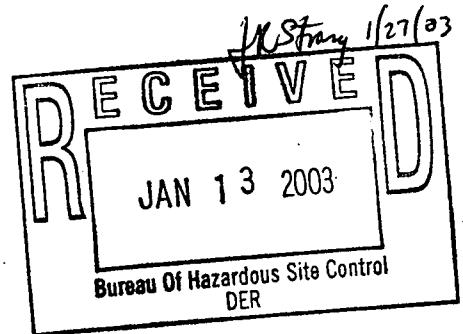


de maximis, inc.

2975 Bee Ridge Road
Suite C
Sarasota, FL 34239
(941) 926-7929
Fax (941) 926-0829

January 9, 2003

Patricia Pierre
Central New York Remedial Section
New York Remediation Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency, Region II
20th Floor, 290 Broadway
New York, New York 10007



Subject: **Quarterly Progress Report - 4Q02**
Operations and Maintenance and Long Term-Monitoring Activities
PAS Site, Oswego, NY

738001

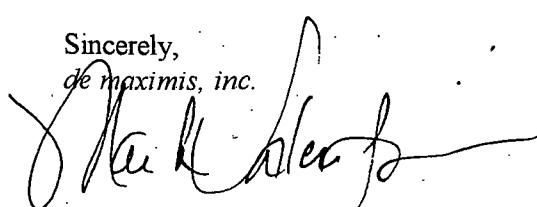
Dear Ms. Pierre:

The January 2003 Quarterly Progress Report is submitted under Consent Decree 98-CV0112NPMGJD for operation, maintenance, and long-term monitoring activities at the PAS Site in Oswego, New York (Consent Decree) is attached. This attached Progress Report, which covers the period October through December 2002, conforms with requirements of Paragraph 30 of the Consent Decree, which was entered on August 10, 1998.

If you have any questions, please call me at (941) 926-7929.

Sincerely,

de maximis, inc.



Mark Valentine

cc: Performing Settling Defendants
L. McDavid, USEPA
G. Rider, NYSDEC, Division of Hazardous Waste Remediation
R. Parker, NYSDEC, Region 7 Office
D. Geraghty, NYDOH, Office of Public Health

Reviewed for
EPA 2nd Quarter
for
Am 1st Report
'03 (53)
~~62~~ JCS
11/27/03

QUARTERLY PROGRESS REPORT
Operation, Maintenance and Long-term Monitoring Activities

PROJECT NAME: *Pollution Abatement Services Site
Oswego, New York*

PERIOD COVERED: OCTOBER - DECEMBER 2002

ACTIONS TAKEN DURING PREVIOUS QUARTER (OCT - DEC 2002):

- Removal activities were conducted at the PAS Oswego Site in accordance with the Operation, Maintenance and Long-term Monitoring Activities Plan (BBL, 1998) (Work Plan). A total of 30,521 gallons of leachate was removed during the period October through December of 2002. Specific quantities of leachate removed during each month, along with removal dates and manifest numbers, are described in this progress report under the section entitled "Documentation of Removal Activities". Subsequent to each of these events, leachate and ground water was disposed of at the BFI/CECOS Niagara Falls, New York, disposal facility. Buffalo Fuels Corporation was the transportation subcontractor for OBG leachate removal activities.
- Routine ground-water elevation monitoring was performed on October 7 and 21, November 4, and 18, December 2 and 16, 2002.
- On November 4, 2002, quarterly ground-water elevation monitoring was also performed. Quarterly ground-water elevation results for the M-series and LR-series monitoring wells indicated upward vertical gradients calculated for the leachate collection well LCW-4 area were less than 1.5 feet per foot. Therefore leachate removal activities were conducted at LCW locations (including LCW-4) during the period October though December 2002, in accordance with the November 15, 1999 leachate removal protocol.
- The semi-annual ground water and leachate quality sampling was conducted on November 4, 2002. A summary of these sampling results, along with historical sampling results, is presented in Figure 1, as attached.
- Site maintenance activities were conducted on October 21, November 18, and December 16, 2002, which included inspection of spill control materials, perimeter fencing, and monitoring wells, as well as cleanup of the storage shed and clearing of any debris accumulated in the concrete surface drainage trenches. These maintenance activities were performed in accordance with the approved Work Plan.
- PSDs communicated with USEPA to determine the status of the USEPA response to the revised, site-specific, version of the Environmental Protection Easement and Restrictive Covenant document that the PSDs submitted to USEPA in September 2002.

ACTION ITEMS FOR FOLLOWING QUARTER (JAN - MAR 2003):

- OMM activities will be performed in January, February, and March 2003, in accordance with the approved Work Plan. The OMM activities include pumping 15,000 gallons of leachate during the first week of the month, or whatever volume can be efficiently removed during a one-day pumping event, up to 15,000 gallons. The ground-water slurry wall wells and leachate wells will be monitored during the beginning of the third week of the month. If leachate elevations measured during the third week indicate that an additional 10,000 gallons of removable leachate has accumulated in the collection trenches, then a contingency removal event will be promptly scheduled to remove the 10,000 gallons of additional leachate.
- Quarterly ground-water elevation monitoring will be conducted on February 3, 2003.
- Routine maintenance activities will be conducted, including inspection of spill control materials and perimeter fence. Snow removal will be performed on an as needed basis throughout the following quarter. These maintenance activities will be performed in accordance with the approved Work Plan.
- The PSDs are awaiting USEPA response to the revised Environmental Protection Easement and Restrictive Covenant document provided to USEPA by the PSDs in September 2002.

- The schedule for leachate removal events and tasks is provided below.

LEACHATE REMOVAL EVENTS AND TASK SCHEDULE (1 st Quarter 2003)							
	January 2003 Removal Events		February 2003 Removal Events		March 2003 Removal Events		Task
	First Event	Contingency Event	First Event	Contingency Event	First Event	Contingency Event	
Pre-Pumping Monitoring	Jan 6	Jan 20	Feb 3	Feb 17	Mar 3	Mar 17	LCW- and SWW- Series Wells for Jan, Feb, Mar LCW-, SWW-, M-, and LR- Series Wells for Feb. (first event only).
Removal	Jan 8	Jan 22	Feb 5	Feb 19	Mar 5	Mar 19	Remove leachate from LCW-1, -2, -3, and -4 wells. (LCW-4 dependent on levels measured on Feb 3)

LEACHATE REMOVAL EVENTS AND TASK SCHEDULE (2 nd Quarter 2003)							
	April 2003 Removal Events		May 2003 Removal Events		June 2003 Removal Events		Task
	First Event	Contingency Event	First Event	Contingency Event	First Event	Contingency Event	
Pre-Pumping Monitoring	Apr 7	Apr 21	May 5	May 19	Jun 2	Jun 16	LCW- and SWW- Series Wells for Apr, May, Jun. LCW-, SWW-, M-, and LR- Series Wells for May. (first event only).
Removal	Apr 9	Apr 23	May 7	May 21	Jun 4	Jun 18	Remove leachate from LCW-1, -2, -3, and -4 wells. (LCW-4 dependent on levels measured on May 5)

ANTICIPATED DELAYS/PROBLEMS:

- None

RESULTS OF FIELD ACTIVITIES:

- Ground-water elevation data collected on October 7 and 21, November 4 and 18, and December 2 and 16, 2002 are attached, along with SWW-series monitoring well charts for the last 12 months (See Attachment 1).
- The routine leachate disposal and site inspection checklists are attached (See Attachment 2).

- The November 2002 semi-annual sampling results are attached, along with Figure 1, Historical Concentrations of VOCs of Concern Detected in Consent Decree Wells (See Attachment 5).

