



**IT Corporation**

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A Member of The IT Group

### Transmittal Letter

Date: June 7, 1999

To: Ms. Juliet Shin, Hazardous Materials Specialist

Company: Alameda County Health Care Services Agency, Environmental Health Services

Address: 1131 Harbor Bay Parkway, Suite 250

City: Alameda State/Zip: CA 94502-6577

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Comments:

As per your request, the attached are copies of all reports/relevant site information for the Sears, Roebuck and Co. (Sears) site #1039 that have been found in the Sears company files. If you have any questions, please call Mr. Scott DeMuth at (847) 286-5530.

Sincerely,  
**IT Corporation**

Melissa Gossell

Melissa Gossell  
West Zone Project Manager

c: Russ Zora, Central Files, Lenexa, KS  
Chronological Files  
Project Files

59 JUN -9 AM 10:15  
ENVIRONMENTAL  
PROTECTION

# **gale/jordan associates, inc.**

ENVIRONMENTAL MANAGEMENT SERVICES

February 28, 1996

Mr. Klaus Ziermaier  
Federated Department Stores  
7 West Seventh Street  
Cincinnati, OH 45202

Re: Former Chevron Station  
1911 Telegraph Avenue  
Oakland, California  
g/ja Project# CE96003

Dear Mr. Ziermaier:

gale/jordan associates (g/ja) is pleased to submit this summary of groundwater monitoring activities for the above-referenced site. On January 17, 1996 groundwater samples were collected from the seven monitoring wells (MW-1 through MW-7) at the Emporium Capwell site located at 1911 Telegraph Avenue in Oakland, California.

Before collecting the samples, g/ja measured and recorded the depth to groundwater in each of the wells. We then purged about three well volumes of water from the wells using a stainless steel bailer. During purging, the temperature, conductivity, and pH of the purged water was monitored. After about three well volumes had been purged from the well and the water level recharged to about 90 percent of static level, a groundwater sample was collected using a disposable polyethylene bailer.

The groundwater samples were collected in laboratory-supplied glass bottles, labeled, and placed in an ice chest. The samples were then delivered to Curtis & Thompkins, a state-certified hazardous materials testing facility. The samples were analyzed for total volatile hydrocarbons as gasoline using EPA Method 8015-M and volatile organic compounds using EPA Method 624.

The bailers were steam-cleaned prior to use and between monitoring wells. The water purged from the monitoring wells and the water generated during steam cleaning were collected in 55-gallon DOT-rated drums and labeled. The drums have been stored inside the former auto service building at the site.

The following table summarizes the results of laboratory analyses. The complete laboratory report is attached.

**LABORATORY RESULTS FOR GROUNDWATER SAMPLES COLLECTED  
JANUARY 1996**

Results expressed in ug/L which equals parts per billion (ppb)

Monitoring Well Number	TVH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TCE	1,2-DCA	Acetone	PCE
MW-1	<50	ND	ND	ND	ND	14	ND	ND	9.9
MW-2	780*	1100	11	100	6.9	38	270	ND	ND
MW-3	<50	ND	ND	ND	ND	ND	ND	ND	11
MW-4	<50	5.8	ND	ND	ND	ND	ND	ND	ND
MW-5	180**	160	3.6*	ND	ND	ND	ND	21	ND
MW-6	<50	ND	ND	ND	ND	12	53	ND0	7.2
MW-7	<50	ND	ND	ND	ND	4.8*	5.7	ND	9.3

Notes: TVH - Total Volatile Hydrocarbons

TCE - Trichloroethene

1,2 DCA - 1,2 Dichloroethane

PCE - Tetrachloroethene

ND - Not Detected Above Reporting Limit

\*Sample exhibits pattern which does not match the indicated standard

\*\*Sample exhibits fuel pattern which does not match gasoline standard, hydrocarbons appear to be a lighter hydrocarbon than gasoline.

If you have any questions or require additional information, please contact this office.

Sincerely,



Kristen Williamson  
Registered Geologist

Enc.

