: /chem/VOA_04.i/050597.b/de522.d
Date : 05-MAY-97 22:09
Client ID: DYNA P&T
Sample Info: S,129116-004
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i

Operator: DM
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCIMW-23@5.5'
Lab ID: 129116-006
Matrix: Soil
Batch#: 33794
Units: ug/Kg
Diln Fac: 1

Sampled: 04/28/97
Received: 04/30/97
Extracted: 05/04/97
Analyzed: 05/04/97

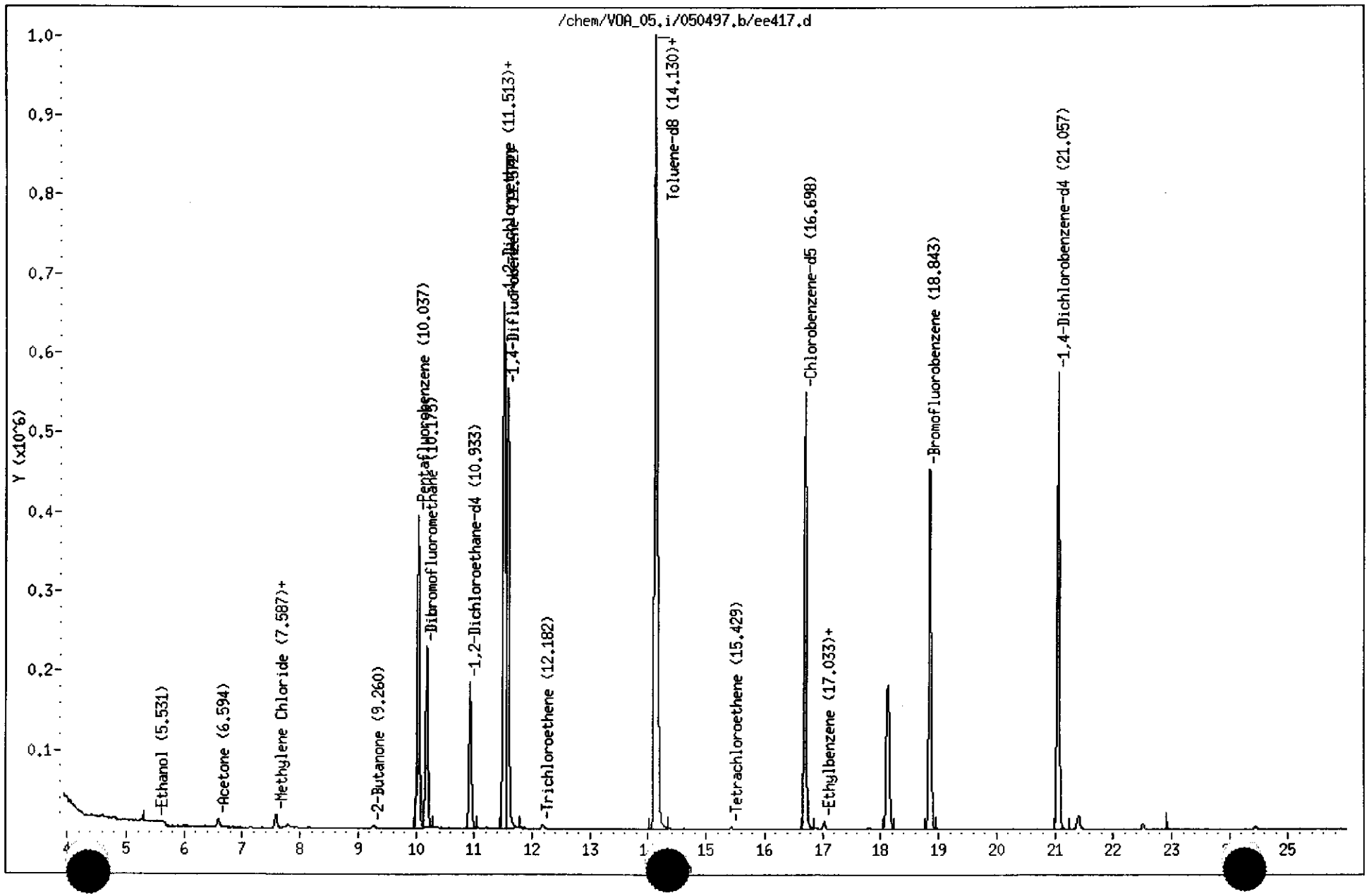
Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	21	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	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	100	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	95	79-122

Data File: /chem/VOA_05.i/050497.b/ee417.d
Date : 04-MAY-97 21:01
Client ID: DYNA P&T
Sample Info: S,129116-006
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#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCIMW-24@3.0'
Lab ID: 129116-007
Matrix: Soil
Batch#: 33816
Units: ug/Kg
Diln Fac: 100

Sampled: 04/29/97
Received: 04/30/97
Extracted: 05/08/97
Analyzed: 05/08/97

Analyte	Result	Reporting Limit
Chloromethane	ND	1000
Bromomethane	ND	1000
Vinyl Chloride	ND	1000
Chloroethane	ND	1000
Methylene Chloride	ND	2000
Acetone	ND	2000
Carbon Disulfide	ND	500
Trichlorofluoromethane	ND	500
1,1-Dichloroethene	ND	500
1,1-Dichloroethane	ND	500
trans-1,2-Dichloroethene	ND	500
cis-1,2-Dichloroethene	ND	500
Chloroform	ND	500
Freon 113	ND	500
1,2-Dichloroethane	ND	500
2-Butanone	ND	1000
1,1,1-Trichloroethane	ND	500
Carbon Tetrachloride	ND	500
Vinyl Acetate	ND	5000
Bromodichloromethane	ND	500
1,2-Dichloropropane	ND	500
cis-1,3-Dichloropropene	ND	500
Trichloroethene	ND	500
Dibromochloromethane	ND	500
1,1,2-Trichloroethane	ND	500
Benzene	1600	500
trans-1,3-Dichloropropene	ND	500
Bromoform	ND	500
2-Hexanone	ND	1000
4-Methyl-2-Pentanone	ND	1000
1,1,2,2-Tetrachloroethane	ND	500
Tetrachloroethene	ND	500
Toluene	310 J	500
Chlorobenzene	ND	500
Ethylbenzene	8600	500
Styrene	ND	500
m,p-Xylenes	4400	500
o-Xylene	500	500

