1550

SCOTT CO.
MECHANICAL CONTRACTORS
1717 Doolittle Drive
P.O. Box 5535
San Leandro, California 94577-0555
(510) 895-2333

Contractors License No. 184480

FAX COVER SHEET

DATE: 3-2-98

TO: Robert Weston

COMPANY: ACEH

FAX NO.: 337-9335

FROM: PAUL FERREIRA EXT #: 385

REFERENCE: Analytical Results for City of Alameda Waste Oil Tank Removal

NUMBER OF PAGES (including this sheet) 20

COMMENTS: Robert, Please advise as soon as you review.

PLEASE FEEL FREE TO CALL IF YOU HAVE ANY FURTHER QUESTIONS.

THANK YOU. PAUL

SCOTT CO./SERVICE CONTRACTING DEPT. FAX: 510 895-8426
PH: 895-2333

98-175

North State Environmental Analytical Laboratory

Phone: (415) 588-9652 Fax: (415) 588-1950

Chain of Custody / Request for Analysis

Lab Job No.: ______ Page ___ of ___

Client: Scott Co	Report to: Paul Ferreira	Phone:	Turnaround Time: Normal
Mailing Address: 1717 Doolittle, San Leandro, CA 94577	Billing to:	Fax:	
		PO# / Billing Reference: 44728-57032-70	Date: 2/19/98
			Sampler: J. Stetz

Project / Site Address: 2040 Grand St, Alameda

Analysis Requested

	Sample ID	Sample Type	Container No. / Type	Pres.	Sampling Date / Time	Gas/BTEX	Diesel	5 Metals (Cd, Cr, Pb, Ni, Zn)	TEPH	8080-PCBs 8270-PNAs only EPA 8010			Comments/Hazards
1	WATER-1	water	4 ambers 1 PL/3 VOAs	HCl	2/19/98 12:10	X	X	X	X	X			Filter + Acidify
2	SP-A,B,C,D	soil	4 brass	—	↓ 12:35	X	X	X	X	X			COMPOSITE

Relinquished by: [signature]	Date: 2/19/98	Time: 1:55 pm	Received by:	Lab Comments
Relinquished by:	Date:	Time:	Received by:	
Relinquished by:	Date:	Time:	Received by:	

North State Environmental
Chemical Waste Disposal · Trucking · Consulting

C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 98-175
Client: Scott Company
Project: PO#44728-57032-70-7003
2040 Grand St, Alameda
Date Reported: 03/02/98

Gasoline, BTEX and MTBE by Methods 8015M and 8020
Diesel Range Hydrocarbons by Method 8015M
Total Extractable Petroleum Hydrocarbons by SM 5520 E&F
Total Cd, Cr, Ni, Pb, Zn by AA Spectroscopy
8010 Halogenated Hydrocarbons by GC/MS EPA 8260

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 98-175-01	Client ID: WATER-1			02/19/98	WATER
Gasoline	8015M	ND			02/20/98
Benzene	8020	ND			
Ethylbenzene	8020	ND			
Toluene	8020	ND			
Xylenes	8020	ND			
Cadmium	7130	ND			02/23/98
Chromium	7190	ND			
Lead	7420	ND			
Nickel	7520	0.07	mg/L		
Zinc	7950	0.08	mg/L		
MTBE	8020	*12	ug/L		02/20/98
TEPH	5520F	22	mg/L		02/20/98
Diesel	8015M	0.11	mg/L		02/20/98
Sample: 98-175-02	Client ID: SP-A,B,C,D			02/19/98	SOIL COMP.
Gasoline	8015M	ND			02/20/98
Benzene	8020	ND			
Ethylbenzene	8020	ND			
Toluene	8020	ND			
Xylenes	8020	ND			
Cadmium	7130	ND			02/23/98
Chromium	7190	39	mg/Kg		

*Confirmed by GC/MS Method 8260.