KW/asj



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:

Gale/Jordan Assoc.  
1650 South Pacific Coast Hwy.  
Suite 201  
Rodondo Beach, CA 90277-5613

Date: 29-JAN-96  
Lab Job Number: 124091  
Project ID: N/A  
Location: Broadway/Emporium

Reviewed by:

Reviewed by:

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## Volatile Organics by GC/MS

Client: Gale/Jordan Assoc.  
Location: Broadway/Emporium

Analysis Method: EPA 8240  
Prep Method: EPA 5030

Field ID: MW-1  
Lab ID: 124091-001  
Matrix: Water  
Batch#: 25409  
Units: ug/L  
Diln Fac: 1

Sampled: 01/17/96  
Received: 01/17/96  
Extracted: 01/18/96  
Analyzed: 01/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	10
Acetone	ND	20
Carbon Disulfide	ND	20
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	5.0
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	5.0
Bromodichloromethane	ND	50
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	5.0
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	10
Tetrachloroethene	ND	5.0
Toluene	14	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	99	87-125
Bromofluorobenzene	96	79-122



## Volatile Organics by GC/MS

Client: Gale/Jordan Assoc.  
Location: Broadway/Emporium

Analysis Method: EPA 8240  
Prep Method: EPA 5030

Field ID: MW-2  
Lab ID: 124091-002  
Matrix: Water  
Batch#: 25409  
Units: ug/L  
Diln Fac: 5

Sampled: 01/17/96  
Received: 01/17/96  
Extracted: 01/18/96  
Analyzed: 01/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	10
Acetone	ND	20
Carbon Disulfide	ND	20
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	270	50
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	5.0
Bromodichloromethane	ND	50
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	38	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	1100	5.0
trans-1,3-Dichloropropene	ND	50
Bromoform	ND	5.0
2-Hexanone	ND	5.0
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	10
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	11	5.0
Ethylbenzene	ND	5.0
Styrene	100	5.0
m,p-Xylenes	ND	5.0
o-Xylene	6.9	5.0
	2.9 J	5.0
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	108	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	98	79-122

J: Estimated Value



Volatile Organics by GC/MS

Client: Gale/Jordan Assoc.  
Location: Broadway/Emporium

Analysis Method: EPA 8240  
Prep Method: EPA 5030

Field ID: MW-3  
Lab ID: 124091-003  
Matrix: Water  
Batch#: 25409  
Units: ug/L  
Diln Fac: 1

Sampled: 01/17/96  
Received: 01/17/96  
Extracted: 01/18/96  
Analyzed: 01/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	10
Acetone	ND	20
Carbon Disulfide	ND	20
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	5.0
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	5.0
Bromodichloromethane	ND	50
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	5.0
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	10
Tetrachloroethene	ND	5.0
Toluene	11	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	99	87-125
Bromofluorobenzene	95	79-122



Volatile Organics by GC/MS

Client: Gale/Jordan Assoc.  
Location: Broadway/Emporium

Analysis Method: EPA 8240  
Prep Method: EPA 5030

Field ID: MW-4  
Lab ID: 124091-004  
Matrix: Water  
Batch#: 25409  
Units: ug/L  
Diln Fac: 1

Sampled: 01/17/96  
Received: 01/17/96  
Extracted: 01/18/96  
Analyzed: 01/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	10
Acetone	ND	20
Carbon Disulfide	ND	20
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	5.0
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	5.0
Bromodichloromethane	ND	50
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	5.8	5.0
Bromoform	ND	5.0
2-Hexanone	ND	5.0
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	10
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	100	87-125
Bromofluorobenzene	98	79-122





Volatile Organics by GC/MS

Client: Gale/Jordan Assoc.  
Location: Broadway/Emporium

Analysis Method: EPA 8240  
Prep Method: EPA 5030

Field ID: MW-5  
Lab ID: 124091-005  
Matrix: Water  
Batch#: 25409  
Units: ug/L  
Diln Fac: 1