DOCUMENTATION OF REMOVAL ACTIVITIES DURING PREVIOUS QUARTER:

- Hazardous Waste Manifests (See Attachment 3)
- Waste Treatment/Disposal Certifications (See Attachment 4)

OCTOBER 2002

October 9, 2002

Manifest #	Amount (gal)	Date Removed
NYG2534814	5,243	10/9/02
NYG2534823	5,157	10/9/02

October 9, 2002 Total 10,400 gallons

October 2002 Total = 10,400 gallons

NOVEMBER 2002

November 6, 2002

Manifest #	Amount (gal)	Date Removed
NYG2534841	5,257	11/6/02
NYG2534859	5,178	11/6/02

November 6, 2002 Total 10,435 gallons

November 2002 Total = 10,435 gallons

DECEMBER 2002

December 4, 2002

Manifest #	Amount (gal)	Date Removed
NYG2534832	5,083	12/4/01
NYG2534868	4,603	12/4/01

December 5, 2002 Total = 9,686 gallons

December 2002 Total = 9,686 gallons

• CUMULATIVE REMOVAL QUANTITIES

Cumulative gallons removed during quarter
under OMM Plan - *October through December 2002* **30,521**

HISTORICAL SUMMARY OF LEACHATE REMOVAL ACTIVITIES

<i>Order/Decree</i>	<i>Disposal Facility/Period</i>	<i>Quantities</i>
1991 IGR Order (2/92 - 10/94)	<i>Dupont:</i> 1992 (2/98 -12/98) 1993 1994 (1/94-10/94) <i>Subtotal</i>	221,808 337,619 <u>254,898</u> 814,325
1994 IGR Order (10/94 - 10/98)	<i>DuPont:</i> 1994 (From 10/94) 1995 1996 (To 5/96) <i>Subtotal (To 5/96)</i> <i>BFI/CECOS:</i> 1996 1997 1998 (1/98-10/98) <i>Subtotal</i> 94 IGR Order Total	50,683 279,164 <u>119,901</u> 449,748 163,446 269,371 <u>207,541</u> 640,358 1,090,106
Final IGR Total		1,904,431
OMM Consent Decree (Beginning 11/98)	<i>BFI/CECOS:</i> 1998 (11/98-12/98) 1999 2000 2001 2002 <i>OMM Subtotal</i>	18,423 177,710 196,613 130,212 118,592 <u>641,550</u>
GRAND TOTAL		2,545,981

- LEACHATE DISPOSAL DOCUMENTATION

October 9, 2002

BFI/CECOS Work Order Number	Manifest #	Date Disposed
285362	NYG2534814	10/9/02
285363	NYG2534823	10/9/02

November 6, 2002

BFI/CECOS Work Order Number	Manifest #	Date Disposed
285465	NYG2534841	11/6/02
285466	NYG2534859	11/6/02

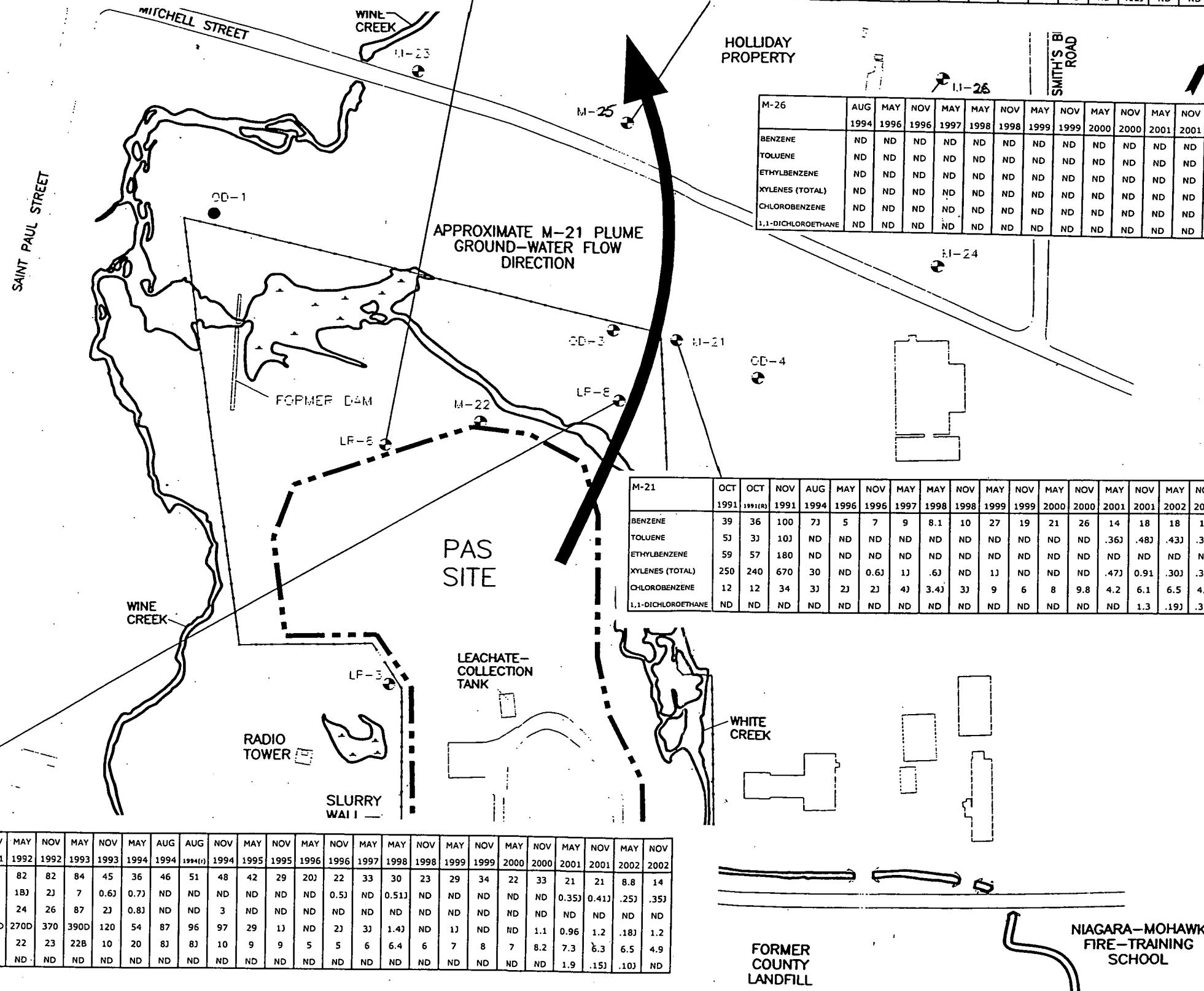
December 4, 2002

BFI/CECOS Work Order Number	Manifest #	Date Disposed
285525	NYG2534832	12/4/01
285524	NYG2534868	12/4/01

Note: "Gallons removed" is based upon BFI/CECOS measurement of the "loaded" and "tare" weights as measured at the Niagara Falls, New York facility and shown on the weight tickets included in Attachment 4, and a density of 8.346 pounds per gallon.

LR-6	NOV 1989	MAY 1990	NOV 1990	MAY 1991	NOV 1991	MAY 1992	NOV 1992	MAY 1993	NOV 1993	MAY 1994	AUG 1994	NOV 1994	MAY 1995	NOV 1995	MAY 1996	NOV 1996	MAY 1997	NOV 1997	MAY 1998	NOV 1998	MAY 1999	NOV 1999	MAY 2000	NOV 2000	MAY 2001	NOV 2001	MAY 2002	NOV 2002
BENZENE	23	ND	13	ND																								
TOLUENE	23	23	23	ND																								
ETHYLBENZENE	13	ND	13	0.3J	ND																							
XYLENES (TOTAL)	13	ND	33	ND																								
CHLOROBENZENE	ND																											
1,1-DICHLOROETHANE	48	67	49	34	33	14	12	8	10	8	7J	13	7	8	ND	8	5	4.2J	6	3	9	2	4.2	ND	4.1	1.6	.16J	

M-25	AUG 1994	MAY 1996	NOV 1996	MAY 1997	NOV 1998	MAY 1999	NOV 1999	MAY 2000	NOV 2000	MAY 2001	NOV 2001	MAY 2002	NOV 2002	
BENZENE	4J	9	ND	12	6.6	5	10	6	8	6.1	0.99	0.72	0.73	.42J
TOLUENE	ND	0.95	.19J	.18J	.17J									
ETHYLBENZENE	ND	.12J	ND	ND	ND									
XYLENES (TOTAL)	ND	0.79	ND	ND	.12J									
CHLOROBENZENE	1J	3J	ND	6	5.1	ND	6	3J	6	4.8	1.1	2.1	2.1	1.6
1,1-DICHLOROETHANE	ND	2J	4J	ND	.12J	ND	ND	ND						



POLLUTION ABATEMENT SERVICES SITE
OSWEGO, NEW YORK
OPERATION AND MAINTENANCE AND
LONG-TERM MONITORING PLAN

HISTORICAL CONCENTRATIONS OF VOCs
OF CONCERN DETECTED IN CONSENT
DECREE WELLS (1989-2001)

O'BRIEN & GERE
ENGINEERS INC.

FIGURE
1

Analytical Results

O'Brien & Gere Laboratories, Inc.

