

RECEIVED

By Alameda County Environmental Health at 2:12 pm, Feb 24, 2014

Limited Soil Sampling and Analysis Program
Levine Fricke, October 9, 2003

October 9, 2003

003-09071-00

Ms. Lydia Gartrell
IKEA Property, Inc.
1700 East Bayshore Road
East Palo Alto, California 94303

Subject: Limited Soil Sampling and Analysis Program, Commerce One Parcel, Hacienda Drive and Interstate 580, Dublin, California

Dear Ms. Gartrell:

LFR Levine-Fricke (LFR) is pleased to submit this letter report to IKEA Property, Inc. ("IKEA") presenting the results of the limited soil sampling program for the property located on the northwestern quadrant of the intersection of Hacienda Drive and Interstate 580 in Dublin, California ("the Site"; Figure 1). The Site is referred to as the "Commerce One Parcel." This work was performed in accordance with our proposal dated August 28, 2003.

BACKGROUND

IKEA is considering purchasing the 27-acre Site for developing a new store. The Site was formerly part of Camp Parks and contained a railroad spur serving several warehouse buildings. Approximately 17 acres of the Site will be developed with an approximately 350,000-square-foot building, a five-level parking structure, at-grade parking, utilities, and landscaping. The remaining 10 acres will be developed in the future with three smaller buildings, at-grade parking, landscaping, and utilities. Additional details of the project are unknown to LFR at this time.

At your request, LFR previously performed a review of environmental documents prepared by other consultants for the Site. The results of our review were presented in our letter report titled "Due Diligence Environmental Review, Commerce One Parcel, Hacienda Drive and Interstate 580, Dublin, California," dated July 31, 2002. LFR submitted a letter to IKEA on May 20, 2003 to clarify issues noted in our previous letter report.

As noted in our previous reports, one documented release (at the former fuel oil storage depot) was reported at the Site. Following issuance of our most recent letter report, LFR was provided with a case closure letter dated July 10, 1998 issued by the Alameda County Health Care Services Agency (ACHCSA), the local oversight agency. The letter from the ACHCSA stated that the volatile organic compounds detected in groundwater beneath and adjacent to the Site "... do not pose a significant health risk at reported levels for current or proposed uses of the subject sites." The letter further indicated that no additional action would be required for "... the historic release associated with the former fuel depot..." on the Site.

Three soil borings were advanced on the Site along the railroad spur by previous consultants. Native soil samples collected immediately below the ballast were analyzed for chlorinated herbicides, total extractable petroleum hydrocarbons, and California Code of Regulations Title 22 metals. The concentrations of the detected compounds/elements do not appear to present a significant environmental concern to the Site. The soil samples were not analyzed for other elements/compounds that may be present based on LFR's experience.

No conclusive evidence of past undocumented releases (i.e. stained and discolored soil), existing or former ASTs, existing USTs, and/or former chemical storage areas was noted by LFR's representatives during the site visit and review of available documents.

Typically, LFR would recommend an extensive Phase II investigation at properties formerly used for military purposes to establish soil and groundwater quality at areas of concern; however, based on the available information, due to the difficulty in precisely locating past on-site features, and as discussed with IKEA, LFR understands that IKEA prefers to address these issues if they present themselves during construction.

LIMITED SOIL SAMPLING AND ANALYSIS PROGRAM

In accordance with IKEA's request, LFR performed a limited soil sampling and analysis program along the former railroad spur. The objective of the soil sampling and analysis program along the former railroad spur was to complete part of IKEA's due diligence prior to purchase of the Site. LFR's scope of work and the results of the soil sampling and analysis program are presented below.

Field Work

LFR advanced a total of four borings, designated IKHA001 through IKHA004 on Figure 2, along the former railroad spur. One soil sample was collected from each boring (immediately below the ballast/native soil interface).

The borings were advanced using hand sampling equipment. Samples were collected in brass steel tubes. Upon recovery from the sample probe, each tube was sealed on both ends with Teflon™ sheeting and plastic caps, and properly labeled. The samples were then sealed in plastic bags and placed in an ice-chilled cooler for transportation under chain-of-custody procedures to the analytical laboratory.

Laboratory Analysis

Soil samples collected from the Site were submitted for chemical analyses to Curtis and Tompkins, Ltd. (C&T) of Berkeley, California, an analytical laboratory certified by the State of California to perform the requested analyses. The samples were analyzed for polychlorinated biphenyls (PCBs) using United States Environmental Protection Agency (EPA) Method 8082, phenols using EPA Method 8040, creosote using EPA Method 8270C, and organochlorine pesticides (OCPs) using EPA Method 8081.

Analytical Results and Discussion

PCBs, phenols and creosote were not detected in the four soil samples at concentrations equal to or greater than their laboratory reporting limits. No OCPs were detected in the soil samples at concentrations equal to or greater than their laboratory reporting limits with the exception of dichlorodiphenyltrichloroethane (DDT). DDT was detected at concentrations of 60 micrograms per kilogram ($\mu\text{g}/\text{kg}$) and $3.7 \mu\text{g}/\text{kg}$ in samples IKHA002 and IKHA003, respectively.