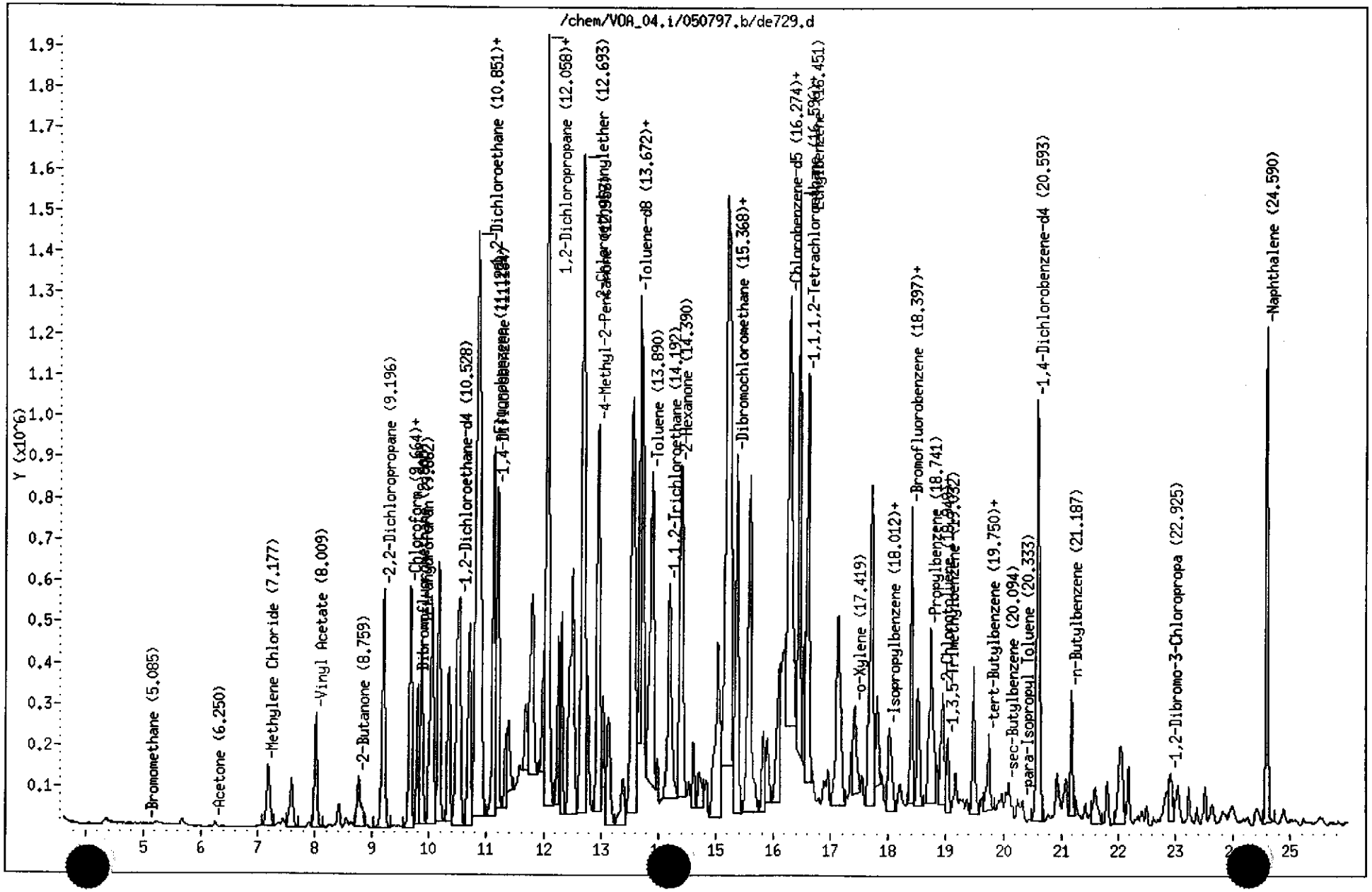
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	87	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	98	79-122

J: Estimated Value

Data File: /chem/VOA_04.i/050797.b/de729.d
Date : 08-MAY-97 02:54
Client ID: DYNA P&T
Sample Info: S,129116-007
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i

Operator: DM
Column diameter: 0.32



Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCIMW-25@10.5'
Lab ID: 129116-008
Matrix: Soil
Batch#: 33794
Units: ug/Kg
Diln Fac: 1

Sampled: 04/29/97
Received: 04/30/97
Extracted: 05/04/97
Analyzed: 05/04/97

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	10	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	5.3 J	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

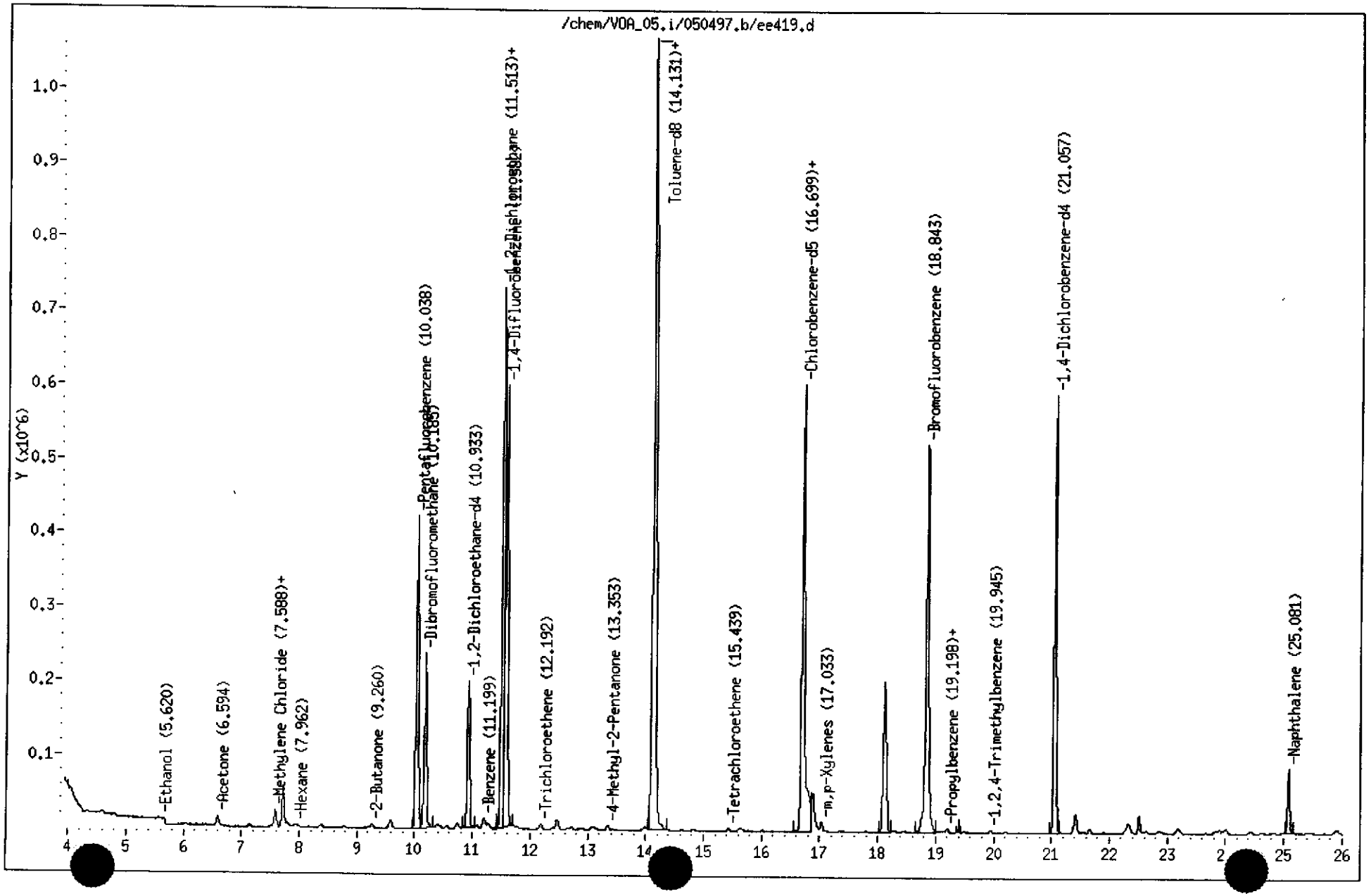
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	96	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	100	79-122