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North State Environmental
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C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 98-175
Client: Scott Company
Project: PO#44728-57032-70-7003
2040 Grand St, Alameda
Date Reported: 03/02/98

Gasoline,BTEX and MTBE by Methods 8015M and 8020
Diesel Range Hydrocarbons by Method 8015M
Total Extractable Petroleum Hydrocarbons by SM 5520 E&F
Total Cd, Cr,Ni, Pb, Zn by AA Spectroscopy
8010 Halogenated Hydrocarbons by GC/MS EPA 8260

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 98-175-02	Client ID: SP-A,B,C,D			02/19/98	SOIL COMP.
Lead	7420	36	mg/Kg		
Nickel	7520	40	mg/Kg		
Zinc	7950	62	mg/Kg		
MTBE	8020	*ND			02/20/98
TEPH	5520F	51	mg/Kg		02/20/98
Diesel	8015M	ND			02/20/98

*Confirmed by GC/MS Method 8260.

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North State Environmental
Chemical Waste Disposal · Trucking · Consulting

CERTIFICATE OF ANALYSIS

Quality Control/Quality Assurance

Lab Number: 98-175
Client: Scott Company
Project: PO#44728-57032-70-7003
2040 Grand St, Alameda
Date Reported:03/02/98

Analyte	Method	Reporting Limit	Unit	Blank	MS/MSD Recovery	RPD
Gasoline	8015M	50	ug/L	ND	102	2
Benzene	8020	0.5	ug/L	ND	93	5
Ethylbenzene	8020	0.5	ug/L	ND	95	9
Toluene	8020	0.5	ug/L	ND	97	8
Xylenes	8020	1.0	ug/L	ND	112	12
MTBE	8020	0.5	ug/L	ND	96	6
Gasoline	8015M	0.5	mg/Kg	ND	96	3
Benzene	8020	.005	mg/Kg	ND	95	2
Ethylbenzene	8020	.005	mg/Kg	ND	93	1
Toluene	8020	.005	mg/Kg	ND	97	2
Xylenes	8020	.010	mg/Kg	ND	108	1
MTBE	8020	.005	mg/Kg	ND	95	2
TEPH	5520F	50	mg/Kg	ND	77	10
TEPH	5520F	5	mg/L	ND	77	10
Diesel	8015M	1.0	mg/Kg	ND	89	2
Cadmium	7130	2.0	mg/Kg	ND	101/103	3
Chromium	7190	5.0	mg/Kg	ND	109/97	12
Lead	7420	2.0	mg/Kg	ND	105/108	3
Nickel	7520	5.0	mg/Kg	ND	86/84	2
Zinc	7950	1.0	mg/Kg	ND	126/114	10
Cadmium	7130	0.1	mg/L	ND	90/100	11
Chromium	7190	0.5	mg/L	ND	100/100	1
Lead	7420	0.1	mg/L	ND	98/101	4
Nickel	7520	0.1	mg/L	ND	97/97	1
Zinc	7950	0.1	mg/L	ND	102/99	3
Diesel	8015M	0.05	mg/L	ND	85	1

ELAP Certificate NO:1753

Reviewed and Approved

John A.Murphy, Laboratory Director

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North State Environmental
Chemical Waste Disposal · Trucking · Consulting