The concentrations of DDT detected in the two soil samples collected from the Site by LFR were well below the U.S. Environmental Protection Agency (EPA 2002) Region IX Preliminary Remediation Goal (PRG) of $1,700 \mu\text{g}/\text{kg}$ for residential soils.

Laboratory reports and chain-of-custody documents are presented in Appendix A.

CONCLUSIONS

Based on the available data, no further investigation is warranted along the former railroad spur at this time, in LFR's opinion.

LIMITATIONS

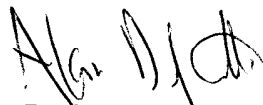
This work was conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The observations and conclusions presented in this letter are professional opinions based on the scope of activities, work schedule, and information obtained through the work described herein. Opinions presented herein apply to site conditions existing at the time of our study and cannot necessarily be taken to apply to site conditions or changes that we are not aware of or have not had the opportunity to evaluate. It must be recognized that conclusions drawn from these data are limited to the amount, type, distribution, and integrity of the information collected at the time of the assessment and the methods used to collect and evaluate the data; a full and complete determination of environmental risks cannot be made. Although LFR has taken steps to obtain true copies of available information, we make no representation or warranty with respect to the accuracy or completeness of this information.

LFR appreciates this opportunity to provide consulting services to IKEA. If you have any questions concerning this letter, please contact either of the undersigned at (916) 786-0320.