J: Estimated Value

Data File: /chem/VOA_05.i/050497.b/ee419.d
Date : 04-MAY-97 22:06
Client ID: DYNA P&T
Sample Info: S,129116-008
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#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: SCIMW-24@6.0'
Lab ID: 129116-009
Matrix: Soil
Batch#: 33816
Units: ug/Kg
Diln Fac: 100

Sampled: 04/29/97
Received: 04/30/97
Extracted: 05/07/97
Analyzed: 05/07/97

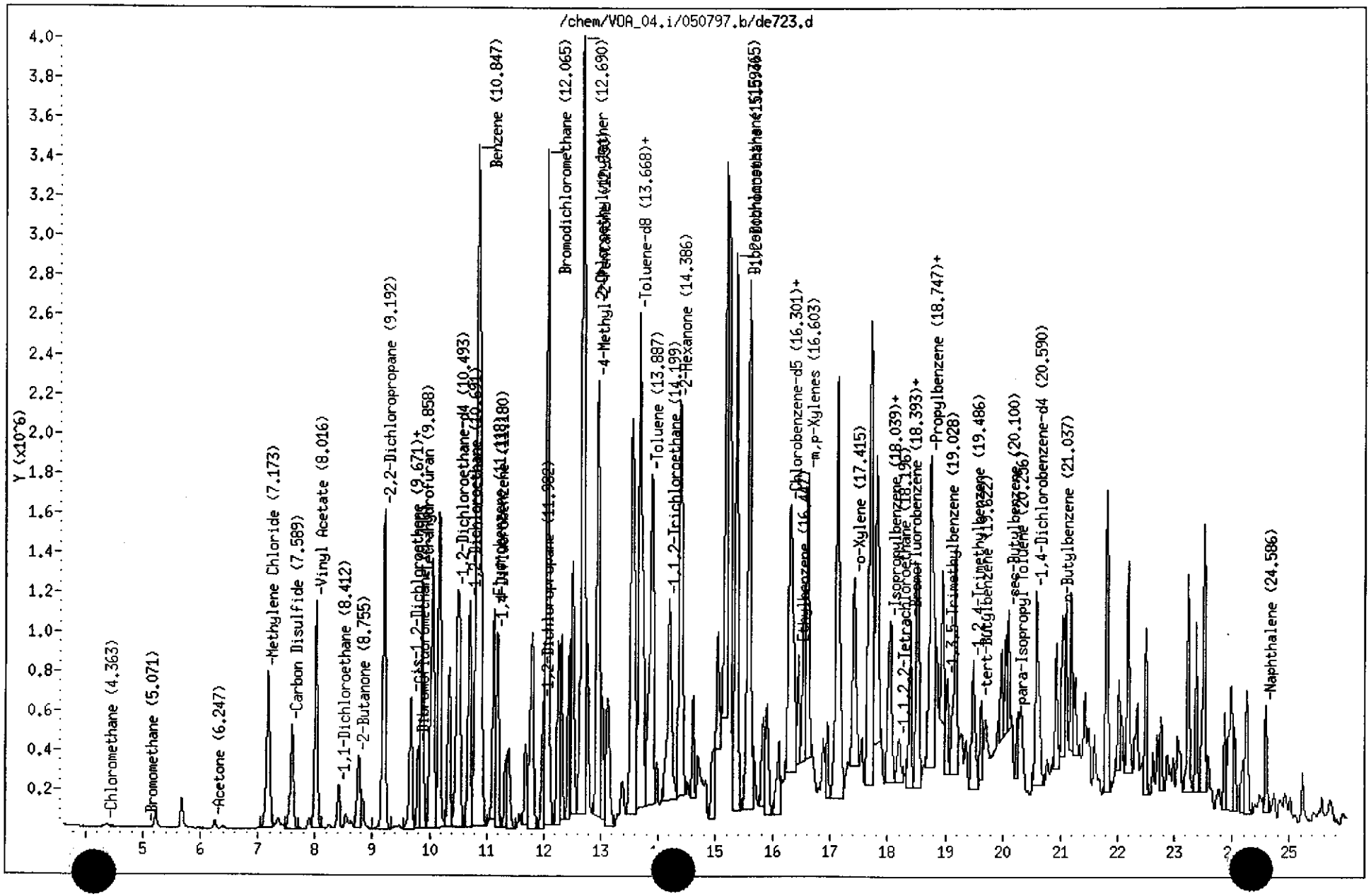
Analyte	Result	Reporting Limit
Chloromethane	ND	1000
Bromomethane	ND	1000
Vinyl Chloride	ND	1000
Chloroethane	ND	1000
Methylene Chloride	ND	2000
Acetone	ND	2000
Carbon Disulfide	ND	500
Trichlorofluoromethane	ND	500
1,1-Dichloroethene	ND	500
1,1-Dichloroethane	ND	500
trans-1,2-Dichloroethene	ND	500
cis-1,2-Dichloroethene	ND	500
Chloroform	ND	500
Freon 113	ND	500
1,2-Dichloroethane	ND	500
2-Butanone	ND	1000
1,1,1-Trichloroethane	ND	500
Carbon Tetrachloride	ND	500
Vinyl Acetate	ND	5000
Bromodichloromethane	ND	500
1,2-Dichloropropane	ND	500
cis-1,3-Dichloropropene	ND	500
Trichloroethene	ND	500
Dibromochloromethane	ND	500
1,1,2-Trichloroethane	ND	500
Benzene	630	500
trans-1,3-Dichloropropene	ND	500
Bromoform	ND	500
2-Hexanone	ND	1000
4-Methyl-2-Pentanone	ND	1000
1,1,2,2-Tetrachloroethane	ND	500
Tetrachloroethene	ND	500
Toluene	ND	500
Chlorobenzene	ND	500
Ethylbenzene	2400	500
Styrene	ND	500
m,p-Xylenes	2100	500
o-Xylene	ND	500

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	91	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	106	79-122

Data File: /chem/VOA_04.i/050797.b/de723.d
Date : 07-MAY-97 23:42
Client ID: DYNA P&T
Sample Info: S,129116-009
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: VOA_04.i

Operator: DM
Column diameter: 0.32



Curtis & Tompkins, Ltd.

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33794
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/04/97
Analysis Date: 05/04/97

MB Lab ID: QC45390

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	105	68-126
Toluene-d8	96	87-125
Bromofluorobenzene	94	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33800
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/05/97
Analysis Date: 05/05/97

MB Lab ID: QC45406

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	99	87-125
Bromofluorobenzene	103	79-122

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 33800
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/05/97
Analysis Date: 05/05/97

MB Lab ID: QC45417

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	100	87-125
Bromofluorobenzene	102	79-122

Curtis & Tompkins, Ltd.