C E R T I F I C A T E O F A N A L Y S I S

Job Number: 98-175
Client : Scott Company
Project : PO#44728-57032-70-7003

Date Sampled : 02/19/98
Date Analyzed: 02/25/98
Date Reported: 03/02/98

Halogenated Volatile Organics by GC/MS Method 8260

Laboratory Number	98 175-01
Client ID	WATER-1
Matrix	WATER
Analyte	ug/L
Chloromethane	ND<5
Vinyl Chloride	ND<5
Bromomethane	ND<5
Chloroethane	ND<5
Trichlorofluoromethane	ND<1
1,1-Dichloroethene	ND<1
Methylene Chloride	3
t-1,2-Dichloroethene	ND<1
1,1-Dichloroethane	ND<1
c-1,2-Dichloroethene	ND<1
Chloroform	ND<1
1,1,1-Trichloroethane	ND<1
Carbon Tetrachloride	ND<1
1,2-Dichloroethane	ND<1
Trichloroethene	ND<1
Bromodichloromethane	ND<1
t-1,3-Dichloropropene	ND<1
c-1,3-Trichloropropene	ND<1
1,1,2-Trichloroethane	ND<1
Tetrachloroethene	ND<1
Dibromobenzene	ND<1
Chlorobenzene	ND<1
1,1,2,2 Tetrachloroethane	ND<1
1,3-Dichlorobenzene	ND<1
1,4-Dichlorobenzene	ND<1
1,2-Dichlorobenzene	ND<1
SUR-Dibromofluoromethane	159% Rec
SUR-Toluene d8	91 % Rec
SUR-4 Bromofluorobenzene	83 % Rec

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C E R T I F I C A T E O F A N A L Y S I S

Job Number: 98-175
Client : Scott Company
Project : PO#44728-57032-70-7003

Date Sampled : 02/19/98
Date Analyzed: 02/25/98
Date Reported: 03/02/98

Halogenated Volatile Organics by GC/MS Method 8260
Quality Control/Quality Assurance Summary

Laboratory Number	98-175	MS/MSD	RPD
Client ID	Blank	Recovery	
Matrix	WATER	WATER	
Analyte	Results ug/L	%Recoveries	
Chloromethane	ND<5		
Vinyl Chloride	ND<5		
Bromomethane	ND<5		
Chloroethane	ND<5		
Trichlorofluoromethane	ND<1		
1,1-Dichloroethene	ND<1	82	1
Methylene Chloride	ND<1		
t-1,2-Dichloroethene	ND<1		
1,1 Dichloroethane	ND<1		
c-1,2 Dichloroethene	ND<1		
Chloroform	ND<1		
1,1,1-Trichloroethane	ND<1		
Carbon Tetrachloride	ND<1		
1,2-Dichloroethane	ND<1		
Trichloroethene	ND<1	102	3
Bromodichloromethane	ND<1		
t-1,3-Dichloropropene	ND<1		
c-1,3-Trichloropropene	ND<1		
1,1,2-Trichloroethane	ND<1		
Tetrachloroethene	ND<1		
Dibromobenzene	ND<1		
Chlorobenzene	ND<1	121	4
1,1,2,2-Tetrachloroethane	ND<1		
1,3-Dichlorobenzene	ND<1		
1,4-Dichlorobenzene	ND<1		
1,2 Dichlorobenzene	ND<1		
SUR-Dibromofluoromethane	131% Rec	159/150	6
SUR Toluene d8	99 % Rec	97/103	5
SUR 4-Bromofluorobenzene	95 % Rec	94/94	0

Reviewed and Approved

John A. Murphy
Laboratory Director

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North State Environmental
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C E R T I F I C A T E O F A N A L Y S I S

Job Number: 98-175
Client : Scott Company
Project : PO#44728-57032-70-7003

Date Sampled : 02/19/98
Date Analyzed: 02/25/98
Date Reported: 03/02/98

Halogenated Volatile Organics by GC/MS Method 8260

Laboratory Number	98-175-02
Client ID	SP-A,B,C,D
Matrix	SOIL COMP.
Analyte	ug/Kg
Chloromethane	ND<25
Vinyl Chloride	ND<25
Bromomethane	ND<25
Chloroethane	ND<25
Trichlorofluoromethane	ND<5
1,1-Dichloroethene	ND<5
Methylene Chloride	ND<5
t-1,2-Dichloroethene	ND<5
1,1-Dichloroethane	ND<5
c-1,2-Dichloroethene	ND<5
Chloroform	ND<5
1,1,1-Trichloroethene	ND<5
Carbon Tetrachloride	ND<5
1,2-Dichloroethane	ND<5
Trichloroethene	ND<5
Bromodichloromethane	ND<5
t-1,3-Dichloropropene	ND<5
c-1,3-Trichloropropene	ND<5
1,1,2 Trichloroethane	ND<5
Tetrachloroethene	ND<5
Dibromobenzene	ND<5
Chlorobenzene	ND<5
1,1,2,2-Tetrachloroethane	ND<5
1,3-Dichlorobenzene	ND<5
1,4-Dichlorobenzene	ND<5
1,2-Dichlorobenzene	ND<5
SUR Dibromofluoromethane	152% Rec
SUR- Toluene d8	83 % Rec
SUR 4-Bromofluorobenze	81 % Rec