Sincerely,

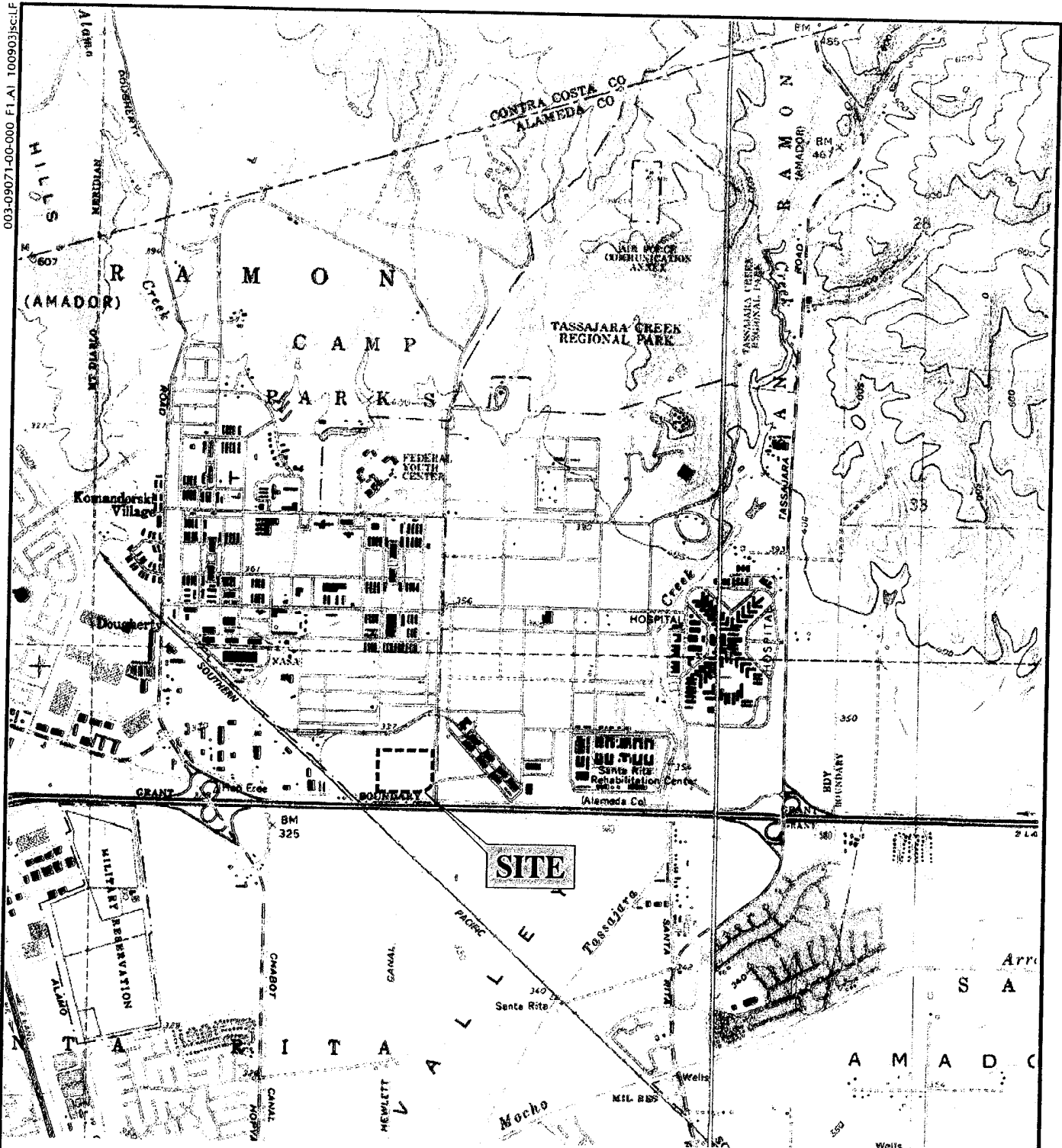


Lita D. Freeman, R.G., R.E.A. II
Senior Associate Geologist

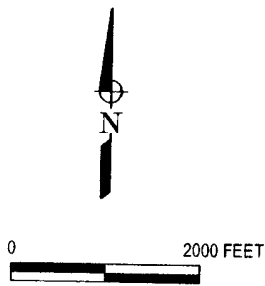


Alan D. Gibbs, R.G., C.HG., R.E.A. II
Principal Hydrogeologist

003-09071-00-000 F1.A1 100903jscLF



MAP SOURCE:
 U.S.G.S. DUBLIN, CA
 15' Quadrangle
 1:24,000 (1 INCH = 2,000 FEET)

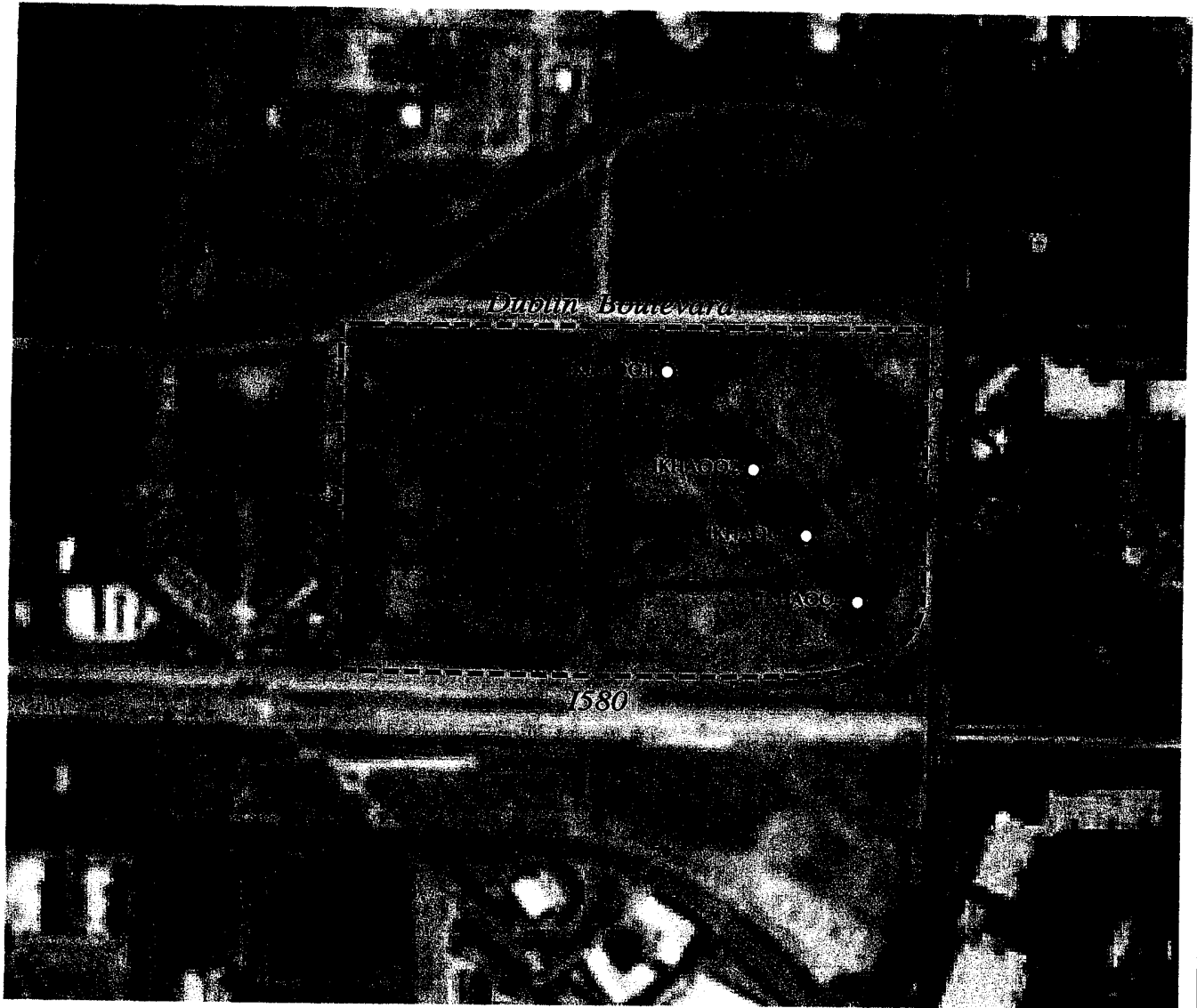


Site Vicinity

Commerce One Parcel, Hacienda Drive and I580, Dublin, California



Figure 1



EXPLANATION

- IKHA001 ○ Soil sampling location
- Site boundary



DRAWING NOT TO SCALE

SOURCE: Mapquest Maps (Globexplorer, AirphotoUSA)