Lab #: 129116

BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33794
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/04/97
Analysis Date: 05/04/97

LCS Lab ID: QC45389

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	50.18	50	100	51-180
Trichloroethene	50.14	50	100	73-141
Benzene	50.88	50	102	78-142
Toluene	50.88	50	102	76-150
Chlorobenzene	50.42	50	101	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	101	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	93	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 #: 129116 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33800
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/05/97
Analysis Date: 05/05/97

LCS Lab ID: QC45405

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	55.76	50	112	51-180
Trichloroethene	51.56	50	103	73-141
Benzene	51.2	50	102	78-142
Toluene	53.92	50	108	76-150
Chlorobenzene	50.15	50	100	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	101	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 #: 129116

BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 33816
Units: ug/L
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/06/97

LCS Lab ID: QC45463

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	49.3	50	99	51-180
Trichloroethene	49.46	50	99	73-141
Benzene	48.66	50	97	78-142
Toluene	53.06	50	106	76-150
Chlorobenzene	50.12	50	100	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	86	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
Spike Recovery: 0 out of 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129124-001
Matrix: Soil
Batch#: 33794
Units: ug/Kg dry weight
Diln Fac: 1

Sample Date: 04/28/97
Received Date: 05/01/97
Prep Date: 05/04/97
Analysis Date: 05/04/97
Moisture: 19%

MS Lab ID: QC45391

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	61.73	0	60.03	97	51-180
Trichloroethene	61.73	1.057	66.97	107	73-141
Benzene	61.73	<6.173	61.5	95	78-142
Toluene	61.73	<6.173	59.21	96	76-150
Chlorobenzene	61.73	0	57.94	94	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	96	87-125
Bromofluorobenzene	94	79-122

MSD Lab ID: QC45392

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	61.73	58.86	95	51-180	2	22
Trichloroethene	61.73	66.86	107	73-141	0	24
Benzene	61.73	62.3	96	78-142	1	21
Toluene	61.73	58.62	95	76-150	1	21
Chlorobenzene	61.73	57.38	93	83-129	1	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	96	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#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129111-001
Matrix: Soil
Batch#: 33800
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/28/97
Received Date: 04/30/97
Prep Date: 05/05/97
Analysis Date: 05/05/97

MS Lab ID: QC45414

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	52.15	104	51-180
Trichloroethene	50	<5	50.5	101	73-141
Benzene	50	<5	48.39	97	78-142
Toluene	50	<5	50.25	100	76-150
Chlorobenzene	50	<5	46.88	94	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	100	79-122

MSD Lab ID: QC45415

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	50.73	101	51-180	3	22
Trichloroethene	50	50.52	101	73-141	0	24
Benzene	50	48.25	97	78-142	0	21
Toluene	50	50.71	101	76-150	1	21
Chlorobenzene	50	47.63	95	83-129	2	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	94	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
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Curtis & Tompkins, Ltd.

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8260
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129094-002
Matrix: TCLP Leachate
Batch#: 33816
Units: ug/L
Diln Fac: 1

Sample Date: 04/28/97
Received Date: 04/29/97
Prep Date: 05/06/97
Analysis Date: 05/06/97

MS Lab ID: QC45514

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	49.13	98	51-180
Trichloroethene	50	<5	47.92	96	73-141
Benzene	50	<5	48.15	96	78-142
Toluene	50	<5	51.66	101	76-150
Chlorobenzene	50	<5	49.01	98	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	91	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	97	79-122

MSD Lab ID: QC45515

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	49.09	98	51-180	0	22
Trichloroethene	50	48.2	96	73-141	1	24
Benzene	50	48.57	97	78-142	1	21
Toluene	50	53.04	104	76-150	3	21
Chlorobenzene	50	49.23	98	83-129	0	21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	91	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
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129116
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH AVE. TERMINAL/KOT

DATE SAMPLED: 04/28-29/97
DATE RECEIVED: 04/30/97
DATE ANALYZED: 05/08/97
QC BATCH#: 33882

ANALYSIS: CYANIDE
METHOD REFERENCE: EPA 335.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129116-002	SCIMW-22@3.5'	ND	mg/Kg	1.0
129116-008	SCIMW-25@10.5'	ND	mg/Kg	1.0
METHOD BLANK	N/A	ND	mg/Kg	1.0

ND = Not detected at or above the reporting limit.

QA/QC SUMMARY: BS/BSD

RPD, %	6
RECOVERY,%	94

San Francisco Regional Office

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

May 8, 1997

Ms. Tracy Babjar
CURTIS & TOMPKINS, LTD.
2323 Fifth Street
Berkeley, CA 94710

Client Ref.: 129116
Clayton Project No.: 97050.14

Dear Ms. Babjar:

Attached is our analytical laboratory report for the samples received on May 1, 1997. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after June 7, 1997, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/las

Attachments

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129116
Clayton Project No. 97050.14

Sample Identification: See Below
Lab Number: 9705014
Sample Matrix/Media: SOIL
Method Reference: EPA 300.0

Date Received: 05/01/97
Date Analyzed: 05/02/97

Lab Number	Sample Identification	Date Sampled	Nitrate-N (mg/kg)	Method Detection Limit (mg/kg)
-01	SCIMW-21@2.0'	04/28/97	<1	1
-02	SCIMW-22@3.5'	04/28/97	<1	1
-03	SCITP-28@1.5'	04/29/97	<1	1
-04	SCIMW-23@5.5'	04/28/97	<1	1
-05	METHOD BLANK	--	<1	1

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Curtis & Tompkins, Ltd.
Client Reference: 129116
Clayton Project No. 97050.14

Sample Identification: See Below
Lab Number: 9705014
Sample Matrix/Media: SOIL
Method Reference: EPA 300.0

Date Received: 05/01/97
Date Analyzed: 05/02/97

Lab Number	Sample Identification	Date Sampled	Nitrite-N (mg/kg)	Method Detection Limit (mg/kg)
-01	SCIMW-21@2.0'	04/28/97	<0.5	0.5
-02	SCIMW-22@3.5'	04/28/97	<0.5	0.5
-03	SCITP-28@1.5'	04/29/97	<0.5	0.5
-04	SCIMW-23@5.5'	04/28/97	<0.5	0.5
-05	METHOD BLANK	--	<0.5	0.5

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

~~9705011~~

9705014

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 ph
(510)486-0532 fx

Project Number: 129116

Subcontract Lab:

Clayton Environmental
1252 Quarry Lane
Pleasanton, CA 94566
(510) 426-2600

Please send report to: Tracy Babjar

Turnaround Time: Normal (5 day)

Sample ID	Date Sampled	Matrix	Analysis	C&T Lab #
SCIMW-21@2.0'	28-APR-97	Soil (Coarse sand)	NITRATE/NITRITE	129116-001
SCIMW-22@3.5'	28-APR-97	Soil	NITRATE/NITRITE	129116-002
SCITP-28@1.5'	29-APR-97	Soil	NITRATE/NITRITE	129116-003
SCIMW-23@5.5'	28-APR-97	Soil	NITRATE/NITRITE	129116-006

***Please report using Sample ID instead of C&T Lab #.

Notes:	RELINQUISHED BY:	RECEIVED BY:
	Jacquelin 5/1/97 Date/Time	G Lumbe 5/1/97 1020 Date/Time
	G Lumbe 5/1/97 11:98 Date/Time	Jmendez 5/1/97 11:10 Date/Time

Signature on this form constitutes a firm Purchase Order for the services requested above.

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129116
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH AVE. TERMINAL/KOT

DATE SAMPLED: 04/28-29/97
DATE RECEIVED: 04/30/97
DATE ANALYZED: 05/13/97
QC BATCH#: 33947

ANALYSIS: TOTAL PHOSPHOROUS
METHOD REFERENCE: EPA 365.2

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129116-001	SCIMW-21@2.0'	16	mg/Kg	1.5
129116-002	SCIMW-22@3.5'	4.0	mg/Kg	0.3
129116-003	SCITP-28@1.5'	57	mg/Kg	15
129116-006	SCIMW-23@5.5'	100	mg/Kg	7.5
METHOD BLANK	N/A	ND	mg/Kg	0.3

ND = Not detected at or above the reporting limit.