Sampled: 01/17/96  
Received: 01/17/96  
Extracted: 01/18/96  
Analyzed: 01/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	10
Acetone	ND	20
Carbon Disulfide	21	20
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	5.0
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	5.0
Bromodichloromethane	ND	50
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	160	5.0
Bromoform	ND	5.0
2-Hexanone	ND	5.0
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	10
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	3.6 J	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

J: Estimated Value



Volatile Organics by GC/MS

Client: Gale/Jordan Assoc.  
Location: Broadway/Emporium

Analysis Method: EPA 8240  
Prep Method: EPA 5030

Field ID: MW-6  
Lab ID: 124091-006  
Matrix: Water  
Batch#: 25409  
Units: ug/L  
Diln Fac: 1

Sampled: 01/17/96  
Received: 01/17/96  
Extracted: 01/18/96  
Analyzed: 01/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	10
Acetone	ND	20
Carbon Disulfide	ND	20
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	53	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	5.0
Bromodichloromethane	ND	50
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	12	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	5.0
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	10
Tetrachloroethene	7.2	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	107	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	98	79-122



Volatile Organics by GC/MS

Client: Gale/Jordan Assoc.  
Location: Broadway/Emporium

Analysis Method: EPA 8240  
Prep Method: EPA 5030

Field ID: MW-7  
Lab ID: 124091-007  
Matrix: Water  
Batch#: 25409  
Units: ug/L  
Diln Fac: 1

Sampled: 01/17/96  
Received: 01/17/96  
Extracted: 01/18/96  
Analyzed: 01/18/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	10
Acetone	ND	20
Carbon Disulfide	ND	20
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	5.7	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	5.0
Bromodichloromethane	ND	50
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	4.8 J	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	5.0
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	10
Tetrachloroethene	9.3	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	99	87-125
Bromofluorobenzene	99	79-122

J: Estimated Value

Lab #: 124091

## BATCH QC REPORT

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EPA 8240 Volatile Organics

 Client: Gale/Jordan Assoc.  
 Location: Broadway/Emporium

 Analysis Method: EPA 8240  
 Prep Method: EPA 5030

METHOD BLANK

 Matrix: Water  
 Batch#: 25409  
 Units: ug/L  
 Diln Fac: 1

 Prep Date: 01/18/96  
 Analysis Date: 01/18/96

MB Lab ID: QC13126

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	5.0
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	5.0
Bromodichloromethane	ND	50
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	108	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	96	79-122

Lab #: 124091

## BATCH QC REPORT

Page 1 of 1

EPA 8240 Volatile Organics

 Client: Gale/Jordan Assoc.  
 Location: Broadway/Emporium

 Analysis Method: EPA 8240  
 Prep Method: EPA 5030

METHOD BLANK

 Matrix: Water  
 Batch#: 25446  
 Units: ug/L  
 Diln Fac: 1

 Prep Date: 01/19/96  
 Analysis Date: 01/19/96

MB Lab ID: QC13259

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	10
Acetone	ND	20
Carbon Disulfide	ND	20
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	5.0
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	5.0
Bromodichloromethane	ND	50
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	5.0
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	10
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	98	87-125
Bromofluorobenzene	95	79-122



Lab #: 124091

## BATCH QC REPORT

## EPA 8240 Volatile Organics

Client: Gale/Jordan Assoc.  
Location: Broadway/EmporiumAnalysis Method: EPA 8240  
Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Water  
Batch#: 25409  
Units: ug/L  
Diln Fac: 1Prep Date: 01/18/96  
Analysis Date: 01/18/96

LCS Lab ID: QC13125

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	57.29	50	115	51-180
Trichloroethene	47.18	50	94	73-141
Benzene	48.14	50	96	78-142
Toluene	47.46	50	95	76-150
Chlorobenzene	48.27	50	97	83-129
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	105	68-126		
Toluene-d8	100	87-125		
Bromofluorobenzene	98	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