Site Plan with Soil Sampling Locations

Commerce One Parcel, Hacienda Drive and I580, Dublin, California



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:

LFR Levine Fricke
1900 Powell Street
12th Floor
Emeryville, CA 94608

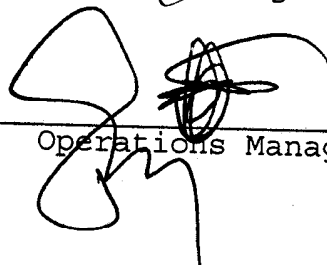
Date: 25-SEP-03
Lab Job Number: 167604
Project ID: 003-09071-00
Location: Commerce One Parcel

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:


Project Manager

Reviewed by:


Operations Manager

This package may be reproduced only in its entirety.

NELAP # 01107CA

Page 1 of 23

Laboratory Numbers: **167604**
Client: **LFR Levine Fricke**
Project #: **003-09071-00**
Location: **Commerce One Parcel**
COC#: **200731**

Sampled Date: **09/16/03**
Received Date: **09/17/03**

CASE NARRATIVE

This hardcopy data package contains sample and QC results for four soil samples, which were received from the site referenced above on September 17, 2003. The samples were received cold and intact. All data were E-mailed to Lita Freeman on September 24, 2003.

Creosote and Phenols by (EPA 8270C):

No analytical problems were encountered.

Organochlorine Pesticides by (EPA 8081A):

The matrix spike recoveries for Dieldrin, Endrin and 4,4'-DDT and surrogate recoveries, of sample IKHA004 (CT# 167604-004), were diluted out because the sample was analyzed at a dilution. High gamma-BHC, Heptachlor and Aldrin relative percent difference's (RPD's) were observed for the matrix spike recoveries. The associated laboratory control sample (LCS) passed all quality control criteria therefore the quality of the data should not be affected. No other analytical problems were encountered.

PCBs (EPA 8082):

No analytical problems were encountered.

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

SAMPLE COLLECTOR:



1900 Powell Street, 12th Floor
Emeryville, California 94608-1827
(510) 652-4500 Fax: (510) 652-2246

PROJECT NO:

003 89071-00

SECTION NO.:

DATE: 9-16-03

SAMPLER'S INITIALS:

LDL

PROJECT NAME:

Commerce Center, Dublin CA

SAMPLER (Signature):

Lita D Freeman

SERIAL NO.:

Nº 200731

SAMPLE

ANALYSES

REMARKS

Sample ID.	Date	Time	Lab Sample No.		TYPE		ANALYSES								TAT	REMARKS			
			No. of Containers	Soil	Water	TPHd (EPA 8015M)	TPHg (EPA 8015M)	BTEX (EPA 8021/802)	VOCs (EPA 8260/824)	Metals (EPA 8010/7000)**	PEB5 (8182)	PCB3 (8183)	CEASO2	VANAD (804D)			Standard	RUSH:	HOLD
1 IKHA001	9-16-03	5:50	1	X									X	X	X	X			
2 IKHA002	9-16-03	5:30	1	X									X	X	X	X			
3 IKHA003	9-16-03	5:45	1	X									X	X	X	X			
4 IKHA004	9-16-03	6:00	1	X									X	X	X	X			

- * VOCs: 8260 List 8240 List 8010 List 624 List
- ** Metals: CAM17 RCRA LUFT

SAMPLE RECEIPT:

Intact Cold
 On Ice Ambient
 Preservative Correct?
 Yes No N/A

Cooler Temp:

Cooler No:

METHOD OF SHIPMENT:

LAB REPORT NO.:

FAX COC CONFIRMATION TO:

FAX RESULTS TO:

SEND HARD COPY TO:

SEND EDD TO:
EMV.LABEDDS.COM

RELINQUISHED BY:

(SIGNATURE) Lita D Freeman

(DATE) 9-17-03

(TIME) 8:55

(COMPANY)

RECEIVED BY:

(SIGNATURE) Tracy B. Bja 9-17-03

(DATE) 9-17-03

(TIME) 2:55

(COMPANY)

1 RELINQUISHED BY:

(SIGNATURE)

(DATE)

(TIME)

(COMPANY)

1 RECEIVED BY:

(SIGNATURE)

(DATE)

(TIME)

(COMPANY)

2 RELINQUISHED BY:

(SIGNATURE)

(DATE)

(TIME)