QA/QC SUMMARY: LCS

RECOVERY,%	95

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal/KOT		

Field ID:	SCIMW-21@2.0'	Sampled:	04/28/97
Lab ID:	129116-001	Received:	04/30/97
Matrix:	Soil	Extracted:	05/06/97
Batch#:	33817	Analyzed:	05/12/97
Units:	ug/Kg		
Diln Fac:	1		

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:	SCIMW-21@2.0'	Sampled:	04/28/97
Lab ID:	129116-001	Received:	04/30/97
Matrix:	Soil	Extracted:	05/06/97
Batch#:	33817	Analyzed:	05/12/97
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	70	25-121
Phenol-d5	71	24-113
2,4,6-Tribromophenol	61	19-122
Nitrobenzene-d5	69	23-120
2-Fluorobiphenyl	79	30-115
Terphenyl-d14	81	18-137

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: SCIMW-22@3.5'
Lab ID: 129116-002
Matrix: Soil
Batch#: 33817
Units: ug/Kg
Diln Fac: 1

Sampled: 04/28/97
Received: 04/30/97
Extracted: 05/06/97
Analyzed: 05/12/97

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:	SCIMW-22@3.5'	Sampled:	04/28/97
Lab ID:	129116-002	Received:	04/30/97
Matrix:	Soil	Extracted:	05/06/97
Batch#:	33817	Analyzed:	05/12/97
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	71	25-121
Phenol-d5	73	24-113
2,4,6-Tribromophenol	59	19-122
Nitrobenzene-d5	73	23-120
2-Fluorobiphenyl	80	30-115
Terphenyl-d14	83	18-137

Semivolatile Organics by GC/MS

Client:	Subsurface Consultants	Analysis Method:	EPA 8270
Project#:	133.004	Prep Method:	EPA 3550
Location:	9th Ave. Terminal/KOT		
Field ID:	SCIMW-25@10.5'	Sampled:	04/29/97
Lab ID:	129116-008	Received:	04/30/97
Matrix:	Soil	Extracted:	05/06/97
Batch#:	33817	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	2		

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	ND	670

Semivolatile Organics by GC/MS

Field ID:	SCIMW-25@10.5'	Sampled:	04/29/97
Lab ID:	129116-008	Received:	04/30/97
Matrix:	Soil	Extracted:	05/06/97
Batch#:	33817	Analyzed:	05/14/97
Units:	ug/Kg		
Diln Fac:	2		

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	ND	670
Anthracene	ND	670
Di-n-butylphthalate	ND	670
Fluoranthene	ND	670
Benzidine	ND	670
Pyrene	ND	670
Butylbenzylphthalate	ND	670
3,3'-Dichlorobenzidine	ND	3300
Benzo(a)anthracene	ND	670
Chrysene	ND	670
bis(2-Ethylhexyl)phthalate	ND	670
Di-n-octylphthalate	ND	670
Benzo(b)fluoranthene	ND	670
Benzo(k)fluoranthene	ND	670
Benzo(a)pyrene	ND	670
Indeno(1,2,3-cd)pyrene	ND	670
Dibenz(a,h)anthracene	ND	670
Benzo(g,h,i)perylene	ND	670

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	84	25-121
Phenol-d5	86	24-113
2,4,6-Tribromophenol	75	19-122
Nitrobenzene-d5	90	23-120
2-Fluorobiphenyl	98	30-115
Terphenyl-d14	95	18-137

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129116-10
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH. AVE. TERMINAL/KOT
SAMPLE ID: SCITP-28

DATE SAMPLED: 04/29/97
DATE RECEIVED: 04/30/97
DATE EXTRACTED: 05/05/97
DATE ANALYZED: 05/13/97
DATE REPORTED: 05/14/97
BATCH NO: 33805

EPA 8270 (Modified): Base/Neutral and Acid Extractables in Water
Extraction Method: EPA 3520 Continuous Liquid/Liquid
(EPA CLP Extraction Protocol)

ACID COMPOUNDS	RESULT ug/L	REPORTING LIMIT ug/L
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
BASE/NEUTRAL COMPOUNDS		
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

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129116-10
CLIENT: SUBSURFACE CONSULTANTS

EPA 8270

BASE/NEUTRAL COMPOUNDS	RESULT ug/L	REPORTING LIMIT ug/L
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4
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
Dibenzo(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

2-Fluorophenol	65	Nitrobenzene-d5	79
Phenol-d5	72	2-Fluorobiphenyl	63
2,4,6-Tribromophenol	47	Terphenyl-d14	28

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129116-10
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH. AVE. TERMINAL/KOT
SAMPLE ID: SCITP-28

DATE SAMPLED: 04/29/97
DATE RECEIVED: 04/30/97
DATE EXTRACTED: 05/05/97
DATE ANALYZED: 05/12/97
DATE REPORTED: 05/14/97
BATCH NO: 33805

EPA 8270 (Modified): Base/Neutral and Acid Extractables in Filtrate
Extraction Method: EPA 3520 Continuous Liquid/Liquid
(EPA CLP Extraction Protocol)

ACID COMPOUNDS	RESULT ug/L	REPORTING LIMIT ug/L
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
BASE/NEUTRAL COMPOUNDS		
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

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129116-10
CLIENT: SUBSURFACE CONSULTANTS

EPA 8270

BASE/NEUTRAL COMPOUNDS	RESULT ug/L	REPORTING LIMIT ug/L
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4
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
Dibenzo(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

2-Fluorophenol	65	Nitrobenzene-d5	73
Phenol-d5	69	2-Fluorobiphenyl	79
2,4,6-Tribromophenol	70	Terphenyl-d14	79

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33817
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/09/97

MB Lab ID: QC45465

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

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 33817
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/09/97

MB Lab ID: QC45465

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	69	25-121
Phenol-d5	69	24-113
2,4,6-Tribromophenol	52	19-122
Nitrobenzene-d5	73	23-120
2-Fluorobiphenyl	79	30-115
Terphenyl-d14	84	18-137

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 129111-003
Matrix: Soil
Batch#: 33817
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/28/97
Received Date: 04/30/97
Prep Date: 05/06/97
Analysis Date: 05/09/97

MS Lab ID: QC45467

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Phenol	3333	<333.3	2384	72	26-90
2-Chlorophenol	3333	<333.3	2435	73	25-102
4-Chloro-3-methylphenol	3333	<333.3	2481	74	26-103
4-Nitrophenol	3333	<1667	2046	61	11-114
Pentachlorophenol	3333	<1667	1488	45	17-109
1,4-Dichlorobenzene	1667	<333.3	977.1	59	28-104
N-Nitroso-di-n-propylamine	1667	<333.3	1043	63	41-126
1,2,4-Trichlorobenzene	1667	<333.3	1080	65	38-107
Acenaphthene	1667	<333.3	1235	74	31-137
2,4-Dinitrotoluene	1667	<333.3	1004	60	28-89
Pyrene	1667	<333.3	1390	83	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	68	25-121
Phenol-d5	69	24-113
2,4,6-Tribromophenol	65	19-122
Nitrobenzene-d5	70	23-120
2-Fluorobiphenyl	79	30-115
Terphenyl-d14	89	18-137