Lab #: 124091

BATCH QC REPORT

EPA 8240 Volatile Organics

Client: Gale/Jordan Assoc.  
Location: Broadway/Emporium

Analysis Method: EPA 8240  
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water  
Batch#: 25446  
Units: ug/L  
Diln Fac: 1

Prep Date: 01/19/96  
Analysis Date: 01/19/96

LCS Lab ID: QC13258

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	49.1	50	98	51-180
Trichloroethene	40.66	50	81	73-141
Benzene	43.41	50	87	78-142
Toluene	42.22	50	84	76-150
Chlorobenzene	43.74	50	88	83-129
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	104	68-126		
Toluene-d8	99	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



Lab #: 124091

## BATCH QC REPORT

Page 1 of 1

## EPA 8240 Volatile Organics

Client: Gale/Jordan Assoc.  
Location: Broadway/EmporiumAnalysis Method: EPA 8240  
Prep Method: EPA 5030

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: MW-1  
Lab ID: 124091-001  
Matrix: Water  
Batch#: 25409  
Units: ug/L  
Diln Fac: 1Sample Date: 01/17/96  
Received Date: 01/17/96  
Prep Date: 01/18/96  
Analysis Date: 01/18/96

MS Lab ID: QC13138

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5.000	55.89	112	51-180
Trichloroethene	50	<5.000	45	90	73-141
Benzene	50	<5.000	46.27	93	78-142
Toluene	50	<5.000	45.48	91	76-150
Chlorobenzene	50	<5.000	46.43	93	83-129
Surrogate	%Rec	Limits			
1,2-Dichloroethane-d4	108	68-126			
Toluene-d8	99	87-125			
Bromofluorobenzene	97	79-122			

MSD Lab ID: QC13139

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	59.23	118	51-180	6	<14
Trichloroethene	50	46.86	93	73-141	4	<14
Benzene	50	47.88	96	78-142	3	<11
Toluene	50	47.16	94	76-150	4	<13
Chlorobenzene	50	48.19	96	83-129	4	<13
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	109	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 #: 124091

## BATCH QC REPORT

EPA 8240 Volatile Organics	
Client: Gale/Jordan Assoc.	Analysis Method: EPA 8240
Location: Broadway/Emporium	Prep Method: EPA 5030
MATRIX SPIKE/MATRIX SPIKE DUPLICATE	
Field ID: MW-2	Sample Date: 01/17/96
Lab ID: 124091-002	Received Date: 01/17/96
Matrix: Water	Prep Date: 01/19/96
Batch#: 25446	Analysis Date: 01/19/96
Units: ug/L	
Diln Fac: 1	

MS Lab ID: QC13260

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<25.00	48.4	97	51-180
Trichloroethene	50	59.37	45	83	73-141
Benzene	50	1086	153.4	90	78-142
Toluene	50	19.32	42.55	83	76-150
Chlorobenzene	50	<25.00	43.05	86	83-129
Surrogate	%Rec	Limits			
1,2-Dichloroethane-d4	104	68-126			
Toluene-d8	98	87-125			
Bromofluorobenzene	97	79-122			

MSD Lab ID: QC13261

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	47.51	95	51-180	2	<14
Trichloroethene	50	44.72	82	73-141	1	<14
Benzene	50	155.6	94	78-142	1	<11
Toluene	50	42.82	83	76-150	1	<13
Chlorobenzene	50	42.6	85	83-129	1	<13
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	104	68-126				
Toluene-d8	100	87-125				
Bromofluorobenzene	96	79-122				

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits



TVH-Total Volatile Hydrocarbons

Client: Gale/Jordan Assoc.  
Location: Broadway/Emporium

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
124091-001	MW-1	25514	01/17/96	01/24/96	01/24/96	
124091-002	MW-2	25514	01/17/96	01/24/96	01/24/96	
124091-003	MW-3	25514	01/17/96	01/24/96	01/24/96	
124091-004	MW-4	25514	01/17/96	01/24/96	01/24/96	