(COMPANY)

2 RECEIVED BY (LABORATORY):

(SIGNATURE)

(DATE)

(TIME)

(LABORATORY)

Lab/Shipping Copy (White)

File Copy (Yellow)

Field Copy (Pink)

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\FORMS\QC\Cooler.wpd



Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 167604 Date Received: 9-17-03 Number of Coolers: 1
Client: LFR Project: 003-09071-00

A. Preliminary Examination Phase

Date Opened: 9-17-03 By (print): Troy Windsor (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES NO
If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler?..... YES NO
How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival?..... YES NO *N/A*
4. Were custody papers dry and intact when received?..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)?..... YES NO
6. Did you sign the custody papers in the appropriate place?..... YES NO
7. Was project identifiable from custody papers?..... YES NO
If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES NO

Type of ice: wet Temperature: 5.2

B. Login Phase

Date Logged In: 9-17-03 By (print): Troy Windsor (sign) [Signature]

1. Describe type of packing in cooler: In ziploc bags
2. Did all bottles arrive unbroken?..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)?..... YES NO
4. Did bottle labels agree with custody papers?..... YES NO
5. Were appropriate containers used for the tests indicated?..... YES NO
6. Were correct preservatives added to samples?..... YES NO *N/A*
7. Was sufficient amount of sample sent for tests indicated?..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below..... YES NO *N/A*
9. Was the client contacted concerning this sample delivery?..... YES NO

If YES, give details below.

Who was called? _____ By whom? _____ Date: _____

Additional Comments:

LABORATORY NUMBER: 167604
CLIENT: LFR Levine Fricke
MATRIX: Soil

DATE SAMPLED: 09/06/03
DATE RECEIVED: 09/17/03
DATE ANALYZED: 09/18,19/03
BATCH#: 84592

ANALYSIS: Creosote
ANALYSIS METHOD: EPA 8270C

<u>LAB ID</u>	<u>SAMPLE ID</u>	<u>RESULT</u>	<u>UNITS</u>	<u>REPORTING LIMIT</u>
167604-001	IKHA001	ND	ug/Kg	17,000
167604-002	IKHA002	ND	ug/Kg	67,000
167604-003	IKHA003	ND	ug/Kg	3,400
167604-004	IKHA004	ND	ug/Kg	82,000

Phenols by GC/MS

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8270C
Field ID:	IKHA001	Batch#:	84592
Lab ID:	167604-001	Sampled:	09/16/03
Matrix:	Soil	Received:	09/17/03
Units:	ug/Kg	Prepared:	09/17/03
Basis:	as received	Analyzed:	09/18/03
Diln Fac:	5.000		

Analyte	Result	RL
Phenol	ND	1,700
2-Chlorophenol	ND	1,700
2-Methylphenol	ND	1,700
4-Methylphenol	ND	1,700
2-Nitrophenol	ND	3,300
2,4-Dimethylphenol	ND	1,700
2,4-Dichlorophenol	ND	1,700
1-Chloro-3-methylphenol	ND	1,700
2,4,6-Trichlorophenol	ND	1,700
2,4,5-Trichlorophenol	ND	1,700
2,4-Dinitrophenol	ND	8,300
4-Nitrophenol	ND	3,300
4,6-Dinitro-2-methylphenol	ND	8,300
Pentachlorophenol	ND	3,300

Surrogate	%REC	Limits
2-Fluorophenol	64	28-120
Phenol-d5	54	26-120
2,4,6-Tribromophenol	40	30-120

ND = Not Detected
 RL = Reporting Limit
 Page 1 of 1

Phenols by GC/MS

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8270C
Field ID:	IKHA002	Batch#:	84592
Lab ID:	167604-002	Sampled:	09/16/03
Matrix:	Soil	Received:	09/17/03
Units:	ug/Kg	Prepared:	09/17/03
Basis:	as received	Analyzed:	09/19/03
Diln Fac:	20.00		

Analyte	Result	RL
Phenol	ND	6,700
2-Chlorophenol	ND	6,700
2-Methylphenol	ND	6,700
4-Methylphenol	ND	6,700
2-Nitrophenol	ND	6,700
2,4-Dimethylphenol	ND	13,000
2,4-Dichlorophenol	ND	6,700
4-Chloro-3-methylphenol	ND	6,700
2,4,6-Trichlorophenol	ND	6,700
2,4,5-Trichlorophenol	ND	6,700
2,4-Dinitrophenol	ND	6,700
4-Nitrophenol	ND	34,000
4,6-Dinitro-2-methylphenol	ND	13,000
Pentachlorophenol	ND	34,000
		13,000

Surrogate	%REC	Limits
2-Fluorophenol	DO	28-120
Phenol-d5	DO	26-120
2,4,6-Tribromophenol	DO	30-120

DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1



Phenols by GC/MS

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8270C
Field ID:	IKHA003	Batch#:	84592
Lab ID:	167604-003	Sampled:	09/16/03
Matrix:	Soil	Received:	09/17/03
Units:	ug/Kg	Prepared:	09/17/03
Basis:	as received	Analyzed:	09/19/03
Diln Fac:	1.000		

Analyte	Result	RL
Phenol	ND	340
2-Chlorophenol	ND	340
2-Methylphenol	ND	340
3-Methylphenol	ND	340
3-Nitrophenol	ND	670
2,4-Dimethylphenol	ND	340
2,4-Dichlorophenol	ND	340
1-Chloro-3-methylphenol	ND	340
2,4,6-Trichlorophenol	ND	340
2,4,5-Trichlorophenol	ND	340
1,4-Dinitrophenol	ND	1,700
3-Nitrophenol	ND	670
4,6-Dinitro-2-methylphenol	ND	1,700
Pentachlorophenol	ND	670

Surrogate	%REC	Limits
2-Fluorophenol	72	28-120
Phenol-d5	69	26-120
2,4,6-Tribromophenol	59	30-120

ND = Not Detected
RL = Reporting Limit
Page 1 of 1

Phenols by GC/MS

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8270C
Field ID:	IKHA004	Batch#:	84592
Lab ID:	167604-004	Sampled:	09/16/03
Matrix:	Soil	Received:	09/17/03
Units:	ug/Kg	Prepared:	09/17/03
Basis:	as received	Analyzed:	09/19/03
Diln Fac:	25.00		

Analyte	Result	RL
Phenol	ND	8,200
2-Chlorophenol	ND	8,200
2-Methylphenol	ND	8,200
4-Methylphenol	ND	8,200
2-Nitrophenol	ND	16,000
2,4-Dimethylphenol	ND	8,200
2,4-Dichlorophenol	ND	8,200
4-Chloro-3-methylphenol	ND	8,200
2,4,6-Trichlorophenol	ND	8,200
2,4,5-Trichlorophenol	ND	8,200
2,4-Dinitrophenol	ND	41,000
4-Nitrophenol	ND	16,000
4,6-Dinitro-2-methylphenol	ND	41,000
Pentachlorophenol	ND	16,000

Surrogate	SRRC	Limits
2-Fluorophenol	DO	28-120
Phenol-d5	DO	26-120
2,4,6-Tribromophenol	DO	30-120

DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1

Phenols by GC/MS

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC226021	Batch#:	84592
Matrix:	Soil	Prepared:	09/17/03
Units:	ug/Kg	Analyzed:	09/18/03
Basis:	as received		

Analyte	Result	RL
Phenol	ND	330
2-Chlorophenol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	670
2,4-Dimethylphenol	ND	330
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	330
2,4-Dinitrophenol	ND	1,700
4-Nitrophenol	ND	670
4,6-Dinitro-2-methylphenol	ND	1,700
Pentachlorophenol	ND	670

Surrogate	%REC	Limits
2-Fluorophenol	84	28-120
Phenol-d5	76	26-120
2,4,6-Tribromophenol	65	30-120

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1



Phenols by GC/MS

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC226022	Batch#:	84592
Matrix:	Soil	Prepared:	09/17/03
Units:	ug/Kg	Analyzed:	09/18/03
Basis:	as received		

Analyte	Spiked	Result	%REC	Limits
Phenol	3,329	2,520	76	34-121
1-Chlorophenol	3,329	2,497	75	37-120
1-Chloro-3-methylphenol	3,329	2,472	74	38-124
4-Nitrophenol	3,329	2,137	64	19-140
Pentachlorophenol	3,329	2,123	64	19-122

Surrogate	%REC	Limits
2-Fluorophenol	79	28-120
Phenol-d5	75	26-120
2,4,6-Tribromophenol	75	30-120

**Organochlorine Pesticides**

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8081A
Field ID:	IKHA001	Batch#:	84690
Lab ID:	167604-001	Sampled:	09/16/03
Matrix:	Soil	Received:	09/17/03
Units:	ug/Kg	Prepared:	09/20/03
Basis:	as received	Analyzed:	09/23/03
Diln Fac:	5.000		

Cleanup Method: EPA 3620

Analyte	Result	RL
alpha-BHC	ND	8.6
beta-BHC	ND	8.6
gamma-BHC	ND	8.6
delta-BHC	ND	8.6
Heptachlor	ND	8.6
Dieldrin	ND	8.6
Heptachlor epoxide	ND	8.6
Endosulfan I	ND	8.6
Dieldrin	ND	17
1,4'-DDE	ND	17
Endrin	ND	17
Endosulfan II	ND	17
Endosulfan sulfate	ND	17
1,1'-DDD	ND	17
Endrin aldehyde	ND	17
1,4'-DDT	ND	17
alpha-Chlordane	ND	8.6
gamma-Chlordane	ND	8.6
Methoxychlor	ND	86
Dioxaphene	ND	300