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CERTIFICATE OF ANALYSIS

Job Number: 98-175
Client : Scott Company
Project : PO#44728-57032-70-7003

Date Sampled : 02/19/98
Date Analyzed: 02/25/98
Date Reported: 03/02/98

Halogenated Volatile Organics by GC/MS Method 8260
Quality Control/Quality Assurance Summary

Laboratory Number	98-175	MS/MSD	RPD
Client ID	Blank	Recovery	
Matrix	SOIL COMP.	SOIL COMP.	
Analyte	Results ug/kg	%Recoveries	
Chloromethane	ND<25		
Vinyl Chloride	ND<25		
Bromomethane	ND<25		
Chloroethane	ND<25		
Trichlorofluoromethane	ND<5		
1,1-Dichloroethene	ND<5	82	1
Methylene Chloride	ND<5		
t-1,2-Dichloroethene	ND<5		
1,1-Dichloroethane	ND<5		
c-1,2-Dichloroethene	ND<5		
Chloroform	ND<5		
1,1,1-Trichloroethene	ND<5		
Carbon Tetrachloride	ND<5		
1,2-Dichloroethane	ND<5		
Trichloroethene	ND<5	102	3
Bromodichloromethane	ND<5		
t-1,3-Dichloropropene	ND<5		
c-1,3-Trichloropropene	ND<5		
1,1,2-Trichloroethane	ND<5		
Tetrachloroethene	ND<5		
Dibromobenzene	ND<5		
Chlorobenzene	ND<5	121	4
1,1,2,2-Tetrachloroethane	ND<5		
1,3-Dichlorobenzene	ND<5		
1,4-Dichlorobenzene	ND<5		
1,2-Dichlorobenzene	ND<5		
SUR-Dibromofluoromethane	131% Rec	159/150	6
SUR- Toluene d8	99 % Rec	97/103	6
SUR- 4-Bromofluorobenze	95 % Rec	94/94	0

Reviewed and Approved

John A. Murphy
Laboratory Director

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

ANALYTICAL REPORT

Prepared for:

North State Environmental
P.O.Box 5624
South San Francisco, CA 94083

Date: 27-FEB-98
Lab Job Number: 132438
Project ID: N/A
Location: N/A

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

Page 1 of 1

Polynuclear Aromatic Hydrocarbons by GC/MS

Client:	North State Environmental	Analysis Method:	EPA 8270B
		Prep Method:	EPA 3520
Field ID:	WATER-1	Sampled:	02/19/98
Lab ID:	132438-001	Received:	02/20/98
Matrix:	Water	Extracted:	02/23/98
Batch#:	39229	Analyzed:	02/24/98
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Naphthalene	ND	9.5
Acenaphthylene	ND	9.5
Acenaphthene	ND	9.5
Fluorene	ND	9.5
Phenanthrene	ND	9.5
Anthracene	ND	9.5
Fluoranthene	ND	9.5
Pyrene	ND	9.5
Benzo(a)anthracene	ND	9.5
Chrysene	ND	9.5
Benzo(b,k)fluoranthene	ND	9.5
Benzo(a)pyrene	ND	9.5
Indeno(1,2,3-cd)pyrene	ND	9.5
Dibenz(a,h)anthracene	ND	9.5
Benzo(g,h,i)perylene	ND	9.5

Surrogate	%Recovery	Recovery Limits
Nitrobenzene-d5	76	35-114
2-Fluorobiphenyl	32*	43-116
Terphenyl-d14	9*	33-141

* Values outside of QC limits

Curtis & Tompkins Ltd.