Analytical Results

Method: 8260

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY
Proj. Desc:
Package#: 3762
Sample: Y0583
Sample Description: LCW 2
Instrument: HP5973 GCMS#3
Units: ug/L
Number of analytes: 48

Job No.: 3027 . 333 . 32301
Certification NY No.: 10155

Collected: 11/04/02 Matrix: Water
Received: 11/04/02 QC Batch: 110602W1
Prepared: 11/06/02 %Solids:
 Sample Size: 10 mL
 Dilution: 12.5

Parameter	Result	Qual	MDL	PQL	Analyzed	Notes
Dichlorodifluoromethane	<12.	U	.42	12	11/06/02	
Chloromethane	<12.	U	.76	12	11/06/02	
Vinyl chloride	56.		.72	12	11/06/02	
Bromomethane	<12.	U	.54	12	11/06/02	
Chloroethane	63.		1.4	12	11/06/02	
Trichlorofluoromethane	<12.	U	.29	12	11/06/02	
Acetone	J 87.	J	9.8	120	11/06/02	
1,1-Dichloroethene	<6.2	U	.36	6.2	11/06/02	
Methylene chloride	J 4.7	J	2.3	25	11/06/02	
Carbon disulfide	<6.2	U	.50	6.2	11/06/02	
trans-1,2-Dichloroethene	J 4.6	J	.58	6.2	11/06/02	
Methyl tert-butyl ether	<6.2	U	.78	6.2	11/06/02	
1,1-Dichloroethane	85.		.32	6.2	11/06/02	
2-Butanone	J 20.	J	3.4	120	11/06/02	
cis-1,2-Dichloroethene	87.		.68	6.2	11/06/02	
Chloroform	J 2.4	J	.50	6.2	11/06/02	
1,2-Dichloroethane	9.5		.28	6.2	11/06/02	
1,1,1-Trichloroethane	6.3		.39	6.2	11/06/02	
Carbon tetrachloride	<6.2	U	.26	6.2	11/06/02	
Benzene	410.		.39	6.2	11/06/02	
1,2-Dichloropropane	<6.2	U	.48	6.2	11/06/02	
Trichloroethene	<6.2	U	.52	6.2	11/06/02	
Bromodichloromethane	<6.2	U	.26	6.2	11/06/02	
cis-1,3-Dichloropropene	<6.2	U	.51	6.2	11/06/02	
4-Methyl-2-pentanone	J 62.	J	4.4	62	11/06/02	
trans-1,3-Dichloropropene	<6.2	U	.80	6.2	11/06/02	
1,1,2-Trichloroethane	<6.2	U	.90	6.2	11/06/02	
Toluene	540.	E	.61	6.2	11/06/02	
Dibromochloromethane	<6.2	U	.66	6.2	11/06/02	
2-Hexanone	<62.	U	4.4	62	11/06/02	
1,2-Dibromoethane	<6.2	U	.72	6.2	11/06/02	
Tetrachloroethene	<6.2	U	.49	6.2	11/06/02	
Chlorobenzene	370.		.35	6.2	11/06/02	
Ethylbenzene	1000.	E	.45	6.2	11/06/02	
Bromoform	<6.2	U	.85	6.2	11/06/02	

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

I - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

Authorized: *Thomas Alexander*
Date: November 21, 2002 Thomas Alexander

Date: November 21, 2002 Thomas Alexander

O'Brien & Gere Laboratories, Inc.

Analytical Results

Method: 8260

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Job No.: 3027 . 333 . 32301
Certification NY No.: 10155

Proj. Desc:

Package#: 3762

Sample: Y0583

Sample Description: LCW 2

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 48

Collected: 11/04/02
Received: 11/04/02
Prepared: 11/06/02

Matrix: Water

OC Batch: 110602W1

%Solids:

Sample Size: 10 mL
Dilution: 12.5

Parameter	Result	Qual	MDL	PQL	Analyzed	Notes
Xylene (total)	2200.	E	.61	6.2	11/06/02	
Styrene	<6.2	U	.45	6.2	11/06/02	
1,1,2,2-Tetrachloroethane	<6.2	U	1.5	6.2	11/06/02	
Isopropylbenzene	J 4.7	J	.94	6.2	11/06/02	
1,3-Dichlorobenzene	J 2.1	J	.48	6.2	11/06/02	
1,4-Dichlorobenzene	7.4		.49	6.2	11/06/02	
1,2-Dichlorobenzene	86.		.60	6.2	11/06/02	
1,2-Dibromo-3-chloropropane	<12.	U	8.6	12	11/06/02	
1,2,4-Trichlorobenzene	<12.	U	.62	12	11/06/02	
1,1,2-Trichloro-1,2,2-trifluoroethane	J 3.7	J	.31	6.2	11/06/02	
Methyl acetate	<6.2	U	2.7	6.2	11/06/02	
Cyclohexane	7.6		.70	6.2	11/06/02	
Methylcyclohexane	J 2.4	J	1.1	6.2	11/06/02	

<u>Surrogate</u>	%R	Qual	%R Limits
Dibromofluoromethane (surrogate)	104		71-130
1,2-Dichloroethane-d4 (surrogate)	110		76-126
Toluene-d8 (surrogate)	95		82-119
Bromofluorobenzene (surrogate)	105		75-119

Notes:

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- Outside control limits. U - Undetected at the reported level.

I - reported value is estimated. D - Result is diluted.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

Authorized: Thomas G. Alexander
Date: November 21, 2002 Thomas Alexander

Date: November 21, 2002

Thomas Alexander

**O'Brien & Gere
Laboratories, Inc.**

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Proj. Desc:

Package#: 3762

Sample: Y0583 DL

Sample Description: LCW 2

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 48

**Analytical Results
Method: 8260**

Job No.: 3027.333.32301
Certification NY No.: 10155

Collected:	11/04/02	Matrix: Water
Received:	11/04/02	QC Batch: 110702W7
Prepared:	11/07/02	%Solids:
		Sample Size: 10 mL
		Dilution: 100

Parameter	Result	Qual	MDL	PQL	Analyzed Notes
Dichlorodifluoromethane	<100.	U	3.4	100	11/07/02
Chloromethane	<100.	U	6.1	100	11/07/02
Vinyl chloride	J 52.	J	D 5.8	100	11/07/02
Bromomethane	<100.	U	4.3	100	11/07/02
Chloroethane	J 60.	J	D 11.	100	11/07/02
Trichlorofluoromethane	<100.	U	2.3	100	11/07/02
Acetone	<1000.	U	78.	1000	11/07/02
1,1-Dichloroethene	<50.	U	2.9	50	11/07/02
Methylene chloride	<200.	U	18.	200	11/07/02
Carbon disulfide	<50.	U	4.0	50	11/07/02
trans-1,2-Dichloroethene	<50.	U	4.6	50	11/07/02
Methyl tert-butyl ether	<50.	U	6.2	50	11/07/02
1,1-Dichloroethane	81.		D 2.6	50	11/07/02
2-Butanone	<1000.	U	27.	1000	11/07/02
cis-1,2-Dichloroethene	73.		D 5.4	50	11/07/02
Chloroform	<50.	U	4.0	50	11/07/02
1,2-Dichloroethane	<50.	U	2.2	50	11/07/02
1,1,1-Trichloroethane	<50.	U	3.1	50	11/07/02
Carbon tetrachloride	<50.	U	2.1	50	11/07/02
Benzene	410.		D 3.1	50	11/07/02
1,2-Dichloropropane	<50.	U	3.8	50	11/07/02
Trichloroethene	<50.	U	4.2	50	11/07/02
Bromodichloromethane	<50.	U	2.1	50	11/07/02
cis-1,3-Dichloropropene	<50.	U	4.1	50	11/07/02
4-Methyl-2-pentanone	<500.	U	35.	500	11/07/02
trans-1,3-Dichloropropene	<50.	U	6.4	50	11/07/02
1,1,2-Trichloroethane	<50.	U	7.2	50	11/07/02
Toluene	570.		D 4.9	50	11/07/02
Dibromochloromethane	<50.	U	5.3	50	11/07/02
2-Hexanone	<500.	U	35.	500	11/07/02
1,2-Dibromoethane	<50.	U	5.8	50	11/07/02
Tetrachloroethene	<50.	U	3.9	50	11/07/02
Chlorobenzene	370.		D 2.8	50	11/07/02
Ethylbenzene	1100.		D 3.6	50	11/07/02
Bromoform	<50.	U	6.8	50	11/07/02

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

Authorized: _____
Date: November 21, 2002 Thomas Alexander

**O'Brien & Gere
Laboratories, Inc.**

Analytical Results

Method: 8260

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Job No.: 3027 . 333 . 32301
Certification NY No.: 10155

Proj. Desc:

Package#: 3762

Sample: Y0583 DL

Sample: 10365-22
Sample Description: LCW 2

Sample Description: EGW-2
Instrument: HP5973 GCMS#3

Instrument.