Surrogate	%REC	Limits
CMX	107	22-136
Decachlorobiphenyl	103	22-140

N = Not Detected
R = Reporting Limit
Page 1 of 1

**Organochlorine Pesticides**

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8081A
Field ID:	IKHA002	Batch#:	84690
Lab ID:	167604-002	Sampled:	09/16/03
Matrix:	Soil	Received:	09/17/03
Units:	ug/Kg	Prepared:	09/20/03
Basis:	as received	Analyzed:	09/24/03
Diln Fac:	5.000		

Cleanup Method: EPA 3620

Analyte	Result	RL
alpha-BHC	ND	8.5
beta-BHC	ND	8.5
gamma-BHC	ND	8.5
delta-BHC	ND	8.5
Heptachlor	ND	8.5
Dieldrin	ND	8.5
Heptachlor epoxide	ND	8.5
Endosulfan I	ND	8.5
Heildrin	ND	17
1,4'-DDE	ND	17
Endrin	ND	17
Endosulfan II	ND	17
Endosulfan sulfate	ND	17
4,4'-DDD	ND	17
Endrin aldehyde	ND	17
1,4'-DDT	60 C	17
alpha-Chlordane	ND	8.5
gamma-Chlordane	ND	8.5
methoxychlor	ND	85
oxaphene	ND	300

Surrogate	REC	Limits
CMX	113	22-136
Decachlorobiphenyl	112	22-140

C = Presence confirmed, but RPD between columns exceeds 40%

N = Not Detected

R = Reporting Limit

Page 1 of 1

Organochlorine Pesticides

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8081A
Field ID:	IKHA003	Batch#:	84690
Lab ID:	167604-003	Sampled:	09/16/03
Matrix:	Soil	Received:	09/17/03
Units:	ug/Kg	Prepared:	09/20/03
Basis:	as received	Analyzed:	09/23/03
File Fac:	1.000		

Cleanup Method: EPA 3620

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
ldrin	ND	1.7
heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
dieldrin	ND	3.3
,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
,4'-DDT	3.7	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
methoxychlor	ND	17
toxaphene	ND	60

Surrogate	EPRC	Limits
CMX	102	22-136
Decachlorobiphenyl	112	22-140

ND = Not Detected
 RL = Reporting Limit
 Page 1 of 1

Organochlorine Pesticides

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8081A
Field ID:	IKHA004	Batch#:	84690
Lab ID:	167604-004	Sampled:	09/16/03
Matrix:	Soil	Received:	09/17/03
Units:	ug/Kg	Prepared:	09/20/03
Basis:	as received	Analyzed:	09/23/03
Diln Fac:	10.00		

Cleanup Method: EPA 3620

Analyte	Result	RL
alpha-BHC	ND	17
beta-BHC	ND	17
gamma-BHC	ND	17
delta-BHC	ND	17
Heptachlor	ND	17
ldrin	ND	17
Heptachlor epoxide	ND	17
Endosulfan I	ND	17
dieldrin	ND	17
4'-DDE	ND	33
Endrin	ND	33
Endosulfan II	ND	33
Endosulfan sulfate	ND	33
4,4'-DDD	ND	33
Endrin aldehyde	ND	33
4'-DDT	ND	33
alpha-Chlordane	ND	17
gamma-Chlordane	ND	17
methoxychlor	ND	170
oxyphene	ND	610

Surrogate	REC	Limits
DMX	DO	22-136
Decachlorobiphenyl	DO	22-140

DO= Diluted Out
 ND = Not Detected
 RL = Reporting Limit

Organochlorine Pesticides

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC226415	Batch#:	84690
Matrix:	Soil	Prepared:	09/20/03
Units:	ug/Kg	Analyzed:	09/23/03
Basis:	as received		

Cleanup Method: EPA 3620

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	3.3
1,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
1,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Dioxaphene	ND	60

Surrogate	%REC	Limits
TCMX	99	22-136
1,2-dichlorobiphenyl	95	22-140

N = Not Detected
 R = Reporting Limit
 Page 1 of 1

Organochlorine Pesticides

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC226416	Batch#:	84690
Matrix:	Soil	Prepared:	09/20/03
Units:	ug/Kg	Analyzed:	09/23/03
Basis:	as received		

Cleanup Method: EPA 3620

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	16.58	15.61	94	43-124
Heptachlor	16.58	18.24	110	43-137
Dieldrin	16.58	14.86	90	47-124
Endrin	16.58	14.54	88	48-123
4,4'-DDT	16.58	17.92	108	54-146
		15.62	94	40-134

Surrogate	%REC	Limits
TCMX	109	22-136
Decachlorobiphenyl	96	22-140

Organochlorine Pesticides

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8081A
Field ID:	IKHA004	Batch#:	84690
SS Lab ID:	167604-004	Sampled:	09/16/03
Matrix:	Soil	Received:	09/17/03
Units:	ug/Kg	Prepared:	09/20/03
Basis:	as received	Analyzed:	09/24/03
Concn Fac:	10.00		