Analyte	Units	124091-001	124091-002	124091-003	124091-004
Diln Fac:		1	1	1	1
Gasoline	ug/L	<50	780 Y	<50	<50
Surrogate					
Trifluorotoluene	%REC	91	92	92	92
Bromobenzene	%REC	88	96	88	88

Y: Sample exhibits fuel pattern which does not resemble standard



**TVH-Total Volatile Hydrocarbons**

<b>Client:</b> Gale/Jordan Assoc.	<b>Analysis Method:</b> CA LUFT (EPA 8015M)
<b>Location:</b> Broadway/Emporium	<b>Prep Method:</b> EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
124091-005	MW-5	25514	01/17/96	01/24/96	01/24/96	
124091-006	MW-6	25514	01/17/96	01/24/96	01/24/96	
124091-007	MW-7	25514	01/17/96	01/24/96	01/24/96	

Analyte	Units	124091-005	124091-006	124091-007
Diln Fac:		1	1	1
Gasoline	ug/L	180 YL	<50	<50
<b>Surrogate</b>				
Trifluorotoluene	%REC	91	91	91
Bromobenzene	%REC	88	88	88

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

Lab #: 124091

BATCH QC REPORT



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Page 1 of 1

**TVH-Total Volatile Hydrocarbons**

Client: Gale/Jordan Assoc.  
Location: Broadway/Emporium

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

**METHOD BLANK**

Matrix: Water  
Batch#: 25514  
Units: ug/L  
Diln Fac: 1

Prep Date: 01/24/96  
Analysis Date: 01/24/96

MB Lab ID: QC13525

Analyte	Result	
Gasoline	<50	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	91	69-120
Bromobenzene	88	70-122



Lab #: 124091

BATCH QC REPORT

**TVH-Total Volatile Hydrocarbons**

Client: Gale/Jordan Assoc.  
Location: Broadway/Emporium

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

**BLANK SPIKE/BLANK SPIKE DUPLICATE**

Matrix: Water  
Batch#: 25514  
Units: ug/L  
Diln Fac: 1

Prep Date: 01/23/96  
Analysis Date: 01/23/96

BS Lab ID: QC13526

Analyte	Spike Added	BS	%Rec #	Limits
Gasoline	2000	2075	104	80-120
Surrogate	%Rec	Limits		
Trifluorotoluene	93	69-120		
Bromobenzene	95	70-122		

BSD Lab ID: QC13527

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1982	99	80-120	5	<35
Surrogate	%Rec	Limits				
Trifluorotoluene	93	69-120				
Bromobenzene	96	70-122				

# Column to be used to flag recovery and RPD values with an asterisk


\* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

# CHAIN OF CUSTODY FORM

Analyses

**Curtis & Tompkins, Ltd.**  
 Analytical Laboratories, Since 1870  
  
 2323 Fifth Street  
 Berkeley, CA 94710  
 (510) 488-0900 Phone  
 (510) 488-0632 Fax

C&T  
 LOGIN # 12401

Sampler: K. Williamson

Project No: —

Report To: Kristen Williamson

Project Name: Broadway/Emporium

Company: gab/pardon andc.

Project P.O.: —

Telephone: 310 316 4377

Turnaround Time: Normal

Fax: 310 316 4558

Lab Number	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				Field Notes
			Soil	Water	Waste		HCl	H2SO4	HNO3	ICE	
	MW-1	1-17-96 10:15		X		4	X				
	MW-2	1-17-96 12:55		X		4					
	MW-3	1-17-96 1:35		X		4					
	MW-4	1-17-96 12:00		X		4					
	MW-5	1-17-96 11:05		X		4					
	MW-6	1-17-96 8:50		X		4					
	MW-7	1-17-96 9:40		X		4	X				

XXXXXIX 8015 (6)  
 XXXXXIX 8240

Notes:  
 1650, South Pacific Coast Hwy  
 Suite 201 Redwood Brook  
 90277-5613

RELINQUISHED BY:  
Kristen Williamson 1-17-96 3:15  
 DATE/TIME

RECEIVED BY: (-)  
Andrew E. Selby  
 DATE/TIME