Number of analytes: 48

Collected: 11/04/02
Received: 11/04/02
Prepared: 11/07/02

Matrix: Water

QC Batch: 110702W7

94 Solids

Sample Size: 10 mL

Sample size:
Dilution: 100

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>PQL</u>	<u>Analyzed</u>	<u>Notes</u>
Xylene (total)	2100.	D	4.9	50	11/07/02	
Styrene	<50.	U	3.6	50	11/07/02	
1,1,2,2-Tetrachloroethane	<50.	U	12.	50	11/07/02	
Isopropylbenzene	<50.	U	7.5	50	11/07/02	
1,3-Dichlorobenzene	<50.	U	3.8	50	11/07/02	
1,4-Dichlorobenzene	<50.	U	3.9	50	11/07/02	
1,2-Dichlorobenzene	83.	D	4.8	50	11/07/02	
1,2-Dibromo-3-chloropropane	<100.	U	69.	100	11/07/02	
1,2,4-Trichlorobenzene	<100.	U	5.0	100	11/07/02	
1,1,2-Trichloro-1,2,2-trifluoroethane	<50.	U	2.5	50	11/07/02	
Methyl acetate	<50.	U	22.	50	11/07/02	
Cyclohexane	<50.	U	5.6	50	11/07/02	
Methylcyclohexane	<50.	U	8.5	50	11/07/02	

<u>Surrogate</u>	<u>%R</u>	<u>Qual</u>	<u>%R Limits</u>
Dibromofluoromethane (surrogate)	96		71-130
1,2-Dichloroethane-d4 (surrogate)	105		76-126
Toluene-d8 (surrogate)	103		82-119
Bromofluorobenzene (surrogate)	98		75-119

Notes:

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

I - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

Authorized: *Thomas Alexander*
Date: November 21, 2002 Thomas Alexander

**O'Brien & Gere
Laboratories, Inc.**

**Analytical Results
Method: 8260**

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Job No.: 3027 . 333 . 32301
Certification NY No.: 10155

Proj. Desc:

Package#: 3762

Collected: 11/04/02 Matrix: Water
Received: 11/04/02 QC Batch: 110702W7
Prepared: 11/07/02 %Solids:

Sample: Y0584

Sample Size: 10 mL
Dilution: 5

Sample Description: LCW 4

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 48

Parameter	Result	Qual	MDL	PQL	Analyzed	Notes
Dichlorodifluoromethane	<5.0	U	.17	5	11/07/02	
Chloromethane	<5.0	U	.30	5	11/07/02	
Vinyl chloride	35.		.29	5	11/07/02	
Bromomethane	<5.0	U	.22	5	11/07/02	
Chloroethane	J 5.0	J	.55	5	11/07/02	
Trichlorofluoromethane	<5.0	U	.12	5	11/07/02	
Acetone	<50.	U	3.9	50	11/07/02	
1,1-Dichloroethene	J 1.7	J	.14	2.5	11/07/02	
Methylene chloride	J 1.4	J	.92	10	11/07/02	
Carbon disulfide	<2.5	U	.20	2.5	11/07/02	
trans-1,2-Dichloroethene	J 1.3	J	.23	2.5	11/07/02	
Methyl tert-butyl ether	<2.5	U	.31	2.5	11/07/02	
1,1-Dichloroethane	61.		.13	2.5	11/07/02	
2-Butanone	<50.	U	1.4	50	11/07/02	
cis-1,2-Dichloroethene	33.		.27	2.5	11/07/02	
Chloroform	9.4		.20	2.5	11/07/02	
1,2-Dichloroethane	2.7		.11	2.5	11/07/02	
1,1,1-Trichloroethane	58.		.16	2.5	11/07/02	
Carbon tetrachloride	<2.5	U	.10	2.5	11/07/02	
Benzene	160.		.16	2.5	11/07/02	
1,2-Dichloropropane	<2.5	U	.19	2.5	11/07/02	
Trichloroethene	150.		.21	2.5	11/07/02	
Bromodichloromethane	<2.5	U	.10	2.5	11/07/02	
cis-1,3-Dichloropropene	<2.5	U	.20	2.5	11/07/02	
4-Methyl-2-pentanone	<25.	U	1.8	25	11/07/02	
trans-1,3-Dichloropropene	<2.5	U	.32	2.5	11/07/02	
1,1,2-Trichloroethane	J 1.8	J	.36	2.5	11/07/02	
Toluene	J 1.9	J	.24	2.5	11/07/02	
Dibromochloromethane	<2.5	U	.26	2.5	11/07/02	
2-Hexanone	<25.	U	1.8	25	11/07/02	
1,2-Dibromoethane	<2.5	U	.29	2.5	11/07/02	
Tetrachloroethene	110.		.20	2.5	11/07/02	
Chlorobenzene	38.		.14	2.5	11/07/02	
Ethylbenzene	68.		.18	2.5	11/07/02	
Bromoform	<2.5	U	.34	2.5	11/07/02	

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

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Authorized: _____
Date: November 21, 2002 Thomas Alexander

**O'Brien & Gere
Laboratories, Inc.**

Analytical Results

Method: 8260

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Job No.: 3027 . 333 . 32301
Certification NY No.: 10155

Proj. Desc:

Package#: 3762

Sample: Y0584

Sample Description: LCW 4

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 48

Collected: 11/04/02
Received: 11/04/02
Prepared: 11/07/02

Matrix: Water

QC Batch: 110702W7

94 Solids

%Solids.

Sample Size

Dilution: 5

Parameter	Result	Qual	MDL	PQL	Analyzed	Notes
Xylene (total)	15.		.24	2.5		11/07/02
Styrene	<2.5	U	.18	2.5		11/07/02
1,1,2,2-Tetrachloroethane	8.0		.61	2.5		11/07/02
Isopropylbenzene	3.5		.38	2.5		11/07/02
1,3-Dichlorobenzene	<2.5	U	.19	2.5		11/07/02
1,4-Dichlorobenzene	J .59	J	.20	2.5		11/07/02
1,2-Dichlorobenzene	2.8		.24	2.5		11/07/02
1,2-Dibromo-3-chloropropane	<5.0	U	.34	5		11/07/02
1,2,4-Trichlorobenzene	<5.0	U	.25	5		11/07/02
1,1,2-Trichloro-1,2,2-trifluoroethane	J 2.0	J	.12	2.5		11/07/02
Methyl acetate	<2.5	U	1.1	2.5		11/07/02
Cyclohexane	J .88	J	.28	2.5		11/07/02
Methylcyclohexane	J 1.4	J	.42	2.5		11/07/02

<u>Surrogate</u>	%R	Qual	%R Limits
Dibromofluoromethane (surrogate)	95		71-130
1,2-Dichloroethane-d4 (surrogate)	103		76-126
Toluene-d8 (surrogate)	111		82-119
Bromofluorobenzene (surrogate)	99		75-119

Notes:

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and

E - concentration exceeded the calibration range and is estimated.

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Authorized: _____
Date: November 21, 2002 Thomas Alexander

**O'Brien & Gere
Laboratories, Inc.**

**Analytical Results
Method: 8260**

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY
Proj. Desc:
Package#: 3762
Sample: Y0585
Sample Description: LR-6
Instrument: HP5973 GCMS#3
Units: ug/L
Number of analytes: 48

Job No.: 3027.333.32301
Certification NY No.: 10155

Collected: 11/04/02 Matrix: Water
Received: 11/04/02 QC Batch: 110602W1
Prepared: 11/06/02 %Solids:
 Sample Size: 10 mL
 Dilution: 1

Parameter	Result	Qual	MDL	PQL	Analyzed Notes
Dichlorodifluoromethane	<1.0	U	.034	1	11/06/02
Chloromethane	<1.0	U	.061	1	11/06/02
Vinyl chloride	J .85	J	.058	1	11/06/02
Bromomethane	<1.0	U	.043	1	11/06/02
Chloroethane	J .88	J	.11	1	11/06/02
Trichlorofluoromethane	<1.0	U	.023	1	11/06/02
Acetone	<10.	U	.78	10	11/06/02
1,1-Dichloroethene	<.50	U	.029	.5	11/06/02
Methylene chloride	<2.0	U	.18	2	11/06/02
Carbon disulfide	<.50	U	.040	.5	11/06/02
trans-1,2-Dichloroethene	<.50	U	.046	.5	11/06/02
Methyl tert-butyl ether	<.50	U	.062	.5	11/06/02
1,1-Dichloroethane	3.3		.026	.5	11/06/02
2-Butanone	<10.	U	.27	10	11/06/02
cis-1,2-Dichloroethene	J .14	J	.054	.5	11/06/02
Chloroform	<.50	U	.040	.5	11/06/02
1,2-Dichloroethane	J .16	J	.022	.5	11/06/02
1,1,1-Trichloroethane	<.50	U	.031	.5	11/06/02
Carbon tetrachloride	<.50	U	.021	.5	11/06/02
Benzene	<.50	U	.031	.5	11/06/02
1,2-Dichloropropane	<.50	U	.038	.5	11/06/02
Trichloroethene	J .25	J	.042	.5	11/06/02
Bromodichloromethane	<.50	U	.021	.5	11/06/02
cis-1,3-Dichloropropene	<.50	U	.041	.5	11/06/02
4-Methyl-2-pentanone	<5.0	U	.35	5	11/06/02
trans-1,3-Dichloropropene	<.50	U	.064	.5	11/06/02
1,1,2-Trichloroethane	<.50	U	.072	.5	11/06/02
Toluene	<.50	U	.049	.5	11/06/02
Dibromochloromethane	<.50	U	.053	.5	11/06/02
2-Hexanone	<5.0	U	.35	5	11/06/02
1,2-Dibromoethane	<.50	U	.058	.5	11/06/02
Tetrachloroethene	<.50	U	.039	.5	11/06/02
Chlorobenzene	<.50	U	.028	.5	11/06/02
Ethylbenzene	<.50	U	.036	.5	11/06/02
Bromoform	<.50	U	.068	.5	11/06/02

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

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Authorized: _____
Date: November 21, 2002 Thomas Alexander

O'Brien & Gere Laboratories, Inc.