MSD Lab ID: QC45468

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Phenol	3333	2730	82	26-90	13	35
2-Chlorophenol	3333	2819	85	25-102	15	50
4-Chloro-3-methylphenol	3333	2651	80	26-103	8	33
4-Nitrophenol	3333	2239	67	11-114	9	50
Pentachlorophenol	3333	1563	47	17-109	4	47
1,4-Dichlorobenzene	1667	1209	73	28-104	21	27
N-Nitroso-di-n-propylamine	1667	1234	74	41-126	16	38
1,2,4-Trichlorobenzene	1667	1284	77	38-107	17	23
Acenaphthene	1667	1371	82	31-137	10	19
2,4-Dinitrotoluene	1667	1109	67	28-89	11	47
Pyrene	1667	1470	88	35-142	6	36

Surrogate	%Rec	Limits
2-Fluorophenol	80	25-121
Phenol-d5	80	24-113
2,4,6-Tribromophenol	70	19-122
Nitrobenzene-d5	84	23-120
2-Fluorobiphenyl	90	30-115
Terphenyl-d14	94	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

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8270
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 33817
Units: ug/Kg
Diln Fac: 1

Prep Date: 05/06/97
Analysis Date: 05/09/97

LCS Lab ID: QC45466

Analyte	Result	Spike Added	%Rec #	Limits
Phenol	2788	3333	84	26-90
2-Chlorophenol	2943	3333	88	25-102
4-Chloro-3-methylphenol	2700	3333	81	26-103
4-Nitrophenol	2161	3333	65	11-114
Pentachlorophenol	1631	3333	49	17-109
1,4-Dichlorobenzene	1351	1667	81	28-104
N-Nitroso-di-n-propylamine	1257	1667	75	41-126
1,2,4-Trichlorobenzene	1367	1667	82	38-107
Acenaphthene	1413	1667	85	31-137
2,4-Dinitrotoluene	1119	1667	67	28-89
Pyrene	1512	1667	91	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	82	25-121
Phenol-d5	82	24-113
2,4,6-Tribromophenol	68	19-122
Nitrobenzene-d5	87	23-120
2-Fluorobiphenyl	92	30-115
Terphenyl-d14	96	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.

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33805
Units: ug/L
Diln Fac: 1

Prep Date: 05/05/97
Analysis Date: 05/12/97

MB Lab ID: QC45431

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#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 33805
Units: ug/L
Diln Fac: 1

Prep Date: 05/05/97
Analysis Date: 05/12/97

MB Lab ID: QC45431

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	63	21-110
Phenol-d5	66	10-110
2,4,6-Tribromophenol	63	10-123
Nitrobenzene-d5	70	35-114
2-Fluorobiphenyl	73	43-116
Terphenyl-d14	78	33-141

Curtis & Tompkins, Ltd.

Lab #: 129116 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Subsurface Consultants
Project#: 133.004
Location: 9th Ave. Terminal/KOT

Analysis Method: EPA 8270
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 33805
Units: ug/L
Diln Fac: 1

Prep Date: 05/05/97
Analysis Date: 05/12/97

BS Lab ID: QC45432

Analyte	Spike Added	BS	%Rec	#	Limits
Phenol	100	70.24	70		12-110
2-Chlorophenol	100	74.7	75		27-123
4-Chloro-3-methylphenol	100	68.06	68		23-97
4-Nitrophenol	100	59.07	59		10-80
Pentachlorophenol	100	50	50		9-103
1,4-Dichlorobenzene	50	31.69	63		36-97
N-Nitroso-di-n-propylamine	50	28.99	58		41-116
1,2,4-Trichlorobenzene	50	33.32	67		39-98
Acenaphthene	50	37.69	75		46-118
2,4-Dinitrotoluene	50	29.82	60		24-96
Pyrene	50	38.05	76		26-127

Surrogate	%Rec	Limits
2-Fluorophenol	67	21-110
Phenol-d5	69	10-110
2,4,6-Tribromophenol	69	10-123
Nitrobenzene-d5	76	35-114
2-Fluorobiphenyl	81	43-116
Terphenyl-d14	83	33-141

BSD Lab ID: QC45433

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
Phenol	100	70.21	70		12-110	0		42
2-Chlorophenol	100	73.55	74		27-123	1		40
4-Chloro-3-methylphenol	100	69.2	69		23-97	1		42
4-Nitrophenol	100	59.97	60		10-80	2		50
Pentachlorophenol	100	45.57	46		9-103	8		50
1,4-Dichlorobenzene	50	30.59	61		36-97	3		28
N-Nitroso-di-n-propylamine	50	31.11	62		41-116	7		38
1,2,4-Trichlorobenzene	50	32.48	65		39-98	3		28
Acenaphthene	50	38.02	76		46-118	1		31
2,4-Dinitrotoluene	50	30.46	61		24-96	2		38
Pyrene	50	40.76	82		26-127	8		31

Surrogate	%Rec	Limits
2-Fluorophenol	63	21-110
Phenol-d5	68	10-110
2,4,6-Tribromophenol	71	10-123
Nitrobenzene-d5	75	35-114
2-Fluorobiphenyl	80	43-116
Terphenyl-d14	89	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

Curtis & Tompkins, Ltd.

SAMPLE ID: SCIMW-21@2.0'
LAB ID: 129116-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal/KOT
MATRIX: Soil

DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97
DATE REPORTED: 05/14/97

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.9	1	33861	EPA 6010A	05/08/97
Arsenic	2.9	0.24	1	33861	EPA 6010A	05/08/97
Barium	160	0.48	1	33861	EPA 6010A	05/08/97
Beryllium	0.37	0.096	1	33861	EPA 6010A	05/08/97
Cadmium	ND	0.096	1	33861	EPA 6010A	05/08/97
Chromium (total)	32	0.48	1	33861	EPA 6010A	05/08/97
Cobalt	7.6	0.96	1	33861	EPA 6010A	05/08/97
Copper	28	0.48	1	33861	EPA 6010A	05/08/97
Lead	36	0.14	1	33861	EPA 6010A	05/08/97
Mercury	0.10	0.091	1	33845	EPA 7471	05/07/97
Molybdenum	ND	0.96	1	33861	EPA 6010A	05/08/97
Nickel	24	0.96	1	33861	EPA 6010A	05/08/97
Selenium	1.2	0.24	1	33861	EPA 6010A	05/08/97
Silver	ND	0.48	1	33861	EPA 6010A	05/08/97
Thallium	0.59	0.24	1	33861	EPA 6010A	05/08/97
Vanadium	31	0.48	1	33861	EPA 6010A	05/08/97
Zinc	69	0.96	1	33861	EPA 6010A	05/08/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCIMW-23@5.5'
LAB ID: 129116-006
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal/KOT
MATRIX: Soil