Polynuclear Aromatic Hydrocarbons by GC/MS

Client:	North State Environmental	Analysis Method:	EPA 8270B
		Prep Method:	EPA 3550
Field ID:	SP-A,B,C,D	Sampled:	02/19/98
Lab ID:	122430-002	Received:	02/20/98
Matrix:	Soil	Extracted:	02/23/98
Batch#:	29214	Analyzed:	02/26/98
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Naphthalene	ND	50
Acenaphthylene	ND	50
Acenaphthene	ND	50
Fluorene	ND	50
Phenanthrene	58	50
Anthracene	ND	50
Fluoranthene	120	50
Pyrene	110	50
Benzo(a)anthracene	68	50
Chrysene	78	50
Benzo(b,k)fluoranthene	120	50
Benzo(a)pyrene	64	50
Indeno(1,2,3-cd)pyrene	ND	50
Dibenz(a,h)anthracene	ND	50
Benzo(g,h,i)perylene	ND	50

Surrogate	%Recovery	Recovery Limits
Nitrobenzene-d5	91	33-117
2-FluoroBiphenyl	95	30-121
Terphenyl-d14	97	29-143

Curtis & Tompkins Ltd. Page 1 of 1

PCBs

Client: North State Environmental	Analysis Method: PCB Prep Method: EPA 3520 Cleanup Method: EPA acid
Field ID: WATER-1 Lab ID: 132438-001 Matrix: Water Batch#: 39260 Units: ug/L Diln Fac: 1	Sampled: 02/19/98 Received: 02/20/98 Extracted: 02/24/98 Analyzed: 02/26/98

Analyte	Result	Reporting Limit
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.96
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%Recovery	Recovery Limits
TCMX	29	19-130
Decachlorobiphenyl	18*	22-110

* Values outside of QC limits

Curtis & Tompkins, Ltd

PCBs

Client:	North State Environmental	Analysis Method:	PCB
		Prep Method:	EPA 3550
		Cleanup Method:	EPA acid
Field ID:	SP-A,B,C,D	Sampled:	02/19/98
Lab ID:	132438-002	Received:	02/20/98
Matrix:	Soil	Extracted:	02/24/98
Batch#:	39255	Analyzed:	02/25/98
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
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	39	20-143
Decachlorobiphenyl	88	43-126

Lab #: 122438

BATCH QC REPORT

Curtis & Tompkins Ltd.

Polynuclear Aromatic Hydrocarbons by GC/MS

Client: North State Environmental

Analysis Method: EPA 8270B
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 39229
Units: ug/L
Diln Fac: 1

Prep Date: 02/23/98
Analysis Date: 02/24/98

MB Lab ID: QC64715

Analyte	Result	Reporting Limit
Naphthalene	ND	10
Acenaphthylene	ND	10
Acenaphthene	ND	10
Fluorene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Benzo(a)anthracene	ND	10
Chrysene	ND	10
Benzo(b,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
Nitrobenzene-d5	89	35-114
2-Fluorobiphenyl	86	43-116
Terphenyl-d14	91	33-141

Lab #: 132438 BATCH QC REPORT Page 1 of 1

Polynuclear Aromatic Hydrocarbons by GC/

Client: North State Environmental Analysis Method: EPA 8270B
Prep Method: EPA 3620

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 38229
Units: ug/L
Diln Fac: 1

Prep Date: 02/23/98
Analysis Date: 02/24/98

BS Lab ID: QC64716

Analyte	Spike Added	BS	%Rec	#	Limits
Acenaphthene	50	41.64	83		50-110
Pyrene	50	43.34	87		43-110

Surrogate	%Rec	Limits
Nitrobenzene-d5	77	35-114
2-Fluorobiphenyl	82	43-116
Terphenyl-d14	93	33-141

BSD Lab ID: QC64717

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
Acenaphthene	50	41.4	83		50-110	1		18
Pyrene	50	43.34	87		43-110	0		19

Surrogate	%Rec	Limits
Nitrobenzene-d5	82	35-114
2-Fluorobiphenyl	85	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 2 outside limits
Spike Recovery: 0 out of 4 outside limits

Lab #: 132438

BATCH QC REPORT

Curtis & Tompkins, Ltd.