Analytical Results

Method: 8260

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Job No.: 3027 . 333 . 32301
Certification NY No.: 10155

Proj. Desc:

Package#: 3762

Sample: Y0585

Sample Description: LR-6

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 48

Collected: 11/04/02
Received: 11/04/02
Prepared: 11/06/02

Matrix: Water

OC Batch: 110602W1

9% Solids:

830ms.

Sample Size
Dilution: 1

Parameter	Result	Qual	MDL	PQL	Analyzed	Notes
Xylene (total)	<.50	U	.049	.5	11/06/02	
Styrene	<.50	U	.036	.5	11/06/02	
1,1,2,2-Tetrachloroethane	<.50	U	.12	.5	11/06/02	
Isopropylbenzene	<.50	U	.075	.5	11/06/02	
1,3-Dichlorobenzene	<.50	U	.038	.5	11/06/02	
1,4-Dichlorobenzene	<.50	U	.039	.5	11/06/02	
1,2-Dichlorobenzene	<.50	U	.048	.5	11/06/02	
1,2-Dibromo-3-chloropropane	<1.0	U	.69	1	11/06/02	
1,2,4-Trichlorobenzene	<1.0	U	.050	1	11/06/02	
1,1,2-Trichloro-1,2,2-trifluoroethane	<.50	U	.025	.5	11/06/02	
Methyl acetate	<.50	U	.22	.5	11/06/02	
Cyclohexane	<.50	U	.056	.5	11/06/02	
Methylcyclohexane	<.50	U	.085	.5	11/06/02	

	%R	Qual	%R Limits
<u>Surrogate</u>			
Dibromofluoromethane (surrogate)	95		71-130
1,2-Dichloroethane-d4 (surrogate)	103		76-126
Toluene-d8 (surrogate)	104.		82-119
Bromofluorobenzene (surrogate)	94		75-119

Notes:

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits. U - Undetected at the reported level.

- Outside control limits U - Undetected at the reported level.
D - Data is estimated. D - Result is diluted

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

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Authorized: *Thomas Alexander*
Date: November 21, 2002 Thomas Alexander

2

**O'Brien & Gere
Laboratories, Inc.**

**Analytical Results
Method: 8260**

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Job No.: 3027 333 32301
Certification NY No.: 10155

Proj. Desc:

Package#: 3762

Collected: 11/04/02

Matrix: Water

Sample: Y0586

Received: 11/04/02

QC Batch: 110602W1

Sample Description: LR-8

Prepared: 11/06/02

%Solids:

Instrument: HP5973 GCMS#3

Sample Size: 10 mL

Units: ug/L

Dilution: 1

Number of analytes: 48

Parameter	Result	Qual	MDL	PQL	Analyzed Notes	
Dichlorodifluoromethane	<1.0	U	.034	1	11/06/02	
Chloromethane	<1.0	U	.061	1	11/06/02	
Vinyl chloride	<1.0	U	.058	1	11/06/02	
Bromomethane	<1.0	U	.043	1	11/06/02	
Chloroethane	4.4		.11	1	11/06/02	
Trichlorofluoromethane	<1.0	U	.023	1	11/06/02	
Acetone	J 1.2	J	.78	10	11/06/02	
1,1-Dichloroethene	<.50	U	.029	.5	11/06/02	
Methylene chloride	<2.0	U	J .19	.18	2	11/06/02
Carbon disulfide	<.50	U	.040	.5	11/06/02	
trans-1,2-Dichloroethene	<.50	U	.046	.5	11/06/02	
Methyl tert-butyl ether	<.50	U	.062	.5	11/06/02	
1,1-Dichloroethane	<.50	U	.026	.5	11/06/02	
2-Butanone	<10.	U	.27	10	11/06/02	
cis-1,2-Dichloroethene	<.50	U	.054	.5	11/06/02	
Chloroform	<.50	U	.040	.5	11/06/02	
1,2-Dichloroethane	<.50	U	.022	.5	11/06/02	
1,1,1-Trichloroethane	<.50	U	.031	.5	11/06/02	
Carbon tetrachloride	<.50	U	.021	.5	11/06/02	
Benzene	14.		.031	.5	11/06/02	
1,2-Dichloropropane	<.50	U	.038	.5	11/06/02	
Trichloroethene	<.50	U	.042	.5	11/06/02	
Bromodichloromethane	<.50	U	.021	.5	11/06/02	
cis-1,3-Dichloropropene	<.50	U	.041	.5	11/06/02	
4-Methyl-2-pentanone	<5.0	U	.35	5	11/06/02	
trans-1,3-Dichloropropene	<.50	U	.064	.5	11/06/02	
1,1,2-Trichloroethane	<.50	U	.072	.5	11/06/02	
Toluene	J .35	J	.049	.5	11/06/02	
Dibromochloromethane	<.50	U	.053	.5	11/06/02	
2-Hexanone	<5.0	U	.35	5	11/06/02	
1,2-Dibromoethane	<.50	U	.058	.5	11/06/02	
Tetrachloroethene	<.50	U	.039	.5	11/06/02	
Chlorobenzene	4.9		.028	.5	11/06/02	
Ethylbenzene	<.50	U	.036	.5	11/06/02	
Bromoform	<.50	U	.068	.5	11/06/02	

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

Authorized: _____
Date: November 21, 2002 Thomas Alexander

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

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**O'Brien & Gere
Laboratories, Inc.**

**Analytical Results
Method: 8260**

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Job No.: 3027.333.32301
Certification NY No.: 10155

Proj. Desc:

Package#: 3762

Collected: 11/04/02

Matrix: Water

Sample: Y0586

Received: 11/04/02

QC Batch: 110602W1

Sample Description: LR-8

Prepared: 11/06/02

%Solids:

Instrument: HP5973 GCMS#3

Sample Size: 10 mL

Units: ug/L

Dilution: 1

Number of analytes: 48

Parameter	Result	Qual	MDL	PQL	Analyzed Notes
Xylene (total)	1.2		.049	.5	11/06/02
Styrene	<.50	U	.036	.5	11/06/02
1,1,2,2-Tetrachloroethane	<.50	U	.12	.5	11/06/02
Isopropylbenzene	.79		.075	.5	11/06/02
1,3-Dichlorobenzene	J .11	J	.038	.5	11/06/02
1,4-Dichlorobenzene	J .48	J	.039	.5	11/06/02
1,2-Dichlorobenzene	J .41	J	.048	.5	11/06/02
1,2-Dibromo-3-chloropropane	<1.0	U	.69	1	11/06/02
1,2,4-Trichlorobenzene	<1.0	U	.050	1	11/06/02
1,1,2-Trichloro-1,2,2-trifluoroethane	<.50	U	.025	.5	11/06/02
Methyl acetate	<.50	U	.22	.5	11/06/02
Cyclohexane	1.1		.056	.5	11/06/02
Methylcyclohexane	J .13	NJ	.085	.5	11/06/02

Surrogate	%R	Qual	%R Limits
Dibromofluoromethane (surrogate)	95		71- 130
1,2-Dichloroethane-d4 (surrogate)	100		76- 126
Toluene-d8 (surrogate)	106		82- 119
Bromofluorobenzene (surrogate)	96		75- 119

Notes:

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

Authorized: Thomas Alexander
Date: November 21, 2002 Thomas Alexander

**O'Brien & Gere
Laboratories, Inc.**

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Proj. Desc:

Package#: 3762
Sample: Y0587
Sample Description: M-21
Instrument: HP5973 GCMS#3
Units: ug/L
Number of analytes: 48

**Analytical Results
Method: 8260**

Job No.: 3027 . 333 . 32301
Certification NY No.: 10155

Collected:	11/04/02	Matrix: Water
Received:	11/04/02	QC Batch: 110602W1
Prepared:	11/06/02	%Solids:
		Sample Size: 10 mL
		Dilution: 1

Parameter	Result	Qual	MDL	PQL	Analyzed Notes
Dichlorodifluoromethane	<1.0	U	.034	1	11/06/02
Chloromethane	<1.0	U	.061	1	11/06/02
Vinyl chloride	<1.0	U	.058	1	11/06/02
Bromomethane	<1.0	U	.043	1	11/06/02
Chloroethane	4.8		.11	1	11/06/02
Trichlorofluoromethane	<1.0	U	.023	1	11/06/02
Acetone	J .80	J	.78	10	11/06/02
1,1-Dichloroethene	<.50	U	.029	.5	11/06/02
Methylene chloride	<2.0	U	.18	2	11/06/02
Carbon disulfide	<.50	U	.040	.5	11/06/02
trans-1,2-Dichloroethene	<.50	U	.046	.5	11/06/02
Methyl tert-butyl ether	<.50	U	.062	.5	11/06/02
1,1-Dichloroethane	J .32	J	.026	.5	11/06/02
2-Butanone	<10.	U	.27	10	11/06/02
cis-1,2-Dichloroethene	<.50	U	.054	.5	11/06/02
Chloroform	<.50	U	.040	.5	11/06/02
1,2-Dichloroethane	<.50	U	.022	.5	11/06/02
1,1,1-Trichloroethane	<.50	U	.031	.5	11/06/02
Carbon tetrachloride	<.50	U	.021	.5	11/06/02
Benzene	13.		.031	.5	11/06/02
1,2-Dichloropropane	<.50	U	.038	.5	11/06/02
Trichloroethene	<.50	U	.042	.5	11/06/02
Bromodichloromethane	<.50	U	.021	.5	11/06/02
cis-1,3-Dichloropropene	<.50	U	.041	.5	11/06/02
4-Methyl-2-pentanone	<5.0	U	.35	5	11/06/02
trans-1,3-Dichloropropene	<.50	U	.064	.5	11/06/02
1,1,2-Trichloroethane	<.50	U	.072	.5	11/06/02
Toluene	J .34	J	.049	.5	11/06/02
Dibromochloromethane	<.50	U	.053	.5	11/06/02
2-Hexanone	<5.0	U	.35	5	11/06/02
1,2-Dibromoethane	<.50	U	.058	.5	11/06/02
Tetrachloroethene	<.50	U	.039	.5	11/06/02
Chlorobenzene	4.3		.028	.5	11/06/02
Ethylbenzene	<.50	U	.036	.5	11/06/02
Bromoform	<.50	U	.068	.5	11/06/02

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

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Authorized: Thomas Alexander
Date: November 21, 2002 Thomas Alexander

**O'Brien & Gere
Laboratories, Inc.**

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Proj. Desc:

Package#: 3762

Sample: Y0587

Sample Description: M-21

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 48

**Analytical Results
Method: 8260**

Job No.: 3027.333.32301
Certification NY No.: 10155

Collected:	11/04/02	Matrix: Water
Received:	11/04/02	QC Batch: 110602W1
Prepared:	11/06/02	%Solids:
		Sample Size: 10 mL
		Dilution: 1

Parameter	Result	Qual	MDL	PQL	Analyzed	Notes
Xylene (total)	J .33	J	.049	.5	11/06/02	
Styrene	<.50	U	.036	.5	11/06/02	
1,1,2,2-Tetrachloroethane	<.50	U	.12	.5	11/06/02	
Isopropylbenzene	1.2		.075	.5	11/06/02	
1,3-Dichlorobenzene	<.50	U	.038	.5	11/06/02	
1,4-Dichlorobenzene	J .23	J	.039	.5	11/06/02	
1,2-Dichlorobenzene	J .48	J	.048	.5	11/06/02	
1,2-Dibromo-3-chloropropane	<1.0	U	.69	1	11/06/02	
1,2,4-Trichlorobenzene	<1.0	U	.050	1	11/06/02	
1,1,2-Trichloro-1,2,2-trifluoroethane	<.50	U	.025	.5	11/06/02	
Methyl acetate	<.50	U	.22	.5	11/06/02	
Cyclohexane	1.8		.056	.5	11/06/02	
Methylcyclohexane	J .44	J	.085	.5	11/06/02	

Surrogate	#R	Qual	%R Limits
Dibromofluoromethane (surrogate)	90		71-130
1,2-Dichloroethane-d4 (surrogate)	94		76-126
Toluene-d8 (surrogate)	103		82-119
Bromofluorobenzene (surrogate)	94		75-119

Notes:

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

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Authorized: _____
Date: November 21, 2002 Thomas Alexander

**O'Brien & Gere
Laboratories, Inc.**

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Proj. Desc:

Package#: 3762

Sample: Y0588

Sample Description: M-25

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 48

**Analytical Results
Method: 8260**

Job No.: 3027.333.32301
Certification NY No.: 10155

Collected:	11/04/02	Matrix: Water
Received:	11/04/02	QC Batch: 110602W1
Prepared:	11/06/02	%Solids:
		Sample Size: 10 mL
		Dilution: 1

Parameter	Result	Qual	MDL	PQL	Analyzed Notes
Dichlorodifluoromethane	<1.0	U	.034	1	11/06/02
Chloromethane	<1.0	U	.061	1	11/06/02
Vinyl chloride	<1.0	U	.058	1	11/06/02
Bromomethane	<1.0	U	.043	1	11/06/02
Chloroethane	1.5		.11	1	11/06/02
Trichlorofluoromethane	<1.0	U	.023	1	11/06/02
Acetone	<10.	U	.78	10	11/06/02
1,1-Dichloroethene	<.50	U	.029	.5	11/06/02
Methylene chloride	<2.0	U	.18	2	11/06/02
Carbon disulfide	<.50	U	.040	.5	11/06/02
trans-1,2-Dichloroethene	<.50	U	.046	.5	11/06/02
Methyl tert-butyl ether	.81		.062	.5	11/06/02
1,1-Dichloroethane	<.50	U	.026	.5	11/06/02
2-Butanone	<10.	U	.27	10	11/06/02
cis-1,2-Dichloroethene	<.50	U	.054	.5	11/06/02
Chloroform	J .30	J	.040	.5	11/06/02
1,2-Dichloroethane	<.50	U	.022	.5	11/06/02
1,1,1-Trichloroethane	<.50	U	.031	.5	11/06/02
Carbon tetrachloride	J .42	J	.021	.5	11/06/02
Benzene	J .42	J	.031	.5	11/06/02
1,2-Dichloropropane	<.50	U	.038	.5	11/06/02
Trichloroethene	<.50	U	.042	.5	11/06/02
Bromodichloromethane	<.50	U	.021	.5	11/06/02
cis-1,3-Dichloropropene	<.50	U	.041	.5	11/06/02
4-Methyl-2-pentanone	<5.0	U	.35	5	11/06/02
trans-1,3-Dichloropropene	<.50	U	.064	.5	11/06/02
1,1,2-Trichloroethane	<.50	U	.072	.5	11/06/02
Toluene	J .17	J	.049	.5	11/06/02
Dibromochloromethane	<.50	U	.053	.5	11/06/02
2-Hexanone	<5.0	U	.35	5	11/06/02
1,2-Dibromoethane	<.50	U	.058	.5	11/06/02
Tetrachloroethene	<.50	U	.039	.5	11/06/02
Chlorobenzene	1.6		.028	.5	11/06/02
Ethylbenzene	<.50	U	.036	.5	11/06/02
Bromoform	<.50	U	.068	.5	11/06/02

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

Authorized: Thomas Alexander
Date: November 21, 2002 Thomas Alexander

**O'Brien & Gere
Laboratories, Inc.**

**Analytical Results
Method: 8260**

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Proj. Desc:

Package#: 3762

Sample: Y0588

Sample Description: M-25

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 48

Job No.: 3027.333.32301
Certification NY No.: 10155

Collected:	11/04/02	Matrix: Water
Received:	11/04/02	QC Batch: 110602W1
Prepared:	11/06/02	%Solids:
		Sample Size: 10 mL
		Dilution: 1