DATE SAMPLED: 04/28/97
DATE RECEIVED: 04/30/97
DATE REPORTED: 05/14/97

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.9	1	33861	EPA 6010A	05/09/97
Arsenic	3.3	0.24	1	33861	EPA 6010A	05/09/97
Barium	53	0.48	1	33861	EPA 6010A	05/08/97
Beryllium	0.27	0.096	1	33861	EPA 6010A	05/09/97
Cadmium	ND	0.24	1	33861	EPA 6010A	05/08/97
Chromium (total)	33	0.48	1	33861	EPA 6010A	05/08/97
Cobalt	3.6	0.96	1	33861	EPA 6010A	05/08/97
Copper	110	0.48	1	33861	EPA 6010A	05/08/97
Lead	22	0.14	1	33861	EPA 6010A	05/09/97
Mercury	2.9	0.10	1	33845	EPA 7471	05/07/97
Molybdenum	ND	0.96	1	33861	EPA 6010A	05/08/97
Nickel	22	0.96	1	33861	EPA 6010A	05/08/97
Selenium	0.50	0.24	1	33861	EPA 6010A	05/09/97
Silver	ND	0.48	1	33861	EPA 6010A	05/09/97
Thallium	ND	0.24	1	33861	EPA 6010A	05/09/97
Vanadium	29	0.48	1	33861	EPA 6010A	05/08/97
Zinc	85	0.96	1	33861	EPA 6010A	05/08/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: SCIMW-25@10.5'
LAB ID: 129116-008
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal/KOT
MATRIX: Soil

DATE SAMPLED: 04/29/97
DATE RECEIVED: 04/30/97
DATE REPORTED: 05/14/97

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.9	1	33861	EPA 6010A	05/09/97
Arsenic	2.8	0.24	1	33861	EPA 6010A	05/09/97
Barium	22	0.48	1	33861	EPA 6010A	05/09/97
Beryllium	0.40	0.097	1	33861	EPA 6010A	05/09/97
Cadmium	1.4	0.097	1	33861	EPA 6010A	05/09/97
Chromium (total)	46	0.48	1	33861	EPA 6010A	05/09/97
Cobalt	7.0	0.97	1	33861	EPA 6010A	05/09/97
Copper	66	0.48	1	33861	EPA 6010A	05/09/97
Lead	4.4	0.14	1	33861	EPA 6010A	05/09/97
Mercury	ND	0.091	1	33845	EPA 7471	05/07/97
Molybdenum	2.1	0.97	1	33861	EPA 6010A	05/09/97
Nickel	42	0.97	1	33861	EPA 6010A	05/09/97
Selenium	ND	0.24	1	33861	EPA 6010A	05/09/97
Silver	ND	0.48	1	33861	EPA 6010A	05/09/97
Thallium	ND	0.24	1	33861	EPA 6010A	05/09/97
Vanadium	37	0.48	1	33861	EPA 6010A	05/09/97
Zinc	56	0.97	1	33861	EPA 6010A	05/09/97

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 129116
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 133.004
LOCATION: 9TH AVE. TERMINAL/KOT

DATE SAMPLED: 04/28-29/97
DATE RECEIVED: 04/30/97
DATE ANALYZED: 05/12/97
QC BATCH#: 33927

ANALYSIS: HEXAVALENT CHROMIUM
METHOD REFERENCE: EPA 7196A

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
129116-002	SCIMW-22@3.5'	ND	mg/Kg	0.05
129116-008	SCIMW-25@10.5'	ND	mg/Kg	0.05
METHOD BLANK	N/A	ND	mg/Kg	0.05

ND = Not detected at or above the reporting limit.

QA/QC SUMMARY: MS/SAMPLE DUPLICATE OF SAMPLE NO:129116-002

RPD, %	<1
RECOVERY,%	110

CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal/KOT
MATRIX: Soil

DATE REPORTED: 05/14/97

Metals Analytical Report

				Lead					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
SCITP-28@1.5'	129116-003	04/29/97	04/30/97	83	15	1	33861	EPA 6010A	05/08/97
SCITP-29@5.0'	129116-004	04/29/97	04/30/97	12	0.15	1	33861	EPA 6010A	05/09/97
SCITP-30@3.0'	129116-005	04/29/97	04/30/97	17	0.15	1	33861	EPA 6010A	05/09/97
SCIMW-24@3.0'	129116-007	04/29/97	04/30/97	18	0.15	1	33861	EPA 6010A	05/09/97

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SAMPLE ID: SCITP-30
LAB ID: 129116-011
CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal/KOT
MATRIX: Filtrate

DATE SAMPLED: 04/29/97
DATE RECEIVED: 04/30/97
DATE REPORTED: 05/14/97

Metals Analytical Report

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Lead	ND	3.0	1	33917	EPA 6010A	05/12/97

ND = Not detected at or above reporting limit

CLIENT: Subsurface Consultants
PROJECT ID: 133.004
LOCATION: 9th Ave. Terminal/KOT
MATRIX: Soil

DATE REPORTED: 05/14/97

Metals Analytical Report

				Potassium					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
SCIMW-21@2.0'	129116-001	04/28/97	04/30/97	1200	24	1	33861	EPA 6010A	05/08/97
SCIMW-22@3.5'	129116-002	04/28/97	04/30/97	910	25	1	33861	EPA 6010A	05/08/97
SCITP-28@1.5'	129116-003	04/29/97	04/30/97	770	25	1	33861	EPA 6010A	05/08/97
SCIMW-23@5.5'	129116-006	04/28/97	04/30/97	1600	24	1	33861	EPA 6010A	05/08/97

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129116

DATE REPORTED: 05/14/97

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3	mg/Kg	1	33861	EPA 6010A	05/08/97
Arsenic	ND	0.25	mg/Kg	1	33861	EPA 6010A	05/08/97
Barium	ND	0.5	mg/Kg	1	33861	EPA 6010A	05/08/97
Beryllium	ND	0.1	mg/Kg	1	33861	EPA 6010A	05/08/97
Cadmium	ND	0.1	mg/Kg	1	33861	EPA 6010A	05/08/97
Chromium (total)	ND	0.5	mg/Kg	1	33861	EPA 6010A	05/08/97
Cobalt	ND	1	mg/Kg	1	33861	EPA 6010A	05/08/97
Copper	ND	0.5	mg/Kg	1	33861	EPA 6010A	05/08/97
Lead	ND	0.15	mg/Kg	1	33861	EPA 6010A	05/08/97
Lead	ND	3	ug/L	1	33917	EPA 6010A	05/12/97
Mercury	ND	0.1	mg/Kg	1	33845	EPA 7471	05/07/97
Molybdenum	ND	1	mg/Kg	1	33861	EPA 6010A	05/08/97
Nickel	ND	1	mg/Kg	1	33861	EPA 6010A	05/08/97
Potassium	ND	25	mg/Kg	1	33861	EPA 6010A	05/08/97
Selenium	ND	0.25	mg/Kg	1	33861	EPA 6010A	05/08/97
Silver	ND	0.5	mg/Kg	1	33861	EPA 6010A	05/08/97
Thallium	ND	0.25	mg/Kg	1	33861	EPA 6010A	05/08/97
Vanadium	ND	0.5	mg/Kg	1	33861	EPA 6010A	05/08/97
Zinc	ND	1	mg/Kg	1	33861	EPA 6010A	05/08/97