Type: MS Cleanup Method: EPA 3620
 Lab ID: QC226417

Analyte	MS Result	Spiked	Result	%REC	Limits
gamma-BHC	<9.700	16.54	10.32	62	34-121
Heptachlor	<14.00	16.54	12.30	74	22-130
Aldrin	<9.300	16.54	11.18	68	35-127
Dieldrin	<7.800	16.54	11.67	DO	38-132
Endrin	<11.00	16.54	19.72	DO	29-148
4'-DDT	<9.900	16.54	20.69	DO	26-150

Surrogate	%REC	Limits
TCMX	DO	22-136
Decachlorobiphenyl	DO	22-140

Type: MSD Cleanup Method: EPA 3620
 Lab ID: QC226418

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	16.73	6.363	38	34-121	48	* 44
Heptachlor	16.73	7.470	45	22-130	50	* 42
Aldrin	16.73	6.591	39	35-127	53	* 44
Dieldrin	16.73	7.136	DO	38-132	NC	46
Endrin	16.73	7.740	DO	29-148	NC	47
4'-DDT	16.73	0.7433	DO	26-150	NC	45

Surrogate	%REC	Limits
TCMX	DO	22-136
Decachlorobiphenyl	DO	22-140

* = Value outside of QC limits; see narrative
 DO = Diluted Out
 NC = Not Calculated
 RPD = Relative Percent Difference

Polychlorinated Biphenyls (PCBs)

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8082
Matrix:	Soil	Batch#:	84586
Units:	ug/Kg	Sampled:	09/16/03
Basis:	as received	Received:	09/17/03
Diln Fac:	1.000	Prepared:	09/17/03

Field ID:	IKHA001	Analyzed:	09/18/03
Type:	SAMPLE	Cleanup Method:	EPA 3665
Lab ID:	167604-001		

Analyte	Result	RL
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	Limits
TCMX	83	45-135
Polychlorobiphenyl	78	39-148

Field ID:	IKHA002	Analyzed:	09/18/03
Type:	SAMPLE	Cleanup Method:	EPA 3665
Lab ID:	167604-002		

Analyte	Result	RL
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	Limits
TCMX	97	45-135
Polychlorobiphenyl	100	39-148

Field ID:	IKHA003	Analyzed:	09/18/03
Type:	SAMPLE	Cleanup Method:	EPA 3665
Lab ID:	167604-003		

Analyte	Result	RL
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	Limits
TCMX	99	45-135
Polychlorobiphenyl	80	39-148

I Not Detected
 I Reporting Limit
 Page 1 of 2



Polychlorinated Biphenyls (PCBs)

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8082
Matrix:	Soil	Batch#:	84586
Units:	ug/Kg	Sampled:	09/16/03
Basis:	as received	Received:	09/17/03
Diln Fac:	1.000	Prepared:	09/17/03

Field ID: IKHA004 Analyzed: 09/18/03
 Type: SAMPLE Cleanup Method: EPA 3665
 Lab ID: 167604-004

Analyte	Result	RL
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	Limits
TCMX	92	45-135
Decachlorobiphenyl	92	39-148

Type: BLANK Analyzed: 09/17/03
 Lab ID: QC225996 Cleanup Method: EPA 3665

Analyte	Result	RL
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	Limits
TCMX	111	45-135
Decachlorobiphenyl	105	39-148

ND : Not Detected
 RL : Reporting Limit



Polychlorinated Biphenyls (PCBs)

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC225997	Batch#:	84586
Matrix:	Soil	Prepared:	09/17/03
Units:	ug/Kg	Analyzed:	09/17/03
Basis:	as received		

Cleanup Method: EPA 3665

Analyte	Spiked	Result	%REC	Limits
rochlor-1232	166.4	218.7	131	67-140

Surrogate	%REC	Limits
CMX	98	45-135
Decachlorobiphenyl	88	39-148



Polychlorinated Biphenyls (PCBs)

Lab #:	167604	Location:	Commerce One Parcel
Client:	LFR Levine Fricke	Prep:	EPA 3550
Project#:	003-09071-00	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	84586
MS Lab ID:	167605-005	Sampled:	09/17/03
Matrix:	Soil	Received:	09/17/03
Units:	ug/Kg	Prepared:	09/17/03
Basis:	as received	Analyzed:	09/17/03
Gain Fac:	1.000		

Type: MS
 Lab ID: QC225998
 Cleanup Method: EPA 3665

Analyte	MS Result	Spiked	Result	%REC	Limits
Aroclor-1232	<3.500	167.3	193.8	116	56-141

Surrogate	%REC	Limits
EMX	93	45-135
Decachlorobiphenyl	103	39-148

Type: MSD
 Lab ID: QC225999
 Cleanup Method: EPA 3665

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1232	164.5	209.2	127	56-141	9	41

Surrogate	%REC	Limits
EMX	84	45-135
Decachlorobiphenyl	86	39-148