Parameter	Result	Qual	MDL	PQL	Analyzed	Notes
Xylene (total)	J .12	J	.049	.5	11/06/02	
Styrene	<.50	U	.036	.5	11/06/02	
1,1,2,2-Tetrachloroethane	<.50	U	.12	.5	11/06/02	
Isopropylbenzene	J .25	J	.075	.5	11/06/02	
1,3-Dichlorobenzene	<.50	U	.038	.5	11/06/02	
1,4-Dichlorobenzene	<.50	U	.039	.5	11/06/02	
1,2-Dichlorobenzene	J .16	J	.048	.5	11/06/02	
1,2-Dibromo-3-chloropropane	<1.0	U	.69	1	11/06/02	
1,2,4-Trichlorobenzene	<1.0	U	.050	1	11/06/02	
1,1,2-Trichloro-1,2,2-trifluoroethane	<.50	U	.025	.5	11/06/02	
Methyl acetate	<.50	U	.22	.5	11/06/02	
Cyclohexane	J .24	J	.056	.5	11/06/02	
Methylcyclohexane	<.50	U	.085	.5	11/06/02	

Surrogate	%R	Qual	%R Limits
Dibromofluoromethane (surrogate)	94		71-130
1,2-Dichloroethane-d4 (surrogate)	99		76-126
Toluene-d8 (surrogate)	105		82-119
Bromofluorobenzene (surrogate)	96		75-119

Notes:

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

Authorized: Thomas Alexander
Date: November 21, 2002 Thomas Alexander

O'Brien & Gere Laboratories, Inc.

Analytical Results

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Job No.: 3027 . 333 . 32301
Certification NY No.: 10155

Proj. Desc:

Package#: 3762

Sample: Y0589

Sample: M-26

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 48

Collected: 11/04/02
Received: 11/04/02
Prepared: 11/07/02

Matrix: Water

OC Batch: 110702W7

94 Solids

%SOLIDS.

Sample Size
Dilution: 1

Parameter	Result	Qual	MDL	PQL	Analyzed Notes
Dichlorodifluoromethane	<1.0	U	.034	1	11/07/02
Chloromethane	<1.0	U	.061	1	11/07/02
Vinyl chloride	<1.0	U	.058	1	11/07/02
Bromomethane	<1.0	U	.043	1	11/07/02
Chloroethane	<1.0	U	.11	1	11/07/02
Trichlorofluoromethane	<1.0	U	.023	1	11/07/02
Acetone	<10.	U	.78	10	11/07/02
1,1-Dichloroethene	<.50	U	.029	.5	11/07/02
Methylene chloride	<2.0	U	.18	2	11/07/02
Carbon disulfide	<.50	U	.040	.5	11/07/02
trans-1,2-Dichloroethene	<.50	U	.046	.5	11/07/02
Methyl tert-butyl ether	<.50	U	.062	.5	11/07/02
1,1-Dichloroethane	<.50	U	.026	.5	11/07/02
2-Butanone	<10.	U	.27	10	11/07/02
cis-1,2-Dichloroethene	<.50	U	.054	.5	11/07/02
Chloroform	J .11	J	.040	.5	11/07/02
1,2-Dichloroethane	<.50	U	.022	.5	11/07/02
1,1,1-Trichloroethane	<.50	U	.031	.5	11/07/02
Carbon tetrachloride	<.50	U	.021	.5	11/07/02
Benzene	<.50	U	.031	.5	11/07/02
1,2-Dichloropropane	<.50	U	.038	.5	11/07/02
Trichloroethene	<.50	U	.042	.5	11/07/02
Bromodichloromethane	<.50	U	.021	.5	11/07/02
cis-1,3-Dichloropropene	<.50	U	.041	.5	11/07/02
4-Methyl-2-pentanone	<5.0	U	.35	5	11/07/02
trans-1,3-Dichloropropene	<.50	U	.064	.5	11/07/02
1,1,2-Trichloroethane	<.50	U	.072	.5	11/07/02
Toluene	<.50	U	.049	.5	11/07/02
Dibromochloromethane	<.50	U	.053	.5	11/07/02
2-Hexanone	<5.0	U	.35	5	11/07/02
1,2-Dibromoethane	<.50	U	.058	.5	11/07/02
Tetrachloroethene	<.50	U	.039	.5	11/07/02
Chlorobenzene	<.50	U	.028	.5	11/07/02
Ethylbenzene	<.50	U	.036	.5	11/07/02
Bromoform	<.50	U	.068	.5	11/07/02

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

I - reported value is estimated D - Result is diluted.

Σ - reported value is estimated. D - Result is doubtful. E - Result exceeded the calibration range and

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

Authorized: _____
Date: November 21, 2002 Thomas Alexander

O'Brien & Gere Laboratories, Inc.

Analytical Results

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Job No.: 3027 . 333 . 32301
Certification NY No.: 10155

Proj. Desc:

Package#: 3762

Sample: Y0589

Sample Description: M-26

Instrument: HP5973 GCMS#3

Units: mg/L

Units: ug/L

Collected: 11/04/02

Received: 11/04/02

Prepared: 11/07/02

Matrix: Water

OC Batch: 110702W7

848-111

%Solids:

Sample Size

Dilution: 1

Parameter	Result	Qual	MDL	PQL	Analyzed	Notes
Xylene (total)	<.50	U	.049	.5	11/07/02	
Styrene	<.50	U	.036	.5	11/07/02	
1,1,2,2-Tetrachloroethane	<.50	U	.12	.5	11/07/02	
Isopropylbenzene	<.50	U	.075	.5	11/07/02	
1,3-Dichlorobenzene	<.50	U	.038	.5	11/07/02	
1,4-Dichlorobenzene	<.50	U	.039	.5	11/07/02	
1,2-Dichlorobenzene	<.50	U	.048	.5	11/07/02	
1,2-Dibromo-3-chloropropane	<1.0	U	.69	1	11/07/02	
1,2,4-Trichlorobenzene	<1.0	U	.050	1	11/07/02	
1,1,2-Trichloro-1,2,2-trifluoroethane	<.50	U	.025	.5	11/07/02	
Methyl acetate	<.50	U	.22	.5	11/07/02	
Cyclohexane	<.50	U	.056	.5	11/07/02	
Methylcyclohexane	<.50	U	.085	.5	11/07/02	

<u>Surrogate</u>	%R	Qual	%R Limits
Dibromofluoromethane (surrogate)	96		71-130
1,2-Dichloroethane-d4 (surrogate)	104		76-126
Toluene-d8 (surrogate)	106		82-119
Bromofluorobenzene (surrogate)	93		75-119

Notes:

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits. U - Undetected at the reported level.

- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

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Authorized: _____
Date: November 21, 2002 Thomas Alexander

20

**O'Brien & Gere
Laboratories, Inc.**

**Analytical Results
Method: 8260**

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Proj. Desc:

Package#: 3762

Sample: Y0590

Sample Description: Equipment Blank

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 48

Job No.: 3027.333.32301
Certification NY No.: 10155

Collected: 11/04/02 Matrix: Water
Received: 11/04/02 QC Batch: 110702W7
Prepared: 11/07/02 %Solids:
Sample Size: 10 mL
Dilution: 1

Parameter	Result	Qual	MDL	PQL	Analyzed Notes
Dichlorodifluoromethane	<1.0	U	.034	1	11/07/02
Chloromethane	<1.0	U	.061	1	11/07/02
Vinyl chloride	<1.0	U	.058	1	11/07/02
Bromomethane	<1.0	U	.043	1	11/07/02
Chloroethane	<1.0	U	.11	1	11/07/02
Trichlorofluoromethane	<1.0	U	.023	1	11/07/02
Acetone	<10.	U	.78	10	11/07/02
1,1-Dichloroethene	<.50	U	.029	.5	11/07/02
Methylene chloride	<2.0	U	.18	2	11/07/02
Carbon disulfide	<.50	U	.040	.5	11/07/02
trans-1,2-Dichloroethene	<.50	U	.046	.5	11/07/02
Methyl tert-butyl ether	<.50	U	.062	.5	11/07/02
1,1-Dichloroethane	<.50	U	.026	.5	11/07/02
2-Butanone	<10.	U	.27	10	11/07/02
cis-1,2-Dichloroethene	<.50	U	.054	.5	11/07/02
Chloroform	<.50	U	.040	.5	11/07/02
1,2-Dichloroethane	<.50	U	.022	.5	11/07/02
1,1,1-Trichloroethane	<.50	U	.031	.5	11/07/02
Carbon tetrachloride	<.50	U	.021	.5	11/07/02
Benzene	<.50	U	.031	.5	11/07/02
1,2-Dichloropropane	<.50	U	.038	.5	11/07/02
Trichloroethene	<.50	U	.042	.5	11/07/02
Bromodichloromethane	<.50	U	.021	.5	11/07/02
cis-1,3-Dichloropropene	<.50	U	.041	.5	11/07/02
4-Methyl-2-pentanone	<5.0	U	.35	5	11/07/02
trans-1,3-Dichloropropene	<.50	U	.064	.5	11/07/02
1,1,2-Trichloroethane	<.50	U	.072	.5	11/07/02
Toluene	<.50	U	.049	.5	11/07/02
Dibromochloromethane	<.50	U	.053	.5	11/07/02
2-Hexanone	<5.0	U	.35	5	11/07/02
1,2-Dibromoethane	<.50	U	.058	.5	11/07/02
Tetrachloroethene	<.50	U	.039	.5	11/07/02
Chlorobenzene	<.50	U	.028	.5	11/07/02
Ethylbenzene	<.50	U	.036	.5	11/07/02
Bromoform	<.50	U	.068	.5	11/07/02

B - Analyte detected above the PQL in the associated Prep Blank.

- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

Authorized: Thomas Alexander
Date: November 21, 2002 Thomas Alexander

**O'Brien & Gere
Laboratories, Inc.**

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Proj. Desc:

Package#: 3762

Sample: Y0590

Sample Description: Equipment Blank

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 48

**Analytical Results
Method: 8260**

Job No.: 3027.333.32301
Certification NY No.: 10155

Collected:	11/04/02	Matrix: Water
Received:	11/04/02	QC Batch: 110702W7
Prepared:	11/07/02	%Solids:
		Sample Size: 10 mL
		Dilution: 1

Parameter	Result	Qual	MDL	PQL	Analyzed Notes
Xylene (total)	<.50	U	.049	.5	11/07/02
Styrene	<.50	U	.036	.5	11/07/02
1,1,2,2-Tetrachloroethane	<.50	U	.12	.5	11/07/02
Isopropylbenzene	<.50	U	.075	.5	11/07/02
1,3-Dichlorobenzene	<.50	U	.038	.5	11/07/02
1,4-Dichlorobenzene	<.50	U	.039	.5	11/07/02
1,2-Dichlorobenzene	<.50	U	.048	.5	11/07/02
1,2-Dibromo-3-chloropropane	<1.0	U	.69	1	11/07/02
1,2,4-Trichlorobenzene	<1.0	U	.050	1	11/07/02
1,1,2-Trichloro-1,2,2-trifluoroethane	<.50	U	.025	.5	11/07/02
Methyl acetate	<.50	U	.22	.5	11/07/02
Cyclohexane	<.50	U	.056	.5	11/07/02
Methylcyclohexane	<.50	U	.085	.5	11/07/02

Surrogate	%R	Qual	%R Limits
Dibromofluoromethane (surrogate)	95		71-130
1,2-Dichloroethane-d4 (surrogate)	103		76-126
Toluene-d8 (surrogate)	105		82-119
Bromofluorobenzene (surrogate)	96		75-119

Notes:

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits U - Undetected at the reported level.

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

Authorized: _____
Date: November 21, 2002 Thomas Alexander

**O'Brien & Gere
Laboratories, Inc.**

Analytical Results

Method: 8260

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY
Proj. Desc:
Package#: 3762
Sample: Y0591
Sample Description: QC Trip Blank
Instrument: HP5973 GCMS#3
Units: ug/L
Number of analytes: 48

Job No.: 3027 . 333 . 32301
Certification NY No.: 10155

Collected: 11/04/02 Matrix: Water
Received: 11/04/02 QC Batch: 110702W7
Prepared: 11/07/02 %Solids:
 Sample Size: 10 mL
 Dilution: 1

Parameter	Result	Qual	MDL	PQL	Analyzed Notes
Dichlorodifluoromethane	<1.0	U	.034	1	11/07/02
Chloromethane	<1.0	U	.061	1	11/07/02
Vinyl chloride	<1.0	U	.058	1	11/07/02
Bromomethane	<1.0	U	.043	1	11/07/02
Chloroethane	<1.0	U	.11	1	11/07/02
Trichlorofluoromethane	<1.0	U	.023	1	11/07/02
Acetone	<10.	U	.78	10	11/07/02
1,1-Dichloroethene	<.50	U	.029	.5	11/07/02
Methylene chloride	<2.0	U	.18	2	11/07/02
Carbon disulfide	<.50	U	.040	.5	11/07/02
trans-1,2-Dichloroethene	<.50	U	.046	.5	11/07/02
Methyl tert-butyl ether	<.50	U	.062	.5	11/07/02
1,1-Dichloroethane	<.50	U	.026	.5	11/07/02
2-Butanone	<10.	U	.27	10	11/07/02
cis-1,2-Dichloroethene	<.50	U	.054	.5	11/07/02
Chloroform	<.50	U	.040	.5	11/07/02
1,2-Dichloroethane	<.50	U	.022	.5	11/07/02
1,1,1-Trichloroethane	<.50	U	.031	.5	11/07/02
Carbon tetrachloride	<.50	U	.021	.5	11/07/02
Benzene	<.50	U	.031	.5	11/07/02
1,2-Dichloropropane	<.50	U	.038	.5	11/07/02
Trichloroethene	<.50	U	.042	.5	11/07/02
Bromodichloromethane	<.50	U	.021	.5	11/07/02
cis-1,3-Dichloropropene	<.50	U	.041	.5	11/07/02
4-Methyl-2-pentanone	<5.0	U	.35	5	11/07/02
trans-1,3-Dichloropropene	<.50	U	.064	.5	11/07/02
1,1,2-Trichloroethane	<.50	U	.072	.5	11/07/02
Toluene	<.50	U	.049	.5	11/07/02
Dibromochloromethane	<.50	U	.053	.5	11/07/02
2-Hexanone	<5.0	U	.35	5	11/07/02
1,2-Dibromoethane	<.50	U	.058	.5	11/07/02
Tetrachloroethene	<.50	U	.039	.5	11/07/02
Chlorobenzene	<.50	U	.028	.5	11/07/02
Ethylbenzene	<.50	U	.036	.5	11/07/02
Bromoform	<.50	U	.068	.5	11/07/02

B - Analyte detected above the PQL in the associated Prep Blank.
- Outside control limits. U - Undetected at the reported level.

- Outside control limits U - Undetected at the reported level
--- - Value is estimated D - Result is diluted

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

Authorized: _____
Date: November 21, 2002 Thomas Alexander

O'Brien & Gere
Laboratories, Inc.

Analytical Results
Method: 8260

Client: O'Brien & Gere Inc. of North America
Project: PAS Site - Oswego, NY

Job No.: 3027.333.32301
Certification NY No.: 10155

Proj. Desc:

Package#: 3762

Collected: 11/04/02

Matrix: Water

Sample: Y0591

Received: 11/04/02

QC Batch: 110702W7

Sample Description: QC Trip Blank

Prepared: 11/07/02

%Solids:

Instrument: HP5973 GCMS#3

Sample Size: 10 mL

Units: ug/L

Dilution: 1

Number of analytes: 48

Parameter	Result	Qual	MDL	PQL	Analyzed Notes
Xylene (total)	<.50	U	.049	.5	11/07/02
Styrene	<.50	U	.036	.5	11/07/02
1,1,2,2-Tetrachloroethane	<.50	U	.12	.5	11/07/02
Isopropylbenzene	<.50	U	.075	.5	11/07/02
1,3-Dichlorobenzene	<.50	U	.038	.5	11/07/02
1,4-Dichlorobenzene	<.50	U	.039	.5	11/07/02
1,2-Dichlorobenzene	<.50	U	.048	.5	11/07/02
1,2-Dibromo-3-chloropropane	<1.0	U	.69	1	11/07/02
1,2,4-Trichlorobenzene	<1.0	U	.050	1	11/07/02
1,1,2-Trichloro-1,2,2-trifluoroethane	<.50	U	.025	.5	11/07/02
Methyl acetate	<.50	U	.22	.5	11/07/02
Cyclohexane	<.50	U	.056	.5	11/07/02
Methylcyclohexane	<.50	U	.085	.5	11/07/02

Surrogate	%R	Qual	%R Limits
Dibromofluoromethane (surrogate)	97		71-130
1,2-Dichloroethane-d4 (surrogate)	105		76-126
Toluene-d8 (surrogate)	105		82-119
Bromofluorobenzene (surrogate)	94		75-119

Notes:

B - Analyte detected above the PQL in the associated Prep Blank.

Authorized:

- Outside control limits U - Undetected at the reported level.

Date: November 21, 2002

Thomas Alexander

J - reported value is estimated. D - Result is diluted.

E - concentration exceeded the calibration range and is estimated.

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

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County Oswego
Town Oswego
Foilable X Yes _____ No
Name 2003-09-09, Q4-02 Report