Polynuclear Aromatic Hydrocarbons by GC/MS

Client: North State Environmental

Analysis Method: EPA 8270B
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 35214
Units: ug/Kg
Diln Fac: 1

Prep Date: 02/23/98
Analysis Date: 02/24/98

MB Lab ID: QC64661

Analyte	Result	Reporting Limit
Naphthalene	ND	50
Acenaphthylene	ND	50
Acenaphthene	ND	50
Fluorene	ND	50
Phenanthrene	ND	50
Anthracene	ND	50
Fluoranthene	ND	50
Pyrene	ND	50
Benzo(a)anthracene	ND	50
Chrysene	ND	50
Benzo(b,k)fluoranthene	ND	50
Benzo(a)pyrene	ND	50
Indeno(1,2,3-cd)pyrene	ND	50
Dibenz(a,h)anthracene	ND	50
Benzo(g,h,i)perylene	ND	50

Surrogate	%Rec	Recovery Limits
Nitrobenzene-d5	93	32-117
2-Fluorobiphenyl	98	38-121
Terphenyl-d14	100	29-143

Lab #: 113418 BATCH QC REPORT Curtis & Tompkins Ltd. Page 1 of 1

Polynuclear Aromatic Hydrocarbons by GC/MS

Client: North State Environmental
Analysis Method: EPA 8270B
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 113364-010
Matrix: Soil
Batch#: 39214
Units: ug/Kg dry weight
Diln Fac: 1
Sample Date: 02/12/98
Received Date: 02/13/98
Prep Date: 02/23/98
Analysis Date: 02/24/98
Moisture: 10%

MS Lab ID: QC64663

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Acenaphthene	1852	<55.56	1569	85	34-128
Pyrene	1852	<55.56	1349	73	21-152

Surrogate	%Rec	Limits
Nitrobenzene-d5	90	32-117
2-Fluorobiphenyl	86	38-121
Terphenyl-d14	82	29-143

MSD Lab ID: QC64664

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Acenaphthene	1852	1551	84	34-128	1	43
Pyrene	1852	1391	75	21-152	3	50

Surrogate	%Rec	Limits
Nitrobenzene-d5	91	32-117
2-Fluorobiphenyl	86	38-121
Terphenyl-d14	84	29-143

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

Lab #: 132438 BATCH QC REPORT Curtis & Tompkins, Ltd. Page 1 of 1

Polynuclear Aromatic Hydorcarbons by GC/MS

Client: North State Environmental
Analysis Method: EPA 8270B
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 39214
Units: ug/Kg
Diln Fac: 1
Prep Date: 02/23/98
Analysis Date: 02/24/98

LCS Lab ID: QC84662

Analyte	Result	Spike Added	%Rec #	Limits
Acenaphthene	1532	1667	92	26-127
Pyrene	1795	1667	108	23-125

Surrogate	%Rec	Limits
Nitrobenzene-d5	90	32-117
2-Fluorobiphenyl	93	38-121
Terphenyl-d14	115	29-143

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

132413E

ate Environmental Analytical Laboratory

588-9652 Fax: (415) 588-1950

Chain of Custody / Request for Analysis

Lab Job No.: _____ Page ___ of ___

	Report to: John Stetz	Phone: 650-210-4583	Turnaround Time: 5 days
	Billing to:	Fax: 650-388-1950	
3		PO# / Billing Reference: 98-175	Date:
			Sampler:

* RECEIVE STOPPED *

Sample	Container No. / Type	Pres.	Sampling Date / Time	Analysis Requested: 8270 - + PNAs Only	8080 - PCBs						Comments / Hazards
1	2 liter	—	2/19/98	X	X						
1	1 qt	—	↓	X	X						

Relinquished by: _____ Date: 2/20/98 Time: 3:05 Received by: _____

Date: _____ Time: _____ Received by: _____

Date: _____ Time: _____ Received by: _____

Lab Comments

Lab #: 132438

BATCH QC REPORT

Curtis & Tompkins Ltd.