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 129116

DATE REPORTED: 05/14/97

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	25	24.1	23.5	mg/Kg	96	94	80-120	3	35	33861	EPA 6010A	05/08/97
Arsenic	100	91.5	94	mg/Kg	92	94	80-120	3	35	33861	EPA 6010A	05/08/97
Barium	100	92	94	mg/Kg	92	94	80-120	2	35	33861	EPA 6010A	05/08/97
Beryllium	2.5	2.385	2.46	mg/Kg	95	98	80-120	3	35	33861	EPA 6010A	05/08/97
Cadmium	2.5	2.385	2.485	mg/Kg	95	99	80-120	4	35	33861	EPA 6010A	05/08/97
Chromium (total)	10	9	9.15	mg/Kg	90	92	80-120	2	35	33861	EPA 6010A	05/08/97
Cobalt	25	23.25	23.75	mg/Kg	93	95	80-120	2	35	33861	EPA 6010A	05/08/97
Copper	12.5	12.5	12.75	mg/Kg	100	102	80-120	2	35	33861	EPA 6010A	05/08/97
Lead	25	23	23.55	mg/Kg	92	94	80-120	2	35	33861	EPA 6010A	05/08/97
Lead	500	506	502	ug/L	101	100	80-120	1	35	33917	EPA 6010A	05/12/97
Mercury	5	4.729	4.815	ug/L	95	96	80-120	2	35	33845	EPA 7470	05/07/97
Molybdenum	20	18.35	18.8	mg/Kg	92	94	80-120	2	35	33861	EPA 6010A	05/08/97
Nickel	25	23	23.4	mg/Kg	92	94	80-120	2	35	33861	EPA 6010A	05/08/97
Potassium	1000	898.5	889	mg/Kg	90	89	80-120	1	35	33861	EPA 6010A	05/08/97
Selenium	100	88.5	89.5	mg/Kg	89	90	80-120	1	35	33861	EPA 6010A	05/08/97
Silver	5	4.995	5	mg/Kg	100	100	80-120	0	35	33861	EPA 6010A	05/08/97
Thallium	100	88.5	91	mg/Kg	89	91	80-120	3	35	33861	EPA 6010A	05/08/97
Vanadium	25	23.25	23.65	mg/Kg	93	95	80-120	2	35	33861	EPA 6010A	05/08/97
Zinc	25	21.25	21.75	mg/Kg	85	87	80-120	2	35	33861	EPA 6010A	05/08/97

CURTIS & TOMPKINS, LTD. BERKELEY LOGIN CHANGE FORM

Reason for change: X Client Request: By: Meg Mendoza Date/Time: 5/8/97 1700 Initials:
_____ Login Review _____ Data Review

Current Lab ID	Previous Lab ID	Client ID	Matrix	Add/Cancel	Analysis	Duedate
129116-010	—		Water	+	8080	
					Filtered	
					AND unfiltered.	

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

MEMO

To: Meg Mendoza, SCI

cc: Jeri Alexander, SCI
Tracy Babjar, C&T

From: John Goyette

Date: 5/5/97

RE: Laboratory No. 129116
SCI Project No. 133.004

Summary of analyses to be performed on sample SCITP-28 (129116-010):

UNFILTERED
Hydrocarbon Oil & Grease (5520BF)
Semi-Volatile Organics (EPA 8270)
Pesticides & PCBs (EPA 8080)
TPH (Diesel & Motor Oil)

FILTERED
Semi-Volatile Organics (EPA 8270)
Pesticides & PCBs (EPA 8080)
TPH (Diesel & Motor Oil)

Filtration will be done using a 0.45 micron filter.

Please let me know if this summary does not reflect your intentions.

Thanks

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CHAIN OF CUSTODY FORM

129116

PAGE OF

PROJECT NAME: KST

JOB NUMBER: 133.004 LAB: Curtis & Tompkins

PROJECT CONTACT: Jeri Alexander / Jerome deVerrier TURNAROUND: Normal

SAMPLED BY: Jerome de Verrier REQUESTED BY: M. Mendoza

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	NOTES	ANALYSIS REQUESTED: TVH/BTEX B015	Extended TEH 8015	VOC 8260	SVOC 8270	Chl. Pest. + PCBs 8080	Metals	O & G SM5520	Cyanide	Chromium 6+	pH	Potassium	Nitrate / Nitrite	Phosphate
-1	SCIMW-21 @ 2.0'		X						X				X		04	20	97		X	X	X	X	X	X	X		X	X	X	X
-2	SCIMW-22 @ 3.5'		X						X				X		04	20	97		X	X	X	X	X		X	X	X	X	X	X	X

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Jeri Alexander	4/30/97 3:49 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
		Tracy Dix	4/30/97 3:52

COMMENTS & NOTES:

Subsurface Consultants, Inc.

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

(510) 268-0461 • FAX: 510-268-0137

CHAIN OF CUSTODY FORM

12916

PAGE OF

PROJECT NAME: KOT

JOB NUMBER: 133.004 LAB: Curtis & Tompkins

PROJECT CONTACT: Jeri Alexander / Jerome de Verteuil TURNAROUND: Normal

SAMPLED BY: Jerome de Verteuil / John Wolfe REQUESTED BY: Meg Mendez

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT JAR	TUBE			METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR
-3	SCITP-2 @ 1.5'		/							/							/		04	29	97
-4	SCITP-2 @ 5.0'		/								/						/		04	29	97
-5	SCITP-3 @ 7.0'		/								/						/		04	29	97
-6	SCIMW-2 @ 5.5'		/								/						/		04	28	97
-7	SCIMW-2 @ 5.0'		/								/						/		04	29	97
-8	SCIMW-2 @ 9.5'		/								/						/		04	29	97
-9	SCIMW-2 @ 6.0'		/								/						/		04	29	97

ANALYSIS REQUESTED

TVH/BTEX 8015	TEPH - extended range 8015	VOC 8240	SVOC 8270	Chl. Pest + PCBs 8080	Metals 6010/7000	Lead 7420	Oil & Grease 5520	Cyanide	Chromium VI	pH	Potassium	Nitrate/Nitrite	Phosphate
	X			X		X	X			X	X	X	X
X	X	X		X		X	X						
X	X			X		X	X						
	X	X		X	X		X			X	X	X	X
X	X	X		X		X	X						
X	X	X	X	X	X		X	X	X				
X	X	X											

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Jerome C. de Verteuil	1/30/97 3:45 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
		Tom Bui	1/30/97 3:8

COMMENTS & NOTES:

Subsurface Consultants, Inc.
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(510) 268-0461 • FAX: 510-268-0137

CHAIN OF CUSTODY FORM

12916

PAGE OF

PROJECT NAME: KOT

JOB NUMBER: 133.004 LAB: C+T

PROJECT CONTACT: J. Alexander/J. de Verrier TURNAROUND: Standard

SAMPLED BY: John Wolfe REQUESTED BY: M. Mendoza

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX						CONTAINERS						METHOD PRESERVED					SAMPLING DATE			NOTES	ANALYSIS REQUESTED																			
		WATER	SOIL	WASTE	AIR			VOA	LITER	PINT	TUBE			HCL	H_2SO_4	HNO_3	ICE	NONE	MONTH	DAY	YEAR		TEH (extended range 8015)	5 VOC 8270	Oil & Grease SM5520	Lead															
-10	SCITP-28	X						6	5	2				/			X		04	29	97		X	X	X																
-11	SCITP-30	X						6	6	3				/			X		04	29	97		X		X	X															

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Devin Alexander	4/30/97 8:45 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
		Tina Bess	4/30/97 3:50

COMMENTS & NOTES:

Subsurface Consultants, Inc.

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

(510) 268-0461 • FAX: 510-268-0137