Page 1 of 1

Polychlorinated Biphenyls

Client: North State Environmental

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

METHOD BLANK

Matrix: Water
Batch#: 39260
Units: ug/L
Diln Fac: 1

Prep Date: 02/24/98
Analysis Date: 02/25/98

MB Lab ID: QC64829

Analyte	Result	Reporting Limit
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	31	19-130
Decachlorobiphenyl	43	22-110

Lab #: 132438

BATCH QC REPORT

Curtis & Tompkins Ltd.

Polychlorinated Biphenyls

Client: North State Environmental

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 39255
Units: ug/Kg
Diln Fac: 1

Prep Date: 02/24/98
Analysis Date: 02/25/98

LCS Lab ID: QC64812

Analyte	Result	Spike Added	%Rec #	Limits
Aroclor-1260	140.3	166.7	84	61-127
Surrogate	**%Rec**	**Limits**		
TCMX	39	20-143		
Decachlorobiphenyl	91	43-126		

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 #: 132438 BATCH QC REPORT Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls

Client:	North State Environmental	Analysis Method:	PCB
		Prep Method:	EPA 3550
		Cleanup Method:	EPA acid

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	SP-A,B,C,D	Sample Date:	02/19/98
Lab ID:	132438-002	Received Date:	02/20/98
Matrix:	Soil	Prep Date:	02/24/98
Batch#:	39255	Analysis Date:	02/25/98
Units:	ug/Kg		
Diln Fac:	1		

MS Lab ID: QC64813

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Aroclor-1260	166.7	<12	134.2	81	18-172

Surrogate	%Rec	Limits
TCMX	39	20-143
Decachlorobiphenyl	89	43-126

MSD Lab ID: QC64814

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	166.7	146.7	88	18-172	9	30

Surrogate	%Rec	Limits
TCMX	42	20-143
Decachlorobiphenyl	93	43-126

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

Lab #: 132436 BATCH QC REPORT Curtis & Tompkins, Ltd. Page 1 of 2

Polychlorinated Biphenyls	
Client: North State Environmental	Analysis Method: PCB Prep Method: EPA 3520 Cleanup Method: EPA acid

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix:	Water	Prep Date:	02/24/98
Batch#:	39260	Analysis Date:	02/25/98
Units:	ug/L		
Dilu Fac:	1		

BS Lab ID: QC64830

Analyte	Spike Added	BS	%Rec #	Limits
Aroclor-1260	5	4	80	61-119

Surrogate	%Rec	Limits
TCMX	32	19-130
Decachlorobiphenyl	66	22-110

BSD Lab ID: QC64831

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Aroclor-1260	5	4.1	82	61-119	3	15

Surrogate	%Rec	Limits
TCMX	31	19-130
Decachlorobiphenyl	76	22-110

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

Lab #: 132438

BATCH QC REPORT

Curtis & Tompkins Ltd.

Polychlorinated Biphenyls

Client: North State Environmental

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

BLANK

Matrix:
Batch#:
Units:
Diln Fac:

Prep Date: 02/24/98
Analysis Date: 02/25/98

MB Lab ID: QC64811

Analyte	Result	Reporting Limit
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	38	20-143
Decachlorobiphenyl	90	43-126

Lab #: 132438 BATCH QC REPORT Curtis & Tompkins Ltd.

Polychlorinated Biphenyls

Client:	North State Environmental	Analysis Method:	PCB
		Prep Method:	EPA 3520
		Cleanup Method:	EPA acid

METHOD BLANK

Matrix:	Water	Prep Date:	02/24/98
Batch#:	39260	Analysis Date:	02/25/98
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC64829

Analyte	Result	Reporting Limit
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	31	19-130
Decachlorobiphenyl	43	22-110